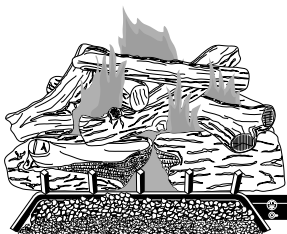




GAS LOG REMOTE READY VENTED DECORATIVE APPLIANCE OWNER'S OPERATION AND INSTALLATION MANUAL

**ANSI Z21.60
CSA 2.26
APPROVED**



Convertible from Natural Gas to Propane/LP Gas

VANGUARD MODELS: VVSA18R, VVSA24R, VVDA18R, VVDA24R AND VVDA30R

For Use with Log Set Models:

VSLR18, VSLR24, VDLR18, VDLR24 (Shown) and VDLR30

FMI MODELS: FVSA18R, FVSA24R, FVDA18R, FVDA24R AND FVDA30R

For Use with Log Set Models:

FSLR18, FSLR24, FDLR18, FDLR24 and FDLR30

⚠ 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.

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

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SAFETY

⚠ 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 5 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 the *National Fuel Gas Codes, ANSI Z233.1/NFPA 54, Air for Combustion and Ventilation*.

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

⚠ 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 odor-making 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.

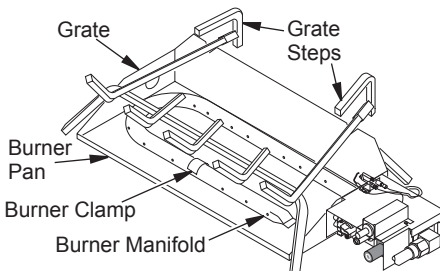
1. This appliance, as supplied, is only for use with the type of gas indicated on the rating plate. This appliance is convertible for use with propane/LP.

SAFETY

Continued

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" 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 fireplace doors or screens in place and fully closed. Unless provided by other means, fireplace doors or screens shall have openings for introduction of combustion air.
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 14.
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. The installation and provisions for combustion and ventilation air must conform with the National Fuel Gas Codes, ANSI Z223.1/NFPA 54, Air for Combustion and Ventilation.
11. Do not run log set
 - where combustible materials, gasoline and other flammable vapors and liquids 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 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.
16. To help prevent breakage, new logs must be broken-in (see Curing Logs, page 13).
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.
18. Provide adequate clearances around air openings.

PRODUCT IDENTIFICATION



Hearth Kit Model _____

Serial Number _____

Log Set Model _____

Figure 1 - Product Identification (FVDA24R Shown)

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 ANSI Z223.1/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

⚠ CAUTION: Do not remove the metal data plates from the burner pan. The data plates contain important warranty and safety information.

1. Remove logs, hearth kit, pan materials, and hardware from carton.
2. Remove all protective packaging applied to logs and base for shipment.
3. Check heater for any shipping damage. If heater is damaged call DESA Heating, LLC at 1-866-672-6040 for replacement parts before returning to dealer.

PRODUCT FEATURE

REMOTE READY SAFETY VALVE/ PILOT

This unit is provided with a millivolt 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 *ANSI Z21.60* and *CSA 2.26* as a vented decorative appliance. It is supplied with the parts and instructions to convert to propane/LP gas use.

INSTALLATION

⚠ WARNING: The Massachusetts State Board requires all installations be performed by a Licensed Plumber or Gas Fitter. Massachusetts state code requires all vent dampers be welded open or removed.

⚠ CAUTION: Do not remove the data plates attached to the burner pan. The data plates contain important warranty and safety 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 in accordance with the 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.

INSTALLATION

Continued

The charts in Figure 2 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 2.

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 8.

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

BURNER ORIFICE						
LOG SIZE	NATURAL			PROPANE/LP		
	In.	Num.	CLR.	In.	Num.	CLR.
18" SA/DA	0.129	30	Green	0.073	49	Red
24" SA	0.141	28	Yellow	0.086	44	Orange
24" DA	0.136	29	White/Yellow	0.086	44	Orange
30" SA/DA	0.157	22	Yellow/Blue	0.089	43	Black

MINIMUM FIREBOX SIZES					
LOG SIZE	FRONT WIDTH	BACK WIDTH*	DEPTH	HEIGHT	MINIMUM FLUE SIZE
18"	34"	16"	14"	18"	8" dia.
24"	35 3/4"	17"	15 1/2"	18"	8" dia.
30"	42"	27"	18"	18"	9" dia.

* At depth indicated

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

* ± .2"

DESCRIPTION	Btu\Hr Input Natural Gas	Btu\Hr Input Propane Gas
18" Single Burner	50,000	40,000
24" Single Burner	60,000	50,000
18" Dual Burner	55,000	45,000
24" Dual Burner	65,000	55,000
30" Dual Burner	70,000	60,000

Figure 2 - Technical Information Charts

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 damper must be fixed open to provide a minimum of 81 sq. in. of free air opening during operation of this log set. A multipurpose damper clamp is provided to fix the damper in position.

The minimum flue sizes shown in Figure 2 are based on a 6' chimney height using round pipe. Your minimum flue size will vary based on input rate and chimney height. Refer to the *National Fuel Gas Code ANSI Z223.1/NFPA 54, Section 6.6*, for details.

INSTALLATION

Continued

INSTALLING DAMPER CLAMP

Secure the damper stop clamp provided to the leading edge of the damper as shown in Figure 3. 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.

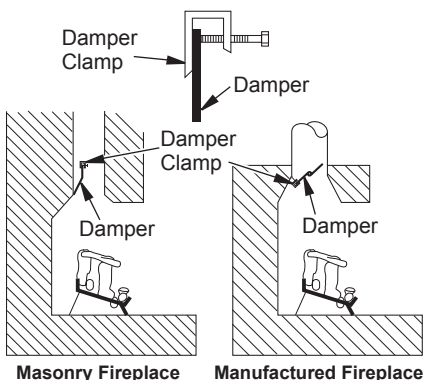


Figure 3 - Attaching Damper Clamp

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)
- equipment 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 volume will occur.

Installation must include an equipment shutoff valve with "T" style handle, gas union and, for propane/LP gas only, a 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 4).

IMPORTANT: Install equipment shutoff valve in an accessible location. The equipment shutoff valve is for turning on or shutting off the gas to the appliance.

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

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

We recommend that you install a sediment trap in the supply line as shown in Figure 4. Locate sediment trap where it is within reach for cleaning. Install in piping system between fuel supply and heater. 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.

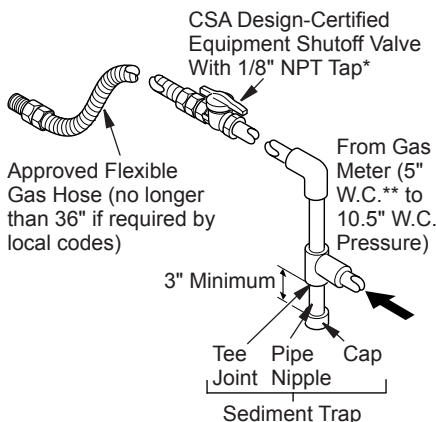


Figure 4 - Gas Connection

* Purchase the optional CSA design-certified equipment shutoff valve from your dealer.

** Minimum inlet pressure for purpose of input adjustment.

INSTALLATION

Continued

CHECKING GAS CONNECTIONS

⚠ WARNING: Test all gas piping and connections, internal and external to unit, for leaks after installing or servicing. Correct all leaks at once.

⚠ WARNING: Never use an open flame to check for a leak. Apply a noncorrosive leak detection fluid 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 (3.5 kPa)

1. Disconnect log set and its individual equipment shutoff valve from gas supply piping system.
2. Cap off open end of gas pipe where equipment shutoff valve was connected.
3. Pressurize supply piping system by either using compressed air or opening main gas valve located on or near gas meter.
4. Check all joints of gas supply piping system. Apply a noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Reconnect log set and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

Test Pressures Equal To or Less Than 1/2 PSIG (3.5 kPa)

1. Close equipment shutoff valve (see Figure 5).
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 equipment shutoff valve (see Figure 5). Apply a noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
4. Correct all leaks at once.

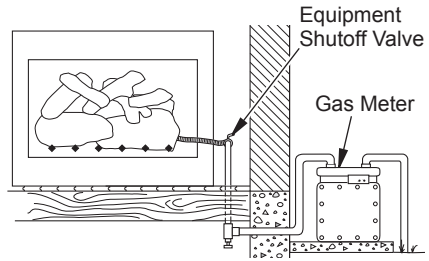


Figure 5 - Checking Gas Joints

HEARTH PAN INSTALLATION

If using propane/LP gas, see [Propane/LP Gas Conversion](#), page 8, before installing hearth pan.

1. Place the burner pan assembly in the center of the fireplace floor. Make sure the front of pan faces forward.
2. Thread the gas supply fitting to the fireplace gas supply pipe. Adjust to most convenient position.
3. Install the gas connector tube to the gas supply adapter. Carefully shape tube and attach to gas inlet fitting (see Figure 6). Be careful not to cause kinks in tube.
4. Test for leaks following instructions under [Testing Burner for Leaks](#), page 10.
5. Retighten and adjust the location of the gas control as necessary. The gas control should be level, with the control rod to the front.

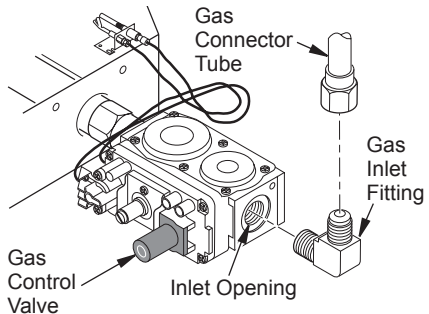


Figure 6 - Installing Inlet Fitting and Gas Connector Tube (Valve Cover Removed for Clarity)

INSTALLATION

Continued

Propane/LP Gas Conversion

To convert to propane/LP gas, the regulator pressure must be reset. Also, 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 pilot assembly from valve cover by removing two screws on bracket (see Figure 7).
2. Unscrew and remove piezo ignitor and ignitor cover from valve cover.
3. Remove two (2) screws on burner pan and remaining screw on rear of the control valve to remove valve cover.
4. Unthread control valve and burner inlet fitting from burner tube by turning valve counter-clockwise (see Figure 8).
5. Remove natural gas inlet fitting from control valve and discard (see Figure 8). DO NOT remove orifice from this fitting. The propane/LP burner inlet fitting is included in the hardware kit (see Figure 9).
6. 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.

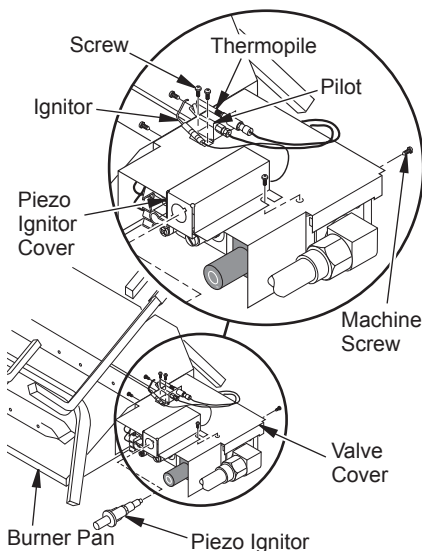


Figure 7 - Removing/Installing Thermocouple, Pilot, and Piezo Ignitor Cover

7. Using thread sealant (resistant to the action of propane/LP gas) on smaller end of fitting, screw the burner inlet fitting into outlet side of gas control. Tighten using a wrench.
8. Rethread valve and fitting assembly into burner tube until fully threaded and level with burner pan. Reattach valve cover with three (3) screws previously removed in step 3.

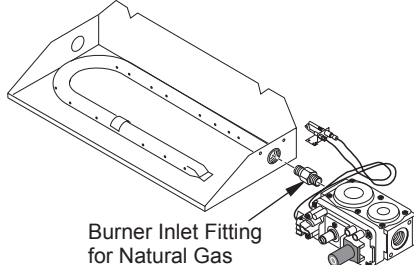


Figure 8 - Remove Burner Inlet Fitting

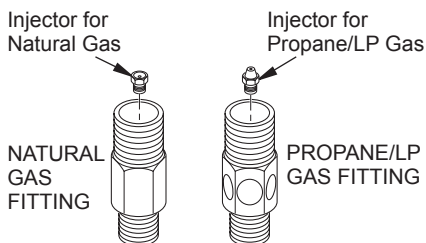


Figure 9 - Burner Inlet Fittings with Injectors

GAS CONTROL VALVE CONVERSION

Convert gas control valve by changing out valve regulator portion of the gas valve.

1. Using a TORX T20 or slotted screwdriver, remove and discard three mounting screws, pressure regulator tower and diaphragm/spring components (see Figure 10, page 9).
2. Insure that rubber gasket is properly positioned on new pressure regulator assembly. Install new pressure regulator assembly to valve using new mounting screws supplied with kit. Tighten screws securely (approximately 25 in-lbs.) See Figure 11, page 9.

INSTALLATION

Continued

3. Install identification label enclosed with gas valve regulator to valve body where it can easily be seen (see Figure 11).

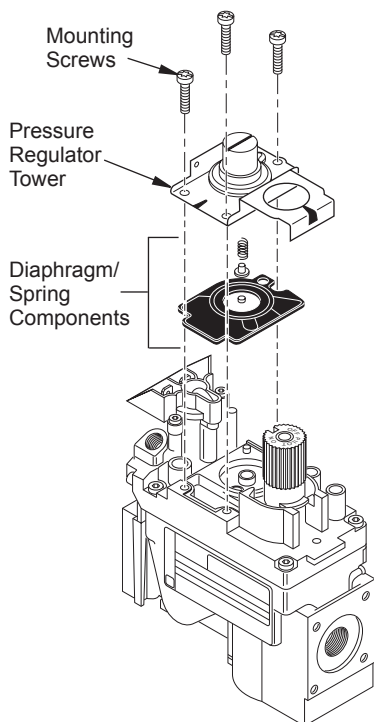


Figure 10 - Removing Mounting Screws, Pressure Regulator Tower and Diaphragm/Spring Components

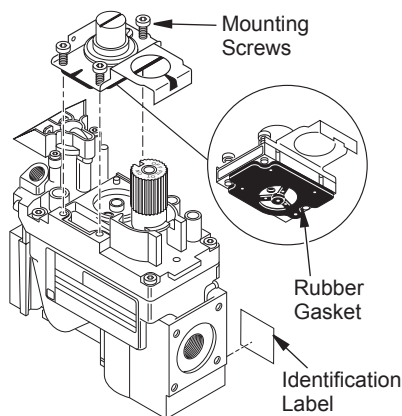


Figure 11 - Installing Pressure Regulator Assembly

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 pilot line connection from bracket (see Figure 12).
2. Replace orifice (see Figure 12) with propane/LP pilot orifice with red stripe.
3. Replace and tighten pilot line to bracket.
4. Reattach pilot and piezo ignitor assembly to valve cover with screws previously removed (see Figure 7, page 8).

Note: Follow instructions under section, Testing Burner for Leaks, page 10.

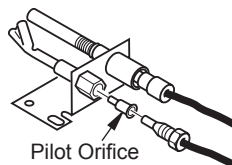


Figure 12 - Installing Propane/LP Pilot Orifice

REMOTE CONTROL OPTIONS

HRC100

If you are using HRC100 remote control option, you must first connect leads of receiver to terminal block on gas control (see Figure 13).

1. Connect leads to male fast-on terminals marked TH and TPTH.
2. Install a 9V battery (refer to instructions included with HRC100).
3. Install a 9V battery into hand-held transmitter.

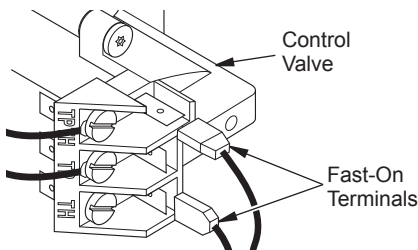


Figure 13 - Connecting Wire Terminals

INSTALLATION

Continued

4. Insert receiver into simulated log control cover, with raised cylinder fitting into the hole in cover.
5. The cover may be moved aside when operation of gas control is necessary.

GWMS2

When installing GWMS2 remote wall switch option, follow all instructions included with accessory. Connect wires as shown in Figure 13. You will need to route wiring away from gas control and log set in a way which prevents direct radiant heat on wires.

No Optional Accessories

If you choose no remote accessories at this time, provided jumper wire must be installed to terminal block on gas control. Connect lead to 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 burner with shutoff valve no more than half open and holding a match slightly in front of pan (see *Lighting Instructions*, page 12).
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 gas valve immediately. Tighten, or reassemble loose connection(s) using pipe joint compound until burner system is leak free.
4. When burner is tested and leak free, observe individual tongues of flame on burner.

Note: Burner design includes more ports on outside of bar. Make sure that all ports are clear and producing flame evenly across burner. If any ports appear blocked, clear them by removing burner manifold and reaming ports with a modified paper clip or other suitable tool.

5. When finished testing, turn gas shutoff valve OFF to extinguish all flames.

ADDING PAN MATERIAL

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

INSTALLING GRATE AND LOGS

1. Place grate over burner pan where two outer horizontal supports on grate fit into two pan positioning notches in rear vertical edge of pan.
2. Slide two rear log grate steps over two outer horizontal supports on grate as shown in Figure 14.
3. Place back log on grate onto grate steps (see Figure 15, page 11).
4. Place front log(s) on grate and slide forward against front bars on grate (see Figure 15, page 11).
5. Place smaller top logs onto bottom logs (see Figure 16, page 11). 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.

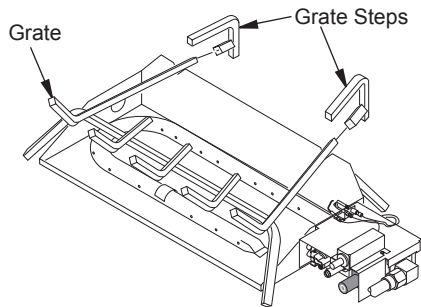


Figure 14 - Installing Grate (Pan Material Not Shown)

INSTALLATION

Continued

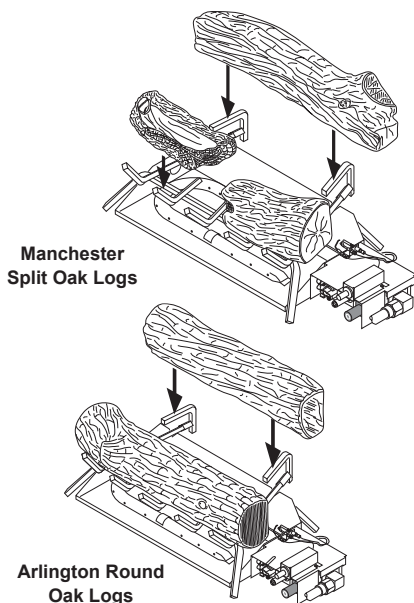


Figure 15 - Installing Front and Back Logs (Number and style of your logs may vary)

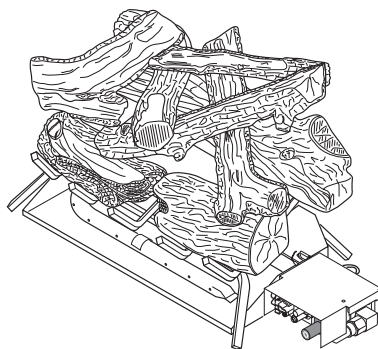


Figure 16 - Placement of Top Logs (Manchester Split Oak Logs Shown)

OPERATION

**FOR YOUR SAFETY
READ BEFORE LIGHTING**

⚠ WARNING: Keep flue open when operating unit.

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

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- WHAT TO DO IF YOU SMELL GAS**
- Do not try to light any appliance.
 - Do not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician or gas supplier. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

OPERATION

Continued

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information on page 11.
2. Make sure equipment 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 11. 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 17).
- 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. Visually locate the pilot on the control valve cover by the edge of the burner pan to look for flame. If needed, keep pressing ignitor button until pilot lights.

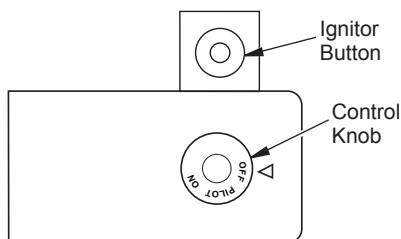


Figure 17 - Control Knob and Ignitor Button Location (Shown as Supplied, No Control Options)

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.

8. 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.
10. **If Using Optional Hand-Held Remote or Wall Switch:** Wait one minute and switch selector switch to the ON position to light burner. when the selector switch is in the ON position after the pilot is lit.
11. **To leave pilot lit and shut off burners only:** Turn control knob clockwise ↻ to the PILOT position, or set selector switch in the OFF position.

TO TURN OFF GAS TO APPLIANCE

Shutting Off Appliance

1. Slightly push in and turn control knob clockwise ↻ to the OFF position.
2. Close equipment shutoff valve.

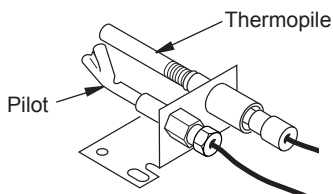


Figure 18 - Thermopile and Pilot

OPERATION

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 HAND-HELD 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, page 12.

After lighting, let pilot flame burn for about one minute. Turn control knob to ON position. Adjust flame adjustment knob anywhere between HI and LO. Slide the selector switch to the REMOTE position.

Note: The burner may light if hand-held remote was on when selector switch was last turned off. You can now turn the burner on and off with the hand-held remote control unit.

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

ON/OFF SERIES (MODEL HRC201)

Hold the control button on the hand-held remote until burner turns on. Hold the control button again until burner turns off.

TO LOCK press both buttons on hand-held remote control until light stops flashing. Hand-held remote control is now locked. If the fire is on it will be turned off automatically. In the locked state, the light will not light up when any button is pressed.

TO UNLOCK press both buttons together on hand-held remote control until the light stops flashing. The hand-held remote is now unlocked.

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 8 of this manual.

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

PILOT ASSEMBLY

The pilot assembly is factory preset for the proper flame height. Alterations may have occurred during shipping and handling. The pilot is located on the back right hand side of the burner.

The thermocouple should be fully enveloped in the flame. The flame should not be lifting off of the thermocouple element.

If your pilot assembly does not meet these requirements:

- Turn the adjustment screw marked pilot clockwise to decrease or counterclockwise to increase the flame to proper size (see Figure 20, page 14). Do not remove the adjustment screw.
- see Troubleshooting, page 15

INSPECTING BURNERS

Continued

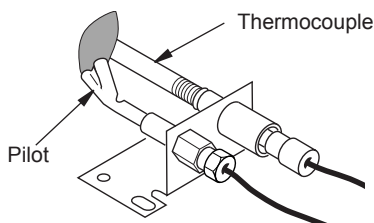


Figure 19 - Correct Pilot Flame Pattern

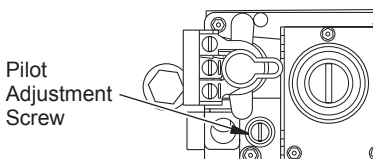


Figure 20 - Locating Pilot Adjustment Screw

BURNER FLAME PATTERN

Burner flames will be steady; not lifting or floating. Flames should go up through the middle of logset. Flames should not "spill" to the edges of the pan or sides of the logset.

Figure 21 shows a typical flame pattern. If burner flame pattern differs from that described:

- turn appliance off (see To Turn Off Gas to Appliance, page 13)
- see Troubleshooting, page 15

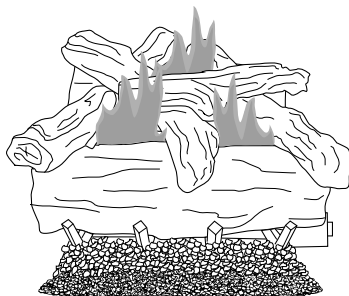


Figure 21 - Typical Flame Pattern

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.
- Periodically inspect the air mixer and burner tube for foreign matter blocking the air inlet and flame holes.
- Once every year a qualified agency or certified chimney sweep should examine and clean the venting system of the fireplace.

SERVICE HINTS

When Gas Pressure is Too Low

- pilot will not stay lit
- burners will have delayed ignition
- heater will not produce specified heat
- propane/LP gas supply may be low

You may feel your gas pressure is too low. If so, contact your local natural gas supplier.

TECHNICAL SERVICE

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

You can also visit DESA Heating, LLC's web site at www.desatech.com.

TROUBLESHOOTING



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: It is natural and unavoidable for vented gas log sets to produce moderate levels of carbon (soot) where flames contact the logs. This is especially true with propane/LP gas.)</i>	<ol style="list-style-type: none"> 1. Poor fuel quality. 2. Fireplace venting system not drafting properly. 3. Excessive flame impingement or blockage. 4. Improper fuel/air mixture. 5. Excessive gas supply/presure. 	<ol style="list-style-type: none"> 1. Contact local natural or propane/LP gas company. 2. Adjust damper wide open and/or have fireplace and venting professionally cleaned and checked. 3. Separate the logs to allow more flame passage. 4. Remove any foreign items from the flame pattern and/or check for proper orifice sizing. 5. Preheat flue in very cold weather.
Burner is excessively noisy. <i>(Note: The movement and combustion of gas will create low, unavoidable levels of noise.)</i>	<ol style="list-style-type: none"> 1. Passage of air/gas across irregular surfaces. 2. Excessive gas pressure on natural gas units. 	<ol style="list-style-type: none"> 1. Relieve any tight bends or kinks in gas supply line. 2. Have inlet gas pressure checked by a qualified service person.
Burner flame is too low or too high.	<ol style="list-style-type: none"> 1. Incorrect gas supply or pressure. 2. Blocked burner orifice or burner manifold ports. 3. Improper burner orifice size. 	<ol style="list-style-type: none"> 1. Check for proper gas supply pressure. 2. Free burner orifice and manifold ports of any burrs, paint, or other blockage. 3. Verify proper burner orifice sizing (see Figure 2, page 5).
Remote does not function (HRC201 only).	<ol style="list-style-type: none"> 1. Battery is not installed. Battery power is low. 	<ol style="list-style-type: none"> 1. Replace 9-volt batteries in receiver and remote control.
When ignitor button is pressed, there is no spark at pilot.	<ol style="list-style-type: none"> 1. Ignitor electrode not connected to ignitor cable. 2. Ignitor cable pinched or wet. 3. Bad ground on piezo ignitor. 4. Broken ignitor cable. 5. Bad piezo ignitor. 6. Ignitor electrode broken. 7. Ignitor electrode positioned wrong. 	<ol style="list-style-type: none"> 1. Reconnect ignitor cable. 2. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry. 3. Scrape away paint on bracket for better contact with ground on piezo ignitor. 4. Replace ignitor cable. 5. Replace piezo ignitor. 6. Replace electrode. 7. Reposition electrode.

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is spark at pilot but no ignition.	<ol style="list-style-type: none"> 1. Gas supply turned off or equipment shutoff valve closed. 2. Control knob not in PILOT position. 3. Control knob not pressed in while in PILOT position. 4. Air in gas lines when in-stalled. 5. Pilot adjustment screw closed. 6. Pilot is clogged. 7. Low gas pressure. 	<ol style="list-style-type: none"> 1. Turn on gas supply or open equipment shutoff valve. 2. Turn control knob to PILOT position. 3. Press in control knob while in PILOT position. 4. Continue holding down control knob. Repeat igniting operation until air is removed. 5. Adjust pilot flame for approximately 2" blue flame. 6. Clean pilot (see Cleaning and Maintenance, page 14) or replace pilot assembly. 7. Replace gas control.
Pilot lights but flame goes out when control knob is released.	<ol style="list-style-type: none"> 1. Control knob not fully pressed in. 2. Control knob not pressed in long enough. 3. Equipment shutoff valve not fully open. 4. 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: A) Low gas pressure B) Dirty or partially clogged pilot 5. Thermocouple connection loose at control valve. 6. Thermocouple damaged. 7. Control valve damaged. 	<ol style="list-style-type: none"> 1. Press in control knob fully. 2. After pilot lights, keep control knob pressed in 30 seconds. 3. Fully open equipment shutoff valve. 4. A) Contact local natural gas company. B) Clean pilot (see Cleaning and Maintenance, page 14) or replace pilot assembly. 5. Hand tighten until snug, then tighten 1/4 turn more. 6. Replace thermocouple. 7. Replace control valve.
Burner does not light after pilot is lit.	<ol style="list-style-type: none"> 1. Burner orifice clogged. 2. Inlet gas pressure is too low. 3. Thermocouple leads disconnected or improperly connected. 	<ol style="list-style-type: none"> 1. Clean burner orifice. 2. Contact local natural or propane/LP gas company. 3. Reconnect leads.
Delayed ignition burner.	<ol style="list-style-type: none"> 1. Pilot flame needs adjusting. 2. Wrong pilot orifice. 	<ol style="list-style-type: none"> 1. Adjust pilot flame for approximately 2" blue flame. 2. Replace pilot orifice set.

TROUBLESHOOTING

Continued



WARNING: 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.

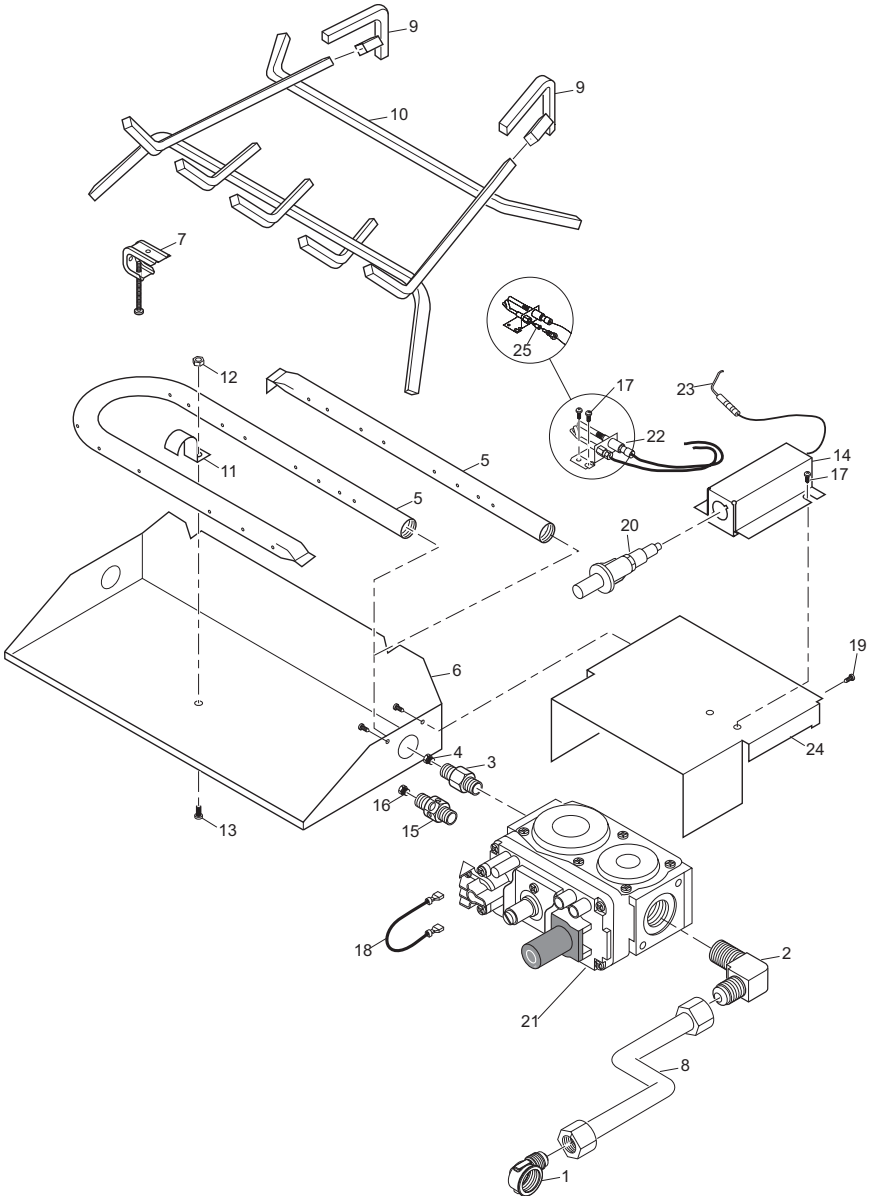
OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Log set produces a clicking/ticking noise just after burner is lit or shut off.	1. Metal expanding while heating or contracting while cooling.	1. This is normal with most log sets. If noise is excessive, contact qualified service person.
Log set produces unwanted odors.	1. Log Set burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. (See IMPORTANT statement above.) 2. Gas leak. See Warning statement at top of page.	1. Open flue to maximum. Stop using odor causing products while log set is running. 2. Locate and correct all leaks (see <u>Checking Gas Connections</u> , page 7).
Gas odor even when control knob is in OFF position.	1. Gas leak. See Warning statement at top of page. 2. Control valve defective.	1. Locate and correct all leaks (see <u>Checking Gas Connections</u> , page 7). 2. Replace control valve.
Gas odor during combustion.	1. Gas leak. See Warning statement at top of page.	1. Locate and correct all leaks (see <u>Checking Gas Connections</u> , page 7).

PARTS

MODELS

VVSA18R, VVSA24R, VVDA18R, VVDA24R AND VVDA30R

FVSA18R, FVSA24R, FVDA18R, FVDA24R AND FVDA30R



PARTS

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.

KEY NO.	PART NO.	DESCRIPTION	VSA18R FVSA18R	VSA24R FVSA24R	VDA18R FVDA18R	VDA24R FVDA24R	VSA30R FVSA30R	QTY.
1	14325	Brass 38 FLR x 1/2 FPT Elbow	•	•	•	•	•	1
2	14264	Brass 38 FLR x 3/8 FPT Elbow	•	•	•	•	•	1
3	901066-01	Brass Air Mixer, Natural Gas	•	•	•	•	•	1
4	901064-03	Natural Gas Injector	•		•			1
	901064-04	Natural Gas Injector		•				1
	901064-08	Natural Gas Injector				•		1
	901064-09	Natural Gas Injector					•	1
5	901208-01	Burner Manifold	•					1
	901208-02	Burner Manifold		•				1
	901209-01	Burner Manifold			•			1
	901209-02	Burner Manifold				•		1
	901209-03	Burner Manifold					•	1
6	901136-01	Burner Pan	•					1
	901136-02	Burner Pan		•				1
	901137-01	Burner Pan			•			1
	901137-02	Burner Pan				•		1
	901137-03	Burner Pan					•	1
7	901242-01	Damper Clamp Assembly, Std.	•	•	•	•	•	1
8	901232-01	Gas Line-12" Aluminum	•	•	•	•	•	1
9	901430-01	Grate Steps	•	•				2
	901431-01	Grate Steps			•	•	•	2
10	901243-01	Log Grate	•					1
	901243-02	Log Grate		•				1
	901246-01	Log Grate			•			1
	901246-02	Log Grate				•		1
	901246-03	Log Grate					•	1
11	901681-01	Burner STrap			•	•	•	1
12	901078-01	Nut #8.32			•	•	•	1
13	901076-01	Screw #8/32 x 3/8			•	•	•	1
14	106824-01	Piezo Cover	•	•	•	•	•	1
15	901066-02	Propane/LP Brass Air Mixer	•	•	•	•	•	1
16	901065-02	Propane/LP Brass Orifices	•		•			1
	901065-03	Propane/LP Brass Orifices		•		•		1
	901065-04	Propane/LP Brass Orifices					•	1
17	901075-01	Screw, 1/4" x #8 (B) pt	•	•	•	•	•	6
18	14580	Jumper Wire	•	•	•	•	•	1
19	M12461-26	Machine Screw #10 x 32 x 3/8"	•	•	•	•	•	1
20	097159-04	Piezo Ignitor	•	•	•	•	•	1
21	14512	Valve, Millivolt	•	•	•	•	•	1
22	901073-01	Pilot Burner, with NG orifice	•	•	•	•	•	1
23	901072-01	Piezo Ignitor Electrode	•	•	•	•	•	1
24	106823-01	Steel Shroud	•	•	•	•	•	1
25	901070-01	Propane/LP Pilot Burner Orifice	•	•	•	•	•	1
PARTS AVAILABLE - NOT SHOWN								
	901156-01	0.125# Bag Embers	•	•	•	•	•	1
	901155-01	1.5# Bag Ash Bed Material (Vermiculite)	•	•	•	•	•	1
	901838-01	Remote Receiver Cover Log	•	•	•	•	•	1

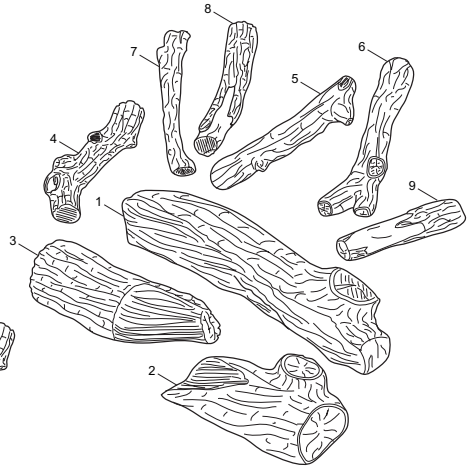
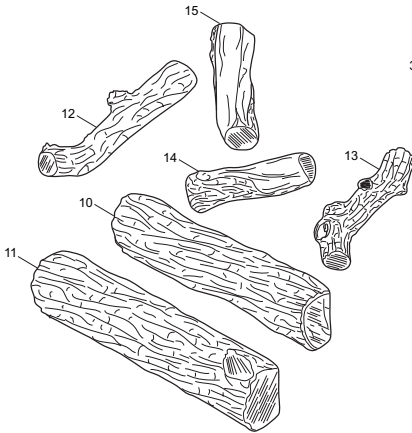
PARTS

HANOVER ROUND OAK LOG MODELS VSLR18 AND VSLR24

KINGSTON SPLIT OAK LOG MODELS VDLR18, VDLR24 AND VDLR30

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.

Hanover Round Oak Logs



Kingston Split Oak Logs

KEY

PART NUMBER

NO.	VSLR18	VSLR24	VDL18	VDL24	VDL30	DESCRIPTION	QTY.
1	—	—	901565-02	901566-02	901567-02	Bottom Rear	1
2	—	—	901603-01	901604-01	901604-04	Bottom Front	1
3	—	—	901593-01	901594-01	901595-01	Bottom Front	1
4	—	—	—	—	901580-02	VR-11VC Top Log	1
5	—	—	901588-01	901588-01	901588-01	VS-12 Top Log	1
6	—	—	—	901592-01	901592-01	VCR-12 Top Log	1
7	—	—	901591-02	901591-02	901591-02	VCR-11VC Top Log	1
8	—	—	901551-03	901551-03	901551-03	CHR-13VC Top Log	1
9	—	—	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-13VR Top Log	1
13	901580-01	901580-01	—	—	—	VR-11VR Top Log	1
14	901579-01	901579-01	—	—	—	VR-10Y Top Log	1
15	—	901578-01	—	—	—	VR-10 Top Log	1

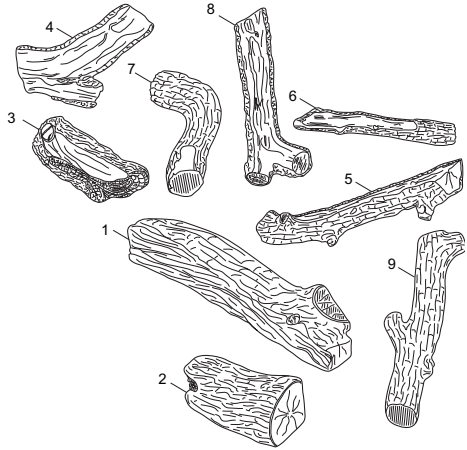
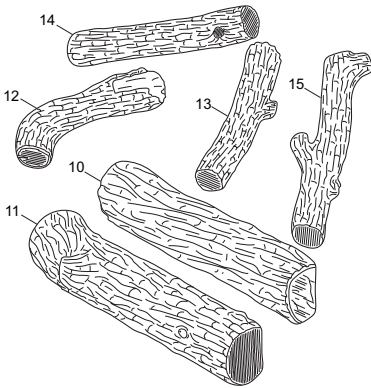
PARTS

ARLINGTON ROUND OAK LOG MODELS FSLR18 AND FSLR24

MANCHESTER SPLIT OAK LOG MODELS FDLR18, FDLR24 AND FDLR30

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.

Arlington Round Oak Logs



Manchester Split Oak Logs

KEY

PART NUMBER

NO.	FSLR18	FSLR24	FDLCR18	FDLCR24	FDLCR30	DESCRIPTION	QTY.
1	—	—	901565-03	901566-03	901567-03	Bottom Rear Log	1
2	—	—	901656-01	901657-01	901658-01	Bottom Front Log	1
3	—	—	901666-01	901667-01	901668-01	Bottom Front Log	1
4	—	—	901619-01	901619-01	901619-01	FS-12Y Top Log	1
5	—	—	901617-01	901617-01	901617-01	FS-16 Top Log	1
6	—	—	901612-01	901612-01	901612-01	FS-17 Top Log	1
7	—	—	901620-02	901620-02	901620-02	FR12L Top Log	1
8	—	—	—	901614-01	901614-01	FS15 Top Log	1
9	—	—	—	—	901623-02	FR14 Top Log	1
10	901625-01	901626-01	—	—	—	Bottom Rear Log	1
11	901635-01	901636-01	—	—	—	Bottom Front Log	1
12	901620-01	901620-01	—	—	—	FR12L Top Log	1
13	901622-01	901622-01	—	—	—	FR11 Top Log	1
14	—	901547-01	—	—	—	CPR11 Top Log	1
15	901623-01	901623-01	—	—	—	FR14 Top Log	1

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 Heating, LLC at 1-866-672-6040. When calling DESA Heating, LLC, have ready:

- your name
- your address
- model and serial numbers of your heater
- how heater was malfunctioning
- purchase date

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

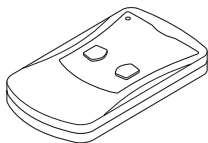
PARTS NOT UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA Heating, LLC at 1-866-672-6040 for referral information. A list of authorized dealers can be found by visiting www.desatech.com. When calling DESA Heating, LLC, have ready:

- model and serial numbers of your heater
- the replacement part number

ACCESSORIES

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



RECEIVER AND HAND-HELD ON/OFF REMOTE CONTROL KIT HRC100 SERIES

For all models. Allows the gas log set to be turned on and off by using the hand-held remote control. A wall-mount docking station is included.

WALL-MOUNT ON/OFF SWITCH GWMS2

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

ASH BED MATERIAL (VERMICULITE) GA9750A

For all models. Carton of 6.

GLOWING EMBERS - GA9950A

For all models. Use for firebox decoration only.

SILICA SAND - GA9850A

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

LAVA ROCK - GA6067A

For all models. Use for firebox decoration only.

DECORATIVE ASH BED CONTROL COVER - CDABKA

An attractive way to cover control knob and piezo ignitor.

NOTES

WARRANTY

KEEP THIS WARRANTY

Model (located on product or identification tag) _____

Serial No. (located on product or identification tag) _____

Date Purchased _____

Keep receipt for warranty verification.

DESA HEATING, LLC LIMITED WARRANTIES

New Products

Standard Warranty: DESA Heating, LLC warrants this new product and any parts thereof to be free from defects in material and workmanship for a period of four (4) years from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with DESA Heating, LLC's warnings and instructions.

For products purchased for commercial, industrial or rental usage, this warranty is limited to 90 days from the date of first purchase.

Factory Reconditioned Products

Limited Warranty: DESA Heating, LLC warrants factory reconditioned products and any parts thereof to be free from defects in material and workmanship for 30 days from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with DESA Heating, LLC's warnings and instructions.

Terms Common to All Warranties

The following terms apply to all of the above warranties:

Always specify model number and serial number when contacting the manufacturer. To make a claim under this warranty the bill of sale or other proof of purchase must be presented.

This warranty is extended only to the original retail purchaser when purchased from an authorized dealer, and only when installed by a qualified installer in accordance with all local codes and instructions furnished with this product.

This warranty covers the cost of part(s) required to restore this product to proper operating condition and an allowance for labor when provided by a DESA Heating, LLC Authorized Service Center or a provider approved by DESA Heating, LLC. Warranty parts must be obtained through authorized dealers of this product and/or DESA Heating, LLC who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty.

Travel, handling, transportation, diagnostic, material, labor and incidental costs associated with warranty repairs, unless expressly covered by this warranty, are not reimbursable under this warranty and are the responsibility of the owner.

Excluded from this warranty are products or parts that fail or become damaged due to misuse, accidents, improper installation, lack of proper maintenance, tampering, or alteration(s).

This is DESA Heating, LLC's exclusive warranty, and to the full extent allowed by law; this express warranty excludes any and all other warranties, express or implied, written or verbal 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 new products and 30 days on factory reconditioned products from the date of first purchase. DESA Heating, LLC makes no other warranties regarding this product.

DESA Heating, LLC's liability is limited to the purchase price of the product, and DESA Heating, LLC shall not be liable for any other damages whatsoever under any circumstances including indirect, incidental, or consequential damages.

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

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

For information about this warranty contact:



DESA Heating, LLC
2701 Industrial Drive
Bowling Green, KY 42101
www.desatech.com
1-866-672-6040



901273 01
NOT A UPC

901273-01
Rev. H
12/08