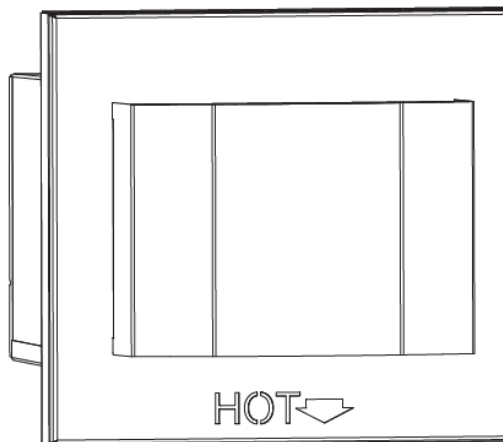


# KOZY POWER VENT #KPV

Kozy Power Vent Approved Fireplaces:  
#ALP-36S, #BHM38, #BHM-44, #BHM-52, #CLW-40, #CLW-50,  
#CLW-72, #CLW-ST, #NDK-36-DV, and #NDK-41-DV

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**READ ALL THESE STEPS BEFORE STARTING INSTALLATION. LEAVE THESE INSTRUCTIONS WITH THE APPLIANCE.**

This kit must be installed by a qualified installer, service agency, or gas supplier at the time of the heater installation. These instructions must be used in conjunction with the installation and operation manual provided with the appliance.

Please read all appliance owner's manual completely before performing any procedures in these instructions.

English and French installation manuals are available through your local dealer. Visit our website [www.kozyheat.com](http://www.kozyheat.com).

Les manuels d'installation en français et en anglais sont disponibles chez votre détaillant local. Visitez [www.kozyheat.com](http://www.kozyheat.com).



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

**INSTALLER:** Leave this manual with the appliance.  
**CONSUMER:** Retain this manual for future reference.



# 1.0 Introduction

## 1.1 General Information

The Kozy Power Vent System, #KPV, is certified for use as a horizontal termination cap only for use with the ALP-36S, BHM-38, BHM-44, BHM-52, CLW-40, CLW-50, CLW-72, CLW-ST, NDK-36-DV, and NDK-41-DV direct vent fireplaces.

The Kozy Power Vent System only works with the approved appliances listed above utilizing the S.I.T. control system.

Control system information:

- The battery-backup feature cannot be used with #KPV
- The wired wall switch feature cannot be used with #KPV

**The following vent pipe manufacturers are approved for use with the Kozy Power Vent:**

American Metal Products (Ameri-Vent), BDM, ICC, Metal Fab, Olympia Chimney Supply, Inc., Selkirk, and Simpson DuraVent.

**IMPORTANT OPERATIONAL NOTE:** When the control being used to run the fireplace is activated, there will be up to a 120 second delay before pilot ignition will begin. This is to allow a pre-ignition purge by the #KPV. If after 135 seconds the pilot and burner do not light, refer to Section 6.0 on page 21 of this manual. There will be also 120 second post-operation purge in which #KPV will continue to run after the appliance is turned off.

## 1.2 Required Components

The S.I.T. Power Vent Control Module is required for #KPV installation. Kozy Heat Fireplaces ship with a standard

Fireplace Components	
Power Vent IFC	700-759

(non-powervent) control module.

The wire harness connecting the #KPV to the appliance is

Power Vent Wire Harness	
20' Power Vent Wire Harness	KPV-WH20
40' Power Vent Wire Harness	KPV-WH40
60' Power Vent Wire Harness	KPV-WH60
80' Power Vent Wire Harness	KPV-WH80
100' Power Vent Wire Harness	KPV-WH100

sold separately. The length of the wire harness needed varies by installation.

### 1.2.3 Optional Components

If you have thick finishing material where the power vent will be installed it may be necessary to order the "Power Vent Finishing Extension Kit" - Part #KPV-FEK.

See Section 3.5.1 for more information on the "Finishing Extension Kit".

## 1.3 Installation Information

### 1.3.1 Installation Precautions

This device must be installed by a qualified installer in accordance with these instructions.

**WARNING:** 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.

- Safety inspection of the venting system should be performed before and after installation of this power vent. Installation of the Kozy Power Vent must comply with local, regional, provincial, state, and national codes and regulations.
- 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.
- NOTE: The fan motor 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.

### 1.3.2 Installation Guidelines

- 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.

### 1.3.3 Electrical Requirements

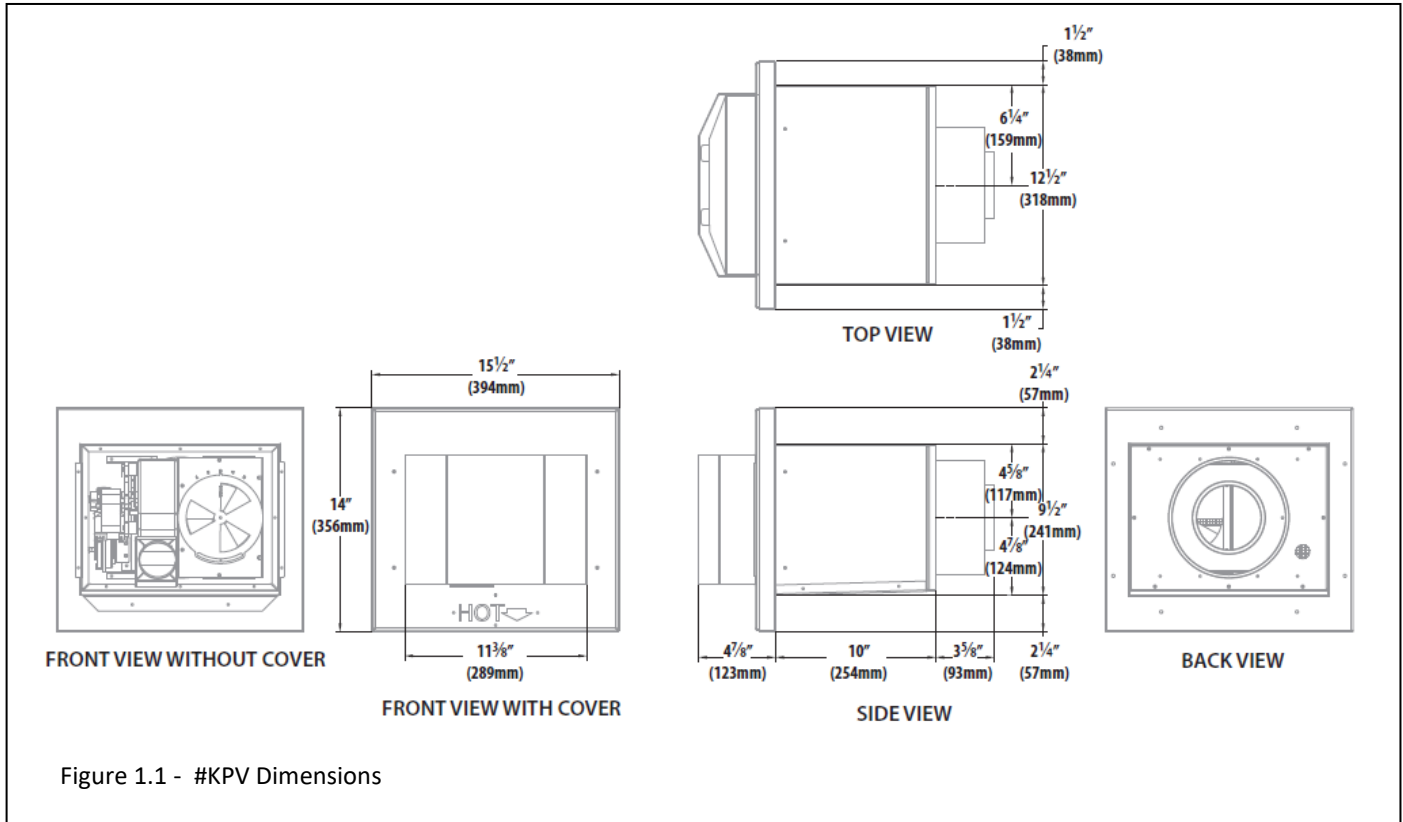
- The #KPV operates on 120VAC, 60Hz electrical service which is supplied at the fireplace junction box. The current draw of this device is 0.85 amperes.

### 1.3.4 Painting Requirements

The #KPV may be painted to a desired color. The paint selected must have sufficient temperature and environmental ratings as described below.

- Prior to painting the #KPV cover assembly, sand the existing coating with sandpaper or steel wool.
- The front of the cap cover assembly may be field-painted and cured up to 400 degrees Fahrenheit (204° C). All remaining parts of the cap may be painted, but they may not be cured beyond 190°F (88°C) due to gaskets and components overheating.
- Certain areas of the cap surface may reach up to 600° F (316°C). Paints selected should have sufficient temperature ratings.
- Cap cover assembly contains silicone sealant which could affect adherence of paint. Please advise local painter of silicone content.

## 1.4 Kozy Power Vent Dimensions



## 1.5 Unit Specific Requirements

### 1.5.1 Alpha 36S

- Model #ALP-36S can have a 4" x 6 - 5/8" reducer right off the top of the appliance.
- Model #ALP-36S requires a pilot shield to be installed. The pilot shield is included in the #KPV parts packet.

To install the pilot shield:

1. Remove the log set and the burner. See installation manual for more information.
2. Loosen, but do not remove, the (2) screws securing the pilot assembly to the pilot bracket.
3. Insert the pilot shield slots onto the pilot bracket screws, as shown in Figure 1.2.
4. Re-tighten screws.
5. Reinstall all components previously removed.

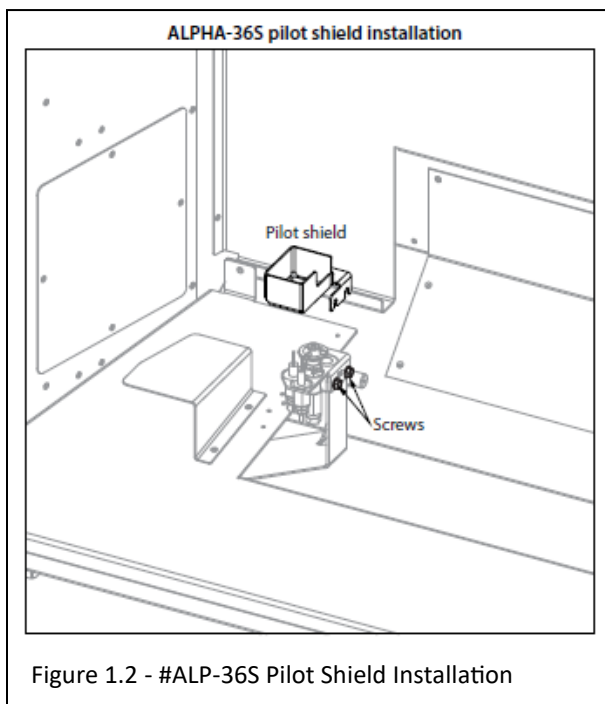


Figure 1.2 - #ALP-36S Pilot Shield Installation

### 1.5.2 Bellingham 38, Bellingham 44, Callaway ST, and Nordik 41 DV

- Model #BHM-38, #BHM-44, #CLW-ST, and #NDK-41-DV can have a 4" x 6 - 5/8" reducer right off the top of the appliance.

### 1.5.3 Nordik 36 DV

- Attach 4" x 6-5/8" pipe directly to the #NDK-36-DV

### 1.5.4 Bellingham 52

- Model #BHM-52 can have a 4" x 6-5/8" reducer right off the top of the appliance.
- If your venting configuration has more vertical length than horizontal run, we recommend to adjust the draft bypass setting to #1 for proper flame appearance. Further adjustment may be needed. See Section 2.2 Draft Bypass Adjustment on page 8.
- Model #BHM-52 requires burner plates to be installed. The burner plates are included in the #KPV parts packet.

To install the burner plates:

1. Hand-bend the tabs on the burner plates so the tabs are facing down to hold the burner plates in place.
2. Position the burner plates at the back of the firebox, as shown in Figure 1.3.

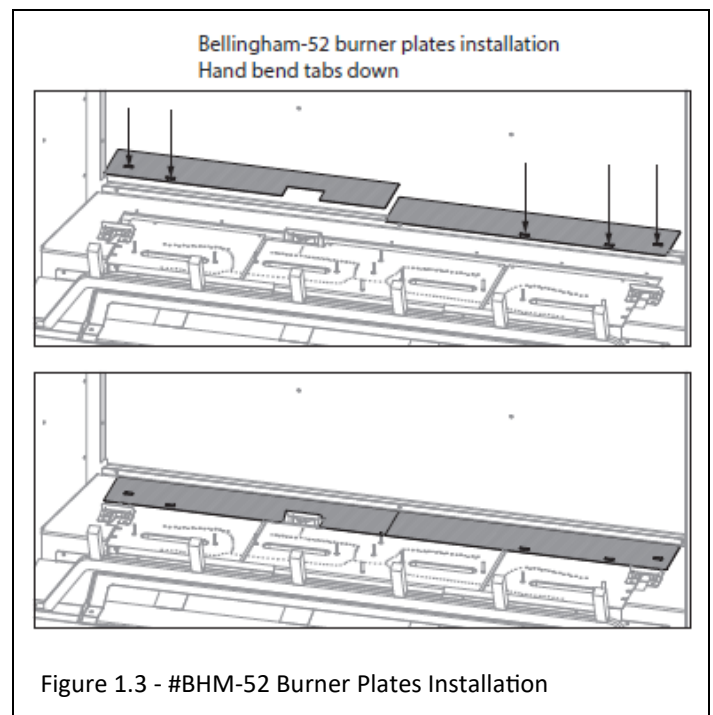


Figure 1.3 - #BHM-52 Burner Plates Installation

### 1.5.5 Callaway 40, Callaway 50, and Callaway 72

- Model #CLW-40, #CLW-50, and #CLW-72 start with a 5" x 8" 45° elbow off the back of the appliance. Next use the required 4" x 6 - 5/8" reducer right off the elbow to keep venting inside the minimum chamber requirements.

## 2.0 Venting

### 2.1 Venting Requirements

For information on standard procedures for venting the appliance, refer to the venting section of your specific appliance installation manual.

The #KPV is for use 4" x 6-5/8" coaxial rigid direct vent pipe. Depending on your appliance, the vent size must be reduced to 4" x 6-5/8". See appliance installation manual for approved venting.

**The #KPV system must terminate horizontally.**

- A minimum of 1" (25mm) clearance on all sides of the vertical vent pipe must be maintained. Attic insulation shields may be insulated using unfaced insulation products listed as noncombustible per ASTM E 136.
- A minimum of 1" (25mm) clearance on all sides of the horizontal vent pipe at the wall pass-through must be maintained. Wall thimble products that comply with the required 1" (25mm) clearance to combustibles must be installed for all horizontal vent runs that pass through interior or exterior walls. These wall thimble products may be insulated using unfaced insulation products listed as noncombustible per ASTM E 136.
- For every 1' of vertical drop, the total allowable length must be reduced by 2'.
- If a pipe configuration includes a vertical component that goes downward, a vertical component going back upward is not allowed.
- No vertical rise is required with #KPV. The venting can run horizontal directly off the appliance.
- Use Table 2.1 for venting guidelines.
- Use Figure 2.2 as a guide for proper vent installation.
- Use Figure 2.3 for a guide to calculate total vent run. Termination must be in shaded area.

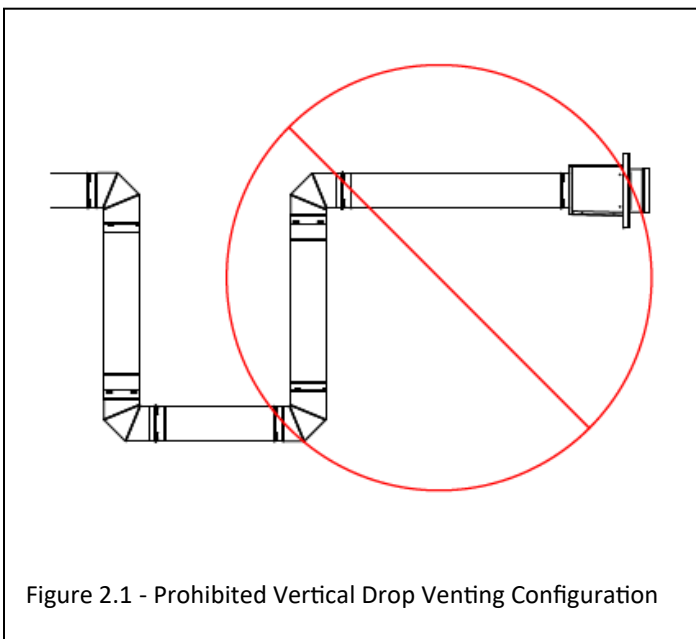
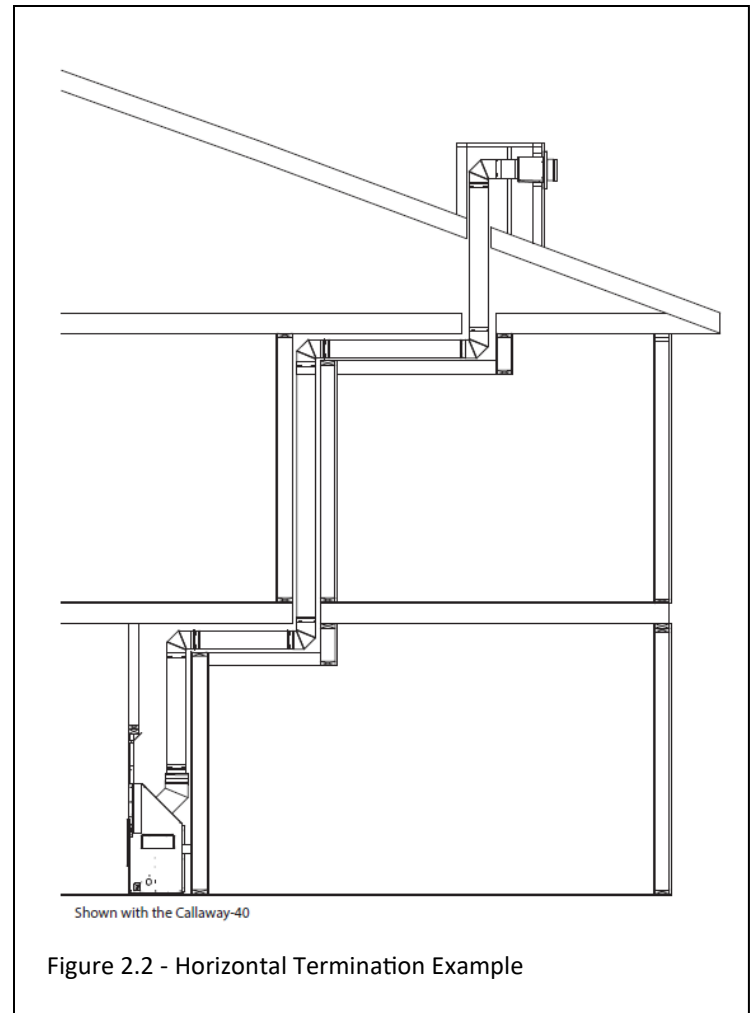
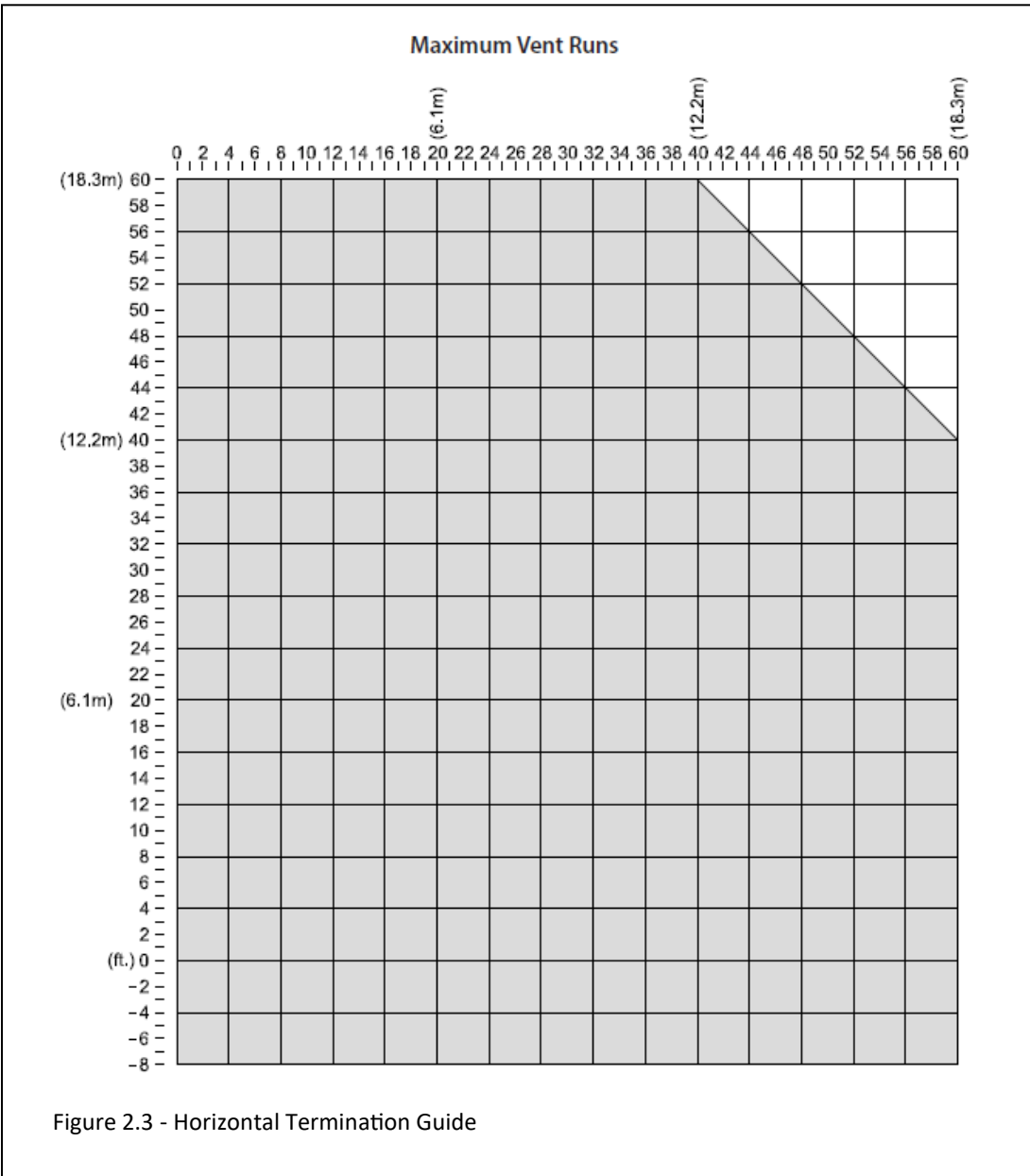


Table 2.1 - KPV Venting Guidelines	
Maximum Elbows	(8) 90° or (16) 45°
Minimum Total Horizontal Vent Run	Models #ALP-36S, #CLW-40, #CLW-50, #CLW-ST, #CLW-72, #NDK-36-DV, and #NDK-41-DV: 6' (1.8m) Models #BHM-38, #BHM-44, #BHM-52: 10' (3m)
Maximum Total Horizontal Vent Run	60' (18.3m) <i>Do not exceed 60'</i>
Maximum Vertical Vent Run	60' (18.3m) <i>Do not exceed 60'</i>
Maximum Vertical Drop Allowed	8' (2.4m) For every 1' (30cm) of vertical drop the maximum total vent run is reduced by 2' (61cm)
Maximum Total Vent Run	100' (30m)



## 2.2 Draft Bypass Adjustment

**NOTE: All Kozy Power Vent systems will be shipped with the draft bypass in setting 5. Adjustment of the draft bypass setting would only occur during troubleshooting or flame appearance adjustments.**

The draft bypass system is factory set to setting 5; for certain vent runs the draft bypass system will need to be adjusted. To adjust the draft bypass, loosen the locking screw. Adjust clockwise or counter clockwise depending on your specific installation. See Figures 2.4, 2.5, and 2.6.

**Table 2.2 - #ALP-36S, #BHM-38, #BHM-44, #BHM-52, #CLW-40, #CLW-50, #CLW-ST, #NDK-36-DV, and #NDK-41-DV Draft Bypass Setting Chart**

	Natural Gas	Propane
Draft Setting		
#1	Allowed	Allowed
#2	Allowed	Allowed
#3	Allowed	Allowed
#4	Allowed	Allowed
#5	Allowed	Allowed

**Table 2.3 - #CLW-72 Draft Bypass Setting Chart**

	Natural Gas	Propane
Draft Setting		
#1	Not Allowed	Allowed*
#2	Not Allowed	Allowed*
#3	Allowed	Allowed
#4	Allowed	Allowed
#5	Allowed	Allowed

\* This draft setting is allowed on all vent configurations except a vent configuration with a vertical drop.

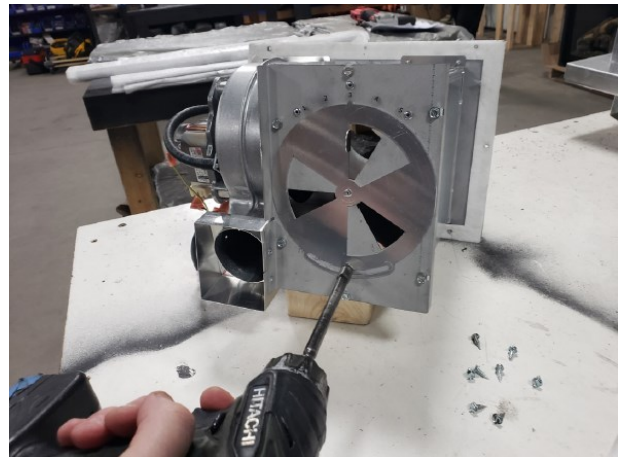


Figure 2.4 - Loosen Locking Screw



Figure 2.5 - Adjust the Draft Bypass



Figure 2.6 - Shown in Position 3



# 3.0 Termination Locations

## 3.1 Termination Cap Clearances

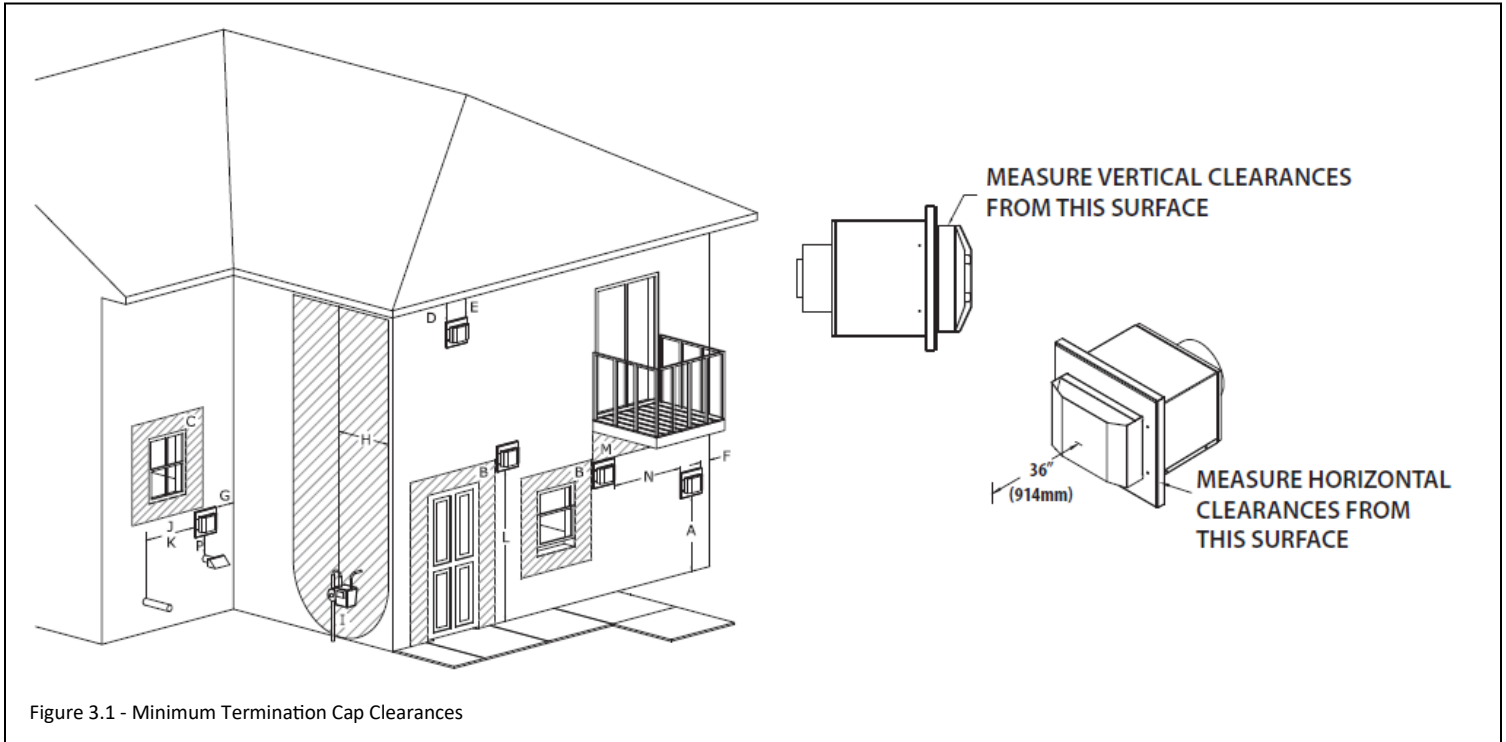


Figure 3.1 - Minimum Termination Cap Clearances

		Canadian Installations	US Installations
A	Clearance above grade, veranda, porch, desk, or balcony.	12" (30cm)	12" (30cm)
B	Clearance to window or door that may be opened	12" (30cm)	9" (23cm)
C	Clearance to permanently closed window (recommended to prevent condensation on window)	12" (30cm)*	12" (30cm)*
D	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (61cm) from the edge of the terminal	0" (0cm)*	0" (0cm)*
E	Clearance to unventilated soffit	0" (0cm)*	0" (0cm)*
F	Clearance to outside corner	0" (0cm)*	0" (0cm)*
G	Clearance to inside corner	12" (30cm)*	12" (30cm)
H	Clearance to each side of center line extended above meter/regulator assembly	3' (91cm) within a height 15' (4.5m) above the meter/regulator assembly	*
I	Clearance to service regulator vent outlet	3' (91cm)	*
J	Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance	12" (30cm)	9" (23cm)
K	Clearance to mechanical air supply inlet	6' (1.83m)	3' (91cm) above [Massachusetts: 10' (3m) above] if within 10' (3m) horizontally
L	Clearance above paved sidewalk or paved driveway located on public property	7' (2.13m)†	*
M	Clearance under veranda, porch deck, or balcony	0" (0cm)‡	0" (0cm)
N	Clearance between two horizontal terminations	12" (30cm)	12" (30cm)
O	Clearance between two vertical terminations (may be same height)	12" (30cm)	12" (30cm)
P	Above furnace exhaust or inlet	12" (30cm)	12" (30cm)

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

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

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

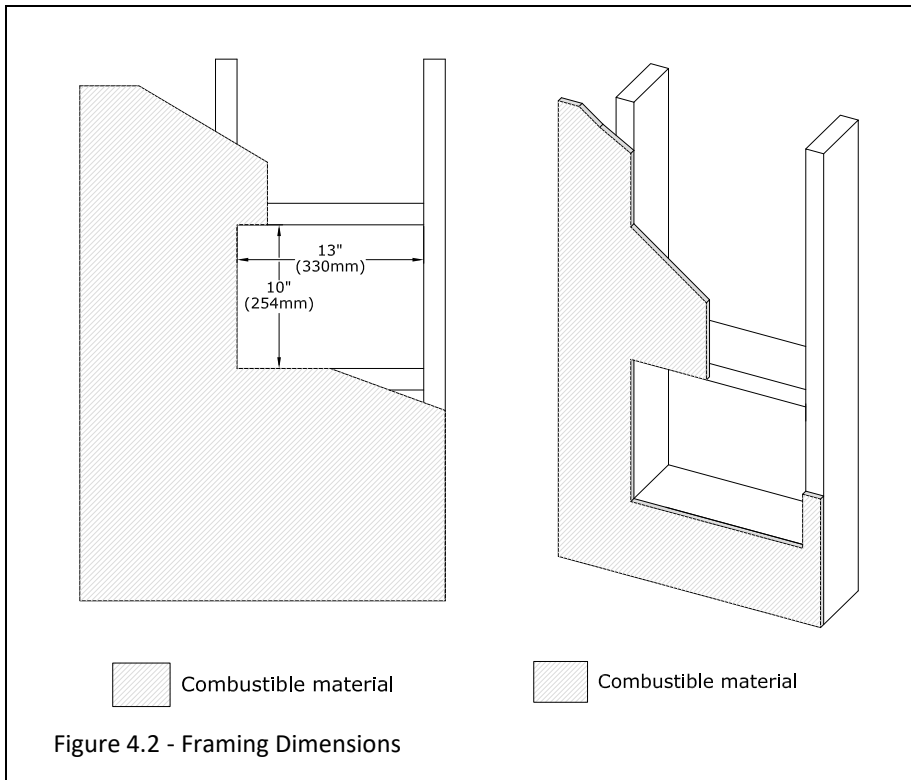
VINYL SOFFIT, VINYL CEILING, AND VINYL OVERHANG DISCLAIMER: Clearances to heat resistant material (i.e. wood, metal). This does not include vinyl. Hussong Manufacturing Co., Inc. will not be held responsible for heat damage caused from terminating under vinyl overhangs, vinyl ceilings, or vinyl ventilated/unventilated soffits.

# 4.0 Framing and Clearances

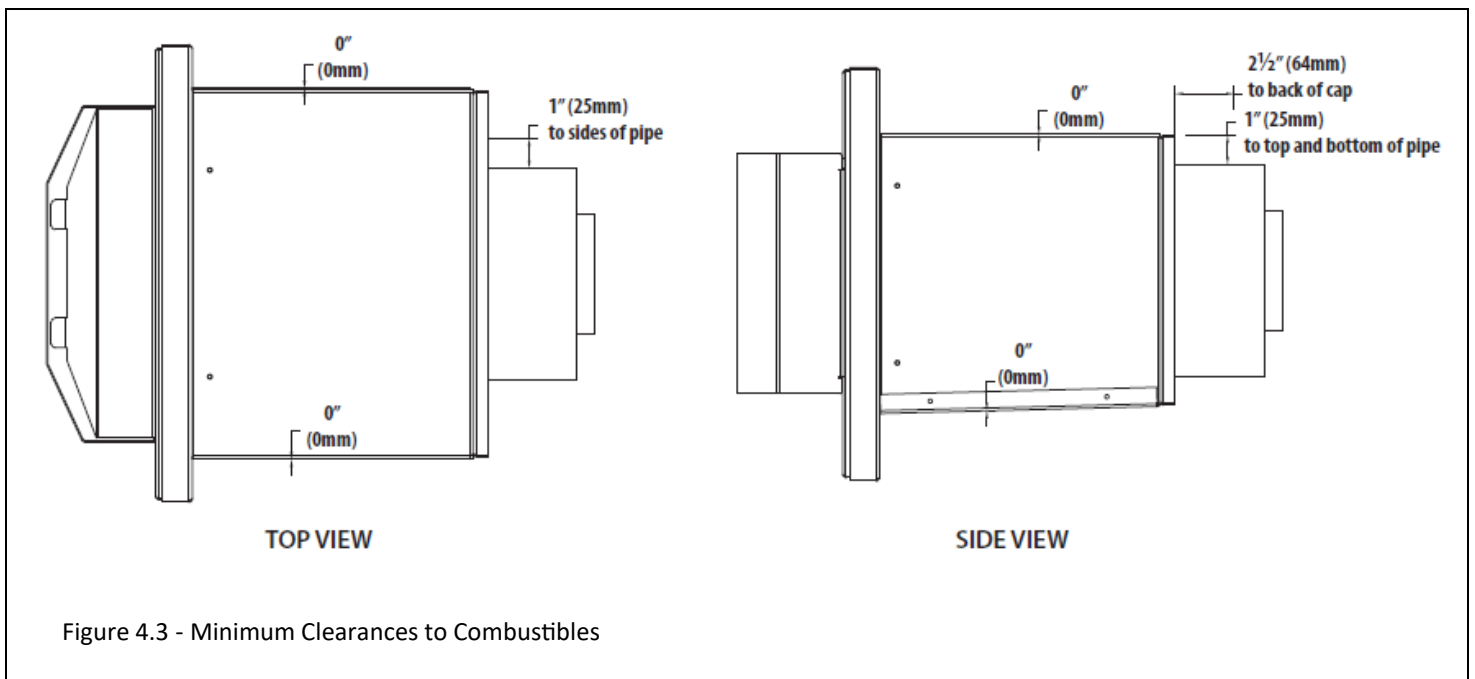
## 4.1 Framing Dimensions

- Dimensions are shown in Figure 4.1
- Construct a framework as shown in Figure 4.2. Framework material should be the same dimensions as the material used for the wall framing.

**IMPORTANT: Framework for #KPV must be level to ensure precipitation does not build up inside the power vent unit.**



## 4.2 Clearances to Combustibles



### 4.3 Rooftop Termination

If the #KPV is going to terminate on a flat roof, an enclosure similar to the one shown in Figure 4.3 needs to be construction.

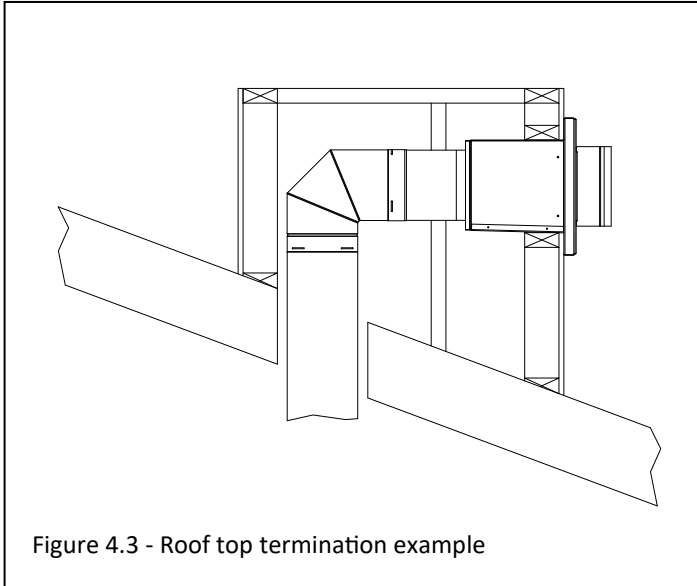


Figure 4.3 - Roof top termination example

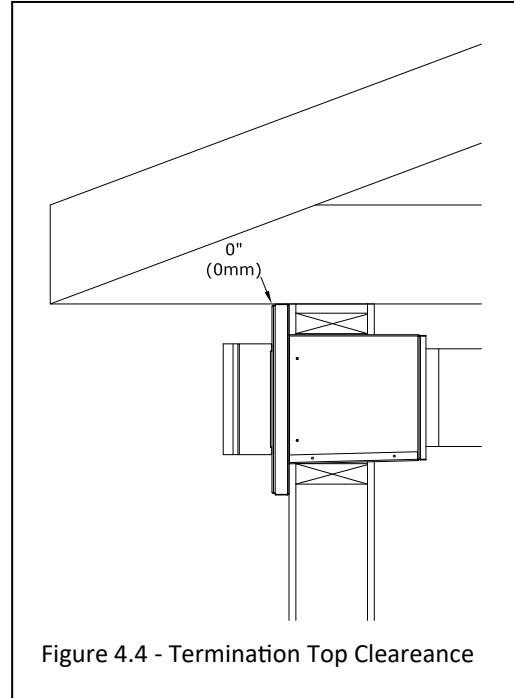


Figure 4.4 - Termination Top Clearance

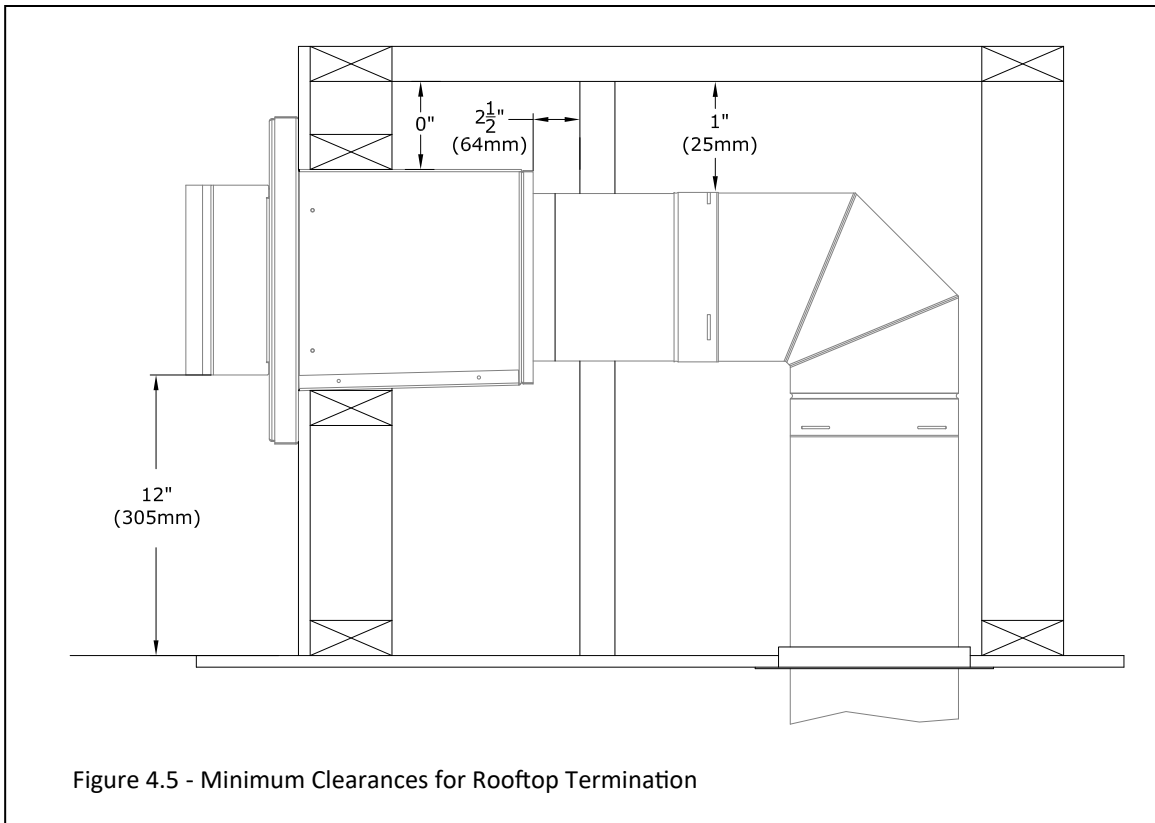


Figure 4.5 - Minimum Clearances for Rooftop Termination

## 5.0 Finishing Materials

**NOTE:** If your installation has exterior finishing materials greater than 1" (25mm) thick, a #KPV-FEK Finishing Extension Kit will be needed. The extension kit must be installed to allow for thicker exterior finishing materials for proper installation and fitting of the #KPV.

**IMPORTANT:** IT IS IMPERATIVE THAT #KPV-FEK IS LEVEL TO ENSURE THE POWER VENT IS LEVEL. THIS IS REQUIRED TO ENSURE PRECIPITATION DOES NOT BUILD UP INSIDE THE CAP. Care should be taken to ensure #KPV-FEK is secured flat to the wall.

**NOTE:** The provided high temperature clear silicone is to be used where sealant is required in this section. If you need additional sealant, it must have a minimum of 300° F continuous exposure rating.

*If installing finishing material less than 1" (25mm) thick, skip to Section 5.2*

### 5.1 Installation with 1" or Greater Finishing Materials

1. Assemble the Finishing Extension Kit and place assembled box over the framed opening in the wall with mounting flanges placed at the top and bottom of the building exterior.
2. Secure the Finishing Extension Kit extension box to the building. Ensure the Finishing Extension Kit is squared on the framed opening. See Figure 5.1. Seal all corners, joints, and bend lines with silicone caulk. Ensure all gaps and holes are filled so a sealed envelope is formed.
3. The wall is now ready to be finished. Finishing materials such as stone/brick can then be installed up to the sides/projection of the Finishing Extension Kit. This will ensure that the cap will fit into the opening after finishing has been completed. It is important that the outside flanges of the Finishing Extension Kit must not have any pressure on them from the finishing materials to inhibit the installation of the Kozy Power Vent. Proceed to Section 6.0 for more information on installation steps.
4. Silicone should be applied around the outer edge of Finishing Extension Kit where it meets the building exterior.
5. Proceed to installing the Kozy Power Vent, Section 6.0.

### 5.2 Installation With Finishing Materials Less Than 1" Thick

**Important:** Ensure the finishing material does not put pressure against the edges of the Kozy Power Vent. The front cover must be able to be removed for maintenance and service.

- You are able to directly install the power vent to the exterior of the wall and butt finishing material against the finishing edge.
- Proceed to installing the Kozy Power Vent, Section 6.0

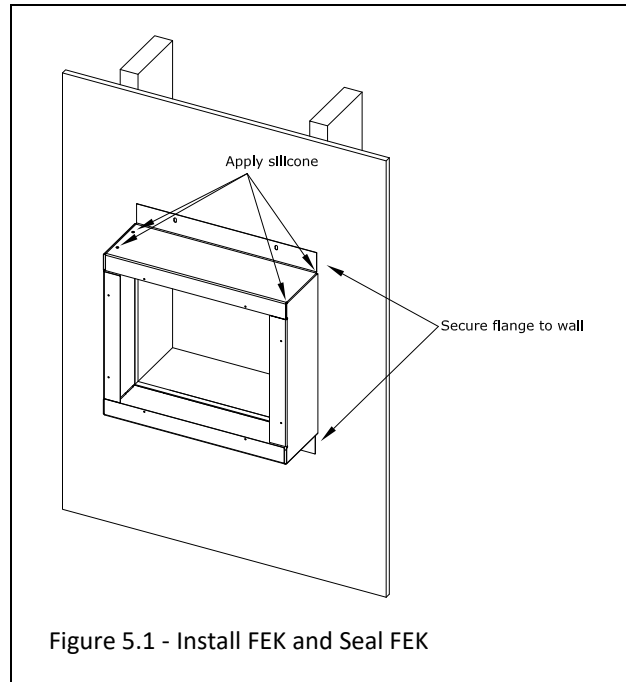


Figure 5.1 - Install FEK and Seal FEK

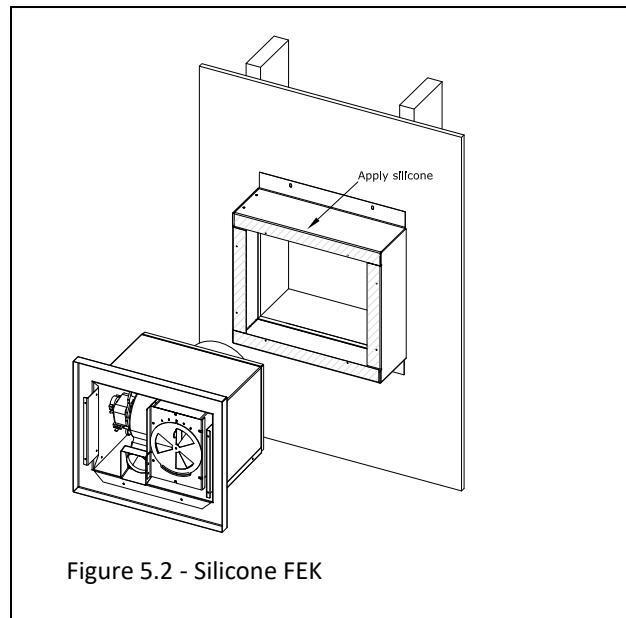


Figure 5.2 - Silicone FEK

# 6.0 Installation

## 6.1 Installing Vent Cap

1. Remove the (4) screws securing the front cover to the Kozy Power Vent.
2. Remove the eight screws securing the back assembly to the cap. See Figure 6.1.
3. Slide the exhaust assembly out of the back of the cap. See Figure 6.2.

Note: Before proceeding with the next steps of wiring the Kozy Power Vent and securing the Kozy Power Vent to the Finishing Extension Kit or framed opening it may be necessary to connect the wire harness to the back plate of the power vent assembly. The wiring harness would be fed through this framed opening and connected to the power vent back plate assembly. You would then reconnect the back plate assembly to the power vent shell. If you have adequate access to the backside of where the power vent will be mounted you can run and secure the wire harness at a later time if desired.

4. Install #KPV wiring harness through the electrical access hole in the back cover cap. See Figure 6.3.
5. Place a bead of silicone on the backside of the power vent assembly as shown in Figure 6.5. This silicone will seal the power vent cap to the framed opening of the building or to the Finishing Extension Kit.
6. Install the Kozy Power Vent shell into the framed opening if finishing material is 1" thick or less. Secure the assembly to the framed opening through the (8) holes shown in 6.4. Install the Kozy Power Vent to the Finishing Extension Kit using (8) threaded screws provided if the finishing material is greater than 1" thick. These (8) holes are located with (2) each side of the rubber gasket.
7. If the cap is fastened to the wall, apply a bead of silicone (with a minimum of 300°F continuous exposure rating) around the cap base where it meets the exterior wall. See Figure 6.8. If the cap is fastened to a Finishing Extension Kit apply a bead of silicone around the outside seam where the Kozy Power Vent and Finishing Extension Kit meet.

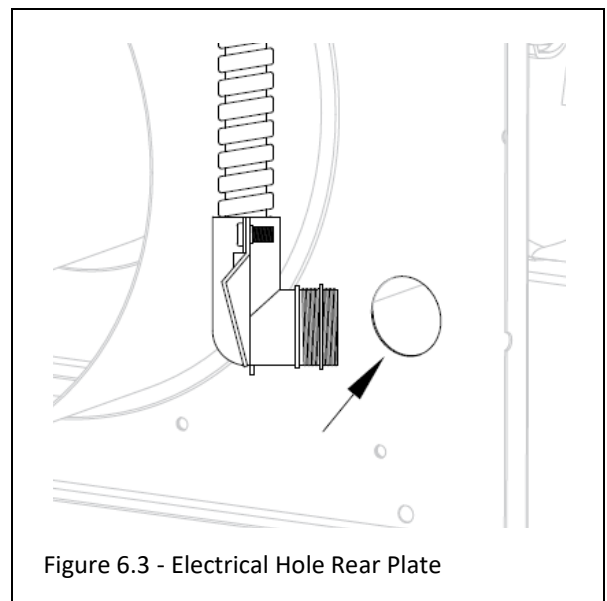
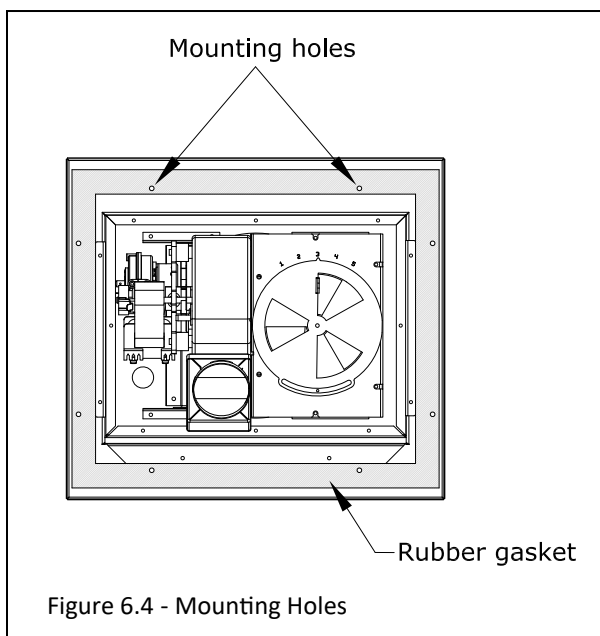
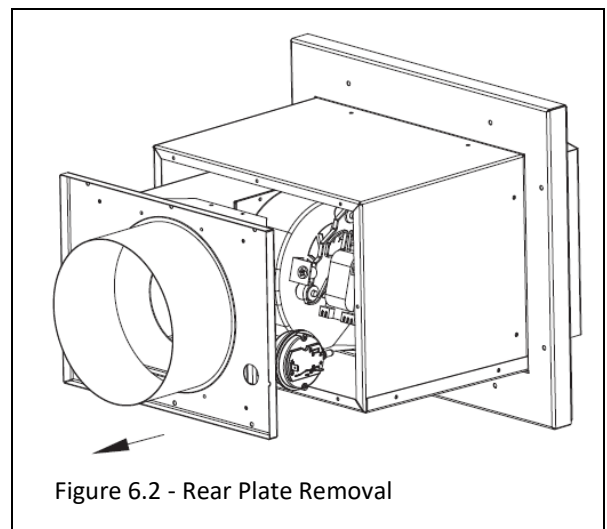
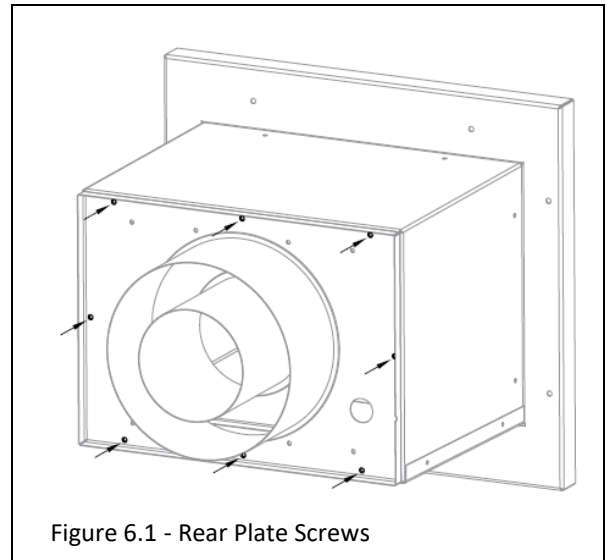




Figure 6.5 - Silicone Backside

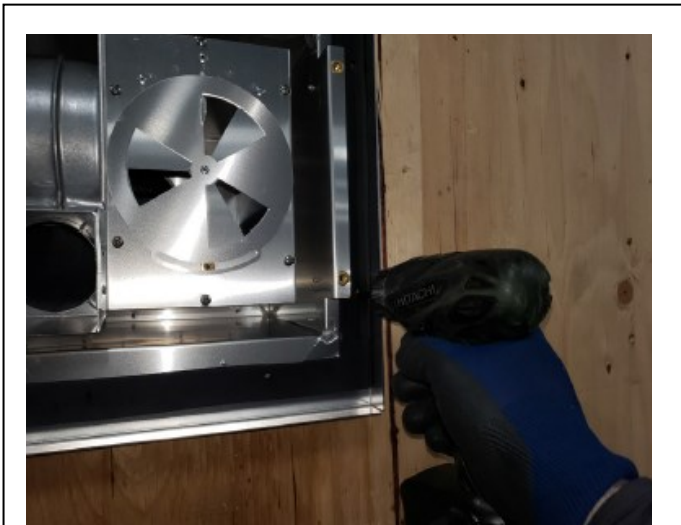


Figure 6.6 - Secure Power Vent to Exterior

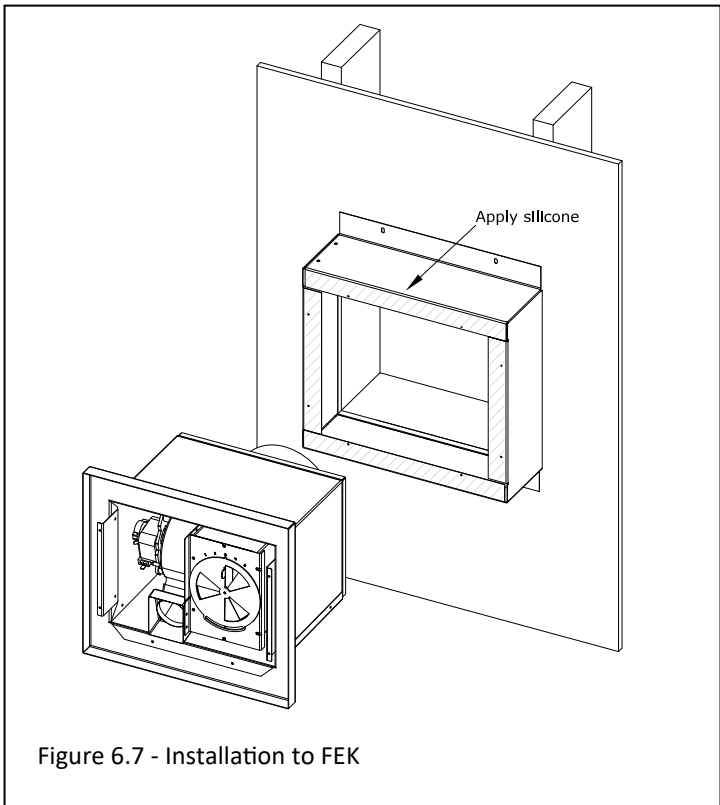


Figure 6.7 - Installation to FEK

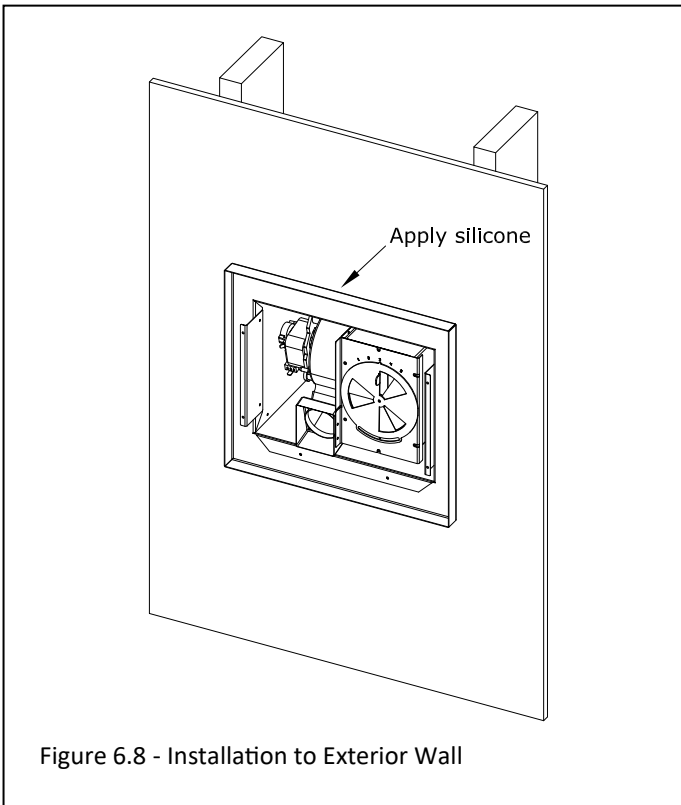


Figure 6.8 - Installation to Exterior Wall

## 6.2 Installing Vent Pipe

- Refer to Section 2.0 Venting for vent requirements.
- Apply a bead of the provided sealant around the inner exhaust pipe connection on the fireplace and the power vent assembly. See Figures 6.9 and 6.10.
- Each individual pipe manufacturer may require or recommend additional sealant in between each vent pipe connection. After completing the vent pipe installation, ensure all of the vent pipe connections are sealed properly before fireplace operation.



Figure 6.9 - Silicone Inner Exhaust on Power Vent Assembly



Figure 6.10 - Silicone Inner Exhaust on Fireplace

### 6.3 Installing Power Vent Wire Harness

See Figure 6.13, Power Vent Internal Wiring on Page 17 for wiring schematic accompanying these instructions.

Complete the necessary electrical preparation in Section 7.0 before connecting the wire harness to the fireplace.

1. After mounting the wiring harness to the back assembly of the Kozy Power Vent in step #4 of Section 6.1 you will proceed with wiring connections at the power vent. Attach the red and brown wires to the vacuum switch as shown in Figure 6.11.
2. Attach the white and black wires from the #KPV harness to the black wires coming from the blower. Attach the green wire from the #KPV harness to the green/yellow wire coming from the fan.

NOTE: After all wires are connected, the wire should look like the picture in Figure 6.12.

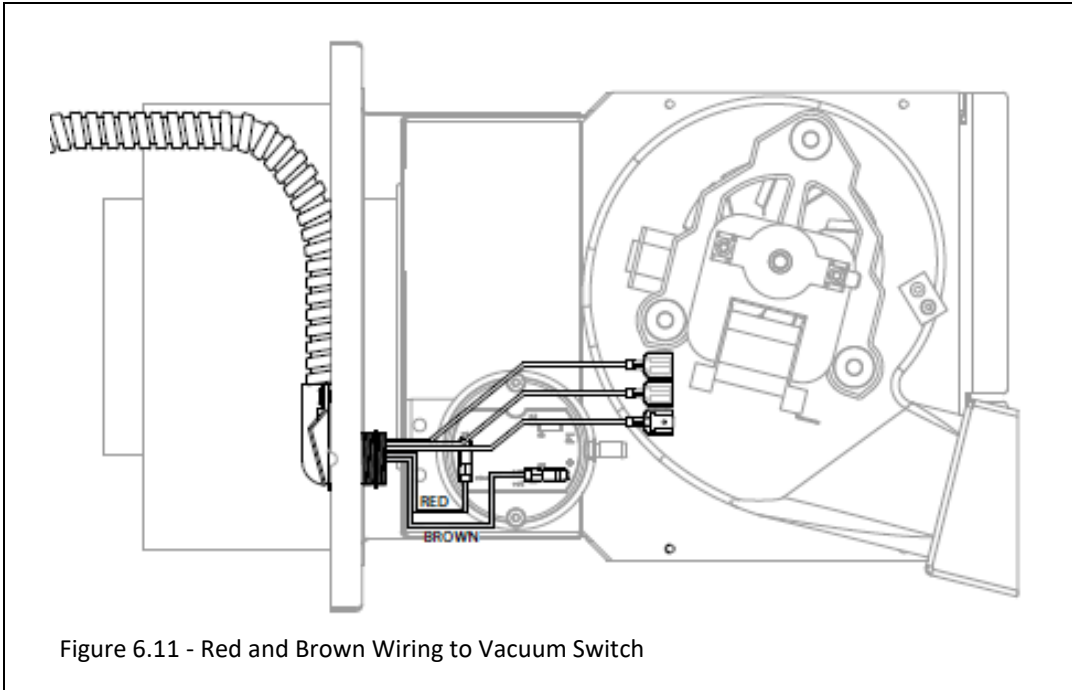


Figure 6.11 - Red and Brown Wiring to Vacuum Switch

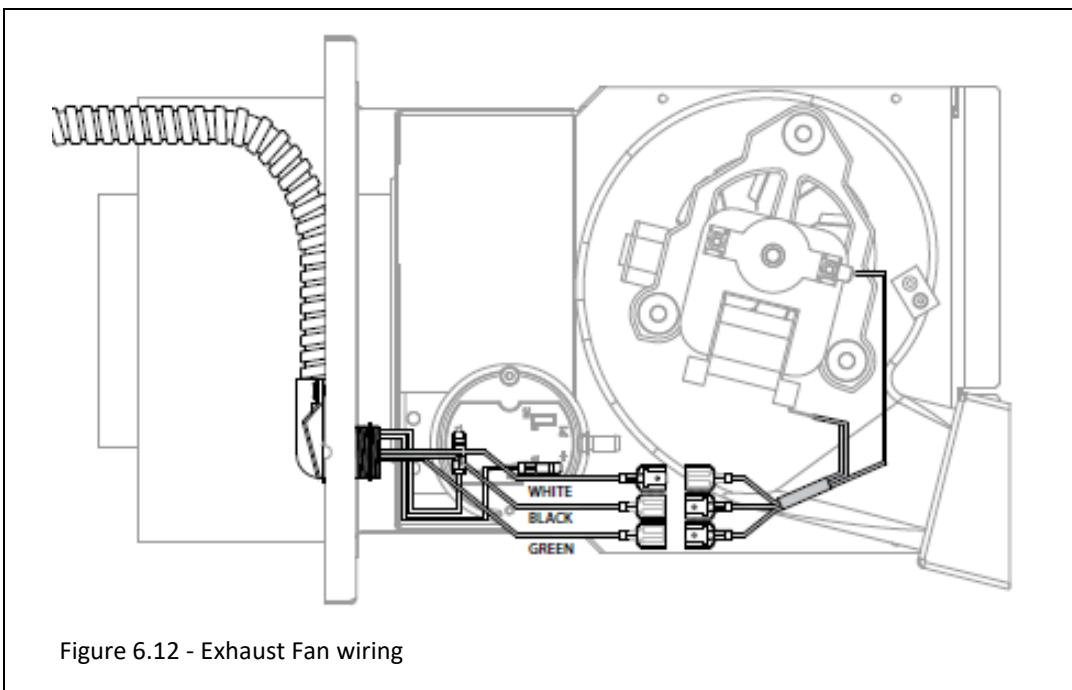


Figure 6.12 - Exhaust Fan wiring



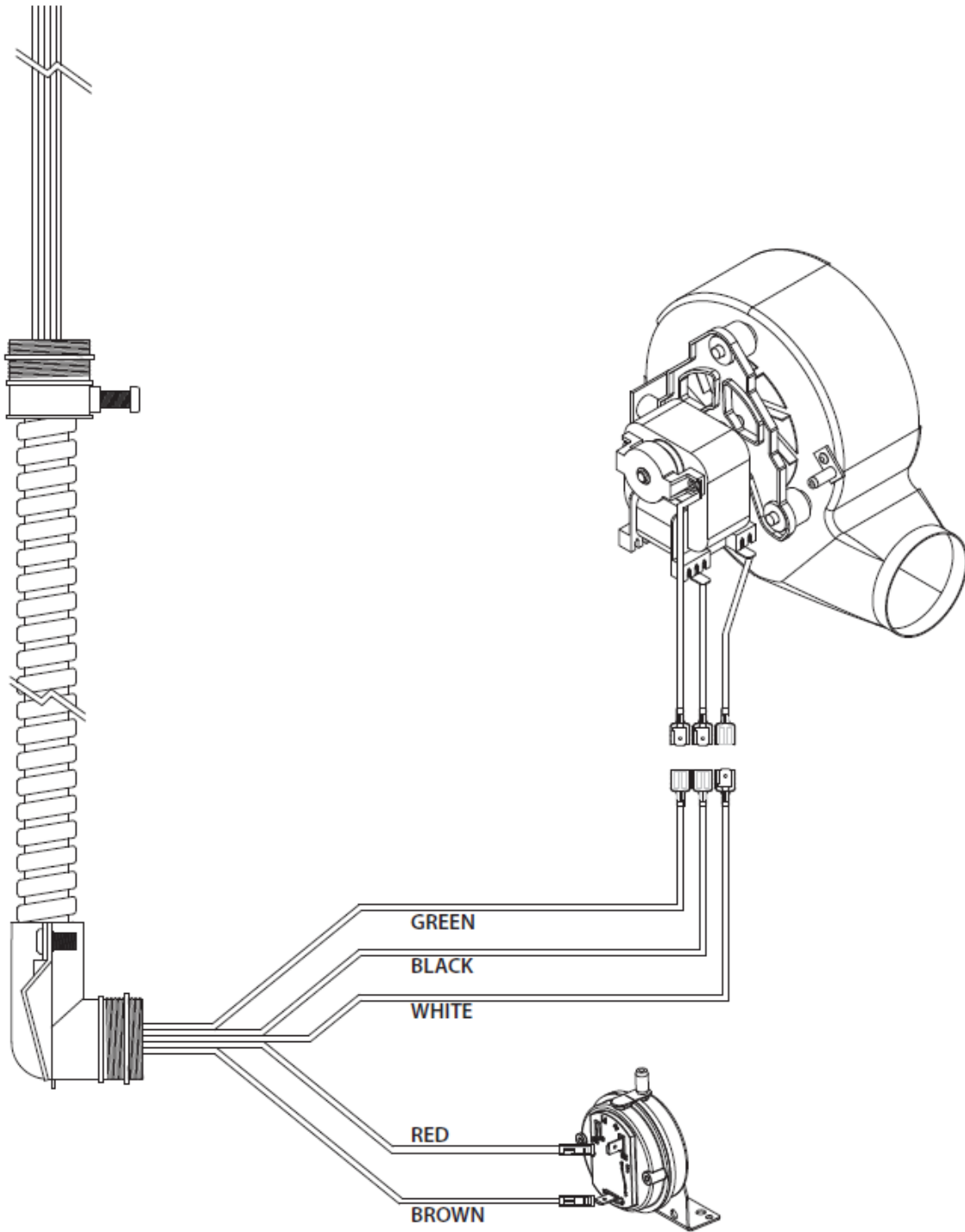


Figure 6.13 - Power Vent Internal wiring

**NOTE: Use Figure 7.4 (pg. 21) as wiring schematic references when following the individual instructions below.**

3. Next we are wiring the other end of the wire harness to the fireplace. Locate the power vent wire harness hole(s) on the fireplace. Your model may have one hole on one side of the fireplace, or one hole on either side of the fireplace. Plan accordingly when ordering your KPV wire harness. The power vent wire harness holes are located on a removable plate. Remove screws that attach the plate to the outer shell for easier access. Reattach the plate when finished. See Figure 6.14.
4. Run the loose wiring through the larger section of the opening until you reach the start of the flexible conduit. Unscrew the nut from the conduit end and slide the conduit end into the smaller section of this opening. Screw the locking nut back on the threads of the conduit securing it to the fireplace. See Figure 6.15.
5. Ensure you complete the necessary preparation steps in Section 7.0 before this step. Locate the Power Vent IFC wire harness in the components packet. Plug the connector into X12 and X13 plug receptor. See Figure 6.16.

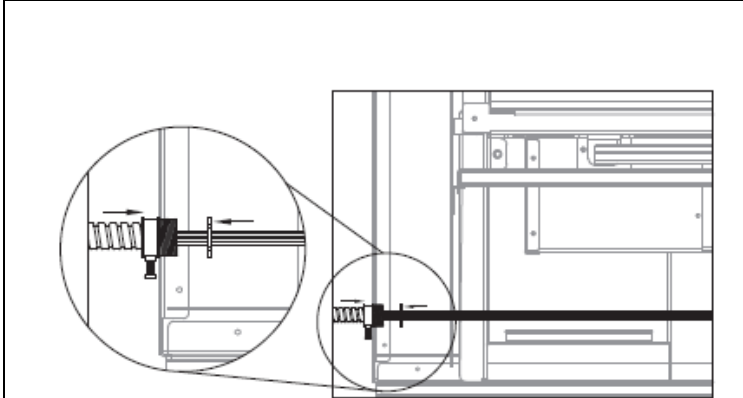


Figure 6.15 - Run Wiring Through Opening and Secure

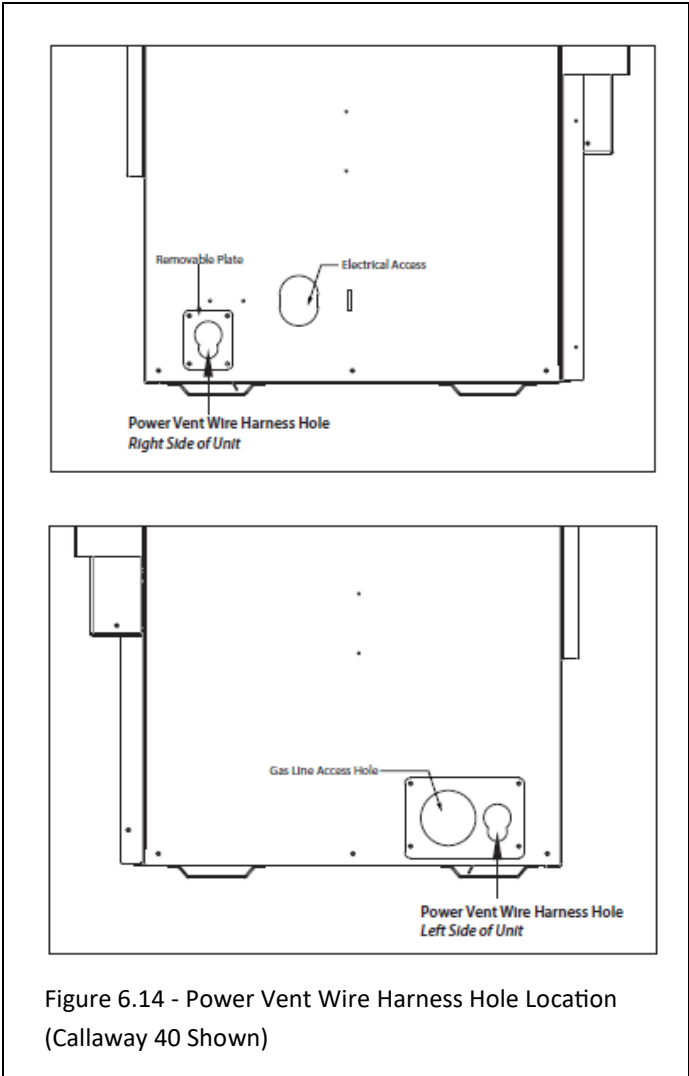


Figure 6.14 - Power Vent Wire Harness Hole Location (Callaway 40 Shown)

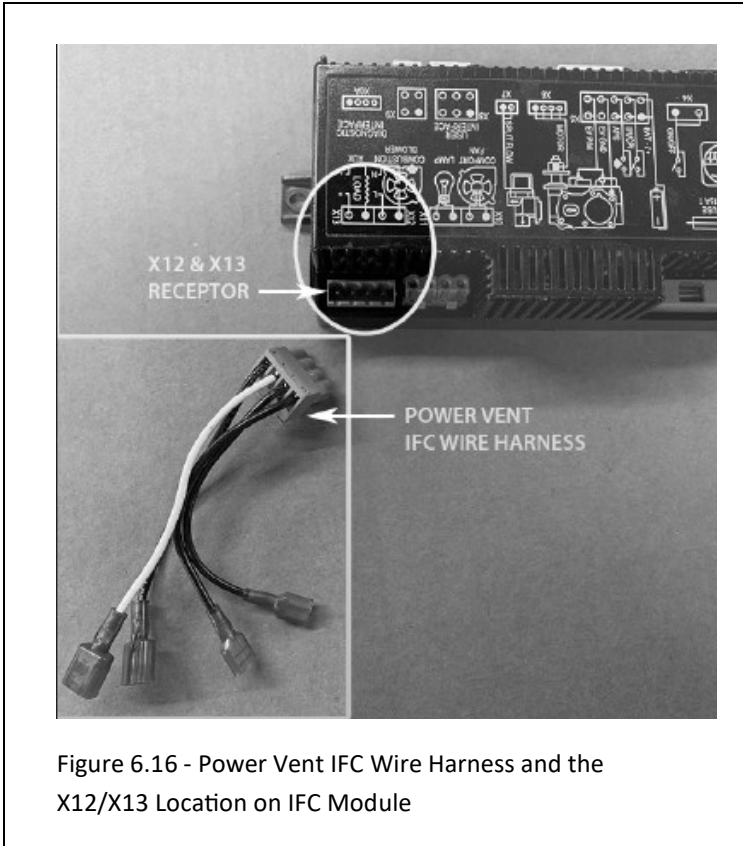


Figure 6.16 - Power Vent IFC Wire Harness and the X12/X13 Location on IFC Module

4. Now we will connect the power vent wire harness to the control module and fireplace wire harness. The power vent wire harness has the black hot wire split with two female quick connections on either end. Plug these into the black leads that have quick connections coming off the control module in the X12 combustion blower location. See Figure 6.17.
5. Locate the blue looped wire on the control module wire harness that connects to the IPI/CPI location on the control module. Cut this looped wires so you have two individual blue wires.
6. Locate the yellow looped "APS" wire on the control module wire harness. Cut this looped wire for two individual yellow wires. Strip back approximately 1/2" of the end of each wire. Using the (2) provided blue wire nuts, twist one of the yellow APS wires into the brown wire coming from the vacuum switch in the power vent assembly. Use the second blue wire nut to twist the second yellow APS wire to the red wire coming from the vacuum switch as shown in Figure 6.18.
7. If not completed - Run the other end of the power vent wiring to the power vent termination assembly. For attaching the wire harness to the fan and vacuum switch, refer to Section 6.3 on page 16.
8. Connect the three prong plug into the electrical box in the fireplace.

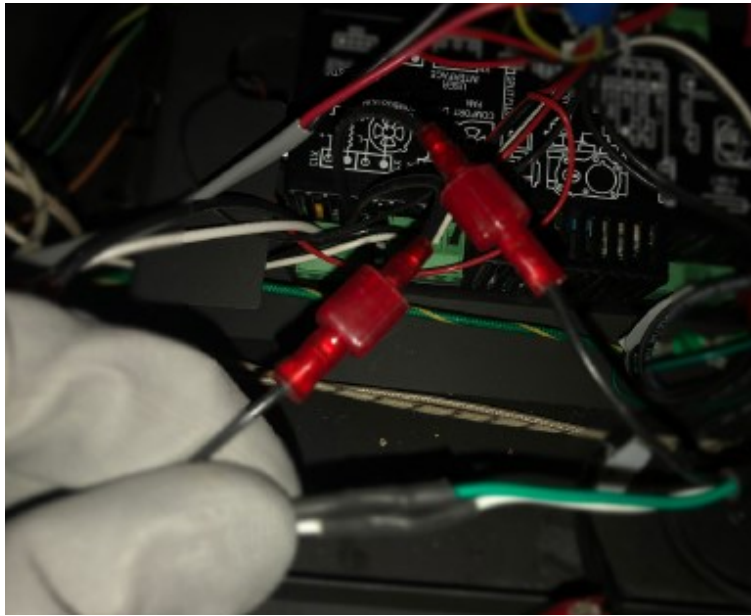


Figure 6.17 - Wire Harness - Quick Connection to Black Leads

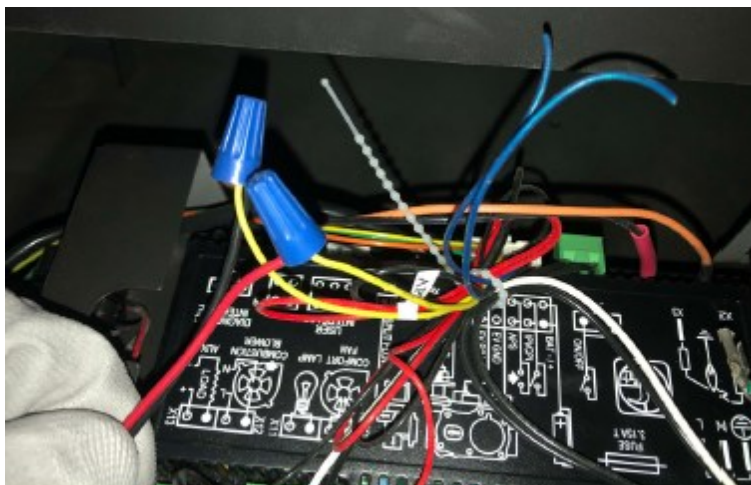


Figure 6.18 - APS Wire Nuts

# 7.0 Electrical Information for Installation

## 7.1 Wiring to the Appliance

NOTE: Electrical wiring must be done in accordance with national, provincial, and/or local electrical codes.

WARNING: Disconnect electrical power from fireplace/power vent before performing any maintenance, repair, or electrical wiring.

NOTE: 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. The current draw of this device is 0.85 amperes.

Ensure that the proper clearances are maintained for wiring and conduit. When installing the wiring, it must never run above the vent run and it must be a minimum 1" (25mm) from all venting.

The battery back up will not run with power venting installed.

### 7.1.1 Prepare Power Vent Control Board

The S.I.T. Power Vent control board is sold separately and must be installed in place of the control module that was shipped with the fireplace.

1. Use a flat blade screwdriver to pry the tabs of the top cover of the control module to release.
2. Locate the JP1 jumper. It is a small plastic jumper that connects two pins as shown in Figure 7.2.
3. Pull the plastic jumper straight up to expose the two individual pins underneath it. This changes the control module function from a natural draft system to a power vent system. See Figure 7.3.
4. Reinstall control module top cover. Plug in all components previously unplugged.

### 7.1.2 Power Vent Control Board Installation

1. Remove the control board from housing (2) screws, and disconnect all wires. Refer to the installation manual included with the fireplace.
2. Install the Power Vent Control Board and reconnect the wiring as previously removed.
3. Now we will connect the wire harness to the new control module.

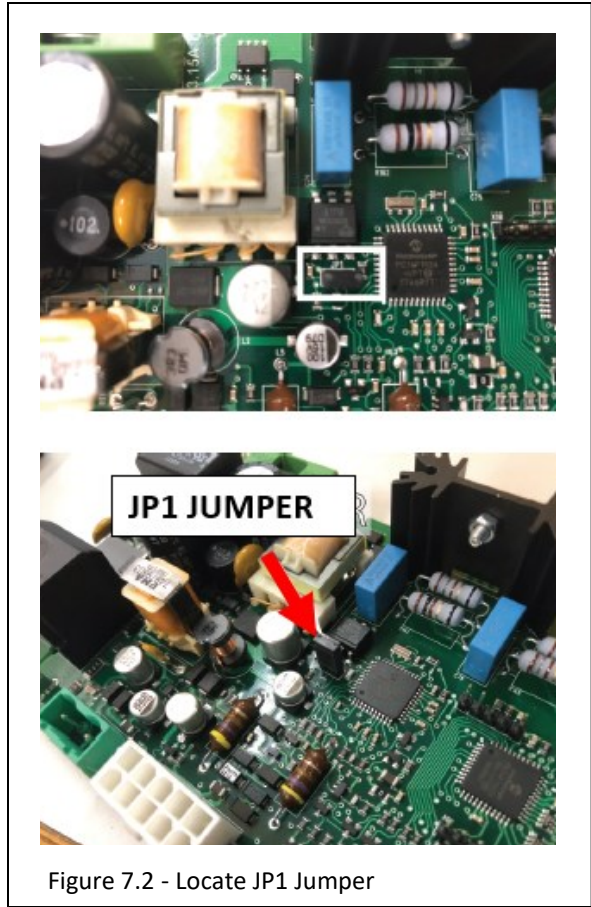


Figure 7.2 - Locate JP1 Jumper

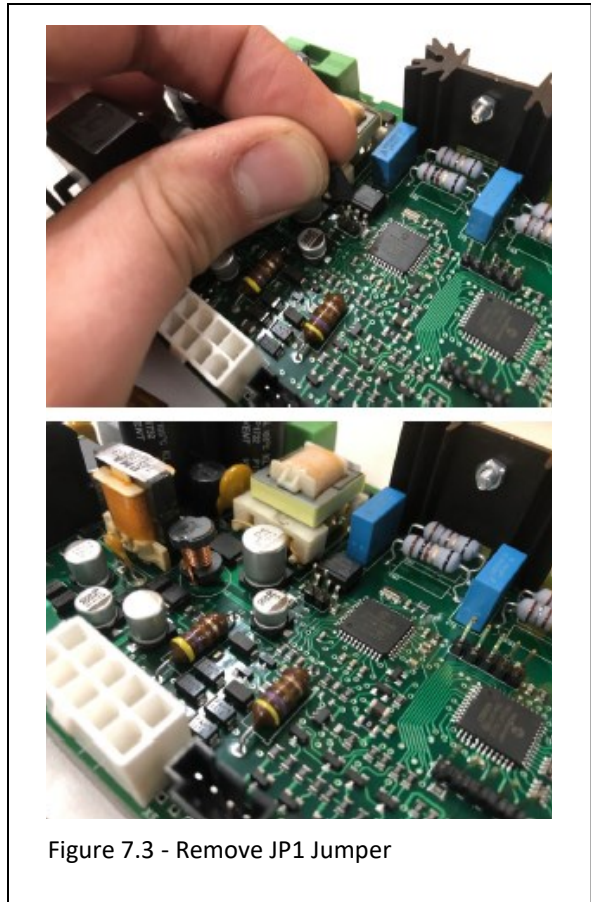


Figure 7.3 - Remove JP1 Jumper

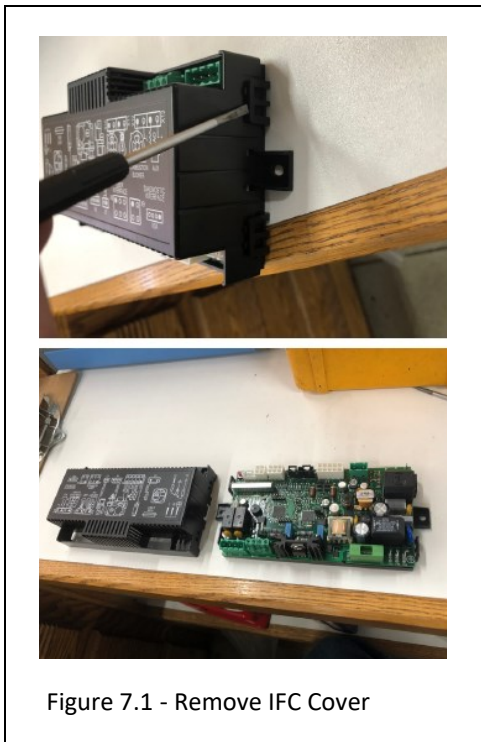


Figure 7.1 - Remove IFC Cover

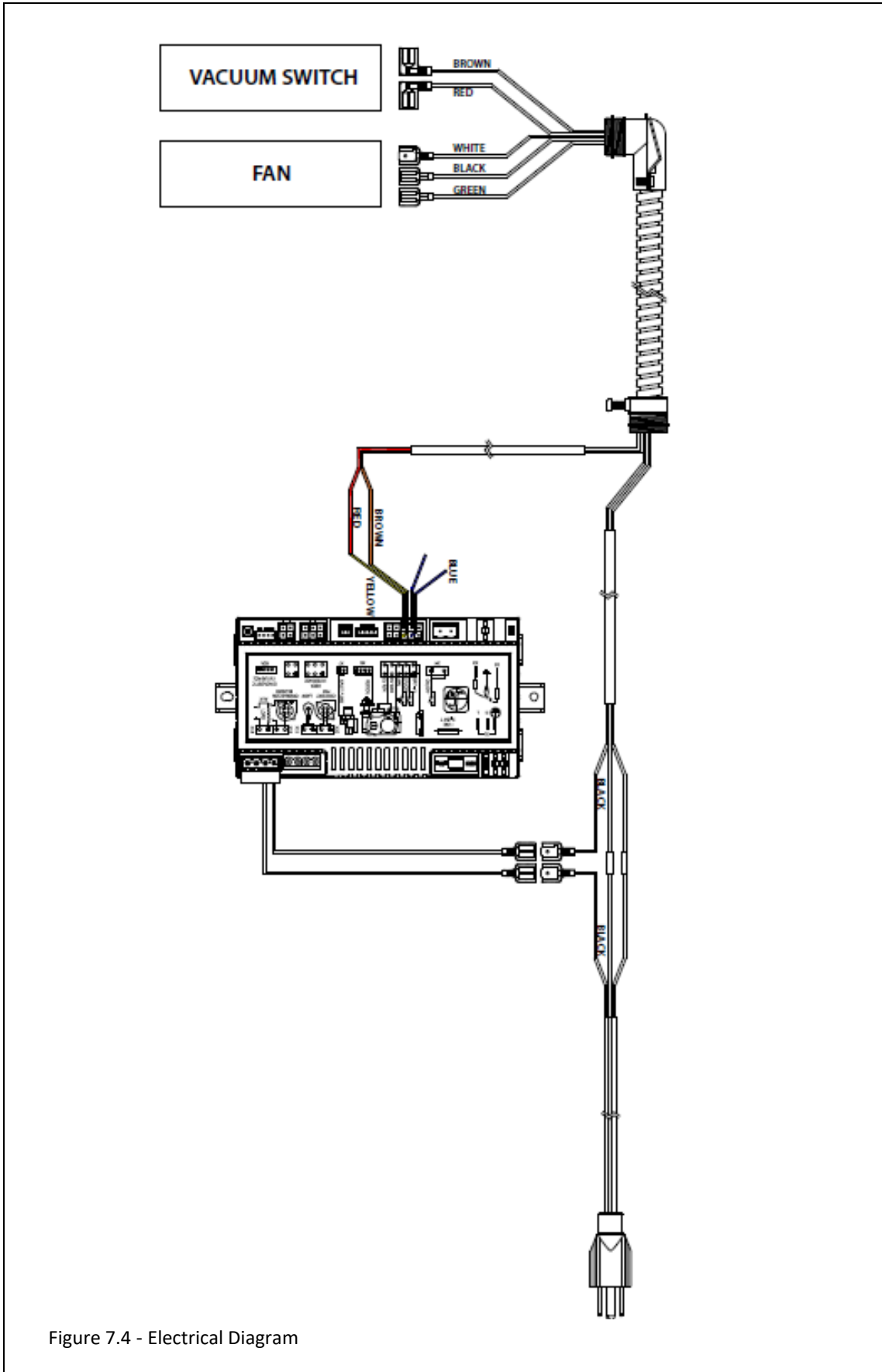


Figure 7.4 - Electrical Diagram

## 8.0 Maintenance

**WARNING:** 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.

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 Section 8.2.

### 8.1 Replace Fan Assembly

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

1. Remove (4) screws securing the front cover assembly and set aside. See Figure 8.1.
2. Remove (6) screws securing the exhaust housing cover and set aside. See Figure 8.2 and Figure 8.3.
3. Remove the hot, neutral, and ground wire from the front of the fan assembly. See Figure 8.4.
4. Remove the vacuum tube from fan assembly. See Figure 8.5 on the following page.
5. Remove the three screws securing the fan assembly. See Figure 8.6 on the next page.
6. Remove fan assembly from housing. See Figure 8.7 on the next page.
7. After replacing the components, reinstall all the previously removed components in reverse order.

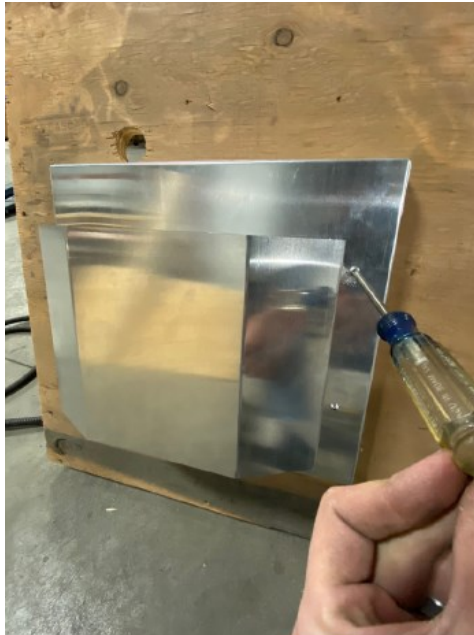


Figure 8.1 - Remove Front Cover



Figure 8.2 - Exhaust Assembly Screws



Figure 8.3 - Exhaust Assembly Removal



Figure 8.4 - Remove Hot, Neutral, and Ground Wire

## 8.2 Replace Vacuum Switch

NOTE: It may be easier to access and remove the vacuum switch by first removing the fan assembly as shown in Section 8.1.

1. Remove (4) screws securing the front cover assembly and set aside. See Figure 8.1.
2. Disconnect the vacuum tube from the fan assembly. See Figure 8.6.
3. Using a long Phillips driver remove the two screws holding the vacuum switch bracket to the exhaust housing. See Figures 8.8 and 8.9.
4. Pull the vacuum switch forward and disconnect the two wire leads to the vacuum switch.
5. After replacing the components, reinstall all the previously removed components in reverse order.



Figure 8.5 - Remove Vacuum Tube



Figure 8.6 - Remove (3) Screws Securing Fan Assembly

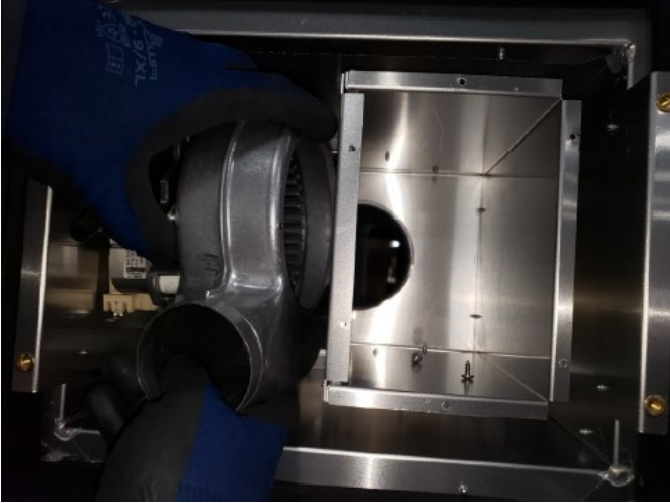


Figure 8.7 - Fan Assembly Removal



Figure 8.8 - Screws Securing Vacuum Switch Bracket



Figure 8.9 - Vacuum Switch Removal



## 9.0 Troubleshooting

Issue	Cause	Solution
<b>Pilot will not light</b>	Electrical power interrupted or disconnected	Restore electrical power to appliance.
	Wiring disconnection	Use wiring schematics in this manual to determine that all wiring connections are secure and correct.
	Gas supply turned off	Check remote shut-off valves from the appliance. Usually there is a valve near the main gas line. There may be more than (1) valve between the appliance and main gas line.
<b>Pilot will not stay lit</b>	No propane in tank	Check propane tank, refill if necessary.
	Low gas pressure	Consult a plumber or a gas supplier.  Can be caused by situations such as a bent line, too narrow diameter of pipe, or a low line pressure.
	Pilot flame not making contact with the flame rectification sensor on the pilot assembly	Verify the pilot flame envelopes the top of the flame sensor and extends far enough onto burner for ignition.  To adjust pilot flame, turn pilot adjustment screw on the gas valve clockwise to decrease flame, and counterclockwise to increase flame.
	Pilot adjustment screw not sealed	Seal pilot adjustment screw. Do not overtighten.
<b>Main burner flame will not light</b>	ON/OFF rocker switch in OFF position	Switch rocker switch to ON position.
	Gas supply turned off	Check for multiple shut-offs in the supply line. Verify gas supply is turned on.
	Low gas supply	Consult with plumber or gas supplier.  Check propane tank, refill if necessary.
	Wiring disconnection or improper wiring	Check for faulty or incorrect wiring.
	Plugged main burner orifice	Remove blockage.
	Pilot flame	Verify the pilot flame is properly directed to ignite burner. See pilot flame troubleshooting above.
	Remote control not working properly	Replace batteries.
	No call for heat	Verify remote control is powered ON and thermostat operation is turned OFF.
	Vacuum is not registering	Check vacuum tube for a solid connection between vacuum switch and the vacuum port of the fan assembly.  Check for faulty or incorrect wiring between the vacuum switch and control module.  Replace vacuum switch.

<b>Issue</b>	<b>Cause</b>	<b>Solution</b>
<b>Pilot and burner extinguish while in operation</b>	No propane in tank	Check propane tank, refill if necessary.
	Incorrect glass assembly installation	Adjust if necessary. See appliance installation manual.
	Incorrect vent cap installation	Adjust if necessary.
	Vent cap blockage	Remove debris if necessary.
	Exhaust vent pipe leaking exhaust gases back into firebox	Check for leaks and repair if necessary.
	Excessive back draft	Adjust the draft bypass system. Refer to Section 2.2 Draft Bypass Adjustment on page 8.
<b>Soot appears on glass</b>	Improper media placement	See appliance installation manual.
	Improper venturi setting	Venturi air shutter may need to be opened slightly to allow more air into the gas mix.
	Incorrect vent cap installation	Adjust if necessary.
	Vent cap blockage	Remove debris if necessary.
<b>Flame burns blue and lifts off burner</b>	Improper venturi setting	Venturi air shutter may need to be opened slightly to allow more air into the gas mix. See appliance installation manual.
	Incorrect vent cap installation	Adjust if necessary.
	Blockage or leakage of the vent system	Check the vent pipes for leaks, and the vent cap for debris. Repair the vent pipes or remove debris from vent cap, if necessary.
	Excessive draft	Adjust the draft bypass system. Refer to Section 2.2 Draft Bypass Adjustment on page 8.
<b>No reaction to command</b>	No communication between remote control and IFC module	Reprogram remote control to IFC module. See appliance installation manual.
	A maximum number of failed ignitions or flame restorations has been reached	Reset IFC module. See appliance installation manual.

# 10.0 Replacement Parts



P.O. BOX 557 204 INDUSTRIAL PARK DRIVE  
LAKEFIELD, MINNESOTA USA 56150-0577

Replacement parts are available through your local dealer. Contact your local dealer for availability and pricing. The following warning is for replacement parts for this appliance.

**⚠ WARNING:** This product can expose you to chemicals including Lead, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, visit [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Power Vent Components	
Fan Assembly	KPV-101
Vacuum Switch	KPV-102
Vacuum Tube	KPV-103
Cover Assembly	KPV-104
Power Vent IFC Wire Harness	700-358

Power Vent Wire Harness	
20' Power Vent Wire Harness	KPV-WH20
40' Power Vent Wire Harness	KPV-WH40
60' Power Vent Wire Harness	KPV-WH60
80' Power Vent Wire Harness	KPV-WH80
100' Power Vent Wire Harness	KPV-WH100

Fireplace Components	
Power Vent IFC	700-759

