



# VENTED & VENT-FREE GAS LOG

## Owner's Operation and Installation Manual

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

**GLVF24MAN, GLVF24MAP, GLVF24MVN, GLVF24MVP**

**Vent-free:** Certified to USA standards: ANSI Z21.11.2 - 2007

**Vented:** Certified for USA and Canada: ANSI Z21.60/2003, ANSI Z21.60a/2003, ANSI Z21.60b/2004, CSA 2.26/2004, CSA 2.26a/2003, CSA 2.26b/2004



This appliance must be installed by a licensed plumber or gas fitter in the Commonwealth of Massachusetts and meet the requirements of 527 CMR 30 and 248 CMR.

### **Warning**

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

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

### **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.

### **Warning**

These gas logs sets are for installation in a masonry solid fuel burning fireplace, a U.L. Listed manufactured solid fuel burning fireplace. The vent free gas log sets are also AGA design, certified for vent free Universal Fireboxes.

### **Warning**

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 "Air for Combustion and Ventilation" section of this manual, page 7.)

**Minimum Fireplace Dimensions:**  
see page 11



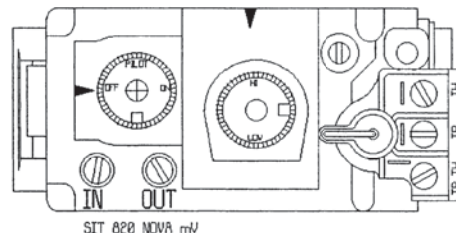
# WARNING:

PLEASE VERIFY THE FOLLOWING STEPS ARE TAKEN WHEN INSTALLING A VENT FREE BURNER SYSTEM.

**STEP 1:** WHEN INSTALLING BURNER SYSTEMS, VERIFY THAT THE SERIAL NUMBER PLATE AND YELLOW BURNER INSPECTION TAG (LOCATED NEAR VALVE) ARE THE SAME TYPE OF GAS. SHOULD THE GAS TYPE NOT BE SAME, RETURN THE BURNER SYSTEM TO WHOM YOU PURCHASED IT FROM, AND ASK FOR A REPLACEMENT.

**STEP 2:** VERIFY THE WATER COLUMN PRESSURE (IN/OUT). (IF YOU DON'T KNOW HOW TO CHECK WATER COLUMN PRESSURE YOU SHOULD NOT BE INSTALLING THIS PRODUCT, CONTACT A LICENSED GAS FITTER.) THE OUTLET PRESSURE IS REQUIRED NOT TO EXCEED THE FACTORY SETTINGS. ADJUST PROPANE AT THE REGULATOR IF PRESSURES EXCEED THOSE RECOMMENDED, IF THE NATURAL GAS PRESSURE IS ABOVE 3 1/2" CONTACT THE FACTORY OR SALES REPRESENTATIVE WITH YOUR READING BEFORE YOU USE THE BURNER SYSTEM.

<u>TYPE OF GAS</u>	<u>INLET</u>	<u>OUTLET</u>
PROPANE	11"	10"
NATURAL GAS	5 1/2 - 7"	3 1/2"



**STEP 3:** THE POSITIONING OF THE LOGS IS CRITICAL FOR SAFE AND CLEAN OPERATION OF THIS HEATER. SOOTING AND OTHER PROBLEMS CAN OCCUR IF THE LOGS ARE NOT PROPERLY AND FIRMLY POSITIONED AS INSTRUCTED IN MANUAL. DO NOT ATTEMPT TO INSTALL LOGS IF THEY ARE DAMAGED OR BROKEN.

**FAILURE TO FOLLOW AND COMPLY WITH THESE STEPS CAN CAUSE SOOTING AND KINGSMAN FIREPLACES WILL NOT BE RESPONSIBLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OR EXPENSES IN CONNECTION WITH ANY USE OR FAILURE OF THE VENT FREE BURNER SYSTEM.**

**READ OWNERS MANUAL CAREFULLY AND COMPLETELY BEFORE TRYING TO ASSEMBLE OPERATE, OR SERVICE THIS APPLIANCE.**

## PRE-INSTALLATION QUESTIONS and ANSWERS

### Why does my fireplace or stove give off odour?

It is normal for your fireplace to give off some odour. This is due to the curing of the paint, adhesives, silicones and any undetected oil from the manufacturing process as well as the finishing materials used with the installations (e.g. marble, tile and the adhesives used to adhere this product to the walls can react with heat and cause odours).

It is recommended that you burn your gas fireplace or stove for a minimum of four hours at a time with the fan off after the curing of the paint has been completed. These odours can last upward to 40 hours of burn time, keep burning at a minimum of four hours per use until odours dissipate.

### About curing of the paint

Your stove or fireplace has been painted with the highest quality silicone stove paint. This paint dries quickly in 15-20 minutes when first applied at the factory. However, due to the high temperature silicone components, the paint will cure when heat is applied to the appliance as it is first used.

The following information **applies to the curing process** to get the paint fully hard and durable.

Fire the appliance four successive times for 10 minutes each firing and a 5 minute cool down between each. Be aware during log and firebox paint curing that a white deposit may be developing on the inside of the glass doors. It is important to remove this white deposit from the glass doors with an appropriate cleaner to prevent build-up (such as Windex or a commercial fireplace glass cleaner).

- Babies, small children, pregnant women and pets should leave the area during the cure phase.
- Ventilate well, open doors and windows.
- Do not touch during curing.

### Noise coming from the fireplace?

- Noise caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of your fireplace.
- Different types and thicknesses of steel will expand and contract at different rates resulting in “cracking” and “ticking” sounds throughout the heating and cooling periods.
- You should also be aware that as temperatures change within the unit these sounds will likely re-occur. Again this is normal for steel fireboxes, and is not a defect.

### Cleaning the Glass

During the first few fires, a white film may develop on the glass front, as part of the curing process. The glass should be cleaned after the unit has cooled down or the film can bake on and become very difficult to remove. Use a non-abrasive cleaner and do not attempt to clean the glass while it is hot.

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## GAS SPECIFICATIONS

### VENT FREE - VENTED GAS LOG SETS *(Burner and Log Set are sold separately)*

Burner Model	Log Size	Fuel Type	BTU Input	Manifold Pressure	Orifice Size	Primary Air	Rate Screw	Min/Max Inlet Press.
GLVF24MAN	24"	Natural Gas	20,000 - 35,000	1.5" - 4.4"	36	0.218	182	5.5/10"
GLVF24MAP	24"	Liquid Propane	24,000 - 30,000	7" - 10"	50	Full Open	250	11/13"
GLVF24MVN	24"	Natural Gas	20,000 - 35,000	1.6" - 3.5"	34	0.218	na	5.5/10"
GLVF24MVP	24"	Liquid Propane	24,000 - 30,000	6.3" - 10"	51	Full Open	na	11/13"

#### Log Set required for each burner (above)

LOGF18	Log Set – Fibre Split Oak 18"
LOGF24	Log Set – Fibre Split Oak 24"
LOGF30	Log Set – Fibre Split Oak 30"

# SAFETY INFORMATION WARNINGS

## WARNINGS

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

Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, and / or nausea. If you have these signs, the heater may not be working properly. **Get fresh air at once! Turn off gas appliance. Have appliance serviced.** Some people (such as pregnant women, persons with heart or lung disease, persons with anemia and those at high altitudes) are more affected by carbon monoxide than others. Make certain you read and understand all warnings.

**This appliance is equipped for (Natural or Propane) Gas.  
Field conversion is not permitted.**

**Warning:** Failure to position parts in accordance with these diagrams or failure to use only part specifically approved with this heater may result in property damages or personal injury.

1. Use correct gas type for your appliance. Do not convert from one gas type to another.
2. If this appliance is for use with Propane gas, do not place propane supply tank(s) inside any structure. Locate propane supply tank(s) outdoors.
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 your gas supplier, call the fire department.
4. Do not use the appliance for burning trash or cooking. Never place matches, paper, garbage, or any other material on top of logs or logs into flame.
5. **Warning:** Always operate appliance with front fire-place screens closed and glass doors open.
6. Make sure any safety screen or guard removed for servicing is in place before running appliance.
7. Never run appliance in a small, closed room. Open the door into next room to help ventilate.



## DANGER

**CARBON MONOXIDE POISONING  
MAY LEAD TO DEATH!**

**NOTE:** It is recommended that a Carbon Monoxide (CO) Detector be installed in or near bedrooms and on all levels of your home. Place a detector about 15 feet (4.5 meters) outside the room that houses your gas appliance.

8. If appliance shuts off, do not relight until you provide fresh outside air. If appliance keeps shutting off, have it serviced.
9. Do not run appliance:
  - where flammable liquids or vapors are used or stored.
  - under dusty conditions.
10. Surface of appliance becomes very hot when operating. Keep children and adults away from hot surface. Appliance will remain hot for some time after shut-down. Allow surface to cool before touching.
11. Do not use this appliance if any part has been submerged under water. Immediately call a qualified technician to inspect the appliance and to replace any part of the control system and gas control which has been under water.
12. The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1.
13. Never install the appliance:
  - in a bedroom, bathroom, mobile home, or recreational vehicle.
  - where curtains, furniture, clothing, or other flammable objects are less than forty-two inches (42") from the front of the appliance.
  - in high traffic areas.
  - in windy or drafty areas.
14. Disconnect the appliance and its individual shut off valve from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig, (3.5kPa).

## SAFETY INFORMATION WARNINGS Cont.

15. Isolate the appliance from the gas supply piping system by closing its individual manual shut off valve during any pressure testing of the the gas supply piping system at test pressure equal or less than 1/2 psig.
16. Do not use any type of after-market blower that fits inside the fireplace. Drafts created by these type of blowers may cause sooting.
17. Turn off appliance and let cool before servicing. Only a qualified service person should install, service and repair appliance.
18. Inspect the appliance before use and at least annually by a professional service person. Frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is important that control compartment, burner and circulating air passage of the appliance be kept open.
19. When operated for the first time, there will be some smell from the appliance. this will diminish and disappear after a few hours of operation.
20. **Warning:** Do not operate ceiling fans in same room as the vent free appliance.
21. Must be installed by a licensed gasfitter in the Commonwealth of Massachusetts. Complies to code 527CMR.
22. Unvented gas fired appliances may be used only for supplemental heat and/or decorative purposes and under no circumstances shall they provide a primary heat source.

### LOCAL CODES

Install and use fireplace with care. Follow all local codes. In the absence of local codes, use the latest edition of The National Fuel Gas Code ANSI Z223.1, also known as NFPA 54\*. Firebox must be electrically grounded in accordance with the National Electrical Code, ANSI/NFPA 70 (latest edition).

\*Available from:

American National Standards Institute, Inc.  
1430 Broadway  
New York, NY 10018

National Fire Protection Association, Inc.  
Batterymarch Park  
Quincy, MA 02260

# AIR FOR COMBUSTION AND VENTILATION

Today's homes are built more energy efficient than ever. New materials, increased insulation, and new construction methods help reduce heat loss in homes. Home owners weather strip and caulk around windows and doors to keep the cold air out and the warm air in. During heating months, home owners want their homes as airtight as possible.

## **WARNING**

This firebox shall not be installed in a confined space unless provisions are provided for adequate combustion and ventilation air. Read the following instructions to insure proper fresh air for this and other fuel-burning appliances in your home.

While it is good to make your home energy efficient, your home needs to breathe. Fresh air must enter your home. All fuel-burning appliances need fresh air for proper combustion and ventilation.

Exhaust fans, fireboxes, clothes dryers, and fuel burning appliances draw air from the house to operate. You must provide adequate fresh air for these appliances. This will insure proper venting of vented fuel-burning appliances.

## **PROVIDING ADEQUATE VENTILATION**

The following are excerpts from *National Fuel Gas Code, NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation*:

All spaces in homes fall into one of the three following ventilation classifications:

1. Unusually Tight Construction
2. Unconfined Space
3. Confined Space.

The information on pages 7 through 10 will help you classify your space and provide adequate ventilation.

### **Unusually Tight Construction**

The air that leaks around doors and windows may provide enough fresh air for combustion and ventilation. However, in building of usually tight construction, you must provide additional fresh air.

**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 one perm (6 x 10<sup>-11</sup> per pasc-m<sup>2</sup>) or less with openings gasketed or sealed and
- b. weather stripping has been added on openable windows and doors *and*
- c. caulking or sealants are applied to areas such as joints around window 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.

**If your home meets all of the three criteria above, you must provide additional fresh air.**

**See *Ventilation Air From Outdoors*, page 10.**

**If your home does not meet all of the three criteria above, proceed to page 11.**

### **Confined and Unconfined Space**

The National Fuel Gas Code (*ANSI Z223.1, 1992 Section 5.3*) defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 btu per hour (4.8 m<sup>3</sup> 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.

\*Adjoining rooms are communicating only if there are doorless passageways or ventilation grills between them.

## **DETERMINING AIR FLOW FOR FIREBOX LOCATION**

### **Determining if You Have a Confined or Unconfined Space**

Use the work sheet on the next page to determine if you have a confined or unconfined space.

**Space:** Includes the room in which you will install logset plus any adjoining rooms with doorless passageways or ventilation grills between the rooms.

# AIR FOR COMBUSTION AND VENTILATION Cont.

1. Determine the volume of the space (length x width x height).

Length x Width x Height = \_\_\_\_\_ cu. ft. (volume of space)

*Example:* Space size 22ft. (length) x 18 ft. (width) x 8 ft. (ceiling height) = 3168 cu. ft. (volume of space)

If additional ventilation to adjoining room is supplied with grills or openings, add the volume of these rooms to the total volume of the space.

2. Divide the space volume by 50 cubic feet to determine the maximum Btu/Hr the space can support.

\_\_\_\_\_ (volume of space) ÷ 50 cu. ft. = 63.3 or 63,300 (maximum Btu/Hr the space can support)

3. Add the Btu/Hr of all fuel burning appliances in the space.

Vent-free logset	_____	Btu/Hr
Gas water heater*	_____	Btu/Hr
Gas furnace	_____	Btu/Hr
Vented gas heater	_____	Btu/Hr
Gas firebox logs	_____	Btu/Hr
Other gas appliances*	+ _____	Btu/Hr
Total	= _____	Btu/Hr

Example:	Gas water heater	40,000 Btu/Hr
	Vent-free firebox with log heater	+ 39,000 Btu/Hr
	Total	= 79,000 Btu/Hr

\* Do not include direct-vent gas appliances. Direct-vent draws combustion air from the outdoors and vents to the outdoors.

4. Compare the maximum Btu/Hr the space can support with the actual amount of Btu/Hr used.

\_\_\_\_\_ Btu/Hr (maximum the space can support)

\_\_\_\_\_ Btu/Hr (actual amount of Btu/Hr used)

Example: 63,300 Btu/Hr (maximum the space can support)

79,000 Btu/Hr (actual amount of Btu/Hr used)

The space in the above example is a confined space because the actual Btu/Hr used is more than the maximum Btu/Hr the space can support. You must provide additional fresh air. Your options are as follows:

- A. Rework work sheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms, See *Ventilation Air from Inside Building*, page 9.
- B. Vent room directly to the outdoors. See *ventilation Air from Outdoors*, page 10.
- C. Install a lower Btu/Hr logset, if lower Btu/Hr size makes room unconfined.

If the actual Btu/Hr used is less than the maximum Btu/Hr the space can support, the space is an unconfined space. You will need no additional fresh air ventilation.

**WARNING**

If the area in which the firebox and gas log heater may be operated is smaller than that defined as an unconfined space, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANSI Z223.1, 1992, Section 5.3.



# AIR FOR COMBUSTION AND VENTILATION Cont.

## VENTILATION AIR FROM INSIDE BUILDING

This fresh air would come from an adjoining unconfined space. When ventilating to an adjoining unconfined space, you must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor on the wall connecting the two spaces (see options 1 and 2, Figure 4). You can also remove door into adjoining room (see option 3, Figure 4). Follow the *National Fuel Gas Code NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

### WARNING

Rework worksheet, adding the space of the adjoining unconfined space. The combined spaces must have enough fresh air to supply all appliances in both spaces.

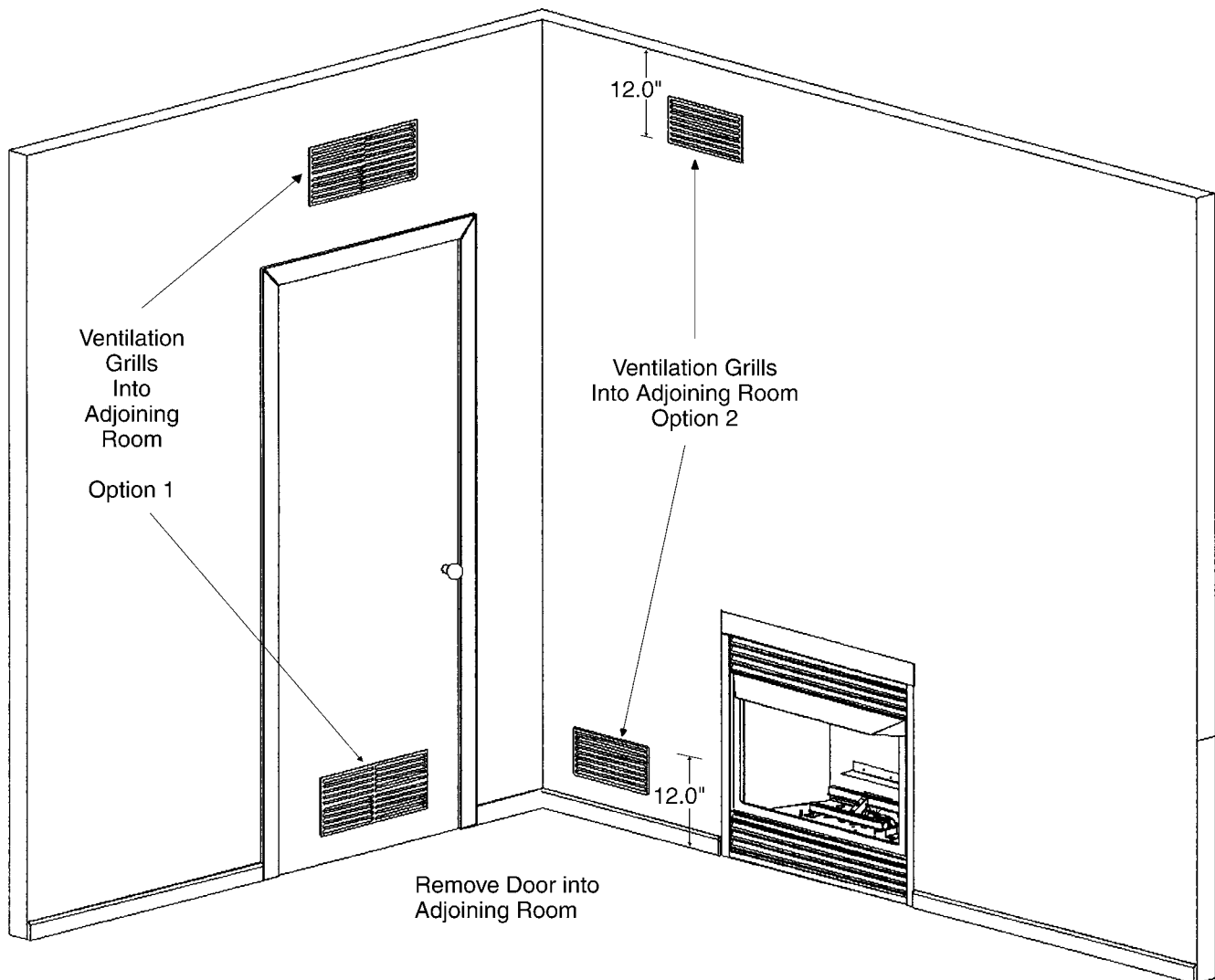


FIGURE 4 - Ventilation Air from Inside Building

# AIR FOR COMBUSTION AND VENTILATION Cont.

## VENTILATION AIR FROM OUTDOORS

Provide extra fresh air by using ventilation grills or ducts. You must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces.

**IMPORTANT:** Do not provide openings for inlet or outlet air into attic if attic has a thermostat-controlled power vent. Heated air entering the attic will activate the power vent.

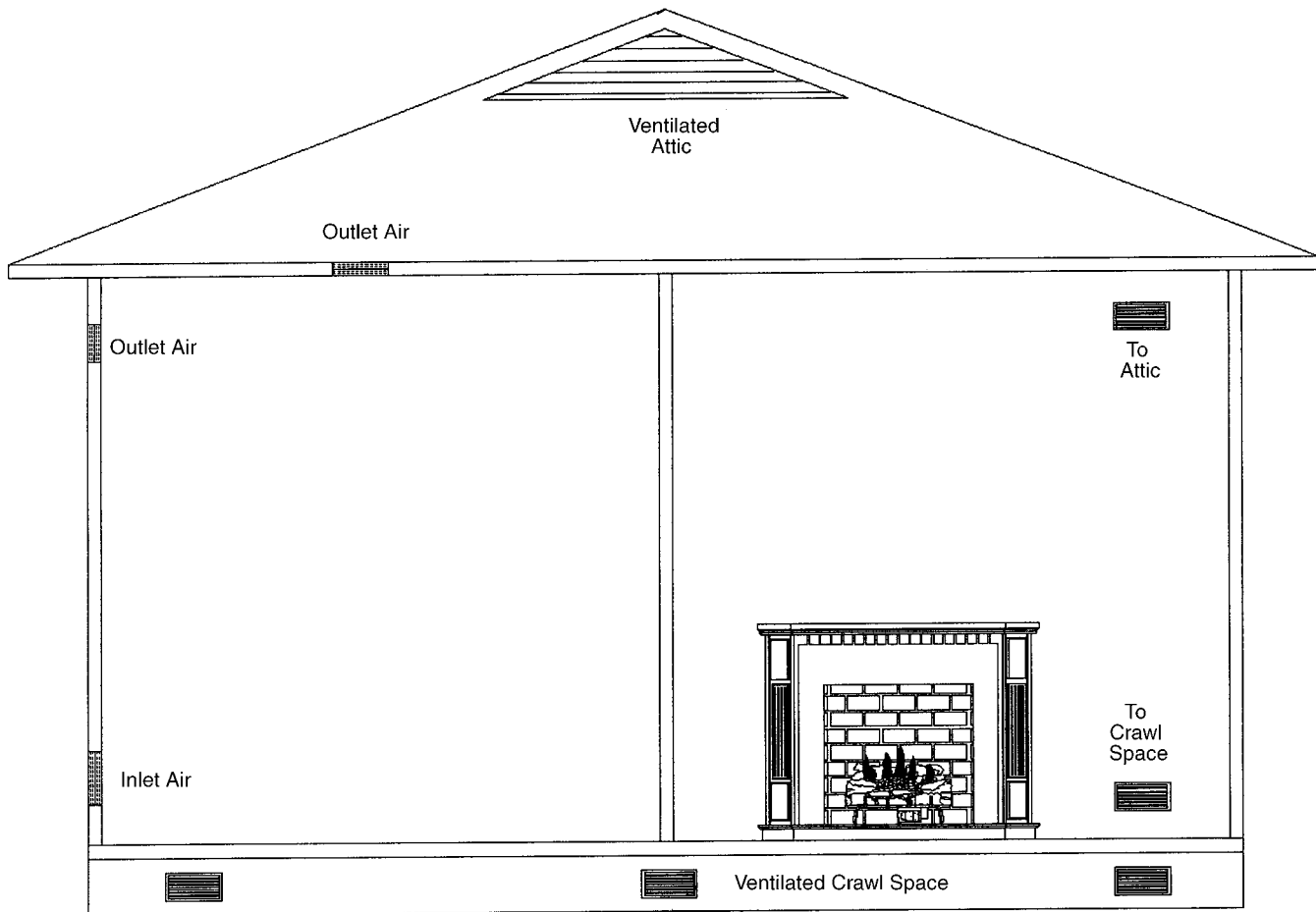


FIGURE 5 - Ventilation Air from Outdoors

# INSTALLING - Clearances

## INSTALLATION CLEARANCES (VENT FREE APPLICATION ONLY)

Minimum noncombustible material above fireplace opening must be no less than shown in the figures above.

Noncombustible materials (slate, marble, tile, etc.) must be at least 1/2" thick, if sheet metal is used, you must have a non-combustible material behind it.

**IMPORTANT:** If these minimum clearances are not possible or if local codes do not permit vent-free operation, you must operate the heater with the damper open.

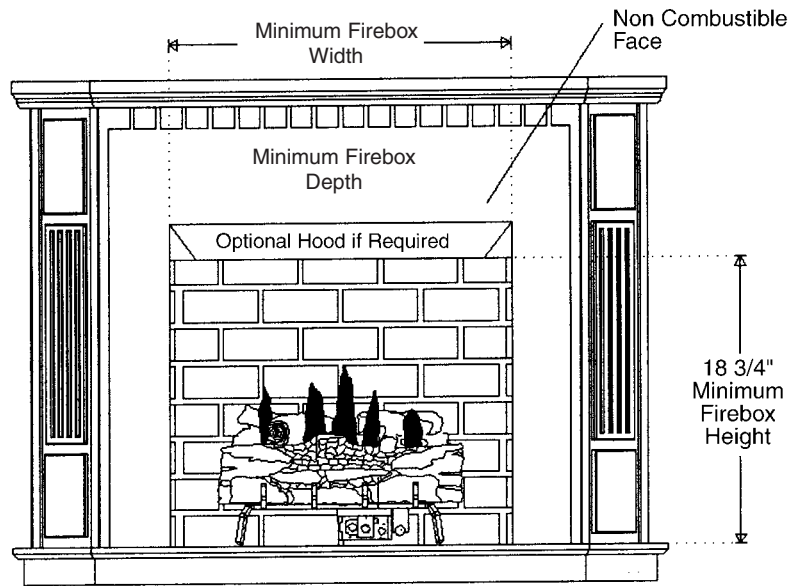


FIGURE 6 - Installation Clearances

	Minimum Fireplace Dimensions			
	Front width	Back Width	Height	Depth
For 18" LOGS	19"	19"	18 3/4"	12 1/2"
For 24" LOGS	29"	22 1/2"	18 3/4"	12 1/2"
For 30" LOGS	38"	28"	18 3/4"	13 1/2"

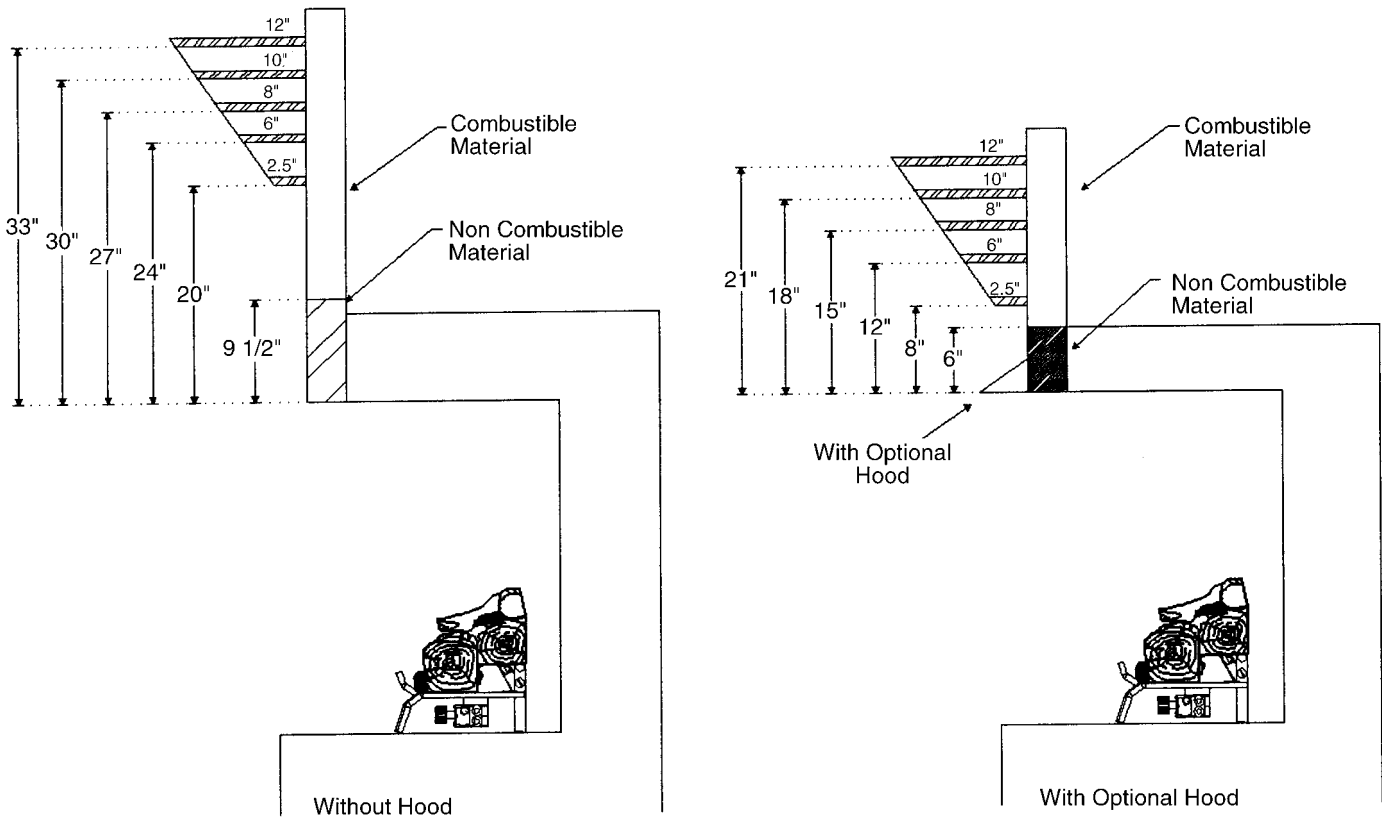


FIGURE 7 - Mantel Clearances.

# INSTALLING

## INSTALLATION OF GLVF24 INTO EXISTING FIREPLACE

If installing in Canada or as a vented logset:

**NOTE:** When used as a vented heater, appliance must be installed only in a solid fuel burning fireplace with a working flue and constructed of non-combustible material. See chart below for minimum permanent flue opening you must provide. The damper must be secured so the minimum flue opening will be maintained at all times. This can be done by removing the damper or welding the damper open.

Chimney Height (feet)	Minimum Permanent Flue Opening (square inches)
6' - 15'	39 square inches
15' - 30'	29 square inches

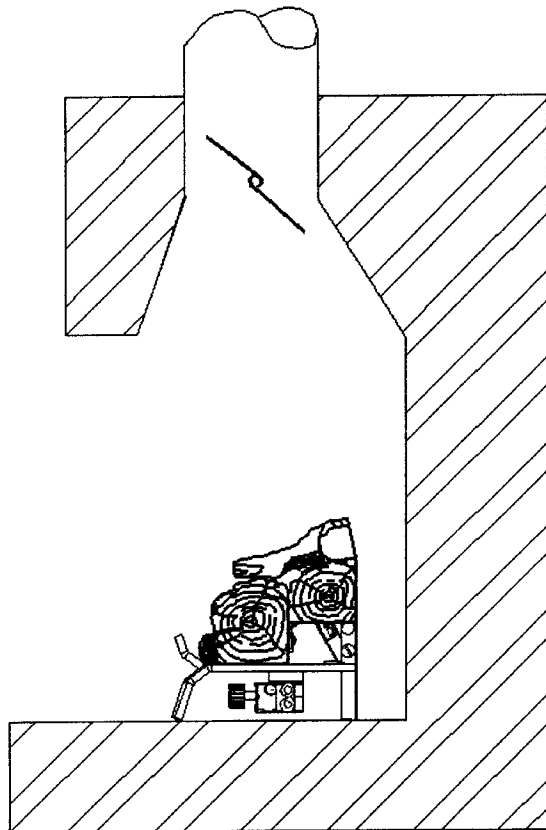
Area of Various Standard Round Flues	
Diameter (inside)	Area (square inches)
5"	20 square inches
6"	29 square inches
7"	39 square inches
8"	51 square inches

### WARNING

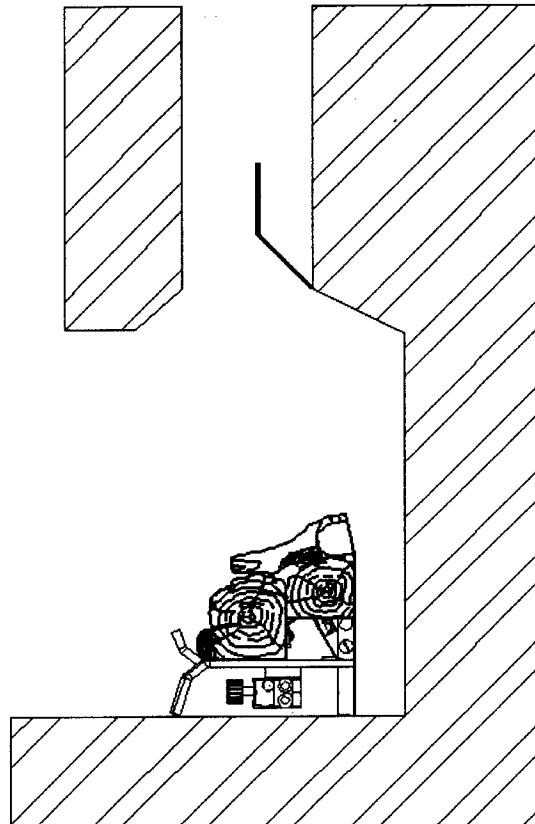
Before installing in a solid fuel burning fireplace, the chimney flue and firebox must be cleaned of soot, creosote, ashes, and loose paint by a qualified chimney cleaner. Creosote may ignite when heated to a high temperature. Have chimney flue inspected for damage. If flue system is damaged, you may close the damper if using as a vent-free system. If you are using the burner as a vented burner and the flue system is damaged, do not install the unit.

### WARNING

Seal any fresh air vents or ash cleanout doors located on the floor or wall of fireplace. If this is not done, drafting may result causing pilot outage or sooting. Use a heat-resistant sealant. Do not seal chimney flue damper.



Manufactured Fireplace



Masonry Fireplace

**FIGURE 8 – Installing GLVF24 into existing fireplace.**

# INSTALLING – Gas Line

## INSTALLING GAS LINE

Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, and / or nausea. If you have these signs, the heater may not be working properly. **Get fresh air at once!** Turn off gas appliance. Have appliance serviced. Some people (such as pregnant women, persons with heart or lung disease, persons with anemia and those at high altitudes) are more affected by carbon monoxide than others. Make certain you read and understand all warnings. Place Burner Base / Grate Assembly in center of firebox and connect flexible gas line to incoming black iron pipe gas line.

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

Prepare incoming black iron gas line with **Teflon tape** or **pipe joint compound** (check with local codes about the use of Teflon tape). 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.

Complete your gas installation by connecting 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 connector. The burner pressure is controlled by the  
(cont'd. on page 14)



## DANGER

**CARBON MONOXIDE POISONING  
MAY LEAD TO DEATH!**



## WARNING

Any changes to this heater or its controls can be dangerous.

## NOTICE

Installation and repair 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 Commissioner before installing this appliance, otherwise your insurance company may not cover this appliance.

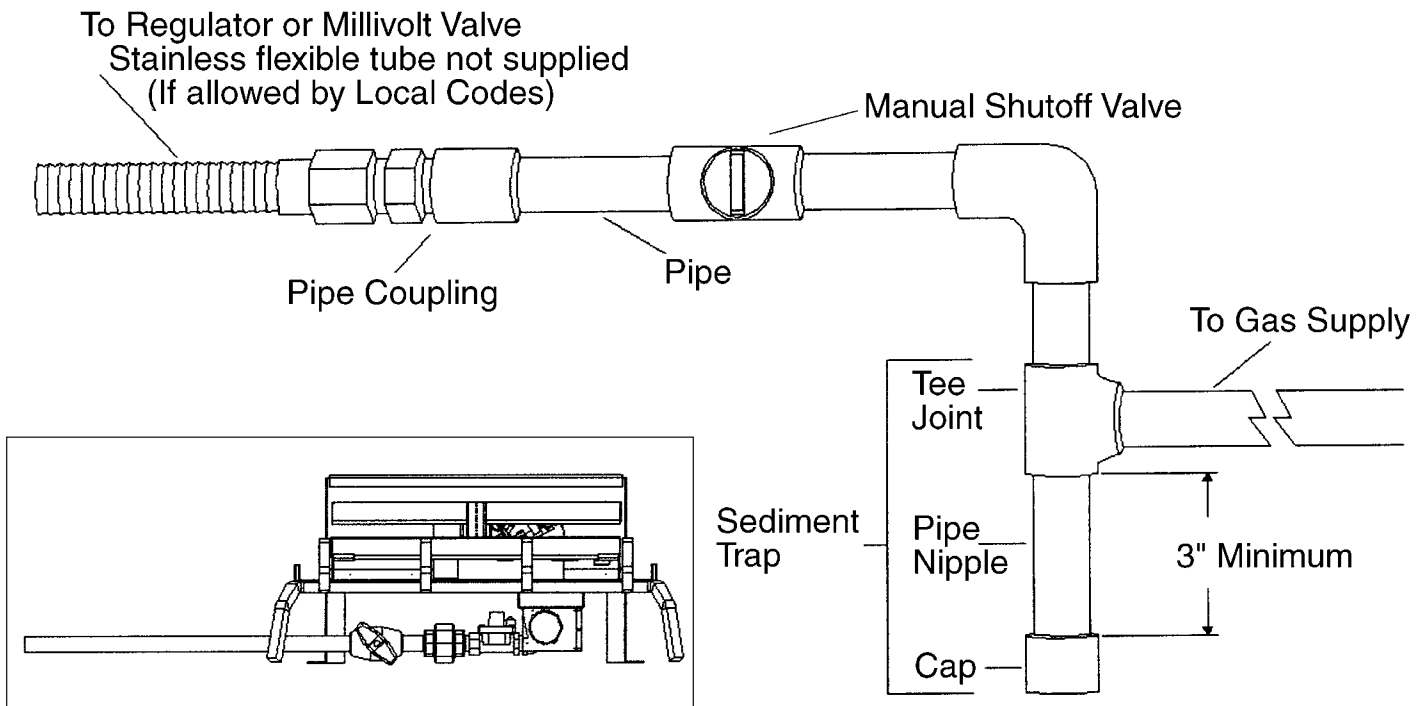


FIGURE 9, 9a – Gas line and manual shutoff valve

## INSTALLING – Gas Line Cont.



### CAUTION

Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the heater.

### NOTICE

A qualified gas appliance installer must connect the fireplace to the gas supply. Consult all local codes.



### CAUTION

Use new black pipe only. Internally tinned copper tubing can be used in some areas when permitted by local codes. Only use pipe of 1/2" or greater diameter to allow full gas volume to heater. Excessive pressure loss will occur if the pipe is too small.

A manual shutoff valve, union and plugged 1/8" NPT pressure tap pointer must be installed upstream of the heater.

A sediment trap must be installed upstream of the heater to prevent moisture and contaminants from passing through the pipe to the heater controls and burners. Failure to do so could prevent the heater from operating reliably.

regulator. Check pressure at the pressure test point, which is located on the side of the gas control near the pilot outlet. Make sure that the pressure tap is completely closed after checking gas pressure. The pressure should be checked with the appliance burning and the control set on high.

**IMPORTANT:** Loosen the pipe adapter on the flex tube before installing to the system 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.



### CAUTION

All gas piping and connections must be tested for leaks after installation is completed. To test, turn gas valve on, then apply a soap and water solution to all connections and joints. If bubbles appear, leak can be detected and corrected. **Never use an open flame for leak testing. Never operate any appliance if a leak is detected!**

For the state of Massachusetts a **T-handle gas shut-off valve** must be used on a gas appliance. This T-handle gas shut-off valve must be listed and approved by the state of Massachusetts. This is in reference to the state of Massachusetts state code CMR238.

# INSTALLING – Burner System

## CLEANING AND SERVICING OF BURNER / ODS PILOT

It is recommended to annually inspect and clean the unit to prevent malfunction and / or sooting. This operation should be performed by your dealer or a qualified technician.

Remove log set, handling carefully by holding gently at each end. (Refer to *Log Placement*, page 16.) Gloves are recommended to prevent skin irritation from ceramic.

### Annual Cleaning / Inspection

- Do not use cleaning fluids to clean logs or any part of the heater.
- Use a soft bristle brush or a vacuum with brush attachment.
- Vacuum loose particles and dust from burner ports, valve and blower compartments.
- Vacuum any accumulation of lint from primary mixing tube.
- Inspect ODS pilot for operation, accumulation of lint at the air inlet holes.
- Verify flame pattern and log placement for proper operation.
- Verify that all ports ignite and cross over smoothly from rear to front burner.

### WARNING

Turn off heater and allow to cool before cleaning. Only a qualified service technician should service and repair appliance.

### WARNING

Failure to keep primary air openings clear, may result in sooting and property damage.

### CAUTION

Never use a wire, needle, or similar object to clean ODS / Pilot. This can damage ODS / Pilot.

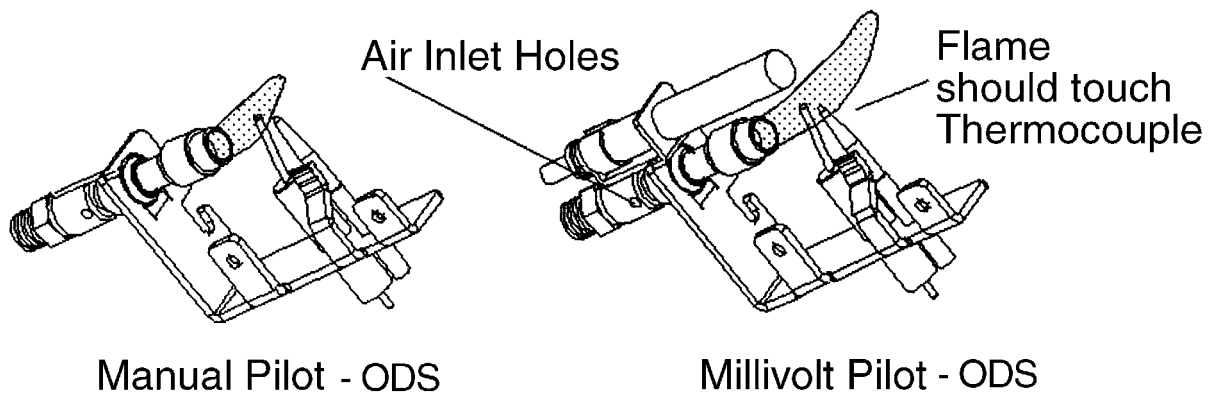


FIGURE 10 – ODS Pilot, both manual and Millivolt pilot flames shown

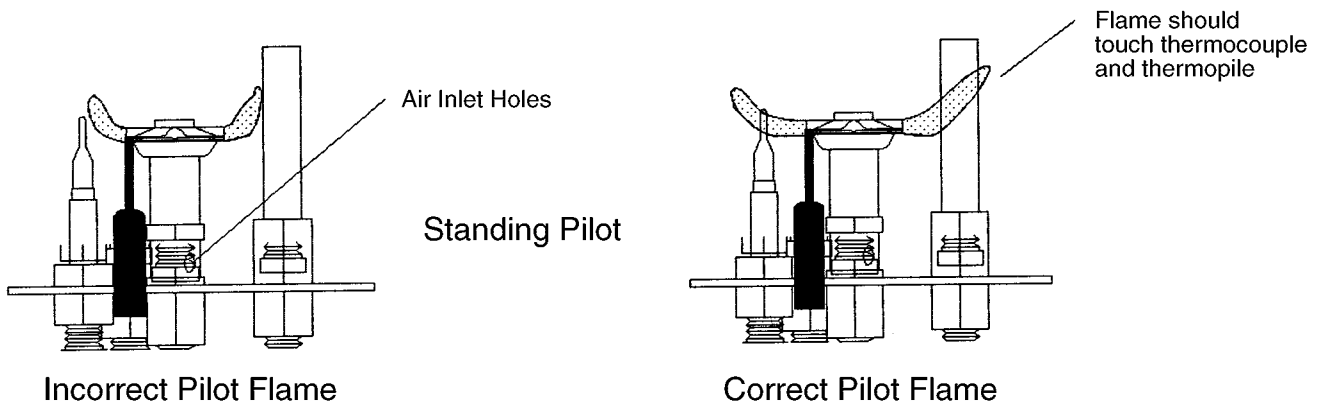


FIGURE 11 – Standing Pilot

# INSTALLING – Log Grate

## ATTACHING LOG GRATE TO FIREPLACE BASE

1. Position log grate into fireplace and mark screw locations on each side of mounting bracket.
2. Remove grate assembly, drill 2 holes at the marked locations.
3. Attach grate assembly to fireplace base. (Screws not provided.)
4. Connect to gas supply.

## INSTALLATION OF LOGF24 LOGSET

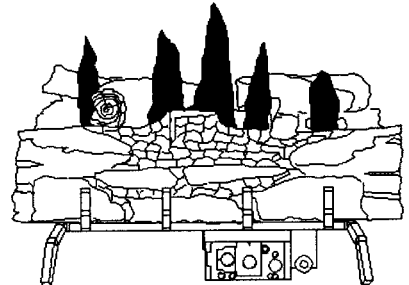
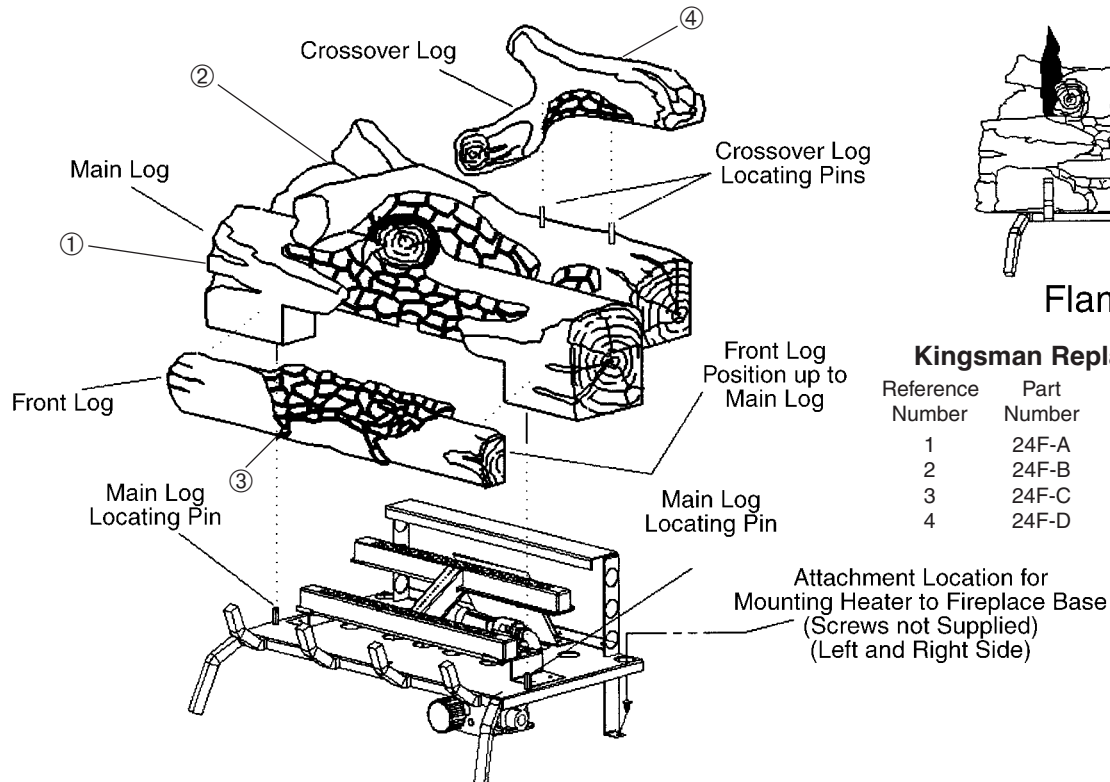
1. Place main log on locating pins on burner grate bottom.
2. Place crossover log on locating pins on top of rear main log.
3. Position front log flat surface up to main log.

**⚠ WARNING**

You must secure this heater to fireplace base, or heater will move when you adjust controls. Moving heater may cause a gas leak and may result in property damage or personal injury.

**⚠ WARNING**

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



Flame Pattern

### Kingsman Replacement Log Listing

Reference Number	Part Number	Description
1	24F-A	Front Main Log A, LOGF24
2	24F-B	Rear Main Log B, LOGF24
3	24F-C	Front Log C, LOGF24
4	24F-D	Crossover Log D, LOGF24

FIGURE 12 – Log Placement

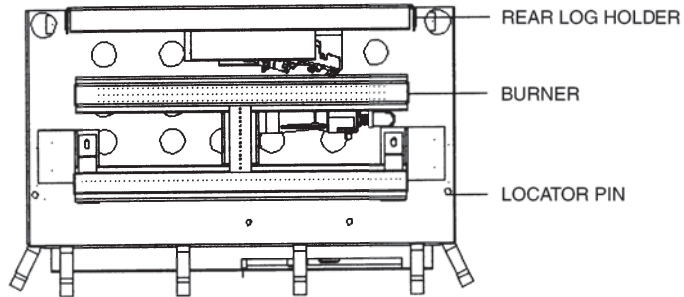
**⚠ WARNING**

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



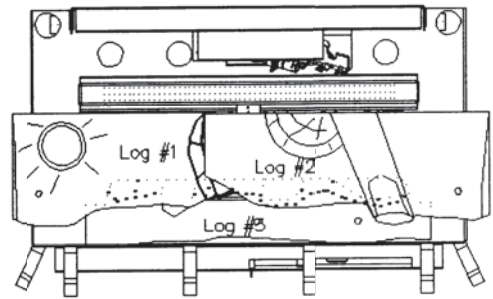
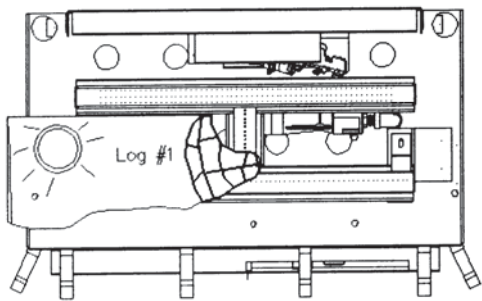
# Log Placement for LOGF18

## LOGF18 LOG SET PLACEMENT



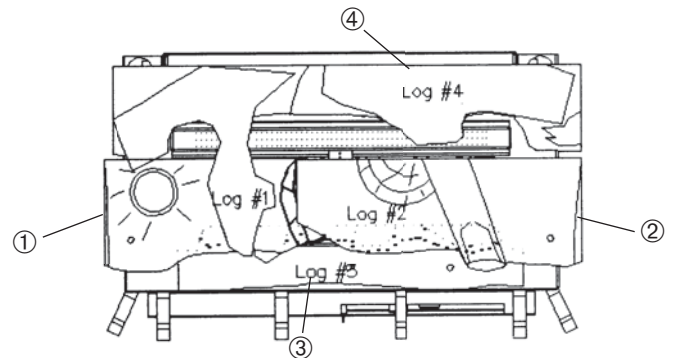
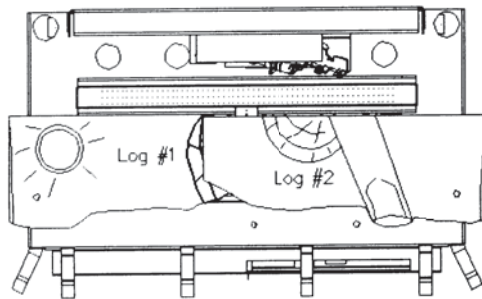
STEP 1 Locate hole on underside of log and place log over burner and Locator Pin and lower into position.

STEP 3 Place flat surface of bottom of log onto burner assembly base and push log up to logs 1 and 2



STEP 2 Locate hole on underside of log and place log over burner and Locator Pin and lower into position.

STEP 4 Position log #4 onto rear log holder and pull up to logs 1 and 2.

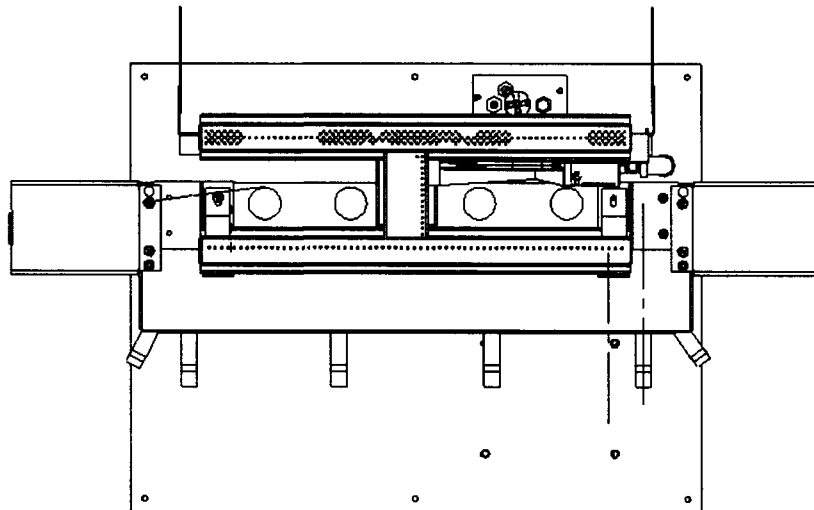
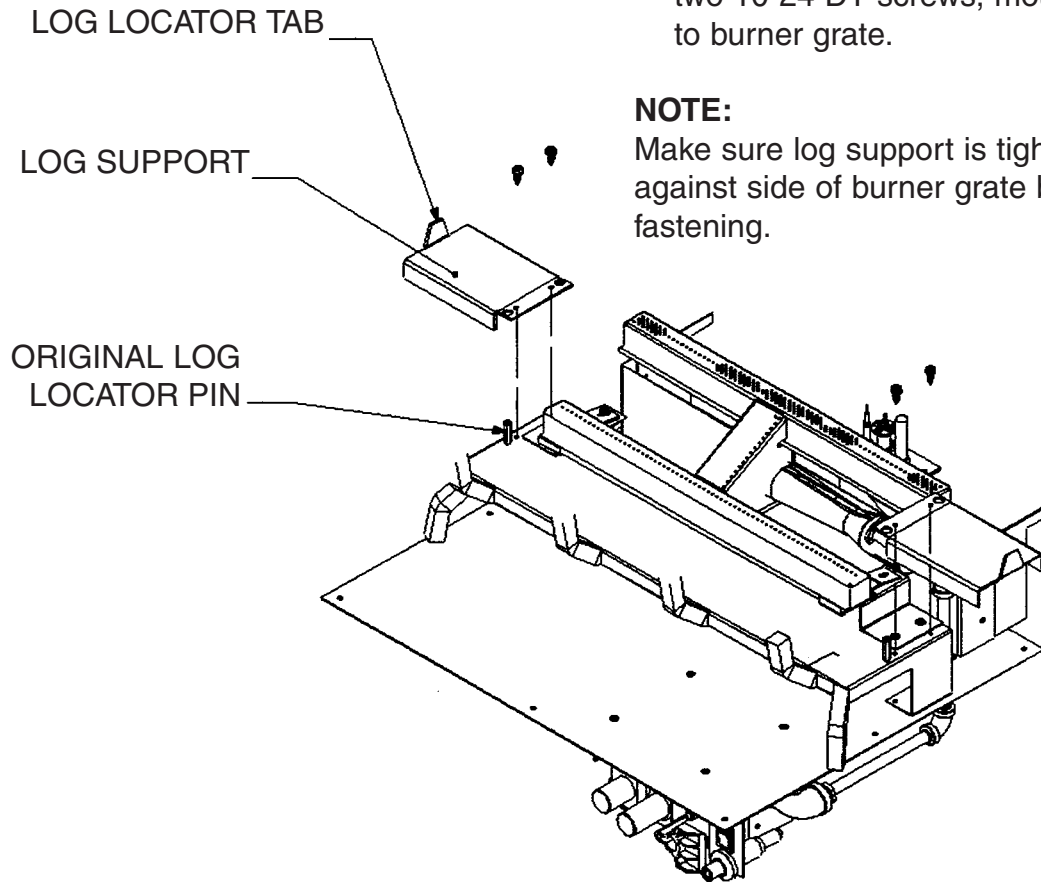


### Kingsman Replacement Log Listing

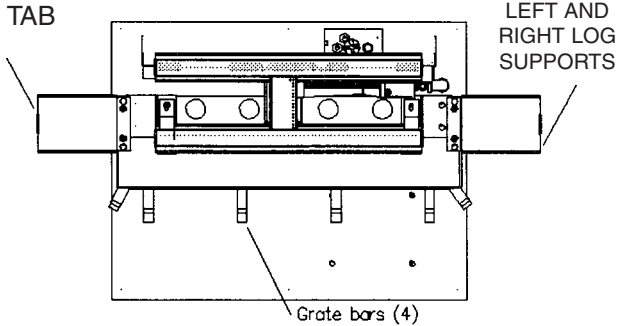
Reference Number	Part Number	Description
1	18F-C	Left hand Main Log C, LOGF18
2	18F-D	Right hand Main Log D, LOGF18
3	18F-B	Front Log B, LOGF18
4	18F-A	Rear Log A, LOGF18

# LOGF30 LOG INSTALLATION

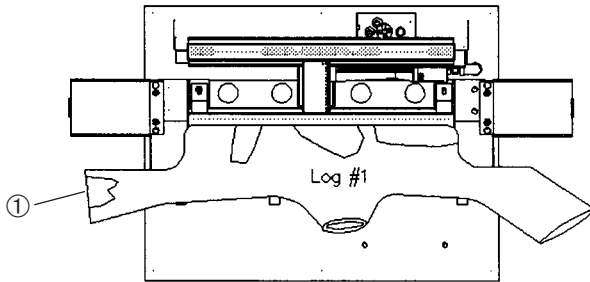
- 1) Align front hole of log support plate with original log locator pin.
- 2) Slide log support over pin & using two 10-24 DT screws, mount plate to burner grate.



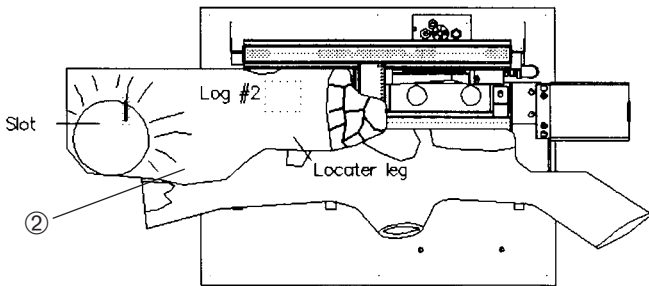
# LOGF30 LOG PLACEMENT



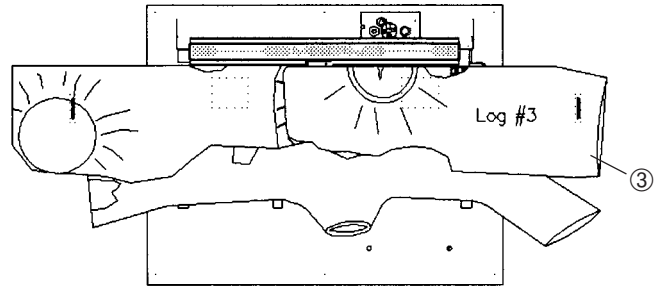
STEP #1. Locate Log #1 by positioning notches on under side of front log with the front Grate bars (4) and pull forward.



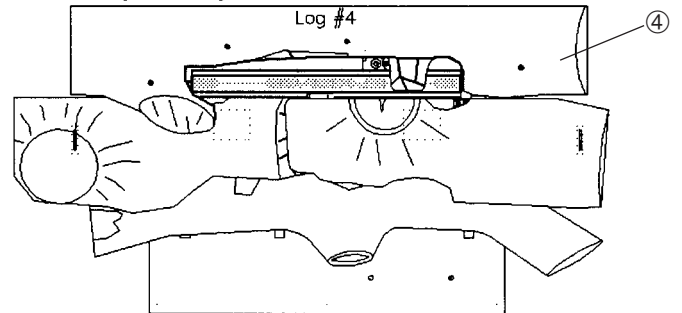
STEP #2. Locate left front Log by positioning slot on bottom of log with Tab on support bracket and lower into position.



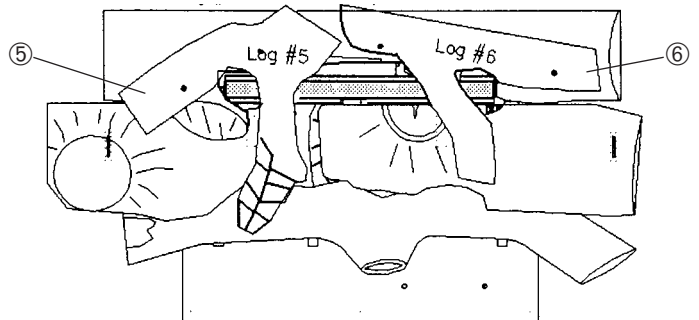
STEP #3. Locate right front Log by positioning slot on bottom of log with Tab on support bracket and lower into position.



STEP #4. Place rear log onto rear log holder and pull up to left and right front logs.



STEP #5 & 6. Line up holes on crossover logs with locator pins on rear log #4 and lower into position.



## Kingsman Replacement Log Listing

Reference Number	Part Number	Description
1	30F-B	Front Main Log B, LOGF30
2	30F-D	Left hand Center Log D, LOGF30
3	30F-C	Right hand Center Log C, LOGF30
4	30F-A	Rear Main Log A, LOGF30
5	30F-E	Left hand Crossover Log E, LOGF30
6	30F-F	Right hand Crossover Log F, LOGF30

# MILLIVOLT LIGHTING INSTRUCTIONS

## 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.**

### BEFORE LIGHTING

- A** This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B** 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 an appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbour'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 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 technician. Force or attempted repair may result in a fire or explosion.
- D** Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system which has been under water.

## LIGHTING INSTRUCTIONS

1. Stop! Read the safety information above on this label.
2. Set the thermostat to lowest setting.
3. Turn off all electrical power to the appliance.
4. Locate valve under the burner assembly.
5. If the control knob is not already in the off position, ie. the word "OFF" in the 9 o'clock position, then push in the gas control knob slightly and turn clockwise to "OFF".  
NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not use force.
6. Wait five (5) minutes to clear out any gas. If you then smell gas. STOP! Follow "B" in the safety information above on this label. If you don't smell gas then go to the next step.
7. Now push in the control knob slightly and turn counter-clockwise to the "PILOT" position.

8. Push in the control knob all the way and hold it. With the other hand push in the red ignitor button until you hear a click. Now observe closely the pilot burner located on the rear center-left hand side of the main burner. If a flame has appeared then continue to depress the control knob for 20 seconds. If the flame did not appear then continue to depress the red ignitor button every 5 seconds until a flame is established. NOTE: If after 30 seconds a flame has not yet been established then turn the control knob back to the off position and repeat steps 5, 6 & 7.
9. Once the pilot has been established hold the control knob in the depressed position for approximately 25 seconds before releasing. If the flame goes out then repeat steps 7 and 8.
10. Now turn the control knob to the "ON" position. The burner will not light unless the wall switch thermostat or remote control is turned "ON" or in the case of the thermostat there is a call for heat.
11. Close the access door and turn all electric power back to the appliance.

## TO TURN OFF THE APPLIANCE

1. Set the thermostat to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Open the control access door.
4. Push in the gas control knob slightly and turn clockwise to the "OFF" position. Do not force.
5. Replace control access panel.



## CAUTION

Do not wire 120 Volt power to Millivolt switches or thermostats.



## WARNING

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

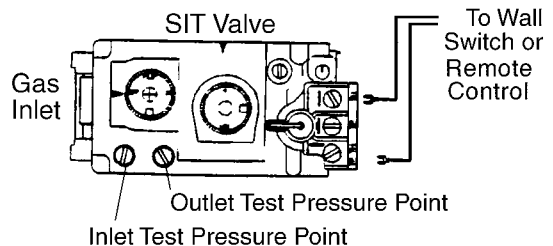
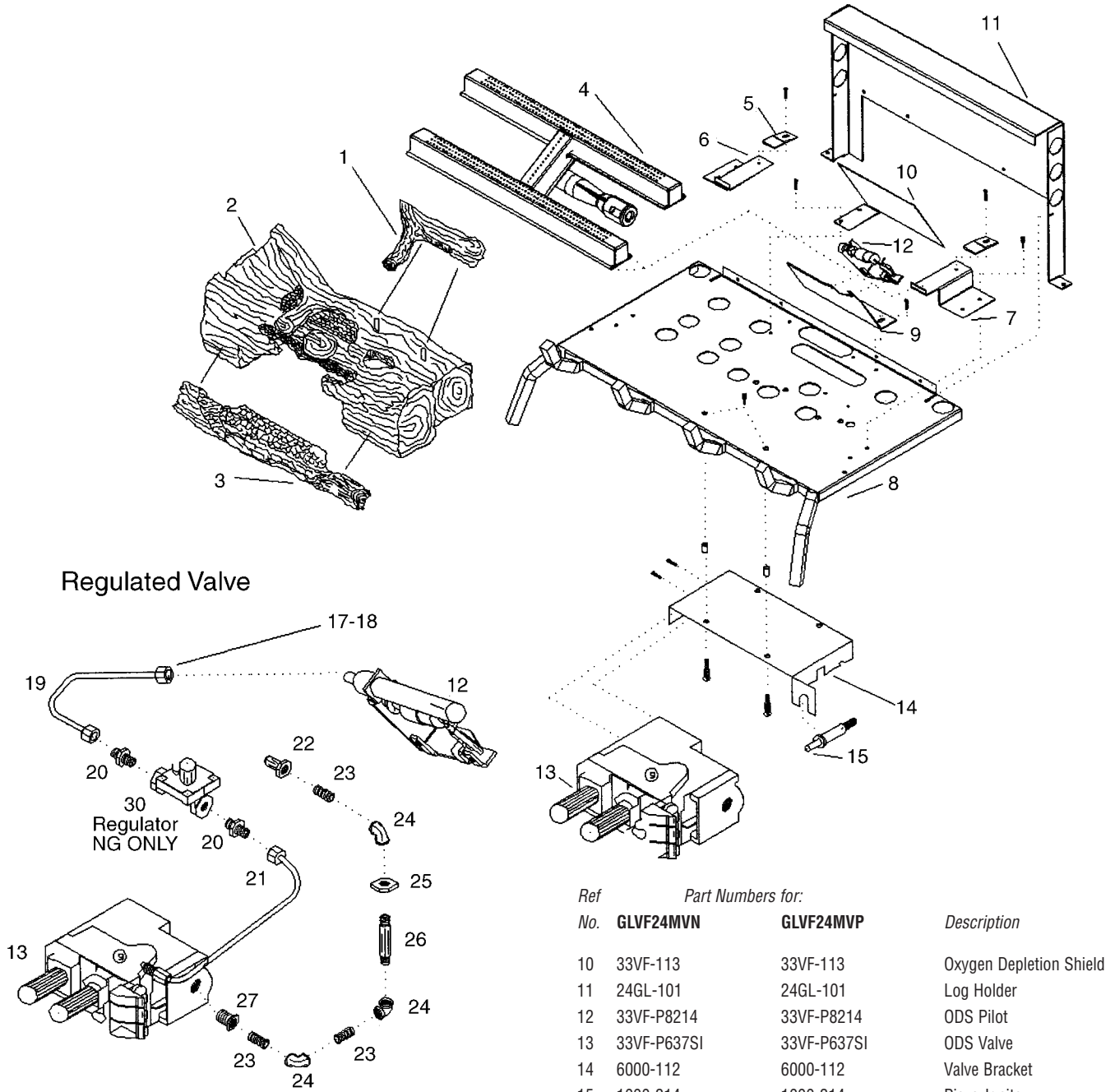


FIGURE 12 – Millivolt Models

# ILLUSTRATED PARTS LIST

## VENT FREE 24" LOG SET PARTS AND ASSEMBLY with SIT Nova Valve

Models: GLVF24MVN, GLVF24MVP



### Regulated Valve

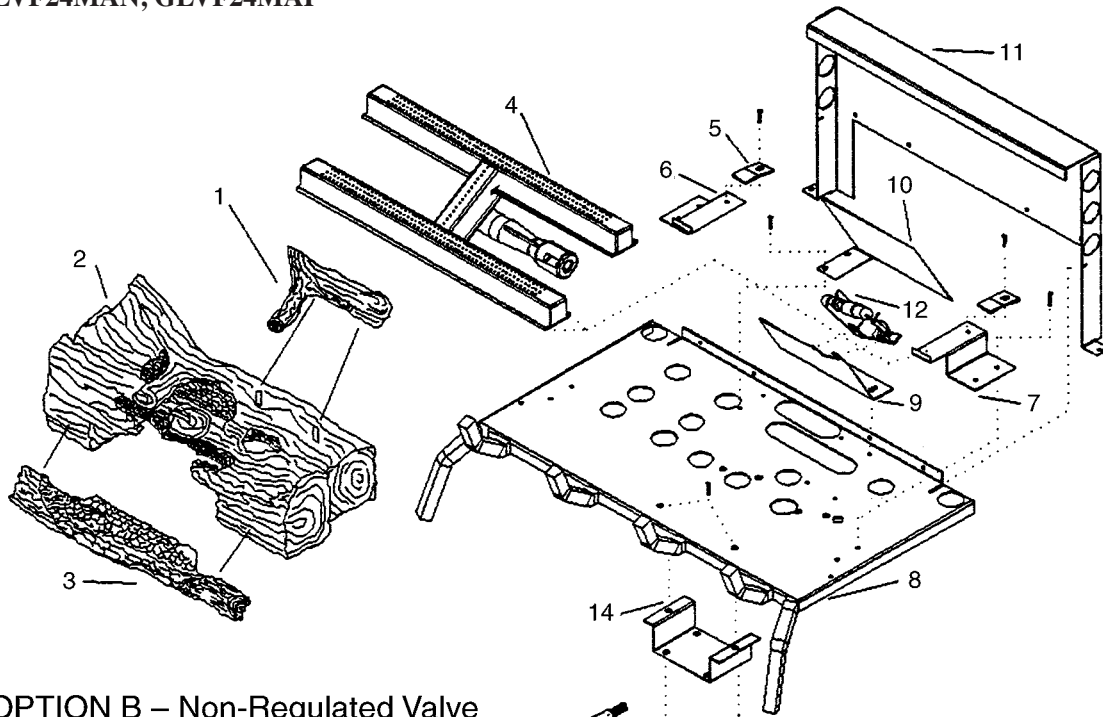
Ref No.	Part Numbers for:		Description
	GLVF24MVN	GLVF24MVP	
1	Sold as a set	Sold as a set	Top Branch
2	Sold as a set	Sold as a set	Main Log Set
3	Sold as a set	Sold as a set	Front Log
4	24GL-200	24GL-200	Burner Assembly
5	4200-132	4200-132	Burner Hold Down
6	33VF-110L	33VF-110L	LH Burner Bracket
7	33VF-110R	33VF-110R	RH Burner Bracket
8	24GL-105	24GL-105	Bottom Burner Pan
9	33VF-106	33VF-106	Pilot Bracket

Ref No.	Part Numbers for:		Description
	GLVF24MVN	GLVF24MVP	
10	33VF-113	33VF-113	Oxygen Depletion Shield
11	24GL-101	24GL-101	Log Holder
12	33VF-P8214	33VF-P8214	ODS Pilot
13	33VF-P637SI	33VF-P637SI	ODS Valve
14	6000-112	6000-112	Valve Bracket
15	1000-214	1000-214	Piezo-Igniter
17	33VF-P603VE	33VF-P603VE	Compression Sleeve $\frac{3}{16}$
18	33VF-P613VE	33VF-P613VE	Compression Nut $\frac{3}{16}$
19	33VF-P316VE	33VF-P316VE	Alt Tubing $\frac{3}{16}$
20	33VF-P683VE	33VF-P683VE	Connector $\frac{3}{16}$
21	33VF-P316VE	33VF-P316VE	Alt Tubing $\frac{3}{16}$
22	1000-255	1000-255	Burner Orifice
23	1000-253	1000-253	Closed Nipple
24	2000-213	2000-213	Elbow $\frac{1}{2}$
25	1000-P203VE	1000-P203VE	Lock Nut $\frac{1}{8}$
26	1000-P200VE	1000-P200VE	Nipple $\frac{1}{8}$ x $2\frac{1}{2}$
27	1000-P202VE	1000-P202VE	Bushing
30	33VF-P245M	N/A	Regulator

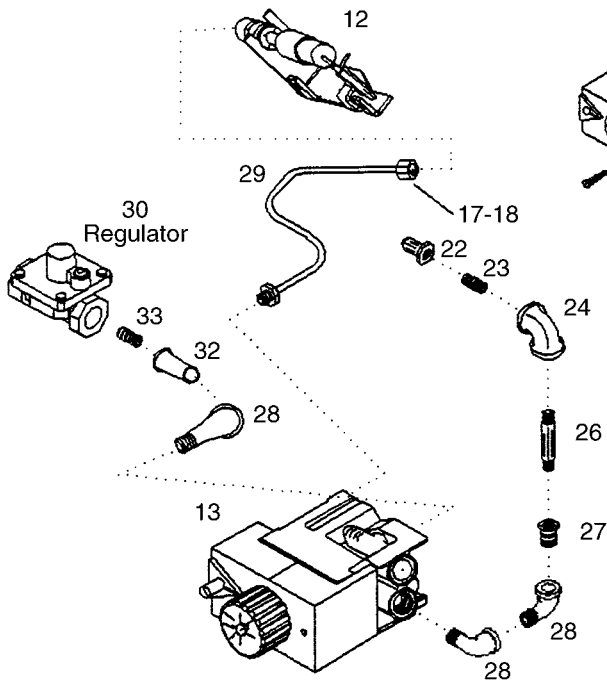
# ILLUSTRATED PARTS LIST Cont.

## VENT FREE 24" LOG SET PARTS AND ASSEMBLY with SIT Euro-Valve

Models: GLVF24MAN, GLVF24MAP



### OPTION B – Non-Regulated Valve



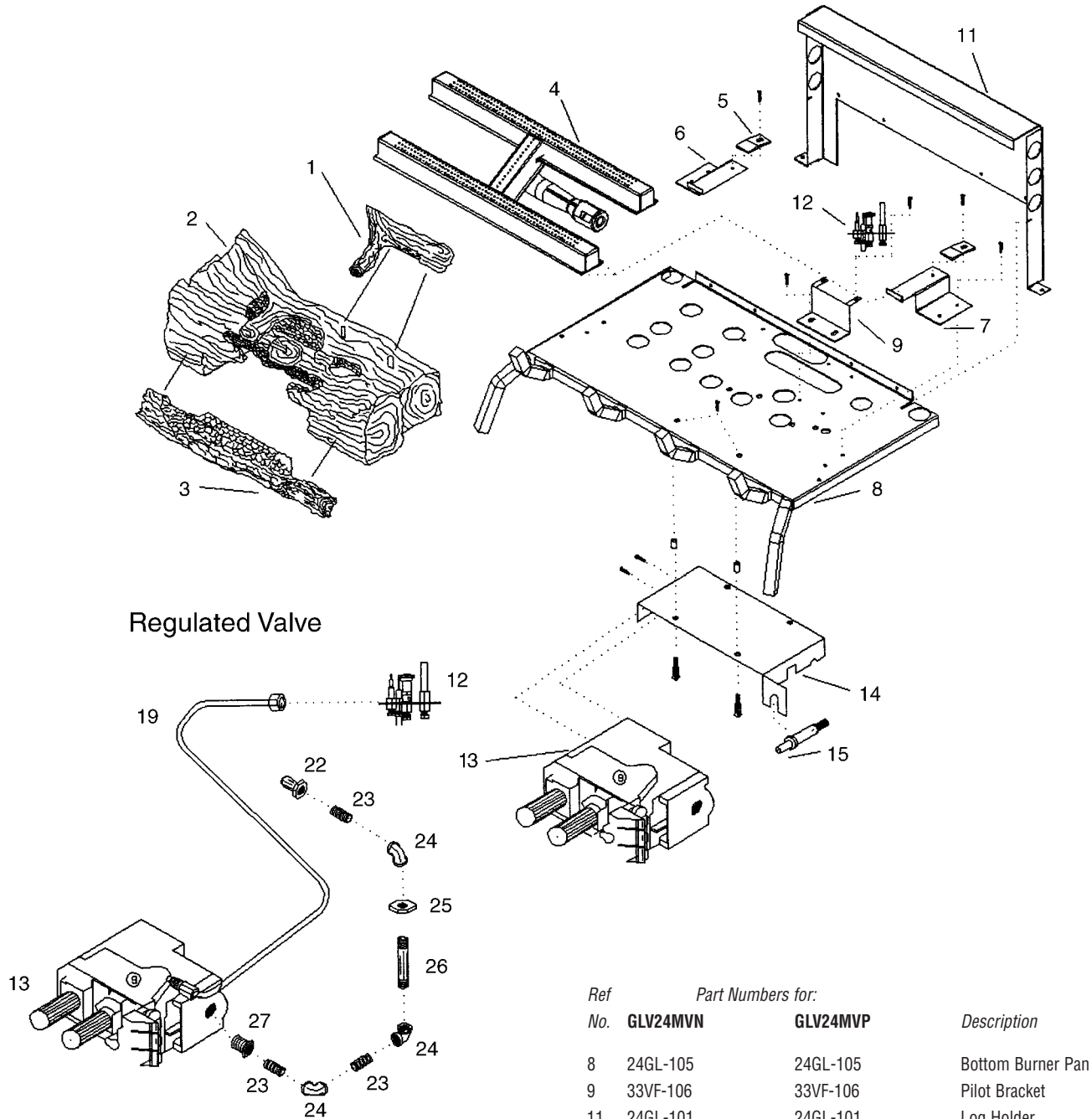
Ref No.	Part Numbers for:		Description
	GLVF24MAN	GLVF24MAP	
1	Sold as a set	Sold as a set	Top Branch
2	Sold as a set	Sold as a set	Main Log Set
3	Sold as a set	Sold as a set	Front Log
4	24GL-200	24GL-200	Burner Assembly
5	4200-132	4200-132	Burner Hold Down
6	33VF-110L	33VF-110L	LH Burner Bracket
7	33VF-110R	33VF-110R	RH Burner Bracket

Ref No.	Part Numbers for:		Description
	GLVF24MAN	GLVF24MAP	
8	24GL-105	24GL-105	Bottom Burner Pan
9	33VF-106	33VF-106	Pilot Bracket
10	33VF-113	33VF-113	Oxygen Depletion Shield
11	24GL-101	24GL-101	Log Holder
12	33VF-P8213	33VF-P8213	ODS Pilot
13	33VF-P522SI	33VF-P522SI	ODS Valve
14	24GL-104	24GL-104	Valve Bracket
16	33VF-P617SI	33VF-P627SI	Rating Screw
17	33VF-P603VE	33VF-P603VE	Compression Sleeve 3/16"
18	33VF-P613VE	33VF-P613VE	Compression Nut 3/16"
22	1000-255	1000-255	Burner Orifice
23	1000-253	1000-253	Closed Nipple
24	2000-213	2000-213	Elbow 1/2"
25	1000-P203VE	1000-P203VE	Lock Nut 1/2"
26	1000-P200VE	1000-P200VE	Nipple 1/2" x 2 1/2"
27	1000-P202VE	1000-P202VE	Bushing
28	1000-245	1000-245	Elbow Street 3/8"
29	33VF-P316VE	33VF-P316VE	Alt Tubing 3/16"
30	33VF-P295M	33VF-P297M	Regulator
32	33VF-P124VE	33VF-P124VE	Street 3/8" x 45 degree
32	33VF-P112VE	33VF-P112VE	Nipple 3/8" x 1 1/2"

# ILLUSTRATED PARTS LIST Cont.

## VENTED 24" LOG SET PARTS AND ASSEMBLY with SIT Nova Valve

Models: GLV24MVN, GLV24MVP



Regulated Valve

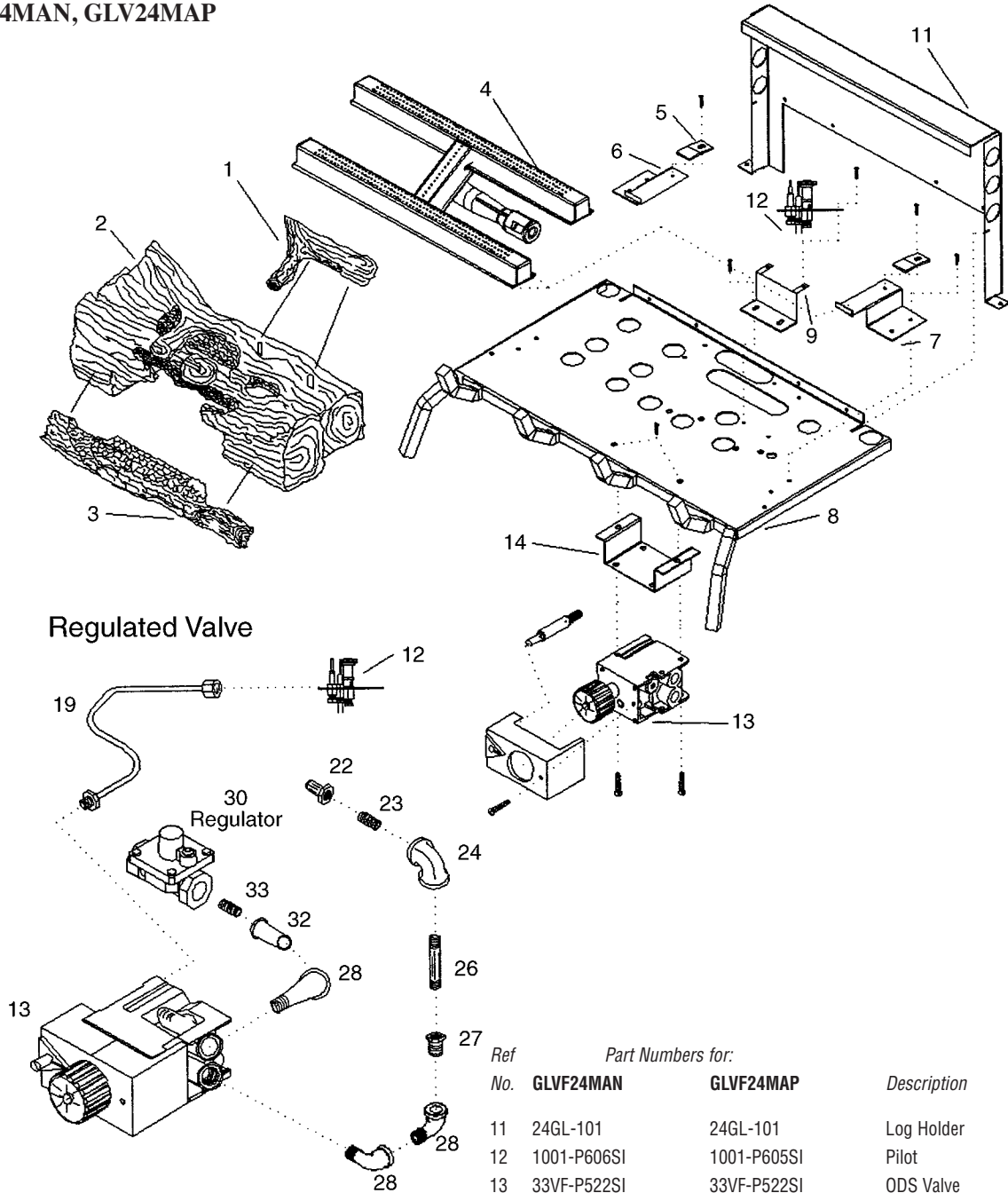
Ref No.	Part Numbers for:		Description
	GLV24MVN	GLV24MVP	
1	Sold as a set	Sold as a set	Top Branch
2	Sold as a set	Sold as a set	Main Log Set
3	Sold as a set	Sold as a set	Front Log
4	24GL-200	24GL-200	Burner Assembly
5	4200-132	4200-132	Burner Hold Down
6	33VF-110L	33VF-110L	LH Burner Bracket
7	33VF-110R	33VF-110R	RH Burner Bracket

Ref No.	Part Numbers for:		Description
	GLV24MVN	GLV24MVP	
8	24GL-105	24GL-105	Bottom Burner Pan
9	33VF-106	33VF-106	Pilot Bracket
11	24GL-101	24GL-101	Log Holder
12	1001-P606SI	1001-P606SI	Pilot
13	1001-634SI	1001-633SI	Valve
14	6000-112	6000-112	Valve Bracket
15	1000-214	1000-214	Piezo
19	1000-220	1000-220	Alt Tubing ¼"
20	33VF-P683VE	33VF-P683VE	Connector ⅜"
22	1000-255	1000-255	Burner Orifice
23	1000-253	1000-253	Closed Nipple
24	2000-213	2000-213	Elbow ⅜"
25	1000-P203VE	1000-P203VE	Locked Nut ⅜"
26	1000-P200VE	1000-P200VE	Nipple ⅜" x 2½"
27	1000-P202VE	1000-P202VE	Bushing

# ILLUSTRATED PARTS LIST Cont.

## VENTED 24" LOG SET PARTS AND ASSEMBLY with SIT Nova Valve

Models: GLV24MAN, GLV24MAP



Ref No.	Part Numbers for:		Description
	GLVF24MAN	GLVF24MAP	
1	Sold as a set	Sold as a set	Top Branch
2	Sold as a set	Sold as a set	Main Log Set
3	Sold as a set	Sold as a set	Front Log
4	24GL-200	24GL-200	Burner Assembly
5	4200-132	4200-132	Burner Hold Down
6	33VF110L	33VF-110L	LH Burner Bracket
7	33VF-110R	33VF-110R	RH Burner Bracket
8	24GL-105	24GL-105	Bottom Burner Pan
9	24GL-106	24GL-106	Pilot Bracket

Ref No.	Part Numbers for:		Description
	GLVF24MAN	GLVF24MAP	
11	24GL-101	24GL-101	Log Holder
12	1001-P606SI	1001-P605SI	Pilot
13	33VF-P522SI	33VF-P522SI	ODS Valve
14	24GL-104	24GL-104	Valve Bracket
16	33VF-P242SI	33VF-P627SI	Rating Screw
19	1000-220	1000-220	Alt Tubing ¼
22	1000-255	1000-255	Burner Orifice
23	1000-253	1000-253	Closed Nipple
24	2000-213	2000-213	Elbow ½
25	1000-P203VE	1000-P203VE	Lock Nut ¼
26	1000-P200VE	1000-P200VE	Nipple ¼ x 2½
27	1000-P202VE	1000-P202VE	Bushing
28	1000-245	1000-245	Elbow Street ¾
30	33VF-P299M	33VF-P100M	Regulator
32	33VF-P124VE	33VF-P124VE	Street ¾ x 45 Degree
33	33VF-P112VE	33VF-P112VE	Nipple ¾ x 1½



## TROUBLESHOOTING

**NOTE:** all troubleshooting items are listed in order of operation.



## WARNING

Turn off and let cool before servicing. Only a qualified service person should service and repair heater.

### **When igniter button is pressed, there is no spark at ODS/Pilot.**

#### *Possible Cause*

1. Igniter electrode positioned wrong.
2. Igniter electrode is broken.
3. Igniter electrode not connected to igniter cable.
4. Igniter cable pinched or wet.
5. Piezo-igniter nut is loose.
6. Broken igniter cable.
7. Bad piezo-igniter.

#### *Remedy*

1. Replace igniter.
2. Replace igniter.
3. Reconnect igniter cable.
4. Free igniter cable if pinched by any metal or tubing. Keep igniter cable dry.
5. Tighten nut.
6. Replace igniter cable.
7. Replace piezo-igniter.

### **Appliance produces unwanted odors.**

#### *Possible Cause*

1. Appliance burning vapors from paint, hair spray, glues, etc.
2. Gas leak.

#### *Remedy*

1. Ventilate room. Stop using odor-causing products while heater is running
2. Locate and correct all leaks.

### **Appliance shuts off in use.**

#### *Possible Cause*

1. Not enough fresh air is available for ODS/pilot to operate.
2. Low line pressure.
3. ODS/pilot is partially clogged.

#### *Remedy*

1. Open window and/or door ventilation.
2. Contact local gas company.
3. Clean ODS/pilot.

### **Gas odor even when control knob is in OFF position.**

#### *Possible Cause*

1. Gas leak.
2. Control valve defective.

#### *Remedy*

1. Locate and correct all leaks.
2. Replace control valve.

### **When igniter button is pressed, there is a spark at ODS/pilot, but no ignition.**

#### *Possible Cause*

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.

#### *Remedy*

1. Turn on gas supply or open manual shutoff valve.
2. Turn control knob while in PILOT position.
3. Press control knob in 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.**

#### *Possible Cause*

1. Control knob not fully pressed in.
2. Control knob not pressed in long enough.
3. Manual shutoff valve not fully open
4. Thermocouple connection loose at valve.

#### *Remedy*

1. Press control knob in fully.
2. After ODS/pilot lights, keep control knob pressed in for 30 seconds.
3. Fully open manual shutoff valve.
4. Hand tighten until snug, then tighten 1/4 turn more.

# TROUBLESHOOTING Cont.

5. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out.  
Problem could be caused by one or both of the following:  
A) Low gas pressure  
B) Dirty or partially clogged ODS/pilot.
6. Thermocouple damaged.
7. Control valve damaged.
5. Contact local gas company.
6. Replace thermocouple
7. Replace control valve.

## **One or both burners do not light after ODS/pilot is lit.**

### *Possible Cause*

1. Burner orifice is clogged.
2. Burner orifice diameter is too small.
3. Inlet pressure is too low.

### *Remedy*

1. Clean burner or replace light burner orifice.
2. Replace burner orifice.
3. Contact qualified service person.

## **Delayed ignition of burner.**

### *Possible Cause*

1. Manifold pressure is too low.
2. Burner orifice is clogged.

### *Remedy*

1. Contact local gas company.
2. Clean burner or replace burner orifice.

## **Burner backfiring during combustion.**

### *Possible Cause*

1. Burner orifice is clogged or damaged.
2. Burner is damaged.
3. Gas regulator is defective.

### *Remedy*

1. Clean burner or replace burner orifice.
2. Replace burner.
3. Replace Gas regulator.

## **Slight smoke or odor during initial operation.**

### *Possible Cause*

1. Vapors from paint or curing process of logs.

### *Remedy*

1. 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 appears to smoke (after initial operation).**

### *Possible Cause*

### *Remedy*

1. Log heater is intended to be smokeless. Turn off heater and call qualified service person.

## **Heater produces a whistling noise when burner is lit.**

### *Possible Cause*

### *Remedy*

1. Turning control knob to HI position when burner is cold.
2. Air in gas line.
3. Dirty or partially clogged burner orifice.
1. Turn control knob to LO position and let warm up for a minute
2. Operate burner until air is removed from line. Have gas line checked by local gas company.
3. Clean burner or replace burner orifice.

## **No Gas to pilot.**

### *Possible Cause*

### *Remedy*

1. LP regulator shut down due to inlet pressure being too high.
1. Verify LP tank regulator is installed and set at 11 to 13 inches w.c.
2. Replace LP regulator on heater.



## LIMITED LIFETIME WARRANTY

This Limited Lifetime Warranty applies only while the unit remains at the site of the original installation and only if the unit is installed inside the continental United States, Alaska, Hawaii, and Canada. The warranty applies only if the unit is installed and operated in accordance with the printed instructions and in compliance with applicable installation and building codes and good trade practices.

### BASIC ONE YEAR WARRANTY

During the first year after installation, we will provide a replacement for any component part of your unit found to be defective in materials or workmanship, including labour costs. Repair work requires prior approval by Kingsman, labour costs are based on a predetermined rate schedule and any repair work must be done through an authorized Kingsman dealer.

### LIMITED LIFETIME WARRANTY

The heat exchanger, combustion chamber and burner of every Kingsman product excluding the Outdoor Firepit are warranted against materials or workmanship during the period the product is owned by the original owner. The part to be replaced must be returned to our distributor in exchange for the replacement part. Any labor, material, freight and/or handling charges associated with any repair or replacement pursuant to this Limited Lifetime Warranty will not be covered by this warranty.

### GENERAL TERMS

In lieu of providing a replacement part, we may, at our option, provide the distributor's component purchase price from us or a credit equal to the distributors component purchase price from us toward the purchase of any new unit which we distribute. If a credit is given in lieu of a replacement part, the rating plate from the unit being replaced must be submitted on a warranty claim, and the unit being replaced must be made available to our distributor for disposition.

In establishing the date of installation for any purpose, including determination of the starting date for the term of this Limited Lifetime Warranty, reasonable proof of the original installation date must be presented\*, otherwise the effective date will be based upon the date of manufacture plus thirty (30) days.

We will not be responsible for and you, the user, will pay for: (a) damages caused by accident, abuse, negligence, misuse, riot, fire, flood, or Acts of God (b) damages caused by operating the unit where there is a corrosive atmosphere containing chlorine, fluorine, or any other damaging chemicals (other than in a normal residential environment) (c) damages caused by any unauthorized alteration or repair of the unit affecting its stability or performance (d) damages caused by improper matching or application of the unit or the unit's components (e) damages caused by failing to provide proper maintenance and service to the unit (f) any expenses incurred for erecting, disconnecting or dismantling the unit (g) parts or supplies used in connection with service or maintenance (h) damage repairs, inoperation or inefficiency resulting from faulty installation or application (i) electricity or fuel costs or any increase in electricity or fuel cost whatsoever including additional or unusual use of supplemental electric heat.

We shall not be liable for any incidental, consequential, or special damages or expenses in connection with any use or failure of this unit. We have not made and do not make any representation or warranty of fitness for a particular use or purpose, and there is no implied condition of fitness for a particular use or purpose. We make no express warranties except as stated in this Limited Lifetime Warranty. No one is authorized to change this Limited Lifetime Warranty or to create for us any other obligation or liability in connections with this unit. Any implied warranties shall last for one year after the original installation. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages or do not allow limitations on how long an implied warranty or condition lasts, so the above limitations or exclusions may not apply to you. The provisions of this limited warranty are in additions to and not a modification of or subtraction from any statutory warranties and other rights and remedies provided by law.

Save this certificate. It gives you specific legal rights, and you may also have other rights which may vary from state to state and province to province.

In the event your unit needs servicing, contact your dealer or contractor who installed or serviced your unit. When requesting service, please have the model and serial number from each unit readily available. If your dealer needs assistance, the distributor is available for support and we, in turn support the distributor's efforts.

Fill in the installation date and model and serial numbers of the unit in the space provided below and retain this limited warranty for your files.

**Model No.** \_\_\_\_\_ **Serial No.** \_\_\_\_\_ **Date installed** \_\_\_\_\_

**Dealer or Contractor Name:** \_\_\_\_\_

\*To receive advantage of your warranty, you must retain the original records that can establish the installation date of your unit.