PVHFL58-300 & PVHFL510-300

5/8 and 5/10 Horizontal Flush Louvered 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 death.

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

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

**NOTICE**
PVHFL58-300 power vent is approved for use with Montigo R320, R320-ST, R420, R420-ST, and R520.

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

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

**NOTICE**
This power vent is approved for use with Montigo fireplaces only and is certified to ANSI Z21.50 / CSA 2.22 vented gas fireplace standard along with the fireplace.

**NOTICE**
PVHFL510-300 power vent is approved for use with Montigo R520, R520-ST, R620-ST, R720, and R820.

**WARNING**
Some materials used in the manufacturing process of this product can expose you to Benzene which is known in the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65warnings.ca.gov.
Introduction

Specifications
Pipe Dimensions PVHFL58-300 ............ 5"/8"
Pipe Dimensions PVHFL510-300 ............ 5"/10"
Maximum Airflow: ........................... 300 CFM
Speed: ......................................... 2700 RPM
Power: .......................................... Connect to fireplace control box
............................................... Refer to fireplace rating plate

Before Your Begin

General Information
This installation guide covers installation of the External Power Vent System only. This system is designed to allow installation of gas fireplaces that cannot be done with a standard Direct Vent gas fireplace installation. Only for use on R-Series, R-Series See-Through and RP-Series.

ONLY USE WITH APPROVED FIREPLACES - see fireplace installation manual.

Read through the fireplace's installation & maintenance manual, as it must also be adhered to.

Power Cord Harnesses:
EPVH10 - 10 foot power cord and harness
EPVH20 - 20 foot power cord and harness
EPVH30 - 30 foot power cord and harness
EPVH40 - 40 foot power cord and harness
EPVH50 - 50 foot power cord and harness
EPVH60 - 60 foot power cord and harness
EPVH70 - 70 foot power cord and harness
EPVH80 - 80 foot power cord and harness
EPVH90 - 90 foot power cord and harness
EPVH100 - 100 foot power cord and harness

For vent configurations and power vent locations, refer to fireplace manual.
Introduction

Product Dimensions

**Figure 1.** PVHFL58-300 (Tolerance ± ¼") [mm]
Installation

Installing the power vent

Step 1: Unpack power vent from box. Remove two screws from bottom of the door. Hold louver assembly securely so it does not fall.

Step 2: Remove the louver assembly by lifting the bottom end forward and then dropping the door out of the top latches.

Step 3: To remove the inner can from the outer can remove the 8 screws on the back of the termination.

Figure 2. Framing dimensions

Figure 3.
**Step 4:** Slide the inner can out by pulling Figure 3c.

**Step 5:** Screw outer can assembly into the wall

**Step 6:** Slide the inner can assembly into the outer can assembly from the inside of the house.

**Step 7:** Screw inner can back to outer can using 8 screws.

---

**Figure 3c.**

**Figure 3d.**

**Figure 3e.**

**Figure 3f.**
**Installation**

**Step 8:** Remove two screws securing electrical plate.

**Step 9:** Remove the power vent power cable from inside the electrical channel.

**Step 10:** Take the electrical harness [EPVH-10-100] that will communicate with the power vent and attach the strain relief for it to the electrical plate. Tighten the nut on the strain relief.

**Step 11:** Attach the power cable from the power vent to the control cable.

**Step 12:** Push all the excess cable back into the electrical channel of the power vent. Screw the electrical plate back on the power vent.
Step 13: Reinstall the door.

Step 14: Connect vent pipe to power vent collar as required.

Note: If you are intending to service power vent from inside the house, use a 4-foot flex pipe to allow for easy removal of pipe from power vent.

**Wiring Installation**

**Conduit & Wiring clearances**

Connect the power vent harness as outlined. Connect the wiring to the fireplace as outlined in the schematic shown in figure 4a. Ensure that the proper clearances are maintained for the wiring and conduit. When installing the wiring it must never run above the vent run and it must be at least 1" clear of all venting.

Figure 4. Conduit and Wiring
Power Vent Wiring

6 PIN MOLEX CONNECTOR

Figure 4a.
**A** = Clearance above grade, veranda, porch, deck, or balcony  
Canadian Installations  
12 in (30 cm)  
US Installations  
12 in (30 cm)

**B** = Clearance to window or door that may be opened  
Canadian Installations  
6 in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), 12 in (30 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 100,000 Btuh (30 kW), 36 in (91 cm) for appliances > 100,000 Btuh (30 kW)

**B** = Clearance to permanently closed window  
Canadian Installations  
6 in (15 cm)  
US Installations  
6 in (15 cm)

**C** = Clearance to permanently closed window  
Canadian Installations  
15 in (38 cm)  
US Installations  
15 in (38 cm)

**D** = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (61 cm) from the center line of the terminal  
See Fireplace Installation Guide

**E** = Clearance to unventilated soffit  
See Fireplace Installation Guide

**F** = Clearance to outside corner  
6 in (15 cm)  
6 in (15 cm)

**G** = Clearance to inside corner  
See Fireplace Installation Guide

**H** = Clearance to each side of center line extended above meter/regulator assembly  
3 ft (91 cm) within a height 15 ft (4.5 m) above the meter/regulator assembly

**I** = Clearance to service regulator vent outlet  
3 ft (91 cm)

**J** = Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance  
Canadian Installations  
6 in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), 12 in (30 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 100,000 Btuh (30 kW), 36 in (91 cm) for appliances > 100,000 Btuh (30 kW)

**K** = Clearance to a mechanical air supply inlet  
Canadian Installations  
6 ft (1.83 m)  
US Installations  
3 ft (91 cm) above if within 10 ft (3 m) horizontally

**L** = Clearance above paved sidewalk or paved driveway located on public property  
7 ft (2.13 m)  
*For clearances not specified in ANSI Z223.1/NFPA or CSA B149.1, one of the following shall be indicated:

- A minimum clearance value determined by testing in accordance with section 2.23.5, or;
- A reference to the following footnote:
- "Clearance in accordance with local installation codes and the requirements of the gas supplier"

**M** = Clearance under veranda porch, deck, or balcony  
12 in (30 cm)  
*In accordance with the current CSA B149.1, Natural Gas and Propane Installation Code

*In accordance with the current ANSI Z223.1/NFPA 54, National Fuel Gas Code

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, deck, or balcony is fully open on a minimum of two sides beneath the floor.

For clearances not specified in ANSI Z223.1/NFPA or CSA B149.1, one of the following shall be indicated:

a) A minimum clearance value determined by testing in accordance with section 2.23.5, or;

b) A reference to the following footnote:

*See Fireplace Installation Guide

Figure 4b.
Servicing

From the outside of the house

Step 1: Turn off gas and power.
Step 2: Remove two screws from the bottom of the louver assembly.
Caution: Hold the louver assembly securely so it does not fall.

Figure 5.

Step 3: Remove the louver assembly by lifting the bottom end forward and then dropping the door out of the top latches.

Figure 5a.

Step 4: Remove the three screws securing the rain guard.

Figure 5b.

Go to Capacitor or Motor and Capacitor Replacement Section.
Service

Reinstalling from the outside

**Step 1:** Reinstall the rain guard using the supplied 3 screws.

![Image](image1)

**Step 2:** Reinstall door with supplied 2 screws.

![Image](image2)

---

**Figure 6.**

**Figure 6a.**
Service

Servicing
From the inside of the house

Step 1: Turn off gas and power.
Step 2: Disconnect venting from the power vent.

Step 5: Remove 8 screws securing the inner can assembly to the outer can assembly.

Figure 7.
Step 3: Remove two screws securing the electrical plate.

Figure 7a.
Step 4: Pull electrical plate off the power vent and pull the molex connection out of the electrical channel. Disconnect the molex.

Figure 7b.
Step 6: Slide the inner can out by pulling. Place the inner can assembly somewhere to work.

Figure 7c.
Step 7: Re-assemble the entire termination in the reverse itemized above.

Figure 7d.
Step 7: Remove the three screws securing the rain guard.

Figure 7e.

Go to Capacitor or Motor and Capacitor Replacement Section.
Reinstalling the inner can
From the inside of the house

**Step 1:** Screw the rain guard back on with the supplied 3 screws.

**Step 2:** Slide the inner can into the outer can

**Step 3:** Secure inner can to the outer can with supplied 8 screws.

**Step 4:** Plug control cable back into power vent power cable.

**Step 5:** Stuff excess wire back into electrical channel and secure electrical plate with supplied two screws.

**Step 6:** Reconnect venting to the power vent.

**Step 7:** Check spin and operation of power vent from outside.
Capacitor Replacement

REC 1250  Note: Maintenance must be performed by qualified personnel/electrician

Figure 9.

Step 1: Cut the two zap straps securing the wiring.

Figure 9a.

Step 2: Cut the brown wire from the motor.

Figure 9b.

Step 3: Cut fibre white wire from power cable, black wire from capacitor and black wire from motor.

Figure 9c.

Step 4: Unscrew mounting screw securing capacitor and remove capacitor.

Figure 9d.

Step 5: Strip all wire ends. Secure new capacitor with mounting screw.

Figure 9e.
**Step 6:** Using the large bell connector, connect the black fibre wire from the power cable to the black wire from the motor and the black wire from the capacitor.

![Figure 9f.](image)

**Step 7:** Using the small bell connector, connect the brown wire from the motor to the black wire from the capacitor.

![Figure 9g.](image)

**Step 8:** Secure the wiring neatly with the supplied zap straps. Check that the power vent operates and spins counterclockwise. Note: When replacing from the inside you will need to reinstall the power vent and check spin from the outside. Note: Ensure wires are secured away from moving parts.

![Figure 9h.](image)

Go to reinstalling either from outside or inside.
Motor and Capacitor Replacement

REC 1251 Note: Maintenance must be preformed by qualified personnel/electrician

Figure 10.
Step 1: Cut the two zap straps securing the wiring.

Figure 10a.
Step 2: Cut the brown wire from the motor.

Figure 10b.
Step 3: Cut fibre white wire from power cable, black wire from capacitor and black wire from motor.

Figure 10c.
Step 4: Cut the black fiber wire from the power cable.

Figure 10d.
Step 5: Unscrew mounting screw securing capacitor and remove capacitor.

Figure 10e.
Step 6: Unscrew 8 screws securing the motor mounting plate.

Figure 10f.

Step 7: Remove the motor.

Figure 10g.

Step 8: Install the new motor.

Figure 10h.

Step 9: Secure motor mounting plate with supplied 8 screws & star washers.

Figure 10i.

Step 10: Secure new capacitor with supplied screw.

Figure 10j.

Step 11: Using supplied small bell connector, connect the blue wire from the motor to the black fibre wire from the power cable.

Figure 10k.
Step 12: Using the other supplied large bell connector, connect the white fibre wire from the power cable to the black wire from the capacitor and the black wire from the motor.

Figure 10l.

Step 13: Using the other supplied small bell connector, connect the brown wire from the motor to the black wire of the capacitor.

Figure 10m.

Step 14: Secure the wiring neatly with the supplied zap straps. Check that the power vent operates and spins counterclockwise. NOTE: When replacing from inside you will need to reinstall the power vent and check spin from the outside. Note: Ensure wires are secured away from moving parts

Figure 10n.

Go to reinstalling either from outside or inside.
Appendix B: Warranty

MONTIGO RESIDENTIAL WARRANTY PROGRAM

Canadian Heating Products Inc. and/or Montigo DelRay Corp (collectively referred to herein as “The Companies”), warrants the Montigo gas appliance (referred to herein as ‘the appliance’) to be free from defects in materials and workmanship at the time of manufacture. The gas appliance and related components are further subject to the terms and conditions set forth below.

This warranty covers the following Montigo product series: Distinction, H, I, L, Linear P and PL, R and Mahana

<table>
<thead>
<tr>
<th>Component</th>
<th>Coverage Period</th>
<th>Labor Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firebox, heat exchanger</td>
<td>15 years</td>
<td>1 year</td>
</tr>
<tr>
<td>Main burner</td>
<td>15 years</td>
<td>1 year</td>
</tr>
<tr>
<td>Gas control valve and related control components (pilot assembly, spark electrode flame sensors, thermopile)</td>
<td>1 year</td>
<td>1 year</td>
</tr>
<tr>
<td>Electrical components (internal blowers, ignition control module, wiring, switches, remote control systems, blower control module, accent bulbs)</td>
<td>1 year</td>
<td>1 year</td>
</tr>
<tr>
<td>Firebox media (logset, glass beads, river rocks)</td>
<td>1 year</td>
<td>1 year</td>
</tr>
<tr>
<td>Glass (thermal breakage)</td>
<td>1 year</td>
<td>1 year</td>
</tr>
<tr>
<td>Plated, painted finishes (including interior reflective glass)</td>
<td>1 year</td>
<td>1 year</td>
</tr>
<tr>
<td>Refractory lining</td>
<td>1 year</td>
<td>1 year</td>
</tr>
<tr>
<td>Mesh/Glass safety barriers</td>
<td>1 year</td>
<td>1 year</td>
</tr>
<tr>
<td>Power Vent Control box</td>
<td>1 year</td>
<td>1 year</td>
</tr>
<tr>
<td>Montigo Venting (excluding terminations)</td>
<td>15 years</td>
<td>1 year</td>
</tr>
</tbody>
</table>

If the components of the appliance covered by this warranty are found to be defective within the time frame stated (see The Companies investigation of claims), the companies will, at its option, replace or repair defective components of the appliance manufactured by the company at no charge and will also pay for labor costs (in accordance with schedule) incurred in replacing or repairing components. If repair or replacement is not commercially practical, the companies will, at its sole discretion, provide a current or most like unit, excluding the cost of labor unless the labor is covered by the terms of the warranty.

This warranty covers only parts and labor as provided above. In no case shall the companies be responsible for materials, components or construction. All replacement or repair components will be shipped F.O.B. from the nearest Company factory.

LIMITATION ON LIABILITY

It is agreed and understood that The Companies sole obligation, and purchaser’s exclusive remedy under this warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to repair or replacement as specified above. The opinion of The Companies with respect to these matters shall be final.

In no event shall The Companies be responsible for any incidental or consequential damages caused by (but not limited to) improper installation, installation by an unqualified or unauthorized installer, accident, lack of regular maintenance, user error, abuse, misuse, Acts of God, power surges, floods, natural disasters, force majeure, defects in its appliance whether such damage occurs or is discovered before or after replacement or repair, and whether or not such damage is caused by The Companies negligence. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. The duration of any implied warranty with respect to the appliance is limited to the duration of the foregoing warranty. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation or exclusion may not apply to you.

QUALIFICATIONS TO THE WARRANTY

This Warranty only covers gas appliances installed in the United States or Canada.

To receive the benefits of this warranty, the appliance must be purchased, installed and serviced annually by a dealer authorized by the Companies for the warranty to be valid.

The gas appliance must be installed by a licensed professional in accordance with The Companies’ installation instructions and local building codes. The warranty on the appliance covers only components manufactured by The Companies. The use of components manufactured or supplied by other manufactures and used in conjunction with the appliance could create serious safety hazards, may result in the denial of certification by recognized national safety agencies and could violate local building codes. Such use may untimely void this warranty. This warranty does not cover any damages occurring from the use of any components not manufactured or supplied by The Companies.

The appliance must be subjected to normal use. The appliance is designed to burn natural gas (NG) or liquefied petroleum (LP) only. Burning conventional fireplace fuels such as wood, coal or any other solid fuel will cause damage to the appliance, produce excessive temperatures will result in a fire hazard and void all warranties. This warranty is transferable. The appliance must remain in its original place of installation to be valid.
Appendix B: Warranty Continued

EXCLUSIONS TO WARRANTY
Corrosion or rust of any kind due to a lack of maintenance, inadequate combustion air or improper venting and corrosive chemicals/environments, expansion and contraction of metals or minor movements of components causing noise are not covered by this warranty.

Willful misconduct (i.e. use of the appliance with problems known to the purchaser and causing further damages), including unauthorized or self-performed ‘fixing’ or exploration of the appliance’s internal workings will void the warranty.

Appliances on which the serial number has been altered, defaced, removed or made illegible will void the warranty.

Costs incurred for diagnosis, service work, shipping and handling of defective or replacement parts are not covered under this warranty.

The published warranties are not applicable for any equipment manufactured by The Companies that has been sold direct to the consumer via internet or auction websites. The Companies do not endorse, approve or certify any online sale of its products through auction websites, online retailers or any other method of online sales direct to consumers.

INVESTIGATION OF CLAIMS AGAINST WARRANTY
The Companies reserve the right to investigate any and all claims against this warranty and decide upon method of settlement. The Companies are not responsible for work done without written consent of The Companies. The Companies shall in no event be responsible for any warranty work done without first obtaining the Companies written consent.

The Companies employees and dealers have no authority to make any warranties to neither alter this warranty nor authorize any remedies in addition to or inconsistent with those stated within this warranty.

IF WARRANTY SERVICE IS NEEDED
To make a claim under this warranty, contact your installing dealer or contractor. The installing dealer is responsible for providing service and will contact the companies to initiate warranted parts replacements. In the event the installing dealer is unavailable, contact your nearest authorized Montigo dealer (www.Montigo.com) or contact Montigo direct at techsupport@montigo.com. Ensure you have your sales receipt and the model and serial number of your appliance.

DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF
If you cannot locate the installing dealer, or nearest dealer/distributor, you must notify The Companies in writing.colors, styles and products.
Add a new section 10.10.4.3 as follows:

The area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

(a) For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

1. INSTALLATION OF CARBON MONOXIDE DETECTORS. At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors
   a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.
   b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

2. APPROVED CARBON MONOXIDE DETECTORS. Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

3. SIGNAGE. A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, “GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS”.

4. INSPECTION. The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

(b) EXEMPTIONS: The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:
   1. The equipment listed in Chapter 10 entitled “Equipment Not Required To Be Vented” in the most current edition of NFPA 54 as adopted by the Board; and
   2. Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

(c) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM PROVIDED. When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:
   1. Detailed instructions for the installation of the venting system design or the venting system components; and
   2. A complete parts list for the venting system design or venting system.

(d) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED. When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:
   1. The referenced “special venting system” instructions shall be included with the appliance or equipment installation instructions; and
   2. The “special venting systems” shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

(e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

(3) After NFPA-54 section 10.10.4.2 add a new section 10.10.4.3 as follows:

When more than four gas appliances are to be vented through a common gas vent or common horizontal vent manifold, a plan of the proposed vent installation shall be submitted to the Inspector and the serving gas supplier for review and approval.
PVHFL58-300 & PVHFL510-300
Power Vent Termination