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.

MODEL R-2000
MODEL SL-2000
Installation and Operation Instructions
A.G.A. Design Certified and
CGA Certified

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

GAS TECHNOLOGIES® INC.
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045-985-B 10/94
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INSTALLATION AND OPERATION INSTRUCTIONS

PLEASE READ THIS MANUAL BEFORE INSTALLING AND USING THE FIREPLACE.


Requires one or more of the following vent systems for installation:
SL-DVK-01 STRAIGHT OUT INSTALLATION

FOR YOUR SAFETY
What to do if you smell gas:
- Extinguish any open flame.
- Do not 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: IF THE INFORMATION IN THIS MANUAL IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY, OR LOSS OF LIFE.
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any appliance.

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.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

FOR YOUR SAFETY:
DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

WARNING: "IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE INJURY OR PROPERTY DAMAGE. REFER TO 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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Printed in U.S.A.
1.0 INTRODUCTION

The information in this manual pertains to both Models SL-2000 and R-2000 unless specifically noted.

These models are designed to operate with all combustion air being piped from the outside of the building and all exhaust gases expelled to the outside of the building.

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

These models MUST use one of the vent systems listed on page 1 and described in the venting section of this manual. NO other vent systems or components may be used.

The control system for these models is a millivolt type. It consists of a gas control valve/regulator, a standing pilot assembly, a thermopile, a piezo ignitor, and a safety high temperature limit switch. The controls are located in the lower compartment behind the mesh trim door of the fireplace. Access to this compartment is gained by rotating the bottom grille of the mesh door upward. See Figure 1.

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 - B149 (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 C22.1 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 UNIT'S 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 DIRECT VENT CAP ON THE EXTERIOR OF THE HOUSE.

MODELS SL-2000 and R-2000 can be installed as a freestanding unit, mounted an exterior wall, or installed inside a framed construction (chase).

Minimum clearances in inches to combustibles are: Floor 0, Back 0, Sides 0, Top 0. Minimum clearance from the front corner of the unit to a wall extending out and running perpendicular to the front of the unit is 12-inches. Ceiling height in front of the unit is 31-inches. See Figure 3.

Minimum inlet gas supply pressure for purpose of input adjustment is 5.0 inches water column natural gas and 11 inches water column propane. Maximum inlet gas supply pressure 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 direct vent gas appliance 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 vent system and gas logs are packaged with the unit. 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 vent system component
- Modification of the fireplace or direct 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.

NOTE: The appliance has an air-tight combustion chamber and takes 100% outside air for combustion. This appliance requires a direct vent system (see venting section of this manual for details). Both Natural Gas and Propane units may be installed in a bedroom.

THIS FIREPLACE AND VENT ASSEMBLY MUST BE VENTED THROUGH AN OUTSIDE WALL AND MUST NEVER BE ATTACHED TO A CHIMNEY SERVING A SOLID FUEL BURNING APPLIANCE.

NOTE: When installing the vent system, it is imperative that the vent cap (horizontal termination) be NO more than a 1/4" below horizontal.

Access to the inside of the combustion box should not be necessary during installation. The ember material for the lower burner (Figure 1) and the gas logs (Figure 2) are installed in the unit.

THE UNIT WILL NOT OPERATE UNLESS THE GLASS DOOR IS SECURED IN PLACE AND SEALED.

WARNING: DO NOT OPERATE APPLIANCE WITH THE GLASS DOOR REMOVED, CRACKED, OR BROKEN. REPLACEMENT OF THE GLASS DOOR SHOULD BE DONE BY A LICENSED OR QUALIFIED PERSON. DO NOT STRIKE OR SLAM THE GLASS DOOR.
CLEARANCE TO COMBUSTIBLES
SIDES: 0
BACK: 0
TOP: 0
SIDEWALL: 12 (IN FRONT OF UNIT)
CEILING: 31 (IN FRONT OF UNIT)
WARNING: GLASS DOOR ASSEMBLIES SHALL ONLY BE REPLACED AS A COMPLETE UNIT AS SUPPLIED BY THE GAS FIREPLACE MANUFACTURER. NO SUBSTITUTE MATERIALS MAY BE USED.

WARNING: THE GLASS DOOR ASSEMBLY MUST BE IN PLACE AND SEALED AND THE FIXED MESH TRIM ASSEMBLY MUST BE IN PLACE ON THE FIREPLACE BEFORE THE UNIT CAN BE PLACED INTO SAFE OPERATION.

Prior to first firing, read Operation 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 unit and to replace any part of the control system and any gas control which has been underwater.

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.

NOTE: IF EXTERIOR WALLS ARE FINISHED WITH VINYL SIDING, IT IS NECESSARY TO INSTALL THE VINYL PROTECTOR KIT (VPK-DV) TO THE TOP OF THE EXTERIOR FIRESTOP.

3.0 INSTALLATION INSTRUCTIONS

In planning the installation for the unit it is necessary to determine where the unit is to be installed and the type of vent system to be used (straight out or extended straight out) and whether optional accessories (fan, remote control, wall switch, or thermostat) are desired. Gas supply piping should also be planned.

CAUTION: 110-120 VAC ELECTRICAL SERVICE SHOULD BE PLANNED CAREFULLY IF AN OPTIONAL FAN OR REMOTE CONTROL IS INTENDED TO BE INSTALLED.

CAUTION: A GFK-50 FAN KIT SHOULD BE INSTALLED BEFORE INSTALLATION OF THE APPLIANCE IS BEGUN.

The unit can be mounted on any of the following surfaces:
1. A flat combustible surface other than carpeting.
2. A raised wooden platform.
3. Outside wall.

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. If the unit is to be hung on an outside wall, it must be centered between 16" o.c. wall studs.

If carpeting or a hearth is installed in front of the unit, the bottom of the unit should be raised to the same level as the carpet or hearth.

If the unit is to be recessed into framed construction, framing can be built before or after the fireplace is set in place. Framing should be positioned to accommodate wall covering and fireplace facing material. The fireplace framing should be constructed of 2 x 4 lumber or heavier. The framing headers may rest on the top of the unit. Refer to Figure 3 and Figure 4 for fireplace and framing reference dimensions. CAUTION: Measure fireplace dimensions and verify framing methods, and wall covering details before framing construction begins.

*MINIMUM DIMENSIONS

FIGURE 4
3.1 VENT SYSTEM APPROVALS

Figures 5 through 7 and Tables 1 through 3 show the vent systems approved for use these models. Approved vent system components are labeled for identification. NO OTHER VENTING SYSTEMS OR COMPONENTS MAY BE USED. Detailed installation instructions are included with each vent termination kit and should be used in conjunction with this manual.

HORIZONTAL VENTING

Figure 5 and Table 1 show the horizontal vent termination kits approved for use on this model.

ELBOWS

The vent systems installed on this gas fireplace may also include two (2) 90 degree or one (1) 45 degree elbow assemblies. The following relationships of vertical rise to horizontal run in vent configurations using elbows MUST be strictly adhered to.

ONE (1) 45 DEGREE ELBOW

Figure 6 and Table 2 show examples of possible installations using one (1) 45 degree elbow. Dimension H is listed as MAXIMUM horizontal dimensions.

TWO (2) 90 DEGREE ELBOWS

Figure 7 and Table 3 show examples of possible installations using two (2) 90 degree elbows. Dimension V is listed as minimum vertical dimensions, dimension H is listed as maximum horizontal dimensions. Vertical dimensions are based on centerline to centerline of pipe. Horizontal dimensions are based on centerline of pipe to end of termination.

3.1.1 HORIZONTAL TERMINATING VENT SYSTEMS

SL-DVK-01 is a telescoping vent kit which is used to terminate a vent system in a horizontal position. These vent kits have pre-assembled round termination caps.

---

<table>
<thead>
<tr>
<th>STRAIGHT-OUT INSTALLATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIT NO.</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>SL-DVK-01</td>
</tr>
<tr>
<td>SL-DVK-01 + SLDV-12&quot;</td>
</tr>
</tbody>
</table>

TABLE 1

*12" LONG EXTENSION

FIGURE 5
3.2 VENT SYSTEM INSTALLATION PRECAUTIONS

Before starting installation of vent systems, the installer should read the Gas Fireplace Instructions and the Vent Kit Instructions to insure that the proper vent system has been selected for the installation.

Determine the mounting method (freestanding or wall hang) and the exact position of the fireplace so the direct vent pipe is centered (if possible) between two studs. This will avoid any extra framing. Using a level, make sure the fireplace is properly positioned and squared. The sides and back of the fireplace may be positioned directly against combustible walls.
If the unit is to be hung on the wall, remove the outer surround/shroud by carefully lifting it up and pulling it forward. NOTE: Remove and discard the screws attaching the surround at the back of the unit. These screws secure the surround for shipping ONLY (See Figure 8). Locate the two mounting holes at the top rear edge of the unit (See Figure 9). Drive lag screws through the front of the holes into 16-inch o.c. wall studs to hang the unit. Re-install the outer surround/shroud after the unit is hung in place.

NOTE: Complete Section 3.3 Straight Out Vent System Installation before placing the unit in it's final hanging position. Consult your local Building Codes before beginning the installation.

WARNING: THIS APPLIANCE AND VENT ASSEMBLY MUST BE VENTED DIRECTLY TO THE OUTSIDE AND MUST NEVER BE ATTACHED TO A CHIMNEY SERVING A SEPARATE SOLID FUEL BURNING APPLIANCE. EACH GAS APPLIANCE MUST USE A SEPARATE VENT SYSTEM-COMMON VENT SYSTEMS ARE PROHIBITED.

CAUTION: UNDER NO CONDITION SHOULD COMBUSTIBLE MATERIAL BE CLOSER THAN 3 INCHES FROM THE TOP OF THE 6-INCH PIPE OR 1-INCH TO THE SIDES AND THE BOTTOM FOR HORIZONTAL SECTIONS OF THIS VENT SYSTEM.
VENT TERMINATION MINIMUM CLEARANCES
FOR MODELS SL-2000 AND R-2000

- **V** = vent terminal
- **X** = air supply inlet
- **■** = area where terminal is not permitted

**A = 12''**
clearances above grade, verandas, porch, deck or balcony

clearance to window or door that may be opened

clearance to permanently closed window

**B = 12''**

**C = 9'' (U.S.A.)**
clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (60 cm) from the centre-line of the terminal

clearance to unventilated soffit

clearance to outside corner

**D = 18''**
clearance to inside corner

**H = 3 feet**
not to be installed above a meter regulator assembly within 3 feet (90 cm) horizontally from the centre-line of the regulator

clearance to service regulator vent outlet

clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance

clearance to a mechanical air supply inlet

clearance above paved side-walk or a paved driveway located on public property

clearance under veranda, porch, deck or balcony

**I = 3 feet (U.S.A.)**
6 feet (Canada)

**J = 9'' (U.S.A.)**
12'' (Canada)

**K = 3 feet (U.S.A.)**
6 feet (Canada)

**L = 7 feet**

**M = 18''**

* a vent shall not terminate directly above a side-walk or paved driveway which is located between two single family dwellings and serves both dwellings.

** only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor.

NOTE: local Codes or Regulations may require different clearances
3.3 STRAIGHT OUT VENT SYSTEM INSTALLATION

Connections between each vent system component must be properly and tightly joined, and system components must be secured with sheetmetal screws at each joint. THE PIPE SEAMS SHOULD BE DOWN ON HORIZONTAL SECTIONS OF THIS SYSTEM.

3.3.1 CUTTING THE HOLE THROUGH THE EXTERIOR WALL

After the exact position has been determined for the fireplace, measure the distance from the back of the fireplace to the inside face of the exterior wall and determine the thickness of the exterior wall. Cut a 10-inch square hole through the exterior wall with the center of the hole 23 1/2 inches above the base of the fireplace (Figure 11). When locating the hole it must be noted that the bottom of the vent termination cap must be a minimum of 12 inches above ground level, the top of the cap must be a minimum of 18 inches below combustible material such as a deck, and the side of the cap must be a minimum of 6 inches away from a parallel outside wall. See Figure 10 for vent termination clearances.

3.3.2 INSTALLING WALL SPACERS

Position the interior firestop over the 10-inch hole on the inside wall (Figure 12). Make sure that the spacer is put in properly (with arrows pointing up). For walls less than 8 inches thick, the pipe shield will have to be trimmed back to a flush position. The exterior firestop should be installed once the unit is permanently positioned and anchored. (Section 3.4).
3.3.3 INSTALLING VENT SYSTEM COMPONENTS

Make sure the proper vent kit is being used by referring to the dimensions shown in Figure 5. Remove the 4-inch inner pipe from the kit assembly and attach it to the unit as shown in Figure 13. Make sure the seam of the pipe is facing down. Using the pipelock provided, drill a 1/8-inch hole into the pipe and secure these together with a sheetmetal screw. Slide the 4-inch outer pipe back onto the 4-inch inner pipe and attach the 6-inch starter (inner) pipe to the 6-inch starter collar with a sheetmetal screw. A high temperature fiberglass rope is installed to seal between the 6-inch pipe and the outer wrap of the fireplace.

![Figure 13]

Slide the 4-inch and the 6-inch outer pipes (termination cap attached) and adjust the termination cap to its final position. Refer to the drawing in Figure 14 which shows the termination cap on the exterior of the building. For round cap termination kits, use the exterior pipelock tab provided on the exterior firestop to secure the 6-inch pipe in place. Use a high temperature fiberglass rope gasketing to seal between the 6-inch pipe and the exterior firestop spacer.

![Figure 14]

CAUTION: UNDER NO CONDITION SHOULD COMBUSTIBLE MATERIAL BE CLOSER THAN 3 INCHES FROM THE TOP OF THE 6-INCH PIPE WITH A 1-INCH CLEARANCE TO THE SIDES AND BOTTOM.

3.4 PERMANENTLY ANCHORING THE FIREPLACE

Care must be taken to prevent the unit from shifting. Avoid bumping the fireplace once it is in its installed position. Securely tighten the lag screws used to mount wall-hung units before re-installing the outer surround/shroud.

The exterior firestop (6-inch-diameter hole) may now be placed over the pipe on the outside of the building and nailed in position. The arrows must point up to provide proper clearances. When positioned, the cap should be as shown in Figure 14, with the cap extended past the exterior firestop a MINIMUM dimension as shown.
3.5 CONNECTING THE GAS LINE

A listed 1/2-inch manual shut-off valve and a listed flexible gas connector (Model FLEX-12) is supplied with this unit and connected to the gas valve. Consult local building codes to properly size the gas supply line leading to the 1/2-inch shut-off valve. Have the gas supply line and hook-up installed by a qualified service person in accordance with applicable building codes.

Locate the gas line access at the bottom rear outer casing of the fireplace (Figure 15). The gas line connection can also be made from below the open bottom of the unit. A 1/8" N.P.T. plugged tapping, accessible for test gauge connection, should be provided for in the gas supply line.

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 SIDE.

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

The unit wiring diagram shown in Figure 16. The control valve DOES NOT require 110-120 VAC to operate.

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

3.7 OPTIONAL ACCESSORY KITS

An optional blower kit (Model GFK-50) and remote control kit (Model RCH-09A) is available. Use of these kits REQUIRES 110-120 VAC electrical service. A pre-wired junction box is installed inside the base of the unit. The RCH-09A remote control kit receiver is mounted to a 110-120 VAC wall outlet and does not require a junction box. Detailed installation instructions are found in each accessory kit.

An optional Wall Switch (WSK-21) may be wired to this appliance. The Wall Switch DOES NOT require 110-120 VAC. Connect low voltage wires from the optional switch installed to the red and brown pigtail wires (labeled Optional Wall Switch, Remote, or Thermostat) from the ON/OFF rocker switch. Set the unit's ON/OFF rocker switch to the "OFF" position. After lighting the pilot, activate the optional switch installed to control the main burner of the unit. Detailed installation instructions for optional switches are found in each accessory kit.

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

WARNING: DO NOT CONNECT 110-120 VAC TO THE GAS CONTROL WIRING SYSTEM - OR TO AN OPTIONAL WALL SWITCH.
3.8 FINISHING

Finish the walls with the material of your choice. Figure 17 shows the minimum vertical and corresponding maximum horizontal dimensions of mantles or other combustible projections above the top front edge of the fireplace.

When finishing the fireplace NEVER OBSTRUCT OR MODIFY THE AIR INLET/OUTLET GRILLES IN ANY MANNER.

DO NOT put any finishing material on the Vent Cap. DO NOT extend a combustible overhang more than 1-1/2 inches beyond the exterior wall itself, unless the overhang is at least 18 inches above the cap (See Figure 10).

![Figure 17]

3.9 HEARTH EXTENSION

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

4.0 ELECTRICAL SAFETY SYSTEM

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

The gas control system is wired so the thermopile, when heated with the pilot light, will provide approximately 350 to 500 millivolts. This activates the gas control valve. Additionally, a high temperature limit switch is wired to ground and will shut-off the pilot and burner should a high surface temperature condition occur. The pilot and main burner must be re-lit when the fireplace cools. See Figure 18 and 16-Unit Wiring Diagram.

![Figure 18]

5.0 OPERATING GUIDELINES 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 lightings of the appliance will not require such purging.

CAUTION: DURING THE INITIAL PURGING AND SUBSEQUENT LIGHTING'S 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 fireplace may produce a noise, caused from metal expansion and contraction as it heats up and cools down. This noise is similar to that of a furnace or heat duct may produce and does not affect the operation or longevity of the fireplace.

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 behind the lower front trim assembly.

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 3/8-inch at the pilot generator should be engulfed in the pilot flame (Figure 19).

**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.

**WARNING:** DO NOT USE ABRASIVE CLEANERS ON THE GLASS DOOR ASSEMBLIES. DO NOT ATTEMPT TO CLEAN THE GLASS DOORS WHEN THEY ARE HOT.

**IMPORTANT:** TURN OFF GAS BEFORE SERVICING APPLIANCE. IT IS RECOMMENDED THAT A COMPETENT SERVICE TECHNICIAN PERFORM THESE CHECK-UPS 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. To remove the glass door, you must remove the mesh trim door by lifting it up and pulling it away from the outer surround/shroud.

2. Noting carefully how the brackets fit on the glass, remove wing nuts and brackets from the glass door.

3. The glass door is now ready for removal.

### 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 the burner orifice is clean.

Visually inspect the pilot periodically. Brush or blow away any dust or linen accumulations. If the pilot orifice is plugged, disassembly may be required to remove any foreign material from the orifice or tubing. When the appliance is put back in service check burner flame patterns with Figure 20.

### 5.3 Log Replacement

1. Remove the mesh trim and glass door assemblies (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 and outer surround/shroud.

---

**FIGURE 19**
5.4 GLASS DOOR REPLACEMENT

1. Before replacing the glass door make sure the logs are properly positioned.

2. Place the bottom edges of the glass door on the rubber spacers of the bottom mounting studs on the fireplace.

3. With glass door in place push glass against unit and at the same time put brackets on upper portion of door and tighten the wing nuts provided.

4. Attach the brackets at the sides and bottom of the glass and hand tighten.

**NOTE:** WING NUTS THAT SECURE THE GLASS ONLY NEED TO BE HAND TIGHTENED TO GIVE A SNUG FIT FOR PROPER GASKET SEAL. OVERTIGHTENING MAY RESULT IN DAMAGED GLASS.

5. Replace the mesh trim door proceeding in reverse order of step 1 under Glass Door Removal.

**WARNING:** THE GLASS DOOR ASSEMBLY MUST BE IN PLACE AND SEALED AND THE FIXED MESH TRIM ASSEMBLY MUST BE IN PLACE ON THE FIREPLACE 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 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

LIGHTING INSTRUCTIONS

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

2. To access controls rotate the lower grille of the mesh trim door upward.

3. Turn the valve control knob 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. Then smell for gas, including near the floor. If you then smell gas, STOP! Follow "B" in the safety information above. If you don't smell gas, go to the 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 and 5.4 for glass door removal and replacement.

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 will not stay lit after two tries, turn the 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 set the ON/OFF switch to the "ON" position.

9. Close the lower grille.

TO TURN OFF GAS TO APPLIANCE

1. Open the lower grille.

2. Turn ON/OFF switch to "OFF".

3. Turn the valve control knob clockwise to the "Pilot" position then depress knob and continue turning to "OFF" position.

4. Close the lower grille.
After the unit has warmed up (i.e. approx. 15 min.), flame height should not be higher than 2" below the top of the mesh trim assembly (Figure 21). If the flame height is higher than this, adjustments must be made to prevent overheating the unit. Please contact your dealer or a qualified service person to replace the orifice or adjust the valve.

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

![Figure 21](image)

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 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

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.

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 feet (in Canada), check with local authorities.

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

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 below. This guide will assist a qualified service person in the diagnosis of problems and the corrective action to be taken.

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>POSSIBLE CAUSE</th>
<th>CORRECTIVE ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Spark Ignitor will not light pilot after repeated triggering of red button.</td>
<td>A. Defective ignitor (no spark at electrode).</td>
<td>1. Check for spark at electrode and pilot; if no spark and electrode wire is properly connected, replace ignitor.</td>
</tr>
<tr>
<td></td>
<td>B. Defective pilot or misaligned electrode (spark at electrode).</td>
<td>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 gas at electrode and pilot - should be 1/8 inch to have a strong spark. If OK, replace pilot.</td>
</tr>
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<td></td>
<td>C. No gas or low gas pressure.</td>
<td>1. Check the unit's shut-off valve and remote shut-off valves from fireplace. Usually there is a valve near the main. There can be more than one (1) valve between the fireplace and main.</td>
</tr>
<tr>
<td></td>
<td>D. No L.P. in tank.</td>
<td>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.</td>
</tr>
<tr>
<td>II. Pilot will not stay lit after carefully following lighting instructions.</td>
<td>A. Defective thermopile.</td>
<td>3. Check L.P. (propane) tank. You may be out of fuel.</td>
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<tr>
<td></td>
<td></td>
<td>1. Check pilot flame. Must impinge on thermopile. Clean and or adjust pilot for maximum flame impingement on thermopile.</td>
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<td></td>
<td>2. Be sure wire connections from thermopile at gas valve terminals are tight and thermopile is fully inserted into pilot bracket.</td>
</tr>
<tr>
<td>SYMPTOM</td>
<td>POSSIBLE CAUSE</td>
<td>CORRECTIVE ACTION</td>
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<tr>
<td>III. Pilot burning, no gas burner, valve knob “ON”, on/off switch ”ON”</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>B. Defective valve.</td>
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<td></td>
<td>C. Open wire connection in pilot circuit.</td>
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<td>3. Check thermopile with millivolt meter. Take reading at “TH-TP&amp;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 thermopile if reading is below specified minimum.</td>
</tr>
<tr>
<td></td>
<td>A. “ON-OFF” switch or wires defective.</td>
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<tr>
<td></td>
<td>B. Thermopile may not be generating sufficient millivoltage (325 m.v.).</td>
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<td></td>
<td>C. Defective valve.</td>
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<tr>
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<td></td>
<td>1. Disconnect thermopile’s red wire from the microswitch and connect to terminal “TP” 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 thermopile is good. If pilot does not stay lit, the valve is defective. If the meter reading is less than 325 m.v., the thermopile is defective.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Check wire continuity and connection in pilot circuit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>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.</td>
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<tr>
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<td></td>
<td>1. Recheck Symptom #2.</td>
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<td></td>
<td>2. Pilot flame not physically close enough to the thermopile.</td>
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<td></td>
<td></td>
<td>1. Turn valve knob to “ON”. Place ON/OFF switch to “ON”. Check with millivolt meter at thermopile 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.</td>
</tr>
<tr>
<td>SYMPTOM</td>
<td>POSSIBLE CAUSE</td>
<td>CORRECTIVE ACTION</td>
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<tr>
<td>IV. Frequent pilot outage problem.</td>
<td>A. Pilot flame may be too low or blowing (high), causing the pilot safety to drop out.</td>
<td>1. Check burner orifice for stoppage and remove.</td>
</tr>
<tr>
<td>V. Pilot and main burner go out while being in operation.</td>
<td>A. High limit switch is defective or has reached its maximum temperature.</td>
<td>1. Clean and adjust pilot flame for maximum flame impingement on thermopile.</td>
</tr>
<tr>
<td></td>
<td>B. No L.P. in tank.</td>
<td>1. Allow unit to cool. Then repeat lighting instructions. If pilot and burner remain lit, after the fireplace warms up, the switch is good.</td>
</tr>
<tr>
<td></td>
<td>C. Inner 4-inch pipe leaking exhaust gases back into system.</td>
<td>2. If 1 above does not allow for ignition, or the fireplace continues to shut-off, disconnect the limit switch wire from the gas valve and repeat lighting instructions. If the pilot and burner remain lit after the fireplace warms up, replace the limit switch. Do not use the fireplace until the high limit switch is replaced and properly wired.</td>
</tr>
<tr>
<td></td>
<td>D. Horizontal vent improperly pitched.</td>
<td>1. Check L.P. (Propane) tank. You may be out of fuel.</td>
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<tr>
<td></td>
<td>E. Glass too loose and air tight gasket leaks in corners after usage.</td>
<td>1. Check for leaks.</td>
</tr>
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<td>F. Bad thermopile.</td>
<td>1. Horizontal vent should slope down only enough to prevent any water from entering the unit. The maximum downward slope is 1/4&quot; for any horizontal run.</td>
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<td></td>
<td>G. Improper vent cap installation.</td>
<td>1. Tighten corner.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Replace if necessary.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Check for proper installation and freedom from debris or blockage.</td>
</tr>
<tr>
<td>SYMPTOM</td>
<td>POSSIBLE CAUSE</td>
<td>CORRECTIVE ACTION</td>
</tr>
<tr>
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<tr>
<td>VI  Glass soots</td>
<td>A. Improper venturi setting</td>
<td>1. Adjust the air shutter at the base of the burner.</td>
</tr>
<tr>
<td>VII. Flame burns blue and lifts off burner.</td>
<td>A. Insufficient oxygen being supplied.</td>
<td>1. Check to make sure vent cap is installed properly and free of debris. Make sure the 4-inch inner pipe has no leaks in it.</td>
</tr>
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<td></td>
<td></td>
<td>2. Be sure glass is tightened properly on unit, particularly on the top corners.</td>
</tr>
</tbody>
</table>

For Natural Gas or Propane for Manufactured Home (Mobile Home) and Recreational Vehicle Installations:

1. A manufactured home (mobile home installation must conform with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 [formerly the Federal Standard for Mobile Home Construction and Safety, Title 24, (Part 280), 1975], or, when such a standard is not applicable, the Standard for Manufactured, Home Installation 1982 (Manufactured Home Sites, Communities and Set-Ups), ANSI A225.1-1984.

IMPORTANT: Only a qualified gas service person should install this conversion kit.

WARNING: Turn off gas supply to unit before proceeding with conversion.

WARNING: When changing from natural gas to LP, or LP to natural gas, the burner orifices and the pilot orifices MUST be changed and control valve regulator MUST be reset.

STEP 1: Carefully remove the log, the ember material, ember screen, and the burner from the unit.

STEP 2: Remove the 3/8" aluminum tube from the burner orifice (under base pan—behind the lower grille).

STEP 3: Remove the existing main burner orifice (use a 3/4" deep socket) and install the new main burner orifice. Be certain to tighten the orifice with a wrench. Reattach the 3/8" tube to the orifice with the compression nut.

STEP 4: Remove the 1/4" aluminum tube from the gas pilot (inside the unit). Replace the existing pilot burner orifice. Be certain to tighten the orifice with a wrench. Reattach the 3/8" tube to the orifice with compression nut.

STEP 5: Using a flat blade screwdriver, adjust the regulator on the valve to the "LP" or "NG" setting depending on the type of gas you are using.

STEP 6: Connect the gas supply to the unit and leak test all connections with soap water.

STEP 7: Replace the burner, ember screen, ember material, and logs, being careful not to plug the burner orifice.

STEP 8: Adjust the air shutter opening at the base of the burner for LP (propane) to "Full Open" - for natural gas to "1/2"-inch Open.
LIMITED WARRANTY POLICY
FOR GAS TECHNOLOGIES® GAS FIREPLACES

The limited two year warranty will not become effective until the completed warranty card has been mailed to GAS TECHNOLOGIES®, Lake City, MN 55041. This card must be mailed within 60 days of the fireplace installation.

Subject to the conditions set forth herein, GAS TECHNOLOGIES® extends the following warranty with respect to GAS TECHNOLOGIES® Decorative Gas Fireplaces.

If GAS TECHNOLOGIES® is satisfied that any part or portion of the fireplace covered by this warranty is defective in material or workmanship under normal use and service as described in the operating instructions, GAS TECHNOLOGIES® will take the following actions:

1. Within the first year from the date of installation, GAS TECHNOLOGIES® shall, at its option, replace or repair any such defect in material or workmanship, at GAS TECHNOLOGIES® expense. GAS TECHNOLOGIES® 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® shall supply replacement parts at the current minimum wholesale price, but GAS TECHNOLOGIES® 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® 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® 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® 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® reserves the right to make changes at anytime, without notice, in design, material, specifications, and prices and the right to discontinue styles and products.