## **Owner's Manual**

## **Care and Operation**

CAUTION! Risk of Fire! DO NOT store instruction manuals inside fireplace cavity. High temperatures could cause a fire.

INSTALLER: Leave this manual with the appliance, not inside the appliance.

CONSUMER: Retain this manual for future reference. Do not store inside the appliance

NOTICE: DO NOT discard this manual! HEAT&GLO **GAS-FIRED** No one builds a better fire Models: PROV-I30-IPI PROV-135-IPI

This appliance may be installed as an OEM installation in manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the Manufactured Home Construction and Safety Standard, Title 24 CFR. Part 3280 in the United States, or the Standard for Installation in Mobile Homes. CAN/CSA Z240 MH Series, in Canada.

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

#### **WARNING:**

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

- DO NOT store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- What to do if you smell gas
  - **DO NOT** try to light any appliance.
  - DO NOT touch any electrical switch. DO **NOT** use any phone in your building.
  - Leave the building immediately.
  - Immediately call your gas supplier from a 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.



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

Pour demander un exemplaire en français de ce Manuel 🗧 du propriétaire, visitez www.heatnglo.com.



Read this manual before operating this appliance.

Please retain this Owner's Manual for future reference.

Read the Installation Manual before making any installation or finishing changes.

## A. Congratulations

Congratulations on selecting a Heat & Glo gas fireplace, an elegant and clean alternative to wood burning fireplaces. The Heat & Glo gas fireplace you have selected is designed to provide the utmost in safety, reliability, and efficiency.

As the owner of a new fireplace, you'll want to read and carefully follow all of the instructions contained in this *Owner's Manual*. Pay special attention to all cautions and warnings.

This *Owner's Manual* should be retained for future reference. We suggest that you keep it with your other important documents and product manuals.

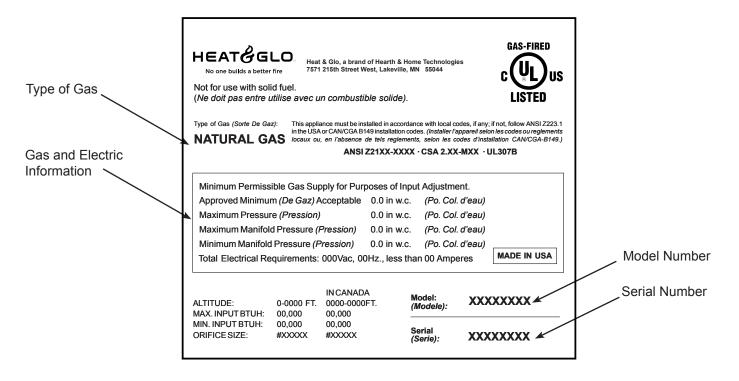
The information contained in this *Owner's Manual*, unless noted otherwise, applies to all models and gas control systems.

Your new Heat & Glo gas fireplace will give you years of durable use and trouble-free enjoyment. Welcome to the Heat & Glo family of fireplace products!

Homeowner Reference Information	We recommend that you record the following pertinent information about your fireplace.
Model Name:	Date purchased/installed:
Serial Number:	Location on fireplace:
Dealership purchased from:	Dealer Phone:
Notes:	

## → Listing Label Information/Location

The model information regarding your specific fireplace can be found on the rating plate usually located in the control area of the fireplace.



## **▲** Safety Alert Key:

- DANGER! Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- WARNING! Indicates a hazardous situation which, if not avoided could result in death or serious injury.
- CAUTION! Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- NOTICE: Used to address practices not related to personal injury.

**Note:** The term "recommend" or "recommended" does not indicate a requirement. It is a best practice suggested by Hearth & Home Technologies<sup>®</sup>.

## **Table of Contents**

	1 Welcome
<b>→</b>	A. Congratulations
	2 Product Specific Information
	A. Appliance Certification6B. Glass Specifications6C. BTU Specifications6
	3 Important Safety and Operating Information
	A. Appliance Safety       7         B. General Operating Parts       8         C. Fuel Specifications       8         D. Wall Surface/TV Guidelines       8         E. Before Lighting Appliance       10         F. Lighting Instructions (IPI)       11         G. Appliance Break-In       12         H. Heat Management       13         I. Operation During A Power Outage (IPI)       13         J. Detailed Component Operating Instructions - IntelliFire™         Ignition       14
	4 Maintenance and Service
	A. Maintenance: Frequency and Tasks
	5 Frequently Asked Questions and Troubleshooting
	A. Frequently Asked Questions
	6 Reference Materials
	A. Accessories

<sup>→ =</sup> Contains updated information.

## → B. Limited Lifetime Warranty

## Hearth & Home Technologies LLC LIMITED LIFETIME WARRANTY

Hearth & Home Technologies LLC ("HHT") extends the following warranty for HHT gas, wood, pellet and electric hearth appliances (each a "Product" and collectively, the "Product(s)") and certain component parts set forth in the table below ("Component Part(s)") that are purchased from a HHT authorized dealer or distributor.

#### **WARRANTY COVERAGE:**

HHT warrants that the Products and their Component Parts will be free from defects in materials and workmanship for the applicable period of Warranty coverage set forth in the table below ("Warranty Period"). If a Product or Component Parts are found to be defective in materials or workmanship during the applicable Warranty Period, HHT will, at its option, repair the applicable Component Part(s), replace the applicable Component Part(s), or refund the purchase price of the applicable Product(s). The maximum amount recoverable under this Warranty is limited to the purchase price of the Product. This Warranty is transferable from the original purchaser to subsequent owners, but the Warranty Period will not be extended in duration or expanded in coverage for any such transfer. This Warranty is subject to conditions, exclusions, and limitations as described below.

#### **WARRANTY PERIOD:**

Warranty coverage begins at the date of installation. In the case of new home constructions, Warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the Product(s) by an independent, authorized HHT dealer or distributor, whichever occurs earlier. However, the Warranty coverage shall commence no later than 24 months following the date of Product shipment from HHT, regardless of the installation or occupancy date.

The term "Lifetime" in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, 10 years from the beginning date of warranty coverage for wood and pellet appliances, and 5 years from the beginning of warranty coverage for standalone gas log sets. These time periods reflect the minimum expected useful lives of the designated Component Parts under normal operating conditions.

Warranty	Period	HHT Manufactured Appliances and Venting					
Component Parts	Labor	Gas	Pellet	Wood	Electric	Venting	Component Parts Covered by this Warranty
1 Ye	ear	х	х	х		х	All parts including handles, external enameled components and other material except as covered by Warranty Conditions, Warranty Exclusions, and Warranty Limitations listed
2 Ye	ars				х		All parts except as covered by Warranty Conditions, Warranty Exclusions, and Warranty Limitations listed
					•		
			х	X			Igniters, Auger Motors, Electronic Components, and Glass
2 ye	ars	x					Electrical components limited to modules, remotes/wall switches, valves, pilots, blowers, junction boxes, wire harnesses, transformers and lights (excluding light bulbs)
		Х		Х			Molded Refractory Panels, Glass Liners
3 ye	ars		х				Firepots, burnpots, mechanical feeders/auger assemblies
5 ye	ars	х					Burners and logs for standalone gas log sets (Vented and Vent Free gas log sets not sold as components of the fireplace or stove)
5 years	1 year	х					Vent Free Burners and Vent Free Log components of HHT manufactured fireplaces or stoves
,	ĺ		х	х			Castings, Medallions and Baffles
6 years	3 years			Х			Catalysts
7 years	3 years		x	х			Manifold tubes, HHT Chimney and Terminations
10 years	1 year	х					Burners, logs and refractory components of HHT manufactured fireplaces or stoves
Limited Lifetime	3 years	х	х	х			Firebox and heat exchanger, FlexBurn® System (engine, inner cover, access cover and fireback)
1 Year	None	х	х	х	x	х	All purchased replacement parts

4021-645M 9/21 Page 1 of 2

#### **WARRANTY CONDITIONS:**

- Because HHT cannot control the quality of any Products sold by unauthorized sellers, this Warranty only covers Products that are purchased through an HHT authorized dealer or distributor unless otherwise prohibited by law; a list of HHT authorized dealers is available on the HHT branded websites.
- This Warranty is only valid while the applicable Product remains at the site of original installation.
- This Warranty is only valid in the country in which the HHT authorized dealer or distributor that sold the applicable Product is authorized to sell applicable Product.
- Contact your installing distributor or dealer for Warranty service. If the installing dealer or distributor is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking Warranty service from a dealer other than the dealer from whom you originally purchased the applicable Product.
- No HHT consumer should bear cost of warranty service or costs incurred while servicing warranty claims (i.e., travel, gas, or mileage) when the service is performed within the terms of this Warranty. Check with your dealer or distributor in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this Warranty.

#### **WARRANTY EXCLUSIONS:**

This Warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under the Warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the Warranty Period are not covered. These parts include: paint, wood and pellet gaskets, firebricks, grates, flame guides, batteries and the discoloration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this Warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the applicable Product in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the applicable Product; (2) failure to install the applicable Product in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operation instructions; (7) installation or use of components not supplied with the applicable Product or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the applicable Product.
- Non-HHT venting components, hearth connections or other accessories used in conjunction with the applicable Product.
- · Any part of a pre-existing fireplace system in which an insert or a decorative gas applicable Product is installed.
- HHT's obligation under this Warranty does not extend to the Product's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper Product for the application. Consideration must be given to the Product location and configuration, environmental conditions, insulation and air tightness of the structure.

#### This warranty is void if:

- The applicable Product has been over-fired, operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, deformation/warping of interior cast iron structure or components, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The applicable Product is subjected to prolonged periods of dampness or condensation.
- There is any damage to the applicable Product due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

#### **LIMITATIONS OF REMEDIES AND LIABILITY:**

• EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. The owner's exclusive remedy and HHT's sole obligation under this Warranty or in contract, tort or otherwise, shall be limited to replacement of the Component Part(s), repair of the Component Part(s), or refund of the original purchase price of the applicable Product(s), as specified above; provided, however, that (i) if HHT is unable to provide replacement of the Component Part(s) and repair of the Component Part(s) is not commercially practicable or cannot be timely made, or (ii) the customer is willing to accept a refund of the purchase price of the applicable Product(s), HHT may discharge all such obligations by refunding the purchase price of the applicable Product. In no event will HHT be liable for any incidental or consequential damages caused by defects in the applicable Product. 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. This Warranty gives you specific legal rights and you may also have other rights which vary from State to State. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE FOR THE APPLICABLE PRODUCT. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

4021-645M 9/21 Page 2 of 2

## **Product Specific Information**

## A. Appliance Certification

MODELS: PROV-I30-IP, PROV-I35-IPI

LABORATORY: Underwriters Laboratories, Inc. (UL)

TYPE: Direct Vent Heater

STANDARD: ANSI Z21.88-2019 CSA 2.33-2019

This product is listed to ANSI standards for "Vented Gas Fireplace Heaters" and applicable sections of "Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles", and "Gas Fired Appliances for Use at High Altitudes".

Gas inserts are designed for installations into solid fuel masonry or factory built fireplaces that have been installed in accordance with the National, Provincial, State and local building codes. Fireplaces are to be constructed of non-combustible materials and, in the absence of local or regional codes, meet criteria of NFPA 211. No additional outside air source is required.

**NOTICE:** This installation must conform with local codes. In the absence of local codes you must comply with the National Fuel Gas Code, ANSI Z223.1-latest edition in the U.S.A. and the CAN/CGA B149 Installation Codes in Canada.

#### NOT INTENDED FOR USE AS A PRIMARY HEAT SOURCE.

This appliance is tested and approved as either supplemental room heat or as a decorative appliance. It should not be factored as primary heat in residential heating calculations.

Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends HHT Factory Trained or NFI certified professionals.





## **B. Glass Specifications**

This appliance is equipped with ceramic glass. Replace glass only with ceramic glass. Please contact your dealer for replacement glass.

#### C. BTU Specifications

<b>Models</b> (U.S. or Canada)		Maximum Input BTU/h	Minimum Input BTU/h	Orifice Size (DMS)
PROV-I30-IPI (NG)	(0-2000 FT)	30.000	21,000	37
PROV-I30-IPI (Propane)	(0-2000 FT)	28,000	19,600	52
PROV-I35-IPI (NG)	(0-2000 FT)	32,700	22,890	35
PROV-I35-IPI (Propane)	(0-2000 FT)	32,000	22,400	51

## **Important Safety and Operating Information**

TO TOUCH GLASS.

## A. Appliance Safety

WARNING! DO NOT operate fireplace before reading and understanding operating instructions. Failure to operate fireplace according to operating instructions could cause fire or injury.



- Keep children away.
- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

High temperatures may ignite clothing or other flammable materials.

 Clothing, furniture, draperies, and other flammable materials must not be placed on or near the appliance.

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and must be installed for the protection of children and other at-risk individuals. DO NOT operate the appliance with the barrier removed. If the barrier becomes damaged, the barrier must be replaced with the manufacturer's barrier for this appliance.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns.

- A physical barrier is recommended if there are at risk individuals in the house.
- To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces.
- Install a switch lock or a wall/remote control with child protection lockout feature.
- · Keep remote controls out of reach of children.
- Never leave children alone near a hot fireplace, whether operating or cooling down.

- Teach children to NEVER touch the fireplace.
- Consider not using the fireplace when children will be present.

Contact your dealer for more information, or visit: <a href="https://www.hpba.org/Product-Info/Fireplace-Stove-Heater/Glass-Fronts-Safety">www.hpba.org/Product-Info/Fireplace-Stove-Heater/Glass-Fronts-Safety</a>.

To prevent unintended operation when not using your fireplace for an extended period of time (summer months, vacations, trips, etc):

- Remove batteries from remote controls.
- · Turn off wall controls.

warning: This product and the fuels used to operate this product (liquid propane or natural gas), and the products of combustion of such fuels, can expose you to chemicals including benzene, which is known to the State of California to cause cancer and reproductive harm. For more information go to: www. P65Warnings.ca.gov.

## Clear Space

**WARNING! DO NOT** place combustible objects in front of the fireplace or block louvers. High temperatures may start a fire. See Figure 3.1.

Avoid placing candles and other heat-sensitive objects on mantel or hearth. Heat may damage these objects.

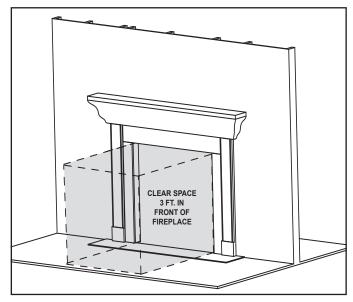


Figure 3.1 Clear Space Requirement - All Models

## **B.** General Operating Parts

Figure 3.2 references the general operating parts of the appliance and the section of this manual in which they are discussed.

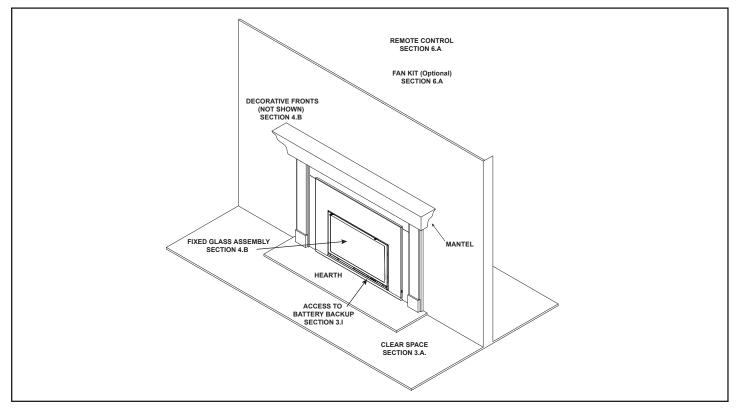


Figure 3.2 General Operating Parts

## C. Fuel Specifications

**WARNING!** Risk of Fire or Explosion! Appliance must be set up for compatible gas type!

- This appliance is designed to operate on either natural gas or propane. Make sure the appliance is compatible with gas type selected for installation site.
- Conversions must be made by a qualified service technician using Hearth & Home Technologies specified and approved parts.

**NOTICE:** Temperatures listed above are taken with a temperature measuring probe as prescribed by the test standard used for appliance certification. Temperatures on walls or mantels taken with an infrared thermometer may yield increased temperatures of up to 30 °F (17 °C) or more depending on the thermometer settings and material characteristics being measured. Use appropriate finishing materials that are able to withstand these conditions. For additional finishing guidelines, see Section 8 Installation Manual.

#### D. Wall Surface/TV Guidelines

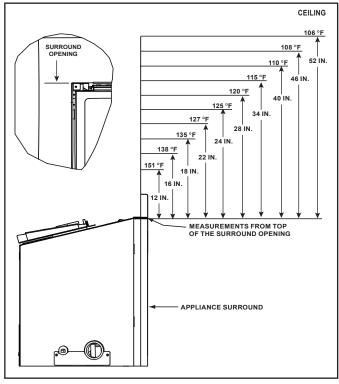
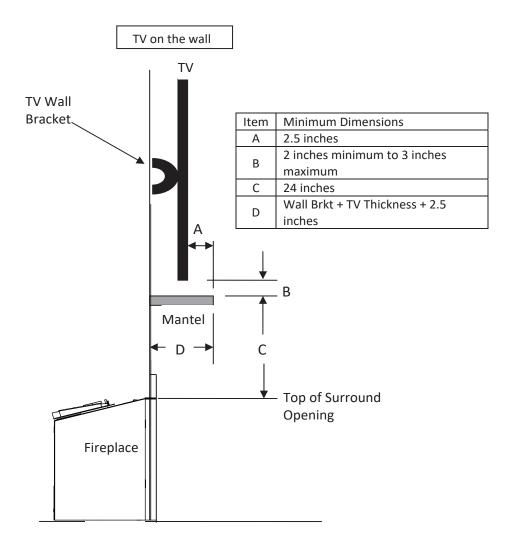


Figure 3.3 Good Faith Wall Surface Temperatures Above Appliance

## Good Faith Guidelines for TV Installations above a Gas Fireplace



#### Notes:

- 1. These are good faith recommended clearances only and not a guarantee of compliance with all TV manufacturers' maximum allowable operating temperatures.
- 2. Since every home has unique air flow characteristics and maximum allowable operating temperatures can vary from manufacturer to manufacturer and from model to model, actual TV temperatures should be validated at the time of each installation. TVs should not be used in situations where the actual TV temperature exceeds the manufacturers' maximum allowable operating temperatures identified in the TV's technical specifications. Contact the TV's manufacturer directly if you cannot locate this information or have questions regarding the information.
- 3. Mantel height and depth must conform to mantle requirements specified in the fireplace installation manual.
- 4. "C" dimension taken from the top of the hood or fireplace opening.
- 5. Suggestions on how to further reduce TV temperatures:
  - a. Increase "A" dimension.
  - b. Increase "C" dimension, however, increasing "B" dimension beyond maximum recommended typically results in higher temperatures.

Figure 3.4 Good Faith TV Guidelines

## E. Before Lighting Appliance

Before operating this fireplace for the first time, it is recommended that a qualified service technician:

- Verify all shipping materials have been removed from inside and/or underneath the firebox.
- Verify multi-purpose tool has been removed and is available.
- Review proper placement of logs, ember material and/ or other decorative materials.
- · Check the wiring.
- · Check the air shutter adjustment.
- · Ensure that there are no gas leaks.
- Verify Glass Seal Plate is properly installed. See Figure 3.6.

**WARNING!** Glass seal plate must be properly installed. Risk of elevated component temps and carbon monoxide exposure.

• Ensure that the glass is sealed and in the proper position and that the integral barrier is in place.

WARNING! Risk of Fire or Asphyxiation! DO NOT operate fireplace with fixed glass assembly removed.

Verify collar slide plate screw is attached see Figure 3.5.

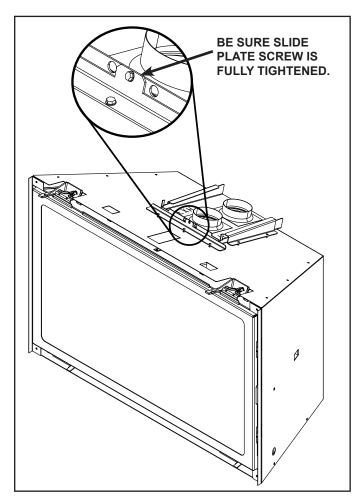


Figure 3.5 Collar Slide Plate Screw Detail

F. Lighting Instructions (IPI)

#### G. Appliance Break-In

NOTICE! Open windows for air circulation during fireplace break-in.

- Some people may be sensitive to smoke and odors.
- Smoke detectors may activate.

#### Initial Break-in Procedure

 The fireplace should be run three to four hours continuously on high.

This cures the materials used to manufacture the fireplace.

- Turn the fireplace off and allow it to completely cool.
- Remove decorative barrier front and fixed glass assembly.
   See Section 4.B.
- Clean fixed glass assembly. See Section 4.B.
- Verify Glass Seal Plate is properly installed. See Figure 3.6.

**WARNING!** Glass seal plate must be properly installed. Risk of elevated component temps and carbon monoxide exposure.

Replace the fixed glass assembly,

**Note:** Some installations may require additional run time to cure. If odors persist after the initial break-in period, run the fireplace for an additional three to four hours continuously on high.

• Verify collar slide plate screw is attached see Figure 3.5.

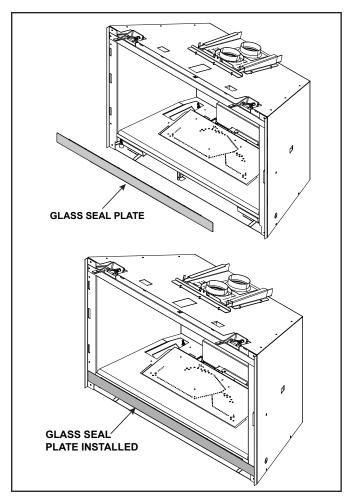


Figure 3.6 Glass Seal Plate

#### H. Heat Management

#### **Heat Output**

The flame on the PROV-IPI models have a variable burn rate which is controlled by the HI/LO knob on the gas valve. Therefore the flame height is adjustable. The HI/LO knob is shown in Figure 3.7. It is located in the control cavity of the appliance. The HI/LO knob may be adjusted as desired by turning counterclockwise to the LO position and by turning clockwise to the HIGH position.

If an optional fan is installed, the fan speed is controlled by adjusting the speed control knob. Turn the knob to increase the fan speed as desired.

# Recommended Operating Procedures When Variable Speed Control and Temperature Switch Are Used

Ignite the fire in the fireplace with the variable speed control switch in an "ON" position. The fan will automatically turn on when the temperature sensor switch closes at approximately 110 °F. Heated air should be delivered at the outlet grille. The fan will continue to operate after the fireplace is turned OFF until the sensor switch opens.

Various conditions (such as fireplace model, type of fireplace installation, outside air temperature vs. inside air temperature) can contribute to the length of the time the fan remains on after the fireplace is turned OFF. The fan can be turned off manually with the speed control switch.

**WARNING!** Risk of Injury! DO NOT contact fan blades during operation.

#### SEE SECTION 4 FOR COMPONENT ACCESS DETAILS.

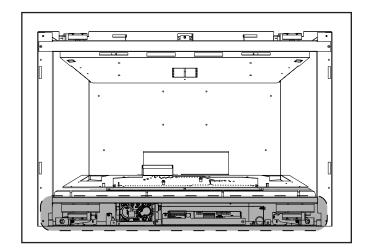


Figure 3.7 Control Cavity

## I. Operation During A Power Outage (IPI)

The IntelliFire™ intermittent pilot ignition system comes with a battery backup system that enables the flame to operate in a power outage. See appliance manual bag for battery pack. Batteries should not be placed in the battery pack while using electrical power to operate the fireplace. Remove batteries from battery pack when power has been restored and remove battery pack from the appliance.

**NOTICE:** Batteries should only be used as a power source in the event of an emergency power outage. Batteries should not be used as a primary long-term power source. Batteries tend to corrode over time.

**NOTE:** Battery pack may have been previously installed during installation of appliance as shown in Figure 3.8.

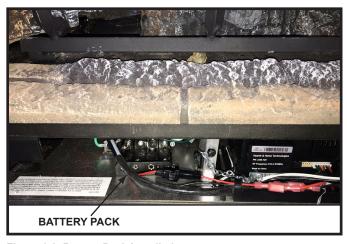


Figure 3.8 Battery Pack Installed

#### To Operate Fireplace Using Battery Power (DC):

- Access the control cavity of the appliance. See Figure 3.7 for location. The decorative barrier front, fixed glass assembly, and glass seal plate will need to be removed.
- Toggle surround ON/OFF switch position to "OFF". See Figure 3.10.
- 3. Locate the battery pack and insert two D cell batteries. The battery pack is shipped in the appliance manual bag. Battery polarity must be correct or module damage will occur. Connect to black and red wires labelled "+" and "-". A complete wiring diagram is included in the Electrical section of the appliance Installation Manual.
- When operating the appliance under battery power, the battery pack MUST be located outside of the appliance.
- 5. Before operating appliance install glass seal plate, fixed glass assembly and appliance front.

**WARNING!** Glass seal plate must be properly installed. Risk of elevated component temps and carbon monoxide exposure.

6. Turn the appliance on according to the instructions below for the appropriate type of control:

## Wired Wall Switch or Factory supplied ON/OFF Switch:

Toggle the ON/OFF switch to operate the appliance.

#### **Optional Wireless Remote:**

 Locate the factory supplied ON/OFF switch on side of surround. See Figure 3.10. Hand-held remote will not operate appliance in power outage

**NOTICE:** Some functionality will be lost when using battery backup including remote control or fan that require household 110-120 VAC power.

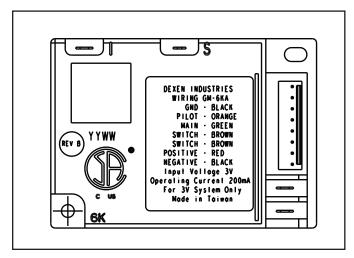


Figure 3.9 Module

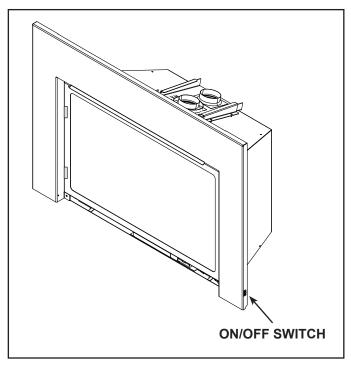
#### To Return to Operation Using Electrical (AC) Power

Standard Wall Switch or Factory-supplied ON/OFF Switch:

 Remove the batteries from the battery pack. Replace door or decorative barrier front on appliance.

#### Wireless Remote:

 Remove the batteries from the battery pack. Replace decorative barrier front on appliance.



3.10 Surround ON/OFF Switch

# J. Detailed Component Operating Instructions - IntelliFire™ Ignition

### IntelliFire™ Ignition System

IntelliFire  $^{\text{TM}}$  is an intermittent pilot ignition, which is an electronic system. The term Intermittent is used because the pilot burner flame is only present when the main burner is operating. When the main burner is off, the pilot is also off.

**NOTICE:** Batteries should not be placed in the battery pack while using the transformer. Remove batteries before using the transformer, and unplug the transformer before installing the batteries. Battery polarity must be correct or module damage will occur. Batteries tend to corrode over time.

## **Appliance ON/OFF**

A factory supplied ON/OFF switch is supplied with the appliance surround. See Figure 3.9 for location.

A wall control, thermostat or remote control may be used to control the ON/OFF function of the appliance. Follow instructions included with the installed control. Contact your dealer for details.

#### Fan Kit

If desired, a fan kit may be added. Contact your dealer to order the correct fan kit. Detailed instructions are included with the fan kit and appliance installation manual.



## **Maintenance and Service**

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

When properly maintained, your fireplace will give you many years of trouble-free service. **Contact your dealer** to answer questions regarding proper operation, troubleshooting and service for your appliance. Visit www. heatnglo.com to locate a dealer. We recommend annual service by a qualified service technician.

## A. Maintenance: Frequency and Tasks

Task	Frequency	To be completed by
Decorative Barrier Front	Annually	
Glass Cleaning	Seasonally	
Control Access	Seasonally	Homeowner
Remote Control (optional)	Seasonally	
Venting	Seasonally	
		•
Gasket Seal and Glass Inspection	Annually	
Log Inspection	Annually	
Firebox Inspection	Annually	Qualified Service Technician
Control Compartment & firebox Top	Annually	Teeringan
Burner Ignition & Operation	Annually	

#### B. Maintenance Tasks - Homeowner

Installation and repair should be done by a qualified service technician only. The appliance should be inspected before use and at least annually by a professional service person.

The following tasks may be performed annually by the homeowner. If you are uncomfortable performing any of the listed tasks, please call your dealer for a service appointment.

More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etcetera. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean. Any safety screen, guard, or barrier removed for servicing the appliance must be replaced prior to operating the appliance.

**CAUTION!** Risk of Burns! The fireplace should be turned off and cooled before servicing.

#### **Decorative Barrier Front**

Frequency: Annually

By: Homeowner

**Tools needed**: Protective gloves, stable work surface

- Assess condition of screen and replace as necessary.
- Inspect for scratches, dents or other damage and repair as necessary.
- · Vacuum and dust surfaces.

## **Glass Cleaning**

Frequency: Seasonally

By: Homeowner

**Tools Needed**: Protective gloves, glass cleaner, drop cloth, multi-purpose tool and a stable work surface.

**CAUTION!** Handle fixed glass assembly with care. Glass is breakable.

- · Avoid striking, scratching or slamming glass
- DO NOT use abrasive cleaners
- DO NOT clean glass while it is hot
- Prepare a work area large enough to accommodate fixed glass assembly and door frame by placing a drop cloth on a flat, stable surface.

**Note**: Fixed glass assembly and gasketing may have residue that can stain carpeting or floor surfaces.

 Remove door or decorative barrier front from fireplace and set aside on work surface.

#### **Removing Fixed Glass Assembly**

**WARNING!** Risk of Asphyxiation! Handle fixed glass assembly with care. Inspect the gasket to ensure it is undamaged and inspect the glass for cracks, chips or scratches.

- DO NOT strike, slam, or scratch glass.
- DO NOT operate fireplace with glass removed, cracked, broken, or scratched.
- · Replace as a complete assembly.
- The glass assembly fastens to the fireplace in four places. The four fastening mechanisms are springloaded glass latches. An example of the glass latch is shown in Figure 4.2
- To release glass assembly, use the supplied multipurpose tool. See Figure 4.1. While supporting the glass assembly, pull the two bottom spring-loaded latches forward and allow them to retract away from the glass assembly. Tilt the bottom of the glass assembly outward until the top latches disengage.
- Clean glass with a non-abrasive commercially available cleaner.
- Light deposits: Use a soft cloth with soap and water.
- Heavy deposits: Use commercial fireplace glass cleaner (consult with your dealer).

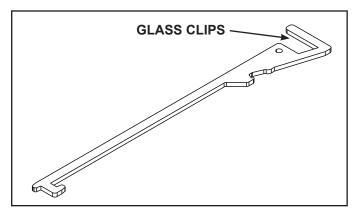


Figure 4.1 Multi-Purpose Tool

#### **Replacing Fixed Glass Assembly**

 Verify Glass Seal Plate is properly installed. See Figure 4.3.

**WARNING!** Glass seal plate must be properly installed. Risk of elevated component temps and carbon monoxide exposure.

- Tilt the top of the glass assembly toward fireplace and slide glass assembly upward to engage top latches.
   Verify top latches are fully engaged and then fasten the two bottom latches using the supplied multi-purpose tool.
- Reinstall door or decorative barrier front.

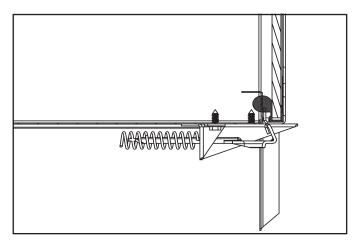


Figure 4.2 Fixed Glass Assembly

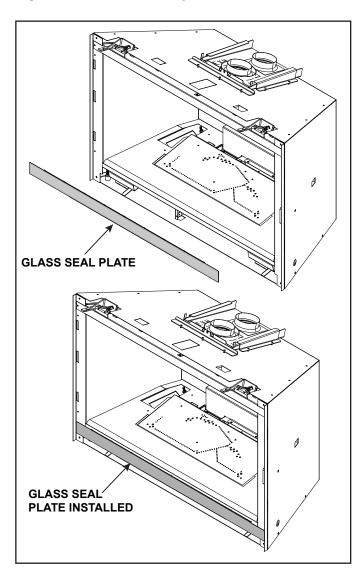


Figure 4.3 Glass Seal Plate

## **Control Cavity Access**

**Tools needed**: Protective gloves, multi-purpose tool.

- · Remove decorative barrier front.
- · Remove fixed glass assembly.
- Remove glass seal plate. See Figure 4.3.
- For easier access, glass clip assemblies can be removed. See Figure 4.5.
- For access, slide out component tray. See Figure 4.4.

**Note:** Wires may need to be removed from clips for full access. See Figure 4.4.

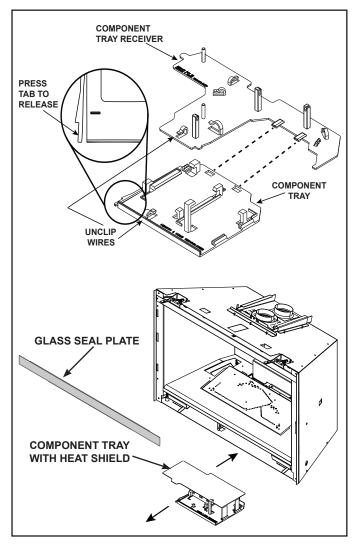


Figure 4.4 Component Tray Access

**CAUTION:** Be sure to reinstall the component heat shield before firing the appliance. Components will overheat without the heatshield in place.

CAUTION: Be sure to reinstall wires into the retaining clips.

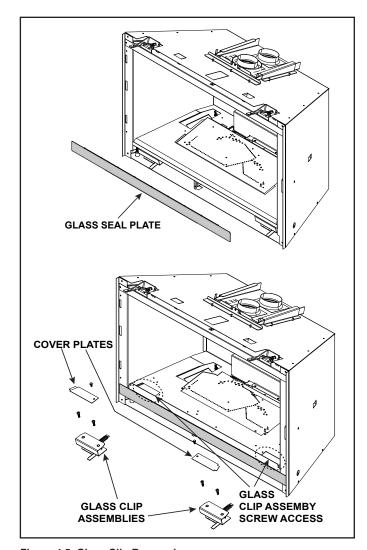


Figure 4.5 Glass Clip Removal

## **Optional Remote Control**

Frequency: Seasonally

By: Homeowner

**Tools needed:** Replacement batteries and remote control instructions.

- · Locate remote control transmitter and receiver.
- Verify operation of remote. Refer to remote control operation instructions for proper calibration and setup procedure.
- Place batteries as needed in remote transmitters.
- Place remote control out of reach of children.

If not using your fireplace for an extended period of time (summer months, vacations/trips, etc), to prevent unintended operation:

- · Remove batteries from remote controls.
- · Remove battery backup from control module.

## Venting

Frequency: Seasonally

By: Homeowner

Tools needed: Protective gloves and safety glasses.

- Inspect venting and termination cap for blockage or obstruction such as plants, bird nests, leaves, snow, debris, etc.
- Verify termination cap clearance to subsequent construction (building additions, decks, fences, or sheds).
- Verify collar slide plate screw is attached see Figure 3.5.
- · Inspect for corrosion or separation.
- Verify weather stripping, sealing and flashing remains intact
- · Inspect draft shield to verify it is not damaged or missing.

## C. Maintenance Tasks - Qualified Service Technician

The following tasks must be performed by a qualified service technician.

## **Gasket Seal and Glass Assembly Inspection**

Frequency: Annually

By: Qualified Service Technician

**Tools needed:** Protective gloves, drop cloth and a stable work surface.

- · Inspect gasket seal and its condition.
- Inspect fixed glass assembly for scratches and nicks that can lead to breakage when exposed to heat.
- Confirm there is no damage to glass or glass frame.
   Replace as necessary.
- Verify that fixed glass assembly is properly retained and attachment components are intact and not damaged. Replace as necessary.
- Verify Glass Seal Plate is properly installed. See Figure 4.3.

**WARNING!** Glass seal plate must be properly installed. Risk of elevated component temps and carbon monoxide exposure.

#### Logs

Frequency: Annually

**By:** Qualified Service Technician **Tools needed:** Protective gloves.

- Inspect for damaged or missing logs. Replace as necessary. Refer to Installation manual for log placement instructions.
- Verify correct log placement and no flame impingement causing sooting. Correct as necessary.

## **Control Compartment and Firebox Top**

Frequency: Annually

By: Qualified Service Technician

**Tools needed:** Protective gloves, vacuum cleaner, dust cloths

- Vacuum and wipe out dust, cobwebs, debris or pet hair.
   Use caution when cleaning these areas. Screw tips that have penetrated the sheet metal are sharp and should be avoided.
- Verify that the collar slide plate screw is installed. See Figure 3.5.
- · Remove all foreign objects.
- · Verify unobstructed air circulation.
- · Ensure no wire connections become disengaged.

## **Burner Ignition and Operation**

Frequency: Annually

By: Qualified Service Technician

**Tools needed:** Protective gloves, vacuum cleaner, whisk broom, flashlight, voltmeter, indexed drill bit set, and a manometer.

- Verify burner is properly secured and aligned with pilot or igniter.
- Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary.
- Replace Glowing Embers® with new dime-size pieces.
   DO NOT block ports or obstruct critical lighting paths.
   Refer to appliance installation manual for proper ember placement.
- Verify batteries have been removed from battery back-up IPI systems to prevent premature battery failure or leaking.
- Check for smooth lighting and ignition carryover to all ports. Verify that there is no ignition delay. Inspect and ensure the lighting of the main burner occurs within four seconds of the main gas valve opening.
- · Inspect for lifting or other flame problems.
- Verify air shutter setting is correct. See Installation Manual for required air shutter setting. Verify air shutter is clear of dust and debris.
- Verify vertical restrictor setting is correct. See Installation Manual for required vertical restrictor setting.
- Inspect orifice for soot, dirt and corrosion. Verify orifice size is correct. See Service Parts List for proper orifice sizing.
- Verify manifold and inlet pressures. Adjust regulator as required.
- Check all accessible gas-carrying tubes, connections, pipes and other components for leaks.
- Inspect pilot flame pattern and strength. See Figure 4.6 for proper pilot flame pattern. Clean or replace orifice spud as necessary.
- Inspect IPI flame sensing rod for soot, corrosion and deterioration. Polish with fine steel wool or replace as required.
- Verify that there is not a short in flame sense circuit by checking continuity between pilot hood and flame sensing rod. Replace pilot as necessary.

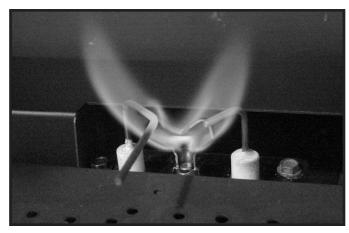


Figure 4.6 IPI Pilot Flame Patterns



## Frequently Asked Questions and Troubleshooting

## A. Frequently Asked Questions

ISSUE	SOLUTIONS
Condensation on the glass	This is a result of gas combustion and temperature variations. Prior to appliance being turned on, the inside of the glass has cooled below the dew point producing a byproduct of combustion: water in the form of condensation. As the fireplace glass warms, the condensation will disappear.
	In the summer, the inside of your fireplace contains hot humid air from outdoors. When the air from outdoors contacts glass cooled below the dew point by your air conditioning, moisture in that air will condense.
Blue flames	This is a result of normal operation and the flames will begin to yellow as the appliance is allowed to burn for 20 to 40 minutes.
Erratic flames	Verify that the glass assembly is correctly installed and that all four glass latches are engaged over the four tabs on the glass frame.  Vent baffle/flue restrictor may be needed when long vertical vent runs are used. Refer to Installation Manual, Section 7: Venting.
Odor from appliance	When first operated, this appliance may release an odor for the first several hours. This is caused by the curing of the paint and the burning off of any oils remaining from manufacturing. Odor may also be released from finishing materials and adhesives used around the appliance. See recommended appliance break-in procedures (Section G).
Film on the glass	This is a normal result of the curing process of the paint and logs. Glass should be cleaned within 3 to 4 hours of initial burning to remove deposits left by oils from the manufacturing process. A non-abrasive cleaner such as gas fireplace glass cleaner may be necessary. See your dealer.
Metallic noise	Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the appliance.
Is it normal to see the pilot flame burn continually?	In an intermittent pilot ignition system (IPI), the pilot flame should turn off when appliance is turned off.
Power Outages (battery backup)	This appliance can operated on battery power in the event of a power outage. To install the battery pack, the decorative barrier front and glass assembly must be removed. The battery pack is shipped in the appliance manual bag (two D cell batteries required). Refer to Section 3.I for more details.

Contact your dealer for additional information regarding operation and troubleshooting. Visit www.heatnglo.com to locate a dealer.

## **B.** Troubleshooting

With proper installation, operation, and maintenance your gas appliance will provide years of trouble-free service. If you do experience a problem, this troubleshooting guide will assist a qualified service technician in the diagnosis of a problem and the corrective action to be taken. This troubleshooting guide can only be used by a qualified service technician. Contact your dealer to arrange a service call by a qualified service technician.

## IntelliFire® Ignition System

Symptom	Possible Cause	Corrective Action
Pilot won't light.     The ignitor/module makes noise, but no	A. Incorrect wiring.	Verify "S" wire (white) for sensor and "I" wire (orange) for ignitor are connected to correct terminals on module and pilot assembly.
spark.	B. Loose connections or electrical shorts in the wiring.	Verify no loose connections or electrical shorts in wiring from module to pilot assembly. Verify connections underneath pilot assembly are tight; also verify connections are not grounding out to metal chassis, pilot burner, pilot enclosure, mesh screen if present, or any other metal object.
	C. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .17 in. or 1/8 in. (3 mm).
	D. Module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place a grounded wire about 3/16 in. (5 mm) away from "I" terminal on module. Place ON/OFF rocker switch or wall switch in ON position. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode. Replace pilot if necessary.
2. Pilot won't light, there is no noise or spark.	A. No power or transformer installed incorrectly.	Verify that transformer is installed and plugged into module. Check voltage of transformer under load at spade connection on module with ON/OFF switch in ON position. Acceptable readings of a good transformer are between 3.2 and 2.8 volts AC.
	B. A shorted or loose connection in wiring configuration or wiring harness.	Remove and reinstall the wiring harness that plugs into module. Verify there is a tight fit. Verify pilot assembly wiring to module. Remove and verify continuity of each wire in wiring harness. Replace any damaged components.
	C. Improper wall switch wiring.	Verify that 110-120 VAC power is "ON" to junction box.
	D. Module not grounded.	Verify black ground wire from module wire harness is grounded to metal chassis of appliance.
	E. Module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF rocker switch or wall switch in ON position. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.
Pilot sparks, but     Pilot will not light.	A. Gas supply.	Verify that incoming gas line ball valve is "open". Verify that inlet pressure reading is within acceptable limits.
	B. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .17 in. or 1/8 in. (3 mm).
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.
	D. Module voltage output /Valve/Pilot solenoid ohms readings.	Verify battery voltage is at least 2.7 volts. Replace batteries if voltage is below 2.7.

## IntelliFire Ignition System - (continued)

Symptom	Possible Cause	Corrective Action
4. Pilot lights but continues to spark, and main burner will not ignite.  (If the pilot continues	A. A shorted or loose connection in flame sensing rod.	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify connections are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.
to spark after the pilot flame has been lit, flame rectification has not occurred.)	B. Poor flame rectification or contaminated flame sensing rod.	With fixed glass assembly in place, verify that flame is engulfing flame sensing rod on left side of pilot hood. Flame sensing rod should glow shortly after ignition. Verify correct pilot orifice is installed and gas inlet is set to pressure specifications. Polish flame sensing rod with fine steel wool to remove any contaminants that may have accumulated on flame sensing rod.
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance. Verify that wire harness is firmly connected to the module.
	D. Damaged pilot assembly or contaminated flame sensing rod.	Verify that ceramic insulator around the flame sensing rod is not cracked, damaged, or loose. Verify connection from flame sensing rod to white sensor wire. Polish flame sensing rod with fine steel wool to remove any contaminants that may have accumulated on flame sensing rod. Verify continuity with a multimeter with ohms set at lowest range. Replace pilot if any damage is detected.
	E. Module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF rocker switch or wall switch in ON position. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine.



## **Reference Materials**

#### A. Accessories

Install approved accessories per instructions included with accessories.

Contact your dealer for a list of approved accessories.

WARNING! Risk of Fire and Electric Shock! Use ONLY Hearth & Home Technologies-approved optional accessories with this appliance. Using non-listed accessories could result in a safety hazard and will void the warranty.

## Remote Controls, Wall Controls and Wall Switches

After a qualified service technician has installed the remote control, wall control or wall switch, follow the instructions supplied with the control installed to operate your fireplace:

For safety:

- Install a switch lock or a wall/remote control with child protection lockout feature.
- · Keep remote controls out of reach of children.

See your dealer if you have questions.

# Required Decorative Barrier Front / Surround

This appliance requires a Surround/Decorative Barrier Front. For available options, consult your dealer.

**WARNING!** Risk of Fire! Install ONLY doors or fronts approved by Hearth & Home Technologies. Unapproved doors or fronts may cause fireplace to overheat.

This fireplace has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the fireplace with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

For more information refer to the instructions supplied with your decorative barrier front.

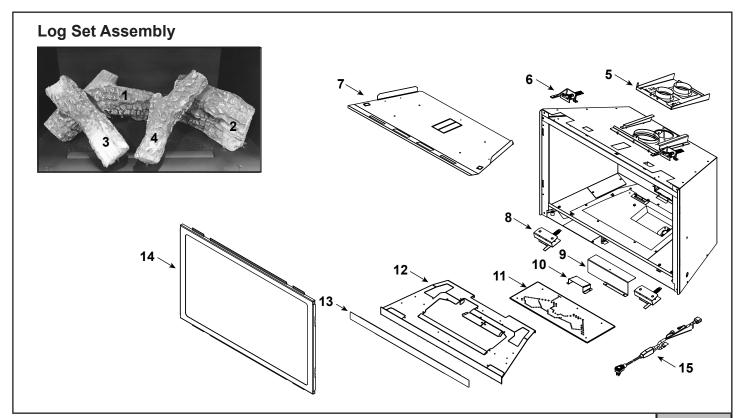
## **Optional Fan**

After a qualified service technician has installed the fan follow the instructions supplied with the fan kit to operate your fan. See your dealer if you have questions.



Providence 30" Gas Insert - DV

Beginning Manufacturing Date: March 2019 Ending Manufactring Date: Active



IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers**. Provide model number and serial number when requesting service parts from your dealer or distributor.

|--|--|

Stocked at Depot

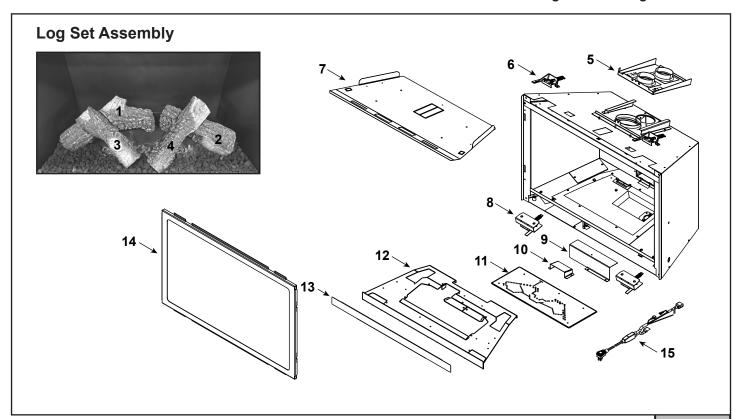
ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
	Log Assembly		LOGS-2534	Υ
1	Log 1		SRV2534-711	
2	Log 2		SRV2534-712	
3	Log 3		SRV2534-713	
4	Log 4		SRV2534-714	
5	Slide Plate Assembly		2532-014	
	Tool, Slide Plate (Multi-purpose)		2532-140	
	Gasket		2532-113	
6	Glass Clip Assembly, Top	Qty 2 req	2155-046	
7	Baffle, Firebox		2532-138	
8	Glass Clip Assembly, Bottom	Qty 2 req	2532-009	
9	Air Scoop		2532-135	
10	Pilot Shield		2532-153	
11	Burner Assembly		2534-007	Υ
12	Base Pan		2534-130	
13	Seal, Glass Frame		2532-122	
14	Glass Door Assembly		GLA-2532	Υ
15	Power Cord		2201-017	Υ

Additional service part numbers appear on following page.



Providence 35" Gas Insert - DV

Beginning Manufacturing Date: March 2019 Ending Manufactring Date: Active



IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers**. Provide model number and serial number when requesting service parts from your dealer or distributor.

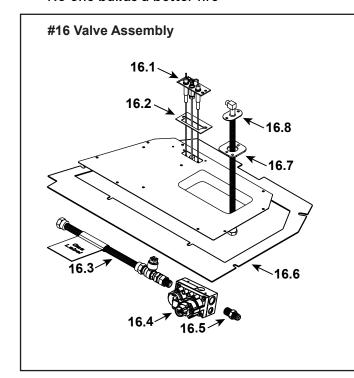
and serial number when requesting service parts from your dealer or distributor.				
ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
	Log Assembly		LOGS-2545	Υ
1	Log 1		SRV2545-711	
2	Log 2		SRV2545-712	
3	Log 3		SRV2534-713	
4	Log 4		SRV2532-715	
5	Slide Plate Assembly		2532-014	
	Tool, Slide Plate (Multi-purpose)		2532-140	
	Gasket		2532-113	
6	Glass Clip Assembly, Top	Qty 2 req	2155-046	
7	Baffle, Firebox		2533-138	
8	Glass Clip Assembly, Bottom	Qty 2 req	2532-009	
9	Air Scoop		2532-135	
10	Pilot Shield		2532-153	
11	Burner Assembly		2534-007	Υ
12	Base Pan		2545-130	
13	Seal, Glass Frame		2533-122	
14	Glass Door Assembly		GLA-2533	Υ
15	Power Cord		2201-017	Υ

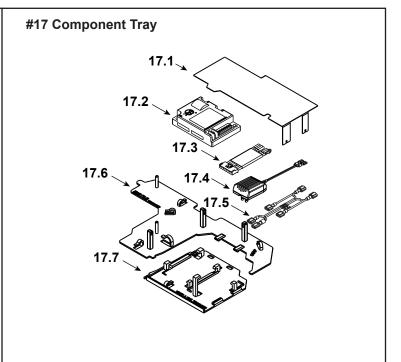
Additional service part numbers appear on following page.

2/22



**Beginning Manufacturing Date: March 2019 Ending Manufactring Date: Active** 





IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. Hearth and Home Technologies does not sell directly to consumers. Provide model number and serial number when

requesting service parts from your dealer or distributor.				at Depot
ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
10.1	Pilot Assembly NG		2550-013	Y
16.1	Pilot Assembly Propane		2550-014	Y
16.2	Pilot Gasket		2532-134	
16.3	Flex Ball Valve Assembly		2532-081	Y
10.4	Valve NG		750-500	Y
16.4	Valve Propane		2155-501	Y
16.5	Male Connector	Pkg of 5	303-315/5	Y
16.6	Gasket, Valve Plate		2532-131	
16.7	Gasket, Bulkhead		438-407	
16.8	Bulkhead w/Flex Tube		SRV7000-156	Y
	Orifice NG (#37C)	DDOV 120 IDI	582-837	Y
	Orifice Propane (#52C)	PROV-I30-IPI	SRV582-852	Y
	Orifice NG (#35C)	DDOV 125 IDI	SRV582-835	Y
	Orifice Propane (#51C)	PROV-I35-IPI	SRV582-851	Y
17.1	Component Heat Shield		2541-144	Y
17.2	IPI Control Module		SRV593-592	Y
17.3	Wire Assembly		SRV593-590	Y
17.4	3V Transformer		SRV593-593	Y
17.5	Remote Wire Assembly		2103-013	Y
17.6	Wire Tray		2534-171	Y
17.7	Tray, Component		2534-170	Υ

Additional service part numbers appear on following page.



**Beginning Manufacturing Date: March 2019 Ending Manufactring Date: Active** 

MPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. <b>Hearth and lome Technologies does not sell directly to consumers</b> . Provide model number and serial number when equesting service parts from your dealer or distributor.			
ITEM DESCRIPTION	COMMENTS	PART NUMBER	at Depot
Battery Pack		SRV593-594	Υ
Fan		GFK-160A	
Bolt, Level Leg	Qty 4 req	2073-162/24	Υ
Lava Rock		4021-296	
Mineral Wool		050-721	
Pem Plate Assembly		2532-013	
Pem Plate Gasket		2532-150	
Remote		SMART-STAT-HHT	Υ
Screw, Bottom Glass Clip	Qty 4 req	419-802/24	Υ
Touch up Paint		TUP-GBK-12	Υ
Comme	ersion Kits		
Conversion Kit NG	FISIOII NILS	NGK-MI-IPI	Υ
		LPK-MI-IPI	Y
Conversion Kit Propane Pilot Orifice NG			
7 1127 0 111102 2 1 0		SRV593-528	Y
Pilot Orifice Propane		593-526	Y
Regulator NG		SRVNGK-DXV	Υ
Regulator Propane: Compatible only with field cor LP 750-500. Valve must be Replaced if using 2155-		SRVLPK-DXV	Y

#### C. Contact Information

Heat & Glo, a brand of Hearth & Home Technologies 7571 215<sup>th</sup> Street West, Lakeville, MN 55044 www.heatnglo.com

Please contact your Heat & Glo dealer with any questions or concerns. For the location of your nearest Heat & Glo dealer, please visit www.heatnglo.com.

- NOTES -	



Important operating

and maintenance

instructions included.

## **NOTICE**

#### DO NOT DISCARD THIS MANUAL

 Read, understand and follow these instructions for safe installation and operation.  Leave this manual with party responsible for use and operation.



This product may be covered by one or more of the following patents: (United States) 6601579, 6769426, 6863064, 7077122, 7074035, 7098269, 7234932, 7258116, 7322819, 7422011, 7470729, 7726300, 8147240, 9625149 or other U.S. and foreign patents pending.

2000-945E