

# Installation Operation & Maintenance



EP28-4
4" B-Vented
Gas Fireplaces
EP28-4-2LB
EP28-4-4LB

## Warning:

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

## For Your Safety:

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. Check local codes and read all instructions prior to installation.

- Installer: Leave this manual with the appliance.
- Consumer: Leave this manual for future reference.

## 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.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.







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## Introduction

Thank you for purchasing the *EC-Plus Series Fireplace*. This fireplace is modular, allowing the installation of three different burner configurations and provides flexibility and the opportunity to upgrade and customize to your immediate and future decorative considerations.

The EP28-4 Series are certified in Canada and the USA as a **Vented Gas Fireplace** (ANSI Z21.50 - 2000 / CSA 2.22 - 2000). The models and their descriptions are shown below:

- **EP-28-4-2LB** 2 logs, 16,700 BTU/H (natural & propane gas)
- EP-28-4-4LB 4 logs, 16,700 BTU/H (natural & propane gas)

#### How to use this manual:

This manual covers installation, operation and maintenance. Lighting, operation and care of this fireplace can be easily performed by the homeowner. However, all installation and service work should be performed by a qualified or licensed contractor, plumber, gasfitter, or installer who is qualified or licensed by the state, province, region, or governing body in which the appliance is being installed.

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

- Modification of the fireplace and/or components including combustion air assembly or glass doors.
- Use of any component part not manufactured or approved by the manufacturer in combination with an EC-Plus 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.

Installations in Canada must conform to the current CAN/CGA B-149.1 and .2 Gas Installation Code and local regulations. When the unit employs the *optional* Blower Kit, it must be electrically grounded in accordance with CSA C22.1 Canadian Electrical Code Part 1 and/or Local Codes.

Installations in the USA must conform to the National Fuel Gas Code, ANSI Z223.1-1988. When the unit employs the *optional* Blower Kit it must be grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70-1987.

#### **CAUTIONS**

Due to its high operating temperatures, the 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.



## **Installing The Fireplace Shell**

The fireplace may be installed in any location that maintains 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 the optional B-Vent & Combustion Air Kit installation.

The fireplace dimensions are shown below:

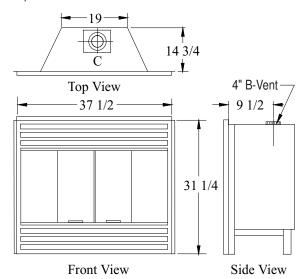


Figure 1. Fireplace dimensions.

#### **Clearances**

The EP-28 Series clearances to combustible materials are:

Top*	12"
Back	0"
Sides	1"
Floor	0"
Mantle**	6"
Recess Depth***	15"

- \* Clearance from the top of the fireplace to a combustible ceiling, within the fireplace enclosure.
- \*\* Refer to page 5.

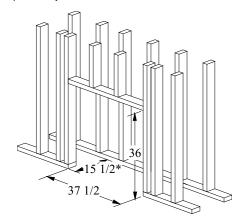
See Figure 2.

#### **WARNING:**

When this appliance is installed directly on carpeting, tile or 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.

#### **Framing**

For protection against freezing temperatures, it is recommended that outer walls of the chase be insulated with a vapour barrier. This will reduce the possibility of a cold-air convection current on the fireplace.



\* When sheetrock is not used behind the fireplace, framing depth may be reduced to 14 3/4"

Figure 2. Framing dimensions.

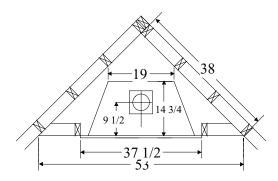


Figure 3. Corner Installation - framing dimensions.



## **Installing The Gas Line**

The gas line must be installed before finishing the fireplace. **Natural Gas** requires a minimum inlet gas supply pressure of 5.5" W.C. & a manifold pressure of 3.5" W.C. **Propane Gas** requires a minimum inlet gas supply pressure of 11" W.C. & a manifold pressure of 10" W.C. Provision must also be made for a 1/8" N.P.T. plugged tapping and be accessible for test gauge connection immediately upstream of the gas supply controls to the appliance. The fireplace gas connection and the main operating gas valve is located behind the removable brass trim at the bottom of the unit and need only be attached to the gas line with an approved fitting, as required by the **applicable installation codes**.

- Only use gas shut-off valves approved for use by the state, province, region, or governing body, in which the appliance is being installed, or as required by the applicable installation codes.
- Flexible gas connectors must not exceed 3 feet in length, unless it is

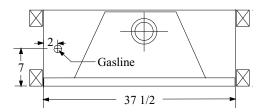


Figure 4. Gas line access.

allowable within applicable installation codes.

The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing

\* 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 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.

## **Installing The Remote Switch**

The **EP-28-4 Series** is equipped with a remote-operated valve, located behind the removable brass grille, to the right of the gas control valve (refer to Figure 10a and 10b.) The valve is pre-wired and completely self contained to generate its own power. **DO NOT** connect any external power to it.

**Note:** The switch location must not exceed 30' from the fireplace.

## **B-Vent Installation**

The **EP-28-4 Series** is certified for use with standard *4" B-Vent* and requires no B-Vent appliance connector. Simply attach the B-Vent to the fireplace flue collar, and secure it to the L-shaped brackets on each side of the opening using sheet metal screws. Do not penetrate the inner sleave of the B-Vent when tightening the screws.

Refer to the current CAN/CGA B-149.1 and .2 or ANSI Z223.1-1988 Gas Installation Code for specific vent sizing.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

Test your B-Vent installation after completion to ensure that no combustible by-products are spilling from the fireplace opening. This draft test should be performed after a fifteen (15) minute warm up period. The manufacturer will not be responsible for any installations with inadequate draw.

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## **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 project beyond shaded area shown in **Figure 5a**. Side wall clearances are 0". Combustible surrounds may be installed with 0" clearance to the side of the fireplace as shown in **Figure 5b**.

#### **Fireplace Facing**

When selecting the finish material for your fireplace, it is important to remember the following: TRIMS MUST NOT BE OBSTRUCTED IN ANY WAY - to do so restricts the air supply for the control compartments and heat exchanger it also prevents access for servicing controls.

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 past the fireplace opening at all, because it will interfere with the access to retainers for removal of glass door.

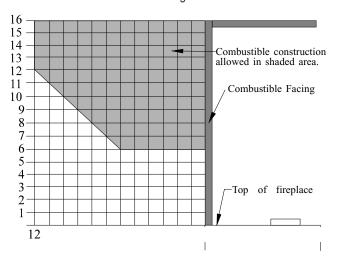


Figure 5a. Combustible mantles and facings.

#### Mantels & Surrounds

**NOTE:** Mantel clearances shown are for fire hazard prevention.

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, discoloration or premature failure of T.V. and radio components.

#### Painting:

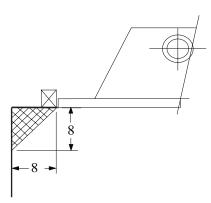


Figure 5b. Combustible surrounds.

Special care is recommended by the Master Painters and Decorators Association, when painting the fireplace surrounds, to select and apply a quality *Alkyd sealer* prior to the applying of latex paints. This is to prevent leaching of water from evaporation and causing a brownish staining effect to paint over coats.



## Wiring

## Gas Control and Pilot Wiring EP-28-4-1



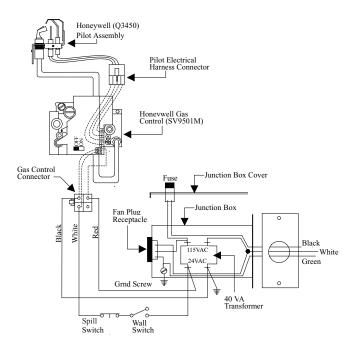


Figure 6. Wiring for the EP28-I with Honeywell gas control and pilot.

## **Optional Blower Kit**

EP-28 Series decorative fireplaces may be equipped with an optional blower kit (Part #FAN-28) for circulating heat into the living space.

Refer to Fan-28 Installation Instructions for more information.

Installations in Canada which employ the fan kit, must be in accordance with CSA C22.1 Canadian Electrical Code Part 1 and/or Local Codes.

**Installations in the USA** employ the fan kit, must be in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70-1987.

NOTE:

If any of the original wire supplied with the appliance is replaced, it must be replaced with the same type, or its equivalent.

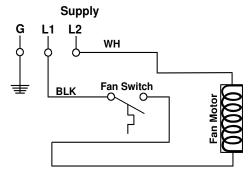


Figure 7. Wiring schematic for optional blower kit.



## **Optional Doors**

EC-Plus 4-Series Fireplaces come standard with a firescreen, and may be fitted with one of the following optional door kits:

Twin-Pane-Style Doors	Part # EP-TWD28
Bi-Fold Doors	Part # EP-BD28
Stereo Cabinet Doors	Part # EP-TWD28E

Twin-Pane and Bi-Fold Doors are available in Black, Brass or Nickel Finshes to match your fireplace's trim. Stereo Cabinet Doors are an all-glass design.

#### Installation

Complete installation instructions are included with the door kit.

#### Adjustment

After installation of the fireplace, the doors may require some adjustment.

The spring clips that are installed on both sides of the top door rail are used to align the doors. With the door open, loosen the screw that holds the spring clip in place (see Inset). This will allow the door to move back and forth. Fit the doors so that they are straight and tighten the screw to hold the door in position. Adjust both doors until the opening between the doors, when closed, is even from top to bottom.

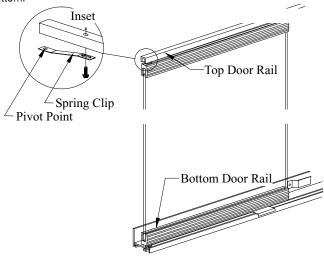


Figure 8. Adjusting the glass doors.

## **Logset Installation**

## EP28-4-2LB Logset

This burner assembly is supplied with two (2) cultured oak logs. To install simply place log **A's** rectangular shaped extension into the log mounting slot located on rear wall of the **b**urner assembly. Place log **B** onto front log slots as shown below.

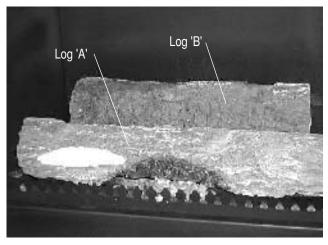


Figure 9a. Installing the -2LB logset.

#### EP28-4-4LB Logset

This burner assembly is supplied with a four piece ceramic fibre logset. To install the logs, simply place log  $\bf A's$  rectangular shaped extension into the log mounting slot located on rear wall of the burner assembly. Place log  $\bf B$  onto front log slots. Place log  $\bf C$  and log  $\bf D$  onto pins on the burner bar as shown below.

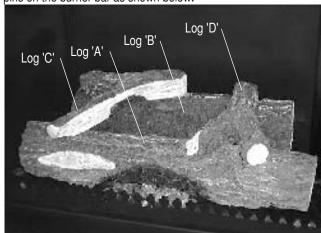


Figure 9b. Installing the -4LB logset.





# **Operation - Model EP28-4**

## with Continuous Pilot

## For Your Safety - READ BEFORE LIGHTING:

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- **A.** This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

#### 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.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.

Department.

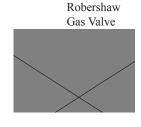
- **C.** Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempt to repair may result in a fire or explosion.
- **D.** Do not use this appliance if any part 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 which has been under water.

## **Lighting Instructions:**

- 1. STOP! Read the safety information above on this
- 2. Remove lower brass trims.
- 3. Push in gas control knob and turn clockwise \times to
- 4. Wait five (5) minutes to clear out any gas. Smell for gas, including near the floor. If you then smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
- 5. Locate pilot burner (See illustration at right.) and follow steps below.

Honeywell Gas Valve





- **6.** Turn knob on gas control counterclockwise to "PILOT."
- 7. Push in gas control knob completely and hold. Light the pilot with a match. Continue to hold the control knob in for about (1) minute after the pilot is lit. Release the knob and it will pop back up. Pilot should remain lit. If it goes out repeat steps 3 through 8.
  - If knob does not pop up when released. Stop and immediately call your service technician or gas supplier.
  - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- 8. Push in gas control knob and turn counterclockwise 7 to "ON."
- 9. Replace lower brass trim.
- 10. Turn on remote switch to ignite fire.

NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.

## To Turn Off Gas To Appliance:

- 1. Turn off remote switch.
- 2. Remove lower brass trim.

- 3. Push in gas control knob slightly and turn \(\sime\) clockwise to "Off". Do not force.

4. Replace brass trim.





# **Operation - Model EP28-4-I**

## with Honeywell Intermittent Pilot

## For Your Safety - READ BEFORE LIGHTING:

**WARNING:** If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance is equipped with an ignition system that lights the pilot burner automatically. Do not attempt to light the pilot by hand.
- **B. BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

#### What To Do If You Smell Gas:

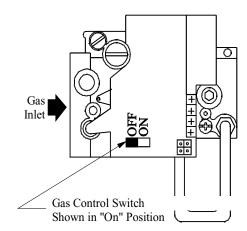
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.

- If you cannot reach your gas supplier, call the Fire Department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempt to repair may result in a fire or explosion.
- D. 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 which has been under water.

## **Lighting Instructions:**

- STOP! Read the safety information above on this label.
- 2. Remove lower brass trims.
- 3. Turn switch on the gas control to OFF".
- **4.** Wait 5 minutes to clear out any gas. If you smell gas, **STOP!** Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
- Turn switch on the gas control to "ON". NOTE: This
  unit is equipped with an ignition system that lights the
  pilot burner automatically. Do not attempt to light the
  pilot by hand.
- 6. Turn on wall switch.
- **7.** Replace lower brass trim.

8. If the fireplace does not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.



## To Turn Off Gas To Appliance:

- 1. Turn off remote switch.
- 2. Remove lower brass trim.

- **3.** Turn the switch on the gas control to "Off".
- 4. Replace brass trim.



## **Maintenance**

#### **CAUTION**

- Fireplace gas control must be in the "OFF" position and pilot and main burners extinguished when cleaning appliance with a vacuum.
- Glass and logs can get very hot. Handle only when cool.

#### **General**

- Have the fireplace installation inspected yearly, including a visual check of the vent system, the burner and the pilot flame. For your convenience a 1/8" manifold pressure tap is supplied on the gas valve for a test gauge connection. See Figure 10a and 10b.
- For **Natural Gas** this appliance requires a minimum inlet pressure of 5.5" W.C. and a manifold pressure of 3.5" W.C.
- For **Propane Gas** this appliance requires a minimum inlet pressure of 11" W.C. and a manifold pressure of 10" W.C.
- Always keep the fireplace area clear and free of combustible materials, as well as gasoline and other flammable vapours and liquids.
- 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 which has been under water.

## **Cleaning**

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

- Glass must be cleaned periodically to remove any film (a normal bi-product of combustion) which may be visible. Handle the door carefully, and clean it with non-abrasive glass cleaners. One of the most effective products is Kel Kem.
- Silicone seals on inner door during initial firing will "off gas", leaving a visual deposit of a white substance on combustion chamber walls. This can easily be removed by following the steps described above.
- Use a vacuum cleaner or whisk broom to keep the control compartment, burner, and firebox free from dust and lint.
- Logs may be cleaned periodically to remove soot.

#### **WARNING:**

Do not attempt to clean glass when hot.

Do not clean glass with abrasive materials as any glass etching may cause premature glass failure.

#### **Gas Control Valve**

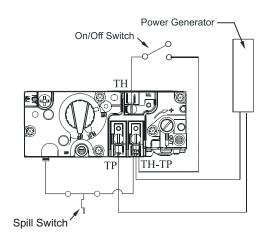


Figure 10a. Honeywell gas valve used on the EP28-2LB or the

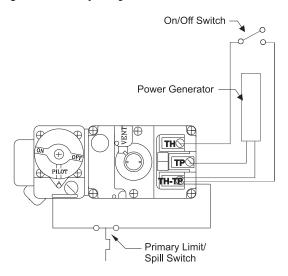


Figure 10b. Robertshaw gas valve used on the EP28-2LB or the EP28-4LB.

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## **Maintenance**

## **Pilot Burner Adjustment**

- 1. Determine which pilot is installed in the fireplace based on figure
- 2. Locate Pilot Adjustment Screw. (See figures 10a or 10b)
- 3. Adjust pilot key to provide properly sized flame. (See figure 10a or 10b).
- 4. Replace pilot adjustment cap.
- 5. After installing or servicing, leak test with a soap solution with main burner on. Coat pipe and tubing joints, gasket etc. with soap solution. Bubbles indicate leaks. Tighten any areas where the bubbles appear until the bubbling stops completely.

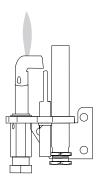


Figure 10. PSE Pilot Burner used on the EP28 4" Series models.

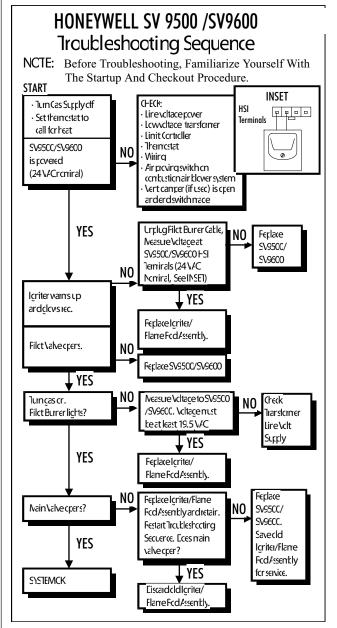
## Troubleshooting **EP28-4**

The following is a troubleshooting chart of possible problems:

PROBLEM	CORRECTIVE ACTION
Noisy Pilot Flame	Remove pilot adjuster cap, located on the gas control valve. Flame is decreased by turning adjustment screw clockwise.
Pilot won't ignite	Disconnect remote wires and try to light pilot. If pilot now works, remote connections are faulty. Check wiring diagram figure 10a/b.
Main burner will not light	Check wiring (see figure 10a/b)     Check wall switch for proper connection.

## Troubleshooting **EP28-4-**





If your fireplace still does not operate correctly, consult your dealer or the manufacturer.

## All service and repairs should be performed by a qualified agency.

All spare parts, optional fans (see optional fan instruction guide), and optional trim finishes are available from the manufacturer or your local dealer.



# Warranty

#### **The Warranty**

The Companies warrants the Montigo Gas Appliance to be free from defects in materials and workmanship at the time of manufacture. On the Montigo, there is a ten-year warranty on the firebox and its components, a five-year warranty on the main burner and pilot burner, and a one-year warranty on the gas control valve and fibre logs. Glass, plated/painted finishes, and refractory lining are exempt.

#### **Remedy And Exclusions**

The coverage of this Warranty is limited to all components of the Gas Appliance manufactured by The Companies.

This Warranty only covers Montigo Gas Appliances installed in the United States or Canada.

If the components of the Gas Appliance covered by this Warranty are found to be defective within the time frame stated (see The Companies right of investigation outlined below). The Companies will, at its option, replace or repair defective components of the Gas Appliance manufactured by The Companies at no charge, and will also pay for reasonable labour costs incurred in replacing or repairing components. If repair or replacement is not commercially practical, The Companies will, at its option, refund the purchase price of the Montigo Gas Appliance.

This Warranty covers only parts and labour 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 labour necessary to install, repair or remove such materials, components or construction. All replacement or repair components will be shipped F.O.B. the nearest The Companies factory.

#### **Qualifications To The Warranty**

The Gas Appliance Warranty outlined above is further subject to the following qualifications:

- (1) The Gas Appliance must be installed in accordance with The Companies installation instructions and local building codes. The Warranty on this Montigo Gas Appliance covers only the component parts manufactured by The Companies. The use of components manufactured by others with this Montigo Gas Appliance could create serious safety hazards, may result in the denial of certification by recognized national safety agencies, and could be in violation of local building codes. This warranty does not cover any damages occurring from the use of any components not manufactured or supplied by The Companies
- (2) The Montigo Gas Appliance must be subjected to normal use. The Gas Appliances are designed to burn gas only. Burning conventional fireplace fuels such as wood, coal or any other solid fuel will cause damage to the Gas Appliance, will produce excessive temperatures and will result in a fire hazard.

#### **Limitations On Liability**

It is expressly 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 replacement, repair, or refund, as specified above.

In no event shall The Companies be responsible for any incidental or consequential damages caused by defects in its products, 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 states 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 this Montigo Gas Appliance is limited to the duration of the foregoing warranty. Some states do not allow limitation on how long an implied warranty lasts, so the above may not apply to you.

#### **Investigation Of Claims Against Warranty**

The Companies reserves the right to investigate any and all claims against this Warranty and to decide upon method of settlement.

The Companies Are Not Responsible For Work Done Without Written Consent

The Companies shall in no event be responsible for any warranty work done without first obtaining The Companies written consent.

Dealers Have No Authority To Alter This Warranty

The Companies employees and dealers have no authority to make any warranties nor to authorize any remedies in addition to or inconsistent with those stated above.

#### **How To Register A Claim Against Warranty**

In order for any claim under this Warranty to be valid, The Companies must be notified of the claimed defect in writing or by telephone, as soon as reasonably possible after the defect is discovered. Claims against this Warranty in writing should include the date of installation, and a description of the defect.

#### **Other Rights**

Canadian Heating Products Inc. and/or Montigo DelRay Corp. reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products.

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# Notes

