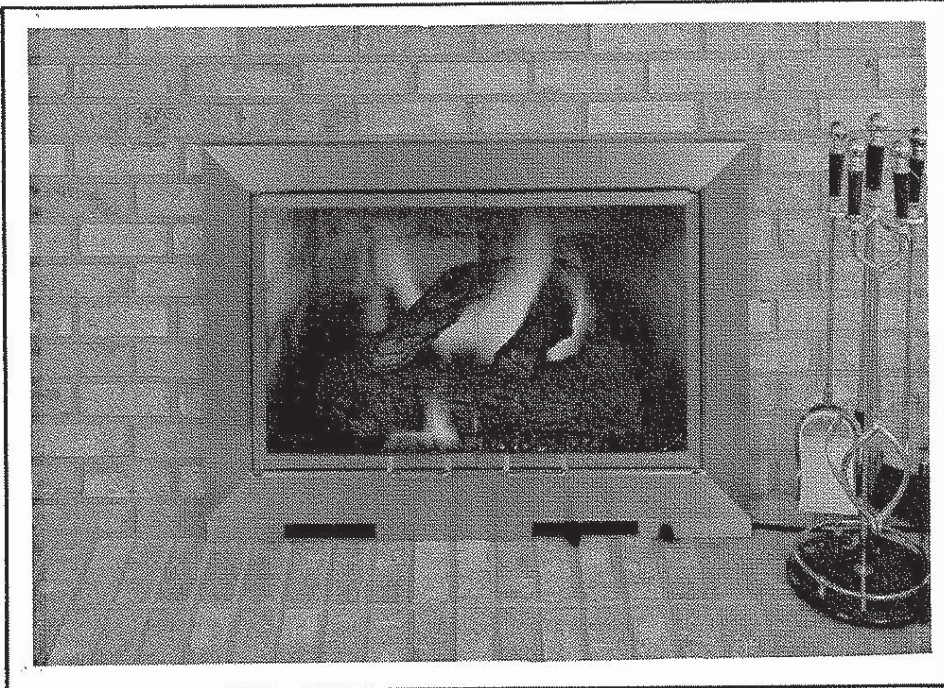


This appliance has been retired.
Service parts pages within have been removed.
For replacement parts, please refer to the individual
service parts list located on the brand websites.



PATENT 4,875,464 AND PATENTS PENDING

**MODEL GES-100 NG: NATURAL GAS
MODEL GES-100 LP: LP GAS (PROPANE)
INSTALLATION AND OPERATION
INSTRUCTIONS**

**FIREPLACE GAS LOGS WITH
GLOWING EMBERS AND BLOWER**

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



INSTALLATION AND OPERATION INSTRUCTIONS

READ INSTRUCTIONS CAREFULLY BEFORE INSTALLING

MODEL GES-100 NG/LP IS A.G.A. DESIGN CERTIFIED AND CGA CERTIFIED FOR NATURAL GAS OR 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

- 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.

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.

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

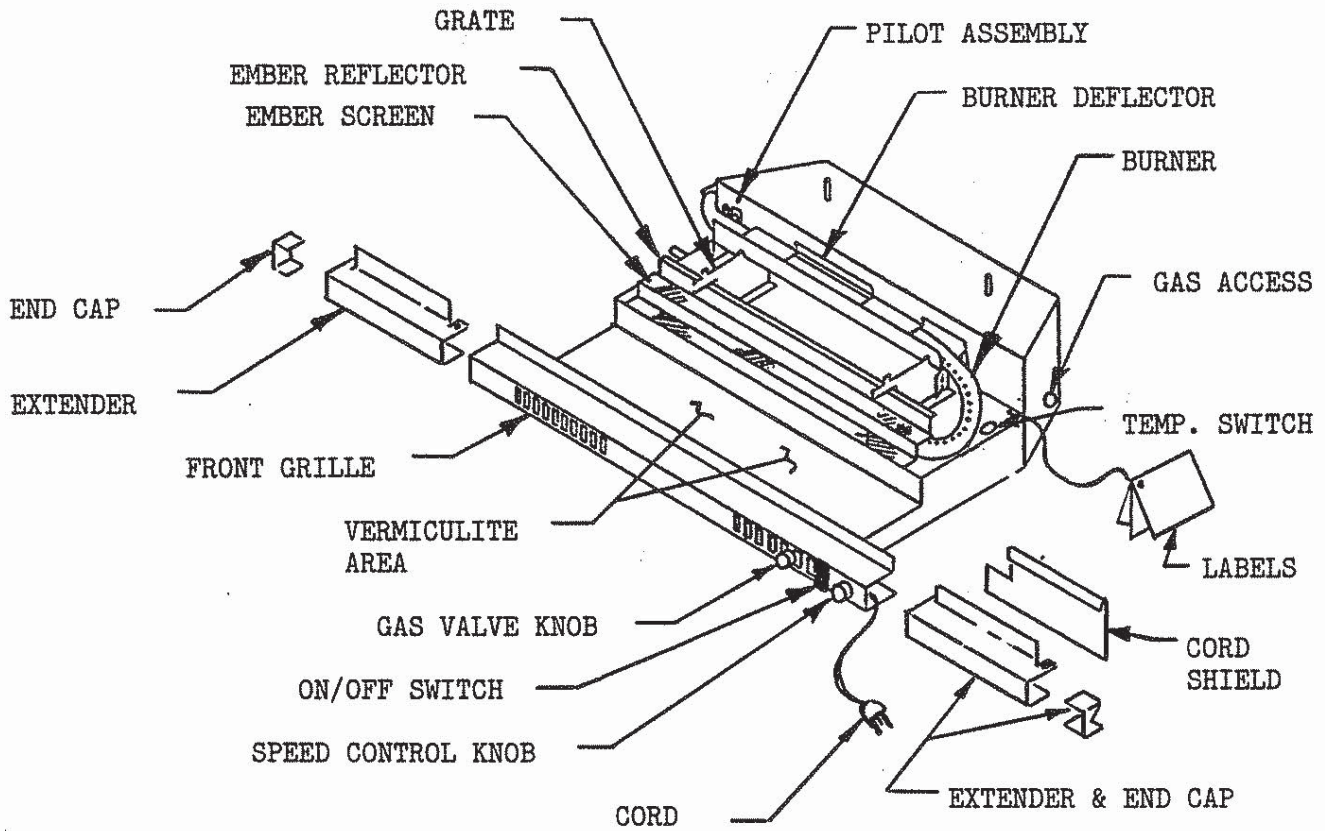
IMPORTANT: Read all instructions carefully before starting installation. Failure to follow these installation instructions may result in a possible fire hazard and will void the warranty.

Save this Manual for future reference

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	4
2.0	Gas Line Connection	4
3.0	Assembly	4
4.0	Safety Information	6
5.0	Lighting Instructions	7
	L.P. Information	7
6.0	Operating Guidelines and Maintenance Instructions	7
7.0	High Elevation Installation	9
8.0	Replacement Parts	10
	Warranty	11



TOP VIEW - FIREPLACE AREA

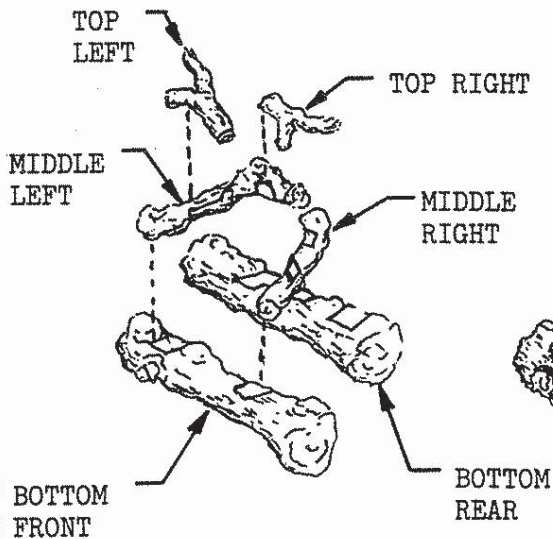
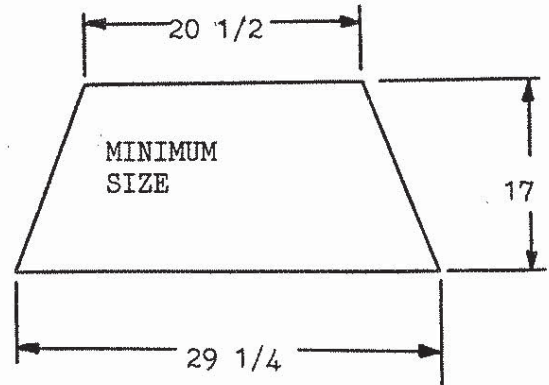


FIGURE 1

1.0 INTRODUCTION

Model GES-100 NG and GES-100 LP Gas Log Sets are Decorative Gas Appliances for Installation in a Solid-Fuel Burning Fireplace (minimum fireplace size: height 19", width 29 1/4", Depth 17").

This log set is to be installed only in a solid-fuel burning fireplace with a working flue and one constructed of noncombustible material. The minimum permanent vent opening provided by the fireplace chimney damper to vent the flue products must not be less than 48 square inches. The chimney damper **MUST** be fixed in a manner to maintain the minimum permanent vent opening. This may be accomplished by fastening the damper stop clamp provided to the edge of the damper to prevent its closing.

WARNING: OPEN THE CHIMNEY DAMPER TO ITS FULLY OPEN POSITION WHEN BURNING THIS GAS LOG SET.

WARNING: ALL GAS APPLIANCES PRODUCE SOME CARBON MONOXIDE WHEN OPERATED. CARBON MONOXIDE IS A COLORLESS, ODORLESS, POISONOUS GAS. ADEQUATE PROVISIONS MUST BE MADE TO PROVIDE COMBUSTION AIR FOR THIS GAS LOG SET. IF OUTSIDE AIR IS NOT INCLUDED IN THE FIREPLACE, IT MAY BE NECESSARY THAT AN ADDITIONAL COMBUSTION AIR SOURCE BE PROVIDED.

CAUTION: CHECK THE CONSTRUCTION OF THE FIREPLACE BEFORE INSTALLING THE GAS LOG SET. THE AREA OF THE FLUE SHOULD NOT BE LESS THAN 1/11 THE AREA OF THE FIREPLACE OPENING. NON-AIRTIGHT GLASS DOORS SHOULD BE INSTALLED ON THE FIREPLACE IF THE AREA OF THE FLUE IS LESS THAN 1/11 THE AREA OF THE FIREPLACE OPENING.

CAUTION: To minimize the possibility of spillage and to maximize proper drafting, position the log set as close to the back of the fireplace as possible.

The installation, including provisions for combustion and ventilation air, must conform with the current American National Standard, National Fuel Gas Code ANSI Z223.1 (in the United States), the current CAN/CGA B-149 Installation Code (in Canada), and applicable local building codes.

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 - (current) (in the United States) or with the current CSA C22.1 Canadian Electric Code (in Canada).

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

WARNING: THIS UNIT IS NOT FOR USE WITH SOLID FUEL

2.0 GAS LINE CONNECTION

Run proper size gas line into fireplace. A 1/2 inch gas line, with a 3/8 inch reduction for hook-up, is usually sufficient for the Gas Log set; however, if the run is unusually long, a larger line may be required. Contact your local gas company or Department of Building and Safety if there are any questions. The inlet gas supply pressure, measured in inches of water column, shall range between 4.5 and 10 for natural gas and between 11 and 13 for LP gas.

CAUTION: When installing this log set in a factory built fireplace, be certain to consult the fireplace Installation Manual. ALL knockouts in the fireplace through which the gas supply line is run, **MUST** be resealed with insulation after the gas line is in place.

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.

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.

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

3.0 ASSEMBLY

The logs and the burner/grate assembly come shipped in two separate cartons. The burner/grate is designated GES-100 NG or GES-100 LP. The logs are designated LOGS-24 (formerly GLS-24).

A. Remove the burner/grate assembly from the carton. It is completely assembled and only requires that the logs, vermiculite, ember material, and front grille extenders be added. Figure 1.

NOTE: For masonry fireplaces with existing glass doors make sure the doors can be elevated 1 3/8". Remove the glass doors. Insert the GES-100 and reposition the glass doors on top of the front grille. This will elevate the glass doors 1 3/8".

B. Mount extender bars on the ends of the front grille with the metal screws provided.

C. Place the glass door enclosure on the front grille of the unit, making sure the glass door and front grille are centered on the fireplace.

D. Remove the extender bars and cut them so the total front grille width is the same as the glass enclosure. Cut the cord shield to the desired length and slide it on the extender bar where the cord is introduced (this protects the cord from heat). Then place the end caps on the ends of the extender bars with the notched cap on the cord side. See Figure 2.

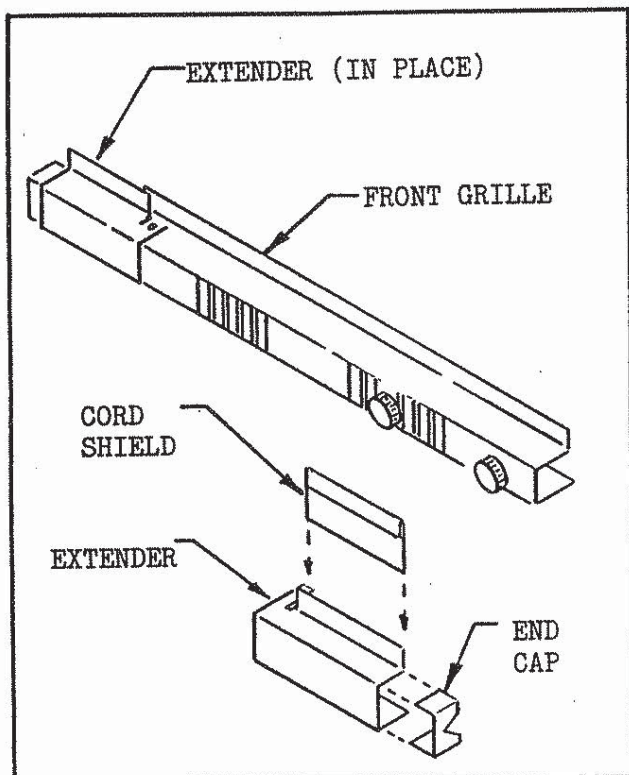


FIGURE 2

E. Reposition and secure the glass door according to the glass door instruction manual.

F. Remove the logs from the carton. Notice that each log has a marking. The gas logs must be properly positioned by using the predrilled holes in the logs to position them on the grate pegs. Open the bag of vermiculite and spread it evenly on the bottom of the firebox pan, making sure not to block the lower burner port holes or the upper burner air shutter hole on the left end of the burner. (Figure 1).

G. With the logs in position, place the complete assembly as far back in the fireplace as possible and center it, left to right. To create a glowing ember effect, 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. See Figure 3.

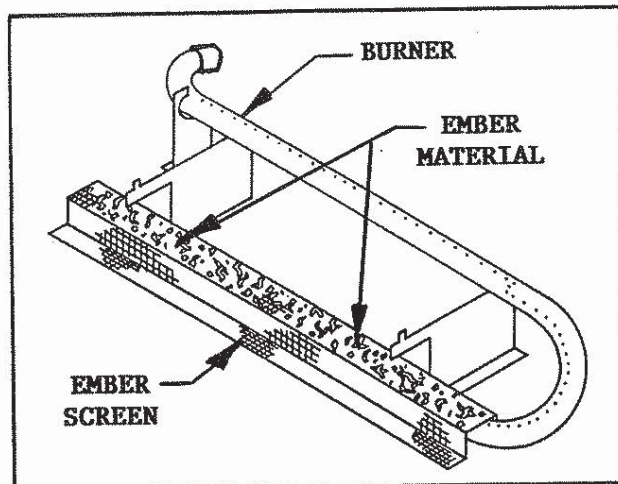


FIGURE 3

H. Be sure gas to the fireplace is "OFF". Connect the proper gas appliance connector from the GAS VALVE to the gas supply line. A connection kit Model Number QC-GLS is available. An approved flex-gas line (Model Flex-12 or Model Flex-18) can also be used. Make certain all connections are tight and use soap water to test for leaks. DO NOT USE AN OPEN FLAME.

I. Purge the gas supply line of any trapped air prior to the first firing of the unit.

CAUTION: During the initial purging and subsequent lightings, NEVER allow the gas control valve knob to remain depressed in the "PILOT" position without pushing the red ignitor button at least once every second.

J. Plug the blower cord into the nearest 110 VAC outlet. The blower has a variable speed control switch for setting desired fan speed and a temperature sensor switch which will start when the temperature reaches 110 °F and turn it off at 90 °F. The fan should be plugged in at all times when the unit is in use.

CAUTION: This unit is equipped with a three (3) wire ground cord for protection. Never remove the ground lead. Be sure the electrical plug provided is plugged into a proper three (3) prong outlet. If an extension cord is used, be sure it has the proper ground and is of the same or greater gauge than the cord provided on the unit. If the extension cord is too light, the fan may fluctuate its speed and operate improperly. See Figure 4 for blower wiring diagram.

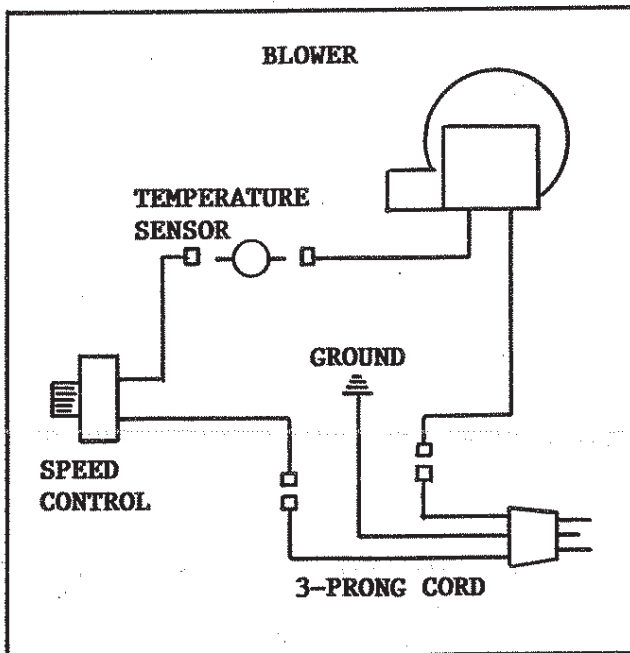


FIGURE 4

K. A damper stop clamp with set screw is provided to prevent full closure of the fireplace damper blade. Attach the clamp to the edge of the damper blade with pliers or wrenches. If the damper stop supplied does not fit the application, use a permanent means that will keep the damper open to a MINIMUM of 40 square inches. See Figure 5.

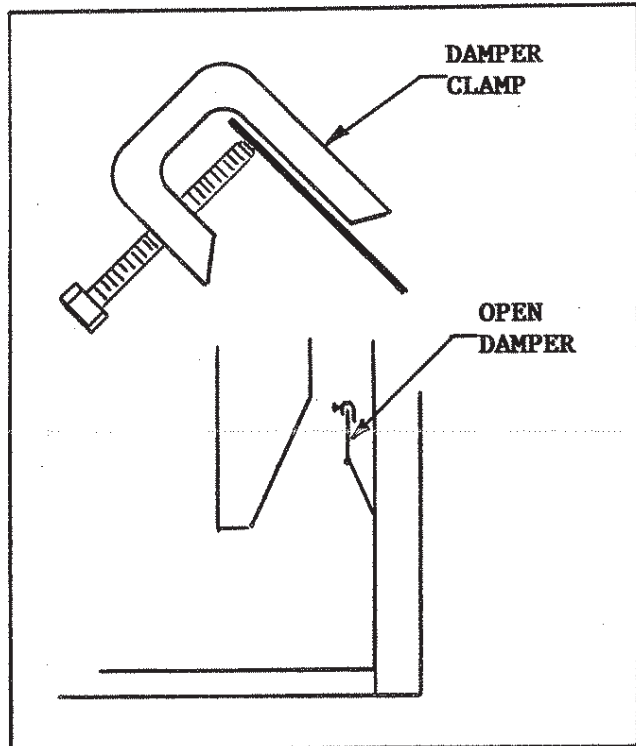


FIGURE 5

WARNING: OPEN THE CHIMNEY DAMPER TO ITS FULLY OPEN POSITION WHEN BURNING THIS GAS LOG SET.

4.0 SAFETY INFORMATION - MODEL GES-100

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 which must be lighted by hand. 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 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.

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. Force or attempted repair may result in a fire or explosion.

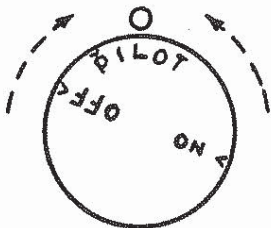
D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

5.0 LIGHTING INSTRUCTIONS - MODEL GES-100

LIGHTING INSTRUCTIONS

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

2. Turn the control knob to the "OFF" position by pressing the knob in and turning it clockwise until it stops.



3. WAIT FIVE (5) MINUTES TO CLEAR OUT ANY GAS.

4. Turn the control knob to the "Pilot" position, by rotating it counter-clockwise. Depress the control knob and immediately depress red piezo button until PILOT lights. It may require several depressions of piezo button until PILOT lights. If PILOT light does not light after 10 seconds, return to Step 2. Continue to depress the control knob until the pilot remains lit when the knob is released (approximately one minute). If the knob does not pop out when released or if pilot does not stay lit, turn the control knob to the "OFF" position, shut off the gas supply to the log set control valve, and IMMEDIATELY call a service technician or gas supplier.

5. After the pilot has been lit, rotate the control knob counter-clockwise to the "ON" position.

6. Set the ON/OFF switch to "ON" to light the burner.

TO TURN OFF GAS TO APPLIANCE

Turn the control knob to "PILOT" position, depress the knob, and continue turning to the "OFF" position.

LPG (PROPANE) WARNING

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, 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.

6.0 OPERATING GUIDELINES AND MAINTENANCE INSTRUCTIONS

Upon completing your 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.

WARNING: Be sure fireplace screen or glass doors are in place when burning fireplace logs. Unless other provisions for combustion air are provided, the screen or doors shall have an opening for introduction of combustion air. **THIS GAS LOG SET IS NOT DESIGNED TO OPERATE WITH AIR TIGHT GLASS DOORS.** If gas odor is noticeable, turn control knob to "OFF" position and check all connections for leaks. **DO NOT USE OPEN FLAME.** Adequate combustion and cooling air **MUST** be provided or the unit will not function properly. **DO NOT BLOCK FRONT GRILLES.**

Your appliance control system is a millivolt type. It consists of a pilot burner, a gas control valve/regulator, a thermogenerator, a piezo ignitor, and an ON/OFF rocker switch. See Figure 6 for control system wiring diagram.

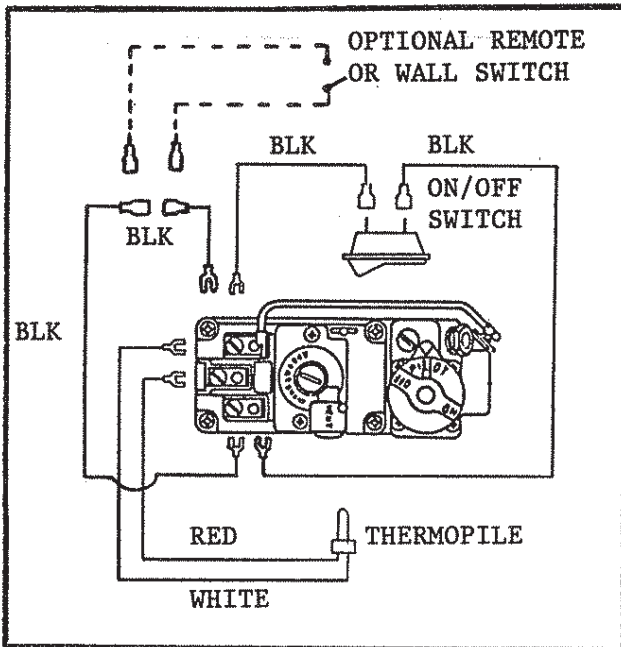


FIGURE 6

NOTE: An Optional Remote Control Kit (RCH-09A) and Wall Switch Kit (WSK-21), for turning the burner ON/OFF, is available. Detailed installation instructions are found in each kit.

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

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 of the thermo generator should be engulfed in the pilot flame (Figure 7).

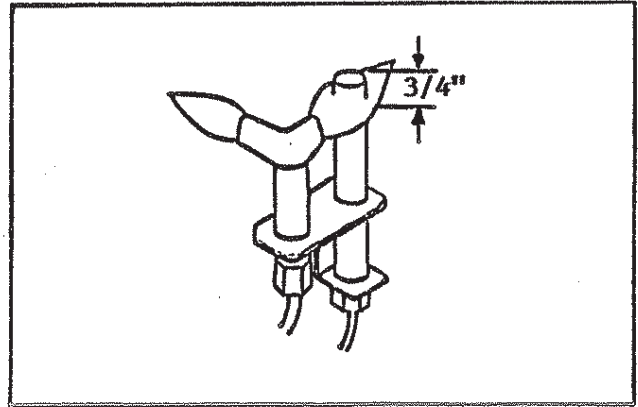


FIGURE 7

Periodically remove the logs and examine the burner. If dirty, clean with a stiff brush. Also examine the area around the burner air shutter, and the pilot. Any dirt or lint in this area should be removed. This will insure long life and trouble free operation. When the appliance is put back in service, check the burner flame patterns with Figure 8.

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

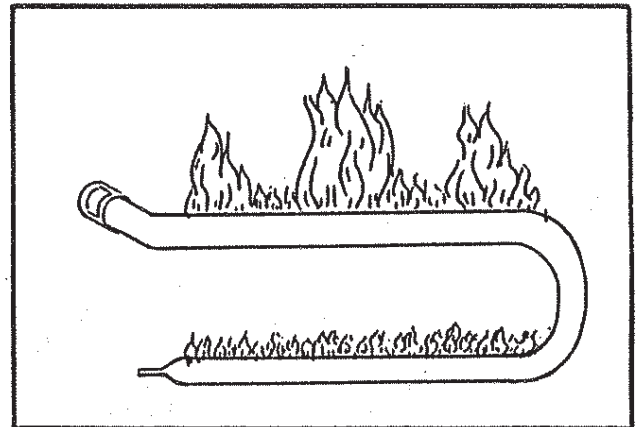


FIGURE 8

7.0 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 company for proper orifice size identification.

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 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.

LIMITED WARRANTY POLICY FOR GAS TECHNOLOGIES, INC. GAS LOG SET

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 Log Appliances.

If Gas Technologies, Inc. is satisfied that any part or portion of the appliance 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. WILL 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 unit if operation is faulty (this does not include logs 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.
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 unit 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 unit 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 APPLIANCE 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.

MODEL GES-100 ADDENDUM "A"

Some Model GES-100 Gas Log Appliances do NOT have an ON/OFF Rocker Switch for turning the burner flame ON/OFF. The following Lighting Instructions and Wiring Diagram pertain to units WITHOUT an ON/OFF Rocker Switch. All other instructions found in the Instruction Manual should be followed when installing and operating the appliance.

Save this addendum sheet and the Instruction Manual for future reference.

4.0 LIGHTING INSTRUCTIONS (FOR UNITS WITHOUT ON/OFF SWITCH)

A. Turn the control knob to the "OFF" position by pressing the knob in and turning it clockwise until it stops in the upright position. See Figure 1.

B. WAIT FIVE (5) MINUTES TO CLEAR OUT ANY GAS.

C. Turn the control knob to the "PILOT" position by rotating it counter-clockwise. 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 A. 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.

D. After the pilot has been lit, turn the burner on by rotating the control knob counter-clockwise to the "ON" position (upright position).

E. To turn off gas to the appliance, turn the control knob to "PILOT" position, depress the knob, and continue turning to the "OFF" position (upright position).

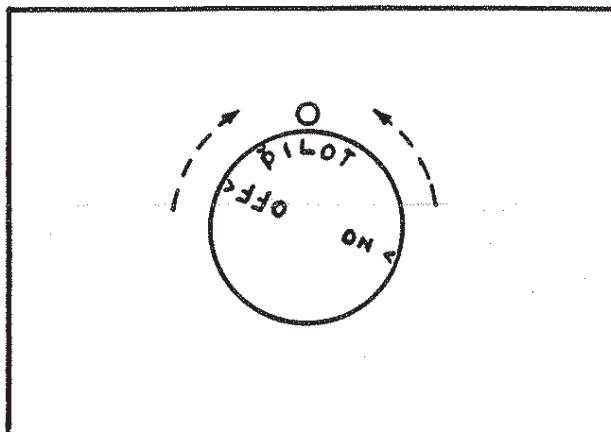


FIGURE 1

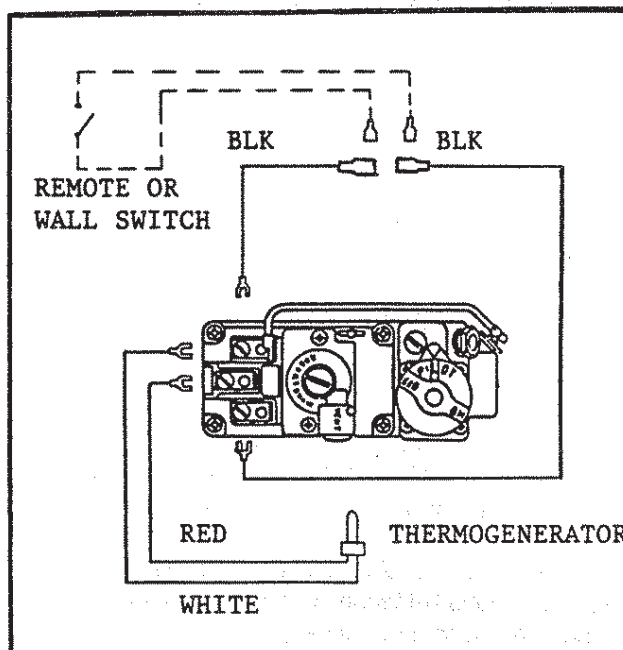
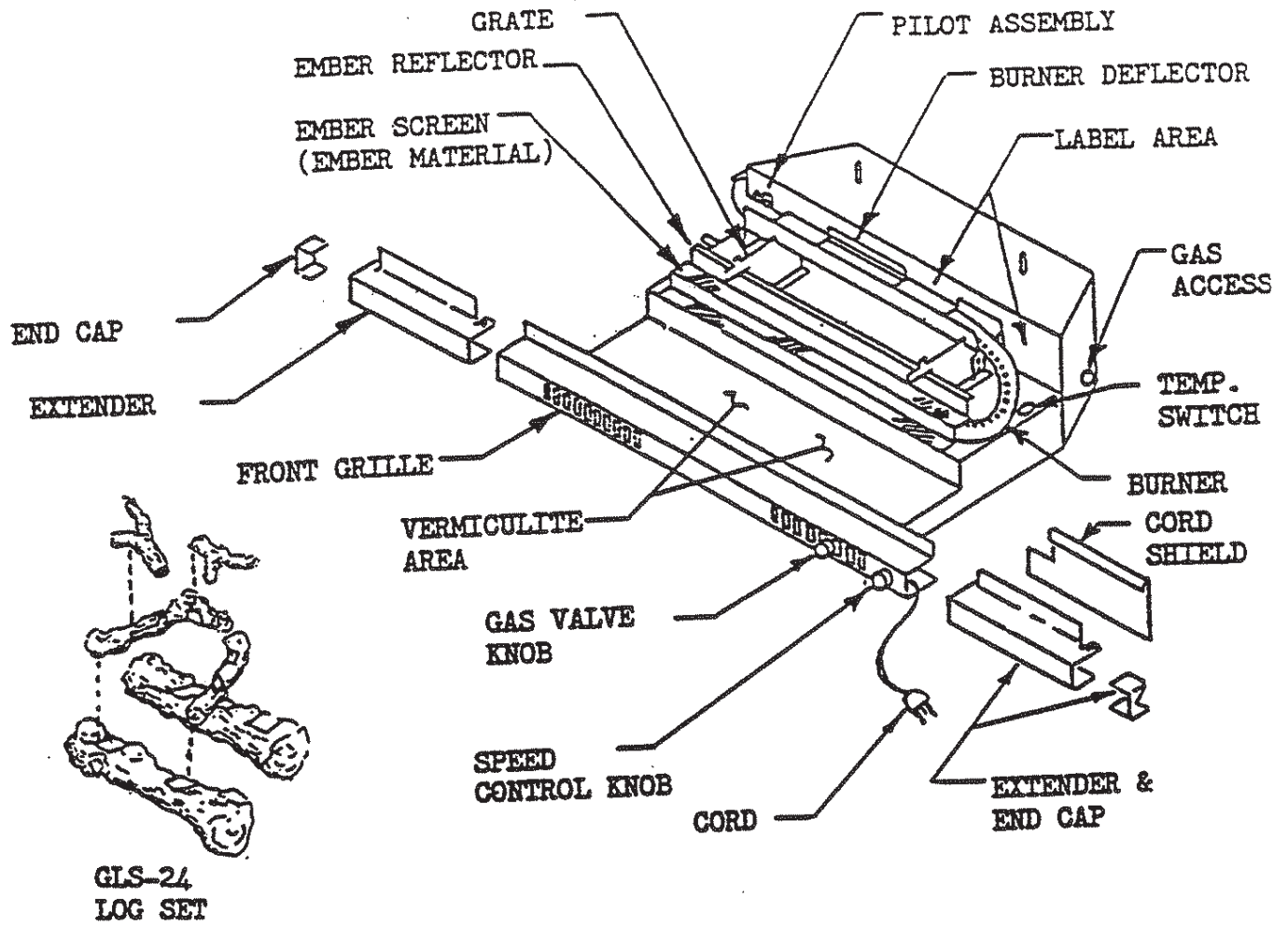
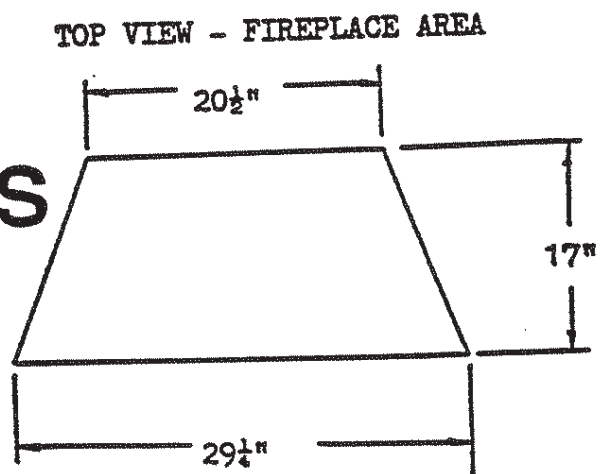


FIGURE 2



GES-100

GOLDEN EMBERS SUPREME



Minimum fireplace size
 for installation is:
 29 1/4" W x 19" H 17" D

PRODUCT INFORMATION
GAS LOG SET
MODEL GLS-18, GLS-24, GLS-30 AND GES-100



GOLDEN EMBERS GAS LOG SET

STANDARD FEATURES

- A Golden Flame and Burning Embers
- Six Realistic Logs
- Designed for Use With Glass Doors Closed
- Piezo Ignitor and Safety Pilot
- Clean Burning
- Concealed Controls that are also Thermally Protected
- Fits Most Prefab and Masonry Fireplaces
- Completely Pre-assembled
- On/Off Switch
- Remote Control and Wall Switch Options.
- Model GES-100 is a heat-circulating model for increased efficiency

APPROVALS

- A.G.A. Design Certified as a Decorative Gas Appliance for Installation in Vented Fireplaces to ANSI Z21.60-1981, Z21.60a-1982, Z21.60b-1984 with Natural and Propane gas.
- CGA Approved

Dimensions

Log Set	Width Front	Depth	Width Back
GLS-18	24 3/4"	11 1/4"	14"
GLS-24	26"	15"	15"
GLS-30	29"	15"	15"
GES-100	29"	17"	20"
Minimum Firebox Size	Width Front	Depth	Width Back
GLS-18	26 1/4"	12 1/2"	17 3/4"
GLS-24	27 5/8"	14 1/4"	21 1/8"
GLS-30	32"	15 1/2"	29"
GES-100	29 1/4"	17"	20 1/2"

GAS LOG SETS

Model	Product	Suggested Retail
GLS-18NG	38,000 BTU	369.00
GLS-18LP	38,000 BTU	369.00
GLS-24NG	48,000 BTU	399.00
GLS-24LP	41,000 BTU	399.00
GLS-30NG	48,000 BTU	449.00
GLS-30LP	41,000 BTU	449.00
GES-100-NG	GLS w/Blower-NG 48,000 BTU	599.00
GES-100-LP	GLS w/Blower-LP 41,000 BTU	599.00
Options		
RCH-09A	Remote Control	145.00
RCH-BAT	Battery Remote	145.00
WSK-21	Wall Switch Kit	15.00
GES-100 Fronts		
GES-FRPB	Polished Brass Front	34.00
GES-FRAB	Antique Brass Front	34.00
GES-FRSB	Satin Brass Front	40.00

NG denotes Natural Gas; LP is Liquid Propane