



P900837-00

# Installation and Operation Instructions Outdoor Decorative Gas Fireplace

## Models

Polaris36ZEN

Polaris42ZEN

Polaris36ZEP

Polaris42ZEP

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

**Installateur :** Laissez cette notice avec l'appareil.  
**Consommateur :** Conservez cette notice pour consultation ultérieure.

## WHEN USED AS AN OUTDOOR APPLIANCE

**! DANGER**



### CARBON MONOXIDE WARNING

- This appliance can produce carbon monoxide which has no odor.
- Using it in an enclosed space can kill you.
- Never use this appliance in an enclosed space such as a camper, tent, car or home.

**! DANGER**

### FIRE OR EXPLOSION HAZARD

If you smell gas:

- Shut off gas to the appliance.
  - Extinguish any open flame.
  - If odor continues, leave the area immediately.
  - After leaving the area, call your gas supplier or fire department.
- Failure to follow these instructions could result in fire or explosion, which could cause property damage, personal injury, or death.

**! WARNING:** For Outdoor Use Only.

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

**! WARNING:** Do not store gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. An LP-cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.

**! WARNING:** If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury, or loss of life

**! DANGER:**

### 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 neighbor'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 supplier.

**! AVERTISSEMENT**

### RISQUÉ D'INCENDIE OU D'EXPLOSION

Le non-respect Des avertissements de sécurité pourrait d'entraîner des blessures graves, la mort ou des dommages matériels.

- Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.
  - **QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ:**
    - Ne pas tenter d'allumer d'appareil.
    - Ne touchez à aucun interrupteur. Ne pas vous servir des téléphones se trouvant dans le bâtiment où vous trouvez.
    - Sortez immédiatement de bâtiment.
    - Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
    - Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incendies.
- L'installation et l'entretien doivent être assurés par un installateur ou un service d'entretien qualifié ou par le fournisseur de gaz.

## Thank you for your purchase. We appreciate your business!

Please carefully read and follow all instructions in this manual. **Pay special attention to all warnings and safety information.**

Following these safety, care, and operation instructions will help ensure many years of dependable and enjoyable service from your fireplace.

**Please read and understand these instructions before installing or operating.**

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**Please read and understand these instructions before beginning your installation.**



We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

## PACKAGING

The assembled outdoor gas fireplace is packaged with the following:

- 1 - the logs are packaged in a carton located within the firebox.
- 2 - one envelope containing the literature package which consists of the Care and Operation manual and Installation Instructions.
- 3 - two (2) bags of volcanic stone, envelope is located in the firebox area.
- 4 - Electrical kit containing the wall switch components, battery holder, box and cover (see **Field Wiring Page 10**).

## INTRODUCTION

The Fireplace models covered in this manual are ventless outdoor gas fireplace heaters designed for exterior application. Ventless appliances operate with the combustion chamber completely open to the outside atmosphere. All air for combustion is brought in through the face opening and exhaust gases are vented through the same face opening. **These appliances must be installed outdoors.**

The Polaris™ Series Outdoor Gas Fireplace is designed for outdoor use. It may also be installed in screened porches and lanais that meet these minimum requirements:

Minimum porch area - 96 square feet  
Minimum ceiling height - 7 feet 8 inches

A minimum of two (2) walls can be screened but must be open to outside ventilation.  
Minimum screen area - 64 square feet  
Minimum screen top height - 6 feet 8 inches

Refer to Outdoor Space definition below and Clearance Specifications on **Page 6**.

## AN OUTDOOR SPACE IS DEFINED AS FOLLOWS PER ANSI Z21.97:

**Outdoor spaces** - An appliance is considered to be outdoors if installed with shelter no more inclusive than:

- (a) With walls on all sides, but with no overhead cover;
- (b) Within a partial enclosure which includes an overhead cover and no more than two side walls. These side walls may be parallel, as in a breezeway, or at right angles to each other; or
- (c) Within a partial enclosure which includes an overhead cover and three sidewalls, as long as 30% or more of the horizontal periphery of the enclosure is permanently open.

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

## GENERAL INFORMATION

**These appliances are designed to operate on natural or propane gas only.** An electronic intermittent pilot ignition system provides safe, efficient operation. A battery pack is required to operate these units (2 "D" batteries).

This fireplace is designed for outdoor use only. It has been tested and approved to ANSI Z21.97 / CSA 2.41 standard for outdoor decorative gas appliance and CAN 1-2.21-M85 standard for gas-fired appliance for outdoor installation.

The Installation must conform to local codes or, in the absence of local codes, with the **National Fuel Gas Code, ANSI Z223.1/NFPA 54**, or the **Natural Gas and Propane Installation Code, CAN/CGA B149.1; or Propane Storage and Handling Code, B149.2, as applicable.**

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the **National Electrical Code, ANSI/NFPA 70**, or the **Canadian Electrical Code, CSA C22.1**.

**DO NOT ATTEMPT TO ALTER OR MODIFY THE CONSTRUCTION OF THE APPLIANCE OR ITS COMPONENTS. ANY MODIFICATION OR ALTERATION MAY VOID THE WARRANTY, CERTIFICATION AND LISTINGS OF THIS UNIT.**

**Solid fuels shall not be burned in this appliance.**

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

## ⚠ WARNING

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

## ⚠ WARNING

**These appliances are not designed or intended to be used for cooking. Do not barbecue, heat food, or roast marshmallows in this appliance. Doing so could damage the appliance and cause injury.**

## WARNING

These fireplaces are gas fireplaces. Do not burn wood or other material in these appliances.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

## WARNING

DO NOT store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

## WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

## WARNING

An LP-cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.

**NOTE:** Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required as necessary. It is imperative that the control compartment, burners, and circulating air passageways of the appliance are kept clean.

Provide adequate clearances around air openings and adequate accessibility clearance for service and proper operation. Never obstruct the front openings of the appliance.

Due to high temperatures the appliance should be located out of traffic and away from furniture and draperies. Locate furniture and window coverings accordingly.

### All Models -

All models have a manually modulated gas valve. Input is shown in **Table 1**:

BTU Input (BTU/Hr)	
Model No.	Input Rate (BTU/Hr)
Natural Gas	
Polaris36ZEN	50,000 to 39,500
Polaris42ZEN	50,000 to 39,500
Propane Gas (LP)	
Polaris36ZEP	46,000 to 37,000
Polaris42ZEP	46,000 to 37,000

**Table 1**

### Gas Pressure - All Models

**Tables 2 and 3** show the appliances' inlet and manifold gas pressure.

Inlet Gas Supply Pressure (all models)		
Fuel #	Minimum*	Maximum
Natural Gas	5.0" WC (1.24 kPa)	10.5" WC (2.61 kPa)
Propane	11.0" WC (2.74 kPa)	13.0" WC (3.23 kPa)

**Table 2** \* For purposes of input adjustment

Manifold Gas Supply Pressure (all models)		
Fuel #	Low	High
Natural Gas	2.2" WC (0.55 kPa)	3.5" WC (0.87 kPa)
Propane	6.3" WC (1.57 kPa)	10.0" WC (2.49 kPa)

**Table 3**

Test gauge connections are provided on the front of the gas control valve identified **IN** for the inlet and **OUT** for the manifold side. A 1/8" NPT Test gauge connection is provided at the inlet and outlet side of the electronic gas control valve.

The appliance and its appliance main gas 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 psi (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures **equal to or less than** 1/2 psi (3.5 kPa).

### Orifice Sizes - Sea Level To High Altitude (All Models)

These appliances are tested and approved for installation at elevations of 0-4500 feet (0-1372 meters) above sea level, using the standard burner orifice (**See Table 4**). For elevations above 4500 feet, contact your gas supplier or qualified service technician. Install the appliance according to the regulations of the local authorities having jurisdiction and, in the USA, the National Fuel Gas Code NFPA 54 / ANSI Z223.1 - latest edition or, in Canada, the CAN/CGA-B149.1 and .2 codes - latest edition.

Burner Orifice Sizes Elevation 0-4500 feet ( 0-1372 meters)		
Model	Nat. Gas drill size (inches)	Propane drill size (inches)
Polaris36	#28 (.1405")	#47 (.0785")
Polaris42	#28 (.1405")	#47 (.0785")

**Table 4**

## WARNING

**PROPANE TANKS ARE AT PRESSURES THAT WILL CAUSE DAMAGE TO VALVE COMPONENTS. VERIFY THAT THE TANKS HAVE STEP DOWN REGULATORS TO REDUCE THE PRESSURE TO SAFE LEVELS.**

### MASSACHUSETTS REQUIREMENTS

These appliances are approved for installation in the US state of Massachusetts if the following additional requirements are met:

- Un-vented Room Heaters shall be installed in accordance with 527 CMR 30.
- Installation and repair must be done by a plumber or gas fitter licensed in the Commonwealth of Massachusetts.
- The flexible gas line connector used shall not exceed 36 inches (92 centimeters) in length.
- The individual manual shut-off must be a T-handle type valve.
- Unvented appliances may NOT be installed in bedrooms or bathrooms.
- A working smoke detector must be installed in the area where vent-free appliances are installed.

Seller of unvented propane or natural gas-fired supplemental room heaters shall provide to each purchaser a copy of 527 CMR 30 upon sale of the unit.

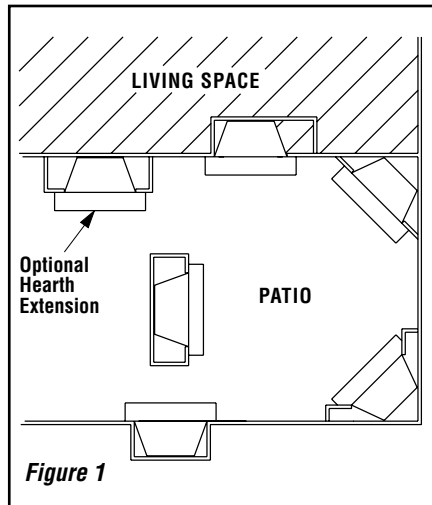
## ASSEMBLY OUTLINE

### Before You Start

Check your inventory list to be sure you have all the necessary parts supplied in good usable condition. Check also for any concealed damage.

### LOCATION OF FIREPLACE

Carefully select the proper location for any obstructions, clearance to side wall(s), air availability, location and aesthetics. With proper pre-planning, a slight adjustment of a few inches can save considerable time and expense later during construction and assembly. See **Figure 1** for some examples.



When choosing a location, care must be taken to avoid places where flooding or running water may be a problem.

Identify the desired location for the battery pack/ON/OFF switch junction box location. This should be easily accessible and convenient for use and high enough on the wall to be protected from water and drifted snow.

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.

Ne pas se servir de cet appareil s'il a été plongé dans l'eau, complètement ou en partie. Appeler un technicien qualifié pour inspecter l'appareil et remplacer toute partie du système de contrôle et toute commande qui ont été plongés dans l'eau.

The burner must be replaced prior to the appliance being put into operation if it is evident that the burner is damaged (use only factory original replacement burner).

Carefully consider the position of the fireplace opening with respect to the location of adjacent or nearby stairwells, doors, windows, walkways and over hanging trees, patios and wires.

When locating the fireplace, consideration must be given to combustibles and final finishing. See **Figure 21, Page 14** and confine the final location of combustible finish materials to the "Safe Zone". Also refer to Clearance Specifications on **Page 6**.

Consider the effects of heat when locating any object in front of or near the fireplace opening.

### PRE-INSTALLATION NOTES

The fireplace may be installed directly on a combustible floor or raised on a platform of an appropriate height. Do not place the fireplace on vinyl or other soft floor coverings. It may, however, be placed on flat wood, plywood, particle board or other hard surfaces.

Position the electrical junction box as detailed in **LOCATION OF FIREPLACE**. (The umbilical cord is 9 feet long).

Be sure the fireplace rests on a solid continuous floor or platform with appropriate framing for support.

The fireplace may be positioned and then the framing built around it, or the framing may be constructed and the fireplace positioned into the opening.

Usually, no special floor support is needed for the fireplace, however, to be certain:

1. Estimate the total weight of the fireplace system including surround materials such as brick, stone, etc., to be installed. Shipping weights for the fireplace may be found on **Page 8**.
2. Measure the square footage of the floor space to be occupied by the system, surrounds and hearth extensions.
3. Note the decking construction, i.e. 2 x 6's, 2 x 8's or 2 x 10's, single or double joists, type and thickness of floor boards.
4. Use this information and consult your local building code to determine if you need additional support.

If you plan to raise the fireplace and hearth extension, build the platform assembly then position fireplace and hearth extension on top. Secure the platform to the floor to prevent possible shifting.

## ASSEMBLY STEPS

**NOTE: The following steps represent the normal sequence of installation. Each installation is unique, however, and might require a different sequence.**

1. Position firebox prior to framing or into prepared framing (non-combustible framing is recommended).
2. Position the electrical junction box as detailed in **LOCATION OF FIREPLACE**. (The umbilical cord is 9 feet long).
3. Waterproof the fireplace or install the optional drip pan (see **Waterproofing The Fireplace and Figure 2 on Page 5**).
4. Plumb gas line. (Gas connections should only be performed by an experienced, licensed/certified tradesman.)
5. Complete the installation, finish wall material, surround and hearth extension to your individual taste.
6. Assemble and attach optional accessories.

Study the three dimensional illustration (**Figure 5, Page 7**) to get a general idea of each element of your fireplace system.

### WATERPROOFING THE FIREPLACE

Although the fireplace is designed to operate safely outdoors, rain may enter the hearth area, condensation and can cause water to collect inside the fireplace bottom.

**To prevent water collection, the fireplace enclosure must allow for adequate drainage and fresh air ventilation. It is recommended that a sealed, corrosion resistant catch pan with provision for drainage be installed under fireplace within fireplace enclosure.**

Special care must be taken when the fireplace is installed against an exterior wall. The enclosure surrounding the fireplace on the sides and back must be treated as an exterior wall.

Innovative Hearth Products (IHP) provides an optional drain pan to assist weatherproofing the fireplace.

H4651 DPSS36 Drain Pan for **Polaris36**, H4652 DPSS42 Drain Pan for **Polaris42**.

When Planning for the installation of the fireplace, the framing height must be increased from 46-1/2" to 47-1/4", when installing the drain pan. An additional space below the fireplace will also be required to plumb a drain line.

**Step 1.** Seal all joints, gaps and corners around the bottom of the drain pan before positioning the fireplace on its location (*Figure 2*).

**Step 2.** On the exposed drain hole, install a PVC threaded coupling reducer, 3/4" x 1/2" going from the top of the pan down through the hole. Apply a silicone-based sealant around the base and threads before installation.

**Step 3.** Holding the reducer coupling with a wrench, thread a 3/4", 90 degree, PVC elbow to the reducer until it is tight to the metal.

**Step 4.** Add additional piping to route the drain to an appropriate location.

**NOTE:** To assure proper drainage, the fireplace must be installed on a leveled surface.

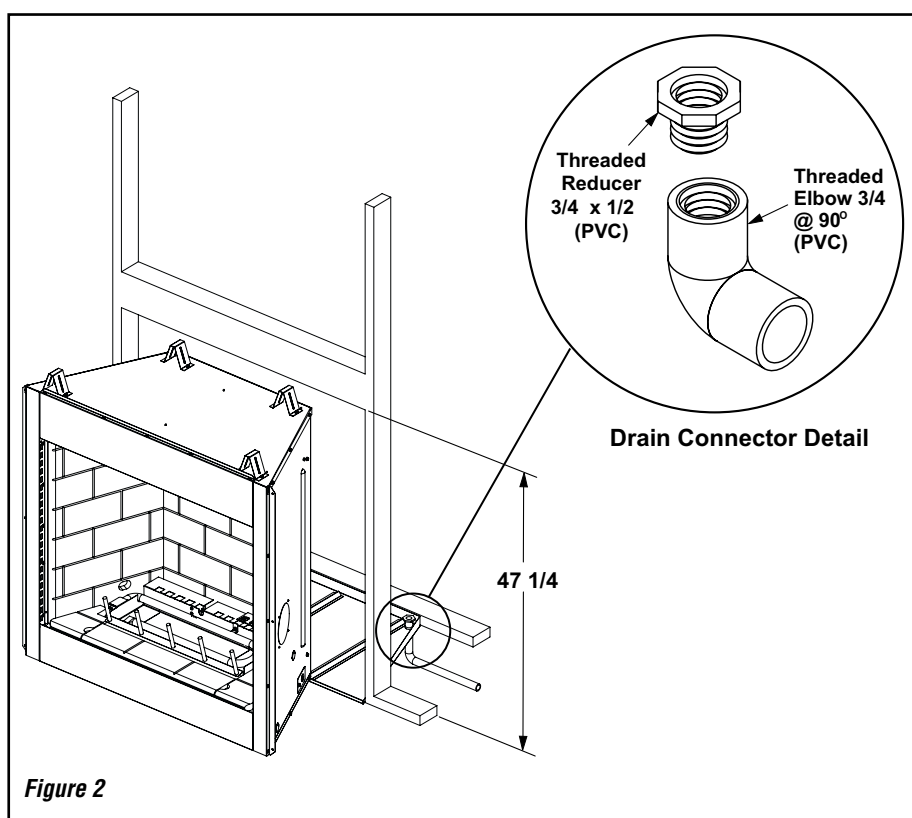
## CLEARANCES

Minimum clearance to combustibles for the fireplace is as follows; sides and back – 1/2" (13mm), combustible floor – 0" (0mm), adjacent wall 6" (152mm), ceiling – 72" (1829mm). Refer to *Figure 3* on this Page and *Figure 21* on Page 14 for more detail.

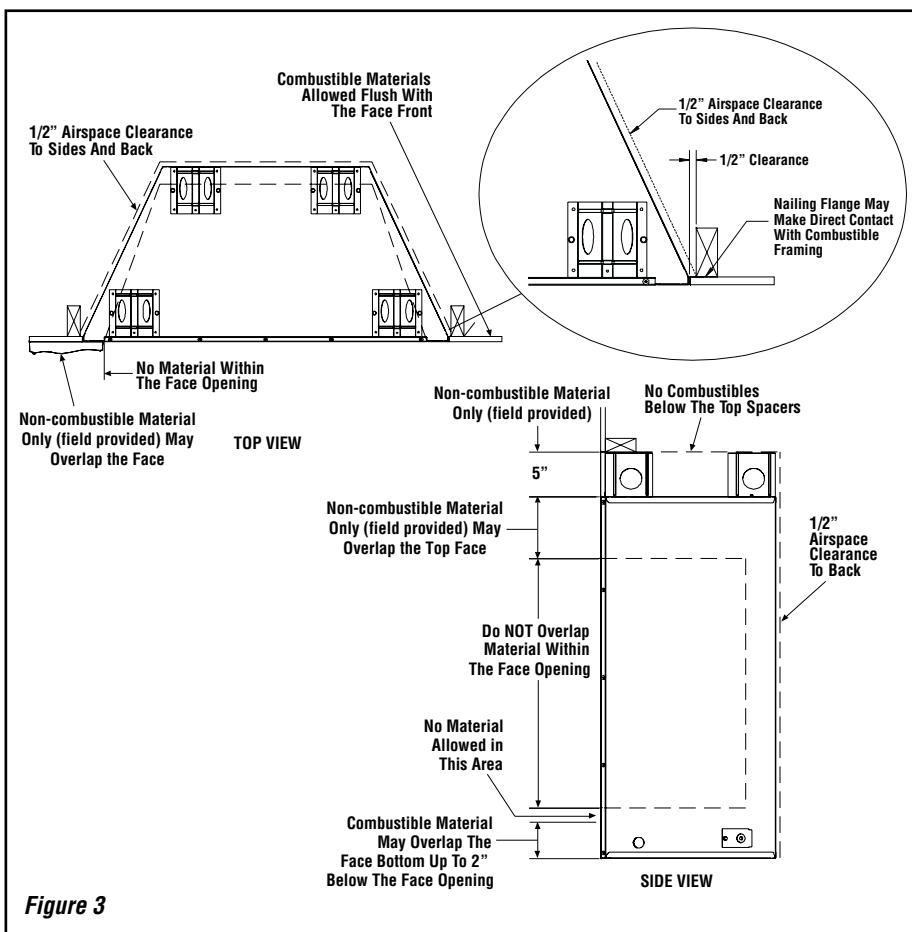
**NOTE:** Clearance behind the nailing flange for both fireplace models is 1/2" (13mm).

**NOTE:** Adjacent wall considerations are for an adjacent wall to only a single side. Walls should not be placed at the minimum distance on both sides of the fireplace. Allow at least 4 feet on one side of the fireplace.

Maintain adequate clearances for accessibility for purposes of servicing and proper operation.

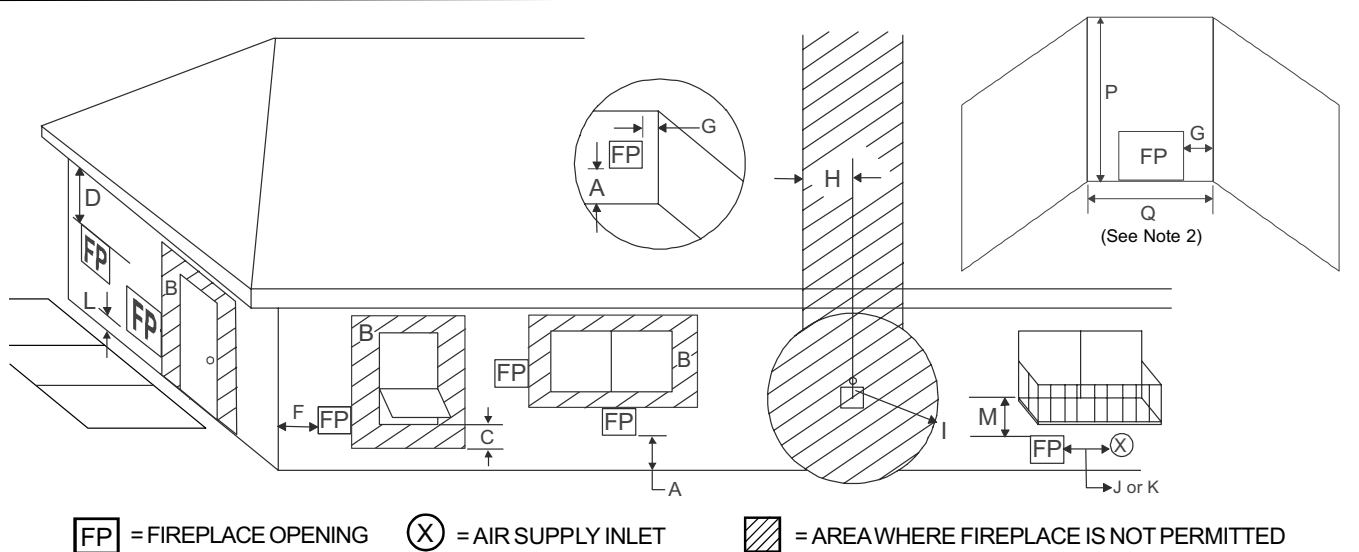


**Figure 2**



**Figure 3**

## CLEARANCE SPECIFICATIONS



A = 2 in. . . . .	clearances above grade, veranda, porch, deck or balcony.	I = 3 ft. (USA) . . . .	clearance to service regulator
B = 12 in. . . . .	clearances to window or door that may be opened, or to permanently closed window.	6 ft. (Canada)	vent outlet and electric service.
36 in. . . . .	vinyl windows or siding.	J = 9 in. (USA) . . . .	clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance.
C = 72 in. . . . .	clearance below an operable window.	12 in. (Canada)	
D = 47 in. . . . .	vertical clearance to unventilated soffit or to ventilated soffit located above the fireplace.	K = 3 ft. (USA) . . . .	clearance to a mechanical air supply inlet.
60 in. . . . .	vinyl clad soffits.	6 ft. (Canada)	
F = 9 in. . . . .	clearance to outside corner.	L* = 54 in. . . . .	clearance above paved sidewalk or a paved driveway located on public property.
G = 6 in. . . . .	clearance to inside corner.	(See note 1)	
48 in. . . . .	vinyl windows or siding.	M** = 47 in. . . . .	clearance under veranda, porch, deck, balcony or overhang.
H = 3 ft. (Canada) .	not to be installed above a gas meter/regulator assembly within 3 ft (914 mm) horizontally from the center line of the regulator.	Not allowed: . . . . .	vinyl.
		P = 92 in.	
		Q = 72 in.	

\* A fireplace shall not open directly above a sidewalk or paved driveway which is located between two single family dwellings and services both dwellings.

\*\* Only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor, or if the screened porch guidelines are followed.

**Note 1:** Local codes or regulations may require different clearances.

**Note 2:** Fireplaces in an alcove space (spaces open only on one side and with an overhang) are permitted with the dimensions specified for vinyl or non-vinyl siding and soffits. **1)** There must be a 3 ft minimum between terminations or between the fireplace and termination. **2)** All mechanical air intakes within 10 ft of the top of the fireplace opening must be a minimum of 3 ft below the top of the fireplace opening.

**3)** All gravity air intakes within 3 ft of the fireplace must be a minimum of 1 ft below the face top opening.

This fireplace is approved for installation in screened porches with the following guidelines:

- Minimum porch area - 96 sq ft
- Minimum ceiling height - 92 in.
- Minimum of two walls must be screened or open
- Minimum top of screen height, side walls - 6 ft 8 in.
- Minimum screen area - 64 sq ft

**Note:** There may be some odor and small amounts of soot associated with burning the fireplace in a screened porch. Ensuring good cross draft ventilation and routine maintenance of the fireplace will maximize comfort and cleanliness.

**Figure 4**

## TYPICAL INSTALLATION

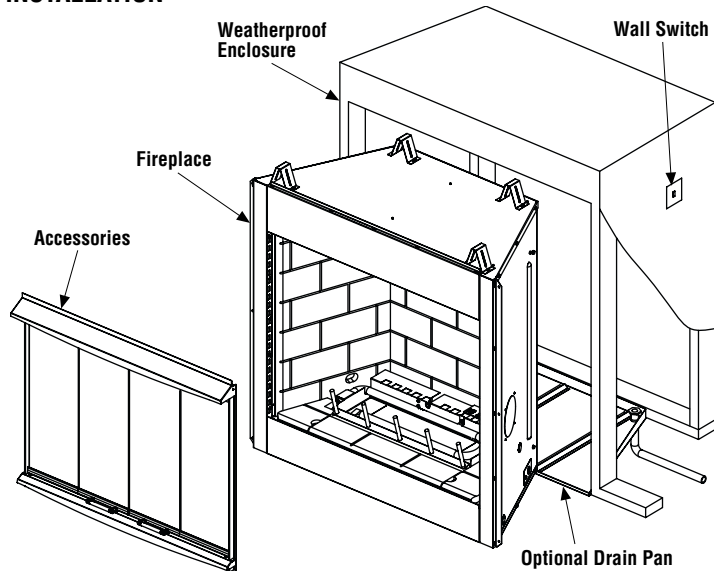


Figure 5

## FIREPLACE INSTALLATION

**Step 1.** Frame these appliances as illustrated in **Figures 8-10, Page 9**. All framing details must allow for a minimum clearance to combustible framing members, as shown in **Figure 3, Page 5**. Also refer to Fireplace Specifications on **Page 8**. Headers may be in direct contact with the appliance top spacers but must not be supported by them or notched to fit around them. All construction above the appliance must be self supporting. **DO NOT USE THE APPLIANCE FOR STRUCTURAL SUPPORT.**

**NOTE:** The framed depth from a framed wall, must always be measured from a finished surface. If a wall covering such as Durock® is to be attached to the rear wall, then the depth must be measured from the wall surface. It is important that this dimension be exact.

**NOTE:** Non-combustible framing members are not required, but are recommended.

**Step 2.** Level the firebox by checking the top edge of the firebox. Shim if necessary.

**Step 3.** The fireplace should be secured to the side framing members, using the full length nailing flange located on both sides of the fireplace. Use 8d nails, or screws.

**IMPORTANT: UNDER NO CIRCUMSTANCES SHALL THE FIREBOX TOP SPACERS BE REMOVED OR MODIFIED. THE HEADER MAY BE IN DIRECT CONTACT WITH THE TOP SPACERS BUT MUST NOT BE SUPPORTED BY THEM OR NOTCHED TO FIT AROUND THEM.**

**Step 4.** Identify the desired location for the battery pack/ON/OFF switch junction box. This should be easily accessible and convenient for use. Avoid installing where the opening could be blocked by snow, bushes, etc. Also, considerations need to be made to avoid water infiltration. The electrical junction box must be positioned within range of the electrical umbilical cord (9 feet). Route the umbilical cord to the box to ensure proper length. Secure the umbilical cord per appropriate local and national electrical codes.

## ROUTING GAS LINE

Route a 1/2" (13 mm) gas line along the inside of the right side framing as shown in **Figure 5**. Gas lines must be routed, constructed and made of materials that are in strict accordance with local codes and regulations.

All appliances are factory-equipped with a flexible gas line connector and 1/2" shutoff valve. (See **Figure 13, Page 11**).

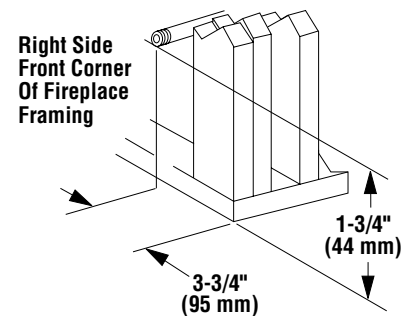


Figure 6

**NOTE:** An additional inlet has been provided on the left side (see **Figure 7, Page 8**).

## CAUTION

If propane is used, be aware that with a tank that is too small (i.e., under 100 lbs, if this is the only gas appliance in the dwelling—see NPFA 58), there may be a loss of pressure. This can result in insufficient fuel delivery that can cause sooting, delayed ignition, or other malfunctions. Any damage resulting from an improper installation is not covered by the limited warranty.

## WARNING

Never connect this appliance to private (non-utility) gas wells. This gas is commonly known as wellhead gas and does not have odorants and may have impurities, and variations in BTU content. The use of well-head gas will void the manufacturer's warranty to this appliance.

When an appliance is for connection to a fixed piping system, the installation must conform with local codes, or in the absence of local codes with the *National Fuel Gas Code*, ANSI Z223.1 • NFPA 54; *National Fuel Gas Code*.

FIREPLACE SPECIFICATIONS

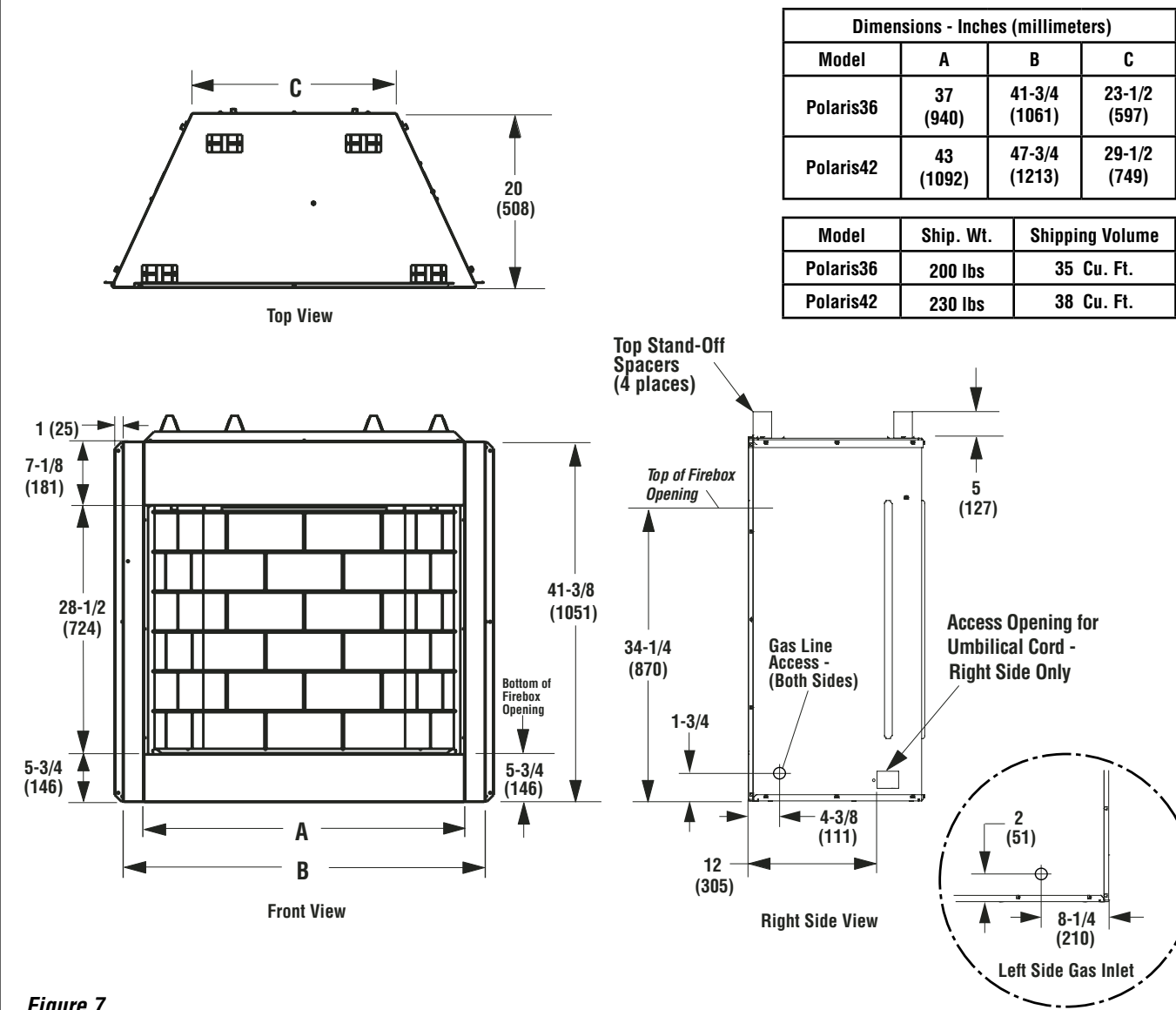


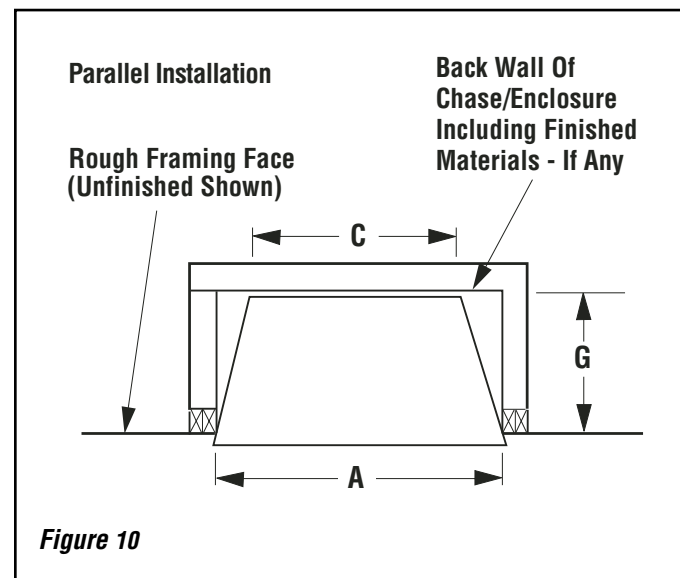
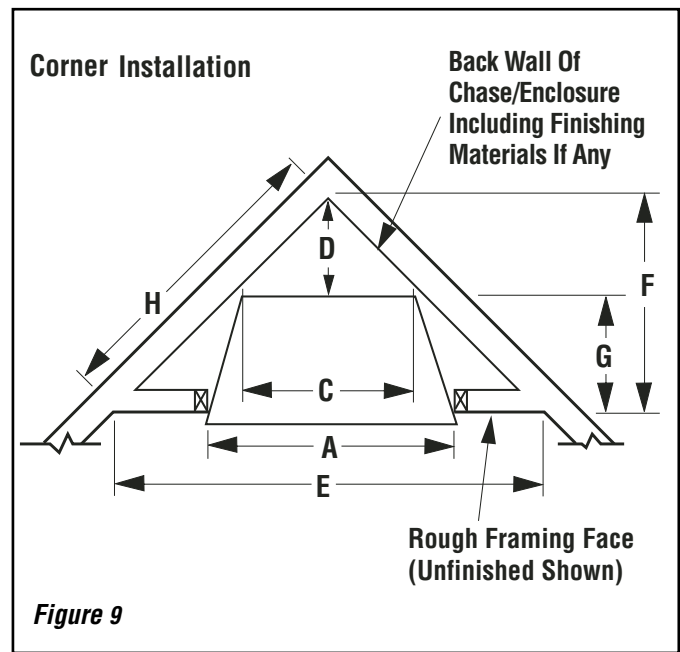
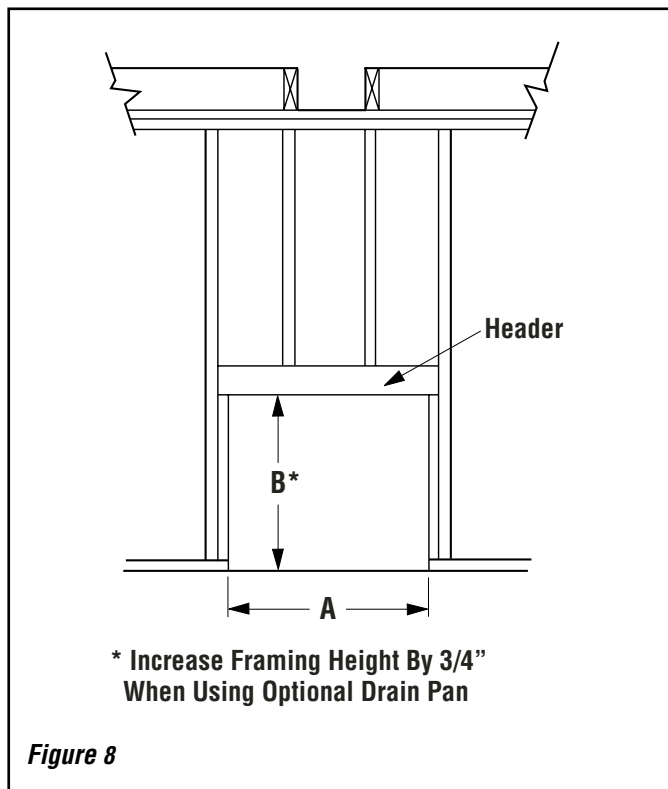
Figure 7

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

## FRAMING SPECIFICATIONS

Opening	Polaris36	Polaris42
A	42-3/4" (1086)	48-3/4" (1238)
B	46-1/2" (1181)	46-1/2" (1181)
C	23-5/8" (600)	29-5/8" (753)
D	11-1/4" (286)	14-1/4" (362)
E	63-1/2" (1613)	69-1/2" (1765)
F	31-3/4" (807)	34-3/4" (883)
G	20-1/2" (521)	20-1/2" (521)
H	44-1/4" (1124)	49-1/8" (1248)

**Table 5 - This Table Corresponds To Figures 8, 9 and 10**



**Figures 8, 9 and 10 Correspond To Table 5.**

## FIELD WIRING

**CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. VERIFY PROPER OPERATION AFTER SERVICING.**

Refer to **Figure 11** for the wiring schematic for these fireplaces.

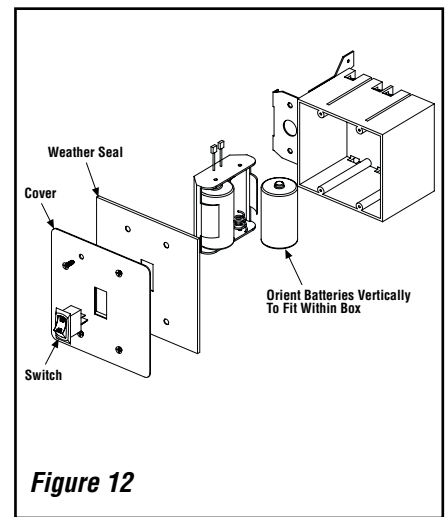
This fireplace is completely wired internally. On the right hand side of the fireplace, at the rear, are four (4) wires required to connect the Battery and switch for operation.

Two brown wires are for the connection of the switch. These are labeled SW and SW. A black and red pair are for connection to the battery pack. These are labeled (+) and (-).

These wires are for low voltage current. An electrical box has been provided to contain both the switch and battery pack. Mount the box in an appropriate location within the length of the wiring provided. Feed all four wires through one of the lower inlets to the box. Connect the switch wires to the switch and the corresponding (+), (-) to the battery holder.

Install two D-cell batteries (not provided) and test the switch before closing the switch box (refer to **Figure 12**). The igniter should spark to the pilot when the switch is on.

Wiring diagrams are provided here for reference purposes only. This information is also provided on schematics attached directly to the appliance on a pullout panel located within the control compartment.

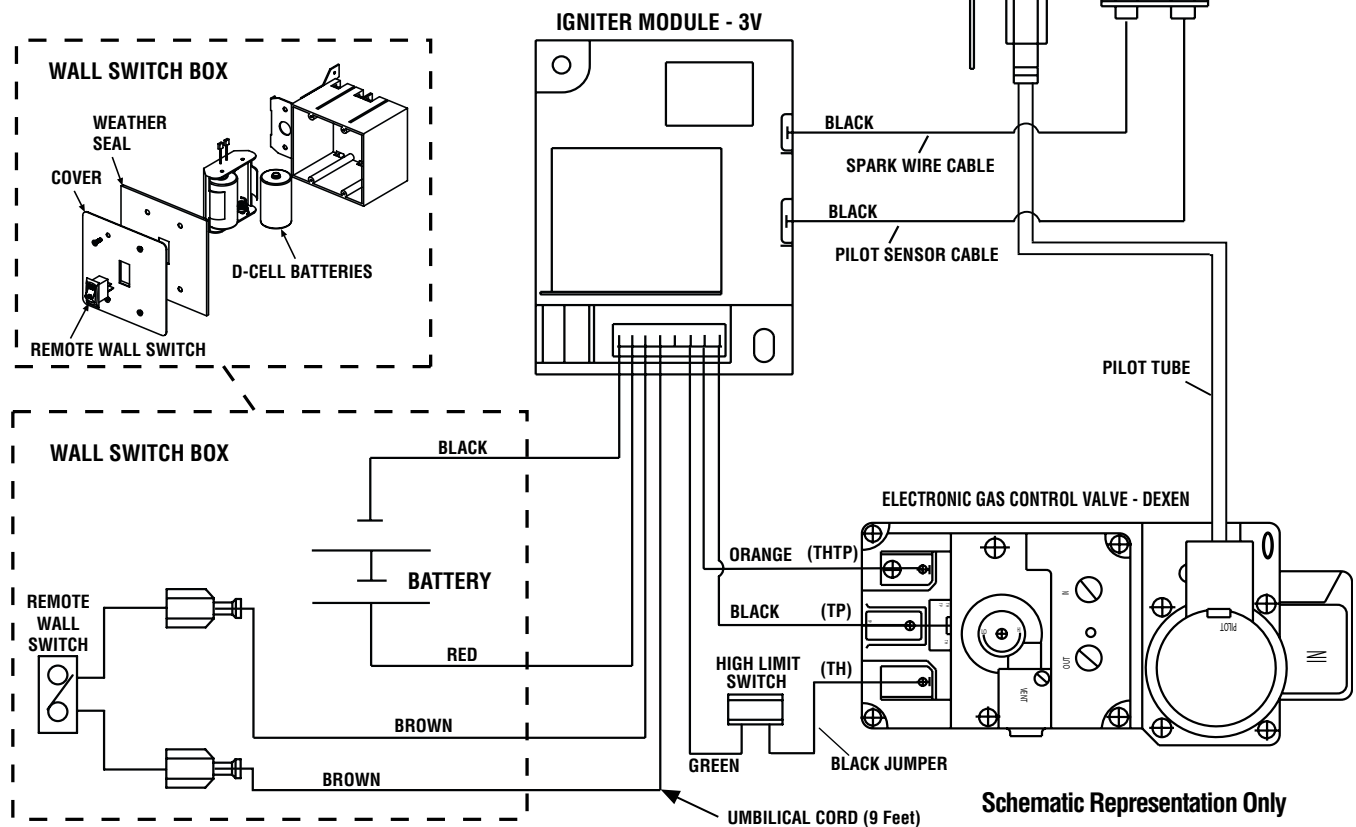


**Figure 12**

## ELECTRONIC IGNITION WIRING DIAGRAM

### NOTES:

1. If any of the original wire as supplied must be replaced, use Type AWM 105°C - 18 gage wire ONLY.
  2. Electrical Rating: 3V DC.
- CAUTION:** label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.



**Figure 11**

## CONNECTING GAS LINE

Codes require a shut-off valve mounted in the supply line. **Figure 13** illustrates two methods for connecting the gas supply. The flex-line method is acceptable in the U.S., however, Canadian requirements vary depending on locality. Installation must be in compliance with local codes.

These appliances are equipped with a gas flex line for use (where permitted) in connecting the unit to the gas line. A gas flex line is provided to aid in attaching the direct vent appliance to the gas supply. The gas flex line can only be used where local codes permit. See **Figure 13** for flex line description. The flex line is rated for both natural and propane gas. A manual shut off valve is also provided with the flex line.

The gas control valve is located under the refractory cover in front of the burner.

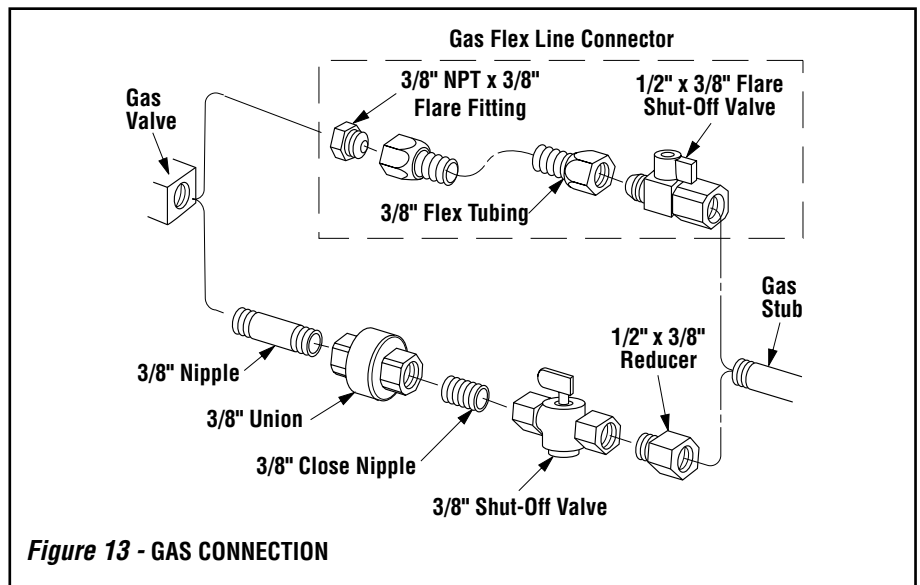
To access the valve, lift out the center refractory and remove the access cover (*see Figure 14*).

The control valves have a 3/8" (10 mm) NPT thread inlet port.

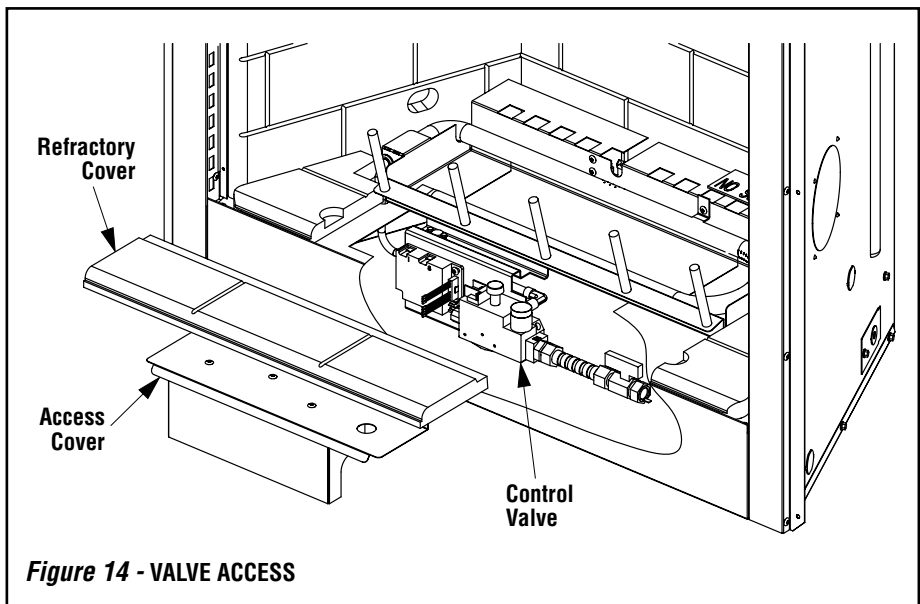
**Secure all joints tightly using appropriate tools and sealing compounds (ensure propane resistant compounds are used in propane applications).**

Turn on gas supply and test for gas leaks, using a gas leak test solution (also referred to as bubble leak solution). **NOTE:** Using a soapy water solution (50% dish soap, 50% water) is an effective leak test solution but it is not recommended, because the soap residue that is left on the pipes/fittings can result in corrosion over time. **Never use an open flame to check for leaks.**

- A. Light the appliance (refer to the lighting instructions label in the control compartment or in the Care and Operation Instructions).
- B. Brush all joints and connections with the gas leak test solution to check for leaks. If bubbles are formed, or gas odor is detected, turn the gas control knob to the "OFF" position. Either tighten or refasten the leaking connection and retest as described above.
- C. When the gas lines are tested and leak free, be sure to rinse off the leak testing solution.



**Figure 13 - GAS CONNECTION**



**Figure 14 - VALVE ACCESS**

## INSTALLING THE LOGS



### WARNING

- LOGS GET VERY HOT AND WILL REMAIN HOT UP TO ONE HOUR AFTER GAS SUPPLY IS TURNED OFF. HANDLE ONLY WHEN LOGS ARE COOL. TURN OFF ALL ELECTRICITY TO THE APPLIANCE BEFORE YOU INSTALL GRATE AND LOGS.
- THIS APPLIANCE IS NOT MEANT TO BURN WOOD. ANY ATTEMPT TO DO SO COULD CAUSE IRREPARABLE DAMAGE TO YOUR APPLIANCE AND PROVE HAZARDOUS TO YOUR SAFETY.
- THE SIZE AND POSITION OF THE LOG SET WAS ENGINEERED TO GIVE YOUR APPLIANCE A SAFE, RELIABLE AND ATTRACTIVE FLAME PATTERN. ANY ATTEMPT TO USE A DIFFERENT LOG SET IN THE FIREPLACE WILL VOID THE WARRANTY AND WILL RESULT IN INCOMPLETE COMBUSTION, SOOTING, AND POOR FLAME QUALITY.
- VOLCANIC STONE WITHIN THE BURNER CAN "POP" FOR THE FIRST FEW FIRES. WIND BORNE DEBRIS MAY ALSO ENTER THE FIREPLACE INEXPEDIENTLY. IN HIGH WIND CONDITIONS, OPERATE THE APPLIANCE WITH THE SCREENS OR DOORS CLOSED.
- NEVER OPERATE THE FIREPLACE WITHOUT THE VOLCANIC STONES IN THE BURNER PAN. PROLONGED USE WITHOUT THE ROCK IN PLACE WILL OVERHEAT THE PAN AND CAUSE THE FIREPLACE TO SHUTOFF AUTOMATICALLY.

After verifying that the fireplace operates properly, replace the cover and set the bottom refractory components in place.

Use two (2) bags of volcanic stone to fill the bottom of the burner tray to completely cover the burner tube. Level the volcanic stone evenly.

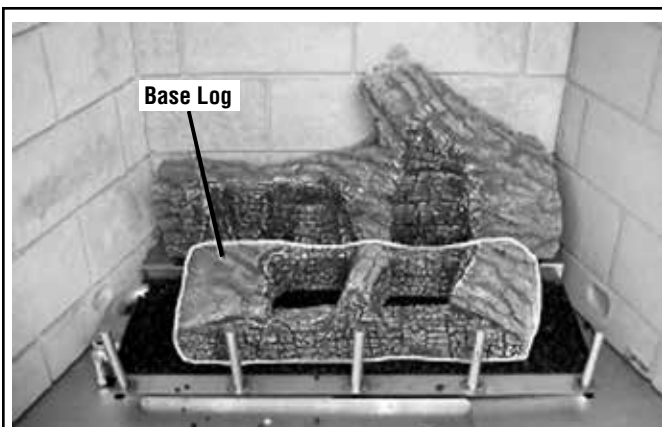
Place the rear log approximately centered as shown in **Figure 15**.

Place the base log approximately as shown in **Figure 16**.

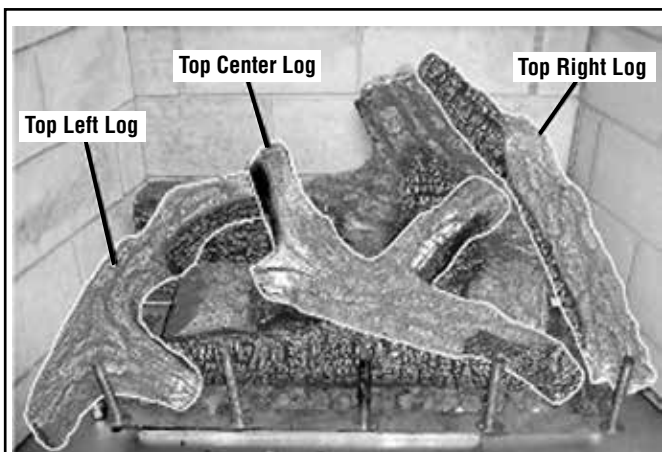
The remaining logs can be placed across the rear and base log approximately as shown in **Figure 17**. **The exact position of these logs is not critical.** Due to the nature of an outdoor environment, the flame will never be strictly controlled. You may need to reposition the logs to get the effect you find most desirable.



**Figure 15**



**Figure 16**



**Figure 17**

## Burner Adjustments

The following paragraphs address burner adjustment concerns and procedures.

### Flame Appearance and Sooting

Proper flame appearance is a matter of taste. Generally most people prefer the warm glow of a yellow to orange flame. Appliances operated with air shutter openings that are too large will exhibit flames that are blue and transparent. These weak, blue and transparent flames are termed anemic. If the air shutter opening is too small excessive sooting may develop.

Sooting is indicated by black puffs developing at the tips of very long orange flames. Sooting results in black deposits forming on the logs, appliance inside surfaces and on exterior surfaces adjacent to the face opening.

Sooting is caused by incomplete combustion in the flames and a lack of combustion air entering the air shutter opening. To achieve a warm yellow to orange flame with an orange body that does not soot, the shutter opening must be adjusted between these two extremes.

These appliances should not smoke. Small amounts of soot will accumulate over time and should be expected. This soot adds to the realism of the firebox interior. The logs can be cleaned, when cool, with a soft brush and small amounts of water.

If the logs are properly positioned and excessive sooting conditions exist, the air shutter opening on the main burner tube should be adjusted. Keep in mind that this is an outdoor appliance. Wind and air currents cannot be strictly controlled.

If the flame acts too erratically, we recommend that the screens be closed.



### WARNING

**AIR SHUTTER ADJUSTMENT SHOULD ONLY BE PERFORMED BY A QUALIFIED PROFESSIONAL SERVICE TECHNICIAN.**

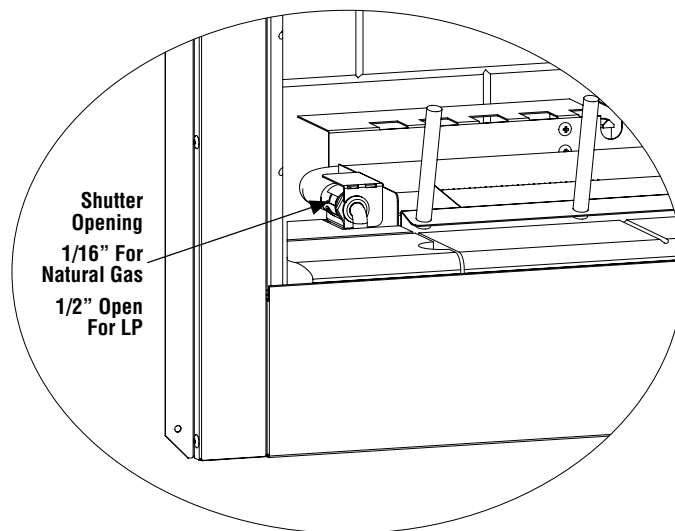
### Burner Adjustment

**CAUTION: THE SHUTTER AND NEARBY APPLIANCE SURFACES ARE HOT. EXERCISE CAUTION TO AVOID INJURY WHILE ADJUSTING FLAME APPEARANCE.**

To adjust the flame, turn the shutter (located in the left side of the burner pan) up or down to increase or reduce the air shutter opening, respectively. **Position the air shutter to the factory setting, as shown in Figure 18.**

Allow the burner to operate for at least 15 minutes. Observe the flame continuously. If it appears weak or sooty as previously described, adjust the air shutter by rotating the shutter until the flame appearance is as desired.

When satisfied that the appliance operates properly, proceed to finish the installation. Leave the control knob in "ON" position and turn the remote switch "OFF." Reinstall the access and refractory cover.



**Figure 18 - Burner Air Shutter Settings**



**Figure 19 - Proper Burner Flame Appearance**

## CHECKING APPLIANCE OPERATION

With gas line installed run initial system checkout before installing any additional accessories. Follow the lighting instructions on **Page 20**.

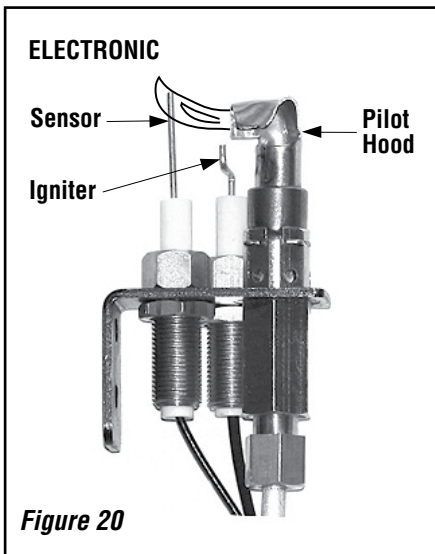
**NOTE:** Lighting Instructions are also found on the literature tag tied to the gas piping next to the gas valve. To access the tag, open the lower control compartment door (refer to Figure 14, Page 11 - Valve Access).

When first lighting the appliance, it will take a few minutes for the line to purge itself of air. Once purging is complete, the pilot and burner will light and operate as indicated in the instruction manual. Subsequent lighting of the appliance will not require such purging. Inspect the pilot flame (remove logs, if necessary, handling carefully).

After the logs have been placed and the fireplace has been checked for proper flame presentation, use the remaining volcanic stone to fill in voids and spaces. Remember, you may need to access the high/low flame control beneath the refractory cover.

## Electronic Appliance Checkout

To light the burner, turn 'ON' the remote wall switch. The battery will energize a spark that will light the pilot. The pilot flame will engulf the sensor and open the main valve. Within seconds the main burner will light. Ensure the igniter lights the pilot. The pilot flame should engulf the sensor as shown in **Figure 20**.



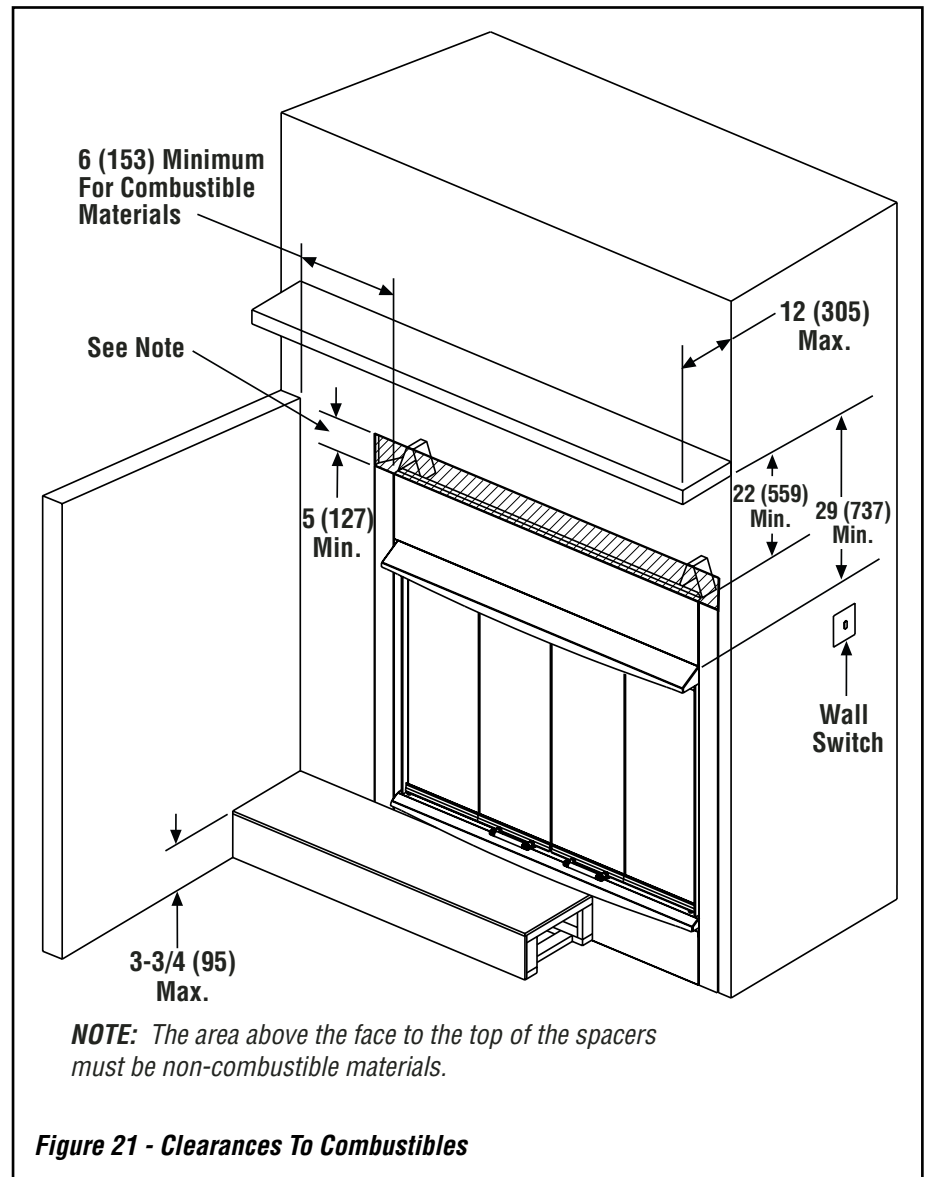
**Carbon Monoxide Poisoning:** Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Turn off the gas supply to the appliance and have it serviced by a qualified professional, as it may not be operating correctly.

## FIREBOX FINISHES

There are a wide variety of "finished looks" for your outdoor fireplace, from formal wall decor with elaborate mantels to rustic wood paneling or warm brick facings.

Only noncombustible materials like marble, stone, tile, brick, etc. may overlap the top and sides of the front facing. Seal all joints between the black facing and wall surrounds to prevent air intrusion. Use noncombustible caulking materials only to seal the metal facing to the surround material on the finished wall. See **Figure 21**.

**CAUTION: DO NOT BLOCK THE FACE OPENING ON THESE FIREBOXES. DOING SO MAY CREATE A POTENTIAL FIRE HAZARD.**



## GAS CONVERSION KITS

### WARNING

This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instruction is not followed exactly, a fire, explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life. The qualified service agency is responsible for the proper installation of this kit. The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit. The qualified service agency performing this installation assumes responsibility for this conversion.

### AVERTISSEMENT

Cette trousse de conversion doit être installée par un technicien agréé, selon les instructions du fabricant et selon toutes les exigences et tous les codes pertinents de l'autorité compétente. Assurez-vous de bien suivre les instructions dans cette notice pour réduire au minimum le risque d'incendie, d'explosion ou la production de monoxyde de carbone pouvant causer des dommages matériels, des blessures ou la mort. Le technicien agréé est responsable de l'installation de cette trousse. L'installation n'est pas adéquate ni complète tant que le bon fonctionnement de l'appareil converti n'a pas été vérifié selon les instructions du fabricant fournies avec la trousse. Le fournisseur de service qualifié ayant réalisé l'installation assume les responsabilités liées à la conversion.

#### In Canada:

THE CONVERSION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROVINCIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN/CGA-B149.1 AND .2 INSTALLATION CODE.

LA CONVERSION DEVRA ÊTRE EFFECTUÉE CONFORMÉMENT AUX RECOMMANDATIONS DES AUTORITÉS PROVINCIALES AYANT JURIDICITION ET CONFORMÉMENT AUX EXIGENCES DU CODE D'INSTALLATION CAN/CGA-B149.1 ET .2.

Gas conversion kits are available to adapt your appliance from the use of one type of gas to the use of another. These kits contain all the necessary components needed to complete the task including labeling that must be affixed to ensure safe operation.

Kit part numbers are listed here and the following steps detail the conversion procedure.

**Step 1.** Turn off the gas supply to the appliance.

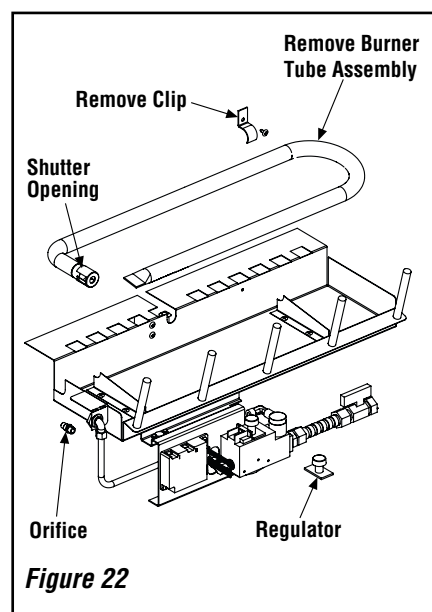
**Step 2.** Carefully remove the logs. Exercise care so as not to break the logs.

**Step 3.** Refer to *Figure 22*.

Remove the burner assembly with attached venturi tube.

Natural to Propane Gas Conversion Kits		
Model No.	Unit Type	Cat. No.
Polaris 36	GCK-DB078P	H4916
Polaris 42	GCK-DB078P	H4916
Propane to Natural Gas Conversion Kits		
Model No.	Unit Type	Cat. No.
Polaris 36	GCK-DB140N	H4915
Polaris 42	GCK-DB140N	H4915

**Table 6**



**Figure 22**

#### Electronic Appliances

**Step 4. Dexen Electronic Valves** - See *Figure 25, Page 16* and the instructions provided with the kit. Remove and discard the two pressure regulator mounting screws. Remove the pressure regulator and diaphragm. Discard all removed components. **Ensure the rubber gasket installed on the back of the replacement pressure regulator is properly positioned.** Install the new pressure regulator using the new screws supplied with the kit. Tighten screws to 25 in. lb. torque.

**NOTE:** Natural gas regulators are identified with a blue dot. Propane regulators have a red dot.

**Step 5.** See *Figure 24* and replace the pilot orifice as follows: Remove pilot hood assembly by grasping the hood and pulling the assembly straight up. Under the hood is the pilot orifice. With caution and using a magnetic screwdriver, undo the pilot orifice and remove it from the assembly. Carefully replace the orifice with the one provided with the kit. Press the pilot hood back over the assembly. The orientation should be aligned as shown in *Figure 24*. **Exercise extreme care to prevent damage to or breakage of the igniter assembly.**

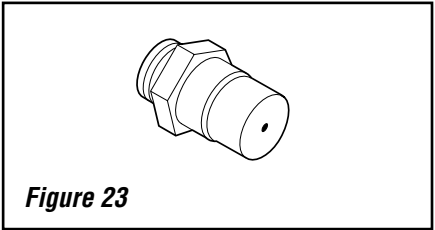
**NOTE:** Propane pilot orifices are identified with a countersink in the head. Natural gas orifices do not have this countersink. See *Figure 24*.

**Step 6.** (Refer to **Figure 22, Page 15**)

- A. Remove the orifice from the manifold with a 1/2" deep throat socket. See the following table for orifice sizes for natural and propane models. **Figure 23** illustrates the orifice. Use pipe joint compound or Teflon tape on all pipe fittings before installing (ensure propane resistant compounds are used in propane applications, do not use pipe joint compounds on flare fittings).

Burner Orifice Sizes Elevation 0-4500 feet ( 0-1372 meters)		
Model	Nat. Gas drill size (inches)	Propane drill size (inches)
Polaris 36	#28 (.1405")	#47 (.0785")
Polaris 42	#28 (.1405")	#47 (.0785")

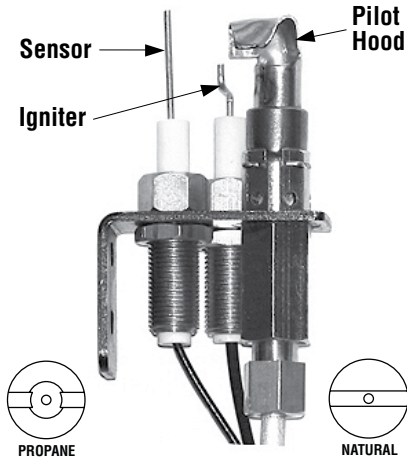
**Table 7**



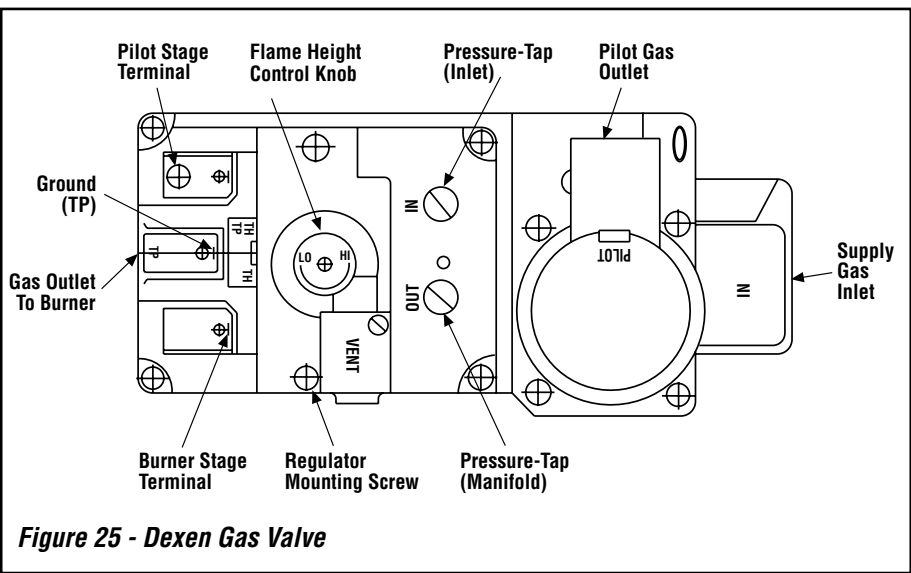
- B. Retrieve the burner and slide the venturi tube over the orifice. Secure the burner in place with the clip shown in **Figure 22, Page 15**.

**Step 7.** Reassemble the remaining components by reversing the procedures outlined in the preceding steps.

**ELECTRONIC PILOT**



**Figure 24**



**Figure 25 - Dexen Gas Valve**

## OPERATION AND CARE OF YOUR APPLIANCE

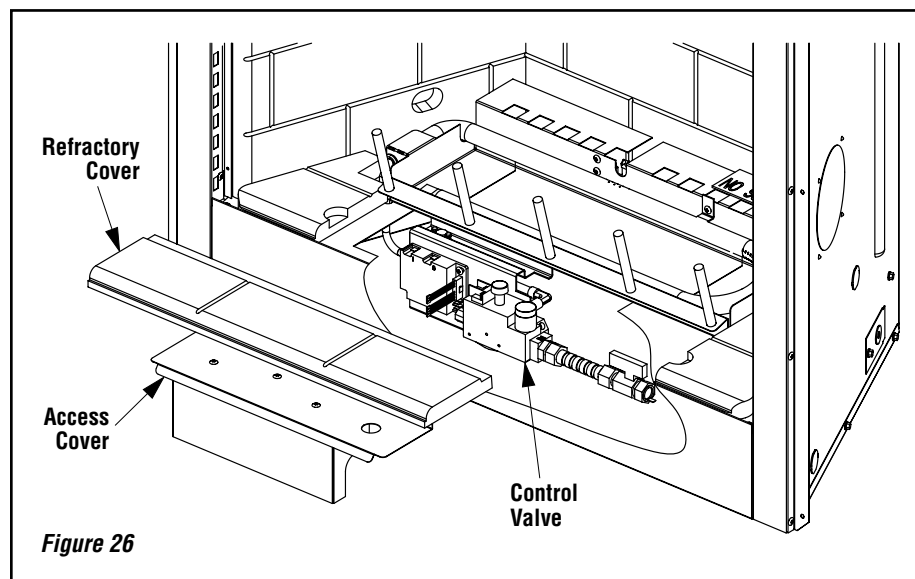
Appliance operation may be controlled by a remotely located wall switch.

### Gas Controls/Control Compartment Access

The gas controls can be found beneath the bottom refractory. Remove the bottom refractory by lifting it up. Remove the access cover (refer to *Figure 26*).

### All Models -

To light these appliances refer to the detailed lighting instructions found in both English and French on **Pages 20 and 21** of these instructions respectively. The appliance lighting instructions may also be found on the pull out lighting instruction labels attached to the gas control valve (see *Figure 26*).



### WARNING

Young children should be carefully supervised when they are in the area of the appliance. Toddlers, young children and others may be susceptible to accidental burns. A physical barrier is recommended if there are at-risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children and other at-risk individuals out of the room and away from hot surfaces.

### WARNING

**FAILURE TO COMPLY WITH THE INSTALLATION AND OPERATING INSTRUCTIONS PROVIDED IN THIS DOCUMENT WILL RESULT IN AN IMPROPERLY INSTALLED AND OPERATING APPLIANCE, VOIDING ITS WARRANTY. ANY CHANGE TO THIS APPLIANCE AND/OR ITS OPERATING CONTROLS IS DANGEROUS. IMPROPER INSTALLATION OR USE OF THIS APPLIANCE CAN CAUSE SERIOUS INJURY OR DEATH FROM FIRE, BURNS, EXPLOSION OR CARBON MONOXIDE POISONING.**

**Carbon Monoxide Poisoning:** Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Turn off the gas supply to the appliance and have it serviced by a qualified professional, as it may not be operating correctly.

### WARNING

**CLOTHING OR OTHER FLAMMABLE MATERIALS SHOULD NOT BE HUNG FROM THE APPLIANCE OR PLACED ON OR NEAR THE APPLIANCE. NEVER PLACE ANY OBJECTS ON THE FIREPLACE.**

### AVERTISSEMENT

**SURVEILLER LES ENFANTS. GARDER LES VÊTEMENTS, LES MEUBLES, L'ESSENCE OU AUTRES LIQUIDES À VAPEUR INFLAMMABLES LOIN DE L'APPAREIL.**

### WARNING

**CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION. FIREPLACE WILL REMAIN HOT FOR A TIME AFTER SHUTDOWN. ALLOW SURFACES TO COOL BEFORE TOUCHING.**

## Variable Flame Height Adjustment

1. All appliances are equipped with a variable gas control valve. Flame height for these models may be adjusted through a range between fixed low and high settings, alternately, while the appliance is in operation.

Adjust the flame height as desired after lighting the appliance by rotating the variable adjustment control knob located on the front of the valve (see **Figure 25, Page 16**).

### IMPORTANT NOTES:

- When lit for the first time, this appliance will emit a slight odor for an hour or two. This is due to the "burn-in" of internal paints and lubricants used in the manufacturing process.
- Keep lower control compartment clean by vacuuming or brushing at least twice a year. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is important that control compartments, burners and circulating air passageways of the appliance be kept clean.  
*S'assurer que le brûleur et le compartiment des commandes sont propres. Voir les instructions d'installation et d'utilisation qui accompagnent l'appareil.*
- Keep the appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

## Maintenance

The appliance should be thoroughly inspected before initial use and at least annually by a qualified service technician. However, more frequent periodic inspections and cleanings should be performed by the homeowner. **Homeowner must contact a qualified service technician at once if any abnormal condition is observed.**

Refer to the maintenance schedule (**Page 23**) for maintenance tasks, procedures, periodicity and by whom they should be performed. Always verify proper operation of the appliance after servicing.

**NOTE:** Make sure you have new batteries and all volcanic stone has filled the pan and that the logs are set correctly.

## CAUTION

You must keep control areas, burner and circulating air passageways of fireplace clean. Inspect these areas of fireplace before each use. Have fireplace inspected yearly by a qualified service person.

## WARNING

- Turn off gas and any electrical power before servicing the appliance.
- Let fireplace completely cool before cleaning.
- Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.
- Burner Flame Pattern - If yellow tipping occurs, your fireplace could produce increased levels of carbon monoxide. Do not mistake orange flames with yellow tipping. Dirt or other fine particles enter the fireplace and burn causing brief patches of orange flame.

Verify proper operation after servicing.  
*S'assurer que l'appareil fonctionne adéquatement une fois l'entretien terminé.*

Perform a periodic visual check of pilot and burner flame.

## Inspect Burner Flame and Pilot Flame Appearance

Periodically do a visual check of the burner flame and the pilot flame. Ensure that the burner flame appearance resembles the flame shown in **Figure 19, Page 13** and as described in Flame Appearance and Sooting on **Page 13**. Refer to **Figure 20 on Page 14** for more information about the pilot flame appearance. Contact a qualified service technician at once if any abnormal condition is observed.

## Battery Replacement

The intermittent ignition system operates on 3 volts provided by two (2) "D" cell batteries. The batteries are located in a pack installed within the J-Box, behind the stainless ON/OFF switch panel. Refer to **Figure 27**.

**NOTE:** All batteries loose voltage when frozen or left for prolonged periods. It may be wise to remove batteries during extended periods of disuse.

## Inspect Burner Assembly

The burner must be replaced prior to the appliance being put into operation if it is evident that the burner is damaged (use only factory original replacement burner).

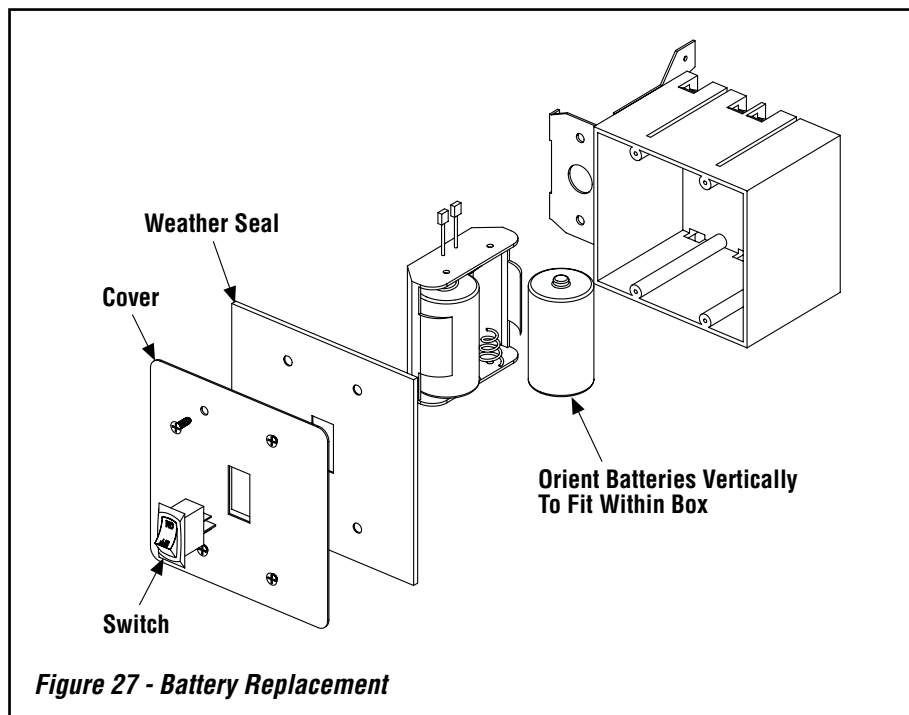
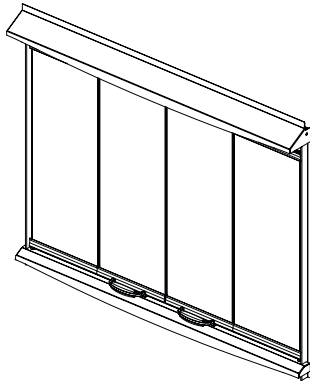


Figure 27 - Battery Replacement

## ACCESSORY COMPONENTS

Purchase these accessories from your local dealer. If they can not supply these accessories contact IHP at [Austria.us.com](http://Austria.us.com) for information.

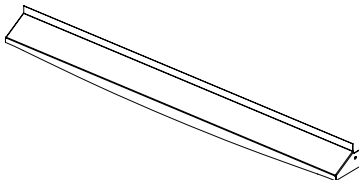
**Only kits supplied by IHP shall be used in the installation of this appliance. Use of non-approved accessory/part kit(s) can result in poor performance and safety hazards.**



### Decorative Bi-Fold Doors

This attractive brushed stainless Bi-Fold door is easy to install and enhances the appearance of the appliance.

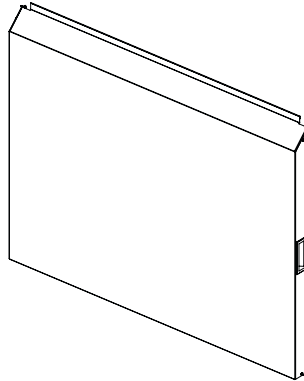
Decorative Bi-Fold Doors		
Cat. No.	Model	Description
H4645	36LBFOD-BS	36" Outdoor B-F Door, Brshd SS
H4646	42LBFOD-BS	42" Outdoor B-F Door, Brshd SS



### Hood Kit

This attractive brushed stainless Hood Kit is easy to install and enhances the appearance of the appliance.

Outdoor Hood Kit		
Cat. No.	Model	Description
H4818	ODGHK36	36" Hood Kit Outdoor Gas
H4819	ODGHK42	42" Hood Kit Outdoor Gas



### Outdoor Weather Cover

This attractive stainless steel Outdoor Weather Cover is easy to install and protects the firebox interior from adverse weather.

Outdoor Weather Cover *		
Cat. No.	Model	Description
H4647	36-EODC	36" SS Outdoor Weather Cover
H4648	42-EODC	42" SS Outdoor Weather Cover

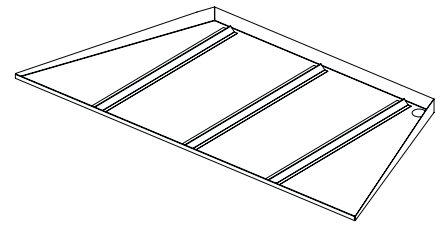
*\* Cannot be used with 36/42LBFOD-BS doors in place*



### Decorative Volcanic Stone

The decorative volcanic stone, Model FDVS, can be used to enhance the look of your appliance. Order model FDVS for replacement of stone when needed. Spread the decorative volcanic stone evenly around the bottom of the firebox.

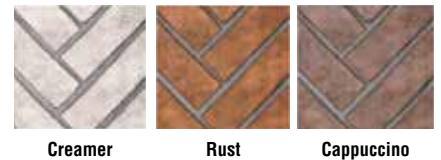
Decorative Volcanic Stone		
Cat. No.	Model	Description
80L42	FDVS	Bag of Volcanic Stone



### Drain Pan

The drain pan is used with the appliance.

Drain Pan		
Cat. No.	Model	Description
H4651	DPSS36	Drain Pan (36)
H4652	DPSS42	Drain Pan (42)



### Refractory Stain Kits

Use the Refractory Stain Kits to give white refractory panels a new look.

Kit includes foam roller, roller handle, paint tray, and one can of stain. Available stain colors are Creamer (ivory), Rust (terra cotta), and Cappuccino (rosy taupe).

Refractory Stain Kits		
Cat. No.	Model	Description
H8176	BSK-CR	Creamer
H8177	BSK-RT	Rust
H8178	BSK-CP	Cappuccino



## FOR YOUR SAFETY READ BEFORE OPERATING

**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 device which automatically lights the pilot. Do not try to light the pilot by hand.

B. BEFORE OPERATING 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 electric switch; do not use any phone in your building.

- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

C. If any portion of this appliance does not operate as the instructions indicate, do not try to repair it, call a qualified service technician. Do not use tools. Force or attempted 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.

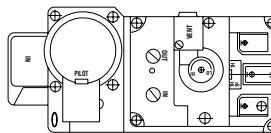
## OPERATING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. (If applicable) Set the thermostat to lowest setting. Turn wall on/off switch, unit mounted on/off switch or remote control switch "OFF." If used, remove the batteries from the battery holder.
3. Turn OFF all electric power to the appliance.
4. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
5. Access the control compartment.
6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. 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.
7. Turn on all electrical power to the appliance.
8. (If applicable) Set thermostat to desired setting. Turn wall on/off switch, unit mounted on/off switch or remote control switch "ON." Replace the batteries in the battery holder, if used.

9. Close control compartment.

10. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

Electronic Gas Control Valve - DEXEN



Electronic Pilot Assembly



## TO TURN OFF GAS TO APPLIANCE

1. (If applicable) Set the thermostat to lowest setting. Turn wall on/off switch, unit mounted on/off switch or remote control switch "OFF."
2. Turn OFF all electric power to the appliance and remove

backup batteries, if service is to be performed.

3. Access the control compartment.
4. Close the main line gas shut-off valve.
5. Close control compartment.



# WARNING



**HOT GLASS WILL CAUSE BURNS.**

**DO NOT TOUCH GLASS UNTIL COOLED.**

**NEVER ALLOW CHILDREN TO TOUCH GLASS.**



## POUR PLUS DE SÉCURITÉ LIRE AVANT DE METTRE EN MARCHÉ

**AVERTISSEMENT.** Quiconque ne respecte pas à la lettre les instructions dans la présente notice risque de déclencher un incendie ou une explosion entraînant des dommages, des blessures ou la mort.

- A. Cet appareil est muni d'un dispositif d'allumage qui allume automatiquement la veilleuse. Ne tentez pas d'allumer la veilleuse manuellement.
- B. **AVANT DE FAIRE FONCTIONNER**, reniflez tout autour de l'appareil pour déceler une odeur de gaz. Reniflez près du plancher, car certains gaz sont plus lourds que l'air et peuvent s'accumuler au niveau du sol.

**QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ :**

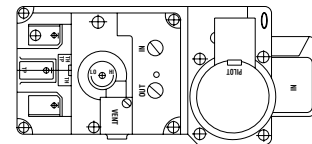
- Ne pas tenter d'allumer d'appareil.
- Ne touchez à aucun interrupteur; ne pas vous servir des téléphones se trouvant dans le bâtiment.

- Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
- Si vous ne pouvez rejoindre le fournisseur, appelez le service des incendies.
- C. Si un élément de cette unité ne fonctionne pas tel que décrit dans les instructions, n'essayez pas de le réparer, appelez un technicien qualifié. N'utilisez pas d'outils. Le fait de forcer la manette ou de la réparer peut déclencher une explosion ou un incendie.
- D. N'utilisez pas cet appareil s'il a été plongé dans l'eau, même partiellement. Faites inspecter l'appareil par un technicien qualifié et remplacez toute partie du système de contrôle et toute commande qui ont été plongés dans l'eau.

## INSTRUCTIONS DE MISE EN MARCHÉ

1. **ARRÊTEZ !** Lisez les instructions de sécurité sur la portion supérieure de cette étiquette.
2. Coupez l'alimentation électrique à l'appareil en tournant l'interrupteur mural à la position "OFF". Retirez les batteries de leur support.
3. Cet appareil est muni d'un dispositif d'allumage qui allume automatiquement la veilleuse. Ne tentez pas d'allumer la veilleuse manuellement.
4. Attendez cinq (5) minutes pour laisser échapper tout le gaz. Reniflez tout autour de l'appareil, y compris près du plancher, pour déceler une odeur de gaz. Si vous sentez une odeur de gaz, **ARRÊTEZ !** Passez à l'étape B des instructions de sécurité sur la portion supérieure de cette étiquette. S'il n'y a pas d'odeur de gaz, passez à l'étape suivante.
5. Remplacez les batteries dans leur support.
6. Réalimentez en électricité l'appareil en tournant l'interrupteur mural à la position "ON."
7. Si l'appareil ne se met pas en marche, suivez les instructions intitulées « Comment couper l'admission de gaz de l'appareil » et appelez un technicien qualifié ou le fournisseur de gaz.

Valve électronique -  
DEXEN



Veilleuse de  
l'appareil électronique



## COMMENT COUPER L'ADMISSION DE GAZ DE L'APPAREIL

1. Coupez l'alimentation électrique à l'appareil en tournant l'interrupteur mural à la position "OFF" et retirez les batteries de leur support, si un entretien est effectué sur l'appareil.
2. Fermer la valve de gaz principale.



# AVERTISSEMENT



**UNE SURFACE VITRÉE CHAUDE PEUT CAUSER DES BRÛLURES.  
LAISSER REFROIDIR LA SURFACE VITRÉE AVANT D'Y TOUCHER.  
NE PERMETTEZ JAMAIS À UN ENFANT DE TOUCHER LA SURFACE VITRÉE.**

## TROUBLESHOOTING THE ELECTRONIC IGNITION SYSTEM

**NOTE:** Before troubleshooting, be sure that the appliance main line gas shut-off valve, the gas control valve and the wall switch are in the "ON" position.

**Important:** Valve system troubleshooting should only be accomplished by a qualified service technician.

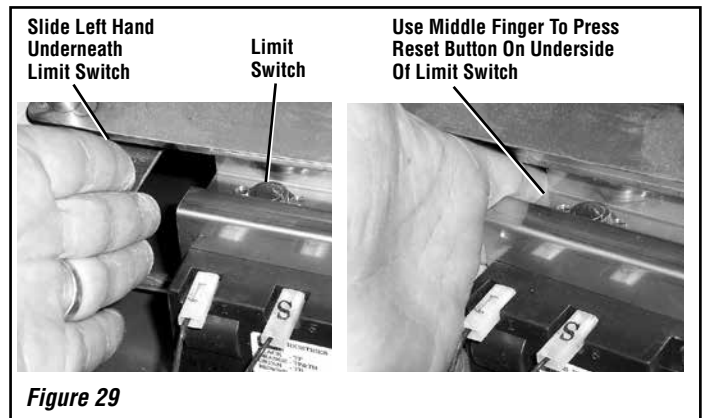
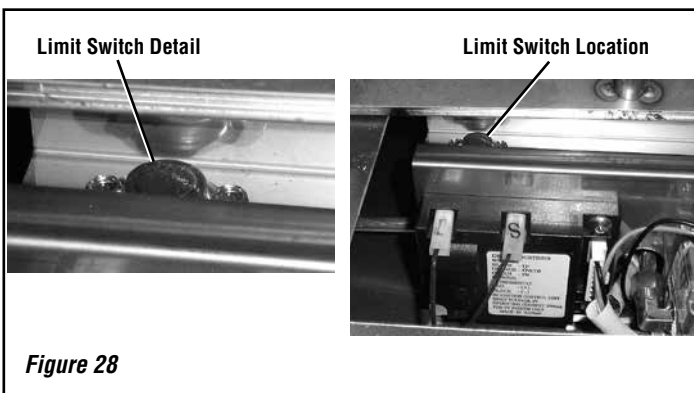
SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Nothing happens when ON/OFF switch is turned on (pilot does not spark).	A. Dead batteries.	Replace batteries (Refer to <b>Page 10</b> ).
	B. Low voltage/or bad lead wires.	Check voltage on the batteries. The value should be around 2.7 to 3.2 VAC. Confirm that wire connections are secure.
	C. Damaged igniter wire.	Check for visible cracked casing, cuts, etc.
	D. Damaged pilot assembly.	Check pilot assembly for visibly broken spark electrode, etc.
2. The main burner does not light and the igniter is sparking.	A. No fuel supply.	Ensure that the gas supply is turned on.
	B. Loose sensor wire.	Ensure sensor wire connection is secure.
	C. Lose wires to valve.	Ensure black, green and orange wires connection is secure to valve.
	D. Loose wires to ignition module.	Ensure black sensor wire (S) and black igniter wire (I) is secure to ignition module.
	E. Air in the gas line.	Purge gas line of air.
	F. Low voltage.	Test voltage at the batteries. It should be around 2.7 to 3.2 VAC.
3. The main burner come "ON" but then go "OFF".	A. Gas supply is turned "OFF".	Turned gas supply to "ON".
	B. Loose wire connection on valve or ignition module.	Check wire connection.
	C. Flame does not engulf flame sensor.	Check location of sensor.
4. Log soot.	A. Flame impingement on the log.	Check for proper log placement.
	B. Improper air shutter opening.	Check for proper air shutter openings.
5. The main burner shuts off but the pilot remains lit.	A. Lose wire to valve or limit switch has activated.	Allow the unit to cool to below 220° F and then reset the limit switch. Refer to <b>Reset Limit Switch</b> on this Page. Check the burner pan for the proper application of volcanic stone.

### RESET LIMIT SWITCH

**Step 1.** Remove bottom middle refractory panel (#4) and valve cover assembly (#9) to gain access to the limit switch (#25).

**Step 2.** Slide your left hand into the fireplace and use your middle finger to feel for two wires connected to the limit switch. Follow up, in between the two wires is the reset button, located on the back of the limit switch. **Refer to Figures 28 and 29 for more detail.**

**NOTE:** Make sure you have new batteries and all volcanic stone has filled the pan and that the logs are set correctly.



## MAINTENANCE SCHEDULE

**Annually** (Before the onset of the Burning Season)

MAINTENANCE TASK	ACCOMPLISHING PERSON	PROCEDURE
Inspecting/Cleaning Burner, Logs and Controls	Qualified Service Technician	Inspect valve and ensure it is properly operating. Check piping for leaks. Vacuum the control compartment, fireplace logs and burner area.
Inspecting/Cleaning Pilot and Burner	Qualified Service Technician	Refer to <b>Figure 20, Page 14</b> and <b>Figure 22, Page 15</b> . Remove any surface build-up on pilot and burner assembly. Wipe the pilot nozzles, igniter/flame rod and hood. Ensure the pilot flame engulfs the flame sensor as shown.
Appliance Checkout	Qualified Service Technician	Perform the appropriate appliance checkout procedure detailed in this manual.
Replacing Volcanic Stone	Homeowner/Qualified Services Technician	Remove old volcanic stone and vacuum the stone placement area. Place new volcanic stone as described in this document.
Replace Spent Batteries	Homeowner	Locate and remove the four (4) screws retaining the stainless J-Box cover. Remove the battery pack and replace the two (2) "D" cell batteries.

**Periodically** (After the Burning Season)

MAINTENANCE TASK	ACCOMPLISHING PERSON	PROCEDURE
Cleaning Firebox Interior	Homeowner	Carefully remove logs and decorative volcanic stone. Vacuum out interior of the firebox. Clean firebox walls and log grate. Replace logs, Rockwool and volcanic stone as detailed in this manual.
Replace Spent Batteries	Homeowner	Locate and remove the four (4) screws retaining the stainless J-Box cover. Remove the battery pack and replace the two (2) "D" cell batteries.

## REPLACEMENT PARTS LIST

Item No.	Description	Polaris 36		Polaris 42	
		Part No.	Qty.	Part No.	Qty.
1, 2, 3	Refractory Set, White Stacked	F3531	1	F3533	1
1	Refractory, LH White Stacked	---	1	---	1
2	Refractory, RH White Stacked	---	1	---	1
3	Refractory, Rear White Stacked	---	1	---	1
1H, 2H, 3H	Refractory, LH White Herringbone	F3532	1	F3534	1
1H	Refractory, LH White Herringbone	---	1	---	1
2H	Refractory, RH White Herringbone	---	1	---	1
3H	Refractory, Rear White Herringbone	---	1	---	1
4	Refractory, Bottom, Middle	H4952	1	H4952	1
5	Refractory, Bottom, Side (LH)	H4948	1	H4949	1
6	Refractory, Bottom, Side (RH)	H4950	1	H4951	1
7	Clip, Refractory	H6368	4	H6368	4
8A	Gas Train Assembly (Natural Gas)	H4941	1	H4941	1
8B	Gas Train Assembly (Propane Gas)	H4942	1	H4942	1
9	Valve Cover Assembly	H4947	1	H4947	1
10	Top Frame	H4933	1	H4934	1
11	Bottom Frame	H4935	1	H4936	1
12	Corner Post (LH)	H4937	1	H4937	1
13	Corner Post (RH)	H4938	1	H4938	1
14	Stand-Off Bracket	H2716	4	H2716	4
15	Cover Plate (Gas Access)	H4955	1	H4955	1
16	Log Set	H4932	1	H4932	1
17	Screen	H4926	2	H4927	2
18	Screen Rod	H4939	2	H4940	2
19	Tube, Burner Assembly	H4930	1	H4930	1
20	Burner Bracket	H6570	2	H6570	2
21	Burner Tube Support	H4953	2	H4953	2
22	Flex Connector	93L32	2	93L32	2
23	Volcanic Stone (Not Pictured)	80L42	3	80L42	3
24	Electrical Kit (Not Pictured)	H4954	1	H4954	1
25	Limit Switch	H6243	1	H6243	1
---	Valve NG.	H4681	1	H4681	1
---	Valve LP.	H4928	1	H4928	1
---	Pilot NG.	H4673	1	H4673	1
---	Pilot LP.	H4929	1	H4929	1
---	Module	H4674	1	H4674	1



### WARNING / AVERTISSEMENT

Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

Risque de dommages ou de blessures si les pièces ne sont pas installées conformément à ces schémas et ou si des pièces autres que celles spécifiquement approuvées avec cet appareil sont utilisées.



### WARNING

Never use substitute materials. Use of non-approved parts can result in poor performance and safety hazards.

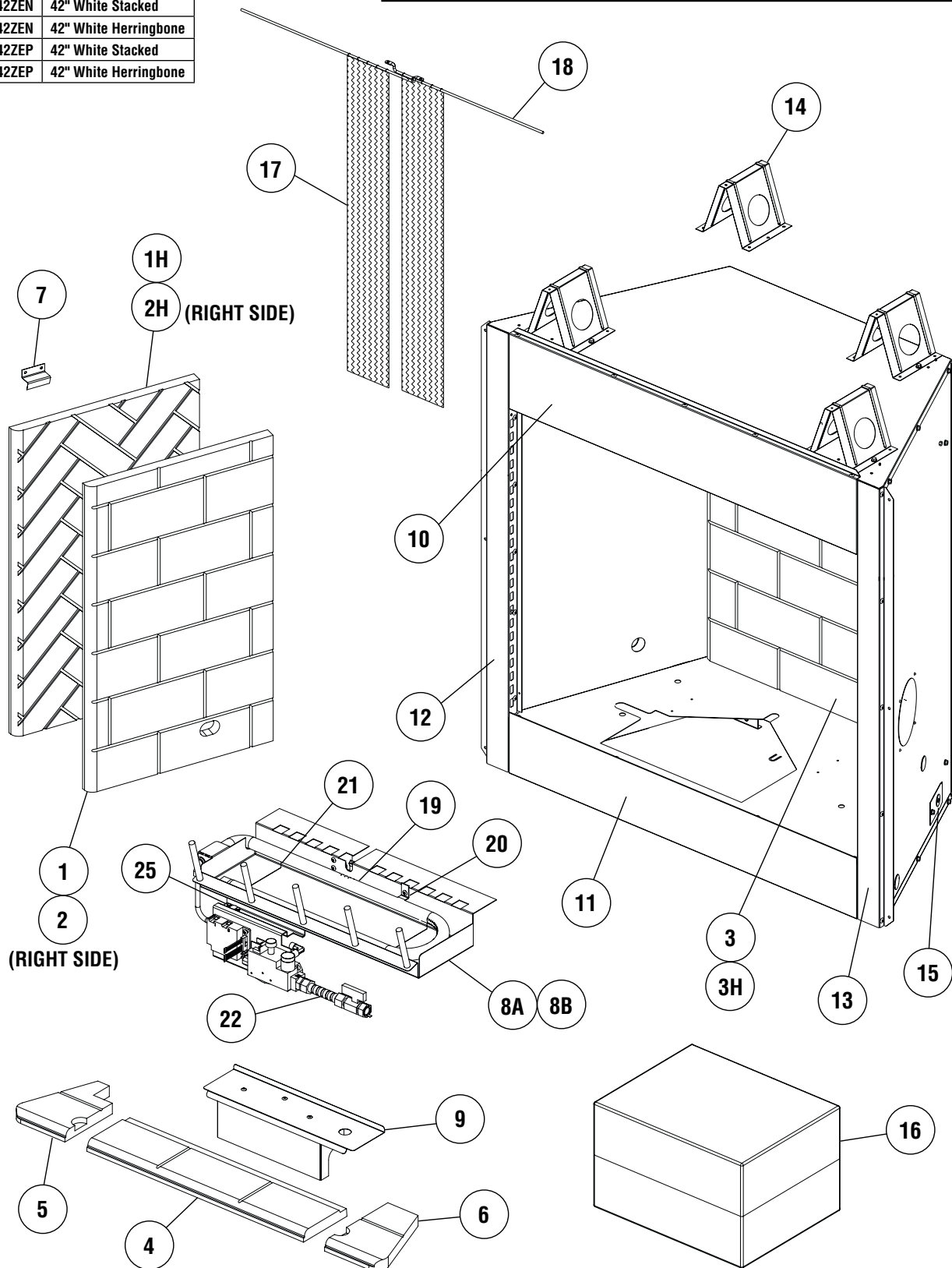
## REPLACEMENT PARTS

Product Reference Information		
Cat. No.	Model	Description
F0576	Polaris36ZEN	36" White Stacked
F0577	Polaris36ZEN	36" White Herringbone
F0578	Polaris36ZEP	36" White Stacked
F0579	Polaris36ZEP	36" White Herringbone
F0580	Polaris42ZEN	42" White Stacked
F0581	Polaris42ZEN	42" White Herringbone
F0582	Polaris42ZEP	42" White Stacked
F0583	Polaris42ZEP	42" White Herringbone



### WARNING

Contact an IHP dealer to obtain any of these parts. Never use substitute materials not approved by IHP. Use of non-approved parts can result in poor performance and safety hazards.



NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

[illegible]

# Innovative Hearth Products Astria® Brand Gas Fireplace Limited Lifetime Warranty

## THE WARRANTY

Innovative Hearth Products ("IHP") Limited Lifetime Warranty warrants your Astria® brand gas fireplace ("Product") to be free from defects in materials and workmanship at the time of manufacture. The product body, firebox and barrier carry the Limited Lifetime Warranty. Ceramic glass carries the Limited Lifetime Warranty against thermal breakage only. After installation, if covered components manufactured by IHP are found to be defective in materials or workmanship during the Limited Lifetime Warranty period and while the Product remains at the site of the original installation, IHP will, at its option, repair or replace the covered components. If repair or replacement is not commercially practical, IHP will, at its option, refund the purchase price or wholesale price of the IHP product, whichever is applicable. IHP will also pay IHP prevailing labor rates, as determined in its sole discretion, incurred in repairing or replacing such components for up to five years. THERE ARE EXCLUSIONS AND LIMITATIONS to this Limited Lifetime Warranty as described herein.

## COVERAGE COMMENCEMENT DATE

Warranty coverage begins on the date of purchase. In the case of new home 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 IHP dealer/distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from IHP, regardless of the installation or occupancy date.

## EXCLUSIONS AND LIMITATIONS

This Limited Lifetime Warranty applies only if the Product is installed in the United States or Canada and only if operated and maintained in accordance with the printed instructions accompanying the Product and in compliance with all applicable installation and building codes and good trade practices.

This warranty is non-transferable and extends to the original owner only. The Product must be purchased through a listed supplier of IHP and proof of purchase must be provided. The product body, firebox and barrier carry the Limited Lifetime Warranty from the date of installation. Vent components, trim components and paint are excluded from this Limited Lifetime Warranty. The following do not carry the Limited Lifetime Warranty but are warranted as follows:

**Burner** – Repair or replacement for five years from the date of installation

**Gas components & electrical components** – Repair or replacement for one year from the date of installation

**Gaskets** – Repair or replacement for one year from the date of installation

**Gold & nickel plating** - Replacement for two years from date of installation. Excludes tarnishing

**Labor coverage** – Prevailing IHP labor rates apply for the warranty period of the component

**Light bulbs & batteries** – Replacement for 90 days from the date of installation

**Logs** – Replacement for five years from the date of installation against thermal breakage only

**Optional blowers & remote controls** – Repair or replacement for one year from the date of installation

**Optional glass doors & optional glass accessories** – Repair or replacement for 90 days from the date of installation

**Optional surrounds** – Stone/Natural Materials: Replacement for one year against cracking or breakage due to thermal stress. Other Materials: Replacement for one year. Excludes surface and hairline cracks and scratches or slight color changes that do not affect the operation or safety of the unit

**Tempered Glass** -Replacement for one year from the date of installation

**Parts not otherwise listed carry a 90 day warranty from the date of installation.**

**Whenever practicable, IHP will provide replacement parts, if available, for a period of 10 years from the last date of manufacture of the Product.**

IHP will not be responsible for: (a) damages caused by normal wear and tear, accident, riot, fire, flood or acts of God; (b) damages caused by abuse, negligence, misuse, or unauthorized alteration or repair of the Product affecting its stability or performance (The Product must be subjected to normal use. The Product is designed to burn either natural or propane gas only. Burning conventional fuels such as wood, coal or any other solid fuel will cause damage to the Product, will produce excessive temperatures and could result in a fire hazard.); (c) damages caused by failing to provide proper maintenance and service in accordance with the instructions provided with the Product; (d) damages, repairs or inefficiency resulting from faulty installation or application of the Product.

IHP is not responsible for inadequate fireplace system draft caused by air conditioning and heating systems, mechanical ventilation systems, or general construction conditions which may generate negative pressure in the room in which the appliance is installed. Additionally IHP assumes no responsibility for drafting conditions caused by venting configurations, adjoining trees or buildings, adverse wind conditions or unusual environmental factors and conditions that affect the operation of the unit.

This Limited Lifetime Warranty covers only parts and labor as provided herein. In no case shall IHP be responsible for materials, components or construction, which are not manufactured or supplied by IHP or for the labor necessary to install, repair or remove such materials, components or construction. Additional utility bills incurred due to any malfunction or defect in equipment are not covered by this warranty. All replacement or repair components will be shipped F.O.B. from the nearest stocking IHP factory.

## LIMITATION ON LIABILITY

It is expressly agreed and understood that IHP's sole obligation and the 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 herein.

In no event shall IHP be liable for any incidental or consequential damages caused by defects in the Product, whether such damage occurs or is discovered before or after repair or replacement, and whether such damage is caused by IHP's negligence. IHP has not made and does not make any representation or warranty of fitness for a particular use or purpose, and there is no implied condition of fitness for a particular use or purpose.

IHP makes no expressed warranties except as stated in this Limited Lifetime Warranty. The duration of any implied warranty is limited to the duration of this expressed warranty.

No one is authorized to change this Limited Lifetime Warranty or to create for IHP any other obligation or liability in connection with the Product. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. The provisions of this Limited Lifetime Warranty are in addition to and not a modification of or subtraction from any statutory warranties and other rights and remedies provided by law.

## INVESTIGATION OF CLAIMS AGAINST WARRANTY

IHP reserves the right to investigate any and all claims against this Limited Lifetime Warranty and to decide, in its sole discretion, upon the method of settlement.

To receive the benefits and advantages described in this Limited Lifetime Warranty, the appliance must be installed and repaired by a licensed contractor approved by IHP.

Contact IHP at the address provided herein to obtain a listing of approved dealers/distributors. **IHP shall in no event be responsible for any warranty work done by a contractor that is not approved without first obtaining IHP's prior written consent.**

## HOW TO REGISTER A CLAIM AGAINST WARRANTY

In order for any claim under this warranty to be valid, you must contact the IHP dealer/distributor from which you purchased the product. If you cannot locate the dealer/distributor, then you must notify IHP in writing. IHP must be notified of the claimed defect in writing within 90 days of the date of failure. Notices should be directed to the IHP Warranty Department at 1769 East Lawrence Street; Russellville, AL 35654 or visit our website at [WWW.ASTRIA.US.COM](http://WWW.ASTRIA.US.COM).

**Astria.us.com**

Record the following important information about your fireplace:

Appliance model number	
Appliance serial number	
Date appliance was Installed	
Type of gas appliance uses	
Dealer name	

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Innovative Hearth Products (IHP) reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products. Consult your local distributor for fireplace code information.

Printed in U.S.A. © 2017 Innovative Hearth Products

**P/N 900837-00 Rev. C 12/2019**



P900837-00



**1769 East Lawrence Street • Russellville, AL 35654**