INSTALLATION INSTRUCTIONS

Kozy Heat

MODEL #761 DIRECT VENT

IMPORTANT:
READ INSTRUCTIONS CAREFULLY BEFORE INSTALLATION. FAILURE TO INSTALL THIS FIREPLACE CORRECTLY CAN CAUSE SERIOUS STRUCTURAL AND FIRE HAZARDS AND MAY VOID YOUR WARRANTY.

REVISED 4/98
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IMPORTANT:

READ THIS MANUAL BEFORE INSTALLING AND USING THIS FIREPLACE

GAS FIREPLACE MODEL 761 DIRECT VENT INSTALLATION INSTRUCTIONS

INSTALLATION AND/OR REPAIR OF THIS UNIT SHOULD ONLY BE DONE BY A QUALIFIED INSTALLER.

This appliance has been tested to and complies with ANSI Z21.44-1992, CGA I.R. #41, CAN1-2.19-M81 "GAS-FIRED DIRECT VENT WALL FURNACES", CAN/CGA-2.17-M91 "GAS-FIRED APPLIANCES FOR USE AT HIGH ALTITUDES". Installation must conform with local building codes, or, in the absence of local building codes, with the national fuel gas code, ANSI Z223.1-1992 NFPA 54(88), the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, or the Canadian CAN1-B149 Installation Code.

FOR YOUR SAFETY

WHAT TO DO IF YOU SMELL GAS

► Do not try to light any appliance
► Do not touch any electrical switch
► Do not use any phone in your building
► Immediately call your gas supplier from a neighbor’s phone. Follow the gas supplier’s instruction.
► If you cannot reach your gas supplier, contact the fire department.
► Do not store or use gasoline or other flammable vapors and liquids in the vicinity of the or any other appliance.

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

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

NOTE: THIS FIREPLACE REQUIRES A DIRECT VENT KIT FOR INSTALLATION. REFER TO PAGE 6 FOR APPROVED SYSTEMS LISTING. FOR VISUAL INSPECTION OF PROPER VENT CONNECTION, UPON COMPLETION OF INSTALLING THE DIRECT VENT KIT, REMOVE THE NUTS AND BAFFLE INSIDE THE UNIT TO EXPOSE THE LOWER END OF THE FLUE GAS EXIT.
IMPORTANT: DO NOT PLACE FACING-MATERIAL OVER THE EXTERIOR FACE. THE FACE WILL EXPAND WHEN HEATED AND WILL CAUSE CRACKING OF THESE MATERIALS. FAILURE TO FOLLOW THESE INSTRUCTIONS WILL VOID YOUR WARRANTY.

WARNING: DO NOT REPLACE THIS BURNER UNIT WITH ANY OTHER SIZED BURNER. REPLACEMENT WITH AN UNAUTHORIZED BURNER CAN RESULT IN TEMPERATURES EXCEEDING THE LIMITS FOR THIS UNIT, AND VOID YOUR WARRANTY.

IMPORTANT NOTICE: DURING THE FIRST INITIAL BURNS, THIS UNIT WILL SMOKE AND GIVE OFF A PUNGENT ODOR. THIS IS THE PAINT CURING AND IS NORMAL. WE RECOMMEND THAT YOU PROVIDE ADDITIONAL VENTILATION DURING THIS CURING PROCESS.

MASONRY CONSTRUCTION: A lintel, PART #788A, must be used to support the added weight when masonry construction is used. See page #16 for additional information.

A) SPECIFICATIONS

- Height: 31"
- Width: 51 1/16"
- Depth: 20 1/8"
- Flue Size: 4" exhaust
- 7" intake

TOP VIEW

BACK
30 3/4"

14 5/8"

13 3/4"

12 1/4"

31 5/8"

51"

20 1/8"

13 3/4"

8 3/4"

7"

7 3/8" D.D.

745 D.V. KIT
B) POSITION THE UNIT. See Figure 1.

1. Determine the exact position of your fireplace. If possible, place the fireplace in such a manner that the piping will be placed between two studs so additional framing is not necessary. Determine the width and depth of the (optional) hearth.

2. The unit may be installed on either the outside or inside of an exterior wall. See Figure 1 for various installation options.

CAUTION: COLD AIR TRANSFER AREA. The surrounding outside walls must be insulated to prevent cold air from entering the room.

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

3. Minimum clearance to combustibles, see Figure 1:

   Unit glazing to sidewalls: 14" (355mm)
   Unit front: 36" (914 mm)
   Backwall, floor: 0" (0mm)
   Unit front/top to combustible sheathing: 1" (25mm)
   Unit top to ceiling: 25" (635mm)
   Inlet vent to enclosure: 1 1/4" (30mm).
   Wall pass-through to framing: 1 1/4" (30mm)
   Outlet grill to mantel: 11" (See diagram)
NOTE: Even though the minimum clearance from the backwall is 0", we recommend that you allow an expansion-space of 1/4" from the backwall to allow for heat expansion. If this room is not left, the unit may make a loud "banging" noise when it heats up or cools down.

4. Cut a hole for the wall thimble, 10" x 10". The center of this hole must be a minimum of 48"" (1219 mm) above the height of the hearth (optional). See Figure 2A.

*Important: This measurement is determined by the vertical height & horizontal length of the venting application desired. The measurement is to the center of the pipe. Please refer to page #3 of this installation manual for requirements & restrictions.

FIG. 2A

5. Rough in the wall enclosure. Minimum rough opening dimensions are 51-1/2" w x 51" h. Depth is determined by your specific application—refer to figure 1. Build the hearth to the desired size, and height.

NOTE: A metal or wood panel extending the full width and depth of the unit (minimum size is 51-1/2" wide x 20" deep) must be placed under the unit when the unit is to be installed directly on carpet, tile or other combustible materials other than wood flooring. If masonry is to be used (optional), prepare the necessary foundation for the masonry load. When masonry construction is being used, a lintel, part #788A, must be used over the top of the unit to support the added weight.

NOTE: A hearth is not required. If a hearth is desired, combustible materials may be used.

NOTE: Provide for a minimum of 6" (152 mm) of clearance in front of the lower grill. This will provide adequate space for opening to operate the appliance.

Do not obstruct the upper and lower grill areas to allow proper ventilation air around the unit. Air enters the unit at the lower grill, and exits at the upper grill. Do not block this passage.

6. Place the unit into position. FIGURE 2B
NOTE: DO NOT PLACE FACING MATERIAL OVER THE EXTERIOR FACE. THE FACE WILL EXPAND WHEN HEATED AND WILL CAUSE CRACKING OF THESE MATERIALS. FAILURE TO FOLLOW THESE INSTRUCTIONS WILL VOID YOUR WARRANTY. SEE FIGURE 3.

Figure 3

DO NOT LAY FACING MATERIALS OVER THE METAL FACE

C) REMOVE THE GLASS FRONT. See Figure 4

1) Remove the brass frame by pulling the bottom out and lifting the entire frame up and off the trim clip.
2) Loosen, but do not remove the bottom clip screws.
3) Loosen and remove the side clip screws.
4) Loosen the top glass clip screws, remove the trim clip and screws.
5) Place both hands around the glass / glass clip assembly and lift entire assembly up and out.
6) Place the glass assembly aside where it will not be broken.
   NOTE: Do not remove the glass clip frame or gasket material around the glass.
7) Remove the box of logs from the unit and set aside.
D) INSTALL THE DIRECT VENT KIT. See Figure 5.

IMPORTANT: This unit is approved for use only with one of the following direct vent systems:

- Kozy Heat Direct Vent Kit #745 - For terminations of 4' or less.
- Kozy Heat Direct Vent Kit #718 - For terminations of 8' or less.
- Kozy Heat Direct Vent Extension Kit #746 - Used to extend the #745 kit an additional 6'. May be used for horizontal and vertical terminations.

-Simpson Dura-Vent DV-GS Direct Vent Chimney System – May be used for straight vertical terminations or the horizontal & vertical terminations using a maximum of 2 - 45° angles as shown on page #9.

NOTE: Adaptor #923-C is required to adapt the flue collars on the unit to the Dura-Vent chimney system and is available from your dealer.

If using the #745, #718 and/or #746 Direct Vent termination kit(s), refer to the installation instructions that follow.

If using the Simpson Dura-Vent DV-GS Direct Vent chimney system, follow the installation instructions included with the #923-C adaptor. Maximum vertical termination is 20 ft. Maximum elbows allowed are 2-45° each. This chimney system may be purchased from your local dealer.

NOTE: IF TERMINATING AGAINST VINYL SIDING, A VINYL SIDING PROTECTOR, INCLUDED WITH #745 DV KIT, MUST BE ATTACHED TO THE TERMINATION KIT. (INSTRUCTIONS PROVIDED WITH PROTECTOR)

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

NOTE: The flex pipe is permanently attached to the exterior wall plate. DO NOT ATTACH THE FLEX PIPE TO THE STOVE (OR EXTENSION KIT) UNTIL IT HAS PASSED THROUGH THE WALL. THE TERMINATION PLATES SHOULD ALL BE INSTALLED ON THE EXTERIOR OF THE OUTSIDE WALL.

Follow Figure 5A for clearances to doors, windows and ground level.

FIG. 5A

MINIMUM DISTANCES FROM:
A. 12" (30cm)
B. 24" (60cm)
C. 84" (214cm)
D. 12" (30cm)

1- FIXED CLOSED 2- OPENABLE

D = UNVENTED SOFFIT  B = VENTED SOFFIT

IMPORTANT: VENT TERMINATION MUST NOT BE LOCATED WHERE IT WILL BECOME PLUGGED WITH SNOW OR OTHER MATERIALS.
1. If your chimney termination is 8' or less from the stove top and doesn't require an extension kit, proceed to step #6.

2. If your chimney termination will require one or more extension kits - (part #746) follow steps #3-10. Each extension kit contains enough 4" & 7" flexible aluminum pipe to extend the chimney an additional 6'.

**NOTE:**

**MINIMUM VERTICAL RISE FROM APPLIANCE OUTLET: 18" (to center of pipe)**

**MAXIMUM VERTICAL RISE FROM APPLIANCE OUTLET: 20 FT. (610CM) U.S. AND CANADA.**

**MAXIMUM HORIZONTAL RUN FROM APPLIANCE OUTLET: 21 FT. (648CM) U.S. AND CANADA.**

**MAXIMUM ELBOWS: 1 - 90° U.S. AND CANADA**

**MINIMUM CLEARANCE TO COMBUSTIBLES: 1 1⁄2" (31.75 mm)**

**NOTE:**

FOR EACH 1' OF HORIZONTAL RUN, THE EXTENSION KIT MUST HAVE A MINIMUM VERTICAL RISE OF 1⁄4".

**NOTE:**

IF VERTICALLY TERMINATING, THE CHIMNEY HEIGHT IS DETERMINED BY FOLLOWING THE 10 FT./2 FT. RULE OR THE TABLE BELOW. See figure 5B

<table>
<thead>
<tr>
<th>Roof Pitch</th>
<th>Minimum Chimney Height</th>
<th>Roof Pitch</th>
<th>Minimum Chimney Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat to 9/12</td>
<td>2 ft.</td>
<td>Over 14/12 to 16/12</td>
<td>6 ft.</td>
</tr>
<tr>
<td>Over 9/12 to 10/12</td>
<td>2 ft. 6 in.</td>
<td>Over 10/12 to 12/12</td>
<td>7 ft.</td>
</tr>
<tr>
<td>Over 10/12 to 11/12</td>
<td>2 ft. 3 in.</td>
<td>Over 12/12 to 20/12</td>
<td>7 ft. 6 in.</td>
</tr>
<tr>
<td>Over 11/12 to 12/12</td>
<td>3 ft.</td>
<td>Over 20/12 to 21/12</td>
<td>8 ft.</td>
</tr>
<tr>
<td>Over 12/12 to 14/12</td>
<td>5 ft.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TYPICAL VERTICAL TERMINATION USING DURA-VENT DV-GS CHIMNEY.**

**TYPICAL HORIZONTAL TERMINATION USING KOZY HEAT FLEXIBLE CHIMNEY.**

**FIG. 5B**

MIN. CHIMNEY HEIGHT SEE CHART

1 1⁄4" CLEARANCE TO COMBUSTIBLES

MINIMUM OF 1⁄4" RISE PER HORIZONTAL FOOT

MAXIMUM OF 21° TERMINATION KIT

1 1⁄4" MIN. CLEARANCE

EXTENSION KIT

18" MIN.
NOTE: ALL PIPE IS DURA-VENT GS DIRECT VENT PIPE

DURA-VENT HORIZONTAL TERMINATION CAP

DURA-VENT 45° ELBOW

DURA-VENT PIPE 24'

DURA-VENT 45° ELBOW

FIG. 5C

NOTE: ALL PIPE IS DURA-VENT GS DIRECT VENT PIPE

DURA-VENT VERTICAL TERMINATION CAP

MIN. CHIMNEY HEIGHT
SEE CHART

1 1/4' CLEARANCE TO COMBUSTIBLES

20' MAX.

DURA-VENT 45° ELBOW

DURA-VENT PIPE 24'

DURA-VENT 45° ELBOW

FIG. 5D.
3. Using your extension kit pieces, place a bead of sealant outside the 4\" flex pipe collar (C) - the end with the **EXTERNAL** notches - and slide it inside the 4\" pipe on top of the stove (D). This is a snap lock connection.

**NOTE:** The snap lock connection is permanent, you will not be able to remove this pipe once applied without damage.

4. Place a bead of sealant outside the 7\" flex pipe collar (E) - the end with the **EXTERNAL** notches - and slide it inside the 7\" pipe on top of the stove (F). This is a snap lock connection.

5. If a second extension is being used repeat steps 3 and 4, placing the 4\" & 7\" pipes onto the previous extension kit. (Repeat with a third kit, if necessary).

**FIG. 5E**

**Note:** The 18\" minimum rise is to the center of the pipe.

Referring to the above figure:

6. Apply a liberal bead of sealant around the outer edge of the plate (A), and place the exterior wall assembly through the 10\" square hole. Place screws through the four slots (B) securing it in place.

**NOTE:** Attachment brackets are included with the termination kit. These optional brackets should be screwed, or nailed (screws not provided) onto the top and bottom of the 10\" square hole, on the exterior of the house. The termination kit then fits in between these brackets, and using the screws provided, screw the brackets to the termination kit box (A).

7. Gently pull the 4\" & 7\" flexible aluminum down to the top of the extension, kit, or the top of the unit if no extension kits were used.

8. Place a bead of sealant outside the 4\" flex pipe collar (C) and slide it inside the 4\" pipe on top of the stove (D). This is a snap lock connection.

**NOTE:** The snap lock is permanent, you will not be able to remove this pipe once applied without damage.

9. Place a bead of sealant outside the 7\" flex pipe collar (E) and slide it inside the 7\" pipe on top of the stove (F). This is a snap lock connection.

10. **OPTIONAL:** Place insulation between the 7\" pipe and the wall studs.
E. FAN KIT INSTALLATION - Model #800

INSTALLATION OF THIS FAN SHOULD BE DONE ONLY BY A QUALIFIED INSTALLER.

THE WIRING MUST BE DONE PRIOR TO ENCLOSING THE SIDES OF THE UNIT. AN ELECTRICAL BOX IS PRE-INSTALLED IN THE FIREPLACE AND A RECEPTACLE AND COVER IS INCLUDED IN THE FIREPLACE COMPONENTS PACKET.

This optional fan kit includes:

1. Fan assembly with 2-110 CFM fans and limit switch already mounted.
2. Components Package - includes: Speed control with nut & knob*, mounting bracket, (2) nuts.

*NOTE: To wall-mount the speed control, you will need to purchase: (1) Electrical box (1) Cover / switch plate

NOTE: Code approved line voltage wiring 16 gauge or better must be used when wiring this system.

For your convenience, a removeable access panel for fan wire installation is located on the left side of the fireplace.

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

NOTE: Place the limit switch (magnet attached) (C) on the bottom of the unit, approximately in the center without coming in contact with the pressure relief cover. The fan will not operate if the limit switch is attached to the pressure relief cover.

Instructions: Refer to figure 6.

1. Remove one of the side lower grills.
2. Place fan (A) on its back and slide through the side lower grill opening.
3. Rotate fan upright and place over the mounting studs (B).
4. Place nuts on mounting studs and tighten.
5. Mount the on/off speed control on a wall, if desired.
6. Snap the receptacle into the cover.
7. OPTIONAL: Remove the access control panel.
8. Insert 115V wiring (with ground) through the romex connector installed in the electrical box in the side of the unit and wire to the receptacle.
9. Place the cover on the box and secure with screws.
10. Replace access panel, if removed.
11. Plug cord (D) into fan receptacle.
12. Turn on/off speed control clockwise until it clicks.
13. Replace side lower grill.

**NOTE:** The fan will not operate unless the speed control has been turned on. The fan will not turn on until sufficient heat is applied to the thermostatic control switch (C). The fan will turn on and off automatically when the fireplace heats and cools. Adjust fan to desired speed while it is running.

**NOTE:** This appliance, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70-1990, or the Canadian Electrical Code, CSA C22.1.
Fig. 6 When using the fan temperature switch, place switch underneath millivolt board, near center.

F) RUN THE GAS LINE.

CAUTION: Installation of the gas line must only be done by a qualified person in accordance with local building codes.

NOTE: This unit is equipped with a 1/2" flexible gas connection, 18" long.

NOTE: The gas line should be run to the point of connection where the shut-off valve and flexible gas line will connect.

1. Run the gas line. An accessible shut off valve must be installed up stream from the regulator.

NOTE: Do not run the incoming gas line in a manner that would obstruct the operation of the fan.

<table>
<thead>
<tr>
<th>NOTE</th>
<th>NATURAL GAS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The minimum inlet gas supply pressure is 4.5 inches W.C. (1.12kPa)</td>
<td></td>
</tr>
<tr>
<td>The maximum inlet gas supply pressure is 10.5 inches W.C. (2.61 kPa)</td>
<td></td>
</tr>
<tr>
<td>Orifice size (0-1370M): 54</td>
<td></td>
</tr>
<tr>
<td>Input Rating (Btu/hr): 6-1370m: 33,500 BTU</td>
<td></td>
</tr>
<tr>
<td>Maximum output (Btu/hr): 24,000 BTU</td>
<td></td>
</tr>
<tr>
<td>AFUE: 66.9%</td>
<td></td>
</tr>
<tr>
<td>Efficiency: 73.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOTE</th>
<th>LP GAS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The minimum inlet gas supply pressure is 10.5 inches W.C. (2.61 kPa)</td>
<td></td>
</tr>
<tr>
<td>The maximum inlet gas supply pressure is 13.0 inches W.C. (3.23 kPa)</td>
<td></td>
</tr>
<tr>
<td>Orifice size (0-610 M): 51</td>
<td></td>
</tr>
<tr>
<td>Input Rating (Btu/hr): 0-610m: 34,500 BTU</td>
<td></td>
</tr>
<tr>
<td>Maximum output (Btu/hr): 25,500 BTU</td>
<td></td>
</tr>
<tr>
<td>AFUE: 68.2%</td>
<td></td>
</tr>
<tr>
<td>Efficiency: 74.8%</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: For high altitude installations consult the local gas distributor or the authority having jurisdiction for proper rating methods.
2. This unit is designed to accept either a 3/8" or 1/2" gas line approved for gas appliances. Consult local building codes to properly size the gas supply line leading to a 3/8" reduction. Also, see the chart below for proper supply line sizing.

3. A gas line knockout is positioned on either side of the unit for gas line connection.

4. Connect the gas line to the manual shut-off valve.

5. Complete installation of the gas line.

**IMPORTANT: ALL CONNECTIONS WHETHER FIELD OR FACTORY MADE MUST BE CHECKED FOR LEAKS**

<table>
<thead>
<tr>
<th>Tubing size</th>
<th>Maximum run</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot; I.D.</td>
<td>10'</td>
</tr>
<tr>
<td>1/2&quot; I.D.</td>
<td>70'</td>
</tr>
<tr>
<td>5/8&quot; I.D.</td>
<td>100'</td>
</tr>
<tr>
<td>3/4&quot; I.D.</td>
<td>125'</td>
</tr>
</tbody>
</table>

**SOLUTION TO EXAMPLE:**

1) Maximum demand for outlet "A" = 30 CFH
   Maximum demand for outlet "B" = 25 CFH
   Maximum demand for outlet "C" = 75 CFH
   Maximum demand for outlet "D" = 136 CFH

   **Total Demand:** 266 CFH

(2) The length of pipe from the gas meter to the most remote outlet (outlet "A") is 60'.

**THIS IS THE ONLY DISTANCE USED.**

(3) Using horizontal line marked 60'. Outlet "A" supplying 30 cubic feet an hour requires 1/2 inch pipe. Outlet "B" supplying 25 cubic feet an hour requires 1/2 inch pipe. Section 1 supplying outlets "A" and "B", 55 cubic feet an hour requires 1/2 inch pipe.
G) MILLIVOLT BOARD INSTALLATION. See Figure 8.

NOTE: This unit is equipped with the millivolt already installed. Follow these procedures should this board need replacing or is removed for servicing.

MILLIVOLT BOARD REMOVAL.

1. Remove the brass frame, glass, & logs;
2. Shut off the gas supply at the manual shut-off valve;
3. Disconnect the flexible gas line from the manual shut-off valve;
4. Loosen and remove the (8)-1/4" nuts and, while grasping the board, gently lift it off the (8) bolts and remove.

INSTALLING THE BOARD.

NOTE: The unit is fitted with a gasket to seal the millivolt board. Make certain this gasket is properly placed around the opening before installing the millivolt board:

1. Grasp the burner with both hands and place into the unit, lining up the eight 1/4" holes.

CAUTION: Before securing the board into place make sure that all of the wires (attached under the board) are clear and unobstructed.

2. Attach the 1/4" nuts (included with the board assembly);
3. Connect the flexible gas line to the manual shut-off valve;
4. Replace the logs, glass, and brass frame.

IMPORTANT: CHECK ALL CONNECTIONS WHETHER FIELD OR FACTORY MADE FOR LEAKS.

FIG. 8

EIGHT 1/4" NUTS (A)
H) LOG INSTALLATION. See Figure 9.

IMPORTANT: USE EXTREME CAUTION WHEN UNWRAPPING THESE LOGS, THEY ARE VERY FRAGILE.

Note: Once these logs have been set in place, do not handle them unless it is absolutely necessary.

This log set includes:
(1) #842-501 Front Log (A)  (1) #511-506 Center "Y" Log (C)
(1) #700-167 Back Log (B)  (2) #842-507 Left & Right Side Knot Logs (D)
(1) #842-503 Bark Log (E)

The following instruction is the only method of log set up that the manufacturer recommends. Alternate layouts will result in irregular fire patterns and impingement.

1. Lay the front log (A) & back log (B) in place, aligning the holes in the bottom of the logs to the pins located on the board assembly.
2. Lay the left & right top logs (D) over the bottom logs as shown so they are just to the outside of the flames.
3. Place remaining top log (C) between the left & right logs (D) as shown so it is between the center flames.
4. Place bark log (E) between the log grate and front burner tube leaning it toward the front log.

NOTE: The center top log should be between the center flames and the left & right top logs should be to the outside of the flames when the unit is burning.

INITIAL BURN PERIOD
DUE TO THE MAKEUP OF THE FIBER LOGS, & REFRACTORY, THE CURING PROCESS MAY TAKE UP TO 6 HOURS OF BURN TIME. DURING THIS PERIOD, THE LOGS AND REFRACTORY WILL DISCOLOR. ONCE THE CURING PROCESS IS COMPLETE, THE TRUE COLOR RETURN.

**MAKE SURE THE HOMEOWNER IS AWARE OF THIS**
I) WALL SWITCH, THERMOSTAT, REMOTE INSTALLATION (opt.). See Fig. 10.

CAUTION: DO NOT CONNECT HIGH VOLTAGE WIRE TO THE SWITCH

1. If desired, a wall switch, thermostat, or remote control unit may be used to turn the unit off and on. Only one of these may be installed. Follow instructions included with each kit.

Figure 10A
Thermostat Wiring Diagram

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

2. Run low-voltage (thermostat) wire from the on/off switch, to the desired location of the wall switch or thermostat. Do not run wire more than 30'.

NOTE: If too heavy of wire is used or run more than 30', the electricity generated by the unit's generator will not be enough to make the regulator work properly. The pilot may light, but will go out when the burner is turned on.

IMPORTANT: No high voltage is required to operate any of these systems.

Figure 10 B

The on/off rocker switch on the millivolt board must be in the 'off' position if any of the above systems are installed on the unit. If the unit is turned 'on' with a remote, wall switch or thermostat, it must be turned 'off' by the same method.
J) COMPLETE THE INSTALLATION

1. a) Secure the stud tabs located on the sides of the unit to the stud walls.
   b) Use screws (not provided) to secure the unit to the flooring through the holes located in the bottom of the outer box.

2. Complete the fireplace walls, and the unit facing.

CAUTION: The surrounding outside walls MUST be insulated to prevent cold air from entering the room.

MASSONRY CONSTRUCTION: A lintel, Part #788A, must be used to support the added weight when masonry construction is used. Follow the instructions below.

REFER TO THE FIGURE BELOW:

a) Remove all upper brass grills. Optional: The 1" stand-offs located on the fireplace top may be removed.

b) Insert lintel iron rods (A) through the holes located at the front corners on the fireplace top. These rods should extend through firebox to the bottom of the outer box.

c) Place the lintel iron (B) on the fireplace top with flange in the "up" position as shown. NOTE: Lintel should be resting on the lintel rods.

d) Complete installation of the brick, filling in all holes in the brick with mortar.
3. **THIS STEP SHOULD ONLY BE DONE BY A QUALIFIED INSTALLER OR SERVICE TECHNICIAN:**
   a) Make sure the burner tube is properly seated over the burner orifice.
   b) Perform lighting and shutdown procedures as described on pages #19-20. This should be done prior to replacing the glass so that any necessary adjustments can be made and proper operation verified.

4. **Replace the glass. Refer also to Figures 4 & 12.**
   a) Place the glass/glass-clip assembly on the lower clip screws and tighten.
   b) Replace the top clip screws. Do not tighten at this time.
   c) Attach the trim clip over the top clip aligning the slots on the trim with the clip screws.
   d) Replace the side clip screws. Do not tighten at this time.
   e) Make certain the glass is in a level position.
   f) Tighten all clip screws.

5. **Remove / Replace the grills.**

   **Upper grills**

   **Remove:**
   a) Lift the upper grills up far enough to clear the bottom holes and pull the bottom of grills out.

   **NOTE:** Springs have been placed over the upper grill rods to hold the grills securely in place.

   **Replace:**
   a) Line the rods of the grill up with the upper holes. Ensure the springs are in place.
   b) Place the rods in the holes and push up until the bottoms of the rods clear the face.
   c) Place the bottom of the rod into the lower hole and release. The grill will set down into place.

   **Lower grill - See figure 11, page 18.**

   **Remove:**
   a) Remove the ¼” nuts (B) from the lower grill assembly.
   b) Pull the entire grill assembly out of the hinges.
   c) Re-attach the ¼” nuts (B)
Replace:

a) The lower grills attach to the hinges (A) located at the bottom of your unit.
b) Remove the 1/4" nuts (B) from the lower grill assembly.
c) Slip the bolt through the hinge (A);
d) Re-attach the 1/4" nuts (B).
e) Repeat "a" through "d" for the remaining hinge.
f) Repeat "a" through "e" for remaining grills.

The grills are now in place. The center grill may be lowered for lighting purposes, etc.

FIG. 11

5) Install the decorative glass trim.

Referring to figure 12:

a) Place the trim over the outer perimeter of the glass, catching the top trim clip and secure to outer perimeter of glass with magnets (pre-installed at factory).
K) LIGHTING AND SHUTDOWN. See Figure 13.

NOTE: Prior to lighting, check all fittings for leakage. This is accomplished by applying soapy water on all connections made. If there is any leakage bubbles will appear at the point of connection. If bubbles occur, tighten the fittings until the bubbles no longer appear. All connections made at the factory have been previously tested.

**IMPORTANT: TEST ALL CONNECTIONS WHETHER FIELD OR FACTORY MADE.**

NOTE: The appliance and its individual shut off valve must be disconnectd from the gas supply piping system during any pressure testing of that system at lest pressures in excess of $\frac{1}{2}$ psi (3.5 kPa).

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 $\frac{1}{2}$ psig (3.5 kPa).

Pressure check taps for the manifold (outgoing) and inlet (incoming) pressures are located in front of the gas valve. The top pressure tap is the manifold pressure and the bottom pressure tap is the incoming pressure. Follow instructions on page 21 for checking these pressures.

NOTE: Read 1-8 before lighting the unit for the first time.

1. Open the lower grill by grasping the center of the top louver, and pull out and down.
2. Set thermostat to the lowest setting.
3. Turn off all electric power to the appliance.
4. Push in control knob (A) slightly and turn clockwise $\rightarrow$ to "OFF".

![Gas control knob shown in "on" position](image)

NOTE: Knob cannot be turned from "PILOT" to "Off" unless knob is pushed in slightly. Do not force.

5. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow the safety information on page 2 of this installation manual. If you don't smell gas, go to the next step.

6. Find the pilot - follow metal tube from gas control. The pilot is in front of the back log.
7. Turn knob on gas control counterclockwise $\leftarrow$ to "PILOT".
8. Push in control knob all the way and hold in. Press the RED igniter button (C). The pilot will generally light with two or three pushes on the igniter. Hold for about one (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 4 through 8.

* If knob does not pop up when released, stop and immediately call your service technician or gas supplier.

* If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
9. Turn gas control knob counter-clockwise \( \sim \) to "ON".
10. Flip the on/off switch (B) to the "on" position. The red is exposed.
11. Set thermostat to desired setting.

**NOTE:** When the unit is initially lit, condensation will appear on the glass, this is normal in all gas-fireplaces, and will disappear in one to three minutes.

12. If you wish to turn the burner off, flip the on/off switch. If a wall switch has been installed, simply turn it off.

**NOTE:** The pilot will stay lit.
13. To turn off the pilot, push in and turn the valve to the "off" position.

---

**FIG. 13**

**NOTE:** A paint smell will occur during the first few hours of burning, it is recommended to leave the fan off during this period as this will speed up the paint curing process.

---

**INITIAL BURN PERIOD**

Due to the nature of the paint, during the first initial burns, the unit will give off smoke and a strong odor. This is not harmful, but we recommend that additional ventilation be provided during this period.

**MAKE SURE THE HOMEOWNER IS AWARE OF THIS**

**NOTE:** Children and adults should be alerted to the hazards of high surface temperature 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 placed on or near the appliance.
L. PRESSURE TESTING - MANIFOLD & INLET PRESSURE

IMPORTANT NOTICE: A pressure check tap for both the manifold (outgoing) and inlet (incoming) pressure has been incorporated into the valve by Robertshaw. The top pressure tap is the manifold pressure and the bottom pressure tap measures the incoming pressure. Follow the instructions below for proper pressure testing procedures.

TO CHECK THE MANIFOLD PRESSURE:

1. Light pilot.
2. Loosen the manifold pressure tap [C] by turning the screw counter-clockwise.
3. Attach manometer to pressure tap using a 5/16" I.D. hose [E].
4. Turn black control knob [A] to the 'on' position.
5. Turn the burner on by depressing the rocker switch [B] to expose the 'red' and note manometer reading.
6. Turn the rocker switch [B] to the 'off' position.
7. Disconnect manometer hose and tighten screw (clockwise). Screw should be snug, do not over tighten.
8. Attach manometer to manifold pressure tap to verify that it is completely sealed.
   Manometer should read no pressure when the rocker switch is turned on.

NOTE: If manifold pressure reading is within the normal range, an incoming pressure check is not necessary. A too high or too low pressure reading warrants an inlet (incoming) gas pressure check.

TO CHECK THE INLET PRESSURE:

1. Loosen Inlet pressure tap screw [D] by turning screw counter-clockwise.
2. Attach manometer using a 5/16" I.D. hose [E].
3. Light the pilot.
4. Turn the black control knob [A] to the 'on' position. (Burner should not come on) and note manometer reading.
5. Turn the rocker switch [B] to the 'on' position and check the pressure to ensure that it stays near the maximum inlet pressure.
6. Turn the rocker switch [B] to the 'off' position.
7. Turn the pilot to the 'off' position.
8. Disconnect hose and tighten screw (clockwise). Screw should be snug, do not over tighten.
9. Relight pilot and turn the control knob [A] to the 'on' position. Attach manometer to the 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.
M) MAINTENANCE REQUIREMENTS.

1. The appliance should be inspected at least once a year by a professional service person. 
   NOTE: INSTALLATION AND REPAIR SHOULD BE DONE ONLY BY A QUALIFIED SERVICE PERSON. 
   THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND AT LEAST ANNUALLY BY A QUALIFIED 
   SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT 
   FROM CARPETING ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS, BURNERS AND 
   CIRCULATION AIR PASSAGeways OF THE APPLIANCE BE KEPT CLEAN.

   NOTE: ANY SAFETY SCREEN OR GUARD REMOVED FOR SERVICING A ROOM HEATER MUST BE 
   REPLACED PRIOR TO OPERATING THE HEATER.

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

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

4. Yearly examination of the venting system by a qualified agency is required. First, remove the glass 
   on the front of the unit. The burner should be covered or removed.

5. Annual cleaning of the burner is required. The burner may be removed for easier access. See 
   Figure 8.

6. Visually check the pilot light and burner when they are burning. See Figure 14. The flames should 
   be steady, not lifting or floating.

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

   ![Diagram of Millivolt board, Orifice, and Pilot]

   FIG. 14

CAUTION: Do not operate this appliance without the glass enclosure in place. Replace glass only with 
   glass approved for this unit. See 'Replacement Parts' listing. DO NOT OPERATE THIS APPLIANCE WITH 
   BROKEN GLASS.

CAUTION: Keep the appliance area clear of combustible materials, such as gasoline and other flammable 
   vapors and liquids.
N) TROUBLE SHOOTING GUIDE

NOTE: The millivolt board includes the following items: Regulator, generator, pilot, piezo, electrode, rocker switch, burner, orifice and orifice holder. If any of these items are defective, contact your dealer for the appropriate repair or replacement procedures to follow.

WARNING: DO NOT ATTEMPT TO SERVICE THIS UNIT IF YOU ARE NOT A QUALIFIED INSTALLER OR REPAIRMAN.

1. If the unit fails to ignite a qualified service person should check the unit installation.

2. It is imperative that the control compartment, burner and circulation air passageways of the unit be kept clean. This is necessary to provide adequate combustion and ventilation air.

3. All of the working parts of this unit can be removed at one time. Before removing regulator board, check for loose wires.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot won't light</td>
<td>Gas shut off</td>
<td>Turn Gas On</td>
</tr>
<tr>
<td></td>
<td>Gas line not purged</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gas line not bleed out</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not holding regulator valve in long enough</td>
<td></td>
</tr>
<tr>
<td>Pilot won't stay lit</td>
<td>Not holding pilot button in long enough</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Generator wires loose at regulator terminals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Generator wire grounded out due to pinching of wires</td>
<td></td>
</tr>
</tbody>
</table>

Figure 15

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<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>No spark when piezo button is depressed</td>
<td>The nut which holds the piezo in place is loose</td>
<td>Tighten nut.</td>
</tr>
<tr>
<td></td>
<td>Wire on back of piezo button is loose or off</td>
<td>Put wire back into place.</td>
</tr>
<tr>
<td></td>
<td>Wire from piezo to electrode is loose at electrode</td>
<td>Reconnect wire.</td>
</tr>
<tr>
<td></td>
<td>Electrode moved out of position</td>
<td>Realign electrode with 1/8” space between it and pilot.</td>
</tr>
<tr>
<td>Burner won’t light</td>
<td>Pilot not lit</td>
<td>Relight pilot</td>
</tr>
<tr>
<td></td>
<td>Regulator valve not turned on</td>
<td>Turn valve to “on”</td>
</tr>
<tr>
<td></td>
<td>Rocker switch not turned on</td>
<td>Press bottom of switch exposing the “Red” or “on” indicator.</td>
</tr>
<tr>
<td></td>
<td>Rocker switch wire not connected</td>
<td>Check wiring diagram Figure 15, and ensure that all wires are secure</td>
</tr>
<tr>
<td>Flame too blue after 15 minutes of burning</td>
<td>Burner tube venturi open too far.</td>
<td>Contact qualified service person to adjust venturi. Approx. 3/8” open-LP gas &amp; 1/8”-1/4” open-Natural gas.</td>
</tr>
<tr>
<td>Carbon build up inside of unit.</td>
<td>Incorrect log placement.</td>
<td>Check log placement, adjust.</td>
</tr>
<tr>
<td></td>
<td>Burner tube venturi closed too far.</td>
<td>Contact qualified service person to adjust venturi.</td>
</tr>
</tbody>
</table>
Replacement Parts

Replacement parts are available through your local Kozy Heat dealer. Please contact them for availability and pricing.

<table>
<thead>
<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
<th>PART #</th>
<th>DESCRIPTION</th>
</tr>
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<tbody>
<tr>
<td>404-4</td>
<td>Limit Switch Assembly</td>
<td>700032</td>
<td>Piezo Ignitor</td>
</tr>
<tr>
<td>600</td>
<td>Fan Kit (2-110 cfm fans)</td>
<td>700033</td>
<td>On/Off Toggle Switch</td>
</tr>
<tr>
<td>718</td>
<td>Direct Vent Kit - 3 ft</td>
<td>700034</td>
<td>3/8&quot; Gas Valve</td>
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<tr>
<td>745</td>
<td>Direct Vent Kit - 4 ft</td>
<td>700036</td>
<td>Millivolt Generator</td>
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<tr>
<td>746</td>
<td>Direct Vent Extension Kit</td>
<td>700037</td>
<td>Pilot with Electrode</td>
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<td>747</td>
<td>Vinyl siding protector</td>
<td>700058</td>
<td>Wall mount thermostat</td>
</tr>
<tr>
<td>770B</td>
<td>Millivolt Board - Natural Gas</td>
<td>700059</td>
<td>Hi/Lo Regulator - Natural Gas</td>
</tr>
<tr>
<td>771B</td>
<td>Millivolt Board - LP Gas</td>
<td>700060</td>
<td>Hi/Lo Regulator - LP Gas</td>
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<tr>
<td>788A</td>
<td>Lintel Iron</td>
<td>700048</td>
<td>Side Glass Frame (Brass)</td>
</tr>
<tr>
<td>796</td>
<td>Remote Control w/Thermostat</td>
<td>700062</td>
<td>Brass Trim Clip</td>
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<td>797</td>
<td>Remote Control</td>
<td>761500</td>
<td>6 Piece Fiber Log Set</td>
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<tr>
<td>850</td>
<td>Upper Brass grill</td>
<td>842-501</td>
<td>Front Log</td>
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<td>855</td>
<td>Lower Brass grill</td>
<td>706-157</td>
<td>Back Log</td>
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<td>857</td>
<td>Upper Brass side grill</td>
<td>511-506</td>
<td>Center &quot;Y&quot; Log</td>
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<tr>
<td>859</td>
<td>Lower Brass side grill</td>
<td>842-507</td>
<td>Left &amp; Right Top Logs</td>
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<td>923-C</td>
<td>Simpson Dura-Vent DV-GS Chimney Adaptor</td>
<td>842-303</td>
<td>Bark Log</td>
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<tr>
<td>800085</td>
<td>Speed Control for #600 Fan-kit</td>
<td>781900</td>
<td>Refractory Back Panels (set of 4)</td>
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<td>700005</td>
<td>Brass Glass Frame</td>
<td>700200</td>
<td>Gas line flex tube</td>
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<td>700006</td>
<td>Sundance Glass Gasket</td>
<td>700203</td>
<td>Manual shut off valve</td>
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<td>70007D</td>
<td>17&quot; x 30&quot; Glass Assembly</td>
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<td>Firestop</td>
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<td>17&quot; x 30&quot; Oval Glass Assembly</td>
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<td>Brass Perimeter trim (3 pc.)</td>
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<td>17&quot; x 30&quot; Grooved Panel Glass Assembly</td>
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<td>70011</td>
<td>17&quot; x 11&quot; Side replacement glass</td>
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<td>781705</td>
<td>3&quot; side trim support clip</td>
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<td>Burner Tube</td>
</tr>
</tbody>
</table>

761 DV
U.S. & Canada
Revised 4/98

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Lakefield, MN 56150

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