EXCALIBUR®

P90 Zero Clearance Direct Vent Gas Fireplace

Owners & Installation Manual

MODELS: P90-NG1 Natural Gas P90-LP1 Propane

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

FOR YOUR SAFETY
Do not store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.

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

FOR YOUR SAFETY
What to do if you smell gas:

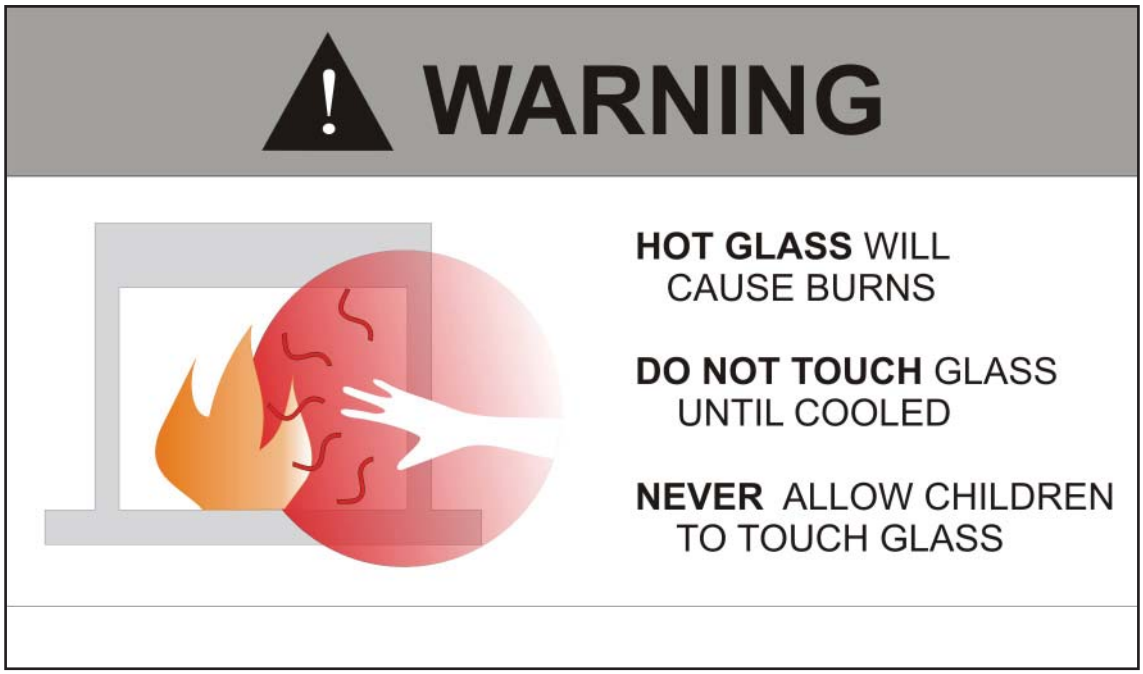
- **Do not try to light any appliance**
- **Do not touch any electrical switch: do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

Tested by:
Intertek

***Installer*: Please complete the details on the back cover and leave this manual with the homeowner.**
***Homeowner:* Please keep these instructions for future reference.**

To the New Owner:

Congratulations!
You are the owner of a state-of-the-art Excalibur® Gas Fireplace by FPI FIREPLACE PRODUCTS INTERNATIONAL LTD. The P90 is a hand crafted appliance and has been designed to provide you with all the warmth and charm of a wood fireplace at the flick of a switch. The model P90 has been approved by Warnock Hersey for both safety and efficiency. As it also bears our own mark, it promises to provide you with economy, comfort and security for many trouble free years to follow. Please take a moment now to acquaint yourself with these instructions and the many features of your Excalibur® Fireplace.



NATIONAL FIREPLACE INSTITUTE NFI CERTIFIED www.nficertified.org

We recommend that our products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) or in Canada by Wood Energy Technical Training (WETT).

Wood Energy Technical Training

ONE REGENCY ONE TREE ™

INFORMATION FOR MOBILE/MANUFACTURED HOMES AFTER FIRST SALE

This Excalibur® product has been tested and listed by Warnock Hersey as a Direct Vent Wall Furnace to the following standards: VENTED GAS FIREPLACE HEATERS ANSI Z21.88a-2007/CSA 2.33a-2007 and GAS-FIRED APPLIANCES FOR USE AT HIGH ALTITUDES CAN/CGA 2.17-M91.

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 of Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities ANSI/NFPA 501A, and with CAN/CSA Z240-MH Mobile Home Standard in Canada.

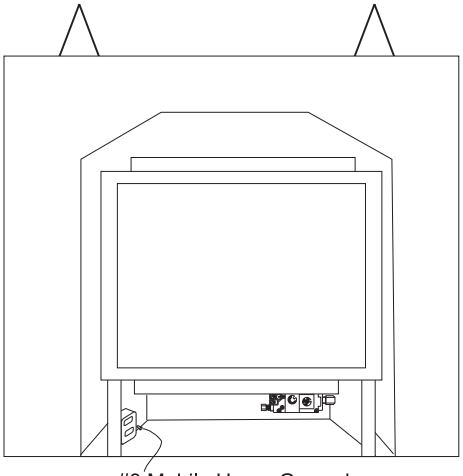
This appliance installation must comply with the manufacturer's installation instructions and local codes, if any. In the absence of local codes follow the current National Fuel Gas Code, ANSI Z223.1 and the current National Electrical Code ANSI/NFPA 70 in the U.S.A., and the current CAN/CGA B149 Gas Installation Code and the current Canadian Electrical Code CSA C22.1 in Canada.

This Excalibur® Mobile/Manufactured Home Listed appliance comes factory equipped with a means to secure the unit.

This Excalibur® Mobile/Manufactured Home listed appliance comes equipped with a dedicated #8 ground lug to which an 18 gauge copper wire from the steel chassis ground must be attached.

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

This appliance is only 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.



#8 Mobile Home Ground

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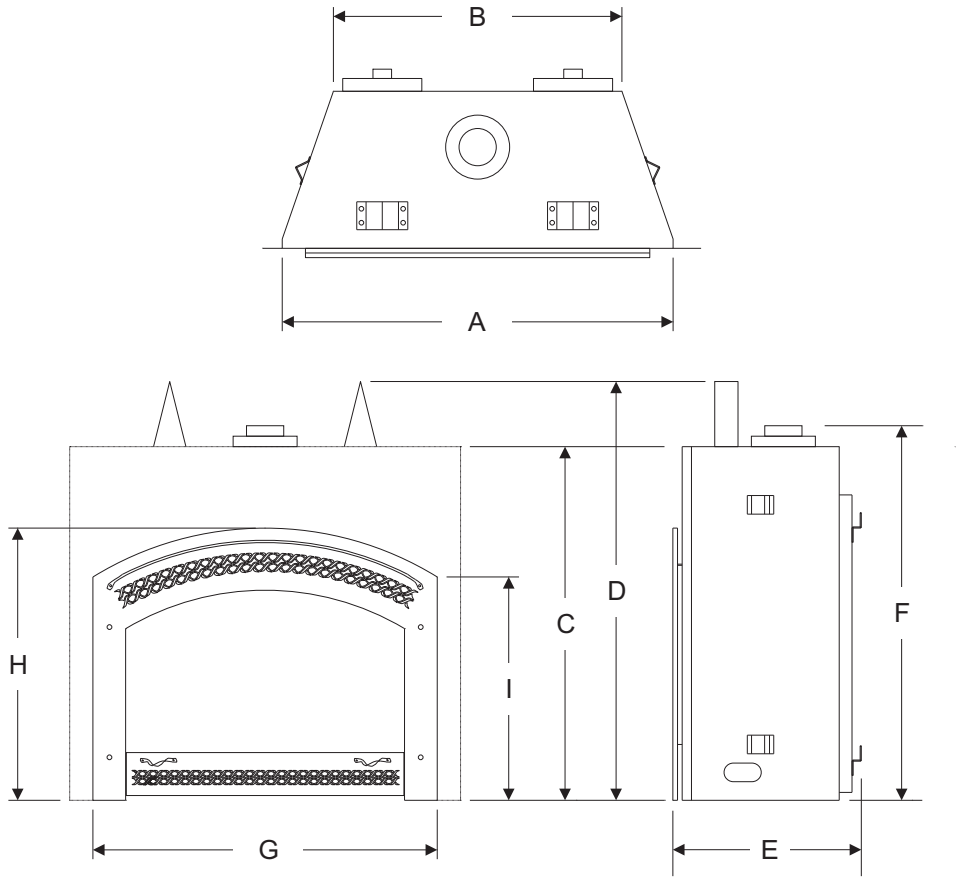


Unit Dimensions	Description	P90
A	Front Firebox Width	42” (1067mm)
B	Rear Firebox Width	31” (787mm)
C	Front Firebox Height	38” (965mm)
D	Height w/ Standoff	45” (1143mm)
E	Unit Depth	19-1/4” (489mm)
F	Height to Vent	40-1/4” (1022mm)
G	Faceplate Width	37” (940mm)
H	Faceplate Height (center)	29-1/4” (743mm)
I	Faceplate Height (edge)	24” (610mm)

SAFETY LABEL

This is a copy of the label that accompanies each P90 Zero Clearance Direct Vent Gas Fireplace. We have printed a copy of the contents here for your review. The safety label is located on the front inside base of the unit, visible when the bottom louver is open.

NOTE: Excalibur® units are constantly being improved. Check the label on the unit and if there is a difference, the label on the unit is the correct one.

For the State of Massachusetts, installation and repair must be done by a plumber or gasfitter licensed in the Commonwealth of Massachusetts.

For the State of Massachusetts, flexible connectors shall not exceed 36 inches in length.

For the State of Massachusetts, the appliances individual manual shut-off must be a t-handle type valve.

The State of Massachusetts requires the installation of a carbon monoxide alarm in accordance with NFPA 720 and a CO alarm with battery back up in the same room where the gas appliance is installed.

Copy of Safety Decal for P90

Listed: VENTED GAS FIREPLACE HEATER / FOYER AU GAZ À ÉVACUATION
Certified for/Certifiée pour: CANADA and U.S.A.
Tested to: CGA-2-17-M91, ANSI Z21.88a-2007 / CSA 2.33a-2007
US WN# 16475

DO NOT REMOVE THIS LABEL / NE PAS ENLEVER CETTE ÉTIQUETTE

EXCALIBUR

Serial No./ No de serie

309

MAY BE INSTALLED IN MANUFACTURED (MOBILE) HOMES AFTER FIRST SALE.

Model/Modele: P90-NG1

NATURAL GAS: Model P90-NG1

Minimum supply pressure	5"	WC (1.25 kPa)
Manifold pressure high	3.8"	WC (0.95 kPa)
Manifold pressure low	1.1"	WC (0.27 kPa)
Orifice size	# 34	DMS
Minimum input	18,200	Btu/h (5.42 kW)
Maximum input	35,000	Btu/h (10.26 kW)
Altitude	0-4500	ft/pi (0-1372 m)

APPAREIL FONCTIONNANT AU NATURAL GAZ CONCU POUR ETRE POELE: Modéle P90-NG1

Pression d'allimentation minimum	5"	WC (1.25 kPa)
Pression à la tubulure d'échappement élevée	3.8"	WC (0.95 kPa)
Pression à la tubulure d'échappement basse	1.1"	WC (0.27 kPa)
Grandeur de l'injecteur	# 34	DMS
Débit Calorifique minimum selon	18,200	Btu/h (5.42 kW)
Débit Calorifique maximum selon	35,000	Btu/h (10.26 kW)
l'altitude	0-4500	ft/pi (0-1372 m)

Model/Modele: P90-LP1

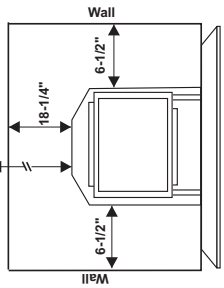
PROPANE: Model P90-LP1

Minimum supply pressure	12"	WC (3.00 kPa)
Manifold pressure high	11"	WC (2.74 kPa)
Manifold pressure low	2.9"	WC (0.72 kPa)
Altitude	0-2000	ft/pi (0-610 m)
Orifice size	# 51	DMS
Minimum input	17,950	Btu/h (5.26 kW)
Maximum input	35,000	Btu/h (10.26 kW)
High Altitude	2000-4500	ft/pi (610-1372 m)
Orifice size	# 52	DMS
Minimum input	15,500	Btu/h (4.54 kW)
Maximum input	31,000	Btu/h (9.08 kW)

APPAREIL FONCTIONNANT AU GAZ PROPANE CONCU POUR ETRE POELE: Modéle P90-LP1

Pression d'allimentation minimum	12"	WC (3.00 kPa)
Pression à la tubulure d'échappement élevée	11"	WC (2.74 kPa)
Pression à la tubulure d'échappement basse	2.9"	WC (0.72 kPa)
l'altitude	0-2000	ft/pi (0-610 m)
Grandeur de l'injecteur	# 51	DMS
Débit Calorifique minimum selon	17,950	Btu/h (5.26 kW)
Débit Calorifique maximum selon	35,000	Btu/h (10.26 kW)
l'altitude	2000-4500	ft/pi (610-1372 m)
Grandeur de l'injecteur	# 52	DMS
Débit Calorifique minimum selon	15,500	Btu/h (4.54 kW)
Débit Calorifique maximum selon	31,000	Btu/h (9.08 kW)

Minimum Clearances to Combustibles
/Degagement Minimum De Materiaux Combustibles



0" Clearance to combustibles from:
Top, bottom, sides & rear of unit

Mantel Clearances from Top:
Min. 18-1/4" (464mm)

Side Wall Clearance from Side Facing
6-1/2" (165mm)

Alcove Clearances:
Max. Depth 36" (914mm)
Min. Width 48" (1219mm)
Min. Height 72" (1229mm)

Minimum Vent Clearances:
Horizontal Top 2-1/2" (64mm)
Horizontal Side 1-1/2" (38mm)
Horizontal Bottom 1-1/2" (38mm)

(See Instruction Manual for Detailed Instructions)

DOOR SEAL: Please check that the door is properly sealed

This appliance must be installed in accordance with local codes, if any; if none, follow the National Fuel Gas Code, ANSI Z223.1, or Natural Gas and Propane Installation Code, CSA B149.1.
This appliance must be installed in accordance with the Standard CAN/CSA Z240 MH, Mobile Housing, in Canada, or with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, in the United States, or when such a standard is not applicable, ANSI/NCSBCSA225.1/NFPA501A, Manufactured Home Installations Standard or ANSI A119.2 ou NFPA 501C Standard for Recreational Vehicles
This appliance is only for use with the type of gas indicated on the rating plate and may be installed in an aftermarket, permanently located, manufactured (mobile) home where not prohibited by local codes. See owner's manual for details. Optional Fan (Part # 432-917) Optional Heat Wave Kit # 946-556 Optional Heat Release Kit # 946-570
Installer l'appareil selon les codes ou règlements locaux, ou, en l'absence de tels règlements, selon les codes d'installation ANSI Z223.1, National Fuel Gas Code ou CSA-B149.1 en vigueur.
Installer l'appareil selon la norme CAN/CSA-Z240, Série MM, Maison mobiles ou CAN/CSA-Z240 VC, Véhicules de camping, ou la norme 24 CFR Part 3280, Manufactured Home Construction and Safety Standard. Si ces normes ne sont pas pertinentes, utilisez la norme ANSI/NCSBCS A225.1/NFPA 501A, Manufactured Home Installations Standard, ou ANSI A119.2 ou NFPA 501C Standard for Recreational Vehicles.
Cet appareil doit être utilize uniquement avec le type de gaz indiqué sur la plaque signalétique. Cet appareil peut être installé dans une maison préfabriquée ou mobile (É.-U. seulement) installée à demeure si les règlements locaux le permettent. Voir la notice de l'utilisateur pour plus de renseignements. Cet appareil ne peut pas être utilisé avec d'autres gaz sauf si une trousse de conversion certifiée est fournie.
This vented gas fireplace heater is not for use with air filters. Ne pas utiliser de filtre à air avec ce foyer au gaz à évacuation.
For use with glass doors certified with the appliance only Pour utilisation uniquement avec les portes en verre certifiées avec l'appareil
Electrical supply / Électrique 115VAC, 1.13 A, 60Hz.

FPI Fireplace Products International Ltd.
Delta, BC, Canada
Made in Canada/ Fabrique au Canada 918-503a

VENTED GAS FIREPLACE HEATER - NOT FOR USE WITH SOLID FUELS.
FOYER AU GAZ À ÉVACUATION - NE PAS UTILISER AVEC DUCOMBUSTIBLE SOLIDE.

MA Code - CO Detector
(for the State of Massachusetts only)

5.08: **Modifications to NFPA-54, Chapter 10**

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

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

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

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

b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

2. APPROVED CARBON MONOXIDE DETECTORS. Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

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

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

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

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

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

(c) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM PROVIDED. When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

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

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

(d) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED. When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

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

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

(e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

IMPORTANT MESSAGE SAVE THESE INSTRUCTIONS

The P90-NG1 or P90-LP1 Direct Vent Fireplace must be installed in accordance with these instructions. Carefully read all the instructions in this manual first. Consult the "authority having jurisdiction" to determine the need for a permit prior to starting the installation. It is the responsibility of the installer to ensure this fireplace is installed in compliance with manufacturer's instructions and all applicable codes.

BEFORE YOU START

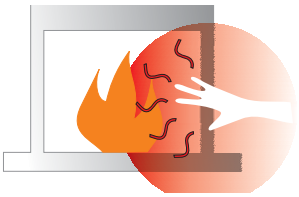
Safe installation and operation of this appliance requires common sense, however, we are required by the Canadian Safety Standards and ANSI Standards to make you aware of the following:

INSTALLATION AND REPAIR SHOULD BE DONE BY AN AUTHORIZED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND AT LEAST ANNUALLY BY A PROFESSIONAL SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIAL, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS, BURNERS AND CIRCULATING AIR PASSAGEWAYS OF THE APPLIANCE BE KEPT CLEAN.

DUE TO HIGH TEMPERATURES, THE APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.

WARNING: FAILURE TO INSTALL THIS APPLIANCE CORRECTLY WILL VOID YOUR WARRANTY AND MAY CAUSE A SERIOUS HOUSE FIRE.

CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES, ESPECIALLY THE FIREPLACE GLASS, AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION.



YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME AREA AS THE APPLIANCE. TODDLERS, YOUNG CHILDREN AND OTHERS MAY BE SUSCEPTIBLE TO ACCIDENTAL CONTACT BURNS. A PHYSICAL BARRIERS IS RECOMMENDED IF THERE ARE AT RISK INDIVIDUAL 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.

CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.

GENERAL SAFETY INFORMATION

1) The appliance installation must conform with local codes or, in the absence of local codes, with the current Canadian or National Gas Codes, CAN1-B149 or ANSI Z223.1 Installation Codes.

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

3) See general construction and assembly instructions. The appliance and vent should be enclosed.

4) This appliance must be connected to the specified vent and termination cap to the outside of the building envelope. Never vent to another room or inside a building. Make sure that the vent is fitted as per Venting instructions.

5) Inspect the venting system annually for blockage and any signs of deterioration.

6) Venting terminals shall not be recessed into a wall or siding.

7) Any safety glass removed for servicing must be replaced prior to operating the appliance.

8) To prevent injury, do not allow anyone who is unfamiliar with the operation to use the fireplace.

9) Wear gloves and safety glasses for protection while doing required maintenance.

10) Be aware of electrical wiring locations in walls and ceilings when cutting holes for termination.

11) Under no circumstances should this appliance be modified. Parts that have to be removed for servicing should be replaced prior to operating this appliance.

12) Installation and any repairs to this appliance should be done by a qualified service person. A professional service person should be called to inspect this appliance annually. Make it a practice to have all of your gas appliances checked annually.

13) Do not slam shut or strike the glass door.

14) Under no circumstances should any solid fuels (wood, paper, cardboard, coal, etc.) be used in this appliance.

15) The appliance area must be kept clear and free of combustible materials, (gases and other flammable vapours and liquids).

Emissions from burning wood or gas could contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

INSTALLATION CHECKLIST

1) Locate appliance, refer to the following sections:

a) Locating Your Gas Fireplace
b) Combustible Mantels
c) Unit Base Stand-offs
d) Framing & Finishing
e) Facing Requirements
f) Hearth Requirements
g) Venting

2) Assemble Top Standoffs, page 9. (Refer to the "Unit Assembly Prior to Installation" section.) NOTE: must be done before installing unit into fireplace.

3) Install vent, refer to the "Venting" section.

4) Make gas and electrical connections. Test the pilot. Must be as per diagram. Refer to the "Pilot Adjustment" section.

6) Install standard and optional features. Refer to the following sections where applicable:

a. Brick Panels
b. Log Set Installation
c. Arch Surround
d. Glass Door Installation
e. Screen Door
f. Accent Kit Installation
g. Option 1: Remote Control
h. Option 2: Wall Switch
i. Option 3: Wall Thermostat

10) Final check.

Before leaving this unit with the customer, the installer must ensure that the appliance is firing correctly and **operation fully explained to customer**.

This includes:

1) Clocking the appliance to ensure the correct firing rate (rate noted on label 35,000 Btu/h) after burning appliance for 15 minutes.

2) If required, adjusting the primary air to ensure that the flame does not carbon. First allow the unit to burn for 15-20 min. to stabilize.

CAUTION: Any alteration to the product that causes sooting or carboning that results in damage is not the responsibility of the manufacturer.

LOCATING YOUR

GAS FIREPLACE

1) When selecting a location for your fireplace, ensure that the clearances outlined on this page are met.

2) Provide adequate clearances for servicing.

3) The appliance must be installed on a flat, solid, continuous surface (e.g. wood, metal, concrete). This may be the floor, or raised up on a platform to enhance its visual impact. If the appliance is going to be installed on carpeting, combustible linoleum tile or other combustible material other than wood flooring, the appliance must be installed on a metal or wood panel extending the full width and depth of the appliance.

4) The P90 Direct Vent Gas Fireplace can be installed in a recessed position or framed out into the room as in A, B, C, D. See Diagram 1.

A) Flat on Wall
B) Flat on Wall Corner
C) Recessed into

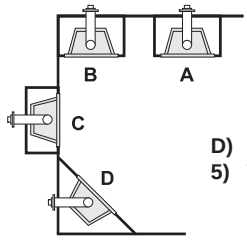


Diagram 1

Wall/Alcove
D) Corner

5) This appliance is Listed for bedroom installations when used with a Listed Millivolt Thermostat. Some areas may have further requirements, check local codes before installation.

6) The P90 Direct Vent Gas Fireplace is approved for alcove installations, which meet the clearances listed on this page.

7) We recommend that you plan your installation on paper using exact measurements for clearances and floor protection before actually installing this appliance. Have a qualified inspector, dealer, or installer review your plans before installation.

Note: For vent terminations see the "Exterior Vent Termination Locations" section.

MANUFACTURED MOBILE HOME ADDITIONAL REQUIREMENTS

1) Ensure that structural members are not cut or weakened during installation.

2) Ensure proper grounding using the #8 ground lug provided. See the "Wiring Diagram" section.

HEATWAVE DUCT SYSTEM OPTIONAL KIT #946-556

The ***HeatWave*** Air Duct Kit increases the effectiveness of your fireplace by dispersing warm air from the fireplace to remote locations in the same room or other rooms in your home.

Up to two kits may be installed on the fireplace. **Please Note:** Only 1 HeatWave kit may be operated at one time. This includes the internal blower option as well.

OPTIONAL HEAT RELEASE KIT #946-570

The Heat Release Kit expels warm air from the fireplace to the outside of the building, allowing the fireplace to be operated with less heat entering the room. The kit may be used on either the left or right side.

CLEARANCES

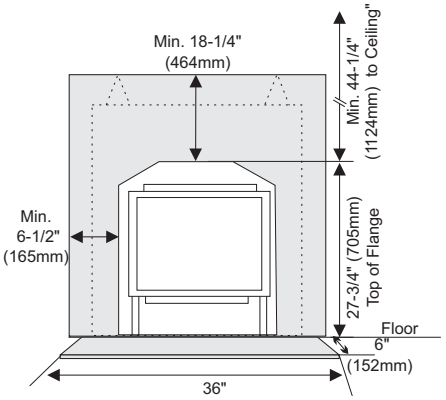
The clearances listed below are Minimum distances unless otherwise stated:

A major cause of chimney related fires is failure to maintain required clearances (air space) to combustible materials. It is of the greatest importance that this fireplace and vent system be installed only in accordance with these instructions.

Clearance to Combustibles from:

Back	0"	(0mm)
Side	0"	(0mm)
Floor	0"	(0mm)

NOTE: The minimum floor clearance must be maintained from the top surface of the carpeting, tile, etc.
See pg. 12 for Hearth Requirements.



Side Wall Clearance	6-1/2" (165mm)

Horizontal Vent Clearances	
Top	2-1/2" (64mm)
Side	1-1/2" (38mm)
Bottom	1-1/2" (38mm)

Vertical Vent Clearances	1-1/4" (32mm)

Alcove Clearances:**		
Max. Depth	36"	(914mm)
Min. Width	48"	1219mm)
Min. Height	72"	1829mm)

** see mantle clearance instructions (Refer to the "Combustible Mantels" section).*

WARNING:
Fire hazard is an extreme risk if these clearances are not adhered to.

Clearances for *HeatWave* and Heat Release Kit

Heat Release Kit

The ***HeatWave*** Duct Kit and the Heat Release Kit have different clearance and framing requirements, check the ***HeatWave*** and Heat Release manual for details.

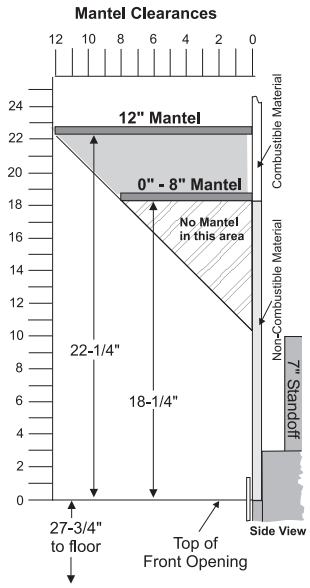
COMBUSTIBLE MANTELS

Because of the extreme heat this fireplace emits, the mantel clearances are critical. Combustible mantel clearances from top of unit are shown in Diagram below.

Note: A non-combustible mantel may be installed at a lower height if the framing is made of metal studs covered with a non-combustible board.

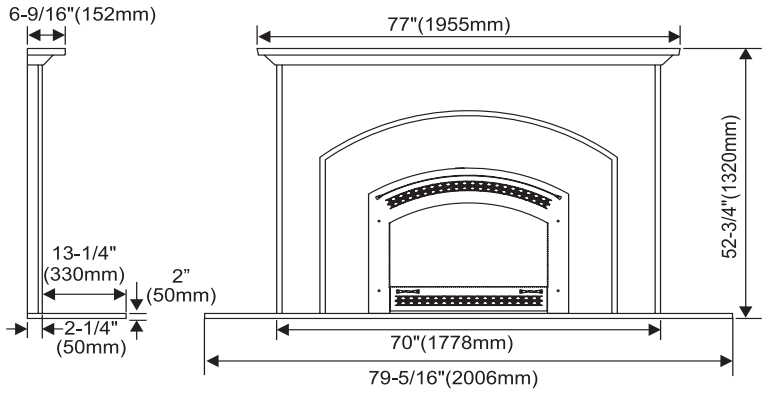
These drawings are to scale at 1:6 (one inch = 6 inches)
Mantel can be installed anywhere in shaded area or higher using the above scale.

Note: Ensure the paint that is used on the mantel and the facing is "heat resistant" or the paint may discolour.



P90 Flat Wall Surround and Tile Kit

The P90 Flat Wall Surround, Hearth Pad and Tile Kit cannot be modified in any way. It must be installed as manufactured.



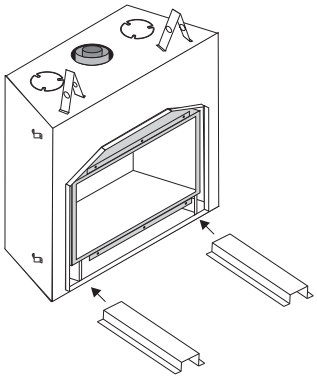
P90 Flat Wall Surround and Tile Kit Specifications

UNIT BASE STAND-OFFS

To accommodate varying thicknesses and finishes of hearth materials, we have increased the overall height of the appliance by a further 1 1/8". This increase is added with the inclusion of two stand-offs at the bottom of the unit, below the outer box, taking the overall height of the framing dimensions from 45-1/4" up to 46-3/8".

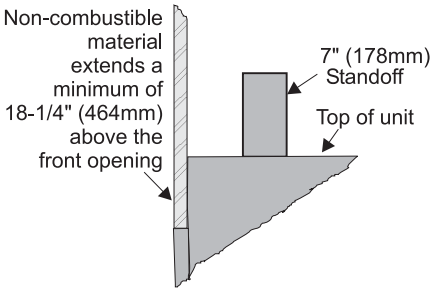
In the event that you should choose to use thinner materials to finish the hearth, you can omit the stand-offs provided for raising the unit. However, we recommend that you leave the framing dimensions as they are in the manual and alter only the facing requirement by reducing it by the same distance that you have lowered the unit.

Insert the 2 unit base stand-offs underneath the unit as shown in the diagram below. Space the stand-offs centrally, approximately 2 or 2-1/2 feet apart. Ensure that the unit is not unstable.



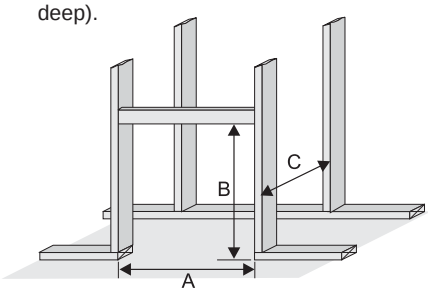
FRAMING AND FINISHING

1) Determine the total thickness of facing material (e.g. drywall plus ceramic tiles) to allow the finished surface to be flush with the front of the unit. Total facing thickness can vary from 1/2" (13mm) to 1" (32mm) thick.



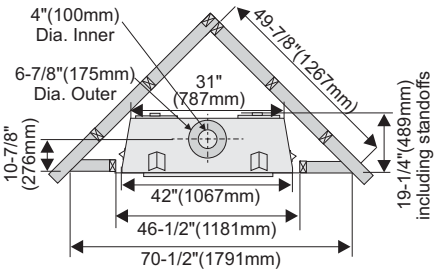
Install Top Standoffs & Side Nailing Strips before unit is slipped into position. See the "Unit Assembly Prior to Installation" section for assembly details.

2) Frame in the enclosure for the unit with framing material. The framed opening is 46-3/8" high x 46-1/2" wide x 19-1/2" deep (1168mm high x 1181mm wide x 495mm deep).



Framing Dimensions		
A	B	C
46-1/2" 1181mm	46-3/8" 1168mm	19-1/2"* 495mm
*If HeatWave option is installed, minimum depth is 20" (508mm)		

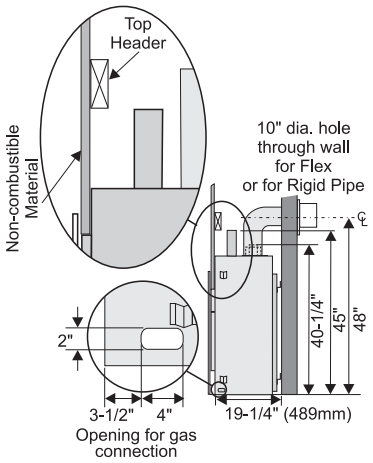
**If HeatWave option is installed, minimum depth is 20" (508mm)*



3) For exterior walls, insulate the enclosure to the same degree as the rest of the house, apply vapour barrier and drywall, as per local installation codes. **(Do not insulate the fireplace itself.)**

4) **Note: The unit does not have to be completely enclosed in a chase. The clearance on top of the unit is 0" to the standoffs so combustible building materials can be laid directly on top of the standoffs. You must maintain clearance from the vent to combustible materials for both rigid and flex, see the "Clearances" section.**

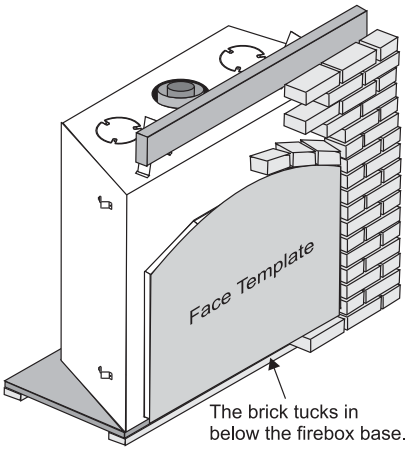
Note: 48" (11219mm) is the minimum height for both flex termination or Rigid Pipe venting.



The ***HeatWave*** Duct Kit has different clearance and framing requirements, check the ***HeatWave*** manual for details.

Facing Over 1" (25mm) Thick

If the facing material is over 1" (25mm) thick (example: brick or river rock), install the facing around the perimeter of the face. You may wish to make a face template as shown on the diagram.



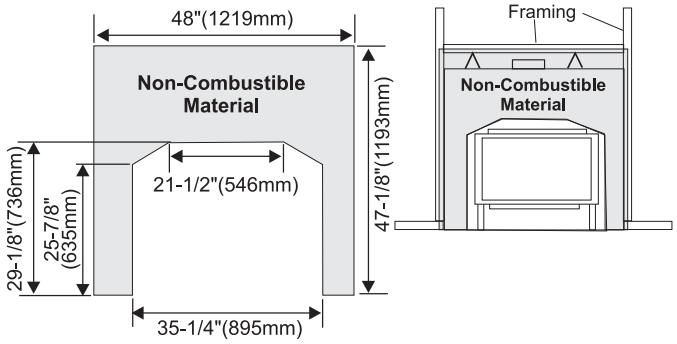
FPI offers a cover plate template. See next page.

NOTE: If using a brick hearth, the fireplace will need to be raised to accommodate the brick thickness. Example: If the brick is 2" thick, the unit must be raised 1".

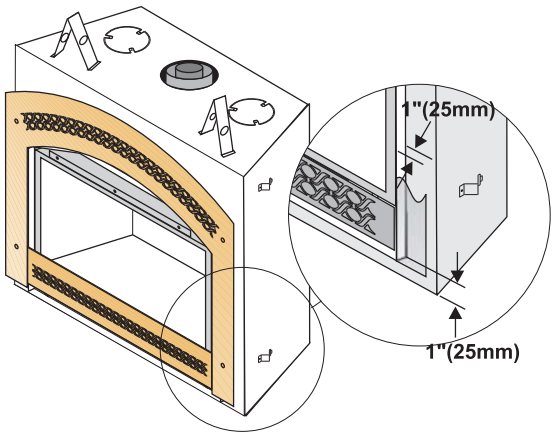
FACING REQUIREMENT

This fireplace requires a non-combustible material extending from the framing header and sides.

The flanges on the front face of the fireplace are for a facing thickness of 1" (25mm).

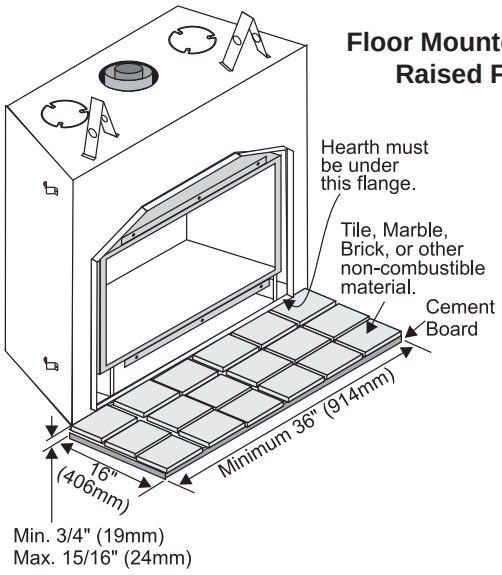


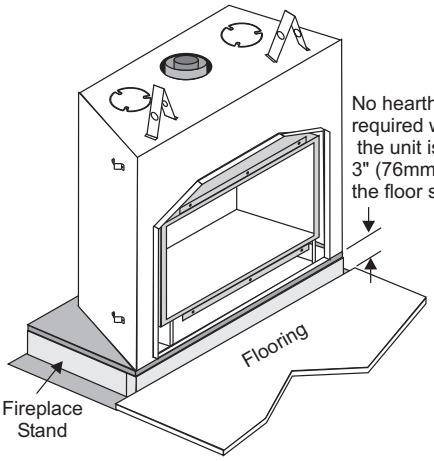
*Please note that all vertical measurements are taken from the base of the unit **excluding** risers or bottom stand-offs.*



HEARTH REQUIREMENTS

Floor Mounted Fireplaces
Raised Fireplaces

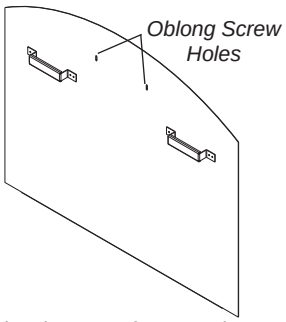




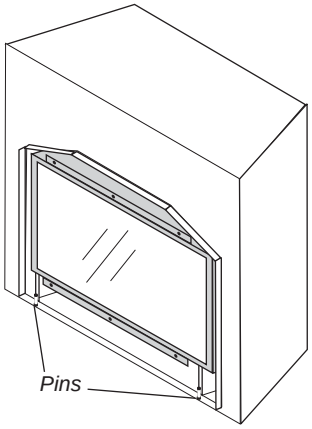
You must take into account the depth of the floor covering (carpet, tile, linoleum, etc.) when determining the height of the fireplace stand.

OPTIONAL COVER PLATE TEMPLATE

1) Ensure top clip screws are at top of oblong holes before installation.

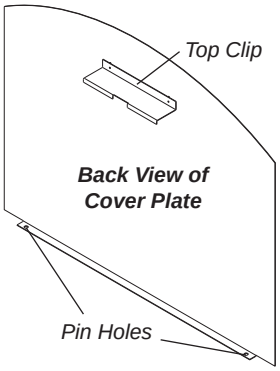


2) Position bottom of cover plate over pins located at the bottom of the firebox.



3) Bring cover plate towards the unit and hook top clip over and behind the glass frame.

The top clip may need to be adjusted. Loosen the 2 screws that secure the top clip to let the cover plate settle over and behind the glass frame. Once settled tighten screws.



TO REMOVE:

1) Remove 2 screws that secure top clip. Ensure to hold cover plate as it will fall forward.

2) Pull out top clip that is still hooked onto glass.

UNIT ASSEMBLY PRIOR TO INSTALLATION

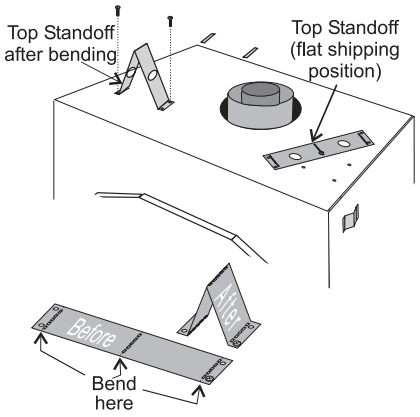
The 2 Top Standoffs must be correctly positioned and attached to the top before unit is slipped into position.

Top Standoff Assembly

The top standoffs are shipped in a flat position and must be folded into shape and attached.

1) Remove the standoffs from the fireplace top.

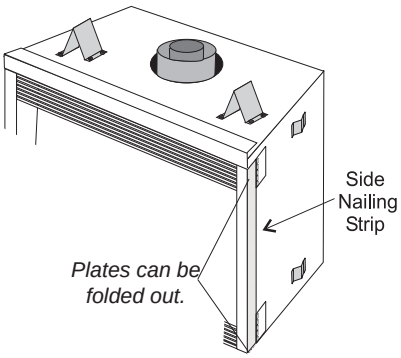
2) Take each standoff and bend into the correct shape. Bend up at the bend lines until the screw holes in the standoff and the pre-punched screw holes on the fireplace top line up.



3) Attach the standoff securely to the top with 2 screws per standoff (on opposite corners).

Side Nailing Strips

The side nailing strips come attached to the unit. There are 2 plates, one on the top and bottom that can be folded out as required.



VENTING INTRODUCTION

The P90 uses the "balanced flue" technology Co-axial system. The inner liner vents products of combustion to the outside while the outer liner draws outside combustion air into the combustion chamber thereby eliminating the need to use heated room air for combustion and losing warm room air up the chimney.

Note: ***These flue pipes must not be connected to any other appliance.***

The gas appliance and vent system must be vented directly to the outside of the building, and never be attached to a chimney serving a separate solid fuel or gas burning appliance. Each direct vent gas appliance must use it's own separate vent system. Common vent systems are prohibited.

VENTING

FPI Direct Vent System (Flex) Horizontal Terminations Only

These venting systems, in combination with the P90 Direct Vent Gas Fireplace, have been tested and listed as a direct vent heater system by Warnock Hersey. The location of the termination cap must conform to the requirements in the Vent Terminal Locations diagram in the "Exterior Vent Termination Locations" section.

FPI Direct Vent (Flex) System Termination Kit (Part # 946-515) includes all the parts needed to install the P90 with a maximum run of 4 feet.

1) 6-7/8" dia. flexible liner (4 ft. length)
2) 4" dia. flexible liner (4 ft. length)
3) spring spacers (4)
4) thimble (2)
5) ***AstroCap*** termination cap (1)
6) screws (12)
7) tube of Mill Pac (1)
8) plated screws (8)
9) screws #8 x 1-1/2" Drill Point, Stainless Steel (4)

If a longer run is needed, the FPI Direct Vent system (Flex) kit is 946-516 which includes all the parts needed to install the P90 with a maximum 10' run.

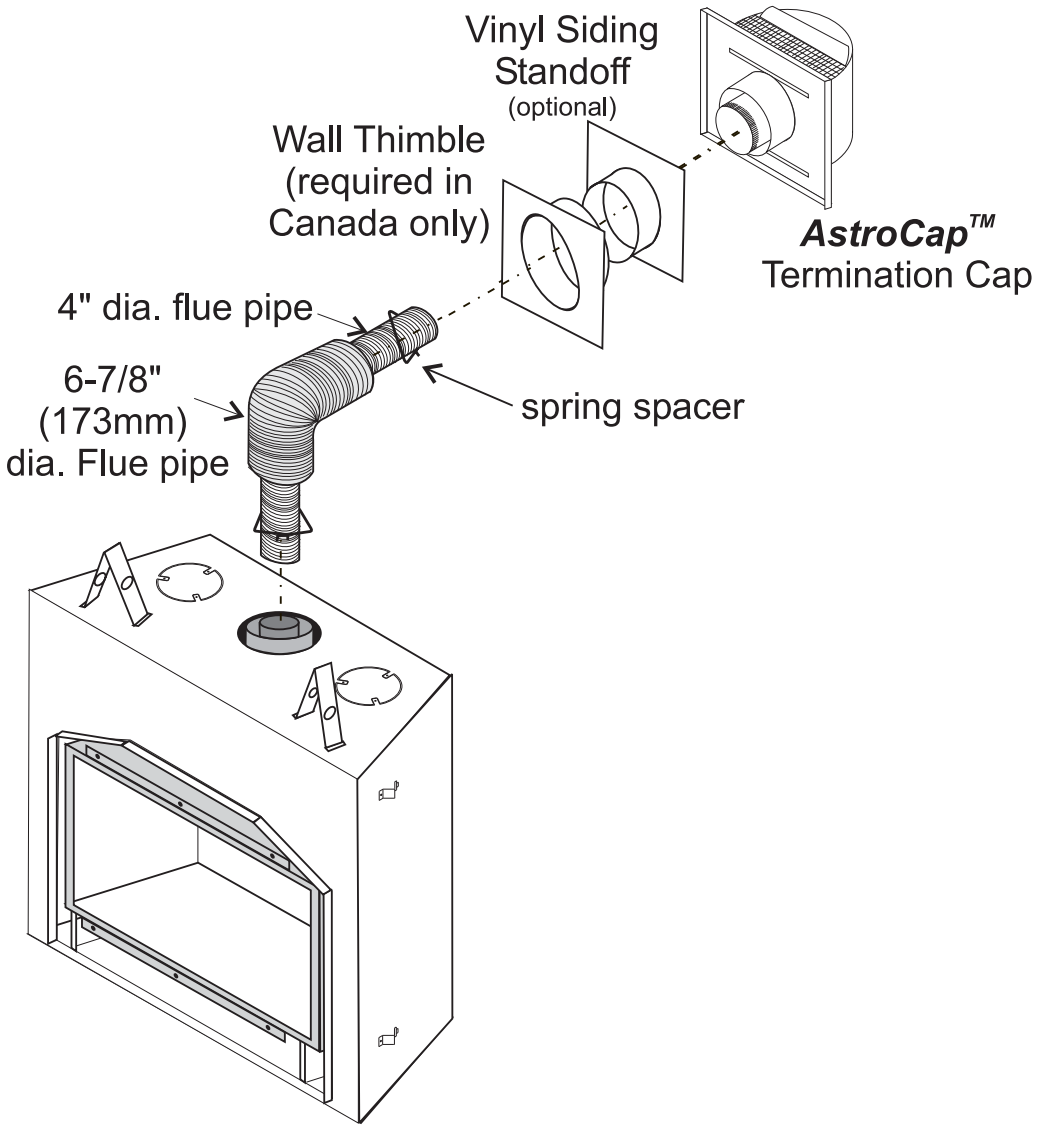
1) 6-7/8" dia. flexible liner (10 ft. length)
2) 4" dia. flexible liner (10 ft. length)
3) spring spacers (7)
4) thimble (2)
5) ***AstroCap*** termination cap (1)
6) screws (12)
7) tube of Mill Pac (1)
8) plated screws (8)
9) screws #8 x 1-1/2" Drill Point, Stainless Steel (4)

Notes:

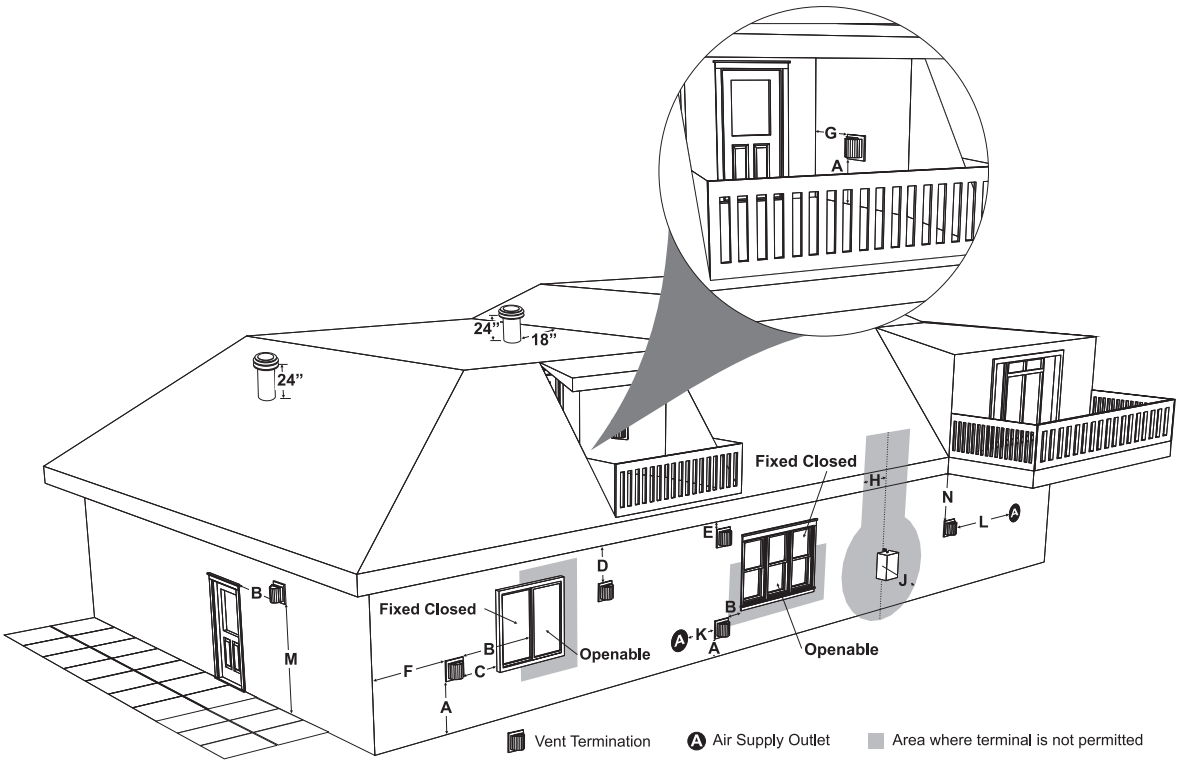
1) Liner sections should be continuous without any joints or seams.

2) Only Flex pipe purchased from FPI may be used for Flex installations.

3) Horizontal vent must be supported every 3 feet.



EXTERIOR VENT TERMINATION LOCATIONS



	Minimum Clearance Requirements	Canada[1]	USA[2]
A	Clearance above grade, veranda, porch, deck, or balcony	12"(30cm)	12"(30cm)
B	Clearance to window or door that may be opened	12"(30cm)	9" (23cm)
C	Clearance to permanently closed window	*	*
D	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (61cm) from the center line of the terminal (check with the local code)	18"(46cm)	18"(46cm)
E	Clearance to unventilated soffit	15"(38cm)	15"(38cm)
F	Clearance to outside corner: with ***AstroCap*** Termination Cap.	6"(15cm)	6"(15cm)
	Clearance to outside corner: with all other approved Termination Caps.	14"(36cm)	14"(36cm)
G	Clearance to inside corner: with ***AstroCap*** Termination Cap	6"(15cm)	6"(12cm)
	Clearance to inside corner: with all other approved Termination Caps.	12"(30cm)	12"(30cm)
H	Clearance to each side of center line extended above meter/regulator assembly	36"(90cm)[a]	*
J	Clearance to service regulator vent outlet	36"(90cm)	*
K	Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance	12"(30cm)	9" (23cm)
L	Clearance to a mechanical air supply inlet #3' (91cm) above if within 10' (3m) horizontally.	72"(1.8m)	36"(90cm)[b]
M	Clearance above paved sidewalk or a paved driveway located on public property	84"(2.1m)†	*
N	Clearance under veranda, porch, deck, or balcony	12"(30cm)‡	*

[1] In accordance with 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*
† A vent shall not terminate directly above a sidewalk or paved driveway which 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
* Clearance in accordance with local installation codes and the requirements of the gas supplier
[a] 3 feet (91cm) within a height of 15 feet (4.5m) above the meter / regulator assembly
[b] 3 feet (91cm) above - if within 10 feet (3m) horizontally

4” X 6-5/8” RIGID PIPE CROSS REFERENCE CHART

Components from different Manufacturers may not be mixed. Not All Rigid Pipe components are available directly from FPI.

Components from different Manufacturers may not be mixed. Not all rigid pipe components are available directly from Regency.

Description	Simpson Direct Vent Pro®	Selkirk Direct Temp™	American Metal Products® Amerivent Direct	Metal-Fab™ Sure Seal	Security Secure- Vent®	ICC Excel Direct
6” Pipe Length-Galvanized	46DVA-06	4DT-6	N/A	4D6	SV4L6	TC-4DL6
6” Pipe Length-Black	46DVA-06B	4DT-6B	N/A	4D6B	SV4LB6	TC-4DL6B
7” Pipe Length-Galvanized	N/A	N/A	4D7	N/A	N/A	N/A
7” Pipe Length-Black	N/A	N/A	4D7B	N/A	N/A	N/A
9” Pipe Length-Galvanized	46DVA-09	4DT-9	N/A	N/A	N/A	N/A
9” Pipe Length-Black	46DVA-09B	4DT-9B	N/A	N/A	N/A	N/A
12” Pipe Length-Galvanized	46DVA-12	4DT-12	4D12	4D12	SV4L12	TC-4DL1
12” Pipe Length-Black	46DVA-12B	4DT-12B	4D12B	4D12B	SV4LB12	TC-4DL1B
18” Pipe Length-Galvanized	46DVA-18	4DT-18	4D18	4D18	SV4LA	TC-4DL18
18” Pipe Length-Black	46DVA-18B	4DT-18B	4D18B	4D18B	SV4LA	TC-4DL18B
24” Pipe Length-Galvanized	46DVA-24	4DT-24	4D24	4D24	SV4L24	TC-4DL2
24” Pipe Length-Black	46DVA-24B	4DT-24B	4D24B	4D24B	SV4LB24	TC-4DL2B
36” Pipe Length-Galvanized	46DVA-36	4DT-36	4D36	4D36	SV4L36	TC-4DL3
36” Pipe Length-Black	46DVA-36B	4DT-36B	4D36B	4D36B	SV4LB36	TC-4DL3B
48” Pipe Length-Galvanized	46DVA-48	4DT-48	4D48	4D48	SV4L48	TC-4DL4
48” Pipe Length-Black	46DVA-48B	4DT-48B	4D48B	4D48B	SV4LB48	TC-4DL4B
60” Pipe Length-Galvanized	46DVA-60	4DT-60	N/A	N/A	N/A	N/A
60” Pipe Length-Black	46DVA-60B	4DT-60B	N/A	N/A	N/A	N/A
Adjustable Length 3”-10”-Galvanized	N/A	N/A	N/A	4DAL	N/A	TC-4DLT
Adjustable Length 3”-10”-Black	N/A	N/A	N/A	4DALB	N/A	TC-4DLTB
Adjustable Length 7”-Galvanized	N/A	N/A	4D7A	N/A	N/A	N/A
Adjustable Length 7”-Black	N/A	N/A	4D7AB	N/A	N/A	N/A
Extension Pipe 8-1/2”-Galvanized	46DVA-08A	N/A	N/A	N/A	N/A	N/A
Extension Pipe 8-1/2”-Black	46DVA-08AB	N/A	N/A	N/A	N/A	N/A
Adjustable Length 12”-Galvanized	N/A	N/A	4D12A	N/A	SV4LA12	N/A
Adjustable Length 12”-Black	N/A	N/A	4D12A	N/A	SV4LBA12	N/A
Extension Pipe 16”-Galvanized	46DVA-16A	N/A	N/A	N/A	N/A	N/A
Extension Pipe 16”-Black	46DVA-16AB	N/A	N/A	N/A	N/A	N/A
45º Elbow-Galvanized	46DVA-E45	4DT-EL45	4D45L	N/A	N/A	TE-4DE45
45º Elbow-Black	46DVA-E45B	4DT-EL45B	4DT-EL45B	N/A	N/A	TE-4DE45B
45º Elbow Swivel-Galvanized	See 46DVA-E45	N/A	N/A	4D45L	SV4E45	N/A
45º Elbow Swivel-Black	See 46DVA-E45B	N/A	N/A	4D45LB	SV4EB45	N/A
90º Elbow-Galvanized	46DVA-E90	4DT-EL90S	4DT-EL90S	N/A	N/A	TE-4DE90
90º Elbow-Black	46DVA-E90B	4DT-EL90SB	4DT-EL90SB	N/A	SV4EBR90-1	TE-4DE90B
90º Elbow, Swivel-Galvanized	See 46DVA-E90	N/A	N/A	4D90L	SV4E90-1	N/A
90º Elbow, Swivel-Black	See 46DVA-E90B	N/A	N/A	4D90LB	SV4EB90-1	N/A
90º Starter Elbow, Swivel-Galvanized	N/A	N/A	N/A	4D90A	N/A	N/A
Adaptor*	N/A	N/A	N/A	4D90L	N/A	N/A
Ceiling Support	N/A	4DT-CS	4DFSP	4DSP	SV4SD	TE-4DE45
Cathedral Support Box	46DVA-CS	4DT-CSS	4DRSB	4DRS	SV4CSB	TE-4DE45B
Wall Support/Band	46DVA-WS	4DT-WS/B	4DWS	4DWS	SV4BM	N/A
Offset Support	46DVA-ES (N/A - FPI)	4DT-OS	N/A	N/A	SV4SU	N/A
Wall Thimble-Black	46DVA-WT	4DT-WT	4DWT	4DWT	SV4RSM	TE-4DE90
Wall Thimble Support/Ceiling Support	46DVA-DC	N/A	N/A	N/A	SV4PF	TE-4DE90B
Firestop Spacer	46DVA-FS	4DT-FS	4DFSP	4DFS	SV4BF	N/A
Trim Plate-Black	N/A	4DT-TP	4DFPB	4DCP	SV4LA	N/A

INSTALLATION

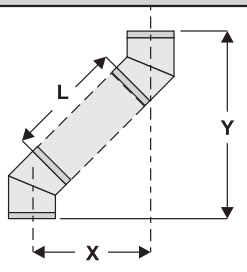
Description	Simpson Direct Vent Pro®	Selkirk Direct Temp™	American Metal Products® Amerivent Direct	Metal-Fab™ Sure Seal	Security Secure- Vent®	ICC Excel Direct
Attic Insulation Shield 12”	46DVA-IS N/A@ FPI	N/A	4DAIS12	N/A	SV4RSA	N/A
Attic Insulation Shield - Cold Climates 36”	N/A	N/A	4DAIS12	N/A	N/A	TM-4AS
Basic Horizontal Termination Kit (A)	Disc.	4DT-HKA	4DHTK2	4DHTKA	SV-SHK	N/A
Horizontal Termination Kit (B)	46DVA-KHA (Changed Components)	4DT-HKB	4DHTK1	4DHTKB	SV-HK	N/A
Vertical Termination Kit	Disc.	4DT-VKC	4DHTK	4DHTK	SV-FK	N/A
High Wind Vertical Cap	46DVA-VCH	N/A	N/A	N/A	N/A	TM-4VT
High Wind Horizontal Cap	46DVA-HC	N/A	N/A	N/A	N/A	TM-4DHT
Horizontal Square Termination Cap	See 46DVA-HC	4DT-HHC	4DHC	4DHT	SV4CHC-1	TM-4HT
Vertical Termination Cap	N/A	4DT-HVC	4DVC	4DVT	SV4CGV-1	TM-4VT
Storm Collar	46DVA-08A	4DT-SC	4DSC	4DSC	SV4FC	TM-SC
Adjustable Flashing 0/12-6/12	N/A	4DT-ST14	4D12S	4DST14	SV4STC14	TF-4FA
Adjustable Flashing 6/12-12/12	N/A	4DT-ST36	4D36S	4DST36	SV4STC36	TF-4FB
Vinyl Siding Standoff	46DVA-VSS	4DT-VS	N/A	4DVS	SV4VS	TM-VSS
Vinyl Siding Shield Plate	N/A	4DT-VSP	N/A	N/A	SV4VS	N/A
Snorkel Termination 14”	46DVA-VCH	N/A	N/A	N/A	N/A	TM-4ST14
Snorkel Termination 36”	46DVA-HC	N/A	N/A	N/A	N/A	TM-4ST36
Restrictor Disk	46DVA-RD	N/A	N/A	N/A	N/A	TM-4DS
Extended Vertical Termination Cap	46DVA-VCE	N/A	N/A	N/A	N/A	N/A
Chimney Conversion Kit A (USA only)	46DVA-KCA	N/A	N/A	N/A	N/A	TM-4CA6
Chimney Conversion Kit B (USA only)	46DVA-KCB	N/A	N/A	N/A	N/A	TM-4CA7
Chimney Conversion Kit C (USA only)	46DVA-KCC	N/A	N/A	N/A	N/A	TM-4CA8
Chimney Conversion Kit Masonry (USA only)	46DVA-KMC	N/A	N/A	N/A	N/A	N/A
Wall Firestop	46DVA-WFS	N/A	N/A	N/A	N/A	TM-4TR
Colinear Flex Connectors	46DVA-ADF	N/A	N/A	N/A	N/A	N/A

FPI			
946-506/P	Vent Guard (Optional) for AstroCap	946-205	Vinyl Siding Shield for Riser Vent Terminal
510-994	Rigid Pipe Adaptor (Must use with all rigid piping)	946-208/P	Vent Guard (Optional) for Riser Vent Terminal
640-530/P	Riser Vent Terminal	946-523/P	AstroCap Horizontal Cap
946-605	Starter Collar Increaser 4” x 6-5/8” to 5” x 8”	946-206	Vinyl Siding Standoff for AstroCap

Note: When using Metal-Fab Sure Seal Rigid Piping - please note that the Adaptor (4DDA) must be used in conjunction with FPI Rigid Pipe Adaptor (510-994).

Offset Pipe Selection: Use this table to determine offset pipe lengths.

Pipe Length (L)	4” x 6-5/8” Venting	
	Run (X)	Rise (Y)
0” (0mm)	4-7/8” (124mm)	13-7/8” (340mm)
6” (152mm)	8” (203mm)	16-1/2” (419mm)
9” (229mm)	10-1/8” (257mm)	18-5/8” (473mm)
12” (305mm)	12-1/4” (311mm)	20-3/4” (527mm)
24” (610mm)	20-5/8” (524mm)	29-1/8” (740mm)
36” (914mm)	29” (737mm)	37-1/2” (953mm)
48” (1219mm)	37-7/16” (951mm)	45-15/16” (1167mm)



For specific instructions on venting components - visit the manufacturers website listed below.

- Simpson Direct Vent Pro: www.duravent.com
- Selkirk Direct-Temp: www.selkirkcorp.com
- American Metal Products: www.americanmetalproducts.com
- Metal-Fab Sure Seal: www.mtlfab.com
- Security Secure Vent: www.securitychimneys.com
- Industrial Chimney Company: www.icc-rsf.com

Note: Horizontal runs of vent must be level, or have a 1/4” rise for every 1 foot of run towards the termination.
Never allow the vent to run downward - this could cause high temperatures and may present a possible fire hazard.

INSTALLATION

5” X 8” RIGID PIPE CROSS REFERENCE CHART

Components from different Manufacturers may not be mixed. Not All Rigid Pipe components are available directly from FPI.

5” X 8” RIGID PIPE CROSS REFERENCE CHART Components from different Manufacturers may not be mixed. Not all rigid pipe components are available directly from Regency.				
Description	Simpson Direct Vent Pro®	Selkirk Direct Temp™	Metal-Fab™ Sure Seal	ICC Excel Direct
6” Pipe Length-Galvanized	58DVA-06	5DT-6	5D6	TC-5DL6
6” Pipe Length-Black	58DVA-06B	5DT-6B	5D6B	TC-5DL6B
9” Pipe Length-Galvanized	58DVA-09	5DT-9	N/A	N/A
9” Pipe Length-Black	58DVA-09B	5DT-9B	N/A	N/A
12” Pipe Length-Galvanized	58DVA-12	5DT-12	5D12	TC-5DL1
12” Pipe Length-Black	58DVA-12B	5DT-12B	5D12B	TC-5DL1B
18” Pipe Length-Galvanized	58DVA-18	5DT-18	5D18	TC-5DL18
18” Pipe Length-Black	58DVA-18B - N/A from FPI	5DT-18B	5D18B	TC-5DL18B
24” Pipe Length-Galvanized	58DVA-24	5DT-24	5D24	TC-5DL2
24” Pipe Length-Black	58DVA-24B	5DT-24B	5D24B	TC-4DL2B
36” Pipe Length-Galvanized	58DVA-36	5DT-36	5D36	TC-5DL3
36” Pipe Length-Black	58DVA-36B	5DT-36B	5D36B	TC-5DL3B
48” Pipe Length-Galvanized	58DVA-48	5DT-48	5D48	TC-5DL4
48” Pipe Length-Black	58DVA-48B	5DT-48B	5D48B	TC-5DL4B
60” Pipe Length-Galvanized	58DVA-60	N/A	N/A	N/A
60” Pipe Length-Black	58DVA-60B - N/A from FPI	N/A	N/A	N/A
Adjustable Length 3”-10”-Galvanized	N/A	N/A	5DAL	TC-5DLT
Adjustable Length 3”-10”-Black	N/A	N/A	5DALB	TC-5DLTB
Adjustable Length 11”-14” -Galvanized	Disc. - See 58DV-08A	5DT-AJ	N/A	N/A
Adjustable Length 11”-14” -Black	Disc. - See 58DV-08B	5DT-AJB	N/A	N/A
Extension Pipe 17”-24” -Galvanized	Disc. - See 58DV-16A	N/A	N/A	N/A
Extension Pipe 17”-24” -Black	Disc. - See 58DV-16AB	N/A	N/A	N/A
Adjustable Length 8-1/2”-Galvanized	58DVA-08A - N/A from FPI	N/A	N/A	N/A
Adjustable Length 8-1/2”-Black	58DVA-08AB	N/A	N/A	N/A
Extension Pipe 16”-Galvanized	58DVA-16A - N/A from FPI	N/A	N/A	N/A
Extension Pipe 16”-Black	46DVA-16AB	N/A	N/A	N/A
45º Elbow-Galvanized	58DVA-E45	5DT-EL45	5DT-EL45	TE-5DE45
45º Elbow-Black	58DVA-E45B	5DT-EL45B	5DT-EL45B	TE-5DE45B
45º Elbow Swivel-Galvanized	Disc. - See 58DVA-E45	N/A	N/A	N/A
45º Elbow Swivel-Black	Disc.-See 58DVA-E45B	N/A	N/A	N/A
90º Elbow-Galvanized	58DVA-E90	5DT-EL90S	5DT-EL90S	TE-5DE90
90º Elbow-Black	58DVA-E90B	5DT-EL90SB	5DT-EL90SB	TE-5DE90B
90º Elbow, Swivel-Galvanized	Disc. - See 46DVA-E45	N/A	N/A	N/A
90º Elbow, Swivel-Black	Disc. - See 46DVA-E45	N/A	N/A	N/A
90º Starter Elbow, Swivel-Galvanized	N/A	N/A	N/A	N/A
Adaptor*	N/A	N/A	N/A	N/A
Ceiling Support	58DVA-DC	5DT-CS	5DSP	TE-5DE45
Cathedral Support Box	58DVA-CS	5DT-CSS	5DRS	TE-5DE45B
Wall Support/Band	58DVA-WS	5DT-WS/B	5DWS	N/A
Offset Support	58DVA-ES - N/A from FPI	5DT-OS	N/A	N/A
Wall Thimble-Black	58DVA-WT	5DT-WT	5DWT	TE-5DE90
Wall Thimble Support/Ceiling Support	58DVA-DC - N/A from FPI	N/A	N/A	TE-5DE90B
Firestop Spacer	58DVA-FS	5DT-FS	5DFS	N/A
Trim Plate-Black	58DAV-WFS	5DT-TP	5DCP	N/A

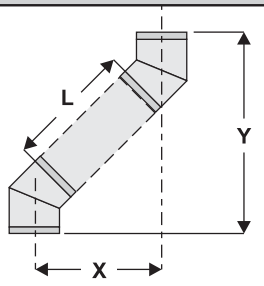
Description	Simpson Direct Vent Pro®	Selkirk Direct Temp™	Metal-Fab™ Sure Seal	ICC Excel Direct
Attic Insulation Shield 12”	58DVA-IS N/A from FPI	N/A	N/A	N/A
Basic Horizontal Termination Kit (A)	N/A	5DT-HKA	N/A	N/A
Horizontal Termination Kit (B)	58DVA-KHA	5DT-HKB	N/A	N/A
Vertical Termination Kit	58DVA-VHA	5DT-VKC	N/A	N/A
High Wind Vertical Cap	58DVA-VCH	N/A	N/A	TM-5VT
High Wind Horizontal Cap	N/A	N/A	N/A	TM-5DHT
Horizontal Square Termination Cap	N/A	5DT-HHC	5DHT	TM-5HT
Vertical Termination Cap	N/A	5DT-HVC	5DVT	TM-5VT
Storm Collar	58DVA-SC	5DT-SC	5DSC	TM-SC
Adjustable Flashing 0/12-6/12	58DVA-F6	5DT-AF6	5DF	TF-5FA
Adjustable Flashing 6/12-12/12	58DVA-F12	5DT-AF12	5DF1-2	TF-5FB
Vinyl Siding Standoff	58DVA-VSS	5DT-VS	5DVS	TM-VSS
Vinyl Siding Shield Plate	N/A	5DT-VSP	N/A	N/A
Snorkel Termination 14”	58DVA-SNK14	N/A	N/A	TM-5ST14
Snorkel Termination 36”	58DVA-SNK36 (N/A - FPI)	N/A	N/A	TM-5ST36
Restrictor Disk	58DVA-RD	N/A	N/A	TM-5DS
Colinear Flex Connectors	N/A	N/A	N/A	N/A

FPI			
946-604/P	Simpson Direct Vent -Vent Guard (Optional)	946-623/P	AstroCap XL Horizontal Cap
770-994	Rigid Pipe Adaptor (Must use with all rigid piping)	946-506/P	Vent Guard (Optional)
946-606	Starter collar reducer 5” x 8” to 4” x 6-5/8”	946-625	Vinyl Siding Standoff - AstroCap XL

Note: When using Metal-Fab Sure Seal Rigid Piping - please note that the Adaptor (4DDA) must be used in conjunction with FPI Rigid Pipe Adaptor (510-994).

Offset Pipe Selection: Use this table to determine offset pipe lengths.

Pipe Length (L)	5” x 8” Venting	
	Run (X)	Rise (Y)
0” (0mm)	5-11/16” (144mm)	15-5/16” (389mm)
6” (152mm)	8-13/16” (224mm)	18-7/16” (468mm)
9” (229mm)	10-15/16” (278mm)	20-9/16” (522mm)
12” (305mm)	13” (330mm)	22-11/16” (576mm)
24” (610mm)	21-7/16” (697mm)	31-1/16” (789mm)
36” (914mm)	29-13/16” (757mm)	39-7/16” (1002mm)
48” (1219mm)	38-1/4” (972mm)	47-7/8” (1216mm)



For specific instructions on venting components - visit the manufacturers website listed below.

Simpson Direct Vent Pro: www.duravent.com

Selkirk Direct-Temp: www.selkirkcorp.com

Metal-Fab Sure Seal: www.mtlfab.com

Industrial Chimney Company: www.icc-rsf.com

Note: Horizontal runs of vent must be level, or have a 1/4” rise for every 1 foot of run towards the termination. Never allow the vent to run downward - this could cause high temperatures and may present a possible fire hazard.

L676 & L900 DIRECT VENT FIREPLACE

IMPORTANT NOTE

- A Vent Guard is required when the AstroCap is installed above grade at 7 feet or lower.
- The Simpson Dura-Vent and Selkirk Direct Temp horizontal termination caps cannot be used in any applications.
- Only the AstroCap XL and Snorkels are certified for horizontal terminations.

RIGID PIPE VENTING SYSTEMS

The minimum components required for a basic horizontal termination are:

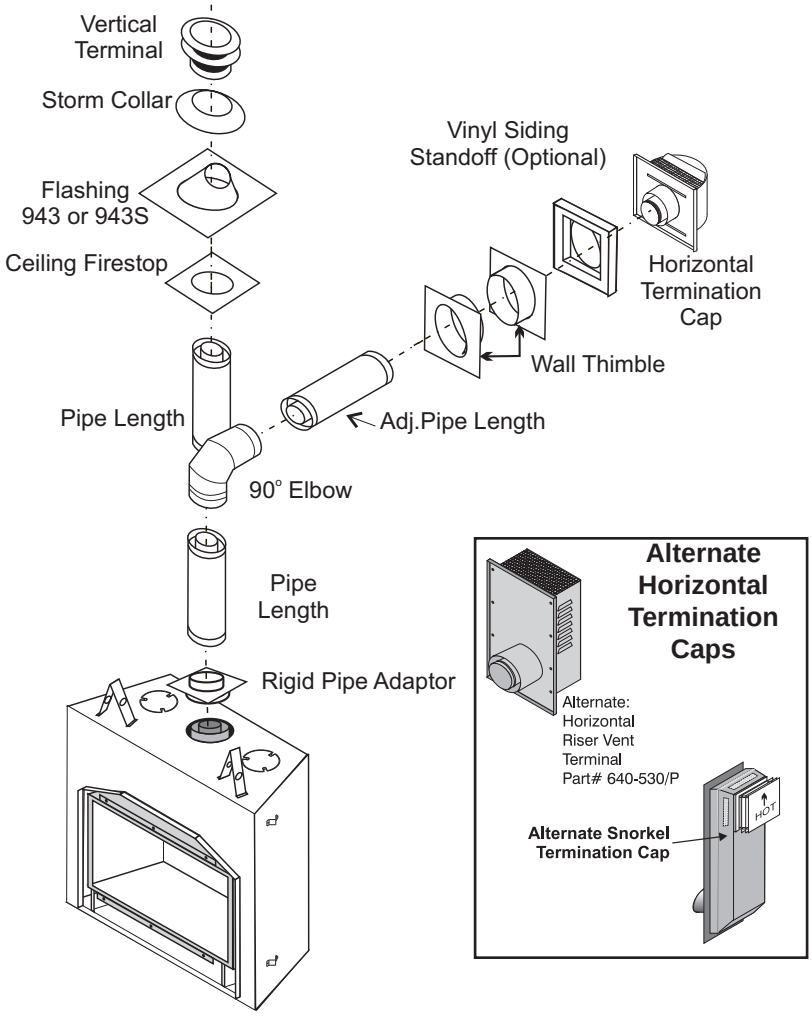
1 Horizontal Termination Cap
1 90° Elbow
1 Rigid Pipe Adaptor
1 Wall Thimble
1 Length of pipe to suit wall thickness (see chart)
1 4" x 6-5/8" to 5" x 8" increaser for 5" x 8" venting

Wall thickness is measured from the back standoffs to the inside mounting surface of termination cap. For siding other than vinyl furring strips may be used, instead of the vinyl siding standoff, to create a level surface to mount the vent terminal. The Terminal must not be recessed into siding. Measure the wall thickness including furring strips.

If a Vinyl Siding Standoff is required (it must be used with vinyl siding), measure to outside surface of wall without siding and add 2 inches.

Flat Wall Installation	
Wall Thickness (inches)	**Vent Length Required (inches)**
4" - 5-1/2"	6"
7" - 8-1/2"	9"
10" - 1-1/2"	12"
9" - 14-1/2"	11" - 14-5/8" Adj. Pipe
15" - 23-1/2"	17" - 24" Adj.
Corner Installation	
Wall Thickness (inches)	**Vent Length Required (inches)**
3-1/4" - 6-3/4"	11" - 14-5/8" Adj. Pipe
7-3/4" - 16-1/4"	17" - 24" Adj. Pipe
7-1/4" - 8-3/4"	6" + 12" 9" + 9"
4-1/4" - 5-3/4"	6" + 9"

Horizontal and Vertical Terminations for 4" x 6-5/8" Venting



WARNING:

Do not combine venting components from different venting systems.

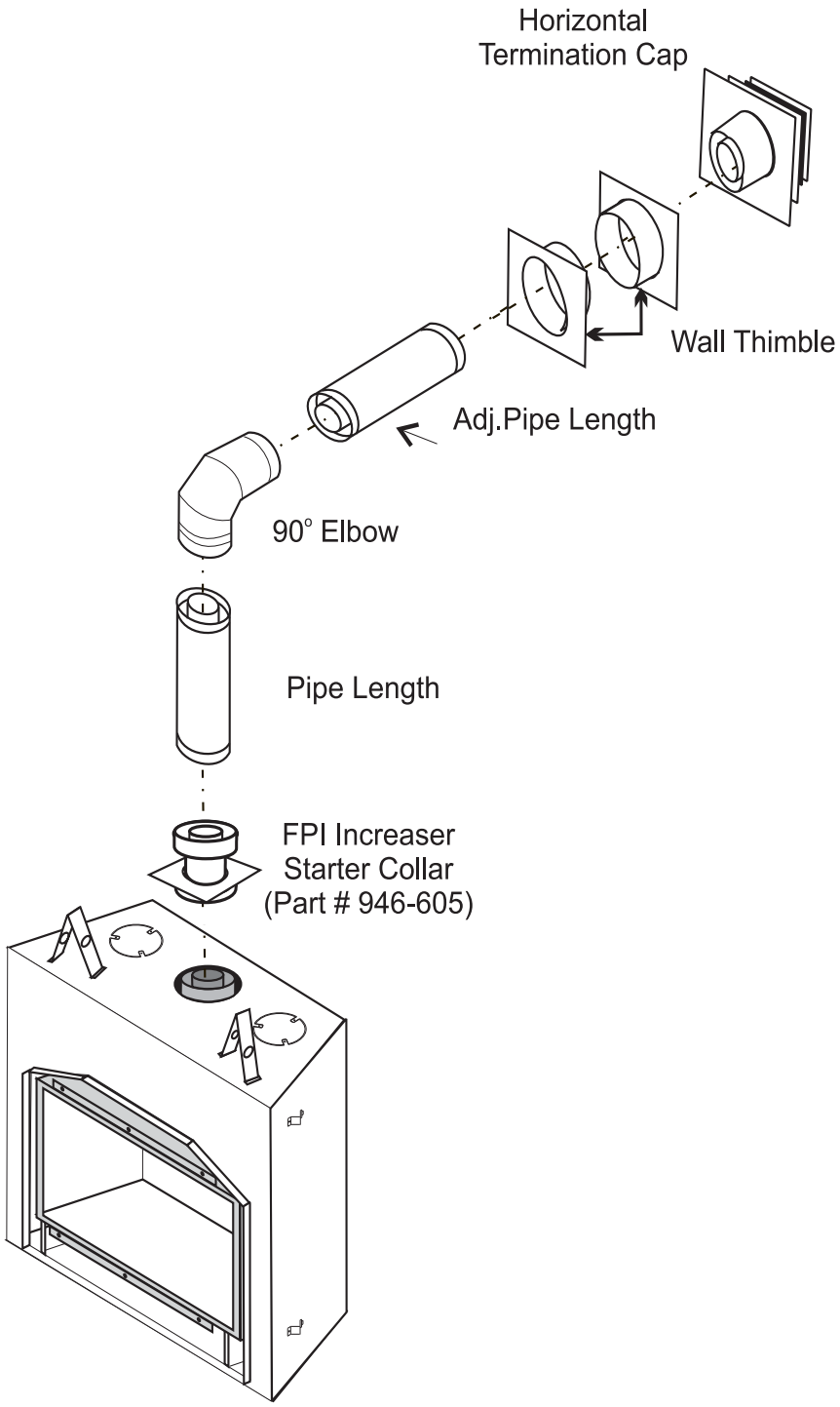
However use of the the AstroCap™ and FPI Riser is acceptable with all systems.

This product has been evaluated by Intertek for using a Rigid Pipe Adaptor in conjunction with Duravent Direct-Vent , Selkirk Direct-Temp, Ameri Vent Direct venting and Security Secure Vent systems. Use of these systems with the Rigid Pipe adaptor is deemed acceptable and does not affect the Intertek WHI listing of components.

When using Rigid Vent other than Simpson Dura-Vent, 3 screws must be used to secure rigid pipe to adaptor.

The FPI AstroCap™ and FPI Riser Vent terminal are certified for installations using FPI venting systems as well as Simpson Dura-Vent® Direct Vent, American Metal Products Ameri Vent Direct Vent, Security Secure Vent®, Selkirk Direct-Temp. AstroCap™ is a proprietary trademark of FPI Fireplace Products International Ltd. Dura-Vent® and Direct Vent are registered and/or proprietary trademarks of Simpson Dura-Vent Co. Inc.

Horizontal & Vertical Terminations for 5" x 8" Venting



RIGID PIPE VENTING ARRANGEMENTS - HORIZONTAL TERMINATIONS

FPI DIRECT VENT SYSTEM (FLEX)

(Propane & Natural Gas)

The diagram shows all allowable combinations of vertical runs with horizontal terminations, using one 90° elbow (two 45° elbows equal one 90° elbow).

All Rigid Pipe Systems
4" inner diameter
6-5/8" outer diameter

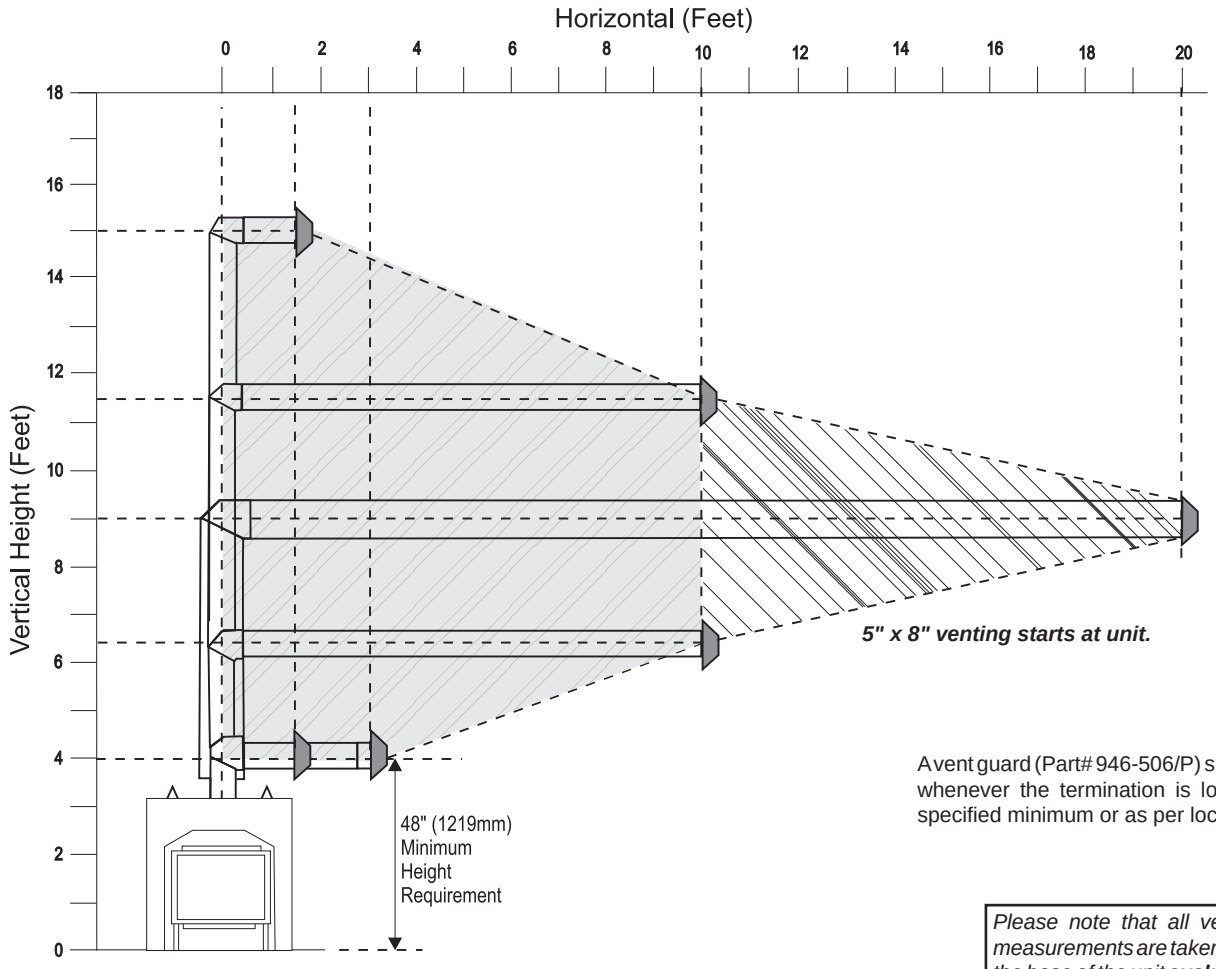
FPI Flex Vent
4" inner diameter
6-7/8" outer diameter

Note: Must use optional rigid pipe adaptor (Part # 510-994) when using Rigid Pipe.

Note: FPI Direct Vent System (Flex) is only approved for horizontal terminations.

All Rigid Pipe Systems
5" inner diameter
8" outer diameter

Note: Must use FPI increaser starter collar (Part # 946-605) at beginning of vent run.



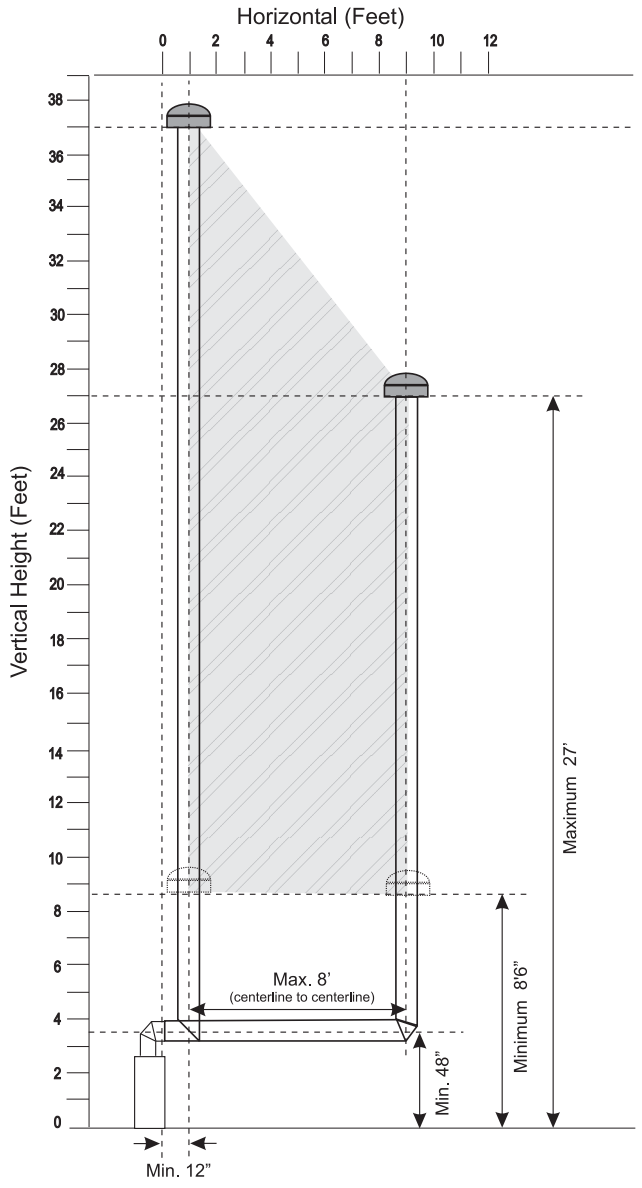
A vent guard (Part# 946-506/P) should be used whenever the termination is lower than the specified minimum or as per local codes.

*Please note that all vertical measurements are taken from the base of the unit **excluding** risers or bottom stand-offs.*

- **Maintain clearances to combustibles as listed in the "Clearances" section.**
- **Horizontal vent must be supported every 3 feet.**
- **Firestops are required at each floor level and whenever passing through a wall.**

RIGID PIPE VENTING ARRANGEMENTS - VERTICAL TERMINATIONS

The shaded area in the diagram shows all allowable combinations of straight vertical and offset to vertical terminations, using two 90° elbow, with **rigid pipe** vent systems for Propane and Natural Gas.



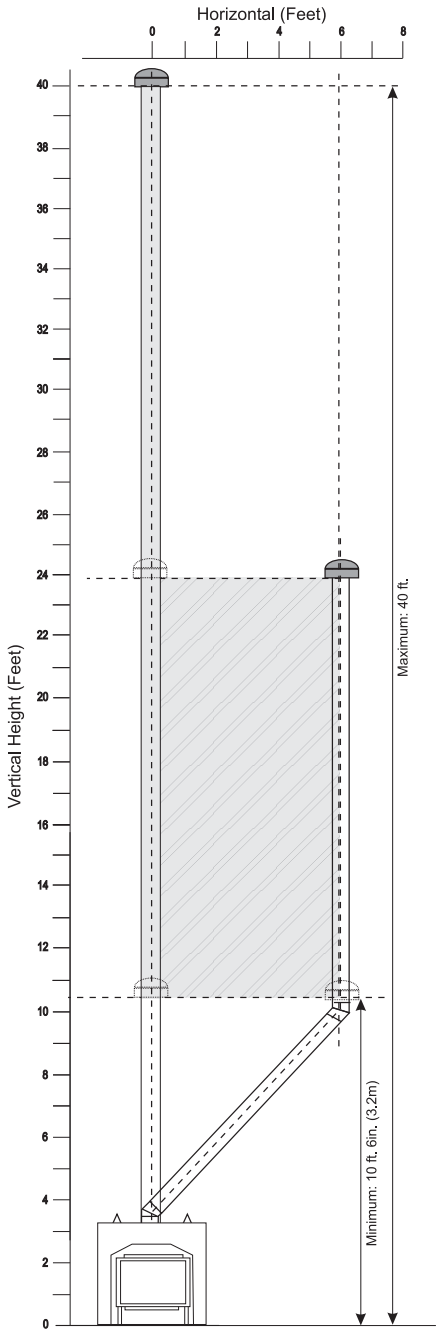
- **Vent must be supported at offsets.**
- **Firestops are required at each floor level and whenever passing through a wall.**
- **Maintain clearances to combustibles.**

Note: Must use optional rigid pipe adaptor when using rigid vent systems (Part # 510-994).

The P90 is approved for a maximum 40 ft. straight vertical, with **rigid pipe** 4" x 6-5/8" vent systems for Propane and Natural Gas, as per diagram.

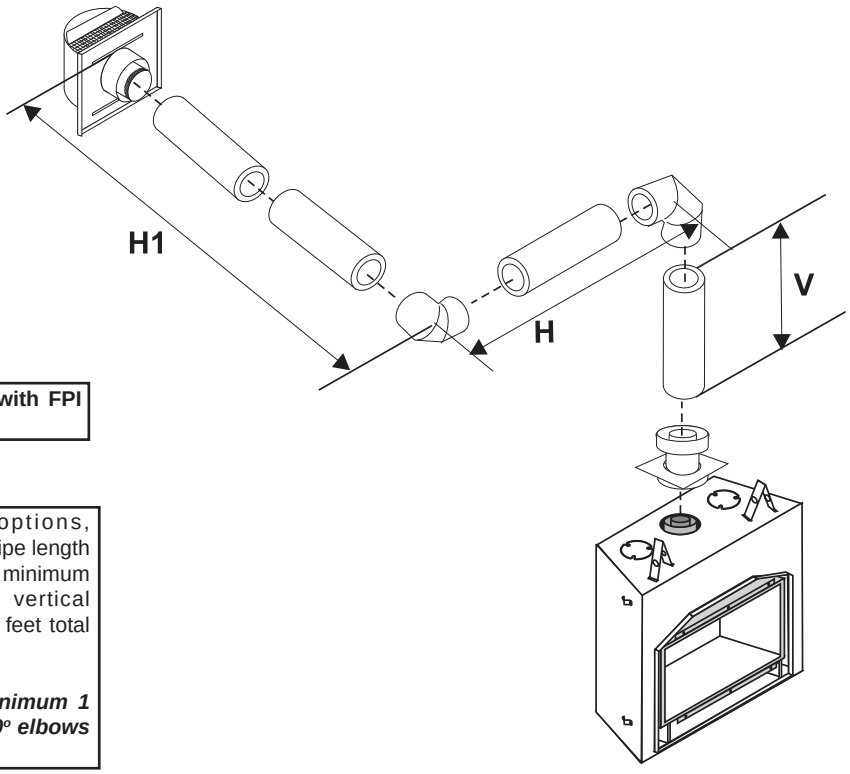
The shaded area in the diagram show all allowable combinations of straight vertical and offset to vertical terminations with **rigid pipe** vent systems for Propane and Natural Gas. Maximum two 45° elbows allowed.

- **Vent must be supported at offsets**
- **Firestops are required at each floor level and whenever passing through a wall.**
- **Maintain clearances to combustibles as listed in the "Clearances" section.**



*Please note that all vertical measurements are taken from the base of the unit **excluding** risers or bottom stand-offs.*

Horizontal Venting with Two (2) 90º Elbows



Must Use: 5" x 8" Simpson Direct Vent Piping with FPI Increaser Starter Collar (Part #946-605).

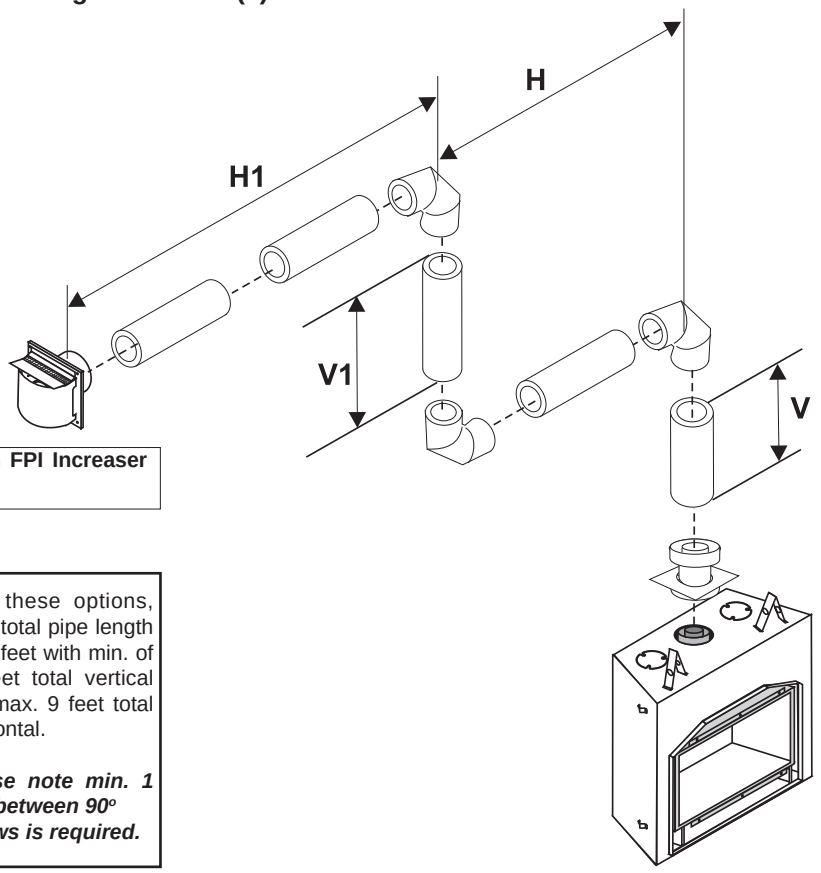
One 90º elbow = Two 45º elbows.

Option	V	H + H1
A)	6" Min.	2' Max.
B)	1' Min.	3' Max.
C)	2' Min.	4' Max.
D)	3' Min.	5' Max.
E)	4' Min.	6' Max.
F)	5' Min.	7' Max.
G)	6' Min.	8' Max.

With these options, maximum total pipe length is 30 feet with minimum of 6 feet total vertical and maximum 8 feet total horizontal.

Please note minimum 1 foot between 90º elbows is required.

Horizontal Venting with Three (3) 90º Elbows



Must Use: 5" x 8" Simpson Direct Vent Piping with FPI Increaser Starter Collar (Part #946-605).

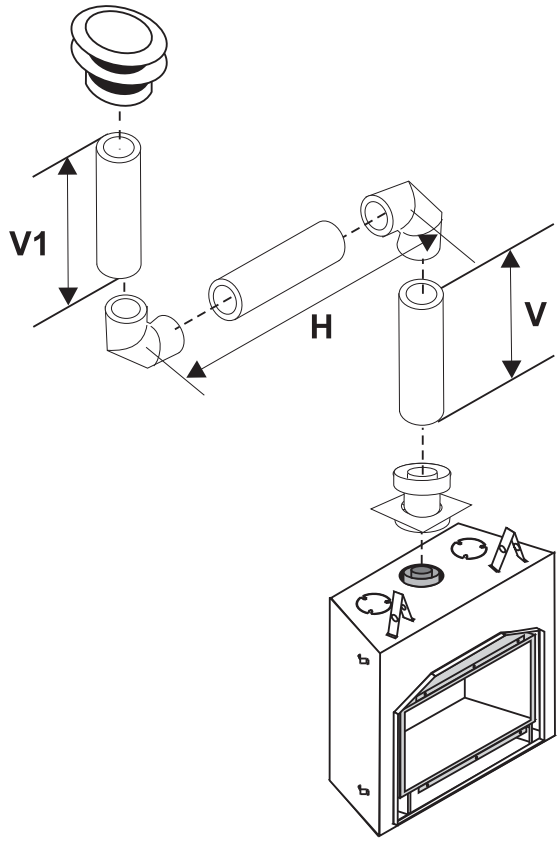
One 90º elbow = Two 45º elbows.

Option	V	H	V + V1	H + H1
A)	6" Min.	1' Max.	1'6" Min.	2' Max.
B)	1' Min.	2' Max.	3' Min.	3' Max.
C)	2' Min.	2' Max.	5' Min.	4' Max.
D)	3' Min.	2' Max.	7' Min.	5' Max.
E)	4' Min.	3 Max.	9' Min.	6' Max.
F)	5' Min.	4' Max.	10' Min.	7' Max.
G)	6' Min.	5' Max.	11' Min.	8' Max.
H)	7' Min.	6' Max.	12' Min.	9' Max.

With these options, max. total pipe length is 30 feet with min. of 12 feet total vertical and max. 9 feet total horizontal.

Please note min. 1 foot between 90º elbows is required.

Vertical Venting with Two (2) 90º Elbows



Must Use: 5" x 8" Simpson Direct Vent Piping with FPI Increaser Starter Collar (Part #946-605), unless V1 is greater than or equal to 4'-6" then use 4" x 6-5/8" piping.

One 90º elbow = Two 45º elbows.

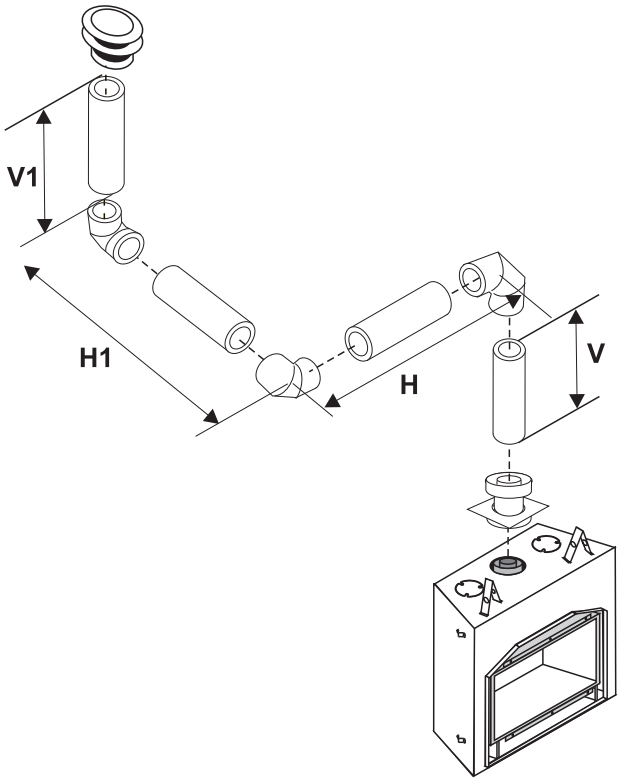
Option	V	H	V + V1
A)	0' Min.	2' Max.	1' Min.
B)	1' Min.	4' Max.	2' Min.
C)	2' Min.	5' Max.	3' Min.
D)	3' Min.	6' Max.	4' Min.
E)	4' Min.	7' Max.	5' Min.
F)	5' Min.	8' Max.	6' Min.

With these options, max. total pipe length is 30 feet with min. of 6 feet total vertical and max. 8 feet total horizontal.

Please note min. 1 foot between 90º elbows is required.

For additional vertical venting with 2 x 90º elbows, refer to the "Rigid Pipe Venting Arrangements - Horizontal Termination" section.

Vertical Venting with Three (3) 90º Elbows



Must Use: 5" x 8" Simpson Direct Vent Piping with FPI Increaser Starter Collar (Part #946-605).

One 90º elbow = Two 45º elbows.

Option	V	H + H1	V + V1
A)	6" Min.	2' Max.	3' Min.
B)	1' Min.	2' Max.	3' Min.
C)	2' Min.	3' Max.	4' Min.
D)	3' Min.	4' Max.	6' Min.
E)	4' Min.	5' Max.	7' Min.
F)	5' Min.	6' Max.	8' Min.
G)	6' Min.	7' Max.	9' Min.
H)	7' Min.	8' Max.	10' Min.

With these options, max. total pipe length is 30 feet with min. of 10 feet total vertical and max. 8 feet total horizontal.

Please note min. 1 foot between 90º elbows is required.

HORIZONTAL TERMINATIONS

Install the vent system according to the manufacturer's instructions included with the components.

1) Set the unit in its desired location. Check to determine if wall studs or roof rafters are in the way when the venting system is attached. If this is the case, you may want to adjust the location of the unit. Rough in the gas preferably on the right side of the unit and the electrical (junction block is on the left side) on the left.

2) Direct Vent pipe and fittings are designed with special twist-lock connections to connect the venting system to the appliance flue outlet. A twist-lock appliance adaptor is an available option that must be used in conjunction with the Simpson Dura-Vent Direct Vent system.

3) Put a bead of silicone inside the outer section of the adapter and a bead of Mill Pac on the inner collar. Slip the adapter over the existing inner and outer flue collar and fasten to the outer collar only with the 3 supplied screws (drilling pilot holes will make this easier). Level the fireplace and fasten it to the framing using nails or screws through the nailing strips.

4) Assemble the desired combination of pipe and elbows to the appliance adaptor and twist-lock for a solid connection.

Note:

a) Twist-lock procedure: Four indentations, located on the female ends of pipes and fittings, are designed to slide straight onto the male ends of adjacent pipes and fittings, by orienting the four pipe indentations so they match and slide in to the four entry slots on the male ends, Diagram 1. Push the pipe sections completely together, then twist-lock one section clockwise approximately one-quarter turn, until the two sections are fully locked. The female locking lugs will not be visible from the outside, on the Black Pipe or fittings. They may be located by examining the inside of the female ends.

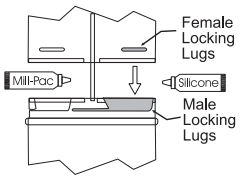


Diagram 1

NOTE: For best results and optimum performance with each approved venting system, it is highly recommended to apply "Mill-Pac" sealant (supplied) to every inner pipe connection. Failure to do so may result in drafting or performance issues not covered under warranty. Silicone (red RTV) is optional.

b) Horizontal runs of vent must be supported every three feet. Wall straps are available for this purpose.

5) Mark the wall for a 10" x 10" square hole. The center of the square hole should line up with the centerline of the horizontal pipe. Cut and frame the 10 inch square hole in the exterior wall where the vent will be terminated. If the wall being penetrated is constructed of non-combustible material, i.e. masonry block or concrete, a 7"(178mm) dia. (7-1/2"(191mm) dia. for flex) hole is acceptable.

Note: With Dura-Vent, the minimum height is achieved by installing a 90° elbow directly to

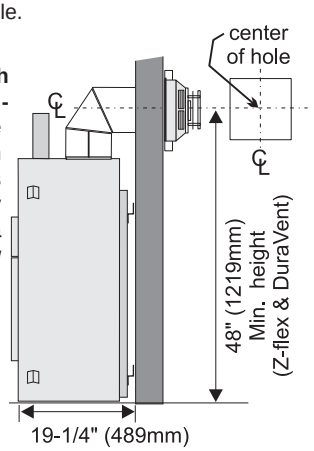


Diagram 2

Note:

a) The horizontal run of vent must be level, or have a 1/4 inch rise for every 1 foot of run towards the termination. Never allow the vent to run downward. This could cause high temperatures and may present the possibility of a fire.

b) The location of the horizontal vent termination on an exterior wall must meet all local and national building codes, and must not be blocked or obstructed. For External Vent Terminal Locations, see diagram in the "Exterior Vent Termination Locations" section.

c) Snorkel Terminations:
For installations requiring a vertical rise on the exterior of the building, 14-inch and 36-inch tall Snorkel Terminations are available, as well as the standard Riser Vent. Follow the same installation procedures as used for standard Horizontal Termination. NEVER install the snorkel upside down.

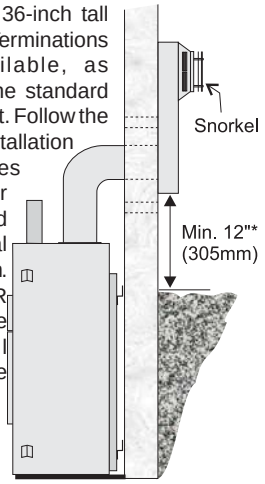
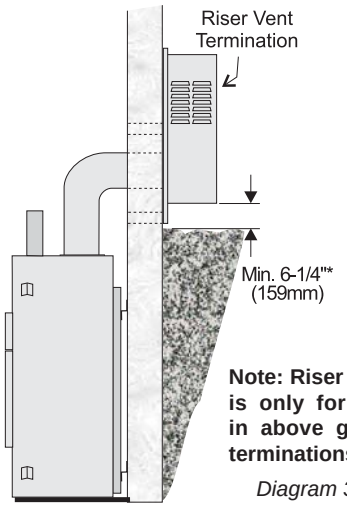


Diagram 3



Note: Riser Vent is only for use in above grade terminations.

Diagram 3a

***Dia 3, 3a & 4: As specified in CGA B149 Installation Code. Local codes or regulations may require different clearances.**

Below Grade Installation

If the Snorkel Termination must be installed below grade, i.e. basement application, proper drainage must be provided to prevent water from entering the Snorkel Termination. Refer to Diagram 4. Do not attempt to enclose the Snorkel within the wall, or any other type of enclosure.

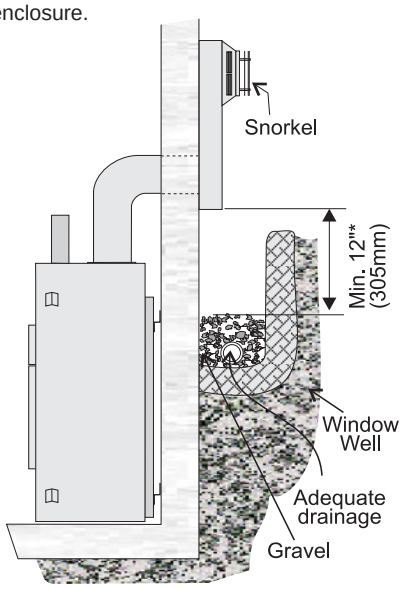


Diagram 4

NOTE: For Snorkel terminations in ABOVE grade installations, follow national or local code requirements.

6) The arrow on the vent cap should be pointing up. Insure that the 1-1/2" clearances to combustible materials are maintained (Diagram 4). Install the termination cap.

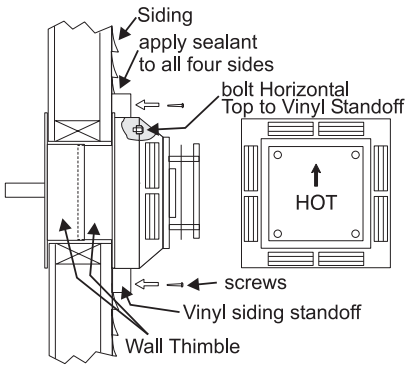


Diagram 5

The four wood screws provided should be replaced with appropriate fasteners for stucco, brick, concrete, or other types of sidings.

Note: If installing termination on a siding covered wall, a vinyl siding standoff or furring strips must be used to ensure that the termination is not recessed into the siding.

7) Before connecting the horizontal run of vent pipe to the vent termination, slide the Wall Thimble (Part # 620-926) over the vent pipe.

8) Slide the appliance and vent assembly towards the wall carefully inserting the vent pipe into the vent cap assembly. It is important that the vent pipe extends into the vent cap sufficient distance so as to result in a minimum pipe overlap of 1-1/4 inches. Secure the connection between the vent pipe and the vent cap by attaching the two sheet metal strips extending from the vent cap assembly into the outer wall of the vent pipe. Use the two sheet metal screws provided to connect the strips to the pipe section. See Diagram 6.

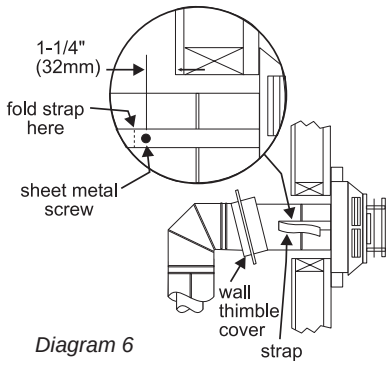


Diagram 6

9) Install wall thimble in the center of the 10" square and attach with wood screws (Diagram 7).

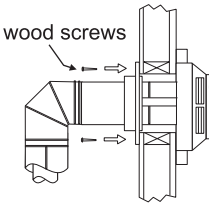


Diagram 7

VERTICAL TERMINATIONS

1) Maintain the 1-1/2" clearances (air spaces) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafter, or other nearby combustible surfaces. Do not pack air spaces with insulation. Check the "Rigid Pipe Venting Systems" & "Rigid Pipe Venting Arrangements" sections for the maximum vertical rise of the venting system and the maximum horizontal offset limitations.

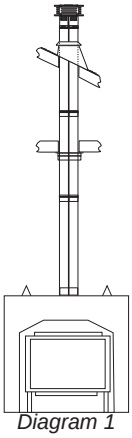


Diagram 1

2) Set the gas appliance in its desired location. Drop a plumb bob down from the ceiling to the position of the appliance flue exit, and mark the location where the vent will penetrate the ceiling. Drill a small hole at his point. Next, drop a plumb bob from the roof to the hole previously drilled in the ceiling, and mark the spot where the vent will penetrate the roof. Determine if ceiling joists, roof rafters or other framing will obstruct the venting system. You may wish to relocate the appliance or to offset, as shown in Diagram 2 to avoid cutting load bearing members.

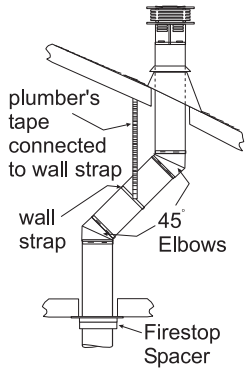
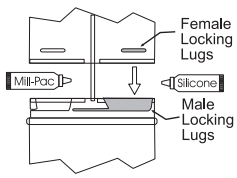


Diagram 2



NOTE: For best results and optimum performance with each approved venting system, it is highly recommended to apply "Mill-Pac" sealant (supplied) to every inner pipe connection. Failure to do so may result in drafting or performance issues not covered under warranty. Silicone (red RTV) is optional.

3) A Firestop spacer must be installed in the floor or ceiling of every level. To install the Firestop spacer in a flat ceiling or wall, cut a 10 inch square hole. Frame the hole as shown in Diagram 3 and install the firestop.

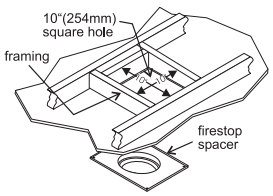


Diagram 3

4) Assemble the desired lengths of pipe and elbows. Ensure that all pipes and elbow connections are in the fully twist-locked position and sealed.

5) Cut a hole in the roof centered on the small drilled hole placed in the roof in Step 2. The hole should be of sufficient size to meet the minimum requirements for clearance to combustibles of 1-1/2". Slip the flashing under the shingles (shingles should overlap half the flashing) as per Diagram 4.

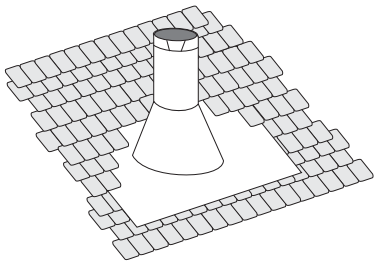


Diagram 4: The upper half of the flashing is installed under the roofing material and not nailed down until the chimney is installed. This allows for small adjustments.

6) Continue to assemble pipe lengths.

Note: If an offset is necessary in the attic to avoid obstructions, it is important to support the vent pipe every 3 feet, to avoid excessive stress on the elbows, and possible separation. Wall straps are available for this purpose (Diagram 2).

Galvanized pipe is desirable above the roofline due to its higher corrosion resistance. Continue to add pipe sections through the flashing until the height of the vent cap meets the minimum height requirements specified in Diagram 5 or local codes. Note that for steep roof pitches,

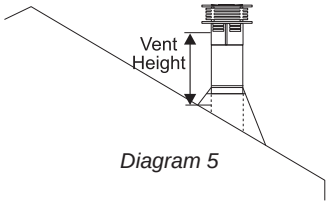


Diagram 5

Roof Pitch	Minimum Vent Height	
	Feet	Meters
flat to 7/12	2	0.61
over 7/12 to 8/12	2	0.61
over 8/12 to 9/12	2	0.61
over 9/12 to 10/12	2.5	0.76
over 10/12 to 11/12	3.25	0.99
over 11/12 to 12/12	4	1.22
over 12/12 to 14/12	5	1.52
over 14/12 to 16/12	6	1.83
over 16/12 to 18/12	7	2.13
over 18/12 to 20/12	7.5	2.29
over 20/12 to 21/12	8	2.44

the vertical height must be increased. A poor draft, or down drafting can result from high wind conditions near big trees or adjoining roof lines, in these cases, increasing the vent height may solve the problem.

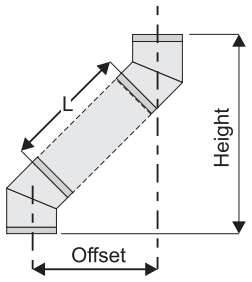
7) Ensure vent is vertical and secure the base of the flashing to the roof with roofing rails, slide storm collar over the pipe section and seal with a mastic.

8) Install the vertical termination cap by twist-locking it.

Note: Any closets or storage spaces, which the vent passes through must be enclosed.

Offset Chart

GS 6"(152mm) Nominal Diameter ID					
Offset		Pipe Length (L)		Height	
inches	mm	inches	mm	inches	mm
4 ¾	121	0	0	13 1/4	337
9	229	6	152	17 1/2	445
11 1/4	286	9	229	19 1/2	495
13 1/4	337	12	305	21 3/4	552
21 3/4	552	24	610	30 1/4	768
30 1/4	768	36	914	39	991
38	965	48	1219	47	1194

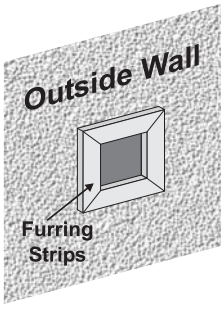


INSTALLATION PROCEDURES
for FPI Direct Vent System (Flex)

1) Locate the unit in the framing, rough in the gas (preferably on the right side of the unit) and the electrical (Junction block is on the left side) on the left. Locate the centerline of the termination and mark wall accordingly. Cut a 10"(254mm) hole in the wall (inside dimension).

Note: A 1-1/2"(38mm) clearance around the liner must be maintained except that only a 1" (25mm) clearance is needed at the termination end. We recommend framing a 10"(254mm) x 10"(254mm) (inside dimensions) hole to give structural rigidity for mounting the termination.

Note: To make the installation more aesthetically pleasing, we recommend framing out a square to mount the terminal to.



Note: If installing termination on a <u>siding covered wall, furring strips must be used</u> to ensure that the termination is not recessed into the siding.

2) Level the fireplace and fasten it to the framing using nails or screws through the nailing strips.

3) Assemble the vent assembly by applying Mill Pac to the 4"(100mm) inner collar of the termination and slipping the 4"(100mm) liner over it at least 1-3/8" (35mm). Fasten with the 3 screws (drilling pilot holes will make this easier). Apply Mill Pac or high temperature silicone to the 6-7/8"(175mm) flex pipe and slip it over the 6-7/8" outer collar of the vent terminal at least 1-3/8"(35mm) and fasten with the 3 screws.

NOTE: Horizontal sections must be supported at intervals not exceeding 3 feet (0.9 meter). (Flame picture and performance will be affected by sags in the liner).

4) Separate the 2 halves of the wall thimble and securely fasten the one with the tabs to the outside wall making sure that the tabs are on top and bottom. Fasten the other thimble half to the inside wall. The thimble halves slip inside each other and can be adjusted for 2 x 4 or 2 x 6 walls. ***The liners must slip over the collars a minimum of 1-3/8".***

5) Slip the assembled liner and termination assembly through the thimble making sure the termination cap faces up (there are markings on the cap that show which way is up). This will position the termination cap with proper down slope for draining water. Fasten the cap to the outer wall with the 4 supplied screws.

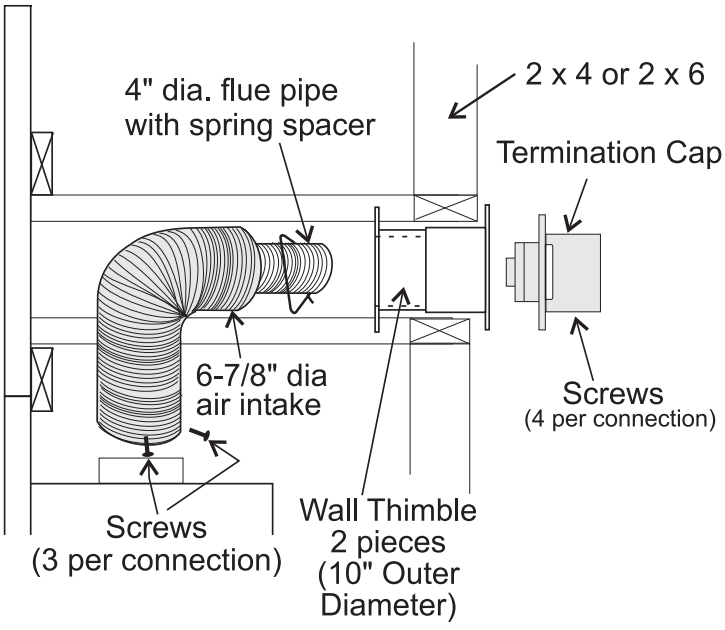
6) Pull the centre 4"(100mm) liner and outer 6-7/8"(175mm) liner out enough to slip over the flue collars of the fireplace. (You may wish to cut the liner shorter to make it more workable.) Do not bend liner more than 90°.

7) Apply Mill Pac over the fireplace inner collar and slip the 4"(100mm) liner down over it and attach with 3 supplied screws.

8) Do the same with the 6-7/8"(175mm) liner.

9) Apply a bead of silicone between the thimble and termination and around the outer edge of the terminal at the wall in order to keep the water out.

IMPORTANT: *Do not locate termination hood where excessive snow or ice buildup 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.*



P90-NG1 System Data	
For 0 to 4500 feet altitude	
Burner Inlet Orifice Sizes:	#34
Max. Input Rating	35,000 Btu/h
Min. Input Rating	18,200 Btu/h
Supply Pressure	min.5.0" w.c.
Manifold Pressure (High)	3.8"+/- 0.2"w.c.

P90-LP1 System Data	
For 0 to 2000 feet altitude	
Burner Inlet Orifice Sizes:	#51
Max. Input Rating	35,000 Btu/h
Min. Input Rating	17,950 Btu/h
High Altitude: For 2000 to 4500 feet altitude	
Burner Inlet Orifice Sizes:	#52
Max. Input Rating	31,000 Btu/h
Min. Input Rating	15,500 Btu/h
Supply Pressure	min.12.0" w.c.
Manifold Pressure (High)	11"+/- 0.2" w.c.

Electrical: 120 V A.C. System.
Circulation Fan: variable speed 130 CFM.
Log Set: Ceramic fibre, 7 per set.

HIGH ELEVATION

This unit is approved in Canada for altitude 0 to 4500 ft. (CAN1 2.17-M91).

GAS LINE INSTALLATION

The gas line is brought through the right side of the appliance. The gas valve is situated on the right hand side of the unit and the gas inlet is on the right hand side of the valve.

The gas line connection may be made of rigid pipe, copper pipe or an approved flex connector. (If you are using rigid pipe, ensure that the valve can be removed for servicing.) Since some municipalities have additional local codes it is always best to consult with your local authorities and the CAN/CGA B149 installation code.

For USA installations follow local codes and/ or the current National Fuel Gas Code, ANSI Z223.1.

When using copper or flex connectors use only approved fittings. Always provide a union so that gas lines can be easily disconnected for servicing. Flare nuts for copper lines and flex connectors are usually considered to meet this requirement.

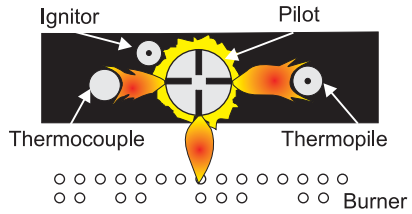
Important: Always check for gas leaks with a soap and water solution or gas leak detector. Do not use open flame for leak testing.

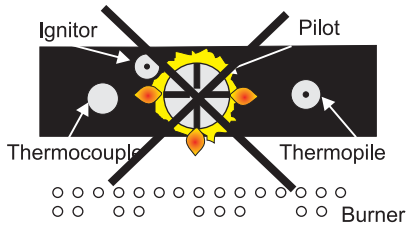
PILOT ADJUSTMENT

Periodically check the pilot flames. Correct flame pattern has three strong blue flames: 1 flowing around the thermopile, 1 around the thermocouple and 1 flowing across the burner (it does not have to be touching the burner).

Note: If you have an incorrect flame pattern, contact your Excalibur® dealer for further instructions.

Incorrect flame pattern will have small, probably yellow flames, not coming into proper contact with the rear burner or thermopile or thermocouple.





GAS PIPE PRESSURE TESTING

The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig. (3.45 kPa). Disconnect piping from valve at pressures over 1/2 psig.

The manifold pressure is controlled by a regulator built into the gas control, and should be checked at the pressure test point.

Note: To properly check gas pressure, both inlet and manifold pressures should be checked using the valve pressure ports on the valve.

1) Make sure the valve is in the "OFF" position.

2) Loosen the "IN" and/or "OUT" pressure tap(s), turning counterclockwise with a 1/8" wide flat screwdriver.

3) Attach manometer to "IN" and/or "OUT" pressure tap(s) using a 5/16" ID hose.

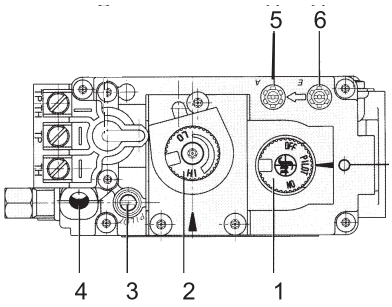
4) Light the pilot and turn the valve to "ON" position.

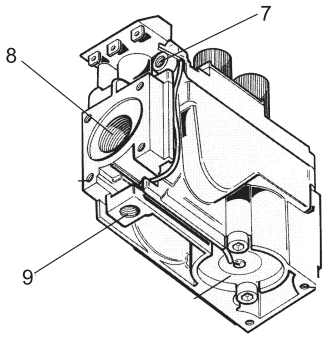
5) The pressure check should be carried out with the unit burning and the setting should be within the limits specified on the safety label.

6) When finished reading manometer, turn off the gas valve, disconnect the hose and tighten the screw (clockwise) with a 1/8" flat screwdriver. ***Note: Screw should be snug, but do not over tighten.***

S.I.T. VALVE DESCRIPTION

1) Gas on/off knob
2) Manual high/low adjustment
3) Pilot Adjustment
4) Thermocouple Connection - *option*
5) Outlet Pressure Tap
6) Inlet Pressure Tap
7) Pilot Outlet
8) Main Gas Outlet
9) Alternative TC Connection





CONVERSION KIT #791-969 FROM NG TO LP

THIS CONVERSION MUST BE DONE BY A QUALIFIED GAS FITTER IF IN DOUBT DO NOT DO THIS CONVERSION !!

Each Kit contains one LPG Conversion Kit and one DC Sparker Kit.

LPG Conversion Kit Contains:

Qty.	Part #	Description
1	904-529	5/32" Allen Key
1	904-645	Burner Orifice #51
1	918-590	Label "Converted to LPG"
1	908-528	Red "LPG" label
1	910-037	LP Injector (Pilot Orifice)
1	918-487	Instruction Sheet

DC Sparker Kit Contains:

Qty.	Part #	Description
1	820-475	Bracket DC Sparker
1	820-476	Bracket DC Sparker
1	904-153	Washer #8 External Star
1	904-330	Nut 8-32 Hex
1	904-438	Plug Nylon 0.750 Hole, Black (for H35 only)
1	904-531	Bushing Split Plastic 0.500 in.
1	904-543	Screw 8-32 x 3/4 Pan Head
2	904-553	Screw #8 x 1/2 Type "B", Black Oxide
1	910-073	Spark Generator Battery Holder
1	910-074	Spark Generator Switch C/W Wire
1	910-078	Battery Size AA Energizer En91
2	910-199	Clip Wire Holder
1	910-903	Wire Fan To Power Cord Ground 30 in.
	904-781	Velcro Hook, Black
	904-782	Velcro Hook, Black

Installation of LPG Conversion Kit:

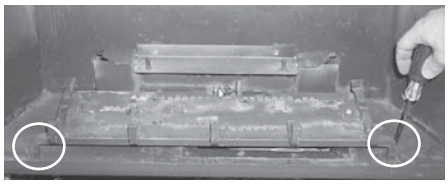
1) **Shut off the gas supply.**

2) **H35-1:** Lift off the Cast Top and remove the glass front. Also, open up the control panel door.

P90-1: Remove the facade if it is installed. Remove the glass door (refer to the glass door section in the manual).

3) Remove the logs, embers, and brick panels (if used).

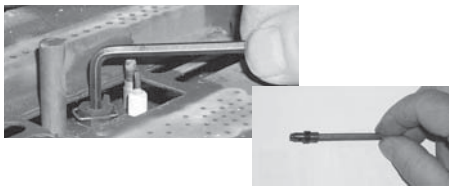
4) Remove the 2 screws holding the Burner Assembly to the firebox base. Push the Burner Assembly to the left and lift out.



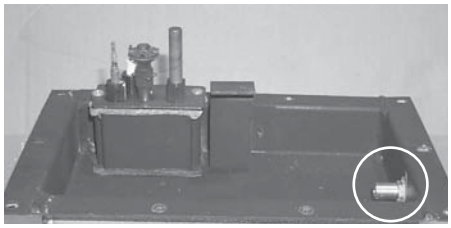
Remove the 2 screws, push Burner Assembly to the left and lift out.

5) Pull off the pilot cap to expose the pilot orifice.

6) Unscrew the pilot orifice with the allen key and replace with the LP pilot orifice in the kit and replace pilot cap.



7) Remove burner orifice with a 1/2" wrench and discard. Use another wrench to hold on to the elbow behind the orifice.



Burner Orifice

8) Reinstall new burner orifice LP stamped #51 and tighten.

9) Turn control knob to the “OFF” position.

10) Remove the black protection cap by hand from the high-low knob (Fig.1).

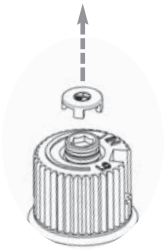


Fig. 1

11) Insert a 5/32” or 4mm Allen wrench into the hexagonal key-way of the screw (Fig. 2), rotate it counter-clockwise until it is free and extract it.

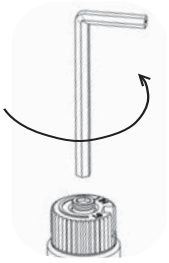


Fig. 2

12) Check that the screw is clean and if necessary remove dirt.

13) Flip the screw (Fig. 3).

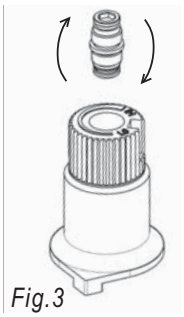


Fig. 3

14) Using the Allen wrench as shown in Fig.4, rotate the screw clockwise until snug, do not overtighten.

Fig.4

WARNING!
Do not overtighten the screw. Recommended to grip the wrench by the short side.

15) Verify that if the conversion is from NG to LPG, the screw must be reassembled with the red o-ring visible (Fig. 5).

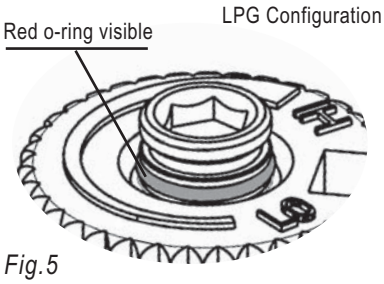


Fig.5

16) Reassemble the black protection cap (Fig. 6).

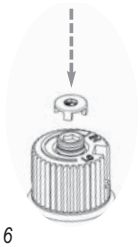


Fig.6

WARNING!
Also check that the pilot and main burner injectors are appropriate for the gas type.

17) Reverse steps 4) to 2).

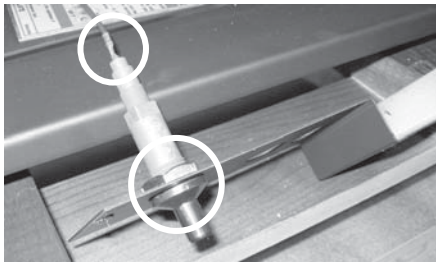
18) Attach clear label "This unit has been converted to LPG" near or on top of the serial # decal.

19) Replace yellow "Natural Gas" label with red "LPG" label.

Installation of the DC Sparker for the H35-1 Units Only:

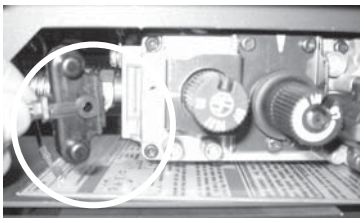
1) Remove the control panel by unscrewing the 2 screws.

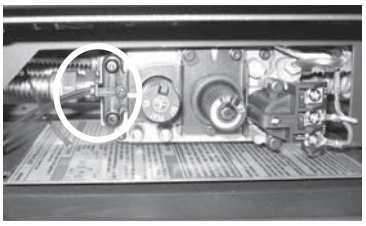
2) First, remove the Piezo Ignition Wire from the Piezo Ignitor. Then remove the Piezo Ignitor from the control panel.



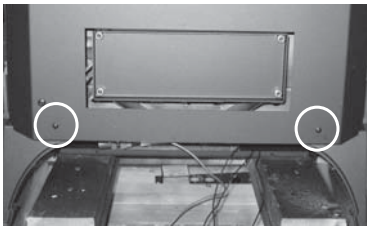
3) Plug up the Piezo hole with the plastic bushing.

4) Attach the DC sparker generator connector to the valve with a screw.

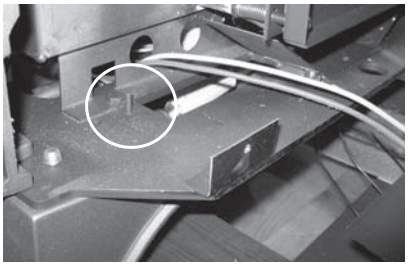




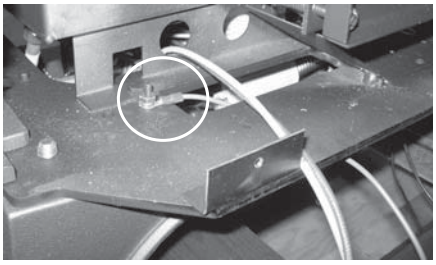
5) Remove the stove's rear panel by unscrewing the two screws.



6) Attach the ground wire to the grounding stud.

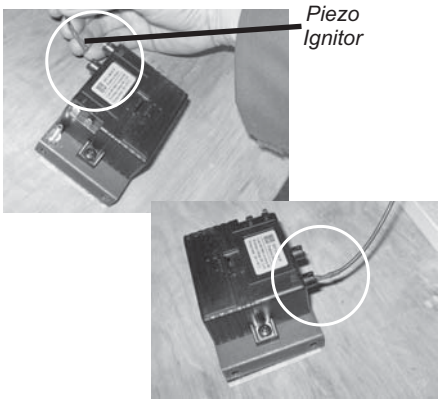


Before

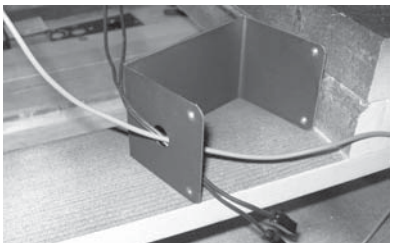


After

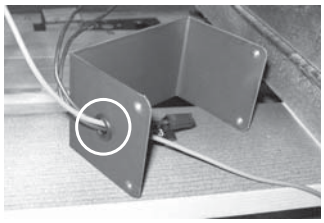
7) Attach the Piezo ignition wire to the DC Sparker.



8) Insert both the ground wire and the DC sparker generator wire through the hole of the DC spark heat shield.

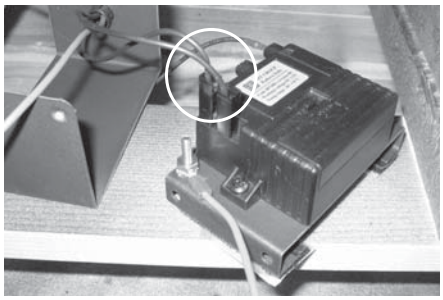


9) Install the plastic bushing over the outside of the hole.



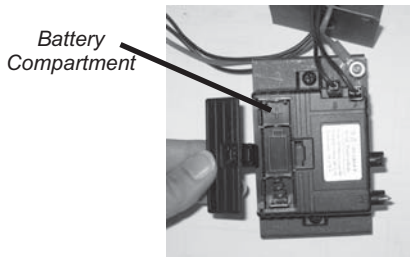
10) Attach the ground wire to the DC spark mounting bracket.

11) Attach the DC sparker generator wires to the DC sparker.



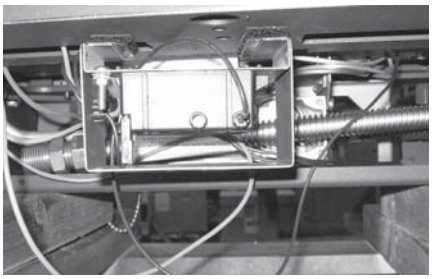
12) Install the supplied battery into the DC Sparker Box by opening the battery compartment.

NOTE: The battery in the DC Sparker Box will need to be replaced annually.

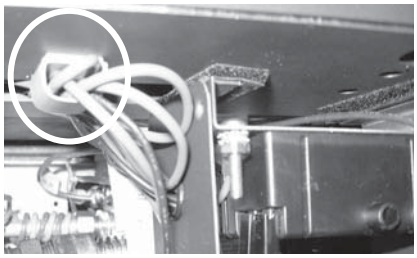


13) Attach the heat shield to the DC sparker, then mount this onto the stove.

Note: We recommend attaching the DC sparker box to the bottom rear of the stove (or place this in a convenient location, away from the heat source).

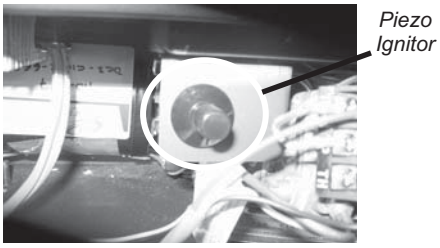


14) Tie up the loose wire with the wire clip.

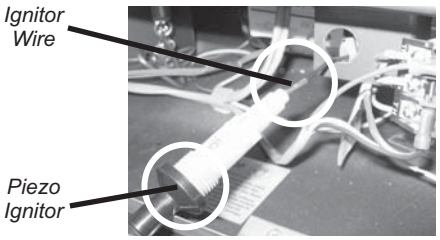


Installation of the DC Sparker for the P90 Units Only:

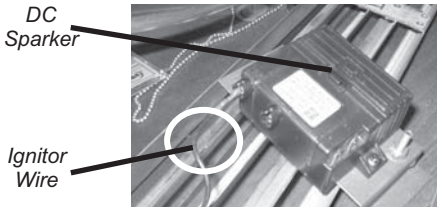
1) Locate the Piezo Ignitor situated at the side of valve.



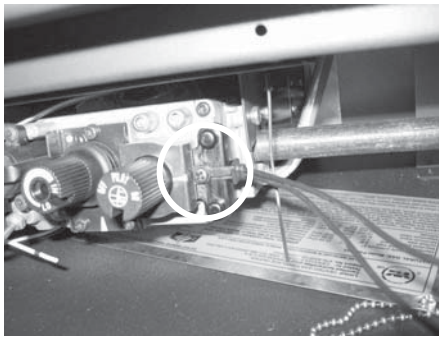
2) Remove the Piezo Ignitor by unscrewing the nut at the back of the mounting bracket.



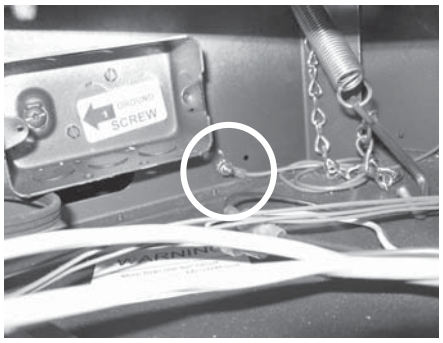
3) Disconnect the ignitor wire from the Piezo Ignitor and connect it to the DC Sparker.



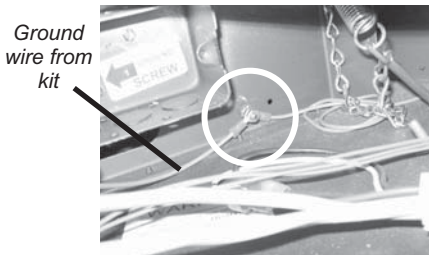
4) Connect the DC spark generator wires to the SIT Valve with the screw, which is provided in the kit.



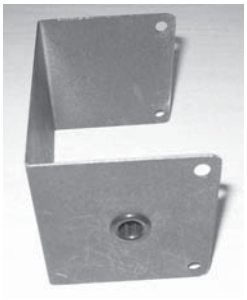
5) Locate the ground lug at the receptical box, left of the unit.



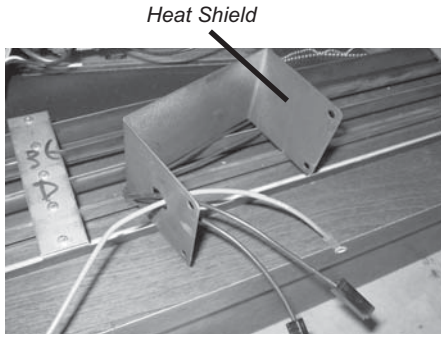
6) Connect one end of the supplied green ground wire to the lug with the nut and washer from the kit.



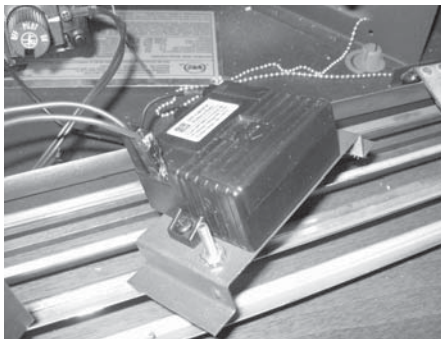
7) Install the 1/2" bushing to the heat shield.



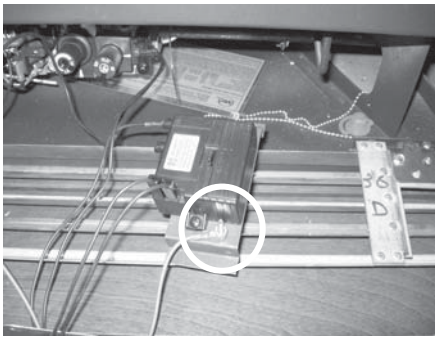
8) Run the other end of the ground wire and DC spark generator wires through the bushing on the heat shield.



9) Plug the DC spark generator wires to the DC Sparker.

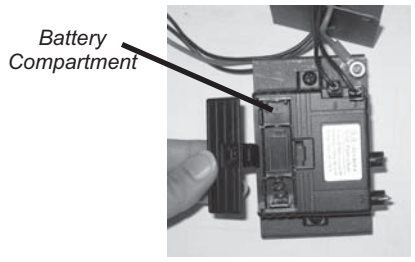


10) Connect the ground wire to the DC Sparker mounting bracket.

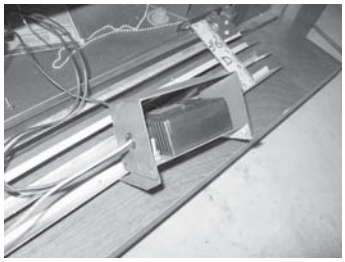


11) Install the supplied battery into the DC Sparker Box by opening the battery compartment.

NOTE: The battery in the DC Sparker Box will need to be replaced annually.

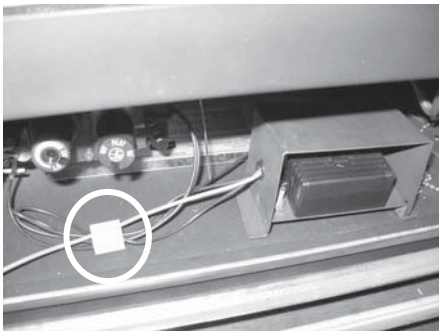


12) Mount the heat shield to the DC Sparker. Secure into place with the velcro, which is provided in the kit.



13) Find a location which is not too hot and is easy to reach for changing the battery.

14) Tie up the loose wire with the wire clip.



15) Check for gas leaks.

16) Check inlet and outlet pressures.

17) Check operation of flame control.

18) Check for proper flame appearance and glow on logs.

Installer Notice:
These instructions must be left with the appliance.

OPTIONAL BRICK PANELS

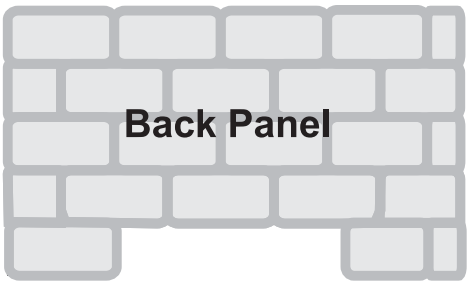
1) Open the bottom louver door. Loosen the 2 screws holding the Burner ON/OFF switch and bracket to the bottom louver and lift the assembly out.

2) Remove Arch Surround.

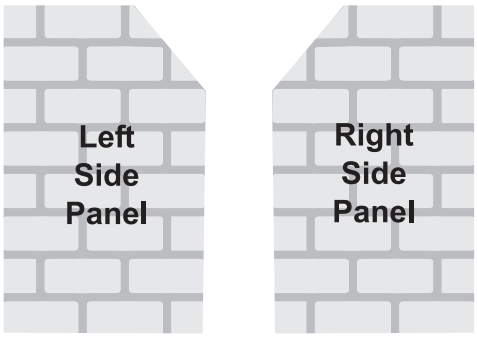
3) Remove glass door. Remove logs.

Note: The logs must not be in the unit.

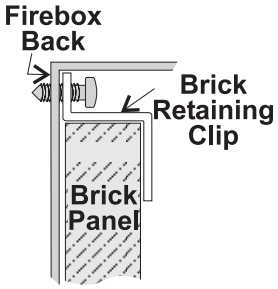
4) Insert the back brick panel first by carefully slipping it between the back wall of the firebox and the rear log bracket.

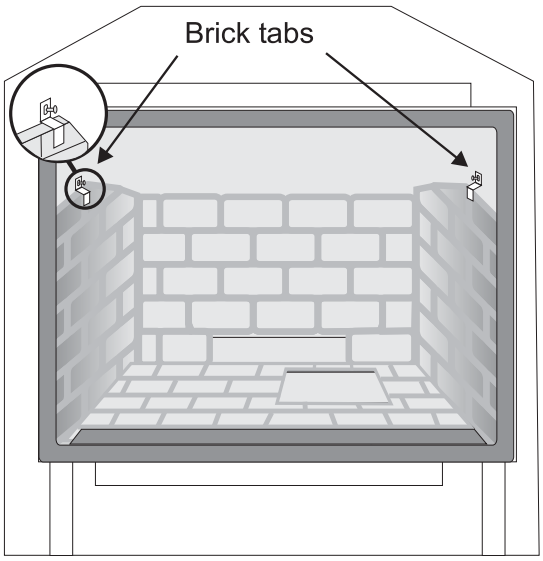


5) Put the side panels in next. Slide them in from the front and push them flat up against the wall. Be very careful not to scratch them on the firebox hardware.



6) Install the 2 brick retaining clips, one on each side.





Note:
If the bottom brick panel must be removed: Remove the Rear Log Stand, then remove the Burner Tray. See the "Removing Valve" section.

LOG SET INSTALLATION

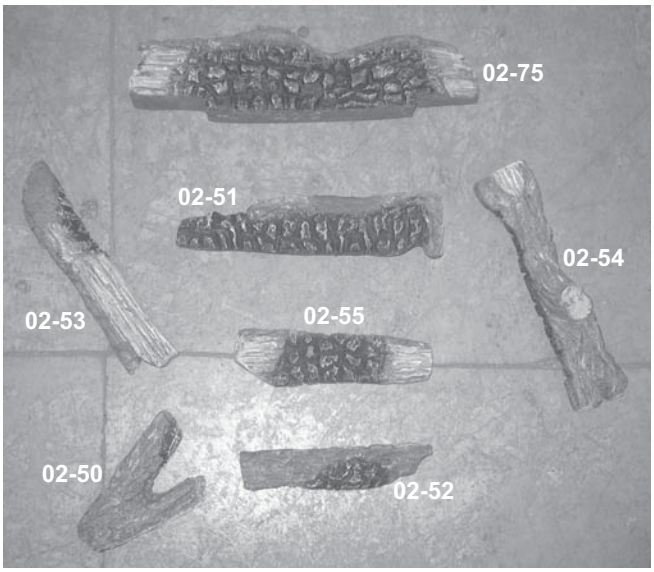
Read the instructions below carefully and refer to the diagrams. If logs are broken do not use the unit until they are replaced. Broken logs can interfere with the pilot operation.

The gas log kit (Part #780-930) contains the following pieces:

a) 02-75 Rear Log
b) 02-55 Middle Left Log
c) 02-50 Front Left Log
d) 02-53 Center Left Log
e) 02-51 Front Bottom Log
f) 02-54 Center Right Log
g) 02-52 Middle Right Log
h) 902-156 Embers
i) 902-179 Vermiculite
j) 946-669 Platinum Embers (supplied with packaged manual)

NOTE: If you will be installing the optional Brick Panels (P36D & P90 only), install the Brick Panels prior to installing the logs.

Model shown has P36D and P90 burner/grate with brick panel option.



The "02" reference numbers (i.e. 02-75) are molded into the rear of each log.

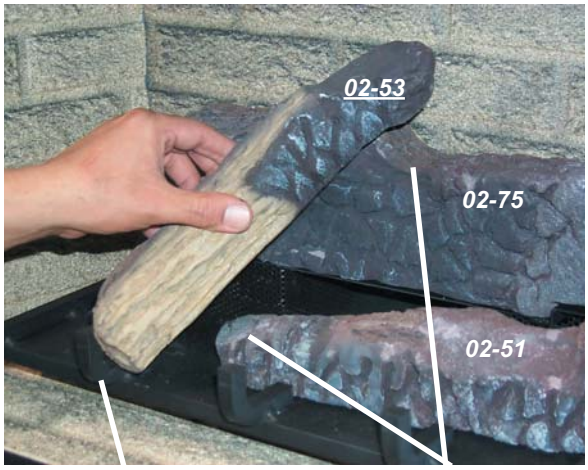
1) Carefully remove the logs from the box and unwrap them. The logs are fragile, handle with care - **do not force into position.**

2) Sprinkle the vermiculite over base brick panel.

3) Place the Log 02-75 on the rear log support pins with the flat side to the back.

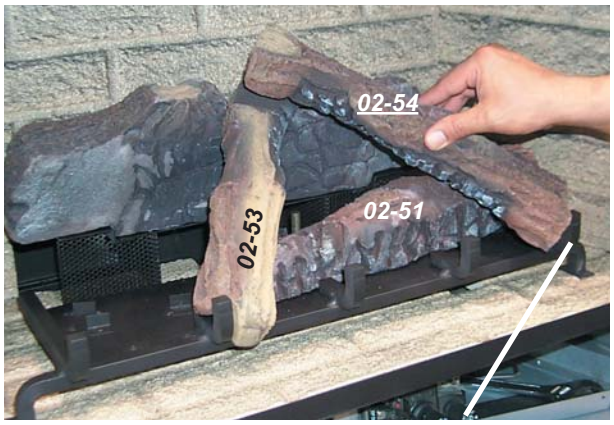
4) Place Log 02-51 on the front right side of the burner. Push the back of the log against the 2 brackets with the notch on the bottom right side of the log fitting into the right side of the grate.

5) Position Log 02-53 across the cutouts in Logs 02-75 and 02-51 with the notch on the left side of the log fitting into the 2nd grate tab.



2nd Grate Tab *Cutouts*

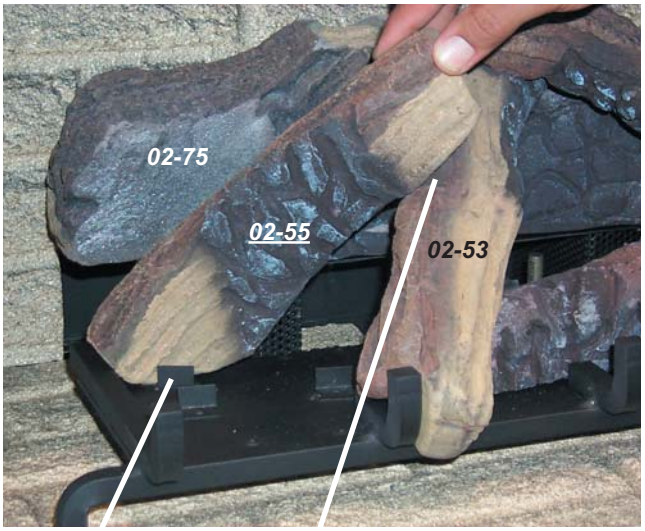
6) Position Log 02-54 across the cutouts in Logs 02-51 and 02-53. The notch in the bottom right end fitting against the 5th grate tab.



5th Grate Tab

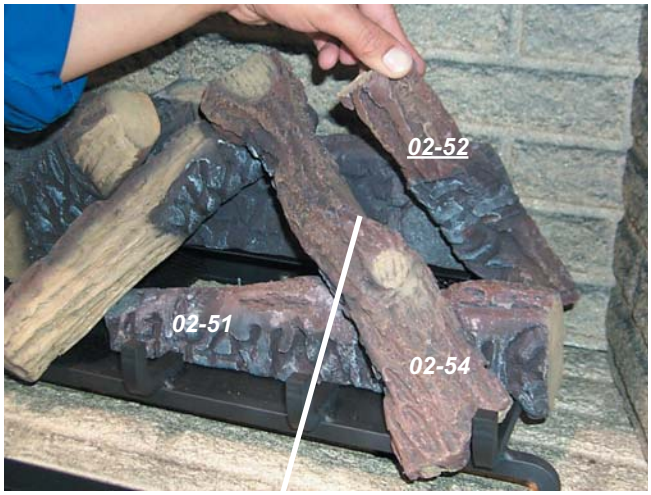
5th Grate Tab

7) Place the bottom left front edge of Log 02-55 against the rear bracket on the burner tray and rest the log on the cutout on Log 02-53.

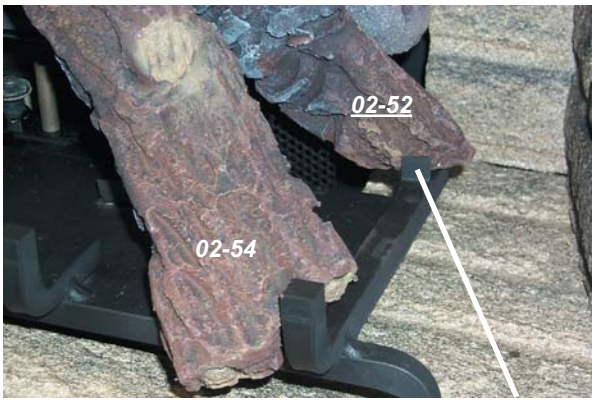


Rear Bracket *Cutouts*

8) Place Log 02-52 between Logs 02-51 and 02-75 and on the indentation on Log 02-54. The bottom right end sits behind the rear grate tab.



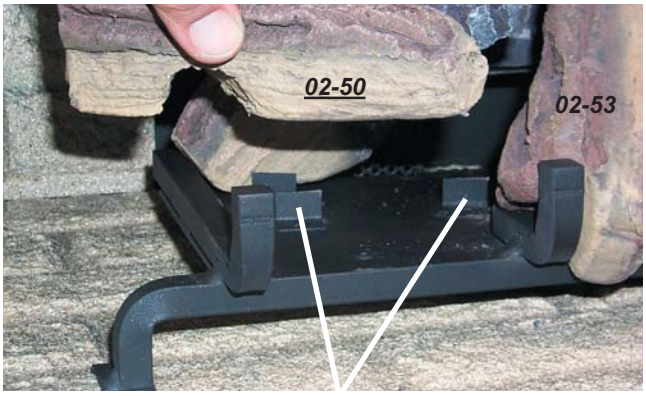
Log Indentation



Rear Grate Tab

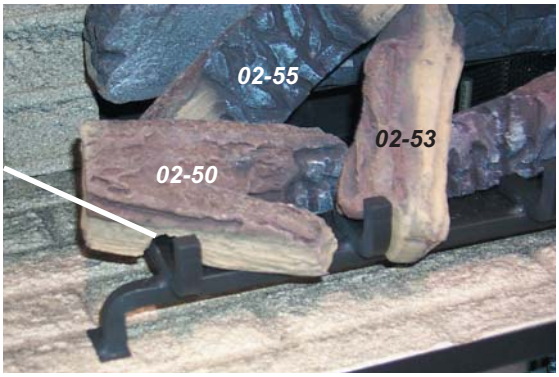
Photo shows rear grate tab.
Log 02-51 was removed to show the positioning of Log 02-52.

9) Sit Log 02-50 on the front left side of the burner. Push the back of the log against the 2 front brackets with the notch on the bottom of the log fitting into the first grate tab.



Front Brackets

Notch



10) Place the embers on the front of the burner tray in the places shown on the photos below.

Separate platinum embers and place on the front burner on and around the embers. Avoid stacking platinum embers. Platinum embers may be placed over burner ports.

Place embers in these 3 locations on the burner tray.

Do not block the burner ports in this area adjacent to the Log 02-54

IMPORTANT

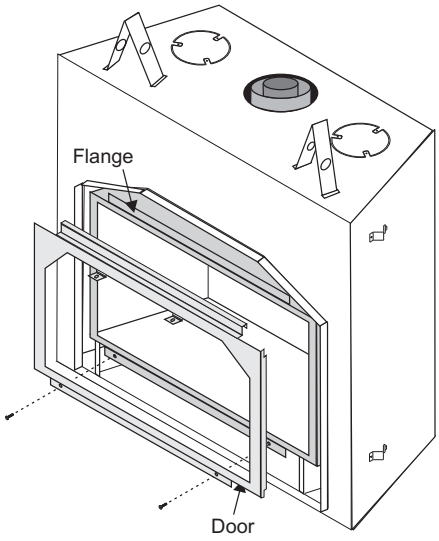
When placing Embers, do not block burner ports as this can cause an incorrect flame pattern, carbon deposits and delayed ignition.

11) Test fire to ensure proper light off (make sure flame flows smoothly from one end of burner to the other). If there is any flame hesitation, check that area for any blockage of the burner ports.

GLASS DOOR INSTALLATION

1) Fit top door bracket over the flange at the top of the firebox.

2) Secure with 2 screws on the bottom.

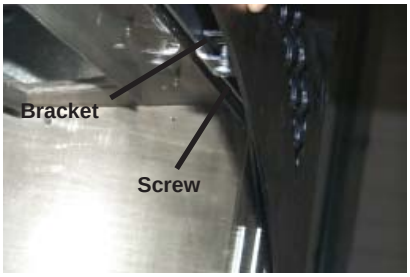


ARCH SURROUND

1) Place the Arch Surround into position by sliding the 2 holes in the bottom brackets over the pins on the base.

Fit the bottom brackets over the pins on the base.

2) Slide the 2 screws on the rear of the Arch Surround into the bracket on the Glass Door and then tighten screw to secure.



View from underneath of the screw and the bracket.

Tighten both screws to secure Arch Surround to Glass Door.

3) Slide Bottom Louver into position. On each side secure the bottom screw first into the side bracket. Do not overtighten, leave slightly loose to allow the louver to move freely. Then tighten the top screw.

4) Attach the two control boxes to the bottom unit base and tighten the 2 screws on the left side and 1 screw on the right side.

Secure left side with 2 screws and right side with one screw.

OPTIONAL SCREEN DOOR

1) Attach door bracket to side using 2 screws.

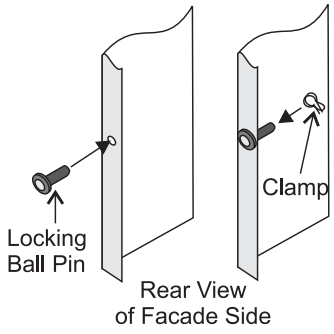
Door Bracket attaches with 2 screws.

Single Screen Door - only attach to right side of unit.

Double Screen Door - attach to left and right side of unit.

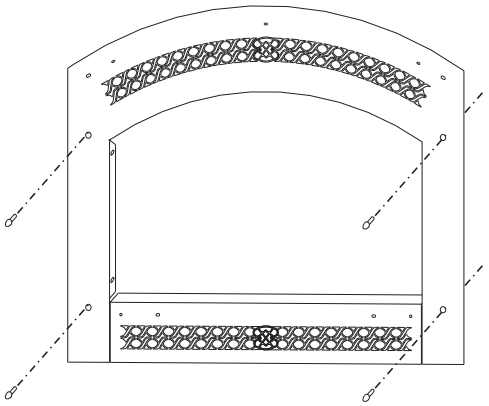
2) Slide the door(s) onto the hinges.

3) **Single Screen Door only:** Push the Locking Ball Pin into the hole on the left side. Squeeze the clamp (use pliers) and slide it over the end of the Locking Ball Pin and tight against the Facade edge.



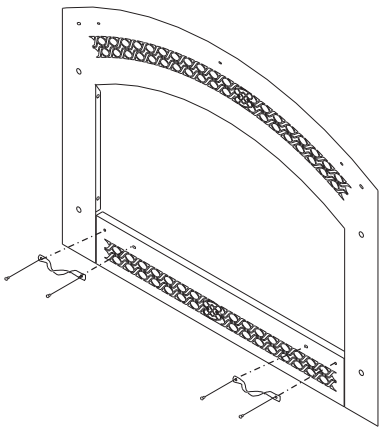
ACCENT KIT INSTALLATION

1) Remove the rivets from the surround by pulling out the hoseclamp with a screwdriver or plyer. Re-install the rivets by putting them through the holes on the sides of the surround.



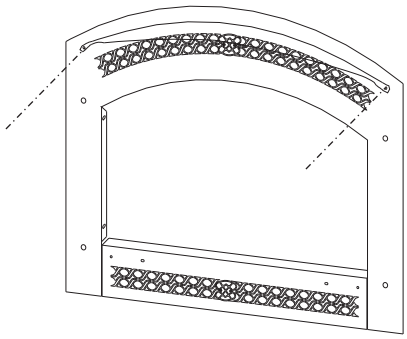
2) Take the hoseclamps and put them over the back of each rivet. Squeeze the hoseclamp to secure onto rivets ensuring that the hoseclamp is touching the back side of the surround. The hoseclamp can now be released.

3) Remove the handles by removing the nut and screw. Install the new handles by placing them in position over the holes on the surround louver. Put the screws through the holes and secure them by tightening them with a nut.



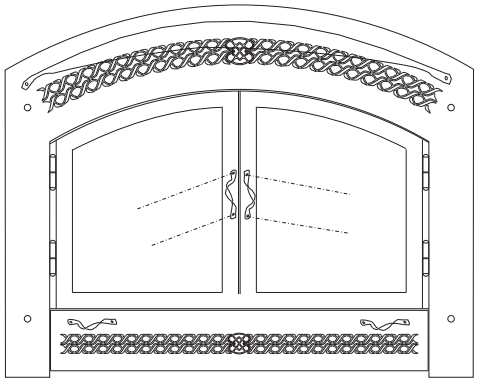
4) Place the emblem over the emblem design on the surround. Insert the studs through the holes. To secure them first put on the split lock washer and then the nut and tighten.

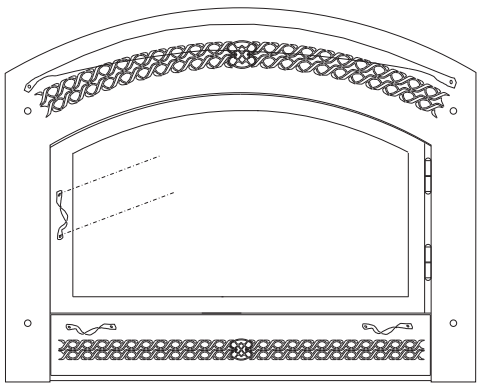
5) Remove the 2 studs on the sides of the Hood. Insert the new studs through the holes and secure them by first putting on the washer and then tighten with a nut.



DOUBLE & SINGLE DOOR OPTION

1) Remove the handles by removing the nut and screw. Install the new handles by placing them in position over the holes on the door(s). Put the studs through the holes and secure them by tightening them with a nut.





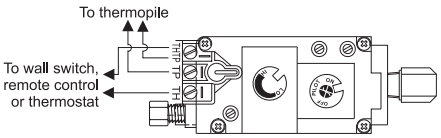
Option 1: REMOTE CONTROL

Use the Excalibur® Remote Control Kit approved for this unit. Use of other systems may void your warranty.

The remote control kit comes with a hand held transmitter, a receiver and a wall mounting plate.

1) Choose a convenient location on the wall to install the receiver and the receptacle box (protection from extreme heat is very important). Run wires from the fireplace to that location. Use the Thermostat Wire Table.

2) Connect the two wires to the gas valve. See diagram below.



CAUTION
Do not connect millivolt remote control wires to a 120V wire.

3) Install 3 AAA alkaline batteries in transmitter and 4 AA alkaline batteries in the receiver. Install the receiver and its cover in the wall. Switch the remote receiver to "remote" mode. The remote control is now ready for operation.

Option 2: WALL SWITCH

1) Run the wire through the right or left side gas inlet opening. Be careful not to damage wire.

Note: We recommend a maximum of 15' of wire but if you wish to go with a longer run, use the Thermostat Wire Table.

2) Connect the wire to the wall switch and install into the receptacle box.

CAUTION
Do not connect millivolt wall switch wire to a 120V wire.

Option 3: WALL THERMOSTAT

A wall thermostat may be installed if desired, connect the wires as per the wiring diagram. Use the table below to determine the maximum wire length.

Note: Preferable if the thermostat is installed on an interior wall.

Excalibur® offers an optional programmable thermostat but any 250-750 millivolt rated non-anticipator type thermostat that is CSA, ULC or UL approved may be used.

CAUTION
Do not connect millivolt wall thermostat wires to a 120V wire.

Thermostat Wire Table

Recommended Maximum Lead Length (Two-Wire) When Using Wall Thermostat (CP-2 System)	
Wire Size	Max. Length
14 GA.	50 Ft.
16 GA.	32 Ft.
18 GA.	20 Ft.
20 GA.	12 Ft.
22 GA.	9 Ft.

WIRING DIAGRAMS

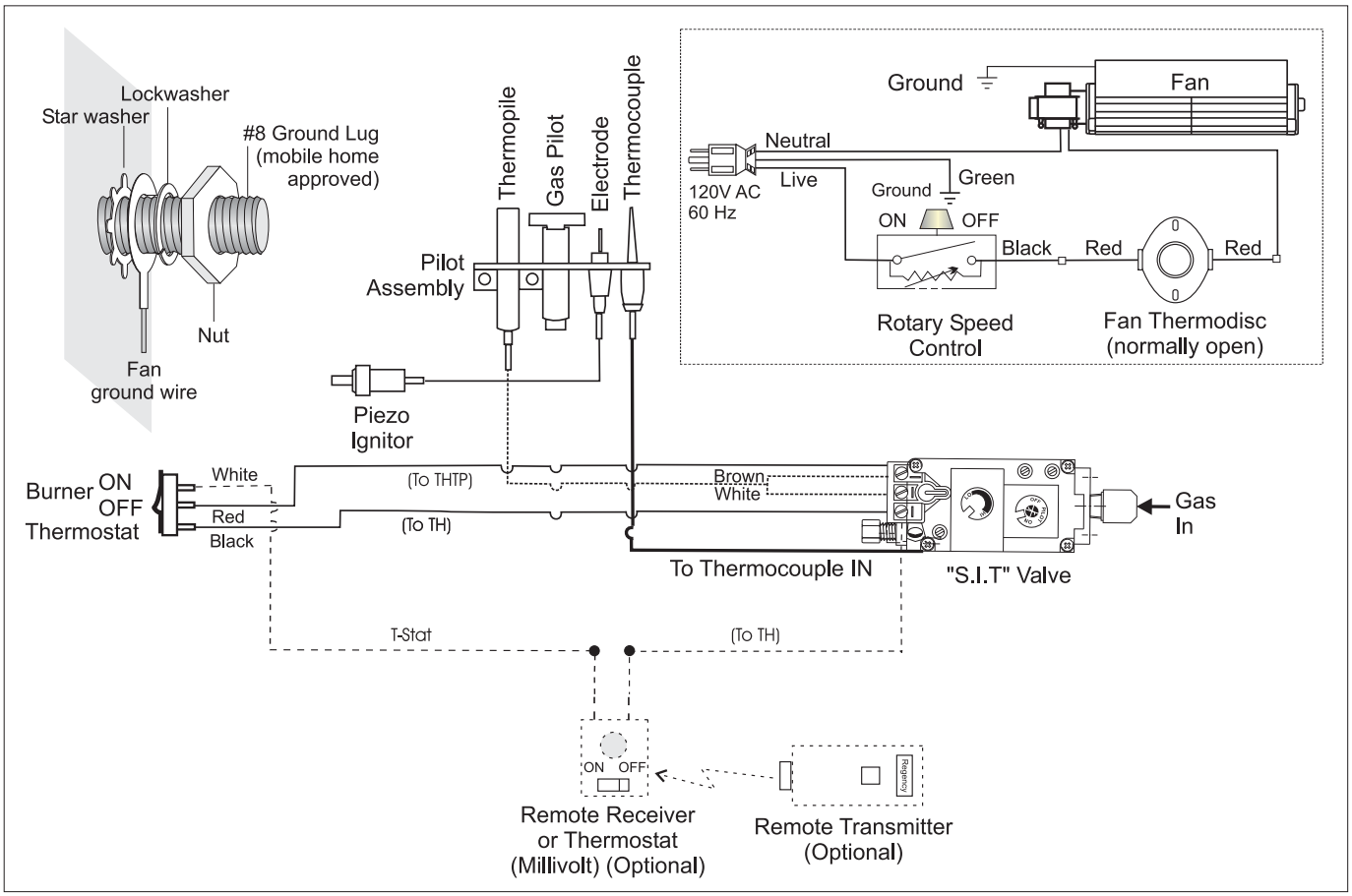
This heater does not require a 120V A.C. supply for operation. In case of a power failure, the burner switch and the optional remote control/ thermostat will continue to operate.

However, a 120V A.C. power supply is needed for the fan/blower operation.

(Do not cut the ground terminal off under any circumstances.)

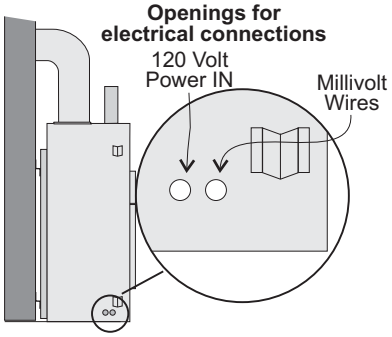
NOTE: Even if the fan is not purchased with the unit, it is still a good idea to bring power to the receptacle box (provided with the unit) in case the fan is installed at a later date.

For NATURAL GAS Units and Units NOT Equipped with DC Spark Boxes



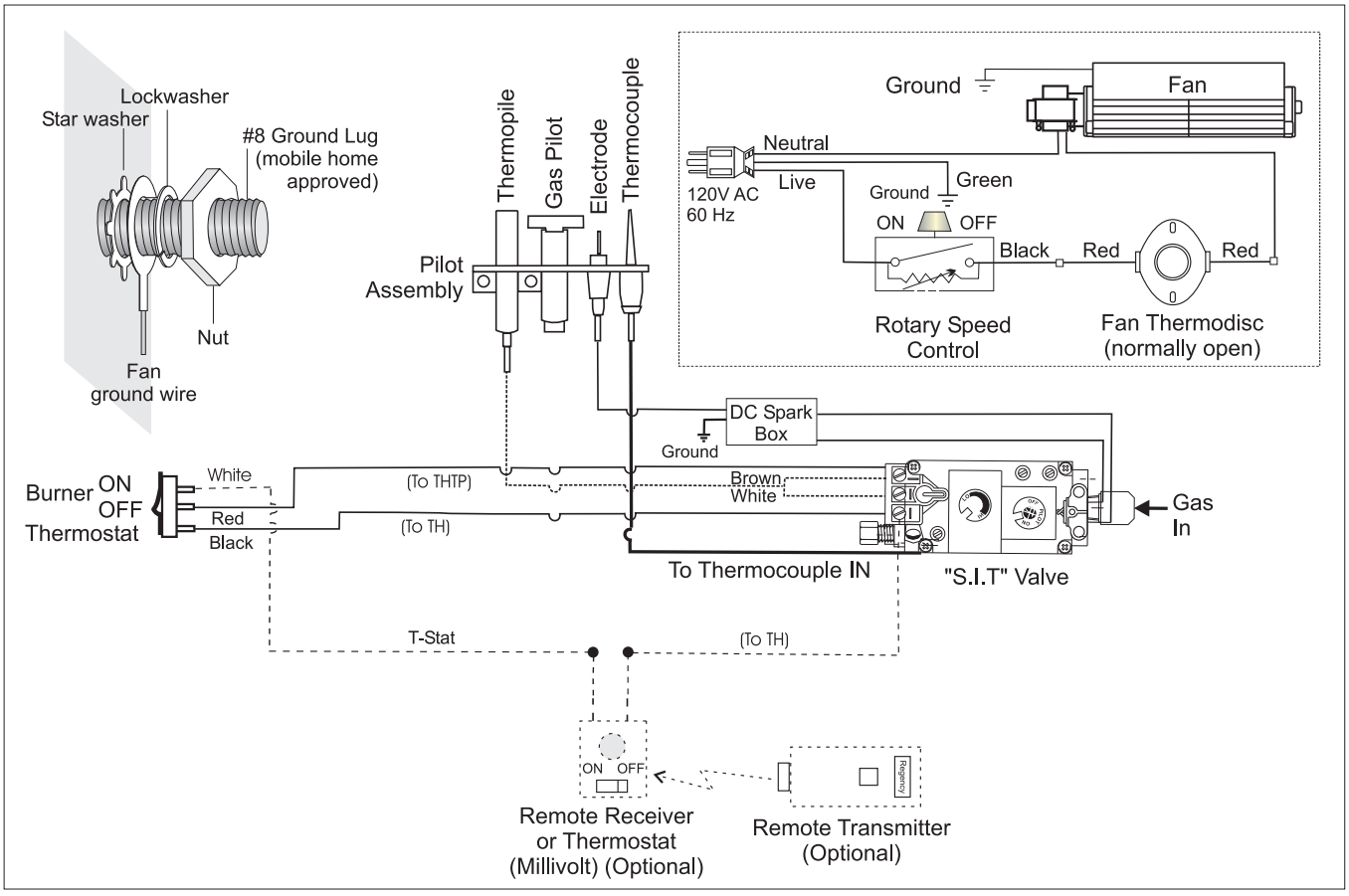
Caution: Ensure that the wires do not touch any hot surfaces and are away from sharp edges.

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



For PROPANE Units and Units Equipped with DC Spark Boxes*

***For installation of the DC Spark Box refer to the LP Conversion instructions in this manual.**



OPERATING INSTRUCTIONS

OPERATING INSTRUCTIONS

1) Read and understand these instructions before operating this appliance.

2) Check to see that all wiring is correct and enclosed to prevent possible shock.

3) Check to ensure there are no gas leaks.

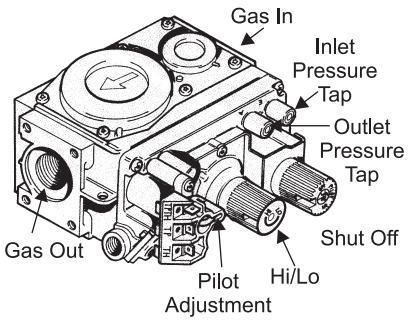
4) Make sure the glass in the door frame is properly positioned. Never operate the appliance with the glass removed.

5) Verify that the venting and cap are unobstructed.

6) Ensure that the brick panels are installed.

7) Verify log placement. If the pilot cannot be seen when lighting the unit, the logs have been incorrectly positioned.

8) The unit should never be turned off, and on again without a minimum of a 60 second wait.



LIGHTING PROCEDURE

IMPORTANT
To ignite or reignite the pilot, remove one glass panel/door.

NOTE: For all propane units and units equipped with electric spark boxes, see "Copy of Lighting Plate Instructions" section for more details.

Only when the pilot holds, without pressure being applied to the control knob, resecure the glass panel to the unit. The unit ***must not*** be operated with the glass removed.

IMPORTANT Gas on/off knob cannot be turned from "PILOT" to "OFF" unless it is partially depressed.

1) Turn burner OFF using "ON/OFF" switch.

2) Turn gas control knob so indicator points to "OFF" position and allow 5 minutes for any gas in the combustion chamber to escape.

3) Turn gas control knob counterclockwise so indicator points to the "PILOT" position. Depress the gas control knob fully. Depress the igniter button several times until the pilot lights. After approximately one minute, release the gas control knob. The pilot flame should continue to burn. If the pilot does not remain lit, repeat operation allowing a longer period before releasing gas control knob.

4) When the pilot stays lit, turn the gas knob further counterclockwise to the "ON" position.

5) Use the wall switch, thermostat or remote control to turn on the unit.

6) Rotate the flame height regulator to adjust the flame height higher or lower.

SHUTDOWN PROCEDURE

1) Use the wall switch, thermostat or remote control to turn off the main burner.

2) Turn the main gas control clockwise to the "OFF" position to turn off the pilot.

3) Turn off all electric power to appliance if service is to be performed.

FIRST FIRE

The first fire in your fireplace is part of the paint curing process. To ensure that the paint is properly cured, it is recommended that you burn your fireplace for at least four (4) hours the first time before you use it with the fan on.

When first operated, the unit will release an odour caused by the curing of the paint, the burning off of any oils remaining from manufacturing. Smoke detectors in the house may go off at this time. Open a few windows to ventilate the room for a couple of hours.

The glass panel may require cleaning after the unit has cooled down.

DO NOT ATTEMPT TO CLEAN THE GLASS WHILE IT IS HOT.

Note: When the glass is cold and the appliance is lit, it may cause condensation and fog the glass. This condensation is normal and will disappear in a few minutes as the glass heats up.

DO NOT BURN THE APPLIANCE WITHOUT THE GLASS FRONT IN PLACE.

During the first few fires, a white film may develop on the glass front as part of the curing process. The glass should be cleaned or the film will bake on and become very difficult to remove. Use a non-abrasive cleaner and NEVER clean the glass while it is hot.

AERATION ADJUSTMENT

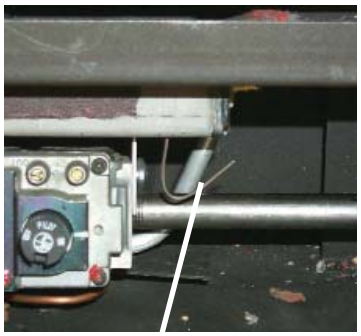
The air shutter can be adjusted by moving the adjusting wire up or down. The wire is accessed through the bottom louver opening. Open the air shutter for a blue flame or close for a more yellow flame. The burner aeration is factory set but may need adjusting due to either the local gas supply or altitude.

Minimum Air Shutter Opening:

3/16"	**Natural Gas**
5/16"	**Propane**

CAUTION: *Carbon will be produced if air shutter is closed too much.*

Note: Any damage due to carboning resulting from improperly setting the aeration controls is NOT covered under warranty.



Adjustment Wire: Push to close or pull to open aeration cap.

Closed - Tall yellow
Open - Short Blue

Note: Aeration Adjustment should only be performed by an authorized Excalibur® Installer at the time of installation or service.

COPY OF THE LIGHTING PLATE INSTRUCTIONS

FOR YOUR SAFETY READ BEFORE LIGHTING

This appliance must be installed in accordance with local codes, if any; if none, follow the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or Natural Gas and Propane Installation Codes, CSA B149.1. (Australia: AG601, New Zealand: NZS 5261)

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

A) This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

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

WHAT TO DO IF YOU SMELL GAS
- Do not try to light any appliance.
- Do not touch any electric switch, do not use any phone in your building.
- Immediately call your gas supplier from a neighbours phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

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

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

E) This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

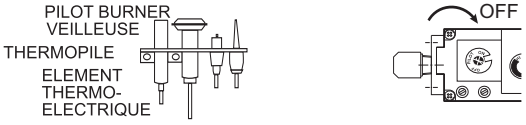
CAUTION: Hot while in operation. Do not touch. Severe Burns may result. Due to high surface temperatures keep children, clothing and furniture, gasoline and other liquids having flammable vapors away. Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

LIGHTING INSTRUCTIONS

STOP! Read the safety information above on this label.

FOR UNITS NOT EQUIPPED WITH ELECTRIC SPARK BOXES:

1) Push in gas control knob slightly and turn clockwise to "OFF". Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.



2) Wait five (5) minutes to clear out any gas. If you then smell gas STOP! Follow step "B" in the Safety Information above on this label. If you don't smell gas, go to the next step.

3) Turn knob on gas control counterclockwise to"PILOT".

4) Push in control knob all the way and hold in. Continually push and release the black button on spark igniter until pilot lights. Continue to hold the control knob in for about 1/2 minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 1) to 4). If knob does not pop up when released, stop and immediately call your service technician or gas supplier. If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.

5) Turn gas control knob counterclock-wise to "ON".

6) Use rocker switch to operate main burner.

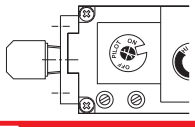
FOR ALL PROPANE UNITS AND UNITS EQUIPPED WITH ELECTRIC SPARK BOXES:

1) Push in gas control knob slightly and turn to "PILOT" position.

2) Push in control knob all the way and hold in until the pilot lights up. Continue to hold the control knob in for about 20 seconds after the pilot is lit. Release knob.

3) Push in gas control knob slightly and turn to "ON" position.

4) Turn ON the flame switch.



TO TURN OFF GAS APPLIANCE

1) Turn off the flame switch.
2) Push in the gas control knob slightly and turn clockwise to "OFF". Do not force.
3) Turn off all electric power to the appliance if service is to be performed.
You may shut off the pilot during prolonged non use periods to conserve fuel.

DO NOT REMOVE THIS INSTRUCTION PLATE 918-473a

NORMAL OPERATING SOUNDS OF GAS APPLIANCES

It is possible that you will hear some sounds from your gas appliance. This is perfectly normal due to the fact that there are various gauges and types of steel used within your appliance. Listed below are some examples. All are **normal operating sounds** and should not be considered as defects in your appliance.

Blower:
Excalibur® gas appliances use high tech blowers to push heated air farther into the room. It is not unusual for the fan to make a "whirring" sound when ON. This sound will increase or decrease in volume depending on the speed setting of your fan speed control.

Burner Tray:
The burner tray is positioned directly under the burner tube(s) and logs and is made of a different gauge material from the rest of the firebox and body. Therefore, the varying thicknesses of steel will expand and contract at slightly different rates which can cause "ticking" and "cracking" sounds. You should also be aware that as there are temperature changes within the unit these sounds will likely re-occur. Again, this is normal for steel fireboxes.

Blower Thermodisc:
When this thermally activated switch turns ON it will create a small "clicking" sound. This is the switch contacts closing and is normal.

Pilot Flame:
While the pilot flame is on it can make a very slight "whisper" sound.

Gas Control Valve:
As the gas control valve turns ON and OFF, a dull clicking sound may be audible, this is normal operation of a gas regulator or valve.

Unit Body/Firebox:
Different types and thicknesses of steel will expand and contract at different rates resulting in some "cracking" and "ticking" sounds will be heard throughout the cycling process.

MAINTENANCE

MAINTENANCE INSTRUCTIONS

1) Always turn off the gas valve before cleaning. For relighting, refer to lighting instructions. Keep the burner and control compartment clean by brushing and vacuuming at least once a year. When cleaning the logs, use a soft clean paint brush as the logs are fragile and easily damaged.

2) Clean appliance and door with a damp cloth (never when unit is hot). Never use an abrasive cleaner. The glass should be cleaned with a gas fireplace glass cleaner. ***The glass should be cleaned when it starts looking cloudy.***

3) The heater is finished in a heat resistant paint and should only be refinished with heat resistant paint. Excalibur® uses StoveBright Paint - Metallic Black #6309.

4) Make a periodic check of burner for proper position and condition. Visually check the flame of the burner periodically, making sure the flames are steady; not lifting or floating. If there is a problem, call a qualified service person.

5) The appliance and venting system must be inspected before use, and at least annually, by a qualified field service person, to ensure that the flow of combustion and ventilation air is not obstructed.

Note: Never operate the appliance without the glass properly secured in place.

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

7) Verify operation after servicing.

General Vent Maintenance

Conduct an inspection of the venting system semi-annually. Recommended areas to inspect as follows:

1) Check the Venting System for corrosion in areas that are exposed to the elements. These will appear as rust spots or streaks, and in extreme cases, holes. These components should be replaced immediately.

2) Remove the Cap, and shine a flashlight down the Vent. Remove any bird nests, or other foreign material.

3) Check for evidences of excessive condensation, such as water droplets forming in the inner liner, and subsequently dripping out the joints, Continuous condensation can cause corrosion of caps, pipe, and fittings. It may be caused by having excessive lateral runs, too many elbows, and exterior portions of the system being exposed to cold weather.

4) Inspect joints, to verify that no pipe sections or fittings have been disturbed, and consequently loosened. Also check mechanical supports such as Wall Straps, or plumbers' tape for rigidity.

GOLD-PLATED DOOR OR SURROUND

The 24 carat gold-plated finish on the surround and door requires little maintenance, and need only be cleaned with a damp cloth.

DO NOT use abrasive materials or chemical cleaners, as they may harm the finish and void the warranty. **Clean any fingerprints off before turning the unit on.**

LOG REPLACEMENT

The unit should never be used with broken logs. Turn off the gas valve and allow the unit to cool before opening door and carefully remove the logs. (The pilot light generates enough heat to burn someone.) If for any reason a log should need replacement, you must use the proper replacement log. The position of these logs must be as shown in the diagrams under Log Installation.

Note: Improper positioning of logs may create carbon build-up and will severely alter the unit's performance which is not covered under warranty.

THERMOPILE / THERMOCOUPLE

1) Open the bottom louvers.

2) Loosen the thermocouple or thermopile with a 7/16" wrench.

3) Disconnect thermocouple by loosening nut from the valve with a 9mm wrench. Disconnect thermopile by loosening 2 screws marked TP on the valve.

4) Drop the thermocouple or thermopile down from the bracket and pull it out of the unit.

5) Reinstall the new ones in reverse order.

GLASS GASKET

If the glass gasket requires replacement use a tadpole glass gasket (Part # 936-155).

DOOR GLASS

Your Excalibur® fireplace is supplied with high temperature, 5 mm Neoceram ceramic glass that will withstand the highest heat that your unit will produce. If your glass requires cleaning, we recommend using an approved glass cleaner available at all authorized dealers. Do not use abrasive materials. Do not clean the glass when hot.

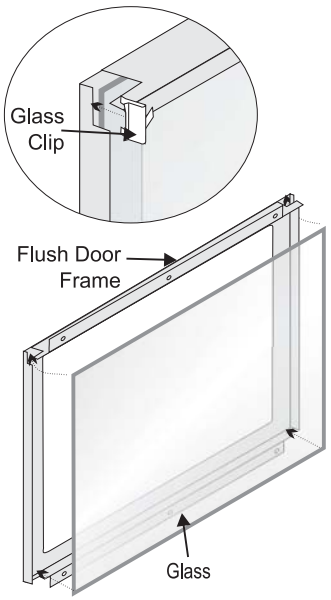
In the event that you break your glass by impact, purchase your replacement from an authorized Excalibur® dealer only, and follow our step-by-step instructions for replacement.

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

Caution: Wear gloves when removing damaged or broken glass.

Glass Replacement

Remove the glass door front (Refer to the "Glass Door Installation" section). Remove the 4 glass clips from each corner. Slide in the new replacement glass. Push the 4 glass clips back onto the frame. **The glass must have gasketing around it.**



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Excalibur® P90 Zero Clearance Direct Vent Gas Fireplace

FAN MAINTENANCE

Unit must be grounded at all times. Do not cut the ground terminal off under any circumstances.

To Install the Fan

1) Shut the power off.

2) Open the bottom louver door. Loosen the 2 screws holding the Burner ON/OFF switch and bracket to the bottom louver and lift the assembly out.

3) Remove the bottom louver door.

4) Slide the fan in towards the rear of the unit and slip it over the two mounting studs. Take care not to damage the insulation on the fan base. **Ensure that the fan blades do not rub against the valve tubing.** Diagram 1.

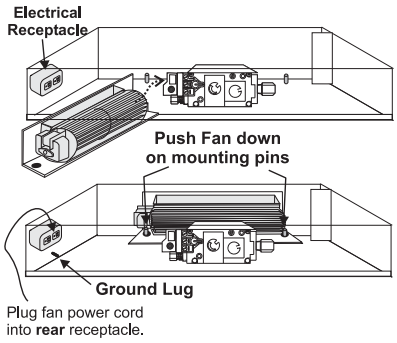


Diagram 1

5) Connect fan ground cable to ground lug. Refer to wiring diagram.

6) Slide the thermodisc/cover assembly into the bracket clip on the underside of the firebox. Check that no wire will touch the hot surfaces. Diagram 2.

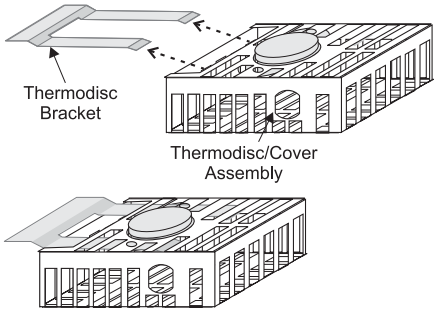


Diagram 2

7) Attach the two control boxes to the bottom unit base and tighten the 2 screws on the left side and 1 screw on the right side.

Secure left side with 2 screws and right side with one screw.

8) Secure the fan wires and power cord by attaching one of the adhesive backed wire holder clips (Part #910-199) onto the stove base. Use the second clip to bundle up the wires approximately 4" from the control box. Ensure that there is no interference with the wires when the louver is closed and that no wire will touch the hot metal surfaces or sharp edges.

9) Plug the fan power cord into the rear end of the receptacle box to provide the maximum clearance from the louvers.

To Remove the Fan

1) Shut the power off.

2) Reverse the above instructions.

Note: The bearings are lubricated for life. Do not lubricate them. Make sure you vacuum the fan area on a regular basis.

IMPORTANT:
These fans collect a lot of dust from within your home. Ensure you maintain these fan motors on a regular basis by vacuuming out the fan blades and housing using a soft brush nozzle.

REMOVING VALVE

1) Shut the power off.

2) Open the bottom louver door. Loosen the 2 screws holding the Burner ON/OFF switch and bracket to the bottom louver and lift the assembly out.

3) Remove the facade if installed.

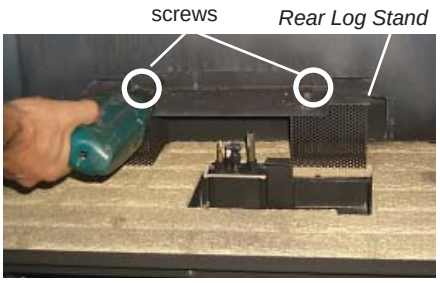
4) Remove the glass door (Refer to the "Glass Door Installation" section).

5) Remove the logs.

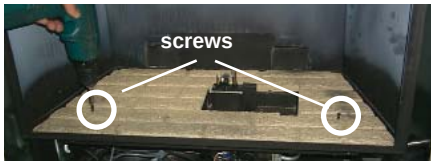
6) Remove the burner/grate assembly by removing the two Phillips head screws and then slide the burner assembly to the left and lift out.

Diagram 1: Remove the left and right screws and then slide the burner/grate assembly to the left and lift out.

7) Remove the rear log stand by removing the 2 screws.



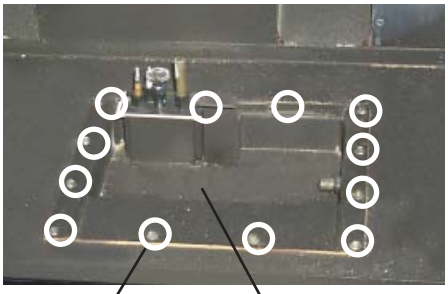
8) Remove the 2 screws & sleeves on the bottom brick panel and lift out the bottom brick panel. **The brick panel is very fragile - handle with care.**

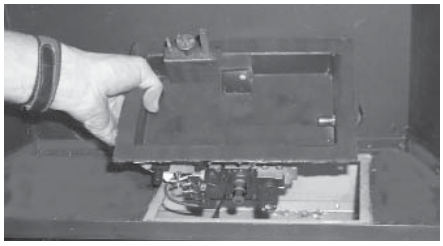


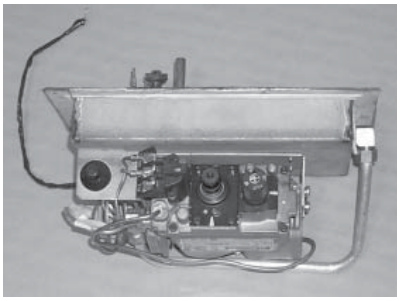
9) Disconnect the inlet gas line. See dia. 2.

10) Disconnect the 2 TP wires and the 2 TH wires from the valve.

11) Remove the 12 Phillips head screws securing the valve tray assembly in place and then lift the entire assembly out.







12) Undo the pilot tube from the valve with a 7/16" wrench.

13) Undo the quick drop out thermocouple nut on the valve with a 9mm (metric) wrench.

14) Remove the Piezo igniter wire and push button assembly.

15) Undo the "gas out" flare nut with a 13/16" wrench.

16) Undo the "gas out" flare fitting with an 11/16" wrench.

17) Remove the 4 Phillips head screws from the sides of the valve bracket and remove valve.

Hint: ***If you are using black pipe, ensure that there is a union by the valve, otherwise removal will be almost impossible.***

INSTALLING VALVE

1) Attach the valve to the valve bracket with the 4 (m5x8 metric) screws provided.

2) Reconnect the "gas out" flare fitting with an 11/16" wrench.

3) Reconnect the "gas out" flare nut with a 13/16" wrench.

4) Install piezo ignitor push button assembly and reconnect wire.

5) Reconnect the quick drop out thermocouple nut with a 9mm wrench.

6) Reconnect the pilot tube nut with a 7/16" wrench.

7) Scrape off the old gasket from the floor of the firebox and from the valve tray assembly.

8) Install a new gasket and reinstall the valve tray assembly.

Note: Failure to install a new gasket may severely affect the appliance performance.

9) Reinstall the 10 hold down screws.

10) Hook up the 2 TP and 2 TH wires to the appropriate connections on the valve.

11) Reinstall the bottom brick panel, then screw the 2 screws & sleeves through the brick panel to the firebox base (reversing step 8) leaving them about 1/4" (6mm) above the brick panel. Reinstall the rear log stand.

12) Install Burner/grate assembly

13) Hook up the gas line and check for gas leaks with a soap and water solution or a gas leak detector. (Do not use open flame for leak testing.)

14) Fire up the unit temporarily

15) Check the manifold pressure.

16) Reinstall the logs and brick panels as needed.

17) Reinstall the glass door and the facade.

18) Fire up the unit again and check for proper flame appearance and glow on logs.

PARTS LIST

MAIN ASSEMBLY

	Part #	Description
1)	430-129	Receptacle Box Mount
2)	*	Thermodisc Bracket
7)	910-428	Duplex Receptacle
8)	910-429	Box - Receptacle
9)	910-430	Cover - Receptacle
10)	904-687	Clamp Connector
15)	*	Heat Shield - Base
20)	790-021	Front Filler - Left Corner
21)	790-022	Front Filler - Right Corner
22)	790-012	Baffle
23)	780-011	Standoff - Top
24)	780-013	Standoff - Side
25)	780-091	Standoff - Rear
27)	*	Outer Flue Collar
28)	*	Inner Flue Collar Assy
30)	*	Gasket for Flue Collar
31)	*	Flue Mounting Bracket
32)	902-600	Brick Panel - Base
	790-901	Brick Panel Set - Standard Brown
	790-902	Brick Panel Set - Standard Red
	790-903	Brick Panel Set - Herringbone Brown
33)	*	Brick Panel - Back
34)	*	Brick Panel - Left
35)	*	Brick Panel - Right
36)	904-716	#10 x 5/8" Butt Spacer
	511-031	Brick Panel Clip

	Part #	Description
	432-967	Burner ON/OFF Switch Assy
38)	910-241	Switch-Burner ON/OFF(3-way)
	910-899	Wire Harness - Valve to Burner
42)	910-331/P	Fan Motor (120 Volts)
	432-966	Fan Switch Assembly-120 V (Optional)
43)	*	Power Cord (120 Volts)
	910-845	Wire Harness - Plug In Fan
46)	910-330	Fan Speed Control Switch
47)	904-586	Knob - Speed Control
48)	910-199	Wire Holder Clip
49)	910-142	Thermodisc-Fan Auto On/Off
	910-845	Wire Harness - Plug in Fan
	904-713	U-clip at Louver
50)	510-994	Rigid Pipe Adaptor (Optional)
51)	790-011	Relief Frame Gasket
59)	790-009	Relief Door Mounting Plate
60)	W260260	Top Relief Frame Gasket
61)	942-117	Top Relief Plate Frame
62)	W260280	Top Relief Plate Gasket
63)	290-021	Air Baffle Plate
64)	790-093	Gasket - Exchanger Relief

	Part #	Description
	946-556	Heat Wave Duct Kit (Optional)
89)	946-004	Junction Box
90)	946-000	Round Duct Adaptor
91)	946-002	Round to Oval Adaptor
92)	946-001	Oval Duct Adaptor
93)	946-007	Angle Bracket
94)	946-517/P	Fan Assy - HeatWave Option
95)	946-006	Grill Plate - White
96)	946-005	Wall Adaptor Plate - White
97)	910-417	Knob - White
98)	910-366	Switch Cover Plate - White
99)	910-412	Fan Speed Controller
100)	910-367	Box-Plastic Switch Receptacle
102)	946-010	Flexible Air Duct
	946-038	Insulation 6" dia. x 24"
	946-570	Heat Release Duct Kit (Optional)
108)	910-165	Fan (120 V)
109)	946-000	Flexible Air Release Duct
	918-525	Manual
	791-969	Conversion Kit - NG to LP

*Not available as a replacement part.

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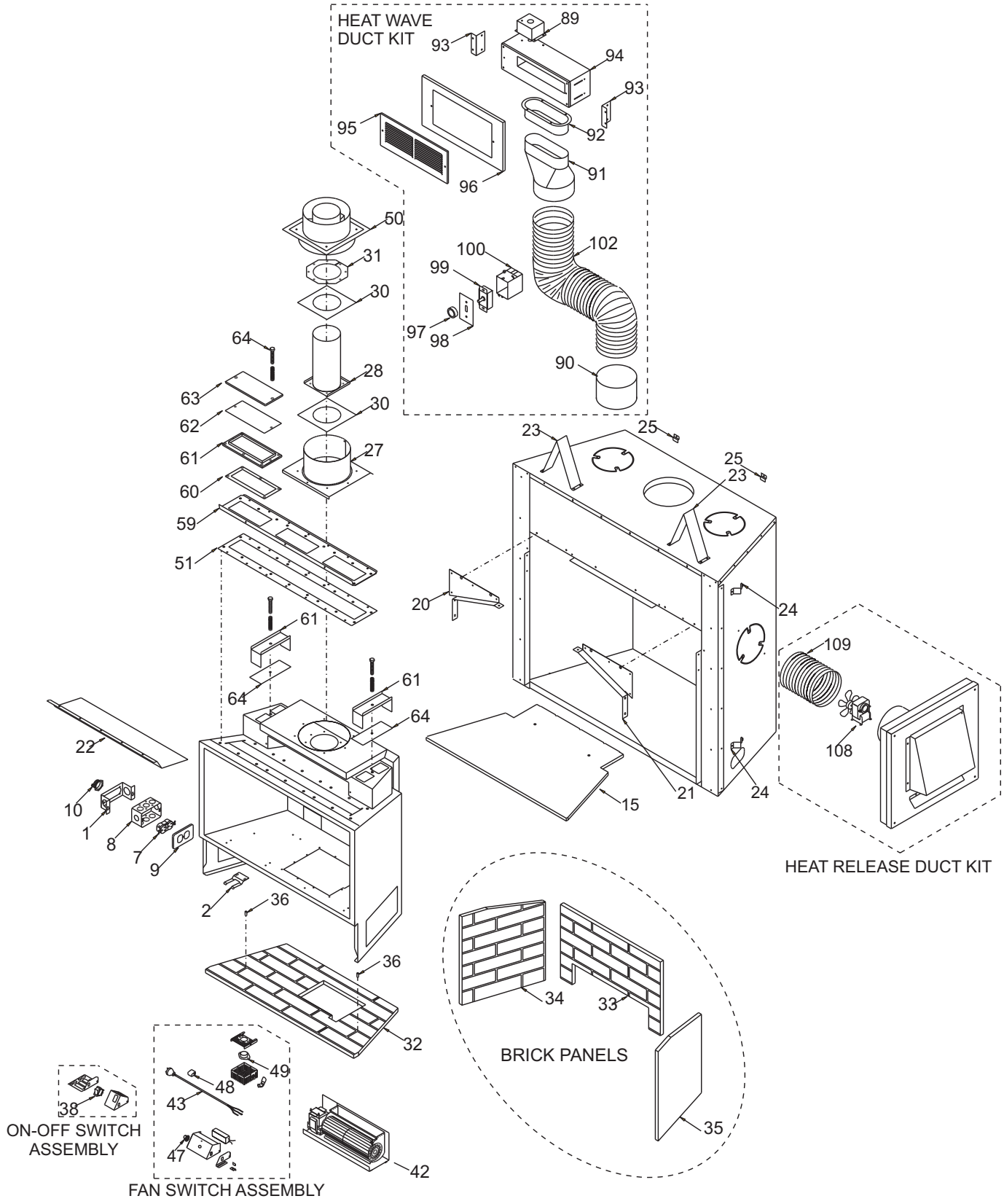
Excalibur® P90 Zero Clearance Direct Vent Gas Fireplace

PARTS LIST


HEAT WAVE
DUCT KIT
89
93
94
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102
90
64
28
63
30
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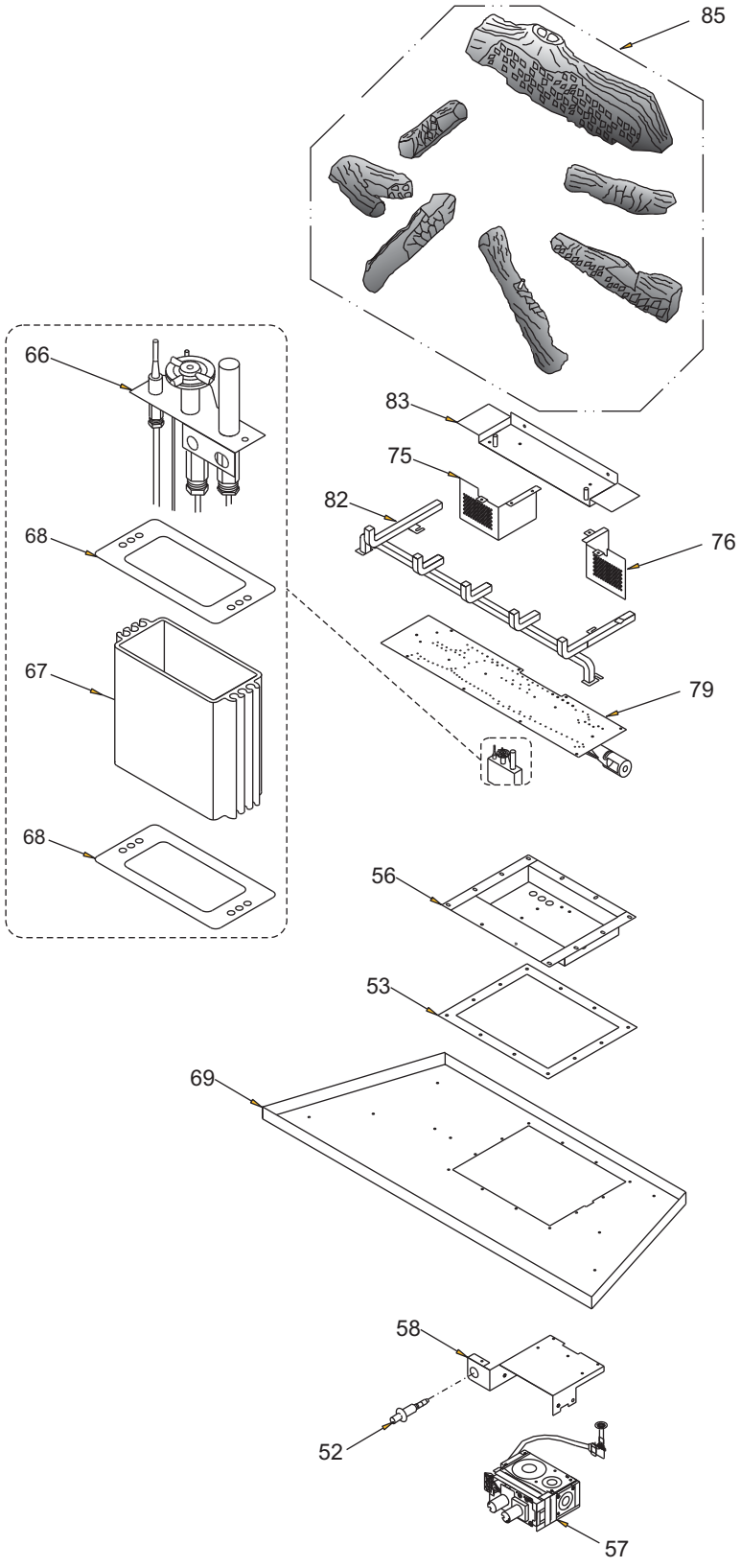
32
23
25
25
23
20
24
15
21
24
109
108
HEAT RELEASE DUCT KIT
BRICK PANELS
34
33
35
38
ON-OFF SWITCH
ASSEMBLY
49
48
43
47
42
FAN SWITCH ASSEMBLY

BURNER ASSEMBLY & LOG SET

Part #	Description
52) 910-190	Piezo Ignitor & Nut
53) 780-021	Gasket - Valve Access Plate
790-574/P	Valve Assy - Natural Gas
790-576/P	Valve Assy - Propane
56) *	Valve Tray - NG/LP
57) 910-478	Valve - S.I.T. - NG/LPG
58) *	Valve Bracket
65) *	Pilot Bracket
66) 910-038	Pilot Assy-NG 3 way flame - S.I.T.
910-039	Pilot Assy-LP 3 way flame - S.I.T.
904-617	Orifice #34 - Natural Gas
904-645	Orifice #51 - Propane
936-170	Orifice Gasket
67) *	Pilot Holder
68) W840470	Pilot Assembly Gasket
69) *	Firebox Base
75) *	Deflector - Left
76) *	Deflector - Right
79) 791-535	Burner Assy - NG/LP
82) 511-030	Burner Grate Assy
83) 780-028	Rear Log Support Bracket
85) 780-930	Log Set (Complete)

*Not available as a replacement part.

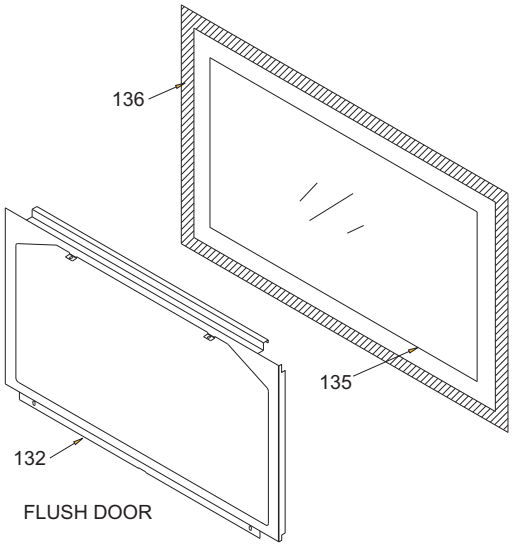


FLUSH FRONT ACCESSORIES

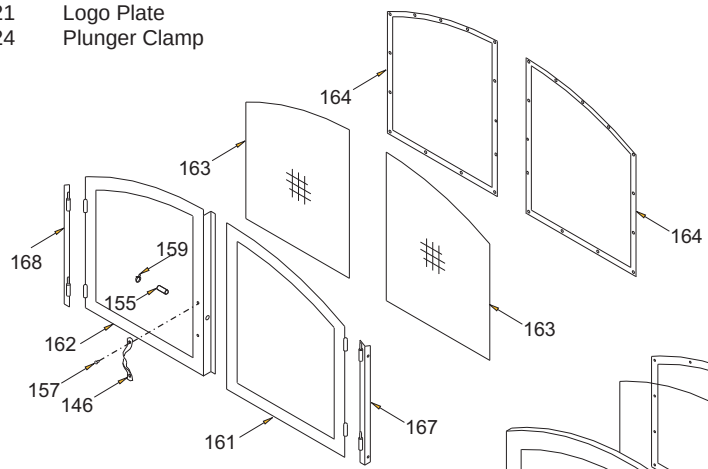
	Part #	Description
	790-518	Door Assembly - Complete
132)	790-137	Flush Door Frame
135)	940-326/P	Glass (Flush)
136)	936-155	Glass Gasket (Tadpole)
	904-691	U-Clip
	790-920	Surround - Black - Complete
	790-922	Surround - Gold - Complete
	790-914	Surround - Antique Gold - Complete
	790-916	Surround - Antique Nickel - Complete
	790-918	Surround - Antique Copper - Complete
141)	*	Surround - Faceplate - Excalibur®
142)	*	Surround - Louver
143)	904-621	Hole Plug
144)	790-122	Emblem
145)	*	Surround - Hood
146)	*	Handle
148)	904-719	Rivet-67-5/16 x 1/2 Black
	904-719/G	Rivet-67-5/16 x 1/2 Gold
149)	904-720	Pushnut Fastener 5/16" hole
	790-924	Single Screen Door - Complete - Black
	790-926	Single Screen Door - Complete - Gold
	790-951	Single Screen Door - Complere - Antique Gold
	790-952	Single Screen Door - Complete - Antique Nickel
	790-953	Single Screen Door - Complete - Antique Copper
151)	*	Single Screen Door Frame
152)	*	Mesh Screen - Single Door
153)	*	Retaining Plate - Single Door
154)	*	Handle - Single Door
155)	904-721	Push-Fit Ball Plunger
156)	*	Door Mounting Bracket - Right
157)	*	Carriage Bolt
158)	948-221	Logo Plate
159)	904-724	Plunger Clamp

	Part #	Description
	790-930	Double Screen Door - Complete - Black
	790-932	Double Screen Door - Complete - Gold
	790-941	Double Screen Door - Complete - Antique Gold
	790-942	Double Screen Door - Complete - Antique Nickel
	790-943	Double Screen Door - Complete - Antique Copper
161)	*	Double Screen Door Frame - Right
162)	*	Double Screen Door Frame - Left
163)	*	Mesh Screen - Double Door
164)	*	Retaining Plate - Double Door
167)	*	Door Mounting Bracket - Right
168)	*	Door Mounting Bracket - Left

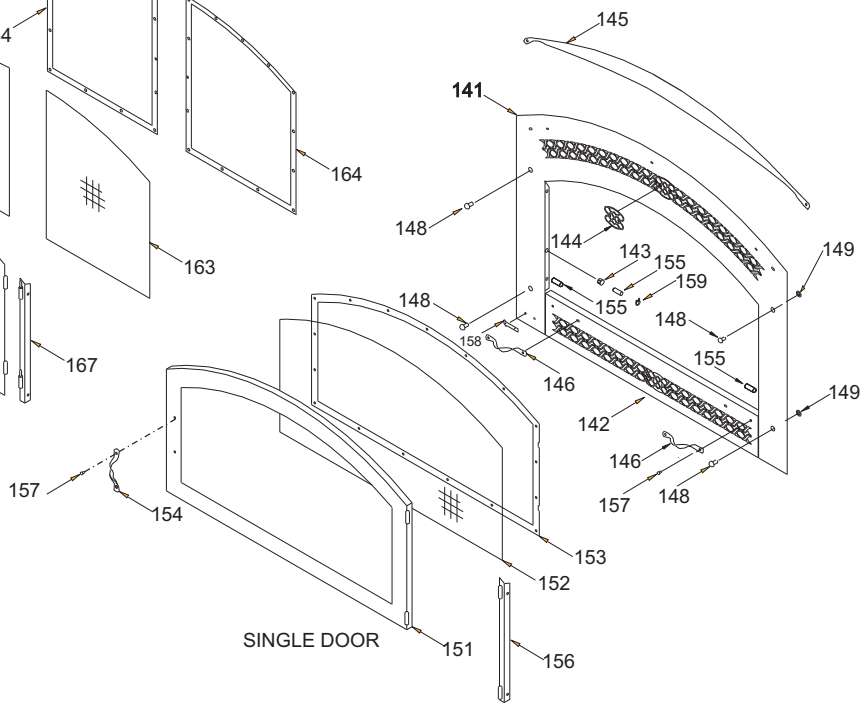
*Not available as a replacement part.



FLUSH DOOR



DOUBLE DOORS



SINGLE DOOR

NOTES

WARRANTY

Excalibur Fireplace Products are designed with reliability and simplicity in mind. In addition, our internal Quality Assurance Team carefully inspects each unit thoroughly before it leaves our facility. FPI Fireplace Products International Ltd. is pleased to extend this limited lifetime warranty to the original purchaser of a Excalibur Product. This warranty is not transferable.

The Warranty: Limited Lifetime
The combustion chamber, heat exchanger, burner tubes/pans, logs, brick panels and gold plating (against defective manufacture only) are covered under the Limited Lifetime Warranty for five (5) years for parts and subsidized labour* and parts only thereafter.

Glass is covered for lifetime against thermal breakage only, parts and subsidized labour* for five (5) years and parts only thereafter from date of purchase.

Special Finishes - One year on brushed nickel, antique gold and antique copper surrounds and doors. You can expect some changes in color as the product "ages" with constant heating and cooling. FPI warranties the product for any manufacturing defects on the original product. However, the manufacturers warranty does not cover changing colors and marks, ie. finger prints, etc applied after the purchase of the product. Damage from the use of abrasive cleaners is not covered by warranty.

Electrical and mechanical components such as blowers, switches, wiring, thermodiscs, FPI remote controls, spill switches, thermopiles, thermocouples, pilot assembly components, and gas valves are covered for two years parts and one year subsidized labour* from the date of purchase. Blowers and valves replaced under warranty are considered repairs and continue as if new with appliance. ie. twelve (12) months from original purchase date of appliance with a minimum of three (3) months coverage from date of replacement.

FPI venting components are covered parts and subsidized labour* for three (3) years from date of purchase.

Simpson Dura-Vent venting components are covered by Simpson Dura-Vent Inc. warranty.

Repair/replacement parts purchased by the consumer from FPI after the original coverage has expired on the unit will carry a 90 day warranty, valid with a receipt only. Any item shown to be defective will be repaired or replaced at our discretion. No labor coverage is included with these parts.

Conditions:
Any part or parts of this unit which in our judgement show evidence of such defects will be repaired or replaced at FPI's option, through an accredited distributor or agent provided that the defective part be returned to the distributor or agent **Transportation Prepaid,** if requested.

It is the general practice of FPI to charge for larger, higher priced replacement parts and issue credit once the replaced component has been returned to FPI and evaluated for manufacturer defect.

The authorized selling dealer is responsible for all in-field service work carried out on your Excalibur product. FPI will not be liable for results or costs of workmanship from unauthorized service persons or dealers.

At all times FPI reserves the right to inspect product in the field which is claimed to be defective.

All claims must be submitted to FPI by authorized selling dealers. It is essential that all submitted claims provide all of the necessary information including customer name, purchase date, serial #, type of unit, problem, and part or parts requested, without this information the warranty will be invalid.

Exclusions:
This limited Lifetime Warranty does not extend to or include paint, door or glass gasketing or trim.

At no time will FPI be liable for any consequential damages which exceed the purchase price of the unit. FPI has no obligation to enhance or modify any unit once manufactured. ie. as products evolve, field modifications or upgrades will not be performed.

FPI will not be liable for travel costs for service work.

Installation and environmental problems are not the responsibility of the manufacturer and therefore are not covered under the terms of this warranty policy.

Embers, gaskets, door handles, paint are not covered under the terms of this warranty policy.

Any unit which shows signs of neglect or misuse is not covered under the terms of this warranty policy.

The warranty will not extend to any part which has been tampered with or altered in any way, or in our judgment has been subject to misuse, improper installation, negligence or accident, spillage or downdrafts caused by environmental or geographical conditions, inadequate ventilation, excessive offsets, negative air pressure caused by mechanical systems such as furnaces, fans, clothes dryer, etc.

Freight damage to stoves and replacement parts is not covered by warranty and is subject to a claim against the freight carrier by the dealer.

FPI will not be liable for acts of God, or acts of terrorism, which cause malfunction of the appliance.

Performance problems due to operator error will not be covered by this warranty policy.

Products made or provided by other manufacturers and used in conjunction with the operation of this appliance without prior authorization from FPI, may nullify your warranty on this product.

Any alteration to the unit which causes sooting or carboning that results in damage to the interior / exterior facia is not the responsibility of FPI.

** Subsidy according to job scale as predetermined by FPI.*

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Excalibur® P90 Zero Clearance Direct Vent Gas Fireplace

Excalibur® fireplace products are designed with reliability and simplicity in mind. In addition, our internal Quality Assurance Team carefully inspects each unit thoroughly before it leaves our door.

FPI Fireplace Products International Ltd. is pleased to extend this Limited Lifetime Warranty to the original purchaser of a Excalibur® Product.

See the inside back cover for details.

Register your Excalibur® online at http://www.excalibur-fire.com

Installer: Please complete the following information

Dealer Name & Address: _____

_____

Installer: _____

Phone #: _____

Date Installed: _____

Serial No.: _____

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