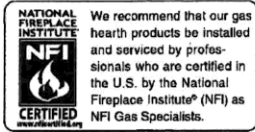


# INSTALLATION AND OPERATION GUIDE FOR LOST RIVER PRODUCTS (VENTLESS ONLY) BLACK DIAMOND SERIES 2.0



DESIGN CERTIFIED to  
UNVENTED - CSA / ANSI Z21.11.2:19



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

**NOTE:** ADEQUATE FIREPLACE VENTILATION IS REQUIRED FOR SAFETY.  
READ INSTRUCTIONS FULLY BEFORE INSTALLING OR OPERATING.  
**INSTALLER:** LEAVE THIS MANUAL WITH THE APPLIANCE.  
**CONSUMER:** RETAIN THIS MANUAL FOR FUTURE REFERENCE.

## **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.

## **WHAT TO DO IF YOU SMELL GAS**

1. Open a window.
2. Do not try to light any appliance.
3. Do not touch any electrical switch; do not use the phone in your building.
4. Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
5. If you cannot reach your gas supplier, call the fire department.

## **FOR YOUR SAFETY**

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

## **IMPORTANT:**

Installation and service must be performed by a qualified professional installer, service agency, or the gas supplier. Improper installation, adjustments, alteration, service, or maintenance can cause personal injury or property damage. Refer to this manual.

This appliance operates as an unvented room heater when fitted to a solid fuel burning masonry fireplace or UL 127 approved factory-built fireplace with the flue damper closed. It may also be installed in an approved unvented fireplace.

## **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. REFERENCE FUEL GAS CODE NFPA 54, ANSI Z223.1 REFER TO PAGE 2 OF THE INSTALLATION INSTRUCTIONS.**

This appliance is designed to supplement a current heating system. It is not designed to be used as a primary heat source.

## **NOTE:**

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. Solid fuels shall not be burned in a fireplace where a decorative appliance is installed.

## IMPORTANT SAFETY INFORMATION

### UNVENTED ROOM HEATER GENERAL SAFETY INFORMATION

#### A. WARNING: CARBON MONOXIDE POISONING MAY LEAD TO DEATH.

Early signs of carbon monoxide poisoning are similar to the flu, with headaches, dizziness, and/or nausea. If you have these signs, the gas appliance may not be installed correctly, or may not be working properly. **GET FRESH AIR AT ONCE! STOP USING THE APPLIANCE IMMEDIATELY!** Some people, including pregnant women; persons with heart or lung disease, asthma, or anemia; those under the influence of alcohol; and persons at high altitudes, are more affected by carbon monoxide than others. **(The appliance must be serviced by a qualified professional service technician before use).**

- B. If any soot appears on the appliance or other areas of the fireplace in which this appliance is installed, shut system off and call a qualified professional service technician, **vent-free gas burner system technician**, or your local gas company.
- C. This appliance may be installed in an aftermarket, permanently located, manufactured (mobile) home, where not prohibited by local codes. Installation of appliances designed for manufactured home (U.S. only) or mobile home installation must conform with the Standard *Mobile Housing*, CAN/CSA Z240 MH, in Canada, or with the *Manufactured Home Construction and Safety Standard*, Title 24 CFR, Part 3280, in the United States, or when such a standard is not applicable, *Manufactured Home Installations Standard ANSI/NCSCS A225.1/NFPA 501A*.
- D. Eliminate drafts **before** using the gas appliance by closing heating and air conditioning vents, returns, and outside air vents. Fans blowing directly into the fireplace must be turned off when this appliance is operating.
- E. **WARNING:** This appliance is for installation only in a solid-fuel-burning masonry or UL 127 factory-built fireplace or in a listed ventless firebox enclosure. Stainless steel models are also permitted in certified RHP/AFD fireplaces. This appliance has been design certified for these installations. Exception: DO NOT install this appliance in a factory-built fireplace that includes instructions stating it has not been tested or should not be used with unvented gas burner systems.
- F. **WARNING: DO NOT MODIFY THIS VENT-FREE HEATER OR ITS CONTROLS. Any change may be dangerous.** Improper installation or use of your vent-free gas appliance can cause serious injury or death from fire, burns, explosions, or carbon monoxide poisoning.
- G. State and local codes may only allow operation of this appliance in a vented configuration. Check your state or local codes.
- H. WHEN INSTALLING AS A DECORATIVE VENTED APPLIANCE, THE UNIT MUST CONFORM TO ALL LOCAL CODES AND TO THE LATEST EDITION OF THE NATIONAL FUEL GAS CODE ANSI Z223.1/NFPA54.

#### **A WARNING: FIRE, EXPLOSION, AND ASPHYXIATION HAZARD**

**Improper adjustment, alteration, service, maintenance, or installation of this burner system or its controls can cause death or serious injury. Read and follow instructions and precautions in this manual.**

**Important:** For safe operation and proper performance of this product and to comply with certification, listings, and building code acceptances, use **ONLY LRP** controls, parts, and accessories that have been specifically listed or certified for use with this burner system. Use of other controls, parts, or accessories is prohibited and will void all warranties, certifications, listings, and building code approvals, and may cause property damage, personal injury, and loss of life.

## **IMPORTANT PRE-INSTALLATION AND FIREPLACE SAFETY INFORMATION**

**To determine the safest and most efficient location for your Vent Free Fireplace, you must take into consideration the following guidelines.**

1. This appliance operates as an unvented room heater certified under CSA/ANSI Z21.11.2:19 when fitted to a masonry or factory-built fireplace with the flue damper open or closed. It may also be installed in approved vent free fireplace. If installing in an approved vent free firebox, refer to their instruction guide for proper installation. Solid fuels shall not be burned in a fireplace where an unvented room heater is installed.
2. Do not use a natural gas set for propane or a propane set for natural gas. If the gas type is not correct. **DO NOT INSTALL.** Contact your dealer for immediate assistance. Any change to this heater or its controls can be dangerous.
3. Gas log sets must be installed by personnel qualified for installing gas appliances.
4. The location must allow for proper clearances for accessibility of servicing and proper operation (see section on Fireplace Clearances - page 4).
5. Consider a location where heat output would not be affected by drafts, air conditioning ducts, windows, or doors. Do not allow fans to blow directly into the fireplace, avoid any drafts that alter burner flame patterns.
6. Inspect area surrounding the location chosen for the fireplace for possible air drafts that may affect the flames and possibly cause sooting. Air drafts may be caused by a ceiling fan near the fireplace, a hot furnace or an open door.
7. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies. Young children should be carefully supervised when they are in the same room with the appliance. It is recommended that adults be present when this gas appliance is operating. It is recommended that this unit is not left burning when unattended or while anyone is sleeping.
8. Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
9. Install in an area providing adequate combustion and ventilation air (see section on adequate combustion and ventilation air requirements - page 2).
10. Do not install in a building that is of unusually tight construction. Unusually tight construction is defined as construction where:
  - a. Walls and ceiling exposed to the outside atmosphere have a continuous wall vapor retarder with a rating of 1 perm 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 penetration for plumbing, electrical and gas lines and at other openings.
11. Do not install this heater in bedrooms, bathrooms, or recreational vehicles.
12. This appliance may be installed in an aftermarket manufactured (mobile) home, where not prohibited by state or local codes.
13. Maintain adequate clearances around air openings.
14. When glass fireplace doors are used, always operate gas log set with the doors fully open to allow for proper combustion air and to keep control valves from overheating.
15. Keep appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids. Do not allow clothing or flammable materials on or near the fireplace. The flame in this appliance is not isolated from the air space it heats and it will ignite flammable vapors, dust particles or other combustible materials that come in contact with it which can result in an explosion or fire.

# SPECIFICATIONS AND REQUIREMENTS

**WARNING: This appliance is for installation only in a:**

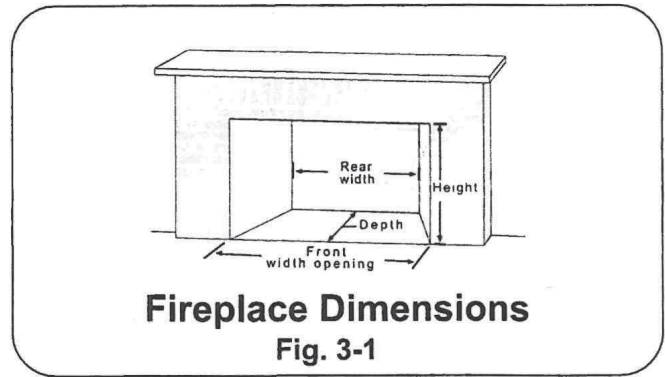
1. Solid-fuel-burning masonry or UL-127 factory-built fireplace \*, or
2. Listed ventless firebox enclosure.

**LRP** stainless steel models are also permitted in certified RHP/AFD fireplaces.

has been designed certified for these installations.

Exception: DO NOT install this appliance in a factory built fireplace that includes instructions stating it has not been tested or should not be used with unvented burner systems.

**Note:** Installation in any other fireplace is prohibited and will void any approvals and warranties.



**Any installation of this appliance is subject to minimum fireplace size requirements below:**

Burner Model	Minimum Fireplace Size (refer to Fig. 3-1)				BTU Rating			
	Width		Depth	Height	Nat. Gas		L.P. Gas	
	Front	Rear*			Low Setting†	High Setting	Low Setting†	High Setting
<b>BDS-18</b>	28"	20"	14"	17"				
<b>BDS-24</b>	32"	22"	14"	17"	19k	37k	24k	37k

\* based on minimum depth

This burner system is equipped with an Oxygen Depletion Sensor (ODS) safety pilot system. The ODS senses the amount of oxygen available in the room and shuts the burner system off before the oxygen level drops below 18%. The pilot can only be relit when fresh air is available. **This may require opening a window or a door to another room or cracking the damper open slightly.**

This burner system has been certified to two standards:

UNVENTED ROOM HEATER-A CSA / ANSI Z21.11.2:19

VENTED DECORATIVE APPLIANCE-ANSI Z21.60

Check local or state codes to determine if vent-free heaters are permitted in your locality before you install this burner system as a vent-free appliance. If not permitted, you may install and operate this burner system as a vented appliance.

This unit may not be installed in a vented fireplace with a chimney of less than 15 feet in height.

Observing minimum fireplace dimensions and centering the appliance in the fireplace will ensure adequate clearance for accessibility for purpose of servicing and proper operation. It may be necessary to disconnect the unit for some types of service.

Minimum Permanent Free Opening in Chimney (when used as a vented appliance)		
Table 3-1	Factory built fireplaces*	
Chimney Height	16/18"	24/30"
15'	15 sq. in	17 sq. in
20'	13 sq. in	14 sq. in
25'	12 sq. in	12 sq. in
30'	11 sq. in	11 sq. in

\*For masonry-built fireplaces, add 10 sq. in. to amount

# PREINSTALLATION SPECIFICATIONS

## MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS AND MANTLE CLEARANCES

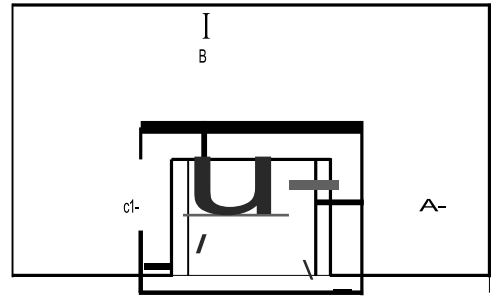
**IMPORTANT:** To ensure a safe installation into a masonry or factory-built fireplace, the following instructions must be carefully observed. If installing in a pre-manufactured fireplace, follow the clearance requirements accompanying that fireplace.

**Refer to Fig. 1 for the following dimensions:**

- A. Minimum left and right clearance to combustible walls = 15".
- B. Minimum clearance to combustible ceiling = 42".
- C. Minimum left and right-side clearances to mantle = 6".

Fig. 1

Minimum Clearances to Combustible Materials



**Note:** Clearances to Combustible Materials and Mantle Clearances are in place to provide adequate spacing to prevent a fireplace mantle or facing from catching fire. In most cases they should also be adequate to prevent any discoloration or warping due to heat. However, each Gas Log installation will present unique circumstances creating many variables beyond the control of the Gas Log Manufacturer, including paint or finish composition, previous heat exposure, quality of construction, air flow patterns etc. Because of these variables we cannot guarantee that heat warping or discoloration will never occur. The possibility of heat damage exists whether burning wood or gas logs.

Fig. 2

Natural Gas or Liquid Propane  
NO CANOPY USED

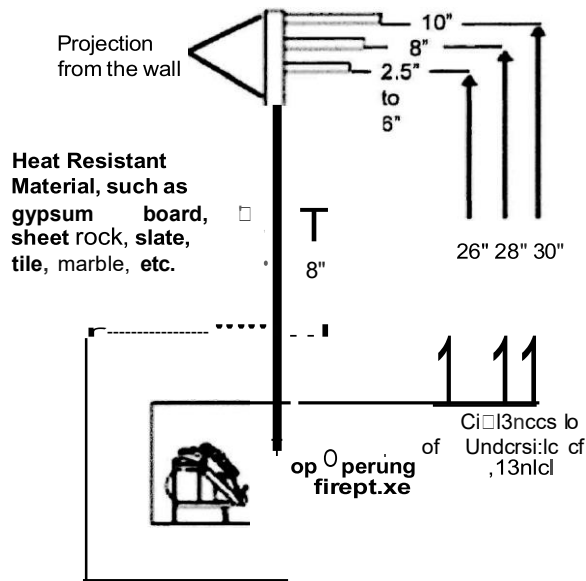
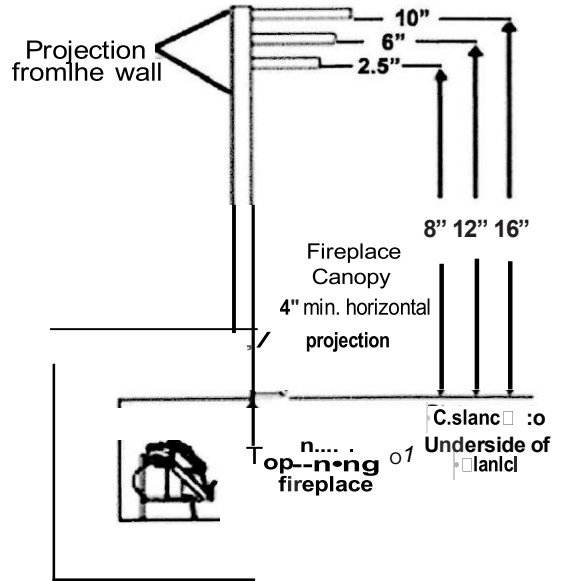


Fig. 3

Natural Gas or Liquid Propane  
CANOPY INSTALLED



**IMPORTANT:** Woodwork such as mantles and other combustible material must be installed as tested per Fig 2 or Fig 3. Heat resistant material are materials such as gypsum board, sheetrock, slate, tile marble etc. If the mantle and wall are both non-combustible, mantle clearances are not applicable.

**NOTE:** A hood (canopy) as shown in Fig 3 is used to deflect heat away from the fireplace face and mantle, reducing the chances of heat damage or discoloration. If using a hood, it must project a minimum of 4" from the face of the firebox. Contact your dealer to purchase a fireplace hood.

# PREINSTALLATION REUIREMENTS

## COMBUSTION AND VENTILATION AIR REQUIREMENT WORKSHEET

**WARNING:** IF THE AREA IN WHICH THE HEATER MAY BE OPERATED IS SMALLER THAN THAT DEFINED AS 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. CSA/ANSI Z21.11.2:19

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

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

**STEP ONE:** DETERMINE THE VOLUME OF SPACE IN CUBIC FEET.

LENGTH X WIDTH X HEIGHT= \_\_\_\_\_cu. Ft.  
(Include adjoining rooms with doorless passageways or ventilation grills between rooms.)

Example: 24' (L) X 16' (W) X 8' (H) = 3,072. cu. Ft.

**STEP TWO:** MULTIPLY THE VOLUME OF SPACE BY 20 BTU/Hr. TO DETERMINE THE MAXIMUM BTU/Hr. THE SPACE CAN SUPPORT.

Example: 3,072 cu. Ft. X 20 BTU/Hr. = 61,440 BTU/Hr.  
(Maximum BTU/Hr. the room can support)

**STEP THREE:** ADD THE BTU/Hr. OF ALL THE FUEL BURNING APPLIANCES IN THE SPACE.

VENT FREE HEATER \_\_\_\_\_BTU/Hr.

GAS APPLIANCE #1 \_\_\_\_\_BTU/Hr.

GAS APPLIANCE #2 \_\_\_\_\_BTU/Hr.

Example: VENT FREE HEATER 26,000 BTU/Hr.  
GAS APPLIANCE #1 35,000 BTU/Hr.  
TOTAL 61,000 BTU/Hr.

**NOTE: DO NOT INCLUDE DIRECT-VENT GAS APPLIANCES. DIRECT VENT IS SEALED COMBUSTION AND DRAWS COMBUSTION AIR FROM THE OUTDOORS.**

THE SPACE IN THE ABOVE EXAMPLE IS AN UNCONFINED SPACE BECAUSE THE 61,000 STU'S AN HOUR USAGE IS LESS THAN THE 61,440 BTU'S AN HOUR AVAILABLE. IF THE TOTAL STU'S AN HOUR USAGE IS GREATER THAN 61,440 STU'S AN HOUR THEN THE SPACE WOULD BE A CONFINED SPACE AND ADDITIONAL AIR MUST BE PROVIDED.

The National Fuel Gas Code 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 and unconfined space as a space whose volume is not 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.

## PREINSTALLATION CHECKLIST

**INSTALLER:** Please leave these instructions with the homeowner.

**HOMEOWNER:** Please retain these instructions for future reference.

State or local codes may only allow operation of this unit in a vented application. Check your state and local codes.

All **LRP** vent free room heaters comply with IAS U.S. Requirement 5-95.

The installation must conform with state and local codes or, in absence of local codes, to the National Fuel Gas Code, ANSI 2223.1

## FIREPLACE PREPARATION

**IMPORTANT:** 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.

1. Turn the gas supply to OFF.
2. Turn OFF all electrical power to blower (if applicable) before installing, servicing, or removing.
3. Clean the fireplace floor, walls, and chimney (if used) of any ashes, soot creosote, obstruction. *This will minimize any smell from the fireplace.* We recommend cleaning by a chimney sweep.
4. Any outside air ducts and/or ash dumps in the fireplace must be permanently closed at the time of appliance installation.
5. A mesh fireplace screen must be in place when the appliance is operating unless other provision for combustion air are provided, the screen shall have an opening(s) for introduction of combustion air.

This unit complies with 527 CMR 30.00 vent free appliance requirements for Massachusetts.

## INSTALLATION

**NOTE:** Before you proceed, make sure your gas supply is OFF!

**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.

**IMPORTANT:** This appliance cannot be used with or converted to a gas other than the type for which it was equipped at the factory.

**WARNING:** OPERATION OF THIS APPLIANCE ON GASES FOR WHICH IT IS NOT EQUIPPED MAY LEAD TO CARBON MONOXIDE POISONING.

**This product must be installed by a licensed plumber or gasfitter when installed within the Commonwealth of Massachusetts.**

**WARNING:** CONNECTING DIRECTLY TO AN UN-REGULATED L.P. TANK CAN CAUSE AN EXPLOSION.

Combustible Construction	Clearance to Fireplace Opening
Side Wall	15" / 381mm
Fascia	10" / 254mm
10" Deep Mantel	26" / 660mm

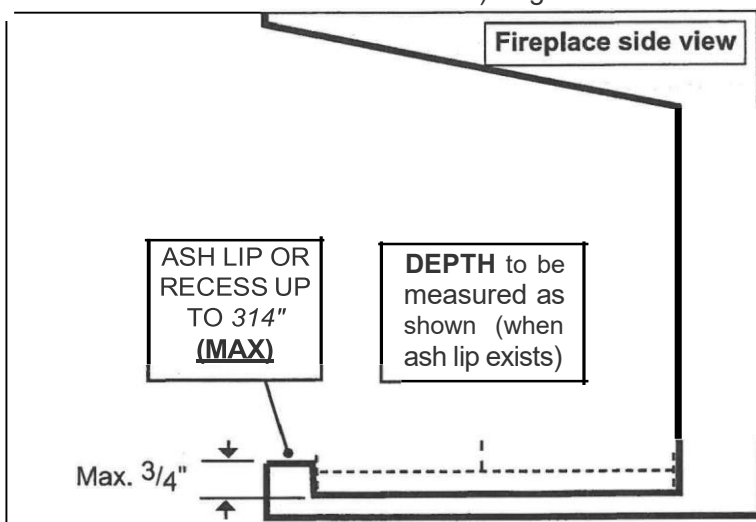
# INSTALLATION SAFETY INFORMATION

## INSTALLATION SAFETY GUIDELINES

- A. Carefully inspect the burner and log cartons for shipping damage. If any parts are missing/damaged, call your dealer. **Do not attempt** to install the appliance unless all parts are in good condition.
- B. Correct installation of the glass or the ceramic refractory log set and proper placement and installation of the burner assembly, including ember placement and Lava Granule placement, are imperative to safe operation of your set. Problems **WILL** occur if all items are not properly installed. Reference the INSTALLATION section, LOG SET PLACEMENT.
- C. When installing in a wood-burning fireplace, **center the appliance in the fireplace** while making certain that no part of the assembly protrudes (forward) beyond the face of the fireplace.  
**DO NOT PUSH THE UNIT ALL THE WAY TO THE BACK.**
- D. If you use Lava Granules, \_\_\_\_\_, for decorative use, do not allow these accessories into or onto any part of the burner or on the logs. Lava Granules, \_\_\_\_\_ used to accessorize the vent-free burner, should only be placed on the floor of the fireplace, in front of and to the sides of the burner, but away from the controls.
- E. **DO NOT PLACE** logs or other accessories, such as wood chips, pine cones, or vermiculite, on this appliance. These items will cause improper burning, sooting, and/or high levels of carbon monoxide. Additional logs and/or accessories may be placed around the burner system, as long as they do not interfere with the burning of your gas appliance.
- F. **Due to high temperatures, this appliance should be located out of traffic and away from furniture and draperies.**
- G. A fireplace screen must be in place when the appliance is operating. Unless other provisions for combustion air are provided, the screen shall have an opening(s) for introduction of combustion air.
- H. Connecting directly to an unregulated LP. tank can cause an explosion.
- I. 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 controls. This will ensure adequate airflow and guard against sooting. Raise the fireplace floor using noncombustible materials.
- J. An unvented room heater having an input rating of more than 10,000 Btu/hr (2931W) shall not be installed in a bedroom or bathroom (1 CSA/ANSI Z21.11.2:19 ).  
An unvented room heater having an input rating of more than 6,000 Btu/hr (1758W) per hour shall not be installed in a bathroom (1 CSA/ANSI Z21.11.2:19 ).

## ASH LIP/RECESS REQUIREMENTS (if applicable)

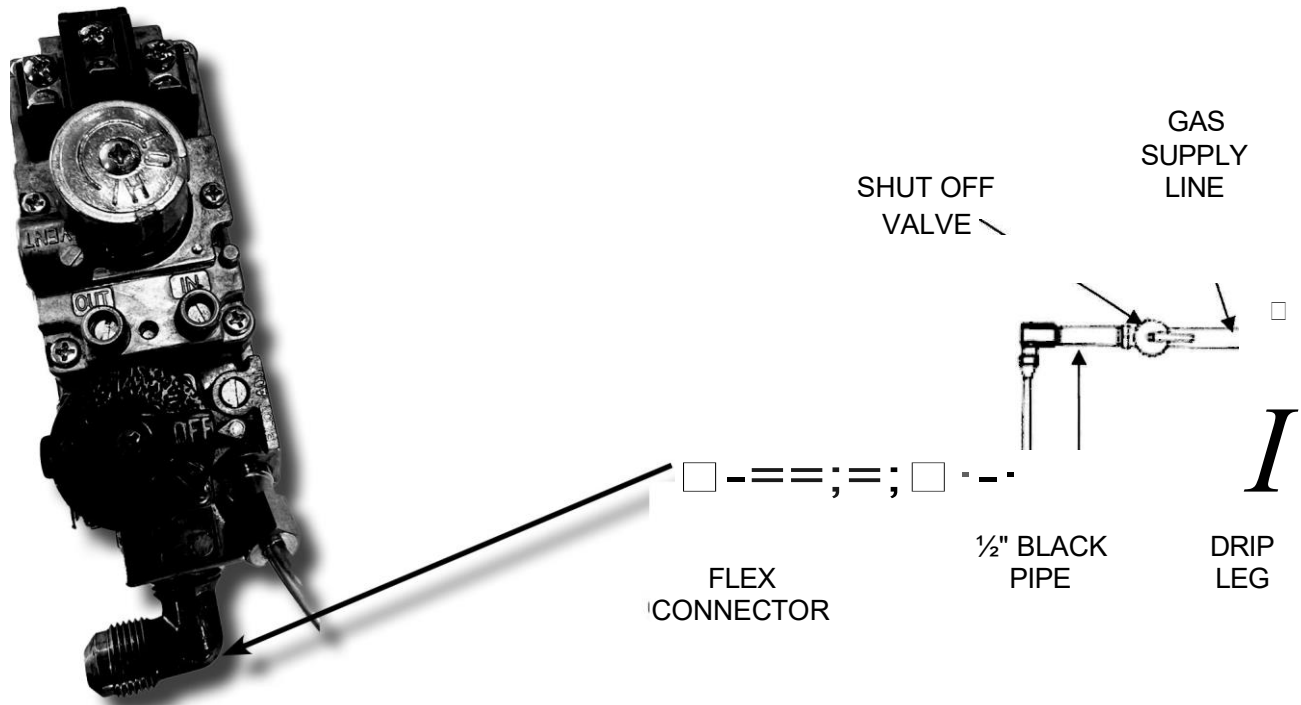
- **DO NOT** install this burner system in a fireplace with an ash lip or recess greater than  $3/4$ " .
- The depth (as indicated in the SPECIFICATIONS section) begins inside of the lip.



**Fig. 9-1** Ash lip/recess detail

## GAS CONNECTION

**WARNING:** ANY MODIFICATION TO THIS UNVENTED GAS 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.



### IMPORTANT STEPS TO FOLLOW WHEN MAKING THE GAS LINE CONNECTION

1. Consult your gas supplier for proper gas pipe sizing. Normally up to 50' of 1/2" inside diameter (ID) gas pipe will supply adequate volume for all vent free units.
2. The incoming gas line may be routed into the fireplace either from the left or right side.
3. Include a manual shutoff valve in the gas supply line so the appliance may be disconnected for servicing.
4. Center the burner system from side to side in the firebox. In a vented firebox, if the damper is used, the burner assembly should be located directly under the damper.
5. Use the 3/8" flex connector (provided in the accessory kit) to connect the gas supply line to the regulator on the burner assembly.
6. Always use an external regulator for all L.P. appliances to reduce the supply tank pressure to a maximum of 13" W.C. This is in addition to the regulator fitted to the heater.
7. Test all connections after turning gas supply on for leaks using a soap and water solution. DO NOT USE AN OPEN FLAME FOR LEAK TESTING.
8. It is most convenient to light the pilot and check the operation of the main burner with the logs not in place. After carefully checking the gas supply line for leaks and correcting any found, refer to the "LIGHTING INSTRUCTIONS" section to test the burner assembly.

**WARNING:** DO NOT USE A BLOWER INSERT, HEAT EXCHANGER INSERT OR OTHER ACCESSORY NOT APPROVED FOR USE WITH THIS HEATER.

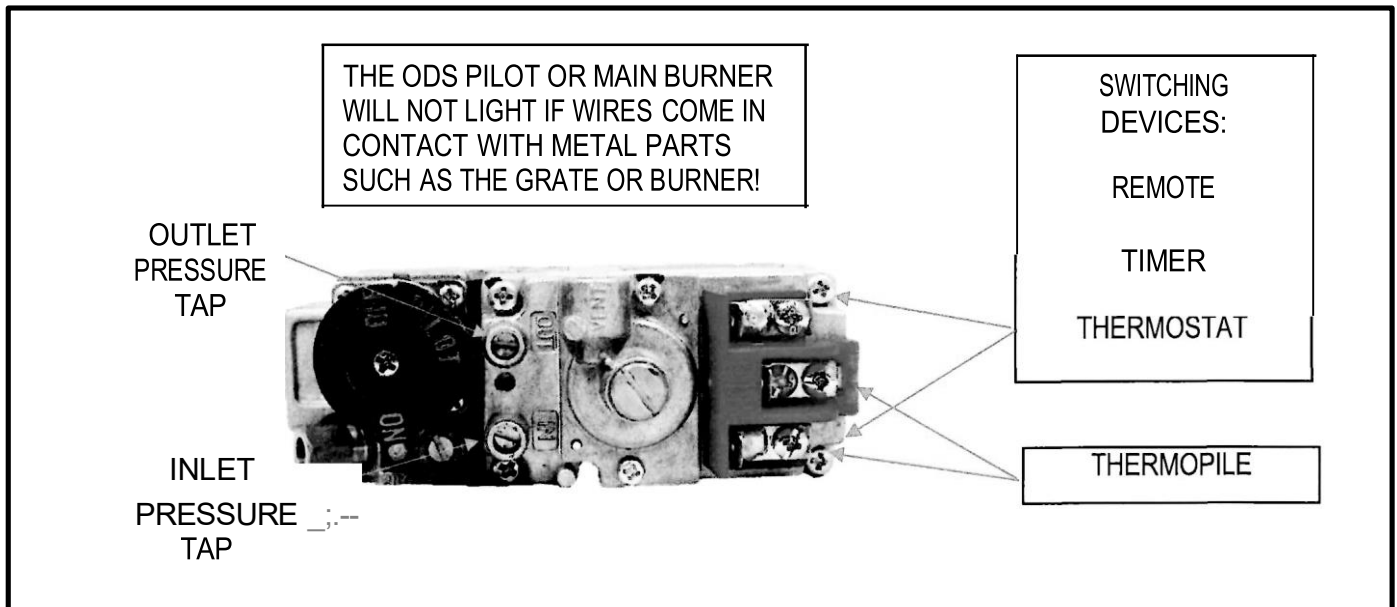
## GAS PRESSURE CHECK

**NOTE:** The appliance and the appliance main gas valve must be disconnected from the gas supply system during any pressure testing of that system at test pressures in excess of 0.5 psig (3.5 kPa). The appliance must be isolated from the gas supply piping system by closing its equipment shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 0.5 psig (3.5 kPa).

1. The gas valve controls the gas pressure, which can be checked at the pressure test point (1/8" NPT plug) located on the side of the valve (see schematic below).
2. The pressure should be checked with the heater burner and the control set to high (HI).
3. The pressure is preset and locked to avoid tampering. If the pressure is not as specified in "BTU Rating and Pressure Requirements" (pg. 3), contact your dealer.
4. Replace the test plug after measuring gas pressure. Check for gas leaks.

**IMPORTANT:** Do not use the 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 any gas control which has been under water.

## MILLIVOLT WIRING SCHEMATIC



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

## **OPERATIONAL SAFETY INFORMATION**

### **OPERATING YOUR UNVENTED GAS APPLIANCE SAFELY AND CORRECTLY**

- A. SOLID FUELS MUST NOT BE BURNED** in a fireplace where a decorative appliance is installed.
- B. GLASS DOORS MUST BE FULLY OPEN** when this vent-free gas appliance is operating. This appliance **MUST NOT BE ON** if glass doors are closed, as it can lead to sooting, burner outages, and possibly explosion, causing damage or injury.
- C. WARNING: DO NOT ALLOW DRAFTS INTO OR AROUND THE FIREPLACE. CLOSE (SHUT) HEATING AND AIR CONDITIONING VENTS, RETURNS, AND OUTSIDE AIR VENTS. DO NOT ALLOW FANS TO BLOW DIRECTLY INTO THE FIREPLACE. AVOID ANY DRAFTS THAT ALTER BURNER FLAME PATTERNS.** Sooting, excess carbon monoxide, or ODS pilot outages may occur due to drafts.
- D. WARNING: DO NOT USE A BLOWER INSERT, HEAT EXCHANGER INSERT,** or any other accessory that is not specifically certified for use with this vent-free gas appliance.
- E.** Make sure there is adequate combustion and ventilation air when this gas appliance is operating. You may need to crack the damper or open a window slightly.
- F. THIS APPLIANCE MUST BE MAINTAINED IN A WELL-CLEANED CONDITION AT ALL TIMES. REGULAR (AT LEAST ONCE PER YEAR) CLEANING OF THE BURNER AND ODS PILOT IS REQUIRED BY A QUALIFIED PROFESSIONAL SERVICE TECHNICIAN.**
- G.** To light this appliance, it may be necessary to purge the unit for longer than one minute after long periods of non-use.
- H.** If you operate this vent-free gas appliance fueled by L.P., operating characteristics may vary as the fuel in the tank approaches empty (**less than 1/4 full**). Sooting and other increases in combustion by-products will occur. Turn off the appliance, refill the L.P. tank, and have the burners cleaned.
- I.** During manufacturing, various parts of this unit are treated with oils or paints. Though not harmful, they may **produce annoying smoke and smells** as they are burned off during initial operation. This is a normal occurrence. Initial break-in period should **last four to six hours**; maximum ventilation should be provided by opening windows, doors, or chimney flue.
- J.** Keep the appliance area clear and free from combustible materials, gasoline, and other flammable vapors and liquids. Provide adequate clearance for accessibility for purpose of servicing and proper operation. Be especially cautious if this gas appliance is installed in a basement or converted garage.
- K. Do not place clothing or other flammable material on or near the appliance.** Matches, paper, garbage, or any other material must not be thrown on top of the logs, burner, or into the flame.
- L. Young children should be carefully supervised when they are in the same room with this appliance.**
- M. Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition.**

# OPERATION

## FOR YOUR SAFETY READ BEFORE LIGHTING

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

### WHAT TO DO IF YOU SMELL GAS:

- \*Do not try to light any appliance.
- \*Do not touch any electric switch; do not use any phone in your building.
- \* Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- \*If you cannot reach your gas supplier, call the fire department.

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

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it, call a qualified service technician. Force or attempt repair may result in a fire or explosion and may void your warranty.

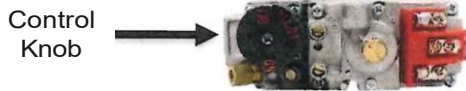
D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

## LIGHTING INSTRUCTIONS

**WARNING:** At no time should the "LIGHTING INSTRUCTION" tags be detached from the burner system. Removing the tags will void the manufacturer's warranty.

1. STOP! Read the safety information above on this label.
2. Turn off all electrical power in firebox before installing.
3. Depress the control knob and turn clockwise as far as it will go to reach the "OFF" position.
4. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you do not smell gas, go to the next step.
5. Depress the control knob and turn counterclockwise to the "PILOT" position.

Fig 10 GAS CONTROL



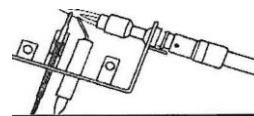
6. Push in control knob all the way and hold in.
  - \* If the control knob is not held in all the way the pilot will not stay lit when the knob is released.
  - \* Do not turn the knob when pushing it in.
7. Light the pilot (mounted in front of the back burner) by pushing the spark igniter button several times. This will cause a spark at the pilot which will ignite the pilot gas. If the spark does not work, light the pilot with a match.
  - \* When lighting the pilot it may take several seconds for gas to reach the pilot.
8. Continue to hold the control knob in all the way for g about 30 seconds after the pilot is lit.
9. Release the knob and it will pop back out. The pilot should remain lit. If it goes out, repeat steps 3 through 9.
  - \* If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
  - \* If the pilot will not stay lit after several tries, turn the

- gas control knob to "OFF" and call your service technician or gas supplier.
7. Depress the control knob and turn counterclockwise to "ON". Turn flame height knob counterclockwise to select desired comfort level.

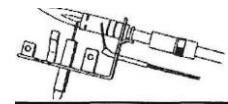
**IMPORTANT:** The gas control has an interlock device. After shutting off all gas flow, the pilot burner cannot be relit until the thermocouple has cooled, allowing the electromagnet to be released (approx. 60 sec.). The gas control knob is designed to be operated by hand. DO NOT use any tools during this operation. Damaged knobs may result in serious injury.

NOTE: A periodic visual check of the pilot flames (Figure 11) and main burner flames (Figure 12) should be made. The pilot flame should always be present when the appliance is in operation. See illustrations below.

Fig 11 NATURAL GAS ODS PILOT



LIQUID PROPANE ODS PILOT



**WARNING:** TAMPERING WITH THE ODS PILOT WILL VOID THE MANUFACTURER'S WARRANTY.

## **OPERATION**

### **TO TURN OFF GAS TO APPLIANCE**

TEMPORARY SHUTDOWN PROCEDURE:	To turn off main burner only, depress the knob and turn it clockwise as far as it will go. Do not force.
COMPLETE SHUT-DOWN PROCEDURE:	Turn off all electrical power in firebox. Turn gas control knob clockwise to the "OFF" position.

### **Controlling Heat Output**

\* The heat output can be controlled by adjusting the vent free burner control knob.

\* Another way to regulate the heat output is to open the fireplace damper.

If you want:

- a. more heat radiated into the room - Keep the damper completely closed
- b. less heat radiated into the room - open the fireplace damper to varying degrees.

### **Important Safeguards**

1. To avoid personal injury, do not touch hot surfaces when the appliance is operating. Touch only the piezo ignitor and control knob.

Hot Surfaces

- a. Grate
- b. Burner
- c. Logs
- d. Surfaces above the opening of the fireplace

2. Although your gas logs are very realistic in appearance, it is not a real wood-burning fireplace and must not be used for burning any material.

\* To avoid irreparable damage to the appliance or personal injury, matches, paper, garbage, or any other material must not be placed or thrown on top of the logs or into the flames.

Close supervision is necessary when the appliance is being operated near children.

Avoid any drafts that alter burner patterns. Do not allow fans to blow directly into the fireplace. Ceiling fans may create drafts that alter burner flame patterns. Sooting and improper burning will occur.

### **Cleaning and Servicing**

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

- If the flames show any unusual shapes or behavior, or the burners fail to ignite properly, then the burner holes may require cleaning.

**WARNING:** TURN OFF VENT FREE BURNER SYSTEM AND ALLOW TO COOL BEFORE CLEANING OR SERVICING.

#### **MONTHLY CLEANING**

1. If removing logs, when reinstalling, refer to "Log Assembly Diagram" for correct log placement.
2. Do not use cleaning fluids to clean logs or any part of the heater.
3. Brush logs with a soft bristle brush or vacuum with brush attachment.
4. Vacuum loose particles and dust from the front and rear burner ports, gas control, piezo cover, and grate.
5. Inspect and clean ODS pilot for operation and accumulation of lint at air intake holes.
6. Verify flame pattern and log placement for proper operation.
7. Verify smooth and responsive ignition of main burner and rear burner. Refer to page for proper pictorial sketch of proper operation.

#### **ANNUAL CLEANING AND INSPECTION**

1. Dealer or qualified inspector - follow the above steps for proper servicing and inspection.

## **OPERATIONAL SAFETY INFORMATION (Cont.)**

### **OPERATING YOUR UNVENTED GAS APPLIANCE SAFELY AND CORRECTLY**

- N.** This appliance is intended for supplemental heating and is not a primary heating source. Water vapor produced by vent-free burner systems can create moisture problems in a home when operated for extended periods of time. If condensation begins to occur, open your damper or a window.
- O.** If the gas quality is poor or pressure low, your ODS pilot may not stay lit, the burners may produce soot, or the unit may backfire. Contact your local gas supplier immediately.
- P.** Adults **MUST** be present when this gas appliance is operating. This appliance **MUST NOT** be left burning when unattended or while anyone is sleeping.
- Q.** **WARNING:** Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.
- R.** **WARNING: All loose material shall be installed per this instruction manual. The application of excess loose material may adversely affect performance of the appliance. All previously applied loose material, such as embers, must be removed prior to reapplication. All replacement loose material must be purchased from the original appliance manufacturer.**
- S.** Unusually tight construction is defined as:
  - a.** Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of 1 perm (6x10<sup>-11</sup> kg per pa-sec-m<sup>2</sup>) or less with openings that are sealed or use gaskets;
  - 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.
- T.** Burning candles, air fresheners and sprays will cause objectionable odors to be created by the unvented burner system.

## **CLEANING AND SERVICING IMPORTANT INFORMATION**

**It is imperative that you maintain your unvented gas appliance by having it cleaned and serviced regularly. A qualified professional service technician shall inspect and service this unit at least annually. (Read and follow the CLEANING AND SERVICING sections for details.)**

**Failure to provide reasonable and necessary maintenance as outlined in the owner's manual will cause your appliance to malfunction and will void your warranty.**

## WHEN USED AS A VENTED DECORATIVE APPLIANCE

This appliance is for installation in a solid-fuel-burning fireplace with a working flue and constructed of noncombustible material.

This burner system may be installed as vented decorative appliance in compliance with ANSI 221.60 and the National Fuel Gas Code. The minimum permanent free opening of the fireplace chimney or chimney damper must be met per Table 3-1 in the SPECIFICATIONS section. Chimney damper must be fixed in a manner that will maintain the minimum permanent vent opening at all times. See below.

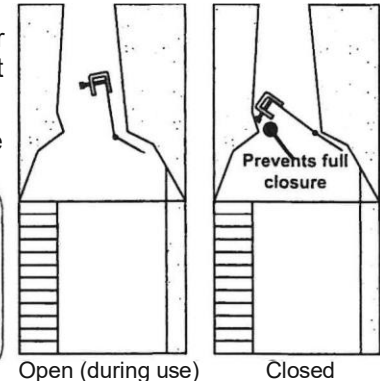
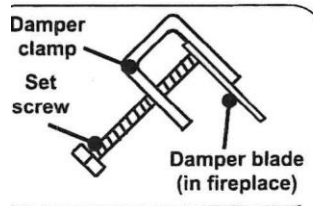
### DAMPER CLAMP INSTRUCTIONS (WHEN USE AS A VENTED DECORATIVE APPLIANCE)

If the burner system is installed as a vented decorative appliance:

The chimney damper **MUST** be fully open when burning the unit. The damper clamp with hex bolt is provided to prevent full closure of the damper blade. It must be permanently installed.

Attach the damper clamp to the damper blade with pliers or a small adjustable wrench.

**Note:** Should the clamp not fit or fail to provide the permanent vent opening listed in the Table found in the SPECIFICATIONS section, have a permanent stop installed, remove the damper blade, or have the damper cut to provide the minimum permanent free opening required.



**The damper clamp is not required if the burner system is installed as an unvented room heater.**

## INSTALLATION

BEFORE PROCEEDING, CAREFULLY READ ALL OF THE IMPORTANT SAFETY INFORMATION CONTAINED IN THIS OWNER'S MANUAL, INCLUDING:

- Pre-Installation and Fireplace Preparation Safety Guidelines
- Ventilation and Confined Space Information
- Installation Safety Guidelines

## IMPORTANT

**Be sure you have read and understand all safety precautions and warnings contained in this manual.**

**Note:** To install the unvented gas burner system, the fireplace must have a gas-supply line that has been installed by a qualified professional service technician in accordance with all local codes. Refer to the PARTS LIST when installing the burner system.

Tools Required:

- Adjustable open-ended wrench
- Pliers
- Propane gas-resistant pipe compound or Teflon tape
- Soapy water solution and brush for leak detection
- Standard screwdriver
- Manometer (for checking gas pressure)

CHECK GAS TYPE (natural or propane). The gas supply must be the same as stated on the burner system rating plate. **If the gas supply is different, DO NOT INSTALL.** Contact the dealer for immediate assistance.

## WARNING

Do not connect this appliance directly to a high-pressure natural gas line or an unregulated propane tank.

**WARNING: Failure to position these 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.**

## INSTALLATION (Cont.)

### CONTROL SETTINGS

It is recommended that before you install the decorative media, you familiarize yourself with the control valve layout. This will assist you when operating the burner system.

### LIGHTING TEST

Prior to proceeding with installation, perform a lighting test (see lighting instructions for lighting your burner).

**Allow the unit to completely cool after testing.**

#### **IMPORTANT**

For all valves, the air **MUST** be purged from the gas line before the pilot will light and burn properly. The time needed to purge will depend on the length of the gas line to the unit and the amount of time since the unit or gas line was last used. It may take several minutes before all the air is purged and the pilot will light and burn properly. Reference the LIGHTING INSTRUCTIONS section in this manual.

### GAS PRESSURE

At this stage, the gas pressure is to be checked. Reference the CHECK GAS PRESSURE section for details.

Select burner models include a decorative wood chip. If equipped, place as instructed below.

Place the wood chip in front of the valve, with at least 1" between it and the valve

**CAUTION:** Ensure the wood chip is placed at least 1" away from the valve to avoid overheating and damage to the valve. If this minimum requirement of 1" clearance is not possible, DO NOT use the wood chip.

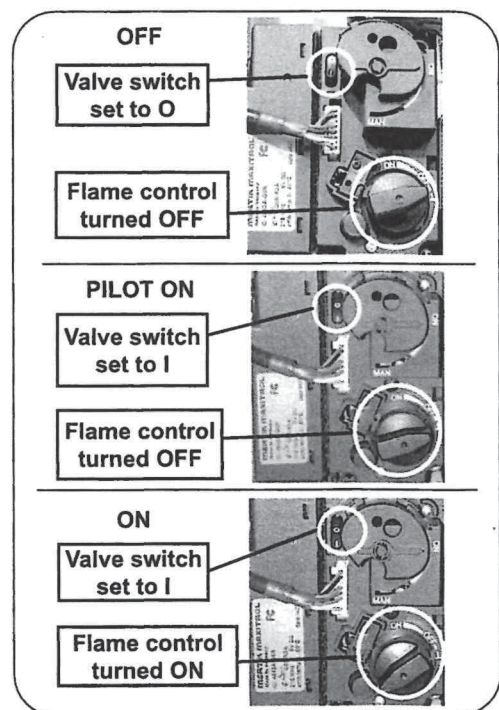
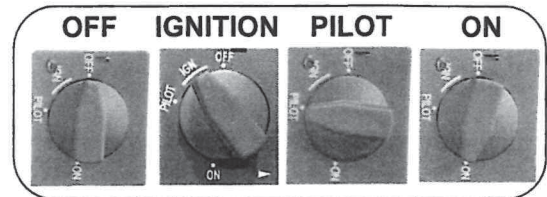
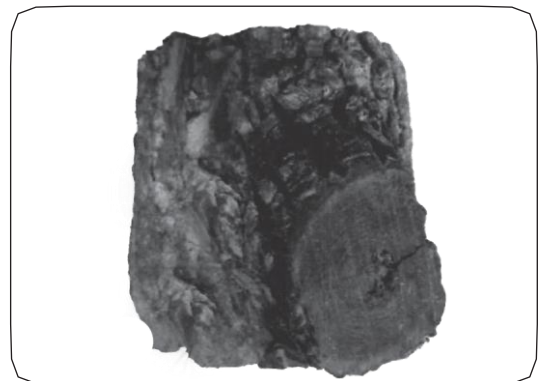


Fig. 18-3 01V valve operating positions



Place Wood Chip

## INSTALLATION (cont.)

### LAVA (DECORATIVE)

1. Spread the supplied lava on the floor of the fireplace; around the front and sides of the burner system. The lava may be placed around the remote receiver (as applicable). Leave the front of the receiver clear for control access.

**Note:** DO NOT place any lava on the burner system, or behind it.

### GLOWING EMBERS PLACEMENT

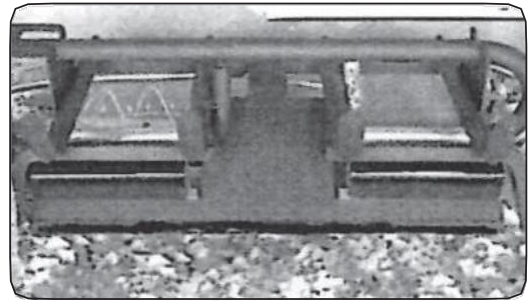
1. Place the glowing embers evenly over the entire surface of the ember burner. **Break up any clumps that may have developed during shipment. Store unused embers for later use/replacement.**

**Important:** Ensure the flash tube and carryover ports are kept clear at all times.

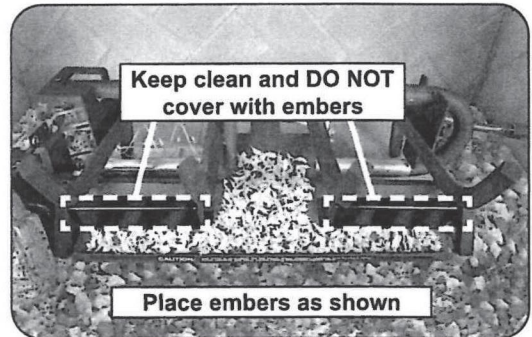
**Note:** Ensure the porcelainized panels are clean of all dust. Use a clean soft cloth if necessary.

2. Separate the small bright embers into small pieces, and evenly place them over the glowing embers.

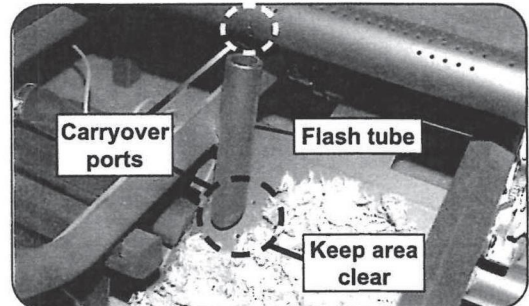
**CAUTION:** It is imperative that all the ports are covered with embers.



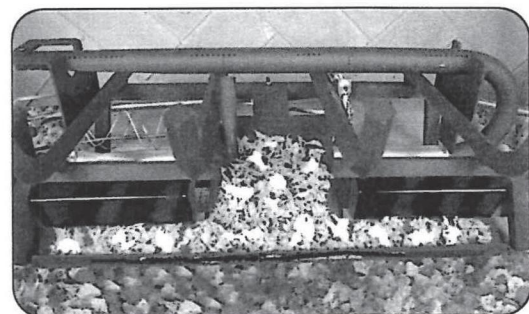
Place Lava Rock



Place glowing embers



Keep flash tube & carryover ports clear



Place Bright Embers

## INSTALL/REPLACE BATTERIES (IF APPLICABLE)

**CAUTION:** Ensure the unit is connected to the gas line and has been tested for leaks before you insert batteries.

**CAUTION:** Turn off the remote and/or burner and allow the unit to completely cool prior to any battery replacements.

**Important:** Prior to inserting batteries, always apply a small amount of dielectric grease to both ends of each battery. This will ensure conductivity and prevent moisture from affecting the contact.

**Important:** **Low/dead batteries will affect burner system operation. Replace batteries any time the burner will not turn on.**

### REMOTE TRANSMITTER BATTERY

The remote transmitter requires one 12V battery to operate (included). Locate the transmitter, remove the lid (found on rear), and properly insert the new battery as marked. Re-secure the lid.

The remote transmitter requires one 9V battery to operate (included). Locate the transmitter, remove the lid (found on rear), and properly insert the new battery as marked. Re-secure the lid.

### REMOTE RECEIVER BATTERIES

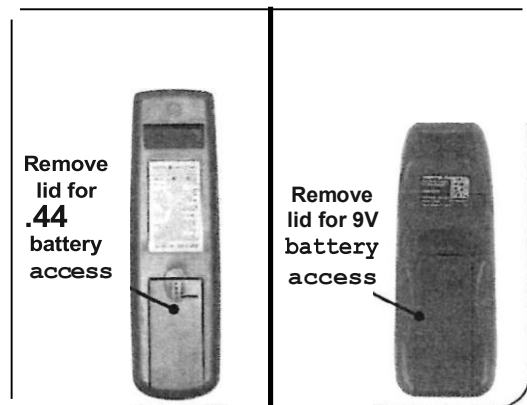
The remote receiver requires 4 AA batteries to operate (included). Locate the remote receiver and turn it over. Slide open the lid, and properly insert the new batteries as marked.

Replace the lid, then re-position the remote receiver in the fireplace. (Ensure the plastic cover is properly in place over the receiver.)

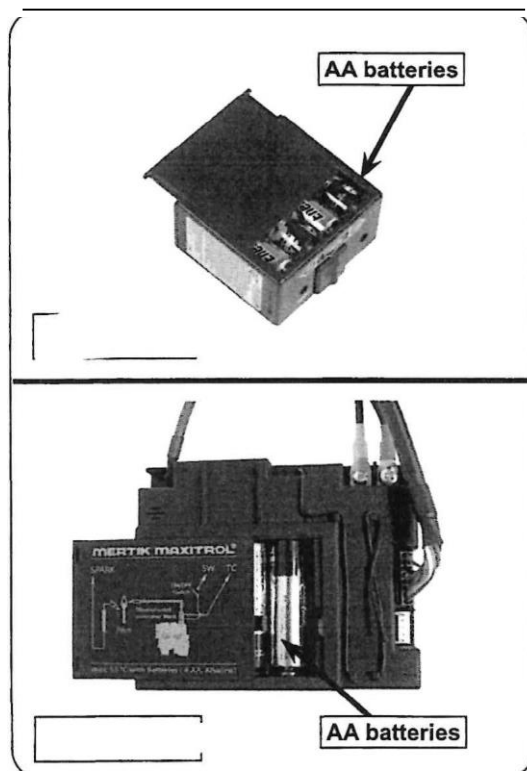
**Important:** Be sure to replace the decorative heat shield over the receiver after battery replacement.

The control module requires 4 AA batteries to operate (included). Locate the control module connected to the burner valve. Slide open the lid, and properly insert the new batteries as marked.

Replace the lid.



i Transmitter battery



! Remote receiver batteries

# 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. Be cautious around all hot surfaces.**

- A. This appliance has an ODS pilot that can be lit using the ignition device, or by hand using a long fireplace match or lighter. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE LIGHTING**, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

**WHAT TO DO IF YOU SMELL GAS**

- Do not try to light any appliances.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions. If you cannot reach your gas supplier, call the fire department.

- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it. Call a qualified professional service technician. Force or attempted repair may result in fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified professional service technician to inspect the appliance and to replace any part of the control system and any gas control which has been underwater.

**LIGHTING THE PILOT**

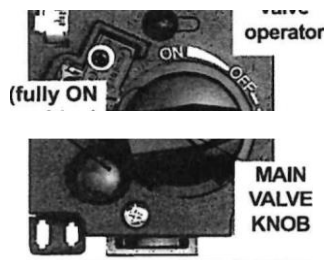
**Note:** This section addresses manual lighting. For automatic pilot lighting and remote operation, refer to the remote-system instruction manual supplied with your unit.

1. STOP! Read the safety information above.
2. Locate the valve on the unit. Turn the control knob clockwise to **OFF**, the manual knob clockwise to **MAN**, and place the ON/OFF switch in the **OFF (0)** position (Fig. 24-1).

**Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you do not smell gas, go to the next step.**

3. Place the ON/OFF switch in the **ON (I)** position.
4. Locate the pilot assembly toward the center of the unit, near the main burner (see Fig. 24-2).

5. Push the manual pilot valve operator **firmly and fully** in and hold. Hold a long-stem match/ long-necked butane lighter near the thermocouple to light the pilot. Continue to hold the knob in for about one (1) minute after the pilot is lit. Release the manual pilot valve operator. The pilot will remain lit. See Fig. 24-1 and 24-2. If it goes out, repeat steps 2-5.



I Combination control

Alternatively, the pilot can be lit using the piezo igniter. The ignition cable would need to be rewired to the valve. Refer to the remote system instruction for details.

If the pilot will not stay lit after several tries, see SHUTTING DOWN section and contact a qualified professional service technician.

**LIGHTING THE BURNER**

1. Ensure the pilot is burning. Turn the manual knob counterclockwise to **ON**. Turn the control knob counterclockwise to **ON**. See Fig. 24-1. The valve will open and the burner will light.

**ADJUSTING THE FLAME HEIGHT**

Turn the control knob counterclockwise toward **ON** to increase the flame height. Turn clockwise toward **OFF** to decrease the flame height.

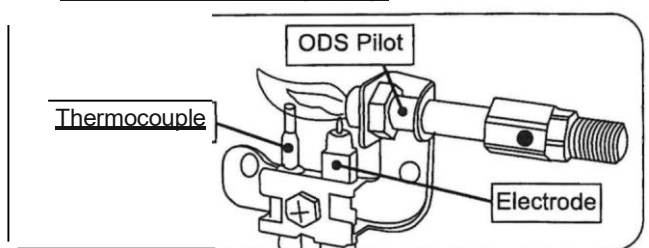
**Note:** Turning the control knob to the fully OFF position will turn off the burner. The pilot will remain lit.

**SHUTTING DOWN**

**To shut down the main burner (pilot will remain lit),** turn the control knob clockwise to the fully OFF position (see Fig. 24-1).

**To shut down the burner and pilot (total shutdown),** turn the control knob clockwise to the fully OFF position, and place the ON/OFF switch in the **OFF (0)** position (see Fig. 24-1).

**Note: Ensure the burner is completely off for one minute before relighting.**



# 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. The decorative wood chip will be hot during and after operation. Be cautious around all hot surfaces.

A. This appliance has an ODS pilot that can be lit using the built-in piezo igniter, or by hand using a long fireplace match or lighter. When lighting the pilot, follow these instructions exactly.

B. **BEFORE LIGHTING**, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

## WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions. If you cannot reach your gas supplier, call the fire department.

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it. Call a qualified professional service technician. Force or attempted repair may result in fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately call a qualified professional service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

## LIGHTING THE PILOT

1. STOP! Read the safety information above.
2. Locate the valve on the unit. Push in the ignition knob slightly and turn clockwise  to **OFF** (see Fig. 25-1).

The ignition knob cannot be turned from **PILOT** to **OFF** unless the knob is pushed in slightly. Do not force.

**Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you do not smell gas, go to the next step.**

3. Locate the pilot assembly toward the center of the unit, near the main burner (see Fig. 25-2).
4. Turn the ignition knob counterclockwise **r'..** toward **IGN** until it stops. Push the knob **firmly and fully** in and hold for 5 seconds (only pilot gas will flow).
5. While still holding the knob in, turn the knob counterclockwise **r'..** to **PILOT** until you hear a click (piezo igniter will activate and light pilot). Continue to hold the knob in for about one (1) minute after the pilot is lit. Release the knob and it will pop back out. The pilot will remain lit. See Fig. 25-1 and 25-2. If it goes out, repeat steps 2-5.

Alternatively, a long-stem match/ long-necked butane lighter can be held near the thermocouple to light the pilot.

- If the knob does not pop up when released, stop, turn off the gas supply, and call your service technician or gas supplier.

- If the pilot will not stay lit after several tries, see **SHUTTING DOWN** section and contact a qualified professional service technician.

## LIGHTING THE BURNER

1. Ensure the pilot is burning. Turn the ignition knob counterclockwise **r'..** to **ON** (see Fig. 25-1).
2. Turn the control knob counterclockwise **r'..** to the **fully ON** position to ignite the burner (see Fig. 25-1). The valve will open and the burner will light.

## ADJUSTING THE FLAME HEIGHT

Turn the control knob counterclockwise **r'..** toward **ON** to increase the flame height. Turn clockwise  toward **OFF** to decrease the flame height.

**Note:** Turning the control knob to the **fully OFF** position will turn off the burner. The pilot will remain lit.

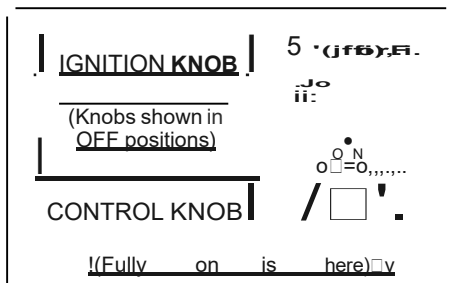
## SHUTTING DOWN

**To shut down the main burner (pilot will remain lit),** turn the control knob clockwise  to the **fully OFF** position (see Fig. 25-1).

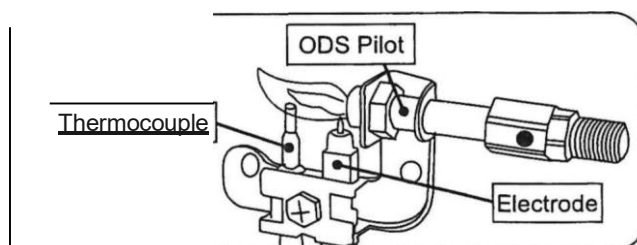
**To shut down the burner and pilot (total shutdown),** turn the control knob clockwise  to the **fully OFF** position, and push in the ignition knob slightly and turn clockwise  to **OFF** (see Fig. 25-1).

**Note:** Ensure the burner is completely off for **5 min**, minute before relighting.

If a remote system is equipped, read and follow the separate remote instructions to operate the burner remotely.



Ignition and control knobs



JDS Pilot assembly detail

## CLEANING AND SERVICING

Only limited cleaning will be required under normal use of the burner system.

### TO CLEAN THE BURNER SYSTEM

1. Remove the log set and embers. Use a vacuum cleaner to remove loose particles from all surfaces of the system. Do not use cleaning fluids.
2. Dust the assembly and the burners. Using a compressed air duster (commonly available at computer, electronic, or office supply stores) blow through the flash tube, carry over ports, and all of the burner ports. See the burner figure on the previous page for locations.
3. Reinstall the embers and log set.

If, after a period of use, the flames start to exhibit unusual shapes and behavior, or the burners fail to ignite smoothly, the burner ports may require some cleaning. If this happens, it is preferable to contact the nearest dealer to get the burner system serviced.

**Do not remove the rating plates or the warning tags. These are an integral safety and identification component of this appliance.**

During periods of heavy use, inspect the burner system frequently for evidence of sooting. If sooting is present, discontinue use until the source of sooting is corrected.

### CLEANING AND SERVICING THE ODS PILOT

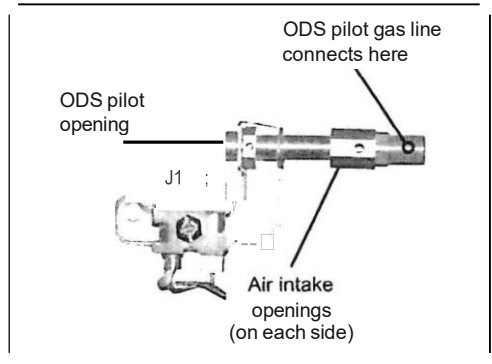
Periodic cleaning and maintenance of the burner system is recommended to ensure that the burner system operates properly. Cleaning of the ODS pilot system is an important part of the maintenance program.

**This ODS pilot cleaning procedure must be performed by a qualified professional service technician familiar with the specific characteristics of the burner system.**

1. Turn the burner system to the **OFF** position and allow it to cool. Inspect the ODS pilot area 1) for any visual contamination or debris (usually lint, hair, spider webs, or small insects). Lightly brush off all external surfaces while vacuuming loosened debris from the ODS pilot opening. **Be careful not to brush any foreign material into the ODS pilot opening.**
2. Clean out the air intake openings 2) by lightly brushing around the openings while vacuuming.

**Note:** It is very important that the air intake openings be kept clear of debris. Should the openings become blocked, the ODS pilot system will not operate properly.

3. Light the ODS pilot according to the relevant LIGHTING INSTRUCTIONS page. Periodically verify the ODS pilot flame appears as shown in the CHECKING THE ODS PILOT FLAME APPEARANCE section.
4. If the ODS pilot flame does not burn as indicated in the instructions, extinguish the ODS pilot by turning the valve to the full **OFF** position. Using a compressed air duster, insert the flexible nozzle through the air intake openings, ensuring that the nozzle is pointed toward the ODS pilot opening 1). Blow air through the intake openings to clear out any debris that may be in the system.
5. Relight the ODS pilot and inspect it to be sure it is burning as shown in the instructions. If not, extinguish the ODS pilot and **turn off the gas supply to the burner system.** Using an adjustable or a 1/4" wrench, disconnect the ODS pilot gas line ( 3) - J from the valve.
6. Insert the flexible nozzle of the compressed air duster and blow air into the input end of the ODS pilot gas line to remove any blockages. **Do not blow air directly into the ODS pilot opening. Blow air in the direction of the gas flow.**
7. Reinstall the ODS pilot gas line and check for leaks.
8. Light the ODS pilot to make sure it is operating properly (see LIGHTING INSTRUCTIONS).
9. If the ODS pilot still does not operate properly, the ODS pilot may need to be replaced with the same model as the one on the burner system.



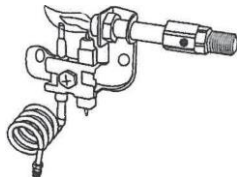
## CHECKING THE ODS PILOT FLAME APPEARANCE

**WARNING: NO ADJUSTMENTS ARE TO BE MADE TO THE ODS PILOT SYSTEM. TAMPERING WITH THIS SYSTEM CAN BE EXTREMELY HAZARDOUS.**

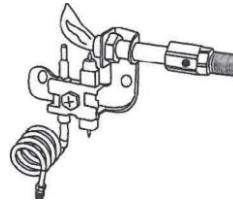
When installing the burner assembly, it is important to visually check the ODS pilot flame and the burner flames.

1. The ODS pilot flame must be present when the burner is operating. The flame should touch the top of the thermocouple tip
2. If the ODS pilot flame does not touch the top of the thermocouple tip, then the main burner will not function properly
3. With the burners off and the ODS pilot flame off, and the assembly cool, check the burner assembly, air intake openings on the ODS pilot, and air shutter openings on the burners for any blockages that could affect the operation of the ODS pilot flame.

### ODS Pilot



Correct ODS pilot flame



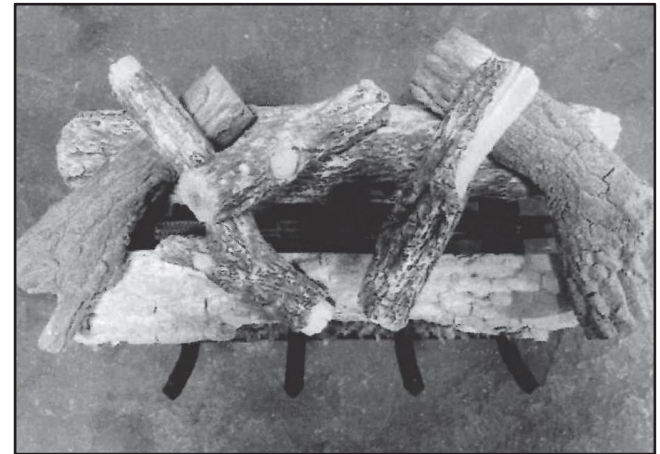
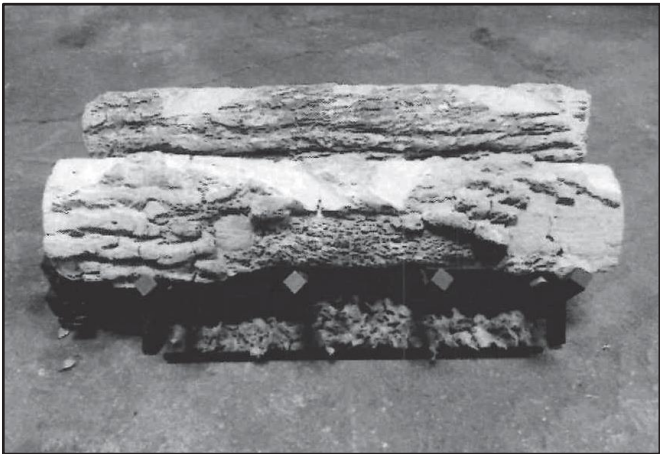
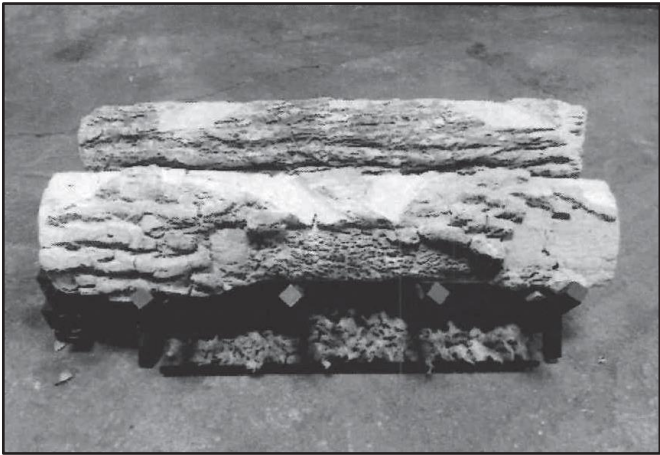
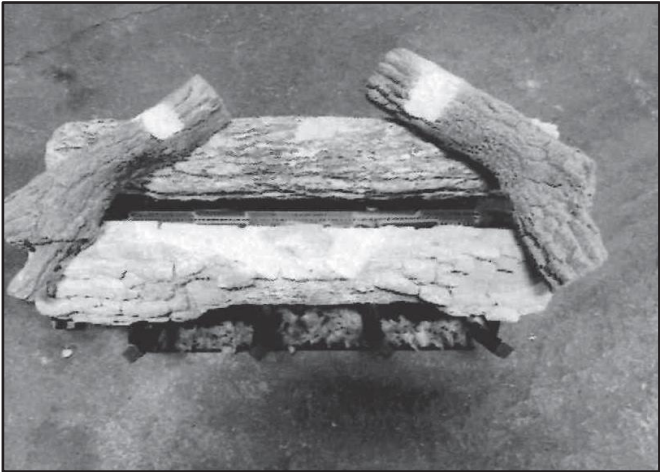
Incorrect ODS pilot flame

# BLACK DIAMOND 2.0 LOGS AND MEDIA INSTALLATION

## 18" LOGS



24" BLACK DIAMOND 2.0 SERIES



## LAVA ROCK PLACEMENT

The large bag of black rock that is included in the log set.



You may use the Lava Rock to cover up metal Lighting Instruction Tags.

1. Once the burner system is in place, pour the Lava Rock on the floor of the fireplace.
2. DO NOT REMOVE THE LIGHTING TAGS FROM THE BURNER SYSTEM. THIS WILL VOID THE MANUFACTURER'S WARRANTY.
3. **DO NOT** POUR ANY LAVA ROCK ON THE BURNERS OR AROUND THE PILOT.

**WARNING: GLASS DOORS MUST BE OPEN WHEN APPLIANCE IS IN OPERATION.**

# **TROUBLE-SHOOTING**

test fires all Vent Free burner systems before shipment. Each test consists of lighting the pilot, checking for proper ignition, and leak testing at each connection. Even though all of these precautions are taken sometimes problems do arise. The following Trouble-Shooting chart lists several problems with their probable cause and remedy.

**WARNING:** TURN OFF AND LET COOL BEFORE SERVICING. ONLY A QUALIFIED SERVICE PERSON SHOULD SERVICE AND REPAIR.

<b><u>OBSERVE PROBLEM</u></b>	<b><u>POSSIBLE CAUSE</u></b>	<b><u>REMEDY</u></b>
A. When ignitor button is pressed there is no spark at the ODS.	<ol style="list-style-type: none"><li>1. Igniter electrode positioned wrong.</li><li>2. Igniter electrode is broken.</li><li>3. igniter electrode is not connected.</li><li>4. Igniter cable is pinched.</li><li>5. ignitor cable is wet.</li><li>6. Broken ignitor cable.</li><li>7. Bad piezo igniter.</li></ol>	<ol style="list-style-type: none"><li>1. Replace igniter.</li><li>2. Replace ignitor.</li><li>3. Reconnect ignitor cable.</li><li>4. Free ignitor cable if pinched by any metal or tubing.</li><li>5. Dry igniter cable.</li><li>6. Replace ignitor cable.</li><li>7. Replace Piezo igniter.</li></ol>
B. ODS pilot lights, but flame goes out when control knob is released.	<ol style="list-style-type: none"><li>1. Control knob is not fully depressed.</li><li>2. Control knob not pressed in long enough.</li><li>3. Manual shutoff valve not fully open.</li><li>4. Thermocouple connection loose at valve.</li><li>5. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following:<ol style="list-style-type: none"><li>A) Log gas pressure.</li><li>B) Dirty or partially clogged ODS pilot.</li></ol></li><li>6. Thermocouple damage.</li><li>7. Control valve damage.</li></ol>	<ol style="list-style-type: none"><li>1. Press in control knob fully.</li><li>2. After ODS pilot lights, keep control knob pressed in 30 seconds.</li><li>3. Fully open manual shutoff valve.</li><li>4. Hand tighten ¼ turn more.</li><li>5. Contact local gas company.</li><li>6. Replace ODS pilot.</li><li>7. Replace control valve.</li></ol>
C. Appliance shuts off in use.	<ol style="list-style-type: none"><li>1. Not enough fresh air is available for ODS pilot to operate.</li><li>2. Low gas pressure.</li><li>3. ODS pilot is partially clogged.</li><li>4. Unstable pilot flame due to drafts from ceiling fan, hot furnace register, open door etc...</li><li>5. If using damper, unstable pilot flame from downdrafts.</li></ol>	<ol style="list-style-type: none"><li>1. Open door to adjoining room for added ventilation or open window.</li><li>2. Contact local gas company.</li><li>3. Clean ODS pilot.</li><li>4. Locate and eliminate drafts.</li><li>5. Close damper.</li></ol>

# **TROUBLE-SHOOTING**

<b><u>OBSERVE PROBLEM</u></b>	<b><u>POSSIBLE CAUSE</u></b>	<b><u>REMEDY</u></b>
D. When ignitor button is pressed there is spark at ODS pilot, but not ignition.	<ol style="list-style-type: none"><li>1. Gas supply turned off or manual shutoff valve closed.</li><li>2. Control knobs are not in PILOT position.</li><li>3. Control knob not pressed in while in PILOT position.</li><li>4. Air in gas line.</li> <li>5. ODS pilot is clogged.</li></ol>	<ol style="list-style-type: none"><li>1. Turn on gas supply or open manual shutoff valve.</li><li>2. Turn control knob to PILOT position then depress knob.</li><li>3. Press in control knob while in PILOT position.</li><li>4. Continue holding down control knob. Repeat igniting operation until air is removed.</li><li>5. Clean ODS pilot.</li></ol>
E. Gas odor even when control knob is in the OFF position.	<ol style="list-style-type: none"><li>1. Gas leak.</li><li>2. Control valve defective.</li></ol>	<ol style="list-style-type: none"><li>1. Locate and correct all leaks.</li><li>2. Contact dealer to receive further instructions on correcting problem.</li></ol>
F. Slight odor during initial operation.	<ol style="list-style-type: none"><li>1. Smell coming from the paint curing on the logs and burner system.</li></ol>	<ol style="list-style-type: none"><li>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.</li></ol>
G. Main burner does not light after ODS pilot is lit.	<ol style="list-style-type: none"><li>1. Burner orifice is clogged.</li><li>2. Inlet gas pressure is too low.</li><li>3. Gas line obstruction. (pipe dope, Teflon tape, etc... )</li></ol>	<ol style="list-style-type: none"><li>1. Clean burner orifice and main burner.</li><li>2. Contact local gas company.</li><li>3. Locate and clear obstruction.</li></ol>
H. Delayed ignition of main burner.	<ol style="list-style-type: none"><li>1. Burner orifice is clogged.</li><li>2. Inlet gas pressure is too low.</li><li>3. Gas line obstruction. (pipe dope, Teflon tape, etc... )</li></ol>	<ol style="list-style-type: none"><li>1. Clean or replace burner orifice. Clean main burner.</li><li>2. Contact local gas company.</li><li>3. Locate and clear obstruction.</li></ol>
I. Main burner backfiring during combustion.	<ol style="list-style-type: none"><li>1. Burner orifice is clogged or damaged.</li><li>2. Inlet gas pressure is too low.</li><li>3. Gas line obstruction. (pipe dope, Teflon tape, etc... )</li></ol>	<ol style="list-style-type: none"><li>1. Clean or replace burner orifice. Clean main burner.</li><li>2. Contact local gas company.</li><li>3. Locate and clear obstruction.</li></ol>
J. Appliances produce unwanted odors.	<ol style="list-style-type: none"><li>1. Fresh paint fumes, cleaning agents, pet hair, or other particles are cycling through the fireplace when it is operating.</li><li>2. Gas leak.</li></ol>	<ol style="list-style-type: none"><li>1. Ventilate room. Stop using odor causing products while heater is running.</li><li>2. Locate and correct all leaks.</li></ol>
K. Soot is depositing on logs, in fireplace, or in room.	<ol style="list-style-type: none"><li>1. Logs are not positioned properly and are obstructing the flame.</li><li>2. Main burners have accumulated dust or other small particles.</li></ol>	<ol style="list-style-type: none"><li>1. Logs must be repositioned, so they do not meet the flame.</li><li>2. Clean main burner.</li></ol>

# WARRANTY

**CONTACT INFO:**  
**LOST RIVER PRODUCTS**  
 812-865-8500  
[lostriverproducts@gmail.com](mailto:lostriverproducts@gmail.com)

## Logs & Burner Lifetime Warranty

Lost River Products gas logs carry a lifetime warranty against any manufactured defect or breakage. A replacement will be available from the dealer at which the appliance was purchased. This warranty does not cover breakage caused by excessive handling once installed and fired.

## Valves, Remote Controls & Switching Devices

Lost River Products warrants all valves, remote controls and switching devices against manufacturing defects which appear within two (2) years of the verified purchase date. Warranty does not cover products that have been damaged by misuse from overheating. Before any product is returned a Return Goods Authorization number (RGA) must be issued by Lost River Products Customer Service Department.

All returns must be accompanied by an explanation of the problem and all necessary parts. Thermocoupling / Thermopile / 1 Yr. Warranty.

## All Other Parts

If any assembled part fail to operate or be found defective which appear within two (2) years of the verified purchase date, a replacement will be available from the dealer at which the appliance was purchased.

Buyer shall notify Lost River Products of any defect covered by this warranty no later than thirty (30) days after defect is discovered. Failure to provide notice within thirty (30) days shall void the limited warranty.

### WHAT IS NOT COVERED

1. Removal and reinstallation costs.
2. Labor costs for replacement or repairs.
3. Transportation or shipping cost.
4. The cost of a service call to diagnose trouble.
5. Painted Surfaces.
6. Damage or defect caused by improper installation, accident, misuse, abuse, alteration, or authorized service technician.
7. Replacement of burner or combustion chamber resulting from improper storage of the appliance.

### LIMITATIONS AND EXCLUSIONS

1. No one has the authority to add or to vary this warranty, or to create for Lost River Products any other obligation or liability in connection with this appliance.
2. Any implied warranty applicable to this appliance is limited in duration to the same period of time as this written Warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.
3. **LOST RIVER PRODUCTS WILL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, SPECIAL OR CONTINGENT DAMAGES YOU MIGHT SUFFER AS A RESULT OF A CLAIM UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY.** Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you.
4. This warranty applies only to the original purchaser and may not be transferred or assigned.
5. If you cannot verify the purchase date of the appliance, the warranty period will begin on the date of which the appliance was manufactured.
6. Replacement or repair parts are warranted for the remaining period of the original part warranty. Warranty parts must be obtained through authorized dealers of this product who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty.
7. The maximum liability of Lost River Products in connection with this warranty shall not in any case exceed the contract price paid for the product claimed to be defective or unsuitable.
8. Purchaser or user agrees to hold Lost River Products harmless from any and all claims by the buyer as a result of injury or damage to an ultimate user or other person caused by the product sold herein by the seller to the buyer, whether the injury or damage results from the assembly, installation, operation, shipment, storage, or manufacture of this product. Lost River Products makes no warranties, expressed or implied, other than those expressly stated herein.

### YOUR DUTIES

This appliance must be installed by a qualified installer, operated and maintained in accordance with all applicable codes and the instructions furnished with the appliance. You must provide a receipt verifying the purchase date of the appliance when making a warranty claim with the dealer from which the appliance was purchased.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

<b>Quality Check</b>			<b>Date:</b> _____		
<b>Burner Orifices</b>	<b>Nat.</b>	<b>L.P.</b>	<b>Leak Test:</b> _____	<b>Model#:</b> _____	
<b>Main:</b>	_____	_____	<b>Burn Test:</b> _____	<b>Serial#:</b> _____	
<b>Other:</b>	_____	_____	<b>Gas Type:</b> <u>Nat. / L.P.</u>	<b>Air Shutter:</b> _____	
				<b>Inspector:</b> _____	



# LOST RIVER PRODUCTS

## WARRANTY CARD

Please fill out this warranty card and mail it to:

Lost River Products

3501 North State Road 37

Paoli IN, 47454

BURNER SIZE:

VALVE TYPE:

GAS TYPE: (circle one) natural gas    propane gas

PURCHASED FROM:

ADDRESS:

DAY/MONTH/YEAR:

YOUR INFORMATION

NAME:

ADDRESS:

PHONE NUMBER:

DATE OF INSTALLATION: