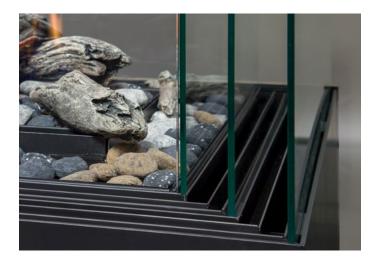
### **Installation & Maintenance Manual**



# the art of **fireplaces**

# Exemplar Pier RP424

INDOOR RESIDENTIAL FIREPLACE







# **A**CAUTION

Installation and service must be performed by a qualified installer, service agency or the gas fitter. Check local codes and read all instructions prior to installation.

#### A WARNING:

FIRE OR EXPLOSION HAZARD Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

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

- WHAT TO DO 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.
- Leave the building immediately.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas fitter.



HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

# NOTICE

**Installer:** Leave this manual with the appliance. Please refer to the Montigo website for the most current version of the fireplaces manual

**Consumer:** Retain this manual for future reference. Please refer to the Montigo website for the most current version of the fireplaces manual

# A 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

# A DANGER

Read and understand this manual. Improper installation, adjustment, alteration, service or maintenance can cause serious injury, property damage or even death. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

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### General

#### Safety Alert Key

# A DANGER

Indicates a hazardous situation which, if not avoided, WILL result in death or serious injury or property damage.



Indicates a hazardous situation which, if not avoided, WILL result in minor or moderate injury.

# WARNING

Indicates a hazardous situation which, if not avoided, COULD result in death or serious injury or property damage.

# NOTICE

Indicates practices that are important, but not related to personal injury.

# Introduction

#### Introduction

Congratulations on your purchase of a Montigo Fireplace.

With over 30 years of experience, Montigo is committed to providing you with a gas fireplace that is not only a beautiful addition to your space, but that is also designed and manufactured to the highest safety, reliability and engineering standards.

We strongly encourage you to read and carefully follow the instructions laid out in this Installation, Operation and Maintenance Manual and retain it for your future reference. Pay special attention to all cautions, warnings, and notices throughout this manual intended to ensure your safety.

This manual covers installation, operation and maintenance. Lighting, operation and care of this fireplace can be easily performed by the homeowner. All installation and service work should be performed by a qualified or licensed installer, plumber or gas fitter as certified by the state, province, region or governing body where the fireplace is being installed.

This installation, operation and maintenance manual is applicable to the models described below. Refer to your rating plate to verify included options.

#### Warranty and Installation Information: (See Appendix B)

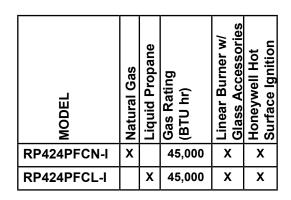
The Montigo warranty will be voided by, and Montigo disclaims any responsibility for, the following actions:

► Modification of the fireplace and/or components including Direct-Vent assembly or glass doors.

► Use of any component part not manufactured or approved by Montigo in combination with this Montigo fireplace system.

► Installation other than as instructed in this manual.

Consult your local Gas Inspection Branch on installation requirements for factory-built gas fireplaces. Installation & repairs should be done by a qualified contractor.



This appliance is equipped for altitudes from 0 - 4500 feet [0 -1370 m]. For higher altitudes contact your Montigo dealer.

# 

Glass doors on gas fireplaces are extremely hot while the fireplace is on and remain hot even after the fireplace has been turned off. Keep children away from the fireplace at all times.



Young children should be carefully supervised when they are in the same room as the applicance. 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 toddles, young children and other at risk individuals out of the room and away from hot surfaces.

#### **Unit Specifications**

4

Model Number	RP424PFCN-I	RP424PFCL-I	
Input Rating	45,000	45,000	
Gas Supply Pressure	7" WC	11" WC	
Manifold Pressure	3.5" WC	10" WC	
Orifice Size (DMS)	3 @ #48	3 @ 1.15 mm	
Pilot Orifice Size (No.)	BCR18	BBR10	
Fireplace Electrical Requirement	115VAC, 60Hz, 5 Amps	115VAC, 60Hz, 5 Amps	
Lighting Electrical Requirement	115VAC, 60Hz, 3 Amps	115VAC, 60Hz, 3 Amps	
Vent Size	5"/8"	5"/8"	
Minimum Vent Length	1' (Rear Vent)	1' (Rear Vent)	
Maximum Vent Length	25'	25'	
Maximum Wall Switch Cable	20' (supplied)	20' (supplied)	
Maximum Power Vent Cable (EPVH)	As ordered	As ordered	
Maximum Control Cable	30' (supplied)	30' (supplied)	
Control Box Power Cord	10"	10"	
PVVEX58-300	2.4 Amps	2.4 Amps	
PVHEX58-300	2.4 Amps	2.4 Amps	
PVHFL58-300	2.4 Amps	2.4 Amps	
Crate Dimensions	74.5" x 40.5" x 66.25"	74.5" x 40.5" x 66.25"	
Crated Weight	877 lbs.	877 lbs.	
Fireplace Weight (excluding glass & media)	436 lbs*	436 lbs*	
Light Bulb Specification	20W, G6.35, 2.5 Amps, Qty 12	20W, G6.35, 2.5 Amps, Qty 12	
Control Box Fuse Specification	5 Amps	5 Amps	
Certification(s)	ANSI Z21.50-2014 / CSA 2.22-2	2014 Vented Gas Fireplaces	
	CGA 2.17-M91 - Gas-Fired Appliances for Use at High Altitudes		

\*The fireplace weight is not evenly distributed. This fireplace is heavier at the rear

### General

#### Section A: Before You Begin

#### **IMPORTANT MESSAGE: SAVE THESE INSTRUCTIONS**

The Exemplar Power Vent fireplaces must be installed in accordance with these Instructions. Carefully read all the instructions in this manual first. Consult the Local Gas Branch to determine the need for a permit prior to starting the installation. It is the responsibility of the installer to ensure this fireplace is installed in compliance with the manufacturers instructions and all applicable codes.

#### **BEFORE YOU START:**

# NOTICE

Installation and repairs should be done by an authorized gas fireplace service technician. The appliance should be inspected before use and at least annually by a professional. 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 fireplace are kept clean.

#### CAUTION <u>/!</u>\

Due to high operating temperatures, this appliance should be located out of traffic & away from furniture and draperies.

Children and adults should be alerted to the hazards of the high surface temperature, which could cause burns or clothing ignition.

Young children should be carefully supervised when they are in the same room as the appliance.

Clothing or other flammable materials should not be placed on or near the appliance.

#### Contents of the Crate:

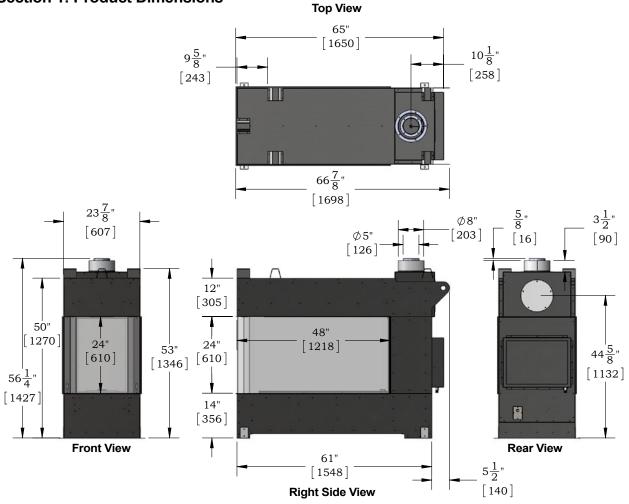
- **RP424PFC Fireplace**
- Control Box
- Chosen Burner Media
- **Glass** Crate
- **Glass Removal Tool**
- Rear Vent Conversion Tube (located inside the control box)
- Installation & Maintenance Manual

#### **Rating Plate Locations:**

- Inside the control box
- Under the burner
- On the rear of the appliance

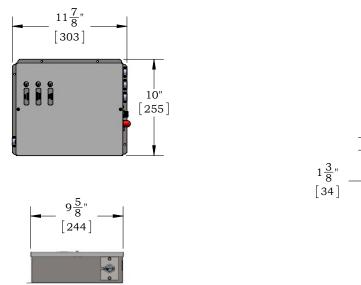
#### Rating label sample: Natural Gas Sample Shown

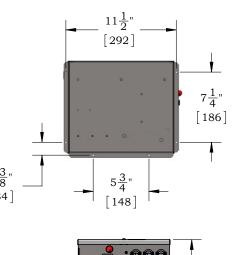
			-		:			Γ
	l ype:	vented Gas Fireplace Not for use with solid fu	replace solid fuel. / I	as pour l'use	vented Gas Fireplace For Indoor Use Not for use with solid fuel. / Pas pour l'usage avec le combustible solide.	*Glearance,t *Degagements	*Glearance, to Gombustibles Aval *Degagements Aux Combustibles	Tek
		Not for use with	air filters. / F	as pour l'usa	Not for use with air filters. / Pas pour l'usage avec des filtres à air.	Sides/Côtés:		N/A
catatus	Model No. Modèle.	RP424PFC-I				Back/Derrière:		<u>"</u> 0
DESIGN	Part No	RP424PFN		Г	1	Top-Top Vent/Du Haut-Évent Du Haut:	/ent Du Haut:	.0
	Serial No.:	2-151021-000000	000		8	Top-Rear Vent/Du Haut-Évent Arrière:	Event Arrière:	0
	Manufacturer / Fabricant:	Canadian Heat	ing Products	Inc., Langley	Canadian Heating Products Inc., Langley BC, 1-800-378-3115	Floor/Plancher:		0"
CATHERD	Tested To / Examiné À:	Niontigo DeliRay Corp., Femdale, WA, 1-800-789-6236 ANSI Z21.50-2014 / CSA 2.22-2014	/ Corp., Fern 014 / CSA 2.:	dale, WA, 1-8 <b>22-2014</b>	200-789-6236	Mantel/Manteau:		0
(	tion É	ectrique: Power Vent 120V / 1Ph / 60Hz /Less than 12A	V / 1Ph / 60	Hz /Less than	12A	Recess Depth/ Profondeur D'Encadrement:		N/A
シ	Altitude Rating / Estimation D'Altitude: N & H (0 - 4500 ft. / 0 - 1371 m).	N & H (0 - 4500	ft. / 0 - 1371	m).		Flue:		0
SU D	Fuel Type / Type De Carburant:	Max. Input	Min. Input	Output /	Orifice Size / Taille D'Orifice	Gas Manifold	Min. Gas Supply	
		Max. Entrée	Min. Entrée	Rendement	Front/Avant Rear/Derrière	Pressure / Pression	Pressure/ Min. Pression	sion
Do Not Remove		BTU/H	BTU/H	BTU/H		D'Admission Du Gaz	D'Alimentation Du Gaz	Gaz
This Label	X N - Natural Gas / Gaz Naturel	45,000	45,000	N/A	3@48dms / N/A	3.5" W.C.	5.5" W.C.	
N'enlevez Pas	LP - Propane / Gaz Propane	45,000	45,000	N/A	3@1.15 MM / N/A	10" W.C.	11" W.C.	
Cette Etiquette	For use only with glass doors certified with appliance	ied with appliar	ice.	*Re	'Refer to installation manual for more information.	nore information.		
	Seulement pour l'usage avec des portes vitrées a certifiées pour l'appareil.	es vitrées a certit	iées pour l'aț		*Référez-vous au manuel d'installation pour plus d'information.	ion pour plus d'informatior	÷	
				]		RP424PF(	RP424PFC_lbl1209-v1.0 OCT.212015	015



#### **Section 1: Product Dimensions**

Figure 1.RP424PFC Fireplace Dimensions (Tolerance  $\pm \frac{1}{8}$ ") [3mm]





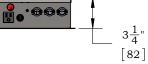


Figure 1a. RP424PFC Control Box Dimensions (Tolerance  $\pm \frac{1}{6}$ ") [3mm]

#### Introduction to the Exemplar Fireplace:

The complete system will require a **RP424PFC** firebox, appropriate venting, suitable termination, and control panel. Review the installation sequence on page 8 for general information on preparing for a successful installation of your fireplace. **The Exemplar fireplace is not intended to be used as a primary heat source and should not be connected and operated with a thermostat switch.**  The **RP424PFC** includes a protective tempered glass barrier designed to meet the 2015 safety standard to protect young children and other at-risk individuals from serious burns.

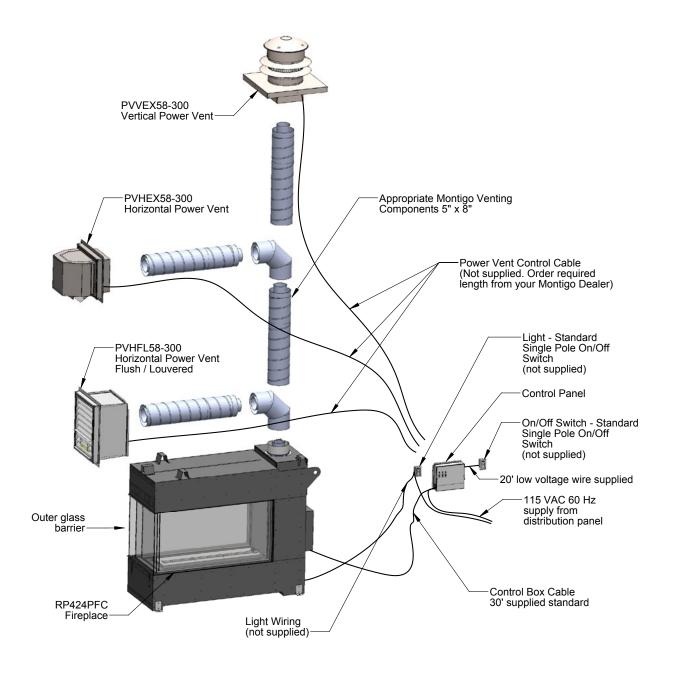


Figure 2. RP424PFC major components

#### Installation Sequence

- Unpacking and set-up
- Rear vent conversion
- Fireplace placement and securing
- Framing
- Power connection
- Gas connection
- Power vent termination installation (see manual provided with the power vent chosen)
- Vent installation
- Test firing
- Wall boarding / finishing
- Installation of glass barriers / accessories

Installation and repairs should be done by a qualified contractor and must conform to:

• Installations in Canada must conform to the local codes or in the absence of local codes to the current version of Natural Gas and Propane Installation Code, CSA B149. Electrical Installations must conform to the local codes or, in the absence of local codes, to the current version of Canadian Electrical Code, CSA C22.1.1

• Installations in the USA must conform to the local codes or in the absence of local codes to the current version of National Fuel Gas Code, ANSI Z223.1/NFPA54. Electrical Installations must conform to the local codes or, in the absence of local codes, to the current version of the National Electrical Code, ANSI/NFPA 70. See Appendix B for installation within the State of Massachusetts.

#### Fuel Type

Verify that your fireplace is compatible with your available gas type. Natural Gas or Propane shown by "N" or "L" in your model number on rating plate.

#### Install location:

The Exemplar fireplace may be installed in any location that maintains proper clearances to air conditioning ducts, electrical wiring, and plumbing. Safety, as well as efficiency of operation, must be considered when selecting the fireplace location. Try to select a location that does not interfere with room traffic, has adequate ventilation, and offers an accessible pathway for Power Vent installation. A gas appliance must not be connected to a chimney flue serving a separate solid-fuel burning appliance. Ensure the fireplace is installed in a way that the flow of combustion and ventilation air is not obstructed.

#### **Basic Operation**:

The gas control components of this fireplace are located at the rear of the fireplace. All models are supplied with a Honeywell smart valve gas control and do **NOT** have a variable flame control. A differential pressure switch located at the rear of the fireplace monitors airflow and controls the gas valve. A thermal switch located on the top of the fireplace in the event that normal operating temperatures are exceeded. These components communicate with the electrical control panel through a nine conductor cable supplied with the fireplace.

To operate the fireplace, Montigo supplies 20' of low voltage wire from the electrical control panel. Connect the two wire harnesses to a standard single pole ON/OFF switch to the location of your choice. You may extend these wires up to 100' in length with a wire of equal quality.

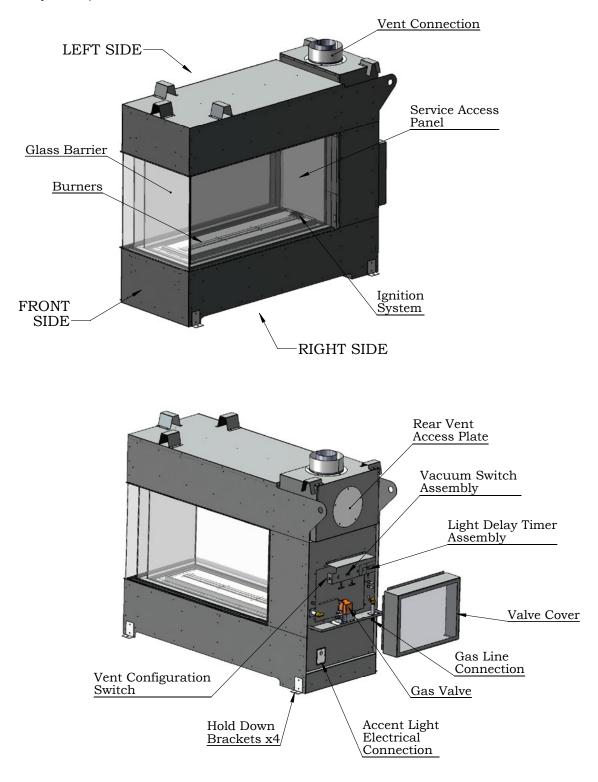
This fireplace is equipped with lights which need to be wired through an ON/OFF wall switch as shown in the schematic. If possible, wire the lights and power vent on the same circuit breaker.

ON/OFF control of this appliance can also be performed using an optional remote control available from your Montigo dealer.

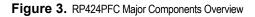
Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water.

# WARNING

The **RP424PFC** is classified under power vented fireplace systems. Under no circumstances can these models be installed without a Power Vent Module. For **Horizontal Vent Installations**, use 5"/8" Power Vent Motor PVHEX58-300 or PVHFL58-300. For **Vertical Vent Installations**, use 5"/8" Power Vent Motor PVVEX58-300.



RP424PFC Major Components Overview:



#### **Unpacking the Crate**

The **RP424PFC** is packaged with the ease of unpacking in mind. Use the following steps to unpack the crate.

**Step 1:** Remove the cardboard covering the Accessory tray on top of the fireplace.



Figure 4.

Step 2: Remove the cardboard wrapping from the crate.

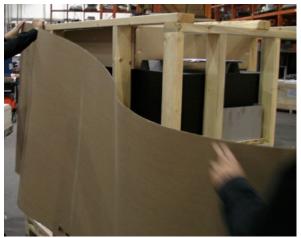


Figure 5.

**Step 3:** Remove the center brace from the top of the crate by removing the wood screws securing the brace to the crate ends.



Figure 6.

**Step 4:** Remove the support that is secured between the Accessory Tray and the Vent Connection.



Figure 7.

**Step 5:** Remove the screws securing the right side of the crate where indicated in **Figure 8**.





Step 6: Remove the Accessory Tray.



Figure 9.

**Step 7:** Remove the screws securing the bottom of the glass crate at both ends.





**Step 8:** Obtain assistance in lifting the glass crate from the crate. The glass crate weighs approximately 200lbs and contains all the glass for the fireplace. This crate can be placed in a safe location until it is needed. See **Section 10** for instructions on installing the glass panes.



Figure 11.

Step 9: Unscrew and remove the left side of the crate.



Figure 12.

**Step 10:** Remove the screws securing the shipping support bracket to the front end of the crate. Shipping support bracket shown from inside the fireplace.

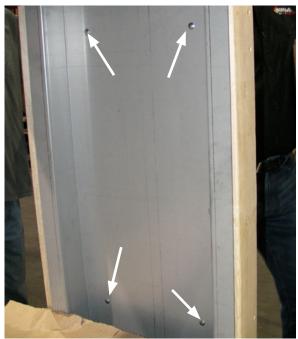


Figure 13. View from inside fireplace.

**Step 11:** Unscrew and remove the front of the crate. Repeat for the rear of the crate.



Figure 14.

**Step 11:** The appliance is anchored to the base of the crate at each corner using hold down brackets and lag bolts. Remove lag bolts using a 7/16" socket wrench. If desired, the hold down brackets may be left on the appliance to mount in the install location.



Figure 15.

**Note:** The shipping support bracket and rear of the fireplace can be used to assist in lifting and moving the appliance to the install location. Ensure all 8 screws are installed before using the shipping support bracket to lift the appliance. There are four lifting points comprised of 1.5" lifting holes. Slide a bar or strap through the lifting holes as shown to assist in moving.

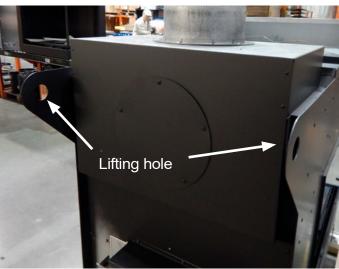


Figure 16a.



The weight in this fireplace is NOT evenly distributed. This fireplace is heavier at the rear. Use caution when lifting to avoid injury or damage.

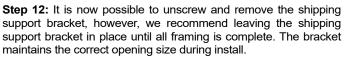




Figure 17.



Figure 16.

**Step 13:** Cardboard is used to protect the burner against dust and debris. Remove prior to install.

**Step 14:** Remove the screw securing the control box to the rear of the appliance. Replace the screw after removing the control box.



Figure 18.

#### **Converting to Rear Vent**

The **RP424PFC** can be easily converted from top vent to rear vent by following the steps below.

Step 1: Remove the Outer Vent Cover from the back of the fireplace.

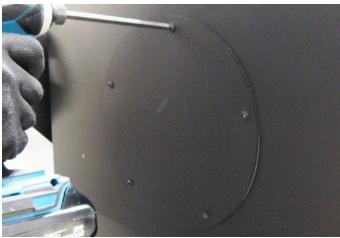


Figure 19.

Step 2: Remove the Inner Vent Cover.

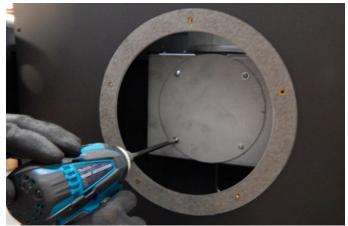


Figure 20.

Step 3: Remove the Pressure Tube using 1/2" wrench.

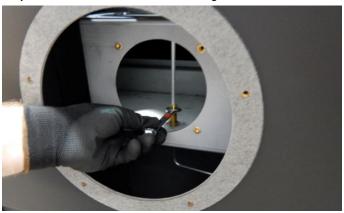


Figure 21.

**Step 4:** Find the Rear Conversion Pressure Tube Kit located in the Control Box.



Figure 22.

**Step 5:** Attach the Rear Conversion Pressure Tube using 1/2" wrench. Ensure the tube points straight out the rear of the appliance.

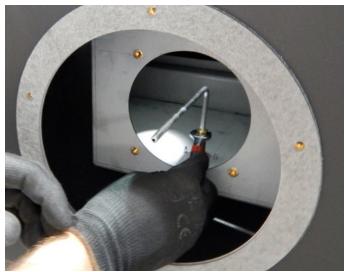
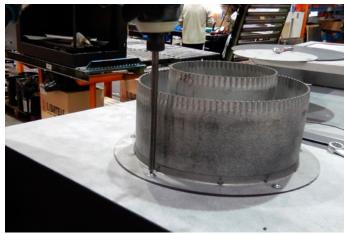


Figure 23.

Step 6: Remove the Intake Collar from the top of the fireplace.





**Step 7:** Remove the Exhaust Collar from inside the top of the Exhaust Box.

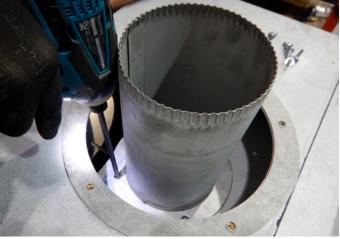


Figure 25.

**Step 8:** Align the Exhaust Collar with a 5" gasket. Secure to the back of the Exhaust Box.



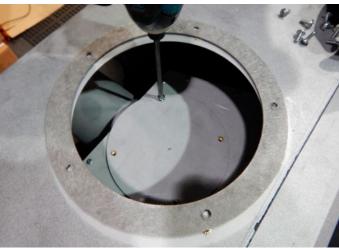
Figure 26.

**Step 8:** Align the Intake Collar with an 8" gasket. Secure to the back of the Fireplace.





**Step 9:** Align the Inner Vent Cover with a 5" gasket. Secure to the top of the Exhaust Box.





**Step 9:** Align the Outer Vent Cover with an 8" gasket. Secure to the top of the fireplace.

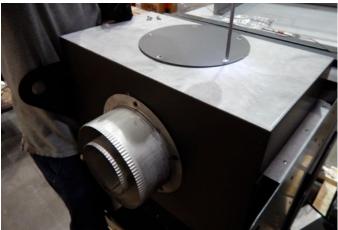


Figure 29.

#### Section 2: Framing

#### **Clearances to combustibles:**

To ensure the fireplace operates safely, all models must maintain the following clearances to combustibles:

MODEL	Top - Rear Vent 🕆	Top - Top Vent ∻	Rear - Top Vent	Rear - Rear Vent	Sides	Floor	Mantel	Venting
RP- 424PFC	0"	0"	0"	0"	0"	0"	0"	0"

 $\dagger$  Note: Clearance from top of fireplace to a combustible ceiling within the fireplace enclosure.

Venting is approved in this appliance to zero clearance to combustible material.

When planning your installation, take into consideration the area around the appliance where combustible building materials cannot be placed. Install in accordance with this manual, regardless of the type of construction used or any other consideration.

# 🚵 DANGER

When this appliance is installed directly on any combustible material other than wood flooring, it must be installed on a metal or wood panel extending the full width and depth of the appliance or a fire will occur causing serious injury, property damage or even death.

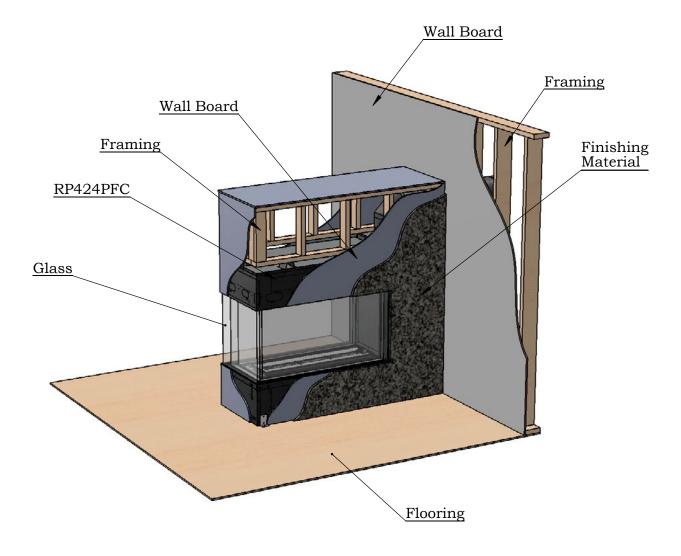


Figure 30. RP424PFC Typical Framing

#### Framing Dimensions:

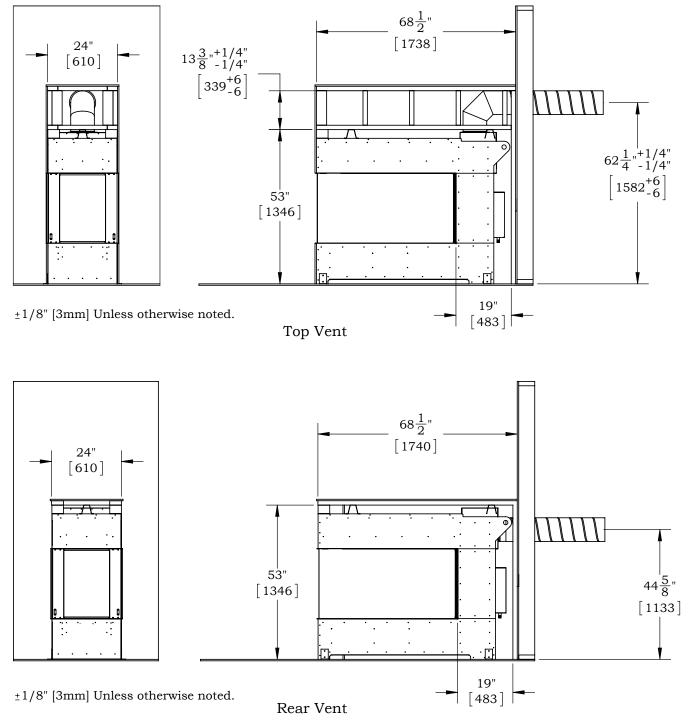


Figure 31. RP424PFC Framing Dimensions

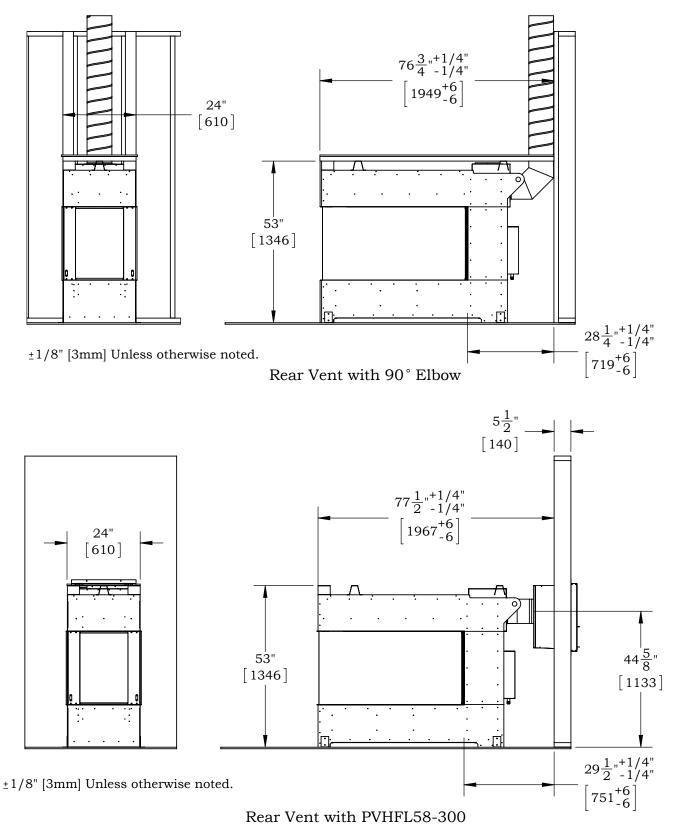


Figure 31a. RP424PFC Framing Dimensions

#### **Section 3: Finishing**

#### Finishing Around the Fireplace

Combustible mantels and mouldings may be safely installed over the top and on the front of the fireplace provided that they do not cover any portion of the glass viewing area or prohibit the removal of glass panels in any way.

The face of the fireplace may be painted to match the room decor, provided you use a heat-resistant paint. Decorative facing must not extend into the fireplace opening at all because it will interfere with removal of glass barriers.

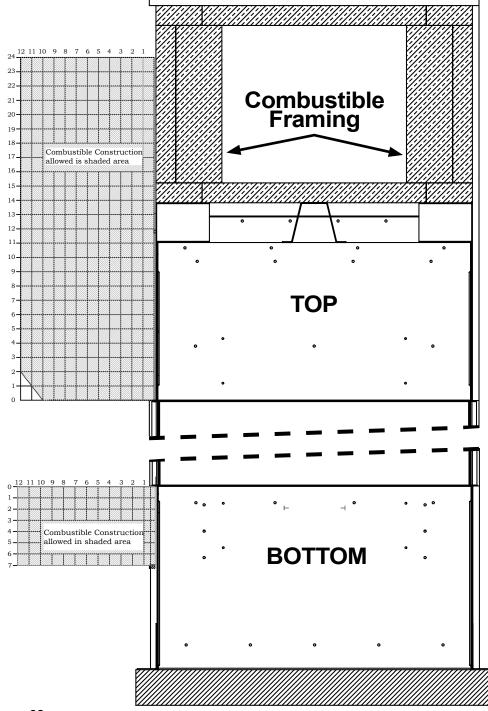
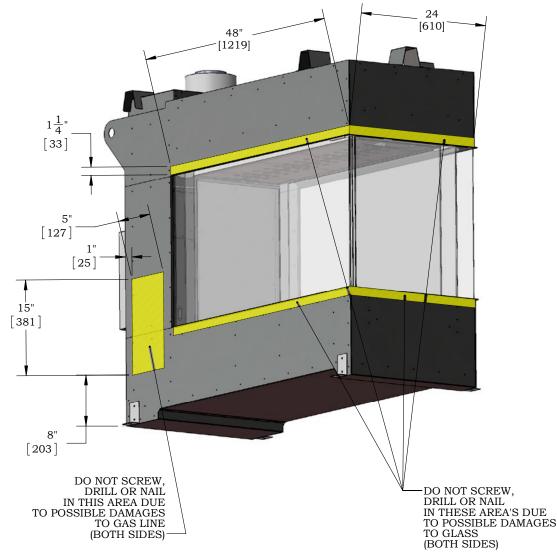


Figure 32. Combustible Mantles and Facings (image cropped for illustration, not to scale).

Note: Dimensions shown in inches. Combustible dimensions referenced above applies to all three sides of the appliance.

Careful consideration should be taken when finishing the outer surface of the fireplace. Never penetrate areas shown in **Figure 32a**. Never penetrate any surface beyond a depth of 1/4".





#### Mantels & Surrounds

NOTE: National Canadian Gas Association mantel test requirements are for fire hazard prevention to combustible materials.

New technology, to meet consumer and government demands for the wise use of energy, has prompted us to manufacture many models of fireplaces which are hot, fuel and energy efficient.

Please be aware; temperatures over the mantel will rise above normal room temperature and walls above fireplace may be hot to touch.

We recommend careful consideration be given to the effects of elevated mantel temperatures which may be in excess of product design, for example: candles, plastic or pictures. This can cause melting, deformation, discolouration or premature failure of T.V. and radio components.

#### Section 4: Wiring

#### Installing the Fireplace Control Box

Install the Fireplace Control Box in an accessible location maintaining a minimum of 1" clearance on all sides. The location should be where maintenance, adjustments and service may be easily made.

#### Installation of Electrical Supply

The **RP424PFC** is supplied with an external electrical control box pre-wired by the factory. The control box is connected to the fireplace with a 30 foot long 9-conductor cable that will communicate with the fireplace. Extension cables are available through your Montigo dealer only.

A 20ft low voltage black / white cable is provided for connection to a single pole on/off switch. The length of this cable can be extended up to a length of 100ft using a cable of equal or greater capacity. This system operates on 24VAC. Do not connect this switch circuit to an external power source.

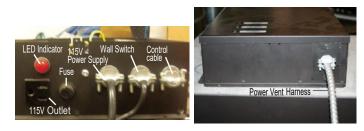
Install the single pole accent lighting ON/OFF switch (not supplied) and/or the optional remote control. Do not use a dimmer switch for accent lighting.

#### $Optional\,remote\,control\,available\,through\,your\,Montigo\,Dealer.$

Do not use third party remote controls without the approval from Montigo.

**Installations in Canada** must be electrically grounded in accordance with **CSA C22.1** Canadian Electrical Code Part 1 and/or Local Codes.

**Installations in the USA** must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, **ANSI/NFPA 70**.



Left-side View

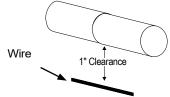
**Right-side View** 

Figure 34. Control Box

**Note:** If any of the original wire supplied with the appliance is replaced, it must be with the same or it's equivalent.

#### **Conduit & Wiring clearances**

Connect the power vent harness as outlined in the previous section. 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.



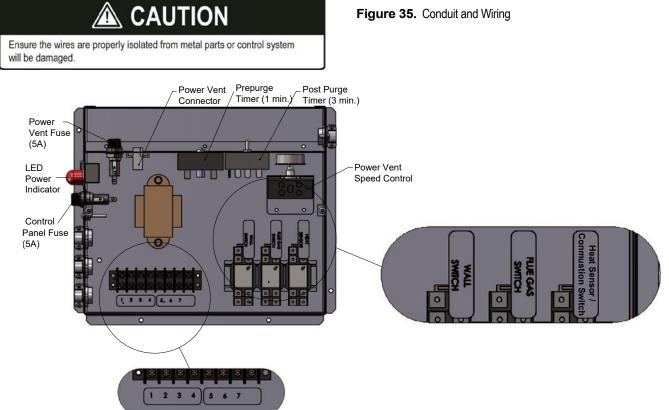


Figure 33. Control box Diagram

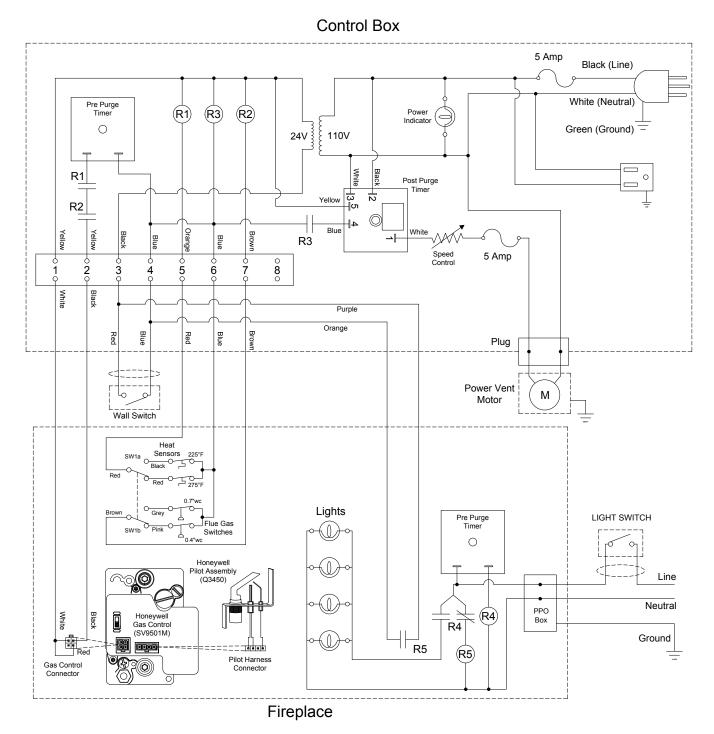


Figure 36. HSI Wiring Diagram

#### Section 5: Installing the gas line

#### Gas Pressure

Optimum appliance performance requires proper inlet pressures.

Gas line sizing requirements will be determined in ANSI Z221.3 National Fuel Gas Code in the USA and CAN/CGAB149 in Canada.

#### **Pressure requirements:**

Pressure Requirements			
Gas Pressure	Natural Gas	Propane	
Maximum Inlet Pressure	14" WC (1/2 psi)	14" WC (1/2 psi)	
Minimum Inlet Pressure (with fireplace on)	5.5" W.C.	11" W.C.	
Manifold Pressure	3.5" W.C. +/- 0.2	10" W.C. +/- 0.3	

See Section 8 for instructions on how to test the gas pressure.

Montigo requires a service shut off valve be located in an accessible location to isolate the appliance.

Only install gas shut-off valves approved for use by the state, province, or other governing body in which the fireplace is being installed.

#### GAS CONNECTION

See Figure 37 below for location of gas line access.

Flexible gas connectors must not exceed 3 feet in length, unless allowable within local regulations.

Connect incoming gas line to the 1/2" MPT gas inlet.

Check appliance connection, valve and valve train under normal operating pressure with a commercially available leak check solution.

#### DO NOT USE A FLAME OF ANY KIND TO TEST FOR LEAKS.

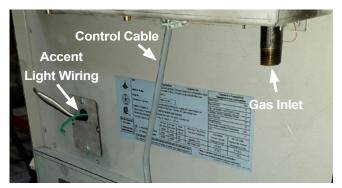


Figure 37. Identifying the Gas Inlet

# 🛕 DANGER

After gas line is connected, each appliance connection, valve and valve train MUST be checked while under normal operating pressure with either a Liquid Solution, or Leak Detection Device, to locate any source of leak. Tighten any areas where bubbling appears or a leak is detected until bubbling stops completely or leak is no longer detected. DO NOT use a flame of any kind to test for leaks. A fire or explosion will occur, causing serious injury, property damage or death.

# NOTICE

When pressure testing the fireplace, Gas line, and input system follow the appropriate local codes for your area. DO NOT connect the fireplace to pressures in excess of 1/2 psi. This will damage the gas control valve.

#### Section 6: Venting Configuration

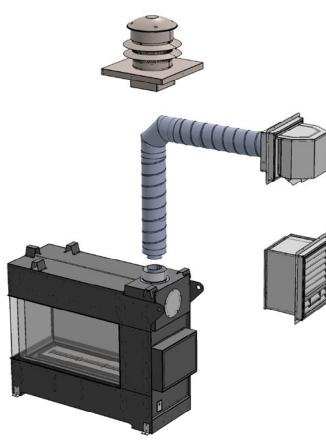


Figure 38. Venting Configuration



Figure 38a. Vent Selector Switch

Vent configurations can include vertical sections, horizontal sections, elbows, flex and/or rigid vent sections. See the following table to determine maximum vent run. Follow the rules outlined below to determine your specific vent options. Maximum vent run length includes one elbow. All venting is to be 5" inner and 8" outer sizing. Because this appliance is intended to only be installed with a power vent termination, vertical and horizontal runs can be calculated in the same manor. **Note:** Venting terminals shall not be recessed into a wall or siding.

Ensure the vent selector switch located on the rear of the fireplace under the vent cover is set to the **25FT OF LINEAR VENTING OR LESS** setting. See **Figure 38a**.

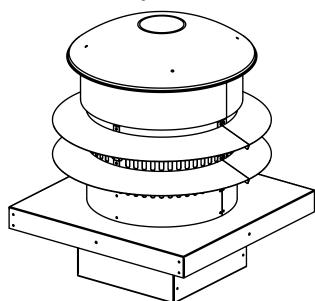
Flexible venting does not flow quite as well as rigid pipe, so a factor needs to be applied, making the total allowable vent run shorter than rigid pipe.

Venting Calculation	Flex Vent	Rigid Vent
Maximum Vent Run	25' total length including 1 elbow	25' total length including 1 elbow
90 degree elbow	subtract 10' each additional	subtract 5' each additional
45 degree elbow	subtract 5' each additional	subtract 2' each additional
Down sections	subtract 2' for every 1' down	subtract 2' for every 1' down
Flex Venting	Subtract 1.3' for every 1' section	

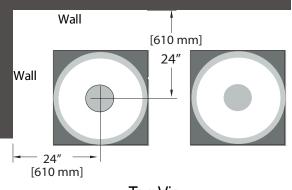
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#### PVVEX58-300 Vertical Power Vent Detail

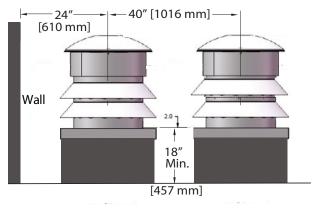
For installation instructions on this termination see instruction guide for the PVVEX58-300. **Note:** Venting terminals shall not be recessed into a wall or siding.











Front View Figure 39a. *PVVEX58-300 clearances* 

# **Not Acceptable**

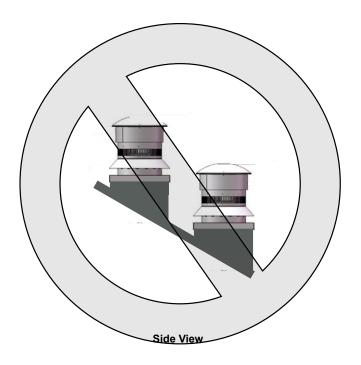
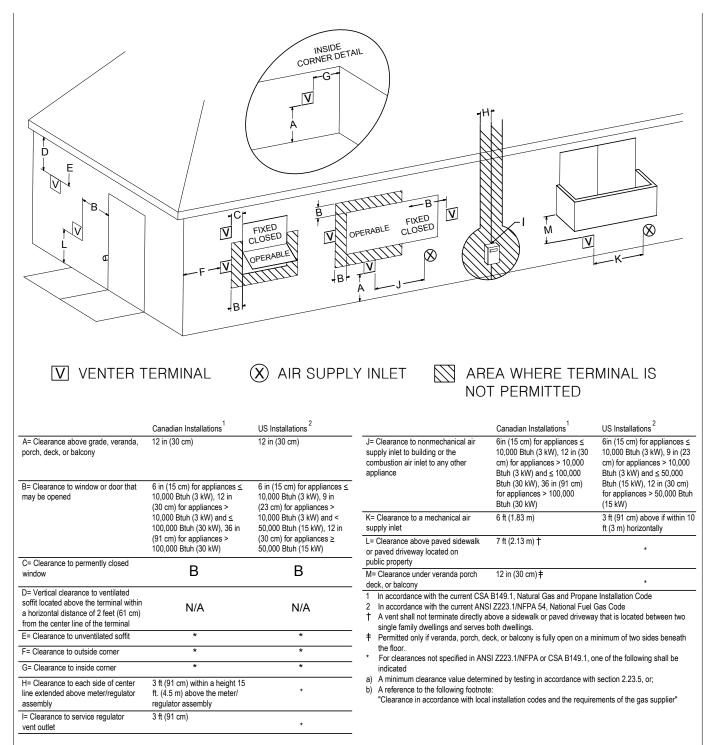


Figure 39b. PVVEX58-300 restrictions

#### PVVEX58-300 Power Vent Locations



#### PVHEX58-300 Horizontal Power Vent Detail

For installation instructions on this termination see instruction guide for the PVHEX58-300. **Note:** Venting terminals shall not be recessed into a wall or siding.

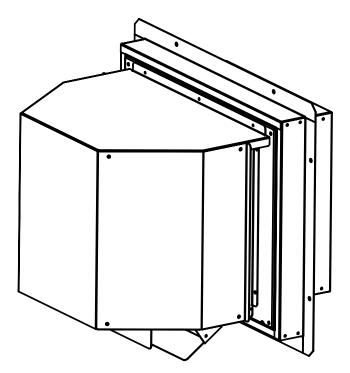


Figure 40. PVHEX58-300

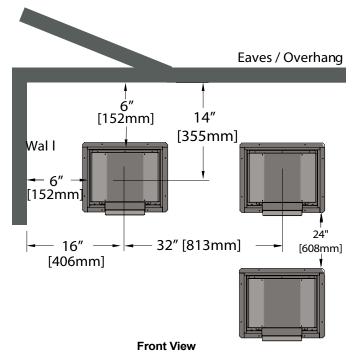
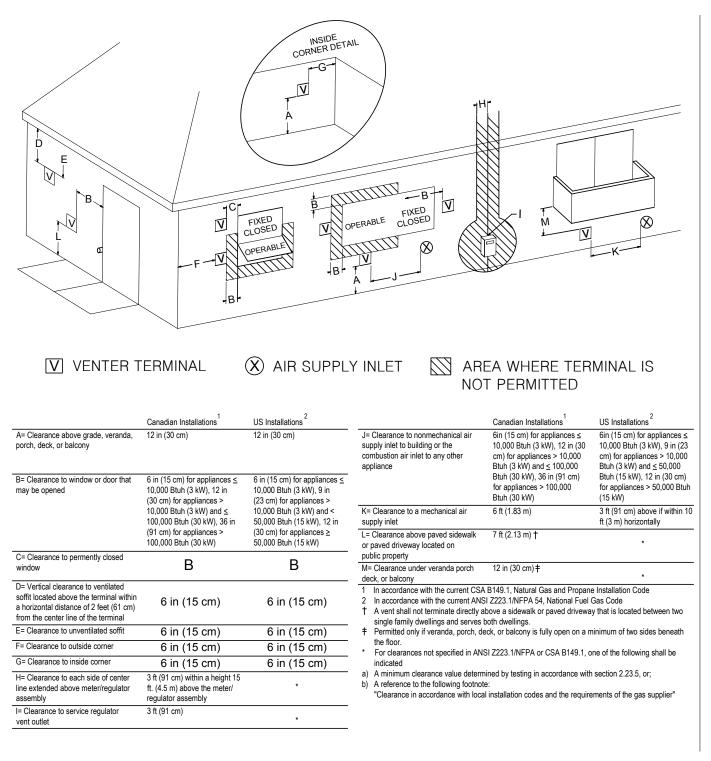


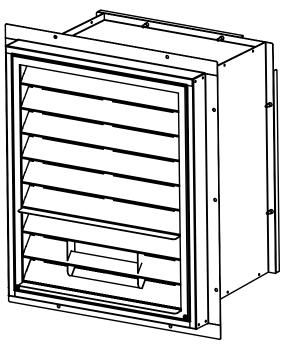
Figure 40a. PVHEX58-300 Termination Clearances

#### PVHEX58-300 Power Vent Locations



#### PVHFL58-300 Horizontal Power Vent Detail

For installation instructions on this termination see instruction guide for the PVHFL58-300. **Note:** Venting terminals shall not be recessed into a wall or siding.



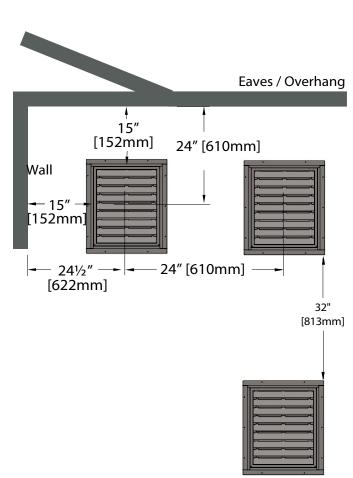
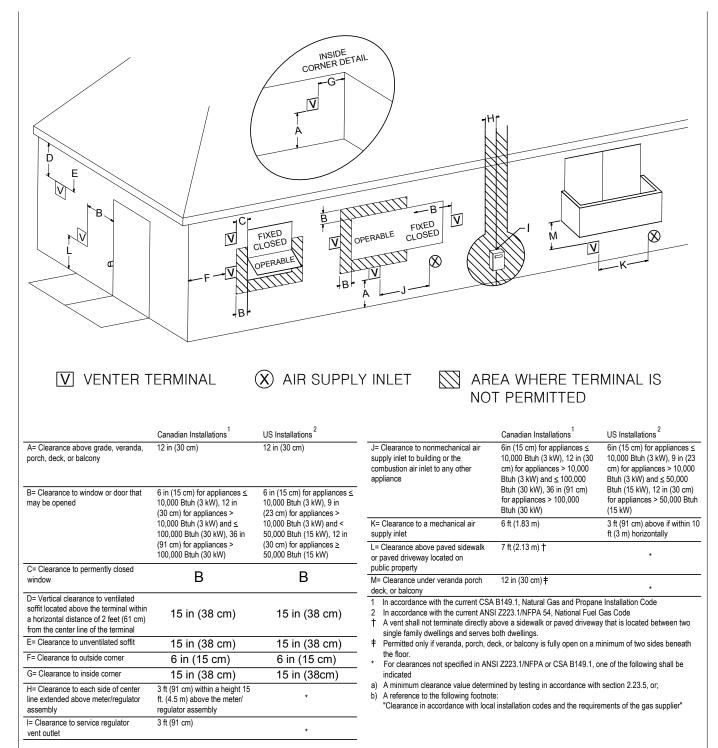


Figure 41. PVHFL58-300

Front View

Figure 41a. PVHFL58-300 Termination Clearances

#### PVHFL58-300 Power Vent Locations



#### Venting components

The following components and associated Montigo part numbers are for installation of a roof or wall mounted vent. **Only use Montigo Vent Components.** Use of non-Montigo parts will **VOID** the warranty and may impede operation of the fireplace.

A - Termination with Frame Kit	PVVEX58-300 (Roof Mount 5"/8") PVHEX58-300 (Wall Mount 5"/8") PVHFL58-300 (Flush Wall Mount 5"/8")
B - Flex Sections	PFL1         (12" f/f Section)           PFL2         (24" f/f Section)           PFL3         (36" f/f Section)           PFL4         (48" f/f Section)           PFL6         (72" f/f Section)
C - Rigid Sections	PXT - 10       (10" f/f Section)         PXT - 20       (20" f/f Section)         PEXT - 1       (12" f/m Section)         PEXT - 2       (24" f/m Section)         PEXT - 3       (36" f/m Section)         PEXT - 4       (48" f/m Section)         PEXT - 6       (72" f/m Section)
D - Elbows	PEL-90MM (m/m 90° Elbow) PEL-90FF (f/f 90° Elbow) PEL-90FM (f/m 90° Elbow) PEL-45FM (f/m 45° Elbow)
E - Support Ring & Plate	RSPXT-8
F - Firestop	FS-8

Montigo supplies a variety of power venting options. The location of the power vent should be selected and laid out to provide the most efficient possible run to an external wall or through the roof.

#### **Notes For Planning Venting:**

- Exemplar fireplaces are Power Vent Designated and use Montigo's 5/8 vent pipes.
- Venting originates from the top or rear of the unit.
- Venting can terminate through the roof or exterior wall.
- For a detailed diagram of allowed termination locations, see the page that relates to the termination purchased.
- Once the termination location has been established refer to the appropriate section for installation details.
- All fireplaces are shipped Top Vent from the factory.
- Follow the chart on **page 24** for maximum vent run and maximum elbows.

Connection and installation of the vent components should adhere to the following guidelines:

- Use any combination of rigid and flex pipe as required and in any orientation (Male connectors can face in any direction).
- Flex sections may be stretched up to 50% of their total length (e.g. a 24" section maybe stretched to 36").
- Ensure the pipe ends male to female slide in a minimum of 1 1/2" of overlap.
- Connect all vent sections using a minimum of three sheet metal screws on the outer pipe flue.
- Ensure all runs are supported with a minimum of 3 supports per 10' of venting.
- Zero clearance vent runs are allowed.
- Rigid pipe may be cut less than half way from the female end only.
- Ensure when cutting sections of rigid pipe to maintain integrity of internal supports.
- Place the springs, supplied with the pipe kit, between the outer and inner pipes to keep the pipes separate and avoid any possible hot spots.
- Montigo recommends the use of a flex section for the final pipe connected directly to the fireplace offering greater flexibility of installation and absorption of movement.
- Firestops must be installed as required by National & local codes.
- When passing vent pipe through a wall use a heat shield.
- Montigo recommends that all exterior corners and joints be sealed with exterior caulking. However, we encourage you to consult your Building Envelope Engineer or Waterproofing Consultant for further recommendations.

#### **IMPORTANT:**

Please Refer to your Building Envelope Engineer or Waterproofing Consultant for a review of ALL penetrations through exterior walls or the roof.

#### Section 8:Testing the System

Overview

The **RP424PFC** Control and Power Vent System can be safely tested prior to finishing the fireplace enclosure. This test can be done quickly and efficiently to ensure all systems function according to the design specifications.

#### Testing the system before gas connection

Note: Gas supply is not required to test the system

- Ensure the valve is in the "ON" position.
- The control panel is supplied with a power cord plug in.
- Plug it into an extension cord or any other 110 Volt power supply.

If the red LED is illuminated (beside the fuse) there is power supplied to the panel.

If no LED, check main power to control box, check fuse and replace with equally rated fuse.

Turn the wall switch to the on position.

■ Wall switch and combustion air LED light up immediately. approximately 30 seconds later when the power vent reaches factory set speed. The flue gas switch LED will light up approximately 1 minute after flue gas LED is lit and the gas valve will turn on. There will be a clicking sound from the valve and the Hot Surface Ignitor will glow red. This confirms the control system operation. **Note:** If the flue gas LED does not light up after 1 minute, slowly increase the power vent speed until the LED turns on. Speed controller located inside the control box, see **Figure 33**.

Refer to **Troubleshooting** for a list of common problems and solutions if you encounter issues during testing.

#### Testing the system with gas connection

#### (Highly recommended)

Connect two 1/8" MPT hose barb fittings to the gas valve inlet and outlet ports, as shown in **Figure 51a**. Connect a 0-16" W.C. manometer to each fitting.

- Ensure the valve is in the "ON" position.
- Turn on the gas supply to the appliance.
- Wait 3 minutes and check for any gas leaks. If you smell or detect a gas leak, turn the gas supply off and take corrective actions.
- Turn supply power on.
- The LED power indicator will be illuminated.

Install the inner glass, middle glass, and outer glass barrier (see Section 10).

Place the appliance in operation See the lighting instructions on page 53.

Once the appliance is operational, confirm the manifold pressure and supply pressure are within the specified limits, see section 5.

Turn lights on and confirm all lights are working.

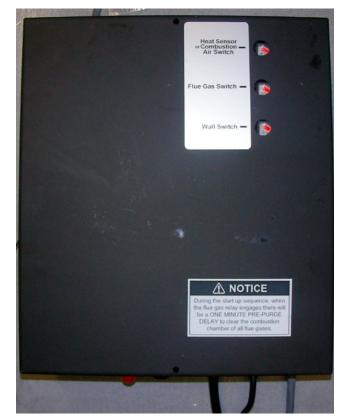


Figure 42. LED Indicators

#### **Testing the Lights**

The **RP424PFC** includes a delay timer to ensure safe operation of the accent lighting. This system is tested during the manufacturing process but should be tested upon install to ensure the system is operating as intended.

**Note:** Supply power to the Control Box and Power Vent and make sure both are functioning before performing the test.

#### If the fireplace is NOT burning

Turn the accent light ON/OFF wall switch to the ON position to power the lights on.

- The Power Vent should start.
- After 60 seconds the lights should come on.
- After another three minutes the Power Vent should turn off.

#### If the fireplace is burning

Turn the accent light ON/OFF wall switch to the ON position to power the lights on.

- After 60 seconds the lights should come on.
- The fireplace will continue to operate normally.

#### Accessing the Valve

Follow the steps below to access the valve for testing and servicing.

#### If you have access to the rear of the appliance:

**Step 1:** Remove screws securing the outer valve cover.



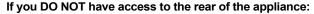
#### Figure 43.

Step 2: Remove the valve cover.



#### Figure 44.

**Step 3:** Perform required servicing. Be sure to replace the valve cover when servicing is complete.



**Step 1:** Remove the glass barriers and mirror glass firebox liner (See **Section 10**).

**Step 2:** Remove the screws securing the access panel. Do not place weight upon the perforated burner tray when installing or servicing this unit.



Figure 46.

**Note:** The access panel and inner valve cover include gaskets. Take care during removal and installation to avoid damaging gaskets.



Figure 45.

Step 3: Remove the access panel.



Step 5: Perform any required servicing from inside the fireplace.



Figure 49.

Step 6: Replace the inner valve cover and access panel.

**Note:** Ensure the access panel is installed with the rubber gasket located at the bottom of the panel. See **Figure 50**.

Figure 47.

Step 4: Remove the inner valve cover from inside the fireplace.



Figure 48.



Figure 50.

Step 7: Replace the glass barriers. See Section 10 for glass installation.

#### **Testing the Gas Pressure**

The manifold outlet pressure is set from the factory to the appropriate pressure but should be verified. To check pressures, gas valves have a provision to remove a 1/8" MPT plug and to be fitted with a hose barb.

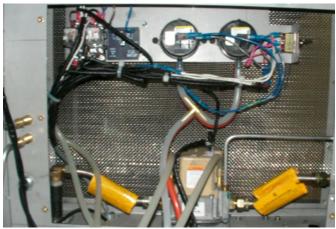
See **Section 10** for instructions on installation and removal of glass. It is possible to remove only one side to set up for this test. The test must be performed with all glass and access panels in place.

Follow the instructions in **Accessing the Valve** for information on how to access the valve.

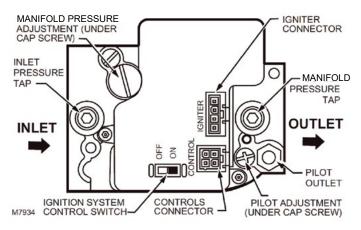
Pressure Requirements			
Gas Pressure	Natural Gas	Propane	
Maximum Inlet Pressure	14" WC (1/2 psi)	14" WC (1/2 psi)	
Minimum Inlet Pressure (with fireplace on)	5.5" W.C.	11" W.C.	
Manifold Pressure	3.5" W.C. +/- 0.2	10" W.C. +/- 0.3	



**Figure 51a.** Pressure Testing (viewed from rear of appliance)



**Figure 51b.** Pressure Testing (viewed from inside appliance)



#### Figure 52. HSI Valve

#### **Pressure Test Setup**

**Note:** The following steps show pressure testing from within the fireplace. If you have access to the rear of the appliance this test may be done by removing the valve cover on the rear of the appliance.

**Step 1:** Remove the testing pass-through covers located inside the fireplace to the left side of the inner valve cover and behind the middle glass retainer on the left or right side of the fireplace.

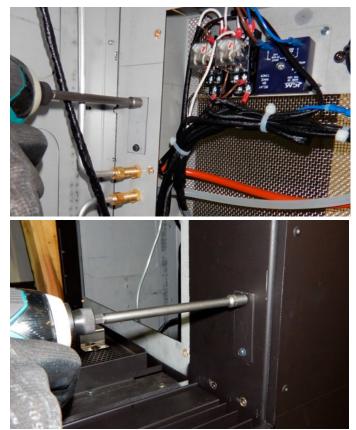


Figure 53.



Step 2: Remove the 1/8" MPT Plug on each side of the valve.



Step 3: Insert a hose barb in both sides.

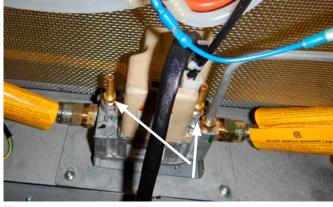


Figure 55.

Step 4: Attach a silicone tube to each barb.





**Step 5:** Thread each tube through the pass-through locations uncovered in **Step 1**.

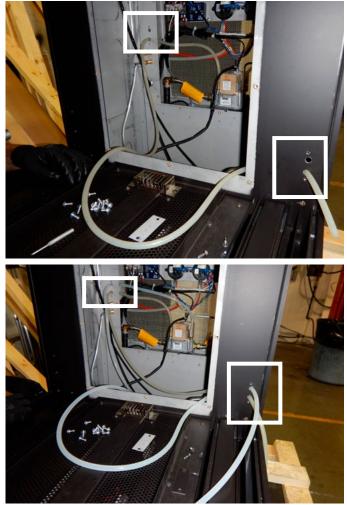


Figure 57.

Step 6: Replace the inner valve cover and access panel.

**Step 7:** Carefully replace the inner layer of glass, inner glass retainer, and middle layer of glass. The middle glass retainer cannot be replaced.

**Step 8:** Replace the outer glass barrier, ensuring the silicone tubing is not kinked or pinched in the glass.

Step 9: Attach the end of each tube to a manometer.



Figure 58.

**Step 10:** When done testing the gas pressure, remove the glass barriers, access panel, and inner valve cover, disconnect the tubing connected in Step 4, remove the hose barbs, and reinsert the 1/8" MPT plugs.



Figure 59.

**Step 11:** Reinstall the inner valve cover and access panel. See **Accessing the Valve** for further information.

### **Section 9: Installing Accessories**

# NOTICE

This fireplace is designed and tested with a buried media burner. Never operate this appliance without media installed. Only use media supplied by Montigo. Contact your local Montigo Dealer for media options or replacement.

Firestone / Fireglass Installation

The RP424PFC is supplied with seven 3lb bags of glass firestones or

fireglass. With the glass barriers removed, spread 15lbs of firestones or fireglass evenly in the upper tray and 6lbs in the lower tray as shown in **Figure 60**.

Note: DO NOT cover the pilot shield with firestones or any other media.



Figure 60. Firestones in upper and lower trays.



Figure 61. Do not place any media on top of the pilot shield.

#### Ceramic Speckled Stone Installation

Place 350 Speckled Stones evenly on the upper burner tray and 150 stones on the lower tray. Ensure proper orientation of each stone with the number side facing down.

# Note: DO NOT cover the pilot shield with Speckled Stones or any other media.



Figure 62. Speckled Stones in upper and lower trays.



Figure 62a. Ensure proper orientation. The number etched in each stone faces down.

#### Driftwood Log Set (Optional)

The **RP424PFC** has the option of installing a driftwood log set in addition to the chosen burner media. See **Figure 77** for an installation overview.

Note: DO NOT block burner ports with logs.

#### **RP424PFC Log Kit Installation**

Log kits used to create sequence shown: 1 LGS58, 1 LGS59.

Step 1: Isolate and identify logs in kit LGS58.



Figure 63. LGS58.

**Step 2:** Place log #2 mid-way from the pilot end to the front of the fireplace on the left side of the burner. Ensure the end closest to the burner does not cover burner ports. See **Figure 64**. See **Figure 3** for an illustration identifying left and right sides of the fireplace.



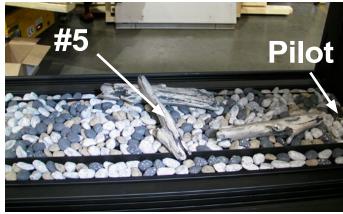
Figure 64.

**Step 3:** From the right side of the fireplace, place log #4 along the right side of the burner near the pilot shield as shown. See **Figure 65**.



Figure 65.

**Step 4:** Place log #5 on the right edge of the upper tray about midway from the pilot shield to the front of the fireplace as shown. The opposite end of log #5 rests on top of log #2. See **Figure 66**.



#### Figure 66.

**Step 4:** Place log #3 on the right front corner of the upper tray as shown. See **Figure 67**.



Figure 67.

Step 5: Log #1 rests on top of log #3 and crosses the burner to sit on the left edge of the upper tray as shown in Figure 68.



**Step 8:** Place log #3 on the right side of the fireplace at the pilot end crossing from the lower tray to the upper tray as shown in **Figure 71**.



Figure 71.

Figure 68.

**Step 6:** Log #6 rests on top of log #4 and crosses the burner to sit on the left edge of the upper tray as shown in **Figure 69**.



Figure 69.

Step 7: Isolate and identify logs in kit LGS59.



Figure 70. LGS59.

**Step 9:** Place log #4 on the left side of the fireplace at the pilot end crossing from the upper tray to the lower tray as shown in **Figure 72**.



Figure 72.

**Step 10:** Place log #5 on the front left corner of the fireplace as shown in **Figure 73**.



Figure 73.

**Step 11:** Place log #6 on the lower tray at the front right corner of the fireplace as shown in **Figure 74**.



Figure 74.

**Step 12:** Place log #1 along the right edge of the upper tray as shown in **Figure 75**.



Figure 75.

**Step 13:** Place log #2 along the left edge of the upper tray as shown in **Figure 76**.

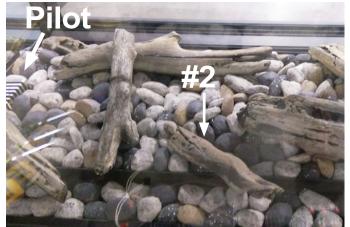


Figure 76.

**Step 14:** When performing **First Fire**, check for carboning of the logs. Reposition the logs away from the burner if necessary.



Figure 77. Overview of Log Installation

### Section 10: Installing the Glass

The **RP424PFC** includes three layers of tempered glass. The outermost layer serves as a protective barrier which meets the 2015 safety standards and helps prevent against burns.

# 

Do not operate appliance with any of the three layers of glass removed, cracked, or broken. Replacement of glass should be done by a licensed or qualified service person.

#### Unpacking the Glass Crate:

The following steps should be taken when unpacking the glass crate.

**Step 1:** Starting with the bottom of the glass crate, stand the crate on end and remove both screws from one end of the center brace as shown in **Figure 78**.



Figure 78.

Step 2: Remove the lower screw only from the top brace as shown in Figure 79.



Figure 79.

Step 3: Remove the upper screw only from the bottom brace as shown in Figure 80.



Figure 80.

**Step 4:** With the help of an assistant, carefully place the glass crate flat on its bottom side. **Note:** the glass crate is heavy.



Figure 81.Step 5: Remove the upper bracing.



Figure 82.

**Step 6:** Remove the screws securing the edge of the glass crate at both sides.

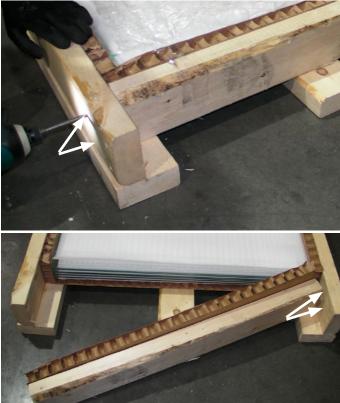


Figure 83.

Step 6: Remove the bubble wrap and cardboard edging.

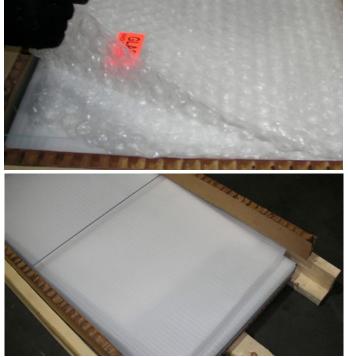


Figure 84.

With the end and one side of the glass crate removed the glass panes can be removed and installed in the fireplace. We recommend cleaning each pane of glass as it is installed.

#### Using the Glass Handling Tool:

Use the following steps to install the glass barriers.

Note: Contact your Montigo Dealer for information on glass replacement.

### 

Tempered glass is fragile. Take care to avoid abuse of glass such as striking or slamming. These actions could potentially lead to damage and/or injury.

Always allow the appliance to cool prior to handling glass. Ensure the glass is clean on both sides before installing.

**Step 1:** Remove the included glass handling tool from the accessory tray. (The tool may not be exactly as shown).



Figure 85.

Step 2: Always ensure the tool is clean and undamaged prior to use.



Figure 86.

**Step 3:** Place the glass handling tool flat against a piece of glass and apply some pressure.



Figure 87.

**Step 4:** Rotate the levers away from the center of the tool to apply suction.





**Step 5:** Lift the glass slightly to ensure the tool has a good hold on the glass pane before lifting and moving glass.

**Note:** we recommend using the two glass handling tools provided at all times to improve handling and protect against damage.

#### Installing the Mirror Glass Firebox Liner:

Use the following steps to install the mirror glass firebox liner. We recommend cleaning the mirror glass prior to handling and installation.

**Note:** Contact your Montigo Dealer for information on glass replacement.

**Step 1:** Remove the four glass retainers. Each glass retainer is secured using two screws per retainer.

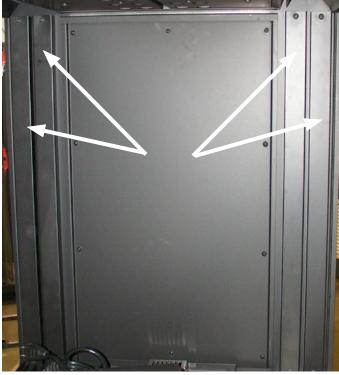


Figure 89.

**Step 2:** Using the glass handling tool as described in **Section 10**, Slide the mirror glass firebox liner into the access panel located behind the pilot shield as shown in **Figure 90**. Ensure the mirror glass rests inside the flange at the top and bottom of the access panel.



Figure 90.

The glass will rest upon two gaskets located on the lower flange of the access panel as shown in **Figure 91**.

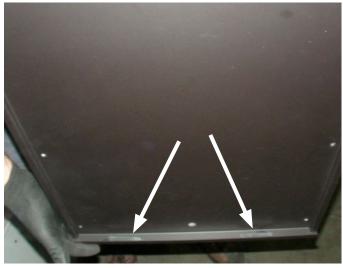


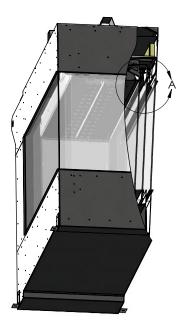
Figure 91.

#### Installing the Glass Barriers:

Contact your Montigo Dealer for information on glass replacement.

Use the following steps to install the glass barriers. Repeat the process for each piece of glass. Clean each piece of glass prior to install. Glass panels should rest evenly on the rubber gasket bumpers located in the lower glass channels.

The inner glass and middle glass is secured at the top using dials as shown in **Figure 92** and **92a** and knobs as shown in **Figure 92b**. It may be necessary to loosen the dials and knobs a little prior to installing the glass barriers.



DIAL FOR GLASS ADJUSTMENT-

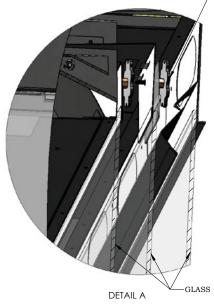


Figure 92. Spring Tension Dial Assembly



Figure 92a.



#### Figure 92b.

**Note:** The knobs and dials are installed finger tight. If they are too tight to remove by hand they can be loosened using a 7/16" wrench. DO NOT use a wrench to tighten the knobs or dials.

#### How to install glass barriers:

Step 1: Insert the top of the glass into the upper channel at an angle.



Figure 93.

**Step 2:** Rotate the bottom of the glass in to rest in the lower channel.



Figure 94.

**Note:** We recommend cleaning both sides of each piece of glass prior to installation.

#### **Glass Barrier Installation Order:**

- 1. Inner glass end
- 2. Middle glass end
- 3. Outer glass end
- 4. Left or right inner side
- 5. Left or right middle side
- 6. Left or right outer side
- 7. Remaining inner side
- 8. Remaining middle side
- 9. Remaining outer side

Glass pieces increase in size when moving from the inner most piece to the outer most piece for any given side.

**Step 3:** Follow the installation procedure described above when installing each piece of glass. To begin, insert the inner glass end, ensuring the glass is centered in place.

**Step 4:** Tighten the two dials and one knob at the top of the glass to secure.

**Step 5:** Insert the middle glass end. Ensure it is centered, and secure using the two dials at the top of the glass.

**Step 6:** Insert the outer glass end and ensure it is centered. The outer glass barrier is held in place at the top with a metal spring. See **Figure 95**.



Figure 95.

Step 7: Begin installing the left or right sides with the innermost piece.

**Step 8:** Butt the glass forward using the glass removal tool to close the gap between the end piece and the side piece.

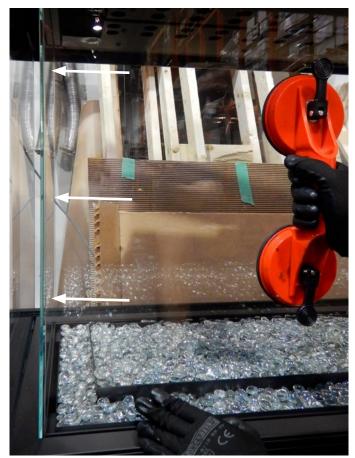


Figure 96. Close the gap

**Step 9:** Secure the glass in place by tightening the dial and five knobs at the top of the glass. See **Figure 92b**.

**Step 10:** Install inner glass retainers and secure using the two screws removed in **Step 1** of **Installing the Mirror Glass Firebox Liner**.



Figure 97.

**Step 11:** Continuing on the same side, install the middle piece of glass. Butt forward and secure using the dial at the top, front corner of the glass.

Step 12: Install the middle glass retainer.



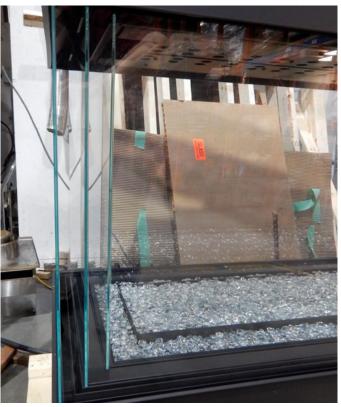


Figure 98.

**Step 13:** Install the outer most side. The outer glass barrier is secured in place using a metal spring. See **Figure 95**. Be sure to butt the glass forward to close the gap between the side and end.



Figure 99. Glass installed (end view)

Figure 100. Glass installed (side view - no gaps)

Step 14: Repeat steps 7 - 13 for the other side of the fireplace.

Note: Removal of glass is the reverse of installation.

# 

Never use substitute materials. See **Replacing the Glass** for glass sizing and specifications.

# 

The outer glass barrier is a protective barrier. Operating the appliance without this barrier could result in injury. Never operate the appliance without all three layers of glass installed.

# Section 11: First Fire Ignition Sequence

Refer to the lighting instructions on **Page 53** for information on how to light the appliance. These instructions may also be found inside the control box.

When the fireplace ON/OFF wall switch is placed in the ON position, the following sequence of events should take place:

The Heat Sensor or Combustion Air Switch light and Wall Switch light on the control box will be lit.

- The power vent will initialize.
- There will be a 60 second prepurge delay.
- If the accent lights have been turned on they will light.

■ The igniter will attempt to light the pilot. The igniter will glow for 30 seconds, pause for 30 seconds. This cycle will occur twice before the system enters a lockout mode. After 5 minutes the system will attempt to light again.

- The pilot will light.
- The igniter will stop glowing.
- The burner will light.
- Allow the fireplace to operate for at least 5 minutes.

Refer to **Troubleshooting** if you encounter any issue during the ignition sequence.

After installing all chosen media and glass, light the fireplace to ensure the desired flame is achieved. A gap in the glass can cause a draft which will make the flame at the front of the fireplace lean to one side.



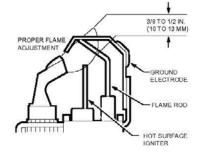
Figure 101. Test flame (side view)



Figure 102. Test flame (end view)

If driftwood logs have been installed, check the logs for carboning and reposition if necessary.

Check the pilot height:



NOTE: GROUND ELECTRODE MUST NOT TOUCH FLAME ROD (050 IN. MINIMUM CLEARANCE): BEND GROUND ELECTRODE IF NECESSARY, DO NOT BEND FLAME ROD.

#### Figure 103.

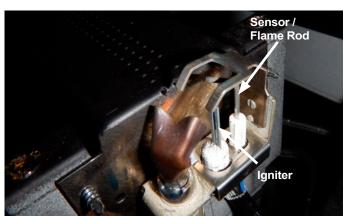


Figure 103a.

#### Adjusting the Fan Speed

The fan speed is set to full speed prior to shipment.

When lighting the fireplace the **Heat Sensor or Combustion Air Switch** and **Wall Switch** LEDs will illuminate. After 30 seconds when the power vent has reached operational speed the **Flue Gas Switch** LED will also illuminate. Refer to **Section 8**.

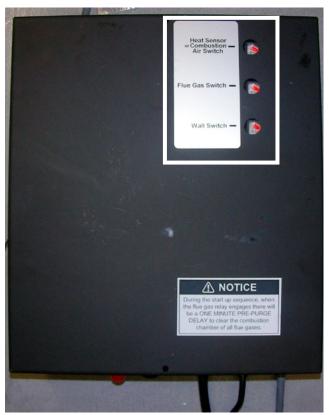


Figure 104.

Adjust the fan to optimal operation speed by performing the following steps.

**Step 1:** Turn the fireplace ON/OFF switch to the ON position and wait 30 seconds for the power vent to power up.

Step 1: Decrease the fan speed until the Flue Gas Switch LED turns off.

**Step 2:** Slowly increase the fan speed in small increments until the **Flue Gas Switch** LED turns on again.

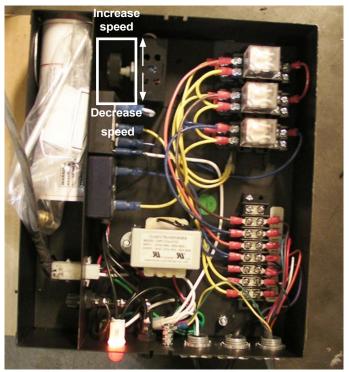


Figure 105.

Note: Increasing the fan speed will result in cooler glass temperatures if desired.

Finish the fireplace as desired. Refer to **Section 3** for information on finishing the fireplace.

#### Section 12: Operation

Refer to **Figure 106** for lighting instructions. This can also be found inside the control box.

#### Operating the fireplace

The **RP424PFC** is controlled using a basic ON/OFF wall switch or by using the optional remote control.

When placed in the ON position:

The blower will initialize.

After approximately one minute the igniter will start to glow and the pilot will light, followed by the main burner.

When placed in the OFF position the flame will turn off and the blower will continue to run for three minutes to purge any remaining exhaust gas from the system.

If the fireplace does not light after three attempts it will go into a safety lock-out mode. After five minutes the fireplace will attempt to light again. If the fireplace will not light, turn the fireplace off, turn off all electrical power to the appliance, locate the gas shut off valve and turn the gas off. Call your service technician or local Montigo dealer. Never attempt to light the pilot by hand.

This fireplace includes a glass barrier which helps prevent injury from burns. Never operate this appliance without all three layers of glass installed. Children and other at risk individuals should be monitored at all times.

#### Operating the accent lights

The accent lighting is operated by a separate ON/OFF wall switch.

#### If the fireplace is NOT burning

Turn the accent light ON/OFF wall switch to the ON position to power the lights on.

- The blower will start.
- After 60 seconds the lights will come on.
- After another three minutes the blower will turn off.

#### If the fireplace is burning

Turn the Accent light ON/OFF wall switch to the ON position to power the lights on.

- After 60 seconds the lights will come on.
- The fireplace will continue to operate normally.

Refer to **Replacing Light Bulbs** for information on the replacement of the halogen bulbs.

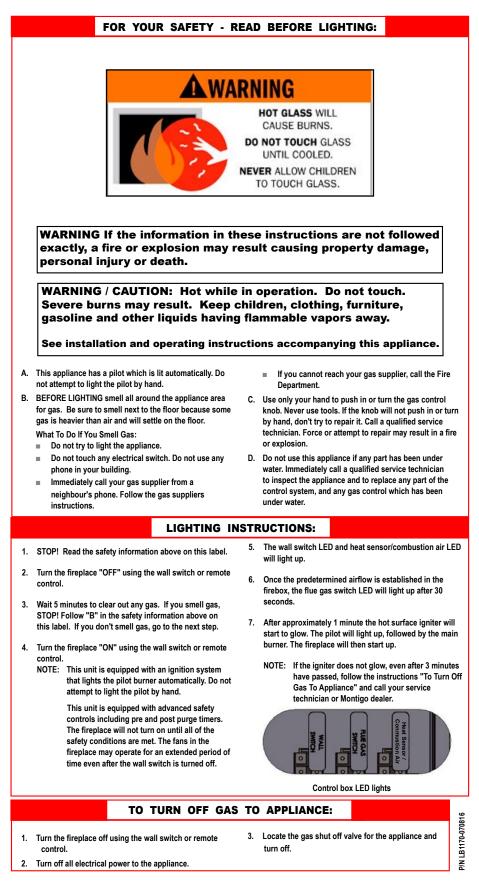


Figure 106. Lighting Instructions (located inside control box)

#### Section 13: Maintenance



This fireplace has multiple power sources. Disconnect all power and gas before servicing.

#### General

- Have the fireplace and installation inspected yearly. The inspection must include, but is not limited to, the following:
  - · A visual check of the entire vent system and termination
  - · Ensure vent selector switch is in the correct position
  - An inspection of the burner, vent run, and primary air openings
  - An inspection of the gas valve, gas components, pilot / burner assembly, and pilot / burner flame
  - · Check fireplace vacuum switches
  - · Check fireplace thermal switches
  - · Ensure glass barriers have not shifted and close any gaps
  - · Check the halogen bulbs
  - · Ensure combustion air into firebox is clear

# 🛍 WARNING

Any safety screen, guard, or barrier removed for servicing an appliance must be replaced prior to operating the appliance.

Contact your local Montigo dealer for service options.

Visit www.montigo.com to find the location of a dealer near you.

#### Cleaning

When the fireplace is first activated, there may be some smoking and a visible film may be left on the glass. This is a normal condition, and is the result of curing of protective coatings on new metal.

- Glass must be cleaned periodically to remove any film (which is a normal by-product of combustion) which may be visible. Clean glass using non-abrasive, non-ammonia based glass cleaners. One of the most effective products is Kel-Kem.
- Use a vacuum cleaner to keep the control compartment, burner, and firebox free from dust and lint.

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Λi,

The glass and internal components will be hot when the appliance is in use. Wait for the appliance to cool before cleaning or servicing.

# NOTICE

Do not use ammonia based or abrasive cleaners on the glass, they will permanently etch the surface. Use an approved gas fireplace glass cleaner such as Kel-Kem or White off.

#### **Replacing Light Bulbs**

The halogen light bulbs in the **RP424PFC** can be replaced by following the steps below. If a single bulb has to be replaced, we recommend replacing all bulbs to reduce frequency of servicing. See **Unit Specifications** for bulb type and wattage.

Disconnect power from the unit and allow to cool prior to servicing.

**Step 1:** Remove the glass barriers. See **Section 10** for installation and removal of glass barriers.

**Step 2:** Remove the burner media. See **Section 9** for installation of accessories.

Step 3: Remove the brackets at both ends of the burner media tray.

**Note:** It is not necessary to remove the Pilot cover to remove the Burner Tray.



Figure 107. Pilot end of burner tray.

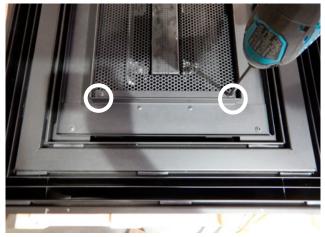


Figure 108. Front end of the burner tray.

Step 4: Remove the burner tray.



Figure 109.

**Step 5:** Remove the halogen bulb. **Note:** DO NOT handle halogen bulbs with bare hands as it can shorten the life of the bulb. We recommend using a pair of cotton gloves when handling bulbs.



Figure 110.

Installation is the reverse of removal.

#### **Replacing the Vacuum Switches**

Follow the steps below to replace the vacuum switches. See **Figure 36** for a wiring diagram. When disconnecting each wire, we recommend marking the wire to ensure they are reconnected in the correct locations.

Step 1: Disconnect power and gas supply to the fireplace.

**Step 2:** Remove glass barriers. See **Section 10** for installation and removal of glass. Note: if removing glass from one side only, take precautions against dirt and damage to the remaining sides.

Step 3: Remove the access panel and inner valve cover. See Accessing the Valve.

#### Replacing the .40 switch:

**Step 4:** The vacuum switches are mounted above the valve. Begin by removing the silicone tubes connected to the bottom of the switch. The clear tube connects to the black nipple and the red tube connects to the grey nipple.



Figure 111.

**Step 5:** Disconnect the wires connected to the switch. The blue wire connects to the closest terminal and the red wire connects to the farthest terminal when viewed from the front of the fireplace. Do not connect a wire to the center terminal.



Figure 112. Disconnect blue wire.

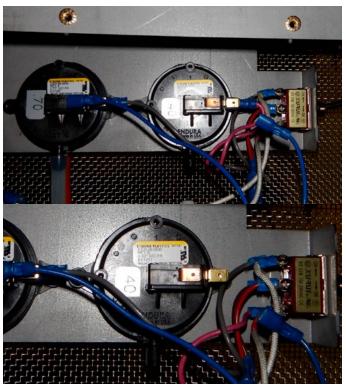


Figure 113. Disconnect red wire.

**Step 6:** Remove the screws securing the switch to the mounting bracket.



Figure 114.

Installation is the reverse of removal.

#### Replace the .70 switch:

Step 1: Disconnect power and gas supply to the fireplace.

**Step 2:** Remove glass barriers. See **Section 10** for installation and removal of glass. Note: if removing glass from one side only, take precautions against dirt and damage to the remaining sides.

Step 3: Remove the access panel and inner valve cover. See Accessing the Valve.

**Step 4:** The vacuum switches are mounted above the valve. Begin by removing the silicone tubes connected to the bottom of the switch. The clear tube connects to the black nipple and the red tube connects to the grey nipple.



Figure 115.

**Step 5:** Disconnect the wires connected to the switch. The blue wire connects to the closest terminal and the grey wire connects to the farthest terminal when viewed from the front of the fireplace. Do not connect a wire do the center terminal.

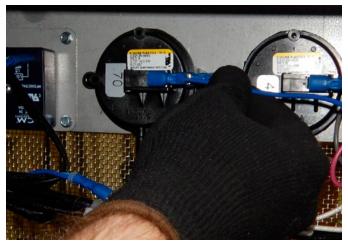


Figure 116. Disconnect blue wire.

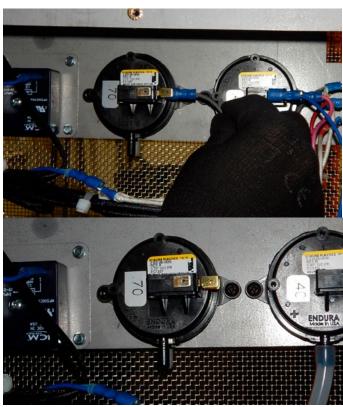


Figure 117. Disconnect grey wire.

Step 6: Remove the screws securing the switch to the mounting bracket.



Figure 118.

#### **Replacing the Delay Timer**

Follow the steps below to service the delay timer. See **Figure 36** for a wiring diagram. When disconnecting each wire, we recommend marking the wire to ensure they are reconnected in the correct locations.

Step 1: Disconnect power and gas supply to the fireplace.

**Step 2:** Remove glass barriers. See **Section 10** for installation and removal of glass. Note: if removing glass from one side only, take precautions against dirt and damage to the remaining sides.

Step 3: Remove the access panel and inner valve cover. See Accessing the Valve.

The delay timer is mounted above the valve on the left side of the fireplace when viewed from the front.

#### If you need to replace the relays only:

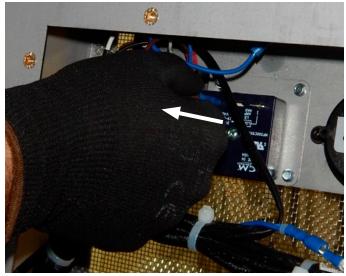
Step 4: Pull the relay from the receptacle.



Figure 119.

#### If you need to replace the Delay Timer Module:

**Step 5:** Unplug the wires connected to the delay timer module. The brown wire connects on the left side and the blue wire connects on the right.



#### Figure 120.

**Step 6:** Remove the three screws securing the delay timer mounting bracket.

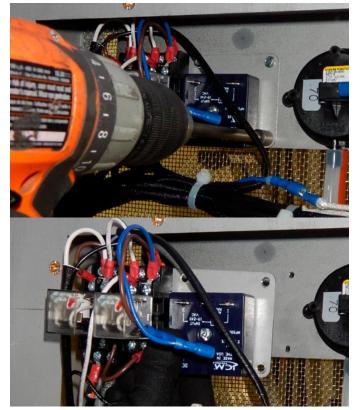
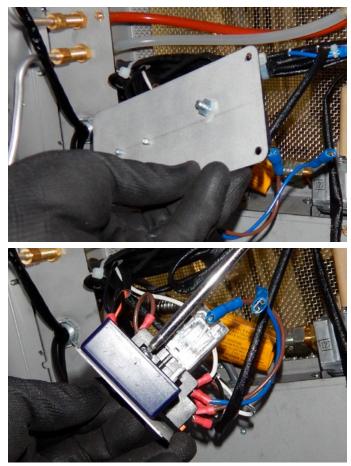


Figure 121.

**Step 7:** The delay timer module is secured to the mounting bracket using a nut on the back side of the bracket. Hold the nut and remove the screw securing the delay timer to the mounting bracket.

Installation is the reverse of removal.



#### Figure 122.

Step 8: Remove and replace the delay timer module.

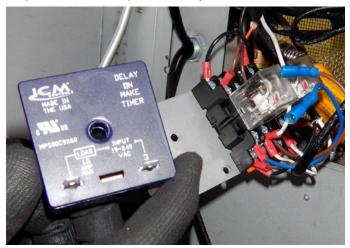


Figure 123.

#### **Replacing the Valve**

Follow the steps below to service the valve.

Step 1: Disconnect power and gas supply to the fireplace.

**Step 2:** Remove glass barriers. See **Section 10** for installation and removal of glass. Note: if removing glass from one side only, take precautions against dirt and damage to the remaining sides.

Step 3: Remove the access panel and inner valve cover. See Accessing the Valve.

Step 4: Unplug electrical connectors from the valve.



Figure 124.



Step 5: Using a 7/16" wrench, unscrew the pilot gas line from the valve.

Figure 125.

**Step 6:** Using a 7/8" wrench, remove the flex lines from the gas connections. **Note:** Replacement flex lines will come pre-assembled with the replacement valve.



Figure 126.

**Step 7:** Remove four screws securing the valve bracket to the valve tray.



Figure 127.

**Step 8:** Gently rotate the Pilot gas line up and away from the valve. Lift the valve assembly away from the fireplace.



Figure 128.

**Step 9:** Install the replacement valve. **Note:** Be sure to install the replacement valve in the correct orientation. The electrical connections align with the right side of the fireplace when installed correctly. See **Figure 130**.



Figure 129.

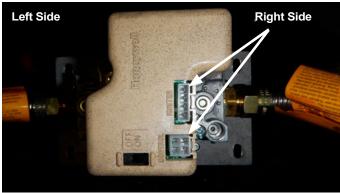


Figure 130.

Step 10: Installation of the valve is the reverse of removal.

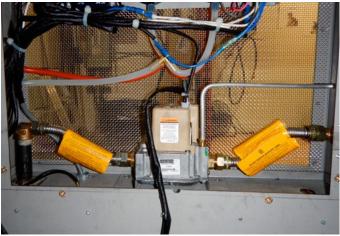


Figure 131. Valve assembly installed.

Step 11: Resupply power and gas to the fireplace.

Step 12: Light the fireplace.

**Step 13:** Check connections under normal operating pressure with a commercially available leak check solution. Tighten any areas where bubbling occurs or a leak is detected.

DO NOT USE A FLAME OF ANY KIND TO TEST FOR LEAKS.



Figure 132.

**Step 11:** Turn the fireplace off and reinstall the inner valve cover and access panel. See **Accessing the Valve**.

**Step 12:** Reinstall the glass barriers. See **Section 10** for installation and removal of glass.

#### **Replacing the Burner**

Follow the steps below to service the burner.

Step 1: Disconnect power and gas supply to the fireplace.

**Step 2:** Remove glass barriers. See **Section 10** for installation and removal of glass. Note: it is possible to leave the end pieces of glass in place while servicing the burner. Always take precautions against dirt and damage to glass while servicing.

Step 3: Remove the access panel and inner valve cover. See Accessing the Valve.

Step 4: Remove burner media See Section 9 for installation of accessories.

**Step 5:** Remove screws securing the burner media tray and burner end brackets at both ends.



Figure 133.

**Step 6:** Remove and retain the brackets at both ends of the burner media tray.



Figure 134.

**Step 7**: Remove eight screws securing the burner media tray to the burner.



#### Figure 135.

Step 8: Remove the burner media tray.

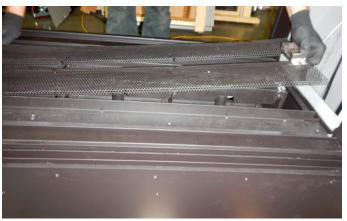
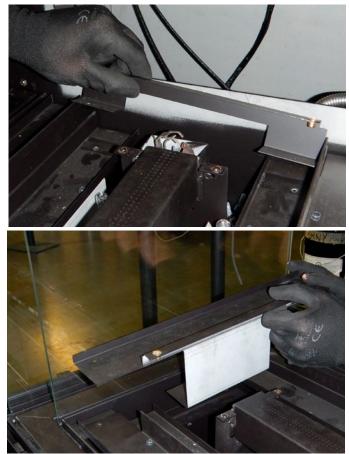


Figure 136.



Step 9: Remove the burner media tray mounting brackets.

Figure 137.

Step 10: Remove five screws securing the left light tray.



Figure 138.

**Step 11:** Lift the left light tray away from the fireplace. Unplug the left light tray from the wire harness.





Figure 139.

Step 12: Repeat for the right light tray.

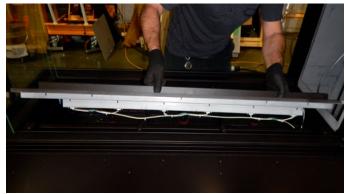


Figure 140.

**Step 13:** Disconnect the pilot line using a 7/16" wrench. The pilot line connects under the burner on the left side of the fireplace.

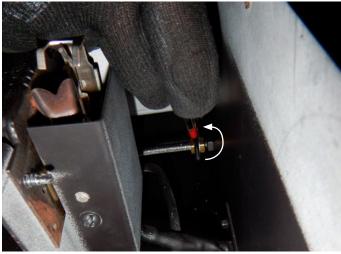


Figure 141.

**Step 14:** Disconnect the flex line located under the burner on the right side of the fireplace using a 7/8" wrench.



Figure 142.

**Step 15:** Remove the four screws securing the burner to the burner brackets.

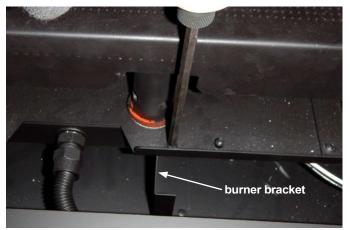


Figure 143.

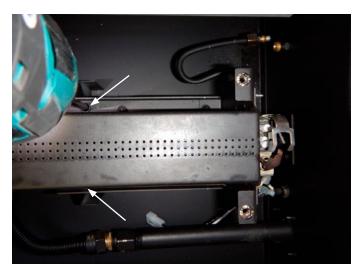


Figure 144.



Figure 145.

**Step 16:** Lift the burner over the bracket and move toward the front of the fireplace.



Figure 146.

Step 17: Remove screws securing the pilot cable cover.





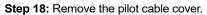




Figure 148.

**Step 19:** Unplug the pilot cable from the valve and pass the wire through the access hole.



Figure 149.



Figure 150.

Step 20: Remove the burner from the fireplace.



Figure 151.

Step 21: Remove the pilot draft shield from the old burner.



Figure 152.

**Step 22:** Installation is the reverse of removal. Connect the pilot cable, secure the burner, connect the gas flex line and pilot lines.

**Step 23:** When the burner is secured in place but before installing the light trays, the gas connections must be tested. Resupply power and gas to the fireplace.

**Step 24:** Light the fireplace and check connections under normal operating pressure with a commercially available leak check solution. Tighten any areas where bubbling occurs or a leak is detected.

DO NOT USE A FLAME OF ANY KIND TO TEST FOR LEAKS.

**Step 25:** Turn the fireplace off and install the pilot draft shield that was removed from the old burner. Reinstall the light trays. Test the lights to ensure they are functional.

**Step 26:** Reinstall the burner media tray mounting brackets, the burner media tray, and the rail ends.

Step 27: Reinstall the inner valve cover and access panel. See Accessing the Valve.

Step 28: Reinstall the burner media. See Section 9 for installation of accessories.

**Step 29:** Reinstall the glass barriers. See **Section 10** for installation and removal of glass.

#### **Replacing the Pilot**

# 

Misalignment or improper installation of the pilot can result in delayed ignition, potentially leading to personal injury or death.

The burner must be removed in order to replace the pilot. Follow the directions in **Replacing the Burner** before continuing. Follow the steps below to replace the pilot.

Step 1: Disconnect power and gas supply to the fireplace.

**Step 2:** Remove glass barriers. See **Section 10** for installation and removal of glass. Note: it is possible to leave the end pieces of glass in place while servicing the burner and pilot. Always take precautions against dirt and damage to glass while servicing.

Step 3: Remove the access panel and inner valve cover. See Accessing the Valve.

Step 4: Remove burner media See Section 9 for installation of accessories.

Step 5: Remove the burner. See Replacing the Burner.

**Step 6:** With the burner removed, remove the screw securing the pilot shield to the pilot.

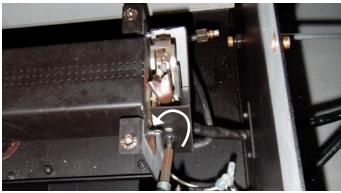
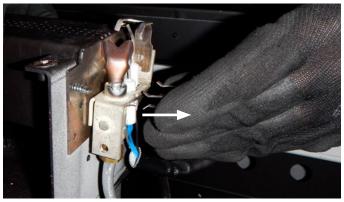


Figure 153. Step 7: remove the pilot draft shield.



Figure 154.

Step 8: remove the clip that secures the sensor and ignitor to the pilot.





Step 9: remove the sensor and ignitor.



Figure 156.

Step 10: remove the screw that secures the pilot to the burner.

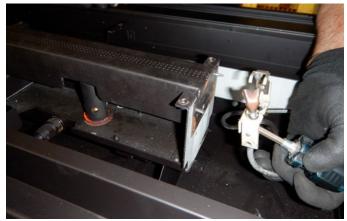


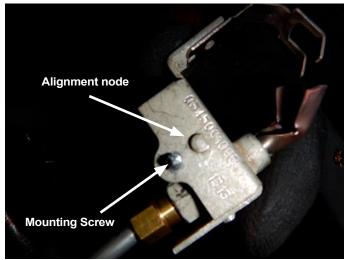
Figure 157.

### **Step 11:** Remove the pilot line from the pilot. **Note:** Be sure the pilot orifice does not drop out of the pilot.



Figure 157b.

**Step 12:** Installation is the reverse of removal. Note: The pilot contains an alignment node to ensure the pilot is properly aligned on the burner. See **Figure 160**.



#### Figure 158.

The pilot end of the burner contains an extra rivet to ensure the pilot is secured in the correct location. The pilot installs to the left of the rivet.

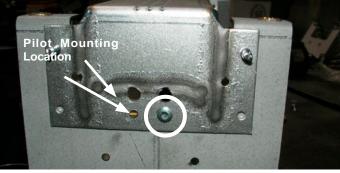


Figure 159.

Note: When installing the sensor and ignitor, ensure they are centered in the pilot bracket as shown in **Figure 160**.



Figure 160.

**Step 13:** Connect the pilot cable, secure the burner, connect the pilot lines and a new flex line (not included with pilot assembly).

**Step 14:** When the burner is secured in place but before installing the light trays, the gas connections must be tested. Resupply power and gas to the fireplace.

**Step 15:** Light the fireplace and check connections under normal operating pressure with a commercially available leak check solution. Tighten any areas where bubbling occurs or a leak is detected.

DO NOT USE A FLAME OF ANY KIND TO TEST FOR LEAKS.

**Step 16:** Turn the fireplace off and install the pilot draft shield that was removed from the old burner. Reinstall the light trays. Test the lights to ensure they are functional.

**Step 17:** Reinstall the burner media tray mounting brackets, the burner media tray, and the rail ends.

Step 18: Reinstall the inner valve cover and access panel. See Accessing the Valve.

**Step 19:** Reinstall the burner media. See **Section 9** for installation of accessories.

**Step 20:** Reinstall the glass barriers. See **Section 10** for installation and removal of glass.

#### **Replacing the Thermal Switches**

Follow the steps below to replace either of the thermal switches. When disconnecting each wire, we recommend marking the wire to ensure they are reconnected in the correct locations.

Step 1: Disconnect power and gas supply to the fireplace.

**Step 2:** Remove glass barriers. See **Section 10** for installation and removal of glass. Note: it is possible to remove just one side of glass from the appliance when replacing a thermal switch. Always take precautions against dirt and damage to glass while servicing.

**Step 3:** Remove the screws securing the firebox baffle. It is possible to remove the thermal switch mounting bracket with one baffle removed.



Figure 161.

**Step 4:** Remove the screws securing the thermal switch mounting bracket.



Figure 162.

Step 5: Pull the thermal switch down and away from the fireplace.



Figure 163.

#### Identifying the switches

The switch connected to the red wire is rated for  $275^{\circ}$ F. The terminals on this switch extend in line with the switch. This switch is intended for vent lengths of 25' or less.

The switch connected to the black wire is rated for  $225^{\circ}$ F. The terminals on this switch are bent at the back of the switch. This switch is intended for vent lengths greater than 25'.

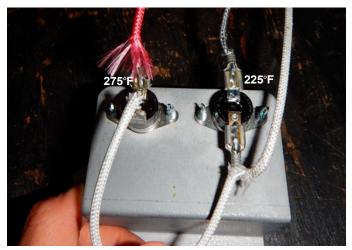


Figure 164.

#### Replacing the 225°F Switch

**Step 1:** Identify the switch on the temperature switch mounting bracket and remove the screws securing the old switch to the bracket.

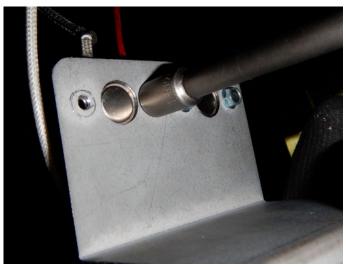


Figure 165.

**Step 2:** Cut the black wire just above the connection to the switch. Strip about 0.25" of shielding from the exposed end.



Figure 166.

**Step 3:** Cut the two white wires just above the connection on the other side of the switch. Strip about 0.25" of shielding from the exposed ends.

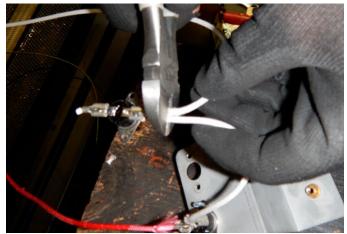


Figure 167.

**Step 4:** Use vice grips to align and secure the new switch with the temperature switch mounting bracket.

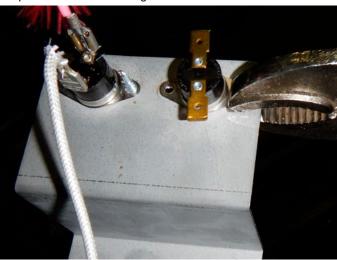


Figure 168.

Step 5: Insert a screw to secure the switch to the bracket.

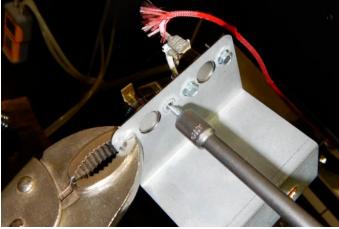


Figure 169.

Step 6: Secure the other side.





**Step 7:** Align one of the supplied spades over the end of the black wire and secure using wire crimpers.



#### Figure 171.



**Step 8:** Twist the exposed ends of the white wires together. Align the second spade with the twisted ends and secure using wire crimpers.

Figure 172.

Step 9: Connect the wires to the new switch.



Figure 173. Step 10: Place solder along the connections.

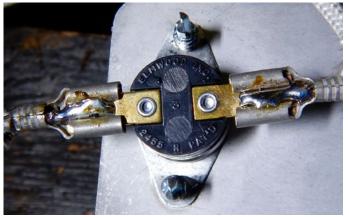


Figure 174.

**Step 11:** Reinstall the temperature switch mounting bracket ensuring proper orientation. The temperature switches align toward the front of the fireplace.

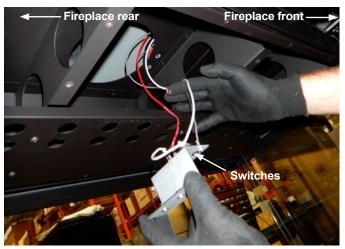


Figure 175. Direction of install

Step 12: Reinstall firebox baffle(s).

**Step 13:** Reinstall glass barriers. See **Section 10** for glass installation and removal. Resupply power and gas supply to the fireplace.

#### Replacing the 275°F Switch

**Step 1:** Identify the switch on the temperature switch mounting bracket and remove the screws securing the old switch to the bracket.





**Step 2:** Cut the red wire just above the connection to the switch. Strip about 0.25" of shielding from the exposed end.



Figure 177.

**Step 3:** Cut the white wire just above the connection on the other side of the switch. Strip about 0.25" of shielding from the exposed end.

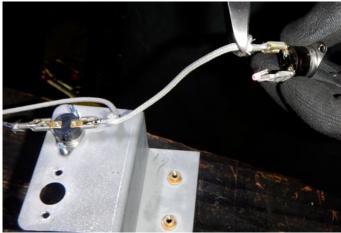


Figure 178.

**Step 4:** Use vice grips to align and secure the new switch with the temperature switch mounting bracket. Insert the two screws removed earlier to secure the switch to the bracket.



Figure 179.

**Step 5:** Align one of the supplied spades over the end of the red wire and secure using wire crimpers.

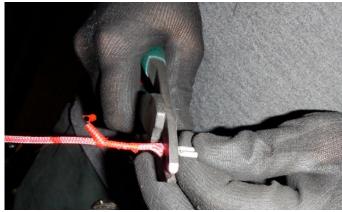


Figure 180.

**Step 6:** Align the second spade with the exposed end of the white wire and secure using wire crimpers.

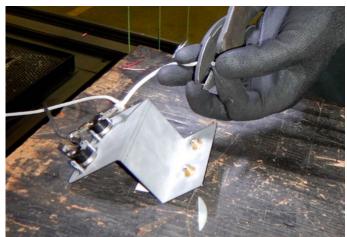
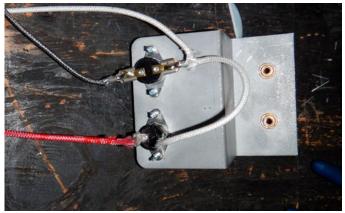


Figure 181.

Step 7: Connect the wires to the new switch.





Step 8: Place solder along the connections.

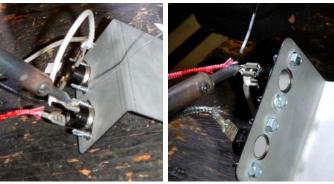


Figure 183.

**Step 9:** Reinstall the temperature switch mounting bracket ensuring proper orientation. The temperature switches align toward the front of the fireplace.

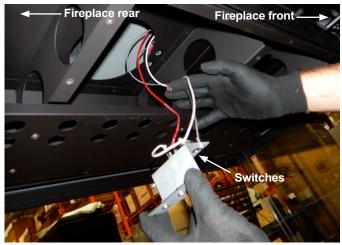


Figure 184. Direction of install

**Step 11:** Reinstall firebox baffle(s).

**Step 12:** Reinstall glass barriers. See **Section 10** for glass installation and removal. Resupply power and gas supply to the fireplace.

### Operation

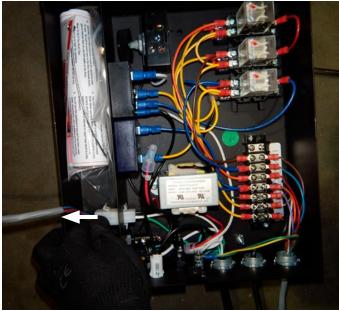
#### **Replacing the Control Box**

Follow the steps below to replace the control box. Take care when reconnecting each wire to ensure they are install in the proper locations. Refer to **Figure 36** for wiring diagram.

Step 1: Disconnect power and gas supply to the fireplace.

Step 2: Remove the screws securing the cover of the control box.

Step 3: Unplug the power vent.



#### Figure 185.

Step 4: Disconnect yellow/green ground wires.

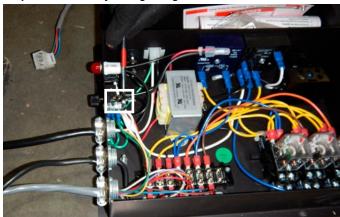


Figure 186.

**Step 5:** Use a Phillips screwdriver to detach the wires for the remaining terminals.

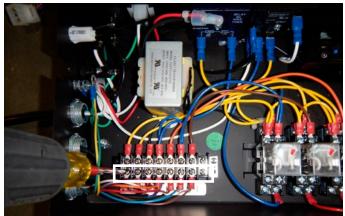


Figure 187.

Step 6: Installation is the reverse of removal.

#### Vent Maintenance / Inspection

Part of the annual maintenance on this appliance should include a thorough inspection of the entire Venting and Termination. Vent inspection should include:

# Roofing Inspection and repair should only be performed by a licensed and qualified roofing professional.

#### **1).** Attachment to the Fireplace

**a.** Make sure that the attachment of the venting to the top of the Appliance is tight, secure and that no corrosion has affected the venting's integrity.

**b.** Make sure that both vents (incoming & outgoing) are secure and that these flexible liners have not been kinked, restricted or damaged in any way.

**c.** Make sure there are no "dips" in the venting. Condensation can collect and affect the performance of the Fireplace if the venting is not vertical in all areas.

#### 2). Roof Termination

**a.** Make sure that all sealing materials are in good condition and that there is no opportunity for moisture to access the building.

**b.** Make sure there are no signs of corrosion to the Vent Termination or Roof Flashing

**c.** Make sure there are no signs of intrusion by any birds or pests of any kind. Make sure animals have not built any nests anywhere in the vicinity of the Vent Termination.

#### 3). Attachment to the Vent Termination

**a.** If you have to re-seal a Vent Termination or Roof Flashing, firstly make sure the Venting is secure to the Termination or Vent Adaptor. Make sure there are no signs of corrosion anywhere in the venting system.

#### **Replacing Glass**

See **Section 10** for Installation and Removal of glass barriers and the mirror glass firebox liner.

If a barrier becomes damaged at any time, contact your local Montigo dealer for information on glass replacement. Refer to the following table for glass specifications:

The glass barriers and mirror glass rest upon rubber gaskets to protect the glass. Always ensure these bumpers are in place when replacing any glass. Replacement glass kit RDTRP424PF contains all glass barriers. Contact your local Montigo dealer for more information. **Note:** RDTRP424PF does not contain the mirror glass firebox liner.

Replacement Part	Dimensions (Width x Height)	Specifications	
RGL1103 - Outer Side	47 5/16" (1202 mm) x 25" (635 mm)	5 mm Tempered, flat polished edge finish	
RGL1104 - Outer End	23 1/2" (597 mm) x 25" (635 mm)	5 mm Tempered, flat polished edge finish	
RGL1105 - Inner Side	43 11/16" (1110 mm) x 25" (635 mm)	5 mm Tempered, flat polished edge finish	
RGL1106 - Inner End	16 5/16" (414 mm) x 25" (635 mm)	5 mm Tempered, flat polished edge finish	
RGL1107 - Middle Side	45 7/16" (1154 mm) x 25" (635 mm)	5 mm Tempered, flat polished edge finish	
RGL1108 - Middle End	19 7/8" (505 mm) x 25" (635 mm)	5 mm Tempered, flat polished edge finish	
RGL1115 - Mirror Glass Firebox Liner	15 13/16" (402 mm) x 23 7/16" (595 mm)	6 mm Tempered Mirrorpane Glass, Arrissed edge finish	

#### Troubleshooting Testing Pressure at Vacuum Switches

**Step 1:** Remove the glass barriers and mirror glass firebox liner. See **Section 10** for installation and removal of glass. Setup of this test requires the removal of only one side of glass.

Step 2: Remove the access panel and inner valve cover.

**Step 3:** Remove the testing pass-through covers located inside the fireplace to the left side of the inner valve cover and behind the middle glass retainer on the left or right side of the fireplace.



Figure 188.

**Step 4**: Starting with the clear silicone tube, disconnect from the lower bulkhead on the left side of the fireplace.

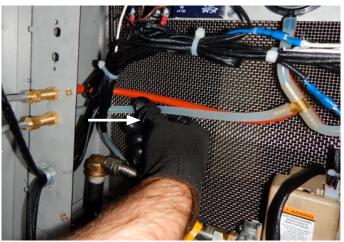


Figure 189.

**Step 5:** Attach a silicone tube to a barbed tee. Connect the tube removed in **Step 1** to the center barb.



Figure 190.

# Step 6: Connect the other tube to the bulkhead referenced in Step 1.

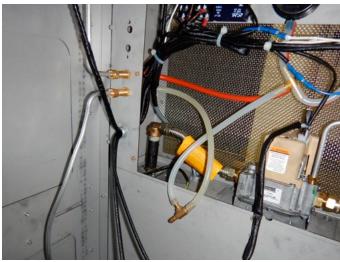


Figure 191.

**Step 7:** Pass a longer silicone tube through the passthrough at the left of the inner valve cover.



Figure 192.

Step 8: Connect to the remaining barb.



Figure 193.

**Step 9:** Pass the other end of the long silicone tube through the foreward passthrough.



Figure 194.

**Step 10:** Unplug the red silicone tube connected to the lower bulkhead on the left side of the fireplace.



Figure 195.

**Step 11:** Attach a silicone tube to a barbed tee. Connect the tube removed in **Step 10** to the center barb.



Figure 196.

Step 12: Connect the other tube to the bulkhead referenced in Step 10.



Figure 197.

**Step 13:** Pass a longer silicone tube through the passthrough at the left of the inner valve cover.

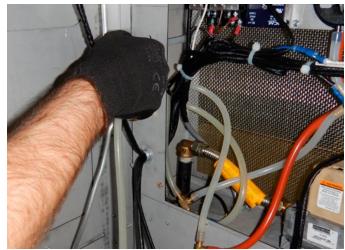


Figure 198.

Step 14: Connect to the remaining barb.



Figure 199.

**Step 15:** Pass the other end of the long silicone tube through the foreward passthrough.



Figure 200.

Step 16: Replace the inner valve cover and access panel.

**Step 17:** Carefully replace the inner layer of glass, inner glass retainer, and middle layer of glass. The middle glass retainer cannot be replaced.

**Step 18:** Replace the outer glass barrier, ensuring the silicone tubing is not kinked or pinched in the glass.

Step 19: Attach a the end of each tube to a manometer.



Figure 201

**Step 20:** When testing is complete, remove the glass barriers, access panel, and inner valve cover. Disconnect the silicone tubing connected in Steps 5 through 14. Reconnect the vacuum switch tubing to the upper and lower bulkheads on the left side of the fireplace.

**Step 21:** Reinstall the inner valve cover and access panel. See **Accessing the Valve** for further information.

#### **Common Problems**

Always ensure this appliance is installed in accordance with these instructions for trouble-free operation. Installation and service must be performed by a qualified installer, service agency, or gas supplier.

The following table provides a list of common problems and solutions to assist in troubleshooting.

Problem	Solution	
1. No power.	1. Check the light on the outside of the Control Box. This light indicates power supply to the box.	
	2. Check the fuse.	
	3. Check power supply.	
2. Wall Switch light on the control box isn't lit.	1. Ensure wall switch is in the ON position.	
	2. Ensure wall is not improperly grounded.	
3. Power vent/blower isn't running.	1. Ensure the power vent is plugged in at both ends.	
	2. Ensure the speed control is on.	
	3. Check the power vent fuse.	
	4. Power vent may be faulty.	
4. Heat Sensor or Combustion Air Switch	1. Faulty switch or connection to the switch.	
light on the control box isn't lit.	<ol> <li>If the light isn't lit but the fireplace is working the unit may be overheating.</li> </ol>	
5. Flue Gas Switch on the control box isn't lit.	1. Ensure the power vent is connected and operating.	
	2. Increase the fan speed.	
	3. Ensure all venting is installed according to these instructions, connected, and free of any kinks.	
6. Control box lights are lit but the igniter isn't glowing.	1. Wait at least 60 - 90 seconds. See <b>Section 11</b> for ignition sequence.	
	2. Listen for an audible click during the first 60 - 90 seconds after lighting the unit. If there is no click, check all wiring and connections to terminal 1 and 2 within the control box. See <b>Figure 36</b> . If there is a click, check the igniter and sensor.	
	3. Check power supply voltage to the igniter.	
7. The igniter is glowing but the pilot will not light.	1. Ensure the gas supply is turned on.	
	2. Allow the system to bleed.	
	3. Refer to <b>Section 11</b> for ignition sequence. Ensure proper actions are taking place.	

Problem	Solution	
8. Pilot is lighting but the	1. Check the flame sensor position.	
burner is not.	2. Ensure the ON/OFF switch on the valve is set to the ON position.	
9. The burner lights but soon dies, the pilot stays lit.	1. Check the gas inlet pressure. See <b>Section 8</b> .	
10. The burner lights but both the burner AND the	1. Check the gas inlet pressure. See <b>Section 8</b> .	
pilot soon die.	2. Check the inlet pipe size.	
11. The fireplace lights but the igniter continues to glow with the flame on.	1. Check the flame sensor position.	
12. The fireplace turns off	1. Check the Flue Gas Switch light.	
after five minutes.	2. Check the Heat Sensor or Combustion Air Switch light.	
	If either light is NOT lit, contact your local Montigo dealer for further assistance.	
15. The flame is flickering/ too fast.	1. Ensure there are no gaps in the glass barriers. See <b>Section 10</b> .	
	2. Check the fan speed. See <b>Adjusting the Fan Speed</b> .	
16. The flame is not centered.	1. Ensure there are no gaps in the glass barriers. See <b>Section 10</b> .	
17. The accent lights do not light.	1. Wait 60 seconds after placing the light switch in the ON position.	
	2. Check power to the lights.	
	3. Check the bulbs. See <b>Replacing</b> Light Bulbs.	

If you experience any further issues please contact your local Montigo dealer for assistance. To find your local Montigo dealer, visit www.montigo.com.

# Appendix

#### **Replacement Parts**

Honeywell HSI				
	RP424PFC			
NG Gas Valve	RGC1047			
LP Gas Valve	RGC1048			
NG Pilot Assembly	RPA048			
LP Pilot Assembly	RPA049			
Control Box	RESCB2			
Fuse, AGC-5Amp	EC1122			
Replacement Halogen Bulbs	REC1416			
Relay Cube	REC1215			
Delay Timer	REC1413			
Vacuum Switch - 0.40	REC1231			
Vacuum Switch - 0.70	REC1259			
Glass - Inner Side	RGL1105			
Glass - Inner End	RGL1106			
Glass - Middle Side	RGL1107			
Glass - Middle End	RGL1108			
Glass - Outer Side	RGL1103			
Glass - Outer End	RGL1104			
Replacement Glass Kit	RDTRP424PF			
Glass - Mirror Glass Firebox Liner	RGL1115			
NG Burner Assembly	RB424PFC01			
LP Burner Assembly	RB424PFC02			
Thermal Switch - 225	REC1064			
Thermal Switch - 275	REC1067			
Gas Connector	RGF1056			

#### **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, Divine & Divine Outdoor (H-Series), Illume (FID Inserts), Phenom (L/P/ PL-Series), Exemplar (R/RP-Series), Mahana and DelRay

Component	Coverage Period	Labor Coverage
Firebox, heat exchanger	15 years	1 year
Main burner	15 years	1 year
Gas control valve and related control components (pilot assembly, spark electrode flame sensors, thermopile)	1 year	1 year
Electrical components (internal blowers, ignition control module, wiring, switches, remote control systems, blower control module, accent bulbs)	1 year	1 year
Firebox media (logset, glass beads, river rocks)	1 year	1 year
Glass (thermal breakage)	1 year	1 year
Plated, painted finishes (including interior reflective glass) *	1 year	1 year
Refractory lining	1 year	1 year
Mesh/Glass safety barriers	1 year	1 year
Power vent termination	1 year	1 year
Montigo terminations*	10 years	1 year
Montigo venting (excluding termination)	15 years	1 year

\* Exterior painted surfaces exempt

#### **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 manufacturers 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.

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 Companies 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, fully discharge all obligations under the warranty by refunding the verified dealer purchase price of the appliance, 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, which are not manufactured or supplied by The Companies, or for the labor necessary to install, repair or remove such 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, replacement or refund 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.

#### **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.

#### **USA Offices**

6955 Salashan Parkway Ferndale WA, 98248 techsupport@montigo.com

#### **Canadian Offices**

27342 Gloucester Way Langley, BC V4W 4A1 techsupport@montigo.com

The terms and conditions of this warranty may be altered or amended from time to time without prior notice.

WARRANTY PERIOD: Warranty coverage begins on the date of original purchase. In the case of new construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the product by an independent, authorized Company dealer/ distributor, whichever occurs earlier.

#### Appendix B: State of Massachusetts

## Amendment

#### (Gas Fireplace / Equipment sold in the State of Massachusetts) 5.08: Modifications to NFPA-54, Chapter 10

#### (1) Revise NFPA-54 section 10.5.4.2 by adding a second exception as follows:

Existing chimneys shall be permitted to have their use continued when a gas conversion burner is installed, and shall be equipped with a manually reset device that will automatically shut off the gas to the burner in the event of a sustained back-draft.

(2) Revise 10.8.3 by adding the following additional requirements:

(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 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 manu-

facturer 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.

# Extraction from: Massachusetts Rules and Regulations 5.00: Amendments To 2002 Edition Of ANSI Z223.1-NFPA-54

# **RP424** Multi Sided Gas Fireplace