



# **Installation Instructions**



#### WARNING

Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information, consult with a qualified installer, service agency, or the gas supplier.

# **Model PVH58FM**

FLUSH MOUNT HORIZONTAL POWER VENT



#### WARNING

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

#### KINGSMAN FIREPLACES

A Division of R-Co. Inc. 2340 Logan Avenue Winnipeg, MB R2R 2V3 Canada Ph: (204) 632-1962



## READ THIS COMPLETE MANUAL BEFORE BEGINNING INSTALLATION.

INSTALLER: Leave this manual with the appliance.
CONSUMER: RETAIN THIS MANUAL FOR FUTURE REFERENCE.
INSTALLATION TO BE DONE BY A QUALIFIED INSTALLER.

The PVH58FM Horizontal Flush Mount Power Vent is intended for use where standard venting configurations are not possible.

#### MILLIVOLT/STANDING PILOT NOTE:

Downward vertical vent runs are NOT permitted for models that are equipped with millivolt / standing pilot ignition.

#### INTERMITTENT PILOT NOTE:

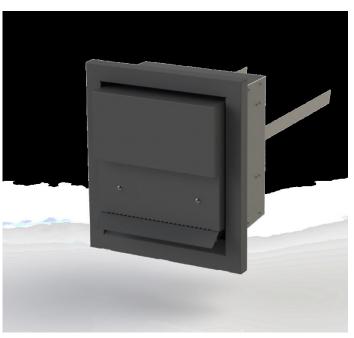
For units equipped with Proflame 1 or Proflame 2 ignition system, downward vertical vent runs are permitted provided that the Cold Climate Switch (Standing Pilot Mode) is NOT used.

All electrical installations much be performed by a qualified electrician to the latest Canadian Electrical Code (CSA C22.1 for Canada), and/or U.S. National Electrical Code (ANSI/NFPA 70 for the USA).

#### **ELECTRICAL SPECIFICATIONS**

VOLTS: 120VAC 60Hz 1 Phase

AMPS: 1A



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### WARNINGS, INSTALLATIONS, AND OPERATIONS

#### **Installation Regulations**

This gas appliance must be installed by a qualified installer in accordance with local building codes, or—in the absence of local codes—with the current CAN/CSA-B149.1 or .2 Installation Code (in Canada), or the current National Fuel Gas Code Z223.1- NFPA 54 (in the USA).

All electrical installations much be performed by a qualified electrician to the latest Canadian Electrical Code CSA C22.1 (for Canada), and/or U.S. National Electrical Code ANSI/NFPA 70 (for the USA).

Thermostats are NOT permitted for Vented Gas Fireplaces (ANSI Z21.50b-Decorative) in the USA.

## **A** WARNING

#### FOR SAFE INSTALLATION AND OPERATION OF YOUR GAS FIREPLACE PLEASE NOTE THE FOLLOWING:

- 1. Do not clean when the glass is hot.
- 2. Do not use abrasive cleaners.
- 3. Using a substitute glass will void all product warranties.
- 4. For safe operation, glass doors must be closed.
- 5. When purging the gas line, the glass front must be removed.
- 6. Do not strike or abuse glass. Take care to avoid breakage.
- 7. Do not alter gas orifice.
- 8. No substitute materials may be used other than factory supplied components.
- 9. This appliance gives off high temperatures and should be located out of heavy traffic areas and away from furniture and draperies.
- 10. Children and adults should be alerted to the hazards of the high surface temperatures of this appliance and should stay away to avoid burns or ignition of clothing.



A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

- 11. Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children and other at-risk individuals out of the room and away from hot surfaces.
- 12. Under no circumstances should any solid fuels (wood, paper, etc.) be used in this appliance.
- 13. Under no circumstances should this appliance be modified. Any parts removed for servicing should be replaced prior to operating this appliance.
- 14. Any safety screen, guard, or barrier removed for servicing an appliance must be replaced prior to operating the appliance.
- 15. Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean. Make sure that the gas valve and pilot light are turned off before you attempt to clean this unit.
- 16. Clothing or other flammable material should not be placed on or near the appliance. This appliance should not be used as a drying rack for clothing nor should Christmas stockings or decorations be hung from it.
- 17. Do not use this heater if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control which has been under water.
- 18. Do not operate appliance unless completely installed as per installation instructions.
- 19. Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.
- 20. WARNING: Do not operate appliance with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.
- 21. The appliance area must be kept clear and free from combustible materials, gasoline, and other flammable vapors and liquids.
- 22. The front of the fireplace gives off high temperatures that could ignite combustible materials that are close to the front of the unit.
- 23. Ensure that power to the Fireplace is turned off before servicing.
- 24. Do not operate this Fireplace without the glass front or with a broken glass.
- 25. Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency, or the gas supplier.
- 26. Operation of this appliance when not connected to a properly installed and maintained venting system or tampering with the blocked vent shutoff system can result in carbon monoxide (CO) poisoning and possible death.
- 27. This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

Gas fired appliances may be used only for supplemental heat and/or decorative purposes, and under no circumstances shall they provide a primary heat source.

This appliance must not be connected to a chimney flue serving a separate solid-fuel burning appliance.

NOTE: It is recommended that a Carbon Monoxide (CO) Detector be installed in or near bedrooms and on all levels of your home. Place a detector about 15ft [4.5m] outside the room that houses your gas appliance.

Certified for installation in a bedroom or bed/sitting room. In Canada must be installed with listed millivolt thermostat.

Thermostats are not permitted for Vented Gas Fireplaces (ANSI Z21.50b-Decorative) in the USA. In USA see local codes.

#### **Operations and Maintenance Instructions**

For safe installation and operation note the following:

- 1. Venting systems should be periodically examined by a qualified agency.
- 2. The flow of combustion and ventilation air must not be obstructed.
- 3. The Burner/Log Assembly has been engineered and permanently adjusted for proper flame control.
- 4. Periodically remove the logs from the grate assembly and vacuum any loose particles from the grate and burner areas. See Log Placement page to remove logs. Vacuum burner parts and replace logs.
- 5. Never use your gas fireplace as a cooking device.
- 6. Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

#### **Installation Requirements for the Commonwealth of Massachusetts**

In the Commonwealth of Massachusetts, the installer or service agent shall be a plumber or gas fitter licensed by the Commonwealth. When installed in the Commonwealth of Massachusetts or where applicable codes; the unit shall be installed with a CO detector per the requirements listed below.

- 1. For direct-vent appliances, mechanical-vent heating appliances or domestic hot water equipment, where the bottom of the vent terminal and the air intake is installed below four feet above grade the following requirements must be satisfied:
  - a. If there is not one already present, on each floor level where there are bedroom(s), a carbon monoxide detector and alarm shall be placed in the living area outside the bedroom(s). The carbon monoxide detector shall comply with NFPA 720.
  - b. A carbon monoxide detector shall be located in the room that houses the appliance or equipment and shall:
    - i. Be powered by the same electrical circuit as the appliance or equipment such that only one service switch services both the appliance and the carbon monoxide detector;
    - ii. Have battery back-up power;
    - iii. Meet ANSI/UL 2034 Standards and comply with NFPA 720; and
    - iv. Have been approved and listed by a Nationally Recognized Testing Laboratory as recognized under 527 CMR.
  - c. A Product-approved vent terminal must be used, and if applicable, a Product-approved air intake must be used. Installation shall be in strict compliance with the manufacturer's instructions. A copy of the installation instructions shall remain with the appliance or equipment at the completion of the installation.
  - d. A metal or plastic identification plate shall be mounted at the exterior of the building, four feet directly above the location of vent terminal. The plate shall be of sufficient size to be easily read from a distance of eight feet away, and read "Gas Vent Directly Below".
- 2. For direct-vent appliances, mechanical-vent heating appliances or domestic hot water equipment where the bottom of the vent terminal and the air intake is installed above four feet above grade the following requirements must be satisfied:
  - a. If there is not one already present, on each floor level where there are bedroom(s), a carbon monoxide detector and alarm shall be placed in the living area outside the bedroom(s). The carbon monoxide detector shall comply with NFPA 720.
  - b. A carbon monoxide detector shall:
    - i. Be located in the room that houses the appliance or equipment;
    - ii. Be either hard-wired or battery powered or both; and
    - iii. Shall comply with NFPA 720.

A Product-approved vent terminal must be used, and if applicable, a Product-approved air intake must be used. Installation shall be in strict compliance with the manufacturer instructions. A copy of the installation instructions shall remain with the appliance or equipment at the completion of the installation.

For the state of Massachusetts, a **T-handle gas shut-off valve** must be used on a gas appliance. This T-handle gas shut-off valve must be listed and approved by the state of Massachusetts. This is in reference to the state of Massachusetts state code CMR238.

#### **PVH58FM Installation Overview**

Either Hard Pipe or Flex Pipe can be used, along with the appropriate adapter kit.

#### **PVH58FM Horizontal Power Vent Installation Procedure**

- 1. Install fireplace as per manual instructions.
- 2. Choose suitable location for PVH58FM Power Vent Termination. Refer to PVH58FM Termination Clearances and Venting Clearances sections of this manual.
- 3. Determine venting configuration to be used (i.e. hard pipe or flex, and routing). Install venting with appropriate adapter kits. See Venting Hard Pipe or Flex (page 8), and Venting Configurations (page 5) sections of this manual.
- 4. Install PVH58FM Wall Thimble if mounting in a combustible wall. Refer to Openings and Wall Thimble Installation section on page 7.
- 5. Install PVH58FM Power Vent (refer to Power Vent Mounting section) and venting.
- 6. Install Power Vent Control Module in fireplace. Refer to Power Vent Control Module Installation sections.
- 7. For electrical connections refer to PVH58FM Wiring Harness Connections and Millivolt/IPI/Proflame 2 System Connections sections.
- 8. Air Intake Adjustment & Troubleshooting (refer to these sections).

#### **PVH58FM TERMINATION CLEARANCES**

It is imperative that the vent termination be located observing the minimum clearances as shown. There must not be any obstruction such as bushes, garden sheds, fences, decks or utility buildings within 24" from the front of the termination plate. Do not locate termination where excessive snow or ice build-up may occur. Be sure to check vent termination area after snow falls, and clear to prevent accidental blockage of venting system. When using snow blowers, make sure snow is not directed towards vent termination area. Venting terminal shall not be recessed into a wall or siding, except for mounting flange. Also refer to VENTING CLEARANCES section.

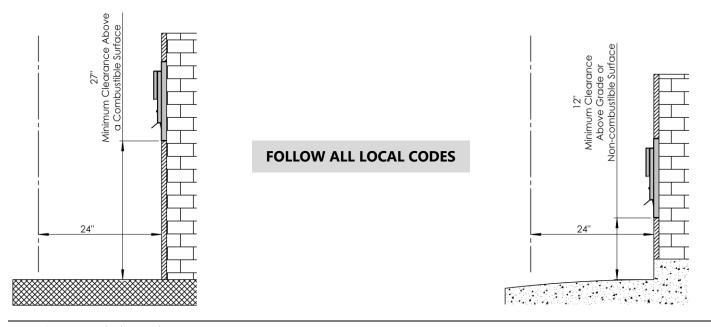


Figure 1 - Exterior discharge clearances.

#### **CARBON MONOXIDE (CO) DETECTOR**

It is recommended that a Carbon Monoxide (CO) Detector be installed in or near bedrooms and on all levels of your home. Place a detector about 15ft [4.5m] outside the room that houses your gas appliance.

Certified for installation in a bedroom or bed/sitting room. In Canada must be installed with listed millivolt thermostat. In USA see local codes.

#### **VENTING CLEARANCES**

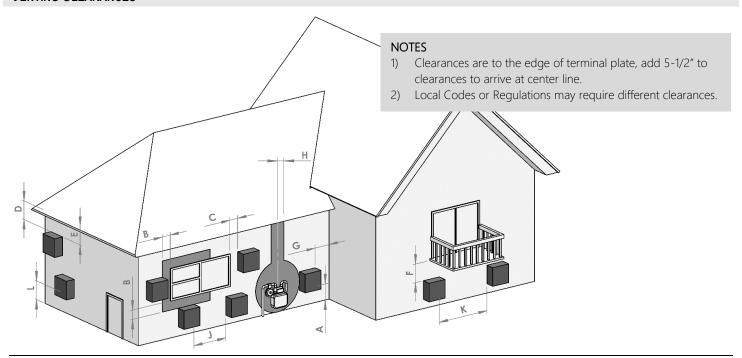


Figure 2 - General clearances.

- A. Clearance above a veranda, porch, deck, or balcony or other combustible surface is 27". Clearance above grade is 12in [30cm] min<sup>12</sup>.
- B. Clearance to window or door that may be opened. 12in [30cm] min. for appliances 100,000 BTU/h [30kW] and lower, in Canada. 9in [23cm]<sup>2</sup> for appliances 50,000 BTU/h and lower, in USA.
- C. Clearance to permanently closed window min. 12in [30cm] recommended to prevent condensation on window, in Canada. 9in [23cm] <sup>2</sup> for appliances 50,000 BTU/h and lower, in USA.
- D. Vertical clearance to ventilated soffit located above the termination within a horizontal distance of 2ft [60cm] from the center line of the termination. 18in [46cm] min<sup>4</sup>.
- E. Clearance to unventilated soffit 12in [30cm] min.
- F. Clearance under veranda, porch, deck or balcony 12in [30cm] min.<sup>3</sup> (US<sup>4</sup>)
- G. Clearance from a perpendicular inside wall or outer corner to the edge of the vent terminal plate is 3in [7.6cm] min.
- H. Clearance to each side of center line extended above meter/regulator assembly 3ft [91cm] within a height 15ft [4.5m] above the meter/regulator assembly.
- I. Clearance to service regulator vent outlet 3ft [91cm] min<sup>1</sup>. (US<sup>4</sup>)
- J. Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance: In Canada, 6in [15cm] for appliances ≤10,000 BTU/h [3kW], 12in [30cm] <sup>1</sup> minimum for BTU/h [30kW], 36in [91cm] for appliances >100,000 BTU/h [30kW]. In the USA, 6in [15cm] <sup>2</sup> for appliances ≤10,000 BTU/h [3kW], 9in [23cm] for appliances >10,000 BTU/h [3kW] and ≤50,000 BTU/h [15kW].
- K. Clearance to a mechanical air supply inlet 6ft [1.8m] min¹. in Canada. In USA, 3ft [91cm] above if within 10ft [3m] ² horizontally.
- L. Clearance above paved sidewalk or a paved driveway located on public property 7ft [2.1m] min<sup>5</sup>.
- M. Clearance above highest point of exit on roof 18in [45cm].
- N. A moisture-exhaust duct shall not terminate within 3ft [1m] in any direction of a service regulator or fresh-air intake.

<sup>&</sup>lt;sup>1</sup> In accordance with the current CSA B149.1, Natural Gas and Propane Code.

<sup>&</sup>lt;sup>2</sup> In accordance with the current ANSI Z223.1/NFPA 54, National Fuel Gas Code.

<sup>&</sup>lt;sup>3</sup> Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

<sup>&</sup>lt;sup>4</sup> Clearance in accordance with local installation codes and the requirements of the gas supplier.

<sup>&</sup>lt;sup>5</sup> A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.

#### **VENTING HARD PIPE OR FLEX**

The PVH58FM Power Vent is approved for use with M&G DuraVent DirectVent Pro Direct Vent system (Model DV-GS Series), and AmeriVent Direct Vent Pipe System, ICC Excel Direct, Metal Fab Sure-Seal DV and Selkirk Direct Temp. Follow installation instructions provided by the appropriate manufacturer for installation of pipe, and adhere to the Clearance to Combustibles provided in this manual. Apply a bead of Mill-Pac High Temp sealant to all joints of pipes, adapters and termination as

recommended. WARNING: DO NOT MIX PARTS FROM DIFFERENT SYSTEMS UNLESS STATED IN THE MANUAL.

# Flex Pipe Venting - Approved For 4/7", 5/7" And 7/10" Kingsman Flex (Z-Flex) Pipe

Kingsman Flex Pipe is shipped in unexpanded length. When installing Flex Pipe be sure to stretch to the stated length and cut off excess. Be sure to use approved couplers and connectors to join flex pipe.

Place the spring spaces provided approximately every two feet to stabilize inner flex in the center of the outer flex. When forming bends place spring in bend or before and after. Horizontal runs require support metal straps every 2 feet. In offset installation support straps should be used to stabilize pipe.

Expand inner and outer flex pipe to the point that the inner flex protrudes approximately 2 to 3 inches past the outer flex. Attach the inner flex to the adapter first and secure with sealant and screws then attach the outer flex to the adapter with caulking and screws. Silicone around termination to waterproof.

#### Use Hi Temp Sealant

Apply a bead of Mill-Pac High Temp sealant to all joints and use four screws to secure each pipe at fireplace, termination and any joint if joining any sections of pipe.

# ONLY VENTING COMPONENTS SPECIFICALLY APPROVED AND LABELED FOR YOUR FIREPLACE MAY BE USED.

NOTE: Must use a one-foot section of 5/8 DV hard pipe (not supplied) to connect to the Power Vent Termination on all installations.

4/7	Choose venting to be used:
VENTING	Section 1 – Hard Pipe, Section 2 – Flex Vent
SECTION 1	DIRECT VENT HARD PIPE 4x6-5/8"
	(For entire installation)
NOTE: Two ad	dapters needed; one at flue and one at termination.
	At Flue of Fireplace
ZDVDFA	DuraVent Adapter – for Sloped Flue
ZDVDKA	DuraVent Adapter – for Flat Flue
	At Termination End
ZDVDIA	DuraVent Hard Pipe Adapter
	(Used to connect 4x6-5/8" to 5/8 Hard Pipe)
SECTION 2	FLEX VENT
	(For entire installation – Order Z47PVA)
	At Termination End
Z47PVA	Flex Pipe Adapter Kit
	(To adapt flex pipe to Power Vent to Hard Pipe)

5/7 VENTING	Choose venting to be used:  Section 1 – 5/8 Hard Pipe, Section 2 – 4x6-5/8" Hard Pipe,  Section 3 – Flex Vent
SECTION 1	DIRECT VENT HARD PIPE 5/8
	(For entire installation – Order Z57DFA)
	At Flue of Fireplace

Z57DFA	DuraVent Hard Pipe Adapter
	(5/7" to 5/8" at Flue of Fireplace)
SECTION 2	DIRECT VENT HARD PIPE 4 x 6-5/8"
	(For entire installation – Order Z57DFA, ZDVDRA, ZDVDIA)
Z57DFA	DuraVent Hard Pipe Adapter
	(5/8" at Flue of Fireplace)
ZDVDRA	DuraVent Reducer- 5/8" to 4x6-5/8" Adapter
	(Used at Flue of Fireplace)
	At Termination End
ZDVDIA	DuraVent Hard Pipe Adapter
	(Used to connect 4x6-5/8" to 5/8 Hard Pipe)
SECTION 3	FLEX VENT
	(For entire installation – Order Z57PVA)
Z57PVA	Flex Pipe Adapter Kit
	(Used to adapt flex 5/7" to power vent to hard pipe 5/8")

5/8 VENTING	Choose venting to be used:  Section 1 – 5/8 Hard Pipe, Section 2 – 4x6-5/8" Hard Pipe,  Section 3 – Flex Vent
SECTION 1	DIRECT VENT HARD PIPE 5/8" (For entire installation – Order Z58DFA)
Z58DFA	DuraVent Hard Pipe Adapter – 5/8" (Sloped Flue) NOTE: Only sloped flues require Z58DFA adapter.
SECTION 2	DIRECT VENT HARD PIPE 4 x 6-5/8" (For entire installation – Order ZDVDRA, ZDVDIA)
Z58DFA	DuraVent Hard Pipe Adapter – 5/8" (Sloped Flue) NOTE: Only sloped flues require Z58DFA adapter.
ZDVDRA	DuraVent Reducer – 5/8" to 4x6-5/8" Adapter (Used at flue of fireplace) NOTE: Models MQVL48/60 and ZCVRB60 will require a one-foot section of MG Hard Pipe at flue before using ZDVDRA. At Termination End
ZDVDIA	DuraVent Pipe Increaser (at Power Vent)
SECTION 3	FLEX VENT (For entire installation – Order Z58PVA)
Z58PVA	Flex Pipe Adapter Kit (To adapt flex pipe to Power Vent to Hard Pipe)

7/10	Choose venting to be used:
VENTING	Section 1 – 5/8 Hard Pipe, Section 2 – 4x6-5/8" Hard Pipe,
	Section 3 – Flex Vent
SECTION 1	DIRECT VENT HARD PIPE
	(For entire installation – Order Z69DFA)
	At Flue of Fireplace
Z69DFA	DuraVent Hard Pipe Adapter – 5/8"
SECTION 2	DIRECT VENT HARD PIPE 4 x 6-5/8"
	(For entire installation – Order Z69DFA, ZDVDRA, ZDVDIA)
	At Flue of Fireplace
Z69DFA	DuraVent Hard Pipe Adapter – 5/8"
NOTE: Will re	quire 1ft section of 5/8" DuraVent attached to Z69DFA.
ZDVDRA	DuraVent Reducer – 5/8" to 4x6-5/8" Adapter
	At Termination End
ZDVDIA	DuraVent Hard Pipe Adapter
	(Used to connect 4x6-5/8" to 5/8" Hard Pipe)
SECTION 3	FLEX VENT 7/10"
	(For entire installation – Order Z69PVA)
	At Termination End
Z69PVA	Flex Pipe Adapter Kit
	(Used to adapt flex pipe to Power Vent to Hard Pipe)

### **Adapters at Fireplace**



**ZDVDKA**DuraVent Fireplace Adapter

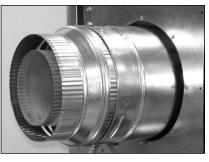


**Adapters at Termination** 

**Z47PVA**Flex Pipe Adapter Kit



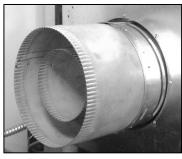
**ZDVDFA & Z58DFA**DuraVent Fireplace Adapter



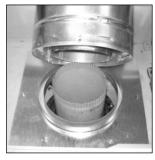
**Z57PVA**Flex Pipe Adapter Kit



**ZDVDRA**DuraVent Reducer



**Z58PVA**Flex Pipe Adapter Kit



**Z57DFA**DuraVent Hard Pipe Adapter



**ZDVDIA**DuraVent Hard Pipe Adapter



**Z69DFA**DuraVent Hard Pipe Adapter



**Z69PVA**Flex Pipe Adapter Kit

## **Maximum** Maximum vent length is 125ft [38.1m] plus six 90° elbows with Air Intake setting at LOW. Termination MUST NOT be below unit. Refer to the Air Intake Adjustment section of this manual to adjust Air Intake. This Power Vent can be installed up to 8ft [2.4m] below the installed fireplace on runs less than 100ft [30.4m] and not more than four 90° elbows. **Minimum** Minimum vent length is 1ft [31cm] vertical x 3ft [92cm] horizontal x 3ft [92cm] vertical x 3ft [92cm] horizontal. Please refer to the illustration below. Minimum Vent Lengths 1ft MAX Venting 3ft 125ft [38.1m] Plus size 90° Elbows 3ft 8ft [2.4m] MAX Below Fireplace

Figure 3 - Vent pipe configurations.

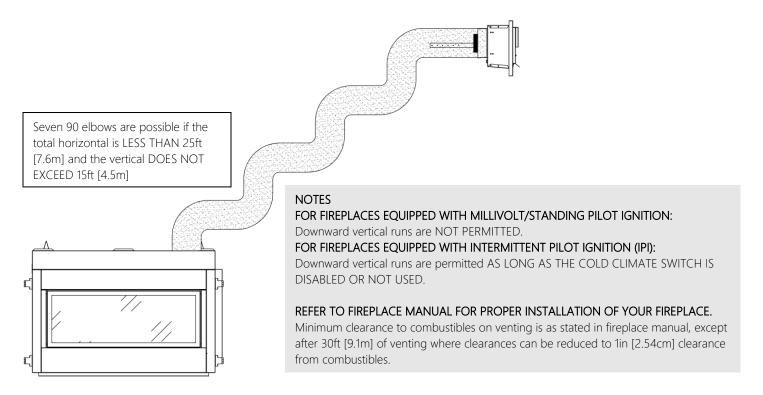


Figure 4 - Maximum elbows.

### **PVH58FM DIMENSIONS**

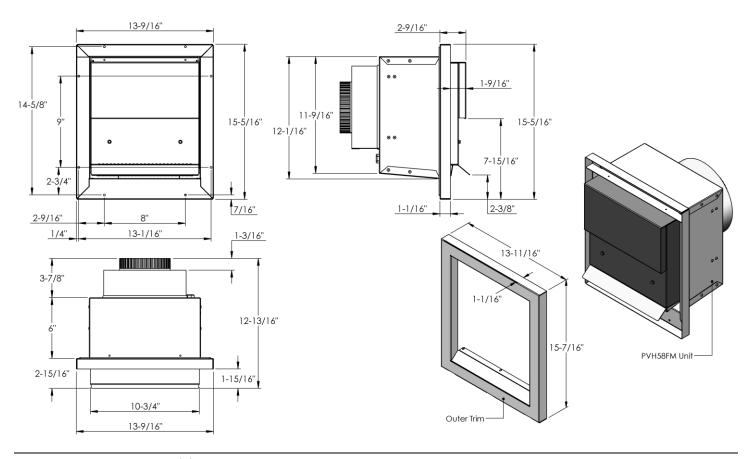


Figure 5 – PVH58FM unit general dimensions.

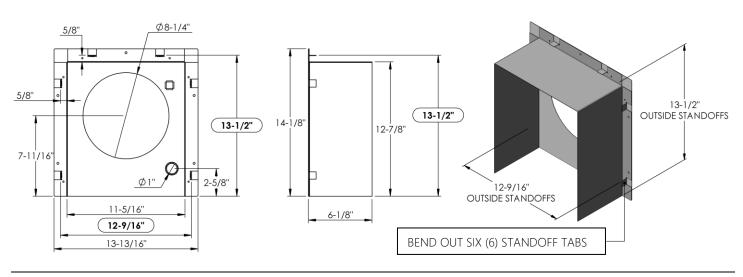


Figure 6 - PVH58FM Wall Thimble general dimensions.

#### **OPENINGS AND WALL THIMBLE INSTALLATION**

The Wall Thimble is installed on the frame side. A **Frame Opening of 12-9/16"** x 13-9/16" [31.9cm x 34.4cm] is required for the Thimble to properly mount. To install, bend the six [6] standoff tabs on the Wall Thimble as shown in Figure 7, orient the assembly so that the bottom is open, insert into the wall frame, and secure with 5 screws. Make note of the cord cut-out for electrical pass-through is located towards the bottom.

#### IMPORTANT: THE FRAME OPENING DIMENSION IS DIFFERENT FROM THE FACE OPENING DIMENSION.

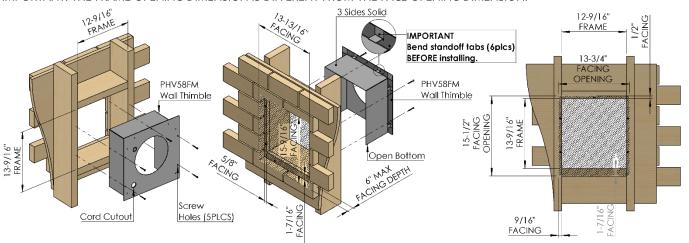


Figure 7 - Wall Thimble positioning and framing dimensions.

#### **POWER VENT MOUNTING**

The Power Vent unit is installed from the outside. A **Face Opening of 13-3/4"** x **15-1/2"** [34.9cm x 39.4cm] is required for the unit to install properly. To install, route the Wiring Harness through Wall Thimble as shown in Figure 8 all the way to the fireplace appliance. Slide Power Vent unit through then opening and mount to wall with screws. Use silicone or insulating foam to properly provide a waterproof seal. Secure Venting Adapters to Power Vent unit by fastening them to the Attachment Straps with screws.

#### IMPORTANT: THE FACE OPENING IS OFFSET 1/2" [1.3cm] ABOVE THE FRAME OPENING. PLEASE REVIEW THE SHADED AREA IN Figure 7.

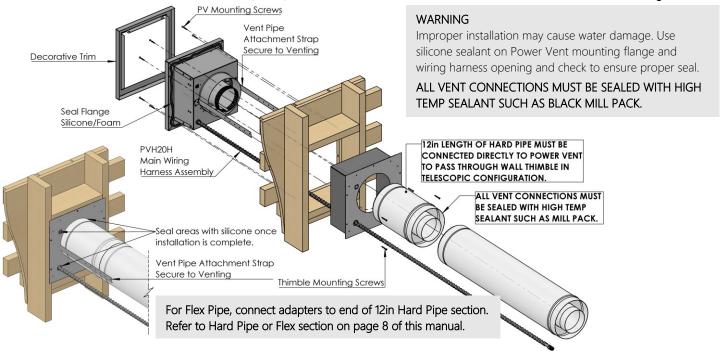


Figure 8 - Power Vent and Wall Thimble mounting guide.

#### **PVH58FM Recess Installation**

The PVH58FM Power Vent unit allows for a recess installation up to 4-1/2 inches [11.4cm] into the wall. Use silicone or insulating foam to properly provide a waterproof seal. Secure Venting Adapters to Power Vent unit by fastening them to the Attachment Straps with screws.

IMPORTANT: THE FACE OPENING IS OFFSET 1/2" [1.3cm] ABOVE THE FRAME OPENING. PLEASE REVIEW THE SHADED AREA IN Figure 9.

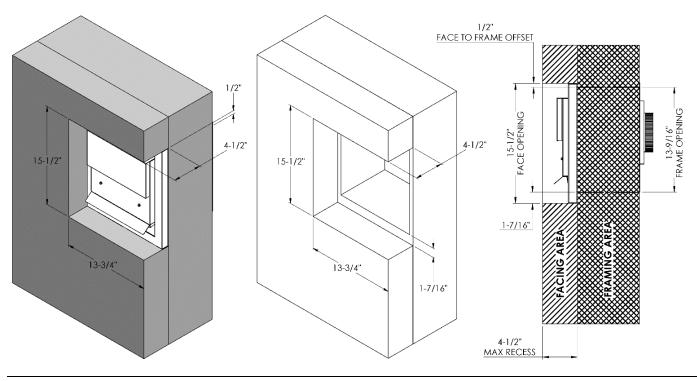


Figure 9 - Installation for recessed application showing maximum allowable depth.

#### **PVH58FM FRONT COVER AND TRIM REMOVAL**

#### CAUTION: Ensure the Power Vent unit is DISCONNECTED FROM ALL ELECTRICAL POWER SOURCE BEFORE PROCEEDING.

#### **Cover Removal**

To gain access to internal components, the Front Cover of the PVH58FM unit can be removed. To do this, simply:

- 1) Unfasten the two screws at the front of the unit,
- 2) Lift cover UPWARDS to dislodge the Upper Rear Tabs from mount slots,
- 3) And pull the cover out.

Installation is the reverse of the above steps. NOTE: Re-seal with silicone or foam to maintain weatherproof if necessary.

#### **Trim Removal**

To remove the whole PVH58FM Power Vent unit, the Trim must be removed to gain access to mounting screws. To do this, simply:

- 1) Remove Cover,
- 2) Unfasten the four screws holding the trim in place,
- 3) And pull the Trim out.

Installation is the reverse of the above steps. NOTE: Re-seal with silicone or foam to maintain weatherproof if necessary.

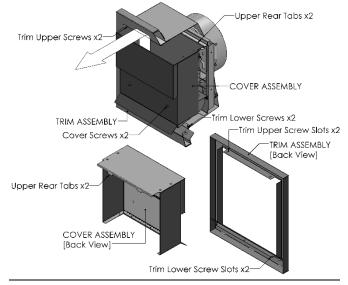


Figure 10 - Cover and Trim screw locations.

#### **PVH20H Main Wiring Harness Extension**

The PVH58 / PVH58FM Power Vent is supplied with a 20ft [6m] wiring harness. This harness can be used on both the main Power Vent assembly and the Double Pole Switch assembly. Should more length be required, additional Harness Extensions can be ordered (PVH20H) and daisy-chained together.

If extensions are used, ensure that the junction nodes are housed in a Junction Box with proper strain reliefs installed.

NOTE: Wire harness can be routed through the Wall Thimble as shown in the, Power Vent Mounting section.



Figure 11 - The PVH58 / PVH58FM comes supplied with a 20ft wiring harness. If required, more harnesses can be ordered (PVH20H). Route wiring harness through Wall Thimble as shown in Power Vent Mounting section on page 7.



Figure 12 - Strain relief: If extension harnesses are used, connect them using a junction box, as shown. This will provide strain relief and ensure that the connection does not come apart.

## 58PVH-P124 DOUBLE POLE SWITCH (MILLIVOLT SYSTEMS ONLY)



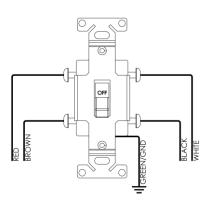


Figure 13 - 10ft Double Pole Switch Wiring Harness for Millivolt systems. Harness is connected to Double Pole Switch as shown. A 20ft extension harness can be ordered (PVH20H).

#### LOCATE YOUR APPLIANCE IN THE POWER VENT CONTROL MODULE INSTALLATION SECTION.

## **PVH58FM MILLIVOLT SYSTEM CONNECTIONS**

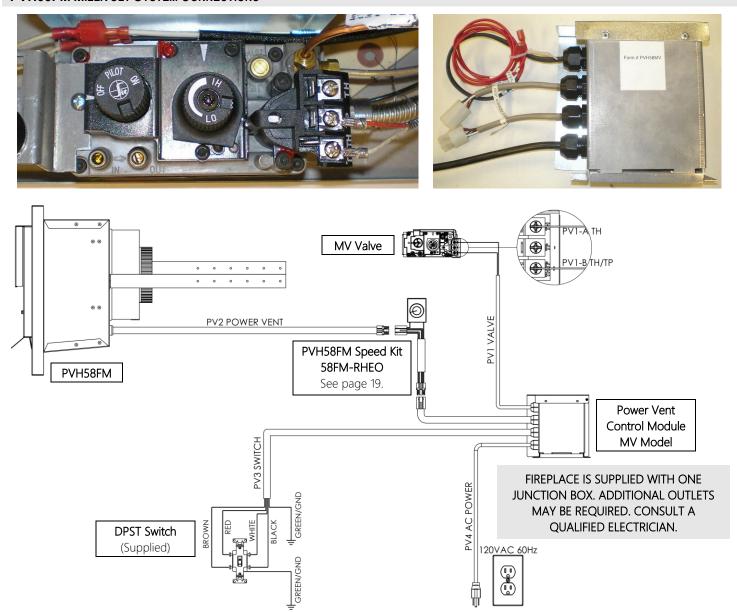


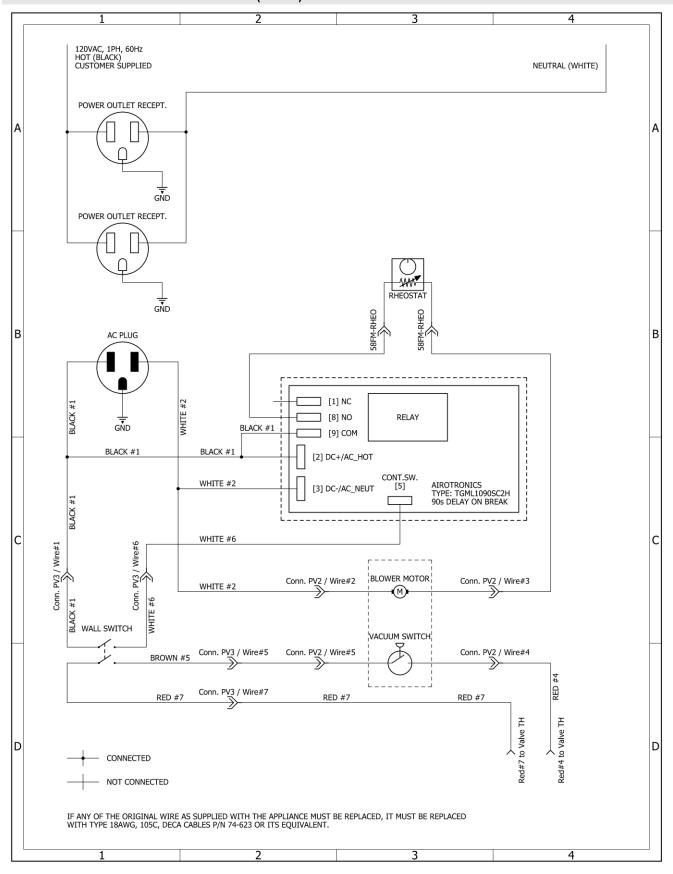
Figure 14 - Connecting Power Vent to a Millivolt system.

#### Items to note:

- 1. Thermostats and Remote Controls are NOT AVAILABLE for Millivolt systems.
- 2. Switch must be ON and Power Vent blower MUST BE RUNNING for appliance to operate.

IMPORTANT: For models equipped with Millivolt / Standing Pilot Ignition, DOWNWARD VERTICAL VENT RUNS ARE NOT PERMITTED.

## PVH58FM POWER VENT CONTROL MODULE (PVCM) SCHEMATICS - MILLIVOLT



## PVH58FM INTERMITTENT PILOT IGNITION (IPI) SYSTEM CONNECTIONS (BASIC)

#### **Recommended Method of Connection**

First ensure the entire IPI system is working properly with connecting any Power Vent components. Then connect the Power Vent Control Module as shown in the diagram below.

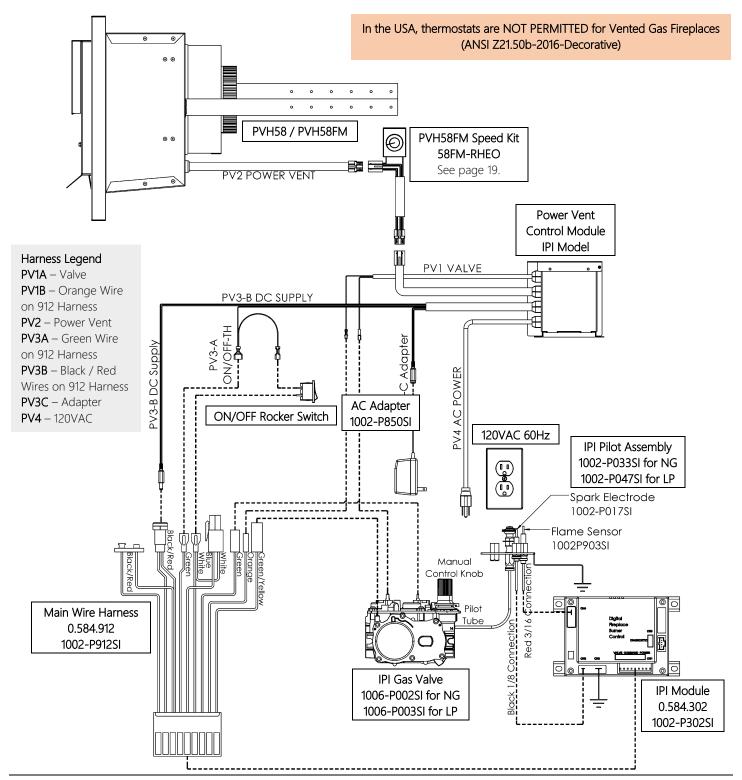


Figure 15 - Power Vent connection to basic IPI system.

#### PVH58FM OPERATING THE RECEIVER WITHOUT BATTERIES FOR EGT / EGTM REMOTE CONTROLS

The Remote Receiver and IPI system can be powered by the AC Adapter. This is advantageous if you do not want to use batteries. Simply connect the AC Adapter into the Remote-Control Wiring Harness (1002-P906si) as shown in the diagram below.

#### **Recommended Method of Connection**

First ensure the entire IPI system is working properly with connecting any Power Vent components. Then connect the Power Vent Control Module as shown in the diagram below.

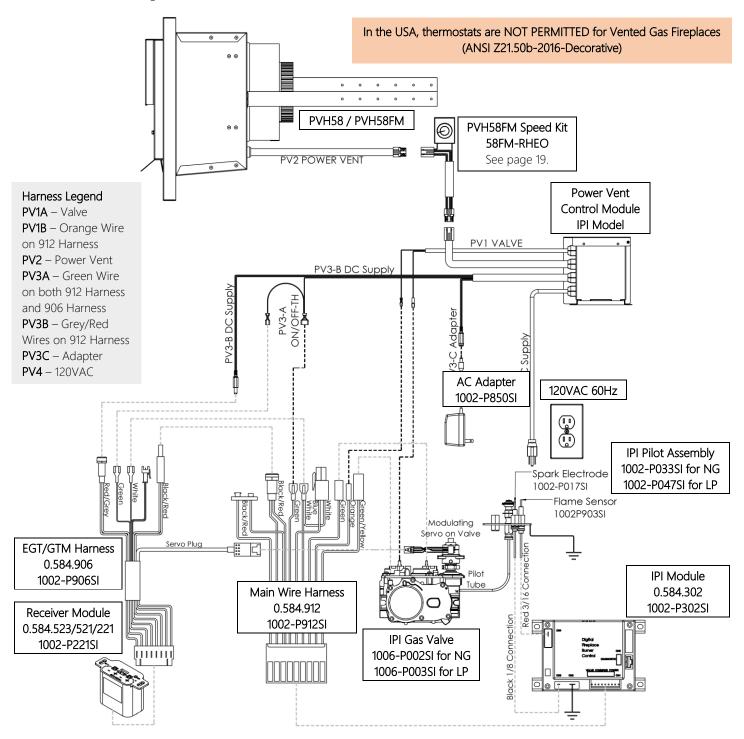


Figure 16 - Power Vent connection to IPI system with Remote Control module.

### PVH58FM Intermittent Pilot Ignition (IPI) System Connections (with Accessories)

#### **Recommended Method of Connection**

First ensure the entire IPI system is working properly with connecting any Power Vent components. Then connect the Power Vent Control Module as shown in the diagram below.

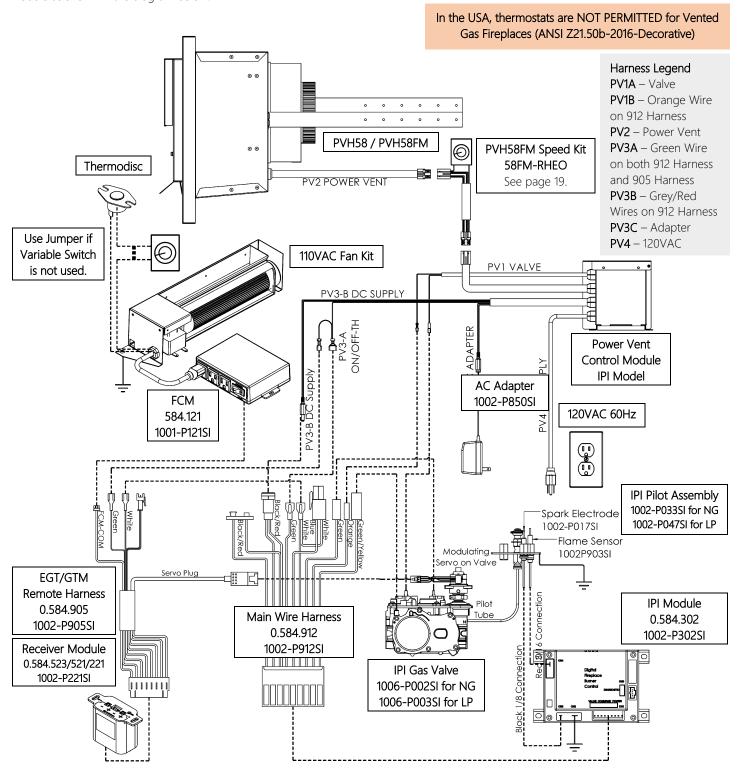
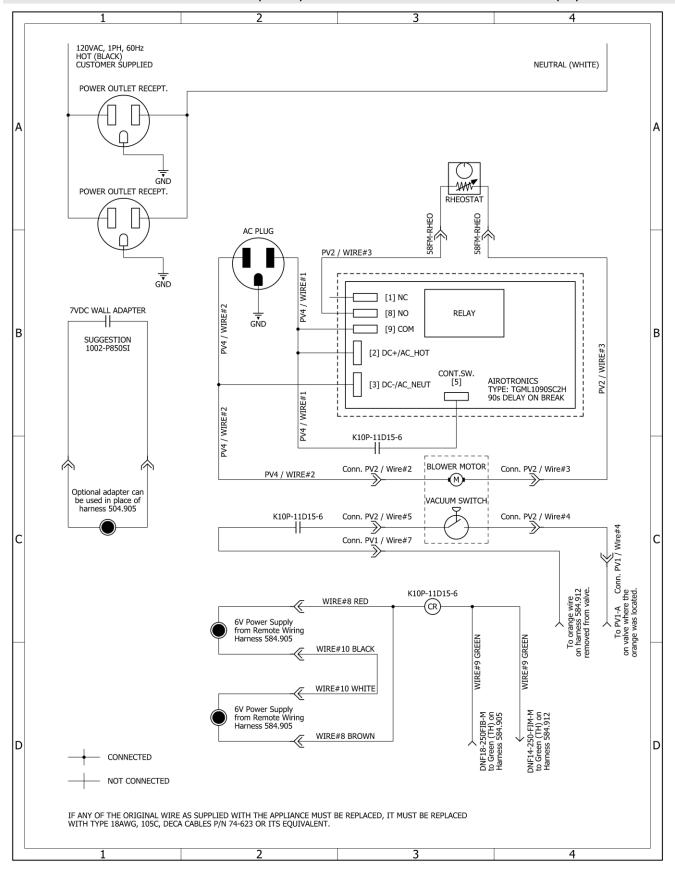


Figure 17 - Power Vent connection to IPI system with Remote Control module and sample Fan Kit.

## PVH58FM Power Vent Control Module (PVCM) Schematics - Intermittent Pilot Ignition (IPI)



## PVH58FM PROFLAME 2 (PF2) SYSTEM CONNECTIONS (WITH ACCESSORIES)

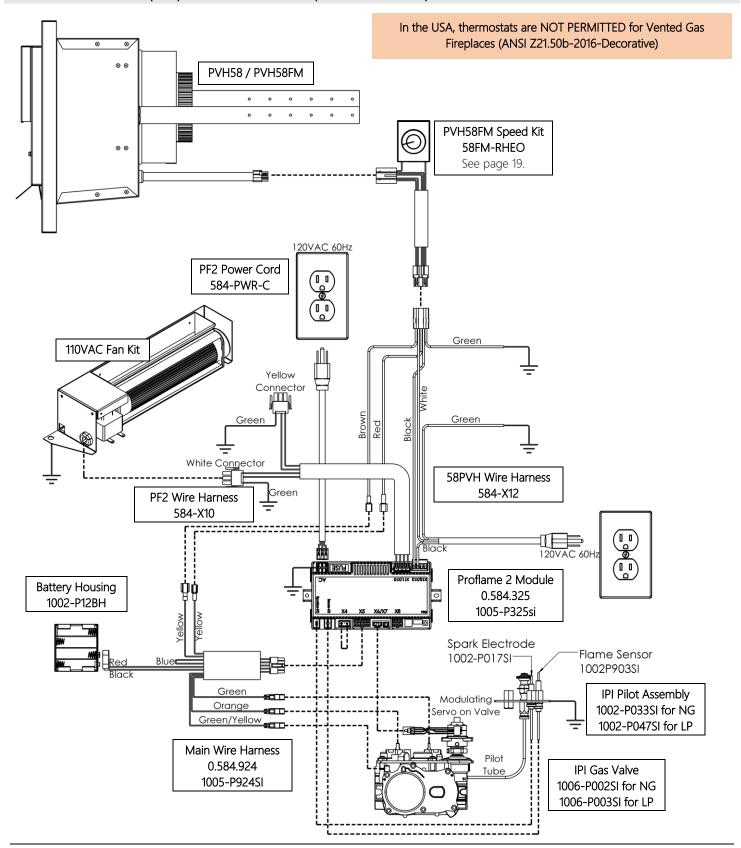


Figure 18 - Power Vent connection to Proflame 2 system with sample Fan Kit.

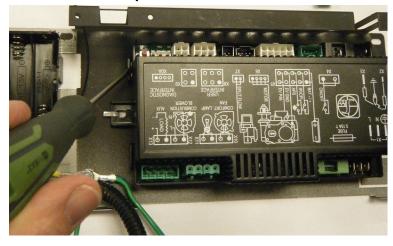
## PVH58FM PROFLAME 2 (PF2) POWER VENT PREPARATIONS

NOTE: PVC58IPI Power Vent Control module is NOT REQUIRED for Proflame 2 systems.

Prior to making connections, two items in the Proflame 2 system must be slightly modified for it to operate in Power Vent configuration:

- 1. Remove INTERNAL JUMPER
- 2. Cut and crimp connectors to the APS wire

#### **Remove Internal Jumper**



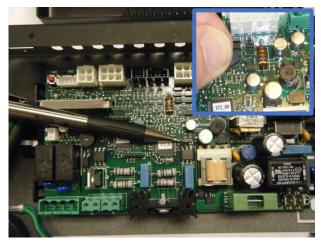


Figure 19 - Remove cover from Proflame 2 module to expose the internal circuit board.

Figure 20 - Locate and remove JUMPER by pulling on it to create an open circuit. Once complete, restore module cover.

#### **Cut and Crimp APS Wire**

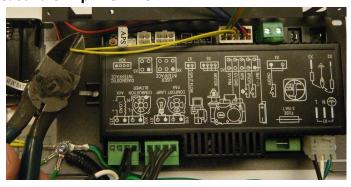
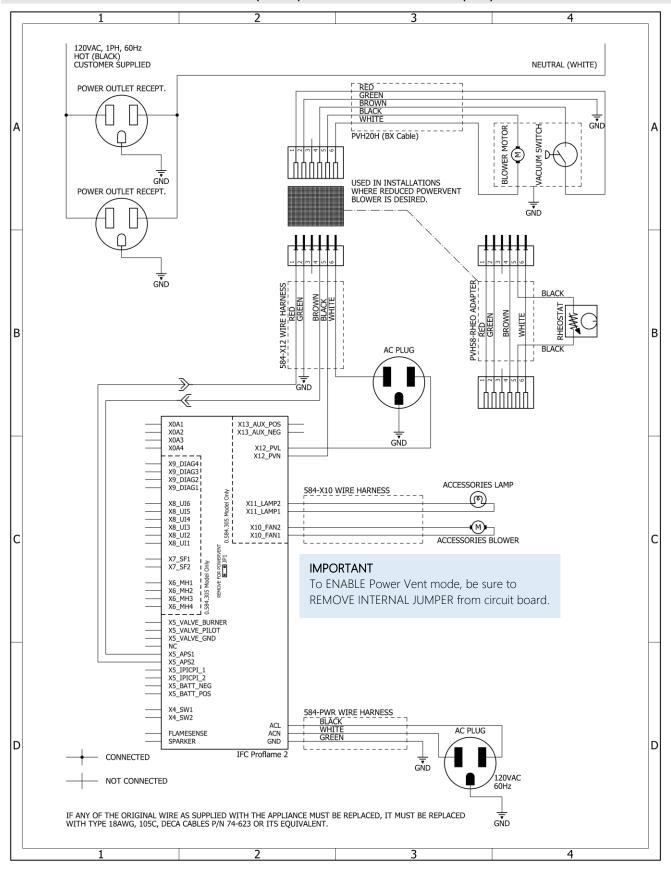


Figure 21 - Locate the yellow APS wire on the 1005-P924SI harness. Cut and strip the wire as shown.



Figure 22 - Crimp on the supplied male and female Quick Disconnect connectors. Connect the two [2] yellow APS lines to the vacuum switch lines (Red and Brown) of the 584-X12 harness. NOTE: Polarity is not important. Refer to Figure 18 for line reference.

## PVH58FM Power Vent Control Module (PVCM) Schematics - Proflame 2 (PF2)



#### **PVH58FM Power Vent Air Flow Adjustment**

The PVH58FM is shipped with Variable Speed Switch to adjust discharge air flow rate based on specific venting configuration. Once the fireplace appliance has been completely installed and setup, the flame characteristics can be adjusted to achieve optimum performance and aesthetics.

#### **Lazy Sooty Flame**

If the flame pattern is too slow and lazy, sooting may occur and therefore requiring more airflow. To accomplish this, simply turn the Variable Speed Switch to the next higher level.

#### Flame too Fast

If the flame pattern is running too fast, less airflow is permissible by turning the Variable Speed Switch to a lower setting.

#### **Wind Gusts**

Strong wind gusts can cause the exhaust gas to reverse flow or stagnate leading to the fireplace appliance shutting down. This is normal. The shutdown is part of the ventilation safety feature of the Power Vent system. If the fireplace appliance shuts down due to excessive wind condition, simply turn the Variable Speed Switch to the next higher level. Continue to increase the exhaust flow rate until the fireplace operation is normal.

#### **Dialing Discharge Flowrate Intensity**

To reduce the exhaust flow rate simply turn the control knob clockwise to the next designated number. Please allow time for the venting flow to equalize before making another adjustment. This should take approximately 30s. Longer vent runs may require a longer wait time.

To increase the flow intensity, turn the control knob counter-clockwise to the next designated number. IMPORTANT: NEVER SET THE CONTROL KNOB TO THE OFF POSITION.

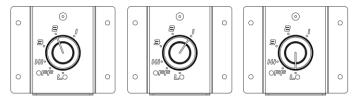


Figure 23 - Dial flow intensity settings.

#### WARNING

DO NOT RUN THE POWER VENT VARIABLE SWITCH IN THE OFF POSITION. Take appropriate provisions to ensure that the Variable Speed Switch is NEVER SWITCHED OFF.

# Discharge Air Flow Check (For Diagnostics Purpose Only)

The PVH58/PVH58FM Power Vents are equipped with a pitot tube on the blower housing used to sample flowrate at discharge. This pitot tube can be used to diagnose venting related issues. To access the pitot tube, disconnect all electrical power and remove cover from the Power Vent unit. Disconnect the silicone tube from the blower housing and replace with manometer's tube. Reinstall the Power Vent cover and run the unit as normal. Observe the reading. NOTE: Manometer tube may be routed through intake slot. To prevent electrical shock, POWER VENT COVER MUST BE IN PLACE BEFORE OPERATING. To restore the Power Vent, reverse the dismantling process.

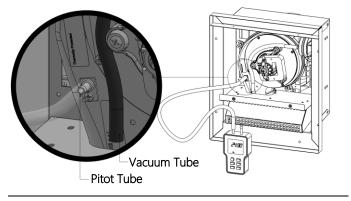


Figure 24 – Pitot manometer measurement connection.

The manometer reading should be a minimum value of 0.1" W.C. [24.9Pa]. If the static pressure is registering lower:

- 1. Increase the Flowrate Intensity by adjusting the Variable Speed Control and/or check for obstructions in the vent pipe if your fireplace appliance is equipped with the PVH58FM Power Vent.
- 2. Open restrictor and/or check for obstructions in the vent pipe if your fireplace appliance is equipped with the PVH58 Power Vent.

#### **PVH58FM TROUBLESHOOTING**

NOTE: Before connecting Power Vent Control Module, ensure that all other systems and accessories (Remote Control, Fan, Lights, etc.) are connected and working properly.

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Power Vent Blower will not come on.	No power is supplied to module.	Plug PVCM into 120VAC source.
	Wires are unplugged.	Check connections.
Power Vent Blower runs constantly.	Wiring connected improperly	Check connections with wiring diagram. For IPI, ensure that wire PV3-A is plugged into the green wire on the 912 or 905 harness, and not the white.
Main Burner will not come on.	Vacuum switch is not closed.	Check / replace vacuum hose. Check / replace vacuum switch.
Main Burner Flame is lazy, and sooting is occurring.	Air Intake Requires Adjustment	See PVH58FM Power Vent Air Flow Adjustment section.
	Leaking Exhaust Vent	Check Installation
Main Burner Flame is running very fast.	Air Intake Requires Adjustment	See PVH58FM Power Vent Air Flow Adjustment section.

## **A** WARNING

BEFORE DOING ANY GAS CONTROL SERVICE WORK, REMOVE THE GLASS FRONT. BEFORE TROUBLESHOOTING THE GAS CONTROL SYSTEM, BE SURE EXTERNAL GAS SHUT-OFF IS IN THE "ON" POSITION.

## **A** WARNING

ALWAYS LIGHT THE PILOT (WHETHER FOR THE FIRST TIME OR IF THE GAS SUPPLY HAS RUN OUT) WITH THE GLASS DOOR OPENED OR REMOVED. PURGE SHOULD BE PERFORMED BY A QUALIFIED SERVICE TECHNICIAN. ENSURE THAT A CONTINUOUS GAS FLOW IS AT THE BURNER BEFORE CLOSING THE DOOR. ENSURE ADEQUATE VENTILATION.

<b>▲</b> WARNING	<b>▲</b> WARNING	<b>▲</b> WARNING
A qualified electrician must connect electrical	Electrical Grounding Instructions – This	Label all wires prior to disconnection when
wiring to junction outlet for built-in installation.	appliance is equipped with a three-pronged (grounding) plug for your protection against shock hazard and should be plugged	servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation and servicing.
FOLLOW ALL CODES	directly into a properly grounded three- prong receptacle.	
CALITION, ELECTRICAL INICTALLATION TO BE DONE BY A QUALIFIED INICTALLED ALL WIDECAMICS BE CONNECTED AND CROUNIDED IN		

CAUTION: ELECTRICAL INSTALLATION TO BE DONE BY A QUALIFIED INSTALLER. ALL WIRES MUST BE CONNECTED AND GROUNDED IN ACCORDANCE WITH CSA STANDARD C22.1 – CANADIAN ELECTRICAL CODE PART 1 OR WITH THE NATIONAL ELECTRICAL CODE, ANSI/NFPA 70 (LATEST EDITION) AND/OR IN ACCORDANCE WITH LOCAL CODES.

#### **PVH58FM PARTS LIST**

PART NO. **DESCRIPTION** 4/7 VENTING AND VENTING ADAPTERS For fireplaces to be converted to hard pipe (DuraVent-DirectVent Pro, etc.) at the fireplace: **ZDVDKA** DuraVent Fireplace Adapter (ZRB46 Only) **ZDVDFA** DuraVent Fireplace Adapter **ZDVDIA** DuraVent Pipe Increaser (Adapts 4/6-5/8" venting to 5/8") For Power Vent installations where flex pipe will be used up to the Power Vent unit: Z47PVA Pipe Reducer 8"Sm - 7"Sm, Pipe Reducer 5"Sm - 4"Sm (Adapts PVH58 to accept 4/7" Flex Pipe \* One 12" section of hard pipe must be connected directly to the Power Vent before any adapters are connected. Order the appropriate lengths of venting (see below). ZDVFK5 Flex Kit (4" & 7" Dia.) x 2.5' (Unexpanded) 5' Expanded ZDVFK8 Flex Kit (4" & 7" Dia.) x 4' (Unexpanded) 8' Expanded ZDVFK20 Flex Kit (4" & 7" Dia.) x 10' (Unexpanded) 20' Expanded \*Kits are complete with spring stand-offs & silicone. ZDV4FC Flex Connector 4" Diameter ZDV7FC Flex Connector 7" Diameter Spring - Standoff Spacer for Inner Pipe ZDV4SS 5/7 VENTING AND VENTING ADAPTERS For fireplaces to be converted to hard pipe (Simpson DuraVent, etc.) at the fireplace: Z57DFA Hard Pipe Adapter (Adapts MQZDV3927, MQRB4436 & MQRB5143 to accept Hard Pipe at Fireplace) For Power Vent installations where flex pipe will be used up to the Power Vent unit: Z57PVA\* Pipe Reducer 8"Sm - 7"Sm, ZDV5FC (Adapts PVH58FM to accept 5/7" Flex Pipe) \* One 12" section of hard pipe must be connected directly to the Power Vent before any adapters are connected. Order the appropriate lengths of venting (see below). Z57FK5 Flex Kit (5" & 7" Dia.) x 5' Expanded (c/w Springs, Screws, Mill Pac) Z57FK8 Flex Kit (5" & 7" Dia.) x 8' Expanded (c/w Springs, Screws, Mill Pac) Z57FK20 Flex Kit (5" & 7" Dia.) x 20' Expanded (c/w Springs, Screws, Mill Pac) ZDV5FC Flex Connector 5" Diameter Flex Connector 7" Diameter ZDV7FC ZDV5FCL Flex Clamp 5" ZDV7FCL Flex Clamp 7" ZDV5SS Spring - Standoff Spacer for Inner Pipe 5/8 VENTING AND VENTING ADAPTERS For fireplaces to be converted to hard pipe (M&G-DuraVent-DirectVent Pro, etc.) at the fireplace: ZD58DFA M&G-DuraVent Fireplace Adapter For Power Vent installations where flex pipe will be used up to the Power Vent unit: Z58PVA Flex Connector Set- ZDV5FC (5" Flex Connector), ZDV8FC (8" Flex Connector) \* One 12" section of hard pipe must be connected directly to the Power Vent before any adapters are connected. Order the appropriate lengths of venting (see below). Flex Kit (5" & 8" Dia.) x 2.5' (Unexpanded) 5' Expanded Z58FK5 Z58FK8 Flex Kit (5" & 8" Dia.) x 4' (Unexpanded) 8' Expanded Flex Kit (5" & 8" Dia.) x 10' (Unexpanded) 20' Expanded Z58FK20 \*Kits are complete with spring stand-offs & silicone. ZDV5FC Flex Connector 5" Diameter ZDV8FC Flex Connector 8" Diameter ZDV5SS Spring - Standoff Spacer for Inner Pipe

#### 7/10 VENTING AND VENTING ADAPTERS

For fireplaces to be converted to hard pipe (Simpson DuraVent, etc.) at the fireplace:

Pipe Reducer 10"Lg – 8"Sm, Pipe Reducer 7"Lg – 5"Sm, 2-1/4" x 10" Riser Collar

(Adapts MQZDV4634 & MQRB6961 to accept Hard Pipe at Fireplace)

For Power Vent installations where flex pipe will be used up to the Power Vent unit:

Z69PVA\* Pipe Reducer 10"Sm- 8"Sm, Pipe Reducer 7"Sm - 5"Sm

(Adapts PVH58 to accept 7/10" Flex Pipe)

\* One 12" section of hard pipe must be connected directly to the Power Vent before any adapters are connected.

Order the appropriate lengths of venting (see below).

Z710FK5 Flex Kit (7/10"x5' Expanded: Springs, Screws, Mill-Pac)
Z710FK8 Flex Kit (7/10"x8' Expanded: Springs, Screws, Mill-Pac)
Z710FK20 Flex Kit (7/10"x20' Exp.: Springs, Screws, Mill-Pac)

ZDV7FC Flex Connector 7" Diameter
ZDV10FC Flex Connector 10" Diameter
ZDV7FCL Flex Clamp 7" Diameter
ZDV10FCL Flex Clamp 10" Diameter

Z69DFA

ZDV7SS Spring – Standoff Spacer for Inner Pipe

#### **PVH58FM TERMINATION COMPONENT PARTS**

58FM-RHEO Power Vent Variable Speed Control
58FM-HR Power Vent Speed Control Wire Harness
58PVH-230S Blower Motor and Housing Assembly
58PVH-230F Blower Motor and Housing Assembly
58PVHFM-025 Blower Housing Gasket

58PVH-P9372 Vacuum Switch

58PVH-P119 PVHFM 11" Silicone Tubing for Vacuum Switch

58PVH-P3211 3/4" K.O. Bushing

58PVH-WTFM PVHFM Wall Thimble Assembly

PVH20H Main Wiring Harness Assembly – Extension Harness (20ft)

#### PVC58MV Power Vent Control Module – Millivolt Box

58PVH-P124 Double Pole Switch 58PVH-P421 Timer Switch

#### PVC58IPI Power Vent Control Module - IPI Box

58PVH-P421 Timer Switch 58PVH-P156 Relay 58PVH-P487 Relay Socket

#### IPI System 2 (Module Box not required)

584-X12 Wiring Harness (required for using PVH58 Power Vent with units equipped with IPI System 2.)





#### LIMITED LIFETIME WARRANTY

This Limited Lifetime Warranty applies only while the unit remains at the site of the original installation and only if the unit is installed inside the continental United States, Alaska, Hawaii, and Canada. The warranty applies only if the unit is installed and operated in accordance with the printed instructions and in compliance with applicable installation and building codes and good trade practices.

#### **BASIC ONE YEAR WARRANTY**

During the first year after installation, we will provide a replacement for any component part of your unit found to be defective in materials or workmanship, including labour costs. Repair work requires prior approval by Kingsman, labour costs are based on a predetermined rate schedule and any repair work must be done through an authorized Kingsman dealer.

#### LIMITED LIFETIME WARRANTY

The heat exchanger, combustion chamber and burner of every Kingsman product excluding the Outdoor Firepit are warranted against materials or workmanship during the period the product is owned by the original owner. The part to be replaced must be returned to our distributor in exchange for the replacement part. Any labor, material, freight and/or handling charges associated with any repair or replacement pursuant to this Limited Lifetime Warranty will not be covered by this warranty.

#### **GENERAL TERMS**

In lieu of providing a replacement part, we may, at our option, provide the distributor's component purchase price from us or a credit equal to the distributors component purchase price from us toward the purchase of any new unit which we distribute. If a credit is given in lieu of a replacement part, the rating plate from the unit being replaced must be submitted on a warranty claim, and the unit being replaced must be made available to our distributor for disposition.

In establishing the date of installation for any purpose, including determination of the starting date for the term of this Limited Lifetime Warranty, reasonable proof of the original installation date must be presented\*, otherwise the effective date will be based upon the date of manufacture plus thirty (30) days.

We will not be responsible for and you, the user, will pay for: (a) damages caused by accident, abuse, negligence, misuse, riot, fire, flood, or Acts of God (b) damages caused by operating the unit where there is a corrosive atmosphere containing chlorine, fluorine, or any other damaging chemicals (other than in a normal residential environment) (c) damages caused by any unauthorized alteration or repair of the unit affecting its stability or performance (d) damages caused by improper matching or application of the unit or the unit's components (e) damages caused by failing to provide proper maintenance and service to the unit (f) any expenses incurred for erecting, disconnecting or dismantling the unit (g) parts or supplies used in connection with service or maintenance (h) damage repairs, inoperation or inefficiency resulting from faulty installation or application (i) electricity or fuel costs or any increase in electricity or fuel cost whatsoever including additional or unusual use of supplemental electric heat.

We shall not be liable for any incidental, consequential, or special damages or expenses in connection with any use or failure of this unit. We have not made and do not make any representation or warranty of fitness for a particular use or purpose, and there is no implied condition of fitness for a particular use or purpose. We make no express warranties except as stated in this Limited Lifetime Warranty. No one is authorized to change this Limited Lifetime Warranty or to create for us any other obligation or liability in connections with this unit. Any implied warranties shall last for one year after the original installation. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages or do not allow limitations on how long an implied warranty or condition lasts, so the above limitations or exclusions may not apply to you. The provisions of this limited warranty are in additions to and not a modification of or subtraction from any statutory warranties and other rights and remedies provided by law.

Save this certificate. It gives you specific legal rights, and you may also have other rights which may vary from state to state and province to province.

In the event your unit needs servicing, contact your dealer or contractor who installed or serviced your unit. When requesting service, please have the model and serial number from each unit readily available. If your dealer needs assistance, the distributor is available for support and we, in turn support the distributor's efforts.

Fill in the installation date and model and serial numbers of the unit in the space provided below and retain this limited warranty for your files.

Model No. Serial No. Date Installed

Dealer or Contractor Name:

\*To receive advantage of your warranty, you must retain the original records that can establish the installation date of your unit.