



# Installation Instructions

## Model Number FDV350 Free Standing Direct Vent Gas Stove (Field Convertible to Vented Stove)

Model Numbers: FDV350N, FDV350NE, FDV350NE2, FDV350LP, FDV350LPE, FDV350LPE2

Certified to: ANSI Z21.88-2017 • CSA 2.33-2017, CSA 2.17-2017  
VENTED GAS FIREPLACE HEATER

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.

### **⚠ WARNING:** **FIRE OR EXPLOSION HAZARD**

Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

-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.
- Leave the building immediately.
- 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.

## **! DANGER**



**HOT GLASS WILL  
CAUSE BURNS.**

**DO NOT TOUCH GLASS  
UNTIL COOLED.**

**NEVER ALLOW CHILDREN  
TO TOUCH GLASS.**

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.

**INSTALLER:** Leave this manual with the appliance.

**CONSUMER:** Retain this manual for future reference.

**For Propane Horizontal installations  
the venting must be an additional  
one foot above the minimum vertical  
rise off the flue before going  
horizontal.**

**VENTED GAS FIREPLACE HEATER:  
NOT FOR USE WITH SOLID FUEL.**

|   |       |
|---|-------|
| Table of Contents.....  | 2     |
| FDV350 Safety Screen Attachment.....  | 3     |
| Pre-installation Questions and Answers / Operating Instructions.....                      | 4     |
| Annual Inspection List for Determining Safe Operation of a Direct Vent Gas Fireplace..... | 5     |
| Warnings, Installations, and Operations.....  | 6     |
| Installation Requirements for the Commonwealth of Massachusetts.....                      | 7     |
| Mobile Home/Manufactured Housing Installation.....  | 8     |
| Fireplace Dimensions / Locating Your Appliance.....                                       | 9     |
| Clearance to Combustibles.....  | 9     |
| Optional Fan Kit Installation.....  | 10    |
| Split Receptacle- Switch Control Outside of Fireplace.....                                | 11    |
| F35RL Brick Liner Installation.....   | 12    |
| LOGF35 Log Installation.....  | 13    |
| Door and Glass Information.....   | 14    |
| Gas Line Installation.....  | 15    |
| Burner System Maintenance.....  | 16    |
| Conversion Kit Instructions – PART A.....   | 16    |
| Gas Conversion for Top Convertible Pilot – Part B (series 0190XYZ).....                   | 17    |
| Gas Conversion for Modulator – PART C.....  | 18    |
| Millivolt System, Lighting, and Burner Control.....                                       | 19    |
| Electronic Ignition Lighting Instructions.....  | 20    |
| Burner Removal / Burner System Removal.....   | 21    |
| Troubleshooting the Gas Control System.....   | 22    |
| Component Locations.....  | 23    |
| <b>PROFLAME 2</b>   |       |
| Proflame 2 Box.....   | 23    |
| Proflame 2- Parts List- Basic System, Parts List, Configuration GTMFL.....                | 24    |
| Proflame 2 Remote Control.....  | 25    |
| Cold Climates – CPI Setting - Proflame 2 Remote Control.....                              | 26    |
| Remote Flame Control, Room Thermostat.....  | 27    |
| Smart Thermostat, Fan Speed Control, Remote Dimmer Control.....                           | 28    |
| Proflame 2 Schematic.....   | 29    |
| <b>PROFLAME 1</b>   |       |
| IPI Electronic Ignition System.....   | 30    |
| Remote Control Operation.....   | 31    |
| IPI Electronic Ignition Parts List – Standard System.....                                 | 32    |
| Configuration 1: Basic Manual Hi / Lo and manual Off.....                                 | 33    |
| Configuration 2: Remote On / Off and manual Hi / Lo.....                                  | 34    |
| Operating the Receiver Without Batteries For GT / EGT / GTM / EGTM Remote Controls.....   | 35    |
| Configuration 3: Remote ON/OFF, Variable HI/LO, and Fan.....                              | 36    |
| <b>VENTING</b>  |       |
| Vent Termination.....   | 37    |
| General Venting Information.....  | 38    |
| Venting Routes and Components.....  | 39    |
| Horizontal Venting Table.....   | 40    |
| Horizontal Vent Installation.....   | 41    |
| Horizontal Snorkel Terminations.....  | 42    |
| Vertical Vent Installation.....   | 43-44 |
| F35BVC B-Vent Converter.....  | 45-46 |
| <b>PARTS LIST</b>   |       |
| FDV350 Parts List.....  | 47-48 |
| <b>WARRANTY</b>   |       |
| Limited Lifetime Warranty.....  | 49    |

## FDV350 Safety Screen Attachment

### INSTALLATION:

#### STEP ONE:

Open Side Panels on FDV350.

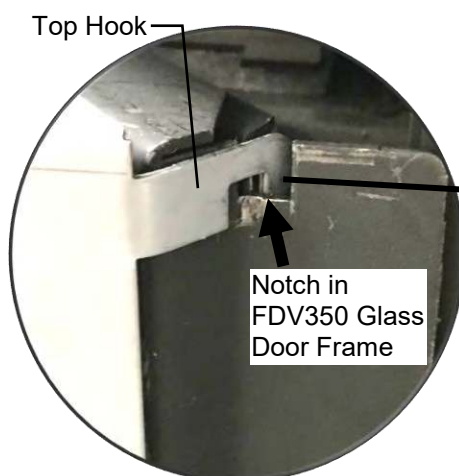
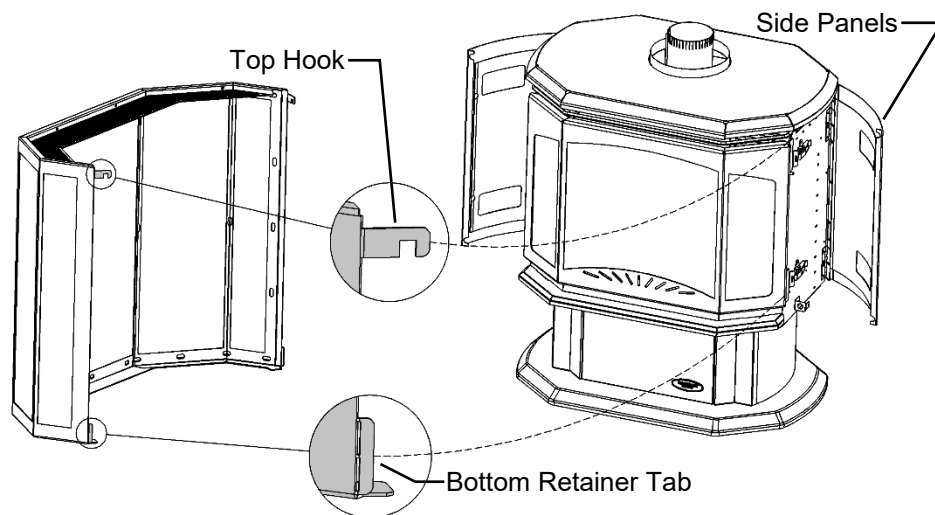
#### STEP TWO:

Hook Safety Screen into Notches in FDV350 Door.

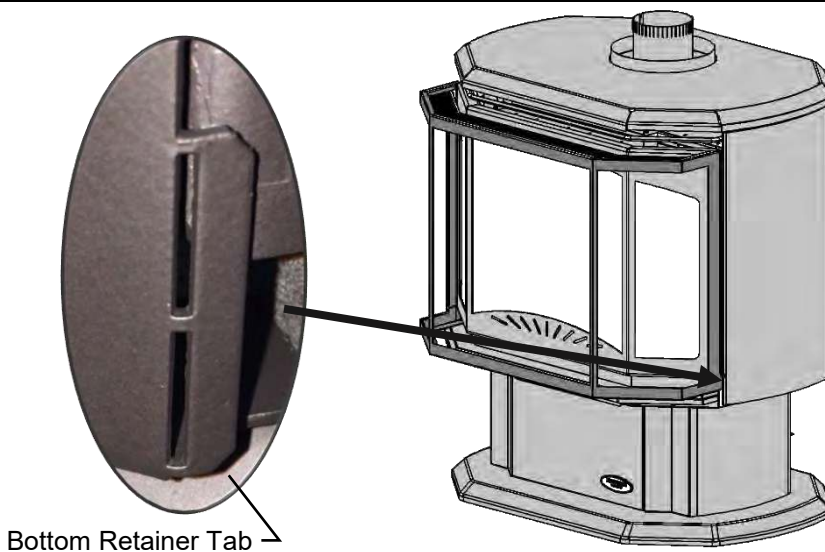
#### STEP THREE:

Spread the bottom of the Safety Screen frame slightly to engage the Bottom Retainer Tab onto the Glass Door Frame.

To remove Safety Screen, **Wait Until Fireplace is Completely Cool**, and reverse these steps.



**NOTE:**  
If Top Hooks require a slight adjustment, use a crescent wrench.



## Pre-installation Questions and Answers

### About curing of the paint

Your stove or fireplace has been painted with the highest quality silicone stove paint. This paint dries quickly in 15-20 minutes when first applied at the factory. However, due to the high temperature silicone components, the paint will cure when heat is applied to the appliance as it is first used. The following information applies to the curing process to get the paint fully hard and durable.

Fire the appliance four successive times for 10 minutes each firing and a 5 minute cool down between each. Be aware during log and firebox paint curing that a white deposit may be developing on the inside of the glass doors. It is important to remove this white deposit from the glass doors using a fireplace glass cleaner.

- Babies, small children, pregnant women and pets should leave the area during the cure phase.
- Ventilate well, open doors and windows.
- Do not touch during curing.

### Why does my fireplace or stove give off odour?

It is normal for your fireplace to give off some odor at first. This is due to the curing of the paint, adhesives, silicones and any undetected oil from the manufacturing process as well as the finishing materials used with the installations (e.g. marble, tile and the adhesives used to adhere this product to the walls can react with heat and cause odours).

It is recommended that you burn your gas fireplace or stove for a minimum of four hours at a time with the fan off (if a fan is present) after the curing of the paint has been completed. These odours can last upward to 40 hours of burn time; keep burning at a minimum of four hours per use until odours dissipate.

### Noise coming from the fireplace?

Noise is caused by the expansion and contraction of metal as the appliance heats up and cools down. This is normal and is similar to the sounds produced by a furnace or heating duct. This noise does not affect the operation or longevity of your fireplace.

It is also normal for the fan to make some noise when it comes on. This noise can be reduced somewhat by turning down the speed of the fan with the variable speed control. Be aware, however, that this will reduce the volume of heated air circulated into the room by the fan.

### Note to the Installer:

Be sure appliance is working properly and its operation (including remote control operation, if included) is fully explained to and understood by the customer.

## Operations and Maintenance Instructions

For safe installation and operation note the following:

- Be sure to read and understand all the instructions in this manual before operation of appliance.
- Ensure all wiring is correct and properly enclosed to prevent possible shock.
- Check for gas leaks.
- Make sure the glass door is properly installed before operation. Never operate the appliance with the glass door removed.
- Make sure venting and termination cap are installed and unobstructed.
- If brick or porcelain liners are used, ensure they are installed.
- Verify that the pilot can be seen when lighting the appliance. If not, the log or rock placement is incorrect.
- If the unit is turned off, you must wait a minimum of 60 seconds before re-lighting it.
- Venting systems should be periodically examined by a qualified agency.
- The flow of combustion and ventilation air must not be obstructed.
- The Burner/Log Assembly has been engineered and permanently adjusted for proper flame control.
- Periodically remove the logs from the grate assembly and vacuum any loose particles from the grate and burner areas. See Log Placement page to remove logs. Vacuum burner parts and replace logs.
- Never use your gas fireplace as a cooking device.
- Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.
- Areas in and around the Chase Vent Openings should be cleaned annually.

## Annual Inspection List for Determining Safe Operation of a Direct Vent Gas Fireplace

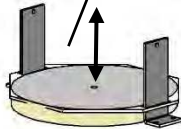
Refer to this checklist for proper maintenance, safe use, and operation.

See each section for more specific information.

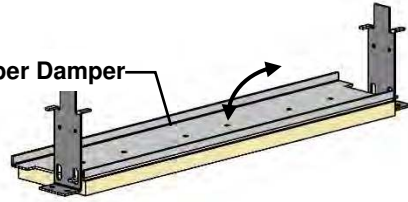
1. Inspect and operate all pressure relief mechanisms (i.e., relief dampers, spring loaded door latches) installed on your appliance to verify relief mechanisms are free from obstruction to operate.

Relief Dampers inside Firebox should open and close freely.

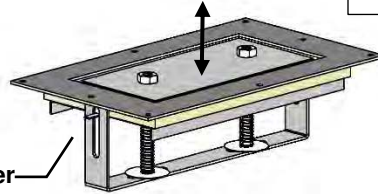
Upper Damper



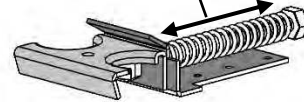
Upper Damper



Lower Damper

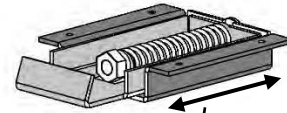


Upper Door Latch



Spring loaded Door Latches should extend and return to the closed position.

Lower Door Latch

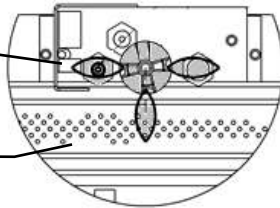


2. Clean glass window with a suitable fireplace glass cleaner. Abrasive cleaners must not be used. Be careful not to scratch the glass when cleaning.

3. Inspect the operation of the Pilot. Ensure that it is working properly.

Pilot Orientation  
(Top View)

Burner

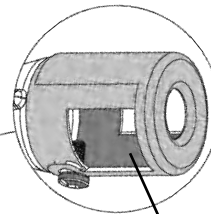
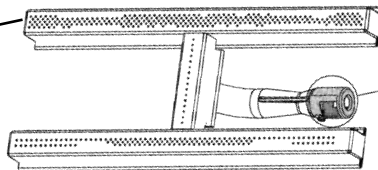


Inspect Pilot Flame



4. Inspect and ensure the lighting of the main burner occurs within 4 seconds of the main gas valve opening. Visual inspection should match that outlined in the appliance instruction manual (refer to **Monthly Flame Inspection**). Inspect primary air openings for blockage.

Burner



Primary Air Opening  
Inspect for Blockage

5. Inspect condition of vent and vent terminal for sooting or obstruction and correct if present.
6. Vacuum and clean any debris in the firebox that is not supposed to be there.
7. Test and measure the flame failure response time of the flame safety system. It must de-energize the safety shutoff in no more than 30 seconds.  
**Procedure for Millivolt Units:** Turn on fireplace for 5 minutes. Shut off fireplace while listening to valve. A "click" should be heard within 30 seconds. This indicates the safety shutoff is working properly.  
**Procedure for IPI Units:** Turn on fireplace and allow main burner to come on. Then disconnect Flame Sense wire from IPI Module (X3 Connection). The fireplace should shut down immediately.
8. Check all accessible gas-carrying tubes, connections, pipes and other components for leaks.



## Warnings, Installations and Operations - Installation Regulations

This gas appliance must be installed by a qualified installer in accordance with local building codes, or in the absence of local codes, with the current CAN/CSA-B149.1 or .2 Installation Code (in Canada) or the current National Fuel Gas Code Z223.1- NFPA 54 when installed in the United States.

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



**FOR SAFE INSTALLATION AND OPERATION OF YOUR GAS FIREPLACE PLEASE NOTE THE FOLLOWING:**

1. Do not clean when the glass is hot.
2. Do not use abrasive cleaners.
3. Using a substitute glass will void all product warranties.
4. For safe operation, glass doors must be closed.
5. When purging the gas line, the glass front must be removed.
6. Do not strike or abuse glass. Take care to avoid breakage.
7. Do not alter gas orifice.
8. No substitute materials may be used other than factory supplied components.
9. This appliance gives off high temperatures and should be located out of heavy traffic areas and away from furniture and draperies.
10. Children and adults should be alerted to the hazards of the high surface temperatures of this appliance and should stay away to avoid burns or ignition of clothing.
11. 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.
12. Under no circumstances should any solid fuels (wood, paper) be used in this appliance.
13. Under no circumstances should this appliance be modified. Any parts that have to be removed for servicing should be replaced prior to operating this appliance.
14. Any safety screen, guard, or barrier removed for servicing an appliance must be replaced prior to operating the appliance.
15. Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, et cetera. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean. Make sure that the gas valve and pilot light are turned off before you attempt to clean this unit.
16. Clothing or other flammable material should not be placed on or near the appliance. This appliance should not be used as a drying rack for clothing nor should Christmas stockings or decorations be hung from it.
17. Do not use this heater if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control which has been under water.
18. Do not operate appliance unless completely installed as per installation instructions.
19. Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.
20. **WARNING: Do not operate appliance with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.**
21. The appliance area must be kept clear and free from combustible materials, gasoline, and other flammable vapors and liquids.
22. The front of the fireplace gives off high temperatures that could ignite combustible material which is kept close to the front of the unit.
23. Ensure that power to the Fireplace is turned off before servicing.
24. Do not operate this Fireplace without the glass front or with a broken glass.
25. Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency, or the gas supplier.
26. Operation of this appliance when not connected to a properly installed and maintained venting system or tampering with the blocked vent shutoff system can result in carbon monoxide (CO) poisoning and possible death.
27. This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.
28. **NOT INTENDED FOR USE AS A PRIMARY HEAT SOURCE.** This appliance is tested and approved as either supplemental room heat or as a decorative appliance. It should not be factored as primary heat in residential heating calculations.
29. This appliance must not be connected to a chimney flue serving a separate solid-fuel burning appliance.

## Installation Requirements for the Commonwealth of Massachusetts

In the Commonwealth of Massachusetts, the installer or service agent shall be a plumber or gas fitter licensed by the Commonwealth.

When installed in the Commonwealth of Massachusetts or where applicable codes; the unit shall be installed with a CO detector per the requirements listed below.

1. For direct-vent appliances, mechanical-vent heating appliances or domestic hot water equipment, where the bottom of the vent terminal and the air intake is installed below four feet above grade the following requirements must be satisfied:
  - A. If there is not one already present, on each floor level where there are bedroom(s), a carbon monoxide detector and alarm shall be placed in the living area outside the bedroom(s). The carbon monoxide detector shall comply with NFPA 720.
  - B. A carbon monoxide detector shall be located in the room that houses the appliance or equipment and shall:
    - Be powered by the same electrical circuit as the appliance or equipment such that only one service switch services both the appliance and the carbon monoxide detector;
    - Have battery back-up power;
    - Meet ANSI/UL 2034 Standards and comply with NFPA 720; and
    - Have been approved and listed by a Nationally Recognized Testing Laboratory as recognized under 527 CMR.
  - C. A Product-approved vent terminal must be used, and if applicable, a Product-approved air intake must be used. Installation shall be in strict compliance with the manufacturer's instructions. A copy of the installation instructions shall remain with the appliance or equipment at the completion of the installation.
  - D. A metal or plastic identification plate shall be mounted at the exterior of the building, four feet directly above the location of vent terminal. The plate shall be of sufficient size to be easily read from a distance of eight feet away, and read "Gas Vent Directly Below".
2. For direct-vent appliances, mechanical-vent heating appliances or domestic hot water equipment where the bottom of the vent terminal and the air intake is installed above four feet above grade the following requirements must be satisfied:
  - A. If there is not one already present, on each floor level where there are bedroom(s), a carbon monoxide detector and alarm shall be placed in the living area outside the bedroom(s). The carbon monoxide detector shall comply with NFPA 720.
  - B. A carbon monoxide detector shall:
    - Be located in the room that houses the appliance or equipment;
    - Be either hard-wired or battery powered or both; and
    - Shall comply with NFPA 720.

A Product-approved vent terminal must be used, and if applicable, a Product-approved air intake must be used. Installation shall be in strict compliance with the manufacturer instructions. A copy of the installation instructions shall remain with the appliance or equipment at the completion of the installation.

For the state of Massachusetts a **T-handle gas shut-off valve** must be used on a gas appliance. This T-handle gas shut-off valve must be listed and approved by the state of Massachusetts. This is in reference to the state of Massachusetts state code CMR238.

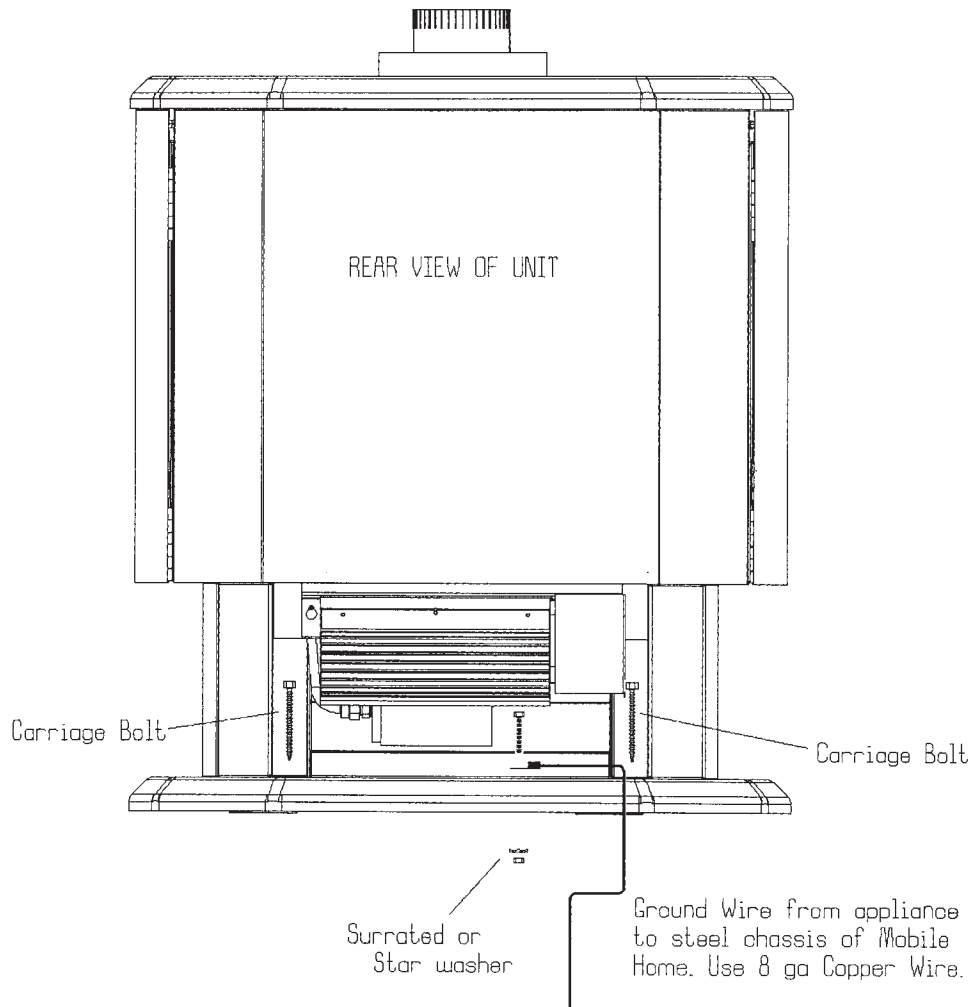
## Carbon Monoxide (CO) Detector

NOTE: It is recommended that a Carbon Monoxide (CO) Detector be installed in or near bedrooms and on all levels of your home. Place a detector about 15ft [4.5m] outside the room that houses your gas appliance.

Certified for installation in a bedroom or bed/sitting room. In Canada must be installed with listed millivolt thermostat. In USA see local codes.

## MOBILE HOME/MANUFACTURED HOUSING INSTALLATION

This Direct Vent System Appliance must be installed in accordance with the manufacturer's installation instructions and the Manufactured Home Construction and Safety Standard Title 24 CFR, Part 3280, or the current Standard for Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities ANSI/NCBS A225.1, and with CSA Z240.4 Mobile Home Standard in Canada.



THE FDV350N AND FDV350LP MAY BE INSTALLED IN MANUFACTURED (MOBILE) HOMES AFTER FIRST SALE. THE MODELS CONVERTED USING THE B-VENT CONVERTER CANNOT BE INSTALLED IN A MANUFACTURED (MOBILE) HOME.

Please follow the current ANSI/NFPA 70 National Electrical Code in the USA and CAN/CSA C22.1 Canadian National Electrical Code in Canada.

Appliance must be grounded to the steel chassis of the home with 8 ga. copper wire using a serrated or star washer to penetrate paint or protective coating to insure grounding.

Use carriage bolt at the attachment point (see diagram above) to secure the appliance to the floor.

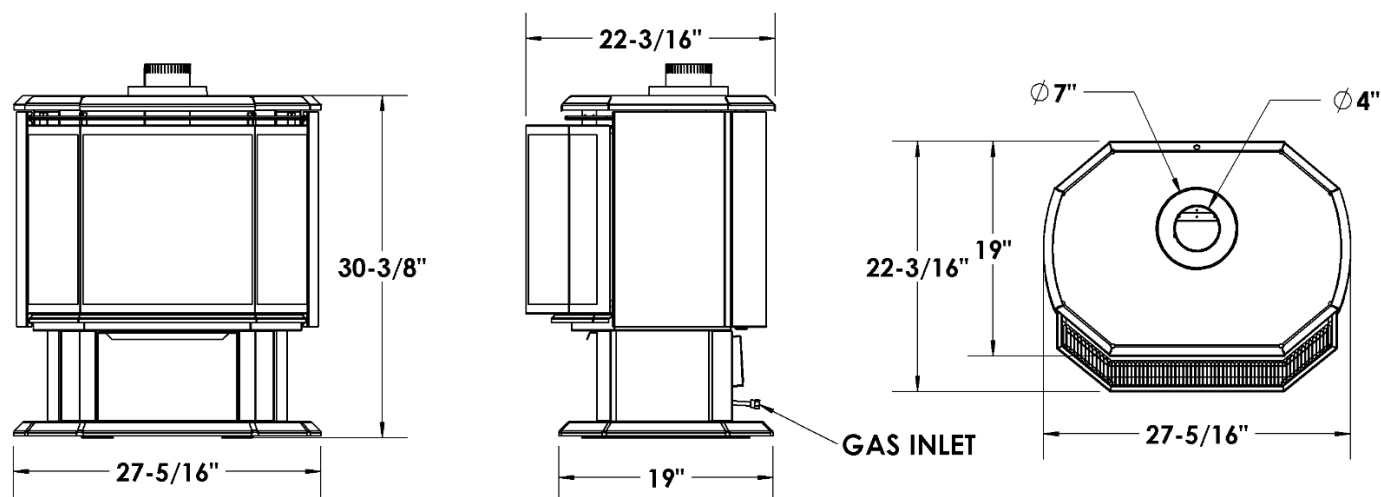


**WARNING:** Do not compromise the structural integrity of the manufactured home wall, floor or ceiling, during installation of appliance or venting.

*For required venting components see venting installation in appropriate section of this manual.*

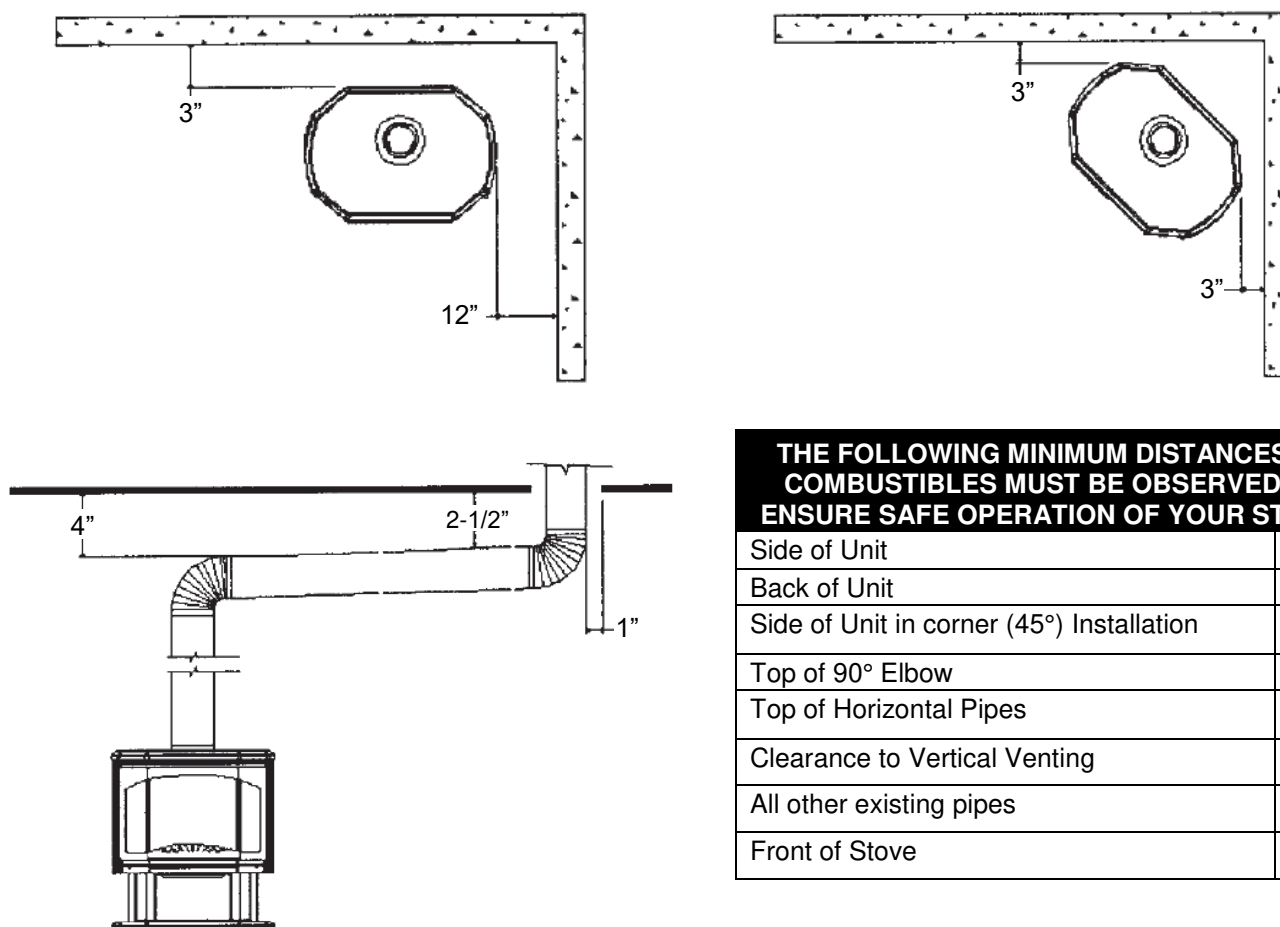


## FDV350 Dimensions



Gas Inlet is located at the back of the unit.

## FDV350 Locating Your Appliance



### THE FOLLOWING MINIMUM DISTANCES TO COMBUSTIBLES MUST BE OBSERVED TO ENSURE SAFE OPERATION OF YOUR STOVE.

|   |        |
|---|--------|
| Side of Unit                              | 12"    |
| Back of Unit                              | 3"     |
| Side of Unit in corner (45°) Installation | 3"     |
| Top of 90° Elbow                          | 4"     |
| Top of Horizontal Pipes                   | 2-1/2" |
| Clearance to Vertical Venting             | 1"     |
| All other existing pipes                  | 1"     |
| Front of Stove                            | 36"    |

The unit should be placed on a hard, stable surface. Appliance may be installed directly on carpeting, tile or other combustible material with no additional floor protection being required.

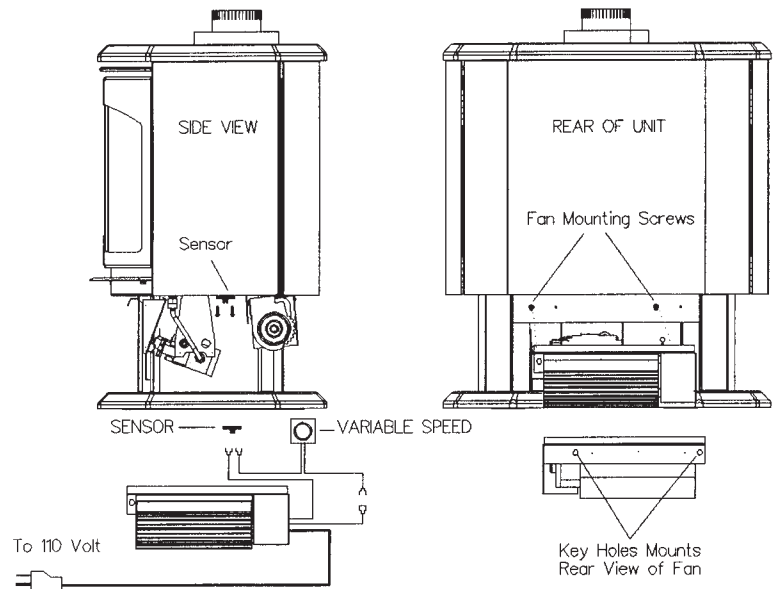
**This unit has been tested in an Alcove. Minimum Dimensions of Alcove are as follows:**  
**Depth 30", Height 55.5", Width 52.5".**

## OPTIONAL FAN KIT INSTALLATION

### NOTE:

FOR EASE OF INSTALLATION THE FAN KIT SHOULD BE INSTALLED BEFORE THE STOVE IS PUT IN ITS FINAL POSITION.

### AUTOMATIC ON/OFF THERMOSTAT CONTROLLED FAN KIT (Part #F45FK)



1. Open the front access door where the piezo-igniter is located. Remove the two screws that hold the control panel in place, pull the control panel out towards you and install the variable speed control in the hole provided opposite the piezo-igniter.
2. Locate the two fan mounting screws in the rear of the unit as shown in the above diagram and place the key holes on the rear of the fan over the mounting screws and drop into position.
3. Connect the wires to the variable speed sensor and variable speed control as shown in the wiring diagram. Plug fan cord into 110 wall outlet.
4. Turn the switch on (clockwise). NOTE: The stove must now be installed and gas line attached before proceeding.
5. Turn the stove on. Once the sensor unit reaches operating temperature (in approximately 10 to 15 minutes) the fan will turn on. The fan can be switched off, if desired by turning the switch fully counter-clockwise.
6. Once the fan has started to turn it may be desirable to adjust the minimum fan speed. Tilt the control panel forward to access the rear of the variable speed switch, turn the variable speed switch to its minimum setting (fully clockwise). Use the set screw on the side of the variable speed control to increase or decrease the minimum fan speed. (It may be desirable to lower minimum fan speed to decrease the sound level created by the fan.) Reinstall the control panel.

### Electrical Services

All optional fan kits are equipped with a 120V, 60Hz blower.

Note: All electric connections are to be made in accordance with CSA Standard C22.1 - Canadian Electrical Code part I or with the National Electrical Code, ANSI/NFPA 70 (latest addition) and/or in accordance with local codes.



#### **WARNING:**

A qualified electrician must connect electrical wiring to junction outlet for built-in installation. **Follow all codes.**



#### **WARNING:** Electrical Grounding

Instructions - This appliance is equipped with a three - pronged (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle.



#### **WARNING:** Label all wires

prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation and servicing.

**Caution:** Should this fan require servicing, the power supply must be disconnected.

## Fan Speed Control Outside of Fireplace

If you plan to locate the variable speed control switch for the fan outside of the fireplace and you require a constant source of AC power inside the unit for another accessory such as lights or an IPI valve system, follow one of the procedures below.

### ⚠ WARNING

A qualified electrician must connect electrical wiring to junction outlet for built-in installation.

**Follow all codes.**

### ⚠ WARNING

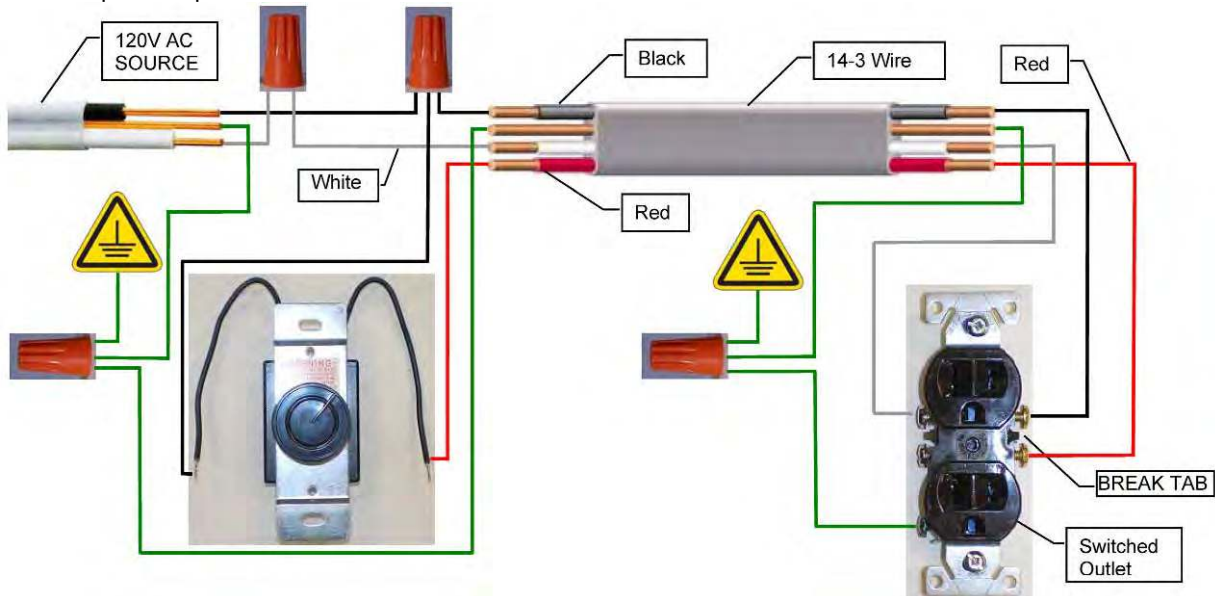
**Electrical Grounding Instructions –**  
This appliance is equipped with a three – pronged (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle.

### ⚠ WARNING

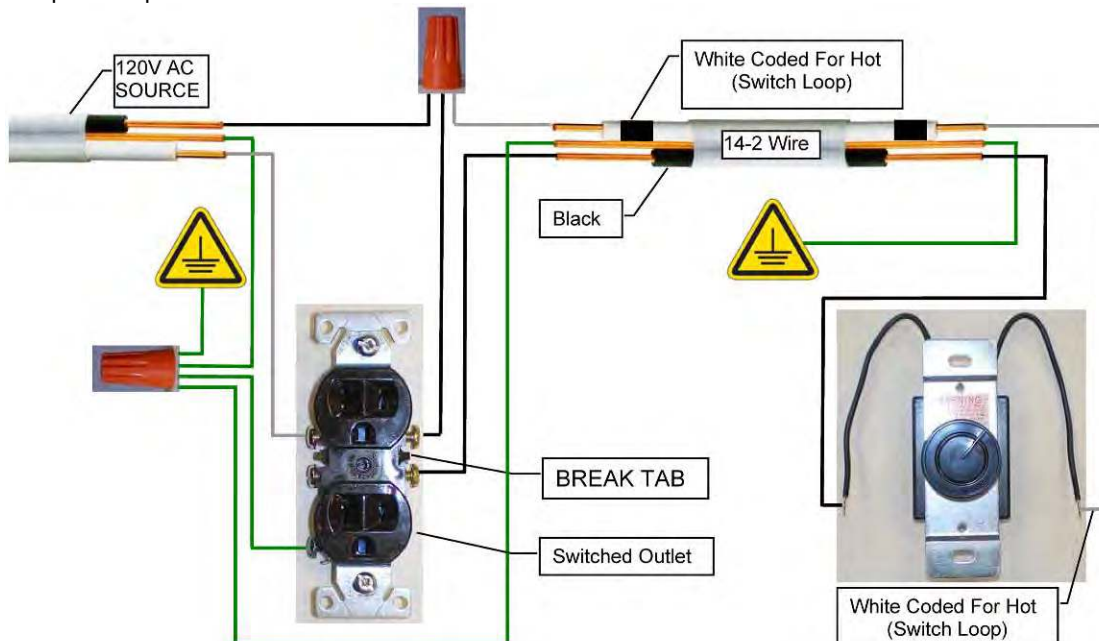
Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation and servicing.

**⚠ Caution:** Electrical installation to be done by a qualified installer. All wires must be connected and grounded in accordance with CSA Standard C22.1- Canadian Electrical Code part 1 or with the National Electrical Code, ANSI /NFPA 70 (latest edition) and /or in accordance with local codes.

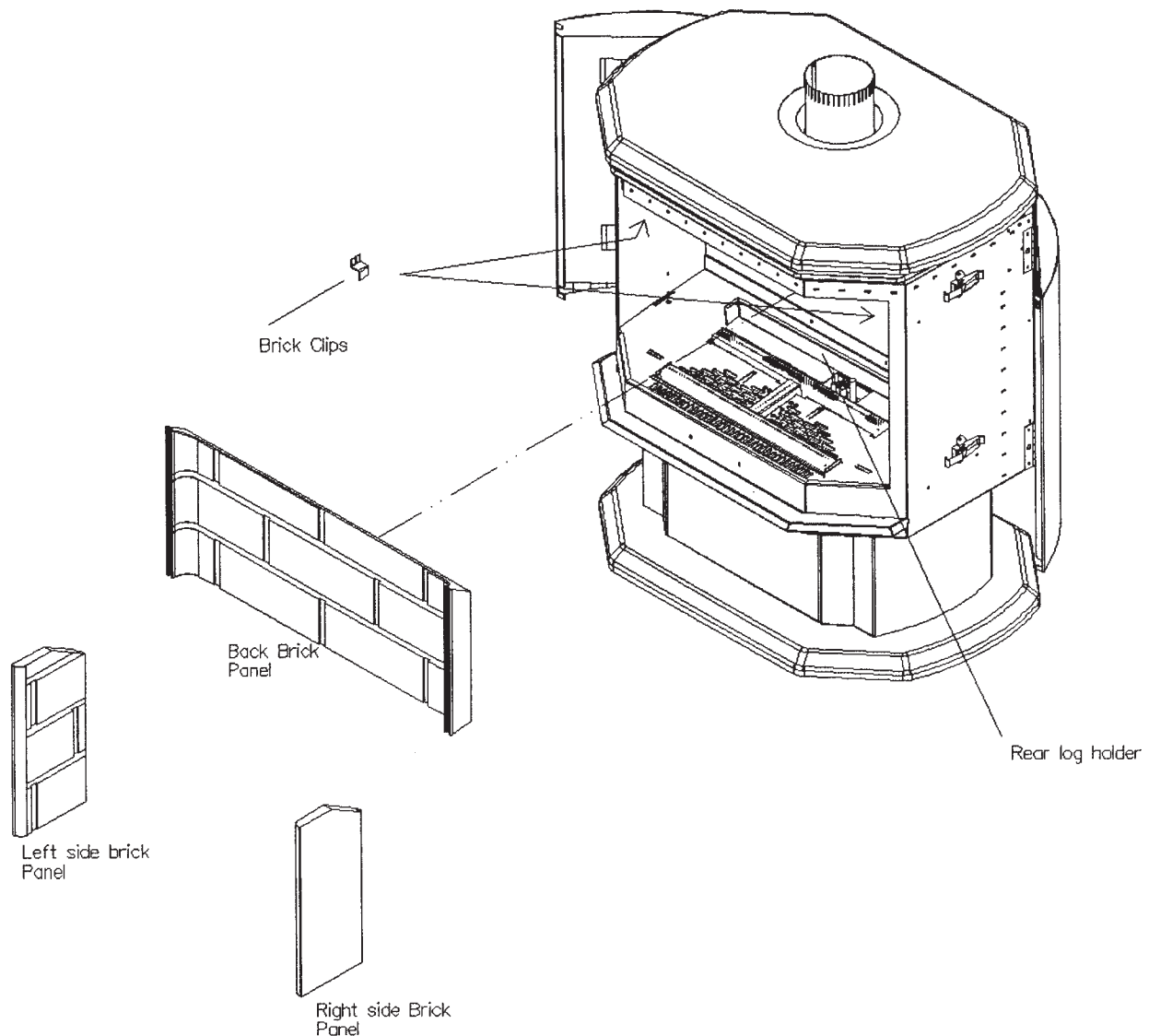
Switch Controlled Split Receptacle With Switch At START Of Cable Run



Switch Controlled Split Receptacle With Switch At END Of Cable Run



## INSTALLATION OF BRICK PANEL KIT



### PART: F35RL

1. Open side panels and remove front door and log set. (Skip this step if components are not installed at this time.)
2. The rear log holder has to be removed to install rear brick panel, using a 1/4" nut driver remove the three hex screws.
3. Hold the rear brick panel with both hands on the left-right of panel, tilt the top panel towards you slightly and pull your right hand towards you slightly and place panel onto the rear of the firebox. NOTE: TAKE CARE NOT TO DAMAGE PILOT ASSEMBLY WHEN PLACING REAR PANEL.
4. Loosen both brick clips using 1/4" nut driver. Swing brick clip out of the way and position side brick panel up to rear brick panel and against side of firebox and tighten brick clip down onto panel, repeat this step with the other side panel.
5. Reinstall rear log holder with the 3 screws.
6. Install log set and front door.

## F35 LOG ASSEMBLY



**WARNING:** Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

- Fig. 1. Remove can of touchup paint from firebox. Remove logs and bag of glowing embers chunks from carton and inspect. There are three logs and they are lettered A, B, and C.
- Fig. 2. Shows rear log positioning bracket and 4 pin locating positions.
- Fig. 3. Log A has 2 locating holes, position the 2 holes on the log over the 2 pins on the left side of the log mounting pan as shown in the picture.
- Fig. 4. Log B has 2 Locating holes, position the 2 holes on the log over the 2 pins on the right side of the log mounting pan as shown in the picture.
- Fig. 5. Log C has to be lowered into position just behind logs A and B. Log C has an area notched out of the rear of it to fit over rear positioning bracket as shown in the picture.
- Fig. 6. A bag of Ember chunks is supplied with the unit, it is very important that these chunks are placed onto the front burner and log mounting pan as shown in the picture, spread the ember chucks out no more than one Layer deep. NOTE: IF YOU DO NOT FOLLOW THIS INSTRUCTION CORRECTLY SOOTING PROBLEMS CAN OCCUR.

Fig. 1



Fig. 2

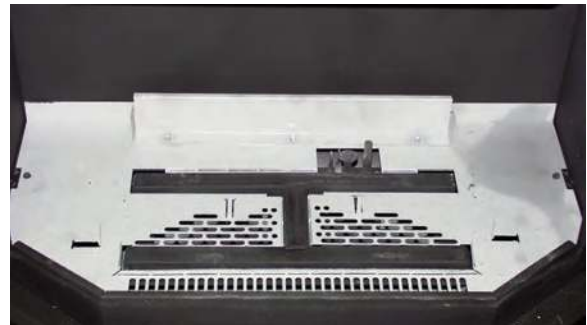


Fig. 3

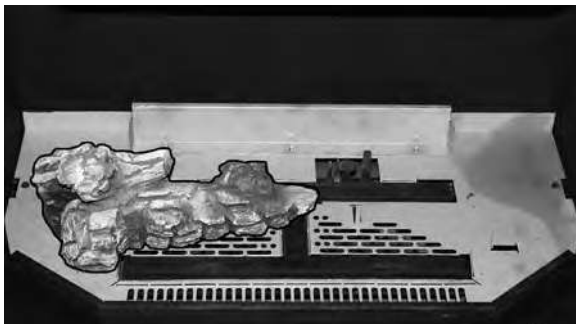


Fig. 4



Fig. 5



Fig. 6





## GENERAL GLASS INFORMATION

### GLASS CLEANING

It will be necessary to clean the glass periodically. During start-up, condensation, which is normal, forms on the inside of the glass and causes dust, lint etc. to cling to the glass surface. Also, initial paint curing can deposit a slight film on the glass. It is therefore recommended that initially the glass be cleaned two or three times with non-abrasive common household cleansers and warm water. After that, the glass should be cleaned two or three times a season depending on the circumstances.



#### Warning and Cautions.

- Do not clean when the glass is hot.
- Do not use abrasive cleaners.
- Using a substitute glass will void all product warranties.
- Do not strike or abuse glass. Care must be taken to avoid breakage of the glass.
- Do not operate this fireplace without the glass front or with a broken glass.

### GLASS REPLACEMENT

Only Robax ceramic or coated Neoceram glass may be used for replacement. It must be a minimum of 5mm thick.



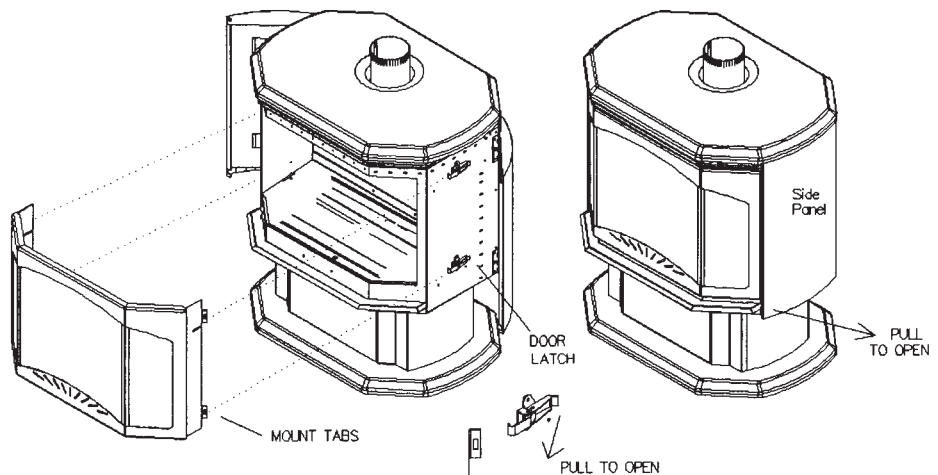
**WARNING:** Do not operate appliance with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.

### REMOVAL OF FRONT DOOR

1. Open both left and right side panels by pulling outwards from the side of the unit.
2. Pull the latch handle towards the front of the unit. Disengage latch from mounting tabs.
3. Hold the Door Frame in both hands and pull towards yourself.
4. To replace the Door Frame to the unit reverse the above steps.

### REPLACING OF CERAMIC GLASS

Follow Removal of Front Door then clean all materials from door frame. Using a high temperature sealant (temperature-resistant to 500°F (260°C)) apply a bead of approximately 1/8" to all four sides of frame and insert glass with new gasket. Frame should be placed on a flat surface with a small amount of weight pressing glass into sealant. Let dry approximately 15 to 20 minutes. The door can be reinstalled by reversing Steps 1,2.

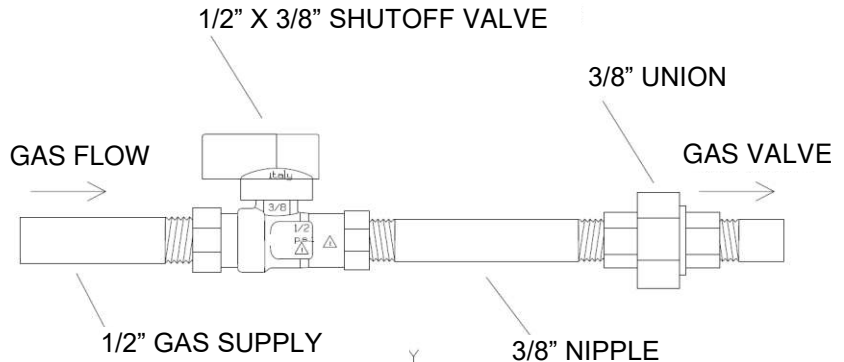




## Gas Line Installation

This gas appliance should be installed by a qualified installer in accordance with local building codes and with current CAN/CGA - B149.1 or .2 installation codes for Gas Burning appliances and equipment in Canada and the National Fuel Gas Code ANSI Z223 in the U.S.A.

1. The gas pipeline can be brought in through the back or bottom of the unit.
2. The gas control inlet is 3/8" NPT. Typical installation layout for rigid pipe is shown at right.
3. When using copper or flex connector, use only approved fittings. Always provide a union so that gas line can be easily disconnected for burner or fan servicing. See gas specification for pressure details and ratings.
4. When a vertical section of gas pipe is required for the installation, a condensation trap is needed. See CAN/CGA-B149.1 or .2 for code details.
5. For natural gas, a minimum of 3/8" iron pipe with gas minimum pressure of 4.5" w.c. must be used for supply from the gas meter. Consult with the local gas utility if any questions arise concerning pipe sizes.
6. A 1/8" NPT plugged tappings are accessible for test gauge connection both on the inlet and outlet of the gas valve.
7. Turn the gas supply ON and check for leaks. **DO NOT USE OPEN FLAME FOR THIS PURPOSE.** Use an approved leak testing solution.
8. The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 PSIG (3.5 KPa).
9. The appliance must be isolated from the gas supply piping system by closing its individual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 PSIG (3.5 KPa).



**NOTE:** The gas line connection may be made of 1/2" rigid pipe or an **Approved Kingsman Flex Connector, such as FP15GC.** Since some municipalities have additional local codes, it is always best to consult your local authorities and the current CAN/CGA - B149.1 or .2 installation code in Canada or the National Fuel Gas code ANSI Z223.1 in the U.S.A

For the state of Massachusetts a T-handle gas shut-off valve must be used on a gas appliance. This T-handle gas shut-off valve must be listed and approved by the state of Massachusetts. This is in reference to the state of Massachusetts state code CMR238.

Important: Always check for gas leaks with a soap and water solution. Do not use open flame for leak testing.

### Gas Specifications

| MODELS                                   | FDV350N               | FDV350NE<br>FDV350NE2 | FDV350LP   | FDV350LPE<br>FDV350LPE2 |
|--|-----------------------|-----------------------|------------|-------------------------|
| Fuel                                     | Natural               | Natural               | Propane    | Propane                 |
| Gas Control                              | Millivolt             | IPI                   | Millivolt  | IPI                     |
| Maximum                                  | 37,000                | 37,000                | 35,000     | 35,000                  |
| Low                                      | 29,000                | 29,000                | 27,000     | 27,000                  |
| Orifice Size<br>(0-4500ft)               | #32                   | #32                   | #50        | #50                     |
| Air Shutter                              | 5/16"                 | 5/16"                 | Fully Open | Fully Open              |
| Gas Inlet Size S.I.T. 820 Nova, 3/8" NPT |                       |                       |            |                         |
| Gas Supply Pressure                      | Minimum               |                       | Normal     | Maximum                 |
| Natural Gas                              | 5.5"                  |                       | 7"         | 9"                      |
| Propane                                  | 11"                   |                       | 11"        | 12"                     |
| Manifold Pressure                        | Natural Gas           |                       |            | Propane                 |
| Manifold Pressure High                   | 3.5 IN. W.C./ .87 KPa |                       |            | 10 IN. W.C./ 2.61 KPa   |
| Manifold Pressure Low                    | 1.6 IN. W.C./ .40 KPa |                       |            | 6.3 IN. W.C./ 1.57 KPa  |

## Burner System Maintenance

It is recommended to annually inspect and clean the Burner System to prevent malfunction and / or sooting. This operation should be performed by your dealer or a qualified technician.

### ! -CAUTION-

Before servicing the burner system ensure that the gas supply is turned OFF and disconnect all electrical connections to the appliance. Allow the appliance to cool to room temperature. Note that the pilot assembly may be hot in an intermittent or standing-pilot system—even if the main burner was never on. Exercise caution when working within the area.

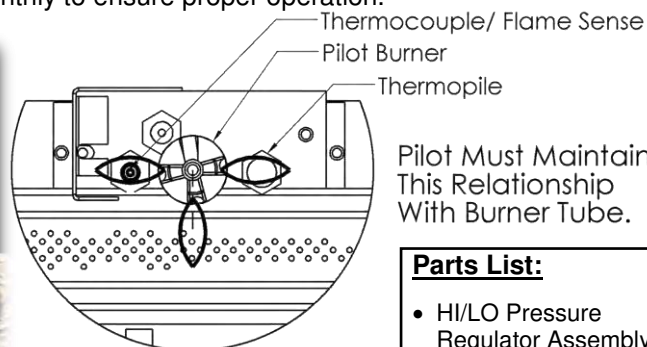
**-ALL WORK SHOULD BE PERFORMED BY A QUALIFIED AND CERTIFIED TECHNICIAN-**

### Monthly Flame Inspection

It is recommended to turn on the unit at least once a month and inspect the flame pattern to ensure there are no problems with the burner tube. The pilot flame should also be inspected monthly to ensure proper operation.



Flame should appear similar to the above picture.



#### Parts List:

- HI/LO Pressure Regulator Assembly
- Pilot Orifice
- Burner Orifice
- Brass Nipple
- Instructions
- Conversion Kit Label

## Conversion Kit Instructions – PART A

Models: FDV350N, FDV350NE, FDV350NE2, FDV350LP, FDV350LPE, FDV350LPE2

| Kit Number    | Description                        | Pilot Orifice                | Burner Orifice<br>Brass (1000-255) | Brass Nipple       | Air Shutter | Hi/Lo Regulator            |
|---------------|------------------------------------|------------------------------|------------------------------------|--------------------|-------------|----------------------------|
| 350DV-CKLP    | Propane Conversion<br>-Millivolt-  | 1001-P167SI<br>#30 (977.167) | #50                                | 1000-253<br>Closed | Fully Open  | 1001-P202SI<br>(0.907.202) |
| 350DV -CKNG   | NG Conversion<br>-Millivolt-       | 1001-P165SI<br>#51 (977.165) | #32                                | 1000-253<br>Closed | 5/16"       | 1001-P201SI<br>(0.907.201) |
| 350DV -CKLPI  | Propane Conversion<br>-Proflame 1- | 1001-P168SI<br>#35 (977.168) | #50                                | 1000-253<br>Closed | Fully Open  | 1002-P014SI<br>(0.907.014) |
| 350DV -CKNGI  | NG Conversion<br>-Proflame 1-      | 1001-P166SI<br>#62 (977.166) | #32                                | 1000-253<br>Closed | 5/16"       | 1002-P016SI<br>(0.907.016) |
| 350DV –CKLPI2 | Propane Conversion<br>-Proflame 2- | 1001-P168SI<br>#35 (977.168) | #50                                | 1000-253<br>Closed | Fully Open  | 1002-P012SI                |
| 350DV –CKNGI2 | NG Conversion<br>-Proflame 2-      | 1001-P166SI<br>#62 (977.166) | #32                                | 1000-253<br>Closed | 5/16"       | 1002-P013SI                |

## Gas Conversion for Top Convertible Pilot – Part B (series 0190XYZ)



Instructions for converting SIT 190 series pilot burner injector from NG to LPG and from LPG to NG only. This information should be considered as supplemental to the Appliance Manufacturer's Instructions.

### **WARNING!**

**The installation of this conversion kit must only be undertaken by a qualified and certified gas appliance installer.**

1. Shut-off the gas supply to the appliance.
2. Allow the pilot burner to cool to room temperature.

**WARNING: Touching a hot pilot burner can result in injury.**

3. The pilot hood is held in place by spring. First remove the spring, then remove the hood by pulling it up from the pilot bracket (fig. 1).
4. Insert a 5/32" or 4 mm Allen wrench into the hexagonal key-way of the injector (fig. 2), and rotate it counter-clockwise until it is free of the injector journal.
5. Verify that the new injector is proper for the application. The injector size is stamped on the side of the injector near the top. LPG injectors have a groove machined around their circumference near the top, while NG injectors do not have a groove (fig. 4). Refer to the Appliance Manufacturer's instruction sheet for the proper injector size.
6. Insert the Allen wrench into the end of the injector. Then, insert the injector into injector journal, and rotate the injector clockwise until a torque of 9 lbf in (1.0 Nm) is achieved.
7. First replace the pilot hood by aligning the tab on the base of the hood with the slot in the side of the pilot journal, and push the hood down, onto the pilot bracket (fig. 3). The hood must sit squarely on the bracket for proper operation. Then replace the spring by pushing it on his seat (fig.3). Check to insure that the hood is properly seated onto the pilot bracket and that the spring is properly inserted onto his seat.
8. Restore the gas supply to the appliance, and ignite the pilot burner. Verify proper ignition and operation.

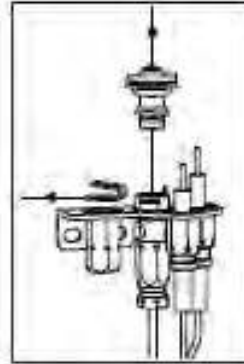


fig. 1

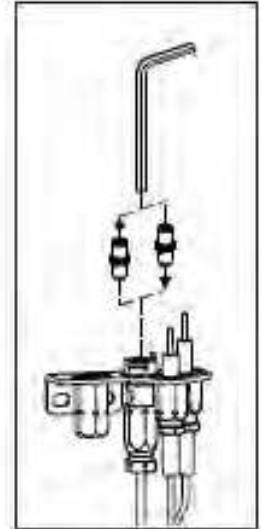


fig. 2



fig. 3

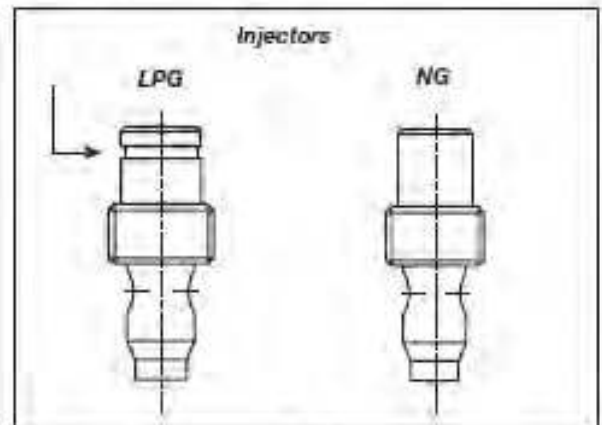


fig. 4

### **WARNING!**

**This conversion kit must ONLY be applied as part of a conversion kit supplied by the APPLIANCE MANUFACTURER for the specific appliance, and type of gas, being converted.**



# SIT GROUP

[www.sitgroup.it](http://www.sitgroup.it)

# installation instructions

7.252.136

## 820 NOVA mV

### Modulating Conversion Kit

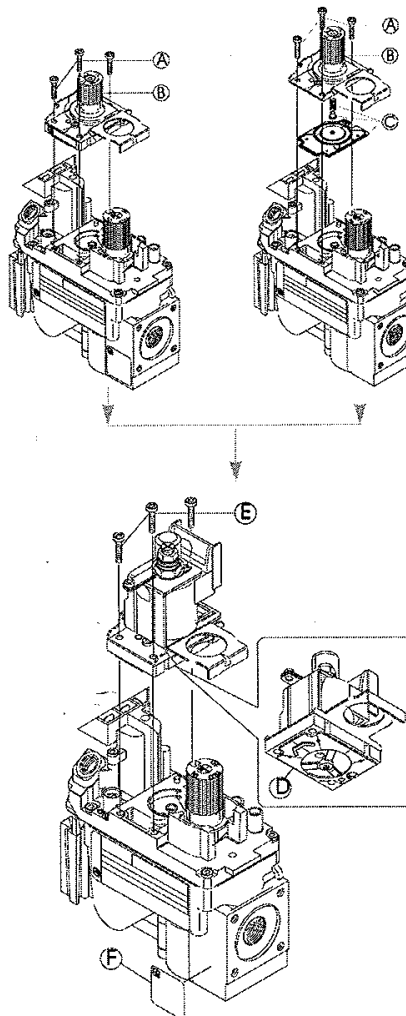


#### WARNING!

The installation of this conversion kit must only be undertaken by a qualified and certified gas appliance installer.

#### MODULATING PRESSURE REGULATOR CONVERSION KIT INSTALLATION OR REPLACEMENT INSTRUCTIONS.

- 1 Turn control knob to the OFF position, and shut off the gas supply to the valve.
- 2 Using a Torx T20, or slotted screwdriver, remove and discard the three pressure regulator mounting screws (A), pressure regulator tower (B), and the spring and diaphragm assembly (C).  
(If applicable)
- 3 Insure that the rubber gasket (D) is properly positioned and install the new modulating pressure regulator assembly to the valve using the new screws (E) supplied with the kit. Tighten screws securely.  
(Reference torque = 25 In.Lb.)
- 4 Install the enclosed identification label (F) to the valve body where it can be easily seen.
- 5 Apply gas to system and re-light appliance according to manufacturers instructions.
- 6 With the main burner "ON", test the new pressure regulator assembly for leaks using a soap solution.
- 7 Relight the main burner in both the HI and LO positions, and verify proper burner ignition and operation.



#### WARNING!

This modulating conversion kit must ONLY be applied as part of a conversion kit supplied by the APPLIANCE MANUFACTURER for the specific appliance, and type of gas, being converted.

INSTALLER NOTICE. These instructions must be left with appliance.



**SIT Group**

# Millivolt System, Lighting, and Burner Control

## 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.

### BEFORE LIGHTING

- A This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
  - Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
- B 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.
  - If you cannot reach your gas supplier, call the fire department.
- C Use only your hand to push 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 technician. Force or attempted repair may result in a fire or explosion.
- D Do not use the appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system which has been under water.

### WHAT TO DO IF YOU SMELL GAS

- Do not try to light an appliance.
- Do not touch any electrical switch; do not use any phone in your building.

### LIGHTING INSTRUCTIONS

1. Stop! Read the safety information above this label.
2. Set the thermostat to lowest setting.
3. Turn off all electrical power to the appliance.
4. Locate valve under the burner assembly.
5. If the control knob is not already in the off position, i.e. the word "OFF" in the 9 o'clock position, then push in the gas control knob slightly and turn ⤵ clockwise to "OFF". NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not use force.
6. Wait five [5] minutes to clear out any gas. If you then smell gas. STOP! Follow "B" in the safety information above on this label. If you don't smell gas then go to the next step.
7. Now push in the control knob slightly and turn ⤴ counter-clockwise to the "PILOT" position.
8. Push in the control knob all the way and hold it. With the other hand push in the red igniter button until you hear a click. Now observe closely the pilot burner located on the rear center-left hand side of the main burner.
9. If a flame has appeared then continue to depress the control knob for 20 seconds. If the flame did not appear then continue to depress the red igniter button every 5 seconds until a flame is established. NOTE: If after 30 seconds a flame has not yet been established then turn the control knob back to the off position and repeat steps 5, 6 & 7.
10. Once the pilot has been established hold the control knob in the depressed position for approximately 25 seconds before releasing. If the flame goes out then repeat steps 7 and 8.
  - If the knob does not pop up when released, stop and immediately call your service technician or gas supplier.
  - If the pilot will not stay lit after several tries, turn the gas control to "OFF" and call your service technician.
11. Now turn the control knob to the "ON" position. The burner will not light unless the wall switch thermostat or remote control is turned "ON" or in the case of the thermostat there is a call for heat.
12. Close the access door and turn all electrical power back to the appliance.
13. The pilot must be turned off when the unit is not in use.

### TO TURN OFF THE APPLIANCE

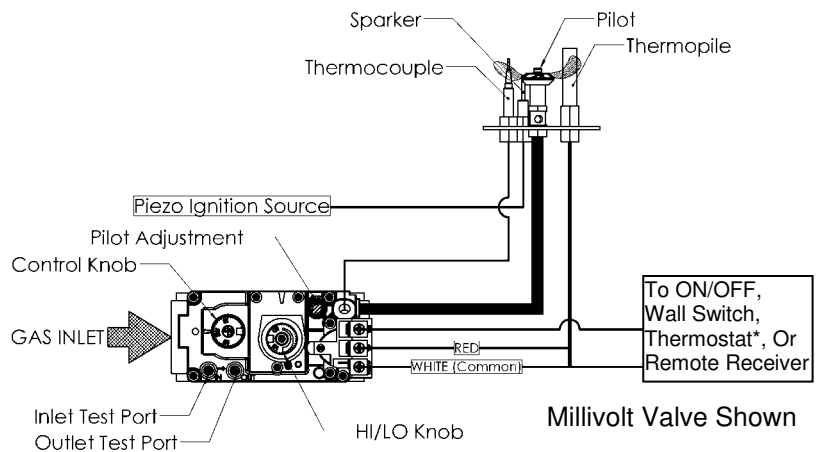
1. Set the thermostat to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Open the control access door.
4. Push in the gas control knob slightly and turn ⤵ clockwise to the "OFF" position. Do not force.
5. Replace control access panel.

**NOTE:** Only one on/off device (manual on/off, remote control, or hard wired thermostat) should be connected to the appliance at any one time, this is most important when installing an insert or stove as the on/off rocker switch is installed at the factory.

Recommended Maximum Lead Length (Double Wire)  
When Using Wall Switch or Thermostat

| Wire Size | Max. Length   |
|-----------|---------------|
| 14ga      | 100ft [30.4m] |
| 16ga      | 64ft [19.5m]  |
| 18ga      | 40ft [12.1m]  |
| 20ga      | 25ft [7.6m]   |
| 22ga      | 15ft [4.5m]   |

**CAUTION: DO NOT WIRE 120V POWER TO MILLIVOLT SWITCHES OR THERMOSTAT.**





# Electronic Ignition Lighting Instructions



## WARNING

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

Always light the pilot whether for the first time or if the gas supply has ran out with the glass door opened or removed.

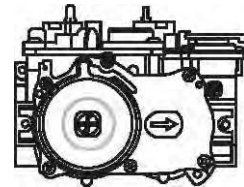
### FOR YOUR SAFETY READ BEFORE LIGHTING:



- A. This fireplace is equipped with an ignition device which automatically lights the pilot. Do not try to light by hand.
- B. Before operating smell all around the fireplace area for gas and next to the floor because some gas is heavier than air and will settle on the floor.
- C. Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the fireplace and replace any part of the control system and any gas control which has been under water.

### WHAT TO DO IF YOU SMELL GAS:

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

### LIGHTING INSTRUCTIONS



1. Stop! Read the above safety information on this label.
2. Remove batteries from receiver, and/or Battery Backup Pack.
3. Turn off all electric power to the fireplace.
4. This fireplace is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
5. Open the glass door.
6. Turn manual shutoff valve clockwise  to off (Located behind the access panel).
7. Wait five (5) minutes to clear out any gas. If you smell gas including near the floor, **STOP!** Follow "B" in the above safety information on this label. If you don't smell gas go to the next step.
8. Turn manual shutoff valve counter-clockwise  to on.
9. Close the glass door.
10. Turn on all electric power to the fireplace and re-install batteries into the Transmitter/Receiver, and/or Battery Backup Pack.
11. Turn "On" Switch that operates the Main Burner. If using a Remote Control refer to Remote Control Operation Manual for activation.

### TO TURN OFF GAS

1. Turn off all electric power to the fireplace if service is to be performed, including removing batteries from Remote Transmitter/Receiver and/or Battery Backup Pack.
2. Access door inside the firebox must be removed to access the manual shutoff valve.
3. If alternate shut-off valve was installed it can be shutoff instead of going through the fireplace to access the fireplace shut off valve.



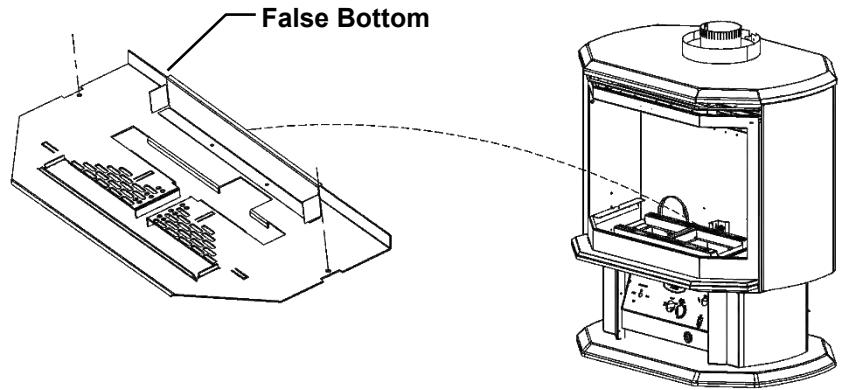
## FDV350 Burner Removal / Burner System Removal

### **⚠ WARNING**

Turn off Unit and allow to cool before cleaning. Only a Qualified service technician should service and repair this appliance.

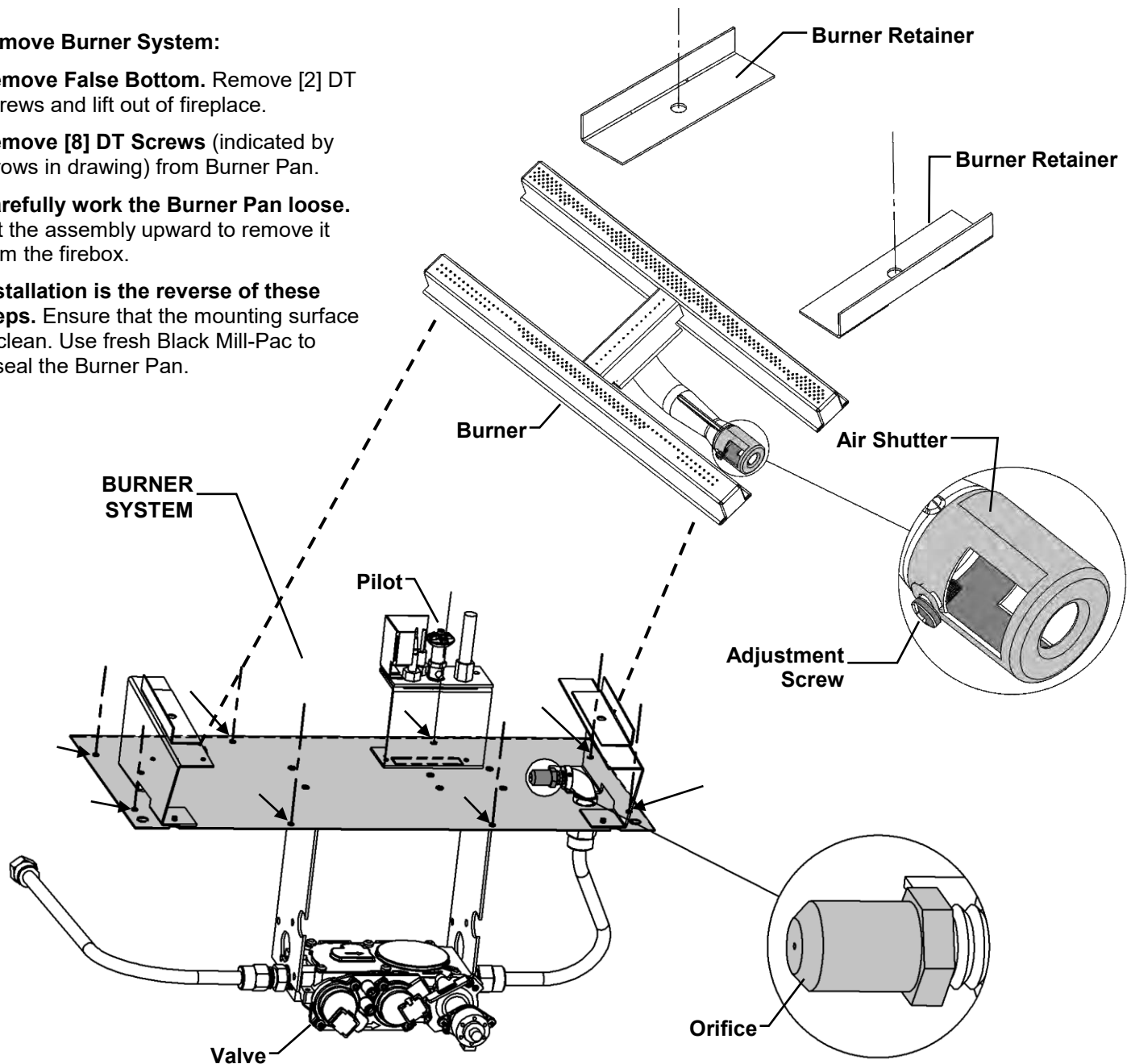
#### **To Remove Burner:**

1. **Remove False Bottom.** Remove [2] DT Screws and lift out of fireplace.
2. **Remove left and right Burner Retainer.** Remove [1] DT Screw from each Burner Retainer.
3. **Remove Burner.** Slide Burner to the left and lift to remove.



#### **To Remove Burner System:**

1. **Remove False Bottom.** Remove [2] DT Screws and lift out of fireplace.
2. **Remove [8] DT Screws** (indicated by arrows in drawing) from Burner Pan.
3. **Carefully work the Burner Pan loose.** Lift the assembly upward to remove it from the firebox.
4. **Installation is the reverse of these steps.** Ensure that the mounting surface is clean. Use fresh Black Mill-Pac to reseal the Burner Pan.



## Troubleshooting the Gas Control System

### **WARNING**

**BEFORE DOING ANY GAS CONTROL SERVICE WORK, REMOVE THE GLASS FRONT.**

NOTE: Before troubleshooting the gas control system, be sure external gas shut off is in the "On" position.

| Problem   | Possible Causes  | Corrective Action   |
|---|--|---|
| Spark igniter will not light.   | Defective or misaligned electrode at pilot.<br>Defective igniter (push-button).  | Check for spark at electrode and pilot: if no spark and electrode wire is properly connected, replace igniter.<br>Using a match, light pilot. If pilot lights, turn off pilot and push the red button again. If pilot will not light - check gap at electrode and pilot should be 1/8" to 1/4" to have a strong spark.  |
| Pilot will not stay lit after carefully following lighting instructions.    | Defective thermocouple (flame switch where applicable).<br>Defective valve magnet.   | Check pilot flame. Must impinge on generator and thermocouple. Clean and/or adjust pilot for maximum flame impingement on generator and thermocouple. Replace thermocouple if pilot will not hold. (Hand tight 1/8 turn on replacement)<br>Replace valve, if pilot won't hold after the thermocouple is replaced.   |
| Pilot burning, no gas to burner, valve knob "ON", and wall switch "ON".     | Wall switch or wires defective.<br>Generator may not be generating sufficient voltage.<br>Plugged burner orifice.<br>Defective automatic valve operator. | Check wall switch and wires for proper connections. Jumper wire across terminals at wall switch. If burner comes on, replace defective wall switch. If okay, jumper wires, across wall switch wires at valve. If burner comes on, wires are faulty or connections are bad.<br>Check generator with millivolt meter. Take reading at generator terminals of gas valve. Should read 325 millivolts minimum while holding valve knob depressed in pilot position and wall switch "off" Replace faulty generator if reading is below specified minimum.<br>Check burner orifice for stoppage and remove.<br>Remove wall switch wires from gas valve. Install jumper wires from top bottom terminals of gas valve. Turn valve on "ON". If main burner does not light, replace valve. |
| Frequent pilot outage problem.  | Pilot flame may be too low or blowing (high) causing the pilot safety to drop out.   | Clean and/or adjust pilot flame for maximum flame impingement on generator and thermocouple.<br>*See NOTE below – Seven Day Timer   |
| Flame lifts off burner and goes out in less than 30 seconds.                | Inner 4" liner has come off flue or termination, flame is starving for oxygen.   | Attach 4" liner to flue or termination using screws, silicone and clamps as stated in manual.   |
| Flame lifts off burner on one side while the rest of the flame remains lit. | Improper installation of firebrick. Firebrick is likely leaning.   | Be sure to position firebrick against firebox walls and be sure to use brick clips attached to the inner side of firebox.   |

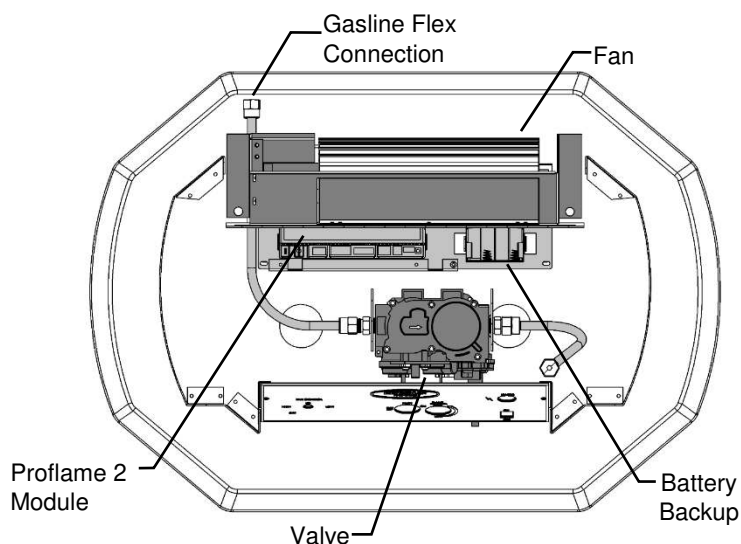
**\*NOTE:** The pilot system for this appliance may be equipped with a **Seven Day Timer**, in which case the pilot flame will be extinguished if the main burner has not been turned ON for seven days.

This Seven Day Cycle is reset every time the main burner is cycled ON / OFF and the pilot remains lit.

If more than seven days has passed since the main burner has been cycled ON / OFF and the pilot is also out, follow the procedures described in this manual to light the pilot.

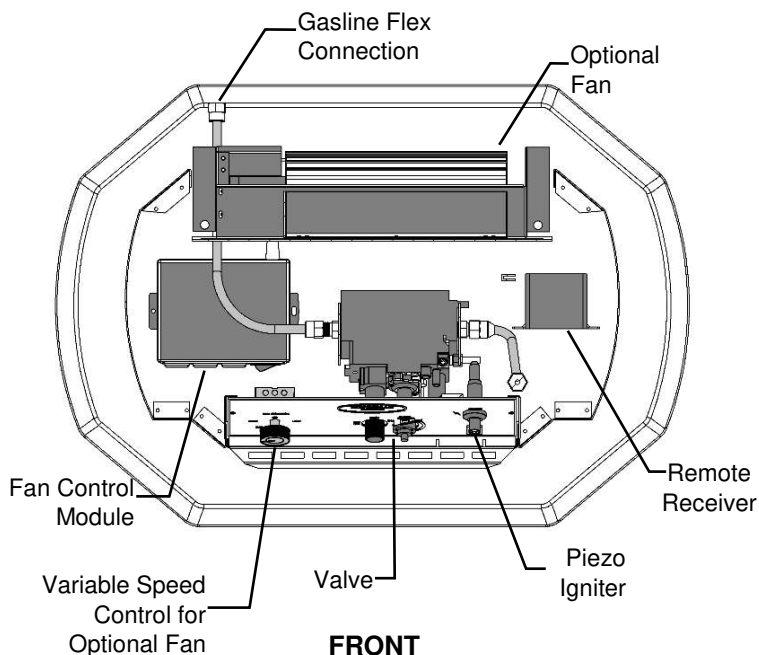
## 350FDV Component Locations - Top View (See Each Section For Connections & Wiring)

### PROFLAME 2



FRONT

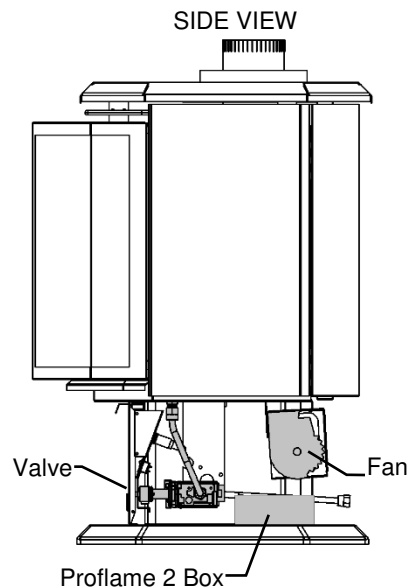
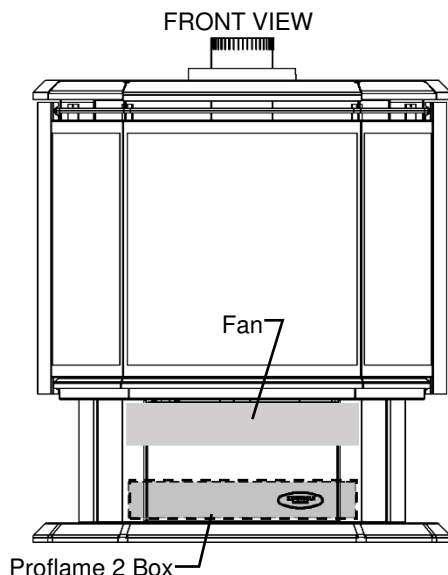
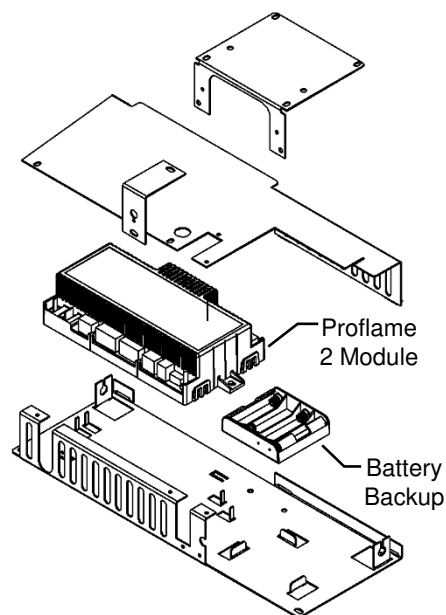
### MILLIVOLT / PROFLAME 1



FRONT

## FDV350 Proflame 2 Box

The Proflame2 IFC (Integrated Fireplace Control) board is a device that allows the automatic ignition and pilot flame supervision, to command the functions of a hearth appliance. Refer to Proflame 2 Section for more information.

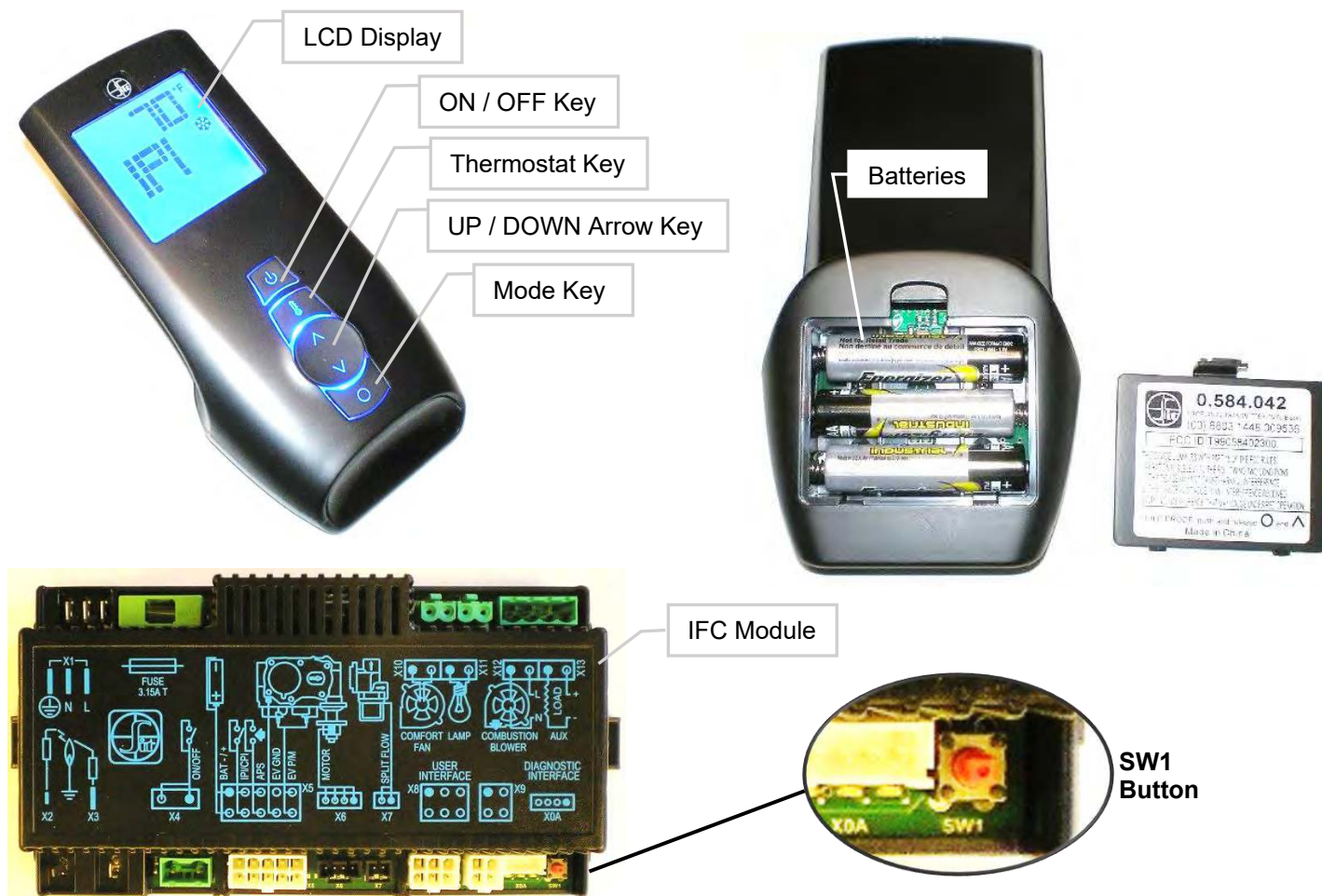


Proflame 2 Box can be inserted & removed through the opening at the back of the pedestal base.





## Proflame 2 IFC Module and Remote Control



### Pairing Remote Control:

- Install the 3 AAA type batteries in the battery bay, located on the base of the Remote Control. Note polarity of the batteries and insert them as indicated.
- Connect the AC power supply to the IFC Module.
- Press the SW1 button on the IFC Module so the IFC will “beep” and a red LED is illuminated to indicate that the IFC Module is ready to synchronize with a Remote Control within 10 seconds. With the batteries already installed in the Remote Control, push the ON button. The receiver will “beep” four times to indicate the Remote Control’s command is accepted.

The system is now initialized.

### Resetting Proflame 2 IFC Module for Manual Use

If the transmitter gets misplaced, is broken, or is no longer wanted the PF2 Module can be reset to a manual system. A manual on/off switch or thermostat may be installed at the X4 connector (this connection is Jumped at the factory) no power is required.

The following sequence must be followed to reset the PF2 Module:

- Press the Red **SW1** button until you hear three beeps.

- Within 10 seconds press the **SW1** button again until you hear it beep.
- The PF2 Module may now be turned on/off manually (x4 connector) by a switch (not supplied), the pilot will remain on CPI (continuous pilot ignition) mode, all other functions of main burner, fan and lights will be on the high setting.

### Fan Startup and Shutdown Timings:

Fan setting is started with a delay of 5 minutes from the fireplace ignition and stopped with a delay of 12 minutes from the fireplace switching off.

### Low Battery Power Detection

When the Remote Control’s batteries are low, a Battery Icon will appear on the LCD display before all power is lost. When the batteries are replaced this icon will disappear.

### Battery Backup

The PF2 module is powered by line voltage (AC) with provision of battery backup in case of main power loss. Fans and lighting features will not function with the PF2 Module is powered by battery backup. It is recommended that the 4 x AA batteries are changed before each heating season.

## Cold Climates – CPI Setting - Proflame 2 Remote Control

Use the **CPI setting** during cold weather, otherwise the fireplace may have a hard time starting up and establishing a flame. The **CPI** (Continuous Pilot Ignition) setting will keep the firebox and fireplace exhaust vent warm during cold weather. When the firebox and exhaust vent are warm, exhaust gasses will readily flow out of the firebox.

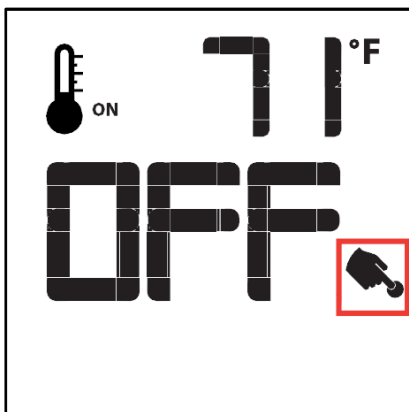
If the firebox and venting are too cold, there is resistance due to the heavy cushion of cold air, and combustion gasses may not rise into the exhaust vent, thus causing the fireplace to cycle or **Lockout** (if this happens see **Lockout Reset Procedures** below).

**NOTE:** The pilot system for this appliance may be equipped with a **Seven Day Timer**, in which case the pilot flame will be extinguished if the main burner has not been turned ON for seven days. This Seven Day Cycle is reset every time the main burner is cycled ON / OFF and the pilot remains lit. If more than seven days has passed since the main burner has been cycled ON / OFF and the pilot is also out, follow the procedures described in this manual to light the pilot.

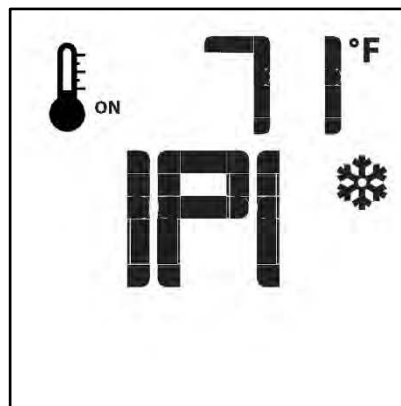


### To switch from IPI to CPI Mode:

1. Turn the fireplace OFF using the **ON / OFF Key**.

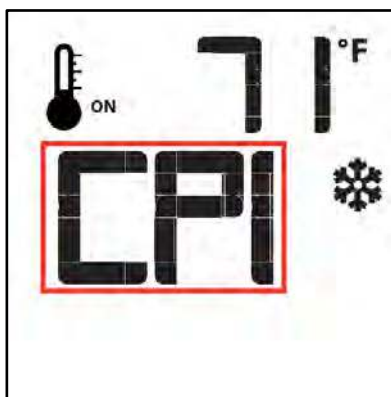


2. Press the **Mode Key**. Display will appear as below.



3. Press UP on the **UP / DOWN Arrow Key**. Display will show **CPI**.

The module in the fireplace will beep once to confirm command.



### TO RETURN TO IPI (INTERMITTENT PILOT) MODE:

Repeat steps one and two, and then press DOWN on the **UP / DOWN Arrow Key**.

The module in the fireplace will beep once to confirm command.

## Lockout Reset Procedures – Proflame 2

If the fireplace has cycled too many times in a short period of time, it will shut down and become unresponsive to any new command.

The LED light on the Proflame 2 module in the fireplace will be flashing red.

This condition is a **Lockout** state.

### Lockout Reset Procedure:

1. Disconnect power from the Proflame 2 module in the fireplace for 10 seconds. This includes removing the backup batteries.
2. Once the 10 second interval has passed, reconnect power and reinstall backup batteries. The pilot should now try to light.
3. If the fireplace does not come on, call your fireplace technician.



## Proflame 2 Remote Control

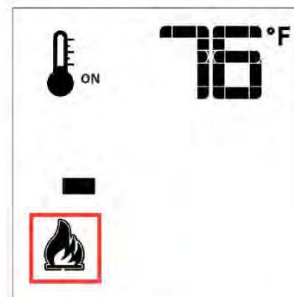
### Remote-Flame Control

The proflame has six (6) flame levels. With the system on, and the flame level at the maximum in the appliance, pressing the Down Arrow Key once will reduce the flame height by one step until the flame is turned off.

The Up Arrow Key will increase the flame height each time it is pressed. If the Up Arrow Key is pressed while the system is on but the flame is off, the flame will come on in the high position. ( Fig. 7 & 8 ) A single "beep" will confirm reception of the command.



Fig. 7: Flame Off



Flame Level 1

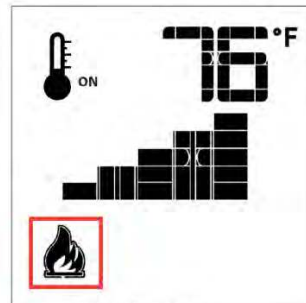


Fig. 8: Flame level 5



Flame Level Maximum

### Room Thermostat ( Transmitter Operation)

The Remote Control can operate as a room thermostat. The thermostat can be set to a desired temperature to control the comfort level in a room.

To activate this function, press the Thermostat Key (Fig. 1). The LCD display on the Transmitter will change to show that the room thermostat is "ON" and the set temperature is now displayed (Fig. 9). To adjust the set temperature, press the Up or Down Arrow Keys until the desired set temperature is displayed on the LCD screen of the Transmitter.

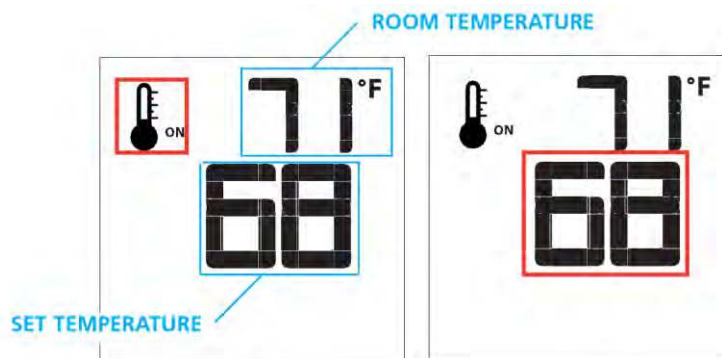


Fig. 9

Fig. 10

## Smart Thermostat (Transmitter Operation)

The Smart Thermostat function adjusts the flame height in accordance to the difference between the set point temperature and the actual room temperatures. As the room temperature gets closer to the set point the Smart Function will modulate the flame down.

To activate this function, press the Thermostat Key (Fig. 1) until the word "SMART" appears to the right of the temperature bulb graphic (Fig. 11).

To adjust the set temperature, press the Up or Down Arrow Keys until the desired set temperature is displayed on the LCD screen of the Transmitter (Fig. 12).

### Note:

When Smart Thermostat is activated, manual flame height adjustment is disabled.

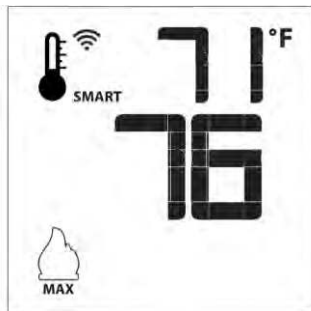


Fig. 11: Smart flame function



Fig. 12

## Fan Speed Control

If the appliance is equipped with a hot air circulating fan, the speed of the fan can be controlled by the Proflame system. The fan speed can be adjusted through six (6) speeds. To activate this function use the Mode Key (fig.1) to index to the fan control icon (Fig. 13). Use the Up/Down Arrow Keys (Fig.1) to turn on, off or adjust the fan speed (fig. 14). A single "beep" will confirm reception of the command.



Fig. 13

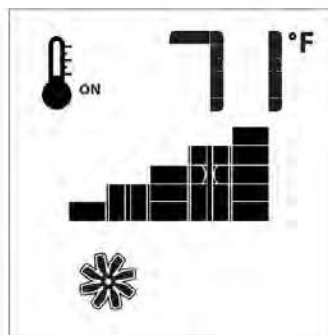


Fig. 14

## Remote dimmer control (Light)

The auxiliary function controls the AUX power outlet by the dimmable light control. To activate this function use the Mode Key (fig. 1) to index to the AUX icon (fig. 15 & 16).

The intensity of the output can be adjusted through six (6) levels. Use the Up/Down Arrow Keys (Fig.1) adjust the output level (fig. 16). A single "beep" will confirm reception of the command.

### Note:

This function is only available in Room Thermostat or Smart Thermostat Control Mode.



Fig. 15

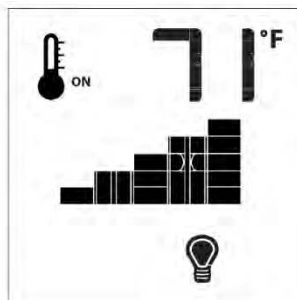


Fig. 16





# IPI Electronic Ignition System

## Overview

The IPI system is an advanced burner controller that provides you with the option of having either a Standing-Pilot, or an intermittent igniting system. This alternating mode is controlled by the CPI/IPI Switch (Continuous Pilot Ignition/Intermittent Pilot Ignition) located on the IPI System Box. The difference between a Standing-Pilot and an Intermittent-Pilot is in whether the pilot stays lit or shuts off:

In Standing-Pilot, the pilot assembly is lit by the IPI Main Module and continues to stay lit until 1) the CPI/IPI Switch is switched to the IPI position; 2) a loss of electrical power (battery and AC source), 3) the flame sensor loses its signal, 4) the fuel supply discontinues, or 5) the IPI Main Module malfunctions.

In the Intermittent-Pilot mode, the pilot shuts off when the appliance is not in use. The advantage of this mode is that fuel is not consumed when the fireplace is not operating.

NOTE: In some jurisdictions Intermittent-Pilot is required. That means the pilot cannot remain lit when the appliance is not operating.

## Components

The core of the IPI system is the Main Module and the IPI Valve. With these two components the system is able to operate a gas fireplace. There are also other components available to complement the IPI system.

**IPI System Cover:** Is essential in keeping the components at their proper operating temperatures. **DO NOT OPERATE THE APPLIANCE WITHOUT THIS COVER.**

**Modulating Servo Motor:** Is an add-on valve component that permits HI/LO functionality to be controlled by the remote. Contrary to this feature is a Manual HI/LO Control Knob. The Modulating Servo Motor requires the Remote system to be present.

**Backup Battery Pack:** This component permits the IPI system to operate without the need for an external AC Adapter power source. The advantage to using the battery backup is that in the case of a power failure, the appliance is still operable.

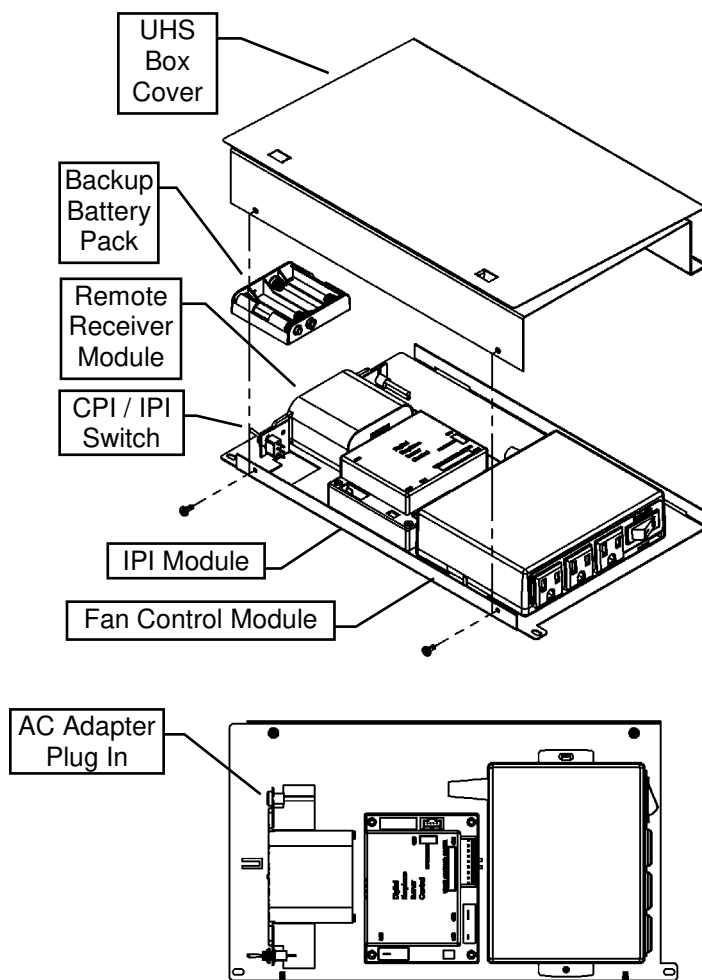
**NOTE:** In certain instances the IPI Main Module requires resetting. This can occur if the system is unable to ignite the pilot or the main burner in the allotted time period. The IPI is programmed to lockout all commands. To reset this lockout you must deplete the system of all electrical power. This means to remove the batteries from the Battery Pack, remove the batteries from the Remote Receiver (if applicable), and disconnect the AC Adapter from the system. Leave the power off for approximately 25 seconds to clear its lockout.

**Remote Receiver:** This component provides the capability of controlling the appliance with a wireless remote transmitter.

### Standing Pilot Mode for Colder Climates (Below Freezing)

For IPI models it may be necessary to set the appliance to Standing Pilot mode to maintain heat in the cavity. The purpose of this procedure is to prevent cold air from penetrating the chimney and then onto the living space. Therefore, when the internal temperature is slightly elevated the fireplace is able to freely exhaust its combustion and hence making it easier to startup.

**NOTE:** The pilot system for this appliance may be equipped with a Seven Day Timer, in which case the pilot flame will be extinguished if the main burner has not been turned ON for seven days. This Seven Day Cycle is reset every time the main burner is cycled ON / OFF and the pilot remains lit. If more than seven days has passed since the main burner has been cycled ON / OFF and the pilot is also out, follow the procedures described in this manual to light the pilot.



## -Remote Control Operation-

The Proflame GTM is configured to control the on/off main burner operation, its flame levels, and provides on/off and Smart thermostatic control of the appliance.



**Remote Receiver**



### Transmitter

The Transmitter is powered by 3 AAA type batteries. A Mode Key is provided to Index between the features and a Thermostat Key is used to turn on/off or index through thermostat functions

### Remote Receiver

The Receiver connects directly to the gas valve and stepper motor with a wiring harness. The Receiver is powered by 4 AA type batteries. The Receiver three position slider switch can be set to one of three positions: ON (Manual Override), Remote (Remote control) or Off.

### Initializing the System for the first time

Install 4 AA batteries into the receiver battery bay. Install 3 AAA type batteries in the Transmitter battery bay. Place the 3 position slider switch in the "Remote" position. Insert the end of a paper clip into the hole marked "PRG" on the Receiver front cover. The Receiver will "beep" three (3) times to indicate that it is ready to synchronize with a Transmitter. Push the On button. The Receiver will "beep" four times to indicate the Transmitter's command is accepted. The system is now initialized.

### Temperature indication Display

With the system in the "OFF" position, press the Thermostat Key and the Mode Key at the same time. Look at the LCD screen on the Transmitter to verify that a C or F is visible to the right of the Room Temperature display.

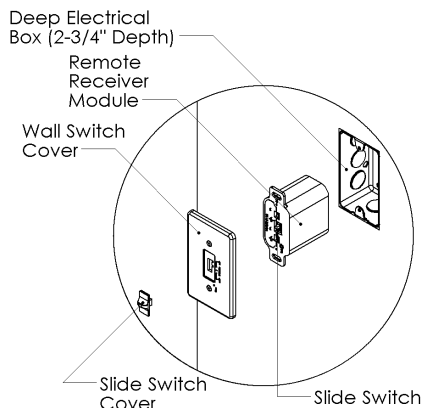
### Turn the Appliance On or Off

Press the ON/OFF Key on the Transmitter

### Remote Flame Control

The Proflame GTM has six (6) flame levels. Pressing the Down Arrow Key once will reduce the flame height by one step until the flame is turned off. The Up Arrow Key will increase the flame height each time it is pressed. If the Up Arrow Key is pressed while the system is on but the flame is off, the flame will come on in the high position.

**NOTE:** The Remote Receiver module can also be located outside of the appliance to a maximum of 6ft away installed in a certified deep wall switch electrical box (2-3/4" depth). For this configuration an extension wiring harness (P/N: 1001-P904SI) is required.



### Room Thermostat ( Transmitter Operation)

The Remote Control can operate as a room thermostat. To activate this function, press the Thermostat Key. The LCD display on the Transmitter will change to show that the room thermostat is "ON" and the set temperature is now displayed. To adjust the set temperature, press the Up or Down Arrow Keys until the desired set temperature is displayed on the LCD screen of the Transmitter.

### Smart Thermostat (Transmitter Operation)

The Smart Thermostat function adjusts the flame height in accordance to the difference between the set point temperature and the actual room temperatures. As the room temperature gets closer to the set point the Smart Function will modulate the flame down. To activate this function, press the Thermostat Key until the word "SMART" appears to the right of the temperature bulb graphic. To adjust the set temperature, press the Up or Down arrow Keys until the desired set point temperature is displayed.

### Key Lock Function

This function will lock the keys to avoid unsupervised operation. To activate this function, press the MODE and the UP Arrow Key at the same time. To de-activate this function, press the MODE and the UP Arrow Key at the same time.

### Low Battery Detection

**Transmitter** - When the Transmitter batteries are low, a Battery Icon will appear on the LCD display of the Transmitter.

**Receiver** - When the Receiver batteries are low, No "beep" will be emitted from the Receiver when it receives an On/Off command from the Transmitter. When the batteries are replaced the "beep" will be emitted from the Receiver when the ON/OFF Key is pressed (See Initializing the System for the first time).

### Manual Bypass Of The Remote System

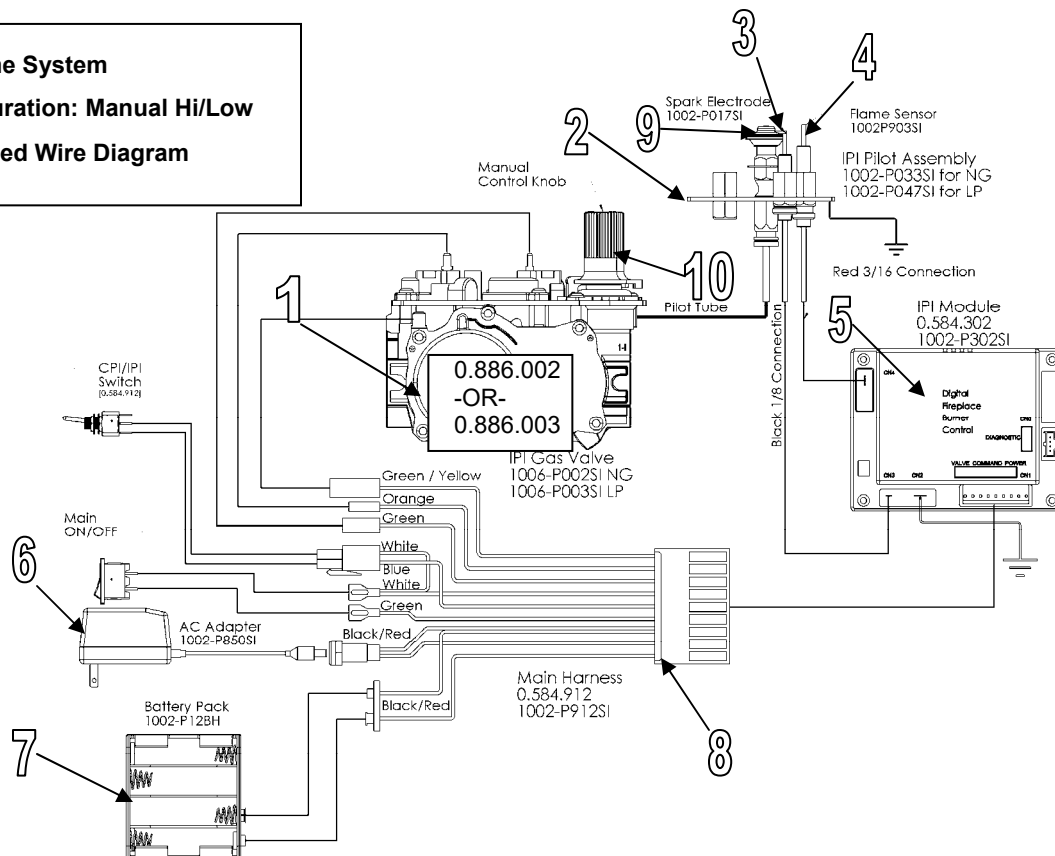
If the batteries of the Receiver or Transmitter are low or depleted, the appliance can be turned on manually by sliding the three position slider switch on the Receiver to the ON position. This will bypass the remote control feature and the appliance main burner will come on if the gas valve is in the "On" position.

\*In the U.S.A. Thermostats are not permitted for Vented Gas Fireplaces (ANSI Z21.50b-2009 -Decorative).,

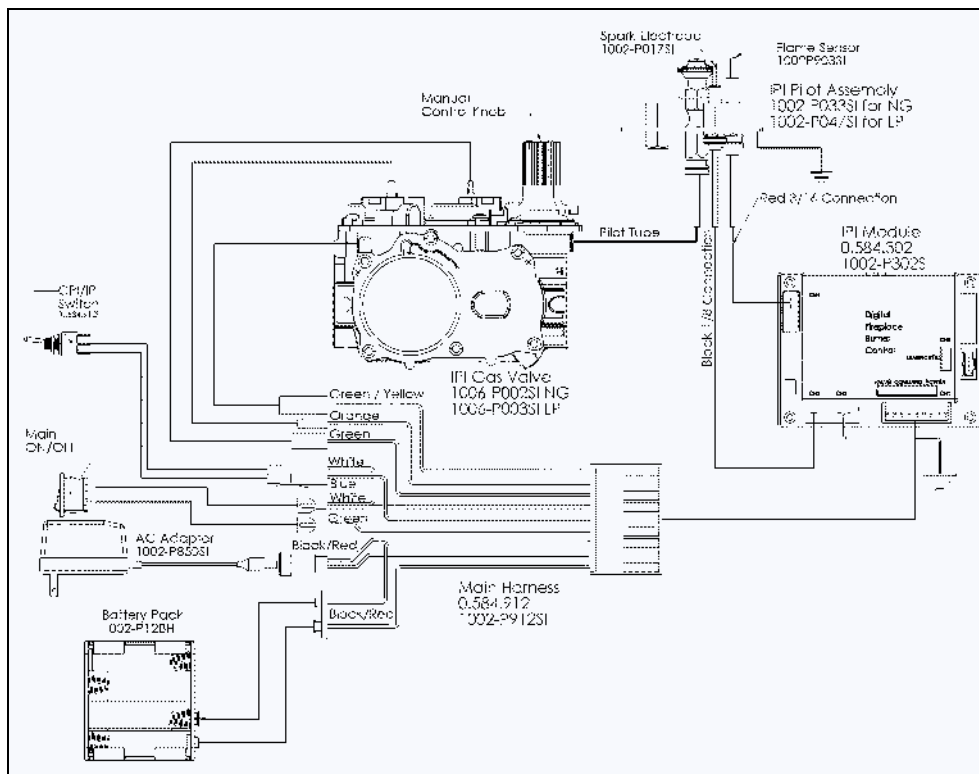
## IPI Electronic Ignition Parts List – Standard System

| ITEM NO.  | PART NO.     | DESCRIPTION                             |
|---|--------------|---|
| 1   | 1006-P002si  | Valve IPI Hi/Lo NG                      |
|   | 1006-P003si  | Valve IPI Hi/Lo LP                      |
| 2   | *1002-P047si | Pilot Assembly-LP -24" Wire             |
|   | *1002-P033si | Pilot Assembly-NG -24" Wire             |
| 3   | 1002-P017si  | Spark Electrode (with wire)             |
|   | *1002-P119si | Spark Electrode (with wire- 35" Length) |
| 4   | 1002-P903si  | Electrode Flame Sensor                  |
|   | *1002-P910si | Electrode Flame Sensor (35" Length)     |
| 5   | 1002-P302si  | IPI Ignition Board                      |
| 6   | 1002-P850si  | AC Wall Adapter                         |
| 7   | 1002-P12BH   | Battery Pack                            |
| 8   | 1002-P912si  | Wiring Harness                          |
| 9   | 1001-P166si  | Orifice Pilot -NG#62                    |
|   | 1001-P168si  | Orifice Pilot -LP#35                    |
| 10  | 1002-P013si  | Stepper Motor -NG                       |
|   | 1002-P012si  | Stepper Motor -LP                       |
|   | 1002-P016si  | Hi/Lo Regulator -NG                     |
|   | 1002-P014si  | Hi/Lo Regulator -LP                     |
| *Models ZRB46E / MQRB4436E / MQRB5143E / MQRB6961E<br>Longer (35") Wire length is required for these units. |              |   |

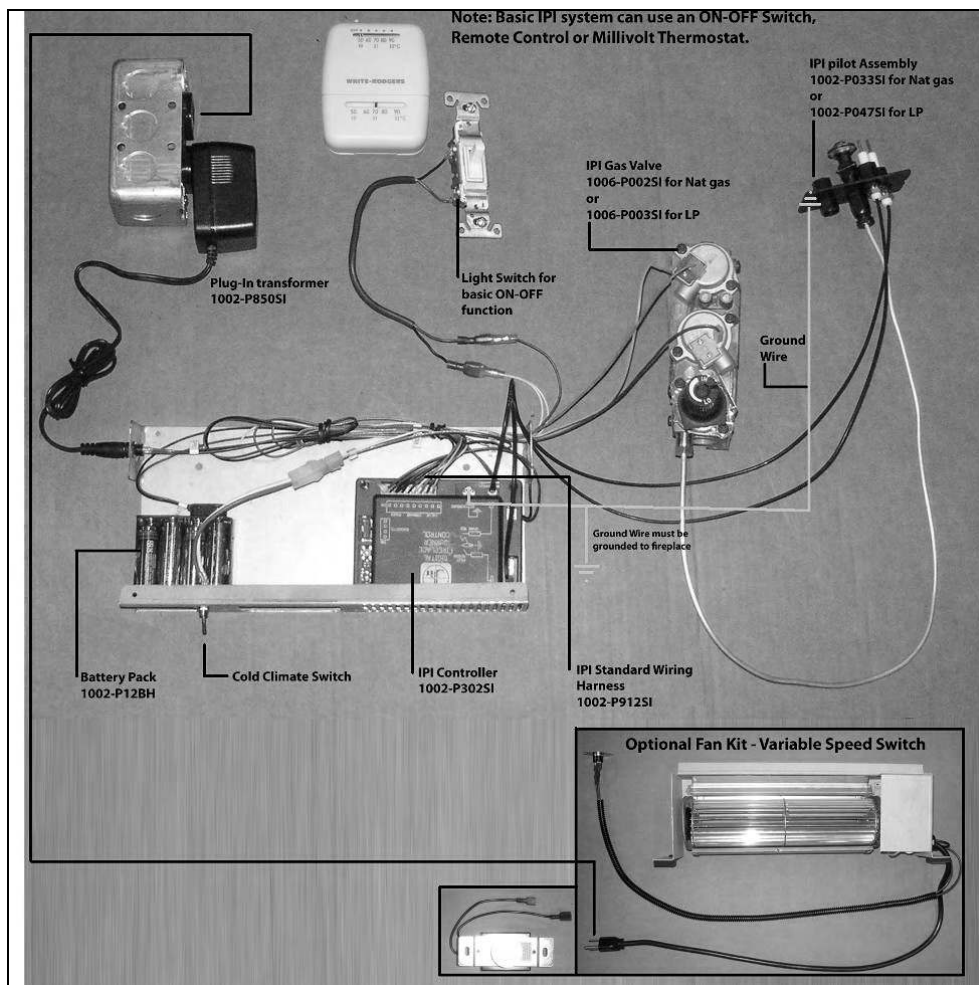
### Simplified Wire Diagram

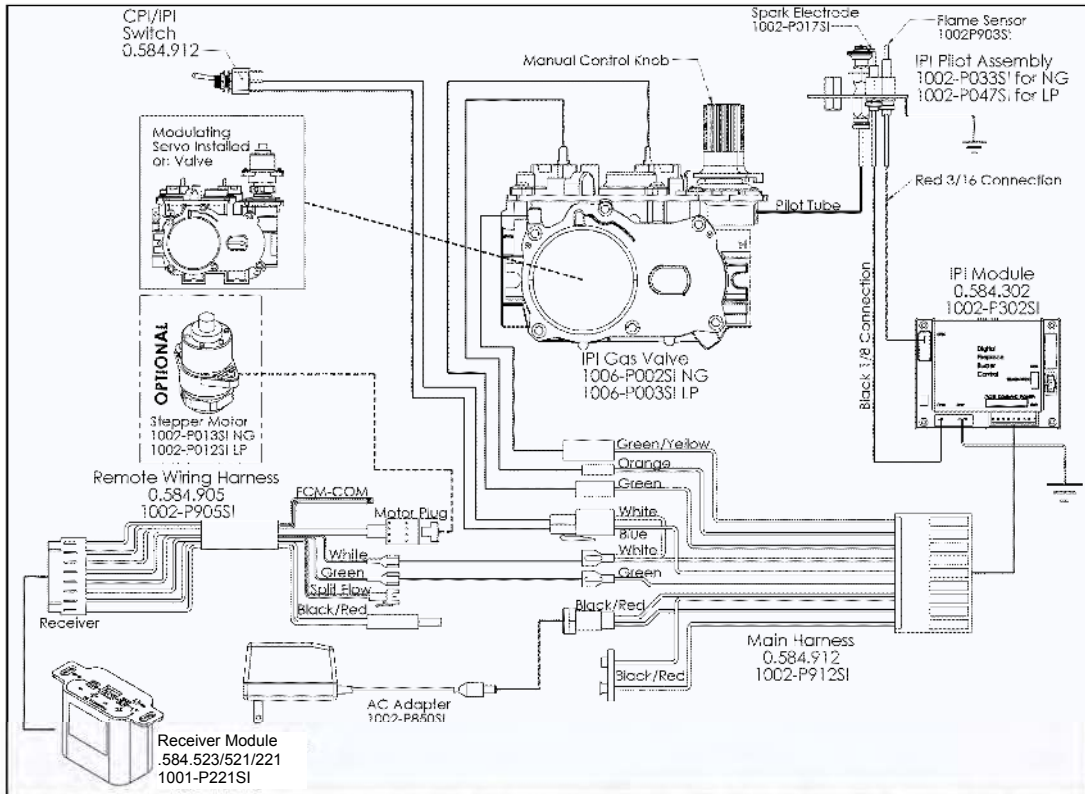




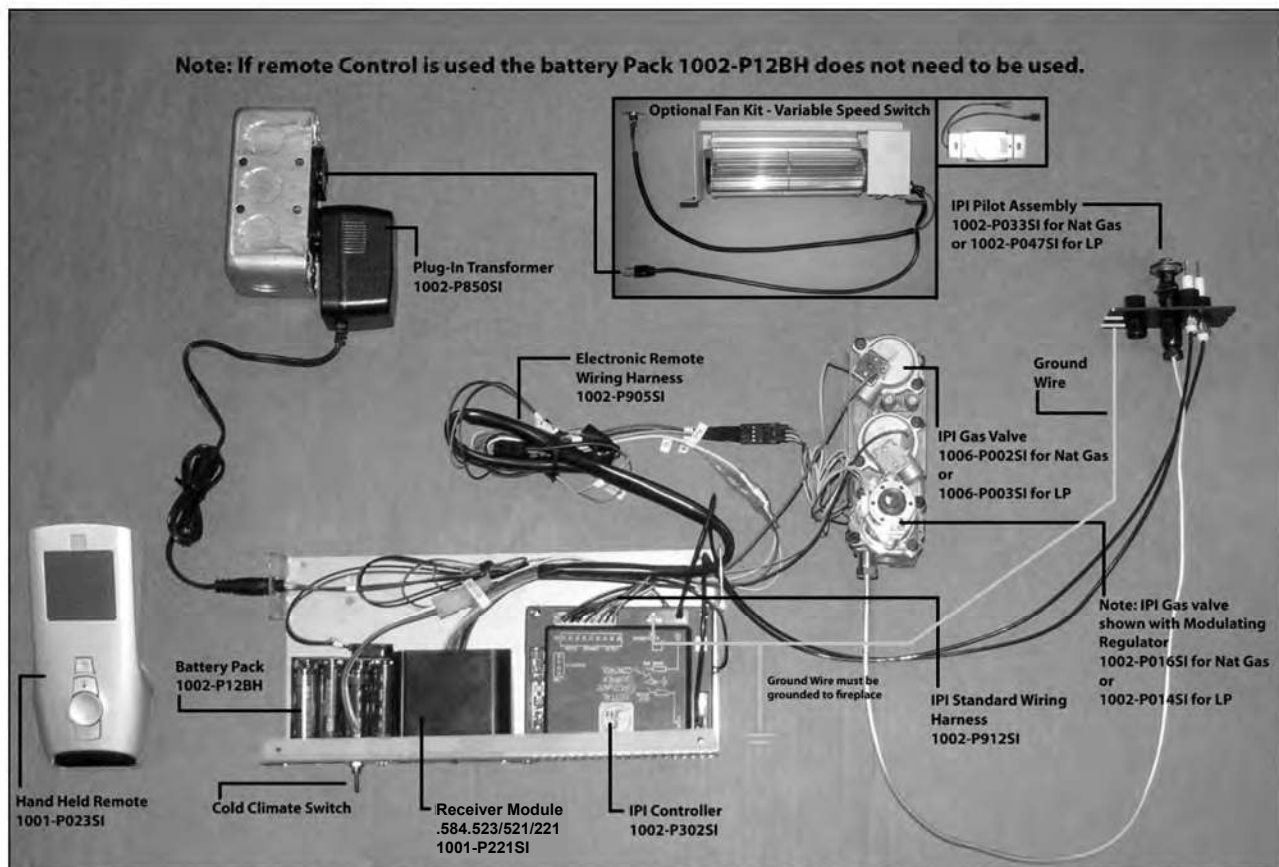


Configuration #1: Basic manual HI/LO and manual ON/OFF capabilities.





Configuration #2: Remote ON/OFF and manual HI/LO capabilities. OPTIONAL: For units with remote HI/LO capabilities, a modulating servo is required to be installed on the valve. The connectors to this servo must be connected to the Remote Harness as shown in the figure above.



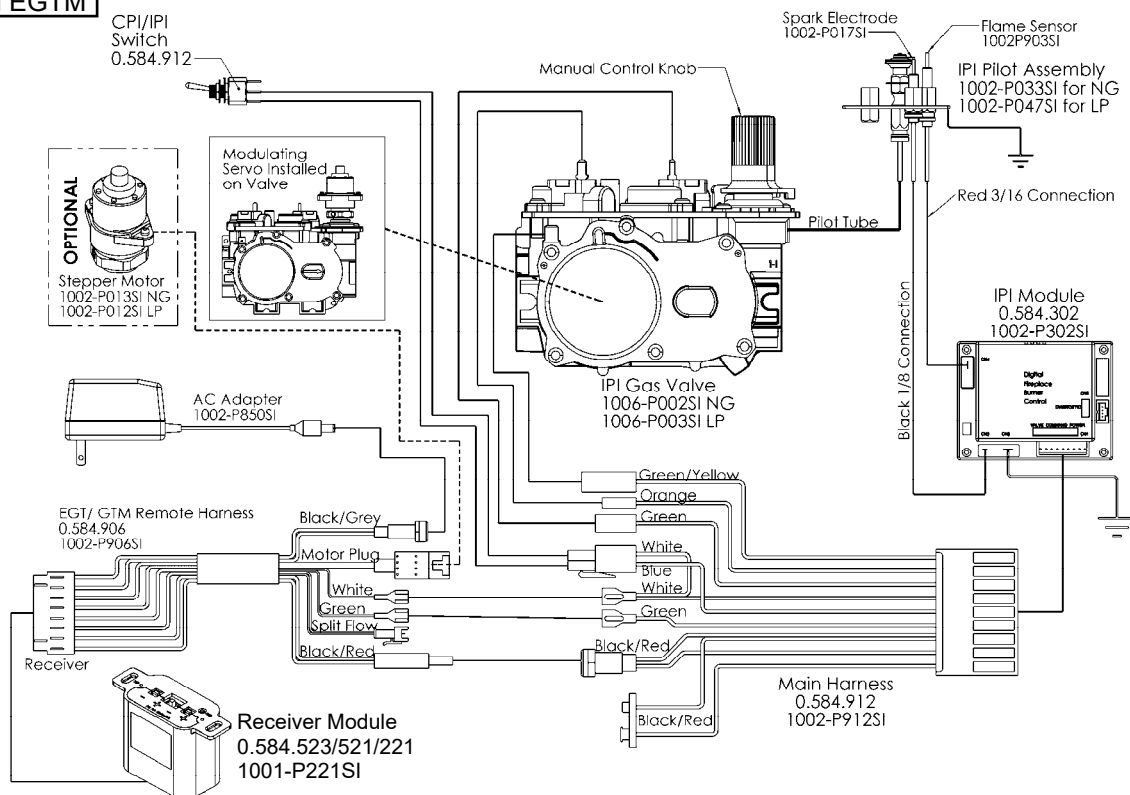
## Operating the Receiver Without Batteries For GT / EGT / GTM / EGTM Remote Controls

**-Wiring Harness P/N 1002-P906si required for both IPI & Millivolt systems.**

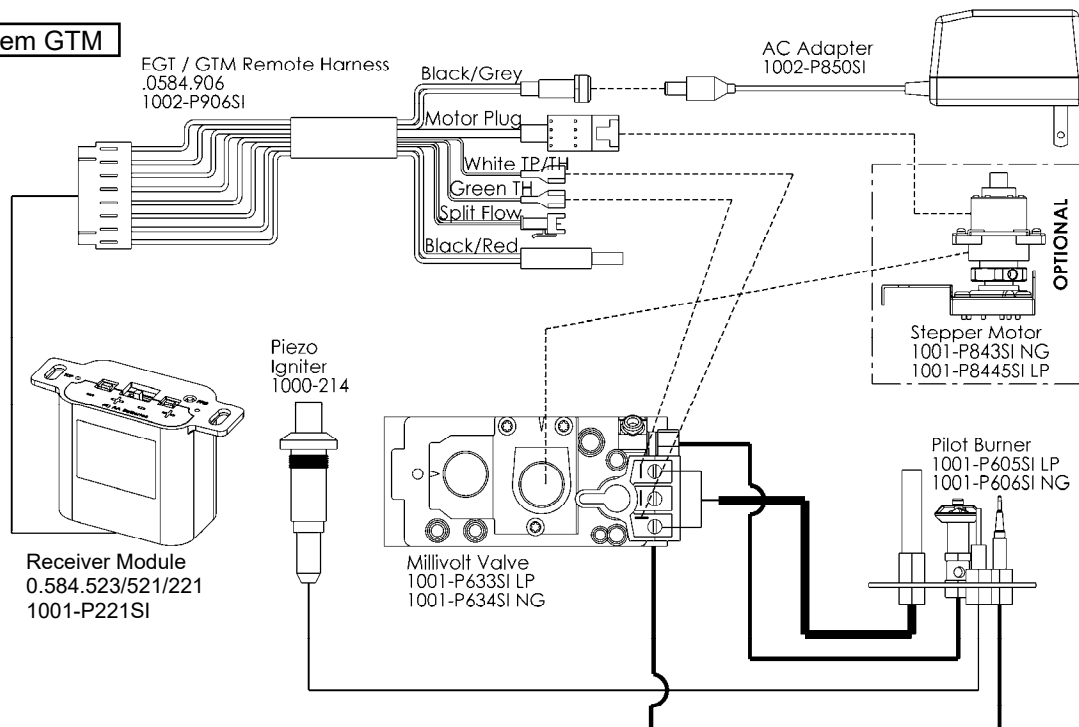
**-Millivolt Systems will also require Power Adapter P/N 1002-P850si.**

The Remote Receiver & IPI or Millivolt system can be powered by the AC Adapter. This is advantageous if you do not want to use batteries. Simply connect the AC Adapter into the Remote Control Wiring Harness as per the diagrams below.

### IPI System EGTM



### Millivolt System GTM

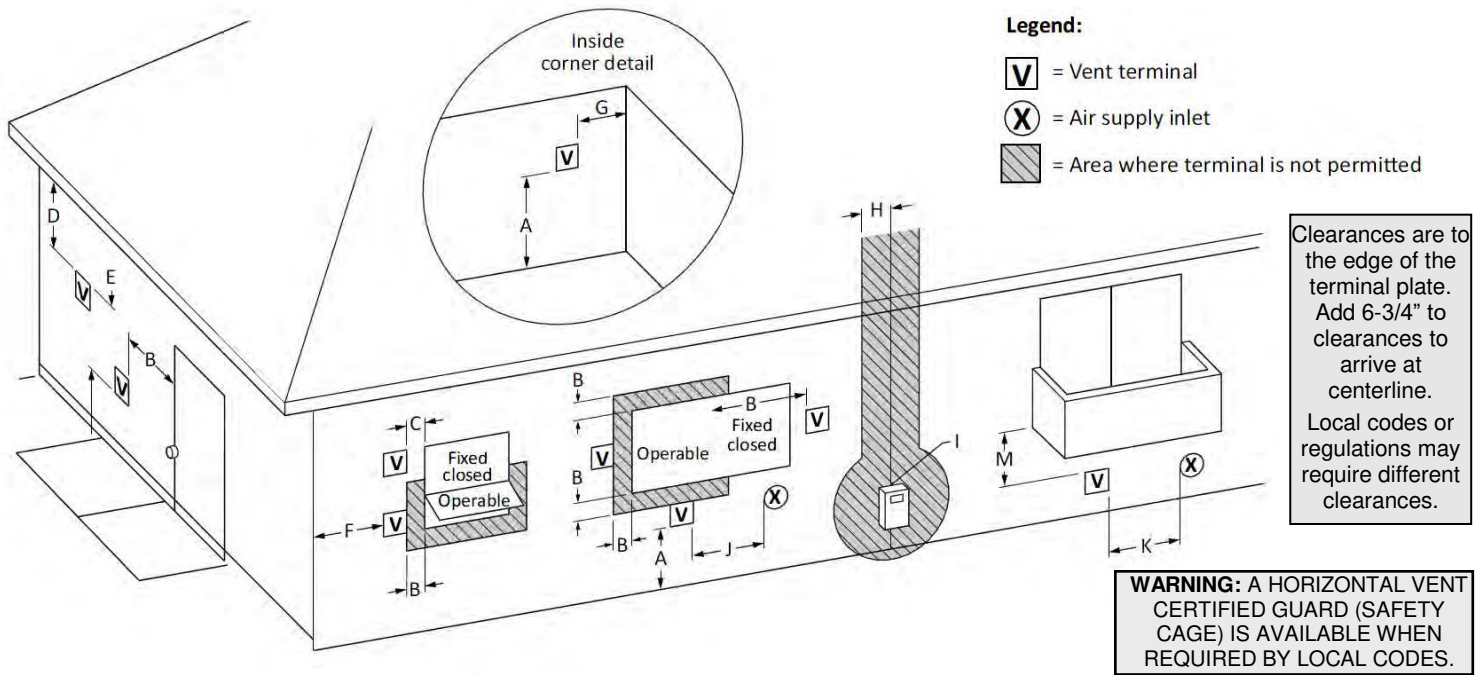


\*In the U.S.A. Thermostats are not permitted for Vented Gas Fireplaces (ANSI Z21.50b-2009 -Decorative).





# Vent Terminal Clearances



|   |  | Canadian installations <sup>1</sup>   | US installations <sup>2</sup>  |
|---|--|---|--|
| A | Clearance above grade, veranda, porch, deck, or balcony  | 12 in (30 cm)   | 12 in (30 cm)  |
| B | Clearance to window or door that may be opened   | 6 in (15 cm) for appliances ≤ 10,000 Btu/h (3 kW), 12 in (30 cm) for appliances > 10,000 Btu/h (3 kW) and ≤ 100,000 Btu/h (30 kW), 36 in (91 cm) for appliances > 100,000 Btu/h (30 kW) | 6 in (15 cm) for appliances ≤ 10,000 Btu/h (3 kW), 9 in (23 cm) for appliances > 10,000 Btu/h (3 kW) and ≤ 50,000 Btu/h (15 kW), 12 in (30 cm) for appliances > 50,000 Btu/h (15 kW) |
| C | Clearance to permanently closed window   | 12 inches (30cm) recommended to prevent condensation on window  | 12 inches (30cm). 9 inches (23cm) for appliances 50,000 Btu's and lower  |
| D | Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (61 cm) from the center line of the terminal | 18 inches (46cm)  | 18 inches (46cm)   |
| E | Clearance to unventilated soffit   | 12 inches (30cm)  | 12 inches (30cm)   |
| F | Clearance to outside corner  | 3" *  | 3" *   |
| G | Clearance to inside corner   | 3" *  | 3" *   |
| H | Clearance to each side of center line extended above meter/regulator assembly  | 3 ft (91 cm) within a height 15 ft (4.5 m) above the meter/regulator assembly   | 3 ft (91 cm) within a height 15 ft (4.5 m) above the meter/regulator assembly  |
| I | Clearance to service regulator vent outlet   | 3 ft (91 cm)  | 3 ft (91 cm)*  |
| J | Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance  | 6 in (15 cm) for appliances ≤ 10,000 Btu/h (3 kW), 12 in (30 cm) for appliances > 10,000 Btu/h (3 kW) and ≤ 100,000 Btu/h (30 kW), 36 in (91 cm) for appliances > 100,000 Btu/h (30 kW) | 6 in (15 cm) for appliances ≤ 10,000 Btu/h (3 kW), 9 in (23 cm) for appliances > 10,000 Btu/h (3 kW) and ≤ 50,000 Btu/h (15 kW), 12 in (30 cm) for appliances > 50,000 Btu/h (15 kW) |
| K | Clearance to a mechanical air supply inlet   | 6 ft (1.83 m)   | 3 ft (91 cm) above if within 10 ft (3 m) horizontally  |
| L | Clearance above paved sidewalk or paved driveway located on public property  | 7 ft (2.13 m)†  | 7 ft (2.13 m)*   |
| M | Clearance under veranda, porch deck, or balcony  | 12 in (30 cm)‡  | 12 in (30 cm) *  |

## Notes:

1) In accordance with the current CSA B149.1, Natural Gas and Propane Installation Code.

2) In accordance with the current ANSI Z223.1/NFPA 54, National Fuel Gas Code.

\* Clearance in accordance with local installation codes and the requirements of the gas supplier.

† A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.

‡ Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

It is imperative that the vent termination be located observing the minimum clearances as shown. There must not be any obstruction such as bushes, garden sheds, fences, decks or utility buildings within 24" from the front of the termination plate.

Do not locate termination 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.

Venting terminal shall not be recessed into a wall or siding. If finishing the outside wall with vinyl or wood siding it is recommended that a Siding Shield be installed, Part Number ZDVSSLR.



This gas appliance is approved to be vented either through the side wall or vertically through the roof. **Only Kingsman Flex (Z-Flex) Venting Kits and components specifically approved and LABELED for this stove may be used.** This appliance is also approved for use Simpson-DuraVent Direct Vent system (Model DV-GS Series), BDM Pro Form Direct Vent, Ameri-Vent Direct Vent Pipe System, ICC Excel Direct, Metal Fab Sure-Seal DV and Selkirk Direct Temp.

### **Rigid or Hard Pipe**

When using Simpson DuraVent, Ameri-Vent pipe, BDM Pro Form Direct Vent, ICC Excel Direct, Metal Fab Sure-Seal DV and or Selkirk Direct Temp a DuraVent hard pipe adapter must be used (part # ZDVDFDA for fireplaces and part # ZDVDKA for Stoves). Follow installation instructions provided by Simpson DuraVent/Ameri-Vent/Selkirk Direct Temp, ICC Excel Direct, and Metal Fab Sure-Seal DV for installation of pipe and adhere to the clearance to combustibles provided in this manual. Apply a bead of Mill Pac high temp sealant to all joints of pipes, adapters and termination, when using Kingsman Flex (Z-Flex) venting and Simpson DuraVent venting.

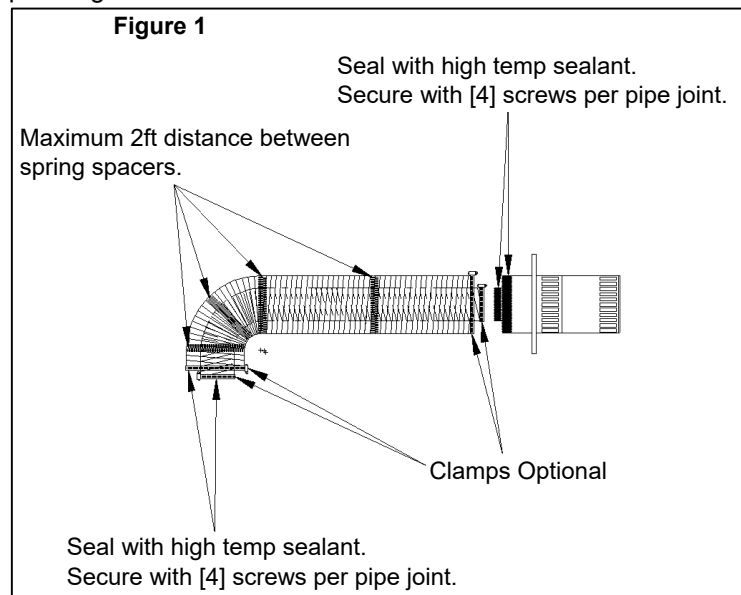
### **Flex Pipe Venting**

Kingsman Flex pipe is shipped in unexpanded length. When installing pipe expand the lengths. Pipe can be expanded to twice their lengths e.g. 4ft. to 8ft. Fully expand pipe and cut off excess.

Do not use more than 2 couplers to extend short pipes. Single sections are preferred in an installation attaching at the fireplace and termination.

Place the spring spaces provided approximately every two feet to stabilize 4" flex in the center of 7" flex. When forming bends place spring in bend or before and after. (See Fig. 1). Horizontal runs require support metal straps every 2 feet. In offset installation support straps should be used to stabilize pipe.

Expand 4" and 7" flex pipe to the point that the 7" protrudes approximately 2 to 3 inches past outer wall and the 4" flex protrudes approximately 2 to 3 inches past the 7" flex. (See Fig. 1). Attach the 4" pipe to the termination first and secure with sealant and screws then attach the 7" flex to the termination with caulking and screws. Termination may then be moved back to the outer wall and attached to home screwing into the framing. Silicone around termination to waterproof. If siding shield is going to be used attach this using same attaching hole as the top of termination after termination has been caulked for water proofing.



**NOTE:** It is critical to the proper and safe operation of this fireplace that on all connections the inner liner and the outer casing are both caulked with liberal amounts of sealant. Do not use any kind of tape or silicone other than that recommended in this manual, Mill Pac Sealant.

### **Use Hi Temp Sealant**

Apply a bead of Mill Pac high temp sealant to all joints and use four screws to secure each pipe at fireplace, termination and any joint if joining any sections of pipe.

**⚠ WARNING:** DO NOT mix parts from different systems unless stated in the manual.

**REMEMBER THAT A 1/4" VERTICAL RISE IS REQUIRED FOR EVERY 12" OF HORIZONTAL RUN.**

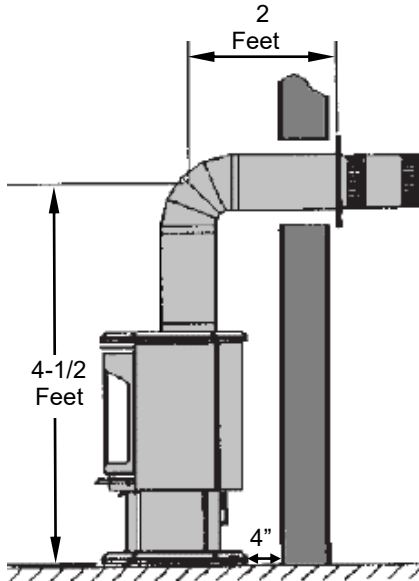
Since it is very important that the vent system maintain its balance between the combustion air intake and the flue gas exhaust, certain limitations as to vent configurations apply and must be adhered to.

See venting chart for total horizontal and vertical runs

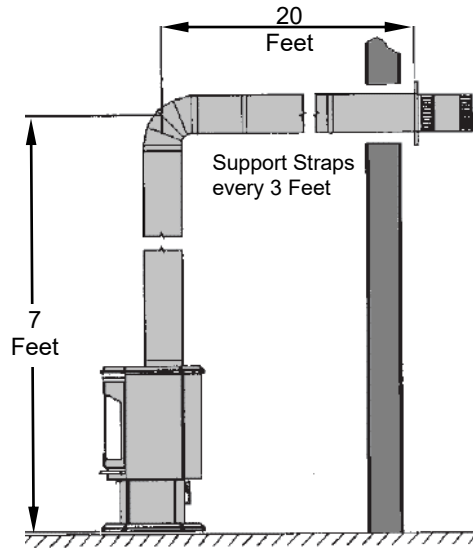
For every 90° elbow after the first 90° elbow the horizontal run must be reduced by 36".

For every 45° elbow after the first 90° elbow the horizontal run must be reduced by 18".

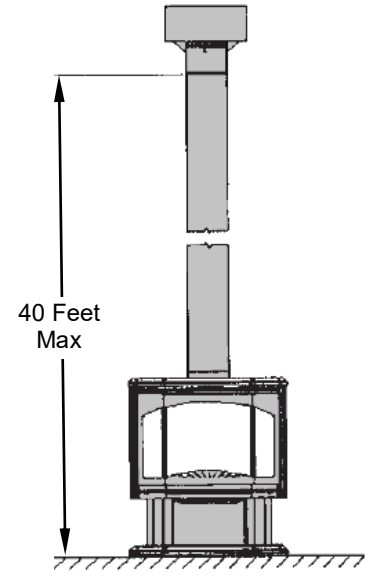
This does not apply if the 45° elbows are installed on the vertical part of the vent system. 45° elbows can be installed in either the horizontal or vertical runs.



The minimum allowable configuration is 4-1/2 feet vertical with unit 4" from wall.



The maximum horizontal vent run with one 90° elbow attached is 20 feet with 7 feet vertical.



The maximum vertical rise is 40 feet.

**Minimum clearances on venting (4" to top of elbow), (2-1/2" from top of horizontal pipes), (1" on all other existing pipes).**

Only trim kit(s) supplied by the manufacturer shall be used in the installation of this appliance. Draft Relief Openings must not be covered or blocked.

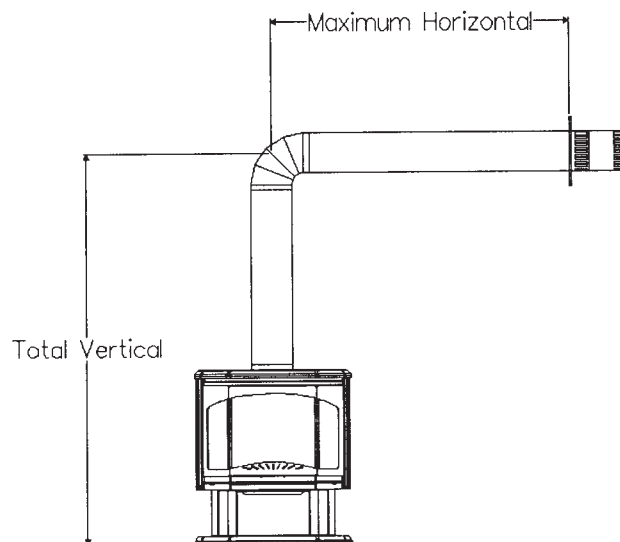
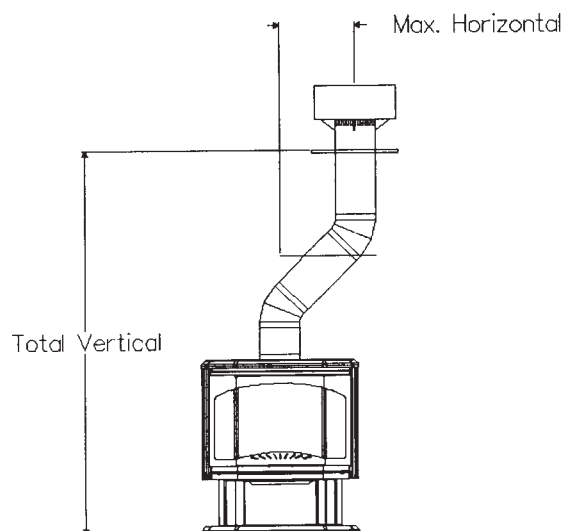
**IMPORTANT:** Always locate the fireplace in such a way that a minimum of offsets and/or horizontal runs are required. 1/4" vertical rise is required for every 12" horizontal run.

**IMPORTANT: ALWAYS LOCATE THE STOVE IN SUCH A WAY AS TO MINIMIZE THE NUMBER OF OFFSETS AND/OR HORIZONTAL RUNS. A 1/4" VERTICAL RISE IS REQUIRED FOR EVERY 12" OF HORIZONTAL RUN.**

The following table shows the relationship between vertical and horizontal vent lengths and will help you to determine the correct vent lengths for optimum stove performance.

### HOW TO USE THE VENT TABLE

1. Determine the height of the system and the number of elbows required.
2. Use the Venting Chart to determine the maximum horizontal distance allowed.



| Total Vertical |        | Max. Total Horizontal |        |
|----------------|--------|-----------------------|--------|
| Feet           | Meters | Feet                  | Meters |
| 4½             | 1.4    | 3                     | 0.9    |
| 5              | 1.5    | 4                     | 1.2    |
| 6              | 1.8    | 8                     | 2.4    |
| 7              | 2.1    | 20                    | 6.1    |
| 8              | 2.4    | 20                    | 6.1    |
| 9              | 2.7    | 20                    | 6.1    |
| 10             | 3.0    | 20                    | 6.1    |
| 11             | 3.4    | 20                    | 6.1    |
| 12             | 3.7    | 20                    | 6.1    |
| 13             | 4.0    | 20                    | 6.1    |
| 14             | 4.3    | 20                    | 6.1    |
| 15             | 4.6    | 20                    | 6.1    |
| 16             | 4.9    | 20                    | 6.1    |
| 17             | 5.2    | 20                    | 6.1    |
| 18             | 5.5    | 20                    | 6.1    |
| 19             | 5.8    | 20                    | 6.1    |
| 20             | 6.1    | 20                    | 6.1    |
| 25             | 7.5    | 15                    | 4.6    |
| 30             | 9.0    | 10                    | 3.0    |
| 40             | 12     | 0                     | 0      |

**Note:** For each 45° elbow installed in the horizontal run, the length of the horizontal run must be reduced by 18" (45 cm). This does not apply if the 45° elbows are installed on the vertical part of the vent system.

**Note:** For each additional 90° elbow installed in the horizontal run, the length must be reduced by 36" (90 cm). Maximum number of 90° elbows are three per installation.

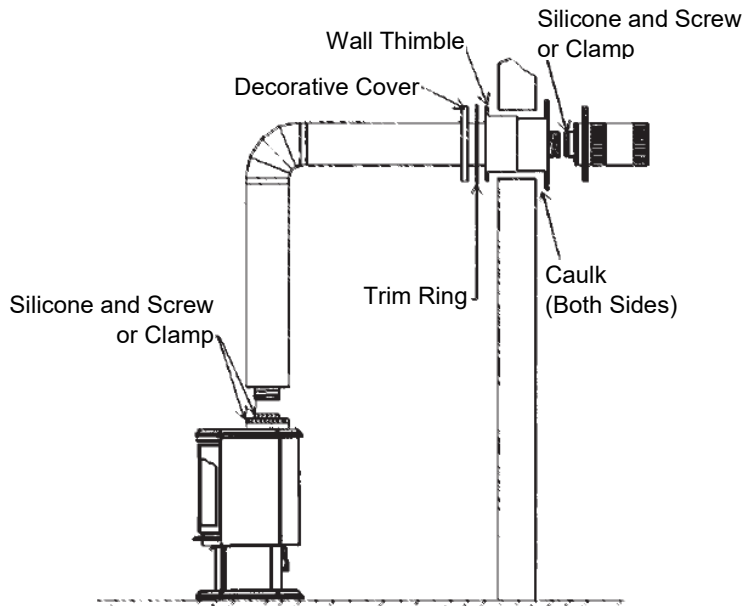


FIGURE 1

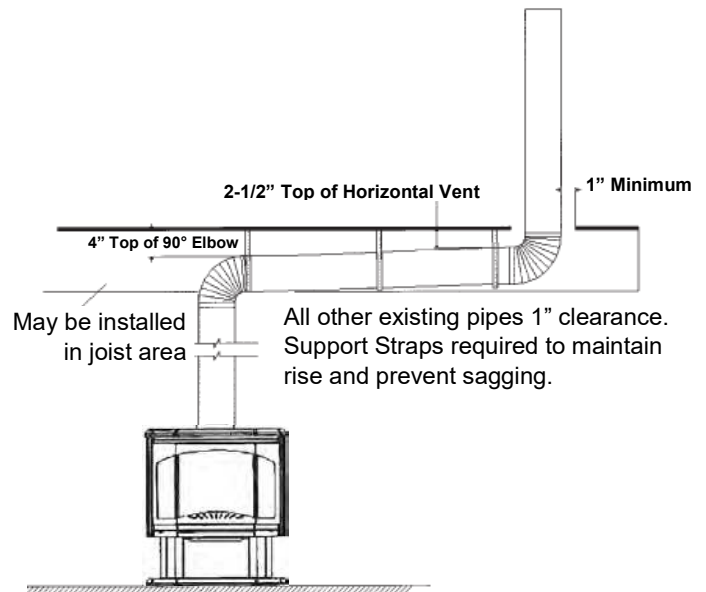


FIGURE 2

1. Use the Venting Table to determine the minimum distance from the bottom of fireplace to center of vent. Cut a hole through the wall allowing for an 11" x 11" (inside diameter) in combustible walls for wall thimble or an 8" diameter hole in a non-combustible wall (See Figure 3).
2. For the clearance to combustibles above a 90 degree bend see **Clearance to Combustibles** section.
3. Select the approximate vent length, precise measurements are not needed as your flex pipe can be expanded to twice its shipped length for ease of installation
4. To install wall thimble center over 11" x 11" (inch) framing from both sides of wall and secure. Route flex vent pipe through wall thimble.

**WARNING: A HORIZONTAL VENT CERTIFIED GUARD (SAFETY CAGE) IS AVAILABLE WHEN REQUIRED BY LOCAL CODES.**

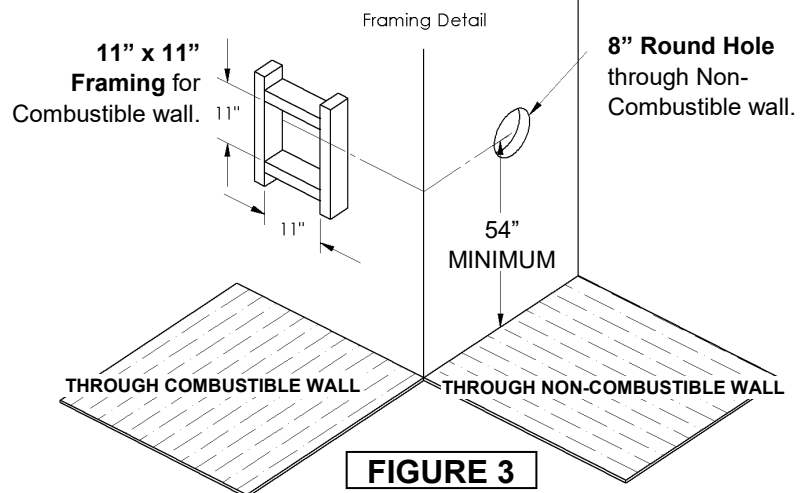


FIGURE 3

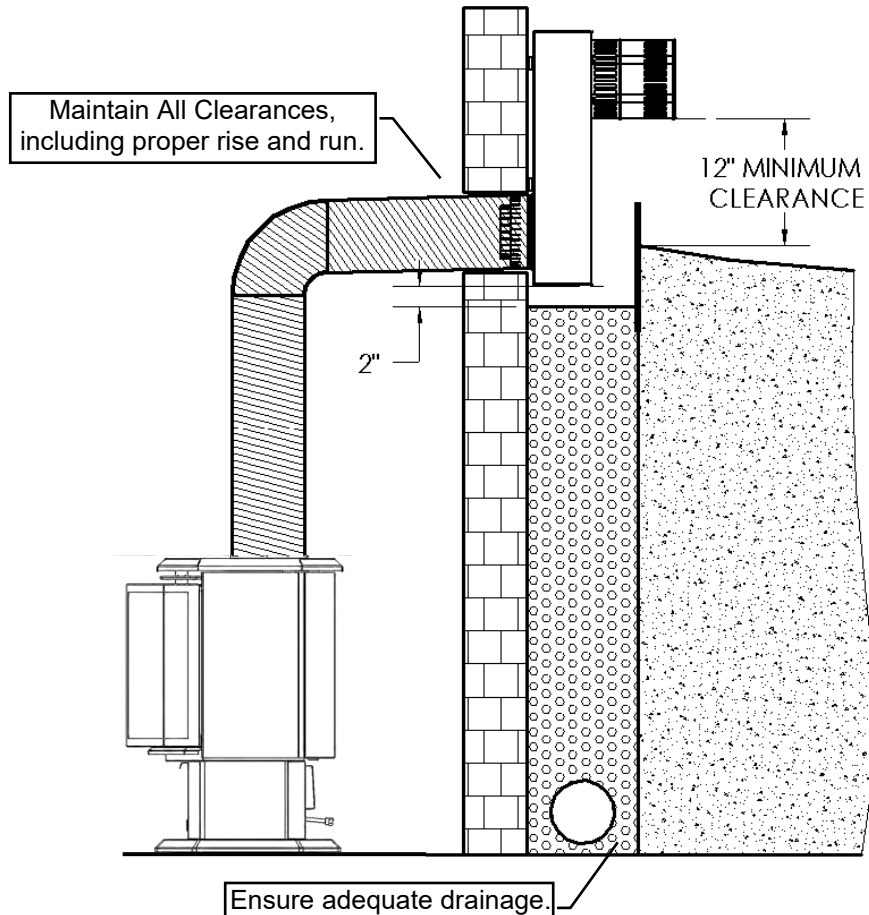
5. Before joining pipes, apply a bead of high temperature sealant (Mill Pac) to end of pipe. First attach the four inch (4") flue pipe to the vent termination with sealant, and secure with the four screws provided. At this time make sure the spacer springs are attached to the (4") flex pipe as required. Then attach the seven inch (7") pipe by the same method.
6. Mount vent termination and seal to wall using caulking around the wall thimble to weather proof. After installing the vent termination, double check to make sure the pipe extends properly through wall thimble and into vent termination.
7. Before joining pipes to fireplace flue, apply a bead of high temperature sealant (Mill Pac) to end of pipe. First attach the four inch (4") flue pipe to fireplace with sealant, and secure with the four screws provided. At this time verify that the spacer springs are attached properly to the (4") flex pipe as required. Then attach the seven inch (7") pipe by the same method.
8. Support horizontal pipes every two (2) feet (61 cm) with metal strap bands. Re-check fireplace to make sure it is levelled and properly positioned and secured.
9. Support vertical pipes to maintain a minimum of 1" or greater clearance to combustibles with metal strapping bands.

If finishing the outside wall with vinyl or wood siding it is recommended that a Siding Shield be installed, Part Number ZDVSSLR.

Two snorkel terminations are available if a vertical rise is necessary on the exterior side of a building:

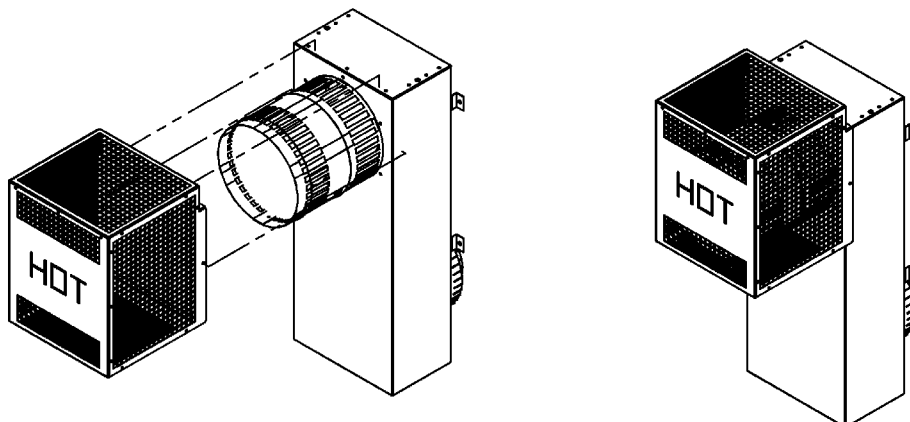
**Z47ST24** (24" Tall, 14-1/2" Center to Center)      **Z47ST36** (36" Tall, 26-1/2" Center to Center)

Follow standard horizontal venting installation procedures. If the Snorkel Termination is to be located below grade, a window well is recommended with adequate and proper drainage as per local codes. Leave 2" clearance below snorkel to prevent water from entering the Snorkel Termination. Do not enclose the Snorkel within a wall or other type of enclosure and **do not back fill**. Ensure that grade level slopes away from the building. Follow all local codes.

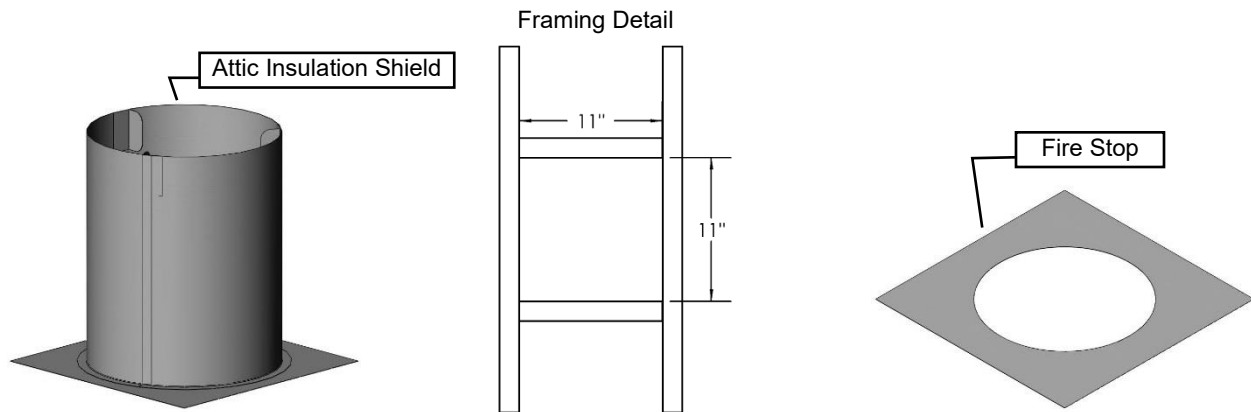


**-FOLLOW ALL LOCAL CODES-**

- A safety cage (Z57STSC) is also available. Place safety cage over snorkel and mount with [4] DT screws (supplied with safety cage).







### Using Flex Bends

Use roof support and rigid pipe at roof level. Flex pipe is not permitted within roof support.

When penetrating the roof a rigid galvanized pipe must be used. Attach flex pipe to the rigid pipe with high temperature sealant, secure with four screws assuring the flex pipe and rigid pipe are secured. Attach rigid pipe to termination with sealant and screw with 4 sheet metal screws. The Inner flex pipe must be secured with 4 screws which must penetrate both the flex pipe and inner section of termination. Attach 7" rigid pipe to 7" termination with sealant and screw with 4 sheet metal screws.

Vertical termination clearance is 18" [45.7cm] above the roof, measured from highest point of exit on the roof line.

Support vertical pipes to maintain minimum of one inch or greater clearances to combustibles.

### Roof Flashing

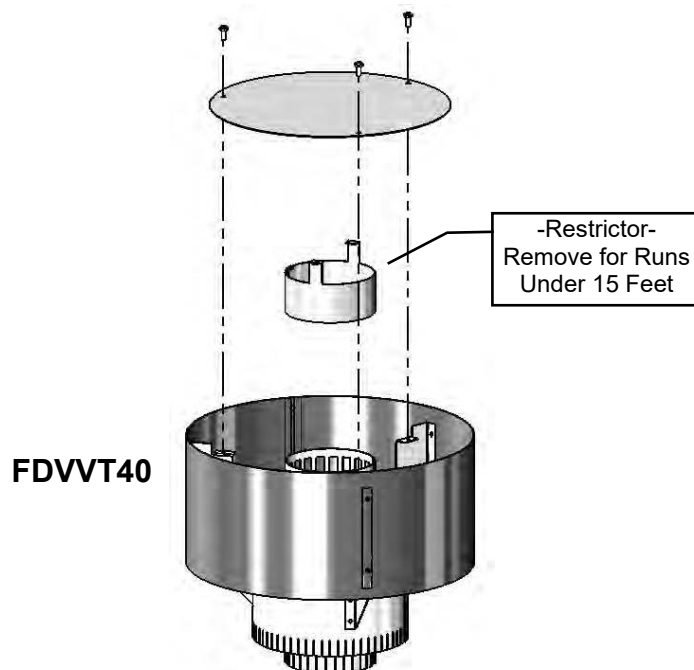
Ensure that you have the proper roof flashing by checking your roof pitch using a level and two rulers, or by using a roof pitch card.

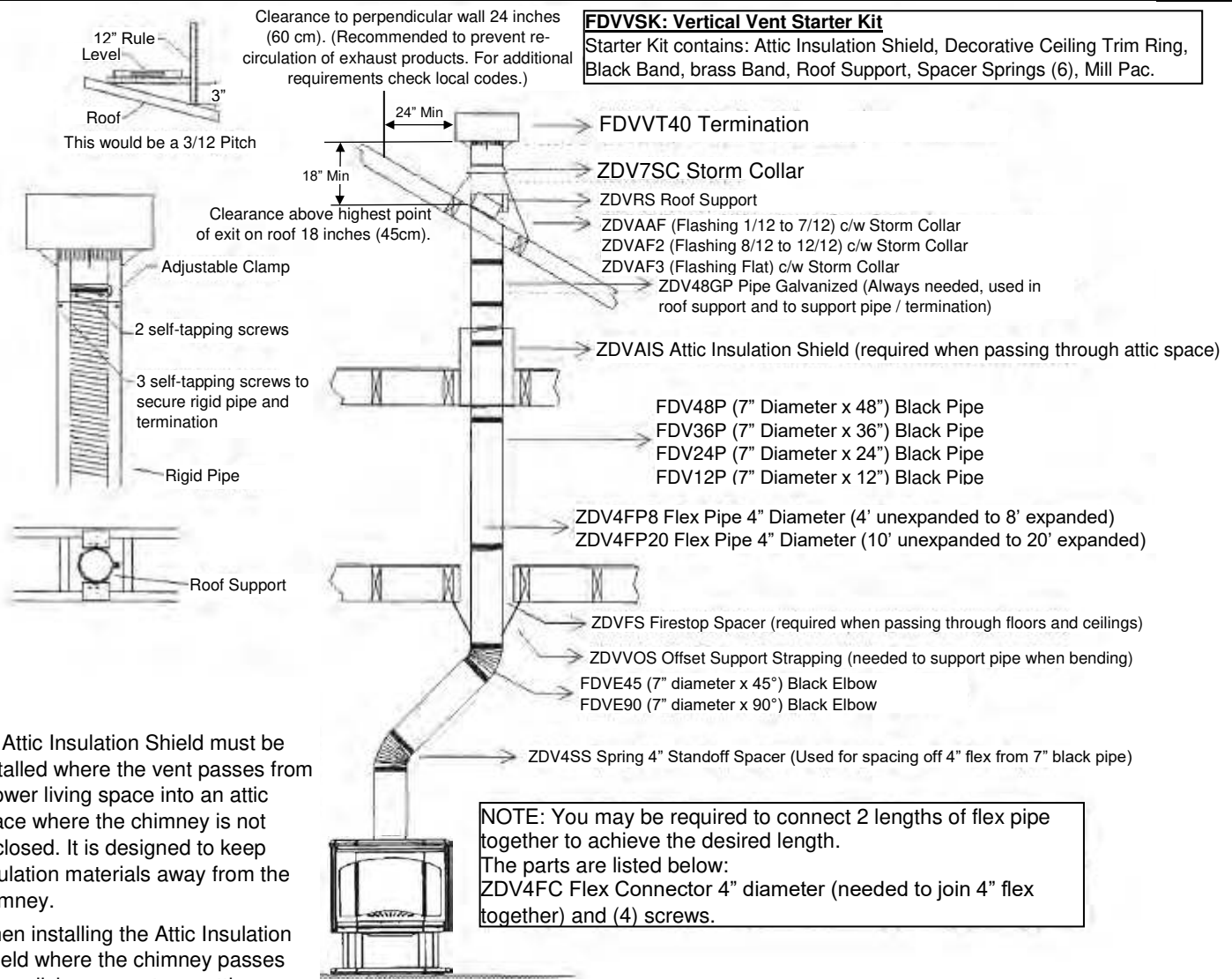
Slide a Roof Flashing suitable to your roof slope over the vent. Place the edge of the flashing plate that will be on the higher part of the roof slope under the shingles. Both the sides and the lower edge lay on top of the shingles.

**NOTE: At the top edge of the flashing plate, lift the shingles and nail the plate to the roof deck, then cement the shingles to the plate with a suitable waterproof mastic.**

Ensure that the chimney is plumb. Square up the flashing plate and nail in place to the roof deck. Use 12 nails with neoprene washers or cover the heads with a suitable waterproof mastic. Wrap the storm collar around the vent above the flashing. Secure the ends together loosely with nut and bolt supplied. Slide the collar down the vent until it comes in contact with the flashing. Tighten the bolt and seal the Storm Collar to the vent with a suitable waterproof non-combustible mastic.

The flashing and storm collar should be painted to match the roof shingles. This will extend its life and improve the appearance. Clean, prime and paint with suitable painting products.





### Vertical Venting in Cold Climates

In cold climate conditions where temperatures go below -10°C [14°F], we recommend that the chase be insulated and where the vent pipe enters into the attic space that the pipe be wrapped with an insulated Mylar sleeve. This will increase the temperature of the vent and help the appliance to vent properly in cold weather conditions.

It is also important in vertical vented direct vent appliances that the appliance be operated daily during the winter months as this will help stop the Termination from freezing up. We recommend using a thermostat set at room temperature to allow the unit to cycle. For IPI models it may be necessary to set the appliance to Standing Pilot mode to maintain heat in the cavity. The purpose of this procedure is to prevent cold air from penetrating the chimney and then onto the living space. Therefore, when the internal temperature is slightly elevated the fireplace is able to freely exhaust its combustion and hence making it easier to startup.

# F35BVC B-Vent Converter - Installation

## Parts List:

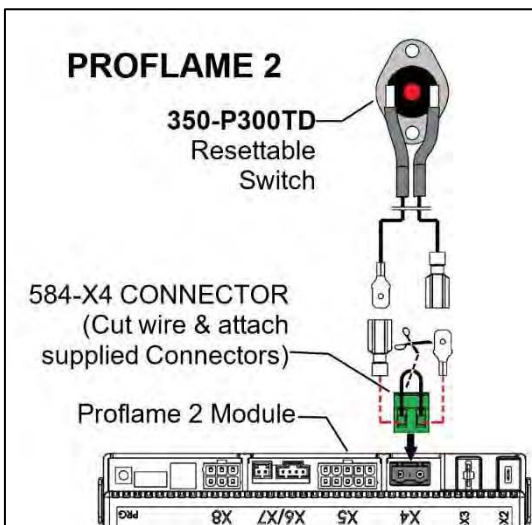
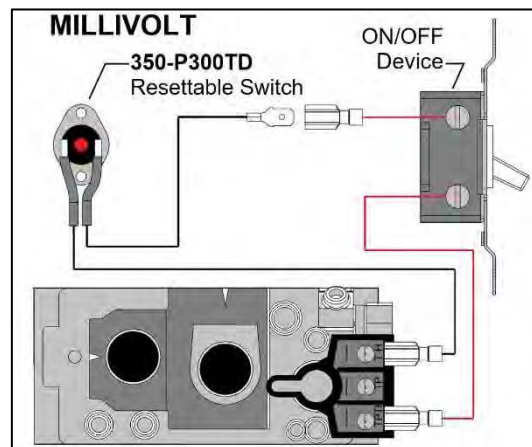
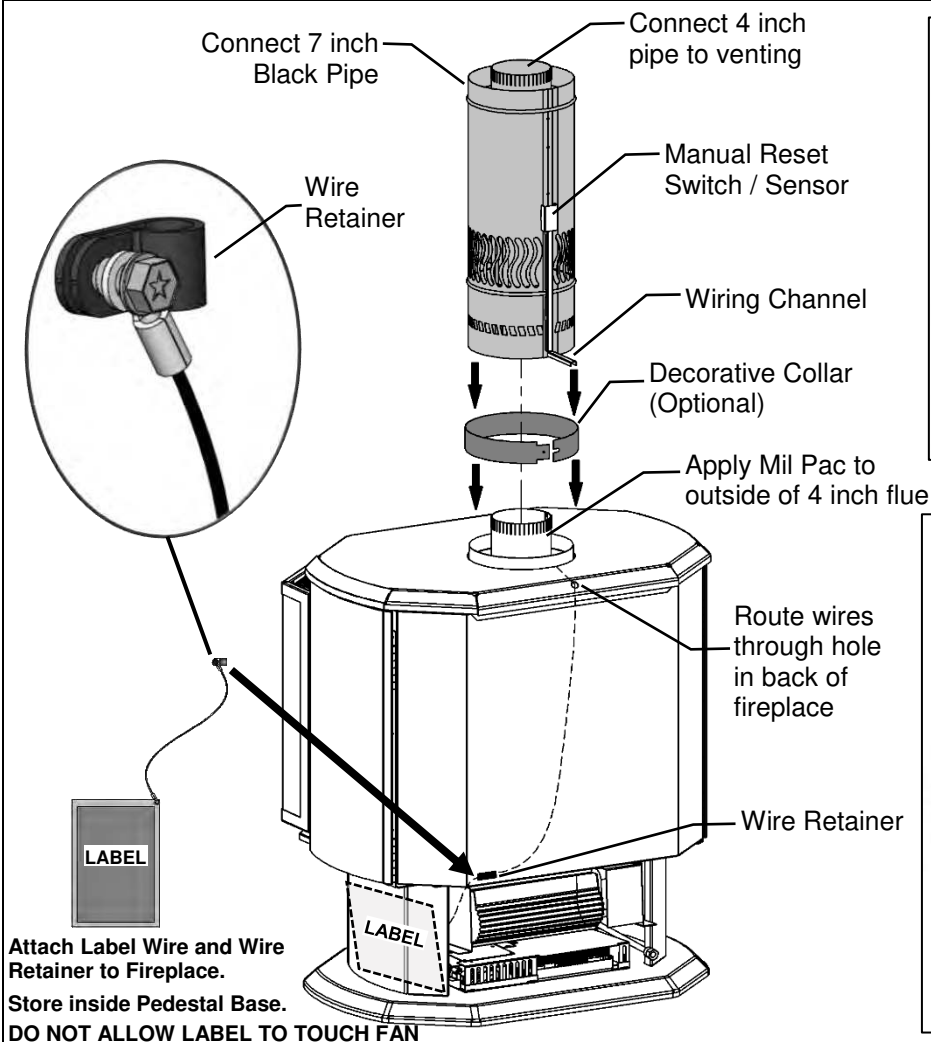
- [1] B-Vent Converter
- [3] DT Screws
- [1] Wire Retainer
- [1] Label Plate c/w wire
- [1] Male Wire Connector
- [1] Female Wire Connector

This component will allow a direct vent fireplace to be vented like a B Vent fireplace.

**FOR QUALIFIED INSTALLERS ONLY.  
MUST BE INSTALLED VERTICALLY AS SHOWN.  
FOLLOW ALL LOCAL CODES.**



**WARNING: Operation of this appliance when not connected to a properly installed and maintained venting system or tampering with the blocked vent shutoff system can result in carbon monoxide (CO) poisoning and possible death.**



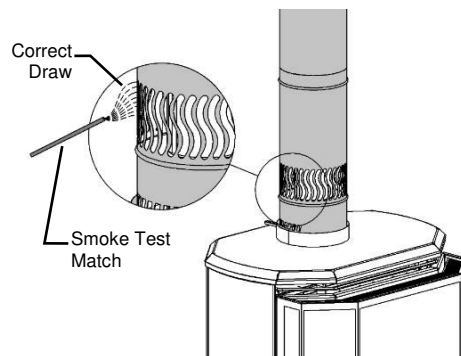
## Installation:

1. Apply Mill-Pac Sealant to outside of 4 inch flue on fireplace.
2. Bend up lower portion of the Wiring Channel as shown above. Ensure that it will be at the back of the fireplace.
3. Carefully push B-Vent Converter down onto the 4 inch and 7 inch collars of the unit until fully seated.
4. Attach the B-Vent Converter with a Screw.
5. (Optional) Install a Decorative Collar Around the base of the B-Vent Converter.
6. Route the wires through the hole in the back of the fireplace top as shown above. Secure in place with the supplied wire retainer and a DT screw. Connect wires as shown in the diagram above.
7. Attach Label wire and Wire Retainer to the bottom left corner at the back of the fireplace. Store Label inside pedestal base of fireplace.

**DO NOT ALLOW LABEL TO TOUCH FAN.**

**The following test must be performed by the installer before installation is complete.**

1. Close all doors and windows in the room with the fireplace.
2. Turn on all exhaust fans and the furnace blower.
3. Turn on the fireplace. Set burner flame to high.
4. Wait for 10 minutes.
5. Check the chimney draft with a smoke test match at the top of the slots in the B-Vent Converter. There must be adequate draft to draw smoke into the chimney.



## F35BVC B-Vent Converter - Venting Information

**-QUALIFIED INSTALLERS ONLY-**

**THIS B-VENT CONVERTER MUST BE INSTALLED VERTICALLY AS SHOWN.  
A CHIMNEY VENTING THIS STOVE SHALL NOT VENT ANY OTHER APPLIANCE.  
-FOLLOW ALL LOCAL CODES-**

This appliance may be vented in various types of applications, including:

- A masonry clay lined chimney
- A solid fuel wood burning chimney
- A B-Vent liquid fuel gas burning chimney

A B-Vent liquid fuel gas chimney or 4" Flex pipe may be used.

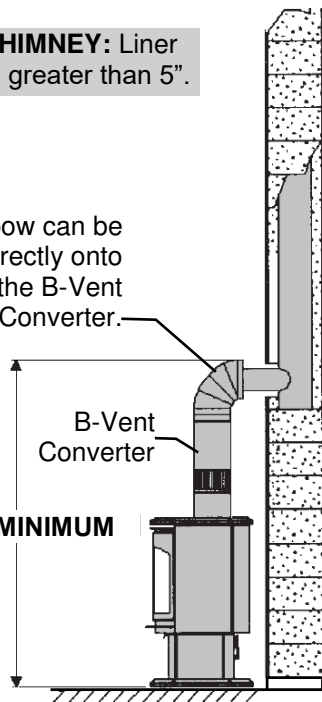
When installing with B-Vent liquid fuel gas chimney, install as per B-Vent Manufacturer installation specifications.

Horizontal, Vertical, and offset installations are allowed. **NOTE: Installation of B-Vent must follow B-vent Manufacturers Installation Instructions when being used.** Follow the B-Vent chart for horizontal, vertical, or offset venting.

**MASONRY CLAY LINED CHIMNEY:** Liner required if inside diameter is greater than 5".

A 90° elbow can be installed directly onto the top of the B-Vent Converter.

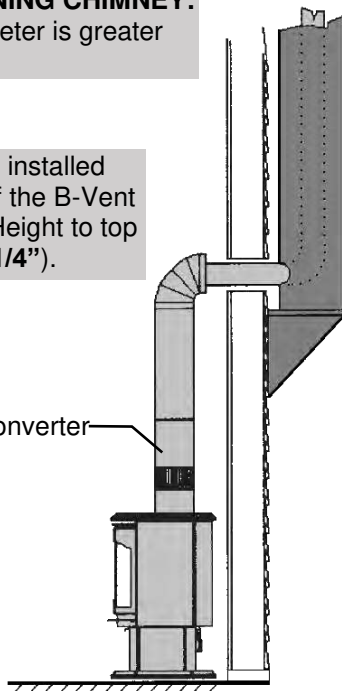
**57-1/4" MINIMUM**



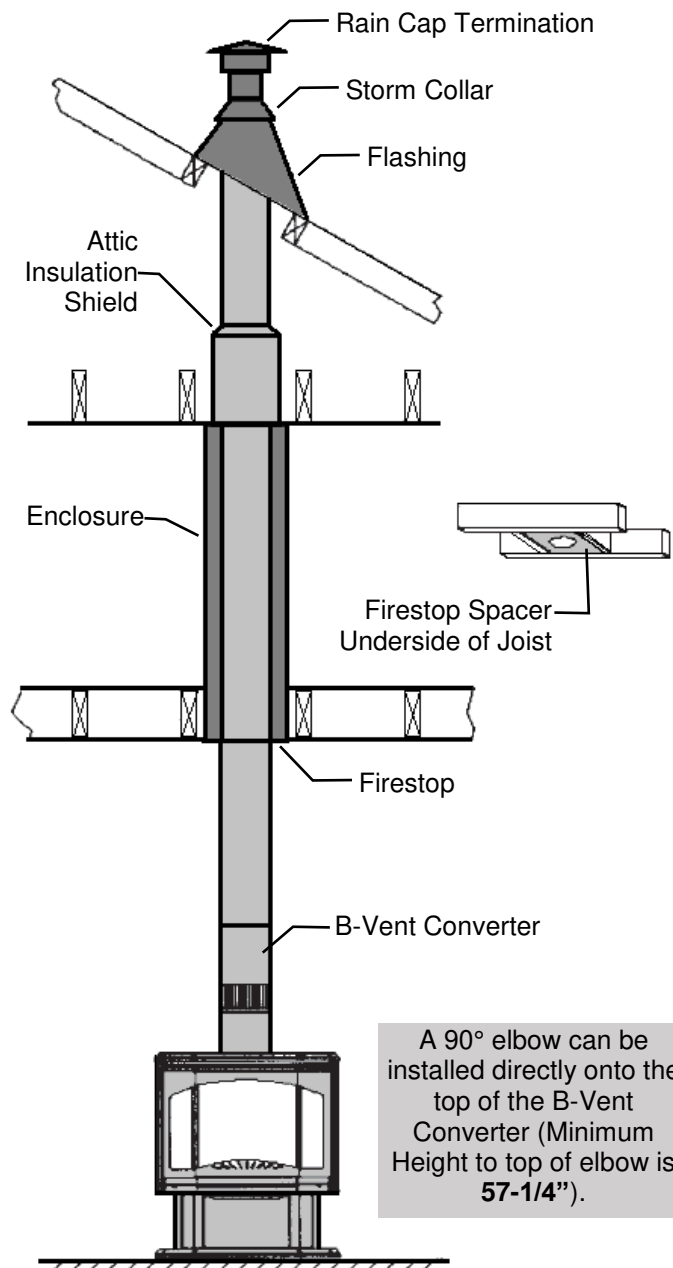
**SOLID FUEL WOOD BURNING CHIMNEY:** Liner required if inside diameter is greater than 6".

A 90° elbow can be installed directly onto the top of the B-Vent Converter (Minimum Height to top of elbow is **57-1/4"**).

B-Vent Converter



**B-VENT LIQUID FUEL GAS BURNING CHIMNEY:** Liner required if inside diameter is greater than 6".



A 90° elbow can be installed directly onto the top of the B-Vent Converter (Minimum Height to top of elbow is **57-1/4"**).

Minimum venting is 12 ft.

Maximum venting is 60ft.

Seal all connections in venting system.

**-FDV350 KINGSMAN STOVE-****FREE STANDING DIRECT VENT GAS STOVE**

Listed for USA/Canada as a Vented Gas Fireplace Heater,  
Dual Burner, Ceramic Glass, Glowing Embers, 4/7" Flue  
37,000 BTU NG, 35,000 BTU Propane

**Fireplace Part Numbers**

|            |  |
|------------|--|
| FDV350N    | Free Standing Direct Vent Stove, Millivolt - Natural Gas                           |
| FDV350NE   | Free Standing Direct Vent Stove, Proflame 1 IPI - Natural Gas                      |
| FDV350NE2  | Free Standing Direct Vent Stove, Remote Control, Fan, Proflame 2 IPI - Natural Gas |
| FDV350LP   | Free Standing Direct Vent Stove, Millivolt - Propane                               |
| FDV350LPE  | Free Standing Direct Vent Stove, Proflame 1 IPI - Propane                          |
| FDV350LPE2 | Free Standing Direct Vent Stove, Remote Control, Fan, Proflame 2 IPI - Propane     |

**DOOR FRAME AND SAFETY SCREEN:  
(REQUIRED FOR EACH UNIT)**

|         |                                      |
|---------|--------------------------------------|
| F35DB   | Door Frame and Ceramic Glass - Black |
| F350CSS | Safety Screen, Black Fame            |

**LOG SET: (REQUIRED FOR EACH UNIT)**

|        |                                       |
|--------|---------------------------------------|
| LOGF35 | Log Set - Fibre Split Oak with Embers |
|--------|---------------------------------------|

**REMOTE CONTROL - MILLIVOLT**

|        |   |
|--------|---|
| GFRC   | Remote Control Millivolt / IPI - On/Off                   |
| GTRC   | Remote Control Millivolt - Thermostat                     |
| GTMRCN | Remote Control Millivolt - Thermostat/Modulating - NG     |
| GTMRCP | Remote Control Millivolt - Thermostat/Modulating - LP     |
| GTFRCN | Remote Control Millivolt - Thermostat/Modulating/Fan - NG |
| GTFRCP | Remote Control Millivolt - Thermostat/Modulating/Fan - LP |

**REMOTE CONTROL - PROFLAME 1**

|         |   |
|---------|---|
| EGTRC   | Remote Control IPI (Thermostat)                     |
| EGTMRCN | Remote Control IPI (Thermostat/Modulating - NG)     |
| EGTMRCP | Remote Control IPI (Thermostat/Modulating - LP)     |
| EGTFRCN | Remote Control IPI (Thermostat/Modulating/Fan - NG) |
| EGTFRCP | Remote Control IPI (Thermostat/Modulating/Fan - LP) |

**B-VENT CONVERTER**

|            |  |
|------------|--|
| F35BVC     | B-Vent Converter - 7"<br>(Converts DV to B-Vent Appliance) |
| 350-P300TD | Resettable Switch (Replacement for F35BVC)                 |

**ACCESSORIES**

|        |  |
|--------|--|
| F7DBC  | Decorative Black Collar 7"                             |
| F45FK  | Fan Kit w/Variable Speed Control (Temperature Sensing) |
| F45FK2 | Fan Kit - Proflame 2 Units                             |

|       |  |
|-------|--|
| F35RL | Refractory Liner   |
| Z2MT  | Thermostat Millivolt Wall Mount                                |
| Z80PT | Thermostat Programmable Digital Millivolt Wall Mount (1F80-40) |
| F7DTP | Decorative Black Wall Trim Plate                               |

**VALVE SYSTEM PARTS / MILLIVOLT**

|             |                                  |
|-------------|----------------------------------|
| 1000-P136WR | Generator / Thermopile           |
| 1001-P069SI | Electrode Sparker 915.069 TC SIT |
| 1001-P216SI | Thermocouple 290.216 TC SIT      |
| 1001-P165SI | Orifice Pilot NG 977.165 TC SIT  |
| 1001-P167SI | Orifice Pilot LP 977.167 TC SIT  |
| 1001-P280SI | Tubing 24"                       |
| 1001-P633SI | Valve Nova LP Hi/Lo 0820651      |
| 1001-P634SI | Valve Nova NG Hi/Lo 0820652      |
| 1001-P713SI | Pilot Burner LP 199.713 TC SIT   |
| 1001-P714SI | Pilot Burner NG 199.714 TC SIT   |

**IPI PROFLAME 1 - COMPONENT PARTS**

|             |  |
|-------------|--|
| 1006-P002SI | Valve IPI Proflame PF1 886.002 NG - HI/LO  |
| 1006-P003SI | Valve IPI Proflame PF1 886.003 LP - HI/LO  |
| 1002-P322SI | IPI Module PF1 - 584.322                   |
| 1002-P850SI | IPI Power Adapter IPI - 584.850 AC         |
| 1002-P905SI | IPI Wire Harness for EGT Remotes - 584.905 |
| 1002-P912SI | IPI Wire Harness for Module - 584.912      |

**IPI PROFLAME 2 - COMPONENT PARTS**

|             |   |
|-------------|---|
| 1005-P001SI | Valve IPI Proflame PF2 885.001 NG - Stepper |
| 1005-P002SI | Valve IPI Proflame PF2 885.002 LP - Stepper |
| 1005-P325SI | Module IPI - Proflame 2 - 584.325           |
| 1005-P924SI | Harness PF2 - 584.924                       |
| 1005-P042SI | Transmitter - PF2 - Black 584.042           |
| 584-PWR-C   | Wire Harness PF2                            |
| 584-X4P     | Terminal Block                              |
| 584-X10     | Wire Harness PF2                            |
| 584-ACC01-C | Wire Harness PF2 - Fan/Light                |
| 584-X8-B    | Wire Harness PF2 - Optional Reset Harness   |

**IPI PROFLAME 1 AND PROFLAME 2  
COMMON COMPONENTS**

|             |   |
|-------------|---|
| 1002-P033SI | TC - Pilot Burner IPI (Assembled) NG 199.033      |
| 1002-P047SI | TC - Pilot Burner IPI (Assembled) LP 199.047      |
| 1001-P166SI | TC - Orifice Pilot NG 977.166 #62 (IPI)           |
| 1001-P168SI | TC - Orifice Pilot LP 977.168 #35 (IPI)           |
| 1001-P280SI | TC - Tubing c/w Fittings 1/8 2.182.280            |
| 1002-P012SI | IPI Stepper Kit - LP 907.012                      |
| 1002-P013SI | IPI Stepper Kit - NG 907.013                      |
| 1002-P014SI | IPI Regulator Kit - LP HI-LO 907.014              |
| 1002-P016SI | IPI Regulator Kit - NG HI-LO 907.016              |
| 1002-P017SI | TC - Electrode Cable & Sparker IPI 915.017 24"    |
| 1002-P119SI | TC - Electrode Cable & Sparker IPI (Infinite) 35" |
| 1002-P12BH  | IPI Battery Housing 12BH347-GR                    |



|             |   |
|-------------|---|
| 1002-P903SI | TC - Electrode Flame Sense IPI<br>007.253/915.903 24" |
| 1002-P910SI | TC - Electrode Flame Sense IPI (Infinite)<br>35"      |

#### CONVERSION KIT

|              |  |
|--------------|--|
| 350DV-CKLP   | Conversion Kit - Millivolt - To Propane      |
| 350DV-CKNG   | Conversion Kit - Millivolt - To Natural Gas  |
| 350DV-CKLPI  | Conversion Kit - Proflame 1 - To Propane     |
| 350DV-CKNGI  | Conversion Kit - Proflame 1 - To Natural Gas |
| 350DV-CKLPI2 | Conversion Kit - Proflame 2 - To Propane     |
| 350DV-CKNGI2 | Conversion Kit - Proflame 2 - To Natural Gas |

#### REPLACEMENT BURNER ASSEMBLY

|            |  |
|------------|--|
| 350-BLPSI  | Burner Assembly- Propane c/w Valve System - Millivolt      |
| 350-BNGSI  | Burner Assembly- Natural Gas c/w Valve System - Millivolt  |
| 350-BLPSI2 | Burner Assembly- Propane c/w Valve System – Proflame 2     |
| 350-BNGSI2 | Burner Assembly- Natural Gas c/w Valve System – Proflame 2 |

#### MISCELLANEOUS PARTS

|             |  |
|-------------|--|
| 1000-134    | Explosion Damper (Round)                     |
| 1000-150GE  | Silicone GE Red IS806 #736                   |
| 1000-150MP  | Hi-Temp Millpac Sealant 840099               |
| 1000-214    | Piezo-Igniter 1244-17 MARK 21                |
| 1000-215    | Pal Nut (18MMX1.5MM)BLK (1364.03)            |
| 1000-216    | On/Off Switch                                |
| 1000-255    | Orifice Brass - (State Size)                 |
| 2000-080    | Thermodisc 2450 (For Blower) - Millivolt     |
| 1000-306    | Thermalcord - Adhesive Back for Door Frame   |
| 1000-085    | Control Variable Speed KBWC-13BV - Millivolt |
| FP15GC      | Stainless Steel Gas Connector                |
| 350-EMBER   | Embers                                       |
| 6000-130    | Explosion Felt                               |
| 350- P217SI | Knob Extension 1-1/2" – ON/OFF - Millivolt   |
| 350-P218SI  | Knob Extension 1-1/2" HI/LO - Millivolt      |
| 350-310     | Ceramic Glass Front c/w Thermalcord          |
| 350-309     | Ceramic Glass Side c/w Thermalcord           |

#### KINGSMAN FIREPLACE VENTING

|          |   |
|----------|---|
| FDVHSK   | <b>Horizontal Vent Starter Kit - (Direct Vent Stoves)</b> Starter Kit Contains:<br>Horizontal Vent Termination, Zero Clearance Wall Sleeve, Black Wall Trim Ring, 7" Dia. Black Pipe 24" Length, 7" Dia. Black Pipe 48" Length 7" - 90 Degree Black Elbow, 4" Flex 48" Unexpanded (96" Expanded) 7" Black Bands(3), Mill Pac. |
| FDVVSK   | <b>Vertical Vent Starter Kit - (Direct Vent Stoves)</b> Starter Kit Contains:<br>Attic Insulation Shield, Fire Stop, Ceiling Trim Plate, Black Trim Ring (2), Roof Support, Spacer Springs(6), Mill Pac   |
| Z47VT    | Vertical Vent Termination   |
| FDVVT40  | Vertical Vent Termination Converts from 15' - 40' to 15' and under  |
| FDVHT    | Horizontal Vent Termination   |
| FDVHSCU  | Safety Cage for Horizontal Termination  |
| FDVHSQ   | Horizontal Square Termination   |
| Z47ST24  | Horizontal Snorkel Termination (24" Tall, 14-1/2" Center to Center)   |
| Z47ST36  | Horizontal Snorkel Termination (36" Tall, 26-1/2" Center to Center)   |
| Z57STSC  | Safety Cage for Horizontal Snorkel Termination  |
| FDV48P   | Black Pipe (7" Diameter x 48")  |
| FDV36P   | Black Pipe (7" Diameter x 36")  |
| FDV24P   | Black Pipe (7" Diameter x 24")  |
| FDV12P   | Black Pipe (7" Diameter x 12")  |
| FDVE90   | Black Elbow (7" Diameter x 90 Degree)   |
| FDVE45   | Black Elbow (7" Diameter x 45 Degree)   |
| ZDVKDA   | Dura-Vent Stove Adapter ( for Direct Vent Stoves)   |
| ZDVAIS   | Attic Insulation Shield   |
| ZDVAIS24 | Attic Insulation Shield 24"   |
| ZDVVOS   | Offset Support  |
| ZDVFS    | Firestop Spacer   |
| ZDVRS    | Roof Support  |
| ZDVSS    | Siding Shield   |
| ZDVWT    | Wall Thimble (Horizontal Venting)   |
| ZDV4FP8  | Flex Pipe 4" Diameter (4' Unexpanded to 8' Expanded)  |
| ZDV4FP20 | Flex Pipe 4" Diameter (10' Unexpanded to 20' Expanded)  |
| ZDV4FC   | Flex Connector 4" Diameter  |
| ZDV4SS   | Spring 4" Standoff Spacer   |
| ZDVAAF   | Flashing 7" c/w Storm Collar (1/12 to 7/12)   |
| ZDVAF2   | Flashing 7" c/w Storm Collar (8/12 to 12/12)  |
| ZDVAF3   | Flashing 7" c/w Storm Collar Flat   |
| ZDV7SC   | Storm Collar 7 Inch   |
| Z47GP36  | Galvanized Pipe 4/7" x 36" (Vertical Installations)   |
| Z47GP48  | Galvanized Pipe 4/7" x 48" (Vertical Installations)   |



## LIMITED LIFETIME WARRANTY

This Limited Lifetime Warranty applies only while the unit remains at the site of the original installation and only if the unit is installed inside the continental United States, Alaska, Hawaii, and Canada. The warranty applies only if the unit is installed and operated in accordance with the printed instructions and in compliance with applicable installation and building codes and good trade practices.

### BASIC ONE YEAR WARRANTY

During the first year after installation of the appliance, we will provide a replacement for any component part of your unit found to be defective in materials or workmanship, including labour costs. Repair work requires prior approval by Kingsman, labour costs are based on a predetermined rate schedule and any repair work must be done through an authorized Kingsman dealer.

(Excluded Components: Accent Light Bulbs, Gasketing and Paint)

### LIMITED LIFETIME WARRANTY

The heat exchanger, combustion chamber and burner of every Kingsman product excluding the Outdoor Firepit are warranted against materials or workmanship during the period the product is owned by the original owner. The part to be replaced must be returned to our distributor in exchange for the replacement part. Any labor, material, freight and/or handling charges associated with any repair or replacement pursuant to this Limited Lifetime Warranty will not be covered by this warranty.

### GENERAL TERMS

In lieu of providing a replacement part, we may, at our option, provide the distributor's component purchase price from us or a credit equal to the distributor's component purchase price from us toward the purchase of any new unit which we distribute. If a credit is given in lieu of a replacement part, the rating plate from the unit being replaced must be submitted on a warranty claim, and the unit being replaced must be made available to our distributor for disposition.

In establishing the date of installation for any purpose, including determination of the starting date for the term of this Limited Lifetime Warranty, reasonable proof of the original installation date must be presented\*, otherwise the effective date will be based upon the date of manufacture plus thirty (30) days.

We will not be responsible for and you, the user, will pay for: (a) damages caused by accident, abuse, negligence, misuse, riot, fire, flood, or Acts of God (b) damages caused by operating the unit where there is a corrosive atmosphere containing chlorine, fluorine, or any other damaging chemicals (other than in a normal residential environment) (c) damages caused by any unauthorized alteration or repair of the unit affecting its stability or performance (d) damages caused by improper matching or application of the unit or the unit's components (e) damages caused by failing to provide proper maintenance and service to the unit (f) any expenses incurred for erecting, disconnecting or dismantling the unit (g) parts or supplies used in connection with service or maintenance (h) damage repairs, inoperation or inefficiency resulting from faulty installation or application (i) electricity or fuel costs or any increase in electricity or fuel cost whatsoever including additional or unusual use of supplemental electric heat.

We shall not be liable for any incidental, consequential, or special damages or expenses in connection with any use or failure of this unit. We have not made and do not make any representation or warranty of fitness for a particular use or purpose, and there is no implied condition of fitness for a particular use or purpose. We make no express warranties except as stated in this Limited Lifetime Warranty. No one is authorized to change this Limited Lifetime Warranty or to create for us any other obligation or liability in connections with this unit. Any implied warranties shall last for one year after the original installation. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages or do not allow limitations on how long an implied warranty or condition lasts, so the above limitations or exclusions may not apply to you. The provisions of this limited warranty are in additions to and not a modification of or subtraction from any statutory warranties and other rights and remedies provided by law.

Save this certificate. It gives you specific legal rights, and you may also have other rights which may vary from state to state and province to province.

In the event your unit needs servicing, contact your dealer or contractor who installed or serviced your unit. When requesting service, please have the model and serial number from each unit readily available. If your dealer needs assistance, the distributor is available for support and we, in turn support the distributor's efforts.

Fill in the installation date and model and serial numbers of the unit in the space provided below and retain this limited warranty for your files.

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_ Date installed \_\_\_\_\_

Dealer or Contractor Name: \_\_\_\_\_

\*To receive advantage of your warranty, you must retain the original records that can establish the installation date of your unit.

**The Ultimate in Design, Engineering & Quality**