

# 55345, 55345-MV, 55345-IPI

*Installation Manual - 2014 Rev 28*



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## INSTALLATION MANUAL

# MINNETONKA

Models: #55345

#55345-MV

#55345-IPI

DIRECT VENT GAS FIREPLACE



English and French Installation Manuals Available Through Your Local Dealer or Visit Our Website at [www.kozyheat.com](http://www.kozyheat.com)  
*Les manuels d'installation en anglais et en français sont disponibles chez votre détaillant local ou en visitant notre site Web : [www.kozyheat.com](http://www.kozyheat.com)*

**IMPORTANT:** This installation manual is to be used in conjunction with SUPPLEMENTAL INSTALLATION AND HOMEOWNER INFORMATION MANUAL. Read both manuals before installing and operating appliance.

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

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.

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

—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.
  - ❑ Immediately call 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.



## WARNING



**HOT GLASS WILL CAUSE BURNS.  
DO NOT TOUCH GLASS UNTIL COOLED.  
NEVER ALLOW CHILDREN TO TOUCH GLASS.**



Report No. 216-F-15c-6.5

MARCH 2014  
MTK-REV-28



# INTRODUCTION

Read this manual before installing or operating this appliance.  
Please retain this owner's manual for future reference.

## CONGRATULATIONS!

*We welcome you as a new owner of a Kozy Heat gas fireplace. Kozy Heat products are designed with superior components and materials and assembled by trained craftsmen who take pride in their work. The burner and valve assembly are 100% test-fired and the complete fireplace is thoroughly inspected before packaging to ensure that you receive a quality product. Our commitment to quality and customer satisfaction have remained the same for over 30 years. We offer a complete line of gas and wood fireplaces, unique cabinets and stylish accessories to compliment any décor. 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 to not only function and reliability, but customer safety as well. 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



### Homeowner Reference Information

*We recommend that you record the following information about your fireplace.*

Model Name: \_\_\_\_\_ Date purchased/installed: \_\_\_\_\_

Serial Number: \_\_\_\_\_ Location on fireplace: \_\_\_\_\_

Dealership purchased from: \_\_\_\_\_ Dealer Phone: \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_





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# SAFETY INFORMATION

This fireplace has been tested by OMNI-Test Laboratories, Portland, Oregon and complies with:

ANSI Z21.88-2009/CSA 2.33-2009, "Standard for Vented Gas Fireplace Heaters"  
CAN/CGA 2.17-M91 (R2009), "Gas-Fired Appliances for Use at High Altitudes"  
CAN/CSA P.4.1-09, "Testing Method for Measuring Annual Efficiency"

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*

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

- Installation and repair should be done only by a qualified service person. The appliance should be inspected by a qualified service person before use. Annual inspection by a qualified service person is required to maintain warranty. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulation air passageways of the appliance be kept clean.
- If this appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.
- Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
- 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.
- Clothing or other flammable material should not be placed on or near the appliance.
- Adequate accessibility clearances for servicing and proper operation must be maintained.
- This appliance must not share or be connected to a chimney flue serving any other appliance.
- Keep area around the appliance clear of combustible materials, gasoline and other flammable vapor and liquids.
- The flow of combustion and ventilation air must not be obstructed.
- Due to high temperatures the appliance should be located out of traffic and away from furniture and draperies.
- The glass front or any part removed for servicing the appliance must be replaced prior to operating the appliance. Work should be done by a qualified service technician.
- Clean glass only when cool and only with non-abrasive cleansers.
- **WARNING: DO NOT OPERATE APPLIANCE WITH THE GLASS/FRAME ASSEMBLY REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD ONLY BE PERFORMED BY A LICENSED OR QUALIFIED SERVICE PERSON.**
- The glass assembly, Part #MTK-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc. DO NOT SUBSTITUTE MATERIALS.
- Do not strike or slam glass assembly.
- Any safety screen or guard removed for servicing the appliance must be replaced prior to operating the appliance.
- Under no circumstances should any solid fuel (wood, coal, paper or cardboard etc.) be used in this appliance.
- Keep burner and control compartment clean.
- 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.

# COMMONWEALTH OF MASSACHUSETTS REQUIREMENTS

## NOTE

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:

## 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 can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

## 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.

## 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"**.

## INSPECTION

The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08 (2) (a) 1 through 4.

## EXEMPTIONS

The following equipment is exempt from 248 CMR 5.08 (2) (a) 1 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.

## MANUFACTURER REQUIREMENTS - 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.

## MANUFACTURER REQUIREMENTS - 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.



# SPECIFICATIONS

## FIREPLACE DIMENSIONS

	DESCRIPTION	Height	Width	Back Width	Depth	Opening Width	Glass Frame Height	Stand-off Height	Front to Vent Center (Vert. Term.)	Floor to Vent Center (Hor. Term.)	Front to Angled Back
FIREPLACE DIMENSIONS	INCHES	34-1/2	40-7/8	29-1/4	21-3/8	35-1/2	26-1/2	10	18-1/2"	32-5/8	10-1/4
	MILLIMETERS	876	1038	743	543	902	673	254	470	829	260

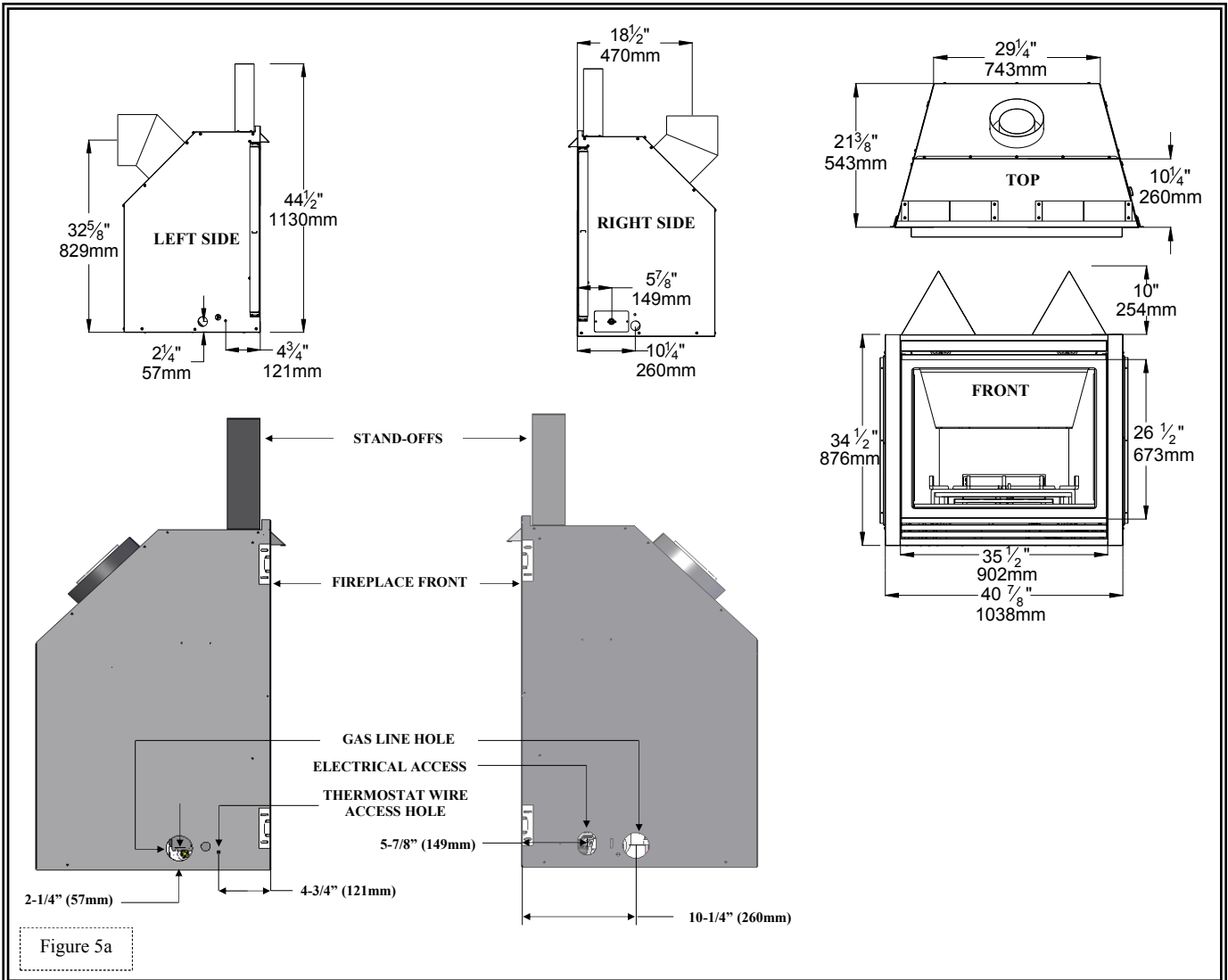


Figure 5a

## CLEARANCES

Top of unit face to header (cement board may be used in this area).	10" (254mm)
From unit left & right sides and back	1/2" (13mm)
From surround sides (flush)	1/4" (6mm)
To flooring	0" (0mm)
Unit top to ceiling	31" (787mm)
Unit side to adjacent sidewall	12" (305mm)
Mantel 10" (254mm) deep from top of fireplace	15" (381mm)

# SPECIFICATIONS

## INSTALLATION OVERVIEW

### NOTE

The qualified installer should follow the procedure best suited for the installation.

1. Frame an opening for the fireplace, allowing for vent installation (top or rear) and type of installation (corner or flat wall application).
2. If masonry (optional) is used, prepare foundation for the masonry load. A lintel is required to support the added weight above fireplace.
3. Attach nailing flanges to fireplace.
4. Insert fireplace into framing.
5. Install hearth (if applicable).
6. Complete gas line installation.
7. Complete electrical hook-up. Install any standard or optional electrical components at this time.
8. Complete venting installation.
9. Secure fireplace to flooring through holes in outer box bottom and to framing with nailing flanges. Verify all clearances at this point.
10. Install facing material, mantel or cabinetry, allowing room for optional full face doors, if applicable.
11. Install logs.
12. Install grills and optional decorative doors / faces.
13. Verify proper operation of fireplace and all components.

## PLACEMENT CLEARANCE REQUIREMENTS

- This fireplace must be installed on a level surface capable of supporting the fireplace and venting.
- Fireplace must be placed directly on wood or non-combustible surface (not linoleum or carpet) extending entire depth and width of fireplace.
- Due to high surface temperatures, fireplace should be located out of traffic and away from furniture and draperies.
- 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.

# PREPARE THE FIREPLACE

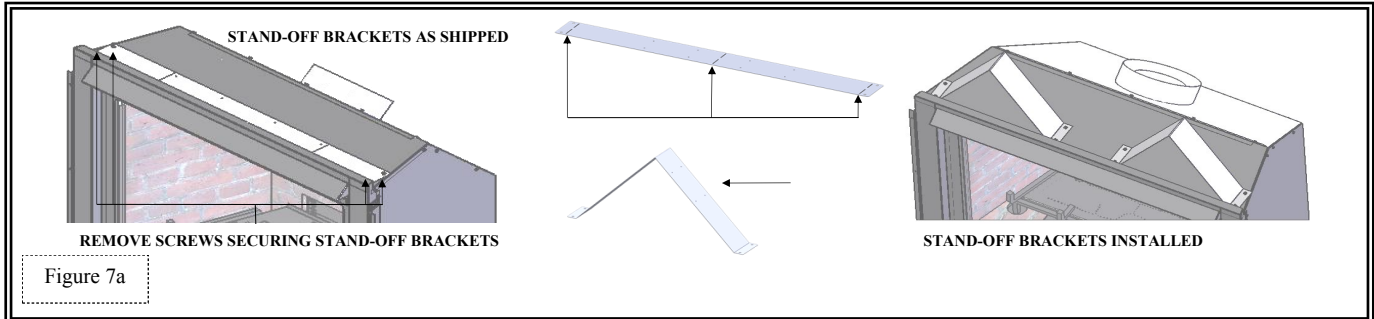
## STAND-OFF ASSEMBLY & INSTALLATION

### WARNING

Top stand-off bracket must be attached to fireplace. Do not remove. Stand-off brackets are not load bearing. Non-combustible zone: Stand-offs provide 10" (254mm) minimum clearance to header. Use only non-combustible material in this area for entire width of fireplace. Do not use wood, sheetrock etc. in this zone. Other clearances apply. All clearances must be maintained.

The top stand-off brackets are attached to fireplace top in a flat state for shipping.

1. Remove and save (4) screws securing stand-off heat shield and stand-off brackets, and (4) screws located under stand-off brackets.
2. Form each stand-off bracket as shown.
3. Re-attach stand-off brackets to fireplace using screws previously removed.



## NAILING FLANGE ASSEMBLY & INSTALLATION

1. Remove (4) nailing flanges from fireplace sides.
2. Align nailing flange with holes on outside corners of fireplace, with the stand-offs tabs on the nailing flanges facing away from the fireplace. Secure with the screws provided in components packet through slots in nailing flanges.
3. Bend perforation on nailing flange until parallel with fireplace face. Do not bend toward fireplace face.
4. Position framing stud against the stand-off tab (located on backside of nailing flange). Secure with nails or screws.

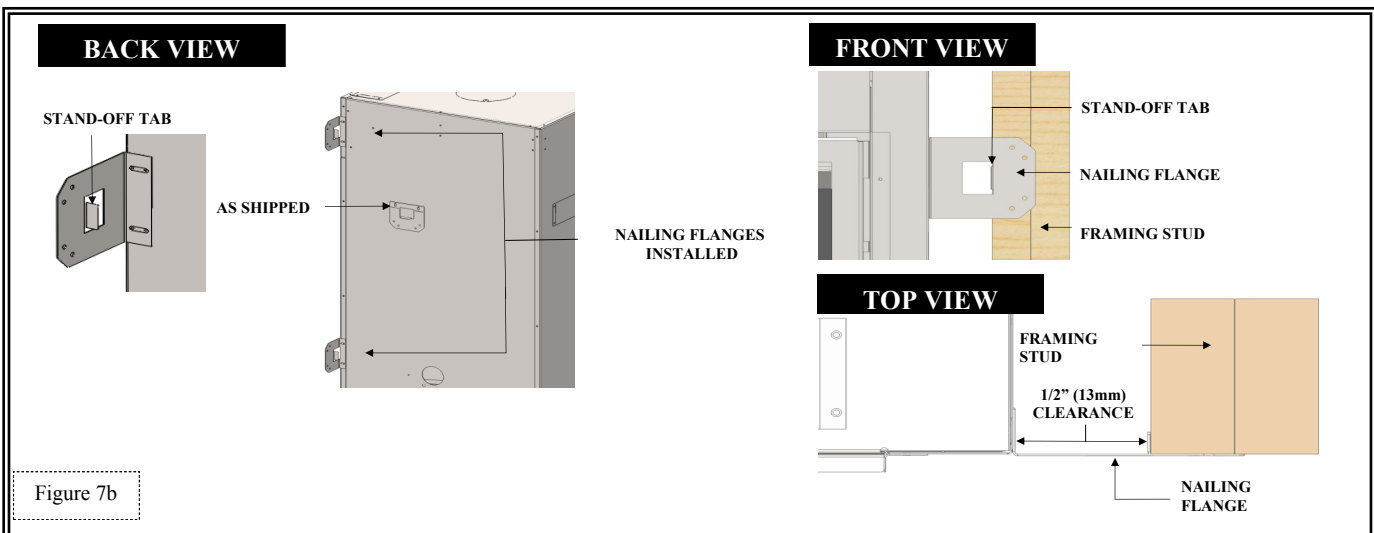
### NOTE

Depending on facing material, the stand-off tabs can be adjusted forward or backward up to 1/2" (13mm).

### CAUTION

Never permanently remove these assemblies from fireplace - they must be secured in place regardless of finish material used.

When installed, nailing flanges provide the minimum 1/2" (13mm) clearance from fireplace sides.



# PREPARE THE FIREPLACE

## HORIZONTAL VENT HEAT SHIELD INSTALLATION

### IMPORTANT

The horizontal vent heat shield must be installed when using a 45-degree elbow to horizontally position the vent system.  
**EXCEPTION:** Corner installations

1. Loosen, but do not remove center three screws at back of fireplace as shown.
2. Bend horizontal vent heat shield at perforation to a 45° angle. Slide (3) slots on horizontal vent heat shield under loosened screws. Re-tighten screws.

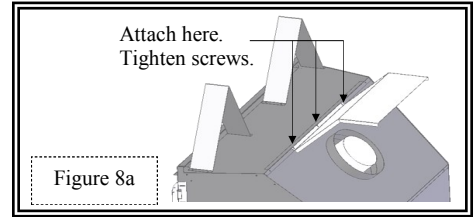


Figure 8a

## FRAMING

### WALL ENCLOSURE ROUGH OPENING

### IMPORTANT

Framing dimensions should allow for wall covering thickness and fireplace facing materials. If using a hearth, add just rough opening size as necessary to maintain at least minimum clearance requirements.

Non-combustible facing material may be applied over (but not directly to) fireplace face. This will prevent facing material from falling off due to heat expansion. Do not obstruct the flow of ventilation air.

### MINIMUM FINISHED OPENING DIMENSIONS

**HORIZONTAL VENTING:** 44-1/2" (1130mm) High x 41-3/8" (1051mm) Wide x 21-7/8" (556mm) Deep.

**VERTICAL VENTING:** 44-1/2" (1130mm) High x 41-3/8" (1051mm) Wide x 23-7/8" (606mm) Deep.

Maintain all clearances as stated in this manual.

### NOTE

Provide adequate clearance in front of fireplace to operate lower grill, open and close optional decorative doors / full door faces, access components, installation of gas line, fan, etc.

### WARNING

Do not obstruct upper and lower grill openings. Room air enters through lower passage, is heated and exits through upper passage. Blocking these passages may result in overheating, creating a potentially hazardous situation.

\* Illustration requires a minimum 5" (127mm) exterior wall depth when using minimum horizontal venting. Anything less than a 5" (127mm) exterior wall depth requires that you add that depth to the 21-7/8" (556mm) dimension to accommodate minimum venting.

5" (127 mm) exterior wall depth shown\*

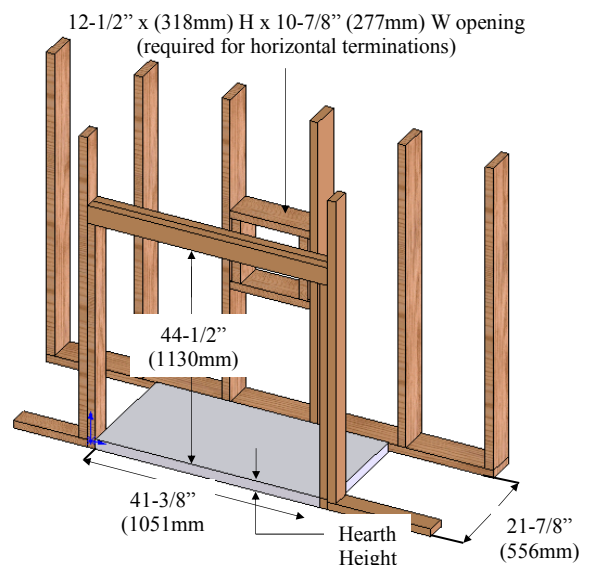


Figure 8b



# FRAMING

Determine exact position of your fireplace, including hearth height, width, and depth, (if applicable). If possible, place fireplace in such a manner that vent termination will be placed between two studs, eliminating the need for additional framing.

If masonry is to be used (optional), prepare necessary foundation for the masonry load. When masonry construction is being used, a lintel must be used over top of fireplace to support the added weight.

Build hearth to desired size and height. If a hearth extension is desired, combustible material may be used.

## NOTE

Consider height of hearth finish material (stone, brick, etc.) when building fireplace platform. Bottom of fireplace must be level with finished hearth to allow for lower grill operation and proper fit of optional decorative full door faces.

## FIRE HAZARD

Do NOT install directly on carpeting, vinyl, or any combustible material other than wood.

## WARNING

Install fireplace on hard metal or wood surface extending the full width and depth of fireplace. Minimum platform size: 40-7/8" (1038mm) wide x 21-3/8" (543mm) deep.

## IMPORTANT

Vent cap location must be in compliance with guidelines on page 19 of this manual.

## WARNING

DO NOT RECESS VENT CAP INTO WALL OR SIDING.

## HORIZONTAL TERMINATIONS

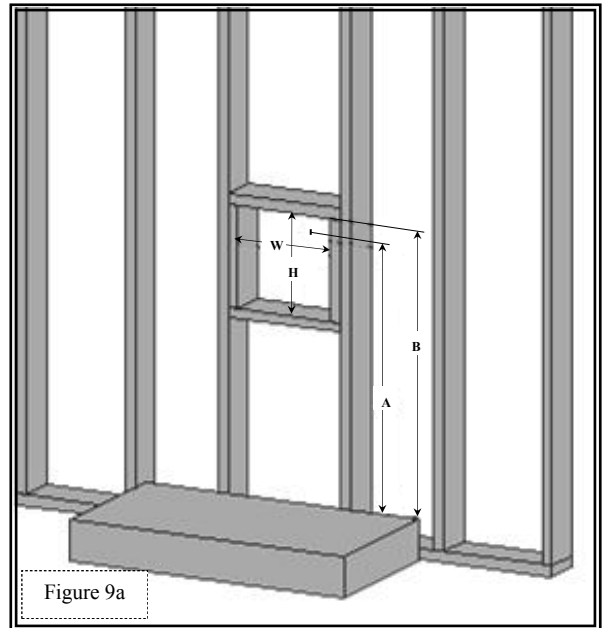
Follow vent pipe manufacturer's installation instructions for horizontal terminations. Include required 3" (76mm) top clearance and 1" (25mm) sides and bottom clearances for approved rigid vent systems and Kozy Heat #800-1 series flexible vent system.

### MINIMUM HORIZONTAL FRAMING DIMENSIONS

	VENT PIPE TOP (A)	FRAMED OPENING TOP (B)
RIGID PIPE	36-1/2" (927mm)	39-1/2" (1003mm)
FLEX PIPE	40" (1016mm)	43" (1092mm)

## VERTICAL TERMINATIONS

Follow vent pipe manufacturer's installation instructions for vertical terminations. A minimum 1" (25mm) clearance on all sides of vertical vent pipe must be maintained.



## CAUTION

Cold air transfer area. The surrounding 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.

## CAUTION

Due to high temperatures, this fireplace should be located out of traffic areas and away from furniture and draperies.

# TYPICAL INSTALLATION OPTIONS

## IMPORTANT

Kozy Heat wall thimble pass-thru (#800-WPT or #800WPT2) must be used on all horizontal vent runs. Follow instructions on page 15 of this manual.

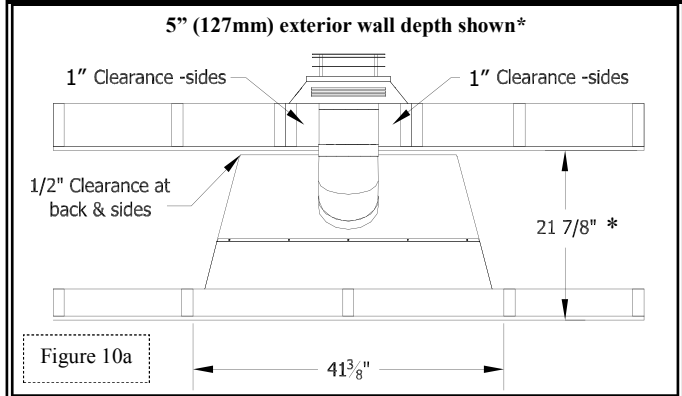
The horizontal heat shield included with this fireplace must be installed when using a 45-degree elbow directly off top of unit to horizontally position vent system. EXCEPTION: Corner installations.

## NOTE

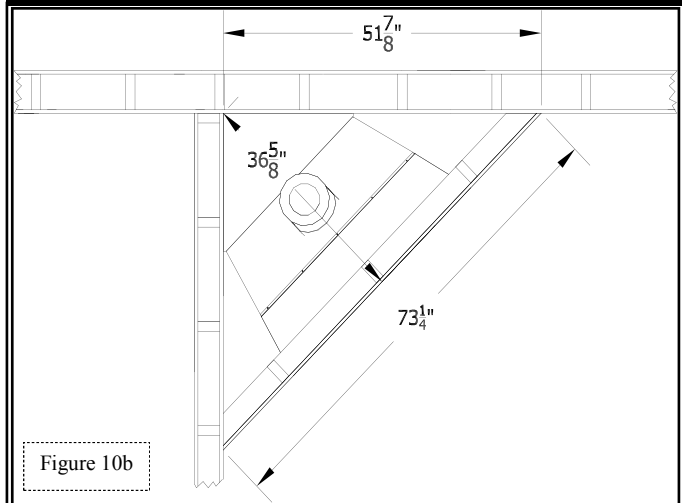
HORIZONTAL VENT HEAT SHIELD NOT SHOWN FOR CLARITY PURPOSES ONLY.

\* Illustration at right requires a min. 5" (127mm) exterior wall depth when using minimum horizontal venting. Anything less than 5" (127mm) exterior wall depth requires adding that depth to 21-7/8" (556mm) dimension to accommodate minimum venting.

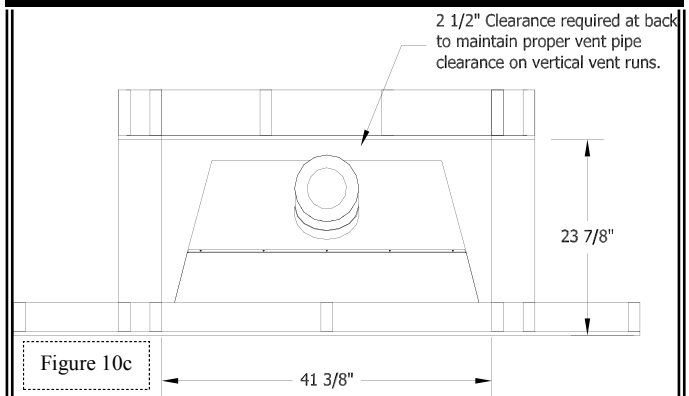
## TYPICAL HORIZONTAL INSTALLATION



## TYPICAL CORNER INSTALLATION



## TYPICAL VERTICAL INSTALLATION



# MANTEL REQUIREMENTS

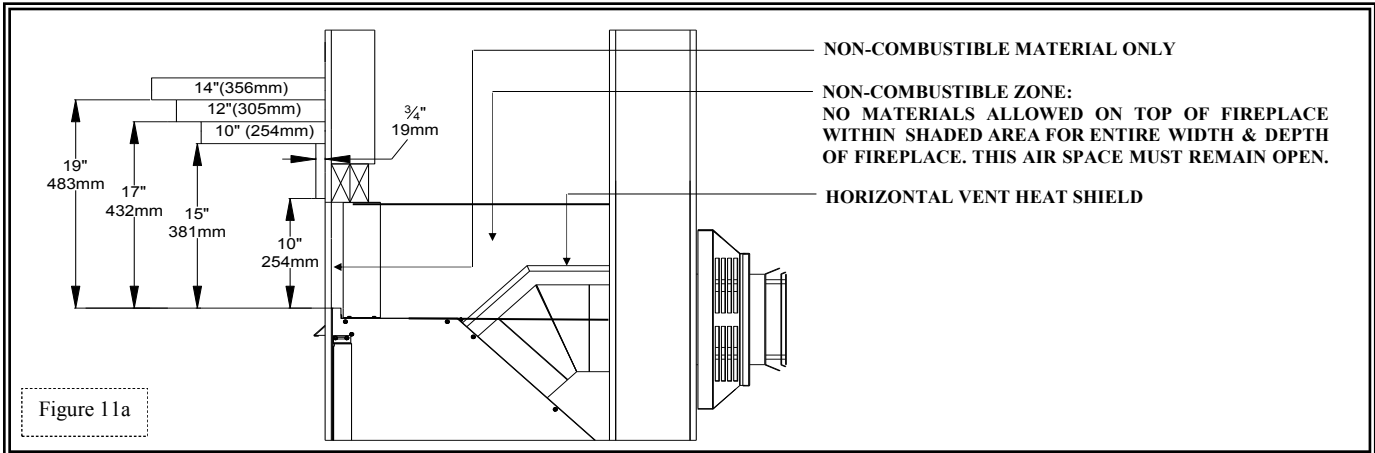
## WARNING

TOP STAND-OFF BRACKETS MUST BE ASSEMBLED AND ATTACHED TO FIREPLACE. DO NOT REMOVE. STAND-OFF BRACKETS ARE NOT LOAD BEARING.

## NON-COMBUSTIBLE ZONE:

**Rigid pipe:** 1-1/2" (38mm) above elbow for entire width and depth (behind header) of fireplace.

**#800-1 series flexible venting:** 1" (25mm) above elbow for entire width and depth (behind header) of fireplace.



# GLASS FRAME ASSEMBLY

## CAUTION

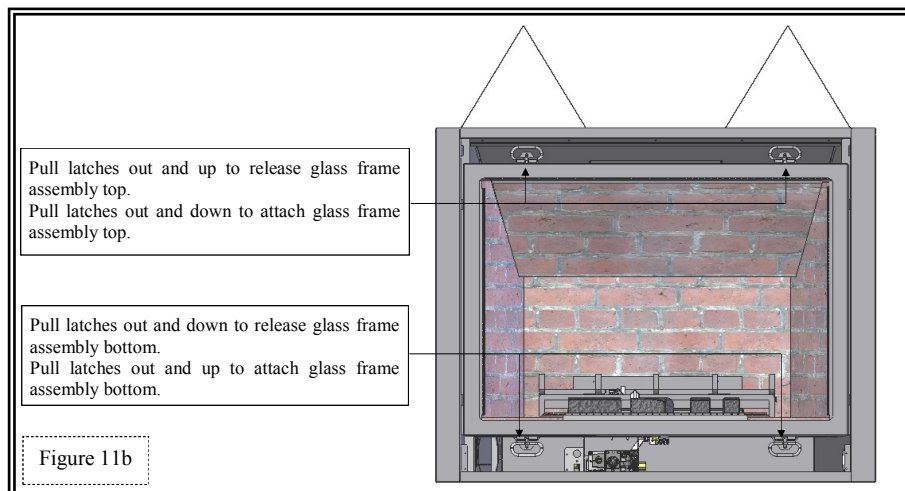
TO PREVENT GLASS FRAME ASSEMBLY FROM FALLING FROM FIREPLACE AND BECOMING DAMAGED, FOLLOW THESE INSTRUCTIONS EXACTLY WHEN REMOVING AND INSTALLING GLASS FRAME ASSEMBLY.

## REMOVE GLASS FRAME ASSEMBLY

1. Locate spring-loaded handles securing glass frame assembly at top & bottom of firebox.
2. Pull bottom handles out and down to release glass frame assembly bottom.
3. Pull top handles out and up to release glass frame assembly top.
4. Remove glass frame assembly from fireplace.

## INSTALL GLASS FRAME ASSEMBLY

1. Place glass frame assembly onto fireplace front.
2. Pull top handles out and down to secure glass frame assembly top.
3. Pull bottom handles out and up to secure glass frame assembly bottom.



# GAS LINE CONNECTION

## GAS CONVERSION

This fireplace is manufactured for use with Natural Gas. Follow instructions included with conversion kit if converting to LP gas. (Sold separately).

### ATTENTION

PLEASE REFER TO SUPPLEMENTAL MANUAL FOR INFORMATION REGARDING PROPER MANIFOLD PRESSURE READINGS FOR YOUR PARTICULAR FIREPLACE MODEL.

### 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.

### 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 Z23.1.

Commonwealth of Massachusetts: Installation must be done by a licensed plumber of gas fitter.

### NOTE

A listed (and Commonwealth of Massachusetts approved) 1/2" (13mm) T-handle manual shut-off valve and flexible gas connector (included) are connected to the 1/2" (13mm) control valve inlet. If substituting for these components, please consult local codes for compliance.

This fireplace is equipped with a 3/8" (10mm) x 18" (457mm) 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.

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 1/2 psi (3.5 kPa).

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

For high altitude installations, consult the local gas distributor or the authority having jurisdiction for proper rating methods.

### IMPORTANT

The efficiency rating of this appliance is a product of thermal efficiency rating determined under continuous operating conditions and was determined independently of any installed system.

	<u>NATURAL GAS</u>	<u>LP GAS</u>
MINIMUM INLET GAS PRESSURE	5" WC (1.25 kPa) (7" WC (1.74 kPa) (recommended)	11" WC (2.74 kPa) (recommended)
MAXIMUM INLET GAS PRESSURE	10.5" WC (2.62 kPa)	13" WC (3.24 kPa)



# VENTING

## IMPORTANT

Consult the local and national installation codes to assure adequate combustion and ventilation air is available.  
Flame height and appearance will vary depending upon venting configuration and type of fuel used.  
Venting requirements apply to both Natural and LP gas.

## CAUTION

This gas appliance must not be connected to or joined with any other chimney flue serving another appliance.

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

## APPROVED VENTING

Simpson Dura-Vent DV-GS 5" x 8" direct vent system (horizontal and vertical terminations).

Metal Fab Direct Chimney System 5" x 8" (horizontal and vertical terminations).

ICC EXCELDirect Direct Chimney Systems 5" x 8" (horizontal and vertical terminations).

Selkirk Model DT Direct Vent Chimney Systems 5" x 8" (horizontal and vertical terminations).

Kozy Heat #800-1 series flexible vent system (horizontal terminations).

BDM 5" x 8" Direct Vent Chimney System (horizontal and vertical terminations).

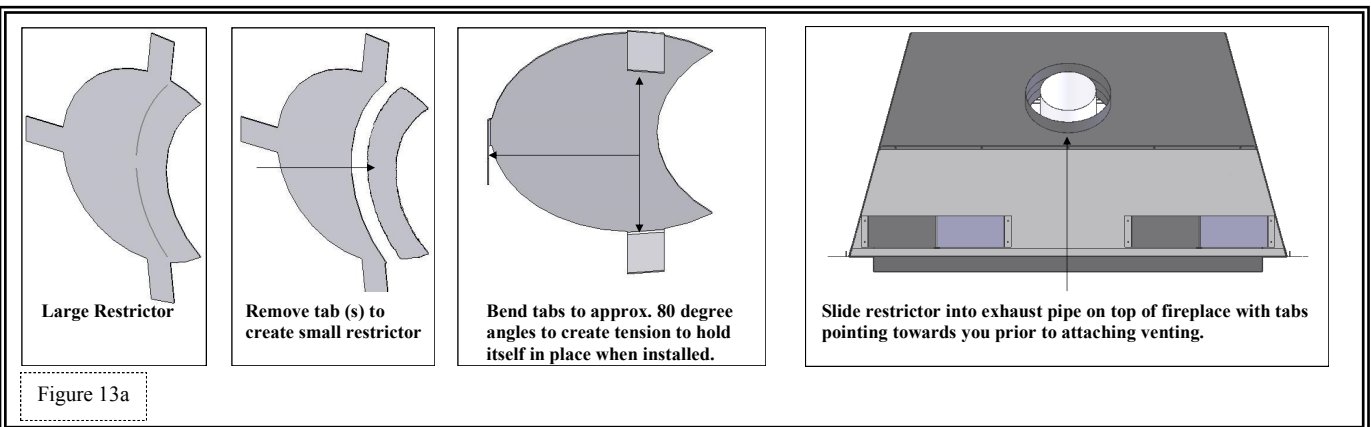
## RESTRICTOR

A restrictor is included in fireplace components packet.

Each installation is unique and affected by various factors including venting configuration, altitude and climate. Therefore, after fireplace installation is complete a restrictor may be required or may need to be removed or modified.

Page 25 has information on restrictor recommendations depending on burner flame appearance and instructions on installation after venting is completed.

**TO BE USED AT INSTALLER DISCRETION.**



## ELBOWS

For each additional 90° elbow used after first elbow, 3ft. (914mm) must be subtracted from maximum allowed venting. For each 45° elbow used, 1-1/2ft. (457mm) must be subtracted from maximum venting allowed.

## NOTE

(2) 45° degree elbows may be used in place of (1) 90° elbow.

# VENTING

## HORIZONTAL TERMINATIONS

### HORIZONTAL VENT SYSTEM CLEARANCES

	TOP	BOTTOM	SIDES
ALL APPROVED VENTING	3 inches (76mm)	1 inch (25mm)	1 inch (25mm)

**NOTE** Horizontal sections require 1/4" (6mm) rise for every 12" (305mm) of travel.

MINIMUM: 45° elbow + 6" (152mm) horizontal + termination cap.

MAXIMUM: U.S. Installations: 45° elbow + 10ft. (3.05m) + termination cap.

Canadian Installations: 0-2000ft. (0-607m): 45° elbow + 10ft. (3.05m) + termination cap.

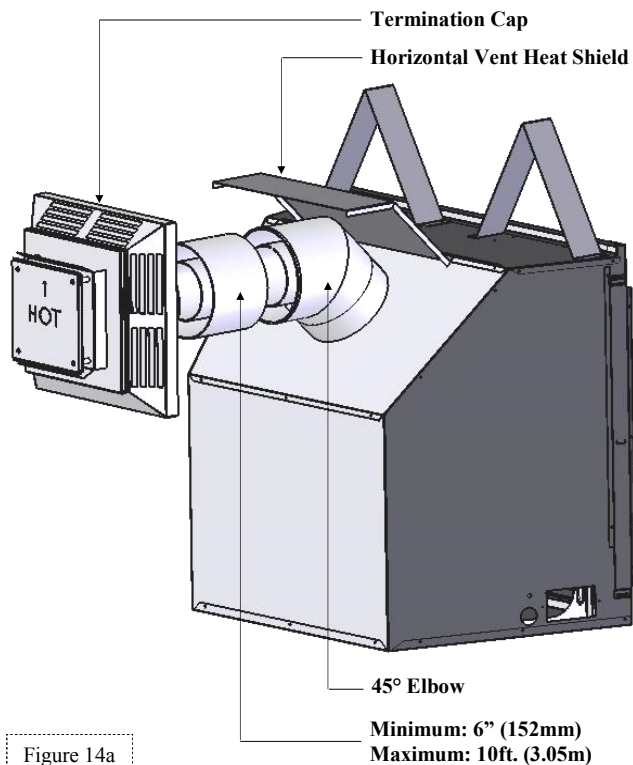
2000-4500ft. (607-1372m): 45° elbow + 10ft. (3.05m) + termination cap. Must de-rate burner orifices: Nat. Gas: #56 & #35  
L.P. Gas: #69 & #52

#### IMPORTANT

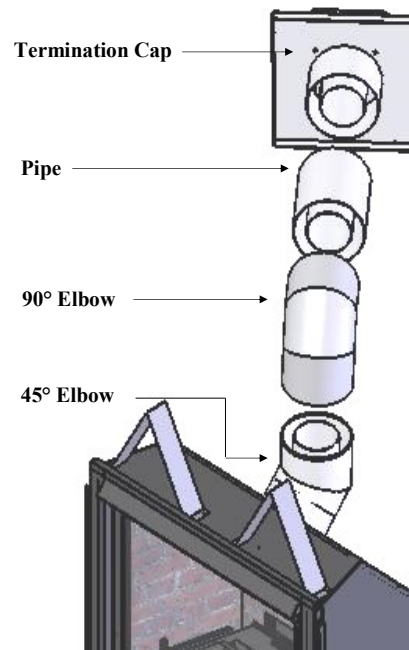
The horizontal vent heat shield must be installed when using a 45-degree elbow to horizontally position the vent system.  
Exception: corner installations

Kozy Heat Wall Pass-thru, #800-WPT (4-1/2" (114mm) - 6-1/2" (165mm) wall thickness) or #800-WPT2 (6-1/2" (165mm) - 12-1/2" (318mm) wall thickness), must be used on all horizontal vent runs.

#### TYPICAL HORIZONTAL INSTALLATION



#### TYPICAL CORNER INSTALLATION



Vent Opening Dimensions for corner installations:  
Refer to vent pipe manufacturer's instructions.

Figure 14b

# VENTING

## #800-WPT WALL PASS-THRU

### IMPORTANT

#800-WPT or #800-WPT2 Wall Pass-Thru must be used on all horizontal vent terminations. This includes both interior and exterior walls. Follow instructions below.

## FRAMING DIMENSIONS FOR #800-WPT KOZY HEAT WALL PASS-THRU

12-1/2" (318mm) HIGH x 10-7/8" (276mm) WIDE

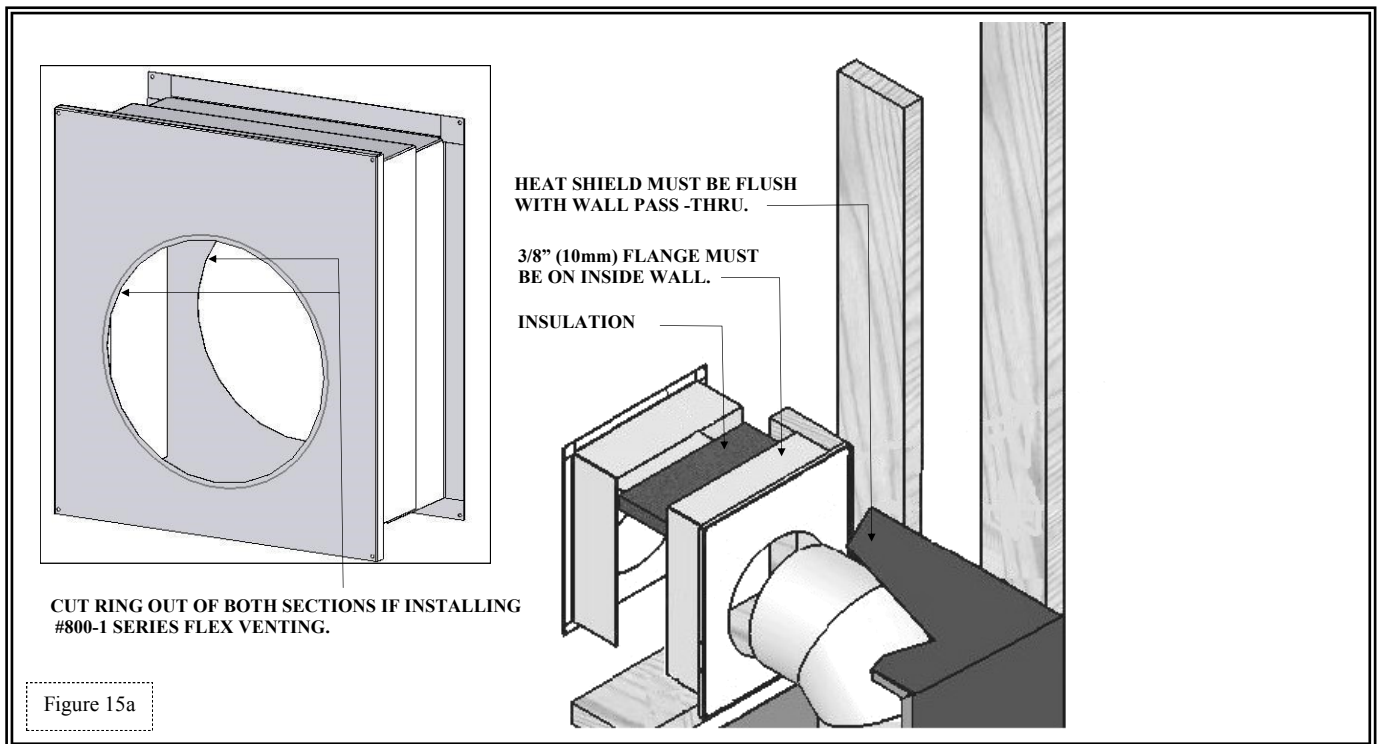
### WARNING

MAINTAIN ALL CLEARANCES AS STATED IN THIS INSTALLATION MANUAL.

### IMPORTANT

If using Kozy Heat series flexible vent system, remove inner ring on each wall pass-thru section with a tin snips. This will provide adequate room for the flexible vent system.

- A. Measure wall thickness; cut insulation panel (included) this length.
- B. Install wall pass-thru section marked #1 (3/8" (10mm) flange) into framed opening. Secure to interior wall with screws (not provided).
- C. From the exterior, place insulation between flange and top of framed opening in wall pass-thru section #1.
- D. Install section marked #2 of wall pass-thru into framed opening, overlapping metal sections as necessary to accommodate wall thickness. Secure to exterior wall with screws (not provided).



# VENTING

## VERTICAL TERMINATIONS

### VERTICAL VENT SYSTEM CLEARANCES

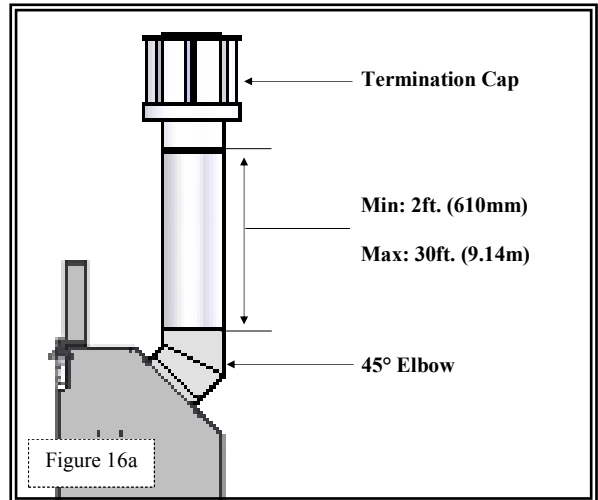
	SIDES
ALL APPROVED VERTICAL PIPE	1 inch (25mm)

MINIMUM: 45° elbow + 2ft. (610mm) + termination cap.

MAXIMUM: 45° elbow + 30ft. (9.14m) + termination cap.

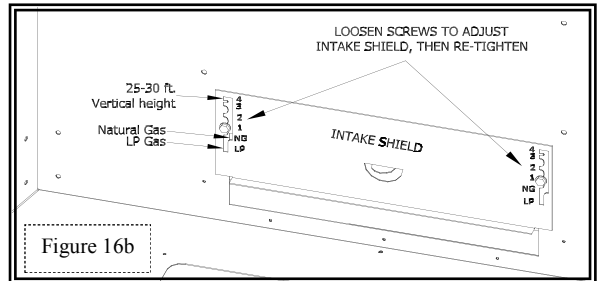
#### NOTE

**VERTICAL TERMINATIONS ONLY:** The combustion air intake shield (located against lower back wall of firebox interior) will require adjustment depending on venting height / configuration and type of fuel used. Use chart below as a guideline when adjusting to achieve desired flame appearance.



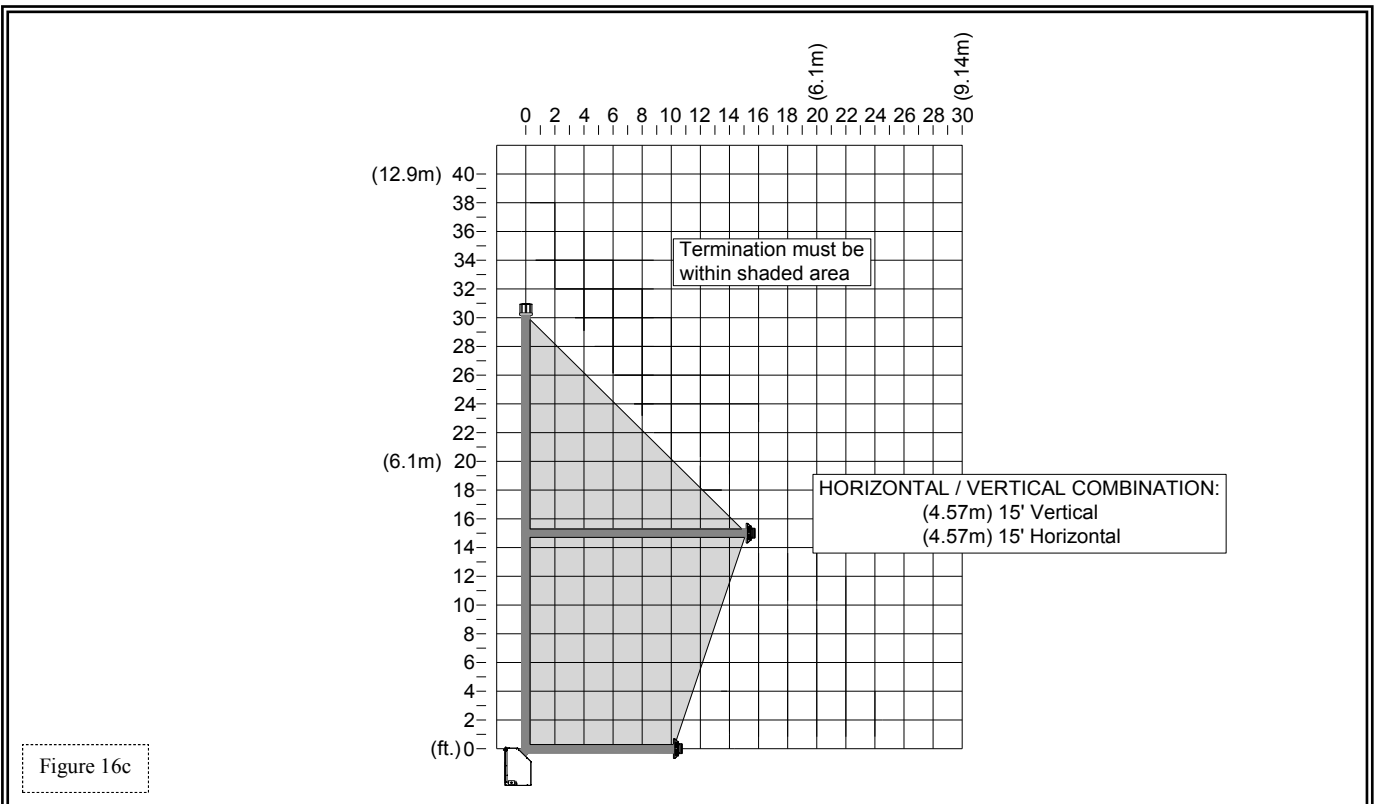
### COMBUSTION AIR INTAKE SETTINGS

VERTICAL TERMINATION HEIGHT	SETTING	GAS TYPE
0 - 10ft. (0 - 3.05m )	1	NAT
11 - 20ft. (3.35m - 6.10m)	2	NAT
21 - 30ft. (6.40m - 9.14m )	3	NAT
25 - 30ft. (7.62m - 9.14m)	4	NAT



## HORIZONTAL & VERTICAL COMBINATION TERMINATIONS

MAXIMUM: 15ft. (4.57m) horizontal + 15ft. (4.57m) vertical + cap. 30ft. (9.14m) total.





# VENTING

## INSTALLATION OF #800-1 SERIES DIRECT VENT TERMINATION KIT(S)

### IMPORTANT

The flex pipe is permanently attached to the exterior plate. **DO NOT ATTACH #844-1 or #845-1 termination kit to fireplace (or extension kit) until it has passed through wall. Install termination plates to outside wall exterior.**

## HORIZONTAL TERMINATIONS Refer to illustration on following page.

IF TERMINATING AGAINST VINYL SIDING, A VINYL SIDING PROTECTOR, INCLUDED WITH #844 AND #845 DIRECT VENT KITS, MUST BE USED. FOLLOW INSTRUCTIONS INCLUDED.

### IMPORTANT

The Kozy Heat wall pass-thru, part #800-WPT or #800-WPT2, must be used on all horizontal vent applications regardless of which vent system you are using.

### CAUTION

This gas appliance must not be connected to a chimney flu serving another type of appliance.

### NOTE

Page 13 has information on restrictor installation in conjunction with venting installation. Page 25 has information on restrictor recommendations depending on burner flame appearance and instructions on installation after venting is completed.

1. If your vent system application does not require an extension kit, proceed to step #7.
2. If your vent system application will require one or more extension kits (Part #846-1), proceed with the following steps. Each #846-1 extension kit contains enough 5" & 8" flexible aluminum to extend chimney an additional 6ft. (1.83m).
3. Gently stretch 5" & 8" flexible aluminum pipes on termination kit (#844-1 or #845-1) and on each extension kit (if used) the length required for your installation.

### IMPORTANT

**DO NOT STRETCH EXTENSION KIT BEYOND 6ft. (1.83 m). DO NOT STRETCH BEYOND WHAT IS REQUIRED - IT IS VERY DIFFICULT TO RECOMPRESS FLEX PIPES ONCE STRETCHED.**

4. Place a bead of sealant outside 5" flex pipe collar (C) (end with EXTERNAL lip), sliding it **inside** 5" pipe on top of fireplace (D). Secure with 3 evenly spaced screws.
5. Place a bead of sealant inside 8" flex pipe collar (E) (end with the INTERNAL lip), sliding it **over** 8" pipe on top of fireplace (F). Secure with 3 evenly spaced screws.
6. If additional extension kits are required, repeat steps #4 - #5, placing 5" & 8" pipes onto previous extension kit.  
**OPTIONAL:** Place insulation between 8" pipe and wall studs.
7. With spacer legs toward the wall, slide interior firestop (H) over 8" pipe and attach to interior wall (over wall materials).

### NOTE

Attachment brackets are included with termination kit. These optional brackets should be screwed or nailed (not provided) onto top and bottom of 9-1/2" (241mm) H x 9-1/2" (241mm) W opening on exterior of house. The termination plates then fit between these brackets. Using screws provided, secure brackets to termination box (A). Attach vinyl siding protector (G).

8. Apply a liberal bead of exterior sealant around outer edge of termination box (A), placing assembly through opening in exterior wall. Place screws through four slots (B), securing it in place.
9. Gently pull 5" & 8" pipes down to top of extension kit, or top of fireplace if no extension kits were used.
10. Place a bead of sealant outside 5" flex pipe collar (C) and slide it into 5" pipe on extension kit or top of fireplace (D). Secure with 3 evenly spaced screws.

**ILLUSTRATION ON FOLLOWING PAGE.**

# VENTING

## FLEXIBLE #800-1 SERIES cont.

A	TERMINATION BOX
B	SLOTS IN EXTERIOR WALL PLATE
C	5" FLEX PIPE COLLAR
D	5" PIPE ON FIREPLACE OR EXTENSION KIT
E	8" FLEX PIPE COLLAR
F	8" PIPE ON FIREPLACE OR EXTENSION KIT
G	VINYL SIDING PROTECTOR
H	INTERIOR FIRESTOP

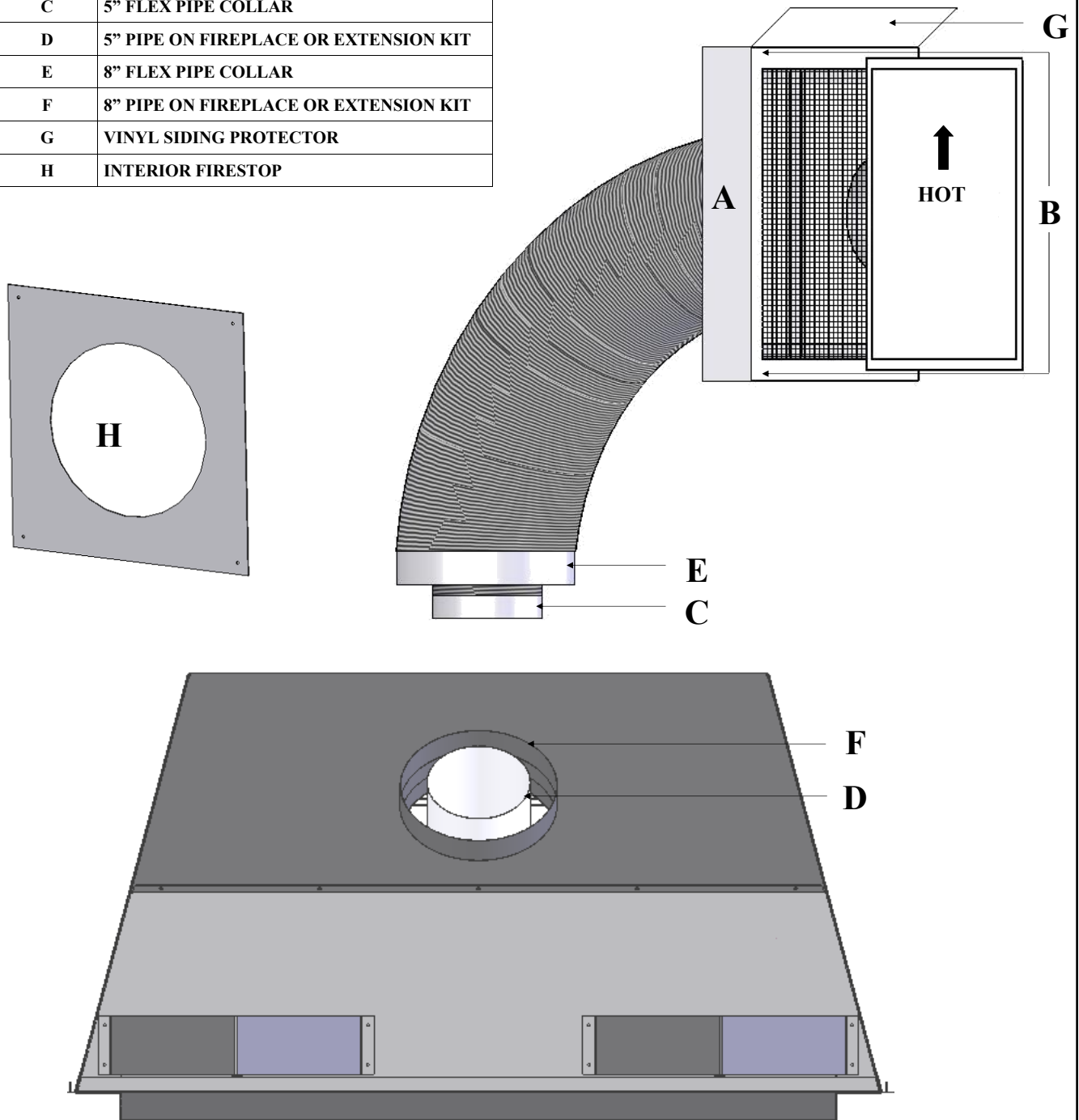


Figure 18a

# TERMINATION VENT CAP LOCATION

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

1. Terminations against vinyl siding must use a vinyl siding protector. Follow instructions included.
2. DO NOT RECESS TERMINATION KIT INTO OUTSIDE BUILDING MATERIALS - i.e.: brick, stone, siding, etc. If necessary, extend framing so that termination kit will be exposed once building materials are installed.
3. Vent termination must not be located where it will become plugged by snow or other material. The flow of combustion and ventilation air must be not obstructed.

## LOCATION CLEARANCES

- A. Above grade, veranda, porch, deck, balcony - 12" (305mm).
- B. Operable window or door - CANADA: 12" (305mm). US: 9" (229mm).
- C. Permanently closed window\* - 12" (305mm) (Recommended to prevent condensation on window).
- D. Ventilated soffit\* \*\* - 24" (610mm).
- E. Unventilated soffit\* \*\* - 12" (305mm).
- F. Outside corner\* - 12" (305mm).
- G. Inside corner\* - 12" (305mm).
- H. Meter / Regulator: CANADA: Not to be installed above a gas meter/regulator assembly within 3ft. (914 mm) horizontally from the centerline of the regulator within a height of 15ft. (4.57m). US\*.
- I. Gas Service regulator vent outlet - CANADA 3ft. (914mm). US\*.
- J. Non-mechanical air supply inlet to building or the combustion air inlet to any other appliance. CANADA: 12" (305mm). US: 9" (229mm).
- K. Mechanical air supply inlet. CANADA: 6ft. (1.83m) US: 3ft. (914mm) above if within 10ft. (3.05m) horizontally. Massachusetts installations: 10ft. (3.05m).
- L. Above paved side-walk or paved driveway located on public property - 7ft. (2.13m).

### NOTE

A vent cannot be located directly above a side-walk or paved driveway that is located between two single family dwellings and serves both dwellings.

- M. Under veranda, porch, deck, or balcony (must be fully opened on a minimum of 2 sides)\*\* - 12" (305mm).
- N. Between two horizontal terminations - 12" (305mm).
- O. Between two vertical terminations - 12" (305mm). Terminations may be same height.
- P. Above furnace exhaust or inlet - 12" (305mm).

\*Clearance must be in accordance with local installation codes & the requirements of the gas supplier.

\*\*VINYL SOFFIT / VINYL CEILING / 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.

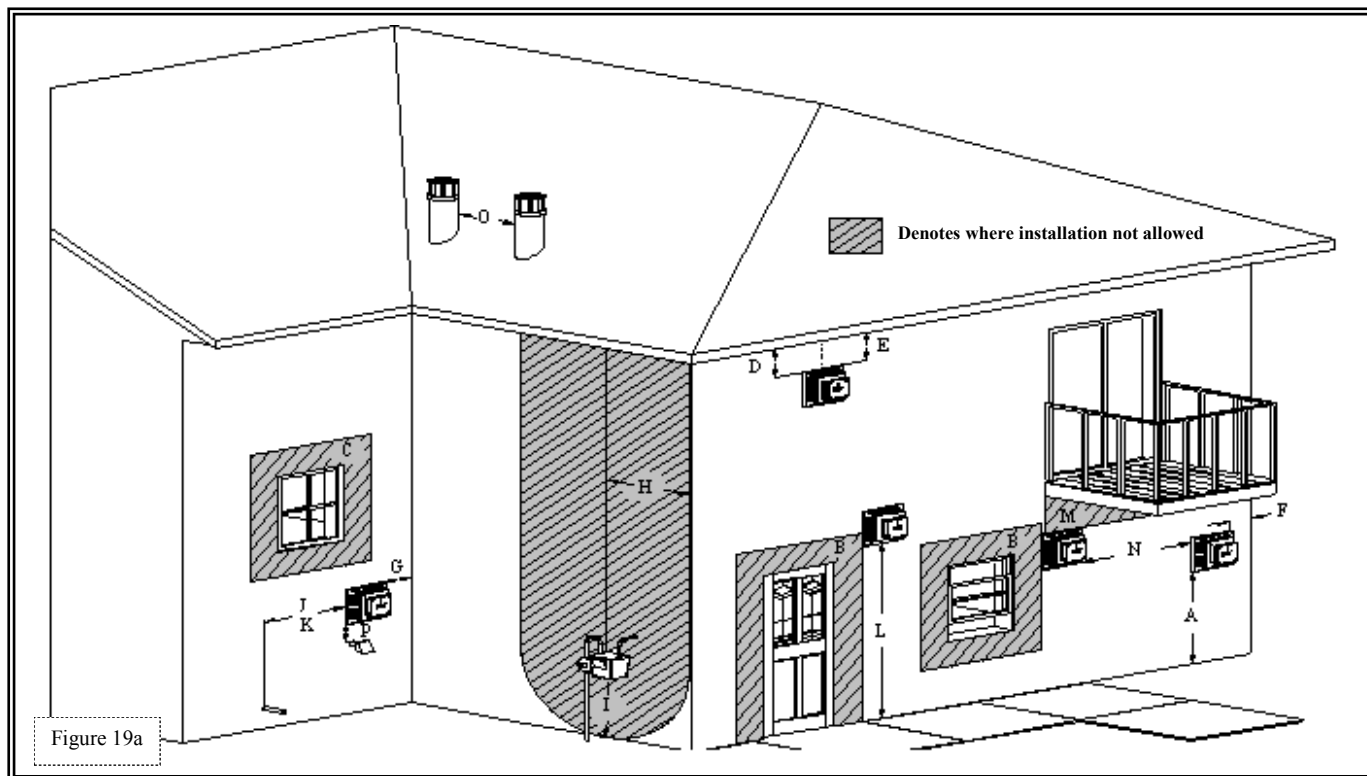


Figure 19a

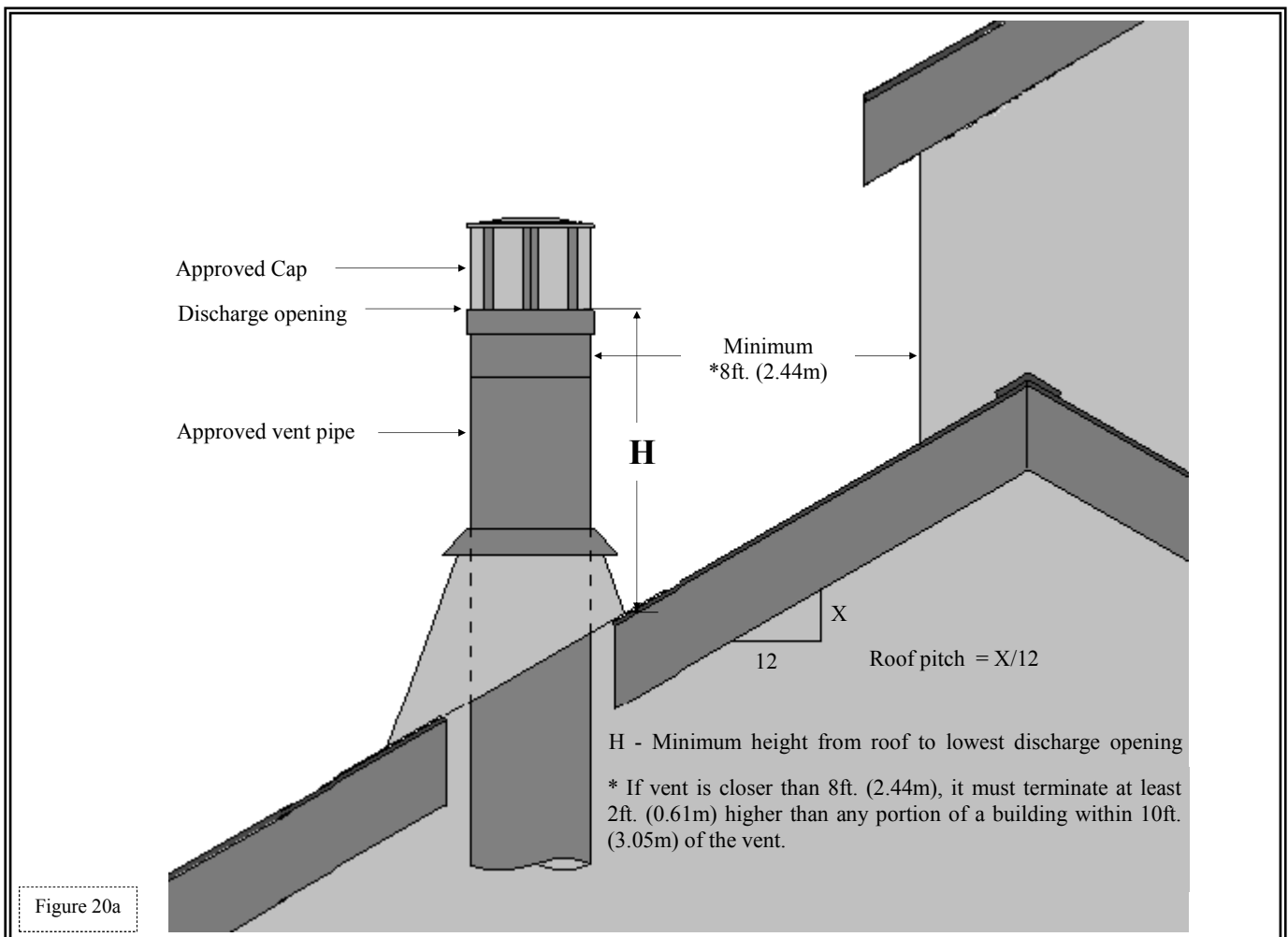
# VENTING (Vertical Cap Requirements)

## VENT TERMINATION CLEARANCES

Roof Pitch	H (Min.) Ft.	H (Min.) m
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

### CAUTION

This appliance must not be connected to or joined with any chimney flue serving any other appliance.



# #MTK-50A LOG SET INSTALLATION

## ATTENTION

If converting to LP (propane) gas or installing optional light kit do so now before installing log set. Follow instructions included with kit. (Sold separately).

## NOTE

Log numbers are located on bottom of each log. Refer to following instructions and illustrations for proper placement.

## CAUTION

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

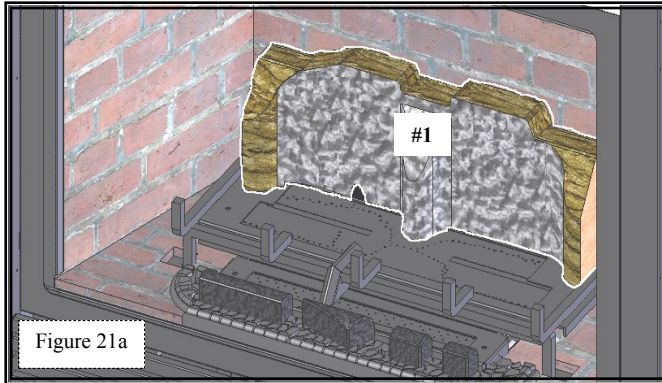


Figure 21a

Position log #1 onto burner, setting backside of log against flange at back. Pull log forward approximately 1/2" (13mm).

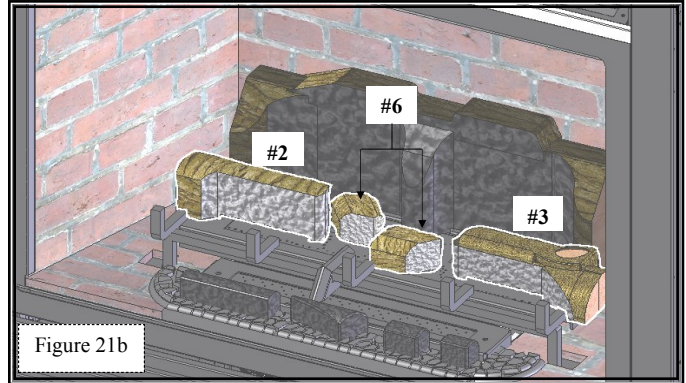


Figure 21b

Position logs #2, #3 & #6 onto burner as shown above.

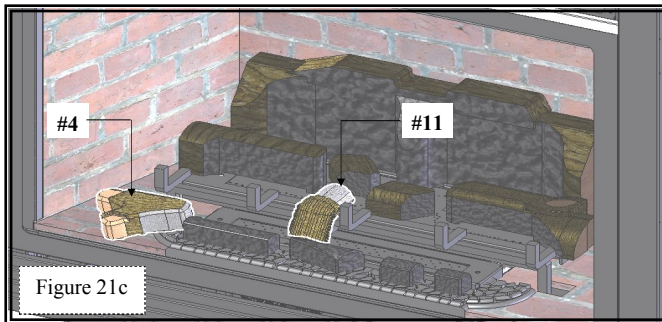


Figure 21c

Position log #4 as shown. Install #11 log over burner jumper tube.

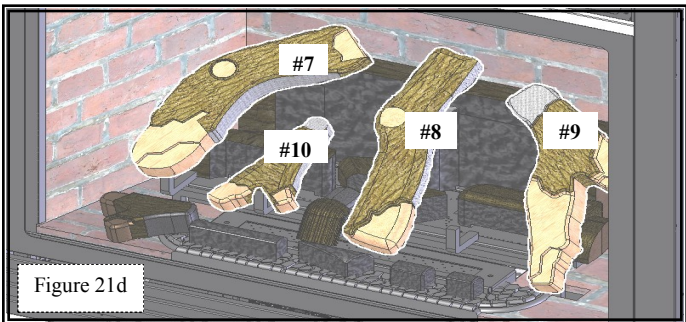


Figure 21d

Position logs #7 - #10 onto base logs, aligning holes in logs to protrusions on base logs and log grate.

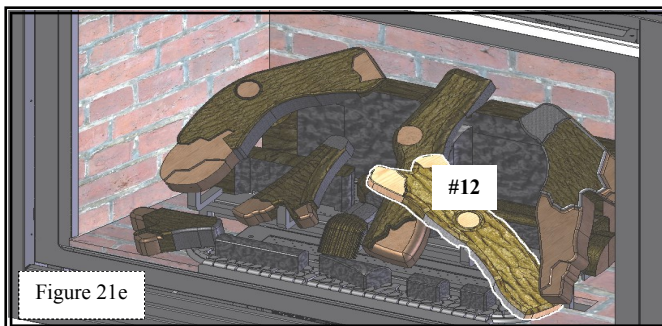


Figure 21e

Align notch in log #12 to log grate while positioning bottom mounting hole to protrusion in log #8.

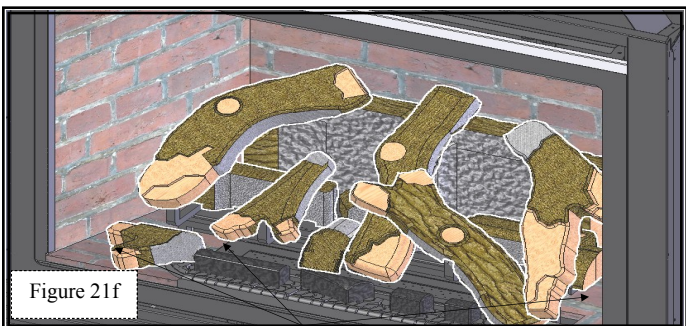


Figure 21f

Randomly place 'Klinkers' in this area. Do not place 'Klinkers' directly on burner ports. Use a steel or stiff bristle nylon brush to distribute Rock Wool Embers onto logs and burner.



# CONTROL BOARD REMOVAL

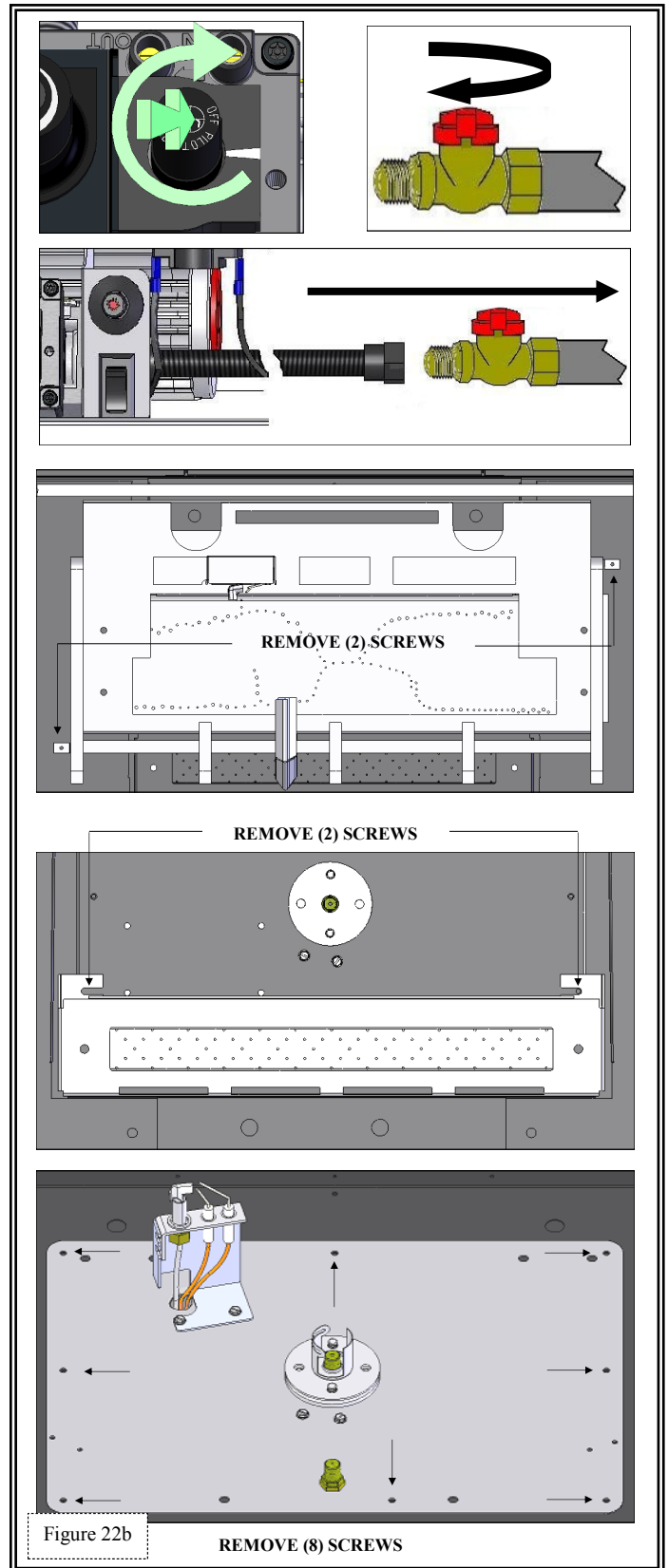
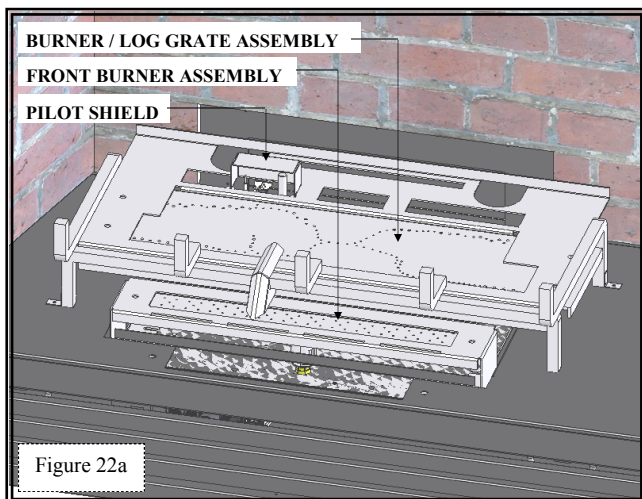
## CAUTION

If burner and/or pilot have been burning, use appropriate protection to avoid burns or damage to personal property before removing any components.

## NOTE

Your components may look slightly different than ones shown.

1. Turn fireplace off.
2. Shut off gas supply at manual shut-off valve.
3. Disconnect gas line flex tube from the manual shut-off valve.
4. Disconnect any wall switch, remote control or thermostat wires from top & bottom terminals on gas valve or unplug all components from electrical outlet, disconnect all wiring harnesses attached to gas valve.
5. Remove upper hood, upper louver.
6. Remove glass assembly.
7. Remove logs, pilot shield and ember log refractory.
8. Remove pilot shield.
9. Remove optional light kit light cylinders, amber light filters, and halogen bulbs if installed.
10. Remove screws securing front left and back right log grate legs. Remove from firebox by lifting front of burner assembly up out of flange while pushing pilot assembly back slightly.
11. Remove screws securing front burner assembly. Remove front burner assembly.
12. Remove adjustable venturi mounting spacers.
13. Remove screws securing optional light kit light stands if installed. Carefully push stands off control board.
14. Remove (8) screws securing control board. Lift board up and out of firebox.



# CONTROL BOARD INSTALLATION

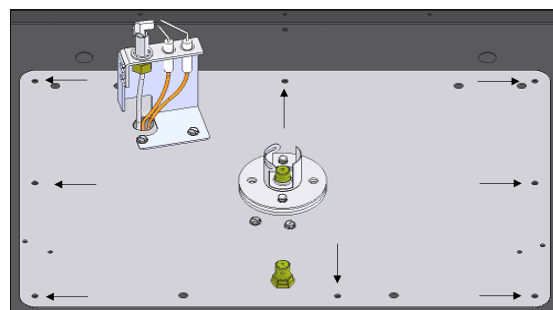
## CAUTION

If burner and/or pilot have been burning, use appropriate protection to avoid burns or damage to personal property before removing any components.

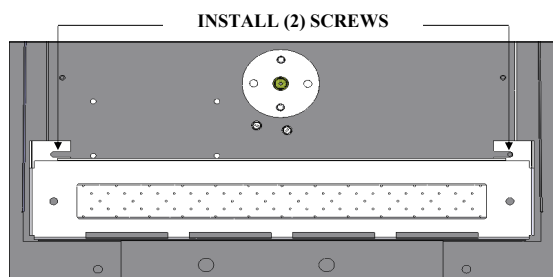
## NOTE

Your components may look slightly different than ones shown.

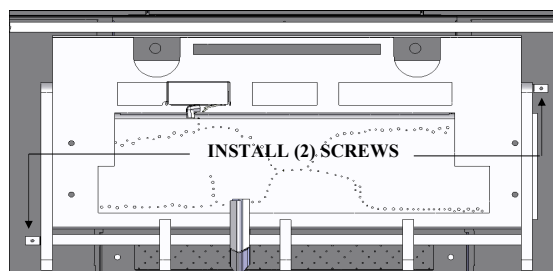
1. Place control board in firebox, aligning holes in control board with holes in firebox bottom. **MAKE SURE SEALING GASKET IS IN PLACE ON FIREBOX BOTTOM!** Secure control board to firebox bottom with (8) screws previously removed.
2. Reinstall optional light kit light kit stands if previously removed.
3. Place venturi spacers onto venturi mounting studs.
4. Re-install front burner assembly, making sure burner tube is positioned over burner orifice. Secure with screws previously removed.
5. Reinstall back burner/log grate assembly by positioning burner tube into venturi collar on control board and pilot assembly through rectangular opening. Secure front left and back right legs with screws previously removed.
6. Reinstall pilot shield.
7. Reinstall ember refractory.
8. Reinstall optional light kit halogen bulbs, light cylinders and amber light filters if previously removed.
9. Reinstall log set. Page 21.
10. Reconnect gas line to manual shut-off valve.
11. Reconnect any wall switch, remote control or thermostat wires to top and bottom terminals on gas valve or re-connect all wiring harnesses to gas valve. Plug all components into electrical outlet.
12. Reinstall glass frame assembly. Page 11.
13. Reinstall upper louver & upper hood. Page 24.
14. Turn gas on.
15. Verify proper log placement, operation of fireplace, and any electrical components.



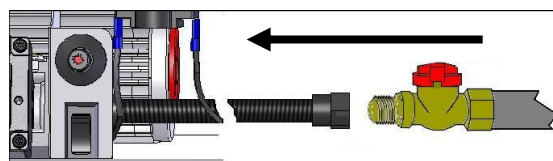
INSTALL (8) SCREWS



INSTALL (2) SCREWS



INSTALL (2) SCREWS



RE-CONNECT REMOTE / THERMOSTAT WIRES

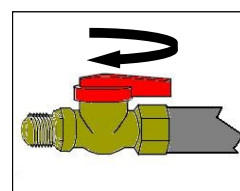
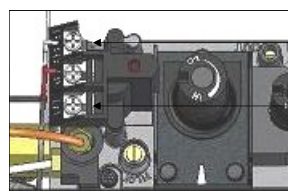


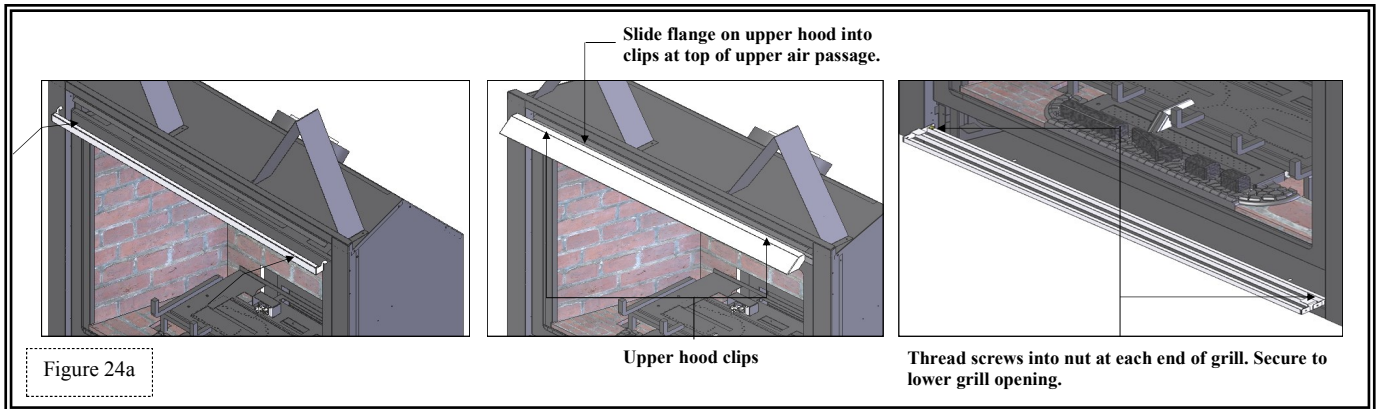
Figure 23a

## CAUTION

CHECK ALL CONNECTIONS FOR LEAKS WITH SOAPY WATER, WHETHER FIELD OR FACTORY MADE.

# GRILL SET

## INSTALLATION



1. Align hooks in upper louver to slots located in fireplace face. Set down into position.
2. Insert upper hood flange into clips located at top of upper air passage, keeping in mind this is a fairly tight fit.
3. Partially thread (2) screws (included in components packet) into nuts at each end of lower grill. Secure to fireplace by threading screws into corresponding holes in inside flange of lower grill opening. The lower grill can now be opened and closed to access gas valve and controls.

## REMOVAL

1. Use both hands to pull hood out of upper air passage clips.
2. Lift upper louver up and out of slots.
3. Remove screws securing lower grill at each end to remove from fireplace.



# FINALIZING THE INSTALLATION

## RESTRICTOR USAGE:

Turn fireplace on and allow to burn for 15 minutes.

If flames indicate there is excessive draft (flickering, short flames), a restrictor may be necessary.

If flames indicate insufficient draft (lifting or ghosting flames), a previously installed restrictor may need to be modified or removed.

### WARNING

TO AVOID PROPERTY DAMAGE OR PERSONAL INJURY, ALLOW FIREPLACE AMPLE TIME TO COOL BEFORE MAKING ANY ADJUSTMENTS AND / OR INSTALLATIONS.

## RESTRICTOR TROUBLESHOOTING

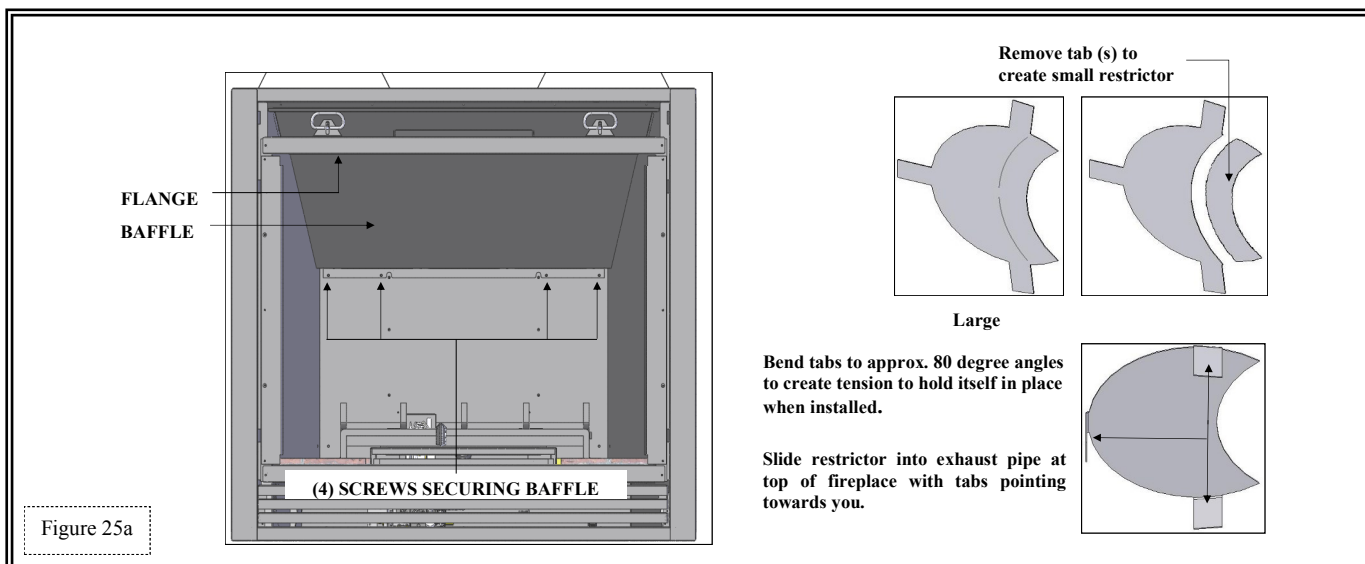
FLAME APPEARANCE	DRAFT PROBLEM	RESTRICTOR SOLUTION
Short, flickering	Excessive draft - not enough restriction	Add restrictor
Lifting or ghosting*	Insufficient draft - too much restriction	Remove inner ring (s) on restrictor or remove restrictor

\* Improper venting installation may cause flames to lift or “ghost” - a dangerous situation. Inspect flames after installation to ensure proper performance. If determined that venting is correct, and the restrictor has been removed, yet flames are still lifting or ghosting, shut off gas supply to fireplace and call a qualified service technician.

## RESTRICTOR INSTALLATION / MODIFICATION (after termination completion):

If determined that a restrictor is needed or restrictor modification is required after termination is installed, access can be reached through fireplace baffle. Please remove logs, upper refractory clip and refractory to avoid damaging these components.

1. Remove (4) screws securing baffle. Tip baffle to slight angle to remove.
2. Depending on your specific needs, determined by the chart above along with other factors, make necessary modifications.
3. If installation of a restrictor (included in fireplace components packet) is necessary, bend tabs on restrictor to approx. 80 degree angles to create tension when inserted into exhaust pipe on fireplace. Insert restrictor into 5” exhaust pipe with tabs pointing towards you.
4. If modification is necessary, remove restrictor by pulling it down and out of 5” exhaust pipe.
5. Reinstall baffle by resting baffle front above flange along inside top of firebox opening. Tip baffle back against rear firebox wall. Secure with (4) screws previously removed.
6. Reinstall refractory panels and log set.
7. Attach glass frame assembly and light fireplace. Wait 15 minutes before determining if any further modifications are necessary.

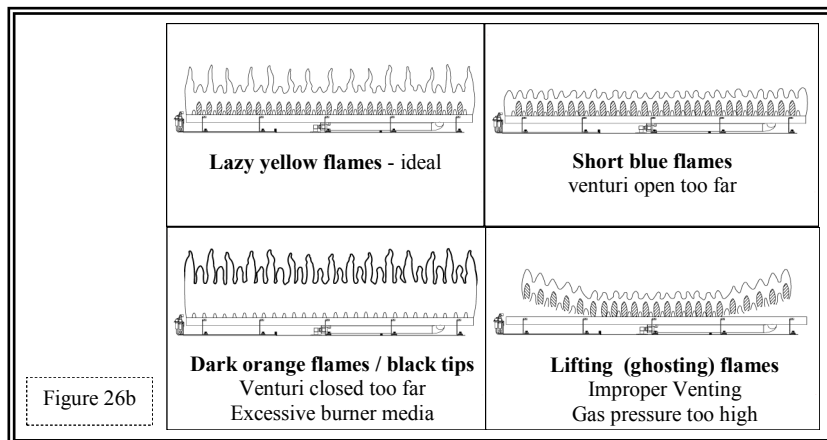
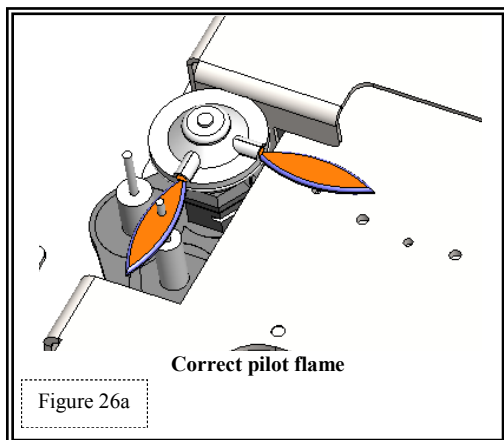


# FINALIZING THE INSTALLATION

## FLAME APPEARANCE:

Flame appearance is affected by several factors including altitude, venting configuration and fuel quality. Although the venturi setting has been factory set, adjustments may be necessary for optimal performance and visual aesthetics.

When fireplace is first lit, the flames will be blue. Flames will gradually turn yellowish-orange during first 15 minutes of operation. If flames remain blue, or become dark orange with evidence of sooting (black tips), the burner tube venturi may need adjustment.



### WARNING

Burner tube adjustable venturi positioning should only be performed by a qualified professional service technician.

### FACTORY SET BURNER TUBE VENTURI SETTINGS (ADJUST AS NECESSARY FOR YOUR INSTALLATION)

	NATURAL GAS	LP (PROPANE) GAS
FRONT BURNER	100% CLOSED	100% OPEN
BACK BURNER	1/8" (3mm) OPEN	100% OPEN

### BURNER TUBE VENTURI ADJUSTMENT GUIDELINES

VENTURI POSITION	FLAME COLOR	VENTURI ADJUSTMENT
Closed too far	Dark orange flame with black tips	Open venturi setting slightly
Open too far	Blue flames	Close venturi setting slightly

### NOTE

If soot is present, check log positioning before adjusting burner venturi. Logs must not block burner ports.

### IMPORTANT

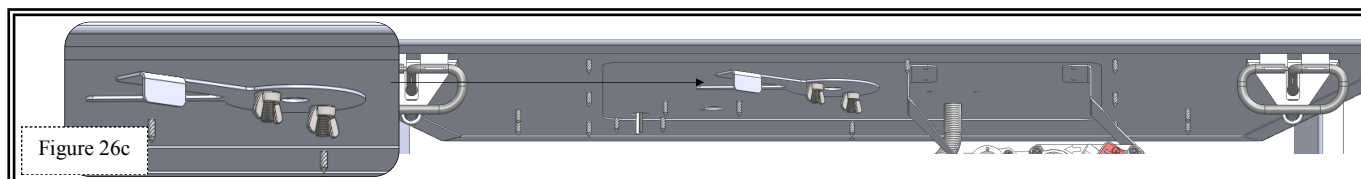
SLIGHT ADJUSTMENTS TO BURNER VENTURI OPENING CREATE DRAMATIC RESULTS. ADJUST AT SLIGHT INCREMENTS UNTIL DESIRED LOOK IS ACHIEVED. ALWAYS BURN FIREPLACE FOR AT LEAST 15 MINUTES AND ALLOW TIME TO COOL BEFORE MAKING ANY FURTHER ADJUSTMENTS.

## TO ADJUST BACK (MAIN) BURNER VENTURI:

### WARNING

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

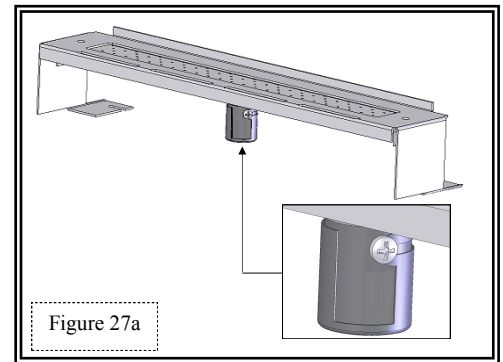
Back (main) burner venturi adjustment handle is attached to underside of control board. Access through lower grill opening. Loosen wing nuts, adjust as necessary, pulling handle forward to open, pushing backwards to close. Tighten wing nuts.



# FINALIZING THE INSTALLATION

## TO ADJUST FRONT BURNER VENTURI:

1. Follow Control Board Removal instructions on page 22 to access and remove front burner assembly.
2. Loosen screw on venturi and adjust as necessary. Tighten screw.
3. Follow Control Board Installation instructions on page 23 to reinstall all components.



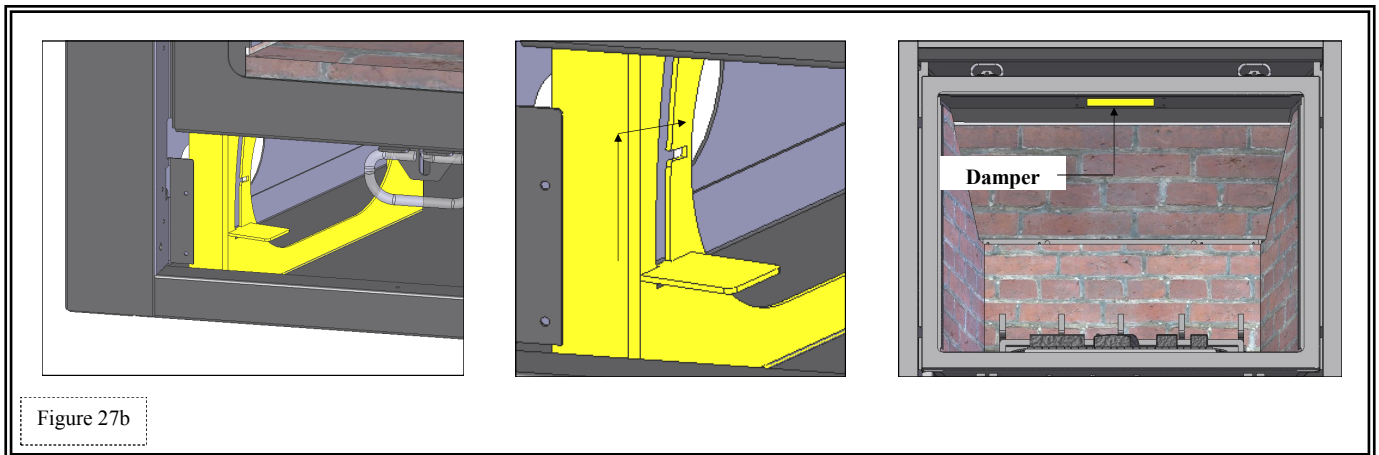
## HEAT DAMPER

This fireplace has been designed to operate with the damper fully open or completely closed depending on desired heat output without compromising flame appearance.

The damper is located at the inside top of firebox and can be viewed through the glass. The damper control is located under the firebox.

To reduce the amount of heat entering the room, raise damper control up and push into mounting slot. The damper is now in the fully open position and allows more heat to exit through the vent system.

If more heat is desired, pull handle out and down. The damper is now closed.



# MAINTENANCE

The appliance is required to be inspected at least once a year by a professional service person.

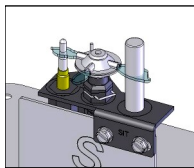
The compartment below firebox must be cleaned at least once a year, more frequent cleaning may be required due to excessive lint from carpeting, bedding materials, or other fibrous materials. Use a vacuum to clean all components at least once a year.

## NOTE

INSTALLATION AND REPAIR SHOULD BE DONE ONLY BY QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND AT LEAST ANNUALLY BY A PROFESSIONAL SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIAL, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS, BURNERS AND CIRCULATING AIR PASSAGeways OF THE APPLIANCE BE KEPT CLEAN.

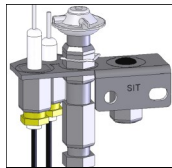
## CONTROL BOARD SYSTEM

- Annual cleaning of burner system is required. Vacuum all components thoroughly.
- The burner assembly may be removed for easier access. Refer to pages 22-23 in this installation manual for complete instruction on removing & reinstalling burner assembly.
- Visually check for blocked port holes, especially near the pilot. Blocked port holes may cause delayed ignition.
- Reinstall burner assembly following instructions on page 23 of this installation manual.
- Visually check pilot light and burner when in operation. Flames should be steady, not lifting or floating.

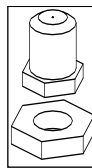


55345 Pilot

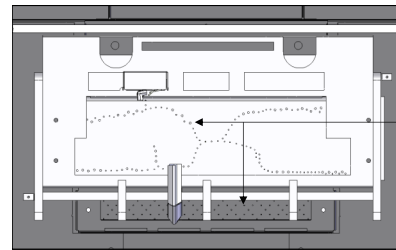
Figure 28a



55345-IPi Pilot



Burner Orifice



Burner Ports

## FAN

The fan should be disconnected from electrical current, and cleaned (vacuumed) every six months. The bearings are sealed and require no oiling.

## VENT SYSTEM

Annual examination of venting system by a qualified agency is required.

IF VENT-AIR INTAKE SYSTEM IS DISASSEMBLED FOR ANY REASON, RE-INSTALL PER INSTRUCTIONS PROVIDED WITH INITIAL INSTALLATION.

The flow of combustion and ventilation air must not be obstructed.

## GLASS CLEANING & REPLACEMENT

- Clean glass only when cool and only with non-abrasive cleansers.
- **CAUTION:** Do not operate the appliance with glass removed, cracked or broken. Replacement of the panel(s) should be done by a licensed or qualified service person.
- Use protective gloves to handle any broken or damaged glass assembly components.
- The glass assembly, part #MTK-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc.
- Replacement of glass & frame assembly, part #MTK-057T, must only be performed by a licensed or qualified service person.  
DO NOT SUBSTITUTE MATERIALS.
- Do not strike or slam glass door assembly.

## IMPORTANT

ANY SAFETY SCREEN OR GUARD REMOVED FOR SERVICING MUST BE REPLACED PRIOR TO OPERATING THE APPLIANCE.

## CAUTION

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

KEEP APPLIANCE AREA CLEAR OF COMBUSTIBLE MATERIALS, SUCH AS GASOLINE AND OTHER FLAMMABLE VAPORS AND LIQUIDS.



# LIMITED WARRANTY

## KOZY HEAT LIMITED 10 YEAR WARRANTY

This limited 10 Year Warranty will not become effective until the Warranty Registration Form has been completed and mailed to Hussong Manufacturing Co., Inc., P.O. Box 577, Lakefield, MN 56150. This registration form must be received within 30 days of installation. Failure to do so may result in delayed warranty coverage and submission of proof of purchase will be required.

Hussong Manufacturing Co., Inc. warrants to the original purchaser of this Kozy Heat Fireplace, that it is free of defects in materials and workmanship at the time of manufacture.

Subject to the following conditions & requirements, Hussong Manufacturing Co., Inc. extends the following limited warranty under normal use and service, with respect to the Kozy Heat line of gas burning fireplaces.

**YEAR 1:** Subject to the conditions & requirements listed below, within the first year from date of purchase, Hussong Manufacturing Co., Inc. shall, at its discretion, replace or repair any such defect in material or workmanship, at Hussong Manufacturing Co., Inc.'s expense, including reasonable labor costs to repair or replace the defective component, if a factory pre-authorization is given for the repair.

**YEARS 2-10:** Subject to the conditions & requirements listed below, beginning with the first day of the second year and continuing through the tenth year, Hussong Manufacturing Co., Inc., will at its discretion, provide repair or replacement parts at current list prices for any defect in material or workmanship of components, including optional components and accessories (if available). Hussong Manufacturing Co., Inc. shall not be responsible for any installation, labor, transportation of other indirect costs.

## LIMITATION OF LIABILITY

To make a claim under this warranty, the purchaser must first contact the dealer/installer from whom the fireplace was purchased.

This limited warranty will be void if the fireplace is not installed by a qualified installer and according to the installation instructions. Use of unauthorized components will make this warranty null and void.

This limited warranty also is void if the fireplace is not operated, at all times, according to the operating instructions furnished.

This warranty is limited to defects in material and workmanship. It does not apply to any product that has been subject to negligence, misapplication, improper installation.

No person is authorized to extend the time of this warranty or to accept on Hussong Manufacturing Co., Inc.'s behalf any additional obligation of liability connected with the unit.

It is expressly agreed and understood that this warranty is Hussong Manufacturing Co., Inc.'s sole obligation and purchaser's exclusive remedy for defective fireplace equipment. Hussong Manufacturing Co., Inc. shall not be liable for any consequential, incidental or contingent damages whatsoever. The foregoing warranty is exclusive and in lieu of all other expressed warranties. Hussong Manufacturing Co., Inc. shall not be held to implied warranties or merchantability and fitness for a particular purpose. This warranty replaces all previous warranty policies.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Hussong Manufacturing Co., Inc. reserves the right to make changes at any time, without notice, in design, material, specifications and prices. Hussong Manufacturing Co., Inc. reserves the right to discontinue models and products.

## WARRANTY CONDITIONS & REQUIREMENTS:

1. You are the original purchaser. This warranty is not transferable.
2. Installation of the fireplace is performed by a qualified installer.
3. Installation and operation must comply with installation and operation instructions.
4. Paint and glass gaskets are covered for 30 days from date of purchase.
5. Remote controls and all optional accessories are covered for 1 year from date of purchase.
6. This warranty does not offer coverage for Light Bulbs or Batteries (whether factory, dealer or installer supplied). This includes any damage stemming from either component's nonuse.
7. Components broken, (including glass panels), during shipping, careless handling of components, or defects resulting from improper installation, misuse of the fireplace and components are not covered under this warranty.
8. This warranty does not cover any part of the fireplace or any components which have been exposed to or submerged under water.
9. Hussong Manufacturing Co., Inc. must be notified by the dealer the fireplace was purchased from or a qualified installer/service technician of the defect.
10. Annual service of the fireplace as required in the installation manual, is performed by a qualified installer/service technician. (Copies of such service records may be required to claim a warranty).
11. All previous warranty/service has been performed by a qualified installer or service technician. (Copies of such service records may be required to claim a warranty).



# LIFETIME WARRANTY

## LIFETIME WARRANTY

**THIS LIFETIME WARRANTY COVERAGE WILL BE EXTENDED AS DESCRIBED BELOW PROVIDED ALL WARRANTY CONDITIONS AND REQUIREMENTS ARE MET AS OUTLINED IN THE 10 YEAR LIMITED WARRANTY POLICY.**

### LIFETIME WARRANTY COVERAGE

LIFETIME WARRANTY IS EXTENDED AS FOLLOWS: Hussong Manufacturing Co., Inc. warrants to the original purchaser that the firebox, heat exchanger, fiber logs, burner tube and glass panel of this Kozy Heat Fireplace will not be defective in material or workmanship under normal use and service for as long as you own this product. If any of these components fail due to defects in material and workmanship under normal use and service, Hussong Manufacturing Co., Inc. will, at its sole discretion, repair or replace the defective component. This LIFETIME WARRANTY does not cover any installation, labor, transportation or other indirect cost arising from defective components.

### LIMITATION OF LIABILITY

This Lifetime Warranty will be void if the fireplace is not installed by a qualified installer and according to the installation instructions. Use of unauthorized components will make this warranty null and void. This Lifetime Warranty also is void if the fireplace is not operated, at all times, according to the operating instructions furnished. This warranty is limited to defects in material and workmanship of components specified. It does not apply to any product that has been subject to negligence, misapplication, improper installation.

No person is authorized to extend the time of this Lifetime Warranty or to accept on Hussong Manufacturing Co., Inc.'s behalf any additional obligation of liability connected with the unit.

Hussong Manufacturing Co., Inc. may fully discharge all obligations with respect to this Lifetime Warranty by refunding the wholesale price of the defective component(s).

It is expressly agreed and understood that this Lifetime Warranty is Hussong Manufacturing Co., Inc.'s sole obligation and original purchaser's exclusive remedy for defective fireplace equipment. Hussong Manufacturing Co., Inc. shall not be liable for any consequential, incidental or contingent damages whatsoever other than those incurred by Hussong Manufacturing Co., Inc. to repair or replace the defective component. The foregoing warranty is exclusive and in lieu of all other expressed warranties. Hussong Manufacturing Co., Inc. shall not be held to implied warranties, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. This lifetime warranty replace all previous lifetime warranty policies.

Hussong Manufacturing Co., Inc. reserves the right to make changes at any time, without notice, in design, material, specifications and prices. Hussong Manufacturing Co., Inc. reserves the right to discontinue models and products.

**To activate this Lifetime Warranty coverage, this registration card must be completed and mailed with your completed 10 Year Limited Warranty form within 30 days of installation to the following address:**

***Hussong Manufacturing Co., Inc.  
P.O. Box 577  
204 Industrial Park Drive  
Lakefield, MN 56150-0577***

Sept. 2011

CUT ALONG DOTTED LINE

**PURCHASER NAME:** \_\_\_\_\_  
**ADDRESS:** \_\_\_\_\_  
\_\_\_\_\_  
**TELEPHONE:** \_\_\_\_\_

**INSTALLATION DATE:** \_\_\_\_\_  
**MODEL #:** \_\_\_\_\_  
**SERIAL #:** \_\_\_\_\_

**INSTALLER NAME:** \_\_\_\_\_  
**ADDRESS:** \_\_\_\_\_  
\_\_\_\_\_  
**TELEPHONE:** \_\_\_\_\_





# Supplemental Installation and Homeowner Information Manual for Minnetonka Model:

# #55345-MV

**DIRECT VENT GAS FIREPLACE**



English and French Installation Manuals Available Through Your Local Dealer or Visit Our Website at [www.kozyheat.com](http://www.kozyheat.com)  
*Les manuels d'installation en anglais et en français sont disponibles chez votre détaillant local ou en visitant notre site Web : [www.kozyheat.com](http://www.kozyheat.com)*

**IMPORTANT:** This supplemental installation and homeowner manual is to be used in conjunction with MINNETONKA INSTALLATION MANUAL. Read both manuals before installing and operating appliance.

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

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

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

—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.
- ▣ Immediately call 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.



# WARNING



**HOT GLASS WILL CAUSE BURNS.  
DO NOT TOUCH GLASS UNTIL COOLED.  
NEVER ALLOW CHILDREN TO TOUCH GLASS.**



Report No. 216-F-15c-6.5

NOV 2012  
55345-MV-SUP-REV-02

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# SAFETY INFORMATION

This fireplace has been tested by OMNI-Test Laboratories, Portland, Oregon and complies with:

ANSI Z21.88-2009/CSA 2.33-2009, "Standard for Vented Gas Fireplace Heaters"  
CAN/CGA 2.17-M91 (R2009), "Gas-Fired Appliances for Use at High Altitudes"  
CAN/CSA P.4.1-09, "Testing Method for Measuring Annual Efficiency"

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*

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

- Installation and repair should be done only by a qualified service person. The appliance should be inspected by a qualified service person before use. Annual inspection by a qualified service person is required to maintain warranty. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulation air passageways of the appliance be kept clean.
- If this appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.
- Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
- 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.
- Clothing or other flammable material should not be placed on or near the appliance.
- Adequate accessibility clearances for servicing and proper operation must be maintained.
- This appliance must not share or be connected to a chimney flue serving any other appliance.
- Keep area around the appliance clear of combustible materials, gasoline and other flammable vapor and liquids.
- The flow of combustion and ventilation air must not be obstructed.
- Due to high temperatures the appliance should be located out of traffic and away from furniture and draperies.
- The glass front or any part removed for servicing the appliance must be replaced prior to operating the appliance. Work should be done by a qualified service technician.
- Clean glass only when cool and only with non-abrasive cleansers.
- **WARNING: DO NOT OPERATE APPLIANCE WITH THE GLASS/FRAME ASSEMBLY REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD ONLY BE PERFORMED BY A LICENSED OR QUALIFIED SERVICE PERSON.**
- The glass assembly, Part #MTK-057T, shall only be replaced as a complete unit, as supplied by Husson Mfg. Co., Inc. DO NOT SUBSTITUTE MATERIALS.
- Do not strike or slam glass assembly.
- Any safety screen or guard removed for servicing the appliance must be replaced prior to operating the appliance.
- Under no circumstances should any solid fuel (wood, coal, paper or cardboard etc.) be used in this appliance.
- Keep burner and control compartment clean.
- 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.

# SPECIFICATIONS

## 55345-MV COMPONENTS LIST

PART NUMBER	DESCRIPTION
MTK-700	Control Board Assembly
700-203	Manual Gas Shut-off Valve
MTK-135A	Burner Assembly
MTK-H900	Refractory Set
MTK-500A	Log Package
MTK-057T	Glass Frame Assembly
600-ECA	Electrical Connection Assembly
942-085	5" Restrictor Plate
500-MTK	3 pc. Grill Assembly
IPI-028	IPI Fan Kit
700-308	Remote Control

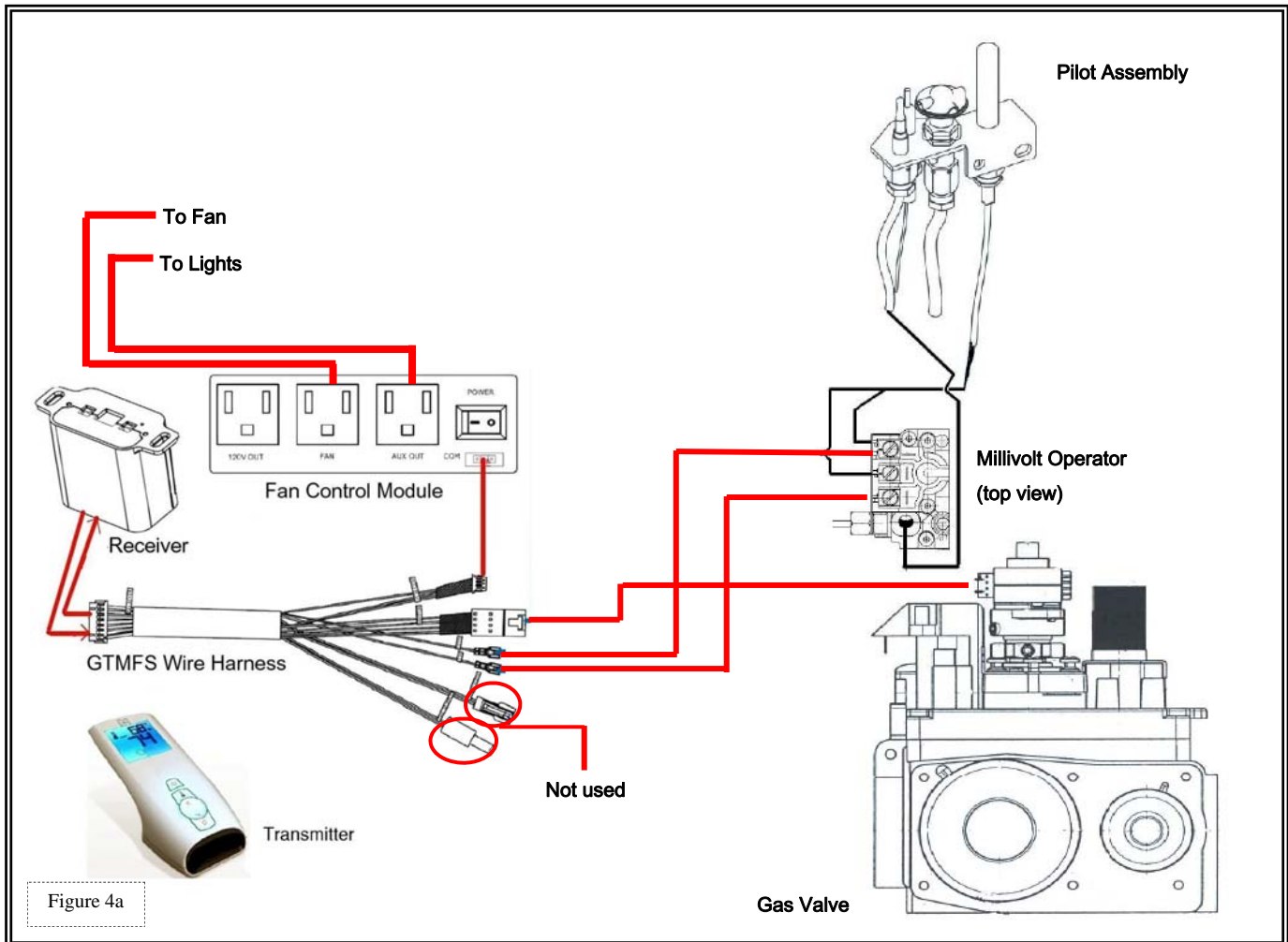
	<u>55345-MV</u>	
	<u>NATURAL GAS</u>	<u>LP GAS</u>
MINIMUM INLET GAS PRESSURE	5" WC (1.25 kPa) (7" WC (1.74 kPa) (recommended)	11" WC (2.74 kPa) (recommended)
MAXIMUM INLET GAS PRESSURE	10.5" WC (2.62 kPa)	13" WC (3.24 kPa)
MANIFOLD PRESSURE (HI)	3.5" WC (.87 kPa)	10" WC (2.49 kPa)
MANIFOLD PRESSURE (LO)	1.6" WC (.40 kPa)	6.4" WC (1.59 kPa)
ORIFICE SIZE	#55 & #34	#68 & #51
INPUT BTU/hr. (kW)	40,000 BTU/hr (11.72 kW)	40,000 BTU/hr (11.72 kW)
MINIMUM INPUT BTU/hr. (kW)	21,500 BTU/hr (6.30 kW)	28,000 BTU/hr (8.21 kW)

# WIRING SCHEMATICS

## IMPORTANT

THIS SYSTEM REQUIRES ELECTRICITY (120V) AND / OR BATTERIES TO OPERATE.

USING BATTERY BACK UP WILL OPERATE BURNER ONLY. FAN AND LIGHT COMPONENTS WILL NOT FUNCTION ON BATTERY BACK-UP POWER.



# CONTROL SYSTEM COMPONENTS

## REMOTE CONTROL

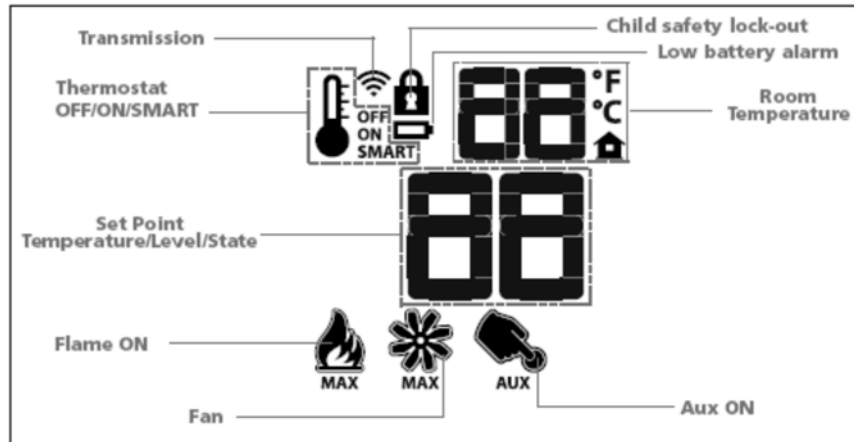


Figure 5a

## GAS VALVE

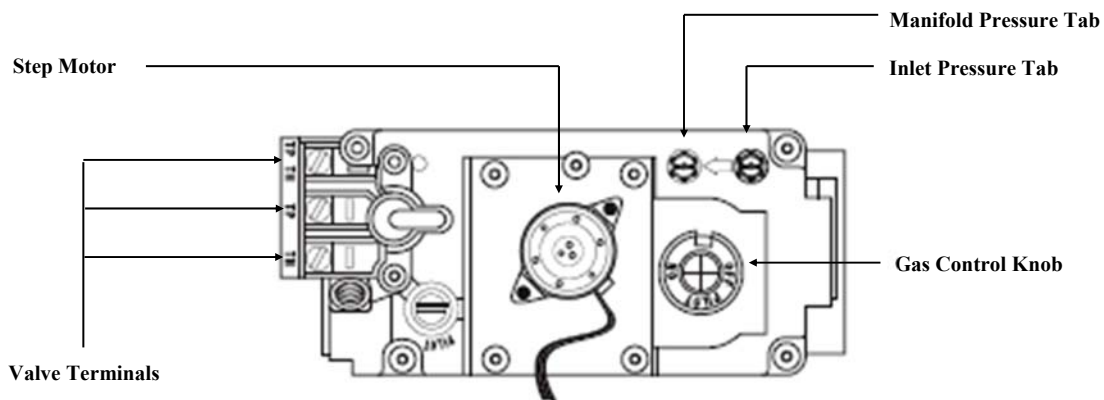


Figure 5b

## PILOT ASSEMBLY

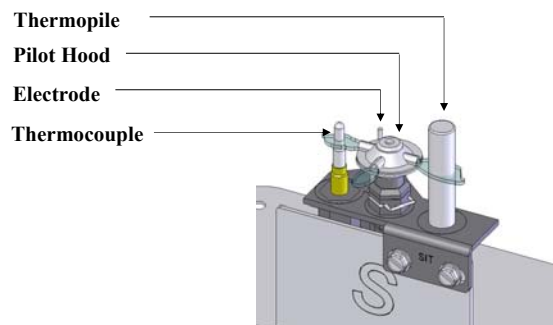


Figure 5c

# CONTROL SYSTEM COMPONENTS

## RECEIVER

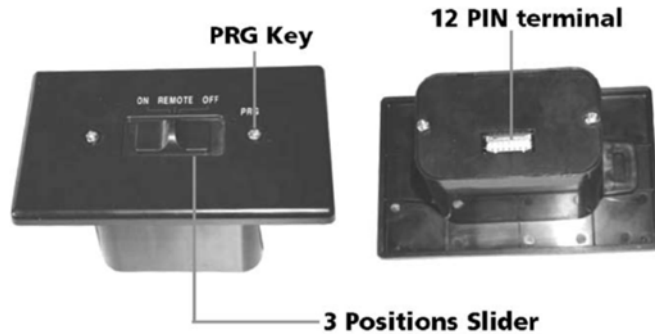


Figure 6a

## FAN CONTROL MODULE



Figure 6b

# SYSTEM OPERATION

## INITIALIZING THE SYSTEM FOR THE FIRST TIME

1. Move slider switch on receiver to **OFF** position.
2. Install 4 AA batteries (included in components packet) into receiver battery bay.
3. Move slider switch to **REMOTE** position.
4. Using the end of a paper clip, or other similar object, press button through hole marked **PRG** on receiver front cover. Receiver will 'beep' three (3) times to indicate it is ready to synchronize with a transmitter.
5. Install 3 AAA batteries (included in components packet) into transmitter battery bay (located on base of transmitter). Push the **ON** button. The receiver will beep four (4) times to indicate the transmitter's command is accepted and set to the particular code of that transmitter.
6. Turn On fan control module, switching to ON ( | ) position.
7. The system is now initialized.

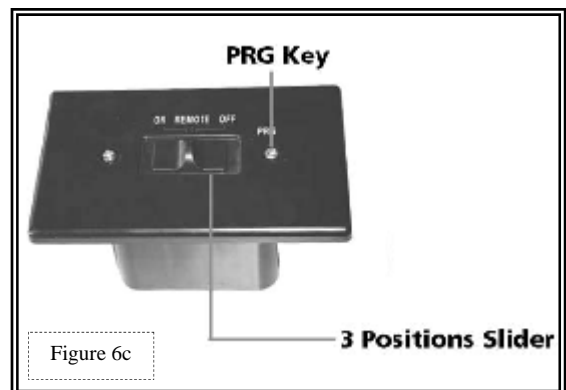


Figure 6c

### NOTE

This procedure must be performed every time batteries are replaced in Receiver or Transmitter.

# SYSTEM OPERATION

## TEMPERATURE DISPLAY

With the system in **OFF** position, press Thermostat Key and Mode Key at the same time to change from degrees F to C. Look at transmitter LCD screen to verify that C or F is visible on right side of Room Temperature display.

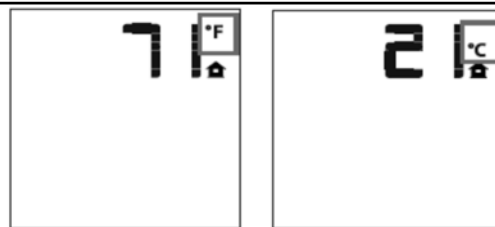


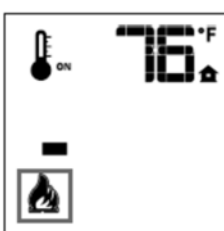
Figure 7a

## REMOTE FLAME CONTROL

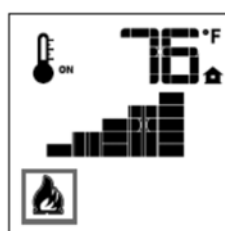
The remote control has six (6) flame levels. With system ON and flame level at maximum, press Down Arrow Key once to reduce flame height by one step until flame is turned off. The Up Arrow Key will increase flame height on step each time it is pressed. If Up Arrow Key is pressed while system is on but flame is off, the flame will come on in High position. A single 'beep' will confirm reception of the command.



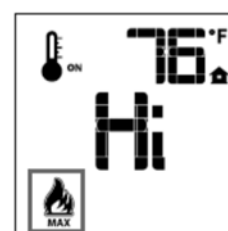
Flame Off



Flame Level 1



Flame level 5



Flame Level Maximum

Figure 7b

## ROOM THERMOSTAT (Transmitter Operation)

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

To activate this function, press the Thermostat Key. The LCD display will change to show the room thermostat is ON and set temperature is now displayed. To adjust set temperature, press Up or Down arrow keys until desired set temperature is display on LCD screen.

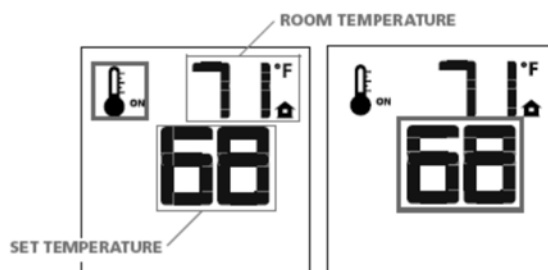


Figure 7c



# SYSTEM OPERATION

## SMART THERMOSTAT (Transmitter Operation)

The Smart Thermostat function adjusts flame height based on set temperature and actual room temperature. As room temperature gets closer to set point the Smart Function will automatically adjust flame down.

1. Press Thermostat key until the word SMART appears on right side of temperature bulb graphic.
2. To adjust set temperature, press Up/Down arrow keys until desired set temperature is displayed on LCD screen.

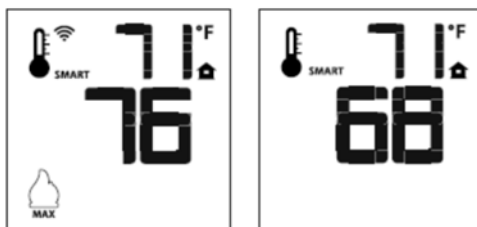


Figure 8a

## FAN SPEED CONTROL

Fan speed can be adjusted through six (6) speeds. To activate this function use Mode Key to index to fan control icon. Use Up/Down Arrow Keys to turn on, off or adjust fan speed. A single 'beep' will confirm reception of the command.



Figure 8b

## ACCENT LIGHT KIT (not available in all fireplace models)

The auxiliary function controls the AUX power outlet on the Fan control module which in turn controls the light kit.

1. Use MODE key to guide you to AUX icon.
2. Press Up Arrow Key to turn light kit on, press Down Arrow Key to turn light kit off. A single 'beep' will confirm reception of the command.
3. Use the installed dimmer switch to adjust brightness of lights.

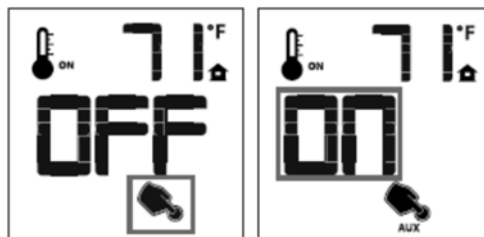


Figure 8c

# SYSTEM OPERATION

## KEY LOCK

This function locks the keys to avoid unsupervised operation.

To Activate: Press MODE and UP keys at same time.

To De-activate: Press MODE and UP keys at same time.



Figure 9a

## LOW BATTERY DETECTION

**TRANSMITTER:** Remote control battery lifespan depends on various factors including battery quality, number of ignitions, changes to room thermostat set point, etc.

When transmitter batteries are low, a Battery Icon will appear on the LCD display before all battery power is lost. When batteries are replaced this icon will disappear.

**RECEIVER:** Receiver battery lifespan depends on various factors including battery quality, number of ignitions, changes to room thermostat set point, etc.

When receiver batteries are low, no 'beep' will be emitted from Receiver when it receives an ON/OFF command from the Transmitter. This is an alert for a low battery condition for the Receiver. When the batteries are replaced the 'beep' will be emitted from the Receiver when ON/OFF Key is pressed.



Figure 9b

## MANUAL BYPASS OF REMOTE SYSTEM

If batteries of the Receiver or Transmitter are low or depleted, the appliance can be turned on by sliding the three position slider switch on the Receiver to the ON position. This will bypass the remote control feature of the system and the appliance main burner will come on if gas valve is in the ON position.

## TURN ON THE APPLIANCE

**Follow instructions as outlined in Lighting and Shutdown. Pages 11-12.**

Press **ON/OFF** key on transmitter. The display will show all active icons on the screen. A single 'beep' from receiver will confirm reception of the command.

## TURN OFF THE APPLIANCE

**Follow instructions as outlined in Lighting and Shutdown. Pages 11-12.**

Press **ON/OFF** key on transmitter. The display will show only room temperature and icon on the screen. A single 'beep' from receiver will confirm reception of the command.

# LIGHTING AND SHUTDOWN

## 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.

**DUE TO HIGH SURFACE TEMPERATURES, KEEP CHILDREN, CLOTHING AND FURNITURE AWAY.**

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

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

### WHAT TO DO IF YOU SMELL GAS:

- \* Do not try to light any appliance.
  - \* Do not touch any electrical switch; do not use any phone in your building.
  - \* Immediately call your gas supplier from a 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, do not try to repair it, call a qualified service technician. Forced or attempted repair may result in a fire or explosion, and loss of warranty.
- 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 which has been under water.

### WARNING

**DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.**

### WARNING

**CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION. YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE. CLOTHING OR OTHER FLAMMABLE MATERIAL MUST NOT BE PLACED ON OR NEAR THE APPLIANCE.**

### NOTE

**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 DEGREES 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.**

# LIGHTING AND SHUTDOWN (cont.)

## LIGHTING INSTRUCTIONS

1. Turn off all electrical power to appliance.
2. Open lower grill to access gas valve & controls.
3. Push gas control knob in slightly and turn clockwise to OFF.
4. Wait five (5) minutes to clear out any gas. Then smell gas, including near the floor. If you then smell gas, **STOP!** Follow **WHAT TO DO IF YOU SMELL GAS** safety information below. If you don't smell gas, go to next step.

### WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electric switch; do not use the 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.

#### NOTE

Gas control knob cannot be turned from PILOT to OFF unless knob is pushed in slightly. Do not force.

5. Locate pilot - follow metal tube from gas control. (Located inside combustion chamber).
6. Push gas control knob on gas valve in slightly and turn counterclockwise to PILOT.
7. Push valve knob in and hold while repeatedly pressing piezo igniter button until pilot is lit while continuing to hold in gas control knob.
8. Hold gas control knob in for one (1) minute after pilot is lit. Release gas control knob. If pilot goes out, repeat steps 3-8. When pilot is lit, proceed to step 9.

#### CAUTION

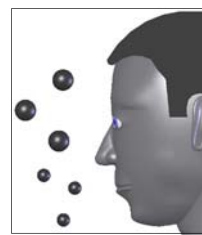
If knob does not pop up when released, stop and immediately call your service technician or the gas supplier. If pilot will not stay lit after several tries, turn gas control knob to OFF and call your service technician or gas supplier.

9. Turn on all electric power to appliance.
10. Push gas control knob in slightly and turn counterclockwise to ON.
11. Move receiver switch to REMOTE position.
12. Press hand held remote ON button.

#### NOTE

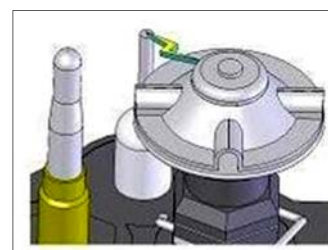
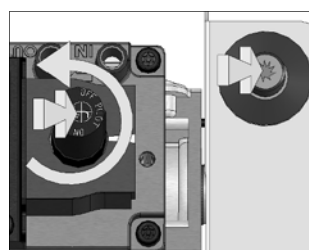
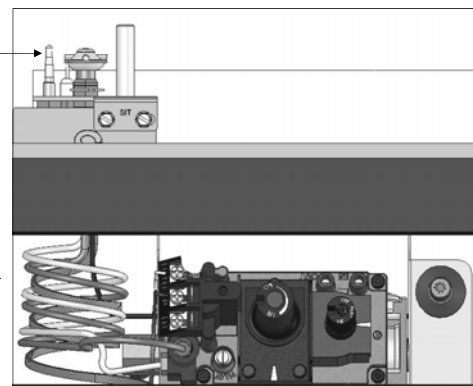
When fireplace is initially lit, condensation will appear on the glass; this is normal in all gas fireplaces and will disappear after several minutes.

5 MINUTES



PILOT

PILOT  
TUBE



1 MINUTE

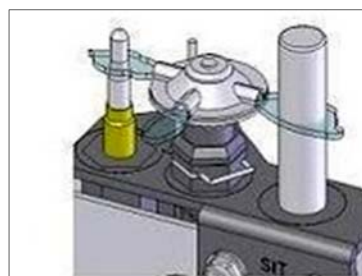


Figure 11a

## LIGHTING AND SHUTDOWN (cont.)

### TO TURN OFF GAS TO APPLIANCE

### TURN BURNER OFF

To turn burner OFF, press hand held remote OFF button.

#### NOTE

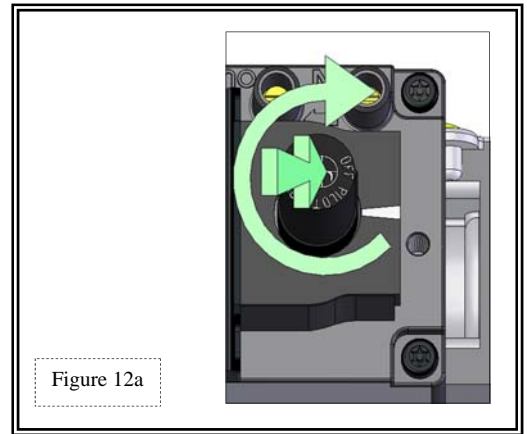
The pilot will stay lit.

### TURN PILOT OFF

Turn pilot off by pushing in and turning gas control knob to OFF.  
**DO NOT FORCE.**

#### NOTE

This control valve has an interlock device. If pilot has been turned off, it cannot be relit until thermocouple has cooled, (approximately 60 seconds).



# PRESSURE TESTING

## 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 and the pressure tap marked IN measures incoming pressure. Follow instructions below for proper testing procedures. Refer to page 17 for proper NAT and LP manifold pressures.

## NOTE

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

## INLET PRESSURE TEST:

1. Loosen inlet (IN) pressure tap screw (counter-clockwise).
2. Attach manometer using a 5/16" I.D. hose.
3. Light pilot.
4. Turn gas control knob to ON (burner should not light). Note manometer reading.
5. Press hand held remote ON button. Check pressure to ensure it stays near maximum inlet pressure.
6. Press hand held remote OFF button.
7. Turn gas control knob to OFF.
8. Disconnect hose and tighten screw (clockwise). Screw should be snug, do not over tighten.
9. Relight pilot and turn gas control knob to ON. Reattach manometer to inlet pressure tap to verify it is completely sealed. Manometer should read no pressure.

## NOTE

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

## MANIFOLD PRESSURE TEST:

1. Light pilot.
2. Loosen manifold (OUT) pressure tap screw (counter-clockwise).
3. Attach manometer to pressure tap using a 5/16" I.D. hose.
4. Turn gas control knob to ON.
5. Press hand held remote ON button and note manometer reading.
6. Press hand held remote OFF button.
7. Disconnect manometer hose and tighten screw (clockwise). Screw should be snug, do not over tighten.
8. Attach manometer to manifold pressure tap to verify it is completely sealed. Manometer should read no pressure when burner is turned on.

## CAUTION

A LOW PRESSURE READING CAN CAUSE DELAYED IGNITION.

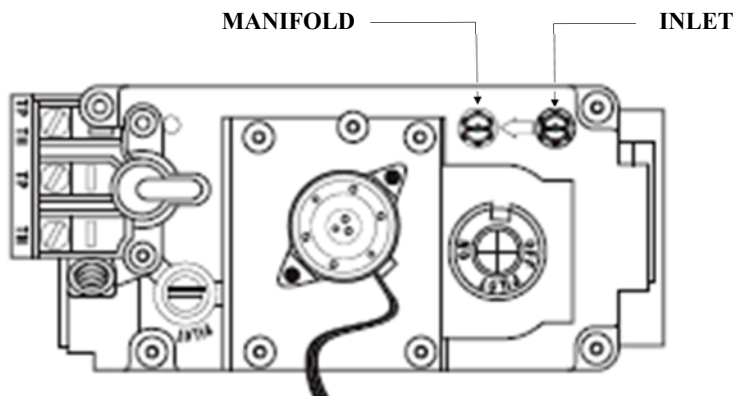


Figure 13a

# TROUBLESHOOTING

## ATTENTION

**TROUBLESHOOTING MUST BE PERFORMED BY A QUALIFIED TECHNICIAN.**

Before proceeding with the steps in the following troubleshooting guide, verify the power supply (AC/DC adapter or Fan Control Module) is present and receiver batteries and/or battery pack are fresh and installed with correct polarity.

Make sure all connections between wire harnesses and system components are proper and positive.

Make sure communication link between transmitter and receiver is established.

Verify inlet pressure meets the recommended inlet pressure. If necessary adjust line pressure regulator.

## PILOT WILL NOT LIGHT / STAY LIT

- Electrical power interrupted or disconnected. Restore electrical power to fireplace or use battery back-up. Ensure batteries are fully charged if using battery back-up as power source.
- Verify gas supply is turned on. Check remote shut-off valves from fireplace. Usually there is a valve near the main. There may be more than (1) valve between the fireplace and the main.
- Low gas pressure. Low gas pressure can be caused by several situations such as a bent line, too narrow diameter pipe, or low line pressure. Consult with plumber or gas supplier.
- No LP in tank. Check LP (propane) tank. Refill if necessary.
- Wiring disconnection. Use wiring schematic in this manual to determine that all wiring connections are secure and correct.
- Pilot flame not making contact with flame rectification sensor on pilot assembly. This valve is equipped with a pilot flame adjustment screw. Adjust as necessary.
- Pilot adjustment screw not sealed. Seal pilot adjustment screw. Do not over tighten.

## PILOT FLAME ALWAYS ON / WILL NOT EXTINGUISH

- CPI/IPI switch set to CPI position (down). Set switch to IPI position (up).

## MAIN FLAME WILL NOT LIGHT

- Remote not working properly. Replace batteries.
- Remote set to thermostat mode and there is no call for heat. Adjust heat setting.
- Thermostat disconnected or set too high. Set thermostat to lower temperature setting.
- Ensure pilot flame will ignite. If not, see pilot flame troubleshooting above.
- Ensure pilot flame is properly located to ignite main flame.
- Plugged main burner orifice.
- Wiring disconnection / improper wiring. Check for faulty or incorrect wiring.
- Verify gas supply is turned on.
- Low gas pressure. Low gas pressure can be caused by several situations such as a bent line, too narrow diameter pipe, or low line pressure. Consult with plumber or gas supplier.

# TROUBLESHOOTING

## PILOT AND BURNER EXTINGUISH WHILE IN OPERATION

- No LP in tank. Check and refill if necessary.
- Glass frame assembly not installed correctly. Refer to corresponding instructions in this manual.
- Improper vent cap installation. Adjust if necessary.
- Vent cap blockage. Remove debris if necessary.
- Improper pitch on horizontal vent. 1/4" (6mm) rise per foot is required on horizontal venting.
- Inner vent pipe leaking exhaust gases back into firebox. Check for leaks and repair if necessary.
- Excessive draft.

## GLASS SOOTING

- Improper log placement. Refer to corresponding pages in this installation manual.
- Improper venturi setting. Venturi may need to be opened slightly to allow more air into the gas mix.
- Improper pitch on horizontal venting. 1/4" (6mm) rise per foot required on horizontal venting.

## FLAME BURNS BLUE AND LIFTS OFF BURNER

- Improper venturi setting. Venturi may need to be closed slightly.
- Improper vent cap installation. Check for proper vent cap installation.
- Blockage or vent system leaks.

## NO REACTION TO COMMAND

- Receiver or transmitter batteries low. Replace batteries.
- No communication between remote control and receiver. Reprogram transmitter to receiver. Follow INITIALIZING THE SYSTEM FOR THE FIRST TIME as outlined in this manual.



# CONVERSION KIT INSTRUCTIONS

#NCK-MTKMV-S NAT GAS CONVERSION KIT / #LCK-MTKMV-S LP GAS CONVERSION KIT

## WARNING

This conversion kit shall be installed by a qualified service agency in accordance with the manufacturers instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion or productions of carbon monoxide may result, causing property damage, personal injury or loss of life. The qualified service agency is responsible for proper installation of this kit. The installation is not proper and complete until operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit. Refer to appliance owner's manual or product data plate for proper inlet and manifold pressure adjustments and orifice sizing.

Kit includes: (1) Gas Conversion Label  
(2) Burner Orifices: NAT #34 & #55 / LP #51 & #68  
(1) Baffle Shield and (3) screws - NAT only

(1) Pilot Injector NAT #62 / LP #35  
(1) Step Motor Pressure Regulator  
(1) Gas Label

## CAUTION

THE GAS SUPPLY SHALL BE SHUT OFF PRIOR TO DISCONNECTING THE ELECTRICAL POWER, BEFORE PROCEEDING WITH THE CONVERSION.

## WARNING

SHUT OFF GAS SUPPLY AND ELECTRIC POWER TO FIREPLACE.  
SHUT OFF GAS SUPPLY BEFORE DISCONNECTING ELECTRIC POWER.

## IMPORTANT

For high altitude installations: Above 2000ft. (610m) US / 4500ft. (1372m) Canada, consult the local gas distributor or authority having jurisdiction for proper de-rating methods.

### PREPARE THE FIREPLACE:

1. Remove upper hood, upper louver and glass assembly\*.
2. Remove logs and ember refractory from fireplace\*.
3. Remove pilot shield\*.
4. Remove light kit cylinders, amber light filters, and halogen bulbs.
5. Remove burner / log grate assemblies from fireplace\*.

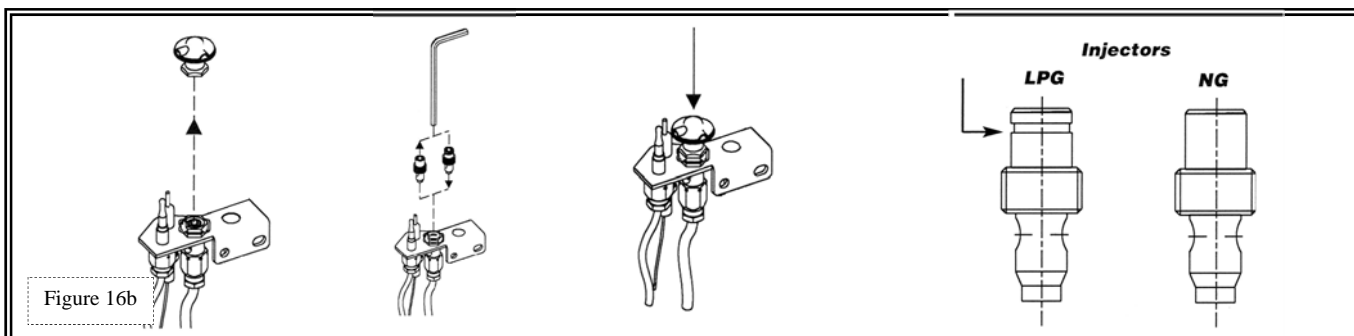
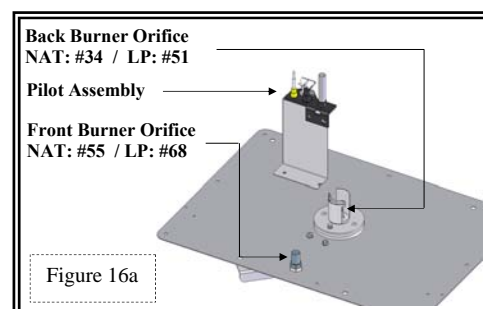
### REPLACE BURNER ORIFICES:

Remove existing orifice caps. Install orifice caps included with kit.

Tighten caps securely.

**Front orifice: (NAT #55 / LP #68)** (Number stamped on burner orifice).

**Back orifice: (NAT #34 / LP #51)** (Number stamped on burner orifice).



### CONVERT PILOT ASSEMBLY:

1. Remove pilot hood by pulling it directly up from pilot bracket.
2. Insert 5/32" (4mm) hex key into hexagon key-way of injector, turn counter clockwise to remove from injector journal.
3. Place hex key into end of injector included with kit, install into injector journal, turning clockwise to a recommended torque of 9 lb-in. (1.0 Nm) is achieved. (LP injectors have groove around top, Nat injectors do not. Numbers are stamped on pilot injectors).  
**NAT: #62 / LP: #35**
4. Align tab on base of pilot hood with slot in side of pilot journal. Push hood down, directly into pilot bracket. Hood must sit squarely for proper operation.

# CONVERSION KIT INSTRUCTIONS

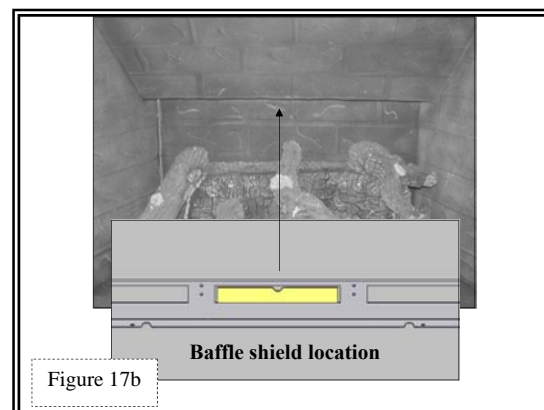
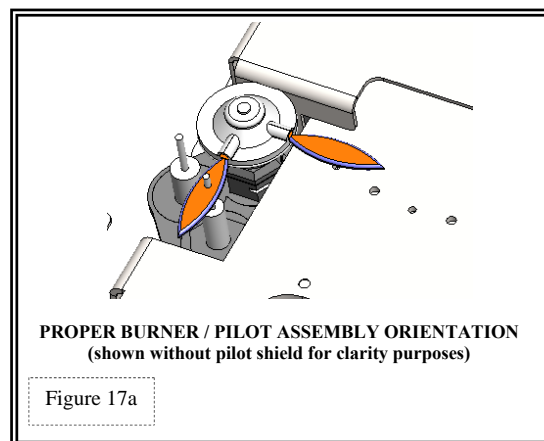
## CONVERT THE GAS CONTROL VALVE:

Follow stepper motor pressure regulator instruction sheet included with conversion kit to convert gas valve. (LP or NAT marked on stepper motor pressure regulator).

## COMPLETE THE CONVERSION:

1. Adjust front burner venturi setting by loosening screw, adjusting cap and retightening screw. **NAT: 100% closed / LP: 5/8" (16mm) open**
2. Re-install burner assemblies into fireplace, checking to ensure burner venturis are properly seated over burner orifices.
3. Back (main) burner venturi adjustment handle is attached to underside of control board. Access through lower grill opening. Loosen wing nuts, adjust as necessary, pulling handle forward to open, pushing backwards to close. Tighten wing nuts.  
**NAT: 1/8" (3mm) open - handle pushed back**  
**LP: 5/8" (16mm) open - handle pulled forward**  
Venturi may need further adjustment, depending on venting configuration.
4. Adjust combustion air intake shield\*.
5. **IF CONVERTING TO LP GAS:** Remove baffle shield.  
**IF CONVERTING TO NAT GAS:** Install baffle shield included with kit
6. Re-install pilot shield.
7. Reinstall any light kit components if previously removed.
8. Re-install ember refractory and logs\*.
9. Turn on gas and electrical supplies.
10. Light fireplace\*. Check for leaks at all connections with soapy water, whether field or factory made.
11. Test inlet pressure, referring to page 13 for proper testing procedures. Chart below states proper pressure readings. Visually check pilot flame. Flame should envelope top of flame sensor and extend onto burner far enough for proper ignition. To Adjust Pilot: Turn pilot adjustment screw clockwise to decrease or counter-clockwise to increase pilot flame.
12. Turn fireplace off.
13. Affix gas type sticker to existing label.
14. Reinstall glass frame assembly, upper louver and upper hood\*.
15. Verify proper ignition and operation of fireplace. Refer to page 18 for proper pilot and burner flame appearance and adjustment.
16. Complete and affix 'Gas Conversion' label behind lower grill.

**\*REFER TO FIREPLACE INSTALLATION MANUAL IF NECESSARY.**



Fireplace Model No.: \_\_\_\_\_  
This appliance and control was converted on \_\_\_\_\_ gas with Kit No.: \_\_\_\_\_ by \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Which accepts responsibility that this conversion has been properly made.  
Minimum / Maximum inlet pressures: Refer to rating plate  
Manifold Pressure: Refer to rating plate.  
Orifice size: \_\_\_\_\_ Input Rating: \_\_\_\_\_ BTU  
Complete and affix as close as possible to rating plate.

**GAS CONVERSION LABEL**  
(included with conversion kit)

Figure 17c

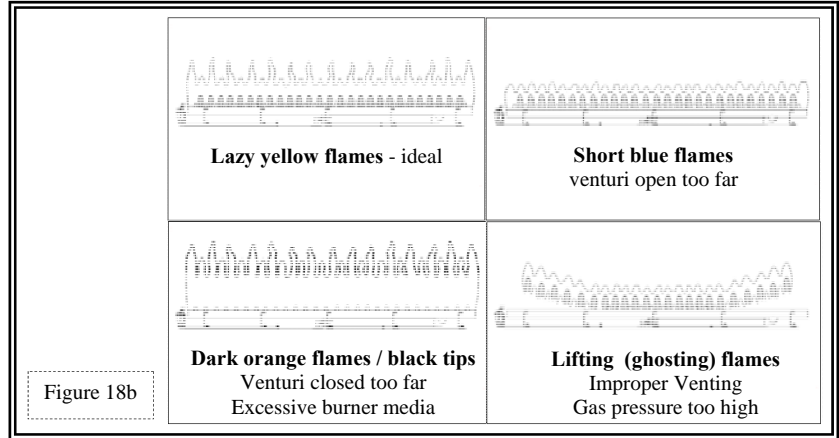
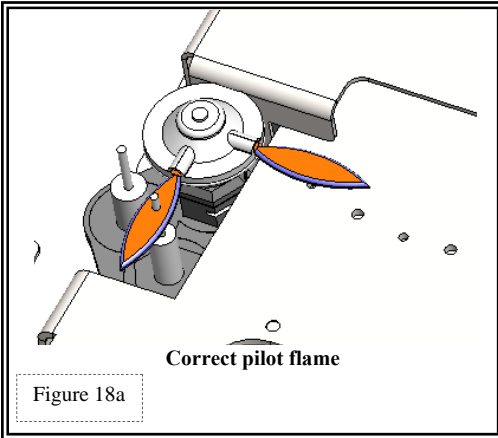
	<u>NATURAL GAS</u>	<u>LP GAS</u>
MINIMUM INLET GAS PRESSURE	5" WC (1.25 kPa) (7" WC (1.74 kPa) recommended)	11" WC (2.74 kPa) (recommended)
MAXIMUM INLET GAS PRESSURE	10.5" WC (2.62 kPa)	13" WC (3.24 kPa)
MANIFOLD PRESSURE (HI)	3.5" WC (.87 kPa)	10" WC (2.49 kPa)
MANIFOLD PRESSURE (LO)	1.6" WC (.40 kPa)	6.4" WC (1.59 kPa)

# CONVERSION KIT INSTRUCTIONS

## FLAME APPEARANCE:

Flame appearance is affected by several factors including altitude, venting configuration and fuel quality. Although the venturi setting has been factory set, adjustments may be necessary for optimal performance and visual aesthetics.

When fireplace is first lit, the flames will be blue. Flames will gradually turn yellowish-orange during first 15 minutes of operation. If flames remain blue, or become dark orange with evidence of sooting (black tips), the burner tube venturi may need adjustment.



### WARNING

Burner tube adjustable venturi positioning should only be performed by a qualified professional service technician.

### FACTORY SET BURNER TUBE VENTURI SETTINGS (ADJUST AS NECESSARY FOR YOUR INSTALLATION)

	NATURAL GAS	LP (PROPANE) GAS
FRONT BURNER	100% CLOSED	5/8" (16mm) OPEN
BACK BURNER	1/8" (3mm) OPEN	5/8" (16mm) OPEN

### BURNER TUBE VENTURI ADJUSTMENT GUIDELINES

VENTURI POSITION	FLAME COLOR	VENTURI ADJUSTMENT
Closed too far	Dark orange flame with black tips	Open venturi setting slightly
Open too far	Blue flames	Close venturi setting slightly

### NOTE

If soot is present, check log positioning before adjusting burner venturi. Logs must not block burner ports.

### IMPORTANT

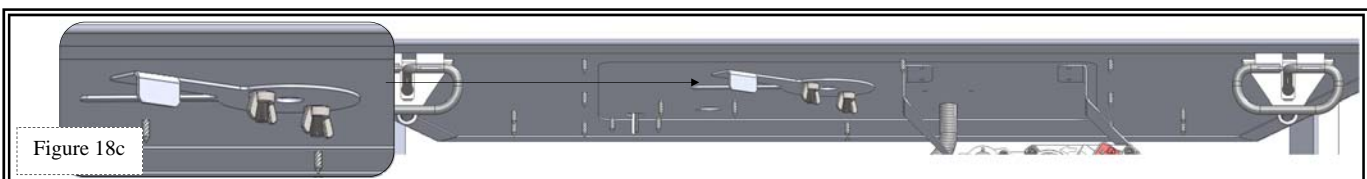
SLIGHT ADJUSTMENTS TO BURNER VENTURI OPENING CREATE DRAMATIC RESULTS. ADJUST AT SLIGHT INCREMENTS UNTIL DESIRED LOOK IS ACHIEVED. ALWAYS BURN FIREPLACE FOR AT LEAST 15 MINUTES AND ALLOW TIME TO COOL BEFORE MAKING ANY FURTHER ADJUSTMENTS.

## TO ADJUST BACK (MAIN) BURNER VENTURI:

### WARNING

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

Back (main) burner venturi adjustment handle is attached to underside of control board. Access through lower grill opening. Loosen wing nuts, adjust as necessary, pulling handle forward to open, pushing backwards to close. Tighten wing nuts.



# MAINTENANCE

The appliance is required to be inspected at least once a year by a professional service person.

The compartment below firebox must be cleaned at least once a year, more frequent cleaning may be required due to excessive lint from carpeting, bedding materials, or other fibrous materials. Use a vacuum to clean all components at least once a year.

## NOTE

INSTALLATION AND REPAIR SHOULD BE DONE ONLY BY QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND AT LEAST ANNUALLY BY A PROFESSIONAL SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIAL, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS, BURNERS AND CIRCULATING AIR PASSAGeways OF THE APPLIANCE BE KEPT CLEAN.

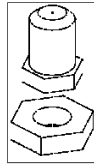
## CONTROL BOARD SYSTEM

- Annual cleaning of burner system is required. Vacuum all components thoroughly.
- The burner assembly may be removed for easier access. Refer to fireplace installation manual for complete instruction on removing & reinstalling burner assembly.
- Visually check for blocked port holes, especially near the pilot. Blocked port holes may cause delayed ignition.
- Reinstall burner assembly following instructions in fireplace installation manual.
- Visually check pilot light and burner when in operation. Flames should be steady, not lifting or floating.

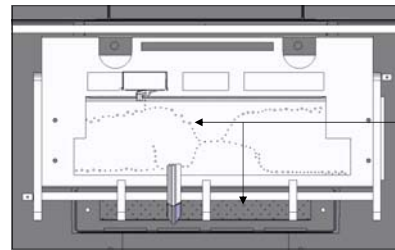


55345-MV Pilot

Figure 19a



Burner Orifice



Burner Ports

## FAN

The fan should be disconnected from electrical current, and cleaned (vacuumed) every six months. The bearings are sealed and require no oiling.

## VENT SYSTEM

Annual examination of venting system by a qualified agency is required.

IF VENT-AIR INTAKE SYSTEM IS DISASSEMBLED FOR ANY REASON, RE-INSTALL PER INSTRUCTIONS PROVIDED WITH INITIAL INSTALLATION.

The flow of combustion and ventilation air must not be obstructed.

## GLASS CLEANING & REPLACEMENT

- Clean glass only when cool and only with non-abrasive cleansers.
- **CAUTION:** Do not operate the appliance with glass removed, cracked or broken. Replacement of the panel(s) should be done by a licensed or qualified service person.
- Use protective gloves to handle any broken or damaged glass assembly components.
- The glass assembly, part #MTK-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc.
- Replacement of glass & frame assembly, part #MTK-057T, must only be performed by a licensed or qualified service person.  
DO NOT SUBSTITUTE MATERIALS.
- Do not strike or slam glass door assembly.

## IMPORTANT

ANY SAFETY SCREEN OR GUARD REMOVED FOR SERVICING MUST BE REPLACED PRIOR TO OPERATING THE APPLIANCE.

## CAUTION

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

KEEP APPLIANCE AREA CLEAR OF COMBUSTIBLE MATERIALS, SUCH AS GASOLINE AND OTHER FLAMMABLE VAPORS AND LIQUIDS.

# REPLACEMENT PARTS LIST

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

## 55345-MV CONTROL BOARD AND PARTS

MTK-700	Control Board - Nat Gas	700-203	Manual Shut-off Valve
MTK-701	Control Board - LP Gas	700-213B	18" Flexible Gas Line-Black
700-084	SIT MV Valve - Natural	700-226	Flexible Gas Line-Valve to Burner Connection
700-085	SIT MV Valve - LP	700-255	Natural Gas Orifice #55 - front burner
700-088	Pilot Assembly - Natural Gas	700-234	NAT Gas Orifice #34 - back burner
700-089	Pilot Assembly - LP Gas	700-268	LP Gas Orifice #68 - front burner
700-308R	Receiver	700-251	LP Gas Orifice #51 - back burner
700-558	GTMFS Wire Harness	NCK-MTKMV-S	Natural Gas Conversion Kit
700-130	Fan Control Module	LCK-MTKMV-S	LP Gas Conversion Kit
700-308	Transmitter	MTK-135A	Burner / Log Grate Assembly
700-166	#62 Natural Gas Pilot Orifice	MTK-043	Pilot Shield
700-168	#35 LP Gas Pilot Orifice	700-992	Pilot Igniter (with wire)
700-403S	Valve Step Motor - Natural Gas	700-993	Pilot Flame Sensor (with wire)
700-403-1	Valve Step Motor - LP Gas		

## GRILL REPLACEMENT

TRF-200	Upper Hood
TRF-201	Lower Grill
TRF-200L	Upper Hood Louver

## GLASS & GLASS GASKET

MTK-005	Replacement Valance
900-006	1-1/8" Glass Gasket w/ Adhesive
MTK-057T	Valance with 26" x 35" glass

## FAN ASSEMBLIES

IPI-028	Fan Assembly
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## REFRACTORY PANELS

MTK-H900	(3 pc.) Refractory Panel Set
MTK-H901	Bottom Refractory Panel
MTK-H900S	Side Refractory (1 pc.)
MTK-H900E	Ember / Log Refractory
MTK-H902	Top Refractory Panel
MTK-H900B	Back Refractory Panel

## COMBUSTIBLE MATERIAL BACKER BOARD

MTK-FPS	FirePro Standoff
---------	------------------

## LOG SET

MTK-50A	Log Set
MTK-1	#1 Log
MTK-2	#2 Log
MTK-3	#3 Log
MTK-4	#4 Log
MTK-5	#5 Log
MTK-6	#6 Log
MTK-7	#7 Log
MTK-8	#8 Log
MTK-9	#9 Log
MTK-10	#10 Log
MTK-11	#11 Log
MTK-12	#12 Log
900-KLK	Klinkers
900-REMB	Rock Wool Embers

# Supplemental Installation and Homeowner Information Manual for Minnetonka Model:

# #55345-IPI

**DIRECT VENT GAS FIREPLACE**



English and French Installation Manuals Available Through Your Local Dealer or Visit Our Website at [www.kozyheat.com](http://www.kozyheat.com)  
*Les manuels d'installation en anglais et en français sont disponibles chez votre détaillant local ou en visitant notre site Web : [www.kozyheat.com](http://www.kozyheat.com)*

**IMPORTANT:** This supplemental installation and homeowner manual is to be used in conjunction with MINNETONKA INSTALLATION MANUAL. Read both manuals before installing and operating appliance.

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

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

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

—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.
- Immediately call 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.



# WARNING



**HOT GLASS WILL CAUSE BURNS.  
DO NOT TOUCH GLASS UNTIL COOLED.  
NEVER ALLOW CHILDREN TO TOUCH GLASS.**



Report No. 216-F-15c-6.5

NOVEMBER 2012  
55345-IPI-SUP-REV-02

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# SAFETY INFORMATION

This fireplace has been tested by OMNI-Test Laboratories, Portland, Oregon and complies with:

ANSI Z21.88-2009/CSA 2.33-2009, "Standard for Vented Gas Fireplace Heaters"  
CAN/CGA 2.17-M91 (R2009), "Gas-Fired Appliances for Use at High Altitudes"  
CAN/CSA P.4.1-09, "Testing Method for Measuring Annual Efficiency"

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*

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

- Installation and repair should be done only by a qualified service person. The appliance should be inspected by a qualified service person before use. Annual inspection by a qualified service person is required to maintain warranty. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulation air passageways of the appliance be kept clean.
- If this appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.
- Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
- 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.
- Clothing or other flammable material should not be placed on or near the appliance.
- Adequate accessibility clearances for servicing and proper operation must be maintained.
- This appliance must not share or be connected to a chimney flue serving any other appliance.
- Keep area around the appliance clear of combustible materials, gasoline and other flammable vapor and liquids.
- The flow of combustion and ventilation air must not be obstructed.
- Due to high temperatures the appliance should be located out of traffic and away from furniture and draperies.
- The glass front or any part removed for servicing the appliance must be replaced prior to operating the appliance. Work should be done by a qualified service technician.
- Clean glass only when cool and only with non-abrasive cleansers.
- **WARNING: DO NOT OPERATE APPLIANCE WITH THE GLASS/FRAME ASSEMBLY REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD ONLY BE PERFORMED BY A LICENSED OR QUALIFIED SERVICE PERSON.**
- The glass assembly, Part #MTK-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc. DO NOT SUBSTITUTE MATERIALS.
- Do not strike or slam glass assembly.
- Any safety screen or guard removed for servicing the appliance must be replaced prior to operating the appliance.
- Under no circumstances should any solid fuel (wood, coal, paper or cardboard etc.) be used in this appliance.
- Keep burner and control compartment clean.
- 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.



# SPECIFICATIONS

## 55345-IPI COMPONENTS LIST

PART NUMBER	DESCRIPTION
MTK-150	IPI Control Board Assembly
700-203	Manual Gas Shut-off Valve
MTK-135A	Burner Assembly
MTK-H900	Refractory Set
MTK-500A	Log Package
MTK-057T	Glass Frame Assembly
600-ECA	Electrical Connection Assembly
942-085	5" Restrictor Plate
500-MTK	3 pc. Grill Assembly
IPI-028	IPI Fan Kit
700-408	Remote Control

	<b>55345-IPI</b>	
	<u>NATURAL GAS</u>	<u>LP GAS</u>
MINIMUM INLET GAS PRESSURE	5" WC (1.25 kPa) (7" WC (1.74 kPa) recommended)	12" WC (2.99 kPa) (recommended)
MAXIMUM INLET GAS PRESSURE	10.5" WC (2.62 kPa)	13" WC (3.24 kPa)
MANIFOLD PRESSURE (HI)	3.8" WC (.95 kPa)	11" WC (2.74 kPa)
MANIFOLD PRESSURE (LO)	1.1" WC (.27 kPa)	2.9" WC (.72 kPa)
ORIFICE SIZE	#55 & #34	#68 & #51
INPUT BTU/hr. (kW)	40,000 BTU/hr (11.72 kW)	40,000 BTU/hr (11.72 kW)
MINIMUM INPUT BTU/hr. (kW)	21,500 BTU/hr (6.30 kW)	21,500 BTU/hr (6.30 kW)

# WIRING SCHEMATICS

## IMPORTANT

THIS SYSTEM REQUIRES ELECTRICITY (120V) AND / OR BATTERIES TO OPERATE.

USING BATTERY BACK UP WILL OPERATE BURNER ONLY. FAN AND LIGHT COMPONENTS WILL NOT FUNCTION ON BATTERY BACK-UP POWER.

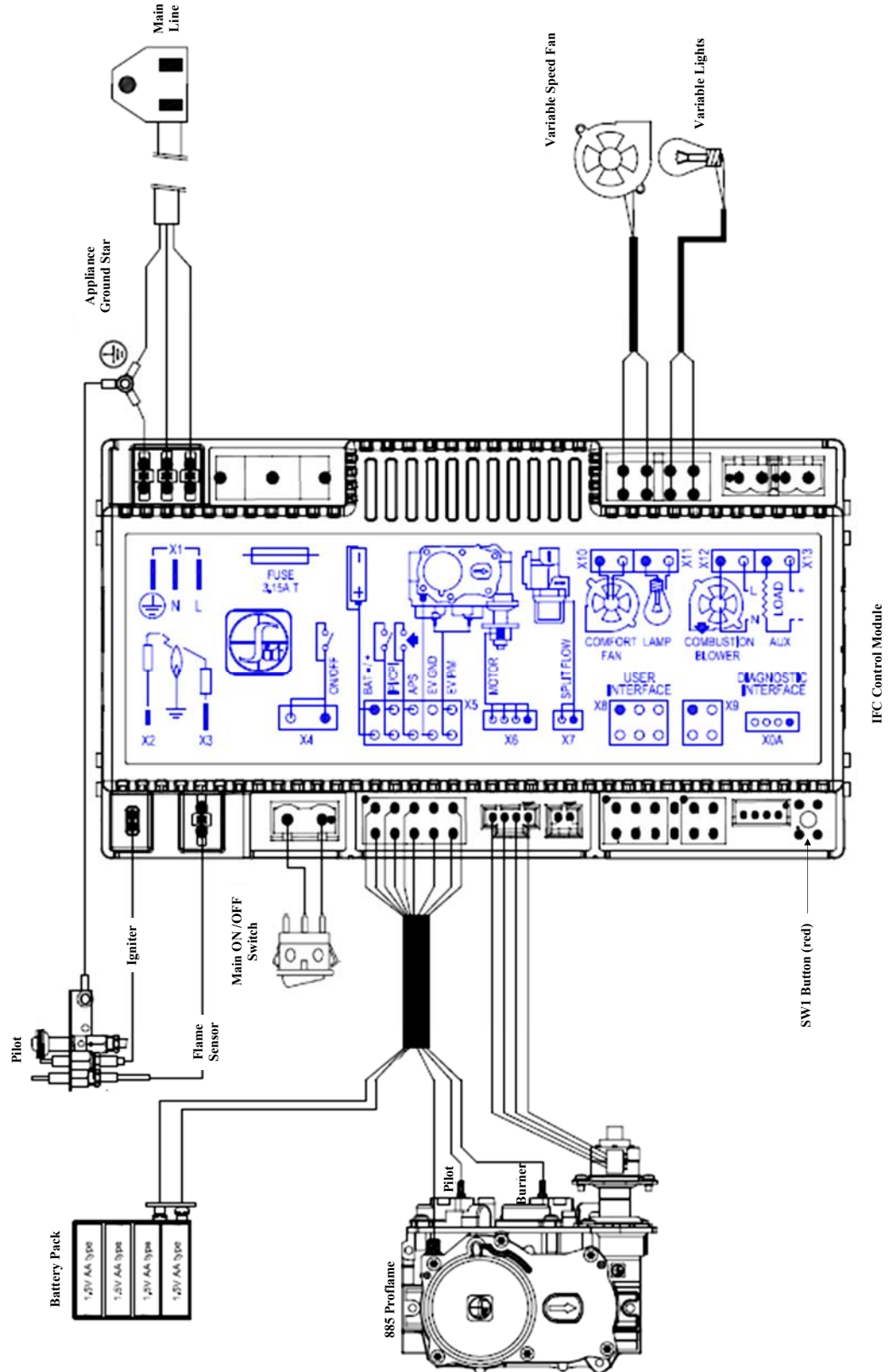
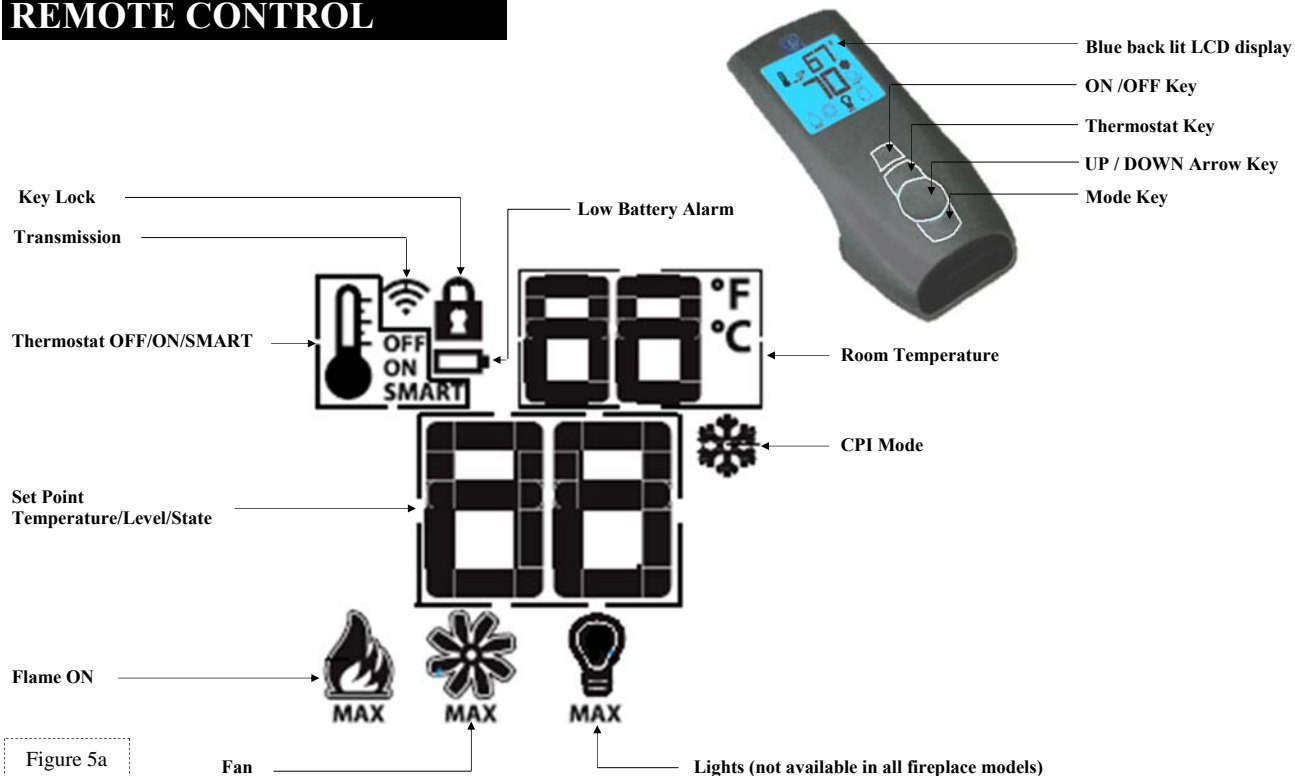


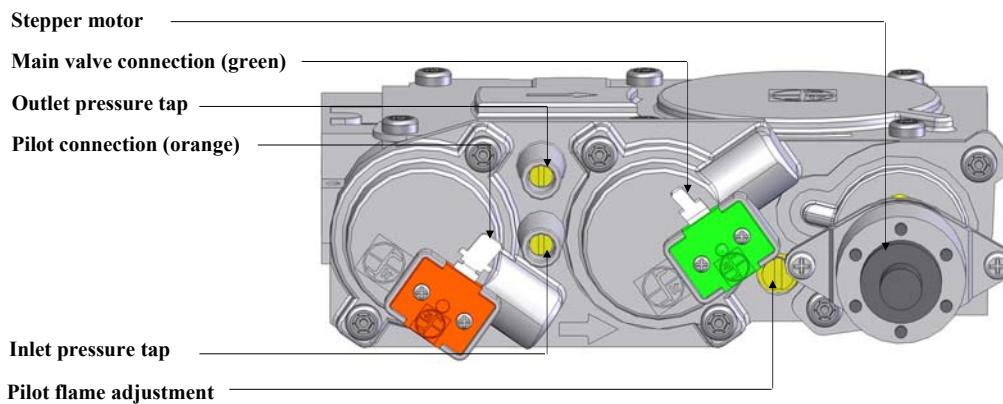
Figure 4a

# CONTROL SYSTEM COMPONENTS

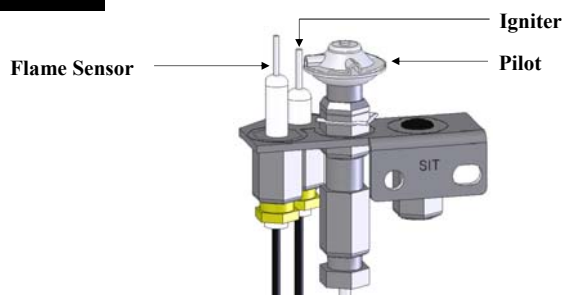
## REMOTE CONTROL



## GAS VALVE



## PILOT ASSEMBLY



# SYSTEM OPERATION

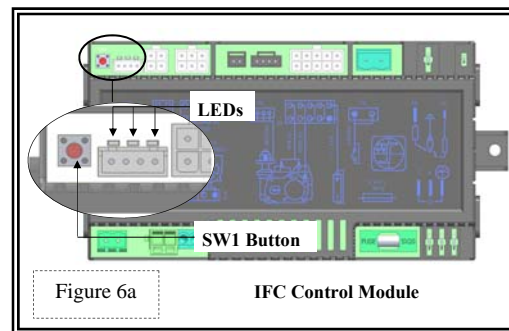
## INITIALIZING THE SYSTEM FOR THE FIRST TIME

1. Set ON/OFF rocker switch to OFF position.
2. Install 4 AA batteries (included in components packet) into battery backup holder.
3. Connect IFC Control Module to AC power supply.
4. Install 3 AAA batteries (included in components packet) into remote control battery bay (located on base of remote control).

**NOTE:** Performing the next step will initiate Pilot Start-up in Manual Mode:  
Pilot igniter will spark repeatedly.

Pilot will ignite if gas is supplied to the fireplace.

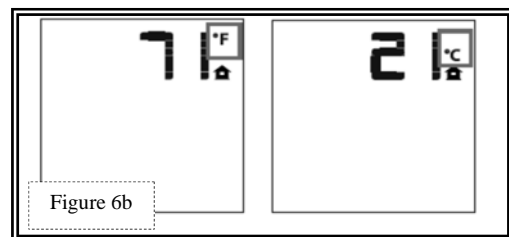
**Remove all packaging / combustible material from fireplace before proceeding.**



5. Press red SW1 button on IFC control module until module beeps three (3) times and/or an amber LED is illuminated indicating the IFC control module is ready to synchronize with the remote control.
6. Within ten (10) seconds push remote control **ON/OFF** button. The IFC control module will beep (4) times to indicate the remote control's command is accepted and set to the particular code of that remote control. Press remote control **ON/OFF** button again. The pilot will shut down indicating the remote has taken over. The system is now initialized.
7. Setting ON/OFF rocker switch to ON position will allow you to operate fireplace with remote control.

## TEMPERATURE DISPLAY

With the system in **OFF** position, press Thermostat Key and Mode Key at the same time to change from degrees F to C. Look at remote control LCD screen to verify that C or F is visible on right side of Room Temperature display.



## TURN ON THE APPLIANCE

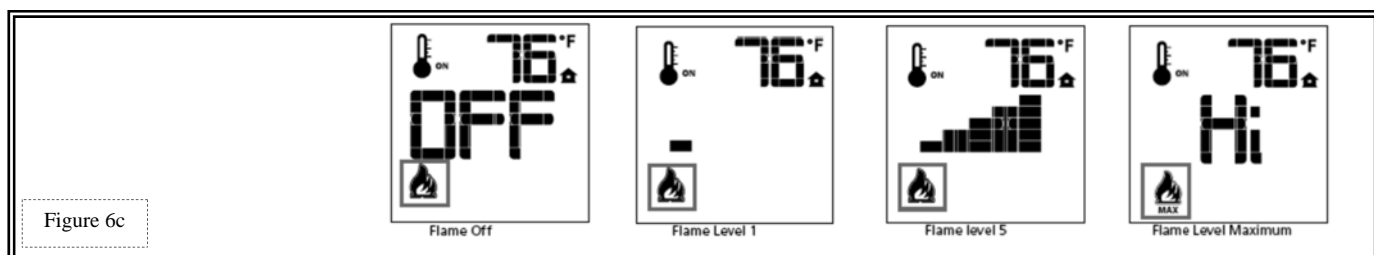
Press **ON/OFF** key on remote control. The display will show all active icons on the screen. A single 'beep' from IFC Control Module will Confirm reception of the command.

## TURN OFF THE APPLIANCE

Press **ON/OFF** key on remote control. The display will show only room temperature and icon on the screen. A single 'beep' from IFC control module will confirm reception of the command.

## MANUALLY CONTROL FLAME WITH REMOTE CONTROL

The remote control has six (6) flame levels. With system ON and flame level at maximum, press Down Arrow Key once to reduce flame height by one step until flame is turned off. The Up Arrow Key will increase flame height on step each time it is pressed. If Up Arrow Key is pressed while system is on but flame is off, the flame will come on in High position. A single 'beep' will confirm reception of the command. When SMART Thermostat is activated, manual flame height adjustment is disabled.

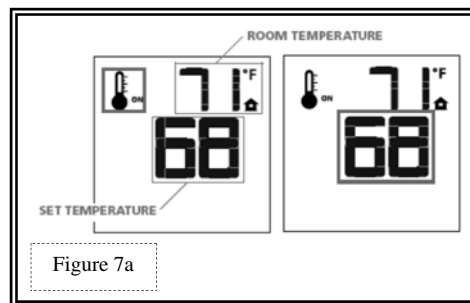


# SYSTEM OPERATION

## ROOM THERMOSTAT (Remote Control Operation)

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

To activate this function, press the Thermostat Key. The LCD display will change to show the room thermostat is ON and set temperature is now displayed. To adjust set temperature, press Up or Down arrow keys until desired set temperature is display on LCD screen.

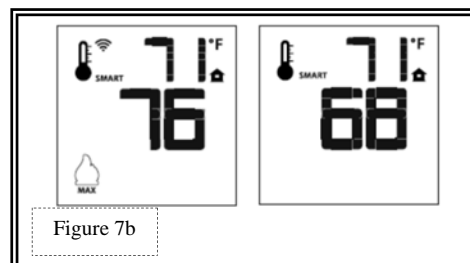


## SMART THERMOSTAT (Remote Control Operation)

The Smart Thermostat function adjusts flame height based on set temperature and actual room temperature. As room temperature gets closer to set point the Smart Function will automatically adjust flame down.

1. Press Thermostat key until word SMART appears on right side of temperature bulb graphic.
2. To adjust set temperature, press Up/Down arrow keys until desired set temperature is displayed on LCD screen.

When SMART Thermostat is activated, manual flame height adjustment is disabled.

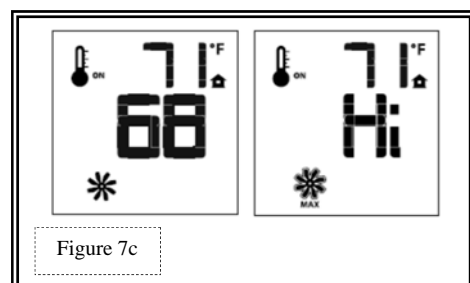


## FAN SPEED CONTROL

Fan speed can be adjusted through six (6) speeds. To activate this function use Mode Key to index to fan control icon. Use Up/Down Arrow Keys to turn on, off or adjust fan speed. A single 'beep' will confirm reception of the command.

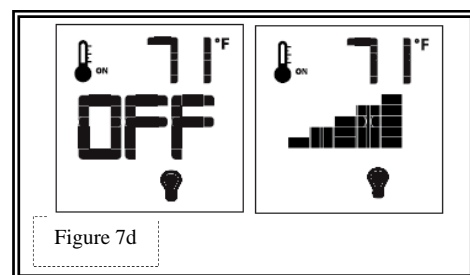
**In Thermostat Mode:** Fan(s) have a five (5) minute delay time when fireplace is lit, allowing time for heat to build in fireplace before operating, and will continue operating for approximately twelve (12) minutes after fireplace has been turned off.

**In Manual Mode:** Fan (s) will operate at previous setting. There is no delay in start up or stop time.



## ACCENT LIGHT KIT (not available in all fireplace models)

1. Use MODE key to guide you to LIGHT icon.
2. The light intensity can be adjusted through six (6) levels. Use UP/DOWN Arrow Keys to adjust intensity level. A single beep will confirm reception of the command.

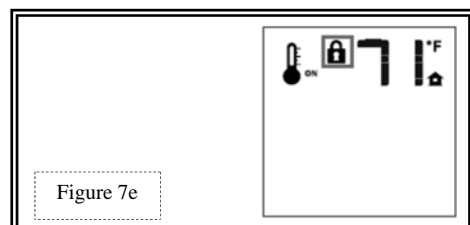


## KEY LOCK

This function locks the keys to avoid unsupervised operation.

To Activate: Press MODE and UP keys at same time.

To De-activate: Press MODE and UP keys at same time.

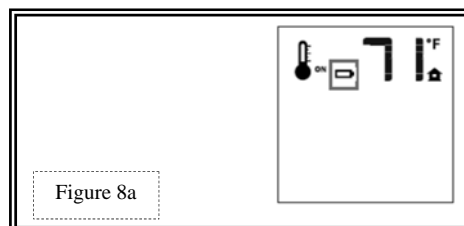


# SYSTEM OPERATION

## LOW BATTERY DETECTION

**REMOTE CONTROL:** Remote control battery lifespan depends on various factors including battery quality, number of ignitions, changes to room thermostat set point, etc. When remote control batteries are low, a Battery Icon will appear on the LCD display before all battery power is lost. When batteries are replaced this icon will disappear.

**BACKUP BATTERY PACK (used when electrical power is interrupted):** Backup batteries lifespan depends on various factors including battery quality, number of ignitions, changes to room thermostat set point, etc. When backup batteries are low, a double-beep will be emitted from the IFC control module when it receives an ON/OFF command from the remote control. This is an alert for a low battery condition of the backup batteries and after this double-beep warning, no commands will be accepted until batteries are replaced. When batteries are replaced a beep will be emitted from IFC control module as soon as powered.



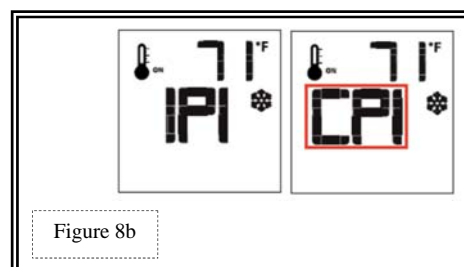
## CONTINUOUS PILOT / INTERMITTENT PILOT (CPI/IPI)

This system has the option of a continuous (standing) pilot feature. This allows you to change from a spark-to-pilot system to a standing pilot system during cold weather conditions. By having the pilot on continuously, the firebox will remain warm and a draft is established in the vent, allowing the main burner to turn on with less air-flow disruption.

With system in OFF position, press Mode Key to index to CPI mode icon. Pressing the UP Arrow Key will activate the Continuous Pilot Ignition Mode (CPI). Pressing the Down Arrow Key will return to IPI. A single beep will confirm the reception of the command.

A snowflake icon will be visible during setup of either IPI or CPI modes. In IPI mode the snowflake is not visible on LCD screen.

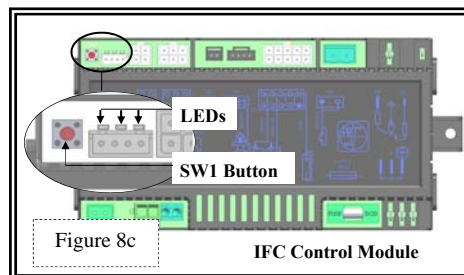
In CPI mode the snowflake will remain visible on LCD screen.



## RESETTING SYSTEM FOR MANUAL OPERATION

1. Put ON/OFF switch in OFF position.
2. Press red SW1 button on IFC control module until the IFC control module emits three (3) beeps and an amber LED is illuminated, indicating the IFC control module is ready to synchronize with remote control. Within ten (10) seconds press the red SW1 button on IFC control module again. The pilot will automatically light.
3. Turn main burner on by pressing ON/OFF switch to ON position, turn off by pressing ON/OFF switch to OFF position. Pilot will remain lit even if burner is turned off.

When operating fireplace in this capacity, the only function available is burner operation on HI.



## AUTOMATIC SAFETY RESTART

This system will execute an automatic turn OFF command within (24) hours of a continued pilot flame ignition. This allows the system to verify correct safety functions. After turn OFF sequence is completed, the IFC control module will re-execute the latest command.

# SYSTEM OPERATION

## S.I.T. PROFLAME 2 IFC IGNITION AND RESET INFORMATION

### IGNITION SEQUENCE

Starting from OFF, press remote control ON button. Approximately (4) seconds after ON/OFF button is pushed, the IFC control module will start the spark. First ignition try will last approximately (60) seconds.

If there is no flame ignition (rectification) during the first try for ignition, the IFC control module will stop sparking for approximately (35) seconds. After this wait time, the IFC control module will start the second try for ignition by sparking for approximately (60) seconds. If ignition is successful on third ignition attempt, there will be a (60) second delay before the main burner lights.

If after this third attempt there is still no positive ignition, the IFC control module will go into LOCK OUT and the red LED will blink (3) times in intervals until the system is reset.

**LED Indicator Location:** Corner of IFC control module. (IFC control module location determined by fireplace model and design. May be located in component housing behind lower grill, or behind left side access panel).

**LOCK OUT = LED blinks (3) times in intervals until the system is reset.**

#### In Summary:

1. The IFC control module will try (2) times for ignition.
2. Each try for ignition will last approximately (60) seconds.
3. The wait time between the two tries is approximately (35) seconds.

### RESET IFC CONTROL MODULE WHEN SYSTEM GOES INTO LOCK OUT

#### Reset Using ON/OFF Switch:

Set ON/OFF switch to OFF position. Wait approximately (2) seconds and move switch to the ON position. The ignition sequence will start again.

#### Reset Using Remote Control ON/OFF Button:

Turn the system off by pressing the remote control ON/OFF button. After approximately (2) seconds press the remote control ON/OFF button again. The IFC control module will reset and the ignition sequence will start again.

#### Reset By Cycling Flame:

In the Manual Flame Control Mode, use the Down Arrow Button to reduce flame to off (indicated by OFF displayed on Remote Control Display Screen). Wait approximately (2) seconds and press the Up Arrow Button, the ignition sequence will start.

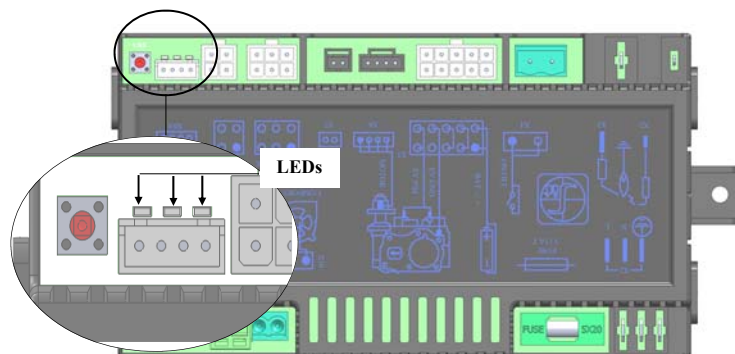
## ADDITIONAL DIAGNOSTIC INDICATIONS INFORMATION

**Low Battery Condition (<4V) Remote Control:** Battery Icon will appear on LCD remote control display. Replace batteries.

**Low Battery Condition (<4V) Battery Backup:** Red LED Indicator will blink (1) time in intervals. Low double-beep emitted from IFC control module when it receives an ON/OFF command from the remote control. Replace Batteries.

**Pilot Flame Error Condition:** Red LED Indicator will blink (2) times in intervals. Contact your dealer if this occurs.

**System Lock Out Condition:** Red LED Indicator will blink (3) times in intervals. Make sure gas is turned on. Make sure sensor is not shorted. Follow **Reset IFC Control Module When System Goes Into Lock Out** instructions above.



IFC Control Module

Figure 9a



# LIGHTING AND SHUTDOWN

## 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.

1. This appliance is equipped with an ignition device which automatically lights the pilot. **DO NOT** try to light the pilot by hand.
2. BEFORE OPERATING, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

### WHAT TO DO IF YOU SMELL GAS:

- \* Do not try to light any appliance.
  - \* Do not touch any electrical switch; do not use any phone in your building.
  - \* Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - \* If you cannot reach your gas supplier, call the fire department.
3. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

### WARNING

CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION. YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.

CLOTHING OR OTHER FLAMMABLE MATERIAL MUST NOT BE PLACED ON OR NEAR THE APPLIANCE.

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

### NOTE

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.

**DUE TO HIGH SURFACE TEMPERATURES, KEEP CHILDREN, CLOTHING AND FURNITURE AWAY.**

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



# LIGHTING AND SHUTDOWN (cont.)

## OPERATING INSTRUCTIONS

### STOP!

Read safety information on previous page and front cover of this manual before continuing.

1. Turn off all electric power to the appliance.

### ATTENTION

This appliance is equipped with an ignition device which automatically lights the pilot. **DO NOT** try to light the pilot by hand.

2. Press hand held remote **OFF** button.
3. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow 'WHAT TO DO IF YOU SMELL GAS' below. If you don't smell gas, go to next step.

### 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.

4. Turn ON all electric power to the appliance.
5. Press hand held remote **ON** button.

### CAUTION

If fireplace will not operate, follow instructions **TO TURN GAS OFF TO APPLIANCE** and call your service technician or the gas supplier.

### NOTE

When fireplace is initially lit, condensation will appear on the glass; this is normal in all gas fireplaces and will disappear after several minutes.

## TO TURN GAS OFF TO APPLIANCE

1. Press hand held remote **OFF** button.
2. Turn OFF all electric power to appliance if service is to be performed.
3. Manual shut-off valve located behind lower grill. Turn manual shut-off valve to **OFF**.

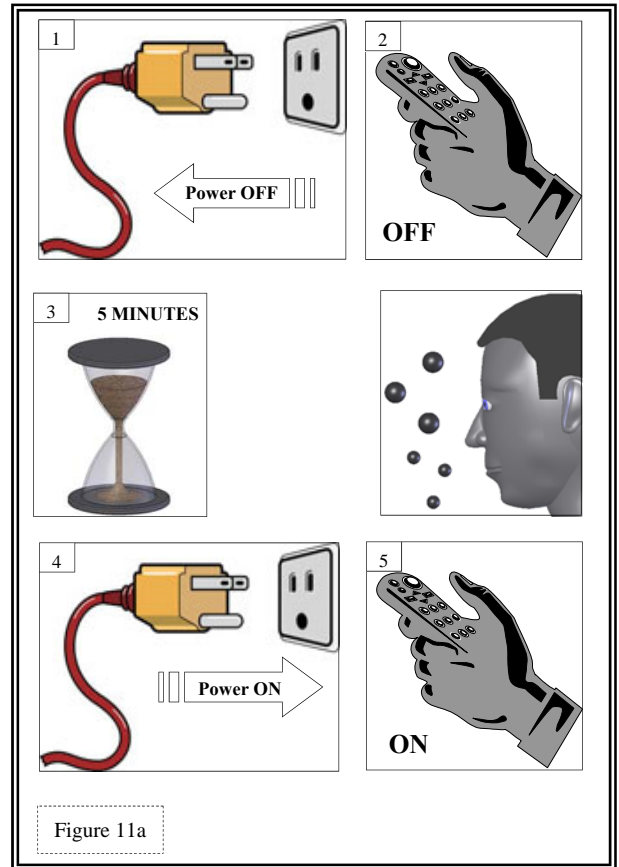


Figure 11a

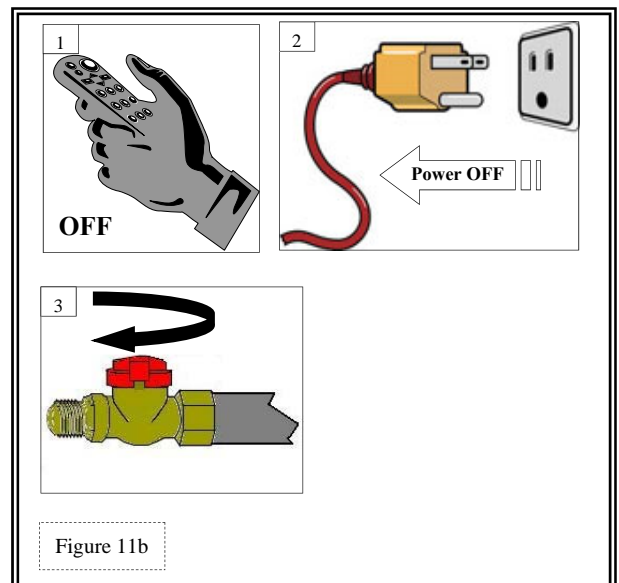


Figure 11b

# PRESSURE TESTING

## 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 and the pressure tap marked IN measures incoming pressure. Follow instructions below for proper testing procedures. Refer to page 16 for proper NAT and LP manifold pressures.

## NOTE

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

## INLET PRESSURE TEST:

1. Loosen inlet (IN) pressure tap screw (counter-clockwise).
2. Attach manometer using a 5/16" I.D. hose.
3. Set IPI/CPI switch to CPI setting.
4. Light pilot. Note manometer reading.
5. Move receiver slider switch to ON. Burner should light. Check pressure to ensure it stays between the min. and max. recommended pressure settings.
6. Set IPI/CPI switch to IPI setting. Move receiver slider switch to OFF. Pilot and burner should go out.
7. Disconnect hose and tighten screw (clockwise). Screw should be snug, do not over tighten.
8. Relight pilot. Reattach manometer to inlet pressure tap to verify that it is completely sealed. Manometer should read no pressure.

## NOTE

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

## CAUTION

A LOW PRESSURE READING CAN CAUSE DELAYED IGNITION.

## MANIFOLD PRESSURE TEST:

1. Light pilot.
2. Loosen manifold (OUT) pressure tap screw (counter-clockwise).
3. Attach manometer to pressure tap using a 5/16" I.D. hose.
4. Set IPI/CPI switch to CPI setting.
5. Move receiver slider switch to ON. Burner should light. Note manometer reading.
6. Set IPI/CPI switch to IPI setting. Move receiver slider switch to OFF.
7. Disconnect manometer hose and tighten screw (clockwise). Screw should be snug, do not over tighten.
8. Attach manometer to manifold pressure tap to verify it is completely sealed. Manometer should read no pressure when receiver slider switch is moved to ON.

Outlet (Manifold) Pressure Screw

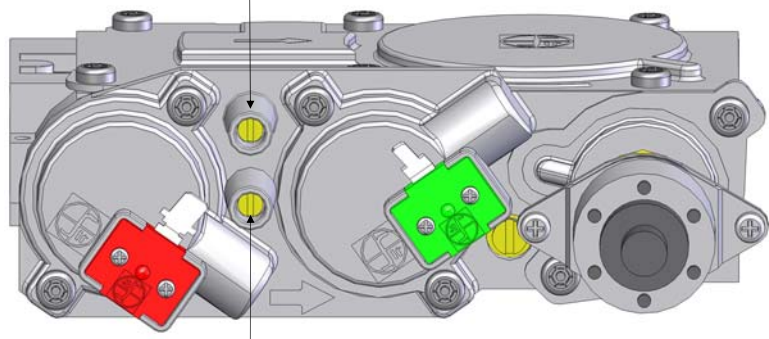


Figure 12a

Inlet Pressure Screw

# TROUBLESHOOTING

## ATTENTION

**TROUBLESHOOTING MUST BE PERFORMED BY A QUALIFIED TECHNICIAN.**

Before proceeding with the steps in the following troubleshooting guide, verify the power supply (AC/DC adapter or Fan Control Module) is present and receiver batteries and/or battery pack are fresh and installed with correct polarity.

Make sure all connections between wire harnesses and system components are proper and positive.

Make sure communication link between transmitter and receiver is established.

Verify inlet pressure meets the recommended inlet pressure. If necessary adjust line pressure regulator.

## PILOT WILL NOT LIGHT / STAY LIT

- Electrical power interrupted or disconnected. Restore electrical power to fireplace or use battery back-up. Ensure batteries are fully charged if using battery back-up as power source.
- Verify gas supply is turned on. Check remote shut-off valves from fireplace. Usually there is a valve near the main. There may be more than (1) valve between the fireplace and the main.
- Low gas pressure. Low gas pressure can be caused by several situations such as a bent line, too narrow diameter pipe, or low line pressure. Consult with plumber or gas supplier.
- No LP in tank. Check LP (propane) tank. Refill if necessary.
- Wiring disconnection. Use wiring schematic in this manual to determine that all wiring connections are secure and correct.
- Pilot flame not making contact with flame rectification sensor on pilot assembly. This valve is equipped with a pilot flame adjustment screw. Adjust as necessary.
- Pilot adjustment screw not sealed. Seal pilot adjustment screw. Do not over tighten.

## PILOT FLAME ALWAYS ON / WILL NOT EXTINGUISH

- CPI/IPI switch set to CPI position (down). Set switch to IPI position (up).

## MAIN FLAME WILL NOT LIGHT

- Remote not working properly. Replace batteries.
- Remote set to thermostat mode and there is no call for heat. Adjust heat setting.
- Thermostat disconnected or set too high. Set thermostat to lower temperature setting.
- Ensure pilot flame will ignite. If not, see pilot flame troubleshooting above.
- Ensure pilot flame is properly located to ignite main flame.
- Plugged main burner orifice.
- Wiring disconnection / improper wiring. Check for faulty or incorrect wiring.
- Verify gas supply is turned on.
- Low gas pressure. Low gas pressure can be caused by several situations such as a bent line, too narrow diameter pipe, or low line pressure. Consult with plumber or gas supplier.

# TROUBLESHOOTING

## PILOT AND BURNER EXTINGUISH WHILE IN OPERATION

- No LP in tank. Check and refill if necessary.
- Glass frame assembly not installed correctly. Refer to corresponding instructions in this manual.
- Improper vent cap installation. Adjust if necessary.
- Vent cap blockage. Remove debris if necessary.
- Improper pitch on horizontal vent. 1/4" (6mm) rise per foot is required on horizontal venting.
- Inner vent pipe leaking exhaust gases back into firebox. Check for leaks and repair if necessary.
- Excessive draft.

## GLASS SOOTING

- Improper log placement. Refer to corresponding pages in this installation manual.
- Improper venturi setting. Venturi may need to be opened slightly to allow more air into the gas mix.
- Improper pitch on horizontal venting. 1/4" (6mm) rise per foot required on horizontal venting.

## FLAME BURNS BLUE AND LIFTS OFF BURNER

- Improper venturi setting. Venturi may need to be closed slightly.
- Improper vent cap installation. Check for proper vent cap installation.
- Blockage or vent system leaks.

## NO REACTION TO COMMAND

- Backup battery pack batteries or remote control batteries low. Replace batteries.
- No communication between remote control and IFC control module. Reprogram remote control to IFC control module. Follow INITIALIZING THE SYSTEM FOR THE FIRST TIME as outlined in this manual.
- A maximum number of failed ignitions or flame restorations have been reached. Reset IFC control module.

### **Reset Using ON/OFF Switch:**

Set ON/OFF switch to OFF position. Wait approximately (2) seconds and move switch to the ON position. The ignition sequence will start again.

### **Reset Using Remote Control ON/OFF Button:**

Turn the system off by pressing the Remote Control ON/OFF button. After approximately (2) seconds press the Remote Control ON/OFF button again. The IFC control module will reset and the ignition sequence will start again.

### **Reset By Cycling Flame:**

In the Manual Flame Control Mode, use the Down Arrow Button to reduce flame to off (indicated by OFF displayed on Remote Control Display Screen). Wait approximately (2) seconds and press the Up Arrow Button, the ignition sequence will start.

# CONVERSION KIT INSTRUCTIONS

#NCK-MTK-S NAT GAS CONVERSION KIT / #LCK-MTK-S LP GAS CONVERSION KIT

## WARNING

This conversion kit shall be installed by a qualified service agency in accordance with the manufacturers instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion or productions of carbon monoxide may result, causing property damage, personal injury or loss of life. The qualified service agency is responsible for proper installation of this kit. The installation is not proper and complete until operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit. Refer to appliance owner's manual or product data plate for proper inlet and manifold pressure adjustments and orifice sizing.

Kit includes: (1) Gas Conversion Label  
(2) Burner Orifices: NAT #34 & #55 / LP #51 & #68  
(1) Baffle Shield and (3) screws - NAT only

(1) Pilot Injector NAT #51 / LP #35  
(1) Step Motor Pressure Regulator  
(1) Gas Label

## CAUTION

THE GAS SUPPLY SHALL BE SHUT OFF PRIOR TO DISCONNECTING THE ELECTRICAL POWER, BEFORE PROCEEDING WITH THE CONVERSION.

## WARNING

SHUT OFF GAS SUPPLY AND ELECTRIC POWER TO FIREPLACE.  
SHUT OFF GAS SUPPLY BEFORE DISCONNECTING ELECTRIC POWER.

## IMPORTANT

For high altitude installations: Above 2000ft. (610m) US / 4500ft. (1372m) Canada, consult the local gas distributor or authority having jurisdiction for proper de-rating methods.

### PREPARE THE FIREPLACE:

1. Remove upper hood, upper louver and glass assembly\*.
2. Remove logs and ember refractory from fireplace\*.
3. Remove pilot shield\*.
4. Remove light kit cylinders, amber light filters, and halogen bulbs.
5. Remove burner / log grate assemblies from fireplace\*.

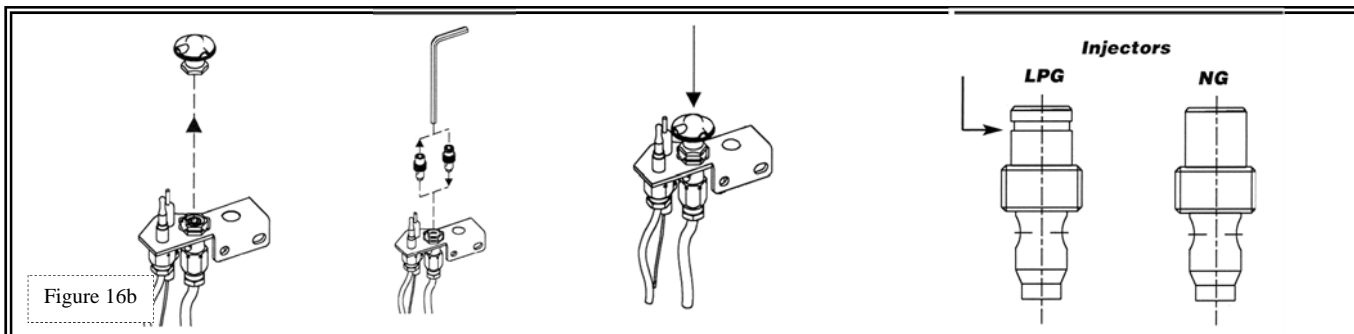
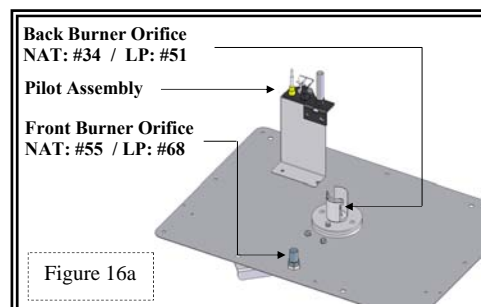
### REPLACE BURNER ORIFICES:

Remove existing orifice caps. Install orifice caps included with kit.

Tighten caps securely.

**Front orifice: (NAT #55 / LP #68)** (Number stamped on burner orifice).

**Back orifice: (NAT #34 / LP #51)** (Number stamped on burner orifice).



### CONVERT PILOT ASSEMBLY:

1. Remove pilot hood by pulling it directly up from pilot bracket.
2. Insert 5/32" (4mm) hex key into hexagon key-way of injector, turn counter clockwise to remove from injector journal.
3. Place hex key into end of injector included with kit, install into injector journal, turning clockwise to a recommended torque of 9 lb-in. (1.0 Nm) is achieved. (LP injectors have groove around top, Nat injectors do not. Numbers are stamped on pilot injectors).  
**NAT: #51 / LP: #35**
4. Align tab on base of pilot hood with slot in side of pilot journal. Push hood down, directly into pilot bracket. Hood must sit squarely for proper operation.

# CONVERSION KIT INSTRUCTIONS

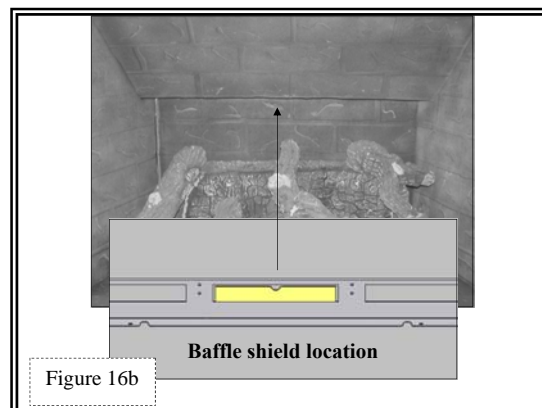
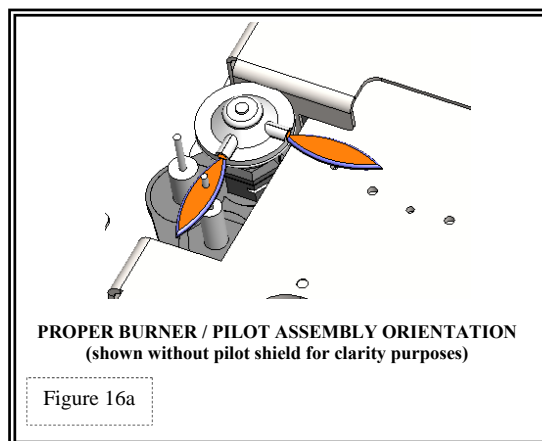
## CONVERT THE GAS CONTROL VALVE:

Follow stepper motor pressure regulator instruction sheet included with conversion kit to convert gas valve. (LP or NAT marked on stepper motor pressure regulator).

## COMPLETE THE CONVERSION:

- Adjust front burner venturi setting by loosening screw, adjusting cap and retightening screw. **NAT: 100% closed / LP: 100% open**
- Re-install burner assemblies into fireplace, checking to ensure burner venturis are properly seated over burner orifices.
- Back (main) burner venturi adjustment handle is attached to underside of control board. Access through lower grill opening. Loosen wing nuts, adjust as necessary, pulling handle forward to open, pushing backwards to close. Tighten wing nuts.  
**NAT: 1/8" (3mm) open - handle pushed back**  
**LP: 5/8" (16mm) open - handle pulled forward**  
Venturi may need further adjustment, depending on venting configuration.
- Adjust combustion air intake shield\*.
- IF CONVERTING TO LP GAS:** Remove baffle shield.  
**IF CONVERTING TO NAT GAS:** Install baffle shield included with kit
- Re-install pilot shield.
- Reinstall any light kit components if previously removed.
- Re-install ember refractory and logs\*.
- Turn on gas and electrical supplies.
- Light fireplace\*. Check for leaks at all connections with soapy water, whether field or factory made.
- Test inlet pressure, referring to page 13 for proper testing procedures. Chart below states proper pressure readings. Visually check pilot flame. Flame should envelope top of flame sensor and extend onto burner far enough for proper ignition. To Adjust Pilot: Turn pilot adjustment screw clockwise to decrease or counter-clockwise to increase pilot flame.
- Turn fireplace off.
- Affix gas type sticker to existing label.
- Reinstall glass frame assembly, upper louver and upper hood\*.
- Verify proper ignition and operation of fireplace. Refer to page 17 for proper pilot and burner flame appearance and adjustment.
- Complete and affix 'Gas Conversion' label behind lower grill.

**\*REFER TO FIREPLACE INSTALLATION MANUAL IF NECESSARY.**



Fireplace Model No.: \_\_\_\_\_  
This appliance and control was converted on \_\_\_\_\_ to \_\_\_\_\_ gas with Kit No.: \_\_\_\_\_ by \_\_\_\_\_ Company: \_\_\_\_\_ Address: \_\_\_\_\_  
Which accepts responsibility that this conversion has been properly made.  
Minimum / Maximum inlet pressures: Refer to rating plate  
Manifold Pressure: Refer to rating plate.  
Orifice size: \_\_\_\_\_ Input Rating: \_\_\_\_\_ BTU  
Complete and affix as close as possible to rating plate.

**GAS CONVERSION LABEL**  
(included with conversion kit)

Figure 16c

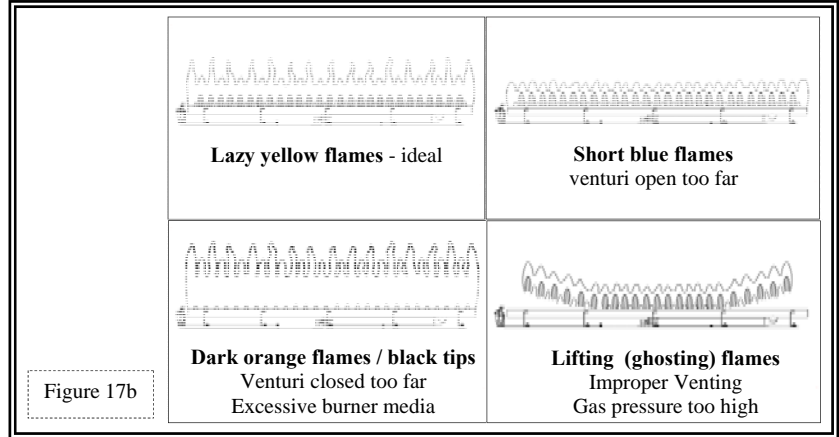
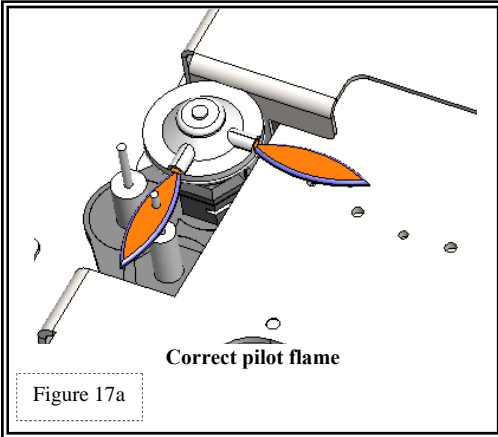
	<u>NATURAL GAS</u>	<u>LP GAS</u>
MINIMUM INLET GAS PRESSURE	5" WC (1.25 kPa) (7" WC (1.74 kPa) recommended)	12" WC (2.99 kPa) (recommended)
MAXIMUM INLET GAS PRESSURE	10.5" WC (2.62 kPa)	13" WC (3.24 kPa)
MANIFOLD PRESSURE (HI)	3.8" WC (.95 kPa)	11" WC (2.74 kPa)
MANIFOLD PRESSURE (LO)	1.1" WC (.27 kPa)	2.9" WC (.72 kPa)

# CONVERSION KIT INSTRUCTIONS

## FLAME APPEARANCE:

Flame appearance is affected by several factors including altitude, venting configuration and fuel quality. Although the venturi setting has been factory set, adjustments may be necessary for optimal performance and visual aesthetics.

When fireplace is first lit, the flames will be blue. Flames will gradually turn yellowish-orange during first 15 minutes of operation. If flames remain blue, or become dark orange with evidence of sooting (black tips), the burner tube venturi may need adjustment.



### WARNING

Burner tube adjustable venturi positioning should only be performed by a qualified professional service technician.

### FACTORY SET BURNER TUBE VENTURI SETTINGS (ADJUST AS NECESSARY FOR YOUR INSTALLATION)

	NATURAL GAS	LP (PROPANE) GAS
FRONT BURNER	100% CLOSED	5/8" (16mm) OPEN
BACK BURNER	1/8" (3mm) OPEN	5/8" (16mm) OPEN

### BURNER TUBE VENTURI ADJUSTMENT GUIDELINES

VENTURI POSITION	FLAME COLOR	VENTURI ADJUSTMENT
Closed too far	Dark orange flame with black tips	Open venturi setting slightly
Open too far	Blue flames	Close venturi setting slightly

### NOTE

If soot is present, check log positioning before adjusting burner venturi. Logs must not block burner ports.

### IMPORTANT

SLIGHT ADJUSTMENTS TO BURNER VENTURI OPENING CREATE DRAMATIC RESULTS. ADJUST AT SLIGHT INCREMENTS UNTIL DESIRED LOOK IS ACHIEVED. ALWAYS BURN FIREPLACE FOR AT LEAST 15 MINUTES AND ALLOW TIME TO COOL BEFORE MAKING ANY FURTHER ADJUSTMENTS.

### NOTE

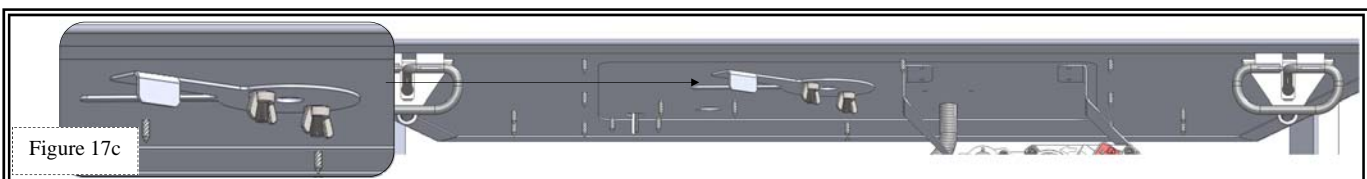
Front burner venturi generally does not require adjustment unless installing a gas conversion kit.

## TO ADJUST BACK (MAIN) BURNER VENTURI:

### WARNING

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

Back (main) burner venturi adjustment handle is attached to underside of control board. Access through lower grill opening. Loosen wing nuts, adjust as necessary, pulling handle forward to open, pushing backwards to close. Tighten wing nuts.



# MAINTENANCE

The appliance is required to be inspected at least once a year by a professional service person.

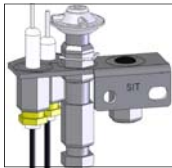
The compartment below firebox must be cleaned at least once a year, more frequent cleaning may be required due to excessive lint from carpeting, bedding materials, or other fibrous materials. Use a vacuum to clean all components at least once a year.

## NOTE

INSTALLATION AND REPAIR SHOULD BE DONE ONLY BY QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND AT LEAST ANNUALLY BY A PROFESSIONAL SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIAL, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS, BURNERS AND CIRCULATING AIR PASSAGeways OF THE APPLIANCE BE KEPT CLEAN.

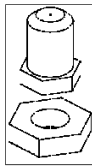
## CONTROL BOARD SYSTEM

- Annual cleaning of burner system is required. Vacuum all components thoroughly.
- The burner assembly may be removed for easier access. Refer to fireplace installation manual for complete instruction on removing & reinstalling burner assembly.
- Visually check for blocked port holes, especially near the pilot. Blocked port holes may cause delayed ignition.
- Reinstall burner assembly following instructions in fireplace installation manual.
- Visually check pilot light and burner when in operation. Flames should be steady, not lifting or floating.

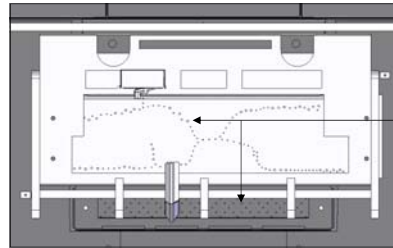


55345-IPI Pilot

Figure 18a



Burner Orifice



Burner Ports

## FAN

The fan should be disconnected from electrical current, and cleaned (vacuumed) every six months. The bearings are sealed and require no oiling.

## VENT SYSTEM

Annual examination of venting system by a qualified agency is required.

IF VENT-AIR INTAKE SYSTEM IS DISASSEMBLED FOR ANY REASON, RE-INSTALL PER INSTRUCTIONS PROVIDED WITH INITIAL INSTALLATION.

The flow of combustion and ventilation air must not be obstructed.

## GLASS CLEANING & REPLACEMENT

- Clean glass only when cool and only with non-abrasive cleansers.
- **CAUTION:** Do not operate the appliance with glass removed, cracked or broken. Replacement of the panel(s) should be done by a licensed or qualified service person.
- Use protective gloves to handle any broken or damaged glass assembly components.
- The glass assembly, part #MTK-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc.
- Replacement of glass & frame assembly, part #MTK-057T, must only be performed by a licensed or qualified service person.  
DO NOT SUBSTITUTE MATERIALS.
- Do not strike or slam glass door assembly.

## IMPORTANT

ANY SAFETY SCREEN OR GUARD REMOVED FOR SERVICING MUST BE REPLACED PRIOR TO OPERATING THE APPLIANCE.

## CAUTION

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

KEEP APPLIANCE AREA CLEAR OF COMBUSTIBLE MATERIALS, SUCH AS GASOLINE AND OTHER FLAMMABLE VAPORS AND LIQUIDS.



# 55345-IPI REPLACEMENT PARTS LIST

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

## 55345-IPI CONTROL BOARD AND PARTS

MTK-150	Control Board - Nat Gas	700-504-1	Valve Step Motor - LP Gas
MTK-151	Control Board - LP Gas	700-203	Manual Shut-off Valve
700-567	SIT IPI Valve - Natural	700-213B	18" Flexible Gas Line-Black
700-567-1	SIT IPI Valve - LP	700-226	Flexible Gas Line-Valve to Burner Connection
700-562	Proflame 2 IFC Board	700-255	Natural Gas Orifice #55 - front burner
700-563	IFC Wire Harness Assembly	700-234	NAT Gas Orifice #34 - back burner
700-551	Pilot Assembly - Natural Gas	700-268	LP Gas Orifice #68 - front burner
700-551-1	Pilot Assembly - LP Gas	700-251	LP Gas Orifice #51 - back burner
700-408	Transmitter	NCK-MTK-S	Natural Gas Conversion Kit
700-094	#51 Natural Gas Pilot Orifice	LCK-MTK-S	LP Gas Conversion Kit
700-168	#35 LP Gas Pilot Orifice	MTK-135A	Burner / Log Grate Assembly
700-504	Valve Step Motor - Natural Gas	MTK-043	Pilot Shield

## GRILL REPLACEMENT

TRF-200	Upper Hood
TRF-201	Lower Grill
TRF-200L	Upper Hood Louver

## GLASS & GLASS GASKET

MTK-005	Replacement Valance
900-006	1-1/8" Glass Gasket w/ Adhesive
MTK-057T	Valance with 26" x 35" glass

## FAN ASSEMBLIES

IPI-028	Fan Assembly
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## REFRACTORY PANELS

MTK-H900	(3 pc.) Refractory Panel Set
MTK-H901	Bottom Refractory Panel
MTK-H900S	Side Refractory (1 pc.)
MTK-H900E	Ember / Log Refractory
MTK-H902	Top Refractory Panel
MTK-H900B	Back Refractory Panel

## COMBUSTIBLE MATERIAL BACKER BOARD

MTK-FPS	FirePro Standoff
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## LOG SET

MTK-50A	Log Set
MTK-1	#1 Log
MTK-2	#2 Log
MTK-3	#3 Log
MTK-4	#4 Log
MTK-5	#5 Log
MTK-6	#6 Log
MTK-7	#7 Log
MTK-8	#8 Log
MTK-9	#9 Log
MTK-10	#10 Log
MTK-11	#11 Log
MTK-12	#12 Log
900-KLK	Klinkers
900-REMB	Rock Wool Embers