HUSSONG MANUFACTURING

KOZY HEAT FIREPLACES

Quality Fireplaces for Life

INSTALLATION AND OPERATION MANUAL

INSTALLER: LEAVE THIS MANUAL WITH THE APPLIANCE.

CONSUMER: RETAIN THIS MANUAL FOR FUTURE REFERENCE.

DO NOT DISCARD

Model: #RFD-30

ROCKFORD

DIRECT VENT FIREPLACE INSERT

WARNING: This product must be installed by a licensed plumber or gas fitter when installed in the commonwealth of Massachusetts.

This appliance may be installed in an aftermarket permanently located, manufactured (mobile) home, where not prohibited by local codes. A manufactured home (USA only) or mobile home OEM installation must conform with the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280,* or when such a standard is not applicable, the Standard for *Manufactured Home Installations, ANSI/NCSBCS A225.1,* or Standard for *Gas Equipped Recreational Vehicles and Mobile Housing, CSA Z240.4*

WARNING: If the information in these instructions are 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.**

IF YOU SMELL GAS:

- **Do not 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.**

This appliance is only for use with the type (s) of gas indicated on the rating plate.
A conversion kit is supplied with the appliance.

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-33-6.5

www.kozyheat.com

JANUARY 2011
RFD-30 REV-05

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:_____

_____

_____

TABLE OF CONTENTS

INTRODUCTION	
Introduction and Homeowner Reference Information	1
CONTENTS	
Table of Contents	2
SAFETY INFORMATION	
Safety Information	3
FEATURES	
Features	4
COMMONWEALTH OF MASSACHUSETTS INFORMATION	
Commonwealth of Massachusetts Information	5
SPECIFICATIONS	
Fireplace Dimensions	6
Parts Diagram	6
Minimum Clearances to Combustibles	7
Components List	8
Additional Components Required	8
Placement Clearance Requirements	8
EXISTING FIREPLACE SPECIFICATIONS	
Existing Fireplace Requirements	9
PREPARE EXISTING FIREPLACE	
Existing Fireplace Minimum Opening Requirements	10
Prepare Existing Fireplace	10
ELECTRICAL WIRING	
Electrical Wiring	10
GAS LINE CONNECTION	
Gas Line Connection	11
CONVERSION KIT INSTRUCTIONS	
Conversion Kit Instructions	12-13
GLASS FRAME ASSEMBLY / SCREEN FRONT	
Glass Frame Assembly / Screen Front Removal & Installation	14
INSTALLATION	
Approved Venting	14
Combustion Air Venting Options	14
Air Duct Removal	15
Kozy Heat #816-CL Co-Linear Vent System	15
Run Vent System Through Existing Chimney	16
Connect Vent System to Air Duct	17
SHROUD INSTALLATION	
Shroud Installation	17
ROCK SET INSTALLATION	
Rock Set Installation	18
OPERATING INSTRUCTIONS	
Wiring Schematics	19
Valve and Pilot Assembly Components	20
Control Module Components	21
Remote Control Components	22
Information and Remote Control Operation	23-26
Lighting and Shutdown	27-28
Pressure Testing	29
Error Codes	30
FINALIZING THE INSTALLATION	
Flame Appearance	31
To Adjust Venturi	31
MAINTENANCE	
Maintenance	32
TROUBLESHOOTING	
Remote Troubleshooting	33-34
REPLACEMENT PARTS LIST	
Replacement Parts List	35
WARRANTY	
Warranty	36-37

SAFETY INFORMATION

This fireplace has been tested to and complies with ANSI Z21.88-2009·CSA 2.33-2009·CSA P.4.1-09 "VENTED GAS FIREPLACE HEATERS" by OMNI-Test Laboratories, Portland, OR. Installation must conform with local building codes or in the absence of local building codes, with the National Fuel Gas Code, ANSIZ223.1/NFPA 54 - Current Edition, or the Natural or Propane Installation Code, CSAB149.1

- **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.**
- **This fireplace insert is to be installed into a solid fuel masonry or factory built non-combustible fireplace that has been installed in accordance with the National, Provincial, State and local building codes.**
- **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 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 place 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.**
- **Do not operate this appliance with the glass/frame assembly removed, cracked or broken. The glass assembly, Part #JOR-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc. Replacement of glass assembly must only be performed by a licensed or qualified service person. 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.**

FEATURES

Please consult with your dealer for a detailed list of optional accessories available for this fireplace insert.

STANDARD FEATURES

- High efficiency
- High quality lifetime glass
  17-1/2" x 25-5/8" (445 mm x 651 mm)
- Quick latch glass frame assembly
- Black firebox liner
- Rock set
- Automatic fan kit (1) - 110 CFM
- IPI control system with remote control
- Engineer-designed burner system
- Co-linear vent system - 3" combustion air / 3" exhaust
- Innovative vent connection system
- Minnesota Energy Code compliant to 50 pascals

OPTIONAL FEATURES

- Standard size or custom sized shrouds
- Decorative doors in various colors
- Screen Fronts in various finishes
- Flex vent adaptor kit

SAFETY FEATURES

- **Each unit factory tested!**
- Tested by OMNI - Test Laboratories
- Sealed combustion chamber
- Intermittent or Standing pilot ignition
- Flame sensing system (safety shutoff)
- Automatic pressure relief glass system
- Battery back-up in the event of power failure
  (excluding fan)
- Bedroom and mobile home approved
- Canadian approved

COMMONWEALTH OF MASSACHUSETTS REQUIREMENTS

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

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

INSTALLATION OF CARBON MONOXIDE DETECTORS

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

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

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

APPROVED CARBON MONOXIDE DETECTORS

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

SIGNAGE

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

INSPECTION

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

EXEMPTIONS

The following equipment is exempt from 248 CMR 5.08 (2) (a) 1 through 4:The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM PROVIDED

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

Detailed instructions for the installation of the venting system design or the venting system components; and

A complete parts list for the venting system design or venting system.

MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED

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

The referenced "special venting systems" instructions shall be included with the appliance or equipment installation instructions and;

The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

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

SPECIFICATIONS

FIREPLACE DIMENSIONS

	DESCRIPTION	Height	Width	Back Width	Depth	Height to Air Chute Top	Back to Elec. Access	Back to Gas Line Access	Front to Vent Center	Back to Vent Center
FIREPLACE DIMENSIONS	INCHES	19-3/4	30	24-5/16	15-1/2	20-5/8	6-9/16	1-1/2	9-7/16	5-7/8
	MILLIMETERS	501	762	618	394	524	167	38	240	149

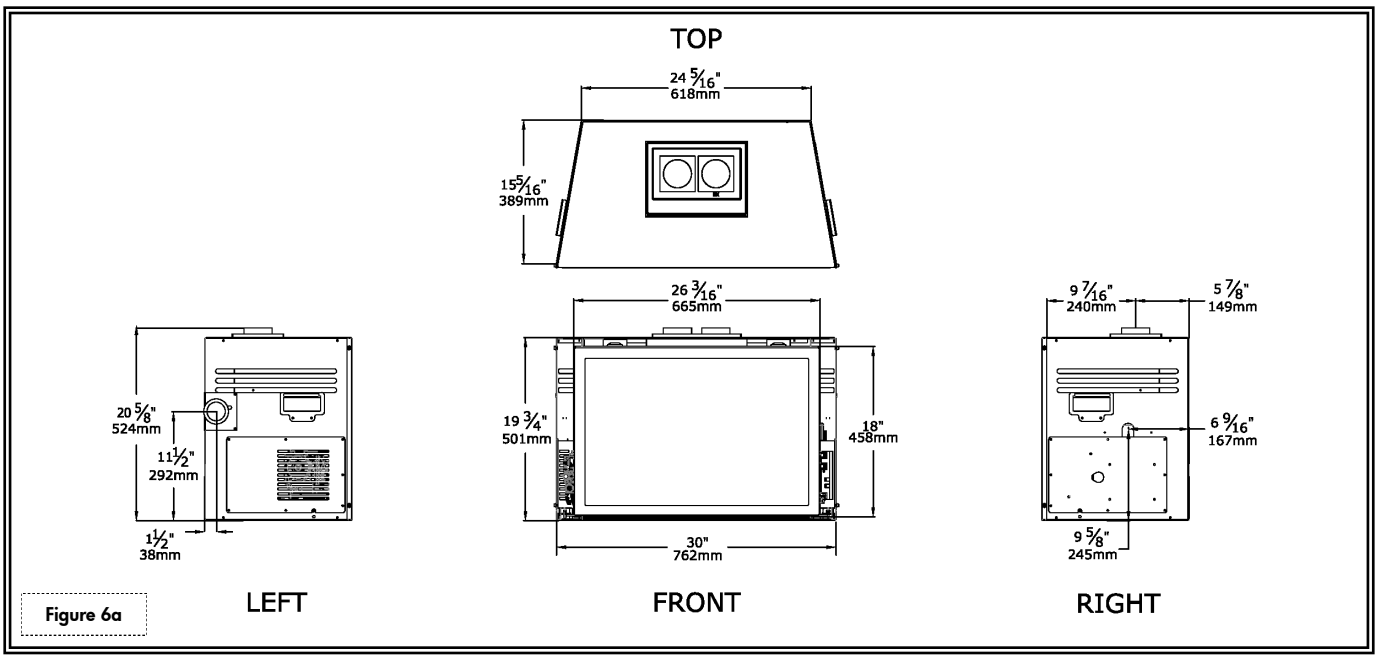


Figure 6a

PARTS DIAGRAM

WARNING: Failure to position components in accordance with these diagrams or failure to use only parts specifically approved for use with RFD-30 may result in property damage or personal injury.

1. Fireplace insert
2. Air chute
3. Module panel assembly
4. Valve access panel
5. Control board assembly
6. Burner base
7. Burner top
8. Glass frame assembly
9. Firebox liner
10. Fan kit (not shown)

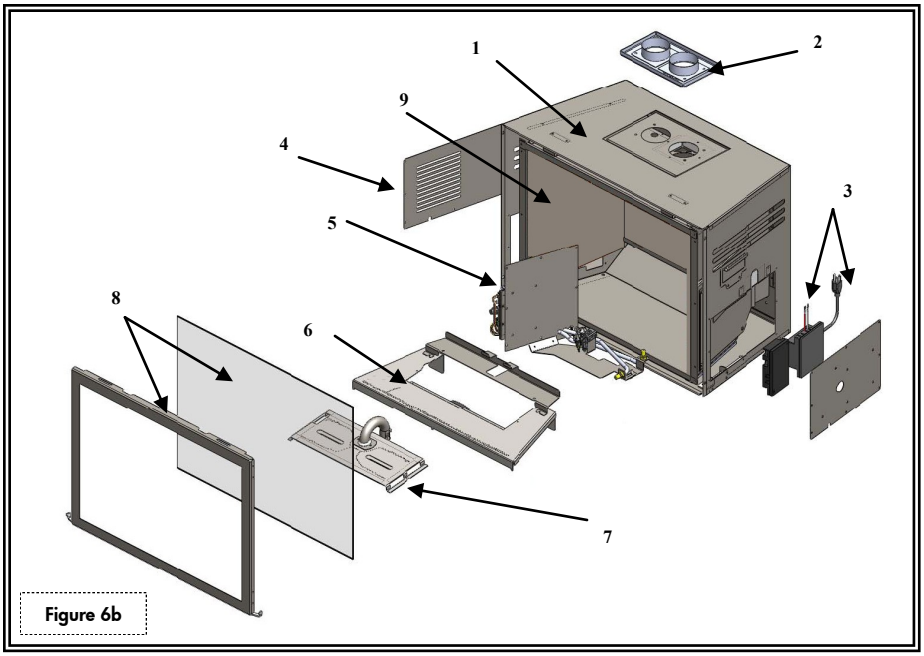
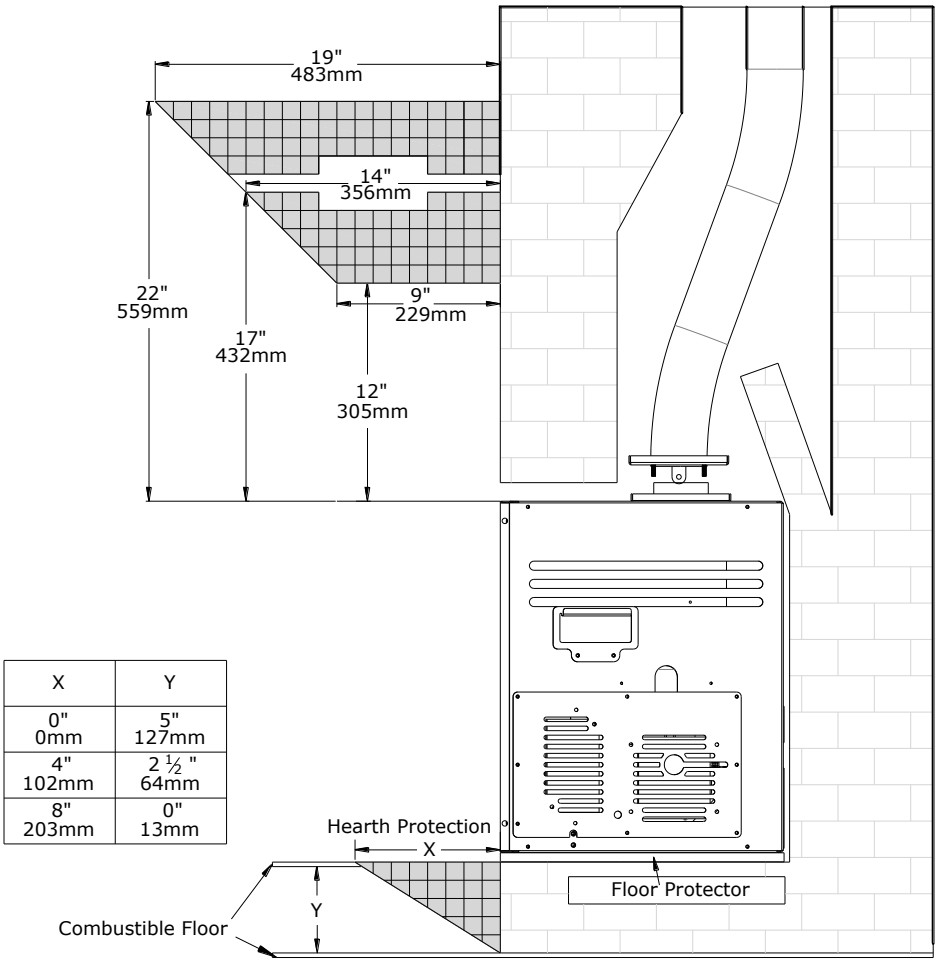


Figure 6b

SPECIFICATIONS

MINIMUM CLEARANCES TO COMBUSTIBLES



X	Y
0" 0mm	5" 127mm
4" 102mm	2 ½ " 64mm
8" 203mm	0" 13mm

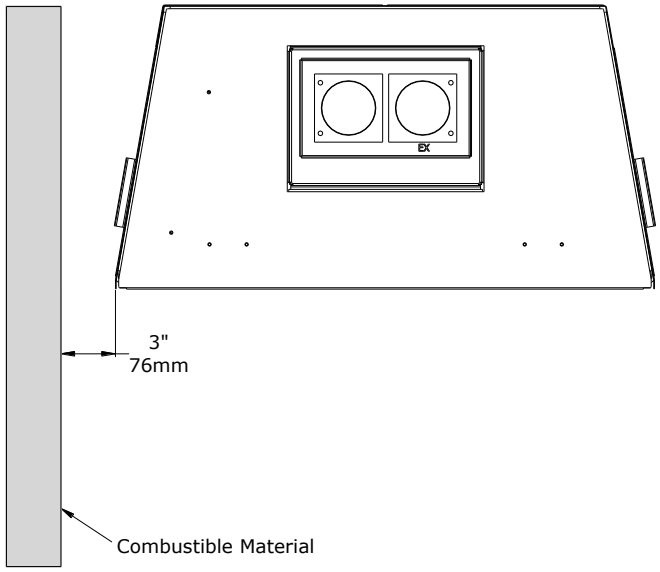


Figure 7a

SPECIFICATIONS

#RFD-30 COMPONENTS

PART NUMBER	DESCRIPTION
RFD-600-IPI	Control Board Assembly
700-203	Manual Gas Shut-off Valve
RFD-135	Burner Assembly
RFD-B-900	Firebox Liner (Black)
RFD-R-500	Rock Set
JXL-028	Fan Kit
JOR-057T	Glass Frame Assembly
OCK-A53L-I-RFD-PSE	LP Conversion Kit
816-CL1	Co-Linear Air Duct
700-208	Remote Control
700-GLT	Glass Latch Tool

ADDITIONAL COMPONENTS REQUIRED

Vent System; Part #816-CL: For use with minimum 6" x 8" I.D. masonry or 7" I.D. Class A metal chimneys - Includes 12 ft. (3.66 m) compressed, expandable to 35 ft (10.67 m) co-linear 3" x 3" flexible chimney, and termination cap.

Other approved venting: ICC, Selkirk, American Metals, Simpson Dura-Vent, RLH, Security, Metal Fab
Approved caps listed on page 14.

Shrouds: Standard shrouds are available for this insert and will fit most applications. Custom shrouds may be ordered on a non-returnable basis. When ordering a custom shroud, please specify the existing fireplace front opening height and width.

or

Blank Shrouds: Blank shrouds are available for on-site custom fit applications and are sized to the opening after the insert has been installed. The interior perimeter is properly sized to fit onto the insert. The outer perimeter must be cut, formed and finished (painted).

To be used with;

Screen Front: Screen Fronts in various finishes.

PLACEMENT CLEARANCE REQUIREMENTS

- This fireplace must be installed on a level surface capable of supporting the fireplace and venting.
- This fireplace insert is to be installed into a solid fuel masonry or factory built non-combustible fireplace that has been installed in accordance with the National, Provincial, State and local building codes.
- 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.

EXISTING FIREPLACE SPECIFICATIONS

THIS INSERT IS APPROVED FOR INSTALLATION IN MASONRY AND FACTORY-BUILT SOLID FUEL BURNING FIREPLACES.

EXISTING FIREPLACE REQUIREMENTS

The existing fireplace & chimney must be clean and in good working order and constructed of non-combustible materials.

A gas line must be able to be installed to the insert.

Provisions made to provide electrical power for operation.

Any chimney clean-outs must fit properly.

Existing Chimney must be comprised of one of the following: Factory built solid fuel chimney: 7" minimum inside diameter.
Masonry chimney: 6" x 8" minimum inside diameter.

Existing Chimney Height: Minimum: 10 ft. (3.05m)
Maximum: 35 ft. (10.67m)

DETERMINE LENGTH OF EXISTING CHIMNEY

1. Remove and discard existing chimney cap.

NOTE: It is helpful to have two people complete next step to determine chimney height.

2. Position one person at fireplace and another person at top of chimney.
   Measure from fireplace base to top of chimney.
   Subtract 19-3/4" (501 mm) (height of insert).
   This is the total length of co-linear flexible aluminum you will require.

MEASUREMENT FROM FIREPLACE BASE TO TOP OF CHIMNEY:_____
LESS 19-3/4" (501 mm) (HEIGHT OF INSERT): -19-3/4" (501 mm)
TOTAL CHIMNEY LENGTH REQUIRED: _____

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

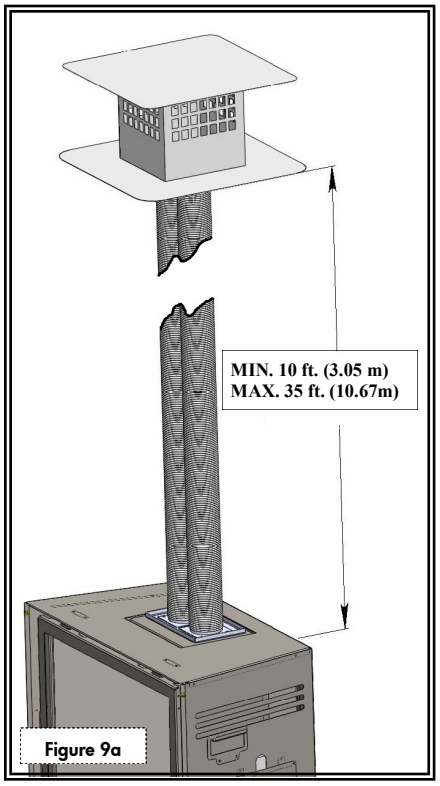


Figure 9a

PREPARE EXISTING FIREPLACE

EXISTING FIREPLACE MINIMUM OPENING REQUIREMENTS

Minimum Requirements

(A) Height: …….20-5/8" (524 mm)
(B) Front Width:…30-5/16" (770 mm)
(C) Depth:……...16" (406 mm)
(D) Back Width:….24-5/16" (618mm)

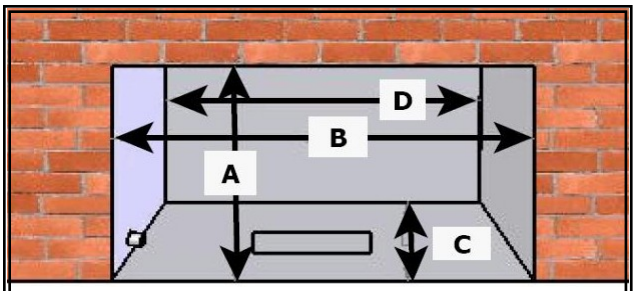


Figure 10a

PREPARE EXISTING FIREPLACE

ATTENTION: Any removed parts must be capable of reinstallation if this insert is ever removed (removal of rivets or screws is acceptable).

Any removed parts must be capable of reinstallation if this insert is ever removed (removal of rivets or screws is acceptable).
The refractory, glass doors, screen rails, screen mesh and log grates may be removed from existing fireplace before installing this gas fireplace insert. Any smoke shelves, shields and baffles may be removed if attached by mechanical fasteners. If necessary, remove firebrick to obtain at least minimum opening requirements.
The fireplace flue damper can be fully blocked open or removed for installation of this gas fireplace insert. Remove existing chimney cap. Clean chimney and inside of fireplace to prevent creosote smell from entering the home.
Cutting of any sheet metal parts is prohibited, except the metal floor. If metal floor is removed, the insert must be placed directly on metal base of metal fireplace. If using this method, **Kozy Heat Floor Protector Kit (#JOR-FLP)**, must be used.

Place 'THIS UNIT HAS BEEN MODIFIED' label at bottom of existing firebox so it will be visible if this gas fireplace insert is removed.
Run any necessary electrical wiring to insert.

ELECTRICAL WIRING

This fireplace insert comes complete with a fan kit already installed.

ATTENTION: Electrical wiring must be installed by a licensed electrician.

ATTENTION: This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with Nation Electric Code, ANSI/NFPA 70-latest edition, or the Canadian Electric Code, CSA C221.1

WARNING: 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. Do not allow excess cord to touch fireplace.

WIRING SCHEMATIC

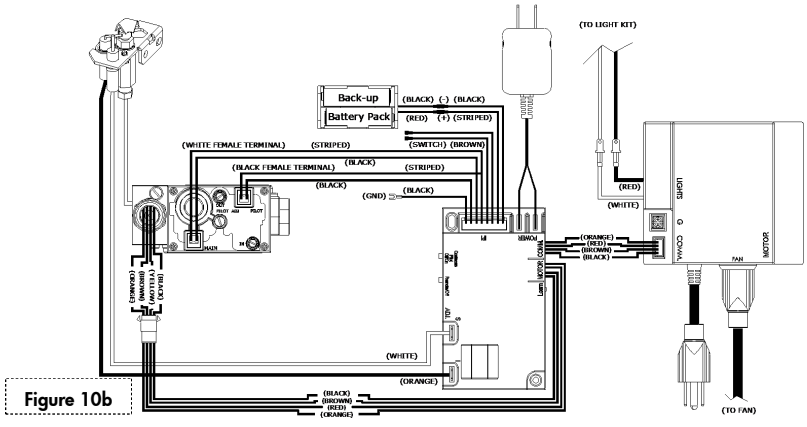


Figure 10b

GAS LINE CONNECTION

GAS CONVERSION

This fireplace is manufactured for use with Natural Gas. An LP conversion kit is included with this fireplace.
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 or gas fitter.

NOTE: A listed (and Commonwealth of Massachusetts approved) 12" (305 mm) manual shut-off valve and flexible gas connector (included) are connected to the 1/2" (13 mm) control valve inlet. If substituting for these components, please consult local codes for compliance.

NOTE: This fireplace is equipped with a 3/8"(10 mm) x 18" (457 mm) long flexible gas connector and manual shut-off valve. The gas line should be run to the point of connection where the shut-off valve and flexible gas line will connect.

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.

NOTE: 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).

NOTE: For high altitude installations, consult local gas distributor or 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.

Run gas line through left gas line access hole at back corners of insert. For your convenience, access hole may be removed and rotated to accommodate side gas line installation.

NOTE: If installing this gas fireplace insert into a factory-built fireplace and the factory-built fireplace has no access hole provided, an access hole of 1-1/2"(38 mm) or less may be drilled through the lower sides or bottom of the firebox in a proper workmanship like manner. This access hole must be plugged with non-combustible insulation after the gas supply line has been installed.

	RFD-30	
	NATURAL GAS	LP GAS
MINIMUM INLET GAS PRESSURE	5.0 inches W.C. (7.0 W.C. recommended)	11.0 inches W.C. (recommended)
MAXIMUM INLET GAS PRESSURE	10.5 inches W.C.	13.0 inches W.C.
MANIFOLD PRESSURE (HI)	3.5	10.0
MANIFOLD PRESSURE (LO)	0.7	2.8
ORIFICE SIZES	#42	#53
INPUT BTU/hr.	26,000	26,000
MINIMUM INPUT BTU/hr.	12,500	14,500

MANUAL SHUT-OFF VALVE

The manual shut-off valve is located on left side wall of insert. Use glass latch attachment tool (included in components packet) to open or close valve.

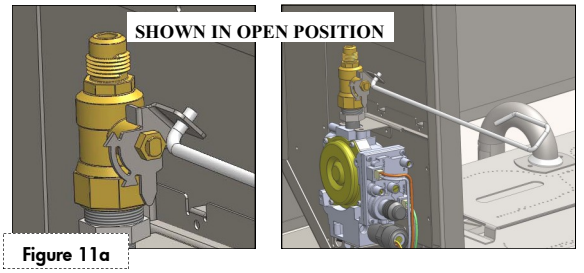


Figure 11a

CONVERSION KIT INSTRUCTIONS

IMPORTANT: This fireplace is NAT gas ready. If converting to LP gas, do so now before installing into existing fireplace.

#OCK-A42N-I-RFD-PSE NAT GAS CONVERSION KIT / #OCK-A53L-I-RFD-PSE 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 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.

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

Kit includes: (1) Gas Conversion Label (2) Burner Orifices: NAT #42 / LP #53
(1) Gas Type Label (1) Pilot Orifice: NAT #.018 / LP #.012 (1) Low Limit Screw: NAT #50 / LP #56

WARNING: SHUT OFF GAS SUPPLY AND ELECTRICAL POWER TO FIREPLACE.
SHUT OFF GAS SUPPLY BEFORE DISCONNECTING ELECTRICAL POWER.

PREPARE THE FIREPLACE:

Remove screen front, glass frame assembly, and rocks from insert.

REPLACE BURNER ORIFICES:

1. Remove back burner (secured with 2 screws).
2. Remove front burner.
3. Remove existing orifice cap. Replace with orifice cap included with kit, making sure to tighten cap securely.

NAT. GAS: #42 orifice
L.P. GAS: #53 orifice

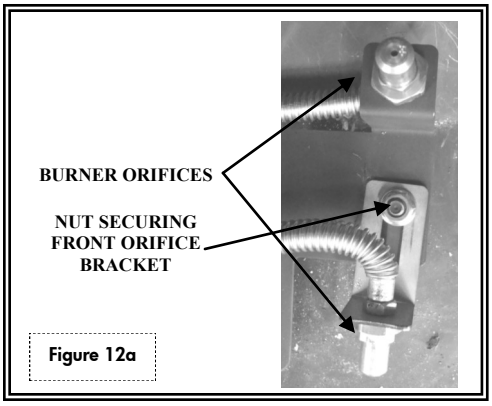


Figure 12a

CONVERT PILOT ASSEMBLY:

1. Remove (2) screws securing pilot assembly to pilot bracket. Place 7/16" wrench on upper fitting and 1/2" wrench onto lower fitting, turn pilot hood nut counter-clockwise to remove pilot hood.
2. Remove pilot orifice located inside lower fitting and replace with one included with kit.
3. Re-attach pilot hood. Tighten with wrenches, making sure pilot hood is positioned as shown in Figure 12d. Final alignment of sensor and hood outlet is critical for proper ignition.
4. Attach pilot assembly to pilot bracket with screws previously removed.

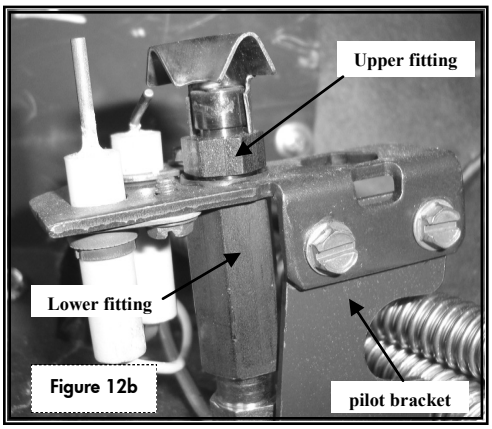


Figure 12b

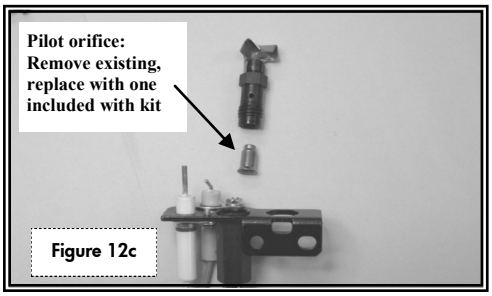


Figure 12c

GAS TYPE CONVERSION:

Press and hold Learn Button on Main Control Module for 20 seconds (access hole on right hand side of outer wrap). A beep will be heard letting you know the procedure has been completed.

If converting from NAT to LP gas: one (1) second long beep

If converting from LP to Nat gas: three (3) second long beep

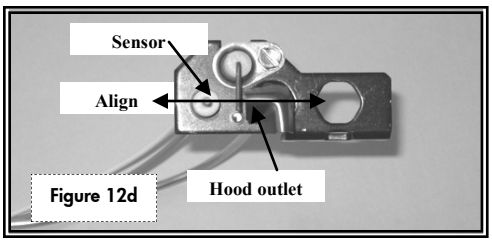


Figure 12d

CONVERSION KIT INSTRUCTIONS

CONVERT THE GAS CONTROL VALVE:

1. Remove cap covering the pressure regulator.

2. Press down on pressure regulator tube and rotate 90˚. The shaft should pop out and point to chosen gas. Re-attach cap.

3. Remove low limit screw (above valve motor; see page 21). Replace with one included in kit.

   NAT. GAS: #50
   L.P. GAS: #56

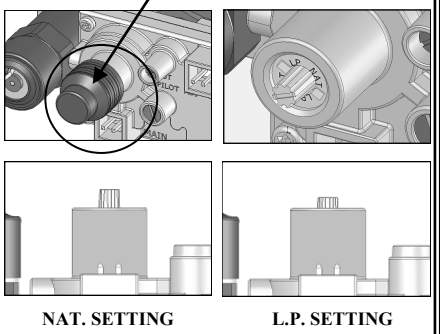


Figure 13a

COMPLETE THE CONVERSION:

1. Adjust burner tube venturi to correct setting by loosening screws, adjusting caps and retightening screws.

   CORRECT SETTINGS: NAT. : 1/16" (2mm) open
   L.P. : 5/8" (16mm) open

2. Install burners. Burner venturi extends through center opening on front (bottom) burner and sits down over back burner orifice. Ensure pilot assembly sits above burner. Align holes in both burners and secure with screws previously removed.

3. Re-install rocks.

4. Turn on gas and electrical supplies. Check for leaks at all connections, whether field or factory made.

5. Test inlet pressure. 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.

6. Turn fireplace off.

7. Affix gas type sticker to label.

8. Re-install glass frame and screen front assemblies.

9. Verify proper ignition and operation of fireplace.

10. Complete and affix 'Gas Conversion' label to outer wrap close to gas valve.

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

GAS CONVERSION LABEL (included with conversion kit)

Figure 13b

GLASS FRAME / SCREEN FRONT

WARNING: DO NOT OPERATE THIS FIREPLACE WITH GLASS REMOVED, CRACKED OR BROKEN. REPLACEMENT OF GLASS FRAME ASSEMBLY, #JOR-057T SHOULD BE DONE BY A LICENSED OR QUALIFIED SERVICE PERSON.

WARNING: DO NOT REMOVE THESE COMPONENTS WHEN HOT!

REMOVE GLASS FRAME ASSEMBLY

A. Locate spring-loaded latches securing glass frame assembly at bottom of firebox.

B. Using glass latch tool (included in components packet) pull bottom latches out and 'up' to release glass frame assembly latch tabs.

C. Lift glass frame assembly up off tabs located at top of firebox.

INSTALL GLASS FRAME ASSEMBLY

A. Make certain bottom latches are pushed 'down' to allow for easier installation.

B. Align slots at top of glass frame assembly over tabs at top of firebox while lowering bottom of glass frame assembly into position.

C. Using glass latch tool, pull latches out and 'down' over latch tabs to secure glass frame assembly bottom.

SCREEN FRONT (sold separately)

To install: Align tabs on back of frame with slots on insert, set into position.

To remove: Lift frame up and out of slots.

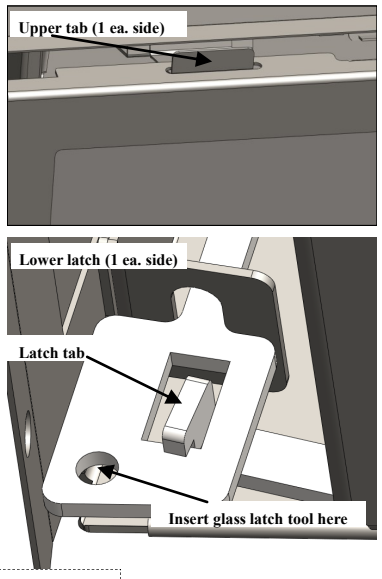


Figure 14a

INSTALLATION

IMPORTANT: All steps as outlined in 'PREPARE EXISTING FIREPLACE' must be completed before continuing with this installation.

IMPORTANT: Please refer to Matching Security Code instructions on pages 23-24 prior to installation. Easy access to LEARN button is reached through hole on outer right side of insert before installation. After installation, some disassembly is required to reach LEARN button. After installation LEARN button access instructions on pages 23-24 also.

IMPORTANT: Follow instructions included from vent pipe manufacturer as well as venting requirements as outlined in this installation manual.

APPROVED VENTING

MANUFACTURER	APPROVED CAPS
Kozy Heat	816-CL Vent System
ICC	TM-IVT
	TM-SVT
Selkirk	4DT-VC
American Metals	4DVC
Simpson Dura-Vent	46DVA-VCH
Security	3PDVCV
Metal Fab	4DVT
RLH	HS-C33U99
	HS-C33F1313
	HS-CD3333-1313

COMBUSTION AIR VENTING OPTIONS

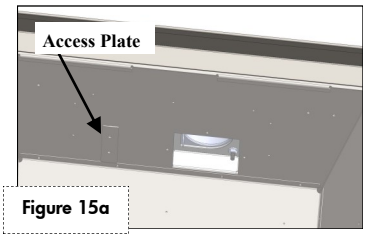
OPTION 1: FULL CONNECTION: Combustion air intake pipe is run entire chimney length and connected to termination cap.

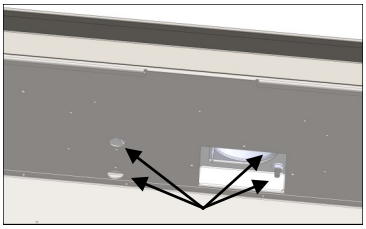
OPTION 2: STUB VENTING: Combustion air intake pipe is extended a minimum of 4 ft. (1.22 m) past damper opening into existing chimney. It is not connected to termination cap.

INSTALLATION

AIR DUCT REMOVAL

1. Remove refractory clips from inside top of firebox. Remove side firebox panels
2. Remove (3) screws securing firebox liner back and baffle to firebox back wall. Remove liner. Pull baffle forward and down to remove.
3. Remove access plate (secured with (2) screws) from firebox ceiling.
4. Locate and remove nuts securing air duct top to firebox; 2 nuts reached through access holes, 2 inside air duct.
5. Remove air duct top.





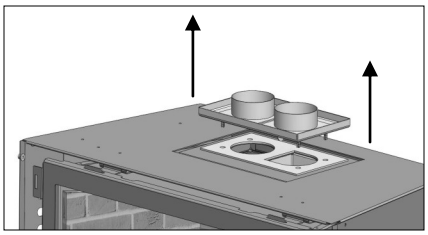


Figure 15a

KOZY HEAT #816-CL CO-LINEAR VENT SYSTEM

The co-linear pipes included in this vent system are designed to extend up to 35 ft. (10.67m)

IMPORTANT: IDENTIFICATION: Exhaust Pipe: red marking.
Proper operation of this insert requires exhaust and combustion air pipes be connected to correct collars on termination kit and insert air duct.

A. Carefully extend exhaust and combustion air intake pipes to equal total chimney length required.

NOTE: If using 'stub' method for combustion air pipe, extending it is not necessary. Determine length needed from air duct on insert (4 ft. (1.22 m) minimum) to above damper opening in existing chimney. Remove excess combustion air pipe from end without a collar. Continue with Step B. below.

If using 'Full Connection' method: Slide intake pipe (end without collar) over collar on termination cap. Secure with 3 self-tapping screws (provided).

B. Place bead of sealant around inner edge at end of exhaust pipe (without collar / red marking) and slide onto corresponding collar on termination cap (collar with label). Secure with 3 self-tapping screws (provided). Apply additional sealant around joint to ensure a proper seal.

IMPORTANT: EXHAUST COLLAR ON FIREPLACE AIR DUCT IS ON RIGHT SIDE. INSTALL TERMINATION CAP WITH EXHAUST COLLAR ON RIGHT SIDE.

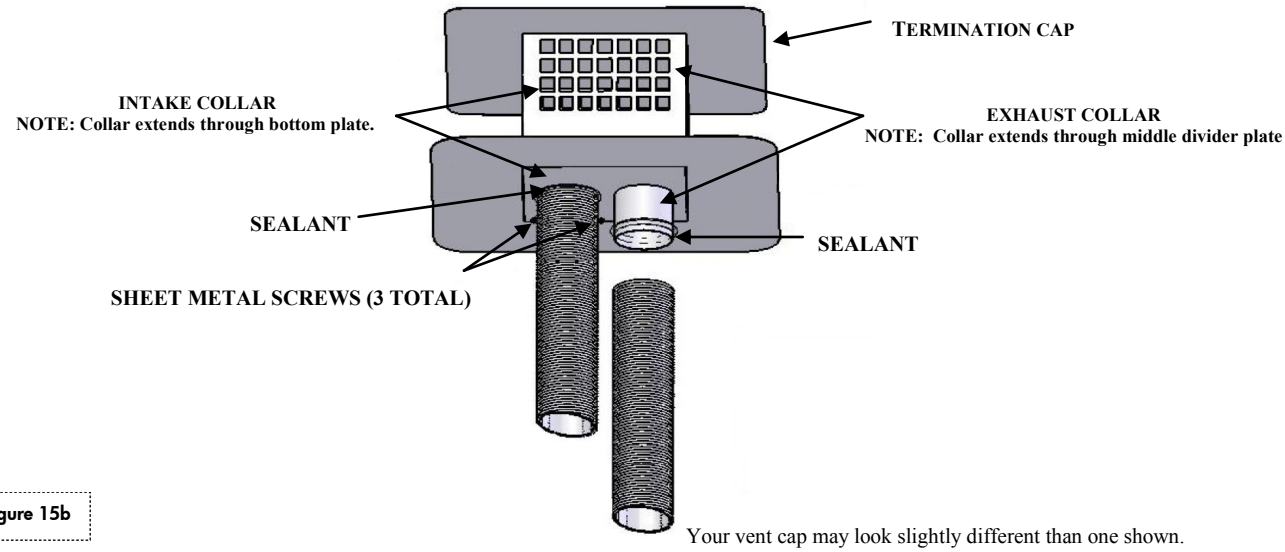


Figure 15b

Your vent cap may look slightly different than one shown.

RUN VENT SYSTEM THROUGH EXISTING CHIMNEY

We strongly suggest wrapping first 3 ft.(914 mm) of vent system below termination cap with non-faced fiberglass insulation (secure with wire) before running it through existing chimney. This will prevent cold air from coming down existing chimney.

DO NOT USE THIS METHOD IF YOU ARE STUBBING COMBUSTION AIR PIPE FROM BOTTOM OF EXISTING CHIMNEY.

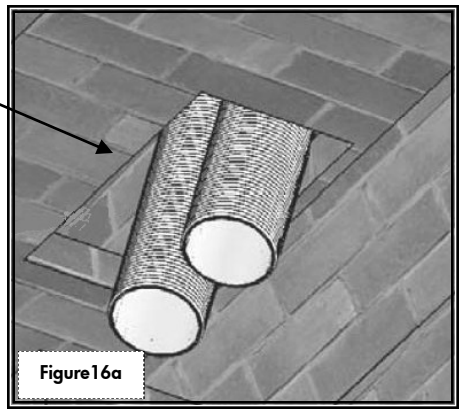


Figure16a

NOTE: If offsets are present in existing chimney, place a weighted rope around pipe ends to guide them through chimney.
DO NOT ATTEMPT TO TIE ONE ROPE AROUND BOTH PIPES.

1. Guide rope, if used, and flexible pipe(s) down existing chimney. See illustration at lower left.

2. To secure chimney termination cap to existing chimney, apply a liberal bead of sealant (provided) around top of existing chimney. Set termination cap into position as instructed in installation manual included with chosen vent system .

   OPTIONAL: #816-CL kits - Secure termination cap to existing chimney with 2" self-tapping screws and anchor straps (provided) through pilot holes located at sides of termination cap.

3. From inside existing fireplace, CAREFULLY pull ropes down until exhaust pipe and combustion air intake (if using 'full connection method') are into existing fireplace.

   STUB VENTING: From inside existing fireplace, insert a minimum of 4 ft. (1.22m) of combustion air pipe (end without collar) past the damper opening and into existing fireplace. See illustration at lower right.

4. We strongly suggested placing non-faced fiberglass insulation between vent pipes and existing chimney to prevent heat loss up chimney, being careful not to block pipe end if using stub method.

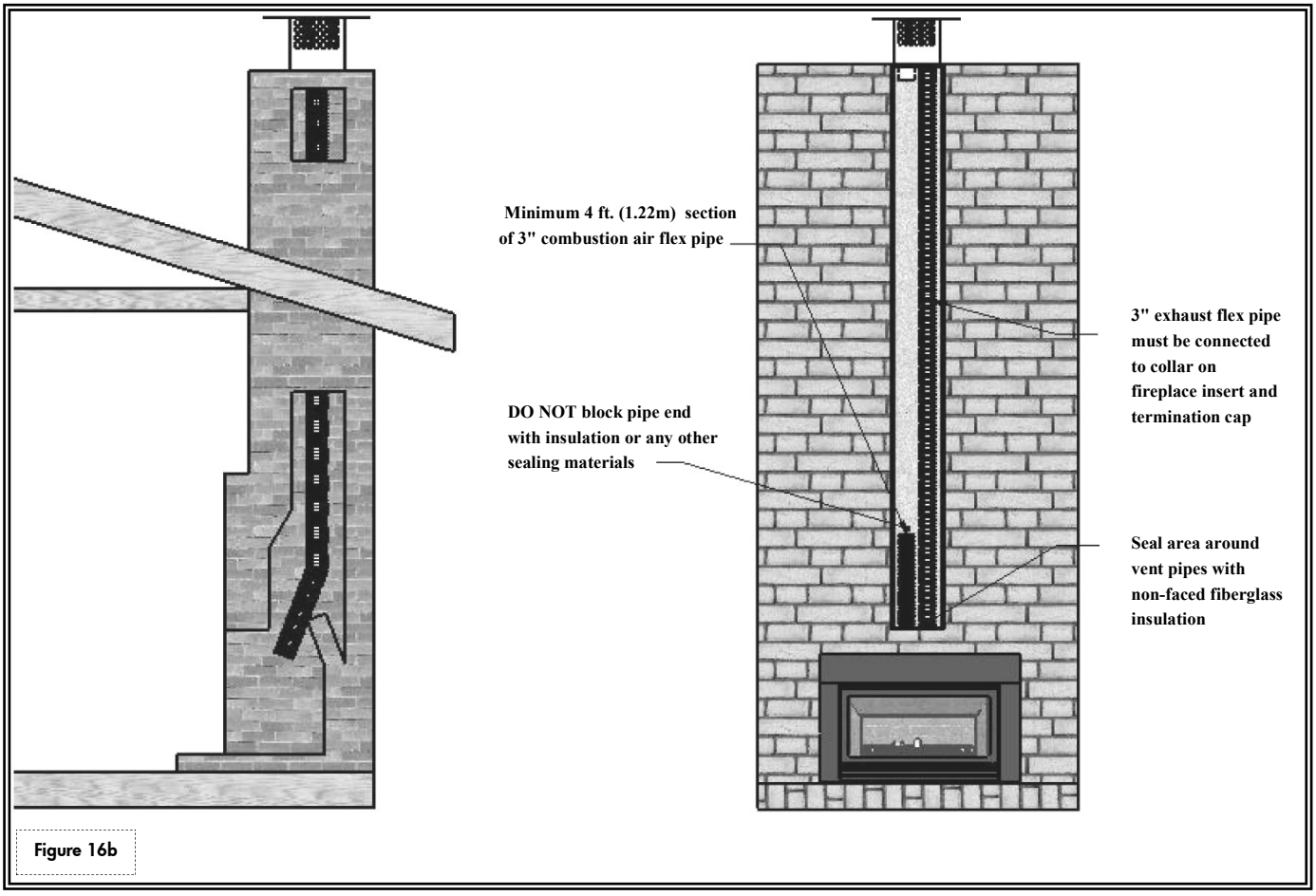


Figure 16b

VENT SYSTEM CONNECTION

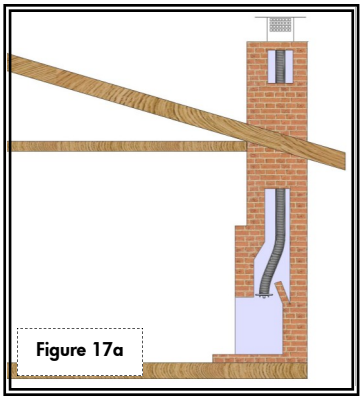


Figure 17a

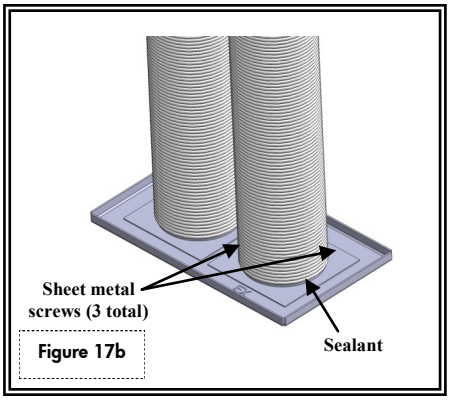


Figure 17b

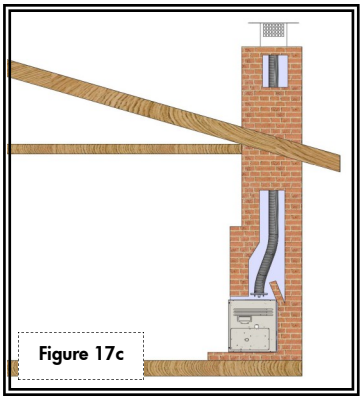


Figure 17c

1. Place air duct (previously removed, page 15) into existing fireplace opening.

2. Place a bead of sealant (provided) around exhaust collar ("EX" marking) Slide exhaust pipe over "EX" collar on air duct. Secure with (3) ½" self-tapping screws, provided. Apply additional sealant around joint to ensure an air tight seal.

3. Apply a liberal bead of sealant (provided) around collar on air duct. Slide combustion intake pipe over collar. Secure with (3) ½" self-tapping screws, provided. To ensure an air-tight seal, apply additional sealant around joint.

4. Slide insert into fireplace opening. Check for level. If necessary, leveling bolts are included in components packet and are threaded through bottom of insert into nuts located on each corner of insert. Remove insert, install leveling legs as necessary, slide insert into fireplace opening.

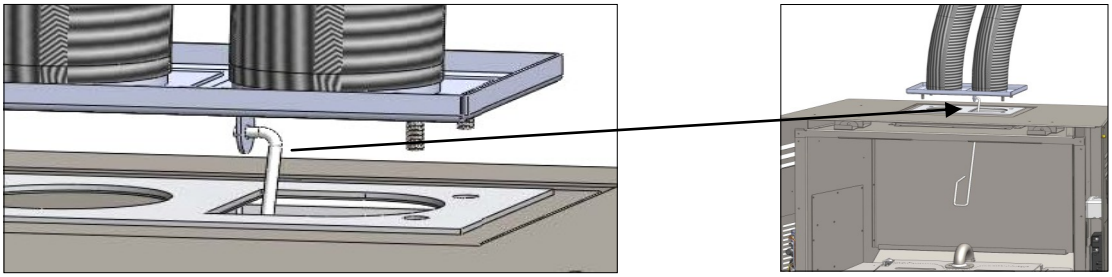


Figure 17d

5. Use glass latch tool included in components packet, to pull air duct down onto insert, aligning mounting studs to holes in top of firebox. Secure with nuts previously removed.

6. Reinstall access panel plate, baffle and firebox liners.

SHROUD INSTALLATION

This kit includes: Shroud and (4) phillips truss head screws.

1. Remove screen front and glass frame assembly from fireplace.

2. Align leg section holes to corresponding mounting nuts in mounting brackets on sides of fireplace opening. Secure with phillips truss head screws (2 ea. side).

3. Re-install glass frame assembly and screen front.

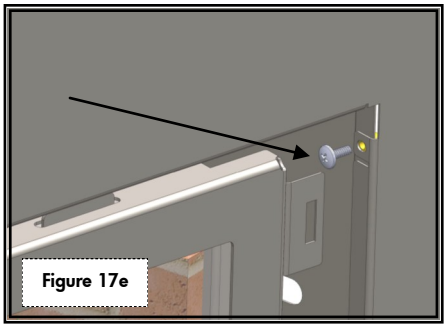


Figure 17e

#RFD-R-500 ROCK SET INSTALLATION

This kit includes:

(1) - RR-1 rock	(8) - RR-2 rocks	(2) - RR-3 rocks
(4) - RR-4 rocks	(2) - RR-5 rocks	(1) - RR-6 rock
(3) - RR-7 rocks	(2) - RR-8 rocks	(2) - RR-9 rocks

NOTE: Rock numbers are located on bottom of each rock. Refer to following illustrations for proper placement.

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

Figure 18a

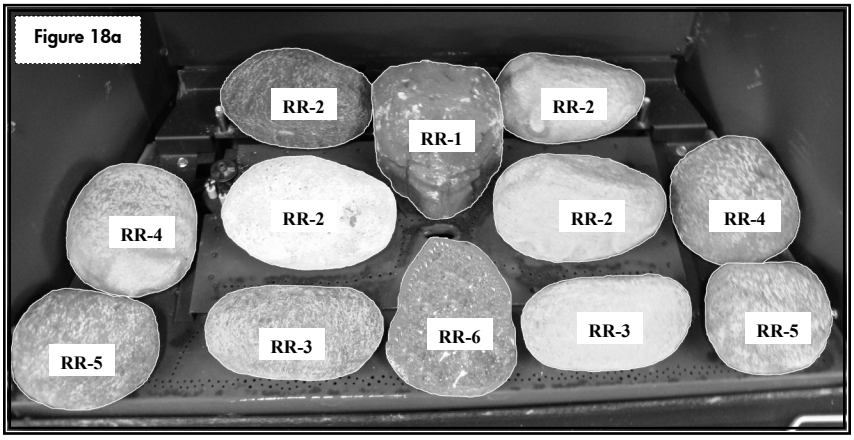


Figure 18b

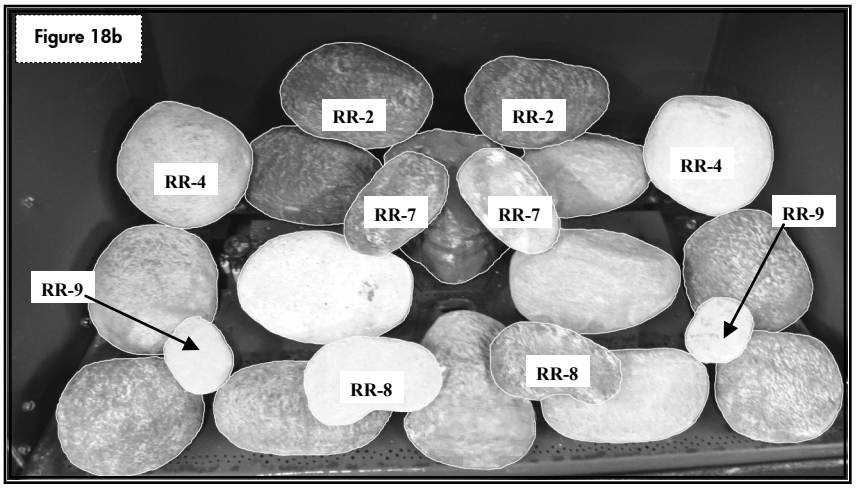
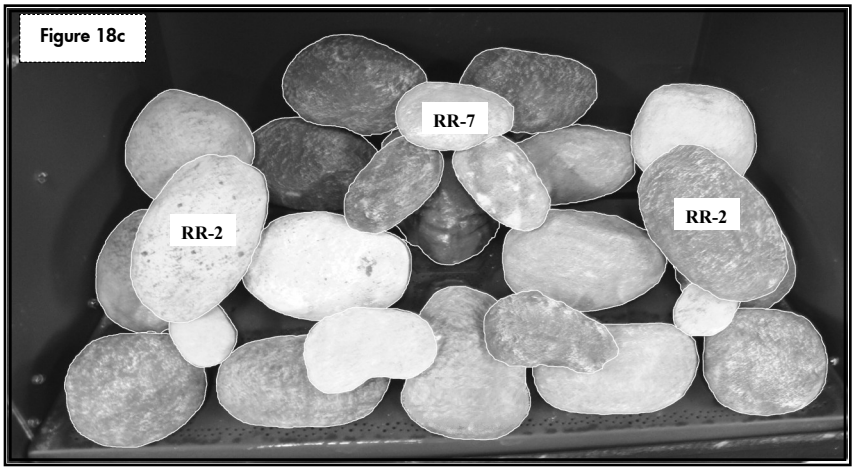


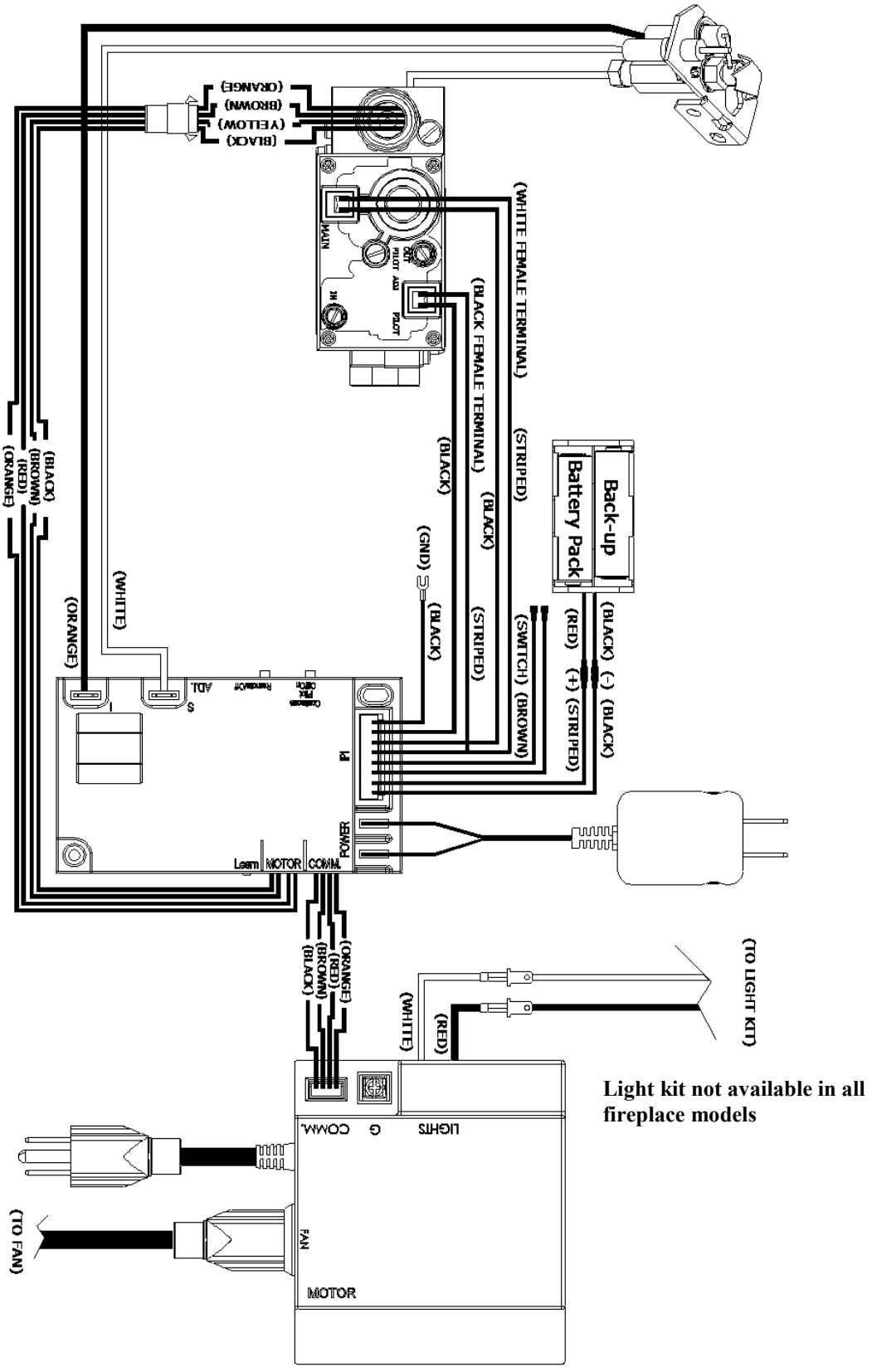
Figure 18c



WIRING SCHEMATICS

IMPORTANT: THIS SYSTEM REQUIRES ELECTRICITY (110 V) AND / OR BATTERIES TO OPERATE.

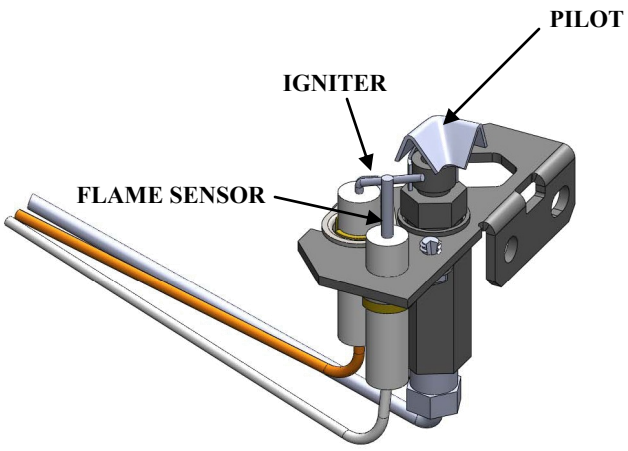
USING BATTERY BACK UP WILL OPERATE BURNER ONLY. FAN COMPONENTS WILL NOT FUNCTION ON BATTERY BACK-UP POWER.



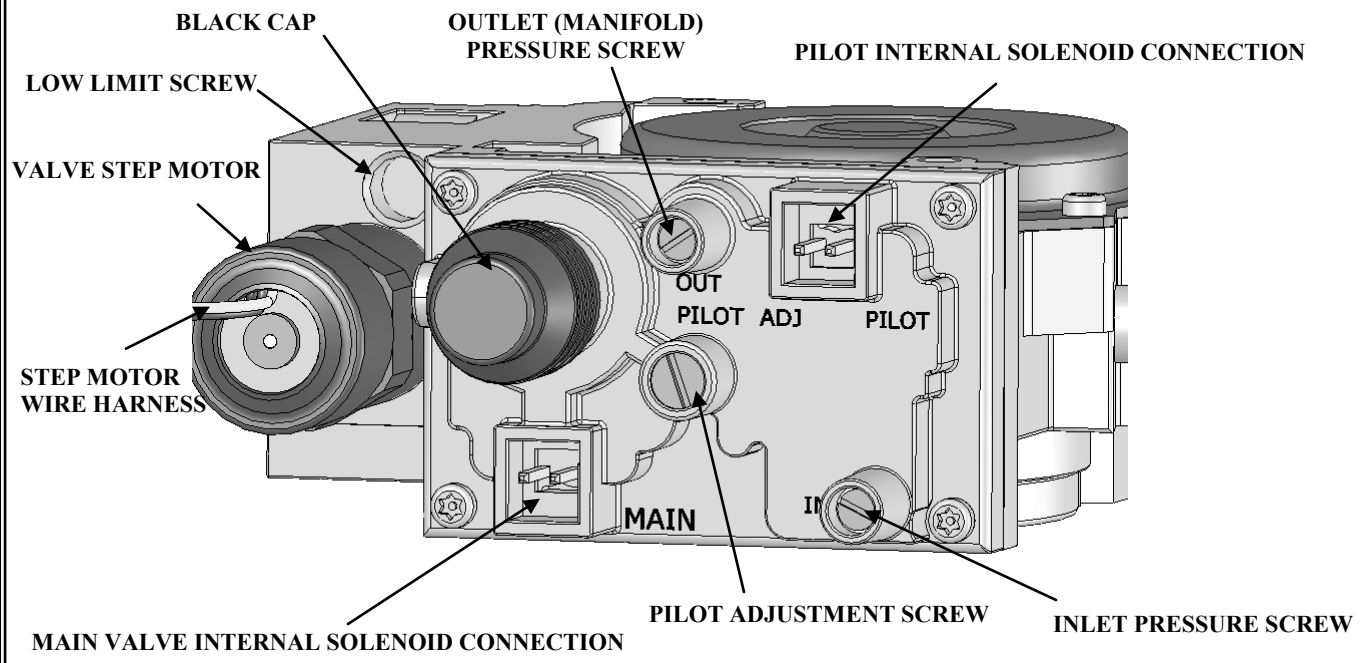
Light kit not available in all fireplace models

Figure 19a

VALVE & PILOT ASSEMBLY COMPONENTS



PSE IPI PILOT ASSEMBLY



IPI GAS VALVE

Figure 20a

CONTROL MODULE COMPONENTS

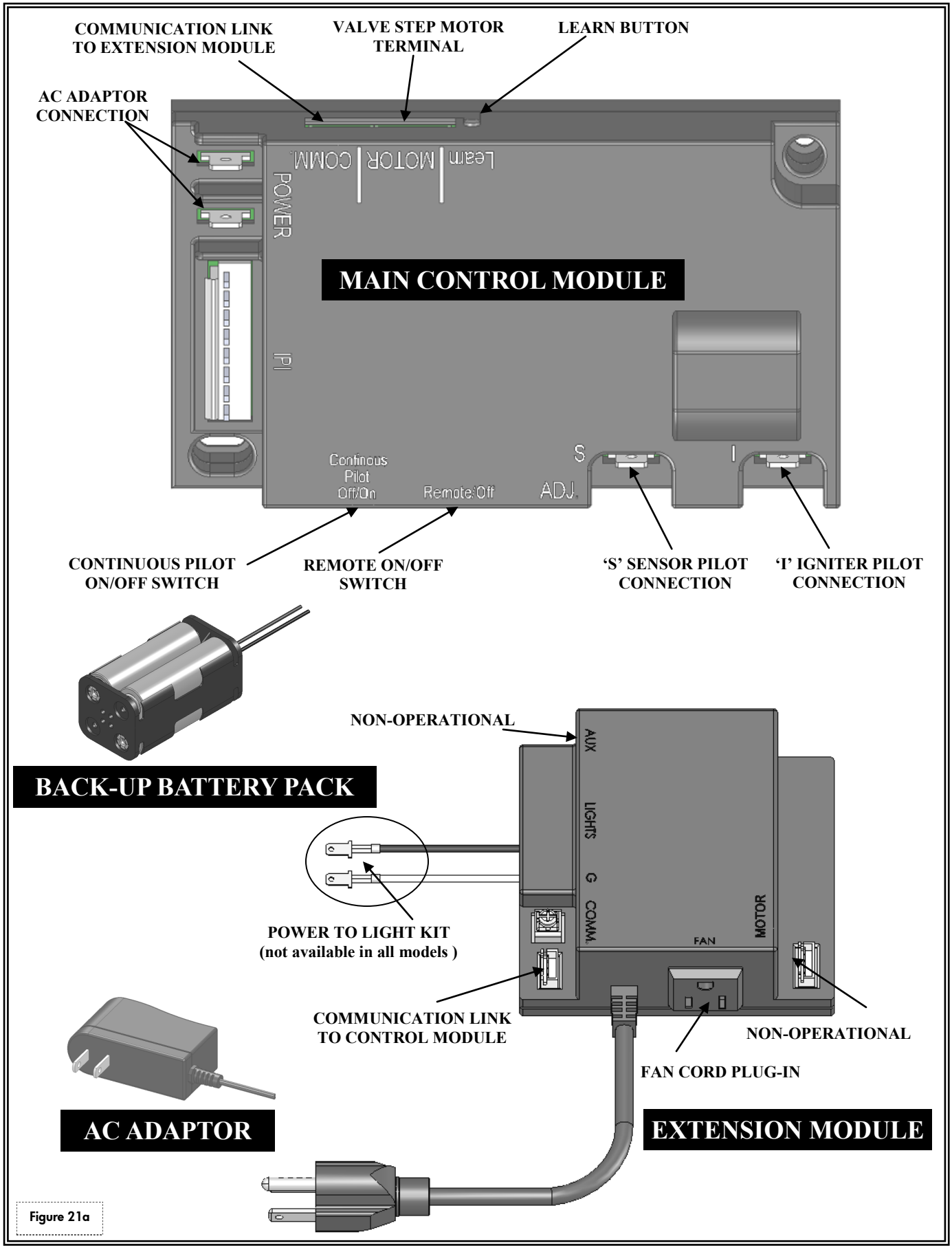
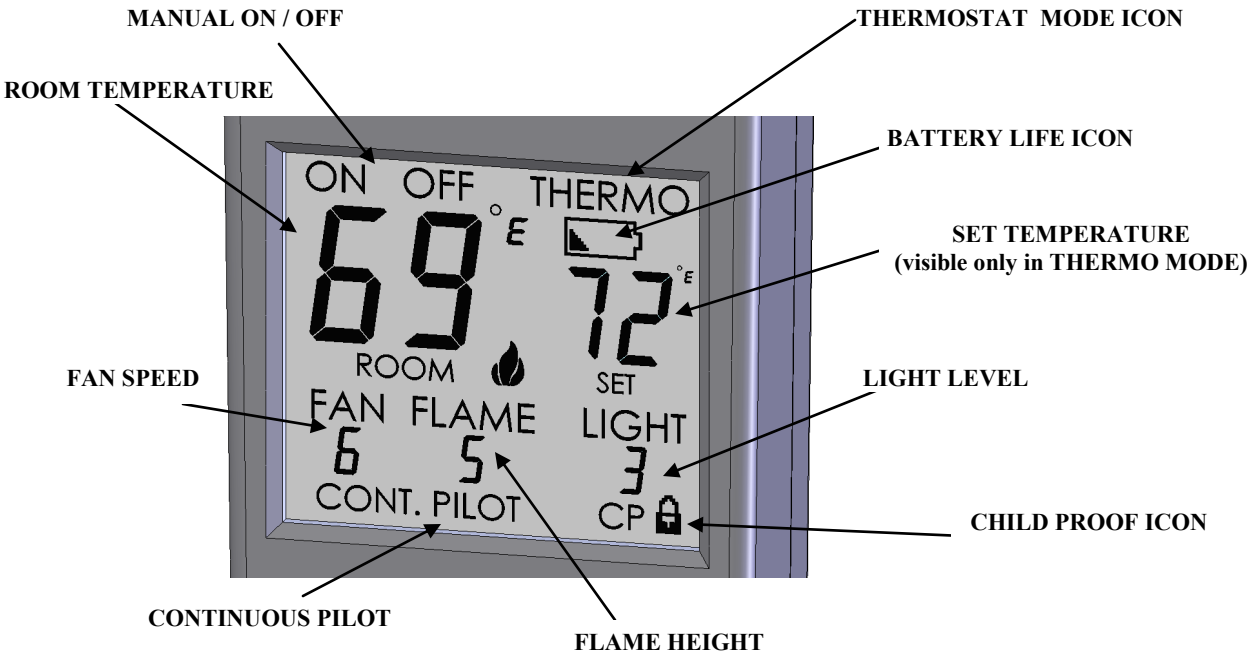
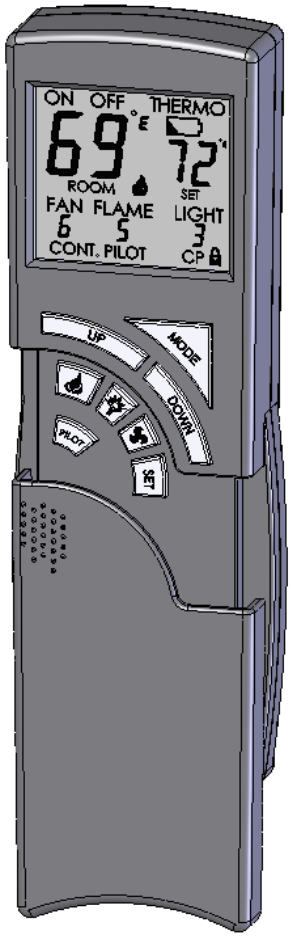


Figure 21a

REMOTE CONTROL INFORMATION





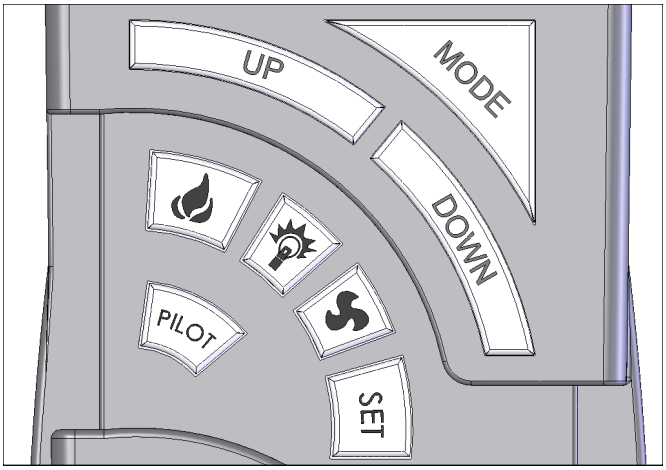


Figure 22a

IPI INFORMATION

ELECTRICAL WARNING AND INFORMATION:

- **Electrical wiring must be installed by a licensed electrician.**
- **Do NOT wire 110V to wall switch.**
- **Uninterrupted or continuous power is required at all times in IPI systems EXCEPT when using battery back-up.**
- **Incorrect wiring will override IPI safety lockout and may cause an explosion.**
- **Disconnect 110V before servicing.**

ATTENTION: This system goes through a calibration mode when switching from ON to THERMO to OFF, creating a humming sound which is a normal part of operation.

CONTINUOUS PILOT (FOR VERY COLD CONDITIONS)

The IPI gas control 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.

This pilot feature can be activated or de-activated by the hand held remote control transmitter. Instructions on page 25.

OPERATION USING BATTERY POWER

This fireplace has an optional battery operation if electrical power is lost. Battery pack is located on right access panel of firebox.

NOTE: When operating fireplace in this capacity, the only function available is flame modulation.

LEARN BUTTON ACCESS PROCEDURE

Prior to installation: Access through hole on right side of insert.

After installation:
A. Remove screen front and glass frame assembly to expose components on right side wall of insert.
B. Move battery pack away from front of main control module.
C. Using a needle nose pliers, remove pilot connection tabs from main control module. Main control module can now be rotated forward to access **LEARN** button. Follow instructions on next page.
D. Reattach pilot connection tabs (top-black, bottom-red), reattach battery pack and install glass frame assembly and screen front.

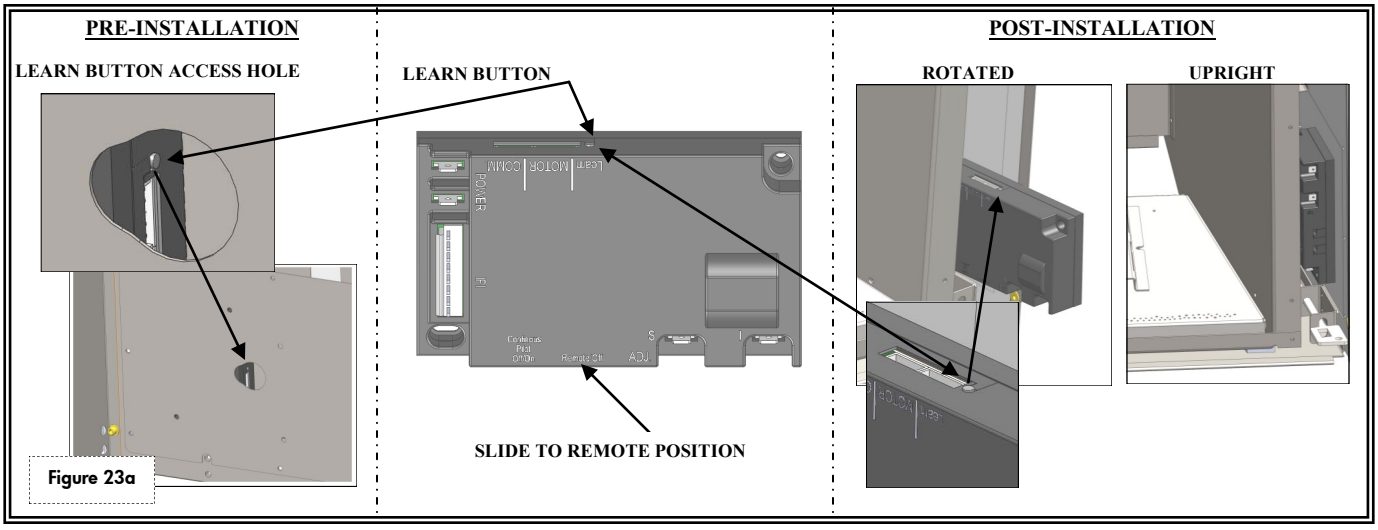


Figure 23a

IPI INFORMATION

MATCHING SECURITY CODES

Before matching security codes make sure 120V AC is connected and powered to fireplace, and hand held remote control is installed with (2) AA batteries.

It may be necessary to program main control module (located on right side of firebox) to LEARN the hand held remote control security code upon initial use, if batteries are replaced, or if a replacement remote control is purchased from your dealer.

1. When matching security codes, be sure slide button on main control module is in **REMOTE**; the code will not "LEARN" if slide is in **OFF.**

2. Following **LEARN BUTTON ACCESS PROCEDURES** on previous page, program main control module to LEARN a new security code by pushing in **LEARN** button on main control module using a pencil point for 2 seconds (you should hear a single 'beep' letting you know module is ready to learn a new code).

3. Press **MODE** button on hand held remote control (you should hear four 'beeps' in rapid succession in main control module, indicating remote control's code has been programmed into the main control module). When an existing main control module is introduced to a new hand held remote control, the new security code will overwrite the old one.

If it ever becomes necessary to clear the memory from the hand held remote control, simply push and hold the **LEARN** button for 10 seconds (you should hear three long beeps in succession). You may now follow steps outlined above to 'RE-LEARN' security codes.

REMOTE CONTROL OPERATION

INITIAL SET-UP:

Plug Extension Module and **AC Adaptor** into receptacles.

Install (4) AAA batteries into battery compartment of **Backup Battery Pack**, making sure batteries are installed in proper direction. Position on right side access panel. A Velcro strip has been attached to help secure in place.

The **Hand Held Remote** operates on (2) 1.5V AAA batteries. We recommend always using ALKALINE batteries to extend battery life and improve operational performance.

NOTE: This system is sent to you set up for Natural Gas and temperature units readable in Fahrenheit.

This system allows for gas type conversion and temperature unit conversion by following the setup procedure outlined below.

GAS TYPE CONVERSION:

Following **LEARN BUTTON ACCESS PROCEDURES** on previous page, press and hold **LEARN** Button on Main Control Module for 20 seconds. A beep will be heard letting you know the procedure has been completed.

If converting from NAT to LP gas: (1) one second long beep

If converting from LP to Nat gas: (3) three second long beep

Continue with gas type conversion by following instructions included with gas conversion kit.

CELSIUS/FAHRENHEIT CONVERSION:

Press **UP** and **DOWN** keys simultaneously to choose Celsius or Fahrenheit.

IMPORTANT SAFETY FEATURE:

This system has a maximum room temperature limit of 95° F (35° C) in both manual and thermostat modes. When room temperature is at or above this point the system will shut down and the hand held remote control will read **OFF**. If you turn the system **ON** when room temperature is still at or above this temperature, the system will again shutdown after 2 minutes when room temperature is recalculated.

REMOTE CONTROL INFORMATION cont.

CONTINUOUS PILOT FEATURE:

Activation of this optional feature is accomplished by pressing the **PILOT** button once. The continuous pilot icon will appear on the LCD screen. Pressing **PILOT** button again will de-activate this feature.

This feature can also be activated via **CONTINUOUS PILOT** switch on Main Control Module.

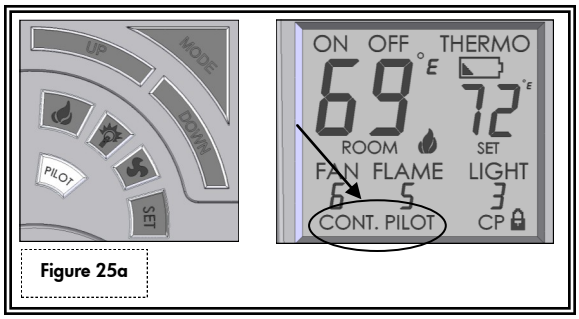


Figure 25a

CHILDPROOF FEATURE:

Activation of this optional feature is accomplished by pushing **SET & UP** buttons simultaneously for 5 seconds. The childproof icon will appear on the screen. When a transmitter button is pressed the icon will flash on screen, but no signal will be transmitted. Pressing and holding these same two buttons again for more than 5 seconds will de-activate this function.

This feature controls only manual functions of the hand held remote, automatic functions (thermostat mode) will not be effected.

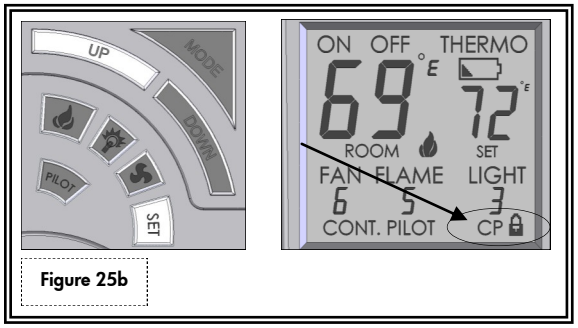


Figure 25b

MANUAL MODE:

This remote can be manually or thermostatically operated.
Press **MODE** button for manual ON. The flame icon will appear on the LCD screen. Press **MODE** button again to put the control into **THERMO** mode. Pressing **MODE** again will turn fireplace OFF.

NOTE: The MODE button operates in a series that will cycle from ON to THERMO to OFF.

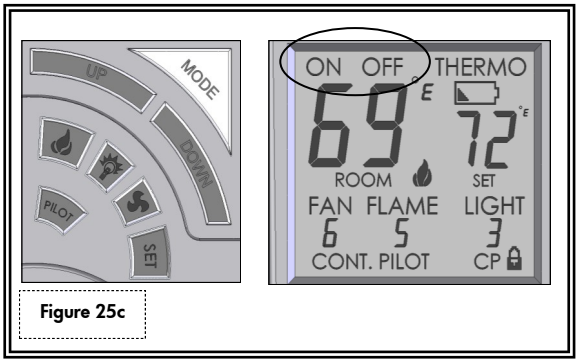


Figure 25c

FAN MODE:

This remote will operate the fan, allowing for (6) different speed levels. When the **FAN** button is pressed, FAN level setting will flash on the LCD screen. Press **UP** or **DOWN** buttons to select desired fan speed level. If no adjustment is made within 7 seconds, the control will exit function setting mode and LCD display will return to normal view.

NOTE: Delayed ON/OFF - The fan will not turn on until fireplace has been burning for 5 minutes and will not turn off for 12 minutes after fireplace has been turned off.

EXCEPTION: If fireplace is turned back on during 12 minute off-delay time frame, the fan will remain on.
This applies to MANUAL and THERMO modes.

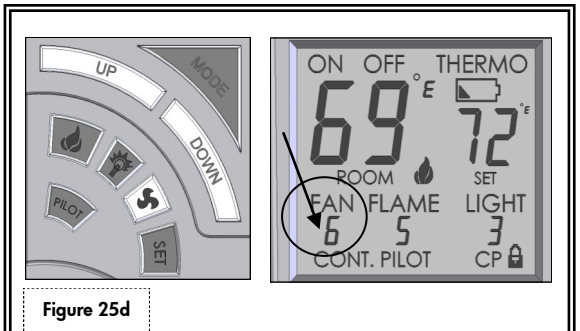


Figure 25d

LIGHTING MODE:

This remote will operate the lights, allowing for (6) different light levels. When **LIGHT** button is pressed, LIGHT level setting will flash on the LCD screen. Press **UP** or **DOWN** buttons to select desired light level. If no adjustment is made within 7 seconds, the control will exit function setting mode and LCD display will return to normal view.

NOTE: There is a 3 second delay before light level setting is achieved.

NOTE: Light operations are completely independent from flame and fan operations.

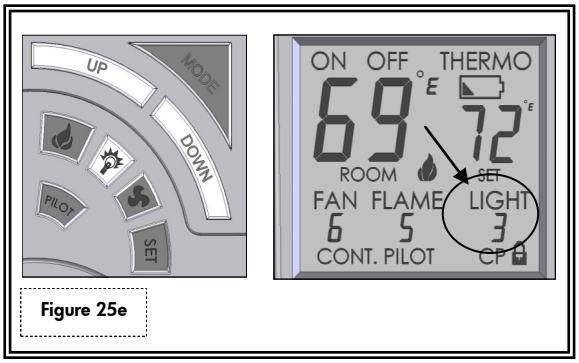


Figure 25e

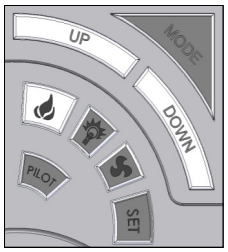
REMOTE CONTROL INFORMATION cont.

FLAME MODE:

This remote will operate the flame, allowing for (6) different flame height levels. When **MAIN FLAME** button is pressed, FLAME level setting will flash on the LCD screen. Press **UP** or **DOWN** buttons to select desired flame level. If no adjustment is made within 7 seconds, the control will exit function setting mode and LCD display will return to normal view.

NOTE: The fireplace will initially light at the highest level. After 5 seconds the flame will adjust to last chosen level before fireplace was turned OFF.

This applies to MANUAL and THERMO modes.



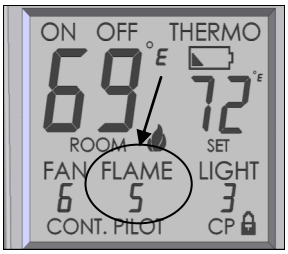


Figure 26a

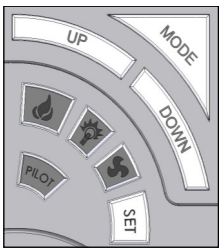
THERMO (THERMOSTAT) MODE:

This remote feature allows you to thermostatically control the fireplace when hand held remote is set to **THERMO** mode.

Set Temperature Range: 45˚F (7˚C) to 90˚F (32˚C).

Set remote to **THERMO** mode by pressing **MODE** button. The smaller **SET** window of numbers appears on the LCD screen. The first SET number will read 45˚F. Press **UP** button to desired set room temperature. Within 5 seconds fireplace will operate to that Set Temperature. The **FLAME, ON** and **THERMO** icons will appear on the LCD screen. By pressing **UP** or **DOWN** buttons a new set temperature may be attained.

SET Temperature will only appear when THERMOSTAT MODE is activated, but is implemented in all MODES with the exception of MANUAL MODE.



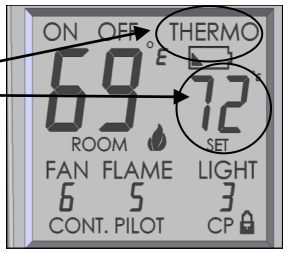


Figure 26b

NOTE: The flame height can adjust up to (6) different height levels according to amount of heat required. This range however is dictated by the Flame Level setting (see previous page). When desired temperature is met, the fireplace will shut off until more heat is required.

To exit **THERMO** mode press the **MODE** button. This also shuts fireplace OFF.

IMPORTANT: When in THERMO mode the fireplace will not turn on until room temperature falls below SET TEMPERATURE.

SYSTEM OPERATION WITHOUT HAND HELD REMOTE:

This system is designed to operate with the hand held remote or a thermostat, but in the unlikely event that it is required to be operated without the hand held remote or a thermostat, follow this simple procedure.

Slide **REMOTE /OFF** switch on main control module to **OFF**. The fireplace can now be lit and shut off by use of the ON/OFF rocker switch.

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

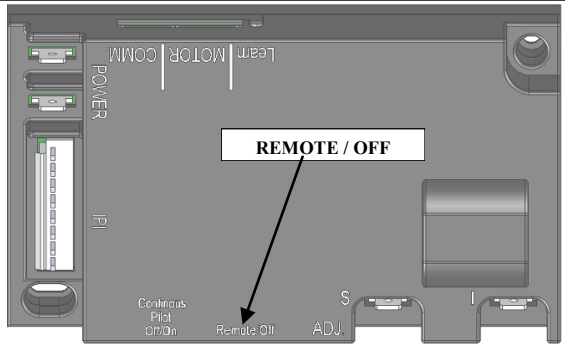


Figure 26c

LIGHTING AND SHUTDOWN

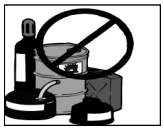
FOR YOUR SAFETY - READ BEFORE LIGHTING

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.

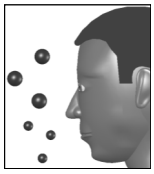
This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

1. This fireplace is equipped with an ignition device which automatically lights the pilot and main burner. The pilot and burner light automatically with the hand held remote only. **DO NOT** try to light the pilot by hand. Before lighting this fireplace, follow these instructions exactly.
2. BEFORE LIGHTING, smell all around the appliance for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
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 which has been under water.



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 touch any electrical switches
* Do not try to light any appliance
* 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

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.

NOTE: 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.

LIGHTING AND SHUTDOWN (cont.)

LIGHTING

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

1. Turn off all electrical power to fireplace.

ATTENTION: This fireplace is equipped with an ignition device which automatically lights the pilot. DO NOT light the pilot by hand.

2. Press hand held remote **MODE** button to **'OFF'**.

3. Wait five (5) minutes to allow any gas that may have accumulated inside firebox to escape. If you then smell gas, **STOP!** Follow safety information on front cover and on previous page of this installation manual. If you don't smell gas, go to next step.

4. Turn ON all electrical power to fireplace.

5. Press hand held remote **MODE** button to **'ON'**.

CAUTION: If fireplace will not operate, follow instructions TURNING OFF GAS TO FIREPLACE 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.

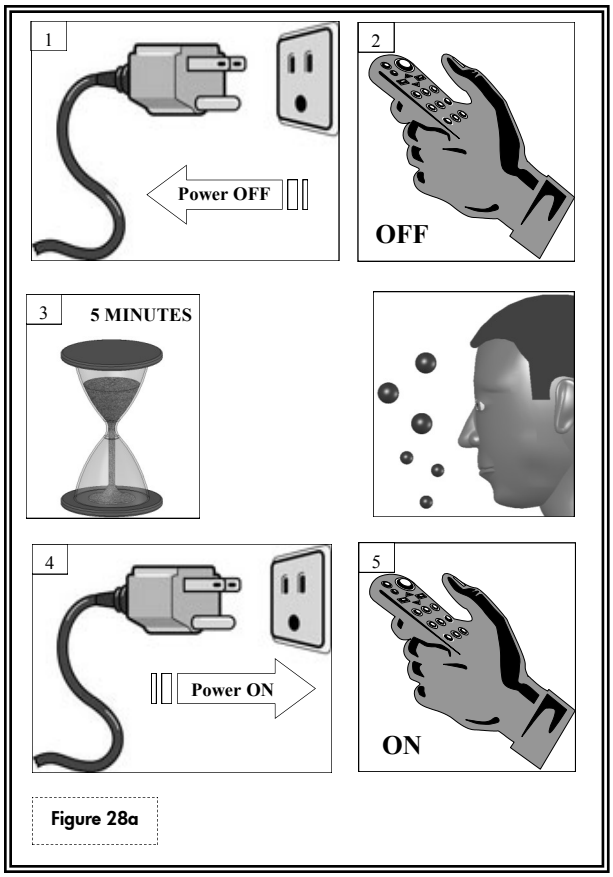


Figure 28a

TURNING OFF GAS TO FIREPLACE

1. Press hand held remote **MODE** button to **'OFF'**.

2. Turn OFF all electrical power to fireplace if service is required.

3. Turn manual shut-off valve to **OFF**.

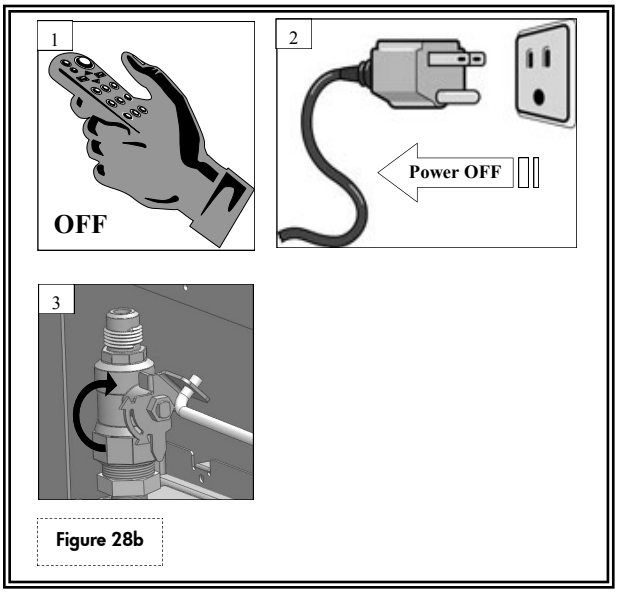


Figure 28b

PRESSURE TESTING

IMPORTANT NOTICE: 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.

NOTE: The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of ½ psi.

NOTE: 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 1/4" I.D. hose.
3. Light fireplace using hand held remote control. Note manometer reading.
4. Turn fireplace off using hand held remote control.
5. Disconnect hose and tighten screw (clockwise). Screw should be snug, do not over tighten.
6. Relight fireplace using hand held remote control. 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 incoming gas pressure.

CAUTION: A LOW PRESSURE READING CAN CAUSE DELAYED IGNITION

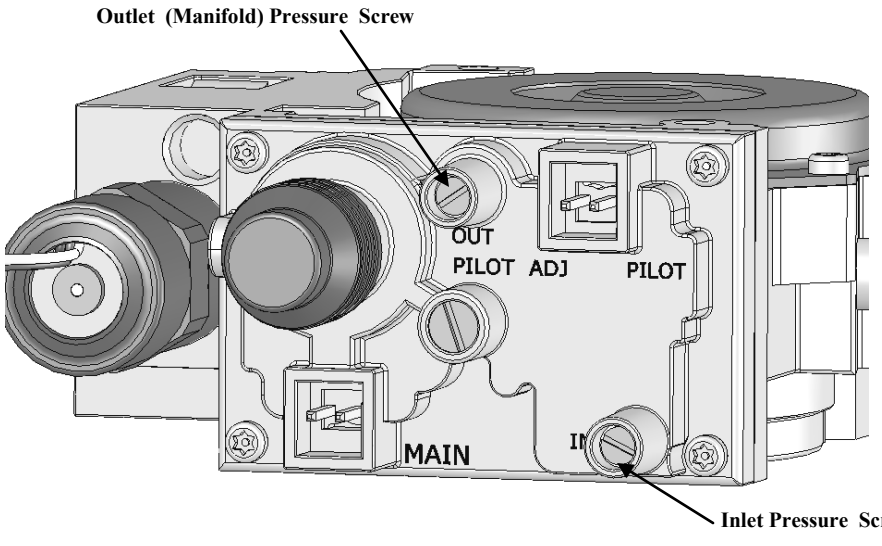


Figure 29a

ERROR CODES

IGNITION SAFETY: Protection for Ignition System

Error Code: One beep every one second.

Description of Fault: Warns users if pilot is not successfully ignited in 60 seconds.

How to Clear: Press MODE button to OFF then to ON to re-attempt ignition.

What to Check:

- Ensure gas supply is turned on.
- Ensure black cap leads marked PILOT from module are plugged into PILOT connection on valve body.
- Verify lead from igniter on pilot assembly is connected to 'I' terminal on main control module. (Clicking sound will also be heard).
- Verify lead from flame sensor on pilot assembly is connected to 'S' terminal on main control module. (Pilot will light but main burner will not. Pilot will extinguish after 60 seconds and error code will alarm).
- Verify black ground lead is connected to tab extending from valve bracket.

SENSOR SAFETY: Protection for Flame Sensor

Error Code: Four beeps every one second.

Description of Fault: Warns users pilot flame senor detects a pilot flame already present when ignition sequence is initiated. This fault will also occur if pilot flame senor on main control module is shorted to ground.

How to Clear: Press MODE button to OFF then to ON to re-attempt ignition.

What to Check:

- Check if pilot flame is actually present when valve is turned OFF (if yes, replace valve).
- Replace pilot assembly.
- Replace module.

THERMAL SAFETY: Overheat Protection

Error Code: Four beeps every two seconds.

Description of Fault: Warns users that module's internal temperatures have exceeded 170˚ F (77˚C).

How to Clear: Module's internal temperatures must cool to below 160˚F (71˚C) and then press ON button.

What to Check:

- Are modules located in an unapproved location. Move to cooler location.

COMMUNICATION SAFETY: Protection for Ignition System

Error Code: One beep every four seconds.

Description of Fault: Warns users the hand held remote and main control module are not communicating properly. This safety feature is active in both manual and thermo modes. The remote control sends a communication safety signal every 15 minutes. If the main control module does not receive this signal, it begins a 2-hour countdown. If no communication safety signal is received at the end of this countdown, the system will enter communication safety shutdown which turns system OFF and emits the error code.

What to Check:

- Verify batteries in hand held remote control are new.
- Ensure remote control is located within 20 ft. (6 m) of main control module.
- Ensure remote control is not placed directly on top of or inside a metal enclosure as this can interfere with transmission.

FINALIZING THE INSTALLATION

FLAME APPEARANCE:

Flame appearance is affected by several factors including altitude, venting configuration and fuel quality. Although the venturi settings have 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 venturis may need adjustment.

WARNING: BURNER TUBE ADJUSTABLE VENTURI POSITIONING SHOULD ONLY BE PERFORMED BY A QUALIFIED PROFESSIONAL SERVICE TECHNICIAN.

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

FACTORY SET BURNER TUBE VENTURI SETTINGS (ADJUST AS NECESSARY FOR YOUR INSTALLATION)	
NATURAL GAS	**LP (PROPANE) GAS**
1/16" (2 mm) OPEN	**100% OPEN**

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

NOTE: IF SOOT IS PRESENT, CHECK ROCK POSITIONING BEFORE ADJUSTING BURNER VENTURI. ROCKS MUST NOT BLOCK BURNER PORTS.

IMPORTANT: SLIGHT ADJUSTMENTS TO THE 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 VENTURIS:

1. Remove screen front and glass frame assembly. Refer to page 14.
2. Remove rock set.
3. Remove burner assemblies.
4. Loosen screw on burner venturi and adjust as necessary. Tighten screws.
5. Reinstall all components previously removed.
6. Light fireplace and wait 15 minutes before determining if any further adjustments are needed.

BURNER VENTURI

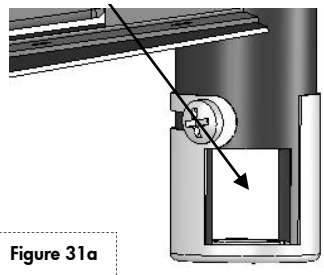


Figure 31a

MAINTENANCE

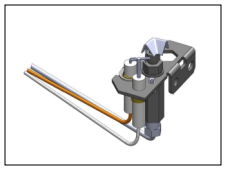
The appliance is required to be inspected at least once a year by a professional service person.

The compartment on sides of 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. It is imperative that the burner be cleaned once a year.

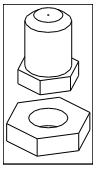
NOTE: INSTALLATION AND REPAIR SHOULD BE DONE ONLY BY QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND ANNUALLY BY A QUALIFIED SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIALS, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS,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

CONTROL BOARD SYSTEM

- **Annual cleaning of burner system is required.**
- **Visually check for blocked port holes, especially near the pilot. Blocked port holes may cause delayed ignition.**
- **Visually check pilot light and burner when in operation. The flames should be steady, not lifting or floating.**



IPI Pilot



Burner Orifice

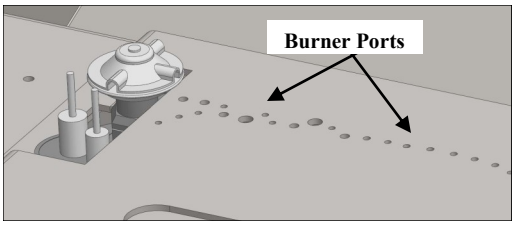


Figure 32a

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 the 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.**
- **Do not operate this fireplace with glass/frame assembly removed, cracked or broken.**
- **The glass assembly, part #JOR-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc.**
- **Replacement of glass & frame assembly, part #JOR-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.

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

TROUBLESHOOTING

MAIN CONTROL MODULE WILL NOT LEARN TRANSMITTER

- Ensure REMOTE/OFF switch on side of main control module is set to REMOTE.
- Make sure batteries in both the hand held remote and backup battery pack are installed in the proper direction and are not drained.
- Verify hand held remote indicates a signal is being sent. The LCD display should indicate ON or OFF depending on which button is being pressed. The LED indicator should illuminate on wall transmitters and on/off transmitters. Buttons should be pressed and held for 1 to 2 seconds to ensure a complete signal is sent.
- Ensure 4-pin lead-set is securely connected from battery pack to main control module's AUX connection. If the A/C adapter is used, check that leads from adapter are securely connected to POWER terminals on main control module.
- Press and hold LEARN button on main control module for approximately 10 seconds to clear memory (you should hear a series of beeps from the receiver), immediately press either the ON or OFF button on hand held remote (you should hear a series of beeps indicating the transmitter code has been learned).

PILOT WILL NOT LIGHT / STAY LIT

- Verify gas supply is turned on.
- Verify main control module is receiving signal from hand held remote by listening for a beep from receiver when ON is pressed on hand held remote. If you do not hear a beep, ensure main control module has learned the hand held remote. (See above).
- Ensure black lead from pilot assembly igniter is securely connected to terminal labeled 'I' and red lead from flame rectification sensor is securely connected terminal labeled 'S' on main control module.
- Make sure black cap leads marked PILOT from main control module are securely connected to terminals labeled PILOT on valve body.
- Ensure black GROUND wire is securely connected to tab located next to ON/OFF toggle switch. **A proper ground is essential to spark igniter operation.**
- Make sure pilot flame is in contact with flame rectification sensor on pilot assembly. This valve is equipped with a pilot flame adjustment screw. If pilot flame is too small it will not contact flame rectification sensor and will not complete the safety circuit.
- Check continuity of pilot on valve. Remove wire connector. If there is no continuity on pin terminals, replace valve.

PILOT FLAME ALWAYS ON / WILL NOT EXTINGUISH

- Ensure continuous pilot icon is not present in LCD screen. If icon is present, press PILOT button. This will de-activate the continuous pilot feature and the icon will disappear from LCD screen.

PILOT BURNING BUT IGNITER CONTINUES TO SPARK

- Check that flame sensor is fully impinged by pilot flame. If needed, adjust pilot.
- Check end-to-end continuity of sensor. If sensor has continuity, replace module.

TROUBLESHOOTING

MAIN FLAME WILL NOT LIGHT

- Verify gas supply is turned on.
- Ensure pilot flame will ignite. If not, see pilot flame troubleshooting on previous page.
- Make sure white cap leads marked MAIN from module are securely connected to terminals marked MAIN on valve body.
- Make certain pilot flame is in contact with flame rectification sensor on pilot assembly. This valve is equipped with a pilot flame adjustment screw. If pilot flame is too small it will not contact flame rectification sensor and will not complete the safety circuit.
- Ensure pilot flame is properly located to ignite main flame.
- Does hand held remote show CP in the display? If yes, childproof is on. De-activate by pushing PROG/TIME & UP keys at same time for more than 5 seconds.
- Check continuity of main burner coil on gas valve. Remove wire connector. If there is no continuity on pin terminals, replace valve.

FLAME HEIGHT ADJUSTMENT NOT WORKING / WORKS BACKWARDS

- Ensure '+' (white dotted wire) and '—' (black wire) leads from battery pack or module are securely connected to '+' (white dotted wire) and '—' (black wire) leads from main control module ('+' to '+', '—' to '—').
- Check functionality with all transmitters to determine if there is an issue with the main control system or an individual transmitter. If the issue is with an individual transmitter, make sure batteries in hand held remote and backup battery pack are installed properly and are not drained.

ROOM TEMP. DISPLAYED ON HANDHELD REMOTE NOT CORRECT

- Ensure transmitter was not recently stored in a different location (air-conditioned, heated) from that in which the hand held remote was tested. It may take up to 3 hours for the temperature inside a packaged transmitter, and several minutes for an unpackaged transmitter to equalize with room temperature.

FIREPLACE WILL NOT RESPOND IN "THERMO" MODE

- Ensure hand held remote is within 20 ft. (6.096 m) operational range.
- Make sure an ON or OFF command was not last sent from another transmitter. These commands will override thermal commands from the handheld remote control. To return system to THERMO mode, press either ON or OFF on hand held remote, then press MODE button to put system in THERMO mode. Press and hold SET button to change set temperature.
- Verify set temperature on hand held remote is at least 2˚F (1˚C) above or below room temperature. The system will not react to temperatures within 2˚F (1˚C) of set temperature.

RFD-30 REPLACEMENT PARTS LIST

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

RFD-30 BOARD SYSTEM AND PARTS			
RFD-600-IPI	Rockford-IPI Control Board - Nat Gas	700-165	#.012 IPI LP Gas Pilot Orifice
RFD-601-IPI	Rockford-IPI Control Board - LP Gas	700-204	Manual Shut-off Valve
700-400-06	Main Control Module	700-213	18" Flexible Gas Line-Black
700-404-RFD	Rockford IPI Valve -Natural	700-226	Flexible Gas Line-Valve to Burner Connection
700-404-RFD-1	Rockford IPI Valve - LP	700-242	Natural Gas Orifice #42
700-200	Pilot Assembly - Natural Gas	700-253	LP Gas Orifice #53
700-200-1	Pilot Assembly - LP Gas	OCK-A42N-I-RFD-PSE	Natural Gas Conversion Kit
700-801	8-PIN Primary Wire Harness: Primary Wire Harness	OCK-A53L-I-RFD-PSE	LP Gas Conversion Kit
700-501	5-PIN Wire Harness: Main Module to Valve Step Motor	RFD-135	Burner Assembly
700-120	Extension Module	700-350	Nat. Gas Low Limit Screw #50
700-401	4-PIN Wire Harness: Control Module to Extension Module	700-356	LP Gas Low Limit Screw #56
700-750	7.5 Volt Adaptor	700-752	Pilot Igniter (with wire)
700-208	IPI Remote Control	700-753	Pilot Flame Sensor (with wire)
700-164	#.018 IPI NAT. Gas Pilot Orifice	700-751	Battery Back-up with (4) AA Batteries

GLASS & GLASS GASKET	
JOR-005	Replacement Valance
900-006	1-1/8" Glass Gasket w/ Adhesive
JOR-057T	Valance with 25-5/8" x 17-1/2" glass

FIREBOX LINER SET (Black)	
RFD-B-900	(3 pc.) Firebox Liner Set
RFD-B-900B	Back Firebox Liner Panel
RFD-B-G900L	Left Side Firebox Liner Panel
RFD-B-900R	Right Side Firebox Liner Panel

ROCK SET	
RFD-R-500	25 pc. Rock Set
RR-1	RR-1 Rock
RR-2	RR-2 Rock
RR-3	RR-3 Rock
RR-4	RR-4 Rock
RR-5	RR-5 Rock
RR-6	RR-6 Rock
RR-7	RR-7 Rock
RR-8	RR-8 Rock
RR-9	RR-9 Rock

FAN ASSEMBLY	
JXL-028	Fan Assembly

**Consult your dealer for information on optional accessories available for this fireplace.*

This appliance tested & certified by:
OMNI - Test Laboratories, Inc.
13327 NE Airport Way
Portland, Oregon 97230

Model #RFD-30 Rockford

www.kozyheat.com

Manufactured by:
Hussong Mfg. Co., Inc.
204 Industrial Park Drive
Lakefield, Minnesota 56150
507-662-6641

LIMITED WARRANTY

KOZY HEAT
LIMITED 10 YEAR WARRANTY

Effective July 01, 2003

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 or 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. Remote control warranties are covered by Ambient Technologies, Inc., and are excluded from this Limited Warranty.

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, including but not limited to the 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. 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.
6. This warranty does not cover any part of the fireplace or any components which have been exposed to or submerged under water.
7. Hussong Manufacturing Co., Inc. must be notified by the dealer the fireplace was purchased from or a qualified installer or service technician of the defect.
8. 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.)
9. All previous warranty/service has been performed by a qualified installer or service technician. (Copies of such service records may be required to claim a warranty.)

LIFETIME WARRANTY

KOZY HEAT FIREPLACES

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 warranties to the original purchaser that the firebox, heat exchanger, fiber logs, burner tube and glass 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 or 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 costs 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 replaces 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.

JUNE 1998

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(CUT ALONG DOTTED LINE)

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.

PURCHASER'S NAME: _____ **INSTALLATION DATE:** _____

ADDRESS: _____ **MODEL#:** _____ **SERIAL #:** _____

_____ **TELEPHONE #** _____

INSTALLER NAME: _____

ADDRESS: _____ **TELEPHONE #** _____

_____