

36CFDV Series Direct Vent Gas Fireplace

Models:

36CFDVNV, 36CFDVPV
36CFDVNI, 36CFDVPI

WARNING: If the information in these instructions are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

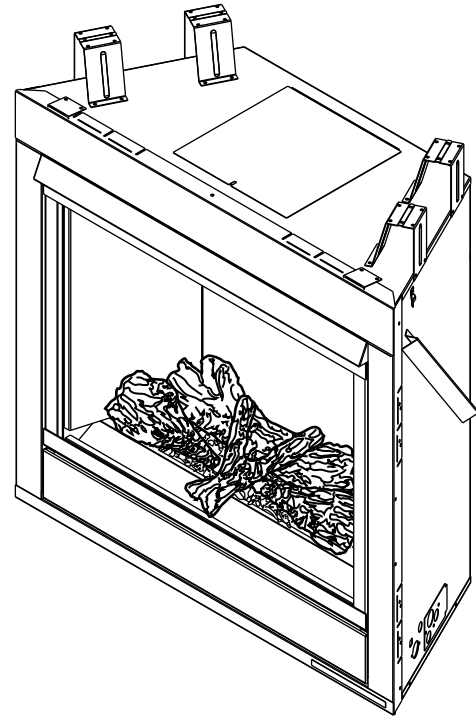
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS**
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

WARNING: Improper installation, adjustment, alteration, services or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

This appliance may be installed in an aftermarket*, permanently located, manufactured home (USA only) or mobile home, where not prohibited by local codes.

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

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



Installation and Operating Instructions

WARNING



**HOT GLASS WILL
CAUSE BURNS.**

**DO NOT TOUCH GLASS
UNTIL COOLED.**

**NEVER ALLOW CHILDREN
TO TOUCH GLASS.**



INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future refer-
ence.

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	Lighting Burner.....	33
Code Approval	4	To Turn Off Gas.....	33
Product Specifications.....	5	Operating Instructions Electronic Ignition.....	34
High Elevations	6	What To Do If You Smell Gas.....	34
Gas Pressures	6	Lighting Electronic Ignition	34
Gas Specifications, Orifice Sizes	6	To Turn Off Gas.....	34
Fireplace & Framing Dimensions.....	7	Check Gas Pressure - IPI.....	35
Pre-Installation Information.....	7	Electrical Installation - IPI.....	35
Before You Start.....	7	Electrical Wiring	35
Fireplace Framing	7	Junction Box Wiring	36
Fireplace Location.....	7	Wall Switch Installation	36
Clearances	8	IPI System Wiring Diagram.....	37
Secure Fireplace to Floor or Framing.....	9	Operating Instructions - IPI	38
Finishing Material.....	9	What To Do If You Smell Gas.....	38
Venting Installation Information.....	10	Operating Instructions.....	39
Optional Top Vent Application	10	To Turn Off Gas.....	39
Installation Precautions.....	12	Final Installation	40
General Venting	12	Glass Frame Removal	40
Termination Location	13	Rockwool Placement	41
Termination Clearances.....	14	Adjustable Baffle	41
Assembling Vent Pipes	14	Log Placement	42
Rear Vent Installation Only	15	Lava Rock and Ember Placement	43
How to Use the Vent Graph	16	Cleaning and Maintenance	44
Vent Pipe Clearances	17	Burner, Pilot and Control Compartment.....	44
Rear Vent Applications & Installation	18	Pilot Flame	44
Top Vent Sidewall Applications & Installation.....	19	Burner Flame	44
Vertical Sidewall Applications & Installation	21	Vent System.....	45
Below Grade Installation	23	Glass Door	45
Vertical Through-the-Roof		Logs	45
Applications & Installation.....	23	Rock Wool	45
Fireplace Installation.....	26	Troubleshooting	46
Check Gas Type.....	26	Millivolt Standing Pilot Ignition	46
Gas Pipe Installation	26	IPI System.....	47
Check Gas Pressure - Millivolt.....	28	All Control/Pilot Systems.....	48
Electrical Installation.....	28	Replacement Parts	49
Electrical Wiring	28	Firebox Components.....	49
Remote Wall Mounted Switch	29	Logs	50
Remote Wall Switch.....	29	Standing Pilot - Millivolt Control	51
Optional DC Remote Systems	29	IPI System.....	53
Electronic Pilot Ignition Wiring	30	Venting Components.....	54
Optional Fan/Blower System BLOT	30	Optional Accessories.....	55
Operating Instructions - Millivolt	31	Massachusetts Requirements.....	58
What To Do If You Smell Gas.....	31	Warranty	59
Lighting Pilot for the First Time	31	Efficiencies.....	60
Lighting Pilot	32		

INSTALLER

Please leave these instructions with the appliance.

OWNER

Please retain these instructions for future reference.

WARNING	<ul style="list-style-type: none"> • Read this owner’s manual carefully and completely before trying to assemble, operate, or service this fireplace. • 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. 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 *Natural 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 Installation, ANSI/NCSBCS A225.A*, or *Standard for Gas Equipped Recreational Vehicles and Mobile Housing, CSA Z240.4*.

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.
3. 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.
 - 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 42" from the front, top, or sides of the fireplace
 - in high traffic areas
 - in windy or drafty areas
6. This fireplace reaches high temperatures. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
7. **Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.**
8. **Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.**
9. **Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces.**
10. **Clothing or other flammable material should not be placed on or near 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. Any safety screen, guard or barrier removed for servicing the appliance, must be replaced prior to operating the appliance.
14. 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, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.
15. 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.
16. Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. See *Cleaning and Maintenance*, Page 48.
17. 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.
18. Do not use this fireplace to cook food or burn paper or other objects.
19. Never place anything on top of fireplace.
20. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on rating plate.
21. 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*.
22. 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.
23. 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.
24. Do not use fireplace if any part has been exposed to or has been under water. Immediately call a qualified service person to inspect the appliance and to replace any part of the control system and any gas control which has been under water.
25. Do not operate fireplace if any log is broken.
26. Do not use a blower insert, heat exchanger insert, or any other accessory not approved for use with this fireplace.
27. Do not operate the fireplace with glass door removed, cracked, or broken.

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 in the USA and Canada as follows:

LISTED VENTED GAS FIREPLACE HEATER

TESTED TO:

ANSI Z21.88a-2012 / CSA 2.33a-2012 STANDARDS

**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.

**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.

WARNING

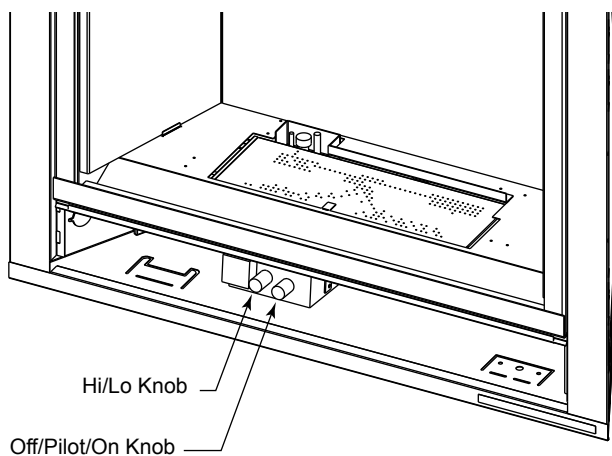
Never connect unit to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

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 any. 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 using Vermont Castings Group Twist-Lock Direct Vent Components.

The classification “noncombustible material” includes, but is not limited to stone, brick and mortar. Noncombustibles are safe to overlay the black-painted metal face (including radiant plates) and do not pose a fire hazard. Do not allow any noncombustible finish material to extend past or interfere with fireplace 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.



**Figure 1 -
36CFDV Fireplace Controls**

HIGH ELEVATIONS

Input ratings are shown in BTU per hour and are certified without deration 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
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

GAS PRESSURES

	Natural	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 INSULATION

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.

NOTE: Refer to cold climate pilot information on Page 43 for more information on standing pilot vs. intermittent pilot options.

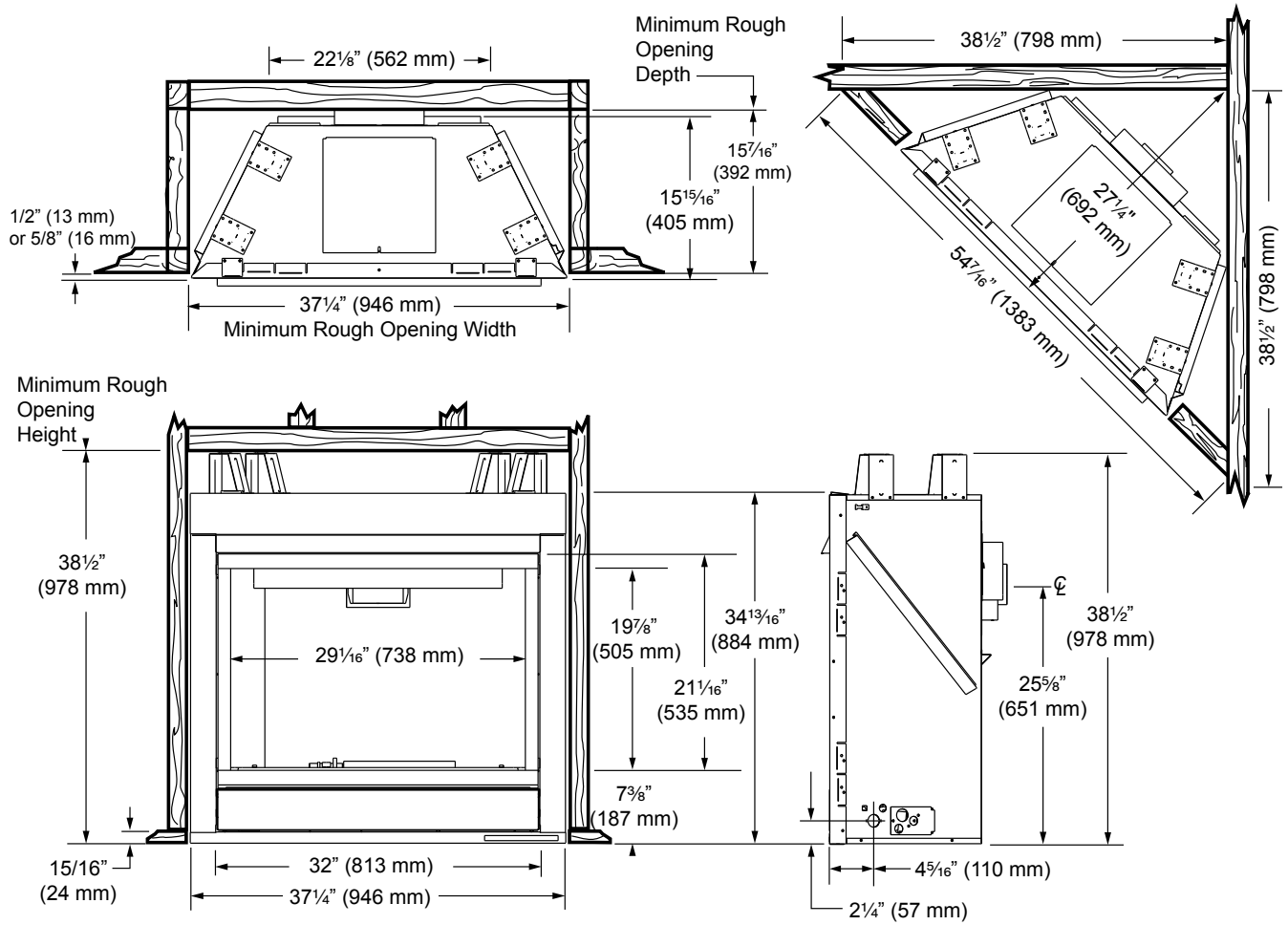


Figure 2 -
36CFDV Series Fireplace Dimensions

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

ITEMS REQUIRED FOR INSTALLATION

Tools:

- Phillips Screwdriver
- Hammer
- Saw and/or saber saw
- Electric Drill and Bits
- Pliers
- Square
- Caulking Material (Noncombustible)
- Fireplace Surround Material (Noncombustible)
- Piping Complying with Local Codes
- Pipe Sealant Approved for use with Propane/LPG (Resistant to Sulfur Compounds)

Building Supplies:

- Framing Materials
- Wall Finishing Materials
- Level
- Tee Joint
- Measuring Tape
- Pipe Wrench

WARNING

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

FIREPLACE FRAMING

Firebox framing can be built before or after the appliance is set in place. Construct firebox framing following *Figure 2* 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.

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 3* 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.

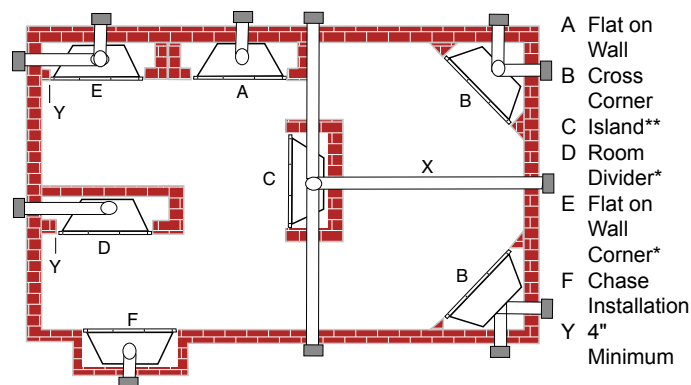


Figure 3 - Locating Gas Fireplace

** 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 4" (102 mm) clearance must be maintained from perpendicular wall and front of fireplace.

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.

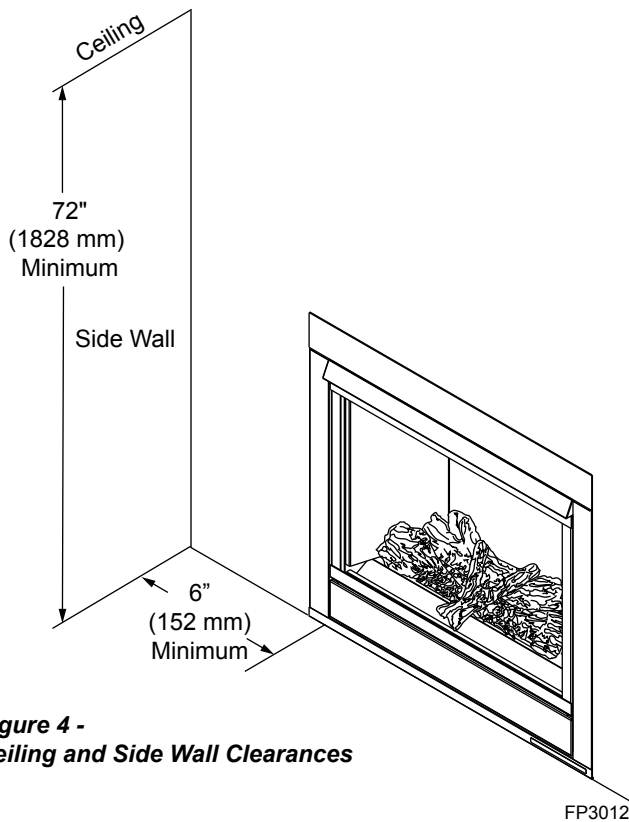
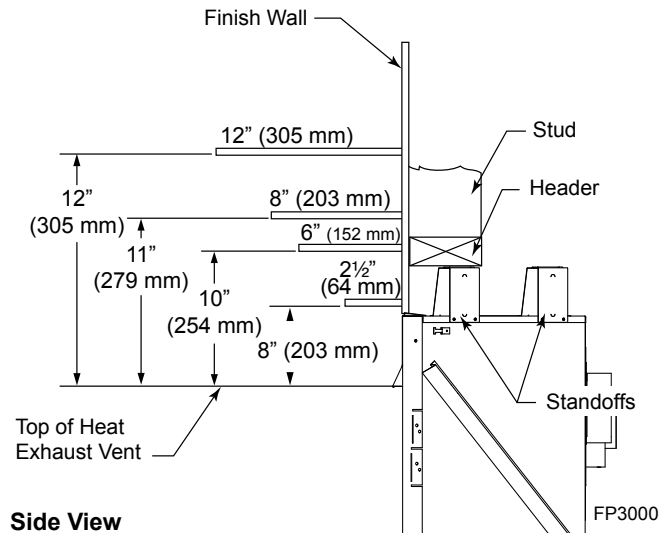


Figure 4 - Ceiling and Side Wall Clearances

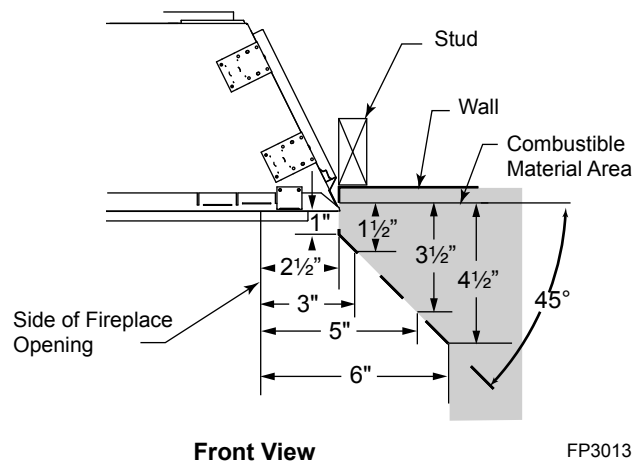


Figure 5 - Mantel Clearances

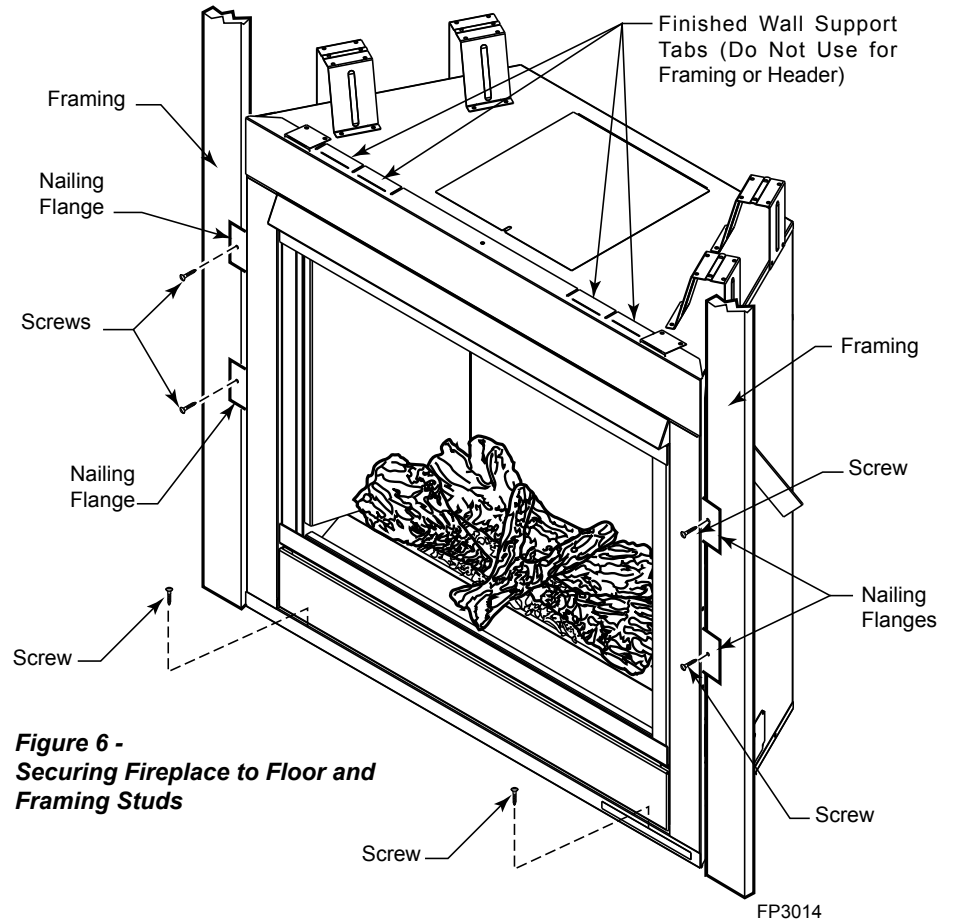
MANTEL CLEARANCES

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.

WARNING

Never obstruct or modify the air inlet or outlet grilles (louvers). This may create a fire hazard.

The fireplace must be secured to the floor and/or to framing studs as shown in *Figure 6*. 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 1/2" or 5/8" to accommodate different wall thickness.



**Figure 6 -
Securing Fireplace to Floor and
Framing Studs**

FP3014

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.

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 7*

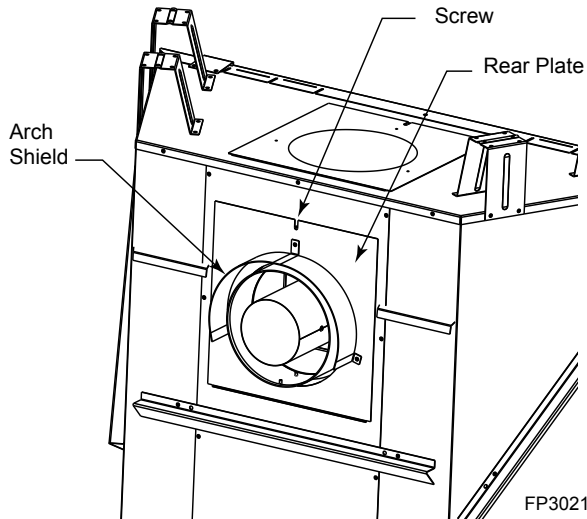


Figure 7 - Remove Rear Plate

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

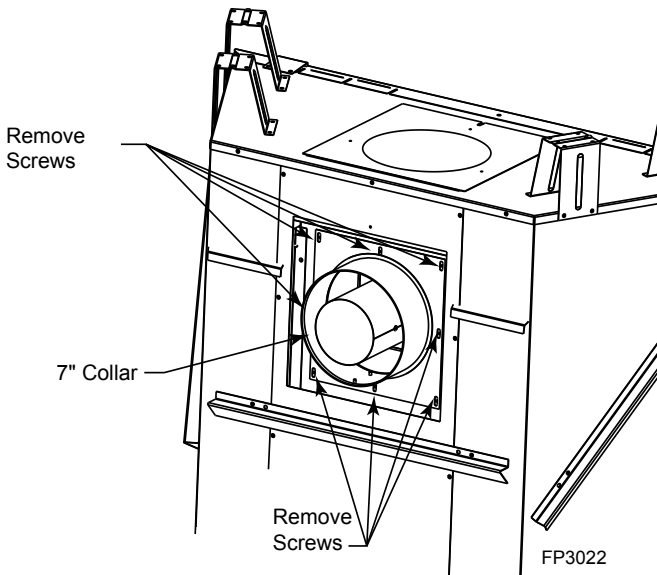


Figure 8 - Remove 7" Collar and Gasket

3. Remove the plate with the 4" collar and gasket by removing four (4) screws. Set aside. *Figure 9*
4. Remove the top plate located on top of the unit by removing one (1) screw. Set aside. *Figure 9*

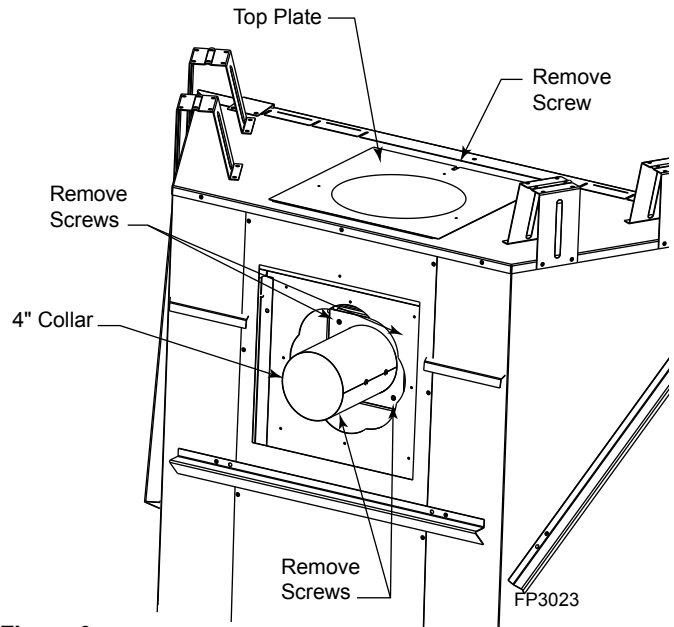


Figure 9 - Remove 4" Collar and Gasket and Top Plate

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 re-install. *Figure 10*

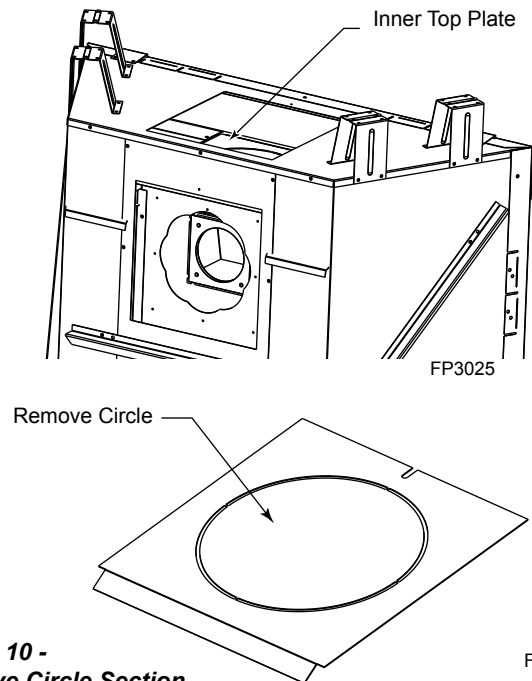


Figure 10 - Remove Circle Section from Inner Top Plate

FP3024

- 6. Remove the large square plate and gasket by removing the eight (8) screws. Set aside. *Figure 11*

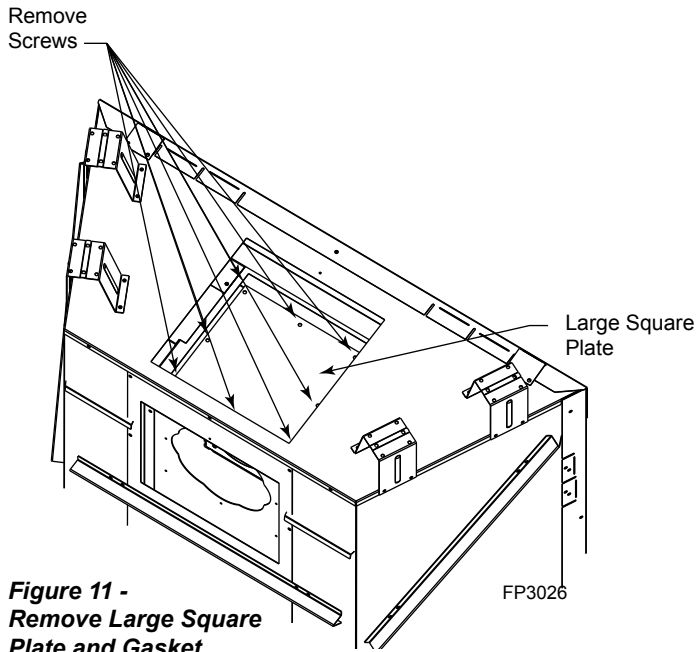


Figure 11 - Remove Large Square Plate and Gasket

- 7. Remove the small square plate and gasket by removing four (4) screws. Set aside. *Figure 12*

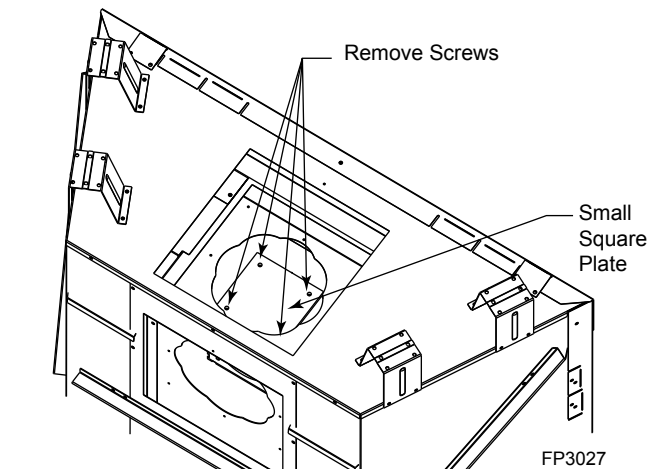


Figure 12 - Remove Small Square Plate and Gasket

- 8. Install the plate and plates with collars removed in Steps 1-3 in reverse order onto the top of the unit. Install the top plate and large and small plates in reverse order into back of unit. *Figure 13*. **NOTE:** The arch shield is not needed for top vent applications and may be discarded. *Figure 7*

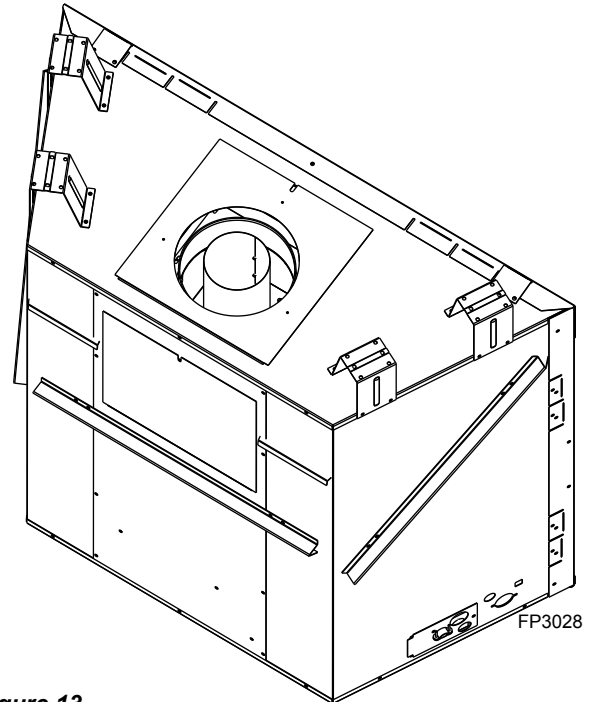


Figure 13 - Completed Top Vent Conversion

WARNING

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

WARNING

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.

WARNING

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 labelled 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.
- Select the amount of vertical rise desired. All horizontal run of venting must have 1/4" rise for every 12" (305 mm) of run towards the termination below 7¹/₂ feet of vertical rise. With 7¹/₂ feet (2.3 m) or more vertical rise off top of fireplace, the horizontal run may run level. **NEVER** run vent piping downward.
- Horizontal venting which incorporates the twist lock pipe must be installed on a level plane without an inclining or declining slope.
- Horizontal venting which incorporates the use of flex venting shall have an inclining slope from the unit of 1" (25 mm) per 24" (610 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.

GENERAL VENTING INFORMATION - TERMINATION LOCATION

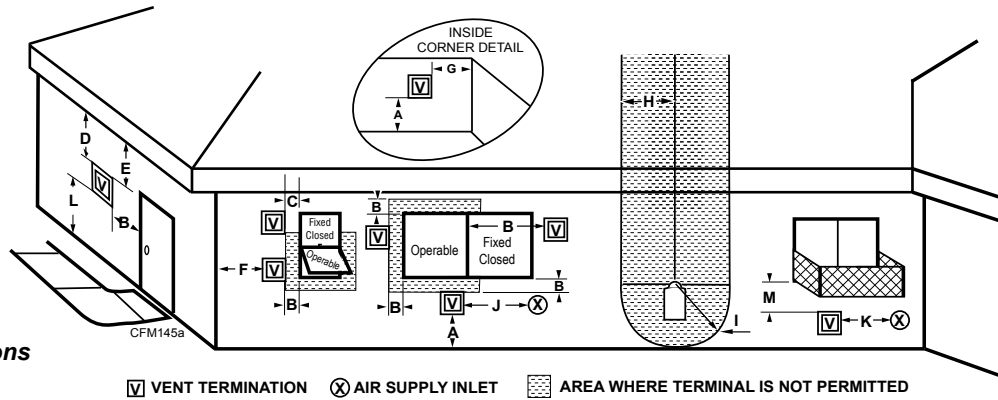


Figure 14 - Termination Locations

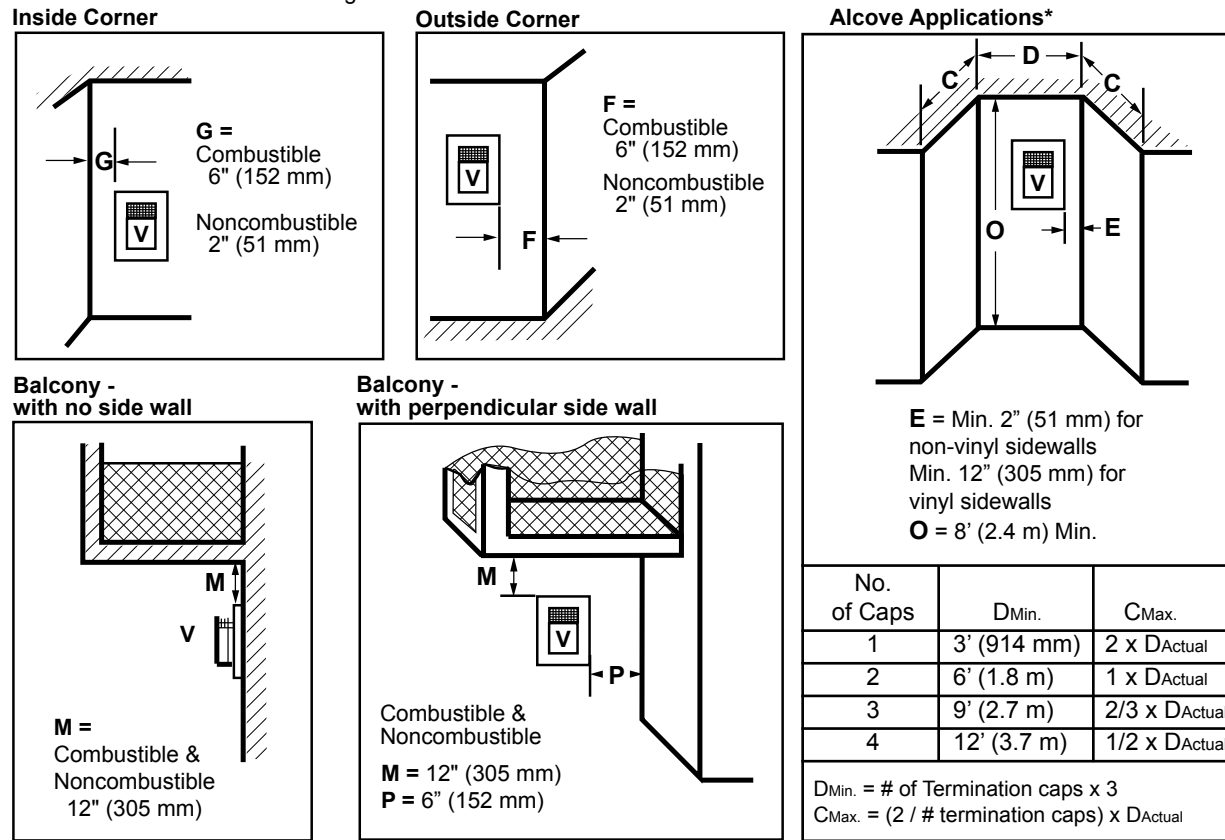
	Canadian Installations ¹	US Installations ²
A = Clearance above grade, veranda, porch, deck, or balcony	12" (30 cm)	12" (30 cm)
B = Clearance to window or door that may be opened	6" (15 cm) for appliances < 10,000BTU/h (3kW), 12" (30 cm) for appliances > 10,000 Btuh (3kW) and < 100,000 BTU/h (30kW), 36" (91 cm) for appliances > 100,000 BTU/h (30kW)	6" (15 cm) for appliances < 10,000 BTU/h (3kW), 9" (23 cm) for appliances > 10,000 Btuh (3kW) and < 50,000 BTU/h (15kW), 12" (30 cm) for appliances > 50,000 BTU/h(15kW)
C = Clearance to permanently closed window	12" (305 mm) recommended to prevent window condensation	12" (305 mm) recommended to prevent window condensation
D = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2' (610mm) from the center line of the terminal	18" (458 mm)	18" (458 mm)
E = Clearance to unventilated soffit	12" (305 mm)	12" (305 mm)
F = Clearance to outside corner	see next page	see next page
G = Clearance to inside corner (see next page)	see next page	see next page
H = Clearance to each inside of center line extended above meter/regulator assembly	3' (91 cm) within a height of 15' (5 m) above the meter/regulator assembly	3' (91 cm) within a height of 15' (5 m) above the meter/regulator assy
I = Clearance to service regulator vent outlet	3' (91 cm)	3' (91 cm)
J = Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliances	6" (15 cm) for appliances < 10,000 BTU/h (3kW), 12" (30 cm) for appliances > 10,000 BTU/h (3kW) and < 100,000 Btuh (30kW), 36" (91 cm) for appliances > 100,000 BTU/h (30kW)	6" (15 cm) for appliances < 10,000 BTU/h (3kW), 9" (23 cm) for appliances > 10,000 BTU/h (3kW) and < 50,000 BTU/h (15kW), 12" (30 cm) for appliances > 50,000 BTU/h(15kW)
K = Clearance to a mechanical air supply inlet	6' (1.83 m)	3' (91 cm) above if within 10' (3 m) horizontally
L = Clearance above paved sidewalk or paved driveway located on public property	7' (2.13 m)†	7' (2.13 m)†
M = Clearance under veranda, porch, deck or balcony	12" (30 cm)‡	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.
 2. 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.
 3. 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 noncombustible 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) mini-

mum between termination caps. 2. All mechanical air intakes within 10' (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.

Figure 15 - Termination Clearances

GENERAL INFORMATION ASSEMBLING VENT PIPES

USA Installations

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

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

Canadian Installations

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

FLEX VENT PIPES

Secure flex vent pipe in place with a hose clamp (provided).

*Be sure the flex pipe overlaps at least 1" (25 mm) onto the collars of the fireplace and termination. If the termination has an internal bead, be sure to overlap and secure 1" (25 mm) past the bead.

* Be sure the vent is actually crushed before proceeding. Apply a tug to be sure the vent will not slip off the collars. Repeat process with 7" flex vent pipe. The same procedure must be performed on the vent side.

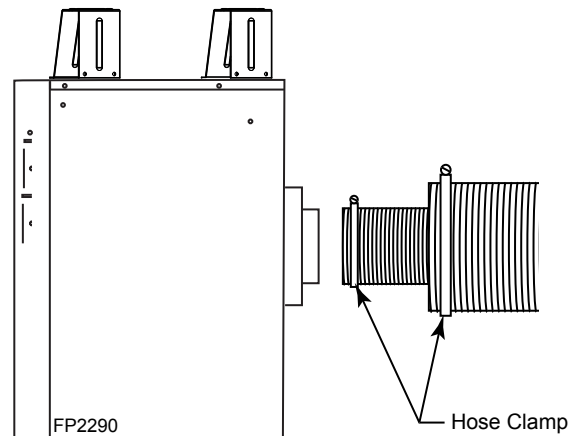


Figure 16 - Secure Flex Vent Pipe with Hose Clamps.

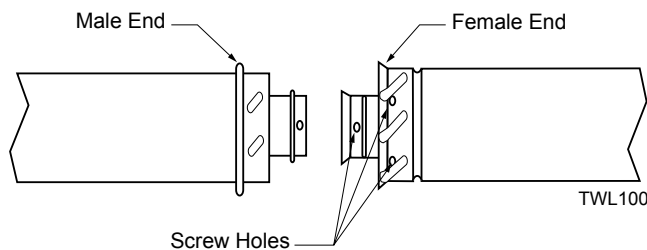
TWIST LOCK PIPES

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

To join twist lock pipes 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. It is recommended that you secure the joints with three (3) sheet metal screws, however, this is not mandatory with twist lock pipe. *Figure 17*

NOTE: Sealant is not required to assemble fireplace venting. Do not use silicone sealant at the inner flue exhaust connections.

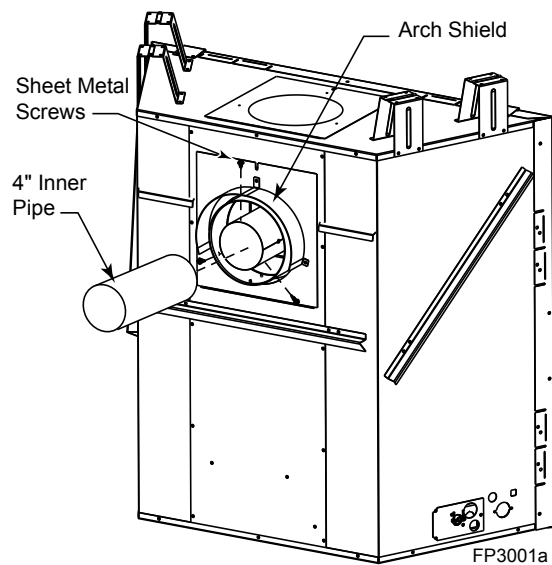
To make it easier to assembly the joints, we suggest putting a lubricant (Vaseline or similar) on the male end of the twist lock pipe prior to assembly.



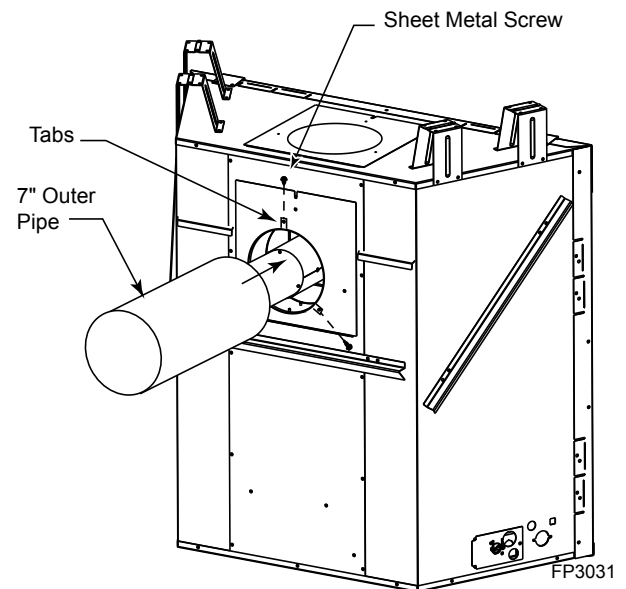
**Figure 17 -
Twist-lock Pipe Joints**

REAR VENT INSTALLATION ONLY:

Remove the three (3) screws holding the arch shield to the rear of the firebox. Set shield aside. Install the 4" (102 mm) inner vent pipe to the appliance inner collar and secure with three (3) stainless steel sheet metal screws. *Figure 18*. Install the 7" (178 mm) outer vent pipe to the appliance outer collar. Secure pipe to the rear cover plate using the tabs and three (3) sheet metal screws. *Figure 19*. Reinstall arch shield. If a 45° or 90° elbow is being used, attach the elbow to the appliance in the same manner then attach the venting to the elbow.



**Figure 18 -
Remove Arch Shield and Install 4" Inner Vent Pipe**



**Figure 19 -
Install 7" Outer Vent Pipe**

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 Sidewall 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.

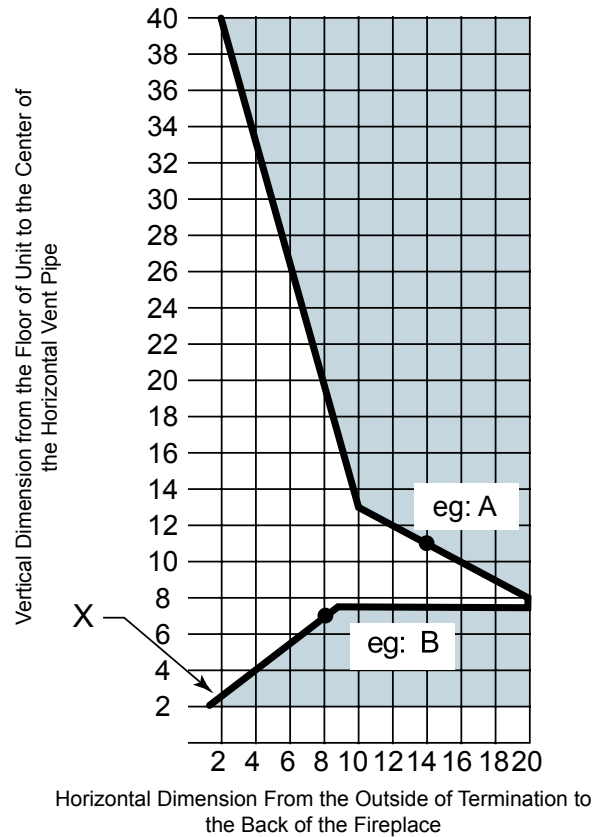
EXAMPLE A:

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 24* for snorkel requirements.



X = 22" minimum for 33" Model
 X = 25¼" minimum for 36" Models
 (Floor to center of horizontal pipe)

**Figure 20 -
 Side Wall Venting Graph**

VENT PIPE CLEARANCES

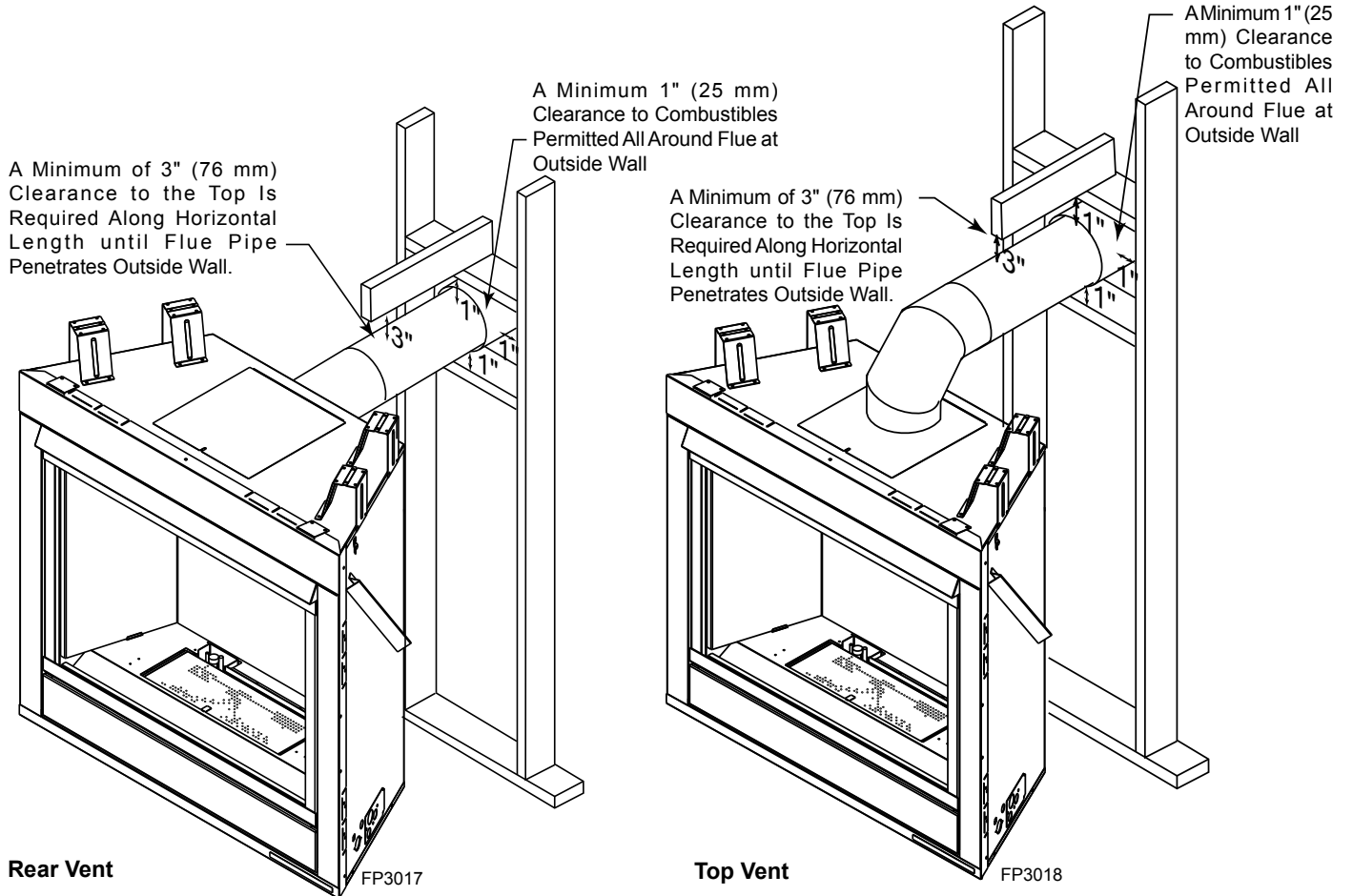


Figure 21 - Combustible Clearances for Vent Pipe

WARNING 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.

WARNING Rear/Top Vent Vertical Sidewall: 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 when top venting, the clearance to combustibles is 1" on all sides of the horizontal run.

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

REAR WALL VENT APPLICATION

When installed as a rear vent unit this appliance may be vented directly to a termination located on the rear wall behind the appliance.

- 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 transition elbow in a corner application) and the outside face of the rear wall is 20" (508 mm). *Figure 22*
- 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)

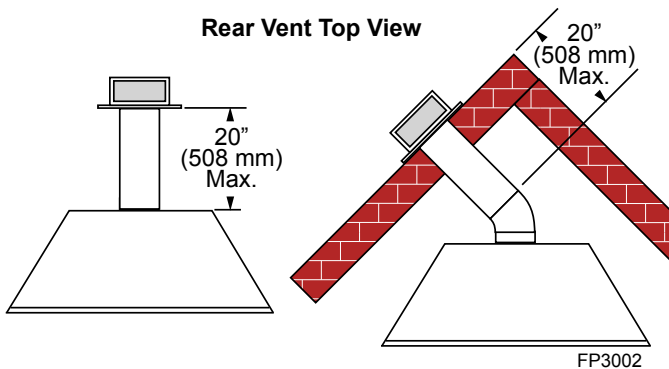


Figure 22 -
Rear Vent Application, No Elbows

REAR WALL VENT INSTALLATION - TWIST LOCK PIPE

Step 1

Locate and cut the vent opening in the wall.

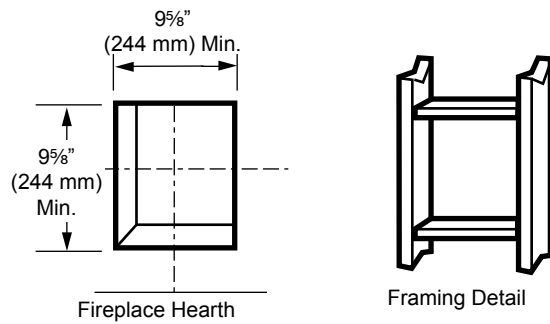
For combustible walls first frame in opening. *Figure 26*

NOTE: When using flex vent, the opening will have to be measured according to the 1" (25 mm) rise in 24" (610 mm) vertical run.

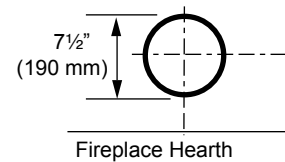
Combustible Walls: Cut a 9 $\frac{5}{8}$ "H x 9 $\frac{5}{8}$ " W (244 x 244 mm) hole through the exterior wall and frame as shown. *Figure 23*

Noncombustible Walls: Hole opening should be 7 $\frac{1}{2}$ " (191 mm) diameter.

Vent Opening for Combustible Walls



Opening for Noncombustible Wall



FP2293

Figure 23 -
Locate vent opening on wall

Step 2

Secure firestop to the inside frame, center in the 9 $\frac{5}{8}$ " x 9 $\frac{5}{8}$ " vent opening.

Step 3

Measure the horizontal length requirement for the venting including a 2" (51 mm) overlap, i.e. from the elbow to the outside wall face plus 2" (51 mm). *Figure 22*

Step 4

Install the 4" (102 mm) vent to the appliance collar and secure with 3 sheet metal screws. Install the 7" (178 mm) vent pipe to the appliance collar and secure with 3 sheet metal screws. It is not necessary to seal this connection. If a 45° elbow is being used attach the elbow to the appliance in the same manner then attach the venting to the elbow.



It is critical that there is no downward slope away from the appliance when connecting the vent or elbow.

Step 5

Guide the venting through the vent hole as you place the appliance in its installed position. Guide the 4" (102 mm) and 7" (178 mm) collar of the vent termination into the outer ends of the venting. Do not force the termination. If the vent pipes do not align with the termination, remove and realign the venting at the appliance flue collars. *Figure 24*. Attach the termination to the wall as outlined in the instruction sheet supplied with the termination.

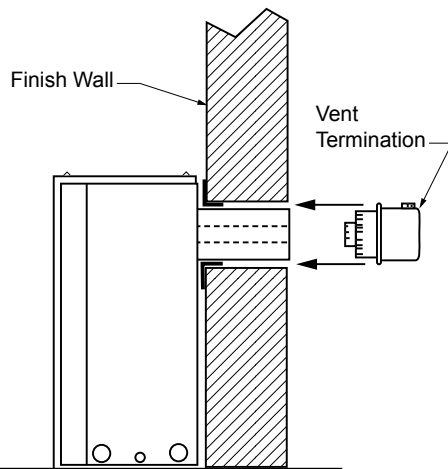


Figure 24 - Side View of Final Unit Location

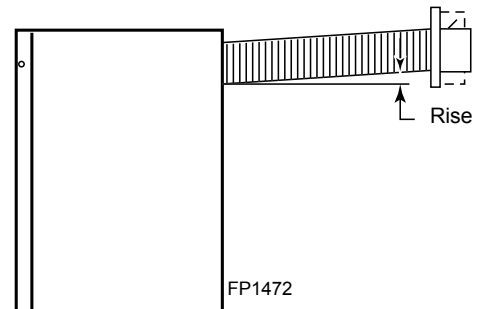


Figure 26 - There must be a 1/2" rise per foot length

REAR WALL VENT INSTALLATIONS - FLEX VENT PIPE

Follow Steps 1 and 2 on Page 18.

Step 3

Install the 4" (102 mm) flex vent pipe to the appliance collars described in "General Information Assembling Vent Pipes", Page 14. 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 25

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

NOTE: There must be a 1/2" (13 mm) rise in a 12" (305 mm) length of flex vent.

Step 4

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

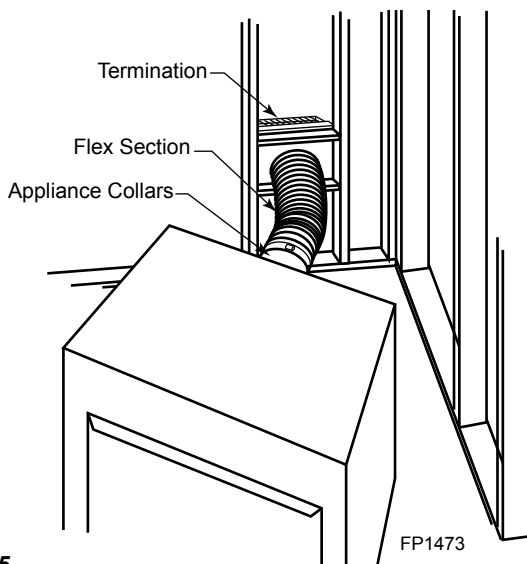


Figure 25 - Grasp the vent pipe close to the collar and bend to 45° angle. do not exceed 45°.

TOP VENT SIDEWALL 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 27
- 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 28
- 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 29 & 30. This does not apply if the 90° elbows are used to increase or redirect a vertical rise. Figure 27

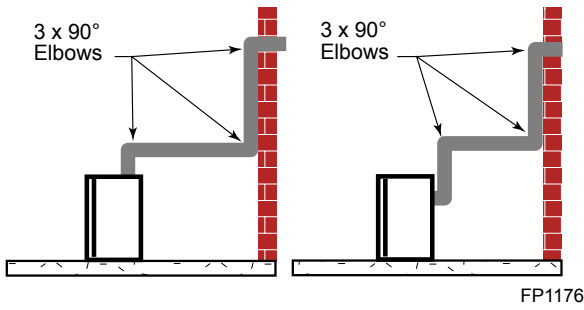


Figure 27 -
Maximum three (3) 90° elbows per installation

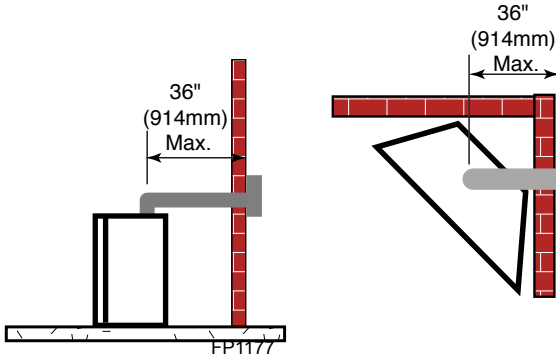


Figure 28 -
Maximum horizontal run with no rise

Example: According to the vent graph (Page 16) the maximum horizontal vent length in a system with a 7½' (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 23 & 24, 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 31*

Example: Elbow 1 = 90°
 Elbow 2 = 45°
 Elbow 3 = 45°
 Elbow 4 = 90°
 Total angular variation = 270°

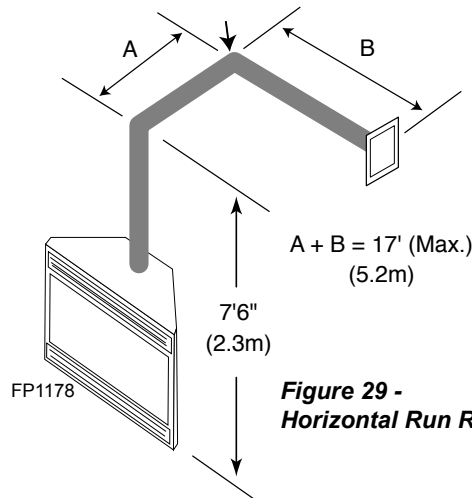


Figure 29 -
Horizontal Run Reduction

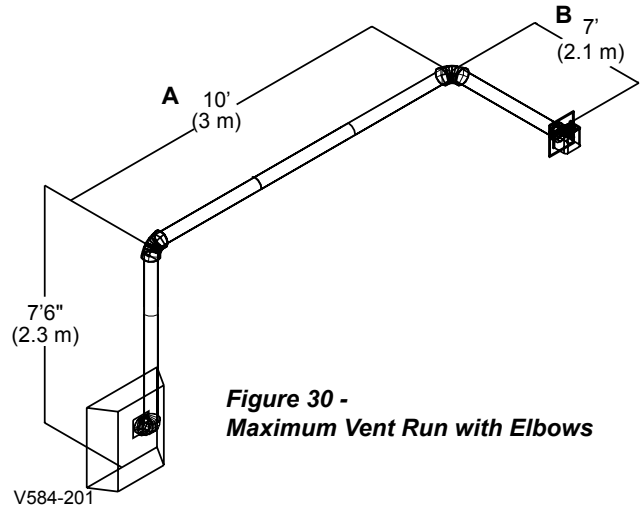


Figure 30 -
Maximum Vent Run with Elbows

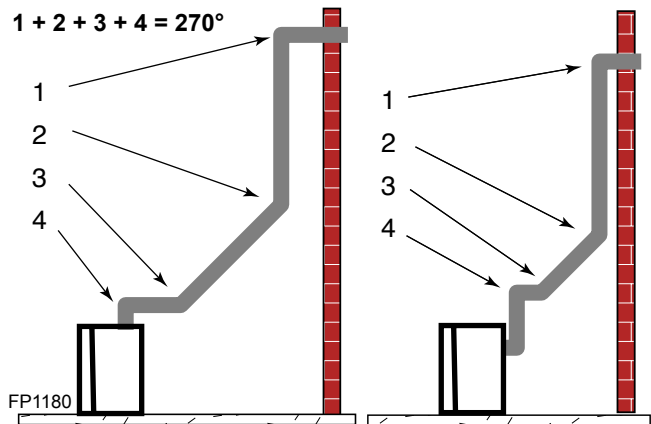


Figure 31 -
Maximum Elbow Usage

VERTICAL SIDEWALL INSTALLATION - TWIST LOCK PIPE

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 32* (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 5/8" H x 9 5/8" W (244 x 244 mm) hole through the exterior wall and frame as shown. *Figure 32*

Noncombustible Walls: Hole opening must be 7 1/2" (191 mm) in diameter.

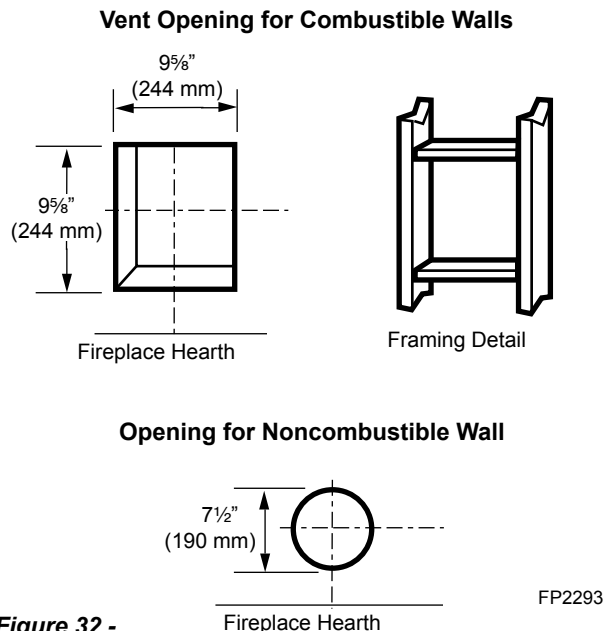


Figure 32 -
Locate Vent Opening on Wall

Step 2

Secure firestop to the inside frame, center in the 9 5/8" x 9 5/8" 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 33*

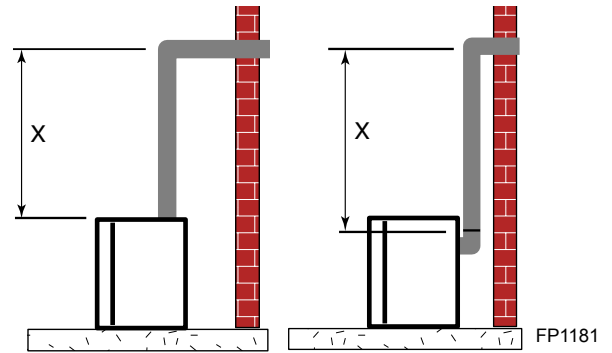


Figure 33 -
Vertical Height Requirements

Step 4

Using appropriate length of pipe section(s) attach to fireplace with three (3) screws. Follow with the installation of the inner and outer elbow, again secure joints with three (3) sheet metal screws.

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 34*



Always install horizontal venting on a level plane.

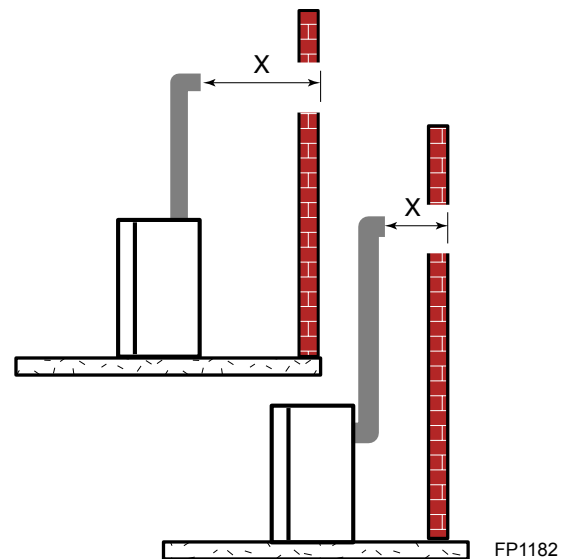


Figure 34 -
Horizontal Length Requirement

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 7" collar into their respective vent pipes. Double check that the vent pipes overlap the collars by 2" (51 mm). Secure the termination 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. You may also attach the termination with screws through the inner body into the 4" vent pipe, however for this method, you must extend the 4" pipe approximately 6" (152 mm) beyond the outer face of the wall.



Support horizontal pipes every 36" (914 mm) with metal pipe straps.

VERTICAL SIDEWALL INSTALLATION - FLEX VENT PIPE

NOTE: The 40" (1016 mm) flex vent is used for 90° off the top of the unit then out the back wall.

Follow Step 1 and 2 on Page 21.

Step 3

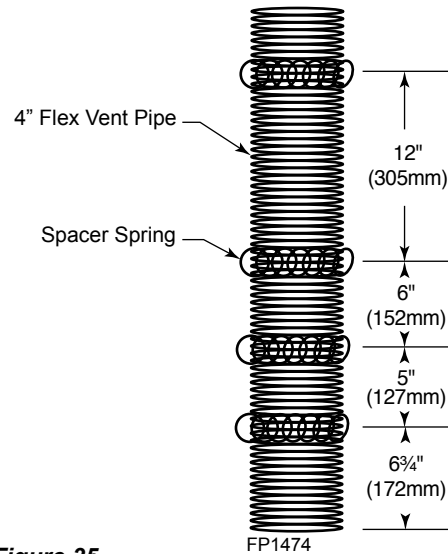
Install the four (4) spacer springs on the 4" flex vent pipe. When installing the spacer springs around the 4" pipe, stretch the spring to approximately 15" (381 mm), wrap the spring around the pipe and interlock the ends of the spacer spring approximately 2" (51 mm). Measure 6¾" (172 mm) from the end of the pipe. Place the next spring 5" (127 mm) from the previously installed spring. Place the next spring 6" (152 mm) from the last spring. Finally place the last spring 12" (305 mm) from the last spring installed. *Figure 35*

Step 4

Install the 4" (102 mm) flex vent pipe to the appliance collar as described on Page 14. Secure the end with the first spring 6¾" (172 mm) from the flex pipe end to the unit.

Step 5

Slide the 7" (178 mm) flex vent pipe over the 4" flex vent pipe and secure the 7" collar as described on Page 14.



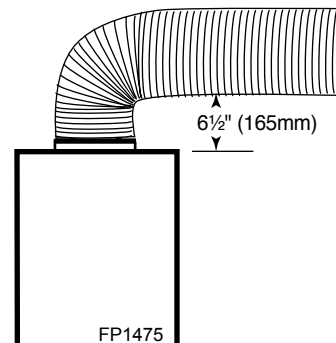
**Figure 35 -
Install Spacer Springs**

Step 6

Bend the flex pipe horizontal so the bottom of the horizontal pipe measure 6½" (165 mm) from the top of the unit immediately after the 90° formation. *Figure 36*. Be sure to follow the 1/2" (13 mm) rise in a 12" (305 mm) horizontal run rule.

Step 7

Install the 4" flex then 7" flex to the termination.



**Figure 36 -
Bend flex vent at 90° so horizontal portion is 6½" (165 mm) off top of unit**

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 sidewall 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 Sidewall Venting Graph for extended horizontal run if the vertical exceeds 24" (610 mm).

1. Establish vent hole through the wall. *Page 21, Figure 32*
2. 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 37*
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 37*

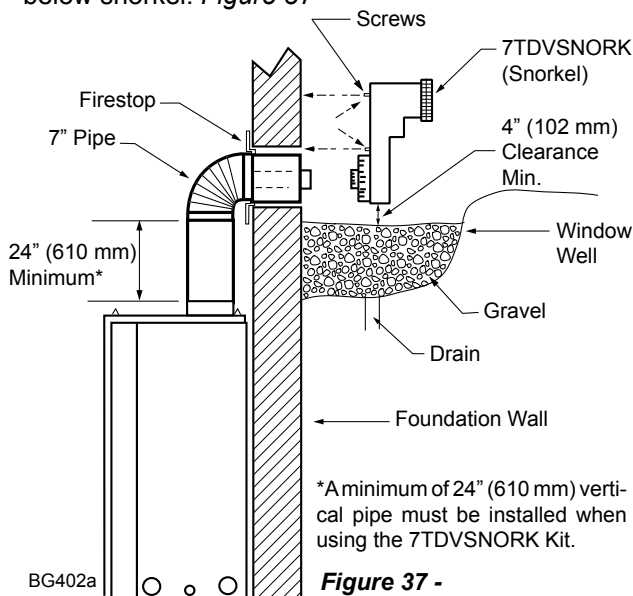


Figure 37 - Below Grade Installation



Do not back fill around snorkel.

A clearance of at least 4" must be maintained between the snorkel and the soil.

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 1/2 sheet metal screws. It will be necessary to extend vent pipes out as far as the protruding wall face. *Figure 38*

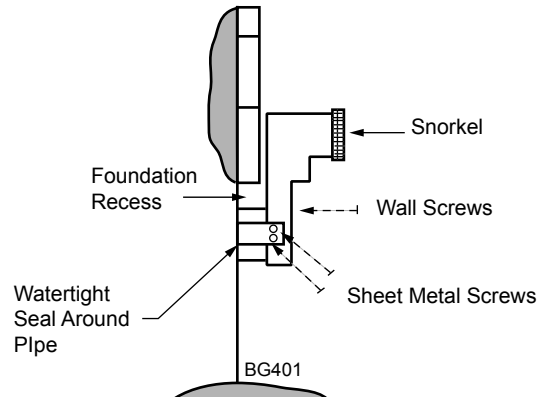


Figure 38 - Snorkel installation, recessed foundation

VERTICAL THROUGH-THE-ROOF APPLICATION

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 39*
- 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 40*
- 7DVCS supports offsets. *Figure 42*. 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 40*

- For the minimum height of the vent above the highest point of penetration through the roof refer to *Figure 43*.

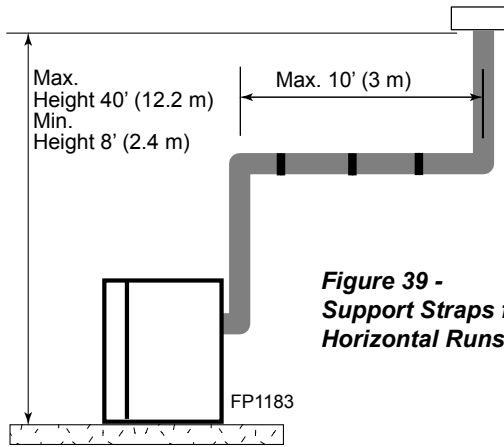
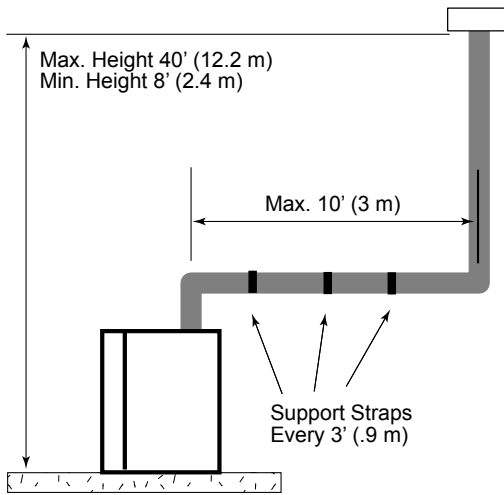


Figure 39 - Support Straps for Horizontal Runs

$1 + 2 + 3 + 4 = 270^\circ$

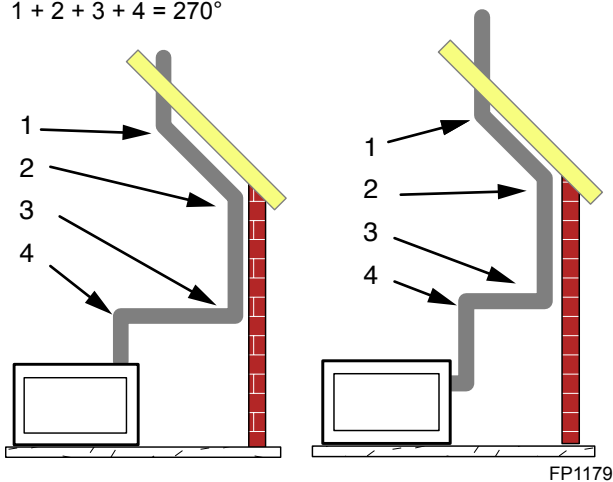


Figure 40 - Maximum Elbow Usage

VERTICAL THROUGH-THE-ROOF INSTALLATION

NOTE: For all top vent vertical through-the-roof installations, install the supplied flue restrictors onto the top edge of the firebox flue adapter.
NOTE: Depending on your installation, it may be necessary to adjust the restrictor settings.

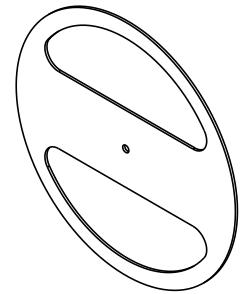
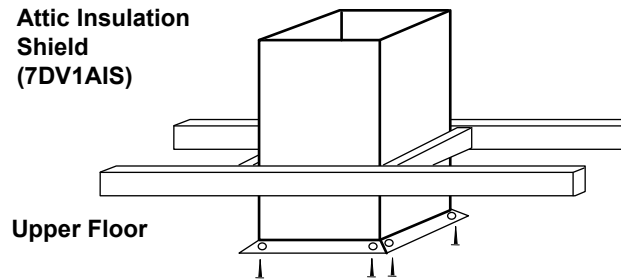


Figure 41 - Flue Restrictor

1. Locate your fireplace.
2. Plumb to center of the (4") flue collar from ceiling above and mark position.
3. Cut opening equal to 9¾" x 9¾" (248 x 248 mm).
4. Proceed to plumb for additional openings through the roof. In all cases, the opening must provide a minimum of 1 inch clearance to the vent pipe, i.e., the hole must be at least 9¾" x 9¾" (248 x 248 mm).
5. Place fireplace into position.
6. Place firestop(s) or Attic Insulation Shield into position and secure. *Figure 42*

Attic Insulation Shield (7DV1AIS)



Upper Floor



Ceiling Installation

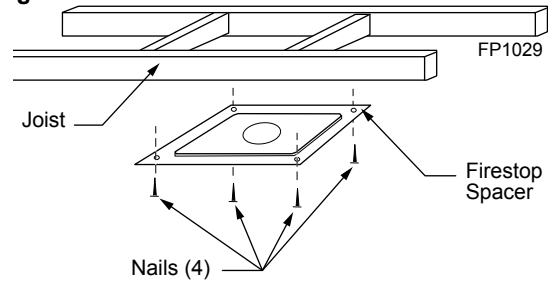


Figure 42 - Place Firestop Spacer(s) and Secure

7. Install roof support (*Figure 43*) and roof flashing making sure upper flange is below the shingles. *Figure 45*
8. Install appropriate pipe sections until the venting is above the flashing. *Figure 43*

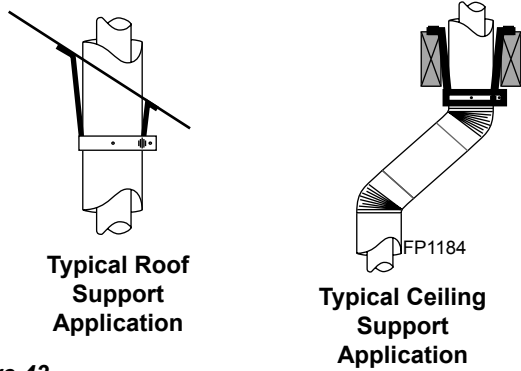


Figure 43 - Venting Supports

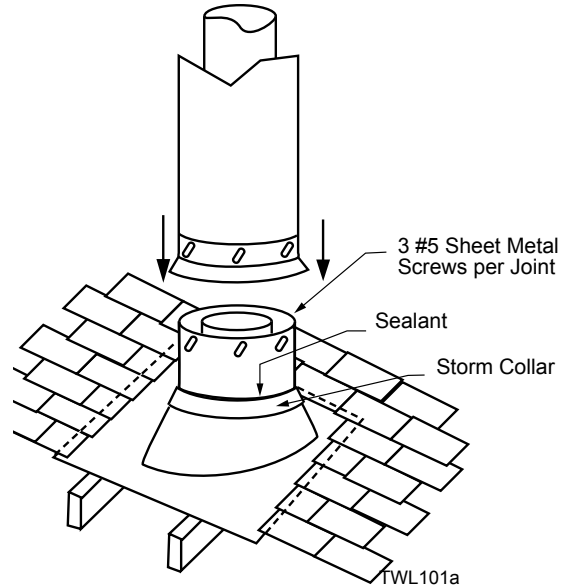


Figure 45 - Roof Flashing

9. Install storm collar and seal around the pipe.
10. Add additional vent lengths for proper height. Figure 44
11. Apply high temperature sealant to 4" and 7" collars of vertical vent termination and install.

If there is a room above ceiling level, fire stop spacer must be installed on both the bottom and the top side of the ceiling joists. If an attic is above ceiling level an Attic Insulation Shield must be installed. The enlarged ends of the vent section always face downward.

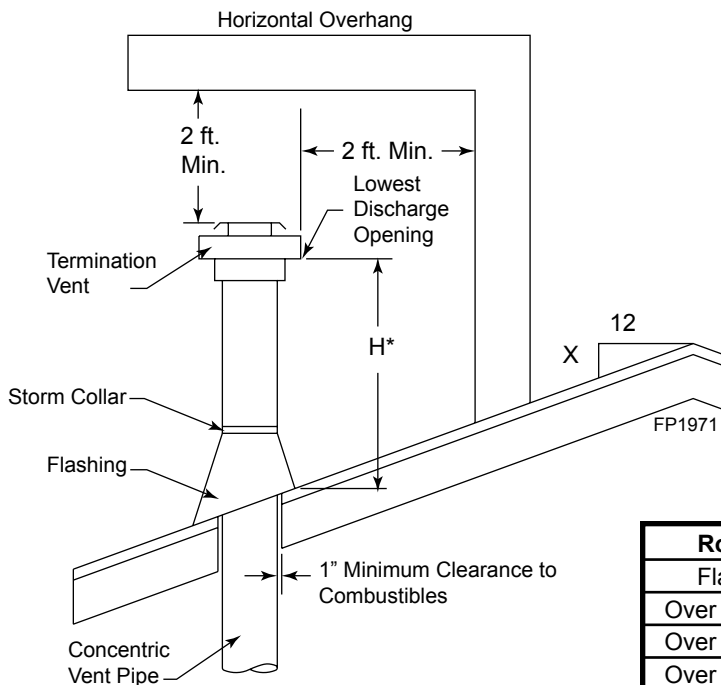


Figure 44 - Minimum Chimney Clearance

Roof Pitch	H (feet)
Flat to 6/12	1.0
Over 6/12 to 7/12	1.25
Over 7/12 to 8/12	1.5
Over 8/12 to 9/12	2.0
Over 9/12 to 10/12	2.5
Over 10/12 to 11/12	3.25
Over 11/12 to 12/12	4.0

*H - Minimum height from roof to lowest discharge opening of vent

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.

INSTALL GAS PIPING TO FIREPLACE / BURNER SYSTEM LOCATION

WARNING

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*
 - Tee joint
 - 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)
 - Test gauge connection*
 - Pipe wrench
- * 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 46*. Pointing the vent down protects it from freezing rain or sleet.

CAUTION

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.

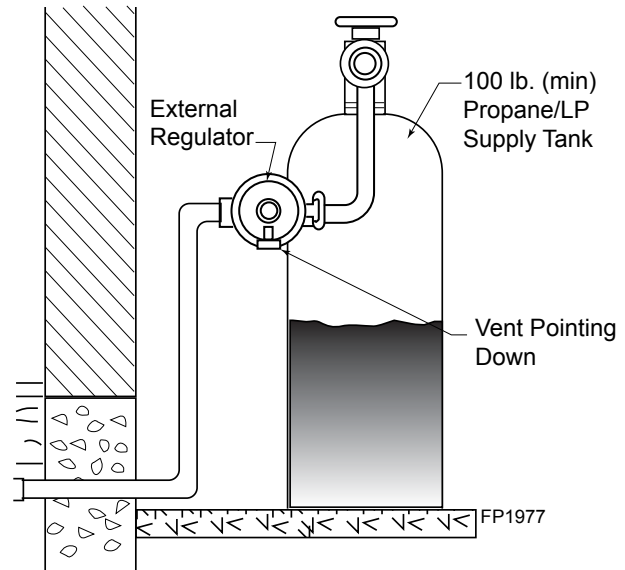


Figure 46 - External Regulator with Vent Pointing Down (Propane/LP Only)

CAUTION

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.

WARNING Only persons licensed to work with gas piping may make the necessary gas connections to this appliance.

CAUTION 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 47*

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 47*

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.

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 47*. 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.

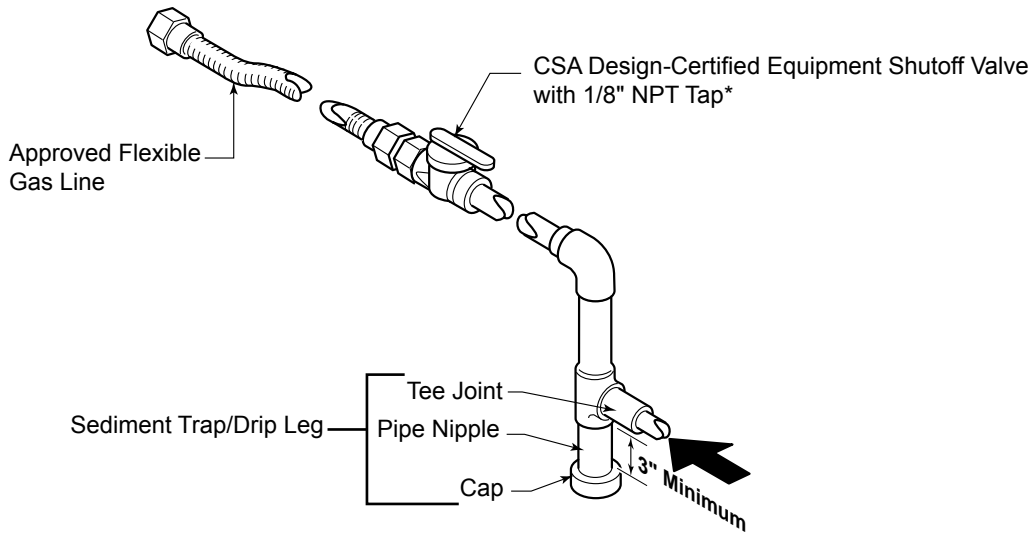
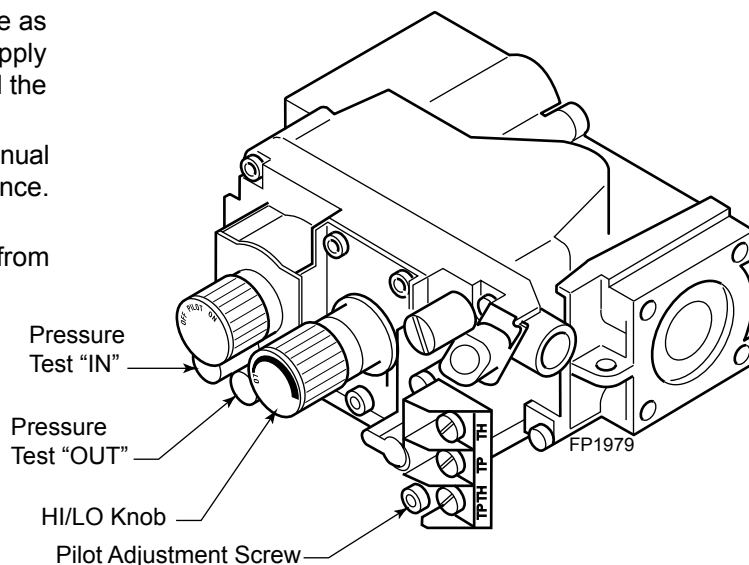


Figure 47 - Gas Connection

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)

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.
2. To ease installation, a 30" (762 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.
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 48.* 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 48 -
Millivolt Gas Pressure Check at Gas Valve**

WARNING

Do not use open flame to check for gas leaks.

CAUTION

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

Verify proper operation after servicing.

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.

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 49*. 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 (110 V) circuit.

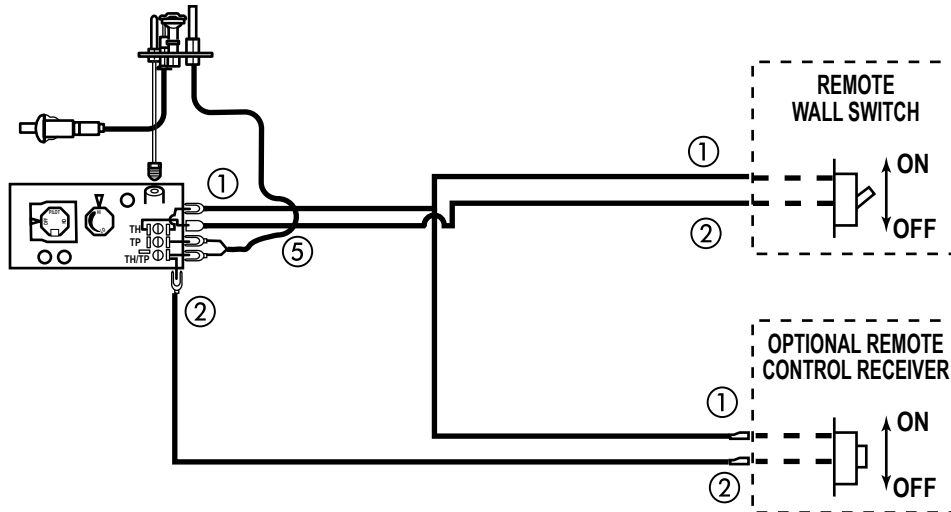


Figure 49 - Wiring Diagram for Wall Switch

FP3032

REMOTE WALL SWITCH

Position the wall switch. Do not extend beyond the 15 feet of wire.

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 50*
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 49*
4. Use the screws that came with the remote control to mount the remote receiver cover to the bent up "remote" tabs. *Figure 50*

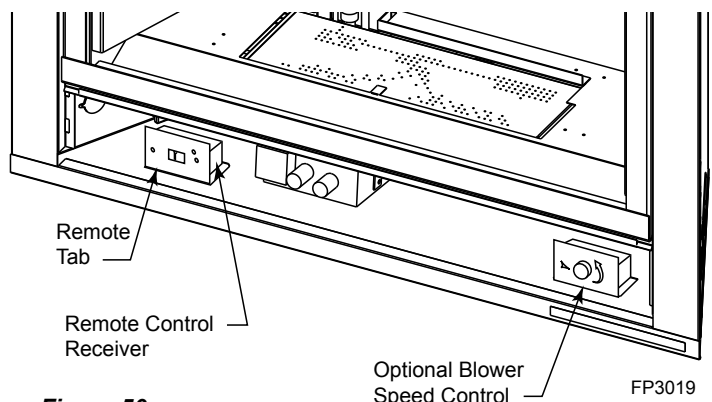
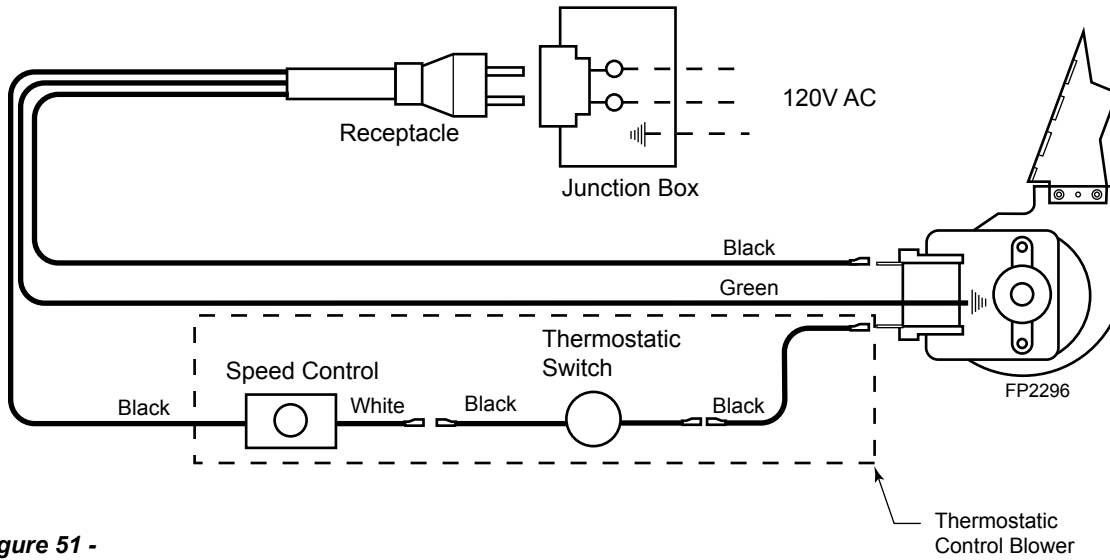


Figure 50 - Optional Control Location

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 51



**Figure 51 -
Blower Wiring Diagram**

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING

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

- A. This appliance is equipped with 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.
 - 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. Use only your hand to push in, or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.
 - D. Do not use this appliance if any part 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.

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.

WARNING

Never use an open flame to check for gas leak.

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

DANGER

Never check for gas leak with open flame!

WARNING

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

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

LIGHTING PILOT

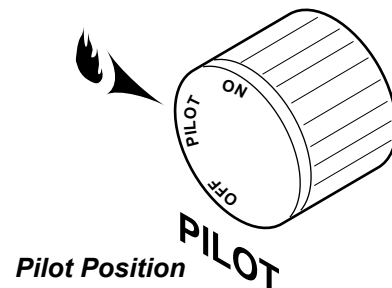
WARNING

The control has an interlock device that does not allow the lighting of the fireplace up to the moment the safety device of the flame has not interrupted the gas flow. After that period of time (when the magnet is closed), it is possible to start the lighting operation.

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  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 a few 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

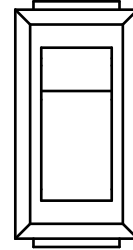
LIGHTING BURNER

LIGHTING THE BURNER

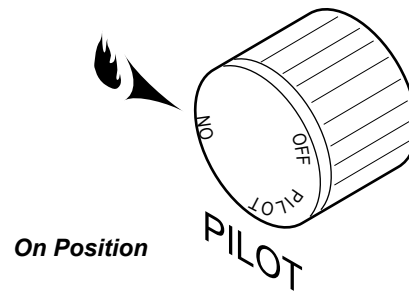
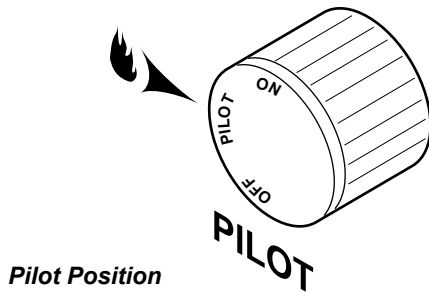
Depress and turn the knob counterclockwise  to the "ON" position. It will take less than four (4) seconds for the burner to ignite.

MAIN BURNER SWITCH

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

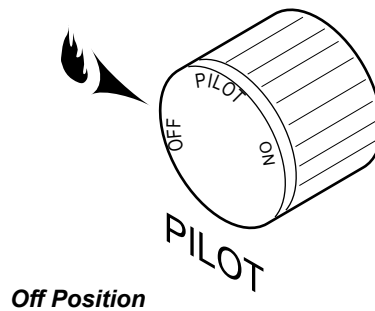


Wall Switch



TO TURN OFF GAS

Depress and turn knob clockwise  to "OFF" position.



FOR YOUR SAFETY READ BEFORE LIGHTING

A. 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.
 - 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.
- B.** Turn off all electric power to appliance.
- C.** 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.

WARNING

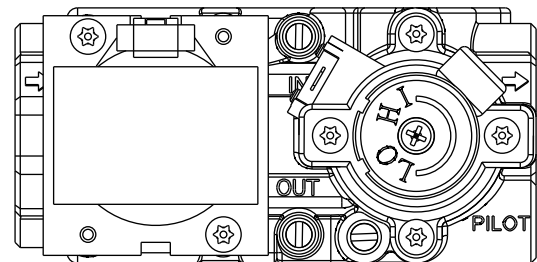
If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

WARNING

Never use an open flame to check for gas leak.

LIGHTING ELECTRONIC IGNITION

1. **STOP!** Read the safety information above.
2. Make sure all power to unit is turned off.
3. Set thermostat to lowest setting or turn wall switch to "OFF".
4. This appliance is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
5. Turn on all electric power to appliance.
6. Turn switch to "ON". It will beep once.
7. Once pilot flame is established, the main burner flame will light automatically.
8. If the pilot will not stay lit after several tries, turn the master switch to "OFF" and call your service technician or gas supplier.



TO TURN OFF GAS

1. Turn master switch to "OFF".
2. Turn off all electrical power to the appliance if service is to be performed.

IPI - CHECK GAS PRESSURE and ELECTRICAL INSTALLATION

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.
2. To ease installation, a 24" (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 52.* After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check test points for gas leaks.

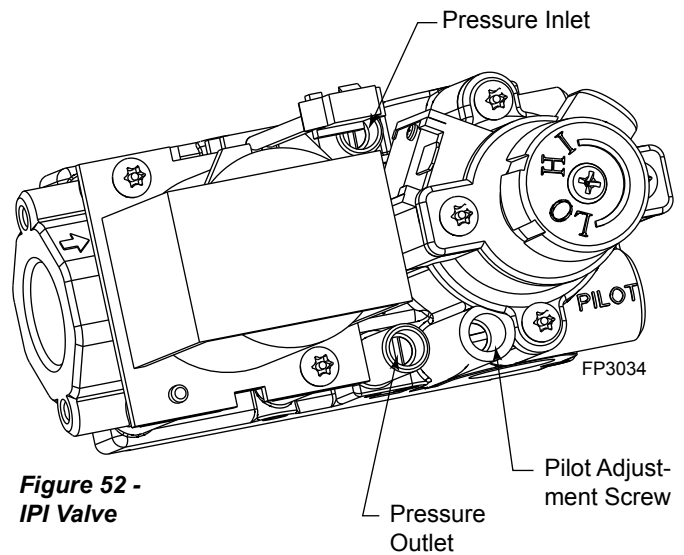


Figure 52 -
IPI Valve

WARNING

Do not use open flame to check for gas leaks.

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.
2. 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 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

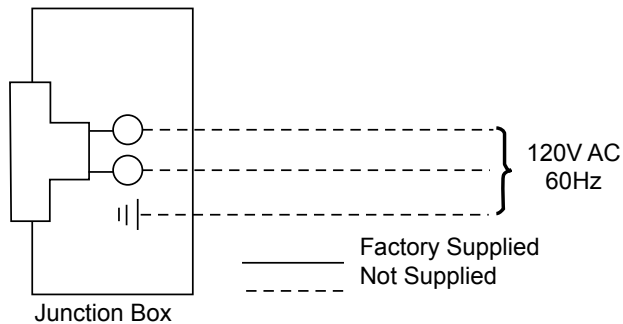
Electrical connections should only be performed by a qualified, licensed electrician. Main power must be off when connecting to main electrical power supply or performing service. All wiring shall be in compliance with all local, city and state codes. The appliance, when installed, must be electrically 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.

JUNCTION BOX WIRING

1. 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 53*.



**Figure 53 -
Junction Box Wiring Diagram**

WALL SWITCH INSTALLATION

The wall switch wire connection is located off the wire harness coming out of the IPI Control Board. The label is wired '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 54*

WARNING

Do not connect wall switch to 110 V circuit.

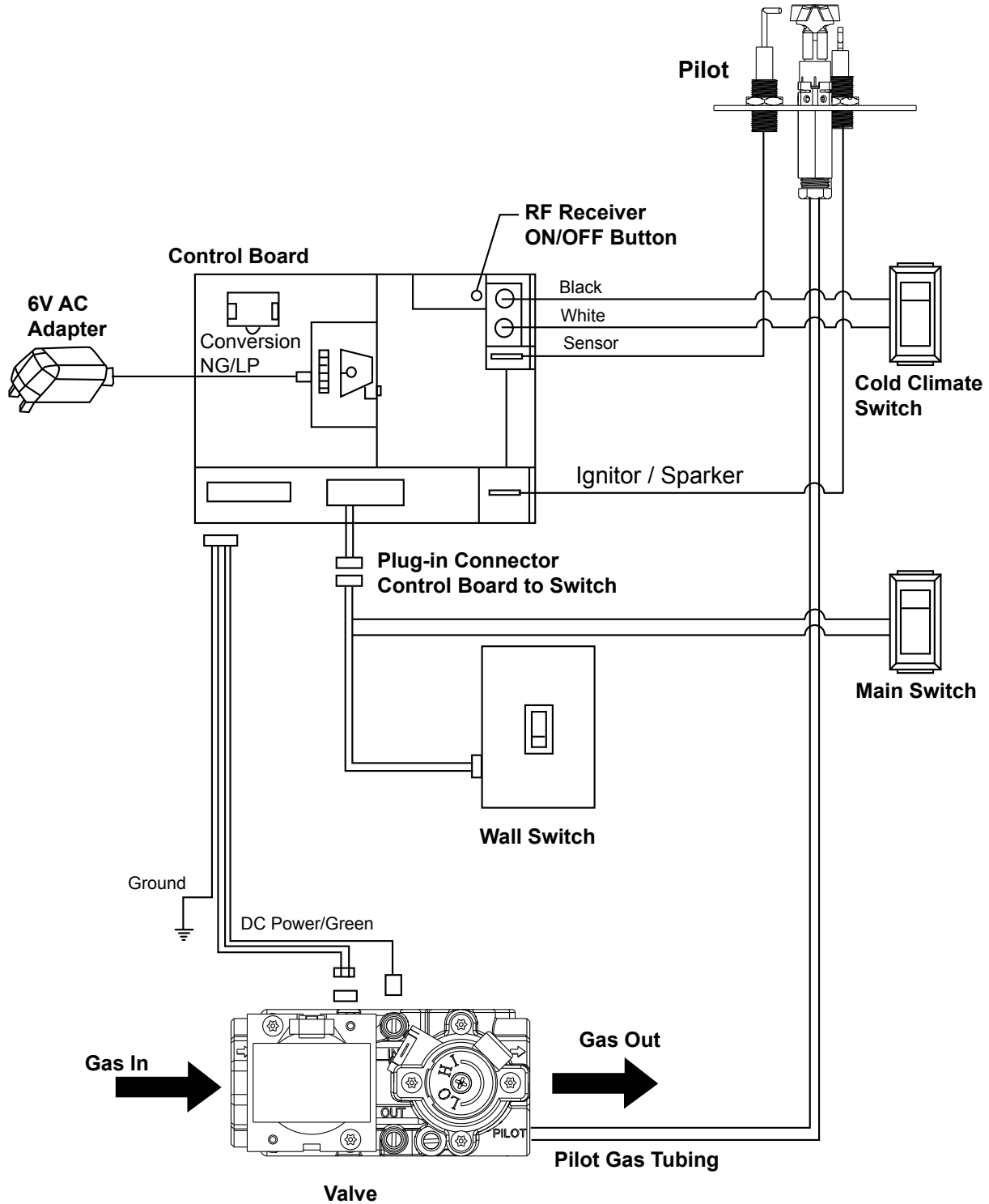


Figure 54 - IPI System Wiring Diagram

CAUTION 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**WARNING**

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

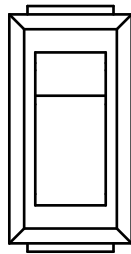
- A.** This appliance is equipped with an ignition device which automatically lights the pilot. Refer to the instructions.
- B.** BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

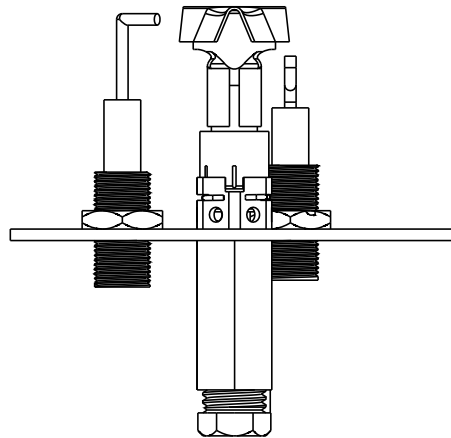
- Do not attempt to light any appliance.
 - Do not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- C.** Use only your finger to push in the master switch. 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.

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 "B" in the safety information on Page 38. 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.



Wall Switch



TO TURN OFF GAS TO APPLIANCE

1. Turn master switch to "OFF".
2. Turn off all electrical power to the appliance if service is to be performed.

GLASS FRAME REMOVAL

1. Remove canopy by pulling forward.
2. Release the two (2) latches on the top of the fireplace by pulling forward and up. *Figure 55*
3. Tilt glass frame out and lift glass frame up and away.
4. Set glass frame aside.

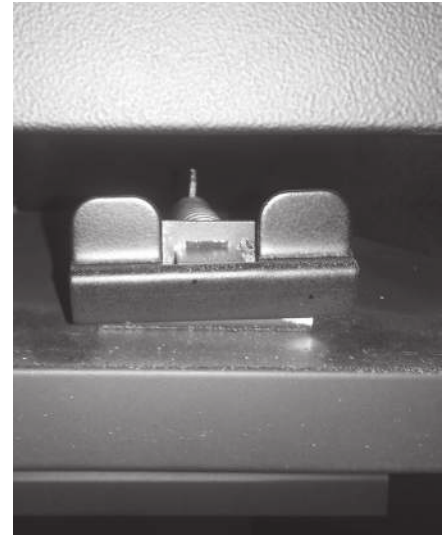


Figure 55a - Glass Frame Latch

FP3041

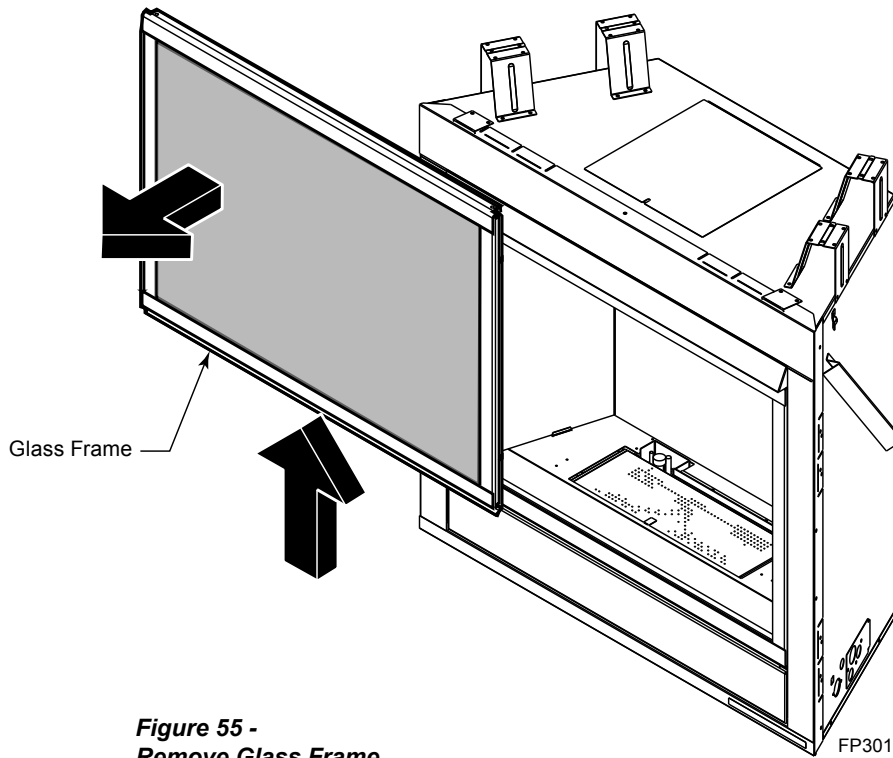


Figure 55 - Remove Glass Frame

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

! WARNING

HOT GLASS WILL CAUSE BURNS.

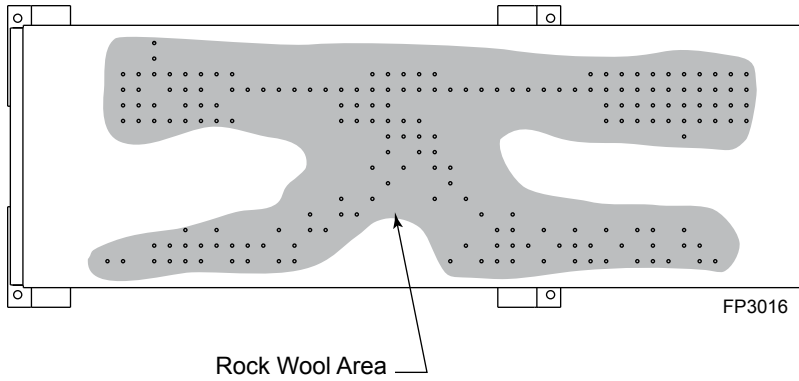
DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

ROCK WOOL PLACEMENT

1. Your fireplace was supplied with three (3) 8-gram bags of rock wool embers: Use one (1) 8 gram bag or 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.
- 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.



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

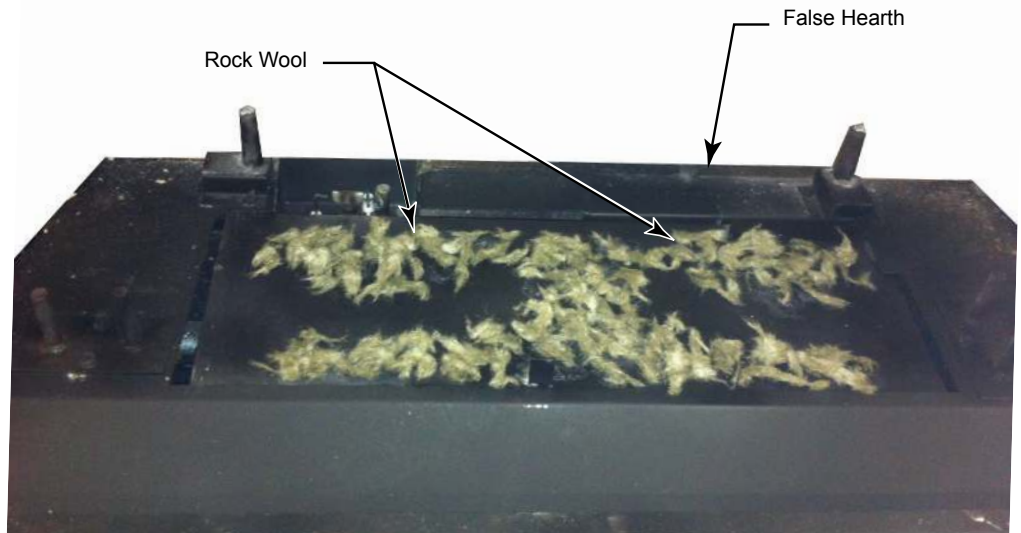


Figure 56 - Placement of Rock Wool on Burner

LG1176

NOTE: An adjustable baffle plate is shipped in the maximum open position secured to the false bottom. The baffle plate may be adjusted to restrict the flame depending on air flow to the burner. Figure 57



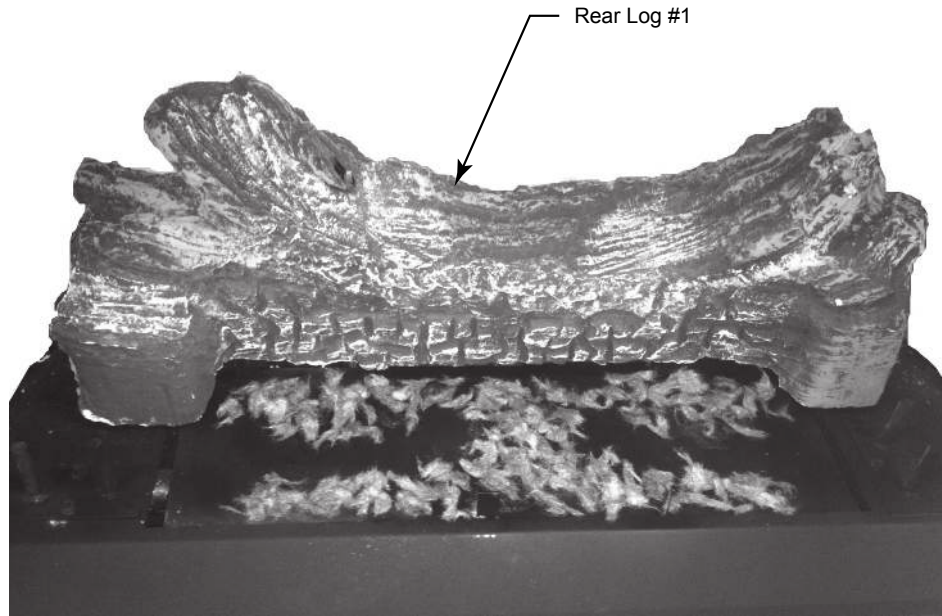
Figure 57 - Flat Baffle

FP3039

LOG PLACEMENT

1. Place rear log (#1) on the two (2) pins on the false hearth in the back of the firebox. The log should rest firmly on the mounting pins. *Figure 58*

Figure 58



LG1177

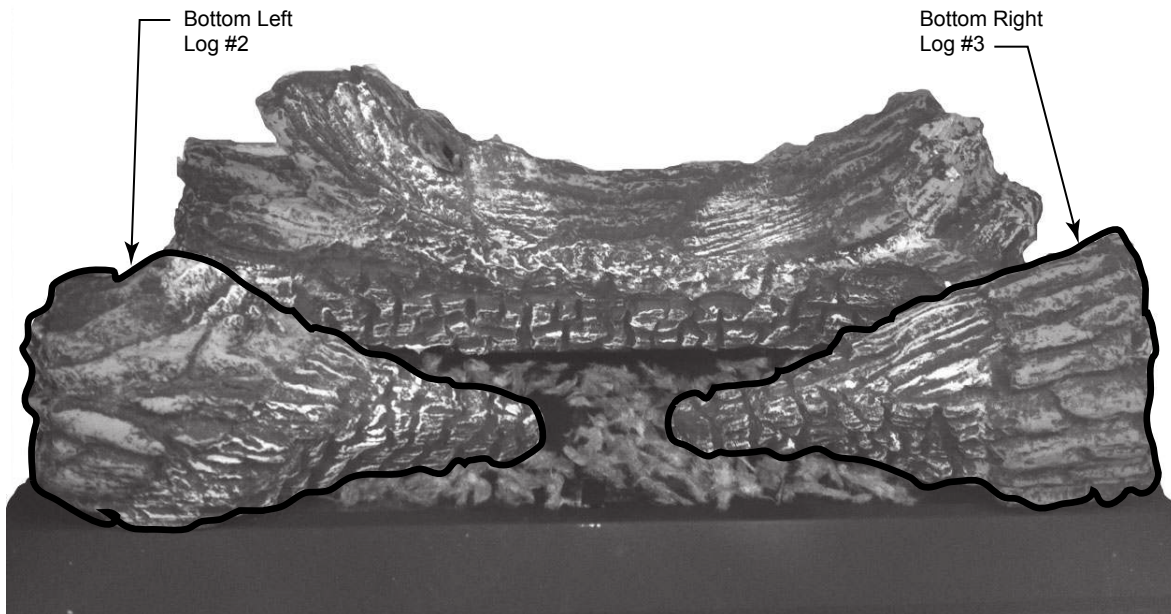


Figure 59

LG1178

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 59*

3. Bend the tab in the center front of the false hearth up to a 90° angle. *Figure 60*. 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 61*

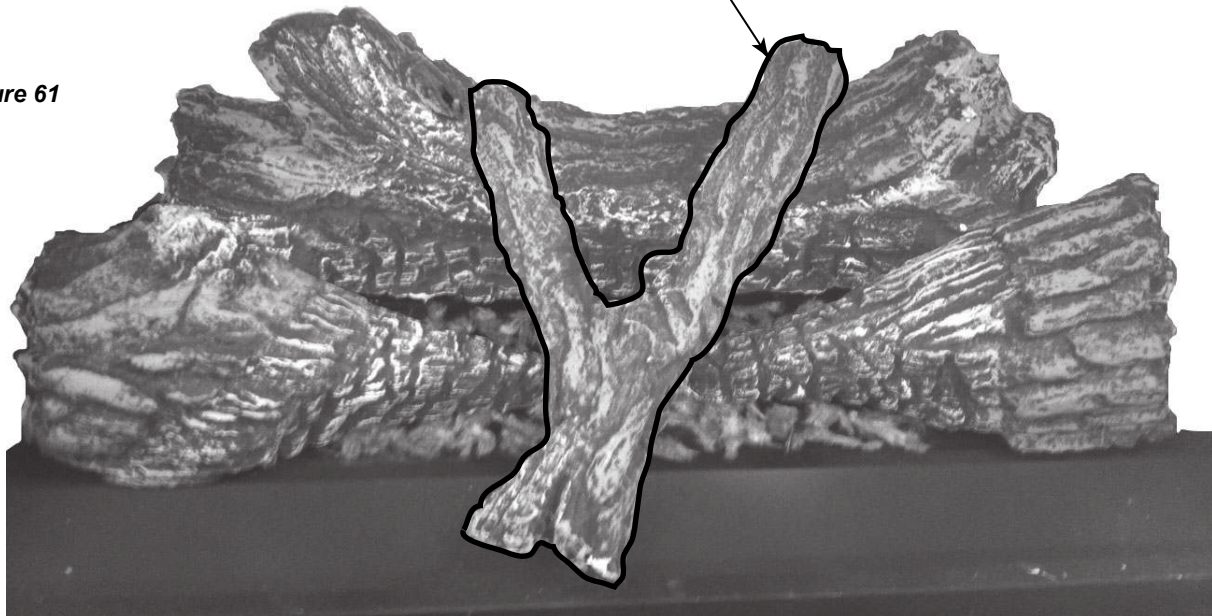


Figure 60

Center Tab

Top Log #4

Figure 61



LG1180

LAVA ROCK AND EMBER PLACEMENT

Sprinkle lava rock on the floor of the inner combustion chamber. Evenly distribute the rock. Do not pile the lava rock up in front of grate. Do not place lava rock on the burner. If desired, purchase optional embers to decorate the floor of the fireplace.

WARNING

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

WARNING

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.

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.

PILOT FLAME

The flames from the pilot should be visually checked as soon as the heater is installed and periodically during normal operation. *Figure 62*. **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.

BURNER

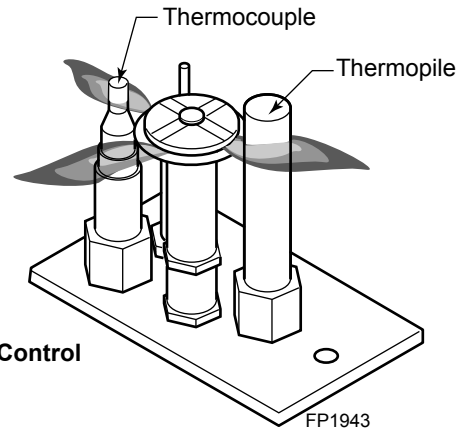
Inspect area around the injector. Remove any lint or foreign material with a brush or vacuum.

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 and slightly taller than the rear log. *Figure 63*

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.



Millivolt Control Pilot

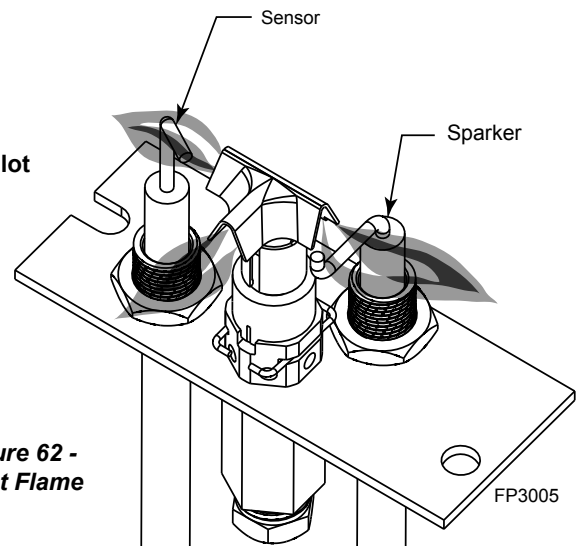


Figure 62 - Pilot Flame

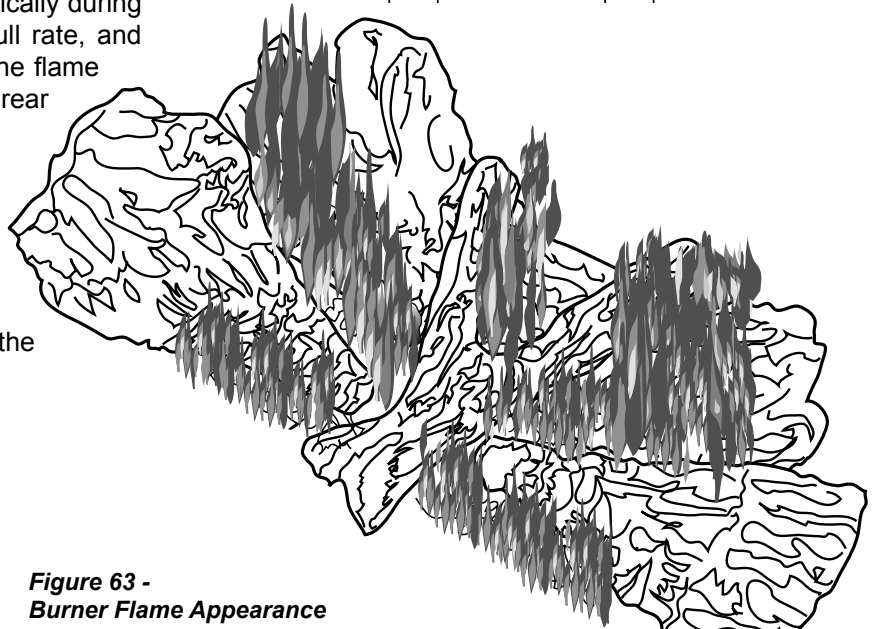


Figure 63 - Burner Flame Appearance

LG1182

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 DOOR

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

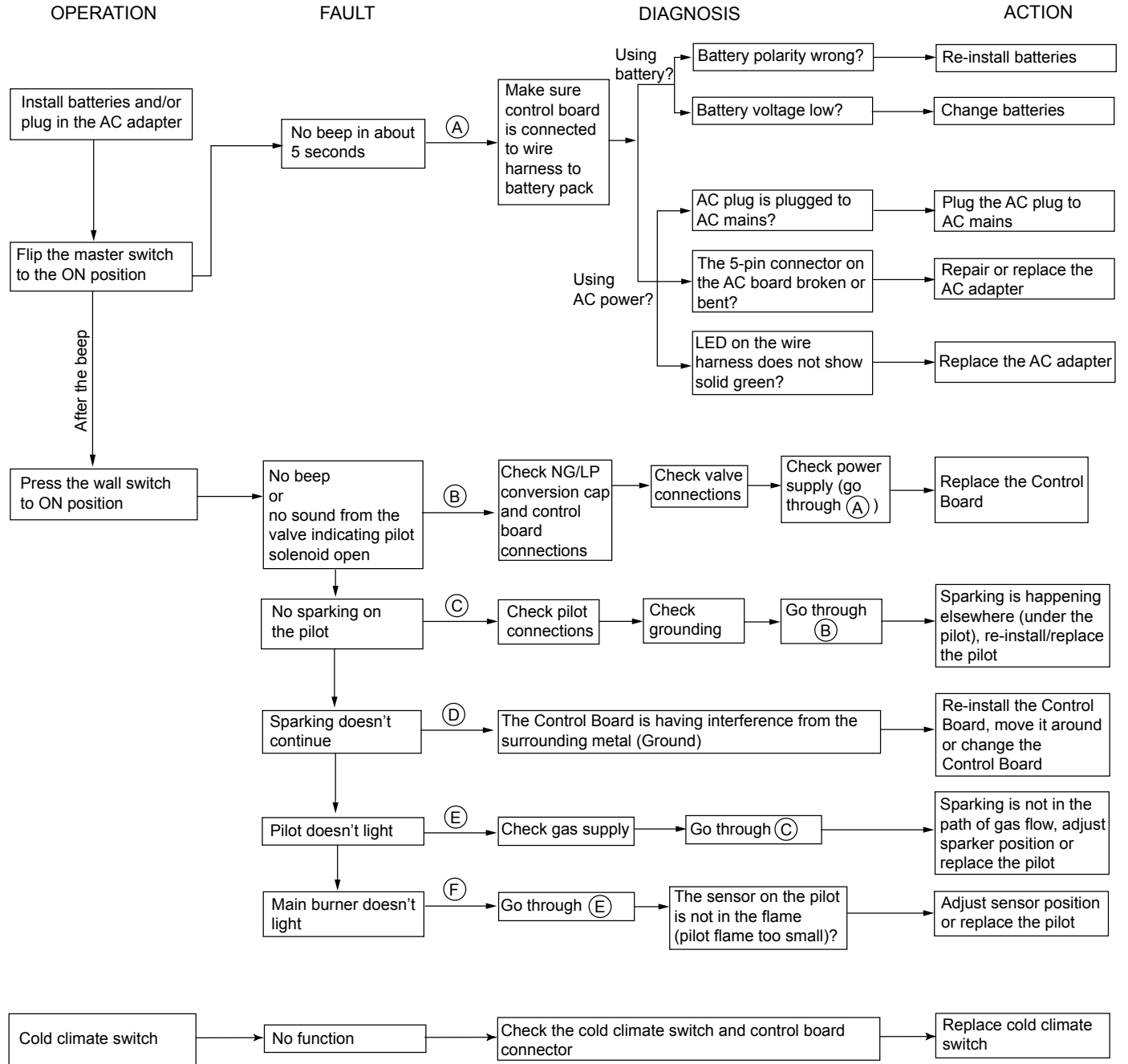
ROCK WOOL

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

MILLIVOLT STANDING PILOT IGNITION

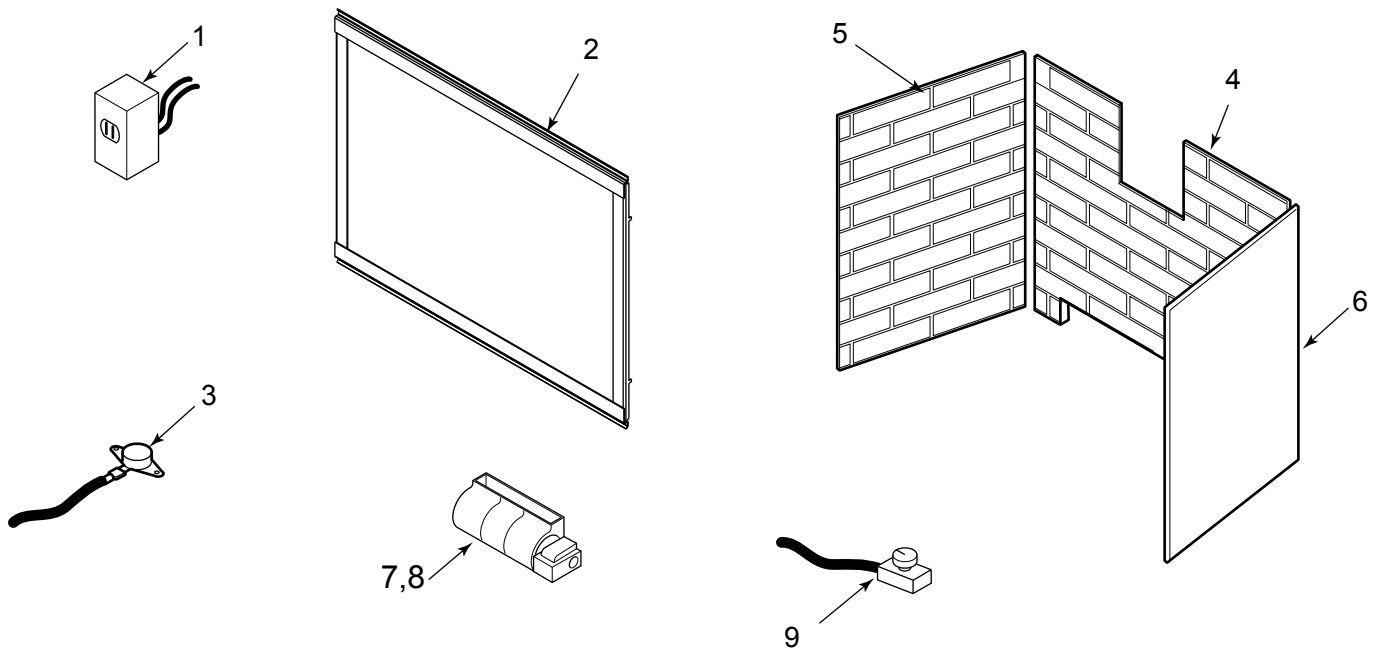
SYMPTOM	POSSIBLE CAUSE	ACTION
1. Spark ignitor will not light pilot after repeated triggering of piezo.	<p>A. Wire disconnected.</p> <p>B. Defective ignitor.</p> <p>C. No gas or low gas pressure.</p> <p>D. No Propane/LPG in tank</p>	<p>A. Open door and check to make sure wire is connected to ignitor.</p> <p>B. Check for spark at electrode and pilot. If no spark and electrode wire is properly connected, replace pilot assembly.</p> <p>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.</p> <p>D. Check Propane/LPG tank. Refill tank.</p>
2. Pilot will not stay lit after carefully following lighting instructions.	<p>A. Defective thermocouple</p> <p>B. Defective valve</p>	<p>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.</p> <p>B. If thermocouple is producing more than 15 mV, replace faulty valve.</p>
3. Pilot burning, valve knob turned to "ON", switch is turned to "ON", but burner will not ignite.	<p>A. Defective switch, wall switch, remote control or wire</p> <p>B. Pilot flame too small</p> <p>C. Defective or malfunctioning thermopile</p> <p>D. Defective valve</p>	<p>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 (terminals marked TH and TP/TH). If burner comes on, wires are faulty or connections are bad. Replace wire.</p> <p>B. If pilot flame is not close enough to the thermopile, adjust pilot flame.</p> <p>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.</p> <p>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.</p>
4. Frequent pilot outage problem.	<p>A. Pilot flame may be too high or too low, causing pilot safety to drop out</p>	<p>A. Clean and adjust the pilot flame for maximum flame impingement on thermocouple.</p>

IPI SYSTEM



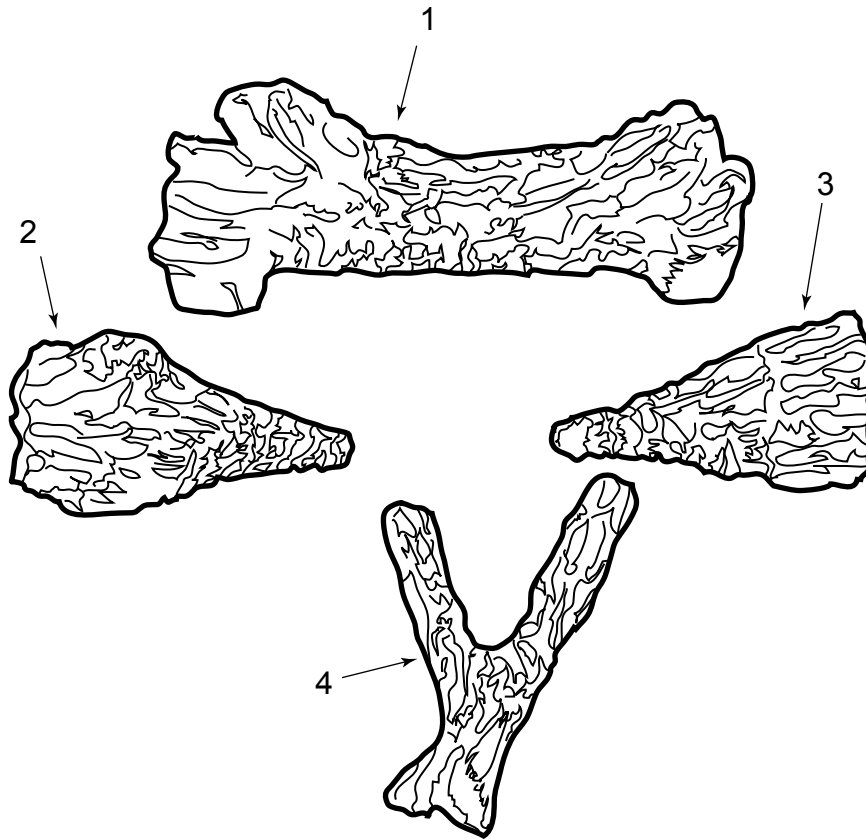
Tous les systèmes de contrôle / pilotes

SYMPTOM	POSSIBLE CAUSE	ACTION
1. The pilot and main burner extinguish while in operation	A. Inner vent pipe leaking exhaust gases back into system	A. Check for flue product leak. Replace defective pipe section.
	B. Horizontal vent improperly pitched C. Improper vent cap installation	B. Check horizontal-venting piping is running upward 1/4" per foot. Do not run the pipe level or downward. C. Check for proper installation and freedom from debris or blockage.
2. Glass Soots	A. Flame impingement on logs	A. 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.
3. Flame burns blue and lifts off burner (ghosting)	A. Insufficient fresh air being supplied	A. Ensure that the vent cap is installed properly and free of debris. Ensure that the vent system joints are tight and have no leaks. Ensure that no debris has been blocking the inner air intake at the bottom back of the combustion chamber. Ensure that the glass is properly secure and latch.



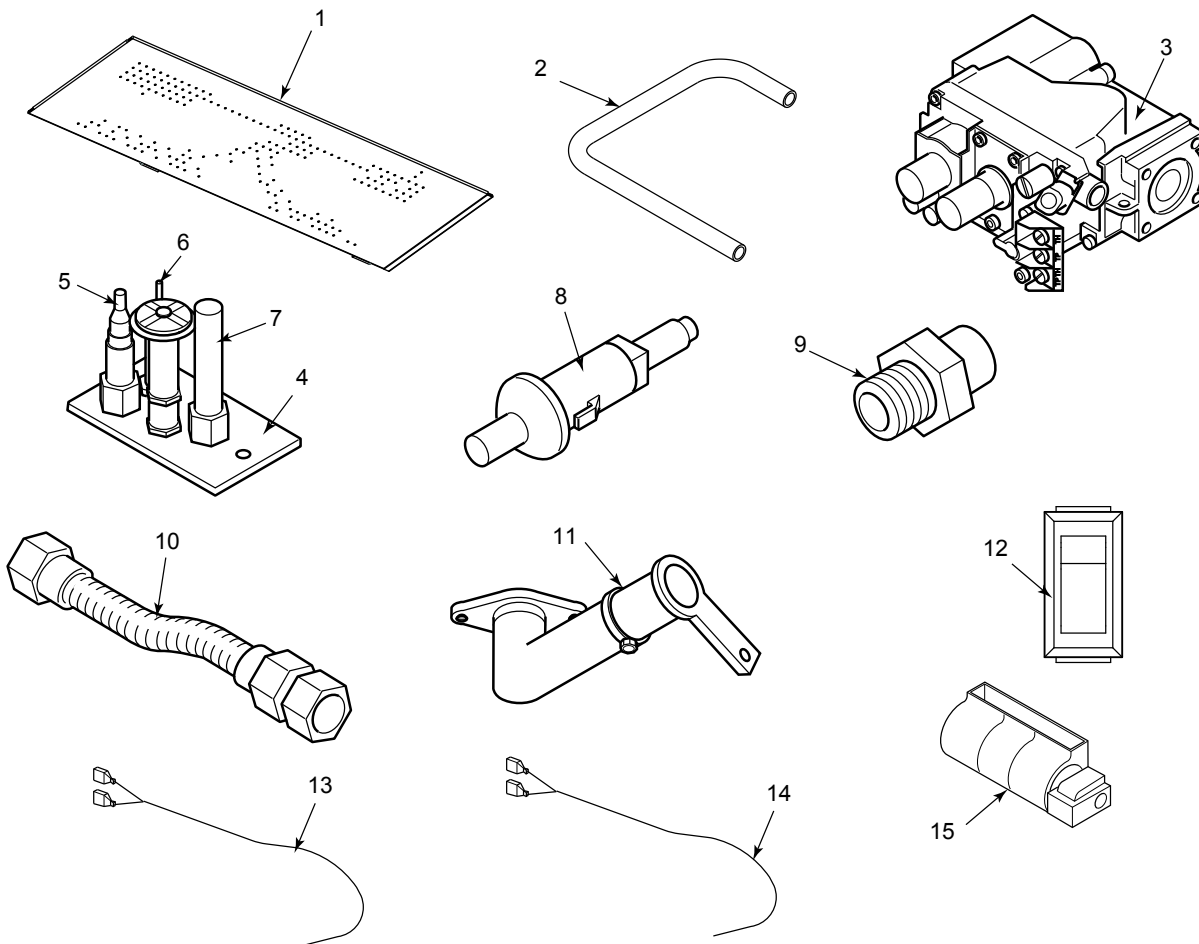
Firebox Components

Ref.	Description	Qty.	36CFDV
Standard Features			
1.	Junction Box Assy.	1	26D2128K
2.	Glass Frame Assy.	1	20305406K
Factory Installed Service Parts			
3.	Thermostat Sensor for Blower	1	26D2870
Firebrick - Cottage Clay			
4.	Rear	1	20305737K
5.	Left	1	20305739K
6.	Right	1	20305738K
Firebrick - Tavern Brown			
4.	Rear	1	20305895K
5.	Left	1	20305897K
6.	Right	1	20305896K
Firebrick - Cottage Red			
4.	Rear	1	20305892K
5.	Left	1	20305894K
6.	Right	1	20305893K



Logs

Item	Description	36CFDV
1.	Rear Log #1	54D0117
2.	Bottom Left Log #2	54D0118
3.	Bottom Right Log #3	54D0119
4.	Top Log #4	54D0120



Standing Pilot – Millivolt Control

Ref.	Description	Qty.	36CFDVNV	36CFDVPV
1.	Burner Assy.	1	20305397K	20305397K
2.	Burner Tube	1	20305364K	20305364K
3.	Gas Valve Assy.	1	37D0117	37D0118
4.	Pilot Assy.	1	37D0018K	37D0019K
5.	Replacement Thermocouple	1	24D0808	24D0808
6.	Replacement Igniter and Wire	1	10001297	10001297
7.	Replacement Thermopile	1	26D0566	26D0566
8.	Piezo Igniter	1	14D0503	14D0503
9.	Injector	1	59D0062	20H3146
10.	Flexhose w/Shut-Off Valve	1	69D0030	69D0030
11.	Venturi	1	69D1119	69D1026
12.	Rocker Switch	1	32D0232	32D0232
13.	Wire Assy.	1	44D0500	44D0500
14.	Wire Assy.	1	44D0501	44D0501

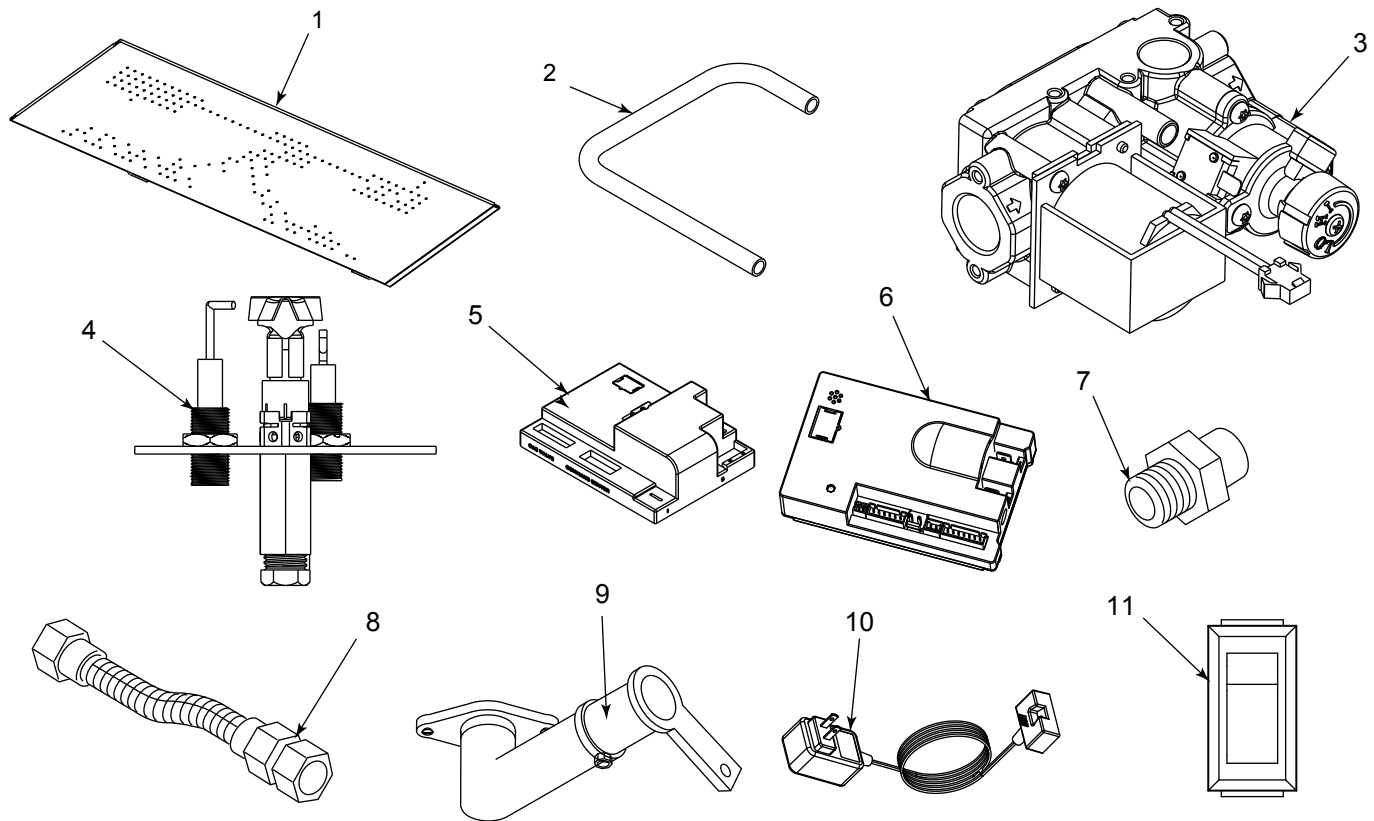
Fuel Conversion Kits - Millivolt

Natural Gas to LP

36CFDVNV Kit #36CFDVCKPV

LP to Natural Gas

36CFDVPV Kit #36CFDVCKNV



IPI System

Ref.	Description	Qty.	36CFDVNI	36CFDVPI
1.	Burner Assy.	1	20305397K	20305397K
2.	Burner Tube	1	20305454K	20305454K
3.	Gas Valve Assy.	1	95E0101	95E0102
4.	Pilot Assy.	1	95E0103	95E0104
5.	Control Board	1	95E0108	95E0109
6.	Control Box	1	95E0100	95E0100
7.	Injector	1	59D0062	20H3146
8.	Flexhose w/Shut-Off Valve	1	69D0030	69D0030
9.	Venturi	1	69D1119	69D1026
10.	A/C Adapter (6 Volt)	1	95E0105	95E0105
11.	Cold Climate Switch	1	95E0111	95E0111
12.	Wire Valve Control (not shown)	1	80D0010	80D0010
13.	Wire On/Off Switch to Control Board (not shown)	1	95E0110	95E0110

Fuel Conversion Kits - IPI System

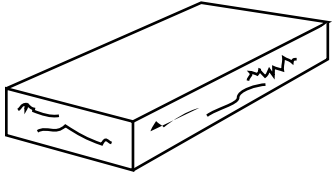
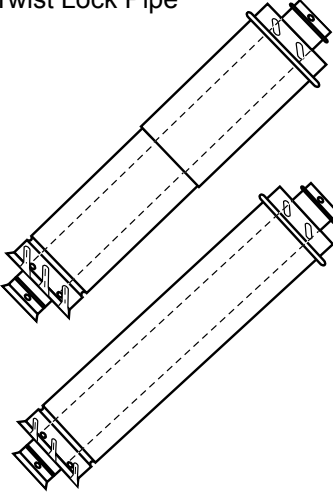
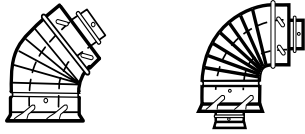
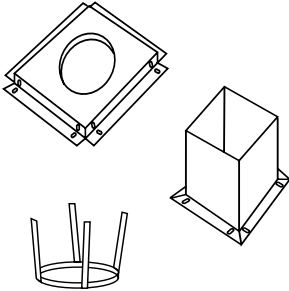
Natural Gas to LP

36CFDVNI Kit #36CFDVCKPI

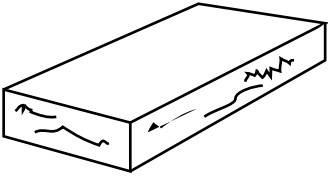
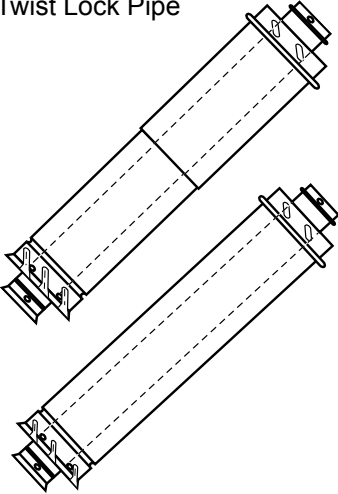
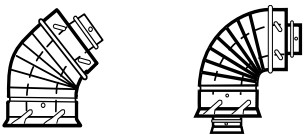
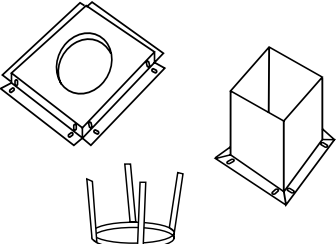
LP to Natural Gas

36CFDVPI Kit #36CFDVCKNI

Vertical Venting

	Description	Model Number
	Vertical Vent Termination w/ Storm Collar (flashing NOT included)	7TDVSKV
	Vertical Vent Termination w/ Storm Collar - 8 pack (flashing NOT included)	7TDVSKV/8
	Vertical Vent Termination w/ 1/12 - 6/12 Flashing, Storm Collar and Ceiling Support Kit	7TDVSKVA*
	Vertical Vent Termination w/ 6/12 - 12/12 Flashing, Storm Collar and Ceiling Support Kit	7TDVSKVB*
	Vertical Vent Termination w/ Flat Flashing, Storm Collar and Ceiling Support Kit	7TDVSKVF*
	20" Rigid Pipe - single pack	7TDVP20
	30" Flex Pipe - single pack	7FDVP30
	12" - 18" Adjustable Vent Length	7TDVP1218
	35" - 64" Adjustable Vent Length	7TDVP3564
	8" Vent Pipe - 4 pack	7TDVP8/4
	12" Vent Pipe - 4 pack	7TDVP12/4
	24" Vent Pipe - 4 pack	7TDVP24/4
	36" Vent Pipe	7TDVP36
	36" Vent Pipe - 30 pack	7TDVP36/30
	48" Vent Pipe	7TDVP48
	48" Vent Pipe - 30 pack	7TDVP48/30
	45° Elbow for Vertical/Horizontal Offset	7TDV45
	45° Elbow for Vertical Offsets - 8 pack	7TDV45/8
	90° Elbow for Vertical/Horizontal Offset	7TDV90
	90° Elbow for Vertical/Horizontal Offset - 8 pack	7TDV90/8
	1" Firestop	7DV1FS
	1" Attic Insulation Shield	7DV1AIS
	Combination Horizontal Offset/Roof Support	7DVCS

Horizontal Venting

	Description	Model Number
Horizontal Vent Termination Kits 	Rear Vent Hot Touch Termination Kit w/ 10" to 16" Adjustable Termination Pipe, Firestop, and Hot Touch Termination w/ Siding Shield	7TBRHTK
	Up and Out Side Wall Termination Kit w/ 10" to 16" Adjustable Termination Pipe, 90° Elbow, Firestop, and Cool Touch Termination w/ Siding Shield	7TDVSCTK
	Rear Vent Cool Touch Termination w/ Siding Shield for Straight-out Applications and Firestop - 8 pack	7TRVCT/8
	Rear Vent Hot Touch Termination w/ Siding Shield for Straight-out Applications and Firestop - 8 pack	7TRVHT/8
	Termination Guard for 7" T.L. Rear Vent Hot Touch Terminations (97TRVT/7TSVKT)	7TRVTG
	Snorkel Termination	7TDVSNORK
	7" T.L. DVRTSB Termination Screen Guard	7TBSG
	Up and Out Starter Kit w/ 40" Flex Pipe, Firestop, Cool Touch Termination w/ Siding Shield, and 2 ea. Clamp Bands	7FDVSCTK
Twist Lock Pipe 	20" Termination Pipe - 8 pack	7TDVP20/8
	10" - 16" Adjustable Termination Pipe - 4 pack	7TDVPA/4
	12" - 18" Adjustable Vent Length	7TDVP1218
	35" - 64" Adjustable Vent Length	7TDVP3564
	8" Vent Pipe - 4 pack	7TDVP8/4
	12" Vent Pipe - 4 pack	7TDVP12/4
	24" Vent Pipe - 4 pack	7TDVP24/4
	36" Vent Pipe	7TDVP36
	36" Vent Pipe - 30 pack	7TDVP36/30
	48" Vent Pipe	7TDVP48
	48" Vent Pipe - 30 pack	7TDVP48/30
Twist Lock Elbows 	45° Elbow for Vertical/Horizontal Offset	7TDV45
	45° Elbow for Vertical Offsets - 8 pack	7TDV45/8
	90° Elbow for Vertical/Horizontal Offset	7TDV90
	90° Elbow for Vertical/Horizontal Offset - 8 pack	7TDV90/8
Shields and Supports 	1" Firestop	7DV1FS
	3" Firestop	7DV3FS
	1" Attic Insulation Shield	7DV1AIS
	Combination Horizontal Offset/Roof Support	7DVCS

There are a variety optional accessories available for the 36CFDV 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 Kit can be used to change your fireplace from a rustic log look to a new modern feel. The stones are arranged on the burner to allow the flames to be the center of attention.

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

Porcelain Panels

Porcelain Panel, Rear	20305407K
Porcelain Panel, Side (2)	20305408K

Contemporary Stone Kit

20304090

Blower Kits

T-Stat Blower w/ Speed Control	BLOT
Manual Blower	FK12
Speed Control	26D0746

Massachusetts Residents Only — 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 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

LIFETIME WARRANTY

The following components are warranted for life to the original owner, subject to proof of purchase: Firebox, Combustion Chamber, Heat Exchanger, Grate and Stainless Steel Burners.

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.

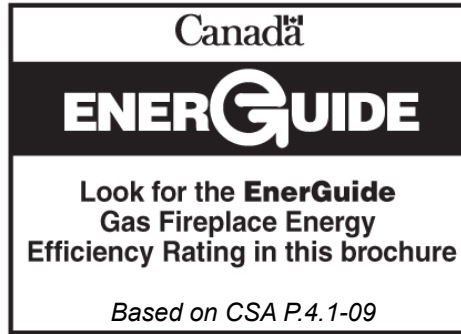
This Limited Lifetime Warranty will be void if the appliance is not installed by a qualified installer in accordance with the installation instructions. The Limited Lifetime Warranty will also be void if the appliance is not operated and maintained according to the operating instructions supplied with 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, reinstallation 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. It 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.



Efficiency Ratings		
Model	EnerGuide Ratings Fireplace Efficiency (%)	D.O.E. (AFUE%)
36CFDVNV	63.0	62.01
36CFDVPV	67.7	66.16
36CFDVNI	66.2	62.01
36CFDVPI	71.6	66.16

**NATIONAL
FIREPLACE
INSTITUTE**



CERTIFIED

www.nficertified.org

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.

Vermont Castings Group

149 Cleveland Drive • Paris, Kentucky 40361
www.vermontcastingsgroup.com