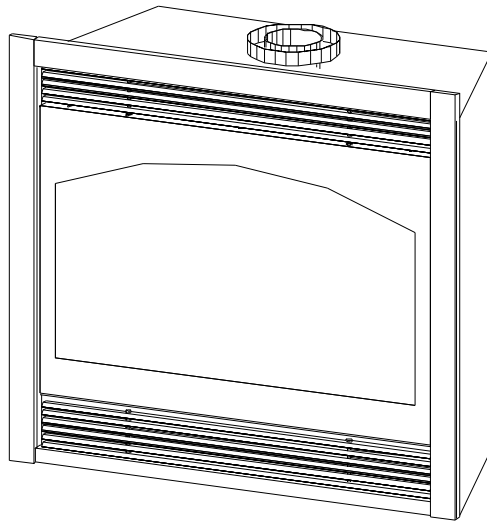


# INSTALLATION & OPERATING MANUAL

## #936 DIRECT VENT WALL FURNACE

*PATENT PENDING*



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



[www.kozyheat.com](http://www.kozyheat.com)

MAY 1998

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**IMPORTANT:**

**READ THIS MANUAL BEFORE INSTALLING AND USING THIS FIREPLACE**

**MODEL #936 DV WALL FURNACE  
INSTALLATION INSTRUCTIONS**

This appliance has been tested to and complies with ANSI Z21.44-1993, "GAS-FIRED DIRECT VENT WALL FURNACES", and applicable sections of ANSI Z21.50-1996 "VENTED DECORATIVE APPLIANCE". 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, or the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280.

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

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

**FOR YOUR SAFETY: 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 you gas supplier from a neighbor's phone.
- Follow the gas suppliers 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.

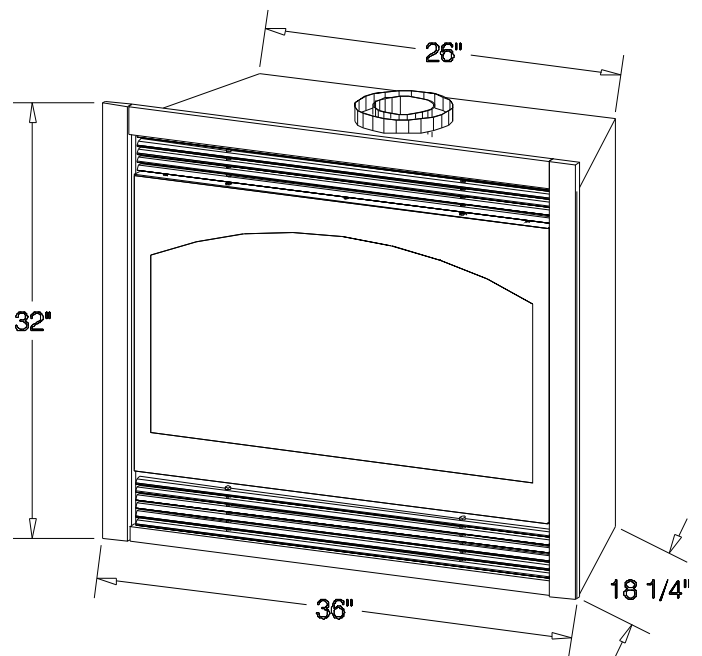
**WARNING:** Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency, or the gas supplier.

**WARNING:** Do not use this heater 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: 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.**

**UNIT SPECIFICATIONS -**

Height:	32"
Front width (w/o face):	36"
Back width:	26"
Depth(incl. face):	18 1/4"
Face to front of 7" intake	11 1/4"
Flue size: 4" exhaust, 7" intake	



**IMPORTANT: THIS UNIT IS APPROVED FOR USE ONLY WITH ONE OF THE FOLLOWING DIRECT VENT SYSTEMS :**

- #745 DIRECT VENT TERMINATION KIT - for terminations 4' for less.

- #718 DIRECT VENT TERMINATION KIT - for terminations greater than 4' but less than 8'.

- #746 DIRECT VENT EXTENSION KIT - used in conjunction with #745 or #718. The extension kit is expandable to 6'.

- SIMPSON DURA-VENT DV-GS DIRECT VENT CHIMNEY SYSTEM: 4" x 6 5/8". For vertical terminations.

\*Adaptor #923-C is required to adapt the flue collars to the chimney.

Refer to pages #7 - # 11 for complete venting installation instructions / requirements.

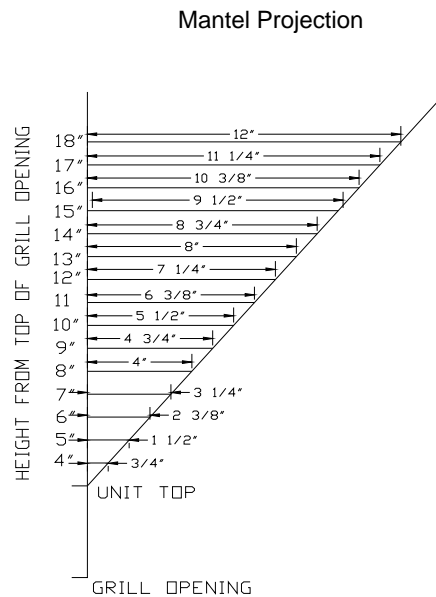
For visual inspection of proper vent connection; upon completion of installing the direct vent kit, remove the nuts and the baffle inside the unit to expose the lower end of the flue gas exit.

**IMPORTANT: NON-COMBUSTIBLE FACING MATERIAL MAY BE APPLIED OVER THE FACE. TO PREVENT THE FACING MATERIAL FROM CRACKING AND FALLING OFF DUE TO EXPANSION OF THE FACE WHEN HEATED, DO NOT ATTACH FACING MATERIAL DIRECTLY TO THE FACE OF THE UNIT.**

**CLEARANCES**

Minimum clearance to combustibles, see Figure 1:

- From unit sides & back: 0"**
- From unit top stand-off: 0"**
- To flooring: 0"**
- From flue vent: 1"**
- From unit glazing to adjacent sidewall: 8"**
- From heat outlet to mantle: 12"**



**GAS CONVERSIONS**

If a gas conversion is necessary, one of the following conversions kits must be used:

**OCK-331- Natural Gas Conversions Kit** - used to convert an LP Millivolt board to natural gas.

**OCK-349 - LP Gas Conversion Kit** - used to convert a Natural Gas Millivolt board to LP Gas.

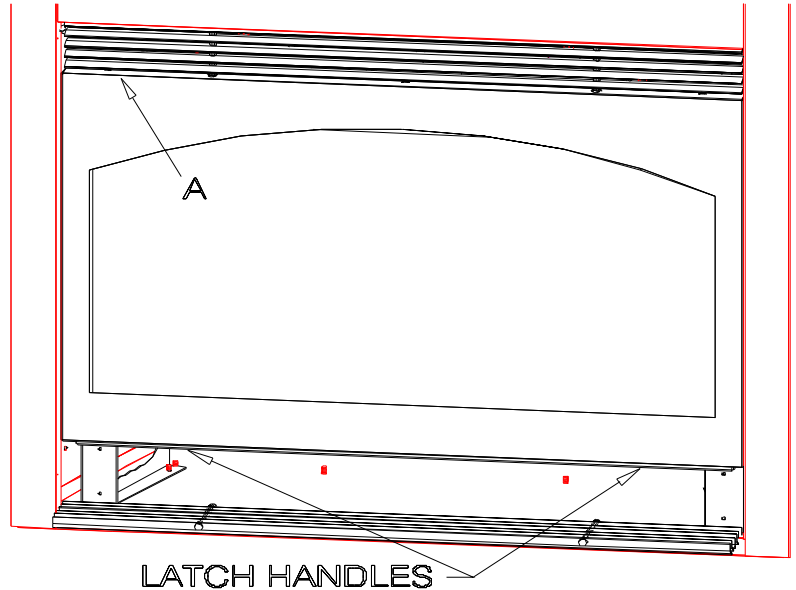
The conversion shall be carried out in accordance with the requirements of the provincial authorities having jurisdiction and in accordance with the requirements of the ANSI Z223.1 installation code.

**A) PREPARE THE UNIT**

## 1. REMOVE THE UPPER GRILL

- A. Remove the upper grill (A) by lifting it up far enough to clear the bottom holes and pull the bottom of the grill out.

Figure 1

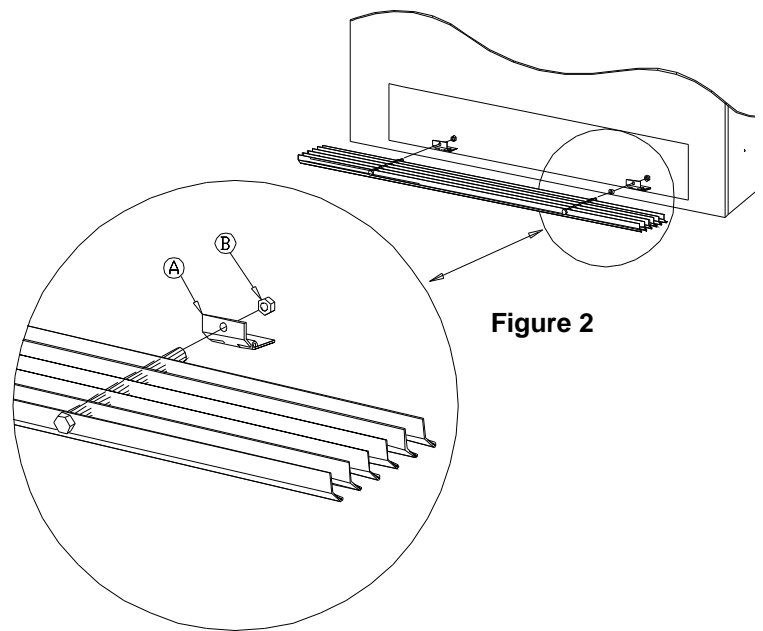


## 2. REMOVE THE GLASS ASSEMBLY. See Figure 3.

- A. Open the lower grill and locate the spring-loaded handles securing the glass assembly (under the firebox).
- B. Pull the handles out, then down to release the glass assembly.
- C. Pull the bottom of the glass assembly out and lift up off the tabs.
- D. Set aside where it will not be broken.
- E. Remove the box of logs from the firebox and set aside.

## 3. REMOVE THE LOWER GRILL. (FOR OPTIONAL FAN INSTALLATION).

- A. Grasp the center of the lower grill and pull down to open.
- B. Remove the 1/4" nuts (B) from the grill assembly.
- C. Pull the entire assembly out of the hinges(A).
- D. Re-attach the 1/4" nuts (B) to the grill assembly and set aside for reinstallation later in this manual.

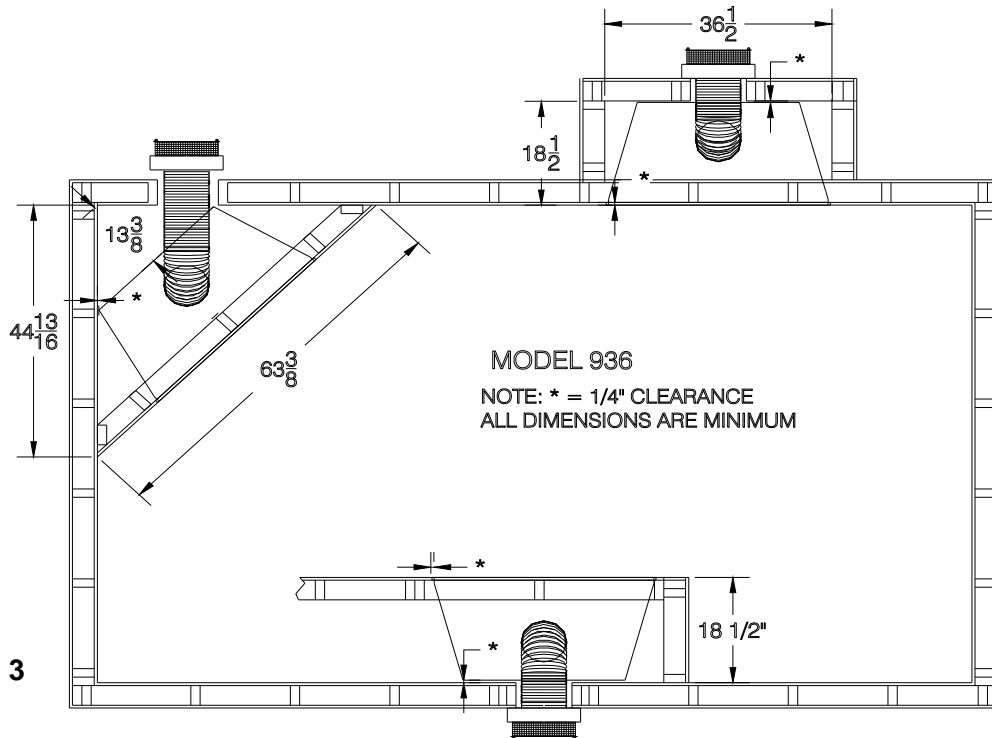


**B) POSITION THE UNIT. See Figure 3.**

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. Follow clearance requirements listed above.

**CAUTION: COLD AIR TRANSFER AREA. THE SURROUNDING WOOD CHASE OF THE OUTSIDE WALL MUST BE INSULATED TO PREVENT COLD AIR FROM ENTERING THE ROOM.**

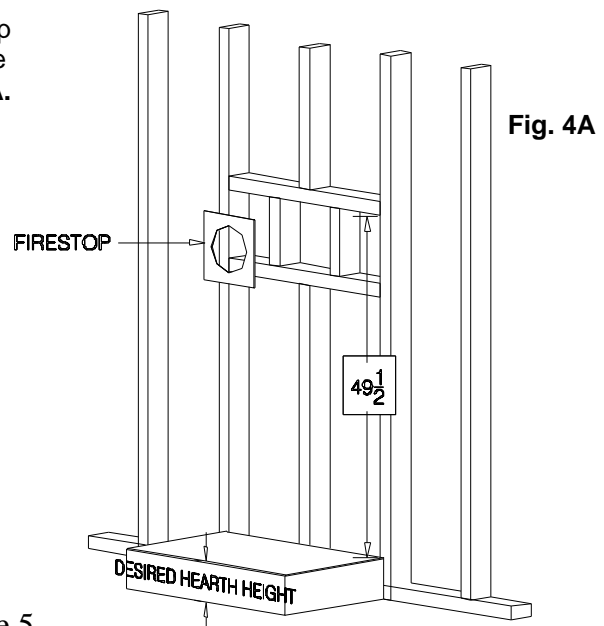
**NOTE: Due to high temperatures, this unit should be located out of traffic areas and away from furniture and draperies.**



**Figure 3**

3. Cut a hole for the firestop, 9 1/2" x 9 1/2". The top of this hole must be a minimum of 49 1/2" \* above the height of the hearth (optional). See Figure 4A.

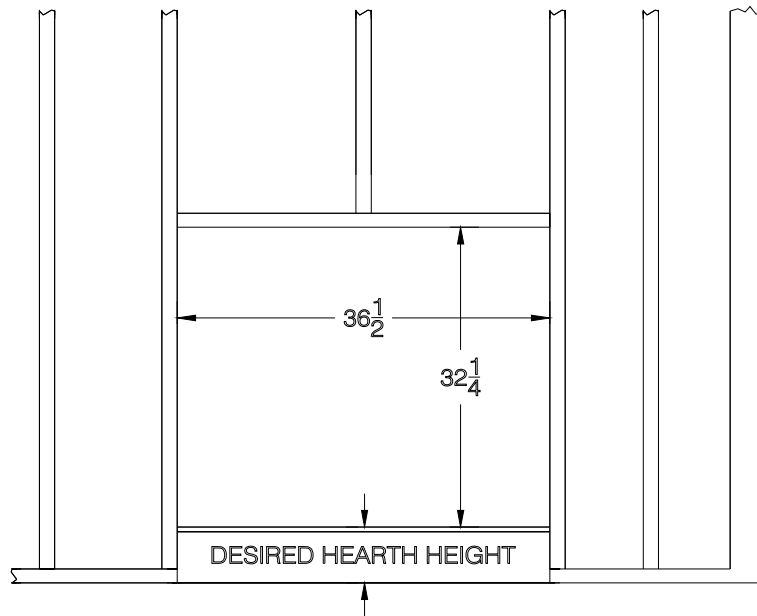
**\*Important: This measurement is determined by the vertical height and horizontal length of the venting application desired. The measurement is to the top of the pipe. Please refer to page #7 of this installation manual for requirements and restrictions.**



**Fig. 4A**

4. **Rough in the wall enclosure.** The minimum rough opening dimensions are 32 1/4" high, 36 1/2" wide and 18 1/2" deep. Build the hearth to the desired size, and height. **See Fig. 4B.**

Figure 4B



**NOTE:** When the unit is installed directly on carpeting, tile, or other combustible materials other than wood flooring, it must be installed on a metal or wood panel extending the full width and depth of the unit. The minimum for the support platform under the unit is 18 1/4" deep by 36" wide. 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 the unit to support the added weight.

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

**NOTE:** Provide for a minimum of 6" of clearance in front of the lower grill. This will provide adequate space for opening to open the lower grill and operate the controls.

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.

5. Place the unit into position.

## C) VENTING REQUIREMENTS

**IMPORTANT: THIS UNIT IS APPROVED FOR USE ONLY WITH THE FOLLOWING DIRECT VENT SYSTEMS:**

### **HORIZONTAL TERMINATIONS**

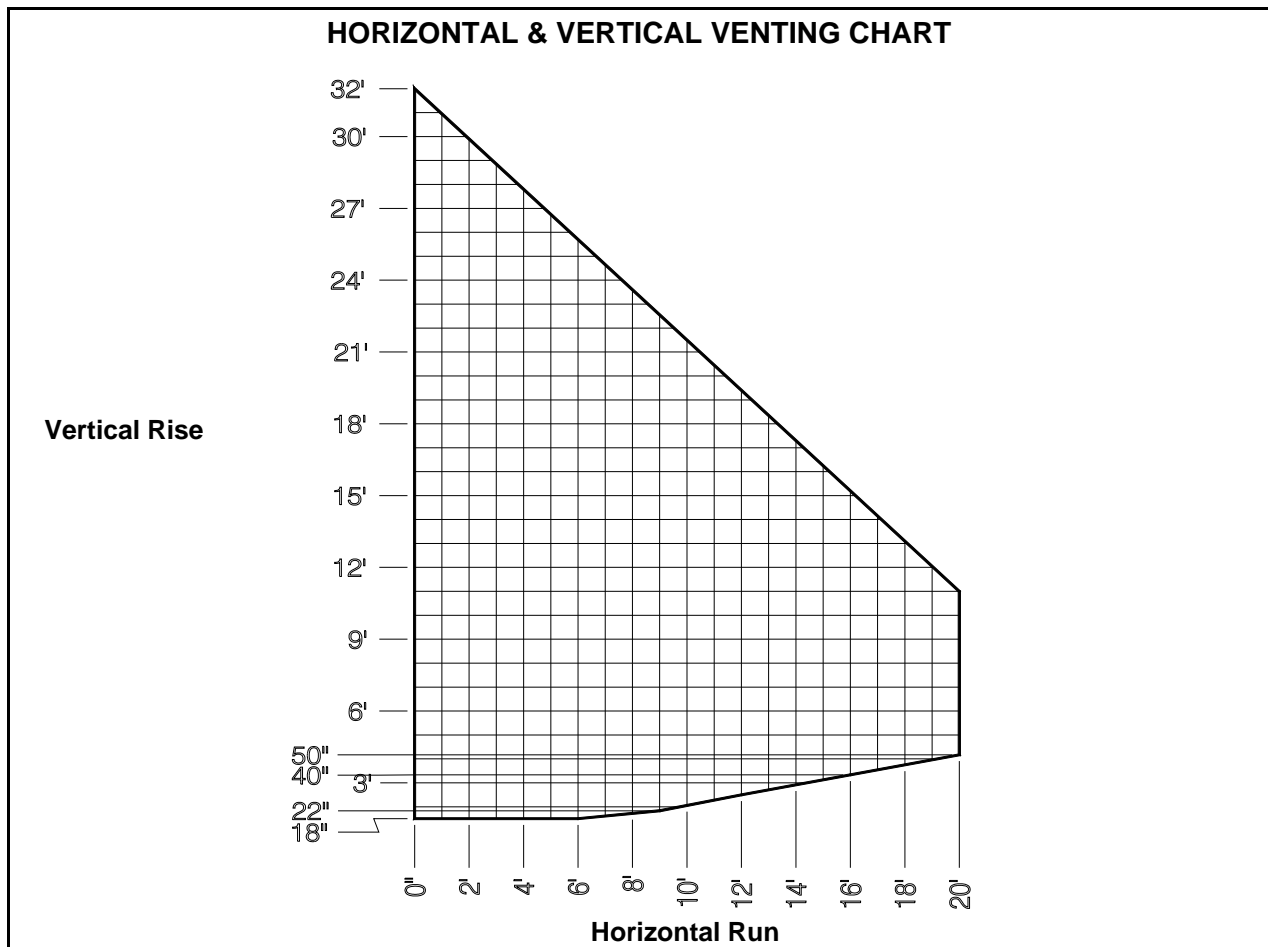
#### **#700 SERIES DIRECT VENT TERMINATION KITS:**

- #745 KOZY HEAT DIRECT VENT KIT - For terminations of 4' or less.
- #718 KOZY HEAT DIRECT VENT KIT - For terminations greater than 4' but less than 8'.
- #746 KOZY HEAT DIRECT VENT EXTENSION KIT #746 - Used to extend the #745 or #718 kit an additional 6'. Used for horizontal terminations.

### **VERTICAL TERMINATIONS**

**-SIMPSON DURA-VENT DV-GS DIRECT VENT CHIMNEY SYSTEM\* ( 4" x 6 5/8").**

- Used for vertical terminations only.
- Adaptor #923-C is required to adapt the flue collars on the unit to the chimney system.
- Vent runs must be in compliance as outlined below.
- 45° elbows only - **Follow installation instructions included with the #923-C adaptor & chimney system.**



### **HORIZONTAL VENTING REQUIREMENTS**



**MINIMUM VERTICAL RISE\* FROM TOP OF UNIT: 18 IN. (to top of 7" pipe)**  
**MINIMUM HORIZONTAL RUN: 6 IN.**  
**MAXIMUM HORIZONTAL RUN: 20 FT. (Horizontal runs must maintain 1/4" rise per ft.)**

**TOTAL HORIZONTAL & VERTICAL RUN MUST NOT EXCEED 32 FT.**

\*Minimum vertical rise directly off the top of the unit is determined by the length of the horizontal run. Refer to the venting diagram on page 7.

1. #700 Series vent kits must be supported every 3 ft. to maintain proper rise.

2. **NOTE: IF TERMINATING AGAINST VINYL SIDING, A VINYL SIDING PROTECTOR, INCLUDED WITH THE #745 AND #718 DIRECT VENT KIT, MUST BE USED. FOLLOW INSTALLATION INSTRUCTIONS INCLUDED.**

3. **IMPORTANT: DO NOT RECESS TERMINATION KIT INTO OUTSIDE BUILDING MATERIALS** - brick, stone, etc. If necessary, extend framing so that termination kit will be exposed once building materials are installed.

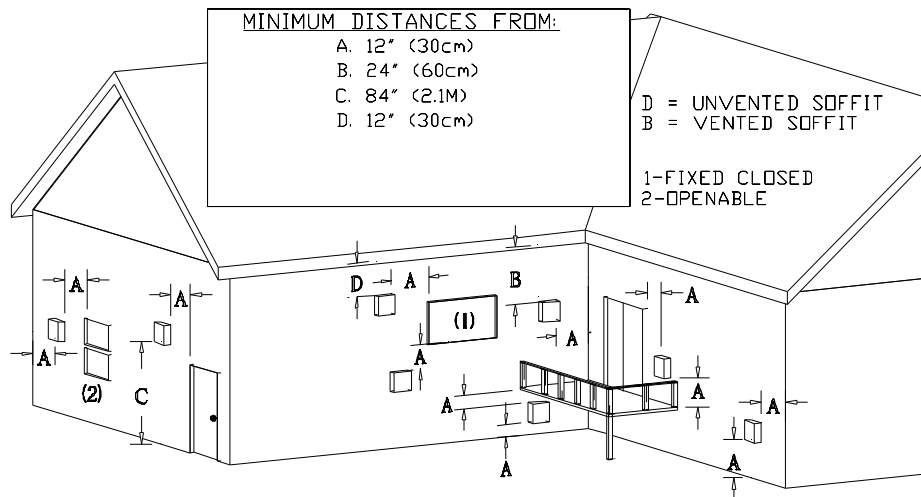
4. **IMPORTANT: VENT TERMINATION MUST NOT BE LOCATED WHERE IT WILL BE BECOME PLUGGED BY SNOW OR OTHER MATERIAL.**

5. For each additional elbow used after the first elbow, you must subtract 5 ft. from the maximum horizontal run allowed.

For example: A vertical rise of 18" directly off the top of the unit with a 90° elbow would be allowed to run 8' with 1/4" rise per ft.. If an additional elbow is used within this vent run, the maximum horizontal run allowed would be 3' with 1/4" rise per ft.. (8 ft - 5 ft. (for additional elbow) = 3 ft.)

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

Fig. 5



**VERTICAL VENTING REQUIREMENTS**

**NOTE: MINIMUM VERTICAL RISE FROM TOP OF UNIT: 18 IN. (to top of 7" pipe)  
 MAXIMUM VERTICAL RISE FROM TOP OF UNIT: 32 FT.**

**ELBOWS: 45° only**

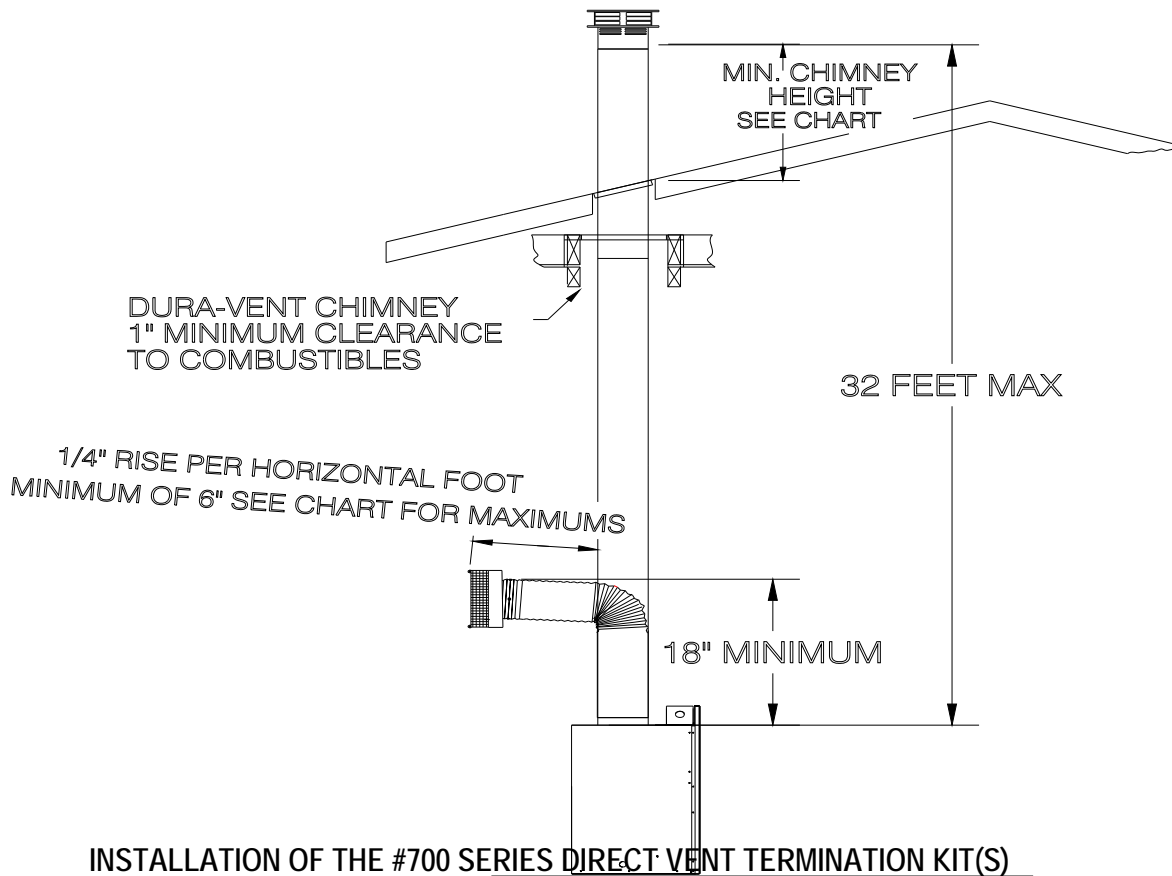
**MINIMUM CLEARANCE TO COMBUSTIBLES: 1"**

**WHEN VERTICALLY TERMINATING, THE MINIMUM CHIMNEY HEIGHT ABOVE THE ROOFLINE IS DETERMINED BY THE FOLLOWING CHART:**

<u>Roof Pitch</u>	<u>Minimum Chimney Height</u>	<u>Roof Pitch</u>	<u>Minimum Chimney Height</u>
Flat to 6/12	1 ft.	13/12 to 16/12	6 ft.
6/12 to 9/12	2 ft.	17/12 to 21/12	8 ft
10/12 to 12/12	4 ft.		

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

**Figure 6**



**NOTE:** THE FLEX PIPE IS PERMANENTLY ATTACHED TO THE EXTERIOR WALL PLATE. DO NOT ATTACH THE #745 OR #718 TERMINATION KIT 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.

1. If your chimney termination is 8' or less from the stove top and doesn't require an extension kit, proceed to step number 6.
2. If your chimney termination will require one or more extension kits (part #746), proceed with the following steps. Each #746 extension kit contains enough 4" & 7" flexible aluminum pipe to extend the chimney an additional 6'.
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 additional extension kits are being used, repeat steps 3 and 4, placing the 4" & 7" pipes onto the previous extension kit.

Referring to the figure below:

6. Apply a liberal bead of sealant around the outer edge of the plate (A), and place the exterior wall assembly through the 9 1/2" 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 9 1/2" square hole, on the exterior of the house. The termination plates then fit in between these brackets, and using the screws provided, screw the brackets to the termination kit box (A). Attach the vinyl siding protector.

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.

Note: The 18" minimum vertical rise measurement is to the top of the 7" pipe.

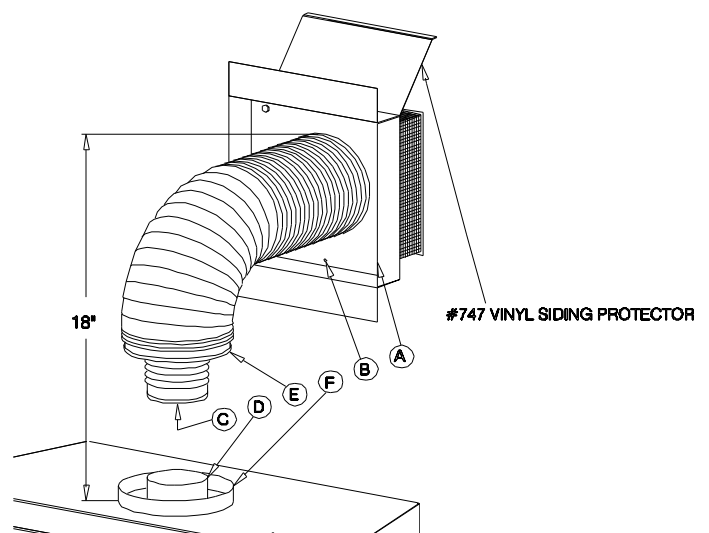


Figure 7

## D) FAN INSTALLATION

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

**IMPORTANT: IF A FAN IS GOING TO BE INSTALLED, IT MUST BE COMPLETED BEFORE THE MILLIVOLT BOARD IS CONNECTED TO THE GAS LINE.**

NOTE: If a fan is going to be installed, 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 & cover is included in the fireplace components packet.

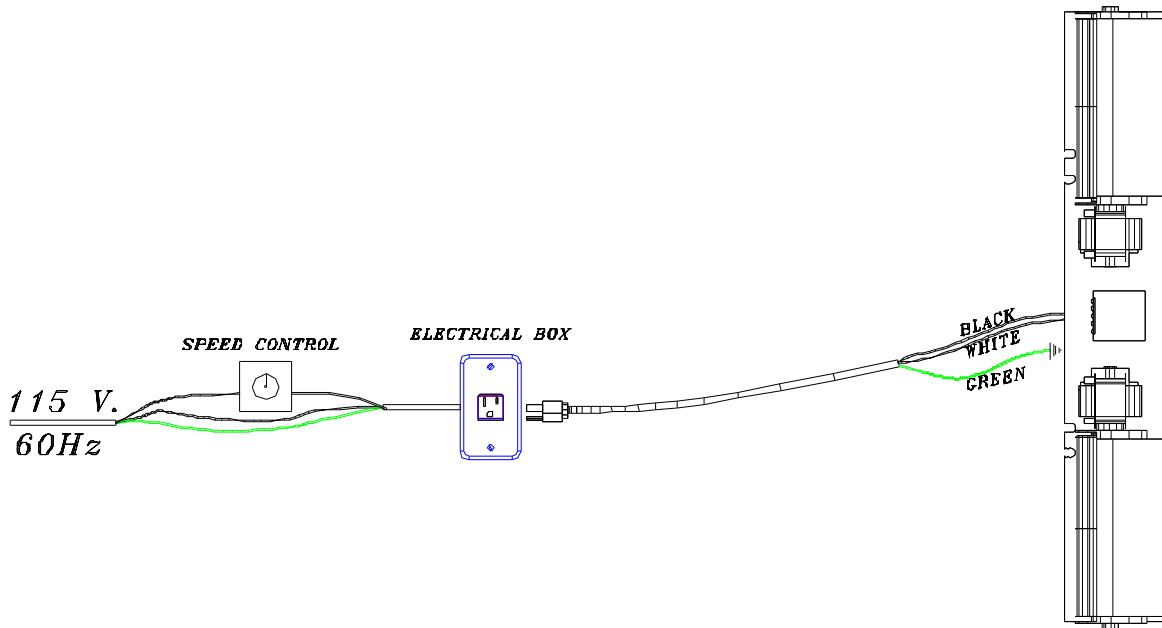
**Your optional fan kit #600 includes:**

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

**\*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.**

**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.**



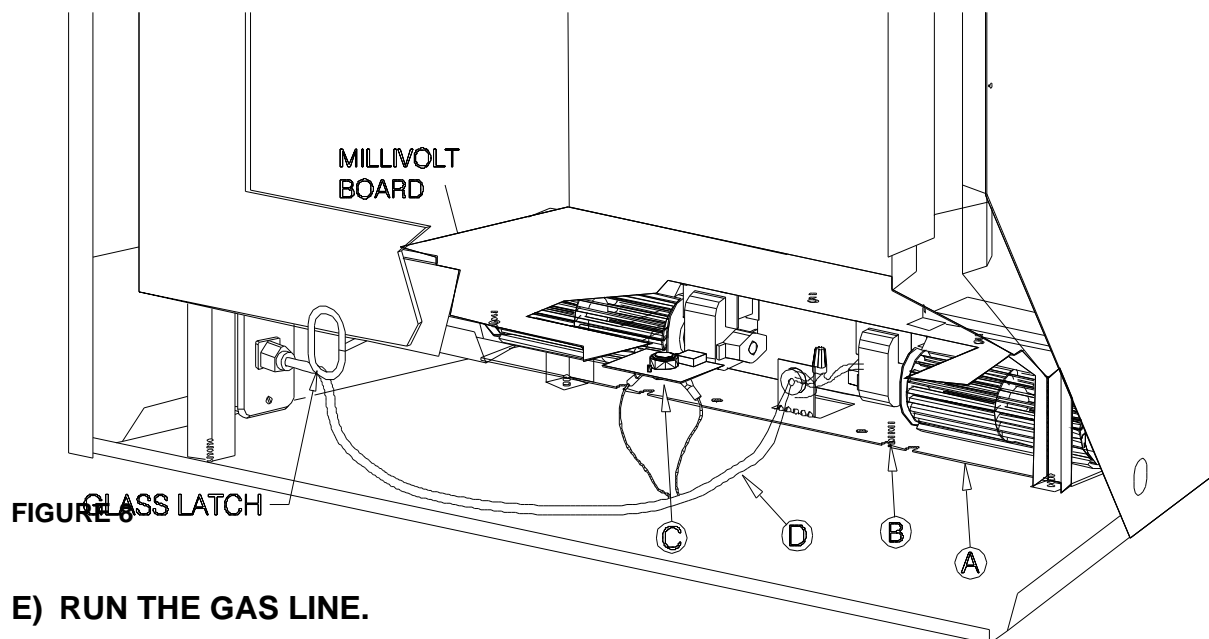
**Instructions:** Refer to figure 8.

1. Remove the glass / frame assembly and lower grill. (Refer to page #4 of this manual.)
2. FOR EASIER INSTALLATION, remove the millivolt board (Refer to page #15 of this manual.)
3. Pull left glass latch out, turn clock-wise 1/4 turn and hook it over the face as shown.
4. Insert right side of the fan (A) diagonally through lower grill opening (to the left of the valve if the millivolt board has not been removed) and slide it to the back right corner.
5. Lift the left side of the fan over the mounting studs. Repeat for the right side.  
NOTE: The fan is now behind the mounting studs.
6. Thread the 1/2" nuts on mounting studs approx. 3/4 of the way.
7. Pull the fan forward aligning the slots on the fan bracket to the mounting studs and tighten the nuts.
8. Install electrical box and mount the on/off speed control on a wall, if desired.
9. Snap the receptacle into the cover.
10. 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.
11. Place the cover on the box and secure with screws.
12. Place the limit switch (C) on the bottom of the unit, as close to the center as possible.
13. Plug cord (D) into fan receptacle.
14. Turn on/off speed control clockwise until it clicks.
15. Replace the millivolt board, if removed in step #2. (Refer to page #15 of this manual.)
16. Replace the glass /frame assembly & lower grill. (Refer to page #4 of this manual.)

**NOTE:** The fan will not operate unless the speed control has been turned on. Adjust fan to desired speed while it is running.

**NOTE:** 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.

**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.*



**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 3/8" 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.

**CAUTION:** The manual shut-off valve or flexible gas tubing must not extend outside of the unit cavity. See the **WARNING** label affixed to the flexible tubing for additional installation instructions and warnings.

**NATURAL GAS:**

**The minimum inlet gas supply pressure:** 7.0 inches W.C. (recommended)

**The maximum inlet gas supply pressure:** 10.5 inches W.C.

**Manifold pressure:** 3.5 inches W.C.

**Efficiency: 74%**

**Manifold pressure (lo setting):** 1.7 inches W.C.

**AFUE: 67%**

Orifice size: 31

Input: 36,000 BTU's

**LP GAS:**

**The minimum inlet gas supply pressure:** 11.0 inches W.C. (recommended)

**The maximum inlet gas supply pressure:** 13.0 inches W.C.

**Manifold Pressure:** 10.0 inches W.C.

**Efficiency: 73%**

**Manifold Pressure (lo setting):** 5.4 inches W.C.

**AFUE: 68%**

Orifice size: 49

Input: 35,000 BTU'S

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

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

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.

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 on page #13 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. Connect the flexible gas line (installed on the millivolt board valve) to the manual shut off valve.

**IMPORTANT:**

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

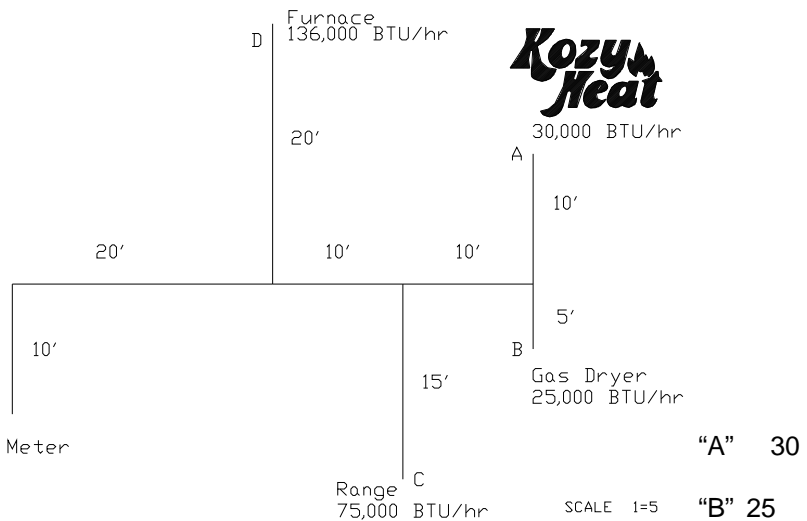
NOTE: The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psi.

NOTE: The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psi.

Pressure check taps for both the manifold (outgoing) & 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 #22 for checking these pressures.

<u>Tubing size</u>	<u>I.D.</u>	<u>Maximum run</u>
3/8"	I.D.	10'
1/2"	I.D.	70'
5/8"	I.D.	100'
3/4"	I.D.	125'

**Figure 9**



**SOULTION TO EXAMPLE**

- (1) Maximum demand for outlet Gas Meter
- CFH
- Maximum demand for outlet
- 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 ½ inch pipe. Outlet "B" supplying 25 cubic feet an hour requires ½ inch pipe. Section 1 supplying outlets "A" & "B", 55 cubic feet an hour requires ½ inch pipe.

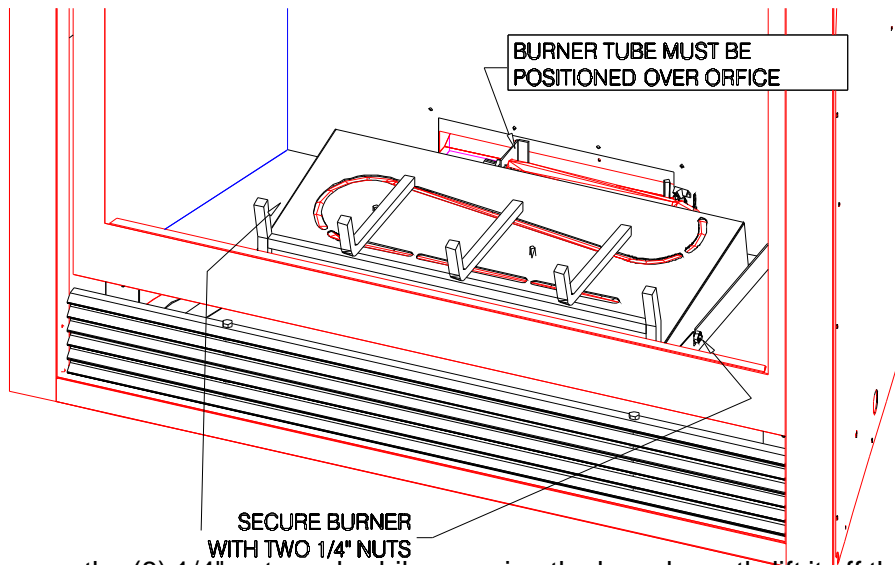
**F) MILLIVOLT BOARD REMOVAL / INSTALLATION. See Figures 10A & 10B.**

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

### **MILLIVOLT BOARD REMOVAL.**

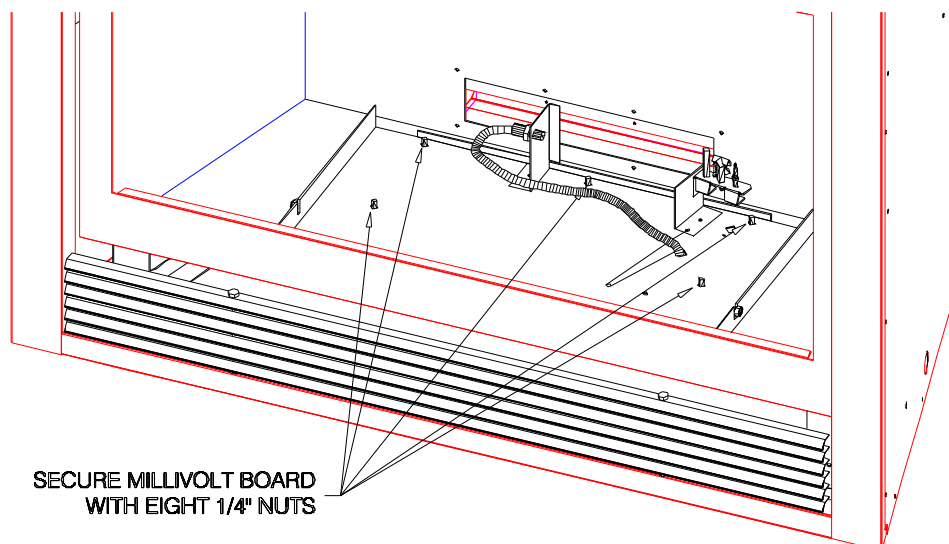
1. Shut off the gas supply at the manual shut-off valve.
2. Disconnect gas line flex tube from the manual shut-off valve.
3. Disconnect any wall switch, remote control or thermostat from the valve.
4. Remove the logs from the unit.
5. Loosen and remove the (2) 1/4" nuts securing the burner tube & burner cover assembly and remove.

**Figure 10A**



6. Loosen and remove the (8) 1/4" nuts and, while grasping the board, gently lift it off the (8) bolts and remove from the unit.

**Figure 10B**





## INSTALLING THE BOARD.

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

1. Grasp the board 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) and tighten.
3. Place the burner tube / cover assembly onto the board, properly seating the burner tube over the orifice and aligning the slots in the board to the studs in the cover. Secure with the (2) 1/4" nuts.
4. Connect the flexible gas line to the manual shut-off valve.
5. Reconnect any remote, wall switch or thermostat.
6. Replace the logs as described in section 'G'.

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

## G) LOG INSTALLATION. See Figures 11A & 11B, page 17.

This #936-500 log set includes:

(1) AA - Log	(1) C - Log	(1) L - Log
(1) AB - Log	(1) G - Log	(1) M - Log
(1) AC - Log (2 pc.)	(1) J - Log	(1) N - Log

Referring to figures 11A & 11B:

**NOTE: THE 'J', 'N', 'L', AND 'AA' LOGS HAVE ALIGNMENT HOLES INCORPORATED INTO THE BOTTOM AND SHOULD BE PLACED ONTO THE CORRESPONDING PINS IN THE BURNER COVER.**

Referring to the diagrams on page #17.

1. Place the 'J', 'N', 'L' and 'AA' logs into position on the burner cover aligning the holes in the bottom of the logs to the corresponding pins in the burner cover.
2. Position top logs 'AB', 'C', and 'M' onto the previously positioned logs as shown\*.
3. Position the 2 pc. 'AC' log behind the log grate and set the 'G' log into the corresponding notch in the 'AC' log\*.

### ATTENTION HOMEOWNER / INSTALLER:

**TO ACHIEVE OPTIMUM GLOW AND FLAME APPEARANCE, IT MAY BE NECESSARY TO SLIGHTLY ADJUST THE VENTURI SHUTTER POSITION AND/OR THE LOG POSITIONS.**

*\*Refer to the completed log set diagram, figure 11B.*

Figure 11A

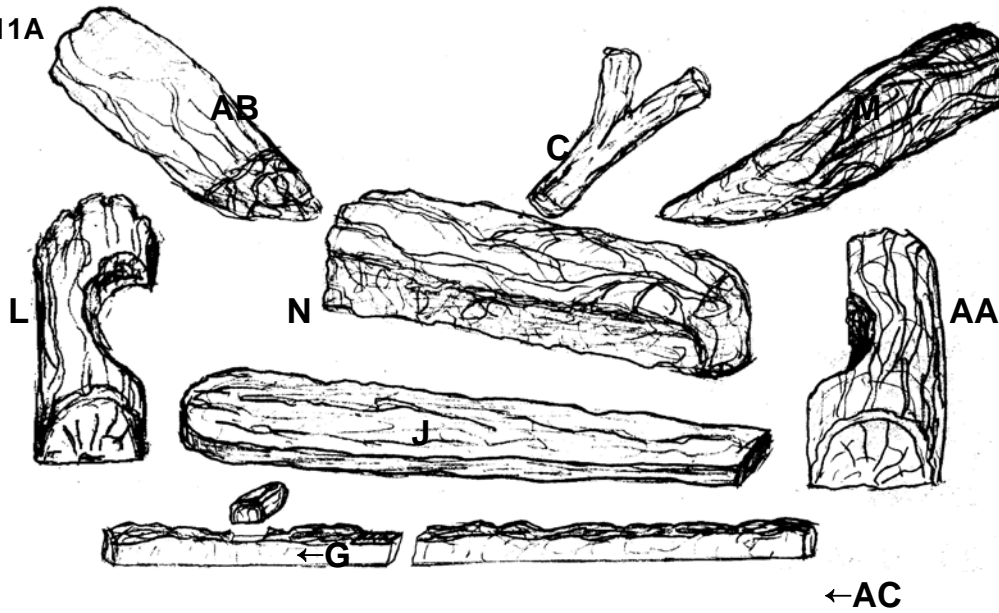
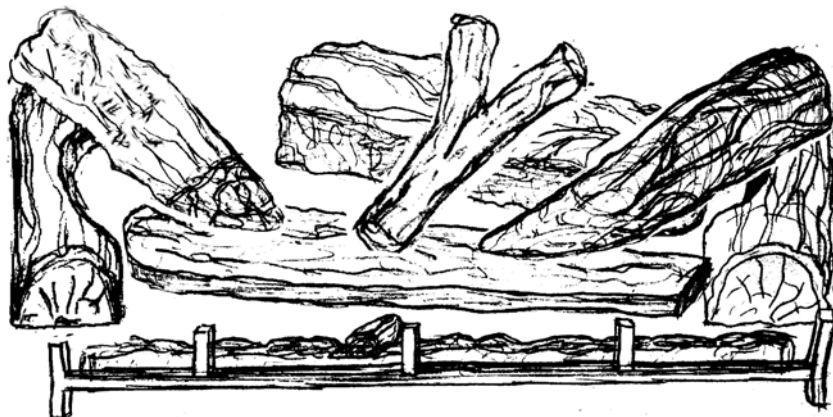


Figure 11B



**INSTALLED #936 DV LOG SET**

**INITIAL BURN PERIOD**

Due to the makeup of these unique fiber logs, the curing process may take up to 4 hours of burn time. During this period, the logs will discolor but will return to their true color once the curing process is complete. Do not burn this fireplace without the glass properly in place.

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

**H) THERMOSTAT - WALL SWITCH - REMOTE INSTALLATION (optional). See Figure 12 & 13.**

**CAUTION: DO NOT** connect high voltage wire to the switch.

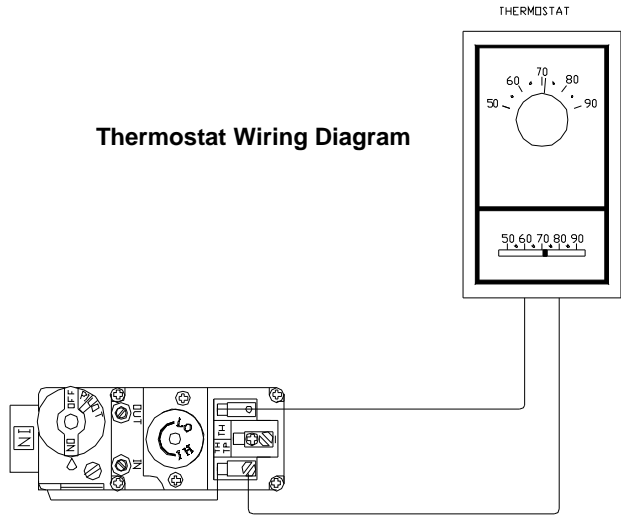
1. If desired, a thermostat, wall switch or remote control unit may be used to turn the unit off and on. Only one of these may be installed. Follow instructions included with each kit.

**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 thermostat or wall switch. 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 sufficient 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.

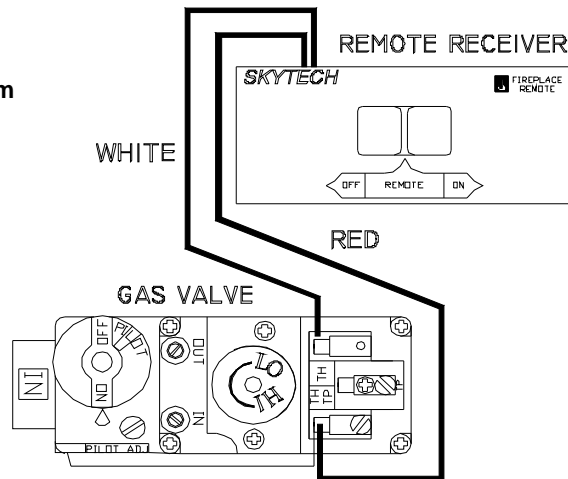


**Figure 12**

**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.**

**Note: If the unit is turned on with a remote control, wall switch or thermostat, it must be turned off by the same method.**

**Remote Control Wiring Diagram**



**Figure 13**

## I) COMPLETE THE INSTALLATION

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

**CAUTION: THE SURROUNDING WOOD CHASE OF THE OUTSIDE WALL MUST BE INSULATED TO PREVENT COLD AIR FROM ENTERING THE ROOM.**

2. THIS STEP SHOULD ONLY BE DONE BY A QUALIFIED INSTALLER OR SERVICE TECHNICIAN:

- a) Perform lighting and shutdown procedures as described on page #19 . This should be done prior to replacing the glass so that any necessary adjustments can be made and proper operation verified.

3. *Replace the glass. Refer also to Figure 3, pg. 6.*

- A) Align the slots in the top of the glass assembly over the tabs on the fireplace.
- B) Place the glass assembly so it is flush with the front of the fireplace front.
- C) Secure the assembly to the fireplace by pushing the two spring loaded handles (located under the firebox) back, locking them into position.

**WARNING: DO NOT OPERATE THIS FIREPLACE WITH THE GLASS ASSEMBLY REMOVED, CRACKED OR BROKEN. Replacement of the glass assembly should be done by a licensed or qualified service person.**

4. *Upper Grill - 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 glass frame.
- C) Place the bottom of the rods into the lower holes and release. The grill will set down into place.

*Remove:*

- A) Lift the upper grill up far enough to clear the bottom holes and pull bottom of grill out.

5. *Lower grill - See Figure 14*

*Remove:*

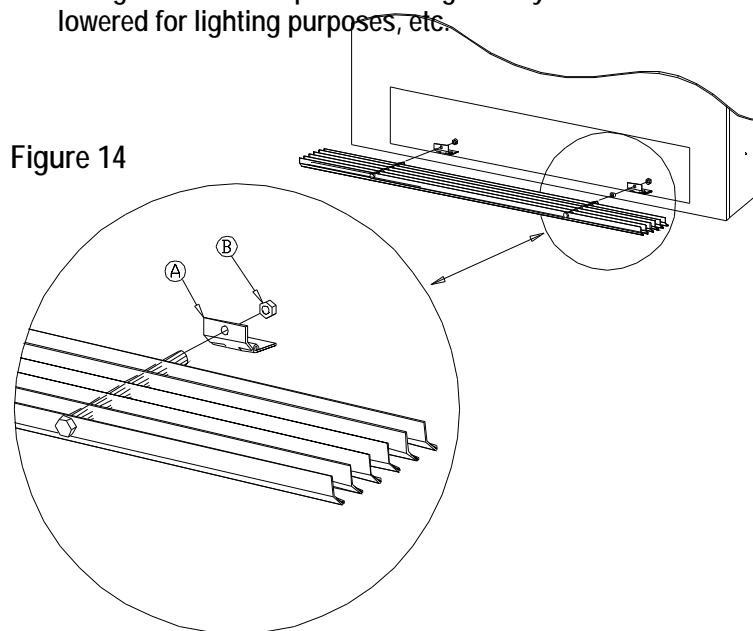
- A) Remove the 1/4" nuts (B) from the lower grill assembly.
- B) Pull the entire grill assembly out of the hinges.
- C) Re-attach the 1/4" nuts (B).

*Replace:*

- A) Remove the 1/4" nuts (B) from the lower grill assembly.
- B) Slip the bolt through the hinge (A).
- C) Re-attach the 1/4" nut (B).
- D) Repeat "a" through "d" for the remaining hinge.

The grill is now in place. The grill may be lowered for lighting purposes, etc.

Figure 14



## J) LIGHTING AND SHUTDOWN. See Figure 15.

**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.

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

**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 test pressures in excess of ½ psi.

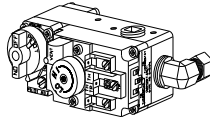
**NOTE:** The appliance must be isolated from the gas supply piping system by closing its individual manual shut off valve during any pressure testing of the gas line at test pressures equal to or less than 1/2 psig (3.5 kPa).

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 #22 for check 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 the thermostat, if used, to the lowest setting
3. Turn off all electric power to the appliance.
4. Push in control knob (A) slightly and turn clockwise ↻ to "OFF"

Gas control knob  
shown in "on" position



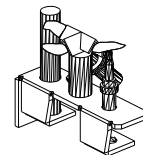
**NOTE:** Knob cannot be turned from "PILOT" to "Off" unless knob is pushed in slightly. Do not force.

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 behind the burner tube.

7. Turn the black knob on gas control counterclockwise ↺ to "PILOT".

8. Push in the black 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 the knob in 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 counterclockwise ↺ to "ON".

10. Flip the on/off switch (B) to the "on" position, the red is exposed.

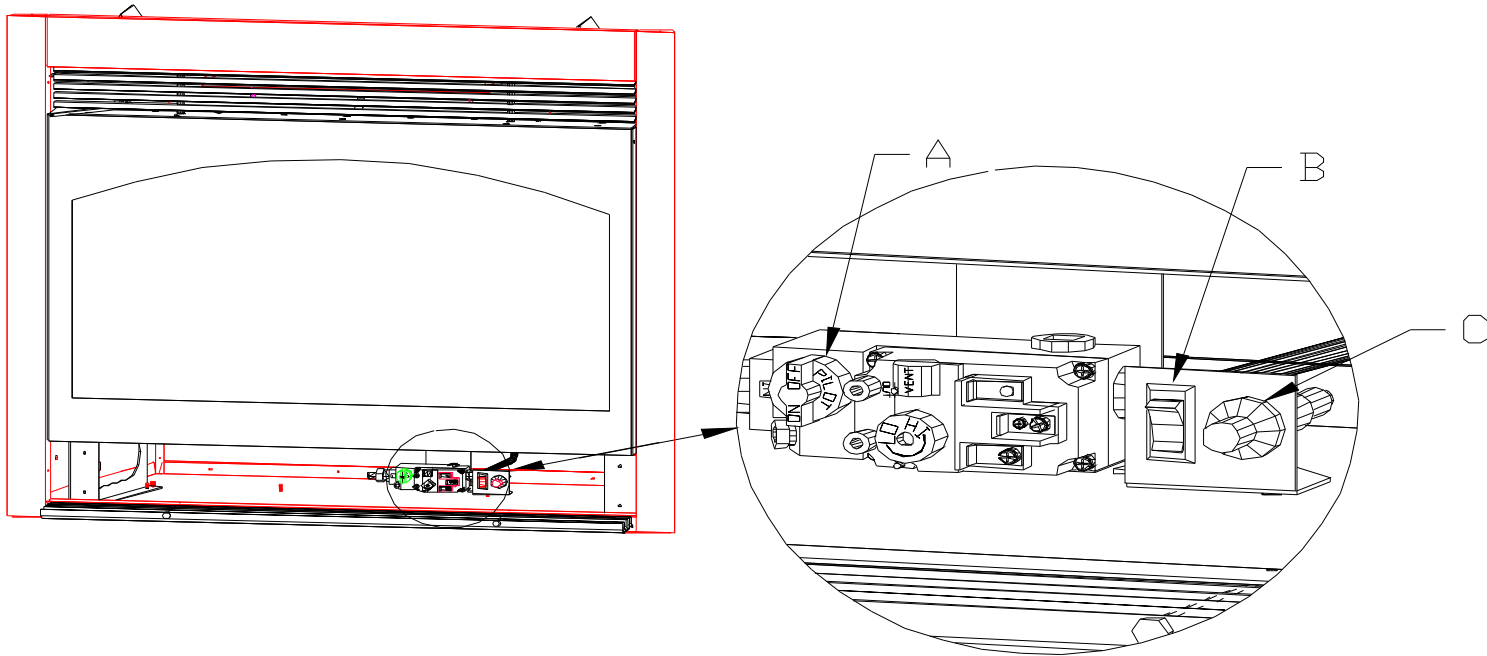
11. Set thermostat, if used, to desired setting.

**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. If a thermostat has been installed, simply adjust temperature setting.

**NOTE:** The pilot will stay lit.

13. To turn off the pilot, push in and turn the knob to the "off" position.



**FIG. 15**

**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 MAKEUP OF THE FIBER LOGS, THE CURING PROCESS MAY TAKE UP TO 4 HOURS OF BURN TIME. DURING THIS PERIOD, THE LOGS WILL DISCOLOR. ONCE THE CURING PROCESS IS COMPLETE, THE TRUE COLOR OF THE LOGS WILL RETURN. DO NOT BURN THIS FIREPLACE WITHOUT THE GLASS PROPERLY IN PLACE.

**\*\*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.

**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.
5. Turn the rocker switch [B] to the 'off' position.
6. Disconnect manometer hose and tighten screw (clockwise).  
Screw should be snug, do not over tighten.
7. Attach manometer to manifold pressure tap to verify 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.

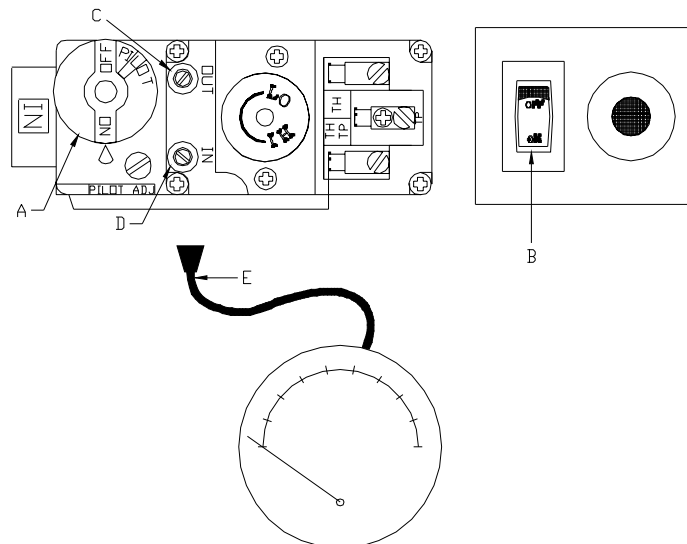


FIGURE 16

## K) 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, BEDDING MATERIALS, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS, BURNERS AND CIRCULATION AIR PASSAGEWAYS OF THE APPLIANCE BE KEPT CLEAN.**

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, bedding materials, or other fibrous materials. It is imperative that the burner be cleaned once a year.

### 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.

1. Remove the glass on the front of the unit.
2. For easier access, remove the logs.
3. Cover the millivolt board system.
4. Loosen the screws securing the baffle at the top of the firebox and remove the baffle.
5. Examine proper sealing of the vent system.
6. Replace the baffle and secure the nuts.
7. Replace the logs, glass and upper grill.

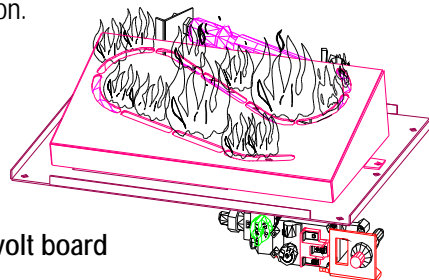
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**IMPORTANT: ANY SAFETY SCREEN OR GUARD REMOVED FOR SERVICING MUST BE REPLACED PRIOR TO OPERATING THE APPLIANCE**

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

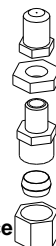
### MILLIVOLT BOARD SYSTEM

1. Annual cleaning of the burner is required. The burner tube / cover may be removed for easier access.
2. Remove the logs.
3. Remove the burner tube / cover by loosening the two nuts securing it on each side of the burner cover.
4. Visually check for blocked port holes, especially near the pilot. Blocked port holes may cause delayed ignition.

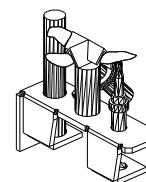


Millivolt board

5. Visually check the pilot light and burner when they are burning. See Figures above and below. The flames should be steady, not lifting or floating.



Burner Orifice



Pilot

### GLASS CLEANING & REPLACEMENT

- Clean glass only when cool and only with non-abrasive cleansers.
- **Do not** operate this fireplace with the glass/frame assembly remove, cracked or broken.
- The glass/frame assembly, **Part #900-07D shall only be replaced as a complete unit**, as supplied by Hussong Mfg. Co., Inc.
- Replacement of the glass/frame assembly, Part #, must only be performed by a licensed or qualified service person. **DO NOT SUBSTITUTE MATERIALS.**
- **Do not** strike or slam glass door assembly.

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



## L) TROUBLE SHOOTING GUIDE

**NOTE:** The millivolt board includes the following items: Valve, generator, pilot assembly, piezo, electrode, rocker switch, burner, orifice and orifice holder. If any of these items are defective, contact your dealer for the appropriate repair / 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 millivolt board, check for loose wires.

<u>PROBLEM</u>	<u>CAUSE</u>	<u>SOLUTION</u>
<b>No spark when piezo button is depressed</b>	The nut which holds the piezo in place is loose	Tighten nut.
	Wire on back of piezo button is loose or off	Put wire back into place.
	Wire from piezo to electrode is loose at electrode	Reconnect wire.
	Electrode moved out of position	Realign electrode with 1/8" space between it & the pilot.
<b>Pilot won't light</b>	Gas shut off	Turn Gas On
	Gas line not bled out	Hold black control knob in long enough to bleed out line.
	Not holding black control knob in long enough.	Hold in longer
<b>Pilot won't stay lit</b>	Not holding black control knob in long enough.	Hold button in longer to heat thermocouple.
	Thermocouple wire loose at valve connection.	Check connection on valve.
	Pilot hood misdirecting pilot flame from thermocouple.	Check pilot flame location. Flame must be burning on generator and thermocouple.

<u>PROBLEM</u>	<u>CAUSE</u>	<u>SOLUTION</u>
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**Burner won't light**

Pilot not lit

Relight pilot

Regulator valve not turned "on".

Turn valve to "on"

Rocker switch not turned exposing the "Red" or "on" indicator.

Press bottom of switch

Rocker switch wire not connected

Check wiring diagram Figure 17 and ensure that all wires are secure.

Generator wires loose at regulator terminals

Reposition wire and tighten screws. See Figure 17 for wiring instructions.

Generator wire grounded out due to pinching of wires

Nuts on millivolt board may need loosening to remove pinched wire.

Wall switch, remote control or thermostat not connected properly or turned to wrong setting. See figure 10.

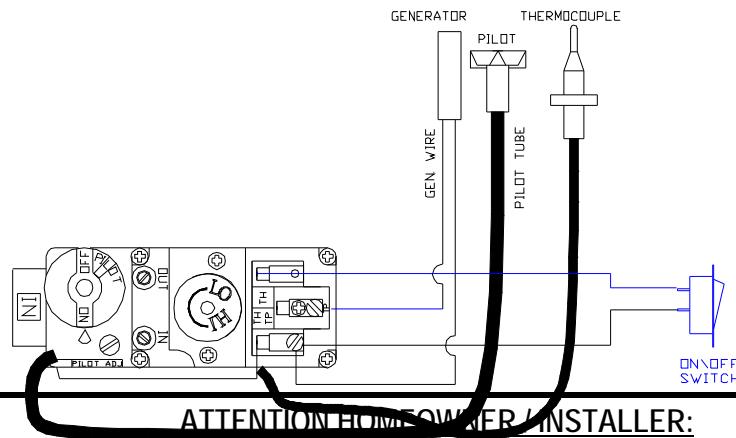
Connect properly or disconnect and use on/off switch only.

**Burner won't stay lit**

Wall switch, thermostat wire too thick or run more than 30 ft.

Disconnect wires from valve. If burner stays lit, change location or use on/off switch only.

Figure 17



**BLUE FLAMES AND/OR LOW FLAMES:**

- ATTENTION HOMEOWNER/INSTALLER:**
1. SLIGHTLY CLOSING THE VENTURI SHUTTER MAY BE NECESSARY IF FLAMES ARE BLUE. THIS IS LOCATED AT THE END OF THE BURNER TUBE WHERE IS IT POSITIONED OVER THE ORIFICE. LOOSEN SET SCREW AND ADJUST. RETIGHTEN SET SCREW.
  2. SLIGHTLY ADJUSTING LOG POSITIONS MAY BE NECESSARY TO ACHEIVE OPTIMUM GLOW & FLAME APPEARANCE.

**REPLACEMENT PARTS**

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

## MILLIVOLT BOARD AND PARTS

936-400	Millivolt Board - Natural Gas	842-135	Burner Tube & Cover
936-401	Millivolt Board - LP Gas	700-203	Manual Shut off Valve
700-032	Piezo Ignitor	700-213	18" Flexible Gas Line (gas line connection)
700-033	On/Off Toggle Switch	700-224	3/8" Flexible Gas Line (valve to burner connection)
700-036	Millivolt Generator		
700-039	Hi/Lo Adjustable regulator (Natural Gas)	700-231	Natural Gas orifice - #31
700-040	Hi/Lo Adjustable regulator (LP Gas)	700-249	LP Gas orifice - #49
700-060	Pilot Tube with fitting (valve to pilot Gas)	700-055	Pilot/Generator/Thermocouple Assembly-Nat.
		700-056	Pilot/Generator/Thermocouple Assembly-LP Gas
		OCK-331	Natural Gas Conversion Kit
		OCK-349	LP Gas Conversion Kit

## FAN - REPLACEMENT ONLY

600	Fan Kit with Temperature limit switch & speed control
404-4	Limit Switch Assembly
600085	Speed Control

## REMOTE CONTROLS / THERMOSTAT

796	Remote Control with thermostat
797	Remote Control
700038	Wall-mount Thermostat

## GLASS

900-07D	Replacement glass assembly - includes 17"x30" glass, gasket & arched frame.
500-404	1 1/8" Glass gasket w/ adhesive
500-936	Arched Frame Brass Trim (2 pc.)

## LOG SET

936-500	Log set
---------	---------

## LINTEL IRON

617	44" Lintel Iron
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## UPPER & LOWER GRILLS

936-200	Black Upper Grill
936-20B	Brass Upper Grill

## LOWER GRILL

936-201	Black Lower Grill
936-21B	Brass Lower Grill

## GRILL LOUVERS

500-225	Brass louver 30 1/2"
500-243	Black louver 30 1/2"

## VENT SYSTEMS

745	Direct Vent Kit (for terminations up to 4')
718	Direct Vent Kit (for terminations up to 8')
746	Direct Vent Extension Kit (6' long)
923-C	Dura-Vent Adaptor
747	Vinyl Siding Protector
745060	Firestop

936 DV - US INSTALLATIONS ONLY  
Revised 05/98

www.kozyheat.com

Manufactured by:

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Lakefield, MN 56150