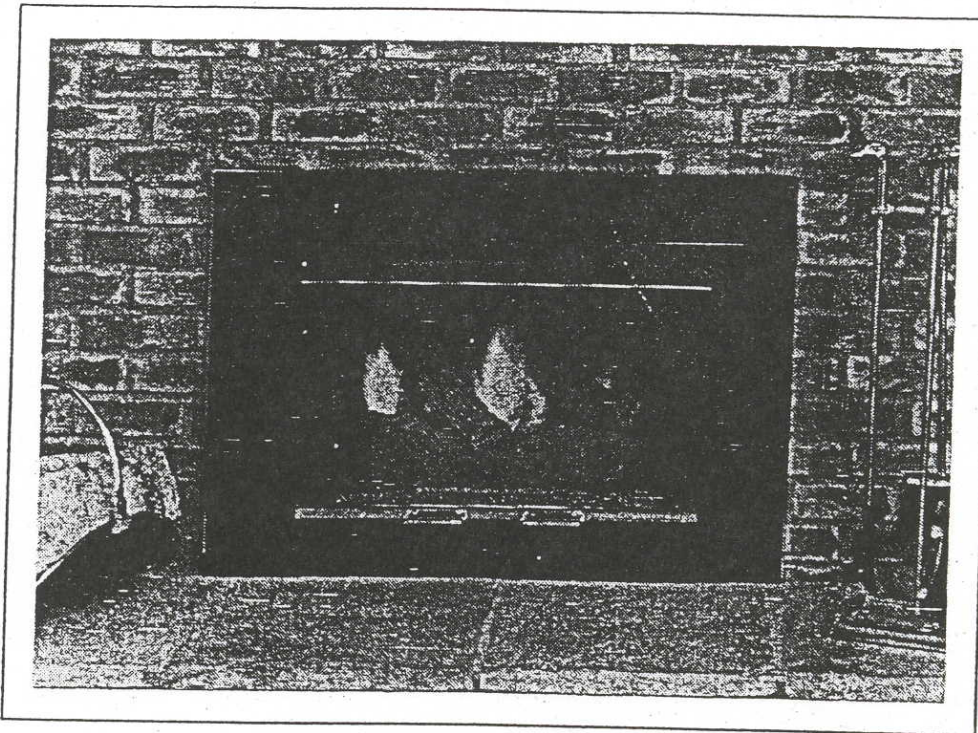


This appliance has been retired.
Service parts pages within have been removed.
For replacement parts, please refer to the individual
service parts list located on the brand websites.



PATENT 4,875,464 AND PATENTS PENDING

MODEL 4000INC INSTALLATION AND OPERATION INSTRUCTIONS

A.G.A. DESIGN CERTIFIED
AND
CGA CERTIFIED



THIS MANUAL MUST BE USED FOR INSTALLATION AND RETAINED BY THE HOMEOWNER FOR
OPERATION AND MAINTENANCE.

GAS TECHNOLOGIES, INC.

Heat-N-Glo

~~800-869-4328~~ 800-869-4328

INSTALLATION AND OPERATION INSTRUCTIONS

PLEASE READ THIS MANUAL BEFORE INSTALLING AND USING THE FIREPLACE

MODEL 4000INC IS A.G.A. DESIGN CERTIFIED AND CGA CERTIFIED FOR NATURAL GAS AND PROPANE.

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

FOR YOUR SAFETY

If you smell gas:

1. Do not try to light any appliance.
2. Do not touch any electrical switch; do not use any phone in the building.
3. Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
4. If you cannot reach your gas supplier, call the fire department.

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

DO NOT PLACE CLOTHING OR OTHER FLAMMABLE MATERIAL ON OR NEAR THE APPLIANCE. CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURE AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION.

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.

IMPORTANT: READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN A POSSIBLE FIRE HAZARD AND WILL VOID THE WARRANTY.

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.

COPYRIGHT 1990, GAS TECHNOLOGIES, INC. 6665 W. HWY 13, SAVAGE, MN 55378 (612)890-8367
PRINTED IN U.S.A.

TABLE OF CONTENTS

1.0 Introduction	5
2.0 Installation Precautions	5-7
3.0 Installation Instructions	7-11
3.1 Venting The Unit	7
3.1.1 Installing The Chimney Liner	7
3.1.2 Connecting The Vent System Components	8
3.2 Connecting The Gas Line	9
3.3 Leveling The Unit	9
3.4 Electrical Wiring	10
3.5 Wall Switch Wiring	10-11
3.6 Finishing	11
3.7 Hearth Extension	11
4.0 Electrical Safety System	12
5.0 Operating Guidelines and Maintenance Instructions	12-13
5.1 Glass Door Removal	13
5.2 Cleaning Burner and Pilot	13
5.3 Log Replacement	13
5.4 Glass Door Replacement	13
6.0 Safety Information	14
7.0 Lighting Instructions	15
L.P. Information	16
8.0 High Altitude Installation	16
9.0 Trouble Shooting	17-19
10.0 Replacement Parts	20
Blower Access	21
Warranty Information	22

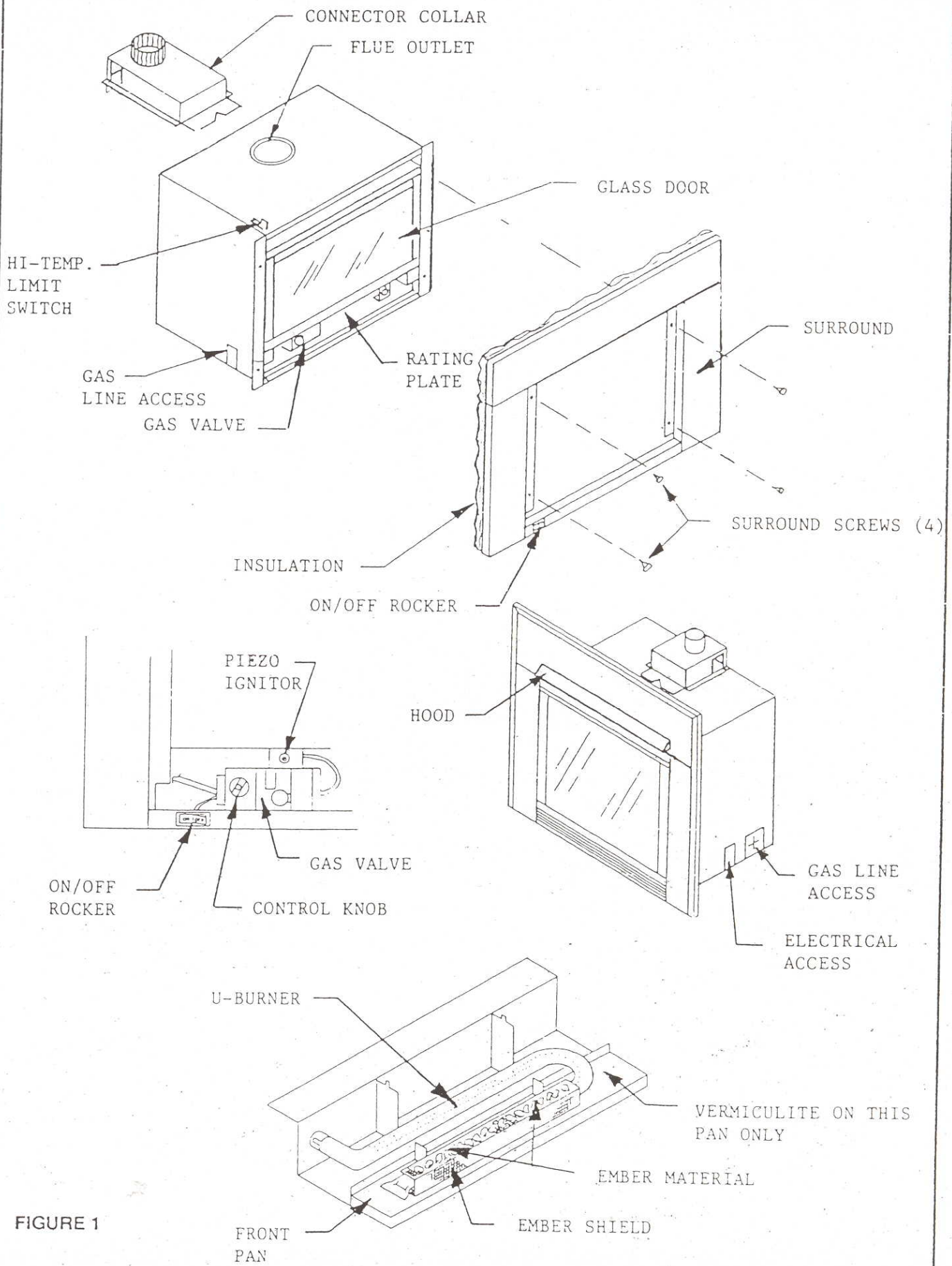


FIGURE 1

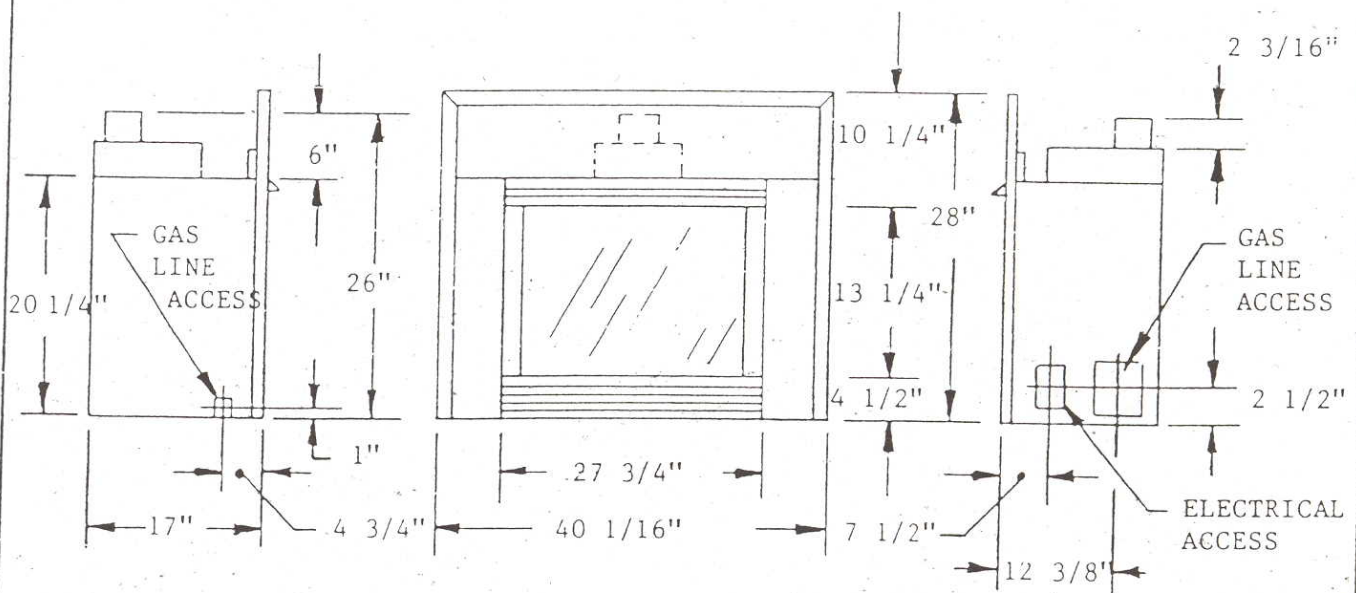
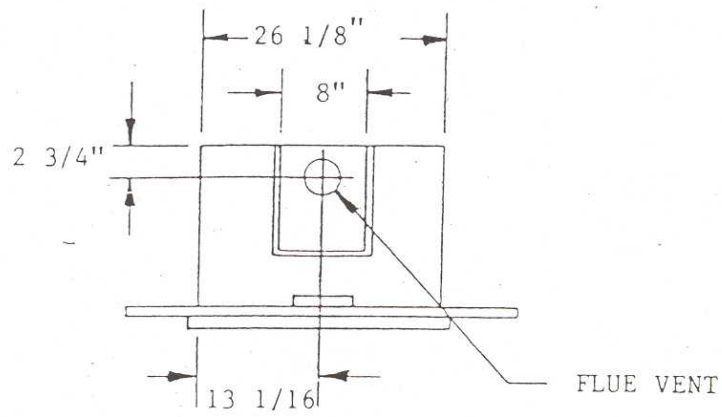


FIGURE 2

1.0 INTRODUCTION

The Model 4000INC Insert is a Decorative Gas Appliance for Installation in a Vented Fireplace (minimum fireplace size: height 21", width 27", depth 16 1/2")

WARNING: THIS UNIT IS NOT FOR USE WITH SOLID FUEL.

NOTE: FOR PROPER OPERATING BENEFITS, THE MODEL 4000INC INSERT MUST BE CONNECTED TO FOUR (4) INCH B-TYPE VENT OR AN APPROVED FOUR (4) INCH DIAMETER FLEXIBLE STAINLESS STEEL OR ALUMINUM CHIMNEY LINER WITH A TOP TERMINATION. CONSULT LOCAL BUILDING CODES FOR REQUIREMENTS.

The control system for Model 4000INC is a millivolt type. It consists of a gas control valve/regulator, a standing pilot assembly, a thermopile, a piezo ignitor, and an ON/OFF rocker switch. The controls are located in the lower compartment behind the lower hinged grille of the fireplace. Access to this compartment is gained by pulling the top of the grille forward and down.

WARNING: DO NOT CONNECT 110-120 VAC TO THE GAS CONTROL VALVE OR CONTROL WIRING SYSTEM OF THIS UNIT.

Installation must conform to local codes. In the absence of local codes installation must conform with the National Fuel Gas Code ANSI Z223.1-1988/NFPA 54-1988 (in the United States) or with the current Installation Code CAN/CGA1-B149 (in Canada). The appliance when installed must be electrically grounded in accordance with local codes; in absence of local codes, with The National Electric Code ANSI/NFPA NO 70-1990 (in the United States) or with the current CSA C 22.1 Canadian Electrical Code (in Canada).

NOTE: INSTALLATION AND REPAIR SHOULD BE DONE BY A QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND AT LEAST ANNUALLY BY A PROFESSIONAL SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIAL ETC. IT IS IMPERATIVE THAT THE UNITS CONTROL COMPARTMENT, BURNERS, AND CIRCULATING AIR PASSAGEWAYS BE KEPT CLEAN TO PROVIDE FOR ADEQUATE COMBUSTION AND VENTILATION AIR.

Provide adequate clearances around air openings into the combustion chamber and allow accessibility clearance for servicing and proper operation.

NEVER OBSTRUCT THE FRONT OPENINGS OF THE FIREPLACE INSERT OR THE CHIMNEY TERMINATION ON THE EXTERIOR OF THE BUILDING.

Minimum inlet gas supply pressure is 4.5 inches water column natural gas and 11.0 inches water column propane. Maximum inlet gas supply pressures is 10.5 inches w.c. natural gas and 13.0 inches w.c. propane. For the purpose of input adjustment, inlet gas supply pressure should be 7.0 inches w.c. natural gas and 11.0 inches w.c. propane and manifold pressure should be set at 3.5 inches w.c. and 10.0 inches w.c. respectively.

A 1/8 inch N.P.T. plugged tapping is provided on the outlet side of the gas control for a test gauge connection to measure the manifold pressure. Provisions must be made to attach a test gauge tapping immediately upstream of the gas supply connection to the appliance to measure inlet pressure.

The appliance and its individual shut off valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of 1/2 psig (3.45 kPa).

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 psig (3.45 kPa).

2.0 INSTALLATION PRECAUTIONS

This Fireplace Insert and its components are tested and safe when installed in accordance with this Installation Manual. Report to your dealer any parts damaged in shipment - specifically check glass condition. The gas logs are in a separate package. Read all instructions before starting installation and follow these instructions carefully during installation to insure maximum benefit and safety. Failure to follow them will void your warranty and may present a fire hazard.

The Gas Technologies, Inc. warranty will be voided by, and Gas Technologies, Inc. disclaims any responsibility for, the following actions:

- Installation of any damaged fireplace or chimney component,
- Modification of the fireplace or vent system,
- Installation other than as instructed by Gas Technologies, Inc.
- Improper positioning of the gas logs or the glass door,
- Installation and/or use of any component part not manufactured or approved by Gas Technologies, Inc., not withstanding any independent testing laboratory or other party approval of such component part or accessory.

ANY SUCH ACTION MAY POSSIBLY CAUSE A FIRE HAZARD.

Consult your local building codes.

The glass door assembly must be removed from the unit to install the gas logs, vermiculite and burner ember material. Lift the door up and out of the bottom glass retainers and slide it down away from the unit.

To install the logs, place the bottom front and rear logs on the fireplace grates - positioning them using the pre-drilled holes in the bottom of the logs and the tabs on the grates. Place the middle left and right logs in the flat cut-out areas on the top of the lower logs and the top right and left twigs in the flat cut-out areas of the middle logs. See Figure 3 for proper log placement.

WARNING: THE GAS LOGS MUST BE POSITIONED SO THAT THERE IS NO FLAME IMPINGEMENT ON THEM. IF THE BURNER FLAME IMPINGES ON THE LOGS, REPOSITION THEM SO THAT NO IMPINGEMENT OCCURS.

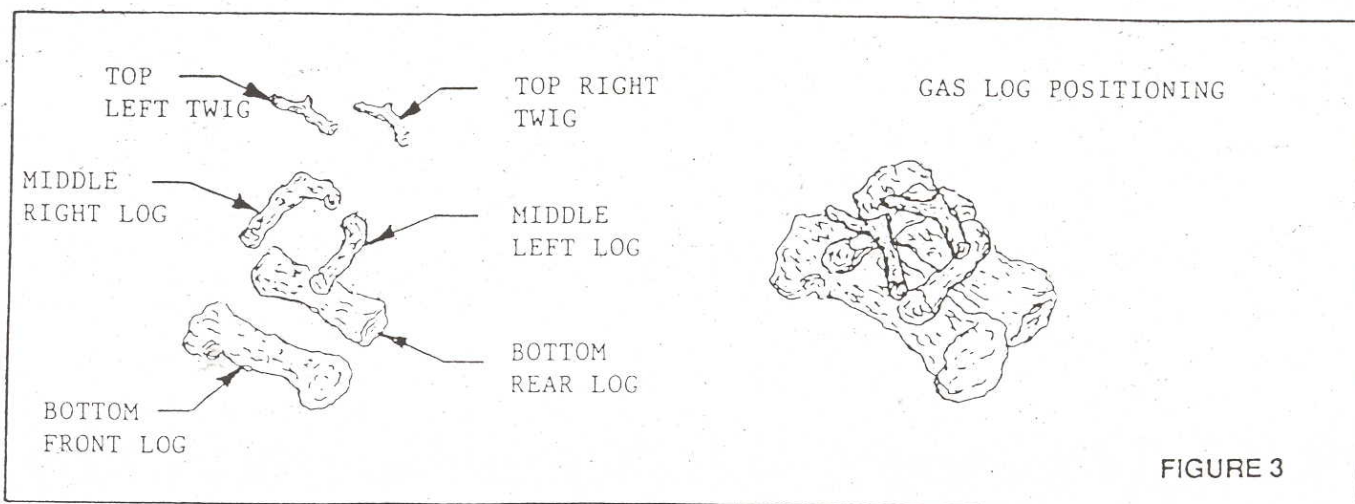


FIGURE 3

Open the bag of vermiculite and spread it evenly on the bottom of the firebox front pan making sure not to block the air hole at the base of the burner or the air holes of the lower glass retainer.

NOTE: IT IS ESSENTIAL FOR PROPER UNIT OPERATION THAT THE VERMICULITE CONTAINED IN THE PLASTIC BAG BE SPREAD EVENLY ACROSS THE BOTTOM OF THE FIREBOX FRONT PAN ONLY (FIGURE 1).

CAUTION: DO NOT BLOCK THE BASE OF THE BURNER WITH VERMICULITE OR PLACE VERMICULITE ON THE LOWER FIREBOX PAN OR BLOCK THE AIR HOLES OF THE LOWER GLASS RETAINER. DO NOT PLACE VERMICULITE ON THE LOWER BURNER EMBER SHIELD.

NOTE: Carefully place a single layer of ember material, the size and shape of a dime or smaller, along the top of the ember shield (screen) Figure 1. DO NOT COVER THE LOWER BURNER WITH VERMICULITE.

The excess ember material should be used as replacement material during the annual servicing.

Install the glass door by sliding the top edge up under the top glass retainer and carefully lower the door until the bottom edge rests in the bottom glass retainers.

WARNING: THE GLASS DOOR ASSEMBLY MUST BE IN PLACE ON THE FIREPLACE INSERT BEFORE THE UNIT CAN BE PLACED INTO SAFE OPERATION. UNDER NO CONDITIONS SHOULD THE UNIT BE OPERATED WITHOUT THE GLASS IN PLACE.

Prior to first firing, read Operations Instructions section of this manual.

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

3.0 INSTALLATION INSTRUCTIONS

In planning the installation for the fireplace it is necessary to install certain components before the insert is completely positioned and installed. These include the vent system, gas piping for the fireplace, insulation for the front surround, and Optional Remote Control Accessory Kit (if desired). All installations require up venting.

Model 4000INC can be installed in a bedroom (in Canada) if a thermostat (Model WH-STAT) is installed with the unit. Consult local code authorities. Detailed installation instructions for Model WH-STAT are included with the kit.

This unit comes with a removable front surround to allow access for gas line hook-up and venting hook-up. To remove the front surround, carefully remove the glass door assembly from the unit. Loosen and remove the top glass retainer from the unit. Remove the two (2) screws at the bottom corners of the front surround and CAREFULLY pull the surround out away from and lay it down in front of the unit. See Figure 4.

CAUTION: When removing the front surround from the unit, CARE must be taken NOT to pull and disconnect the wiring connecting the valve

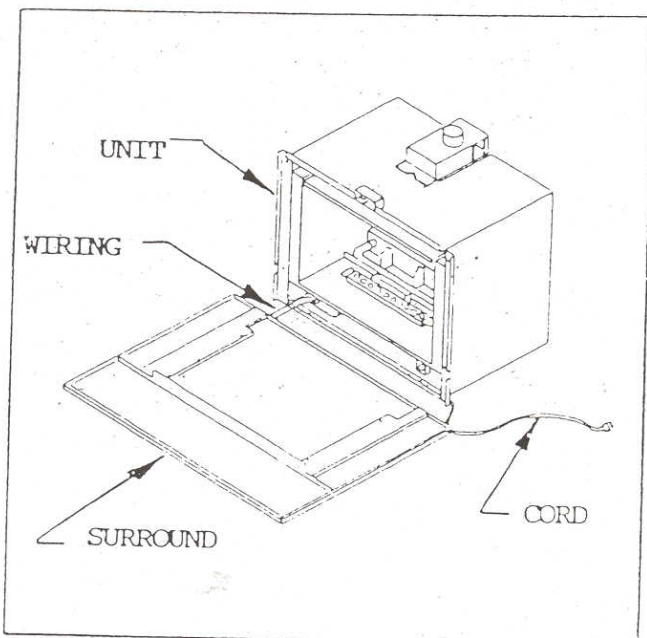


FIGURE 4

and the ON/OFF rocker switch (mounted in the lower surround) - AND the grounded power chord (connected to the Junction Box) which exits the unit at the lower right front surround.

3.1 VENTING THE UNIT

The Model 4000INC is a top venting fireplace insert. The unit must be installed only in a vented fireplace with a working flue and constructed of noncombustible material. THE MODEL 4000INC MUST NEVER BE INSTALLED WITHIN COMBUSTIBLE CONSTRUCTION.

Model 4000INC can be installed into a fireplace which has an approved chimney liner or into a fireplace without a chimney liner. For proper operating benefits, it is recommended that Model 4000INC be installed into a fireplace with an approved chimney liner with a top termination. Removal of the fireplace flue damper might be required for installation of the chimney liner and flue connector collar.

When installing into a fireplace with a chimney liner, Model 4000INC must be connected with the connector collar to an approved four (4) inch diameter stainless steel or aluminum chimney liner, which is installed inside the existing solid-fuel fireplace chimney.

When installing into a fireplace without a chimney liner, DO NOT use the connector collar. The chimney damper must be fixed in a manner which will maintain a minimum permanent vent opening of 20-square inches at all times. Means to accomplish this include placing a screw or bolt in the edge of the damper to prevent its closing, or by placing a hole or holes in the damper itself.

NOTE: FOR BEDROOM INSTALLATION IN CANADA

Model 4000INC MUST NOT be vented into a vent system installed exterior to a building. The part of the vent system above the roof line can be exterior to the building. A masonry chimney built on an outside exterior wall is NOT considered to be exterior to the building.

3.1.1 INSTALLING THE CHIMNEY LINER

Model 4000INC is designed to be connected to an approved 4-inch diameter, stainless steel or aluminum, flexible masonry chimney liner with a top termination. Refer to and follow the manufacturer's Installation Instructions provided with the flex-liner kit obtained. An approved flex-liner kit (Model FP1-04) is available from your Dealer.

CAUTION: TO AVOID DOWNDRAFTS AND/OR COLD AIR PROBLEMS, IT IS RECOMMENDED TO SEAL OFF THE AREA BETWEEN THE CHIMNEY LINER AND THE TOP OF THE SOLID-FUEL CHIMNEY OPENING INTO WHICH THE LINER HAS BEEN INSTALLED.

Consult your local building codes and code officials for proper installation.

3.1.2 CONNECTING THE VENT SYSTEM COMPONENTS

Remove the connector collar from the top of the unit. Pull down on the spring-loaded T-handle (found at the top of the inside of the firebox chamber) and remove the attachment plate from the inside top of the firebox. The attachment plate is slotted to allow access for the T-handle. See Figure 5.

Slide the connector collar (removed from the unit) into the bottom of the previously installed chimney flex-liner and fasten the collar to the liner with a minimum of three (3) sheetmetal screws. See figure 6.

Carefully slide the insert unit into the fireplace opening. Reach up through the hole on the inside firebox top and pull the connector collar down and forward onto the top of the unit. When the connector collar has been positioned on the top of the insert, pull down on the T-handle and re-install the slotted attachment plate. Release the T-handle and the connector collar will be held in place.

WARNING: THE CONNECTOR COLLAR MUST BE PULLED ALL THE WAY FORWARD TO POSITION IT PROPERLY.

Carefully replace the surround, top glass retainer, and glass door assembly to the front of the unit with the attachment screws previously removed and adjust the unit to its final position inside the masonry fireplace. To insure that a good seal is made between the surround and the existing fireplace, be certain that the surround insulation is in place and the insert is pushed tightly against the fireplace face.

CAUTION: Prior to re-attaching the front surround and adjusting the unit to its final position, please read the next four (4) sections of this manual - 3.2 CONNECTING THE GAS LINE; 3.3 LEVELING THE UNIT; 3.4 ELECTRICAL WIRING; AND 3.5 WALL SWITCH WIRING.

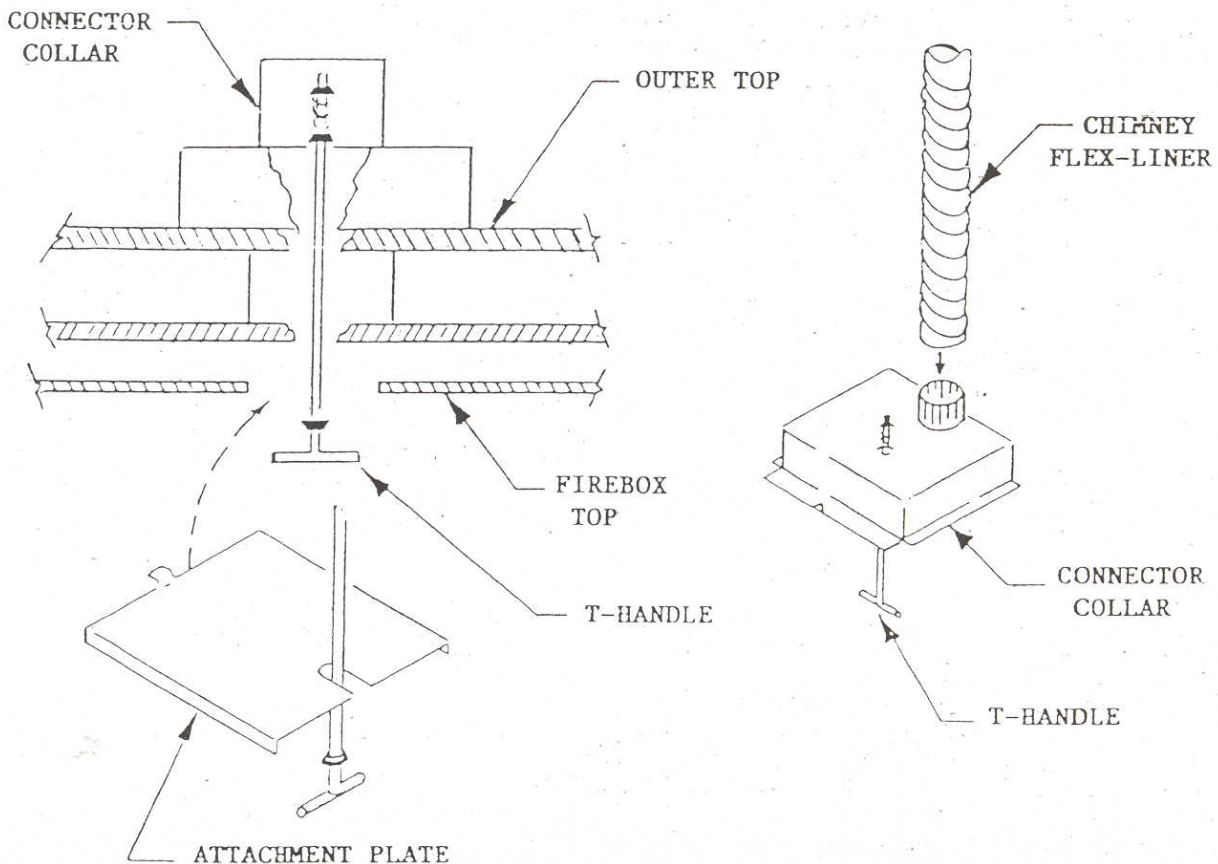
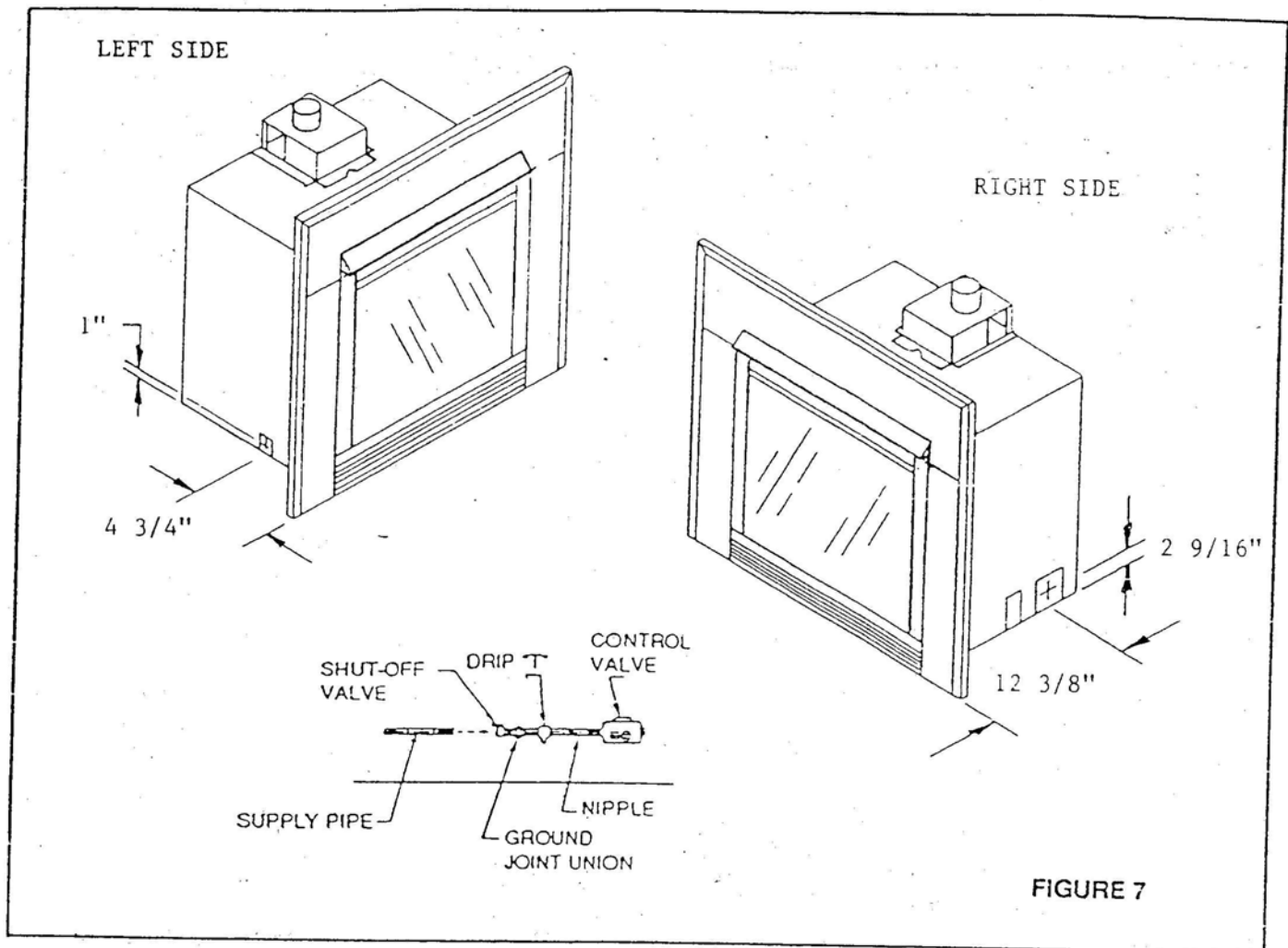


FIGURE 5

FIGURE 6



3.2 CONNECTING THE GAS LINE

The gas insert is designed accept a 3/8 inch gas line for an approved gas appliance. Have the gas line installed by a qualified service person in accordance with all building codes. Consult local building codes to properly size the gas supply line leading to the 3/8 inch reduction for hook-up at the unit. It is recommended to assemble a gas pipe train as shown in Figure 7. Use a 3/8" nipple, drip "T", union, and male/female manual gas shut-off valve. An N.P.T. plugged tapping, accessible for test gauge connection, should also be provided for, in the pipe train. An approved flex-gas line (Model Flex - 12 or Model Flex - 18) can also be used to connect the supply line to the gas control valve. Both models are available from your dealer.

Locate the gas line access hole in the left or right outer casing of the fireplace (Figure 7).

Next, insert the gas pipe train through the gas line hole from the outside of the fireplace and connect it to the gas valve. Support the control when attaching the pipe so that the pilot line is not bent or torn. A coiled

copper tubing (internally tinned) can be used as the supply line inside the masonry fireplace. Consult local codes. After the gas pipe installation is complete, check carefully all gas connections for leaks with a soap solution. **DO NOT USE AN OPEN FLAME.** Use insulation to repack the space around the pipe. This should be inserted from the outside of the unit and packed tightly to totally seal between the pipe and the outer casing.

NOTE: THE GAS SUPPLY LINE SHOULD BE PURGED OF ANY TRAPPED AIR PRIOR TO THE FIRST FIRING OF THE UNIT.

After testing the gas piping for leaks, the outer surround can be reattached to the unit. To help prevent air leakage, pack the insulation provided with unit, into the cavities at the back of the front surround.

3.3 LEVELING THE UNIT

Two (2) leveling nuts are attached to the base pan of the appliance (behind the lower grille). Insert two (2) 5/16 - 24 bolts through the bottom of the unit's base pan to level the unit as needed.

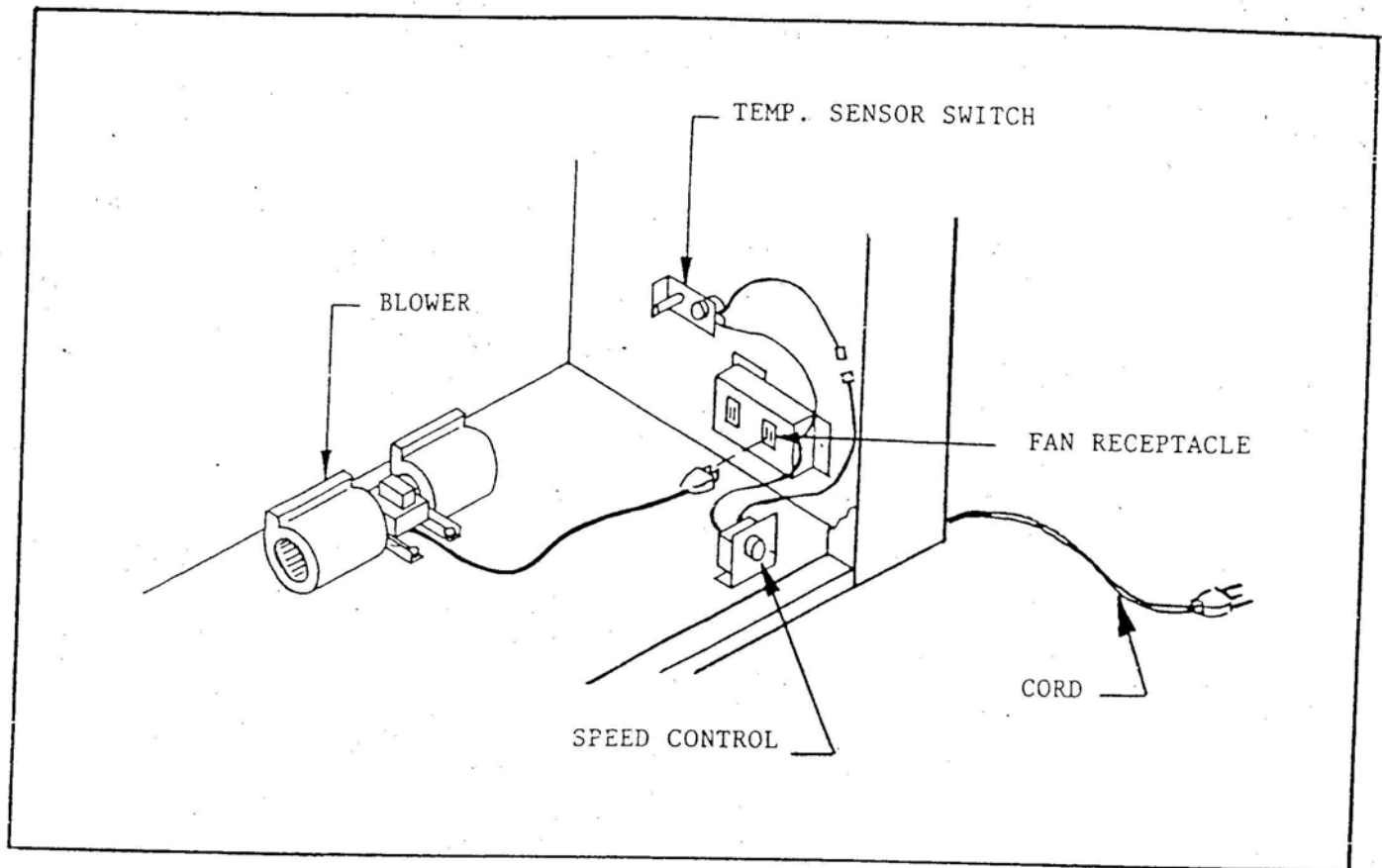


FIGURE 8

NOTE: If the leveling bolts are used to raise the back of the Insert, it is recommended that an additional support piece be placed under the unit base pan.

3.4 ELECTRICAL WIRING

Model 4000INC has a factory installed Blower, Junction Box, variable speed ON/OFF Rheostat Control Switch, and Temperature Sensor Switch for the Blower. To provide the 110-120 VAC, 60 HZ needed at the Junction Box, simply plug the 3-prong grounded cord into a 3-prong grounded 110-120 VAC, 60 HZ wall outlet. This cord exits the unit at the lower right hand front surround corner. To operate the Blower, turn the Rheostat Switch "ON" to a desired setting. The Temperature Sensor Switch will automatically turn the blower ON when the unit warms up. See Figure 8.

NOTE: IF BLOWER SYSTEM NEEDS SERVICING, SEE SECTION 10.0 REPLACEMENT PARTS FOR INSTRUCTIONS ON HOW TO ACCESS THE BLOWER.

An optional hand held Remote Control Kit (RCH-09A) for turning the unit ON/OFF, is also available. Detailed instructions for the optional Remote Control are included with the kit.

WARNING: DO NOT CONNECT 110-120 VAC TO THE GAS CONTROL VALVE

3.5 WALL SWITCH WIRING

An optional wall switch kit (WSK-21) for turning the fireplace ON/OFF is also available. This kit does NOT require 110 VAC. Connect the low voltage wires from the wall switch to the red and brown pigtail wires from the ON/OFF rocker switch. These wires are labeled "FOR REMOTE OR WALL SWITCH ONLY". Turn the unit's ON/OFF rocker switch to the "OFF" position to use the wall switch. See Figure 9 - unit wiring diagram.

NOTE: POSITION THE WALL SWITCH SO THAT A MAXIMUM OF 25 FEET OF WIRING FROM THE SWITCH TO THE FIREPLACE IS USED.

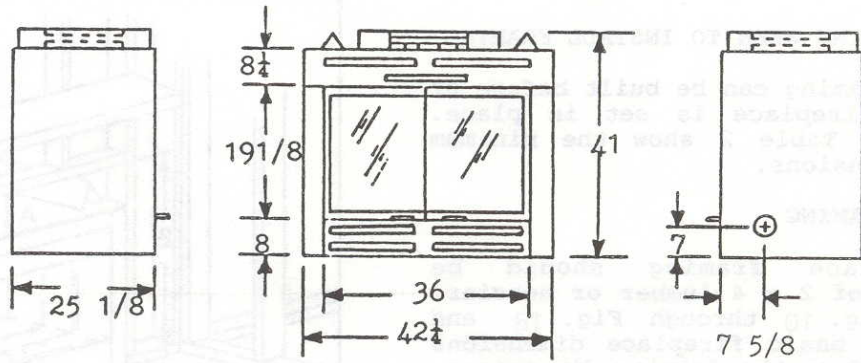
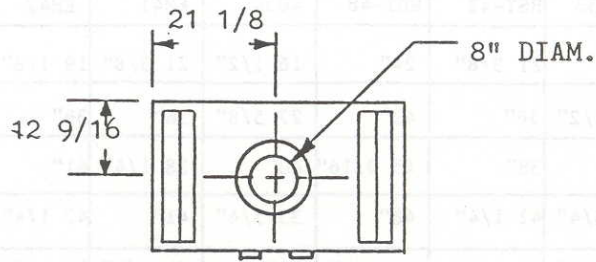


FIG. 17 DIMENSIONS OF EM42 & EM42AT

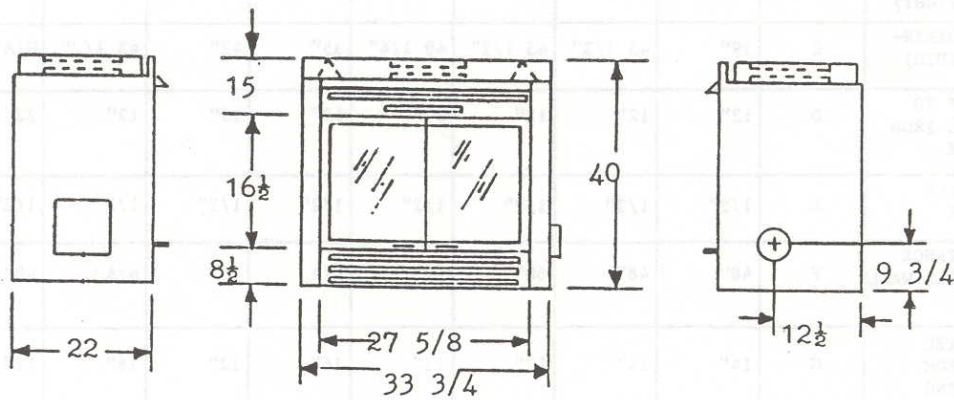
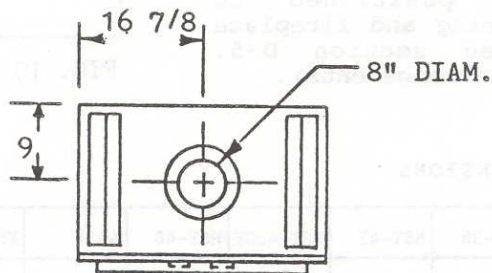


FIG. 18 DIMENSIONS OF 4034, 4034AT & 4034HT

TABLE 1 FIREPLACE DIMENSIONS

DESCRIPTION	HST-38	HST-42	HST-48	4034	EM41	EM42	BAY	PIER	OASIS
GLASS DOOR HEIGHT	20"	21 3/8"	24"	16 1/2"	21 3/8"	19 1/8"	19"	19"	19"
GLASS DOOR WIDTH	31 1/2"	36"	42"	27 5/8"	36"	36"	36"	36"	36"
UNIT HEIGHT	38"	38"	45 9/16"	40"	38 1/4"	41"	39 1/2"	39 1/2"	39 1/2"
UNIT WIDTH	37 3/4"	42 1/4"	48"	33 3/4"	41"	42 1/4"	37"	42"	37"
UNIT DEPTH	22 1/4"	25 1/8"	25 1/8"	22"	21 1/2"	25 1/8"	23 1/4"	23 1/4"	23 1/4"

C-2 FRAMING

A. DETERMINING WHEN TO INSTALL FRAMING

Fireplace framing can be built before or after the fireplace is set in place. Fig. 19 and Table 2 show the minimum framing dimensions.

B. BUILD FRAMING

The fireplace framing should be constructed of 2 x 4 lumber or heavier. Refer to Fig. 10 through Fig. 18 and Table 1 for basic fireplace dimensions that will affect the framing dimensions.

The header may rest on the fireplace standoffs.

Framing should be positioned to accommodate wall covering and fireplace facing material (see section D-5. Finishing for typical arrangements).

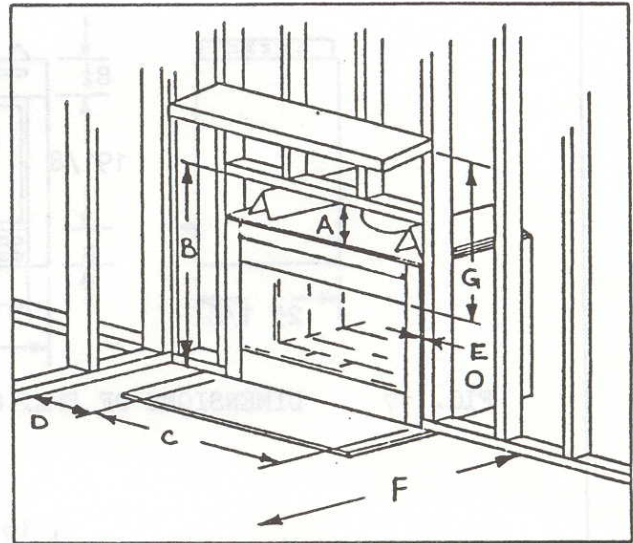


FIG. 19 FRAMING DIMENSIONS

Table 2 FRAMING DIMENSIONS

DESCRIPTION	LETTER	HST-38	HST-42	HST-42CF	HST-48	4034	EM41	EM42	BAY	PIER	OASIS
TOP CLEARANCE (NONCOMBUSTIBLES ONLY)	A	1/2"	3"	1/2"	1/2"	4"	3 1/2"	5 1/2"	3 1/2"	3"	3"
FRAMING DIMENSIONS (HEIGHT)	B	38 1/4"	38 1/4"	38 1/4"	46 3/4"	40 1/4"	38 1/2"	41 1/4"	39 3/4"	39 3/4"	39 3/4"
FRAMING DIMENSIONS (WIDTH)	C	39"	43 1/2"	43 1/2"	49 1/4"	35"	42"	43 1/2"	N/A	N/A	N/A
CLEARANCE TO SIDE WALL FROM UNIT SIDE	D	12"	12"	12"	12"	12"	10"	12"	22"	22"	22"
SIDE & BACK CLEARANCE	E	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	N/A
MIN. DISTANCE TO PARALLEL WALL	F	48"	48"	60"	60"	N/A	48"	N/A	48"	48"	54"
MIN. MANTEL HEIGHT FROM TOP OPENING	G	14"	14"	12"	12"	16"	12"	16"	12"	12"	12"

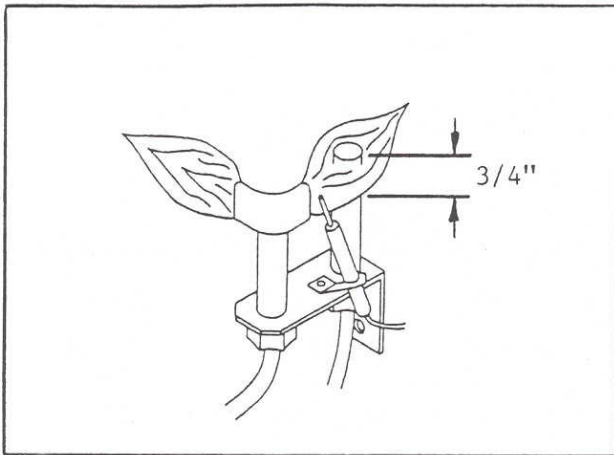


FIGURE 13

WARNING: 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.

IMPORTANT: TURN OFF GAS BEFORE SERVICING APPLIANCE. IT IS RECOMMENDED THAT A COMPETENT SERVICEMAN PERFORM THESE CHECKUPS AT THE BEGINNING OF EACH HEATING SEASON.

Inspect the external vent opening on a regular basis to make sure that no debris is interfering with the air flow.

5.1 GLASS DOOR REMOVAL

1. To remove the glass door assembly, remove the two screws at the top corners of the assembly. Lift the door assembly out of the bottom retainer.

5.2 CLEANING BURNER AND PILOT

In order to properly clean the burner and pilot assembly, turn off the gas to the unit and remove the logs exposing the burner and pilot assembly. Clean all foreign materials from top of burner. Check to make sure that burner orifice is clean.

Visually inspect pilot periodically. Brush or blow away any dust or linen accumulations. If pilot orifice is plugged, disassembly may be required to remove any foreign material from orifice or tubing. When appliance is put back in service check burner flame patterns with Figure 14.

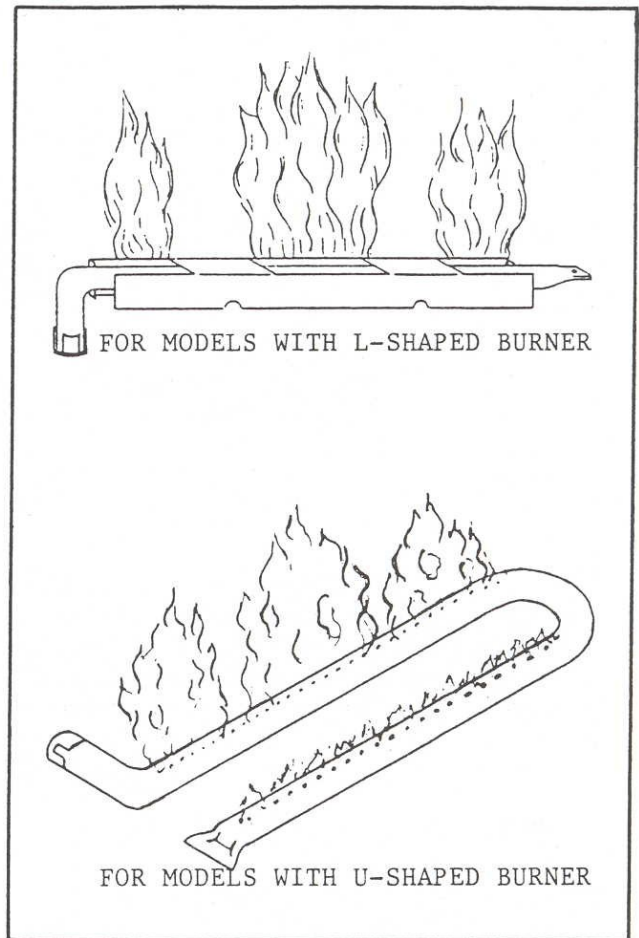


FIGURE 14

5.3 LOG REPLACEMENT

1. Remove the glass door assembly (see Section 5.1)
2. The Log(s) can now be removed as required. Replace the log(s) as previously shown in Figure 2, Gas Log Positioning. Replace the glass assembly.

5.4 GLASS DOOR REPLACEMENT

1. Before replacing the glass door make sure the vermiculite material is spread evenly over the bottom of the firebox and the logs are properly positioned.
2. Set the bottom glass door frame into the bottom glass retainer, push the glass against the face of the unit and re-install the top attachment screws.

WARNING: THE GLASS DOOR ASSEMBLY MUST BE IN PLACE ON THE FIREPLACE INSERT BEFORE THE UNIT CAN BE PLACED INTO SAFE OPERATION.

6.0 SAFETY INFORMATION

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.

A. This appliance has a pilot. When lighting the pilot, follow these instructions exactly.

B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOUR SMELL GAS

- Do not try to light any appliance
- Do not touch any electric 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.

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Forced or attempted repair may result in a fire or explosion.

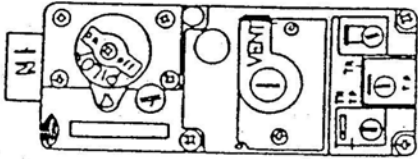
D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the gas control system which has been under water.

7.0 LIGHTING INSTRUCTIONS

LIGHTING INSTRUCTIONS

1. "STOP" Read the safety information above first.

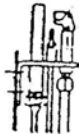
2. To access controls, pull top of lower grille forward. The grille is hinged to open downward.



3. Turn the control to the OFF position. To do this, you must turn the knob clockwise to the pilot position and then press in and continue turning clockwise to the OFF position.

4. WAIT FIVE (5) MINUTES TO CLEAR OUT ANY GAS. If you then smell gas, STOP! Follow "B" in the safety information above. If you don't smell gas, go to next step.

THERMOPILE



PILOT BURNER

5. The pilot should not require accessing for lighting purposes. The pilot is located inside the combustion chamber. If it is necessary to access the pilot, follow the instructions in Section 5.1 for glass door removal.

6. To put the control in the pilot position, turn the control knob counter-clockwise to the pilot position.

7. To light the pilot depress the control knob and then depress the red piezo button until it makes a clicking sound. It may be necessary to repeat this step. If the pilot does not light after 10 seconds, go back to step 4. The control knob should be held down for a MINUTE after pilot ignition. If the pilot lights but will not stay lit after two tries, turn the gas control knob to the "OFF" position and call your service technician or gas supplier. If the control knob does not pop out when released, STOP - shut off the gas supply to the fireplace control valve, and IMMEDIATELY call your service technician or gas supplier.

8. After the pilot has been lit, the burner can be turned on by turning knob counter-clockwise to the "ON" position. Then flip the ON/OFF switch to "ON" position.

9. To close control panel simply lift grille and press in.

TO TURN OFF GAS TO APPLIANCE

1. Open access grille by pulling grille top forward.

2. Turn knob clockwise to pilot position then depress knob and continue turning to "OFF" position.

3. To close control panel simply lift grille and press in.

NOTE: After the unit has warmed up (i.e. approx. 15 min.), flame height should be slightly (about 2") below the top of the top glass retainer (Figure 15). If the flame height is higher than this, adjustments must be made to prevent overheating the glass. Please contact your dealer or a qualified service person to replace the orifice or adjust the valve.

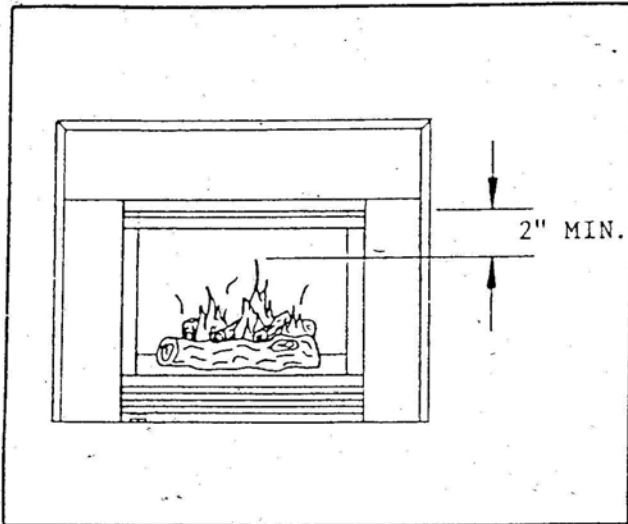


FIGURE 15

NOTE: THE TOPS OF THE FLAMES SHOULD NEVER HIT THE TOP OF THE FIREBOX.

LPG (PROPANE) INFORMATION

THE FOLLOWING WARNING APPLIES TO INSTALLATIONS USING L.P. (PROPANE) GAS:

WARNING: To avoid possible injury, fire, and explosion, please read and follow these precautions and all instructions on this appliance before lighting the pilot. This appliance uses L.P. (Propane) gas which is heavier than air and will remain at floor level if there is a leak. Before lighting, **smell at floor level and/or use other means** (such as using a soap solution on all piping and connections, using a gas detector, etc.) **to check for gas leaks.** **NOTE:** L.P. (Propane) gas can become odorless and **CANNOT always be detected by smell.** If you smell gas, detect a gas leak, or suspect that a gas leak exists, follow these rules:

1. Get all people out of building.
2. DO NOT light matches. DO NOT turn electric lights or switches on or off in area. DO NOT use an electric fan to remove gas from area. DO NOT use a telephone inside the building.
3. Shut off gas at L.P. tank outside of building.
4. Telephone gas company and fire department. Ask instructions.

Before hanging up, give your name, address, and phone number. DO NOT go back into building. If your L.P. tank runs out of fuel, turn off gas at the appliance. After L.P. tank is refilled, appliance must be re-lit according to manufacturer's instructions. If the gas control has been exposed to WATER in any way, DO NOT try to use it. It must be replaced. DO NOT attempt repair on gas control or appliance.

Tampering is DANGEROUS and voids all warranties. Any component that is found to be faulty, must be replaced with an approved component.

8.0 HIGH ELEVATION INSTALLATION

A.G.A. Design Certified units are tested and approved for elevations from 0-2000 feet. CGA approved units are certified for elevations from 0-4500 feet.

When installing this unit at an elevation above 2000 feet, (in United States) it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input should be reduced 4 percent for each 1000 feet above sea level. Check with the local gas utility for proper orifice size identification.

When installing this unit at an elevation between 0-4500 feet (in Canada) the input rating does not need to be reduced.

When installing this unit at an elevation above 4500 (in Canada), check with local authorities.

Consult your local gas company for assistance in determining the proper orifice for your location.

9.0 TROUBLE SHOOTING - MODEL 4000INC

With proper installation and maintenance, your new Gas Fireplace should provide years of trouble-free service. If you do experience a problem, refer to the trouble shooting guide shown below. This guide will assist a qualified service person in the diagnosis of problems and the corrective action to be taken.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
I. Spark Ignitor will not light after repeated triggering of red button.	A. Defective Ignitor (no spark at electrode.)	1. Check for spark at electrode and pilot; if no spark and electrode wire is properly connected, replace ignitor.
	B. Defective pilot or misaligned electrode at pilot (spark at electrode).	1. Using a match, light pilot. If pilot lights, turn off pilot and trigger the red button again. If pilot lights, an improper gas/air mixture caused the improper lighting and a longer purge period is recommended. If pilot will not light - check gap at electrode and pilot - should be 1/8 inch to have a strong spark. If OK, replace pilot.
	C. No gas or low gas pressure.	1. Check remote shut off valves from fireplace. Usually there is a valve near the fireplace and sometimes there is a valve near the main. There can be more than one (1) valve between the fireplace and main.
		2. Low pressure can be caused by a variety of situations such as a bent line, too narrow diameter of pipe or even low line pressure. Check for kinked lines. If none, consult with plumber or gas supplier.
D. No L.P. in tank.		1. Check L.P. (Propane) You may be out of fuel.
II. Pilot will not stay lit after carefully following lighting instructions.	A. Defective thermo generator.	1. Check pilot flame. Must impinge on thermo generator. Clean and or adjust pilot for maximum flame impingement on generator.
		2. Be sure wire connections from generator at valve terminals are tight and generator is fully inserted into pilot bracket.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
<p>III. Pilot burning, no gas burner, valve knob "ON", "ON/OFF" switch "ON".</p>	<p>B. Defective Valve.</p>	<p>3. Check thermo generator with millivolt meter. Take reading at "TH-TP & TP" terminals of gas valve. Should read 325 millivolts minimum while holding valve knob depressed in pilot position, pilot lit, and on/off switch "OFF". Replace faulty generator if reading is below specified minimum.</p> <p>1. Connect the millivolt meter probes to the "TH TP" and "TP" terminals on gas valve. Turn green knob to pilot position, depress and light. If meter reading is greater than 325 m.v. after 30 seconds, the pilot generator is good. If pilot does not stay lit, the valve is defective. If the meter reading is less than 325 m.v. the thermo-generator is defective</p>
	<p>C. Open wire connection in pilot circuit.</p>	<p>1. Check wire continuity and connections in pilot circuit.</p>
	<p>A. "ON/OFF" switch or wires defective.</p>	<p>1. Check "on-off" switch and wires for proper connections. Place jumper wires across terminals at switch - if burner comes on, replace defective switch. If OK place jumper wires across switch wires at gas valve - if burner comes on, wires are faulty or connections are bad.</p>
	<p>B. Thermo-Generator may not be generating sufficient millivoltage (325 m.v.)</p>	<p>1. Recheck Symptom #2.</p> <p>2. Pilot flame not physically close enough to thermo generator.</p>
	<p>C. Defective Valve.</p>	<p>1. Turn valve knob to "ON", place on-off switch to "ON". Check with millivolt meter at generator terminals. Millivolt meter should read greater than 100 m.v. If the reading is okay and the burner does not come on, replace the gas valve.</p>

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
IV. Frequent pilot outage problem.	D. Plugged burner orifice.	1. Check burner orifice for stoppage and remove.
	E. Wall switch or wires defective.	1. Follow corrective action in A.1 above; check switch and wiring. Replace where defective.
V. Pilot and main burner go out while being in operation.	A. Pilot flame may be too low or blowing (high), causing the pilot safety to drop out.	1. Clean and adjust pilot flame for maximum flame impingement on pilot generator.
	A. High limit switch is defective or has reached its maximum temperature.	1. Allow unit to cool. Then repeat lighting instructions.
	B. No L.P. in tank.	2. If 1 above does not allow for ignition, check high limit switch. Place jumper wires across high limit switch. If you can re-ignite the pilot, your high limit switch is defective. Do not use fireplace until the high limit switch is replaced, as this is an important safety feature. If the unit does not light with jumper wires in place, the wires may be defective or the connectors are bad.
	C. Bad thermo-generator.	1. Check L.P. (Propane) tank. You may be out of fuel.
VI. Glass soots.	A. Flame impingement on logs.	1. Replace if necessary.
	B. Improper venturi setting.	1. Adjust the log set so that the flame does not impinge on it.
	C. Vermiculite around base of burner or on the lower firebox pan.	1. Adjust the air shutter at the base of the burner.
VII. Flame burns blue and lifts off burner.	A. Insufficient oxygen being supplied.	1. Inspect the base of the burner. It is imperative that NO material be placed around the base of the burner or on the lower firebox pan.
		1. Check to make sure that the vermiculite has not been improperly placed at the burner base or lower firebox pan.
		2. Be certain flue connector collar is in place and properly positioned.

MODEL 4000INC BLOWER ACCESS PROCEDURE

1. Turn off the incoming gas supply at a manual shut-off valve, upstream of the control valve and disconnect the incoming gas supply line at the control valve.
2. Remove the glass door assembly and gas logs from the unit. Carefully remove the burner ember material and vermiculite from the top front firebox base pan.
3. Bend the burner hold-down tab on the pilot bracket and carefully rotate the burner up towards the front of the unit.
4. Remove the five (5) screws securing the top front base pan. Two of these screws are found at each bottom/side of the pan and one screw is found at the bottom/center. Carefully lift the top front base pan from the unit. The burner is attached to this pan.
5. Remove the three screws on each side and the three screws at the back that secure the lower firebox base pan to the combustion box. CAREFULLY slide the base pan out of the unit. The gas valve is attached to this pan.

NOTE: BURNER, GRATES, AND PILOT COMPONENTS ARE NOT SHOWN.

