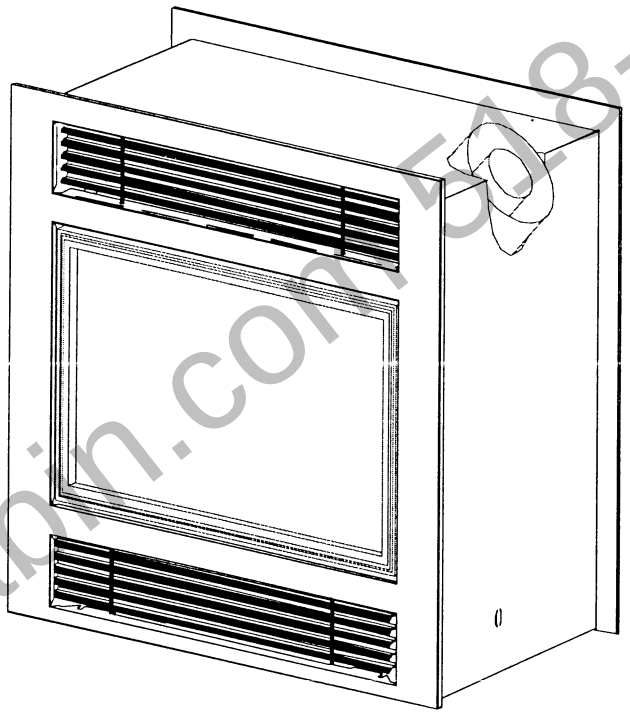
K O Z Y H E A T

Quality Fireplaces For Life

INSTALLATION & OPERATING INSTRUCTIONS

SUNDANCE II
MODEL #744 SEE-THRU DIRECT VENT



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

RETAIN THIS MANUAL FOR FUTURE REFERENCE

With ANSI National Design Complies Safety Standards
Wilmock Hersey Certified
•Gas Appliance•

SEPTEMBER 1998

INDEX

IMPORTANT

READ THIS MANUAL BEFORE INSTALLING AND USING THIS FIREPLACE

GAS FIREPLACE MODEL #744 - SUNDANCE II
SEE-THRU DIRECT VENT

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-M91 and CAN1-2.19-M81 "Direct Vent Wall Furnaces", CAN/CGA IR #41 "Direct Vent Gas Fireplaces", and CAN/CGA 2.17-M9 "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 in the absence of such code the Standard for Manufactured Home Installations, ANSI A225.1 / NFPA 501A 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 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: 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 or property damage. 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 #7 for approved systems listing. 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(S). 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.

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

WARRANTY: Please complete warranty card (included with installation packet) information prior to installation of unit. Warranty information is located behind the lower grill, on certification tag. This warranty card must be returned to manufacturer to validate your warranty.

NOTE: Although no foundation is required for this unit, the foundation must be sufficient to carry the weight of the face brick and/or rock front, if used.

SPECIFICATIONS: See figure 1.

Height:	36" (915 mm)
Width:	40" (1016 mm)
Depth including faces:	20" (508 mm)
Depth excluding faces:	18.5" (470 mm)
Flue size:	4" Outlet, 7" Inlet

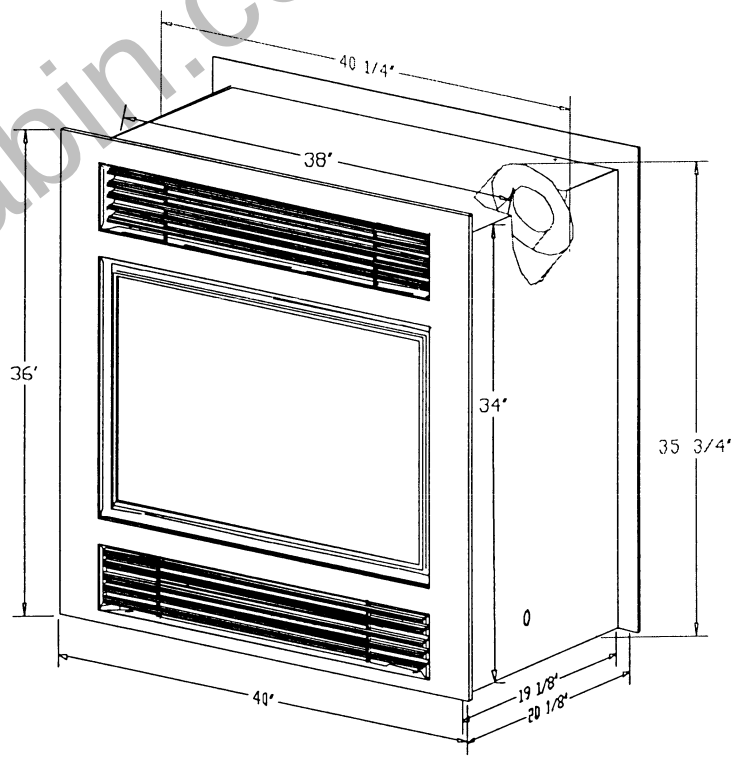


Figure 1

MINIMUM CLEARANCE TO COMBUSTIBLES:

From unit top and sides:	0" (0mm)	**Inlet vent to enclosure:**	1" (25mm)
Unit facing:	0" (0mm)	**Wall Pass-through to framing**	1" (25mm)
From heat outlet to mantel:	12" (305mm)	**Unit glazing to adjacent wall:**	12" (305 mm)

A) POSITION THE UNIT. See figure 2

1. Determine the exact position of your fireplace. Determine width and depth of the (optional) hearth(s).

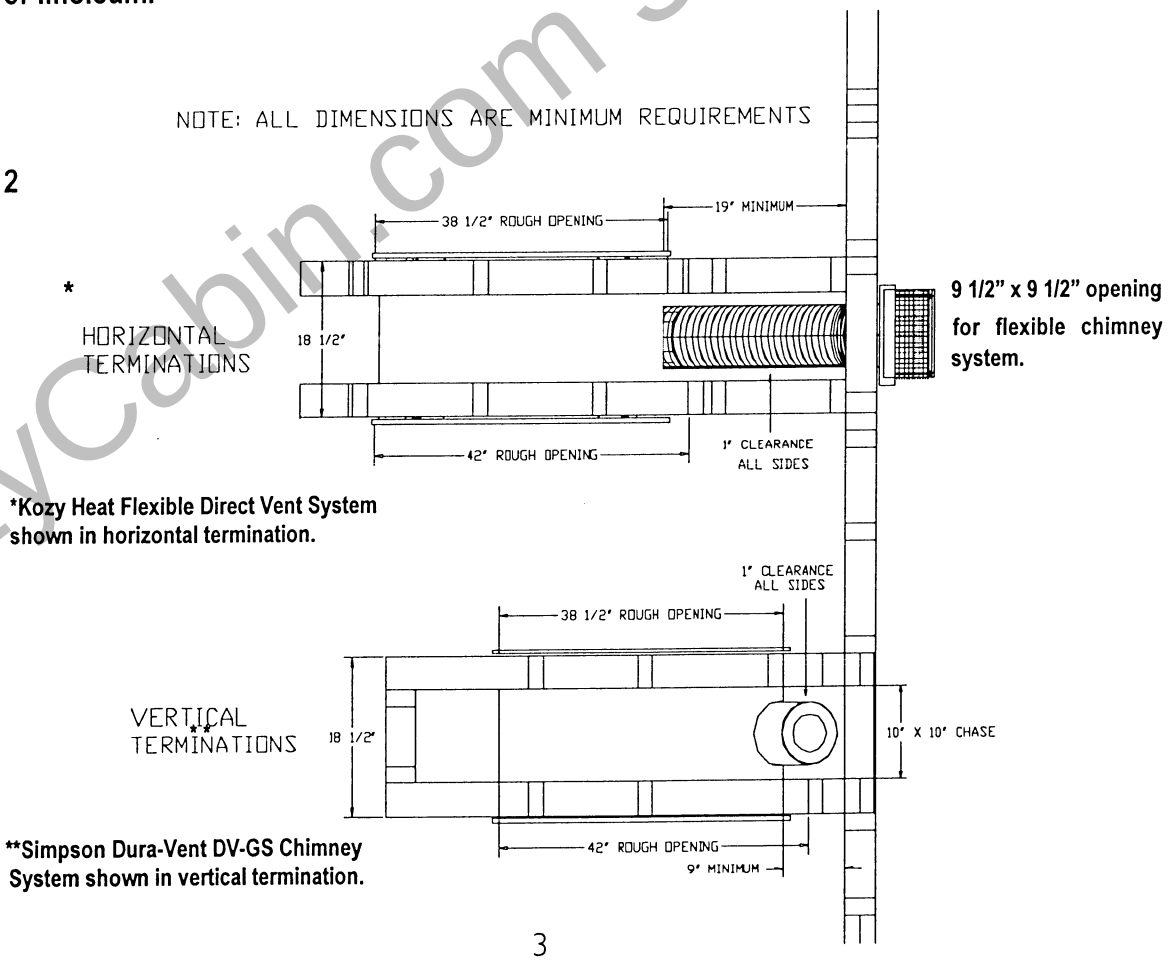
NOTE: Even though the minimum clearance from the sides and top is 0", we recommend that you allow an expansion space of 1/4" from sides and top to prevent cracking of face materials due to expansion of the unit during heating. If expansion room is not left, the unit will make a loud "banging" noise when it heats up or cools down.

2. **See figure 2** for various installation options.

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

NOTE: The unit may be placed on any flat combustible or non-combustible floor surface without carpet or linoleum.

Figure 2



NOTE: This fireplace has a "front face" and a "back face". The side which has been designated as the **"front face"** has the control valve behind the lower grill. Once the "front" has been determined, termination flue collars should be to the right.

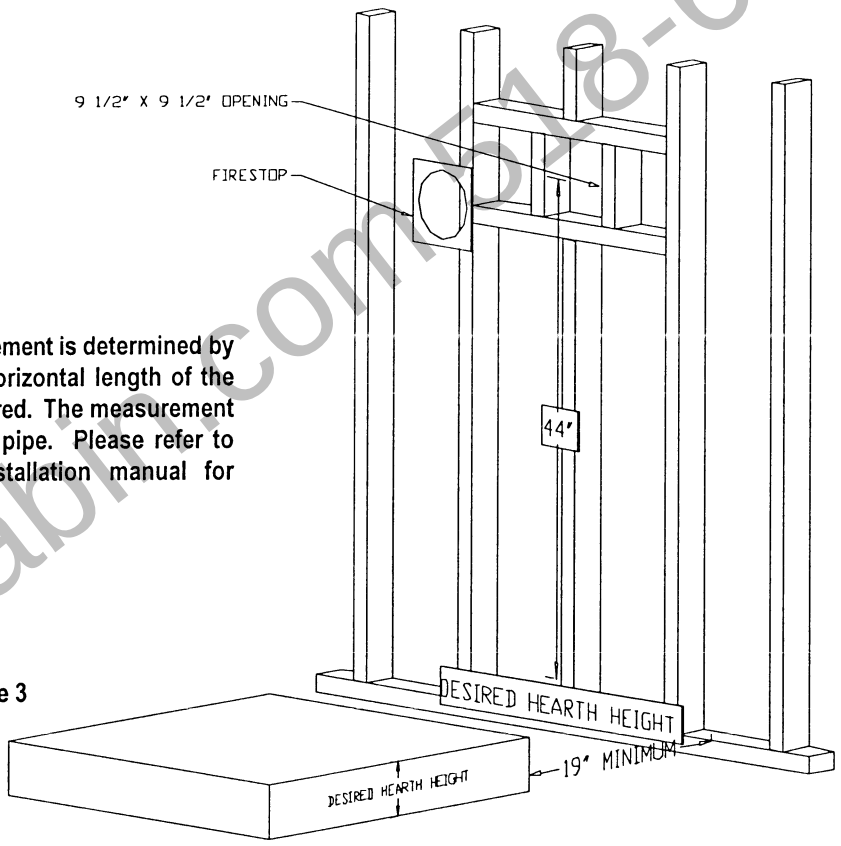
NOTE: Rough opening dimensions differ on "front face". Opening on this side must be a minimum of 42" wide to allow adequate room to slide the unit into place.

IMPORTANT

Horizontal terminations must allow a minimum space of 19" (483mm) between the unit and inside wall to comply with termination requirements. See page 8 for horizontal termination guidelines.

Vertical terminations must allow a minimum of 9" (229 mm) between the unit and inner wall or framing to comply with termination / clearance requirements. See page 9 for vertical termination guidelines.

3. If horizontally terminating, cut a hole for the firestop, 9 1/2" x 9 1/2" (242 mm x 242 mm). The center of this hole must be a minimum of 44" (1118 mm) above the height of the hearth (optional)*. **See figure 3.**



***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 #8 of this installation manual for requirments and restrictions.**

Figure 3

4. Rough in the wall enclosure. A maximum depth* of 18 1/2" (470mm), height of 36" (914mm), front face width of 42" (1,067mm), back face width of 38 1/2" (978mm) is required for proper installation. **See Fig. 4.** Build the hearth to the desired size and height.

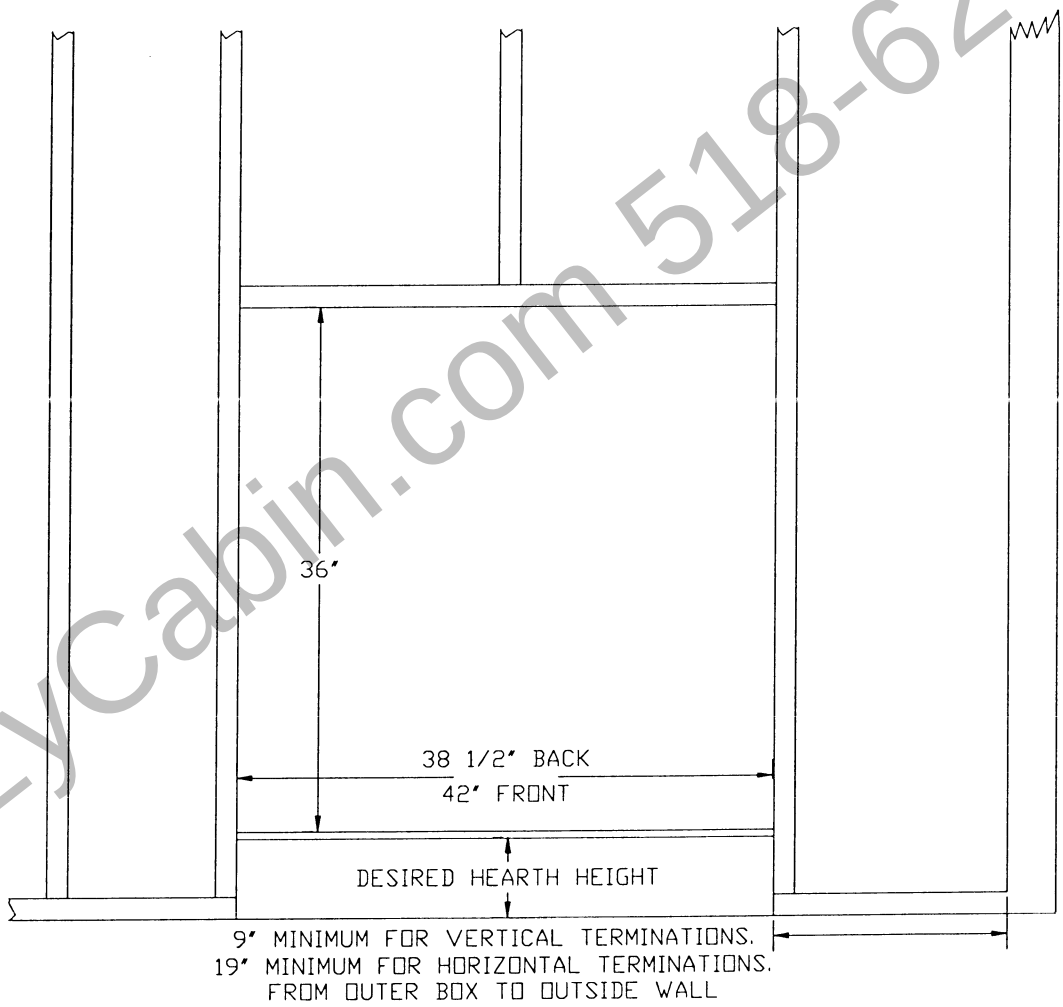
***IMPORTANT: The rough opening depth is determined by the thickness of the facing material.**

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 20" (508mm) deep by 38" (965mm) 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 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 to open and operate the gas valve and piezo ignitor.

Figure 4



B. REMOVE THE FRONT AND BACK FACES. See figure 5

1. Place the unit into position.
2. Loosen, but do not remove, the two 1/4" bolts (A) with a 7/16" wrench from the unit.
3. Remove the two 1/4" nuts (B) and slide the face off.
4. Repeat steps 1-3 for remaining face.

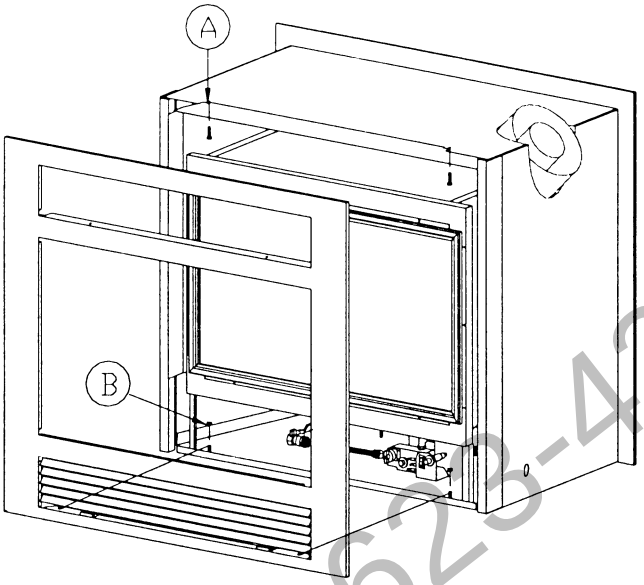


FIGURE 5

NOTE: NON-COMBUSTIBLE FACING MATERIAL MAY BE APPLIED OVER THE FACE(S) OF THE UNIT. TO PREVENT THE FACING MATERIAL FROM CRACKING AND FALLING OFF, DO NOT ATTACH FACING MATERIAL DIRECTLY TO THE FACE OF THE UNIT. THE FACE WILL EXPAND WHEN THE UNIT IS HEATED.

PLEASE BE ADVISED THAT SHOULD THE UNIT'S FACE NEED TO BE REMOVED, THE FACING MATERIAL, IF ANY USED, WILL ALSO BE REMOVED.

C. REMOVE THE GLASS FRONT. See figure 6.

1. Remove the brass glass frame by pulling the bottom out, then lifting it up and off the clip.
2. Loosen and remove the brass frame clip and screws and set aside.
3. Loosen, but do not remove the bottom glass clip screws.
4. Loosen and remove the side glass clip screws.
5. Place both hands around the glass/glass clip assembly and lift entire assembly off from the bottom screws.
6. Place the glass assembly aside where it will not be broken.
   NOTE: Do not remove the glass clip or gasket material around the glass.
7. Remove the box of logs from the unit and set aside.
8. Repeat steps #1-#6 for remaining glass.

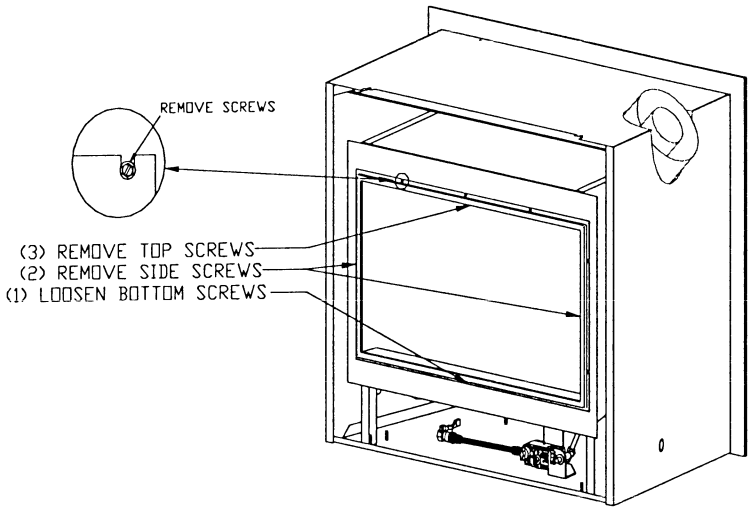


Figure 6

E) INSTALL THE DIRECT VENT KIT. See figure 7

IMPORTANT: THIS UNIT IS APPROVED FOR USE ONLY WITH 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 greater than 4' but less than 8'.
- **KOZY HEAT DIRECT VENT EXTENSION KIT #746 -** Used to extend the #745 or #718 kits an additional 6'.

- **SIMPSON DURA-VENT DV-GS DIRECT VENT CHIMNEY SYSTEM -** Used for vertical terminations only. Adaptor # 923-C is required to adapt the flue collars on the unit to the chimney system and is available through your dealer.

If using the #745 or #718 with or without the #746 extension kit, refer to the installation instructions that follow.

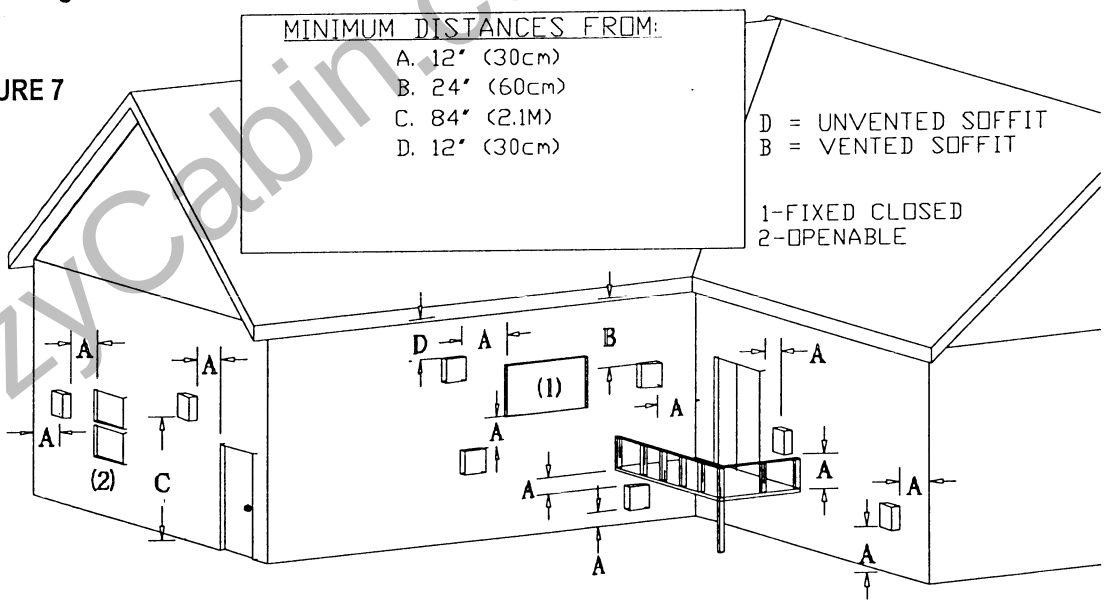
If using the Simpson Dura-Vent DV-GS Direct Vent Chimney System, follow the installation instructions included with the chimney system. Connect the #923-C adaptor, chimney section, if any used, and the 45° degree elbow together ***PRIOR*** to attaching to the fireplace to vertically position the chimney. Maximum vertical termination is 24 ft (7.3M). Maximum elbows are 2 - 45^0. This chimney system may be purchased from your dealer. IMPORTANT: THE APPROPRIATE CHIMNEY CAP MUST BE INSTALLED!

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

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

Follow Figure 7 for clearance to doors, windows and ground level.

FIGURE 7



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 ON THE TERMINATION KIT SHOULD ALL BE INSTALLED ON THE EXTERIOR OF THE OUTSIDE WALL.

1. If your chimney termination is between 24" and 8' from the stove and doesn't require an extension kit, proceed to step number 6.

2. If your chimney termination is greater than 8' from the unit, extension kit(s) - part #746 - must be purchased. Each extension kit contains enough 4" & 7" flexible aluminum pipe to extend the chimney an additional 6'. A maximum of three kits may be used.

HORIZONTAL TERMINATION REQUIREMENTS

NOTE: **MINIMUM HORIZONTAL RUN FROM OUTLET: 24" (610mm)**
MAXIMUM HORIZONTAL RUN FROM OUTLET: 20 FT. (5.5M)

MINIMUM CLEARANCE TO COMBUSTIBLES: 1" (25mm)

NOTE: THE FIRST 2 FEET OF HORIZONTAL RUN MUST MAINTAIN AN 8" RISE PER FOOT. FOR EACH ADDITIONAL FOOT OF HORIZONTAL RUN, A 3/4" RISE PER FOOT MUST BE MAINTAINED. See figure 8.

NOTE: TOTAL TERMINATION (A + B) MUST NOT EXCEED 20 FEET.

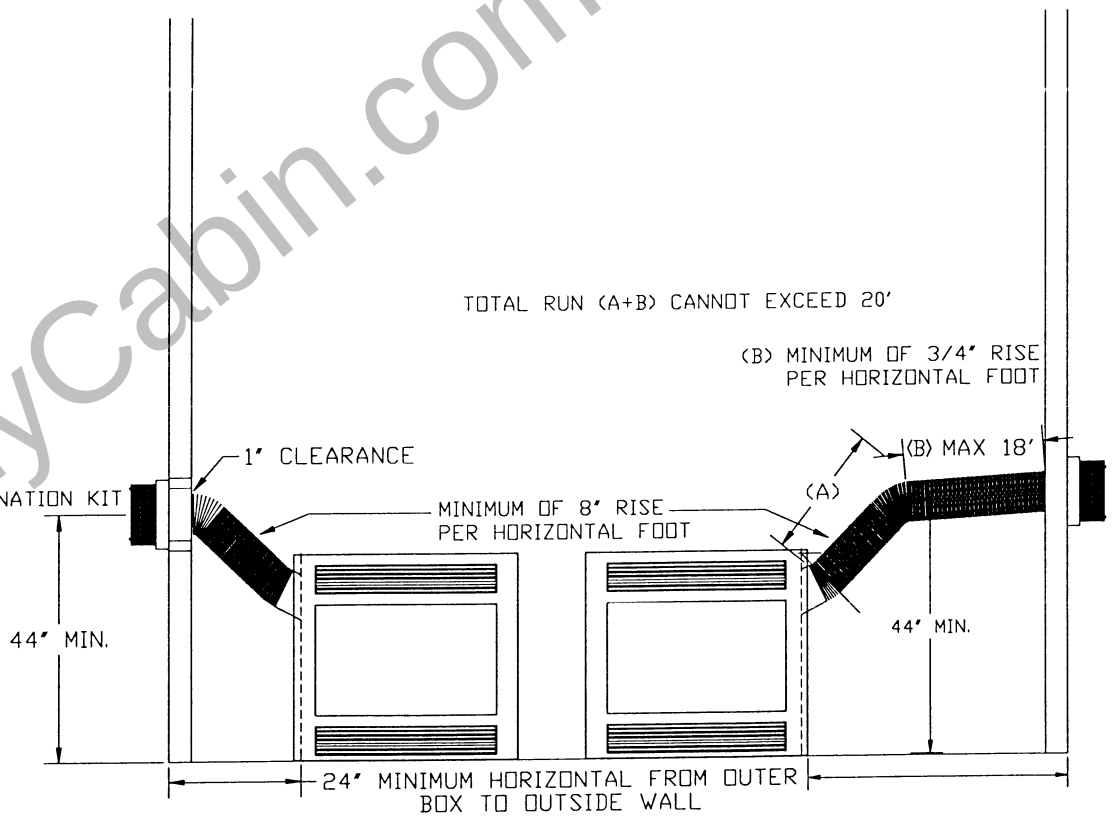


Figure 8

VERTICAL TERMINATION REQUIREMENTS

NOTE: Minimum vertical rise from appliance outlet: 16" (406mm)

Maximum vertical run: 24 FT (7.3M)
Elbows: 2 (45 degree)

NOTE: TOTAL HORIZONTAL & VERTICAL RUN MUST NOT EXCEED 24 FT. (7.3 M)

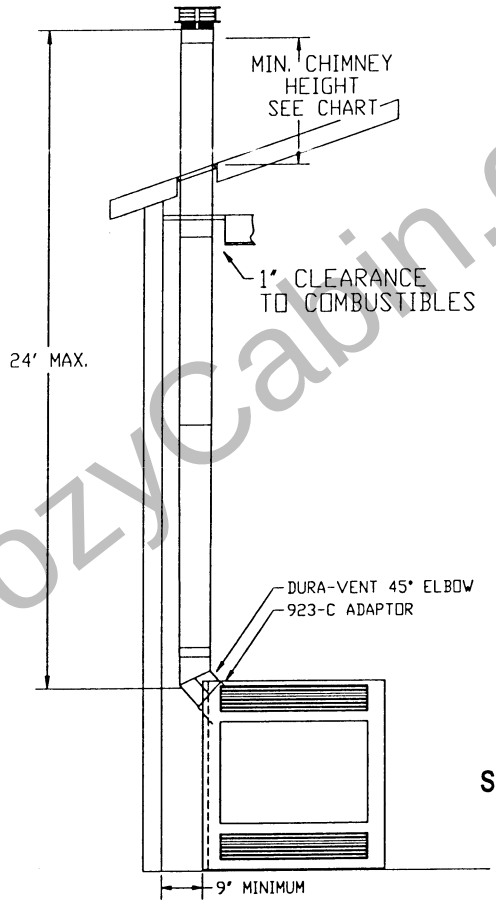
NOTE: The chimney height above the roof is determined by following 10 FT. / 2 Ft. rule or the table below. See figure 9. Flex pipe terminations must use the termination cap provided on the #745 or #718 termination kit.

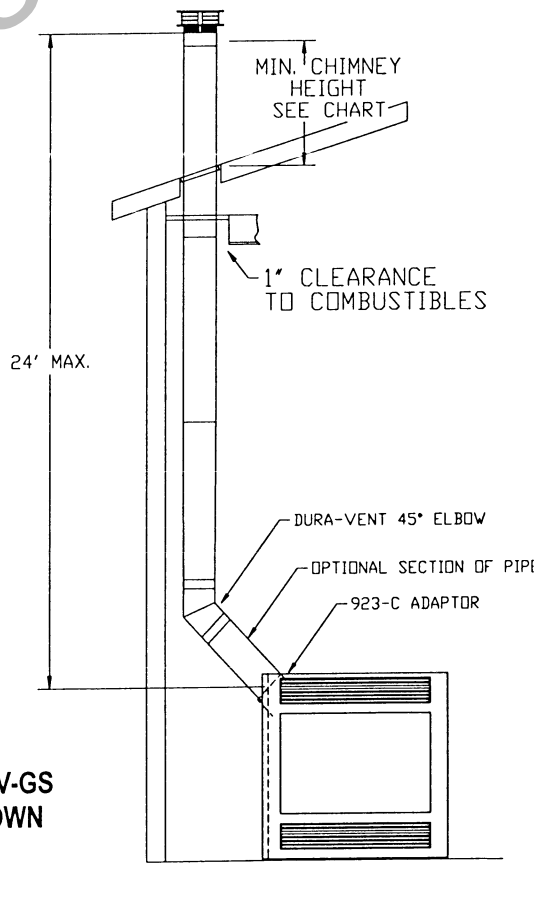
SIMPSON DURA-VENT DV-GS APPLICATIONS: Follow the installation instructions included with the chimney system. Adaptor # 923-C is required to adapt the flue collars on the unit to the chimney system and is available through your dealer. Connect the #923-C adaptor, chimney section, if any used, and 45° degree elbow together ***PRIOR*** to attaching to the fireplace to vertically position the chimney. Maximum vertical termination is 24 ft (7.3M). Maximum elbows are 2 - 45°. **IMPORTANT: THE APPROPRIATE CHIMNEY CAP MUST BE INSTALLED.**

Roof Pitch	Minimun Chimney Height
Flat to 9/12	2 ft.
Over 9/12 to 10/12	2 ft. 6 in.
Over 10/12 to 11/12	3 ft. 3 in.
Over 11/12 to 12/12	4 ft.
Over 12/12 to 14/12	5 ft.

Roof Pitch	Minimum Chimney Height
Over 14/12 to 16/12	6 ft.
Over 16/12 to 18/12	7 ft.
Over 18/12 to 20/12	7 ft. 6 in.
Over 20/12 to 21/12	8 ft.

Figure 9





SIMPSON DURA-VENT DV-GS CHIMNEY SYSTEM SHOWN

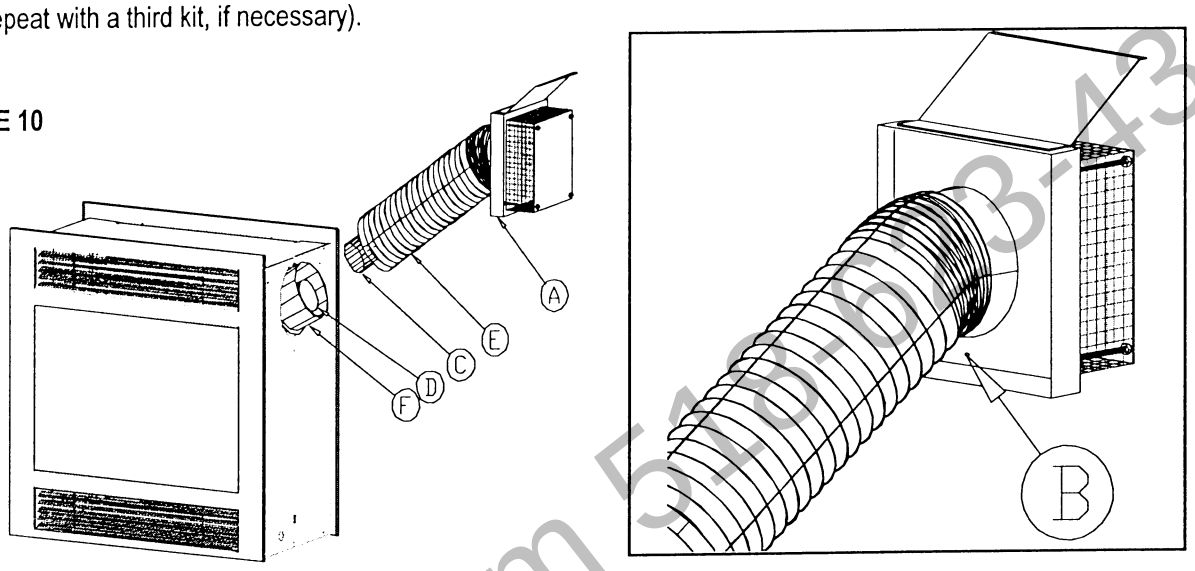
3. Using your extension kit pieces, place a bead of sealant outside the 4" flex pipe collar (C) - the end with the external notches - and slide it inside the 4" pipe on the side of the fireplace (D). This is a snap lock connection.

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 the side of the fireplace (F). This is a snap lock connection.

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

FIGURE 10



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 9 1/2" square hole. The side with the 2 - 1/8" holes on the flange should be placed to the t op. 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 kit then fits 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 side of fireplace 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 extension kit or side of the fireplace (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 the extension kit or side of the fireplace (F). This is a snap lock connection.

10. OPTIONAL: Place insulation between the 7" pipe and the wall studs.
If terminating against vinyl siding, attach vinyl siding protector.

F) FAN KIT INSTALLATION

INSTALLATION OF THIS KIT SHOULD BE DONE ONLY BY A QUALIFIED INSTALLER

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 and cover is included in the fireplace components packet.

Your optional fan kit includes:

1. Fan assembly with (1) 125 CFM fan and limit switch already mounted.
2. Components package - includes: speed control with nut & knob*, mounting bracket & (2) wing nuts.

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

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

NOTE: Place the limit switch (magnet attached) on the bottom of the millivolt board as close to the center as possible without coming in contact with the pressure relief cover.

1. Remove one of the lower grills.
2. Insert fan (A) through the lower grill opening and place over mounting studs (B).
3. Place wing nuts on mounting studs and tighten.
4. Optional - Mount the On/Off speed control on a wall.
5. Snap the receptacle into the cover.
6. Insert 115V wiring (with ground) through the romex connector installed in the electrical box installed in the side of the unit, and wire to the receptacle.
7. Place the cover on the box and secure with the screws.
8. Connect the limit switch wires (C) to the matching terminals on the fan cord.
9. Plug cord (D) into fan receptacle.
10. Turn On/Off speed control clockwise slightly until it clicks.
11. Replace lower grill.

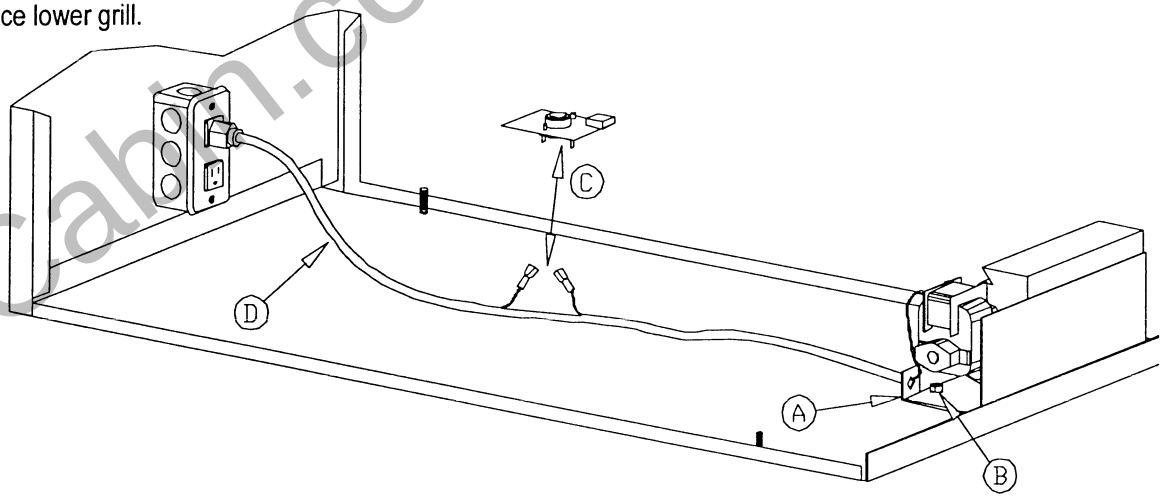


Figure 11

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

G) GAS LINE CONNECTION

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

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 flexible gas line connected on the regulator will attach.

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

1. Run the gas line. An accessible shut off valve (provided) must be installed upstream for the regulator.

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

2. This unit is designed to accept either 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 the gas line connection.

4. Connect the manual shut off valve to the previous run gas line.

5. Connect the flexible gas line(installed on the millivolt board) to the manual shut off valve and complete installation of the gas line.

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

NOTE: This appliance and its individual shut off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi.

NOTE: This 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 supply piping system at test pressures equal to or less than 1/2 psi.

Pressure check taps for both 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: NATURAL GAS :

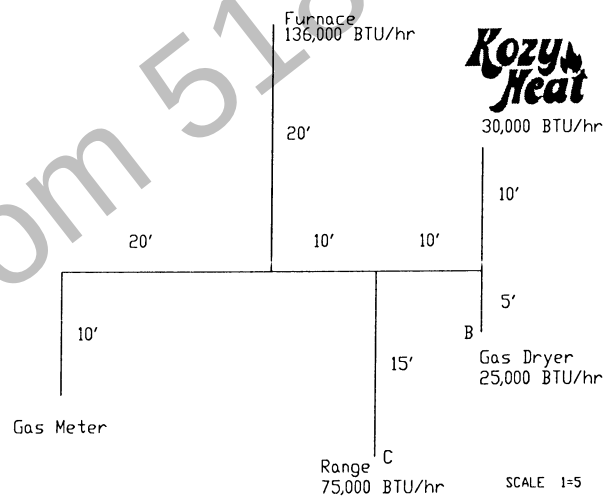
The minimum inlet gas supply pressure is 4.5 inches W.C. (1.12kPa) EFFICIENCY: 78.0%
The maximum inlet gas supply pressure is 10.5 inches W.C. (2.61kPa) AFUE: 71.02%
Input rating 0-610M: 34,000 Orifice (DMS) 0-610M: 36
Input rating 610-1370M: 33,000 Orifice (DMS) 610-1370M: 37
MAXIMUM OUTPUT: 26,500

LP GAS:

The minimum inlet gas supplypressure is 11.0 inches W.C. (2.74kPa). EFFICIENCY: 79.4%
The maximum inlet gas supply pressure is 13.0 inches W.C. (3.24kPa) AFUE: 72.7%
Input rating 0-610M: 32,000 Orifice: 52
Input rating 610-1370M: 30,000 Orifice: 53
MAXIMUM OUTPUT: 25,500

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

Tubing Size	Maximum Run
3/8" I.D.	10' (3M)
1/2" I.D.	70' (31M)
5/8" I.D.	100' (30.5M)
3/4" I.D.	125' (38M)



SOLUTION TO EXAMPLE

(1)

Maximum demand for outlet "A"	30 CFH
Maximum demand for outlet "B"	25 CFH
Maximum demand for outlet "C"	175 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 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 pipe.

H) MILLIVOLT BOARD

NOTE: THIS UNIT IS SHIPPED FROM THE MANUFACTURER WITH THE MILLIVOLT BOARD ALREADY INSTALLED. FOLLOW THESE PROCEDURES SHOULD THIS MILLIVOLT BOARD NEED REPLACING OR IS REMOVED FOR SERVICING.

REMOVING THE MILLIVOLT BOARD, see figure 12.

CAUTION: The fireplace should be cool prior to any service to avoid burns.

1. Shut off the gas supply at the manual shut-off valve.
2. Disconnect the flexible gas line from the manual shut off valve.
3. Disconnect any remote control, wall switch, or thermostat wire from the valve.
4. Remove the brass frame, glass and logs.
5. Remove the bottom refractory panels (A) and metal refractory supports (B) from the unit.
6. Loosen and remove the (2) 1/4" nuts (C) securing the left side of the burner/cover/log grate assembly.
7. Lift the front end up and carefully slide the burner tube off of the burner orifice(located on the right side of the board assembly) and remove from unit.
8. Loosen and remove the (8) 1/4" nuts (D) securing the millivolt board and gently lift it off the (8) studs and remove from unit.

INSTALLING THE MILLIVOLT BOARD, see figure12.

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 regulator board.

1. Grasp the millivolt board with both hands and place into the unit, lining up the eight 1/4" holes in the board to the 8 studs in the firebox bottom.

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 (8) 1/4" nuts (D) (included with board assembly).
3. Replace the burner/cover/log grate assembly by aligning the slots on the left side to the studs on the millivolt board and sliding the burner tube over the burner orifice on the right side. Make sure it is properly positioned over the orifice. Secure with the (2) 1/4" nuts (C).
4. Replace the metal refractory supports (B) and refractory panels (A).
5. Connect the flexible gas line to the manual shut off valve.
6. Reconnect any remote control, wall switch or thermostat wires.
7. Replace the logs, glass , brass frame clip & brass frame.

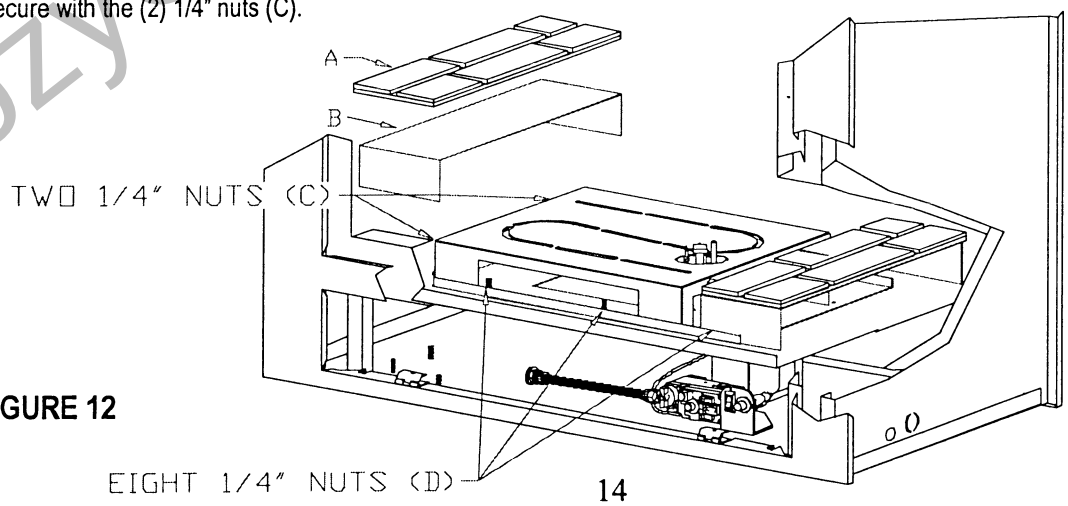


FIGURE 12

I) LOG INSTALLATION. See figures 13A - 13C.

THIS LOG SET INCLUDES: (2) 'AC' Logs (2-pc.) (1) 'AK' Log (1) "AL' Log (1) 'S" Log
(2)'AM' Logs (2) 'C" Logs (2) 'M' Logs

INITIAL BURN PERIOD

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

BASE LOGS INSTALLATION - Figure 13A

Position base logs onto the burner cover in the following order:

1. 'AK' log, 'AL' log, 'AM' logs, and 'AC' logs.
2. Do not allow the logs to cover the burner or burner port holes.

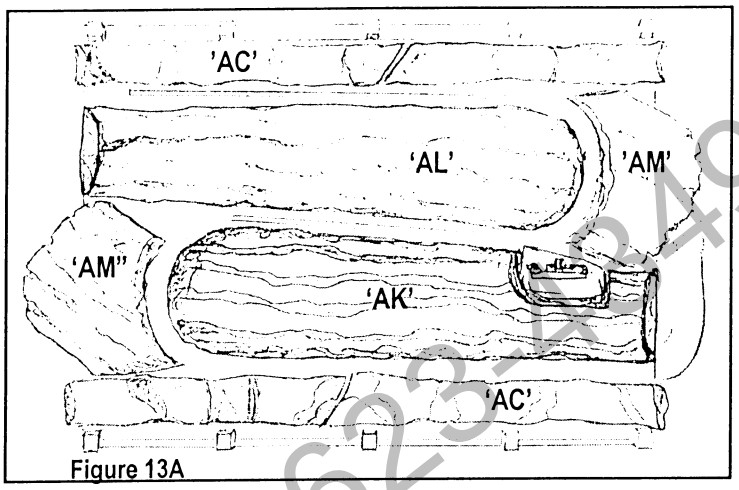


Figure 13A

CENTER LOGS INSTALLATION - Figure 13B

1. Position the 'S' log over the center base logs 'AK' and 'AL' as shown.
2. Place one of the 'M" logs over the 'S' log and 'AK' log as shown.

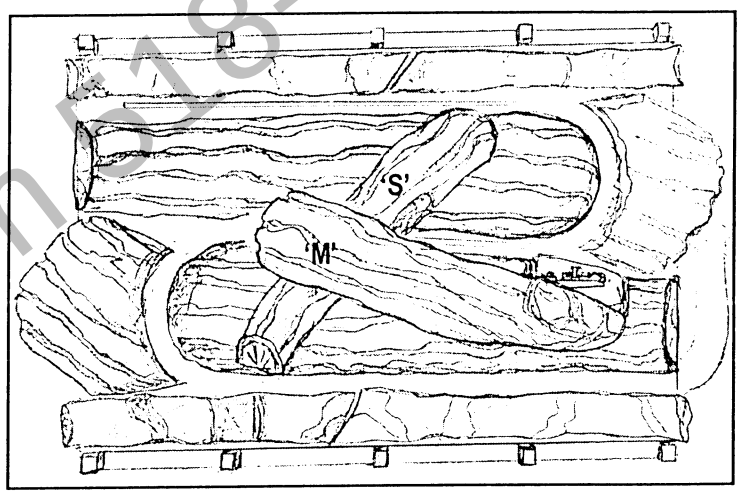


Figure 13B

TOP LOGS INSTALLATION - Figure 13C

1. Position remaining 'M' log over the 'S' log and back base log 'AL'.
2. Set the 'C' logs into position aligning the neck end of the logs into the notched out section of the 'AC' logs.

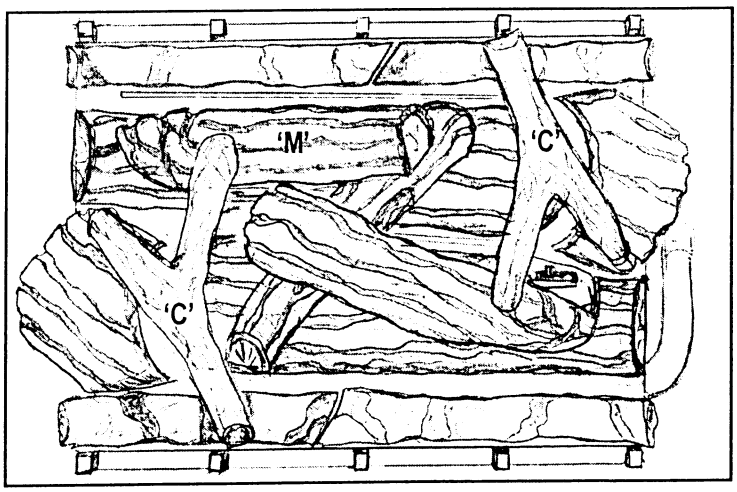


Figure 13C

J) WALL SWITCH, THERMOSTAT, OR REMOTE INSTALLATION (opt.)

CAUTION: DO NOT CONNECT HIGH VOLTAGE WIRE TO THE SWITCH.

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

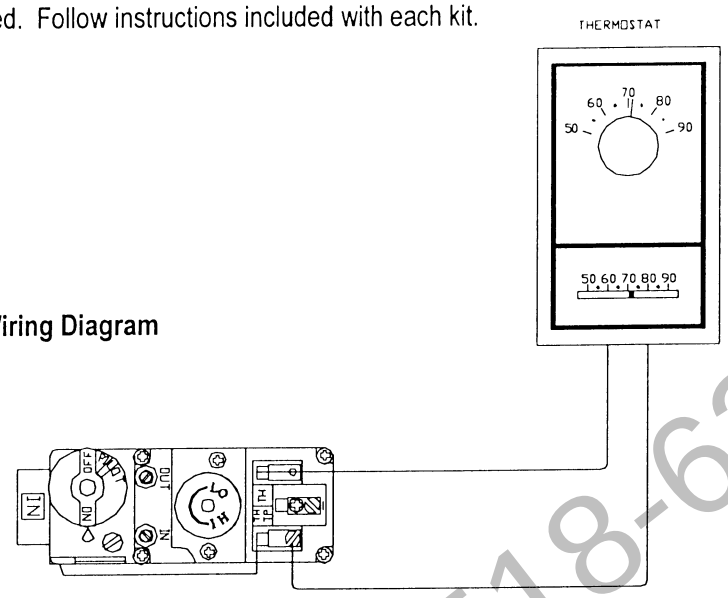


Figure 14A

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 valve termination to the desired location of the thermostat or wall switch. Do not run the 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.

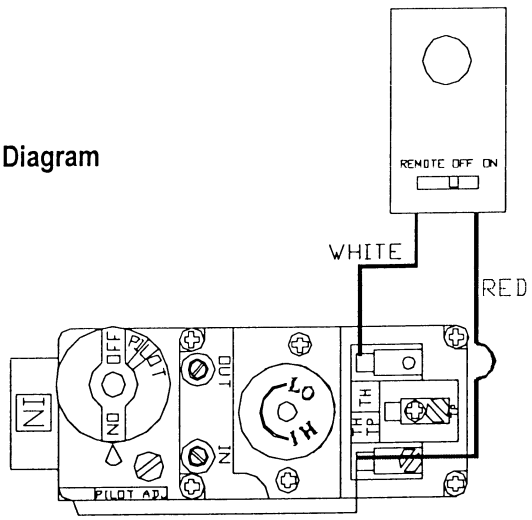


FIGURE 14B

Remote Control Wiring Diagram

K) COMPLETE THE INSTALLATION

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

CAUTION: THE SURROUNDING OUTSIDE WALLS 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 & 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 and log position verified.**

3. **Replace the glass. Refer to figure 6, page 6.**

   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.
      Attach the trim clip over the top clip, aligning the slots on the trim clip with the clip screws.
   c) Replace the side clip screws. Do not tighten at this time.
   d) Make certain the glass is in a level position.
   e) Tighten all clip screws.
   f) Repeat a-e for remaining side.

4. **Replace the face. Refer to figure 5, page 6.**

   a) Slide the face onto the unit and replace the two 1/4" nuts.
   b) Adjust to level.
   c) Tighten the bolts with a 7/16" wrench.
   d) Repeat steps a-c for remaining face.

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

   UPPER GRILL

   Remove:

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

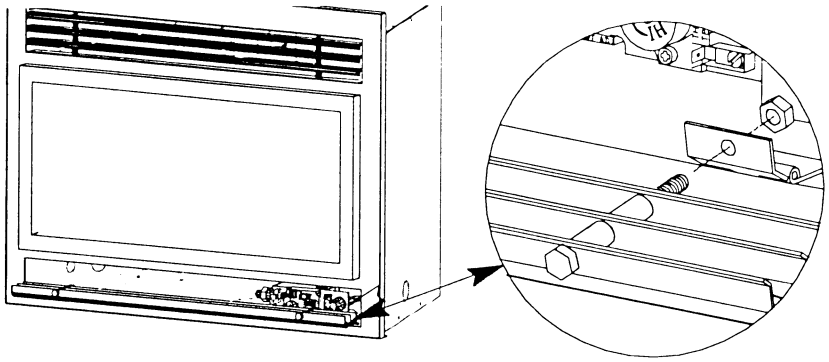
      NOTE: Springs have been placed over the upper grill rods to hold the grills securely in place.

   Replace:

   a) Line the rods of the grill up with the upper holes. Ensure that the springs are in place.
   b) Place the rods in the holes and push up until the bottom of the rods clear the face.
   c) Line the bottom of the rod up with the lower holes and release. The grill will set down into place.
   d) Repeat for remaining grill.

LOWER GRILL - See Figure 15

Figure 15



Remove:

a) Remove the 1/4" nuts from the lower grill assemblies.
b) Pull the entire grill assembly out of the hinges.
c) Re-attach the 1/4" nuts.

Replace:

a) Remove the 1/4" nuts from the lower grill assembly.
b) Slip the bolts through the hinges.
c) Re-attach the 1/4" nuts.
d) Repeat "a" through "c" for the remaining grill .

6) Install the decorative glass trim.

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). See figure 16.

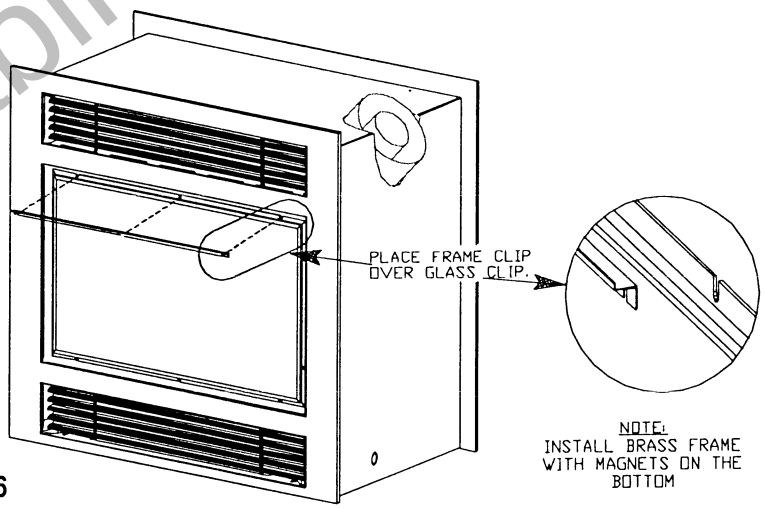


Figure 16

L) LIGHTING AND SHUTDOWN See Figure 17.

NOTE: Prior to lighting, check all fittings for leakage. This is accomplished by lightly spraying soapy water on all connections made. If there is any leakage, bubbles will appear at the point of connection. If bubbles occur, tighten 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: This appliance and it individual shut off valve must be disconnected from the gas supplyl piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5kPa).

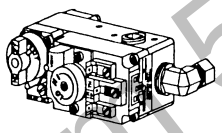
NOTE: This appliance must be isolated from the gas supply piping system by closing its individual manual shut off valve during any pressure testing of the gas ine at test pressures equal to or less than 1/2 psig (3.5 kPa).

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

NOTE: Read 1-11 before lighting the unit for the first time.

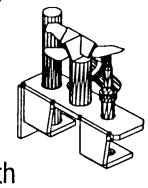
1. Open the lower grill by grasping the center of the top louver, and pull out and down.
2. Set the thermostat to the lowest setting.
3. Turn off all electrical power to the appliance.
4. Push in control knob (A) slightly and turn clockwise↘ to "OFF".

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 do not smell gas, go to the next step.



6. Find the pilot - follow metal tube from gas control. The pilot is in the center of the millivolt board.
7. Turn knob on gas control counterclockwise ↙ 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 counterclockwise ↙ to **"ON".**
10. Flip the On/Off switch (B) to the "on" position, exposing the "red".
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 (B). 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 the control knob (A) and turn to the " off" position.

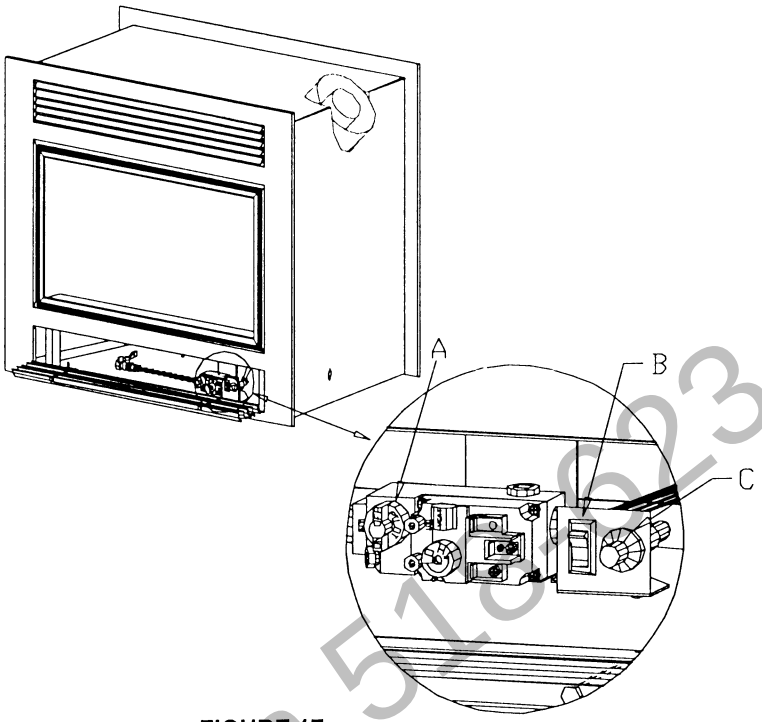


FIGURE 17

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 SPLIT FIBER LOGS, THE CURING PROCESS MAY TAKE UP TO 4 HOURS OF BURNTIME. DURING THIS TIME, 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 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 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 manomoeter 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.

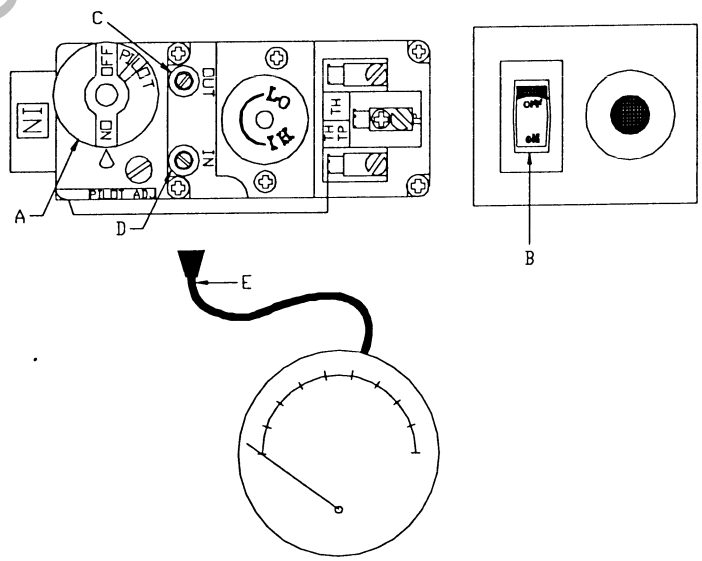


FIGURE 18

M) MAINTENANCE REQUIREMENTS

1. The appliance should be inspected at least once a year by a professional service person.

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

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

4. Annual 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 12 .**

6. Visually check the pilot light and burner when they are burning. **See figure 19.** The flames should be steady, not lifing or floating.

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

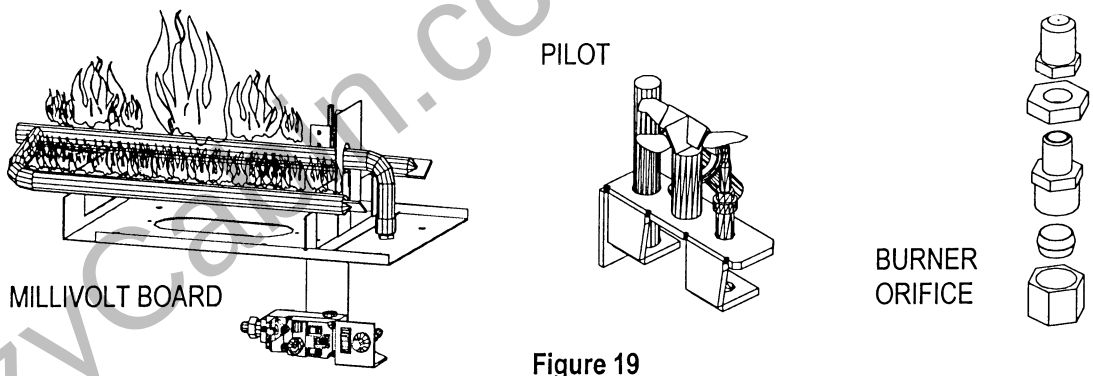


Figure 19

CAUTION: EXCEPT FOR THE FIRST LIGHTING, DO NOT OPERATE THIS APPLIANCE WITHOUT THE GLASS IN PLACE. REPLACEMENT SHOULD BE DONE BY A LICENSE OR QUALIFIED SERVICE PERSON. DO NOT OPERATE THIS APPLIANCE WITH BROKEN GLASS.

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

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

N) TROUBLE SHOOTING GUIDE

NOTE: The millivolt board includes the following items: Regulator, generator, pilot, thermocouple, piezo, electrode, rocker switch, burner, orifice, orifice holder, flexible gas lines , manual shut-off valve, adjustable regulator. If any of these items are defective, replacement of the entire board is easier and would not void the warranty. Please contact your dealer if this becomes necessary.

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.

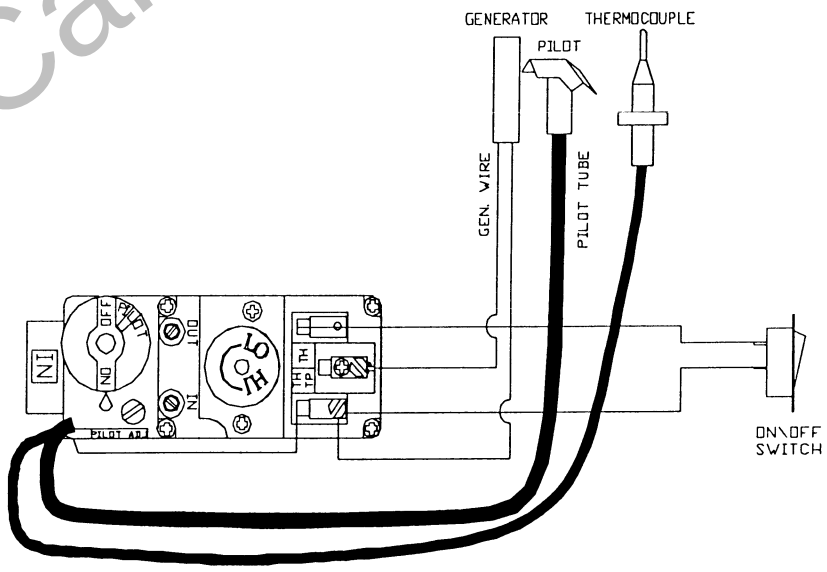
2. It is imperative that the control compartment, burner and circulation air passageways of the unit be kept clean. This is necessary to provide adequate combustion and ventilation air.

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

PROBLEM	CAUSE	SOLUTION
No spart when piezo button is depressed.	The nut which holds the piezo in place is loose.	Tighten nut.
	Wire on back of p iezo 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 and the pilot.
Pilot won't light	Gas shut off	Turn on gas
	Gas line not purged	Must be purged by qualified service technician.
	Gas line not bled out	Hold valve knob in long enough to bleed out line.
	Not holding regulator valve long enough.	Hold in longer
Pilot won't stay lit	Not holding pilot button in long enough.	Hold button in longer to heat generator.
	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 & thermocouple.

PROBLEM	CAUSE	SOLUTION
Burner won't light	Pilot not lit.	Relight pilot.
	Regulator valve not turned on.	Turn valve to "on".
	Rocker switch not turned on.	Press bottom of switch exposing the "Red" or "on" indicator.
	Rocker switch wire not connected.	Check wiring diagram figure 20 and ensure that all wires are secure.
	Generator wires loose at regulator terminals.	Reposition wires and tighten screws. See figure 20 for wiring instructions.
	Wall switch, remote control, or thermostat not conntect properly or turned to wrong setting. See figures 14A & 14B.	Connect properly or disconnect and use on/off switch on ly.
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.
	Generator wires loose at regulator terminals.	Reposition wires and tighten screws. See figure 20 for wiring instructions.
Flame too blue after 15 minutes of burning	Burner tube venturi open too far.	Contact qualified service person to adjust venturi. Approx. 3/8" open-LP gas & 1/8"-1/4" open-Natural gas.
Carbon build up inside of unit.	Incorrect log placement.	Check log placement, adjust.
	Burner tube venturi closed too far.	Contact qualified service person to adjust venturi.

Figure 20



REPLACEMENT PARTS

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

PART #	DESCRIPTION
744-400	Millivolt board - Natural Gas
744-401	Millivolt board - LP Gas
700032	Piezo Ignitor
700033	On/Off Toggle Switch
700036	Millivolt Generator
700039	Hi/Lo Adjustable regulator (Natural Gas)
700040	Hi/Lo adjustable regulator (LP Gas)
744135	Burner Tube / Cover / Log Grate Assembly
700203	Manual Gas Shut-off Valve
700213	18" Flexible Gas Line
700224	24" Flexible Gas Line (Valve to burner orifice)

PART #	DESCRIPTION
700055	Pilot / Generator / Thermocouple Assembly - Nat. Gas
700056	Pilot / Generator / Thermocouple Assembly - LP Gas
700059	Thermocouple (30-second pilot safety)
700060	Pilot Tube with fitting (to Pilot)
700230	Natural Gas Orifice - #30
700250	LP Gas Orifice - #50
OCK-330	Natural Gas Conversion Kit
OCK-350	LP Gas Conversion Kit
700267	Natural Gas Pilot Orifice
700266	LP Gas Pilot Orifice

FAN / FAN PARTS

619	Fan Kit - #744
404-4	Limit Switch Assembly (#619 fan kit)
600085	Speed Control for fan kit

REMOTE CONTROLS / THERMOSTAT

796	Remote Control with Thermostat
797	Remote Control
700038	Wall-Mount Thermostat

GLASS

700006	3/4" Glass gasket w/ PSA
70007D	17"x30" Glass W/ Full frame clip
70009D	17"x30" Oval Beveled Glass w/ full frame clip
70010D	17"x30" Grooved Panel Glass w/ full frame clip

TERMINATION KITS

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

MISCELLANEOUS

617	Lintel Iron
741002	Sundance Outer Face

UPPER / LOWER GRILL

500111	Upper Grill Spring
753	Black Upper Grill
754	Black Lower Grill
756	Brass Upper Grill
757	Brass Lower Grill

BRASS TRIM

700005	Brass Frame (fits 17"x30" glass)
700012	Brass frame magnet
700062	Brass Frame trim clip
790	Brass face trim (3 pc.)
792	Brass face trim (4 pc.)

VALANCES / SCREENS

812-S	Arched Glass Valance with Screen
812	Arched Glass Valance w/o Screen
813	Rectangular Valance with Screen
814	Rectangular Valance w/o Screen

LOG SET / REPLACEMENT LOGS

744-50B	#744 Fiber Log set
M-LOG	
C-LOG	
S-LOG	
AC-LOG	
AK-LOG	
AL-LOG	
AM-LOG	
744400	Side Refractory Panels
744401	Bottom Refractory Panels

744 DV
Revised 9/98

www.kozyheat.com

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