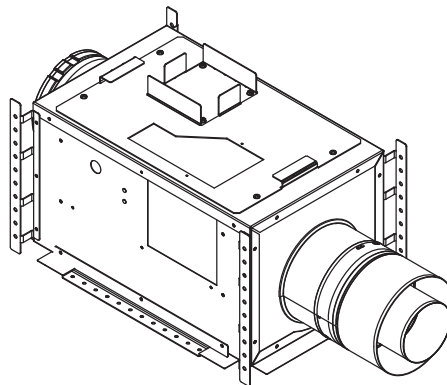


# PVI-SLP

## Power Vent Inline

- Installation Instructions -



GAS-FIRED



### NOTICE



#### DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.



# 1 Introduction

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**IMPORTANT:** Failure to read and follow these instructions may create a possible hazard and will void the fireplace warranty.

**These instructions must remain with the equipment.**

**CAUTION! Risk of Cuts or Abrasions.** Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

### INTRODUCTION

The Power Vent Inline (PVI-SLP) is certified for use only on fireplaces manufactured by Hearth & Home Technologies with IPI (intermittent pilot ignition) gas controls and is for use only on top-vented applications. Fireplaces equipped with millivolt type gas controls CANNOT use this product.

Note: The battery back-up feature of the IPI system is removed when the PVI-SLP power vent is installed. The fireplace may no longer be operated with battery back-up.

The PVI-SLP operates on 120VAC, 60Hz electrical service which is supplied at the fireplace junction box.

**IMPORTANT OPERATIONAL NOTE:** When the control being used to run the fireplace is activated, a 120 second delay will occur before ignition occurs. This is to allow a pre-purge by the PVI-SLP. If fireplace does not light after 135 seconds, refer to the Troubleshooting section of this instruction for further direction. If an RC100, RC200 or RC300 remote is being used, there will also be a 20 minute post-purge in which the PVI-SLP will continue to run after appliance is turned off.

Installation of the PVI-SLP may be done by a qualified service technician only. Installation MUST comply with local, regional, state and national codes and regulations.

## A. Components and Service Parts List

### Service Parts List

Replacement parts can be obtained from your dealer. Repair of the Power Vent should only be done by a qualified service technician.

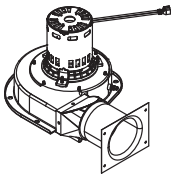
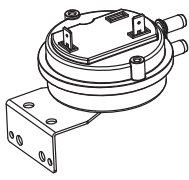
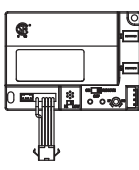
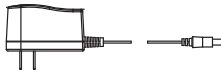
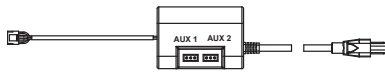
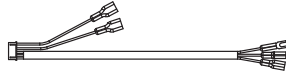
<b>BLOWER ASSEMBLY</b> 2196-025 	<b>VACUUM SWITCH</b> 2196-326 	<b>8K1-PVI</b> 2196-150 	<b>6VDC POWER RECEPTACLE</b> 2326-131 	<b>AUX300 MODULE</b> 2166-335 																
<table border="1"> <thead> <tr> <th colspan="2">Required Wire Harness</th> </tr> <tr> <th>Lengths Available</th> <th>Part Number</th> </tr> </thead> <tbody> <tr> <td>10 ft. PV Wire Harness</td> <td>PVI-WH10</td> </tr> <tr> <td>20 ft. PV Wire Harness</td> <td>PVI-WH20</td> </tr> <tr> <td>40 ft. PV Wire Harness</td> <td>PVI-WH40</td> </tr> <tr> <td>60 ft. PV Wire Harness</td> <td>PVI-WH60</td> </tr> <tr> <td>80 ft. PV Wire Harness</td> <td>PVI-WH80</td> </tr> <tr> <td>100 ft. PV Wire Harness</td> <td>PVI-WH100</td> </tr> </tbody> </table>					Required Wire Harness		Lengths Available	Part Number	10 ft. PV Wire Harness	PVI-WH10	20 ft. PV Wire Harness	PVI-WH20	40 ft. PV Wire Harness	PVI-WH40	60 ft. PV Wire Harness	PVI-WH60	80 ft. PV Wire Harness	PVI-WH80	100 ft. PV Wire Harness	PVI-WH100
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60 ft. PV Wire Harness	PVI-WH60																			
80 ft. PV Wire Harness	PVI-WH80																			
100 ft. PV Wire Harness	PVI-WH100																			
<b>8K1-PVI WIRE HARNESS</b> 2196-200 																				
<b>NOTE: Wire Harness connecting PVI to appliance sold separately. The length of wire harness needed varies by installation.</b>																				

Figure 1.1 Service Parts

## B. Installation of PVI-SLP

### 1. INSTALLATION PRECAUTIONS

- This device must be installed by a qualified installer in accordance with these instructions.
- Safety inspection of the venting system should be performed before and after installation of this power vent. Consult local code officials and follow applicable installation codes.
- DO NOT INSTALL DAMAGED EQUIPMENT OR VENT COMPONENTS.**
- Disconnect electrical power supply before making wiring connections.
- Venting of more than one appliance in a common vent system is prohibited.
- Clearances between the vent pipe and combustible materials must be maintained at 1-1/2-inch top, 1-inch sides and bottom.
- All outer pipe joints must be sealed with high temperature silicone. See Section 2.A.
- The access panel opening must be located such that access for service and adjustment is available. The NEC requires a minimum of 30 inches of space around the opening and 36 inches in front of the opening to the access panel. Consult officials having jurisdiction regarding regional requirements.

**CAUTION!** Failure to install, operate, and maintain the power venting system in accordance with manufacturer's instructions will result in conditions which may produce bodily injury and/or property damage.

**NOTICE:** The blower motors present in this power vent will generate sound during operation. The effects of the increased sound level can be minimized with careful planning during installation of the system. Locating the power vent service access grill in an area remote of immediate living space will reduce the effects of the added sound generated during operation.

### 2. INSTALLATION GUIDELINES

**WARNING: RISK OF FIRE AND BURNS. DO NOT** install PVI-SLP with the access panel facing upward. Overheating may occur.

**NOTICE:** Installation of the PVI-SLP in an attic is not recommended in regions where temperatures reach 0°F (-18°C) and relative humidity exceeds 60% simultaneously. Low temperatures and high moisture content may cause the PVI-SLP to freeze.

- If the PVI-SLP is being installed in a confined space (such as a utility closet, mechanical room or attic space) with a total volume less than 250 cubic feet, an access hole with **minimum** dimensions of 8 inches by 16 inches will be required directly in front of the access panel. The recommended access hole size is 12 inches by 17 inches. This size will allow full access to the 11 inch x 16 inch access panel on the PVI-SLP. See Figure 3.1. The confined space where the PVI is installed, and the space to which the access hole opens, must add up to at least 250 cubic feet. This hole may be covered with a decorative cover as long as the cover has a minimum of 50% open air. If the PVI-SLP is being installed in a space greater than 250 cubic feet the access hole is still required, but a solid cover may be used. This also applies to a fireplace chase.

The decorative cover **CANNOT** be located on an outside wall that is open to the environment.

- For installations near loose-fill insulation (such as attics) a minimum clearance of six inches must be maintained between the access panel and the insulation.
- The PVI-SLP **CANNOT** be installed with the access panel facing upward.
- The exit termination of mechanical draft systems shall not be less than seven feet above grade when located adjacent to public walkways.
- A mechanical drafting venting system shall terminate at least three feet above any forced air inlet located within 10 feet.

## 2 Vent Information and Diagrams

### A. Installation of Vent Pipe

For information on standard procedures for venting the appliance, refer to the "Vent Information and Diagrams" section of the appliance installation manual.

For the allowable pipe lengths and elbow combinations for an appliance utilizing the PVI-SLP, consult the Power Vent diagrams in the Vent Information and Diagrams section of the appliance installation manual. The PVI-SLP uses SLP pipe (6-5/8 inch) connections for both the inlet and outlet.

The following termination caps are available for use with the power vent inline (PVI-SLP): SLP-TVHW, SLP-LPC, SLP-TRAP, SLP-HHW2, SLP-HRC-SS, SLP-HRC-ZC-SS, SLP-TB1. Check installation manual for termination caps specifications.

In certain cases, a pipe adapter may be used in the vent run. The DVP-2SL adapts from 5 in. / 8 in. DVP series starting collars to 4 in. / 6-5/8 in. SLP series vent pipe.

Either SLP or DVP venting may be used throughout the vent run except on certain models that require DVP pipe. See Table 2.1. Refer to Section 2.B for more information regarding venting regulations.

SLP pipe may be used on the termination side of the PVI.

All outer pipe joints must be sealed with high temperature silicone (with a minimum of 300°F continuous exposure rating), including the slip section that connects directly to the horizontal termination cap.

- Apply a bead of silicone sealant inside the female outer pipe joint prior to joining sections. See Figure 2.1.
- Only outer pipes need to be sealed. All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed in this manner, unless otherwise stated.



Figure 2.1 High Temperature Silicone Sealant

### B. Vent/Pipe Regulations

#### **WARNING! Risk of Fire!**

*Maintain minimum pipe length between appliance and PVI-SLP on all models. Combustible materials surrounding pipe may overheat.*

1. A minimum length of venting is required between the appliance and the PVI-SLP. This minimum length requirement varies for the specific appliance. Refer to Table 2.1. for requirements for specific models. Once the minimum length requirement is met, the PVI-SLP may be installed at any location within the vent run configuration.
2. A minimum of 18 inches is required between the PVI-SLP and the termination cap to allow room for the pipe to go through a wall or roof.
3. If PVI-SLP is installed in the vertical position, a minimum of two 90 degree elbows and two feet of pipe is required between the appliance and the PVI-SLP.
4. Total allowable length decreases by 2 ft. for every 1 ft. of vertical drop.

**Note:** See Table 2.1 for model specific vent requirements.

## B. Vent/Pipe Regulations (continued)

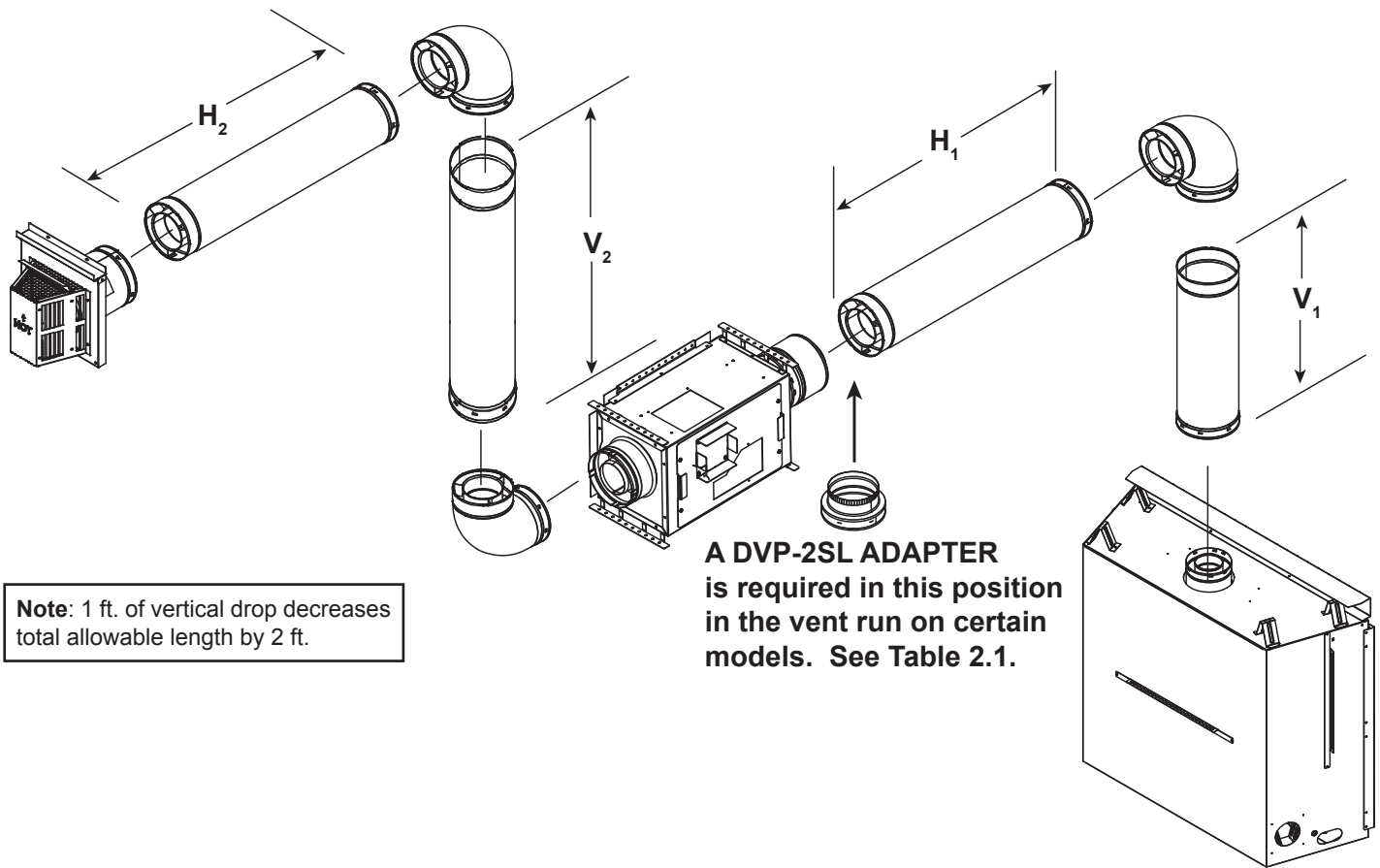
### WARNING! Risk of Fire!

- PVI-SLP cannot be installed directly on appliance. The PVI-SLP and combustible materials surrounding vent pipe may overheat.
- A minimum length run of initial vent pipe is required between the appliance and the inlet of the PVI-SLP. The initial minimum vent run requirement varies depending on the specific appliance and its venting configuration.
- Some models require DVP Series pipe for the initial minimum vent section directly off the appliance.

MODEL	MINIMUM VENTING BETWEEN APPLIANCE AND PVI-SLP
6000C, 6000CL, 6000CLX, 8000C, 8000CL, 8000CLX 6000BEC	<p><b>PVI installed horizontal orientation:</b> One 90 degree elbow and a total of two feet of straight horizontal or straight vertical SLP pipe. See Figure 2.2 and Figure 2.5.</p> <p><b>PVI installed vertical orientation:</b> Two 90 degree elbows and a total of two feet straight horizontal or straight vertical SLP pipe. See Figure 2.3, 2.4, 2.6.</p>
6000CMOD, 8000CMOD	
CD4236, CD4842	
CNXT4236, CNXT4842	
DBDV36I, DBDV42I, DBDV36PLATI, DBDV42PLATI	
DV3732SBI	
GDST3831, GDST4336, GDFL4136, GDCR4136, GDCL4136	
NDV3630, NDV3933, NDV4236, NDV4842	
NEVO3630, NEVO4236	
ST-36TR, ST-36TR, ST-36TRB, PIERI-36TR, PIER-36TRB, LCOR-36TRB, RCOR-36TRB	
RED40, RED40ST	
REVO-S21, REVO-H31	
SLR32, RAVE3012I	
SLR-B, SLR-C, RAVE 4013I, RAVE4013I-C	
SL-350TRS, SL-550TRS, SL-750STRS	
SL-550TR, SL-750TR, SL-950TR	
SL-550METRO, SL-550-BE-M	
ST-550T, ST-550TM	
MODEL	
ESC-42ST	<p><b>PVI installed horizontal orientation:</b> Minimum two feet straight vertical DVP pipe directly off appliance followed by 90 degree elbow and two feet DVP pipe. PVI-SLP adapter must be located directly between initial DVP pipe and PVI-SLP. See Figure 2.2 and Figure 2.5.</p> <p><b>PVI installed vertical orientation:</b> Minimum two feet straight vertical DVP pipe directly off appliance, followed by two 90 degree elbows and a total of two feet straight horizontal or straight vertical DVP pipe. PVI-SLP adapter must be located directly between initial DVP pipe and PVI-SLP. See Figure 2.3, Figure 2.4, Figure 2.6.</p>
ESCAPE-36DV, ESCAPE42DV	
HEIR36, HEIR42, HEIR50	
LUX36, LUX42	
CRAVE4836, CRAVE4836ST, CRAVE6048, CRAVE6048ST CRAVE7260, CRAVE7260ST, CRAVE8472, CRAVE8472ST	
MEZZO36, MEZZO36ST, MEZZO48, MEZZO48ST MEZZO60, MEZZO60ST, MEZZO72, MEZZO72ST	
TRUE-36, TRUE-42, TRUE-50 CERONA-36, CERONA-42	
PRIMO48, PRIMO48ST, PRIMO60, PRIMO60ST, PRIMO72, PRIMO72ST	
	<p><b>PVI installed vertical or horizontal orientation:</b> Minimum three feet of DVP or SLP pipe is required before connecting the PVI-SLP system. The 3 foot minimum does not include the factory-installed six inch DVP pipe.</p>

Table 2.1

## Top Vent - Horizontal Termination



**Note:** 1 ft. of vertical drop decreases total allowable length by 2 ft.

**A DVP-2SL ADAPTER** is required in this position in the vent run on certain models. See Table 2.1.

**WARNING! Risk of Fire!** Use DVP pipe between appliance and PVI-SLP on these models: ESCAPE-42DV, ESCAPE-36DV, ESC-42ST, HEIR36, HEIR42, HEIR50, LUX36, LUX42, TRUE-36, TRUE-42, TRUE-50, CERONA-36, CERONA-42, MEZZO36, MEZZO36ST, CRAVE4836, CRAVE4836ST, MEZZO48, MEZZO48ST, CRAVE6048, CRAVE6048ST, MEZZO60, MEZZO60ST, CRAVE7260, CRAVE7260ST, MEZZO72, MEZZO72ST, CRAVE8472, CRAVE8472ST

Combustibles surrounding pipe may overheat.

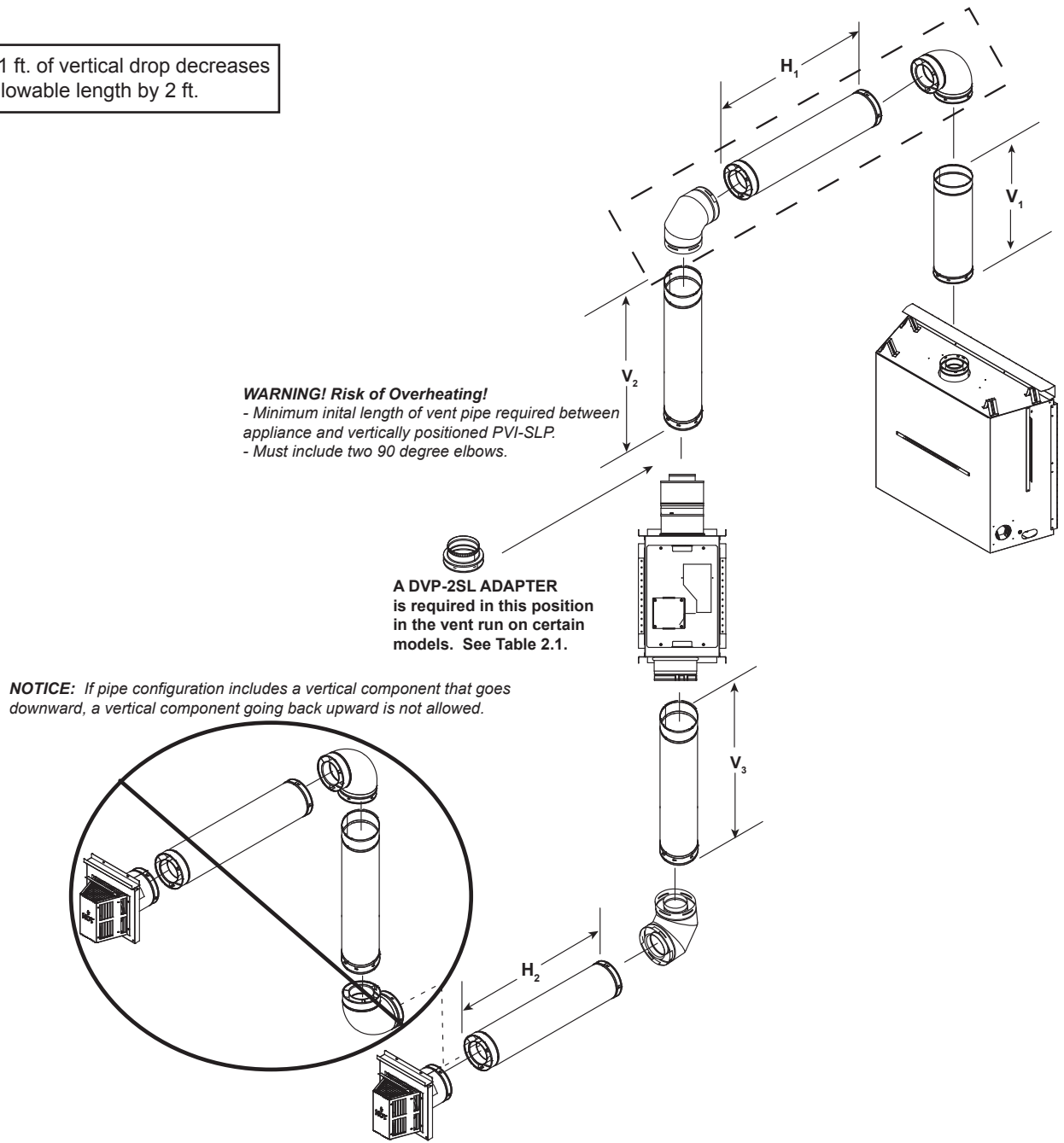
**Note:** For PRIMO models, see the PRIMO Installation Manual for vent configurations.

	Minimum		Maximum
$H_1 + V_1$	24 in.	610 mm	See Chart in Section 2.C: "Venting Length - Model Categories and Length Requirements by Termination Type."
$H_2$	18 in.	457 mm	
$V_2$	0 in.	0 mm	
A minimum of 2 ft. of vertical piping is required between the appliance and the PVI-SLP in addition to the minimum venting described above when installing PVI-SLP with certain appliance models. See Table 2.1.			

Figure 2.2 Horizontal PVI Orientation



**Note:** 1 ft. of vertical drop decreases total allowable length by 2 ft.



**WARNING! Risk of Fire!** Use DVP pipe between appliance and PVI-SLP on these models:

**ESCAPE-42DV, ESCAPE-36DV, ESC-42ST, HEIR36, HEIR42, HEIR50, LUX36, LUX42, TRUE-36, TRUE-42, TRUE-50, CERONA-36, CERONA-42, MEZZO36, MEZZO36ST, CRAVE4836, CRAVE4836ST, MEZZO48, MEZZO48ST, CRAVE6048, CRAVE6048ST, MEZZO60, MEZZO60ST, CRAVE7260, CRAVE7260ST, MEZZO72, MEZZO72ST, CRAVE8472, CRAVE8472ST**

Combustibles surrounding pipe may overheat.

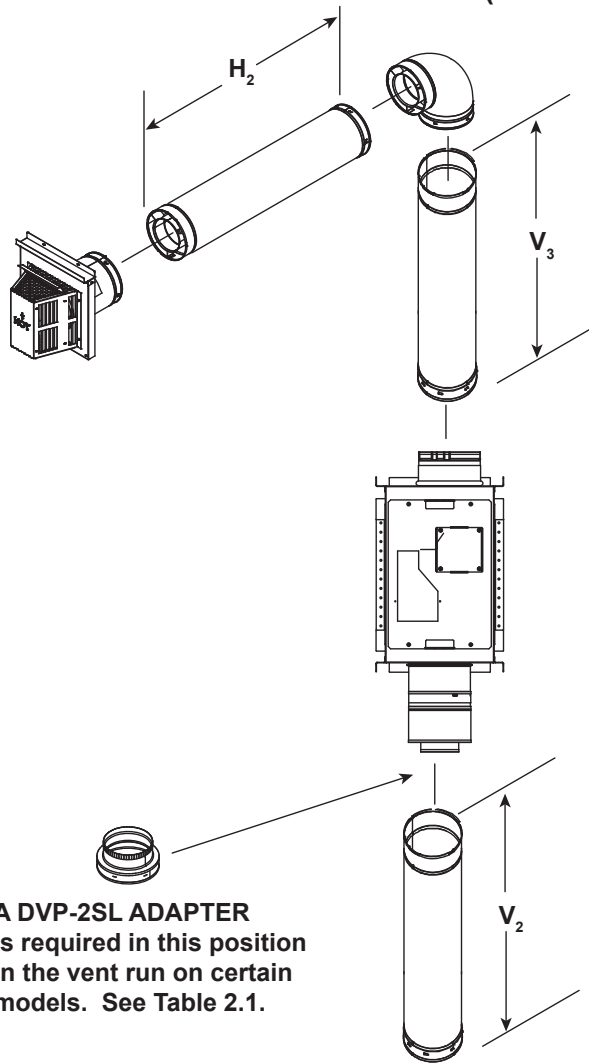
**Note:** For PRIMO models, see the PRIMO Installation Manual for vent configurations.

	Minimum		Maximum
$H_1 + V_1 + V_2$	24 in.	610 mm	See Chart in Section 2.C: "Venting Length - Model Categories and Length Requirements by Termination Type."
$H_2$	18 in.	457 mm	
$V_3$	0 in.	0 mm	
A minimum of 2 ft. of vertical piping is required between the appliance and the PVI-SLP in addition to the minimum venting described above when installing PVI-SLP with certain appliance models. See Table 2.1. $V$ minimum = 2 ft. and $V_2 + H_1 + V_1$ minimum = 4 ft. for certain appliance models. See Table 2.1.			

Figure 2.3 Vertical PVI Orientation

## Top Vent - Horizontal Termination - (continued)

**Note:** 1 ft. of vertical drop decreases total allowable length by 2 ft.



	Minimum		Maximum
$H_1 + V_1 + V_2$	24 in.	610 mm	See Chart in Section 2.C: "Venting Length - Model Categories and Length Requirements by Termination Type."
$V_3$	0 in.	0 mm	
$H_2$	18	457 mm	

A minimum of 2ft. of vertical piping is required between the appliance and the PVI-SLP in addition to the minimum venting described above when installing PVI-SLP with certain appliance models. See Table 2.1.

$V$  minimum = 2 ft. and  $V_2 + H_1 + V_1$  minimum = 4 ft. for certain appliance models. See Table 2.1.

A DVP-2SL ADAPTER is required in this position in the vent run on certain models. See Table 2.1.

### **WARNING! Risk of Overheating!**

- Minimum initial length of vent pipe required between appliance and vertically positioned PVI-SLP.
- Must include two 90 degree elbows.

**WARNING! Risk of Fire!** Use DVP pipe between appliance and PVI-SLP on these models:

ESCAPE-42DV, ESCAPE-36DV, ESC-42ST, HEIR36, HEIR42, HEIR50, LUX36, LUX42, TRUE-36, TRUE-42, TRUE-50, CERONA-36, CERONA-42, MEZZO36, MEZZO36ST, CRAVE4836, CRAVE4836ST, MEZZO48, MEZZO48ST, CRAVE6048, CRAVE6048ST, MEZZO60, MEZZO60ST, CRAVE7260, CRAVE7260ST, MEZZO72, MEZZO72ST, CRAVE8472, CRAVE8472ST

Combustibles surrounding pipe may overheat.

**Note:** For PRIMO models, see the PRIMO Installation Manual for vent configurations.

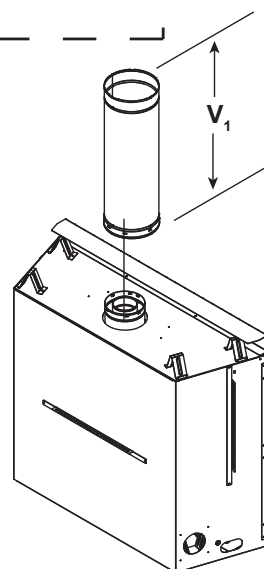


Figure 2.4 Vertical PVI Orientation

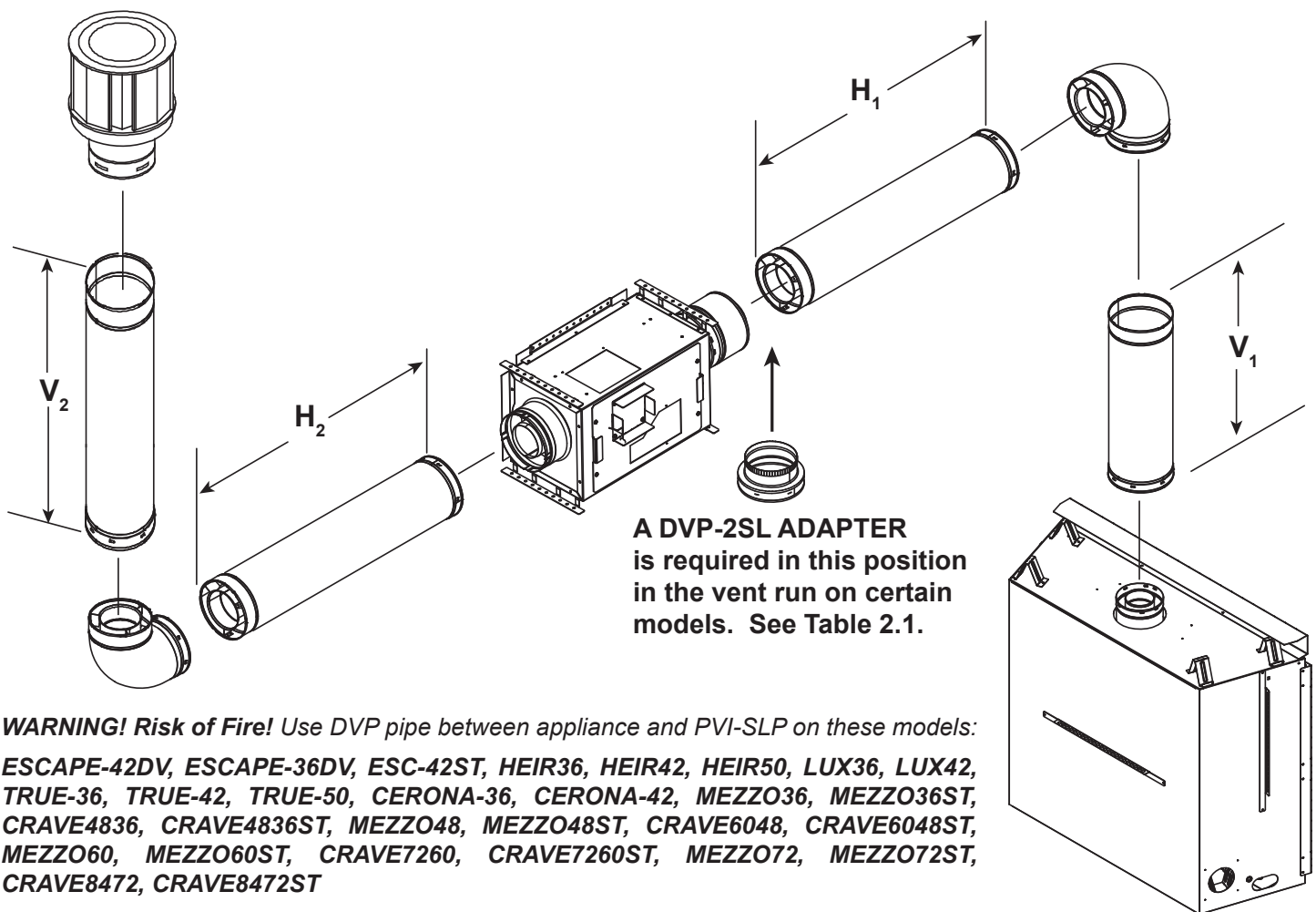
## Top Vent - Vertical Termination

	Minimum		Maximum
$H_1 + V_1$	24 in.	610 mm	See Chart in Section 2.C: "Venting Length - Model Categories and Length Requirements by Termination Type."
$V_2$	18 in.	457 mm	See Chart in Section 2.C: "Venting Length - Model Categories and Length Requirements by Termination Type."
$H_{TOTAL}$	0	0	30% of total vent length allowed in chart: "Venting Length - Model Categories and Length Requirements by Termination Type" in Section 2.C.

A minimum of 2ft. of vertical piping is required between the appliance and the PVI-SLP in addition to the minimum venting described above when installing PVI-SLP with certain appliance models. See Table 2.1.

V minimum = 2 ft. and  $H_1 + V_1$  minimum = 4 ft. with certain appliance models. See Table 2.1.

**Note:** 1 ft. of vertical drop decreases total allowable length by 2 ft.

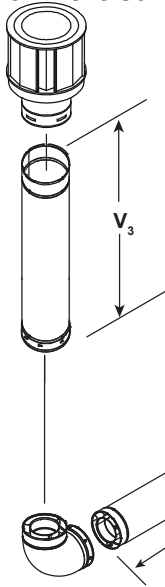


**Note:** For PRIMO models, see the PRIMO Installation Manual for vent configurations.

Figure 2.5 Horizontal PVI-SLP Orientation



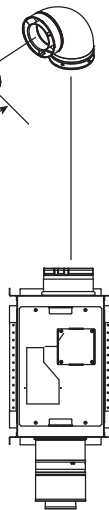
## Top Vent - Vertical Termination - (continued)



	Minimum		Maximum
$H_1 + V_1 + V_2$	24 in.	610 mm	See Chart in Section 2.C: "Venting Length - Model Categories and Length Requirements by Termination Type."
$V_3$	18 in.	457 mm	See Chart in Section 2.C: "Venting Length - Model Categories and Length Requirements by Termination Type."
$H_{TOTAL}$	0 in.	0 in.	30% of total vent length allowed in chart: "Venting Length - Model Categories and Length Requirements by Termination Type" in Section 2.C.

A minimum of 2ft. of vertical piping is required between the appliance and the PVI-SLP in addition to the minimum venting described above when installing PVI-SLP with certain appliance models. See Table 2.1.

$V$  minimum = 2 ft. and  $v_2 + H_1 + V_1$  minimum = 4 ft. for certain appliance models. See Table 2.1.



**WARNING! Risk of Fire!** Use DVP pipe between appliance and PVI-SLP on these models:

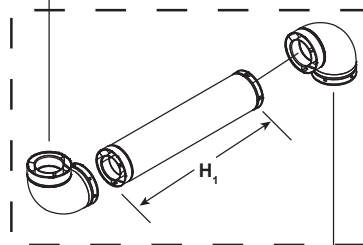
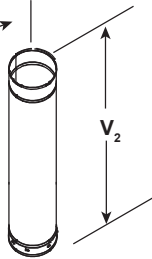
**ESCAPE-42DV, ESCAPE-36DV, ESC-42ST, HEIR36, HEIR42, HEIR50, LUX36, LUX42, TRUE-36, TRUE-42, TRUE-50, CERONA-36, CERONA-42, MEZZO36, MEZZO36ST, CRAVE4836, CRAVE4836ST, MEZZO48, MEZZO48ST, CRAVE6048, CRAVE6048ST, MEZZO60, MEZZO60ST, CRAVE7260, CRAVE7260ST, MEZZO72, MEZZO72ST, CRAVE8472, CRAVE8472ST**

Combustibles surrounding pipe may overheat.

**Note:** For PRIMO models, see the PRIMO Installation Manual for vent configurations.



A DVP-2SL ADAPTER is required in this position in the vent run on certain models. See Table 2.1.



**WARNING! Risk of Overheating!**

- Minimum initial length of vent pipe required between appliance and vertically positioned PVI-SLP.
- Must include two 90 degree elbows.

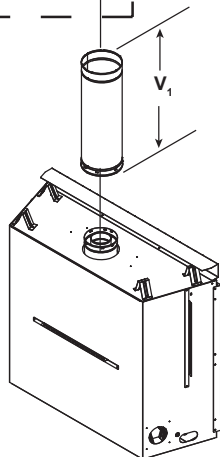


Figure 2.6 Vertical PVI-SLP Orientation

### C. Venting Length - Model Categories and Length Requirements by Termination Type

The Model Category (0, 1, 2 or 3) in Table 2.2 corresponds with the number in the shaded area of the Vent Length Requirement Chart In Tables 2.3 and 2.4.

**Note:** For PRIMO models, see the PRIMO Installation Manual for vent configurations.

Category 0	HEAT & GLO			Category 0, 1	HEATILATOR		MAJESTIC
	Category 0 & 1	Category 0, 1 & 2	Category 0, 1, 2 & 3		Category 0, 1 & 2	Category 0, 1, 2 & 3	Category 0, 1 & 2
REVO-S21	ST-550T	SL-550TR, SL-750TR, SL-950TR	SLR-B, SLR-C	RAVE3012I	NDV3630, NDV3933, NDV4236, NDV4842	RAVE4013I, RAVE4013I-C	DBDV36I, DBDV42I, DBDV36PLATI, DBDV42PLATI
REVO-H31	ST-550TM	SL-350TRS, SL-550TRS, SL-750TRS	RED40, RED40ST		CD4236, CD4842		
	SLR32	6000C, 6000CL, 6000CLX, 6000BEC	ESC-42ST		CNXT4236, CNXT4842		
		8000C, 8000CL, 8000CLX	ESCAPE-36DV		NEVO3630, NEVO4236		
		6000CMOD, 8000CMOD	ESCAPE-42DV		DV3732SBI		
		SL-550METRO, SL-550-BE-M	TRUE-36, HEIR36		GDST3831, GDST4336, GDFL4136, GDCR4136, GDCL4136		
		ST-36TR, ST-36TRB, PIER-36TR, PIER-36TRB, LCOR-36TRB, RCOR-36TRB	TRUE-42, HEIR42 TRUE-50, HEIR50				
		MEZZO60, MEZZO60ST, MEZZO72, MEZZO72ST	LUX36, LUX42		CRAVE4836, CRAVE4836ST, CRAVE6048, CRAVE6048ST		
		MEZZO36, MEZZO36ST, MEZZO48, MEZZO48ST	CERONA-36, CERONA-42		CRAVE7260, CRAVE7260ST, CRAVE8472, CRAVE8472ST		

Table 2.2 Models

**Note:** The REVO-V12 is not approved for use with the PVI-SLP.


Horizontal Termination														
Total Venting Length (Feet) Includes both horizontal and vertical section of pipe														
# of Elbows	10	20	30	40	50	60	70	80	90	100	110	120	130	140
1	0	0	0	0	0	1	1	1	1	2	3			
2	0	0	0	0	0	1	1	1	2	3				
3	0	0	0	0	1	1	1	1	2					
4	0	0	0	0	1	1	1	2	3					
5	0	0	0	1	1	1	1	2						
6	0	0	0	1	1	1	2	3						
7	0	0	1	1	1	1	2	3						
8	0	0	1	1	1	1	2							
9	0	1	1	1	1	1	2							
10	0	1	1	1	1	2	3							
11	1	1	1	1	1	2								
12	1	1	1	1	1	2								

Table 2.3 Allowable Vent Runs - Horizontal Termination

Vertical Termination														
Total Venting Length (feet) Includes both horizontal and vertical section of pipe														
# of Elbows	10	20	30	40	50	60	70	80	90	100	110	120	130	140
1	0	0	0	0	0	1	1	1	1	1	1	1	1	1
2	0	0	0	0	0	1	1	1	1	1	1	1	1	
3	0	0	0	0	1	1	1	1	1	1	1	1		
4	0	0	0	0	1	1	1	1	1	1	1	1		
5	0	0	0	1	1	1	1	1	1	1	1			
6	0	0	0	1	1	1	1	1	1	1				
7	0	0	1	1	1	1	1	1	1	1				
8	0	0	1	1	1	1	1	1	1					
9	0	1	1	1	1	1	1	1	1					
10	0	1	1	1	1	1	1	1						
11	1	1	1	1	1	1	1	1						
12	1	1	1	1	1	1	1							

Table 2.4 Allowable Vent Runs - Vertical Termination

## D. Vent Termination Minimum Clearances



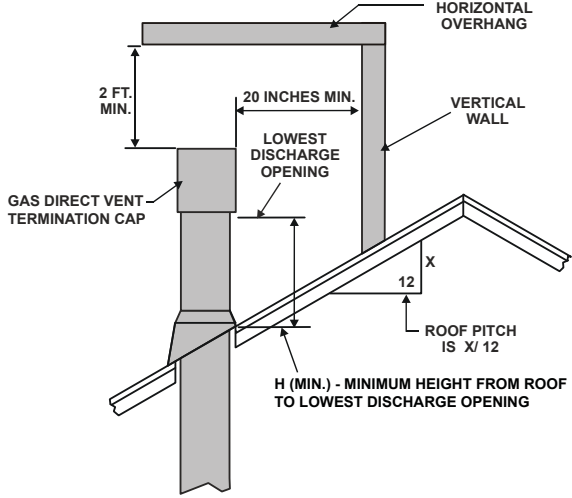
### ⚠ WARNING

Fire Risk.  
Maintain vent clearance to combustibles as specified.

- DO NOT** pack air space with insulation or other materials.

Failure to keep insulation or other materials away from vent pipe may cause overheating and fire.

Refer to the appliance installation manual for information on minimum clearances for vent termination.



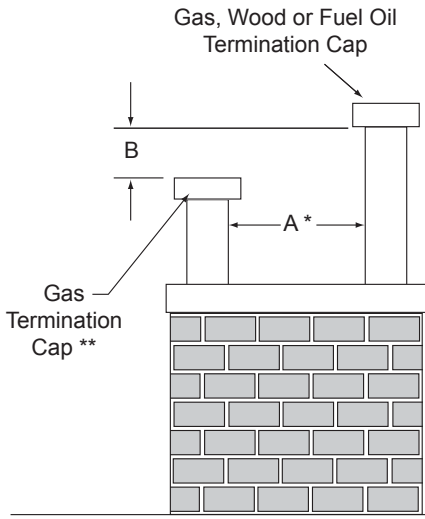
Roof Pitch	H (Min.) Ft.
Flat to 6/12.....	1.0*
Over 6/12 to 7/12.....	1.25*
Over 7/12 to 8/12.....	1.5*
Over 8/12 to 9/12.....	2.0*
Over 9/12 to 10/12.....	2.5*
Over 10/12 to 11/12.....	3.25
Over 11/12 to 12/12.....	4.0
Over 12/12 to 14/12.....	5.0
Over 14/12 to 16/12.....	6.0
Over 16/12 to 18/12.....	7.0
Over 18/12 to 20/12.....	7.5
Over 20/12 to 21/12.....	8.0

\* 3 foot minimum in snow regions

**Figure 2.8 Minimum Height From Roof To Lowest Discharge Opening**

A	B
6 in. (minimum) up to 20 in. <i>152 mm/508 mm</i>	18 in. minimum <i>457 mm</i>
20 in. and over	0 in. minimum

Gas, Wood or Fuel Oil Termination Cap



\* If using decorative cap cover(s), this distance may need to be increased. Refer to the installation instructions supplied with the decorative cap cover.

\*\* In a staggered installation with both gas and wood or fuel oil terminations, the wood or fuel oil termination cap must be higher than the gas termination cap.

**Figure 2.9 Staggered Termination Caps**

# 3 Framing and Clearances

## A. Framing and Clearances

**Note:** The factory-installed mounting brackets must be used to install the PVI-SLP securely to adjacent structures.

### Chassis Dimensions

The dimensions are measured as shown in Figure 3.1.

### Framing Dimensions

**WARNING! Risk of fire and burns! DO NOT install PVI-SLP with the access panel facing upward. Overheating may occur.**

Table 3.1 and Figure 3.1 show the clearances required for the PVI-SLP. Required clearances are the same for all allowable PVI-SLP orientations.

Height	Width	Depth
20-7/8 in.	13-5/8 in.	12 in.

Table 3.1.

If the PVI-SLP is being installed in a confined space (such as a utility closet, mechanical room or attic space) with a total volume less than 250 cubic feet, an access hole with minimum dimensions of 8 inches by 16 inches will be required directly in front of the access panel. The recommended access hole size is 12 inches by 17 inches. This size will allow full access to the 11 inch x 16 inch cover on the PVI-SLP. The confined space where the PVI is installed, and the space to which the access hole opens, must add up to at least 250 cubic feet. This hole may be covered with a decorative cover as long as the cover has a minimum of 30% open air. If the PVI-SLP is being installed in a space greater than 250 cubic feet the minimum size access hole is still required, but a solid cover may be used. This also applies to a fireplace chase. See Figure 3.2.

If the PVI-SLP is being installed in a space greater than 250 cubic feet, the minimum size access hole is still required, but a solid cover may be used.

The access panel opening must be located such that access for service and adjustment is available. The NEC requires a minimum of 30 inches of space around the opening and 36 inches in front of the opening to the access panel. Consult officials having jurisdiction regarding regional requirements.

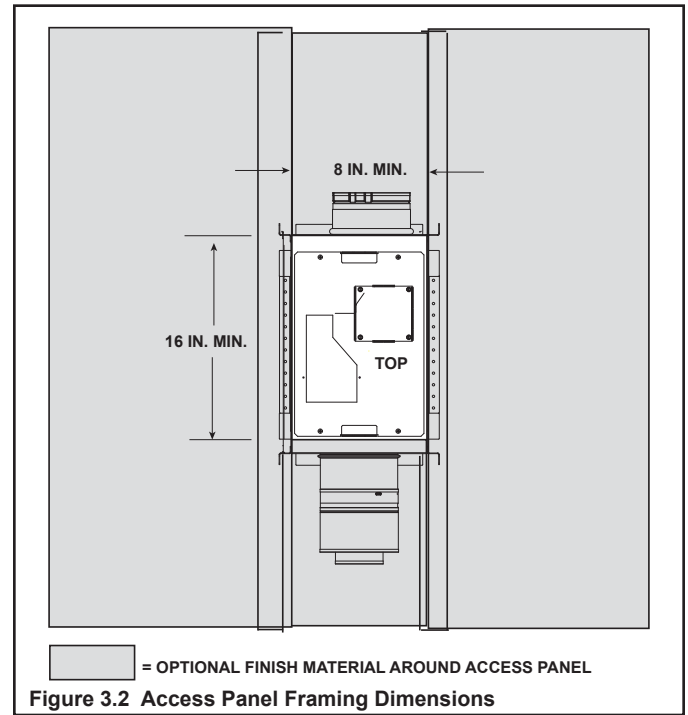


Figure 3.2 Access Panel Framing Dimensions

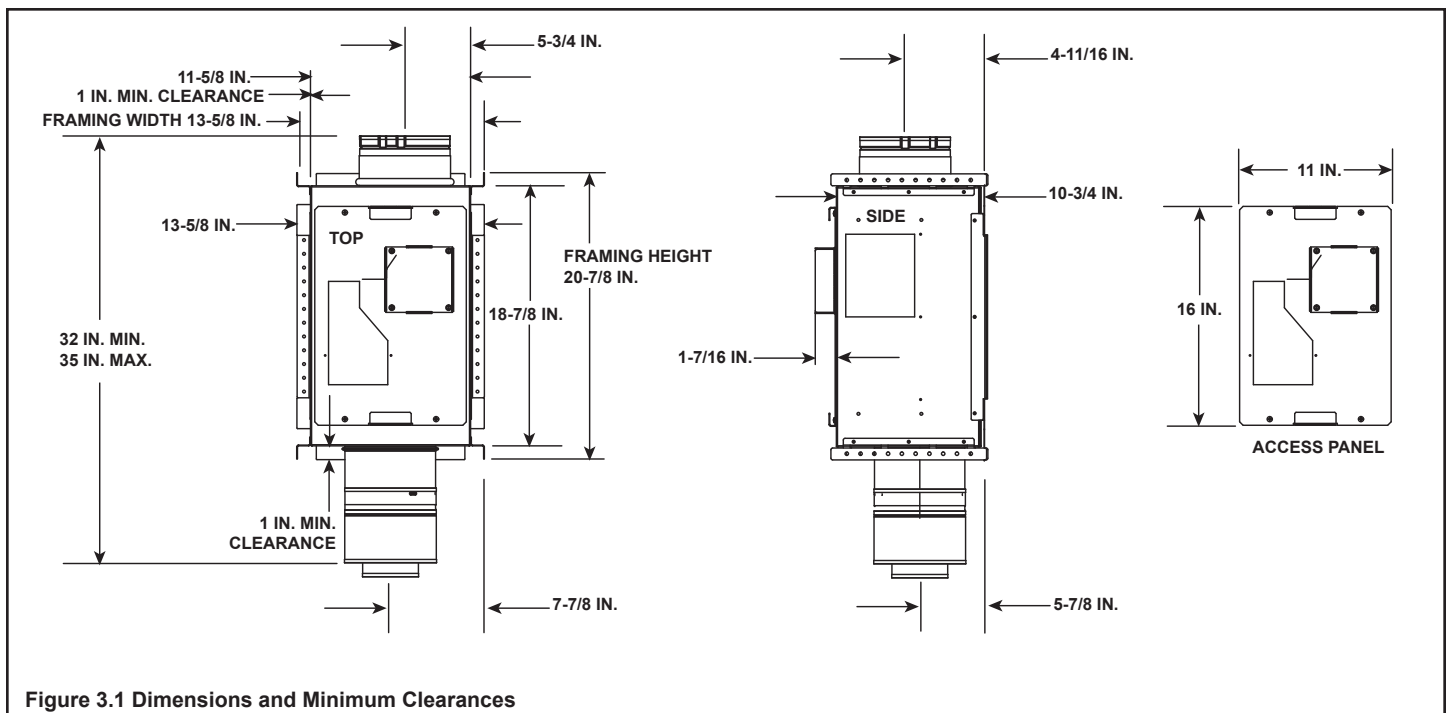


Figure 3.1 Dimensions and Minimum Clearances

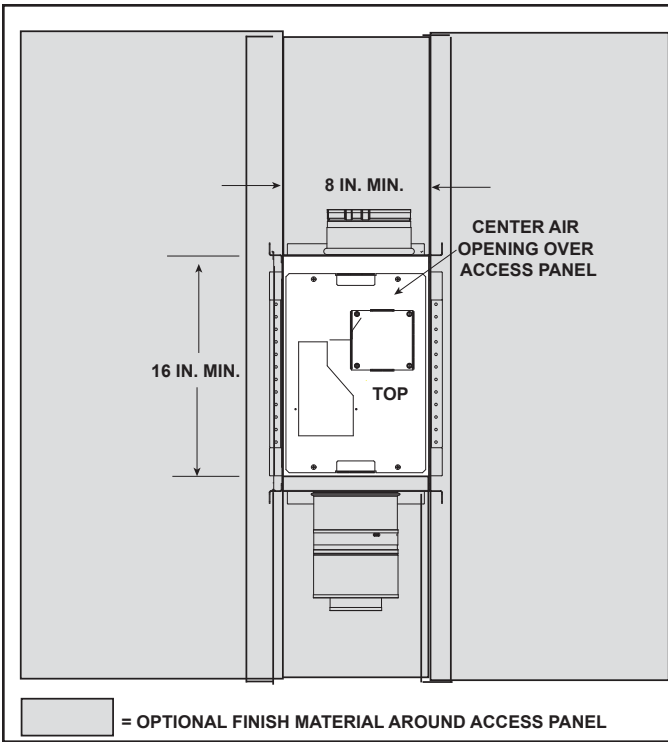


Figure 3.3 Access Panel Framing Dimensions

Figures 3.4 - 3.6 show possible framing techniques.

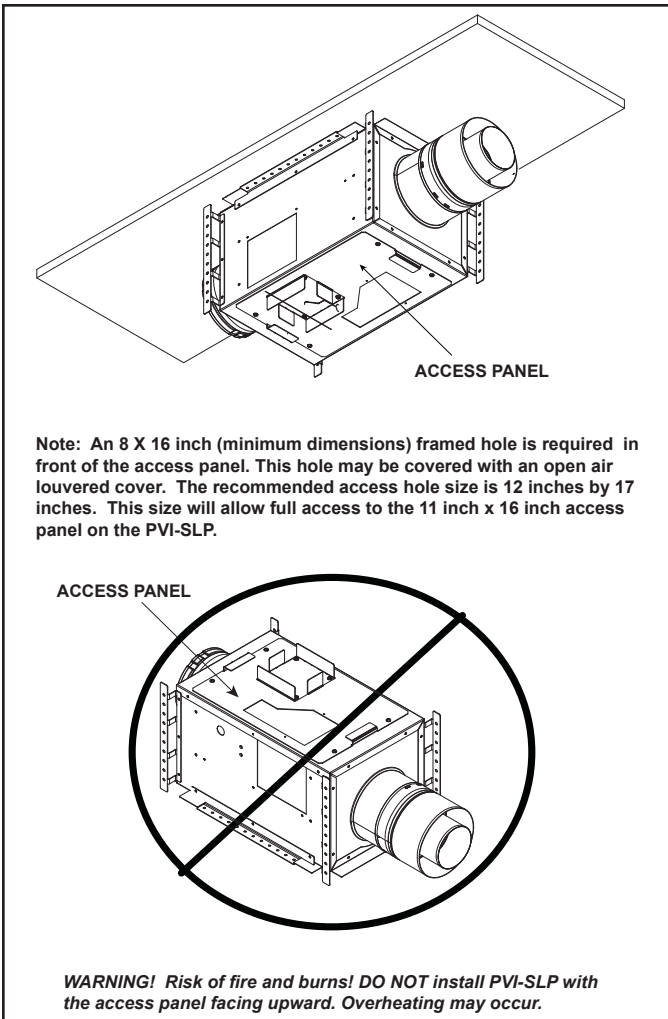


Figure 3.4 PVI-SLP Mounted to Horizontal Surface

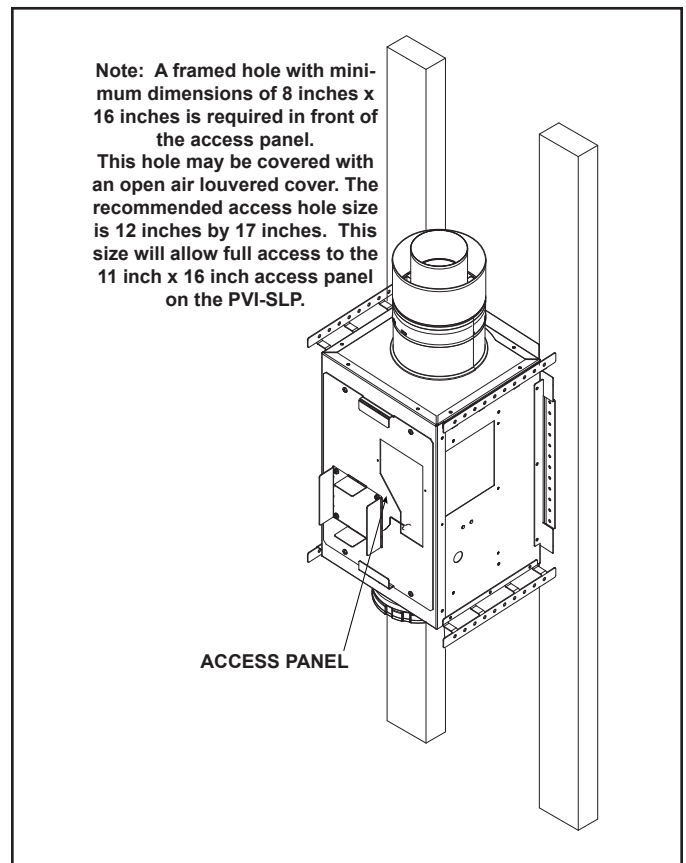


Figure 3.5 PVI-SLP Mounted to Vertical Surface

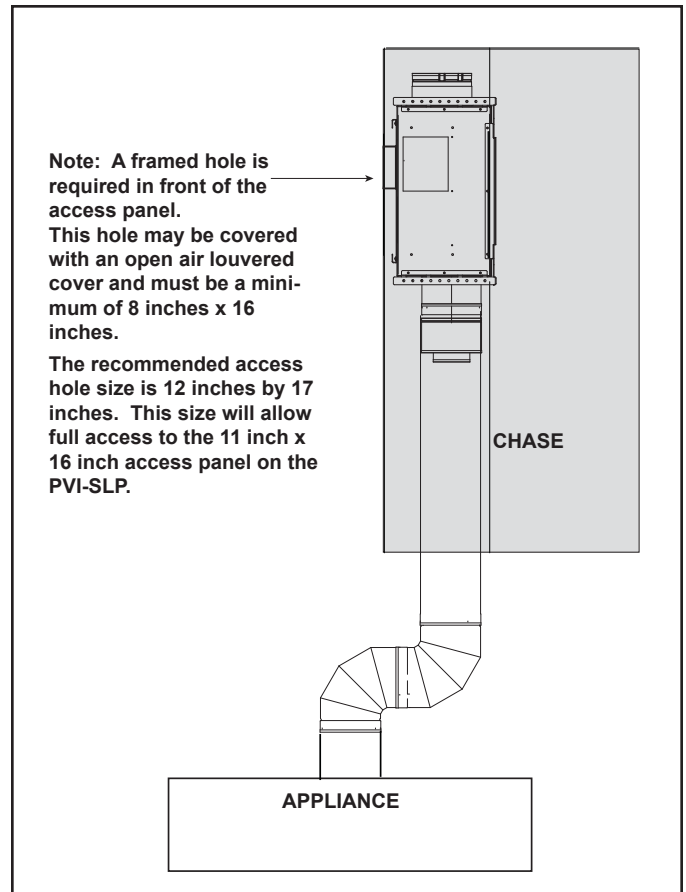


Figure 3.6 Mount PVI-SLP to Chase



Refer to Figures 3.7, 3.8 and 3.9 for installation requirements depending on orientation of the PVI-SLP.

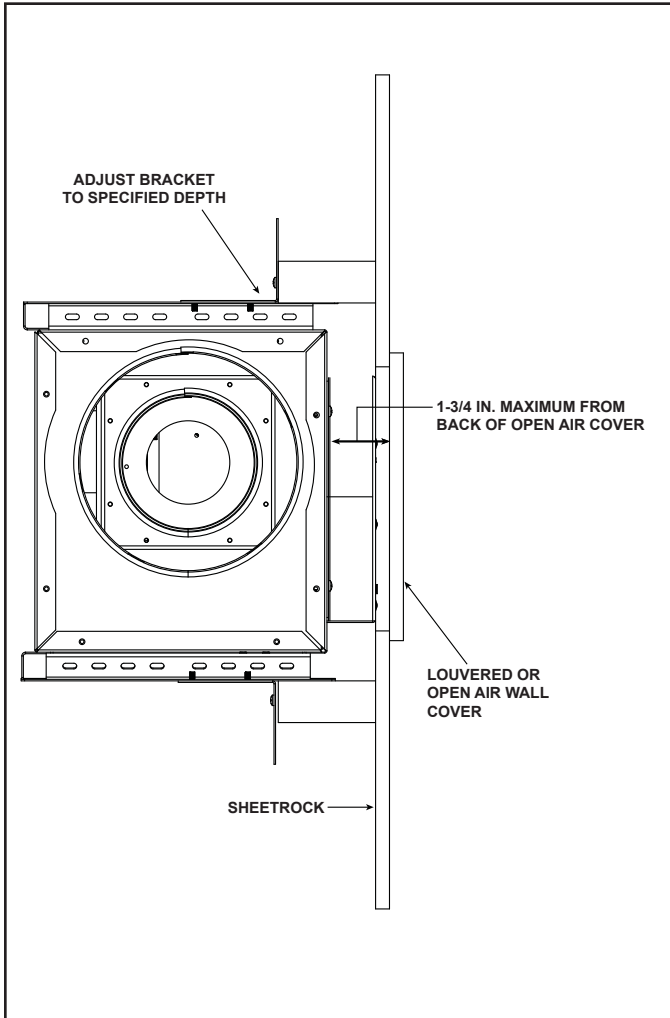


Figure 3.7 PVI-SLP Mounted with Fresh Air Access

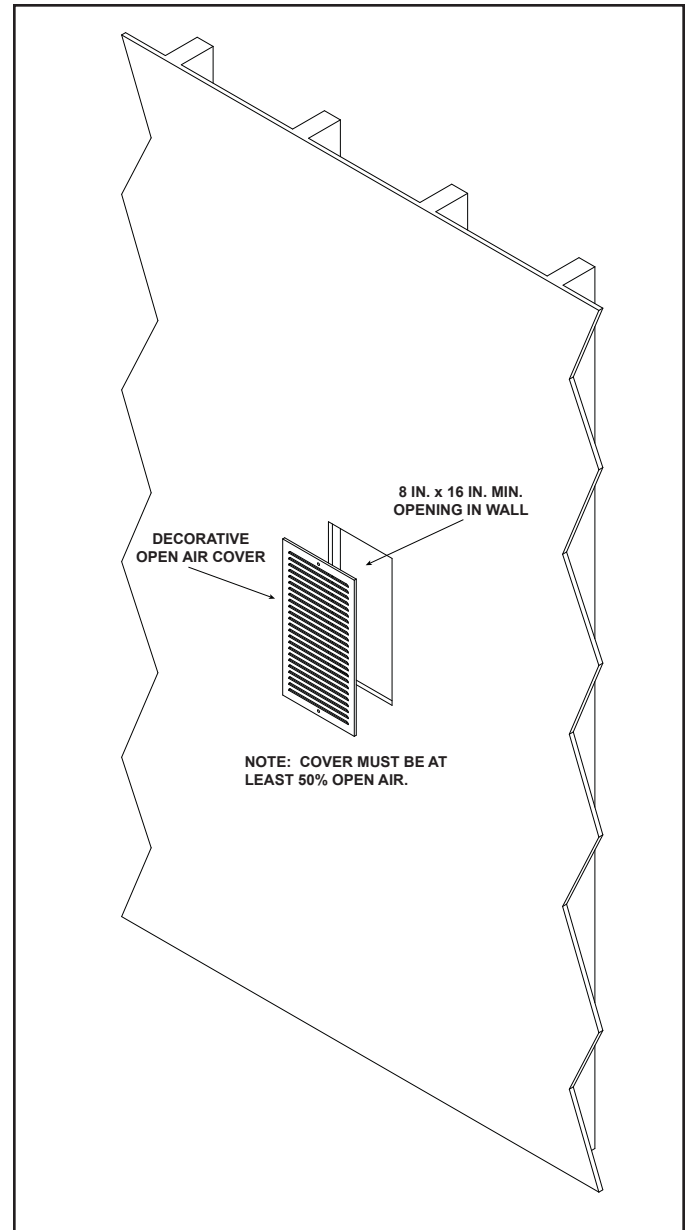


Figure 3.9 Requirements for Decorative Cover Installation

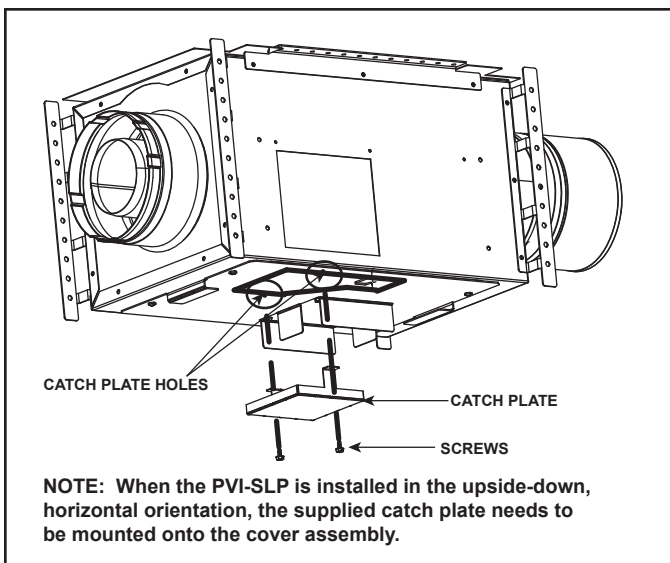


Figure 3.8 Mount the Catch Plate

For additional scenarios to attach the PVI-SLP, the optional mounting brackets (2196-024) can be used. They can be secured to the side brackets on the PVI-SLP using wing nuts (supplied). The brackets can be attached anywhere along these designated holes. See Figure 3.11.

The optional mounting brackets may be used when mounting the PVI-SLP to a studded wall. See Figure 3.12. Securing the PVI-SLP inside a floor joist can be easily done using the side brackets. See Figure 3.13. If the side brackets cannot be used, or additional support is needed, the optional mounting brackets can be used as shown in Figure 3.14.



Figure 3.12

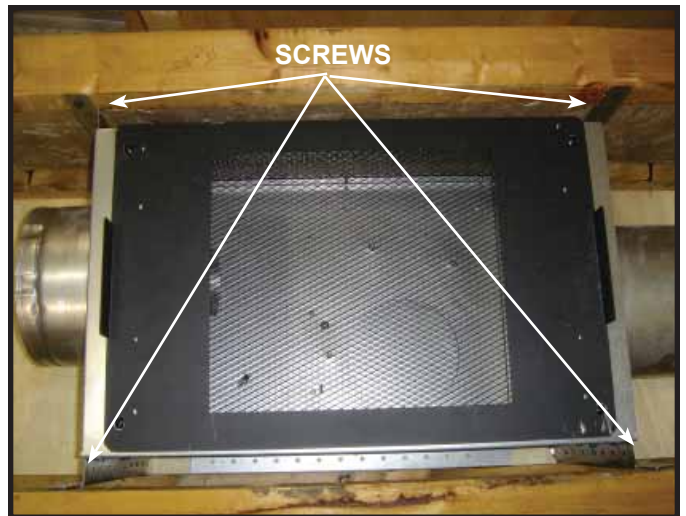


Figure 3.13



Figure 3.10



Figure 3.11



Figure 3.14



## IntelliFire IPI Module (Green)

Refer to Figure 4.2 for steps 1 through 5.

1. Remove and discard wire harness connecting the valve to the control module.
2. Unhook the 3V transformer and discard. This will no longer be used.
3. Remove and discard battery pack (if present).
4. Detach the white and orange wires from the control module.
5. Remove the green control module. This will no longer be used.

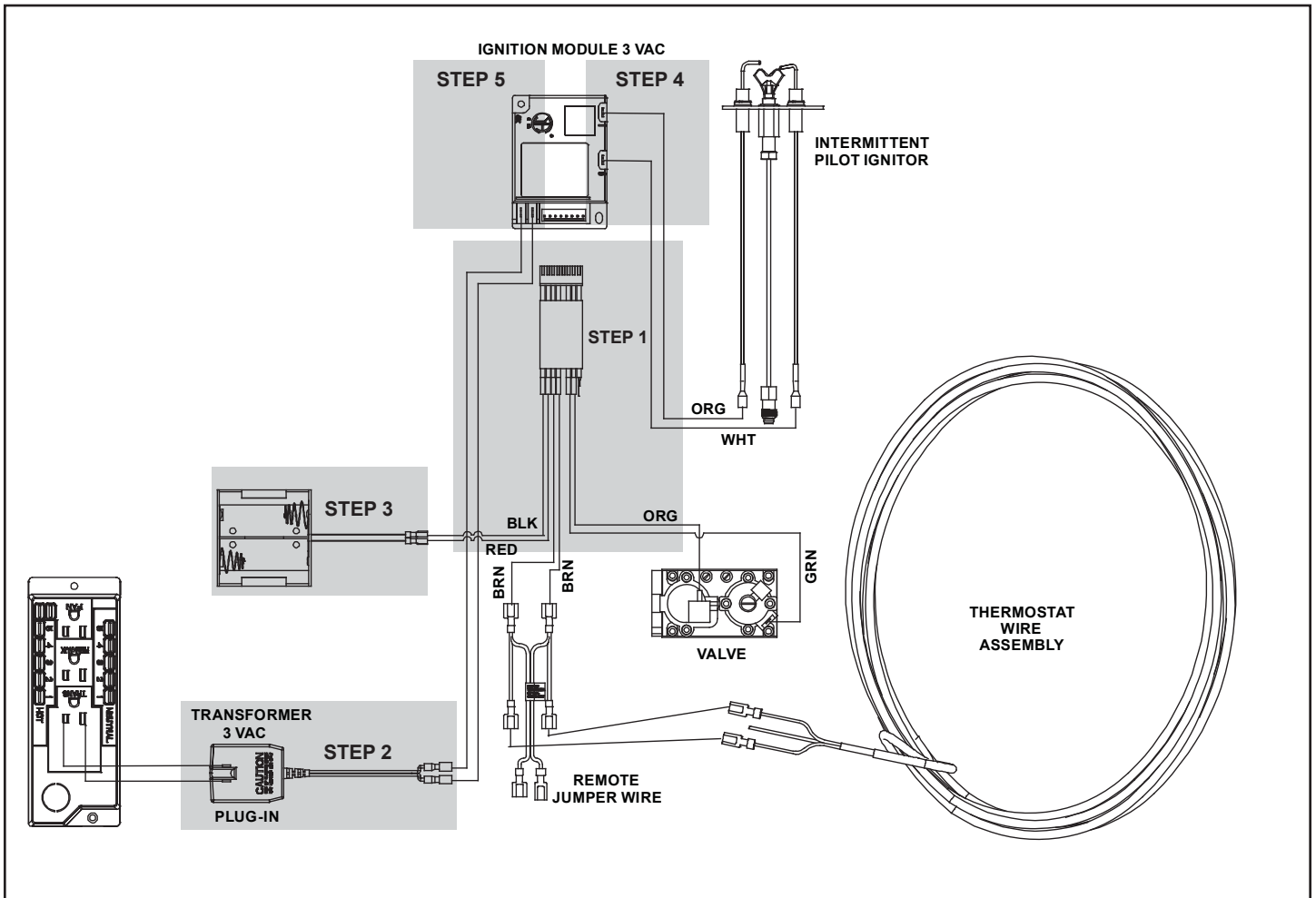


Figure 4.2. IntelliFire (Green) IPI Module Wiring as Shipped from Factory

## INSTALLATION

The type of control used to power the appliance is the determining factor in making the appliance compatible with the PVI-SLP. Table 4.1 indicates which set of instructions to use.

- A 7/8 in. diameter hole must be bored in the side of the fireplace outer wrap in which the 5 wires from the power vent will be routed. The hole should be located 2 inches to the side of the junction box and 4-inches up from the base of the fireplace.

CONTROL	REFERENCE
RC100	FIGURE 4.3
RC200	FIGURE 4.4
RC300	FIGURE 4.4

Table 4.1.

## IntelliFire™ Plus IPI Module (Black)

1. Attach the new 8K1-PVI module to the 6V transformer.
2. Connect the pilot wires (white to S and orange to I) to the 8K1-PVI module.
3. Connect the new Aux RC300 to the 8K1-PVI module.
4. Plug the Aux RC300 into the Junction Box.
5. Attach the 8K1-PVI wire harness to the 8K1-PVI module. Connect green and orange valve wires and reconnect ground wire to chassis.
6. Connect the accessory cable coming from the PVI to the AUX RC300 (AUX2 port) and the corresponding colored wire on the wire harness.
7. Connect the stepper motor wires to the 8K1-PVI module.

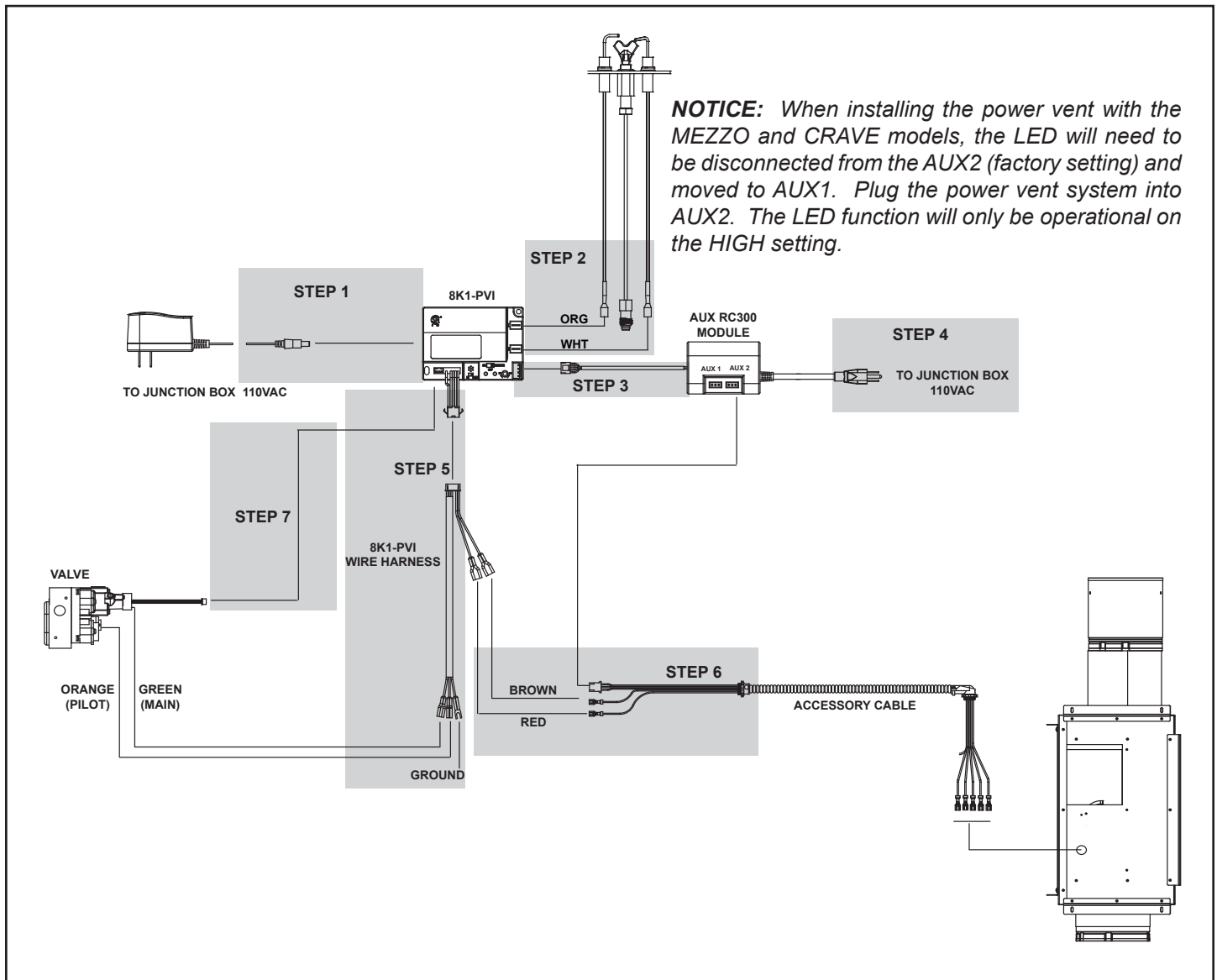


Figure 4.3 PVI Wiring - IntelliFire™ Plus (RC100, RC200, RC300 Controls)

## IntelliFire IPI Module (Green)

1. Attach the new 8K1-PVI module to the 6V transformer.
2. Connect the pilot wires (white to S and orange to I) to the 8K1-PVI module.
3. Connect the new Aux RC300 to the 8K1-PVI module.
4. Plug the Aux RC300 into the Junction Box.
5. Attach the 8K1-PVI wire harness to the 8K1-PVI module. Connect green and orange valve wires and reconnect ground wire to chassis.
6. Connect the accessory cable coming from the PVI to the AUX RC300 (AUX 2 port) and the corresponding colored wire on the wire harness.

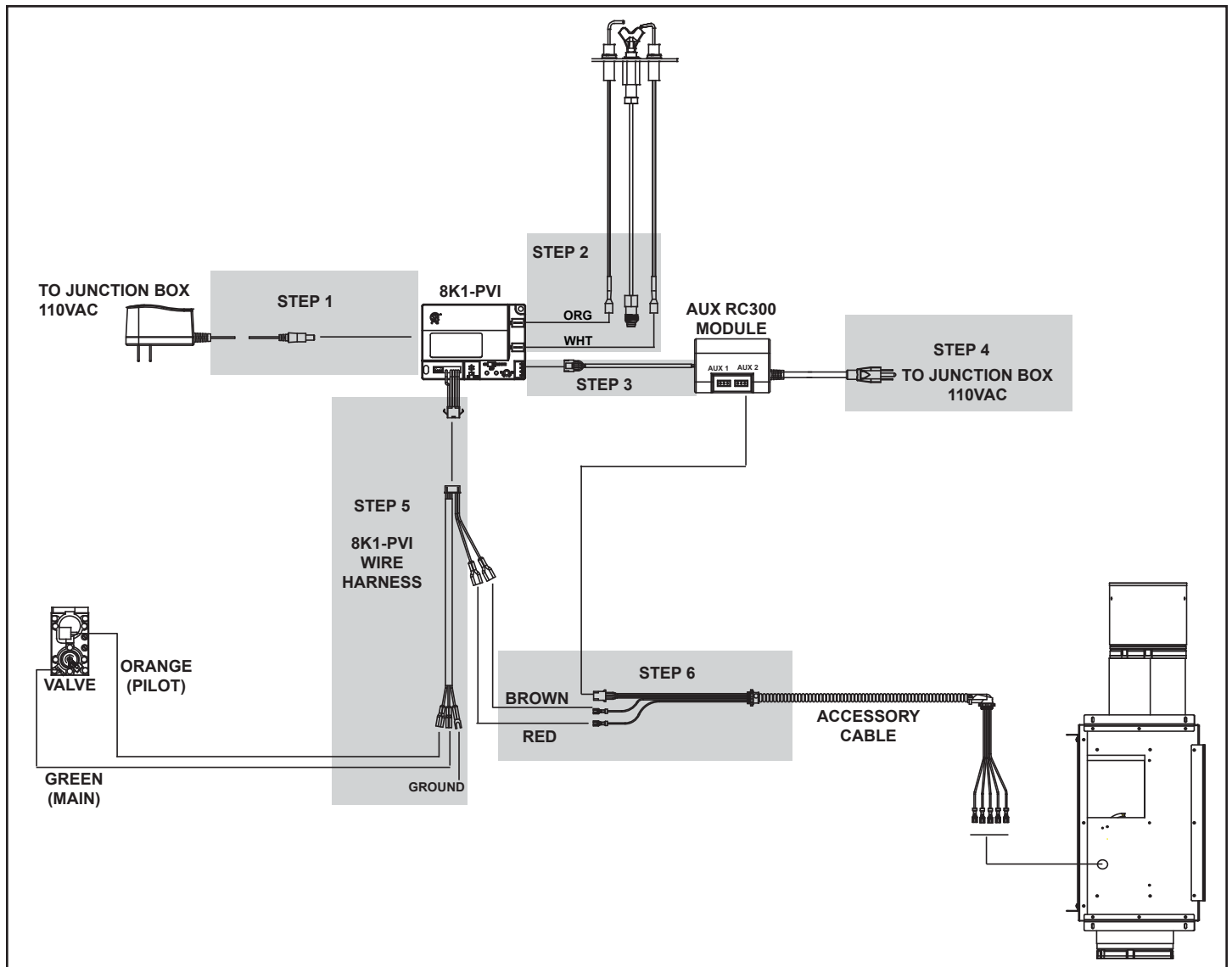


Figure 4.4 PVI Wiring - IntelliFire™ Ignition System



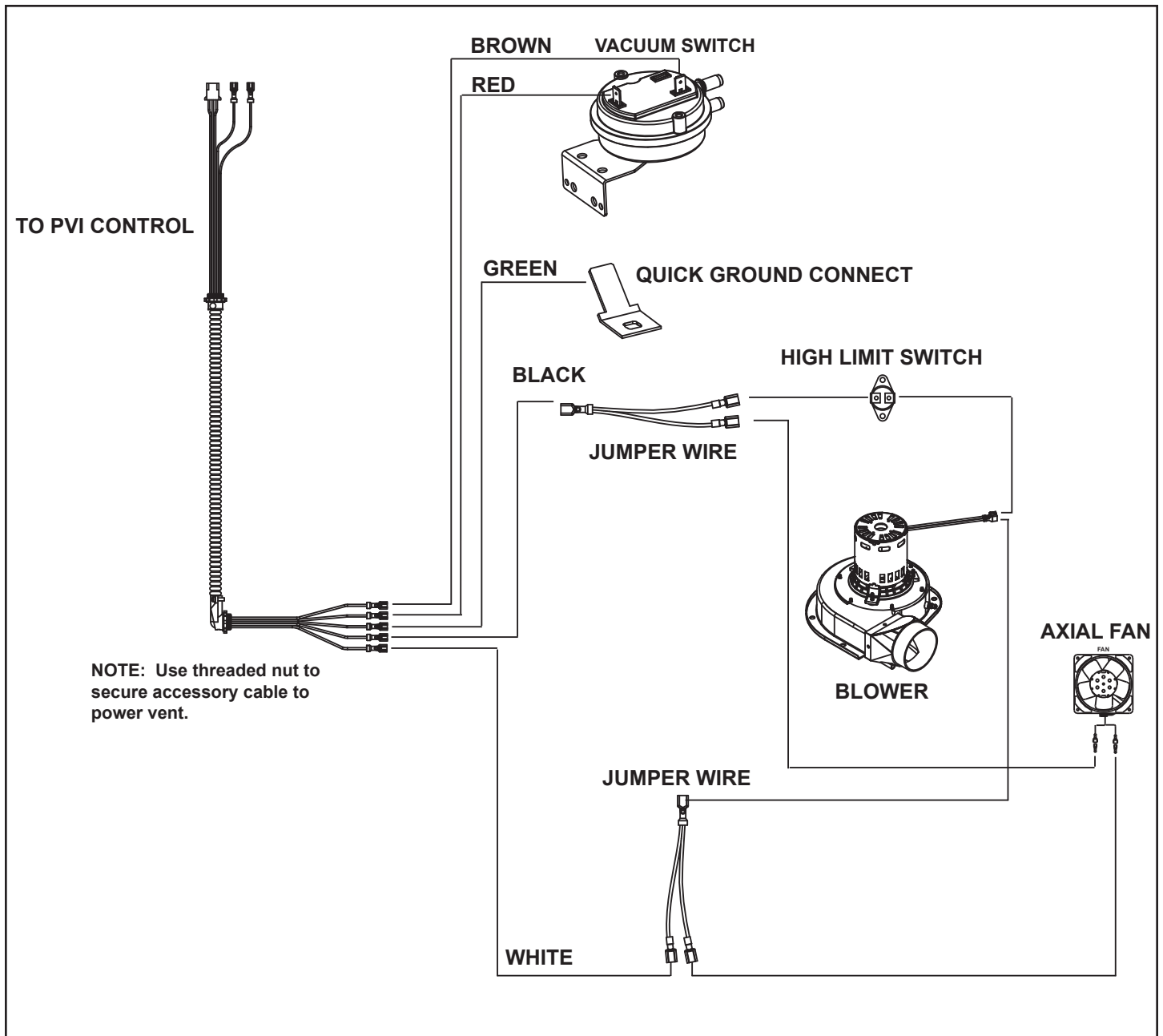


Figure 4.7 Internal PVI Wiring

# 5 Operating Instructions

## A. Installation Inspection

1. Follow safety inspection procedures recommended by national, provincial, and/or local codes.
2. Be certain all electrical connections are properly made and secure.
3. Visually inspect the vent system and determine that there is no flue gas spillage, blockage or restriction, leakage, corrosion or other unsafe deficiencies.
4. Place the fireplace in operation and determine that the burner and power vent are operating properly. The main burner should show no signs of floating, lifting, or flashbacks.

## B. Vacuum Switch Orientation

The vacuum switch must be installed on a vertical plane for proper function. If the PVI-SLP is mounted in a vertical position, the vacuum switch needs to be moved from its place in Figure 5.1 to the location shown in Figure 5.2. To do this, loosen and remove the two nuts securing it to the inside wall of the PVI-SLP. Move and secure the vacuum switch onto the adjacent wall using the two bolts that are sticking out of the surface. Be sure that the tube running from the vacuum switch to the motor is not pinched closed.

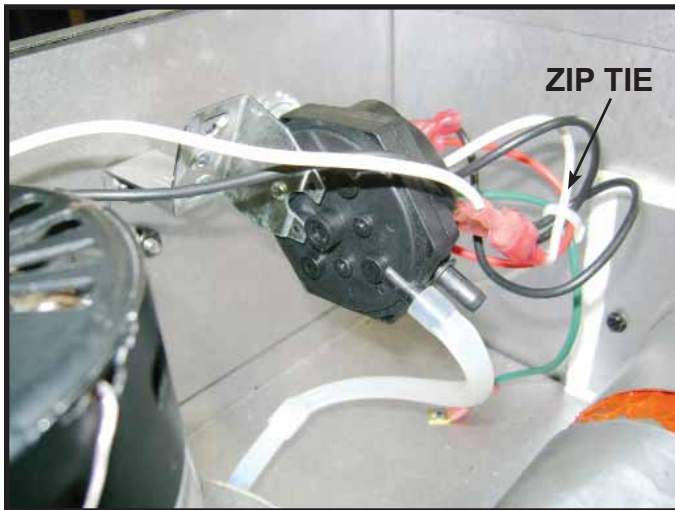


Figure 5.1 Switch Position for Horizontal Installation

**CAUTION! Risk of electrical shock! DO NOT allow 120VAC wires to contact hot metal surfaces. Use supplied wire ties to bundle wires away from flue pipe, fan housing and other metal surfaces.**

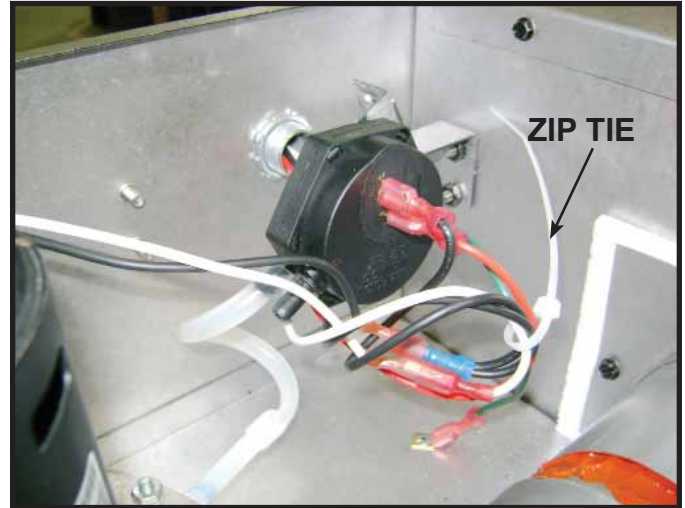


Figure 5.2 Switch Position for Vertical Installation

## C. Setting the PVI-SLP Baffle Adjustment

The PVI-SLP has a baffle adjustment which must be set during the Installation Inspection. This baffle adjustment is located alongside the motor. See Figure 5.3.

The baffle adjustment is measured using the holes on the indicator bar of the PVI-SLP baffle. See Figure 5.4. This bar raises as the baffle is opened and lowers as the baffle is closed. When only one hole is showing, the baffle is closed. When all three holes are visible, the baffle is all the way open. DO NOT TRY TO FORCE IT OPEN ANY FURTHER THAN 1/2 in.

When the power vent is located within ten feet of the appliance, there is no limit to the baffle adjustment. If the power vent is located more than 40 feet from the appliance, the flue baffle must remain closed and cannot be adjusted. See Table 3 for limitations to the baffle adjustment.

The need to adjust the baffle will depend upon vent run configuration and burner flame characteristics.

Next to the bolt used for baffle adjustment is an indicator bar.

- If the burner flames are short, active, and jumping – turn the bolt clockwise (open). Check the burner flames and adjust the baffle again as necessary until the flames are stable, strong, and steady.
- If the burner flames are tall, lifting, floating, and ghost-like, the baffle is too open and MUST be closed (turn bolt counter-clockwise).
- If the pilot continuously sparks and does not become steady, the baffle may need to be opened. The requirements in table 3 must still be met.

### PRIMO MODELS ONLY:

**CAUTION! Risk of overheating!** The baffle must remain fully closed when using the PVI-SLP with the PRIMO models. See PRIMO Installation Manual for details and PRIMO48/PRIMO48ST exception.

Distance from PVI-SLP to Appliance	Maximum Allowable Baffle Setting
2-15 ft.	3 holes visible
16-39 ft.	2 holes visible
Greater than 40	1 hole visible

Table 3.

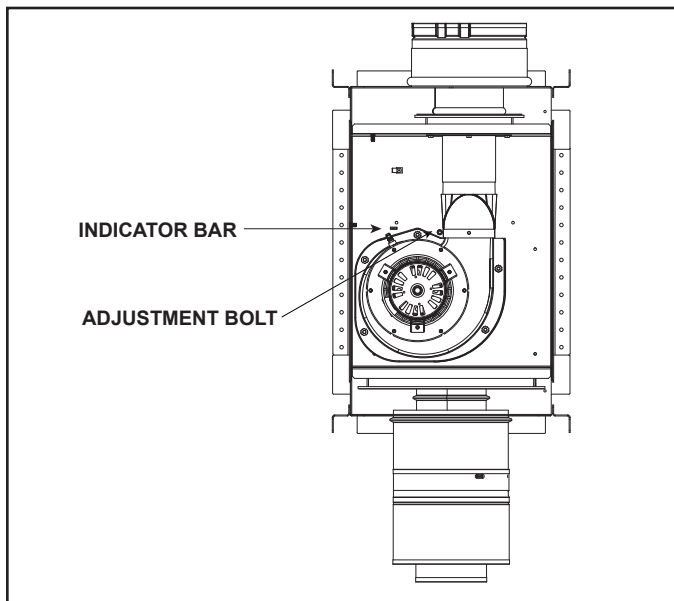


Figure 5.3 Baffle Adjustment Location

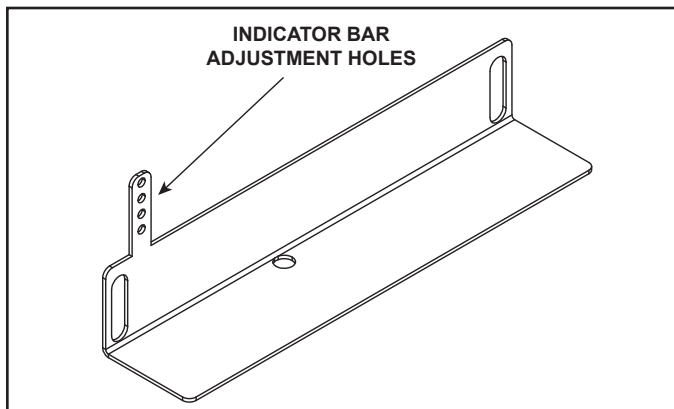


Figure 5.4 Baffle Adjustment

## D. Operating Instructions

After installation of the power vent, follow the operation instructions of the fireplace.

1. Turn the fireplace ON/OFF switch to "ON".

**Note:** During periods of operation after turning the fireplace "ON", there will be a delay before the fireplace ignites. This is due to the time necessary for the fan to reach operating speed and to remove any gases from the combustion chamber.

2. After turning the switch to the "ON" position, if the fireplace does not turn on, shut the switch to "OFF" and inspect the power vent system for any debris that may be obstructing the fan blade movement.
3. Turn the fireplace ON/OFF switch to "OFF" to turn off the burner and the power vent.

## E. Maintenance

**WARNING! Risk of Shock!** Before performing any maintenance or repair to the power vent assembly, make sure electrical power is disconnected to the fireplace.

1. Vent System: Inspect all components and connections annually. Replace, seal, or tighten pipe connections if necessary.
2. Access Panel: Inspect at least annually. Ensure mesh is free of dust and debris.
3. Motor: The fan motor bearings are sealed and no further lubrication is necessary. To access the motor, vacuum switch or pressure sense tube, refer to Figure 5.5.

If the motor needs to be removed, take out the three screws that attach the collar to the wall and the five nuts holding the motor down as shown in Figure 5.6.

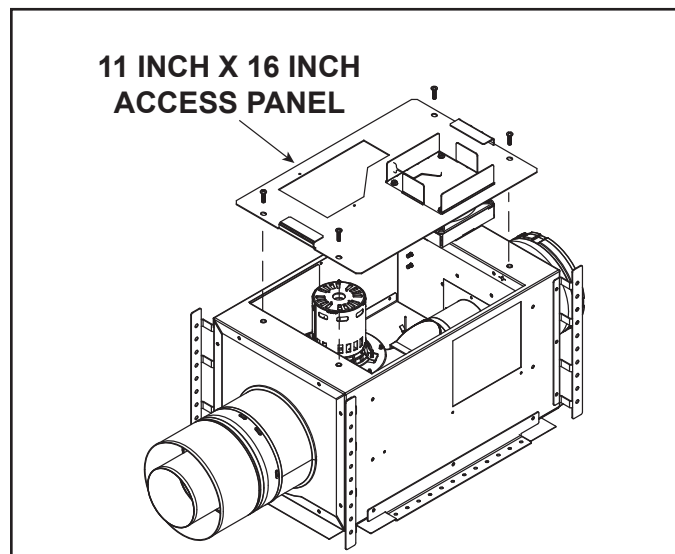


Figure 5.5 Maintenance Access

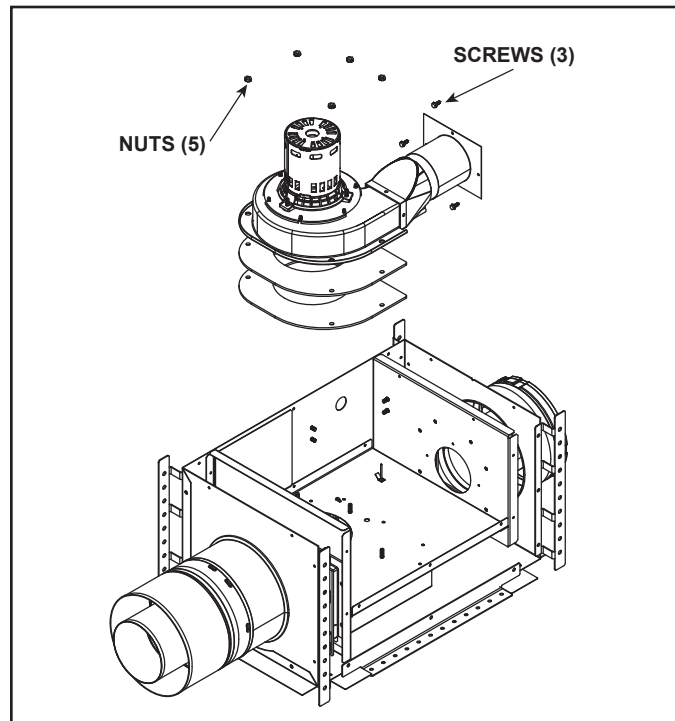


Figure 5.6 Motor/Blower Service

## F. PVI-SLP Troubleshooting

Symptoms	Possible Causes	Corrective Action
<b>IntelliFire™ Plus System</b>		
Main Closes/ Pilot open, 5 seconds later pilot sparking with Blower ON. If condition persists for 60 seconds, 8K-1 locks out with 3 LED alarm.	Pilot Rectification Failure	<ol style="list-style-type: none"> <li>1. Verify that black wire on IPI wire harness is properly grounded to the fireplace chassis.</li> <li>2. Verify that pilot is not being compromised by draft such that it fails to rectify. With the glass assembly in place, verify that the pilot flame is engulfing the flame sensing rod on the left side of the pilot hood. With a multi-meter, verify that the current in series between the module and the sense lead is at least 0.14 microamps.</li> <li>3. Verify that line inlet pressure is within range on rating plate and correct pilot orifice is in pilot.</li> <li>4. If #1-4 are correct, replace IPI module.</li> </ol>
Pilot and Main shut down and 8K1-PVI locks out with 4,5, or 6 LED alarm.	Blocked Flue/Insufficient Draft	<ol style="list-style-type: none"> <li>1. Verify the teflon pressure tube is connected between blower impeller housing and vacuum switch.</li> <li>2. Verify that wiring within PVI is correct and that the blower operates during the ignition command.</li> <li>3. Verify that the venting is connected and sealed properly.</li> <li>4. Verify that the vent termination is not blocked.</li> <li>5. If #1 thru #4 are complete, connect brown and red wires to bypass vacuum switch. If malfunction is corrected, lock-out system until the vacuum switch can be replaced.</li> </ol>
Main Closes, 5 seconds later pilot sparking with Blower ON. If condition persists for 60 seconds, 8K-1 locks out with 3 LED alarm.	Shorted Pilot Sense	<ol style="list-style-type: none"> <li>1. Verify that the white sensor lead is properly connected to the S-terminal on the module.</li> <li>2. Check for soot deposits on the pilot sense rod, adjacent shielding, or logs. If so, clean affected parts.</li> <li>3. Verify that the white sense lead from the pilot is not damaged or melted within the firebox or valve compartment. Replace pilot if damage exists.</li> </ol>
Main Closes, 5 seconds later pilot sparking with Blower ON. If condition persists for 60 seconds, 8K-1 locks out with 3 LED alarm.	Disconnected Pilot Sense	Verify that white sensor lead is properly connected to the S-terminal and the orange ignitor lead is connected to the I-terminal on the module
If given ignition command in both ON and REMOTE modes, system immediately locks-out with 3 LED alarm. Does not spark or attempt to ignite.	Pre-Existing/False Pilot Flame	Check for pre-existing pilot flame. If so, the valve is defective and should be replaced.
Pilot rectifies, burner begins to light, but has a difficult time fully lighting.	Draft from back of firebox is too strong due to power vent.	Place ember material along the back side of the ports that are experiencing the difficult lighting. This will block a portion of the strong draft.

Please contact your Hearth & Home Technologies dealer with any questions or concerns.

For the location of your nearest Hearth & Home Technologies dealer, please visit [www.hearthnhome.com](http://www.hearthnhome.com).

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