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.

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

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

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

— Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

**WHAT TO DO IF YOU SMELL GAS:**
  - Do not try to light any appliance.
  - Do not touch any electrical switch: do not use any phone in your building.
  - Immediately call gas supplier from a neighbors phone. Follow the gas supplier instructions.
  - If you cannot reach your gas supplier, call the fire department.

— Installation and service must be performed by a qualified installer, service agency or the gas supplier.

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

www.kozyheat.com
CONGRATULATIONS!

We welcome you as a new owner of a Kozy Heat gas fireplace. Kozy Heat products are designed with superior components and materials and assembled by trained craftsmen who take pride in their work. The burner and valve assembly are 100% test-fired and the complete fireplace is thoroughly inspected before packaging to ensure that you receive a quality product. Our commitment to quality and customer satisfaction have remained the same for over 30 years. We offer a complete line of gas and wood fireplaces, unique cabinets and stylish accessories to compliment any décor. Adding a fireplace is one of the best ways to increase the value of your home and we are proud to offer a network of dealers throughout the country to help make your experience everything you imagine. We pride ourselves in being dedicated to not only function and reliability, but customer safety as well. We offer our continual support and guidance to help you achieve the maximum benefit and enjoyment from your Kozy Heat gas fireplace.

Jim Hussong
President

Dudley Hussong
Board Chairman

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

Homeowner Reference Information

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

Model Name:_________________________________ Date purchased/installed:______________________________________

Serial Number:________________________________ Location on fireplace:_____________________________________

Dealership purchased from:______________________ Dealer Phone:___________________________________________

Notes:_______________________________________________________________________________________________
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SAFETY INFORMATION

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


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

- Installation and repair should be done only by a qualified service person. The appliance should be inspected by a qualified service person before use. Annual inspection by a qualified service person is required to maintain warranty. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulation air passageways of the appliance be kept clean.

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

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

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

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

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

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

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

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

- Due to high temperatures the appliance should be located out of traffic and away from furniture and draperies.

- The glass front or any part removed for servicing the appliance must be replaced prior to operating the appliance. Work should be done by a qualified service technician.

- Clean glass only when cool and only with non-abrasive cleansers.

- **WARNING: DO NOT OPERATE APPLIANCE WITH THE GLASS/FRAME ASSEMBLY REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD ONLY BE PERFORMED BY A LICENSED OR QUALIFIED SERVICE PERSON.**

- The glass assembly, Part #CSK-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc. DO NOT SUBSTITUTE MATERIALS.

- Do not strike or slam glass assembly.

- Any safety screen or guard removed for servicing the appliance must be replaced prior to operating the appliance.

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

- Keep burner and control compartment clean.

- Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect this appliance and to replace any part of the control system and any gas control which has been under water.
For all sidewall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

### INSTALLATION OF CARBON MONOXIDE DETECTORS

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

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

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

### APPROVED CARBON MONOXIDE DETECTORS

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

### SIGNAGE

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

### INSPECTION

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

### EXEMPTIONS

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

### MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM PROVIDED

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

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

### MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED

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

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

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

#### FIREPLACE DIMENSIONS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>Height</th>
<th>Width</th>
<th>Back Width</th>
<th>Depth</th>
<th>Back Height</th>
<th>Back to Elec. Access</th>
<th>Back to Gas Line Access</th>
<th>Front to Vent Center</th>
<th>Back to Vent Center</th>
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<td>19-1/4</td>
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#### WARNING
Failure to position components in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

1. Fireplace insert
2. Spring-loaded latch glass assembly
3. Control board with burner cover
4. Co-linear air duct
5. Log set (see page 14)
6. Refractory panels
7. Fan Kit (not shown)

#### CLEARANCES

- Insert to sidewall: 10” (254mm)
- Insert top to 10” (254mm) mantel: 13” (330mm)
- Insert top to 3/4” (20mm) trim: 8” (203mm)
- Insert bottom to combustible floor in front: 3-1/2” (89mm)
SPECIFICATIONS

ADDITIONAL COMPONENTS REQUIRED

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

**Other approved venting:** ICC, Selkirk, American Metals, Simpson Dura-Vent

**Shrouds - 3 pc & 4 pc:** Standard shrouds are available for this insert and will fit most applications. Custom shrouds may be ordered on a non-returnable basis. When ordering a custom shroud, please specify the existing fireplace front opening height and width. An upper hood and lower grill are included with fireplace.

**Blank Shrouds - 3 & 4 pc:** Blank shrouds are available for on-site custom fit applications and are sized to the opening after the insert has been installed. The interior perimeter is properly sized to fit onto the insert. The outer perimeter must be cut, formed and finished (painted). An upper hood and lower grill are included with fireplace.

**Full Door Shrouds:** Full door decorative shrouds are available for this insert and are used in place of a standard or blank shroud. An upper hood and lower grill are included with fireplace.

PLACEMENT CLEARANCE REQUIREMENTS

- This fireplace must be installed on a level surface capable of supporting the fireplace and venting.
- This fireplace insert is to be installed into a solid fuel masonry or factory built non-combustible fireplace that has been installed in accordance with the National, Provincial, State and local building codes.
- Due to high surface temperatures, fireplace should be located out of traffic and away from furniture and draperies.
- This fireplace may be installed in a bedroom.
- Please be aware of the large amount of heat this fireplace will produce when determining a location.

EXISTING FIREPLACE SPECIFICATIONS

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

EXISTING FIREPLACE REQUIREMENTS

The existing fireplace & chimney must be clean and in good working order and constructed of non-combustible materials. A gas line must be able to be installed to the insert. Provisions made to provide electrical power for operation. Any chimney clean-outs must fit properly. Existing Chimney must be comprised of one of the following: Factory built solid fuel chimney: 7” minimum inside diameter. Masonry chimney: 6” x 8” minimum inside diameter.

Existing Chimney Height: Minimum: 12ft. (3.66m) Maximum: 30ft. (9.14m)

DETERMINE LENGTH OF EXISTING CHIMNEY

1. Remove and discard existing chimney cap.

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

2. Position one person at fireplace and another person at top of chimney. Measure from fireplace base to top of chimney. Subtract 23” (584mm) (height of insert). This is the total length of co-linear flexible aluminum you will require.

MEASUREMENT FROM FIREPLACE BASE TO TOP OF CHIMNEY:
LESS 19-1/2” (489mm) (HEIGHT OF INSERT): -19-1/2” (489mm)
TOTAL CHIMNEY LENGTH REQUIRED:

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

EXISTING FIREPLACE MINIMUM OPENING REQUIREMENTS

<table>
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<th>Minimum Requirements</th>
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<tr>
<td>(A) Height:…………………19-1/2” (495mm)</td>
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<tr>
<td>(B) Front Width:…………. 31” (787mm)</td>
</tr>
<tr>
<td>(C) Depth:………………….15-1/4” (387mm)</td>
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<tr>
<td>(D) Back Width:…………...23-7/8” (606mm)</td>
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PREPARE EXISTING FIREPLACE

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

Any removed parts must be capable of reinstallation if this insert is ever removed (removal of rivets or screws is acceptable). The refractory, glass doors, screen rails, screen mesh and log grates may be removed from existing fireplace before installing this gas fireplace insert. Any smoke shelves, shields and baffles may be removed if attached by mechanical fasteners. If necessary, remove firebrick to obtain at least minimum opening requirements.

The fireplace flue damper can be fully blocked open or removed for installation of this gas fireplace insert. Remove existing chimney cap. Clean chimney and inside of fireplace to prevent creosote smell from entering the home.

Cutting of any sheet metal parts is prohibited, except the metal floor. If metal floor is removed, the insert must be placed directly on metal base of metal fireplace. If using this method, **Kozy Heat Floor Protector Kit (#CSK-FLP)**, must be used.

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.

Run any necessary electrical wiring to insert.

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

ELECTRICAL WIRING

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

This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with Nation Electric Code, ANSI/NFPA 70-latest edition, or the Canadian Electric Code, CSA C22.1

**WARNING**  This appliance is equipped with a three-prong (grounding) plug for protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove grounding prong from this plug. Do not allow excess cord to touch fireplace.
GLASS FRAME ASSEMBLY

WARNING

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

DO NOT REMOVE GLASS ASSEMBLY WHEN HOT!

REMOVE GLASS FRAME ASSEMBLY

A. Locate spring-loaded latches securing glass frame assembly at bottom of firebox.
B. Pull bottom latches out and down to release glass frame assembly bottom.
C. Lift glass frame assembly up off tabs located at top of firebox.

INSTALL GLASS FRAME ASSEMBLY

A. Align slots at top of glass frame assembly over tabs at top of firebox while lowering bottom of glass frame assembly into position.
B. Pull bottom latches out and up to secure glass frame assembly bottom.

INSTALLATION

ATTENTION

All steps as outlined in ‘PREPARE EXISTING FIREPLACE’ must be completed before continuing with this installation.

APPROVED VENTING

Kozy Heat #816-CL Co-Linear Vent System. Follow instructions on following pages.
ICC
Selkirk
American Metals
Simpson Dura-Vent

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

COMBUSTION AIR VENTING OPTIONS

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

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

AIR DUCT REMOVAL

Remove air duct at top of insert, sliding backwards out of channel.
Refer to instructions on following pages for vent system attachment to air duct.

Figure 8a

WARNING

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

DO NOT REMOVE GLASS ASSEMBLY WHEN HOT!

REMOVE GLASS FRAME ASSEMBLY

A. Locate spring-loaded latches securing glass frame assembly at bottom of firebox.
B. Pull bottom latches out and down to release glass frame assembly bottom.
C. Lift glass frame assembly up off tabs located at top of firebox.

INSTALL GLASS FRAME ASSEMBLY

A. Align slots at top of glass frame assembly over tabs at top of firebox while lowering bottom of glass frame assembly into position.
B. Pull bottom latches out and up to secure glass frame assembly bottom.

INSTALLATION

ATTENTION

All steps as outlined in ‘PREPARE EXISTING FIREPLACE’ must be completed before continuing with this installation.

APPROVED VENTING

Kozy Heat #816-CL Co-Linear Vent System. Follow instructions on following pages.
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AIR DUCT REMOVAL

Remove air duct at top of insert, sliding backwards out of channel.
Refer to instructions on following pages for vent system attachment to air duct.

Figure 8a
The co-linear pipes included in this vent system are designed to extend up to 35ft. (10.67m)

**IMPORTANT**

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

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

**NOTE**

If using stub method for combustion air pipe, extending it is not necessary. Determine length needed from air duct on insert (4ft. (1.22m) minimum) to above damper opening in existing chimney. Remove excess combustion air pipe from end without a collar. Continue with Step B. #2 below.

**Full Connection Method:** Slide intake pipe (end without collar) over termination cap collar. Secure with 3 self-tapping screws (provided).

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

**IMPORTANT**

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

---

*Your vent cap may look slightly different than one shown.*
RUN VENT SYSTEM THROUGH EXISTING CHIMNEY

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

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

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

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

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

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

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

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

---

NOTE

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

---
1. Place air duct (previously removed, page 12) into existing fireplace opening.

2. Place a bead of sealant (provided) around exhaust pipe (red marking). Slide exhaust pipe inside collar marked ‘Exhaust’ on air duct. Secure with (3) ½” self-tapping screws, provided. Apply additional sealant around joint to ensure an air tight seal.

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

4. Slide insert into fireplace opening.

5. Position air duct into channels located at top of insert. Slide air duct forward until seated. Secure air duct to insert front with (2) 1/2” sheet metal screws (included in components packet)

6. If necessary, level insert by threading leveling bolts (included in components packet) into nuts in bottom of insert - 2 each side.
GAS LINE CONNECTION

GAS CONVERSION

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

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

CAUTION
Installation of the gas line must only be done by a qualified person in accordance with local building codes, if any.
If not, follow ANSI 223.1.
Commonwealth of Massachusetts: Installation must be done by a licensed plumber or gas fitter.

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

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

The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of ½ psi (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas line at test pressures equal to or less than ½ psi (3.5 kPa).

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

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

Run gas line into fireplace, preferably through left or right gas line holes provided. A gas line knock-out is also located in outer bottom of insert if running gas line through bottom is necessary.

NOTE
If installing this insert into minimum opening dimensions, the gas line may need to be run after placement due to space limitations.

If installing this gas fireplace insert into a factory-built fireplace and the factory-built fireplace has no access hole provided, an access hole of 1 ¾” (38 mm) or less may be drilled through the lower sides or bottom of the firebox in a proper workmanship like manner. This access hole must be plugged with non-combustible insulation after the gas supply line has been installed.

IMPORTANT
Do not run gas line in a manner that would obstruct fan operation.

<table>
<thead>
<tr>
<th></th>
<th>NATURAL GAS</th>
<th>LP GAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINIMUM INLET GAS PRESSURE</td>
<td>5” WC (1.25 kPa) (7” WC (1.74 kPa) (recommended)</td>
<td>11” WC (2.74 kPa) (recommended)</td>
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<tr>
<td>MAXIMUM INLET GAS PRESSURE</td>
<td>10.5” WC (2.62 kPa)</td>
<td>13” WC (3.24 kPa)</td>
</tr>
</tbody>
</table>
3 PIECE SHROUD ASSEMBLY AND INSTALLATION

If installing a Full Door Shroud, follow instructions included with component.

Shroud assembly includes:

- (1) Shroud top
  - (2) 10-24 x 1" RH Philips Mch Screw (#300388)
- (1) Shroud left side
  - (6) 8 x 3/8" Phillips PH-Type B Blk Zinc SMS (#300121)
- (1) Shroud right side
  - (4) 10-24 x 1/2" PH Phillips Truss head Screw BZ (300338-1)

You will also need flanged upper hood and lower grill (included with fireplace).

1. Remove glass assembly from fireplace.

2. Lay shroud sections face down on a protective surface to assemble. Noting orientation of leg sections in photo at right, attach leg sections to top section by aligning holes (2 ea. side) in top section with holes in leg sections. Secure with black phillips head sheet metal screws (2 ea. side).

3. Partially thread remaining (2) black phillips head sheet metal screws into holes located along bottom flange of top section (1 ea. side). Do not tighten at this time.

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

5. Install upper hood with flanged ends. Align slots in hood to partially threaded screws in shroud top, slide hood back. Tighten screws.

6. Attach lower grill by threading 1" phillips head screws through mounting nuts (1 ea. side) on grill and into corresponding holes located at bottom of shroud leg sections. Tighten screws.

NOTE: When completed, lower grill may be adjusted slightly from side to side.
ATTENTION
If converting to LP (propane) gas, do so now before installing log set. Follow instructions included with conversion kit.

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

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

Figure 14a
Align holes in bottom of base logs C1, C2, & C3 to mounting pins on burner. Push logs down onto pins to seat. Position ember logs C12 & C13 in front of burner as shown above.

Figure 14b
Use a steel or stiff bristle nylon brush to distribute Rock Wool Embers onto logs and burner.

Install C4 - C8 logs, aligning with notches in base logs.
**CONTROL BOARD REMOVAL & INSTALLATION**

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

**NOTE**
Your components may look slightly different than ones shown.

### REMOVAL

1. Turn fireplace off.
2. Shut off gas supply at manual shut-off valve.
3. Disconnect gas line flex tube from manual shut-off valve.
4. Disconnect any wall switch, remote control or thermostat wires from top & bottom terminals on gas valve or unplug all components from receptacle, disconnect all wiring harnesses attached to gas valve.
5. Remove glass assembly and logs.
6. Remove burner assembly. (Secured with (2) nuts).
7. Remove top burner heat shield. Remove secondary burner heat shield resting on control board.
8. Remove (6) nuts securing control board. Remove control board.

### INSTALLATION

1. Place control board in firebox, aligning holes in board with mounting studs in firebox bottom. **MAKE SURE SEALING GASKET IS IN PLACE ON FIREBOX BOTTOM!** Secure board with nuts previously removed.
2. Re-install secondary burner heat shield, placing on top of control board. Re-install burner heat shield, positioning cut-outs over pilot assembly and burner orifice, centering from side to side and as far back as possible.
3. Re-install burner assembly, making sure burner tube is positioned over burner orifice, and alignment slots are placed over mounting studs in burner heat shield. Secure with nuts previously removed.
4. Reinstall log set.
5. Reconnect gas line to manual shut-off valve.
6. Re-connect any wall switch, remote control or thermostat wires to top & bottom terminals on gas valve or re-connect all wiring harnesses to gas valve. Plug all components into electrical outlet.
7. Reinstall glass frame assembly.
8. Turn gas on.
9. Verify proper log placement, operation of fireplace, and any electrical components.

**CAUTION**
CHECK ALL CONNECTIONS FOR LEAKS WITH SOAPY WATER, WHETHER FIELD OR FACTORY MADE.
FINALIZING THE INSTALLATION

FLAME APPEARANCE:

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

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

<table>
<thead>
<tr>
<th>FACTORY SET BURNER TUBE VENTURI SETTINGS</th>
<th>NATURAL GAS</th>
<th>LP (PROPANE) GAS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/8&quot; (3mm) OPEN</td>
<td>1/2&quot; (13mm) OPEN</td>
</tr>
</tbody>
</table>

<p>| BURNER TUBE VENTURI ADJUSTMENT GUIDELINES |
|------------------------------------------|-----------------|</p>
<table>
<thead>
<tr>
<th>VENTURI POSITION</th>
<th>FLAME COLOR</th>
<th>VENTURI ADJUSTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed too far</td>
<td>Dark orange flame with black tips</td>
<td>Open venturi setting slightly</td>
</tr>
<tr>
<td>Open too far</td>
<td>Blue flames</td>
<td>Close venturi setting slightly</td>
</tr>
</tbody>
</table>

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

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

**TO ADJUST VENTURI:**

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

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

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

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

CONTROL BOARD SYSTEM

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

CONTROL BOARD SYSTEM

Figure 17a

CSK-31 Pilot
CSK-31-RAD Pilot
CSK-31-MV Pilot
CSK-31-IPI Pilot
Burner Orifice
Burner Ports

FAN

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

VENT SYSTEM

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

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

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

GLASS CLEANING & REPLACEMENT

- Clean glass only when cool and only with non-abrasive cleansers.
  WARNING: DO NOT OPERATE APPLIANCE WITH GLASS/FRAME ASSEMBLY REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD ONLY BE PERFORMED BY A LICENSED OR QUALIFIED SERVICE PERSON.
- Use protective gloves to handle any broken or damaged glass assembly components.
- The glass assembly, part #CSK-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc.
- Replacement of glass & frame assembly, part #CSK-057T, must only be performed by a licensed or qualified service person.
  DO NOT SUBSTITUTE MATERIALS.
- Do not strike or slam glass door assembly.

IMPORTANT

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

CAUTION

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

KEEP APPLIANCE AREA CLEAR OF COMBUSTIBLE MATERIALS, SUCH AS GASOLINE AND OTHER FLAMMABLE VAPORS AND LIQUIDS.
KOZY HEAT LIMITED 10 YEAR WARRANTY

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

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

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

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

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

LIMITATION OF LIABILITY

To make a claim under this warranty, the purchaser must first contact the dealer/installer from whom the fireplace was purchased. This limited warranty will be void if the fireplace is not installed by a qualified installer and according to the installation instructions. Use of unauthorized components will make this warranty null and void.

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

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

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

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

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

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

WARRANTY CONDITIONS & REQUIREMENTS:

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

Effective September 01, 2011

18
LIFETIME WARRANTY

LIFETIME WARRANTY

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

LIFETIME WARRANTY COVERAGE

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

LIMITATION OF LIABILITY

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

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

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

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

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

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

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

Purchaser Name: ____________________________
Address: __________________________________
Telephone: _________________________________

Installer Name: ______________________________
Address: __________________________________
Telephone: _________________________________

Sept. 2011
IMPORTANT: This supplemental installation and homeowner manual is to be used in conjunction with CHASKA INSTALLATION MANUAL. Read both manuals before installing and operating appliance.

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

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

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

—Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS:
 protección
Do not try to light any appliance.
Do not touch any electrical switch: do not use any phone in your building.
Immediately call gas supplier from a neighbors phone. Follow the gas supplier instructions
If you cannot reach your gas supplier, call the fire department.

— Installation and service must be performed by a qualified installer, service agency or the gas supplier.

WARNING
HOT GLASS WILL CAUSE BURNS.
DO NOT TOUCH GLASS UNTIL COOLED.
NEVER ALLOW CHILDREN TO TOUCH GLASS.
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</tbody>
</table>
SAFETY INFORMATION

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


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

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

## CSK-31-IPI COMPONENTS LIST

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-150</td>
<td>Control Board Assembly</td>
</tr>
<tr>
<td>700-203</td>
<td>Manual Gas Shut-off Valve</td>
</tr>
<tr>
<td>CSK-135</td>
<td>Burner Assembly</td>
</tr>
<tr>
<td>CSK-G900</td>
<td>Firebrick Refractory Set</td>
</tr>
<tr>
<td>CSK-50A</td>
<td>Log Package</td>
</tr>
<tr>
<td>CSK-057T</td>
<td>Glass Frame Assembly</td>
</tr>
<tr>
<td>816-CL1</td>
<td>Co-Linear Air Duct</td>
</tr>
<tr>
<td>CSK-028-IPI</td>
<td>Fan Kit (2)-75 CFM</td>
</tr>
<tr>
<td>500-CSK</td>
<td>Grill Assembly</td>
</tr>
<tr>
<td>700-408</td>
<td>Remote Control</td>
</tr>
</tbody>
</table>

## CSK-31-IPI

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<td>MAXIMUM INLET GAS PRESSURE</td>
<td>10.5” WC (2.62 kPa)</td>
<td>13” WC (3.24 kPa)</td>
</tr>
<tr>
<td>MANIFOLD PRESSURE (HI)</td>
<td>3.5” WC (.87 kPa)</td>
<td>10” WC (2.49 kPa)</td>
</tr>
<tr>
<td>MANIFOLD PRESSURE (LO)</td>
<td>1.6” WC (.40 kPa)</td>
<td>6.4” WC (1.59 kPa)</td>
</tr>
<tr>
<td>ORIFICE SIZE</td>
<td>#37</td>
<td>#52</td>
</tr>
<tr>
<td>INPUT BTU/hr. (kW)</td>
<td>28,000 BTU/hr (8.21 kW)</td>
<td>28,000 BTU/hr (8.21 kW)</td>
</tr>
<tr>
<td>MINIMUM INPUT BTU/hr. (kW)</td>
<td>19,000 BTU/hr (5.67 kW)</td>
<td>20,400 BTU/hr (5.98kW)</td>
</tr>
</tbody>
</table>
WIRING SCHEMATICS

IMPORTANT

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

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

Figure 5a

- Key Lock
- Transmission
- Thermostat OFF/ON/SMART
- Set Point
- Temperature/Level/State
- Flame ON
- Fan
- Low Battery Alarm
- Room Temperature
- CPI Mode
- Blue back lit LCD display
- ON/OFF Key
- Thermostat Key
- UP/DOWN Arrow Key
- Mode Key

GAS VALVE

Figure 5b

- Stepper motor
- Main valve connection (green)
- Outlet pressure tap
- Pilot connection (orange)
- Inlet pressure tap
- Pilot flame adjustment
- Blue back lit LCD display
- ON/OFF Key
- Thermostat Key
- UP/DOWN Arrow Key
- Mode Key

PILOT ASSEMBLY

Figure 5c

- Flame Sensor
- Igniter
- Pilot
SYSTEM OPERATION

INITIALIZING THE SYSTEM FOR THE FIRST TIME

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

NOTE: Performing the next step will initiate Pilot Start-up in Manual Mode:
- Pilot igniter will spark repeatedly.
- Pilot will ignite if gas is supplied to the fireplace.

Remove all packaging / combustible material from fireplace before proceeding.

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

TEMPERATURE DISPLAY

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

TURN ON THE APPLIANCE

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

TURN OFF THE APPLIANCE

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

MANUALLY CONTROL FLAME WITH REMOTE CONTROL

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

ROOM THERMOSTAT (Remote Control Operation)

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

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

SMART THERMOSTAT (Remote Control Operation)

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

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

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

FAN SPEED CONTROL

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

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

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

ACCENT LIGHT KIT (not available in all fireplace models)

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

KEY LOCK

This function locks the keys to avoid unsupervised operation.
To Activate: Press MODE and UP keys at same time.
To De-activate: Press MODE and UP keys at same time.
SYSTEM OPERATION

LOW BATTERY DETECTION

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

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

CONTINUOUS PILOT / INTERMITTENT PILOT (CPI/IPI)

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

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

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

RESETTING SYSTEM FOR MANUAL OPERATION

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

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

AUTOMATIC SAFETY RESTART

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

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

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

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

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

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

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

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

RESET IFC CONTROL MODULE WHEN SYSTEM GOES INTO LOCK OUT
Reset Using ON/OFF Switch:
Set ON/OFF switch to OFF position. Wait approximately (2) seconds and move switch to the ON position. The ignition sequence will start again.

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

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

ADDITIONAL DIAGNOSTIC INDICATIONS INFORMATION

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

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

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

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

Figure 9a
1. This appliance is equipped with an ignition device which automatically lights the pilot. **DO NOT** try to light the pilot by hand.

2. BEFORE OPERATING, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

**WHAT TO DO IF YOU SMELL GAS:**

* Do not try to light any appliance.

* Do not touch any electrical switch; do not use any phone in your building.

* Immediately call your gas supplier from a neighbor’s phone. Follow the gas supplier’s instructions.

* If you cannot reach your gas supplier, call the fire department.

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

---

**WARNING**

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

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

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

---

**NOTE**

A PAINT SMELL WILL OCCUR DURING THE FIRST FEW HOURS OF BURNING. IT IS RECOMMENDED TO LEAVE THE FAN OFF DURING THIS PERIOD TO HELP SPEED THE PAINT CURING PROCESS.

THIS FIREPLACE MAY PRODUCE NOISES OF VARYING DEGREE AS IT HEATS AND COOLS DUE TO METAL EXPANSION AND CONTRACTION. THIS IS NORMAL AND DOES NOT AFFECT THE PERFORMANCE OR LONGEVITY OF THE FIREPLACE.

---

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

---

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

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

1. Turn off all electric power to the appliance.

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

2. Press hand held remote **OFF** button.

3. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow ‘WHAT TO DO IF YOU SMELL GAS’ below. If you don’t smell gas, go to next step.

**WHAT TO DO IF YOU SMELL GAS:**
* Do not try to light any appliance.
* Do not touch any electric switch; do not use any phone in your building.
* Immediately call your gas supplier from a neighbor’s phone. Follow the gas supplier’s instructions.
* If you cannot reach your gas supplier, call the fire department.

4. Turn **ON** all electric power to the appliance.

5. Press hand held remote **ON** button.

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

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

**TO TURN GAS OFF TO APPLIANCE**

1. Press hand held remote **OFF** button.

2. Turn **OFF** all electric power to appliance if service is to be performed.

PRESSURE TESTING

IMPORTANT
Pressure check taps for manifold (outgoing) and inlet (incoming) pressure have been incorporated into the valve. The pressure tap marked OUT measures outgoing pressure and the pressure tap marked IN measures incoming pressure. Follow instructions below for proper testing procedures. Refer to page 16 for proper NAT and LP manifold pressures.

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

INLET PRESSURE TEST:
1. Loosen inlet (IN) pressure tap screw (counter-clockwise).
2. Attach manometer using a 1/14” I.D. hose.
3. Light pilot and burner. Check pressure to ensure it is between the min. and max. recommended pressure settings.
4. Turn off burner and pilot.
5. Disconnect hose and tighten screw (clockwise). Screw should be snug, do not over tighten.
6. Relight pilot and burner. Reattach manometer to inlet pressure tap to verify that it is completely sealed. Manometer should read no pressure.

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

CAUTION
A LOW PRESSURE READING CAN CAUSE DELAYED IGNITION.

MANIFOLD PRESSURE TEST:
1. Light pilot.
2. Loosen manifold (OUT) pressure tap screw (counter-clockwise).
3. Attach manometer to pressure tap using a 1/4” I.D. hose.
4. Light pilot and burner. Check manometer reading.
5. Turn burner and pilot off.
6. Disconnect manometer hose and tighten screw (clockwise). Screw should be snug, do not over tighten.
7. Attach manometer to manifold pressure tap to verify it is completely sealed. Manometer should read no pressure when pilot and burner are on.
TROUBLESHOOTING

ATTENTION  TROUBLESHOOTING MUST BE PERFORMED BY A QUALIFIED TECHNICIAN.

Before proceeding with the steps in the following troubleshooting guide, verify the power supply is present and receiver batteries and/or battery pack are fresh and installed with correct polarity.

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

Make sure communication link between remote control and IFC control module is established.

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

PILOT WILL NOT LIGHT / STAY LIT

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

PILOT FLAME ALWAYS ON / WILL NOT EXTINGUISH

- System set to CPI mode. Set system to IPI mode.

MAIN FLAME WILL NOT LIGHT

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

PILOT AND BURNER EXTINGUISH WHILE IN OPERATION

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

GLASS SOOTING

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

FLAME BURNS BLUE AND LIFTS OFF BURNER

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

NO REACTION TO COMMAND

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

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

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

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

#NCK-#CSK-# NAT GAS CONVERSION KIT / #LCK-#CSK-# LP GAS CONVERSION KIT

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

Kit includes:
(1) Gas Conversion Label
(1) Pilot Injector NAT #62 / LP #35
(1) Burner Orifices: NAT #37 / LP #52
(1) Step Motor Pressure Regulator
(1) Gas Label

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

WARNING
SHUT OFF GAS SUPPLY AND ELECTRIC POWER TO FIREPLACE.

WARNING
SHUT OFF GAS SUPPLY BEFORE DISCONNECTING ELECTRIC POWER.

IMPORTANT
THE CONVERSION SHALL BE CARRIED OUT BY A MANUFACTURER’S AUTHORIZED REPRESENTATIVE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER, PROVINCIAL OR TERRITORIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN/CGA-B149.1 OR CAN/CGA-B149.2 INSTALLATION CODES.

PREPARE THE FIREPLACE:
Remove glass frame assembly, burner assembly and logs from insert.

REPLACE BURNER ORIFICE:
1. Remove burner by lifting front up and pulling towards you to release venturi from orifice.
2. Remove existing orifice cap. Replace with orifice cap included with kit, making sure to tighten cap securely. (Number stamped on orifice). NAT: #37 / LP: #52

CONVERT PILOT ASSEMBLY:
1. Remove pilot hood by pulling it directly up from pilot bracket.
2. Insert 5/32" (4mm) hex key into hexagon key-way of injector, turn counter clockwise to remove from injector journal.
3. Place hex key into end of injector included with kit, install into injector journal, turning clockwise to a recommended torque of 9 lb-in. (1.0 Nm) is achieved. (LP injectors have groove around top, Nat injectors do not. Numbers are stamped on pilot injectors). NAT: #62 / LP: #35
CONVERSION KIT INSTRUCTIONS

CONVERT THE GAS CONTROL VALVE:

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

COMPLETE THE CONVERSION:

1. Adjust burner tube venturi to correct setting by loosening screw, adjusting cap and retightening screw.
   **CORRECT SETTINGS: NAT: 1/8” (3mm) open   LP: 1/2” (13mm) open**

1. Re-install burner into fireplace, checking to ensure burner venturi is properly seated over burner orifice.

4. Re-install logs*.

5. Turn on gas and electrical supplies.

6. Check for leaks at all connections, whether field or factory made.

7. Test inlet pressure. Visually check pilot flame. Flame should envelope top of flame sensor and extend onto burner far enough for proper ignition. To Adjust pilot: Turn pilot adjustment screw clockwise to decrease or counter-clockwise to increase pilot flame.

8. Turn fireplace off.

9. Affix gas type sticker to label.

10. Re-install glass frame assembly.

11. Verify proper ignition and operation of fireplace.

12. Complete and affix ‘Gas Conversion’ label behind lower grill as close to gas valve as possible.

<table>
<thead>
<tr>
<th></th>
<th>NATURAL GAS</th>
<th>LP GAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MINIMUM INLET GAS PRESSURE</strong></td>
<td>5” WC (1.25 kPa) (7” WC (1.74 kPa) recommended)</td>
<td>11” WC (2.74 kPa) (recommended)</td>
</tr>
<tr>
<td><strong>MAXIMUM INLET GAS PRESSURE</strong></td>
<td>10.5” WC (2.62 kPa)</td>
<td>13” WC (3.24 kPa)</td>
</tr>
<tr>
<td><strong>MANIFOLD PRESSURE (HI)</strong></td>
<td>3.5” WC (.87 kPa)</td>
<td>10” WC (2.49 kPa)</td>
</tr>
<tr>
<td><strong>MANIFOLD PRESSURE (LO)</strong></td>
<td>1.6” WC (.40 kPa)</td>
<td>6.4” WC (1.59 kPa)</td>
</tr>
</tbody>
</table>
CONVERSION KIT INSTRUCTIONS

FLAME APPEARANCE:

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

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

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

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

<table>
<thead>
<tr>
<th>NATURAL GAS</th>
<th>LP (PROPANE) GAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8” (3 mm) OPEN</td>
<td>1/2” (13 mm) OPEN</td>
</tr>
</tbody>
</table>

BURNER TUBE VENTURI ADJUSTMENT GUIDELINES

<table>
<thead>
<tr>
<th>VENTURI POSITION</th>
<th>FLAME COLOR</th>
<th>VENTURI ADJUSTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed too far</td>
<td>Dark orange flame with black tips</td>
<td>Open venturi setting slightly</td>
</tr>
<tr>
<td>Open too far</td>
<td>Blue flames</td>
<td>Close venturi setting slightly</td>
</tr>
</tbody>
</table>

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

TO ADJUST VENTURIS:

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

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

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, or other fibrous materials. Use a vacuum to clean all components at least once a year.

NOTE

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

CONTROL BOARD SYSTEM

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

CONTROL BOARD SYSTEM

![Figure 18a](image.png)

| Pilot | Burner Orifice | Burner Ports |

FAN

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

VENT SYSTEM

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

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

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

GLASS CLEANING & REPLACEMENT

- Clean glass only when cool and only with non-abrasive cleansers.
  WARNING: DO NOT OPERATE APPLIANCE WITH GLASS/FRAME ASSEMBLY REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD ONLY BE PERFORMED BY A LICENSED OR QUALIFIED SERVICE PERSON.
- Use protective gloves to handle any broken or damaged glass assembly components.
- The glass assembly, part #CSK-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc.
- Replacement of glass & frame assembly, part #CSK-057T, must only be performed by a licensed or qualified service person.
  DO NOT SUBSTITUTE MATERIALS.
- Do not strike or slam glass door assembly.

IMPORTANT

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

CAUTION

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

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

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

### CONTROL BOARD AND PARTS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-150</td>
<td>Control Board - Nat Gas</td>
<td>700-503</td>
<td>Valve Step Motor - Natural Gas</td>
</tr>
<tr>
<td>CSK-151</td>
<td>Control Board - LP Gas</td>
<td>700-503-1</td>
<td>Valve Step Motor - LP Gas</td>
</tr>
<tr>
<td>700-557</td>
<td>SIT IPI Valve - Natural</td>
<td>700-203</td>
<td>Manual Shut-off Valve</td>
</tr>
<tr>
<td>700-557-1</td>
<td>SIT IPI Valve - LP</td>
<td>700-213B</td>
<td>18” Flexible Gas Line-Black</td>
</tr>
<tr>
<td>700-652</td>
<td>Proflame 2 IFC Board</td>
<td>700-226</td>
<td>Flexible Gas Line-Valve to Burner Connection</td>
</tr>
<tr>
<td>700-653</td>
<td>IFC Wire Harness Assembly</td>
<td>700-237</td>
<td>Natural Gas Orifice #37</td>
</tr>
<tr>
<td>700-551</td>
<td>Pilot Assembly - Natural Gas</td>
<td>700-252</td>
<td>LP Gas Orifice #52</td>
</tr>
<tr>
<td>700-551-1</td>
<td>Pilot Assembly - LP Gas</td>
<td>NCK-CSK-S</td>
<td>Natural Gas Conversion Kit</td>
</tr>
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<td>700-408</td>
<td>Transmitter</td>
<td>LCK-CSK-S</td>
<td>LP Gas Conversion Kit</td>
</tr>
<tr>
<td>700-166</td>
<td>Natural Gas Pilot Orifice</td>
<td>CSK-135</td>
<td>Burner Assembly</td>
</tr>
<tr>
<td>700-168</td>
<td>LP Gas Pilot Orifice</td>
<td></td>
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</table>

### GRILL REPLACEMENT

<table>
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<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>CSK-200</td>
<td>Upper Hood (For 3 &amp; 4 pc. Shrouds)</td>
</tr>
<tr>
<td>CSK-200F</td>
<td>Upper Hood (For Full Door Shrouds)</td>
</tr>
<tr>
<td>CSK-201</td>
<td>Lower Grill</td>
</tr>
</tbody>
</table>

### GLASS & GLASS GASKET

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-005</td>
<td>Replacement Valance</td>
</tr>
<tr>
<td>900-006</td>
<td>1-1/8” Glass Gasket w/ Adhesive</td>
</tr>
</tbody>
</table>

### FAN ASSEMBLY

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>CSK-028-IPI</td>
<td>Fan Assembly</td>
</tr>
<tr>
<td>CSK-057T</td>
<td>Valance with 31-1/4” x 17-5/8” glass</td>
</tr>
</tbody>
</table>

### LOG SET

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-50A</td>
<td>10 pc. Log Set</td>
</tr>
<tr>
<td>CSK-1</td>
<td>#1 Log</td>
</tr>
<tr>
<td>CSK-2</td>
<td>#2 Log</td>
</tr>
<tr>
<td>CSK-3</td>
<td>#3 Log</td>
</tr>
<tr>
<td>CSK-4</td>
<td>#4 Log</td>
</tr>
<tr>
<td>CSK-5</td>
<td>#5 Log</td>
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<tr>
<td>CSK-6</td>
<td>#6 Log</td>
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<td>CSK-7</td>
<td>#7 Log</td>
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<td>CSK-8</td>
<td>#8 Log</td>
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<td>CSK-12</td>
<td>#12 Log</td>
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<tr>
<td>CSK-13</td>
<td>#13 Log</td>
</tr>
<tr>
<td>900-REMB</td>
<td>Rock Wool Embers</td>
</tr>
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### REFRACTORY PANELS (Sandstone)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-G900</td>
<td>(4 pc.) Refractory Panel Set</td>
</tr>
<tr>
<td>CSK-900B</td>
<td>Back Refractory Panel</td>
</tr>
<tr>
<td>CSK-G900L</td>
<td>Left Side Refractory</td>
</tr>
<tr>
<td>CSK-900R</td>
<td>Right Side Refractory</td>
</tr>
<tr>
<td>CSK-G902</td>
<td>Top Refractory Panel</td>
</tr>
</tbody>
</table>

---

*Hussong Manufacturing Co., Inc.*

P.O. Box 577

204 Industrial Park Drive

Lakefield, MN 56150-0577

USA

*CSK-31-IPI*  
[www.kozyheat.com](http://www.kozyheat.com)
Supplemental Installation and Homeowner Information Manual for Chaska Model:

#CSK-31-MV

DIRECT VENT GAS FIREPLACE

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

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

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

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

—Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS:
❖ Do not try to light any appliance.
❖ Do not touch any electrical switch: do not use any phone in your building.
❖ Immediately call gas supplier from a neighbors phone. Follow the gas supplier instructions.
❖ If you cannot reach your gas supplier, call the fire department.

— Installation and service must be performed by a qualified installer, service agency or the gas supplier.

WARNING

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

www.kozyheat.com
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SAFETY INFORMATION

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


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

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

## CSK-31-MV COMPONENTS LIST

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-700</td>
<td>Control Board Assembly</td>
</tr>
<tr>
<td>700-203</td>
<td>Manual Gas Shut-off Valve</td>
</tr>
<tr>
<td>CSK-135</td>
<td>Burner Assembly</td>
</tr>
<tr>
<td>CSK-G900</td>
<td>Refractory Set</td>
</tr>
<tr>
<td>CSK-500</td>
<td>Log Package</td>
</tr>
<tr>
<td>CSK-057T</td>
<td>Glass Frame Assembly</td>
</tr>
<tr>
<td>816-CL1</td>
<td>Co-Linear Air Duct</td>
</tr>
<tr>
<td>500-CSK</td>
<td>Grill Assembly</td>
</tr>
<tr>
<td>CSK-028-IPI</td>
<td>IPI Fan Kit</td>
</tr>
<tr>
<td>700-308</td>
<td>Remote Control</td>
</tr>
</tbody>
</table>

## CSK-31-MV

<table>
<thead>
<tr>
<th></th>
<th>NATURAL GAS</th>
<th>LP GAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINIMUM INLET GAS PRESSURE</td>
<td>5&quot; WC (1.25 kPa) (7&quot; WC (1.74 kPa) (recommended)</td>
<td>11&quot; WC (2.74 kPa) (recommended)</td>
</tr>
<tr>
<td>MAXIMUM INLET GAS PRESSURE</td>
<td>10.5&quot; WC (2.62 kPa)</td>
<td>13&quot; WC (3.24 kPa)</td>
</tr>
<tr>
<td>MANIFOLD PRESSURE (HI)</td>
<td>3.5&quot; WC (.87 kPa)</td>
<td>10&quot; WC (2.49 kPa)</td>
</tr>
<tr>
<td>MANIFOLD PRESSURE (LO)</td>
<td>1.6&quot; WC (.40 kPa)</td>
<td>6.4&quot; WC (1.59 kPa)</td>
</tr>
<tr>
<td>ORIFICE SIZE</td>
<td>#37</td>
<td>#52</td>
</tr>
<tr>
<td>INPUT BTU/hr. (kW)</td>
<td>28,000 BTU/hr (8.21 kW)</td>
<td>28000 BTU/hr (8.21 kW)</td>
</tr>
<tr>
<td>MINIMUM INPUT BTU/hr. (kW)</td>
<td>19,000 BTU/hr (5.67 kW)</td>
<td>20,400 BTU/hr (5.98 kW)</td>
</tr>
</tbody>
</table>
IMPORTANT

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

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

### REMOTE CONTROL

Figure 5a

- Blue LCD display
- ON/OFF Key
- THERMOSTAT Key
- UP/DOWN Arrow key
- MODE Key

Transmission

Child safety lock-out

Low battery alarm

Room Temperature

Set Point Temperature/Level/State

Flame ON

Fan

MAX

AUX

Aux ON

### GAS VALVE

Figure 5b

- Step Motor
- Manifold Pressure Tab
- Inlet Pressure Tab
- Valve Terminals
- Gas Control Knob

### PILOT ASSEMBLY

Figure 5c

- Thermopile
- Pilot Hood
- Electrode
- Thermocouple
CONTROL SYSTEM COMPONENTS

RECEIVER

![Image of Receiver](image)

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

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

TEMPERATURE DISPLAY

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

REMOTE FLAME CONTROL

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

ROOM THERMOSTAT (Transmitter Operation)

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

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

SMART THERMOSTAT (Transmitter Operation)

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

1. Press Thermostat key until the word SMART appears on right side of temperature bulb graphic.

2. To adjust set temperature, press Up/Down arrow keys until desired set temperature is displayed on LCD screen.

FAN SPEED CONTROL

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

ACCENT LIGHT KIT (not available in all fireplace models)

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

1. Use MODE key to guide you to AUX icon.

2. Press Up Arrow Key to turn light kit on, press Down Arrow Key to turn light kit off. A single ‘beep’ will confirm reception of the command.

3. Use the installed dimmer switch to adjust brightness of lights.
SYSTEM OPERATION

KEY LOCK

This function locks the keys to avoid unsupervised operation.
To Activate: Press MODE and UP keys at same time.
To De-activate: Press MODE and UP keys at same time.

LOW BATTERY DETECTION

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

RECEIVER: Receiver battery lifespan depends on various factors including battery quality, number of ignitions, changes to room thermostat set point, etc. When receiver batteries are low, no ‘beep’ will be emitted from Receiver when it receives an ON/OFF command from the Transmitter. This is an alert for a low battery condition for the Receiver. When the batteries are replaced the ‘beep’ will be emitted from the Receiver when ON/OFF Key is pressed.

MANUAL BYPASS OF REMOTE SYSTEM

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

TURN ON THE APPLIANCE

Follow instructions as outlined in Lighting and Shutdown. Pages 11-12.
Press ON/OFF key on transmitter. The display will show all active icons on the screen. A single ‘beep’ from receiver will confirm reception of the command.

TURN OFF THE APPLIANCE

Follow instructions as outlined in Lighting and Shutdown. Pages 11-12.
Press ON/OFF key on transmitter. The display will show only room temperature and icon on the screen. A single ‘beep’ from receiver will confirm reception of the command.
**LIGHTING AND SHUTDOWN**

**FOR YOUR SAFETY - READ BEFORE LIGHTING**

**WARNING**

IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT, CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

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

---

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

---

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

**WHAT TO DO IF YOU SMELL GAS:**

* Do not try to light any appliance.
* Do not touch any electrical switch; do not use any phone in your building.
* Immediately call your gas supplier from a neighbor’s phone. Follow the gas supplier’s instructions.
* If you cannot reach your gas supplier, call the fire department.

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in, or turn by hand, do not try to repair it, call a qualified service technician. Forced or attempted repair may result in a fire or explosion, and loss of warranty.

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

---

**WARNING**

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

**WARNING**

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

**NOTE**

A PAINT SMELL WILL OCCUR DURING THE FIRST FEW HOURS OF BURNING. IT IS RECOMMENDED TO LEAVE THE FAN OFF DURING THIS PERIOD TO HELP SPEED THE PAINT CURING PROCESS. THIS FIREPLACE MAY PRODUCE NOISES OF VARYING DEGREES AS IT HEATS AND COOLS DUE TO METAL EXPANSION AND CONTRACTION. THIS IS NORMAL AND DOES NOT AFFECT THE PERFORMANCE OR LONGEVITY OF THE FIREPLACE.
LIGHTING AND SHUTDOWN (cont.)

LIGHTING INSTRUCTIONS

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

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electric switch; do not use the phone in your building.
- Immediately call your gas supplier from a neighbor’s phone. Follow the gas supplier’s instructions.
- If you cannot reach your gas supplier, call the fire department.

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

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

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

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

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

TURN BURNER OFF

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

**NOTE**
The pilot will stay lit.

TURN PILOT OFF

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

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

IMPORTANT

Pressure check taps for manifold (outgoing) and inlet (incoming) pressure have been incorporated into the valve. The pressure tap marked OUT measures outgoing pressure and the pressure tap marked IN measures incoming pressure. Follow instructions below for proper testing procedures. Refer to page 17 for proper NAT and LP manifold pressures.

NOTE

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

INLET PRESSURE TEST:

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

NOTE

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

MANIFOLD PRESSURE TEST:

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

CAUTION

A LOW PRESSURE READING CAN CAUSE DELAYED IGNITION.

Figure 13a
Before proceeding with the steps in the following troubleshooting guide, verify the power supply (AC/DC adapter or Fan Control Module) is present and receiver batteries and/or battery pack are fresh and installed with correct polarity.

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

Make sure communication link between transmitter and receiver is established.

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

**ATTENTION**

TROUBLESHOOTING MUST BE PERFORMED BY A QUALIFIED TECHNICIAN.

PILOT WILL NOT LIGHT / STAY LIT

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

PILOT FLAME ALWAYS ON / WILL NOT EXTINGUISH

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

MAIN FLAME WILL NOT LIGHT

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

PILOT AND BURNER EXTINGUISH WHILE IN OPERATION

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

GLASS SOOTING

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

FLAME BURNS BLUE AND LIFTS OFF BURNER

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

NO REACTION TO COMMAND

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

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

**WARNING**

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

---

**IMPORTANT**

THE CONVERSION SHALL BE CARRIED OUT BY A MANUFACTURER'S AUTHORIZED REPRESENTATIVE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER, PROVINCIAL OR TERRITORIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN/CGA-B149.1 OR CAN/CGA-B149.2 INSTALLATION CODES.

Kit includes:  
(1) Burner Orifice: NAT #37  /  LP #52  
(1) Pilot Injector: NAT #BL22N  /  LP #BL14LP  
(1) Gas Label  
(1) Valve and Pilot Assembly Conversion Instructions  
(1) Gas Conversion Label

---

**CAUTION**

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

**WARNING**

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

---

**IMPORTANT**

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

**PREPARE THE FIREPLACE:**

1. Turn fireplace off by pushing in and turning gas control knob clockwise to OFF position.
2. Remove glass frame assembly, logs, and burner assembly from fireplace insert.

**REPLACE BURNER ORIFICES:**

Remove existing orifice caps. Install orifice caps included with kit. Tighten caps securely.
NAT #37  /  LP #52  (Number stamped on burner orifice).

**CONVERT THE PILOT ASSEMBLY:**

1. Using a 7/16” wrench, loosen and remove pilot hood by turning counter-clockwise.
2. Remove pilot orifice located inside pilot housing. Install pilot orifice included with kit. (Number stamped on orifice).
NAT: BL22N  /  LP: #BL14LP
3. Re-attach pilot hood. Tighten with wrench, making sure hood is centered between thermopile and thermocouple.
CONVERSION KIT INSTRUCTIONS

CONVERT THE GAS CONTROL VALVE:

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

COMPLETE THE CONVERSION:

1. Adjust burner tube venturi to correct setting by loosening screws adjusting cap and retightening screw.
   **CORRECT SETTINGS:** NAT: 1/8” (3mm) open / L.P: 1/2” (13mm) open

2. Re-install burner into fireplace, making sure orifice is properly seated inside burner venturi and pilot hood is above burner assembly.

3. Re-install logs.

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

5. Test inlet pressure. Visually check pilot flame. Flame should envelope top of flame sensor and extend onto burner far enough for proper ignition. To Adjust pilot: Turn pilot adjustment screw clockwise to decrease or counter-clockwise to increase pilot flame.

6. Turn fireplace off.

7. Affix gas type sticker to label.

8. Re-install glass frame.

9. Verify proper ignition and operation of fireplace.

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

---

<table>
<thead>
<tr>
<th></th>
<th><strong>NATURAL GAS</strong></th>
<th><strong>L.P GAS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MINIMUM INLET GAS PRESSURE</strong></td>
<td>5” WC (1.25 kPa) (7” WC (1.74 kPa) recommended)</td>
<td>11” WC (2.74 kPa) (recommended)</td>
</tr>
<tr>
<td><strong>MAXIMUM INLET GAS PRESSURE</strong></td>
<td>10.5” WC (2.62 kPa)</td>
<td>13” WC (3.24 kPa)</td>
</tr>
<tr>
<td><strong>MANIFOLD PRESSURE (HI)</strong></td>
<td>3.5” WC (.87 kPa)</td>
<td>10” WC (2.49 kPa)</td>
</tr>
<tr>
<td><strong>MANIFOLD PRESSURE (LO)</strong></td>
<td>1.6” WC (.40 kPa)</td>
<td>6.4” WC (1.59 kPa)</td>
</tr>
</tbody>
</table>
FLAME APPEARANCE:

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

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

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

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

<table>
<thead>
<tr>
<th>NATURAL GAS</th>
<th>LP (PROPANE) GAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8” (3mm) open</td>
<td>1/2” (13mm) open</td>
</tr>
</tbody>
</table>

### BURNER TUBE VENTURI ADJUSTMENT GUIDELINES

<table>
<thead>
<tr>
<th>VENTURI POSITION</th>
<th>FLAME COLOR</th>
<th>VENTURI ADJUSTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed too far</td>
<td>Dark orange flame with black tips</td>
<td>Open venturi setting slightly</td>
</tr>
<tr>
<td>Open too far</td>
<td>Blue flames</td>
<td>Close venturi setting slightly</td>
</tr>
</tbody>
</table>

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

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

### TO ADJUST VENTURI:

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

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

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

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

CONTROL BOARD SYSTEM

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

![CSK-31-MV Pilot](image1)  
![Burner Orifice](image2)  
![Burner Ports](image3)  

Figure 19a

FAN

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

VENT SYSTEM

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

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

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

GLASS CLEANING & REPLACEMENT

- Clean glass only when cool and only with non-abrasive cleansers.  
  WARNING: DO NOT OPERATE APPLIANCE WITH GLASS/FRAME ASSEMBLY REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD ONLY BE PERFORMED BY A LICENSED OR QUALIFIED SERVICE PERSON.  
- Use protective gloves to handle any broken or damaged glass assembly components.
- The glass assembly, part #CSK-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc.
- Replacement of glass & frame assembly, part #CSK-057T, must only be performed by a licensed or qualified service person.  
  DO NOT SUBSTITUTE MATERIALS.  
- Do not strike or slam glass door assembly.

IMPORTANT

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

CAUTION

LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. VERIFY PROPER OPERATION AFTER SERVICING.  
KEEP APPLIANCE AREA CLEAR OF COMBUSTIBLE MATERIALS, SUCH AS GASOLINE AND OTHER FLAMMABLE VAPORS AND LIQUIDS.
**REPLACEMENT PARTS LIST**

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

### CONTROL BOARD AND PARTS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-700</td>
<td>Control Board - Nat Gas</td>
<td>700-403S</td>
<td>Valve Step Motor - Natural Gas</td>
</tr>
<tr>
<td>CSK-701</td>
<td>Control Board - LP Gas</td>
<td>700-403S-1</td>
<td>Valve Step Motor - LP Gas</td>
</tr>
<tr>
<td>700-084</td>
<td>SIT MV Valve - Natural</td>
<td>700-203</td>
<td>Manual Shut-off Valve</td>
</tr>
<tr>
<td>700-085</td>
<td>SIT MV Valve - LP</td>
<td>700-213B</td>
<td>18” Flexible Gas Line-Black</td>
</tr>
<tr>
<td>700-088</td>
<td>Pilot Assembly - Natural Gas</td>
<td>700-226</td>
<td>Flexible Gas Line-Valve to Burner Connection</td>
</tr>
<tr>
<td>700-089</td>
<td>Pilot Assembly - LP Gas</td>
<td>700-237</td>
<td>Natural Gas Orifice #37</td>
</tr>
<tr>
<td>700-308R</td>
<td>Receiver</td>
<td>700-252</td>
<td>LP Gas Orifice #52</td>
</tr>
<tr>
<td>700-558</td>
<td>GTMFS Wire Harness</td>
<td>NCK-CSKVM-S</td>
<td>Natural Gas Conversion Kit</td>
</tr>
<tr>
<td>700-130</td>
<td>Fan Control Module</td>
<td>LCK-CSKVM-S</td>
<td>LP Gas Conversion Kit</td>
</tr>
<tr>
<td>700-308</td>
<td>Transmitter</td>
<td>CSK-135</td>
<td>Burner Assembly</td>
</tr>
<tr>
<td>700-166</td>
<td>#62 Natural Gas Pilot Orifice</td>
<td>700-993</td>
<td>Pilot Flame Sensor (with wire)</td>
</tr>
<tr>
<td>700-168</td>
<td>#35 LP Gas Pilot Orifice</td>
<td>700-992</td>
<td>Pilot Igniter (with wire)</td>
</tr>
</tbody>
</table>

### GRILL REPLACEMENT

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-200</td>
<td>Upper Hood (For 3 &amp; 4 pc. Shrouds)</td>
</tr>
<tr>
<td>CSK-200F</td>
<td>Upper Hood (For Full Door Shrouds)</td>
</tr>
<tr>
<td>CSK-201</td>
<td>Lower Grill</td>
</tr>
</tbody>
</table>

### GLASS & GLASS GASKET

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-005</td>
<td>Replacement Valance</td>
</tr>
<tr>
<td>900-006</td>
<td>1-1/8” Glass Gasket w/ Adhesive</td>
</tr>
<tr>
<td>CSK-057T</td>
<td>Valance with 31-1/4” x 17-5/8” glass</td>
</tr>
</tbody>
</table>

### FAN ASSEMBLY

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-028</td>
<td>Fan Assembly</td>
</tr>
<tr>
<td>CSK-50A</td>
<td>10 pc. Log Set</td>
</tr>
<tr>
<td>CSK-1</td>
<td>#C1 Log</td>
</tr>
<tr>
<td>CSK-2</td>
<td>#C2 Log</td>
</tr>
</tbody>
</table>

### LOG SET

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-3</td>
<td>#C3 Log</td>
</tr>
<tr>
<td>CSK-4</td>
<td>#C4 Log</td>
</tr>
<tr>
<td>CSK-5</td>
<td>#C5 Log</td>
</tr>
<tr>
<td>CSK-6</td>
<td>#C6 Log</td>
</tr>
<tr>
<td>CSK-7</td>
<td>#C7 Log</td>
</tr>
<tr>
<td>CSK-8</td>
<td>#C8 Log</td>
</tr>
<tr>
<td>CSK-12</td>
<td>#C12 Log</td>
</tr>
<tr>
<td>CSK-13</td>
<td>#C13 Log</td>
</tr>
<tr>
<td>900-REMB</td>
<td>Rock Wool Embers</td>
</tr>
</tbody>
</table>

### REFRACTORY PANELS (Sandstone)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-G900</td>
<td>(4 pc.) Refractory Panel Set</td>
</tr>
<tr>
<td>CSK-900B</td>
<td>Back Refractory Panel</td>
</tr>
<tr>
<td>CSK-G900L</td>
<td>Left Side Refractory</td>
</tr>
<tr>
<td>CSK-900R</td>
<td>Right Side Refractory</td>
</tr>
<tr>
<td>CSK-G902</td>
<td>Top Refractory Panel</td>
</tr>
<tr>
<td>CSK-8</td>
<td>#C8 Log</td>
</tr>
<tr>
<td>CSK-12</td>
<td>#C12 Log</td>
</tr>
<tr>
<td>CSK-13</td>
<td>#C13 Log</td>
</tr>
<tr>
<td>900-REMB</td>
<td>Rock Wool Embers</td>
</tr>
</tbody>
</table>

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

CSK-31-MV

www.kozyheat.com
Supplemental Installation and Homeowner Information Manual for Chaska Model:

#CSK-31-RAD

DIRECT VENT GAS FIREPLACE

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

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

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

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

—Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electrical switch: do not use any phone in your building.
- Immediately call gas supplier from a neighbors phone. Follow the gas supplier instructions.
- If you cannot reach your gas supplier, call the fire department.

— Installation and service must be performed by a qualified installer, service agency or the gas supplier.

WARNING: HOT GLASS WILL CAUSE BURNS. DO NOT TOUCH GLASS UNTIL COOLED. NEVER ALLOW CHILDREN TO TOUCH GLASS.
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<td><strong>SPECIFICATIONS</strong></td>
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<td>Components List</td>
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<td>Gas Pressure Requirements / BTU’s</td>
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<td><strong>FAN INSTALLATION</strong></td>
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<tr>
<td>CSK-028 Optional Fan Installation</td>
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<tr>
<td><strong>THERMOSTAT / WALL SWITCH / REMOTE</strong></td>
</tr>
<tr>
<td>Thermostat / Wall Switch / Remote</td>
</tr>
<tr>
<td><strong>OPERATING INSTRUCTIONS</strong></td>
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<td>Valve and Pilot Assembly Components</td>
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<td>Lighting and Shutdown Instructions</td>
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<td>Pressure Testing</td>
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<tr>
<td><strong>TROUBLESHOOTING</strong></td>
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<tr>
<td>Troubleshooting</td>
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<tr>
<td><strong>CONVERSION KIT INSTRUCTIONS</strong></td>
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<tr>
<td>Conversion Kit Instructions</td>
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<td><strong>MAINTENANCE</strong></td>
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<tr>
<td>Maintenance</td>
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<td><strong>REPLACEMENT PARTS</strong></td>
</tr>
<tr>
<td>Replacement Parts</td>
</tr>
</tbody>
</table>
SAFETY INFORMATION

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


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

- Installation and repair should be done only by a qualified service person. The appliance should be inspected by a qualified service person before use. Annual inspection by a qualified service person is required to maintain warranty. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulation air passageways of the appliance be kept clean.

- If this appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

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

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

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

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

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

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

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

- Due to high temperatures the appliance should be located out of traffic and away from furniture and draperies.

- The glass front or any part removed for servicing the appliance must be replaced prior to operating the appliance. Work should be done by a qualified service technician.

- Clean glass only when cool and only with non-abrasive cleansers.

**WARNING: DO NOT OPERATE APPLIANCE WITH THE GLASSFRAME ASSEMBLY REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD ONLY BE PERFORMED BY A LICENSED OR QUALIFIED SERVICE PERSON.**

- The glass assembly, Part #CSK-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc. DO NOT SUBSTITUTE MATERIALS.

- Do not strike or slam glass assembly.

- Any safety screen or guard removed for servicing the appliance must be replaced prior to operating the appliance.

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

- Keep burner and control compartment clean.

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

## CSK-31-RAD COMPONENTS LIST

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-770A</td>
<td>Millivolt Control Board Assembly</td>
</tr>
<tr>
<td>700-203</td>
<td>Manual Gas Shut-off Valve</td>
</tr>
<tr>
<td>CSK-135</td>
<td>Burner Assembly</td>
</tr>
<tr>
<td>CSK-G900</td>
<td>Refractory Set</td>
</tr>
<tr>
<td>CSK-50A</td>
<td>Log Package</td>
</tr>
<tr>
<td>CXL-057T</td>
<td>Glass Frame Assembly</td>
</tr>
<tr>
<td>816-CL1</td>
<td>Co-Linear Air Duct</td>
</tr>
<tr>
<td>500-CSK</td>
<td>Grill Assembly</td>
</tr>
</tbody>
</table>

## CSK-31-RAD

<table>
<thead>
<tr>
<th></th>
<th>NATURAL GAS</th>
<th>LP GAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINIMUM INLET GAS PRESSURE</td>
<td>5&quot; WC (1.25 kPa)</td>
<td>11&quot; WC (2.74 kPa)</td>
</tr>
<tr>
<td>MAXIMUM INLET GAS PRESSURE</td>
<td>10.5&quot; WC (2.62 kPa)</td>
<td>13&quot; WC (3.24 kPa)</td>
</tr>
<tr>
<td>MANIFOLD PRESSURE (HI)</td>
<td>3.5&quot; WC (.87 kPa)</td>
<td>10&quot; WC (2.49 kPa)</td>
</tr>
<tr>
<td>MANIFOLD PRESSURE (LO)</td>
<td>1.6&quot; WC (.40 kPa)</td>
<td>6.4&quot; WC (1.59 kPa)</td>
</tr>
<tr>
<td>ORIFICE SIZE</td>
<td>#37</td>
<td>#52</td>
</tr>
<tr>
<td>INPUT BTU/hr. (kW)</td>
<td>28,000 BTU/hr (8.21 kW)</td>
<td>28000 BTU/hr (8.21 kW)</td>
</tr>
<tr>
<td>MINIMUM INPUT BTU/hr. (kW)</td>
<td>19,000 BTU/hr (5.67 kW)</td>
<td>20,400 BTU/hr (5.98 kW)</td>
</tr>
</tbody>
</table>
Optional fan kit #CSK-028 includes: (2) 75 CFM fan with temperature control switch and 4ft. (1219mm) fan cord
(4) 1/4" nuts

1. Remove glass assembly.
3. From inside lower right grill opening, loosen screw securing removable access panel (with electrical box & romex connector installed). Remove panel.
4. Insert 115V wiring (with ground) through romex connector and wire to speed control / receptacle assembly matching black (hot), white (neutral), and green (ground) wires to corresponding wires on speed control / receptacle assembly.
5. Secure speed control / receptacle assembly (purchased separately) to electrical box with (2) screws provided.
6. Re-install electrical access panel. Tighten screw.
7. Attach temperature control switch to bottom of firebox.
8. Plug cord into electrical box receptacle.
9. Turn speed control counter-clockwise until it ‘clicks’. This is the OFF position.
10. Turn speed control ON by turning knob clockwise past the ‘click’ - this is the highest setting.
11. Re-install glass assembly.

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

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

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

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

---

**WALL SWITCH / THERMOSTAT:**

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

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

**REMote CONTROL:**

Follow instructions included with remote control.

**IMPORTANT**
If ON/OFF rocker switch wires are not disconnected, the ON/OFF rocker switch on millivolt board must be in OFF position for proper operation of any of these components.

If rocker switch is ON, fireplace burner will operate until it is turned OFF by rocker switch. A wall switch, thermostat, or remote control will not turn fireplace OFF when it has been turned ON by the rocker switch.

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

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

---

**Figure 5a**

Remote Control Wiring Diagram

Thermostat Wiring Diagram

OPTIONAL  Disconnect ON/OFF rocker switch wires from back of gas valve.
VALVE & PILOT ASSEMBLY COMPONENTS

- THERMOPILE
- PILOT HOOD
- ELECTRODE
- THERMOCOUPLE
- PIEZO IGNITOR
- GAS CONTROL KNOB
- HI/LO FLAME ADJUSTMENT KNOB
- VALVE TERMINALS
- ON/OFF ROCKER SWITCH

Figure 6a
LIGHTING AND SHUTDOWN

FOR YOUR SAFETY - READ BEFORE LIGHTING

WARNING
IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT, CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

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

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

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

B. BEFORE LIGHTING, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

* Do not try to light any appliance.

* Do not touch any electrical switch; do not use any phone in your building.

* Immediately call your gas supplier from a neighbor’s phone. Follow the gas supplier’s instructions.

* If you cannot reach your gas supplier, call the fire department.

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in, or turn by hand, do not try to repair it, call a qualified service technician. Forced or attempted repair may result in a fire or explosion, and loss of warranty.

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

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

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

NOTE
A PAINT SMELL WILL OCCUR DURING THE FIRST FEW HOURS OF BURNING. IT IS RECOMMENDED TO LEAVE THE FAN OFF DURING THIS PERIOD TO HELP SPEED THE PAINT CURING PROCESS. THIS FIREPLACE MAY PRODUCE NOISES OF VARYING DEGREES AS IT HEATS AND COOLS DUE TO METAL EXPANSION AND CONTRACTION. THIS IS NORMAL AND DOES NOT AFFECT THE PERFORMANCE OR LONGEVITY OF THE FIREPLACE.
LIGHTING AND SHUTDOWN (cont.)

LIGHTING INSTRUCTIONS

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

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electric switch; do not use the phone in your building.
- Immediately call your gas supplier from a neighbor’s phone. Follow the gas supplier’s instructions.
- If you cannot reach your gas supplier, call the fire department.

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

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

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

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

| NOTE | When fireplace is initially lit, condensation will appear on the glass; this is normal in all gas fireplaces and will disappear after several minutes. |
TO TURN OFF GAS TO APPLIANCE

TURN BURNER OFF

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

NOTE The pilot will stay lit.

TURN PILOT OFF

Turn pilot off by pushing in and turning gas control knob to OFF.

DO NOT FORCE.

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

ADJUSTING FLAME HEIGHT

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

**IMPORTANT**
Pressure check taps for manifold (outgoing) and inlet (incoming) pressure have been incorporated into the valve. The pressure tap marked OUT measures outgoing pressure and pressure tap marked IN measures incoming pressure. Follow instructions below for proper testing procedures.

**NOTE**
The appliance and its individual shut-off valve must be disconnected from gas supply piping system during any pressure testing of that system at pressures in excess of ½ psi (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas line at test pressures equal to or less than ½ psi (3.5 kPa).

**INLET PRESSURE TEST:**

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

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

**MANIFOLD PRESSURE TEST:**

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

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

CAUTION  THE FOLLOWING MUST BE PERFORMED BY A QUALIFIED TECHNICIAN.

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

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

B. Check wiring at electrode for proper connection.

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

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

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

A. No gas or low gas pressure.

♦ Check remote shut off valves from fireplace. Usually there is a valve near the main. There may be more than (1) valve between the fireplace and the main.

♦ Low gas pressure can be caused by several situations such as a bent line, too narrow diameter pipe, or low line pressure. Consult with plumber or gas supplier.

B. No LP in tank.

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

PILOT WILL NOT STAY LIT AFTER CAREFULLY FOLLOWING LIGHTING INSTRUCTIONS.

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

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

C. Thermocouple reading below 15 millivolts.

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

D. Thermopile not generating sufficient millivolts.

♦ Pilot flame must be enveloping thermopile. Adjust pilot flame if necessary.

♦ Check thermopile wire connections at valve. Tighten if necessary.

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

CAUTION  THE FOLLOWING MUST BE PERFORMED BY A QUALIFIED TECHNICIAN.
A. Gas control knob not turned to ON.
B. ON/OFF switch not turned on.
C. Remote, wall switch or thermostat not turned ON.
D. Plugged main burner orifice.
E. Remote, wall switch, thermostat or ON/OFF switch wires defective.

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

FREQUENT PILOT OUTAGES
A. Pilot shield not installed.
B. Pilot flame too high or too low, causing pilot safety to drop out.

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

BURNER WON’T STAY LIT
A. Thermopile wires loose at valve terminals.

♦ Tighten if necessary.
B. Thermopile wires ground out due to pinched wires.

♦ Free pinched wires if necessary.
C. Refractory panel placement (if installed).

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

MORE TROUBLESHOOTING ON FOLLOWING PAGE
TROUBLESHOOTING

PILOT AND BURNER EXTINGUISH WHILE IN OPERATION

A. No LP (propane) in tank.
   ♦ Check tank and refill if necessary.

B. Glass frame assembly not installed correctly.
   ♦ Refer to installation manual for proper glass frame assembly installation instructions.

C. Defective thermopile or thermocouple.
   ♦ Check thermopile and thermocouple for proper millivolts.

D. Improper pitch on horizontal vent.
   ♦ 1/4” (6mm) rise per foot is required on horizontal venting.

E. Inner vent pipe leaking exhaust gases back into firebox.
   ♦ Check for leaks. Repair if necessary.

F. Improper vent cap installation.
   ♦ Check for proper vent cap installation. Maximum downward slope of horizontal vent cap is 1/4” (6mm). Adjust if necessary.
   ♦ Check vent cap for blockage. Remove debris if necessary.

G. Excessive draft.

GLASS SOOTING

A. Improper log placement.
   ♦ Refer to log placement instructions in fireplace installation manual.

B. Improper venturi setting.
   ♦ Venturi may need to be opened slightly to allow more air into gas mix.

C. Improper pitch on horizontal venting.
   ♦ 1/4” (6mm) rise per foot is required on horizontal venting.

FLAME BURNS BLUE AND LIFTS OFF BURNER

A. Improper Venturi setting.
   ♦ Venturi may need to be closed slightly.

B. Improper vent cap installation.
   ♦ Check for proper vent cap installation.

C. Blockage or vent system leaks.
CONVERSION KIT INSTRUCTIONS

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

Kit includes:
- (1) Burner Orifice: NAT #37 / LP #52
- (1) Pilot Injector: NAT #BL22N / LP #BL14LP
- (1) Gas Labe
- (1) Valve and Pilot Assembly Conversion Instructions
- (1) Gas Conversion Label

**CAUTION**

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

**WARNING**

SHUT OFF GAS SUPPLY AND ELECTRIC POWER TO FIREPLACE.

**WARNING**

SHUT OFF GAS SUPPLY BEFORE DISCONNECTING ELECTRIC POWER.

**IMPORTANT**

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

**PREPARE THE FIREPLACE:**

1. Turn fireplace off by pushing in and turning gas control knob clockwise to OFF position.
2. Remove glass frame assembly, logs, and burner assembly from fireplace insert.

**REPLACE BURNER ORIFICES:**

Remove existing orifice caps. Install orifice caps included with kit. Tighten caps securely.
NAT #37 / LP #52 (Number stamped on burner orifice).

**CONVERT THE PILOT ASSEMBLY:**

1. Using a 7/16” wrench, loosen and remove pilot hood by turning counter-clockwise.
2. Remove pilot orifice located inside pilot housing. Install pilot orifice included with kit. (Number stamped on orifice).
   NAT: BL22N / LP: #BL14LP
3. Re-attach pilot hood. Tighten with wrench, making sure hood is centered between thermopile and thermocouple.
CONVERT GAS VALVE:
Follow instructions included with kit to convert gas valve to either Nat. or LP.

COMPLETE THE CONVERSION:

1. Adjust burner tube venturi to correct setting by loosening screws adjusting cap and retightening screw.
   **CORRECT SETTINGS:** NAT: 1/8” (3mm) open / L.P: 1/2” (13mm) open
2. Re-install burner into fireplace, making sure orifice is properly seated inside burner venturi and pilot hood is above burner assembly.
3. Re-install logs.
4. Turn on gas and electrical supplies. Check for leaks at all connections with soapy water, whether field or factory made.
5. Test inlet pressure. Visually check pilot flame. Flame should envelope top of flame sensor and extend onto burner far enough for proper ignition. To Adjust pilot: Turn pilot adjustment screw clockwise to decrease or counter-clockwise to increase pilot flame.
6. Turn fireplace off.
7. Affix gas type sticker to label.
8. Re-install glass frame.
9. Verify proper ignition and operation of fireplace.
10. Complete and affix ‘Gas Conversion’ label as close to gas valve as possible.

### MINIMUM INLET GAS PRESSURE

<table>
<thead>
<tr>
<th>NATURAL GAS</th>
<th>LP GAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MINIMUM INLET GAS PRESSURE</strong></td>
<td><strong>LP GAS</strong></td>
</tr>
<tr>
<td>5” WC (1.25 kPa) (7” WC (1.74 kPa) recommended)</td>
<td>11” WC (2.74 kPa) (recommended)</td>
</tr>
<tr>
<td><strong>MAXIMUM INLET GAS PRESSURE</strong></td>
<td>10.5” WC (2.62 kPa)</td>
</tr>
<tr>
<td><strong>MANIFOLD PRESSURE (HI)</strong></td>
<td>13” WC (3.24 kPa)</td>
</tr>
<tr>
<td><strong>MANIFOLD PRESSURE (LO)</strong></td>
<td>10” WC (2.49 kPa)</td>
</tr>
<tr>
<td>3.5” WC (.87 kPa)</td>
<td>6.4” WC (1.59 kPa)</td>
</tr>
<tr>
<td>1.6” WC (.40 kPa)</td>
<td></td>
</tr>
</tbody>
</table>
CONVERSION KIT INSTRUCTIONS

FLAME APPEARANCE:

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

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

![Correct pilot flame](Figure 16a)

[Image of flame appearance]

### WARNING

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

### FACTORY SET BURNER TUBE VENTURI SETTINGS

(ADJUST AS NECESSARY FOR YOUR INSTALLATION)

<table>
<thead>
<tr>
<th>NATURAL GAS</th>
<th>LP (PROPANE) GAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8” (3mm) OPEN</td>
<td>1/2” (13mm) OPEN</td>
</tr>
</tbody>
</table>

### BURNER TUBE VENTURI ADJUSTMENT GUIDELINES

<table>
<thead>
<tr>
<th>VENTURI POSITION</th>
<th>FLAME COLOR</th>
<th>VENTURI ADJUSTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed too far</td>
<td>Dark orange flame with black tips</td>
<td>Open venturi setting slightly</td>
</tr>
<tr>
<td>Open too far</td>
<td>Blue flames</td>
<td>Close venturi setting slightly</td>
</tr>
</tbody>
</table>

### IMPORTANT

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

### TO ADJUST VENTURI:

1. Remove glass frame assembly.
2. Remove log set.
3. Remove burner assembly.
4. Loosen screw on burner venturi and adjust as necessary. Tighten screws.
5. Reinstall all components previously removed.
6. Light fireplace and wait 15 minutes before determining if any further adjustments are needed.
The appliance is required to be inspected at least once a year by a professional service person.

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

### NOTE

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

### CONTROL BOARD SYSTEM

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

![CSK-31-RAD Pilot](Figure 17a)

![Burner Orifice](Burner Orifice)

![Burner Ports](Burner Ports)

### FAN

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

### VENT SYSTEM

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

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

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

### GLASS CLEANING & REPLACEMENT

- Clean glass only when cool and only with non-abrasive cleansers. **WARNING:** DO NOT OPERATE APPLIANCE WITH GLASS/FRAME ASSEMBLY REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD ONLY BE PERFORMED BY A LICENSED OR QUALIFIED SERVICE PERSON.
- Use protective gloves to handle any broken or damaged glass assembly components.
- The glass assembly, part #CSK-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc.
- Replacement of glass & frame assembly, part #CSK-057T, must only be performed by a licensed or qualified service person. DO NOT SUBSTITUTE MATERIALS.
- Do not strike or slam glass door assembly.

### IMPORTANT

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

### CAUTION

LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. VERIFY PROPER OPERATION AFTER SERVICING. KEEP APPLIANCE AREA CLEAR OF COMBUSTIBLE MATERIALS, SUCH AS GASOLINE AND OTHER FLAMMABLE VAPORS AND LIQUIDS.
Replacement parts are available through your local dealer. Contact them for availability and pricing.

---

### CSK-31 MILLIVOLT CONTROL BOARD AND PARTS

<table>
<thead>
<tr>
<th>Part Code</th>
<th>Description</th>
<th>Part Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-770A</td>
<td>Millivolt Board - Nat Gas</td>
<td>700-094</td>
<td>Pilot Orifice - Natural Gas</td>
</tr>
<tr>
<td>CSK-771A</td>
<td>Millivolt Board - LP Gas</td>
<td>700-095</td>
<td>Pilot Orifice - LP Gas</td>
</tr>
<tr>
<td>700-023</td>
<td>On/Off Rocker Switch</td>
<td>700-098</td>
<td>Pilot Hood</td>
</tr>
<tr>
<td>700-087</td>
<td>S.I.T. Valve - LP Gas</td>
<td>700-213B</td>
<td>18” Flexible Gas Line-Black</td>
</tr>
<tr>
<td>700-063</td>
<td>Pilot / Generator / Thermocouple - Nat Gas</td>
<td>700-226</td>
<td>Flexible Gas Line-Valve to Burner Connection</td>
</tr>
<tr>
<td>700-063-1</td>
<td>Pilot / Generator / Thermocouple - LP Gas</td>
<td>700-237</td>
<td>Natural Gas Orifice #37</td>
</tr>
<tr>
<td>700-090</td>
<td>Piezo Igniter w/ Nut (no wire)</td>
<td>700-252</td>
<td>LP Gas Orifice #52</td>
</tr>
<tr>
<td>700-099</td>
<td>Flexible Pilot Tubing (Valve to Pilot)</td>
<td>OCK-S37A</td>
<td>Natural Gas Conversion Kit</td>
</tr>
<tr>
<td>700-092</td>
<td>Millivolt Generator</td>
<td>OCK-S52A</td>
<td>LP Gas Conversion Kit</td>
</tr>
<tr>
<td>700-093</td>
<td>Thermocouple</td>
<td>CSK-135</td>
<td>Burner Assembly</td>
</tr>
<tr>
<td>700-090-1</td>
<td>On/Off Rocker Switch</td>
<td>CSK-004</td>
<td>Replacement Valance</td>
</tr>
<tr>
<td>700-091</td>
<td>Pilot / Generator / Thermocouple - Nat Gas</td>
<td>CSK-008</td>
<td>Replacement Valance</td>
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<tr>
<td>700-091-1</td>
<td>Pilot / Generator / Thermocouple - LP Gas</td>
<td>CSK-009</td>
<td>Replacement Valance</td>
</tr>
<tr>
<td>700-092</td>
<td>Millivolt Generator</td>
<td>CSK-005</td>
<td>Replacement Valance</td>
</tr>
<tr>
<td>900-023</td>
<td>S.I.T. Valve - LP Gas</td>
<td>CSK-008</td>
<td>Replacement Valance</td>
</tr>
<tr>
<td>900-024</td>
<td>S.I.T. Valve - LP Gas</td>
<td>CSK-009</td>
<td>Replacement Valance</td>
</tr>
<tr>
<td>700-123</td>
<td>Pilot / Generator / Thermocouple - Nat Gas</td>
<td>CSK-006</td>
<td>Replacement Valance</td>
</tr>
<tr>
<td>700-123-1</td>
<td>Pilot / Generator / Thermocouple - LP Gas</td>
<td>CSK-007</td>
<td>Replacement Valance</td>
</tr>
</tbody>
</table>

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### REFRACTORY PANELS (Sandstone)

<table>
<thead>
<tr>
<th>Part Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-G900</td>
<td>(4 pc.) Refractory Panel Set</td>
</tr>
<tr>
<td>CSK-900B</td>
<td>Back Refractory Panel</td>
</tr>
<tr>
<td>CSK-G900L</td>
<td>Left Side Refractory</td>
</tr>
<tr>
<td>CSK-900R</td>
<td>Right Side Refractory</td>
</tr>
<tr>
<td>CSK-G902</td>
<td>Top Refractory Panel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK-50A</td>
<td>10 pc. Log Set</td>
</tr>
<tr>
<td>CSK-1</td>
<td>#1 Log</td>
</tr>
<tr>
<td>CSK-2</td>
<td>#2 Log</td>
</tr>
<tr>
<td>CSK-3</td>
<td>#3 Log</td>
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<td>CSK-4</td>
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<td>CSK-5</td>
<td>#5 Log</td>
</tr>
<tr>
<td>CSK-6</td>
<td>#6 Log</td>
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<tr>
<td>CSK-7</td>
<td>#7 Log</td>
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<tr>
<td>CSK-8</td>
<td>#8 Log</td>
</tr>
<tr>
<td>CSK-12</td>
<td>#C12 Log</td>
</tr>
<tr>
<td>CSK-13</td>
<td>#C13 Log</td>
</tr>
<tr>
<td>900-REMB</td>
<td>Rock Wool Embers</td>
</tr>
</tbody>
</table>

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### GLASS & GLASS GASKET

<table>
<thead>
<tr>
<th>Part Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>CSK-200</td>
<td>Upper Hood (For 3 &amp; 4 pc. Shrouds)</td>
</tr>
<tr>
<td>CSK-200F</td>
<td>Upper Hood (For Full Door Shrouds)</td>
</tr>
<tr>
<td>CSK-201</td>
<td>Lower Grill</td>
</tr>
<tr>
<td>CSK-005</td>
<td>Replacement Valance</td>
</tr>
<tr>
<td>900-006</td>
<td>1-1/8” Glass Gasket w/ Adhesive</td>
</tr>
<tr>
<td>CSK-057T</td>
<td>Valance with 31-1/4” x 17-5/8” glass</td>
</tr>
</tbody>
</table>

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

CSK-31-RAD

www.kozyheat.com