

CHASKA-34 ROCK

INSTALLATION AND OPERATION MANUAL



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

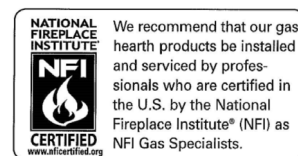
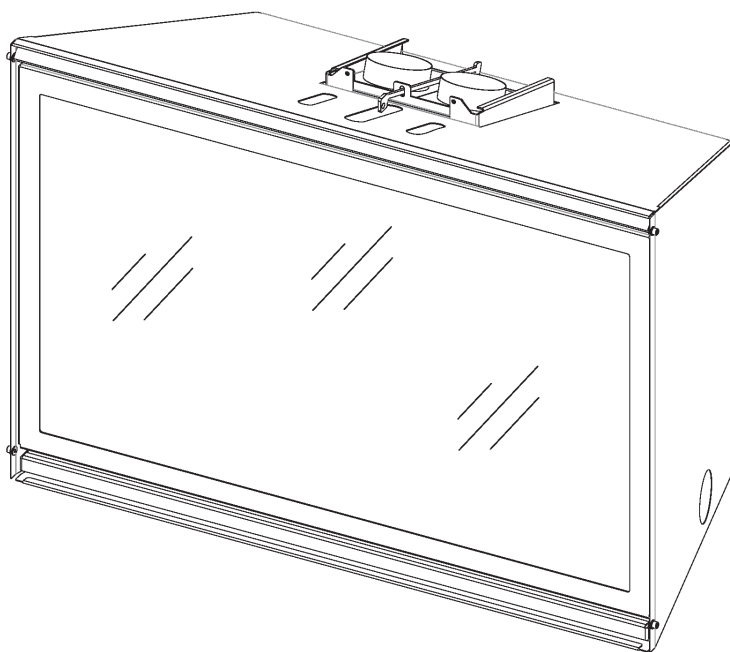
⚠ WARNING:

FIRE OR EXPLOSION HAZARD

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

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT DO IF YOU SMELL GAS
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Leave the building immediately.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

MODEL #CSK-34 R DIRECT VENT GAS FIREPLACE INSERT



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.



English and French installation manuals are available through your local dealer. Visit our website www.kozyheat.com or scan this QR code for our mobile app.

⚠ DANGER



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

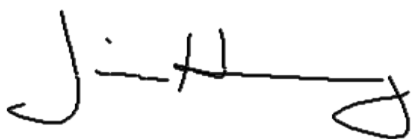
A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

Read this manual before installation 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. To ensure you receive a quality product, the burner and valve assembly are 100 percent test-fired, and the complete fireplace is thoroughly inspected before packaging. Our commitment to quality and customer satisfaction has remained the same for over 30 years. We offer a complete line of gas and wood fireplace, unique cabinets and stylish accessories to complement any decor. Adding a fireplace is one of the best ways to increase the value of your home, and we are proud to offer a network of dealers throughout the country to help make your experience everything you imagine. We pride ourselves in being dedicated not only to functionality and reliability, but also customer safety. We offer our continual support and guidance to help you achieve the maximum benefit and enjoyment from your Kozy Heat gas fireplace.

Jim Hussong
President



Dudley Hussong
Board Chairman



Homeowner Reference Information

We recommend you record the following information:

Model Name: _____

Date purchased/installed: _____

Serial Number: _____

Location of fireplace: _____

Dealership Purchased from: _____

Dealer phone: _____

Notes: _____

TABLE OF CONTENTS

TABLE OF CONTENTS.....	5	8.0 ELECTRICAL INFORMATION	20
1.0 INTRODUCTION	6	8.1 Electrical Specifications	20
1.1 Appliance Certification	6	8.2 Wiring Requirements.....	20
1.2 Requirements for the Commonwealth of Massachusetts	6	8.3 CK34-LKT Optional Light Kit Installation.....	21
2.0 SPECIFICATIONS.....	7	9.0 OPERATING INSTRUCTIONS.....	22
2.1 Components.....	7	9.1 Initialize the Control System for the First Time.....	23
2.2 Heating Specifications	7	9.2 Temperature Display	24
2.3 High Altitude Installations.....	7	9.3 Key Lock	24
2.4 Appliance Dimensions and Assembly	8	9.4 Turn ON/OFF the Appliance.....	24
2.5 Safety Barriers Dimensions	9	9.5 Remote Control Flame Adjustment	24
3.0 EXISTING FIREPLACE REQUIREMENTS	10	9.6 Remote Control Thermostat Operation	24
3.1 Existing Fireplace Specifications	10	9.7 Continuous Pilot / Intermittent Pilot (IPI/CPI) Selection.....	25
3.2 Existing Chimney Specifications.....	10	9.8 Fan Speed Control	25
4.0 CLEARANCES.....	11	9.9 Accent Light Kit	25
4.1 Fireplace Insert Placement Considerations	11	9.10 Low Battery Detection.....	25
4.2 Vent Termination Clearances.....	11	9.11 Reset the System for Manual Operation.....	26
4.3 Combustible Material Clearances.....	11	9.12 IFC Module Ignition and Reset Information	26
5.0 INSTALLATION	12	10.0 ADJUSTMENT.....	27
5.1 Prepare Existing Fireplace.....	12	10.1 Pressure Testing.....	27
5.2 Fireplace Insert Air Duct Removal.....	12	10.2 Burner Tube Venturi Adjustment	28
5.3 Combustion Air Venting Options.....	12	11.0 TROUBLESHOOTING.....	29
5.4 Kozy Heat #816-CL Co-Linear Vent System	13	12.0 MAINTENANCE.....	31
5.5 Run Vent Through Existing Chimney	14	12.1 Burner and Pilot System	31
5.6 Vent System Connection	15	12.2 Fans.....	31
6.0 GAS LINE CONNECTION	16	12.3 Vent System	31
6.1 Gas Conversion (sold separately)	16	12.4 Glass Assembly	31
6.2 Gas Line Installation.....	16	13.0 REPLACEMENT PARTS LIST	32
7.0 FIREPLACE INSERT SETUP.....	17	LIMITED WARRANTY	34
7.1 Glass Assembly.....	17	LIFETIME WARRANTY	36
7.2 #CK34-R500 Rock Kit Installation.....	18		
7.3 Control Board Removal and Installation	19		

1.0 INTRODUCTION

1.1 Appliance Certification

This appliance has been tested OMNI-Test Laboratories located in Portland, Oregon and complies with:

- ANSI Z21.88-2014/CSA 2.33a-2014, “*Vented Gas Fireplace Heaters*”
- CGA 2.17-M91 (R2009), “*Gas-Fired Appliances for Use at High Altitudes*”
- CSA P.4.1-2009, “*Testing Method for Measuring Annual Fireplace 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.

1.2 Requirements for the Commonwealth of Massachusetts

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

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

1.2.1 Installation of Carbon Monoxide Detectors

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

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

1.2.2 Approved Carbon Monoxide Detectors

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

1.2.3 Signage

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

1.2.4 Inspection

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

1.2.5 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.

1.2.6 Manufacturer Requirements

1.2.6.1 Gas Equipment Venting System Provided

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

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

1.2.6.1 Gas Equipment Venting System NOT Provided

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

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

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

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

2.0 SPECIFICATIONS

2.1 Components

Table 2.1, Included Parts and Components

PART NUMBER	DESCRIPTION
CK34L-150	Control Board Assembly
700-203	Manual Gas Shut-off Valve
CK34L-135	Burner Assembly
CK34-I900	Firebrick Refractory Set
CK34-500	Log Package
701-001T	Glass Assembly
CK34-028	Fan Kit (1)-75 CFM
500-CK34	Grill Assembly
700-408	Remote Control Transmitter

2.1.1 Additional Components Required

Approved Venting Systems:

- Kozy Heat #816-CL Co-linear vent system
 - 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 co-linear 3" x 3" flexible pipes and termination cap.
- Other approved vent manufacturers: ICC, Selkirk, American Metals (Amerivent), Simpson Dura-vent

Shrouds:

- Part #CK34-2740, 27" x 40" shroud (1 pc.)
- Part #CK34-3044, 30" x 44" shroud (1 pc.)
- Part #CK34-3346, 33" x 46" shroud (1 pc.)
- Part #CK34-A3444, 34" x 44" shroud (1 pc.)

Custom Shrouds:

- Part #CK34-CUS Custom Shroud
- Part #CK34-ACUS Arched Custom Shroud

2.2 Heating Specifications

Fuel	Minimum Input BTU/h (kW)	Maximum Input BTU/h (kW)	Manifold Pressure (High)	Manifold Pressure (Low)	Orifice Size (DMS)
Natural Gas	34,000 BTU/h (9.96 kPa)	18,500 BTU/h (5.42 kPa)	3.8" W.C. (.95 kPa)	1.1" W.C. (.27 kPa)	#38
LP Gas	34,000 BTU/h (9.96 kPa)	18,500 BTU/h (5.42 kPa)	11" W.C. (2.74 kPa)	2.9" W.C. (.72 kPa)	#52

2.3 High Altitude Installations

NOTE

USA: The appliance may be installed at higher altitudes. Please refer to your American Gas Association guidelines which state the sea level rated input of Gas Designed Appliances installed at elevations above 2,000 ft. (610 m) is to be reduced 4% for each 1,000 ft. (305 m) above sea level. Refer also to National Fuel Gas Code, ANSI Z223.1 / NFPA 54, local authorities, or codes which have jurisdiction in your area regarding the de-rate guidelines.

Canada: When the appliance is installed at elevations above 4,500 ft. (1,372 m), the certified high altitude rating shall be reduced at the rate of 4% for each additional 1,000 ft. (305 m). Refer also to CSA-B149.1 Natural Gas and Propane Installation Code, local authorities, or codes which have jurisdiction in your area regarding the de-rate guidelines.

2.4 Appliance Dimensions and Assembly

Table 2.2, Physical Dimensions								
Description	Height	Width	Back Width	Depth	Back Height	Back to Gas Line Access	Front to Vent Center	Back to Vent Center
Inches	23	33 ³ / ₈	24 ³ / ₈	16	17 ³ / ₈	5 ⁹ / ₁₆	10 ³ / ₈	5 ⁵ / ₈
Millimeters	585	848	618	407	442	142	264	143

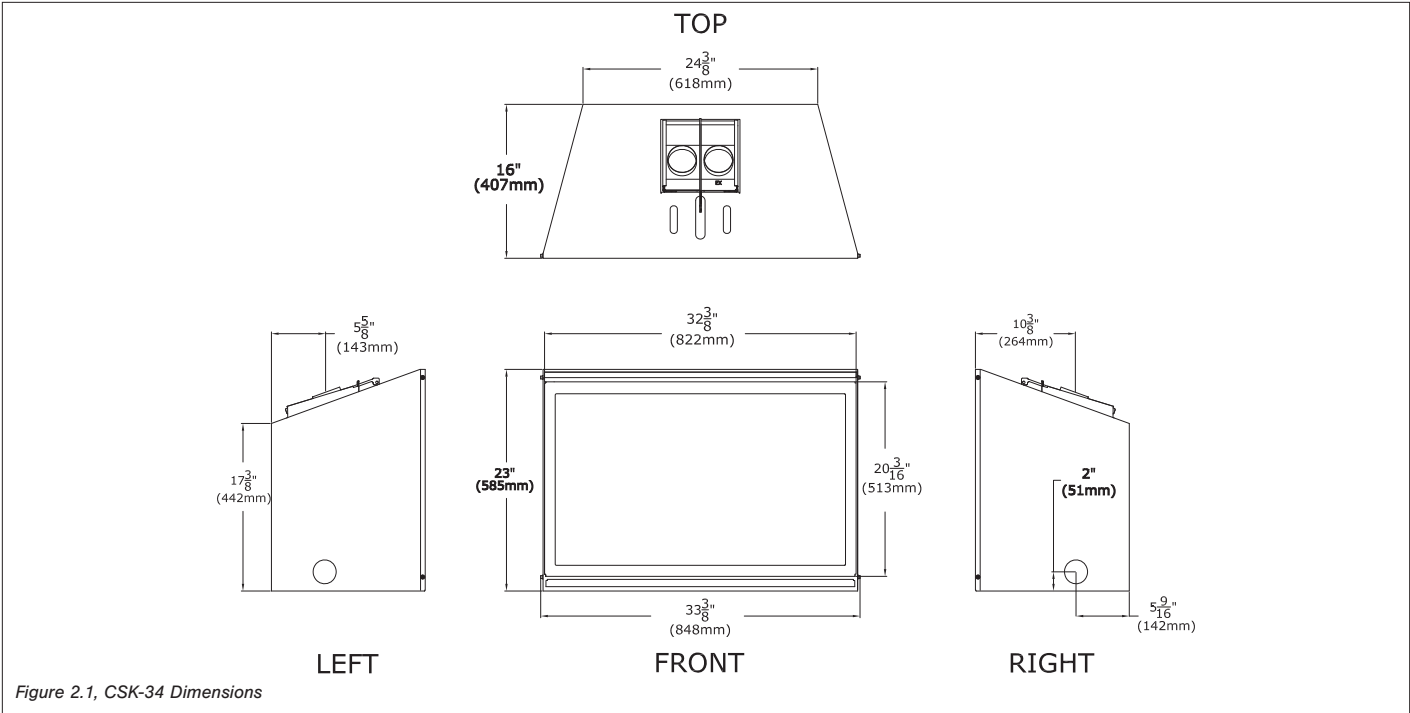
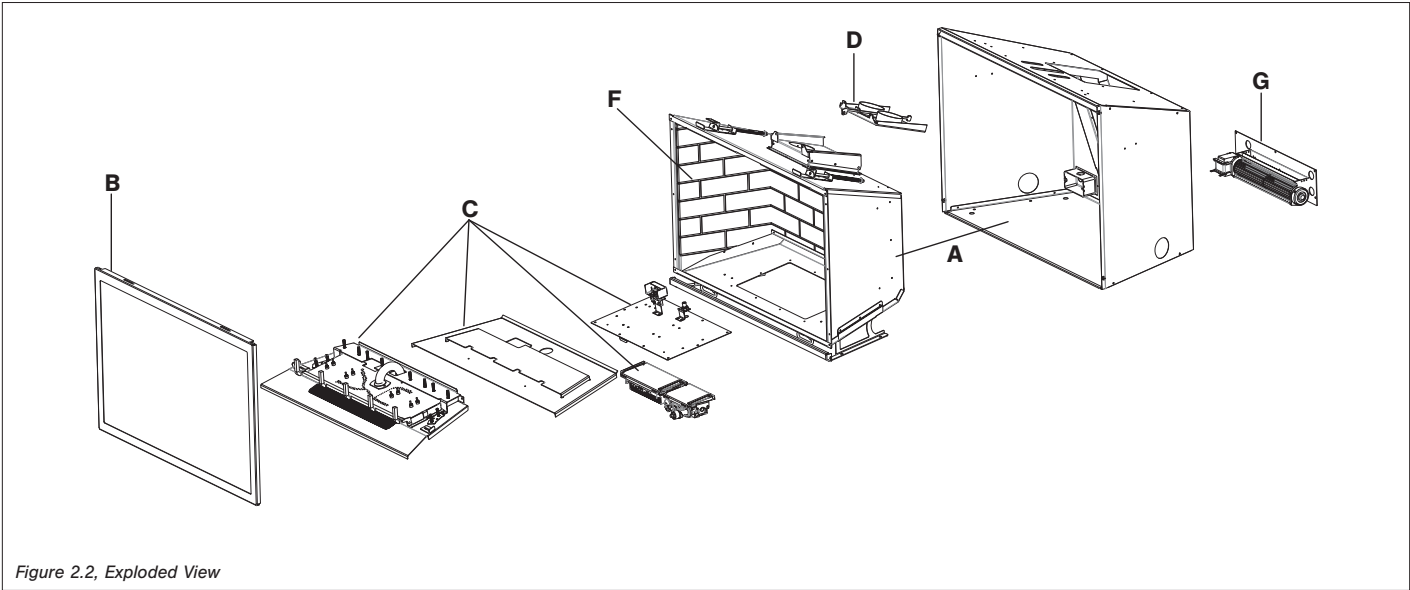


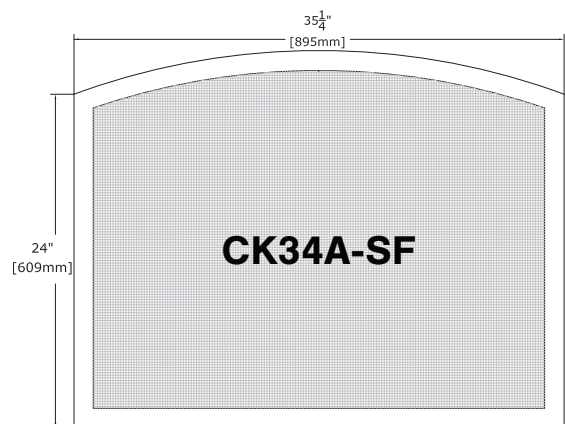
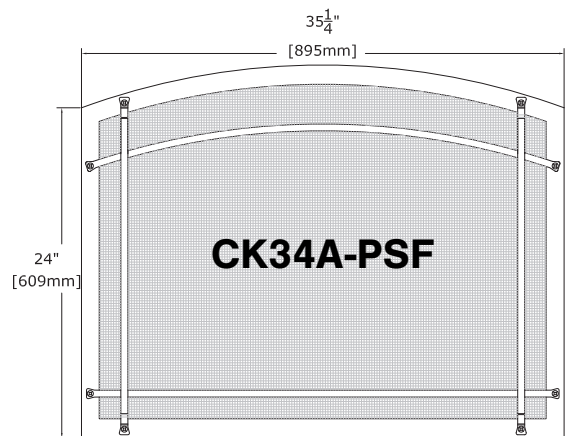
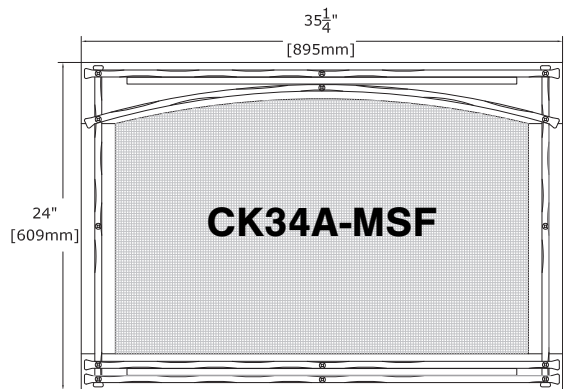
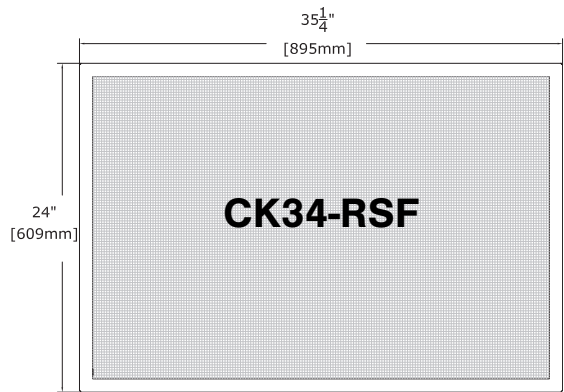
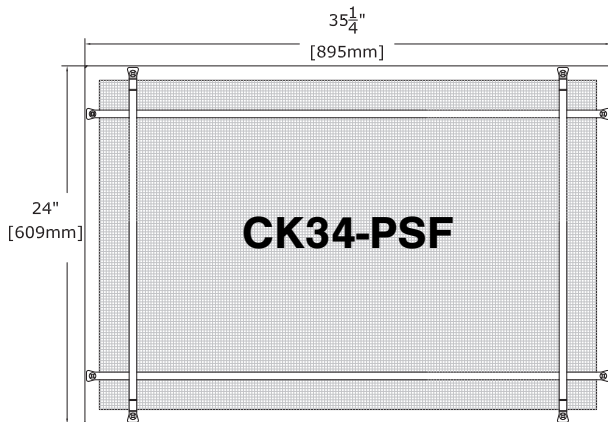
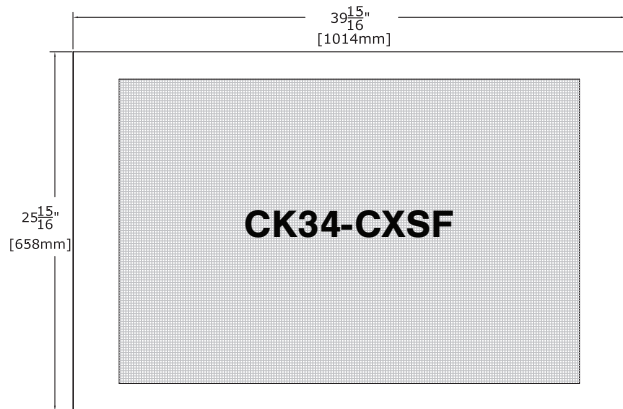
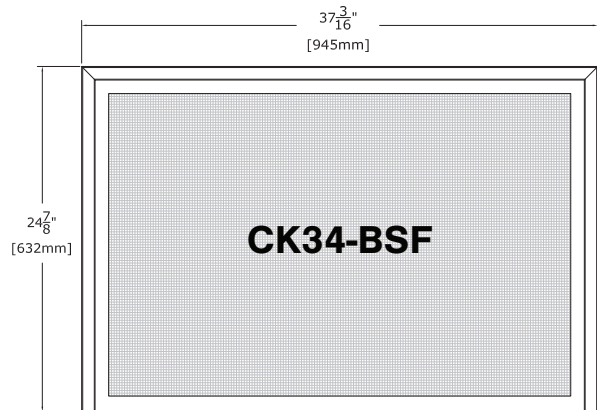
Table 2.3, Part Assembly Overview			
A	Fireplace insert	E	Rock kit
B	Spring-loaded latch glass assembly	F	Refractory panels
C	Control board with burner cover	G	Fan kit
D	Co-linear air duct		

WARNING: Failure to position these parts in accordance with these diagrams, or failure to use only specified approved parts with this appliance, may result in property damage or personal injury.



2.5 Safety Barriers Dimensions

- A safety barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.
- If the safety barrier becomes damaged, the barrier shall be replaced only with Hussong Mfg. Co., Inc.'s barriers for this appliance.



3.0 EXISTING FIREPLACE REQUIREMENTS

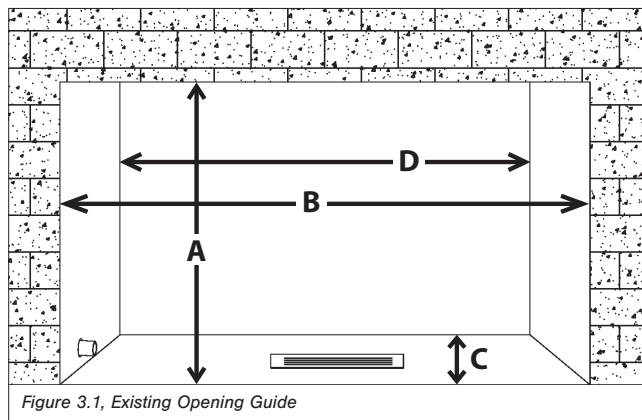
3.1 Existing Fireplace Specifications

NOTE: This fireplace is approved for installation in masonry and factory-built solid fuel burning fireplaces.

- 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.
- The existing fireplace and chimney must be clean, in good working order, and be constructed of non-combustible materials.
- Any smoke shelves, shields, and baffles may be removed if attached by mechanical fasteners. If necessary, remove firebrick to obtain at least the minimum opening requirements.
- A gas line must be able to be installed to the insert. Refer to 6.0 Gas Line Connection, on page 16.
- Provisions must be made to provide electrical power for appliance operation.
- Adequate accessibility clearances for servicing and proper operation must be maintained.

Table 3.1, Minimum Opening Dimensions

A	Height	23½ in.	597 mm
B	Front Width	33½ in.	851 mm
C	Depth	16⅜ in.	419 mm
D	Back Width	24½ in.	622 mm



3.2 Existing Chimney Specifications

WARNING: Any chimney clean-outs must fit properly. This appliance must not share, or be connected, to a chimney flue serving any other appliance.

The existing chimney must be comprised of one of the following:

- Factory built solid fuel chimney: 7 in. (178 mm) minimum inside diameter
- Masonry Chimney: 6 in. x 8 in. (152 mm x 203 mm) minimum inside diameter

Existing chimney height:

- Minimum: 12 ft. (3.66 m)
- Maximum: 50 ft. (15.24 m)

3.2.1 Determine Length of Existing Chimney

1. Remove and discard existing chimney cap.
2. It is helpful to have two people complete this step. Position one person at the fireplace and another person at the top of the chimney.
3. Measure from the fireplace base to the top of the chimney.
4. Subtract the height of the insert from the previous measurement. This is the total length of the co-linear flexible aluminum pipe required for your installation.

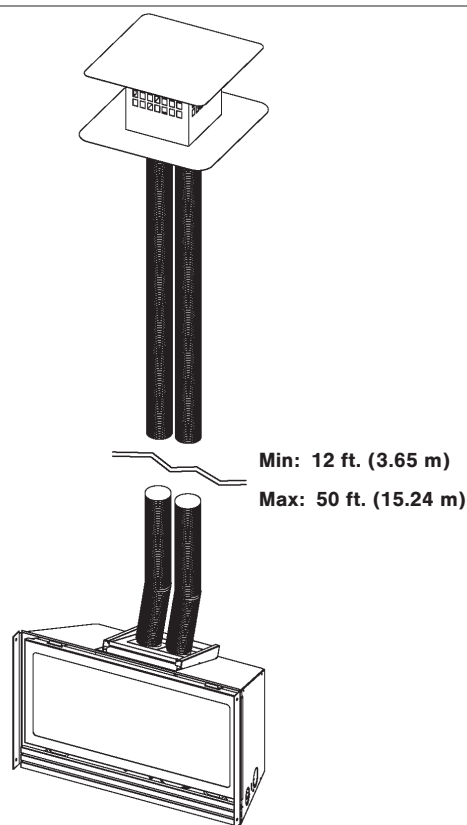


Figure 3.2, Minimum and Maximum Existing Chimney Length

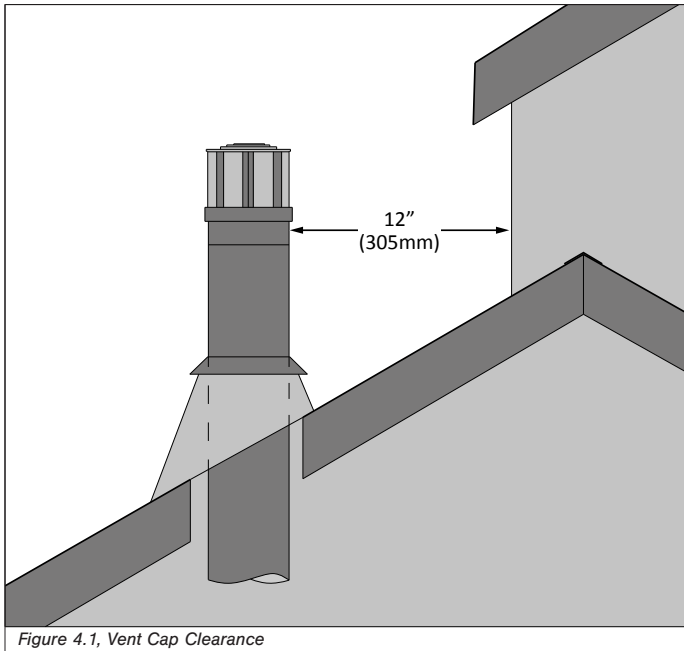
4.0 CLEARANCES

4.1 Fireplace Insert Placement Considerations

- This fireplace must be installed on a level surface capable of supporting the fireplace insert and venting.
- Due to high surface temperatures, the fireplace insert should be located out of traffic and away from furniture and draperies.
- This fireplace insert may be installed in a bedroom.
- Please be aware of the large amount of heat this fireplace insert will produce when determining a location.

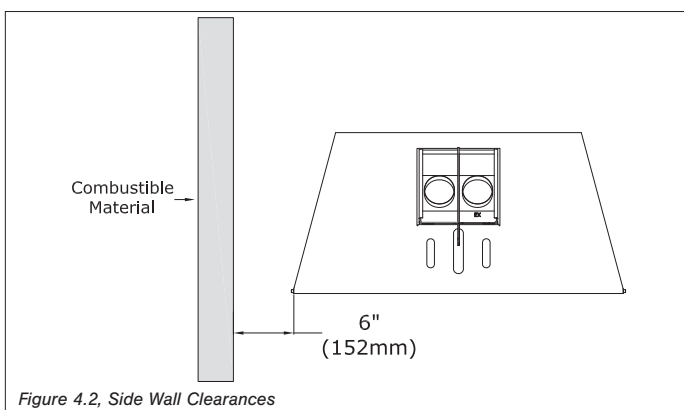
4.2 Vent Termination Clearances

- Approved vent caps require 12 in. (305 mm) clearance to intersecting walls, overhangs, or eaves, as verified by test.



4.3 Combustible Material Clearances

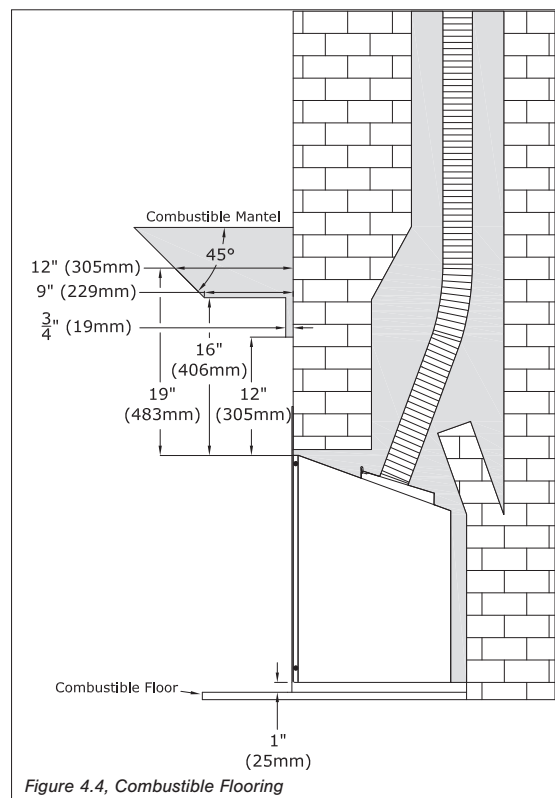
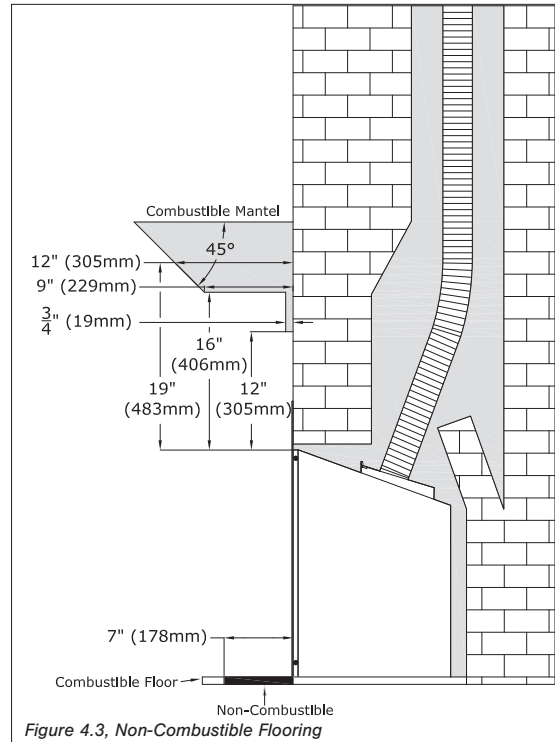
4.3.1 Sidewall Clearances



4.3.2 Projection Requirements

7 in. (178 mm) of non-combustible flooring in front of the appliance is required if this appliance is directly installed on the fireplace floor. See Figure 4.3.

Combustible flooring is allowed 1 in. (25 mm) below the appliance. This airspace must be maintained. See Figure 4.4.



5.0 INSTALLATION

5.1 Prepare Existing Fireplace

CAUTION: Trim panels or surrounds must not seal ventilation openings in existing fireplace that this appliance is installed in.

ATTENTION: Any removed parts must be capable of re-installation 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.
- The fireplace flue damper can be fully blocked, open, or removed for installation of this gas fireplace insert.
- Clean the chimney and inside of the fireplace to prevent a creosote smell from entering the home.
- Cutting of any sheet metal parts of the existing fireplace is prohibited.
- If the metal floor is removed, the insert must be placed directly on metal base of metal fireplace. Mechanically attach 'THIS UNIT HAS BEEN MODIFIED' label at bottom of existing firebox so it will be visible if this gas fireplace insert is removed.
- If the factory-built fireplace has no gas access hole(s) provided, an access hole of 1½ in. (37.5 mm) or less may be drilled through the lower sides or bottom of the firebox in a proper workmanship like manner. The access hole must be plugged with non-combustible insulation after the gas supply line has been installed.
- Run any necessary electrical wiring to insert.

5.2 Fireplace Insert Air Duct Removal

ATTENTION: All information outlined above must be completed before continuing with this installation.

1. Remove the air duct at the top of the insert by sliding backward out of the channel.
2. Refer to 5.6 Vent System Connection (applies to both venting options), on page 15 for re-attachment of the air duct.

5.3 Combustion Air Venting Options

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

Follow the instructions provided in this manual for the combustion air venting option required for installation, depending on which option used.

Full Connection Venting:

Combustion air intake pipe is ran entire chimney length and connected to termination cap.

Stub Venting:

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

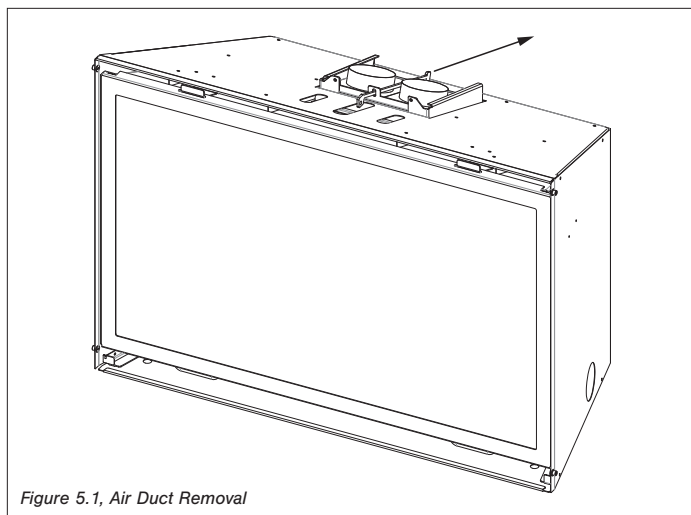


Figure 5.1, Air Duct Removal

5.4 Kozy Heat #816-CL Co-Linear Vent System

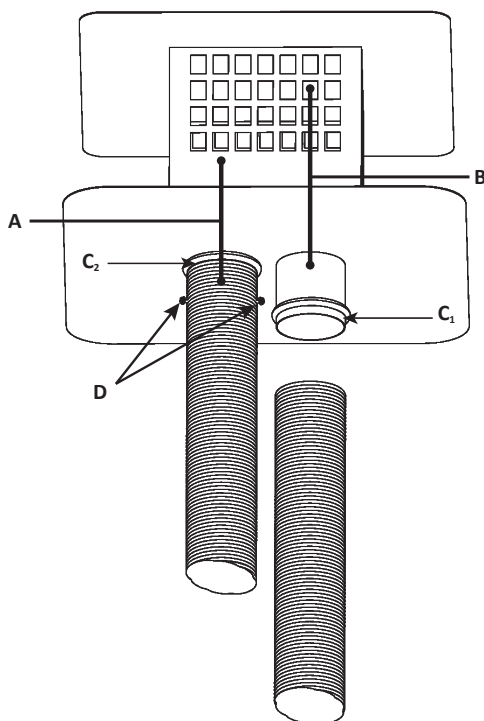
IMPORTANT: Proper operation of this insert requires the exhaust and combustion air pipes to be connected to the correct collar, on both the termination kit and the fireplace insert air duct.

5.4.1 Full Connection Venting Assembly

1. Carefully extend the exhaust and combustion air intake pipes to the total chimney length required. Refer to 3.2.1, Determine Existing Chimney Length, on page 9.
2. Slide the combustion air intake pipe (the end without a collar) over the intake termination cap collar (A).
3. Secure the combustion air intake pipe to the termination cap (E) with the provided (3) self-tapping screws (D).
4. Place a bead of sealant around the inner edge at the end of the exhaust pipe (without collar / red marking).
5. Slide the exhaust pipe onto corresponding labeled collar (B) on the termination cap (E).
6. Secure the exhaust pipe to the termination cap (E) with the provided (3) self-tapping screws. Apply additional sealant around joint to ensure a proper seal (C₁).
7. Run vent system. Refer to 5.5.1 Run Vent - Full Connection Venting, on page 14.

5.4.2 Stub Venting Assembly

1. Determine the length needed for the combustion air intake pipe, measuring from the fireplace air duct to above to a minimum length of 4 ft. (1.22 m) above the damper opening in the existing chimney.
2. Remove the excess length of combustion air pipe (from the end without a collar).
3. Extend the exhaust pipe equal to the total chimney length required. Refer to 3.2.1 Determine Length of Existing Chimney, on page 10.
4. Place a bead of sealant around the inner edge at the end of the exhaust pipe (without collar / red marking).
5. Slide the exhaust pipe onto corresponding labeled collar (B) on the termination cap (E).
6. Secure the exhaust pipe to the termination cap (E) with the provided (3) self-tapping screws. Apply additional sealant around joint to ensure a proper seal (C₁).
7. Run vent system through existing chimney. Refer to 5.5.2 Run Vent - Stub Venting, on page 14.



IMPORTANT: The exhaust collar on the fireplace insert air duct is on the right side. Install the #816-CL termination cap (E) with the exhaust collar on the right side. The exhaust pipe will have a red marking.

LEGEND

A	Intake Collar - extends through bottom plate
B	Exhaust Collar - extends through middle divider plate
C₁-C₂	Sealant
D	Self-Tapping Screws - (3) total (2 shown)
E	Termination Cap

Figure 5.2, #816-CL Termination Cap (your component may look different than the one shown)

5.5 Run Vent Through Existing Chimney

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

5.5.1 Run Vent - Full Connection Venting

- Hussong Mfg. strongly suggests 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.
- Guide ropes (if used) and the flexible pipes down the existing chimney. See Figure 5.3, Chimney Vent Run.
 - Secure the chimney termination cap to the existing chimney.
 - Kozy Heat #816-CL:** Secure termination cap to existing chimney with 2 in. (50 mm) self tapping screws and anchor straps (provided) through the pilot holes, located on the sides of the termination cap.
 - Approved Vent Systems:** 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.
 - From inside the existing fireplace, carefully pull ropes (if used) or the flexible pipes down until both the exhaust pipe and the combustion air intake are into the existing fireplace firebox.

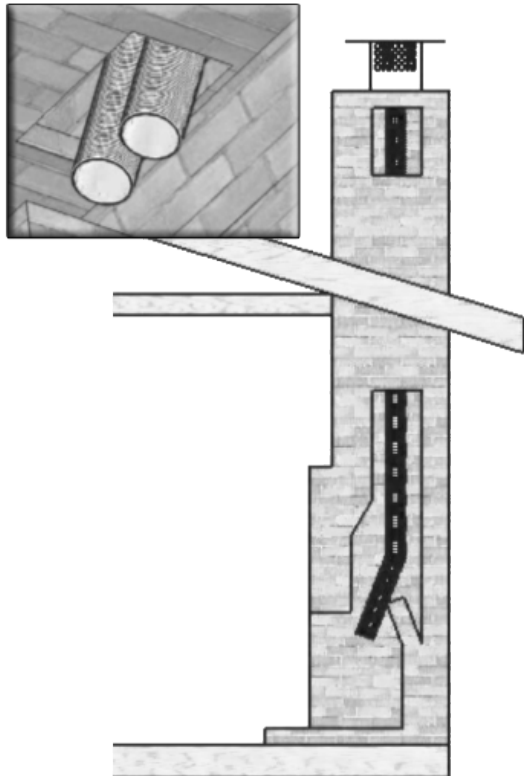


Figure 5.3, Chimney Vent Run

5.5.2 Run Vent - Stub Venting

- Guide the rope (if used) and the exhaust pipe down the existing chimney. See Figure 5.3, Chimney Vent Run.
 - Secure the chimney termination cap to the existing chimney.
 - Kozy Heat #816-CL:** Secure termination cap to existing chimney with 2 in. (50 mm) self tapping screws and anchor straps (provided) through the pilot holes, located on the sides of the termination cap.
 - Approved Vent Systems:** Apply a liberal bead of sealant (provided) around the top of existing chimney. Set termination cap into position as instructed in installation manual included with chosen vent system.
 - From inside the existing fireplace, insert a minimum of 4 ft. (1.22m) of combustion air pipe (end without collar) past the damper opening and into the existing fireplace firebox. See Figure 5.4, Stub Venting.
- Hussong Mfg. strongly suggests placing non-faced fiberglass insulation between the vent pipes and the existing chimney to prevent heat loss up the chimney, being careful not to block the combustion air intake pipe end.

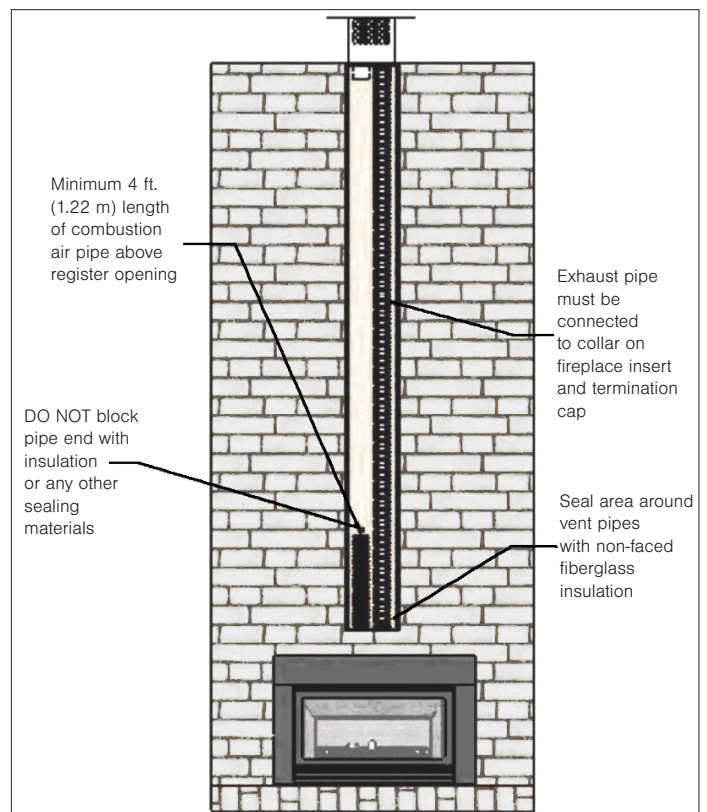
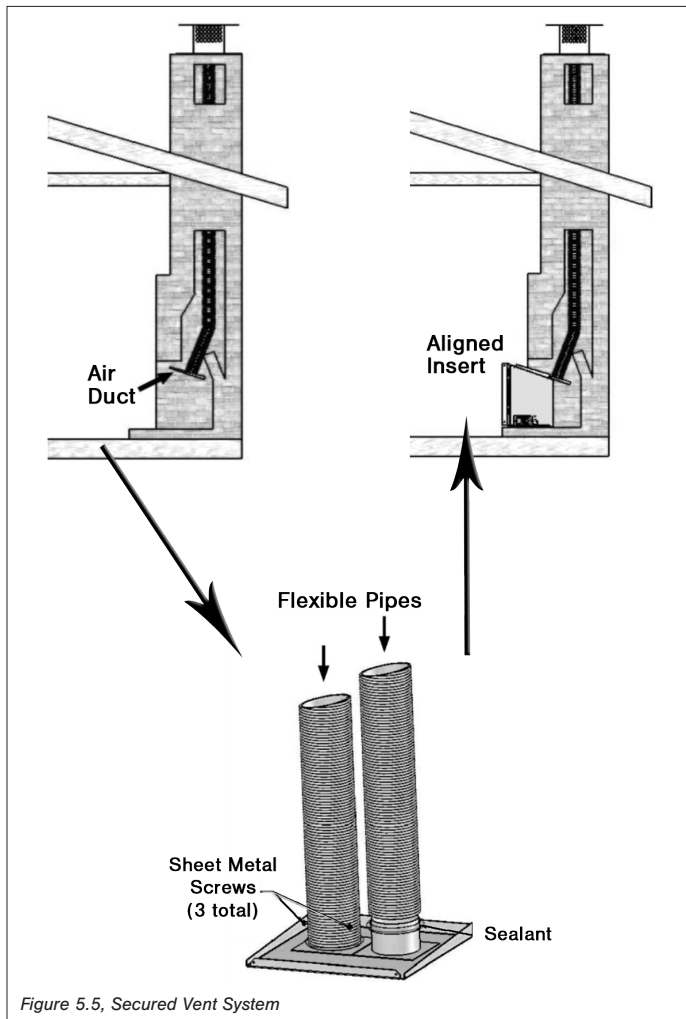


Figure 5.4, Stub Venting

5.6 Vent System Connection (applies to both venting options)

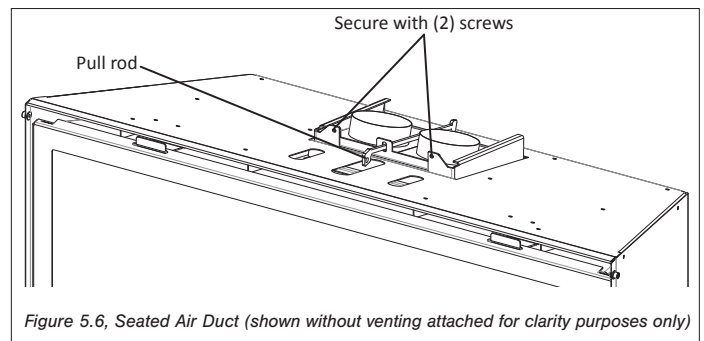
5.6.1 Secure Vent System to Air Duct

1. Place previously removed air duct (5.2 Fireplace Insert Air Duct Removal, on page 12) into existing fireplace opening. See Figure 5.5, Secured Vent System.
2. Apply a bead of sealant (provided) around exhaust pipe (red marking), then slide the exhaust pipe inside collar marked 'Exhaust' on air duct.
3. Secure the exhaust pipe to the collar on the air duct with (3) $\frac{1}{2}$ in. (13 mm) self-tapping screws, provided. Apply additional sealant around joint to ensure an air tight seal. See Figure 5.5.
4. Apply a liberal bead of sealant (provided) around the collar on the air duct. Slide combustion intake pipe over collar.
5. Secure the combustion intake pipe to the collar on the air duct with (3) $\frac{1}{2}$ in. (13 mm) self-tapping screws, provided. Apply additional sealant around joint to ensure an air tight seal.
6. Slide the insert into fireplace. See Figure 5.5.



5.6.2 Secure Air Duct to Fireplace Insert

1. Insert air duct pull handle (included) through the access slot the at top of insert, placing hook through hole in pull rod.
2. Simultaneously pull the air duct forward and push the insert backward into the fireplace opening until the air duct is seated and the insert is properly positioned.
3. Use the slots at top of fireplace to secure the air duct to the fireplace insert with (2) $\frac{1}{2}$ in. (13 mm) sheet metal screws (included in components packet). See Figure 5.6, Seated Air Duct.
4. Use the pull rod handle to slide pull rod back to its starting position. Remove pull rod handle.
5. If necessary, level the insert by threading leveling bolts (included in components packet) into nuts at the bottom of the insert - 2 each side.



6.0 GAS LINE CONNECTION

6.1 Gas Conversion (sold separately)

ATTENTION: The conversion shall be carried out in accordance with the requirements of the provincial authorities having jurisdiction and in accordance with the requirements of the ANSI Z223.1 installation code.

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

6.2 Gas Line Installation

CAUTION: Installation of the gas line must only be done by a qualified person in accordance with local building codes, if any. If not, follow ANSI Z223.1. Commonwealth of Massachusetts installations must be done by a licensed plumber or gas fitter.

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

- A listed (and Commonwealth of Massachusetts approved) ½ in. (13 mm) tee handle manual shut-off valve and flexible gas connector are to be connected to the ½ in. (13 mm) control valve inlet. If substituting for these components, please consult local codes for compliance.
- If installing this insert into minimum opening dimensions, the gas line may need to be run after placement due to space limitations. Refer to 3.2.1 Determine Length of Existing Chimney, on page 10.
- This fireplace is equipped with a ¾" (10 mm) x 18" (457 mm) long flexible gas connector and manual shut-off valve.
- Run gas line into fireplace, preferably through left or right gas line holes provided. The gas line should be run to the point of connection where the shut-off valve and flexible gas line will connect.
- Do not run gas line in a manner that would obstruct fan operation.
- For high altitude installations, consult the local gas distributor or the authority having jurisdiction for proper rating methods.

Table 6.1, Inlet Gas Supply Pressures

Fuel	Minimum Pressure	Maximum Pressure
Natural Gas	5" WC (1.25 kPa)	10.5" WC (2.62 kPa)
LP Gas	11" WC (2.74 kPa)	13" WC (3.24 kPa)

7.0 FIREPLACE INSERT SETUP

7.1 Glass Assembly

WARNING: Do not operate this fireplace with the glass removed, cracked, or broken. Replacement of the glass assembly #701-001T, should be done by a licensed or qualified service person.

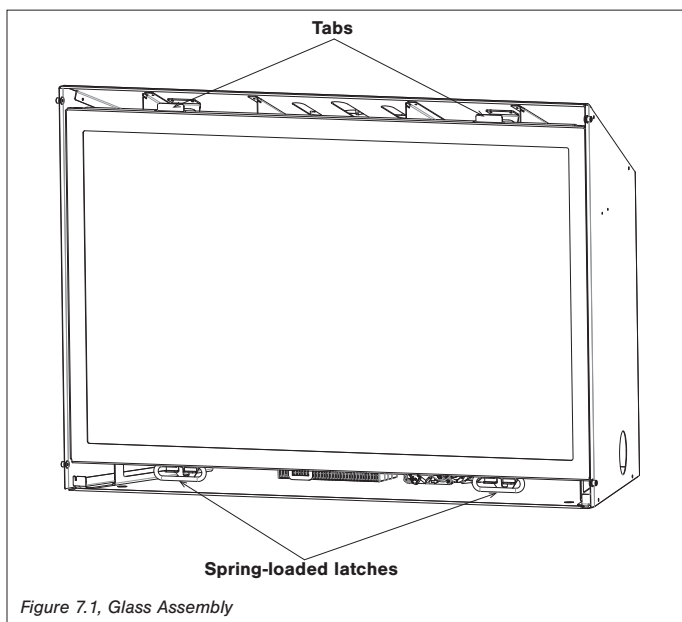
7.1.1 Remove Glass Assembly

WARNING: Do not remove the glass assembly when hot.

1. Locate (2) spring-loaded latches securing the glass assembly at the bottom of the firebox. Refer to Figure 7.1, Glass Assembly.
2. Pull the spring-loaded latches out and down to release the bottom of the glass assembly.
3. Lift glass assembly up and off of the (2) tabs located at the top of the firebox.

7.1.2 Install Glass Assembly

1. Align the slots on top of the glass assembly over the tabs at the top of the firebox while lowering the bottom of the glass assembly into position. Refer to Figure 7.1.
2. Pull the spring-loaded latches out and up to secure the bottom of glass to the bottom of the fireplace.



7.2 #CK34-R500 Rock Kit Installation

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

NOTE: Rock numbers are located on the bottom on of each rock. Follow the instructions and illustrations below.

- Remove refractory panels (if used or desired), the burner tube, and the back log plate.
- 1. Optional: Install (3) porcelain panels.
- 2. Install the (2) rock brackets on the left and right side of the burner. Refer to Figure 7.3.
- 3. Install the rock plate at the back of the firebox. Refer to Figure 7.3.
- 4. Reinstall the burner tube. Verify gasket is underneath.
- 5. Place the (8) spacers onto the pins on the burner. Tighten with the nuts included with this kit using a $\frac{5}{16}$ " nut driver.
- 6. Align the holes in on the bottom each RX10 rock with the pins on the burner, as shown in Figure 7.4. Push to seat.
- 7. Place rocks R6 and R1 over the burner tube as shown in Figure 7.4.
- 8. Place rocks R11 as shown in Figure 7.4. Distribute rockwell embers onto burner and base rocks using a stiff bristle brush.
- 9. Place the rest of the rocks as shown in Figure 7.5. Distribute additional rockwell embers once completed.

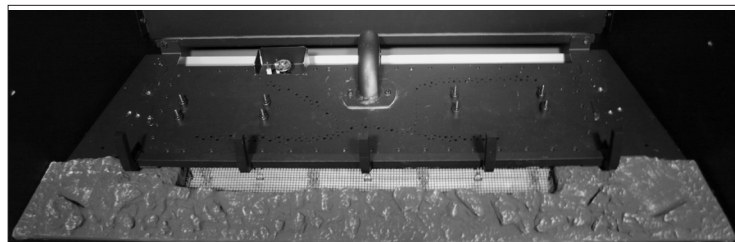


Figure 7.2, Removed Log Plate

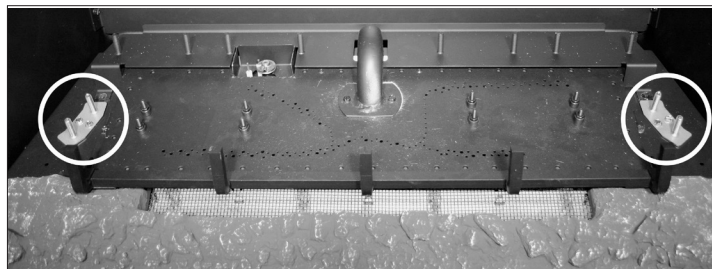


Figure 7.3, Installed Rock Plate and Brackets

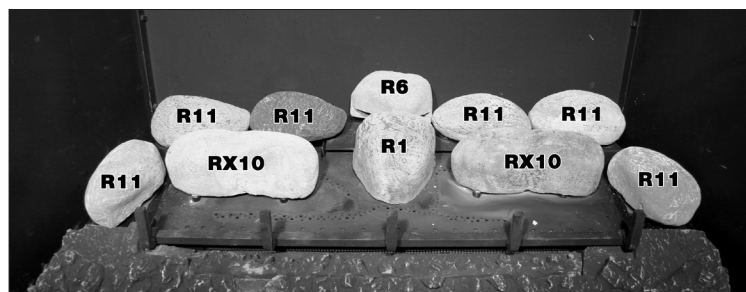


Figure 7.4, Rock Set Installation

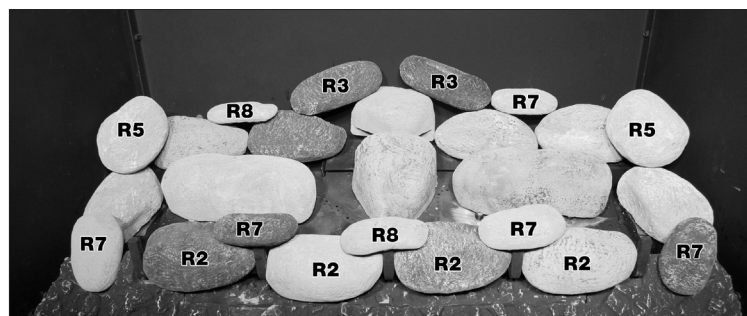


Figure 7.5, Completed Installation

7.3 Control Board Removal and Installation

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

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

7.3.1 Control Board Removal

1. Turn the fireplace off.
2. Shut off the main gas line to the appliance.
3. Disconnect all components from electrical outlet.
4. Remove safety barrier, glass assembly, and logs.
5. Disconnect the gas line flex tube from manual shut-off valve.
6. Disconnect all wiring harnesses attached to gas valve.
7. Remove the burner assembly. (Secured with [2] screws).
8. Remove refractory panels.
9. Remove burner heat shield (secured at back corners - 2 screws).
10. Remove secondary burner heat shield resting on control board.
11. Remove (10) screws securing control board. Remove the control board.

7.3.2 Control Board Installation

1. Place the control board in firebox, aligning the holes in board with mounting studs at the bottom of the firebox. **VERIFY SEALING GASKET IS IN PLACE ON THE BOTTOM OF THE FIREBOX.**
2. Secure the control board with screws previously removed.
3. Reinstall secondary burner heat shield by placing it on top of the control board.
4. Reinstall burner heat shield. Position the cut-outs over pilot assembly and burner orifice, centering from side-to-side and as far back as possible.
5. Secure the burner heat shield with screws previously removed.
6. Reinstall refractory panels.
7. Reinstall burner assembly. Verify the burner tube is positioned over burner orifice. Secure with screws previously removed.
8. Reinstall rock kit.
9. Reconnect the gas line flex tube to the manual shut-off valve.
10. Reconnect all wiring harnesses to gas valve.
11. Plug all components into the electrical outlet.
12. Reinstall glass assembly and safety barrier.
13. Turn on the main gas line feeding the appliance.
14. Verify proper log placement, operation of fireplace, and any electrical components.

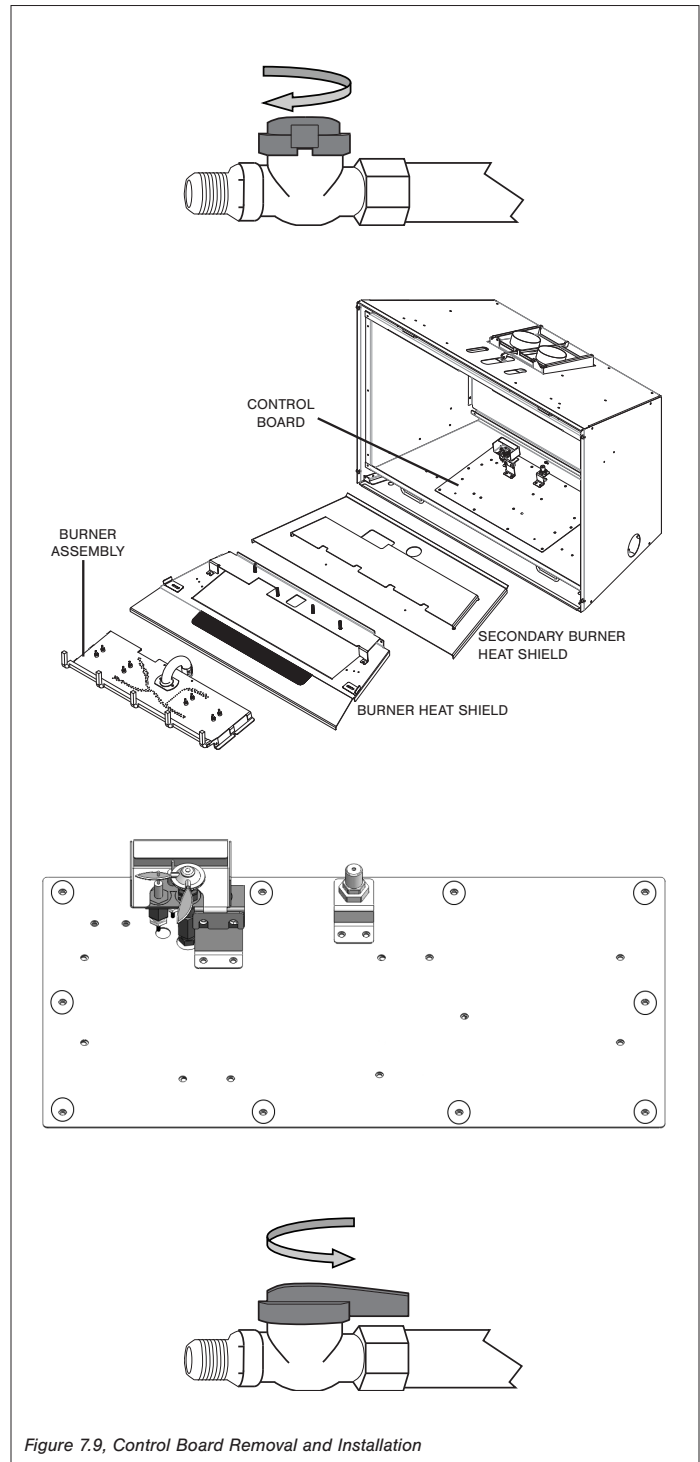


Figure 7.9, Control Board Removal and Installation

8.0 ELECTRICAL INFORMATION

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

8.1 Electrical Specifications

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

8.2 Wiring Requirements

- The IFC System Module requires 120V of electricity / batteries to operate.
- Using the battery back-up will operate the burner only.
- Optional fan and light components will not function on battery back up power.

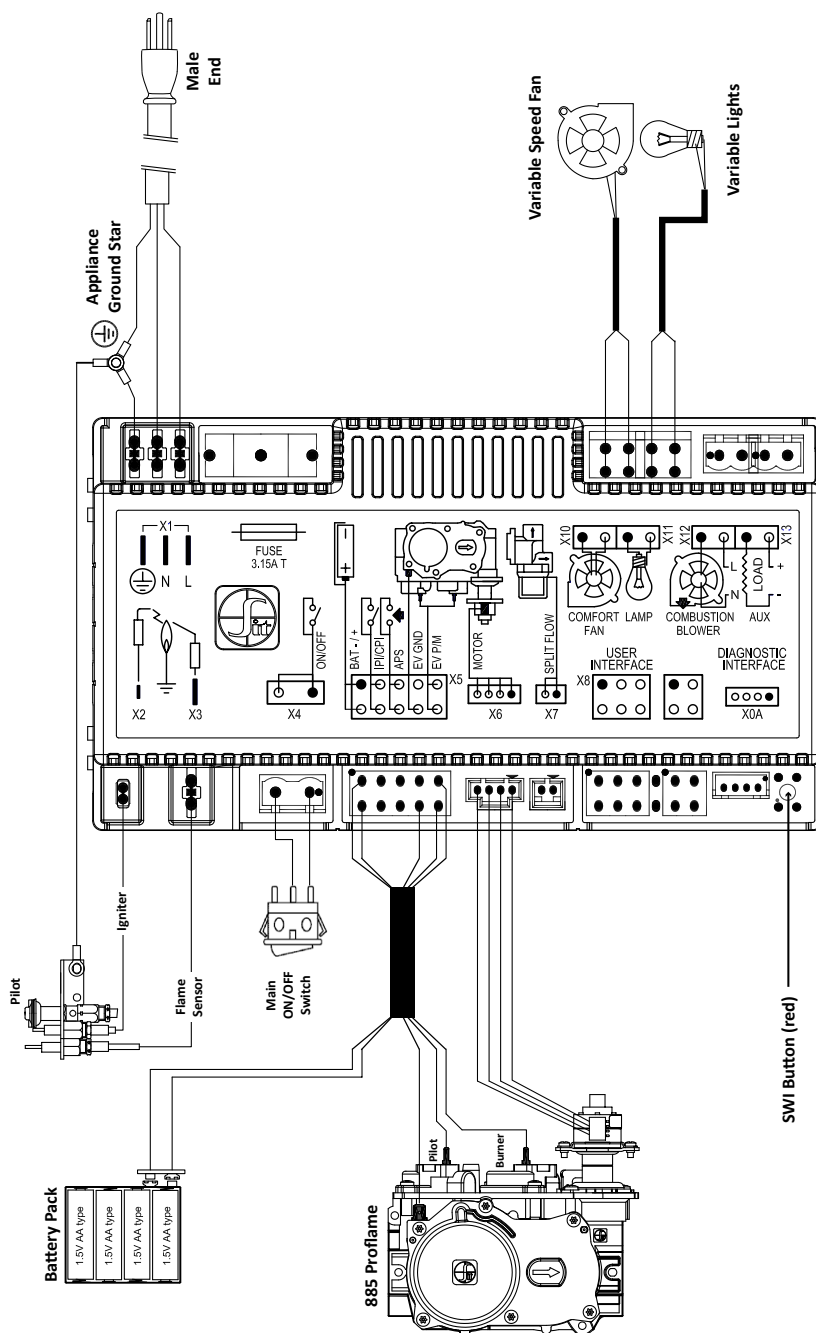


Figure 8.1, Wiring Schematics

8.3 CK34-LKT Optional Light Kit Installation

ATTENTION: If converting to LP (propane) gas, complete the conversion before installing this light kit. Follow instructions included with the gas conversion kit.

CAUTION: Disconnect all electric power from the fireplace insert before performing any of these tasks.

NOTE: To avoid damage and prolong the life of the halogen bulbs, never touch with bare hands. Always use a soft cloth when handling.

Remove the following items from the fireplace insert:

- Safety barrier and glass frame assembly
- Log set or rock set
- Refractory panels (if installed)
- Ember panel
- Burner assembly

1. Remove the first access cover held by (2) screws.
2. Remove the secondary heat shield.
3. Remove and save the (1) screw securing the second access cover. Secure control board underneath using previously removed screw.
4. Install the rubber grommet then thread the lead wires on the light bar through the grommet.
5. Connect the light wires to the light lead wires on the IFC module. Apply high temperature sealant around the grommet and wires to create an air-tight seal.
6. Install (4) halogen bulbs into the lamp bases. Check bulbs turning the lights on by remote control. Unplug the IFC module before continuing.
7. Reinstall the secondary heat shield.
8. Reinstall the burner assembly previously removed.
9. Reinstall the refractory panels (if used) and the ember panel.
10. Place glass media into the cavity in front of the burner assembly.
11. Reinstall log set or rock set. Use a steel bristle or stiff bristle brush to distribute rock wool embers onto the logs and burner.
12. Reinstall the glass frame assembly and the safety barrier.

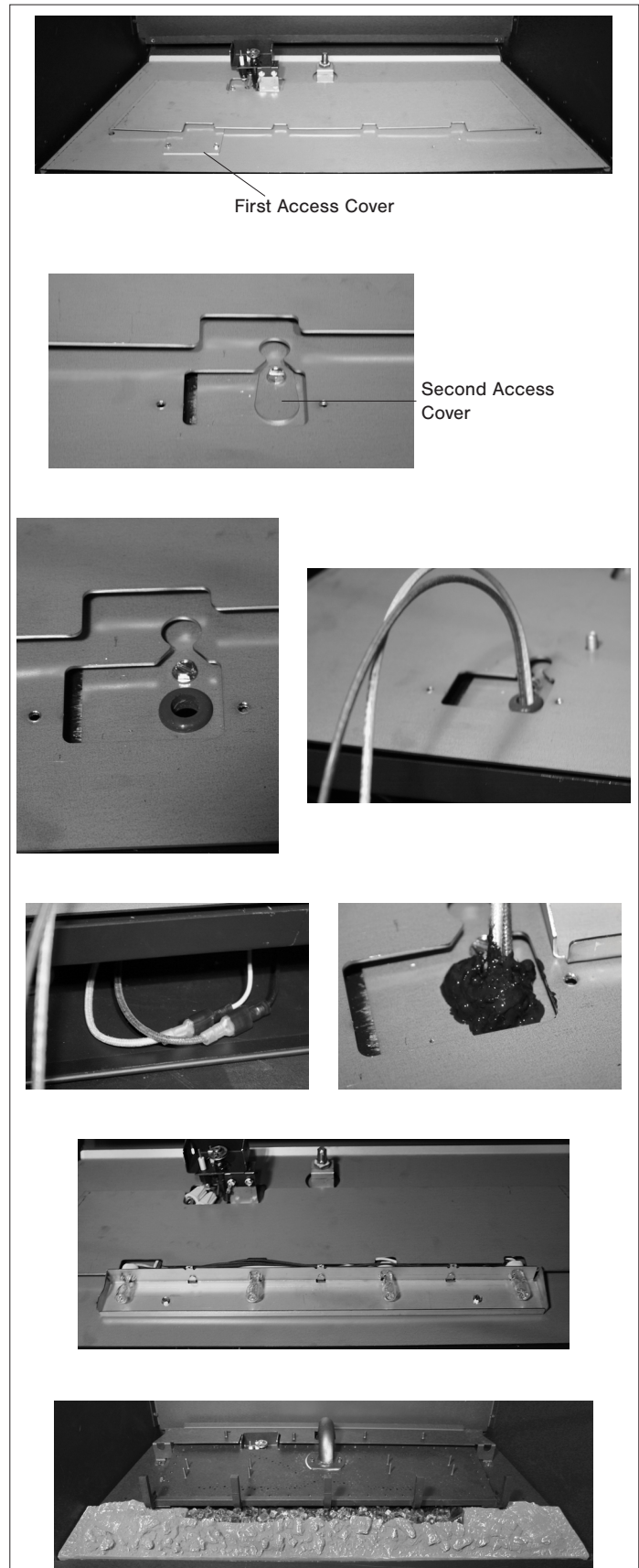


Figure 8.2, CK34-LKT Installation

9.0 OPERATING INSTRUCTIONS

FOR YOUR SAFETY READ BEFORE OPERATING

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

- A. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light pilot by hand.
- B. 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

WARNING

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

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

Keep area around the appliance clear of combustible materials, gasoline, and other flammable liquids.

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. 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.

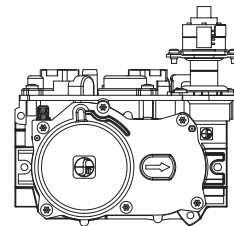
CAUTION

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


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

OPERATING INSTRUCTIONS

1. STOP! Read all safety information above on this page.
2. Turn off all electric power to the appliance.
3. Press the wireless remote OFF button.
4. Open the lower louver to access the gas control manual valve.
5. Turn the manual valve clockwise  to OFF position.
6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this page. If you don't smell gas, go to the next step.
7. Turn the manual valve counterclockwise  to ON position.
8. Close the lower louver.
9. Turn on all electrical power to the appliance.
10. Press the wireless remote ON button.
11. If the appliance will not operate, follow the instructions "TO TURN OFF GAS TO APPLIANCE" and call your service technician or the gas supplier.



TO TURN GAS OFF TO APPLIANCE

1. Press the wireless remote OFF button.
2. Turn off all electric power to the appliance if service is to be performed.
3. Open the lower louver to access the gas control manual valve.
4. Turn the manual valve clockwise  to OFF position.

NOTE

When this fireplace is initially lit, condensation will appear on the glass. This is normal in all gas fireplaces and will disappear after several minutes. A paint smell will occur during the first few hours of burning. It is recommended to leave the fan off during this period to help speed the paint curing process. This fireplace may produce noises of varying degree as it heats and cools due to metal expansion and contraction. This is normal, and does not affect the performance or longevity of the fireplace.

9.1 Initialize the Control System for the First Time

Remove all packaging and combustible material from the firebox before initializing the control system.

- Set the main ON/OFF rocker switch to OFF position.
- Install 4 AA batteries (included in components packet) in the battery backup holder with correct polarity.
- Connect the IFC module to an AC power supply.
- Install 3 AAA batteries (included in components packet) in the remote control battery bay, located at the base of remote control. Note polarity of the batteries and insert them as indicated by silkscreen (+/-) on the battery cover or holder.

NOTE: Performing the next step will initiate pilot start-up in manual mode, where the pilot igniter will spark repeatedly. The pilot will ignite if gas is supplied to the fireplace.

1. Press the red SW1 button on the IFC module.
2. The control module will BEEP (3) times, and/or illuminate an amber LED, indicating it is ready to synchronize with the remote control.
3. Within (5) seconds, push the remote control ON/OFF button. The IFC module will BEEP (4) times to indicate the remote control's command is accepted, and is set to the particular code of that remote control.
4. Press the remote control ON/OFF button again. The pilot will shut down indicating the remote has taken over. The system is now initialized.
5. Set the main ON/OFF rocker switch to ON position to operate the fireplace with the remote control.

If pilot does not ignite and the red LEDs indicator blinks (2) times in intervals, contact your dealer. This is a pilot flame error condition.

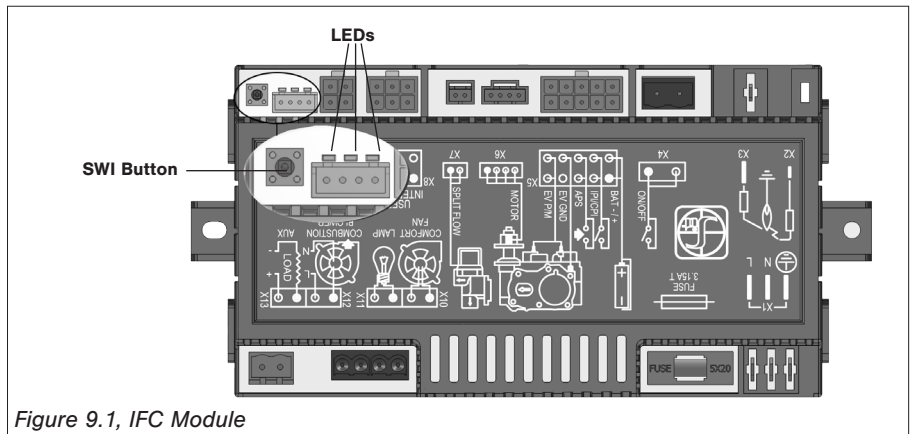


Figure 9.1, IFC Module

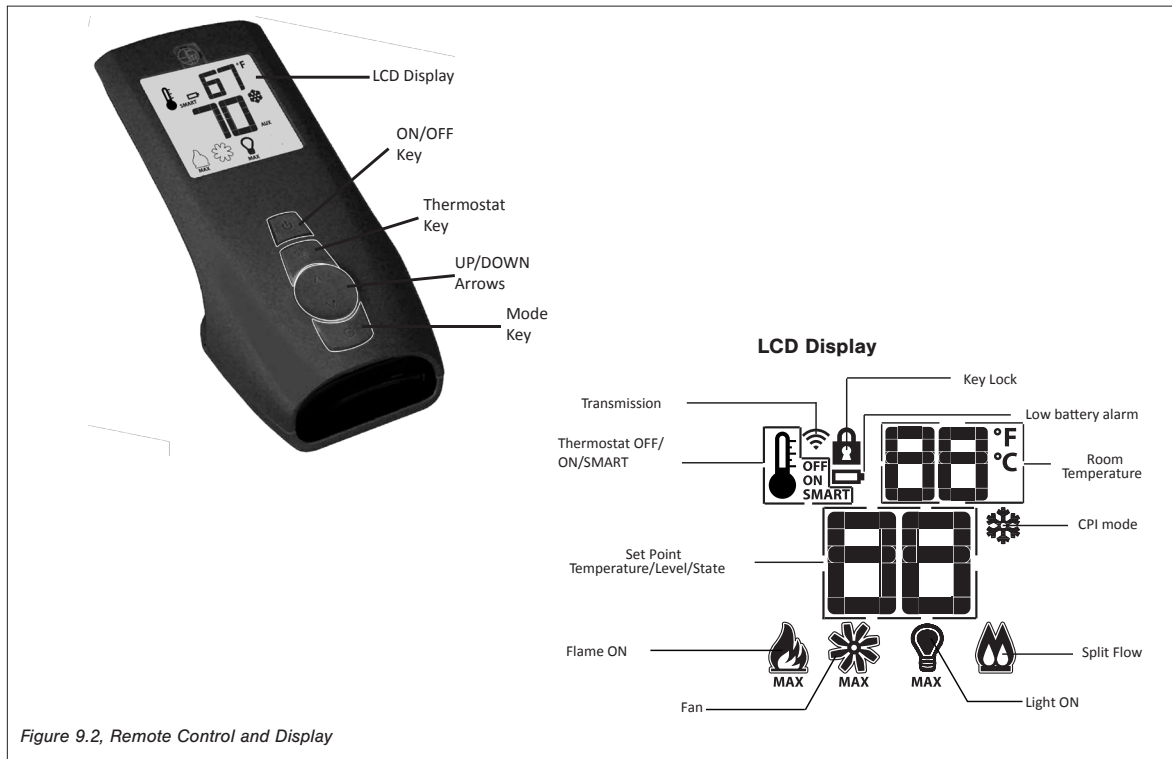


Figure 9.2, Remote Control and Display

9.2 Temperature Display

With the system in OFF position, press thermostat key and mode key at the same time to change from degrees °F to degrees °C.

Look at the LCD screen on the remote control to verify °C or °F is visible on the right side of the Room Temperature display.

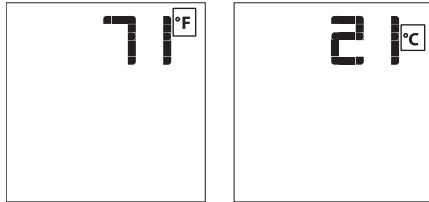


Figure 9.3

9.3 Key Lock

This function locks the keys to avoid unsupervised operation. A lock icon will appear on the LCD display screen once activated.

To Activate: Press the mode key and up key at same time.

To De-activate: Press the mode key and up key at same time.

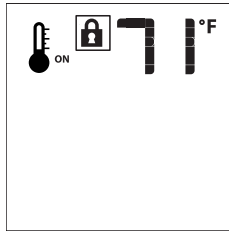


Figure 9.4

9.4 Turn ON/OFF the Appliance

9.4.1 Turn ON the Appliance

1. With the system in OFF position, press the remote control ON/OFF key to turn ON the appliance. A single 'beep' from the IFC module will confirm reception of the command.
2. The remote control LCD screen will show all active icons and the IFC module will be commanded to start the ignition sequence.

9.4.2 Turn OFF the Appliance

1. With the system in ON position, press the remote control ON/OFF key to turn OFF the appliance. A single 'beep' from the IFC module will confirm reception of the command.
2. The remote control LCD screen will only show the room temperature and its icon, and the IFC module will be commanded to turn off the appliance burner.

9.5 Remote Control Flame Adjustment

The control system has six (6) flame levels.

1. With system in ON position and the flame level at maximum, press the down arrow key once to reduce flame height by one step until flame is turned off.
2. Press the up arrow key once to increase flame height by one step. If the up arrow key is pressed while system is on but the flame is off, the flame will come on in 'HI' position. A single 'beep' will confirm reception of the command.

When the smart thermostat operation is activated, manual flame height adjustment is disabled.

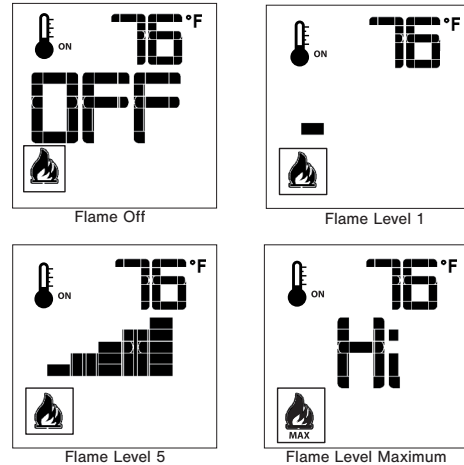


Figure 9.5

9.6 Remote Control Thermostat Operation

9.6.1 Room Thermostat

The remote control can operate as a room thermostat. The thermostat can be set to a desired temperature to control a room's comfort level. To activate this function,

1. Press the thermostat key. The LCD display will change to show the room thermostat is ON, and will display the set temperature and temperature bulb graphic.
2. To adjust the set temperature, press the up or down arrow keys until the desired set temperature is displayed on the LCD screen.

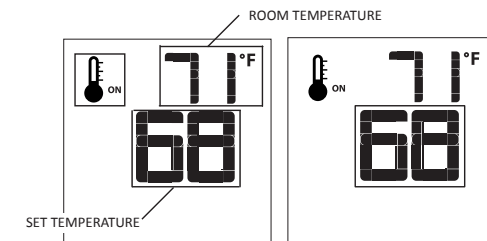


Figure 9.6

9.6.2 Smart Thermostat

The smart thermostat function adjusts the flame height based on the set temperature and the actual room temperature. As the room temperature gets closer to the set point, the smart function will automatically adjust the flame down. To activate this function,

1. Press the thermostat key until the word 'SMART' appears on the right side of the temperature bulb graphic.
2. To adjust set temperature, press the up or down arrow keys until the desired set temperature is displayed on the LCD screen.

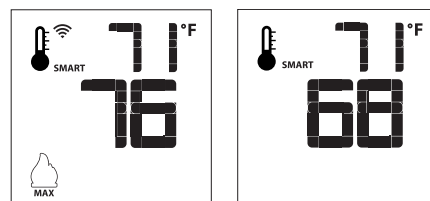


Figure 9.7

9.6.3 Deactivate Remote Control Thermostat Operation

The thermostat operation function on the remote control can be deactivated. The remote control will still operate the main burner on and off, and function flame, fan, and light modulation. To deactivate this function,

1. Verify all (3) AAA type batteries are installed in the remote control.
2. Remove one AAA battery.
3. While re-inserting the AAA battery, push and hold down the thermostat key. The temperature bulb graphic will not appear on the remote control LCD screen.

To re-activate thermostat operation, follow the same button sequence procedure described above. The temperature bulb graphic will reappear on the remote control LCD screen.

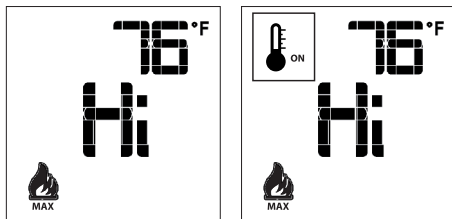


Figure 9.8

9.7 Continuous Pilot / Intermittent Pilot (IPI/CPI) Selection

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 that allows the main burner to turn on with less air-flow disruption.

1. A snowflake icon is visible during the setup of either IPI or CPI modes when the system is OFF. To select the preferred pilot ignition feature,
2. With system in OFF position, press the mode key to index to CPI mode icon.
3. Press the up arrow key to activate CPI.
4. Press the down arrow key to return to IPI. A single 'beep' will confirm the reception of the command.

When the system is ON,

- IPI mode - the snowflake icon is not visible on LCD screen.
- CPI mode - the snowflake icon is visible on LCD screen.

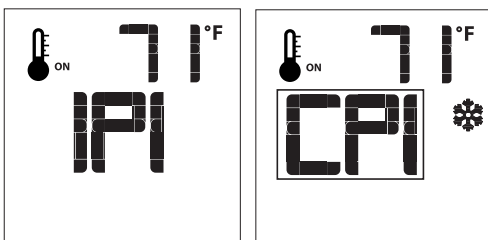


Figure 9.9

9.8 Fan Speed Control

Fan speed can be adjusted through six (6) speeds. A single 'beep' will confirm reception of the command. To activate this function,

- Press the mode key to index to the fan control icon.
- Press the up or down arrow keys to turn on, off, or to adjust fan speed.

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

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

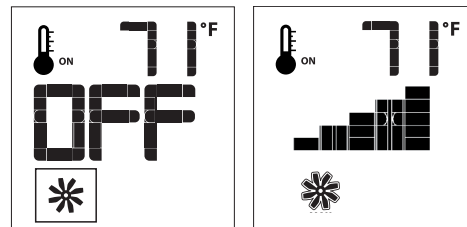


Figure 9.10

9.9 Accent Light Kit

The light intensity can be adjusted through six (6) levels. A single 'beep' will confirm reception of the command.

1. Press the mode key to index to light icon.
2. Press the up or down arrow keys to adjust the intensity level.

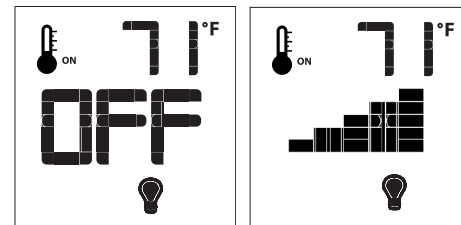


Figure 9.11

9.10 Low Battery Detection

9.10.1 Remote Control

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

When the remote control batteries are low, a battery icon will appear on the LCD display before all battery power is lost.

When batteries are replaced, this icon will disappear.

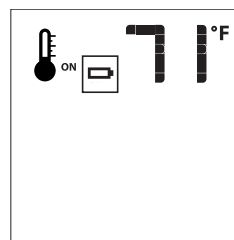


Figure 9.12

9.10.2 Backup Battery Pack

The backup battery pack is used when electrical power to the appliance is interrupted. The lifespan of backup batteries depends on various factors including battery quality, number of ignitions, changes to room thermostat set point, etc.

When backup batteries are low, a double-beep will be emitted from the IFC module when it receives an ON/OFF command from the remote control.

This is an alert for a low battery condition of the backup batteries and after this double-beep warning, no commands will be accepted until batteries are replaced.

When batteries are replaced, a beep will be emitted from the IFC module as soon as powered.

9.11 Reset the System for Manual Operation

- Manual operation of the control system will only operate the burner on 'HI.'
- Put the ON/OFF rocker switch into OFF position (located on the control module housing).
- Press the red SW1 button on the IFC module until the module emits three (3) BEEPS and an amber LED is illuminated. This indicates the IFC module is ready to synchronize with the remote control.
- Within five (5) seconds, press the red SW1 button on the IFC module again. The pilot will automatically light.
- Turn the main burner ON by pressing ON/OFF rocker switch to ON position.
- Turn the main burner OFF by pressing ON/OFF rocker switch to OFF position. Pilot will remain lit even if burner is turned off (provided CPI mode is turned ON).

9.12 IFC Module Ignition and Reset Information

9.12.1 Automatic Safety Restart

This system will execute an automatic turn OFF command within (24) hours of a continued pilot flame ignition. This allows the system to verify correct safety functions.

After the turn OFF sequence is completed, the IFC module will re-execute the latest command.

9.12.2 IFC Module Ignition Sequence

NOTE: The location of the LED indicator on the IFC module is determined by fireplace model and design. The red LED indicator also may be located in the component housing behind the lower grill, or behind the access panel on the left side.

First Attempt

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

Second Attempt

- If there is no flame ignition (rectification) during the first try for ignition, the IFC module will stop sparking for approximately (35) seconds.

- After this wait time, the IFC module will start the second try for ignition by sparking for approximately (60) seconds.
- If ignition is successful on third ignition attempt, there will be a (60) second delay before the main burner lights.

Third Attempt

If after this third attempt there is still no positive ignition, the IFC module will go into LOCK OUT and the red LED will blink (3) times in intervals until the system is reset. Verify the gas supply is turned on and the sensor is not shorted.

In Summary:

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

9.12.3 Reset IFC Module After Lockout

Reset Using ON/OFF Rocker Switch on Control Module:

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

Reset Using Remote Control ON/OFF Key:

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

Reset By Cycling Flame:

- In remote control flame adjustment, use the down arrow key to reduce flame to off (indicated by OFF displayed on the LCD screen on the remote control).
- Wait approximately (2) seconds and press the up arrow key. The ignition sequence will start.

10.0 ADJUSTMENT

10.1 Pressure Testing

NOTE: The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of ½ psi (3.5 kPa).

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

10.1.1 Inlet Pressure Test

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

IMPORTANT: If the inlet pressure reading is too high or too low, contact the gas company. Only a qualified gas service technician should adjust incoming gas pressure. A LOW PRESSURE READING CAN CAUSE DELAYED IGNITION.

1. Loosen the inlet (IN) pressure tap by turning screw counter-clockwise. See (A) in Figure 10.1, Gas Valve Pressure Check Taps.
2. Attach manometer using a ¼ in. (6 mm) I.D. hose.
3. Light pilot and burner. Check pressure to ensure it is between the minimum and maximum recommended pressure settings.
4. Turn off burner and pilot.
5. Disconnect hose and tighten the inlet (IN) pressure tap by turning screw clockwise. Screw should be snug. Do not over tighten.
6. Relight pilot and burner. Then reattach manometer to the inlet pressure tap (A) to verify the tap is completely sealed. Manometer should read no pressure.

10.1.2 Manifold Pressure Test

1. Light pilot.
2. Loosen manifold (OUT) pressure tap by turning screw counter-clockwise. See (B) in Figure 11.1, Gas Valve Pressure Check Taps.
3. Attach manometer to pressure tap using a ¼ in. (6 mm) I.D. hose.
4. Light burner. Check manometer reading.
5. Turn burner and pilot off.
6. Disconnect manometer hose and tighten the manifold (OUT) pressure tap by turning screw clockwise. Screw should be snug. Do not over tighten.
7. Attach the manometer to the manifold pressure tap (B) to verify it is completely sealed. The manometer should read no pressure when pilot and burner are on.

Table 10.1, Incoming Pressures

Fuel	Natural Gas	LP Gas
Gas Supply	Min - Max	Min - Max
Inlet Pressure Tap (A)	5" - 10.5" WC (1.25 - 2.62 kPa)	12" - 13" WC (2.99 - 3.24 kPa)

Table 10.2, Outgoing Pressures

Fuel	Natural Gas	LP Gas
Gas Supply	Low - High	Low - High
Manifold Pressure Tap (B)	1.1" - 3.8" WC (.27 - .95 kPa)	2.9" - 11" WC (.72 - 2.74 kPa)

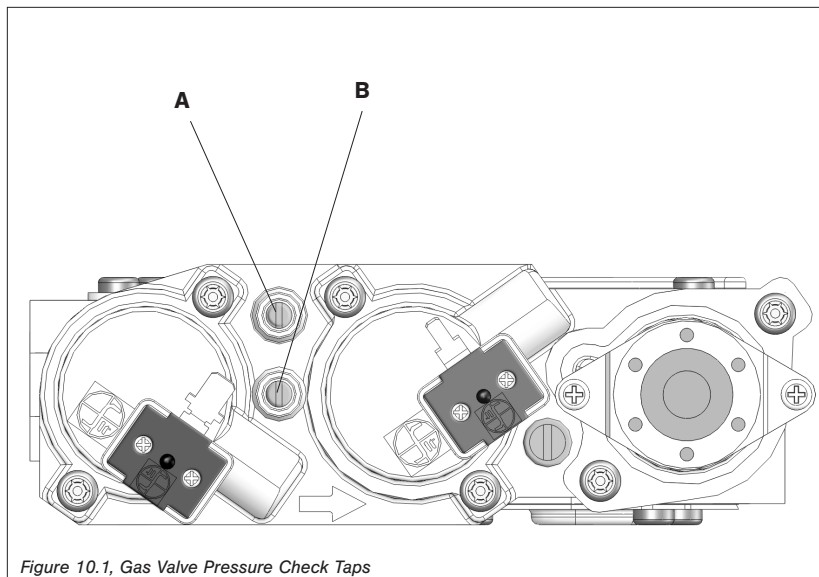


Figure 10.1, Gas Valve Pressure Check Taps

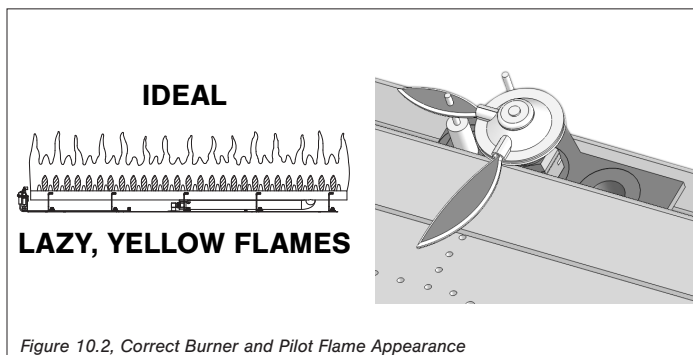
10.2 Burner Tube Venturi Adjustment

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

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



10.2.2 Venturi Adjustment

WARNING: Venturi adjustment should only be performed by a qualified personal service technician.

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

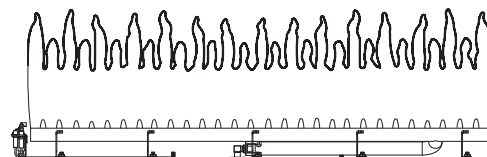
1. Remove the safety barrier and glass frame assembly.
2. Remove log set.
3. Remove burner assembly.
4. Loosen burner venturi screw and make the adjustment, then re-tighten screw.
5. Reinstall burner, making sure venturi is positioned over burner orifice. Re-install burner venturi housing.
6. Reinstall all components previously removed.
7. Light fireplace. Wait at least 15 minutes before determining if any further adjustments are necessary.

Table 10.3, Factory Set Air Shutter Opening

NG	1/8" (3 mm) OPEN
LPG	5/8" (16 mm) OPEN

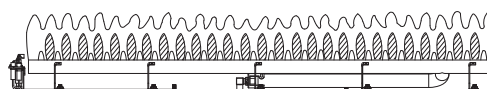
10.2.3 Flame Appearance and Adjustment

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



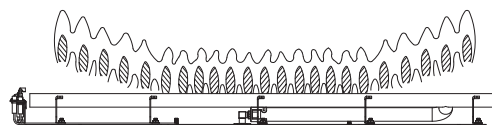
**DARK, ORANGE FLAME
WITH BLACK TIPS**

- Cause:** Venturi closed too far
Excessive Burner media
- Solution:** Open venturi slightly
Remove burner media as necessary



SHORT, BLUE FLAMES

- Cause:** Venturi open too far
- Solution:** Close setting slightly



LIFTING (GHOSTING) FLAMES

- Cause:** Improper Venting
Gas Pressure too high
Venturi closed too far
- Solution:** Check the vent pipe and vent cap
Check manometer settings
Open venturi setting slightly

11.0 TROUBLESHOOTING

ATTENTION: Troubleshooting must be performed by a qualified technician.

Before proceeding with the steps in the following troubleshooting guide,

- Verify proper 120VAC power supply to the control module.
- Verify the control module battery pack and the remote control batteries are fresh and installed with correct polarity.
- Verify all connections between the wire harnesses and the system components are proper and positive.
- Verify the communication link is established between the remote control and the IFC module.
- Verify inlet pressure meets the recommended inlet pressure. If necessary, adjust line pressure regulator.

Issue	Cause	Solution
Pilot will not light	Electrical power interrupted or disconnected	Restore electrical power to fireplace or use battery back-up.
	Wiring disconnection	Ensure batteries are fully charged if using battery back-up as power source.
	Gas Supply turned off	Use wiring schematic in this manual to determine that all wiring connections are secure and correct. Check remote shut-off valves from the fireplace. Usually there is a valve near the main gas line. There may be more than (1) valve between the fireplace and the main gas line.
Pilot will not stay lit	No LP gas in tank	Check LP (propane) tank. Refill if necessary.
	Low gas pressure	Consult a plumber or a gas supplier. Can be caused by situations such as a bent line, too narrow diameter of pipe, or a low line pressure.
	Pilot flame not making contact with the flame rectification sensor on the pilot assembly	Adjust the pilot flame adjustment screw on the gas valve as necessary.
	Pilot adjustment screw not sealed	Seal pilot adjustment screw. Do not over-tighten.
Pilot flame always on or will not extinguish	Control system set to CPI mode	Set control system to IPI mode.
Main burner flame will not light	ON/OFF rocker switch in OFF position	Switch rocker to ON position.
	Gas supply turned off	Check for multiple shut-offs in the supply line. Verify gas supply is turned on.
	Low gas supply	Consult with plumber or gas supplier. Check LP (propane) tank. Refill if necessary.
	Wiring disconnection or improper wiring	Check for faulty or incorrect wiring.
	Plugged main burner orifice	Remove blockage.
	Pilot flame	Verify the pilot flame is properly directed to ignite the burner. See pilot flame troubleshooting above.
	Remote control not working properly	Replace batteries.
	No call for heat	Verify remote control is powered ON and thermostat operation is turned OFF.

Issue	Cause	Solution
Pilot and burner extinguish while in operation	No LP gas in tank	Check LP (propane) tank. Refill if necessary.
	Incorrect glass assembly installation	Refer to 7.1 Glass Assembly, on page 17.
	Incorrect vent cap installation	Adjust if necessary
	Vent cap blockage	Remove debris if necessary
	Inner vent pipe leaking exhaust gases back into the firebox	Check for leaks and repair if necessary.
	Excessive draft	An exhaust restrictor may be necessary into the exhaust pipe outlet of the fireplace.
Soot appears on glass	Improper log placement	Refer to Section 7.2, #CK34-500 Log Set Installation on page 18.
	Improper venturi setting	Venturi may need to be opened slightly to allow more air into the gas mix. Refer to 10.2 Burner Tube Venturi Adjustment, on page 28.
	Incorrect vent cap installation	Adjust if necessary
	Vent cap blockage	Remove debris if necessary
Flame burns blue and lifts off burner	Improper venturi setting	Venturi may need to be opened slightly to allow more air into the gas mix. Refer to 10.2 Burner Tube Venturi Adjustment, on page 28.
	Incorrect vent cap installation	Adjust if necessary
	Blockage or leakage of the vent system.	Check the vent pipe for leaks and the vent cap for debris. Repair vent pipe or remove debris from vent cap if necessary.
No reaction to command	Battery pack batteries or remote control batteries low.	Replace batteries
	No communication between remote control and IFC module	Reprogram remote control to IFC module. Refer to 9.1 Initialize the Control System for the First Time, on page 23.
	A maximum number of failed ignitions or flame restorations has been reached	Reset IFC module

12.0 MAINTENANCE

ATTENTION: Installation and repair shall only be done by a qualified service person. The appliance should be inspected before use by a qualified service person. This appliance is required to be inspected at least once a year by a professional service person.

IMPORTANT: The compartment below the firebox must be cleaned at least once a year. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that the control compartments and circulation air passageways of the appliance be kept clean. Use a vacuum to clean all components.

12.1 Burner and Pilot System

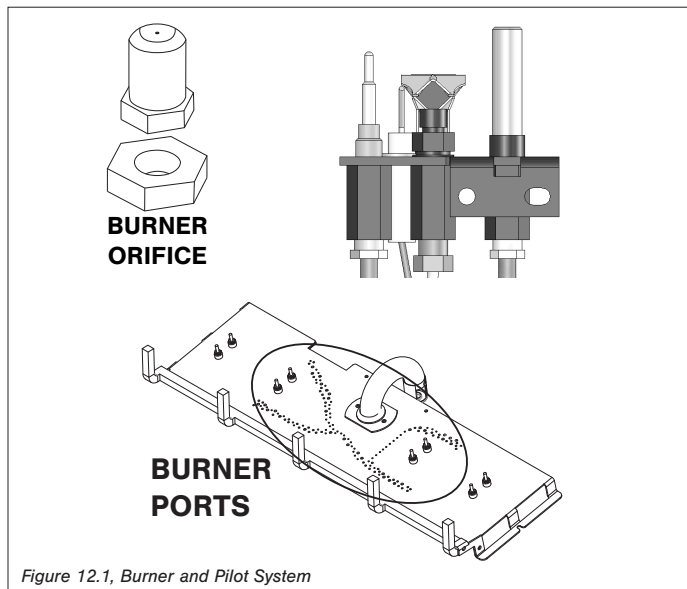
The burner assembly may be removed for easier access. Refer to 7.4 Control Board Removal and Installation, on page 19.

Performed by: Qualified Service Person

Frequency: Annually

Action:

- Vacuum all components of the burner system
- Visually check burner ports for blockage, especially near the pilot
- Visually check pilot light and burner flame pattern when in operation. Flames should be steady, not lifting or floating.



12.2 Fans

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

Performed by: Qualified Service Person

Frequency: Every 6 months

Action:

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

12.3 Vent System

NOTE: If the vent-air intake system is disassembled for any reason, reinstall per instructions provided with installation.

Performed by: Qualified Service Person

Frequency: Annually

Action:

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

12.4 Glass Assembly

WARNING: Do not operate appliance with the glass assembly removed, cracked, or broken. Use protective gloves to handle any broken or damaged glass assembly components. DO NOT SUBSTITUTE MATERIALS.

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

Performed by: Homeowner

Frequency: Annually

Action:

- Prepare a work area large enough to accommodate the glass assembly on a flat, stable surface.
- Remove safety screen and glass frame assembly.
- Clean glass with a soft cloth and a non-abrasive cleaner.
- Reinstall glass assembly and safety screen.
- Any safety screen, guard, or barrier removed for servicing the appliance must be replaced prior to operating the appliance.

Performed by: Qualified Service Person

Frequency: Annually

Action:

- Inspect the glass for cracks, scratches, and nicks.
- Verify the glass assembly is properly intact and not damaged.
- Replace the glass and the assembly #701-001T as necessary.
- Only Hussong Mfg. Co., Inc. will supply the replacement of glass assembly as a complete unit.

13.0 REPLACEMENT PARTS LIST

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

CONTROL BOARD AND PARTS			
Control Board - NG	CK34L-150	Pilot Orifice - LPG	700-168
Control Board - LPG	CK34L-151	Valve Step Motor - NG	700-504
S.I.T. IPI Gas Valve - NG	700-567	Valve Step Motor - LPG	700-504-1
S.I.T. IPI Gas Valve - LPG	700-567-1	18 in. Flexible Gas Line - Black	700-213B
Proflame 2 IFC Board	700-652	Flexible Gas Line - Valve to Burner Connection	700-226
IFC Wire Harness Assembly	700-653	NG Burner Orifice #38	700-238
Pilot Assembly - NG	700-551	LPG Burner Orifice #52	700-252
Pilot Assembly - LPG	700-551-1	Conversion Kit - NG	NCK-CK34L-S
Transmitter (Remote Control)	700-408	Conversion Kit - LPG	LCK-CK34L-S
Pilot Orifice - NG	700-094	Burner Assembly	CK34L-135

GLASS AND GLASS GASKET	
32 ¹ / ₈ " x 20 ³ / ₁₆ " Glass with tadpole gasket	701-001T
Tadpole Glass Gasket	900-006

REFRACTORY PANELS	
(3 piece) Refractory Panel Set	CK34-I900
Back Refractory Panel	CK34-I900B
Left Side Refractory Panel	CK34-I900L
Right Side Refractory Panel	CK34-I900R

ROCK SET	
25 Piece Rock Set	CK34-R500
Rock Plate	CK34-R35
R1 Rock	R1
R2 Rock	R2
R3 Rock	R3
R5 Rock	R5
R6 Rock	R6
R7 Rock	R7
R8 Rock	R8
RX10 Rock	RX10
RX11 Rock	RX11

ENAMEL PANELS	
Enamel Firebox Panels (Black)	CK34-B900

SAFETY BARRIERS	
Beveled Screen Front	CK34-BSF
Convex Screen Front	CK34-CXFS
Prairie Screen Front	CK34-PSF
Rectangular Screen Front	CK34-RSF
Arched Mission Screen Front	CK34A-MSF
Arched Prairie Screen Front	CK34A-PSF
Arched Screen Front	CK34A-SF

Hussong Manufacturing Co., Inc.
P.O. Box 577
204 Industrial Park Drive
Lakefield, MN 56150-0577
CSK-34 R

LIMITED WARRANTY

Kozy Heat Limited 10 Year Warranty

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

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

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

Year 1

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

Years 2 through 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 and 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 underwater.
9. Hussong Manufacturing Co., Inc. must be notified by the dealer the fireplace was purchased from or a qualified installer/service technician of the defect.
10. Annual service of the fireplace as required in the installation manual, is performed by a qualified installer/service technician. (Copies of such service records may be required to claim a warranty).
11. All previous warranty/service has been performed by a qualified installer or service technician. (Copies of such service records may be required to claim a warranty).

LIFETIME WARRANTY

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

Lifetime Warranty Coverage

LIFETIME WARRANTY IS EXTENDED AS FOLLOWS:

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

Limitation of Liability

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

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

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

It is expressly agreed and understood that this Lifetime Warranty is Hussong Manufacturing Co., Inc.'s sole obligation and original

purchaser's exclusive remedy for defective fireplace equipment. Hussong Manufacturing Co., Inc. shall not be liable for any consequential, incidental or contingent damages whatsoever other than those incurred by Hussong Manufacturing Co., Inc. to repair or replace the defective component. The foregoing warranty is exclusive and in lieu of all other expressed warranties. Hussong Manufacturing Co., Inc. shall not be held to implied warranties, including but not limited to the implied warranties 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

September 2011

CUT ALONG DOTTED LINE

PURCHASER NAME: _____

ADDRESS: _____

TELEPHONE: _____

INSTALLER NAME: _____

ADDRESS: _____

TELEPHONE: _____

INSTALLATION DATE: _____

MODEL NUMBER: _____

SERIAL NUMBER: _____

