INSTALLATION MANUAL

THIEF RIVER FALLS

Models: #56701
#56701-MV
#56701-IPI

DIRECT VENT GAS FIREPLACE

HUSSONG MANUFACTURING

KOZY HEAT FIREPLACES

Quality Fireplaces for Life

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.

English and French Installation Manuals Available Through Your Local Dealer or Visit Our Website at www.kozyheat.com

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 neighbors phone. Follow the gas supplier 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.

NATIONAL FIREPLACE INSTITUTE NFI CERTIFIED www.nficertified.org

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

Tested & Listed By OMNI-Test Laboratories, Inc. Portland Oregon USA

Report No. 216-S-05-5

TRF-MAY-2012-REV-18

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 2.14-M91 (R2009), "Gas-Fired 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*

- **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.**
- **<u>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.</u>**
- **The glass assembly, Part #TRF-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

	LETTER KEY	A	B	C	D	E	F	G	H	I	J	K
	DESCRIPTION	Height	Width	Back Width	Depth	Opening Width	Glass Frame Height	Stand-off Height	Top to Upper Vent Center	Unit Top to Back Vent Top	Rear Vent Center to Top	Floor to Rear Vent Center
FIREPLACE DIMENSIONS	INCHES	34-1/2	40-3/4	22-1/2	15-3/4	36	26	3-1/2	6-3/4	3-1/2	6-1/2	27-7/8
	MILLIMETERS	876	1035	572	400	914	660	89	171	89	165	708

WARNING

Top stand-off bracket must be attached to fireplace. Do not remove. Stand-off bracket is not load bearing.
Non-combustible zone: Stand-off provides 3-1/2" (89mm) 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.

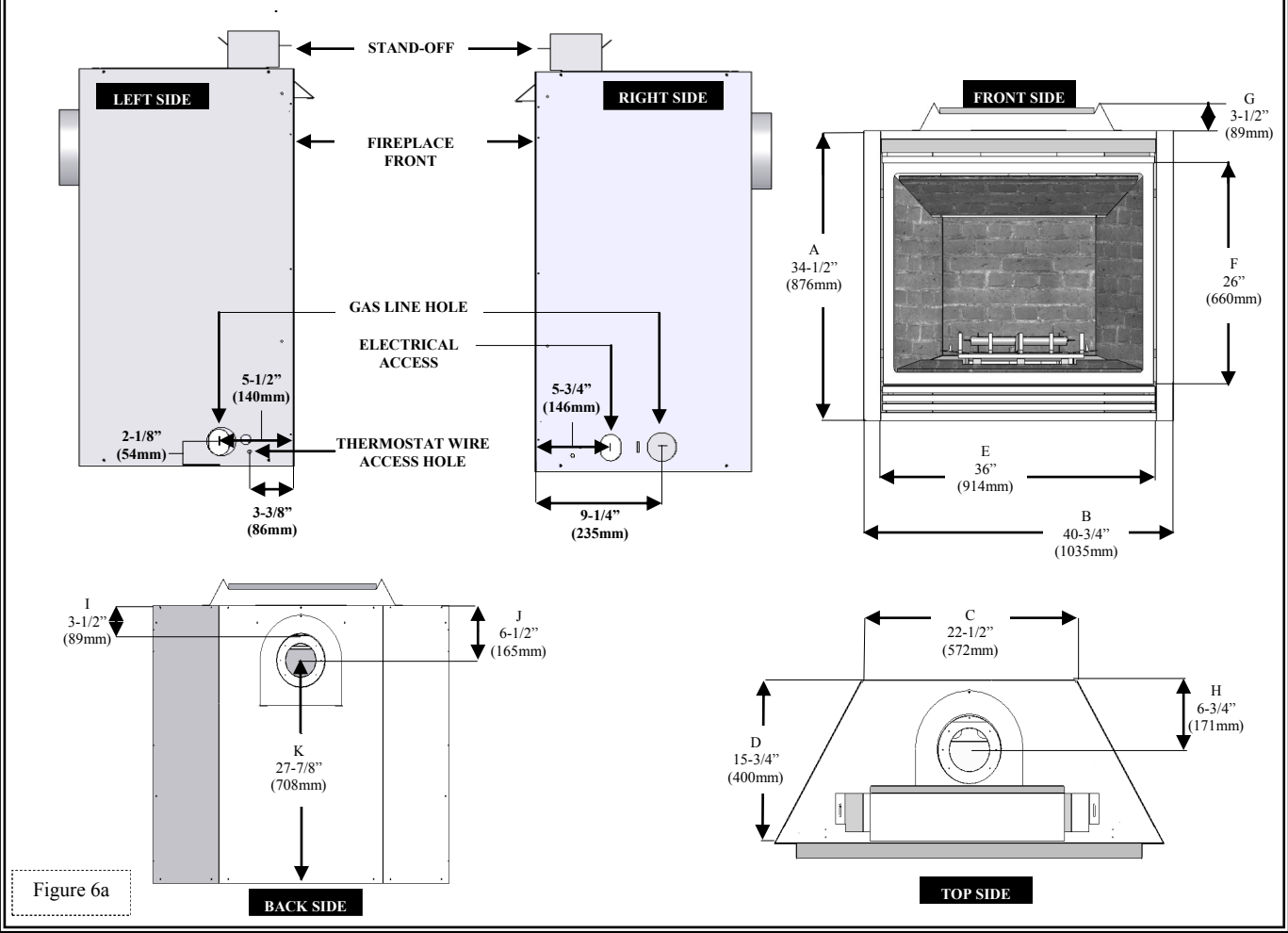


Figure 6a

CLEARANCES

Top of unit face to framing	3-1/2" (89mm)
From unit left & right sides & back	1/2" (13mm)
To flooring	0" (0mm)
Unit top to ceiling	31" (787mm)
Unit side to adjacent sidewall	0" (0mm)
Unit front to combustibles	36" (914mm)
Top of unit to 3/4" (19mm) trim	6" (152mm)
Mantel 8" (203mm) deep from top of fireplace	8" (203mm)

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 optional refractory.
12. Install logs.
13. Install grills and optional decorative doors / faces.
14. 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

NAILING FLANGE ASSEMBLY & INSTALLATION

1. Remove (4) nailing flanges from fireplace sides.
2. With the 1/2" (13mm) long stand-offs on nailing flanges facing away from fireplace, align nailing flange with holes on outside corners of fireplace. Secure with 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 1/2" (13mm) long stand-off (located on backside of nailing flange). Secure with nails or screws.

NOTE	**Depending on facing material, tabs can be adjusted forward or back wards 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.

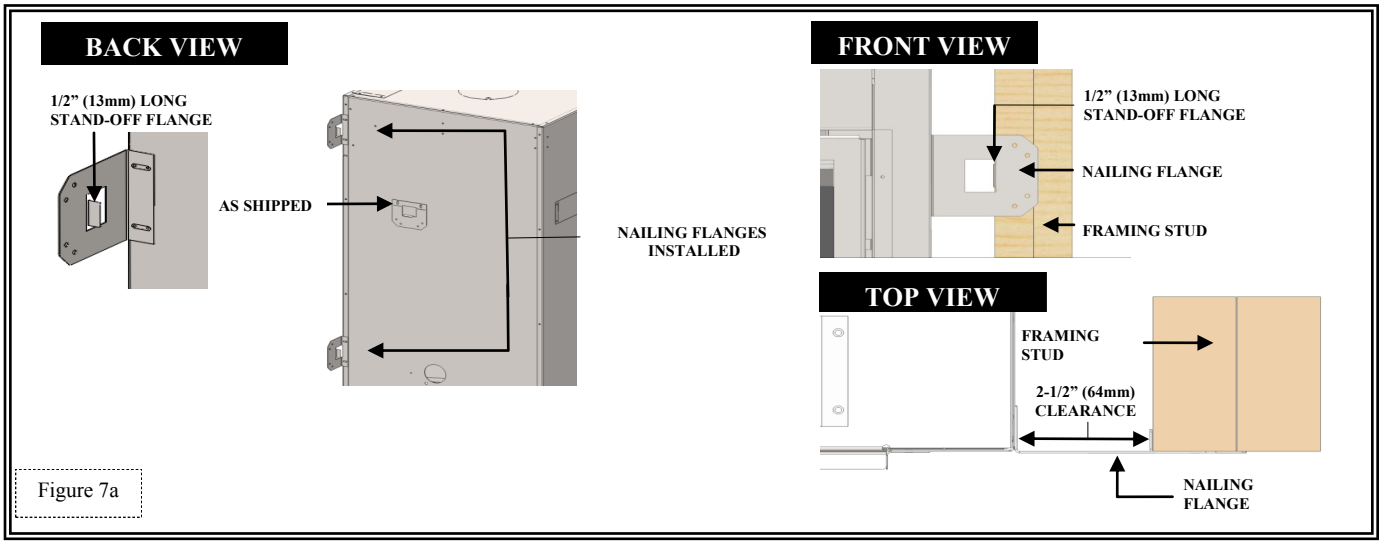


Figure 7a

TOP STAND-OFF ADJUSTMENT

The top stand-off is adjustable to accommodate finish material thickness (non-combustible material only).

TO ADJUST: Loosen screws at fireplace top, slide top stand-off to desired position, retighten screws.

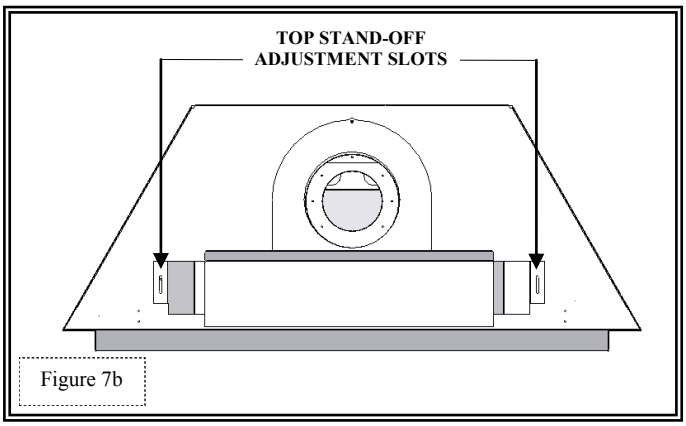


Figure 7b

FRAMING

WALL ENCLOSURE ROUGH OPENING

IMPORTANT	**Framing dimensions should allow for wall covering thickness and fireplace facing materials.** **If using a hearth, adjust 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

(APPLIES TO BOTH HORIZONTAL AND VERTICAL VENTING TERMINATIONS)

38-1/4”(972mm) High x 41-1/4”(1084mm) Wide x 16-1/4” (413mm) Deep.

1/2” (13mm) clearance at back and sides of fireplace must be maintained.

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.**

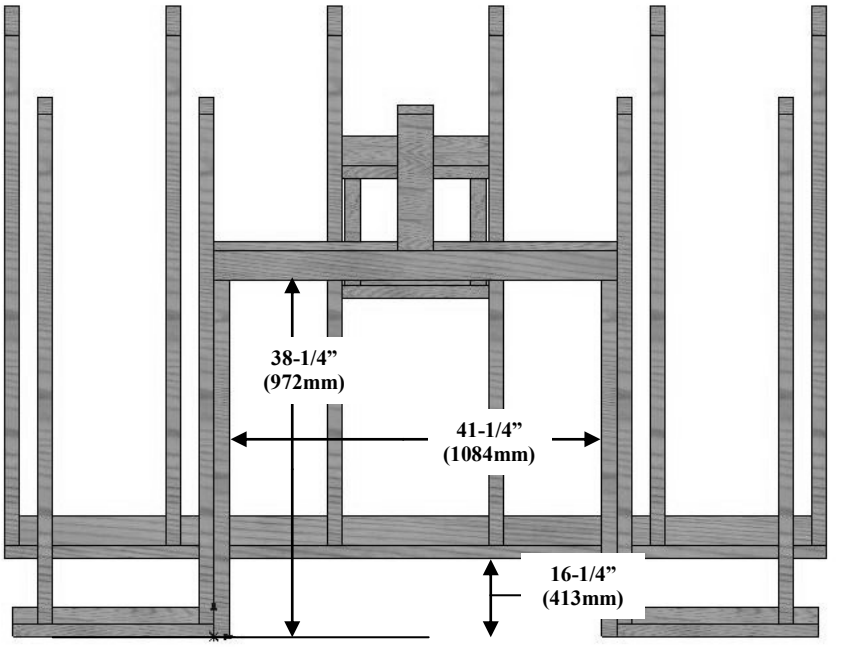


Figure 8a

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 the 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. The bottom of fireplace must be level with finished hearth to allow for lower grill operation and proper fit of optional decorative full door faces.**

WARNING	**Install fireplace on hard metal or wood surface extending the full width and depth of fireplace.** **Minimum platform size: 40-3/4" (1035mm) wide x 15-3/4" (400mm) deep.** **FIRE HAZARD: Do NOT install directly on carpeting, vinyl, or any combustible material other than wood.**

IMPORTANT	**Vent cap location must be in compliance with guidelines on page 21 of this manual**.

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.

HORIZONTAL TERMINATIONS

Follow vent pipe manufacturer's installation instructions for horizontal terminations. Include required 1-1/2" (38mm) top clearance and 1" (25mm) sides and bottom clearances for approved rigid vent systems and the Kozy Heat 700-1 Series Flexible Vent System.

MINIMUM HORIZONTAL FRAMING DIMENSIONS (REAR VENT APPLICATIONS)

	VENT PIPE TOP (A)	FRAMED OPENING TOP (B)
RIGID PIPE	31" (787mm)	32-1/2" (826mm)

MINIMUM HORIZONTAL FRAMING DIMENSIONS (TOP VENT APPLICATIONS)

	VENT PIPE TOP (A)	FRAMED OPENING TOP (B)
RIGID PIPE	44-1/8" (1121mm)	45-5/8" (1159mm)
FLEX PIPE	52-1/2" (1333mm)	53-1/2 (1359mm)

MINIMUM HORIZONTAL FRAMING DIMENSIONS (CORNER INSTALLATIONS)

	VENT PIPE TOP (A)	FRAMED OPENING TOP (B)
RIGID PIPE	44-1/8" (1121mm)	45-5/8" (1159mm)

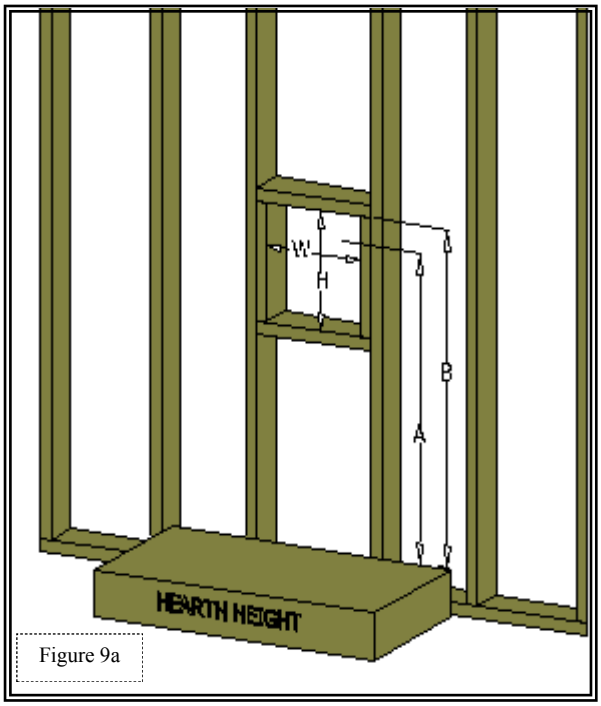


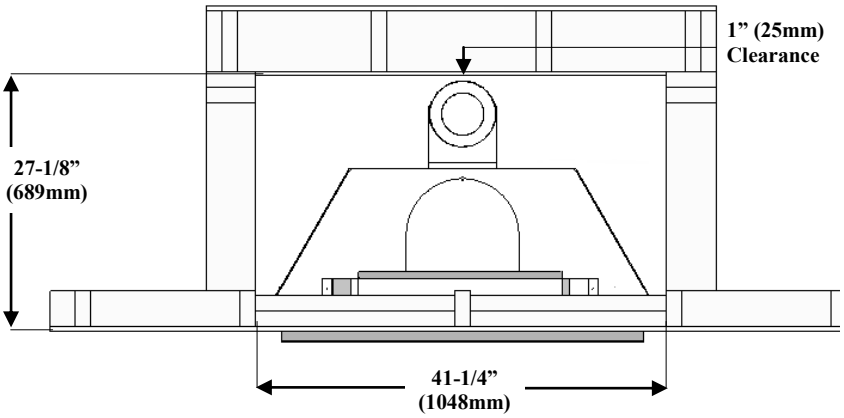
Figure 9a

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.**

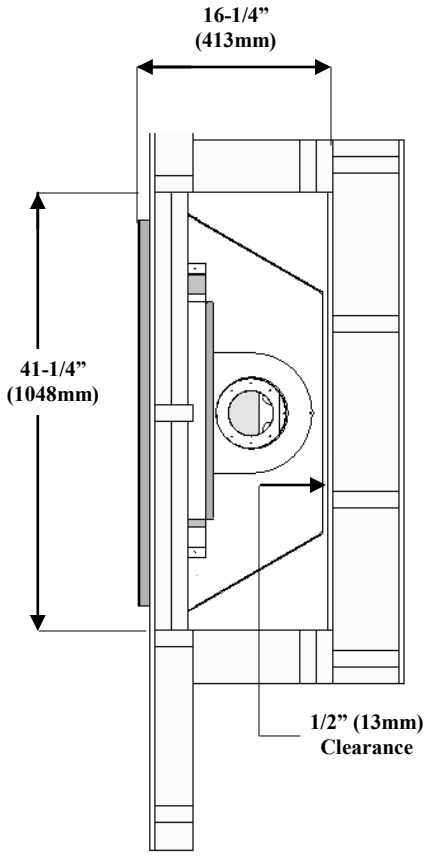
CAUTION	**Due to high temperatures, this fireplace should be located out of traffic areas and away from furniture and draperies.**

TYPICAL INSTALLATION OPTIONS

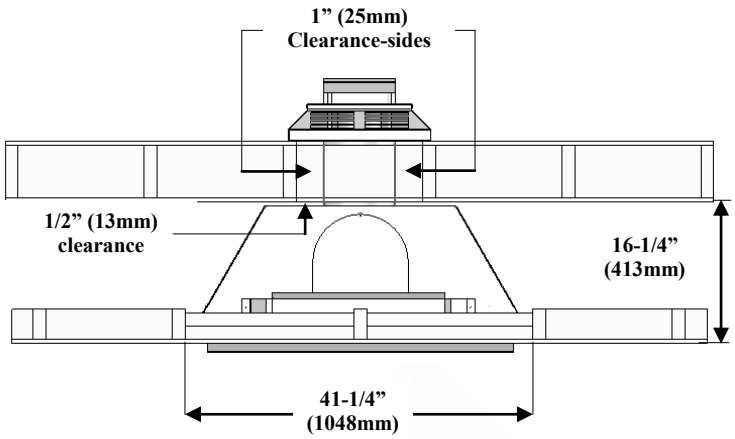
REAR VENT VERTICAL



TOP VENT



REAR VENT HORIZONTAL



CORNER

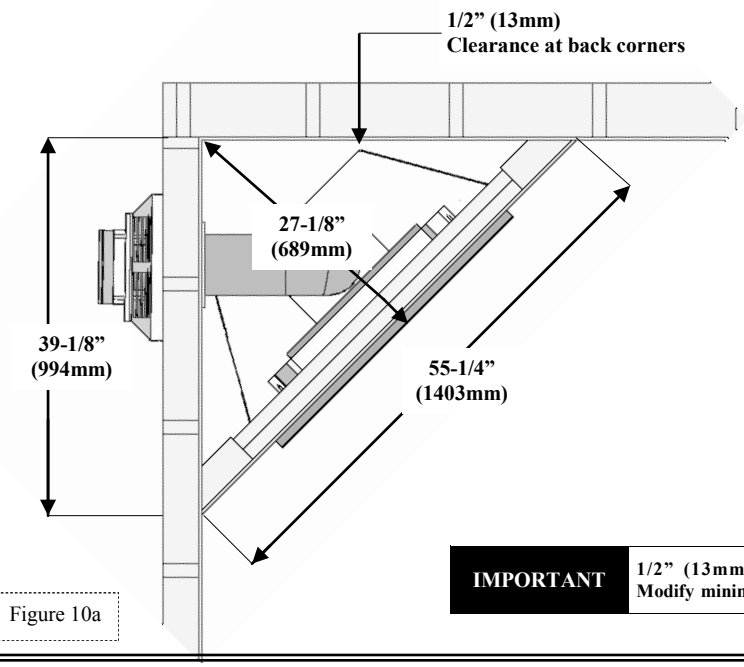


Figure 10a

IMPORTANT	1/2" (13mm) wall materials included in dimensions where applicable. Modify minimum opening if necessary to accommodate finish material thickness.

MANTEL REQUIREMENTS

NON-COMBUSTIBLE ZONE:

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

#700-1 Series Flexible Venting: 1" (25mm) above elbow for entire width and depth (behind header) of fireplace.

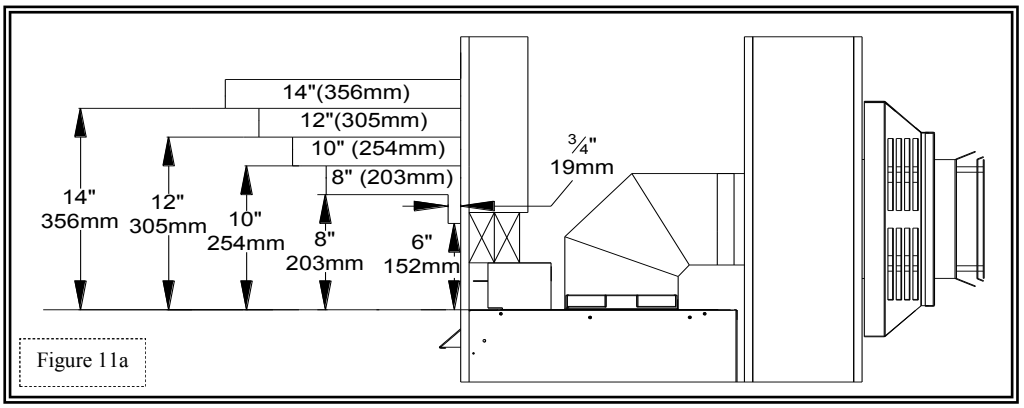


Figure 11a

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.

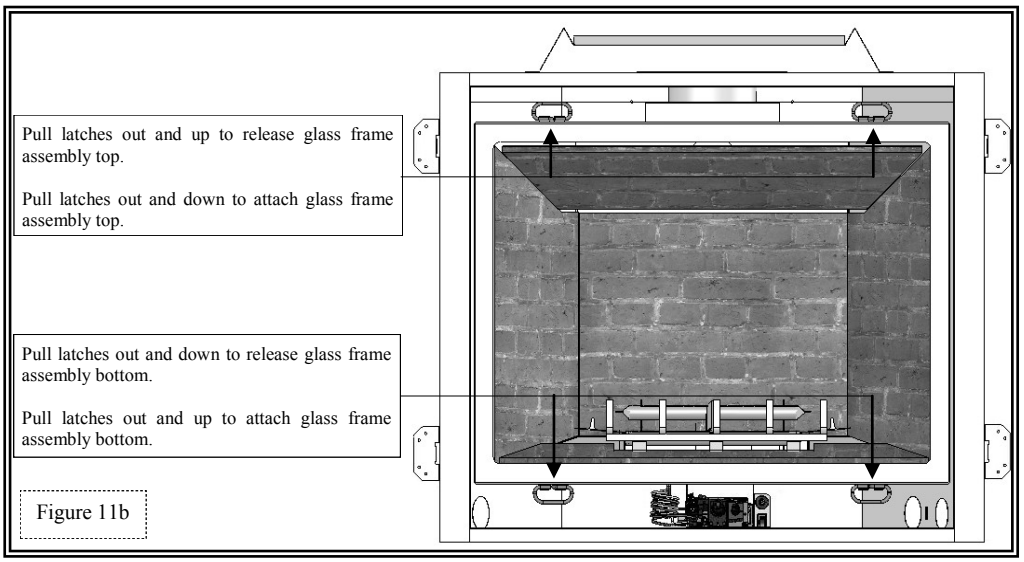


Figure 11b

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.

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 223.1.** **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 ½ 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 ½ 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.**

	NATURAL GAS	LP GAS
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 (Top vent conversion instructions)

REMOVE BACK VENT COLLARS

NOTE	All components removed from fireplace back vent will be re-installed for top venting.

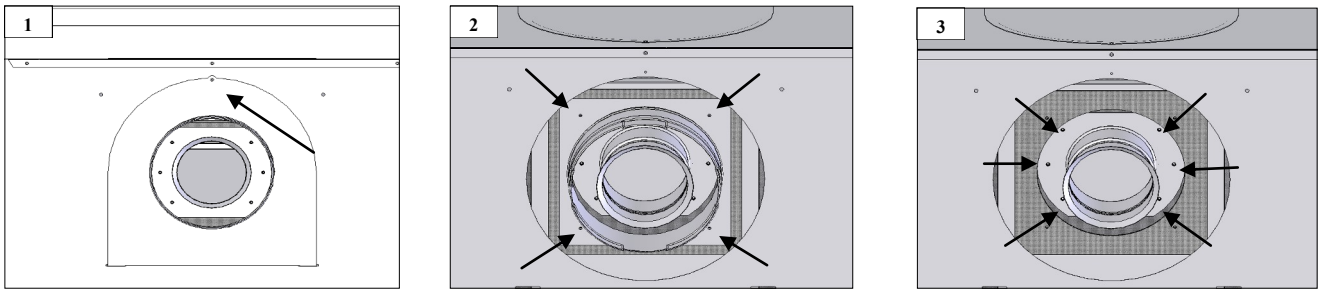


Figure 13a

1. Remove back cover and attachment screw .
2. Remove 6-5/8” combustion air intake collar and (4) screws.
3. Remove 4” exhaust collar and (6) screws.

REMOVE TOP COMBUSTION AIR INTAKE & EXHAUST COLLARS

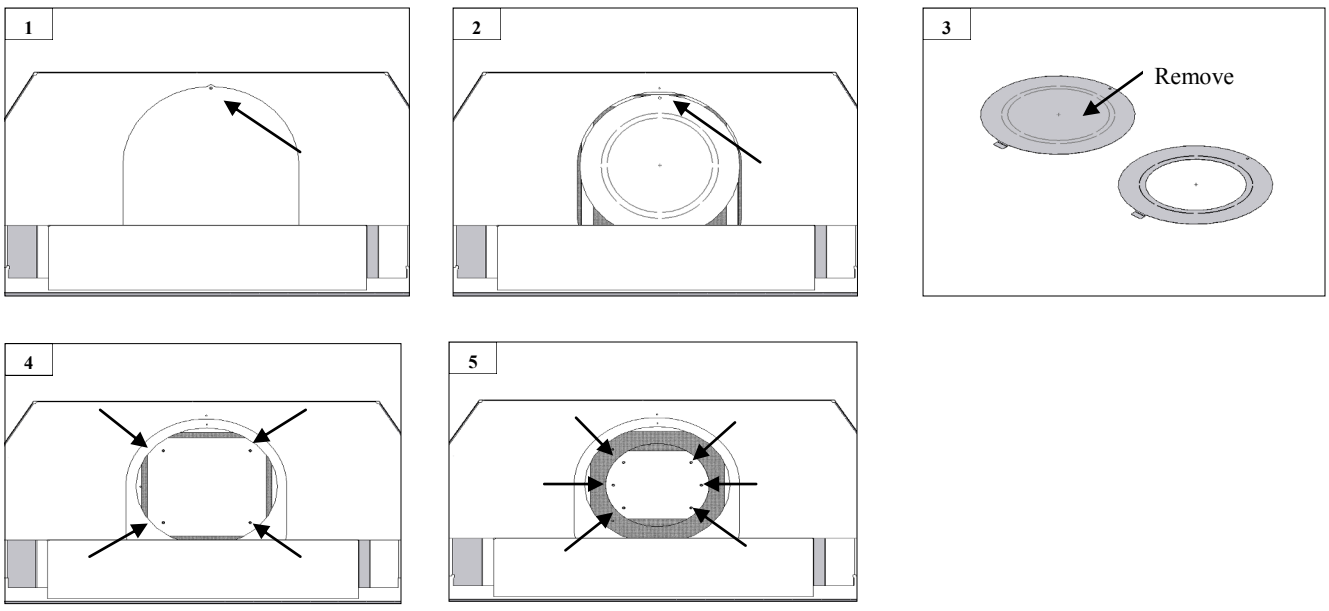


Figure 13b

1. Remove top cover and screw.
2. Remove heat shield cover (w/ knockout) and screw.
3. Using tin snips, remove center knockout section.
4. Remove 6-5/8” combustion air intake cover and (4) screws.
5. Remove exhaust cover and (6) screws.

VENTING (Top vent conversion instructions cont.)

INSTALL EXHAUST & COMBUSTION AIR INTAKE COLLARS TO FIREPLACE TOP

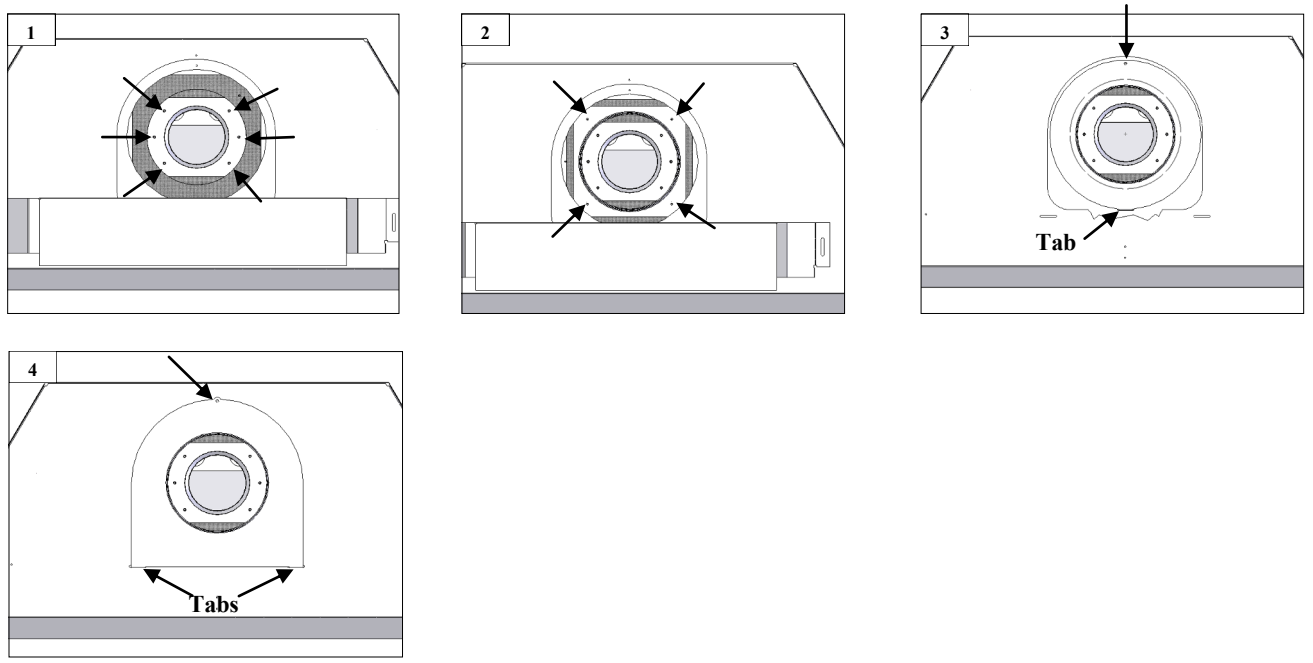


Figure 14a

1. Install 4" exhaust collar to fireplace top. Secure with (6) screws previously removed.
2. Install 6-5/8" combustion air intake collar to fireplace top. Secure with (4) screws previously removed.
3. Insert tab on heat shield cover (center previously removed) into slot on fireplace top.
4. Insert tabs on top cover plate into slots at top of fireplace. Secure with (1) screw previously removed .

INSTALL COVER PLATES TO FIREPLACE BACK

WARNING	**Cover plates must be installed on back of fireplace. Do not proceed with fireplace installation until this procedure is completed. Follow instructions below.**

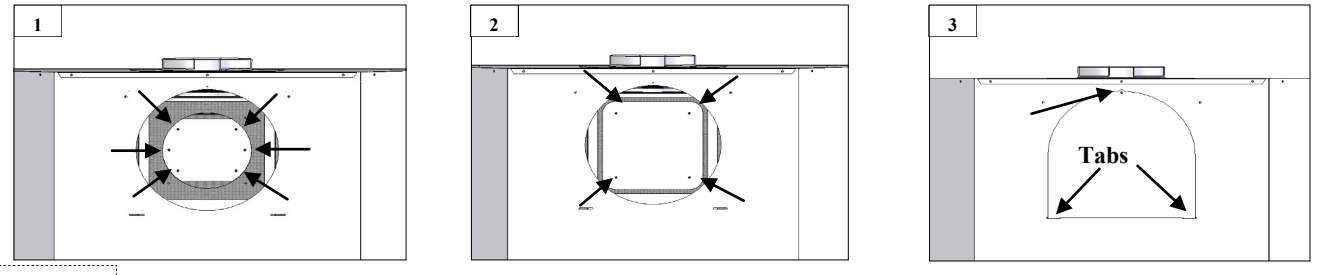


Figure 14b

1. Install 4" exhaust cover plate to fireplace back. Secure with (6) previously removed screws.
2. Install combustion air intake cover to fireplace back. Secure with (4) previously removed screws.
3. Insert tabs on outer cover into slots in fireplace back. Secure cover top with (1) previously removed screw.

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.**

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

APPROVED VENTING

Simpson Dura-Vent DV-GS 4" x 6-5/8" direct vent system (horizontal and vertical terminations).

Ameri-Vent Direct Chimney System 4" x 6-5/8" (horizontal and vertical terminations).

Kozy Heat #700 series flexible vent system (horizontal terminations).

Metal Fab 4" x 6-5/8" direct vent chimney system (horizontal and vertical terminations).

ICC EXCELDirect 4" x 6-5/8" direct vent chimney system (horizontal and vertical terminations).

Security 4" x 6-5/8" direct vent chimney system (horizontal and vertical terminations).

Amerivent / American Metal 4" x 6-5/8" direct vent chimney system (horizontal and vertical terminations).

Selkirk Model DT 4" x 6-5/8" direct vent chimney system (horizontal and vertical terminations).

BDM 4" x 6-5/8" Direct Vent Chimney System (horizontal and vertical terminations).

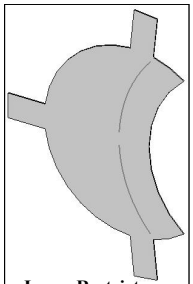
RESTRICTOR

A restrictor is included in fireplace components packet.

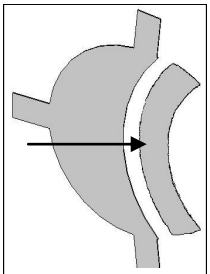
Each installation is unique and affected by various factors including venting configuration, altitude and climate. Therefore, after fireplace installation is complete a restrictor may be required or may need to be removed or modified.

Page 28 has information on restrictor recommendations depending on burner flame appearance and instructions on installation after venting is completed.

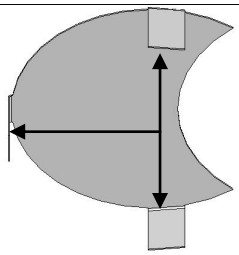
TO BE USED AT INSTALLER DISCRETION.



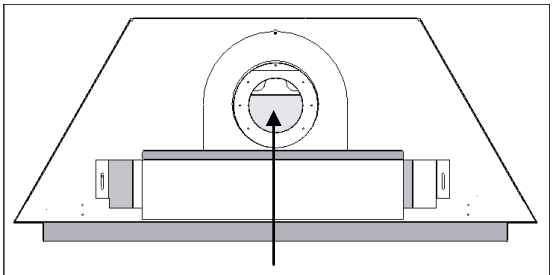
Large Restrictor



Remove tab (s) to create small restrictor



Bend tabs to approx. 80 degree angles to create tension to hold itself in place when installed.



Slide restrictor into exhaust pipe on top of fireplace with tabs pointing towards you prior to attaching venting.

Figure 15a

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 VENT SYSTEM CLEARANCES

	TOP	BOTTOM	SIDES
ALL APPROVED VENTING	1-1/2 inches (38mm)	1 inch (25mm)	1 inch (25mm)

NOTE	**Horizontal sections require 1/4" (6mm) rise for every 12" (305mm) of travel.** **Flange on top stand-off must be bent upwards to a 90˚ angle when top venting.**

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

IMPORTANT	**A WALL THIMBLE PASS-THRU MUST BE USED ON ALL HORIZONTAL VENT RUNS THAT PASS THROUGH EITHER INTERIOR OR EXTERIOR WALLS. FOLLOW VENT SYSTEM MANUFACTURER'S INSTRUCTIONS.**

HORIZONTAL TERMINATIONS (top vent)

MINIMUM: 90° elbow + 6" (152mm) horizontal + termination cap.

MAXIMUM: 90° elbow + 14ft. (4.27m) + termination cap.

HORIZONTAL TERMINATIONS (rear vent)

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

MAXIMUM: 24" (610mm) horizontal + termination cap.

HORIZONTAL TERMINATIONS (top vent)

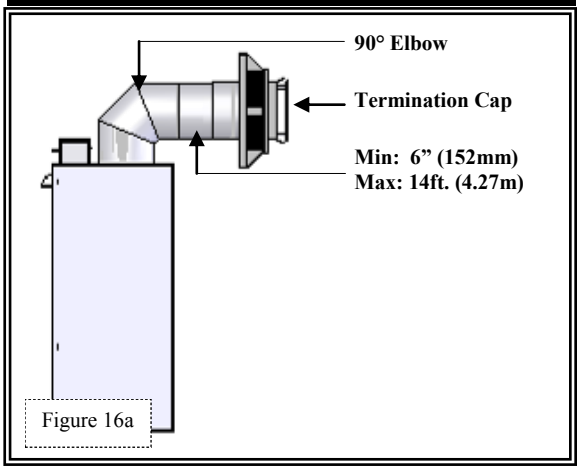


Figure 16a

HORIZONTAL TERMINATIONS (rear vent)

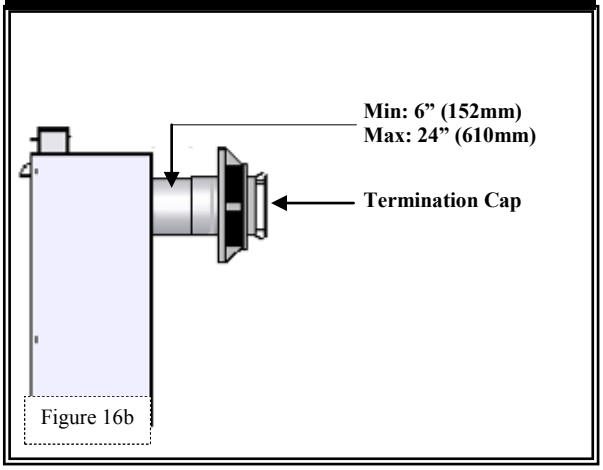


Figure 16b

TYPICAL CORNER INSTALLATION

90° elbow + horizontal pipe + termination cap.

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

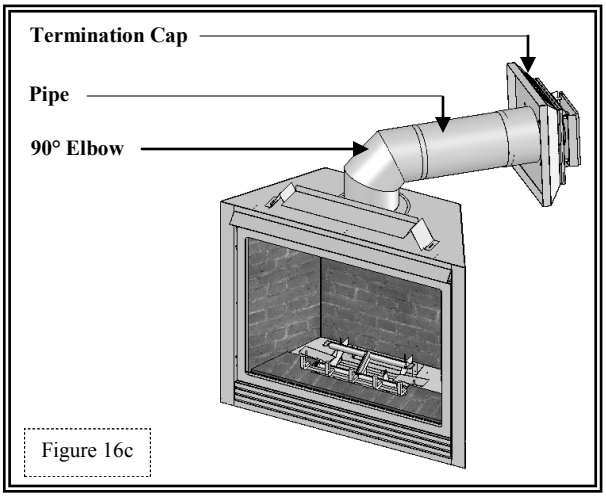


Figure 16c

VENTING

VERTICAL TERMINATIONS

VERTICAL VENT SYSTEM CLEARANCES	
	SIDES
ALL APPROVED VERTICAL PIPE	1 inch (25mm)

VERTICAL TERMINATIONS (top vent)

MAXIMUM: 33ft. (10.06m) + cap.

NOTE	**Flange on top stand-off must be bent upwards to a 90˚ angle when top venting.**

VERTICAL TERMINATIONS (rear vent)

MINIMUM: 90˚ elbow +14" (356mm) + cap.

MAXIMUM: 90˚ elbow + 22ft. (6.71m) + cap.

VERTICAL VENTING (rear vent)

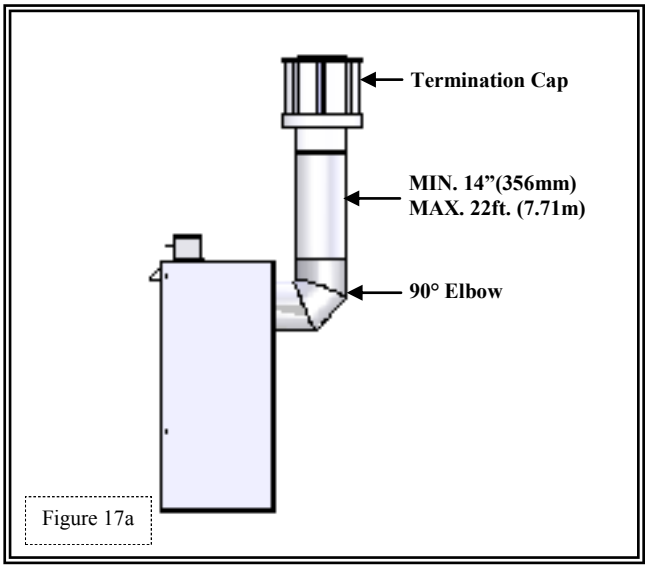


Figure 17a

MAXIMUM VERTICAL VENTING (top vent)

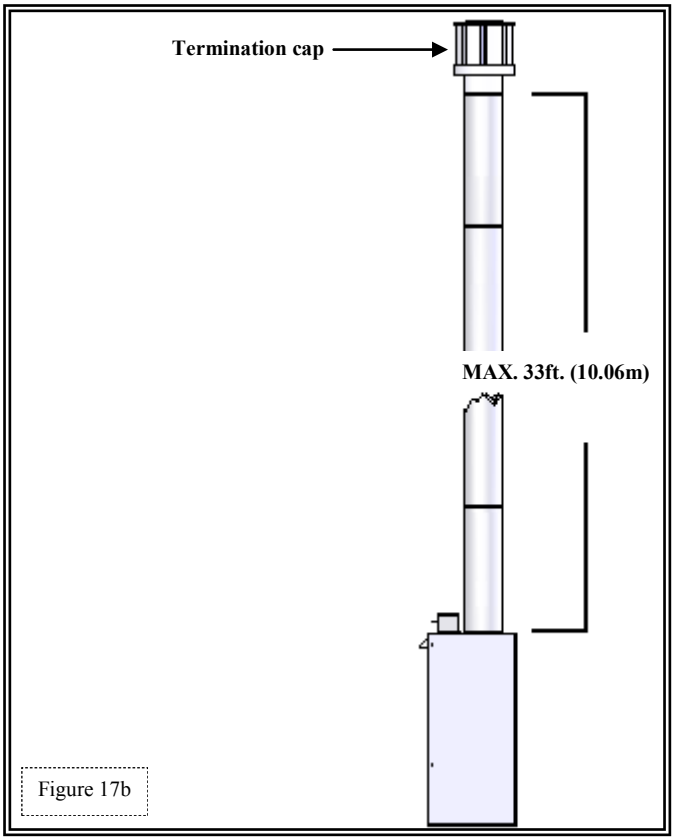


Figure 17b

VENTING

HORIZONTAL & VERTICAL COMBINATION TERMINATIONS (top vent)

MAXIMUM: 10ft. (3.05m) horizontal + 20ft. (6.10m) vertical + cap. 30ft (9.14m) total.

NOTE	**Flange on top stand-off must be bent upwards to a 90˚ angle when top venting.**

IMPORTANT	**A WALL THIMBLE PASS-THRU MUST BE USED ON ALL HORIZONTAL VENT RUNS THAT PASS THROUGH EITHER INTERIOR OR EXTERIOR WALLS. FOLLOW VENT SYSTEM MANUFACTURER'S INSTRUCTIONS.**

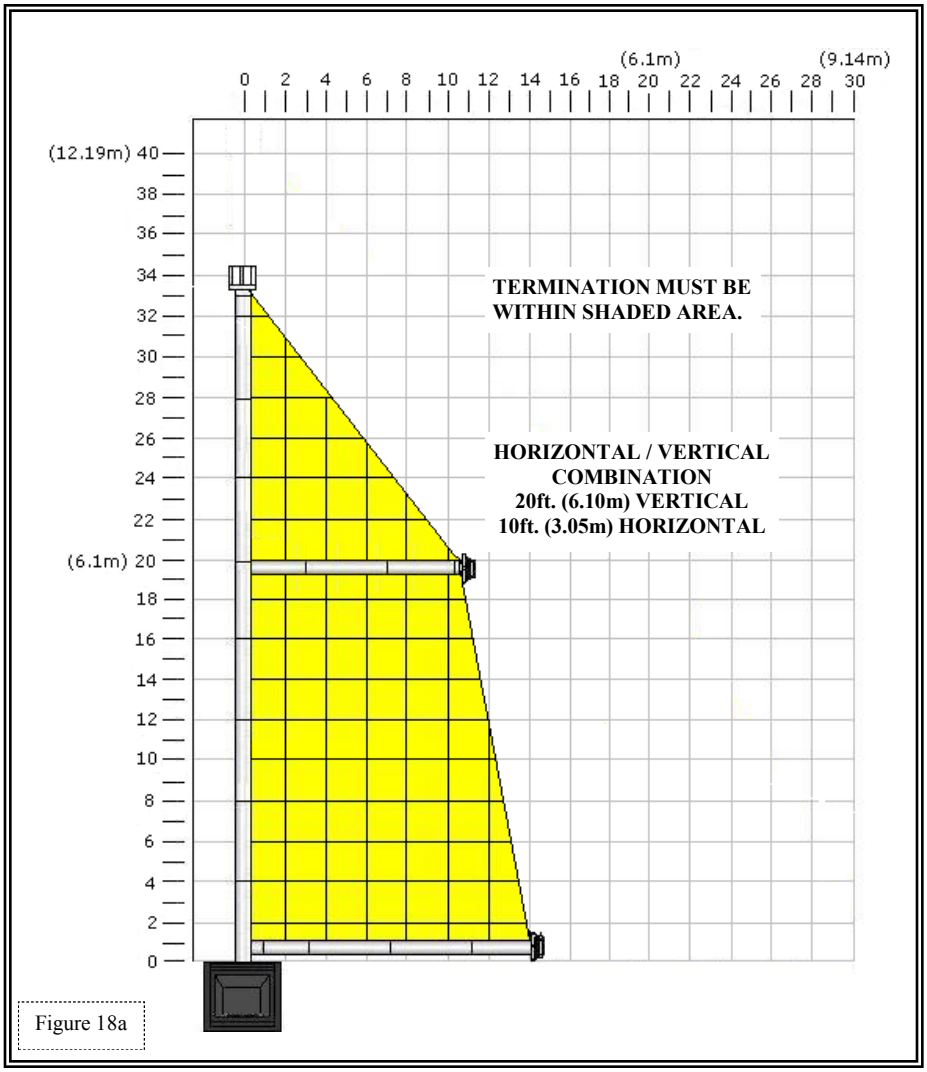


Figure 18a

VENTING

#700-1 SERIES DIRECT VENT TERMINATION KIT(S) INSTALLATION

IMPORTANT	**The flex pipe is permanently attached to the exterior plate. DO NOT ATTACH #745-1 or #718-1 termination kit to fireplace (or extension kit) until it has passed through the 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 #718-1 AND #745-1 DIRECT VENT KITS, MUST BE USED. FOLLOW INSTRUCTIONS INCLUDED.

ATTENTION	**Horizontal Top Vent Terminations using Kozy Heat #700-1 series Flexible Vent System must install #923-F Kozy Heat Flex Vent System Adaptor.**

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

NOTE	**Page 15 has information on restrictor installation in conjunction with venting installation. Page 28 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 #746-1), proceed with following steps. Each #746-1 extension kit contains enough 4" & 7" flexible aluminum to extend chimney an additional 6ft. (1.83m).

3. Gently stretch 4" & 7" flexible aluminum pipes on termination kit (#745-1 or #718-1) and on each extension kit (if used) length required for installation.

IMPORTANT	**DO NOT STRETCH EXTENSION KIT- #746 BEYOND 6ft. (1.83m). DO NOT STRETCH BEYOND WHAT IS REQUIRED - IT IS VERY DIFFICULT TO RECOMPRESS FLEX PIPES ONCE STRETCHED.**

4. Place a bead of sealant outside 4" flex pipe collar (C) (end with EXTERNAL lip), sliding it **inside** 4" pipe on top of fireplace (D). Secure with 3 evenly spaced screws.

5. Place a bead of sealant inside 7" flex pipe collar (E) (end with INTERNAL lip), sliding it **over** 7" pipe on top of fireplace (F). Secure with 3 evenly spaced screws.

6. If additional extension kits are required, repeat steps #4 - #5, placing 4" & 7" pipes onto previous extension kit.
   OPTIONAL: Place insulation between 7" pipe and wall studs.

7. With spacer legs toward wall, slide interior firestop (H) over 7" 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 4" & 7" pipes down to top of extension kit, or top of fireplace if no extension kits were used.

10. Place a bead of sealant outside 4" flex pipe collar (C) and slide it into 4" pipe on extension kit or top of fireplace (D). Secure with 3 evenly spaced screws.

11. Place a bead of sealant inside 7" flex pipe collar (E) and slide it over 7" pipe on extension kit or top of fireplace (F). Secure with 3 evenly spaced screws.

ILLUSTRATION ON FOLLOWING PAGE.

VENTING

FLEXIBLE #700-1 SERIES cont.

A	TERMINATION BOX
B	SLOTS IN EXTERIOR WALL PLATE
C	4” FLEX PIPE COLLAR
D	4” PIPE ON FIREPLACE OR EXTENSION KIT
E	7” FLEX PIPE COLLAR
F	7” PIPE ON FIREPLACE OR EXTENSION KIT
G	VINYL SIDING PROTECTOR
H	INTERIOR FIRESTOP

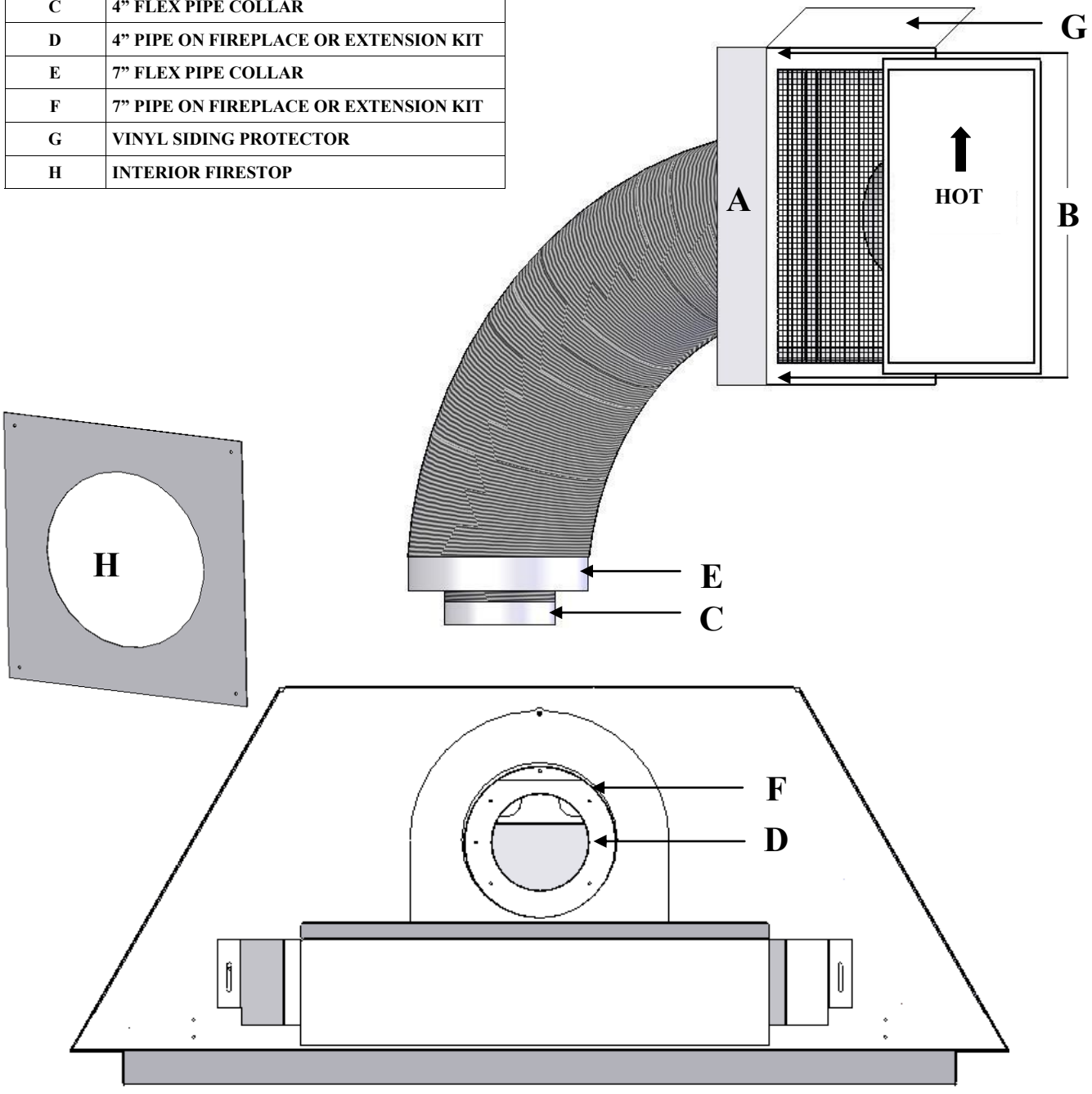


Figure 20a

IMPORTANT **If top venting, follow instructions on pages 13-14 to convert fireplace from rear vent ready to top vent ready.**

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.

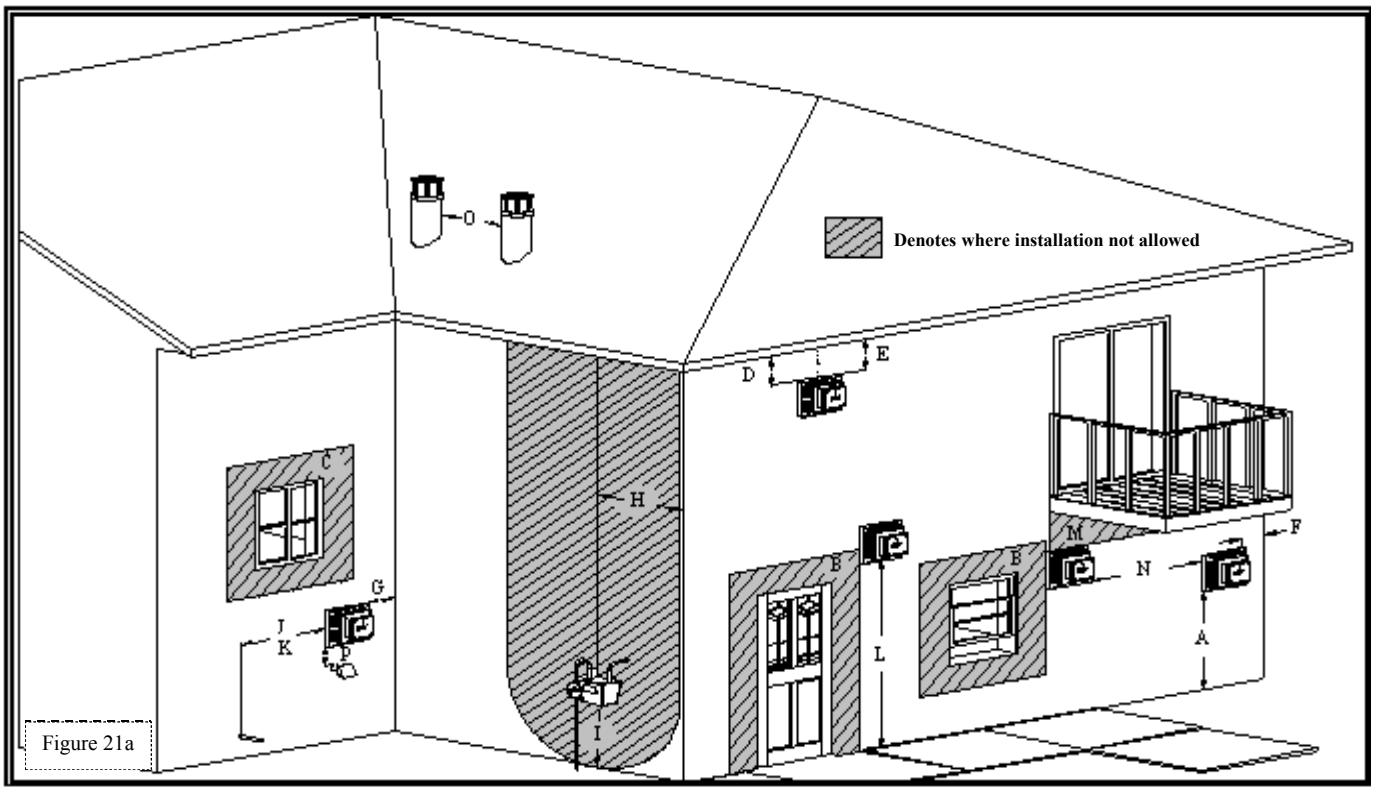


Figure 21a

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.**

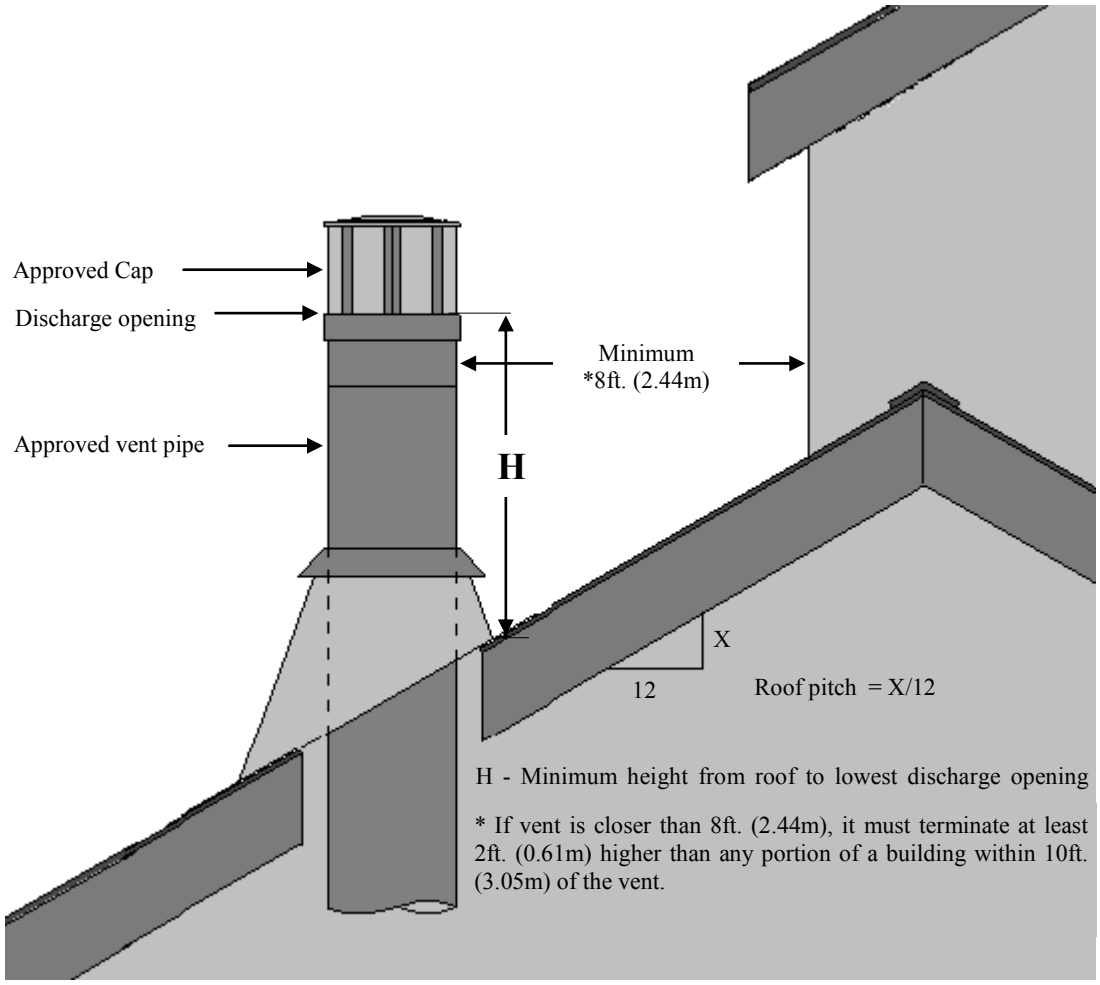


Figure 22a

#TRF-500A LOG SET INSTALLATION

ATTENTION	**If installing optional brick refractory please do so now before installing log set. Follow instructions included with kit. If converting to LP (propane) gas do so now before installing log set. Follow instructions included with kit.**
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.**

LP GAS MODELS (only)

If installing an optional firebrick refractory set, the break-away tab at front of LP log plate will need to be removed. Position LP log plate onto back log bracket. When properly seated, sides of log plate sit between back log brackets and burner heat shield sides.

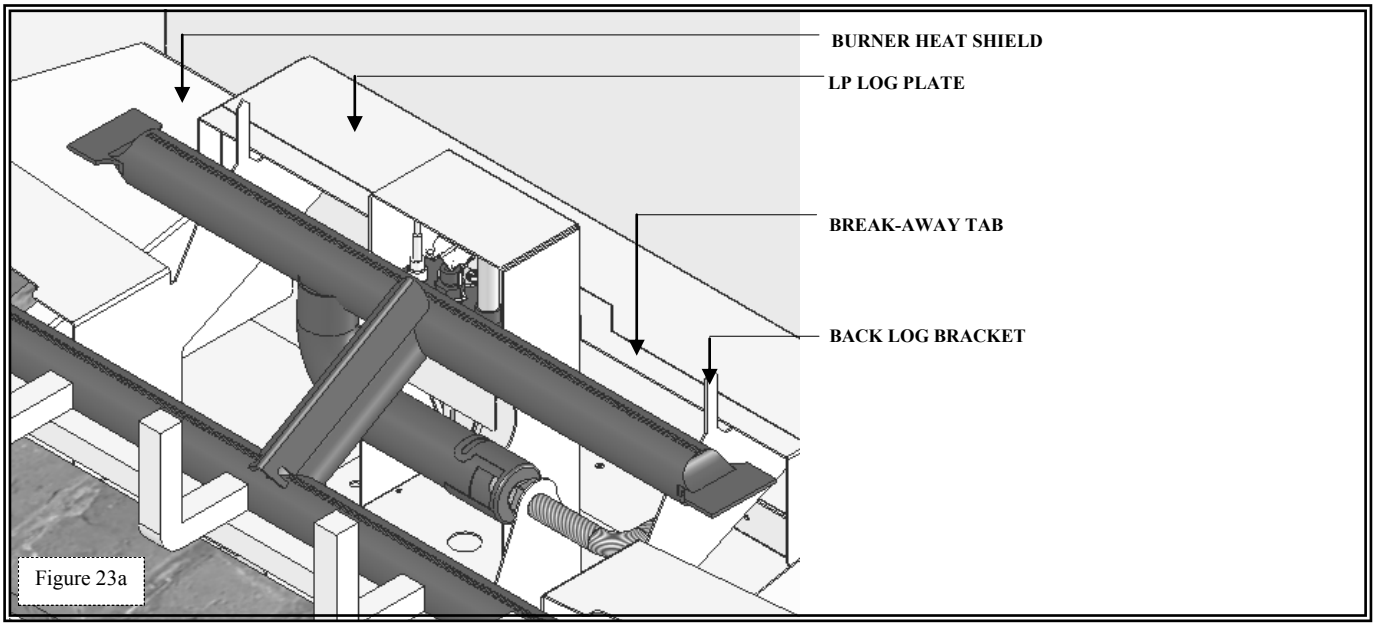


Figure 23a

#1 LOG PLACEMENT

Place #1 log onto back log brackets, aligning log bracket pins with alignment holes in bottom of log while positioning notched out section of log over pilot shield. Set down onto mounting pins.

LP GAS MODELS: Position back log to create 1/4" (6mm) air space between back of burner and front of log.

NATURAL GAS MODELS: Position back log so front side of log is resting against backside of burner tube.

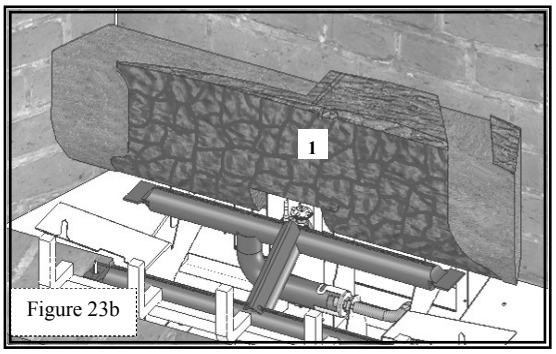


Figure 23b

#2 & #3 LOG PLACEMENT

Place left side alignment hole on base log #2, and right side alignment hole on base log #3 over pins on front log brackets, positioning cut-outs on logs over log grate. Press logs down onto pins.

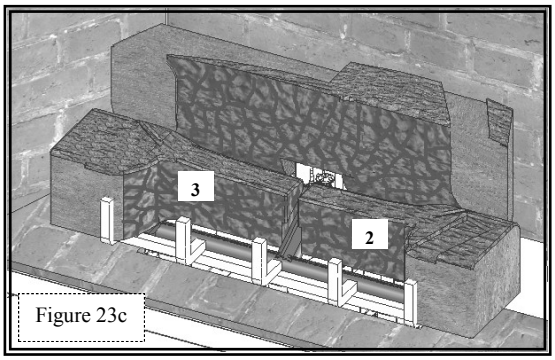


Figure 23c

LOG SET INSTALLATION cont.

#11, #12 & #6 LOG PLACEMENT

Position #11, #12, and #6 logs onto corresponding cut-outs / notches on base logs. The #6 log must not extend over front of #2 log.

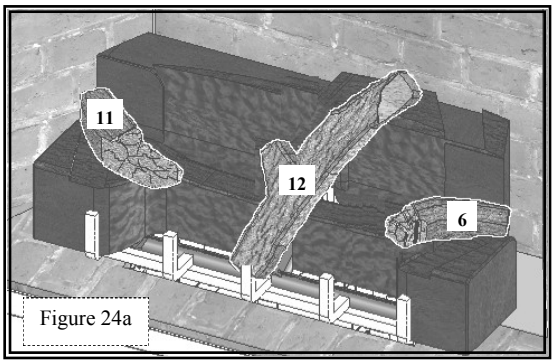


Figure 24a

#7, #8 & #9 LOG PLACEMENT

Position #7, #8 and #9 logs onto corresponding cut-outs / notches on base, center logs and log grate.

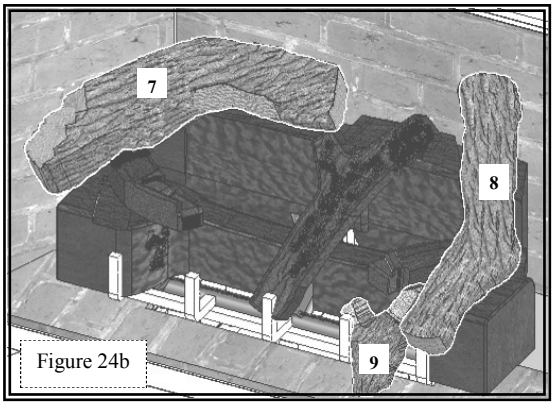


Figure 24b

COMPLETE LOG SET INSTALLATION

Use a steel or stiff bristle nylon brush to distribute Rock Wool Embers onto logs and burner.

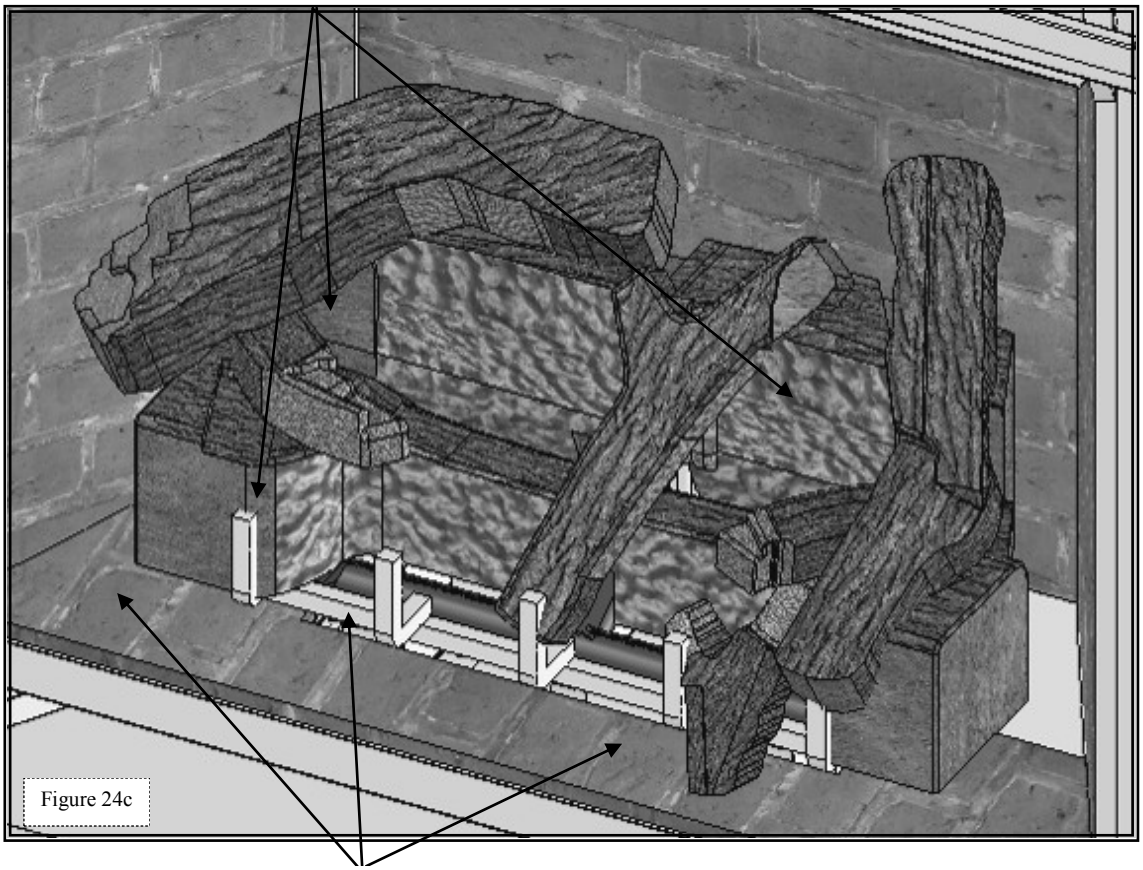


Figure 24c

Randomly place ‘Klinkers’ in this area. Do not place ‘Klinkers’ directly on burner ports.

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 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 receptacle, disconnect all wiring harnesses attached to gas valve.
5. Remove upper hood and upper louver.
6. Remove glass frame assembly.
7. Remove logs, pilot shield and bottom refractory panels. **LP gas models:** Remove LP log plate.
8. Remove refractory panel set (if installed).
9. Remove burner tube from firebox by lifting up off tabs, sliding to left & off orifice.
10. Remove front log supports. Save supports and screws.
11. Remove log grate/burner heat shield.
12. Remove and save (6) screws securing control board, lift board out of firebox being careful not to damage sealing gasket lying underneath.

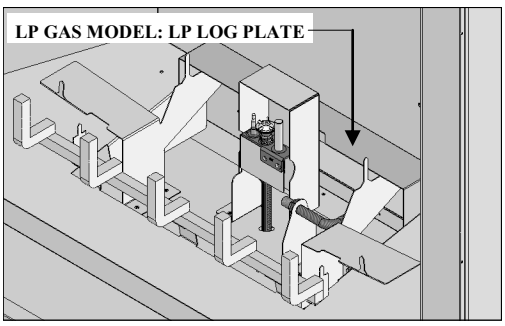
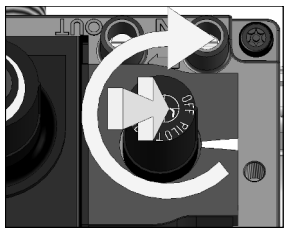
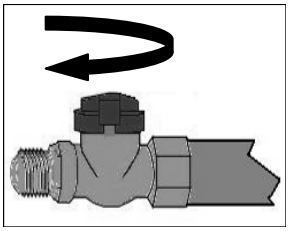
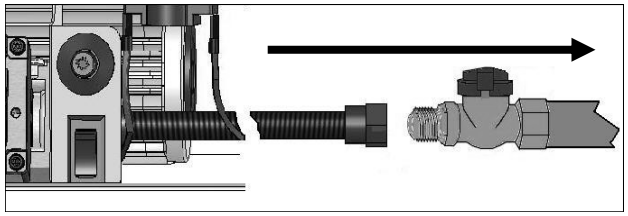
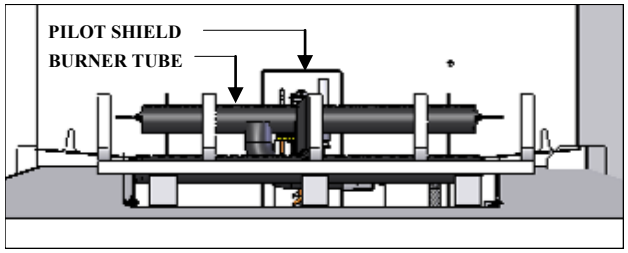


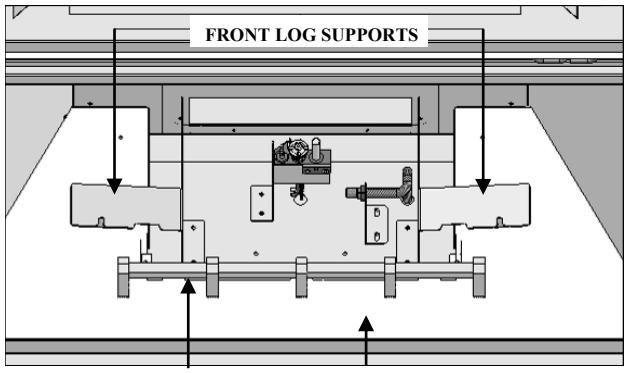
Figure 25a



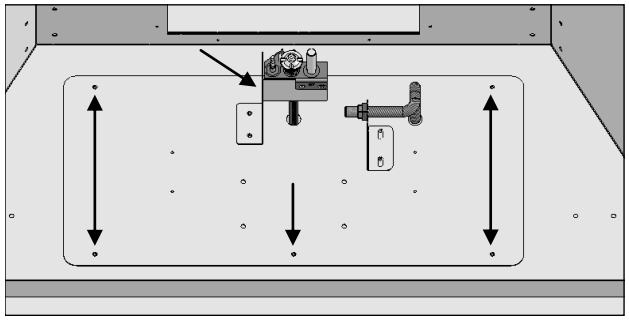








LOG GRATE / BURNER HEAT SHIELD



REMOVE (6) SCREWS

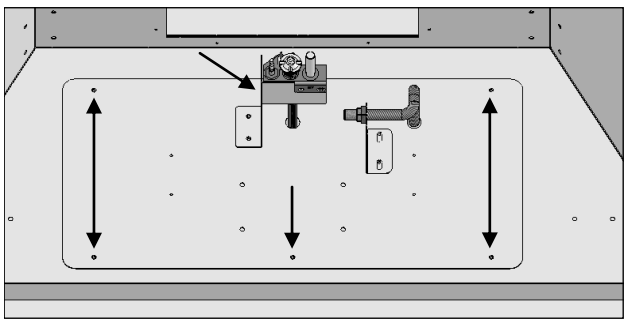
Figure 25b

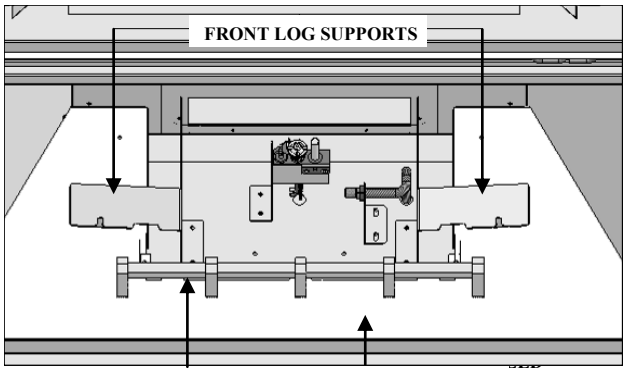
CONTROL BOARD INSTALLATION

WARNING	DO NOT OPERATE THIS FIREPLACE WITHOUT SEALING GASKET (LOCATED UNDER CONTROL BOARD) IN PLACE. IF GASKETING IS DAMAGED, IT MUST BE REPLACED.

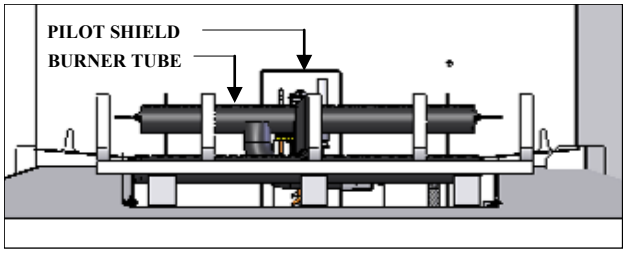
NOTE	Your components may look slightly different than ones shown

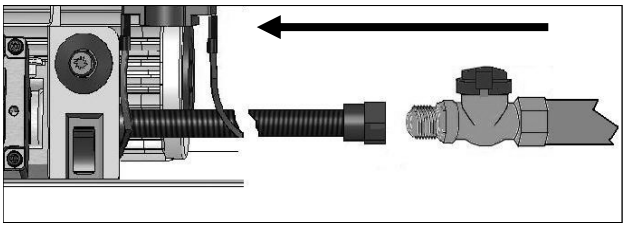
1. Place control board in firebox, aligning holes in control board with holes in firebox bottom. MAKE SURE SEALING GASKET IS IN PLACE ON FIREBOX BOTTOM! Secure to firebox bottom with (6) screws previously removed.
2. Install log grate/burner heat shield assembly into fireplace, ensure entire assembly (front flange) is inside firebox when completed.
3. Reinstall front log supports, securing with screws previously removed.
4. Reinstall burner tube, sliding venturi over control board orifice, placing mounting holes in burner tube over tabs on log grate/ burner heat shield assembly.
   LP Gas Models: Reinstall LP log plate.
5. Reinstall pilot shield.
6. Reinstall refractory panels, if previously removed.
7. Reinstall bottom refractory panels.
8. Reinstall log set.
9. Reconnect gas line to manual shut-off valve.
10. Reconnect any wall switch, remote control or thermostat wires to top & bottom terminals on gas valve **or** re-connect all wiring harnesses to gas valve. Plug all components into electrical outlet.
11. Reinstall glass frame assembly.
12. Reinstall upper louver, upper hood and lower grill.
13. Turn gas on.
14. Verify proper log placement, operation of fireplace, and any electrical components.





LOG GRATE / BURNER HEAT SHIELD





RE-CONNECT REMOTE / THERMOSTAT WIRES

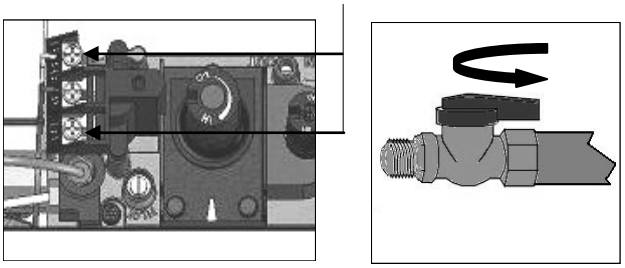


Figure 26a

CAUTION	CHECK ALL CONNECTIONS FOR LEAKS, WHETHER FIELD OR FACTORY MADE.

GRILL SET

INSTALLATION

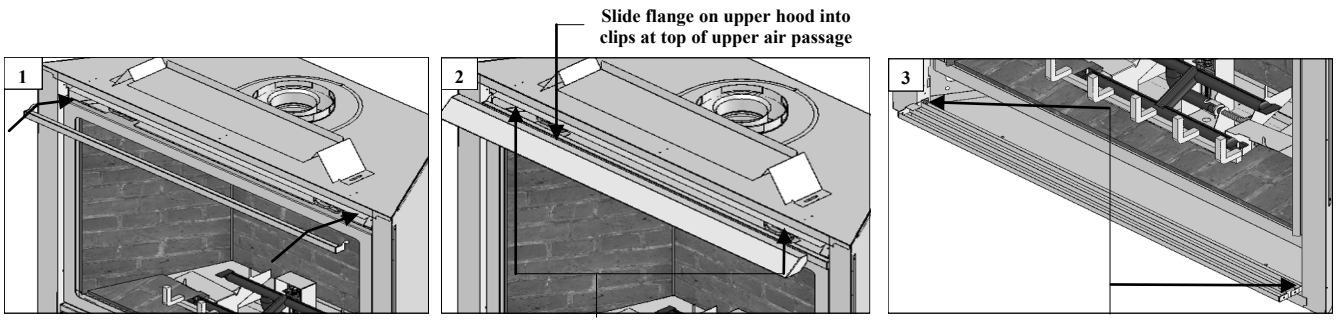


Figure 27a

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.

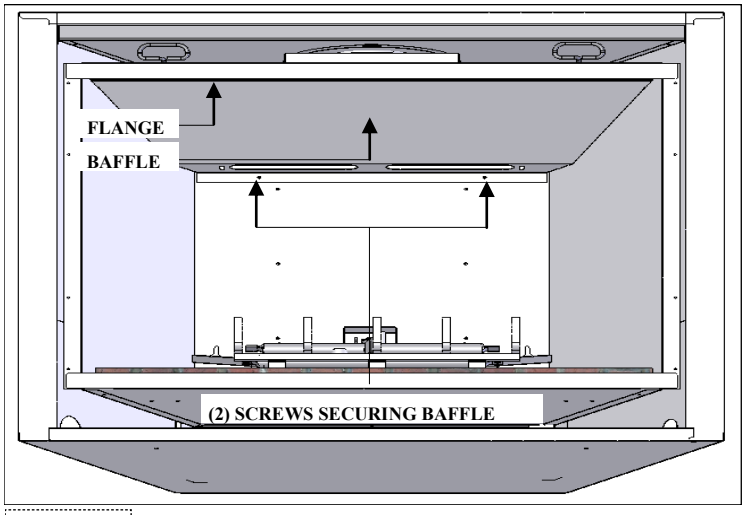
WARNING	TO AVOID PROPERTY DAMAGE OR PERSONAL INJURY, ALLOW FIREPLACE AMPLE TIME TO COOL BEFORE MAKING ANY ADJUSTMENTS AND / OR INSTALLATIONS.

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 and optional refractory (if installed) to avoid damaging these components.

1. Remove (2) screws securing baffle. Remove baffle to expose venting.
2. Depending on your specific needs, determined by 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 4" exhaust pipe with tabs pointing towards you.
4. If modification is necessary, remove restrictor by pulling it down and out of 4" 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 (2) screws previously removed.
6. Reinstall optional refractory set (if applicable), and log set.
7. Attach glass frame assembly and light fireplace. Wait 15 minutes before determining if any further modifications are necessary.



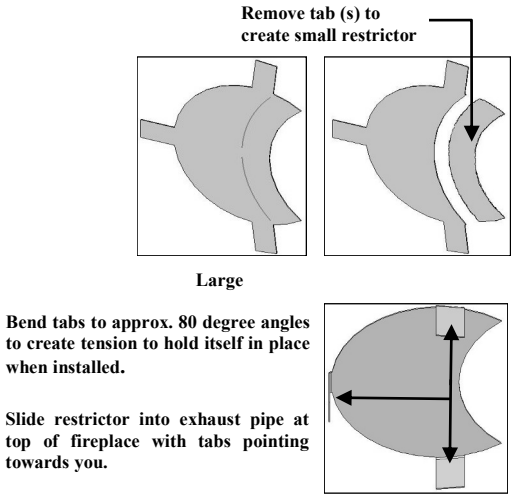


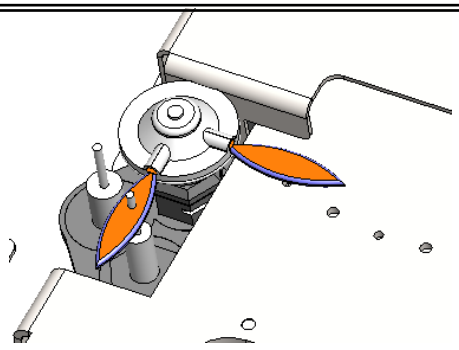
Figure 28a

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.



Correct pilot flame

Figure 29a

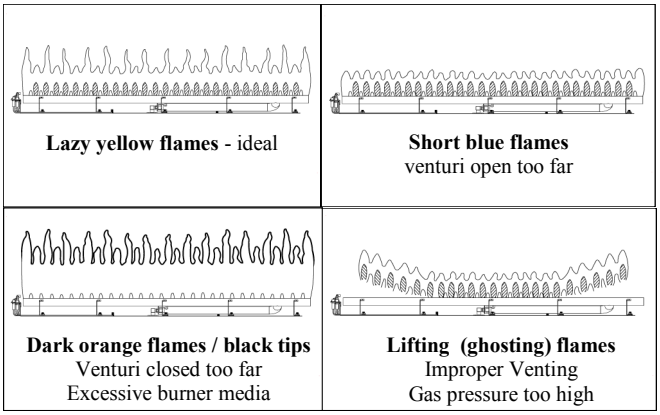


Figure 29b

FACTORY SET BURNER TUBE VENTURI SETTINGS (ADJUST AS NECESSARY FOR YOUR INSTALLATION)	
NATURAL GAS	**LP (PROPANE) GAS**
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 VENTURI:

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

1. Remove upper louver and hood.
2. Remove glass frame assembly.
3. Remove log set.
4. Remove burner tube.
5. Loosen screw on burner venturi and adjust as necessary. Tighten screw.
6. Reinstall all components previously removed.
7. Light fireplace and wait 15 minutes before determining if any further adjustments are needed.

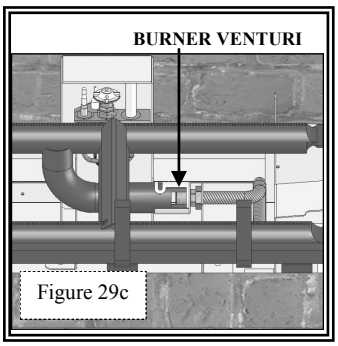


Figure 29c

MAINTENANCE

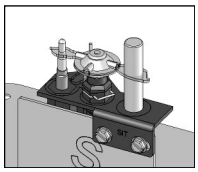
The appliance is required to be inspected at least once a year by a professional service person.

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.

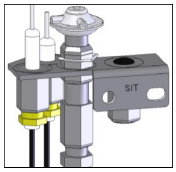
NOTE	INSTALLATION AND REPAIR SHOULD BE DONE ONLY BY QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND ANNUALLY BY A QUALIFIED SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIALS, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS,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

CONTROL BOARD SYSTEM

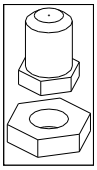
- **Annual cleaning of burner system is required. Vacuum all components thoroughly.**
- **The burner assembly may be removed for easier access. Refer to pages 25-26 in this installation manual for complete instruction on removing & reinstalling burner assembly.**
- **Visually check for blocked port holes, especially near the pilot. Blocked port holes may cause delayed ignition.**
- **Reinstall burner assembly following instructions on page 26 of this installation manual.**
- **Visually check pilot light and burner when in operation. Flames should be steady, not lifting or floating.**



56701 Pilot
56701-MV Pilot



56701-IPI Pilot



Burner Orifice

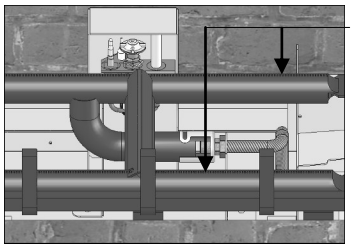


Figure 30a

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.**
  WARNING: DO NOT OPERATE APPLIANCE WITH GLASS/FRAME ASSEMBLY REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD ONLY BE PERFORMED BY A LICENSED OR QUALIFIED SERVICE PERSON.
- **Use protective gloves to handle any broken or damaged glass assembly components.**
- **The glass assembly, part #TRF-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc.**
- **Replacement of glass & frame assembly, part #TRF-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. warranties 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).

Effective September 01, 2011

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. warranties 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 or 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: _____ **INSTALLATION DATE:** _____

ADDRESS: _____ **MODEL #:** _____

_____ **SERIAL #:** _____

TELEPHONE: _____

INSTALLER NAME: _____

ADDRESS: _____

_____

TELEPHONE: _____

KOZY HEAT FIREPLACES

Supplemental Installation and Homeowner Information Manual for Thief River Falls Model:

HUSSONG MANUFACTURING

KOZY HEAT FIREPLACES

Quality Fireplaces for Life

#56701

DIRECT VENT GAS FIREPLACE

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

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

English and French Installation Manuals Available Through Your Local Dealer or Visit Our Website at www.kozyheat.com

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 neighbors phone. Follow the gas supplier 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.

NATIONAL FIREPLACE INSTITUTE NFI CERTIFIED www.nficertified.org

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

Tested & Listed By O-TL C US Portland Oregon USA

OMNI-Test Laboratories, Inc.

Report No. 216-S-05-5

JULY 2012
56701-SUP-REV-03

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SPECIFICATIONS

#56701 COMPONENTS LIST

PART NUMBER	DESCRIPTION
TRF-770	Millivolt Board Assembly
700-203	Manual Gas Shut-off Valve
TRF-35	Burner Plate
TRF-035	Burner Tube
TRF-500A	Log Package
TRF-057T	Glass Frame Assembly
600-083	Receptacle / Speed Control Assembly
900085	4” Restrictor Plate
500-TRF	3 pc. Grill Assembly

	56701	
	NATURAL GAS	**LP GAS**
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)**	**6.3” WC (1.57 kPa)**
ORIFICE SIZE	**#38**	**#.0625**
INPUT BTU/hr. (kW)	**28,000 BTU/hr (8.21 kW)**	**28,000 BTU/hr (8.21 kW)**
MINIMUM INPUT BTU/hr. (kW)	**20,000 BTU/hr (5.86 kW)**	**21,000 BTU/hr (6.16 kW)**

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 2.14-M91 (R2009), "Gas-Fired 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*

- **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.**
- **<u>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.</u>**
- **The glass assembly, Part #TRF-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.**

OPTIONAL FAN INSTALLATION

INSTALLATION OF THIS FAN SHOULD BE DONE ONLY BY A QUALIFIED INSTALLER

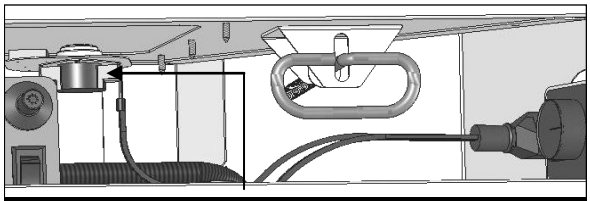
WARNING	**MAKE SURE HOUSEHOLD BREAKER IS SHUT OFF PRIOR TO WORKING ON ANY ELECTRICAL LINES.** **THIS APPLIANCE IS EQUIPPED WITH A THREE-PRONG (GROUNDING) PLUG FOR PROTECTION AGAINST SHOCK HAZARD AND SHOULD BE PLUGGED DIRECTLY INTO A PROPERLY GROUNDED THREE-PRONG RECEPTACLE. DO NOT CUT OR REMOVE GROUNDING PRONG FROM THIS PLUG.**

IMPORTANT	**If installing a fan, it is easier to complete prior to connecting millivolt board to gas supply. Wiring must be done before enclosing fireplace sides. An electrical box and romex connector are pre-installed on a removable panel on right side of fireplace. A receptacle / speed control assembly and (3) wire nuts are included in fireplace components packet.**

NOTE	**Code approved line voltage wiring 14 gauge or better must be used when wiring this assembly.** **Refer local electrical codes for specific requirements.** **This appliance must be electrically grounded and connected in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 Current Edition, or the Canadian electrical Code CSA C22.1.** **This fan will not operate unless speed control has been turned ON and sufficient heat has been applied to temperature control switch. The fan will turn ON and OFF automatically as fireplace heats and cools. Adjust fan to desired speed while it is running.**

Optional fan kit #TRF-028 includes: (2) 75 CFM fan with temperature control switch and 4ft. (1219mm) fan cord
(4) 1/4" nuts

1. Remove upper hood, upper louver & lower grill, if installed.
2. Remove glass assembly.
3. Insert fans through lower grill opening on left side of gas valve. Push to back of fireplace. Align mounting slots in fan brackets with mounting studs. Secure with nuts.
4. From inside lower right grill opening, loosen screw securing removable access panel (with electrical box & romex connector installed). Remove panel.
5. Insert 115V wiring (with ground) through romex connector and wire to speed control / receptacle assembly matching black (hot), white (neutral), and green (ground) wires to corresponding wires on speed control / receptacle assembly.
6. Secure speed control / receptacle assembly to electrical box with (2) screws provided.
7. Re-install electrical access panel. Tighten screw.
8. Attach temperature control switch to bottom of firebox.
9. Plug cord into electrical box receptacle.
10. Turn speed control counter-clockwise until it 'clicks'. This is the OFF position.
11. Turn speed control ON by turning knob clockwise past the 'click' - this is the highest setting.
12. Re-install glass assembly, lower grill, upper louver & upper hood.



TEMPERATURE CONTROL SWITCH POSITION

Before adjusting temperature control switch, unplug 3-prong plug on fan cord from receptacle. Adjust position of temperature control switch to a warmer location under firebox to turn fan ON sooner or move it to a cooler location under firebox to turn fan ON later. The fan will turn on when sensor in temperature control switch reaches 110° F and will turn OFF when sensor reaches 90° F. After adjustment, insert fan cord 3-prong plug into receptacle.

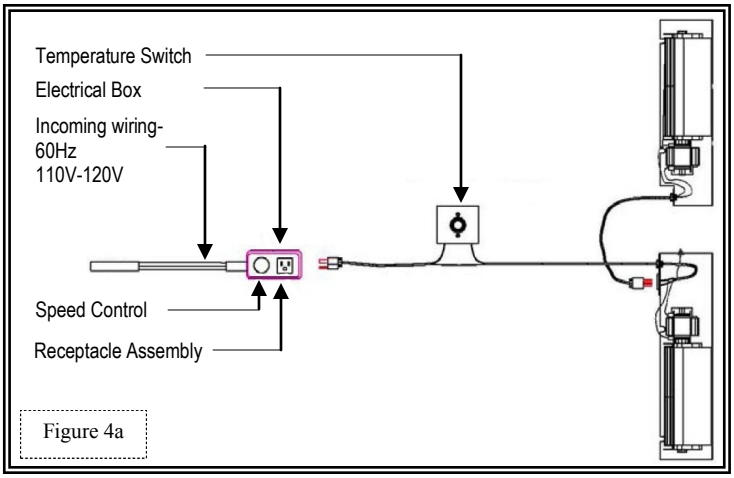


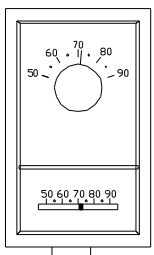
Figure 4a

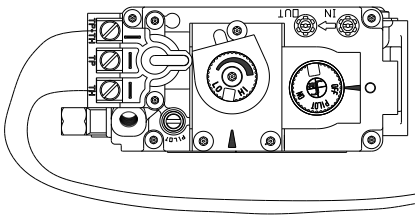
THERMOSTAT / WALL SWITCH / REMOTE

If desired, a thermostat (wireless style also available), wall switch, or remote control assembly may be used to turn fireplace OFF and ON. Only ONE of these may be installed. Follow instructions included with chosen assembly.

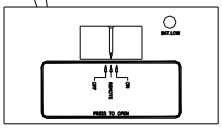
NOTE	**INSTALLATION OF THERMOSTAT OR WALL SWITCH SHOULD ONLY BE PERFORMED BY A QUALIFIED INSTALLER**.

CAUTION	**DO NOT CONNECT HIGH VOLTAGE (115V) WIRE TO THE GAS VALVE!**





Remote Control Wiring Diagram



Thermostat Wiring Diagram

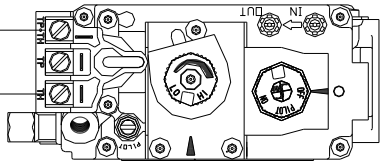
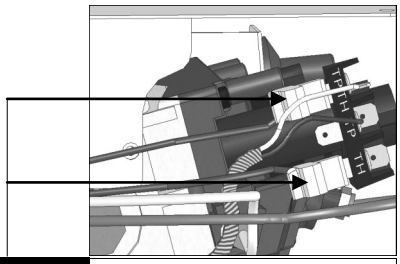


Figure 5a



OPTIONAL	**Disconnect ON/OFF rocker switch wires from back of gas valve.**

WALL SWITCH / THERMOSTAT:

Run low-voltage (thermostat) wires from terminals on gas valve to desired location of wall switch or thermostat.

Attach appropriate connectors to wall switch / thermostat wires and connect to top and bottom terminals marked TH/TPTH on gas valve.

REMOTE CONTROL:

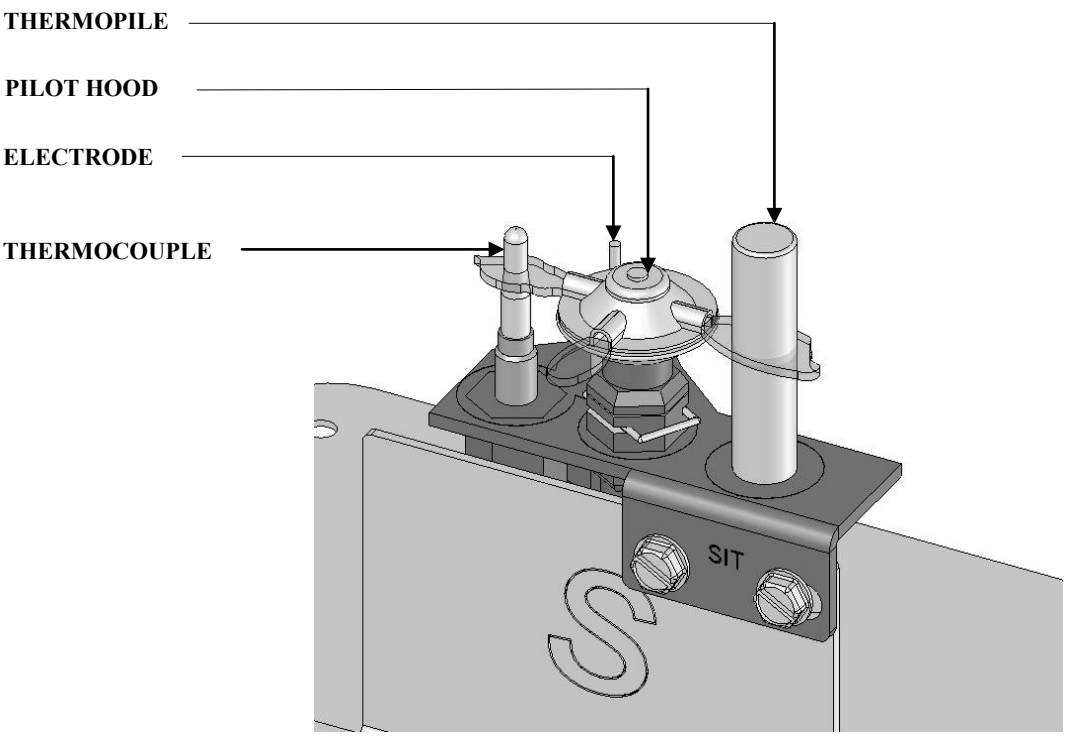
Follow instructions included with remote control.

IMPORTANT	**If ON/OFF rocker switch wires are <u>not disconnected</u>, the ON/OFF rocker switch on millivolt board must be in OFF position for proper operation of any of these components.** **If rocker switch is ON, fireplace burner will operate until it is turned OFF by rocker switch. A wall switch, thermostat, or remote control will not turn fireplace OFF when it has been turned ON by the rocker switch.**

NOTE	**Fireplace must be turned ON and OFF by same method. For example: If fireplace is turned ON by remote control, it must be turned OFF by remote control.**

IMPORTANT	**The insulated cover included with remote control must be placed over remote receiver to prevent overheating.**

VALVE & PILOT ASSEMBLY COMPONENTS



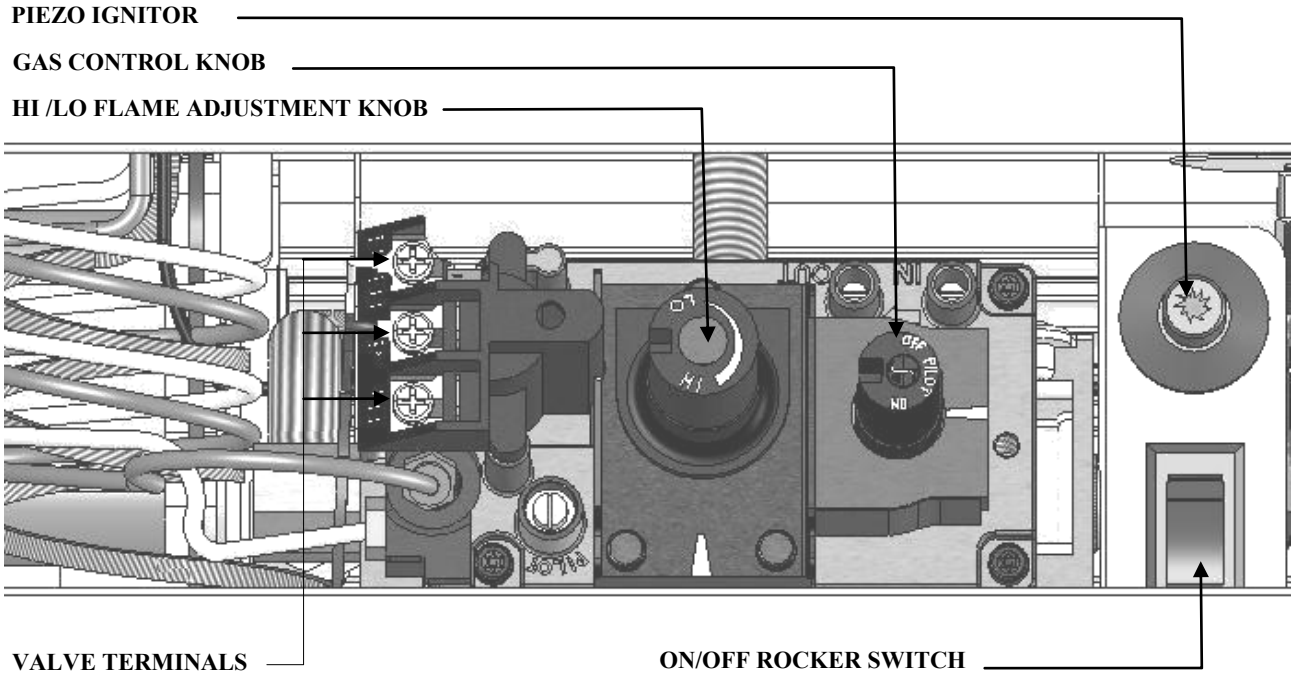


Figure 6a

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. Set thermostat to lowest setting, if installed.
2. Turn off all electrical power to appliance. (Fan).
3. Open lower grill to access gas valve & controls.
4. Push gas control knob in slightly and turn clockwise to OFF.
5. 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**.

6. Locate pilot - follow metal tube from gas control. (Located inside combustion chamber).
7. Push gas control knob on gas valve in slightly and turn counterclockwise to PILOT.
8. Push valve knob in and hold while repeatedly pressing piezo igniter button until pilot is lit while continuing to hold in gas control knob.
9. Hold gas control knob in for one (1) minute after pilot is lit. Release gas control knob. If pilot goes out, repeat steps 4-8. When pilot is lit, proceed to step 10.

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.**

10. Push gas control knob in slightly and turn counterclockwise to ON. The burner can now be turned ON by depressing ON/OFF rocker switch located beside valve, or wall switch, OR by setting thermostat or remote control to desired setting.
11. Turn on all electric power to appliance (if applicable).

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.**

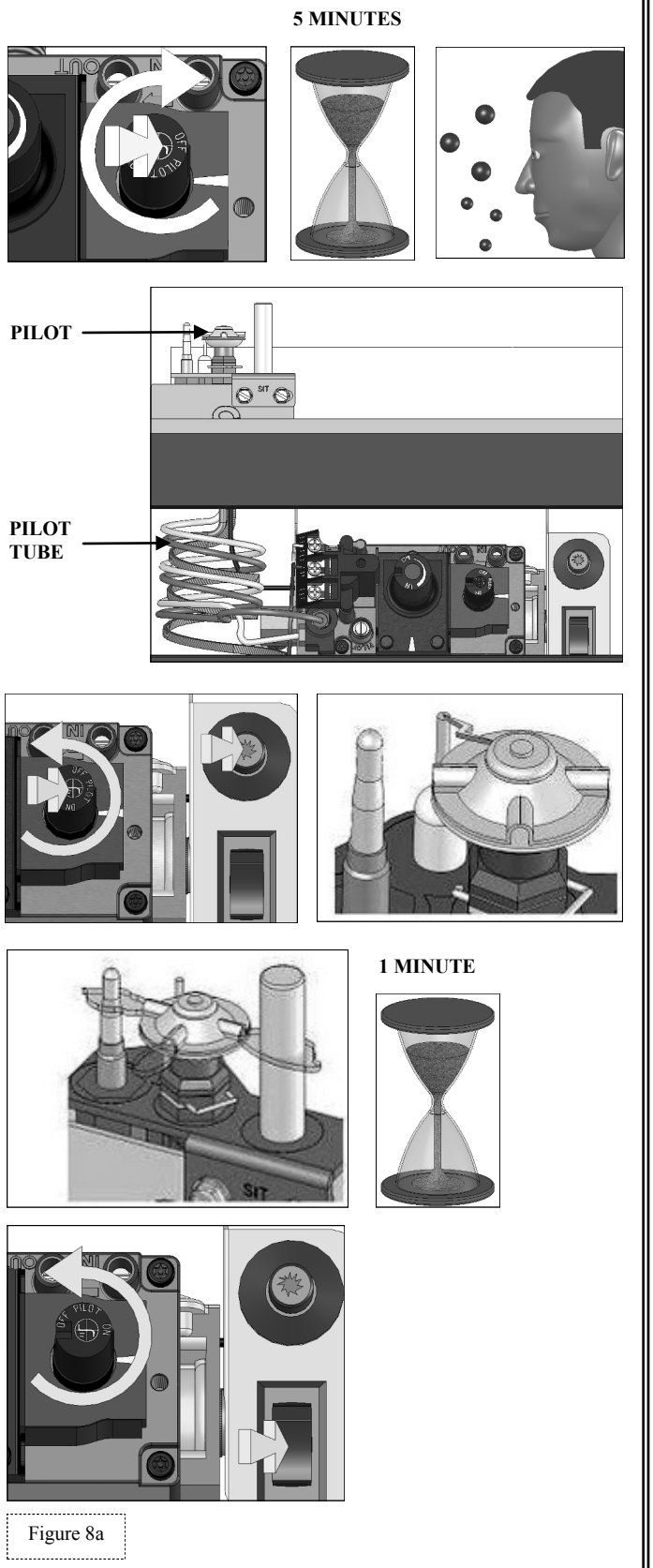


Figure 8a

LIGHTING AND SHUTDOWN (cont.)

TO TURN OFF GAS TO APPLIANCE

TURN BURNER OFF

To turn burner OFF, depress ON/OFF rocker switch to OFF, turn off wall switch or adjust setting on thermostat or remote control.

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).**

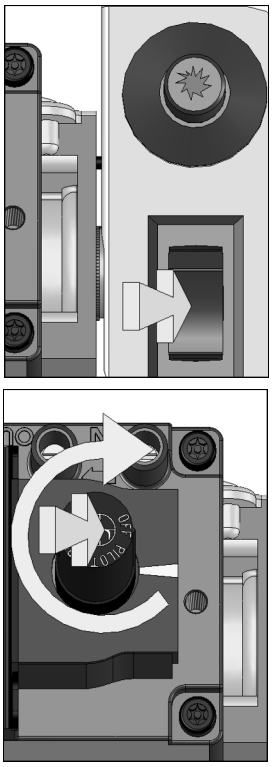


Figure 9a

ADJUSTING FLAME HEIGHT

The gas control valve has a HI /LO flame adjustment knob designed to allow you to tailor the look and heat output of your fireplace. Adjust by turning middle knob on gas control valve.

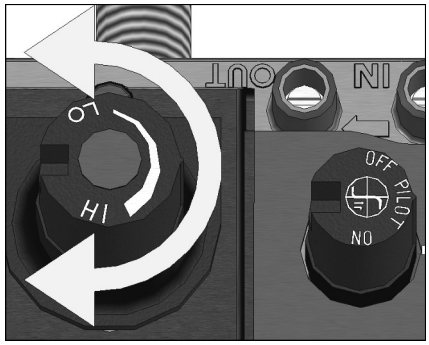


Figure 9b

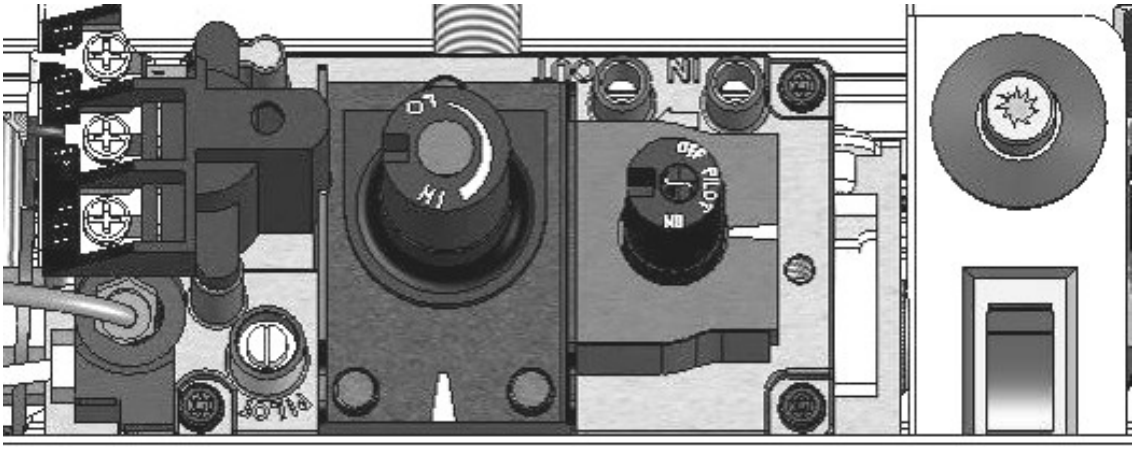


Figure 9c

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 pressure tap marked IN measures incoming pressure. Follow instructions below for proper testing procedures. Refer to page 15 for proper NAT and LP manifold pressures.**

NOTE	**The appliance and its individual shutoff valve must be disconnected from gas supply piping system during any pressure testing of that system at pressures in excess of ½ 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 ½ 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 rocker switch to ON. Check pressure to ensure it stays near maximum inlet pressure.
6. Press rocker switch to OFF.
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 rocker switch to ON and note manometer reading.
6. Press rocker 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 rocker switch is pressed to ON.

CAUTION	**A LOW PRESSURE READING CAN CAUSE DELAYED IGNITION.**

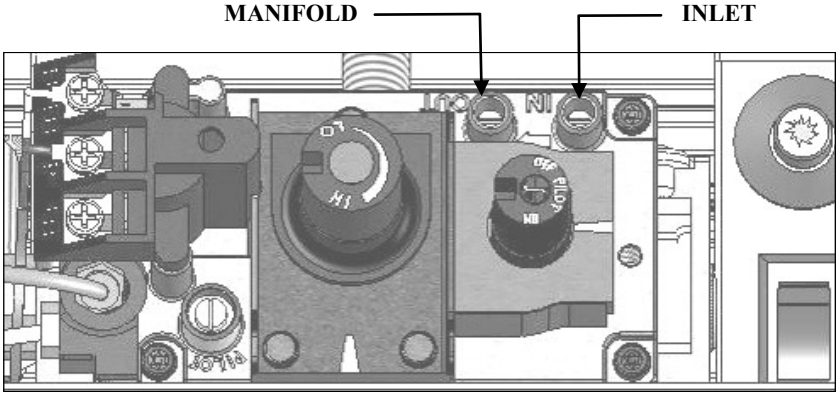


Figure 10a

TROUBLESHOOTING

CAUTION	THE FOLLOWING MUST BE PERFORMED BY A QUALIFIED TECHNICIAN.

NO SPARK FROM ELECTRODE TO PILOT WHEN PIEZO BUTTON IS TRIGGERED.

A. Check wiring at back of piezo for proper connection.

B. Check wiring at electrode for proper connection.

C. Check position of electrode (1/8" (3mm) between electrode and pilot). Readjust if necessary.

D. Look for arc below electrode and along electrode wire. Direct metal contact may cause an arc below electrode.

SPARK IGNITER WILL NOT LIGHT AFTER REPEATED TRIGGERING OF PIEZO BUTTON.

A. No gas or low gas pressure.

- 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 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.

B. No LP in tank.

- Check LP (propane) tank. Refill if necessary.

PILOT WILL NOT STAY LIT AFTER CAREFULLY FOLLOWING LIGHTING INSTRUCTIONS.

A. Check that pilot flame impinges on thermocouple. Clean and/or adjust pilot for maximum flame impingement.

B. Ensure thermocouple connection at gas valve is fully inserted and tight (hand tight plus 1/4 turn).

C. Thermocouple reading below 15 millivolts.

- Disconnect thermocouple from valve, place one millivolt meter lead wire on end of thermocouple and other millivolt meter lead wire on thermocouple's copper wire. Start pilot while holding valve knob in. If millivolt reading is less than 15 millivolts, replace thermocouple.

D. Thermopile not generating sufficient millivolts.

- Pilot flame must be enveloping thermopile. Adjust pilot flame if necessary.
- Check thermopile wire connections at valve. Tighten if necessary.
- Check thermopile with millivolt meter. Turn remote / thermostat / wall switch or ON/OFF switch to OFF. Turn valve knob to PILOT position (pilot should remain lit). Take reading at THTP & TP terminals on gas valve. Reading should be 350 millivolts minimum. Replace thermopile if reading falls below specified minimum.

TROUBLESHOOTING

BURNER WILL NOT LIGHT

A. Gas control knob not turned to ON.

B. ON/OFF switch not turned on.

C. Remote, wall switch or thermostat not turned ON.

D. Plugged main burner orifice.

E. Remote, wall switch, thermostat or ON/ OFF switch wires defective.

- ♦ Check wires for proper connections. Place jumper wires across terminal at switch. If burner lights, replace defective switch.
- ♦ If switch checks ok, place jumper wires across switch wires on gas valve. If burner lights, wires are faulty or connections are bad.

FREQUENT PILOT OUTAGES

A. Pilot shield not installed.

B. Pilot flame too high or too low, causing pilot safety to drop out.

- ♦ Clean and adjust flame for maximum flame impingement on thermopile.

BURNER WON'T STAY LIT

A. Thermopile wires loose at valve terminals.

- ♦ Tighten if necessary.

B. Thermopile wires ground out due to pinched wires.

- ♦ Free pinched wires if necessary.

C Refractory panel placement (if installed).

- ♦ Refractory panels must be tight against firebox walls. It may be necessary to secure panels with high-temp sealant, especially around intake duct.

TROUBLESHOOTING

PILOT AND BURNER EXTINGUISH WHILE IN OPERATION

A. No LP (propane) in tank.

♦ Check tank and refill if necessary.

B. Glass frame assembly not installed correctly.

♦ Refer to installation manual for proper glass frame assembly installment instructions.

C. Defective thermopile or thermocouple.

♦ Check thermopile and thermocouple for proper millivolts.

D. Improper pitch on horizontal vent.

♦ 1/4" (6mm) rise per foot is required on horizontal venting.

E. Inner vent pipe leaking exhaust gases back into firebox.

♦ Check for leaks. Repair if necessary.

F. Improper vent cap installation.

♦ Check for proper vent cap installation. Maximum downward slope of horizontal vent cap is 1/4" (6mm). Adjust if necessary.

♦ Check vent cap for blockage. Remove debris if necessary.

G. Excessive draft.

GLASS SOOTING

A. Improper log placement.

♦ Refer to log placement instructions in fireplace installation manual.

B. Improper venturi setting.

♦ Venturi may need to be opened slightly to allow more air into gas mix.

C. Improper pitch on horizontal venting.

♦ 1/4" (6mm) rise per foot is required on horizontal venting.

FLAME BURNS BLUE AND LIFTS OFF BURNER

A. Improper Venturi setting.

♦ Venturi may need to be closed slightly.

B. Improper vent cap installation.

♦ Check for proper vent cap installation.

C. Blockage or vent system leaks.

CONVERSION KIT INSTRUCTIONS

#OCK-S38A NAT GAS CONVERSION KIT / #OCK-S52A 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) Burner Orifice: NAT #38 / LP #52 (1) Pilot Injector: NAT #51 / LP #30 (1) Gas Label
(1) Valve and Pilot Assembly Conversion Instructions (1) Gas Conversion Label
(1) LP Log Plate (LP conversion kits only)

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 FIREPLACE:

1. Turn fireplace off. Push in and turn gas control knob clockwise to OFF position.
2. Remove upper hood, upper louver and glass assembly*.
3. Remove logs from fireplace.
4. **IF CONVERTING TO NAT GAS:** Remove LP log plate (if installed).
5. Remove pilot shield.
6. Remove burner tube from fireplace.

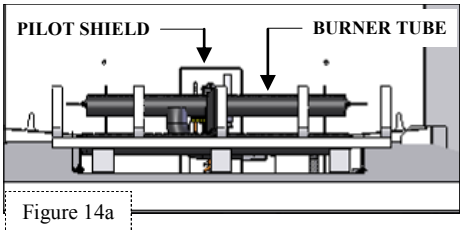


Figure 14a

REPLACE BURNER ORIFICE:

Remove existing orifice cap. Install orifice cap included with kit, making sure to tighten cap securely. (Number stamped on orifice).
Nat: 38 / LP: 52

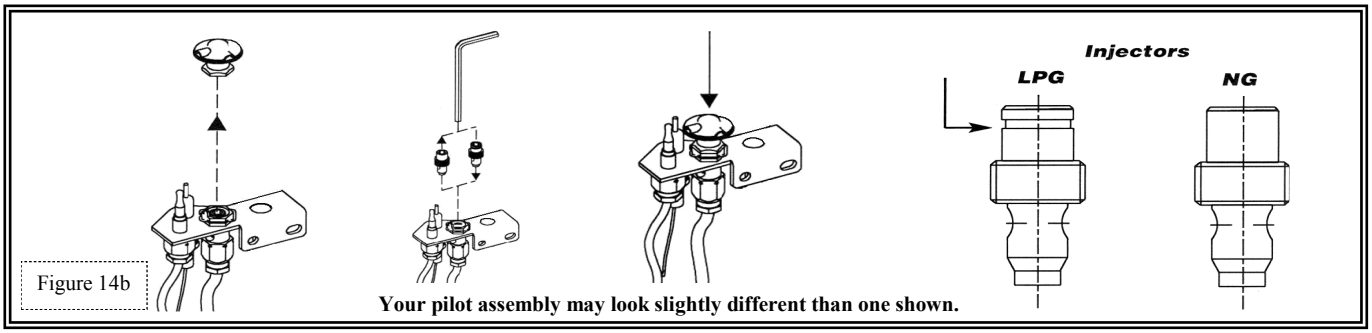


Figure 14b

Your pilot assembly may look slightly different than one shown.

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 LP injector, install into injector journal, turning clockwise until 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: #30
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 GAS VALVE:

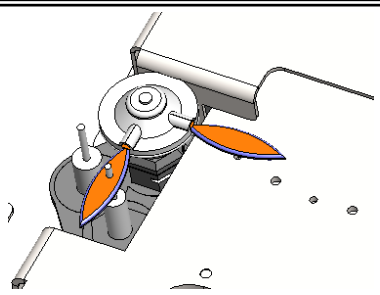
Follow instructions included with kit to convert gas valve to either Nat. or LP.

COMPLETE THE CONVERSION:

1. Adjust venturi on burner tube to correct setting by loosening screw, adjusting cap and retightening screw.
   CORRECT SETTINGS: NAT. : 1/8" (3mm) open
   L.P. : 5/8" (16mm) open
2. Re-install burner tube into fireplace, checking to ensure burner venturi is properly seated over burner orifice.
3. **IF CONVERTING TO LP GAS:** Install LP log plate (included with conversion kit). When properly seated, log plate sits between back log brackets and burner heat shield.
4. Re-install pilot shield and log set.
5. Light pilot and turn burner on. Pages 7-9
6. Test both inlet and manifold pressures following procedure as outlined on page 10. Chart below states proper pressure readings.
7. Visually check for leaks at all connections with soapy water, whether field or factory made. Check pilot flame. Flame should envelope top of thermocouple and thermopile 3/8" (10mm) to 1/2" (13mm), and extend onto burner far enough for proper ignition.

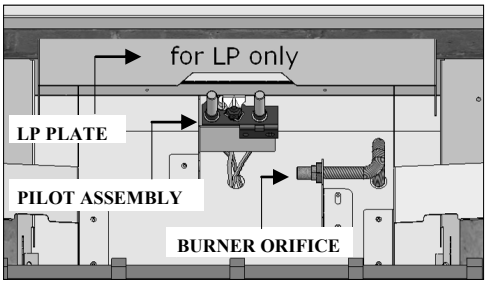
   To Adjust pilot: Remove pilot adjustment screw from gas valve. Turn inner pilot adjustment screw clockwise to decrease or counter-clockwise to increase pilot flame. Re-install pilot adjustment screw cover and tighten.
8. Turn burner and pilot off.
9. Affix Gas sticker over existing label on metal tag.
10. Re-install glass frame assembly, upper louver and upper hood* .
11. Verify proper ignition and operation of fireplace. Refer to page 16 for proper pilot and burner flame appearance and adjustment.
12. Complete and affix 'Gas Conversion' label as close to rating plate as possible.

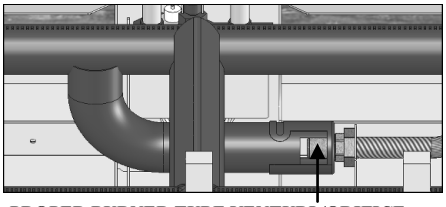
*** REFER TO FIREPLACE INSTALLATION MANUAL IF NECESSARY.**



PROPER BURNER / PILOT ASSEMBLY ORIENTATION
(shown without pilot shield for clarity purposes)

Figure 15a





PROPER BURNER TUBE VENTURI /ORIFICE PLACEMENT

Figure 15b

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 15c

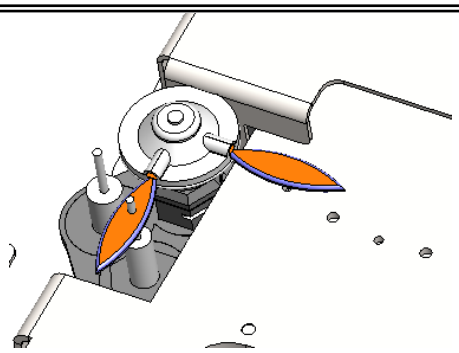
	56701	
	NATURAL GAS	**LP GAS**
MINIMUM INLET GAS PRESSURE	**5" WC (1.25 kPa) (7" WC (1.74 kPa) (recommended)**	**11" WC (2.74 kPa) (recommended)**
MAXIMUM INLET GAS PRESSURE	**10.5" WC (2.62 kPa)**	**13" WC (3.24 kPa)**
MANIFOLD PRESSURE (HI)	**3.5" WC (.87 kPa)**	**10" WC (2.49 kPa)**
MANIFOLD PRESSURE (LO)	**1.6" WC (.40 kPa)**	**6.3" WC (1.57 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.



Correct pilot flame

Figure 16a

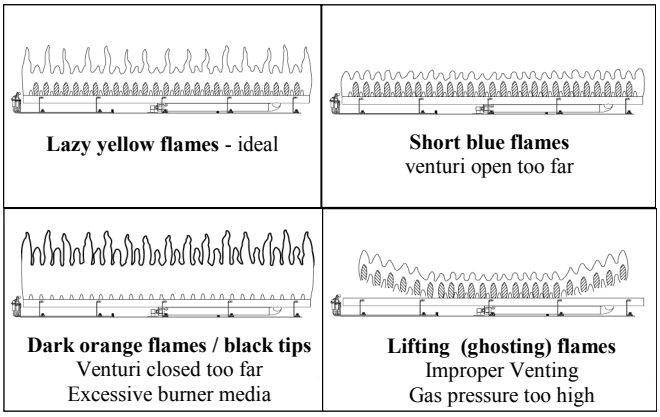


Figure 16b

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**
1/8" (3mm) open	**5/8" (16mm) open**

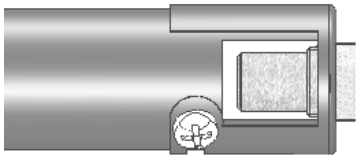
BURNER TUBE VENTURI ADJUSTMENT GUIDELINES		
VENTURI POSITION	**FLAME COLOR**	**VENTURI ADJUSTMENT**
Closed too far	**Dark orange flame with black tips**	**Open venturi setting slightly**
Open too far	**Blue flames**	**Close venturi setting slightly**

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 VENTURI:

1. Remove glass frame assembly, log set and burner assembly
2. Loosen burner venturi screw, make adjustment, retighten screw.
3. Reinstall burner, making sure venturi is positioned over burner orifice.
4. Reinstall log set and glass frame assembly.
5. Light fireplace and wait 15 minutes before determining if any further adjustments are needed.



BURNER VENTURI

Figure 16c

MAINTENANCE

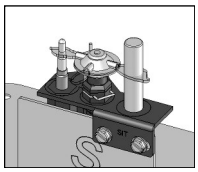
The appliance is required to be inspected at least once a year by a professional service person.

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.

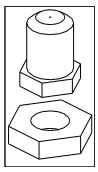
NOTE	**INSTALLATION AND REPAIR SHOULD BE DONE ONLY BY QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND ANNUALLY BY A QUALIFIED SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIALS, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS,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

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.**



56701Pilot



Burner Orifice

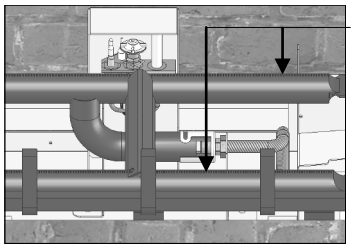


Figure 17a

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.**
  WARNING: DO NOT OPERATE APPLIANCE WITH GLASS/FRAME ASSEMBLY REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD ONLY BE PERFORMED BY A LICENSED OR QUALIFIED SERVICE PERSON.
- **Use protective gloves to handle any broken or damaged glass assembly components.**
- **The glass assembly, part #TRF-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc.**
- **Replacement of glass & frame assembly, part #TRF-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.

56701 MILLIVOLT CONTROL BOARD AND PARTS			
TRF-770	Millivolt Board - Nat Gas	700-095	#30 Pilot Orifice - LP Gas
TRF-771	Millivolt Board - LP Gas	700-098	Pilot Hood
700-023	On/Off Rocker Switch	700-203	Manual Shut-off Valve
700-086N	S.I.T. Valve - Natural Gas	700-213B	18" Flexible Gas Line-Black
700-087	S.I.T. Valve - LP Gas	700-226	Flexible Gas Line-Valve to Burner Connection
700-088	Pilot / Generator / Thermocouple - Nat Gas	700-238	Natural Gas Orifice #38
700-089	Pilot / Generator / Thermocouple - LP Gas	700-252	LP Gas Orifice #52
700-090	Piezo Igniter w/ Nut (no wire)	OCK-S38A	Natural Gas Conversion Kit
700-091	Flexible Pilot Tubing (Valve to Pilot)	OCK-S52A	LP Gas Conversion Kit
700-092	Millivolt Generator	TRF-035	Burner Tube
700-093	Thermocouple	TRF-35	Burner Plate
700-094	#51 Pilot Orifice - Natural Gas	TRF-043	Pilot Shield

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

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

FAN ASSEMBLIES	
TRF-028	Fan Assembly

LOG SET	
TRF-500A	Log Set
T1	#1 Log
T2	#2 Log
T3	#3 Log
T6	#6 Log
T7	#7 Log
T8	#8 Log
T9	#9 Log
T11	#11 Log
T12	#12 Log
900-KLK	Klinkers
900-REMB	Rock Wool Embers

COMBUSTIBLE MATERIAL BACKER BOARD	
MTK-FPS	FirePro Standoff

Supplemental Installation and Homeowner Information Manual for Thief River Falls Model:

HUSSONG MANUFACTURING

KOZY HEAT FIREPLACES

Quality Fireplaces for Life

#56701-IPI

DIRECT VENT GAS FIREPLACE

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

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

English and French Installation Manuals Available Through Your Local Dealer or Visit Our Website at www.kozyheat.com

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 neighbors phone. Follow the gas supplier 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.

NATIONAL FIREPLACE INSTITUTE NFI CERTIFIED www.nficertified.org

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

Tested & Listed By O-T-L C US Portland Oregon USA

OMNI-Test Laboratories, Inc.

Report No. 216-S-05-5

MARCH 2012
56701-IPI-SUP-REV-01

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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 2.14-M91 (R2009), "Gas-Fired 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*

- **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.**
- **<u>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.</u>**
- **The glass assembly, Part #TRF-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

56701-IPI COMPONENTS LIST

PART NUMBER	DESCRIPTION
TRF-100	IPI Control Board Assembly
700-203	Manual Gas Shut-off Valve
TRF-35	Burner Plate
TRF-035	Burner Tube
TRF-500A	Log Package
TRF-057T	Glass Frame Assembly
900-085	4" Restrictor Plate
500-TRF	3 pc. Grill Assembly
IPI-028	IPI Fan Kit
700-308	Remote Control

	56701-IPI	
	NATURAL GAS	LP GAS
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	#38	#.0625
INPUT BTU/hr. (kW)	28,000 BTU/hr (8.21 kW)	28,000 BTU/hr (8.21 kW)
MINIMUM INPUT BTU/hr. (kW)	20,000 BTU/hr (5.86 kW)	21,000 BTU/hr (6.16 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.

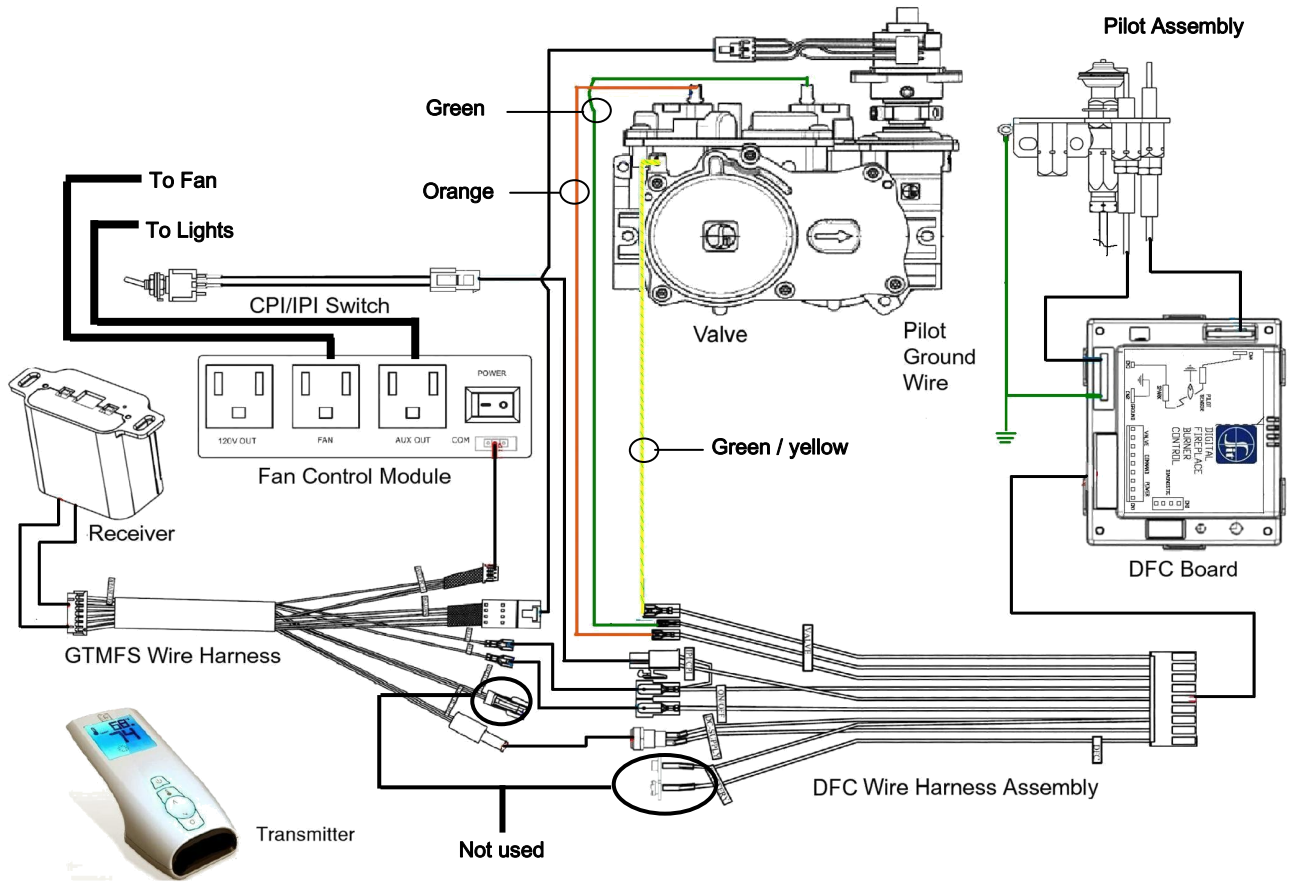


Figure 4a

CONTROL SYSTEM COMPONENTS

REMOTE CONTROL

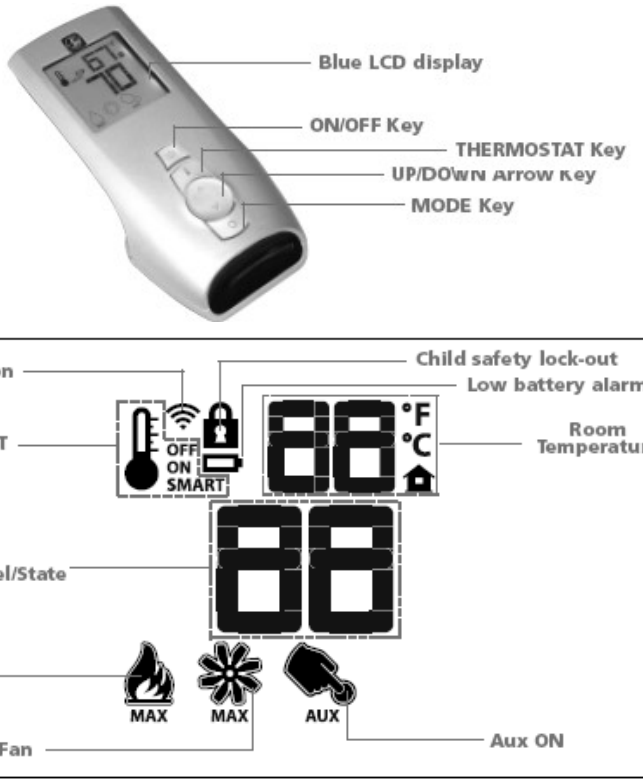


Figure 5a

GAS VALVE

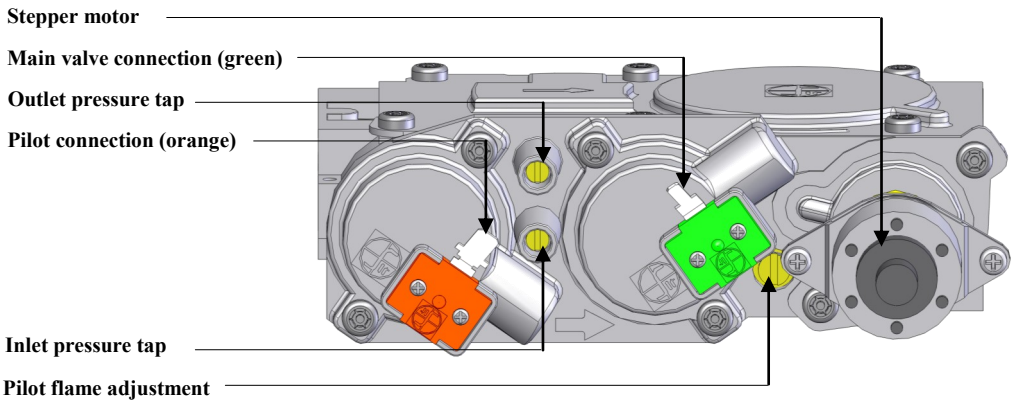


Figure 5b

PILOT ASSEMBLY

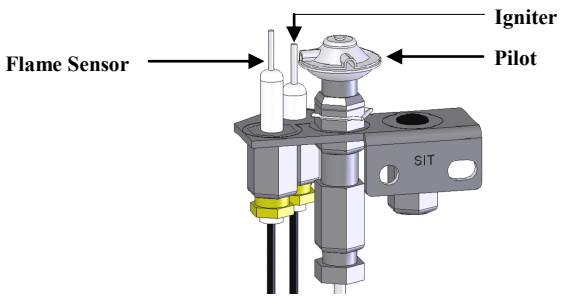


Figure 5c

CONTROL SYSTEM COMPONENTS

RECEIVER

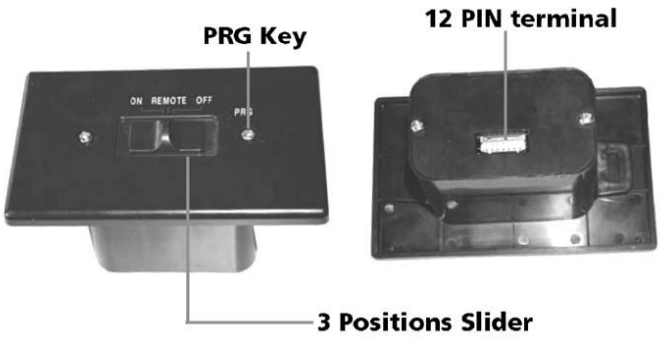


Figure 6a

FAN CONTROL MODULE

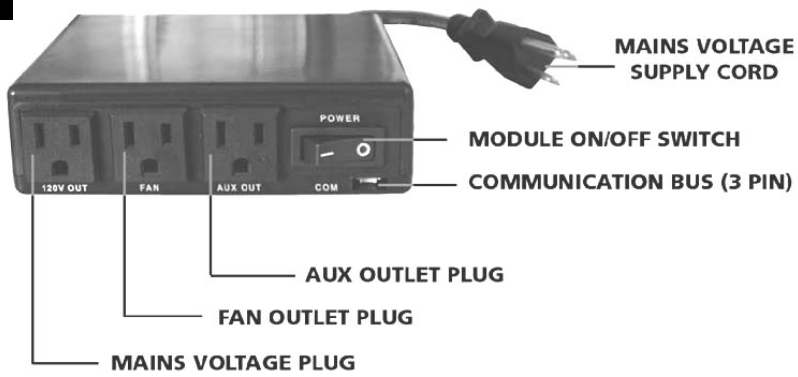


Figure 6b

DFC CONTROL BOARD

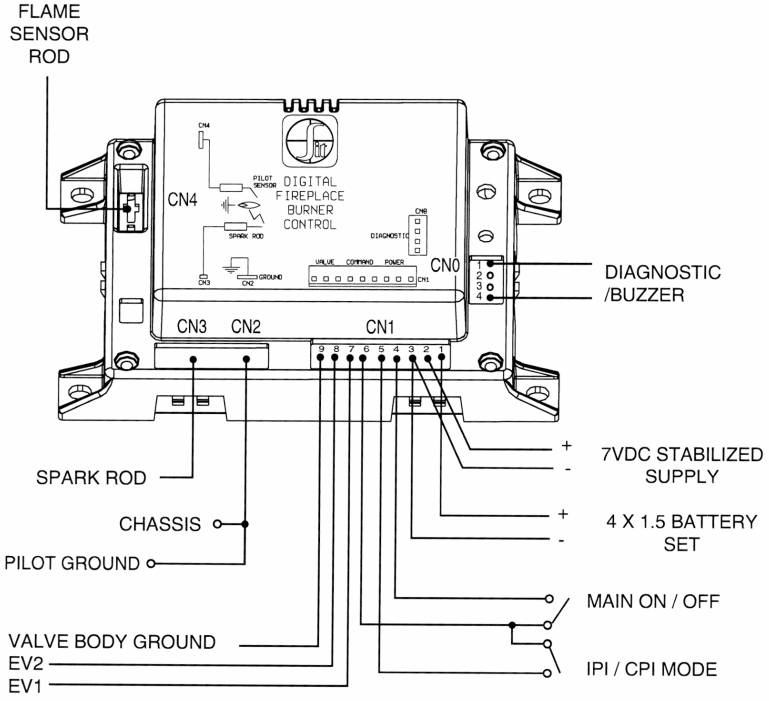


Figure 6c

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. 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.
4. 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.
5. Push **OFF** button on transmitter. The receiver will 'beep' two (2) times to indicate the transmitter's command is again accepted.
6. Move slider switch to **REMOTE** position.
7. Turn On fan control module, switching to ON (|) position.
8. The system is now initialized.

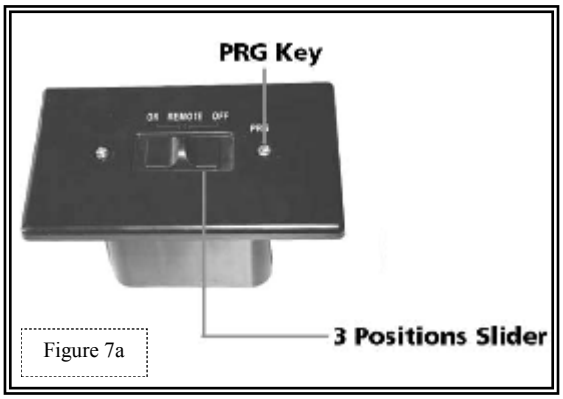


Figure 7a

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

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.

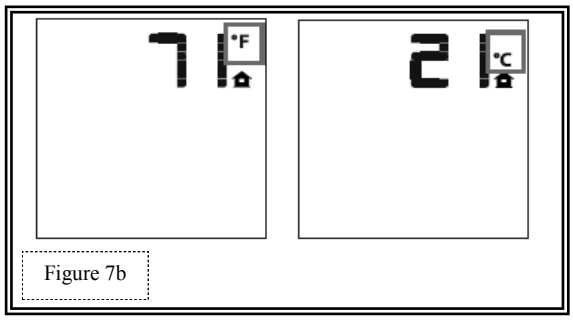


Figure 7b

TURN ON THE APPLIANCE

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

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.

SYSTEM OPERATION

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.

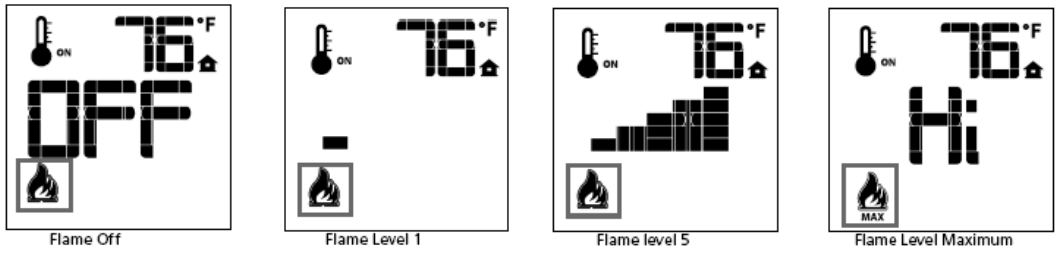


Figure 8a

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.

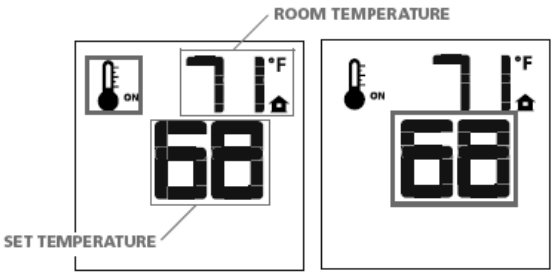


Figure 8b

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.

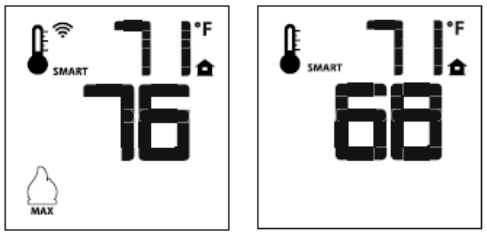


Figure 8c

SYSTEM OPERATION

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.

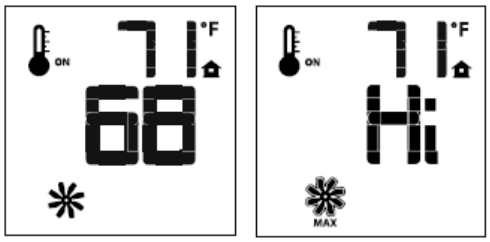


Figure 9a

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.

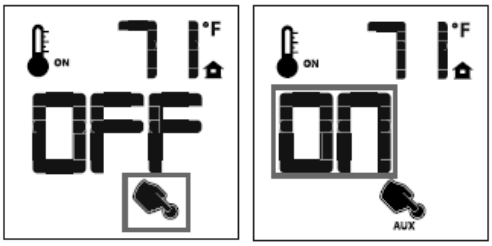


Figure 9b

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.

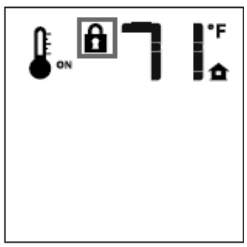


Figure 9c

SYSTEM OPERATION

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.

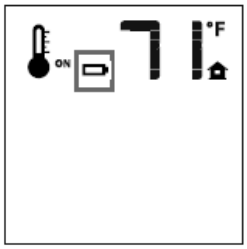


Figure 10a

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.

CONTINUOUS PILOT OPTION

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.

When continuous pilot mode is activated and fireplace is turned ON, the pilot will spark and light. When fireplace is turned OFF, the pilot will remain lit when main burner has been turned OFF.

DIRECT FIREPLACE OPERATION

The fireplace may be directly operated from the receiver.

ON: Fireplace burner turns on (regardless of transmitter settings).

OFF: Fireplace burner turns off (regardless of transmitter settings).

REMOTE: Fireplace is controlled by remote control (transmitter).

NOTE	**When receiver switch is turned to ON or Off, mode settings (Accent Lights, Fan, Flame Height, Smart Thermostat) will remain in same state as before switch was moved. If you wish to adjust mode settings use transmitter mode button to adjust settings. The thermostat and burner ON/OFF operating functions will not work on the transmitter.**

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.**

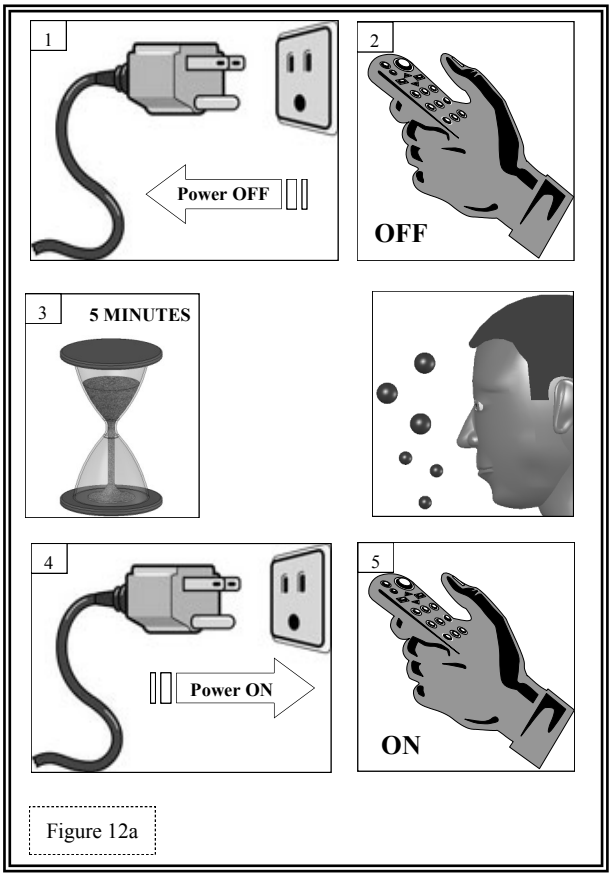


Figure 12a

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**.

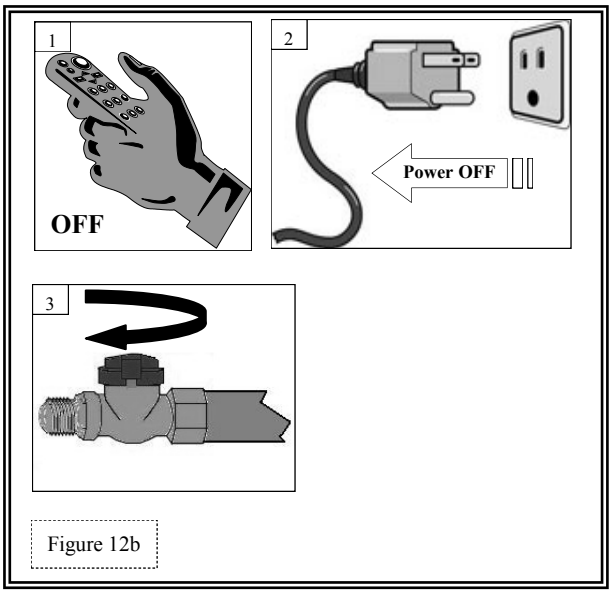


Figure 12b

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 that 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.

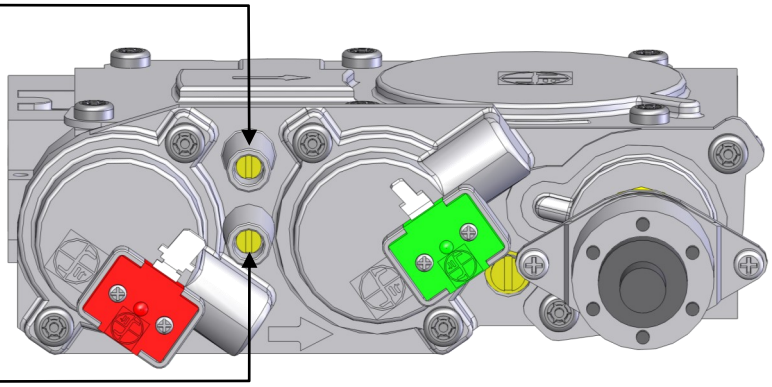


Figure 13a

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.
- A maximum number of failed ignitions or flame restorations have been reached. Reset DFC control board.
    1. Turn system off by pressing ON/OFF button on transmitter.
    2. After approximately 2 seconds press ON/OFF button on transmitter again.
    3. In manual flame mode, use down arrow button to reduce flame to off, indicated by the word OFF displayed on transmitter LCD screen.
    4. Wait approximately 2 seconds and press up arrow button, the ignition sequence will start.
    5. With the transmitter off, move slider switch on receiver to OFF position.
    6. Wait approximately 2 seconds and move receiver switch to ON position.

CONVERSION KIT INSTRUCTIONS

#NCK-TRF-S NAT GAS CONVERSION KIT / #LCK-TRF-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 (1) Pilot Injector NAT #62 / LP #35 (1) Gas Label
(1) Burner Orifice NAT #38 / LP #52 (1) Step Motor Pressure Regulator
(1) LP log plate (LP conversion kits only)

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 FIREPLACE:

1. Remove upper hood, upper louver and glass assembly*.
2. Remove logs from fireplace.
3. **IF CONVERTING TO NAT GAS:** Remove LP log plate (if installed).
4. Remove pilot shield.
5. Remove burner tube from fireplace.

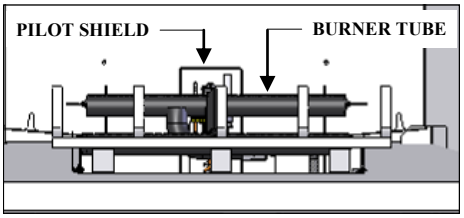


Figure 16a

REPLACE BURNER ORIFICE:

Remove existing orifice cap and replace with orifice cap included with kit, making sure to tighten cap securely. (Number stamped on orifice.).
NAT. GAS: #38 / LP GAS: #52

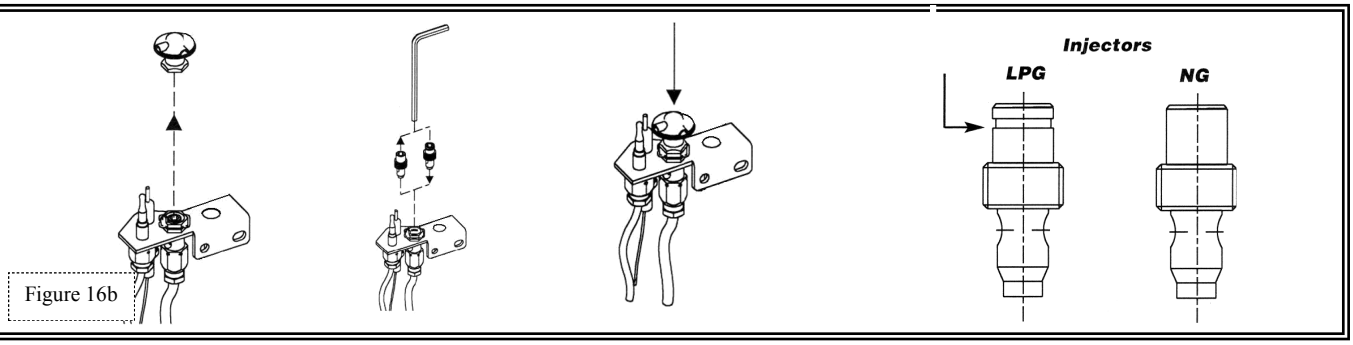


Figure 16b

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.

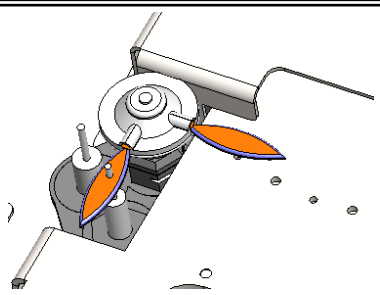
CONVERSION KIT INSTRUCTIONS

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).

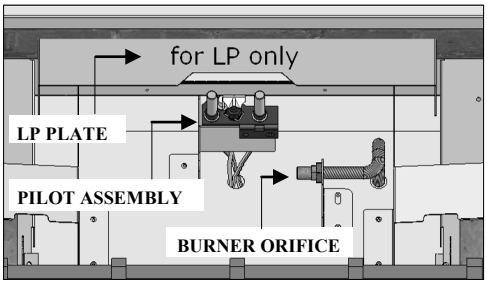
COMPLETE THE CONVERSION:

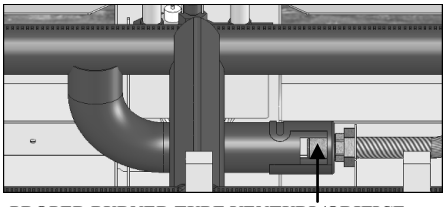
1. Adjust venturi on burner tube to correct setting by loosening screw, adjusting cap and retightening screw.
   CORRECT SETTINGS: NAT: 1/8" (3mm) open / L.P: 5/8 (16mm) open
2. Re-install burner tube into fireplace, checking to ensure burner venturi is properly seated over burner orifice.
3. **IF CONVERTING TO LP GAS:** Install LP log plate (included with kit). When properly seated, log plate sits between back log brackets and burner heat shield.
4. Re-install pilot shield and log set.
5. Turn on gas and electrical supplies, following lighting and shutdown instructions as outlined on pages 11-12. Check for leaks at all connections with soapy water, whether field or factory made.
6. 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.
7. Turn fireplace off.
8. Affix gas type sticker to label.
9. Re-install glass frame assembly, upper louver and upper hood*.
10. Verify proper ignition and operation of fireplace. Refer to page 18 for proper pilot and burner flame appearance and adjustment.
11. Complete and affix 'Gas Conversion' label behind lower grill as close to rating plate as possible.



PROPER BURNER / PILOT ASSEMBLY ORIENTATION
(shown without pilot shield for clarity purposes)

Figure 17a





PROPER BURNER TUBE VENTURI /ORIFICE PLACEMENT

Figure 17b

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 17c

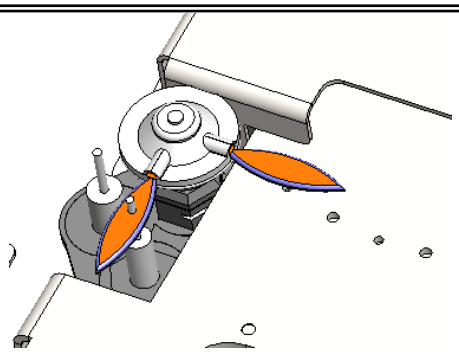
	NATURAL GAS	LP GAS
MINIMUM INLET GAS PRESSURE	**5" WC (1.25 kPa) (7" WC (1.74 kPa) recommended)**	**11" WC (2.74 kPa) (recommended)**
MAXIMUM INLET GAS PRESSURE	**10.5" WC (2.62 kPa)**	**13" WC (3.24 kPa)**
MANIFOLD PRESSURE (HI)	**3.5" WC (.87 kPa)**	**10" WC (2.49 kPa)**
MANIFOLD PRESSURE (LO)	**1.6"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



Correct pilot flame

Figure 18a

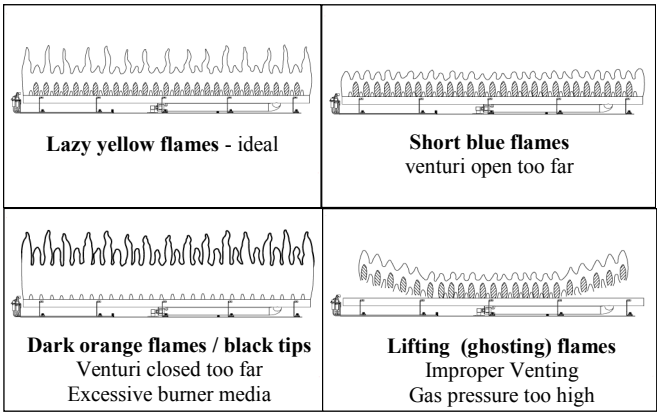


Figure 18b

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**
1/8" (3mm) open	**5/8" (16mm) open**

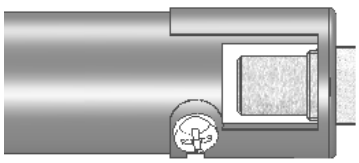
BURNER TUBE VENTURI ADJUSTMENT GUIDELINES		
VENTURI POSITION	**FLAME COLOR**	**VENTURI ADJUSTMENT**
Closed too far	**Dark orange flame with black tips**	**Open venturi setting slightly**
Open too far	**Blue flames**	**Close venturi setting slightly**

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 VENTURI:

1. Remove glass frame assembly, log set and burner assembly
2. Loosen burner venturi screw, make adjustment, retighten screw.
3. Reinstall burner, making sure venturi is positioned over burner orifice.
4. Reinstall log set and glass frame assembly.
5. Light fireplace and wait 15 minutes before determining if any further adjustments are needed.



BURNER VENTURI

Figure 18c

MAINTENANCE

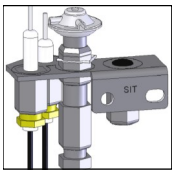
The appliance is required to be inspected at least once a year by a professional service person.

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.

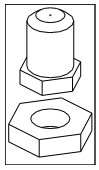
NOTE	**INSTALLATION AND REPAIR SHOULD BE DONE ONLY BY QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND ANNUALLY BY A QUALIFIED SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIALS, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS,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

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.**



56701-IPI Pilot



Burner Orifice

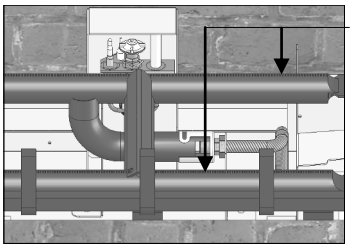


Figure 19a

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.**
  WARNING: DO NOT OPERATE APPLIANCE WITH GLASS/FRAME ASSEMBLY REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD ONLY BE PERFORMED BY A LICENSED OR QUALIFIED SERVICE PERSON.
- **Use protective gloves to handle any broken or damaged glass assembly components.**
- **The glass assembly, part #TRF-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc.**
- **Replacement of glass & frame assembly, part #TRF-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.

CONTROL BOARD AND PARTS			
TRF-100	Control Board - Nat Gas	700-503	Valve Step Motor - Natural Gas
TRF-101	Control Board - LP Gas	700-503-1	Valve Step Motor - LP Gas
700-557	SIT IPI Valve - Natural	700-203	Manual Shut-off Valve
700-557-1	SIT IPI Valve - LP	700-213B	18” Flexible Gas Line-Black
700-552	Proflame DFC Board	700-226	Flexible Gas Line-Valve to Burner Connection
700-553	DFC Wire Harness Assembly	700-238	Natural Gas Orifice #38
700-551	Pilot Assembly - Natural Gas	700-252	LP Gas Orifice #52
700-551-1	Pilot Assembly - LP Gas	NCK-TRF-S	Natural Gas Conversion Kit
700-308R	Receiver	LCK-TRF-S	LP Gas Conversion Kit
700-558	GTMFS Wire Harness	TRF-035	Burner Tube
700-130	Fan Control Module	TRF-35	Burner Plate
700-308	Transmitter	TRF-043	Pilot Shield
700-166	#62 Natural Gas Pilot Orifice	700-992	Pilot Igniter (with wire)
700-168	#35 LP Gas Pilot Orifice	700-993	Pilot Flame Sensor (with wire)

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

GLASS & GLASS GASKET	
TRF-005	Replacement Valance
900-006	1-1/8” Glass Gasket w/ Adhesive
TRF-057T	Valance with 26” x 35” glass

LOG SET	
TRF-500A	Log Set
T1	#1 Log
T2	#2 Log
T3	#3 Log
T6	#6 Log
T7	#7 Log
T8	#8 Log
T9	#9 Log
T11	#11 Log
T12	#12 Log
900-KLK	Klinkers
900-REMB	Rock Wool Embers

FAN ASSEMBLIES	
IPI-028	Fan Assembly

COMBUSTIBLE MATERIAL BACKER BOARD	
MTK-FPS	FirePro Standoff

Supplemental Installation and Homeowner Information Manual for Thief River Falls Model:

#56701-MV

DIRECT VENT GAS FIREPLACE

HUSSONG MANUFACTURING

KOZY HEAT FIREPLACES

Quality Fireplaces for Life

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

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

English and French Installation Manuals Available Through Your Local Dealer or Visit Our Website at www.kozyheat.com

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 neighbors phone. Follow the gas supplier 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.

NATIONAL FIREPLACE INSTITUTE NFI CERTIFIED www.nficertified.org

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

Tested & Listed By OMNI-Test Laboratories, Inc. Portland Oregon USA

Report No. 216-S-05-5

MAY 2012
56701-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 2.14-M91 (R2009), "Gas-Fired 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*

- **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.**
- **<u>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.</u>**
- **The glass assembly, Part #TRF-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

56701-MV COMPONENTS LIST

PART NUMBER	DESCRIPTION
TRF-700	Control Board Assembly
700-203	Manual Gas Shut-off Valve
TRF-35	Burner Plate
TRF-035	Burner Tube
TRF-500A	Log Package
TRF-057T	Glass Frame Assembly
900-085	4" Restrictor Plate
500-TRF	3 pc. Grill Assembly
IPI-028	IPI Fan Kit
700-308	Remote Control

	56701-MV	
	NATURAL GAS	LP GAS
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	#38	#.0625
INPUT BTU/hr. (kW)	28,000 BTU/hr (8.21 kW)	28,000 BTU/hr (8.21 kW)
MINIMUM INPUT BTU/hr. (kW)	20,000 BTU/hr (5.86 kW)	21,000 BTU/hr (6.16 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.

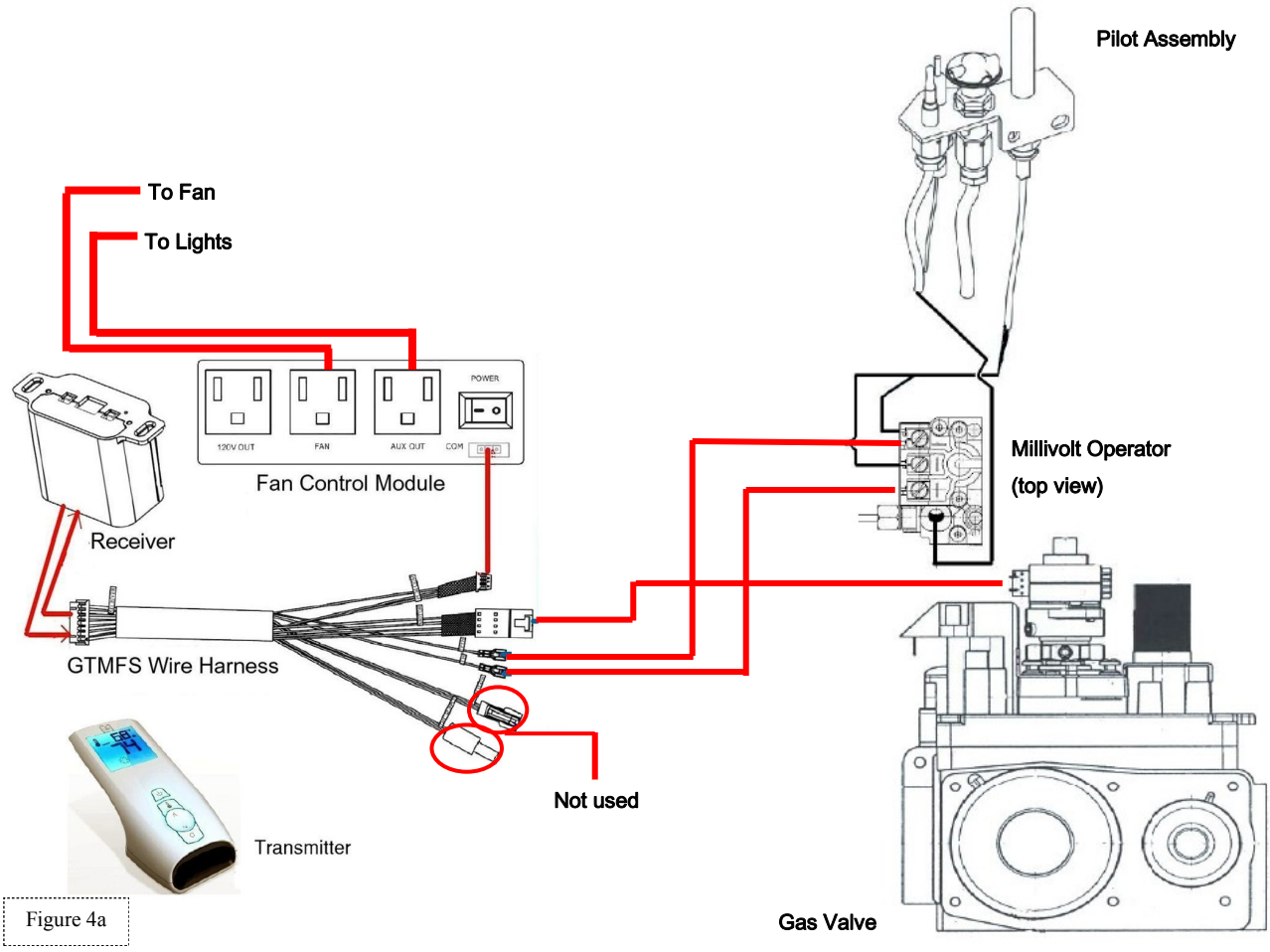


Figure 4a

CONTROL SYSTEM COMPONENTS

REMOTE CONTROL

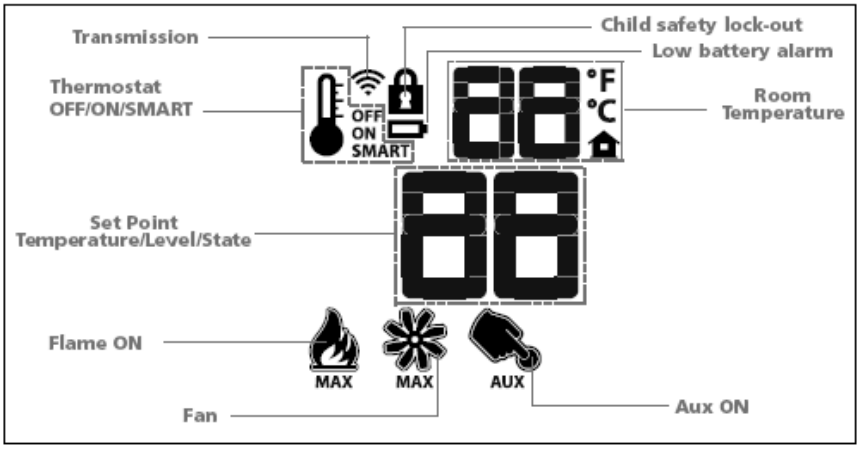


Figure 5a

GAS VALVE

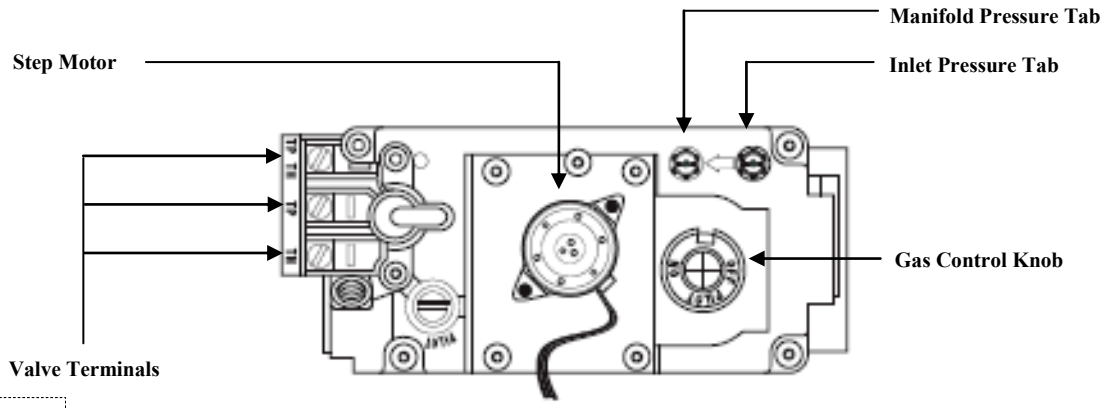


Figure 5b

PILOT ASSEMBLY

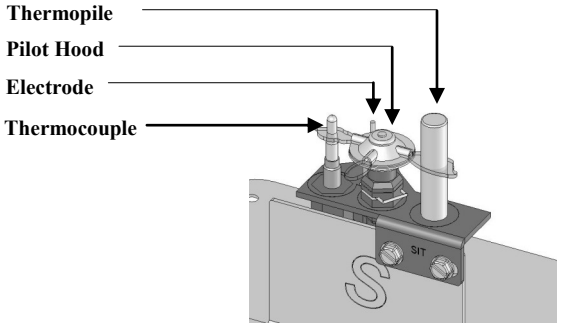


Figure 5c

CONTROL SYSTEM COMPONENTS

RECEIVER

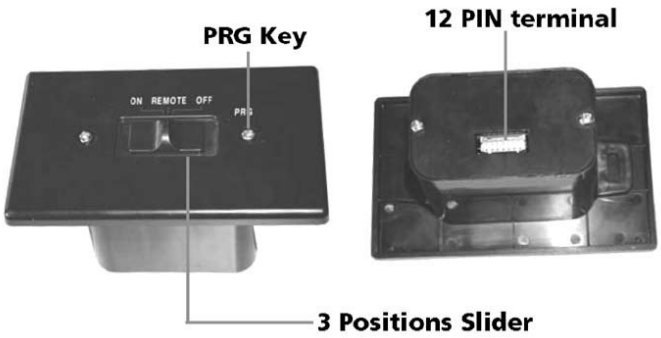


Figure 6a

FAN CONTROL MODULE

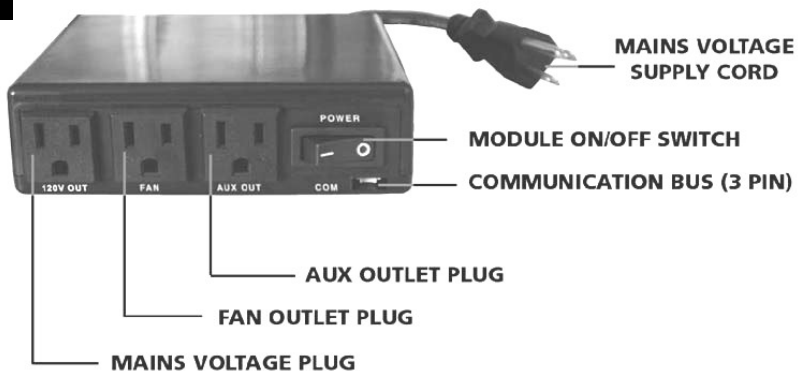


Figure 6b

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.

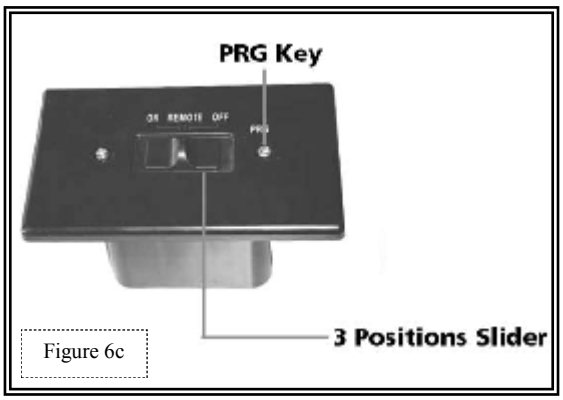


Figure 6c

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.

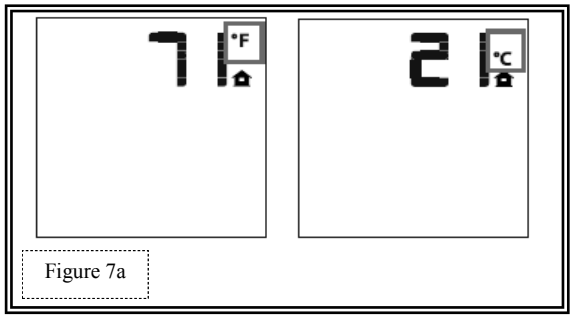


Figure 7a

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.

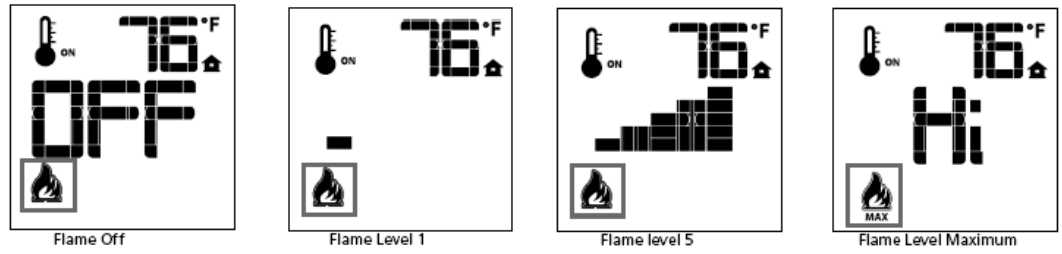


Figure 7b

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.

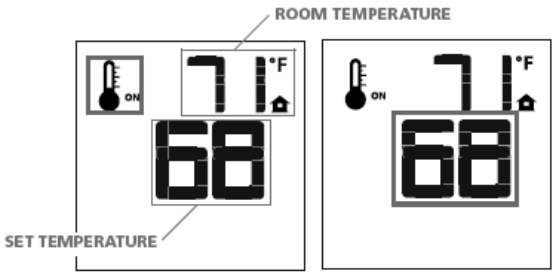


Figure 7c

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.

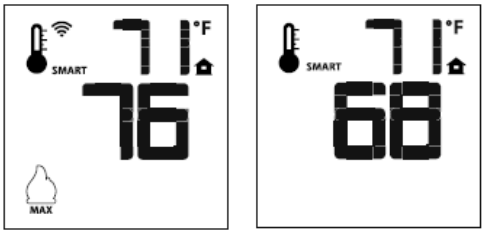


Figure 8a

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.

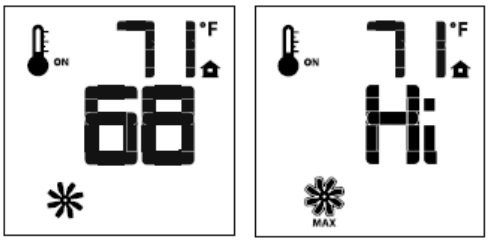


Figure 8b

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.

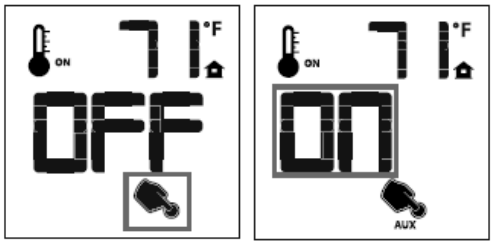


Figure 8c

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.

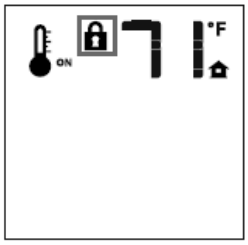


Figure 9a

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.

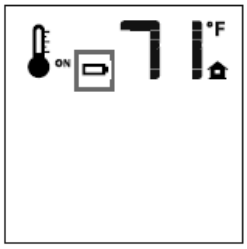


Figure 9b

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.**

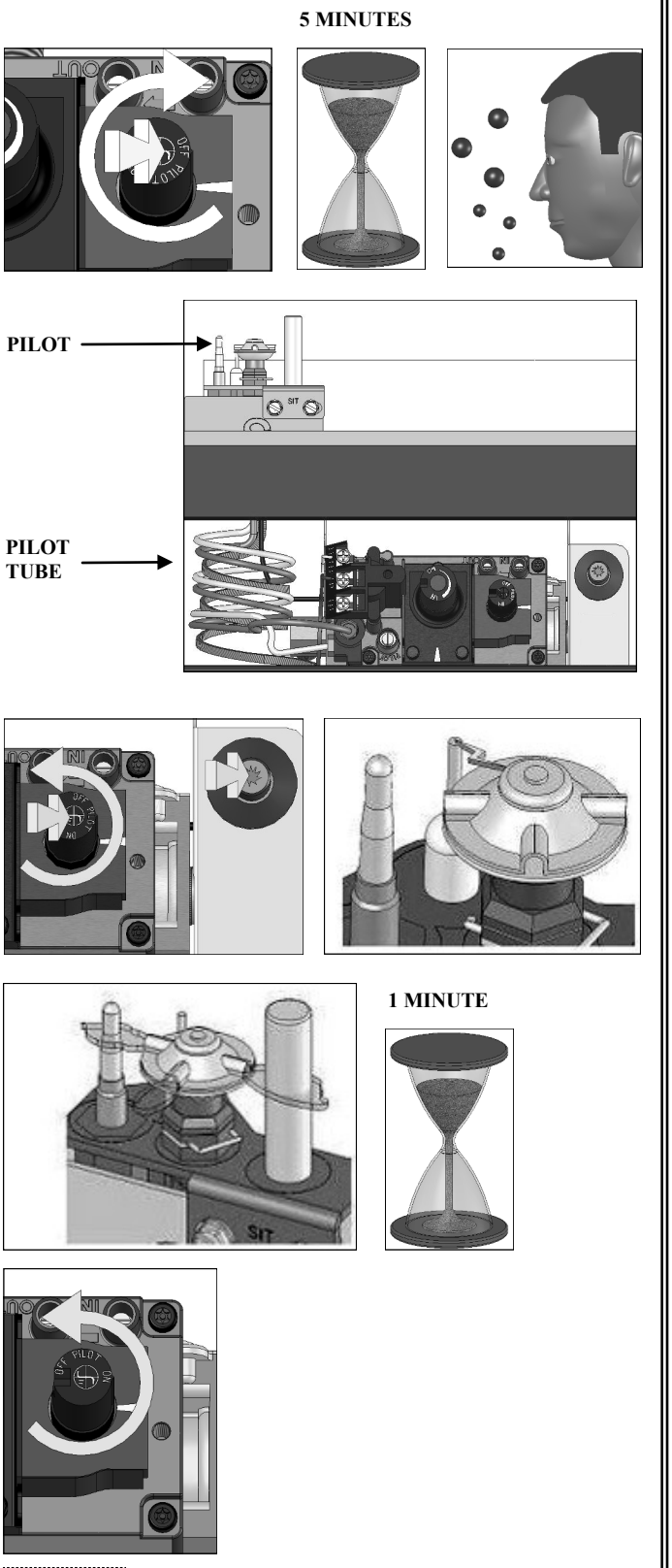


Figure 11a

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).**

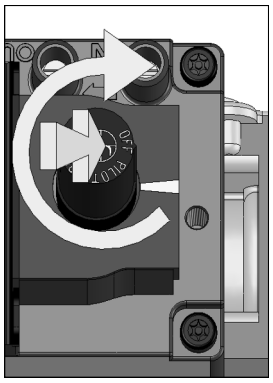


Figure 12a

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 that 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.**

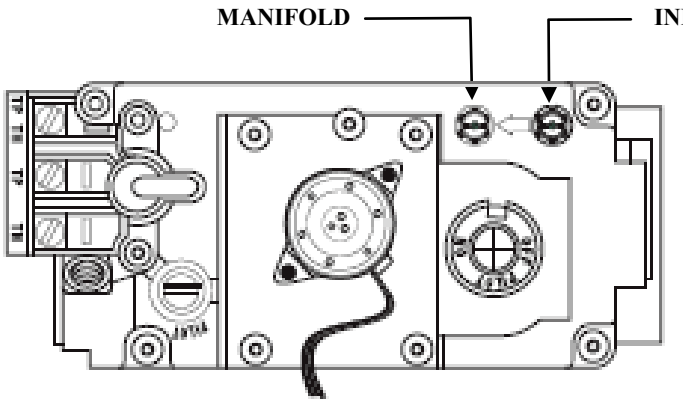


Figure 13a

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-TRFMV-S NAT GAS CONVERSION KIT / #LCK-TRFMV-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 (1) Pilot Injector NAT #62 / LP #35 (1) Gas Label
(1) Burner Orifice NAT #38 / LP # 52 (1) Step Motor Pressure Regulator
(1) LP Log Plate (LP conversion kits only)

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 FIREPLACE:

1. Remove upper hood, upper louver and glass assembly*.
2. Remove logs from fireplace.
3. **IF CONVERTING TO NAT GAS:** Remove LP log plate (if installed).
4. Remove pilot shield.
5. Remove burner tube from fireplace.

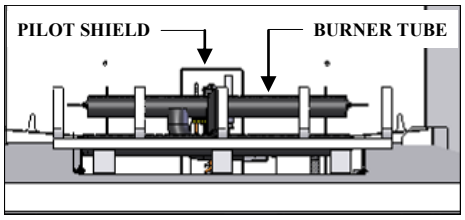


Figure 16a

REPLACE BURNER ORIFICE:

Remove existing orifice cap and replace with orifice cap included with kit, making sure to tighten cap securely. (Number stamped on orifice.). **NAT. GAS: #38 / LP GAS: #52**

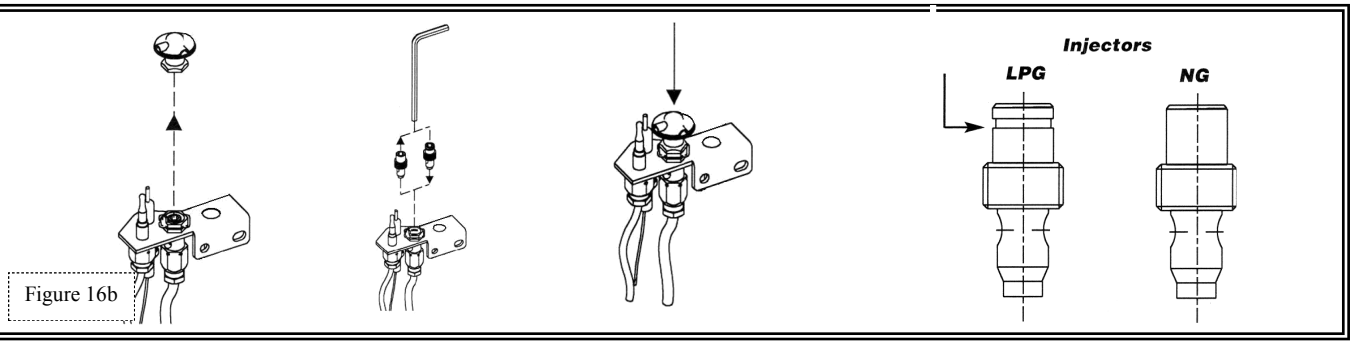


Figure 16b

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.

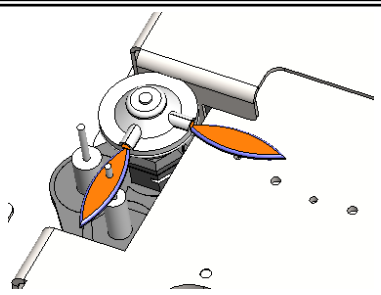
CONVERSION KIT INSTRUCTIONS

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).

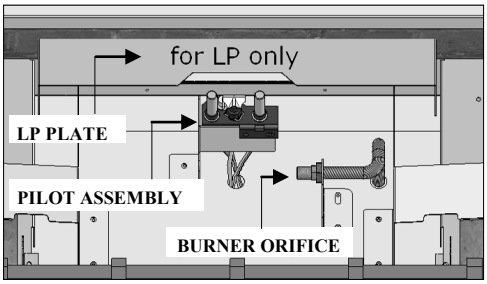
COMPLETE THE CONVERSION:

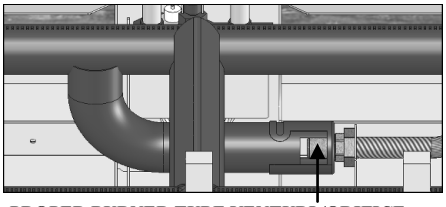
1. Adjust venturi on burner tube to correct setting by loosening screw, adjusting cap and retightening screw.
   CORRECT SETTINGS: NAT: 1/8" (3mm) open / L.P: 5/8 (16mm) open
2. Re-install burner tube into fireplace, checking to ensure burner venturi is properly seated over burner orifice.
3. **IF CONVERTING TO LP GAS:** Install LP log plate (included with kit). When properly seated, log plate sits between back log brackets and burner heat shield.
4. Re-install pilot shield and log set.
5. Turn on gas and electrical supplies, following lighting and shutdown instructions as outlined on pages 11-12. Check for leaks at all connections with soapy water, whether field or factory made.
6. 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.
7. Turn fireplace off.
8. Affix gas type sticker to label.
9. Re-install glass frame assembly, upper louver and upper hood*.
10. Verify proper ignition and operation of fireplace. Refer to page 18 for proper pilot and burner flame appearance and adjustment.
11. Complete and affix 'Gas Conversion' label behind lower grill as close to rating plate as possible.



PROPER BURNER / PILOT ASSEMBLY ORIENTATION
(shown without pilot shield for clarity purposes)

Figure 17a





PROPER BURNER TUBE VENTURI /ORIFICE PLACEMENT

Figure 17b

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 17c

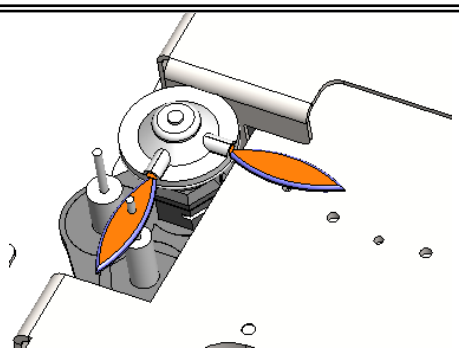
	NATURAL GAS	LP GAS
MINIMUM INLET GAS PRESSURE	**5" WC (1.25 kPa) (7" WC (1.74 kPa) recommended)**	**11" WC (2.74 kPa) (recommended)**
MAXIMUM INLET GAS PRESSURE	**10.5" WC (2.62 kPa)**	**13" WC (3.24 kPa)**
MANIFOLD PRESSURE (HI)	**3.5" WC (.87 kPa)**	**10" WC (2.49 kPa)**
MANIFOLD PRESSURE (LO)	**1.6"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



Correct pilot flame

Figure 18a

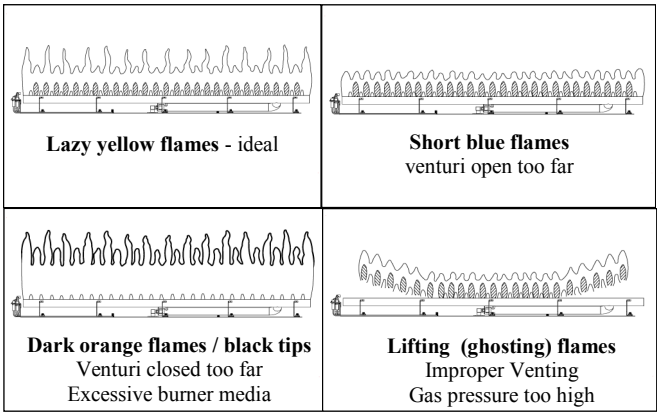


Figure 18b

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**
1/8" (3mm) open	**5/8" (16mm) open**

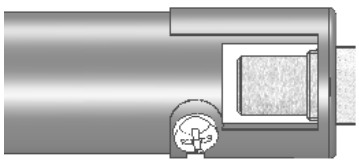
BURNER TUBE VENTURI ADJUSTMENT GUIDELINES		
VENTURI POSITION	**FLAME COLOR**	**VENTURI ADJUSTMENT**
Closed too far	**Dark orange flame with black tips**	**Open venturi setting slightly**
Open too far	**Blue flames**	**Close venturi setting slightly**

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 VENTURI:

1. Remove glass frame assembly, log set and burner assembly
2. Loosen burner venturi screw, make adjustment, retighten screw.
3. Reinstall burner, making sure venturi is positioned over burner orifice.
4. Reinstall log set and glass frame assembly.
5. Light fireplace and wait 15 minutes before determining if any further adjustments are needed.



BURNER VENTURI

Figure 18c

MAINTENANCE

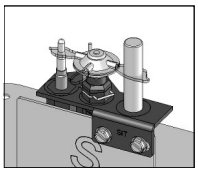
The appliance is required to be inspected at least once a year by a professional service person.

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.

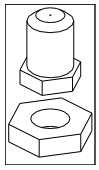
NOTE	**INSTALLATION AND REPAIR SHOULD BE DONE ONLY BY QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND ANNUALLY BY A QUALIFIED SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIALS, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS,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

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.**



56701-MV Pilot



Burner Orifice

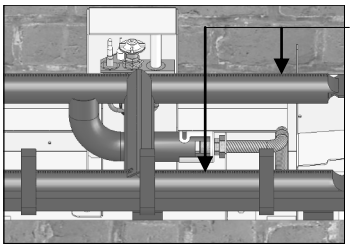


Figure 19a

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.**
  WARNING: DO NOT OPERATE APPLIANCE WITH GLASS/FRAME ASSEMBLY REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD ONLY BE PERFORMED BY A LICENSED OR QUALIFIED SERVICE PERSON.
- **Use protective gloves to handle any broken or damaged glass assembly components.**
- **The glass assembly, part #TRF-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc.**
- **Replacement of glass & frame assembly, part #TRF-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.

CONTROL BOARD AND PARTS			
TRF-700	Control Board - Nat Gas	700-403S-1	Valve Step Motor - LP Gas
TRF-701	Control Board - LP Gas	700-203	Manual Shut-off Valve
700-084	SIT MV Valve - Natural	700-213B	18” Flexible Gas Line-Black
700-085	SIT MV Valve - LP	700-226	Flexible Gas Line-Valve to Burner Connection
700-088	Pilot Assembly - Natural Gas	700-238	Natural Gas Orifice #38
700-089	Pilot Assembly - LP Gas	700-252	LP Gas Orifice #52
700-308R	Receiver	NCK-TRFMV-S	Natural Gas Conversion Kit
700-558	GTMFS Wire Harness	LCK-TRFMV-S	LP Gas Conversion Kit
700-130	Fan Control Module	TRF-035	Burner Tube
700-308	Transmitter	TRF-35	Burner Plate
700-166	#62 Natural Gas Pilot Orifice	TRF-043	Pilot Shield
700-168	#35 LP Gas Pilot Orifice	700-993	Pilot Flame Sensor (with wire)
700-403S	Valve Step Motor - Natural Gas	700-992	Pilot Igniter (with wire)

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

GLASS & GLASS GASKET	
TRF-005	Replacement Valance
900-006	1-1/8” Glass Gasket w/ Adhesive
TRF-057T	Valance with 26” x 35” glass

LOG SET	
TRF-500A	Log Set
T1	#1 Log
T2	#2 Log
T3	#3 Log
T6	#6 Log
T7	#7 Log
T8	#8 Log
T9	#9 Log
T11	#11 Log
T12	#12 Log
900-KLK	Klinkers
900-REMB	Rock Wool Embers

FAN ASSEMBLIES	
IPI-028	Fan Assembly

COMBUSTIBLE MATERIAL BACKER BOARD	
MTK-FPS	FirePro Standoff