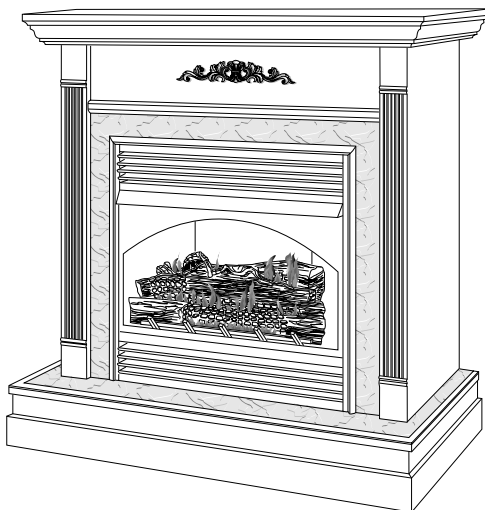


VANGUARD®

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

For more information, visit www.desatech.com

Thermostatically-
Controlled Models
VSGF28NTD and
VSGF28PTD
with Split Oak Logs



Shown with
optional cabinet
mantel, hearth
base, and trim
accessories.

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

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS**
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency, or the gas supplier.

WARNING: This 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 4 of this manual.

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

Save this manual for future reference.

TABLE OF CONTENTS

SAFETY INFORMATION	2	WIRING DIAGRAM	17
LOCAL CODES	3	TROUBLESHOOTING	18
UNPACKING	3	SPECIFICATIONS	21
PRODUCT IDENTIFICATION	4	REPLACEMENT PARTS	21
PRODUCT FEATURES	4	SERVICE HINTS	21
AIR FOR COMBUSTION AND VENTILATION	4	TECHNICAL SERVICE	21
INSTALLATION	7	ILLUSTRATED PARTS BREAKDOWN AND PARTS LIST	22
OPERATING FIREPLACE	14	ACCESSORIES	26
INSPECTING BURNERS	16	OWNER'S REGISTRATION FORM	27
CLEANING AND MAINTENANCE	17	WARRANTY INFORMATION	Back Cover

SAFETY INFORMATION

WARNINGS

⚠ 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 fireplace. Improper use of this fireplace 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 fireplace may not be working properly. **Get fresh air at once!** Have fireplace 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 fireplace.

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

⚠ 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.

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

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.

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

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

SAFETY INFORMATION

Continued

1. 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.
2. 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 soot-ing. Do not add lava rock around base. Rock and debris could fall into the control area of fireplace.
7. This fireplace is designed to be smokeless. If logs ever appear to smoke, turn off fireplace and call a qualified service person. **Note:** During initial operation, slight smoking could occur due to log curing and fireplace burning manufacturing residues.
8. To prevent the creation of soot, follow the instructions in *Cleaning and Maintenance*, page 17.
9. 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.
10. 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 not enough fresh air is available. See *Air for Combustion and Ventilation*, pages 4 through 6. If fireplace keeps shutting off, see *Troubleshooting*, pages 18 through 20.
11. Do not run fireplace
 - where flammable liquids or vapors are used or stored
 - under dusty conditions
12. Do not use this fireplace to cook food or burn paper or other objects.
13. 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.
14. Do not operate fireplace if any log is broken. Do not operate fireplace if a log is chipped (dime-sized or larger).

15. Turn fireplace off and let cool before servicing. Only a qualified service person should service and repair fireplace.
16. Operating fireplace above elevations of 4,500 feet could cause pilot outage.
17. To prevent performance problems, do not use propane/LP fuel tanks of less than 100 lbs. capacity (propane/LP units only).
18. 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.
Batterymarch Park
Quincy, MA 02269

UNPACKING

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

1. 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 in the packing on the right hand side of the heater front. Lift the heater off the bottom tray.
2. Locate two screws above top corners of the fireplace screen. Remove and discard these screws. Lift fireplace screen up and pull out to remove.
3. Remove protective packaging applied to logs, log base assembly, and fireplace.
4. Remove fireplace hood from carton insert.
5. Check all items for any shipping damage. If damaged, promptly inform dealer where you bought fireplace.

PRODUCT IDENTIFICATION

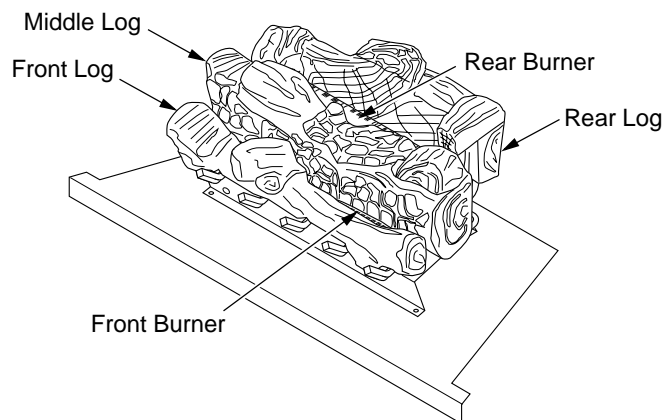


Figure 1 - Log Base Assembly, Split Oak Set

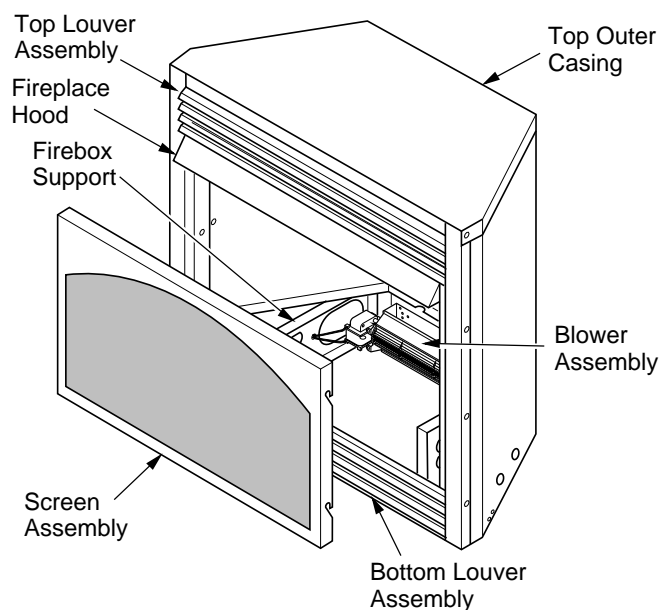


Figure 2 - Fireplace

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.

BLOWER ASSEMBLY

This fireplace has a blower assembly. The blower operates thermostatically and has a variable speed control. The blower circulates heated air from the fireplace into the room. Use of blower is optional.

THERMOSTAT CONTROL

This fireplace has a thermostat sensing bulb and a control valve. The thermostat controls the heat output and flame height. This maintains a consistent room temperature. Even the lowest setting provides realistic flames and glowing embers from two burners. Selecting higher comfort settings allows fireplace to run longer, producing greater heat output. At lower comfort settings, the fireplace will run less. This results in increased heating comfort. This can also result in lower gas bills.

AIR FOR COMBUSTION AND VENTILATION

⚠ WARNING: This heater 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.

AIR FOR COMBUSTION AND VENTILATION

Continued

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

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

PROVIDING ADEQUATE VENTILATION

The following are excerpts from *National Fuel Gas Code, 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 4 through 6 will help you classify your space and provide adequate ventilation.

Unusually Tight Construction

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

Unusually tight construction is defined as construction where:

- a. walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm (6×10^{-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 and
- c. caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

If your home meets all of the three criteria above, you must provide additional fresh air. See *Ventilation Air From Outdoors*, page 6.

If your home does not meet all of the three criteria above, proceed to *Determining Fresh-Air Flow for Fireplace Location*, column 2.

Confined Space 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.

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 20 ft. (length) x 16 ft. (width) x 8 ft. (ceiling height) = 2560 cu. ft. (volume of space)
 If additional ventilation to adjoining room is supplied with grills or openings, add the volume of these rooms to the total volume of the space.
2. 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: 2560 cu. ft. (volume of space) x 20 = 51,200 (maximum Btu/Hr the space can support)
3. Add the Btu/Hr of all fuel burning appliances in the space.

Vent-free heater	_____ 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 heater	+	28,000	Btu/Hr
Total	=	68,000	Btu/Hr

AIR FOR COMBUSTION AND VENTILATION

Continued

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

_____ Btu/Hr (maximum the space can support)

_____ Btu/Hr (actual amount of Btu/Hr used)

Example: 51,200 Btu/Hr (maximum the space can support)

73,000 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:

- 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*.
- Vent room directly to the outdoors. See *Ventilation Air From Outdoors*.
- Install a lower Btu/Hr heater, if lower Btu/Hr size makes room unconfined.

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

⚠ 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, ANSI Z223.1/NFPA 54 Section 5.3* or applicable local codes.

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 3). 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.

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 thermostat-controlled power vent. Heated air entering the attic will activate the power vent.

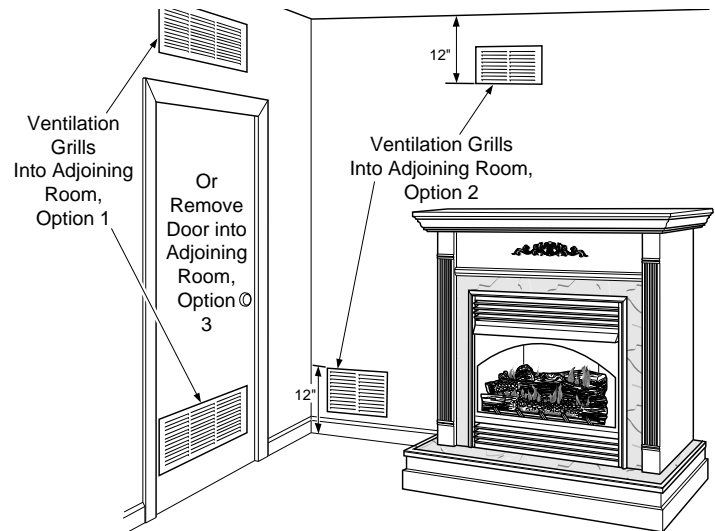


Figure 3 - Ventilation Air from Inside Building

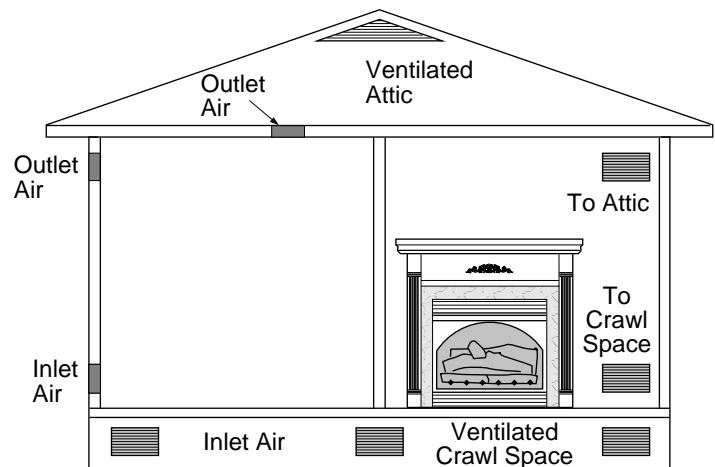


Figure 4 - Ventilation Air from Outdoors

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.

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 fireplace
- in high traffic areas
- in windy or drafty areas

WARNING: These models have 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.

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 10).

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*, pages 4 through 6.

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). If your gas supply is not correct, do not install fireplace. Call dealer where you bought fireplace for proper type fireplace.

ELECTRICAL HOOKUP

This fireplace has a blower assembly with an electrical cord. The electrical cord is five feet in length. You must locate fireplace within reach of a 120-volt grounded electrical outlet. If not, you must install an electrical outlet within reach of fireplace power cord. The GA3555 outlet accessory may be used for built-in installation when a blower is installed.

INSTALLING HOOD

Install hood to rail already installed in fireplace as shown in Figure 5. Use 3 Phillips screws provided.

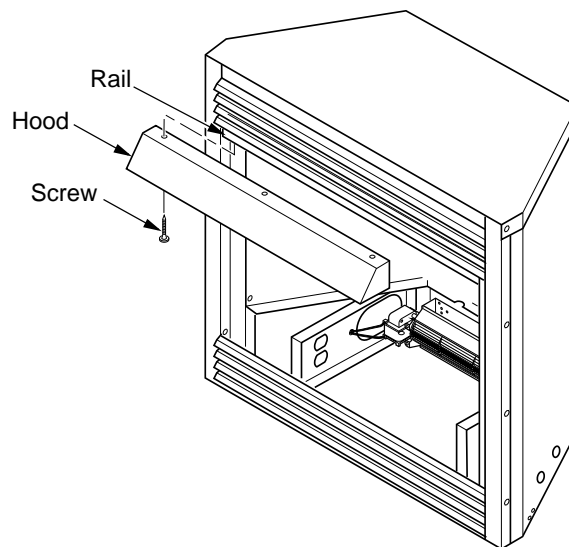


Figure 5 - Installing Hood

INSTALLATION

Continued

ASSEMBLING AND ATTACHING OPTIONAL BRASS TRIM

(Included with Mantel Accessory)

IMPORTANT: If you are recessing the firebox in a wall, do not attach brass trim at this time. See page 10 for built-in fireplace installation.

Note: The instructions below show assembling and attaching brass trim to fireplace.

1. Remove packaging from three pieces of brass trim.
2. Locate four brass screws, two adjusting plates with set screws, and two shims in the hardware packet.
3. Align shim under adjusting plate as shown in Figure 6.
4. Slide one end of adjusting plate/shim in slot on mitered edge of top brass trim (see Figure 6).
5. Slide other end of adjusting plate/shim in slot on mitered edge of side brass trim (see Figure 6).
6. While firmly holding edges of brass trim together, tighten both set screws on the adjusting plate with slotted screwdriver.
7. Repeat steps 1 through 6 for other side.
8. Tighten trim hanging screws (#10 x 6.25 shoulder) into holes in cabinets. Place the assembled trim onto fireplace cabinet. Align hanging notches on trim with hanging screws on side of fireplace (see Figure 7). Push trim firmly into place, sliding hanging notches over hanging screws.

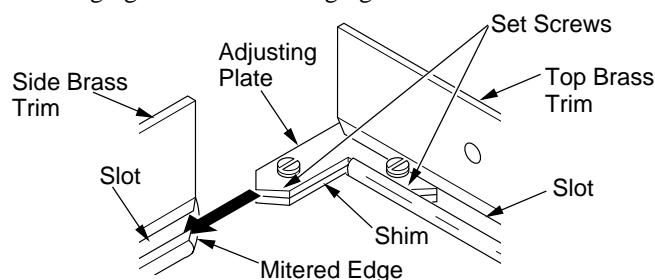


Figure 6 - Assembling Brass Trim

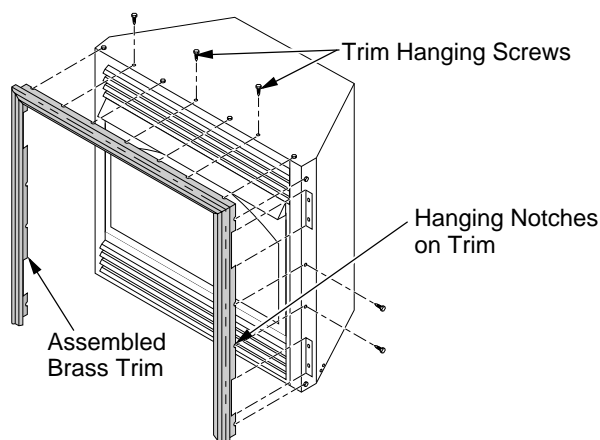


Figure 7 - Attaching Brass Trim to Fireplace

INSTALLATION CLEARANCES

⚠ 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 Clearances For Side Combustible Material, Side Wall, and Ceiling

- A. Clearances from the side of the fireplace cabinet to any combustible material and wall should follow diagram in Figure 8.
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 opening (see Figure 8).
- B. Clearances from the top of the fireplace opening to the ceiling should not be less than 42 inches.

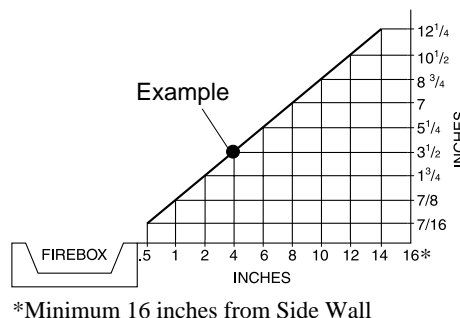


Figure 8 - Minimum Clearance for Combustible to Wall

CONVENTIONAL FIREPLACE INSTALLATION

Conventional installation of this fireplace involves installing fireplace along with the corner or cabinet mantel with hearth base accessories against a wall in your home (see *Accessories*, page 26). Follow the instructions below to install the fireplace in this manner.

Note: The instructions below show installation using the cabinet mantel and the G3000F/G3001U/G3004W/G3006F/G3007U series hearth base accessories. The hearth base accessory shown is optional for this installation. You can install fireplace and cabinet/corner mantel directly on the floor. The corner mantel accessory cannot be installed with the G3000F/G3001U/G3004W/G3006F/G3007U hearth base. The corner mantel can be paired with the G3008F/G3009U/G3010F corner hearth base. If mounting fireplace and cabinet or corner mantel to the floor, an optional G3005 Slim Base kit may be installed.

INSTALLATION

Continued

1. Assemble cabinet mantel, hearth base, and trim accessories. Assembly instructions are included with each accessory.
2. When installing blower, install a properly grounded, 120 volt three-prong electrical outlet at fireplace location if an outlet is not there. If possible, locate outlet so cabinet mantel will cover it when installed (see Figure 9).
3. Install gas piping to fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the equipment shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Installing Gas Piping to Fireplace Location*, page 11.
4. Place hearth base accessory against wall at installation location. Cut an access hole in hearth top to run gas line to fireplace (see Figure 9). 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.
5. Route gas line through access hole in hearth base.
6. Center cabinet mantel on hearth base (see Figure 10). Make sure mantel is flush against wall.
7. Break off nailing flanges (see Figure 11) with hammer or pliers.
8. Place cardboard or other protective material on top of hearth base. Carefully set fireplace on protective material, with back of fireplace inside mantel opening.
9. If blower is installed, route blower electrical cord through access holes in either side of fireplace. **Note:** Bushing may be moved if necessary. Plug electrical cord into electrical outlet.
10. Carefully insert fireplace into cabinet mantel (Figure 12). Be careful not to scratch or damage hearth base, cabinet mantel, or any laminate trim on hearth base. Remove protective material from top of hearth base and from front of fireplace (if any). **Note:** You can secure fireplace to hearth or floor. Open lower louver. Locate screw holes in bottom of base. Tighten wood screws through these holes and into hearth or floor.
11. Attach gas line from fireplace gas regulator to gas supply. See *Connecting Fireplace to Gas Supply*, page 12.
12. Check all gas connections for leaks. See *Checking Gas Connections*, pages 12 and 13.

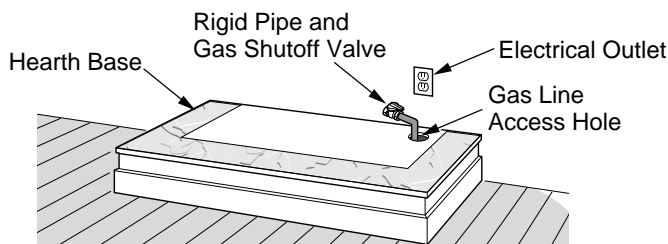


Figure 9 - Placing Hearth Base Accessory Against Wall

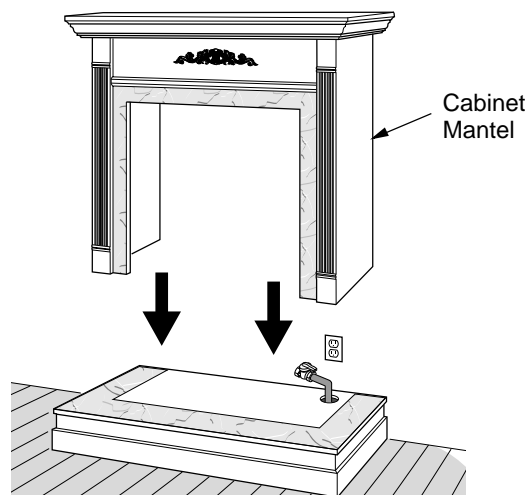


Figure 10 - Installing Cabinet Mantel

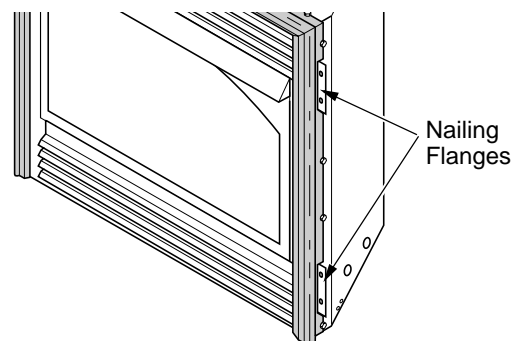


Figure 11 - Location of Nailing Flanges

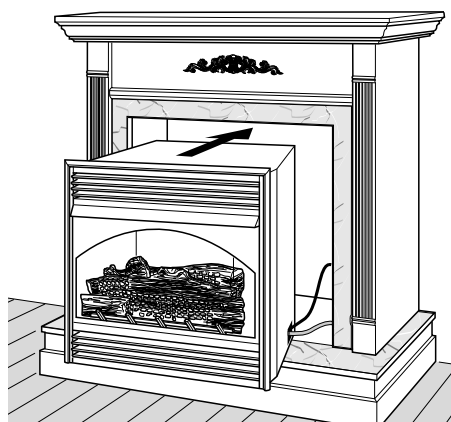


Figure 12 - Inserting Fireplace Into Cabinet Mantel

INSTALLATION

Continued

BUILT-IN FIREPLACE INSTALLATION

Built-in installation of this fireplace involves installing fireplace into a framed-in enclosure. This makes the front of fireplace flush with wall. If installing a mantel above the fireplace, you must follow the clearances shown in Figure 16. Follow the instructions below to install the fireplace in this manner.

	Actual	Framing
Height	32 ³ / ₈ "	33"
Front Width	34 ⁵ / ₁₆ "	35 ¹ / ₂ "
Depth	16 ¹¹ / ₁₆ "	17 ³ / ₄ "

1. Frame in rough opening. Use dimensions shown in Figure 13 for the rough opening.
- If installing in a corner, use dimensions shown in Figure 14, page 10 for the rough opening. The height is 33" which is the same as the wall opening above.
2. If using blower, install and properly ground GA3555, three-prong 120 volt electrical outlet, in fireplace. Follow instructions included in kit.
3. Install gas piping into fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the equipment shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Installing Gas Piping to Fireplace Location*, page 11.
4. Carefully set fireplace in front of rough opening with back of fireplace inside wall opening.

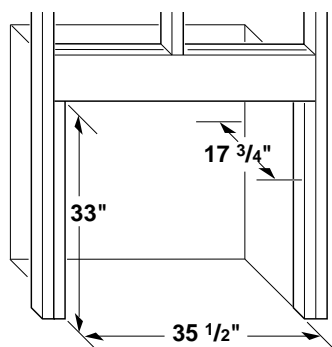


Figure 13 - Rough Opening for Installing in Wall

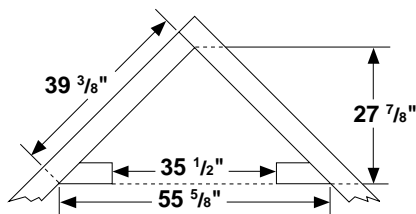


Figure 14 - Rough Opening for Installing in Corner

5. Plug electrical cord into electrical outlet installed in step 2.
6. Carefully insert fireplace into rough opening.
7. Attach flexible gas line to gas supply. See *Connecting Fireplace to Gas Supply*, page 12.
8. Attach fireplace to wall studs using nails or wood screws through holes in nailing flange (see Figure 15).
9. Check all gas connections for leaks. See *Checking Gas Connections*, pages 12 and 13.
10. Install brass trim after final finishing and/or painting of wall (see Figure 7, page 8).

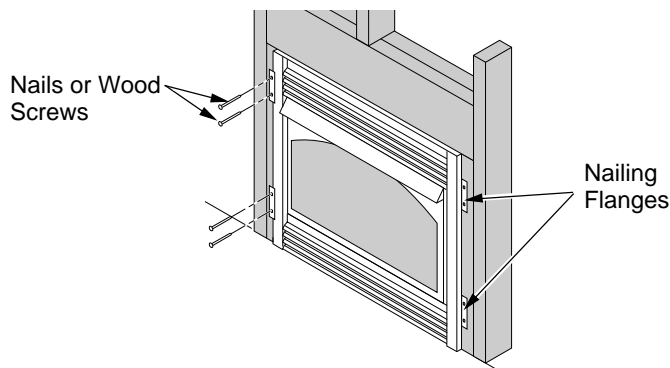


Figure 15 - Attaching Fireplace to Wall Studs

Mantel Clearances for Built-In Installation

If placing mantel above built-in fireplace, you must meet minimum clearance between mantel shelf and top of fireplace opening.

If your installation does not meet the below minimum clearances, you must:

- raise the mantel to an acceptable height,
- OR
- remove the mantel.

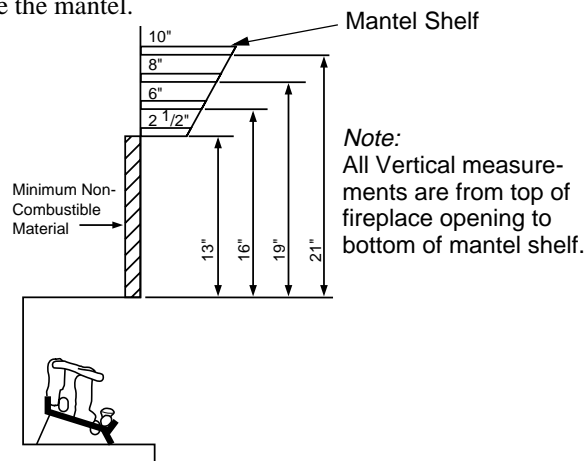


Figure 16 - Minimum Mantel Clearances for Built-In Installation

INSTALLATION

Continued

INSTALLING GAS PIPING TO FIREPLACE LOCATION

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

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

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

⚠ 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 (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

* 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 26.

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 17. Pointing the vent down protects it from freezing rain or sleet.

⚠ 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 18).

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.

⚠ 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 18. 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.

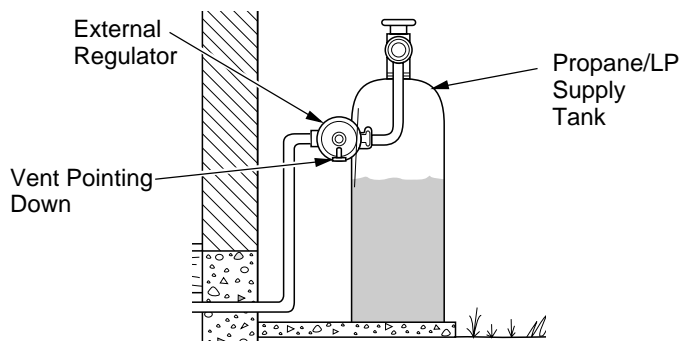


Figure 17 - External Regulator with Vent Pointing Down

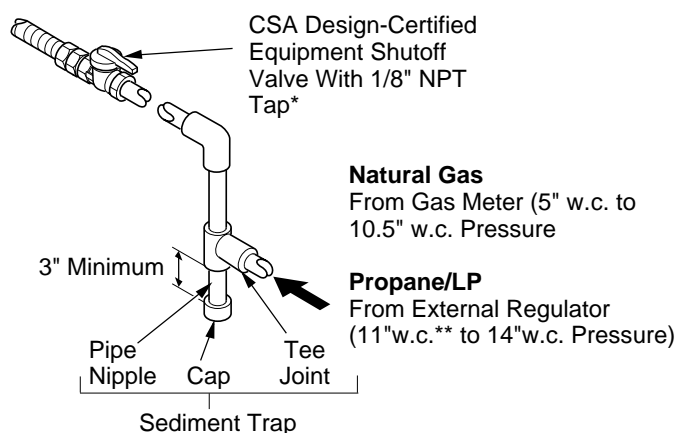


Figure 18 - Gas Connection

* Purchase the optional CSA design-certified equipment shutoff valve from your dealer. See *Accessories*, page 26.

** Minimum inlet pressure for purpose of input adjustment.

INSTALLATION

Continued

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)
1. Remove fireplace screen. Remove two screws that hold fireplace screen in place for shipping. These screws are located near top of screen. Discard screws. Lift fireplace screen up and pull out to remove.
 2. Remove screws that attach log base assembly to fireplace (see Figure 19). Carefully lift up log base assembly and remove from fireplace (see Figure 19).

Note: If adding the G8000 series brick liner accessory, install it now. Follow instructions in G8000 accessory kit.

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

3. Route gas line (provided by installer) from equipment shutoff 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 20). The flexible gas supply line connection to the equipment shutoff valve should be accessible.

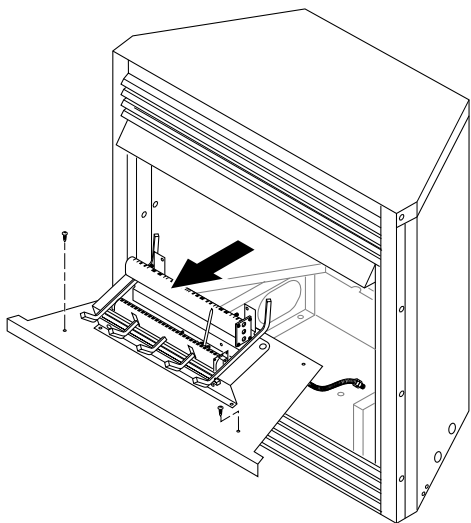


Figure 19 - Removing Log Base Assembly From Fireplace

4. Attach flexible gas line to gas supply (see Figure 20). Check connection of flexible gas line attached to gas regulator of fireplace (see Figure 20).
5. Check all gas connections for leaks. See *Checking Gas Connections*.
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.

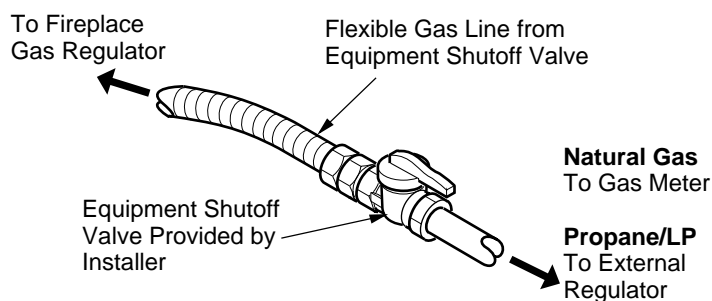


Figure 20 - Attaching Flexible Gas Lines Together

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 fireplace with its appliance main gas valve (control valve) and equipment shutoff valve from gas supply piping. Pressures in excess of 1/2 psig will damage fireplace gas regulator.
2. Cap off open end of gas pipe where equipment shutoff valve was connected.
3. 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 by using compressed air.
4. Check all joints of gas supply piping system. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.

INSTALLATION

Continued

5. Correct all leaks at once.
6. 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 21).
2. 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.
3. Check all joints from gas meter for natural or propane/LP supply to equipment shutoff valve (see Figure 22 or 23). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
4. Correct all leaks at once.

Pressure Testing Fireplace Gas Connections

1. Open equipment shutoff valve (see Figure 21).
2. 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.
4. Check all joints from equipment shutoff valve to gas control valve (see Figure 22 or 23). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light fireplace (see *Operating Fireplace*, page 16). Check all other internal joints for leaks.
7. Turn off fireplace (see *To Turn Off Gas to Appliance*, page 15).

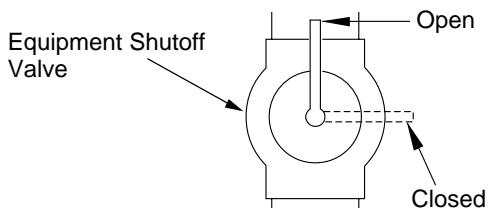


Figure 21 - Equipment Shutoff Valve

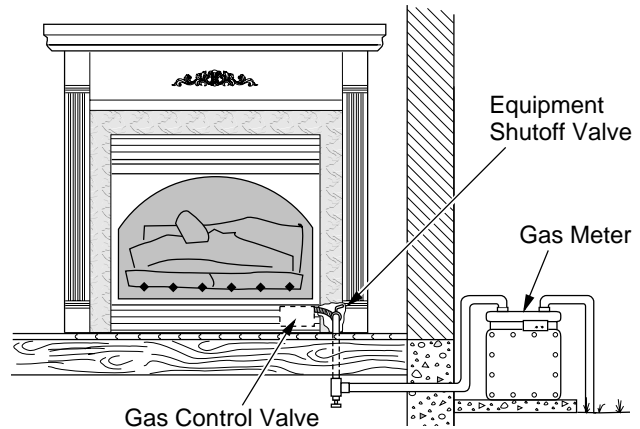


Figure 22 - Checking Gas Joints (Natural Gas Only)

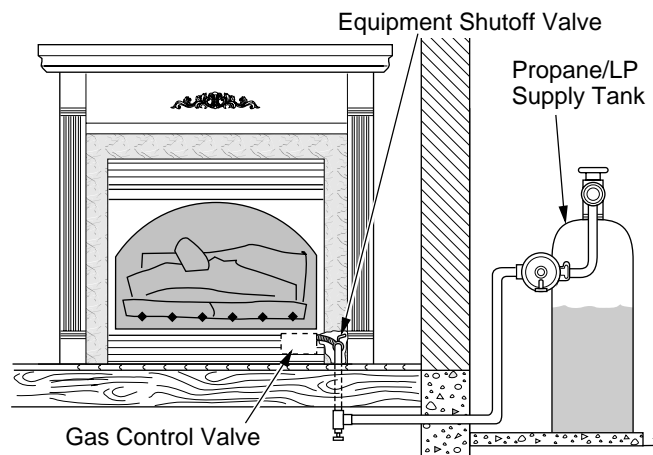


Figure 23 - Checking Gas Joints (Propane/LP Gas Only)

INSTALLING LOGS

⚠ 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.

Each log is marked with a number. These numbers will help you identify the log when installing. 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 (#1) on top of the grate. Make sure the notches in the bottom of the log fit over the grate prongs (see Figure 24, page 14). Push back of logs flush with metal grate bars.
2. Rest middle log (#2) 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 25, page 14).

INSTALLATION

Continued

3. Slide the grooves in the back of the rear log (#3) against the rear grate prongs. Make sure the log fits securely over the prongs (see Figure 26). Make sure log is completely vertical and not leaning in toward burner where the flame will touch the log.
4. Install fireplace screen by slipping notches of fireplace screen over screws on front of fireplace (see Figure 27).

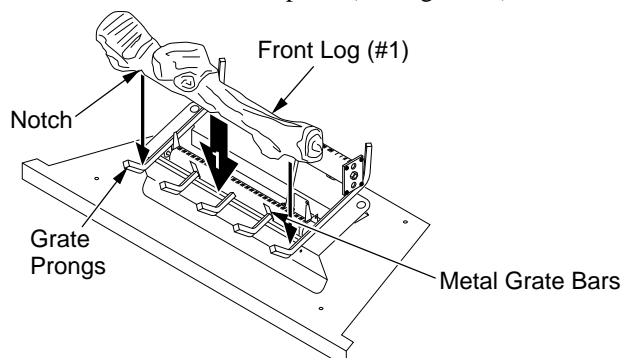


Figure 24 - Installing Front Log (#1)

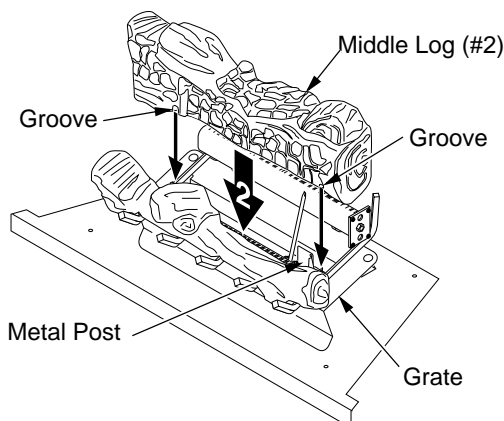


Figure 25 - Installing Middle Log (#2)

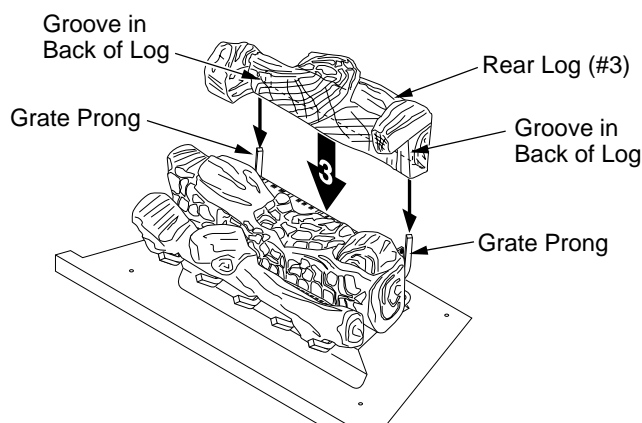


Figure 26 - Installing Rear Log (#3)

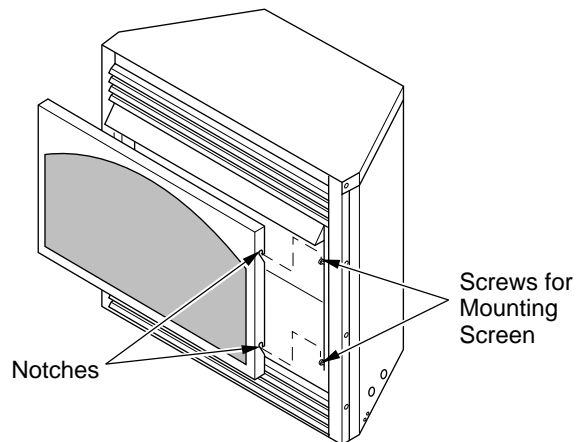


Figure 27 - Installing Fireplace Screen

OPERATING FIREPLACE

FOR YOUR SAFETY READ BEFORE LIGHTING

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

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

WHAT TO DO IF YOU SMELL GAS



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

OPERATING FIREPLACE *Continued*

LIGHTING INSTRUCTIONS

⚠ 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, page 14 column 2.
2. Make sure equipment shutoff valve is fully open.
3. Turn control knob clockwise  to the OFF position (see Figure 28).
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, page 14 column 2. 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 28).

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.

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*, column 2.

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.

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

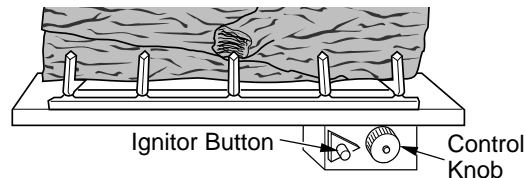


Figure 28 - Control Knob and Ignitor Button Location

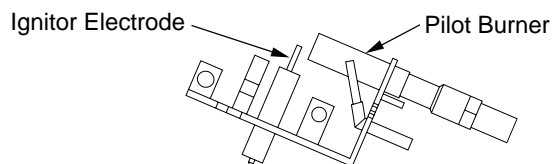




Figure 29 - Pilot

TO TURN OFF GAS TO APPLIANCE

Shutting Off Fireplace

Turn control knob clockwise  to the OFF position.

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*, column 1.
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.

OPERATING FIREPLACE

Continued

BLOWER OPERATION

⚠ 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.

This thermostat-controlled blower has a variable speed control with an ON/OFF switch. The blower will start when the thermostat senses a sufficient increase in firebox temperature.

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.

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

PILOT FLAME PATTERN

Figure 30 shows a correct pilot flame pattern. Figure 31 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 31

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 15)
- see *Troubleshooting*, pages 18 through 20

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

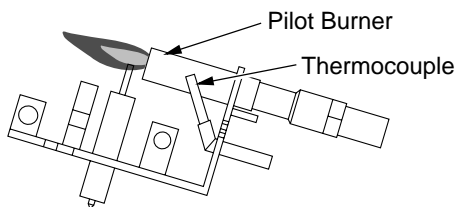


Figure 30 - Correct Pilot Flame Pattern (Propane/LP Shown)

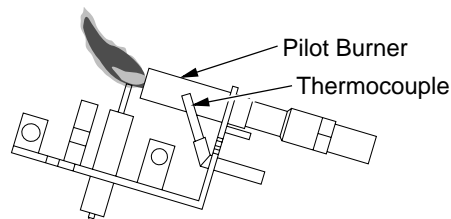


Figure 31 - Incorrect Pilot Flame Pattern (Propane/LP Shown)

FRONT BURNER FLAME PATTERN

Figure 32 shows correct front burner flame pattern. Figure 33 shows incorrect front burner flame pattern. The incorrect burner flame pattern shows yellow tipping at top of blue flame.

⚠ WARNING: If front burner flame pattern shows yellow tipping, your fireplace could produce increased levels of carbon monoxide. Follow instructions at bottom of this page. Yellow flame on rear burner is normal.

NOTICE: Do not mistake orange flames with yellow tipping. Dirt or other fine particles are burned by fireplace, causing brief patches of orange flame.

If front burner flame pattern is incorrect, as shown in Figure 33

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 15)
- see *Troubleshooting*, pages 18 through 20

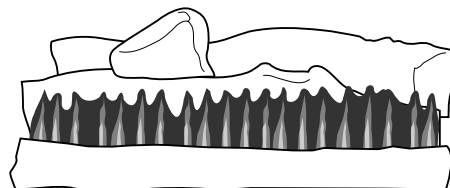


Figure 32 - Correct Front Burner Flame Pattern

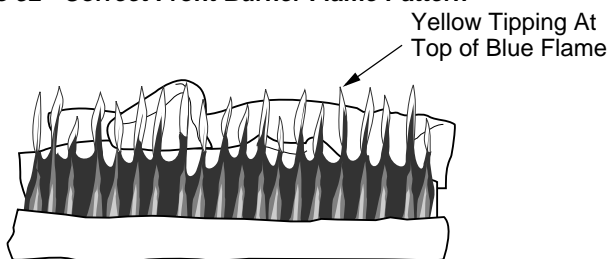


Figure 33 - Incorrect Front Burner Flame Pattern

CLEANING AND MAINTENANCE

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

⚠ CAUTION: You must keep control areas, burners, 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.

CLEANING 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.
2. Inspect burner, pilot, and primary air inlet holes on injector holder for dust and dirt (see Figure 34).
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.

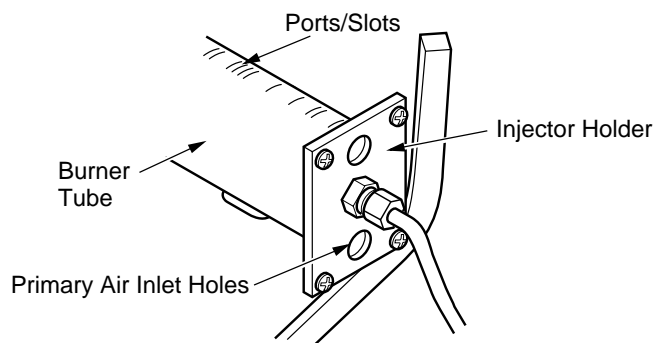


Figure 34 - Injector Holder On Outlet Burner Tube

5. Blow air into the primary air holes on the injector holder.
6. 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 35). 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.

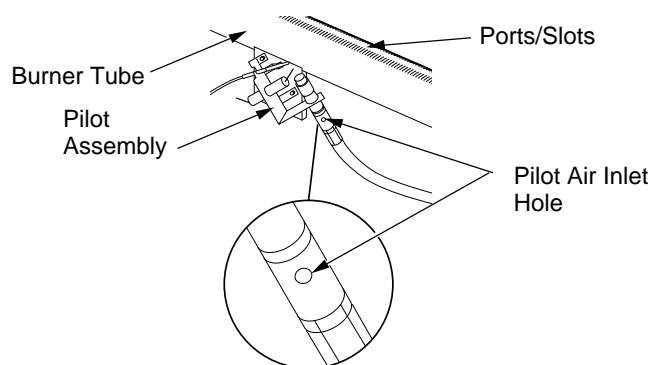


Figure 35 - Pilot Inlet Air Hole

LOGS

- If you remove logs for cleaning, refer to *Installing Logs*, pages 13 and 14, to properly replace logs.
- Replace log(s) if broken or chipped (dime-sized or larger).

WIRING DIAGRAM

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

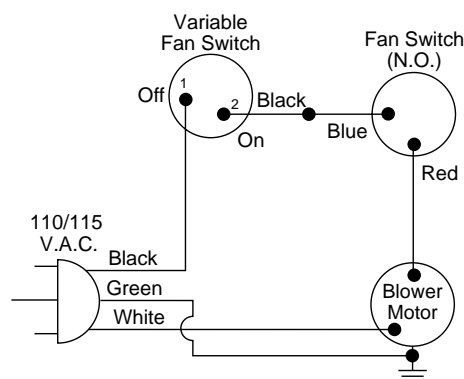


Figure 36 - Blower Wiring Diagram for Thermostat-Controlled Models

TROUBLESHOOTING

Note: For additional help, visit DESA Heating Products' technical service web site at www.desatech.com.

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

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

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

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at ODS/pilot	<ol style="list-style-type: none"> 1. Ignitor electrode not connected to ignitor cable 2. Piezo ignitor nut is loose 3. Ignitor cable pinched or wet 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. Tighten nut holding piezo ignitor to base panel of log set. Nut is located behind base panel 3. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry 4. Replace ignitor cable 5. Replace piezo ignitor 6. Replace pilot assembly 7. Replace pilot assembly
When ignitor button is pressed, there is spark at ODS/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 installed 5. Depleted gas supply (propane/LP only) 6. ODS/pilot is clogged 7. Gas regulator setting is not correct 	<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. Contact local propane/LP gas company 6. Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 17) or replace ODS/pilot assembly 7. Replace gas regulator
ODS/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. Thermocouple connection loose at control valve 5. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following: <ol style="list-style-type: none"> A) Low gas pressure B) Dirty or partially clogged ODS/pilot 6. Thermocouple damaged 7. Control valve damaged 8. On thermostat models, safety interlock system has been triggered 	<ol style="list-style-type: none"> 1. Press in control knob fully 2. After ODS/pilot lights, keep control knob pressed in 30 seconds 3. Fully open equipment shutoff valve 4. Hand tighten until snug, then tighten 1/4 turn more 5. A) Contact local natural or propane/LP gas company B) Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 17) or replace ODS/pilot assembly 6. Replace pilot assembly 7. Replace control valve 8. Wait one minute for safety interlock system to reset. Repeat ignition operation

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
One or both burners do not light after ODS/pilot is lit	<ol style="list-style-type: none"> 1. Burner orifice(s) clogged 2. Inlet gas pressure is too low 3. Mislocated crossover tube 	<ol style="list-style-type: none"> 1. Clean burner(s) (see <i>Cleaning and Maintenance</i>, page 17) or replace burner orifice(s) 2. Contact local natural or propane/LP gas company 3. Contact qualified service person
Delayed ignition of one or both burners	<ol style="list-style-type: none"> 1. Manifold pressure is too low 2. Burner orifice(s) clogged 3. Mislocated crossover tube 	<ol style="list-style-type: none"> 1. Contact local natural or propane/LP gas company 2. Clean burner(s) (see <i>Cleaning and Maintenance</i>, page 17) or replace burner orifice(s) 3. Contact qualified service person
Burner backfiring during combustion	<ol style="list-style-type: none"> 1. Burner orifice is clogged or damaged 2. Damaged burner 3. Gas regulator defective 	<ol style="list-style-type: none"> 1. Clean burner (see <i>Cleaning and Maintenance</i>, page 17) or replace burner orifice 2. Replace damaged burner 3. Replace gas regulator
Yellow flame in front burner during burner combustion	<ol style="list-style-type: none"> 1. Not enough air 2. Gas regulator defective 	<ol style="list-style-type: none"> 1. Check burner(s) for dirt and debris. If found, clean burner(s) (see <i>Cleaning and Maintenance</i>, page 17) 2. Replace gas regulator
Slight smoke or odor during initial operation	<ol style="list-style-type: none"> 1. Residues from manufacturing processes and logs curing 	<ol style="list-style-type: none"> 1. Problem will stop after a few hours of operation
Fireplace produces a whistling noise when burners are lit	<ol style="list-style-type: none"> 1. Turning control knob to HI position when burners are cold 2. Air in gas line 3. Air passageways on fireplace blocked 4. Dirty or partially clogged burner orifice(s) 	<ol style="list-style-type: none"> 1. Turn control knob to LO position and let warm up for a minute 2. Operate burners until air is removed from line. Have gas line checked by local natural or propane/LP gas company 3. Observe minimum installation clearances (see pages 8 through 10) 4. Clean burners (see <i>Cleaning and Maintenance</i>, page 17) or replace burner orifice(s)
White powder residue forming within burner box or on adjacent walls or furniture	<ol style="list-style-type: none"> 1. When heated, vapors from furniture polish, wax, carpet cleaners, etc. may turn into white powder residue 	<ol style="list-style-type: none"> 1. Turn heater off when using furniture polish, wax, carpet cleaners, or similar products
Dark residue on logs or inside of fireplace <i>Note:</i> After removing all causes of residue deposits, completely clean fireplace and appliance of all residue before reusing appliance.	<ol style="list-style-type: none"> 1. Improper log placement 2. Drafts or other air currents affecting flame pattern 3. Air holes at burner inlet blocked 4. Burner flame holes blocked 	<ol style="list-style-type: none"> 1. Properly locate logs (see <i>Installing Logs</i>, pages 13 through 15) 2. Eliminate source of drafts around heater 3. Clean out air holes at burner inlet. Periodically repeat as needed 4. Remove blockage

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 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.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces a clicking/ticking noise just after burners are lit or shut off	1. Metal expanding while heating or contracting while cooling	1. This is common with most fireplaces. If noise is excessive, contact qualified service person
Fireplace produces unwanted odors	1. Fireplace burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. (See IMPORTANT statement above) 2. Gas leak. See Warning statement above	1. Open window and ventilate room. Stop using odor causing products while fireplace is running 2. Locate and correct all leaks (see <i>Checking Gas Connections</i> , pages 12 and 13)
Fireplace shuts off in use (ODS operates)	1. Not enough fresh air is available 2. Low line pressure 3. ODS/pilot is partially clogged	1. Open window and/or door for ventilation 2. Contact local propane/LP gas company 3. Clean ODS/pilot (see <i>Cleaning and Maintenance</i> , page 17)
Gas odor even when control knob is in OFF position	1. Gas leak. See Warning statement above 2. Control valve defective	1. Locate and correct all leaks (see <i>Checking Gas Connections</i> , pages 12 and 13) 2. Replace control valve
Gas odor during combustion	1. Foreign matter between control valve and burner 2. Gas leak. See Warning statement above	1. Take apart gas tubing and remove foreign matter 2. Locate and correct all leaks (see <i>Checking Gas Connections</i> , pages 12 and 13)
Moisture/condensation noticed on windows	1. Not enough combustion/ventilation air	1. Refer to <i>Air for Combustion and Ventilation</i> requirements (page 4)

SPECIFICATIONS

	VSGF28NTD	VSGF28PTD
Btu (Low/High)	20,000/28,000	20,000/28,000
Type Gas	Natural Gas Only	Propane/LP Gas Only
Ignition	Piezo	Piezo
Manifold Pressure	3.4" W.C.	7.9" W.C.
Inlet Gas Pressure (in. of water)		
Maximum	10.5"	14"
Minimum	5"	11"
Shipping Weight	100 lbs.	100 lbs.

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

When calling DESA Heating Products, have ready

- your name
- your address
- model and serial numbers of your fireplace
- how fireplace 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 Heating Products at 1-866-672-6040 for referral information.

When calling DESA Heating Products, have ready

- model number of your fireplace
- the replacement part number

SERVICE HINTS

When Gas Pressure Is Too Low

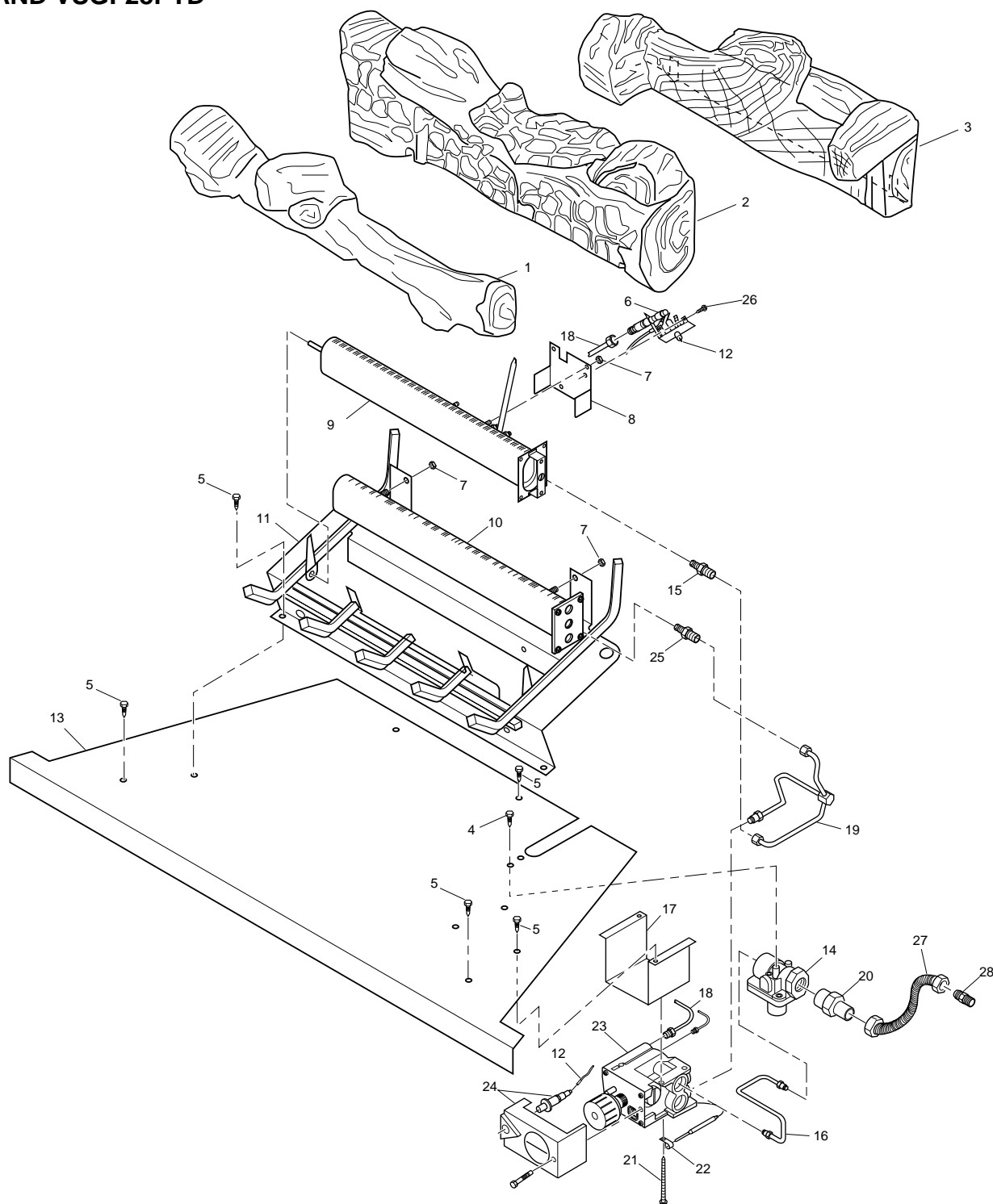
- pilot will not stay lit
- burners will have delayed ignition
- fireplace will not produce specified heat
- propane/LP gas supply might be low

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

TECHNICAL SERVICE

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

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

ILLUSTRATED PARTS
BREAKDOWNLOG BASE ASSEMBLY MODELS
VSGF28NTD AND VSGF28PTDFor more information, visit www.desatech.com

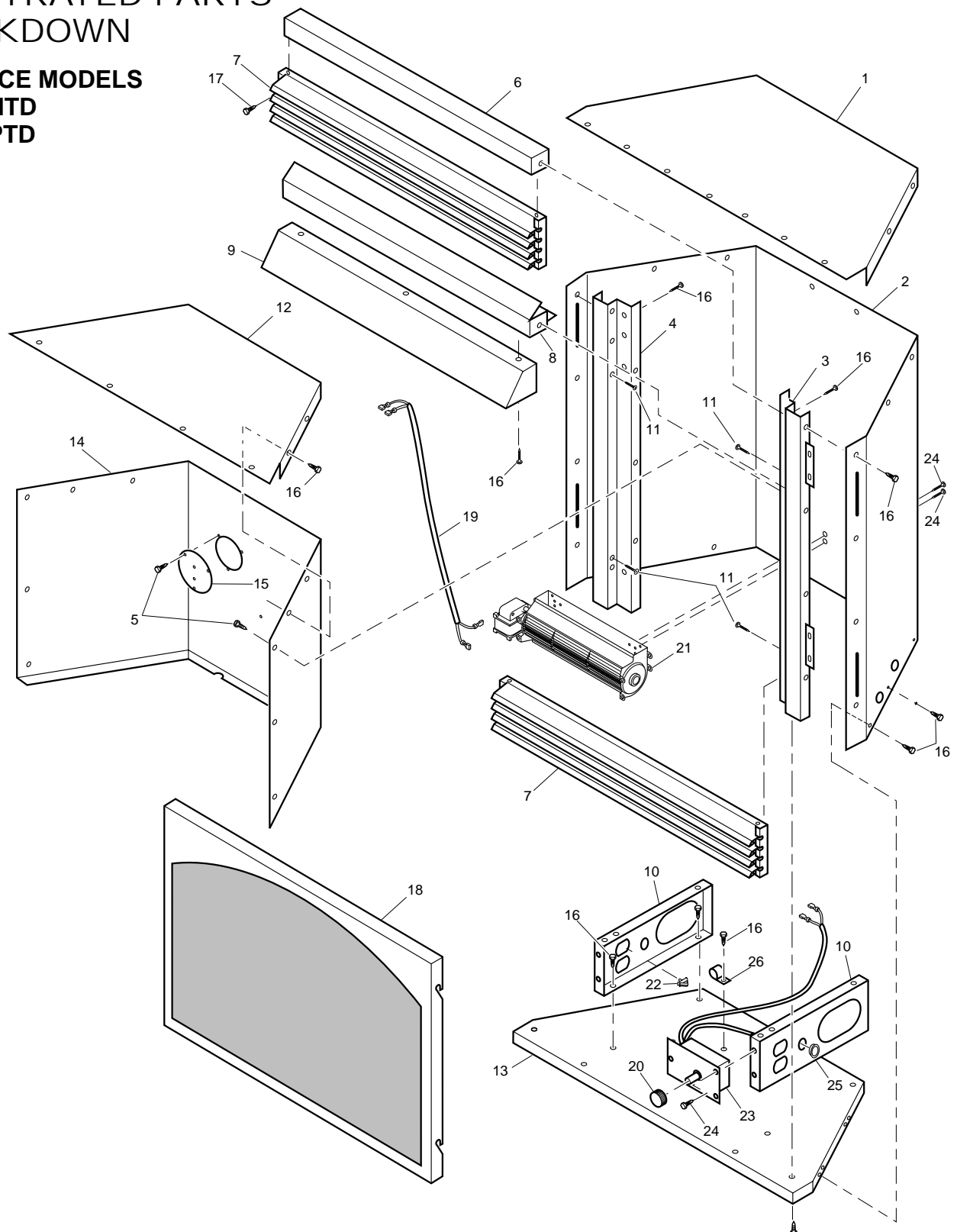
PARTS LIST

LOG BASE ASSEMBLY

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 21 of this manual.

KEY NO.	PART NUMBER		DESCRIPTION	QTY.
	VSGF28NTD	VSGF28PTD		
1	110881-01	110881-01	Front Log (#1)	1
2	110881-02	110881-02	Middle Log (#2)	1
3	110881-03	110881-03	Rear Log (#3)	1
4	M11084-38	M11084-38	Screw	2
5	098304-01	098304-01	Screw, #10 Phillips, Black	8
6	104285-01	104286-01	ODS Pilot	1
7	098249-01	098249-01	Nut	4
8	101006-02	101006-02	Pilot Bracket	1
9	101330-05	101330-05	Front Burner Assembly	1
10	109824-02	109824-02	Rear Burner Assembly	1
11	**	**	Base Assembly	1
12	098271-06	098271-06	Ignitor Cable	1
13	**	**	Firebox Bottom	1
14	098867-09	098867-10	Gas Regulator	1
15	101004-04	101004-15	Front Burner Injector	1
16	102845-01	102845-01	Inlet Tube	1
17	101382-01	101382-01	Thermovalve Bracket	1
18	099387-03	099387-03	Pilot Tube	1
19	102846-01	102846-01	Burner Tube	1
20	097809-02	097809-02	Adapter	1
21	099211-01	099211-01	Screw	2
22	098544-01	098544-01	Thermostat Clamp	1
23	101329-20	101329-26	Thermostat Gas Valve Assembly	1
24	101381-01	101381-01	Cover and Piezo	1
25	101004-14	101004-10	Rear Burner Injector	1
26	M11084-26	M11084-26	Hex Screw, #10	2
27	101628-03	101628-03	Flex Hose	1
28	901063-01	901063-01	3/8" Flare x 1/2" NPT	1
PARTS AVAILABLE — NOT SHOWN				
	100563-01	100563-01	Warning Plate	1
	101054-01	101054-01	Lighting Instructions Plate	1
	100565-01	100565-01	Warning Plate Fastener	1

** Not a field replaceable part.

ILLUSTRATED PARTS
BREAKDOWNFIREPLACE MODELS
VSGF28NTD
VSGF28PTD

PARTS LIST

FIREPLACE MODELS

VSGF28NTD

VSGF28PTD

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 21 of this manual.

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	101357-01	Top Outer Casing	1
2	**	Outer Casing	1
3	102758-02CK	Right Front Side	1
4	102759-02CK	Left Front Side	1
5	098304-01	Phillips Pan Head Screw, #10	17
6	101351-01CK	Top Front	1
7	102455-02	Louver Extruded	2
8	101353-01CK	Middle Front Rail	1
9	101712-02	Firebox Hood	1
10	**	Firebox Support	2
11	099230-01	Shoulder Screw	4
12	101872-03	Firebox Top	1
13	101346-01	Outer Base	1
14	**	Firebox Wrapper	1
15	101614-02	Limit Switch (thermal disk) Assy.	1
16	M11084-26	Hex Screw, #10	57
17	098304-03	Phillips Pan Head Screw, #8	4
18	101727-03	Screen Assembly	1
19	101398-03	Wire Harness	1
20	103650-01	Control Knob	1
21	103581-02	Blower Assembly	1
22	099123-01	Wire Clip	4
23	105649-01	Blower Speed Control	1
24	M11084-38	Hex Screw, 8-18 x .38"	4
25	101629-01	Plastic Bushing	2
26	098544-01	Clamp	1
	099038-01	Strain Relief Bushing	1
	100639-01	Caution Decal	1
	104313-01	Hinge, Pin	1
	104313-02	Hinge, Pin	1
	M10908-2	Screw, Slotted Hex Head Tapping	4

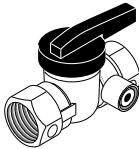
** Not a field replaceable part.

ACCESSORIES

Purchase these fireplace accessories from your local dealer. If they can not supply these accessories, call DESA Heating Products' 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

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



CLEANING KIT - GCK (Not Shown)

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.

INFORMATION VIDEO - 108917-01

For all models. A care and maintenance video is available by calling 1-866-672-6040.

CABINET MANTEL

GMC11F Series - Walnut Finished

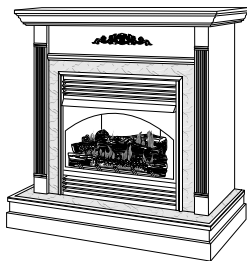
GMC12U Series - Unfinished

GMC13F Series - Oak Finished with Medium Stain

GM102W Series - Off-White Paint

Shown with optional base and laminate hearth and mantel trim accessories.

Dimensions (WxHxD): 56 3/4" x 48" x 22 3/4"



HARDWOOD HEARTH BASE

GC3333F Series - Walnut Finished

GC3334U Series - Unfinished

GC3335F Series - Oak Finished with Medium Stain
G3004W Series - Off-White Paint

The hearth base can be used with the cabinet mantels to create a handsome riser for the fireplace (cannot be used with corner mantel).

Dimensions (WxHxD): 58" x 6 1/2" x 28 9/16"



SLIM HEARTH BASE (Not Shown)

G3005J Series - Jade Marble Laminate

G3005S Series - Sandstone Marble Laminate

G3005B Series - Black Onyx Marble Laminate

The slim hearth base allows you to further customize your fireplace.

Dimensions (WxHxD): 41 7/8" x 5/8" x 10"

CORNER MANTEL

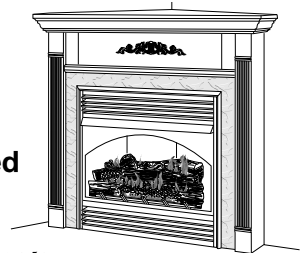
GMC36F Series - Walnut Finished

GMC37U Series Unfinished

GM202F Series - Oak Finished

Shown with optional laminate mantel trim accessory.

Dimensions (WxHxD): 60 7/8" x 48 3/4" x 34 5/8"

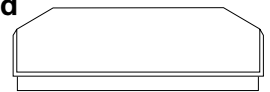


CORNER HEARTH BASE

G3008F Series - Walnut Finished

G3009U Series - Unfinished

G3010F Series - Oak Finished



The corner hearth base is designed for use with the corner mantels to create a handsome riser for the fireplace.

Dimensions (WxHxD): 52 1/2" x 6" x 23 3/4"

FIREBOX BRICK LINER - G8001 SERIES (Not Shown)

Ceramic fiber firebox liner adds the look of real brick.

BRASS TRIM ACCESSORY - (Not Shown)

PT32 - Black Finish

PT32P - Platinum Finish

PT32PB - Polished Brass Finish

PT32B - Brushed Brass Finish

Included with accessory mantels

DUPLEX OUTLET KIT - GA3555 (Not Shown)

For built-in installation

LAMINATE TRIM FOR HEARTH OR MANTEL

G3002J Series - Jade

Marble Laminate Mantel Trim

G3003J Series - Jade

Marble Laminate Hearth

Base Trim

G3002S Series - Sandstone

Marble Laminate Mantel Trim

G3003S Series - Sandstone

Marble Laminate Hearth Base Trim

G3002B Series - Black

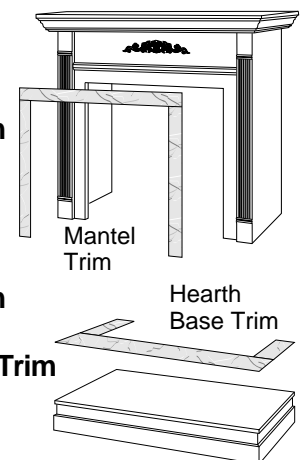
Onyx Marble Laminate Trim

G3003B Series - Black Onyx

Marble Laminate Hearth Base Trim

Mantel trim for cabinet or corner mantel.

Hearth base trim for hardwood hearth bases.



OWNER'S REGISTRATION FORM

In order to provide better customer service for this and future purchases, we recommend that you register your product with us. You can register online at www.desatech.com. If access to our website is not available to you, please complete this Owner's Registration Form and mail to the address on the back of this owner's manual. Please provide the following product information:

Brand: _____ (Comfort Glow, Vanguard, etc.)
Model: _____ (EFP33PR, VTGH33NR, etc.)
Date Purchased: _____ *Note: Keep receipt for warranty verification.*
Serial Number: _____ 7 or 9 digit number located on product or identification tag.
First Name: _____ Last Name: _____
Address: _____
City: _____ State: _____ Zip: _____ Country: _____
Home Phone: _____ () - _____
E-Mail: _____

Please answer the following questions to register your product with DESA Heating Products:

1. Where will the product be used?
☐ Living/Family Room ☐ Office/Warehouse ☐ Utility Shed/Outbuilding ☐ Garage ☐ Bedroom ☐ Bathroom ☐ Other
2. If you bought this product yourself, did you plan to purchase this type of product before going into the store? ☐ Yes ☐ No
3. Who selected the product? ☐ Male ☐ Female ☐ Both
4. What is the population of your area? ☐ Under 10,000 ☐ 10,000 to 25,000 ☐ 25,000 to 50,000 ☐ 50,000 to 100,000
☐ 100,000 to 250,000 ☐ Over 250,000
5. What is your primary source of heat? ☐ Propane (LP Gas) ☐ Fuel Oil ☐ Wood ☐ Natural Gas ☐ Electric ☐ Other
6. How was the product installed? ☐ Professional Installer ☐ Self ☐ Other
7. Cost of product excluding sales tax? \$ _____
8. Cost to install product? \$ _____
9. Type of store where product was purchased? ☐ Hardware ☐ Propane Dealer ☐ Natural Gas/Utility Co. ☐ Home Center/Builder's Supply
☐ Fireplace or Hearth Shop ☐ Farm Store ☐ Other
10. What motivated you to buy this product? ☐ Sudden Cold Weather ☐ Replace Older Model ☐ D.I.Y. Home Project
☐ Emergency Back-Up Heat ☐ Heater was on Sale ☐ Energy Savings/High Efficiency ☐ Construction Project ☐ Other
11. How did you learn about this product brand? ☐ Advertising ☐ Relative or Friend ☐ Store Display ☐ Other _____
12. Level of Education of Purchaser: ☐ Some High School ☐ Completed High School ☐ Completed College ☐ Completed Graduate School
13. Age of Purchaser: ☐ Under 20 ☐ 20 - 29 ☐ 30 - 39 ☐ 40 - 49 ☐ 50 - 59 ☐ 60 or Over
14. Buyer's total annual household income: ☐ Under \$15,000 ☐ \$15,000 to \$19,999 ☐ \$20,000 to \$34,999 ☐ \$35,000 to \$49,999
☐ \$50,000 to \$74,999 ☐ \$75,000 to \$99,999 ☐ \$100,000 and Over

15. Store where product was purchased:

Name: _____

City: _____ State: _____

16. In choosing this product, how important were the following:

	Not Important	Somewhat Important	Very Important
Availability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brand Name	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heat Output	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Made in USA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warranty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Value for Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prior Brand Experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Controls Location	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thermostat, Remote, or Manual Operation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ease of Operation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Special Features	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Salesperson's Recommendation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friend/Relative's Recommendation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Portability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quiet Operation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

TAPE

Postage
Required

DESATM
HEATING PRODUCTS
2701 Industrial Drive
P.O. Box 90004
Bowling Green, KY 42102-9004

TAPE

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

DESA Heating Products warrants this product to be free from defects in materials and components for four (4) years and five (5) years on stainless steel burners 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 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, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO FOUR (4) YEARS ON ALL COMPONENTS AND FIVE (5) YEARS ON STAINLESS STEEL BURNERS 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:

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



111149 01

NOT A UPC

111149-01
Rev. B
03/03

For more information, visit www.desatech.com