

UNVENTED (VENT-FREE) GAS FIREPLACE SYSTEM OWNER'S OPERATION AND INSTALLATION MANUAL







We recommend that our products be installed and serviced by professionals who are certified in the U.S. by NFI (National Fireplace Institute). www.nficertified.org

MODELS

VSGF36NTA, VSGF36PTA, VSGF36NRA AND VSGF36PRA

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. 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 is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to *Air for Combustion and Ventilation* section on page 7 of this manual.

WARNING: For use only with a listed decorative type unvented room heater. Do not build a wood fire.

This firebox has been tested and approved by CSA International under Z21.91-2001 for use with approved ANSI Z21.11.2 decorative type unvented room heater.

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

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

*Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer

Safety Information	3
Local Codes	4
Product Identification	5
Unpacking	5
Product Features	5
Locating Firebox	6
Product Specifications	6
Air For Combustion and Ventilation	7
Installation	9
Operating Fireplace	19
Inspecting Burners	24

TABLE OF CONTENTS

Cleaning and Maintenance	. 25
Wiring Diagram	. 26
Specifications	. 26
Replacement Parts	. 26
Technical Service	. 26
Service Hints	. 26
Troubleshooting	. 27
Accessories	. 31
Illustrated Parts Breakdown and Parts List Warranty InformationBack Co	

SAFETY INFORMATION

A WARNING: This product contains and/or generates chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.

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

A 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 heater may not be working properly. **Get fresh air at once!** Have heater 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 heater.

A WARNING: Any change to this heater or its controls can be dangerous.

A WARNING: Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this heater.

WARNING: 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 cause sooting.

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

Do not place clothing or other flammable material on or near the appliance. Never place any objects on the heater.

Fireplace front and screen become very hot when running fireplace. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.

Carefully supervise young children when they are in the room with fireplace. When using the optional hand-held remote accessory, keep selector switch in the OFF position to prevent children from turning on burners with remote.

You must operate this fireplace with the fireplace screen and hood in place. Make sure fireplace screen and hood are in place before running heater.

Keep the appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

SAFETY INFORMATION Continued

- This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.
- Do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors (propane/LP units only).
- 3. If you smell gas
 - shut off gas supply
 - do not try to light any appliance
 - do not touch any electrical switch; do not use any phone in your building
 - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
 - if you cannot reach your gas supplier, call the fire department
- 4. This fireplace shall not be installed in a bedroom or bathroom.
- 5. Do not use this fireplace as a wood-burning fireplace. Use only the logs provided with the fireplace.
- 6. Do not add extra logs or ornaments such as pine cones, vermiculite or rock wool. Using these added items can cause sooting. Do not add lava rock around base. Rock and debris could fall into the control area of fireplace.
- To prevent the creation of soot, follow the instructions in *Cleaning and maintenance*, page 25.
- Before using furniture polish, wax, carpet cleaner or similar products, turn heater off. If heated, the vapors from these products may create a white powder residue within burner box or on adjacent walls or furniture.
- 9. This fireplace needs fresh air ventilation to run properly. This fireplace has an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS shuts down the fireplace if enough fresh air is not available. See Air for Combustion and Ventilation, page 7. If fireplace keeps shutting off, see Troubleshooting, page 27.
- 10. Do not run fireplace
 - where flammable liquids or vapors are used or stored
 - under dusty conditions
- 11. Do not use this fireplace to cook food or burn paper or other objects.

- 12. Do not use fireplace if any part has been exposed to or under water. Immediately call a qualified service technician to inspect the fireplace and to replace any part of the control system and any gas control which has been under water.
- Do not operate fireplace if any log is broken. Do not operate fireplace if a log is chipped (dime-sized or larger).
- Turn fireplace off and let cool before servicing. Only a qualified service person should service and repair fireplace.
- 15. Operating fireplace above elevations of 4,500 feet could cause pilot outage.
- To prevent performance problems in propane/LP units, do not use propane/LP fuel tanks of less than 100 lbs. capacity (propane/LP units only).
- 17. Provide adequate clearances around air openings.

LOCAL CODES

Install and use fireplace with care. Follow all local codes. In the absence of local codes, use the latest edition of *The National Fuel Gas Code ANSI Z223.1/NFPA 54**.

*Available from:

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

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

Note: Where listed vented decorative logs are required, thermostat operation is not permitted.

State of Massachusetts: The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

Sellers of unvented propane or natural gas-fired supplemental room heaters shall provide to each purchaser a copy of 527 CMR 30 upon sale of the unit.

Vent-free gas products are prohibited for bedroom and bathroom installation in the Commonwealth of Massachusetts.

PRODUCT IDENTIFICATION



Figure 1 - Log Base Assembly (VSGF36NRA Shown)



Figure 2 - Fireplace (VSGF36NRA Shown)

UNPACKING

A CAUTION: Do not remove the data plates attached to the heater base assembly. The data plates contain

- With utility knife, cut the carton all the way around above the staples on the bottom tray. Lift the carton off the heater. Remove packing. *Note:* The hood is located on top of fireplace in a carton.
- 2. Locate one screw above top left corner of the fireplace screen. Remove and discard screw. Lift fireplace screen up and pull out to remove.
- 3. Remove protective packaging applied to logs, log base assembly and fireplace.
- Check all items for any shipping damage. If damaged, promptly inform dealer where you bought fireplace.

PRODUCT FEATURES

OPERATION

This vent-free fireplace is clean burning. It requires no outside venting. There is no heat loss out a vent or up a chimney. Heat is generated by both realistic flames and glowing embers. When used without the blower, the fireplace requires no electricity making it ideal for emergency backup heat.

SAFETY DEVICE

This fireplace has a pilot with an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS/ pilot is a required feature for vent-free room heaters. The ODS/pilot system shuts off the fireplace if there is not enough fresh air.

PIEZO IGNITION SYSTEM

This fireplace has a piezo ignitor. This system requires no matches, batteries or other sources to light fireplace.

OPTIONAL REMOTE CONTROL ACCESSORY

There are four optional remote controls (not included) that can be purchased separately for this log heater:

- wall switch
- wall thermostat
- hand-held ON/OFF remote
- hand-held thermostat remote

See Accessories, page 31.

LOCATING FIREBOX

PLANNING

Plan where you will install the firebox. This will save time and money later when you install the firebox. Before installation, consider the following:

- 1. Where the firebox will be located. Allow for wall and ceiling clearances (see *Installation Clearances*, page 10).
- 2. Everything needed to complete installation.
- 3. These models CANNOT be installed in a bedroom unless the maximum Btu rating of the installed vent-free log set is less than 10,000 Btu/hr.
- 4. Proper air for combustion and ventilation (page 7).



PRODUCT SPECIFICATIONS



AIR FOR COMBUSTION AND VENTILATION

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

PROVIDING ADEQUATE VENTILATION

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

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

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

The information on pages 7 through 9 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 (6 x 10⁻¹¹ kg per pa-sec-m²) or less with openings gasketed or sealed and
- b. weather stripping has been added on openable windows and doors <u>and</u>
- 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 9.

If your home does not meet all of the three criteria above, proceed to *Determining Fresh-Air Flow for Heater Location*, page 8.

Confined and Unconfined Space

The National Fuel Gas Code, ANSI Z223.1/NFPA 54 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.

* 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 HEATER 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 heater plus any adjoining rooms with doorless passageways or ventilation grills between the rooms.

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

Length x Width x Height =_____cu. ft. (volume of space)

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

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

2. Multiply the space volume by 20 to determine the maximum Btu/Hr the space can support.

_____ (volume of space) x 20 = (Maximum Btu/Hr the space can support)

Example: 3168 cu. ft. (volume of space) x 20 = 63,360 (maximum Btu/Hr the space can support)

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

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

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

Example:

Gas water heater		40,000	Btu/Hr
Vent-free fireplace	+	39,000	Btu/Hr
Total	=	79,000	Btu/Hr

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

_Btu/Hr (maximum the space can support)
Btu/Hr (actual amount of Btu/Hr used)

Example: 63,360 Btu/Hr (maximum the space can support)

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

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

- A. Rework 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 9.
- B. Vent room directly to the outdoors. See Ventilation Air From Outdoors, page 9.
- C. Install a lower Btu/Hr fireplace, 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 heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANSIZ223.1/NFPA 54 Section 5.3 or applicable local codes.

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 4). You can also remove door into adjoining room (see option 3, Figure 3). Follow the *National Fuel Gas Code, ANSI Z223.1/NFPA 54, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.



Figure 4 - Ventilation Air from Inside Building

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, ANSI Z223.1/NFPA 54, 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 thermostatcontrolled power vent. Heated air entering the attic will activate the power vent.



Figure 5 - Ventilation Air from Outdoors

INSTALLATION

NOTICE: This heater is intended for use as supplemental heat. Use this heater along with your primary heating system. Do not install this heater as your primary heat source. If you have a central heating system, you may run system's circulating blower while using heater. This will help circulate the heat throughout the house. In the event of a power outage, you can use this heater as your primary heat source.

A WARNING: A qualified service person must install fireplace. Follow all local codes.

WARNING: Never install the fireplace

- in a bedroom or bathroom
- 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 heater
- · in high traffic areas
- · in windy or drafty areas

A CAUTION: This fireplace creates warm air currents. These currents move heat to wall surfaces next to fireplace. Installing fireplace next to vinyl or cloth wall coverings or operating heater where impurities (such as, but not limited, to tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist, may discolor walls or cause odors.

Note: Your fireplace is designed to be used in zero clearance installations. Wall or framing material can be placed directly against any exterior surface on the rear, sides or top of your fireplace, except where standoff spacers are integrally attached. If standoff spacers are attached to your fireplace, these spacers can be placed directly against wall or framing materials.

Use the dimensions shown for rough openings to create the easiest installation. See *Built-In Fireplace Installation*, page 11.

IMPORTANT: Vent-free heaters add moisture to the air. Although this is beneficial, installing fireplace in rooms without enough ventilation air may cause mildew to form from too much moisture. See *Air for Combustion and Ventilation*, page 7.

IMPORTANT: Make sure the fireplace is level. If fireplace is not level, log set will not work properly.

CHECK GAS TYPE

Use the correct gas type (natural or propane/LP) for your fireplace. If your gas supply is not correct, do not install fireplace. Call dealer where you bought fireplace for proper type fireplace.

WARNING: This appliance is equipped for (natural or propane/LP) gas. Field conversion is not permitted.

INSTALLATION CLEARANCES

A WARNING: Maintain the minimum clearances. If you can, provide greater clearances from floor, ceiling and adjoining wall.

Carefully follow the instructions below. This will ensure safe installation.

Minimum Wall and Ceiling Clearances (see Figure 6)

A. Clearances from the side of the fireplace cabinet to any combustible material and wall should follow diagram in Figure 6.

Example: The face of a mantel, bookshelf, etc. is made of combustible material and protrudes $3^{1/2}$ " from the wall. This combustible material must be 4" from the side of the fireplace cabinet (see Figure 6).

- B. Clearances from the top of the firebox opening to the ceiling should not be less than 42 inches.
- C. When the firebox is installed on carpeting or other combustible material, other than wood flooring, the firebox should be installed on a metal or wood panel extending the full width and depth of the enclosure.
- D. Clearances from the bottom of firebox to the floor is 0 inches.

These fireboxes can be installed as freestanding units against a wall with the approved, optional cabinet mantels (see *Accessories*, page 31) or as a built-in unit. The clearances are the same for either installation method.

A CAUTION: Do not install the firebox directly on carpet or vinyl.



Figure 6 - Minimum Clearance for Combustible to Wall

Mantel Clearances for Built-In Installation

If placing custom mantel above built-in firebox, you must meet the minimum allowable clearance between mantel shelf and top of firebox opening shown in Figure 7. These are the minimum allowable mantel clearances for a safe installation. Use larger clearances wherever possible to minimize the heating of objects and materials placed on the mantel.

A CAUTION: Do not allow the vent-free gas log heater to touch or extend beyond the fireplace screen.

NOTICE: Surface temperatures of adjacent walls and mantels become hot during operation. Walls and mantels above the firebox may become hot to the touch. If installed properly, these temperatures meet the requirement of the national product standard. Follow all minimum clearances shown in this manual. NOTICE: If your installation does not meet the minimum clearances shown, you must do one of the following:

- raise the mantel to an acceptable height
- remove the mantel

BUILT-IN FIREBOX INSTALLATION

Built-in installation of this firebox involves installing firebox into a framed-in enclosure. This makes the front of firebox flush with wall. Optional brass trim accessories are available (see *Accessories*, page 31). The brass trim will extend past sides of firebox approximately 1/2 inch. This will cover the rough edges of the wall opening. If installing a mantel above the firebox, you must follow the clearances shown in Figure 6, page 10. Follow the instructions below to install the firebox in this manner.



Figure 7 - Minimum Mantel Clearances for Built-In Installation

- Frame in rough opening. The firebox framing should be constructed of 2 x 4 lumber or heavier. Use dimensions in Table 1 and rough opening layout in Figure 8. Adjust framing so that firebox flushes with finished wall surface. If installing in a corner, use dimensions in Figures 8 and 9 for rough opening.
- Install gas piping to firebox location. See Installing Gas Piping to Fireplace Location on page 13 and Connecting Fireplace to Gas Supply, page 15.

IMPORTANT: If installing blower accessory (circulating models with louvers only), see *Hard-Wiring Firebox*, page 18.

- 3. Carefully set firebox in front of rough opening with back of firebox inside wall opening. *IMPORTANT:* If installing a perimeter trim kit, see instructions included with trim accessory. You must install shoulder screws from trim kit now.
- 4. Carefully insert firebox into rough opening.
- Attach firebox to wall studs using nails or wood screws through holes in nailing flange (see Figure 10).
- If using an optional perimeter trim kit, install the trim after final finishing and/or painting of wall. See instructions included with trim accessory for attaching trim.
- 7. Install and properly test gas log heater. Follow installation instructions included with the vent-free gas log heater that is being installed.

IMPORTANT: When finishing your firebox, combustible materials such as wall board, gypsum board, sheet rock, drywall, plywood, etc. may be butted up next to the sides and top of the firebox. Combustible materials should never overlap the firebox front facing.

A WARNING: Do not allow any combustible materials to overlap the firebox front facing.

IMPORTANT: Noncombustible materials such as brick, tile, etc. may overlap the front facing, but should never cover any necessary openings like louvered slots.

A WARNING: Do not allow noncombustible materials to cover any necessary openings like louvered slots. A WARNING: Use only noncombustible mortar or adhesives when overlapping the front facing with noncombustible facing material.





Figure 9 - Rough Opening for Installing in Corner Wall



Figure 10 - Attaching Firebox to Wall Studs

Continued

INSTALLING FIREBOX USING OPTIONAL ACCESSORY MANTELS

A WARNING: A qualified service person must install firebox. Follow all local codes.

This firebox may be installed using the corner or cabinet mantel with hearth base accessories against a wall in your home. A trim kit is included with the mantel accessories (see *Accessories*, page 31).

- 1. Assemble cabinet mantel, hearth base, and trim accessories. Assembly instructions are included with each accessory.
- 2. Install gas piping to firebox location. See *Installing Gas Piping to Fireplace Location*. You may have to cut a hole in the floor or wall to run gas line to firebox. Make sure to locate access hole so it is covered by mantel/base when installed.
- 3. Place hearth base against wall at installation location. Cut an access hole in hearth top to run flexible gas line to firebox (see Figure 11). Make sure to locate access hole so cabinet mantel will cover it when installed. *Note:* You can secure base to floor using wood screws. Countersink screw heads and putty over.
- 4. Route flexible gas line through access hole in hearth base.
- 5. Center cabinet mantel on hearth base (see Figure 12). Make sure mantel is flush against wall.
- 6. Install trim kit furnished with mantel. See instruction sheet included with mantel.
- 7. Carefully insert firebox into cabinet mantel. Be careful not to scratch firebox, mantel, base, etc. when installing (see Figure 13).





Figure 12 - Center Mantel on Hearth Base



Figure 13 - Inserting Firebox Into Cabinet Mantel (Model May Vary From Illustration)

INSTALLING GAS PIPING TO FIREPLACE LOCATION

A WARNING: This appliance requires a 1/2" NPT (National Pipe Thread) inlet connection to the pressure regulator.

A WARNING: Aqualified service person must connect fireplace to gas supply. Follow all local codes.

A CAUTION: Never connect propane/LP fireplace directly to the propane/LP supply. This fireplace requires an external regulator (not supplied). Install the external regulator between the fireplace and propane/LP supply.

Continued

A WARNING: Never connect natural gas fireplace to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

Installation Items Needed

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

- external regulator for propane/LP unit only (supplied by installer)
- piping (check local codes)
- sealant (resistant to propane/LP gas)
- equipment shutoff valve *
- test gauge connection *
- sediment trap (optional)
- tee joint
- pipe wrench
- approved flexible gas line with gas connector (if allowed by local codes) (not provided)

* A CSA design-certified equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the optional CSA design-certified equipment shutoff valve from your dealer. See *Accessories*, page 31.

For propane/LP units, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11 and 14 inches of water. If you do not reduce incoming gas pressure, heater regulator damage could occur. Install external regulator with the vent pointing down as shown in Figure 14. Pointing the vent down protects it from freezing rain or sleet.





A 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 fireplace. If pipe is too small, undue loss of volume will occur.

Installation must include an equipment 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 fireplace (see Figure 15).

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.

Check your building codes for any special requirements for locating equipment shutoff valve to fireplaces.

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 clogged fireplace valves. Never use sealant on flare threads.



Figure 15 - Gas Connection

* Purchase the optional CSA design-certified equipment shutoff valve from your dealer. See *Accessories*, page 31.

** Minimum inlet pressure for purpose of input adjustment.

Continued

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

We recommend that you install a sediment trap in supply line as shown in Figure 15, page 14. Locate sediment trap where it is within reach for cleaning. Install in piping system between fuel supply and fireplace. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into fireplace gas controls. If sediment trap is not installed or is installed wrong, fireplace may not run properly.

CONNECTING FIREPLACE TO GAS SUPPLY

Installation Items Needed

- 5/16" hex socket wrench or nut-driver
- · Phillips screwdriver
- sealant (resistant to propane/LP gas, not provided)
- Remove fireplace screen. Remove one screw that holds fireplace screen in place for shipping. This screw is located near top left side of screen. Discard screw. Lift fireplace screen up and pull out to remove.
- 2. Remove screws that attach log base assembly to fireplace (see Figure 16). Carefully lift up log base assembly and remove from fireplace (see Figure 16).



Figure 16 - Removing Log Base Assembly From Fireplace *Note*: If adding the G8007 series brick liner accessory, install it now. Follow instructions in G8007 accessory kit.

A CAUTION: Do not pick up log base assembly by burner. This could damage burner. Only handle base by grates.

 Route gas line (provided by installer) from equipment shutoff valve to fireplace. Route flexible gas supply line through one of the access holes.

NOTICE: Most building codes do not permit concealed gas connections. A flexible gas line is provided to allow accessibility from the fireplace (see Figure 17). The flexible gas supply line connection to the equipment shutoff valve should be accessible.

- 4. Attach the flexible gas line to gas supply (see Figure 17). Check tightness of flexible gas line attached to gas regulator of fireplace (see Figure 17).
- 5. Check all gas connections for leaks. See *Checking Gas Connections*, page 16.
- 6. Replace log base assembly back into fireplace. Feed flexible gas line into fireplace base area while replacing log base assembly. Make sure the entire flexible gas line is in fireplace base area. Reattach log base assembly to fireplace with screws removed in step 2.



Continued

CHECKING GAS CONNECTIONS

A 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.

A CAUTION: Make sure external regulator has been installed between propane/LP supply and fireplace. See guidelines under *Connecting Fireplace to Gas Supply*, page 15.

PRESSURE TESTING GAS SUPPLY PIPING SYSTEM

Test Pressures In Excess Of 1/2 PSIG (3.5 kPa)

- 1. Disconnect fireplace with its main gas valve (control valve) and equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig will damage fireplace regulator.
- 2. Cap off open end of gas pipe where equipment shutoff valve was connected.
- Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas or opening main gas valve located on or near gas meter for natural gas or using compressed air.
- Check all joints of gas supply piping system. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
- 5. Correct all leaks at once.
- Reconnect fireplace 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 18).

- Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas or opening main gas valve located on or near gas meter for natural gas or using compressed air.
- Check all joints from gas meter to equipment shutoff valve for natural gas or propane/LP supply to equipment shutoff valve for propane/ LP (see Figures 19 and 20). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
- 4. Correct all leaks at once.



Figure 18 - Equipment Shutoff Valve



Figure 19 - Checking Gas Joints for Natural Gas



Figure 20 - Checking Gas Joints for Propane/LP Gas

PRESSURE TESTING FIREPLACE GAS CONNECTIONS

- 1. Open equipment shutoff valve (see Figure 18).
- Open main gas valve located on or near gas meter for natural gas or open propane/LP supply tank valve.
- 3. Make sure control knob of fireplace is in the OFF position.

- Check all joints from equipment shutoff valve to gas control valve (see Figures 19 or 20, page 16). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
- 5. Correct all leaks at once.
- Light fireplace (see *Operating Fireplace*, page 19. Check all other internal joints for leaks.
- Turn off fireplace (see *To Turn Off Gas to Appliance*, pages 20 or 22, depending on your model).

INSTALLING LOGS (MODELS VSGF36NTA, VSGF36PTA, VSGF36NRA AND VSGF36PRA)

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

A CAUTION: Do not remove the data plates attached to the heater base assembly. The data plates contain important safety and warranty information.

It is very important to install these logs exactly as instructed. Do not modify logs. Only use logs supplied with heater.

- 1. Place front log on top of the grate. Make sure the notches in the bottom of the log fit over the grate prongs (see Figure 21). Push back of logs flush with metal grate bars.
- Rest middle log behind metal posts on grate assembly. Make sure the grooves in the bottom of the log fit over the grate. Bring the log forward next to the metal posts (see Figure 22).
- 3. Slide the grooves in the back of the rear log against the rear grate prongs. Make sure the log fits securely over the prongs (see Figure 23). Make sure log is completely vertical and not leaning in toward burner where the flame will touch the log.

A WARNING: You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is in place before running fireplace.



Figure 21 - Installing Front Log



Figure 22 - Installing Middle Log



Figure 23 - Installing Rear Log

HARD-WIRING FIREBOX

NOTICE: A qualified electrician must connect electrical wiring to duplex outlet for built-in installation. Follow all local codes. In absence of local codes follow *The National Electric Code ANSI/NFPA 70*.

The "Handy Box" with duplex outlet is provided in the firebox located in the lower right base area.

- 1. Remove screw holding duplex outlet cover to handy box. Remove duplex outlet.
- Route electrical cable through strain relief and handy box (see Figure 24). Tighten screws on strain relief.
- 3. Connect electrical cable to duplex outlet. Match wire colors to those on duplex outlet. Be sure to connect the ground wire.
- 4. Place duplex outlet back into handy box and secure with screws. Replace outlet cover.



Figure 24 - Hard-Wiring Firebox

INSTALLING FIREPLACE HOOD AND SCREEN

- Loosen screws inside top edge of firebox. Slide notches in hood over screws and tighten screws (see Figure 25).
- Install fireplace screen by slipping notches of fireplace screen over screws on front of fireplace (see Figure 26).



Figure 25 - Hood Placement (Model May Vary From Illustration)



Figure 26 - Screen Placement (Model May Vary From Illustration)

OPERATING FIREPLACE

THERMOSTAT MODELS

FOR YOUR SAFETY READ BEFORE LIGHTING

A 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.

LIGHTING INSTRUCTIONS

A WARNING: You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is installed before running fireplace.

NOTICE: During initial operation of new fireplace, burning logs will give off a paper-burning smell. Orange flame will also be present. Open window to vent smell. Operate fireplace on HI position to burn off odor. This will only last a few hours.

- 1. STOP! Read the safety information, column 1.
- 2. Make sure equipment shutoff valve is fully open.
- 3. Turn control knob clockwise to the OFF position (see Figure 27).
- 4. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information, column 1. If you don't smell gas, go to the next step.
- 5. Turn control knob counterclockwise to the PILOT position. Press in control knob for five (5) seconds (see Figure 27). *Note:* If running fireplace for first time, there will be air in gas line. You may need to press in control knob for 30 seconds or longer. This will allow air to bleed from the gas system.
- 6. Continue pressing control knob in. Press and release ignitor button. This will light pilot. The pilot is attached to the front burner. If needed, keep pressing ignitor button until pilot lights.



Control Knob

Figure 27 - Control Knob and Ignitor Button Location

OPERATING FIREPLACE Continued

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*.

7. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.

Note: If pilot goes out, repeat steps 3 through 7. This fireplace has a safety interlock system. Wait one (1) minute for system to reset before lighting pilot again.

- If control knob does not pop out when released, contact a qualified service person or gas supplier for repairs.
- 8. Turn control knob counterclockwise to desired heating level. The burners should light. Set control knob to any heat level between HI and LO.

A CAUTION: Do not try to adjust heating levels by using the equipment shutoff valve.



Figure 28 - Pilot



TO TURN OFF GAS TO APPLIANCE

Shutting Off Fireplace

Shutting Off Burners Only (pilot stays lit) Turn control knob clockwise to the PILOT position.

THERMOSTAT CONTROL OPERATION

You can set the thermostat control knob to any comfort level between HI and LO. The thermostat will gradually modulate the heat output and flame height from higher to lower settings or pilot, in order to maintain the comfort level you select. The ideal comfort setting will vary by household depending upon the amount of space to be heated, the output of the central heating system, etc.

Note: Selecting the HI setting will cause the burner to remain on without modulating down in most cases.

MANUAL LIGHTING PROCEDURE

- 1. Follow steps 1 through 5 under *Lighting Instructions*, page 19.
- 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 step 8 under *Lighting Instructions*, column 1.

REMOTE CONTROL MODELS

FOR YOUR SAFETY READ BEFORE LIGHTING

A 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.

OPERATING FIREPLACE Continued

- 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.



LIGHTING INSTRUCTIONS

A WARNING: You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is installed before running fireplace.

NOTICE: During initial operation of new fireplace, burning logs will give off a paper-burning smell. Open damper or window to vent smell. This will only last a few hours.

- 1. STOP! Read the safety information, starting on page 20, column 2.
- 2. Make sure equipment shutoff valve is fully open.
- 3. Set selector switch in OFF position.

A WARNING: Burners 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 20. 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 29).

Note: You may be running this heater 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.

A CAUTION: Do not try to adjust heating levels by using the equipment shutoff valve.

7. With control knob pressed in, press and release ignitor button. This will light pilot. The pilot is attached to the front burner. 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*, page 22.

- 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. Wait one minute and switch selector switch to the ON position to light burners.
- 11. Set flame adjustment knob to any level between HI and LO.



Figure 29 - Control Knob and Ignitor Button Location (Shown as Supplied, No Control Options)

OPERATING FIREPLACE

Continued

WARNING: Make sure the selector switch is in the OFF position when you are away from home for long periods of time. Heater will come on automatically with selector switch in the ON position.



Figure 30 - Pilot (Natural) Figure 31 - Pilot (Propane/LP)

TO TURN OFF GAS TO APPLIANCE

Shutting Off Heater

- 2a. Set selector switch in the OFF position.
- 2b. If Using Optional Hand-Held Remote: Set selector switch in the OFF position to keep from draining battery.

Shutting Off Burners Only (pilot stays lit) You may shut off the burners and keep the pilot lit by doing one of the following:

- Use remote control manual OFF button.
- Set selector switch in the OFF position.

MANUAL LIGHTING PROCEDURE

- 1. Follow steps 1 through 6 under *Lighting Instructions*, page 21.
- 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 11 under *Lighting Instructions*, page 21.

BLOWER OPERATION

A WARNING: This fireplace has a three-prong, grounded electrical plug. This plug helps protect you against electrical shock. Only connect plug to a properly grounded, three-prong receptacle. Do not cut or remove the grounding prong from this plug.

Locate the blower switch by opening lower louver on fireplace. Blower switch is located at lower left inside louver door.

Note: It is safe to operate fireplace with blower turned off. However, the blower helps distribute heated air from the fireplace.

Note: Periodically check the louvers of the firebox and remove any dust, dirt or other obstructions.

OPTIONAL HAND-HELD REMOTE OPERATION

Note: All remote control accessories must be purchased separately (see *Accessories*, pages 31). Follow instructions included with the remote control.

NOTICE: You must light the pilot before using the hand-held remote control unit. See *Lighting Instructions* on page 21.

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 (see Figure 32, page 23). *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.

OPERATING FIREPLACE Continued



Selector Switch in Remote Position (Optional Hand-Held Remote Control) Control Knob in On Position

Figure 32 - Setting the Selector Switch, Control Knob and Flame Adjustment Knob for Hand-Held Remote Operation

ON/OFF SERIES (MODEL HRC100)

Hold the control button on the hand-held remote until burner turns on. Hold the control button again until burner turns off (see Figure 33).

TO LOCK press both buttons on hand-held remote control until light stops flashing. Handheld 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.



Figure 33 - On/Off Hand-Held Remote Control Unit (HRC100)

THERMOSTAT SERIES (MODEL HRC200)

The hand-held remote can be operated using either the manual mode (MANU) or thermostatic mode (AUTO) (see Figure 34). To select Fahrenheit/Centigrade mode display, carefully press the °C/°F mode button with the end of a paper clip or similar blunt object.

Manual Mode

- 1. Press the POWER and LOCK buttons together to turn on the hand-held remote control.
- 2. Press the MANU button to turn on the fireplace.
- **3.** Press the POWER and LOCK buttons together to turn off the fireplace.



Figure 34 - Thermostat Hand-Held Remote Control Unit (HRC200)

Auto (Thermostatic) Mode

- 1. Press the POWER and LOCK buttons together to turn on the hand-held remote control.
- 2. Press AUTO button to select this mode.
- 3. Set the desired room temperature by pressing the TEMP + or - buttons.
- 4. Press the POWER and LOCK buttons together to turn off the fireplace

Note: Do not leave the hand-held remote in the AUTO mode close to the fireplace. The radiant heat from the fireplace will turn off the fireplace. Ideally, place the hand-held remote in the center of the room facing towards the fireplace.

Note: Do not hold the hand-held remote for a long time. Body temperature will affect its operation in the AUTO mode.

Safety Features

When away from home for an extended period of time or as a child safety feature to prevent accidental ignition of the fireplace, the receiver ON/OFF/REMOTE switch should be in the OFF position.

Auto Shutoff Feature

1. If the average room temperature exceeds 82 degrees Fahrenheit (28 degrees Centigrade), the hand-held remote control will perform a safety override and shut the fireplace off. This feature is not available in the MANU mode.

OPERATING FIREPLACE Continued

2. The receiver continuously receives signals from the hand-held remote to control the room temperature. If the hand-held remote is misplaced, obstructed or for any reason cannot transmit to the receiver, the receiver will shut off the fireplace after 8 minutes.

Key Pad Lock Feature

This feature allows the user to lock/unlock the keypad on the hand-held remote in the MANU or AUTO mode to prevent inadvertent operation (i.e. children operating the hand-held remote control, etc.). The keypad is locked in either on or off. Press the POWER and LOCK buttons together to turn the unit on or off.

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

PILOT FLAME PATTERN

Figure 35 shows a correct pilot flame pattern. Figure 36 shows an incorrect pilot flame pattern. The incorrect pilot flame is not touching the thermocouple. This will cause the thermocouple to cool. When the thermocouple cools, the fireplace will shut down.

If pilot flame pattern is incorrect, as shown in Figure 36

- turn fireplace off (see To Turn Off Gas to Appliance, page 20 or 22, depending on your model.)
- see Troubleshooting, page 27

Note: The correct pilot flame on natural gas units will have a slight curve, but flame should be blue and have no yellow or orange color.



Figure 35 - Correct Figure 36 - Incorrect Pilot Flame Pattern

Pilot Flame Pattern

MAIN BURNER

Periodically inspect all burner flame holes with the heater running. All slotted burner flame holes should be open with yellow flame present. All round burner flame holes should be open with a small blue flame present. Some burner flame holes may become blocked by debris or rust, with no flame present. If so, turn off heater and let cool. Remove blockage. Blocked burner flame holes may create soot.

FRONT BURNER FLAME PATTERN

Figure 37 shows correct front burner flame pattern. Figure 38 shows incorrect front burner flame pattern. The incorrect burner flame pattern shows yellow tipping at top of blue flame.

If front burner flame pattern is incorrect, as shown in Figure 38

- turn fireplace off (see To Turn Off Gas to Appliance, page 20 or 22, depending on your model.)
- see Troubleshooting, page 27



Figure 37 - Correct Burner Flame Pattern

Yellow Tipping At Top of Blue Flame



Figure 38 - Incorrect Burner Flame Pattern

CLEANING AND MAINTENANCE

A WARNING: Turn off fireplace and let cool before cleaning.

A CAUTION: You must keep control areas, burner and circulating air passageways of fireplace clean. Inspect these areas of fireplace before each use. Have fireplace inspected yearly by a qualified service person. Fireplace may need more frequent cleaning due to excessive lint from carpeting, bedding material, pet hair, etc.

A WARNING: Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.

BURNER INJECTOR HOLDER AND PILOT AIR INLET HOLE

The primary air inlet holes allow the proper amount of air to mix with the gas. This provides a clean burning flame. Keep these holes clear of dust, dirt, lint and pet hair. Clean these air inlet holes prior to each heating season. Blocked air holes will create soot. We recommend that you clean the unit every three months during operation and have heater inspected yearly by a qualified service person.

We also recommend that you keep the burner tube and pilot assembly clean and free of dust and dirt. To clean these parts we recommend using compressed air no greater than 30 PSI. Your local computer store, hardware store or home center may carry compressed air in a can. You can use a vacuum cleaner in the blow position. If using compressed air in a can, please follow the directions on the can. If you don't follow directions on the can, you could damage the pilot assembly.

- 1. Shut off the unit, including the pilot. Allow the unit to cool for at least thirty minutes.
- Inspect burner, pilot and primary air inlet holes on injector holder for dust and dirt (see Figure 39).
- 3. Blow air through the ports/slots and holes in the burner.

- 4. Check the injector holder located at the end of the burner tube again. Remove any large particles of dust, dirt, lint or pet hair with a soft cloth or vacuum cleaner nozzle.
- 5. Blow air into the primary air holes on the injector holder.
- In case any large clumps of dust have now been pushed into the burner repeat steps 3 and 4.

Clean the pilot assembly also. A yellow tip on the pilot flame indicates dust and dirt in the pilot assembly. There is a small pilot air inlet hole about two inches from where the pilot flame comes out of the pilot assembly (see Figure 40). With the unit off, lightly blow air through the air inlet hole. You may blow through a drinking straw if compressed air is not available.



Figure 39 - Injector Holder On Outlet Burner Tube





Figure 40 - Pilot Inlet Air Hole

WIRING DIAGRAM

Note: For proper operation of optional accessories, the wires from the thermopile to the control must be connected exactly as shown.



SPECIFICATIONS

Models VSGF36NTA and VSGF36NRA

Btu (Variable)	33,000/21,500
Type Gas	Natural Gas
Ignition	Piezo
Pressure Manifold	3.5" W.C.
Inlet Gas Pressure (in.	of water)
Maximum	10.5"
Minimum*	5"
Shipping Weight	120 lbs.
* For input adjustment	

Models VSGF36PTA and VSGF36PRA

Btu (Variable)	33,000/21,500
Type Gas	Propane/LP
Ignition	Piezo
Pressure Manifold	7.9" W.C.
Inlet Gas Pressure (in. o	f water)
Maximum	13"
Minimum*	11"
Shipping Weight	120 lbs.
* For input adjustment	

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's Technical Service Department at 1-866-672-6040.

When calling DESA, have ready

- your name
- your address
- · model and serial numbers of your firebox
- · how firebox was malfunctioning
- type of gas used (propane/LP or natural gas)
- · 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 at 1-866-672-6040 for referral information.

When calling DESA, have ready

- model number of your firebox
- the replacement part number

Note: The firebox identification label (including model number, serial number, clearances, etc.) is located on the right front edge of the firebox.

TECHNICAL SERVICE

You may have further questions about installation, operation or troubleshooting. If so, contact DESA's Technical Service Department at 1-866-672-6040. When calling, please have your model and serial numbers of your firebox ready.

You can also visit DESA's technical services web site at **www.desatech.com**.

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 for propane/ LP unit

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

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

A CAUTION: Never use a wire, needle or similar object to clean ODS/pilot. This can damage ODS/pilot unit.

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

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at ODS/pilot	1. Ignitor electrode not con- nected to ignitor cable	1. Reconnect ignitor cable
	2. Ignitor cable pinched or wet	2. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry
	3. Piezo ignitor nut is loose	 Tighten nut holding piezo ignitor to base panel of log set. Nut is located behind base panel
	4. Broken ignitor cable	4. Replace ignitor cable
	5. Bad piezo ignitor	Replace piezo ignitor
	6. Ignitor electrode broken	6. Replace pilot assembly
	7. Ignitor electrode positioned wrong	7. Replace pilot assembly
When ignitor button is pressed, there is spark at ODS/pilot but	1. Gas supply turned off or equip- ment shutoff valve closed	1. Turn on gas supply or open equipment shutoff valve
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	3. Press in control knob while in PILOT position
	4. Air in gas lines when in- stalled	 Continue holding down con- trol knob. Repeat igniting op- eration until air is removed
	5. Depleted gas supply (propane/ LP only)	5. Contact local propane/LP gas company
	6. ODS/pilot is clogged	 Clean ODS/pilot (see Clean- ing and Maintenance, page 25) or replace ODS/pilot as- sembly
	7. Gas regulator setting is not correct	7. Replace gas regulator

Continued

	continueu	
OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
ODS/pilot lights but flame goes out when control knob is released	 Control knob not fully pressed in Control knob not pressed in long enough 	 Press in control knob fully After ODS/pilot lights, keep control knob pressed in 30 seconds
	3. Equipment shutoff valve not fully open	3. Fully open equipment shutoff valve
	4. Pilot flame not touching ther- mocouple, which allows ther- mocouple to cool, causing	4. A) Contact local natural or propane/LP gas company
	pilot flame to go out. Thisproblem could be caused byone or both of the following:A) Low gas pressureB) Dirty or partially cloggedODS/pilot	B) Clean ODS/pilot (see <i>Cleaning and Maintenance</i> , page 25) or replace ODS/pilot assembly
	5. Thermocouple connection loose at control valve	5. Hand tighten until snug, then tighten 1/4 turn more
	 6. Thermocouple damaged 7. Control valve damaged 	 Replace pilot assembly Replace control valve
	8. Safety interlock system has been triggered	8. Wait one minute for safety in- terlock system to reset. Repeat ignition operation.
Burner does not light after ODS/pilot is lit	1. Inlet gas pressure is too low	1. Contact local natural or pro- pane/LP gas company
	2. Burner orifice(s) clogged	2. Clean burner(s) (see Cleaning and Maintenance, page 25) or replace burner orifice(s)
	3. Thermopile leads disconnect- ed or improperly connected	 Reconnect leads (see Wiring Diagram, page 26)
	 Burner will not come on in remote position 	 4. Replace battery in transmitter and receiver
	 Wire disconnected from gas con- trol (Remote ready models only) 	5. See Wiring Diagram, page 26
Delayed ignition of one or both burners	1. Manifold pressure is too low	1. Contact local natural or pro- pane/LP gas company
	2. Burner orifice(s) clogged	2. Clean burner(s) (see <i>Cleaning and Maintenance</i> , page 25) or
	3. Mislocated crossover tube	replace burner orifice(s) 3. Contact qualified service person
Burner backfiring during com- bustion	1. Burner orifice is clogged or damaged	1. Clean burner (see <i>Cleaning</i> <i>and Maintenance</i> , page 25) or replace burner orifice(s)
	 Damaged burner Gas regulator defective 	 Replace damaged burner Replace gas regulator

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Slight smoke or odor during initial operation	1. Not enough air	1. Check burner for dirt and debris. If found, clean burner (see <i>Cleaning and Mainte-</i> <i>nance</i> , page 25)
	 2. Gas regulator defective 3. Residues from manufacturing processes and logs curing 	 Replace gas control Problem will stop after a few hours of operation
Moisture/condensation noticed on windows	1. Not enough combustion/ven- tilation air	1. Refer to Air for Combustion and Ventilation requirements (page 7)
Heater produces a whistling noise when burners are lit	1. Turning control knob to HI position when burners are cold	1. Turn control knob to LO position and let warm up for a minute
	2. Air in gas line	 Operate burners until air is removed from line. Have gas line checked by local natural or propane/LP gas company
	 Air passageways on heater blocked Dirty or partially clogged burner orifice(s) 	 3. Observe minimum installation clearances (see page 10) 4. Clean burners (see <i>Cleaning</i> <i>and Maintenance</i>, page 25) or replace burner orifice(s)
White powder residue forming within burner box or on adjacent walls or furniture	1. When heated, vapors from furniture polish, wax, carpet cleaners, etc. may turn into white powder residue	1. Turn heater off when using furniture polish, wax, carpet cleaners or similar products
Remote does not function (GHRCB and GHRCTB only)	1. Battery is not installed. Bat- tery power is low	1. Replace 9-volt batteries in receiver and remote control
Yellow flame in front burner during burner combustion	1. Not enough air	1. Check burner(s) for dirt and debris. If found, clean burner(s) (see <i>Cleaning and</i> <i>Maintenance</i> , page 25)
	2. Gas regulator defective	2. Replace gas regulator
Fireplace 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 common with most heat- ers. If noise is excessive, contact qualified service person

Continued

A 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 fireplace 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.

DEMEDV

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces unwanted odors	 Heater burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. (See <i>IMPORTANT</i> statement above) Low fuel supply (propane/LP only) Gas leak. See Warning statement at top of page 	 Open window to ventilate room. Stop using odor caus- ing products while heater is running Refill supply tank (propane/LP only) Locate and correct all leaks (see <i>Checking Gas Connec-</i> <i>tions</i>, page 16)
Fireplace shuts off in use (ODS operates)	 Not enough fresh air is available Low line pressure ODS/pilot is partially clogged 	 Open window and/or door for ventilation Contact local natural or pro- pane/LP gas company Clean ODS/pilot (see <i>Cleaning</i> <i>and Maintenance</i>, page 25)
Gas odor even when control knob is in OFF position	 Gas leak. See Warning statement at top of page Control valve or gas control defective 	 Locate and correct all leaks (see <i>Checking Gas Connec-</i> <i>tions</i>, page 16) Replace control valve or gas control
Gas odor during combustion	 Foreign matter between con- trol valve and burner Gas leak. See Warning statement at top of page 	 Take apart gas tubing and remove foreign matter Locate and correct all leaks (see <i>Checking Gas Connec-</i> <i>tions</i>, page 16)
Dark residue on logs inside of their fireplace. <i>Note:</i> After removing all causes of residue deposits, completely clean fire- place and appliance off residue before reusing appliance	 Improper log placement Drafts or other air currents affecting flame pattern Air holes at burner inlet blocked Burner flame holes blocked 	 Properly locate logs (see In- stalling Logs, page 17) Eliminate source of drafts around heater Clean out air holes at burner inlet. Periodically repeat as needed Remove blockage
Log set cycles to pilot, but room temperature drops to a lower than ideal level before log set comes back on	 Thermostat sensing bulb needs to be repositioned (Thermo- stat-Controlled Models Only) Hand-held remote control is too close to heater (Remote- Ready Models Only) 	 Reposition thermostat sensing bulb Move hand-held remote control unit farther away from the heater

ACCESSORIES

NOTICE: All accessories may not be available for all fireplace models.

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



EQUIPMENT SHUTOFF VALVE GA5010

All Models. Equipment shutoff valve with 1/8" NPT tap.

CLEANING KIT - GCK/CCK

All Models. Your vent-free gas appliance requires regular cleaning and maintenance to prevent performance problems. This kit gives you the tools and instructions to make it easy to clean all critical areas of your appliance.

FIREBOX BRICK LINER - HFL401 (Not Shown)

All Models. Ceramic fiber firebox liner adds the look of real brick. Aged red color panels with black mortar and straight brick pattern.

MANTELS (Not Shown)

- GMC55F Cabinet Mantel & Base, Stained Oak
- W36GLS Cabinet Mantel & Base, Lyptus/Dark Oak
- C36GLS Corner Mantel & Base, Lyptus/Dark Oak
- W36DLS Cabinet Mantel & Base, Lyptus/Cherry
- W36IP Cabinet Mantel with Click-n-Brick Surround & Base, White

PERIMETER TRIM (Not Shown)

- **PT36** Perimeter Trim Black
- **PT36B** Perimeter Trim Brushed Brass
- PT36PB Perimeter Trim Polished Brass
- PT36P Perimeter Trim Platinum



RECEIVER AND HAND-HELD THERMOSTAT REMOTE CONTROL KIT - HRC200

For all Remote-Ready Models. Allows the gas log heater to be operated in a manually or thermostatically controlled mode. You can turn the gas log heater on and off without ever leaving the comfort of your easy chair. Wall-mount docking station included.



RECEIVER AND HAND-HELD REMOTE CONTROL KIT - HRC100

For all Remote-Ready Models. Allows the gas log heater to be turned on and off by using a hand-held remote control. Wall-mount docking station included.

WALL-MOUNT THERMOSTAT SWITCH - GWMT1 (Not Shown)

For all remote ready models. The desired comfort setting can be selected on the wall thermostat and the fireplace will automatically cycle from pilot to the heat setting selected.

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

For all remote ready models. Allows the gas fireplace to be turned on and off with a wall switch.

CLEANING KIT - GCK (Not Shown)

For all models. Your vent-free gas appliance requires regular cleaning and maintenance to prevent performance problems. This kit gives you the tools and instructions to make it easy to clean all critical areas of your appliance.

FIRE CRACKLE - CF6-A

Creates the sound of a real burning fire.

ILLUSTRATED PARTS BREAKDOWN MODELS VSGF36PTA, VSGF36NTA



PARTS LIST

This list contains replaceable parts used in your firebox. When ordering parts, follow the instructions listed under *Replacement Parts* on page 26 of this manual.

KEY	PART N	UMBER		
NO.	VSGF36PTA	VSGF36NTA	DESCRIPTION	QTY.
1	109824-02	109824-02	Rear Burner Assembly	1
2	102239-02	102239-02	Front Burner Assembly	1
3		107634-01	NG Conversion Plate	1
4	101004-15	101004-11	Rear Burner Injector	1
5	101004-01	101004-08	Front Burner Injector	1
6	101008-01	101008-01	Crossover Burner Gasket	1
7	101007-01	101007-01	Crossover Ignition Burner	1
8	101006-02	101006-02	Pilot Bracket	1
9	104286-01	104285-01	ODS Pilot	1
10	098249-01	098249-01	ODS Nut	4
11	102846-01	102846-01	Burner Tube	1
12	**	**	Base Assembly	1
13	**	**	Firebox Bottom	1
14	115410-01	115410-01	Magnet and Bracket Kit	2
15	103650-01	103650-01	Knob	1
16	106683-01	106683-01	Firebox Support Leg	2
17	101382-01	101382-01	Valve Bracket	1
18	101329-22	101329-20	Thermostat Gas Valve	1
19	101381-01	101381-01	Cover and Piezo Valve	1
20	099387-09	099387-09	Pilot Tube	1
21	102845-01	102845-01	Inlet Tube	1
22	098867-10	098867-09	Gas Regulator	1
23	097809-03	097809-03	Male Fitting	1
24	101628-03	101628-03	Flex Hose	1
25	105649-01	105649-01	Blower Speed Control	1
26	103651-01	103651-01	Lock Nut	1
27	110881-04	110881-04	Front Log	1
28	110881-05	110881-05	Middle Log	1
29	110881-06	110881-06	Rear Log	1
	P	ARTS AVAILABI	LE — NOT SHOWN	
	100563-01	100563-01	Warning Plate	1
	101054-01	101054-01	Lighting Instructions Plate	1

** Not a field replacement part

ILLUSTRATED PARTS BREAKDOWN MODELS VSGF36PRA, VSGF36NRA



PARTS LIST

This list contains replaceable parts used in your firebox. When ordering parts, follow the instructions listed under *Replacement Parts* on page 26 of this manual.

KEY	PART NUMBER				
NO.	VSGF36PRA	VSGF36NRA	DESCRIPTION	QTY.	
1	109824-02	109824-02	Rear Burner Assembly	1	
2	102239-02	102239-02	Front Burner Assembly	1	
3		107634-01	NG Conversion Plate	1	
4	101004-15	101004-14	Rear Burner Injector	1	
5	101004-01	101004-08	Front Burner Injector	1	
6	101008-01	101008-01	Crossover Burner Gasket	1	
7	101007-01	101007-01	Crossover Ignition Burner	1	
8	103780-02	103780-02	Pilot Bracket	1	
9	103778-01	103779-01	ODS Pilot	1	
10	098249-01	098249-01	ODS Nut	4	
11	102846-02	102846-02	Burner Tube	1	
12	**	**	Base Assembly	1	
13	**	**	Firebox Bottom	1	
14	115410-01	115410-01	Magnet and Bracket Kit	2	
15	103650-01	103650-01	Knob	1	
16	106683-01	106683-01	Firebox Support Leg	2	
17	104241-02	104241-02	Valve Bracket	1	
18	103781-02	103781-01	Gas Valve	1	
19	103782-01	103782-01	Valve Bracket	1	
20	098265-02	098265-02	Male Elbow	1	
21	099387-09	099387-12	Pilot Tube	1	
22		099918-02	Pilot Regulator	1	
23		100609-01	Pilot Tube	1	
24	102334-01	102334-01	Palnut Fastener	1	
25	102445-01	102445-01	Piezo Ignitor	1	
26	097809-03	097809-03	Male Fitting	1	
27	101628-03	101628-03	Flex Hose	1	
28	105649-01	105649-01	Blower Speed Control	1	
29	103651-01	103651-01	Lock Nut	1	
30	110881-04	110881-04	Front Log	1	
31	110881-05	110881-05	Middle Log	1	
32	110881-06	110881-06	Rear Log	1	
PARTS AVAILABLE — NOT SHOWN					
	100563-01	100563-01	Warning Plate	1	
	103877-01	103877-01	Lighting Instructions Plate	1	
	101480-12	101480-12	Remote Jumper Wire	1	

** Not a field replacement part

ILLUSTRATED PARTS BREAKDOWN

MODELS VSGF36PTA, VSGF36NTA, VSGF36PRA AND VSGF36NRA



PARTS LIST

This list contains replaceable parts used in your firebox. When ordering parts, follow the instructions listed under *Replacement Parts* on page 26 of this manual.

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	113190-01CK	Screen	2
2	116865-01CK	Bottom Louver Assembly	1
3	**	Face Weldment	1
4	101355-03CK	Hood	1
5	116864-01CK	Louver Assembly	1
6	112862-02CK	Firebox Bottom Bracket	1
7	21195	Right Firebox Support Leg	1
8	21194	Left Firebox Support Leg	2
9	**	Firebox Surround	1
10	**	Firebox Top Shield	1
11	**	Firebox Top	1
12	106687-01	Damper Can Collar	1
13	**	Insulation Pan	1
14	**	Fireplace Top Insulation	1
15	**	Fireplace Top	1
16	20280	Top Spacer	4
17	**	Fireplace Surround	1
18	107128-01	Gas Conduit	2
19	115408-01	Receptacle Plate	1
20	21171	Gas Knock-Out Cover	4
21	103771-01	Strain Relief	1
22	115402-01	Steel Receptacle Box	1
23	103581-02	Blower	1
24	M11084-38	Hex Screw, #8	3
25	GA3555	Duplex Outlet	1
26	115403-01	Steel Receptacle Cover	1
27	101378-01	Thermostat Switch	1
28	116460-01	Left Brick Refractory	1
29	116460-02	Rear Brick Refractory	1
30	116460-03	Right Brick Refractory	1

** Not a field replaceable part.

NOTES



NOTES



WARRANTY INFORMATION

KEEP 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 VENT-FREE GAS FIREPLACE SYSTEM

DESA Heating Products warrants this product to be free from defects in materials and components for (4) years 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 heater to proper operating condition and an allowance for labor when provided by a DESA Heating Products Authorized Service Center. Warranty part(s) MUST be obtained through authorized dealers of this product and/or DESA Heating Products who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty. The heater 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 heater 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, INCLUD-ING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO FOUR (4) YEARS ON ALL COMPONENTS FROM THE DATE OF FIRST PURCHASE; AND DESA HEATING PRODUCTS' LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA HEATING PRODUCTS 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:



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



116746-01 Rev. A 03/05

NOT A UPC