

INSTALLATION AND OPERATION MANUAL

CHASKA 335S

Model #CSK-335S Direct Vent Gas Fireplace Insert

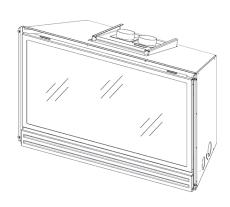
English and French installation manuals are available through your local dealer. Visit our website www.kozyheat.com.

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





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



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

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

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

A DANGER



HOT GLASS WILL CAUSE BURNS

DO NOT TOUCH GLASS UNTIL COOLED

NEVER ALLOW CHILDREN TO TOUCH GLASS

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

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

CONGRATULATIONS!

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

Jim Hussong President Dudley Hussong Board Chairman

Read this manual before installing or operating this appliance.

Please retain this owner's manual for future reference.

Homeowner Reference Information

We recommend you record the following information:

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

TABLE OF CONTENTS

TAB	LE OF CONTENTS5
1.0	INTRODUCTION7
1.1	Appliance Certification7
	California Proposition 65 Warning7
1.3	Requirements for the Commonwealth of Massachusetts7
2.0	SPECIFICATIONS8
2.1	Heating Specifications8
	Appliance Dimensions9
	Part Assembly Overview10
2.4	Safety Barrier Dimensions11
	EXISTING FIREPLACE REQUIREMENTS12
3.1	Appliance Placement Considerations12
3.2	Existing Fireplace Specifications12
	TERMINATION LOCATION13
4.1	Vent Termination Clearances
5.0	INSTALLATION PREPARATION14
	INSTALLATION PREPARATION14 Inspect and Clean Existing Chimney
5.1	
5.1 5.2	Inspect and Clean Existing Chimney14
5.1 5.2 5.3 5.4	Inspect and Clean Existing Chimney 14 Flue Damper 14 Gas Line 14 Electrical Wiring 14
5.1 5.2 5.3 5.4	Inspect and Clean Existing Chimney
5.1 5.2 5.3 5.4 5.5	Inspect and Clean Existing Chimney 14 Flue Damper 14 Gas Line 14 Electrical Wiring 14
5.1 5.2 5.3 5.4 5.5 6.0 6.1	Inspect and Clean Existing Chimney 14 Flue Damper 14 Gas Line 14 Electrical Wiring 14 Fireplace Conversion 14 INSTALLATION 15 Approved Vent Systems 15
5.1 5.2 5.3 5.4 5.5 6.0 6.1 6.2	Inspect and Clean Existing Chimney 14 Flue Damper 14 Gas Line 14 Electrical Wiring 14 Fireplace Conversion 14 INSTALLATION 15 Approved Vent Systems 15 Kozy Heat #816 and #816-CAP 15
5.1 5.2 5.3 5.4 5.5 6.0 6.1 6.2 6.3	Inspect and Clean Existing Chimney 14 Flue Damper 14 Gas Line 14 Electrical Wiring 14 Fireplace Conversion 14 INSTALLATION 15 Approved Vent Systems 15 Kozy Heat #816 and #816-CAP 15 Co-linear to Co-axial Venting 16
5.1 5.2 5.3 5.4 5.5 6.0 6.1 6.2 6.3 6.4	Inspect and Clean Existing Chimney 14 Flue Damper 14 Gas Line 14 Electrical Wiring 14 Fireplace Conversion 14 INSTALLATION 15 Approved Vent Systems 15 Kozy Heat #816 and #816-CAP 15 Co-linear to Co-axial Venting 16 Remove Vent Adapter 17
5.1 5.2 5.3 5.4 5.5 6.0 6.1 6.2 6.3 6.4 6.5	Inspect and Clean Existing Chimney 14 Flue Damper 14 Gas Line 14 Electrical Wiring 14 Fireplace Conversion 14 INSTALLATION 15 Approved Vent Systems 15 Kozy Heat #816 and #816-CAP 15 Co-linear to Co-axial Venting 16 Remove Vent Adapter 17 Run Vent System 17
5.1 5.2 5.3 5.4 5.5 6.0 6.1 6.2 6.3 6.4 6.5 6.6	Inspect and Clean Existing Chimney 14 Flue Damper 14 Gas Line 14 Electrical Wiring 14 Fireplace Conversion 14 INSTALLATION 15 Approved Vent Systems 15 Kozy Heat #816 and #816-CAP 15 Co-linear to Co-axial Venting 16 Remove Vent Adapter 17 Run Vent System 17 Connect Vent Pipe to Vent Adapter 17
5.1 5.2 5.3 5.4 5.5 6.0 6.1 6.2 6.3 6.4 6.5 6.6 6.7	Inspect and Clean Existing Chimney 14 Flue Damper 14 Gas Line 14 Electrical Wiring 14 Fireplace Conversion 14 INSTALLATION 15 Approved Vent Systems 15 Kozy Heat #816 and #816-CAP 15 Co-linear to Co-axial Venting 16 Remove Vent Adapter 17 Run Vent System 17

7.0	GAS LINE CONNECTION	20
7.1	Gas Conversion (sold separately)	20
7.2	Gas Line Installation	20
8.0	FACING AND FINISHING	21
8.1	Clearances to Combustibles	21
8.2	CK34 Low Mantel Kit	22
	Shroud Installation	
8.4	Safety Barrier Installation	24
9.0	GAS FIREPLACE INSERT SETUP	25
9.1	Glass Assembly	25
	#CXL2-500 Log Set Installation	
9.3	Control Board Removal and Installation	27
10.0	ELECTRICAL INFORMATION	28
10.1	Electrical Specifications	28
	2 Wiring Requirements	
	B #CSK-028 Optional Fan Kit	
11.0	OPERATING INSTRUCTIONS	31
12.0	ADJUSTMENT	32
12.1	Gas Pressure Testing	32
12.2	Burner Flame Adjustments	33
13.0	TROUBLESHOOTING	34
14.0	MAINTENANCE	36
14.1	Firebox	36
14.2	? Fan	36
14.3	3 Vent System	36
	F Glass Assembly	
14.5	Burner and Pilot System	37
15.0	REPLACEMENT PARTS LIST	38
IM	ITED I IFETIME WARRANTY	40

1.0 INTRODUCTION

1.1 Appliance Certification

Laboratory: PFS in Cottage Grove, Wisconsin Standards:

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

This installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1.

1.2 California Proposition 65 Warning

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

1.3 Requirements for the Commonwealth of Massachusetts

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

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

1.3.1 Installation of Carbon Monoxide Detectors

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

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

1.3.2 Approved Carbon Monoxide Detectors

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

1.3.3 Signage

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

1.3.4 Inspection

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

1.3.5 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.

1.3.6 Manufacturer Requirements

1.3.6.1 Gas Equipment Venting System Provided

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

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

1.3.7 Gas Equipment Venting **System NOT Provided**

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

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

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

2.0 SPECIFICATIONS

2.1 Heating Specifications

	Natural Gas	Propane
Maximum	36,000 Btu/h	36,500 Btu/h
Input Rating	10.55 kW	10.7 kW
Minimum	22,000 Btu/h	24,000 Btu/h
Input Rating	6.49 kW	7.03 kW
Manifold Pressure	3.5"WC	10"WC
(High)	(0.87 kPa)	(2.49 kPa)
Manifold Pressure	1.6"WC	6.4" WC
(Low)	(0.40 kPa)	(1.59 kPa)
Orifice Size (DMS)	#35	#50

2.1.1 Altitude Adjustment

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

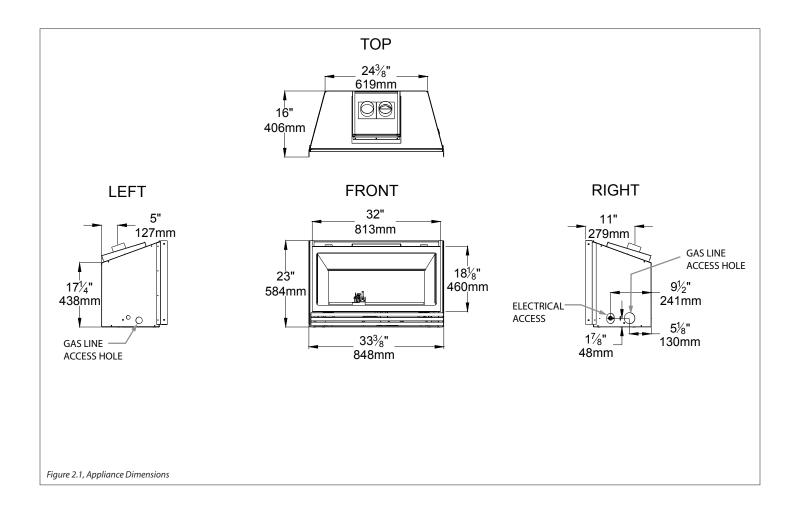
2.1.1.1 US Installations

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

2.1.1.2 Canadian Installations

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).

2.2 Appliance Dimensions



2.3 Part Assembly Overview

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.

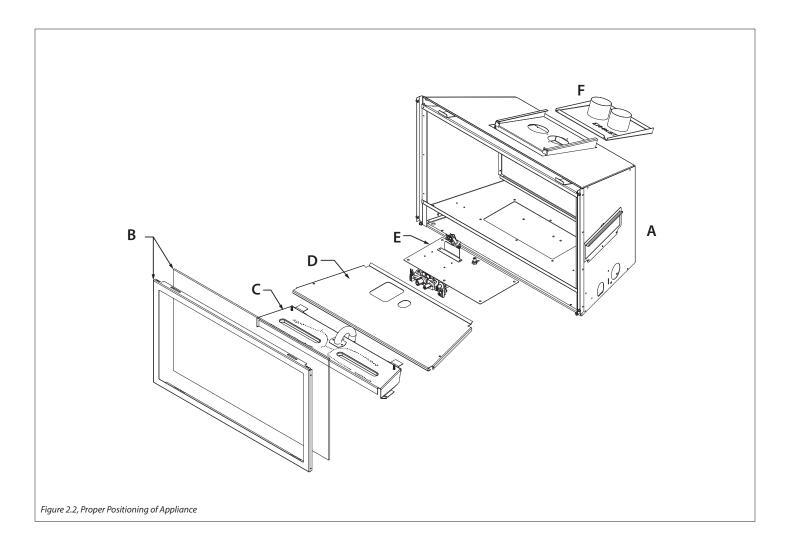


	Table 2.1, Field-Assembled Parts		
Α	A Fireplace insert E Control board assembly		
В	Glass and glass valance	F	Co-linear vent adapter
С	Burner assembly	G	Refractory panels (not shown)
D	Heat shield		

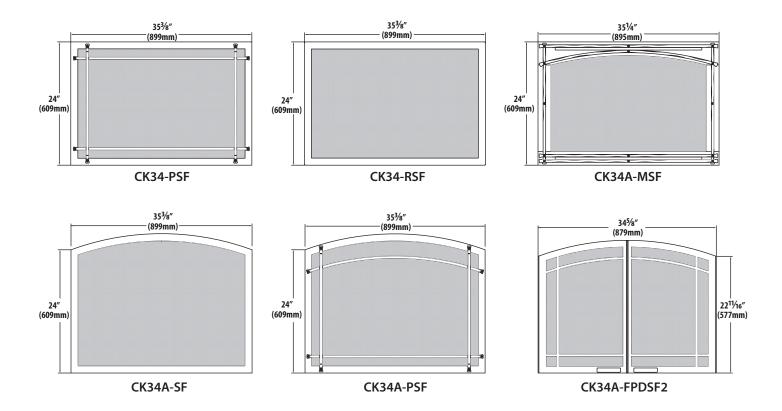
2.4 Safety Barrier Dimensions

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

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

IMPORTANT: Consider the height of hearth finish material when building a fireplace platform. Proper installation of safety barriers require the bottom of the fireplace to be level with finished hearth.

See section 8.4 Safety Barrier Installation on page 24 for installation and removal of safety barriers.



3.0 EXISTING FIREPLACE REQUIREMENTS

3.1 Appliance Placement Considerations

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

- This fireplace must be installed on a level surface capable of supporting the fireplace insert and venting.
- 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.

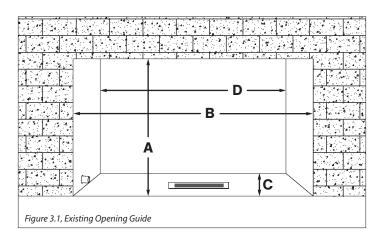
3.2 Existing Fireplace Specifications

IMPORTANT: Adequate accessibility clearances for servicing and proper operation must be maintained.

- 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.
- Cutting of any sheet metal parts of the existing fireplace is prohibited.
- A gas line must be able to be installed to the fireplace insert. Please refer to Figure 2.1 on page 9. There are gas line access holes on both the right and left side of insert.
- 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.

3.2.1 Existing Fireplace Opening Minimum Requirements

(A)	Height	23-1/2 in (597 mm)
(B)	Front Width	33-1/2 in (851 mm)
(C)	Depth	16-3/8 in (419 mm)
(D)	Back Width	24-1/2 in (622 mm)



3.2.2 Chimney Specifications

WARNING: Any chimney clean-outs must fit properly.

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 chimney must be comprised of one of the following:

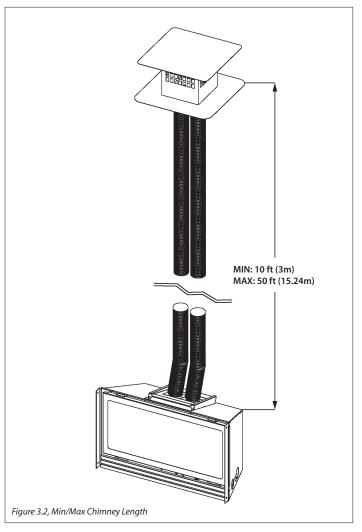
- Factory-built solid fuel chimney: 7 in (178mm) minimum inside diameter
- Masonry chimney: 6 in x 8 in (152mm x 203mm) minimum inside diameter

Existing chimney height:

Minimum: 10 ft (3 m) Maximum: 50 ft (15.24 m)

3.2.2.1 Determine Length of Existing Chimney

- Remove and discard existing chimney cap.
- NOTE: It is helpful to have two people complete this step. Position one person at the fireplace opening and another person at the top of the chimney.
- Measure from the fireplace base to the top of the chimney.
- 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. If using Kozy Heat #816, cut to lenath.

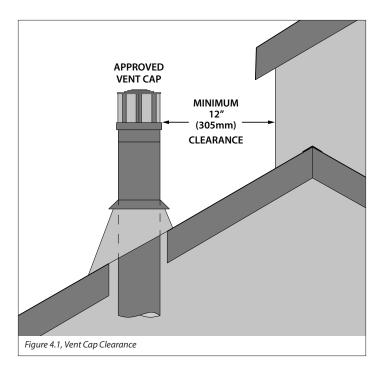


4.0 TERMINATION LOCATION

4.1 Vent Termination Clearances

WARNING: This appliance must not share or be connected to a chimney flue serving any other appliance.

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



5.0 INSTALLATION PREPARATION

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

ATTENTION: Any removed parts must be capable of re-installation if this insert is ever removed. Removal of rivets or screws is acceptable.

5.1 Inspect and Clean Existing Chimney

- Verify existing chimney is constructed of non-combustible material.
- Verify existing chimney is clean and in good working order. Clean
 existing chimney and fireplace to prevent a creosote odor from
 entering the home.
- Verify combustible mantel and sidewall clearances comply with Section 8.0 on page 21.
- The refractory, glass doors, screen rails, screen mesh, and log grates may be removed from existing fireplace before installing this gas fireplace insert.

5.2 Flue Damper

 The fireplace flue damper can be fully blocked open, or removed for installation of this gas fireplace insert. Remove existing chimney cap.

5.3 Gas Line

- A gas line must be able to be installed to the insert.
- 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 gas line to the gas fireplace insert through the gas line hole provided. There are gas line access holes on both the right and left side of the unit. Do not run gas line in a manner that would obstruct fan operation.
- If the gas fireplace insert is to be installed into minimum opening dimensions, the gas line may need to be run after appliance placement due to space limitations.

5.4 Electrical Wiring

- Provisions must be made to provide electrical power for appliance operation.
- See Figure 2.1 on page 9 for electrical outlet box location to run any necessary electrical wiring to the gas fireplace insert.

5.5 Fireplace Conversion

 Mechanically attach the label with the following warning to at the bottom existing firebox so it will be visible if this gas fireplace insert is removed.

WARNING: This fireplace has been converted for use with a gas fireplace insert only and cannot be used for burning wood or solid fuels unless all original parts have been replaced, and the fireplace re-approved by the Authority Having Jurisdiction.

6.0 INSTALLATION

6.1 Approved Vent Systems

Kozy Heat #816 and #816-CAP

For use with minimum 6" x 8" I.D. masonry or 7" I.D. Class A metal chimneys; includes one roll of 36' (10.97 m) of expandable 3" flexible pipe and round termination cap.

Other approved vent manufacturers BDM, American Metals (Amerivent), Metal Fab, Selkirk, Simpson Dura-Vent, and ICC.

This appliance is approved to combine co-linear and co-axial venting in a single venting system using an approved 4" x 6-5/8" adapter. Chimney specifications (Section 3.2.2 on page 12) must be adhered to when converting to co-linear to co-axial vent system. See section 6.3 Co-linear to Co-axial Combined Venting on page 16.

6.2 Kozy Heat #816 and #816-CAP

IMPORTANT: Proper operation of this insert requires the exhaust pipe and combustion air pipe to be connected to their correct flue collar, on both the termination kit and the gas fireplace insert vent adapter.

The fireplace insert exhaust flue collar is located on the right side. *Install termination cap with the exhaust flue collar on the right side.*

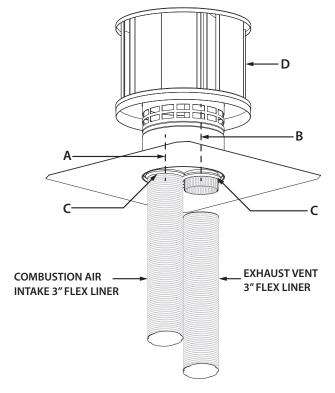
NOTE: The exhaust pipe will have a red marking.

IMPORTANT: Maximum horizontal vent runs of 24 in (609 mm) require a 1 in (25mm) rise per 12 in (305 mm) run. Care should be taken when installing the flexible vent pipes to avoid a tight bend that may cause abrasion or damage to the flexible pipes.

- Measure the total chimney length required and cut #816 (36' [10.97m] of 3" flexible pipe) to the measured length.
- Carefully extend the exhaust and combustion air intake pipes to total chimney length required.
- Slide the combustion air intake pipe (the end without a collar) over termination cap collar (A). Secure to #816-CAP termination cap (E) with (3) self-tapping screws (not provided).
- Place a bead of sealant around the inner edge at the end of the exhaust pipe (without collar / red marking) and slide onto the corresponding labeled collar (B) on termination cap (E).
- Secure the exhaust pipe to termination cap (E) with (3) selftapping screws (not provided). Apply additional sealant around joint to ensure a proper seal.
- Complete vent system installation by following the instructions outlined in Sections 6.3 through 6.6.

#816 and #816-CAP

- Intake Collar (extends through bottom plate)
- Exhaust Collar (extends through middle divider
- (C) Sealant (not provided)
- (D) #816-CAP Termination Cap



USES #816 36 ft (10.97m) EXPANDABLE 3" FLEXIBLE PIPE

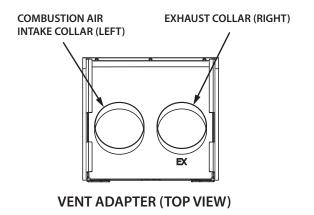


Figure 6.1, #816-CAP

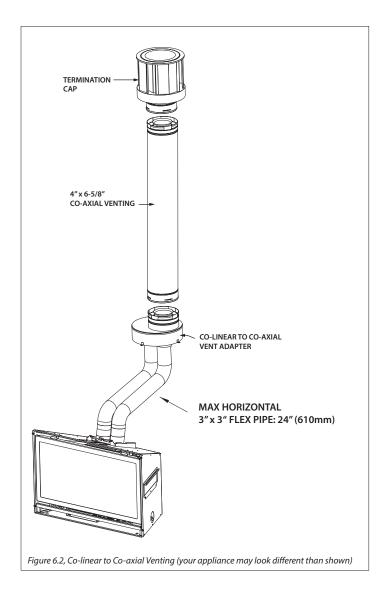
6.3 Co-linear to Co-axial **Combined Venting**

IMPORTANT: Maximum horizontal vent runs of 24 in (609 mm) require a 1 in (25mm) rise per 12 in (305 mm) run. Care should be taken when installing the flexible vent pipes to avoid a tight bend that may cause abrasion or damage to the flexible pipes.

Maximum horizontal 3" x 3" flexible pipe length: 24" (610mm)

Minimum total combination of co-linear and co-axial vent pipe: 10 ft

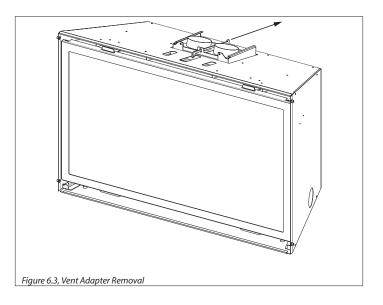
Maximum total combination of co-linear and co-axial vent pipe: 50 ft (15.24m)



6.4 Remove Vent Adapter

ATTENTION: All information outlined in Section 6.0 on page 15 must be completed before continuing with this installation.

Remove the vent adapter at the top of appliance by sliding the vent adapter back out of channels. Refer to the following instructions for vent system attachment to the vent adapter.

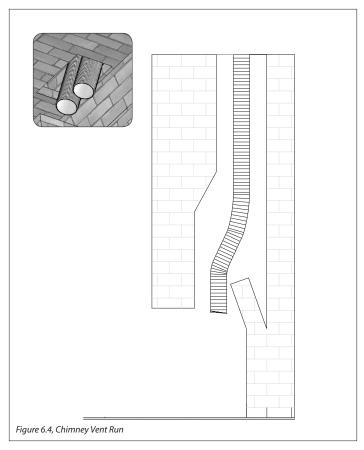


6.5 Run Vent System

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.

- To prevent cold air drafts, Hussong Manufacturing recommends to insulate the 3" x 3" flexible vent pipes and chimney using unfaced insulation products listed as noncombustible per ASTM E 136.
- OPTIONAL: Before installing vent system down through the chimney, place unfaced insulation around the first 3 ft (914 mm) of vent system below termination cap. Secure with wire.
- Install the 3" x 3" flexible pipes down through existing chimney. Guide ropes (if used) to aid installation.
- To secure chimney termination cap to chimney, apply a liberal bead of sealant (provided) around the top of the chimney. Set termination cap into position as instructed by vent system manufacturer's installation manual.
 - OPTIONAL Kozy Heat #816-CAP: Secure termination cap to existing chimney with 2 in (50 mm) self-tapping screws and anchor straps (not provided) through the pilot holes, located on the sides of the termination cap.
- From inside the existing fireplace, carefully pull ropes (if used) or the flexible pipes down until both exhaust pipe and combustion air intake are into the existing fireplace firebox.
- OPTIONAL: To prevent heat loss up chimney, place unfaced insulation products listed as non-combustible per ASTM E 136 between the 3" x 3" flexible vent pipes and chimney.

6.6 Connect Vent Pipe to Vent Adapter

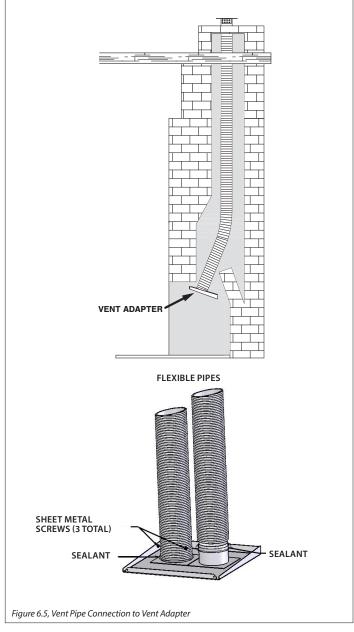


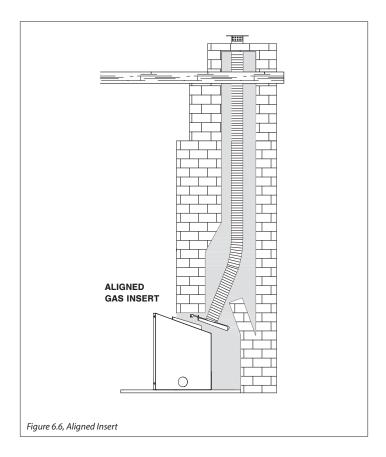
IMPORTANT: Proper operation of this insert requires the exhaust pipe and combustion air pipe to be connected to their correct flue collar, on both the termination kit and the gas fireplace insert vent adapter.

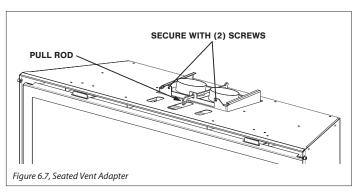
- Place previously removed vent adapter into existing fireplace opening.
- Connect exhaust vent pipe (red marking) to exhaust collar on vent adapter. Apply a bead of sealant (provided) around exhaust pipe and slide inside collar marked 'Exhaust'. Secure with provided (3) ½ in (13 mm) self-tapping screws. Apply additional sealant around join to ensure an air tight seal.
- Connect air intake vent pipe to intake collar on vent adapter.
 Apply a liberal bead of sealant around intake collar on vent adapter. Slide combustion intake pipe over the collar and secure with provided (3) ½ in (13 mm) self-tapping screws. Apply additional sealant around joint to ensure an air tight seal.
- 4. Visually check vent pipe connection to vent adapter.

6.7 Place and Secure Appliance

- 1. Slide the gas fireplace insert into existing fireplace opening until the channels on top of the appliance are aligned with the vent adapter.
- 2. Insert the vent adapter pull rod handle through access slot at the top of appliance and place pull handle hook through the hole in pull rod. Simultaneously push the gas insert into existing fireplace and pull the vent adapter forward until seated.
- 3. Secure vent adapter to appliance by using slots at the top of the appliance to secure with (2) ½ in (13 mm) sheet metal screws (included in components packet).
- 4. Use the pull rod handle to pull the vent adapter back to starting position. Remove pull handle. Verify vent system connection.
- 5. If necessary, level the gas insert by threading leveling bolts (included in components packet) into nuts at the bottom of the insert (2 each side). Verify appliance is properly positioned.







6.8 Outdoor Covered Fireplace Installation

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

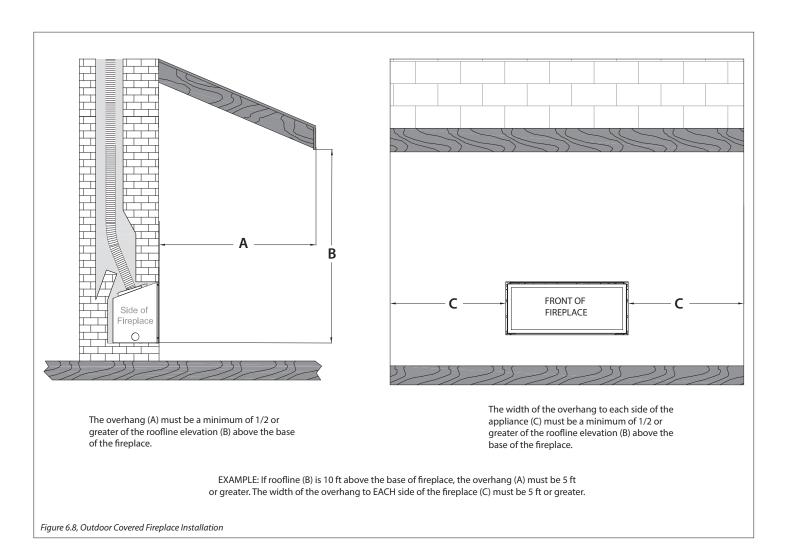
Follow the instructions and illustration below for installation procedures. Drawings are for reference only and your fireplace may look different than shown.

6.8.1 Safety Screen Barriers

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

- Fireplace operation is approved from 40°F to 110°F.
- All wiring connections shall be in accordance with outdoor requirements of NECA NFPA 70.
- All clearances and requirements in this manual must be adhered

6.8.2 Requirements



7.0 GAS LINE CONNECTION

7.1 Gas Conversion (sold separately)

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

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

7.2 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 223.1. 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.

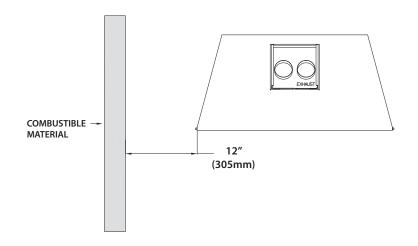
- A listed (and Commonwealth of Massachusetts approved) $\frac{1}{2}$ in. (13 mm) tee handle manual shut-off valve and flexible gas connector are to be connected to the $\frac{1}{2}$ in. (13 mm) control valve inlet. If substituting for these components, please consult local codes for compliance.
- If installing this insert into minimum opening dimensions, the gas line may need to be run after placement due to space limitations. See Figure 2.1, Appliance Dimensions on page 9.
- This fireplace is equipped with a 3/8" (10 mm) x 18" (457 mm) long flexible gas connector and manual shut-off valve.
- Run gas line into fireplace, preferably through right gas line hole 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.

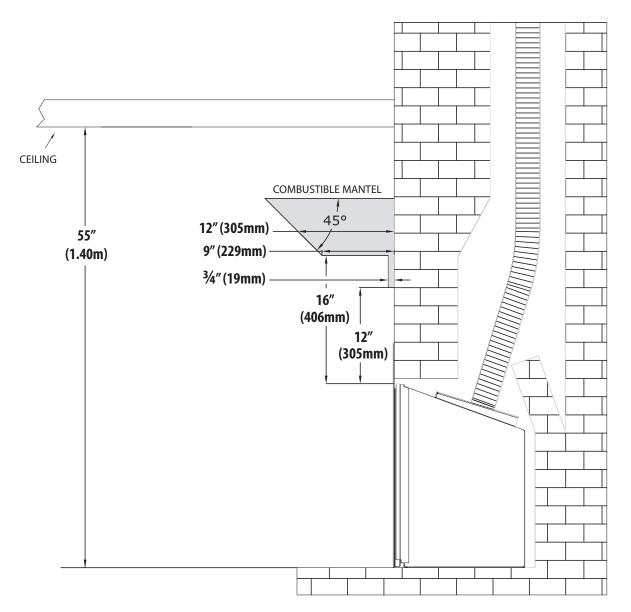
Table 7.1, Inlet Gas Supply Pressures			
Fuel	Minimum Pressure Maximum Pressure		
Natural Gas	5"WC (1.25 kPa)	10.5"WC (2.62 kPa)	
Propane	11"WC (2.74 kPa)	13"WC (3.24 kPa)	

8.0 FACING AND FINISHING

8.1 Clearances to Combustibles

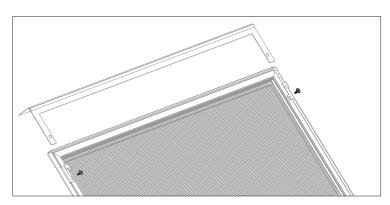
IMPORTANT: Adequate accessibility clearances for servicing and proper operation must be maintained.



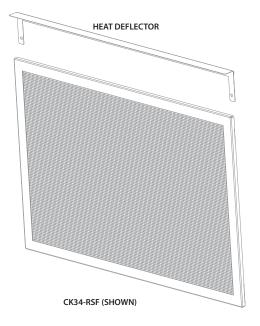


8.2 CK34 Low Mantel Kit

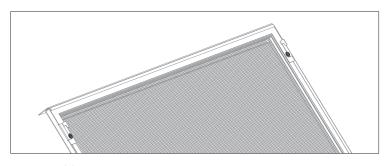
This low clearance kit is for use with safety barriers CK34-PSF or CK34-RSF ONLY.



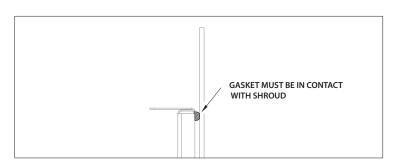
REMOVE (2) SCREWS AS SHOWN LOCATED AT THE BACK OF THE SCREEN FRONT AND ALIGN THE HEAT DEFLECTOR



POSITION THE HEAT DEFLECTOR BY SLIDING IT UNDER THE MOUNTING TABS AS SHOWN

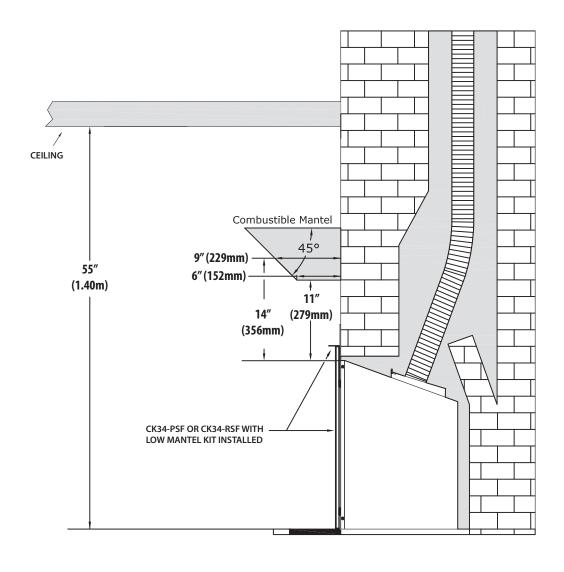


REPLACE (2) SCREWS THROUGH THE HOLES IN THE MOUNTING TAB AND HEAT DEFLECTOR



8.2.1 Low Mantel Kit Clearances

IF USING CK34-PSF OR CK34-RSF SAFETY BARRIER WITH LOW MANTEL KIT INSTALLED, THESE LOWER MANTEL CLEARANCES ARE ALLOWED

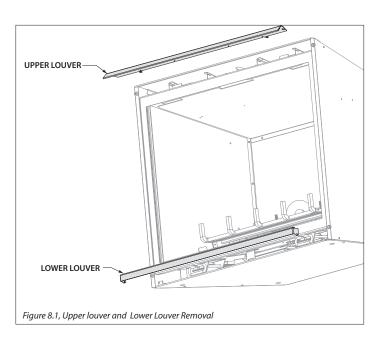


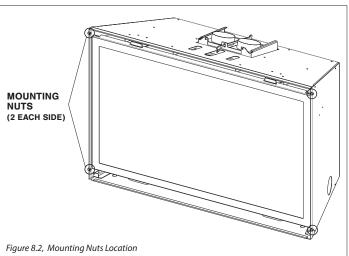
8.3 Shroud Installation

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

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

- Remove the upper louver by lifting up and out of the mounting 1. flanges.
- Remove lower louver by lifting the louver out of the slots on the mounting bracket.
- Remove the glass assembly. 3.
- 4. Align the mounting holes on the shroud to the corresponding mounting nuts on the sides of the insert metal cabinet.
- Secure with (4) truss head screws (provided). 5.
- Reinstall all components previously removed.





8.4 Safety Barrier Installation

- Locate the (4) slots on the shroud (2 each side).
- Align the tabs located on the back of the safety barrier with the slots on the shroud.
- Raise the safety barrier slightly into the slots and allow the tabs to lower into position.
- To remove safety screen: lift the screen up and out of slots.

9.0 GAS FIREPLACE INSERT SETUP

9.1 Glass Assembly

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

9.1.1 Remove Glass Assembly

WARNING: Do not remove the glass assembly when hot.

- Remove safety barrier.
- Locate (2) spring-loaded latches securing the glass assembly at 1. the bottom of the firebox.
- Pull the spring-loaded latches out and down to release the bottom of the glass assembly.
- Lift glass assembly up and off of the (2) tabs located at the top of the firebox.

9.1.2 Install Glass Assembly

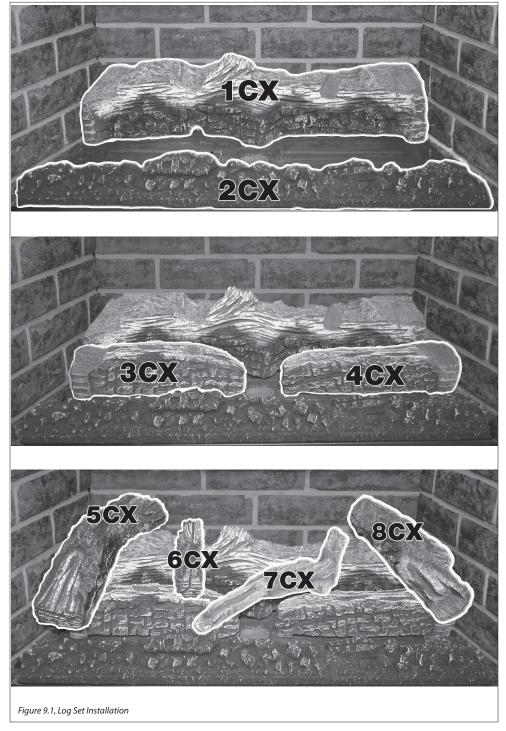
- Align the slots on top of the glass assembly over the tabs at the top of the firebox while lowering the bottom of the glass assembly into position.
- Pull the spring-loaded latches out and up to secure the bottom of glass to the bottom of the fireplace.
- Reinstall safety barrier.

9.2 #CXL2-500 Log Set Installation

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

- If converting to propane, complete the conversion before installing the log set. Follow the conversion instructions included with the kit.
- Log numbers located on the bottom of each log. Refer to following instructions and illustrations for proper placement.

- Position the ember panel 2CX in front of the burner as shown.
- Align the (2) holes in the bottom of log 1CX with the (2) mounting pins at the back of the burner. Push log down onto pins to seat.
- Align the holes on the bottom of logs 3CX and 4CX with the mounting pins on the burner. Push to seat.
- Align logs 5CX and 6CX with the notches on logs 1CX and 3CX.
- Align log 7CX with the notches in 1CX, 4CX, and ember panel 2CX.
- Align log 8CX with the notches in 1CX and 4CX.



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

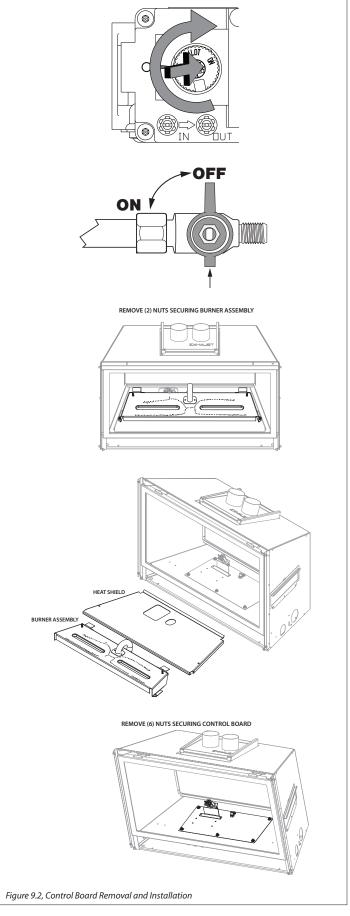
CAUTION: Check all connections for leaks with soapy water, whether field or factory made.

9.3.1 Control Board Removal

- Disconnect electrical power. 1.
- Locate the manual valve installed by your qualified service 2. technician. Turn the manual valve clockwise to the OFF position.
- Disconnect any wall switch, remote control, or thermostat from 3. the top and bottom terminals on the gas valve, OR unplug all components from receptacle and disconnect all wiring harnesses attached to the gas valve.
- Remove the safety barrier and glass assembly. 4.
- Remove logs. 5.
- Remove the burner assembly, secured with (2) nuts. 6.
- 7. Remove top burner heat shield.
- Remove secondary burner heat shield resting on control board. 8.
- Remove (6) nuts securing control board. Remove the control 9. board.

9.3.2 Control Board Installation

- 10. 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.
- 11. Secure the control board with nuts previously removed.
- 12. Reinstall secondary burner heat shield by placing it on top of the control board.
- 13. 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.
- 14. Reinstall burner assembly. Verify the burner tube is positioned over burner orifice. Secure with screws previously removed.
- 15. Reinstall log set.
- 16. Reconnect any wall switch, remote control, or thermostat wires to the top and bottom terminals on the gas valve, OR reconnect all wiring harnesses to the gas valve. Plug all components into an electrical outlet.
- 17. Turn the manual valve counterclockwise to the ON position.
- 18. Reinstall the glass assembly and safety barrier.
- 19. Verify proper log placement, operation of fireplace, and any electrical components.



10.0 ELECTRICAL INFORMATION

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

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

10.1 Electrical Specifications

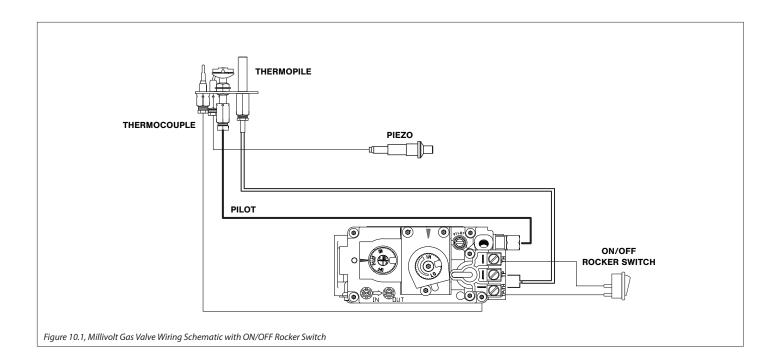
WARNING: AN OPTIONAL COMPONENT CONNECTION IS FOR LOW **VOLTAGE BATTERY OR DIRECT CURRENT ONLY. DO NOT CONNECT TO** 120 OR 240 VOLTS AC.

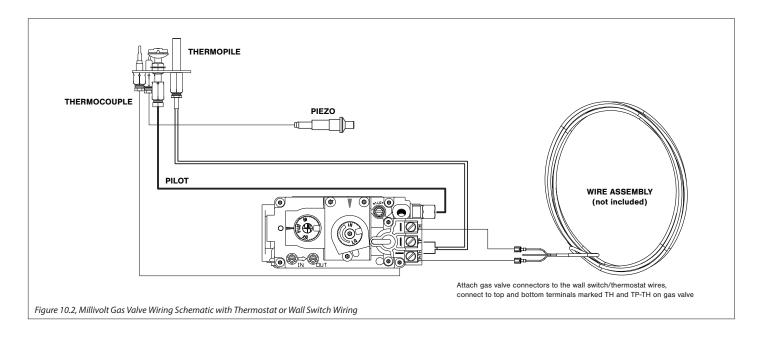
This appliance, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1.

10.2 Wiring Requirements

CAUTION: Do connect high voltage (115V) wire to the gas valve.

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





10.3 #CSK-028 Optional Fan Kit

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

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

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

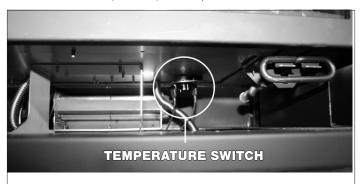
NOTE: It is easier to install the fan kit before connecting the gas line to the control board

- Hussong Manufacturing recommends to install an electrical outlet near the fireplace. A pre-installed electrical box is included with the appliance, along with a receptacle/box cover assembly in the fireplace components packet.
- Code-approved line voltage wiring, 14 gauge or better, must be used when wiring this assembly. Refer to your local electrical codes for specific requirements.

Kit Components:

- (2) 75 cfm fan with temperature control switch
- (4) 1/4" 1/4 nuts
- Remove safety barrier and glass assembly.

- Slide the left fan through the lower grill opening and position it onto corresponding mounting studs on the floor of the unit. Secure with (2) nuts included. Repeat with right fan.
- Place temperature control switch on the bottom of the firebox.
- 4. Plug fan cord into receptacle in the electrical box.
- Turn the speed control counter-clockwise until it 'clicks.' This is the OFF position. Turn the speed control ON by turning the knob clockwise past the 'click' - this is the highest setting.
- Reinstall all components previously removed.

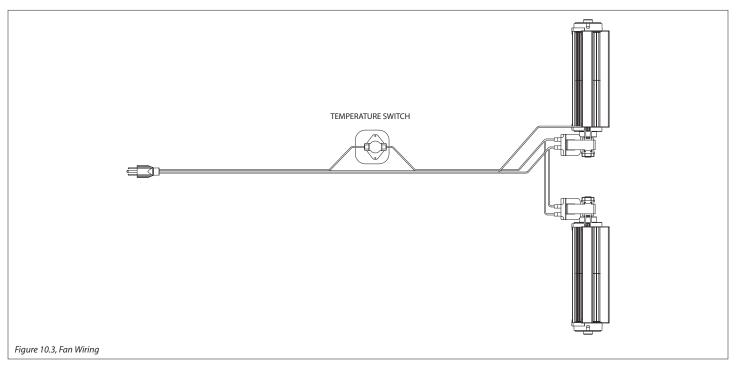


TEMPERATURE CONTROL SWITCH POSITION

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

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

After adjustment, plug 3-prong plug on fan cord into receptacle.



11.0 OPERATING INSTRUCTIONS

- 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.

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.

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

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in vour building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.

WARNING

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

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

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

- If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water.

CAUTION

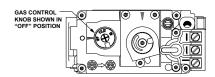
Clothing or other flammable material should not be placed on or near the appliance.

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

LIGHTING INSTRUCTIONS

- STOP! Read all the safety information above on this page. 1.
- 2. Set thermostat to lowest setting (if applicable).
- 3. Turn off all electric power to the appliance.
- 4. Locate the gas controls.
- 5. Push in gas control knob slightly and turn clockwise "OFF".
 - NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.
- Wait five (5) minutes to clear out any gas. Then, smell 6. for gas, including near the floor. If you smell gas, STOP! Follow 'B' in the safety information above. If you do not smell gas, go to the next step.
- 7. Locate pilot - follow metal tube from gas control. The pilot is located inside the combustion chamber.
- Push in gas control knob slightly and turn counterclockwise 8. to "PILOT".
- 9. Push in control knob all the way and hold. Press the piezo igniter button repeatedly until the pilot is lit and continue to hold in the gas control knob.

- Hold the gas control knob in for one (1) minute after pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 10.
 - •If the knob does not pop out when released, stop and immediately call your service technician or gas supplier.
 - •If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- Turn the gas control knob counterclockwise ¥ 11.
- Turn on all electric power to the appliance. 12.
- Set thermostat to desired setting (if applicable). 13.





TO TURN GAS OFF TO APPLIANCE

- Set thermostat to lowest setting (if applicable). 1.
- Turn off all electric power to the appliance if service is to be 2. performed.
- 3. Access the gas controls.

Push in gas control knob slightly and turn clockwise "OFF".

12.0 ADJUSTMENT

12.1 Gas 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 $\frac{1}{2}$ psi (3.5 kPa).

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

12.1.1 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 a proper pressure reading. If the inlet pressure reading is too high or too low, contact the gas company. Only a qualified gas service technician should adjust incoming gas pressure. A low pressure can cause a delayed ignition.

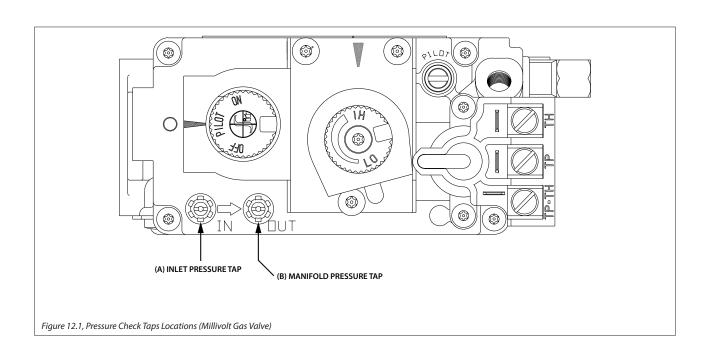
- Loosen the inlet (IN) pressure tap by turning screw counterclockwise. See (A) in Figure 12.1.
- Attach manometer using a ¼ in (6 mm) I.D. hose. 2.
- 3. Light pilot.
- Turn the gas control knob to ON. Burner should not light. Note manometer reading.
- Press the ON/OFF rocker switch to ON. Check pressure to ensure it is near maximum inlet pressure.
- Press the ON/OFF rocker switch to OFF. 6.
- 7. Turn the gas control knob to OFF.
- 8. Disconnect hose and tighten the inlet (IN) pressure tap by turning screw clockwise. Screw should be snug. Do not over

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

12.1.2 Manifold Pressure Test

- Light pilot.
- Loosen manifold (OUT) pressure tap by turning screw counterclockwise. See (B) in Figure 12.1.
- Attach manometer to pressure tap using a ¼ in (6 mm) I.D. hose.
- 4. Turn gas control knob to ON.
- 5. Press the rocker switch to ON and note manometer reading.
- Disconnect manometer hose and tighten the manifold (OUT) pressure tap by turning screw clockwise. Screw should be snug. Do not over tighten.
- Attach the manometer to the manifold pressure tap (B) to verify it is completely sealed. The manometer should read no pressure when the ON/OFF rocker switch is pressed to ON.

Table 12.1, Pressure Requirements			
Gas Pressure	Natural Gas	Propane	
Inlet Pressure	5" - 10.5"WC	11" - 13"WC	
Tap (A)	(1.25 - 2.62 kPa)	(2.74 - 3.24 kPa)	
Manifold Pressure	1.6" - 3.5"WC	6.4" - 10"WC	
Tap (B)	(0.41 - 0.87 kPa)	(1.59 - 2.48 kPa)	



12.2 Burner Flame Adjustments

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

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

12.2.1 Burner Venturi

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

NOTE: Burner venturi air shutter settings have been factory set. Refer to Table 12.2.

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

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

Table 12.2, Factory Set Venturi Openings		
Fuel Air Shutter Opening		
Natural Gas	1/16" (2 mm) OPEN	
Propane	1/2" (13 mm) OPEN	

12.2.1.1 Venturi Adjustment

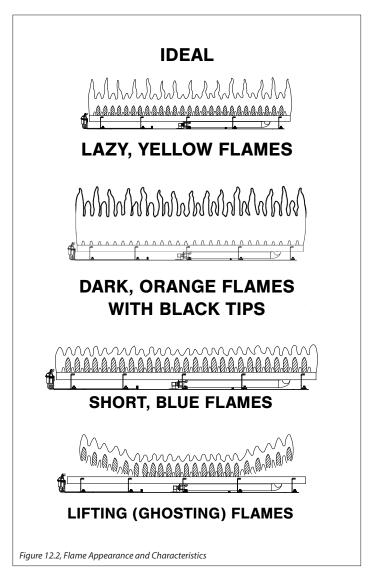
NOTE: If soot is present on the glass, check log positioning before adjusting the venturi. Logs must not block burner ports.

- Remove the safety barrier and glass frame assembly. 1.
- 2. Remove the log set.
- Remover burner assembly. 3.
- 4. Loosen the screw on the burner venturi and adjust as necessary. Re-tighten screw.
- Reinstall burner, making sure venturi is positioned over burner over burner orifice. Reinstall burner venturi housing.
- Reinstall all components previously removed.



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

Table 12.3, Venturi Adjustment Guidelines				
Flame Characteristic Cause Solution				
Dark, orange flame with black tips	Venturi closed too far	Open venturi slightly		
Short, blue flames	Venturi open too far	Close setting slightly		
Lifting (ghosting) flames	Gas pressure too high Venturi closed too far	Check manometer settings Open venturi setting slightly		



13.0 TROUBLESHOOTING

ATTENTION: Troubleshooting must be performed by a qualified technician.

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

Issue	Cause	Solution
Burner will not light	Lighting instructions not followed	Turn gas control knob to ON position. Turn the ON/OFF rocker switch to ON position. Put wall switch, remote control, or thermostat in heat demand position.
	Plugged main burner orifice	Remove blockage as necessary.
	Switching device is defective	Check remote, thermostat, or wall switch wires for proper connection. Place jumper wires across terminals at switch. If the burner lights, replace the defective switch, thermostat, or batteries in remote control as necessary. If switching device checks out as described above, place jumper wires across switches on the gas valve. If the burner lights, the switching wires are faulty or connections are bad. Replace as necessary.
Burner will not stay lit	Thermopile wires loose at valve terminals	Tighten if necessary.
	Thermopile wires ground out due to pinched wires	Free pinched wires if necessary.
	Improper refractory panel placement (if installed)	Refractory panels must be tight against firebox walls. It may be necessary to secure panels with high-temperature sealant, especially around the intake duct.
Pilot and burner extinguish	No propane in tank	Check propane tank. Refill if necessary.
while in operation	Incorrect glass frame assembly installation	See section 9.1 Glass Assembly on page 25.
	Defective thermopile or thermocouple	Check thermopile and thermocouple for proper millivolts
	Inner vent pipe leaking exhaust gases back into firebox	Check for leaks and repair if necessary.
	Vent cap blockage	Remove debris if necessary.
Glass sooting	Improper log placement	See section 9.2 #CXL2-500 Log Set Installation on page 26.
	Improper venturi setting	Venturi may need to be opened slightly to allow more air into the gas mix. See section 12.2.1 Burner Venturi on page 33.
	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. See section 12.2.1 Burner Venturi on page 33.
	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.

14.0 MAINTENANCE

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

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

14.1 Firebox

Performed by: Qualified Service Person

Frequency: Annually

Action:

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

14.2 Fan

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

Performed by: Qualified Service Person

Frequency: Every 6 months

Action:

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

14.3 Vent System

NOTE: If the vent-air intake system is disassembled for any reason, reinstall per instructions provided with installation. Refer to Section 6.0 on page 15.

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.

14.4 Glass Assembly

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

WARNING: Do not use substitute materials.

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

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

Performed by: Homeowner Frequency: Annually

Action:

- Prepare a work area large enough to accommodate the glass assembly on a flat, stable surface.
- Remove safety screen and glass frame assembly.
- Clean glass window with a suitable fireplace glass cleaner using a soft cloth. Abrasive cleaners must not be used. Be careful not to scratch the glass when cleaning.
- Reinstall glass assembly and safety screen. Do not operate fireplace without safety screen.

Performed by: Qualified Service Person

Frequency: Annually

Action:

- Clean glass window with a suitable fireplace glass cleaner using a soft cloth. Abrasive cleaners must not be used. Be careful not to scratch the glass when cleaning.
- Inspect the glass for cracks, scratches, and nicks.
- Verify the glass assembly is properly intact and not damaged.
- Replace the glass and the assembly #700-006T as necessary.
- Only Hussong Mfg. Co., Inc. will supply the replacement of glass assembly as a complete unit.

14.5 Burner and Pilot System

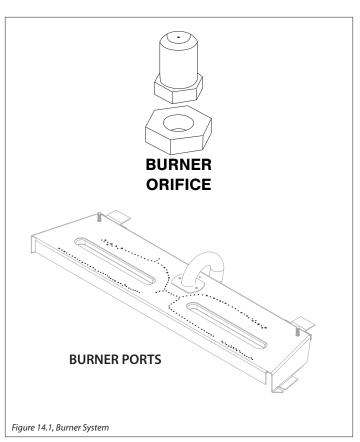
The burner assembly may be removed for easier access to the control compartment. See Section 9.3 Control Board Removal and Installation on page 27. Verify gas supply is turned on and filled. Consult with plumber or gas supplier as necessary.

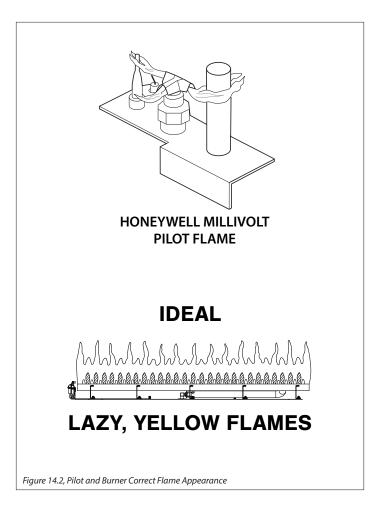
Performed by: Qualified Service Person

Frequency: Annually

Action:

- Vacuum all components of the burner system.
- Check all accessible gas-carrying tubes, connections, pipes and other components for leaks.
- Inspect the operation of the flame safety system Pilot or Flame rectification device. Visually check pilot light when in operation.
- Ensure pilot flame impinges on thermocouple. Clean pilot hold and adjust pilot flame at gas valve for proper flame impingement. Verify thermocouple connections and millivolt production.
- Inspect and ensure the lighting of the main burner occurs within (4) seconds of the main gas valve opening. Check for faulty or incorrect wiring and correct or replace as necessary. Inspect primary air openings (burner ports) for blockage, especially near the pilot.
- Visually check burner flame pattern when in operation. Flames should be steady, not lifting or floating.
- Test and measure the flame failure response time of the flame safety system. It must de-energize the safety shutoff in no more than (30) seconds.





15.0 REPLACEMENT PARTS LIST

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

The following warning is for replacement parts for this appliance.

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

CONTROL BOARD AND PARTS			
Control Board - NG	CXL-770A	Pilot Orifice - NG	700-294
Control Board - Propane	CXL-771A	Pilot Orifice - Propane	700-295
S.I.T. Gas Valve - NG	700-086N	Pilot Hood	700-098
S.I.T. Gas Valve - Propane	700-087A	18 in. Flexible Gas Line - Black	700-213B
On/Off Rocker Switch	700-023	Flexible Gas Line - Valve to Burner Connection	700-226F
Pilot/Generator/Thermocouple - NG	700-063	NG Burner Orifice #35	700-235
Pilot/Generator/Thermocouple - Propane	700-063-1	Propane Burner Orifice #50	700-250
Piezo Igniter with nut (no wire)	700-090	Conversion Kit - NG	OCK-S35A
Flexible Pilot Tubing (valve to pilot)	700-091	Conversion Kit - Propane	OCK-S50A
Millivolt Generator	700-092	Burner Assembly	CXL-135
Thermocouple	700-058		

GLASS AND GLASS PARTS		
31-1/4" x 17-5/8" Glass with tadpole gasket 700-0		
Tadpole Glass Gasket	900-006	
Replacement Valance CXL-5		

SAFETY BARRIERS		
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	
Arched Full Prairie Door Screen Front	CK34-AFPDSF2	

SHROUDS		
Blank Shroud (4 pc.)	CK34-004	
4 sided blank shroud (4 pack)	CK34-008	
27" x 40" shroud (1 piece)	CK34-2740	
30" x 44" shroud (1 piece)	CK34-3044	
33" x 46" shroud (1 piece)	CK34-3346	
34" x 44" arched shroud (1 piece)	CK34-A3444	
Custom shroud	CK34-CUS	
Custom arched shroud	CK34-ACUS	

#CSK-335S Hussong Manufacturing Co., Inc. P.O. Box 577 204 Industrial Park Drive Lakefield, MN 56150-0577 USA

FAN KIT		
Fan Kit	CSK-028	

ADDITIONAL COMPONENTS		
Manual Gas Shut-off Valve 700-203		

LOUVER REPLACEMENT		
Upper Louver (for 3 and 4 piece shrouds)	CXL-202	
Upper Louver (for full door shrouds)	CXL-202F	
Lower Louver	CXL-201	

LOG SET		
8 Piece Log Set	CXL2-500	
#2CX Ember Panel	2CX	
#1CX Log	1CX	
#3CX Log	3CX	
#4CX Log	4CX	
#5CX Log	5CX	
#6CX Log	6CX	
#7CX Log	7CX	
#8CX Log	8CX	
Rock Wool Embers	900-REMB	

LIMITED LIFETIME WARRANTY

Warranty Coverage

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

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

30 Days: Parts & Labor*

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

Year 1: Parts & Labor*

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

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

Years 2 through Lifetime: Parts Only

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

EXCLUSIONS AND LIMITATIONS

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