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.

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

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.

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

O-T-L US
OMNI Test Laboratories, Inc.

Tested & Listed By

www.kozyheat.com

October-2009
MTK-R16
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                                                            Dudley Hussong
President                                                                 Board Chairman

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

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

Model Name:______________________________   Date purchased/installed:____________
Serial Number:____________________________    Location on fireplace:_______________
Dealership purchased from:__________________    Dealer Phone:_____________________
Notes:_____________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
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Installation and repair should be done only by a qualified service person. The appliance should be inspected by a qualified service person before use. Annual inspection by a qualified service person is required to maintain warranty. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulation air passageways of the appliance be kept clean.

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

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

Young children should be carefully supervised when they are in the same room as the appliance.

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 #MTK-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.
## FEATURES

### STANDARD FEATURES
- High efficiency
- High quality lifetime glass
  26” x 35” (660 mm x 889 mm)
- Quick latch glass frame assembly
- Upper grill / hood & lower grill (black)
- Accepts rigid pipe or Kozy Heat flexible vent system
- High - Low regulator
- Patented log design
- Automatic fan kit (2) - 75 CFM*
- Light Kit**
- Refractory brick lining
- Minnesota Energy Code compliant to 50 pascals

*Standard on RF and IPI models
**Standard on IPI models
***Standard on Regular and RF models

### OPTIONAL FEATURES
- Red brick refractory
- Clean Face Kit
- Light Kit**
- Automatic fan kit* with variable speed control (2) 75 CFM*
- 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

*Standard on RF and IPI models
**Standard on IPI models
***Standard on Regular and RF models

### WEIGHT
- Fireplace Weight (as packaged for shipment)
  186 lbs. (84.37 kg)

### SAFETY FEATURES
- Each unit factory tested!
- Tested by OMNI - Test Laboratories
- Sealed combustion chamber
- Standing pilot ignition***
- Intermittent or Standing pilot ignition*
- 30-second delay pilot***
- Flame sensing system (safety shutoff)**
- Automatic pressure relief glass system
- Requires no electricity to operate
  (excluding fan & light kit)***
- Battery back-up in the event of power failure**
  (excluding fan & light kit)
- Bedroom and mobile home approved
- Canadian approved

*Standard on RF and IPI models
**Standard on IPI models
***Standard on Regular and RF models
NOTE: The following requirements reference various Massachusetts and national codes not contained in this manual.

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

**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 than the one-half inch (1/2”) in size, **“GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS”**.

**INSPECTION**

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

**EXEMPTIONS**

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

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

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

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

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

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

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

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

### FIREPLACE DIMENSIONS

<table>
<thead>
<tr>
<th>LETTER KEY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESCRIPTION</td>
<td>Height</td>
<td>Width</td>
<td>Back Width</td>
<td>Depth</td>
<td>Opening Width</td>
<td>Glass Frame Height</td>
<td>Stand-off Height</td>
<td>Front to Vent Center (Vert. Term.)</td>
<td>Floor to Vent Center (Hor. Term.)</td>
<td>Front to Angled Back</td>
</tr>
<tr>
<td>INCHES</td>
<td>34-1/2</td>
<td>40-7/8</td>
<td>29-1/4</td>
<td>21-3/8</td>
<td>35-1/2</td>
<td>26-1/2</td>
<td>10</td>
<td>18-1/2&quot;</td>
<td>32-5/8</td>
<td>10-1/4</td>
</tr>
<tr>
<td>MILLIMETERS</td>
<td>876</td>
<td>1038</td>
<td>743</td>
<td>543</td>
<td>902</td>
<td>673</td>
<td>254</td>
<td>470</td>
<td>829</td>
<td>260</td>
</tr>
</tbody>
</table>

**WARNING:** NON-COMBUSTIBLE ZONE: STAND-OFFS PROVIDE 10" (254 mm) MINIMUM CLEARANCE TO HEADER. USE ONLY NON-COMBUSTIBLE MATERIAL IN THIS AREA FOR ENTIRE WIDTH OF FIREPLACE. DO NOT USE WOOD, SHEETROCK ETC. IN THIS ZONE.

**NOTE:** OTHER CLEARANCES APPLY. ALL CLEARANCES MUST BE MAINTAINED. REFER TO PAGE 14 FOR MORE INFORMATION.

**CAUTION:** STAND-OFF BRACKETS ARE NOT LOAD BEARING.
WARNING: NON-COMBUSTIBLE ZONE: STAND-OFFS PROVIDE THE 10" (254 mm) MINIMUM CLEARANCE TO HEADER. USE ONLY NON-COMBUSTIBLE MATERIAL IN THIS AREA FOR ENTIRE WIDTH OF FIREPLACE. DO NOT USE WOOD, SHEETROCK ETC. IN THIS ZONE.

NOTE: OTHER CLEARANCES APPLY. ALL CLEARANCES MUST BE MAINTAINED. REFER TO PAGE 14 FOR MORE INFORMATION.

**CLEARANCES**

- From fireplace face top to framing (cement board to be used in this area)........10" (254 mm)
- From fireplace left & right sides & back...........................................½" (13 mm)
- Surround sides (flush).................................................................¾" (6 mm)
- Fireplace bottom to flooring........................................................0
- Fireplace top to ceiling..............................................................31" (787 mm)
- Fireplace side to adjacent sidewall.............................................12" (305 mm)
- Mantel 10" (254 mm) deep from top of fireplace.........................15" (381 mm)
# SPECIFICATIONS

## MODEL #55345 COMPONENTS LIST

- (#MTK-770) - Millivolt Board Assembly with 18” Flexible Gas Line attached
- (#700-203) - Manual Gas Shut-off Valve
- (#MTK-135A) - Burner / Log Grate Assembly
- (#MTK-G900) - Refractory Set
- (#MTK-500A) - Log Package
- (#MTK-057T) - Glass Frame Assembly
- (#OCK-S5168) - LP Conversion Kit
- (#600-083) - Receptacle/Speed Control Assy. with (3) Wire Nuts
- (#942-085) - 5” Restrictor Plate
- (#500-MTK) - Grill Assembly: Upper Hood, Upper Louver, Lower Grill

## MODEL #55345-RF COMPONENTS LIST

- (#MTK-800-RF) - Millivolt Board Assembly with 18” Flexible Gas Line attached
- (#700-203) - Manual Gas Shut-off Valve
- (#MTK-135A) - Burner / Log Grate Assembly
- (#MTK-G900) - Refractory Set
- (#MTK-G900) - Refractory Set
- (#MTK-500A) - Log Package
- (#RF-028) - RF Fan Kit
- (#MTK-057T) - Glass Frame Assembly
- (#OCK-H5168L-RF) - LP Conversion Kit
- (#700-108) - Remote control
- (#942-085) - 5” Restrictor Plate
- (#500-MTK) - Grill Assembly: Upper Hood, Upper Louver, Lower Grill

## MODEL #55345-IPI COMPONENTS LIST

- (#MTK-600-IPI) - IPI Board Assembly with 18” Flexible Gas Line attached
- (#700-203) - Manual Gas Shut-off Valve
- (#MTK-135A) - Burner / Log Grate Assembly
- (#MTK-G900) - Refractory Set
- (#MTK-500A) - Log Package
- (#IPI-028) - IPI Fan Kit
- (#MTK-BLK) - Back Light Kit
- (#MTK-057T) - Glass Frame Assembly
- (#OCK-A5168L-IPI) - LP Conversion Kit
- (#700-208) - Remote Control
- (#600-002) - Double Receptacle Assembly with (3) Wire Nuts
- (#942-085) - 5” Restrictor Plate
- (#500-MTK) - Grill Assembly: Upper Hood, Upper Louver, Lower Grill
INSTALLATION OVERVIEW

NOTE: The qualified installer should follow the procedure best suited for the installation.

1. Frame an opening for fireplace, allowing for vent installation and type of installation (corner, flat wall, clean face application).

2. If masonry (optional) will be used, prepare foundation for the masonry load. A lintel is required to support the added weight above the fireplace.

3. Attach nailing flanges to fireplace.

4. Insert fireplace into framing.

5. Install hearth (if applicable).

6. Complete gas line installation.

7. Complete electrical hook-up. Install any standard or optional electrical components at this time.

8. Complete venting installation.

9. Secure fireplace to flooring through holes located in outer box bottom and to framing with nailing flanges. Verify all clearances at this point.

10. Install facing material, mantel or cabinetry, allowing room for optional full face doors, if applicable.

11. Install logs.

12. Install grills and optional decorative doors / faces.

13. Verify proper operation of fireplace and all components.

PLACEMENT CLEARANCE REQUIREMENTS

- This fireplace must be installed on a level surface capable of supporting the fireplace and venting.
- Fireplace must be placed directly on wood or non-combustible surface (not linoleum or carpet) extending entire depth and width of fireplace.
- 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.
PREPARE THE FIREPLACE

STAND-OFF ASSEMBLY & INSTALLATION

The top stand-off brackets are attached to fireplace top in a flat state for shipping.

1. Remove and save (4) screws securing stand-off heat shield and stand-off brackets, and (4) screws located under stand-off brackets.
2. Form each stand-off bracket as shown.
3. Re-attach stand-off brackets to fireplace using screws previously removed.

WARNING: STAND-OFFS PROVIDE 10" (254 mm) MINIMUM CLEARANCE TO HEADER. USE ONLY NON-COMBUSTIBLE MATERIAL IN THIS AREA FOR ENTIRE WIDTH OF FIREPLACE. DO NOT USE WOOD, SHEETROCK ETC. IN THIS ZONE.

IMPORTANT: TOP STAND-OFF BRACKETS MUST BE FORMED AND ATTACHED PRIOR TO POSITIONING FIREPLACE INTO FRAMED OPENING.

CAUTION: STAND-OFF BRACKETS ARE NOT LOAD BEARING.

NOTE: OTHER CLEARANCES APPLY. ALL CLEARANCES MUST BE MAINTAINED. REFER TO PAGE 14 FOR MORE INFORMATION.

IMPORTANT: TOP STAND-OFF BRACKETS MUST BE FORMED AND ATTACHED PRIOR TO POSITIONING FIREPLACE INTO FRAMED OPENING.

CAUTION: STAND-OFF BRACKETS ARE NOT LOAD BEARING.

NOTE: OTHER CLEARANCES APPLY. ALL CLEARANCES MUST BE MAINTAINED. REFER TO PAGE 14 FOR MORE INFORMATION.
PREPARE THE FIREPLACE

HORIZONTAL VENT HEAT SHIELD INSTALLATION

When installed, nailing flanges provide the minimum 1/4” (6 mm) clearance from fireplace sides.

CAUTION: NEVER PERMANENTLY REMOVE THESE ASSEMBLIES FROM FIREPLACE - THEY MUST BE SECURED IN PLACE REGARDLESS OF FINISH MATERIAL USED.

To Install Horizontal Vent Heat Shield:

1. Loosen, but do not remove center three screws at back of fireplace as shown.

2. Bend horizontal heat shield at perforation to a 45° angle. Slide (3) slots on horizontal vent heat shield under loosened screws. Re-tighten screws.

NAILING FLANGE ASSEMBLY & INSTALLATION

1. Remove (4) nailing flanges from fireplace sides.

2. With the 1/4” (6 mm) stand-offs on nailing flanges facing away from fireplace, align nailing flange with holes on outside corners of fireplace. Secure with screws (provided in components packet) through slots in nailing flanges.

3. Bend perforation on nailing flange until parallel with fireplace face. Do not bend toward fireplace face.

4. Position framing stud against 1/4” (6 mm) stand-off (located on backside of nailing flange). Secure with nails or screws.

NOTE: Depending on facing material, tabs can be adjusted forward or back up to 1/2” (13 mm).

IMPORTANT: THE HORIZONTAL VENT HEAT SHIELD MUST BE INSTALLED WHEN USING A 45-DEGREE ELBOW TO HORIZONTALLY POSITION THE VENT SYSTEM. EXCEPTION: CORNER INSTALLATIONS

When installed, nailing flanges provide the minimum 1/4” (6 mm) clearance from fireplace sides.
MINIMUM FINISHED OPENING DIMENSIONS

(APPLIES TO BOTH HORIZONTAL AND VERTICAL VENTING TERMINATIONS)

44-1/2”(1130 mm) High x 41-3/8”(1051 mm) Wide x 21-7/8” (556 mm) Deep.

1/2” (13 mm) clearance at back and sides of fireplace must be maintained.

NOTE: Provide adequate clearance in front of fireplace to operate lower grill, open and close optional decorative doors / full door faces, access components, installation of gas line, fan, etc.

WARNING: DO NOT OBSTRUCT UPPER AND LOWER GRILL OPENINGS. ROOM AIR ENTERS THROUGH LOWER PASSAGE, IS HEATED AND EXITS THROUGH UPPER PASSAGE. BLOCKING THESE PASSAGES MAY RESULT IN OVERHEATING, CREATING A POTENTIALLY HAZARDOUS SITUATION.

IMPORTANT: Framing dimensions, clearances to combustibles above and below fireplace along with mantel clearances and framed opening location for horizontal venting differ if installing the optional #MTK-CFK Minnetonka Clean Face Kit. Please refer to instructions included with kit.

Illustration at right requires a minimum 5” (127 mm) exterior wall depth when using minimum horizontal venting. Anything less than a 5” (127 mm) exterior wall depth requires that you add that depth to the 21-7/8” (556 mm) dimension to accommodate minimum venting.

5” (127 mm) exterior wall depth shown*

12-1/2” x (318 mm) H x 10-7/8” (277 mm) W opening (required for horizontal terminations)
Determine exact position of your fireplace, including hearth height, width, and depth, (if applicable). If possible, place fireplace in such a manner that vent termination will be placed between two studs, eliminating the need for additional framing.

If masonry is to be used (optional), prepare the necessary foundation for the masonry load. When masonry construction is being used, a lintel must be used over the top of fireplace to support the added weight.

Build hearth to desired size and height. If a hearth extension is desired, combustible material may be used.

NOTE: Consider height of hearth finish material (stone, brick, etc.) when building fireplace platform. The bottom of fireplace must be level with finished hearth to allow for lower grill operation and proper fit of optional decorative full door faces.

WARNING: Install fireplace on hard metal or wood surface extending the full width and depth of fireplace.
Minimum platform size: 44-7/8” (1038 mm) wide x 21-3/8” (543 mm) deep.

FIRE HAZARD: Do NOT install directly on carpeting, vinyl, or any combustible material other than wood.

IMPORTANT: Vent cap location must be in compliance with the guidelines on page #31 of this manual.

HORIZONTAL TERMINATIONS

Follow vent pipe manufacturer’s installation instructions for horizontal terminations. Include the required 1-1/2” (38 mm) top clearance and 1” (25 mm) sides and bottom clearances for approved rigid vent systems and the Kozy Heat #800 series flexible vent system.

<table>
<thead>
<tr>
<th>MINIMUM HORIZONTAL FRAMING DIMENSIONS</th>
<th>VENT PIPE TOP (A)</th>
<th>FRAMED OPENING TOP (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIGID PIPE</td>
<td>36-1/2” (927 mm)</td>
<td>39-1/2” (1003 mm)</td>
</tr>
<tr>
<td>FLEX PIPE</td>
<td>40” (1016 mm)</td>
<td>43” (1092 mm)</td>
</tr>
</tbody>
</table>

VERTICAL TERMINATIONS

Follow vent pipe manufacturer’s installation instructions for vertical terminations. A minimum 1” (25 mm) clearance on all sides of vertical vent pipe must be maintained.

NOTE: The included Horizontal Vent Heat Shield is not used for vertical configurations.

CAUTION: Cold air transfer area. The surrounding fireplace chase must comply with all clearances as outlined in this manual and be constructed in compliance with local building codes. Outside walls should be insulated to prevent cold air from entering room.

CAUTION: Due to high temperatures, this fireplace should be located out of traffic areas and away from furniture and draperies.

IMPORTANT: Framing dimensions, clearances to combustibles above and below fireplace along with mantel clearances and framed opening location for horizontal venting differ if installing optional #MTK-CFK Minnetonka Clean Face Kit. Please refer to instructions included with kit.
Illustration at right requires a minimum 5” (127 mm) exterior wall depth when using minimum horizontal venting. Anything less than a 5” (127 mm) exterior wall depth requires that you add that depth to the 21-7/8” (556 mm) dimension to accommodate minimum venting.

**Note:** Horizontal vent heat shield not shown for clarity purposes only.

**Typical Corner Installation**

**Typical Vertical Installation**

**Typical Horizontal Installation**

For clarity purposes only.

IMPORTANT:KOZY HEAT WALL THIMBLE PASS-THRU (#800-WPT or #800-WPT2) MUST BE USED ON ALL HORIZONTAL VENT RUNS. FOLLOW INSTRUCTIONS ON PAGE 23 OF THIS INSTALLATION MANUAL.

IMPORTANT: THE HORIZONTAL HEAT SHIELD INCLUDED WITH THIS FIREPLACE MUST BE INSTALLED WHEN USING A 45-DEGREE ELBOW DIRECTLY OFF TOP OF UNIT TO HORIZONTALLY POSITION VENT SYSTEM. EXCEPTION: CORNER INSTALLATIONS.
WARNING: TOP STAND-OFF BRACKETS MUST BE ASSEMBLED AND ATTACHED TO FIREPLACE. DO NOT REMOVE.

CAUTION: STAND-OFF BRACKETS ARE NOT LOAD BEARING.

NON-COMBUSTIBLE ZONE:

Rigid pipe: 1-1/2" (38 mm) above elbow for entire width and depth (behind header) of fireplace.

#800 series flexible venting: 1" (25 mm) above elbow for entire width and depth (behind header) of fireplace.

NON-COMBUSTIBLE ZONE:

NO MATERIALS ALLOWED ON TOP OF FIREPLACE WITHIN SHADED AREA FOR ENTIRE WIDTH & DEPTH OF FIREPLACE. THIS AIR SPACE MUST REMAIN OPEN.
**GLASS FRAME ASSEMBLY**

**REMOVE GLASS FRAME ASSEMBLY**

CAUTION: TO PREVENT THE GLASS FRAME ASSEMBLY FROM FALLING FROM THE FIREPLACE AND BECOMING DAMAGED, FOLLOW THESE INSTRUCTIONS EXACTLY WHEN REMOVING GLASS FRAME ASSEMBLY.

A. Locate spring-loaded handles securing glass frame assembly at top & bottom of firebox.
B. Pull bottom handles out and ‘down’ to release glass frame assembly bottom.
C. Pull top handles out and ‘up’ to release glass frame assembly top.
D. Remove glass frame assembly from fireplace.

**INSTALL GLASS FRAME ASSEMBLY**

CAUTION: TO PREVENT GLASS FRAME ASSEMBLY FROM FALLING OFF WHEN INSTALLING, SECURE TOP GLASS LATCH BRACKETS BEFORE SECURING BOTTOM BRACKETS.

A. Place glass frame assembly onto fireplace front.
B. Pull top handles out and ‘down’ to secure glass frame assembly top.
C. Pull bottom handles out and ‘up’ to secure glass frame assembly bottom.

Pull latches ‘out’ and ‘up’ to release glass frame assembly top.

Pull latches ‘out’ and ‘down’ to attach glass frame assembly top.

Pull latches ‘out’ and ‘down’ to release glass frame assembly bottom.

Pull latches ‘out’ and ‘up’ to attach glass frame assembly bottom.

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

WARNING: DO NOT REMOVE GLASS ASSEMBLY WHEN HOT!
INSTALLATION OF THIS FAN SHOULD BE DONE ONLY BY A QUALIFIED INSTALLER

**WARNING:** MAKE SURE HOUSEHOLD BREAKER IS SHUT OFF PRIOR TO WORKING ON ANY ELECTRICAL LINES.

**IMPORTANT:** If installing a fan, it is easier to complete before the millivolt board is connected to the gas line. Wiring must be done before enclosing fireplace sides. An electrical box and romex connector are pre-installed on a removable panel on the right side of fireplace. A receptacle / speed control assembly and (3) wire nuts are included in fireplace components packet.

Optional fan kit #TRF-028 includes:

- (2) 75 CFM fan with temperature control switch and 4 ft. (1219 mm) fan cord
- (4) 1/4" nuts

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

**WARNING:** THIS APPLIANCE IS EQUIPPED WITH A THREE-PRONG (GROUNDING) PLUG FOR PROTECTION AGAINST SHOCK HAZARD AND SHOULD BE PLUGGED DIRECTLY INTO A PROPERLY GROUNDED THREE-PRONG RECEPTACLE. DO NOT CUT OR REMOVE GROUNDING PRONG FROM THIS PLUG.

The following components must be removed from fireplace prior to installation of this fan. Refer to corresponding pages in this installation manual for assistance if necessary.


1. Insert fans through lower grill opening, push to the back, positioning behind legs. Align mounting slots in fan brackets onto mounting studs. Secure with nuts.

2. Connect fan wiring by attaching connectors on right fan onto terminals on left fan.

3. From inside lower right grill opening, loosen screw securing removable access panel (with electrical box & romex connector installed). Remove panel.

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

5. Secure speed control / receptacle assembly to electrical box with (2) screws provided.

6. Re-install electrical access panel. Tighten screw.

7. Attach temperature control switch to bottom of firebox.

8. Plug cord into electrical box receptacle.

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

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

11. Re-install glass assembly. Refer to page 16 of this installation manual if necessary.

12. Re-install lower grill, upper louver & upper hood. Refer to page 39 of this installation manual if necessary.

**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.
GAS LINE CONNECTION

GAS CONVERSION

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

Model 55345; #OCK-S5168A
Model 55345-RF; #OCK-H5168L-RF
Model 55345-IPI; #OCK-A5168L-IPI

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

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

Commonwealth of Massachusetts: Installation must be done by a licensed plumber of gas fitter.

NOTE: A listed (and Commonwealth of Massachusetts approved) 12” (13 mm) T-handle manual shut-off valve and flexible gas connector (included) are connected to the 1/2” (13 mm) control valve inlet. If substituting for these components, please consult local codes for compliance.

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

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).

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

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

### 55345

<table>
<thead>
<tr>
<th></th>
<th>NATURAL GAS</th>
<th>LP GAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MINIMUM INLET GAS PRESSURE</strong></td>
<td>5.0 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>3.8 inches W.C</td>
<td>10.0 inches W.C.</td>
</tr>
<tr>
<td><strong>MANIFOLD PRESSURE (LO)</strong></td>
<td>1.1 inches W.C</td>
<td>6.3 inches W.C</td>
</tr>
<tr>
<td><strong>ORIFICE SIZE</strong></td>
<td>#55 &amp; #34</td>
<td>#68 &amp; #51</td>
</tr>
<tr>
<td><strong>INPUT BTU/hr.</strong></td>
<td>40,000</td>
<td>40,000</td>
</tr>
<tr>
<td><strong>MINIMUM INPUT BTU/hr.</strong></td>
<td>21,500</td>
<td>26,500</td>
</tr>
<tr>
<td><strong>EFFICIENCY</strong></td>
<td>69%</td>
<td>73%</td>
</tr>
<tr>
<td><strong>AFUE</strong></td>
<td>68%</td>
<td>72%</td>
</tr>
<tr>
<td><strong>P-4 AFE</strong></td>
<td>66%</td>
<td>63%</td>
</tr>
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### 55345-RF

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</tr>
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<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>
<td>#55 &amp; #34</td>
<td>#68 &amp; #51</td>
</tr>
<tr>
<td><strong>INPUT BTU/hr.</strong></td>
<td>40,000</td>
<td>40,000</td>
</tr>
<tr>
<td><strong>MINIMUM INPUT BTU/hr.</strong></td>
<td>21,500</td>
<td>26,500</td>
</tr>
<tr>
<td><strong>EFFICIENCY</strong></td>
<td>69%</td>
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</tr>
<tr>
<td><strong>AFUE</strong></td>
<td>68%</td>
<td>72%</td>
</tr>
<tr>
<td><strong>P-4 AFE</strong></td>
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<td>63%</td>
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### 55345-IPI

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<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>ORIFICE SIZE</strong></td>
<td>#55 &amp; #34</td>
<td>#68 &amp; #51</td>
</tr>
<tr>
<td><strong>INPUT BTU/hr.</strong></td>
<td>40,000</td>
<td>40,000</td>
</tr>
<tr>
<td><strong>MINIMUM INPUT BTU/hr.</strong></td>
<td>21,500</td>
<td>21,500</td>
</tr>
<tr>
<td><strong>EFFICIENCY</strong></td>
<td>69%</td>
<td>73%</td>
</tr>
<tr>
<td><strong>AFUE</strong></td>
<td>68%</td>
<td>72%</td>
</tr>
<tr>
<td><strong>P-4 AFE</strong></td>
<td>66%</td>
<td>63%</td>
</tr>
</tbody>
</table>
THERMOSTAT / WALL SWITCH / REMOTE (55345 only)

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

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!

WALL SWITCH / THERMOSTAT:

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

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

REMOTE CONTROL:

Follow instructions included with remote control.

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

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

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

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

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

NOTE: The insulated cover included with remote control must be placed over remote receiver to prevent overheating.
IMPORTANT: Consult the local and national installation codes to assure adequate combustion and ventilation air is available.

Refer to the vent systems manufacturer's installation manual for complete installation instructions. Installation must conform with the venting requirements and restrictions as outlined in this manual.

APPROVED VENTING

Simpson Dura-Vent DV-GS 5" x 8" direct vent system (horizontal and vertical terminations).
Metal Fab Direct Chimney System 5" x 8" (horizontal and vertical terminations).
ICC Direct Chimney Systems 5" x 8" (horizontal and vertical terminations).
Selkirk-Metalbestos Chimney Systems 5" x 8" (horizontal and vertical terminations).
Kozy Heat #800 series flexible vent system (horizontal terminations).

IMPORTANT: Consult the local and national installation codes to assure adequate combustion and ventilation air is available.

HORIZONTAL VENT SYSTEM CLEARANCES

<table>
<thead>
<tr>
<th></th>
<th>TOP</th>
<th>BOTTOM</th>
<th>SIDES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL APPROVED VENTING</td>
<td>3 inches (76 mm)</td>
<td>1 inch (25 mm)</td>
<td>1 inch (25 mm)</td>
</tr>
</tbody>
</table>

VERTICAL VENT SYSTEM CLEARANCES

<table>
<thead>
<tr>
<th></th>
<th>TOP</th>
<th>BOTTOM</th>
<th>SIDES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL APPROVED VENTING</td>
<td>1 inch (25 mm)</td>
<td>1 inch (25 mm)</td>
<td>1 inch (25 mm)</td>
</tr>
</tbody>
</table>

HORIZONTAL TERMINATIONS

MINIMUM: 45° elbow + 6” (152 mm) horizontal + termination cap.

MAXIMUM: U.S. Installations: 45° elbow + 10 ft. (3.05 m) + termination cap.
Canadian Installations: 0-2000 ft. (0-607 m): 45° elbow + 10 ft. (3.05 m) + termination cap.
2000-4500 ft. (607-1372 m): 45° elbow + 10 ft. (3.05 m) + termination cap. Must de-rate burner orifices: Nat. Gas: #56 & #35
L.P. Gas: #69 & #52

IMPORTANT: The horizontal vent heat shield must be installed when using a 45-degree elbow to horizontally position the vent system.
Exception: corner installations

Kozy Heat Wall Pass-thru, #800-WPT (4-1/2" (114 mm) - 6-1/2" (165 mm) wall thickness) or #800-WPT2 (6-1/2" (165 mm) - 12-1/2" (318 mm) wall thickness), must be used on all horizontal vent runs.

RESTRICTOR

A restrictor is included in fireplace components packet.

Each installation is unique and affected by various factors including venting configuration, altitude and climate. Therefore, after fireplace installation complete a restrictor may be required or may need to be removed or modified.

Please refer to page 27 for installation instructions if installing restrictor in conjunction with venting.

Page 65 has information on restrictor recommendations depending on burner flame appearance and instructions on installation after venting is completed.

ELBOWS

For each additional 90° elbow used after the first elbow, 3 ft. (914 mm) must be subtracted from maximum allowed venting. For each 45° elbow used, 1-1/2 ft. (457 mm) must be subtracted from maximum venting allowed.

NOTE: (2) 45° degree elbows may be used in place of (1) 90° elbow.

IMPORTANT: Flame height and appearance will vary depending upon venting configuration and type of fuel used. Venting requirements apply to both Natural and L.P. gas.
#800-WPT WALL PASS-THRU

**IMPORTANT:** #800-WPT or #800-WPT2 WALL PASS-THRU MUST BE USED ON ALL HORIZONTAL VENT TERMINATIONS. THIS INCLUDES BOTH INTERIOR AND EXTERIOR WALLS. FOLLOW INSTRUCTIONS BELOW.

HORIZONTAL TERMINATIONS CLEARANCES

TOP: 3” (76 mm)  SIDES & BOTTOM: 1” (25 mm)

FRAMING DIMENSIONS FOR #800-WPT KOZY HEAT WALL PASS-THRU

12-1/2” (318 mm) HIGH x 10-7/8” (276 mm) WIDE

**WARNING:** MAINTAIN ALL CLEARANCES AS STATED IN THIS INSTALLATION MANUAL.

**IMPORTANT:** If using Kozy Heat series flexible vent system, remove inner ring on each wall thimble section with a tin snips. This will provide adequate room for the flexible vent system.

A. Measure wall thickness; cut insulation panel (included) this length.

B. Install wall pass-thru section marked #1 (with 3/8” (10 mm) flange) into framed opening. Secure to interior wall with screws (not provided).

C. From the exterior, place insulation between flange and top of framed opening in wall pass-thru section #1.

D. Install section marked #2 of wall pass-thru into framed opening, overlapping metal sections as necessary to accommodate wall thickness. Secure to exterior wall with screws (not provided).

**CUT RING OUT OF BOTH SECTIONS IF USING #800 SERIES FLEX VENTING.**
NOTE: Horizontal sections require 1/4" (6 mm) rise for every 12" (305 mm) of travel.

CAUTION: This gas appliance must not be connected to or joined with any other chimney flue serving another appliance.

IMPORTANT: The horizontal vent heat shield must be installed when using a 45-degree elbow to horizontally position the vent system. Exception: corner installations

Kozy Heat Wall Pass-thru, #800-WPT (4-1/2" (114 mm) - 6-1/2" (165 mm) wall thickness) or #800-WPT2 (6-1/2" (165 mm) - 12-1/2" (318 mm) wall thickness), must be used on all horizontal vent runs.

NOTE: Page 27 has information on restrictor installation in conjunction with venting installation. Page 65 has information on restrictor recommendations depending on burner flame appearance and instructions on installation after venting is completed.
VENTING

HORIZONTAL TERMINATIONS

TYPICAL CORNER INSTALLATION

45° elbow + 90° elbow + horizontal pipe + termination cap.

VENTING DIMENSIONS FOR MINIMUM CORNER INSTALLATIONS

Vent Opening Dimensions: Refer to vent pipe manufacturer’s instructions.

NOTE: Horizontal sections require 1/4” (6 mm) rise for every 12” (305 mm) of travel.

NOTE: Horizontal Vent Heat Shield not used in corner installations.

CAUTION: This gas appliance must not be connected to or joined with any other chimney flue serving another appliance.

NOTE: Page 27 has information on restrictor installation in conjunction with venting installation. Page 65 has information on restrictor recommendations depending on burner flame appearance and instructions on installation after venting is completed.

IMPORTANT: The horizontal vent heat shield must be installed when using a 45-degree elbow to horizontally position the vent system. Exception: corner installations

Kozy Heat Wall Pass-thru, #800-WPT (4-1/2” (114 mm) - 6-1/2” (165 mm) wall thickness) or #800-WPT2 (6-1/2” (165 mm) - 12-1/2” (318 mm) wall thickness), must be used on all horizontal vent runs.
VENTING

VERTICAL VENT SYSTEM CLEARANCES

<table>
<thead>
<tr>
<th></th>
<th>TOP</th>
<th>BOTTOM</th>
<th>SIDES</th>
</tr>
</thead>
<tbody>
<tr>
<td>DURA-VENT</td>
<td>1 inch (25 mm)</td>
<td>1 inch (25 mm)</td>
<td>1 inch (25 mm)</td>
</tr>
<tr>
<td>AMERI-VENT</td>
<td>1 inch (25 mm)</td>
<td>1 inch (25 mm)</td>
<td>1 inch (25 mm)</td>
</tr>
<tr>
<td>ICC</td>
<td>1 inch (25 mm)</td>
<td>1 inch (25 mm)</td>
<td>1 inch (25 mm)</td>
</tr>
<tr>
<td>KOZY HEAT #800 SERIES</td>
<td>DO NOT USE FOR VERTICAL TERMINATIONS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

VERTICAL TERMINATIONS

MINIMUM: 45° elbow + 2 ft. (610 mm) + termination cap.

MAXIMUM: 45° elbow + 30 ft. (9.14 m) + termination cap.

NOTE: VERTICAL TERMINATIONS ONLY: The combustion air intake shield (located against lower back wall of firebox interior) will require adjustment depending on venting height / configuration and type of fuel used. Use the chart below as a guideline when adjusting to achieve desired flame appearance.

COMBUSTION AIR INTAKE SETTINGS

<table>
<thead>
<tr>
<th>VERTICAL TERMINATION HEIGHT</th>
<th>SETTING</th>
<th>GAS TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 10 ft. (0 - 3.05 m)</td>
<td>1</td>
<td>NAT</td>
</tr>
<tr>
<td>11 - 20 ft. (3.35 m - 6.10 m)</td>
<td>2</td>
<td>NAT</td>
</tr>
<tr>
<td>21 - 30 ft. (6.40 m - 9.14 m)</td>
<td>3</td>
<td>NAT</td>
</tr>
<tr>
<td>25 - 30 ft. (7.62 m - 9.14 m)</td>
<td>4</td>
<td>NAT</td>
</tr>
</tbody>
</table>

RESTRICTOR

A restrictor is included in fireplace components packet.

Each installation is unique and affected by various factors including venting configuration, altitude and climate. Therefore, after fireplace installation is complete a restrictor may be required or may need to be removed or modified.

Please refer to page 27 for installation instructions if installing the restrictor in conjunction with venting.

Page 65 has information on restrictor recommendations depending on burner flame appearance and instructions on installation after venting is completed.

HORIZONTAL & VERTICAL COMBINATION TERMINATIONS

MAXIMUM: 15 ft. (4.57) horizontal + 15 ft. (4.57 m) vertical + cap. 30 ft (9.14m) total.

ELBOWS

For each additional 90° elbow used after first elbow, 3 ft. (914 mm) must be subtracted from maximum allowed venting. For each 45° elbow used, 1-1/2 ft. (457 mm) must be subtracted from maximum venting allowed.

NOTE: (2) 45° degree elbows may be used in place of (1) 90° elbow.

IMPORTANT: The horizontal vent heat shield must be installed when using a 45-degree elbow to horizontally position the vent system. Exception: corner installations

Kozy Heat Wall Pass-thru, #800-WPT (4-1/2" (114 mm) - 6-1/2" (165 mm) wall thickness) or #800-WPT2 (6-1/2" (165 mm) - 12-1/2" (318 mm) wall thickness), must be used on all horizontal vent runs.
CAUTION: This gas appliance must not be connected to or joined with any other chimney flue serving another appliance.

RESTRICTOR INSTALLATION

TO BE USED AT INSTALLER DISCRETION.

Large Restrictor

Remove tab(s) to create small restrictor

Bend tabs to approx. 80 degree angles to create tension to hold itself in place when installed.

Slide restrictor into exhaust pipe on top of fireplace with tabs pointing towards you prior to attaching venting.

NOTE: Page 65 has information on restrictor recommendations depending on burner flame appearance and instructions on installation after venting is completed.
CAUTION: This gas appliance must not be connected to or joined with any other chimney flue serving another appliance.

NOTE: Page 27 has information on restrictor installation in conjunction with venting installation.
Page 65 has information on restrictor recommendations depending on burner flame appearance and instructions on installation after venting is completed.

Horizontal sections require 1/4" (6 mm) rise for every 12" (305 mm) of travel.

For each additional elbow used after first elbow, 3 ft. (914 mm) must be subtracted from maximum venting allowed. For each 45° elbow used, 1-1/2 ft. (457 mm) must be subtracted from maximum venting allowed.

(2) 45° degree elbows may be used in place of (1) 90° elbow.

IMPORTANT: The horizontal vent heat shield must be installed when using a 45-degree elbow to horizontally position the vent system.
Exception: corner installations

Kozy Heat Wall Pass-thru, #800-WPT (4-1/2" (114 mm) - 6-1/2" (165 mm) wall thickness) or #800-WPT2 (6-1/2" (165 mm) - 12-1/2" (318 mm) wall thickness), must be used on all horizontal vent runs.
VENTING (Flexible (#800 Series))

Installation of #800 Series Direct Vent Termination Kit(s)

**IMPORTANT:** The flex pipe is permanently attached to the exterior plate. DO NOT ATTACH #844 or #845 termination kit to fireplace (or extension kit) until it has passed through wall. Install termination plates to outside wall exterior.

**HORIZONTAL TERMINATIONS** Refer to illustration on following page.

IF TERMINATING AGAINST VINYL SIDING, A VINYL SIDING PROTECTOR, INCLUDED WITH #844 AND #845 DIRECT VENT KITS, MUST BE USED. FOLLOW INSTRUCTIONS INCLUDED.

**IMPORTANT:** The Kozy Heat wall pass-thru, part #800-WPT or #800-WPT2, must be used on all horizontal vent applications regardless of which vent system you are using.

**CAUTION:** This gas appliance must not be connected to a chimney flue serving another type of appliance.

NOTE: Page 27 has information on restrictor installation in conjunction with venting installation. Page 65 has information on restrictor recommendations depending on burner flame appearance and instructions on installation after venting is completed.

1. If your vent system application does not require an extension kit, proceed to step #7.
2. If your vent system application will require one or more extension kits (Part #846), proceed with the following steps. Each #846 extension kit contains enough 5” & 8” flexible aluminum to extend chimney an additional 6’ (1.83 m).
3. Gently stretch 5” & 8” flexible aluminum pipes on termination kit (#844 or #845) and on each extension kit (if used) the length required for your installation.

**IMPORTANT:** DO NOT STRETCH EXTENSION KIT BEYOND 6’ (1.83 m). DO NOT STRETCH BEYOND WHAT IS REQUIRED - IT IS VERY DIFFICULT TO RECOMPRESS THE FLEX PIPES ONCE STRETCHED.

4. Place a bead of sealant outside 5” flex pipe collar (C) (end with EXTERNAL lip), sliding it inside 5” pipe on top of fireplace (D). Secure with 3 evenly spaced screws.
5. Place a bead of sealant inside 8” flex pipe collar (E) (end with the INTERNAL lip), sliding it over 8” pipe on top of fireplace (F). Secure with 3 evenly spaced screws.
6. If additional extension kits are required, repeat steps #4 - #5, placing 5” & 8” pipes onto previous extension kit.
7. With spacer legs toward the wall, slide interior firestop (H) over 8” pipe and attach to interior wall (over wall materials).

**NOTE:** Attachment brackets are included with termination kit. These optional brackets should be screwed or nailed (not provided) onto the top and bottom of 9-1/2” (241 mm) H x 9-1/2” (241 mm) W opening on exterior of house. The termination plates then fit between these brackets. Using screws provided, secure brackets to termination box (A). Attach vinyl siding protector (G).

8. Apply a liberal bead of exterior sealant around outer edge of termination box (A), placing assembly through opening in exterior wall. Place screws through four slots (B), securing it in place.
9. Gently pull 5” & 8” pipes down to top of extension kit, or top of fireplace if no extension kits were used.
10. Place a bead of sealant outside 5” flex pipe collar (C) and slide it into 5” pipe on extension kit or top of fireplace (D). Secure with 3 evenly spaced screws.

PAGE 29
11. Place a bead of sealant inside 8” flex pipe collar (E) and slide it over 8” pipe on extension kit or top of fireplace (F). Secure with 3 evenly spaced screws.

12. **OPTIONAL**: Place insulation between 8” pipe and wall studs.

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<tbody>
<tr>
<td>A</td>
<td>TERMINATION BOX</td>
</tr>
<tr>
<td>B</td>
<td>SLOTS IN EXTERIOR WALL PLATE</td>
</tr>
<tr>
<td>C</td>
<td>5” FLEX PIPE COLLAR</td>
</tr>
<tr>
<td>D</td>
<td>5” PIPE ON FIREPLACE OR EXTENSION KIT</td>
</tr>
<tr>
<td>E</td>
<td>8” FLEX PIPE COLLAR</td>
</tr>
<tr>
<td>F</td>
<td>8” PIPE ON FIREPLACE OR EXTENSION KIT</td>
</tr>
<tr>
<td>G</td>
<td>VINYL SIDING PROTECTOR</td>
</tr>
<tr>
<td>H</td>
<td>INTERIOR FIRESTOP</td>
</tr>
</tbody>
</table>
1. Terminations against vinyl siding must use a vinyl siding protector. Follow instructions included.
2. DO NOT RECESS TERMINATION KIT INTO OUTSIDE BUILDING MATERIALS - i.e.: brick, stone, siding, etc. If necessary, extend framing so that termination kit will be exposed once building materials are installed.
3. Vent termination must not be located where it will become plugged by snow or other material. The flow of combustion and ventilation air must not be obstructed.

**LOCATION CLEARANCES**

A. Above grade, veranda, porch, deck, balcony - 12” (305 mm).
B. Operable window or door - CANADA: 12" (305 mm). US: 9” (229 mm).
C. Permanently closed window* - 12” (305 mm) (recommended to prevent condensation on window).
D. Ventilated soffit* - 24” (610 mm).
E. Unventilated soffit* - 12” (305 mm).
F. Outside corner* - 12” (305 mm).
G. Inside corner* - 12” (305 mm).
H. Meter / Regulator: Not to be installed above a gas meter/ regulator assembly within 3 ft. (914 mm) horizontally from the centerline of the regulator.
I. Gas Service regulator vent outlet - 3 ft. (914 mm).
J. Non-mechanical air supply inlet to building or the combustion air inlet to any other appliance. CANADA: 12” (305 mm). US: 9” (229 mm).
K. Mechanical air supply inlet. CANADA: 6 ft. (1.83 m) US: 3 ft. (914 mm) above if within 10 ft. (3.05 m) horizontally. Massachusetts installations: 10 ft. (3.05 m).
L. Above paved side-walk or paved driveway located on public property - 7 ft. (2.13 m).
M. Under veranda, porch, deck, or balcony (must be fully opened on a min. of 2 sides) - 12” (305 mm).
N. Between two horizontal terminations - 12” (305 mm).
O. Between two vertical terminations - 12” (305 mm). Terminations may be the same height.
P. Above furnace exhaust or inlet - 12” (305 mm).

*Clearance must be in accordance with local installation codes & the requirements of the gas supplier.

NOTE: A vent cannot be located directly above a side-walk or paved driveway that is located between two single family dwellings and serves both dwellings.
**VENT TERMINATION CLEARANCES**

<table>
<thead>
<tr>
<th>Roof Pitch</th>
<th>H (Min.) Ft.</th>
<th>H (Min.) m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat to 6/12</td>
<td>1.0</td>
<td>0.30</td>
</tr>
<tr>
<td>Over 6/12 to 7/12</td>
<td>1.25</td>
<td>0.38</td>
</tr>
<tr>
<td>Over 7/12 to 8/12</td>
<td>1.5</td>
<td>0.46</td>
</tr>
<tr>
<td>Over 8/12 to 9/12</td>
<td>2.0</td>
<td>0.61</td>
</tr>
<tr>
<td>Over 9/12 to 10/12</td>
<td>2.5</td>
<td>0.76</td>
</tr>
<tr>
<td>Over 10/12 to 11/12</td>
<td>3.25</td>
<td>0.99</td>
</tr>
<tr>
<td>Over 11/12 to 12/12</td>
<td>4.0</td>
<td>1.22</td>
</tr>
<tr>
<td>Over 12/12 to 14/12</td>
<td>5.0</td>
<td>1.52</td>
</tr>
<tr>
<td>Over 14/12 to 16/12</td>
<td>6.0</td>
<td>1.83</td>
</tr>
<tr>
<td>Over 16/12 to 18/12</td>
<td>7.0</td>
<td>2.13</td>
</tr>
<tr>
<td>Over 18/12 to 20/12</td>
<td>7.5</td>
<td>2.27</td>
</tr>
<tr>
<td>Over 20/12 to 21/12</td>
<td>8.0</td>
<td>2.44</td>
</tr>
</tbody>
</table>

**CAUTION**: This appliance must not be connected to or joined with any chimney flue serving any other appliance.

**ROOF PITCH** = X/12

**H** (minimum) - MINIMUM HEIGHT FROM ROOF TO LOWEST DISCHARGE OPENING

*If vent is closer than 8' (2.44 m), it must terminate at least 2' (0.61 m) higher than any portion of a building within 10' (3.05 m) of the vent.*
NOTE: #MTK-BLK Back Light Kit comes standard with #55345-IPI models. This light kit is available as an optional accessory for models #55345 and #55345-RF. See your dealer for details.

ATTENTION: If converting to LP (propane) gas, do so now before installing light kit components. Follow instructions included with conversion kit.

CAUTION: Disconnect all electrical power from fireplace before performing this task.

1. Remove light cylinders from back of burner assembly.

2. Locate (2) 35 Watt 120V Halogen Bulbs in fireplace components packet. Install halogen bulbs into receptacles.

3. Reinstall light cylinders (with flared end up) over light stands and through holes in burner until resting on light stand tabs.

4. Locate (2) Amber Colored Light Filters in fireplace components packet. Install one into each light cylinder.

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

ATTENTION: If converting to LP (propane) gas, do so now before installing light kit components. Follow instructions included with conversion kit.
#MTK-50A LOG SET INSTALLATION

ATTENTION: If converting to LP (propane) gas, do so now before installing log set. Follow instructions included with conversion kit.

ATTENTION: #55345-IPI Models: Please refer to page 33 for light kit installation instructions before installing log set.

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.

---

STEP 1

Position base log #1 onto burner, setting backside of log against the flange at back.
Pull log forward approximately 1/2”.
DO NOT ALLOW LOGS TO COVER BURNER PORT HOLES.

STEP 2

Position base logs #2, #3 & #6 onto burner as shown above.
DO NOT ALLOW LOGS TO COVER BURNER PORT HOLES.
Position log #4 as shown above. Install #11 log over burner jumper tube.

Position logs #7 - #10 onto base logs, aligning holes in logs to protrusions on base logs and log grate.
STEP 5

Align notch in log #12 to log grate while positioning bottom mounting hole to protrusion in log #8.

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

Randomly place ‘Klinkers’ in this area. Do not place ‘Klinkers’ directly on burner ports.
1. **Models 55345 & 55345-RF:**
   Turn gas control knob to ‘OFF’.
   
   **Model 55345-IP:**
   Use remote to turn fireplace off.

2. Shut off gas supply at manual shut-off valve.

3. Disconnect gas line flex tube from the manual shut-off valve.

4. **Model 55345:**
   Disconnect any wall switch, remote control or thermostat wires from top & bottom terminals on gas valve.

   **Model 55345-RF:**
   Unplug fan cord from receptacle, disconnect (2) wires from fan cord. (Wires will remain connected to back of gas valve).

   **Model 55345-IP:**
   Unplug all components from electrical outlet, disconnect all wiring harnesses attached to gas valve.

5. Remove upper hood, upper louver.

6. Remove glass assembly.

7. Remove logs, pilot shield and ember log refractory.

8. Remove pilot shield.

   **Model 55345-IP:**
   Remove light cylinders, amber light filters, and halogen bulbs.

9. Remove screws securing front left and back right log grate legs. Remove burner/log grate assembly from firebox by lifting front of burner assembly up out of flange while pushing pilot assembly back slightly.


11. Remove adjustable venturi mounting spacers.

   **Model 55345-IP:**
   Remove screws securing light stands. Carefully push stands off millivolt board.

12. Remove (8) screws securing millivolt board. Lift board up and out of firebox.

---

**CAUTION:** If burner and/or pilot have been burning, use appropriate protection to avoid burns or damage to personal property before removing any components.
1. Place millivolt board in firebox, aligning holes in millivolt board with holes in firebox bottom. **MAKE SURE SEALING GASKET IS IN PLACE ON FIREBOX BOTTOM!** Secure millivolt board to firebox bottom with (8) screws previously removed.

**Model 55345-IP:**
Reinstall light stands with screws previously removed.

2. Place venturi spacers onto venturi mounting studs.

3. Re-install front burner assembly, making sure burner tube is positioned over burner orifice. Secure with screws previously removed.

4. Reinstall back burner/log grate assembly by positioning burner tube into venturi collar on millivolt board and pilot assembly through rectangular opening. Secure front left and back right legs with screws previously removed.

5. Reinstall pilot shield.

6. Reinstall ember refractory.

**Model 55345-IP:**
Reinstall halogen bulbs, light cylinders and amber light filters.


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

9. **Model 55345:**
Reconnect any wall switch, remote control or thermostat wires to top and bottom terminals on gas valve.

**Model 55245-RF:**
Re-connect the (2) wires to fan cord. Plug fan cord into receptacle.

**Model 55345-IP:**
Re-connect all wiring harnesses to gas valve. Plug all components into electrical outlet.


12. Turn gas on.

13. 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.
**UPPER LOUVER, HOOD & LOWER GRILL INSTALLATION & REMOVAL**

**INSTALLATION**

A. Align hooks in upper louver to slots located in fireplace face. Set down into position.

B. Insert upper hood flange into clips located at top of upper air passage.

*C. Partially thread (2) screws (included in components packet) into nuts at each end of lower grill. Secure to fireplace by threading screws into corresponding holes in inside flange of lower grill opening. The lower grill can now be opened and closed to access gas valve and controls.*

**REMOVAL**

A. Use both hands to pull hood out of upper air passage clips.

B. Lift upper louver up and out of slots.

C. Remove screws securing lower grill at each end to remove from fireplace.
DUE TO HIGH SURFACE TEMPERATURES, KEEP CHILDREN, CLOTHING AND FURNITURE AWAY.

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

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.

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.
LIGHTING

1. Set thermostat to lowest setting, if installed.
2. Turn off all electrical power to appliance. (Fan).
3. Open lower grill to access gas valve & controls.

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 previous page and front cover of this installation manual. If you don’t smell gas, go to 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 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 gas control knob. If pilot goes out, repeat steps C-D. When 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 pilot will not stay lit after several tries, turn gas control knob to OFF and call your service technician or gas supplier.

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

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

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

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

NOTE: The pilot will stay lit.

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

ADJUSTING FLAME HEIGHT

The gas control valve has a HI /LO flame adjustment knob designed to allow you to tailor the look and heat output of your fireplace. Adjust by turning middle knob on gas control valve.
NOTE: The appliance and its individual shut-off valve must be disconnected from gas supply piping system during any pressure testing of that system at pressures in excess of ½ psi.

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 rocker switch is pressed to ‘ON’.

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

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

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

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

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

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 appliance. (Fan).

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

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

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

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

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

NOTE: When fireplace is initially lit, condensation will appear on the glass; this is normal in all gas fireplaces and will disappear after several minutes.
IMPORTANT: Upon initial use of transmitter, a recognition operation is required between receiver/valve and transmitter.

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

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

3. Turn gas control knob to **ON** position.

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

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

**TURN THE BURNER OFF**

**LOCAL SETTING:** Turn control knob clockwise to **PILOT**.

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

**TURN THE SYSTEM OFF**

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

**NOTE:** If manual switch is in **LOCAL**, 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).
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.

**CAUTION: A LOW PRESSURE READING CAN CAUSE DELAYED IGNITION**
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 remote ‘AUTO’ mode, the valve shuts off if it does not receive a signal within 3 hours from transmitter.
- In ‘LOCAL’ mode, the valve does not shut off.
- In remote ‘MANUAL’ mode, the valve shuts off if it does not receive a signal within 6 hours from transmitter.

**THERMOPILES:**
- Negative leads (white) must be connected to 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

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

**DOWN:**
- Decrease Flame Height, Fan Speed, Timer, or Set Point
### 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 for at least two seconds; then move switch to REMOTE.</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 AUTO mode, the flame in main burner will turn on, off, or change height based on heat needed to maintain 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 temper-</td>
<td>Press UP or DOWN key to change temperature.</td>
</tr>
<tr>
<td>ature.</td>
<td></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 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**  
Flame in main burner will turn off and the room temperature will be displayed in remote window.

| OFF Mode          | Press MODE until mode is OFF.               |

**Operation in LOCAL Mode.**  
NOTE: Remote/Local switch on receiver/valve must be in LOCAL.

| FAN               | In LOCAL mode, to turn fan ON/OFF, rotate manual knob from ON to PILOT position. |

### OTHER FUNCTIONS:

<table>
<thead>
<tr>
<th>STATUS</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change between Fahrenheit and</td>
<td>Press UP and DOWN arrow keys at same time and hold for at least three seconds.</td>
</tr>
<tr>
<td>Celsius temperature units.</td>
<td></td>
</tr>
<tr>
<td>Fan override during AUTO Mode.</td>
<td>Press FAN button, then press UP or DOWN arrow key to change fan speed.</td>
</tr>
<tr>
<td>Disable/enable thermostat function in AUTO Mode.</td>
<td>Press TIME, DOWN and FLAME arrow keys at same time and hold for at least three seconds.</td>
</tr>
</tbody>
</table>
IMPORTANT: THIS SYSTEM REQUIRES ELECTRICITY (110 V) AND / OR BATTERIES TO OPERATE.

USING BATTERY BACK UP WILL OPERATE BURNER ONLY. FAN AND LIGHT COMPONENTS WILL NOT FUNCTION ON BATTERY BACK-UP POWER.
IPI VALVE & PILOT ASSEMBLY COMPONENTS

IPI PILOT ASSEMBLY

BLACK CAP
MINIMUM RATE SCREW
VALVE STEP MOTOR
STEP MOTOR WIRE HARNESS
MAIN VALVE INTERNAL SOLENOID CONNECTION GREEN AND WHITE WIRES
PILOT ADJUSTMENT SCREW
INLET PRESSURE SCREW
OUTLET (MANIFOLD) PRESSURE SCREW
PILOT INTERNAL SOLENOID CONNECTION ORANGE AND WHITE WIRES
IGNITER
PILOT
FLAME SENSOR
WIRE HARNESS
MAIN
COMMUNICATION LINK TO EXTENSION MODULE

VALVE STEP MOTOR TERMINAL

LEARN BUTTON

AC ADAPTOR CONNECTION

CONTINUOUS PILOT ON/OFF SWITCH

REMOTE ON/OFF SWITCH

'S' SENSOR PILOT CONNECTION

'I' IGNITER PILOT CONNECTION

MAIN CONTROL MODULE

BACK-UP BATTERY PACK

POWER TO LIGHT KIT

COMMUNICATION LINK TO CONTROL MODULE

FAN CORD PLUG-IN

AC ADAPTOR

EXTENSION MODULE
55345-IPI REMOTE CONTROL INFORMATION

- **Manual On / Off**
- **Thermostat Mode Icon**
- **Room Temperature**
- **Battery Life Icon**
- **Fan Speed**
- **Continuous Pilot**
- **Set Temperature** (visible only in Thermostat Mode)
- **Light Level**
- **Child Proof Icon**

**Set Temperature**: 69°F

**Room Temperature**: 72°F

**Fan Speed**: 6

**Continuous Pilot**: 3

UP

DOWN

Mode
ELECTRICAL WARNING AND INFORMATION:

- Electrical wiring must be installed by a licensed electrician.
- Do NOT wire 110V to wall switch.
- Uninterrupted or continuous power is required at all times in IPI systems EXCEPT when using battery back-up.
- Incorrect wiring will override IPI safety lockout and may cause an explosion.
- Disconnect 110V before servicing

A double receptacle box cover and (3) wire nuts are supplied in fireplace components packet to be used when hardwiring to electrical box located under firebox on right side of fireplace. **Ensure receptacle box cover is installed with flange to top.**

ATTENTION: THIS SYSTEM GOES THROUGH A CALIBRATION MODE WHEN SWITCHING FROM ON TO THERMO TO OFF MODES, CREATING A HUMMING SOUND WHICH IS A NORMAL PART OF OPERATION.

CONTINUOUS PILOT  (FOR VERY COLD CONDITIONS)

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

When continuous pilot mode is activated and fireplace is turned ON, the pilot will spark and light. When fireplace is turned OFF, the pilot will remain lit when main burner has been turned OFF.

This pilot feature can be activated or de-activated by the hand held remote control transmitter. Please follow instructions on page 57.

OPERATION USING BATTERY POWER

This fireplace has an optional battery operation if electrical power is lost. Position battery pack with four “AA” size batteries installed between valve and front of fireplace. This is the coolest location under firebox, ensuring longer battery life.

**NOTE:** When operating fireplace in this capacity, the only function available is flame modulation.

MATCHING SECURITY CODES

Before matching security codes make sure 120V AC is connected and powered to fireplace, and hand held remote control is installed with (2) AA batteries.

It may be necessary to program main control module to LEARN the security code of the hand held remote control upon initial use, if batteries are replaced, or if a replacement remote control is purchased from your dealer.

1. When matching security codes, be sure slide button on main control module is in REMOTE; the code will not “LEARN” if slide is in OFF.

2. Program main control module to LEARN a new security code by pushing in LEARN button on main control module using a pencil point (you should hear a single ‘beep’ letting you know module is ready to learn a new code).

3. Press any button on hand held remote control (you should hear four ‘beeps’ in rapid succession in main control module, indicating remote control’s code has been programmed into the main control module). When an existing main control module is introduced to a new hand held remote control, the new security code will overwrite the old one.

If it ever becomes necessary to clear the memory from the hand held remote control simply push and hold the LEARN button for 10 seconds (you should hear three long beeps in succession). You may now follow steps outlined above to ‘RE-LEARN’ security codes.
INITIAL SET-UP:

Plug Extension Module and AC Adaptor into receptacles.

Position Backup Battery Pack between valve and front of stove. A Velcro strip has been attached to help secure in place.

The Hand Held Remote operates on (2) 1.5V AAA batteries. We recommend always using ALKALINE batteries to extend battery life and improve operational performance.

Install (2) AAA remote receiver batteries into battery compartment, making sure batteries are installed in proper direction.

NOTE: This system is sent to you set up for Natural Gas and temperature units readable in Fahrenheit.

This system allows for gas type conversion and temperature unit conversion by following the setup procedure outlined below.

GAS TYPE CONVERSION:

Press and hold Learn Button on Main Control Module for 20 seconds. A beep will be heard letting you know the procedure has been completed.

If converting from NAT to LP gas: (1) one second long beep

If converting from LP to Nat gas: (3) three second long beep

Continue with gas type conversion by following instructions included with gas conversion kit.

CELSIUS/FAHRENHEIT CONVERSION:

Press UP and DOWN keys simultaneously to choose Celsius or Fahrenheit.

IMPORTANT SAFETY FEATURE:

This system has a maximum room temperature limit of 95° F (35° C) in both manual and thermostat modes. When room temperature is at or above this point the system will shut down and the hand held remote control will read OFF. If you turn the system ON when room temperature is still at or above this temperature, the system will again shutdown after 2 minutes when room temperature is recalculated.

CONTINUOUS PILOT FEATURE:

Activation of this optional feature is accomplished by pressing the PILOT button once. The continuous pilot icon will appear on the LCD screen. Pressing PILOT button again will de-activate this feature.

This feature can also be activated via CONTINUOUS PILOT switch on Main Control Module.

CHILDPROOF FEATURE:

Activation of this optional feature is accomplished by pushing SET & UP buttons simultaneously for 5 seconds. The childproof icon will appear on the screen. When a transmitter button is pressed the icon will flash on screen, but no signal will be transmitted. Pressing and holding these same two buttons again for more than 5 seconds will de-activate this function.

This feature controls only manual functions of the hand held remote, automatic functions (thermostat mode) will not be effected.
MANUAL MODE:

This remote can be manually or thermostatically operated. Press MODE button for manual ON. The flame icon will appear on the LCD screen. Press MODE button again to put the control into THERMO mode. Pressing MODE again will turn fireplace OFF.

**NOTE:** The MODE button operates in a series that will cycle from ON to THERMO to OFF.

FAN MODE:

This remote will operate the fan, allowing for (6) different speed levels. When the FAN button is pressed, FAN level setting will flash on the LCD screen. Press UP or DOWN buttons to select desired fan speed level. If no adjustment is made within 7 seconds, the control will exit function setting mode and LCD display will return to normal view.

**NOTE:** Delayed ON/OFF - The fan will not turn on until fireplace has been burning for 5 minutes and will not turn off for 12 minutes after fireplace has been turned off.

**EXCEPTION:** If fireplace is turned back on during 12 minute off-delay time frame, the fan will remain on. This applies to MANUAL and THERMO modes.

LIGHTING MODE:

This remote will operate the lights, allowing for (6) different light levels. When LIGHT button is pressed, LIGHT level setting will flash on the LCD screen. Press UP or DOWN buttons to select desired light level. If no adjustment is made within 7 seconds, the control will exit function setting mode and LCD display will return to normal view.

**NOTE:** There is a 3 second delay before light level setting is achieved.

**NOTE:** Light operations are completely independent from flame and fan operations.

FLAME MODE:

This remote will operate the flame, allowing for (6) different flame height levels. When MAIN FLAME button is pressed, FLAME level setting will flash on the LCD screen. Press UP or DOWN buttons to select desired flame level. If no adjustment is made within 7 seconds, the control will exit function setting mode and LCD display will return to normal view.

**NOTE:** The fireplace will initially light at the highest level. After 5 seconds the flame will adjust to last chosen level before fireplace was turned OFF.

This applies to MANUAL and THERMO modes.
THERMO (THERMOSTAT) MODE:

This remote feature allows you to thermostatically control the fireplace when hand held remote is set to THERMO mode.

Set Temperature Range: 45°F (7°C) to 90°F (32°C).

Set remote to THERMO mode by pressing MODE button. The smaller SET window of numbers appears on the LCD screen. The first SET number will read 45°F. Press UP button to desired set room temperature. Within 5 seconds fireplace will operate to that Set Temperature. The FLAME, ON and THERMO icons will appear on the LCD screen. By pressing UP or DOWN buttons a new set temperature may be attained.

SET Temperature will only appear when THERMOSTAT MODE is activated, but is implemented in all MODES with the exception of MANUAL MODE.

NOTE: The flame height can adjust up to (6) different height levels according to amount of heat required. This range however is dictated by the Flame Level setting (see previous page). When desired temperature is met, the fireplace will shut off until more heat is required.

To exit THERMO mode press the MODE button. This also shuts fireplace OFF.

IMPORTANT: When in THERMO mode the fireplace will not turn on until room temperature falls below SET TEMPERATURE.

SYSTEM OPERATION WITHOUT HAND HELD REMOTE:

This system is designed to operate with the hand held remote or a thermostat, but in the unlikely event that it is required to be operated without the hand held remote or a thermostat, follow this simple procedure.

Slide REMOTE /OFF switch on main control module to OFF. The fireplace can now be lit and shut off by use of the ON/OFF rocker switch.

NOTE: When operating fireplace in this capacity, the only function available is burner operation on HI.
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 fireplace is equipped with an ignition device which automatically lights the pilot and main burner. The pilot and burner light automatically with the hand held remote only. **DO NOT** try to light the pilot by hand. Before lighting this fireplace, 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. 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.

**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 fireplace.

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

2. Press hand held remote MODE button to ‘OFF’.

3. Wait five (5) minutes to allow any gas that may have accumulated inside firebox to escape. If you then smell gas, **STOP!** Follow safety information on front cover and on previous page of this installation manual. If you don’t smell gas, go to next step.

4. Turn ON all electrical power to fireplace.

5. Press hand held remote MODE button to ‘ON’.

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

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

---

**55345-IPI LIGHTING AND SHUTDOWN (cont.)**

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**LIGHTING**

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

1. Turn off all electrical power to fireplace.

2. Press hand held remote MODE button to ‘OFF’.

3. Wait five (5) minutes to allow any gas that may have accumulated inside firebox to escape. If you then smell gas, **STOP!** Follow safety information on front cover and on previous page of this installation manual. If you don’t smell gas, go to next step.

4. Turn ON all electrical power to fireplace.

5. Press hand held remote MODE button to ‘ON’.

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

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

---

**TURNING OFF GAS TO FIREPLACE**

1. Press hand held remote MODE button to ‘OFF’.

2. Turn OFF all electrical power to fireplace if service is required.

3. Turn manual shut-off valve to **OFF**.
IMPORTANT NOTICE: Pressure check taps for manifold (outgoing) and inlet (incoming) pressure have been incorporated into the valve. The pressure tap marked ‘OUT’ measures outgoing pressure and the pressure tap marked ‘IN’ measures incoming pressure. Follow instructions below for proper testing procedures.

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 fireplace using hand held remote control. Note manometer reading.
4. Turn fireplace off using hand held remote control.
5. Disconnect hose and tighten screw (clockwise). Screw should be snug, do not over tighten.
9. Relight fireplace using hand held remote control. 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.

CAUTION: A LOW PRESSURE READING CAN CAUSE DELAYED IGNITION
**ERROR CODES (55345-IPI only)**

### IGNITION SAFETY: Protection for Ignition System

**Error Code:** One beep every one second.

**Description of Fault:** Warns users if pilot is not successfully ignited in 60 seconds.

**How to Clear:** Press MODE button to OFF then to ON to re-attempt ignition.

**What to Check:**
- Ensure gas supply is turned on.
- Ensure orange/white leads from module are plugged into “PILOT” connection on valve body.
- Verify lead from igniter on pilot assembly is connected to “I” terminal on main control module. (Clicking sound will also be heard).
- Verify lead from flame sensor on pilot assembly is connected to “S” terminal on main control module. (Pilot will light but main burner will not. Pilot will extinguish after 60 seconds and error code will alarm).
- Verify black ground lead is connected to tab extending from valve bracket.

### SENSOR SAFETY: Protection for Flame Sensor

**Error Code:** Four beeps every one second.

**Description of Fault:** Warns users pilot flame sensor detects a pilot flame already present when ignition sequence is initiated. This fault will also occur if pilot flame sensor on main control module is shorted to ground.

**How to Clear:** Press MODE button to OFF then to ON to re-attempt ignition.

**What to Check:**
- Check if pilot flame is actually present when valve is turned OFF (if yes, replace valve).
- Replace pilot assembly.
- Replace module.

### THERMAL SAFETY: Overheat Protection

**Error Code:** Four beeps every two seconds.

**Description of Fault:** Warns users that module’s internal temperatures have exceeded 170˚F (77˚C).

**How to Clear:** Module’s internal temperatures must cool to below 160˚F (71˚C) and then press ON button.

**What to Check:**
- Are modules located in an unapproved location. Move to cooler location.

### COMMUNICATION SAFETY: Protection for Ignition System

**Error Code:** One beep every four seconds.

**Description of Fault:** Warns users the hand held remote and main control module are not communicating properly. This safety feature is active in both manual and thermo modes. The remote control sends a communication safety signal every 15 minutes. If the main control module does not receive this signal, it begins a 2-hour countdown. If no communication safety signal is received at the end of this countdown, the system will enter communication safety shutdown which turns system OFF and emits the error code.

**What to Check:**
- Verify batteries in hand held remote control are new.
- Ensure remote control is located within 20 ft. (6 m) of main control module.
- Ensure remote control is not placed directly on top of or inside a metal enclosure as this can interfere with transmission.
FINALIZING THE INSTALLATION

FLAME APPEARANCE:

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

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

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

| FACTORY SET BURNER TUBE VENTURI SETTINGS (ADJUST AS NECESSARY FOR YOUR INSTALLATION) |
|-----------------------------------------------|-----------------|-----------------|
| NATURAL GAS                                  | LP (PROPANE) GAS |
| FRONT BURNER                                 | 100% CLOSED     | 100% OPEN       |
| BACK BURNER                                  | 1/8” (3 mm) OPEN| 100% OPEN       |

| BURNER TUBE VENTURI ADJUSTMENT GUIDELINES |
|-------------------------------------------|-----------------|-----------------|
| VENTURI POSITION                          | FLAME COLOR     | VENTURI ADJUSTMENT |
| Closed too far                            | Dark orange flame with black tips | Open venturi setting slightly |
| Open too far                              | Blue flames     | Close venturi setting slightly |

**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 BACK BURNER VENTURI:**

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

1. Remove set screw securing venturi wheel (located under firebox).
2. Moving handle towards #1 position closes venturi opening. Moving handle towards #9 position opens venturi opening.
4. Light fireplace and wait 15 minutes before determining if any further adjustments are needed.

**TO ADJUST FRONT BURNER VENTURI:**

1. Follow Millivolt Board Removal instructions on page 37 to access and remove front burner assembly.
2. Loosen screw on venturi and adjust as necessary. Tighten screw.
3. Follow Millivolt Board Installation instructions on page 38 to reinstall all components.
# FINALIZING THE INSTALLATION

## RESTRICTOR USAGE:

Turn fireplace on and allow to burn for 15 minutes. If flames indicate there is excessive draft (flickering, short flames) or insufficient draft (lifting or ghosting flames) a restrictor may be necessary, or previously installed restrictor may need to be modified or removed.

---

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

---

### RESTRICTOR TROUBLESHOOTING

<table>
<thead>
<tr>
<th>FLAME APPEARANCE</th>
<th>DRAFT PROBLEM</th>
<th>RESTRICTOR SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short, flickering</td>
<td>Excessive draft - not enough restriction</td>
<td>Add restrictor</td>
</tr>
<tr>
<td>Lifting or ghosting*</td>
<td>Insufficient draft - too much restriction</td>
<td>Remove inner ring (s) on restrictor or remove restrictor</td>
</tr>
</tbody>
</table>

* Improper venting installation may cause flames to lift or “ghost” - a dangerous situation. Inspect flames after installation to ensure proper performance. If it is determined that venting is correct and the restrictor has been removed, yet flames are still lifting or ghosting, shut off gas supply to fireplace and call a qualified service technician.

---

### RESTRICTOR INSTALLATION / MODIFICATION (after termination completion):

If it is determined that a restrictor is needed or restrictor modification is required after termination is installed, access can be reached through the fireplace baffle. Please remove logs, upper refractory clip and refractory to avoid damaging these components.

1. Remove (4) screws securing baffle. Remove baffle to expose venting.
2. Depending on your specific needs, determined by the chart above along with other factors, make necessary modifications.
3. If installation of a restrictor (included in fireplace components packet) is necessary, bend tabs on restrictor to approx. 80 degree angles to create tension when inserted into exhaust pipe on fireplace. Insert restrictor into 5” exhaust pipe with tabs pointing towards you.
4. If modification is necessary, remove restrictor by pulling it down and out of 5” exhaust pipe.
5. Reinstall baffle by resting baffle front above flange along inside top of firebox opening. Tip baffle back against rear firebox wall. Secure with (4) screws previously removed.
6. Reinstall refractory panels and log set.
7. Attach glass frame assembly and light fireplace. Wait 15 minutes before determining if any further modifications are necessary.

---

**BAFFLE**

- **FLANGE**
- **LARGE**
- **(4) SCREWS SECURING BAFFLE**

Bend tabs to approx. 80 degree angles to create tension to hold itself in place when installed.

---

**5” EXHAUST**

- **Remove tab (s) to create small restrictor**
- **Slide restrictor into exhaust pipe at top of fireplace with tabs pointing towards you.**
This fireplace has been designed to operate with the damper fully open or completely closed depending on heat output desired without compromising flame appearance.

The damper is located at the inside top of firebox and can be viewed through the glass. The damper control is located under the firebox.

To reduce the amount of heat entering the room, raise damper control up and push into mounting slot. The damper is now in the fully open position and allows more heat to exit through the vent system.

If more heat is desired, pull handle out and down. The damper is now closed.
MAINTENANCE

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

The compartment below firebox (behind 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 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.

**MILLIVOLT BOARD SYSTEM**

- Annual cleaning of the burner system is required.
- The burner assembly may be removed for easier access. Refer to pages 37-38 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 38 of this installation manual.
- Visually check pilot light and burner when in operation. The flames should be steady, not lifting or floating.

![Burner Ports](image)

**FAN**

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

**VENT SYSTEM**

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

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

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

**GLASS CLEANING & REPLACEMENT**

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

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

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

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

PAGE 67
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 IGNITER WILL NOT LIGHT AFTER REPEATED TRIGGERING OF PIEZO BUTTON.

A. No gas or low gas pressure.
   - Check remote shut off valves from fireplace. Usually there is a valve near the main. There may be more than (1) valve between the fireplace and the main.
   - Low gas pressure can be caused by several situations such as a bent line, too narrow diameter pipe, or low line pressure. Consult with plumber or gas supplier.

B. No LP in tank.
   - Check LP (propane) tank. Refill if necessary.

PILOT WILL NOT STAY LIT AFTER CAREFULLY FOLLOWING LIGHTING INSTRUCTIONS.

A. Check that pilot flame impinges on thermocouple. Clean and/or adjust pilot for maximum flame impingement.
B. Ensure 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 end of thermocouple and other millivolt meter lead wire on thermocouple’s copper wire. Start pilot while holding valve knob in. If millivolt reading is less than 15 millivolts, replace thermocouple.

D. Thermopile not generating sufficient millivolts.
   - Pilot flame must be enveloping thermopile. Adjust pilot flame if necessary.
   - Check thermopile wire connections at valve. Tighten if necessary.
   - Check thermopile with millivolt meter. Turn remote/thermostat/wall switch to 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.
TROUBLESHOOTING (55345 only)

**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 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 16 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 pages 34-36 of this installation manual.

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

C. Improper pitch on horizontal venting.
   ♦ 1/4” (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 (55345-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?
  - Yes
  - No

- If the setting is above room temperature on the transmitter, does the main valve and fan turn on?
  - Yes
  - No

- If the setting is below room temperature on the transmitter, does the main valve and fan turn off?
  - Yes
  - No

- Turn pilotstat knob to OFF to turn valve completely off.
  - Yes
  - No

- Set manual switch to LOCAL or REMOTE
  - Yes
  - No

- Light pilot burner.
  - Yes
  - No

- Did the LED stop blinking?
  - Yes
  - No

- Release pilotstat knob.
  - Yes
  - No

- Turn pilotstat knob from PILOT to ON.
  - Yes
  - No

- Cycle switch once and leave in remote. Press any key on transmitter for recognition operation.
  - Yes
  - No

**REMOTE PATH**

- If the manual switch is set to REMOTE, set the Mode button to display “ON”. Does the transmitter control the main burner and fan?
  - Yes
  - No

- Does transmitter change levels of flame height, fan speed and set temperature?
  - Yes
  - No

- Set levels of flame height and fan to “0” to shut off main burner and fan.
  - Yes
  - No

- Turn pilotstat knob to OFF to turn valve completely off.
  - Yes
  - No

**LOCAL PATH**

- If the manual switch is set to LOCAL, did the main burner light?
  - Yes
  - No

- Does the transmitter control the fan?
  - Yes
  - No

- Turn pilotstat knob to PILOT to turn off main burner.
  - Yes
  - No

- Turn pilotstat knob to OFF to turn valve completely off.
  - Yes
  - No

- Choose LOCAL or REMOTE path. Set switch to LOCAL or REMOTE.
TROUBLESHOOTING (55345-RF only)

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 fireplace and 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 thermopile connections at gas valve are properly connected. The negative leads (white) must be connected to 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.
TROUBLESHOOTING (55345-RF only)

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 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 16 in this manual for proper glass frame assembly installation 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 pages 34-36 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.
TROUBLESHOOTING (55345-IPI only)

MAIN CONTROL MODULE WILL NOT LEARN TRANSMITTER

♦ Ensure REMOTE/OFF switch on side of main control module is set to REMOTE.

♦ Make sure batteries in both the hand held remote and backup battery pack are installed in the proper direction and are not drained.

♦ Verify hand held remote indicates a signal is being sent. The LCD display should indicate ON or OFF depending on which button is being pressed. The LED indicator should illuminate on wall transmitters and on/off transmitters. Buttons should be pressed and held for 1 to 2 seconds to ensure a complete signal is sent.

♦ Ensure 4-pin lead-set is securely connected from battery pack to main control module’s AUX connection. If the A/C adapter is used, check that leads from adapter are securely connected to POWER terminals on main control module.

♦ Press and hold LEARN button on main control module for approximately 10 seconds to clear memory (you should hear a series of beeps from the receiver), immediately press either the ON or OFF button on hand held remote (you should hear a series of beeps indicating the transmitter code has been learned).

PILOT WILL NOT LIGHT / STAY LIT

♦ Verify gas supply is turned on.

♦ Verify main control module is receiving signal from hand held remote by listening for a beep from receiver when ON is pressed on hand held remote. If you do not hear a beep, ensure main control module has learned the hand held remote. (See above).

♦ Ensure black lead from pilot assembly igniter is securely connected to terminal labeled “I” and red lead from flame rectification sensor is securely connected terminal labeled “S” on main control module.

♦ Make sure orange and white leads from main control module are securely connected to terminals labeled “PILOT” on valve body.

♦ Ensure black GROUND wire is securely connected to tab located next to ON/OFF toggle switch. A proper ground is essential to spark igniter operation.

♦ Make sure pilot flame is in contact with flame rectification sensor on pilot assembly. This valve is equipped with a pilot flame adjustment screw. If pilot flame is too small it will not contact flame rectification sensor and will not complete the safety circuit.

♦ Check continuity of pilot on valve. Remove wire connector. If there is no continuity on pin terminals, replace valve.

PILOT FLAME ALWAYS ON / WILL NOT EXTINGUISH

♦ Ensure continuous pilot icon is not present in LCD screen. If icon is present, press PILOT button. This will de-activate the continuous pilot feature and the icon will disappear from LCD screen.

PILOT BURNING BUT IGNITOR CONTINUES TO SPARK

♦ Check that flame sensor is fully impinged by pilot flame. If needed, adjust pilot.

♦ Check end-to-end continuity of sensor. If sensor has continuity, replace module.
MAIN FLAME WILL NOT LIGHT

- Verify gas supply is turned on.
- Ensure pilot flame will ignite. If not, see pilot flame troubleshooting on previous page.
- Make sure green and white leads from module are securely connected to terminals marked “MAIN” on valve body.
- Make certain pilot flame is in contact with flame rectification sensor on pilot assembly. This valve is equipped with a pilot flame adjustment screw. If pilot flame is too small it will not contact flame rectification sensor and will not complete the safety circuit.
- Ensure pilot flame is properly located to ignite main flame.
- Does hand held remote show CP in the display? If yes, childproof is on. De-activate by pushing PROG/TIME & UP keys at same time for more than 5 seconds.
- Check continuity of main burner coil on gas valve. Remove wire connector. If there is no continuity on pin terminals, replace valve.

FLAME HEIGHT ADJUSTMENT NOT WORKING / WORKS BACKWARDS

- Ensure black and red leads from battery pack module are securely connected to red and black leads from motor drive located on valve body (red to red, black to black).
- Check functionality with all transmitters to determine if there is an issue with the main control system or an individual transmitter. If the issue is with an individual transmitter, make sure batteries in hand held remote and backup battery pack are installed properly and are not drained.

ROOM TEMP. DISPLAYED ON HANDHELD REMOTE NOT CORRECT.

- Ensure transmitter was not recently stored in a different location (air-conditioned, heated) from that in which the hand held remote was tested. It may take up to 3 hours for the temperature inside a packaged transmitter, and several minutes for an unpackaged transmitter to equalize with room temperature.

FIREPLACE WILL NOT RESPOND IN “THERMO” MODE

- Ensure hand held remote is within 20 ft. (6.096 m) operational range.
- Make sure an ON or OFF command was not last sent from another transmitter. These commands will override thermal commands from the handheld remote control. To return system to THERMO mode, press either ON or OFF on hand held remote, then press MODE button to put system in THERMO mode. Press and hold SET button to change set temperature.
- Verify set temperature on hand held remote is at least 2°F (1°C) above or below room temperature. The system will not react to temperatures within 2°F (1°C) of set temperature.
### REPLACEMENT PARTS LIST

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

#### 55345 MILLIVOLT BOARD AND PARTS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Catalog Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTK-770</td>
<td>MTK Millivolt Board - Nat Gas</td>
<td>700-098</td>
<td>Pilot Hood</td>
</tr>
<tr>
<td>MTK-771</td>
<td>MTK Millivolt Board - LP Gas</td>
<td>700-203</td>
<td>Manual Shut-off Valve</td>
</tr>
<tr>
<td>700-023</td>
<td>On/Off Rocker Switch</td>
<td>700-213</td>
<td>18” Flexible Gas Line-Black</td>
</tr>
<tr>
<td>700-086N</td>
<td>S.I.T. Valve - Natural Gas</td>
<td>700-226</td>
<td>Flexible Gas Line-Valve to Burner Connection</td>
</tr>
<tr>
<td>700-087</td>
<td>S.I.T. Valve - LP Gas</td>
<td>700-234</td>
<td>NAT Gas Orifice #55 - front burner</td>
</tr>
<tr>
<td>700-088</td>
<td>Pilot / Generator / Thermocouple - Nat Gas</td>
<td>700-234</td>
<td>NAT Gas Orifice #55 - back burner</td>
</tr>
<tr>
<td>700-089</td>
<td>Pilot / Generator / Thermocouple - LP Gas</td>
<td>700-268</td>
<td>LP Gas Orifice #56 - front burner</td>
</tr>
<tr>
<td>700-090</td>
<td>Piezo Igniter w/ Nut (no wire)</td>
<td>700-251</td>
<td>LP Gas Orifice #51 - back burner</td>
</tr>
<tr>
<td>700-099</td>
<td>Flexible Pilot Tubing (Valve to Pilot)</td>
<td>OCK-S3455</td>
<td>Natural Gas Conversion Kit</td>
</tr>
<tr>
<td>700-092</td>
<td>Millivolt Generator</td>
<td>OCK-S3456</td>
<td>LP Gas Conversion Kit</td>
</tr>
<tr>
<td>700-093</td>
<td>Thermocouple</td>
<td>MTK-135A</td>
<td>Burner / Log Grate Assembly</td>
</tr>
<tr>
<td>700-094</td>
<td>#30 Pilot Orifice - Natural Gas</td>
<td>MTK-043</td>
<td>Pilot Shield</td>
</tr>
<tr>
<td>700-095</td>
<td>#35 Pilot Orifice - LP Gas</td>
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#### 55345-RF MILLIVOLT BOARD AND PARTS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Catalog Number</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>MTK-800RF</td>
<td>MTK-RF Millivolt Board - Natural Gas</td>
<td>700-213</td>
<td>18” Flexible Gas Line-Black</td>
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<tr>
<td>700-107</td>
<td>Honeywell RF Valve - Natural Gas</td>
<td>700-226</td>
<td>Flexible Gas Line-Valve to Burner Connection</td>
</tr>
<tr>
<td>700-108</td>
<td>Remote Control - RF Valve</td>
<td>700-255</td>
<td>NAT Gas Orifice #55 - front burner</td>
</tr>
<tr>
<td>700-109</td>
<td>Honeywell RF Pilot Assembly</td>
<td>700-234</td>
<td>NAT Gas Orifice #34 - back burner</td>
</tr>
<tr>
<td>700-060</td>
<td>Flexible Pilot Tubing (Valve to Pilot)</td>
<td>700-268</td>
<td>LP Gas Orifice #56 - front burner</td>
</tr>
<tr>
<td>700-092</td>
<td>Millivolt Generator</td>
<td>OCK-H3456-RF</td>
<td>Natural Gas Conversion Kit</td>
</tr>
<tr>
<td>700-203</td>
<td>Manual Shut-off Valve</td>
<td>OCK-H5168-RF</td>
<td>LP Gas Conversion Kit</td>
</tr>
<tr>
<td>700-213</td>
<td>18” Flexible Gas Line - Black</td>
<td>MTK-135A</td>
<td>Burner / Log Grate Assembly</td>
</tr>
<tr>
<td>700-098</td>
<td>Pilot Hood</td>
<td>MTK-043</td>
<td>Pilot Shield</td>
</tr>
<tr>
<td>700-203</td>
<td>Manual Shut-off Valve</td>
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</table>

#### 55345-IPI BOARD SYSTEM AND PARTS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Catalog Number</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>MTK-800-IPI</td>
<td>MTK IPI Board - Nat Gas</td>
<td>700-203</td>
<td>Manual Shut-off Valve</td>
</tr>
<tr>
<td>MTK-601-IPI</td>
<td>MTK IPI Board - LP Gas</td>
<td>700-213</td>
<td>18” Flexible Gas Line-Black</td>
</tr>
<tr>
<td>700-400</td>
<td>Main Control Module</td>
<td>700-226</td>
<td>Flexible Gas Line-Valve to Burner Connection</td>
</tr>
<tr>
<td>700-404</td>
<td>IPI Valve - Natural / LP Gas</td>
<td>700-255</td>
<td>NAT Gas Orifice #55 - front burner</td>
</tr>
<tr>
<td>700-199</td>
<td>Pilot Assembly - Natural Gas</td>
<td>700-234</td>
<td>NAT Gas Orifice #56 - back burner</td>
</tr>
<tr>
<td>700-199-1</td>
<td>Pilot Assembly - LP Gas</td>
<td>700-251</td>
<td>LP Gas Orifice #57 - back burner</td>
</tr>
<tr>
<td>700-800</td>
<td>8-PIN Primary Wire Harness: Primary Wire Harness</td>
<td>700-251</td>
<td>NAT Gas Orifice #56 - back burner</td>
</tr>
<tr>
<td>700-500</td>
<td>5-PIN Wire Harness: Main Module to Valve Step Motor</td>
<td>OCK-A3455N-IPI</td>
<td>Natural Gas Conversion Kit</td>
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<tr>
<td>700-120</td>
<td>Extension Module</td>
<td>OCK-A5168L-IPI</td>
<td>LP Gas Conversion Kit</td>
</tr>
<tr>
<td>700-401</td>
<td>4-PIN Wire Harness: Control Module to Extension Module</td>
<td>MTK-135A</td>
<td>Burner / Log Grate Assembly</td>
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<tr>
<td>700-750</td>
<td>7.5 Volt Adaptor</td>
<td>MTK-043</td>
<td>Pilot Shield</td>
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<tr>
<td>700-208</td>
<td>IPI Remote Control</td>
<td>700-099</td>
<td>#99 Low Limit Screw</td>
</tr>
<tr>
<td>700-168</td>
<td>#62 IPI NAT. Gas Pilot Orifice</td>
<td>700-752</td>
<td>Pilot Igniter (with wire)</td>
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<tr>
<td>700-168</td>
<td>#35 IPI LP Gas Pilot Orifice</td>
<td>700-753</td>
<td>Pilot Flame Sensor (with wire)</td>
</tr>
<tr>
<td>700-751</td>
<td>Battery Back-up with (4) AA Batteries</td>
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**REPLACEMENT PARTS LIST (cont.)**

### GRILL REPLACEMENT
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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>TRF-200</td>
<td>Upper Hood</td>
</tr>
<tr>
<td>TRF-201</td>
<td>Lower Grill</td>
</tr>
<tr>
<td>TRF-200L</td>
<td>Upper Hood Louver</td>
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</table>

### FAN ASSEMBLIES
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>RF-028</td>
<td>Fan Assembly (55345-RF only)</td>
</tr>
<tr>
<td>TRF-028</td>
<td>Fan Assembly (55345 only)</td>
</tr>
<tr>
<td>IPI-028</td>
<td>Fan Assembly (55345-IPI only)</td>
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</tbody>
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### LOG SET
<table>
<thead>
<tr>
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<tr>
<td>MTK-50A</td>
<td>Log Set</td>
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<tr>
<td>MTK-1</td>
<td>#1 Log</td>
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<tr>
<td>MTK-2</td>
<td>#2 Log</td>
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<tr>
<td>MTK-3</td>
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<td>MTK-4</td>
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<td>#11 Log</td>
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<td>#12 Log</td>
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<tr>
<td>900-KLK</td>
<td>Klinkers</td>
</tr>
<tr>
<td>900-REMB</td>
<td>Rock Wool Embers</td>
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### GLASS & GLASS GASKET
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>MTK-005</td>
<td>Replacement Valance</td>
</tr>
<tr>
<td>900-006</td>
<td>1-1/8” Glass Gasket w/ Adhesive</td>
</tr>
<tr>
<td>MTK-057T</td>
<td>Valance with 26” x 35” glass</td>
</tr>
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</table>

### LIGHT KIT (55345-IPI only)
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>600-676</td>
<td>35 Watt 120V Halogen Bulb</td>
</tr>
<tr>
<td>600-678</td>
<td>Amber Colored Light Filter</td>
</tr>
</tbody>
</table>

### REFRACTORY PANELS
(Sandstone)
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>MTK-G900</td>
<td>(3 pc.) Refractory Panel Set</td>
</tr>
<tr>
<td>MTK-901</td>
<td>Bottom Refractory Panel</td>
</tr>
<tr>
<td>MTK-G900S</td>
<td>Side Refractory (1 pc.)</td>
</tr>
<tr>
<td>MTK-900E</td>
<td>Ember / Log Refractory</td>
</tr>
<tr>
<td>MTK-G902</td>
<td>Top Refractory Panel</td>
</tr>
<tr>
<td>MTK-900B</td>
<td>Back Refractory Panel</td>
</tr>
<tr>
<td>900-KLK</td>
<td>Klinkers</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 #55345 Minnetonka
Model #55345-RF Minnetonka RF
Model #55345-ST Minnetonka IPI
October 2009-REV-16

Manufactured by:
Hussong Mfg. Co., Inc.
204 Industrial Park Drive
Lakefield, Minnesota 56150
507-682-6641

www.kozyheat.com

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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 comply 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.
   (Copies of such service records may be required to claim a warranty.)
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 warranties 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 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 #__________