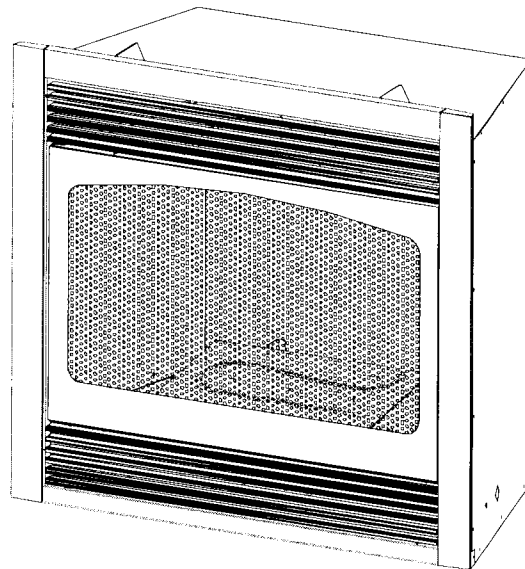


K O Z Y H E A T
Quality Fireplaces For Life

VF - 36 VENT FREE FIREPLACE



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

RETAIN THIS MANUAL FOR FUTURE REFERENCE

Warnock Hersey



OCTOBER 1998

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**INSTALLATION MANUAL
MODEL VF 36
GAS-FIRED UNVENTED ROOM HEATER**

This unit has been tested to and complies with ANSI Z21.11.2 "Unvented Room Heaters". Installation must conform with local building codes, or, in the absence of local building codes, with the National Fuel Gas Code, ANSI Z223.1 NFPA 54, or the Manufactured Home Construction and Safety Standard, Title 23 CFR, Part 3280.

**INSTALLATION AND GAS LINE CONNECTIONS MUST BE IN COMPLIANCE WITH THIS
INSTALLATION MANUAL AND CONFORM WITH LOCAL BUILDING CODES.**

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. Installation and service must be performed by a qualified installer, service agency, or the gas supplier. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

FOR YOUR SAFETY:

WHAT TO DO IF YOU SMELL GAS:

- * DO NOT TRY TO LIGHT ANY APPLIANCE.
- * DO NOT TOUCH ELECTRICAL SWITCHES.
- * DO NOT USE THE PHONE IN YOUR BUILDING. IMMEDIATELY CALL YOUR GAS SUPPLIER FROM A NEIGHBORS PHONE. FOLLOW YOUR GAS SUPPLIERS INSTRUCTIONS.
- * IF YOU CANNOT REACH YOUR GAS SUPPLIER, CALL THE FIRE DEPARTMENT.

IMPORTANT: THIS APPLIANCE IS FOR USE ONLY WITH THE TYPE OF GAS AS EQUIPPED FOR FROM THE MANUFACTURER AND IS NOT CONVERTIBLE FOR USE WITH OTHER GASES.

This is an Unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to pgs. 3-4.

THIS APPLIANCE MAY BE INSTALLED IN AN AFTER MARKET MANUFACTURED (MOBILE) HOME. CHECK YOUR STATE OR LOCAL CODES.

READ ALL OF THE ENCLOSED INFORMATION BEFORE OPERATING THIS UNIT. EVERY PERSON WHO USES THIS APPLIANCE MUST UNDERSTAND AND FOLLOW CORRECT LIGHTING PROCEDURE FOR SAFE OPERATION. NOT FOR USE BY CHILDREN. HANDLE METAL PARTS WITH CARE TO AVOID INJURY.

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 the entire control system.

IMPORTANT: The screen installed in this appliance must be in place at all times when in operation to prevent foreign objects from entering the unit.

CAUTION: HOT WHILE IN OPERATION

The screen, grills and surface of this fireplace become hot while in operation.
Precautions must be taken to avoid serious burns when handling.

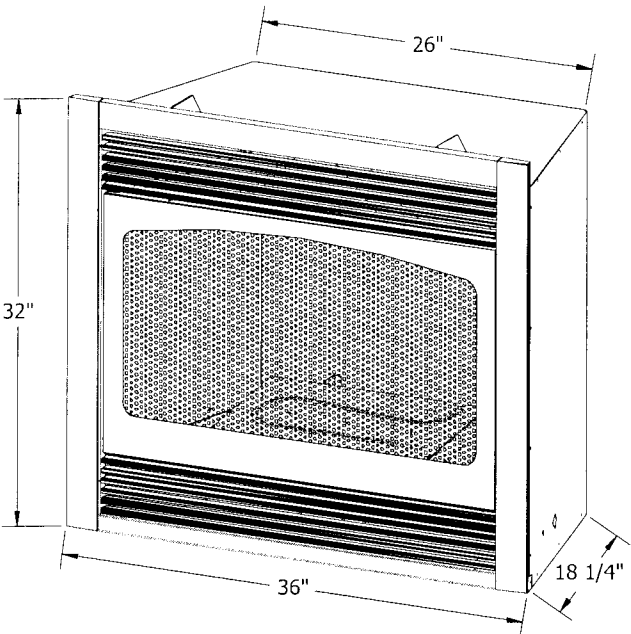
Keep burner and control compartment clean. See installation and operating instructions.

For proper ventilation around the unit, do not obstruct the upper and lower grill openings. Air enters the unit at the lower grill and exits at the upper grill.

I. GENERAL INFORMATION

A. UNIT SPECIFICATIONS

- Height: 32"
- Width: 36"
- Back Width: 26"
- Depth: 18 1/4"

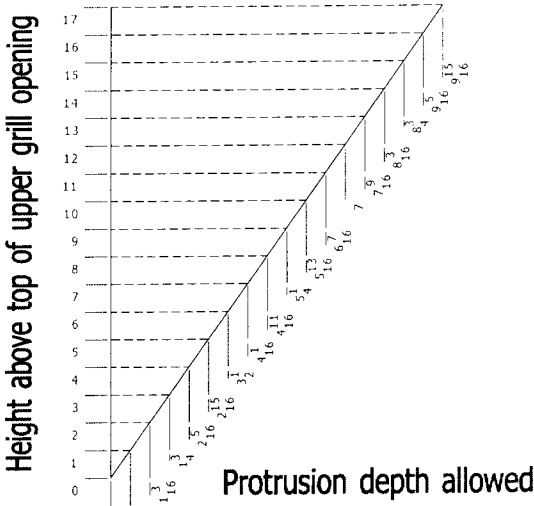


B. CLEARANCE TO COMBUSTIBLES:

- Unit left side, right side: 0"
- Unit top & back: 0"

- Adjacent sidewall: 9"
- Protrusion* above air discharge opening: 12" (or per chart)
- Protrusion* maximum depth: 7" (or per chart)

*includes mantel, shelves, alcove, etc.



II. INSTALLATION GUIDELINES

IMPORTANT: THIS HEATER SHALL NOT BE INSTALLED IN A CONFINED SPACE UNLESS PROVISIONS ARE PROVIDED FOR ADEQUATE COMBUSTION AND VENTILATION AIR.

The National Fuel Gas Code defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 BTU per hour (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 BTU per hour (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

Unusually tight construction is defined as where:

- * Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of 1 perm or less with openings gasketed or sealed and
- * Weather stripping has been added on operable windows and doors, and
- * Caulking and sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

SIZING THE UNIT

NOTE: ALTHOUGH THE VF36 IS CAPABLE OF HEATING OVER 1,000 SQ. FT., THIS UNIT REQUIRES THAT IT BE INSTALLED IN AN AREA WITH AT LEAST 1800 CU. FT. OF VOLUME, WHICH IS EQUIVALENT TO A 12' X 20' ROOM FOR SUFFICIENT COMBUSTION AIR.

Use this worksheet to determine if you have confined space or unconfined space:

IMPORTANT: Include the room in which installation is desired as well as adjoining rooms with doorless passageways or ventilation grills between rooms.

NOTE: Due to the heat output of this appliance be sure that the room in which installation is desired, when determined 'unconfined space', is large enough to prevent the room from overheating.

1. Determine your volume of air:

Room size - Length:	_____ x	Example: Length:	24' x
Width:	_____ x	Width:	18' x
Depth:	_____ =	Height:	8'
Cu. Ft.	_____ (volume of air)	Cu. Ft.:	3,456 (volume of air)

If additional ventilation to adjoining rooms is supplied with grills or doorless openings, include that volume of air to the total.

2. Divide your total by 50 cubic feet. This will determine the maximum BTU/HR the space can support.

Total volume of air _____ ÷ 50 cubic feet = _____ Maximum BTU / Hour.

Example: Total volume of air: 3456 ÷ 50 cu. ft. = 69.1 or 69,100 Maximum BTU/Hour.

3. Add the BTU / Hour rating of all fuel burning appliances located in the space.

Vent-free heater	_____	BTU / HR		
Gas Water Heater	_____	BTU / HR	Example:	
Gas furnace	_____	BTU / HR		
Vented gas heater	_____	BTU / HR	Gas water heater	30,000 BTU / HR
Gas Fireplace logs	_____	BTU / HR	Ventless fireplace	+ 36,000 BTU / HR
Gas Oven appliance	_____	BTU / HR		
Other gas appliance	_____	BTU / HR	TOTAL	= 66,000 BTU / HR
TOTAL	= _____	BTU / HR		

***Do not include direct-vent gas appliances. These types of appliances use combustion air from the outdoors and vents to the outdoors.**

4. Compare your total from #2 (maximum BTU / HR the space can support) with the actual amount of BTU / HR being supported from #3.

_____ BTU/HR (max. space can support) _____ BTU/HR (actual amnt.supported)

Example: 69,100 BTU/Hr (max. space can support) 66,000 BTU/HR (actual amnt. supported)

The space in the above example is an unconfined space because the actual BTU / HR used is less than the maximum BTU / HR the space can support. No additional fresh air provisions are necessary.

If the actual BTU / Hour used is more than the maximum BTU / Hour the space can support (confined space), additional fresh air must be provided by one of the following:

1. Add the air volume of another adjoining room (not previously factored in) to your original worksheet. If the extra room provides the necessary air volume, remove any doors to the adjoining room or add ventilation grills between rooms.
2. Vent room directly to the outdoors.

WARNING:
IF THE AREA IN WHICH THE HEATER MAY BE OPERATED IS SMALLER THAN THAT DEFINED AS AN UNCONFINED SPACE, PROVIDE ADEQUATE COMBUSTION AND VENTILATION AIR BY ONE OF THE METHODS DESCRIBED IN THE NATIONAL FUEL GAS CODE ANSI Z223.1, 1992, SECTION 5.3.

IMPORTANT: THIS UNIT MAY NOT BE INSTALLED IN A BEDROOM OR BATHROOM.

III. GAS LINE INSTALLATION GUIDELINES

A. MINIMUM / MAXIMUM PRESSURES

Natural Gas Only:
The minimum inlet gas supply pressure: 5.0 IN W.C.
The maximum inlet gas supply pressure: 11.0 IN W.C.
Manifold pressure: 3.5 IN W.C.
Manifold Pressure (Lo Setting): 1.7 IN W.C.
Input Rating: (0-4000 FT.): 36,000 BTU's
Orifice Size: (0-4000 FT.): #31

LP Gas Only:
The minimum inlet gas supply pressure: 11.0 IN W.C.
The maximum inlet gas supply pressure: 13.0 IN W.C.
Manifold Pressure: 10.0 IN W.C.
Manifold Pressure (Lo Setting): 5.4 IN W.C.
Input Rating: (0-4000 FT.): 35,000 BTU's
Orifice Size (0-4000 FT.): #51

FACTORY EQUIPPED FOR USE AT 0-4000 FT.

B. LEAK / PRESSURE TESTING

Inlet pressure: The inlet pressure check point is the tap [Item D] located above the control knob [item A].

Manifold Pressure: The manifold (outlet) pressure check point is the tap [item C] located above the hi/lo control knob [item B]. The pressure should be checked with the heater burning and the control set on 'high'.

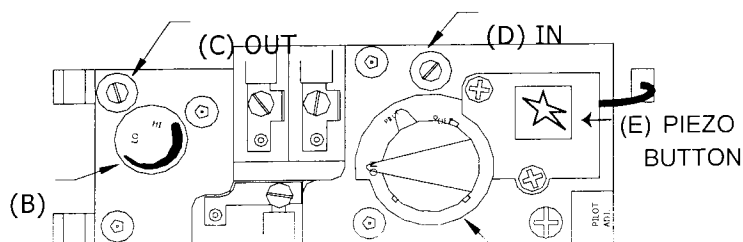
To check either of these pressures, loosen but do not remove the inset screw and attach test equipment. After test is complete, tighten inset screw and check for leaks. Refer to figure 1 below.

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 psig.

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 psig.

NOTE: Upon initial installation, it may be necessary to bleed out air in the gas lines. Do this by holding in the control knob and turning the knob to the pilot position for about 30 seconds.

Figure 1



C. RUN / CONNECT THE GAS LINE

INSTALLATION OF THE GAS LINE MUST ONLY BE DONE BY A QUALIFIED PERSON IN ACCORDANCE WITH LOCAL BUILDING CODES.

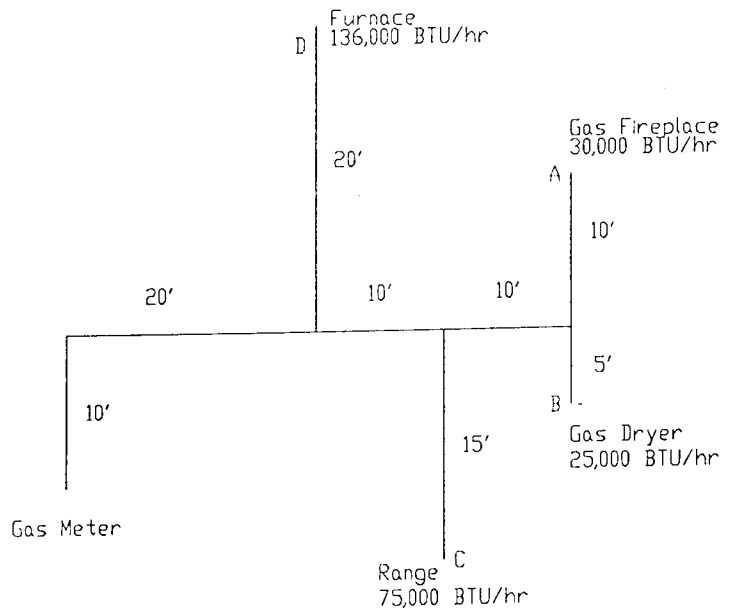
NOTE: This unit is equipped with a 3/8" flexible gas connection, 12" long.

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

1. Run the gas line. An accessible shut off valve must be installed upstream from the regulator.
2. This unit is designed to accept either a 3/8" or 1/2" gas line approved for gas installations. 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.

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

<u>Tubing Size</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'



SOLUTION TO EXAMPLE

(1) Maximum demand for outlet "A"	30 CFH
Maximum demand for outlet "B"	25 CFH
Maximum demand for outlet "C"	75 CFH
Maximum demand for outlet "D"	<u>136 CFH</u>
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" supply 30 cubic feet an hour requires 1/2" pipe. Outlet "B", supplying 25 cubic feet an hour requires 1/2" pipe. Section 1 supply outlets "A" & "B", 55 cubic feet an hour requires 1/2" pipe.

IV. FIREPLACE RECESSED (BUILT-IN) INSTALLATION

**INSTALLATION AND REPAIR SHOULD ONLY BE DONE BY A QUALIFIED INSTALLER
IN ACCORDANCE WITH LOCAL BUILDING CODES.**

IMPORTANT: **ELECTRICITY** is required for operation of the optional fan kit (#600-1). The wiring must be done prior to enclosing the sides of the unit.

A. POSITION THE UNIT. See figure 2.

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

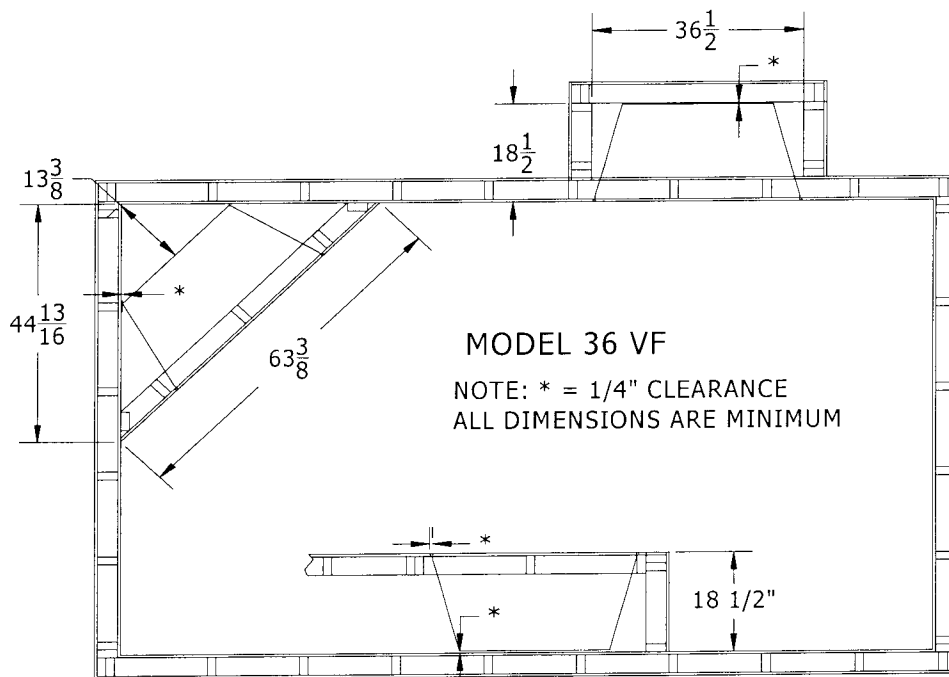
NOTE: Location must conform with minimum clearance to combustibles as outlined on page #2 of this installation manual.

**This unit may be installed on either the outside or inside of an exterior wall. See figure 2 for various installation options.

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

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

Figure 2

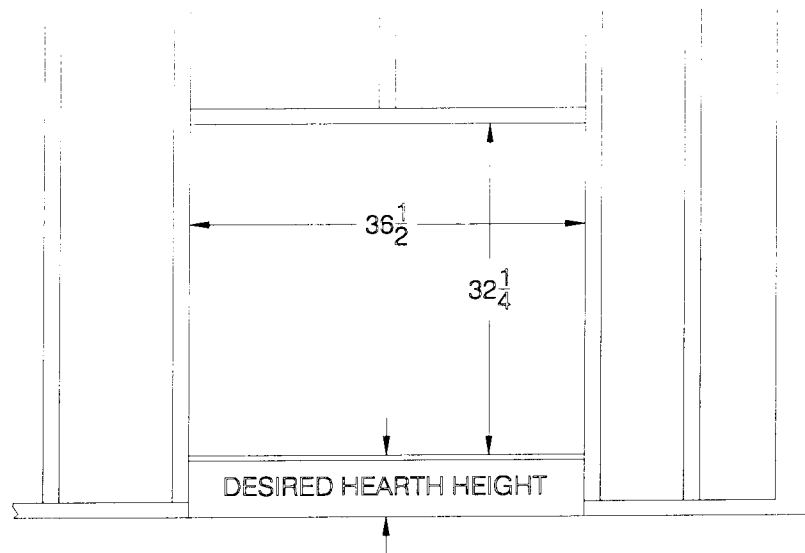


B. Rough in the wall enclosure. □ See figure #3.

The minimum rough opening dimensions are:

Height: 32 1/4"
Width: 36 1/2"
Depth: 18 1/2"

Figure 3



C. Build the hearth to the desired size and height. □ See figure #3.

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 36" wide x 18 1/4" deep.

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

PROVIDE FOR A MINIMUM OF 6" OF CLEARANCE IN FRONT OF THE LOWER GRILL. THIS WILL PROVIDE ADEQUATE SPACE TO OPEN THE LOWER GRILL AND OPERATE THE CONTROLS.

Do not obstruct the upper and lower grill areas to allow proper ventilation around the unit. Air enters the unit at the lower grill, and exits at the upper grill. Blocking these passages may result in overheating the fireplace creating a potentially hazardous situation.

D. Place the unit into position.

V. REMOVE THE SCREEN ASSEMBLY:

- A. Remove the upper grill by lifting it up far enough to clear the bottom holes and pull bottom of grill out.
- B. Loosen and remove the (2) screws securing the screen assembly at the bottom as shown and lift entire assembly up and off the mounting screws at the top of the firebox.
- C. Remove the box of logs from the unit.

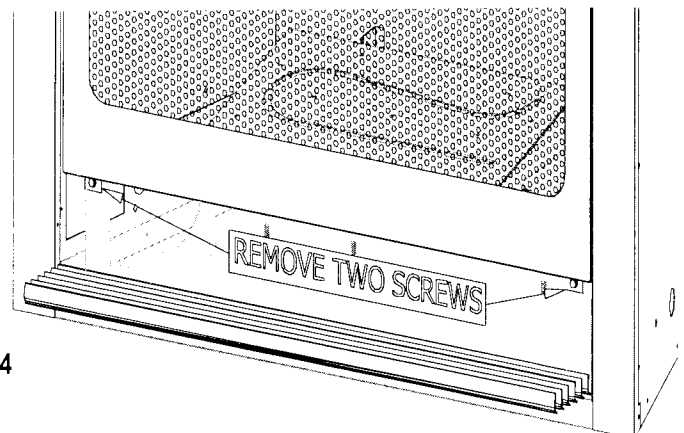


Figure 4

VI. CONNECT THE GAS LINE

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

- A. Gas line holes are located on both sides and on the left side of the interior floor of the unit.
- B. Connect the gas line to the manual shut-off valve.
- C. Complete installation of the gas line.
- D. Refer to pages #5-6 for complete gas pressure requirements & testing procedures.

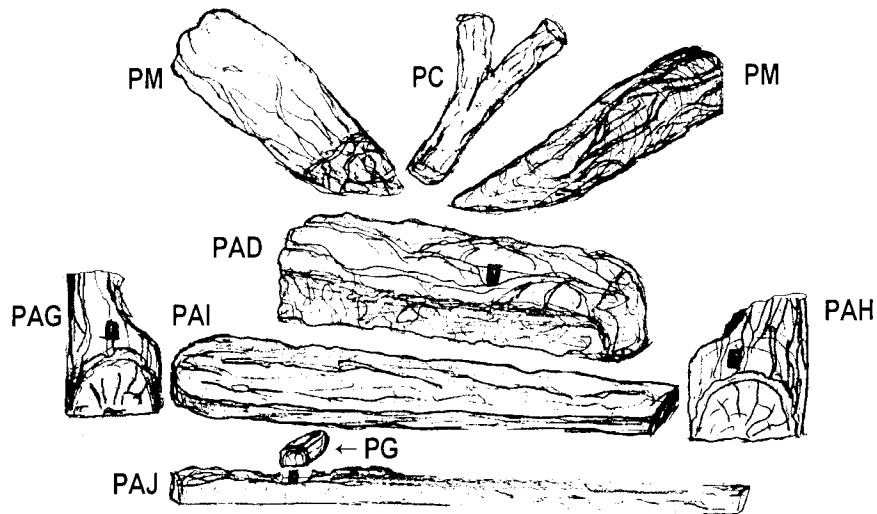
CHECK ALL CONNECTIONS WHETHER FIELD OR FACTORY MADE!

VII. LOG INSTALLATION. See Figures 5A & 5B

This #PVF-500 log set includes:

(1) 'PAD' log	(1) 'PAI' log	(1) 'PAJ' log
(1) 'PAG' log	(2) 'PM' logs	(1) 'PG' log
(1) 'PAH' log	(1) 'PC' log	

Figure 5A



NOTE: PINS OR ALIGNMENT HOLES HAVE BEEN INCORPORATED INTO THESE LOGS TO ENSURE PROPER PLACEMENT. FOLLOW INSTRUCTIONS BELOW AND REFER TO THE DIAGRAMS AS NECESSARY.

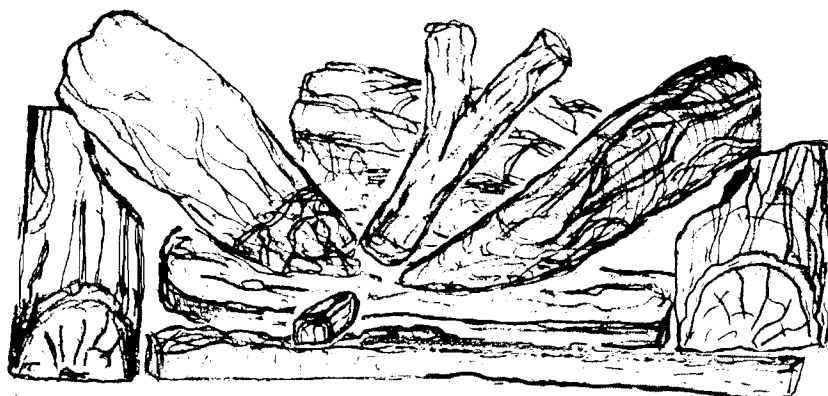
- A. Make sure that the ODS board is properly positioned and secured. Refer to page #17 for complete instructions.
- B. Place the 'PAD', 'PAG', 'PAI', & 'PAH' logs into position on the burner cover aligning the holes in the bottom of the logs to the corresponding pins in the burner cover.
- C. Position top logs 'PM' and 'PC' onto the previously positioned logs as shown*.
- D. Position the 'PAJ' log behind the log grate and set the 'PG' log onto the 'PAJ' log*.

***Refer to completed log set diagram, figure 5B.**

ATTENTION HOMEOWNER / INSTALLER:

TO ACHIEVE OPTIMUM GLOW AND FLAME APPEARANCE, IT MAY BE NECESSARY TO SLIGHTLY ADJUST THE VENTURI SHUTTER POSITION.

Figure 5B



Installed Log Set

VIII. COMPLETE THE INSTALLATION

- A. Complete installation of any optional components. See pages 18-19 for complete instructions on optional component installation.
- B. Complete the fireplace walls.
- C. Perform lighting & shutdown procedures as described on pages #12-13.
 - 1. Verify proper operation of unit.
- D. Replace fireplace screen assembly. Refer to Figure 4, page #8
 - 1. Align the holes in the top of the screen assembly over the mounting screws located at the upper grill opening.
 - 2. Place the screen assembly so it is flush with the front of the fireplace front.
 - 3. Align the holes in the tabs at the bottom of the screen assembly to the mounting holes located on the legs of the fireplace and secure with (2) screws.

E. Upper grill - Replace:

1. Line the rods of the grill up with the upper holes. Ensure the springs are in place.
2. Place the rods in the holes and push up until the bottoms of the rods clear the screen assembly frame.
3. Place the bottom of the rods into the lower holes and release. The grill will set down into place.

Remove:

1. Lift the upper grill up far enough to clear the bottom holes. Pull bottom of grill out.

F. Lower Grill - See Figure 6.

Remove:

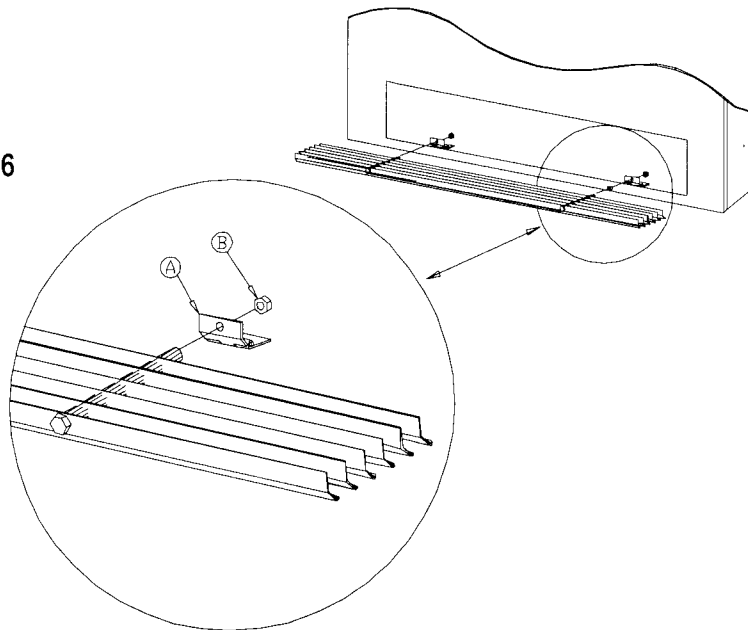
1. Remove the 1/4" nuts (B) from the lower grill assembly.
2. Pull the entire grill assembly out of the hinges.
3. Re-attach the 1/4" nuts (B).

Replace (if removed during installation)

1. Remove the 1/4" nuts (B) from the lower grill assembly.
2. Slip the bolts through the hinges (A).
3. Re-attach the 1/4" nuts (B).

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

Figure 6



IX. LIGHTING & SHUTDOWN

FOR YOUR SAFETY - READ BEFORE LIGHTING!

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

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. **DO NOT ALLOW SOAPY WATER TO GET INTO THE O.D.S. PILOT!!**

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 1/2 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 psi.

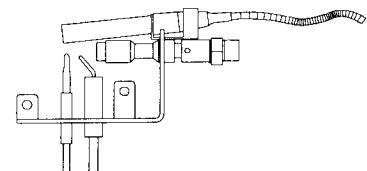
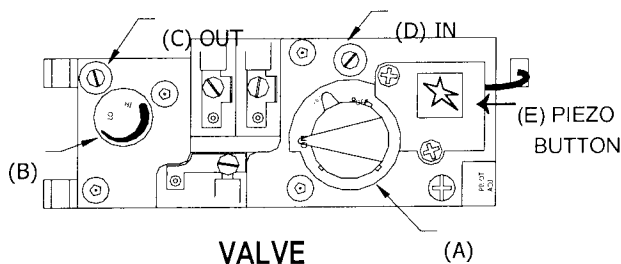
INLET PRESSURE TEST: The inlet pressure check point is the tap [item D] located above the control knob [A]. Refer to page #5 for instructions.

MANIFOLD PRESSURE TEST: The manifold (outlet) pressure check point is the tap [item C] located above the hi/lo control knob [item B]. Refer to page #5 for instructions.

NOTE: Read 1-12 before lighting the unit for the first time.

PIEZO ↗

1. Open the lower grill by grasping the center of the top louver, and pull out and down.
2. If a thermostat is used, turn to the lowest setting.
3. Make sure the manual shut off valve is fully open.
4. Turn control knob [A] clockwise ↘ to the "OFF" position.



5. Wait five (5) minutes to clear out any gas. Smell for gas, including near the floor. If you 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 the metal tube from the gas control. The pilot is behind the burner tube.
7. Turn the control knob [A] counterclockwise ✓ to the "PILOT" position. Press in control knob for (15) fifteen seconds.
8. With control knob [A] pressed, in push the plunger on the piezo (E) until the pilot lights. Hold the knob down until a strong flame is present (approximately 60 seconds).

9. Release the knob. The shaft will move upward and engage the safety lever that opens the safety valve.

- * If control knob does not pop up when released, contact a qualified service person or gas supplier for repairs.
- * If pilot does not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.

NOTE: If pilot goes out, STOP! Wait five (5) minutes before attempting to light pilot again. Repeat steps 6-9.

10. Turn control knob (A) counterclockwise ✓ to the "ON" position, the burner will light.

11. If using a thermostat, turn control knob [A] to counterclockwise to the "ON" position. Set thermostat to desired setting.

CAUTION:

Do not try to adjust heating levels by using the manual shut off valve!

12. Close the lower grill.

13. To turn the burner off, turn the control valve to the 'PILOT' position. If using a thermostat, turn to the lowest setting.

TO TURN OFF GAS TO APPLIANCE:

1. Turn the burner off, then turn control knob clockwise ✗ to the 'PILOT' position.
2. To turn the pilot off, turn the control knob clockwise ✗ to the 'OFF' position.

IMPORTANT: Turn off all electric power to the appliance if service is to be performed.

NOTE: Once the control knob has been turned to 'OFF', the knob will not turn to re-light the pilot until it has reset. You will hear a 'click' approximately one minute after pilot has been turned off.

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.

DUE TO HIGH TEMPERATURES, THIS APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.

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 flammables should not be placed on or near this appliance.

SIT 820 VALVE LIGHTING & SHUTDOWN INSTRUCTIONS

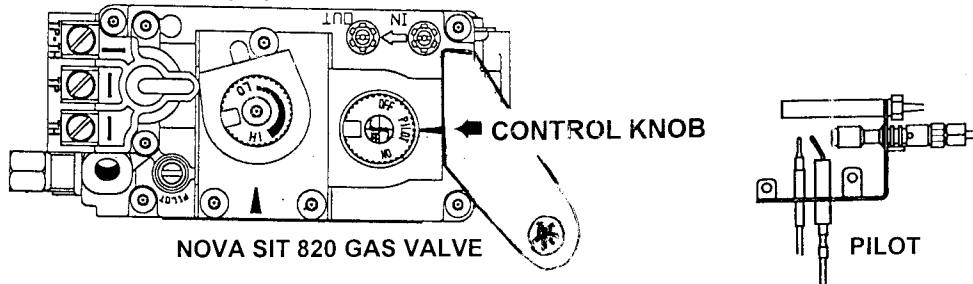
FOR YOUR SAFETY - READ BEFORE LIGHTING!

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

NOTE: Prior to lighting, check all fittings for leakage. This is accomplished by applying soapy water on all connections, whether field or factory 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. **DO NOT ALLOW SOAPY WATER TO GET INTO THE O.D.S. PILOT!**

NOTE: Read Steps 1-10 before lighting this unit for the first time.

1. Open the lower grill by grasping the center of the top louver, and pull out and down.
2. If a thermostat, remote control or wall switch is used, turn to the lowest setting or 'OFF'.
3. Make sure the manual shut off valve is fully open.
4. Push in the gas control knob slightly and turn clockwise ↘ to 'OFF'. See figure below.
5. **WAIT 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. Turn the control knob counterclockwise ↙ to 'PILOT'.
7. Push in control knob all the way and immediately light pilot by depressing the piezo igniter button at least once every second until a flame appears. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back out. Pilot should remain lit. If it goes out, repeat steps 4 through 7.

***If the control knob does not pop out when released, stop and call your service technician or gas supplier.**

***If the gas pilot will not stay lit after several tries, turn the gas control knob to 'OFF' and call your service technician or gas supplier.**

8. After the pilot has been lit, the burner can be turned on by turning the knob counterclockwise ↙ to the 'ON' position.
9. If a thermostat, wall switch or remote is used, set to desired setting or turn to the 'ON' position.
10. Close lower grill.

TO TURN THE BURNER OFF:

Turn the control knob to 'PILOT' position. If using a thermostat, turn to the lowest setting. If using a wall switch or remote control, turn to the 'Off' position.

TO TURN GAS OFF TO THE APPLIANCE:

1. Turn the burner off, then turn the control knob clockwise ↘ to the 'PILOT' position.
2. To turn the pilot off, push in control knob slightly and turn clockwise to 'OFF'. Do not force.

X. MAINTENANCE REQUIREMENTS

CAUTION: DO NOT USE THIS ROOM HEATER IF ANY PART HAS BEEN UNDER WATER. IMMEDIATELY CALL A QUALIFIED SERVICE TECHNICIAN TO INSPECT THE ROOM HEATER AND REPLACE THE ENTIRE CONTROL SYSTEM.

1. The appliance should be inspected at least once a year by a professional service person. Do not use any cleaning solvent / fluids to clean the logs or any other part of the heater.

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.

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

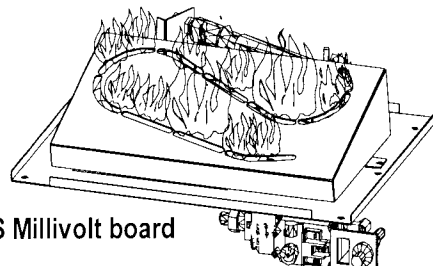
CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. VERIFY PROPER OPERATION AFTER SERVICING.

WARNING: FAILURE TO POSITION THE PARTS IN ACCORDANCE WITH THE DIAGRAMS OR FAILURE TO USE ONLY PARTS SPECIFICALLY APPROVED WITH THIS HEATER MAY RESULT IN PROPERTY DAMAGE OR PERSONAL INJURY.

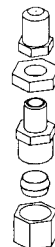
WARNING: ANY CHANGE TO THIS HEATER OR ITS CONTROLS CAN BE DANGEROUS.

ODS BOARD SYSTEM

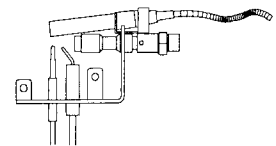
1. Annual cleaning of the burner is required. A vacuum cleaner may be used to clean the heater.
2. Remove the logs and carefully vacuum dust and loose particles from the base, logs and around the burner. Gloves should be used when handling the logs to prevent irritating the skin.
3. The burner tube / cover may be removed for easier access.
4. Remove the burner tube / cover by loosening the two nuts securing it on each side of the burner cover.



ODS Millivolt board



Burner Orifice



ODS Pilot

5. Visually check for blocked port holes, especially near the pilot. Blocked port holes may cause delayed ignition. The flames should be steady, not lifting or floating.

SCREEN CLEANING

- Clean screen only when cool and only with non-abrasive cleansers.
- **Do not** operate this fireplace with the screen assembly removed.
- The fireplace screen may discolor after several uses. This may be repainted by using a high temperature rated paint.

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

XI. ODS BOARD

WARNING: The ODS board may only be used ONLY for the type of gas as listed and is not convertible for use with other gases.

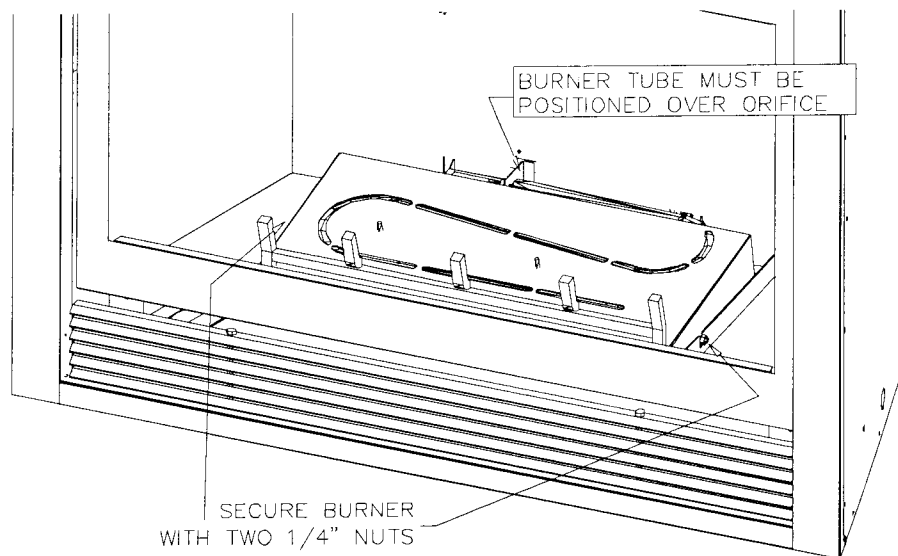
IMPORTANT: All controls and valves have been pre-set at the factory. Do not attempt to adjust these settings as it may result in improper operation. If you experience any problems with this ODS board, please contact your dealer for specific instructions.

NOTE: The unit is equipped with the ODS board & burner/cover assembly already in position. The ODS board must be secured in place using the nuts included in the components packet. Follow instructions 'INSTALLING THE BOARD' on page #17 to properly secure the board and burner/cover assembly in place. Follow these procedures should the ODS board need replacing or must be removed.

A. Removing the board:

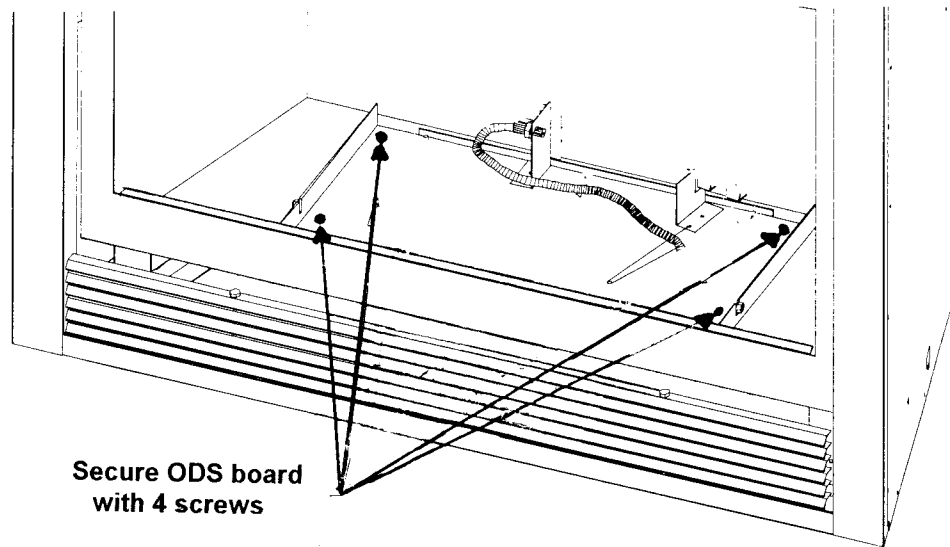
1. Shut off the gas supply at the manual shut-off valve.
2. Disconnect gas line flex tube from the manual shut-off valve.
3. Disconnect any wall switch, remote control or thermostat from the valve.
4. Remove the upper grill, screen assembly and the logs from the unit.
5. Loosen and remove the (2) 1/4"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

Figure 1A



6. Loosen and remove the (4) screws securing the board and, while grasping the board, gently lift it up and remove from the unit.

Figure 1B



INSTALLING THE BOARD

1. Grasp the board with both hands and place into the unit, lining up the four holes in the board to the holes 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. Secure with the 4 screws (included with the board assembly).
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, screen assembly and upper grill.

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

7. Verify proper operation and log position by following lighting & shutdown instructions.

XII. FAN WIRING & INSTALLATION INSTRUCTIONS

A. GENERAL INFORMATION

This optional fan kit #600-1 includes:

1. Right and left fan assemblies with fan and limit switch already mounted.
2. Components package: Includes speed control with mounting bracket, nut & knob*, (4) nuts, installation instructions.

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

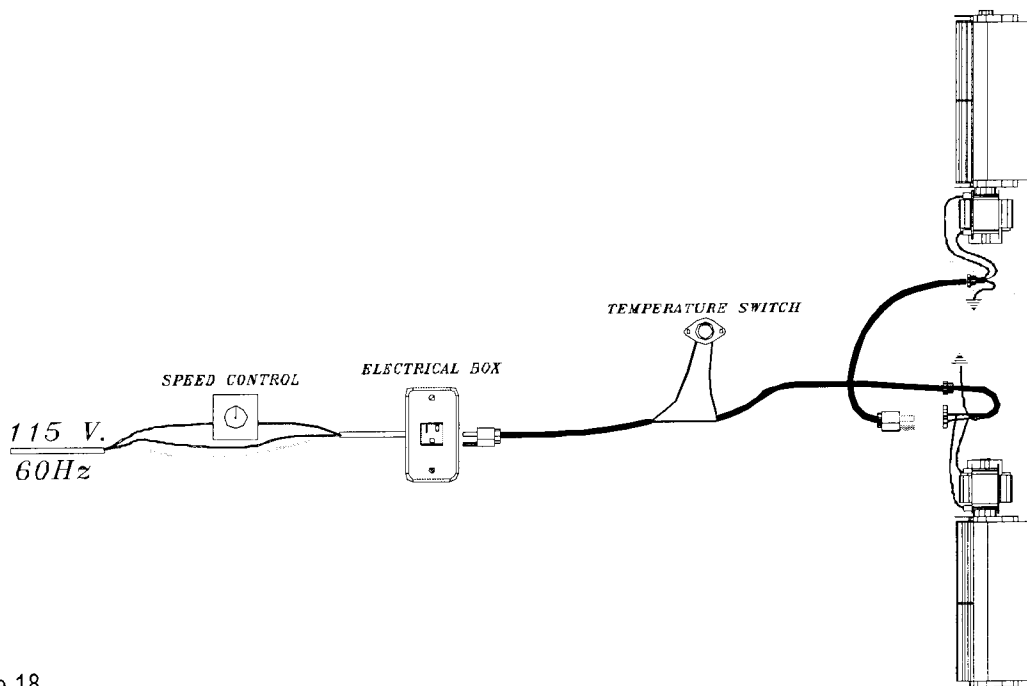
IMPORTANT: CODE APPROVED LINE VOLTAGE WIRING 16 GAUGE OR BETTER MUST BE USED WHEN WIRING THIS SYSTEM.

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.

Note: The limit switch controls the fan operation and should be placed on the bottom of the firebox (magnet attached), approximately in the center. The fan will not operate until sufficient heat has been applied to this switch. The fan will turn on and off automatically as the fireplace heats & cools.

WARNING: Electrical Grounding Instructions -This fan is equipped with a three-prong (grounding) plug for your protection against shock hazard and 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-Current Edition.

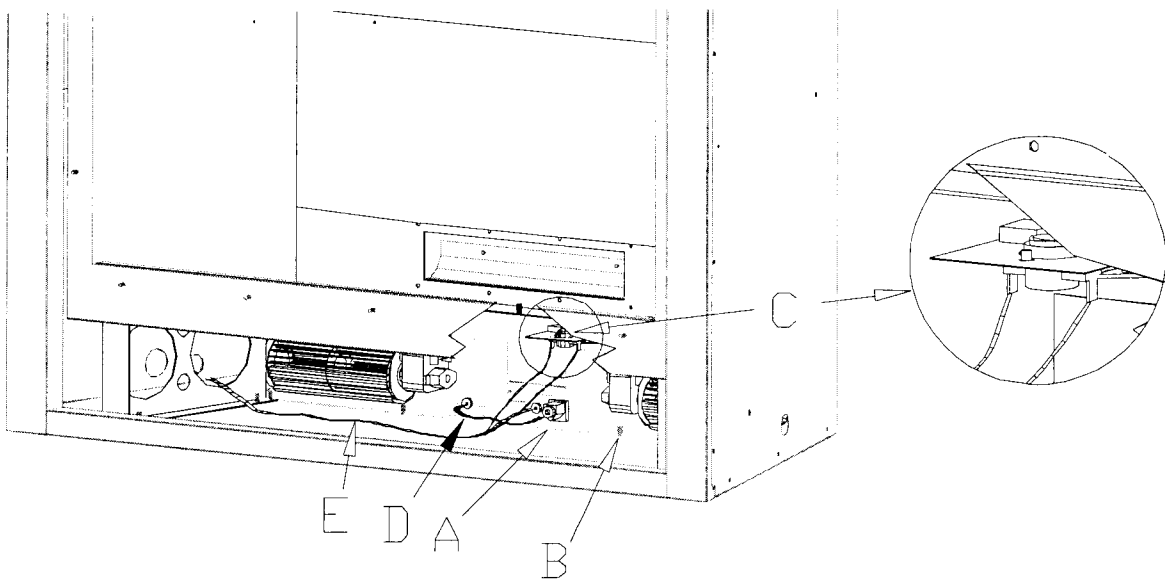
Do not cut or remove the grounding prong from this plug.



B. INSTALLING THE FAN - See figure 1 below.

1. Remove the lower grill , if not previously removed. (Refer to page #11.)
2. Slide the left fan (without receptacle) through the lower grill opening and place over the (2) left mounting studs (B) located towards the back of the unit.
3. Slide the right fan(with receptacle) (A) through the lower grill opening and place over the (2) right side mounting studs (B) located towards the back of the unit.
4. Place nuts on mounting studs and tighten.
5. Plug fans together by inserting the white three-prong male end on the short fan cord on the left fan assembly into the receptacle in the right fan assembly.
6. Install electrical box and mount the speed control on a wall, if desired.
7. Snap the receptacle into the cover (included with the fireplace components packet).
8. Insert 115V wiring (with ground) through the romex connector installed in the electrical box in the side of the unit and wire to the receptacle.
9. Place the cover on the electrical box (in the side of the unit) and secure with screws.
10. Place the limit switch (C) on the bottom of the firebox.
11. Plug cord (E) into receptacle in the electrical box.
12. Turn on/off speed control clockwise until it clicks.

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



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

IMPORTANT: VERIFY PROPER OPERATION AFTER SERVICING.

IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE FAN MUST BE REPLACED, IT MUST BE REPLACED WITH WIRE OF AT LEAST 140° TEMPERATURE RATING.

XIII. THERMOSTAT - WALL SWITCH - REMOTE INSTALLATION (optional).

CAUTION: DO NOT connect high voltage (115 V) 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. Disconnect wire connection from the top left and bottom terminals. (Save for possible future use.)

SIT VALVES: Disconnect white wire from the top and bottom terminals. (Save for possible future use.)

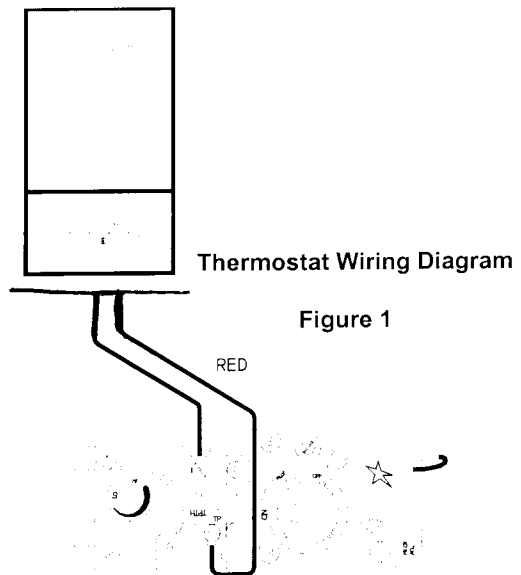
3. Run **low-voltage** (thermostat) wire from the fireplace, to the desired location of the thermostat or wall switch. Do not run wire more than 30'.

4. Connect the wiring to the top left and bottom terminals.

SIT VALVES: Connect the wiring to the top and bottom terminals.

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.

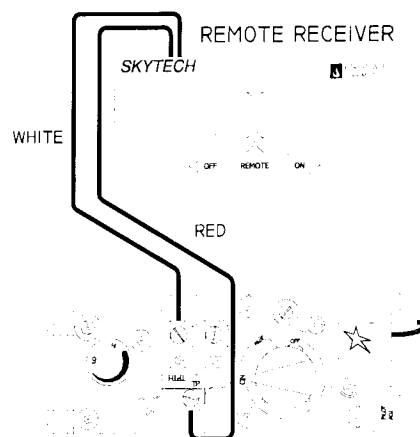
IMPORTANT: No high voltage (115v) is required to operate any of these systems.



The control valve must always be in the 'ON' position if any of the above systems are installed on the unit.

Note: The fireplace must be turned 'on' and 'off' by the same method. For example: If the fireplace is turned 'on' by the remote, it must be turned 'off' by the remote.

To turn gas off to the burner, turn the control valve clockwise to the 'PILOT' position. The thermostat or remote will not turn the unit on unless the control valve is turned to the 'ON' position.



Remote Control Wiring Diagram

Figure 2

XIII. TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
Pilot won't light	Gas has not been turned on.	Turn gas supply on. Open manual shut-off valve.
	Air in the line.	Purge air in the line by holding in the control knob while in the "pilot" position for several minutes. Contact a qualified plumber to purge the air in the at the nearest connection to the unit.
	No spark at ignitor.	Visually check for spark at ignitor. Check wire connection at pilot. Check for pinched piezo wire either by the ODS board or pipe connection made by the plumber.
Control knob will not turn.	Valve has not reset.	Wait for the valve to reset. You will hear a 'click' approximately one minute after pilot has been turned off.
	Valve has not reset.	Wait for the valve to reset. You will hear a 'click' approximately one minute after pilot has been turned off.

PROBLEM	CAUSE	REMEDY
Burner won't light	Pilot not lit.	Light pilot.
	Control knob has not been turned to the "on" position.	Turn control knob counter clockwise to the "on" position.
	Shut off valve not fully open.	Check shut off valve and open.
	Thermostat setting too low.	Change setting on thermostat.
	Batteries low in remote control.	Replace batteries in both the transmitter and receiver components of the remote control.
Unit turns off	Unit has been installed in too small a room.	Provide additional ventilation. See pages 3-4.
	There is a leak in the gas line or gas line connection.	Check all connections whether field or factory made for leaks.
	Obstruction at or near pilot.	Remove any obstructions.
	Logs not positioned properly.	Position logs as shown on pages 9-10.
	Burner and / or pilot dirty.	Have burner and pilot cleaned by a qualified service technician.
	O.D.S. pilot loose or out of adjustment.	Check screws securing O.D.S. Pilot for tightness - DO NOT MOVE OR ADJUST THIS O.D.S. PILOT TO ANY OTHER POSITION!
	Thermostat setting too low.	Change setting on thermostat.
Fan does not turn on.	Unit has not been burning long enough.	It may take up to 15 minutes for the fan to turn on, especially if the unit is cold.
	Fan limit switch not in proper location.	Place fan limit switch under the firebox, approximately in the center.

PROBLEM	CAUSE	REMEDY
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(Fan does not turn on con't.)

Fan not plugged in.	Plug fan cord into properly grounded outlet.
No current at the outlet. (Check with a test or another appliance.)	Re-set circuit breaker or GFI breaker.
Variable speed control has not been turned on.	Turn counter clockwise to off then clockwise until you hear a 'click'. (Note: The fan speed is on 'high' in this position.)
Fan is obstructed	Disconnect fan from electrical current. Manually rotate fan to make sure that it moves freely. With a flashlight, check for foreign objects. (This may require removal of the fan, refer to pages 17 & 18.) Remove any obstructions. To inspect the fan after it has been removed from the unit, a jumper wire must be used to bypass the thermal disc and should only be done by a qualified electrician.

XV. UNIT IDENTIFICATION

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.

INSTALLER / HOMEOWNER: Please complete the following information prior to installation.

PURCHASE DATE: _____ **CERTIFICATION LABEL # WHI:** _____

MODEL NUMBER: _____ **ODS BOARD SERIAL NUMBER:** _____

XVI. REPLACEMENT PARTS

The following replacement parts may be purchased from your local dealer.

<u>Part Number</u>	<u>Description</u>
VF-400	ODS Millivolt Board - Natural Gas
VF-401	ODS Millivolt Board - LP Gas
36VF35A	Burner / Cover / Log grate
600-1	Fan Kit
600-085	Speed Control
404-4	Limit Switch
700-038	Wall Mount Thermostat
796	Remote Control with thermostat
797	Remote Control
VF-200	Brass Accent Upper Grill (brass & black)
VF-201	Brass Accent Lower Grill (brass & black)
936-20B	Brass Upper Grill (all brass)
936-21B	Brass Lower Grill (all brass)
936-200	Black Upper Grill
936-201	Black Lower Grill
617	Lintel Iron
936-080	Black Interior Trim
936-081	Black Exterior Trim
500-936	Brass trim for arched frame (2 pc.)
VF-102	Honeycomb Screen (replacement)
VF-103	Arched frame for honeycomb screen (replacement)
936-900	Refractory Sides & Back - 3 pc.
PVF-500	9 piece log set Includes: (1) 'PAD' log (1) 'PAG' log (1) 'PAH' log (1) 'PAI' log (2) 'PM' logs (1) 'PC' log (1) 'PAJ' log (1) 'PG' log

Manufactured by:

**Hussong Manufacturing Co., Inc.
204 Industrial Park Drive
Lakefield, Minnesota 56150**

Patents Pending

October 1998