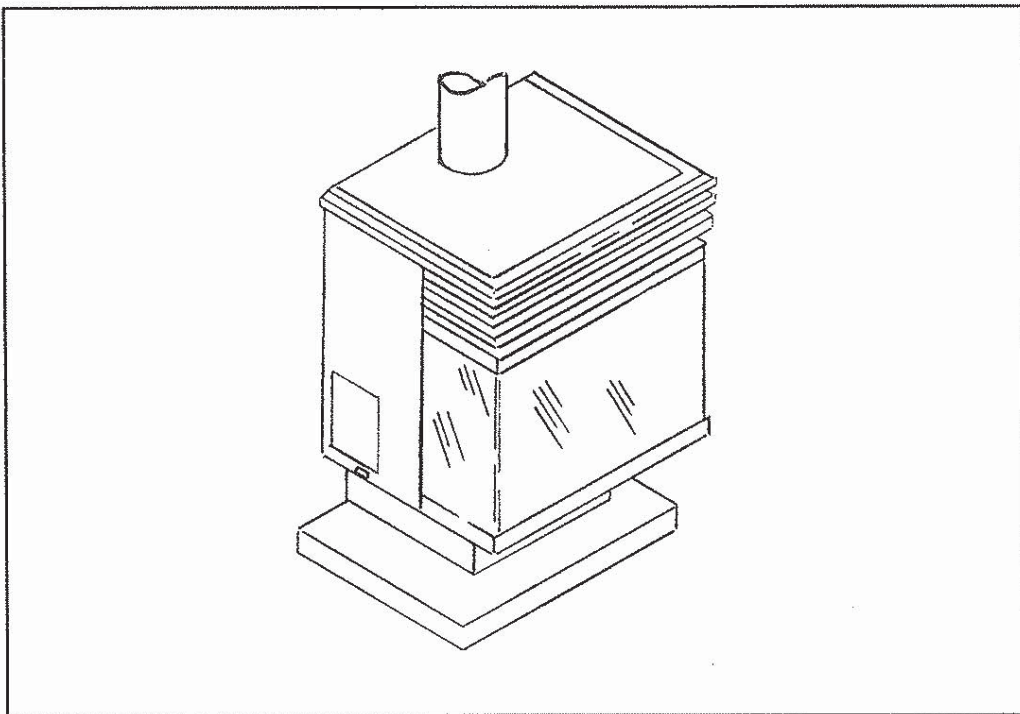


**This appliance has been retired.
Service parts pages within have been removed.
For replacement parts, please refer to the individual
service parts list located on the brand websites.**



U.S. PATENTS 4,875,464 AND 5,000,162

**Model GS-4000
Installation and Operation
Instructions
Warnock Hersey Listed**



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

**GAS TECHNOLOGIES, INC.
6665 W. Hwy. 13 Savage, MN 55378 (612)890-8367**



INSTALLATION AND OPERATION INSTRUCTIONS

PLEASE READ THIS MANUAL BEFORE INSTALLING AND USING THE FIREPLACE

MODEL GS-4000 IS WARNOCK HERSEY LISTED 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

What to do if you smell gas:

- Extinguish any open flame.
- 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.

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 installation instructions may result in a possible fire hazard and will void the warranty.

Save this Manual for future reference.

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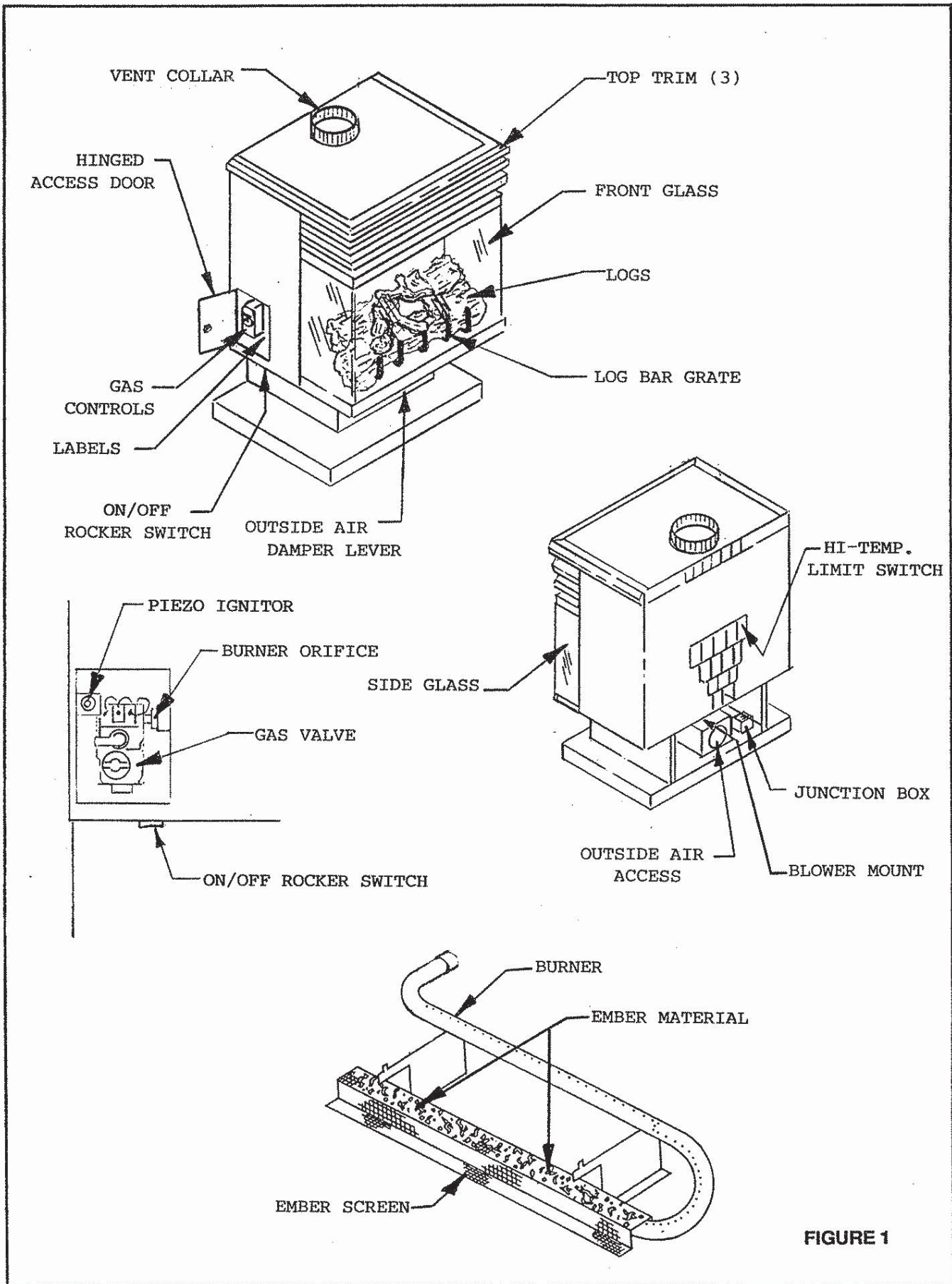


FIGURE 1

1.0 INTRODUCTION

Model GS-4000 is a top-venting Vented Decorative Gas Appliance. It is designed to operate by drawing combustion air from either inside the living space or from outside the building with the use of an optional outside air kit Model AK-225. Exhaust gases are expelled to the outside of the building by using a combination 5-inch single wall/5-inch B-Type vent system. Model GS-4000 **MUST** use this combination vent system - NO other vent system may be used.

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

The control system for Model GS-4000 is a millivolt type. It consists of a gas control valve/adjustable regulator, a standing pilot assembly, a thermopile, a piezo ignitor, a high temperature limit switch, and an ON/OFF rocker switch. The controls are located in the side compartment behind the cover door. Access to this compartment is gained by pulling open the cover door away from the side.

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 current National Fuel Gas Code ANSI Z223.1 (in the United States) or with the current installation code CAN/CGA B-149 (in Canada). The appliance when installed must be electrically grounded in accordance with local codes; in absence of local codes, with the current National Electric Code ANSI/NFPA NO. 70 (in The United States) or with the current CSA C 22.1 Canadian Electric 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 OR THE VENT CAP ON THE EXTERIOR OF THE HOUSE.**

Minimum clearances in inches to combustibles are: Sides 8, Floor 0, Back 3, Top 3 6. Minimum distance from the ceiling to the top front of the unit is 36 inches. The rear of the appliance may **NOT** be recessed into combustible construction. See Figure 4.

Minimum inlet gas supply pressure for purpose of input adjustment 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 to a 1/8 - inch NPT plugged 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 Top Vent Gas Fireplace 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 and glass doors are shipped in separate packages. 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.

THIS FIREPLACE MUST BE TOP VENTED AND MUST NEVER BE ATTACHED TO A CHIMNEY SERVING A SOLID FUEL BURNING APPLIANCE.

Carefully spread a single layer of dime size and shape pieces of ember material (found in a separate bag) uniformly over the upper portion of the lower burner ember shield (Figure 1). The excess ember material should be used as replacement material during the annual servicing.

To install the logs, remove bottom glass trim frame by pulling it straight out from the unit. Place the bottom front and rear logs on the fireplace grates. Position the middle left and right logs in the flat cut-out areas

on the top of the lower logs. Finally, place the top left and right twigs in the cut-out areas on the top of the middle logs. See Figure 2 for proper log positioning.

WARNING: THE GAS LOGS MUST BE PROPERLY POSITIONED, WITH NO FLAME IMPINGEMENT ON THEM, OR THE FIREPLACE WILL NOT FUNCTION PROPERLY AND MAY RESULT IN SOOT ACCUMULATION ON THE INSIDE OF THE FIREBOX. IF THE BURNER FLAME IMPINGES ON THE LOGS, REPOSITION THEM SO THAT NO IMPINGEMENT OCCURS.

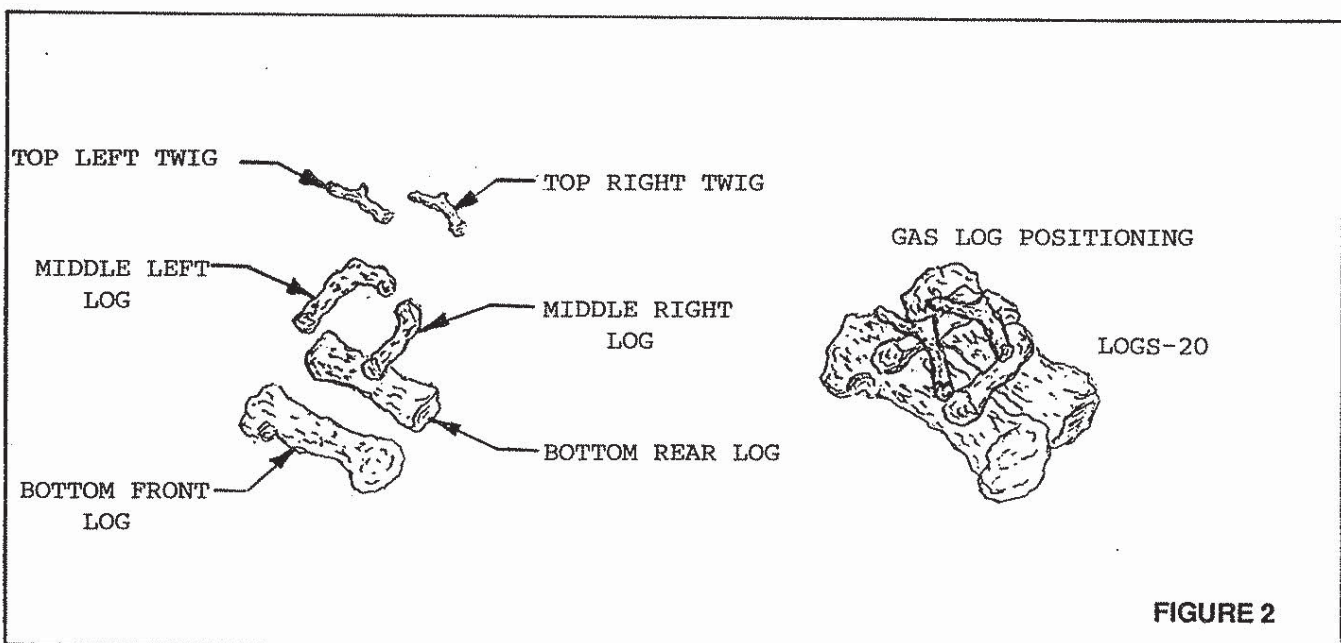
Install the glass sides and front by following the instructions found in the glass shipping carton. Retain these instructions for reference.

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

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.

Due to high temperature, the appliance should be located out of traffic areas and away from furniture and draperies. Clothing or flammable material should not be placed on or near the appliance.



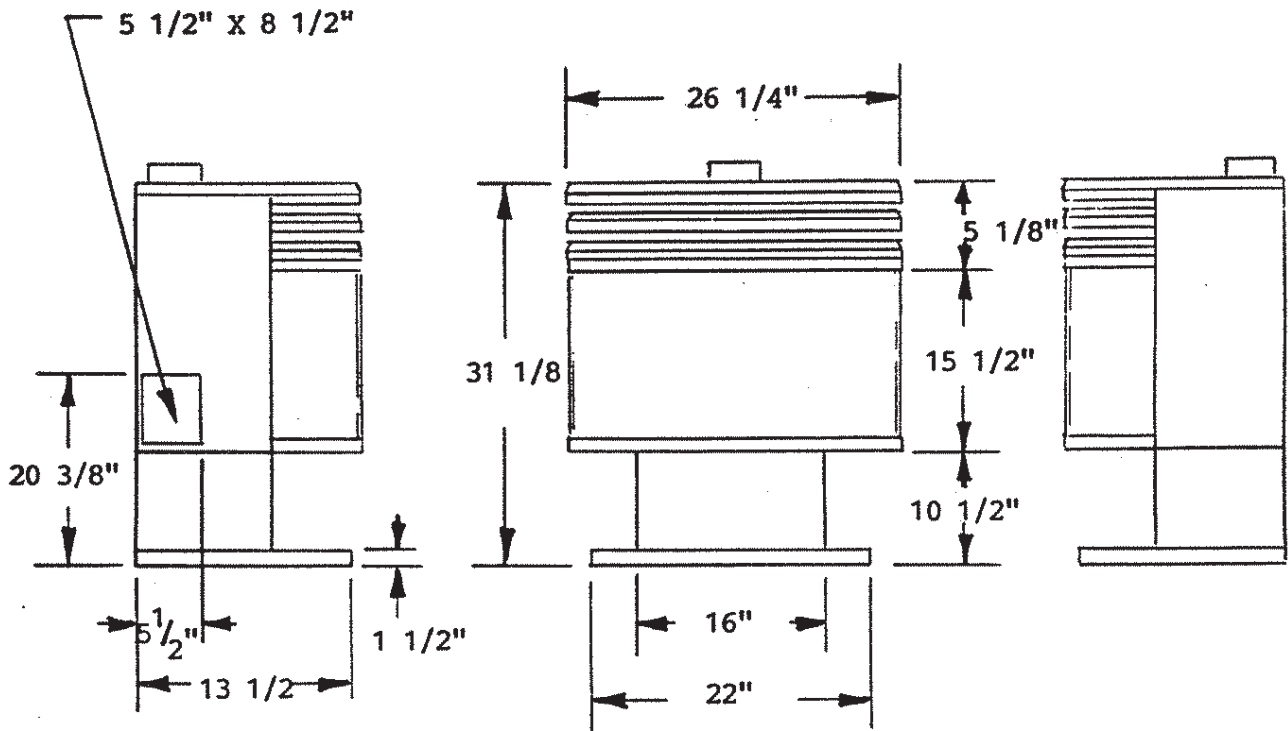
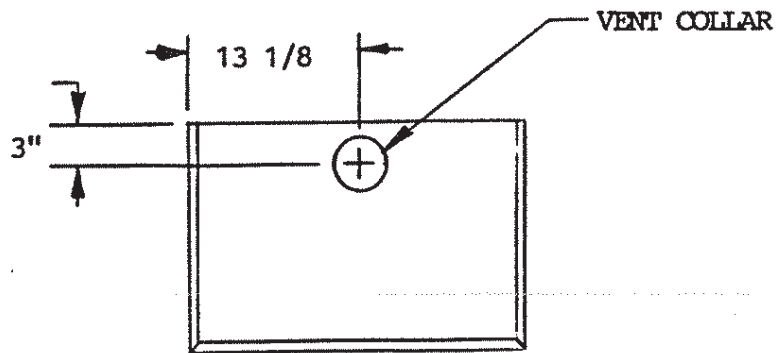


FIGURE 3

3.0 INSTALLATION INSTRUCTIONS

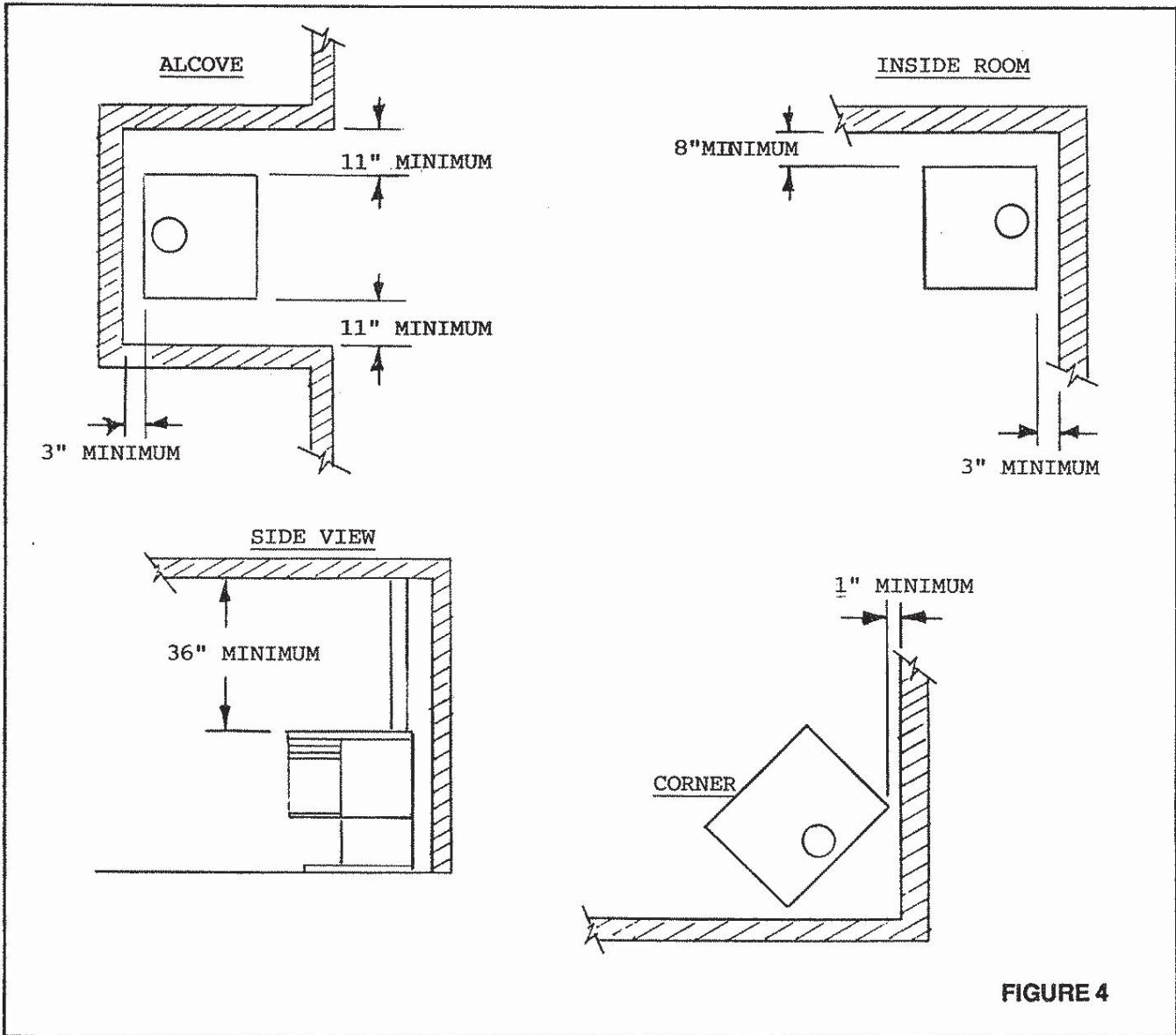
In planning the installation for the fireplace it is necessary to determine where the unit is to be installed, the routing of the single wall/B-type vent system, and whether optional accessories (fan, remote control, wall switch and/or outside air kit) are desired. Gas supply piping should also be planned.

Model GS-4000 (with the use of the optional Outside Air Kit) can be installed in a bedroom (in the United States) which has a total volume of unconfined space appropriate to the particular installation. Refer to the National Fuel Gas Code ANSI Z223.1/NFPA 54 - (current edition) The Uniform Mechanical Code - (current edition), and Local Building Officials for the options allowed in obtaining an effective bedroom volume of unconfined space.

Model GS-4000 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.

The fireplace can be mounted on any flat, solid combustible or non-combustible surface. If the fireplace is installed directly on carpeting, tile, or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the unit.

Model GS-4000 **CANNOT** be framed within combustible construction. See Figure 3 for fireplace dimensions and Figure 4 for typical installation settings and minimum clearances.



3.1 INSTALLING THE SINGLE WALL/ B-TYPE VENT SYSTEM

3.1.1 POSITIONING THE FIREPLACE

Determine the exact position of the fireplace so that the vent run can be planned. Figure 4 shows possible locations for the fireplace; inside of a room, installed in an alcove, or installed in a corner. Using a level, make sure the fireplace is properly positioned and squared. The back of the fireplace must always be positioned a minimum of 3-inches away from a combustible wall.

3.1.2 CONNECTING THE VENT SYSTEM COMPONENTS

A straight section of 5-inch diameter single-wall gas vent (minimum length-3 feet) **MUST** first be attached to the crimped starting collar at the top of the unit. The decorative brass ring may be slipped over the single-walled pipe after attaching the pipe to the collar. Continue adding sections of single-wall pipe until the vent run is just short of combustible construction, such as a ceiling. Connect 5-inch B-Type vent to the single wall pipe and continue to add vent components, per vent Manufacturer's Installation Instructions, until the vent run is completed. See Figure 5.

NOTE: A STARTER PIPE KIT (MODEL GSVK-5) IS AVAILABLE. THIS KIT ATTACHES TO THE FIREPLACE AND ALLOWS FOR EASY CONNECTION TO B-TYPE VENT. INSTRUCTIONS ARE INCLUDED WITH THE KIT.

WARNING:

1. 5-inch diameter, single-wall gas vent (minimum 3-feet) **MUST** be attached to the top of the unit.
2. 5-inch B-Type vent **MUST** be used within combustible construction.

NOTE: FOR BEDROOM INSTALLATION IN CANADA.

Model GS-4000 **MUST NOT** be vented into a Type-B Vent System installed exterior to a building. The part of the vent system above the roof line can be exterior to the building.

NOTE: THE VENT TERMINATION MUST BE IN A VERTICAL POSITION.

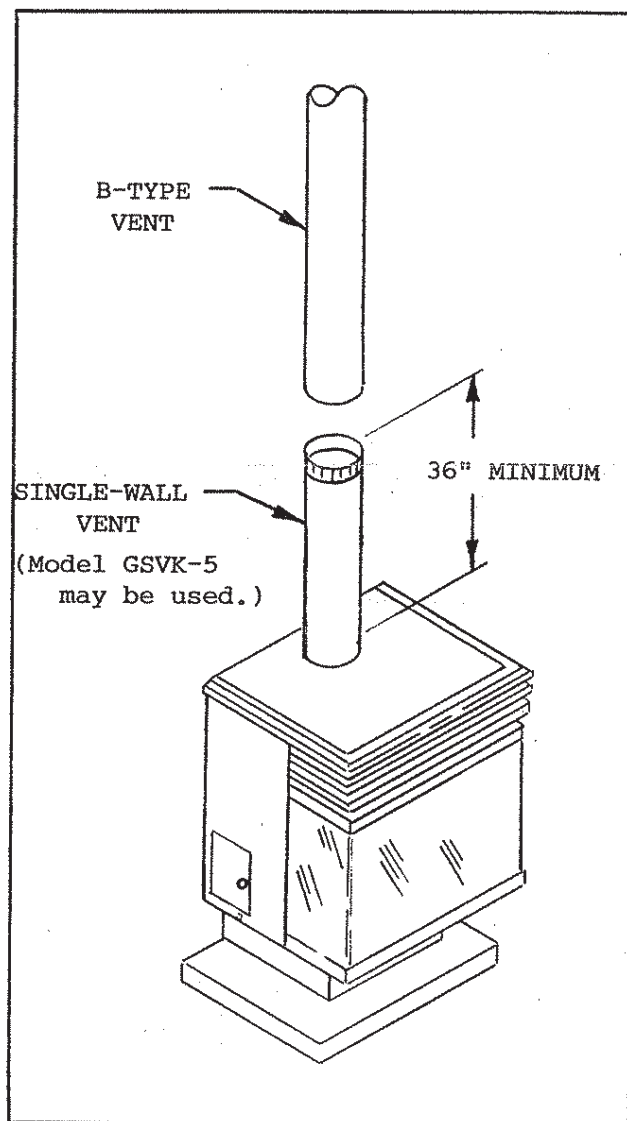


FIGURE 5

Consult Local Building Code Officials and Codes for proper vent system installations.

WARNING: THIS GAS FIREPLACE MUST NEVER BE VENTED BY CONNECTING TO A CHIMNEY FLUE SERVING A SEPARATE SOLID FUEL BURNING APPLIANCE.

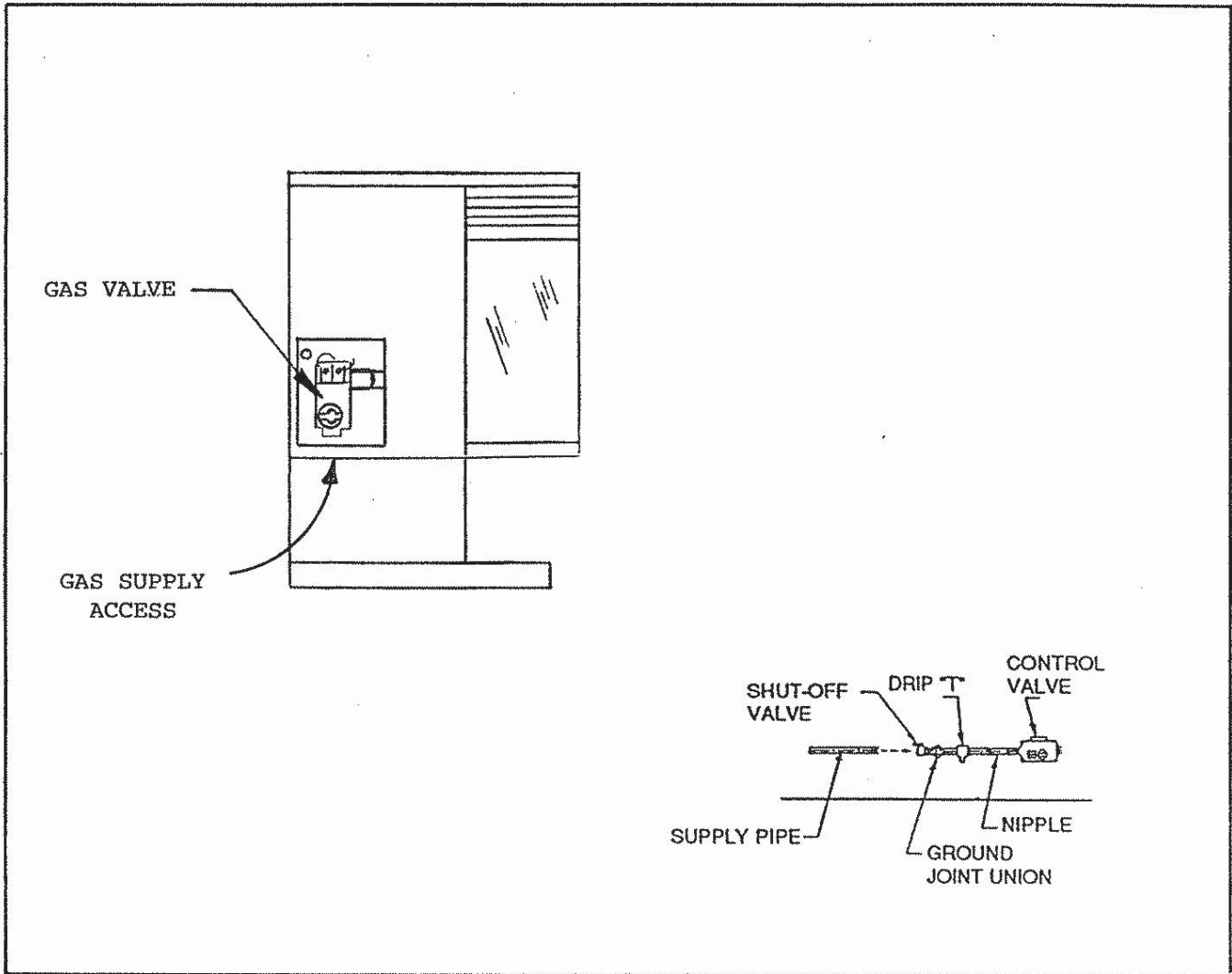


FIGURE 6

3.2 CONNECTING THE GAS LINE

The gas fireplace is designed to accept a 3/8 inch gas line for a listed 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 6. Use a 3/8 inch nipple, drip "T", union, and male/female manual gas shut-off valve. A 1/8 - inch NPT plugged tapping, accessible for test gauge connection, should also be provided for, in the pipe train.

Run the gas supply line through the open bottom of back of the unit and connect it to the gas valve. Support the control when attaching the pipe so that the pilot line is not bent or torn. After the gas pipe installation is complete, check carefully all gas connections for leaks with a soap solution. **DO NOT USE AN OPEN FLAME.**

NOTE: THE GAS PIPE SHOULD NOT COME IN CONTACT WITH ANY WOOD STRUCTURES UNTIL IT HAS REACHED A POINT AT LEAST 1 INCH AWAY FROM THE FIREPLACE.

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

3.3 ELECTRICAL WIRING FOR OPTIONAL KITS

Model GS-4000 Gas Fireplaces have factory installed electrical junction boxes (with grounded electrical cords) which are used ONLY for operating optional kits.

An optional blower kit (GFK-160A) and hand held remote control kit (RCH-09A) are available. Use of these options requires that the junction box (factory installed) be connected to 110 VAC service by plugging the cord into a grounded electrical wall outlet.

Detailed instructions for the optional blower and the optional remote kits are included with each kit.

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

3.4 WALL SWITCH WIRING

A 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 8 - 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.

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

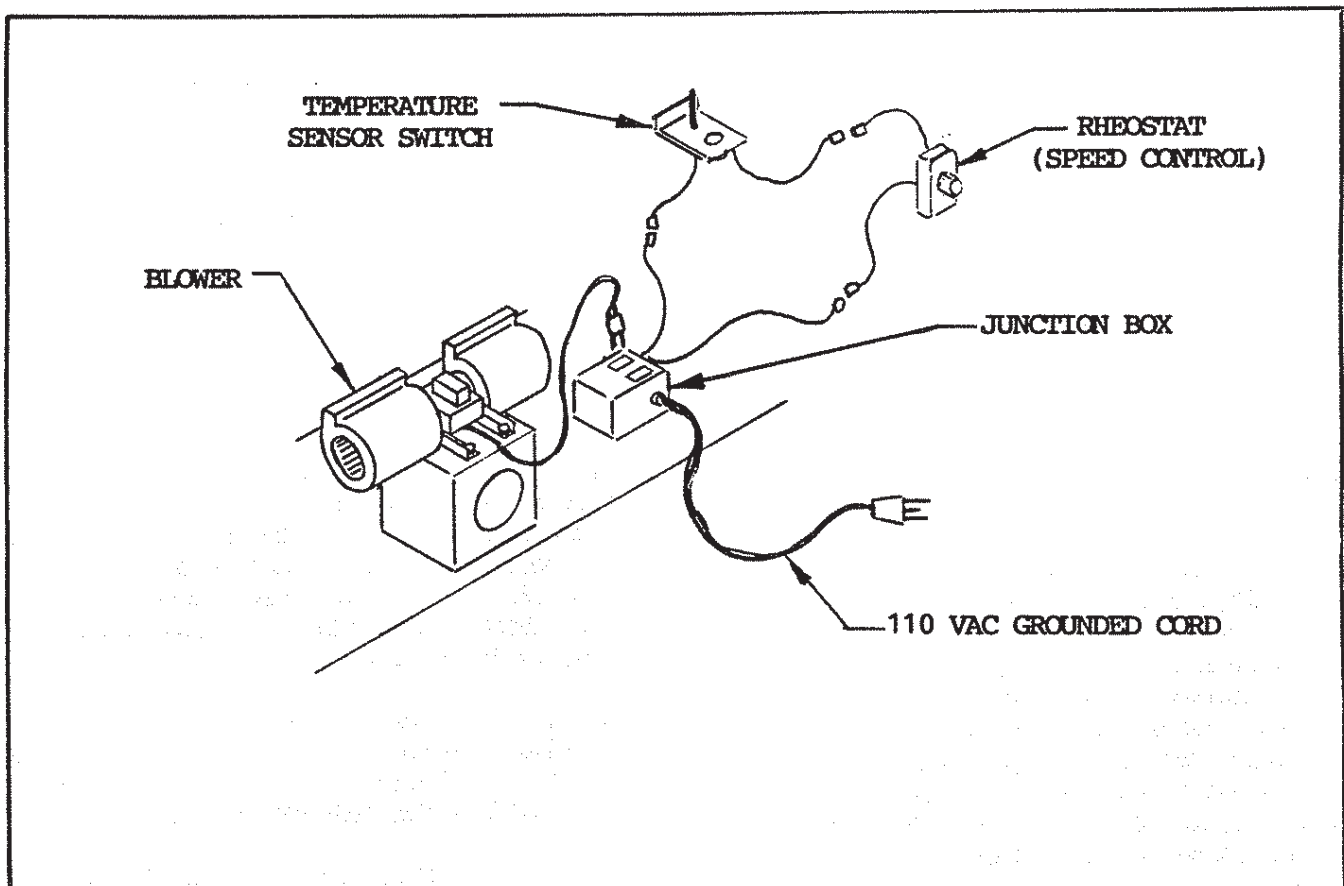


FIGURE 7

GS-4000

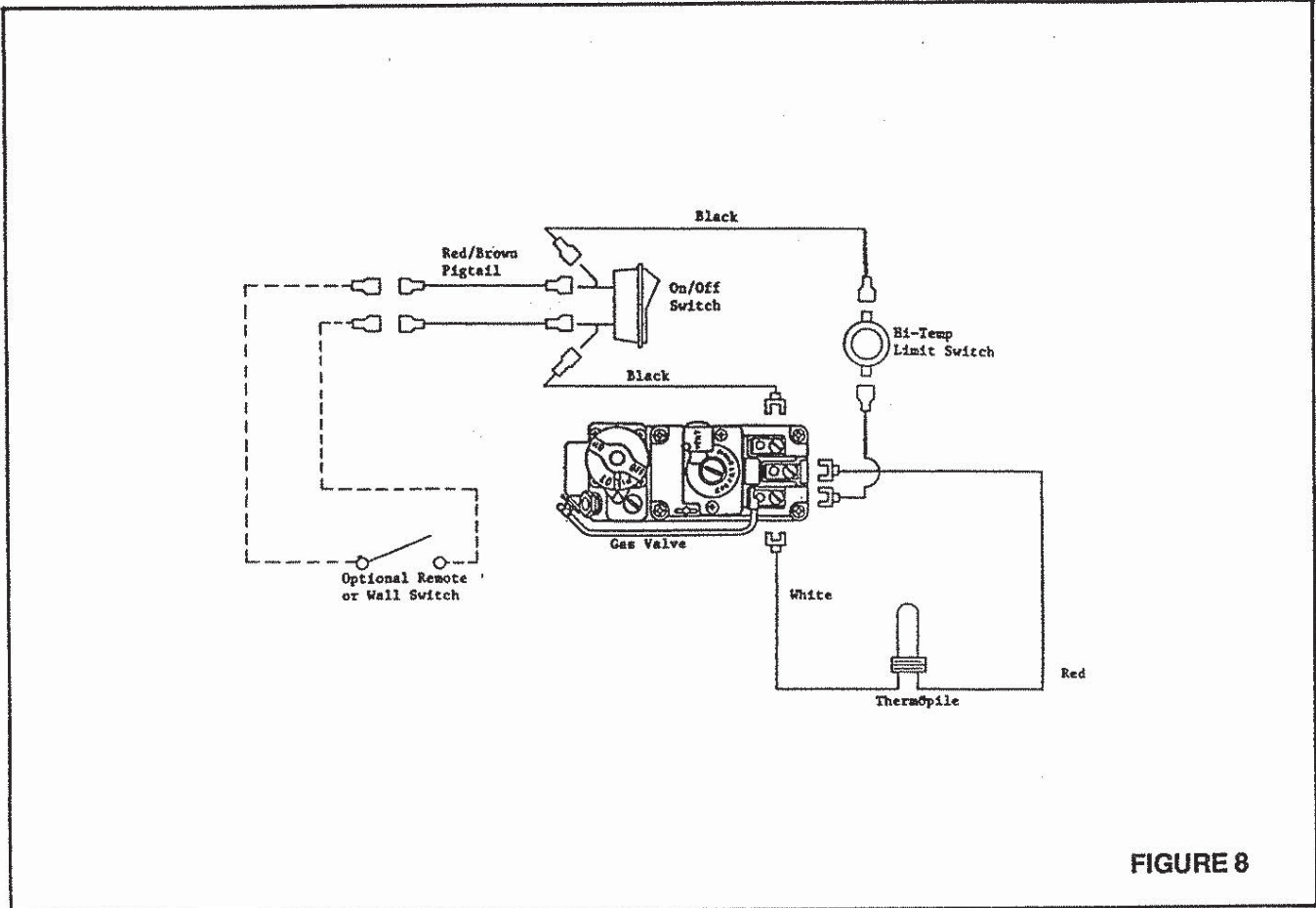


FIGURE 8

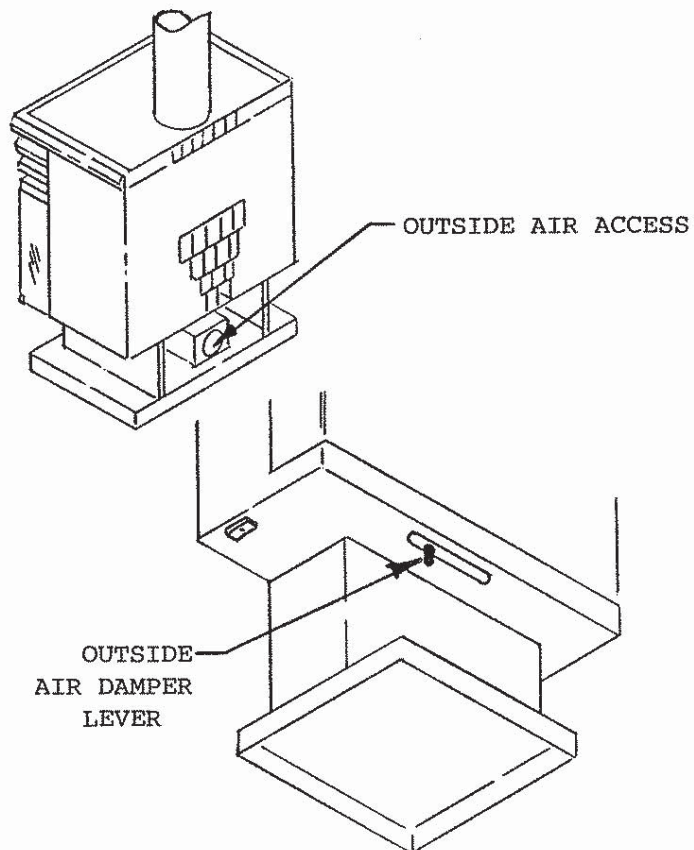
3.5 INSTALLING OPTIONAL OUTSIDE AIR

The GS-4000 unit is equipped to accept outside combustion air and it is recommended that the outside air system be used whenever practical. By using outside combustion air, the amount of room air that will be used for combustion will be reduced.

Detailed installation instructions for Model AK-225 Outside Air Kit are found in the kit. Attach the starting collar from the kit to the access hole at the rear base of the fireplace (Figure 9) and continue the installation per the instructions.

NOTE: If an outside air kit is installed, open the outside air damper by sliding the damper lever to the left. See Figure 9 for lever location.

If an outside air kit is NOT installed, the damper can remain either open or closed.



-11- FIGURE 9

3.6 FINISHING

Finish the walls surrounding the fireplace with the material of your choice. Do not install a combustible mantle or other combustible projection above the fireplace unless it is a minimum of 36 inches above the unit. Figure 10.

NEVER OBSTRUCT OR MODIFY THE AIR INLET/OUTLET GRILLES IN ANY MANNER.

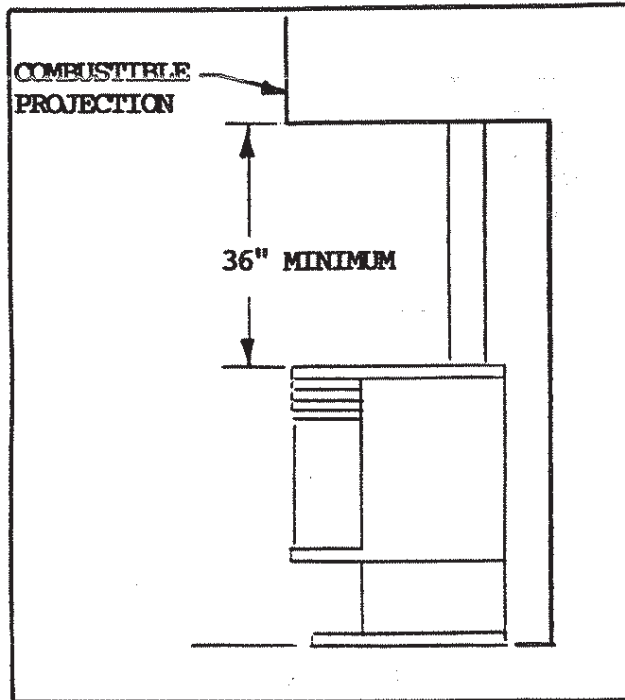


FIGURE 10

3.7 HEARTH EXTENSION

While a hearth extension may be desirable for aesthetic reasons, it is not required for decorative gas appliances per ANSI or CAN/CGA Testing Standards.

4.0 ELECTRICAL SAFETY SYSTEM

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

The MODEL GS-4000 system is wired so the thermogenerator, when heated with the pilot light, will produce approximately 350 to 500 millivolts. This activates the gas control valve. The unit is equipped with an ON/OFF rocker switch and a high temperature limit switch is used for protection and will close the main gas valve should the vent system become obstructed or a prolonged down-draft situation occur (Figure 11). Figure 12 shows switch locations.

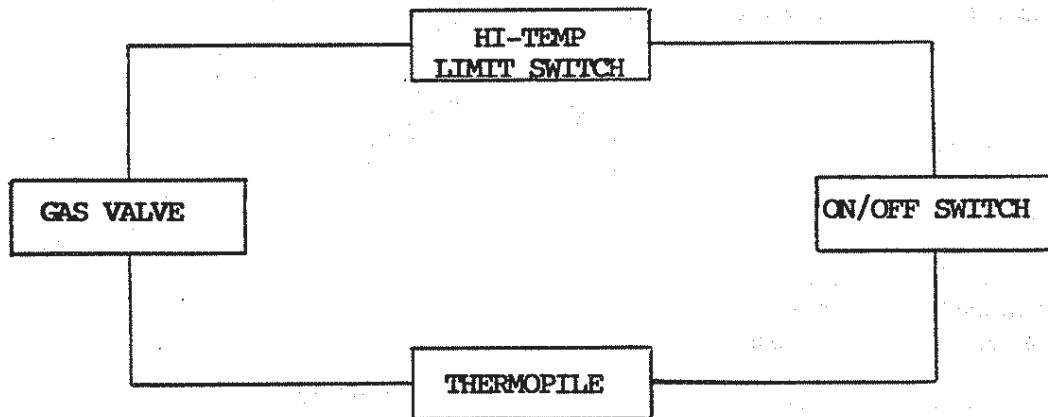
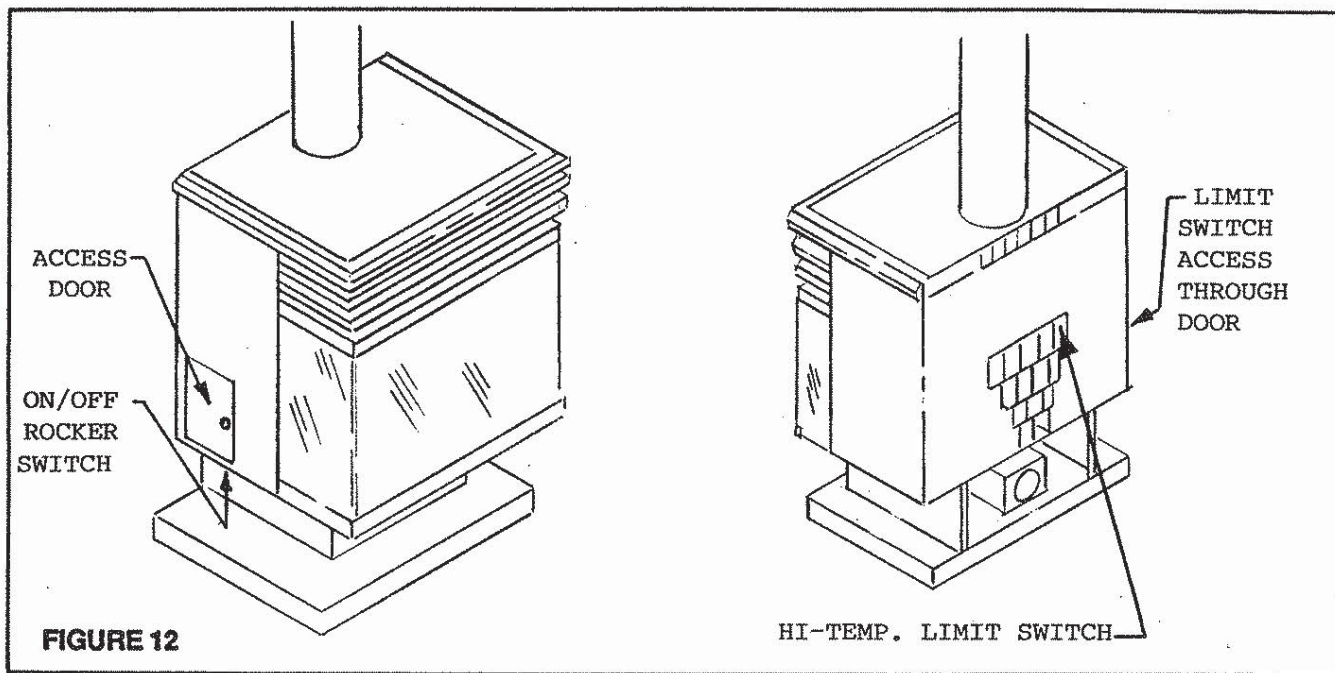


FIGURE 11



5.0 OPERATING GUIDELINES AND MAINTENANCE INSTRUCTIONS

Upon completing the gas line connection, a small amount of air will be in the lines. When first lighting the pilot light, it will take a few minutes for the lines to purge themselves of this air. Once the purging is complete, the pilot and burner will light and operate as indicated in the instruction manual. Subsequent lighting of the appliance will not require such purging.

CAUTION: DURING THE INITIAL PURGING AND SUBSEQUENT LIGHTING, NEVER ALLOW THE GAS VALVE CONTROL KNOB TO REMAIN DEPRESSED IN THE "PILOT" POSITION WITHOUT PUSHING THE RED IGNITOR BUTTON AT LEAST ONCE EVERY SECOND.

When lit for the first time, the appliance will emit a slight odor for an hour or two. This is due to paint and lubricants used in the manufacturing process. Additionally, for the first few minutes after each lighting, vapor may condense and fog the glass and the flames may be blue. After a few minutes this moisture will disappear and within 15-30 minutes the flames should become yellow.

The brass trim extrusions, at the top of glass, may show a crazing effect after the fireplace has been operated. This is normal with this unit.

Keep the control compartment, logs and burner area surrounding the logs clean by vacuuming or brushing at least twice a year.

CAUTION: THE LOGS CAN GET VERY HOT-HANDLE ONLY WHEN COOL.

Always turn off gas to the pilot before cleaning. For relighting, refer to lighting instructions located at the back of the unit.

The appliance and venting system should be inspected before initial use and at least annually by a qualified field service person.

Always keep the appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

Never obstruct the flow of combustion and ventilation air. Keep the front of the appliance clear of all obstacles and materials.

To obtain proper operation, it is imperative that the pilot and main burner flame characteristics are steady, not lifting or floating. Typically the top 3/4 inch at the pilot generator should be engulfed in the pilot flame. (Figure 13)

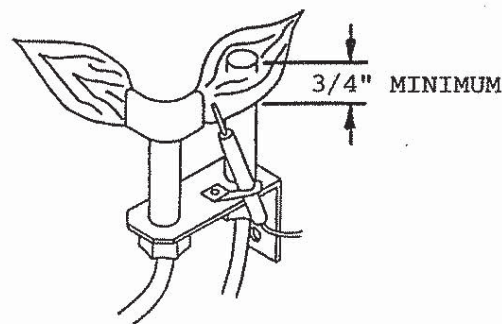


FIGURE 13

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 SERVICE TECHNICIAN PERFORM THESE CHECKUPS AT THE BEGINNING OF EACH HEATING SEASON.

Inspect the external vent cap on a regular basis to make sure that no debris is interfering with the airflow.

5.1 GLASS DOOR REMOVAL

1. Remove the bottom glass trim frame by pulling it straight out from the unit.
2. Remove the front glass door by lifting it out of the bottom glass retainers and lowering it until it clears the top 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 front glass and the logs exposing the burner and pilot assembly.

Clean all foreign materials from top of burner. Check to make sure that the burner orifice is clean.

NOTE: SIDE GLASS DOORS SHOULD NOT HAVE TO BE REMOVED TO ACCESS THE FIREBOX.

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

5.3 LOG REPLACEMENT

1. Remove the front glass door. (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 glass door.

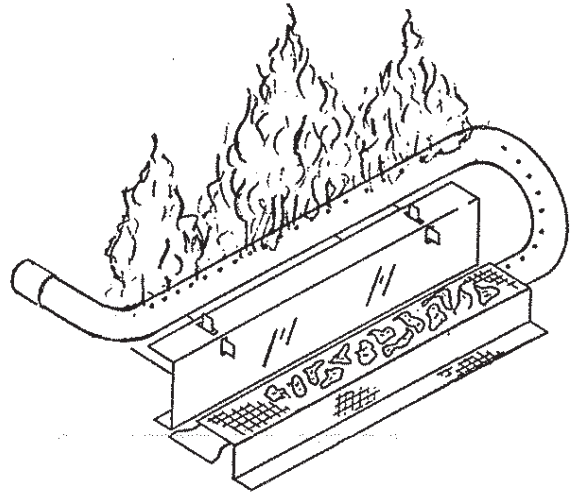


FIGURE 14

5.4 GLASS DOOR REPLACEMENT

1. Before replacing the glass door make sure the logs are properly positioned.
2. Slide the top edge of the glass door behind the top retainer, rotate the bottom edge in, and lower the door into the bottom retainer.
3. Replace the bottom glass trim frame.

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

5.5 BURNER FLAME ADJUSTMENT

The gas control valve has a pressure regulator knob which can be rotated clockwise to "HI" to increase the burner flame height, and counter-clockwise to "LO" to decrease the flame height. See Figure 15.

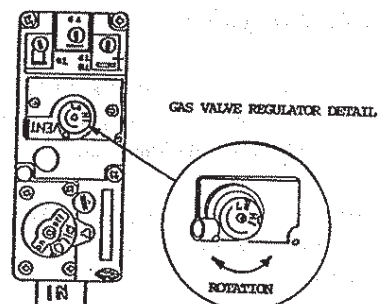


FIGURE 15

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 YOU 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.

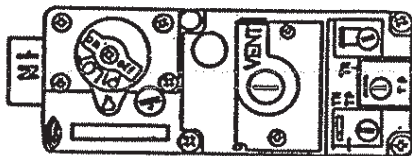
C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Forced or attempted repair may result in a fire or explosion.

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 - GS-4000

LIGHTING INSTRUCTIONS

1. "Stop" read the safety information above first.
2. To access the controls, open the cover door on the side of the unit.
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.



GAS VALVE

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.
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.

THERMOPILE

PILOT BURNER



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 3. 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 the knob counter-clockwise to the "ON" position. Then flip the ON/OFF switch to the "ON" position.

9. Rotate the control valve regulator knob clockwise to increase burner flame height or counter-clockwise to decrease flame height.

10. Close the access cover door.

TO TURN OFF GAS TO APPLIANCE

1. Turn ON/OFF switch to "OFF".
2. Open the access cover door.
3. Turn the valve control knob clockwise to the "Pilot" position then depress knob and continue turning to "OFF" position.
4. Close the cover door.

NOTE: THE TIPS OF THE FLAMES SHOULD NOT CONTINUOUSLY HIT THE TOP OF THE FIREBOX. IF ADJUSTMENTS MUST BE MADE, CONTACT YOUR DEALER OR A QUALIFIED SERVICE PERSON TO REPLACE THE ORIFICE OR ADJUST THE VALVE.

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 ALTITUDE INSTALLATION

Warnock Hersey Listed units are tested and approved for elevations from 0-2000 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 your local gas company for help in determining proper orifice size.

When installing this unit at an elevation between 2000-4500 feet (in Canada) the input rating must be reduced by 10 percent.

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 - GS-4000

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 pilot after repeated triggering	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 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 bad 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) tank. You may be out of fuel.	

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
<p>II. Pilot will not stay lit after carefully following lighting instructions.</p>	<p>A. Defective pilot generator.</p>	<p>1. Check pilot flame. Must impinge on pilot generator. Clean and or adjust pilot for maximum flame impingement on generator.</p>
	<p>2. Be sure wire connections from generator at gas valve terminals are tight and generator is fully inserted into pilot bracket.</p>	
	<p>3. Check thermogenerator with millivolt meter. Take reading at "TH-TP" and "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>B. Defective valve.</p>	<p>1. Disconnect the thermogenerator's red wire (female connector) from the high limit switch's black wire (male connector) and connect to terminal "TP" on the gas valve. Connect the millivolt meter probes to the "TH TP" and "TP" terminals on the gas valve. Turn green knob to pilot position, depress and light pilot 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 thermogenerator is defective.</p>
	<p>C. Open wire connection in pilot circuit.</p>	<p>1. Check wire continuity and connections in pilot circuit.</p>

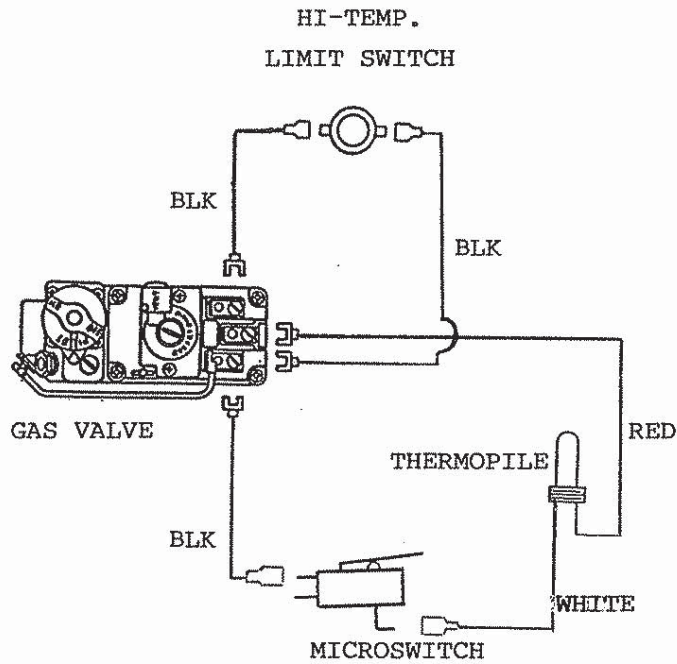
SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
III. Pilot burning, no gas burner, valve knob "ON", "ON/OFF switch "ON".	A. "ON/OFF" switch or wires defective.	1. Check "ON/OFF" switch and wires for proper connection. Place jumper wires across terminals at switch - If burner comes on replace defective switch. If OK, place jumper wires across switch wires at gas valve - If burner comes on, wires are faulty or connections are bad.
	B. Thermo-generator may not be generating sufficient millivoltage. (325 m.v.)	1. Recheck Symptom #2. 2. Pilot flame not physically close enough to thermo-generator
	C. Defective valve.	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.
	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.
IV. Frequent pilot outage problem.	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.
V. Pilot and main burner go out while being in operation.	A. High limit switch is defective or has reached its maximum.	1. Allow unit to cool. Then repeat lighting instructions.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
	B. No L.P. in tank.	1. Check L.P. (Propane) tank. You may be out of fuel.
	C. Bad thermogenerator.	1. Replace if necessary.
	D. Improper vent cap installation.	1. Check for proper installation & freedom from debris or blockage.
VI. Glass Soots	A. Flame impingement on logs.	1. Adjust the log set so that the flame does not impinge on it.
	B. Improper venturi setting.	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. Check to make sure vent cap is installed properly.

11.0 MODEL GS-4000 NY

Model GS-4000 NY is constructed and operates without a standing pilot flame when the main burner is shut off. The pilot must be lit every time the unit is operated. The main burner flames are turned on using the control knob on the gas valve. See the following Wiring Diagram And Lighting Instructions for Model GS-4000 NY.

Wiring Diagram Model GS-4000 NY



REPLACEMENT PARTS - MODEL GS-4000 NY

The gas valve assemblies shown on this table must be used on Model GS-4000 NY fireplaces. See Replacement Part Section 10.0 in this manual for other parts.

ITEM	PART NO.	DESCRIPTION
1	057-009A	GAS VALVE ASSY-NG
2	057-010A	GAS VALVE ASSY-LP

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 YOU 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.

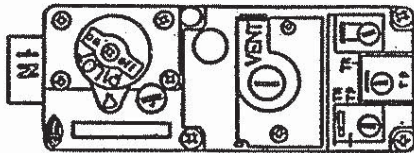
C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Forced or attempted repair may result in a fire or explosion.

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.

LIGHTING INSTRUCTIONS - GS-4000 NY

LIGHTING INSTRUCTIONS

1. "Stop" read the safety information above first.
2. To access the controls, open the cover door on the side of the unit.
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.



GAS VALVE

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.
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.

THERMOPILE

PILOT BURNER



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 3. 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 the knob counter-clockwise to the "ON" position.
9. Close the access cover door.

TO TURN OFF GAS TO APPLIANCE

1. Open the access cover door.
2. Turn the valve control knob clockwise to the "Pilot" position then depress knob and continue turning to "OFF" position.
3. Close the cover door.

LIMITED WARRANTY POLICY FOR GAS TECHNOLOGIES, INC. GAS FIREPLACES

The limited two year warranty will not become effective until the completed warranty card has been mailed to GAS TECHNOLOGIES, INC., Savage, MN 55378.
This card must be mailed within 60 days of the fireplace installation.

Subject to the conditions set forth herein, Gas Technologies, Inc. extends the following limited warranty with respect to Gas Technologies, Inc. Decorative Gas Fireplaces.

If Gas Technologies, Inc. is satisfied that any part or portion of the fireplaces covered by this warranty is defective in material or workmanship under normal use and service as described in the operating instructions, Gas Technologies, Inc. will take the following actions:

1. Within the first year from the date of installation, Gas Technologies, Inc. shall, at its option, replace or repair any such defect in material or workmanship, at Gas Technologies, Inc. expense. GAS TECHNOLOGIES, INC. SHALL NOT BE RESPONSIBLE FOR ANY OTHER LABOR COSTS, OR EXPENSES, INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.
2. During the second year after the date of installation, GAS TECHNOLOGIES, INC. shall supply replacement parts at the current minimum wholesale price, but GAS TECHNOLOGIES, INC. SHALL NOT BE RESPONSIBLE FOR ANY LABOR, TRANSPORTATION, OR OTHER INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES.
3. During the first six months after installation, GAS TECHNOLOGIES, INC. shall, at its option, replace or repair the glass door if operation is faulty (this does not include glass panels broken during shipping, misuse or careless handling). GAS TECHNOLOGIES, INC. SHALL NOT BE RESPONSIBLE FOR ANY LABOR, TRANSPORTATION OR OTHER INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. IF GLASS DOORS OTHER THAN FACTORY DOORS ARE USED, ALL WARRANTY AND LIABILITY ON THE FIREPLACE IS VOIDED.
4. All electrical, manual, and optional components or accessories found to be defective will be repaired or replaced without charge during the first year after installation.

Gas Technologies, Inc. may discharge its entire warranty liability by refunding the price of the product.

Products made by other manufacturers, sold with the fireplace or thereafter are not covered by this limited warranty. The use of other unauthorized components will make this warranty null and void.

This limited warranty will be void if the appliance is not installed by a qualified installer and according to the installation instructions. The limited warranty also is void if the fireplace is not operated, at all times, according to the operating instructions furnished.

EXCEPT TO THE EXTENT PROVIDED BY LAW, NO IMPLIED WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND NO IMPLIED WARRANTIES SHALL APPLY TO THE FIREPLACE AFTER THE ABOVE LIMITED WARRANTY HAS EXPIRED.

In states that do not allow limitations on how long implied warranty lasts, or do not allow exclusion of indirect damages, those limitations or exclusions may not apply to you. You may also have additional rights not covered in this limited warranty.

Gas Technologies, Inc. reserves the right to make changes at anytime, without notice, in design, material, specifications and prices and the right to discontinue styles and products.