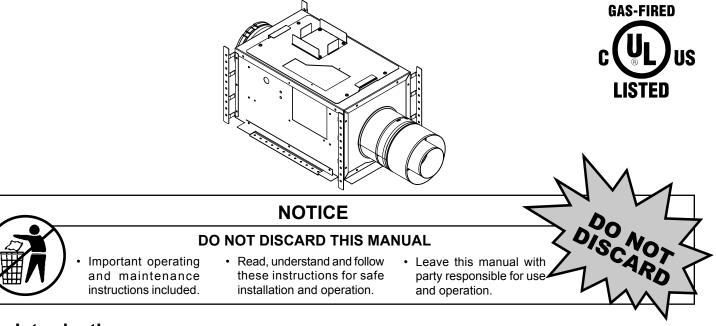
# PVI-SLP-B Power Vent Inline



- Installation Instructions -



# Introduction

# **Table of Contents**

#### **1** Introduction

1

Β.	Components and Service Parts List.       2         Installation of PVI-SLP-B       3         Orientation of PVI-SLP-B       3
2 \	/ent Information and Diagrams
Β.	Installation of Vent Pipe       4         Vent/Pipe Regulations       4         Venting Length - Model Categories and Length
D.	Requirements by Termination Type         11           Vent Termination Minimum Clearances         14
3 F	Framing and Clearances
A.	Framing and Clearances 15
4 E	Electrical Information
	Wiring the Appliance for the PVI-SLP-B with IntelliFire®         or IntelliFire® Plus (IPI) Controls
5 (	Dperating Instructions
В. С. D. Е.	Installation Inspection       29         Vacuum Switch Orientation       29         Setting the PVI-SLP-B Baffle Adjustment       29         Power Vent Operating Instructions       30         Maintenance       31         PVI-SL P-B Troubleshooting       32

G. IFT-Controls and PVI-SLP Power Vent Troubleshooting . 33

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

**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-B) 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:** PVI-SLP-B requires special control system configurations:
- For IntelliFire<sup>®</sup> and IntelliFire<sup>®</sup> Plus models, an RC100, RC200, or RC300 and PV-IPI-CK control system is required for installation (except on PRIMO models). The PV-IPI-CK is sold separately.
- For IntelliFire Touch<sup>®</sup> models, an IFT-ACM and IFT-RC400 are required for installation. The IFT-RC400, which includes the IFT-ACM, will need to be purchased if the appliance is not already equipped with IFT.
- The battery-backup feature cannot be used with models configured with the PVI-SLP-B.
- The wired wall switch feature cannot be used with models configured with the PVI-SLP-B.
- An appliance with PVI-SLP-B installed cannot be operated with battery-backup or a wired wall switch.

Note: The battery back-up and wired wall switch feature of any IPI system are removed when the PVI-SLP-B power vent is installed. The fireplace may no longer be operated with battery back-up and/or a wired wall switch.

The PVI-SLP-B 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-B. If fireplace does not light after 135 seconds, refer to the Troubleshooting section of this instruction for further direction. There will also be a 20 minute post-purge in which the PVI-SLP-B will continue to run after appliance is turned off.

## 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.

BLOWER ASSEMBLY	VACUUM SWITCH	Required Wire Harness
2196-025	2196-326	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
	00 0.	80 ft. PV Wire Harness PVI-WH80
		100 ft. PV Wire Harness PVI-WH100

Figure 1.1 Service Parts

### B. Installation of PVI-SLP-B

## 1. INSTALLATION PRECAUTIONS

- a. This device must be installed by a qualified installer in accordance with these instructions.
- b. 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.
- c. DO NOT INSTALL DAMAGED EQUIPMENT OR VENT COMPONENTS.
- d. Disconnect electrical power supply before making wiring connections.
- e. Venting of more than one appliance in a common vent system is prohibited.
- f. Clearances between the vent pipe and combustible materials must be maintained at 1-1/2-inch top, 1-inch sides and bottom.
- g. All outer pipe joints must be sealed with high temperature silicone. See Section 2.A.
- h. 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-B with the access panel facing upward. Overheating may occur.

**NOTICE:** Installation of the PVI-SLP-B 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-B to freeze.

a. If the PVI-SLP-B 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-B. 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-B 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.

- b. 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.
- c. The PVI-SLP-B **CANNOT** be installed with the access panel facing upward.
- d. The exit termination of mechanical draft systems shall not be less than seven feet above grade when located adjacent to public walkways.
- e. A mechanical drafting venting system shall terminate at least three feet above any forced air inlet located within 10 feet.

## C. Orientation of PVI-SLP-B

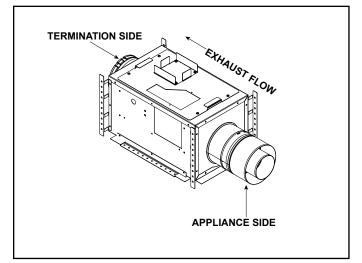


Figure 1.2 PVI-SLP-B Orientation

**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-B, consult the Power Vent diagrams in the Vent Information and Diagrams section of the appliance installation manual. The PVI-SLP-B 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-B): SLP-TVHW, SLP-LPC, SLP-TRAP, SLP-HHW2, SLP-HRC-SS, SLP-HRC-ZC-SS, SLP-TB1. Check installation manual for termination caps specifications.

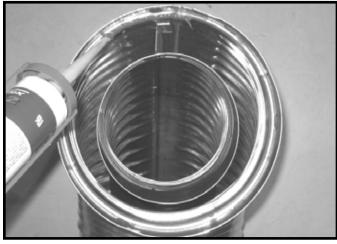
In certain cases, a pipe adapter may be used in the vent run. The DVP-2SL adapts from 5 in. / 8 in. DVP series starting collars to 4 in. / 6-5/8 in. SLP series vent pipe.

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.
   <u>OR</u>
- Apply aluminum foil tape (300 °F minimum continuous exposure rating) to the outside of connecting joint after joining sections. On horizontal pipe runs, it is recommended that the tape seam is positioned on the bottom side of the vent pipe.
- 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.



## **B. Vent/Pipe Regulations**

#### WARNING! Risk of Fire!

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

- 1. A minimum length of venting is required between the appliance and the PVI-SLP-B. 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-B may be installed at any location within the vent run configuration.
- 2. A minimum of 18 inches is required between the PVI-SLP-B and the termination cap to allow room for the pipe to go through a wall or roof.
- 3. If PVI-SLP-B 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-B.
- 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.

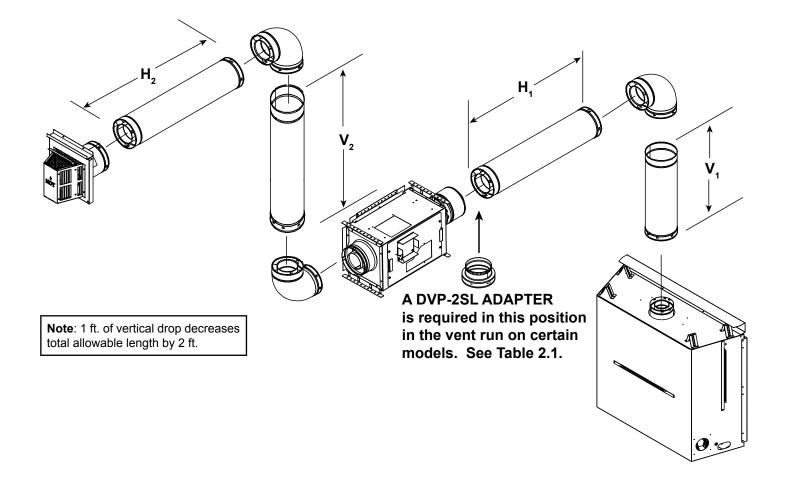
## B. Vent/Pipe Regulations (continued)

#### WARNING! Risk of Fire!

- PVI-SLP-B cannot be installed directly on appliance. The PVI-SLP-B 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-B. 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-B					
6K/KL/KX, 6000C, 6000CL, 6000CLX (IPI / IFT), 6000BEC-IPI 8K/KL/KX, 8000C, 8000CL, 8000CLX (IPI / IFT),						
6KMOD, 8KMOD, 6000CMOD, 8000CMOD (IPI / IFT)						
CAL36/42, CAL36X, CAL42X, CD4236, CD4842, CNXT4236, CNXT4842 (IPI / IFT)						
DBDV36I, DBDV42I, DBDV36PLATI, DBDV42PLATI, MER36, MER42, MER36P, MER42P, MER36MN, MER42MN, MERID36I, MERID42I, MERIDPLA36I, MERIDPLA42I						
ECLIPSE-32, ECLIPSE-36, EVEREST-B, GDST3831, GDST4336, GDFL4136, GDCR4136,GDCL4136, ST-550T-IPI						
RCOR-DV36IN, LCOR-DV36IN, ST-DV36IN, PIER-DV36IN						
NDV3630, NDV3933, NDV4236, NDV4842, NDV30-IFT, NDV33-IFT, NDV36-IFT NDV42-IFT						
NEVO3630, NEVO4236						
PEARL36PRIN, PEARL36STIN	<b>PVI installed horizontal orientation:</b> One 90 degree elbow and a total of two feet of straight horizontal or					
ALL QUARTZ32, QUARTZ36, QUARTZ42, QUARTZPLA36	straight vertical SLP pipe. See Figure 2.2 and Figure					
NNXT3933, NNXT4236, NNXT33-IFT, NNXT36-IFT	2.5.					
ST-36TR. ST-36TR, ST-36TRB, PIERI-36TR, PIER-36TRB, LCOR-36TRB, RCOR-36TRB	<b>PVI installed vertical orientation:</b> Two 90 degree elbows and a total of two feet straight horizontal or					
RED40, RED40ST	straight vertical SLP pipe. See Figure 2.3, 2.4, 2.6.					
REVO-S21, REVO-H31, ION-S7, ION-H7						
ALL COSMO32-IFT, RAVE32-IFT, JADE32IN, SLR32, ALL RAVE3012I, RAVE3012-IFT						
ALL COSMO36-IFT, COSMO42-IFT, RAVE36-IFT, RAVE42-IFT ALL RAVE4013I, RAVE4013-IFT, ALL JADE42IN, JADE42IL, ALL SLR						
SL-350TRS, SL-550TRS, SL-750STRS						
SL-550TR, SL-750TR, SL-950TR						
SL-550METRO, SL-550-BE-M						
SL-5, SL-7, SL-9, SL-5F, SL-7F, SL-5F-IFT, SL-7F-IFT, SL-5-IFT, SL-7-IFT, SL-9-IFT						
SL-3X, SL-5X, SL-7X, SL-9X, SL-3X-IFT, SL-5X-IFT, SL-7X-IFT, SL-9X-IFT						
ODMEZG-36						
MODEL	MINIMUM VENTING BETWEEN APPLIANCE AND PVI-SLP-B					
ALL ESC-42ST	PVI installed horizontal orientation: Minimum two					
ESCAPE-36DV, ESCAPE42DV	feet straight vertical DVP pipe directly off appliance					
ALL HEIR36, HEIR42, HEIR50	followed by 90 degree elbow and two feet DVP pipe. DVP-2SL or DVP-SLP24 adapter must be located					
ALL LUX36, LUX42	directly between initial DVP pipe and PVI-SLP-B. See					
ALL CRAVE4836, CRAVE4836ST, CRAVE6048, CRAVE6048ST CRAVE7260, CRAVE7260ST, CRAVE8472, CRAVE8472ST	Figure 2.2 and Figure 2.5. PVI installed vertical orientation: Minimum two feet					
ALL MEZZO36, MEZZO36ST, MEZZO48, MEZZO48ST MEZZO60, MEZZO60ST, MEZZO72, MEZZO72ST, ALL ECHEL36IN, ECHEL36STIN, ECHEL48IN, ECHEL48STIN, ECHEL60IN, ECHEL72IN	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. DVP-2SL or					
ALL TRUE-36, TRUE-42, TRUE-50, CERONA-36, CERONA-42	DVP-SLP24 adapter must be located directly between initial DVP pipe and PVI-SLP-B. See Figure 2.3, Figure					
MARQ36IN, MARQ42IN, MARQ42STIN, ODFORTG-36	2.4, Figure 2.6.					
PRIMO48, PRIMO48ST, PRIMO60, PRIMO60ST, PRIMO72, PRIMO72ST	<b>PVI installed vertical or horizontal orientation:</b> Minimum three feet of DVP or SLP pipe is required before connecting the PVI-SLP-B system. The 3 foot minimum does not include the factory-installed six inch DVP pipe.					
ahla 2 1						

## **Top Vent - Horizontal Termination**



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

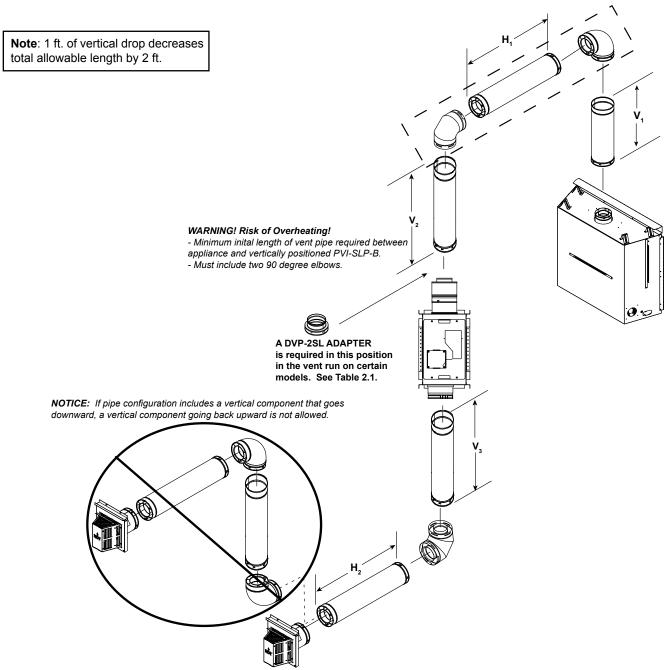
ESCAPE-42DV, ESCAPE-36DV, ESC-42ST, HEIR36, HEIR42, HEIR50, LUX36, LUX42, TRUE-36, TRUE-42, TRUE-50, CERONA-36, CERONA-42, MEZZO36, MEZZO36ST, CRAVE4836, CRAVE4836ST, MEZZO48, MEZZO48ST, CRAVE6048, CRAVE6048ST, MEZZO60, MEZZO60ST, CRAVE7260, CRAVE7260ST, MEZZO72, MEZZO72ST, CRAVE8472, CRAVE8472ST, MARQ36IN, MARQ42IN, MARQ42STIN, ECHEL36IN, ECHEL36STIN, ECHEL48IN, ECHEL48STIN, ECHEL60IN, ECHEL72IN, ODFORTG-36, ODMEZG-36

Combustibles surrounding pipe may overheat.

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

	Min	iimum	Maximum								
<b>H</b> <sub>1</sub> + <b>V</b> <sub>1</sub>	24 in.	610 mm									
H <sub>2</sub>	18 in.	457 mm	See Chart in Section 2.C: "Venting Length - Model Categories - Length Requirements by Termination Type."								
V <sub>2</sub>	0 in.	0 mm									
	A minimum of 2 ft. of vertical piping is required between the appliance and the PVI-SLP-B in addition to the minimum venting described above when installing PVI-SLP-B with certain appliance models. See										

Figure 2.2 Horizontal PVI Orientation



WARNING! Risk of Fire! Use DVP pipe between appliance and PVI-SLP-B 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, MARQ36IN, MARQ42IN, MARQ42STIN, ECHEL36IN, ECHEL36STIN, ECHEL48IN, ECHEL48STIN, ECHEL60IN, ECHEL72IN, ODFORTG-36, ODMEZG-36

Combustibles surrounding pipe may overheat.

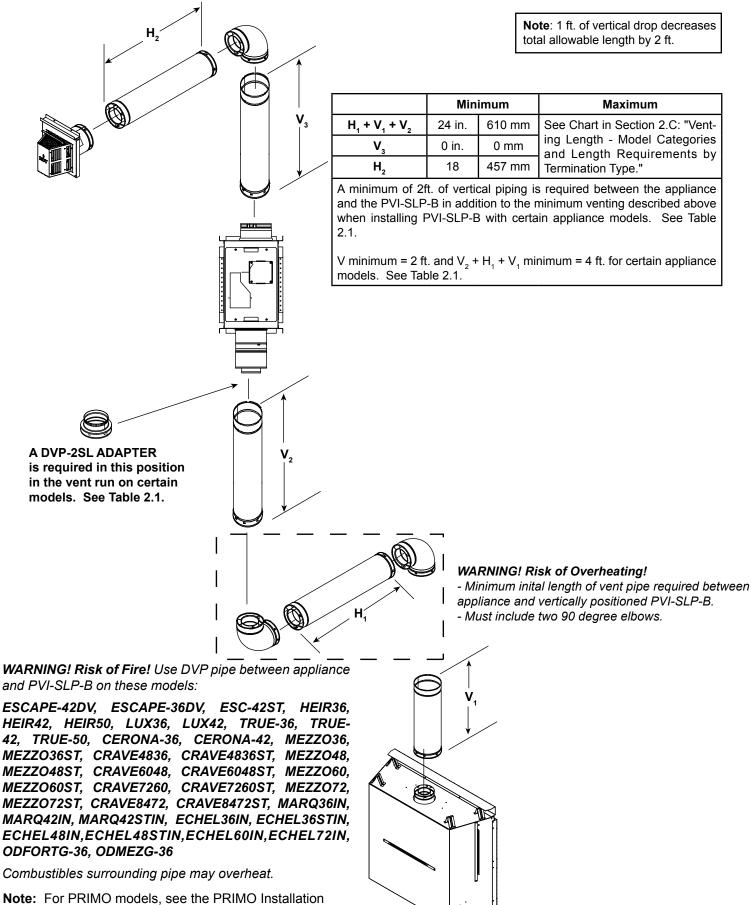
Note: For PRIMO models, see the PRIMO Installation Manual for vent configurations.

	Min	limum	Maximum				
$H_1 + V_1 + V_2$	24 in.	610 mm					
H <sub>2</sub>	18 in.	457 mm	See Chart in Section 2.C: "Venting Length - Model Ca egories and Length Requirements by Termination Type.				
V <sub>3</sub>	0 in.	0 mm					
			ired between the appliance and the PVI-SLP-B in addition				

A minimum of 2 ft. of vertical piping is required between the appliance and the PVI-SLP-B in addition to the minimum venting described above when installing PVI-SLP-B 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)



Manual for vent configurations.

#### Figure 2.4 Vertical PVI Orientation

Ø

#### **Top Vent - Vertical Termination**

Note: 1 ft. of vertical drop decreases

	Min	imum	Maximum
H <sub>1</sub> + V <sub>1</sub>	24 in. 610 mm		See Chart in Section 2.C: "Venting Length - Model Categories and Length Requirements by Termination Type."
V <sub>2</sub>	18 in.	457 mm	See Chart in Section 2.C: "Venting Length - Model Categories and Length Requirements by Termination Type."
H <sub>total</sub>	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-B in addition to the minimum venting described above when installing PVI-SLP-B with certain appliance models. See Table 2.1.

V minimum = 2 ft. and  $H_4 + V_4$  minimum = 4 ft. with certain appliance models. See Table 2.1.

total allowable length by 2 ft. H, V<sub>2</sub> H, A DVP-2SL ADAPTER is required in this position in the vent run on certain models. See Table 2.1.

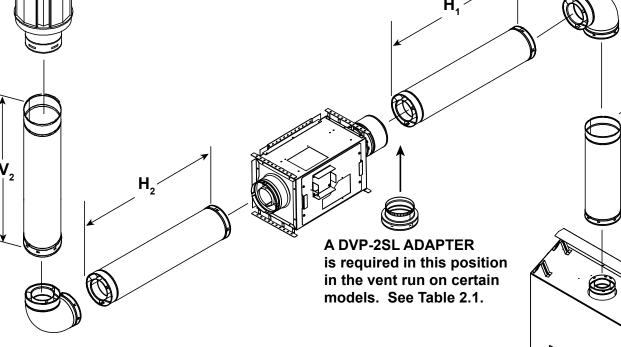
WARNING! Risk of Fire! Use DVP pipe between appliance and PVI-SLP-B on these models:

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, MARQ36IN, MARQ42IN, MARQ42STIN, ECHEL36IN, ECHEL36STIN, ECHEL48IN, ECHEL48STIN, ECHEL60IN, ECHEL72IN, ODFORTG-36, **ODMEZG-36** 

Combustibles surrounding pipe may overheat.

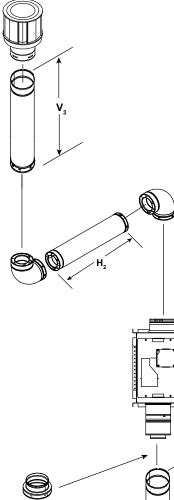
Note: For PRIMO models, see the PRIMO Installation Manual for vent configurations.

Figure 2.5 Horizontal PVI-SLP-B Orientation



**()**. 6

## Top Vent - Vertical Termination - (continued)



	Min	imum	Maximum					
$\mathbf{H}_{1} + \mathbf{V}_{1} + \mathbf{V}_{2}$	24 in.	610 mm	See Chart in Section 2.C: "Venting Length - Model Categories and Length Requirements by Termina-tion Type."					
<b>V</b> <sub>3</sub>	18 in.	457 mm	See Chart in Section 2.C: "Venting Length - Model Categories and Length Requirements by Termina-tion Type."					
H <sub>total</sub>	0 in.	0 in.	30% of total vent length allowed in chart: "Venting Length - Model Categories and Length Require- ments by Termination Type" in Section 2.C.					

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

V minimum = 2 ft. and v2 + H1 + V1 minimum = 4 ft. for certain appliance models. See Table 2.1.

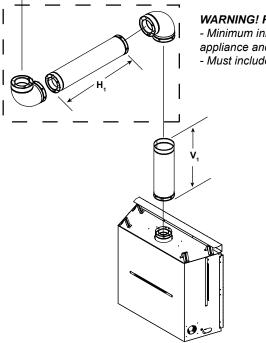
**WARNING!** Risk of Fire! Use DVP pipe between appliance and PVI-SLP-B on these models:

ESCAPE-42DV, ESCAPE-36DV, ESC-42ST, HEIR36, HEIR42, HEIR50, LUX36, LUX42, TRUE-36, TRUE-42, TRUE-50, CERONA-36, CE-RONA-42, MEZZO36, MEZZO36ST, CRAVE4836, CRAVE4836ST, MEZZO48, MEZZO48ST, CRAVE6048, CRAVE6048ST, MEZZO60, MEZZO60ST, CRAVE7260, CRAVE7260ST, MEZZO72, MEZZO72ST, CRAVE8472, CRAVE8472ST, MARQ36IN, MARQ42IN, MARQ42STIN, ECHEL36IN, ECHEL36STIN, ECHEL48IN, ECHEL48STIN, ECHEL60IN, ECHEL72IN, ODFORTG-36, ODMEZG-36

Combustibles surrounding pipe may overheat.

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

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



#### WARNING! Risk of Overheating!

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

Figure 2.6 Vertical PVI-SLP-B Orientation

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

The Model Category (0,1, 2 or 3) in Table 2.2 and Table 2.3 corresponds with the number in the shaded area of the Vent Length Requirement Chart In Tables 2.4 and 2.5.

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

		HEAT & GLO		HEATILATOR						
Category 0	Category 0 &1	Category 0, 1 & 2	Category 0,1, 2 & 3	Category 0 & 1	Category 0	Category 0, 1 & 2	Category 0, 1, 2 & 3			
REVO-S21		SL-550TR SL-750TR SL-950TR	ALL SLR COSMO42-IFT COSMO36-IFT	RAVE3012I RAVE3012-IFT RAVE32-IFT	ION-S7 ION-H7	NDV3630 NDV3933 NDV4236 NDV4842 NDV30-IFT NDV33-IFT NDV36-IFT NDV42-IFT	ALLRAVE4013i RAVE4013-IFT RAVE36-IFT RAVE42-IFT			
REVO-H31		SL-350TRS SL-550TRS SL-750TRS	RED40 RED40ST			CAL36/42, CD4236 (IPI / IFT) CD4842 (IPI / IFT)				
		SL-5F, SL-5F-IFT SL-7F, SL-7F-IFT				ECLIPSE-32 ECLIPSE-36				
		SL-5, SL-5-IFT SL-7, SL-7-IFT SL-9, SL-9-IFT								
		SL-3X, SL-5X SL-7X, SL-9X SL-3X-IFT SL-5X-IFT SL-7X-IFT SL-9X-IFT								
	SLR32 COSMO32- IFT	6K, 6KL, 6KX 6000C (IPI / IFT) 6000CL (IPI / IFT) 6000CLX (IPI / IFT) 6000BEC-IPI	ESC-42ST			CAL36X, CAL42X CNXT4236 (IPI / IFT) CNXT4842 (IPI / IFT)				
		8K, 8KL, 8KX 8000C (IPI / IFT) 8000CL (IPI / IFT) 8000CLX (IPI / IFT)	ESCAPE-36DV			NEVO3630 NEVO4236				
		6KMOD, 8KMOD 6000CMOD (IPI / IFT) 8000CMOD (IPI / IFT)	ESCAPE-42DV			NNXT3933 NNXT4236 NNXT33-IFT NNXT36-IFT				
		SL-550METRO SL-550-BE-M								
		ST-36TR ST-36TRB ST-550T-IPI PIER-36TR PIER-36TRB LCOR-6TRB RCOR-36TRB	TRUE-36 TRUE-42 TRUE-50			GDST3831 GDST4336 GDFL4136 GDCR4136 GDCL4136	HEIR36 HEIR42 HEIR50			
		MEZZO60 MEZZO60ST MEZZO72 MEZZO72ST	LUX36 LUX42			CRAVE4836 CRAVE4836ST CRAVE6048 CRAVE6048ST				
		MEZZO36 MEZZO36ST MEZZO48 MEZZO48ST EVEREST-B	CERONA-36 CERONA-42			CRAVE7260 CRAVE7260ST CRAVE8472 CRAVE8472ST				

Table 2.2 Heat & Glo and Heailator Models

Note: The REVO-V12 and ION-V7 are not approved for use with the PVI-SLP-B.

	MAJ	ESTIC		ННТ
Category 0 & 1	Category 0, 1 & 2	Category 0, 1, 2 & 3	Category 0, 1 & 2	Category 0,1,2 & 3
JADE32IN	DBDV36I DBDV42I DBDV36PLATI DBDV42PLATI MER36, MER42 MER36P, MER42P MARQ42IN MER36MN, MER42MN MERID36I MERID42I MERIDPLA36I MERIDPLA42I		RCOR-DV36IN LCOR-DV36IN ST-DV36IN PIER-DV36IN	ODFORTG-36
	QUARTZ32I QUARTZ32IFT QUARTZ36I QUARTZ36IFT QUARTZ42I QUARTZ42IFT QUARTZPLA36	JADE42IN JADE42IL	ODMEZG-36	
	PEARL36PRIN PEARL36STIN			
	ECHEL36IN ECHEL36STIN ECHEL48IN ECHEL48STIN ECHEL60IN ECHEL72IN			

Table 2.3 Majestic and Hearth & Home Technologies (HHT) Models

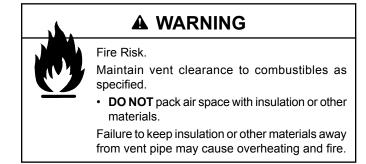
	Horizontal Termination													
Т	Total Venting Length (Feet) Includes both horizontal and vertical section of pipe													
# of Elbows	10	20	30	40	50	60	70	80	90	100	110	120	130	140
1	0	0	0	0	0	1	1	1	1	2	3			
2	0	0	0	0	0	1	1	1	2	3				
3	0	0	0	0	1	1	1	1	2					
4	0	0	0	0	1	1	1	2	3					
5	0	0	0	1	1	1	1	2						
6	0	0	0	1	1	1	2	3			These configurations			
7	0	0	1	1	1	1	2	3			are not	allowed		
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								
		N			n numbe n numbe					= 6.				

Table 2.4 Allowable Vent Runs - Horizontal Termination

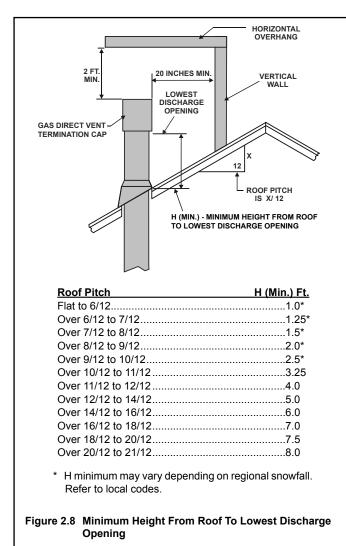
	Vertical Termination													
	Total Venting Length (feet) Includes both horizontal and vertical section of pipe													
# of Elbows	10	20	30	40	50	60	70	80	90	100	110	120	130	140
1	0	0	0	0	0	1	1	1	1	1	1	1	1	1
2	0	0	0	0	0	1	1	1	1	1	1	1	1	
3	0	0	0	0	1	1	1	1	1	1	1	1		
4	0	0	0	0	1	1	1	1	1	1	1	1		
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			e config		
9	0	1	1	1	1	1	1	1	1		are n	ot allow	ed.	
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							
	-	N					degree ( degree (			= 6.				

Table 2.5 Allowable Vent Runs - Vertical Termination

## **D. Vent Termination Minimum Clearances**



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



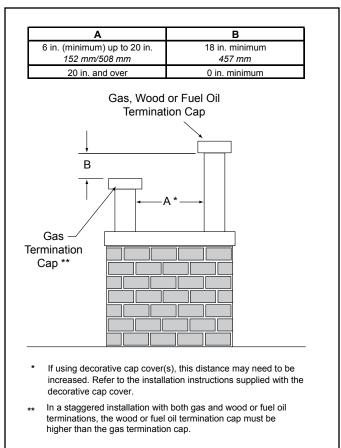


Figure 2.9 Staggered Termination Caps

**3** Framing and Clearances

#### A. Framing and Clearances

**Note:** The factory-installed mounting brackets must be used to install the PVI-SLP-B 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-B with the access panel facing upward. Overheating may occur.

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

Height	Width	Depth
20-7/8 in.	13-5/8 in.	12 in.
Table 3.1		

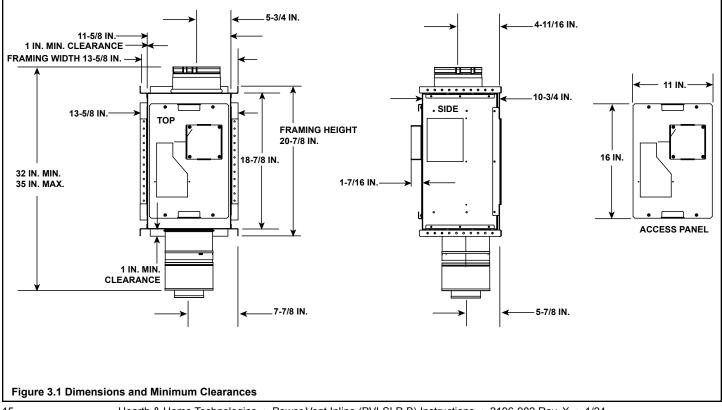
Table 3.1.

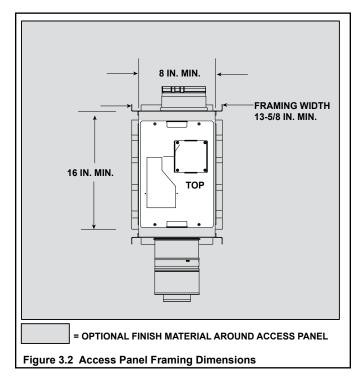
If the PVI-SLP-B is being installed in a confined space (such as a utility closet, mechanical room or attic space) with a total volume less than 250 cubic feet, an access hole with minimum dimensions of 8 inches by 16 inches will be required directly in front of the access panel. See Figure 3.2. The distance between the fresh air access opening and the back of the open air cover MUST be no greater than 1-3/4 inches. See Figure 3.6. The <u>recommended</u> 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-B. The confined space where the PVI-SLP-B is installed, and the space to which the access hole opens, must add up to at least 250 cubic feet. The distance between the fresh air access opening and the back of the open air cover MUST be no greater than 1-3/4 inches. See Figure 3.6.

The hole may be covered with a decorative cover as long as the cover has a minimum of 50% open air. See Figure 3.8.

If the PVI-SLP-B 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 3.5.

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.





Figures 3.3 - 3.5 show possible framing techniques.

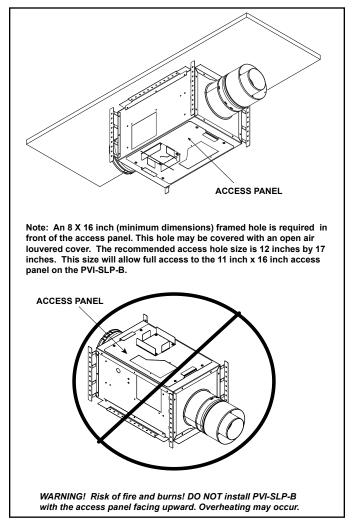


Figure 3.3 PVI-SLP-B Mounted to Horizontal Surface

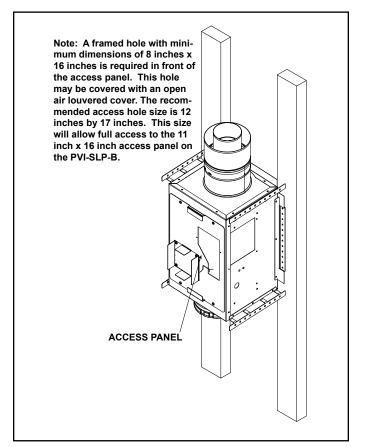


Figure 3.4 PVI-SLP-B Mounted to Vertical Surface

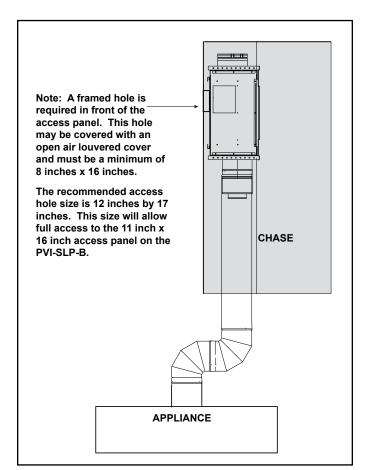


Figure 3.5 Mount PVI-SLP-B to Chase

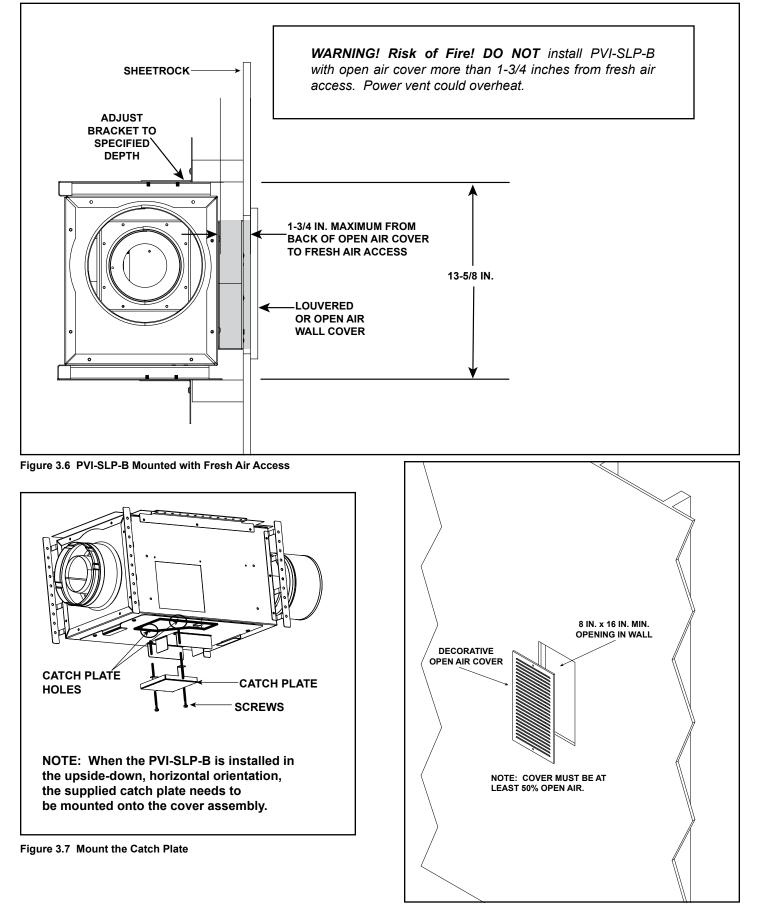


Figure 3.8 Requirements for Decorative Cover Installation Hearth & Home Technologies • Power Vent Inline (PVI-SLP-B) Instructions • 2196-902 Rev. X • 1/24

For additional scenarios to attach the PVI-SLP-B, the optional mounting brackets (2196-024) can be used. They can be secured to the side brackets on the PVI-SLP-B using wing nuts (supplied). The brackets can be attached anywhere along these designated holes. See Figure 3.10.

The optional mounting brackets may be used when mounting the PVI-SLP-B to a studded wall. See Figure 3.11.

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



Figure 3.9



Figure 3.10



Figure 3.11

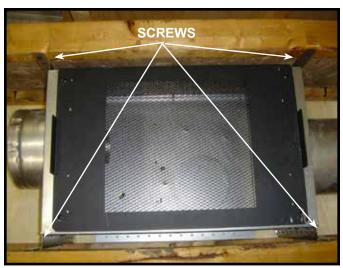


Figure 3.12



Figure 3.13

## A. Wiring the Appliance for the PVI-SLP-B with IntelliFire<sup>®</sup> or IntelliFire<sup>®</sup> Plus (IPI) Controls

**NOTICE:** The 8K1-PVI control module must be used to integrate the PVI-SLP-B to the fireplace. (The 8K1-PVI is included with the PV-IPI-CK which is sold separately. When installing the PVI-SLP-B on PRIMO models the 8K1-PVI is included with the fireplace.)

**NOTICE:** Electrical wiring must be done in accordance with national, provincial, and/or local electric codes.

**CAUTION! Risk of shock!** Disconnect electrical power from fireplace/power vent before performing any maintenance, repair, or electrical wiring.

**NOTICE:** Electrical service of 120 VAC-60Hz must be supplied to the junction box of the fireplace in order for the power vent to operate correctly.

#### **REMOVAL OF UNNECESSARY PARTS**

Refer to the appropriate directions depending on the color of the IPI module (Black or Green.)

#### IntelliFire Plus IPI Module (Black)

Refer to Figure 4.1 for steps 1 through 7. The shaded portion corresponding to the numbered step is the task to be performed.

- 1. Unplug control module power.
- 2. Detach the white and orange wires from the control module.
- 3. Detach the remaining harnesses from the control module.
- 4. Remove the black control module. This will no longer be needed.
- 5. Remove and discard battery pack (if present).
- 6. Unplug wall switch wires (if present).
- 7. Remove and discard IPI wire harness.

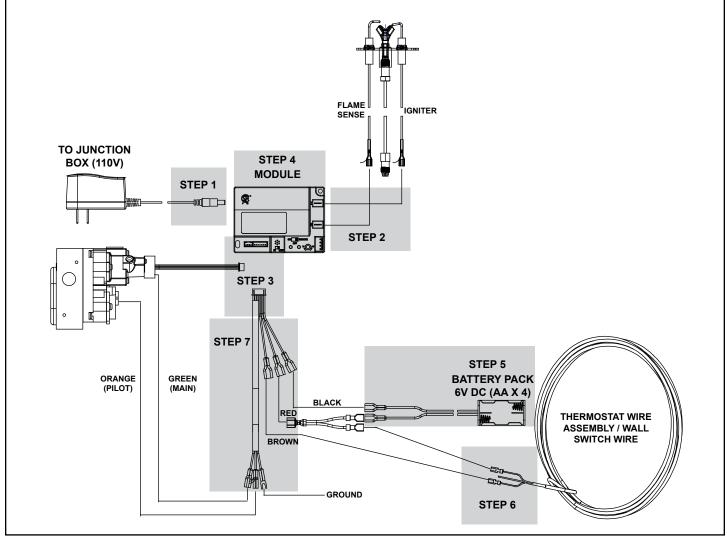


 Figure 4.1 IntelliFire Plus (Black) IPI Module Wiring as Shipped from Factory

 19
 Hearth & Home Technologies
 • Power Vent Inline (PVI-SLP-B) Instructions
 • 2196-902 Rev. X • 1/24

#### IntelliFire IPI Module (Green)

Refer to Figure 4.2 for steps 1 through 6.

- 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.
- 6. Unplug wall switch wires (if present).

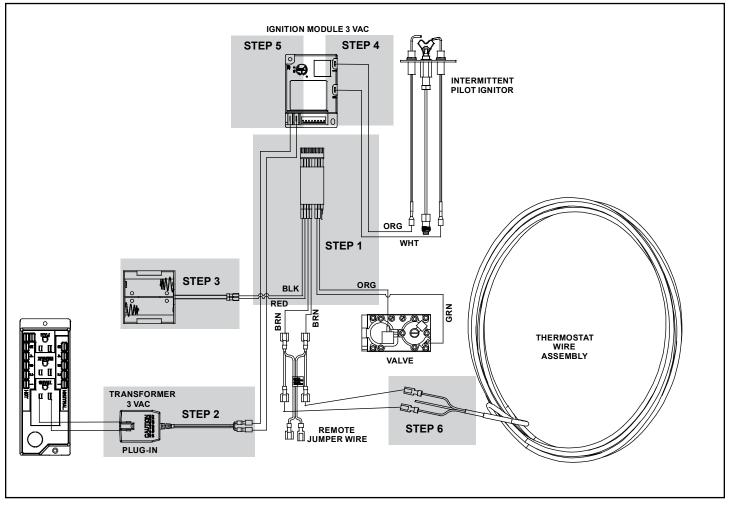


Figure 4.2. IntelliFire (Green) IPI Module Wiring as Shipped from Factory

#### INSTALLATION

The type of control used to power the appliance is the determining factor in making the appliance compatible with the PVI-SLP-B.

 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.

#### 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-SLP-B to the AUX RC300 (AUX 2 port) and the corresponding colored wire on the wire harness.
- 7. Connect the stepper motor wires to the 8K1-PVI module.

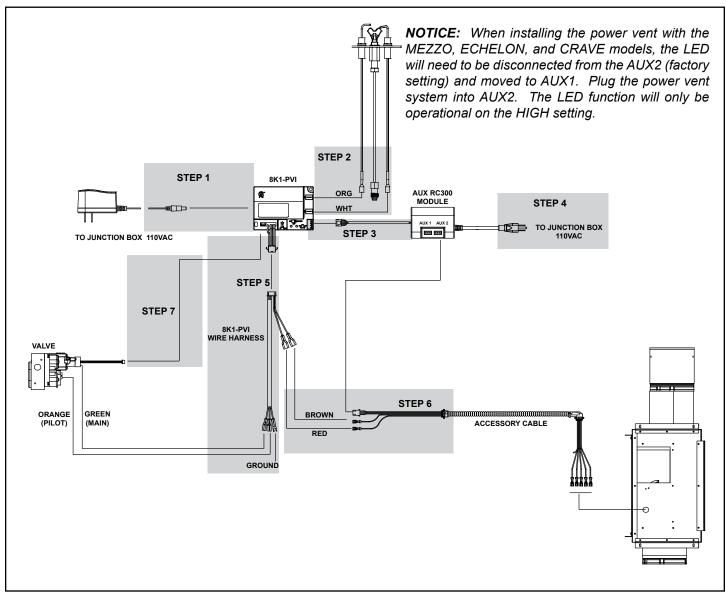


Figure 4.3 PVI Wiring - IntelliFire Plus (RC100, RC200, RC300 Controls)

#### 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  $8\mbox{K1-PVI}$  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.

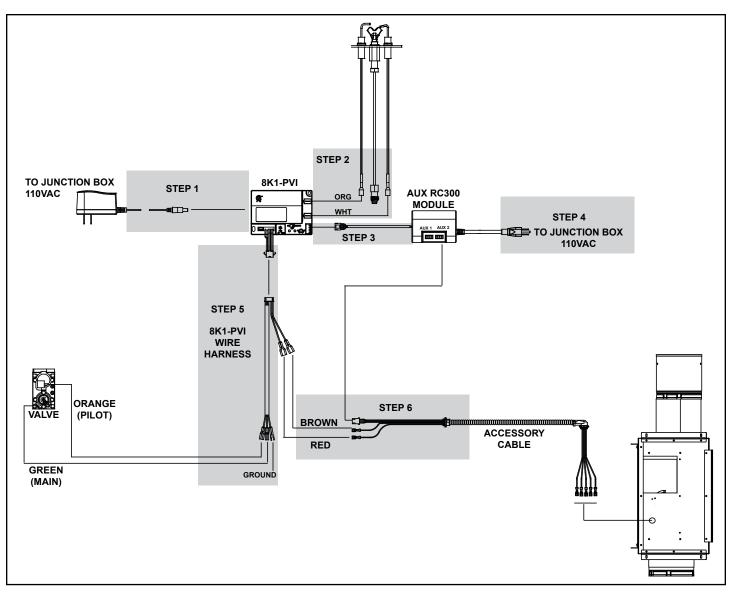


Figure 4.4 PVI Wiring - IntelliFire Ignition System

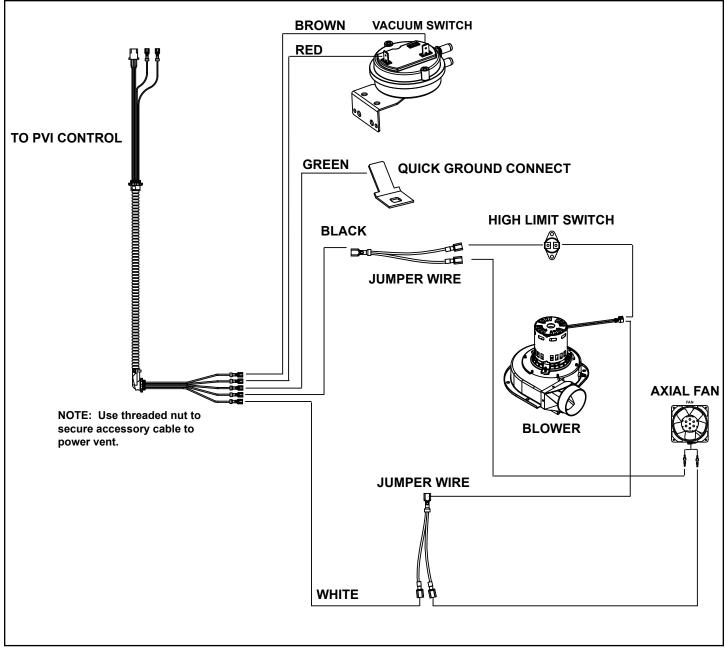


Figure 4.5 Internal PVI Wiring

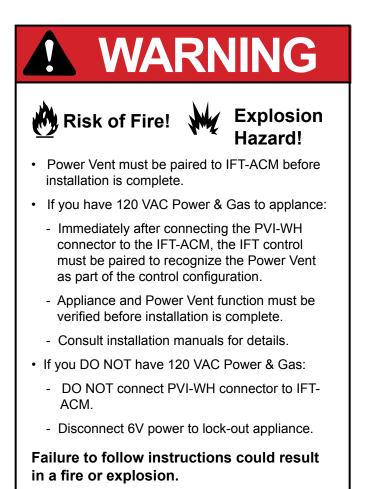
# B. Wiring the Appliance for the PVI-SLP-B with IntelliFire Touch<sup>®</sup> (IFT) Controls

**NOTICE:** When integrating the PVI-SLP-B onto an appliance with IntelliFire Touch (IFT) controls, the RC400 remote control and the Auxiliary Control Module (IFT-ACM) must be equipped on the appliance. The IFT-RC400 includes RC400 and the IFT-ACM.

**NOTICE:** Electrical wiring must be done in accordance with national, provincial, and/or local electric codes.

**CAUTION! Risk of shock!** Disconnect electrical power from fireplace/power vent before performing any maintenance, repair, or electrical wiring.

**NOTICE:** Electrical service of 120 VAC-60Hz must be supplied to the junction box of the fireplace in order for the power vent to operate correctly.



#### REMOVAL OF UNNECESSARY PARTS

Refer to Figure 4.6 for steps 1 through 4. Some features may or may not exist on appliance. The shaded portion corresponding to the numbered step is the task to be performed.

- 1. Unplug control module power.
- 2. Remove and discard battery pack (if present).
- 3. Detach wires from 6 pin harness that connect an optional appliance on/off control (if present) and discard.
- 4. Remove jumper/splitter wire (if present) and discard.

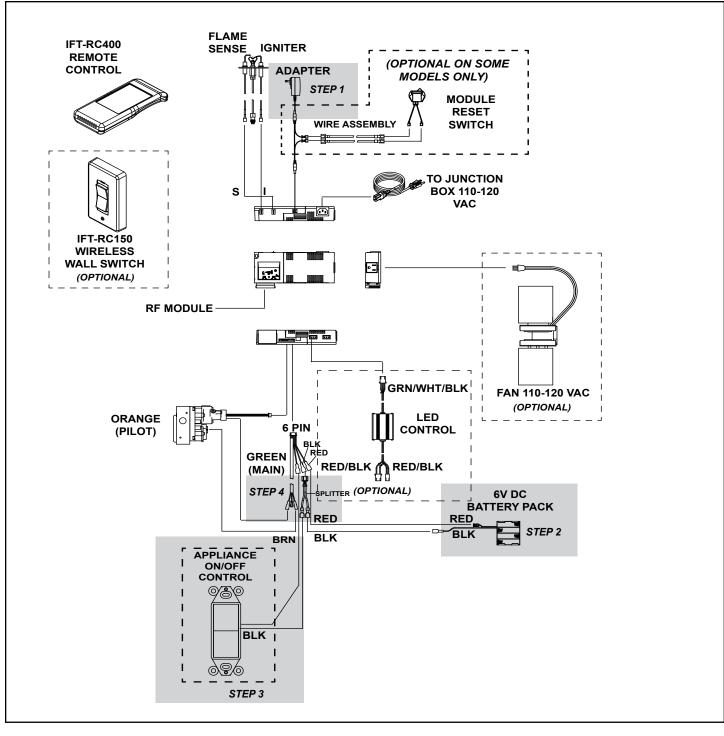


Figure 4.6. IFT-RC400 Wiring Diagram without Power Vent

#### Installation Steps:

If the appliance is equipped with an IFT-ACM, proceed to step 10. If not, proceed to next step.

- 5. Locate the IntelliFire Touch electronic control module (IFT-ECM) in the control cavity of the appliance and move the three-position switch to the OFF position. See Figure 4.7.
- 6. Remove protective rubber cap from connector on the top of the IFT-ECM. See Figure 4.7.

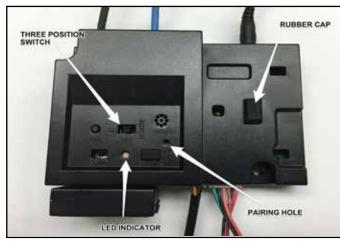


Figure 4.7. IFT-ECM

- 7. Attach velcro included with the IFT-ACM to the bottom of the ACM. See Figure 4.8.
- 8. Connect the IFT-ACM to the IFT-ECM by aligning the pins and tabs and pushing the IFT-ACM into the IFT-ECM until both tabs latch in place. Ensure the IFT-ECM and IFT-ACM are aligned with each other and fastened securely. See Figure 4.8.

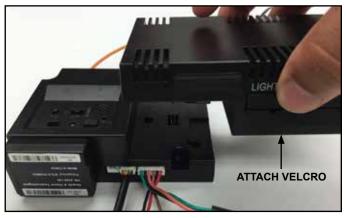


Figure 4.8. Connecting IFT-ACM and IFT-ECM

**WARNING!** Risk of Shock! DO NOT touch male pins. Leave rubber cap on all ports unless port is being connected to a load.

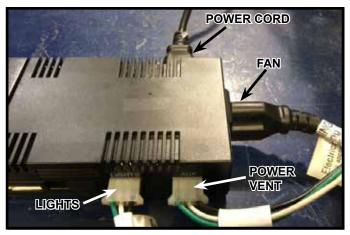


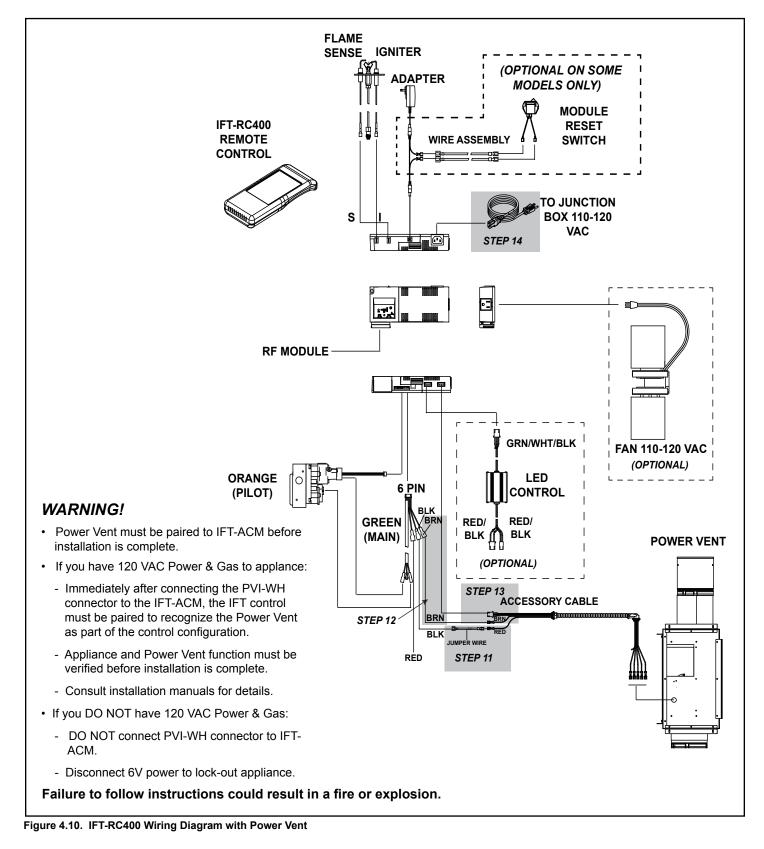
Figure 4.9. Fan, Lights and Power Vent Connection

- 9. The IFT-ACM can provide power to HHT approved kits including fan, lights and power vent.
  - To connect a fan kit to the IFT-ACM, insert the three prong male plug from the fan into the receptacle located on the right side of the IFT-ACM. See Figure 4.9.
  - To connect a light kit to the IFT-ACM, remove protective rubber cap labeled 'LIGHTS' and connect to the female cord that was supplied in your lights kit into the three male pins on the IFT-ACM. See Figure 4.9.
  - To connect a power vent kit to the IFT-ACM, remove protective rubber cap labeled 'AUX' and connect to the female cord of the PVI-WH wire harness into the three male pins on the IFT-ACM. See Figure 4.9.

**WARNING!** Risk of Shock! DO NOT touch male pins. Leave rubber cap on all ports unless port is being connected to a lead.

**Note:** It will be necessary to re-pair the remote after installing HHT approved options to the appliance. Refer to Section 4C for pairing the remote.

10. Refer to wiring diagram with Power Vent to make remaining connections. See Figure 4.10.



- 11. Attach jumper wire included in manual bag of Power Vent between black wire on 6 pin harness and red wire on accessory cable. See Figure 4.10.
- 12. Attach brown wire from 6 pin harness to brown wire on accessory cable. See Figure 4.10.
- 13. Plug (3) connector plug on accessory cable into Power Vent port on IFT-ACM. See Figures 4.9 & 4.10.
- 14. Plug harness from IFT-ACM to junction box. This will already be plugged in if equipped on appliance, or it is included in the IFT-ACM kit if the appliance is not equipped with an IFT-ACM
- 15. Restore power to the control module.

#### C. Pairing or Re-Pairing the IFT-RC400 to the Electronic Control Module (IFT-ECM)

**WARNING!** After installation of Power Vent components, the RC400 and IFT-ECM **MUST BE** Re-Paired for safe operation.

**CAUTION!** Risk of Burns! DO NOT program the IFT Remote Controls to the IFT-ECM when flame or cold climate fuction is on or when appliance is hot.

1. On the IFT-ECM, move the ON/OFF/REMOTE switch to the REMOTE position. The green LED will blink three times. A few seconds later, an audible "beep" will occur to indicate that the system is ready.

**Note:** If the green LED continues to blink slowly (system is searching for a clear channel), wait until it stops before proceeding to step 2.

2. Locate the pairing hole on the IFT-ECM. See Figure 4.11. Using a paper clip or similar item, press and release the pairing button. The IFT-ECM will "beep" once and the green LED will blink for 14 seconds. During the 14 seconds, it is normal for installed accessories such as lights, fan, and Power Vent to energize momentarily.

While the green LED on the IFT-ECM is blinking, tap anywhere on the gray indicator bar located at the top of the IFT-RC400 screen. Tap on the pairing function as shown in Figure 4.12. If the IFT-RC400 has been paired successfully to the IFT-ECM, a double audible 'beep" will be heard from the IFT-ECM.

**Note:** If the RC400 displays the 'Now pairing remote to product' display as shown below **before** able to reach the diagnostic menu on remote, you must repeat the process as follows;



- A. Remove one battery from the RC400.
- B. Press the pairing button on the IFT-ECM.
- C. Quickly install the battery into the RC400.
- D. As soon as the main screen appears, tap on the RC400 gray indicator bar. Then immediately tap the pairing icon. Successful pairing will be indicated by a double beep from the IFT-ECM.
- 3. If the pairing is unsuccessful, repeat steps 1 & 2.

Note: If additional components are added such as blowers, lights or Power Vent after initial pairing, the pairing process must be repeated again to detect additional components.

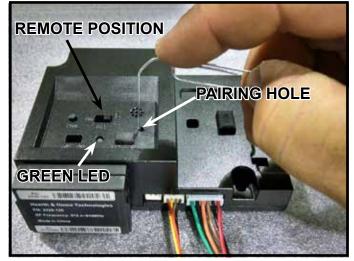


Figure 4.11. Pairing IFT-ECM



Figure 4.12. IFT-RC400 Wall Mount / Pairing Screen

NOTE: Refer to Operating Guide and Troubleshooting Section of IFT-RC400 Installation Manual for Operation and Maintenance Sections of Remote Control.



#### 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.

## **B. Vacuum Switch Orientation**

The vacuum switch must be installed on a vertical plane for proper function. If the PVI-SLP-B 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-B. 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.

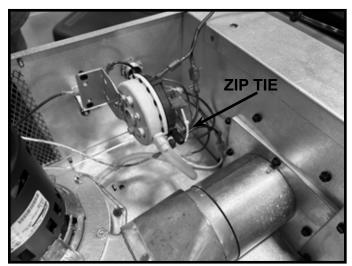


Figure 5.1 Switch Position for Horizontal Installation

**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.

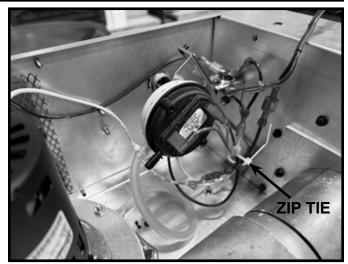


Figure 5.2 Switch Position for Vertical Installation

## C. Setting the PVI-SLP-B Baffle Adjustment

The PVI-SLP-B 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-B 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 ghostlike, the baffle is too open and MUST be closed (turn bolt counter-clockwise).
- If the pilot continously 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-B with the PRI-MO models. See PRIMO Installation Manual for details and PRIMO48/PRIMO48ST exception.

Distance from PVI-SLP-B 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.

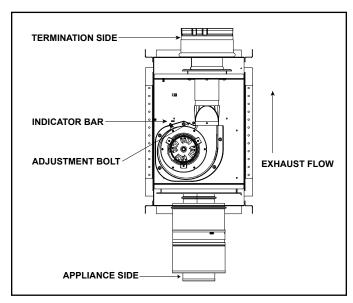


Figure 5.3 Baffle Adjustment Location

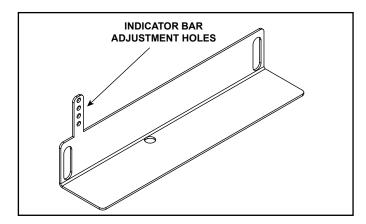


Figure 5.4 Baffle Adjustment

## **D.** Power Vent Operating Instructions

After installation of the power vent, follow the operation instructions below for the type of control system/remote control used (IPI Plus/RC300, IFT/RC400/RC150.

#### **IPI Plus/RC300**

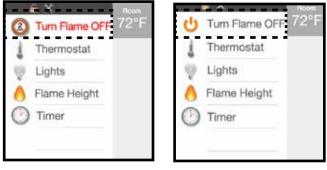
1. Turn the remote "ON".

**Note**: During the period of operation after turning the fireplace "ON", there will be a delay (approx. 120 seconds) 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 remote to the "ON" position, if the fireplace does not turn on, turn the remote to "OFF" refer to the troubleshooting section.
- 3. Turn the remote to "OFF" to turn off the burner. The power vent will continue to run for 20 minutes.

#### IFT/RC400

- 1. Touch screen on RC400 to wake up.
- 2. Touch 'Turn Flame On'.
- Observe touch screen if system is configured properly for Power Vent Operation, a 2 min countdown timer will be displayed next to 'Turn Flame OFF'. See Figure below.



#### CORRECT PV DISPLAY INCORRECT PV DISPLAY

If RC400 display is incorrect, touch 'Turn Flame OFF' and refer to troubleshooting section.

- 4. If the RC400 display is correct, the Power Vent will be running and the 2-minute countdown timer will run, after which the pilot will ignite followed by the main burner.
- 5. Touch 'Turn Flame OFF' on the RC400. The pilot and main will extinguish. The Power Vent will continue to run for 20 min.

WARNING! After installation of Power Vent components, the RC400 and IFT-ECM MUST BE Re-Paired for safe operation.

## 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.

- 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.

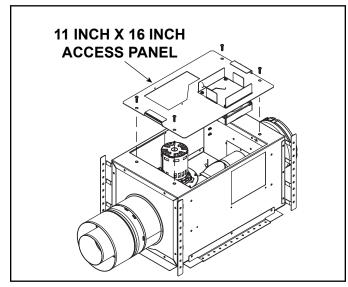


Figure 5.5 Maintenance Access

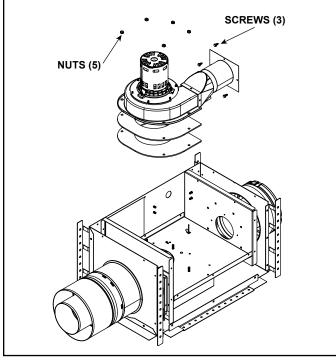


Figure 5.6 Motor/Blower Service

# F. PVI-SLP-B Troubleshooting

Symptoms	Dessible Courses	Corrective Action
IntelliFire Plus System	Possible Causes	Corrective Action
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> <li>Verify that black wire on IPI wire harness is properly grounded to the fireplace chassis.</li> <li>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>Verify that line inlet pressure is within range on rating plate and correct pilot orifice is in pilot.</li> <li>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> <li>Verify the teflon pressure tube is connected be- tween blower impeller housing and vacuum switch.</li> <li>Verify that wiring within PVI is correct and that the blower operates during the ignition command.</li> </ol>
		<ol> <li>Verify that the venting is connected and sealed properly.</li> <li>Verify that the vent termination is not blocked.</li> <li>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> <li>Verify that the white sensor lead is properly connected to the S-terminal on the module.</li> <li>Check for soot deposits on the pilot sense rod, adjacent shielding, or logs. If so, clean affected parts.</li> <li>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 con- nected to the I-terminal on the module
If given ignition command in both ON and RE- MOTE 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 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.

## G. IFT-Controls and PVI-SLP Power Vent Troubleshooting

Symptoms	Possible Causes	Corrective Action
System will not respond to 'ON' command. IFT-ECM in lockout with 5 RED:1 GREEN LED Error Code. RC400 shows 'Call Dealer - Power Vent Error' Message	<ol> <li>Power Vent Motor Failure</li> <li>Power Vent Over Heating</li> <li>Power Vent Pressure Switch Open</li> <li>Blocked Flue</li> <li>Insufficient Draft</li> <li>IFT-ECM selector switch in 'ON' Mode</li> <li>IFT-ECM not paired to remote and Power Vent,</li> </ol>	<ol> <li>Verify that the wiring within the Power Vent is correct. Verify that the PVI-SLP Cord assembly is correctly connected to the IFT switch wires, and the AUX port on the IFT-ACM.</li> <li>Verify that blower operates during 'ON' com- mand.</li> <li>Verify that the PVI-SLP is correctly installed such that it is properly vented and will not over- heat.</li> <li>Verify that venting is connected and sealed properly. Verify termination is not blocked.</li> <li>Verify the Teflon tube between the blower and pressure switch is securely connected.</li> <li>Verify that the 'ON' command is provided with IFT-ECM in 'REMOTE' mode with approved re- mote control.</li> <li>Re-pair the ECM to the Power Vent.</li> </ol>
System responds to 'ON' command. After PVI-SLP completes 60 second pre-purge, IFT system fails to rectify proven pilot flame. IFT- ECM in lockout with 3 RED:1 GREEN LED. RC400 shows 'Call Dealer - Appliance safety disabled' Message	<ol> <li>Pilot Rectification Failure resulting from:</li> <li>Soot or embers contaminating pilot and burner</li> <li>Shorted/melted pilot white 'S' sensor wire</li> <li>Disconnected pilot white 'S' sensor wire</li> <li>Excessive draft turbulence acting on the pilot flame</li> <li>Oxidation or resistance on the IPI pilot flame sense electrode</li> <li>Supply gas pressure out of specification</li> </ol>	<ol> <li>Verify that the IPI Pilot is clean. If necessary, remove any soot or ember deposits, and clean/ polish flame sensor electrode with fine steel wool. If sooting is present, determine possible causes to correct issue.</li> <li>Verify that the IPI pilot white 'S' wire is securely connected to the IFT-ECM, and is not melted/ pinched/shorted along its length. Replace pilot is damage exists.</li> <li>Verify that the gas supply working inlet pressure is within the specification range.</li> <li>Verify that the pilot flame is igniting easily, and the pilot flame is not compromised by excessive draft. With glass assembly fully installed, verify that the pilot flame is stable and fully engulfing the flame sensor electrode.</li> <li>Verify that the pilot sensor/wire resistance is &lt;1 ohm. If &gt; 1 ohm, and flame rectification is occurring slowly, replace the pilot.</li> </ol>
Pilot ignites and rectifies flame, but burner fails to light, or does not fully light.	Excessive draft.	<ol> <li>Verify that the glass is properly installed and all latches are engaged.</li> <li>Place ember material along the back side of the affected burner ports – that can reduce draft af- fect and promote ignition.</li> </ol>

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.

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