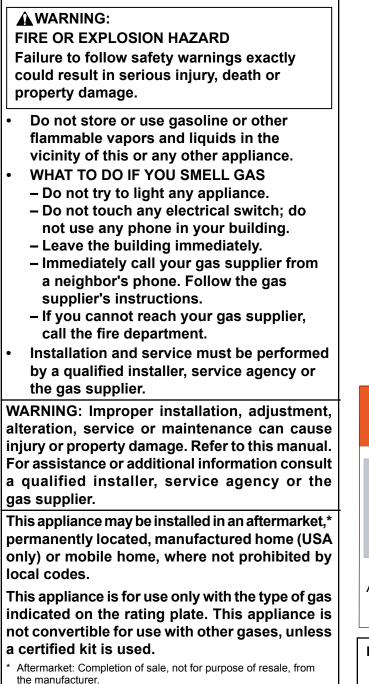


CFDV Series Direct Vent Gas Fireplace Installation and Operating Instructions

Models: 33CFDV(N/P)(V/I)SL, 36CFDV(N/P)(V/I)SL, 42CFDV(N/P)(V/I)SL





PLEASE READ THE INSTALLATION & OPERATING INSTRUCTIONS BEFORE USING APPLIANCE.

Thank you and congratulations on your purchase of a Vermont Castings Group fireplace. IMPORTANT: Read all instructions and warnings carefully before starting installation. Failure to follow these instructions fully may result in a possible fire hazard and will void the warranty.

Important Safety Information	3
Code Approval	4
Product Features	5
Product Specifications	
Gas Specifications & Orifice Sizes	
Gas Pressures	
High Elevations	5
Cold Climate Insulation	
Battery Back Up Kit	
Pre-Installation Information	
Before You Start	
Items Required for Installation Fireplace Framing	
Fireplace & Framing Dimensions	/ 8
Fireplace Location	0 Q
Clearances Clearances to Combustibles	
Mantel Clearances	
Fireplace Installation	
Secure Fireplace to Floor or Framing	
Finishing Material	
Venting Installation Information	
Optional Top Vent Application	
Installation Precautions	
General Venting	
Termination Location Termination Clearances	
Assembling Vent Pipe	
How to Use the Vent Graph	
SLP Pipe	
Additional Assembly Instructions	
Disassemble Vent Sections	
Vent Pipe Clearances	
Inner Flex Vent Pipe	
SLP-RVTM - Horizontal Termination Kit	
Horizontal Termination Kit	20
Rear Wall Vent Installation—Flex Vent Pipe	21
Top Vent Side Wall Application	
Vertical Side Wall Applications Vertical Side Wall Installaion	
SLP-HSFTK - Horizontal Termination Kit	
Below Grade Installation	
Vertical Through-the-Roof Application	
Vertical Through-the-Roof Installation	
Attic Shield Installation	
Roof Support Installation	30
Vertical Termination Kit Installation	
Attaching Flex Vent to Vertical Termination Kit	32
Gas Pipe Installation	
Check Gas Type	
Installation Items Needed	
Gas Pipe Installation Check Gas Pressure – Millivolt	
Electrical Installation – Millivolt	
Electrical Wiring	35
Remote Wall Mounted Switch	
Optional DC Remote Systems Optional Fan/Blower System BLOT	
Optional Fan/Blower System BLOT Optional Fan/Blower System FK12	
	51

Operating Instructions – Millivolt For Your Safety Read Before Lighting	38 38
What To Do If You Smell Gas	
Lighting Pilot for the First Time	
Lighting Pilot Lighting Burner	
To Turn Off Gas	
Check Gas Pressure and Electrical Installation – IPI	
Electrical Wiring	
Junction Box Wiring	
Wall Switch Installation	
IPI System Wiring Diagram	
Operating Instructions – IPI	
For Your Safety Read Before Lighting What To Do If You Smell Gas	
Operating Instructions	
To Turn Off Gas	
EcoLogic Control System Operation and Indications	46
Final Installation	47
Glass Frame Removal	
Pilot Flame	
Burner Flame Installing Porcelain Liner Kit	
Installing Brick Liner Kit	
Rockwool Placement	
Adjustable Baffle	
Log Placement	
Lava Rock and Ember Placement Fireglass and Stone Placement	
Fireglass Only Placement	
Safety Barrier Installation	
Safety, Cleaning and Maintenance	
Burner, Pilot and Control Compartment	54
Burner	
Vent System Glass Frame	
Logs	
Rock Wool	
Stones and Fireglass	
Troubleshooting	
Millivolt Standing Pilot Ignition	
IPI System All Control/Pilot Systems	
Optional Accessories	
Replacement Parts Firebox Components	
Firebox Components	
Standing Pilot – Millivolt Control	
IPI System	
Venting Components	61
Massachusetts Requirements	
Limited Lifetime Warranty Policy	
Efficiency Ratings	

IMPORTANT SAFETY INFORMATION

INSTALLER

Please leave these instructions with the appliance.

WARNING:

• Read this owner's manual carefully and completely before trying to assemble, operate, or service this fireplace.

OWNER

- Any change to this fireplace or its controls can be dangerous.
- Improper installation or use of this fireplace can cause serious injury or death from fire, burns, explosions, electrical shock and carbon monoxide poisoning.

This fireplace is a vented product. This fireplace must be properly installed by a qualified service person. The glass door must be properly seated and sealed. If this unit is not properly installed by a qualified service person with glass door properly seated and sealed, combustion leakage can occur.

CARBON MONOXIDE POISONING: Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, the fireplace may not have been installed properly. Get fresh air at once! Have the fireplace inspected and serviced by a qualified service person. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

Propane/LP gas and natural gas are both odorless. An odor-making agent is added to each of these gases. The odor helps you detect a gas leak. However, the odor added to these gases can fade. Gas may be present even though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this fireplace.

- 1. Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, et cetera. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.
- 2. 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.
- For propane/LP fireplace, do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity.

- 4. If you smell gas:
 - Shut off gas supply.
 - Do not try to light any appliance.

Please retain these instructions for future reference.

- 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.
- 5. Never install the fireplace:
 - In a recreational vehicle
 - Where curtains, furniture, clothing, or other flammable objects are less than 36" from the front, top, or sides of the fireplace
 - In high traffic areas
 - In windy or drafty areas
- 6. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- 7. This fireplace reaches high temperatures. Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
- 8. Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children and others at risk individuals out of the room and away from hot surfaces.
- 9. Clothing or other flammable material should not be placed on or near the appliance.
- 10. When the appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, you must set appliance on a metal or wood panel or hearth pad extending the full width and depth of the appliance.

- 11. Do not modify fireplace under any circumstances. Any parts removed for servicing must be replaced prior to operating fireplace.
- 12. Turn fireplace off and let cool before servicing, installing, or repairing. Only a qualified service person should install, service, or repair the fireplace. Have burner system inspected annually by a qualified service person.
- 13. You must keep control compartments, burners, and circulating air passages clean. More frequent cleaning may be needed due to excessive lint and dust. Turn off the gas valve and pilot light before cleaning fireplace.
- 14. Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. Refer to *Cleaning and Maintenance* section of this manual.
- 15. Keep the area around your fireplace clear of combustible materials, gasoline, and other flammable vapor and liquids. Do not run fireplace where these are used or stored. Do not place items such as clothing or decorations on or around fireplace.
- 16. Do not use this fireplace to cook food or burn paper or other objects.
- 17. Never place anything on top of fireplace.
- 18. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on rating plate.
- 19. 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*.
- 20. Do not obstruct the flow of combustion and ventilation air in any way. Provide adequate clearances around air openings into the combustion chamber along with adequate accessibility clearance for servicing and proper operation.
- 21. Do not use fireplace 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.
- 22. Do not operate fireplace if any log is broken.
- 23. Do not use a blower insert, heat exchanger insert, or any other accessory not approved for use with this fireplace.
- 24. Do not operate appliance with the glass front removed, cracked, or broken. Replacement of the glass should be done by a licensed qualified service person.

CODE APPROVAL

Direct Vent type appliances draw all combustion air from outside of the dwelling through the vent pipe.

These appliances have been tested by CSA and found to comply with the established standards for DIRECT VENT GAS FIREPLACE HEATERS in the USA and Canada as follows:

LISTED VENTED GAS FIREPLACE HEATER

TESTED TO:

ANSI Z21.88-2015/CSA 2.33-2015 STANDARDS

The installation must conform with local codes or, in the absence of local codes, with the *National Fuel Gas Code, ANSI Z223.1/NFPA 54*, or the *National Gas and Propane Installation Code, CSA B149.1*.

A manufactured home (USA only) or mobile home OEM installation must conform with the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280,* or when such a standard is not applicable, the *Standard for Manufactured Home Installations, ANSI/NCSBCS A225.1,* or *Standard for Gas Equipped Recreational Vehicles and Mobile Housing, CSA Z240.4.*

Never connect unit to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

IMPORTANT: PLEASE READ THE FOLLOWING CAREFULLY

It is not unusual for gas fireplace to give off some odor the first time it is burned. This is due to the manufacturing process.

Please ensure that your room is well ventilated during burn off — open all windows.

It is recommended that you burn your fireplace for at least ten (10) hours the first time you use it. Place the fan switch in the "OFF" position during this time.

IMPORTANT: PLEASE READ THE FOLLOWING CAREFULLY

It is normal for fireplaces fabricated of steel to give off some expansion and/or contraction noises during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or car engine.

PRODUCT SPECIFICATIONS

- This appliance has been certified for use with either natural or propane gas. See appropriate data plates.
- · This appliance is not for use with solid fuels.
- The appliance is approved for bedroom or bedsitting room installations.
- The appliance must be installed in accordance with local codes. If none exist use the current installation code: ANSI Z223.1/NFPA 54 in the USA, CSA B149 in Canada.
- This appliance is mobile home approved.
- The appliance must be properly connected to a venting system.
- The appliance is not approved for closet installations.
- This appliance is approved to be vented with Vermont Castings Group SLP pipe.
- The IPI system must be plugged into an A/C source to operate unless the included battery back up is used.

The classification "noncombustible material" includes, but is not limited to stone, brick and mortar. Noncombustibles are safe to overlay the black-painted metal face and do not pose a fire hazard. Do not allow any noncombustible finish material to extend past or interfere with fireplace or control door opening.

The classification "combustible material" includes, but is not limited to plywood, drywall and particle board. Combustible materials may contact the sides, bottom or back of firebox. Do not overlay the black painted face with combustible materials.

HIGH ELEVATIONS

Input ratings are shown in BTU per hour and are certified without derating for elevations up to 4,500 feet (1,370 m) above sea level.

For elevations above 4,500 feet (1,370 m) in USA, installations must be in accordance with the current ANSI Z223.1/NFPA 54 and/or local codes having jurisdiction.

In Canada, please consult provincial and/or local authorities having jurisdiction for installations at elevations above 4,500 feet (1,370 m).

GAS SPECIFICATIONS & ORIFICE SIZE

MODEL	FUEL	MAX INPUT BTU/H	MIN. INPUT BTU/H	ORIFICE SIZE
33CFDVNV	NAT.	18,000	12,300	#47
33CFDVPV	LP	18,000	16,000	#55
33CFDVNI	NAT.	18,000	12,300	#47
33CFDVPI	LP	18,000	16,000	#55
36CFDVNV	NAT.	21,000	15,000	#44
36CFDVPV	LP	21,000	17,500	#54
36CFDVNI	NAT.	21,000	15,000	#44
36CFDVPI	LP	21,000	17,500	#54
42CFDVNV	NAT.	24,000	16,500	2.35mm
42CFDVPV	LP	24,000	17,500	1.45mm
42CFDVNI	NAT.	24,000	16,500	2.35mm
42CFDVPI	LP	24,000	17,500	1.45mm

GAS PRESSURES

	Natural Gas	Propane (LP)
Inlet Minimum	5.5" w.c.	11.0" w.c.
Inlet Maximum	14.0" w.c.	14.0" w.c.
Manifold Pressure	3.5" w.c.	10.0" w.c.

COLD CLIMATE OPTION (IPI Models Only)

NOTE: If you live in a cold climate, seal all cracks around your appliance and wherever cold air could enter the room, with noncombustible material. It is especially important to insulate the outside chase cavity between the studs and under the floor on which the appliance rests, if the floor is above ground level.

Your fireplace is equipped with an intermittent pilot ignition (IPI) control. An IPI control with a standing pilot option provides the dual benefit of an economical and environmentally responsible product and one which lights easily even in the coldest climates. When in intermittent pilot mode (as it comes from the factory), your pilot remains unlit until needed, saving you fuel. Standing pilot mode, by comparison, is characterized by a continuously burning pilot. The benefit of a pilot which lights only when needed is fuel savings. However, with no pilot burning in your fireplace, units operating in colder climates may experience delayed start up or lock out. Because colder air is heavier than milder air and there is no pilot burning to maintain a warm stable temperature in your firebox, establishing a draft to aid ignition becomes difficult. This is perfectly normal but can be somewhat frustrating.

To remedy this issue, your fireplace has been designed with a cold climate pilot option, which, when active, maintains a warmer temperature inside your firebox to make ignition faster and more efficient. Operating your appliance in cold climate (aka standing) pilot mode will prohibit the need for multiple ignition attempts and will prevent the system from delaying start up or locking out. To activate the cold climate option, simply move the cold climate toggle switch located on the right side of the black control center to the "On" (left) position. (*Figure 1*) You can operate your appliance in this mode regardless of whether you are using a remote control, wall switch or thermostat.

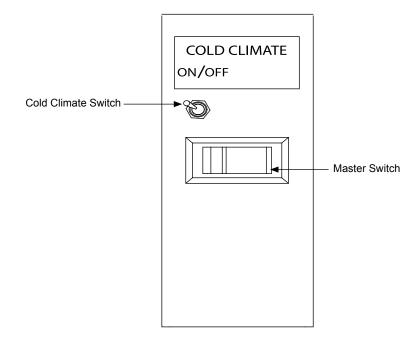


Figure 1 – CFDV Fireplace Controls–IPI (featuring Cold Climate option)

BATTERY BACK UP KIT INSTALLATION

The IPIBK battery back-up kit is intended for use with the Ecologic IPI control system. The use of this battery backup kit will allow the fireplace to continue operating in the event electric power is lost, such as may occur during severe snow or ice storms.

Kit Contents:

- One (1) Battery holder with wires
- One (1) Installation instruction sheet
- Not included:
 - Four (4) AA alkaline batteries

Turn off, unplug, and allow the fireplace to cool before installing the battery back-up kit. Only a qualified service person should service and repair the fireplace. A qualified service person must connect and disconnect the fireplace to the gas supply. Follow all local codes. **NOTE:** To ensure you will always have back-up power available to your fireplace, replace batteries before each heating season. Four (4) AA alkaline batteries are required, (not included).

Installation Instructions

- Find the appropriate male and female wire terminals attached to the unused red and black colored wires (Figure 2) on the wire harness located in the lower control area of the fireplace.
- 2. Connect the female terminal of the red wire to the red male terminal of the battery backup kit. Push terminals together firmly. (Figure 3)
- 3. Connect the male terminal of the black wire to the female black terminal of the battery backup kit. Push terminals together firmly. (Figure 4)
- Install four (4) fresh "AA" alkaline batteries into the battery holder. Note correct polarity of each battery. (Figure 5).
- 5. Place battery holder with batteries into the lower control area behind access panel with supplied Velcro.
- 6. Installation complete!



Figure 2 – Male/female wire terminals

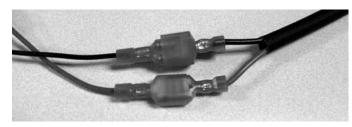


Figure 3 – Female wire terminal connections

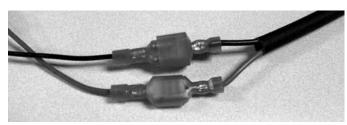


Figure 4 – Male wire terminal connections

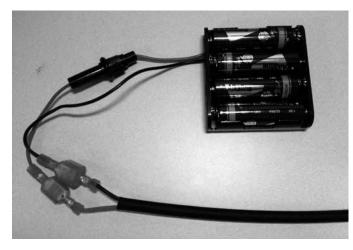


Figure 5 – Completed assembly

WARNING

Do not fill spaces around firebox with insulation or other materials. This could cause a fire.

BEFORE YOU START

Read this homeowner manual thoroughly and follow all instructions carefully. Inspect all contents for shipping damage and immediately inform your dealer if any damage is found. Do not install any unit with damaged, incomplete, or substitute parts. Check your packing list to verify that all listed parts have been received. You should have the following:

- Fireplace (Firebox and Burner System)
- Log Set
- Rock Wool
- Volcanic Rock
- Battery Back-Up
- Restrictor Disks

ITEMS REQUIRED FOR INSTALLATION

Tools and Building Supplies:

- Phillips Screwdriver
- Hammer
- Pliers
- Square
- Level
- Tee Joint
- Pipe Wrench
- · Saw and/or saber saw
- Measuring Tape
- Electric Drill and Bits
- Framing Materials
- Wall Finishing Materials
- Caulking Material (Noncombustible)
- Fireplace Surround Material (Noncombustible)
- Piping Complying with Local Codes
- Pipe Sealant Approved for use with Propane/LPG (Resistant to Sulfur Compounds)

FIREPLACE FRAMING

Firebox framing can be built before or after the appliance is set in place. Construct firebox framing following *Figure* 6 (*page 8*) for specific installation requirements and for firebox dimensions. The framing headers may rest on the top of the firebox standoffs. Do not bring headers below top of standoffs.

The firebox may be installed directly on a combustible floor or raised on a platform of an appropriate height. When the firebox is installed directly on carpeting, tile, or other combustible material, other than wood flooring, the firebox shall be installed on a metal or wood panel extending the full width and depth of the enclosure.

REFERENCE	33CFDV	36CFDV	42CFDV
FIREPLACE DI	MENSIONS	•	•
A	33" (838 mm)	37" (940 mm)	41" (1042 mm)
В	35%" (905 mm)	38½" (978 mm)	38½" (978 mm)
С	31%" (810 mm)	34¾" (883 mm)	34¾" (883 mm)
D	27" (689 mm)	291⁄8" (740 mm)	331⁄8" (841 mm)
E	18" (457 mm)	197⁄8" (505 mm)	19¾"(505 mm)
F	15%" (430 mm)	15%" (430 mm)	15%" (430 mm)
G	21¼" (537 mm)	221⁄8" (562 mm)	26½" (673 mm)
Н	23¼" (591 mm)	25%" (657 mm)	25%" (657 mm)
I	29¾" (759 mm)	32" (813 mm)	36" (914 mm)
J	2¼" (57 mm)	2¼" (57 mm)	2¼" (57 mm)
K	4¾" (111 mm)	4¾" (111 mm)	4¾" (111 mm)
L	28¼" (714 mm)	30½" (775 mm)	30½" (775 mm)
FRAMING DIM	ENSIONS		
М	52¾" (1330 mm)	54½" (1384 mm)	57%" (1464 mm)
N	37" (940 mm)	38½" (978 mm)	40¾" (1035 mm)
0	27½" (689 mm)	28" (711 mm)	30¼" (768 mm)
Р	15%" (397 mm)	15%" (397 mm)	15%" (397 mm)
Q	33½" (850 mm)	37½" (946 mm)	41½" (1054 mm)
R	35%" (913 mm)	38¾" (978 mm)	38¾" (978 mm)

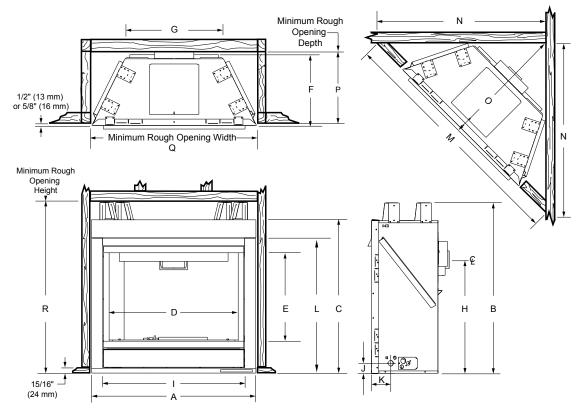


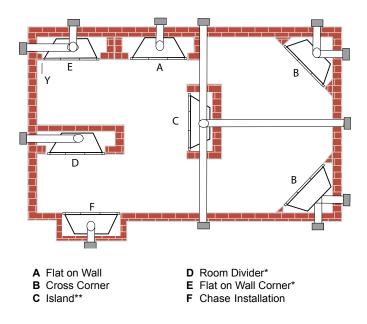
Figure 6 – CFDV Series Fireplace Dimensions

FIREPLACE LOCATION

Plan for the installation of your appliance. This includes determining where the unit is to be installed, the vent configuration to be used, framing and finishing details, and whether any optional accessories (i.e. blower, wall switch, or remote control) are desired. Consult your local building code agency to ensure compliance with local codes, including permits and inspections.

The following factors should be taken into consideration:

- Clearance to side-wall, ceiling, woodwork, and windows. Minimum clearances to combustibles must be maintained.
- This fireplace may be installed along a wall, across a corner, or use an exterior chase. Refer to *Figure 4* for suggested locations.
- Location should be out of high traffic areas and away from furniture and draperies due to heat from appliance.
- · Never obstruct the front opening of the fireplace.
- Do **not** install in the vicinity where gasoline or other flammable liquids may be stored.
- Vent pipe routing. See *Venting* section found in this manual for allowable venting configurations.
- These units can be installed in a bedroom. See National Fuel Gas Code ANSI Z233.1/NFPA 54 — (current edition), the Uniform Mechanical Code — (current edition), and Local Building Codes for specific installation requirements.



- ** Island (C) and room divider (D) installation is possible as long as the horizontal portion of vent system (X) does not exceed 20' (6 m).
- * When you install your fireplace in (D) room divider or (E) flat on wall corner positions (Y), a minimum of 6" (102 mm) clearance must be maintained from perpendicular wall and front of fireplace.

Figure 7 – Locating Gas Fireplace

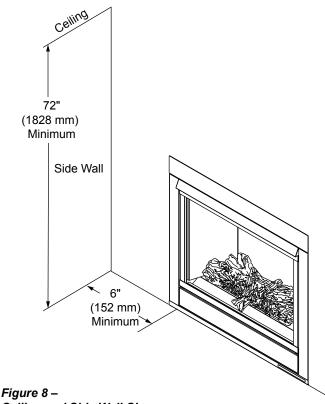
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CLEARANCES TO COMBUSTIBLES

WARNING

Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard.

The appliance cannot be installed on a carpet, tile or other combustible material other than wood flooring. If installed on carpet or vinyl flooring, the appliance shall be installed on a metal, wood or noncombustible material panel extending full width and depth of the appliance.

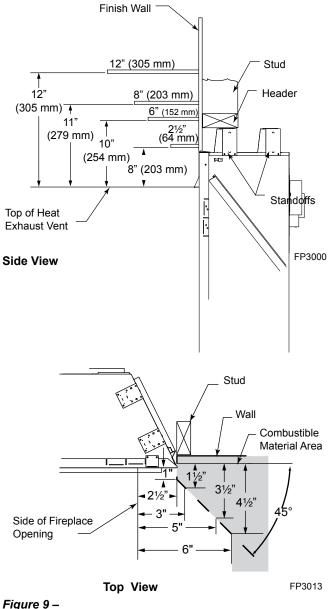


Ceiling and Side Wall Clearances

FP3012

MANTEL CLEARANCES

NOTE: The combustible area above the facing must not protrude more than 3/4" (19 mm) from the facing. If it does, it is considered a mantel and must meet the mantel requirements listed in this manual. *Figure 9*



Mantel Clearances

SECURE FIREPLACE TO FLOOR OR FRAMING

The fireplace must be secured to the floor and/or to framing studs as shown in *Figure 10*. Use two (2) wood screws or masonry/concrete screws to secure fireplace to the floor. Use four (4) screws to attach fireplace to framing. The side nailing flanges are $\frac{1}{2}$ " or $\frac{5}{8}$ " to accommodate different wall thickness.

FINISHING MATERIAL

NOTE: Any wiring (i.e. remote control, wall switch, and optional fan) must be done prior to final finishing to avoid costly reconstruction.

Only noncombustible materials (i.e. brick, tile, slate, steel, or other materials with a UL fire rating of Zero) may be used to cover the black surface of the appliance. A 300°F minimum adhesive may be used to attach facing materials to the black surface. If joints between the finished wall and the fireplace surround are sealed, a 300°F minimum sealant material (General Electric RTV103 or equivalent) must be used.

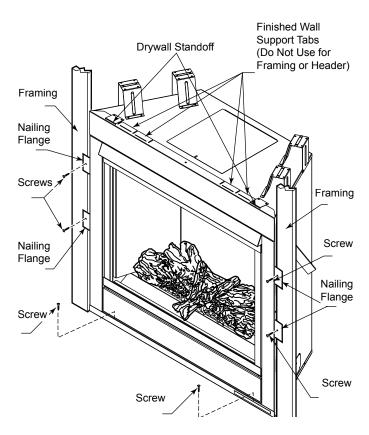


Figure 10 – Securing Fireplace to Floor and Framing Studs

A WARNING

Never obstruct or modify the air inlet. This may create a fire hazard.

OPTIONAL TOP VENT APPLICATION

The appliance is shipped as a rear vent unit. If the installation layout requires the unit to be a top vent configuration the appliance can be converted by following the steps below.

When removing and refitting the plates be sure the associated gaskets are undamaged and refitted as required.

1. Remove the rear plate by removing one (1) screw. Set aside. *Figure 11*

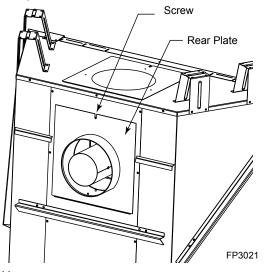


Figure 11 – Remove Rear Plate

2. Remove the plate with the 7" collar and gasket by removing eight (8) screws. Set aside. *Figure 12*

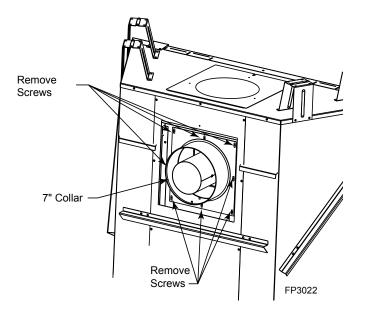


Figure 12 – Remove 7" Collar and Gasket

- 3. Remove the plate with the 4" collar and gasket by removing four (4) screws. Set aside. *Figure 13*
- 4. Remove the top plate located on top of the unit by removing one (1) screw. Set aside. *Figure 13*

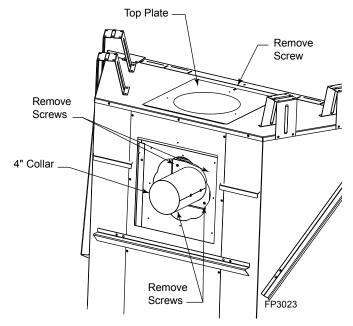


Figure 13 – Remove 4" Collar and Gasket and Top Plate

5. Remove one (1) screw to remove the inner top plate located on top directly beneath the plate just removed. Break away the 7" circle using a screwdriver and reinstall. *Figure 14*

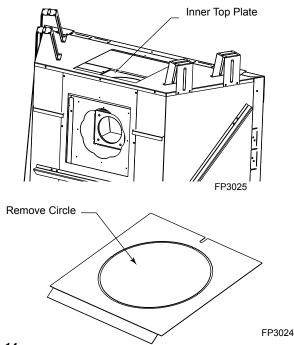


Figure 14 – Remove Circle Section from Inner Top Plate

6. Remove the large square plate and gasket by removing the eight (8) screws. Set aside. *Figure 15*

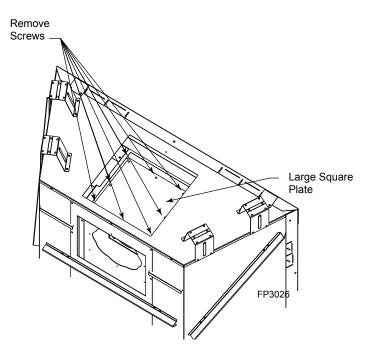


Figure 15 – Remove Large Square Plate and Gasket

7. Remove the small square plate and gasket by removing four (4) screws. Set aside. *Figure 16*

- 8. Install the plate with the 4" collar and gaskets on top of the unit with screws previously removed.
- 9. Install the plate with the 7" collar and gaskets on top of the unit with screws previously removed.
- 10. Install the small square plate and gaskets on the back of the unit with screws previously removed, covering the original rear opening for 4" collar.
- 11.Install the large square plate and gaskets on the back of the unit with screws previously removed, covering the original rear opening for 7" collar. *Figure 17.*

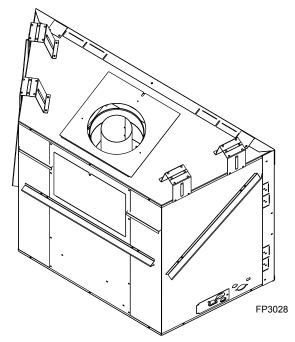


Figure 17 – Completed Top Vent Conversion

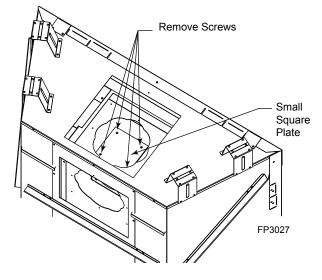


Figure 16 – Remove Small Square Plate and Gasket

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 improperly installed and maintained venting system could result in serious injury, property damage or loss of life.

This fireplace must be vented 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 common vent systems.

Do not pack the open air spaces with insulation or other materials. This could cause high temperatures and may present a fire hazard.

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 vent kit, the installer must read this fireplace manual and vent kit instructions.

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

- Wear gloves and safety glasses for protection.
- Use extreme caution when using ladders or when on rooftops.
- Be aware of 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 Vermont Castings Group.
- Installation other than permitted by these instructions.

GENERAL VENTING

Your fireplace is approved to be vented either through the side wall, or vertical through the roof.

- Only Vermont Castings Group venting components specifically approved and labeled for this fireplace may be used.
- Flexible UL1777 listed venting may be used in any venting application where rigid direct vent components can be used. All restrictions, clearances and allowances that pertain to the rigid piping apply to the flexible venting. Flex kits may not be modified. Flex kits may be added to the end of a vent run made of rigid vent sections using pipe manufacturer's approved flex to pipe adapters. This may occur only if doing so does not violate any of the venting length, height, routing, horizontal to vertical ratio requirements or clearance considerations detailed in this manual.
- Venting terminals shall not be recessed into a wall or siding.
- Vertical side wall venting in horizontal applications must be installed with a 1/4" rise for every 12" of run.
- Select the amount of vertical rise desired. All horizontal run of venting must be run level or have 1/4" rise for every 12" (305 mm) of run towards the termination below 7½ feet of vertical rise. With 7½ feet (2.3 m) or more vertical rise from floor of fireplace, the horizontal run may run level. NEVER run vent piping downward.
- Horizontal venting which incorporates the use of flex venting shall have an inclining slope from the unit of 1/2" (13 mm) per 12" (305 mm).

There must not be any obstruction such as bushes, garden sheds, fences, decks or utility buildings within 24" (610 mm) from the front of the termination hood.

Do not locate termination hood where excessive snow or ice build up may occur. Be sure to check vent termination area after snow falls, and clear to prevent accidental blockage of venting system. When using snow blowers, make sure snow is not directed towards vent termination area.

Location of Vent Termination

It is imperative the vent termination be located observing the minimum clearances as shown on following page.

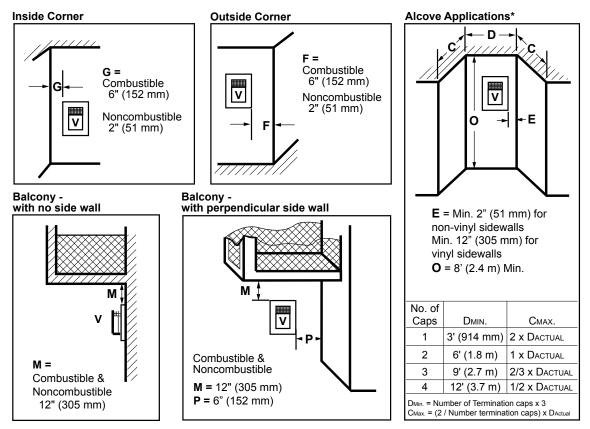
TERMINATION LOCATION		
Figure 19		
Figure 18 – Termination Locations IV VENT TER		E TERMINAL IS NOT PERMITTED
	CANADIAN INSTALLATIONS ¹	US INSTALLATIONS ²
A = Clearance above grade, veranda, porch, deck or balcony	12" (30cm)	12" (30cm)
B = Clearance to window or door that may be opened	6" (15cm) for appliances <10,000 BTU/h (3kW) 12" (30cm) for appliances >10,000 BTU/h (3kW) and <100,000 BTU/h (30kW) 36" (91cm) for appliances >100,000 BTU/h (30kW)	6" (15cm) for appliances <10,000 BTU/h (3kW) 9" (23cm) for appliances >10,000 BTU/h (3kW) and <50,000 BTU/h (15kW) 12" (30cm) for appliances >50,000 BTU/h (15kW)
C = Clearance to permanently closed window	12" (305mm) recommended to prevent window condensation	12" (305mm) recommended to prevent window condensation
D = Vertical clearance to ventilated soffit located above the terminal within a hor- izontal distance of 2' (610 mm) from the center line of the terminal	18" (458mm)	18" (458mm)
E = Clearance to unventilated soffit	12" (305mm)	12" (305mm)
F = Clearance to outside corner	see next page	see next page
G = Clearance to inside corner	see next page	see next page
H = Clearance to each inside of center line extended above meter/regulator assembly	3' (91cm) within a height of 15' (5m) above the meter/regulator assembly	3' (91cm) within a height of 15' (5m) above the meter/regulator assembly
I = Clearance to service regulator vent outlet	3' (91cm)	3' (91cm)
J = Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance	6" (15cm) for appliances <10,000 BTU/h (3kW) 12" (30cm) for appliances >10,000 BTU/h (3kW) and <100,000 BTU/h (30kW) 36" (91cm) for appliances >100,000 BTU/h (30kW)	6" (15cm) for appliances <10,000 BTU/h (3kW) 9" (23cm) for appliances >10,000 BTU/h (3kW) and <50,000 BTU/h (15kW) 12" (30cm) for appliances >50,000 BTU/h (15kW)
K = Clearance to mechanical air supply inlet	6' (1.83m)	3' (91cm) above if within 10' (3m) horizontally
L = Clearance above paved sidewalk or paved driveway located on public property	7' (2.13m) [†]	7' (2.13m) [†]
M = Clearance under veranda, porch, deck or balcony	12" (30cm) [‡]	12" (30cm) [‡]

- 1 In accordance with the current CSA-B149 Installation Codes
- 2 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Codes
- † A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings
- ‡ Only permitted if veranda, porch, deck or balcony is fully open on a minimum 2 sides beneath the floor.
- **NOTE:** 1. Local codes or regulations may require different clearances.

 The special venting system used on Direct Vent Fireplaces are certified as part of the appliance, with clearances tested and approved by the listing agency.
 Vermont Castings Group assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.

TERMINATION CLEARANCES

Termination clearances for buildings with combustible and non-combustible exteriors.



*NOTE: Termination in an alcove space (spaces open only on one side and with an overhang) is permitted with the dimensions specified for vinyl or non-vinyl siding and soffits. 1. There must be a 3' (914 mm) minimum between termination caps. 2. All mechanical air intakes within 10'

Figure 19 –

Termination Clearances

ASSEMBLING VENT PIPE

Only venting components manufactured or approved by Vermont Castings Group may be used in Direct Vent systems.

USA Installations

The venting system must conform to local codes and/or the current National Fuel Code ANSI Z223.1/NFPA 54.

Canadian Installations

The venting system must be installed in accordance with the current CSA-B149.1 installation code.

(1 m) of a termination cap must be a minimum of 3' (914 mm) below the termination cap. 3. All gravity air intakes within 3' (914 mm) of a termination cap must be a minimum of 1' (305 mm) below the termination cap.

584-15

HOW TO USE THE VENT GRAPH

The Vent Graph should be read in conjunction with the following vent installation instructions to determine the relationship between the vertical and horizontal dimensions of the vent system.

- 1. Determine the height of the center of the horizontal vent pipe exiting through the outer wall. Using this dimension on the Side wall Vent Graph, *Figure 20*, locate the point intersecting with the slanted graph line.
- 2. From the point of this intersection, draw a vertical line to the bottom of the graph.
- 3. Select the indicated dimension, and position the fireplace in accordance with same.

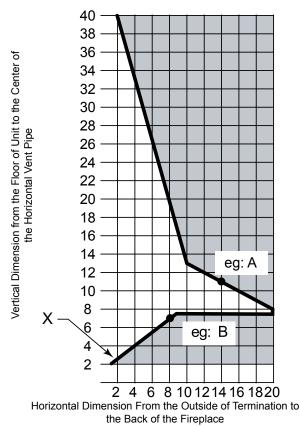
EXAMPLE A:

If the vertical dimension from the floor of the unit is 11' (3.4 m) the horizontal run to the face of the outer wall must not exceed 14' (4.3 m).

EXAMPLE B:

If the vertical dimension from the floor of the unit is 7' (2.1 m), the horizontal run to the face of the outer wall must not exceed 8' (2.4 m).

Refer to Page 26 for snorkel requirements.



X = 22" minimum for 33" Model

 $X = 25^{1}/4$ " minimum for 36" and 42" Models (Floor to center of horizontal pipe)

Figure 20 – Side Wall Venting Graph

SLP PIPE

When using SLP pipe it is not necessary to use sealant on the joints.

To join SLP pipe together, simply align the beads of the male end with the grooves of the female end, twisting the pipe until the flange on the female end contacts external flange on the male end. NOTE: Sealant is not required to assemble fireplace venting. Do not use silicone sealant at the inner flue exhaust connections.

1. Attach the First Vent Component to SLP Starting Collars

To attach the first vent component to the starting collars of the appliance:

- Lock the vent components into place by sliding the pipe section onto the collar.
- Align the seam of the pipe and seam of collar to allow engagement. Rotate the vent component to lock into place. Use this procedure for all vent components. See *Figure 21*.
- Continue adding vent components, locking each succeeding component into place.
- Ensure that each succeeding vent component is securely fitted and locked into the preceding component.
- 2. Commercial or High-Rise Applications

For installation into a commercial or high-rise application: All outer pipe joints must be sealed with high temperature aluminum foil tape, including the slip section that connects directly to the horizontal termination cap.

• Only outer pipes are to be sealed. Do not seal the inner flue. All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed in this manner, unless otherwise stated.

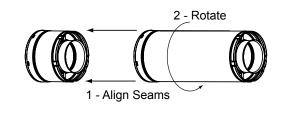


Figure 21– Adding Venting Components

Note: The end of the pipe sections with the lances/tabs on it will face toward the appliance.

ADDITIONAL ASSEMBLY INSTRUCTIONS

1. Assemble Slip Sections

The outer flue of the slip section should slide over the outer flue of the pipe section and into the inner flue of the last pipe section (see Figure 22A).

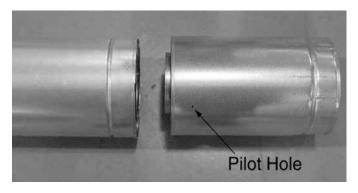
Slide together to the desired length, making sure that a 1½ in. outer flue overlap is maintained between the pipe section and slip section.

The pipe and slip section need to be secured by driving two 1/2 in. screws through the overlapping portions of the outer flues using the pilot holes (see Figure 23).

This will secure the slip section to the desired length and prevent it from separating. The slip section can then be attached to the next pipe section.

If the slip section is too long, the inner and outer flues of the slip section can be cut to the desired length.

WARNING! Risk of Fire/Explosion! DO NOT break seals on slip sections. Use care when removing termination cap from slip pipe. If slip section seals are broken during removal of the termination cap, vent may leak.



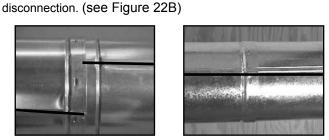
Make sure the seams are not aligned to prevent unintentional

Figure 22A-Slip section pilot holes



CORRECT

Figure 22B-Seams



INCORRECT

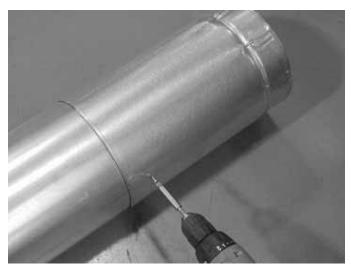


Figure 23-Screws into Slip Section

Secure the Vent Sections

Vertical sections of SLP pipe must be supported every 8 ft.

The SLP firestop includes tabs that may be used to secure vertical sections.

The vent support or plumber's strap (spaced 120° apart) may be used to secure the vertical sections of pipe (see Figure 24).

Horizontal sections of vent must be supported every 5 ft with a vent support or plumber's strap (see Figure 8).

WARNING! Risk of Fire/Explosion/Asphyxiation! Improper support may allow vent to sag and separate. Use vent run supports and connect vent sections per installation instructions. DO NOT allow vent to sag below connection point to appliance.

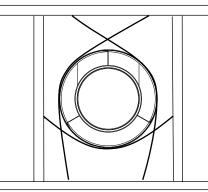


Figure 24-Securing Vertical Pipe Sections

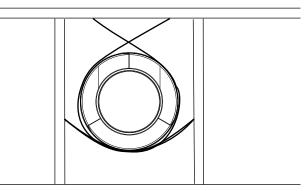


Figure 25 – Securing Horizontal Pipe Sections

DISASSEMBLE VENT SECTIONS

To disassemble any two pieces of pipe, rotate either section (Figure 26), so that the seams on both pipe sections are aligned (Figure 27). They can then be carefully pulled apart.

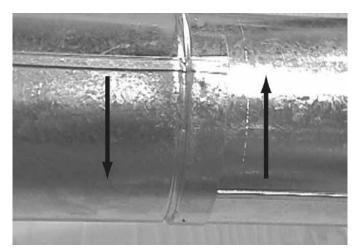


Figure 26 – Rotate Seams for Disassembly

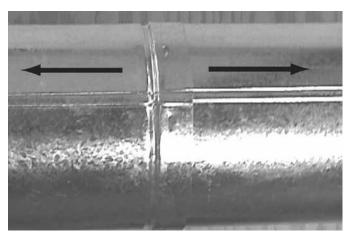


Figure 27– Align and Disassemble Vent Sections

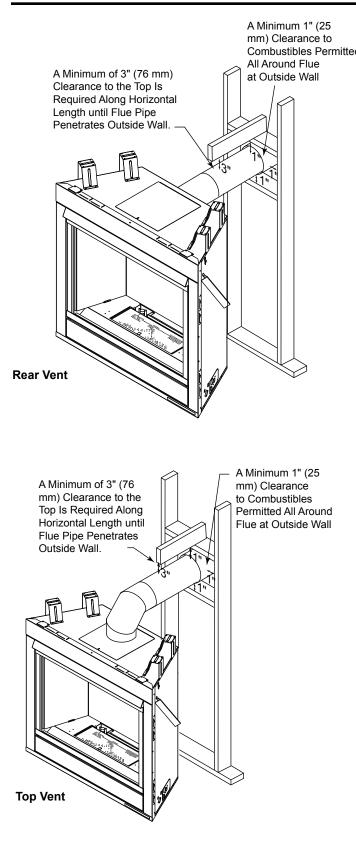
All vertical sections of this vent system require a minimum of 1" (25 mm) clearance to combustibles on all sides of the pipe.

AWARNING

Rear Wall Vent: Horizontal sections of this vent system require a minimum of 3" (76 mm) clearances to combustibles at the top of the flue and 1" (25 mm) clearance at the sides and bottom *until the flue penetrates the outside wall.* A minimum 1" clearance all around the flue is acceptable at this point of penetration.

AWARNING

Rear/Top Vent Vertical Side wall: Horizontal sections of this vent system require a minimum of 3" (76 mm) clearances to combustibles at the top of the flue and 1" (25 mm) clearance at the sides and bottom *until the flue penetrates the outside wall.* A minimum 1" clearance all around the flue is acceptable at this point of penetration. (If vertical rise is 7¹/₂ feet (2.3 m) or higher from the floor when top venting, the clearance to combustibles is 1" on all sides of the horizontal run.)





REAR WALL VENT APPLICATIONS

Combustibles Permitted All Around Flue at Outside Wall

- Only Vermont Castings Group approved venting components are approved to be used in these applications (Refer to 'Venting Components' listed for different installation requirements).
- The maximum horizontal distance between the rear of the appliance (or end of the 45° elbow in a corner application) and the outside face of the rear wall is 20" (508 mm). *Figure 23*
- Only one 45° elbow is allowed in these installations.
- Minimum clearances between vent pipe and combustible materials are as follows:

Top – 3" (76 mm), except at outside wall 1" (25 mm) Sides – 1" (25 mm) Bottom – 1" (25 mm)

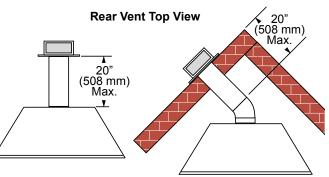


Figure 29 – Rear Vent Application, No Elbows

INNER FLEX VENT PIPE

Start the flexible vent as follows-

A. Installing the inner flex adaptor and pipe.

- Attach the flex adapter starter onto the starting collar on the unit. Align seam of the pipe and seam of collar to allow engagement. Rotate the flex starter to lock onto appliance. Install three (3) self tapping #10 screws through the flex starter into the starting collar of the appliance.
- 2. Slide the small gear clamp over the inner flexible vent pipe, and push out of the way.
- 3. Pull and extend the inner flexible vent.
- 4. Slide the inner vent onto the adapter collar, for a minimum 2" overlap.
- 5. Locate the clamp at approximately 3/4" from the flex end and tighten.
- 6. Secure the clamped inner section with three self tapping screws, drilled equidistant, just above the clamp perimeter.

- B. Installing the outer flex pipe. *Figure 30*
 - 1. Slide the large gear clamp over the outer flexible vent pipe, and push out of the way.
 - 2. Pull and extend the outer flexible vent.
 - 3. Slide the outer vent onto the appliance collar outer adapter for a minimum 2" overlap.
 - 4. Locate the clamp at approximately 3/4" from the flex end and tighten.
 - 5. Secure the clamped outer section with three self tapping screws, drilled equidistant, just above the clamp perimeter.

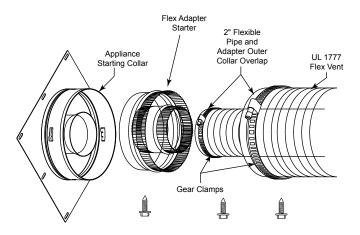


Figure 0 – Typical Appliance Connection

SLP-RVTM -HORIZONTAL TERMINATION KIT

Installation Instructions

- A wall square firestop MUST BE installed if the vent passes through a ceiling or exterior wall. Cut a 9" wide x 9" high (229 x 229 mm) opening through the exterior wall or framing. A wall rectangular firestop (not provided) MUST BE installed if the vent passes through interior walls. In that case, cut a 10" wide x 10" high (254 x 254 mm) opening through the wall or framing. The framing members may need to be reinforced. Position the firestop on the hole previously cut and secure with screws or nails (not provided). Run vent pipe through firestop. The gap between the vent pipe and firestop may be sealed.
- Attach slip section of cap to last vent section. Maintain 1-1/2 in. overlap between slip and vent sections. Make sure the termination cap is installed with the embossed arrow pointing up.
- 3. If the house has vinyl siding, mark and cut the vinyl siding around the pipe so the termination cap can be mounted flush to the wall. Finish the edges of the sid-

ing with trim or "J channel" and caulking to prevent water from leaking into the building. *Figure 13*

- 4. Attach the termination cap to the exterior wall using four (4) screws provided.
- 5. Guide the venting throught the vent hole as you place the appliance in its installed position. Guide the 4" (102 mms) and 6%" (168mm) collar of the vent termination into the outer ends of the venting. Do not force the termination. If the vent pieces do not align with the termination, remove and realign the venting at the appliance flue collars. *Figure 31* Attach the termination to the wall as outlined in the instruction sheet supplied with the termination.

HORIZONTAL TERMINATION CAP

WARNING! Risk of Fire! The telescoping flue section of the termination cap MUST be used when connecting vent. 1½ (38 mm) minimum overlap of vent and telescoping flue section is required. Failure to maintain overlap may cause overheating and fire.

NOTE: For horizontal vent runs through a combustible wall and framing dimensions, refer to appliance installation manual.

Installation Instructions

1. Attach slip section of cap to last vent section. Maintain $1\frac{1}{2}$ in. overlap between slip and vent sections.

NOTE: For installations using black pipe, slide the decorative wall thimble over the last vent pipe before connecting the termination to the pipe. When this connection has been made, slide the wall thimble up to the interior wall surface and attach with screws provided.

- 1. Secure termination cap to exterior wall using provided holes and fasteners.
- 2. Vent termination must not be recessed in the wall. Siding may be brought to the edge of the cap base.
- 3. Flash and seal as appropriate for siding material at outside edges of cap.

When installing a horizontal termination cap, follow the cap location guidelines as prescribed by current **ANSI Z223.1** and **CAN/CGA-B149** installation codes.

CAUTION! Risk of Burns! Local codes may require installation of a termination guard to prevent anything or anyone from touching the hot cap.

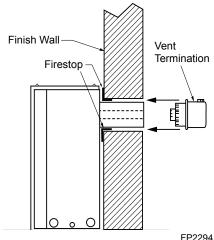


Figure 31 – Side View of Final Unit Location

REAR WALL VENT INSTALLATIONS – FLEX VENT PIPE

Follow Steps 1 and 2 on Page 20.

Step 3

Install the 4" (102 mm) flex vent pipe to the appliance collars described in the *General Information Assembling Vent Pipes* section of this manual. If the installation requires a 45° angle, grasp the vent pipe close to the appliance collar and bend to 45°. DO NOT exceed 45°. *Figure 32*

Install the 7" vent pipe in the same manner as Step 2.

NOTE: There must be a $\frac{1}{2}$ " (13 mm) rise in a 12" (305 mm) length of flex vent. *Figure 33*

Step 4

Assemble the flex vent to the collars on the termination as you did on the appliance.

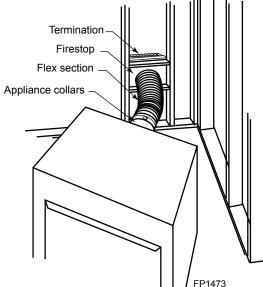


Figure 32 – Grasp the vent pipe close to the collar and end to 45° angle. Do not exceed 45°.

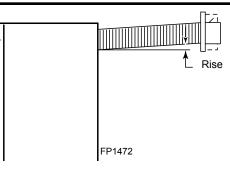


Figure 33 – There must be a 1/2" rise per foot length

TOP VENT SIDE WALL APPLICATION

Since it is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust, certain limitations as to vent configurations apply and must be strictly adhered to.

The Vent Graph, showing the relationship between vertical and horizontal side wall venting, will help to determine the various dimensions allowable.

Minimum clearance between vent pipes and combustible materials is 3" (76 mm) on top, and 1" (25 mm) on the bottom and sides unless otherwise noted.

When vent termination exits through foundations less than 20" (508 mm) below siding outcrop, the vent pipe must flush up with the siding.

It is best to locate the fireplace in such a way that minimizes the number of offsets and horizontal vent length.

The horizontal vent run refers to the total length of vent pipe from the flue collar of the fireplace (or the top of the Transition Elbow) to the face of the outer wall.

Horizontal plane means no vertical rise exists on this portion of the vent assembly.

When installing the appliance as a rear vent unit, the 90° or 45° Transition Elbow attached directly to the rear of the unit is NOT INCLUDED in the following criteria and calculations, and unless specifically mentioned should be ignored when calculating venting layouts.

- The maximum number of 90° elbows per side wall installation is three (3). *Figure 34*
- If a 90° elbow is fitted directly on top of the fireplace flange the maximum horizontal vent run before the termination or a vertical rise is 36" (914 mm). Figure 35
- If a 90° elbow is used in the horizontal vent run (level height maintained) the horizontal vent length is reduced by 36" (914 mm). *Figures 36 & 37*. This does not apply if the 90° elbows are used to increase or redirect a vertical rise. *Figure 34*

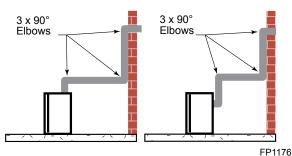


Figure 34 –

Maximum three (3) 90° elbows per installation

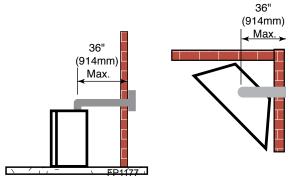


Figure 35 – Maximum horizontal run with no rise

Example: According to the vent graph (Page 16) the maximum horizontal vent length in a system with a $7\frac{1}{2}$ ' (2.3 m) rise is 20' (6 m) and if a 90° elbow is required in the horizontal vent it must be reduced to 17' (5.2 m).

In Figures 36 & 37, dimension A plus B must not be greater than 17' (5.2 m)

- The maximum number of 45° elbows permitted per installation is six (6). These elbows can be installed in either the vertical or horizontal run.
- For each 45° elbow installed in the horizontal run, the length of the horizontal run MUST be reduced by 18" (457 mm). This does not apply if the 45° elbows are installed on the vertical part of the vent system.
- The maximum number of elbow degrees in a system is 270°. *Figure 38*

Example:	Elbow 1 =	=	90°
	Elbow 2 =	=	45°
	Elbow 3 =	=	45°
	Elbow 4 =	=	<u>90°</u>
Total angular	variation =	=	270°

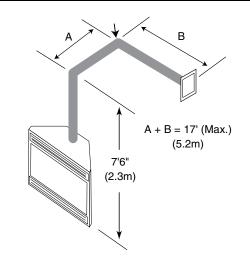


Figure 36 – Horizontal Run Reduction

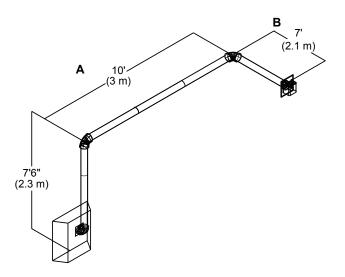


Figure 37 – Maximum Vent Run with Elbows

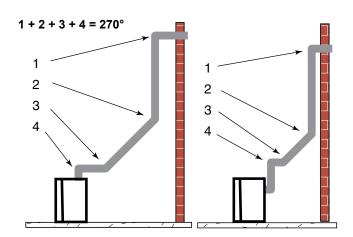


Figure 38 – Maximum Elbow Usage

VERTICAL SIDE WALL APPLICATIONS

For all vertical Side wall installations, the supplied flue restrictors must be installed. Install the flue restrictor according to the settings shown in the Vertical Side wall Installation Flue Restrictor Chart in order to balance the airflow in and out of the unit and to maintain proper flame height.

Vertical Side wall Installation Flue Restrictor Setting Chart

Vertical Run	Horizontal Run	Restrictor Setting
0-8 feet of pipe	2-8 feet of pipe	Minimum restriction
(0 – 2.4 m)	(.6 – 2.4 m)	<i>Figure</i> 39
8-12 feet of pipe	0-12 feet of pipe	Medium restriction
(2.4 – 3.7 m)	(1.2 – 3.7 m)	Figure 40
12-40 feet of pipe	2-10 feet of pipe	Maximum restriction
(3.7 – 12 m)	(.6 – 3 m)	Figure 41



Figure 39 – Flue Restrictor Set at Minimum Restriction



Figure 40 – Flue Restrictor Set at Medium Restriction



Figure 41 – Flue Restrictor Set at Maximum Restriction

VERTICAL SIDE WALL INSTALLATION – PIPE

NOTE: For all top vent vertical through-the-roof installations, install the supplied flue restrictors onto the top edge of the firebox flue adapter according to the Vertical Side wall Installation Flue Restrictor Chart.

Step 1

Locate vent opening on the wall. It may be necessary to first position the fireplace and measure to obtain hole location. Depending on whether the wall is combustible or noncombustible, cut opening to size. *Figure 42* (For combustible walls first frame in opening.)

NOTE: When using flex vent, the opening will have to be measured according to the 1/2" (13 mm) rise in 12" (305 mm) vent run.

Combustible Walls: Cut a 9"H x 9"W (244 x 244 mm) hole through the exterior wall and frame as shown. *Figure* 42

Noncombustible Walls: Hole opening must be 7" (178 mm) in diameter.

Step 2

Secure firestop to the inside frame, center in the 9" x 9" vent opening.

Step 3

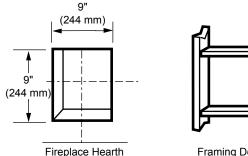
Place fireplace into position. Measure the vertical height (X) required from the base of the flue collars to the center of the wall opening. *Figure 43*

Step 4

Using appropriate length of pipe section(s) attach to fireplace by twisting collar.

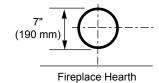
VENTING INSTALLATION

Vent Opening for Combustible Walls



Framing Detail

Opening for Noncombustible Wall





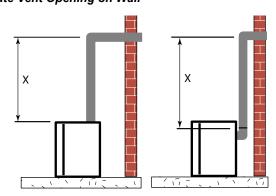


Figure 43 -Vertical Height Requirements

Step 5

Measure the horizontal length requirement including a 2" (51 mm) overlap, i.e. from the elbow to the outside wall face plus 2" (51 mm) (or the distance required if installing a second 90° elbow). Figure 44

ΤE	Always	install	vertical	side	wall	horizonta	al
NO	venting	with a	1/4" rise	for e	very	12" of rur	า.

Step 6

Use appropriate length of pipe sections – telescopic or fixed - and install. The sections which go through the wall are packaged with the starter kit, and can be cut to suit if necessary.

Step 7

Guide the vent terminations 4" and 6%" collars into their respective vent pipes. Double check that the vent pipes overlap the collars by 2" (51 mm). Secure the termination

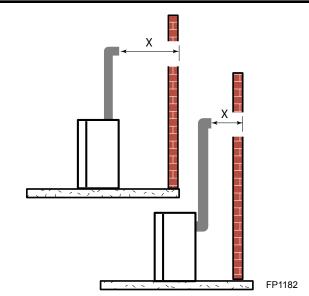
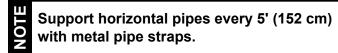
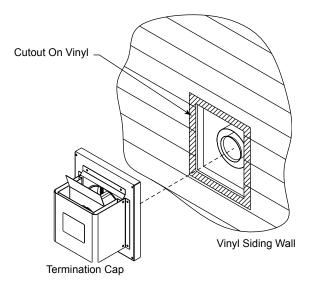


Figure 44 – Horizontal Length Requirement

to the wall with screws provided and caulk around the wall plate to weatherproof. As an alternative to screwing the termination directly to the wall, you may also use expanding plugs or an approved exterior construction adhesive.





Fiaure 45 -Horizontal Termination Cap on a Vinyl Siding Wall

SLP-HSFTK – HORIZONTAL TERMINATION KIT

Figure 46

Installation Instructions

- 1. Set the unit in place and survey how best to vent the unit.
- 2. A wall square firestop **MUST BE** installed if the vent passes through a ceiling or exterior combustible wall. Cut a 9" wide x 9" high (229 x 229 mm) opening through the wall or framing. A wall rectangular firestop **MUST BE** installed if the vent passes through interior walls. In that case, cut a 10" wide x 10" high (254 x 254 mm) opening through the wall or framing. The framing members may need to be reinforced. Position the firestop on the hole previously cut and secure with screws or nails (not provided). Run vent pipe through firestop. The gap between the vent pipe and the firestop may be sealed.
- 3. If the house has vinyl siding, after the termination cap location has been decided, mark and cut the vinyl siding around the termination cap so that the cap can be mounted flush to the wall.
- 4. Attach the SLP flex starter onto the starting collar on the unit. Align seam of the pipe and seam of collar to allow engagement. Rotate the SLP flex starter to lock onto appliance. Install three (3) self tapping #10 screws through the SLP flex starter into the starting collar of the appliance.
- Slide one end of the 4" flex pipe over the inner pipe of the SLP flex starter that is attached to the unit. Secure the flex pipe to the inner of the SLP flex starter with one (1) small band clamp and three (3) self tapping #10 screws.
- Slide the 6%" flex pipe over the outer pipe of the SLP flex starter that is attached to the unit. Secure the flex pipe to the outer of the SLP flex starter with one (1) large band clamp and three (3) self tapping #10 screws.
- 7. Remove the slip section from the termination cap.
- Attach the SLP inner flex adapter to the inner pipe of the slip section for the termination cap using three (3) self tapping #10 screws.
- Attach the SLP outer flex adapter to the outer pipe of the slip section for the termination cap using three (3) self tapping #10 screws.
- 10. Extend 4" inside flex pipe to reach the inner flex adapter on the slip section of the termination cap and install spacer springs. Spacer springs should be equally spaced to prevent the inside and outside flex pipe from touching each other and should be placed in locations where the vent must bend.
- 11. Extend 6⁵/₈" outside flex pipe to reach the outer flex adapter on the slip section of the termination cap.

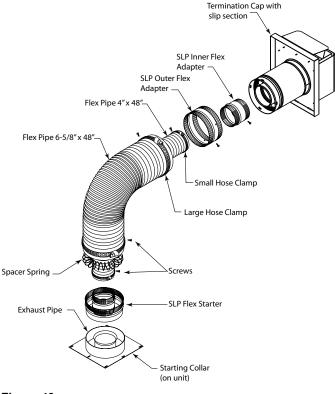
- 12. Slide 4" inner flex pipe over the inner flex adapter on the slip section and secure it with one (1) small band clamp and three (3) self tapping #10 screws.
- 13. Slide 6-5/8" outer flex pipe over the outer flex adapter on the slip section and secure it with one (1) large band clamp and three (3) self tapping #10 screws.
- 14. Carefully form the flexible duct so the end attached to the slip section aligns with the 6.8" diameter opening in the SLP-FS 1" firestop.
- **CAUTION! DO NOT crush, distort, or otherwise modify the dimension of the flexible vent.** Damage could cause appliance to overheat or have performance issues.
- 15. Install the termination cap to the exterior wall with four (4) #8 x 3" screws provided. In some installations the flexible vent may need to pass through the SLP-FS wall shield firestop. The flexible vent outside diameter exceeds the diameter of the hole in the SLP-FS. The diameter of the inner hole of the SLP-FS will need to be increased from 6¾" to 7¼". This modification can be made by trimming ¼" evenly around the circumference of the inner hole in the SLP-FS. This modification is not required in installations where the SLP slip section projects through the SLP-FS.
- 16. Install the slip section on the end of the flex onto the collars on the termination cap. Ensure that the two overlap at least $1\frac{1}{2}$ ".
- 17. When using aluminum or vinyl siding, finish the edges of the siding around the termination cap with "J channel" and caulking to prevent water from leaking into the building.

WARNING! Refer to your fireplace homeowner's manual for the minimum and maximum venting requirements of your fireplace and for approved horizontal vent termination locations prior to installation. Failure to do so may cause fire hazard.

WARNING! Any vertical sidewall horizontal run must have a ¼" rise for every 12" of run towards the vent termination. NEVER ALLOW the vent pipe to run down. This could cause high temperatures and may present a fire hazard.

WARNING! Termination cap must be positioned so the embossed arrow is pointed up.

WARNING! This flexible pipe termination kit is ONLY for horizontal terminations with one (1) 90° bend.





BELOW GRADE INSTALLATION

When it is not possible to meet the required vent terminal clearances of 12" (305 mm) above grade level, a snorkel kit is recommended. It allows installation depth down to 7" (178 mm) below grade level. The 7" (178 mm) is measured from the center of the horizontal vent pipe as it penetrates through the wall.

Ensure the side wall venting clearances are observed. If venting system is installed below ground, we recommend a window well with adequate and proper drainage to be installed around the termination area.

If installing a snorkel, a minimum 24" (610 mm) vertical rise is necessary. The maximum horizontal run with the 24" vertical pipe is 36" (914 mm). This measurement is taken from the collar of the fireplace (or transition elbow) to the face of the exterior wall. See the Side wall Venting Graph for extended horizontal run if the vertical exceeds 24" (610 mm).

- 1. Establish vent hole through the wall. Page 22, Figure 36
- Remove soil to a depth of approximately 16" (406 mm) below base of snorkel. Install drain pipe. Install window well (not supplied). Refill hole with 12" (305 mm) of coarse gravel leaving a clearance of approximately 4" (102 mm) below snorkel. *Figure 41*
- 3. Install vent system.
- 4. Ensure a watertight seal is made around the vent pipe coming through the wall.

- 5. Apply high temperature sealant caulking (supplied) around the 4" and 7" snorkel collars.
- 6. Slide the snorkel into the vent pipes and secure to the wall.
- 7. Level the soil so as to maintain a 4" (102 mm) clearance below snorkel. *Figure 47*

If the foundation is recessed, use recess brackets (not supplied) for securing lower portion of the snorkel. Fasten brackets to wall first, then secure to snorkel with self drilling #8 x $\frac{1}{2}$ sheet metal screws. It will be necessary to extend vent pipes out as far as the protruding wall face. *Figure 48*

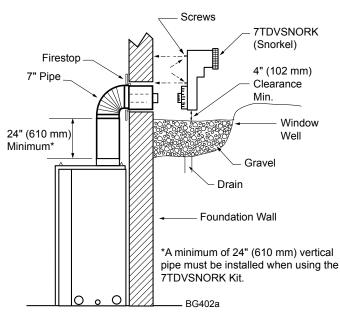
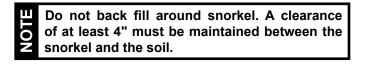


Figure 47 – Below Grade Installation



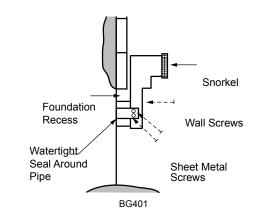


Figure 48 – Snorkel installation, recessed foundation

VERTICAL THROUGH-THE-ROOF APPLICATION

For all vertical through-the-roof installations, the supplied flue restrictors must be installed. Install the flue restrictor according to the settings shown in the Vertical Through-the-Roof Installation Flue Restrictor Chart in order to balance the airflow in and out of the unit and to maintain proper flame height.



Figure 49 – Flue Restrictor Set at Medium Restriction

Vertical Through-the-Roof Installation Flue Restrictor Setting Chart

Vertical Run	Restrictor Setting
8-12 feet of pipe	Medium restriction
(2.4 – 3.7 m)	Figure 49
12-40 feet of pipe	Maximum restriction
(3.7 – 12 m)	Figure 50



Figure 50 – Flue Restrictor Set at Maximum Restriction

This gas fireplace has been approved for:

- Vertical installations up to 40' (12 m) in height. Up to a 10' (3 m) horizontal vent run can be installed within the vent system using a maximum of two 90° elbows. *Figure 51*
- Up to two 45° elbows may be used within the horizontal run. For each 45° elbow used on the horizontal plane, the maximum horizontal length must be reduced by 18" (450 mm).

Example: Maximum horizontal length:

No elbows =
$$10' (3 m)$$

1 x 45° elbow = $8.5' (2.6 m)$
2 x 45° elbows = 7' (2.1 m)

- A minimum of an 8' (2.5 m) vertical rise is required.
- Two sets of 45° elbow offsets may be used within the vertical sections. From 0 to a maximum of 8' (2.5 m) of vent pipe can be used between elbows. *Figure 52*
- SLP-HVS supports offsets. *Figure 54.* This application will require that you first determine the roof pitch and use the appropriate starter kit. (Refer to Venting Components list)
- The maximum angular variation allowed in the system is 270°. *Figure 52*
- For the minimum height of the vent above the highest point of penetration through the roof refer to *Figure 60*.

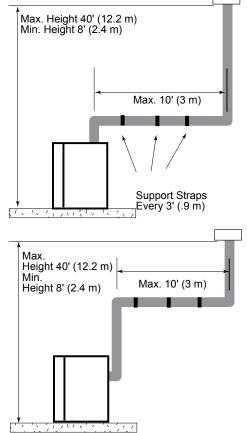


Figure 51 – Support Straps for Horizontal Runs

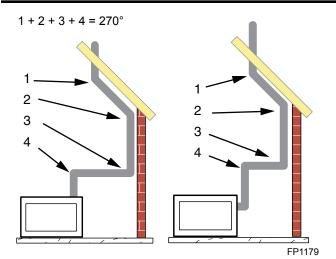


Figure 52 – Maximum Elbow Usage

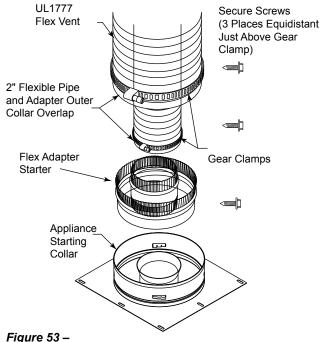
VERTICAL THROUGH-ROOF FLEX VENTING

- Flexible UL1777 listed venting may be used in any venting application where rigid direct vent components can be used. All restrictions, clearances and allowances that pertain to the rigid piping apply to the flexible venting. Flex kits may not be modified. Flex kits may be added to the end of a vent run made of rigid vent sections using pipe manufacturer's approved flex to pipe adapters. This may occur only if doing so does not violate any of the venting length, height, routing, horizontal to vertical ratio requirements or clearance considerations detailed in this manual.
- The flex adapter starter is used to attach flex venting to the appliance starting collar. It includes a 4" inner and 6-5/8" outer unitized flex adapter starter. *Figure 1*
 - The flex adapter starter is required to start all flex runs.
 - Never install damaged or torn flexible venting.
 - Over tightening clamps may rip, tear, or otherwise damage flexible venting.
 - The adaptor kit does not include individual flex pipe sections which may be purchased separately. (UL1777 listed type venting only.)

3. Start the flexible vent as follows-

- A. Installing the inner flex adaptor and pipe. *Figure 1*
 - 1. Attach the flex adapter starter onto the starting collar on the unit. Align seam of the pipe and seam of collar to allow engagement. Rotate the flex starter to lock onto appliance. Install three (3) self tapping #10 screws through the flex starter into the starting collar of the appliance.
 - 2. Slide the small gear clamp over the inner flexible vent pipe, and push out of the way.
 - 3. Pull and extend the inner flexible vent.
 - 4. Slide the inner vent onto the adapter collar, for a minimum 2" overlap.

VENTING INSTALLATION



Typical Appliance Connection

- 5. Locate the clamp at approximately 3/4" from the flex end and tighten.
- 6. Secure the clamped inner section with three self tapping screws, drilled equidistant, just above the clamp perimeter.
- B. Installing the outer flex pipe. Figure 53
 - 1. Slide the large gear clamp over the outer flexible vent pipe, and push out of the way.
 - 2. Pull and extend the outer flexible vent.
 - 3. Slide the outer vent onto the appliance collar outer adapter for a minimum 2" overlap.
 - 4. Locate the clamp at approximately 3/4" from the flex end and tighten.
 - 5. Secure the clamped outer section with three self tapping screws, drilled equidistant, just above the clamp perimeter.
- C. Routing UL1777 flex pipe.
 - 1. Always maintain the required clearance when routing the flex vent assembly.
 - 2. Install firestop spacers, *Figure 55*, when penetrating ceilings, attic spaces, or walls.
 - 3. Do not allow the flexible vent to bend in radius tighter than 5" (127 mm). *Figure 54*
 - 4. Horizontal runs of flexible vent shall be supported at maximum 2 foot intervals; vertical runs, five feet intervals. Metal strapping, properly secured, is an acceptable means to support the flexible vent.
 - 5. Flexible vent spacers are to be installed at intervals prescribed by the flexible vent manufacture; and in such a way as to maintain concentric inner and outer vent spacing.

VENTING INSTALLATION

NOTE: Flex vent pipe spacers: Refer to manufacturer's specifications for correct positioning of the spacer springs to maintain proper distance between inside and outside pipe.

Install the Ceiling Firestop

- Frame an opening 9 in. x 9 in. (229 mm x 229 mm) whenever the vent system penetrates a ceiling/floor . *Figure 55*
- Frame the area with the same sized lumber as used in ceiling/floor joist.
- When installing a top vent vertical termination appliance the hole should be directly above the appliance, unless the flue is offset.
- The ceiling firestop may be installed above or below the ceiling. *Figure 56*
- Secure with three fasteners on each side.
- Do not pack insulation around the pipe. Insulation must be kept away from the pipe.
- The gap between the vent pipe and firestop may be sealed.

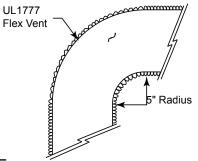


Figure 54 – *^{ever}* Minimum Radius for Flex Vent Section

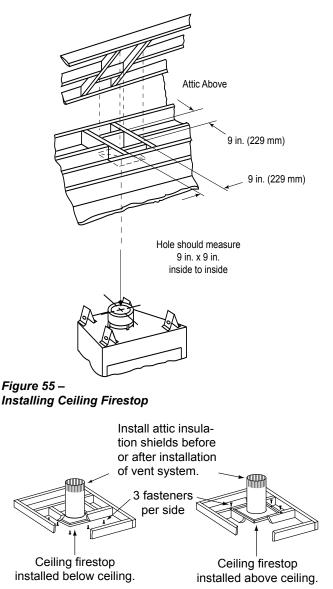


Figure 56 – Installing Ceiling Firestop & Attic Insulation Shield

Install Attic Insulation Shield

WARNING! Fire Risk. DO NOT allow loose materials or insulation to touch vent. VCG/HHT requires the use of an attic shield.

THE NATIONAL FUEL GAS CODE ANSI Z223.1 RE-QUIRES AN ATTIC SHIELD CONSTRUCTED OF 26 GAUGE MINIMUM METAL THAT EXTENDS AT LEAST 2 IN. (51 mm) above insulation.

Attic shields must meet specified clearance and be secured in place.

1. Flat Ceiling Installation

Remove one shield from box.

Cut previously installed batt insulation to make room for the attic insulation shield.

- Wrap shield around pipe if pipe is already installed in area to be insulated.
- Match the three holes in each side and fasten with three screws to form a tube.
- One or more tabs may be folded outward on the bottom of the shield to allow attachment to ceiling firestop.
- Bend remaining tabs inward on bottom of shield where it rests on the ceiling firestop to maintain the air space between the pipe and shield. Set the shield on the ceiling firestop.
- Bend all tabs inward 90° around the top of the shield. These tabs must be used to prevent blow-in insulation from getting between the shield and vent pipe, and to maintain clearance.

2. Vaulted Ceiling Installation

Remove one shield from box.

Cut previously installed batt insulation to make room for the attic insulation shield.

- · Cut the attic insulation shield (if application is for vaulted ceiling) using a laser-etched cut line, to fit your ceiling pitch. Snip cut edge to create three bend tabs.
- Wrap shield around pipe if pipe is already installed in area to be insulated.
- Match the three holes in each side and fasten with three screws to form a tube.
- One or more tabs may be folded outward on the bottom of the shield to allow attachment to ceiling firestop.

- Bend remaining tabs inward on bottom of shield where it rests on the ceiling firestop to maintain the air space between the pipe and shield. Set the shield on the ceiling firestop.
- Bend all tabs inward 90° around the top of the shield. These tabs must be used to prevent blow-in insulation from getting between the shield and vent pipe, and to maintain clearance.

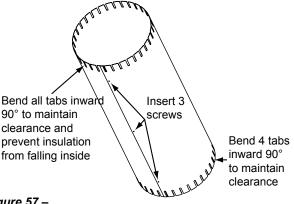
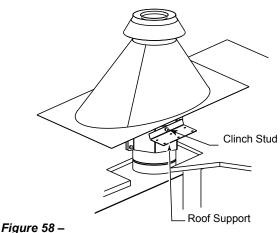


Figure 57 – Attic Insulation Shield

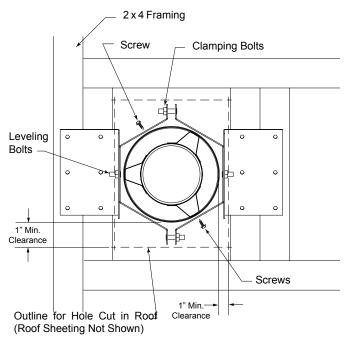
Roof Support

- 1. Fasten the roof support to the roof sheathing using 2" wood screws provided. Figure 58. Ensure that the termination pipe is centered and has a minimum of 1" clearance on all sides from combustible materials. Fiaure 59
- 2. Slip the rigid pipe section into the roof support to the required height and tighten the two clamping bolts to secure pipe. Also, level pipe vertically (plumb) and secure by tightening the leveling bolts.

The roof support must be installed as shown. Weld stud location to top for ease Ö of installation.



Roof Support





Install Roof Flashing

To install roof flashing see Figures 61 and 62.

For installation of vertical termination cap see minimum vent heights for various pitched roofs (see Figure 60).

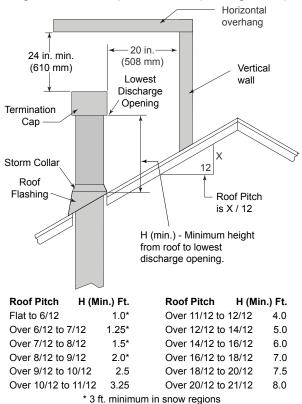


Figure 60 -

Minimum Height from Roof to Lowest Discharge Opening

Caulk the gap between the roof flashing and the outside diameter of the pipe. Caulk the perimeter of the flashing where it contacts the roof surface.

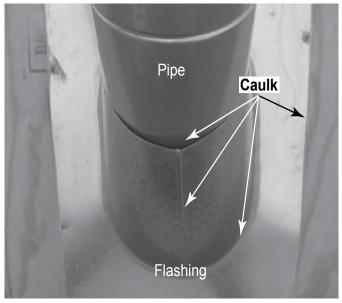


Figure 61 – Caulk the Gap

Assemble and Install Storm Collar

- Slide the storm collar onto the exposed pipe section and align brackets.
- Insert a bolt (provided) through the brackets and install nut (do not completely tighten).
- Slide the assembled storm collar down the pipe section until it rests on the roof flashing.
- Tighten nut and make sure the collar is tight against the pipe section.
- Caulk around the top of the storm collar.



Figure 62 – Insert Bolt into Brackets

VENTING INSTALLATION

Install Vertical Termination Cap

To attach the vertical termination cap, slide the inner collar of the cap into the inner flue of the vent section and place the outer collar of the cap over the outer flue of the vent section.

Secure the cap by driving the three self-tapping screws (supplied) through the pilot holes or dimples in the outer collar of the cap into the outer flue of the vent. *Figure 63*

Attaching Flexible Venting to Vertical

Termination Kit

- 1. Attach the inner flex adapter to the inner pipe of the rigid pipe length using three (3) self tapping #10 screws.
- 2. Attach the outer flex adapter to the outer pipe of the rigid pipe lenth using three (3) self tapping #10 screws.
- 3. Attach the 4" and 6-5/8" flex pipe to the flex pipe adapter in the same manner as the starting adapter. *Figure 65*

Termination



Figure 63 – Secure with Screws

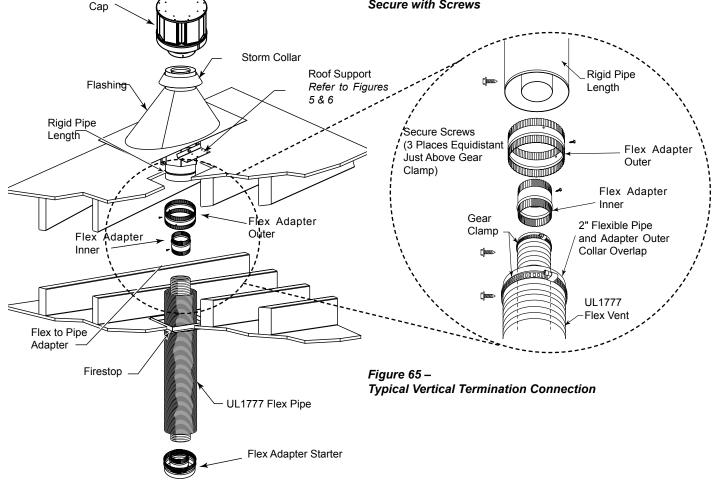


Figure 64 – Typical Vertical Flex Vent Installation

CHECK GAS TYPE

Use proper gas type for the fireplace you are installing. If you have conflicting gas type, do not install fireplace. See dealer where you purchased the fireplace for proper fireplace for your gas type or conversion kit.



.

A qualified installer or service person must connect appliance to gas supply. Follow all local codes.

INSTALLATION ITEMS NEEDED

Before installing fireplace and burner system, make sure you have the items listed below.

- External regulator
- Piping (check local codes)
 - Equipment shutoff valve Test gauge connection
- Tee joint
- Pipe wrench
- Sediment trap (recommended)
- Sealant (resistant to propane/LP gas) (supplied by installer)
- approved flexible gas line with gas connector (if allowed by local codes — not provided)
- * A CSA design-certified equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the CSA design-certified equipment shutoff valve from your dealer.

For propane/LP connections only, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11 and 13 inches of water. If you do not reduce incoming gas pressure, burner system regulator damage could occur. Install external regulator with the vent pointing down as shown in *Figure 66*. Pointing the vent down protects it from freezing rain or sleet.

AUTION

For propane/LP units, never connect fireplace directly to the propane/LP supply. This burner system requires an external regulator (not supplied). Install the external regulator between the burner system and propane/LP supply.

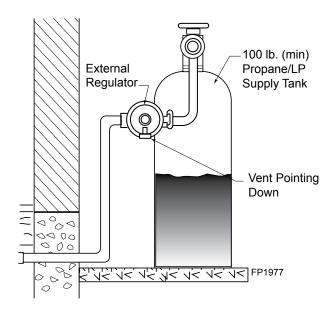


Figure 66 – External Regulator with Vent Pointing Down (Propane/LP Only)

VOLUCE Use only new black iron or steel pipe. Internally tinned copper or copper tubing can be used per National Fuel Code, Section 2.6.3, providing gas meets hydrogen sulfide limits, and where permitted by local codes. Gas piping system must be sized to provide minimum inlet pressure (listed on data plate) at the maximum flow rate (BTU/hr). Undue pressure loss will occur if the pipe is too small.

When using copper or flex connectors use only fittings approved for gas connections. The gas control inlet is 3/8" NPT.

GAS PIPE INSTALLATION

AWARNING

Only persons licensed to work with natural or liquid propane gas may make the necessary gas connections to this appliance.

NOTE: The gas line connection may be made using 1/2" rigid tubing or an approved flex connector. Since some municipalities have additional local codes it is always best to consult your local authorities and the current edition of the National Fuel Gas Code ANSI.Z223.1, NFPA54. In Canada CSA-B149 (1 or 2) Installation Code.

A listed manual shutoff valve must be installed upstream of the appliance. Union tee and plugged 1/8" NPT pressure tapping point should be installed upstream of the appliance. *Figure 67*

IMPORTANT: Install main gas valve (equipment shutoff valve) in an accessible location. The main gas valve is for turning on or shutting off the gas to the fireplace.

Check your building codes for any special requirements for locating equipment shutoff valve to fireplaces.

A manual shutoff valve must be installed upstream of the appliance. Union tee and plugged 1/8" NPT pressure tapping point should be installed upstream of the appliance. *Figure 67*

Apply pipe joint sealant lightly to male threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged burner system valve. We recommend that you install a sediment trap/drip leg in supply line as shown in *Figure 67*. Locate sediment trap/ drip leg where it is within reach for cleaning. Install in piping system between fuel supply and burner system. Locate sediment trap/drip leg where trapped matter is not likely to freeze. A sediment trap collects moisture and contaminants and keeps them from going into the burner system gas controls. If sediment trap/drip leg is not installed or is installed wrong, burner system may not run properly.

CAUTION

Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.

CHECK GAS PRESSURE – MILLIVOLT

- 1. Check gas type. The gas supply must be the same as stated on the appliance's rating decal. If the gas supply is different from the fireplace, **STOP!** Do not install the appliance. Contact your dealer immediately.
- To facilitate easier installation, an 18" (457 mm) flex line with manual shut-off valve has been provided with this appliance. Install and attach 1/2" gas line onto shut-off valve.
- 3. After completing gas line connection, purge air from gas line and test all gas joints from the gas meter to the fireplace for leaks. Use a solution of 50/50 water and soap or a gas sniffer.

Do NOT use open flame to check for gas leaks.

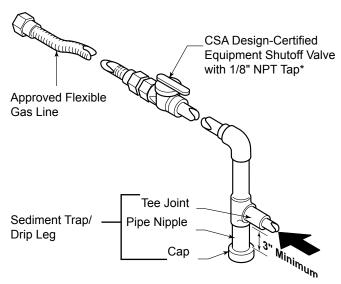


Figure 67 – Gas Connection

Natural Gas

From Gas Meter (4.5" w.c. to 10.5" w.c. Pressure) **Propane/LP** From External Regulator (11" w.c. to 13" w.c. Pressure)

- 4. To adjust flame height, turn HI/LO knob to HI to get maximum pressure to burner. Turn HI/LO knob to LO to get minimum pressure.
- 5. To check gas pressures at valve, turn captured screw counter clockwise 2 or 3 turns and then place tubing to pressure gauge over test point. Turn unit to high. *Figure 68.* After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check test points for gas leaks.

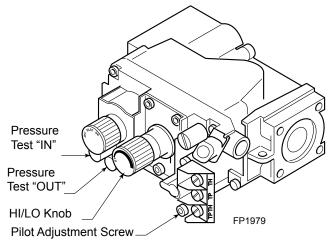


Figure 68 – Millivolt Gas Pressure Check at Gas Valve

JUNCTION BOX WIRING

- This should be done before framing the fireplace. Wire the receptacle into an electrical circuit. Wire with minimum 60° C wire in accordance with prevailing codes.
- 2. Remove the external junction box cover by removing the screw from the side of the outside firebox wall. Junction box was installed at the factory.
- 3. The junction box cover has a factory installed "romex" style strain relief connector. After connecting the wires, route the wire leads through this connector. *Figure 69*

Verify proper operation after servicing.

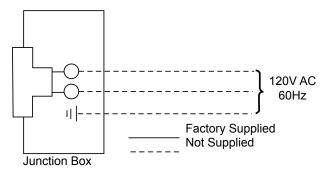


Figure 69 – Junction Box Wiring Diagram

ELECTRICAL WIRING

This fireplace will work without any electrical supply. Electricity is only needed to operate blower.

NOTE: If installed in mobile home, fireplace must be bolted securely to floor.

WARNING

Electrical connections should only be performed by a qualified, licensed electrician. Main power must be off when connecting to main electrical power supply or performing service. All wiring shall be in compliance with all local, city and state codes. The 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 (latest edition) and Canadian Electrical Code, CSA C22.1.

CAUTION

Label all wires before disconnecting when servicing controls. Wiring errors can cause improper and dangerous operation.

REMOTE WALL MOUNTED SWITCH

A remote wall switch and up to fifteen (15) feet of 18 Ga. wire may be used with this appliance. Attach the wall switch in a junction box at the desired location on the wall. *Figure 70*. Do not extend beyond the wall switch wire length provided.

NOTE: Extended lengths of wire may cause the fireplace not to function properly. Longer length of wire is permitted if the wire is made out of larger gauge (diameter) wire. Always check with local code.

WARNING

Do NOT connect wall switch to 110V circuit.

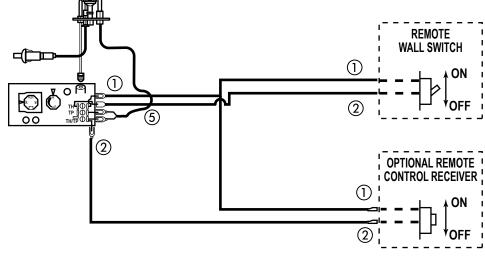


Figure 70 – Wiring Diagram for Wall Switch

OPTIONAL DC REMOTE SYSTEMS

See section entitled *Hearth Mount* in the Millivolt hand held remote instructions supplied with the remote.

- 1. Using a flat head screw driver, bend the remote tabs up from the bottom of the fireplace. *Figure 71*
- 2. Follow the instructions on remote control to snap the remote cover plate to the remote receiver
- 3. Connect the wire terminal from the remote receiver. *Figure 70*
- 4. Use the screws that came with the remote control to mount the remote receiver cover to the bent up remote tabs. *Figure 71*

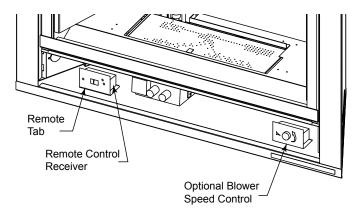


Figure 71 – Optional Control Location

OPTIONAL FAN/BLOWER SYSTEMS – BLOT

The junction box for the fan/blower systems has been factory installed. This system requires that 110-120 VAC to be wired to the factory installed junction box before the fireplace is permanently installed. *Figure 72*

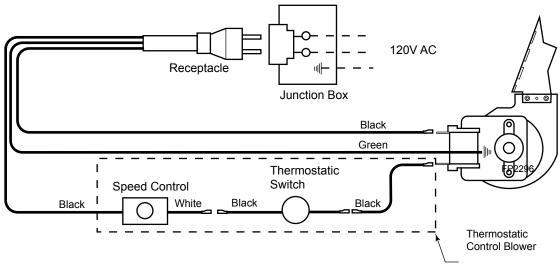
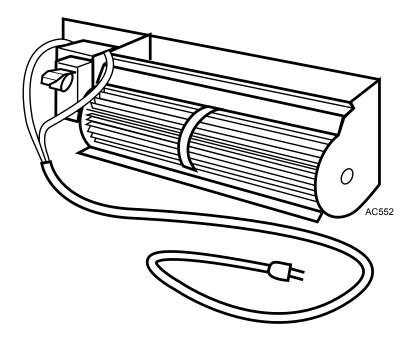


Figure 72 – BLOT Blower Wiring Diagram

OPTIONAL FAN/BLOWER SYSTEMS – FK12



FOR YOUR SAFETY READ BEFORE LIGHTING

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

- **A.** This appliance is equipped with a pilot which must be lit with built-in piezo ignitor while following these instructions exactly.
- **B.** BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

- Turn off all gas to the appliance.
- Open windows.
- ٠ Do not attempt 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. ٠
- **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 gualified service technician. Force or attempted repair may result in a fire or explosion.
- **D.** Do not use this appliance if any part of it has been under water. Immediately call a gualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water. We recommend the unit be completely replaced if it has been under water.

LIGHTING PILOT FOR THE FIRST TIME

INITIAL LIGHTING

Purge air from the supply line as follows:

- Open main shutoff valve.
- · Unscrew main pressure test point.
- · Leave inlet test screw open until gas comes in.
- When gas is flowing, tighten inlet screw immediately.

LEAK TESTING

- 1. Follow the pipe from the gas supply line connection to the gas valve. Check connection for leaks with soap and water mixture.
- 2. Next check for gas leaks at the burner with soap and water mixture.
- 3. Check the pilot for gas leaks with soap and water mixture.

Do NOT use open flame to check for gas leaks.

LIGHTING PILOT FOR THE FIRST TIME

APPROVED LEAK TESTING METHOD

You may check for gas leaks with the following methods only:

- Soap and water solution
- An approved leak testing spray
- Electronic sniffer

NOTE: Remove any excessive pipe compound from the connections. Excessive pipe compound can set off electronic sniffers.

Check for gas leaks in each of the following locations:

- · Pipe from the gas supply line connection to the gas valve
- Burner connections
- Pilot
- Each joint or connection

- Field made joints / gas shutoff valve
- · Factory made joints
- All joints on valve and control body

Do NOT use open flame to check for gas leaks.

AWARNING

If using a soap and water solution to test for leaks, DO NOT spray solution onto control body.

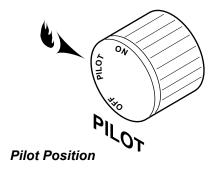
LIGHTING PILOT

The control is fitted with a safety interlock device which prevents unsafe ignition of the pilot burner after the control knob has been turned to the OFF position. The knob may only be rotated back to the PILOT position after the safety magnet has been released (approximately 60 seconds). You will hear a "click" when the safety magnet releases.

The gas control knob is designed to be operated by hand. DO NOT use any tools during this operation. Damaged knobs may result in serious injury.

- 1. Depress and turn knob counterclockwise r to pilot position.
- 2. Depress fully and hold pilot gas knob. Depress piezo igniter as many times as needed to ignite pilot. Keep knob fully depressed for 30 - 60 seconds. Release and check that pilot continues to burn.

If the pilot does not stay lit, repeat steps 1 and 2.



Continued on next page

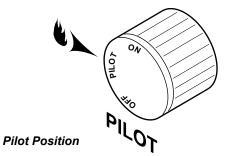
LIGHTING BURNER

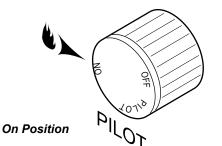
LIGHTING THE BURNER

Depress and turn the knob counterclockwise row to the "ON" position. It will take less than four (4) seconds for the burner to ignite.

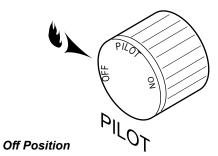
MAIN BURNER SWITCH

This switch allows you to turn on and to turn off the main burner without using the gas valve knob. Make sure the switch is in the "ON" position to light the main burner.





TO TURN OFF GAS



Wall Switch

CHECK GAS PRESSURE – IPI

- Check gas type. The gas supply must be the same as stated on the appliance's rating decal. If the gas supply is different from the fireplace, STOP! Do not install the appliance. Contact your dealer immediately.
- To facilitate easier installation, an 18" (610 mm) flex line with manual shut-off valve has been provided with this appliance. Install and attach 1/2" gas line onto shut-off valve.
- 3. After completing gas line connection, purge air from gas line and test all gas joints from the gas meter to the fireplace for leaks. Use a solution of 50/50 water and soap solution or a gas sniffer.
- 4. To check gas pressures at valve, turn captured screw counter clockwise 2 or 3 turns and then place tubing to pressure gauge over test point. Turn unit to high. *Figure 74.* After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check test points for gas leaks. Ensure that master switch and cold climate switch are turned off before energizing unit.

Do NOT use open flame to check for gas leaks.

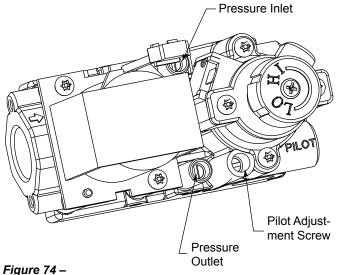


Figure 74 IPI Valve

ELECTRICAL WIRING

General

- 1. This fireplace is equipped with an IPI control valve which operates on 6 volts. The 6 volt DC adapter plugs into the fireplace junction box A/C power supply.
- The IPI system can also be operated without A/C power. The system can run on four (4) "AA" batteries using the optional battery backup for approximately four (4) to six (6) months under normal use.

Optional Accessories

This fireplace may be used with a wall switch, wall mounted thermostat or IPI hand held remote control.

WARNING

Before energizing a unit with IPI control system, ensure that the master switch and cold climate switch are in the OFF position.

WARNING

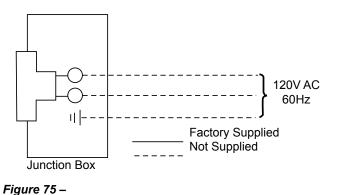
Electrical connections should only be performed by a qualified, licensed electrician. Main power must be off when connecting to main electrical power supply or performing service. All wiring shall be in compliance with all local, city and state codes. The appliance, when installed, must be electrically grounded in accordance with local codes or in the absence of local codes, with the National Electrical Code ANSI/NFPA 70 (latest edition) and Canadian Electrical Code, CSA C22.1.

Label all wires before disconnecting when servicing controls. Wiring errors can cause improper and dangerous operation.

JUNCTION BOX WIRING

Junction Box Wiring Diagram

- This should be done before framing the fireplace. Wire the receptacle into an electrical circuit. Wire with minimum 60° C wire in accordance with prevailing codes.
- 2. Remove the external junction box cover by removing the screw from the side of the outside firebox wall. Junction box was installed at the factory.
- 3. The junction box cover has a factory installed "romex" style strain relief connector. After connecting the wires, route the wire leads through this connector. Refer to the wiring diagram in *Figure 75*.



WALL SWITCH INSTALLATION

The wall switch wire connection is located off the wire harness coming out of the IPI Control Board. The wire is labeled 'wall switch'. Connect the low voltage switch wires to the two (2) terminals labeled "wall switch" from the control board. Run wire to desired location on wall. Up to 50 feet of 18 gauge wire may be used if necessary. Attach wires to wall switch. Mount the wall switch in a junction box and screw on cover. *Figure* 76

Do NOT connect wall switch to 110V circuit.

IPI SYSTEM WIRING DIAGRAM

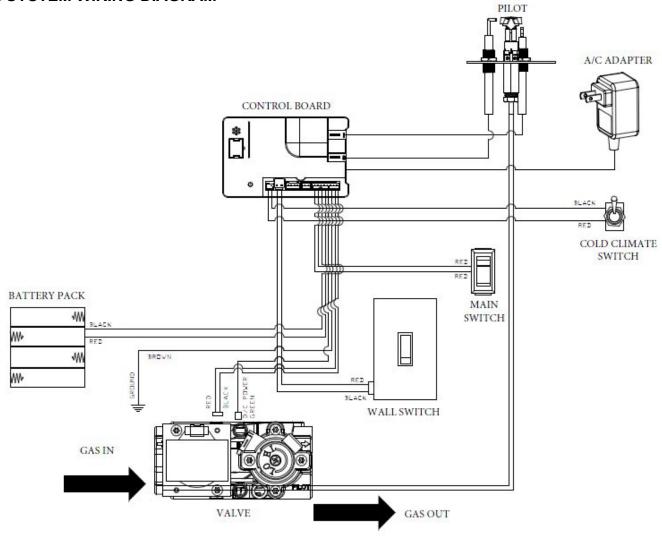


Figure 76 – IPI System Wiring Diagram

Electrical connections should only be performed by a qualified, licensed electrician. Main power supply must be turned off before connecting fans to the main electrical power supply or performing service.

FOR YOUR SAFETY READ BEFORE LIGHTING

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

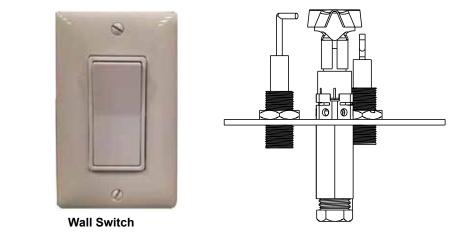
- **A.** This appliance is equipped with an ignition device which automatically lights the pilot. Refer to the instructions.
- **B.** BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

- Do not attempt 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.** Turn Master Switch to ON position by hand. Never use tools. If the switch will not function 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 of it 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 that has been under water. We recommend the unit be completely replaced if it has been under water.

OPERATING INSTRUCTIONS

- 1. **STOP!** Read the safety information above.
- 2. This appliance is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
- 3. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow the safety information on the prior page. If you do not smell gas, go to next step.
- 4. Press the wall switch to the "ON" (-) position. Sparker will spark and pilot flame will light.
- 5. Once pilot flame is established, the main burner flame will light automatically.
- 6. If the pilot will not stay lit after several tries, turn the master switch to "OFF" and call your service technician or gas supplier.





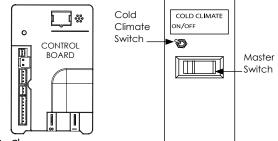
Master Switch

TO TURN OFF GAS TO APPLIANCE

- 1. Turn Wall Switch to "OFF".
- 2. Turn Master Switch to "OFF".
- 3. Turn off all electrical power to the appliance if service is to be performed.



OPERATIONS AND INDICATIONS



System Set Up Chart

NOTE: When using ON/OFF wall switch, the master switch, located in bottom of fireplace must be in the ON position to perform all configuration setup operations.

FUNCTION		DEFAULT SETTING
Cold Climate Pilot On/Off	Flip the toggle switch to ON.	OFF

Operations

FUNCTION	OPERATION
Power Up	Flip the Master Switch to ON position to power up the system.
Fireplace On	Turn on wall switch to turn the fireplace on. NOTE: If master switch was just switched to ON, then at first use of wall switch, it may need to be turned ON - OFF - ON to synchronize the two switch settings.
Fireplace Off	Turn the wall switch to the OFF position, or turn the ON/OFF master switch to the OFF position

Self Diagnostics Chart

The fireplace has a self diagnostic LED on the control board enabling you to troubleshoot problems and potentially avoid a service call. Please refer to the chart below for indicator reference.

FUNCTION	OPERATION
Sparking error	Red LED, Flash 2 times
Flame error	Red LED, Flash 3 times
Ignition fail	Red LED, Flash 4 times
Re-ignite warning	Red LED, Flash 5 times
Pilot valve voltage error	Red LED, Flash 6 times
Main valve voltage error	Red LED, Flash 7 times
Low battery	Red LED 2.5 sec, Flash once

Remote Operations

The following functions are available on the RMSC hand held remote. NOTE: Flame height control is only available with purchase and installation of a stepper motor kit with RF receiver

REMOTE FUNCTION	OPERATION	ICON	
Fireplace On	replace On Press the ON button on the transmitter.		
Fireplace Off	Press the OFF button 3 times or hold the OFF button 3 seconds for memory off.		
Flame Height Up	Press the ON button once to turn on the fireplace with maximum flame setting.	() () () () () () () () () ()	
Flame Height Down	ame Height Down Press the OFF button to lower the flame height to medium and low.		
Count Down Timer Mode	Press TIMER button to enter the timer mode. Keep pressing the TIMER button to set the desired time or press TIMER button to "0" to exit timer mode.	10°	

GLASS FRAME REMOVAL

NOTE: You must first remove the safety barrier before you remove the glass frame. To remove the barrier, simply lift up and pull out until the tabs are clear of their corresponding slots on the firebox. Then proceed to remove the glass frame by following the steps below.

- 1. Remove heat shield by pulling forward.
- 2. Release the two (2) latches on the top of the fireplace by pulling forward and up. *Figure* 77
- 3. Tilt glass frame out and lift glass frame up and away. *Figure 78*
- 4. Set glass frame aside.



Figure 77 – Glass Frame Latch

Each latch has a quick spring force. When reinstalling glass, keep fingers clear.





HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed.

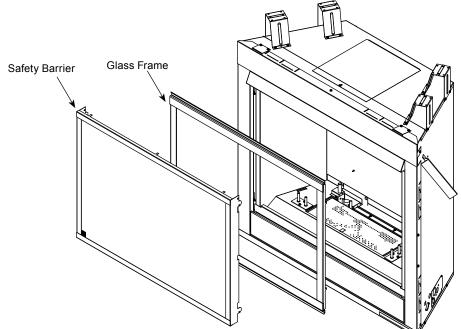


Figure 78 – Remove Safety Barrier and Glass Frame

PILOT FLAME

The flames from the pilot should be visually checked as soon as the heater is installed and periodically during normal operation. *Figure 79*. **The pilot flame must always be present when the fireplace is in operation.** The pilot flame has three distinct flames, one engulfing the thermopile, one engulfing the thermocouple or sensor, and the other reaching to the main burner.

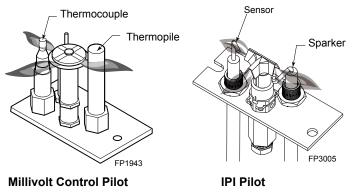


Figure 79 – Pilot Flame

BURNER FLAME

The flames from the burner should be visually checked as soon as the heater is installed and periodically during normal operation. In normal operation, at full rate, and after operating for about 15 to 30 minutes, the flame should be yellow. *Figure 80*

If the flame is blue and only in the center, turn off unit and let cool. After unit is cool, remove logs and check to make sure rock wool is placed correctly. Replace logs.

NOTE: The type of installation, vent system configuration, and wind effects may cause the flame patterns to vary.

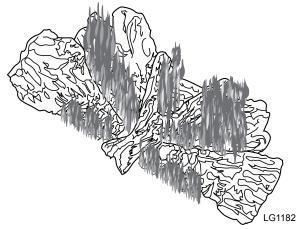


Figure 80 – Burner Flame Appearance

PILOT FLAME

Firebrick and porcelain liner kits are approved to be used with with your fireplace. Before you begin installation, ensure that you have the correct size liner kit for your fireplace.

WARNING

Turn off, unplug, and allow the fireplace to cool before installing the panels. Only a qualified service person should service and repair the fireplace. A qualified service person must connect and disconnect the fireplace to the gas supply. Follow all local codes.

Always handle the panels with two hands. Do not force the panels into place. Excessive force will break the panels. Always wash hands after handling the panels.

Read these instructions carefully before beginning to install the panels. Please check your fireplace size and model number to verify the correct kit part number.

Some fireplace systems may require removal of a screen panel, glass front, log assembly or engine assembly before you can install the panels. Please refer to the homeowner's manual for further instruction.

INSTALLING PORCELAIN LINER KIT

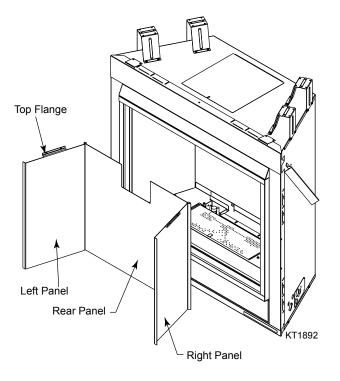
Kit contents:

- One (1) Right panel
- One (1) Left panel
- One (1) Rear panel
- Four (4) Self-drilling #8 screws

NOTE: If logs are being used, porcelain panels must be installed first.

- 1. Remove safety barrier, glass frame, and stones, fireglass or logs (if applicable).
- 2. Remove top heat shield.
- 3. Place rear panel against the center of the rear wall of the firebox.
- Place left and right panels against firebox sides and attach top flanges of the panels using self-drilling screws provided.
- 5. Replace stones, fireglass and/or logs as applicable and re-install glass frame and safety barrier.

FINAL INSTALLATION



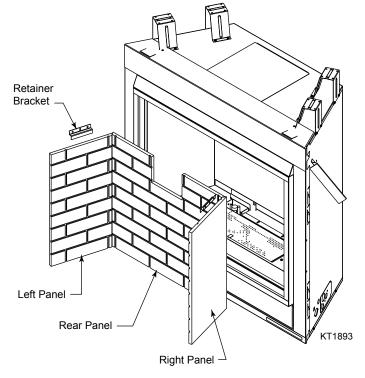


Figure 81 – Porcelain liner installation

INSTALLING BRICK LINER KIT

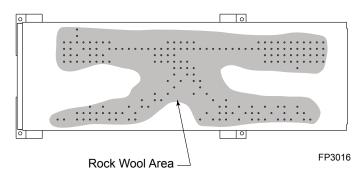
Kit contents:

- One (1) Right panel
- One (1) Left panel
- One (1) Rear panel
- Two (2) Self-drilling #8 screws
- Two (2), Retainer brackets
- 1. Remove the canopy, safety barrier, glass door frame and log set (if applicable) .
- 2. Remove the top heat shield.
- 3. Install the center firebrick panel on the back wall first. Stand firebrick panel straight up against the back of fireplace with the bottom edge at bottom of inner firebox.
- 4. Repeat Step 3 with the left and right side firebrick panels. Secure the top of each side firebrick panel to the fireplace with one retainer bracket and one screw.
- 5. Use a screw gun to drive in the self-drilling screw into the sheet metal through the hole in the retainer bracket.
- 6. Re-install top heat shield.
- 7. Re-install log set, glass door, safety barrier and canopy.

Figure 82 – Firebrick liner installation

ROCK WOOL PLACEMENT

- 1. Your fireplace is supplied with three (3) 8-gram bags of rock wool embers: Use one (1) 8 gram bag of rock wool for propane/LP models and up to three (3) bags of rock wool for natural gas models depending on the size of your fireplace.
- 2. For best results in flame appearance and operation, pull the rock wool apart into dime-sized pieces or smaller. Cover the entire ported surface of the burner with one thin layer of rock wool. *Figure 83*
- 3. Place the logs on the burner. Refer to the "Log Placement Section." Light the unit and after 15 minutes check burner flame and glow. Adjust embers as necessary to achieve an even and clean flame.



Rear Log #1

The use of too much rock wool could cause flame to burn poorly and may cause sooting.

LOG PLACEMENT

1. Place rear log (#1) on the two (2) brackets in the back of the firebox. The log should be placed between the two bent tabs on the right and left, and rest against the two rear tabs. Figure 85

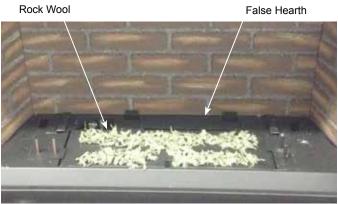


Figure 83 -Placement of Rock Wool on Burner

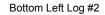


Figure 85

ADJUSTABLE BAFFLE

NOTE: An adjustable baffle plate is shipped in the maximum open position secured to the false bottom. The baffle plate may be adjusted forward up to 3/8" to fully close to regain the flame height by restricting air flow to the burner for some applications. Figure 84

2. Place the bottom left and right logs (#2 & #3) on the two (2) pins located on the left and right sides of the false hearth toward the front. Figure 86



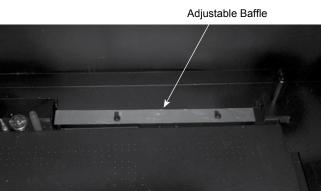
Bottom Right Log #3



Figure 86

Bend the tab in the center front of the false hearth up to a 90° angle. Figure 87. Place the top log (#4) by resting the square notch located on the bottom of the log over the tab mentioned above. Rest the top part of the log on the flat areas of the rear log. Figure 88

Figure 84 -Adjustable Baffle



FP3039

LAVA ROCK PLACEMENT

Sprinkle lava rock on the raised floor of the inner combustion chamber. Evenly distribute the rock. *Figure 89*

AWARNING

Do not sprinkle the lava rock on top of the burner. This may cause sooting, glass breakage and a fire hazard.

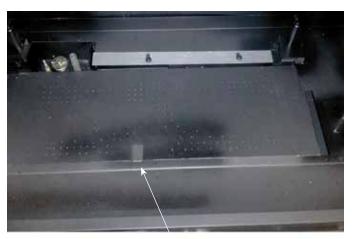


Figure 87

Center Tab

LG1183



Figure 88

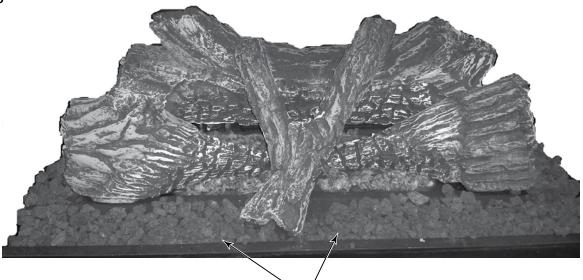


Figure 89 20306739 LG1184

Turn off gas before servicing fireplace. It is recommended that a qualified service technician perform these check-ups at the beginning of each heating season.

FIREGLASS AND STONE PLACEMENT

Your CFDV fireplace system is designed to be configured in a traditional format (with logs) or a contemporary design (using fireglass and stones). You may elect to use only fireglass or a combination of fireglass and stones. (The unit is *not* designed to be operated with stones only. If you opt to utilize the stones, you must also place fireglass on the burner.) The below instructions explain how to set up the fireplace with fireglass and/or fireglass and stones. The CKCFDV kit and/or GKB, GKD, GKO and GKS fireglass kits are designed for use with these instructions.

WARNING: Before beginning installation, turn off fireplace and allow to cool completely.

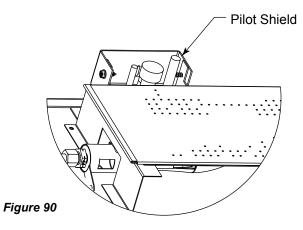
Kit contents:

- 16 Stones
- 1 Bag of Onyx Glass
- 1 Bag of Diamond Glass
- Pilot Shield
- 2 Screws

Tools required: Phillips screwdriver, vacuum

CAUTION: Use gloves when handling glass pieces.

- 1. Remove the canopy above the glass frame by sliding it forward. Set aside.
- 2. Remove the access panel located beneath the glass frame by lifting it up and out of the unit. Set aside.
- 3. Remove the safety barrier by lifting up and pulling out. Remove the glass frame assembly by releasing the latches on top of the fireplaces and tilting frame forward. Lift off and set aside.
- 4. Remove the logs if they are installed. Vacuum the rock wool off the burner.
- Remove the four (4) pin log plate assemblies by removing the two (2) screws on each assembly. Discard.
 NOTE: There is a right front pin log plate assembly, a left front pin log plate assembly and two (2) rear pin log plate assemblies.
- 6. Loosen two (2) pilot screws.
- 7. Install the extra pilot shield provided with the kit by sliding it down between the front of the pilot and the burner. Fasten the shield using the two (2) screws supplied in kit. *Figure 90*
- 8. Tighten screws that were loosened in Step 6.



NOTE: The CFDV is designed to operate with either glass only or with glass and stones.

Glass & Stone Installation

Begin by placing stones randomly on the unported areas of the burner. Then place stones around the burner and on top of the false hearth. *Figure 91* Mix the glass and place it on top of the burner between and around the stones. Sprinkle glass over the false bottom and on the inclined front edge of the false bottom. Build the glass up toward the top of the incline. *Figure 92*

NOTE: Do not allow glass to fall down in the pilot area as it may obstruct the pilot flame.



Figure 91



Figure 92

FINAL INSTALLATION

FIREGLASS ONLY PLACEMENT

Mix the fireglass and sprinkle over the burner, false bottom and on the inclined front edge of the false bottom. Build the glass up toward the top of the incline.

NOTE: Do not allow glass down in the pilot area to eliminate obstructing the pilot flame.

CAUTION: Do not place any glass between the burner and the false bottom as this will effect the performance of the unit. Use a vacuum to remove any glass in the event it has fallen and is blocking the air gap.

NOTE: Remove any glass in bottom door track.

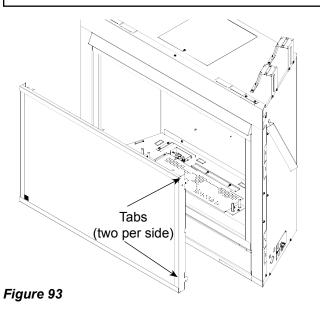
Replace safety barrier, glass, access panel and canopy in reverse order of removal.



SAFETY BARRIER INSTALLATION INSTRUCTIONS

NOTE: A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at risk individuals. If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.* Any safety screen, guard, or barrier removed for servicing the appliance must be replaced prior to operating the appliance.

* See parts list for model number.





A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed.



WARNING: The safety screen barrier must be installed after the glass front is in place. It is NOT a replacement for the glass and the unit must NOT be operated without the glass in place.

- 1. Remove screen from packaging.
- 2. Align the four tabs on the sides of the screen frame (two top, two bottom) *Figure 93* with the corresponding slots on the firebox. *Figure 94*.
- 3. Slide the screen down into the slots until it fits securely in place.

NOTICE: It is the responsibility of the installer to ensure the barrier is affixed to the fireplace at the time of installation.

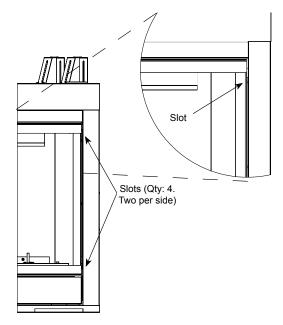


Figure 94

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BURNER, PILOT AND CONTROL COMPARTMENT

Keep the control compartment, logs, and burner areas surrounding the logs clean by vacuuming or brushing at least twice a year. Make sure the burner porting, pilot air opening and burner air opening are free of obstructions at all times.

BURNER

Inspect area around the injector. Remove any lint or foreign material with a brush or vacuum.

VENT SYSTEM

The fireplace and venting system should be inspected before initial use and at least annually by a qualified field service person. Inspect the external vent cap on a regular basis to make sure that no debris is interfering with the airflow. Inspect entire venting system to ensure proper function.

GLASS FRAME

Thoroughly clean the inside of the glass door after using the fireplace for ten hours. Periodically clean the glass as necessary.

When cleaning the glass, remember:

- Do not remove the glass when hot. Allow glass to cool before removal.
- NEVER use abrasive materials.
- Keep children and pets a safe distance away.
- Never operate the fireplace without the glass door properly secured.
- Never operate the fireplace if the glass is broken.
- Replace any glass that is chipped, cracked, or broken. Replacement glass frame assemblies MUST be supplied by the fireplace manufacturer – No substitute materials may be used.
- Handle glass door with care to avoid striking or scratching it on hard objects.

To clean glass door, follow "Glass Removal" procedure outlined in the *Final Installation* section. Film deposit on the inside of the glass should be cleaned off using a nontoxic, non-corrosive, non-abrasive, mild-cleaning solution. Simply apply an adequate amount to the glass and wipe off with a damp cloth. After all maintenance has been completed, re-install glass door.

LOGS

Leave logs installed in the fireplace for cleaning. Vacuum surface of the logs with a brush attachment. If logs must be removed for cleaning, handle carefully by holding gently at each end. Gloves are recommended to prevent skin irritation from ceramic fibers. If skin becomes irritated, wash gently with soap and water. Vacuum surface of logs with brush attachment or brush logs with a soft bristle brush (i.e. clean, dry paintbrush). To place logs back in the fireplace, Refer to "Log Placement" section in this manual.

NOTE: Do not use fluids to clean ceramic fiber logs.

ROCK WOOL

Replace or add rock wool as required following installation instructions in the *Final Installation* section of this manual.

STONES AND FIREGLASS

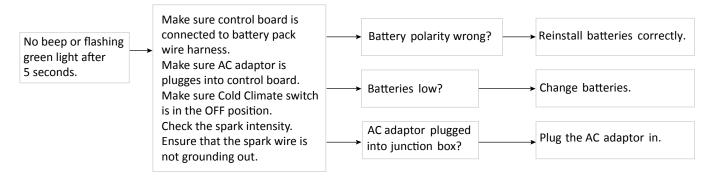
Vacuum surface of the stones with a brush attachment. Fireglass can be removed (an empty wet/dry vac works well to gather up fireglass) and washed with soap and water. Allow to dry thoroughly before placing back on the burner.

MILLIVOLT STANDING PILOT IGNITION

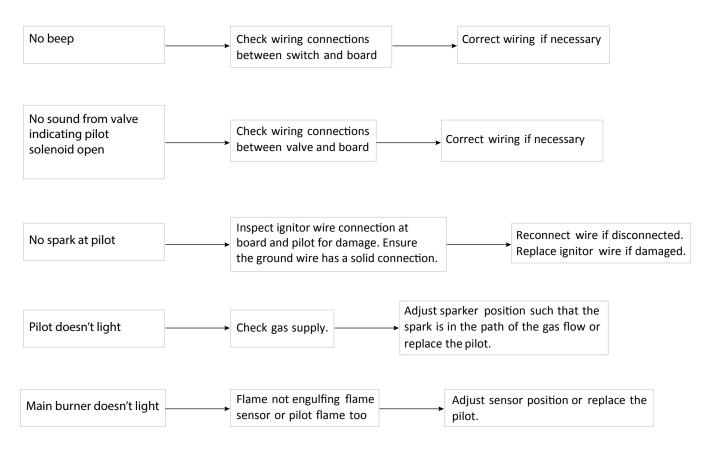
SYMPTOM	POSSIBLE CAUSE	ACTION
 Spark ignitor will not light pilot after repeated trig- gering of piezo. 	A. Wire disconnected.B. Defective ignitor.	A. Open door and check to make sure wire is connected to ignitor.B. Check for spark at electrode and pilot. If no spark and electrode wire is properly connected, replace
	C. No gas or low gas pres- sure.	 the ignitor. C. Check remote/manual shut off valve from fireplace. Low pressure can be caused by bent lines, restricted lines, low pressure line pressure. Consult with plumber or gas supplier.
	D. No Propane/LPG in tank	D. Check Propane/LPG tank. Refill tank.
 Pilot will not stay lit after carefully following lighting instructions. 	 A. Defective thermocouple B. Defective valve 	 A. Check that thermocouple flame impinges on thermocouple. Clean and/or adjust pilot for maximum flame impingement. Ensure that the thermocouple connection at the gas valve is fully inserted and tight. Disconnect the thermocouple from the valve, place one millivolt lead wire on the tip of the thermocouple and the other meter lead wire on the thermocouple copper lead. Start the pilot and hold the valve knob in. If the millivolt reading is less than 15 mV, replace pilot assembly.
	B. Defective valve	B. If thermocouple is producing more than 15 mV, replace faulty valve.
 Pilot burning, valve knob turned to "ON," switch is turned to "ON," but burner will not ignite. 	A. Defective switch, wall switch, remote control or wire	A. Check switch and wire for proper connection. Place jumper wires across terminals of switch. If burner comes on, replace defective switch. If the switch is OK, repeat the same procedure on remote control If burner comes on, replace remote control. Place jumper wire across wire at gas valves (termi- nals marked TH and TP/TH). If burner comes on, wires are faulty or connections are bad. Replace wire.
	B. Pilot flame too small	B. If pilot flame is not close enough to the thermopile, adjust pilot flame.
	C. Defective or malfunc- tioning thermopile	C. Check thermopile wire connections to make sure all are tight and that the thermopile is fully inserted into pilot assembly. Check thermopile with a millivolt meter. Connect leads to TP and TP/TH terminals on the control valve. If meter reading is below 325 mV, replace pilot assembly.
	D. Defective valve	D. Turn valve knob to "On" and switch to "ON." Take a reading at the thermopile leads (TP & TP/TH) on the valve. If the meter reads greater than 175 mV and the burner does not light, replace defective valve.
 Frequent pilot outage problem. 	A. Pilot flame may be too high or too low, causing pilot safety to drop out	A. Clean and adjust the pilot flame for maximum flame impingement on thermocouple.

IPI SYSTEM

Flip the master switch to the ON position.



Press the wall switch to the ON position.



Press the cold climate switch to the ON position.

No function	board —— Replace cold climate switch
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ALL PILOT/CONTROL SYSTEMS

SYMPTOM	POSSIBLE CAUSE	ACTION		
	Inner vent pipe leaiking exhaust gasses back into system	Check for product leak. Replace defective pipe section.		
The pilot and main burner extinguish while in operation	Horizontal vent improperly pitched.	Check that horizontal venting pipe is running upward ¼" per foot. Do not run the pipe level or downward.		
	Improper vent cap intallation	Check for proper installation and that cap is clear of debris or blockage.		
Glass soots	Flame impingement on logs	Install log set per the instructions. Inspect the injector and air intake area. Make sure this area does not have any blockage from debris and clean. Check gas supply.		
Flame burns blue and lifts off burner (ghosting)	Insufficient fresh air being supplied	 Check: That the vent cap is installed properly and free of debris. That the vent system joints are tight and have no leaks. That no debris is blocking the inner air intake at the bottom back of the combustion chamber. That the glass is properly secured and latched. 		

OPTIONAL ACCESSORIES

There are a variety optional accessories available for the CFDV Direct Vent Fireplace. Porcelain panels are available as an alternative to the firebrick provided with your fireplace. The porcelain panels can give your fireplace a smooth contemporary look and feel.

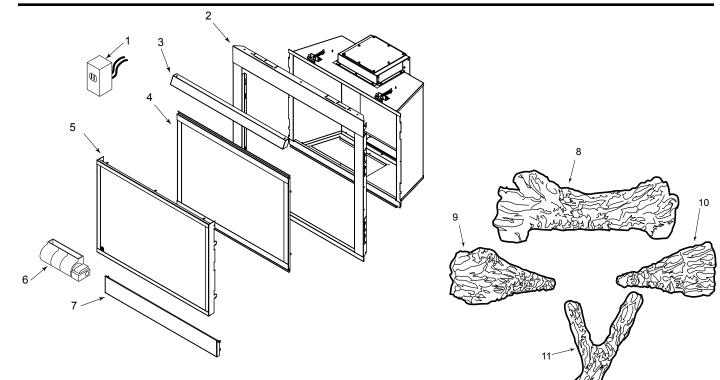
The Contemporary Stone and Glass Kit includes a set of ceramic fiber stones and fireglass and can be used to alter your fireplace from a rustic look to a minimalist appearance. Additional crushed fireglass is available in a variety of colors.

There is also a choice of two optional fans. The BLOT fan utilizes a thermostat for blower operation. The FK12 fan is also available. A speed control is available to regulate fan speed.

Porcelain Panel Kit (33CFDV)	PL33CFDVB
Porcelain Panel Kit (36CFDV)	PL36CFDVB
Porcelain Panel Kit (42CFDV)	PL42CFDVB
Contemporary Stone and Glass Kit	CKCFDV

Crushed Fireglass Kits:

Glass Kit Bronze	GKB
Glass Kit Diamond	GKD
Glass Kit Onyx	GKO
Glass Kit Sapphire	GKS
Blower Kits:	
T-Stat Blower w/ Speed Control	BLOT
Manual Blower	FK12
Speed Control for FK12	26D0746

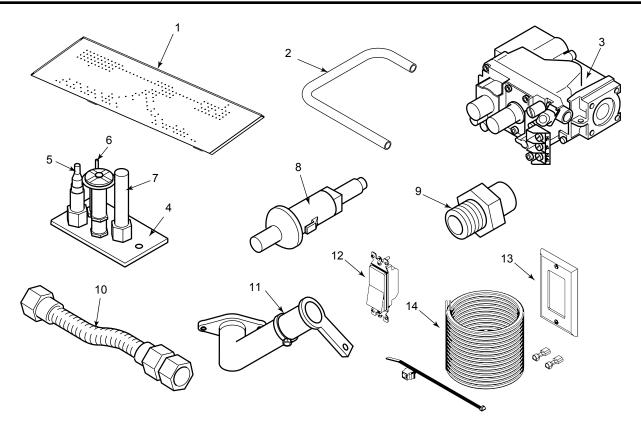


FIREBOX COMPONENTS

REF	DESCRIPTION	QUANTITY	33CFDV	36CFDV	42CFDV	
Standa	Standard Features					
1	Junction Box Assembly	1	26D2128K	26D2128K	26D2128K	
2	Face Frame		20305996	20306783	20306908	
3	Canopy	1	20305551	20305998	20306094	
4	Glass Frame Assembly	1	20305556K	20305406K	20305624K	
5	Safety Barrier (Post 2015)	1	33CFDVSB	36CSB	42CSB	
5	Safety Barrier (Pre 2015)	1	33CFDVSB	36CFDVSB	42CFDVSB	
7	Control Panel Access Door	1	20305572	20307388	20306117	
Kits S	old Separately	^				
6	Blower	1	BLOT	BLOT	BLOT	
6	Manual Blower	1	FK12	FK12	FK12	
N/A	Firebrick Kit—Cottage Clay	1	FB33CFDVCC	FB36CFDVCC	FB42CFDVCC	
N/A	Firebrick Kit—Cottage Red	1	FB33CFDVCR	FB36CFDVCR	FB42CFDVCR	
N/A	Firebrick Kit—Tavern Brown	1	FB33CFDVTB	FB36CFDVTB	FB42CFDVTB	
N/A	Porcelain Black Liner Kit	1	PL33CFDV	PL36CFDV	PL42CFDV	

LOGS

REF DESCRIPTION		33CFDV	36CFDV	42CFDV	
8	Rear Log	54D0122K	54D0117K	54D0331K	
9	Bottom Left Log	54D0123K	54D0118K	54D0118K	
10	Bottom Right Log	54D0124K	54D0119K	54D0119K	
11	Top Log	54D0125K	54D0120K	54D0552K	



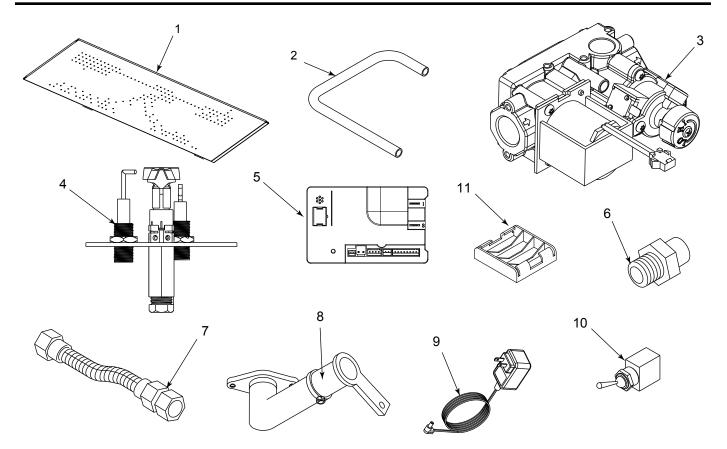
STANDING PILOT-MILLIVOLT CONTROL

REF	DESCRIPTION	QTY	33CFDVNV	33CFDVPV	36CFDVNV	36CFDVPV	42CFDVNV	42CFDVPV
1	Burner Assembly	1	20305595K	20305595K	20305899K	20305899K	20305809K	20305809K
2	Burner Tube	1	20305364K	20305364K	20305364K	20305364K	20305364K	20305364K
3	Gas Valve Assembly	1	37D0117	37D0118	37D0117	37D0118	37D0117	37D0118
4	Pilot Assembly	1	37D0018K	37D0019K	37D0018K	37D0019K	37D0018K	37D0019K
5	Replacement Thermocouple	1	24D0808	24D0808	24D0808	24D0808	24D0808	24D0808
6	Replacement Igniter and Wire	1	10001297	10001297	10001297	10001297	10001297	10001297
7	Replacement Thermopile	1	26D0566	26D0566	26D0566	26D0566	26D0566	26D0566
8	Piezo Ignitor	1	14D0503	14D0503	14D0503	14D0503	14D0503	14D0503
9	Injector	1	58D0061	62D3005	59D0062	20H3146	20H3155	33D4046
10	Flexhouse w/shut-off valve	1	69D0030	69D0030	69D0030	69D0030	69D0030	69D0030
11	Venturi	1	45D0600	45D0600	69D1119	69D1026	69D1119	69D1026
12	Wall Switch	1	20304686	20304686	20304686	20304686	20304686	20304686
13	Wall Switch Plate	1	20304687	20304687	20304687	20304687	20304687	20304687
14	Wall Switch Assembly	1	54D0691	54D0691	54D0691	54D0691	54D0691	54D0691

Fuel Conversion Kits – Millivolt

Natural Gas to LP

33CFDVNV: Kit #33CFDVCKPV	36CFDVNV: Kit #36CFDVCKPV	42CFDVNV: Kit #42CFDVCKPV
LP to Natural Gas		
33CFDVPV: Kit #33CFDVCKNV	36CFDVPV: Kit #36CFDVCKNV	42CFDVPV: Kit #42CFDVCKNV



IPI CONTROL

REF	DESCRIPTION	QTY	33CFDVNI	33CFDVPI	36CFDVNI	36CFDVPI	42CFDVNI	42CFDVPI
1	Burner Assembly	1	20305595K	20305595K	20305899K	20305899K	20305809K	20305809K
2	Burner Tube	1	20306019K	20306019K	20306019K	20306019K	20306019K	20306019K
3	Gas Valve Assembly	1	95E0101	95E0102	95E0101	95E0102	95E0101	95E0102
4	Pilot Assembly	1	95E0103	95D0104	95E0103	95E0104	95E0103	95E0104
5	Control Board	1	95E0100	95E0100	95E0100	95E0100	95E0100	95E0100
6	Injector	1	58D0061	62D3005	59D0062	20H3146	20H3155	33D4046
7	Flexhouse w/shut-off valve	1	69D0030	69D0030	69D0030	69D0030	69D0030	69D0030
8	Venturi	1	45D0600	45D0600	20306795	69D1026	20306795	69D1026
9	A/C Adapter (6 volt)	1	95E0105	95E0105	95E0105	95E0105	95E0105	95E0105
10	Cold Climate Switch	1	95E0111	95E0111	95E0111	95E0111	95E0111	95E0111
11	Battery Back Up	1	95E0115	95E0115	95E0115	95E0115	95E0115	95E0115
N/A	On/Off Switch	1	32D0232	32D0232	32D0232	32D0232	32D0232	32D0232
N/A	Wire – Control Board to Wall Switch	1	95E0119	95E0119	95E0119	95E0119	95E0119	95E0119

Fuel Conversion Kits – IPI Control

Natural Gas to LP

33CFDVNI: Kit #33CFDVCKPI LP to Natural Gas 33CFDVPI: Kit #33CFDVCKNI

36CFDVNI: Kit #36CFDVCKPI

36CFDVPI: Kit #36CFDVCKNI

42CFDVNI: Kit #42CFDVCKPI

42CFDVPI: Kit #42CFDVCKNI

VERTICAL VENTING

CATEGORY	DESCRIPTION	MODEL NUMBER	
Vertical Vent Termination Kits	Vertical termination cap – high wind (includes storm collar)	SLP-TVHW	
ANAL.	0/12 – 6/12 roof flashing (multi-pack of 6)	SLP-RF6M	
	7/12 – 12/12 roof flashing (multi-pack of 6)	SLP-RF12M	
	3" – 12" telescoping pipe extension (multi-pack of 6)	SLP-12AM	
	3"– 6" telescoping pipe extension (multi-pack of 6)	SLP-6AM	
	6" pipe length (multi-pack of 6)	SLP-6M	
	12" pipe length (multi-pack of 6)	SLP-12M	
	24" pipe length (multi-pack of 6)	SLP-24M	
	36" pipe length (multi-pack of 6)	SLP-36M	
	48" pipe length (multi-pack of 6)	SLP-48M	
Twist Lock Elbows	45° elbow (multi-pack of 6)	SLP45M	
	90° elbow (multi-pack of 6)	SLP90M	
Shields and Supports	SLP 1" firestop (multi-pack of 6)	SLP-FSM	
	3" wall firestop (multi-pack of 6)	SLP-WSM	
	Attic shield (multi-pack of 6) (firestop not included)		
	Horizontal vent support hanger (multi-pack of 6)	SLP-HVSM	

HORIZONTAL VENTING

CATEGORY	DESCRIPTION	MODEL NUMBER
Horizontal Vent Termination Kits	Rear vent termination kit includes adjustable termination cap, 1" firestop, 9" – 12" adjustable termination pipe	SLP-RVTK
	Horizontal vent termination kit includes adjustable termination cap, 1" firestop, 3" firestop, 90° elbow, 9" – 12" adjustable termination pipe	SLP-HVTK
	Rear vent termination includes adjustable termination cap, 1" firestop (multi-pack of 4)	SLP-RVTM
	Horizontal vent termination kit includes adjustable termination cap, 1" firestop, 42" flex and adaptors	SLP-HSFTK
SLP Pipe	20" termination pipe (multi-pack of 6)	SLP-20TPM
	9"– 12" adjustable termination pipe (multi-pack of 6)	SLP-RVT12AM
	3"– 6" telescoping pipe extension (multi-pack of 6)	SLP-6AM
	3" – 12" telescoping pipe extension (multi-pack of 6)	SLP-12AM
	4" (100 mm) pipe length (multi-pack of 6)	SLP-4M
	6" pipe length (multi-pack of 6)	SLP-6M
	12" pipe length (multi-pack of 6)	SLP-12M
	24" pipe length (multi-pack of 6)	SLP-24M
	36" pipe length (multi-pack of 6)	SLP-36M
	48" pipe length (multi-pack of 6)	SLP-48M
Twist Lock Elbows	45° elbow (multi-pack of 6)	SLP45M
	90° elbow (multi-pack of 6)	SLP90M
Shields and Supports	SLP 1" firestop (multi-pack of 6)	SLP-FSM
	3" wall firestop (multi-pack of 6)	SLP-WSM
	Attic shield (multi-pack of 6) (firestop not included)	UNIV-AS2
	Horizontal vent support hanger (multi-pack of 6)	SLP-HVSM

VENT ADAPTERS FOR 4" x 7" TWIST LOCK

SLP PART NO.	QTY/BOX	DESCRIPTION
SLP-DVFAM	4	SLP flex adapter kit w/gear clamps (multi-pack of 4)
SLPMP	8	SLP unit and inline pipe adapter to 4" x 7" Twist Lock (carton of 8)
MBSLP	8	VCG fireplace unit adapter to SLP (Carton of 8)
MPSLP	8	VCG inline pipe adapter to 4 x 7 Twist Lock (Carton of 8)

Please read and follow these special requirements

NOTE REGARDING VENTED PRODUCTS

This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts.

Any residence with a direct vent product must have a carbon monoxide (CO) detector installed in the residence.

Installation of the fireplace or vented gas log in the State of Massachusetts requires the damper to be permanently removed or welded in the fully open position.

In addition, a naturally vented gas log may not be installed in a bedroom or bathroom in the State of Massachusetts.

Flex line installation must not exceed 36 inches and must have a T shutoff valve.

NOTE REGARDING VENT FREE PRODUCTS

This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts.

In addition, vent free products may not be installed in a bedroom or bathroom regardless of size or type in the State of Massachusetts.

Flex line installation must not exceed 36 inches and must have a T shutoff valve.

CARBON MONOXIDE DETECTOR REQUIREMENTS

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

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

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

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

b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed. 2. **Approved Carbon Monoxide Detectors.** Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

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

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

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

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

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

(c) **Manufacturer requirements — Gas Equipment Venting System Provided.** When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

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

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

(d) **Manufacturer requirements — Gas Equipment Venting System Not Provided.** When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems," the following requirements shall be satisfied by the manufacturer:

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

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

(e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design

LIMITED LIFETIME WARRANTY POLICY

LIMITED LIFETIME WARRANTY

The following components are warranted for life (limited) to the original owner, subject to proof of purchase: Firebox, Combustion Chamber and Heat Exchanger.

FIVE YEAR WARRANTY

The following components are warranted five (5) years to the original owner, subject of proof of purchase: Ceramic Fiber Logs.

BASIC WARRANTY

Vermont Castings Group warrants the components and materials in your gas appliance to be free from manufacturing and material defects for a period of two years from date of installation. After installation, if any of the components manufactured by Vermont Castings Group in the appliance are found to be defective in materials or workmanship, Vermont Castings Group will, at its option, replace or repair the defective components at no charge to the original owner. Vermont Castings Group will also pay for reasonable labor costs incurred in replacing or repairing such components for a period of two years from date of installation. Any products presented for warranty repair must be accompanied by a dated proof of purchase.

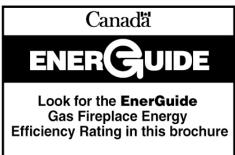
This Limited Lifetime Warranty will be void if the appliance in not installed by a qualified installer in accordance with the installation instructions. The Limited Lifetime Warranty will also be void if the appliance is not operated and maintained according to the operating instructions supplied with the appliance, and does not extend to (1) firebox/burner assembly damage by accident, neglect, misuse, abuse, alterations, negligence of others, including the installation thereof by unqualified installers, (2) the costs of removal, re-installation or transportation of defective parts on the appliance, or (3) incidental or consequential damage. All service work must be performed by an authorized service representative.

This warranty is expressly in lieu of other warranties, express or implied, including the warranty of merchantability of fitness for purpose and of all other obligations or liabilities. Vermont Castings Group does not assume for it any other obligations or liabilities in connection with sale or use of the appliance. In states that do not allow limitations on how long an implied warranty lasts, or do not allow exclusion of indirect damage, those limitations of exclusions may not apply to you. You may also have additional rights not covered in the Limited Lifetime Warranty.

Vermont Castings Group reserves the right to investigate any and all the claims against the Limited Lifetime Warranty and decide upon method of settlement.

IF WARRANTY SERVICE IS NEEDED:

- 1. Contact your supplier. Make sure you have your warranty, your sales receipt and the model/ serial number of your Vermont Castings Group product.
- 2. DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF.



Based on CSA P.4.1-09

EFFICIENCY RATINGS

MODEL	ENERGUIDE RATINGS FIREPLACE EFFICIENCY PERCENTAGE	D.O.E. (AFUE PERCENTAGE)
33CFDVNV	40.7	59.70
33CFDVPV	42.3	63.83
33CFDVNI	40.4	59.70
33CFDVPI	47.0	63.83
36CFDVNV	59.4	62.01
36CFDVPV	49.9	66.16
36CFDVNI	62.1	62.01
36CFDVPI	50.7	66.16
42CFDVNV	55.2	68.96
42CFDVPV	56.0	72.79
42CFDVNI	56.6	68.96
42CFDVPI	57.4	72.79



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



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