

# INSTALLATION AND OPERATION MANUAL

# O A K P O R T - 18 - L O A K P O R T - 18 - M V

Models #OAK-18-L & #OAK-18-MV Direct Vent Gas Stove

English and French installation manuals are available through your local dealer. Visit our website www.kozyheat.com.

Les manuels d'installation en français et en anglais sont disponibles chez votre détaillant local. Visitez www.kozyheat.com.





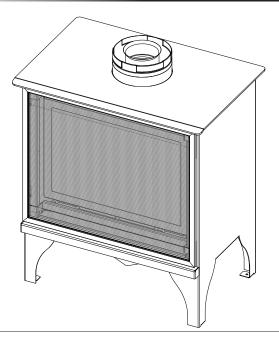
We suggest that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.



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.



This appliance may be installed in an aftermarket, permanently located, manufactured home (USA only) or mobile home, where not prohibited by local codes.

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.

# **A DANGER**



HOT GLASS WILL CAUSE BURNS

DO NOT TOUCH GLASS UNTIL COOLED

NEVER ALLOW CHILDREN
TO TOUCH GLASS

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

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

# **CONGRATULATIONS!**

Hussong Manufacturing welcomes you as a new owner of a Kozy Heat gas fireplace. Kozy Heat products are designed with superior components and materials, assembled with care by trained craftsmen who take pride in their work. To ensure you receive a quality product, the burner and valve assembly are 100 percent test-fired, and the complete fireplace is thoroughly inspected before packaging. Our commitment to quality and customer satisfaction has remained the same for over 40 years. We offer a complete line of gas, wood, and electric fireplaces, along with stylish accessories to complement any decor. Adding a fireplace is one of the best ways to increase the value of your home, and we are proud to offer a network of dealers throughout the country to help make your experience everything you imagine. We pride ourselves in being dedicated not only to functionality and reliability, but also customer safety. We offer our continual support and guidance to help you achieve the maximum benefit and enjoyment from your Kozy Heat gas fireplace.

Jim Hussong President Dudley Hussong Board Chairman

Read this manual before installing or operating this appliance.

Please retain this owner's manual for future reference.

#### **Homeowner Reference Information**

We recommend you record the following information:

Model Name:	Date purchased/installed:
Serial Number:	Location of fireplace:
Dealership Purchased from:	Dealer phone:
Notes:	

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#### 1.0 INTRODUCTION

#### 1.1 Appliance Certification

Laboratory: PFS in Cottage Grove, Wisconsin Standards:

ANSI Z21.88-2019/CSA 2.33-2019, Vented Gas Fireplace Heaters CSA 2.17-2017, Gas-Fired Appliances for Use at High Altitudes

This installation must conform with 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, CSA B149.1.

#### 1.2 California Proposition 65 Warning

**WARNING:** This product can expose you to chemicals including Carbon Monoxide, that is an externally vented by-product of fuel combustion, which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov.

#### 1.3 Requirements for the Commonwealth of Massachusetts

The following requirements reference various Massachusetts and national codes not contained in this manual.

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

#### 1.3.1 Installation of Carbon Monoxide Detectors

At time of installation of side wall horizontally vented gas fueled equipment, the installing plumber or gas-fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas-fitter shall observe that a battery operated or hard wired carbon monoxide detector is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level. In the event that the requirements of this subdivision cannot be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

#### 1.3.2 Approved Carbon Monoxide Detectors

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

#### 1.3.3 Signage

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

#### 1.3.4 Inspection

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

#### 1.3.5 Exemptions

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

#### 1.3.6 Manufacturer Requirements

#### 1.3.6.1 Gas Equipment Venting System Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

#### 1.3.7 Gas Equipment Venting **System NOT Provided**

When the manufacturer of Product Approved side wall horizontally vented gas equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

- The referenced "special venting systems" instructions shall be included with the appliance or equipment installation instructions and;
- The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

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

#### 2.0 SPECIFICATIONS

#### 2.1 Heating Specifications

	OAK18-L		OAK18-MV	
	Natural Gas	Propane	Natural Gas	Propane
Maximum	24,500 Btu/h	24,500 Btu/h	24,500 Btu/h	24,500 Btu/h
Input Rating	(7.2 kW)	(7.2 kW)	(7.2 kW)	(7.2 kVV)
Minimum	12,500 Btu/h	12,500 Btu/h	15,500 Btu/h	19,000 Btu/h
Input Rating	(3.7 kW)	(3.7 kW)	(4.5 kW)	(5.6 kVV)
Manifold Pressure	3.5"WC	10" WC	3.5"WC	10"WC
(High)	(0.87 kPa)	(2.49 kPa)	(0.87 kPa)	(2.49 kPa)
Manifold Pressure	1.0"WC	2.7" WC	1.6"WC	6.4"WC
(Low)	(0.25 kPa)	(.67 kPa)	(0.40 kPa)	(1.59 kPa)
Orifice Size (DMS)	#43	#54	#43	#54

#### 2.1.1 Altitude Adjustment

This appliance may be installed at higher altitudes. Please refer to National Fuel Gas Code ANSI Z223.1/NFPA 54, CSA-B149.1 Natural Gas and Propane Installation Code, local authorities, or codes having jurisdiction in your area regarding derate guidelines.

#### 2.1.1.1 US Installations

Refer to the American Gas Association guidelines for the gas designed appliances derating method. For elevations above 2,000' (610 m), input ratings are to be reduced by 4% for each 1,000' (305 m) above sea level.

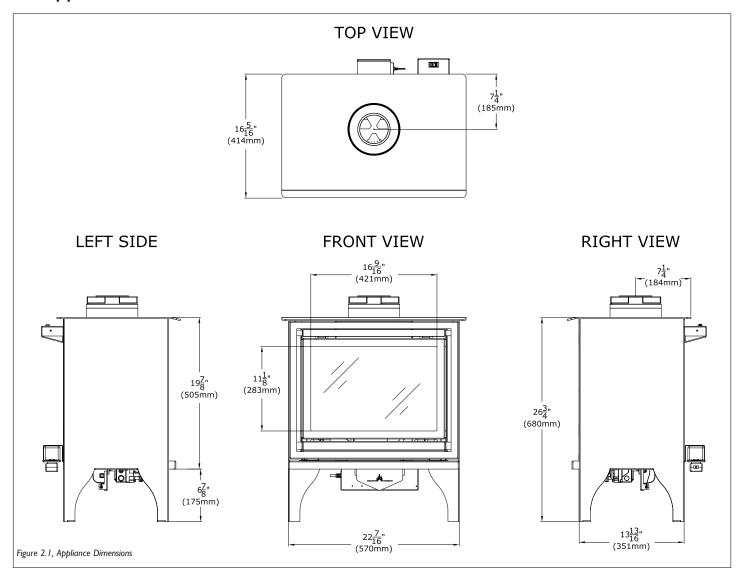
#### 2.1.1.2 Canadian Installations

When the appliance is installed at elevations above 4,500' (1,372 m), the certified high altitude rating shall be reduced at the rate of 4% for each additional 1,000' (305 m).

#### 2.2 Electrical Specifications

- OP18-MV Electrical specifications ONLY apply to optional fan #OP18-028
- The junction box in this appliance requires 120VAC, 60Hz, and 6 Amps.
- Verify the household breaker is shut off prior to working on any electrical lines.
- OP18-L The AC power supply to this appliance must be hot at all times and shall not have a switch installed in it.

## 2.3 Appliance Dimensions

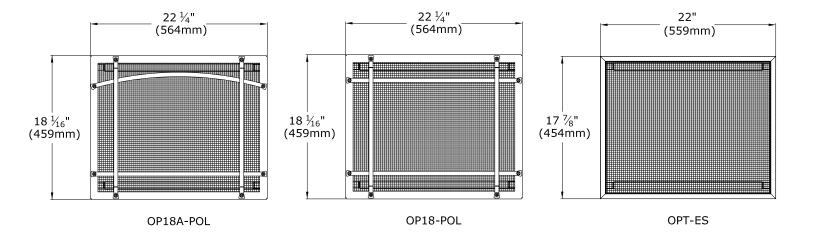


### 2.4 Safety Barrier Dimensions

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

If the barrier becomes damaged, the barrier shall be replaced with Hussong Mfg.'s barriers for this appliance.

Please refer to Section 7.1 Safety Barrier Installation on page 23 for installation instructions.



#### 3.0 FRAMING

#### 3.1 Appliance Placement Considerations

WARNING: Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

FIRE HAZARD: Do NOT install this appliance directly on carpeting, vinyl, or any other combustible material other than wood.

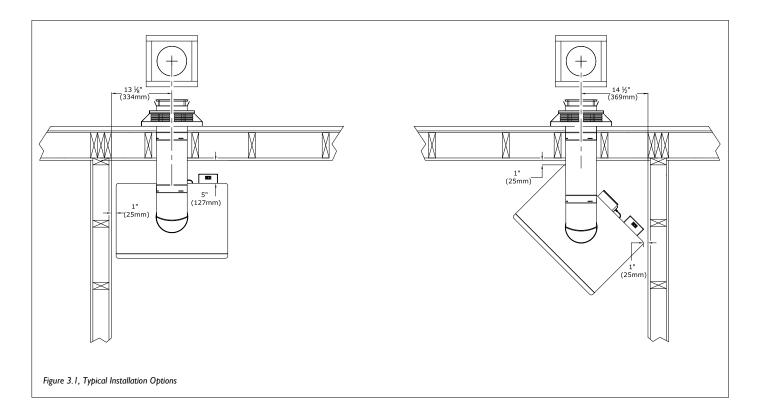
- This appliance must be installed on a level surface capable of supporting the fireplace and venting.
- This fireplace may be installed in a bedroom.
- Please be aware of the large amount of heat this fireplace will produce when determining a location.

#### 3.2 Floor Support and Protection

- The fireplace must be placed directly on a wood or noncombustible surface (not linoleum or carpet) extending the entire depth and width of the fireplace
- If this appliance is to be installed directly on carpeting, tile, or other combustible material other than wood flooring, this appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.
- If the appliance is to be installed above floor level, a solid, continuous platform must be constructed below the appliance.

#### 3.3 Clearances to Combustibles

Table 3.1, Minimum Appliance Clearances to Combustible Material			
From appliance top corner to sidewall	1"	25 mm	
From appliance top corner to backwall	5"	127 mm	
From appliance top to ceiling	37-1/4"	946 mm	
From top of horizontal pipe surface to ceiling	3-1/8"	79 mm	



#### 3.4 Vent Termination Framing

IMPORTANT: Vent cap location must be in compliance with Section 5.2 Minimum Termination Clearances on page 18.

WARNING: DO NOT RECESS THE VENT CAP INTO WALL OR SIDING.

#### 3.4.1 Vertical Terminations

CAUTION: Cold air transfer area. The surround fireplace chase must comply with all clearances as outlined in this manual and be constructed in compliance with local building codes. Outside walls should be insulated to prevent cold air from entering room.

- Follow vent pipe manufacturer's installation instructions for vertical terminations.
- A minimum of I" (25 mm) clearance on all sides of the vertical vent pipe must be maintained.
- Attic insulation shields may be insulated using unfaced insulation products listed as non-combustible per ASTM E 136.

#### 3.4.2 Horizontal Terminations

IMPORTANT: Horizontal vent sections require 1/4" (6 mm) rise for every 12" (305 mm) of travel.

NOTE: Elbows listed with approved vent systems for this appliance vary in vertical length. Please consult the vent manufacturer's instructions to determine the elbow dimension used for installation. Adjust the wall pass-through rough opening dimensions as necessary to maintain clearance requirements.

NOTE: Wall thimble products that comply with the required clearance to combustibles must be installed for all horizontal vent runs that pass through interior or exterior walls. These wall thimble products may be insulated using unfaced insulation products listed as noncombustible per ASTM E 136.

- A minimum of I" (25 mm) clearance on top, side, and bottom surfaces of the horizontal vent pipe must be maintained.
- Measure from floor level of the fireplace to the center of where the vent pipe will penetrate the wall.
   Elbows listed with approved vent systems for this appliance vary in vertical length. Please consult the vent manufacturer's instructions to determine the elbow dimension used for installation.
- Adjust the wall pass-through rough opening dimensions as necessary to maintain clearance requirements. There is a 1" (25mm) clearance on all sides of the horizontal pipe at the wall pass-through.
- 3. Cut and frame an opening in the wall to allow the vent system to run level through the wall pass-through.
- Follow the vent pipe manufacturer's installation instructions for vent installation.

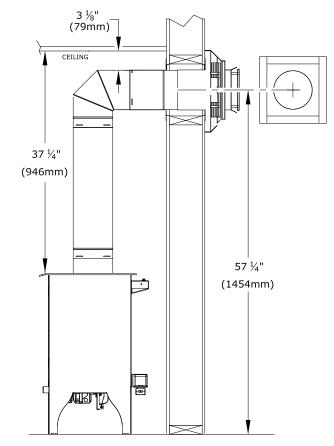


Figure 3.2, Minimum Horizontal Venting

#### 3.5 Outdoor Covered Fireplace Installation

An outdoor covered fireplace installation allows a fireplace to be installed in an outdoor covered area, where the appliance is protected from direct precipitation.

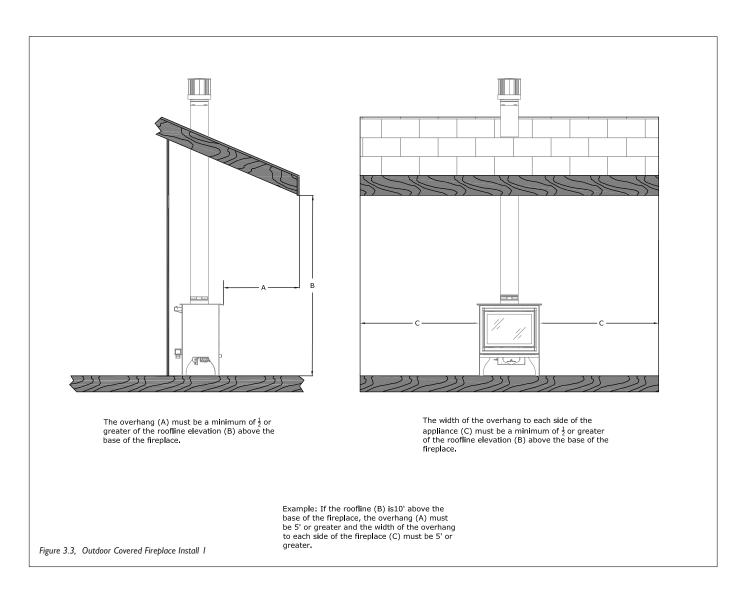
Follow the instructions and illustrations in this section for installation procedures.

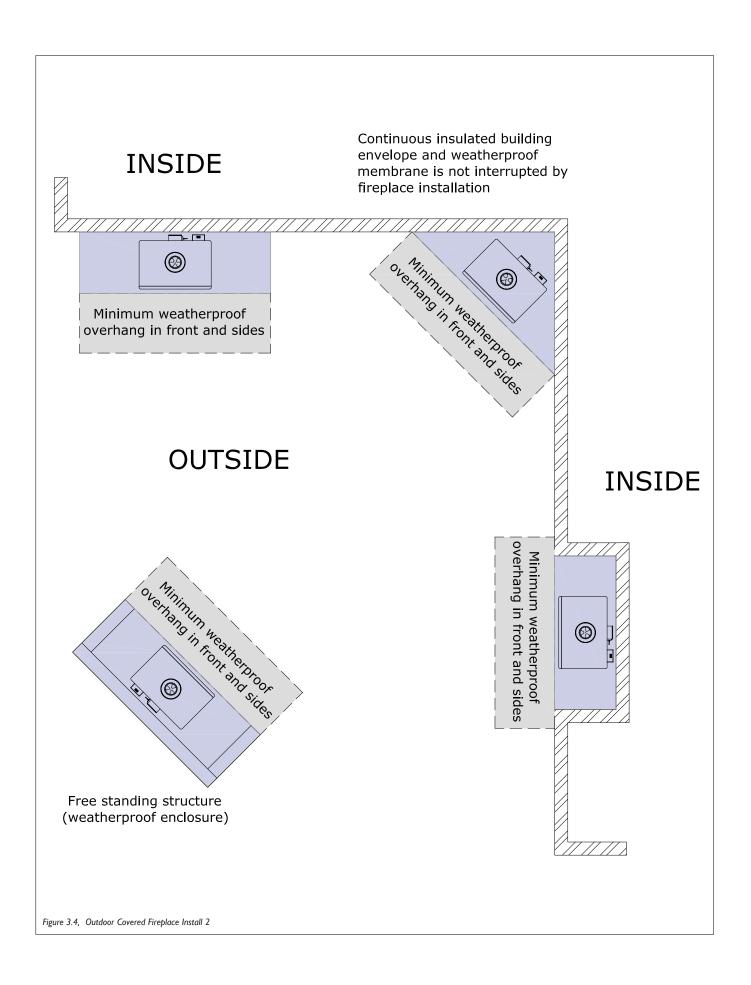
#### 3.5.1 Safety Screen Barriers

Hussong Mfg. highly recommends to use black painted safety barriers in outdoor installations. Other screen barriers that incorporate a plated or patina finish are highly susceptible to oxidation and discoloration.

#### 3.5.2 Requirements

- The continuous insulated building envelope and weatherproof membrane is not to be interrupted by fireplace installation. See Figure 3.4 on the following page.
- Fireplace operation is approved from 40°F to 110°F.
- All wiring connections shall be in accordance with outdoor requirements of NECA NFPA 70.
- All clearances and requirements in your appliance manual must be adhered to.





#### 4.0 GAS LINE CONNECTION

#### 4.1 Gas Conversion (sold separately)

ATTENTION: 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 ANSI Z223.1 installation code

This fireplace is manufactured for use with natural gas. Follow the instructions included with the conversion kit if converting to propane.

#### 4.2 Gas Pressures

NOTE: The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of ½ psi (3.5 kPa). For test pressures equal to or less than ½ psi (3.5 kPa), the appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve.

- For high altitude installations, consult the local gas distributor or the authority having jurisdiction for proper rating methods.
- For pressure testing instructions, refer to Section 10.1 Gas
   Pressure Testing on page 39.

Table 4.1, Inlet Pressure Requirements – OAK-18-L (Electronic)				
Gas Pressure Natural Gas Propane				
Minimum Inlet Pressure	5"WC (1.25 kPa) 7" WC (1.74 kPa) recommended	12"WC (2.99 kPa) recommended		
Maximum Inlet Pressure	10.5"WC (2.61 kPa)	13"WC (3.24 kPa)		

Table 4.2, Inlet Pressure Requirements – OAK-18-MV (Millivolt)				
Gas Pressure Natural Gas		Propane		
Minimum Inlet Pressure	5"WC (1.25 kPa) 7" WC (1.74 kPa) recommended	11"WC (2.74 kPa) recommended		
Maximum Inlet Pressure	10.5"WC (2.61 kPa)	13"WC (3.24 kPa)		

#### 4.3 Gas Line Installation

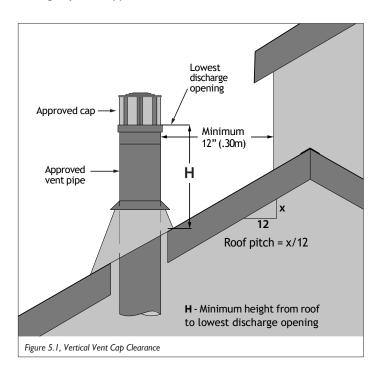
CAUTION: Installation of the gas line must only be done by a qualified person in accordance with local building codes, if any. If not, follow ANSI 223.1. Commonwealth of Massachusetts installations must be done by a licensed plumber or gas fitter.

- A listed (and Commonwealth of Massachusetts approved) ½"
   (13 mm) tee handle manual shut-off valve and flexible gas
   connector are to be connected to the ½" (13 mm) control valve
   inlet. If substituting for these components, please consult local
   codes for compliance.
- This fireplace is equipped with a 3/8" (10 mm) x 36" (914 mm) long flexible gas connector and manual shut-off valve.
- The gas line should be run to the point of connection where the shut-off valve and flexible gas line will connect. See Figure 2.1, Appliance Dimensions on page 9.
- Do not run gas line in a manner that would obstruct fan operation.

#### **5.0 TERMINATION LOCATIONS**

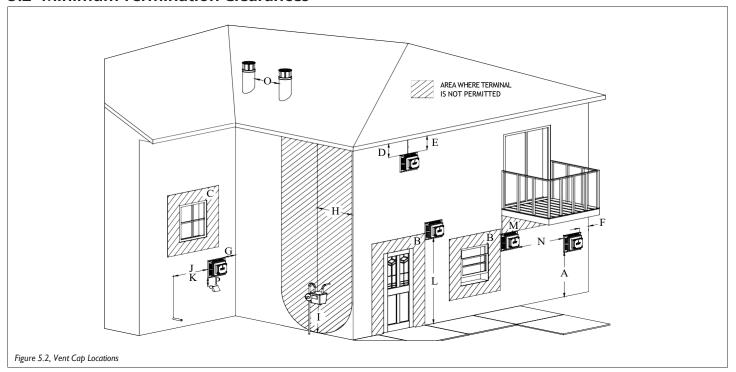
#### 5.1 Vertical Vent Cap Termination

WARNING: This gas appliance must not be connected to a chimney serving any other appliance.



Minimum height (H) from roof **Roof Pitch** Feet Meters Flat to 6/12 1.0 0.30 Over 6/12 to 7/12 1.25 0.38 Over 7/12 to 8/12 1.5 0.46 Over 8/12 to 9/12 2.0 0.61 Over 9/12 to 10/12 2.5 0.76 Over 10/12 to 11/12 3.25 0.99 Over 11/12 to 12/12 4.0 1.22 Over 12/12 to 14/12 5.0 1.52 Over 14/12 to 16/12 6.0 1.83 Over 16/12 to 18/12 7.0 2.13 Over 18/12 to 20/12 7.5 2.27 Over 20/12 to 21/12 8.0 2.44

#### 5.2 Minimum Termination Clearances



		Canadian installations	US installations
Α	Clearance above grade, veranda, porch, deck, or balcony	12" (30 cm)	12" (30 cm)
В	Clearance to window or door that may be opened	12" (30 cm)	9" (23 cm)
С	Clearance to permanently closed window (recommended to prevent condensation on window)	12" (30 cm)*	12" (30 cm)*
D	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (61 cm) from the edge of the terminal	24" (61 cm)*	24" (61 cm)*
Ε	Clearance to unventilated soffit	12" (30 cm)*	12" (30 cm)*
F	Clearance to outside corner	0" (0 cm)*	0" (0 cm)*
G	Clearance to inside corner	12" (30 cm)*	12" (30 cm)
Н	Clearance to each side of center line extended above meter/regulator assembly	3' (91 cm) within a height 15' (4.5 m) above the meter/ regulator assembly	*
1	Clearance to service regulator vent outlet	3' (91 cm)	*
J	Clearance to non mechanical air supply inlet to building or the combustion air inlet to any other appliance	12" (30 cm)	9" (23 cm)
К	Clearance to mechanical air supply inlet	6' (I.83 m)	3' (91 cm) above if within 10' (3 m) horizontally Massachusetts: 10' (3 m)
L	Clearance above paved sidewalk or paved driveway located on public property	7' (2.13 m)†	*
M	Clearance under veranda, porch deck, or balcony	12" (30 cm)‡	12" (30 cm)
N	Clearance between two horizontal terminations	12" (30 cm)	12" (30 cm)
0	Clearance between two vertical terminations (may be same height)	12" (30 cm)	12" (30 cm)
Р	Above furnace exhaust or inlet	12" (30 cm)	12" (30 cm)

<sup>\*</sup> Clearance in accordance with local installation codes and the requirements of the gas supplier.

VINYL SOFFIT, VINYL CEILING, AND VINYL OVERHANG DISCLAIMER: Clearances to heat resistant material (i.e. wood, metal). This does not include vinyl. Hussong Manufacturing Co., Inc. will not be held responsible for heat damage caused from terminating under vinyl overhangs, vinyl ceilings, or vinyl ventilated/unventilated soffits.

<sup>†</sup> A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.

<sup>‡</sup> Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

#### 6.0 VENTING

#### 6.1 Approved Vent Systems

This appliance is equipped for use with a 4" exhaust by  $6^5/8$ " air intake co-axial vent pipe system.

Vertical 4" x 6-5/8" co-axial flexible vent pipe with vertical terminations are not approved for use with this fireplace.

This appliance is approved for use with vent manufacturers (horizontal and vertical terminations): American Metal Products (Ameri-Vent), BDM, ICC, Metal Fab, Olympia Chimney Supply, Inc., Selkirk, and Simpson DuraVent.

The following caps are not allowed: BDM Cap 940264 and Simpson DuraVent Cap 46DVASNK14

Refer to the vent manufacturer's installation manual for complete installation instructions. Vent installation must conform with venting requirements and restrictions as outlined in this manual.

#### 6.2 Venting Requirements

Consult the local and national installation codes to assure adequate combustion and ventilation air is available. Venting requirements apply to both natural gas and propane.

NOTE: Wall thimble products that comply with the required clearance to combustibles must be installed for all horizontal vent runs that pass through interior or exterior walls. These wall thimble products may be insulated using unfaced insulation products listed as noncombustible per ASTM E 136.

NOTE: Attic insulation shields may be insulated using unfaced insulation products listed as noncombustible per ASTM E 136.

- Flame height and appearance will vary depending upon venting configuration and the type of fuel used.
- Refer to the vent manufacturer's installation manual for complete installation instructions. Vent installation must conform with venting requirements and restrictions as outlined in this manual.
- Provide a means for visually checking the vent connection to the appliance after the fireplace is installed.
- A minimum of I" (25 mm) clearance on all side of the vertical pipe must be maintained.
- A minimum of I" (25 mm) clearance on all sides of the horizontal vent pipe at the wall pass-through must be maintained.

#### 6.3 Use of Elbows

- MAXIMUM NUMBER OF 90° ELBOWS: 5
- For each additional 90° elbow used after the first elbow, 3' (91.4 cm) must be subtracted from maximum venting allowed.
- For each 45° elbow used, 1½' (457 mm) must be subtracted from maximum venting allowed.
- (2) 45° elbows may be used in place of (1) 90° elbow.

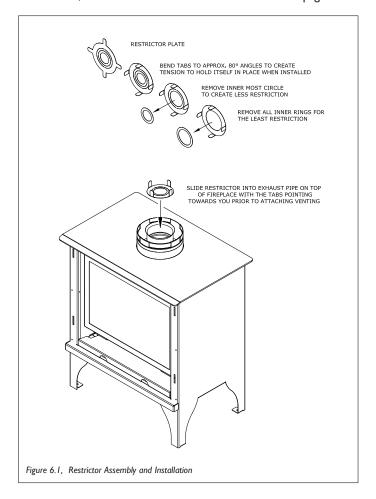
#### 6.4 Vent Restriction

Vertical terminations may display an active, compact flame. To achieve desirable flame appearance, the vent exhaust may be restricted by the restrictor plate (included in components packet) and/or by adjusting the built-in restrictor located in the fireplace baffle. This fireplace is shipped with the baffle restrictor set in position for natural gas minimum horizontal venting.

Hussong Manufacturing has outlined vent restriction recommendations with for vent configurations listed in the following pages. Follow the instructions below and vent restriction recommendations on the following pages for optimal flame appearance.

#### 6.4.1 Restrictor Plate Assembly and Installation

A restrictor plate (included in components packet) may be installed before vent installation to achieve desired flame appearance. Hussong Manufacturing has outlined restrictor plate recommendations for vent configurations listed on the following pages. For vent restriction plate recommendations after vent installation, refer to Section 10.2.2 Vent Restriction on page 38.



#### 6.4.2 Baffle Restriction

This fireplace is shipped with the baffle restrictor set in position for natural gas minimum horizontal venting. Hussong Manufacturing has outlined baffle restrictor adjustments for vent configurations listed on the following pages. To adjust the baffle restrictor,

- 1. Remove the safety barrier and glass frame assembly.
- Remove and save (1) screw to adjust the baffle restrictor to achieve desired flame appearance.
- 3. Secure the baffle restrictor with (1) screw previously removed.
- 4. Reinstall all components previously removed.

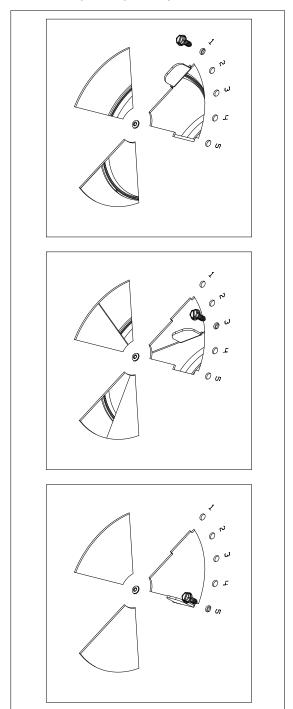


Figure 6.2, Baffle Restrictor Adjustments

#### 6.5 Vertical Terminations

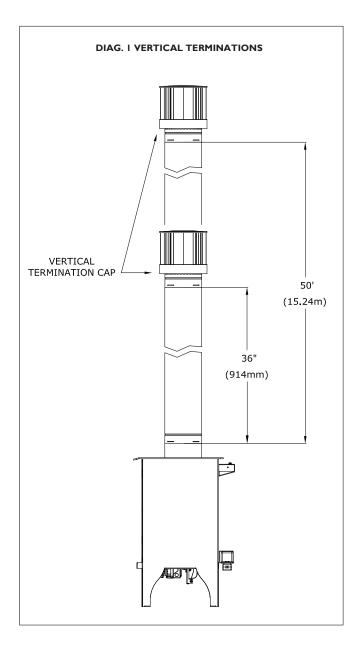
NOTE: Attic insulation shields may be insulated using unfaced insulation products listed as non-combustible per ASTM E 136.

Table 6.1, NG/Propane – Minimum/Maximum Vertical Terminations			
Minimum Vertical Length Maximum Vertical Length			
3'	914 mm	50'	15.2 m

#### Minimum/Maximum Vertical Venting:

3' (914mm) minimum vertical length / 50' (15.24m) maximum vertical length + termination cap

Table 6.2, Recommended Restriction for Vertical Terminations				
Fuel	Vent Configurations	Baffle Positions	Restrictor Setting	
Natural Gas	Minimum Vertical	Setting (5)	Install Restrictor Remove knockout(s)	
Natural Gas	Maximum Vertical	Setting (5)	Install Restrictor Remove knockout(s)	
Propane	Minimum Vertical	Setting (5)	Install Restrictor Remove knockout(s)	
Propane	Maximum Vertical	Setting (5)	Install Restrictor Remove knockout(s)	



#### 6.6 Combination Venting

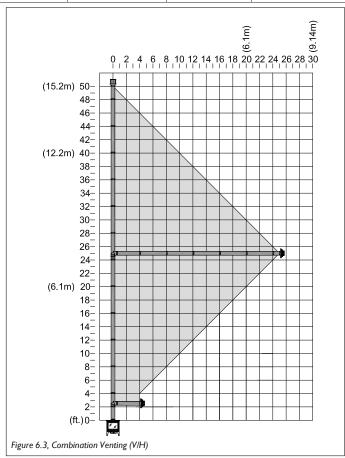
IMPORTANT: Horizontal vent sections require  $\frac{1}{4}$ " (6 mm) rise for every 12" (305 mm) of travel.

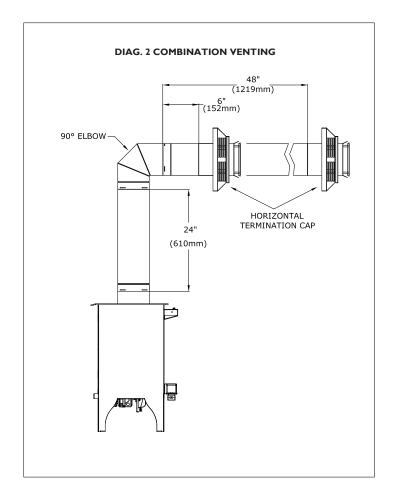
Table 6.3, NG & Propane – Minimum Horizontal Vent Terminations						
Min. Vertical Rise		Min. Horizontal Run		Max. Horizontal Run		
24"	610 mm	6"	152 mm	48"	1219 mm	

Minimum Vertical Rise, Minimum/Maximum Horizontal Run: 24" (610mm) minimum vertical rise + 90° horizontal elbow + 48" (1219mm) maximum horizontal run + termination cap

Table 6.4, NG & Propane – Max Vertical/Max Horizontal Combination						
Max. Vertical Rise		Max. Horizontal Run		Total Length		
25'	7.6 m	25'	7.6 m	50'	15.2 m	
Maximum number of 90° elbows: 5						

Table 6.5, Recommended Restriction for Vertical Terminations				
Fuel	Vent Config.	Baffle Positions	Restrictor Setting	
Natural Gas	Min vert / min horz	Setting (3)	None	
Natural Gas	Min vert / max horz	Setting (I)	None	
Natural Gas	Max vert / max horz	Setting (5)	Install restrictor	
Propane	Min vert / min horz	Setting (2)	None	
Propane	Min vert / max horz	Setting (5)	None	
Propane	Max vert / max horz	Setting (5)	Install restrictor	





#### 7.0 FIREPLACE SETUP

#### 7.1 Safety Barrier Installation

#### 7.1.1 Safety Barrier Screen (#OPT-ES)

- 1. Locate the (4) slots located on each side of the fireplace frame.
- Align the notched tabs located on the back of the safety screen with the slots on the fireplace frame.
- 3. Raise the safety screen front slightly into slots and allow the tabs to lower into position.
- To remove safety screen: lift the screen up and out of slots.

#### 7.1.2 Overlay (#OP18-POL and #OP18-APOL)

- I. If installed, remove the safety barrier screen.
- Locate the (4) tabs on the overlay. Hand bend tabs to secure the overlay to the safety screen front.
- 3. Locate the (4) slots located on each side of the fireplace frame.
- 4. Align the notched tabs located on the back of the safety screen with the slots on the fireplace frame.
- Raise the safety barrier slightly into slots and allow the tabs to lower into position.
- To remove safety barrier: lift the screen up and out of slots.

# Figure 7.1, Safety Barrier Installation

#### 7.2 Glass Frame Assembly

WARNING: Do not operate this fireplace with the glass removed, cracked, or broken. Replacement of the glass assembly should be done by a licensed or qualified service person.

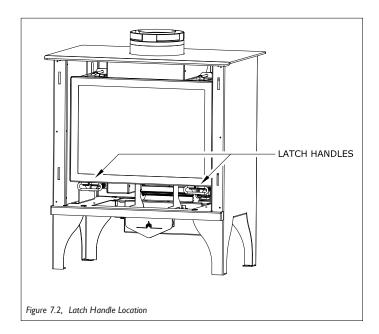
#### 7.2.1 Remove Glass Frame Assembly

WARNING: Do not remove the glass assembly when hot.

- I. Remove the safety screen.
- 2. Locate (2) spring-loaded latches securing the glass assembly at the bottom of the firebox.
- Pull the spring-loaded latches out and down to release the bottom of the glass assembly.
- Lift glass assembly up and off of the (2) tabs located at the top of the firebox.

#### 7.2.2 Install Glass Frame Assembly

- Align the slots on top of the glass assembly over the tabs at the top of the firebox while lowering the bottom of the glass assembly into position.
- 2. Pull the spring-loaded latches out and up to secure the bottom of glass to the bottom of the fireplace.
- 3. Reinstall the safety screen.



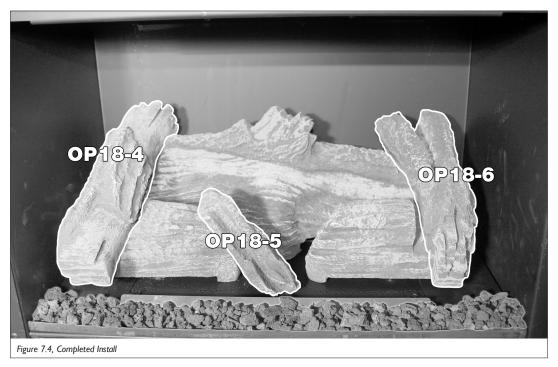
#### 7.3 #OP18-500 Log Set Installation

CAUTION: Do not place logs directly over burner port holes. Improper log placement may affect flame appearance and cause excessive soot to build upon the logs and glass.

- If converting to propane, complete the conversion before installing the log set. Follow the conversion instructions included with the kit.
- Log numbers are located on the bottom of each log. Refer to the following instructions and illustrations for proper log placement.
- Align the holes in the bottom of log OP18-1 with the mounting pins on the burner plate at the back of the firebox. Push log down to seat.

- 2. Align the holes in the bottom of logs OP18-2 and OP18-3 with the mounting pins on the burner. Push to seat.
- Align the pin on the bottom of log OP18-4 with the hole in base log OP18-2. Position log with notches as shown.
- 4. Align the pin on the bottom of log OP18-6 with the hole in base log OP18-3. Position log with notches as shown.
- 5. Align log OP18-5 with the notch in log OP18-2 as shown.
- Distribute lava rock onto air deflector in front of the burner. Do not block burner ports or airspaces.
- Distribute rockwool embers onto the logs and burner using a stiff bristle brush.





#### 7.4 Control Board Removal and Installation

WARNING: If burner and/or pilot have been burning, use appropriate protection to avoid burns or damage personal property before removing any components. DO NOT OPERATE THIS APPLIANCE WITHOUT THE SEALING GASKET (LOCATED UNDER THE CONTROL BOARD) IN PLACE. IF GASKETING IS DAMAGED, IT MUST BE REPLACED.

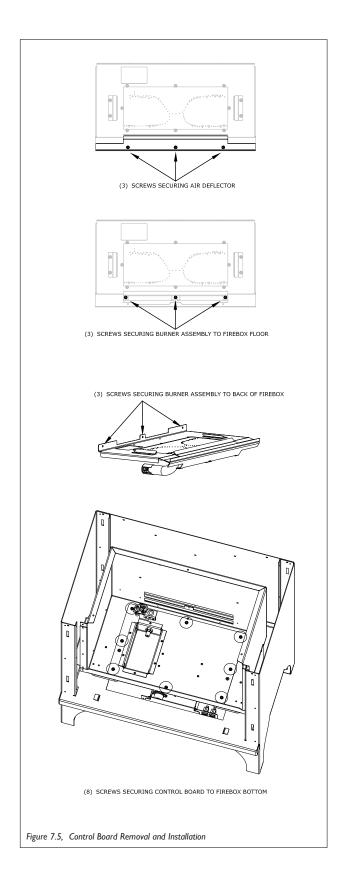
CAUTION: Check all connections for leaks with soapy water, whether field or factory made.

#### 7.4.1 Control Board Removal

- Disconnect electrical power.
- Locate the manual valve installed by your qualified service 2. technician. Turn the manual valve clockwise to the OFF position.
- Disconnect any optional control from the top and bottom terminals on the gas valve, OR unplug all components from receptacle and disconnect all wiring harnesses attached to the
- Remove the safety barrier and glass frame assembly. 4.
- Remove logs and pilot shield. 5.
- 6. Remove (3) screws securing the air deflector in front of the
- Remove (3) screws underneath the previously removed air deflector securing burner assembly to the firebox floor.
- Remove (3) screws at the back wall of the firebox securing the burner assembly.
- 9. Release the burner tube venturi off of the burner orifice and remove the burner assembly from the firebox.
- 10. Remove and save (8) screws securing the control board. Lift the control board and control module out of the firebox, being careful not to damage sealing gasket underneath.

#### 7.4.2 Control Board Installation

- Place the control module in the firebox, aligning the holes in the control board with the holes in the firebox bottom. VERIFY SEALING GASKET IS IN PLACE.
- Secure the control board to the firebox using (8) screws previously removed.
- Position the burner tube venturi over the burner orifice. 3.
- Align the holes in the burner assembly with the holes in the back of the firebox and the firebox floor. Secure with (6) screws previously removed.
- Reinstall air deflector (3) screws previously removed.
- Reinstall pilot shield and log set. 6.
- Reconnect any optional control wires to the top and bottom gas valve terminals, OR reconnect all wiring harnesses to the gas valve. Plug all components into an electrical outlet.
- Reinstall the glass frame assembly and safety barrier.
- Turn the manual valve counterclockwise to the ON position.
- 10. Reconnect electrical power.
- 11. Verify proper log placement, operation of fireplace, and any electrical components.



#### 8.0 ELECTRICAL INFORMATION

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

WARNING - Electrical Grounding Instructions: This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

#### 8.1 Electrical Specifications

WARNING: AN OPTIONAL COMPONENT CONNECTION IS FOR LOW VOLTAGE BATTERY OR DIRECT CURRENT ONLY. DO NOT CONNECT TO 120 OR 240 VOLTS AC.

This 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.

- Determine if the appliance uses an electronic ignition system or continuous pilot ignition system (millivolt) by locating gas valve and its controls. Access the gas valve by opening the control compartment access panel.
- Appliances with the standing pilot ignition system are equipped with a black piezo igniter button. Appliances with electronic ignition system will not have a button.

#### 8.2 Wiring Requirements

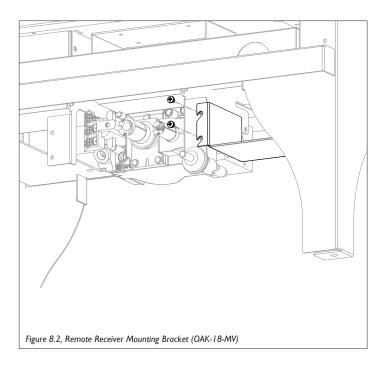
#### 8.2.1 Electronic Ignition System

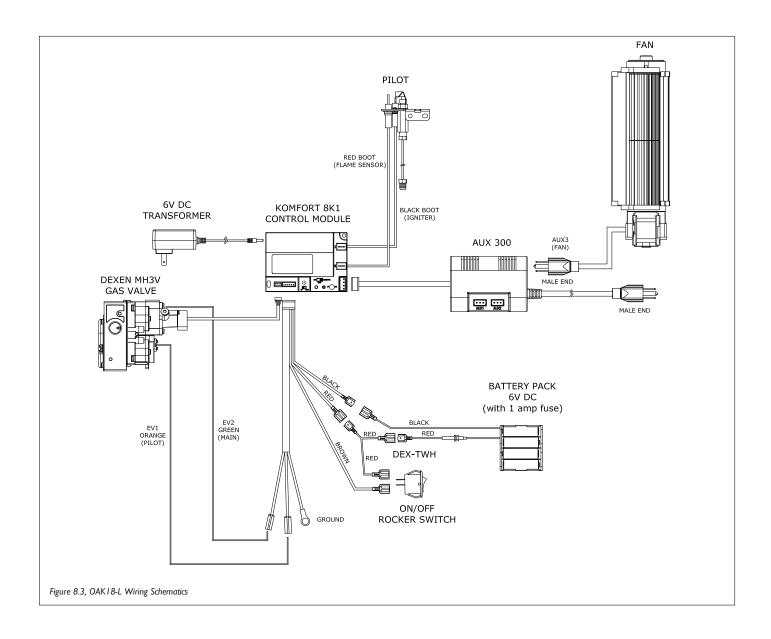
- The Komfort 8K1 requires 120VAC power supply and/or batteries to operate. Using the battery back-up will operate the burner only. Optional components will not function on battery backup power.
- If desired, a thermostat or a wall switch may be installed for main burner operational control using low-voltage wires. A thermostat wire assembly is not included with this appliance.
- It is optional to disable the main ON/OFF rocker switch operating the main burner by disconnecting the wires from the control module (Figure 8.3).
- If the rocker switch wires are not disconnected, the main ON/OFF rocker switch must be in the OFF position for proper operation of optional controls. If the main ON/OFF rocker switch is ON, the main burner will operate until it is turned OFF by the rocker switch. The thermostat/wall switch components will not turn the main burner off if the main burner has been turned on by the rocker switch.
- If a wall-mounted ON/OFF control or thermostat is to be used, mount it in a convenient location on a wall near the fireplace. Follow instructions included with assembly.

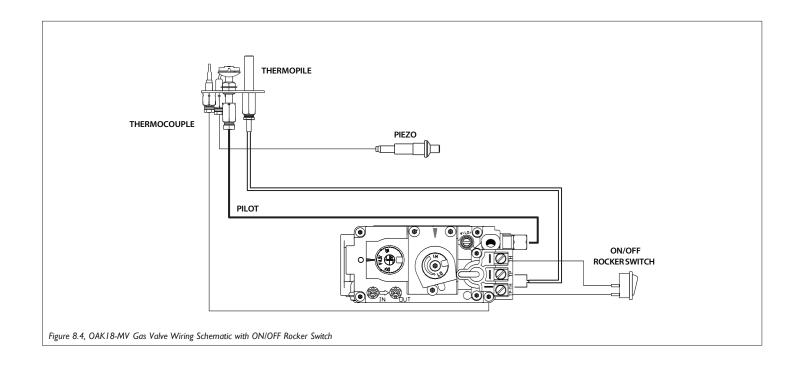
#### 8.2.2 Continuous Pilot Ignition System (Millivolt)

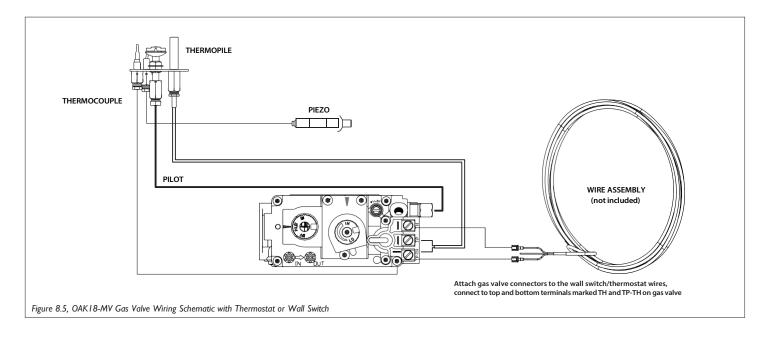
CAUTION: Do not connect high voltage (115V) wire to the gas valve.

- The millivolt gas valve system does not require 110-120 VAC supply to operate.
- If desired, a thermostat or a wall switch may be installed for main burner operational control using low-voltage wires. A thermostat wire assembly is not included with this appliance.
- It is optional to disable rocker switch operating the main burner by disconnecting the wires from the back of the gas valve (Figure 8.5).
- If the rocker switch wires are not disconnected, the ON/OFF rocker switch must be in the OFF position for proper operation of optional controls. If the ON/OFF rocker switch is ON, the main burner will operate until it is turned OFF by the rocker switch. The thermostat/wall switch components will not turn the main burner off if the main burner has been turned on by the rocker switch.
- If a wall-mounted ON/OFF control or thermostat is to be used, mount it in a convenient location on a wall near the fireplace. Follow instructions included with assembly.
- An optional remote receiver mounting bracket may be installed on the control compartment using (2) screws as shown in Figure 8.2).
- If an optional component is to be used, run low-voltage wires from gas valve to the location of component.









#### 8.3 #OP18-028 Optional Fan Kit - Millivolt Only

WARNING - Electrical Grounding Instructions: This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

WARNING: Installation of this fan kit should be done by a qualified installer. Verify household breaker is shut off prior to working on any electrical lines.

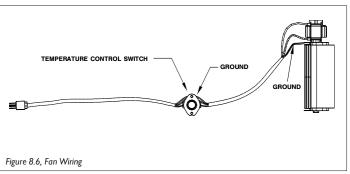
IMPORTANT: This fan will not operate unless speed control has been turned ON and sufficient heat has been applied to temperature control switch. The fan will turn ON and OFF automatically as fireplace heats and cools. Adjust fan to desired speed while it is running.

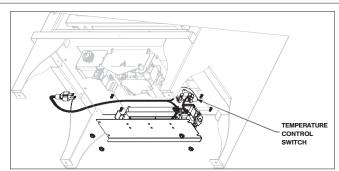
 Hussong Manufacturing recommends to install an electrical outlet near the gas stove.

#### This kit includes:

- (I) Fan assembly mounted
- (4) Flange nuts
- (I) Temperature control switch with magnet attached
- (I) Speed control box with 5' (1524mm) cord
- (2) Philips head screws (black)
- Remove the safety barrier and the heat shield underneath the firebox.
- Locate (4) mounting studs underneath the rear of the gas stove.
   With the motor end facing to the right, slide the fan underneath the firebox.
- 3. Align the (4) mounting slots in the fan bracket to the mounting studs under the firebox. Lift up the fan and secure the fan assembly to the firebox with (4) flange nuts.
- Mount the speed control box onto the left side of the gas valve bracket. Align the slots in the speed control box to the holes in bracket. Secure with (2) black Philips head screws (included).
- Place the temperature control switch (magnet attached) onto the firebox floor on the right, as far back as possible to the fan motor.
- 6. Plug fan cord into the electrical box receptacle.
- Plug the speed control box cord into a properly grounded threeprong receptacle.
- 8. Reinstall all components previously removed.
- Turn speed control counter-clockwise until it 'clicks'. This is the OFF position.

Turn speed control ON by turning knob clockwise past the 'click' - this is the highest setting.





TEMPERATURE CONTROL SWITCH POSITION

Before adjusting temperature control switch, unplug 3-prong plug on fan cord from receptacle.

Adjust position of temperature control switch to a warmer location under firebox to turn fan ON sooner or move it to a cooler location under firebox to turn fan ON later. The fan will turn on when sensor in temperature control switch reaches 110° Fan will turn OFF when sensor reaches 90° F

 $\label{lem:adjustment} \textbf{After adjustment, plug 3-prong plug on fan cord into receptacle.}$ 

Figure 8.8, Mounting Stud and Temperature Control Switch Locations

#### 9.0 OPERATING INSTRUCTIONS

#### 9.1 Lighting Instructions (#OAK-18-L)

#### 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 <u>not</u> try to light the pilot by hand
- B. **BEFORE OPERATING** smell 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. Use only your hand to turn the gas control manual valve. Never use tools. If the valve will not turn by hand, do not try to repair it; call a qualified service technician. 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 that has been under water.

#### WARNING

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

Under no circumstances should any solid fuel (wood, coal, paper, cardboard, etc.) be used in this appliance.

Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.

#### **CAUTION**

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

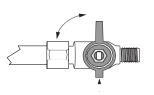
Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to a fireplace or stove,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

#### **OPERATING INSTRUCTIONS**

- 4. STOP! Read all the safety information above on this page.
- 5. Press the wireless remote POWER button.
- 6. Turn off all electric power to the appliance.
- This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
- Locate the manual valve installed by your qualified service technician.
- 9. Turn the manual valve clockwise C to the OFF position.
- 10. 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. If you do not smell gas, go to the next step.
- 1. Turn the manual valve counterclockwise  $^{\circ}$  to the ON position.

- I. Turn on all electric power to the appliance.
- 2. Press the wireless remote POWER button.
- If the appliance will not operate, follow the instruction, "To Turn Off Gas To Appliance" and call your service technician or gas supplier.





#### TO TURN OFF GAS TO APPLIANCE

- I. Press the wireless remote POWER button
- Turn off all electric power to the appliance if service is to be performed.
- Locate the manual valve installed by your qualified service technician.
- 4. Turn the manual valve clockwise ( to OFF position.

#### NOTE

When this fireplace is initially lit, condensation will appear on the glass. This is normal in all gas fireplaces and will disappear after several minutes. A paint smell will occur during the first few hours of burning. It is recommended to leave the fan off during this period to help speed the paint curing process.

This fireplace may produce noises of varying degree as it heats and cools due to metal expansion and contraction. This is normal and does not affect the performance or longevity of the fireplace.

#### 9.1.1 Set up Komfort 8K1 Control Module

- I. Set the main ON/OFF rocker switch in the OFF position.
- 2. Remove the remote control components from packaging.
- Install (3) AAA batteries (included in the components packet) in the remote control battery bay.
- 4. Connect the transformer to an AC power supply.
- Connect the fan to the AUX 300 control module (FIGURE 8.3, page 28).

#### 9.1.2 Initialize the Komfort 8K1 Control System

- Verify the ON/OFF/REMOTE switch is in the REMOTE position. A green LED will illuminate and blink three times.
- Using a small item, such as a paper clip, press and release the LEARN button located near the ON/OFF/REMOTE switch.
- The control module will beep once and illuminate a green LED for 10 seconds.
- While the green LED is blinking, press the POWER button on the remote control. The control module will emit a double beep to indicate that the remote is initialized to the control system.

#### 9.1.3 Flame Height and Heat Output Adjustment

This system will execute an automatic turn OFF command after 8 hours of continuous main burner operation.

#### 9.1.4 Backup Battery Operation

This appliance will operate on the backup battery pack in a power outage. The lifespan of the backup batteries depends on various factors, such as the quality of the batteries, number of ignitions, etc.

Only install backup batteries in power outages only. Do not leave batteries installed in the backup battery pack.

#### 9.1.5 Control System 7 Day Time-out

If your Komfort 8KI control system is set to pilot-on-demand ignition with **7** consecutive days without ignition of the main burner, the pilot will turn off. This is a standard safety feature of the Komfort 8KI control system.

Once you turn the pilot-on-demand on, the **7** day timer will start. If at any time during the following **7** days your main burner ignites, it will reset the timer back to **7** days.

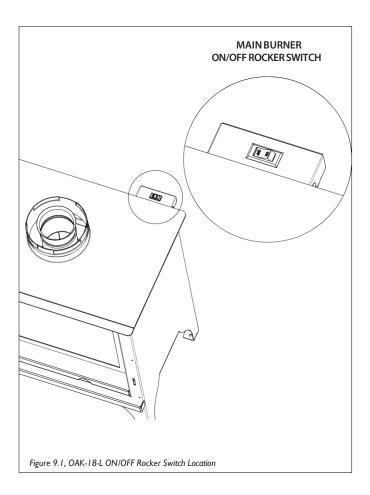
See section 9.1.14 on page 34 for more information about pilot ignition selection.

#### How to check if your system is set to pilot-on-demand:

 The remote control screen will display the snowflake with text PILOT icon.

#### To select the preferred pilot ignition:

- I. Press the MENU button to activate the menu.
- Using the UP and DOWN arrows, highlight the PILOT icon and press SELECT.
- Use the UP and DOWN arrows to turn the pilot-on-demand ON or OFF, then press SELECT.
- A single beep will be emitted from the control module indicating pilot-on-demand feature has been activated.



# 9.1.6 Komfort 8K1 Control System Ignition Sequence

The Komfort 8K1 control module will attempt (1) time for ignition, for approximately 60 seconds.

If there is no flame ignition (rectification) within the (60) second time frame, the Komfort 8KI system will go into a lockout. The control module will display an error code (see section 9.1.8), followed by a blinking red/green LED, indicating a system lockout

#### 9.1.7 Reset Control Module after Lockout

#### 9.1.7.1 Disconnect Power Supply

 Disconnect the power supply to the control module. After approximately (5) second, reconnect power supply.

#### 9.1.7.2 ON/OFF/REMOTE Switch

- Turn the ON/OFF/REMOTE switch on the control module to OFF.
   Wait approximately (5) seconds and turn the ON/OFF/REMOTE switch to REMOTE. The control module will illuminate a green LED (2) times and emit a beep.
- Turn the ON/OFF/REMOTE switch on the control module to OFF.
  Wait approximately (5) seconds and turn the ON/OFF/REMOTE
  switch to ON. The control module will illuminate a green LED (2)
  times and emit a beep. The ignition sequence will start again.

#### 9.1.8 Additional Diagnostic Information

Diagnostic codes are outlined below and should be used as an additional troubleshooting tool.

#### Red LED will blink (1) time, then a red/green LED blink (lockout)

 Error caused by fuel-type selector switch is in incorrect position or fuel-type selector switch is damaged. Verify selector is in correct position. If condition persists, replace the control module.

#### Red LED will blink (2) times, then a red/green LED blink (lockout)

 Error caused by Insufficient voltage from ignition coil to pilot flame igniter. Clear the lockout (see section 9.1.8 above) and attempt ignition. If condition persists, replace the control module.

#### Red LED will blink (3) times, then a red/green LED blink (lockout)

- Error caused by inadequate gas supply. Verify proper inlet pressure to the gas line.
- Error caused by detection of false flame or short in sensor lead. Verify that pilot leads are correctly terminated to the control module, and that no shorted wires exist.
- Error caused by sense and/or igniter lead disconnected.
   Verify that the pilot sensor rod, igniter rod, and hood are clean.

#### 9.1.9 Remote Control Operation

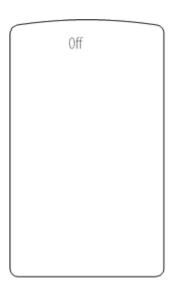
#### 9.1.9.1 Idle Mode

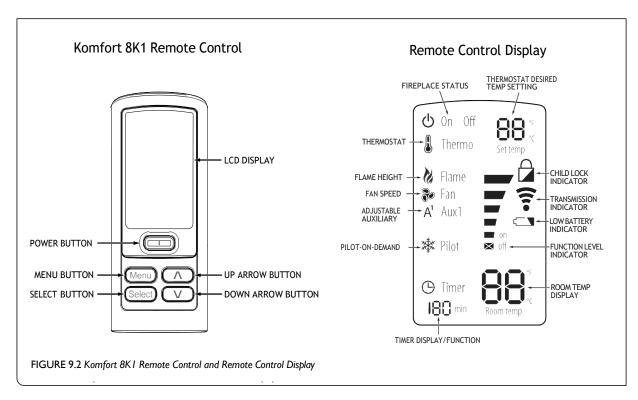
The remote control will go into an idle mode when the remote is ON if no buttons are pressed within (5) seconds. Press any button to resume full functionality. In idle mode, only active functions will show on the screen.

#### 9.1.9.2 Standby Mode

The remote control will go into a standby mode if no buttons are pressed within (5) minutes. Press the POWER button to reactivate the remote control to ON mode. Active functions will be displayed once in ON mode.







#### 9.1.10 Temperature Display

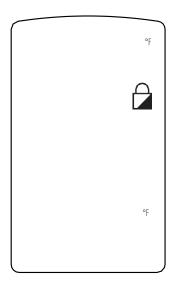
To change the temperature display between Celsius and Fahrenheit, Remove the battery cover from the back of the control. Slide the switch to desired temperature scale. Reinstall batteries and battery cover.



#### 9.1.11 Child Lock

To lock the remote to avoid unsupervised operation,

Press and hold the MENU and UP arrow buttons simultaneous for 4 seconds to enable or disable the child lock feature.



#### 9.1.12 Turn ON the Appliance

With the system in the OFF position, press the remote control POWER button to turn ON the appliance.

- The appliance will attempt to ignite the pilot (if Pilot-on-Demand function is OFF). Once the pilot flame is rectified, the main burner will ignite.
- Whenever the appliance is cycled from OFF to ON, the main burner will light on high for 10 seconds before returning to the previous user setting.
- All functions can be accessed when the remote control is ON. Only active functions will be displayed when the remote control is ON.

The transmission indicator icon will flash, and a single beep will confirm the reception of the command.

#### 9.1.13 Turn OFF the Appliance

With the system in the ON position, press the remote control POWER button to turn OFF the appliance.

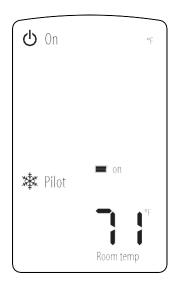
- Functions AUX1, AUX2, and Pilot-on-Demand can be accessed when the remote control is OFF. Only active functions will be displayed when the remote control is OFF.
- The transmission indicator icon will flash, and a single beep will confirm the reception of the command.

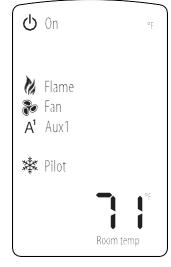
# 9.1.14 Pilot Ignition Selection (Intermittent or Pilot-on-Demand)

This system has the option of a pilot-on-demand, allowing the system to change from a spark-to-pilot system to the pilot-on-demand option. The pilot-on-demand will keep the firebox warm and establish a draft in the vent, which allows the main burner to ignite with less air-flow disruption.

To select the preferred

- Press the MENU button to activate the menu.
- Using the UP and DOWN arrows, highlight the PILOT icon and press SELECT.
- Use the UP and DOWN arrows to turn the pilot-on-demand ON or OFF, then press SELECT.
- The transmission indicator icon will flash, and a single beep will be emitted from the control module indicating pilot-on-demand feature has been activated. The remote control screen will display the snowflake with text PILOT icon.
- The transmission indicator icon will flash, and a double beep will be emitted from the control module indicating the piloton- demand feature has been deactivated. The remote control will not display the snowflake with text PILOT icon.



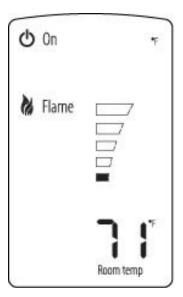


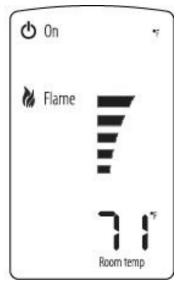
#### 9.1.15 Turn ON the Appliance

This control system has (5) flame levels. Flame height will not be adjustable for the first (10) seconds when the appliance is turned ON. The control system will remember the previous flame level setting and will automatically adjust after (10) seconds.

To adjust the flame level,

- I. Press the MENU button to activate the menu.
- Using the UP and DOWN arrows, highlight the FLAME icon and press SELECT.
- Use the UP and DOWN arrows to adjust the flame level to desired setting, then press SELECT.
- The transmission indicator icon will flash and a single beep will confirm the reception of the command





#### 9.1.16 Thermostat Operation

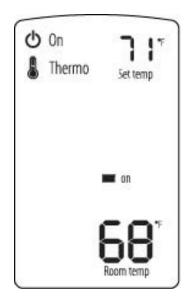
The remote control can operate as a room thermostat. The thermostat can be set to a desired temperature to control a room's comfort level.

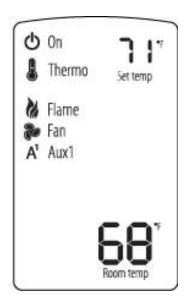
This control system requires a two degree Fahrenheit or higher temperature difference between the room temperature and set temperature for the fireplace to turn on.

The system will remember the previous temperature setting when thermostat mode is cycled ON or OFF.

To activate this function.

- I. Press the MENU button to activate the menu.
- Using the UP and DOWN arrows, highlight the THERMO icon and press SELECT.
- Use the UP and DOWN arrows to turn the THERMO ON or OFF, then press SELECT. The SET TEMP will start blinking. Using the UP and DOWN arrows, select the desired temperature and press SELECT.
- If the thermostat function is on, the set temperature can be adjusted at any time by pressing the UP and DOWN arrows.
- As the room temperature approaches the set temperature, the remote system will automatically adjust the flame height.
- If the room temperature rises above the set temperature, the fireplace will shut down the main burner. The fireplace will turn back on after the room temperature drops below the set temperature.





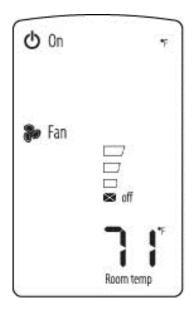
#### 9.1.17 Fan Speed Control (optional)

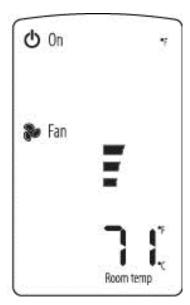
The fan speed can be adjusted through (3) speeds: HIGH, MEDIUM, LOW.

The fan is controlled by a timer built into the control module. After the fireplace is turned ON, the timer will wait for (3) minutes before turning on the fan. After the fireplace is turned OFF, the fan will remain on for (12) minutes.

To activate this function,

- I. Press the MENU button to activate the menu.
- 2. Using the UP and DOWN arrows, highlight the FAN icon and press SELECT.
- Use the UP and DOWN arrows to adjust to desired fan speed, then press SELECT.
- The transmission indicator icon will flash and a single beep will confirm the reception of the command.





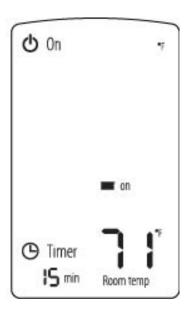
#### 9.1.18 Timer Adjustment

This control system has the option to set a timer function to turn OFF the main burner operation. The timer operates in increments of 15, 30, 45, 60, 90, 120, and 180 minutes.

To activate this function,

- 1. Press the MENU button to activate the menu.
- Using the UP and DOWN arrows, highlight the TIMER icon and press SELECT.
- Use the UP and DOWN arrows to turn the TIMER ON or OFF, then press select.
- 4. Using the UP and DOWN arrows, select the desired set time and press SELECT.
- The transmission indicator icon will flash to confirm the reception of the command.





# 9.2 Lighting Instructions (#OAK-18-MV)

## FOR YOUR SAFETY READ BEFORE LIGHTING

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

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell 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
- 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. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or 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 that has been under water.

## WARNING

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

Under no circumstances should any solid fuel (wood, coal, paper, cardboard, etcetera) be used in this appliance.

Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.

## **CAUTION**

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

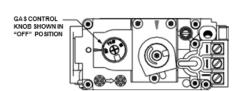
Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to a fireplace or stove,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

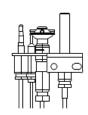
## LIGHTING INSTRUCTIONS

- STOP! Read all the safety information above on this page. Ι.
- Set thermostat to lowest setting (if applicable). 2.
- 3. Turn off all electric power to the appliance.
- 4. Open the control compartment access panel.
- Push in gas control knob slightly and turn Cockwise NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.
- 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. If you do not smell gas, go to the next step.
- Push in gas control knob slightly and turn counterclockwise to "PILOT".
- Push in control knob all the way and hold. Press the piezo igniter button repeatedly until the pilot is lit and continue to hold in the gas control knob.
- Hold the gas control knob in for one (I) minute after pilot is lit.

Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 10.

- · If the knob does not pop out when released, stop and immediately call your service technician or gas
- · If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or
- 10. Turn the gas control knob counterclockwise **7** to "ON"
- 11. Set the ON/OFF rocker switch to the "ON" position.
- 12. Turn on all electric power to the appliance.
- 13. Set thermostat to desired setting (if applicable).





## TO TURN GAS OFF TO APPLIANCE

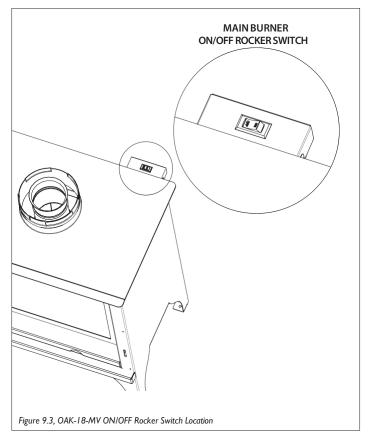
- 2. Set thermostat to lowest setting (if applicable).
- 3. Turn off all electric power to the appliance if service is to be performed.
- Push in gas control knob slightly and turn clockwise to "OFF".



## 9.2.1 Main Burner On/Off Rocker Switch Location

The ON/OFF Rocker Switch location for the OAK-18-MV is located at the rear of the appliance as shown in Figure 9.3. If you wish to turn off just the burner, flip the ON/OFF switch to OFF. The pilot will stay lit.

For lighting instructions, follow section 9.2 on the previous page.



# 9.2.2 7 Day Time-out Pilot-on- Demand Installations

For regions that require installations a 7 day time-out (refer to your local dealer to see if this applicable to your installation), model #oak-I8s-MV is fitted with a millivolt Pilot-on-Demand gas control valve equipped with a timer set for **7 consecutive days** once the pilot has been ignited. If there is no appliance operation within the **7 days**, the main burner and/or the pilot will turn off, but the gas control knob will still be set in its original position ('PILOT' or 'ON').

- You must manually cycle the system to reignite operation.
- This a standard safety feature of the SIT Millivolt Pilot-on-Demand control system.
- Once you turn the pilot on, the **7 day** timer will start. If at any time during the following **7 days** your main burner ignites, it will reset the timer back to **7 days**.

To operate your millivolt pilot-on-demand system, open the control compartment access panel to access the gas valve and gas control knob. Refer to the lighting instructions on the previous page for lighting procedures and safety information.

# 10.0 ADJUSTMENT

# 10.1 Gas Pressure Testing – OAK-18-L

NOTE: The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of  $\frac{1}{2}$  psi (3.5 kPa).

IMPORTANT: Pressure check taps for manifold (outgoing) and inlet (incoming) pressure have been incorporated into the valve. The pressure tap marked OUT measures outgoing pressure. The pressure tap marked IN measures incoming pressure.

## 10.1.1 Electronic Gas Valve Pressure Testing

## 10.1.1.1 Inlet Pressure Test

NOTE: Make sure to apply these incoming pressure test with all other gas appliances on, or at full capacity in the house for proper pressure reading.

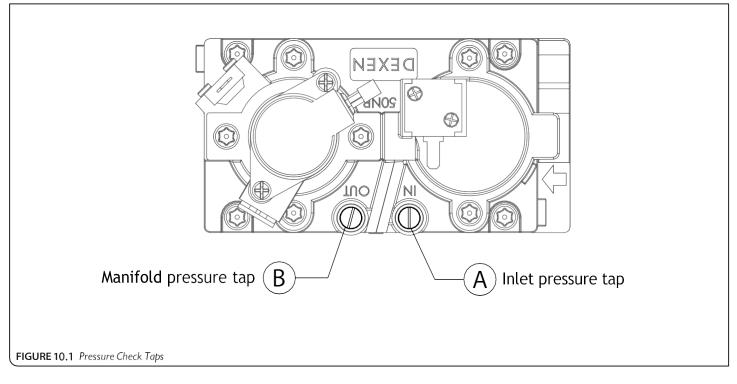
IMPORTANT: If the inlet pressure reading is too high or too low, contact the gas company. Only a qualified gas service technician should adjust incoming gas pressure.

- Loosen the inlet (IN) pressure tap by turning screw counterclockwise. See (A) in FIGURE 10.1.
- 2. Attach manometer using a 1/4" (6mm) I.D. hose.
- Light pilot and burner. Check pressure to ensure it is between the minimum and maximum recommended pressure settings (TABLE 10.1).
- Turn off burner and pilot.
- Disconnect hose and tighten the inlet (IN) pressure tap by turning screw clockwise. Screw should be snug. Do not over tighten.
- Relight pilot and burner. Then reattach manometer to the inlet pressure tap (A) to verify the tap is completely sealed. Manometer should read no pressure.
- Relight pilot and burner. Then reattach manometer to the inlet pressure tap (A) to verify the tap is completely sealed. Manometer should read no pressure.

## 10.1.1.2 Manifold Pressure Test

- Light pilot.
- Loosen manifold (OUT) pressure tap by turning screw counterclockwise. See (B) in FIGURE 10.1.
- 3. Attach manometer to pressure tap using a 1/4" (6mm) I.D. hose.
- 4. Light burner. Check manometer reading. Refer to TABLE 10.1.
- Turn burner and pilot off. 5.
- Disconnect manometer hose and tighten the manifold (OUT) pressure tap by turning screw clockwise. Screw should be snug. Do not over tighten.
- Attach the manometer to the manifold pressure tap (B) to verify it is completely sealed. The manometer should read no pressure when pilot and burner are on.

Table 10.1, Pressure Requirements – OAK-18-L (IPI)			
Gas Pressure	Natural Gas	Propane	
Inlet Pressure	5" – 10.5"WC	12" - 13" WC	
Tap (A)	(1.25 – 2.61 kPa)	(2.99 - 3.24 kPa)	
Manifold Pressure	1.0" - 3.5" WC	6.4" - 10" WC	
Tap (B)	(0.25 - 0.87 kPa)	(1.59 - 2.49 kPa)	



# 10.1.2 Gas Pressure Testing - Millivolt

IMPORTANT: Pressure check taps for manifold (outgoing) and inlet (incoming) pressure have been incorporated into the valve. The pressure tap marked OUT measures outgoing pressure. The pressure tap marked IN measures incoming pressure.

## 10.1.2.1 Inlet Pressure Test

NOTE: Make sure to apply the incoming pressure test with all other gas appliances on, or at full capacity in the house for a proper pressure reading. If the inlet pressure reading is too high or too low, contact the gas company. Only a qualified gas service technician should adjust incoming gas pressure. A low pressure can cause a delayed ignition.

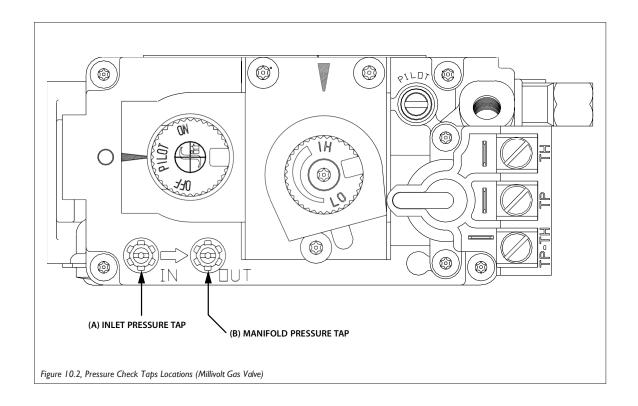
- Loosen the inlet (IN) pressure tap by turning screw counterclockwise. See (A) in Figure 10.2.
- 2. Attach manometer using a 1/4 in (6 mm) I.D. hose.
- 3. Light pilot.
- Turn the gas control knob to ON. Burner should not light. Note manometer reading.
- 5. Press the ON/OFF rocker switch to ON. Check pressure to ensure it is near maximum inlet pressure.
- 6. Press the ON/OFF rocker switch to OFF.
- 7. Turn the gas control knob to OFF.
- Disconnect hose and tighten the inlet (IN) pressure tap by turning screw clockwise. Screw should be snug. Do not over tighten.

Relight pilot and turn the gas control knob to ON. Reattach
manometer to the inlet pressure tap (A) to verify the tap is
completely sealed. Manometer should read no pressure.

## 10.1.2.2 Manifold Pressure Test

- I. Light pilot.
- Loosen manifold (OUT) pressure tap by turning screw counterclockwise. See (B) in Figure 10.2.
- 3. Attach manometer to pressure tap using a ¼ in (6 mm) I.D. hose.
- 4. Turn gas control knob to ON.
- 5. Press the rocker switch to ON and note manometer reading.
- Disconnect manometer hose and tighten the manifold (OUT) pressure tap by turning screw clockwise. Screw should be snug. Do not over tighten.
- Attach the manometer to the manifold pressure tap (B) to verify it is completely sealed. The manometer should read no pressure when the ON/OFF rocker switch is pressed to ON.

Table 10.2, Pressure Requirements – OAK-18-MV (Millivolt)			
Gas Pressure	Natural Gas	Propane	
Inlet Pressure	5" – 10.5"WC	11"- 13" WC	
Tap (A)	(1.24 - 2.61 kPa)	(2.74 - 3.24 kPa)	
Manifold Pressure	1.6" - 3.5" WC	2.7" - 10"WC	
Tap (B)	(0.4 - 0.87 kPa)	(.67 - 2.49 kPa)	



# 10.2 Burner Flame Adjustments

WARNING: To avoid property damage or personal injury, allow the fireplace ample time to cool before making any adjustments.

Burner flame appearance and characteristics are affected by altitude, fuel quality, venting configuration, and other factors. After installation, this appliance may need additional adjustments to achieve optimum flame appearance and visual aesthetics.

## 10.2.1 Burner Venturi

WARNING: VENTURI ADJUSTMENT MUST BE DONE BY A OUALIFIED SERVICE TECHNICIAN.

NOTE: Burner venturi air shutter settings have been factory set. Refer to Table 10.3.

When this appliance is first lit, the burner flames will appear blue. During the first 15 minutes of operation, flame appearance will gradually turn to the desired yellow appearance. If the flames remain blue or become dark orange with evidence of sooting (black tips), adjustment of the air shutter opening may be necessary.

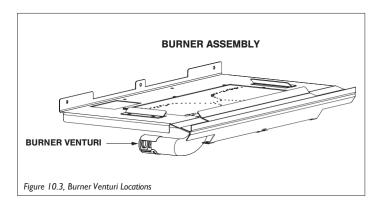
Regardless of venturi orientation, closing the air shutter will achieve a desired yellow flame, but may produce soot on the glass. Opening the air shutter will cause a short, blue flame that may lift off the burner.

Table 10.3, Factory Set Venturi Openings		
Fuel Air Shutter Opening		
Natural Gas	1/8" (3 mm) OPEN	
Propane	5/8" (16 mm) OPEN	

## 10.2.1.1 Venturi Adjustment

NOTE: If soot is present on the glass, check log positioning before adjusting the venturi. Logs must not block burner ports.

- ١. Remove the safety barrier and glass frame assembly.
- 2. Remove the log set and pilot shield.
- Remove the air deflector (3) screws.
- Remove (3) screws underneath the previously removed air deflector and (3) screws at the back of the firebox.
- 5. Remove burner assembly from firebox.
- Loosen screw on venturi and adjust as necessary. Re-tighten
- Reinstall all components previously removed.

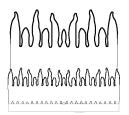


IMPORTANT: Slight adjustments to the venturi opening will create dramatic results. Adjust at slight increments until desired look is achieved. Always burn the fireplace for at least 15 minutes and allow the appliance ample time to cool before making any further adjustments.

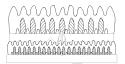
Table 10.4, Venturi Adjustment Guidelines			
Flame Characteristic	Cause	Solution	
Dark, orange flame with black tips	Venturi closed too far	Open venturi slightly	
Short, blue flames	Venturi open too far	Close setting slightly	
Lifting (ghosting) flames	Gas pressure too high Venturi closed too far	Check manometer settings Open venturi setting slightly	



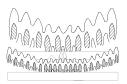
Lazy, yellow flames-no adjustment necessary (Ideal Flame Appearance)



Dark, orange flames with black tips (Venturi closed too far. Open venturi slightly)



Short, blue flames (Venturi open too far. Close venturi slightly)



Lifting (ghosting) flames

(Venturi closed too far. Open venturi slightly) OR

(Gas pressure too high-check with manometer)

Figure 10.4, Flame Appearance and Characteristics

## 10.2.2 Vent Restriction

WARNING: To avoid property damage or personal injury, allow the fireplace ample time to cool before making any adjustments.

WARNING: Improper vent installation may cause the burner flames to lift or "ghost." Perform a visual check on flame appearance after restrictor adjustment to ensure proper performance.

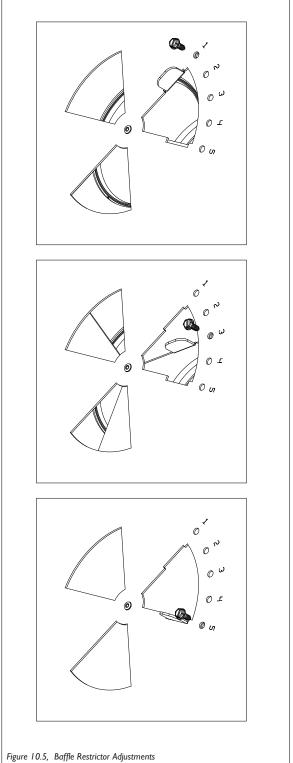
Vertical terminations may display an active, compact flame. If this appearance is not desirable, a restrictor may need to be installed or modified after vent termination installation. Access to the vent exit for restriction can be reached through the fireplace baffle. Allow the fireplace to burn for 15 minutes before making any adjustments.

Table 10.5, Restrictor Adjustment Guidelines			
Flame Appearance	Draft Problem	Solution	
Short, flickering	Excessive draft Not enough restriction	Close baffle restrictor	
		Install restrictor plate	
Lifting or ghosting*	Insufficient draft	Open baffle restrictor	
		Remove inner ring(s) on restrictor plate, or remove restrictor plate	

<sup>\*</sup>If flames continue to lift or ghost after opening the restrictor and verifying correct vent installation, shut off the gas supply and call a qualified service technician.

## 10.2.2.1 Baffle Restrictor Adjustment

- Remove the safety barrier and glass frame assembly to access the baffle restrictor.
- 2. Remove and save (1) screw to adjust the baffle restrictor to achieve desired flame appearance.
- Secure baffle restrictor with (1) screw previously removed. 3.
- Reinstall the glass frame assembly and safety barrier.

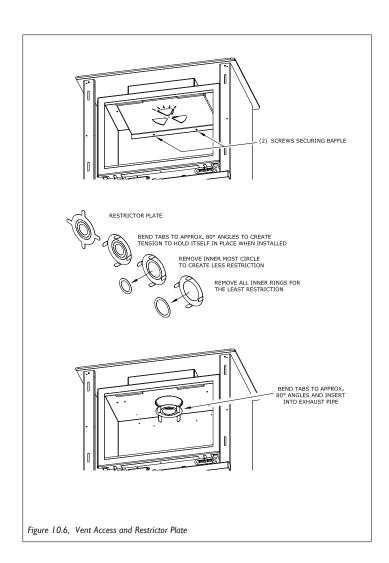


## 10.2.2.2 Restrictor Plate Installation

- Remove the safety barrier and the glass frame assembly. Ι.
- Remove (2) screws at the firebox back wall securing the baffle. 2. Remove baffle to access venting.
- Bend the tabs on the restrictor plate (included in components 3. packet) to approximately 80° angles. This will create tension when the restrictor is inserted into the exhaust pipe.
- Insert restrictor into the 4" (102 mm) exhaust pipe with the tabs pointing towards you.
- Reinstall baffle by resting the front of the baffle above flange 5. along the inside top of firebox opening. Tip the baffle against the firebox back wall, and secure with (2) screws previously removed.
- Reinstall all components previously removed.

## 10.2.2.3 Restrictor Plate Modification

- ١. Remove the safety barrier and the glass frame assembly.
- Remove (2) screws at the firebox back wall securing the baffle. Remove baffle to access venting.
- Remove the restrictor by pulling it down and out of the 4" (102 mm) exhaust pipe. Make necessary modifications to achieve desired flame appearance.
- Insert restrictor into the 4" (102 mm) exhaust pipe with the tabs pointing towards you.
- Reinstall baffle by resting the front of the baffle above flange along the inside top of firebox opening. Tip the baffle against the firebox back wall, and secure with (2) screws previously removed.
- Reinstall all components previously removed.



# 11.0 TROUBLESHOOTING

# 11.1 Electronic Ignition System

ATTENTION: Troubleshooting must be performed by a qualified technician.

Before proceeding with the steps in the following troubleshooting guide,

- Verify proper I20VAC power supply to the control module.
- Verify the control module battery pack batteries (not included)

are fresh and installed with correct polarity.

- Verify all connections between the wire harnesses and the system components are proper and positive.
- Verify inlet pressure meets the recommended inlet pressure. If necessary, adjust line pressure regulator.

Issue	Cause	Solution
Pilot will not light	Electrical power interrupted or disconnected	Restore electrical power to appliance or use battery back-up.
	Wiring disconnection	Ensure batteries are fully charged if using battery back-up as power source.
		Use wiring schematic in this manual to determine that all wiring connections are secure and correct.
	Gas supply turned off	Check remote shut-off valves from the appliance. Usually there is a valve near the main gas line. There may be more than (I) valve between the appliance and main gas line.
	LP/NG switch on control system not engaged	Verify the switch on the control module is set to the correct gas fuel type.
Pilot will not stay lit	No propane in tank	Check propane tank. Refill if necessary.
	Low gas pressure	Consult a plumber or a gas supplier.  Can be caused by situations such as a bent line, too narrow diameter or pipe, or a low line pressure.
	Pilot flame not making contact with the flame rectification sensor on the pilot assembly	Verify the pilot flame envelopes the top of the flame sensor and extends far enough onto burner for ignition.  To adjust pilot flame, turn pilot adjustment screw on the gas valve clockwise to decrease flame, and counterclockwise to increase flame.
	Pilot adjustment screw not sealed	Seal pilot adjustment screw. Do not over-tighten.
Pilot flame always on, or will not extinguish	Control system set to CPI mode	Set control system to IPI mode.
Main burner flame will not light	ON/OFF rocker switch in OFF position	Switch rocker switch to ON position.
	Gas supply turned off	Check for multiple shut-offs in the supply line. Verify gas supply is turned on.
	Low gas supply	Consult with plumber or gas supplier. Check propane tank. Refill if necessary.
	Wiring disconnection or improper wiring	Check for faulty or incorrect wiring. Refer to FIGURE 8.3 OAK18-L WIRING SCHEMATICS (page 28).
	Plugged main burner orifice	Remove blockage.
	Pilot flame	Verify the pilot flame is properly directed to ignite burner. See pilot flame troubleshooting above.
	Remote control not working properly	Replace batteries.
	No Call for heat	Verify remote control is powered ON and thermostat operation is turned OFF

Issue	Cause	Solution
Pilot and burner extinguish	No propane in tank	Check propane tank. Refill if necessary.
while in operation	Incorrect glass assembly installation	Refer to section 7.2 <b>GLASS FRAME ASSEMBLY</b> on page 23.
	Incorrect vent cap installation	Adjust if necessary.
	Vent cap blockage	Remove debris if necessary.
	Improper pitch on horizontal venting	1/4" (6 mm) rise per 1' (30 cm) is required on horizontal venting
	Exhaust vent pipe leaking exhaust gases back into firebox	Check for leaks and repair if necessary.
	Excessive draft	A restrictor may need to be installed or modified. Refer to section 10.2.2 <b>VENT RESTRICTION</b> on page 42
Soot appears on glass	Improper log placement	Refer to section 7.3 #OPI8-500 <b>LOG SET INSTALLATION</b> on page 24.
	Improper venturi setting	Venturi air shutter may need to be opened slightly to allow more air into the gas mix. Refer to section 10.2.1.1 <b>BURNER VENTURI</b> on page 41.
	Incorrect vent cap installation	Adjust if necessary.
	Vent cap blockage	Remove debris if necessary.
Flame burns blue and lifts off burner	Improper venturi setting	Venturi air shutter may need to be opened slightly to allow more air into the gas mix. Refer to section 10.2.1.1 <b>BURNER VENTURI</b> on page 41.
	Incorrect vent cap installation	Adjust if necessary.
	Blockage or leakage of the vent system	Check the vent pipes for leaks, and the vent cap for debris. Repair the vent pipes or remove debris from vent cap, if necessary.
No reaction to command	Battery back up batteries low	Replace batteries.
	No communication between remote control and control module	Reprogram remote control to Komfort 8K1 module. Refer to section 9.1.2, INITIALIZE THE KOMFORT 8K1 CONTROL SYSTEM on page 32.
	A maximum number of failed ignitions or flame restorations has been reached	Reset Komfort 8K1 control module. Refer to section 9.1.2, INITIALIZE THE KOMFORT 8K1 CONTROL SYSTEM on page 32.

# 11.2 Continuous Pilot Ignition (Millivolt) System

ATTENTION: Troubleshooting must be performed by a qualified technician.

Issue	Cause	Solution
No spark from electrode to pilot when piezo button is triggered	Piezo igniter wiring disconnection	Verify piezo igniter is properly grounded. Tighten mounting fastener, if required.
		Check and repair, if necessary, the wire connections between the piezo igniter and igniter electrode.
	Check wiring disconnection	Check wiring at back of electrode igniter for proper connection.
	Incorrect electrode position	Verify there is a 1/8" (3 mm) gap between the electrode and pilot. Readjust if necessary. Direct metal contact may cause an arc below the electrode and along the electrode wire.
Spark igniter will not light after	No gas	Check for multiple shut-off valves in the supply line.
repeated triggering of piezo button		Check propane tank for gas supply. Refill if necessary.
Pilot will not stay lit after	Pilot flame does not impinge on	Clean pilot hood
carefully following lighting instructions	thermocouple	Adjust pilot flame at gas valve for proper flame impingement.
	Loose thermocouple connection	Ensure thermocouple connection at gas valve is full inserted and tight - hand tight plus 1/4 turn.
	Thermocouple reading below 15 millivolts	Disconnect the thermocouple from valve. Place one millivolt meter lead wire on the end of the thermocouple, and the other millivolt meter lead wire on the thermocouple's copper wire. Start the pilot while holding the gas valve control knob in.  If the millivolt reading is less than 15 millivolts, replace thermocouple.
	Thermopile not generating	Adjust, if necessary, the pilot flame to envelope thermopile.
	sufficient millivolts	Check thermopile connections are properly wired to the gas control valve. Tighten if necessary.
		Measure millivolt production with a millivolt meter. Turn remote/ thermostat/wall switch, or ON/OFF rocker switch to OFF. Turn the gas valve control to the PILOT position (pilot should remain lit).  Take millivolt reading at TH-TP and TP terminals on gas valve. Reading should be 350 millivolts, minimum. If reading is less than 350 millivolts, replace thermopile.
Frequent pilot outages	Pilot shield not installed	Install pilot shield.
	Pilot safety dropout	Pilot flame is too high or too low. Clean pilot hood and adjust pilot flame for maximum flame impingement on thermopile.

Issue	Cause	Solution
Burner will not light	Lighting instructions not followed	Turn gas control knob to ON position. Turn the ON/OFF rocker switch to ON position. Put wall switch, remote control, or thermostat in heat demand position.
	Plugged main burner orifice	Remove blockage as necessary.
	Switching device is defective	Check remote, thermostat, or wall switch wires for proper connection.
		Place jumper wires across terminals at switch. If the burner lights, replace the defective switch, thermostat, or batteries in remote control as necessary.
		If switching device checks out as described above, place jumper wires across switches on the gas valve. If the burner lights, the switching wires are faulty, or connections are bad. Replace as necessary.
Burner will not stay lit	Thermopile wires loose at valve terminals	Tighten if necessary.
	Thermopile wires ground out due to pinched wires	Free pinched wires if necessary.
	Improper refractory panel placement (if installed)	Refractory panels must be tight against firebox walls. It may be necessary to secure panels with high-temperature sealant, especially around the intake duct.
Pilot and burner extinguish while	No propane in tank	Check propane tank. Refill if necessary.
in operation	Incorrect glass frame assembly installation	Refer to section 7.2 <b>GLASS FRAME ASSEMBLY</b> on page 23.
	Improper pitch on horizontal venting	1/4" (6 mm) per 12" (30 cm) is required on horizontal venting
	Defective thermopile or thermocouple	Check thermopile and thermocouple for proper millivolts
	Inner vent pipe leaking exhaust gases back into firebox	Check for leaks and repair if necessary.
	Vent cap blockage	Remove debris if necessary.
	Excessive draft	A restrictor may need to be installed or modified. Refer to section 10.2.2 <b>VENT RESTRICTION</b> on page 42.
Glass sooting	Improper log placement	Refer to section 7.3 #OP18-500 <b>LOG SET INSTALLATION</b> on page 24.
	Improper venturi setting	Venturi may need to be opened slightly to allow more air into the gas mix. Refer to section 10.2.1 <b>BURNER VENTURI</b> on page 41.
	Incorrect vent cap installation	Adjust if necessary.
	Vent cap blockage	Remove debris if necessary.
Flame burns blue and lifts off burner	Improper venturi setting	Venturi may need to be opened slightly to allow more air into the gas mix. Refer to section 10.2.1 <b>BURNER VENTURI</b> on page 41.
	Incorrect vent cap installation	Adjust if necessary.
	Blockage or leakage of the vent system	Check the vent pipe for leaks, and the vent cap for debris. Repair vent pipe or remove debris from vent cap if necessary.

# 12.0 MAINTENANCE

ATTENTION: Installation and repair should only be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning might be required due to excessive lint from carpeting, bedding material, et cetera. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean. Use a vacuum to clean all components.

WARNING: The appliance area must be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.

## 12.1 Firebox

Performed by: Qualified Service Person

Frequency: Annually

Action:

- Vacuum and clean any debris in the firebox that is not supposed to be there.
- Inspect and operate the bottom latch assembly. Verify the assembly is free from obstruction to operate. The handles must have spring tension but be able to move forward freely.

# 12.2 Fan (if applicable)

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

Performed by: Qualified Service Person

Frequency: Every 6 months

Action:

- Disconnect the fan from electrical current and vacuum.
- The bearings are sealed and require no oiling.

# 12.3 Vent System

NOTE: If the vent-air intake system is disassembled for any reason, reinstall per instructions provided with installation. Refer to Section 6.0 VENTING on page 19.

Performed by: Qualified Service Person

Frequency: Annually

Action:

- Examination of the vent system is required.
- The flow of combustion and ventilation air must not be obstructed.

# 12.4 Glass Assembly

CAUTION: Do not operate appliance with the glass assembly removed, cracked, or broken. Use protective gloves to handle any broken or damaged glass assembly components.

WARNING: Do not use substitute materials.

WARNING: Avoid striking or slamming glass assembly. Avoid abrasive cleaner. DO NOT clean glass while it is hot.

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

Performed by: Homeowner

Frequency: Annually

#### Action:

- Prepare a work area large enough to accommodate the glass assembly on a flat, stable surface.
- · Remove safety screen and glass frame assembly.
- Clean glass window with a suitable fireplace glass cleaner using a soft cloth. Abrasive cleaners must not be used. Be careful not to scratch the glass when cleaning.
- Reinstall glass assembly and safety screen.
- Any safety screen, guard, or barrier removed for servicing the appliance must be replaced prior to operating the appliance.

Performed by: Qualified Service Person

Frequency: Annually

#### Action:

- Clean glass window with a suitable fireplace glass cleaner using a soft cloth. Abrasive cleaners must not be used. Be careful not to scratch the glass when cleaning.
- Inspect the glass for cracks, scratches, and nicks.
- Verify the glass assembly is properly intact and not damaged.
- Replace the glass and the assembly #701-014T as necessary.
- Only Hussong Mfg. Co., Inc. will supply the replacement of glass assembly as a complete unit.

# 12.5 Burner and Pilot System

The burner assembly may be removed for easier access to the control compartment. Refer to section 7.4 Control Board Removal and Installation on page 25. Verify gas supply is turned on and filled. Consult with plumber or gas supplier as necessary.

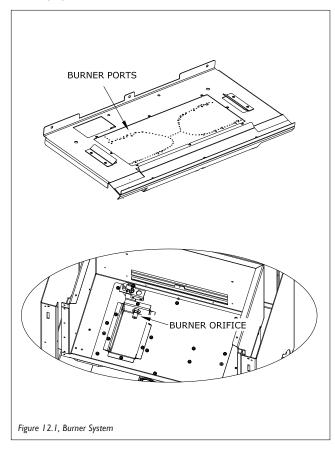
Performed by: Qualified Service Person

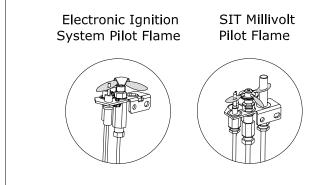
Frequency: Annually

## **Action:**

- Vacuum all components of the burner system.
- Check all accessible gas-carrying tubes, connections, pipes, and other components for leaks.
- Inspect the operation of the flame safety system Pilot or Flame rectification device. Visually check pilot light when in operation.
- Continuous Pilot Ignition System (Millivolt): Ensure pilot flame impinges on thermocouple. Clean pilot hold and adjust pilot flame at gas valve for proper flame impingement. Verify thermocouple connections and millivolt production.
- Inspect and ensure the lighting of the main burner occurs within

   (4) seconds of the main gas valve opening. Check for faulty or
   incorrect wiring and correct or replace as necessary. Inspect
   primary air openings (burner ports) for blockage, especially near
   the pilot.
- Visually check burner flame pattern when in operation. Flames should be steady, not lifting or floating.
- Test and measure the flame failure response time of the flame safety system. It must de-energize the safety shutoff in no more than (30) seconds.







Lazy, yellow flames-no adjustment necessary (Ideal Flame Appearance)

Figure 12.2, Pilot and Burner Correct Flame Appearance

# 13.0 REPLACEMENT PARTS LIST

Replacement parts are available through your local dealer. Contact your local dealer for availability and pricing.

## The following warning is for replacement parts for this appliance.

**WARNING:** This product can expose you to chemicals including Lead, which is [are] known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information, visit www.P65Warnings.ca.gov.

OAK-18-L CONTROL BOARD AND PARTS			
Dexen Control Board - Natural Gas	OP18-D350	Pilot Orifice - Natural Gas #.018	700-094P
Dexen Control Board - Propane	OP18-D351	Pilot Orifice - Propane #.012	700-095P
Dexen MH3V Gas Valve - Natural Gas	DEX-3VN	Dexen Valve Step Motor - Natural Gas	DEX-SMN
Dexen MH3V Gas Valve - Propane	DEX-3VLP	Dexen Valve Step Motor - Propane	DEX-SMLP
Komfort 8KI Control Module	DEX-8KI	36" Flexible Gas Line - Black	700-236B
DEX-AUX3 Control Board	DEX-AUX3	Flexible Gas Line - Valve to Burner Connection	700-226F
Main Wire Harness	DEX-MWH	NG Burner Orifice #43	700-243
AUXI Wire Harness	DEX-AIWH	Propane Burner Orifice #54	700-254
On/Off Rocker Switch	700-023	Conversion Kit - Natural Gas	NCK-OPI8L-D
NG Dexen PSE IPI Pilot Assembly	DEX-191	Conversion Kit - Propane	LCK-OP18L-D
Propane Dexen PSE IPI Pilot Assembly	DEX-191-1	Burner Plate	OP18-350
Dexen Transmitter (Remote Control)	DEX-RC3	Burner	OP18-351
Toggle Wire Harness	DEX-TWH	Battery Pack – 6V	DEX-BP

OAK-18-MV CONTROL BOARD AND PARTS			
Control Board - Natural Gas	OP18-770	Pilot Orifice - Natural Gas #51	700-165
Control Board - Propane	OP18-771	Pilot Orifice - Propane #35	700-095
SIT Gas Valve - Natural Gas	700-086N	SIT Millivolt Pilot Hood	700-098
SIT Gas Valve - Natural Gas (7 day time-out)	700-086N-7	SIT Millivolt Quick Change Screw	900-QCS
SIT Gas Valve - Propane	700-087A	36". Flexible Gas Line - Black	700-236B
SIT Gas Valve - Propane (7 day time-out)	700-087A-7	Flexible Gas Line - Valve to Burner Connection	700-226F
On/Off Rocker Switch	700-023	NG Burner Orifice #43	700-243
SIT Pilot Assembly - Natural Gas	700-088	Propane Burner Orifice #54	700-254
SIT Pilot Assembly - Propane	700-089	Conversion Kit - NG	OCK-S43A
Push Button Igniter	700-032	Conversion Kit - Propane	OCK-S54A
Flexible Pilot Tubing (valve to pilot)	700-091	Burner Plate	OP18-350
Millivolt Generator	700-092	Burner	OP18-351
Thermocouple	700-093		

Hussong Manufacturing Co., Inc. P.O. Box 577 204 Industrial Park Drive Lakefield, MN 56150-0577 USA OAK-18-L and OAK-18-MV

GLASS AND GLASS GASKET		
12.75" x 18.125" Standard Glass with Gasket	701-014T	
I-I/8" Glass Gasket	900-006	
Valance	OP18-005	

FAN KIT	
Fan Kit (OP18-L) (Standard)	OP18-028-IPI
Fan Kit (OP18-MV) (Optional)	OP18-028

SAFETY BARRIERS		
I7.875" x 22" Safety Screen (only)	OPT-ES	

OVERLAYS				
Prairie Design Overlay	OP18-POL			
Arched Prairie Design Overlay	OP18A-POL			

LOG SET			
6 Piece Log Set	OP18-500		
#OP18   Log	OP18-1		
#OP18 2 Log	OP18-2		
#OP18 3 Log	OP18-3		
#OP18 4 Log	OP18-4		
#OP18 5 Log	OP18-5		
#OP18 6 Log	OP18-6		
Rock Wool Embers	900-REMB		
Lava Rock 1/2"	600-702		
Lava Rock 1/4"	600-703		

ADDITIONAL COMPONENTS			
4" Restrictor Plate	900-085		
Manual Gas Shut-off Valve	700-203		
Remote Receiver Mounting Bracket	700-308RB		

Hussong Manufacturing Co., Inc. P.O. Box 577 204 Industrial Park Drive Lakefield, MN 56150-0577 USA OAK-18-L and OAK-18-MV

# LIMITED LIFETIME WARRANTY

## **Warranty Coverage**

Hussong Manufacturing Company, Inc. (Hussong Mfg.) warrants this Kozy Heat gas appliance from the date of purchase to the original purchaser, that it is free of defects in materials and workmanship at the time of manufacture. Registering your fireplace warranty does not require any documents to be sent in to Hussong Mfg. Please retain your proof of purchase reflecting the date of purchase along with the serial number and model of your fireplace for any future warranty claims.

If a defect is noted within the warranty period, the customer should contact their authorized dealer for service within 30 days.

## 30 Days: Parts & Labor\*

- **Paint**
- Light bulbs
- Gasket material
- Glass media and media dam

## Year 1: Parts & Labor\*

All parts and material except the items listed in the 30 day warranty and any exclusions or limitations that may apply.

\*Hussong Mfg. will issue labor reimbursement to an authorized dealer only. Hussong Mfg. will not be liable for charges occurred as a result of any service performed by a non-authorized service provider, without pre-authorization.

## **Years 2 through Lifetime: Parts Only**

- Firebox
- Heat Exchanger
- Logs
- Burner tube or pan
- Outer shell
- Heat shield(s)
- Front Viewing Glass (thermal shock only)
- Refractory Firebox liner (excluding enamel and glass panels)

## **EXCLUSIONS AND LIMITATIONS**

- This appliance must be installed by a licensed, authorized service technician or contractor. It must be installed, operated and maintained at all times in accordance with the instructions in the owner's manual or the warranty is void.
- This warranty is nontransferable and is made to the original purchaser only. 2.
- 3. This warranty excludes standard wear and tear of the appliance which is considered normal usage over time.
- 4. Discoloration and some minor expansion, contraction or movement of certain parts, resulting in noise, is normal and not a defect.
- Warranty is automatically voided if the appliance's serial number and/or testing label is removed or if the appliance is altered or 5. tampered with in any way.
- Warranty is void if the appliance is subject to submersion in water or prolonged periods of dampness or condensation. Any damage 6. to any part of the appliance due to water or weather damage which is the result of, but not limited to, improper chimney/venting installation will also render this warranty void.
- 7. This warranty does not cover installation and operational related problems such as environmental conditions, nearby trees, buildings, hilltops, mountains, inadequate venting or ventilation, excessive offsets, negative air pressures caused by any mechanical systems.
- Chimney components and other Non-Hussong Mfg. accessories used in conjunction with the installation of this appliance are not covered under this warranty.
- Damage to plated surfaces or accessories, if applicable, caused by scratches, fingerprints, melted items or other external sources left on the surfaces from the use of cleaners is not covered under this warranty.
- 10. It is expressly agreed and understood that this warranty is Hussong Mfg.'s sole obligation and purchaser's exclusive remedy for defective fireplace equipment. Hussong Mfg. is free of liability for any damages caused by this appliance, as well as inconvenience expenses and materials. Incidental or consequential damages are not covered by this warranty. In some states, the exclusion of incidental or consequential damage may not apply. Hussong Mfg. shall not be held to implied warranties and this warranty shall replace all previous warranties.
- 11. This limited lifetime warranty is the only warranty supplied by Hussong Mfg. Any warranties extended to the purchaser by the dealer/ distributor, whether expressed or implied, are hereby disclaimed and the purchaser's recourse is expressly limited to the warranties set forth herein.
- 12. Any part repaired or replaced during the limited warranty period will be warranted under the terms of the limited warranty for a period not to exceed the remaining term of the original limited warranty.
- 13. Any replacement part repaired after the warranty period will include a 90 day parts coverage
- 14. Hussong Mfg. may require the defective part to be returned using a pre-authorized RGA number or a photo of the defective component. Failure to provide either can result in a denied claim.
- 15. This warranty does not cover the appliances' ability to heat a desired space, as there are many factors that can impact the heating performance in each home. Consideration should be implied to the appliance's location, room size, home design, environmental conditions, insulation, and tightness of the home.
- 16. Hussong Mfg. reserves the right to make changes at any time, without notice, in design, material, specifications, and prices. Hussong Mfg. reserves the right to discontinue models and products.