WARNING:
FIRE OR EXPLOSION HAZARD
Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

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

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

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

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

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

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

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

Jim Hussong
President

Dudley Hussong
Board Chairman

Homeowner Reference Information

We recommend you record the following information:

Model Name: ____________________________ Date purchased/installed: ____________________________
Serial Number: __________________________ Location of fireplace: ____________________________
Dealership Purchased from: __________________ Dealer phone: ____________________________
Notes: ________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 INTRODUCTION</td>
<td>7</td>
</tr>
<tr>
<td>1.1 Appliance Certification</td>
<td>7</td>
</tr>
<tr>
<td>1.2 Requirements for the Commonwealth of Massachusetts</td>
<td>7</td>
</tr>
<tr>
<td>2.0 SPECIFICATIONS</td>
<td>8</td>
</tr>
<tr>
<td>2.1 Appliance Components</td>
<td>8</td>
</tr>
<tr>
<td>2.2 Heating Specifications</td>
<td>8</td>
</tr>
<tr>
<td>2.3 Appliance Dimensions</td>
<td>9</td>
</tr>
<tr>
<td>2.4 Part Assembly Overview</td>
<td>10</td>
</tr>
<tr>
<td>2.5 Safety Barriers</td>
<td>11</td>
</tr>
<tr>
<td>3.0 EXISTING FIREPLACE REQUIREMENTS</td>
<td>12</td>
</tr>
<tr>
<td>3.1 Appliance Placement Considerations</td>
<td>12</td>
</tr>
<tr>
<td>3.2 Existing Fireplace Specifications</td>
<td>12</td>
</tr>
<tr>
<td>4.0 TERMINATION LOCATION</td>
<td>13</td>
</tr>
<tr>
<td>4.1 Vent Termination Clearances</td>
<td>13</td>
</tr>
<tr>
<td>5.0 INSTALLATION PREPARATION</td>
<td>14</td>
</tr>
<tr>
<td>5.1 Inspect and Clean Existing Chimney</td>
<td>14</td>
</tr>
<tr>
<td>5.2 Flue Damper</td>
<td>14</td>
</tr>
<tr>
<td>5.3 Gas Line</td>
<td>14</td>
</tr>
<tr>
<td>5.4 Electrical Wiring</td>
<td>14</td>
</tr>
<tr>
<td>6.0 INSTALLATION</td>
<td>15</td>
</tr>
<tr>
<td>6.1 Kozy Heat #816-CL Co-Linear Vent System</td>
<td>15</td>
</tr>
<tr>
<td>6.2 Remove Air Duct</td>
<td>16</td>
</tr>
<tr>
<td>6.3 Run Vent System</td>
<td>16</td>
</tr>
<tr>
<td>6.4 Connect Vent Pipe to Air Duct</td>
<td>17</td>
</tr>
<tr>
<td>6.5 Place and Secure Appliance</td>
<td>17</td>
</tr>
<tr>
<td>7.0 GAS LINE CONNECTION</td>
<td>18</td>
</tr>
<tr>
<td>7.1 Gas Conversion (sold separately)</td>
<td>18</td>
</tr>
<tr>
<td>7.2 Gas Line Installation</td>
<td>18</td>
</tr>
<tr>
<td>8.0 FACING AND FINISHING</td>
<td>19</td>
</tr>
<tr>
<td>8.1 Clearances to Combustibles</td>
<td>19</td>
</tr>
<tr>
<td>8.2 Shroud Installation</td>
<td>20</td>
</tr>
<tr>
<td>8.3 Safety Barrier Installation</td>
<td>20</td>
</tr>
<tr>
<td>9.0 GAS FIREPLACE INSERT SETUP</td>
<td>21</td>
</tr>
<tr>
<td>9.1 Glass Assembly</td>
<td>21</td>
</tr>
<tr>
<td>9.2 #CK29-500 Log Set Installation</td>
<td>22</td>
</tr>
<tr>
<td>9.3 Control Board Removal and Installation</td>
<td>23</td>
</tr>
<tr>
<td>10.0 THERMOSTAT, WALL SWITCH, REMOTE</td>
<td>24</td>
</tr>
<tr>
<td>10.1 Rocker Switch Operation</td>
<td>24</td>
</tr>
<tr>
<td>10.2 Remote Control</td>
<td>24</td>
</tr>
<tr>
<td>10.3 Thermostat and Wall Switch</td>
<td>24</td>
</tr>
<tr>
<td>11.0 LIGHTING AND SHUTDOWN</td>
<td>25</td>
</tr>
<tr>
<td>12.0 ADJUSTMENT</td>
<td>26</td>
</tr>
<tr>
<td>12.1 Pressure Testing</td>
<td>26</td>
</tr>
<tr>
<td>12.2 Burner Flame Adjustments</td>
<td>27</td>
</tr>
<tr>
<td>13.0 TROUBLESHOOTING</td>
<td>28</td>
</tr>
<tr>
<td>13.1 Burner and Pilot System</td>
<td>30</td>
</tr>
<tr>
<td>14.1 Fans</td>
<td>30</td>
</tr>
<tr>
<td>14.2 Vent System</td>
<td>30</td>
</tr>
<tr>
<td>14.3 Glass Assembly</td>
<td>30</td>
</tr>
<tr>
<td>15.0 REPLACEMENT PARTS LIST</td>
<td>31</td>
</tr>
<tr>
<td>LIMITED WARRANTY</td>
<td>33</td>
</tr>
<tr>
<td>LIFETIME WARRANTY</td>
<td>35</td>
</tr>
</tbody>
</table>
INTRODUCTION

1.0 INTRODUCTION

1.1 Appliance Certification
Laboratory: OMNI-Test Laboratories in Portland, Oregon
Standards:
• CGA 2.17-M91 (R2009), Gas-Fired Appliances for Use at High Altitudes
• CSA P.4.1-2009, Testing Method for Measuring Annual Fireplace Efficiency

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

1.2 Requirements for the Commonwealth of Massachusetts
The following requirements reference various Massachusetts and national codes not contained in this manual.

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

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

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

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

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

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

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

1.2.6 Manufacturer Requirements

1.2.6.1 Gas Equipment Venting System Provided
When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:
• Detailed instructions for the installation of the venting system design or the venting system components; and
• A complete parts list for the venting system design or venting system.

1.2.6.2 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.

INTRODUCTION 7
2.0 SPECIFICATIONS

2.1 Appliance Components

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CK29MV-770</td>
<td>Millivolt Control Board Assembly</td>
</tr>
<tr>
<td>700-203</td>
<td>Manual Gas Shut-off Valve</td>
</tr>
<tr>
<td>CK29L-135</td>
<td>Burner Assembly</td>
</tr>
<tr>
<td>CK29-500</td>
<td>Log Package</td>
</tr>
<tr>
<td>701-009T</td>
<td>Glass Assembly</td>
</tr>
<tr>
<td>CK29-028-MV</td>
<td>Fan Kit (1)-75 CFM</td>
</tr>
<tr>
<td>500-C29</td>
<td>Grill Assembly</td>
</tr>
</tbody>
</table>

2.1.1 Additional Components Required

2.1.1.1 Shrouds

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CK29-004</td>
<td>Blank Shroud (4 pc.)</td>
</tr>
<tr>
<td>CK29-2538</td>
<td>25” x 38” shroud (1 pc.)</td>
</tr>
<tr>
<td>CK29-27542</td>
<td>27½” x 42” shroud (1 pc.)</td>
</tr>
<tr>
<td>CK29-3044</td>
<td>30” x 44” shroud (1 pc.)</td>
</tr>
<tr>
<td>CK29A-2838</td>
<td>28” X 38” Arched shroud (1 pc.)</td>
</tr>
<tr>
<td>CK29-CUS</td>
<td>Custom shroud</td>
</tr>
<tr>
<td>CK29-ACUS</td>
<td>Custom arched shroud</td>
</tr>
</tbody>
</table>

2.1.1.2 Approved Vent Systems

Kozy Heat #816-CL co-linear vent system

For use with minimum 6” x 8” I.D. masonry or 7” I.D. Class A metal chimneys; includes 12 ft. (3.66 m) compressed, expandable co-linear 3” x 3” flexible pipes and termination cap.

Other approved vent manufacturers

BDM, American Metals (Amerivent), Metal Fab, Selkirk, Simpson Dura-Vent, and ICC TM-IVT cap only.

2.2 Heating Specifications

<table>
<thead>
<tr>
<th></th>
<th>Natural Gas</th>
<th>LP Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Input Rating</td>
<td>28,500 BTU/h (8.35 kW)</td>
<td>29,000 BTU/h (8.5 kW)</td>
</tr>
<tr>
<td>Minimum Input Rating</td>
<td>18,500 BTU/h (5.42 kW)</td>
<td>22,000 BTU/h (6.45 kW)</td>
</tr>
<tr>
<td>Manifold Pressure (High)</td>
<td>3.5” WC (.87 kPa)</td>
<td>10” WC (2.49 kPa)</td>
</tr>
<tr>
<td>Manifold Pressure (Low)</td>
<td>1.6” WC (.40 kPa)</td>
<td>6.4” WC (1.59 kPa)</td>
</tr>
<tr>
<td>Orifice Size (DMS)</td>
<td>#42</td>
<td>#53</td>
</tr>
</tbody>
</table>

2.2.1 Altitude Adjustment

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

2.2.1.1 US Installations

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

2.2.1.2 Canadian Installations

When the appliance is installed at elevations above 4,500 ft (1,372 m), the certified high altitude rating shall be reduced at the rate of 4% for each additional 1,000 ft (305 m).
### 2.3 Appliance Dimensions

#### Table 2.1, Physical 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 Gas Line Access</th>
<th>Front to Vent Center</th>
<th>Back to Vent Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inches</td>
<td>19-1/4</td>
<td>29</td>
<td>18-7/8</td>
<td>14-1/2</td>
<td>14-1/8</td>
<td>7-3/16</td>
<td>8-7/8</td>
<td>5-5/8</td>
</tr>
<tr>
<td>Millimeters</td>
<td>488</td>
<td>737</td>
<td>479</td>
<td>368</td>
<td>360</td>
<td>183</td>
<td>225</td>
<td>143</td>
</tr>
</tbody>
</table>

![CSK-29 Unit Dimensions](image-url)
2.4 Part Assembly Overview

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

![Diagram of part assembly](image)

**Figure 2.2, Proper Positioning of CSK-29-MV (Exploded View)**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Fireplace insert</td>
</tr>
<tr>
<td>B</td>
<td>Spring-loaded latch glass assembly</td>
</tr>
<tr>
<td>C</td>
<td>Control board with burner assembly</td>
</tr>
<tr>
<td>D</td>
<td>Co-linear air duct</td>
</tr>
<tr>
<td>E</td>
<td>Fan kit</td>
</tr>
<tr>
<td>F</td>
<td>Refractory panels</td>
</tr>
<tr>
<td>G</td>
<td>Log set (not shown)</td>
</tr>
</tbody>
</table>
2.5 Safety Barriers

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

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

Please refer to Section 8.3 Safety Barrier Installation on page 20 for installation instructions.
3.0 EXISTING FIREPLACE REQUIREMENTS

3.1 Appliance Placement Considerations

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

- This fireplace must be installed on a level surface capable of supporting the fireplace insert and venting.
- This fireplace insert may be installed in a bedroom.
- Please be aware of the large amount of heat this fireplace insert will produce when determining a location.

3.2 Existing Fireplace Specifications

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

- Any smoke shelves, shields, and baffles may be removed if attached by mechanical fasteners. If necessary, remove firebrick to obtain at least the minimum opening requirements.
- Cutting of any sheet metal parts of the existing fireplace is prohibited.
- If the metal floor is removed, the insert must be placed directly on metal base of metal fireplace. Mechanically attach 'THIS UNIT HAS BEEN MODIFIED' label at bottom of existing firebox so it will be visible if this gas fireplace insert is removed.

3.2.1 Existing Fireplace Minimum Opening Requirements

See Figure 3.1.

(A) Height............................................................. 19¼ in (489 mm)
(B) Front Width.................................................... 29½ in (749 mm)
(C) Depth............................................................... 15 in (381 mm)
(D) Back Width...................................................... 18¾ in (479 mm)

3.2.2 Chimney Specifications

WARNING: Any chimney clean-outs must fit properly.

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

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

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

Existing chimney height:

- Minimum: 10 ft (3.05 m) Maximum: 50 ft (15.24 m)

3.2.2.1 Determine Length of Existing Chimney

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

4.1 Vent Termination Clearances

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

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

Figure 4.1, Vent Cap Clearance
5.0 INSTALLATION PREPARATION

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

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

5.1 Inspect and Clean Existing Chimney

- Verify existing chimney is constructed of non-combustible material.
- Verify existing chimney is clean and in good working order. Clean existing chimney and fireplace to prevent a creosote odor from entering the home.
- Verify combustible mantel and sidewall clearances comply with Section 8.1 Clearances to Combustibles on page 19.
- The refractory, glass doors, screen rails, screen mesh, and log grates may be removed from existing fireplace before installing this gas fireplace insert.

5.2 Flue Damper

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

5.3 Gas Line

- A gas line must be able to be installed to the insert. Refer to Section 7.0 Gas Line Connection on page 18.
- If the factory-built fireplace has no gas access hole(s) provided, an access hole of 1½ in. (37.5 mm) or less may be drilled through the lower sides or bottom of the firebox in a proper workmanship like manner. The access hole must be plugged with non-combustible insulation after the gas supply line has been installed.
- Run gas line to the gas fireplace insert through the gas line hole provided. Do not run gas line in a manner that would obstruct fan operation.
- If the gas fireplace insert is to be installed into minimum opening dimensions, the gas line may need to be run after appliance placement due to space limitations.

5.4 Electrical Wiring

- Provisions must be made to provide electrical power for appliance operation.
- Refer to Section 2.3 Appliance Dimensions (Figure 2.1) on page 9 for electrical outlet box location to run any necessary electrical wiring to the gas fireplace insert.

5.5 Fireplace Conversion

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

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

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

IMPORTANT: Proper operation of this insert requires the exhaust and combustion air pipes to be connected to the correct collar, on both the termination kit and the gas fireplace insert air duct. The fireplace insert air duct exhaust collar is located on the right side. Install termination cap with the exhaust collar on the right side.

NOTE: The exhaust pipe will have a red marking.

IMPORTANT: Maximum horizontal vent runs of 24 in (609 mm) require a 1 in (25mm) rise per 12 in (305 mm) run.

1. Carefully extend the exhaust and combustion air intake pipes to total chimney length required (see Section 3.2.2 on page 12).

2. Slide the combustion air intake pipe (the end without a collar) over termination cap collar (A). Secure to termination cap (E) with provided (3) self-tapping screws (D).

3. Place a bead of sealant around the inner edge at the end of the exhaust pipe (without collar / red marking) and slide onto the corresponding labeled collar (B) on termination cap (E).

4. Secure the exhaust pipe to termination cap (E) with the provided (3) self-tapping screws. Apply additional sealant around joint to ensure a proper seal.

5. Complete vent system installation by following the instructions outlined in Sections 6.2 through 6.5.
6.2 Remove Air Duct

**ATTENTION: All information outlined in Section 5.0 Installation Preparation on page 14 must be completed before continuing with this installation.**

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

![Figure 6.2, Air Duct Removal](image)

6.3 Run Vent System

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

- To prevent cold air drafts, Hussong Manufacturing recommends to insulate the 3” x 3” flexible vent pipes and chimney using unfaced insulation products listed as noncombustible per ASTM E 136.

1. **OPTIONAL:** Before installing vent system down through the chimney, place unfaced insulation around the first 3 ft (914 mm) of vent system below termination cap. Secure with wire.

2. Install the 3” x 3” flexible pipes down through existing chimney. Guide ropes (if used) to aid installation.

3. To secure chimney termination cap to chimney, apply a liberal bead of sealant (provided) around the top of the chimney. Set termination cap into position as instructed by vent system manufacturer’s installation manual.

   **OPTIONAL Kozy Heat #816-CL:** Secure termination cap to existing chimney with 2 in (50 mm) self-tapping screws and anchor straps (provided) through the pilot holes, located on the sides of the termination cap.

4. From inside the existing fireplace, carefully pull ropes (if used) or the flexible pipes down until both exhaust pipe and combustion air intake are into the existing fireplace firebox.

5. **OPTIONAL:** To prevent heat loss up chimney, place unfaced insulation products between the 3” x 3” flexible vent pipes and chimney.

![Figure 6.3, Chimney Vent Run](image)
6.4 Connect Vent Pipe to Air Duct

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

1. Place previously removed air duct (Section 6.2 on page 16) into existing fireplace opening.

2. Connect exhaust vent pipe (red marking) to exhaust collar on air duct. Apply a bead of sealant (provided) around exhaust pipe and slide inside collar marked ‘EX’. Secure with provided (3) ½ in (13 mm) self-tapping screws. Apply additional sealant around joint to ensure an air tight seal.

3. Connect air intake vent pipe to intake collar on air duct. Apply a liberal bead of sealant around intake collar on air duct. Slide combustion intake pipe over the collar and secure with provided (3) ½ in (13 mm) self-tapping screws. Apply additional sealant around joint to ensure an air tight seal.

4. Visually check vent pipe connection to air duct.

6.5 Place and Secure Appliance

1. Slide the gas fireplace insert into existing fireplace opening until the channels on top of the appliance are aligned with the air duct.

2. Insert the air duct pull rod handle through access slot at the top of appliance and place pull handle hook through the hole in pull rod. Simultaneously push the gas insert into existing fireplace and pull the air duct forward until seated.

3. Secure air duct to appliance by using slots at the top of the appliance to secure with (2) ½ in (13 mm) sheet metal screws (included in components packet).

4. Use the pull rod handle to pull the air duct back to starting position. Remove pull handle. Verify vent system connection.

5. If necessary, level the gas insert by threading leveling bolts (included in components packet) into nuts at the bottom of the insert (2 each side). Verify appliance is properly positioned.

---

**Figure 6.5, Air Duct in Existing Fireplace**

**Figure 6.6, Secured Vent Pipes to Air Duct**

**Figure 6.4, Seated Air Duct**

(Shown without venting attached for clarity purposes only)

**Figure 6.7, Aligned Gas Insert in Existing Fireplace**
7.0 GAS LINE CONNECTION

7.1 Gas Conversion (sold separately)

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

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

7.2 Gas Line Installation

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

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

• A listed (and Commonwealth of Massachusetts approved) ½ in. (13 mm) tee handle manual shut-off valve and flexible gas connector are to be connected to the ½ in. (13 mm) control valve inlet. If substituting for these components, please consult local codes for compliance.

• If installing this insert into minimum opening dimensions, the gas line may need to be run after placement due to space limitations. Refer to Section 3.2.1 Existing Fireplace Minimum Opening Requirements on page 12.

• This fireplace is equipped with a ¾” (10 mm) x 18” (457 mm) long flexible gas connector and manual shut-off valve.

• Run gas line into fireplace, preferably through left or right gas line holes provided. The gas line should be run to the point of connection where the shut-off valve and flexible gas line will connect.

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

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

<table>
<thead>
<tr>
<th>Table 7.1, Inlet Gas Supply Pressures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fuel</strong></td>
</tr>
<tr>
<td>Natural Gas</td>
</tr>
<tr>
<td>LP Gas</td>
</tr>
</tbody>
</table>
8.1 Clearances to Combustibles

Figure 8.1, Mantel Requirements
8.2 Shroud Installation

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

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

For shrouds #CK29-2538, #CK29-27542, #CK29-3044, #CK29A-2838, #CK29-CUS, and #CK29-ACUS.

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

8.3 Safety Barrier Installation


1. Locate the (4) slots on the shroud (2 each side).
2. Align the tabs located on the back of the safety barrier with the slots on the shroud.
3. Raise the safety barrier slightly into the slots and allow the tabs to lower into position.
   • To remove safety screen: lift the screen up and out of slots.
9.0 GAS FIREPLACE INSERT SETUP

9.1 Glass Assembly

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

9.1.1 Remove Glass Assembly

WARNING: Do not remove the glass assembly when hot.

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

9.1.2 Install Glass Assembly

1. Align the slots on top of the glass assembly over the tabs at the top of the firebox while lowering the bottom of the glass assembly into position.
2. Pull the spring-loaded latches out and up to secure the bottom of glass to the bottom of the fireplace.
9.2 #CK29-500 Log Set Installation

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

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

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

1. Position the ember panel in front of the burner as shown.
2. Align the holes in base logs CK29-1, CK29-2, CK29-3, and CK29-4 with the corresponding mounting pins on the burner. Push the logs down onto pins to seat.
3. Align logs CK29-5 and CK29-8 with corresponding notches on the base logs and the ember panel.
4. Align the notches in logs CK29-6 and CK29-7 with the log grates on the burner.
5. Distribute rockwool embers onto logs and burner.

---

*Figure 9.1, Base Logs*

*Figure 9.2, Completed Installation*
9.3 Control Board Removal and Installation

WARNING: If burner and/or pilot have been burning, use appropriate protection to avoid burns or damage to personal property before removing any components. DO NOT OPERATE THIS APPLIANCE WITHOUT THE SEALING GASKET (LOCATED UNDER THE CONTROL BOARD) IN PLACE. IF GASKETING IS DAMAGED, IT MUST BE REPLACED.

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

9.3.1 Control Board Removal

1. Remove the safety barrier.
2. Turn the fireplace off.
3. Locate the manual valve installed by your qualified service technician. Turn the manual valve clockwise to the OFF position.
4. Disconnect any wall switch, remote control, or thermostat from the top and bottom terminals on the gas valve, OR unplug all components from receptacle and disconnect all wiring harnesses attached to the gas valve.
5. Remove the glass frame assembly and log set.
6. Remove the burner assembly, secured with (2) screws.
7. Remove refractory panels (if installed).
8. Remove burner, secured with (2) screws at the back of the firebox.
9. Remove the primary and secondary burner heat shields.
10. Remove (10) screws securing control board. Remove the control board.

9.3.2 Control Board Installation

1. Place the control board in firebox, aligning the holes in board with mounting studs at the bottom of the firebox. VERIFY SEALING GASKET IS IN PLACE ON THE BOTTOM OF THE FIREBOX. Secure with screws previously removed.
2. Secure the control board with screws previously removed.
3. Reinstall the burner heat shields by placing the primary burner heat shield on top of the control board. Position the cut-outs over pilot assembly and burner orifice, centering from side-to-side and as far back as possible.
4. Reinstall burner (2) screws.
5. Reinstall refractory panels (if used).
6. Reinstall burner assembly. Verify the burner tube is positioned over burner orifice. Secure with (2) screws previously removed.
7. Reinstall log set.
8. Reconnect any wall switch, remote control, or thermostat wires to the top and bottom terminals on the gas valve, OR reconnect all wiring harnesses to the gas valve. Plug all components into an electrical outlet.
9. Reinstall the glass frame assembly and safety barrier.
10. Turn the manual valve counter clockwise to the ON position.
11. Verify proper log placement, operation of fireplace, and any electrical components.

Figure 9.3, Control Board Removal and Installation
10.0 THERMOSTAT, WALL SWITCH, REMOTE

**NOTE:** The fireplace must be turned ON and OFF by the same method. For example, if the fireplace insert is turned on by the remote control, it must be turned off by the remote control.

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

If desired, a thermostat, a wall switch, or a remote control assembly may be installed to enable ON/OFF control of the main burner. Only one of these components may be installed. Follow instructions included with your chosen assembly.

10.1 Rocker Switch Operation

- It is optional to disable the rocker switch operation of the main burner by disconnecting the rocker switch wires from the back of the gas valve.
- If the 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 the thermostat, wall switch, or remote control.
- If the rocker switch is ON, the main burner will operate until it is turned OFF by the rocker switch. These components will not turn the main burner OFF when it has been turned ON by the rocker switch.

![ON/OFF ROCKER SWITCH WIRES](image)

Figure 10.1, Rocker Switch Wire Locations (Side View)

10.2 Remote Control

- Follow instructions included with the remote control.
- The insulated cover included with the remote control must be in place over the remote receiver to prevent overheating.

![REMOTE CONTROL](image)

Figure 10.2, Remote Control Wiring Diagram

10.3 Thermostat and Wall Switch

**NOTE:** Installation of the thermostat or wall switch should only be performed by a qualified installer.

1. Run low-voltage wires from the terminals on the gas valve to the desired location of the component (thermostat or wall switch).
2. Attach the appropriate connectors to the wall switch wires or thermostat wires. Connect to top and bottom terminals marked TH and TP-TH on the gas valve.

![THERMOSTAT WIRING](image)

Figure 10.3, Thermostat Wiring Diagram
11.0 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.

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
B. BEFORE LIGHTING smell around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don’t try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water.

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

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

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

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

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

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

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
B. BEFORE LIGHTING smell around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don’t try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water.

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

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

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

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

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

LIGHTING INSTRUCTIONS

1. STOP! Read all the safety information above on this page.
2. Set thermostat to lowest setting (if applicable).
3. Turn off all electric power to the appliance.
4. Remove the safety barrier to access the gas controls.
5. Push in gas control knob slightly and turn clockwise to “OFF”.
   NOTE: Knob cannot be turned from “PILOT” to “OFF” unless knob is pushed in slightly. Do not force.
6. Wait five (5) minutes to clear out any gas. Then, smell for gas, including near the floor. If you smell gas, STOP! Follow ‘B’ in the safety information above. If you do not smell gas, go to the next step.
7. Locate pilot - follow metal tube from gas control. The pilot is located inside the combustion chamber.
8. Push in gas control knob slightly and turn counterclockwise to “PILOT”.
9. Push in control knob all the way and hold. Press the piezo igniter button repeatedly until the pilot is lit and continue to hold in the gas control knob.
10. Hold the gas control knob in for one (1) minute after pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 10.
   • If the knob does not pop out when released, stop and immediately call your service technician or gas supplier.
   • If the pilot will not stay lit after several tries, turn the gas control knob to “OFF” and call your service technician or gas supplier.
11. Turn the gas control knob counterclockwise to “ON”.
12. Reinstall the safety barrier.
13. Turn on all electric power to the appliance.
14. Set thermostat to desired setting (if applicable).

TO TURN GAS OFF TO APPLIANCE

1. Set thermostat to lowest setting (if applicable).
2. Turn off all electric power to the appliance if service is to be performed.
3. Remove the safety barrier to access the gas controls.
4. Push in gas control knob slightly and turn clockwise to “OFF”.
5. Reinstall the safety barrier.

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

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

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

12.1.1 Inlet Pressure Test

NOTE: Make sure to apply the incoming pressure test with all other gas appliances on, or at full capacity in the house for a proper pressure reading. If the inlet pressure reading is too high or too low, contact the gas company. Only a qualified gas service technician should adjust incoming gas pressure. A low pressure can cause a delayed ignition.

1. Loosen the inlet (IN) pressure tap by turning screw counterclockwise. See (A) in Figure 12.1.
2. Attach manometer using a ¼ in (6 mm) I.D. hose.
3. Light pilot.
4. Turn the gas control knob to ON. Burner should not light. Note manometer reading.
5. Press the rocker switch to ON. Check pressure to ensure it is near maximum inlet pressure.
6. Press the rocker switch to OFF.
7. Turn the gas control knob to OFF.
8. Disconnect hose and tighten the inlet (IN) pressure tap by turning screw clockwise. Screw should be snug. Do not over tighten.
9. Relight pilot and turn the gas control knob to ON. Reattach manometer to the inlet pressure tap (A) to verify the tap is completely sealed. Manometer should read no pressure.

12.1.2 Manifold Pressure Test

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

<table>
<thead>
<tr>
<th>Table 12.1, Inlet Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
</tr>
<tr>
<td>Gas Supply</td>
</tr>
<tr>
<td>Inlet Pressure</td>
</tr>
<tr>
<td>Tap (A)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 12.2, Manifold Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
</tr>
<tr>
<td>Gas Supply</td>
</tr>
<tr>
<td>Manifold Pressure</td>
</tr>
<tr>
<td>Tap (B)</td>
</tr>
</tbody>
</table>
12.2 Burner Flame Adjustments

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

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

### 12.2.1 Burner Venturi

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

**NOTE:** Burner venturi air shutter settings have been factory set. Refer to Table 12.3.

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

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

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Air Shutter Opening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas</td>
<td>1/8&quot; (3 mm) OPEN</td>
</tr>
<tr>
<td>LP Gas</td>
<td>5/8&quot; (15 mm) OPEN</td>
</tr>
</tbody>
</table>

#### Table 12.3, Factory Set Venturi Openings

**12.2.1.1 Venturi Adjustment**

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

1. Remove the safety barrier and glass frame assembly.
2. Remove the log set and burner assembly from firebox.
3. Loosen screw on venturi and adjust as necessary. Re-tighten screw.
4. Reinstall all components previously removed.

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

<table>
<thead>
<tr>
<th>Flame Characteristic</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark, orange flame with black tips</td>
<td>Venturi closed too far</td>
<td>Open venturi slightly</td>
</tr>
<tr>
<td>Short, blue flames</td>
<td>Venturi open too far</td>
<td>Close setting slightly</td>
</tr>
<tr>
<td>Lifting (ghosting) flames</td>
<td>Gas pressure too high</td>
<td>Check manometer settings</td>
</tr>
<tr>
<td></td>
<td>Venturi closed too far</td>
<td>Open venturi setting slightly</td>
</tr>
</tbody>
</table>

#### Table 12.4, Venturi Adjustment Guidelines

**IDEAL - LAZY, YELLOW FLAMES**

**DARK, ORANGE FLAME WITH BLACK TIPS**

**SHORT, BLUE FLAMES**

**LIFTING (GHOSTING) FLAMES**

**Figure 12.2, Flame Appearance and Characteristics**

**Figure 12.3, Burner Venturi Location**
### 13.0 TROUBLESHOOTING

**ATTENTION: Troubleshooting must be performed by a qualified technician.**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No spark from electrode to pilot when piezo button is triggered</td>
<td>Piezo igniter wiring disconnection</td>
<td>Verify piezo igniter is properly grounded. Tighten mounting fastener, if required. Check and repair, if necessary, the wire connections between the piezo igniter and igniter electrode.</td>
</tr>
<tr>
<td></td>
<td>Check wiring disconnection</td>
<td>Check wiring at back of electrode igniter for proper connection.</td>
</tr>
<tr>
<td></td>
<td>Incorrect electrode position</td>
<td>Verify there is a 1/8 in (3 mm) gap between the electrode and pilot. Readjust if necessary. Direct metal contact may cause an arc below the electrode and along the electrode wire.</td>
</tr>
<tr>
<td>Spark igniter will not light after repeated triggering of piezo button</td>
<td>No gas</td>
<td>Check for multiple shut-off valves in the supply line. Check LP (propane) tank for gas supply. Refill if necessary.</td>
</tr>
<tr>
<td>Pilot will not stay lit after carefully following lighting instructions</td>
<td>Pilot flame does not impinge on thermocouple</td>
<td>Clean pilot hood Adjust pilot flame at gas valve for proper flame impingement.</td>
</tr>
<tr>
<td></td>
<td>Loose thermocouple connection</td>
<td>Ensure thermocouple connection at gas valve is full inserted and tight - hand tight plus 1/4 turn.</td>
</tr>
<tr>
<td></td>
<td>Thermocouple reading below 15 millivolts</td>
<td>Disconnect the thermocouple from valve. Place one millivolt meter lead wire on the end of the thermocouple, and the other millivolt meter lead wire on the thermocouple's copper wire. Start the pilot while holding the gas valve control knob in. If the millivolt reading is less than 15 millivolts, replace thermocouple.</td>
</tr>
<tr>
<td></td>
<td>Thermopile not generating sufficient millivolts</td>
<td>Adjust, if necessary, the pilot flame to envelope thermopile. Check thermopile connections are properly wired to the gas control valve. Tighten if necessary. Measure millivolt production with a millivolt meter. Turn remote/thermostat/wall switch, or ON/OFF rocker switch to OFF. Turn the gas valve control to the PILOT position (pilot should remain lit). Take millivolt reading at TH-TP and TP terminals on gas valve. Reading should be 350 millivolts, minimum. If reading is less than 350 millivolts, replace thermopile.</td>
</tr>
<tr>
<td>Frequent pilot outages</td>
<td>Pilot shield not installed</td>
<td>Install pilot shield.</td>
</tr>
<tr>
<td></td>
<td>Pilot safety dropout</td>
<td>Pilot flame is too high or too low. Clean pilot hood and adjust pilot flame for maximum flame impingement on thermopile.</td>
</tr>
<tr>
<td>Issue</td>
<td>Cause</td>
<td>Solution</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Burner will not light</td>
<td>Lighting instructions not followed</td>
<td>Turn gas control knob to ON position. Turn the ON/OFF rocker switch to ON position. Put wall switch, remote control, or thermostat in heat demand position.</td>
</tr>
<tr>
<td></td>
<td>Plugged main burner orifice</td>
<td>Remove blockage as necessary.</td>
</tr>
<tr>
<td></td>
<td>Switching device is defective</td>
<td>Check remote, thermostat, or wall switch wires for proper connection. Place jumper wires across terminals at switch. If the burner lights, replace the defective switch, thermostat, or batteries in remote control as necessary. If switching device checks out as described above, place jumper wires across switches on the gas valve. If the burner lights, the switching wires are faulty or connections are bad. Replace as necessary.</td>
</tr>
<tr>
<td>Burner will not stay lit</td>
<td>Thermopile wires loose at valve terminals</td>
<td>Tighten if necessary.</td>
</tr>
<tr>
<td></td>
<td>Thermopile wires ground out due to pinched wires</td>
<td>Free pinched wires if necessary.</td>
</tr>
<tr>
<td></td>
<td>Improper refractory panel placement (if installed)</td>
<td>Refractory panels must be tight against firebox walls. It may be necessary to secure panels with high-temperature sealant, especially around the intake duct.</td>
</tr>
<tr>
<td>Pilot and burner extinguish while in operation</td>
<td>No LP gas in tank</td>
<td>Check LP (propane) tank. Refill if necessary.</td>
</tr>
<tr>
<td></td>
<td>Incorrect glass frame assembly installation</td>
<td>Refer to Section 9.1 Glass Assembly on page 21.</td>
</tr>
<tr>
<td></td>
<td>Defective thermopile or thermocouple</td>
<td>Check thermopile and thermocouple for proper millivolts.</td>
</tr>
<tr>
<td></td>
<td>Incorrect vent cap installation</td>
<td>Adjust if necessary.</td>
</tr>
<tr>
<td></td>
<td>Vent cap blockage</td>
<td>Remove debris if necessary.</td>
</tr>
<tr>
<td>Glass sooting</td>
<td>Improper log placement</td>
<td>Refer to Section 9.2 #CK29-500 Log Set Installation on page 22.</td>
</tr>
<tr>
<td></td>
<td>Improper venturi setting</td>
<td>Venturi may need to be opened slightly to allow more air into the gas mix. Refer to Section 12.2.1.1 Venturi Adjustment on page 27.</td>
</tr>
<tr>
<td></td>
<td>Incorrect vent cap instillation</td>
<td>Adjust if necessary.</td>
</tr>
<tr>
<td></td>
<td>Vent cap blockage</td>
<td>Remove debris if necessary.</td>
</tr>
<tr>
<td>Flame burns blue and lifts off burner</td>
<td>Improper venturi setting</td>
<td>Venturi may need to be opened slightly to allow more air into the gas mix. Refer to Section 12.2.1.1 Venturi Adjustment on page 27.</td>
</tr>
<tr>
<td></td>
<td>Incorrect vent cap installation</td>
<td>Adjust if necessary.</td>
</tr>
<tr>
<td></td>
<td>Blockage or leakage of the vent system</td>
<td>Check the vent pipe for leaks, and the vent cap for debris. Repair vent pipe or remove debris from vent cap if necessary.</td>
</tr>
</tbody>
</table>
14.0 MAINTENANCE

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

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

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

13.1 Burner and Pilot System

The burner assembly may be removed for easier access to the control compartment. Refer to Section 9.3 Control Board Removal and Installation on page 23, for instructions.

Performed by: Qualified Service Person
Frequency: Annually
Action:
• Vacuum all components of the burner system.
• Visually check burner ports for blockage, especially near the pilot.
• Visually check pilot light and burner flame pattern when in operation. Flames should be steady, not lifting or floating.

14.1 Fan(s)

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

Performed by: Qualified Service Person
Frequency: Every 6 months
Action:
• Disconnect the fan(s) from electrical current and vacuum.
• The bearings are sealed and require no oiling.

14.2 Vent System

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

Performed by: Qualified Service Person
Frequency: Annually
Action:
• Examination of the vent system is required.
• The flow of combustion and ventilation air must not be obstructed.

14.3 Glass Assembly

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

WARNING: Do not use substitute materials.

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

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

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

Performed by: Qualified Service Person
Frequency: Annually
Action:
• Inspect the glass for cracks, scratches, and nicks.
• Verify the glass assembly is properly intact and not damaged.
• Replace the glass and the assembly #CK29-057T as necessary.
• Only Hussong Mfg. Co., Inc. will supply the replacement of glass assembly as a complete unit.
Replacement parts are available through your local dealer. Contact your local dealer for availability and pricing.

## CONTROL BOARD AND PARTS

<table>
<thead>
<tr>
<th>Control Board - NG</th>
<th>CK29MV-770</th>
<th>Pilot Orifice - NG</th>
<th>700-294</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Board - LPG</td>
<td>CK29MV-771</td>
<td>Pilot Orifice - LPG</td>
<td>700-295</td>
</tr>
<tr>
<td>S.I.T. Gas Valve - NG</td>
<td>700-086N</td>
<td>Pilot Hood</td>
<td>700-098</td>
</tr>
<tr>
<td>On/Off Rocker Switch</td>
<td>700-023</td>
<td>Flexible Gas Line - Valve to Burner Connection</td>
<td>700-226</td>
</tr>
<tr>
<td>Pilot/Generator/Thermocouple - NG</td>
<td>700-063</td>
<td>NG Burner Orifice #42</td>
<td>700-242</td>
</tr>
<tr>
<td>Pilot/Generator/Thermocouple - LPG</td>
<td>700-063-1</td>
<td>LPG Burner Orifice #53</td>
<td>700-253</td>
</tr>
<tr>
<td>Piezo Igniter with nut (no wire)</td>
<td>700-090</td>
<td>Conversion Kit - NG</td>
<td>OCK-S42A</td>
</tr>
<tr>
<td>Flexible Pilot Tubing (valve to pilot)</td>
<td>700-091</td>
<td>Conversion Kit - LPG</td>
<td>OCK-S53A</td>
</tr>
<tr>
<td>Millivolt Generator</td>
<td>700-092</td>
<td>Burner Assembly</td>
<td>CK29L-135</td>
</tr>
<tr>
<td>Thermocouple</td>
<td>700-093</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## GLASS AND GLASS GASKET

| Glass with gasket 14³/₄” x 27½” | 701-009T |
| Glass Gasket           | 900-006  |

## SAFETY BARRIERS

| Beveled Screen Front   | CK29-BSF |
| Convex Screen Front    | CK29-CXF |
| Prairie Screen Front   | CK29-PSF |
| Rectangular Screen Front | CK29-RSF |
| Arched Mission Screen Front | CK29A-MSF |
| Arched Prairie Screen Front | CK29A-PSF |
| Arched Screen Front    | CK29A-SF |
| Arched Full Prairie Door Screen Front | CK29A-FPDSF |

## LOG SET

| 8 Piece Log Set        | CK29-500 |
| Log Plate              | CK29-L35 |
| Ember Panel            | CK29-900EMV |
| #CK29-1 Log            | CK29 1   |
| #CK29-2 Log            | CK29 2   |
| #CK29-3 Log            | CK29 3   |
| #CK29-4 Log            | CK29 4   |
| #CK29-5 Log            | CK29 5   |
| #CK29-6 Log            | CK29 6   |
| #CK29-7 Log            | CK29 7   |
| #CK29-8 Log            | CK29 8   |
| Rock Wool Embers       | 900-REMB |

Hussong Manufacturing Co., Inc.
P.O. Box 577
204 Industrial Park Drive
Lakefield, MN 56150-0577
USA
CSK-29-MV
**LIMITED WARRANTY**

**Kozy Heat Limited 10 Year Warranty**

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

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

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

**Year 1**

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

**Years 2 through 10**

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

**Limitation of Liability**

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

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

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

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

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

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

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

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

---

**Warranty Conditions and Requirements**

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

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

Lifetime Warranty Coverage
LIFETIME WARRANTY IS EXTENDED AS FOLLOWS:
Hussong Manufacturing Co., Inc. 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 of merchantability and fitness for a particular purpose. This lifetime warranty replace all previous lifetime warranty policies.

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

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

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

September 2011