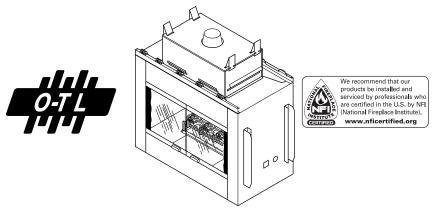


2-SIDED (SEE-THROUGH), VENTED DECORATIVE GAS APPLIANCE OWNER'S OPERATION AND INSTALLATION MANUAL



NATURAL GAS MODELS GL36ST AND GL36STE PROPANE/LP GAS MODELS GL36STP AND GL36STEP

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

FOR YOUR SAFETY

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

INSTALLER: Leave this manual with the appliance. CONSUMER: Retain this manual for future reference.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

NOT FOR USE WITH SOLID FUEL CHECK LOCAL CODES PRIOR TO INSTALLATION

SAVE THIS BOOK

This book is valuable. In addition to instructing you on how to install and maintain your appliance, it also contains information that will enable you to obtain replacement parts or optional accessory items when needed. Keep it with your other important papers.

This appliance is only for use with the type of gas indicated on the rating plate.

This appliance is not convertible for use with other gases.

TABLE OF CONTENTS

Safety Information	3	Technical Service	15
Dimensions			
Introduction	5	Wiring Diagrams	16
Selecting Location	5	Troubleshooting	17
Fireplace Installation	6	Replacement Parts and Accessories	19
Operating Fireplace	13	Limited 2-Year Warranty	Back Page
Cleaning and Maintenance			Ü

SAFETY INFORMATION

WARNING: This product contains and/or generates chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate or service this fireplace. Improper use of this fireplace can cause serious injury or death from burns, fire, explosions, electrical shock and carbon monoxide poisoning.

A DANGER: Carbon monoxide poisoning may lead to death!

This fireplace is a vented product. This fireplace will not produce any gas leakage into your home if properly installed. This fireplace must be properly installed by a qualified service person. If this unit is not properly installed by a qualified service person, gas leakage can occur.

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness or nausea. If you have these signs, the fireplace may not have been installed properly. Get fresh air at once! Have fireplace inspected and serviced by a qualified service person. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol and those at high altitudes.

Propane/LP gas and natural gas are both odorless. An odor-making agent is added to each of these gases. The odor helps you detect a gas leak. However, the odor added to these gases can fade. Gas may be present even though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this fireplace.

A WARNING: Any change to this fireplace or its controls can be dangerous.

- This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.
- For propane/LP fireplace, do not place propane/ LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity.
- 3. If you smell gas
 - · shut off gas supply
 - · 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 you gas supplier, call the fire department.
- 4. Never install the fireplace
 - · in a recreational vehicle
 - where curtains, furniture, clothing or other flammable objects are less than 42" from the front, top or sides of the fireplace
 - · in high traffic areas
 - · in windy or drafty areas
- This fireplace reaches high temperatures. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
- 6. Carefully supervise young children when they are in the room with fireplace.
- A hearth extension is not required with this appliance. If one is installed, it is for aesthetic purposes only and does not have to meet the standard requirements.
- Turn fireplace off and let cool before servicing or repairing. Only a qualified service person should install, service or repair this fireplace. Have fireplace inspected annually by a qualified service person.
- You must keep control compartments, burners and circulating air passages clean. More frequent cleaning may be needed due to excessive lint and dust from carpeting, bedding material, etc. Turn off the gas valve and pilot light before cleaning fireplace.
- Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. See *Cleaning* and *Maintenance*, page 15.

SAFETY INFORMATION

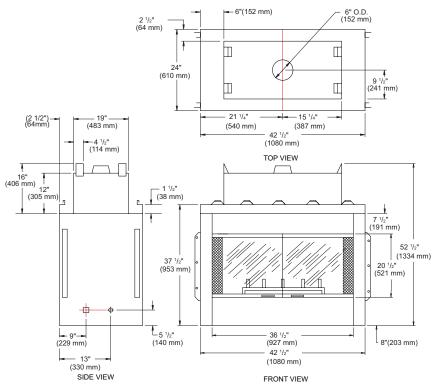
Continued

- 11. Keep the area around your fireplace clear of combustible materials, gasoline and other flammable vapor and liquids. Do not run fireplace where these are used or stored. Do not place items such as clothing or decorations on or around fireplace.
- 12. Do not use this fireplace to cook food or burn paper or other objects.
- Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on fireplace nameplate.
- 14. This appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 or the Canadian Electrical Code, CSA C22.1.
- 15. Do not obstruct the flow of combustion and ventilation air in any way. Provide adequate clearances around air openings into the combustion chamber along with adequate accessibility clearance for servicing and proper operation.

4

- 16. Do not install fireplace directly on carpeting, vinyl tile or any combustible material other than wood. The fireplace must set on a metal or wood panel extending the full width and depth of the fireplace.
- 17. Do not use fireplace if any part has been exposed to or under water. Immediately call a qualified service person to arrange for replacement of the unit.
- 18. Do not operate fireplace if any log is broken.
- Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this fireplace.
- Provide adequate clearances around air openings.

DIMENSIONS



55173-G

INTRODUCTION

Models GL36ST/P and GL36STE/EP are decorative gas appliances that use a millivolt gas control and piezo pilot or an electronic gas control valve with an electronic ignition system respectively. These systems require a 6", B-type venting system for operation.

The 6" B-type vent is not supplied by DESA. For installation guidelines, check your B-vent instructions.

WARNING: This gas appliance must not be connected to a chimney flue servicing a solid fuel burning appliance.

Models GL36ST and GL36STE are smooth face units for natural gas only. The GL36STP and GL36STEP are smooth face units for propane/LP gas only. To determine which type of gas your unit is approved and tested for, check the rating plate on the lift-out plate located inside the firebox under the access panel.

BEFORE YOU BEGIN

Before beginning the installation of your appliance, read these instructions through completely. This DESA appliance and its approved components are safe when installed according to this installation manual and are operated as recommended by DESA. Unless you use DESA approved components tested for this appliance, YOU MAY CAUSE A FIRE HAZARD!

The DESA warranty will be voided by and DESA disclaims any responsibility for the following actions:

- Modification of the appliance or any of the components manufactured by DESA unless otherwise permitted by DESA.
- B) Use of any component part not approved by DESA in combination with this appliance.
- C) Installation and/or operation in a manner other than instructed in this manual.
- D) The burning of anything other than the type of gas approved for use in this gas appliance.

This appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code*, *ANSI/NFPA 70-1987* and the *CSA C22.1 Canadian Electrical Code* for Canada.

The installation must conform with local codes or, in the absence of local codes, with the current *National Fuel Gas Code*, *ANSI Z223.1/NFPA 54* or with the current *CAN/CGA B149 Installation Codes* for Canada.

This appliance complies with ANSI Z21.50B-1990 and CAM/CGA-2.22-M89 as a Vented Gas Appliance and is listed and tested by the Omni Test Laboratories.

WARNING: Installation of this appliance should be done by a qualified service person well trained in the installation of such appliances. You will also need a building permit from your local Building and Safety Commissioner before installing this appliance; otherwise your insurance company may not cover this appliance.

NOTICE: This appliance is not intended to be used as a primary source of heat.

SELECTING LOCATION

To determine the safest and most efficient location for your appliance, you must take into consideration the following guidelines:

- The location must allow for proper clearances (see Clearances, page 6). Note: This decorative appliance is not designed for outdoor installation.
- The location should be in a place where drafts, air conditioning ducts, windows or doors will not affect fireplace heat output.
- A location that avoids the cutting of joists or roof rafters will make installation easier. Figure 2 shows a typical two-sided fireplace installation.

IMPORTANT: All fireplace openings must be located at least 3 feet from facing wall or combustible material.

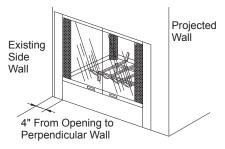


Figure 2 - Typical Two-Sided Fireplace Installation

SELECTING LOCATION

Continued

In selecting a location, the following precautions must be observed:

- Do not connect this appliance to a chimney system used for a solid fuel burning fireplace.
- 2. Install in an area providing ventilation and adequate combustion air.
- Due to high temperatures, do not locate this appliance in high traffic areas or near furniture and draperies.
- Never obstruct the front opening of the appliance or the flow of combustion and ventilation air. Keep control compartments accessible.
- DO NOT locate in the vicinity where gasoline or other flammable liquids may be stored. The appliance area must be kept clear and free from these combustible materials.

FIREPLACE INSTALLATION

CLEARANCES

Minimum clearances to combustibles are:

•	Fireplace flanges to studs 0
•	Fireplace back/sides
•	Fireplace spacers to framing0
•	Openings to perpendicular wall 4
•	End glass to facing wall
•	Side glass to facing wall36
•	Bottom of fireplace to floor or platform 0
•	"B" vent surfaces
•	Top of fireplace opening to ceiling35
Se	ee Figures 3 and 4.

A CAUTION: Do not block required air spaces with insulation or any other material. Do not obstruct effective opening of appliance with any type of facing material.

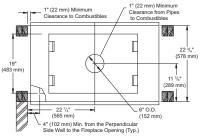


Figure 3 - Clearances from Top View

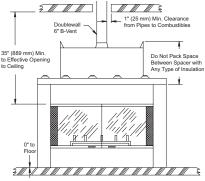


Figure 4 - Clearances from Side View

MANTEL CLEARANCES

Woodwork, such as wood trims, mantels and other combustible materials, should not be placed within 7" of the opening of this appliance (see Figure 5). Combustible material above the fireplace projecting more than 1 ¹/₂" from the appliance's front face must not be less than 12" from the appliance opening.

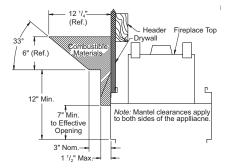


Figure 5 - Mantel Clearances

Continued

FRAMING

Construct framing using dimensions shown if Figures 6, 7 and 8. (Use the figure applicable to your application.) Figure 6 shows the framing dimensions prior to having the appliance in place. Once the unit has been fitted, bring studs in against nailing flanges located on the side of the appliance making sure a 1" clearance is maintained as shown in Figure 7.

If the fireplace is to be installed directly on carpeting, tile (other than ceramic) or any combustible material other than wood flooring the fireplace must be installed upon a metal or wood panel extending the full width and depth of the fireplace (see Figure 8). The platform must be solid, flat and fully supported.

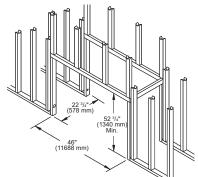


Figure 6 - Framing Dimensions Prior to Placing Appliance

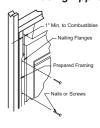


Figure 7 - Securing Appliance with Nailing Flanges

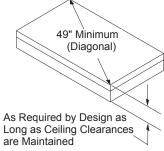


Figure 8 - Appliance Must Be Installed on a Wood or Metal Panel if Being Installed on Any Combustible Material Other Than Wood

VENT PIPE INSTALLATION

A 6", B-1 type gas vent pipe is a double-wall, venting system (not supplied) which must be installed during rough framing of the appliance. Any B-1 type gas vent system may be used for proper venting as long as the vent system is installed per the vent manufacturer's recommendations.

DESA supplies this appliance with a tapered starter pipe for a snug fit. Slide B-1 type vent pipe over this starter pipe until vent pipe is fully seated. Secure this first section of B-vent pipe by strapping the connector around the vent pipe and then tightening the strap (not supplied) with any 1/8" nut and bolt (see Figure 9). *Note:* Visually inspect for proper vent connection by looking inside top of appliance. If connection does not appear to be correct, contact your local service technician.

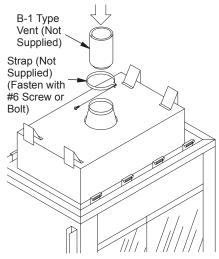


Figure 9 - Installing B-Vent Pipe

Continued

OPTIONAL OUTSIDE AIR KIT (MODEL AK-4)

The installation of an outside air kit should be completed during the rough framing of the fire-place due to the nature of it's location. Outside combustion air is accessed through a vented crawl space.

A CAUTION: Air inlet ducts must not be terminated in an attic space.

Avoid installing outside air eyebrow in areas where inlet opening may be blocked by snow, bushes or other obstacles (see Figure 10).

The maximum height for the air inlet termination cannot exceed 3 feet below the B-vent termination exhaust height.

Secure to Collars with Duct Tape or Screws Air Inlet Location Must Allow For Bushes or Snow Air Inlét Eyebrow Vent Hood Vented Crawl Space Required for (Check Local Codes Wall Installation Before Installing in a Vented Crawl Space)

Figure 10 - Outside Air Kit

MILLIVOLT MODELS (GL36ST/STP)

The installation of a wall switch in this millivolt control appliance allows you to activate the gas control valve without the use of normal current. CAUTION: Do not connect this millivolt system wall switch to a regular 120v power source! Gas valve will be damaged beyond repair.

Wall Switch Installation

- Remove the J-box cover plate from side of appliance's outer surround.
- Using the 18 ga. millivolt wire and wall switch (both supplied), connect wiring per wiring diagram (see Figure 11). For more detail, see Wiring Diagrams on page 16.

Note: If any of the original 10 feet supplied wire must be replaced, use Thermostat Millivolt Wire 18 AWG Type CL2-105 C or equivalent only.

IMPORTANT: Do not hook up to standard 120 VAC household wiring.

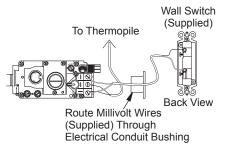


Figure 11 - Wall Switch Installation

ELECTRONIC MODELS (GL36STE/EP)

This appliance must be properly wired to standard 120v household current through the DESA-provided wall switch before its remote control unit can be used to activate the automatic pilot ignition (turn fireplace flames ON).

Wall Switch Installation

- Remove the J-box cover plate from side of appliance's outer surround.
- 2. Using the 18 ga. wires coming through strain relief grommet on side of appliance's outer wall to standard household 120 VAC current through the wall switch provided, as shown in Figure 12, page 9. For more detail, see *Wiring Diagrams*, page 16.

Note: If any of the original 10 feet supplied wire must be replaced, use 20 AWG electrical wire or equivalent only.

Continued

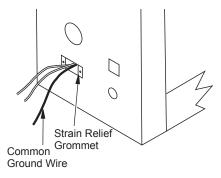


Figure 12 - Wiring Through Outer Surround

GAS SUPPLY TESTING

Note: This section is intended as a guide for qualified technicians installing gas to this appliance.

A CAUTION: Do not connect appliance before pressure testing gas piping. Damage to gas valve may result and an unsafe condition may be caused.

The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).

The 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 (3.5 kPa).

This unit has been tested for installation at high altitude in accordance with Canadian test standard CAN/CGA-2.17. Higher altitudes affect the atmospheric pressure and heat valve of gaseous fuels. When installing this unit at high altitudes, the rated input will be lower than at sea level. The lowered oxygen content in the air and the lowered gas density require installation of a different size orifice in order to achieve clean combustion of the unit. Consult the unit data plate for the proper high-altitude orifice size. Fill out the information sticker attached to the unit when field converting. See *Specifications*, page 15, when derating.

The gas control valve is secured to the burner pan assembly underneath the front ledge. A 1/8" NPT plugged tapping is provided on the gas control valve for a test gauge connection immediately upstream of the gas supply connection to the appliance (see Figures 13 and 14).

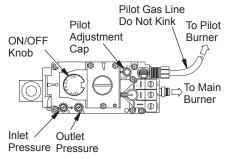


Figure 13 - Millivolt Control Valve

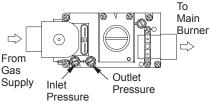


Figure 14 - Electronic Control Valve

GAS LINE HOOK-UP

WARNING: Gas line hookup should be done by your gas supplier or a qualified service person.

WARNING: Before you proceed, make sure your gas supply is OFF.

A manual shutoff valve has been included in the appliance's gas supply system. You may consider installing an extra gas shutoff valve outside the appliance's enclosure (check with local codes) where it can be accessed more conveniently with a key through a wall as shown in Figure 15, page 10.

A 30" long, 1/2" NPT SCHD 40 flexible gas line (supplied) may be used between the incoming 1/2" NPT black iron gas line and the fireplace regulator (located inside the firebox, under the access plate). The incoming gas line may be routed toward the appliance from either the left or right hand side of fireplace outer surround.

Continued

To install:

- Remove gas line cover plate from appliance's outer surround at the location to be used.
- Remove insulation from inside the gas line conduit sleeve.
- 3. Run gas line through sleeve.
- Prepare incoming black iron gas line with Teflon tape or pipe joint compound. (Check local codes as to the use of Teflon tape.)

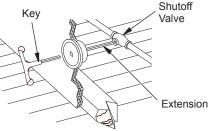
CAUTION: Compounds used on threaded joints of gas piping shall be resistant to the action of Liquefied Petroleum (LP or propane) and should be applied lightly to ensure excess sealant does not enter the gas line.

- Connect incoming gas line to regulator. Secure all joints tightly with wrench, but do not over tighten. If a flexible gas line is used, take care not to kink the connector.
- 6. Re-pack insulation in and around the conduit sleeve and flexible gas line.

WARNING: All gas piping and connections must be tested for leaks after the installation is completed.

After ensuring that the gas valve is on, apply a commercial leak detection solution to all connections and joints. If bubbles appear, leaks can be detected and corrected.

Do not use an open flame for leak testing and do not operate any appliance if a leak is detected.



Typical Exterior Wall Gas Shutoff Installation

Figure 15 - Typical Exterior Wall Gas Shut-Off Installation

LOG SET PLACEMENT

Carefully remove log set from packaging. Place the two bottom logs over grate and align with pins. Place three loose logs, or twigs, onto alignment pins on two bottom logs (see Figure 16).

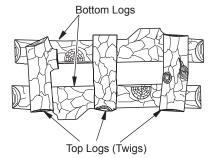


Figure 16 - Log Placement

FIREPLACE FACING

Any non-combustible material may be used for facing (glass, tile, brick, etc.) as long as the proper clearances are adhered to and the fireplace openings are not blocked or obstructed in any way. See *Clearances*, page 6, and Figure 17 on page 11.

Use only heat-resistant, noncombustible mortar or adhesive when securing facing material to the front of the fireplace.

Continued

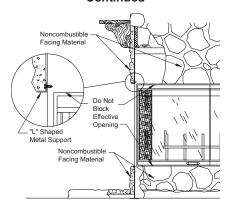


Figure 17 - Fireplace Facing Material

MANTELS

Mantels, combustible or non-combustible, may be constructed as long as proper clearances are observed (see Figure 2, page 6 and *Clearances*, page 6).

PILOT ASSEMBLY ADJUSTMENT

The pilot assembly is factory preset for the proper flame height. Alteration to factory settings may have occurred during shipping. If this is the case, some minor readjustments may be necessary and should be done by a qualified technician.

The pilot assembly is located behind the burner next to the rear refractory piece at the right-hand side. The thermopile (in millivolt models) or the sensor (in electronic models) should be engulfed with the pilot flame approximately 3/8" to 1/2" in order for the regulator to receive proper signal (see Figures 18 and 19).

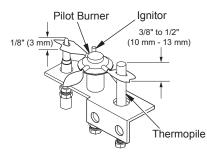


Figure 18 - Correct Pilot Flame Pattern
- Millivolt Assembly

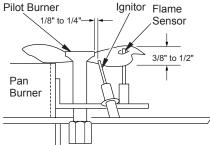


Figure 19 - Correct Pilot Flame Pattern - Electronic Assembly

BURNER FLAME ADJUSTMENT

The air shutter, located at the base of the main burner tube, has been factory preset to the proper air to bas ratio which results in a long, blue, cleaner burning flame (see Figure 20).

If readjustment is necessary, loosen the air shutter screw and rotate air shutter until proper flame setting is achieved, retighten air shutter screw. See Figure 20 for air shutter location.

Closing the air shutter reduces the air-to-gas mix, resulting in a longer, yellow flame wihich produces excessive carbon monoxide (CO) and could also cause sooting.

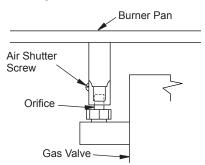


Figure 20 - Air Shutter Adjustment

Continued

OPTIONAL GLASS DOOR

Glass doors are optional with this gas appliance (see *Replacement Parts and Accessories*, page 19).

Installing Glass Door

- Be sure top spring clip hole is aligned with hole in fireplace frame (see Figure 21). Fit glass door top pin into aligned holes.
- Swing inner end of bottom clip out away from fireplace frame. Fit door bottom pin into clip. Push clip into frame until bottom door pin slips into hole in frame.
- Check door alignment. If doors do not align with each other, use top spring clip to align.
 - a. Use Phillips screwdriver to loosen screw that holds top spring clip in place.
 - b. Push spring clip left or right in its alignment slot until door is at proper angle (aligned with opposing door). Moving spring clip to the LEFT (your left as you face the fireplace) moves glass door's top, inner corner UP; moving spring clip to the RIGHT moves glass door's top, inner corner DOWN.
 - When door alignment is satisfactory, use Phillips screwdriver to retighten spring clip screw.

WARNING: When fireplace is in operation, both sets of cabinet doors on each side of the fireplace must be either FULLY OPEN or FULLY CLOSED. If not, a fire hazard may be created.

Only doors certified with this appliance may be used. When operating doors, do not slam or abuse them. Always keep area below bottom edge of doors clear of obstacles or debris. Do not operate this appliance if glass doors are broken or damaged. See Figure 22.

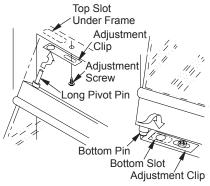
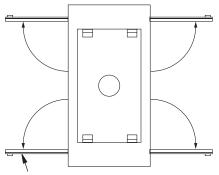


Figure 21 - Installing Glass Doors



Glass Doors Must be Fully Open (as Shown) or Fully Closed when Appliance is in Operation

Figure 22 - Glass Doors Shown Fully Open

OPERATING FIREPLACE

MILLIVOLT MODELS



FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- · Do not try to light any appliance.
- Do not touch any 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 or gas supplier. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.



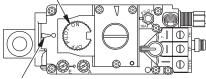
LIGHTING INSTRUCTIONS



NOTICE: During initial operation of new heater, burning logs will give off a paper-burning smell. Orange flame will also be present. Open window to vent smell. This will only last a few hours.

- STOP! Read the safety information, column 1.
- 2. Turn wall switch to the OFF position.
- 3. Turn off all electric power to the appliance.
- 4. Open control access panel.
- 5. Push in gas control knob and turn clockwise to the OFF position (see Figure 23). Note: It is recommended that you maintain the gas control knob in the full OFF position during lengthy periods of seasonal non usage.
- 6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you don't smell gas, go to the next step.
- Turn control knob counterclockwise to the PILOT position.
- 8. Push in control knob all the way and hold in. Immediately light the pilot by pressing the red ignitor button until a flame appears. Continue to hold the control knob in for about (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 8.
 - If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
 - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- Turn gas control knob counterclockwise to "ON". Knob can be turned to "ON" only if the control knob is popped out.
- 10. Replace control access panel.
- 11. Turn on all electric power to the appliance.

Gas Control Knob



Position Indicator

Figure 23 - Millivolt Control Valve

OPERATING FIREPLACE

Continued

TO TURN OFF GAS TO APPLIANCE

- 1. Turn off the wall switch.
- 2. Turn off all electric power to the appliance if service is to be performed.
- 3. Remove control access panel.
- 4. Push in gas control knob and turn clockwise to "OFF". Do not force.
- 5. Replace control access panel.

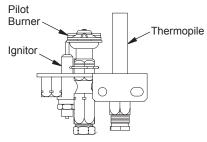


Figure 24 - Pilot

ELECTRONIC MODELS



FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- · Do not try to light any appliance.
- Do not touch any 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 or gas supplier. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.



LIGHTING INSTRUCTIONS



NOTICE: During initial operation of new heater, burning logs will give off a paper-burning smell. Orange flame will also be present. Open window to vent smell. This will only last a few hours.

- 1. STOP! Read the safety information, column 1.
- 2. Set the thermostat to lowest setting (if applicable).
- 3. Turn off wall switch.
- 4. Open control access panel or louver.
- Smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information in column 1. If you don't smell gas, go to the next step.
- Turn the main burner wall switch to the ON position for ignition. There will be a spark at the electrode.
- 7. Replace control access panel or louver once there is a flame at the burner.
- 8. If burner will not stay lit after several tries, flip the wall switch to OFF and call your service technician or gas supplier.

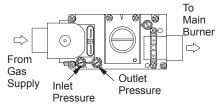


Figure 25 - Electronic Control Valve

OPERATING FIREPLACE

Continued

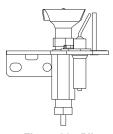


Figure 26 - Pilot



TO TURN OFF GAS



- 1. Turn off all electric power to the appliance if service is to be performed.
- 2. Remove control access panel.
- 3. Close the gas valve.

CLEANING AND MAINTENANCE

WARNING: Installation and repair should be done by a qualified service person. The appliance should be inspected before each use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, pet hair, etc. It is imperative that the control compartments, burners and circulating air system be kept clean.

WARNING: The logs can be hot. Handle only when cool.

WARNING: Turn off gas and electrical power before servicing appliance. Any safety screen or guard removed for servicing must be replaced prior to operating the appliance.

WARNING: Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.

Keep control compartment, logs, burner and area surrounding logs clean by vacuuming or brushing at least twice a year. Take care not to alter the settings on the pilot assembly.

Do not use abrasive liquids or cleaners for cleaning glass doors and trims. Any household glass cleaner should suffice. Do not clean doors when hot. Allow appliance to cool before cleaning.

TECHNICAL SERVICE

You may have further questions about installation, operation or troubleshooting. If so, contact DESA's Technical Service Department at 1-866-672-6040. When calling please have your model and serial numbers of your heater ready.

You can also visit DESA's Technical Services web site at **www.desatech.com**.

SPECIFICATIONS

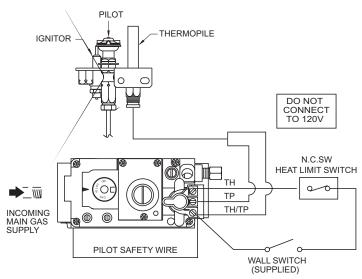
GL36ST, GL36STE

- Maximum Input Rating at Altitudes: 2,000 ft. 42,000 Btu/hr., 2,000 ft. to 4,000 ft. 37,800 Btu/hr.
- Manifold Pressure: 3.5 W.C. (.87 kPa)
- Supply Pressure (in. of water): Minimum* 4.5"
 (1.12 kPa), Maximum 11.0" (2.74 kPa)
- Orifice Size at Altitudes: 2,000 ft. #30, 2,000 ft. to 4,000 ft. #31

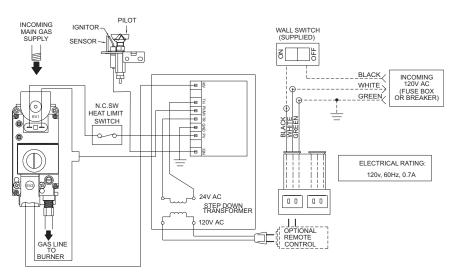
GL36STP, GL36STEP

- Maximum Input Rating at Altitudes: 2,000 ft. 42,000 Btu/hr., 2,000 ft. to 4,000 ft. 37,800 Btu/hr.
- Manifold Pressure: 11.0 W.C. (2.74 kPa)
- Supply Pressure (in. of water): Minimum* -12.0" (2.89 kPa), Maximum - 13.0" (3.23 kPa)
- Orifice Size at Altitudes: 2,000 ft. #49, 2,000 ft. to 4,000 ft. #51
- * For the purpose of input adjustment

WIRING DIAGRAMS



MILLIVOLT WIRING DIAGRAM



ELECTRONIC WIRING DIAGRAM

TROUBLESHOOTING

MILLIVOLT SYSTEM

Note: Before troubleshooting the system, make sure the gas shutoff valve is ON.

The two most common causes of a malfunctioning gas appliance are:

- 1. Loose wiring connections
- 2. Construction debris clogging the pilot and/or gas control valve filter

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Pilot will not light	No gas supply or shutoff valve is OFF Air in gas line	Check to see if you have gas supply Hold regulator control valve in the PILOT position for 2 to 3 minutes to purge air. If you smell gas stop and wait for a few minutes before trying to light the fireplace
	Construction debris clog- ging pilot orifice	3. Remove debris and dirt, inspect and clean any other possible obstructions
	4. Low gas pressure5. Control valve knob is not on the PILOT position	4. Contact your gas supplier5. Refer to section on pilot lighting
	6. Kinked pilot line	6. Have a qualified technician replace pilot line
	7. Bad valve	7. Replace control valve (see Replacement Parts, page 19)
Pilot will not stay lit	1. Loose wiring on thermopile to control valve.	Check wiring connections. Refer to wiring diagrams on page 15
	2. No millivolt current is being sent back to regulator	Have a qualified technician check millivolts
	3. If valve knob and wall switch are in the ON position, probable defective control valve	3. Have a qualified technician replace valve (see <i>Replacement Parts and Accessories</i> , page 19)
No gas to burner, although wall switch and valve are set to the	1. Wall switch wires defective	Check electrical connections and wires for continuity
ON position	2. Thermopile or sensor not generating sufficient voltage	2. See <i>Pilot will not stay lit</i> , above
Frequent pilot outage	Pilot flame may be too low, causing safety pilot to "drop out"	Clean and adjust pilot flame for maximum flame impinge- ment on thermopile
Pilot goes out when wall switch is ON	Millivolt output on thermo- pile too high	Have a qualified technician replace thermopile

TROUBLESHOOTING

ELECTRONIC IGNITION SYSTEM

Note: Before troubleshooting the system, make sure the gas shutoff valve is ON.

The two most common causes of a malfunctioning gas appliance are:

- 1. Loose wiring connections
- 2. Construction debris clogging the pilot and/or gas control valve filter

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Pilot will not light	 No gas supply or shutoff valve is OFF Construction debris clogging pilot orifice Low gas pressure Control valve knob is not on the PILOT position Kinked pilot line Bad valve 	 Check to see if you have gas supply Remove debris and dirt, inspect and clean any other possible obstructions Contact your gas supplier Refer to section on pilot lighting Have a qualified technician replace pilot line Replace control valve (see Replacement Parts and Accessories, page 19)
Pilot will not stay lit	Loose wiring on thermopile to regulator valve. No millivolt current is being sent back to regulator If valve knob and wall switch are in the ON position, probable defective control valve	Check wiring connections. Refer to wiring diagrams on page 16 Have a qualified technician replace valve (see Replacement Parts and Accessories, page 19)
No gas to burner, although wall switch and valve are set to the ON position	Wall switch wires defective Thermocouple generator or sensor not generating sufficient voltage	Check electrical connections and wires for continuity See <i>Pilot will not stay lit</i> , above
Frequent pilot outage	Pilot flame may be too low, causing safety pilot to "drop out"	Clean and adjust pilot flame for maximum flame impinge- ment on thermopile
Pilot goes out when wall switch is ON	Output on flame sensor too high	1. Replace flame sensor

REPLACEMENT PARTS AND ACCESSORIES

Purchase these fireplace replacement parts and accessories from your local dealer. If they can not supply these parts, call DESA at 1-866-672-6040 for referral information. You can also write to the address listed on the back page of this manual.

Before ordering, please have your appliance's model name or number and part number of the item(s) you are ordering ready. The model name or number for your particular appliance may be found on the rating label located inside the appliance.

MILLIVOLT VALVE

Natural Gas - 14512 Propane/LP Gas - 14513

ELECTRONIC VALVE

Natural Gas - 14569 Propane/LP Gas - 14570

MILLIVOLT PILOT ASSEMBLY

Natural Gas - 112784-01 Propane/LP Gas - 112784-02

ELECTRONIC PILOT ASSEMBLY

Natural Gas - 108866-01 Propane/LP Gas - 108866-02

TRANSFORMER - 14129

For use with all models.

PIEZO IGNITER - 14261

For use with all models.

ORIFICE

Natural Gas - 23105 Propane/LP Gas - 23106 For use with all models.

WALL SWITCH KIT - 22180

Wall Switch - 14112 Cover Plate - 14113 For use with all models.

IGNITION CONTROL - 110286-01

For use with all models.

GAS VALVE CONVERSION KIT

Millivolt Propane/LP Gas - PC-GL36 Millivolt Natural Gas - NC-GL36 Electronic Propane/LP Gas - PC-GL36E Electronic Natural Gas - NC-GL36E

BRUSHED BRASS CABINET STYLE DOOR KIT - DBBGL36ST

Right Panel Assy - 22367 Left Panel Assy - 22368 For use with all models.

BURNER ASSEMBLY - 23439

For use with all models.

REMOTE CONTROL KIT - 01026

For Millivolt Units Only - Batteries required for receiver and transmitter.

REMOTE CONTROL KIT - 00825

For Millivolt Units Only - No batteries required for receiver or transmitter.

REMOTE CONTROL KIT - 11710

For use with all models.

VENT HOOD - AK4

For use with all models.

REFRACTORY

Side Refractory - 23519 Bottom Refractory - 23516 Face - 112139-01 For use with all models.

GRATE ASSEMBLY - 11159

For use with all models.

LOG SET ASSEMBLY - 25793

Bottom Rear Log - 25795 Bottom Front Log - 25794 Top Left Log - 25797 Top Center Log - 25672 Top Right Log - 25796 For use with all models.

"B-1 TYPE" VENT PIPE

For use with all models. Any B-1 type, 6" diameter, gas vent pipe may be purchased from your local vent manufacturer.

LIMITED 2-YEAR WARRANTY

DESA warrants this gas appliance to be free from the defects in material or workmanship at the time of manufacture.

REMEDY AND EXCLUSIONS

The coverage of this warranty is limited to all components of the gas appliance manufactured by DESA, with the exception of glass and refractory. The glass is warranted for 90 days. There will be no cost for replacement of glass within 90 days of installation, provided that breakage is due to heat from the appliance. We do not warranty breakage occurring during installation or transportation.

If the decorative gas appliance covered by this warranty is found to be defective within one year from the date of installation, DESA will, at its option, replace or repair defective components of the decorative gas appliance manufactured by DESA at no charge or will pay for reasonable costs incurred in replacing or repairing such components. These charges should be pre-approved by DESA before any work is done. During the second year of the warranty, DESA shall supply replacement parts, if readily available, at the current minimum wholesale price. DESA will not be responsible for any other expense.

REFRACTORY WARRANTY

FIRST YEAR: DESA warrants the refractory (except the hairline cracks less than 1/16" in width) one year from the date of manufacture to be free from defect in material and workmanship. If the original owner of a DESA fireplace believes that any of the refractory parts have failed during the above one year period, the current owner should notify the nearest (DESA) distributor or dealer. DESA will pay for the refractory replacement and reasonable labor charges. DESA will be responsible for the freight charges.

SECOND YEAR: DESA will supply the refractory replacement parts at the current list price that is in effect at time of the replacement. DESA will assume no responsibility for any labor and freight charges incurred.

This warranty covers only parts and labor as provided above. In no case shall DESA be responsible for materials, components or construction which are not manufactured or supplied by DESA. DESA will not be responsible for any labor charges to remove such materials, components or construction. All replacement parts will be shipped. F.O.B., Santa Ana, to purchasers' address or the nearest DESA distributor.

QUALIFICATIONS TO THE WARRANTY

The decorative gas appliance warranty outlined above is further subject to the following qualifications:

- 1. The gas appliance must be installed as per the DESA installation instructions and local building codes. The use of components manufactured by others with this DESA gas appliance (except for the Type B venting system as outlined in the installation instructions, if applicable) could create serious safety hazards may result in denial of certification by recognized national safety agencies and could be in violation of local building codes. This warranty does not cover any damages occurring from the use of my components not manufactured or supplied by DESA.
- The DESA appliance must be subjected to normal use. The decorative gas appliances are designed to burn either natural or propane/LP gas only. Burning conventional fireplace fuels such as wood, coal or any other solid fuel will cause damage to the decorative gas appliance, will produce excessive temperatures and will result in a fire hazard.

LIMITATION OF LIABILITY

It is expressly understood that DESA's sole obligation and purchaser's exclusive remedy under this warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to replacement or repair as specified above. In no event shall DESA be responsible for any incidental or consequential damages caused by defects in its products, whether such damage occurs or is discovered before or after replacement or repair and whether or not such damage is caused by DESA's negligence. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. The duration of any implied warranty with respect to this DESA decorative gas appliance is limited to the duration of the foregoing warranty.

INVESTIGATION OF CLAIMS AGAINST WARRANTY

DESA reserves the right to investigate any and all claims against this warranty and to decide upon method of settlement. DESA is not responsible for work done without written consent. DESA shall in no event be responsible for any warranty work done without first obtaining DESA's written consent.

HOW TO REGISTER A CLAIM

A (DESA) dealer or distributor should be contacted directly by the owner for any service, including service under these warranties. The repair and replacement of any defective part covered by these warranties is the responsibility of the nearest (DESA) dealer or distributor.

OTHER

This warranty gives you specific rights and you may also have other rights which vary from state to state,. These warranties are given in lieu of any other expressed warranties. DESA does not authorize any person or representative to make representations to the contrary in connection with the sale of a decorative gas appliance.



2701 Industrial Drive

P.O. Box 90004 Bowling Green, KY 42102-9004 www.desatech.com

55173 Rev. G 07/06