VANGUARD

GAS LOG

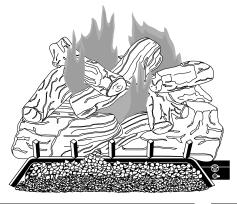
REMOTE READY VENTED DECORATIVE APPLIANCES OWNER'S OPERATION AND INSTALLATION MANUAL

Convertible from Natural Gas to Propane/LP Gas

Z21.60-1996 CGA 2.26-M96

APPROVED





Models VVSA18R, VVSA24R, VVDA18R, VVDA24R, and VVDA30R

For Use with Log Sets Hanover Round Oak Log Models VSLR18 and VSLR24

Kingston Split Oak Log Models VDLCR18, VDLCR24 (Shown), and VDLCR30

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: This appliance is for installation only in a solid-fuel burning masonry or UL127 factory-built fireplace, constructed of noncombustible material, and connected to a working flue. (See page 7 for minimum flue opening.)

WARNING: This is a gas-fired appliance. 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 on page 4 of this manual.

SAFETY INFORMATION



WARNING: Keep flue open when operating unit.

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

DANGER: Carbon monoxide poisoning may lead to death!

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

Natural and Propane/LP Gas: Natural and propane/LP gases are odorless. An odormaking agent is added to the gas. The odor helps you detect a gas leak. However, the odor added to the gas can fade. Gas may be present even though no odor exists.

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

WARNING: Any change to this log set or its controls can be dangerous.

1. This appliance, as supplied, is only for use with the type of gas indicated on the rating plate. This appliance is convertible for use with propane/LP.

- 2. 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
- 3. Never install the log set
 - in a recreational vehicle
 - where curtains, furniture, clothing, or other flammable objects are less than 42 inches from the front, top, or sides of the log set
 - · in high traffic areas
 - · in windy or drafty areas
- 4. 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 will ignite if highly heated. Inspect chimney flue for damage.
- 5. You must operate this log set with a fireplace screen in place. Make sure fireplace screen is closed before running log set.
- 6. This log set is designed to be smokeless. If logs ever appear to smoke, turn off appliance and call a qualified service person. *Note:* During initial operation, slight smoking could occur due to log curing and the burning of manufacturing residues. You may wish to add more ventilation by opening a window.
- 7. To reduce the creation of soot, follow the instructions in *Cleaning and Maintenance*, page 22.
- 8. Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns. Ceiling fans can create drafts that alter burner flame patterns. Altered burner patterns can increase sooting.
- 9. Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this log set.
- 10. This log set needs fresh, outside air ventilation to run properly. See *Air for Combustion and Ventilation*, pages 4 through 6.

- 11. Do not run log set
 - where flammable liquids or vapors are used or stored
 - · under dusty conditions
- 12. Do not burn solid fuel in the fireplace after installing the log set. Do not use this log set to cook food or burn paper or other objects.
- 13. Log set becomes very hot when in use. Keep children and adults away from hot surface to avoid burns or clothing ignition. Log set will remain hot for a time after shut-down. Allow surface to cool before touching.
- 14. Carefully supervise young children when they are in the room with log set.
- 15. Do not use appliance if any part has been exposed to or under water. Immediately call a qualified service technician to inspect the room appliance and to replace any part of the control system.
- 16. To help prevent breakage, new logs must be broken-in (see *Curing logs* page 14).
- 17. Turn log set off and let cool before servicing, installing, or repairing. Only a qualified service person should install, service, or repair log set.

OWNER'S MANUAL

PRODUCT IDENTIFICATION

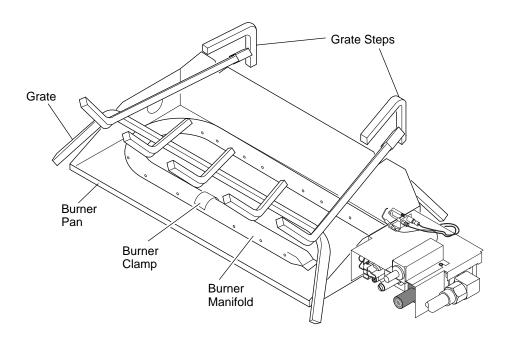


Figure 1 - Product Identification (VVDA24 Shown)

Hearth Kit Model	
Serial Number	
Log Set Model	

LOCAL CODES

Install and use log set with care. Follow all local codes. In the absence of local codes, use the latest edition of *The National Fuel Gas Code ANS Z223.1*, also known as NFPA 54*.

*Available from:

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

National Fire Protection Association, Inc. Batterymarch Park Quincy, MA 02269

UNPACKING

A CAUTION: Do not remove the metal data plates from the burner pan. The data plates contain important product information.

- 1. Remove logs, hearth kit, pan materials, and hardware from carton.
- 2. Remove all protective packaging applied to logs and base for shipment.
- Check all items for any shipping damage. If damaged, promptly inform dealer where you bought the product.

PRODUCT FEATURE

REMOTE READY SAFETY VALVE/PILOT

This unit is provided with a milivolt remote ready control valve which may be connected to optional remote accessories for wall switch or wireless operation (see *Accessories*, page 22).

Unit is tested and approved to ANS Z21.60-1996 and CGA 2.26-M96 as a vented decorative appliance. It is supplied with the parts and instructions to convert to propane/LP gas use.

AIR FOR COMBUSTION AND VENTILATION

WARNING: This appliance shall not be installed in a confined space or unusually tight construction 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.

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.

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, fireplaces, 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/ANS 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 4 through 6 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 buildings of unusually 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 (6x10⁻¹¹ kg per pa-sec-m²) or less with openings gasketed or sealed <u>and</u>
- 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 6.

If your home does not meet all of the three criteria above, proceed to *Determining Fresh-Air Flow For Appliance Location*, page 5.

Confined and Unconfined Space

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

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

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

AIR FOR COMBUSTION AND VENTILATION

Continued

DETERMINING FRESH-AIR FLOW FOR APPLIANCE LOCATION

Determining if You Have a Confined or Unconfined Space

Use this work sheet to determine if you have a confined or unconfined space.

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

l.	Determine the volume of the space (length x width x height).
	Length x Width x Height =cu. ft. (volume of space)
	Example: Space size 20 ft. (length) x 16 ft. (width) x 8 ft. (ceiling height) = 2560 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. = (maximum Btu/Hr the space can support)
	Example: 2560 cu. ft. (volume of space) ÷ 50 cu. ft. = 51.2 or 51,200 (maximum Btu/Hr the space can support)
3.	Add the Btu/Hr of all fuel burning appliances in the space.
	Gas fireplace logs Gas water heater* Btu/Hr Gas water heater* Btu/Hr Gas furnace Btu/Hr Vented gas heater Until gas appliances* + Btu/Hr
	* Do not include direct-vent gas appliances. Direct-vent draws combustion air from the outdoors and vents to the outdoors.
1.	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: 51,200 Btu/Hr (maximum the space can support)
	95,000 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 worksheet, 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 6.
- B. Vent room directly to the outdoors. See Ventilation Air From Outdoors, page 6.
- C. Install a lower Btu/Hr heater, 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.

A WARNING: If the area in which the appliance may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the *National Fuel Gas Code*, ANS Z223.1, 1992, Section 5.3 or applicable local codes.

Continued

AIR FOR **COMBUSTION AND VENTILATION** Continued

VENTILATION AIR

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 2). You can also remove door into adjoining room (see option 3, Figure 2). Follow the National Fuel Gas Code NFPA 54/ANS 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.

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. Follow the National Fuel Gas Code NFPA 54/ANS Z223.1, Section 5.3, Air for Combustion and Ventilation for required size of ventilation grills or ducts.

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.

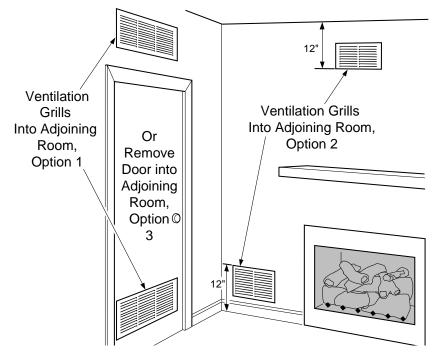


Figure 2 - Ventilation Air from Inside Building

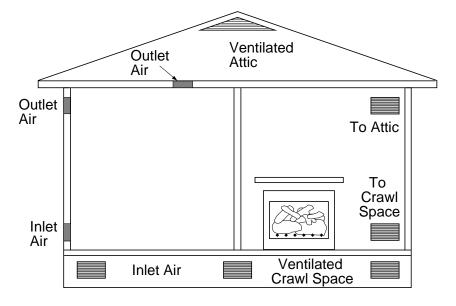


Figure 3 - Ventilation Air from Outdoors

INSTALLATION

CAUTION: Do not remove the metal data plates attached to the burner pan. The data plates contain important warranty information.

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 will ignite if highly heated. A dirty chimney flue may create and distribute soot within the house. Inspect chimney flue for damage.

NOTICE: Installation, service, and repair of this appliance must be performed by a qualified installer, service agency, company or gas supplier experienced with this type of gas appliance. Only factory authorized components listed in these instructions may be used accordance with manufacturer's instructions and all codes and requirements of the authority having jurisdiction. Any modifications to this kit, or use of unauthorized components or accessory items will void the manufacturer's warranty, and may result in a hazardous condition.

FLUE OPENING SPECIFICATIONS

Note: This vented appliance must be installed only in a solid-fuel burning fireplace with a working flue and constructed of noncombustible material.

The charts in Figure 4 indicate technical information regarding the installation of your gas log set. Please make sure that all of the specifications shown are applicable before installation is attempted.

The fireplace must include a working flue and venting system with the minimum openings shown in the Figure 4.

MODEL	DESCRIPTION	Btu Input Natural Gas	Btu Input Propane/LP Gas
VVSA18R	18" Single Burner	50,000	40,000
VVSA24R	24" Single Burner	60,000	50,000
VVDA18R	18" Dual Burner	55,000	45,000
VVDA24R	24" Dual Burner	65,000	55,000
VVDA30R	30" Dual Burner	70,000	60,000

The minimum vent opening on all models is 8" in diameter.

MINIMUM FIREBOX SIZES								
LOG SIZE								
18"	34"	16"	14"	18"				
24"	35 3/4"	17"	15 ¹ / ₂ "	18"				
30"	42"	27"	18"	18"				

*At depth indicated

FUEL PRESSURE SPECIFICATIONS (W.C.)					
Inlet Manifold*					
NG	5.5"-10.5"	3.5"			
LP	11"-13"	10"			

* ± .2"

	BURNER ORIFICE										
LOG	i	NATURAL PROPANE/LP									
SIZE	IN.	NUM.	COLOR	IN.	NUM.	COLOR					
18"	.129	30	Green	.073	49	Red					
24"	.141	28	Yellow	.086	44	Orange					
30"	.157	22	Yellow/Blue	.089	43	Black					

Figure 4 - Technical Information Charts

CHECK GAS TYPE

Use only natural gas. If your gas supply is not natural gas, you must convert the appliance to propane/LP. Follow the instructions on page 10.

If the fireplace does not have a gas supply shut-off valve, one must be installed.

VENTING SPECIFICATIONS FOR INSTALLATION

The fireplace chimney flue and vent must be drafting properly. To check the vent for proper drafting: Light a tightly rolled newspaper on one end and place it at the inside front edge of the fireplace. Observe the smoke and be sure the vent is properly drawing it up the chimney. If the smoke spills out into the room, extinguish the flame and remove any obstruction until proper venting is achieved.

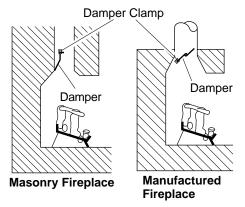
The chimney flue must remain open a minimum of 3" at all times during the operation of this log set (see Figure 5, page 8).

Continued

INSTALLATION Continued

INSTALLING DAMPER CLAMP

Secure the damper stop clamp provided to the leading edge of the damper as shown in Figure 5. If for any reason this clamp doesn't work on your fireplace, another suitable clamp or permanent stop must be installed, or the damper blade must be cut or removed.



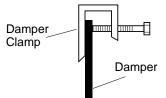


Figure 5 - Attaching Damper Clamp

CONNECTING TO GAS SUPPLY

WARNING: A qualified service person must connect log set to gas supply. Follow all local codes.

Installation Items Needed

Before installing log set, make sure you have the items listed below.

- piping (check local codes)
- sealant (resistant to propane/LP gas)
- manual shutoff valve
- adjustable (crescent) wrench or pliers
- sediment trap
- tee joint
- pipe wrench

CAUTION: Use only new, black iron or steel pipe. Internally-tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2" diameter or greater to allow proper gas volume to log set. If pipe is too small, undue loss of pressure will occur.

Installation must include a manual shutoff valve, union, and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from log set (see Figure 6).

Apply pipe joint sealant lightly to male threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in a clogged burner injector.

A CAUTION: Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.

Install sediment trap in supply line as shown in Figure 6. Locate sediment trap where it is within reach for cleaning. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into log set controls. If sediment trap is not installed or is installed wrong, log set may not run properly.

Approved Flexible Gas Hose (if allowed by local codes)



MARNING: Test all gas piping and connections for leaks after installing or servicing. Correct all leaks at once.

WARNING: Never use an open flame to check for a leak. Apply a mixture of liquid soap and water to all joints. Bubbles forming show a leak. Correct all leaks at once.

Pressure Testing Gas Supply Piping System

Test Pressures In Excess Of 1/2 PSIG

- Disconnect log set and its individual manual shutoff valve from gas supply piping system.
- Cap off open end of gas pipe where manual shutoff valve was connected.
- Pressurize supply piping system by either using compressed air or opening main gas valve located on or near gas meter.
- Check all joints of gas supply piping system. Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
- Correct all leaks at once.
- Reconnect log set and manual shutoff valve to gas supply. Check reconnected fittings for leaks.

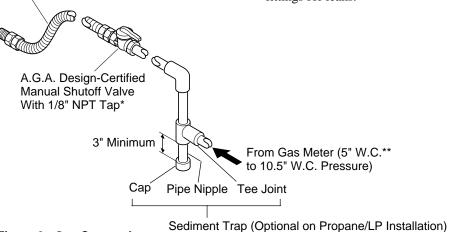


Figure 6 - Gas Connection

- * Purchase the optional A.G.A. design-certified manual shutoff valve from your dealer. See Accessories, page 22.
- ** Minimum inlet pressure for purpose of input adjustment.

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OWNER'S MANUAL

INSTALLATION Continued

Test Pressures Equal To or Less Than 1/2 PSIG

- 1. Close manual shutoff valve (see Figure 7).
- 2. Pressurize supply piping system by either using compressed air or opening main gas valve located on or near gas meter.
- 3. Check all joints from gas meter to manual shutoff valve (see Figure 7). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
- 4. Correct all leaks at once.

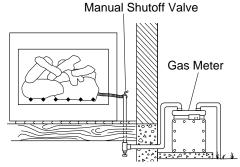


Figure 7 - Checking Gas Joints

HEARTH KIT ASSEMBLY AND INSTALLATION

Kit Assembly

Note: The following instructions apply to both standard single bar burners, as well as dual flame "U" style burners. Be sure all pipe threaded connections are tight, and have thread compound to prevent leaks.

- 1. Determine which side the gas line will be coming into the fireplace.
- 2. Using a hammer and screw driver, remove knock-out plug from the side of the pan that corresponds to the gas line (see Figure 8).

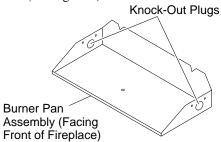


Figure 8 - Knock-Out Plug Locations

- 3. Place burner manifold in pan with threaded opening facing open knock-out plug. *Note:* If using propane/LP gas, see *Propane/LP Gas Conversion*, page 10.
- 4. Thread the gas control valve onto the burner inlet fitting (see Figure 10). Use thread sealant on the male threads of the burner inlet fitting. Hold the burner inlet fitting with a wrench to prevent overtightening the connection to the burner. Make sure the control knob is facing the front (see Figure 10).
- 5. Using burner clamp, screw, and nut provided, assemble clamp to pan ("U" style burners only). This will hold the burner manifold in place (see Figure 9).
- 6. Attach the pilot gas line to the pilot outlet of the gas control valve and tighten. Connect the thermocouple to the terminal block on the gas control valve. See Figure 11. Do not overtighten. If using propane/LP gas, see *Changing Pilot Orifice*, page 11.

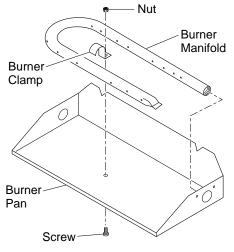


Figure 9 - Installing Burner

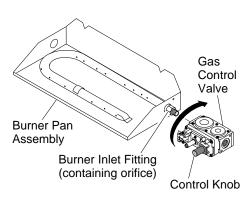


Figure 10 - Installing Gas Control Valve

- 7. Install the inlet fitting into the inlet opening of the gas control valve (see Figure 12). Use thread sealant on the male pipe threads.
- 8. Place the burner pan assembly in the center of the fireplace floor. Make sure the front of pan faces forward.
- 9. Thread the gas supply adaptor to the fireplace gas supply pipe. Adjust to most convenient position.
- 10. Install the gas connector tube to the gas supply adaptor. Carefully shape tube and attach to gas inlet fitting (see Figure 12). Be careful not to cause kinks in tube.
- 11. Test for leaks following instructions under *Testing Burner for Leaks*, page 11.
- 12. Retighten and adjust the location of the gas control as necessary. The gas control should be level, with the control knob to the front.

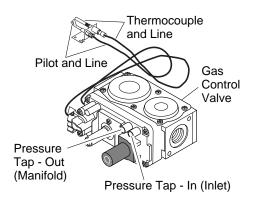


Figure 11 - Gas Control Valve with Thermocouple and Pilot

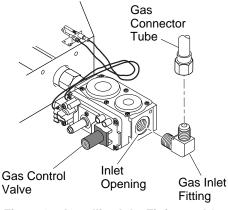


Figure 12 - Installing Inlet Fitting and Gas Connector Tube

Continued

INSTALLATION Continued

- 13. Install cover to burner pan using screws provided.
- 14. Install thermocouple, pilot, and piezo ignitor cover onto valve cover as shown in Figure 13. Use the provided screws.

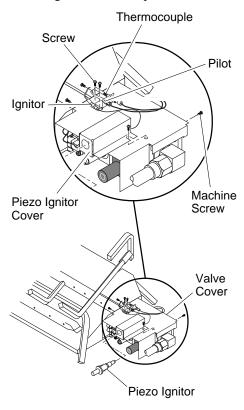


Figure 13 - Installing Thermocouple, Pilot, and Piezo Ignitor Cover

Propane/LP Gas Conversion

To convert to propane/LP gas, the regulator pressure must be reset. Also, the burner inlet fitting and pilot orifice must be replaced. The propane/LP burner inlet fitting is supplied with the orifice installed for your log set.

Burner Inlet Fitting

- 1. Remove the burner inlet fitting from the gas control assembly (see Figure 14). DO NOT remove the orifice from this fitting. The propane/LP burner inlet fitting is included in the hardware kit (see Figure 15).
- Be sure to use the correct orifice for your appliance. The orifice kit included with this appliance contains an orifice installed in an air mixer fitting.
- Using thread sealant (resistant to the action of propane/LP gas) on smaller end of fitting, screw the burner inlet fitting into the outlet side of the gas control. Tighten using a wrench.
- 4. Follow steps 1 through 14 under Kit Assembly, pages 9 and 10.

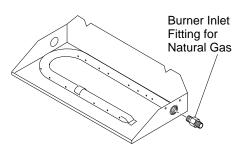


Figure 14 - Remove Burner Inlet Fitting

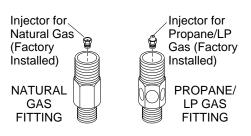


Figure 15 - Burner Inlet Fittings with Injectors

Adjusting Regulator Pressure For **Propane/LP Conversion**

- 1. Locate the pressure button on regulator tower of gas control valve.
- 2. Remove the pressure button from the regulator tower (see Figure 16).
- Reverse the pressure button and replace into regulator tower (see Figure 17).

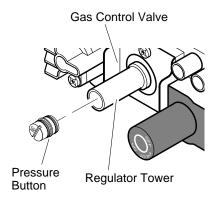


Figure 16 - Removing Pressure Button

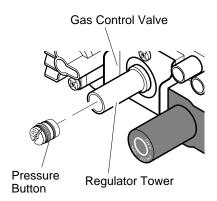


Figure 17 - Replacing the Pressure Button in the Propane/LP position

INSTALLATION

Continued

Changing Pilot Orifice

The pilot is provided with a natural gas orifice installed. For propane/LP gas you must remove it and replace it with a propane/LP orifice. The hardware kit contains an propane/LP orifice with a red stripe for converting the pilot.

- 1. Gently loosen and remove the pilot line connection from the bracket (see Figure 18).
- Replace the orifice (see Figure 18) with the propane/LP pilot orifice with the red stripe.
- 3. Replace and tighten the pilot line to the bracket.
- 4. Continue with step 7 under *Hearth Kit Assembly and Installation*, page 9.

Note: Follow the instructions under the section, *Testing Burner for Leaks*, column 3.

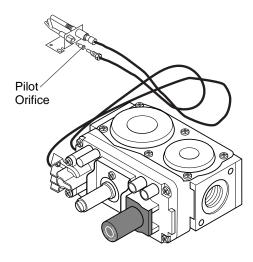


Figure 18 - Installing Propane/LP Pilot Orifice

REMOTE CONTROL OPTIONS

GHRC

If you are using the GHRC remote control option, you must first connect the leads of the receiver to the terminal block on the gas control (see Figure 19).

- 1. Connect the leads to the male fast-on terminals marked TH and TPTH.
- 2. Install a 9V battery (refer to the instructions included with the GHRC).
- Install a 9V battery into the hand-held transmitter.
- 4. Insert the receiver into the simulated log control cover, with the raised cylinder fitting into the hole in the cover.
- 5. The cover may be moved aside when operation of the gas control is necessary.

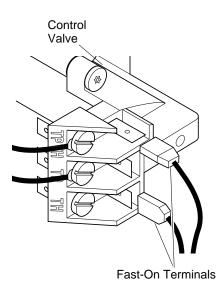


Figure 19 - Connecting Wire Terminals

GWMS2

When installing the GWMS2 remote wall switch option, follow all instructions included with the accessory. Connect wires as shown in Figure 19. You will need to route the wiring away from the gas control and log set in a way which prevents direct radiant heat on the wires.

No Optional Accessories

If you choose no remote accessories at this time, the provided jumper wire must be installed to the terminal block on the gas control. Connect the lead to the fast-on terminals marked TH and TPTH.

TESTING BURNER FOR LEAKS

1. Generously apply soapy solution to all connections.

WARNING: Never check for gas leaks with open flame.

- 2. Light the burner with the shut-off valve no more than half open and holding a match slightly in front of the pan (see *Lighting Instructions*, page 13).
- 3. Inspect all connections for bubbles, raw gas odor, or flame from any area other than the burner (leaks). If leaks are detected, shut off the gas valve immediately. Tighten, or reassemble the loose connection(s) using pipe joint compound until burner system is leak free.
- 4. When the burner is tested and leak free, observe the individual tongues of flame on the burner. *Note:* The burner design includes more ports on the outside of the bar. Make sure that all ports are clear and producing flame evenly across the burner. If any ports appear blocked, clear them by removing the burner manifold and reaming the ports with a modified paper clip or other suitable tool.
- 5. When finished testing, turn the gas shutoff valve OFF to extinguish all flames.

Continued

INSTALLATION Continued

ADDING PAN MATERIAL

- Open the bag of ash bed material (vermiculite) and spread it evenly across the burner pan to the top. You may overflow the front and sides of the pan to cover the entire pan. Do not cover valve.
- Open the glowing embers and evenly cover the ash bed material (vermiculite) in the burner pan.

INSTALLING THE GRATE AND LOGS

- Place the grate over the burner pan where the two outer horizontal supports on the grate fit into the two pan positioning notches in the rear vertical edge of the pan.
- Slide the two rear log grate steps over the two outer horizontal supports on the grate as shown in Figure 20.
- Place the back log on the grate onto the grate steps (see Figure 21).
- Place the front log(s) on the grate and slide forward against the front bars on the grate (see Figure 22).
- Place the smaller top logs onto the bottom logs (see Figure 22). Leave as much open space between logs as possible to minimize flame impingement and sooting. Note: Logs may chip if they are handled roughly or if hit together while being placed.

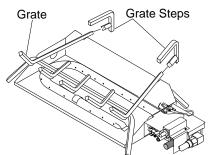
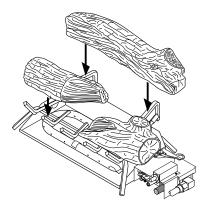
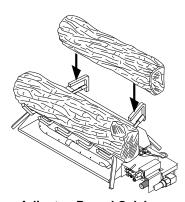


Figure 20 - Installing Grate (Pan Material Not Shown)



Manchester Split Oak Logs



Arlington Round Oak Logs Figure 21 - Installing Front and Back Logs (Number and style of your logs may vary)

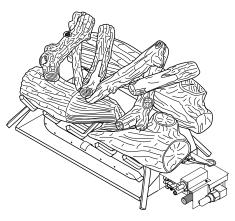


Figure 22 - Placement of Top Loas (Manchester Split Oak Logs Shown)

OPERATING APPLIANCE



FOR YOUR SAFETY READ BEFORE **LIGHTING**



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

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

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician or gas supplier. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

OPERATING APPLIANCE

Continued



LIGHTING INSTRUCTIONS



- 1. STOP! Read the safety information, page 12 column 3.
- 2. Make sure manual shutoff valve is fully open.
- 3. If Using Optional Hand-Held Remote or Wall Switch: Set switch to OFF position.

WARNING: Burner will come on automatically within one minute when the selector switch is in the ON position after the pilot is lit.

- 4. Press in and turn control knob clockwise to the OFF position.
- 5. 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, page 12 column 3. If you don't smell gas, go to the next step.
- 6. Press in and turn control knob counterclockwise to the PILOT position. Press in control knob for five (5) seconds (see Figure 23).

Note: You may be running this log set for the first time after hooking up to gas supply. If so, the control knob may need to be pressed in for 30 seconds or more. This will allow air to bleed from the gas system.

7. With control knob pressed in, press and release ignitor button. This will light pilot. If needed, keep pressing ignitor button until pilot lights.

Note: If pilot does not stay lit, contact a qualified service person or gas supplier for repairs. Until repairs are made, light pilot with match. To light pilot with match, see *Manual Lighting Procedure*.

- Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.
 - If control knob does not pop out when released, contact a qualified service person or gas supplier for repairs.
 Note: If pilot goes out, repeat steps 4 through 8.
- 9. Slightly push in and turn control knob counterclockwise to the ON position.
- If Using Optional Hand-Held Remote or Wall Switch: Wait one minute and switch selector switch to the ON position to light burner.

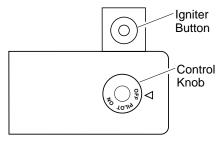


Figure 23 - Control Knob and Ignitor Button Location (Shown as Supplied, No Control Options)

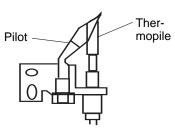


Figure 24 - Thermopile and Pilot



TO TURN OFF GAS TO APPLIANCE



Shutting Off Appliance

1. Slightly push in and turn control knob clockwise to the OFF position.

Shutting Off Burner Only (pilot stays lit)

You may shut off the burner and keep the pilot lit by doing one of the following:

- 1. Slightly push in and turn control knob clockwise to the PI-LOT position.
- 2. If Using Optional Hand-Held Remote or Wall Switch: Set switch to OFF position.



MANUAL LIGHTING PROCEDURE



- 1. Follow steps 1 through 6 under *Lighting Instructions*.
- 2. Depress control knob and light pilot with match.
- 3. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow steps 9 through 10.

Continued

OPERATING APPLIANCE Continued



CURING LOGS



During the 2-3 hour appliance break-in period, you may detect an odor from the appliance as the various paints and compounds used in the manufacturing of this log set cure. This is a normal and temporary situation that is not cause for alarm. However, you may want to provide extra ventilation to the room during this time. To ensure proper curing of the logs:

- Ignite a 2" flame and maintain it for 1 hour.
- Burn the logs in consecutive 1 hour periods raising the flame an additional 2" to full flame height for a total of three hours.



OPTIONAL REMOTE **OPERATION**



Note: All remote control accessories must be purchased separately. Follow instructions included with the remote control.

NOTICE: You must light the pilot before using the hand-held remote control unit. See Lighting Instructions.

1. After lighting, let pilot flame burn for about one minute. Turn control knob to ON position. Slide the selector switch to the REMOTE position. NOTE: The burner may light if hand-held remote ON button was on when selector switch was last turned off. You can now turn the burner on and off with the handheld remote control unit.

IMPORTANT: Do not leave the selector switch in the REMOTE position when the pilot is not lit. This will drain the battery.

IMPORTANT: Be sure to press the ON/OFF buttons on the hand-held remote control unit for up to 3 seconds to assure proper operation.

GHRC Operation:

Press the ON/OFF button to turn the burner on and off. When turning burner off, the pilot will remain lit.



GWMS2 WALL MOUNTED SWITCH (OPTIONAL)



This wall switch works just like the conventional light switch. Flip the switch up for on and down for off.

Note: Make sure that this switch is not in a position to be mistaken for a light switch. This may result in the log set being inadvertently turned on without the proper precautions being taken. See installation instructions on page 11 of this manual.

TROUBLESHOOTING

Note: For additional help, visit DESA International's technical service web site at **www.desatech.com**.

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

WARNING: Turn off log set and let cool before servicing. Only a qualified service person should service and repair log set.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Log set is smoking/sooting excessively (<i>Note</i> : It is natural and unavoidable for	1. Poor fuel quality	Contact local natural or propane/LP gas company
vented gas log sets to produce moderate levels of carbon (soot) where flames contact the logs. This is especially true	2. Fireplace venting system not drafting properly	2. Adjust damper wide open and/or have fireplace and venting professionally cleaned and checked
with propane/LP gas.)	3. Excessive flame impingement or blockage	3. Separate the logs to allow more flame passage
	4. Improper fuel/air mixture	4. Remove any foreign items from the flame pattern and/or check for proper orifice sizing
	5. Excessive gas supply/pressure	5. Preheat flue in very cold weather
Burner is excessively noisy (<i>Note</i> : The movement and combustion of	Passage of air/gas across irregular surfaces	Relieve any tight bends or kinks in gas supply line
gas will create low, unavoidable levels of noise.)	2. Excessive gas pressure on natural gas units	2. Check/reset gas regulator pressure (see Adjusting Regulator Pressure For Propane/LP Conversion, page 10)
Burner flame is too low or too high	Incorrect gas supply or pressure Blocked burner orifice or burner mani-	 Check for proper gas supply pressure Free burner orifice and manifold ports
	fold ports	of any burrs, paint, or other blockage
	3. Improper burner orifice size	3. Verify proper burner orifice sizing (see Figure 4, page 7)
Remote does not function (GHRC only)	Battery is not installed. Battery power is low	Replace 9-volt batteries in receiver and remote control

www.desatech.com

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at pilot	Ignitor electrode not connected to ignitor cable	Reconnect ignitor cable
ор ши ш р.100	2. Ignitor cable pinched or wet	2. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry
	3. Bad ground on piezo ignitor	3. Scrape away paint on bracket for better contact with ground on piezo ignitor
	4. Broken ignitor cable	4. Replace ignitor cable
	5. Bad piezo ignitor	5. Replace piezo ignitor
	6. Ignitor electrode broken	6. Replace electrode
	7. Ignitor electrode positioned wrong	7. Reposition electrode
When ignitor button is pressed, there is spark at pilot but no ignition	Gas supply turned off or manual shutoff valve closed	Turn on gas supply or open manual shutoff valve
spark at prior out no ignition	2. Control knob not in PILOT position	2. Turn control knob to PILOT position
	3. Control knob not pressed in while in PILOT position	Press in control knob while in PILOT position
	4. Air in gas lines when installed	Continue holding down control knob. Repeat igniting operation until air is removed
	5. Pilot adjustment screw closed	5. Adjust pilot flame for approximately 2" blue flame
	6. Pilot is clogged	6. Clean pilot (see <i>Cleaning and Maintenance</i> , page 22) or replace pilot assembly
	7. Low gas pressure	7. Replace gas control
Pilot lights but flame goes out when control	Control knob not fully pressed in	Press in control knob fully
knob is released	2. Control knob not pressed in long enough	2. After pilot lights, keep control knob pressed in 30 seconds
	3. Manual shutoff valve not fully open	3. Fully open manual shut-off valve
	4. Pilot flame not touching thermocouple,	4. A) Contact local natural gas company
	which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following:	B) Clean pilot (see <i>Cleaning and Mainte-nance</i> , page 22) or replace pilot assembly
	A) Low gas pressure	
	B) Dirty or partially clogged pilot 5. Thermocouple connection loose at con-	5. Hand tighten until snug, then tighten
	trol valve 6. Thermocouple damaged	1/4 turn more6. Replace thermocouple
	7. Control valve damaged	7. Replace control valve
Burner does not light after pilot is lit	Burner orifice clogged	Clean burner orifice
Burner does not right after phot is it	2. Inlet gas pressure is too low	2. Contact local natural or propane/LP gas
	3. Burner orifice diameter is too small	company 3. Replace burner orifice
	Thermocouple leads disconnected or improperly connected	Reconnect leads
Delayed ignition burner	1. Pilot flame needs adjusting	Adjust pilot flame for approximately 2" blue flame
	2. Wrong pilot orifice	2. Replace pilot orifice set
	www.desatech.com	

TROUBLESHOOTING

Continued

MARNING: 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.

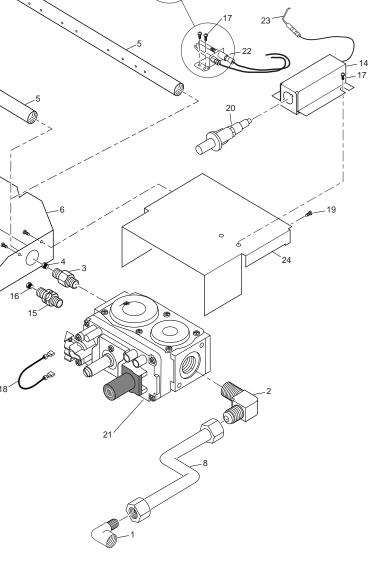
IMPORTANT: Operating log set where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors. These odors will disappear over time.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Log Set produces a clicking/ticking noise just after burner is lit or shut off	Metal expanding while heating or contracting while cooling	This is common with most log sets. If noise is excessive, contact qualified service person
Log Set produces unwanted odors	1. Log Set burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. (See <i>IMPORTANT</i> statement above)	Open flue to maximum. Stop using odor causing products while log set is running
	 Gas leak. See Warning statement at top of page 	2. Locate and correct all leaks (see <i>Checking Gas Connections</i> , page 8)
Gas odor even when control knob is in OFF position	 Gas leak. See Warning statement at top of page Control valve defective 	 Locate and correct all leaks (see <i>Checking Gas Connections</i>, page 8) Replace control valve
Gas odor during combustion	Gas leak. See Warning statement at top of page	Locate and correct all leaks (see <i>Checking Gas Connections</i> , page 8)

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ILLUSTRATED PARTS BREAKDOWN MODELS VVSA18R, VVSA24R, VVDA18R, VVDA24R, AND VVDA30R



PARTS LIST

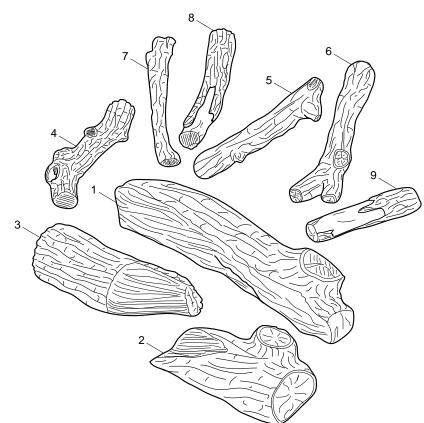
This list contains replaceable parts used in your log set. When ordering parts, follow the instructions listed under *Replacement Parts* on page 22 of this manual.

MODELS VVSA18R, VVSA24R, VVDA18R, VVDA24R, AND VVDA30R

KEY	PART NUMBER FOR							
NO.	VVSA18R	VVSA24R VVDA18R		VVDA24R	VVDA30R	DESCRIPTION	QTY.	
1	901063-01	901063-01	901063-01	901063-01	901063-01	Brass 3/8 FLR x 1/2 FPT Elbow	1	
2	901056-01	901056-01	901056-01	901056-01	901056-01	Brass 3/8 FLR x 3/8 MPT Elbow	1	
3	901066-01	901066-01	901066-01	901066-01	901066-01	Brass Air Mixer - Natural Gas	1	
4	901064-03	901064-04	901064-03	901064-04	901064-09	Natural Gas Injector	1	
5	901208-01	901208-02	901209-01	901209-02	901209-03	Burner Manifold	1	
6	901136-01	901136-02	901137-01	901137-02	901137-03	Burner Pan	1	
7	901242-01	901242-01	901242-01	901242-01	901242-01	Damper Clamp - Std. Assembly	1	
8	901232-01	901232-01	901232-01	901232-01	901232-01	Gas Line - 12" Aluminum	1	
9	901430-01	901430-01	901431-01	901431-01	901431-01	Grate Steps	2	
10	901243-01	901243-02	901246-01	901246-02	901246-03	Log Grate	1	
11	l —	_	901681-01	901681-01	901681-01	Burner Strap	1	
12	_	_	901063-01	901063-01	901063-01	Nut #8/32	1	
13	_	_	901076-01	901076-01	901076-01	Screw #8/32 x 3/8	1	
14	106824-01	106824-01	106824-01	106824-01	106824-01	Piezo Cover	1	
15	901066-02	901066-02	901066-02	901066-02	901066-02	Propane/LP Brass Air Mixer	1	
16	901065-02	901065-03	901065-02	901065-03	901065-04	Propane/LP Brass Orifice	1	
17	901075-01	901075-01	901075-01	901075-01	901075-01	Screw 1/4" #8 "B" pt	1	
18	105575-01	105575-01	105575-01	105575-01	105575-01	Jumper Wire	1	
19	M12461-26	M12461-26	M12461-26	M12461-26	M12461-26	Machine Screw #10-32 x 3.8"	1	
20	097159-04	097159-04	097159-04	097159-04	097159-04	Piezo Igniter	1	
21	901071-01	901071-01	901071-01	901071-01	901071-01	Valve, mV	1	
22	901073-01	901073-01	901073-01	901073-01	901073-01	Pilot Burner (with natural gas orifice)	1	
23	901072-01	901072-01	901072-01	901072-01	901072-01	Piezo Ignitor Electrode	1	
24	106823-01	106823-01	106823-01	106823-01	106823-01	Steel Shroud	1	
25	901070-01	901070-01	901070-01	901070-01	901070-01	Propane/LP Pilot Burner Orifice	1	
			PAF	⊥ RTS AVAILABLI	E — NOT SHOW	/N		
	901156-01	901156-01	901156-01	901156-01	901156-01	.125# Bag Embers	1	
	901155-01	901155-01	901155-01	901155-01	901155-01	1.5# Bag Ash Bed Material		
						(Vermiculite)	1	
	901838-01	901838-01	901838-01	901838-01	901838-01	Remote Receiver Cover (Log)	1	

ILLUSTRATED PARTS BREAKDOWN

LOG SET MODELS VSLR18, VSLR24, VDLCR18, VDLCR24, AND VDLCR30



Kingston Split Oak Logs

12

Hanover Round Oak Logs

OWNER'S MANUAL

PARTS LIST

This list contains replaceable parts used in your log set. When ordering parts, follow the instructions listed under *Replacement Parts* on page 22 of this manual.

LOG SET MODELS VSLR18, VSLR24, VDLCR18, VDLCR24, AND VDLCR30

KEY	PART NUMB	BER FOR					
NO.	VSLR18 VSLR24 V		VDLCR18	VDLCR24	VDLCR30	DESCRIPTION	QTY.
1	_	_	901565-02	901566-02	901567-02	Bottom Rear	1
2	<u> </u>	_	901603-01	901604-01	901604-04	Bottom Front	1
3	<u> </u>	_	901593-01	901594-01	901595-01	Bottom Front	1
4	<u> </u>	_	_	_	901580-02	VR-11\VC Top Log	1
5	<u> </u>	_	901588-01	901588-01	901588-01	VS-12 Top Log	1
6	<u> </u>	_	_	901592-01	901592-01	VCR-12 Top Log	1
7	<u> </u>	_	901591-02	901591-02	901591-02	VCR-11\VC Top Log	1
8	<u> </u>	_	901551-03	901551-03	901551-03	CHR-13\VC Top Log	1
9	<u> </u>	_	901587-01	901587-01	901587-01	VCR-9 Top Log	1
10	901625-03	901626-03	_	_	_	Bottom Rear	1
11	901583-01	901584-01	_	_	_	Bottom Front	1
12	901541-02	901541-02	_	_	_	CPR-13\VR Top Log	1
13	901580-01	901580-01	_	_	_	VR-11\VR Top Log	1
14	901579-01	901579-01	_	_	_	VR-10Y Top Log	1
15		901578-01	_		_	VR-10 Top Log	1

CLEANING AND MAINTENANCE

- · Keep the area around the log set clean and clear of debris.
- Occasionally, you may use a soft bristle brush to clean logs.
- Once every year a qualified agency or certified chimney sweep should examine and clean the venting system of the fireplace.

REPLACEMENT **PARTS**

Note: Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

PARTS UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA International's Technical Service Department at

1-800-323-5190. When calling DESA International, have ready

- · your name and address
- model and serial numbers of your log set
- how log set was malfunctioning
- type of gas used (propane or natural gas)
- · purchase date

Usually, we will ask you to return the defective part to the factory.

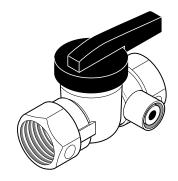
PARTS NOT UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA International's Parts Department at 1-800-972-7879 for referral information. When calling DESA International, have ready

- model number of your log set
- the replacement part number

ACCESSORIES

Purchase these log set accessories from your local dealer. If they can not supply these accessories, call DESA International's Parts Department at 1-800-972-7879 for referral information. You can also write to the address listed on the back page of this manual.



MANUAL SHUTOFF VALVE **GA5010**

For all models. Manual shutoff valve with 1/8" NPT tap. Fits 1/2" NPT pipe.

ASH BED MATERIAL (Vermiculite) - GA9700 (Not Shown)

For all models. Carton of 6.

GLOWING EMBERS - GA9900 (Not Shown)

For all models. Use for firebox decoration only.

SILICA SAND - GA9800 (Not Shown)

For all models. Use for firebox decoration only. Carton of 6.

LAVA ROCK - GA6066 (Not Shown)

For all models. Use for firebox decoration only.

DECORATIVE ASH BED CONTROL COVER - DABK (Not Shown)

An attractive way to cover control knob and piezo ignitor.

18" ORNAMENTAL GRATE **ENHANCER - GA9310** (Not Shown)

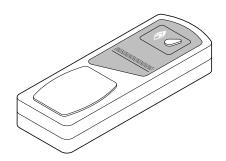
For 18" models only. Additional decoration for front grate.

24" ORNAMENTAL GRATE **ENHANCER - GA9320** (Not Shown)

For 24" models only. Additional decoration for front grate.

30" ORNAMENTAL GRATE **ENHANCER - GA9330** (Not Shown)

For 30" models only. Additional decoration for front grate.



RECEIVER AND HAND-HELD REMOTE CONTROL KIT GHRC SERIES

For all models. Allows the gas log heater to be turned on and off by using a hand-held remote control.

WALL-MOUNT ON/OFF SWITCH - GWMS2 (Not Shown)

For all models. Allows the gas log heater to be turned on and off with a wall switch.

OWNER'S MANUAL

NOTES			

WARRANTY INFORMATION

KFFP THIS WARRANTY

Model	
Serial No	
Date Purchased	

Always specify model and serial numbers when communicating with the factory.

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We make no other warranty, expressed or implied.

LIMITED WARRANTY VANGUARD VENTED GAS LOGS

DESA International warrants this product to be free from defects on burner system for four (4) years, valves/controls for one (1) year, and logs for a lifetime from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale or cancelled check must be presented.

This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this log set to proper operating condition and an allowance for labor when provided by a DESA Authorized Service Center. Warranty part(s) MUST be obtained through authorized dealers of this product and/or DESA International who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty. The log set MUST be installed by a qualified installer in accordance with all local codes and instructions furnished with the unit.

This warranty does not apply to parts that are not in original condition because of normal wear and tear, or parts that fail or become damaged as a result of misuse, accidents, lack of proper maintenance or defects caused by improper installation. Travel, diagnostic cost, labor, transportation and any and all such other costs related to repairing a defective log set will be the responsibility of the owner.

TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT; THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES AND LIMITS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO FOUR (4) YEARS ON BURNER SYSTEM, VALVES/CONTROLS FOR ONE (1) YEAR, AND A LIFETIME ON LOGS FROM THE DATE OF FIRST PURCHASE; AND DESA INTERNATIONAL'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA INTERNATIONAL SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow a limitation on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitation on implied warranties, or exclusion or limitation on damages may not apply to you.

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

For information about this warranty write:

DESAINTERNATIONAL

2701 Industrial Drive P.O. Box 90004 Bowling Green, KY 42102-9004 www.desatech.com

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