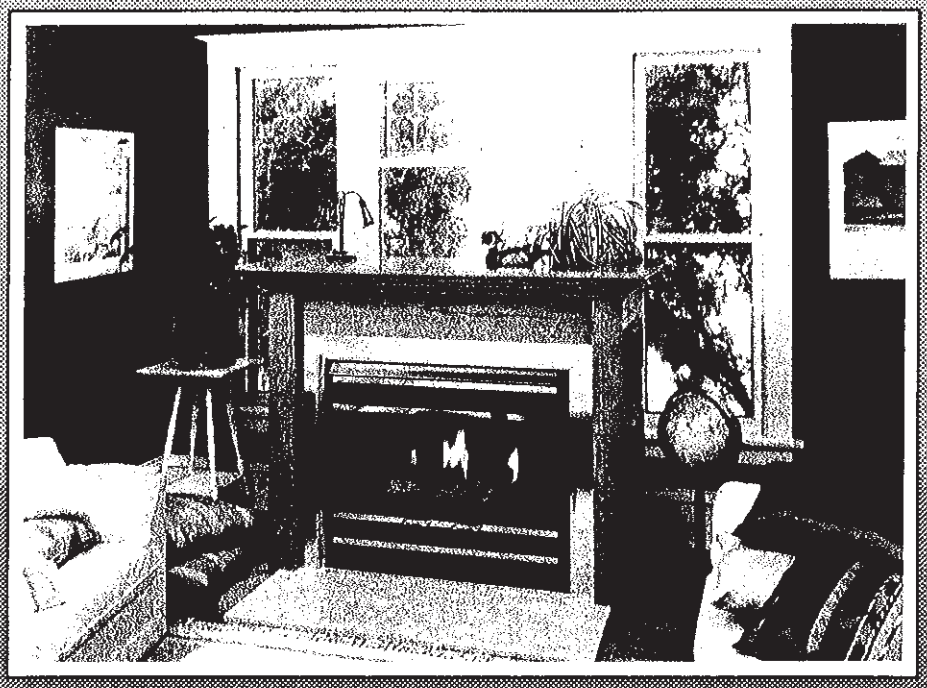
This appliance has been retired.
Service parts pages within have been removed.
For replacement parts, please refer to the individual service parts list located on the brand websites.



U.S. PATENT 4,793,322 AND PATENTS PENDING

Model 6000 GDV (Gas 36 DV 88) Installation and Operation Instructions

A.G.A. Design Certified

C.G.A. Approved

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 6000 GDV (GAS 36 DV88) A.G.A. DESIGN CERTIFIED AND C.G.A. APPROVED FOR NATURAL GAS OR PROPANE

Requires one or more of the following vent kits for installation:

DVK-01 - STRAIGHT OUT INSTALLATION
DVK-02 - EXTENDED STRAIGHT OUT INSTALLATION
DVK-03 - 45 DEGREE ELBOW OUT
DVK-04 - 90 DEGREE UP AND 90 DEGREE OUT INSTALLATION
DVK-05 - MINIMUM VERTICAL RISE OF 11" AND MAXIMUM HORIZONTAL RUN OF 115"
NOTE: DVK-05 IS APPROVED BY A.G.A. ONLY AND IS APPROVED FOR USE WITH NATURAL GAS ONLY

FOR YOUR SAFETY
"WHAT TO DO IF YOU SMELL GAS"

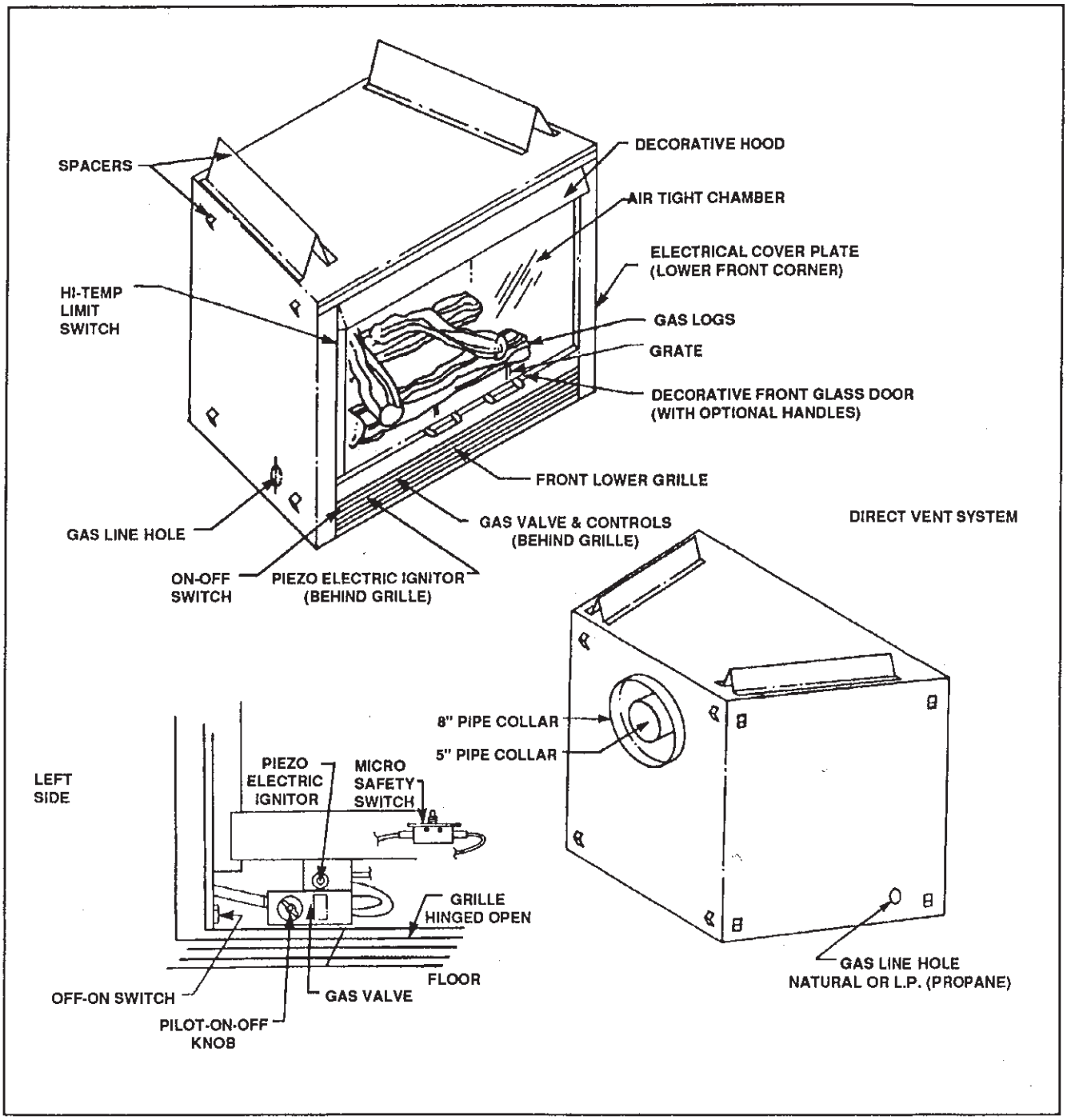
•OPEN WINDOWS, EXTINGUISH OPEN FLAMES.
•DO NOT TRY TO LIGHT ANY APPLIANCE.
•DO NOT TOUCH ANY ELECTRICAL SWITCH.
•DO NOT USE ANY PHONE IN YOUR BUILDING.
•IMMEDIATELY CALL YOUR GAS SUPPLIER FROM A NEIGHBOR'S PHONE. FOLLOW THE GAS SUPPLIER'S INSTRUCTIONS.
•IF YOU CANNOT REACH YOUR GAS SUPPLIER, CALL THE FIRE DEPARTMENT.
•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 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.

TABLE OF CONTENTS



0.0 GENERAL INFORMATION

Access to the gas control and piezo electric lighter is by opening the front lower grille. Provisions have been made to attach a test gauge to the 1/8-inch NPT plugged tapping immediately upstream of the gas supply connection to the appliance.

The unit is designed to operate with all combustible air being siphoned through the coaxial pipe from the outside.

The 6000 GDV (GAS 36 DV-88) must use one or more of the vent kits listed on page 1. No other pipe systems may be used.

The unit comes with a burner on/off switch that is located on the lower left behind the front grille. The switch is for turning unit on/off in the absence of a wall switch. Additionally, if the unit has the optional blower kit, the rheostat (variable speed control) is on the lower right behind the front grille.

1.0 INTRODUCTION

This appliance complies with national safety standards and is tested, listed, and design certified by A.G.A. to ANSI Z21.50-1986; Z21.50a-1987; and applicable portions of ANSI Z21.44-1985, Z21.50b-1988; Z21.44a-1985 and Z21.44b-1987.

Installation must conform to local codes. In the absence of local codes installation must conform with the National Fuel Gas Code ANSI Z223.1-1988/ NFPA 54-1988 (in the United States) or with the current Installation Code CAN/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 National Electric Code ANSI/NFPA NO 70-1987 (in the United States) or with the current CSA C 22.1 Canadian Electric Code (in Canada).

INSTALLATION AND REPAIR SHOULD BE DONE BY A QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED 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 OPENING OF THE FIREPLACE OR THE DIRECT VENT CAP ON THE EXTERIOR OF THE HOUSE.

Minimum clearances in inches to combustibles are: Sides 0, Floor 0, Back 0, Top 0 (these clearances are defined by the standoffs). Minimum distance to the side wall (perpendicular to the front) is 1 inch. Minimum distance from the ceiling to the top front of the unit is 31 inches.

Minimum inlet gas supply pressure is 4.0 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.

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 fireplace and its components are tested and safe when installed in accordance with this Installation Manual. 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.

Report to your dealer any parts damaged in shipment. Specifically, check glass condition. The logs must be positioned using the predrilled holes in the logs and the pegs on the grate provided (Figure 1). Gas logs must be properly positioned or the fireplace will not function properly and may result in soot accumulation on the inside of the firebox. See Figure 1.

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 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.

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

NOTE: Fireplace screens are provided with each unit. The screens must be installed and closed before lighting the burner.

NOTE: When installing the vent kits, it is imperative that no more than a 1/4" downward slope be present in the horizontal run.

NOTE: It is essential for proper unit operation that the vermiculite contained in the plastic bag be spread evenly across the bottom of the firebox. CAUTION: No vermiculite can be present in the vermiculite dam (the 2" circular tube located at the base of the burner).

NOTE: The appliance has an air-tight combustion chamber and takes 100% outside air for combustion and therefore meets the requirements for bedroom installations. This appliance requires a direct vent kit (see page 6 for details).

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 heater 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.

NOTE: [redacted]

IF EXTERIOR WALLS ARE FINISHED WITH VINYL SIDING, IT IS RECOMMENDED THAT THE PROTECTION KIT DESIGNED TO BE ATTACHED TO THE TOP OF THE EXTERIOR FIRESTOP, BE INSTALLED.

For framing dimensions (Figure 2), 1/2 inch must be added on each side and to the depth. This unit comes with the grate secured in place. The vent system and gas logs are in separate packages.

To install the logs remove the glass door. The gas logs must be properly positioned using the predrilled holes in the logs to position logs on the grate pegs. Open the bag of vermiculite and spread it evenly on the bottom of the firebox making sure not to block the air hole at the base of the burner. The glass door must be replaced to light the unit. THE UNIT WILL NOT OPERATE UNLESS THE GLASS DOOR IS SECURED IN PLACE.

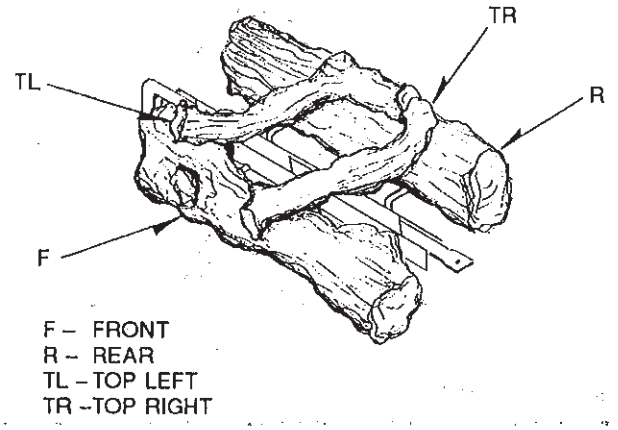


Figure 1

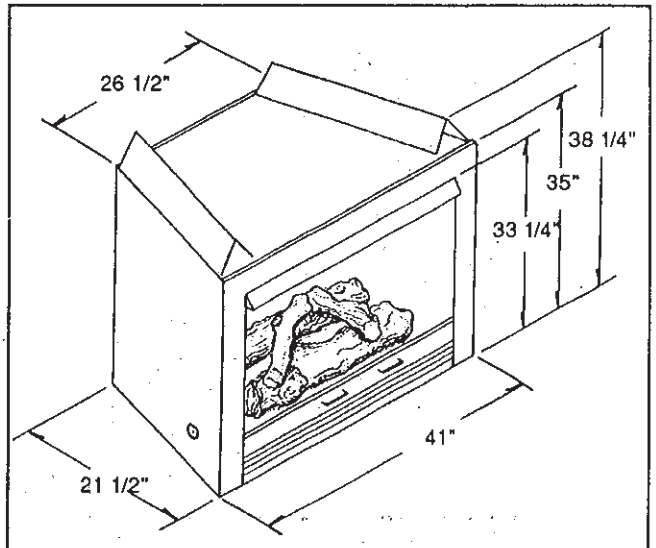


Figure 2

3.0 INSTALLATION INSTRUCTIONS

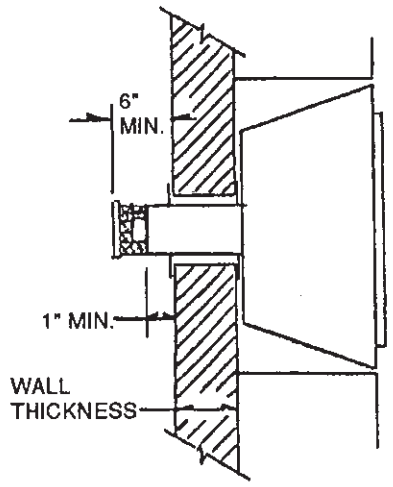
In planning the installation for the fireplace it is necessary to install certain components before the fireplace is completely positioned and installed. These include the direct vent system, gas piping for the fireplace and the electrical wiring (if the fan option is used).

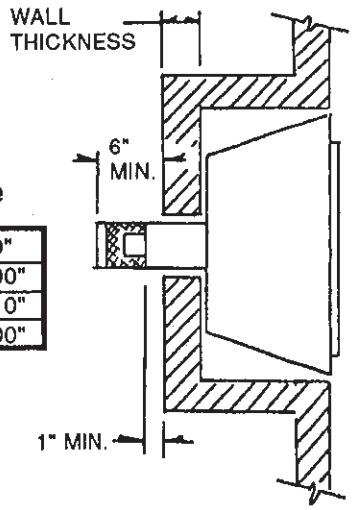
Determine if the fireplace is to be installed inside the room (Figure 3a), or flush mounted with the wall (Figure 3b), corner (Figure 3c), or elevated installation (Figure 3d). Once determined refer to that section of the manual and the wall thickness tables below for the necessary vent kit(s). Detailed installation instructions are included with each vent kit and should be used in conjunction with this manual. All installations of this fireplace require venting to the outside using the concentric pipe and vent cap provided.

The fireplace can be mounted on any of the following surfaces:

1. A flat combustible surface other than carpeting.
2. A raised wooden platform.
3. Four (4) corner supports. (Example: Four (4) concrete masonry blocks). These supports must be positioned so they contact all four (4) dimples and perimeter edges on the bottom of the unit.

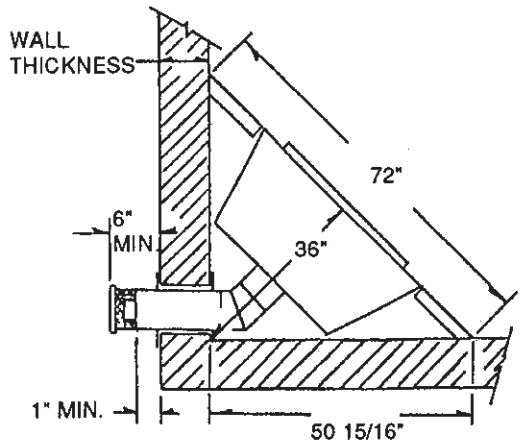
If the fireplace is installed directly on carpeting, tile, or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the unit.

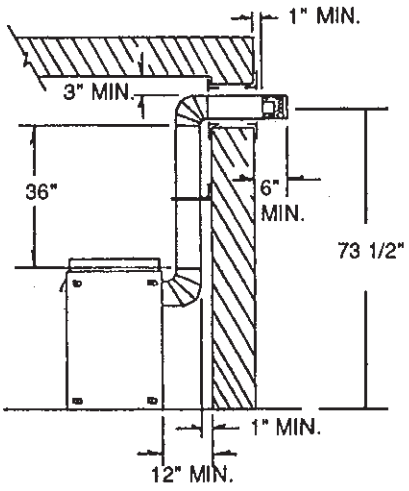




Figures 3a & b with table

DVK-01	Minimum	8.00"
	Maximum	13.00"
DVK-02	Minimum	13.10"
	Maximum	24.00"





Figures 3c & d with tables

DVK-03 45° with DVK-01	Minimum	4.00"
	Maximum	10.00"
DVK-03 45° with DVK 02	Minimum	10.10"
	Maximum	22.00"

DVK-04 90° with DVK-01	Minimum	9.75"
	Maximum	15.75"
DVK-04 90° with DVK 02	Minimum	15.75"
	Maximum	24.00"

3.1 Inside Room Installation

3.1.1 Positioning the Fireplace

Determine 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. The back of the fireplace may be positioned directly against a combustible wall.

3.1.2 Cutting the Hole

After the exact position has been determined for the fireplace, the hole through the exterior wall of the house can be cut. This hole needs to be a 12-inch square hole with the center of the hole located 26 inches above the base of the fireplace (Figure 4). When locating the hole it must be noted that the bottom of the cap must be a minimum of 12 inches above the ground level and 18 inches below combustible material such as a deck. See figure 11.

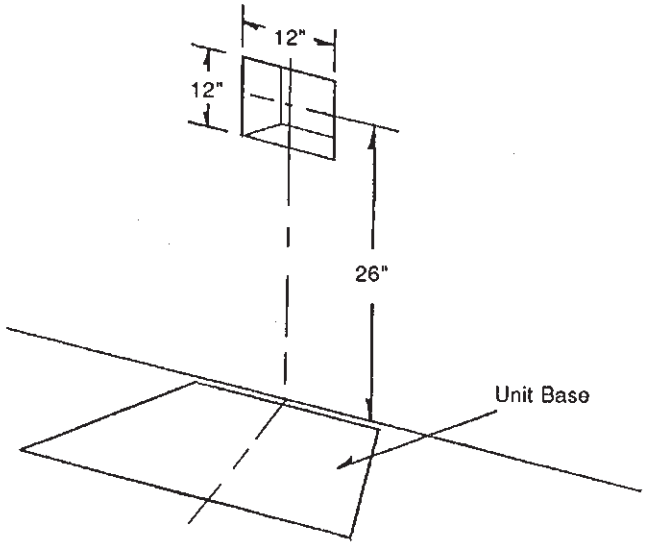


Figure 4

3.1.3 Installing Wall Spacers

Position the interior firestop over the 12-inch hole on the inside wall (Figure 5). 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 (Section 3.5).

UNDER NO CONDITIONS SHOULD COMBUSTIBLE MATERIAL (INCLUDING SIDING) BE CLOSER THAN 3 INCHES TO TOP OF 8-INCH PIPE OR CLOSER THAN 1 INCH ON SIDES AND BOTTOM.

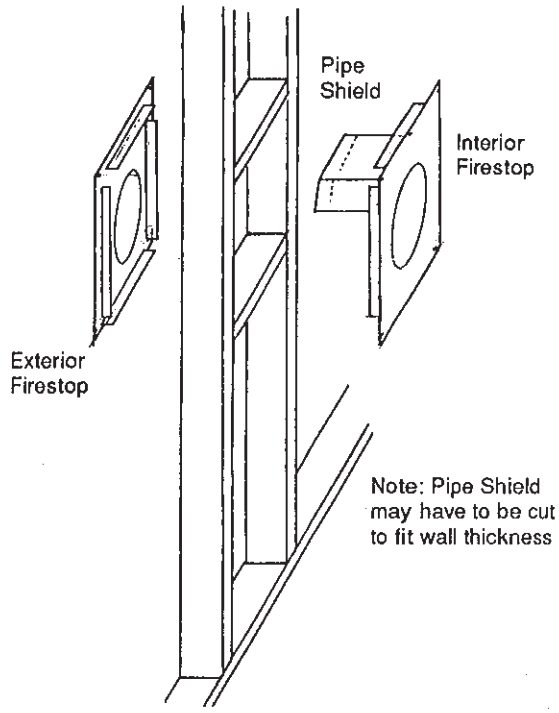


Figure 5

3.1.4 Framing

Fireplace framing can be built before or after the fireplace is set in place. The fireplace framing should be constructed of 2 x 4 lumber or heavier. Refer to Figure 6 for framing dimensions. The depth of the opening is 22" minimum.

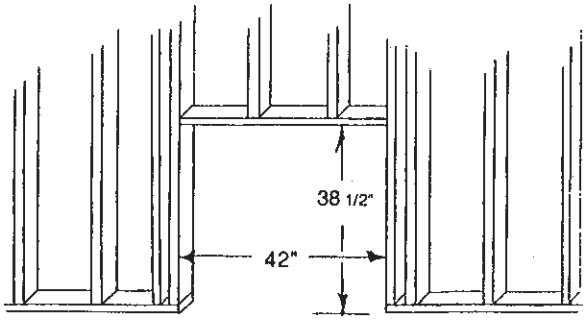


Figure 6

The header may rest on the fireplace standoffs which are 3 inches above the top of the unit. Framing should be positioned to accommodate wall covering and fireplace facing material.

3.1.5 Installing Direct Vent System (Inside Room)

Measure the thickness of the exterior wall. Make sure the proper kit is being used. Attach the 5-inch inner pipe to the unit as shown in Figure 7. 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 sheet metal screw. Attach the 8-inch starter pipe to the 8-inch starter collar with a sheet metal screw. Use a non-combustible, high-temperature sealant (300° F minimum) or high temperature fiberglass rope gasketing to caulk between the 8-inch pipe and the outer skin of the fireplace. Slide the 5-inch and the 8-inch outer pipes (termination cap attached) onto the 5-inch and 8-inch inner pipes. Refer to the drawing in Figure 14, and adjust the termination cap to its final position. Using the exterior pipelock provided on the exterior firestop, secure the 8-inch pipe in place. Use a non-combustible, high-temperature sealant (300° F minimum) or high temperature fiberglass rope gasketing to caulk between the 8-inch pipe and the exterior firestop spacer.

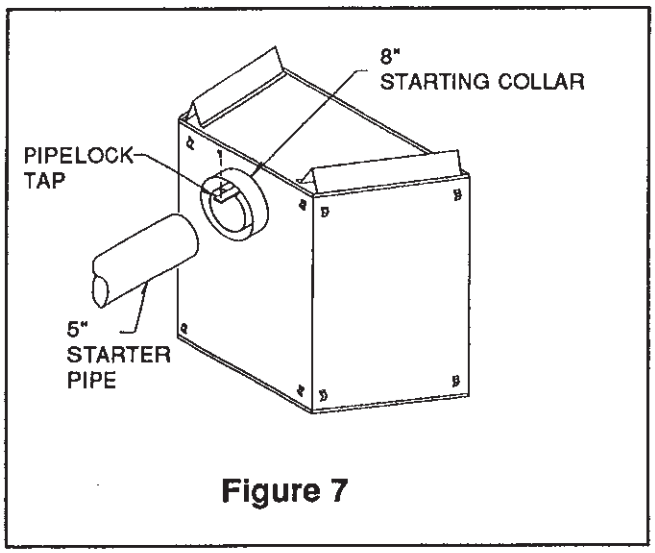


Figure 7

3.2 Flush Mount Installation

To install the fireplace as a flush mount it is necessary to cut and frame a hole in the wall, build an exterior support platform, and build and insulate a small exterior chase.

3.2.1 Cutting the Hole

Cut a rectangular hole through the wall that is 38-1/2 inches high and 42 inches wide. A framing header also will be needed. (Refer to Figure 6).

3.2.2 Support Platform

The support platform (Figure 8) must be a minimum of 22 inches deep and 42 inches wide. Inside dimensions of the support platform can be tapered to match the contour of the unit, although it is easier to use the rectangular dimensions.

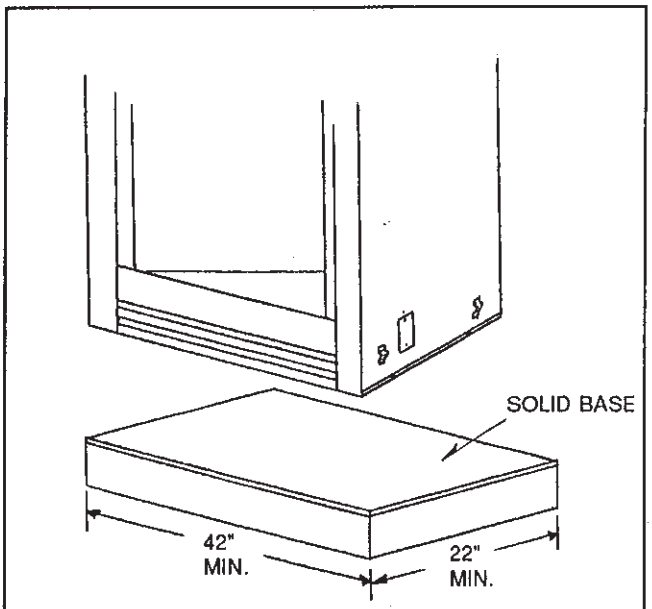


Figure 8

CAUTION:

UNDER NO CONDITION SHOULD COMBUSTIBLE MATERIAL BE CLOSER THAN 3 INCHES FROM TOP OF 8-INCH PIPE WITH A 1-INCH CLEARANCE TO SIDES AND BOTTOM.

3.2.3 Building and Insulating the Chase

A chase is a box-like structure built to enclose the fireplace. While the fireplace does not require a full chase for the chimney system, it does require a small chase when it is installed as shown in Figure 9. Minimum and maximum dimensions are given.

When installing a direct vent gas fireplace in a chase, it is always good building practice to insulate the chase as you would the outside wall of your home.

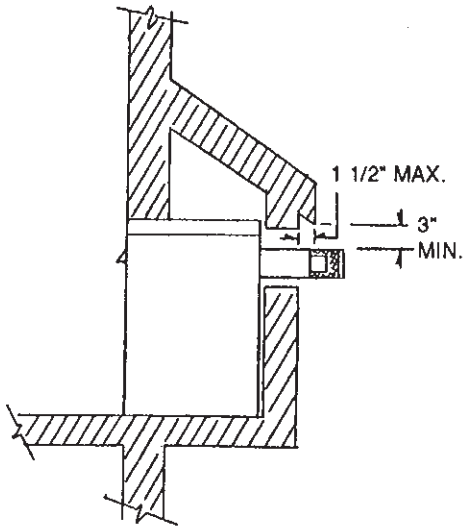


Figure 9

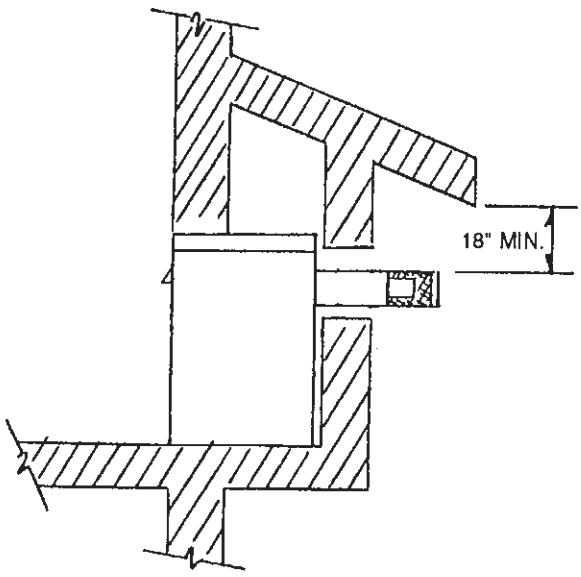


Figure 9a

CAUTION:

TREATMENT OF WALL SPACERS AND CONSTRUCTION OF THE CHASE MAY VARY WITH THE TYPE OF BUILDING. THESE INSTRUCTIONS ARE NOT SUBSTITUTES FOR THE REQUIREMENTS OF LOCAL BUILDING CODES. THEREFORE, YOUR LOCAL BUILDING CODES MUST BE CHECKED TO DETERMINE THE REQUIREMENTS FOR THESE STEPS.

3.2.4 Installing Direct Vent System (Flush Mount)

Refer to Section 3.1.5

3.3 Corner Installations

Corner installations require the use of the vent kits DVK-03 and DVK-01 or DVK-02 depending upon wall thickness. Check wall thickness to be sure the proper kit is being used. The DVK-03 can be used for a left or right hand installation. Detailed instructions for the DVK-03 are included with the kit. It is important that all 5" joints be tightly sealed and secured to insure that the unit functions properly.

3.3.1 Cutting the Hole

The unit is designed to sit in the corner at an exact 45 degree angle. With the unit in position the hole location is an shown in Figure 10. The location to the center of the hole is 26 inches up from the base of the fireplace and 7-1/2 inches from hole center to inside corner of the house.

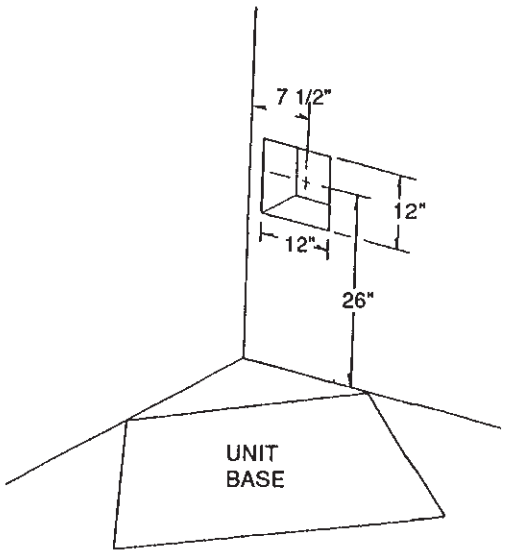


Figure 10

3.3.2 Installing Wall Spacers

Refer to Section 3.1.3.

3.3.3 Framing

Refer to Section 3.1.4.

3.3.4 Installing Direct Vent System (Corner)

Attach the 45°, 5 inch and 8 inch elbow assembly by sliding the uncrimped ends of the elbows to the crimped starting collars on the unit. Secure the 8 inch collar-elbow connection with two (2) screws. Measure the thickness of the exterior wall and adjust telescoping pipe. Put the 5-inch pipe on the elbow and lock into position with the screws provided, doing the same with the 8-inch pipe. Slide the unit into position making sure the pipe slides through the interior fire stop.

3.4 Elevated Installation

Elevated Installations require the use of vent kits DVK-04 and DVK-01 or DVK-02. These kits can be used for a left or right installation. This system can also be installed up against a back wall. Detailed instructions for the DVK-04 are included with the kit.

3.4.1 Cutting the Hole

The hole is to be 12 inches square. When locating the hole it must be noted that the bottom of the cap must be 12 inches above the ground level. This is a minimum clearance. You must also maintain a minimum of 3 inches clearance from the ceiling as shown in Figure 11. The maximum rise in the vertical position is a 3-foot section of center pipe. This will make the center of the exhaust hole 73-1/2 inches above the base of the fireplace. If the required height is less than 73-1/2 inches, then the 3-foot lengths of pipe must be cut on the non-crimped end to accommodate the required height. The minimum vertical rise for the DVK-04 installation is 11".

3.4.2 Installing Wall Spacers

Refer to Section 3.1.3

3.4.3 Framing

Refer to Section 3.1.4

3.4.4 Installing Direct Vent System (Elevated)

Attach the lower 5-inch and 8-inch 90 degree elbow system with the screws provided. Next attach the 5-inch x 36-inch pipe, using three screws for assembly. Do the same for the 8-inch x 36-inch pipe. Then attach the second elbow system in the same manner. Before sliding the unit into position, attach the 5-inch and 8-inch vent pipes in the top elbows, securing them with screws and tabs provided. Slide the unit into position and guide the vent pipes through the interior firestop.

3.5 Permanently Anchoring the Fireplace

To prevent the unit from shifting, the fireplace should be anchored. Two methods are possible: create the bottom nailing tabs as shown in Figure 12, or use the standoffs on the top of the fireplace. A nail may be driven through the header at the front of the fireplace into the standoff as shown in Figure 13.

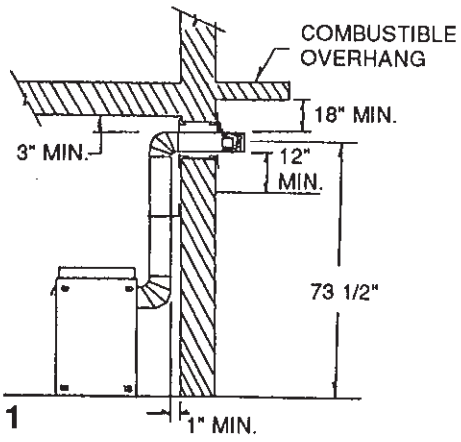


Figure 11

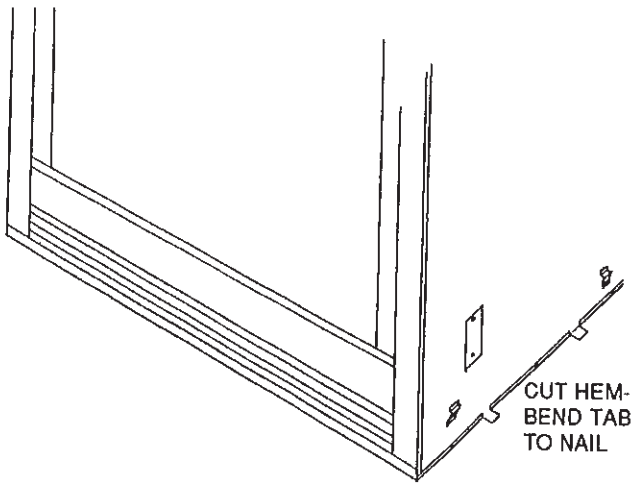


Figure 12

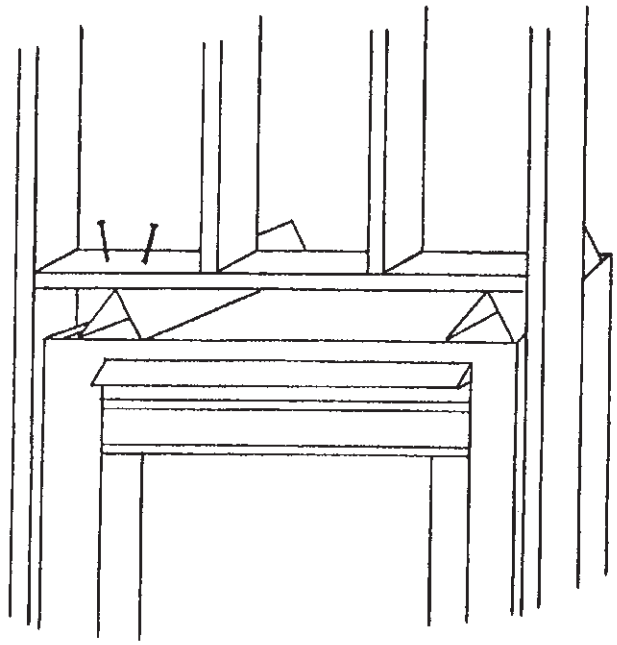


Figure 13

The exterior firestop (8-inch-diameter hole) may now be placed over the pipe on the outside of the house and nailed in position, again the arrows must point up to provide proper clearances. When finished, the cap should be as shown in Figure 14, with the cap extended past the exterior firestop a MINIMUM of 6 inches.

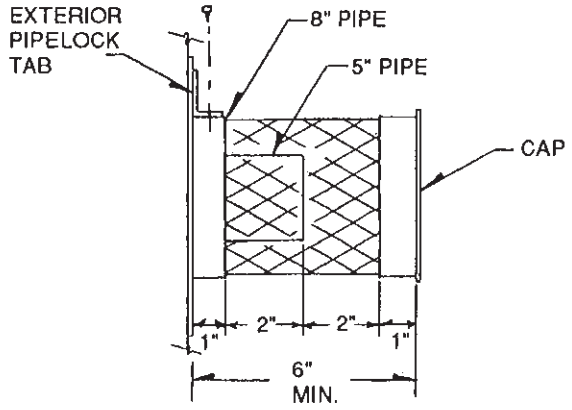


Figure 14

3.6 Connecting the Gas Line

The gas fireplace is designed to accept a 3/8 inch gas line for an approved gas appliance. Have the gas line installed by a qualified service person in accordance with all building codes. Consult local building codes to properly size the gas supply line leading to the 3/8 inch reduction for hook-up at the unit. It is recommended to assemble a gas pipe train as shown in Figure 15. Use a 3/8" nipple, drip "T", union, and male/female manual gas shut-off valve. A 1/8" N.P.T. plugged tapping, accessible for test gauge connection, should also be provided for, in the pipe train.

Locate the gas line access hole in the left outer casing of the fireplace (Figure 15).

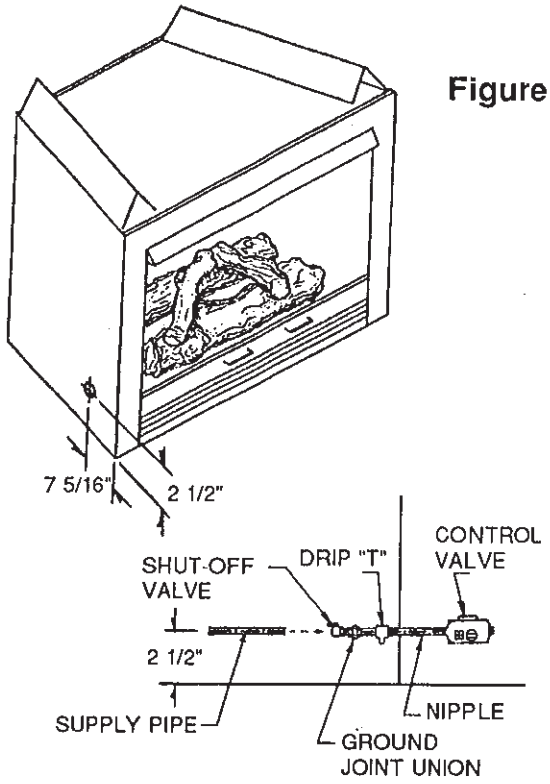


Figure 15

Next, insert the gas pipe train through the gas line hole from the outside of the fireplace and connect it to the gas valve. Support the control when attaching the pipe so that the pilot line is not bent or torn. After the gas pipe installation is complete, check carefully all gas connections for leaks with a soap solution. DO NOT USE AN OPEN FLAME. Use insulation to repack the space around the pipe. This should be inserted from the outside of the fireplace and packed tightly to totally seal between the pipe and the outer casing.

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.

Blower Kit Shown

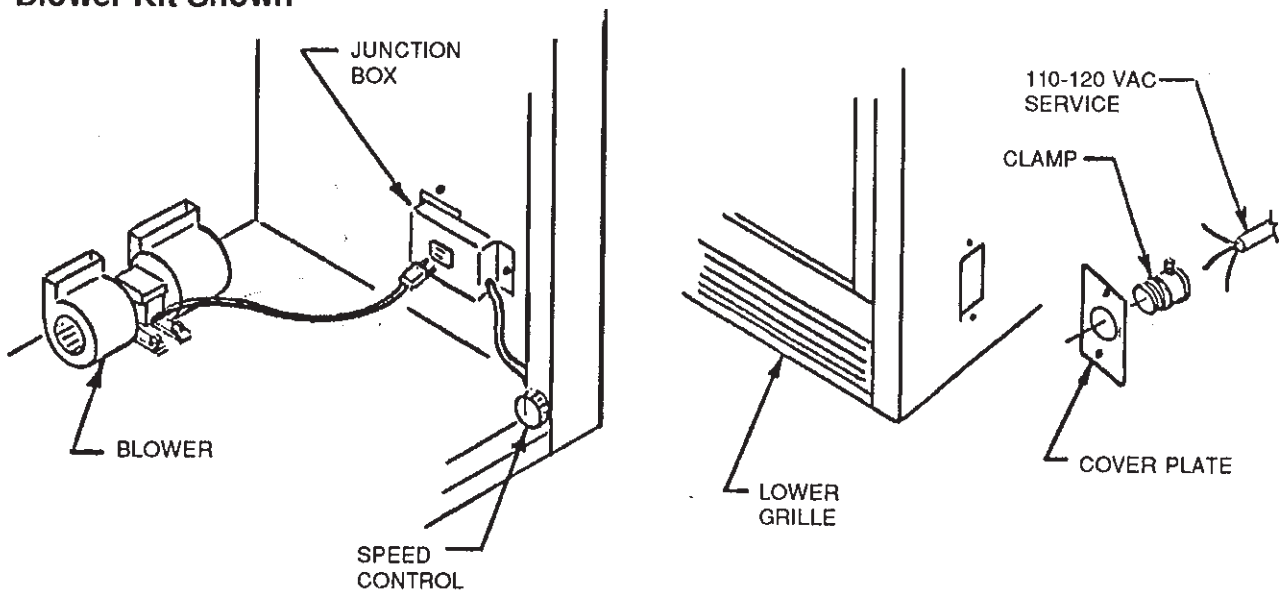


Figure 16

3.7 Electrical Wiring

An optional blower kit (GFK-160) and hand held remote control kit (RCH-09) are available. Use of these options requires that a junction box (JBC-11) be installed and connected to 110 VAC service before permanently positioning the fireplace. The access hole for connecting the 110 VAC service wires is found on the lower right exterior side of the unit. See figure 16. Detailed instructions for the junction box, 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

3.8 Wall Switch Wiring

An optional wall switch kit (WSK-21) for turning the fireplace ON/OFF is also available. This kit does NOT require 110 VAC. Attach one low voltage wire from the wall switch to the "TH" (#3) terminal of the gas control valve. Connect the other low voltage wire from the switch to the "TH-TP" (#1) terminal of the valve (Figure 17). Turn the unit's ON/OFF rocker switch to the "OFF" position to use the wall switch.

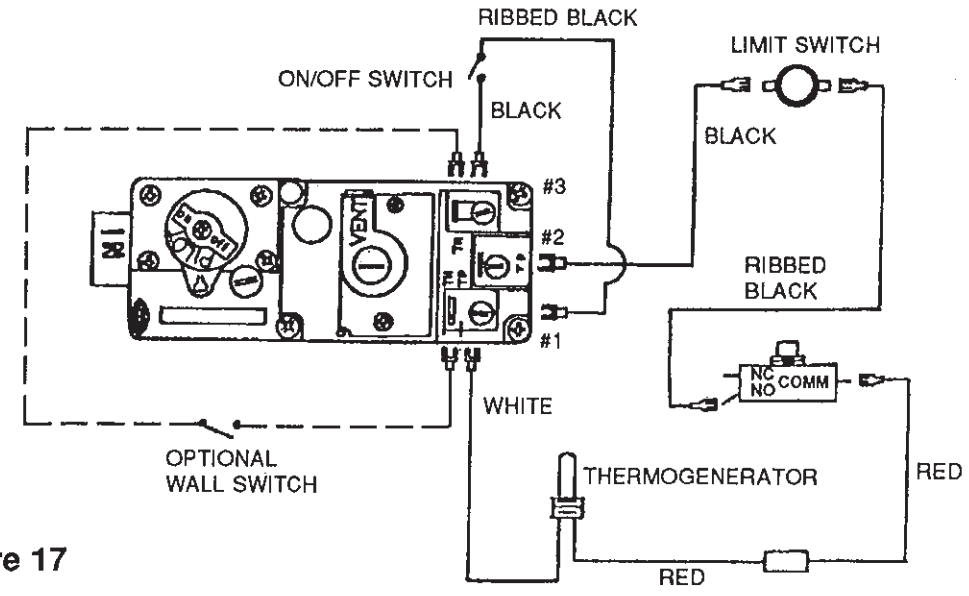


Figure 17

NOTE:

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

3.9 Finishing

CAUTION:

ALL JOINTS BETWEEN THE FINISHED WALL AND THE FIREPLACE SURROUND (TOP AND SIDES) CAN ONLY BE SEALED WITH NON-COMBUSTIBLE MATERIAL. ONLY NON-COMBUSTIBLE MATERIAL CAN BE APPLIED AS FACING TO THE FIREPLACE SURROUND.

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

THE HEAT DEFLECTOR HOOD MUST BE INSTALLED IN ALL APPLICATIONS.

Finish the wall with the material of your choice. Do not install a combustible mantle or other combustible projection above the fireplace opening unless it is a minimum of 12 inches above the front edge of the decorative hood (Figure 18).

The exterior of the chase may be finished to match the exterior of the house. DO NOT put any finishing material on the Vent Cap. DO NO extend the roofing material more than 1-1/2 inches beyond the chase itself, unless the roofing material is at least 18 inches above the cap (see Figure 9A).

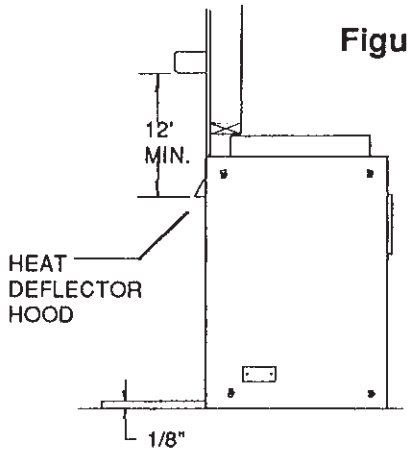


Figure 18

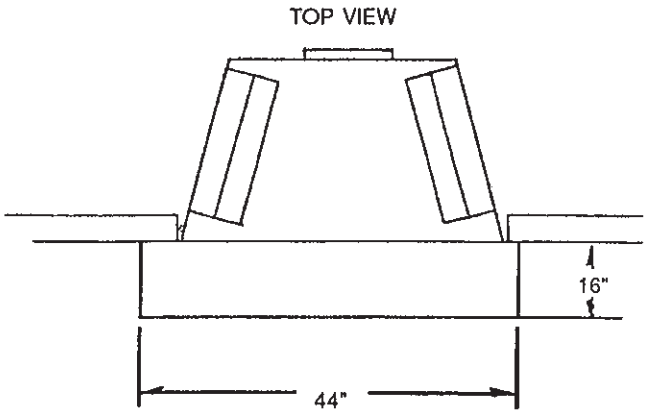


Figure 18A

3.10 Installing Hearth Extension

It is recommended that a non-combustible hearth that is a minimum of 16 inches x 44 inches be used in front of the unit.

A built-up hearth extension must be constructed of a non-combustible material.

4.0 Electrical Safety System

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

The 6000 GDV (GAS 36DV-88) system is wired so the thermo generator, when heated with the pilot light, will provide approximately 700 millivolts. This activates the gas control valve. For protection, the glass door must be in the closed position to work (this activates the microswitch). Additionally, a high temperature limit switch is used for protection and would close the main gas valve should a high surface temperature condition be encountered (Figure 19).

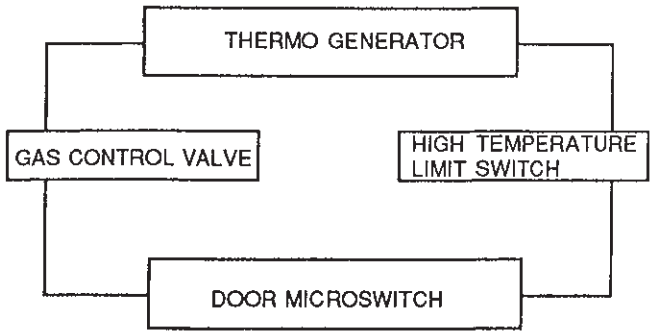


Figure 19

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

CAUTION: DURING THE INTIAL PURGING AND SUBSEQUENT LIGHTINGS, NEVER ALLOW THE GAS VALVE CONTROL KNOB TO REMAIN DEPRESSED IN THE "PILOT" POSITION WITHOUT PUSHING THE RED IGNITOR BUTTON AT LEAST ONCE EVERY 10 SECONDS.

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. After a few minutes this moisture will disappear.

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 grille assembly.

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

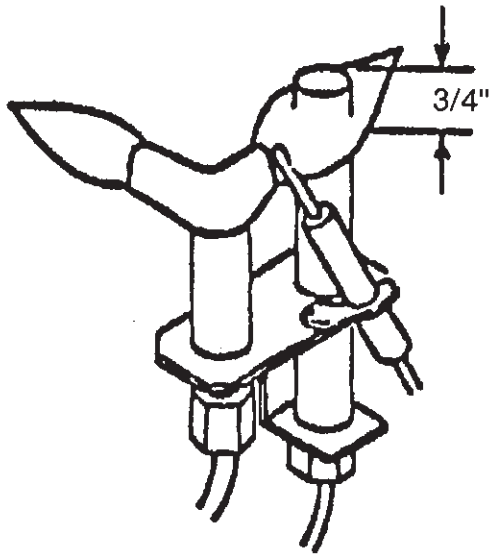
Always keep the appliance area clear and free from combustible materials, gasoline, and other flammable vapors and liquids.

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

Your appliance control system is a millivolt type. It consists of a pilot burner, a piezo ignitor, a gas control valve regulator, a microswitch, an on/off switch, and a safety high temperature limit switch.

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 20).



TYPICAL VIEW OF PILOT GENERATOR

Figure 20

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 SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.

IMPORTANT:

TURN OFF GAS BEFORE SERVICING APPLIANCE. IT IS RECOMMENDED THAT A COMPETENT SERVICEMAN PERFORM THESE 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 air flow.

5.1 GLASS DOOR REMOVAL

1. To remove the glass panel, the rectangular decorative front (piece includes the handles) must be removed first. To do this, lift and pull from the top above the glass panel.

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

3. 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 burner orifice is clean.

Visually inspect pilot. Brush or blow away any dust or linen accumulations. If pilot orifice is plugged, disassembly may be required to remove any foreign material from orifice or tubing. When appliance is put back in service check burner flame patterns with Figure 21.

5.3 Ceramic Log Replacement

1. Remove the window trim assembly (see Section 5.1).

2. The Log(s) can now be removed as required. Replace the log(s) as previously shown in Figure 1 Gas Log Positioning. Replace window frame and decorative trim.

5.4 Glass Door Replacement

1. Before replacing the glass door make sure the vermiculite material is spread evenly over the bottom of the firebox and the logs are properly positioned.

2. Center the glass door and place the bottom lip of glass door firmly on top of the MICRO SWITCH push button.

NOTE: [redacted]

IF GLASS DOES NOT PUSH AGAINST THE MICROSWITCH, THE PILOT WILL NOT STAY ON.

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: [redacted]

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 decorative trim proceeding in reverse order of step 1 under Glass Removal.

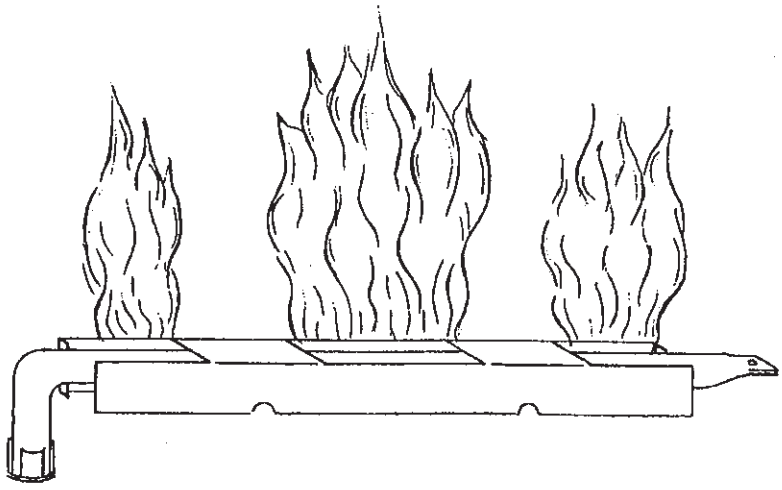


Figure 21

6.0 SAFETY INFORMATION

"FOR YOUR SAFETY READ BEFORE LIGHTING"

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

o Do not try to light any appliance
o Do not touch any electric switch: do not use any phone in your building.
o Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
o 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

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

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

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

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

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

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

7. To light the pilot depress the control knob and then depress the red piezo button until it makes a clicking sound. It may be necessary to repeat this step. If the pilot does not light after 20 seconds, go back to step 3. The pilot button should be held down for a minute after ignition. If the pilot will not stay lit after several tries, turn the gas control knob to the "OFF" position and call your service technician or gas supplier. If the knob does not pop up when released, stop and call your service technician or gas supplier.

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

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

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

10. To turn off gas to appliance:

a. Open access grille by pulling grille top forward.
b. Turn knob clockwise to pilot position then depress knob and continue turning to "OFF" position.
c. To close control panel simply lift grille and press in.

After the unit has warmed up (i.e. approx. 15 min.), flame height should be slightly (about 2") below the top of the decorative front (Figure 22). If the flame height is higher than this, adjustments must be made to prevent overheating the gasket and glass. Please contact your dealer or a qualified service person to replace the orifice or adjust the valve.

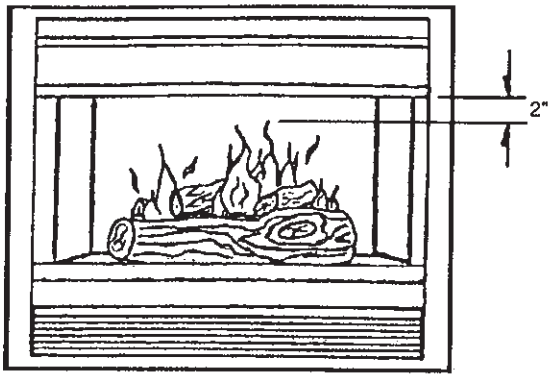


Figure 22

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

WARNING: [redacted]

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, sniff at floor level. If you smell gas, 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

When installing this unit at an elevation above 2,000 feet, it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size.

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

9.0 TROUBLE SHOOTING

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 you or a qualified service person in the diagnosis of problems and the corrective action to be taken.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
1. Spark ignitor will not light pilot after repeated triggering of red button.	A. Defective ignitor (no spark at electrode.)	1. Check for spark at electrode and pilot; if no spark and electrode wire is properly connected, replace ignitor.
	B. Defective pilot or misaligned electrode (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.	3. Check L.P. (Propane) tank. You may be out of fuel.
2. Pilot will not stay lit after carefully following lighting instructions.	A. Defective thermo generator.	1. Check pilot flame. Must impinge on thermo generator. Clean and or adjust pilot for maximum flame impingement on generator.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
		2. Be sure wire connections from generator at gas valve terminals are tight and generator is fully inserted into pilot bracket.
		3. Check thermo generator with millivolt meter. Take reading at "TH-TP & TP" terminals of gas valve. Should read 325 millivolts minimum while holding valve knob depressed in pilot position, pilot lit, and on/off switch "OFF". Replace faulty generator if reading is below specified minimum.
	B. Defective valve.	1. Disconnect the Thermogenerator's red wire from the micro switch 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 lighted, the valve is defective. If the meter reading is less than 325 m.v., the Thermogenerator is defective.
	C. Glass door does not fully depress Micro switch.	1. Adjust glass so it fully depresses the Micro switch. (Do not operate the unit with broken or cracked glass.)
		2. If fully depressed, place jumper wires across connectors and if it allows you to re-ignite, the switch should be replaced. Do not operate unit with jumper wires in place. When the jumper wire is in place and the unit won't re-ignite, you may have problems with the wiring or connectors.
	D. Open wire connection in pilot circuit.	1. Check wire continuity and connections in pilot circuit.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
3. 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 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.
	B. Thermo generator may not be generating sufficient milli-voltage. (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.
4. 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 thermo generator.
5. Pilot and main burner go out while being in operation.	A. High limit switch is defective or has reached its maximum temperature.	1. Allow unit to cool. Then repeat lighting instructions. 2. If 1 above does not allow for ignition, check high limit switch. Place jumper wires across high limit switch. If you can re-ignite the pilot, your high limit switch is

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
		defective. Do not use fireplace until the high limit switch is replaced, as this is an important safety feature. If the unit does not light with jumper wires in place, the wires may be defective or the connectors are bad.
	B. Door micro switch is not fully depressed or defective.	1. Adjust glass so it fully depresses the Micro switch. (Do not operate unit with broken or cracked glass.)
		2. If fully depressed, place jumper wires across connectors and if it allows you to re-ignite, the switch should be replaced. Do not operate unit with jumper wires in place. When jumper wire is in place and the unit won't re-ignite, you may have problems with the wiring or connectors.
	C. No L.P. in tank.	1. Check L.P. (Propane) tank. You may be out of fuel.
	D. Inner 5-inch pipe leaking exhaust gases back into system.	1. Check for leaks.
	E. Horizontal vent improperly pitched.	1. Horizontal vent should slope down only enough to prevent any water from entering unit. The maximum downward slope is 1/4" for any horizontal run.
	F. Glass too loose and air tight gasket leaks in corners after usage.	1. Tighten corner.
	G. Bad thermo-generator.	1. Replace if necessary.
	H. Improper vent cap installation.	1. Check for proper installation & freedom from debris or blockage.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
6. 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.
	C. Vermiculite around venturi.	1. Inspect the opening in the vermiculite dam at the base of the burner. It is imperative that NO material be placed in this opening.
7. Flame burns blue and lifts off burner.	A. Insufficient oxygen being supplied.	1. Check to make sure vent cap is installed properly and free of debris. Make sure that the 5-inch inner pipe extends 2 inches beyond the 8-inch pipe and has no leaks in it.
		2. Check to make sure that the vermiculite has not been improperly placed in the vermiculite dam down at the burner base.
		3. Be sure glass is tightened properly on unit, particularly on top corners.

10.0 Replacement Parts: When requesting service or replacement parts for your fireplace, please provide model number and serial number. All parts listed in this manual may be ordered from an authorized dealer.

LIMITED WARRANTY POLICY
FOR GAS TECHNOLOGIES, INC. GAS FIREPLACES

The limited 2-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 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 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 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 wholesale 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 IMPLEMENTED WARRANTIES OF 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.