

No one builds a better fire

FOUNDATION SERIES - BAY

Co-linear Direct Vent Gas Fireplaces

Installation and Operating Manual

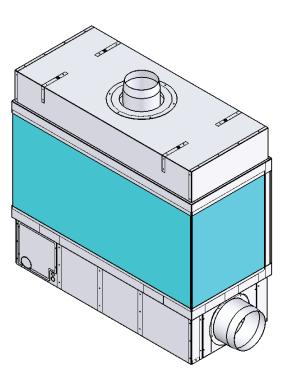
Natural Gas

FDN-4-BAY

FDN-5-BAY

FDN-6-BAY

FDN-7-BAY



Do not discard

Installer: Leave this manual with the appliance. Consumer: Retain this manual for future reference.

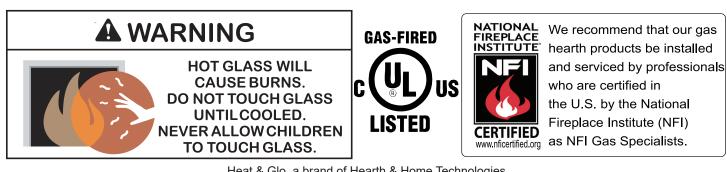
WARNING: If the information in these instructions are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

 Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

- WHAT TO DO IF YOU SMELL GAS

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

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



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1 - SAFETY INFORMATION

This fireplace complies with ANSI Z21.50-2016 CSA 2.22-2016 "VENTED DECORATIVE GAS APPLIANCES".

Installation must conform with local building codes or in the absence of local building codes,

with the National Fuel Gas Code, ANSI Z223.1/NFPA 54 - Current Edition, or the Natural or Propane Installation Code, CSA B149.1

A. SAFETY ICON DESIGNATIONS

Various safety icons appear throughout this installation manual. Please familiarize yourself with the icons making sure you understand the serious consequences that may occur if ignored or if the products are handled inappropriately.



IMPORTANT NOTE

This indicates additional instructions that you should consider during the installation.



This indicates danger of serious bodily injury or property damage.

damage if glass is handled while still hot.

HOT GLASS WARNING



RISK OF FIRE

This designates a danger of risk of fire or damage to property.

B. IMPORTANT SAFETY CONSIDERATIONS

- Installation and repair should be done only by a qualified service person. The appliance should be inspected by a qualified service person before use. Annual inspection by a qualified service person is required to maintain warranty. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulation air passageways of the appliance be kept clean.
- Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
- Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to a fireplace, 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.
- Adequate accessibility clearances for servicing and proper operation must be maintained.
- This appliance must not share or be connected to a chimney flue serving any other appliance.
- Keep area around the appliance clear of combustible materials, gasoline and other flammable vapor and liquids.
- The flow of combustion and ventilation air must not be obstructed.



STOP!

This indicates notes that may include reviewing warnings on other pages throughout the manual.

This indicates danger of serious bodily injury or property

- Due to high temperatures the appliance should be located out of traffic and away from furniture and draperies.
- The glass front or any part removed for servicing the appliance must be replaced prior to operating the appliance. Work should be done by a qualified service technician.
- Clean glass only when cool and only with non-abrasive commercially available cleaner.
- Do not operate this appliance with the glass/frame assembly removed, cracked or broken. Replacement of the glass assembly must only be performed by a licensed or qualified service person. DO NOT SUBSTITUTE MATERIALS.
- Do not strike or slam glass assembly.
- Keep burner and control compartment clean.
- Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect this appliance and to replace any part of the control system and any gas control which has been under water.
- DANGER: <u>Under no circumstances should any solid fuel</u> (wood, coal, paper or cardboard etc.) be used in this appliance.
- **STATE OF CA WARNING:** This product and the fuels used to operate this product (liquid propane or natural gas), and the combustion of such fuels, can expose you to chemicals including benzene, which is known to the State of California to cause cancer and reproductive harm.

For more information go to: www.P65Warnings.ca.gov.

Note: The following requirements reference various Massachusetts and national codes not contained in this document.

C. Requirements for the Commonwealth of Massachusetts

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:

Installation of Carbon Monoxide Detectors

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

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.

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.

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.

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) in. in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OB-STRUCTIONS".

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.

Exemptions

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

- 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
- 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.

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:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

Gas Equipment Venting System NOT Provided

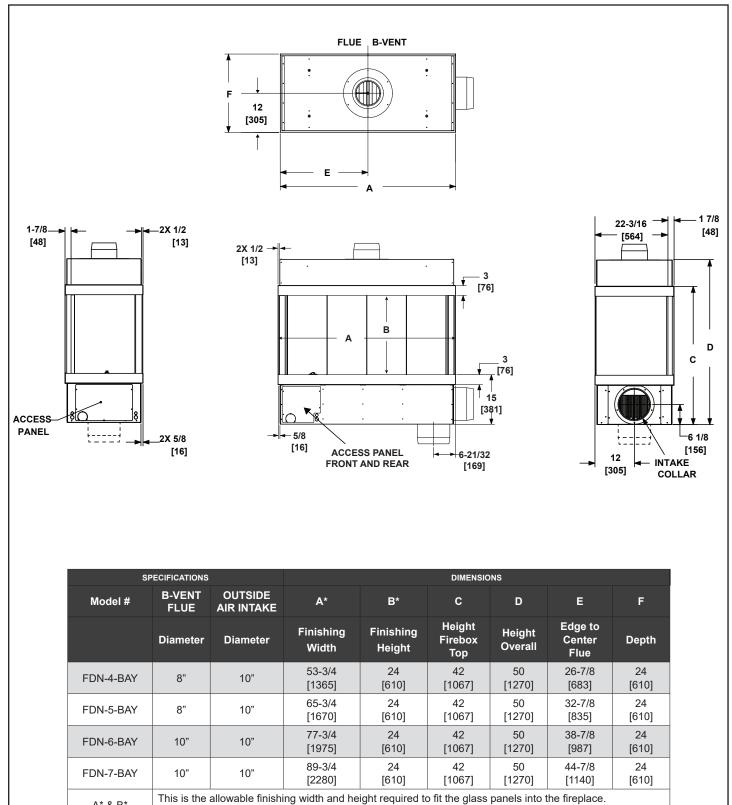
When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

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

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.

See Gas Connection section for additional Commonwealth of Massachusetts requirements.

A. BAY DIMENSIONS



A* & B* Finishing materials shall not overlap dimensions.

Figure 2A

			SPECIFICATIO	NS TABLE				
MODEL #	DESCRIPTION	B-VENT	OA	REG PV	IN-LINE PV	BTU'S	NG ORIFICE	PROPANE ORIFICE
FDN-4-BAY	4X2 BAY	8"	10"	PVK-45	PVI-45	60,000	(3X) #43	(3X) #55
FDN-5-BAY	5X2 BAY	8"	10"	PVK-45	PVI-45	80,000	(4X) #43	(4X) #55
FDN-6-BAY	6X2 BAY	10"	10"	PVK-67	PVI-67	100,000	(5X) #43	(5X) #55
FDN-7-BAY	7X2 BAY	10"	10"	PVK-67	PVI-67	120,000	(6X) #43	(6X) #55

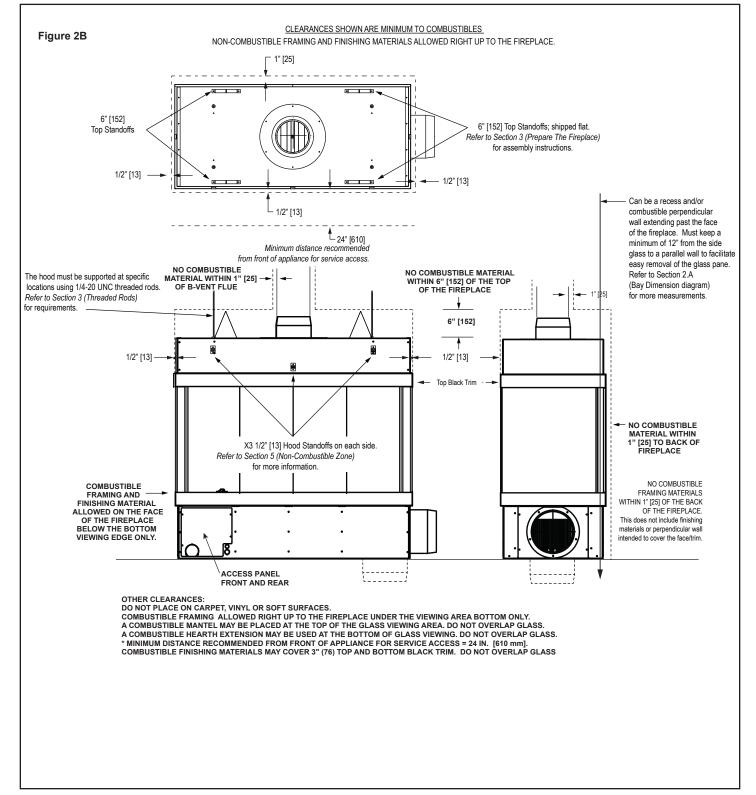
B. CLEARANCES

WARNING: NON-COMBUSTIBLE ZONE: USE ONLY NON-COMBUSTIBLE MATERIAL IN THIS AREA FOR ENTIRE WIDTH OF FIREPLACE. DO NOT USE WOOD, SHEETROCK, ETC., IN THIS ZONE. SEE FIGURE 2B

 $\langle \mathbf{0} \rangle$

NOTE: OTHER CLEARANCES APPLY. ALL CLEARANCES MUST BE MAINTAINED. Refer to Section 5 (Non-Combustible Zone) and Section 10 (Finishing) for more information.

CLEARANCES		
From unit left & right sides	1"	25mm
To flooring under fireplace	0	0
Unit top to ceiling	6"	152mm
Unit side to adjacent sidewall	1"	25mm
From appliance front*	*See note	e below





NOTE: The qualified installer should follow the procedure best suited for the installation.

C. INSTALLATION OVERVIEW

- 1. Framing should be built after the fireplace is installed or extra clearance must be planned for at the intake collar. Framing must allow for vent installation.
- 2. If masonry (optional) will be used, prepare foundation for the masonry load. A lintel is required to support the added weight above the fireplace.
- 3. Install hearth if desired.
- 4. Insert fireplace into framing.
- 5. Double check clearances to combustibles.
- 6. Complete gas line installation.
- 7. Complete electrical hook-up.
- 8. Complete venting installation.
- 9. Install facing material, mantel or cabinetry.
- 10. Install optional mirrored glass, optional logs, media, and required glass.
- 11. Verify proper operation of fireplace and all components.

D. PLACEMENT CLEARANCE REQUIREMENTS

- · This fireplace must be installed on a level surface capable of supporting the fireplace and venting.
- Fireplace must be placed directly on wood or non-combustible surface (not linoleum or carpet) extending entire depth and width of fireplace.
- Due to high surface temperatures, fireplace should be located out of traffic and away from furniture and draperies.
- This fireplace may be installed in a bedroom.

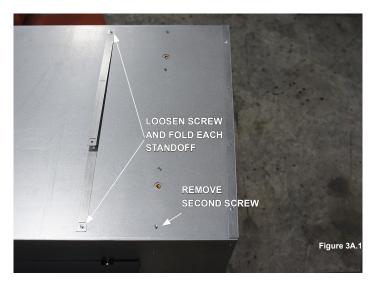
3 - PREPARE THE FIREPLACE



CAUTION: FIREPLACE IS NOT LOAD-BEARING.

NOTE: OTHER CLEARANCES APPLY. ALL CLEARANCES MUST BE MAINTAINED.

A. STANDOFF INSTALLATION

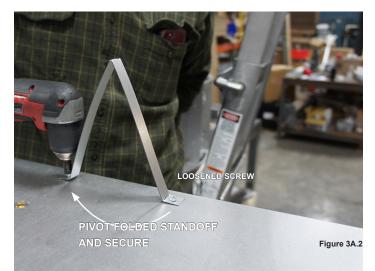


STEP 1: Refer to Figure 3A.1

The (4) standoffs will be shipped in a flat state placed on the firebox top. Locate the standoffs and loosen the screws holding them in place.

STANDOFFS

The Bay fireplace has a quantity of four (4) standoffs that are secured with two (2) screws each (left and right sides of top).



STEP 2: Refer to Figure 3A.2

Fold the center of the standoff up and both ends out at the perforated lines. Using Figure 3A.2 for reference, locate the second pre-installed screw on the firebox top at each standoff location. Remove the screw, pivot the folded standoff into location and re-install the screw to secure the standoff. Tighten up the screw that was loosened in Step 1.

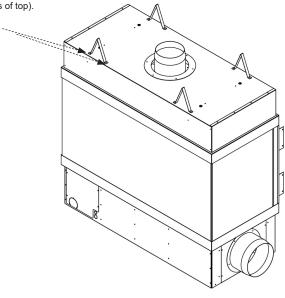


Figure 3A.3

Placement of the standoffs on the Bay design fireplace.

BRACE REMOVAL

1. Remove the shipping brace from the left and right sides as highlighted in Figure 1. Each brace is retained with eight sheet metal screws.

The four sheet metal fasteners removed from the rear panel of each shipping brace **MUST** be replaced prior to placing the appliance into the wall cavity.

All shipping braces can be discarded after removal.

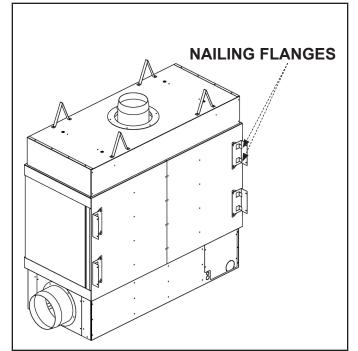
IMPORTANT: The left and right braces highlighted in Figure 3A.4 **MUST** be removed and screws replaced (where applicable) prior to placement of appliance in wall cavity. **DO NOT** remove any other temporary braces at this time.



Figure 3A.4 Shipping Brace

NAILING FLANGES

Bay fireplace has a quantity of four (4) nailing flanges that are secured with two (2) screws each (right side and left back of fireplace).





3 - PREPARE THE FIREPLACE

B. NAILING TAB INSTALLATION



STEP 1: Refer to Figure 3B.1

The four (4) nailing flanges will be shipped in a flat state placed on the firebox back. Locate the nailing flanges and remove the screws holding them in place.



STEP 2: Refer to Figure 3B.2

Bend the two (2) small tabs out on each nailing flange at the perforated lines. Using Figure 3A.4 for reference, locate the pre-drilled holes on the firebox side each nailing flange will be placed at.



STEP 3: Refer to Figure 3B.3 & Figure 3B.4

Set each nailing flange in place and secure using two (2) screws each. Bend the nailing flange out from fireplace at the remaining perforated line.





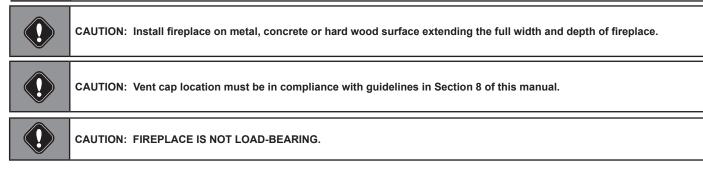
The nailing flanges will ensure the 1" minimum clearance is kept to combustible framing. Refer to Figure 3B.5

Depending on your installation and how you frame it out, you may not use the provided nailing flanges.

4 - FRAMING



NOTE: Framing dimensions should allow for wall covering thickness and fireplace facing materials. When using a hearth, adjust rough opening size as necessary to maintain at least minimum clearance requirements.



If masonry is to be used (optional), prepare the necessary foundation for the masonry load. When masonry construction is being used, a lintel must be used over top of fireplace to support the added weight. Build hearth to desired size and height. If a hearth extension is desired, combustible material may be used.



NOTE: Refer to Dimensions section for allowable finishing dimensions required to fit the glass panels into the fireplace. Finishing materials must not overlap the dimensions highlighted in Figure 2A. Never cover the glass with finishing materials.



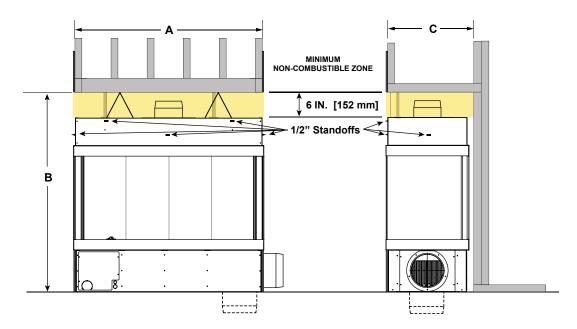
NOTE: DO NOT pierce any of the black painted surfaces with screws, rivets, etc. This includes the three inch black top and bottom glass trim and any painted sides adjacent to the glass.

4 - FRAMING

A. BAY Framing Dimensions

IMPORTANT: FIREPLACE IS NOT LOAD-BEARING.

Refer to Section 5A for information on the 1/2" standoffs. Refer to Section 4B for information regarding supporting the fireplace hood with 1/4-20 threaded rods.



NOTE: Fireplace MUST be square in both directions prior to finishing or the glass will not fit properly.

BAY					
Model #	A	B	C		
	WIDTH	HEIGHT	DEPTH		
FDN-4-BAY	52 3/4	56	25		
	[1,340]	[1,422]	[635]		
FDN-5-BAY	64-3/4	56	25		
	[1,645]	[1,422]	[635]		
FDN-6-BAY	76-3/4	56	25		
	[1,949]	[1,422]	[635]		
FDN-7-BAY	88-3/4	56	25		
	[2,254]	[1,422]	[635]		

IMPORTANT FRAMING NOTES:

FRAMING SHOULD BE BUILT AFTER THE FIREPLACE IS INSTALLED OR EXTRA CLEARANCE MUST BE PLANNED FOR AT THE INTAKE COLLAR AND FOR THICKNESS OF MATERIALS USED .

FRAMING DIMENSIONS ASSUMING 1/2" [13] DRYWALL AND NON-COMBUSTIBLE BOARD USED.

THESE DIMENSIONS REPRESENT THE FRAMING DIMENSIONS FOR COMBUSTIBLE MATERIAL.

NON-COMBUSTIBLE FRAMING AND FINISHING MATERIALS MAY BE USED WITHIN THESE DIMENSIONS RIGHT UP TO THE UNIT.

NO COMBUSTIBLE MATERIAL WITHIN 6" [152] OF THE TOP OF THE FIREPLACE.

NO COMBUSTIBLE MATERIAL WITHIN 1" [25] OF THE SIDES AND BACK OF THE FIREPLACE.

COMBUSTIBLE MATERIAL SHALL NOT BE PLACED DIRECTLY ON THE FACE OF THE FIREPLACE, TOP AND SIDES.

STEEL SURFACE MAY BE COVERED WITH NON-COMBUSTIBLE FINISHING MATERIAL.

1" [25] CLEARANCE TO THE B-VENT MUST BE MAINTAINED.

Figure 4A

B. Fireplace Support

Threaded Rods

The hood must be supported using .250-.20 UNC threaded rods at the locations noted as "Required" in Figure 4B.1. Additional threaded rods can be installed in the locations noted as "Optional" in Figure 4B.2.

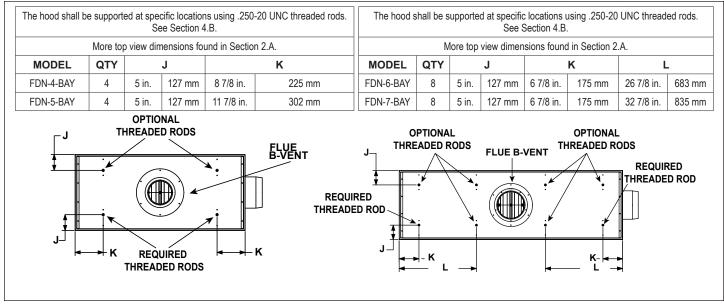


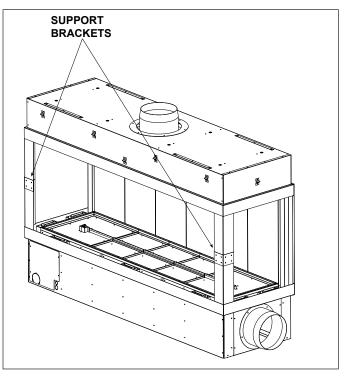
Figure 4B.1

Support Brackets

Temporary support brackets are put in place for shipping and support during the installation process. They must stay in place until the fireplace hood is fully supported. See Figure 4B.2.

- 1. Install the threaded rods in the locations noted as "Required" in Figure 4B.1.
- 2. Level the fireplace.
- 3. Ensure fireplace is fully supported and leveled and then remove support brackets.

Caution! Risk of Injury! DO NOT remove support brackets until fireplace is fully supported and level.



4 - FRAMING

Threaded Rod Installation

There are several different ways to support the fireplace top and one option is to use a Unistrut installed over the fireplace that is secured to structurally sound framing. Refer to Figure 4B.3 or 4B.4.

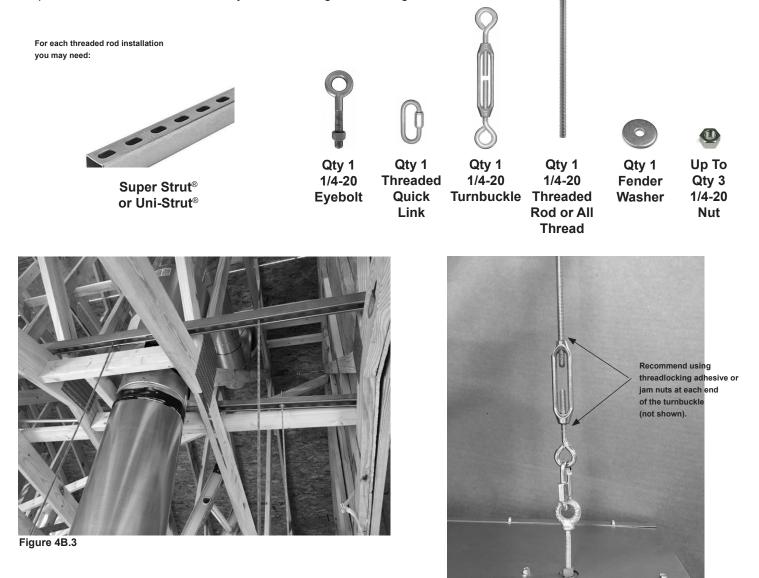


Figure 4B.4

- Install the threaded rod fully into the threaded fastener located on top of the fireplace.
- Insert the threaded rod into a hole in the Unistrut[®] straight above the threaded fastener located on top the fireplace.
- Use a fender washer and nut on the top end of the threaded rod to adjust the height of the fireplace opening. Make sure the opening dimension is exact all the way around. Use threadlocking adhesive to secure the nut from from loosening (not shown).
- If the top of the threaded rod is to be secured into blind threaded fastener or if there isn't clearance above to adjust the rod, you can use a turnbuckle to adjust the height.
- Install an eyebolt fully into the threaded nut located on top of the fireplace.
- Use a quick link to connect the eye bolt to the reverse thread side of the turnbuckle.
- Thread the threaded rod into the normal side of the turnbuckle.
- Use the threadlocking adhesive or jam nuts to secure the turnbuckle from loosening.

5 - MANTEL REQUIREMENTS

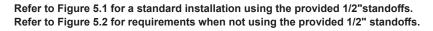
A. NON-COMBUSTIBLE ZONE - USING THE PROVIDED 1/2" STANDOFFS

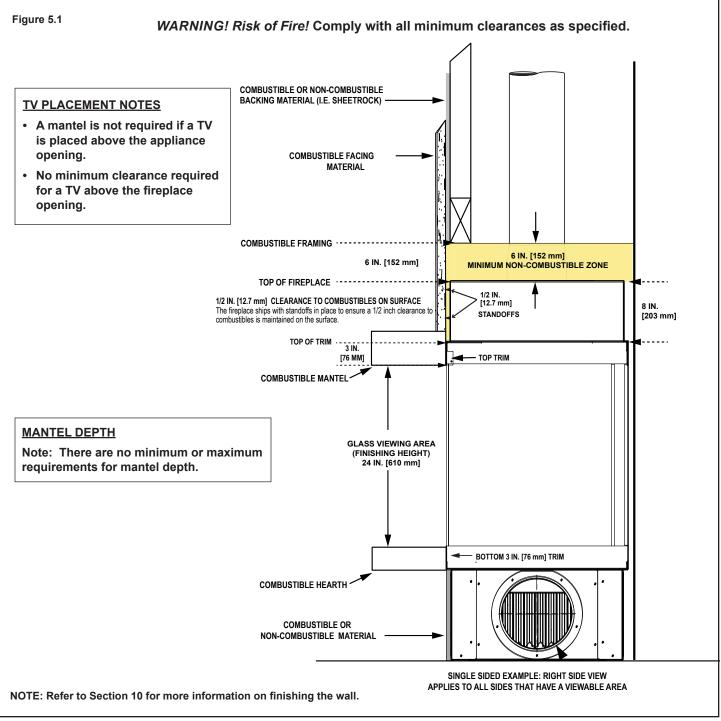
The fireplace has standoffs installed on the front of the fireplace standard from the factory. They are located on the upper left, center and right front of the fireplace and are to ensure that the 1/2" [12.7mm] required clearance to combustibles on the surface of the fireplace is maintained.

If the standoffs are removed, only non-combustible material can be installed against the surface of the fireplace such as a non-combustible backer cement board. 1/2" [12.7mm] minimum thickness must be used in the 15" [381mm] between the top of the 3" trim to the combustible framing the full width of the fireplace. The 15" includes a 7" [178mm] minimum above the top of the fireplace that is recommended for ease of attachment.



1/2" [12.7mm] Standoff





5 - MANTEL REQUIREMENTS

B. NON-COMBUSTIBLE ZONE - NOT USING THE PROVIDED 1/2" STANDOFFS

The fireplace has standoffs installed on the front of the fireplace standard from the factory. They are located on the left, center and right front hood of the fireplace and are to ensure that the 1/2" [12.7mm] required clearance to combustibles on the surface of the fireplace is maintained.

If the standoffs are removed, only non-combustible material can be installed against the surface of the fireplace such as a non-combustible backer cement board. 1/2" [12.7mm] minimum thickness must be used in the 15" [381mm] between the top of the 3" trim to the combustible framing the full width of the fireplace. The 15" includes a 7" [178mm] minimum above the top of the fireplace that is recommended for ease of attachment.

Refer to Figure 5.2 for requirements when not using the provided 1/2" standoffs. Refer to Figure 5.1 for a standard installation using the provided 1/2" standoffs.

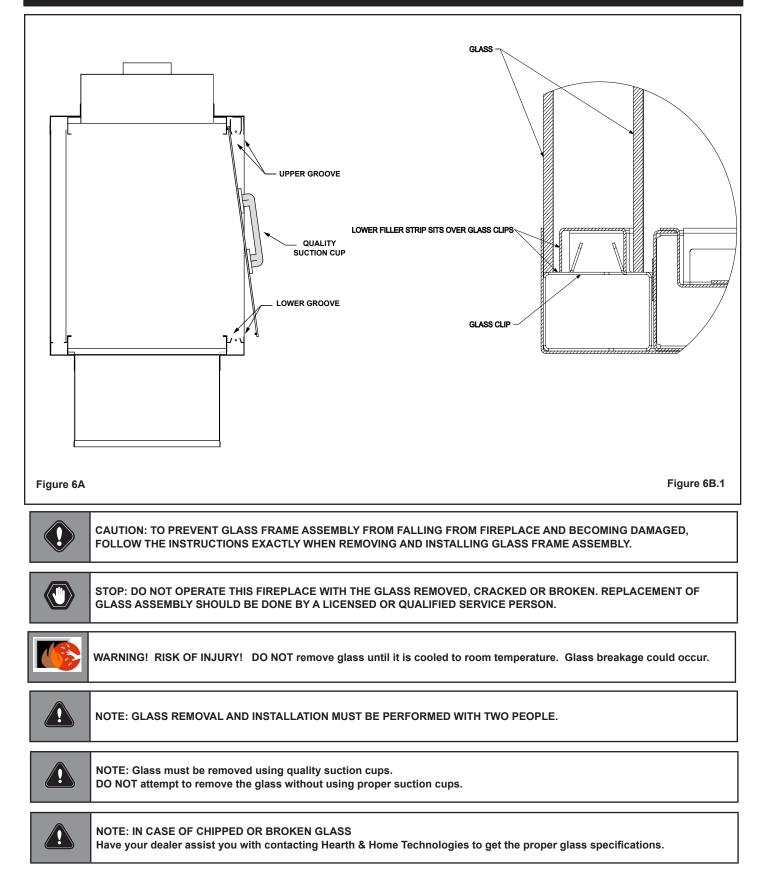


1/2" [12.7mm] Standoff

Figure 5.2 WARNING! Risk of Fire! Comply with all minimum clearances as specified. **TV PLACEMENT NOTES** A mantel is not required if a TV is placed above the appliance COMBUSTIBLE FRAMING opening. COMBUSTIBLE OR NON-COMBUSTIBLE No minimum clearance required BACKING MATERIAL (I.E. SHEETROCK) for a TV above the fireplace opening. COMBUSTIBLE FACING MATERIAL 7 IN. [178 mm] ABOVE TOP OF FIREPLACE 1/2 IN. [12.7 mm] CLEARANCE TO COMBUSTIBLES ON SURFACE The fireplace ships with standoffs in place to ensure a 1/2 inch clearance to 6 IN. [152 mm] combustibles is maintained on the surface MINIMUM NON-COMBUSTIBLE ZONE 15 IN. If the standoffs are removed, only non-combustible material can be installed [381 mm] against the surface. 1/2 inch [12.7 mm] minimum thickness must be used between the top of the 3 inch trim extending 15 inches [381 mm] high the 8 IN. full width of the fireplace. The 15 inches includes a 7 inch [178 mm] minimum above above the top of the fireplace that is recommended for [203 m ease of attachment TOP OF TRIM 3 IN. [76 MM] TOP TRIM COMBUSTIBLE MANTEL MANTEL DEPTH Note: There are no minimum or maximum requirements for mantel depth. GLASS VIEWING AREA (FINISHING HEIGHT) 24 IN. [610 mm] BOTTOM 3 IN. [76 mm] TRIM COMBUSTIBLE HEARTH COMBUSTIBLE OR NON-COMBUSTIBLE MATERIAL SINGLE SIDED EXAMPLE: RIGHT SIDE VIEW APPLIES TO ALL SIDES THAT HAVE A VIEWABLE AREA NOTE: Refer to Section 10 for more information on finishing the wall.

6 - GLASS FRAME ASSEMBLY

A. GLASS FRAME ASSEMBLY IDENTIFICATION



Refer to Glass Frame Assembly Identification Figures 6A & 6B.1 when installing and removing the glass frame assembly.

B. INSTALL GLASS FRAME ASSEMBLY

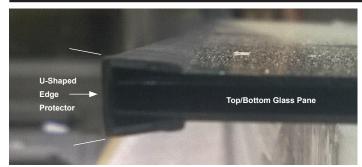


Figure 6B.2 - Edge Protector



Figure 6B.3 - Vertical Trim Piece

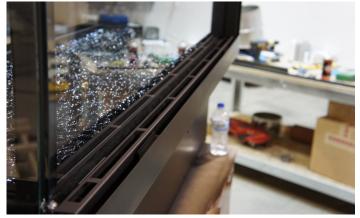


Figure 6B.4 - Horizontal Trim Piece

C. REMOVE GLASS FRAME ASSEMBLY



WARNING! RISK OF INJURY! DO NOT remove glass until it is cooled to room temperature. Glass breakage could occur.

- 1. Apply the suction cups to the outer glass panel following the instructions included with the suction cups.
- 2. Gently lift the glass until the bottom edge is clear of the groove it sits in.
- 3. Bring the bottom edge of the glass towards you while lowering it to disengage it from the top groove.
- 4. Set the glass on a padded surface to protect it. IMPORTANT: Protect the glass's edges.
- 5. Remove the lower trim panel that sits between the layer of glass.
- 6. Remove the inner trim vertical panels.
- 7. Using the suction cups, remove the inner panel in the same manner.

Heat & Glo • FDN-4-BAY, FDN-5-BAY, FDN-6-BAY, FDN-7-BAY Installation Manual • 16400-9802 Rev. P • 4/21

IMPORTANT: PLASTIC EDGE PROTECTORS

The fireplace is shipped with plastic edge protectors on the outer panes of glass only.

If the edge protectors on the outer panes of glass are not installed, the glass may rattle during operation. See Figure 6B.2.

Note: All glass on this appliance is tempered.

CAUTION! Risk of Injury! Handle glass panels with care. Glass is breakable.

Inner Glass

- 1. Unwrap the panes of glass carefully making sure to protect the edges.
- 2. Apply the suction cups to the inner glass assembly, following instructions included with the suction cups.
- 3. Lift the glass into place. The top edge slips into the top groove, lift into the groove until the bottom is clear of the bottom trim. Slide the glass down into the inner bottom groove. See Figure 6A.
- 4. Push inner trim vertical panels into place on each side. See Figure 6B.3.
- 5. Place the lower trim panel between the lower glass clips. Slide back against the vertical trim piece. See Figure 6B.4.
- 6. Repeat process for all inner glass panels on appliance.

Outer Glass

- 7. Apply the suction cups to the outer unframed glass (which has the U-shaped edge protector) and lift it into place in the same manner as the inner glass.
- 8. Repeat process for installing all outer glass panels on appliance.

7 - GAS LINE SPECIFICATIONS & ACCESS

This fireplace is manufactured for use with Natural Gas or Propane.

CAUTION: Installation of the gas line must only be done by a qualified person in accordance with local building codes, if any. If not, follow ANSI Z223.1.
NOTE: The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of ½ psi.
NOTE: 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 line at test pressures equal to or less than ½ psi (3.5 kPa).
NOTE: For high altitude installations above 2000 feet, fireplace does not need to be derated.

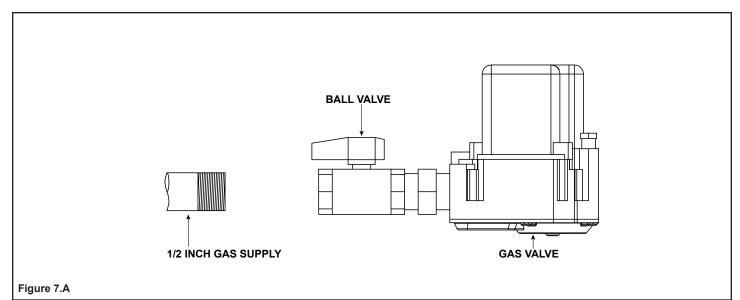
A. GAS LINE CONNECTION

GAS LINE CONNECTION	Propane	Natural Gas
MINIMUM INLET GAS PRESSURE	11.0 inches W.C. (recommended)	7.0 inches W.C. (recommended)
MAXIMUM INLET GAS PRESSURE	14.0 inches W.C.	10.0 inches W.C.
MANIFOLD PRESSURE (HI)	10.0 inches W.C.	3.5 inches W.C.
ORIFICE SIZE	See Specifications Table in Section 2.A.	See Specifications Table in Section 2.A.
INPUT BTU/HR	See Specifications Table in Section 2.A.	See Specifications Table in Section 2.A.

Note: Have the gas supply line installed in accordance with local codes, if any. If not, follow ANSI Z223.1. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter).

Note: A listed (and Commonwealth of Massachusetts approved) 1/2 in. (13 mm) T-handle manual shut-off valve and flexible gas connector are connected to the 1/2 in. (13 mm) control valve inlet.

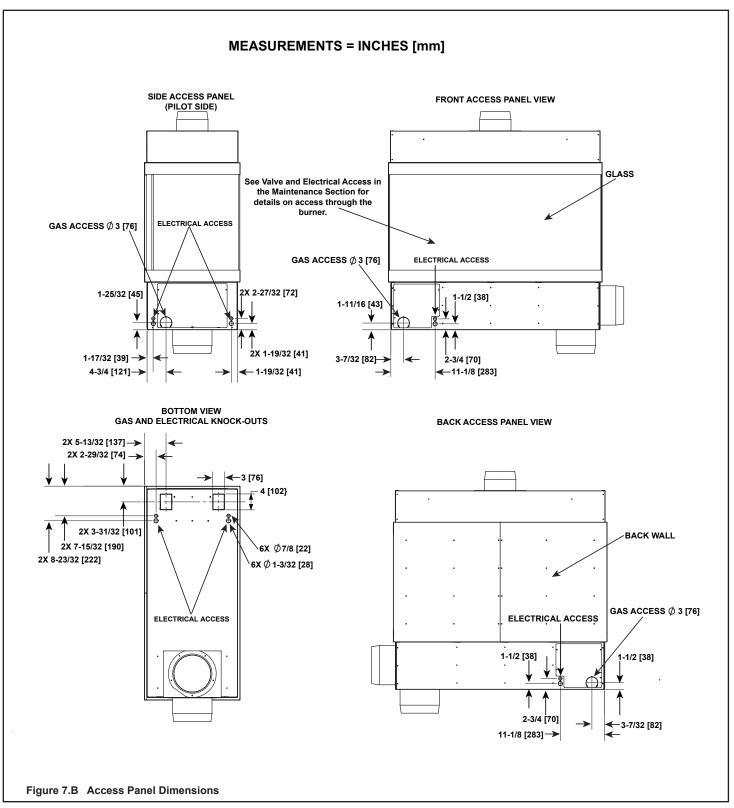
• If substituting for these components, please consult local codes for compliance.



7 - GAS LINE SPECIFICATIONS & ACCESS

B. GAS AND ELECTRICAL ACCESS PANELS

Each fireplace will have four points of access for installation and service. There are access panels on the pilot side of the fireplace front, side and rear of the fireplace. *Plan in advance of the installation which access location will be used and accommodate for it in the finish work to allow for easy access to service later.* You also have access through the interior of the fireplace by removing the mesh on the burner pan in the pilot area. There are gas and electrical gas knock-outs on the bottom if you need to come up from below the fireplace.





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CAUTION: Consult the local and national installation codes to assure adequate combustion and ventilation air is available.

NOTE: Flame height and appearance will vary depending upon venting configuration and type of fuel used. Venting requirements apply to both Natural and Propane gas.

STOP: MAINTAIN ALL CLEARANCES AS STATED IN THIS INSTALLATION MANUAL.

A. APPROVED VENTING

Model #		B-VENT	INTAKE AIR	POWER VENT	IN-LINE POWER VENT
FDN-4-BAY	4X2 BAY	8"	10"	PVK-45	PVI-45
FDN-5-BAY	5X2 BAY	8"	10"	PVK-45	PVI-45
FDN-6-BAY	6X2 BAY	10"	10"	PVK-67	PVI-67
FDN-7-BAY	7X2 BAY	10"	10"	PVK-67	PVI-67

Refer to the vent systems manufacturer's installation manual for complete installation instructions.

Installation must conform with the venting requirements and restrictions as outlined in this manual.

SEE CHART ABOVE FOR SIZE diameter B-Type Venting that must be used. UL/CSA approved B-Vent only.

DO NOT decrease the vent size.

Vent runs are approved for up to 110 feet with quantity of eleven 90 degree elbows.

Note: It is acceptable to install a 90 degree elbow off the top of the appliance.

Vent runs may also contain a downward component. The downward component may be a maximum of 6 feet plus the distance to the center line of the elbow. See Figure 8A.1.

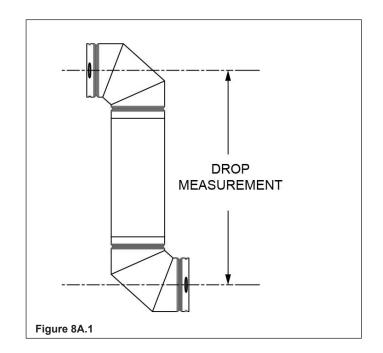
This will be about 87" for 8" diameter pipe and 92" for 10" diameter pipe. Due to natural buoyancy of flue gas products, venting downward increases restriction.

Every inch of vertical drop counts as triple inches subtracted off the total vent run.

Example: a maximum drop of 92" means the total allowed vent run is decreased by 276" (23')

<u>Once a downward component has been utilized, the vent cannot go</u> <u>upwards again</u>, <u>Moisture may get trapped in the vent pipe</u>.

Important: Be sure to do your own calculations based on the center line dimension given from the pipe manufacture you are using for your installation.



Available Power Venting

A power vent (PVK-45 or PVK-67) is approved for use with this appliance. It is crucial that all B-Vent pipe and elbow joints, and the longitudinal seam are sealed using a high temperature RTV Silicone and/or foil tape.



NOTE: All pipe and elbow joints must be sealed. This includes the longitudinal seam on the pipe. High Temp RTV Silicone and/or foil tape MUST be used on each joint/seam. Failure to do so may cause lack of vacuum and may not trigger the vacuum switch.

	MODEL	PVK-45	PVK-67
	Fan Type	Axial vane	Axial vane
	Motor Type	Totally enclosed, variable speed, Class H	Totally enclosed, variable speed, Class H
	Voltage (VAC)	1 x 120	1 x 120
		1600	1600
	CFM	950	1400
	Amperage (Amps)	1.2	1.4
	Motor Output HP (kW)	1/9 (0.08)	1/7 (0.1)
J E	Weight Ibs (kg)	37 (17)	47 (21)
B	Dimension A in. (mm)	11.5 (292)	13.1 (334)
	Dimension B x B in.(mm)	14.3 (364)	16.6 (422)
	Dimension C in. (mm)	13.5 (344)	15.5 (395)
	Dimension D in. (mm)	3.3 (85)	3.9 (100)
	Dimension E in. (mm)	11.6 (294)	13.5 (342)
	Temperature Rating-Intermittent	575 °F / 300 °C	575 °F / 300 °C
	Temperature Rating-Continuous	482 °F / 250 °C	482 °F / 250 °C

Figure 8A.2

Chimney Collar Dimensions

A chimney collar is included for use with the PVK-45 and PVK-67. The chimney collar is used to attach the PVK power vent. Figures 8A.3 and 8A.4 show the dimensions of the chimney collar.

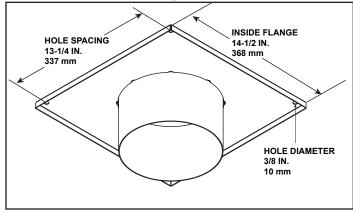


Figure 8A.3 8 Inch Chimney Collar Dimensions (PVK-45)

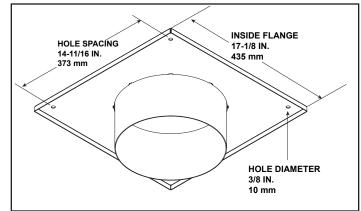


Figure 8A.4 10 Inch Chimney Collar Dimensions (PVK-67)

Available In-Line Power Venting

An in-line power vent (PVI-45 or PVI-67) is approved for use with this appliance. It is crucial that all B-Vent pipe and elbow joints, and the longitudinal seam are sealed using a high temperature RTV Silicone and/or foil tape.



NOTE: All pipe and elbow joints must be sealed. This includes the longitudinal seam on the pipe. High Temp RTV Silicone and/or foil tape MUST be used on each joint/seam. Failure to do so may cause lack of vacuum and may not trigger the vacuum switch.

' in. (60 mm)→ ─ (C →(D →)	MODE	L	PVI-45	PVI-67 in.
	Fan Type		Centrifugal Impeller (F-Wheel)	Centrifugal Impeller (F-Wheel)
	Motor Type		TEFC	TEFC
E -	Voltage	(VAC)	1 x 120	1 x 120
	Amperage	Amps	2.9	5.3
	Motor Output	hp (kW)	3/7 (.32)	13/16 (.61)
G	RPM		1600	1600
	Weight	lbs (kg)	38 (17)	60 (27)
K	Duct Connection ((E) in. (mm)	8 (203)	8 (203)
	Dimension A	in. (mm)	14.57 (370)	16.15 (410)
	Dimension B	in. (mm)	12.60 (320)	13.98 (355)
в	Dimension C	in. (mm)	9.26 (235)	9.26 (235)
	Dimension D	in. (mm)	5.52 (140)	7.68 (195)
	Dimension E	in. (mm)	7.9 (200)	7.9 (200)
<u>А</u>	Dimension G	in. (mm)	15.75 (400)	15.75 (400)
	Dimension H	in. (mm)	7.10 (180)	7.88 (200)
D	Dimension J	in. (mm)	8.27 (210)	9.26 (235)
	Dimension K	in. (mm)	5.12 (130)	5.12 (130)
1	Dimension R	in. (mm)	14.57 (370)	16.15 (410)

Figure 8A.5

IN-LINE POWERVENT PREPARATION - PVI-67

Perform the following steps when installing the PVI-67 on six foot and seven foot models.

- 1. Attach the provided 10 inch B-Vent collar to the intake side of the powervent. The intake side is located opposite the fan motor as shown in Figure 8A.6. The 10 inch B-Vent collar is packaged separately from the powervent. See Figure 8A.7.
- 2. Note the silhouette circle printed on the intake side of the powervent. The pre-drilled screw holes within the circle will be matched with the holes on the intake collar of the base plate. See Figure 8A.8.
- Place the intake collar base plate onto the silhouette, matching up the holes as shown in Figure 8A.9. Fasten the base plate to the silhouette using five selftapping screws.
- 4. Add the rope gasket included with the kit to the outlet side of the inline powervent.
- 5. An adapter to increase from eight inch pipe to ten inch pipe is required on the outlet side of the in-line powervent. The adapter is included in the PVI-67 kit. See Figure 8A.10. Connect the adapter directly to the eight inch outlet collar of the in-line powervent. Connect the ten inch exhaust B-Vent to the collar and continue the vent run.

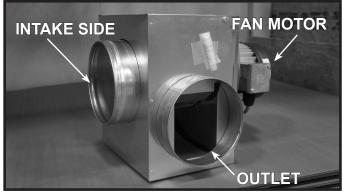


Figure 8A.6 In-Line Powervent (PVI-67)

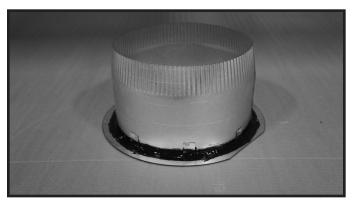


Figure 8A.7 Ten Inch B-Vent Collar

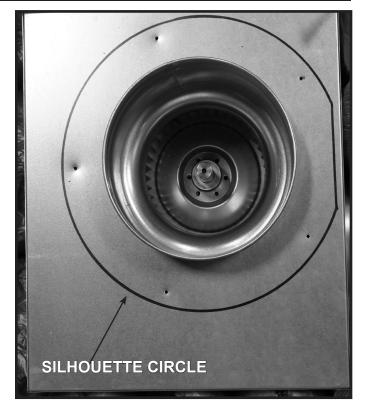


Figure 8A.8 Silhouette Circle on Intake

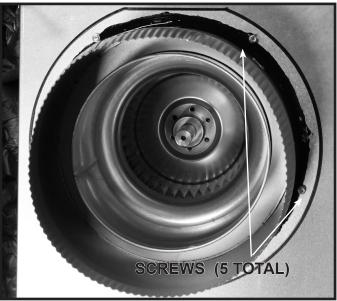


Figure 8A.9 Base Plate Fastened to Intake



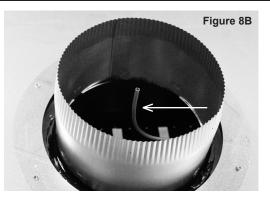
Figure 8A.10 Heat & Glo • FDN-4-BAY, FDN-5-BAY, FDN-6-BAY, FDN-7-BAY Installation Manual • 16400-9802 Rev. P • 4/21

B. PITOT TUBE INFORMATION

There is a 1/4" pitot tube mounted in the center of the flue collar and is connected to the pressure switch (Figure 8B).

This monitors the pressure in the flue and is necessary for proper operation. Take care to keep the end of the tube clean.

IMPORTANT: PITOT TUBE MUST NOT BE BENT, CLOGGED, REMOVED, OR ALTERED IN ANY WAY. IF ADJUSTMENT IS NEEDED, THE PITOT TUBE CAN BE ACCESSED THROUGH THE INSIDE OF THE APPLIANCE BY REMOVING THE ROOF PANELS.



C. HORIZONTAL VENT SYSTEM CLEARANCES

ALL APPROVED VENTING	ТОР	воттом	SIDES
HORIZONTAL	1 inch (25mm)	1 inch (25mm)	1 inch (25mm)

D. WALL PASS-THROUGH - Follow all local codes for requirement of firestops.

E. VERTICAL TERMINATIONS

- The Foundation Series fireplace must terminate with the approved powervent termination cap.
- NO SUBSTITUTION IS ACCEPTABLE.
- · Carefully follow the instructions included with the approved powervent termination cap.
- DO NOT use an additional speed control on this powervent.
- You must use the included Capacitor.
- All pipe seams must be sealed with aluminum tape or high temperature silicone (minimum 300 °F).

F. HORIZONTAL TERMINATION VENT CAP LOCATION & CLEARANCES

This gas appliance must not be connected to a chimney serving any other appliance.

- DO NOT RECESS TERMINATION KIT INTO OUTSIDE BUILDING MATERIALS i.e.: brick, stone, siding, etc. If necessary, extend framing so
 that termination kit will be exposed once building materials are installed.
- Vent termination must not be located where it will become plugged by snow or other material. The flow of combustion and ventilation air must not be obstructed.

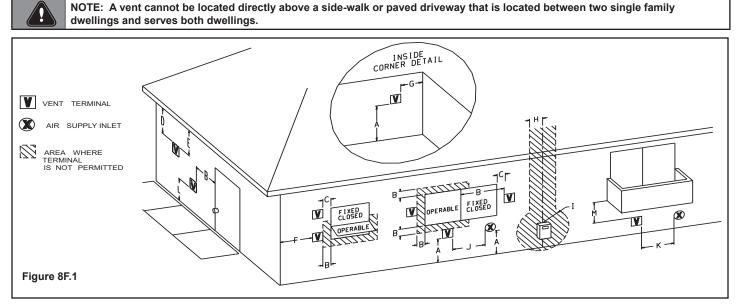
LOCATION CLEARANCES:

- A. Above grade, veranda, porch, deck, balcony 12 inches (305 mm).
- B. Operable window or door 12 inches (305 mm).
- C. Permanently closed window* 12 inches (305 mm) (recommended to prevent condensation on window).
- D. Ventilated soffit* 24 inches (610 mm).
- E. Unventilated soffit* 12 inches (305 mm).
- F. Outside corner* 6 inches (152 mm).
- G. Inside corner* to non-combustibles 12 inches (305 mm). Inside corner* to combustibles 24 inches (610 mm).
- H. Meter / Regulator: Not to be installed above a gas meter/regulator assembly within 3 ft. (914 mm) horizontally from the center-line of the regulator.
- I. Gas Service regulator vent outlet 3 ft. (914 mm).
- J. Non-mechanical air supply inlet to building or the combustion air inlet to any other appliance.
- US: 9 inches (229 mm) CANADA: 12 inches (305 mm).
- K. Mechanical air supply inlet.
- US: 3 ft. (914 mm) above if within 10 ft. (3.05 m) horizontal. Massachusetts installations: 10 ft. (3.05 m). CANADA: 6 ft. (1.83 m).
- L. Above paved side-walk or paved driveway located on public property 7 ft. (2.13 m).
- M. Under veranda, porch, deck, or balcony (must be fully opened on a minimum of 2 sides) 24 inches (610 mm).
- N. Between two horizontal terminations 12 inches (305 mm). (Not shown in Figure 8F.1).
- O. Between two vertical terminations 12 inches (305 mm). Terminations may be same height. (Not shown in Figure 8F.1).

N & O: Minimum of 12 inches (305 mm) required when two exhaust termination caps are placed next to each other. Measurement must be taken from inside edge of one steel chimney adapter to the inside edge of the other steel chimney adapter. A metal divider plate with same length and height as termination cap is required to be installed between the caps. Divider plate is not required if caps are at least 24 inches (610 mm) apart, measured edge to edge.

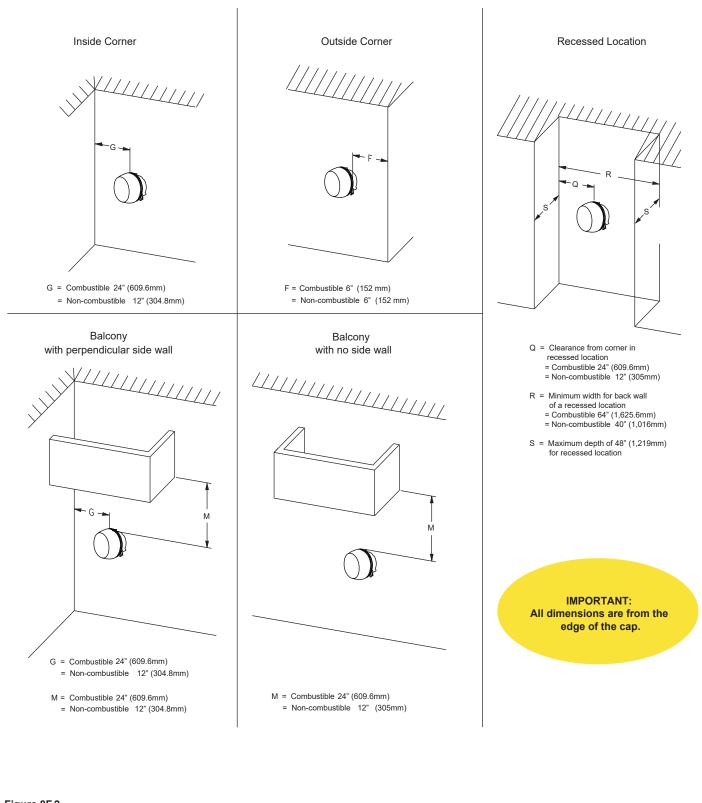
P. Above furnace exhaust or inlet - 12 inches (305 mm). (Not shown in Figure 8F.1).

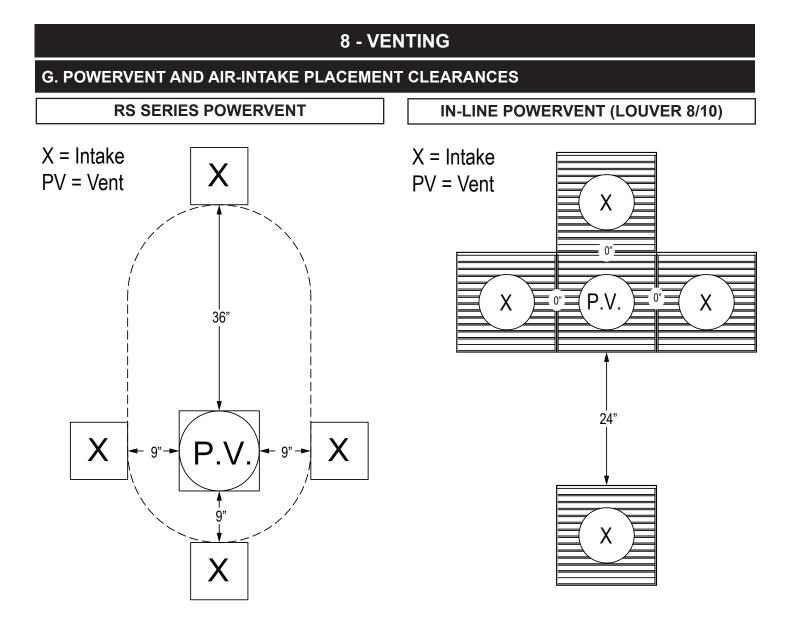
*Clearance must be in accordance with local installation codes & the requirements of the gas supplier.



F. HORIZONTAL TERMINATION VENT CAP LOCATION & CLEARANCES

Note: For horizontal terminations, it is advised that the hinges on the powervent be positioned to the left or right, rather than top or bottom, for safer maintenance.





Minimum Clearance Using an RS Series Powervent Intake Placed Above Vent = 36 Inches Intake Placed to Left Side, Right Side or Below Vent = 9 Inches Minimum Clearance Using an In-Line Powervent Intake Placed Below Vent = 24 Inches Intake Placed to Left Side, Right Side or Above Vent = 0 Inches

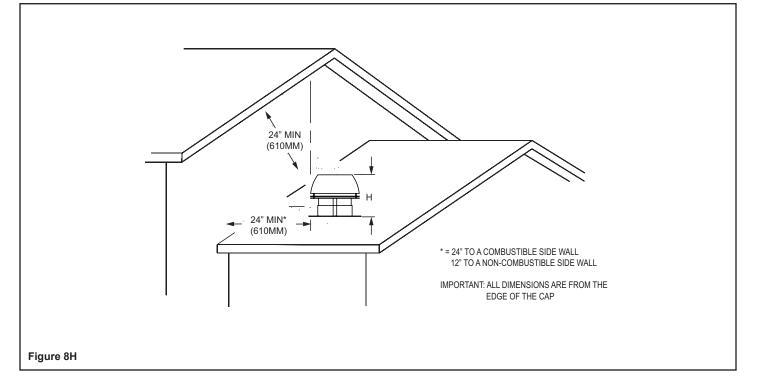
Figure 8G.1

Figure 8G2

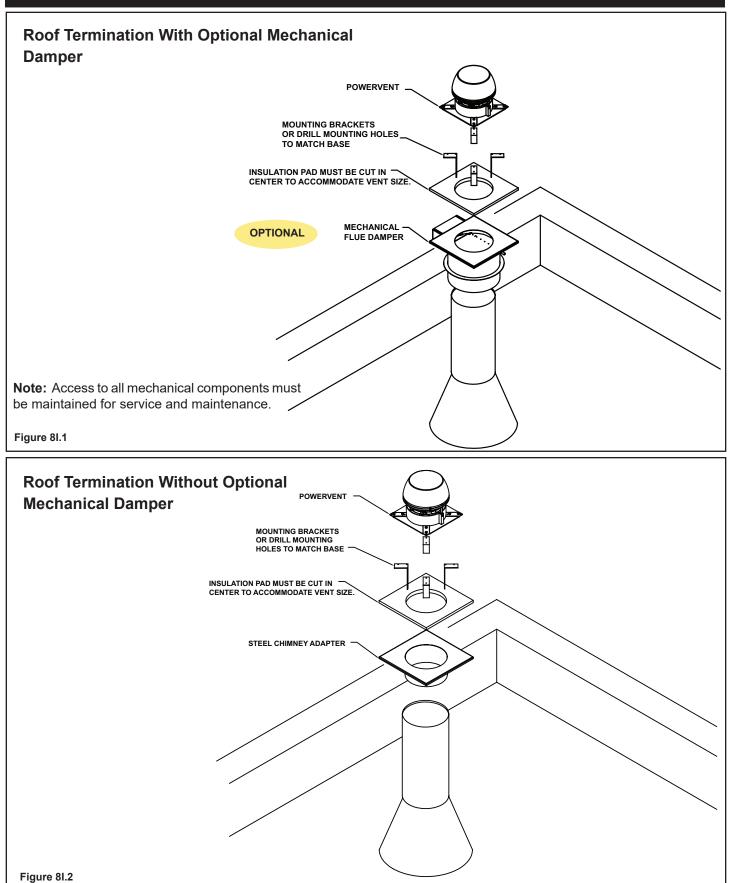
H. VERTICAL TERMINATION VENT CAP LOCATION AND CLEARANCES

ROOF PITCH	H (Min.) Ft.	H (Min.) M
FLAT TO 6/12	1.0*	0.30
OVER 6/12 TO 7/12	1.25*	0.38
OVER 7/12 TO 8/12	1.5*	0.46
OVER 8/12 TO 9/12	2.0*	0.61
OVER 9/12 TO 10/12	2.5*	0.76
OVER 10/12 TO 11/12	3.25	0.99
OVER 11/12 TO 12/12	4.0	1.22
OVER 12/12 TO 14/12	5.0	1.52
OVER 14/12 TO 16/12	6.0	1.83
OVER 16/12 TO 18/12	7.0	2.13
OVER 18/12 TO 20/12	7.5	2.27
OVER 20/12 TO 21/12	8.0	2.44

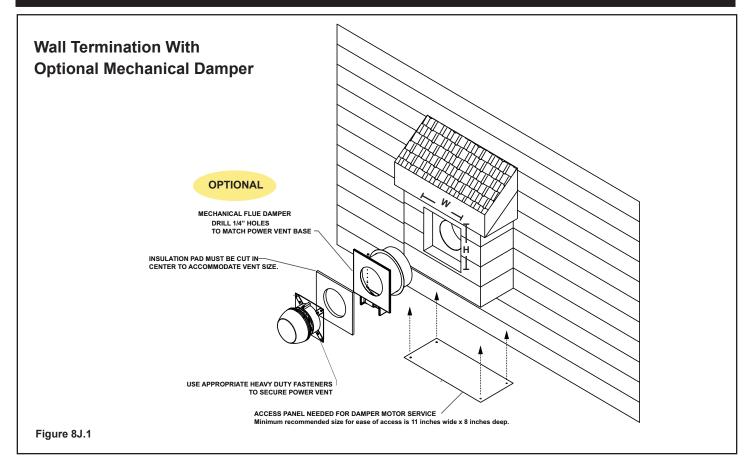
* = 3 foot minimum in snowy regions

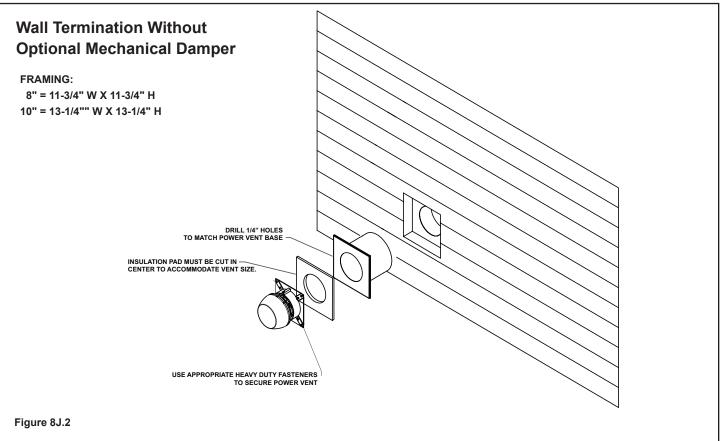


I. ROOF TERMINATION CAP INSTALLATION - WITH AND WITHOUT OPTIONAL DAMPER



J. WALL TERMINATION INSTALLATION - WITH AND WITHOUT OPTIONAL DAMPER





K. INTAKE AIR

This fireplace has the options of air intake connections on the side or the bottom of the fireplace. This fireplace is approved for use with 10 inch rigid metal pipe or UL approved 10 inch Class 0 or Class 1 flex for intake air. Use Table 8K.1 for venting requirements if using UL approved 10 inch flex for intake air.

Vent runs utilizing 10 inch rigid metal pipe may be 110 feet with 11 elbows. We recommend insulating the intake air duct or using UL approved Class 1 insulated flex in hot, humid or cold climates.

The intake pipe must maintain 1.5X the square inches of the flue pipe in free area. Intake screen/vent must be sized appropriately. Failure to do so will result in higher operating temperatures.

The fireplace may also take room air for combustion. Intake screen/vent must be sized appropriately. You must plan for the replacement air that is consumed from the room by the fireplace. Do not draw intake air from a crawl space or an attic (ventilated or not ventilated).

WARNING! Risk of Fire! DO NOT draw intake air from an attic or crawl space. Appliance could overheat.

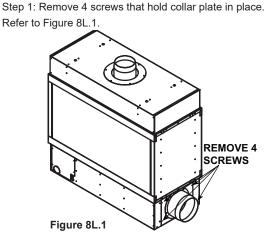
Use Table 8K.2 for reference on CFM replacement air if drawing intake air from inside the house and open air requirements for intake screen/vent or consult Hearth & Home Technologies for more information.

Table 8K.1

UL Approved 10 Inch Class 1 or Class 0 Flex Intake Air Venting Requirements							
		Number of offsets					
		0-3	4	5	6	7	8
FDN-4-BAY	Length of Run	100 ft	90 ft	80 ft	70 ft	60 ft	50 ft
FDN-5-BAY		45 ft	35 ft	25 ft	15 ft	5 ft	N/A
FDN-6-BAY		70 ft	60 ft	50 ft	40 ft	30 ft	20 ft
FDN-7-BAY		32 ft	20 ft	15 ft	10 ft	N/A	N/A

5	Fireplace	Required	Open Air				
٦	Size	CFM	Requirement				
٦	FDN-4-BAY	480 CFM	78 Sq. Inches				
٦	FDN-5-BAY	640 CFM	78 Sq. Inches				
٦	FDN-6-BAY	800 CFM	78 Sq. Inches				
1	FDN-7-BAY	960 CFM	78 Sq. Inches				
-i							

L. CHANGING FROM SIDE INTAKE AIR TO BOTTOM INTAKE AIR

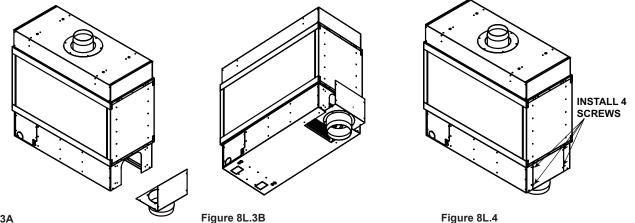


Step 2: Slide collar plate off fireplace.

Refer to Figure 8L.2.

Figure 8L.2

Step 3: Turn plate so collar is facing down, slide plate into slots on each side. Refer to Figure 8L.3A and Figure 8L.3B. Step 4: Re-attach the plate with four screws Refer to Figure 8L.4.



M. OPTIONAL UNIVERSAL EXHAUST IN AIR-INTAKE LOUVER

MODEL	UNITS	USE
LOUVER-8	4 ft, 5 ft	Exhaust and Air-Intake
LOUVER-10	6 ft., 7 ft	Exhaust and Air-Intake

This kit is an optional method of terminating the fresh air and/or exhaust for the appliance.

Exhaust terminations must be installed with an inline powervent.



FOLLOW COMPLETE INSTALLATION INSTRUCTIONS PROVIDED WITH THE LOUVER KIT

LOUVER-8 & LOUVER-10

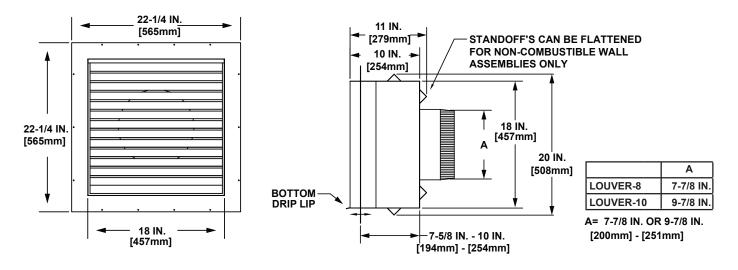
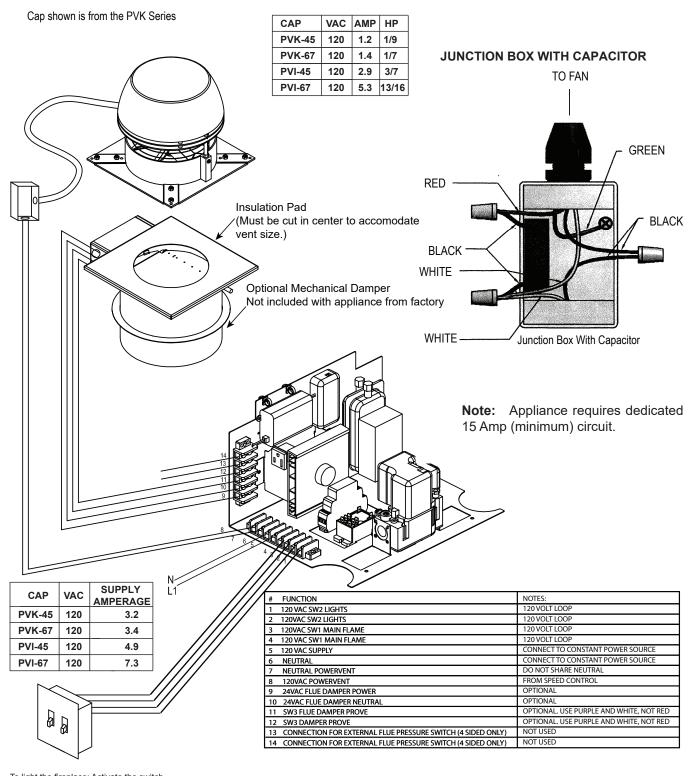


Figure 8M

9 - ELECTRICAL

A. FIELD WIRING (AT INSTALL) See Terminal Details in Section 9B and 9C.

Figure 9A

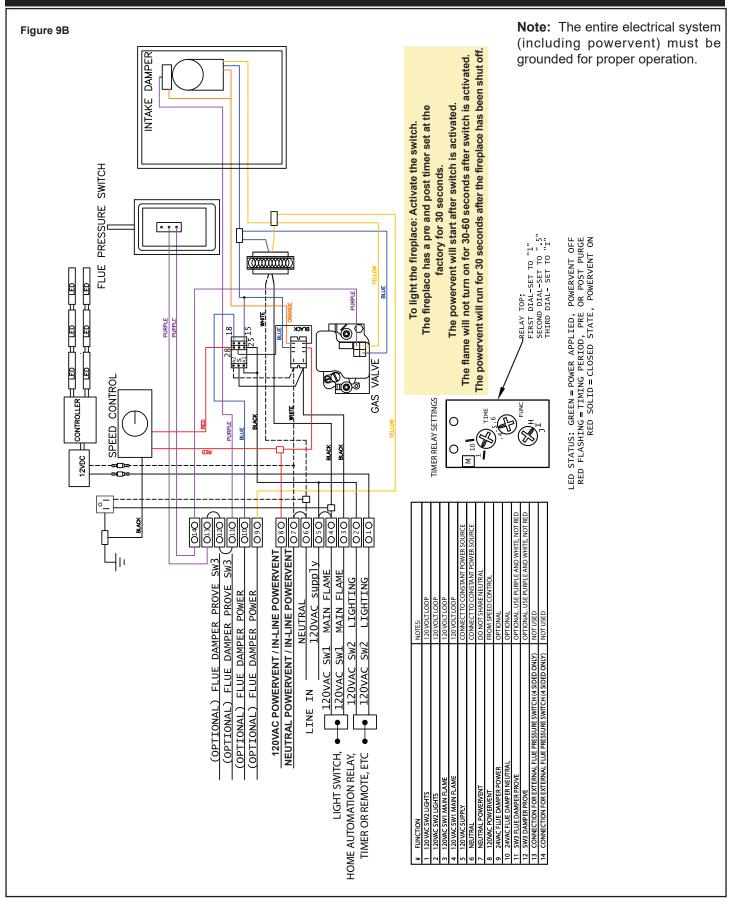


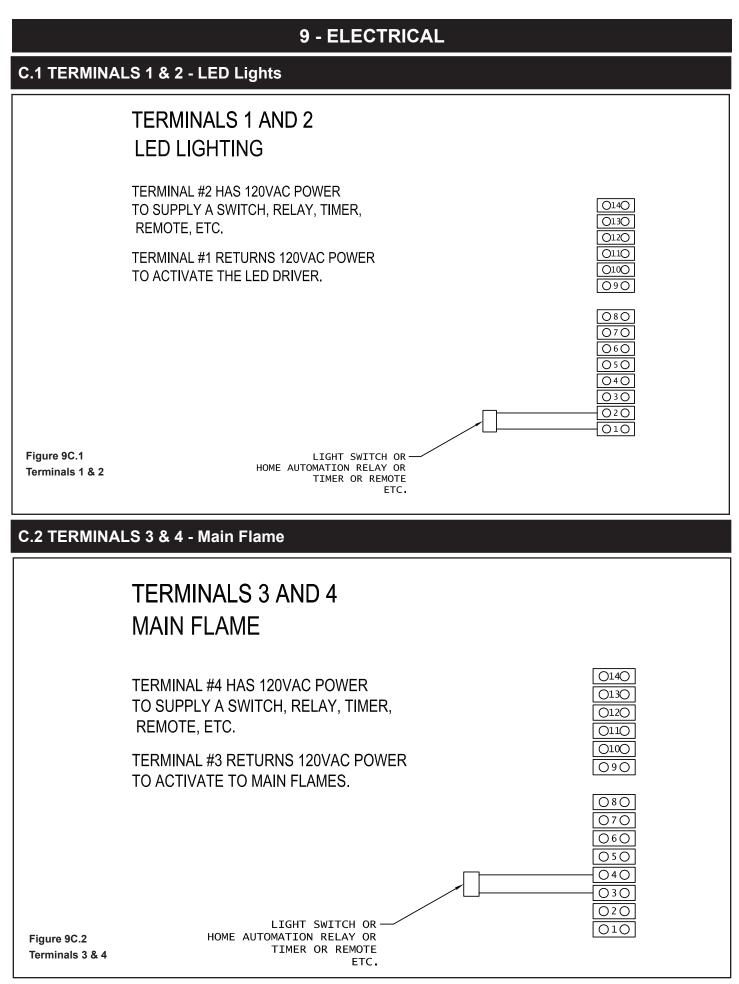
To light the fireplace: Activate the switch. The fireplace has a pre and post timer, set at the factory for 30 seconds. The powervent will start after switch is activated. The flame will not turn on for 30-60 seconds after switch is activated.

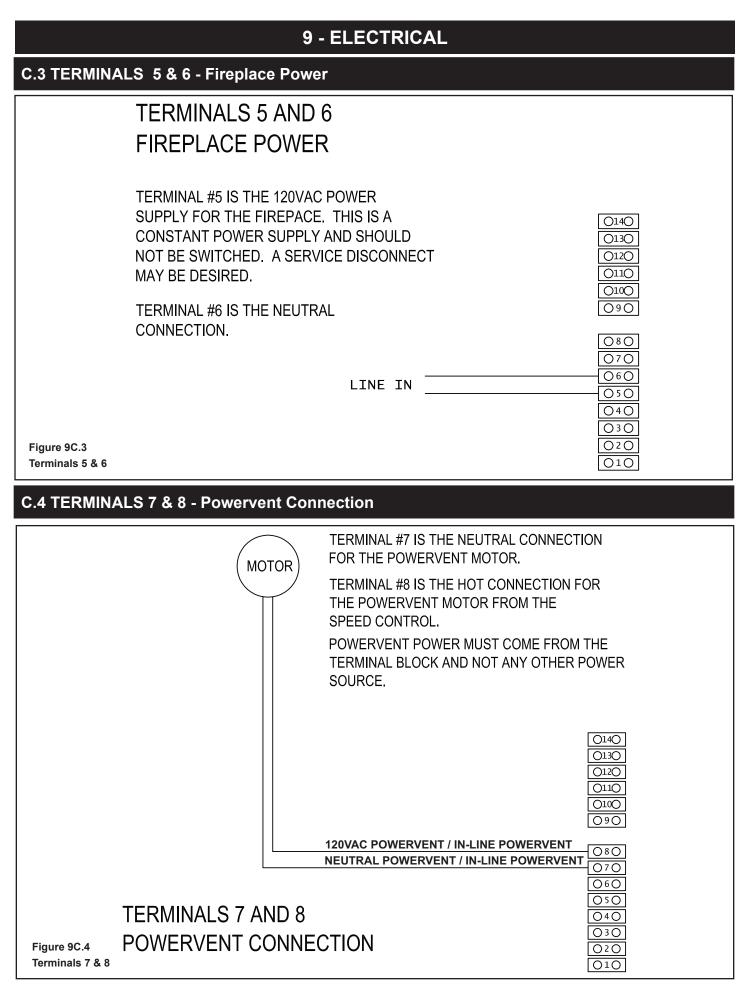
The powervent will run for 30 seconds after the fireplace has been shut off.

9 - ELECTRICAL

B. FIELD WIRING (SERVICE & TROUBLESHOOTING)







9 - ELECTRICAL

C.5 TERMINALS 9 & 10 - Flue Damper Connection

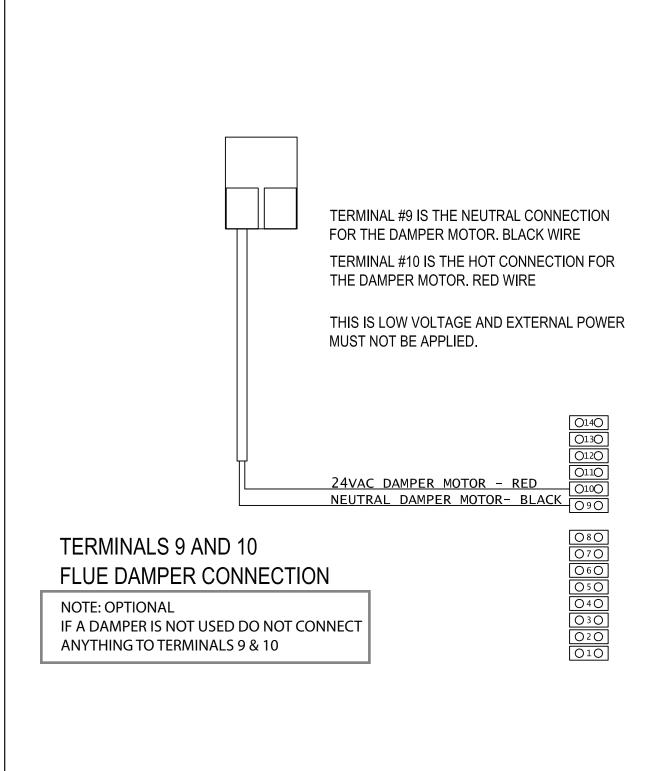
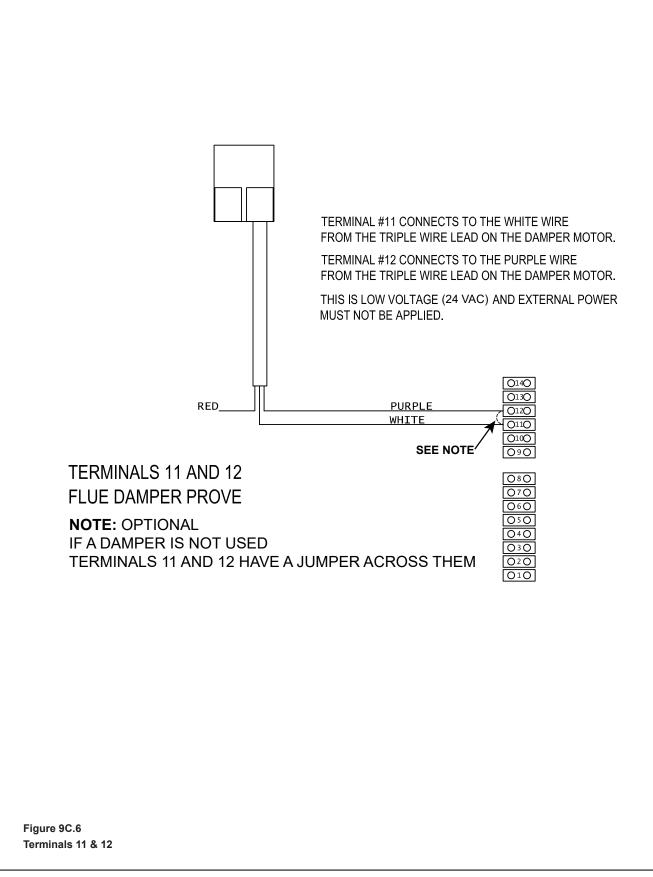


Figure 9C.5 Terminals 9 & 10



C.6 TERMINALS 11 & 12 - Flue Damper Prove



10 - FINISHING

A. FINISHING THE WALL - USING THE PROVIDED 1/2" STANDOFFS

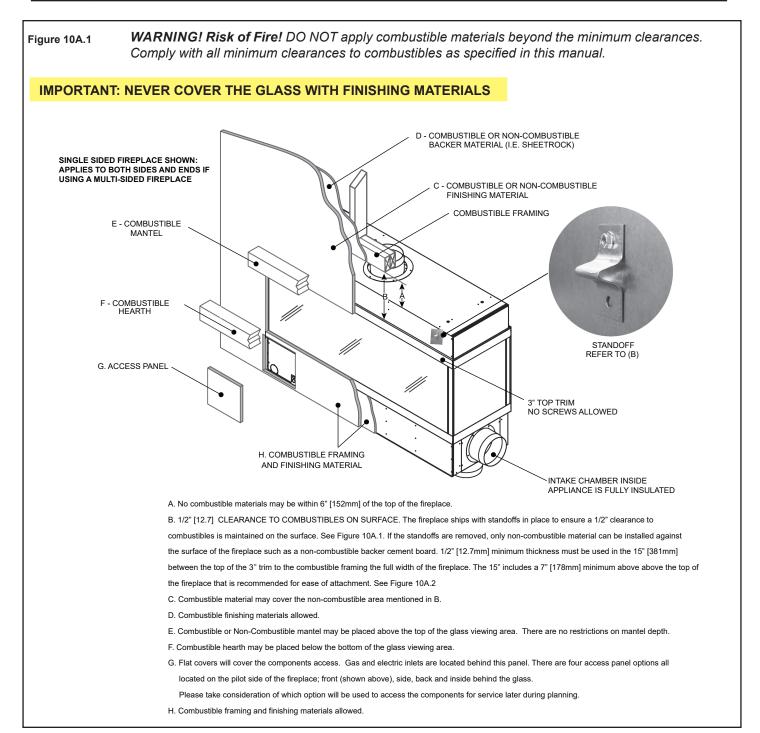
NOTE: REFER TO DIMENSIONS SECTION FOR ALLOWABLE FINISHING DIMENSIONS REQUIRED TO FIT THE GLASS PANELS INTO THE FIREPLACE. FINISHING MATERIALS MUST NOT OVERLAP THE FRAMING DIMENSIONS HIGHLIGHTED IN SECTION 2.A. NEVER COVER THE GLASS WITH FINISHING MATERIALS.



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NOTE: <u>DO NOT</u>PIERCE ANY OF THE BLACK PAINTED SURFACES WITH SCREWS, RIVETS, ETC. THIS INCLUDES THE 3" BLACK TOP AND BOTTOM GLASS TRIM AND ANY PAINTED SIDES ADJACENT TO THE GLASS.

NOTE: REFER TO MANTEL REQUIREMENTS: NON-COMBUSTIBLE ZONE USING PROVIDED 1/2" STANDOFFS FOR MORE INFORMATION (SECTION 5A).



10 - FINISHING

B FINISHING THE WALL - NOT USING THE PROVIDED 1/2" STANDOFFS



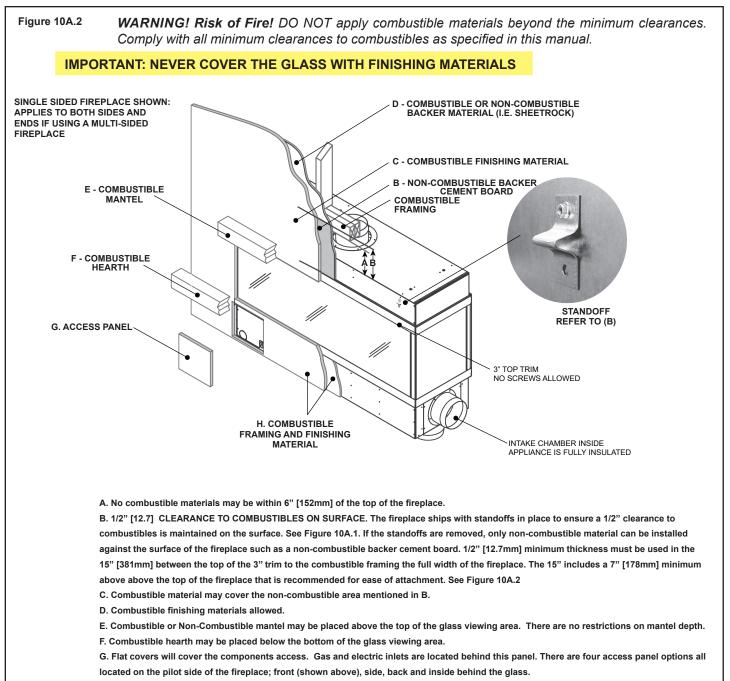
NOTE: REFER TO DIMENSIONS SECTION FOR ALLOWABLE FINISHING DIMENSIONS REQUIRED TO FIT THE GLASS PANELS INTO THE FIREPLACE. FINISHING MATERIALS MUST NOT OVERLAP THE FRAMING DIMENSIONS HIGHLIGHTED IN SECTION 2.A. NEVER COVER THE GLASS WITH FINISHING MATERIALS.



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NOTE: <u>DO NOT</u>PIERCE ANY OF THE BLACK PAINTED SURFACES WITH SCREWS, RIVETS, ETC. THIS INCLUDES THE 3" BLACK TOP AND BOTTOM GLASS TRIM AND ANY PAINTED SIDES ADJACENT TO THE GLASS.

NOTE: REFER TO MANTEL REQUIREMENTS: NON-COMBUSTIBLE ZONE NOT USING PROVIDED 1/2" STANDOFFS FOR MORE INFORMATION (SECTION 5B).



Please take consideration of which option will be used to access the components for service later during planning. H. Combustible framing and finishing materials allowed.

11 - LIGHTING & SHUTDOWN

FOR YOUR SAFETY - READ BEFORE LIGHTING



STOP: IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT, CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

DUE TO HIGH SURFACE TEMPERATURES, KEEP CHILDREN, CLOTHING AND FURNITURE AWAY.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air. It is important to make sure the termination cap remains unobstructed at all times from snow, ice, leaves or other debris.

- This fireplace is equipped with an ignition device which automatically lights the pilot and main burner. The pilot and burner light automatically with the wall switch. DO NOT try to light the pilot by hand. Before lighting this fireplace, follow these instructions exactly.
- BEFORE LIGHTING, smell all around the appliance for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- 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 which has been under water.

WHAT TO DO IF YOU SMELL GAS:

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

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE



NOTE: A PAINT SMELL WILL OCCUR DURING THE FIRST FEW HOURS OF BURNING.



NOTE: THIS FIREPLACE MAY PRODUCE NOISES OF VARYING DEGREE AS IT HEATS AND COOLS DUE TO METAL EXPANSION AND CONTRACTION. THIS IS NORMAL AND DOES NOT AFFECT THE PERFORMANCE OR LONGEVITY OF THE FIREPLACE.

A. LIGHTING THE FIREPLACE

To light the fireplace:

Activate the switch.

The fireplace has a pre and post timer, set at the factory for 30 seconds. The powervent and flame will not turn on for 30-60 seconds after switch is activated and the powervent will run for 30 seconds after it has been shut off.

11 - LIGHTING & SHUTDOWN

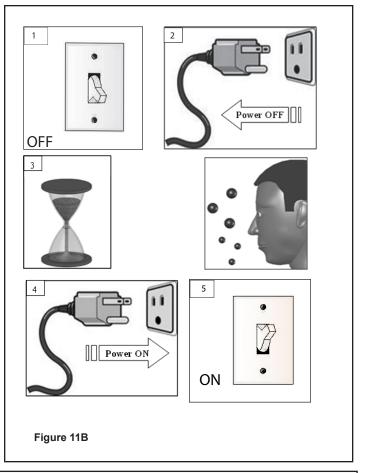


STOP! Read safety information on previous page and front cover of this manual before continuing.

NOTE: This fireplace is equipped with an ignition device which automatically lights the pilot. DO NOT try to light the pilot by hand.

B. IF THE FIREPLACE DOES NOT LIGHT

- 1. Turn off the fireplace at switch.
- 2. Turn off all electrical power to fireplace.
- Wait five (5) minutes to allow any gas that may have accumulated inside firebox to escape. If you then smell gas, STOP! Follow safety information on front cover and on previous page of the installation manual. If you don't smell gas, go to next step.
- 4. Turn ON all electrical power to fireplace.
- 5. Turn fireplace on at switch.





CAUTION: If fireplace will not operate, follow instructions TO TURN OFF GAS TO APPLIANCE on lighting instructions tag fastened to the appliance and call your service technician or the gas supplier.



NOTE: When fireplace is initially lit, condensation could appear on the glass; this is normal in all gas fireplaces and will disappear after several minutes.

12 - PRESSURE TESTING



NOTE: The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of ½ psi.



NOTE: 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 line at test pressures equal to or less than $\frac{1}{2}$ psi (3.5 kPa).

INLET PRESSURE TEST

- 1. The valve has an allen plug on the inlet and outlet.
- 2. Install a barb fitting on the tap you want to measure.
- 3. Light the fireplace, check the pressure.
- 4. Turn off fireplace; reinstall plug.
- 5. Check for leaks.



CAUTION: A LOW PRESSURE READING CAN CAUSE DELAYED IGNITION



NOTE: If inlet pressure reading is too high or too low, contact the gas company. Only a qualified gas service technician should adjust incoming gas pressure.

13 - FINALIZING THE INSTALLATION

A. INSTALLING THE MEDIA

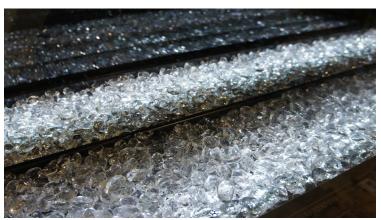
Figure 13

Place the supplied glass media into the base tray. Cover the base evenly. Do not use more than the supplied amount.

Do not get any glass media into the pilot area; a hazardous condition could result!

You should be able to see the burner slightly through the media.

DO NOT COVER THE BURNERS; POOR FLAME APPEARANCE WILL RESULT.



Clear media shipped standard with appliance.

NOTE: DO NOT SUBSTITUTE THE SUPPLIED MEDIA WITH ANY OTHER KIND OF MEDIA Additional media options are available and may be ordered from your Hearth and Home Technologies dealer.

B. FLAME APPEARANCE

Flame appearance is affected by several factors including altitude, venting configuration and fuel quality. Although the venturi setting has been factory set, adjustments may be necessary for optimal performance and visual aesthetics.

When fireplace is first lit, the flames will be blue. Flames will gradually turn yellowish-orange during first 15 minutes of operation. If flames remain blue, or become dark orange with evidence of sooting (black tips), the burner tube venturi may need adjustment.

14 - MAINTENANCE

The appliance is required to be inspected at least once a year by a professional service person. The compartment below firebox (behind lower access panel) must be cleaned at least once a year, more frequent cleaning may be required due to excessive lint from carpeting, bedding materials, or other fibrous materials. It is imperative that the burner be cleaned once a year.

VALVE AND ELECTRICAL ACCESS

There is an access panel in the floor of the firebox should more extensive service be needed. Using the suction cups (provided with the appliance) remove the inner and outer glass panels. Remove the glass media or natural stone on the end with the pilot. Remove the screws on the mesh screen and remove the mesh screen. Remove the Phillips head screws on the LED "U" shaped metal tray and gently fold metal tray over the burners. Remove the 6 screws on the solid access panel and remove panel.



NOTE: INSTALLATION AND REPAIR SHOULD BE DONE ONLY BY QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND ANNUALLY BY A QUALIFIED SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIALS, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS, BURNERS AND CIRCULATION AIR PASSAGEWAYS OF THE APPLIANCE BE KEPT CLEAN.

A. VENT SYSTEM

- Annual examination of venting system by a qualified agency is required.
- IF VENT-AIR INTAKE SYSTEM IS DISASSEMBLED FOR ANY REASON, RE-INSTALL PER INSTRUCTIONS PROVIDED WITH INITIAL INSTALLATION.
- The flow of combustion air must not be obstructed.

B. GLASS CLEANING & REPLACEMENT



WARNING! RISK OF INJURY! DO NOT remove glass until it is cooled to room temperature. Glass breakage could occur. See Section 6 for glass installation and removal instructions.

- · Clean glass only when cool and only with non-abrasive cleansers.
- Do not operate this fireplace with glass/frame assembly removed, cracked or broken.
- The glass assembly shall only be replaced as a complete unit, as supplied by Hearth & Home Technologies.
- Replacement of glass & frame assembly, must only be performed by a licensed or qualified service person.
- DO NOT SUBSTITUTE MATERIALS.
 Do not strike or slam glass door assembly.



CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. VERIFY PROPER OPERATION AFTER SERVICING. KEEP APPLIANCE AREA CLEAR OF COMBUSTIBLE MATERIALS, SUCH AS GASOLINE AND OTHER FLAMMABLE VAPORS AND LIQUIDS. VAPORS AND LIQUIDS.

C. REPLACEMENT PARTS LIST

PART	PART NUMBER			
Gas Valve	SV9501			
Pilot (Natural Gas / Propane)	112-5000-NG / 112-5000-LP			
Pilot Tube	16400-2851			
Vacuum Switch	112-5003			
Transformer, 24 VAC	112-5002			
Orifice, NG #43	16400-2043			
Orifice, Propane #55	16400-2055			
Propane Conversion Kit	LPK-FDN			
Side Service Class Aft	GLA-B4-IN (INNER)			
Side Service Glass, 4 ft.	GLA-B4-OUT (OUTER)			
Side Service Class E ft	GLA-B5-IN (INNER)			
Side Service Glass, 5 ft.	GLA-B5-OUT (OUTER)			
Side Service Class 6 ft	GLA-B6-IN (INNER)			
Side Service Glass, 6 ft.	GLA-B6-OUT (OUTER)			
Sido Sonvico Glass 7 ft	GLA-B7-IN (INNER)			
Side Service Glass, 7 ft.	GLA-B7-OUT (OUTER)			

PART	PART NUMBER	QUANTITY		
Crystal Rock 5 lb bag	2188-851	<u>Varies by model size</u> FDN-4-BAY = 10 bags FDN-5-BAY = 12 bags FDN-6-BAY = 14 bags FDN-7-BAY = 16 bags		

PART	PART NUMBER		
Replacement Capacitor - PVK-45	601.0400.0064		
Replacement Capacitor - PVK-67	604.0400.0064		
Replacement Capacitor - PVI-45	604.0600.0064		
Replacement Capacitor - PVI-67	604.0800.0064		

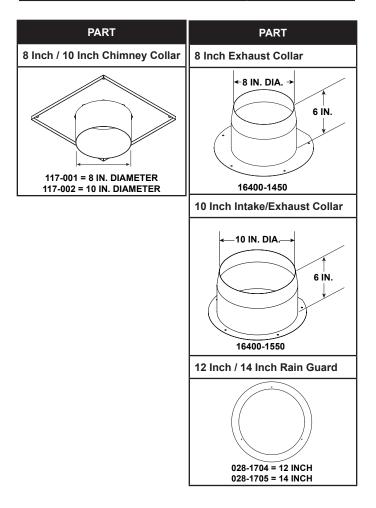
PART	PART NUMBER
End Service Glass (All Sizes - Inner)	GLA-B-IN (INNER)
End Service Glass (All Sizes - Outer)	GLA-B-OUT (OUTER)

NOTE: All appliances utilize two pieces of end service glass. The Outer pane of glass has the plastic U-Channel on the top and bottom.

MODEL	Vertical Trim Pieces Between Glass		Left Hand Horizontal Trim (As viewed from front)		Horizontal Trim Pieces Between Glass		Right Hand Horizontal Trim (As viewed from front)	
	Part #	Qty	Part #	Qty	Part #	Qty	Part #	Qty
FDN-4-BAY	SRV16400-1033	2	SRV16400-1145	1	SRV16400-1044	1	SRV16400-1245	1
FDN-5-BAY	SRV16400-1033	2	SRV16400-1145	1	SRV16500-1044	1	SRV16400-1245	1
FDN-6-BAY	SRV16400-1033	2	SRV16400-1145	1	SRV16600-1044	1	SRV16400-1245	1
FDN-7-BAY	SRV16400-1033	2	SRV16400-1145	1	SRV16700-1044	1	SRV16400-1245	1

C. REPLACEMENT PARTS LIST

	PART	PART NUMBER		
	8 Inch Exhaust Collar	16400-1450		
	10 Inch Intake/Exhaust Collar	16400-1550		
	Transformer, 12 VDC	16400-1900		
	LED Controller	16400-1901		
	LED Remote Control	16400-1901R		
	Switch, 15 Amp Toggle	16400-3013		
	2-Gang Electrical Box	16400-3014		
	White Nylon 2-Gang Plate	16400-3015		
	Timer Relay	112-5014		
	Relay	112-5009		
→	Speed Control	16400-4000		
	Suction Cup	675-9605		
	12 Inch Rain Guard (For use on PVK-45)	028-1704		
	14 Inch Rain Guard (For use on PVK-67)	028-1705		
	8 Inch Chimney Collar	117-001		
	10 Inch Chimney Collar	117-002		
	Touch Up Paint	TUP-FDN-12		



Limited Lifetime Warranty

Hearth & Home Technologies LLC LIMITED LIFETIME WARRANTY

Hearth & Home Technologies LLC ("HHT") extends the following warranty for HHT gas, wood, pellet and electric hearth appliances (each a "Product" and collectively, the "Product(s)") and certain component parts set forth in the table below ("Component Part(s)") that are purchased from a HHT authorized dealer or distributor.

WARRANTY COVERAGE:

HHT warrants that the Products and their Component Parts will be free from defects in materials and workmanship for the applicable period of Warranty coverage set forth in the table below ("Warranty Period"). If a Product or Component Parts are found to be defective in materials or workmanship during the applicable Warranty Period, HHT will, at its option, repair the applicable Component Part(s), replace the applicable Component Part(s), or refund the purchase price of the applicable Product(s). The maximum amount recoverable under this Warranty is limited to the purchase price of the Product. This Warranty is transferable from the original purchaser to subsequent owners, but the Warranty Period will not be extended in duration or expanded in coverage for any such transfer. This Warranty is subject to conditions, exclusions, and limitations as described below.

WARRANTY PERIOD:

Warranty coverage begins at the date of installation. In the case of new home constructions, Warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the Product(s) by an independent, authorized HHT dealer or distributor, whichever occurs earlier. However, the Warranty coverage shall commence no later than 24 months following the date of Product shipment from HHT, regardless of the installation or occupancy date.

The term "Lifetime" in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, and 10 years from the beginning date of warranty coverage for wood and pellet appliances. These time periods reflect the minimum expected useful lives of the designated Component Parts under normal operating conditions.

Warranty Period		HHT Manufactured Appliances and Venting						
Component Parts	Labor	Gas	Pellet	Wood	Electric	Venting	Component Parts Covered by this Warranty	
1 Ye	ear	x	x	x		x	All parts including handles, external enameled components and other material except as covered by Warranty Conditions, Warranty Exclusions, and Warranty Limitations listed	
2 Ye	ars				x		All parts except as covered by Warranty Conditions, Warranty Exclusions, and Warranty Limitations listed	
							Innitara Augar Matara Electronia Componente and	
			x	х			Igniters, Auger Motors, Electronic Components, and Glass	
2 years		x					Electrical components limited to modules, remotes/wall switches, valves, pilots, blowers, junction boxes, wire harnesses, transformers and lights (excluding light bulbs)	
		х		х			Molded Refractory Panels, Glass Liners	
3 уеа	ars		х				Firepots, burnpots, mechanical feeders/auger assemblies	
5 years	1 year	x					Vent Free Burners, Vent Free Logs	
e youro	r your		х	X			Castings, Medallions and Baffles	
6 years	3 years			x			Catalysts	
7 years	3 years		x	х			Manifold tubes, HHT Chimney and Terminations	
10 years	1 year	x					Burners, logs and refractory	
Limited Lifetime	3 years	x	x	x			Firebox and heat exchanger, FlexBurn® System (engine, inner cover, access cover and fireback)	
1 Year	None	x	x	x	x	x	All purchased replacement parts	

Limited Lifetime Warranty (continued)

WARRANTY CONDITIONS:

- Because HHT cannot control the quality of any Products sold by unauthorized sellers, this Warranty only covers Products that are purchased through an HHT authorized dealer or distributor unless otherwise prohibited by law; a list of HHT authorized dealers is available on the HHT branded websites.
- This Warranty is only valid while the applicable Product remains at the site of original installation.
- This Warranty is only valid in the country in which the HHT authorized dealer or distributor that sold the applicable Product is authorized to sell applicable Product.
- Contact your installing distributor or dealer for Warranty service. If the installing dealer or distributor is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking Warranty service from a dealer other than the dealer from whom you originally purchased the applicable Product.
- No HHT consumer should bear cost of warranty service or costs incurred while servicing warranty claims (i.e., travel, gas, or mileage) when the service is performed within the terms of this Warranty. Check with your dealer or distributor in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this Warranty.

WARRANTY EXCLUSIONS:

This Warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under the Warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the Warranty Period are not covered. These parts include: paint, wood and pellet gaskets, firebricks, grates, flame guides, batteries and the discoloration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this Warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the applicable Product in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the applicable Product; (2) failure to install the applicable Product in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operation instructions; (7) installation or use of components not supplied with the applicable Product or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the applicable Product.
- Non-HHT venting components, hearth connections or other accessories used in conjunction with the applicable Product.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas applicable Product is installed.
- HHT's obligation under this Warranty does not extend to the Product's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper Product for the application. Consideration must be given to the Product location and configuration, environmental conditions, insulation and air tightness of the structure.

This warranty is void if:

- The applicable Product has been over-fired, operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, deformation/warping of interior cast iron structure or components, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The applicable Product is subjected to prolonged periods of dampness or condensation.
- There is any damage to the applicable Product due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

LIMITATIONS OF REMEDIES AND LIABILITY:

EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. The owner's exclusive remedy and HHT's sole obligation under this Warranty or in contract, tort or otherwise, shall be limited to replacement of the Component Part(s), repair of the Component Part(s), or refund of the original purchase price of the applicable Product(s), as specified above; provided, however, that (i) if HHT is unable to provide replacement of the Component Part(s) and repair of the Component Part(s) is not commercially practicable or cannot be timely made, or (ii) the customer is willing to accept a refund of the purchase price of the applicable Product(s), HHT may discharge all such obligations by refunding the purchase price of the applicable Product. In no event will HHT be liable for any incidental or consequential damages caused by defects in the applicable Product. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from State to State. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE FOR THE APPLICABLE PRODUCT. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.