DIRECT VENT FIREPLACE INSERT

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

IMPORTANT: Installation of a CO detector is required in the fireplace room when installed in the Commonwealth of Massachusetts.

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

A manufactured home (USA only) or mobile home OEM installation must conform with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, or when such a standard is not applicable, the Standard for Manufactured Home Installations, ANSI/NCSBCS A225.1, or Standard for Gas Equipped Recreational Vehicles and Mobile Housing, CSA Z240.4

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

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

IF YOU SMELL GAS:

- Do not light any appliance.
- Do not touch any electrical switch: do not use any phone in your building.
- Immediately call gas supplier from a neighbor's phone. Follow the gas supplier instructions.
- If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

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

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

Jim Hussong  
President  

Dudley Hussong  
Board Chairman  

Homeowner Reference Information

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

Model Name:______________________________   Date purchased/installed:____________
Serial Number:____________________________   Location on fireplace:_______________
Dealership purchased from:__________________   Dealer Phone:_____________________
Notes:_____________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

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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.

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

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

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

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

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

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

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

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

Do not operate this appliance with the glass/frame assembly removed, cracked or broken. The glass assembly, Part #CXL-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc. Replacement of the glass assembly must only be performed by a licensed or qualified service person. DO NOT SUBSTITUTE MATERIALS.

Do not strike or slam glass assembly.

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

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

Keep burner and control compartment clean.

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

This fireplace has been tested to and complies with ANSI Z21.88a-2007-CSA 2.33a-2007-CSA P.4.1-02 “VENTED GAS FIREPLACE HEATERS” by OMNI-Test Laboratories, Portland, OR. Installation must conform with local building codes or in the absence of local building codes, with the National Fuel Gas Code, ANSIZ223.1/NFPA 54 - Current Edition, or the Natural or Propane Installation Code, CSAB149.1.
**STANDARD FEATURES**

- High efficiency
- High quality lifetime glass 18” x 32” (457 mm x 813 mm)
- Quick latch glass frame assembly
- Co-linear vent system - 3” combustion air / 3” exhaust
- Innovative vent connection system
- Engineer-designed burner system
- High - Low regulator
- Modulating valve system w/ fan and flame adjustment, remote control (Kozy Kontrol)*
  - **Automatic fan kit (2) - 75 CFM**
- Refractory brick lining
- (2) hoods / lower grill (black)
- Minnesota Energy Code compliant to 50 pascals

*Standard on CSK-335-RF models
**Standard on CSK-335 and CSK-335-RF models

---

**SAFETY FEATURES**

- Each unit factory tested!
- Tested by OMNI - Test Laboratories
- Sealed combustion chamber with standing pilot ignition
- Removable millivolt board with 30-second delay pilot
- Automatic pressure relief glass system
- Requires no electricity to operate (excluding fan)
- Bedroom and mobile home approved

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**WEIGHT**

- Fireplace Weight (as packaged for shipment)
  155 lbs. (70.31 kg)

---

**OPTIONAL FEATURES**

- Red brick refractory
- Standard size or custom sized (3 & 4 pc.) shrouds
- Surrounds
- Flex vent adaptor kit
- Remote control* or thermostat remote control
- Wall mount thermostat / wireless wall mount thermostat
- Decorative full door faces in various styles and finishes
- Mission design doors in various finishes
- Various cabinet & flush surrounds
- Fan Kit (CSK-335-RAD Models)
- Speed Control / Receptacle Assembly (CSK-335-RAD Models)

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

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

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

**APPROVED CARBON MONOXIDE DETECTORS**

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

**SIGNAGE**

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

**INSPECTION**

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

**EXEMPTIONS**

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

**MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM PROVIDED**

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

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

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

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

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

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

#### FIREPLACE DIMENSIONS

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<th>Back Width</th>
<th>Depth</th>
<th>Back Height</th>
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![Fireplace Dimensions Diagram]

**Warning:** Failure to position the parts 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. Millivolt board with burner cover
4. Co-linear air duct
5. Log set (see page 21)
6. Refractory panels

Model CSK-335 includes 150 CFM fan with limit switch and speed control.

Model CSK-335-RF includes modulating valve on millivolt board, fan kit and remote control.

### MINIMUM CLEARANCES TO COMBUSTIBLES

- Insert to sidewall: 12” (305 mm)
- Insert top to 9” (229 mm) mantel: 16” (406 mm)
- Insert top to 3/4” (20 mm) trim: 12” (305 mm)
- Insert bottom to combustible floor in front: 6” (152 mm)
- Insert bottom to combustible floor underneath: 0” (0 mm)

---

PAGE 6
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 to operate the insert fan and thermostatic control (if used).

Any chimney clean-outs must fit properly.

Existing Chimney must be comprised of one of the following: Class ‘A’ metal chimney: 7” minimum inside diameter.
Masonry Chimney: 6" x 8" minimum inside diameter.

Existing Chimney Height:  
Minimum: 12 ft. (3.66m)  
Maximum: 35 ft. (10.67m)

Determine length of your existing chimney:

1. Remove and discard existing chimney cap.

   NOTE: It is helpful to have two people complete the next step in determining chimney height.

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

   MEASUREMENT FROM FIREPLACE BASE TO TOP OF CHIMNEY:
   LESS 23” (584 mm) (HEIGHT OF INSERT):
   TOTAL CHIMNEY LENGTH REQUIRED:

   CAUTION: THIS APPLIANCE MUST NOT BE CONNECTED TO A CHIMNEY FLUE SERVING A SEPARATE SOLID-FUEL BURNING APPLIANCE.
EXISTING FIREPLACE MINIMUM OPENING REQUIREMENTS

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

All dimensions are minimum requirements

- The firebrick (refractory), glass doors, screen rails, screen mesh and log grates can be removed in order to gain minimum gas insert opening requirements.
- Any smoke shelves, shields and baffles may be removed from firebox if attached with mechanical fasteners.

WARNING: CUTTING ANY SHEET-METAL PARTS OF THE FIREPLACE, IN WHICH THE GAS FIREPLACE IS TO BE INSTALLED, IS PROHIBITED.

PREPARE THE EXISTING FIREPLACE

1. The refractory, glass doors, screen rails, screen mesh and log grates may be removed from existing fireplace before installing this gas fireplace insert.

2. Any smoke shelves, shields and baffles may be removed if attached by mechanical fasteners.

3. If necessary, remove firebrick on sides and back of the existing fireplace to obtain at least the minimum opening requirements listed above.

4. The fireplace flue damper can be fully blocked open or removed for installation of this gas fireplace insert.

5. Remove existing chimney cap.

6. Clean chimney and inside of fireplace to prevent creosote smell from entering the home.

7. Place ‘THIS UNIT HAS BEEN MODIFIED’ label in the bottom of existing firebox so it will be visible if this gas fireplace insert is removed.

8. Run electrical wiring if hard wiring to the pre-installed electrical box in the insert if desired. See ‘FAN DIRECT WIRE INSTALLATION’ instructions on following pages.

9. Run any electrical wiring needed if insert is to be run by a thermostat.
FAN DIRECT WIRE INSTALLATION

#CSK-335
#CSK-335-RAD OPTIONAL FAN KIT #CSK-028

DIRECT WIRE CONNECTION MUST BE PERFORMED BY A QUALIFIED ELECTRICIAN.

CSK-335: This fireplace insert comes complete with a fan and thermostatic control switch already installed. A speed control, receptacle, and 8 ft. (2.44 m) fan cord have been installed, wired and mounted in a removable electrical box panel on the right side of the fireplace. If wiring to the pre-installed electrical box is desired, the wiring should be run prior to permanently setting the insert in place and connecting the vent system.

CSK-335-RAD: A speed control, receptacle, with 8 ft. (2.44 m) fan cord wired and mounted in an electrical box panel (#600-083C) is available. If hardwiring to the electrical box is desired, the wiring should be run prior to permanently setting the insert in place and connecting the vent system.

NOTE: If this fireplace insert is being installed in the minimum opening dimensions, the wiring may need to be completed after the fireplace insert is set in place.

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 the grounding prong from this plug. Do not allow any excess fan cord to touch the fireplace.

NOTE: Code approved line voltage wiring 14 gauge or better must be used when wiring this assembly. Refer to your local electrical codes for specific requirements in your area.

DIRECT WIRE INSTALLATION:

NOTE: The cord must be removed and wiring disassembled.

Insert 110V-120V wiring (with ground) through the romex connector and wire to speed control / receptacle assembly, matching black, white & green (ground) wires to the corresponding wires on the speed control / receptacle assembly.

DETAILED INSTALLATION INSTRUCTIONS:

1. Loosen (but do not remove) screw securing removable access panel (with electrical box & romex connector installed) from the right side of fireplace. Remove access panel.

2. Remove (2) screws securing speed control / receptacle to expose wiring.

3. Remove existing cord and insert 110V-120V wiring (with ground) through romex connector, wiring to speed control / receptacle assembly, matching black (hot), white (neutral), and green (ground) wire to the corresponding wires on speed control / receptacle assembly. NOTE: The (3) wire nuts obtained when removing existing cord may be used for this purpose.

4. Secure speed control / receptacle assembly into the electrical box with (2) screws provided.

Refer to page 19 for instructions on completing fan wiring after insert has been installed.

This appliance, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Codes, CSA C22.1
CSK-335-RF (only) FAN DIRECT WIRE INSTALLATION

#CSK-335-RF (ONLY) INSTRUCTIONS

DIRECT WIRE CONNECTION MUST BE PERFORMED BY A QUALIFIED ELECTRICIAN.

IMPORTANT: A fan assembly is pre-installed and wired to the RF gas valve in CSK-335-RF models.

A receptacle and 8 ft. (2.44m) fan cord have been installed, wired, and mounted in a removable electrical box panel on the right side of the fireplace. If direct wiring to the pre-installed electrical box is desired, wiring should be completed prior to permanently positioning insert and connecting the vent system.

NOTE: If this fireplace insert is being installed in the minimum opening dimensions, the wiring may need to be completed after the fireplace insert is set in place.

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 the grounding prong from this plug. Do not allow any excess fan cord to touch the fireplace.

NOTE: Code approved line voltage wiring 14 gauge or better must be used when wiring this assembly. Refer to your local electrical codes for specific requirements in your area.

DIRECT WIRE INSTALLATION:

NOTE: The cord must be removed and wiring disassembled.

Insert 110V-120V wiring (with ground) through the romex connector and wire to speed control / receptacle assembly, matching black, white & green (ground) wires to corresponding wires on the receptacle.

DIRECT WIRE INSTALLATION

1. Loosen (but do not remove) screw securing removable access panel (with electrical box & romex connector installed) from the right side of fireplace. Remove access panel.

2. Remove (2) screws securing speed control / receptacle to expose wiring.

3. Remove existing cord and insert 110V-120V wiring (with ground) through romex connector, wiring to speed control / receptacle assembly, matching black (hot), white (neutral), and green (ground) wire to the corresponding wires on speed control / receptacle assembly. NOTE: The (3) wire nuts obtained when removing existing cord may be used for this purpose.

4. Secure speed control / receptacle assembly into the electrical box with (2) screws provided.

Refer to page 19 for instruction on completing fan wiring after insert has been installed.

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

PAGE 11
If desired, a thermostat (wireless style also available), wall switch, or remote control assembly may be used to turn the fireplace ‘OFF’ and ‘ON’. Only ONE of these may be installed. Follow instructions included with each assembly.

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

**WALL SWITCH / THERMOSTAT:**
Run low-voltage (thermostat) wires from terminals on the gas valve to the desired location of wall switch or thermostat.

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

**REMOTE CONTROL:**
Follow instructions included with the remote control.

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

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

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

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

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

**NOTE:** The fireplace must be turned ‘ON’ and ‘OFF’ by the same method. For example: If fireplace is turned ‘ON’ by the remote control, it must be turned ‘OFF’ by the remote control.
GLASS FRAME ASSEMBLY

REMOVE GLASS FRAME ASSEMBLY

A. Locate the 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.

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

WARNING: DO NOT REMOVE GLASS ASSEMBLY WHEN HOT!

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.

FIREBOX TABS / GLASS FRAME ASSEMBLY SLOTS

GLASS FRAME ASSEMBLY LATCHES
IMPORTANT: ALL STEPS AS OUTLINED IN ‘PREPARE THE 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 the venting requirements as outlined in this installation manual.

VENT SYSTEM INSTALLATION

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

OPTION 2: STUB VENTING: A 3” combustion air intake pipe is extended a minimum of 4 ft. (1.22 m) past the damper opening and into existing chimney. It is not connected to the termination cap.

AIR DUCT REMOVAL

Remove air duct, located at the top of insert, by sliding it back out of the channel. Follow instructions on following pages for vent system attachment to air duct.
The co-linear pipes included in this vent system are designed to extend up to 35 ft. (10.67m)

**IMPORTANT:** The 3” exhaust pipe can be identified by the red marking. It is imperative for proper operation of this insert that the exhaust and combustion air pipes be connected to the correct collar both on the termination kit and air duct on the insert.

A. Carefully extend the 3” exhaust and combustion air intake pipes to equal the total chimney length required.

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

B. 1. If using ‘full connection’ method:

   Slide 3” intake pipe (end without collar) over collar on termination cap. Secure with 3 self-tapping screws (provided).

   2. Place a bead of sealant around inner edge at end of 3” 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.
We strongly suggest wrapping the first 3 ft. (914 mm) of vent system below termination cap with non-faced fiberglass insulation (secure with wire) before running it through the existing chimney. This will prevent cold air from coming down the existing chimney.

**DO NOT USE THIS METHOD IF YOU ARE STUBBING THE 3” COMBUSTION AIR PIPE FROM BOTTOM OF EXISTING CHIMNEY!**

**NOTE:** If offsets are present in existing chimney, it may be easier to place a weighted rope around the end of each 3” pipe to guide them through it. 
**DO NOT ATTEMPT TO TIE ONE ROPE AROUND BOTH PIPES.**

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

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

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

3. From inside existing fireplace opening, CAREFULLY pull ropes down until 3” exhaust pipe and 3” 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 figure at lower right.

4. We strongly suggest placing non-faced fiberglass insulation between vent pipes and existing chimney to prevent heat loss up the chimney, being careful not to block end pipe if using stub method.
CONNECT VENT SYSTEM TO AIR DUCT

1. Place air duct (previously removed from insert top, page 14) into the existing fireplace opening.

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

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

POSITION FIREPLACE INSERT

1. Slide insert into fireplace opening.

2. Position air duct into channels located at top of insert. Slide air duct forward until seated.

3. Secure air duct to insert front with (2) 1/2” sheet metal screws (included in components packet).

4. If necessary, level insert by threading leveling bolts (included in components packet) into nuts mounted in the bottom of insert behind lower air passage - 2 each side.
GAS LINE CONNECTION

IMPORTANT: DO NOT RUN GAS LINE IN A MANNER THAT WOULD OBSTRUCT THE OPERATION OF THE FAN OR FAN COMPONENTS.

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

NOTE: If installing this insert into minimum opening dimensions, the gas line may need to be run after the insert is in place 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 ½" (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.

1-3/8" (35 mm) from bottom to gas line

WARNING LABEL

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**CSK-335 / CSK-335-RAD / CSK-335-RF**

<table>
<thead>
<tr>
<th></th>
<th>NATURAL GAS</th>
<th>LP GAS</th>
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</thead>
<tbody>
<tr>
<td><strong>MINIMUM INLET GAS PRESSURE</strong></td>
<td>5.0 inches W.C. (7.0 W.C. recommended)</td>
<td>11.0 inches W.C. (recommended)</td>
</tr>
<tr>
<td><strong>MAXIMUM INLET GAS PRESSURE</strong></td>
<td>10.5 inches W.C.</td>
<td>13.0 inches W.C.</td>
</tr>
<tr>
<td><strong>MANIFOLD PRESSURE (HI)</strong></td>
<td>3.5 inches W.C</td>
<td>10.0 inches W.C.</td>
</tr>
<tr>
<td><strong>MANIFOLD PRESSURE (LO)</strong></td>
<td>1.7 inches W.C</td>
<td>6.3 inches W.C</td>
</tr>
<tr>
<td><strong>ORIFICE SIZE</strong></td>
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<td>#50</td>
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<td><strong>INPUT BTU/hr.</strong></td>
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<td>36,500</td>
</tr>
<tr>
<td><strong>MINIMUM INPUT BTU/hr.</strong></td>
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<td><strong>AFUE</strong></td>
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</tr>
<tr>
<td><strong>P-4 AFE</strong></td>
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<td>66%</td>
</tr>
</tbody>
</table>

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**CHECK MILLIVOLT BOARD INSTALLATION**

NOTE: Refer to page 23 for complete millivolt board installation procedures.

1. Ensure that all (6) nuts are attached to the mounting studs, securing the millivolt board in position.
2. Verify burner venturi is properly positioned over burner orifice and the burner/cover assembly is secured to burner heat shield.
3. Check all gas connection for leaks, whether field or factory made.
#CSK-335
#CSK-335-RAD OPTIONAL FAN KIT #CSK-028

#CSK-31-RAD with optional fan kit #CSK-028

1. If not previously done, turn gas valve and manual shut off valve to ‘OFF’. Disconnect gas line from manual shut off valve.

2. Remove glass frame assembly. Refer to page 13.

3. Slide left, then right fan through the lower grill opening (right side of gas valve), positioning onto their corresponding mounting studs on the floor of fireplace. Secure each fan with (2) nuts included.

4. Connect the flexible gas line to the manual shut off valve. Turn the manual shut off valve to ‘ON’.

**CAUTION: CHECK CONNECTION FOR LEAKS.**

#CSK-335 & #CSK-335-RAD (#600-083C Speed Control / Receptacle Assy. w/ 8ft. cord available for #CSK-335-RAD Models).

1. Secure electrical access panel to side of fireplace.

2. Place thermostatic control switch on bottom of firebox.

3. Plug power cord into electrical box receptacle.

4. Turn speed control counter-clockwise until it ‘clicks’. This is the ‘OFF’ position.

5. Turn speed control ‘ON’ by turning the knob clockwise past the ‘click’ - this is the highest setting.

**NOTE: This appliance must be electrically grounded and connected in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 Current Edition, or the Canadian Electrical Code CSA C22.1.**

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

**TEMPERATURE CONTROL SWITCH POSITION**

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

**#CSK-335-RF (only)**

1. Secure electrical access panel to side of fireplace.

2. Plug power cord into electrical box receptacle.

**NOTE: This appliance must be electrically grounded and connected in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 Current Edition, or the Canadian Electrical Code CSA C22.1.**

3. Upon complete installation of this fireplace, follow Lighting & Shutdown instructions as outlined in this manual as well as the instructions included with the remote transmitter for complete fan operation guidelines.
3 PIECE SHROUD ASSEMBLY AND INSTALLATION

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 the flanged upper hood and lower grill which are included with fireplace.

1. Remove glass assembly from fireplace.

2. Lay shroud sections face down on a protective surface to assemble. Note the orientation of leg sections in Figure 1. 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 the bottom flange of top section (1 ea. side). Do not tighten at this time. Figure 1.

4. Attach shroud to fireplace by aligning the (2) holes in each leg section to the corresponding mounting nuts in mounting brackets on either side of fireplace opening. Secure with phillips truss head screws (2 ea. side). Refer to Figure 2.

5. Install the upper hood that has a flange on each end (Figure 3) by aligning slots in hood to the partially threaded screws in shroud top, slide hood back and tighten screws. Figure 4.

6. Attach lower grill by threading 1” phillips head screws through mounting nuts (1 ea. side) on grill and into corresponding holes located at the bottom of shroud leg sections (1 ea. side) Refer to Figure 5. Tighten screws. Note: When completed the grill may be adjusted slightly from side to side if necessary.

NOTE: If installing a Full Door Shroud, follow instructions included with that component.)
LOG SET INSTALLATION

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 the 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.

Align holes in bottom of base logs CX1, CX2, & CX3 to mounting pins on burner. Push logs down onto pins to seat.

Position ember logs CX4 & CX5 in front of burner as shown above.

Install CX6 - CX11 logs, aligning with notches in base logs.

Use a steel or stiff bristle nylon brush to distribute Rock Wool Embers onto logs and burner.
1. Turn gas control knob to the ‘OFF’ position.
2. Shut off gas supply at the manual shut-off valve.
3. Disconnect gas line flex tube from the manual shut-off valve.
4. **Model CSK-335 /CSK-335-RAD:**
   Disconnect any wall switch, remote control, or thermostat wires from ‘TH’ / ‘THTP’ terminals on the gas valve.

   **Model CSK-335-RF:**
   Unplug fan cord from receptacle, disconnect the (2) wires from fan cord. (Wires will remain connected to the back of gas valve).


6. Remove logs.

7. Remove nuts securing burner assembly. Remove burner assembly from firebox.

8. Remove burner heat shield from firebox.

9. Remove (6) nuts securing millivolt board. Lift board up and out of firebox.

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

**NOTE:** It is not necessary to remove the shroud or full door shroud to remove millivolt board.
1. Place millivolt board in firebox, aligning holes in the millivolt board with mounting studs in the firebox bottom. MAKE SURE SEALING GASKET IS IN PLACE ON FIREBOX BOTTOM! Secure millivolt board to firebox bottom with the (6) nuts previously removed.

2. 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.


5. Reconnect gas line to manual shut-off valve.

6. **Model CSK-335 / CSK-335-RAD:**
   Reconnect any wall switch, remote control or thermostat wires to terminals on the gas valve marked ‘TH’ / ‘THTP’.

   **Model CSK-335-RF:**
   Re-connect the (2) wires to fan cord. Plug fan cord into receptacle.


8. Turn gas on.

9. Verify proper log placement, operation of fireplace, and any electrical components.

---

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

**CAUTION:** CHECK ALL CONNECTIONS FOR LEAKS, WHETHER FIELD OR FACTORY MADE.
CSK-335 / CSK-335-RAD VALVE & PILOT ASSEMBLY COMPONENTS

THERMOCOUPLE

ELECTRODE

PILOT HOOD

THERMOPILE

HI / LO FLAME ADJUSTMENT KNOB

GAS CONTROL KNOB

PIEZO IGNITOR

ON/OFF ROCKER SWITCH

VALVE TERMINALS
FOR YOUR SAFETY - READ BEFORE LIGHTING

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

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

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

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

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

3. 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.

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

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

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

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

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

NOTE: THIS FIREPLACE MAY PRODUCE NOISES OF VARYING DEGREE AS IT HEATS AND COOLS DUE TO METAL EXPANSION AND CONTRACTION. THIS IS NORMAL AND DOES NOT AFFECT THE PERFORMANCE OR LONGEVITY OF THE FIREPLACE.
CSK-335 / CSK-335-RAD LIGHTING AND SHUTDOWN

**LIGHTING**

1. Set thermostat to the lowest setting, if installed.

2. Turn off all electrical power to the appliance. (Fan).

3. Open lower grill to access the gas valve & controls.

A. Push gas control knob in slightly and turn clockwise to “OFF”. Wait five (5) minutes to allow any gas that may have accumulated inside the firebox to escape. If you then smell gas, **STOP!** Follow the safety information on the front cover and on the previous page of this installation manual. If you don’t smell gas, go to the next step.

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

B. Locate pilot - follow metal tube from gas control. The pilot is located inside the combustion chamber.

C. Push gas control knob on the gas valve in slightly and turn counterclockwise to ‘PILOT’. Push valve knob in and hold while repeatedly pressing the piezo igniter button until the pilot is lit while continuing to hold in the gas control knob.

D. Hold gas control knob in for one (1) minute after pilot is lit. Release the gas control knob. If the pilot goes out, repeat steps C-D. When the pilot is lit, proceed to step E.

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

E. Push gas control knob in slightly and turn counterclockwise to ‘ON’. The burner can now be turned ‘ON’ by depressing the ON/OFF rocker switch located beside the valve, or wall switch, OR by setting the thermostat or remote control to the desired setting.

F. Turn on all electric power to the appliance (if applicable).

**NOTE:** When the fireplace is initially lit, condensation will appear on the glass; this is normal in all gas fireplaces and will disappear after several minutes.
NOTE: This control valve has an interlock device. If pilot has been turned off, it cannot be relit until the thermocouple has cooled, (approximately 60 seconds).

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

NOTE: The pilot will stay lit.

H. Turn the pilot off by pushing in and turning the gas control knob to the ‘OFF’ position. DO NOT FORCE.

NOTE: This control valve has an interlock device. If pilot has been turned off, it cannot be relit until the 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 the middle knob on the gas control valve.
IMPORTANT NOTICE: Pressure check taps for the manifold (outgoing) and inlet (incoming) pressure have been incorporated into the valve. The pressure tap marked ‘OUT’ measures outgoing pressure and the pressure tap marked ‘IN’ measures incoming pressure. Follow instructions below for proper testing procedures.

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

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

### INLET PRESSURE TEST:

1. Loosen inlet (‘IN’) pressure tap screw (counter-clockwise).
2. Attach manometer using a 5/16” I.D. hose.
3. Light pilot.
4. Turn gas control knob to ‘ON’ (burner should not light). Note manometer reading.
5. Press rocker switch to ‘ON’. Check pressure to ensure that it stays near the 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 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 the incoming gas pressure.

### MANIFOLD PRESSURE TEST:

1. Light pilot.
2. Loosen manifold (‘OUT’) pressure tap screw (counter-clockwise).
3. Attach manometer to pressure tap using a 5/16” I.D. hose.
4. Turn gas control knob to ‘ON’.
5. Press rocker switch to ‘ON’ and note manometer reading.
6. Press rocker switch to ‘OFF’.
7. Disconnect manometer hose and tighten screw (clockwise). Screw should be snug, do not over tighten.
8. Attach manometer to manifold pressure tap to verify that it is completely sealed. Manometer should read no pressure when the rocker switch is pressed to ‘ON’.

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

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![Diagram of CSA-355 / CSK-335 RAD PRESSURE TESTING](image-url)
FOR YOUR SAFETY - READ BEFORE LIGHTING

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

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

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

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

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

3. 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.

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

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

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

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

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

NOTE: THIS FIREPLACE MAY PRODUCE NOISES OF VARYING DEGREE AS IT HEATS AND COOLS DUE TO METAL EXPANSION AND CONTRACTION. THIS IS NORMAL AND DOES NOT AFFECT THE PERFORMANCE OR LONGEVITY OF THE FIREPLACE.
1. Turn off all electrical power to the appliance. (Fan).
2. Open lower grill to access the gas valve & controls.

A. Push control knob in slightly and turn clockwise to the **OFF** position. Wait five (5) minutes to clear out any gas. If you then smell gas, **STOP!** Follow the safety information on the previous page and on the front cover of this installation manual. If you don’t smell gas, go to the next step.

B. Locate pilot. The pilot is located inside the combustion chamber.

C. Push the control knob on the gas valve in slightly and turn counterclockwise to **PILOT**. Push the control knob all the way in and hold. Push the plunger on the piezo ignitor until the pilot is lit. The pilot will generally light within two or three pushes on the piezo ignitor. Hold the knob for about one (1) minute after the pilot is lit. Release knob and it will pop back out. Pilot should remain lit. If it goes out, repeat steps A-C.

D. Push the control knob on the gas valve in slightly and turn counterclockwise to the **ON** position.

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

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

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

1. Turn gas control knob to the PILOT position. Move LOCAL / REMOTE switch to the LOCAL position for at least two (2) seconds, then move switch to the REMOTE position.

2. Press FAN or FLAME button on the transmitter within thirty (30) seconds of the switch change.

3. Turn gas control knob to the ON position.

The LED will blink, indicating that the transmitter will now work with the receiver / valve. If the switch stays in the REMOTE position, the TR8220A Transmitter will control the main valve, flame modulation level and fan control.

If the LOCAL / REMOTE switch is in the LOCAL position, the receiver / valve will be at the highest setting.

TURN THE BURNER OFF

LOCAL SETTING: Turn control knob clockwise to the PILOT position.

REMOTE SETTING: The TR8220A transmitter can shut off the main burner and fan. However, the control is still ‘ON’ and a command from the transmitter can turn on the main burner and fan.

TURN THE SYSTEM OFF

1. Open lower grill to access the gas valve & controls.
2. Turn gas control knob clockwise to the OFF position. This closes the main gas and safety valves. The transmitter cannot turn on the main burner or the fan.

NOTE: If the manual switch is in the LOCAL position, the main burner will turn on immediately.

NOTE: This control valve has an interlock device. If pilot has been turned off, it cannot be relit until the thermocouple has cooled, (approximately 60 seconds).
IMPORTANT NOTICE: Pressure check taps for the manifold (outgoing) and inlet (incoming) pressure have been incorporated into the valve. The pressure tap marked ‘OUT’ measures outgoing pressure and the pressure tap marked ‘IN’ measures incoming pressure. Follow instructions below for proper testing procedures.

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

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

INLET PRESSURE TEST:

1. Loosen inlet (‘IN’) pressure tap screw (counter-clockwise).
2. Attach manometer using a 1/4” I.D. hose.
3. Light pilot.
4. Turn gas control knob to ‘ON’. Note manometer reading.
5. Turn gas control knob to ‘OFF’.
6. 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 that it is completely sealed.

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’. Note manometer reading.
5. Disconnect manometer hose and tighten screw (clockwise). Screw should be snug, do not over tighten.
6. Attach manometer to manifold pressure tap to verify that it is completely sealed. Manometer should read no pressure.
IMPORTANT: PLEASE REVIEW AND RETAIN INSTRUCTIONS INCLUDED WITH THE RF TRANSMITTER. IT PROVIDES ADDITIONAL INFORMATION AND DETAILS CONCERNING OPERATIONAL PROCEDURES AND FUNCTIONS FOR THE RF REMOTE CONTROL.

FUNCTIONS:

- Flame powered system.
- Flame powered flame modulation.
- Electronics integrated into valve to provide thermostat, flame, and fan functions with RF commands.
- Temperature compensated RF receiver.
- Main burner runs on ‘HIGH’ when manual switch is set to ‘LOCAL’.

TRANSMITTER SIGNAL:

- When transmitter is in Auto mode, a signal is sent every 10 minutes if there is a change in room temperature.
- When transmitter is in ‘ON’ or ‘OFF’ modes, a signal is sent every 10 minutes with the ‘ON’ or ‘OFF’ status condition.
- Make sure antennae is not touching metal.

RECEIVER SHUTDOWN OF BURNER:

- In the remote ‘AUTO’ mode, the valve shuts off if it does not receive a signal within 3 hours from the transmitter.
- In the ‘LOCAL’ mode, the valve does not shut off.
- In the remote ‘MANUAL’ mode, the valve shuts off if it does not receive a signal within 6 hours from the transmitter.

THERMOPILES:

- The negative leads (white) must be connected to the terminals marked with white dots.

LED TROUBLESHOOTING:

- In normal operation, LED blinks once every two seconds; also, LED will be on for one second after every valid command received by the RV83110D; these are not error codes.
- Failure codes (see table) can occur anytime after the pilot burner is lit. Failure code timing is 1/4 second on, 1/2 second off.
- Sequence is failure code followed by LED not blinking for four seconds.
- In the event of multiple failure codes, the next failure code follows the previous code failure by approximately three seconds.

<table>
<thead>
<tr>
<th>Code</th>
<th>Service Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Replace valve</td>
</tr>
<tr>
<td>7</td>
<td>Confirm stepper motor connection exists</td>
</tr>
<tr>
<td>4</td>
<td>Fuel conversion plug missing or has poor connection (RV8310E only)</td>
</tr>
<tr>
<td>3</td>
<td>Replace thermopile with Q313</td>
</tr>
<tr>
<td>2</td>
<td>Device too hot. Check application</td>
</tr>
<tr>
<td>1</td>
<td>None required. This is normal operation and indicates the control is powered</td>
</tr>
</tbody>
</table>

RT8220A TRANSMITTER DISPLAY:

- Room Temperature
- Set Temperature
- Flame Height Level
- Fan Speed Level
- Countdown Timer
- Low Battery

MODE:
- AUTO
- ON
- OFF

COUNTDOWN TIMER

UP:
- Increases Flame height, Fan Speed, Timer, or Set Point

DOWN:
- Decrease Flame Height, Fan Speed, Timer, or Set Point

FLAME

FAN
# CSK-335-RF REMOTE RECEIVER FUNCTIONS

## FIRST USE OF TRANSMITTER:

<table>
<thead>
<tr>
<th>STATUS</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Begin communication between transmitter and receiver / valve.</td>
<td>Move LOCAL/REMOTE Switch to LOCAL position for at least two seconds; then move switch to the REMOTE position.</td>
</tr>
<tr>
<td>Transmit unique code.</td>
<td>Press Fan or Flame key within 30 seconds.</td>
</tr>
<tr>
<td>Confirm recognition between transmitter and receiver valve.</td>
<td>Observe LED turns on for one second.</td>
</tr>
<tr>
<td>Chose REMOTE or LOCAL operation.</td>
<td>Move LOCAL/REMOTE switch to LOCAL or leave in REMOTE.</td>
</tr>
</tbody>
</table>

## OPERATION IN THE REMOTE POSITION:

### AUTO Mode

With the control in the AUTO mode, the flame in the main burner will turn on, off, or change height based on the heat needed to maintain the set temperature.

<table>
<thead>
<tr>
<th>STATUS</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set to AUTO.</td>
<td>Press MODE button until mode is AUTO.</td>
</tr>
<tr>
<td>Change set temperature.</td>
<td>Press UP or DOWN key to change temperature.</td>
</tr>
<tr>
<td>Flame.</td>
<td>Automatically changes.</td>
</tr>
<tr>
<td>Fan.</td>
<td>Automatically changes.</td>
</tr>
<tr>
<td>To set Delay Timer.</td>
<td>Press TIME key followed by either UP or DOWN arrow key.</td>
</tr>
</tbody>
</table>

**CAUTION: PROPERTY DAMAGE HAZARD.** Excessive heat can cause property damage. In AUTO Mode, the main burner will cycle indefinitely to maintain the set temperature. Keep the transmitter in a heated living space to make sure the main burner is not on continuously.

### ON Mode

With the control in the ON mode, the flame and fan levels and the delay timer are changed with the UP and DOWN arrow keys.

<table>
<thead>
<tr>
<th>STATUS</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set to ON.</td>
<td>Press MODE button until mode is ON.</td>
</tr>
<tr>
<td>Flame.</td>
<td>Press FLAME button and press UP or DOWN arrow keys to change flame height.</td>
</tr>
<tr>
<td>Fan.</td>
<td>Press FAN button and press UP or DOWN arrow keys to change fan speed.</td>
</tr>
<tr>
<td>Delay Time.</td>
<td>Press DELAY TIMER button and press UP or DOWN key to change timer.</td>
</tr>
</tbody>
</table>

### OFF Mode

The flame in the main burner will turn off and the room temperature will be displayed in the remote window.

<table>
<thead>
<tr>
<th>STATUS</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press MODE until mode is OFF.</td>
<td></td>
</tr>
</tbody>
</table>

### Operation in the LOCAL Mode.

**NOTE:** Remote/Local switch on the receiver/valve must be in the LOCAL position.

### FAN

Flame height and fan speed both go to the highest position.

<table>
<thead>
<tr>
<th>STATUS</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>In LOCAL mode, to turn fan ON/OFF, rotate manual knob from ON to PILOT position.</td>
<td></td>
</tr>
</tbody>
</table>

### OTHER FUNCTIONS:

<table>
<thead>
<tr>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press UP and DOWN arrow keys at the same time and hold for at least three seconds.</td>
</tr>
<tr>
<td>Press FAN button, and press UP or DOWN arrow key to change the fan speed.</td>
</tr>
<tr>
<td>Press the TIME, DOWN and FLAME arrow keys at the same time and hold for at least three seconds.</td>
</tr>
</tbody>
</table>
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. The flames will gradually turn yellowish-orange during the first 15 minutes of operation. If the flames remain blue or the flames become dark orange with evidence of sooting (black tips), the burner tube venturi may need to be adjusted.

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

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

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

<table>
<thead>
<tr>
<th>NATURAL GAS</th>
<th>LP (PROPANE) GAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/16” (2 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>

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

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

TO ADJUST VENTURI:

1. Remove glass frame assembly. Refer to page 13.
2. Remove log set.
3. Remove burner and burner heat shield 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.
The appliance is required to be inspected at least once a year by a professional service person.

The compartment below the firebox (behind the lower grill) must be cleaned at least once a year, more frequent cleaning may be required due to excessive lint from carpeting, bedding materials, or other fibrous materials. It is imperative that the burner be cleaned once a year.

NOTE: INSTALLATION AND REPAIR SHOULD BE DONE ONLY BY A 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.

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

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

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

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

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

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

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

MILLIVOLT BOARD SYSTEM

- Annual cleaning of the burner system is required.
- The burner assembly may be removed for easier access. Refer to pages 22-23 in this installation manual for complete instruction on removing & reinstalling the burner assembly.
- Visually check for blocked port holes, especially near the pilot. Blocked port holes may cause delayed ignition.
- Reinstall the burner assembly following instructions on page 23 of this installation manual.
- Visually check pilot light and burner when in operation. The flames should be steady, not lifting or floating.

Burner Orifice

GLASS CLEANING & REPLACEMENT

- Clean glass only when cool and only with non-abrasive cleansers.
- Do not operate this fireplace with the glass/frame assembly removed, cracked or broken.
- The glass assembly, part #CXL-057T, shall only be replaced as a complete unit, as supplied by Hussong Mfg. Co., Inc.
- Replacement of the glass & frame assembly, part #CXL-057T, must only be performed by a licensed or qualified service person.
- Do not substitute materials.
- Do not strike or slam glass door assembly.
TROUBLESHOOTING (CSK-335 / CSK-335-RAD only)

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" (3 mm) 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 IGNITOR 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 the 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 the end of the thermocouple and the other millivolt meter lead wire on the thermocouple’s copper wire. Start pilot while holding valve knob in. If the millivolt reading is less than 15 millivolts, replace the 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.
BURNER WILL NOT LIGHT

A. Gas control knob not turned to ‘ON’.

B. ‘ON’/‘OFF’ switch not turned on.

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

D. Plugged main burner orifice.

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

♦ Check wires for proper connections. Place jumper wires across terminal at switch. If burner lights, replace defective switch.

♦ If switch checks ok, place jumper wires across switch wires on gas valve. If burner lights, wires are faulty or connections are bad.

FREQUENT PILOT OUTAGES

A. Pilot shield not installed.

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

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

BURNER WON’T STAY LIT

A. Thermopile wires loose at valve terminals.

♦ Tighten if necessary.

B. Thermopile wires ground out due to pinched wires.

♦ Free pinched wires if necessary.

C. Refractory panel placement (if installed).

♦ Refractory panels must be tight against firebox walls. It may be necessary to secure panels with high-temp sealant, especially around the intake duct.
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 page 13 in this manual for proper glass frame assembly installment instructions.

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

D. Improper pitch on horizontal vent.
   ♦ 1/4” (6 mm) 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” (6 mm). 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 on page 21 of this installation manual.

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

C. Improper pitch on horizontal venting.
   ♦ 1/4” (6 mm) 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.
RF REMOTE TROUBLESHOOTING (CSK-335-RF only)

**AUTO PATH**

If the manual switch is set to REMOTE, press the Mode button to display AUTO on the transmitter. Does the transmitter display the room and temperature setting?

- If yes, move switch from LOCAL to REMOTE. Press any key within 30 seconds.

- If the setting is above room temperature on the transmitter, does the main valve and fan turn on?
  - Yes, move switch from LOCAL to REMOTE. Press any key within 30 seconds.
  - No, move switch from LOCAL to REMOTE. Press any key within 30 seconds.

- If the setting is below room temperature on the transmitter, does the main valve and fan turn off?
  - Yes, turn pilotstat knob to OFF to turn valve completely off.
  - No, set manual switch to LOCAL or REMOTE.

- Five minute wait period.

- Yes, light pilot burner.

- Yes, did the LED stop blinking?
  - Yes, review LED failure analysis.
  - No, turn pilotstat knob to PILOT to turn off main burner and fan.

- Release pilotstat knob.

- Yes, turn pilotstat knob from PILOT to ON.

- Yes, cycle switch once and leave in remote. Press any key on transmitter for recognition operation.

- Choose LOCAL or REMOTE path. Set switch to LOCAL or REMOTE.

**REMOTE PATH**

If the manual switch is set to REMOTE, move switch from MANUAL to REMOTE. Press any key on transmitter.

- Does the transmitter control the main burner and fan?
  - Yes, does transmitter change levels of flame height, fan speed and set temperature?
    - Yes, set levels of flame height and fan to “0” to shut off main burner and fan.
    - No, move switch from LOCAL to REMOTE. Press any key within 30 seconds.
  - No, turn pilotstat knob to OFF to turn valve completely off.

**LOCAL PATH**

If the manual switch is set to LOCAL, did the main burner light?

- Yes, does the transmitter control fan.
  - Yes, turn pilotstat knob to PILOT to turn off main burner.
  - No, turn pilotstat knob to OFF to turn valve completely off.

- No, move switch from LOCAL to REMOTE. Press any key on transmitter. Move switch back to LOCAL.

- Yes, cycle switch once and leave in remote. Press any key on transmitter for recognition operation.

- Choose LOCAL or REMOTE path. Set switch to LOCAL or REMOTE.
TROUBLESHOOTING (CSK-335-RF only)

CAUTION: THE FOLLOWING MUST BE PERFORMED BY A QUALIFIED TECHNICIAN.

NO SPARK FROM ELECTRODE TO PILOT WHEN PIEZO BUTTON IS TRIGGERED.
A. Check piezo wiring for proper connection.
B. Check position of electrode (1/8” (3 mm) between electrode and pilot). Readjust if necessary.
C. Look for arc below electrode and along electrode wire. Direct metal contact may cause an arc below electrode.

SPARK IGNITOR 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 thermopiles. Clean and / or adjust pilot for maximum flame impingement.
B. Ensure the thermopile connections at gas valve are properly connected. The negative leads (white) must be connected to the terminals with the one white dot next to them.

BURNER WILL NOT LIGHT
A. Gas control knob not turned to ‘ON’.
B. Plugged main burner orifice.

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 thermopiles.

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.
BURNER WON’T STAY LIT

A. Thermopile wires loose at valve terminals.
   ♦ Adjust 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 the intake duct.

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 page 13 in this manual for proper glass frame assembly installment instructions.

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

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

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

F. Excessive draft.

GLASS SOOTING

A. Improper log placement.
   ♦ Refer to log placement instructions on page 21 of this installation manual.

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

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

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

### CSK-335 / CSK-335-RAD MILLIVOLT BOARD AND PARTS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXL-770A</td>
<td>Millivolt Board - Nat Gas</td>
<td>Nat Gas Conversion Kit</td>
</tr>
<tr>
<td>CXL-771A</td>
<td>Millivolt Board - LP Gas</td>
<td>LP Gas Conversion Kit</td>
</tr>
<tr>
<td>700-203</td>
<td>On/Off Rocker Switch</td>
<td>Pilot Hood</td>
</tr>
<tr>
<td>700-206</td>
<td>Valve - Natural Gas</td>
<td>Manual Shut-off Valve</td>
</tr>
<tr>
<td>700-207A</td>
<td>Valve - LP Gas</td>
<td>18&quot; Flexible Gas Line-Black</td>
</tr>
<tr>
<td>700-208</td>
<td>Jet Assembly - Nat Gas</td>
<td>Flexible Gas Line-Valve to Burner Connection</td>
</tr>
<tr>
<td>700-209A</td>
<td>Pilot Assembly - LP Gas</td>
<td>Natural Gas Orifice #35</td>
</tr>
<tr>
<td>700-210</td>
<td>Pilot Assembly</td>
<td>LP Gas Orifice #50</td>
</tr>
<tr>
<td>700-211</td>
<td>Flexible Pilot Tubing (Valve to Pilot)</td>
<td>OCK-S50A Natural Gas Conversion Kit</td>
</tr>
<tr>
<td>700-212</td>
<td>Millivolt Generator</td>
<td>OCK-S51A LP Gas Conversion Kit</td>
</tr>
<tr>
<td>700-213</td>
<td>Thermocouple</td>
<td>CXL-135 Burner Assembly</td>
</tr>
</tbody>
</table>

### CSK-335 - RF MILLIVOLT BOARD AND PARTS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXL-800RF</td>
<td>RF Millivolt Board - Natural Gas</td>
<td>Nat Gas Conversion Kit</td>
</tr>
<tr>
<td>700-207B</td>
<td>Honeywell RF Valve - Natural Gas</td>
<td>LP Gas Conversion Kit</td>
</tr>
<tr>
<td>700-208A</td>
<td>Remote Control - RF Valve</td>
<td>Remote Control</td>
</tr>
<tr>
<td>700-209A</td>
<td>Honeywell RF Pilot Assembly-NAT</td>
<td>Flexible Gas Line-Valve to Burner Connection</td>
</tr>
<tr>
<td>700-210</td>
<td>Honeywell RF Pilot Assembly-LP</td>
<td>LP Gas Orifice #50</td>
</tr>
<tr>
<td>700-211</td>
<td>Flexible Pilot Tubing (Valve to Pilot)</td>
<td>OCK-H54N-RF Natural Gas Conversion Kit</td>
</tr>
<tr>
<td>700-212</td>
<td>Millivolt Generator</td>
<td>OCK-H55L-RF LP Gas Conversion Kit</td>
</tr>
<tr>
<td>700-213</td>
<td>Manual Shut-off Valve</td>
<td>CXL-135 Burner Assembly</td>
</tr>
<tr>
<td>700-214</td>
<td>18&quot; Flexible Gas Line - Black</td>
<td>Jet Assembly - LP Gas</td>
</tr>
<tr>
<td>700-215</td>
<td>6&quot; Flexible Gas Line-Valve to Burner Connection</td>
<td>Flexible Gas Line-Valve to Burner Connection</td>
</tr>
<tr>
<td>700-216</td>
<td>Pilot Hood</td>
<td>Pilot Hood</td>
</tr>
</tbody>
</table>

### GRILL REPLACEMENT

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

### FAN ASSEMBLIES

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF-028</td>
<td>Fan Assembly (CSK-335-RF only)</td>
</tr>
<tr>
<td>CSK-028</td>
<td>Fan Assembly (CSK-335 only)</td>
</tr>
</tbody>
</table>

### REFRACTORY PANELS

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

### GLASS & GLASS GASKET

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

### LOG SET

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXL-50A</td>
<td>11 pc. Log Set</td>
</tr>
<tr>
<td>CXL-1</td>
<td>#CX1 Log</td>
</tr>
<tr>
<td>CXL-2</td>
<td>#CX2 Log</td>
</tr>
<tr>
<td>CXL-3</td>
<td>#CX3 Log</td>
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<tr>
<td>CXL-4</td>
<td>#CX4 Log</td>
</tr>
<tr>
<td>CXL-5</td>
<td>#CX5 Log</td>
</tr>
<tr>
<td>CXL-6</td>
<td>#CX6 Log</td>
</tr>
<tr>
<td>CXL-7</td>
<td>#CX7 Log</td>
</tr>
<tr>
<td>CXL-8</td>
<td>#CX8 Log</td>
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<tr>
<td>CXL-9</td>
<td>#CX9 Log</td>
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<tr>
<td>CXL-10</td>
<td>#CX10 Log</td>
</tr>
<tr>
<td>CXL-11</td>
<td>#CX11 Log</td>
</tr>
<tr>
<td>900-REMB</td>
<td>Rock Wool Embers</td>
</tr>
</tbody>
</table>

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

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

Model #CXL-335 Chaska XL
Model #CSK-335-RAD Chaska XL-RAD
Model #CXL-335-RF Chaska XL - RF
October 2009-REV08

www.kozyheat.com

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

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KOZY HEAT
LIMITED 10 YEAR WARRANTY  
Effective July 01, 2003

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

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

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

LIMITATION OF LIABILITY

To make a claim under this warranty, the purchaser must first contact the dealer/installer from whom the fireplace was purchased.

This limited warranty will be void if the fireplace is not installed by a qualified installer and according to the installation instructions. Use of unauthorized components will make this warranty null and void.

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

This warranty is limited to defects in material and workmanship. It does not apply to any product that has been subject to negligence, misapplication, improper installation. Remote control warranties are covered by Ambient Technologies, Inc., and are excluded from this Limited Warranty.

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

It is expressly agreed and understood that this warranty is Hussong Manufacturing Co., Inc.’s sole obligation and purchaser’s exclusive remedy for defective fireplace equipment. Hussong Manufacturing Co., Inc. shall not be liable for any consequential, incidental or contingent damages whatsoever. The foregoing warranty is exclusive and in lieu of all other expressed warranties. Hussong Manufacturing Co., Inc. shall not be held to implied warranties, including but not limited to the implied warranties of 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 be made in compliance with installation and operation instructions.
4. Paint and glass gaskets are covered for 30 days from date of purchase.
5. Components broken, (including glass panels), during shipping, careless handling of components, or defects resulting from improper installation, misuse of the fireplace and components are not covered under this warranty.
6. This warranty does not cover any part of the fireplace or any components which have been exposed to or submerged under water.
7. Hussong Manufacturing Co., Inc. must be notified by the dealer the fireplace was purchased from or a qualified installer or service technician of the defect.
8. Annual service of the fireplace as required in the installation manual, is performed by a qualified installer/service technician.
9. All previous warranty/service has been performed by a qualified installer or service technician. (Copies of such service records may be required to claim a warranty.)
LIFETIME WARRANTY

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

LIMITATION OF LIABILITY

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

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

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

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

JUNE 1988

TO ACTIVATE THIS LIFETIME WARRANTY COVERAGE, THIS REGISTRATION CARD MUST BE COMPLETED AND MAILED WITH YOUR COMPLETED 10 YEAR LIMITED WARRANTY FORM WITHIN 30 DAYS OF INSTALLATION.

PURCHASER'S NAME: ___________________________ INSTALLATION DATE: __________

ADDRESS: ____________________________________ MODEL#: __________ SERIAL #: __________

_____________________________________________ TELEPHONE # __________

INSTALLER NAME: ____________________________

ADDRESS: __________________________________ TELEPHONE # __________