

Models

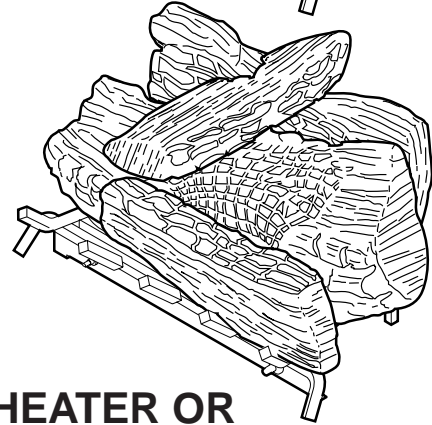
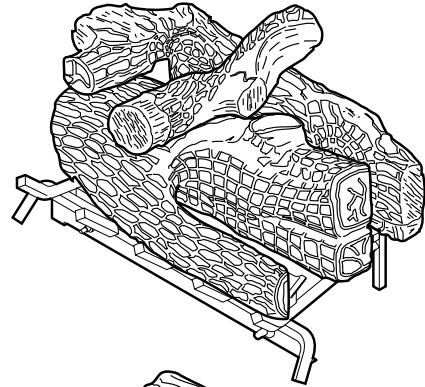
DLY18/GLY18

DLY24/GLY24

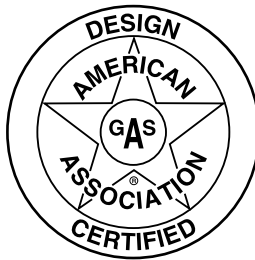
DLY30/GLY30

Natural Gas or Propane/LPG

Control Type: Manual,
or Milli-Volt



UNVENTED GAS LOG HEATER OR VENTED DECORATIVE APPLIANCE INSTALLATION AND OPERATING INSTRUCTIONS



This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. *Refer to page 5*

WARNINGS

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

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

• READ AND SAVE THESE INSTRUCTIONS •

CONTENTS

Important Safety Information	3
Getting Started	5
Product Specifications	6
General Installation Information	7
Fireplace & Hearth Dimensions	9
Clearances / Height Requirements	10
Floor Clearance.....	14
Fireplace Preparation	15
Installing Vented Applications	15
Placing & Securing Appliance	18
Connecting the Gas	17
Checking Gas Pressure	18
Electrical Wiring	19
Log Placement	20
Flame Appearance	21
Checking the Burner Flames	22
Operating Instructions	23
Cleaning and Servicing.....	27
Parts List	28-30
Troubleshooting	32

IMPORTANT SAFETY INFORMATION

INSTALLER

Please leave these instructions with the owner.

OWNER

Please retain these instructions for future reference.

IMPORTANT

Read these instructions carefully before installing or trying to operate this vent-free gas heater.

WARNING

- **Any change to this heater or its controls can be dangerous.**
- **Improper installation or use of the heater can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.**
- **Do not allow fans to blow directly into the fireplace. Avoid drafts that alter burner flame patterns.**
- **Do not use a blower insert, heat exchanger insert or other accessory, not approved for use with this heater where applicable.**

1. Due to high temperatures, the heater should be located out of traffic and away from furniture and draperies.
2. Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition.
3. Young children should be carefully supervised when they are in the same room with the heater.
4. Do not place clothing or other flammable material near the fireplace when the heater is in use.
5. Any safety screen or guard removed for servicing, must be replaced prior to operating the heater.
6. Installation and repair should be done by a qualified service person.
7. To prevent malfunction and/or sooting, an unvented gas heater should be cleaned at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, etc. It is imperative that control compartments, burners and circulating air passageways be kept clean.
8. **CARBON MONOXIDE POISONING:** Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Have the heater serviced as it may not be operating properly.
9. The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1.
10. This unit complies with ANSI Z21.11.2a-1997 Unvented Heaters and also complies with ANSI Z21.60-1991 Decorative Vented Appliances for Solid Fuel Burning Fireplaces. State and local codes may only allow operation of this appliance in a vented configuration. Check your state or local codes. For vented operation, see "Vented Instructions" in this manual.
11. Do not install the heaters in a bathroom or bedroom.
12. Correct installation of the ceramic fiber logs, proper location of the heater and annual cleaning are necessary to avoid potential problems with sooting. Sooting, resulting from improper installation or operation, can settle on surfaces outside the fireplace. See log placement instructions for proper installation.
13. Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into fireplace. Do not place a blower inside burn area of firebox. Ceiling fans may create drafts that alter burner flame patterns. Sooting and improper burning will occur.
14. This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to installation guidelines.

IMPORTANT SAFETY INFORMATION

15. Keep room area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
16. Unvented gas heaters are a supplemental zone heater. They are not intended to be a primary heating appliance. Water vapor produced by an unvented heater can create moisture problems in a home when operated for extended periods of time.
17. During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance; possibly causing headaches or eye or lung irritation. This is a normal and temporary occurrence.

The initial break-in operation should last 2-3 hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in period will be slight and will disappear with continued use.
18. Input ratings are shown in BTU per hour and are for elevations up to 2,000 feet. For elevations above 2,000 feet, input ratings should be reduced 4 percent for each 1,000 feet above sea level. Refer to the National Fuel Gas Code.
19. The heater and its individual shutoff 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).
20. The heater must be isolated from the gas supply piping system by closing its individual manual shutoff 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).
21. Do not use this room heater if any part has been under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.
22. This appliance must not be used with glass doors in the closed position. This can lead to pilot outages and severe sooting outside the fireplace.
23. Never burn solid fuels in a fireplace where a unvented room heater is installed.
24. Always have a fireplace screen in place when the appliance is in operation and , unless other provisions for combustion air are provided, the screen shall have an opening(s) for induction of combustion air.

This appliance may be installed in an aftermarket, permanently located, manufactured (mobile) home, where not prohibited by local codes.

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.

Make sure you have received all parts:

Check your packing list to verify that all listed parts have been received. You should have the following:

- Unvented gas log grate/burner assembly.
- Installation/operating instructions.
- Ceramic fiber logs.
- Two (2) anchoring screws.
- Plastic bag containing crushed volcanic rock.

Millivolt controlled heater designed to be operated with optional devices for ON/OFF functions.

- Hand held Remote w/receiver.
- Wall Switch with 20' wire.
- Wall T-stat with 20' wire.
- Hand Held Thermostat Remote w/receiver

CAUTION

Handle the gas log burner assembly by the grate only. Do not pick the unit up by the burners.

Gloves are recommended when handling ceramic fiber logs to prevent skin irritation from loose fibers. Logs are fragile--handle with care.

Carefully inspect the contents for shipping damage. If any parts are missing or damaged, immediately inform the dealer from whom you purchased the appliance. **Do not attempt to install any part of the appliance unless you have all parts in good condition.**

What you will need for installation:

You must have the following items available before proceeding with installation:

- External regulator (for propane/L.P.G. only)
- Piping which complies with local codes
- Pipe sealant approved for use with propane/L.P.G. (Resistant to sulfur compounds)
- Manual shutoff valve
- Sediment trap
- Tee joint
- Pipe wrench
- Screwdriver
- Drill, with 5/32 bit

PRODUCT SPECIFICATIONS

Natural Gas

Manual

Regulator Pressure Setting: 4.0" w.c.

Gas Inlet Pressure: Max. 10 1/2" w. c.
Min. 5" w.c.

Millivolt Pressure

Regulator Pressure Setting: 3.5" w.c.

Pilot Regulator: 3.5" w.c.

Gas Inlet Pressure: Max. 10 1/2" w. c.
Min. 5" w.c.

Model Number	Type	Gas Rate	
		Max. BTU/Hr	Min. BTU/Hr
DLY18NM, GLY18NM	Manual	24,000	18,000
DLY24/30NM, GLY24/30NM	Manual	36,000	20,000
DLY18NV, GLY18NV	Milli-Volt	24,000	18,000
DLY24/30NV, GLY24/30NV	Mill-Volt	36,000	25,000

Propane / LPG

Note: An external regulator is required to reduce supply pressure to a maximum of 13" w. c.

Manual

Regulator Pressure Setting: 10" w.c.

Gas Inlet Pressure: Maximum 13" w.c.
Minimum 11" w.c.

Millivolt Pressure

Regulator Pressure Setting: 10" w.c.

Gas Inlet Pressure: Maximum 13" w.c.
Minimum 11" w.c.

Model Number	Type	Gas Rate	
		Max. BTU/Hr	Min. BTU/Hr
DLY18PM, GLY18PM	Manual	21,000	17,000
DLY24/30PM, GLY24/30PM	Manual	36,000	20,000
DLY18PV, GLY18PV	Milli-Volt	21,000	17,000
DLY24/30PV, GLY24/30PV	Mill-Volt	36,000	28,000

Ignition - Piezo ignitor allows ignition of the pilot without the use of matches or batteries.

Controls

Manual control has three (3) positions:

- OFF** - All gas to the gas logs is shut off at the valve.
- IGN** - Valve position to light/maintain a standing pilot.
- HI/LOW** - Variable position corresponding to desired flame height (heat output).

Millivolt control has four (4) positions:

- OFF** - All gas to the gas logs is shut off at the valve.
- IGN** - Valve position to light/maintain a standing pilot.
- ON** - Valve position to turn ON/OFF log set with remote switch/thermostat.
- HI/LOW** - Variable position corresponding to desired flame height (heat output).

GENERAL INSTALLATION INFORMATION

Pilot - The gas log heater is fitted with a specially designed safety pilot light which senses the amount of oxygen available in the room and shuts the gas log heater off if the oxygen level begins to drop below a satisfactory level. The pilot can only be relit when adequate fresh air is available.

Thermal

Generator - The millivolt gas log pilot is fitted with a millivolt generator to provide power for remote activation.

CODES

Adhere to all local codes, or in their absence, the latest edition of **THE NATIONAL FUEL GAS CODE ANSI Z223.1** or **NFPA54** which can be obtained from:

American National Standards Institute
1430 Broadway
New York, NY 10018
or
National Fire Protection Association, Inc.
Batterymarch Park
Quincy, MA 02269

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

The **National Fuel Gas Code ANSI Z223.1** defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour (4.8m³ per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 Btu per hour (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

Unusually tight construction is defined as construction where:

- a) Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of 1 perm (6 x 10⁻¹¹ kg per-pa-sec-m²) or less with openings gasketed or sealed, and
- b) Weather stripping has been added on openable windows and doors, and
- c) Caulking or sealant are applied to areas such as joints around windows and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

GENERAL INSTALLATION INFORMATION

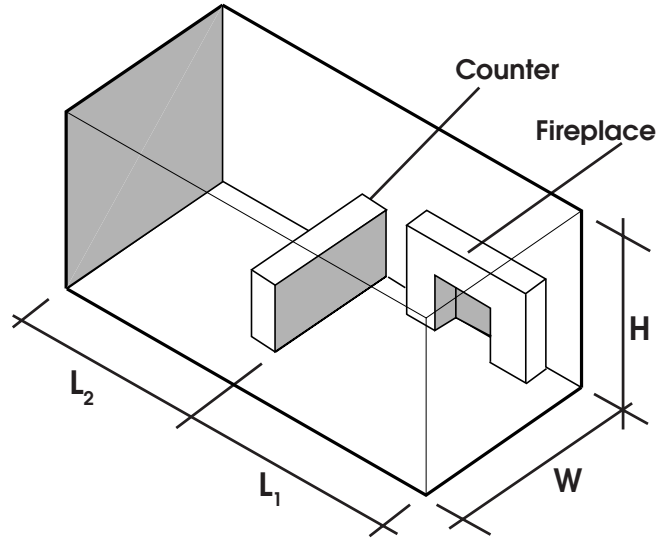


Figure 1: Example of Large Room with 1/2 Wall Divider

The following formula can be used to determine the maximum heater rating per the definition of unconfined space:

$$Btu/Hr = \frac{(L_1 + L_2)FT \times (W)FT \times (H)FT}{50} \times 1000$$

Example: Refer to *Figure 1*, two (2) connecting rooms with an open area between, with the following dimensions:

$$\begin{aligned} L_1 &= 15 \frac{1}{2}' \\ L_2 &= 12' \\ W &= 12' \\ H &= 8' \end{aligned}$$

$$\frac{(15 \frac{1}{2} + 12) \times (12) \times (8)}{50} \times 1000 = 52800 \text{ Btu/Hr}$$

If there was a door between the two rooms the calculation would be based only on the room with the heater:

$$\frac{(15 \frac{1}{2}) \times (12) \times (8)}{50} \times 1000 = 29760 \text{ Btu/Hr}$$

WARNING

If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANSI Z223.1, Section 5.3 or applicable local codes.

FIREPLACE and HEARTH DIMENSIONS

WARNING

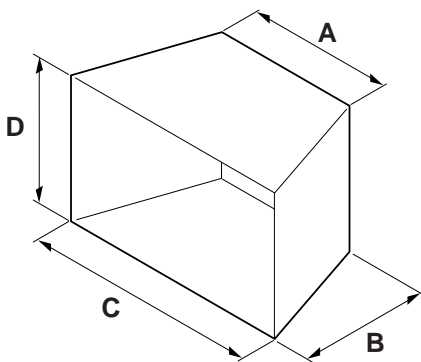
This appliance has been specifically tested and design certified for installation only in a solid-fuel burning fireplace including factory-built UL127 fireplaces and masonry fireplaces, or approved ventless firebox enclosure. (see below)

Use manufacturer's installation and clearance requirements as defined in their manual.

The DLY/GLY Series unvented room heater is approved for installation into the following unvented fireplaces:

	<u>18</u>	<u>24</u>	<u>30</u>
Monessen			
GC/GR 32	X		
GC/GR 36	X	X	
GC/GR 42	X	X	X

The DLY/GLY Series unvented room heater may also be installed into a Ventless Firebox Enclosure for Gas Fired Decorative Type Unvented Room Heaters per IAS Requirement No. 2-97, as long as firebox hearth dimensions meet the minimum hearth dimensions shown below.



Model	A	B	C	D
DLY18/GLY18	17.5"	13.25"	27"	17"
DLY24/GLY24	21"	14"	29.5"	17"
DLY30/GLY30	25"	14"	33.5"	17"

Figure 2: Hearth Minimum Dimension for Solid Fuel Burning Fireplaces and UL127 Factory Built Fireplaces

CLEARANCES / HEIGHT REQUIREMENTS

WARNING

The dimensions shown in *Figures 3 - 11* and defined in the fireplace manufacturer's instructions are **minimum clearances** to maintain in installing this heater. Left and right clearances are determined when facing the front of the heater.

When heater is installed into a ventless firebox, minimum clearances, as specified by the ventless firebox manufacturer, must be met.

Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard.

Sidewall and ceiling clearances

The **sides** of the fireplace opening must be **at least 16"** from any combustible wall. The **ceiling** must be **at least 42"** from the top of the fireplace opening.

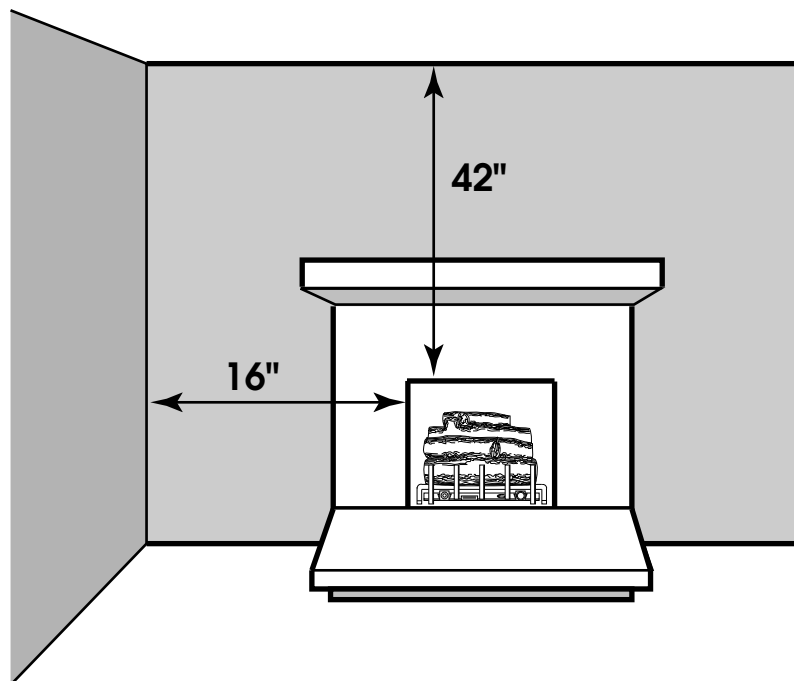


Figure 3: Sidewall & Ceiling Clearances

CLEARANCES / HEIGHT REQUIREMENTS

Heat resistant material (minimum requirements) with no wooden mantel or other combustible projection:
To install the gas logs into a fireplace with no wooden mantel, shelf or other combustible projection above the fireplace opening, measure the heat resistant material height, per *Figure 4*, then refer to **TABLE A**.

Heat resistant materials such as slate and marble must be **at least 1/2" thick**. **Sheet metal should not be installed onto combustible material.**

IMPORTANT: If you cannot meet these minimum clearances you must operate the heater with chimney flue damper open. Refer to "Installing Vented Applications" found on page 14.

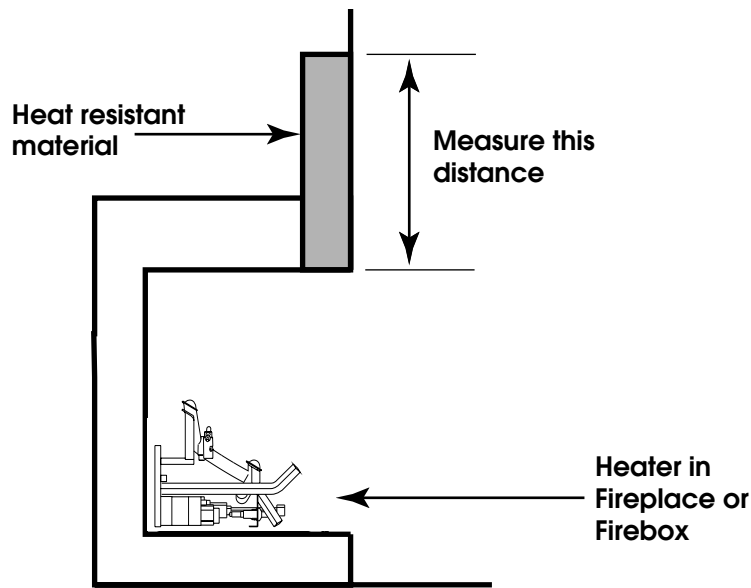


Figure 4: Measuring Heat Resistant Material

Heat Resistant Material Measurement	Requirements for Safe Installation	
	DLY18 / GLY18	DLY / GLY 24 & 30
16" or more	Hood not required.	Hood not required.
8" to less than 16"	Hood not required.	Extend heat resistant material to 16" or install hood. See <i>Figure 5</i>
Less than 8"	Extend heat resistant material to at least 8"	Extend heat resistant material to at least 8" and install hood. See <i>Figure 5</i> . Or , extend heat resistant material to a height of at least 16".

TABLE A: Heat Resistant Material Requirements with no Mantel or Combustible Projection

CLEARANCES / HEIGHT REQUIREMENTS

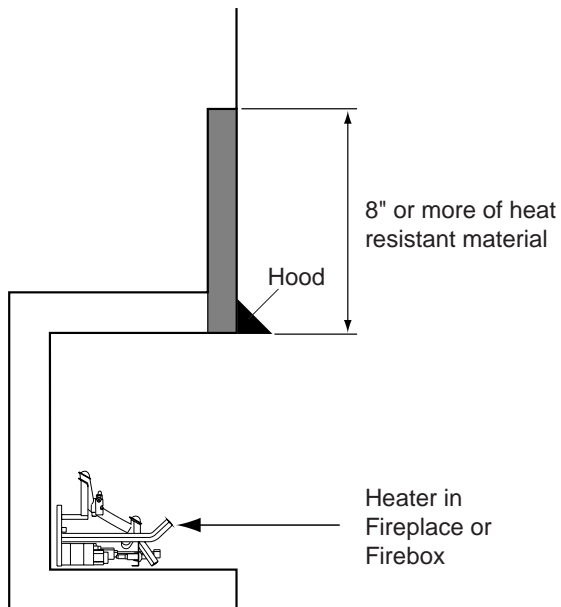


Figure 5: Measuring Heat Resistant Material for Mantel

Heat resistant material (minimum requirements) with wooden mantel or other combustible projection:
 To install the heater with a wooden mantel, shelf or other combustible projection above, first measure the heat resistant material shown in *Figure 5*.

Heat Resistant Material Measurement	Requirements for safe installation with wooden mantel, shelf or other combustible projection
	All Models
20" or more	Hood not required. Observe profile (side elevations) shown in Figure 7.
8" to less than 20"	Install hood and observe profiles shown in <i>Figure 6</i> . Or, extend heat resistant material to at least 20" and observe profiles shown in <i>Figure 7</i> .
Less than 8"	Extend heat resistant material to at least 8", install hood and observe profiles shown in <i>Figure 6</i> . Or , Extend heat resistant material to at least 20" and observe profiles shown in <i>Figure 7</i> .

TABLE B: Heat Resistant Material Heights and Mantel Location

CLEARANCES / HEIGHT REQUIREMENTS

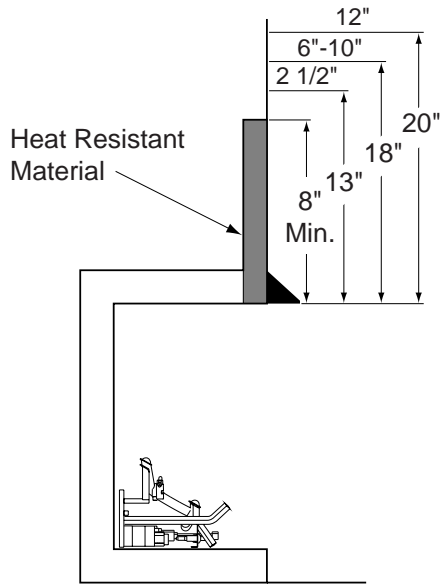


Figure 6: Minimum Mantel Clearance with Hood--All Models

Example: A mantel may project from the wall a maximum of 2 1/2" at a **minimum** of 13" above the opening, and a **maximum** of 10" at a **minimum** of 18" above the opening.

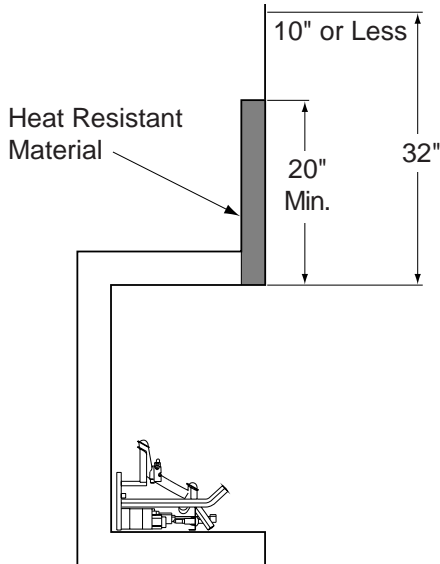


Figure 7: Minimum Mantel Clearance with No Hood - DLY/GLY 24 & 30

Example: The bottom of the mantel may project from the wall of a **maximum** of 10" at a **minimum** of 32" above the opening.

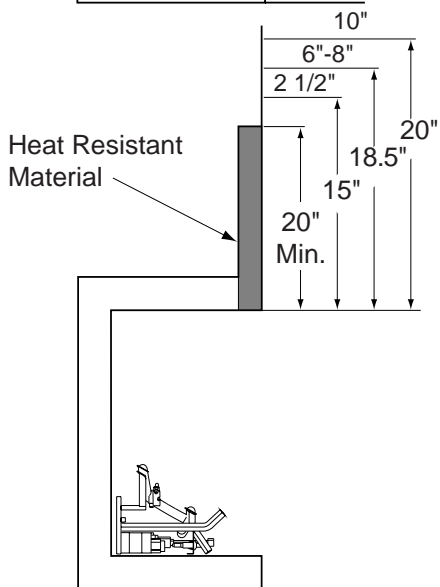


Figure 7a: Minimum Mantel Clearance with No Hood - DLY/GLY 18

Example: A mantel may project from the wall a maximum of 2 1/2" at a **minimum** of 15" above the opening, and a **maximum** of 10" at a **minimum** of 20" above the opening.

FLOOR CLEARANCE

The gas log heater must be installed at least 5" above any combustible flooring material, such as carpeting or tile, which is closer than 14" to the base of the fireplace. This minimum distance must be maintained from the top surface of carpeting, tile, etc. *Refer to Figure 8.*

OR,

The gas log heater may be installed nearer to the floor if a minimum of 14" of noncombustible material such as slate or marble is installed between the base of the fireplace and the combustible flooring. Refer to *Figure 9.*

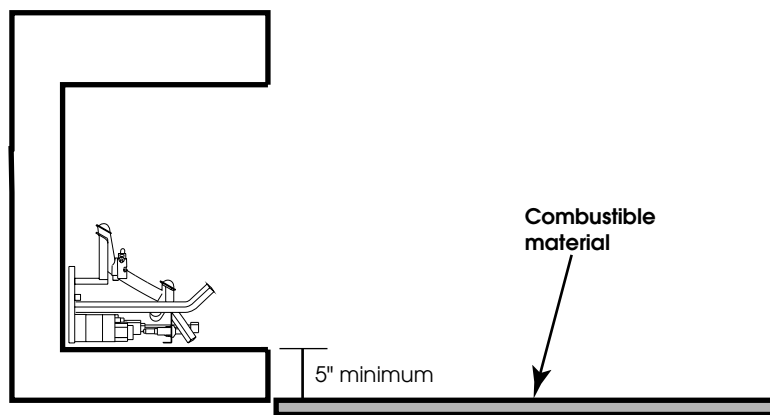


Figure 8: Minimum Clearance above Combustible Flooring

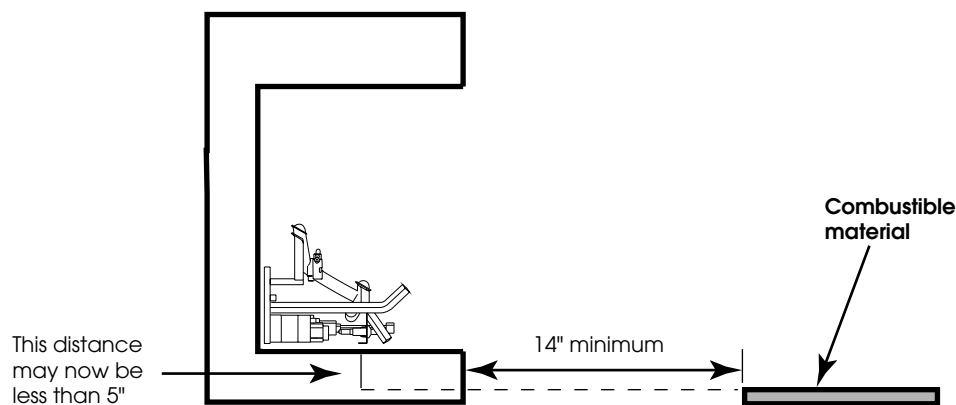


Figure 9: Minimum Clearance above Combustible Flooring with Noncombustible Material Installed at Base of Fireplace

Before fully installing the unit:

- Turn **OFF** the gas supply to the fireplace or firebox.
- Seal any fresh air vents and/or ash clean-out doors located on the floor or wall of the fireplace. If left unsealed, drafting may cause pilot outage or sooting. Use a heat resistant sealant. **Do not seal the chimney flue damper.**

WARNING

Before installing in a solid fuel burning fireplace, The chimney flue and firebox must be cleaned of soot, creosote, ashes and loose paint by a qualified chimney cleaner.

INSTALLING VENTED APPLICATIONS

Manual and millivolt controlled gas logs may be installed as a vented decorative log set in compliance with ANSI Z21.60 and National Fuel Gas Code, Section 6.6 Since, the gas logs are operated with the damper open, non-combustible material and minimum mantel requirements do not apply.

CAUTION

This appliance is for installation only in a solid fuel burning fireplace (masonry fireplace or manufactured fireplace) with a working flue and constructed of noncombustible material.

Before installing the appliance:

- Turn off gas supply to fireplace or firebox.
- Have the fireplace floor and chimney professionally cleaned to remove ashes, soot, creosote or other obstructions. Have this cleaning performed annually after installation.
- Seal any fresh air vents or ash clean-out doors located on floor or wall of fireplace. If not, drafting may cause pilot outage or sooting. Use a heat-resistant sealant. Do not seal chimney flue damper.

Install and operate the appliance as directed in this manual.

Damper stop installation:

A damper stop must be provided with the unit. Contact your dealer to obtain one. The damper stop must be installed as shown in (Figure 10) to prevent full closure of the fireplace damper blade and provide a minimum 29 square inch flue opening.

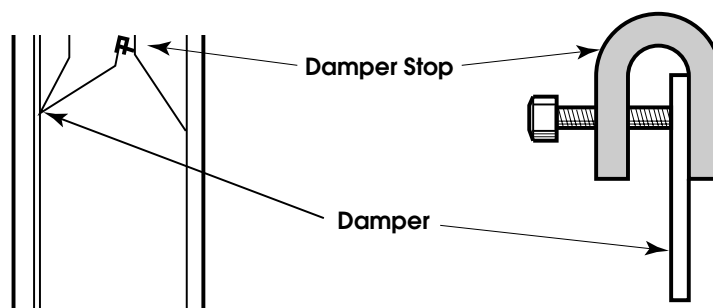


Figure 10: Damper Stop Installation

PLACING and SECURING APPLIANCE

WARNING

You must secure the gas log heater to the fireplace floor. If not, the entire unit may move when you adjust the controls. Movement of unit may cause shifting of the gas logs which leads to sooting and improper burning. Grate movement could cause a gas leak.

Special care is required if you are installing the unit into a sunken fireplace. You must raise the fireplace floor to allow access to gas log controls. This will insure adequate air flow and guard against sooting. Raise the fireplace floor using noncombustible materials.

Assembly procedure:

1. Center the gas log unit in the fireplace or firebox. Make certain the front feet of the grate sit inside the front edge of the fireplace or firebox.
2. Anchor hole are provided in the front plate of the grate frame. After centering the grate correctly, mark the hole positions on the fireplace/firebox floor. Drill two (2) 5/32" diameter holes approximately 1 1/2" deep.
3. Anchor the grate to the fireplace/firebox floor using the screws provided. Refer to *Figure 11*.

Proper installation of the grate is essential to prevent any movement of the gas logs and controls during operation.

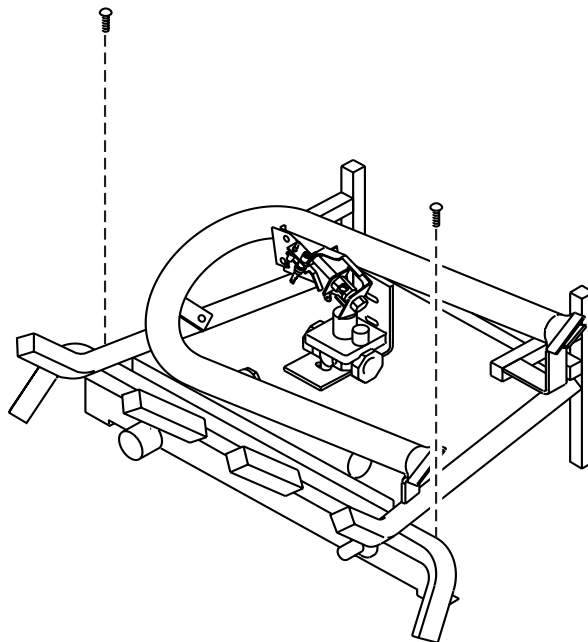


Figure 11: Securing Heater to Floor of Fireplace/Firebox

NOTICE: A qualified gas appliance installer must connect the heater to the gas supply. Consult all local codes.

CAUTION

Use new black iron or steel pipe. Internally tinned copper or copper tubing can be used per National Fuel Code, section 2.6.3, providing gas meets hydrogen sulfide limits, and where permitted by local codes. Gas piping system must be sized to provide minimum inlet pressure (Listed on Data Plate) at the maximum flow rate (BTU/Hr). Undue pressure loss will occur if the pipe is too small.

A manual shutoff valve must be installed upstream of the appliance. Union tee and plugged 1/8" NPT pressure tapping point should be installed upstream of the appliance. Refer to *Figure 12*.

A sediment trap should be installed upstream to prevent moisture and contaminants from passing through the pipe to appliance controls and burners. Failure to do so could prevent the appliance from operating reliably. Refer to *Figure 12*.

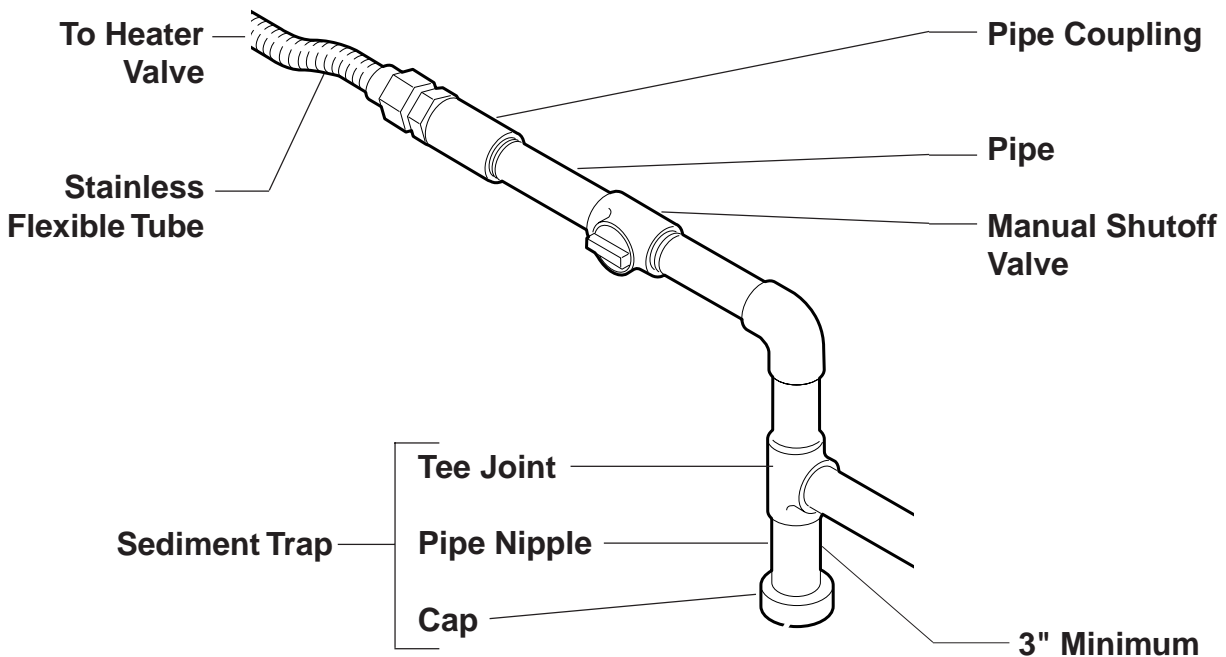


Figure 12: Gas Connection

IMPORTANT: Hold heater valve firmly with a wrench to prevent movement when connecting to inlet piping.

Check gas type: The gas supply must be the same as stated on the heater's rating plate. If the gas supply is different, **DO NOT INSTALL THE HEATER.** Contact your dealer for the correct model.

Always use an external regulator for all propane/L.P.G. heaters only, to reduce the supply tank pressure to a maximum of 13" w.c. This is in addition to the internal regulator in the heater valve.

CHECKING GAS PRESSURE

WARNING

Connecting directly to an unregulated propane/L.P.G. tank can cause an explosion.

The heater gas inlet connection is 3/8" NPT at the valve, inlet on the left side facing the heater. If a right side connection is required, the connecting pipe may be led under the rear of the gas log heater at the left hand side for connection to the inlet.

When tightening up the joint to the valve, hold the valve securely with a wrench to prevent movement.

Test all gas joints from the gas meter to the heater valve for leaks using a gas analyzer or soap and water solution after completing connection. **DO NOT USE AN OPEN FLAME.**

Check the gas pressure with the appliance burning and the control set to **HIGH**.

Manual Control (Figure 13)

The pressure regulator is preset and locked to discourage tampering. If the pressure is not as specified, replace the regulator with the correct part from the parts list in this manual.

Remove 1/8" NPT plug, located on side of regulator body. Install fitting and tubing to pressure gauge. After taking pressure reading, re-install test plug. Check for gas leaks.

Millivolt Control (Figure 14)

The valve regulator controls the burner pressure which should be checked at the pressure test point. Turn captured screw counter clockwise 2 or 3 turns and then place tubing to pressure gauge over test point (Use test point "A" closest to control knob). After taking pressure reading, be sure and turn captured screw clockwise firmly to re-seal. Do not over torque. Check for gas leaks.

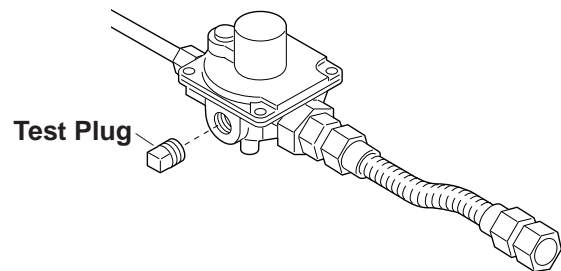


Figure 13: Pressure Test Point Location

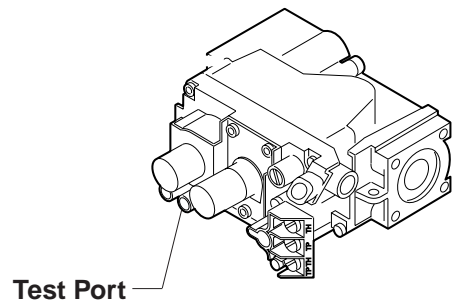


Figure 14: Pressure Test Point Location

ELECTRICAL WIRING (Millivolt)

CAUTION
Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

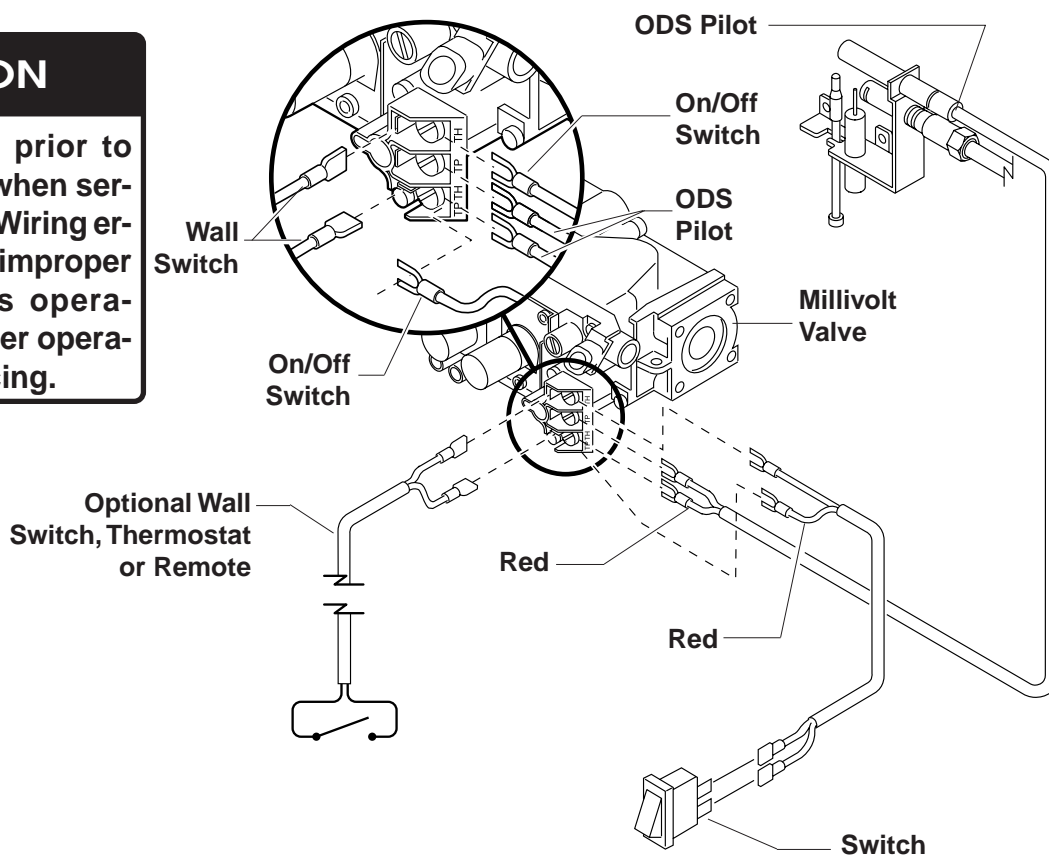


Figure 15: Wiring Diagram

The DL series Milli-Volt (thermopile) is a self powered combination gas control, does not require 110vac to operate. Refer to **Figure 15** and installation instructions provided with optional wall switch, thermostat or remote control for wiring instructions. A maximum length of 20 feet of 18awg two conductor wire is to be used for wall switch or thermostat installations. Note thermostats and switches must be suitable for millivolt operation.

Checking System Operation

The millivolt system and individual components may be checked with a millivolt meter having a 0-1000MV range. Conduct each check shown in chart below by connection meter test leads to terminals as indicated.

CHECK TEST	TO TEST	CONNECT METER LEADS TO TERMINALS	THERMOSTAT CONTACTS	METER READING SHOULD BE
A	COMPLETE SYSTEM	2 & 3	CLOSED	CLOSED
B	THERMOPILE OUTPUT	1 & 2	OPEN	OPEN

A. Complete Millivolt System Check ("A" Reading - Thermostat contacts CLOSED - Control Knob "ON" - Main burner should be come ON)

- If the reading is more than 100 millivolts and the automatic valve still does not come on - replace the control.
- If the closed circuit reading ("A" reading) is less than 100 millivolts, determine cause for low reading - proceed as follows:

B. Thermopile Output Reading Check ("B" Reading - Thermostat contacts OPEN - Main burner OFF)

- CP-2 system - 325 millivolts minimum. If the minimum millivolt reading is not obtainable, readjust pilot for maximum millivolt output. If millivolt reading is still below minimum specified, replace thermopile.

LOG PLACEMENT

Before you begin: This unit is supplied with a set of four ceramic fiber logs. Do not handle these logs with your bare hands! **Always wear gloves to prevent skin irritation from ceramic fibers.** After handling logs, wash your hands gently with soap and water to remove any traces of fibers.

WARNING

The positioning of the logs is critical to the safe and clean operation of this heater. Sooting and other problems may result if the logs are not properly and firmly positioned in the appliance. Never add additional logs or embellishments such as pine cones, vermiculite or rock wool to the heater.

Proper installation sequence:

1. Install the front/rear log (#1) on the grate. Visually check that the notch on the front log rests securely on the front grate fingers. In addition, the notches in the back of the rear log should contact the two tabs on the back side of the grate.
2. Install the cross log (#2) by engaging the holes in the cross log onto pins on the front/rear log.

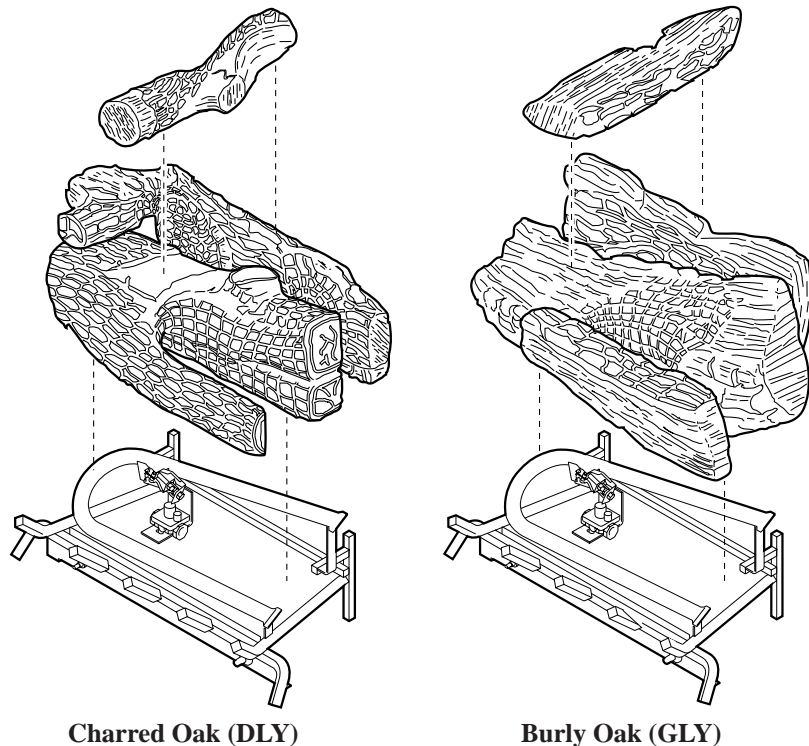


Figure 16: Proper Sequence of Log Installation

WARNING

Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this heater may result in property damage or personal injury.

Placing the decorative volcanic rock:

CAUTION

DO NOT sprinkle volcanic rock on the logs or around the pilot or the main burner. This may cause sooting. Only place volcanic rock on the floor of the fireplace.

During initial operation of the new heater, burning logs will give off a paper burning smell and orange flames will be present. Simply open the windows for a few hours to vent the odor.

Flames from the pilot, front and rear burner should be visually checked as soon as the heater is installed. In addition, periodically check the flames visually during operation.

Checking the pilot flame:

The pilot flame must always be present when the heater is in operation. It should just touch the top of the thermocouple tip. Refer to *Figure 17 and 19*.

If the pilot flame does not touch the thermocouple, then the main burner cannot function reliably. Refer to *Figure 18 and 20* for incorrect shape of pilot flame.

Millivolt Control

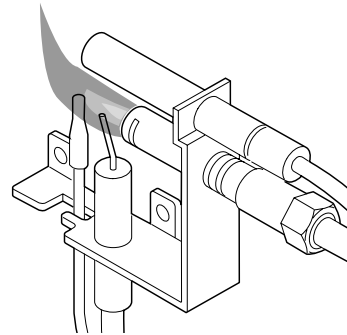
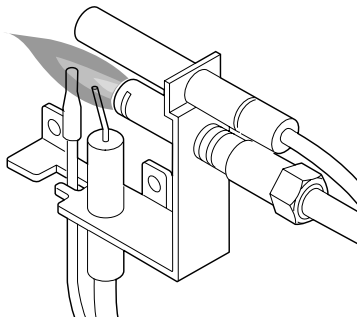


Figure 17: Correct Appearance of Pilot Flame *Figure 18: Incorrect Appearance of Pilot Flame*

Manual Control

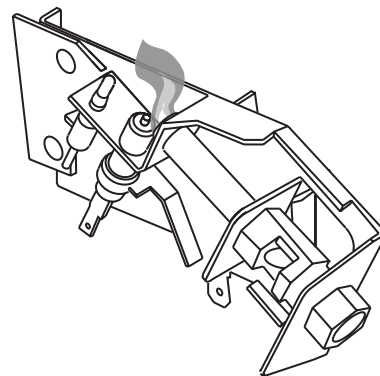
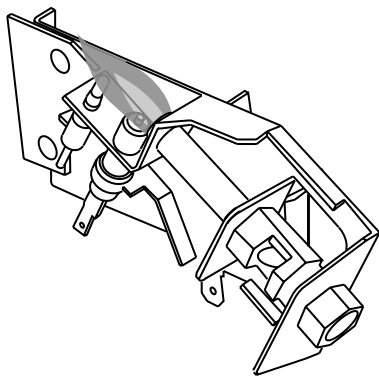


Figure 19: Correct Appearance of Pilot Flame *Figure 20: Incorrect Appearance of Pilot Flame*

CHECKING THE BURNER FLAMES

In normal operation at full rate after 15 minutes, the following flame appearances should be observed:

The front and rear flames should be yellow and extend 2"-3" above the log top surfaces. The yellow flames should not contact the logs.

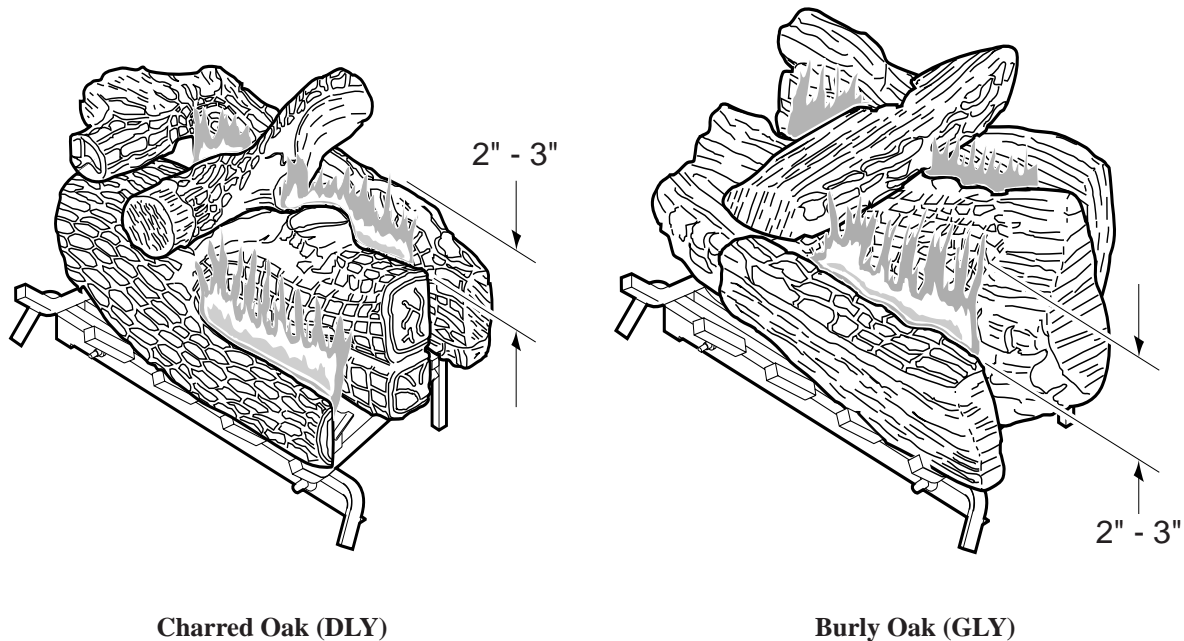


Figure 21: Correct Appearance of Flames

OPERATING INSTRUCTIONS

Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into the fireplace. Do not place a blower inside the burn area of the firebox. Ceiling fans may create drafts that alter flame patterns. Sooting and improper burning will result.

During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful, but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance, possibly causing headaches or eye or lung irritation. *This is a normal and temporary occurrence.*

The initial break-in operation should last 2-3 hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in will be slight and will disappear with continued use.

This appliance must not be used with glass doors in the closed position. This can lead to pilot outages and severe sooting outside the fireplace.

OPERATING INSTRUCTIONS

WARNING

FOR YOUR SAFETY READ BEFORE LIGHTING

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

- A. This heater is equipped with an ignition device (piezo) which automatically lights the pilot.
- B. BEFORE LIGHTING smell all around the heater area for gas. Be sure to smell next to the floor because some propane/LPG is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

- Do not attempt to light any appliance or heater.
 - Do not touch any electric switch; do not use any telephone in you 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 or turn by hand, don't try to repair or adjust the valve or the mechanism. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this heater if any part of it has been underwater. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system or gas control that has been submerged.

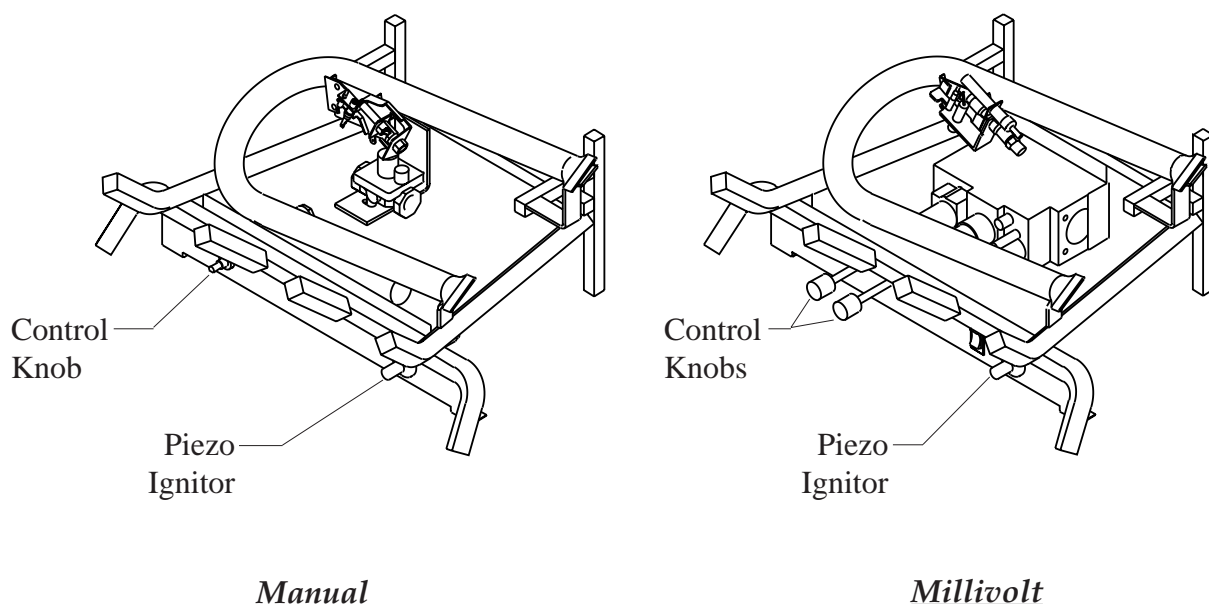






Figure 22: Location of Piezo Ignitor & Control Knob

OPERATING INSTRUCTIONS

MANUAL CONTROL LIGHTING INSTRUCTIONS

1. STOP! Read the safety information.
2. Make sure the manual shutoff valve is fully open.
3. This heater is equipped with an ignition device (piezo) which automatically lights the pilot.
4. Refer to *Figure 22* for the location of the piezo ignitor and control knob. Push in gas control knob slightly and turn control knob clockwise  to the OFF position.
NOTE: Knob cannot be turned to OFF unless knob is pushed in slightly. Do not force.
5. Wait 5 minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas STOP! Follow the instructions under "WHAT TO DO IF YOU SMELL GAS". If you do not smell gas, go to the next step.
6. From OFF position, push in gas control knob slightly and turn counterclockwise  to the IGN position. See *Figure 23*. Push in and hold control knob for 5 seconds.
NOTE: If you are running the heater for the first time, it will be necessary to press in the control knob for 30 seconds to allow air to bleed out of the gas piping.
7. With the control knob pushed in, push and release the piezo ignitor button to light the ODS pilot. The pilot is located on the left side of the heater, behind the center log and in front of the burner. If piezo ignitor does not light the pilot, refer to "*Match Lighting Instructions*".
8. Hold the control knob in for an additional 10 seconds to prevent the ODS pilot from shutting off the gas while the thermocouple is warming up.
9. Release the control knob.
* If the knob does not pop out when released, stop and immediately call your service technician or gas supplier.
* If the ODS pilot will not stay lit after several tries, push and turn the gas control knob clockwise  to OFF and wait 15 seconds. Repeat steps 6 through 9.
10. Push in control knob and turn counterclockwise  to the "HI" setting. At this location the knob will pop out when positioned correctly. The knob can now be positioned at any position from "HI" to "LO". Refer to *Figure 24*.

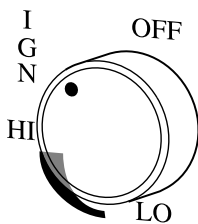


Figure 23: IGN Position

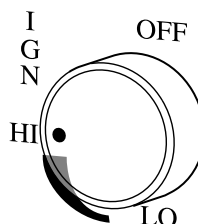



Figure 24: HI/LO Position

WARNING




Wait 30 seconds before readjusting the heater when the control knob has been turned down to a lower setting.

TO TURN OFF GAS TO HEATER

1. Turn control knob clockwise  to OFF position to completely shut off the heater.
2. If applicable: Turn off all electric power to the heater.

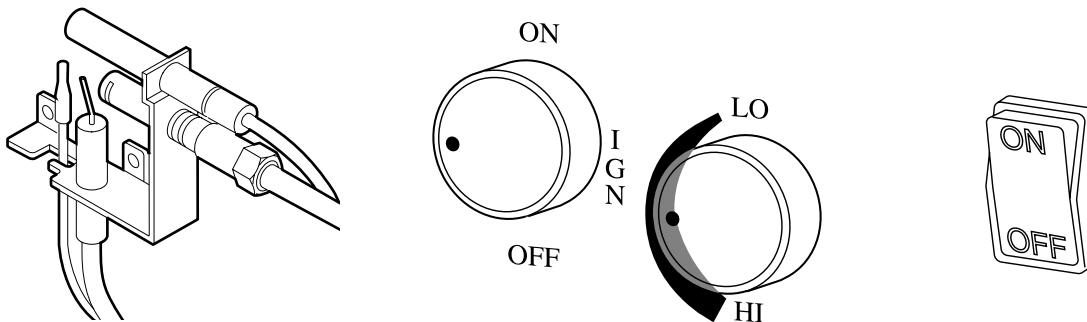
OPERATING INSTRUCTIONS

MILLI-VOLT CONTROL LIGHTING INSTRUCTIONS


1. STOP! Read the safety information label.
2. Make sure the manual shutoff valve is fully open.
3. This gas log set is equipped with an ignition device (piezo) which automatically lights the pilot. If piezo ignitor does not light the pilot, refer to instructions for "Match Lighting"
4. Turn gas control knob clockwise  to the "OFF" position, set the thermostat to the lowest setting and turn ON/OFF switch to OFF position.
5. Wait (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 label. If you don't smell gas, go to next step.
6. From "OFF" position, turn the gas control knob counterclockwise  to "IGN" position. Push in control knob for 5 seconds.
7. With the control knob pushed in, push in and release the piezo ignitor button to light the pilot.
8. Continue pushing the control knob in for a further 60 seconds to prevent the flame detector from shutting off the gas while the probe is warming up. Release the control knob.
9. Turn gas control knob counterclockwise  to the "ON" position.
10. After the pilot has been lit for one minute, the burners can be turned on. Turn the ON/OFF switch to "ON" position or adjust thermostat to desired setting.
11. If the gas logs will not operate, follow the instructions "To Turn Off Gas To Appliance: and call your service technician or has supplier.

WARNING

Wait 30 seconds before readjusting the heater when the control knob has been turned down to a lower setting.



TO TURN OFF GAS TO HEATER

1. Turn control knob clockwise  to OFF position to completely shut off the heater.
2. If applicable: Turn ON/OFF switch to OFF position and/or set thermostat (if present) to lowest setting.
3. If applicable: Turn off all electric power to the heater.

OPERATING INSTRUCTIONS

MATCH LIGHTING INSTRUCTIONS

1. Remove any items necessary for easy access to the pilot (for example: logs, screens, etc.).
2. Follow appropriate lighting instructions found previously. Instead of pushing and releasing the piezo button, light a match and hold the flame to the end of the pilot and ignite the pilot.
3. After control knob has been released and pilot stays lit, re-install any items that were removed for pilot access.
4. Call a qualified service technician for repair or replacement of the piezo ignitor.

Annual inspection and cleaning by your dealer or qualified service technician is recommended to prevent malfunction and/or sooting.

WARNING

Turn off heater and allow to cool before cleaning. Disconnect electrical power (optional blower) before cleaning or servicing.

Remove logs, handling carefully by holding gently at each end. Gloves are recommended to prevent skin irritation from ceramic fibers. If skin becomes irritated, wash gently with soap and water. Refer to manual for correct log placement.

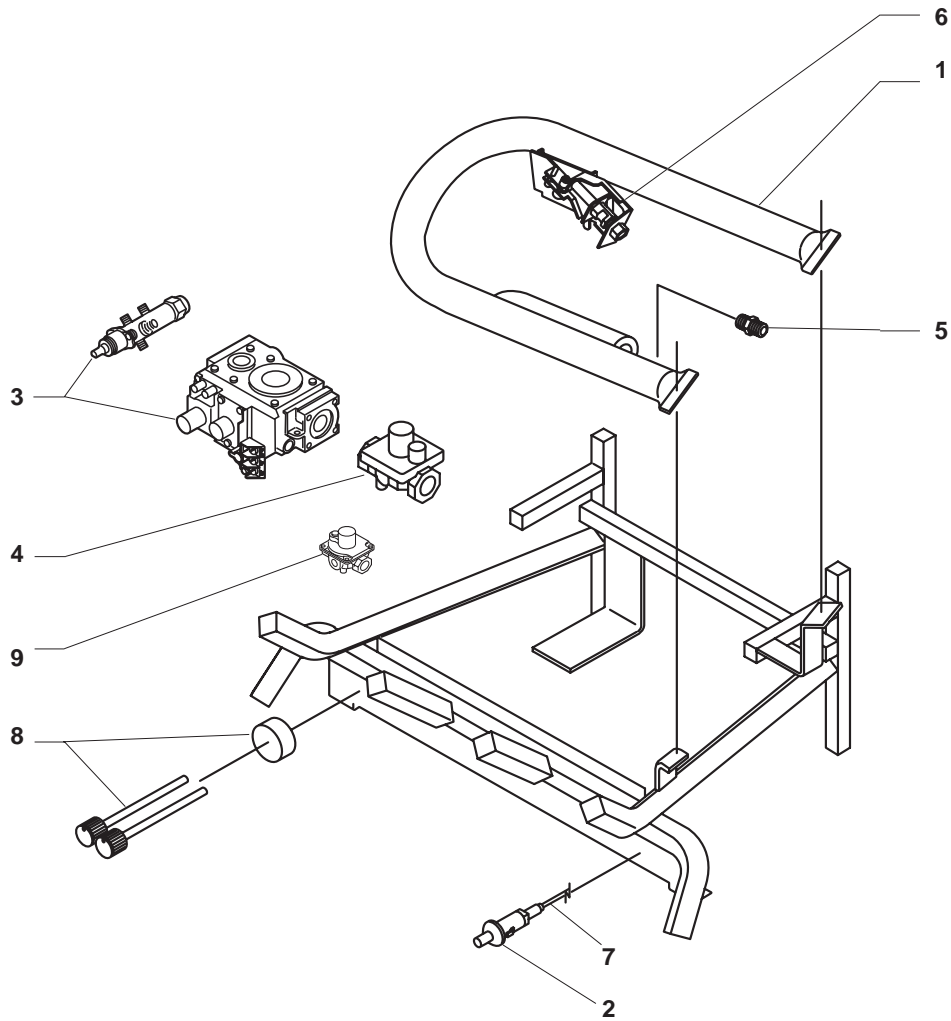
Periodic Cleaning - Refer to parts diagram for location of items discussed below.

- Do not use cleaning fluid to clean logs or any part of heater.
- Logs - brush with soft bristle brush or vacuum with brush attachment.
- Vacuum loose particles and dust from the burner, control and piezo covers and grate weldment.
- Inspect and clean burner air intake holes. Remove lint or particles with vacuum or brush. Failure to keep air intake holes clean will result in sooting and poor combustion.
- External case should be dusted and wiped with a wet soapy cloth.

Annual Cleaning/Inspection - Refer to parts diagram for location of items discussed below.

- Inspect and clean burner air intake holes. Remove lint or particles with vacuum or brush. Failure to keep air intake holes clean will result in sooting and poor combustion.
- Inspect and clean all burner ports.
- Inspect ODS pilot for operation and accumulation of lint at air intake holes.
- Verify flame pattern and log placement for proper operation.
- Verify smooth and responsive ignition of burner.

ILLUSTRATION



WARNING

Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

REPLACEMENT PARTS LIST

REPLACEMENT PARTS ARE AVAILABLE THROUGH YOUR RETAILER.

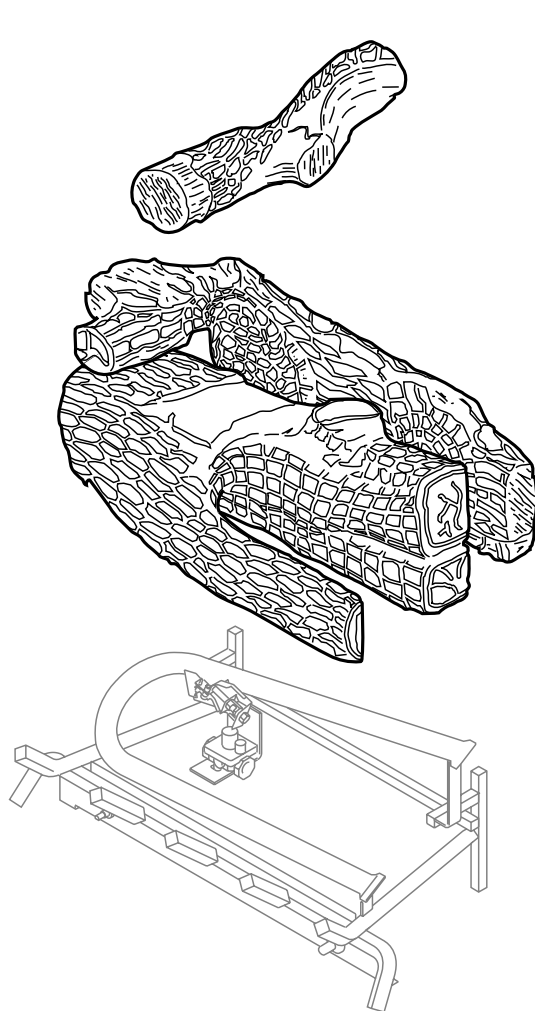
Item	Description	Qty	DLY/GLY 18		DLY/GLY 24/28/30	
			Natural	Propane	Natural	Propane
Common Parts						
1	Burner Front	1	30D1008	30D1009	30D1010	30D1011
2	Ignitor Piezo	1	14D0503	14D0503	14D0503	14D0503
Manual Control						
3	Valve Control	1	30D0201	30D0202	30D0201	30D0202
4	Valve Regulator	1	24D0305	24D0306	24D0305	24D0306
5	Injector Main	1	30D0360	27D0425	30D0359	27D0427
6	Pilot ODS Ass'y	1	30D0204	30D0205	30D0204	30D0205
7	Wire Piezo	1	30D0200	30D0200	30D0200	30D0200
8	Control Knob	1	18D0603	18D0603	18D0603	18D0603
Millivolt Control						
3	Valve Control	1	14D0467	14D0468	14D0467	14D0468
4	Valve Regulator	1	N/A	N/A	N/A	N/A
5	Injector Main	1	36D0360	27D0425	30D0359	27D0427
6	Pilot ODS Ass'y	1	14D0473	14D0474	14D0473	14D0474
7	Wire Piezo	1	00K0632	00K0632	00K0632	00K0632
8	Control Knob	2	18D0603	18D0603	18D0603	18D0603
9	Pilot Regulator	1	14D0469	N/A	14D0469	N/A

Accessories		
Connector, Flex	FLEXCON24	AllModels
Switch, Wall Kit	MVWS	Millivolt only
Thermostat, Wall Kit	MVWTS	Millivolt only
Remote, Hand Held	MVHHR	Millivolt only
Remote, Hand Held Thermostat	MVHHR-T	Millivolt only

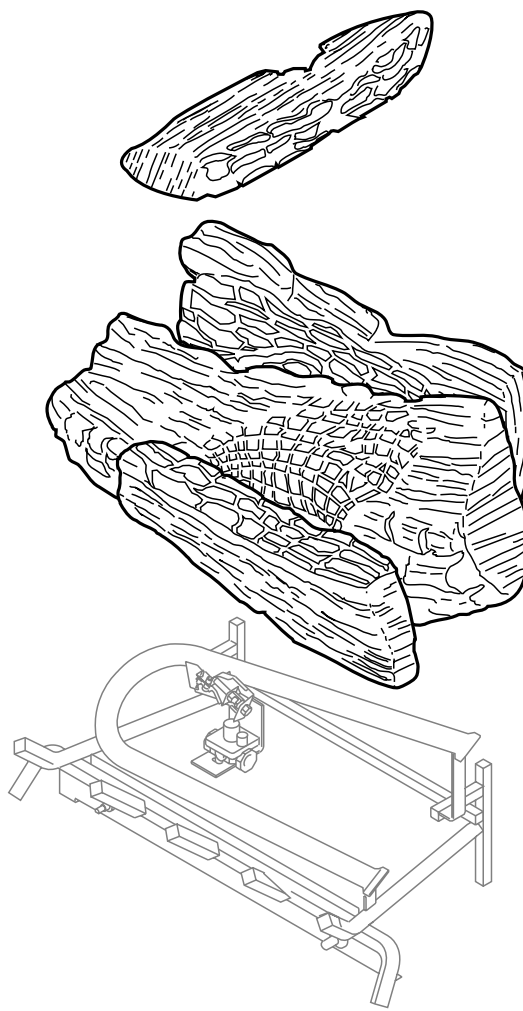
REPLACEMENT PARTS LIST

REPLACEMENT PARTS ARE AVAILABLE THROUGH YOUR RETAILER.

Item	Description	Qty	DLY 18	DLY 24	DLY 30
DLY Charred Oak Logs					
1	Log Front/Rear	1	30D2100	30D2102	30D2104
2	Log Top	1	30D2101	30D2103	30D2105
GLY Burly Oak			GLY 18	GLY 24	GLY 30
1	Log Front/Rear	1	30D2106	30D2108	30D2110
2	Log Top	1	30D2107	30D2109	30D2111



Charred Oak (DLY)



Burly Oak (GLY)

WARNING

Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

TROUBLESHOOTING

WARNING

Turn appliance OFF and allow to cool before servicing. Only a qualified service person should service and repair the heater.

Note: All troubleshooting items are listed in order of operation.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at ODS/pilot.	<ol style="list-style-type: none">1. Ignitor electrode positioned wrong.2. Ignitor electrode is broken.3. Ignitor electrode not connected to ignitor cable.4. Ignitor cable pinched or wet. Keep ignitor cable dry.5. Broken ignitor cable.6. Bad piezo ignitor.	<ol style="list-style-type: none">1. Replace ignitor.2. Replace ignitor.3. Reconnect ignitor cable.4. Free ignitor cable if pinched by any metal or tubing.5. Replace ignitor cable.6. Replace piezo ignitor.
Appliance produces unwanted odors.	<ol style="list-style-type: none">1. Appliance burning vapors from paint, hair spray, glues, etc.2. Gas leak.	<ol style="list-style-type: none">1. Ventilate room. Stop using odor causing products while heater is running.2. Locate and correct all leaks.
Appliance shuts off during use.	<ol style="list-style-type: none">1. Not enough fresh air is available for ODS/ pilot to operate.2. Low line pressure.3. ODS/pilot is partially clogged.4. Defective Thermopile	<ol style="list-style-type: none">1. Open window and/or door for ventilation.2. Contact local gas company.3. Clean ODS/pilot.4. Check pilot flame, check wire connections, check output, should be 325 millivolts across TH/TP and TP Terminals with ON/OFF switches off.
Gas odor even when control knob is in OFF position.	<ol style="list-style-type: none">1. Gas leak.2. Control valve defective.	<ol style="list-style-type: none">1. Locate and correct all leaks.2. Replace control valve.
When ignitor button is pressed, there is spark at ODS pilot, but no ignition.	<ol style="list-style-type: none">1. Gas supply turned off or manual shutoff valve closed.2. Control knob not in PILOT position.3. Control knob not pressed in while in PILOT position.4. Air in gas lines when installed.5. ODS/pilot is clogged.6. Gas regulator setting is not correct.	<ol style="list-style-type: none">1. Turn on gas supply or open manual shutoff valve.2. Turn control knob to PILOT position.3. Press in control knob while in PILOT position.4. Continue holding down control knob. Repeat igniting operation until air is removed.5. Replace ODS/pilot assembly or get it serviced.6. Replace gas regulator
ODS/pilot lights, but flame goes out when control knob is released.	<ol style="list-style-type: none">1. Control knob not fully pressed in.2. Control knob not pressed in long enough.3. Manual shutoff valve not fully open.	<ol style="list-style-type: none">1. Press in control knob fully.2. After ODS/pilot lights, keep control knob pressed in for 30 seconds.3. Fully open manual shutoff valve.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
	<ol style="list-style-type: none"> Thermocouple connection loose at control valve. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by either low gas pressure, or a dirty or partially clogged ODS/pilot. Thermocouple damaged. Control valve damaged. 	<ol style="list-style-type: none"> Hand tighten until snug, then tighten 1/4 turn more. Contact local gas company. Replace thermocouple. Replace control valve.
Burner does not light after ODS/pilot is lit.	<ol style="list-style-type: none"> Burner orifice is clogged. Burner orifice diameter is too small. Inlet gas pressure is too low. 	<ol style="list-style-type: none"> Clean burner or replace burner orifice. Replace burner orifice. Contact qualified service person.
Burner backfires during combustion.	<ol style="list-style-type: none"> Manifold pressure is too low. Burner orifice is clogged. 	<ol style="list-style-type: none"> Contact local gas company. Clean burner or replace burner orifice.
Slight smoke or odor during initial operation.	<ol style="list-style-type: none"> Burner orifice is clogged or damaged. Burner is damaged. Gas regulator defective. 	<ol style="list-style-type: none"> Clean burner or replace burner orifice. Replace burner. Replace gas regulator.
Logs appear to smoke after initial operation.	<ol style="list-style-type: none"> Vapors from paint or curing process of logs. 	<ol style="list-style-type: none"> Problem will stop after a few hours of operation. Run the heater with the damper open if you have one, or open a window for the first few hours. Log heater is intended to be smokeless. Turn OFF heater and call qualified service person.
Heater produces a whistling noise when burner is lit.	<ol style="list-style-type: none"> Turning control knob to HIGH position when burner is cold. Air in gas line. Dirty or partially clogged burners orifice. 	<ol style="list-style-type: none"> Turn control knob to LOW position and let warm up for a minute. Operate burner until air is removed from line. Have gas line checked by local gas company. Clean burner or replace burner orifice.
No gas to pilot.	<ol style="list-style-type: none"> LP-regulator shut down due to inlet pressure too high. 	<ol style="list-style-type: none"> Verify LP tank regulator is installed and set at 11" to 13" w.c. Replace regulator on heater.

WARNING

If the gas quality is bad, your pilot may not stay lit, the burners may produce soot and the heater may backfire when lit. If the gas quality or pressure is low, contact your local gas supplier immediately.

MONESSEN HEARTH SYSTEMS

LIMITED LIFETIME WARRANTY POLICY

Lifetime Warranty

The following components are warranted for life to the original owner, subject to proof of purchase: Firebox, Combustion Chamber, Heat Exchanger, Grate and Stainless Steel Burners.

Five Year Warranty

The following components are warranted for 5 years to the original owner, subject of proof of purchase: Ceramic Fiber Logs, Catalytic Filter and Aluminized Burners.

Basic Warranty

Monessen Hearth Systems (MHS) warrants the components and materials in your gas appliance to be free from manufacturing and material defects for a period of one year from date of installation. After installation, if any of the components manufactured by MHS in the appliance are found to be defective in materials or workmanship, MHS will, at its option, replace or repair the defective components at no charge to the original owner. MHS will also pay for reasonable labor costs incurred in replacing or repairing such components for a period of one year from the date of installation. Any products presented for warranty repair must be accompanied by a dated proof of purchase and date of purchase.

This Limited Warranty will be void if the appliance is not installed by a qualified installer in accordance with the installation instructions. The Limited Warranty will also be void if the appliance is not operated and maintained according to the operating instructions supplied with the appliance, nor does not extend to (1) firebox damage by accident, neglect, misuse, abuse, alteration, negligence of others, including the installation thereof by unqualified installers, (2) the costs of removal, reinstallation or transportation of defective parts on the heater, or (3) incidental or consequential damage. Any service work must be performed by an authorized service representative.

This warranty is expressly in lieu of other warranties, express or implied, including the warranty of merchantability of fitness for purpose and of all other obligations or liabilities, Monessen Hearth Systems, Inc., does not assume for it, any other obligations or liability in connection with the sale or use of this heater. In states that do not allow limitations on how long an implied warranty lasts, or do not allow exclusion of indirect damages, those limitations of exclusions may not apply to you. You may also have additional rights not covered in this Limited Warranty.

MHS reserves the right to investigate any and all claims against the Limited Warranty and decide upon method of settlement.

For information about this warranty, contact:

**Technical Services
Monessen Hearth Systems
P.O. Box 40
Paris, Kentucky 40362-0040**