

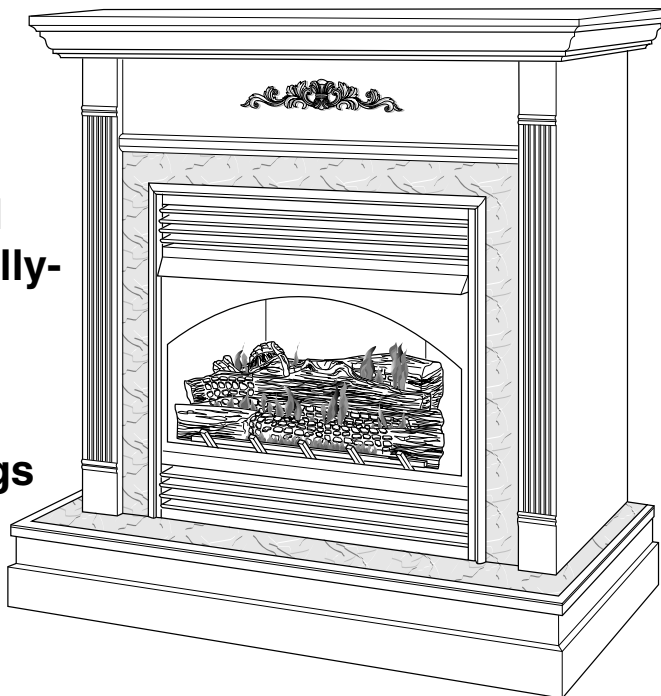
DESA INTERNATIONAL UNVENTED (VENT-FREE) NATURAL GAS FIREPLACE

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

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

OWNER'S OPERATION AND INSTALLATION MANUAL

**Variable
Manually-
Controlled
Models and
Thermostatically-
Controlled
“B” Models
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 in this manual.

Save this manual for future reference.

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SAFETY INFORMATION

WARNINGS

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 Gas: Natural gas is 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.

Safety Information continues on next page

SAFETY INFORMATION

Continued

WARNINGS *Continued*

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

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. If you smell gas
 - shut off gas supply
 - do not try to light any appliance
 - do not touch any electrical switch; do not use any phone in your building
 - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
 - if you cannot reach your gas supplier, call the fire department
3. This fireplace shall not be installed in a bedroom or bathroom.
4. Never install the fireplace
 - in a recreational vehicle
 - where curtains, furniture, clothing, or other flammable objects are less than 36 inches from the front, top, or sides of the fireplace
 - in high traffic areas
 - in windy or drafty areas
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.
7. You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is in place before running fireplace.
8. 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.
9. 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.
10. Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this heater.
11. This fireplace needs fresh air ventilation to run properly. This fireplace has an oxygen depletion sensor (ODS) pilot light safety system. The ODS shuts down the fireplace if not enough fresh air is available. See *Air for Combustion and Ventilation*, pages 6 through 8. If fireplace keeps shutting off, see *Troubleshooting*, pages 28 through 31.
12. Do not run fireplace
 - where flammable liquids or vapors are used or stored
 - under dusty conditions
13. Do not use this fireplace to cook food or burn paper or other objects.
14. Never place any objects in the fireplace or on logs.
15. Fireplace front and screen becomes 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 shut-down. Allow surfaces to cool before touching.
16. Carefully supervise young children when they are in the room with fireplace.
17. 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.
18. Do not operate fireplace if any log is broken. Do not operate fireplace if a log is chipped (dime-sized or larger).
19. Turn fireplace off and let cool before servicing. Only a qualified service person should service and repair fireplace.
20. Operating fireplace above elevations of 4,500 feet could cause pilot outage.

PRODUCT IDENTIFICATION

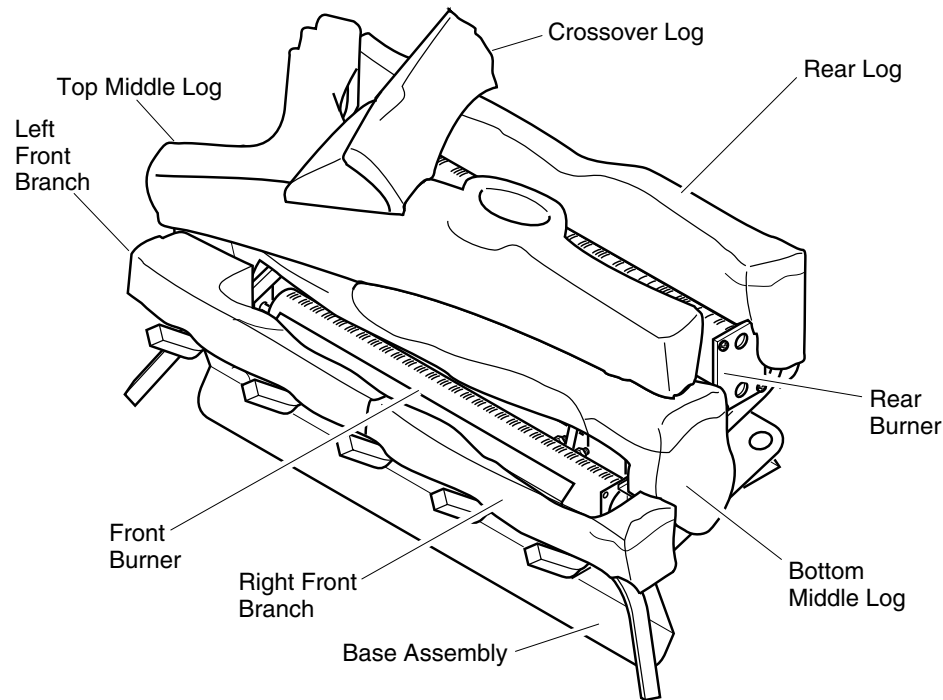


Figure 1 - Log Base Assembly, Split Oak Set

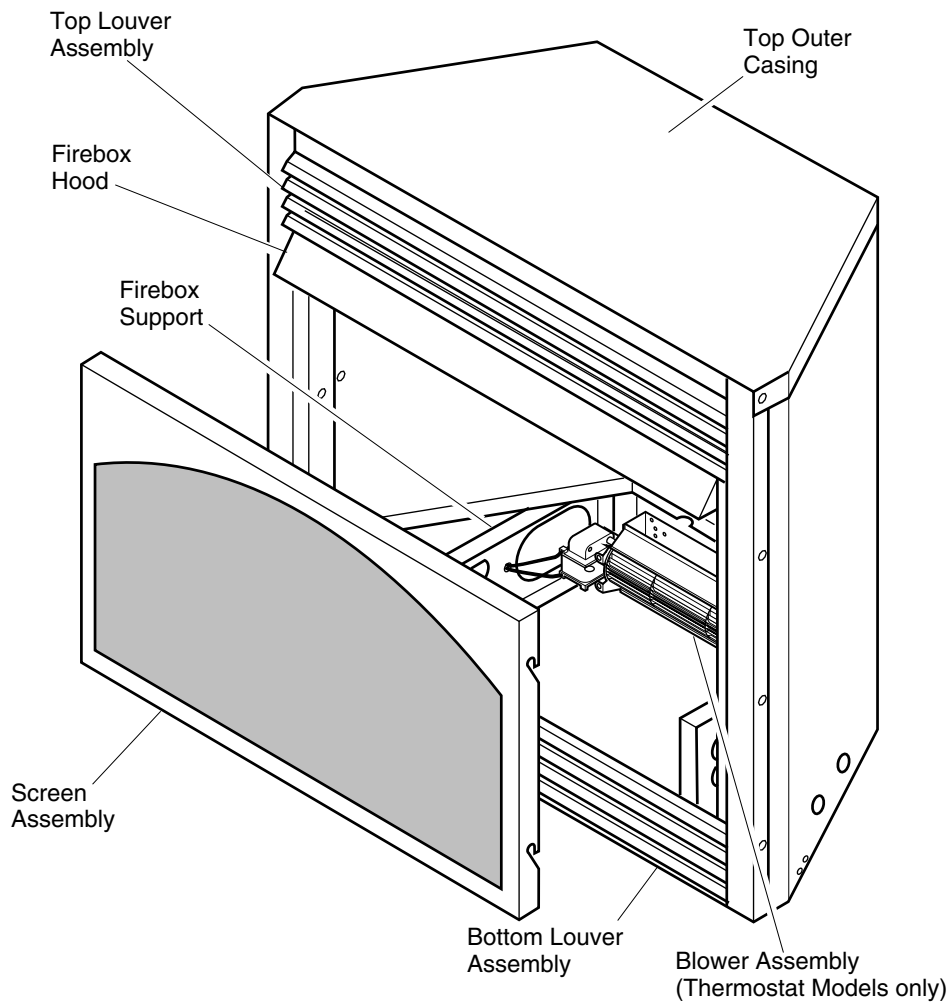


Figure 2 - Fireplace

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, also known as NFPA 54*.

*Available from:

American National Standards Institute, Inc.
1430 Broadway
New York, NY 10018
National Fire Protection Association, Inc.
Batterymarch Park
Quincy, MA 02269

UNPACKING

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 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 back-up heat.

Safety Device

This fireplace has a pilot with an Oxygen Depletion Sensor Shutoff System (ODS). The ODS/pilot is a required feature for vent-free room heaters. The ODS 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 (VSGF28NTB/CSGF28NTB)

This fireplace has a blower assembly. The blower operates thermostatically. The blower circulates heated air from the fireplace into the room. Use of blower is optional. An optional blower accessory is available for models VSGF28NV/CSGF28NV.

Thermostat Control Models (VSGF28NTB/CSGF28NTB)

These fireplaces have 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.

Variable Manual Control (VSGF28NV/CSGF28NV)

These fireplaces have a variable manual control valve which allows the user to choose the heat setting that best suits his needs. Any setting between low and high may be selected by simply turning the control knob.

AIR FOR COMBUSTION AND VENTILATION

WARNING

This heater shall not be installed in a confined space unless provisions are provided for adequate combustion and ventilation air. Read the following instructions to insure proper fresh air for this and other fuel-burning appliances in your home.

Today's homes are built more energy efficient than ever. New materials, increased insulation, and new construction methods help reduce heat loss in homes. Home owners weather strip and caulk around windows and doors to keep the cold air out and the warm air in. During heating months, home owners want their homes as airtight as possible.

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

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

PROVIDING ADEQUATE VENTILATION

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

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

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

The information on pages 6 through 8 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 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 8.

If your home does not meet all of the three criteria above, proceed to page 7.

Confined Space and Unconfined Space

The National Fuel Gas Code (*ANSI Z223.1, 1992 Section 5.3*) defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 Btu per hour (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed*, through openings not furnished with doors, are considered a part of the unconfined space.

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

AIR FOR COMBUSTION AND VENTILATION

Continued

DETERMINING AIR FLOW FOR FIREPLACE 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 fireplace 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. Divide the space volume by 50 cubic feet to determine the maximum Btu/Hr the space can support.

_____ (volume of space) ÷ 50 cu. ft. = (Maximum Btu/Hr
the space can support)

Example: 3168 cu. ft. (volume of space) ÷ 50 cu. ft. = 63.3 or 63,300 (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

Example:

Gas water heater	40,000	Btu/Hr
Vent-free fireplace	+ 28,000	Btu/Hr
Total	= 68,000	Btu/Hr

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

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: 63,300 Btu/Hr (maximum the space can support)
68,000 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 work sheet, 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 8.
- B. Vent room directly to the outdoors. See *Ventilation Air from Outdoors*, page 8.
- 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.

Continued

AIR FOR COMBUSTION AND VENTILATION

Continued

⚠ WARNING

If the area in which the heater may be operated is smaller than that defined as an unconfined space, provide adequate combustion and ventilation air by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1, 1992, Section 5.3*.

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 NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

⚠ WARNING

Rework worksheet, adding the space of the adjoining unconfined space. The combined spaces must have enough fresh air to supply all appliances in both spaces.

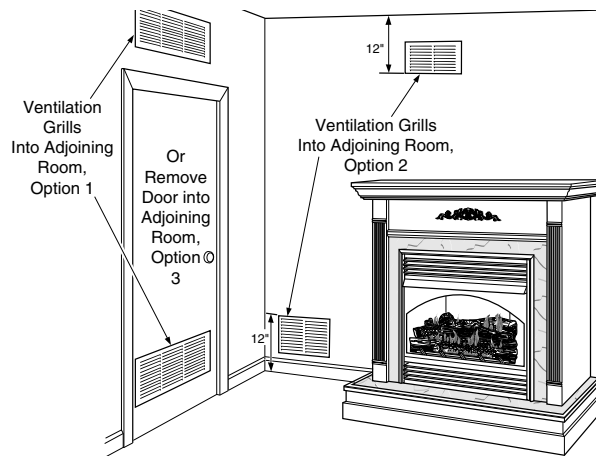


Figure 3 - Ventilation Air from Inside Building

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.

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.

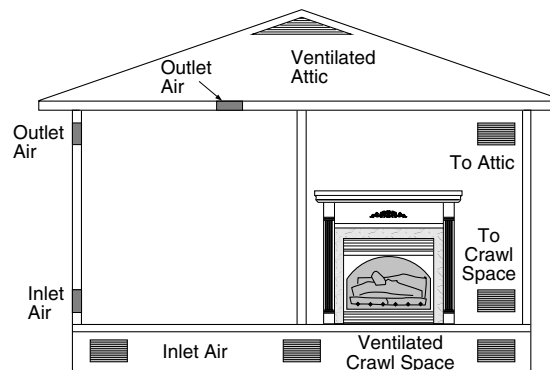


Figure 4 - Ventilation Air from Outdoors

INSTALLING

NOTICE

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 36 inches from the front, top, or sides of the fireplace
- in high traffic areas
- in windy or drafty areas

WARNING

Models VSGF28NTB/CSGF28NTB 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 fireplace where impurities in the air (such as tobacco smoke) exist, may discolor walls.

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 6 through 8.

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

CHECK GAS TYPE

Use only natural gas. If your gas supply is not natural gas, do not install fireplace. Call dealer where you bought fireplace for proper type fireplace.

ELECTRICAL HOOKUP (Models VSGF28NTB/CSGF28NTB)

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.

INSTALLING HOOD

Install hood to top of firebox as shown in Figure 5. Use 3 Phillips screws provided.

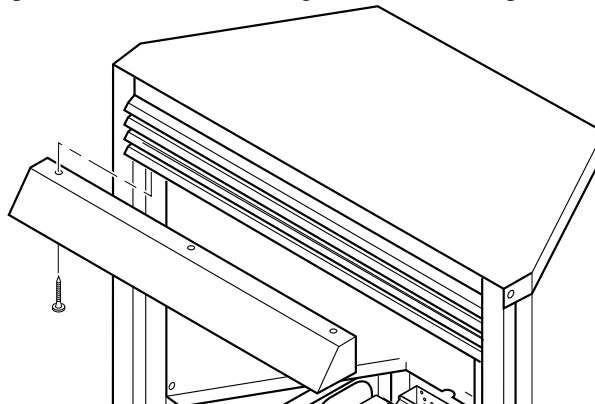


Figure 5 - Installing Hood to Firebox

Continued

INSTALLING

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 13.

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.

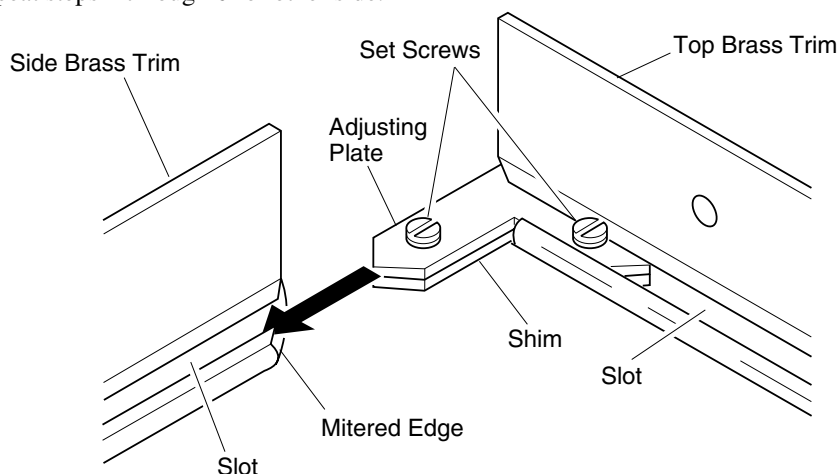


Figure 6 - Assembling Brass Trim

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.

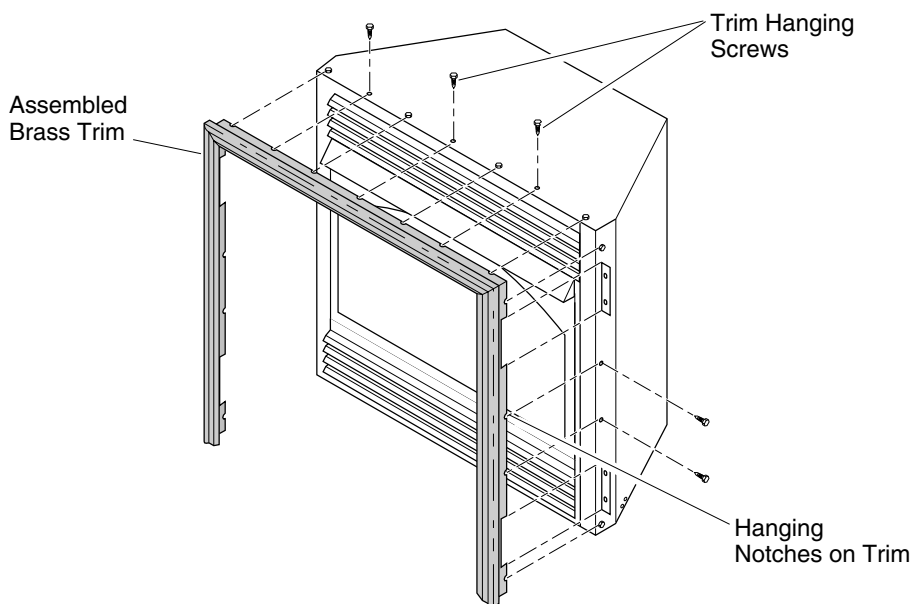


Figure 7 - Attaching Brass Trim to Fireplace

INSTALLING

Continued

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 Wall and Ceiling Clearances (see Figure 8)

- A. Clearances from the side of the fireplace opening to any combustible wall should not be less than 16 inches for a cabinet mantel or 12 inches for a corner installation.
- B. Clearances from the top of the fireplace opening to the ceiling should not be less than 42 inches.

Note: Clearances are the same if using optional cabinet mantel or built-in installation.

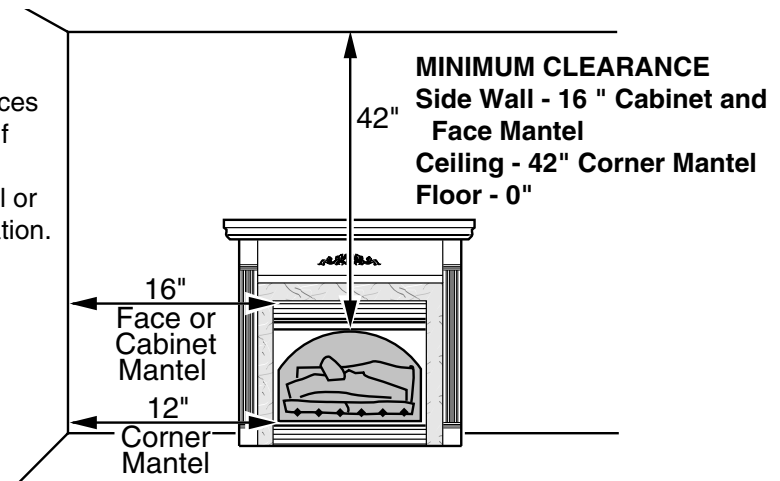


Figure 8 - Minimum Clearance to Wall and Ceiling

CONVENTIONAL FIREPLACE INSTALLATION

Conventional installation of this fireplace involves installing fireplace along with the corner, face, or cabinet mantel with hearth base accessories against a wall in your home. Follow the instructions below to install the fireplace in this manner.

WARNING

For conventional installation, it is recommended you use the cabinet mantel, corner mantel, face mantel, or hearth bases specified in this manual. Surface clearances may not be sufficient with other cabinet mantels and hearth bases. This may create a fire hazard. See *Accessories*, pages 34 and 35 for correct mantels and hearth bases.

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

1. Assemble cabinet mantel, hearth base, and trim accessories. Assembly instructions are included with each accessory.

Continued

INSTALLING

Continued

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 manual shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Installing Gas Piping to Fireplace Location*, page 16.
4. Place hearth base accessory against wall at installation location. Cut an access hole in hearth top to run flexible 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.

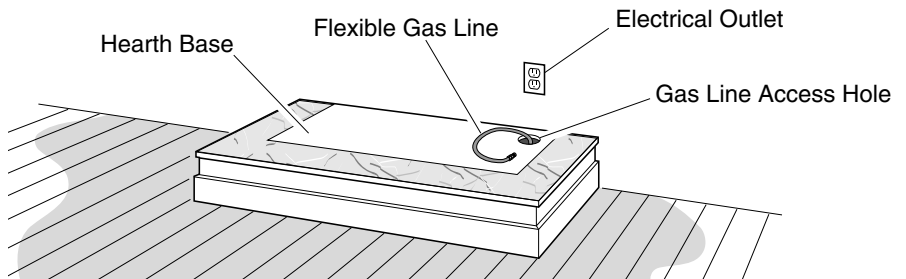


Figure 9 - Placing Hearth Base Accessory Against Wall

5. Route flexible 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.

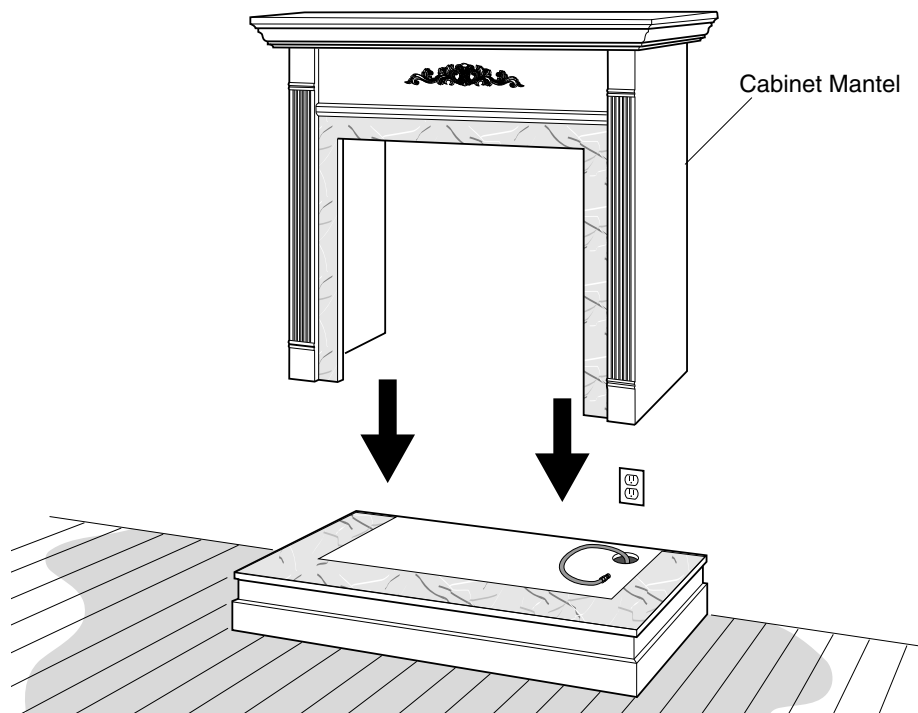


Figure 10 - Installing Cabinet Mantel

INSTALLING

Continued

7. Break off nailing flanges (see Figure 11) with hammer or pliers.

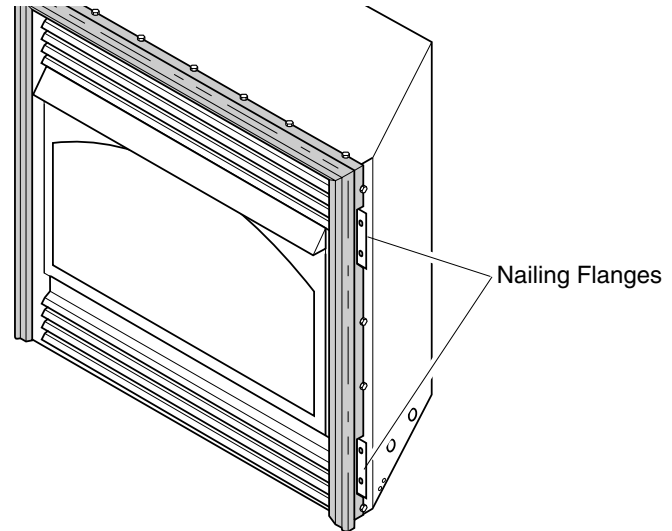


Figure 11 - Location of Nailing Flanges

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. Attach flexible gas line to fireplace gas regulator. See *Connecting Fireplace to Gas Supply*, page 17.
10. 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.
11. Carefully insert fireplace into cabinet mantel. 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.
12. Check all gas connections for leaks. See *Checking Gas Connections*, page 18.



Figure 12 - Inserting Fireplace Into Cabinet Mantel

Continued

INSTALLING

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, but you must follow the clearances shown in Figure 16 , page 15. Follow the instructions below to install the fireplace in this manner.

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

1. Frame in rough opening. Use dimensions shown in Figure 13 for the rough opening.

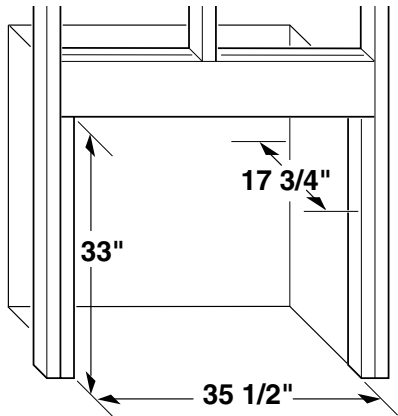


Figure 13 - Rough Opening for Installing in Wall

If installing in a corner, use dimensions shown in Figure 14 for the rough opening. The height is 33" which is the same as the wall opening above.

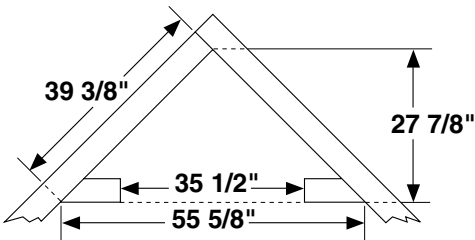


Figure 14 - Rough Opening for Installing in Corner

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 to fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the manual shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Installing Gas Piping to Fireplace Location*, page 16.
4. Carefully set fireplace in front of rough opening with back of fireplace inside wall opening.
5. Attach flexible gas line to gas supply. See *Connecting Fireplace to Gas Supply*, page 17.
6. Plug electrical cord into electrical outlet installed in step 2.
7. Carefully insert fireplace into rough opening.

INSTALLING

Continued

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*, page 18.
10. Install brass trim after final finishing and/or painting of wall (see Figure 7, page 10).

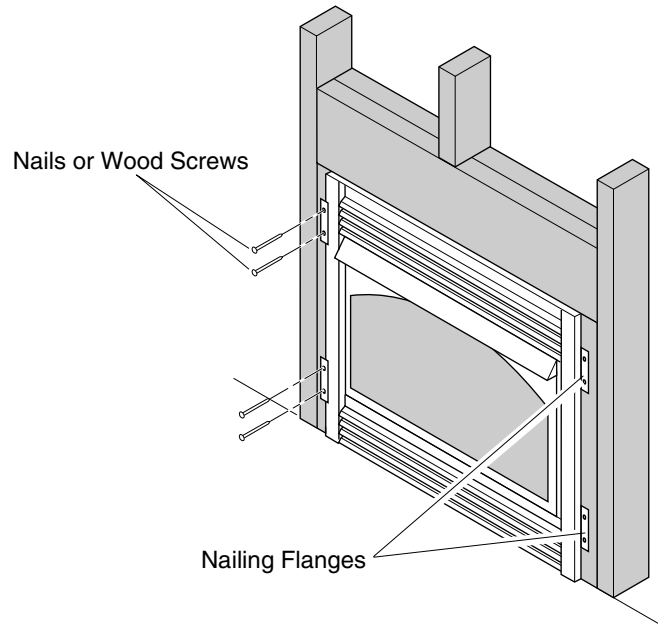


Figure 15 - Attaching Fireplace to Wall Studs

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.

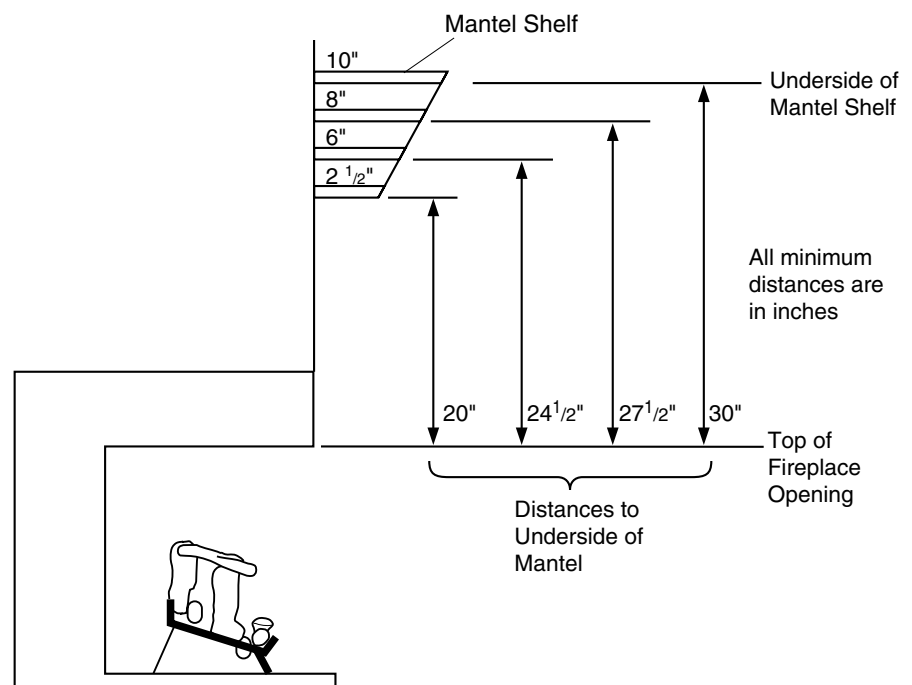


Figure 16 - Minimum Mantel Clearances for Built-In Installation

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

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

INSTALLING

Continued

INSTALLING GAS PIPING TO FIREPLACE LOCATION

NOTICE

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

Installation Items Needed

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

- piping (check local codes)
- sealant (resistant to LP/propane gas)
- manual shutoff valve *
- test gauge connection *
- sediment trap
- tee joint
- pipe wrench
- approved flexible gas line with gas connector (if allowed by local codes) (not provided)

* An A.G.A. design-certified manual shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the optional A.G.A. design-certified manual shutoff valve from your dealer. See *Accessories*, page 34.



WARNING

Never connect fireplace to private (non-utility) gas wells. This gas is commonly known as well-head gas.



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 pressure will occur.

Installation must include a manual shutoff valve, union, and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from fireplace (see Figure 17, page 17).

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

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



CAUTION

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

Install sediment trap in supply line as shown in Figure 17, page 17. Locate sediment trap where it is within reach for cleaning. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into fireplace gas controls. If sediment trap is not installed or is installed wrong, fireplace may not run properly.

INSTALLING

Continued

3. Route flexible gas line from manual 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. The flexible gas supply line connection to the manual shutoff valve should be accessible.

4. Attach a 45° flare union gas connector to flexible gas line from gas supply (see Figure 19). Connect flare union to flexible gas line attached to gas regulator of fireplace (see Figure 19).
5. Check all gas connections for leaks. See *Checking Gas Connections*, below.
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 3.

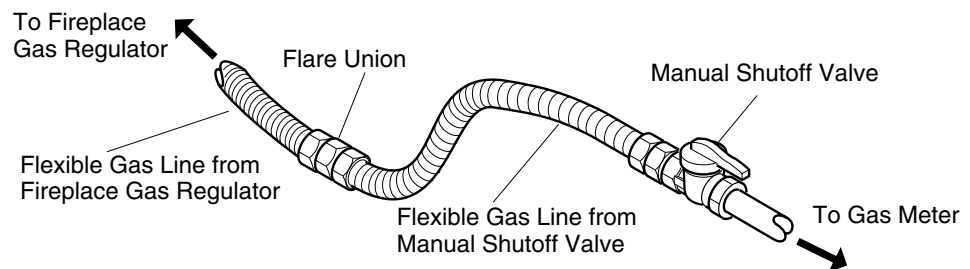


Figure 19 - Attaching Flexible Gas Lines Together

CHECKING GAS CONNECTIONS

WARNING

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

WARNING

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

Pressure Testing Gas Supply Piping System Test Pressures In Excess Of 1/2 PSIG

1. Disconnect fireplace and its individual manual shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig will damage fireplace gas regulator.
2. Cap off open end of gas pipe where manual shutoff valve was connected.
3. Pressurize supply piping system by either using compressed air or opening main gas valve located on or near gas meter.
4. Check all joints of gas supply piping system. Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Re-connect fireplace and manual shutoff valve to gas supply. Check re-connected fittings for leaks.

INSTALLING

Continued

Test Pressures Equal To or Less Than 1/2 PSIG

1. Close manual shutoff valve (see Figure 20).
2. Pressurize supply piping system by either using compressed air or opening main gas valve located on or near gas meter.
3. Check all joints from gas meter to manual shutoff valve (see Figure 21). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
4. Correct all leaks at once.

Pressure Testing Fireplace Gas Connections

1. Open manual shutoff valve (see Figure 20).
2. Open main gas valve located on or near gas meter.
3. Make sure control knob of fireplace is in the OFF position.
4. Check all joints from manual shutoff valve to thermostat gas valve (see Figure 21). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light fireplace (see *Operating Fireplace*, pages 22 and 23 [Thermostat-controlled models] or pages 24 and 25 [Manually-controlled models]). Check all other internal joints for leaks.
7. Turn off fireplace (see *To Turn Off Gas to Appliance*, page 23 [Thermostat-controlled models] or page 25 [Manually-controlled models]).

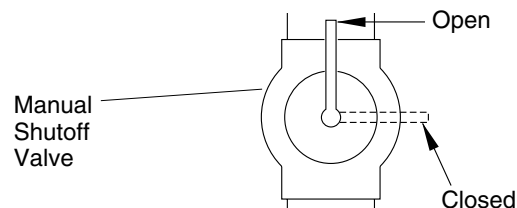


Figure 20 - Manual Shutoff Valve

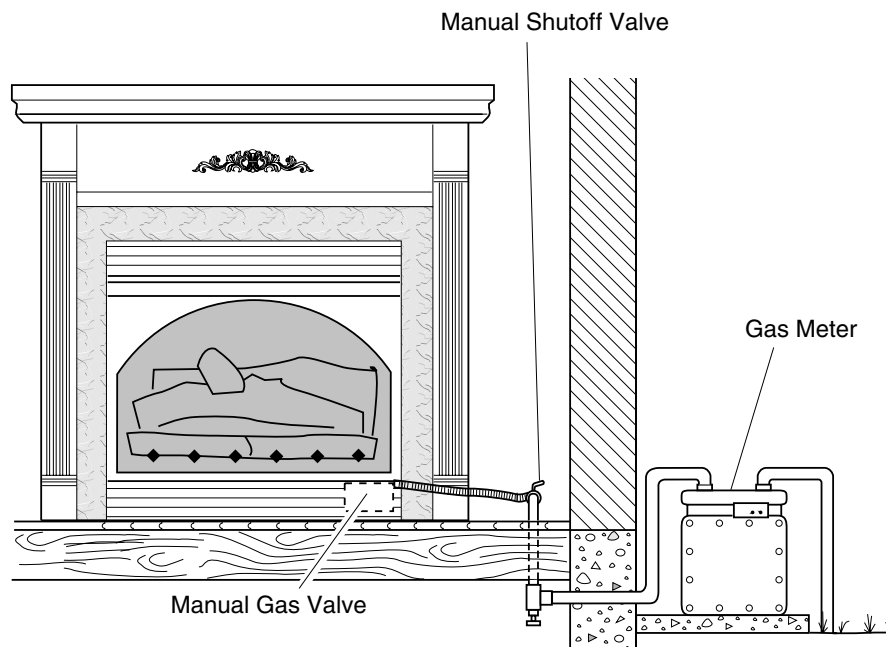


Figure 21 - Checking Gas Joints

Continued

INSTALLING

Continued

INSTALLING LOGS (Split Oak Design Models)

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 logs (#1L and #1R) on top of the grate. Make sure the notches in the bottom of the logs fit over the grate prongs (see Figure 22). Push back of logs flush with metal grate bar. *Note:* 18" model has only one front log.
2. Rest bottom middle log (#2) behind metal posts on front burner. Make sure the grooves in the bottom of the log fit over the grate. Bring the log forward next to the metal posts. The pegs on the log must be on top (see Figure 23).
3. Slide the grooves in the back of the rear log (#3) against the rear grate prongs. Make sure the peg on the log is on top (see Figure 24).
4. Place the top middle log (#4) on the bottom middle log (#2). Make sure the pegs of the bottom middle log fit securely in the holes of the top middle log (see Figure 25).

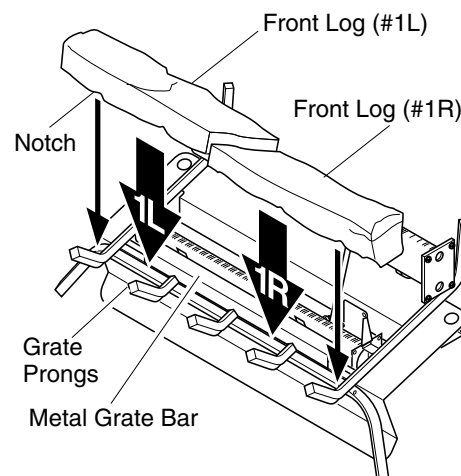


Figure 22 - Installing Front Logs (#1L and #1R)

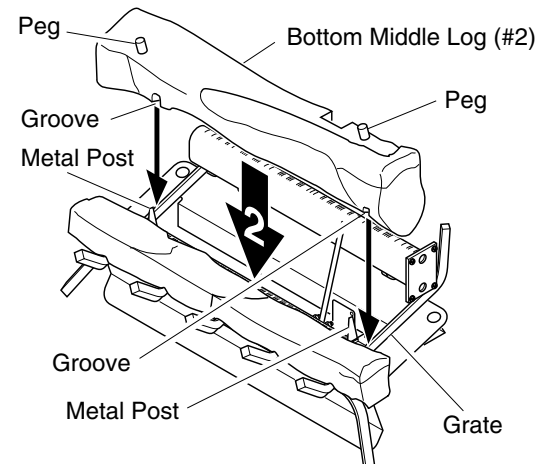


Figure 23 - Installing Bottom Middle Log (#2)

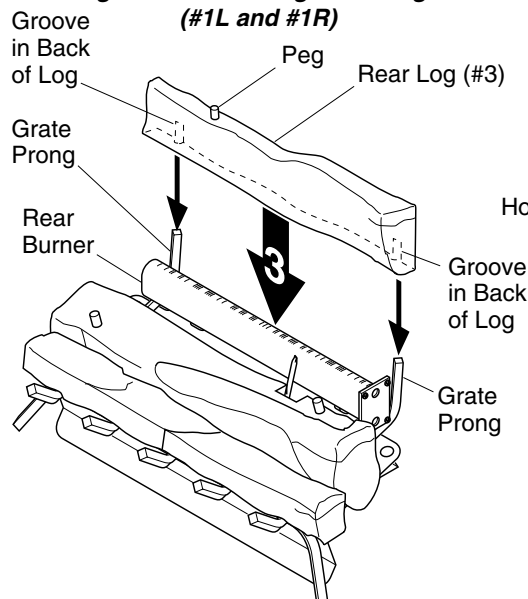


Figure 24 - Installing Rear Log (#3)

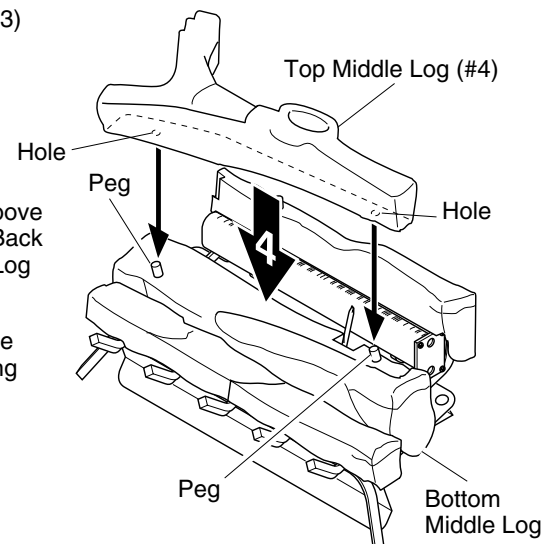


Figure 25 - Installing Top Log (#4)

INSTALLING

Continued

4. Place the crossover log (#5) on the back log and the top middle log. Make sure the peg on the rear log is in the hole in the bottom of the crossover log. The crossover log should fit in the cutout of the top middle log (see Figure 26).

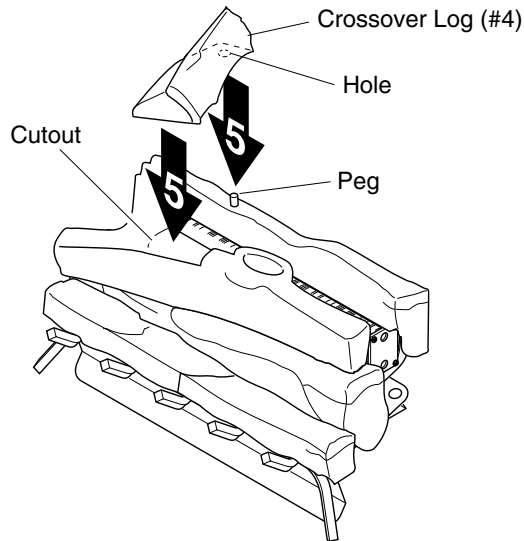


Figure 26 - Installing Crossover Log (#5)

WARNING

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

5. Install fireplace screen by slipping notches of fireplace screen over screws on front of fireplace (see Figure 27).

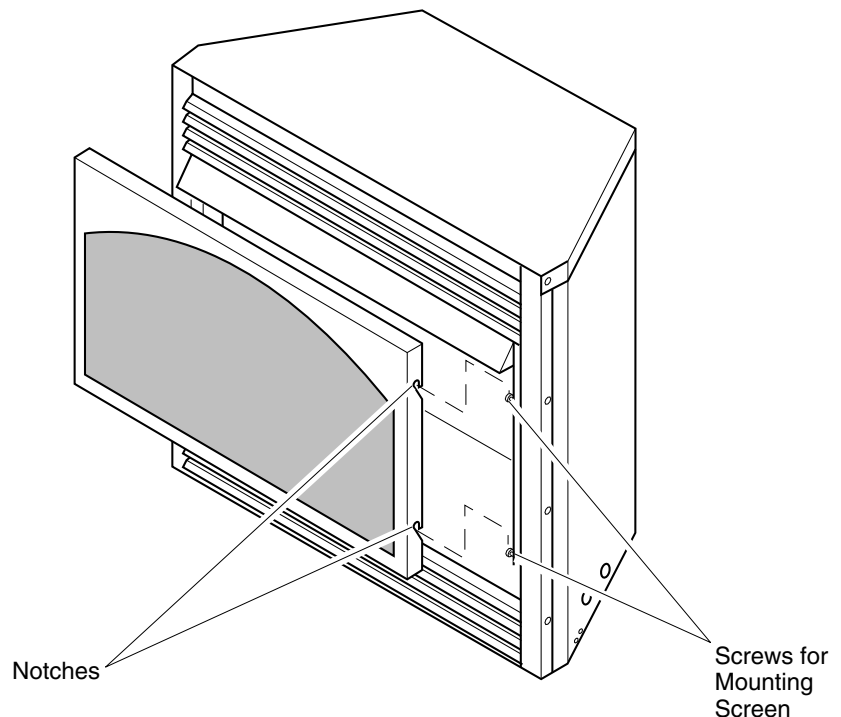


Figure 27 - Installing Fireplace Screen

OPERATING FIREPLACE

Thermostat-
Controlled Models

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.


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 on page above.
2. Make sure manual shutoff valve is fully open.
3. Turn control knob clockwise  to the OFF position.

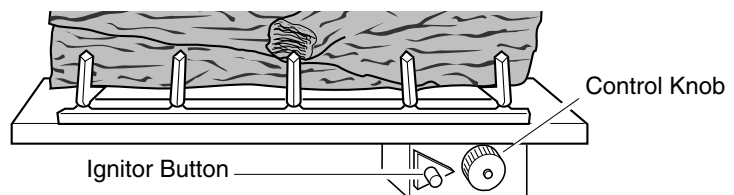



Figure 28 - Control Knob and Ignitor Button Location

4. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow "B" in the safety information above. 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, above).

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.

OPERATING FIREPLACE

Thermostat- Controlled Models

Continued

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*, below.

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.

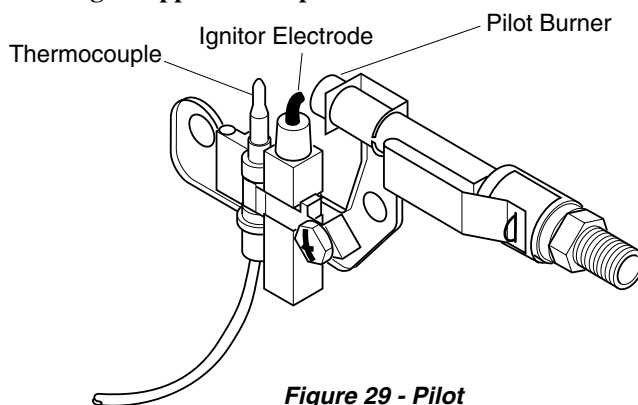


Figure 29 - Pilot

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 manual shutoff valve.

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*, page 22.
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, above.

Continued

OPERATING FIREPLACE

Manually-Controlled Models

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.


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 on above.
2. Make sure manual shutoff valve is fully open.
3. Turn control knob clockwise  to the OFF position.

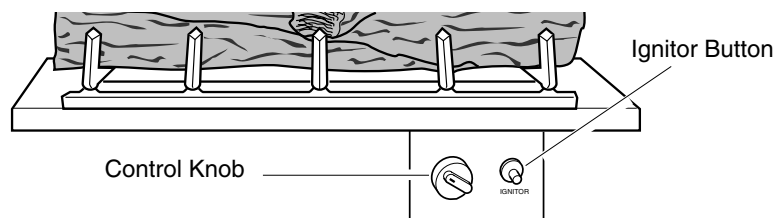



Figure 30 - Control Knob and Ignitor Button Location

4. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you don't smell gas, go to the next step.
5. Slightly depress and turn control knob counterclockwise  to the PILOT position. Press in control knob for five (5) seconds (see Figure 30, above).
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.

OPERATING FIREPLACE

Manually-Controlled Models

Continued

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*, below.

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.

- If control knob does not pop out when released, contact a qualified service person or gas supplier for repairs.

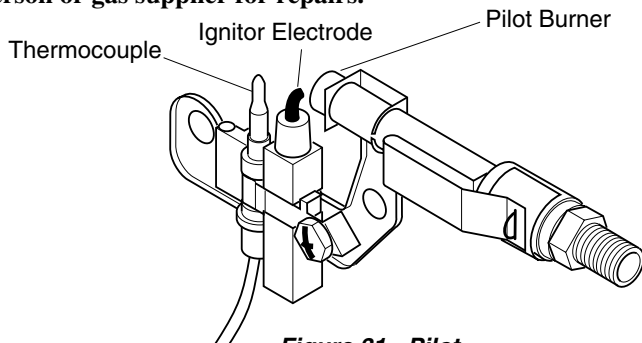


Figure 31 - Pilot

8. Slightly depress and turn control knob counterclockwise to the **HIGH** position. Both burners should light. Set control knob to either **HIGH** or **LOW**.

VARIABLE CONTROL OPERATION

The variable control valve can be set to any heat setting and flame height desired, by simply turning the control knob until that setting is attained. Even the lowest setting provides realistic flames and glowing embers from two burners. Selecting higher settings produces greater heat output. This results in increased heating comfort.

WARNING

Do not operate heater between locked positions.

CAUTION

Do not try to adjust heating levels by using the manual shutoff valve.

TO TURN OFF GAS TO APPLIANCE

Shutting Off Fireplace

1. Turn control knob clockwise to the **HIGH** position.
2. Slightly depress control knob and turn clockwise to the **PILOT** position.
3. Slightly depress control knob and turn clockwise to the **OFF** position.

Shutting Off Burners Only (pilot stays lit)

1. Turn control knob clockwise to the **HIGH** position.
2. Press in and turn clockwise to the **PILOT** position.

MANUAL LIGHTING PROCEDURE

1. Follow steps 1 through 5 under *Lighting Instructions*, page 24.
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, above.

Continued

OPERATING FIREPLACE

VSGF28NTB/
CSGF28NTB Models

VSGF28NV Only

INSPECTING BURNERS

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.

Thermostat-controlled blowers have three settings: ON, OFF, and AUTO. In the ON position, the blower will operate constantly. In the OFF position, the blower will not operate. In the AUTO position, the blower will start when the thermostat senses a sufficient increase in firebox temperature.

Note: Your gas logs and thermostat blower will not turn on and off at the same time. The fireplace may run for several minutes before the blower turns on. After the heater modulates to the pilot position, the blower will continue to run. The blower will shut off after the firebox temperature decreases.

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

Manual blowers on manually-controlled models have an ON and OFF position.

Blower Kit Model GA3700

This optional non-thermostat blower kit has a rotary dial which allows infinitely adjustable blower speed control. Follow installation instructions included with blower.

Check pilot flame pattern and burner flame patterns often.

PILOT FLAME PATTERN

Figure 32 shows a correct pilot flame pattern. Figure 33 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.

Thermocouple

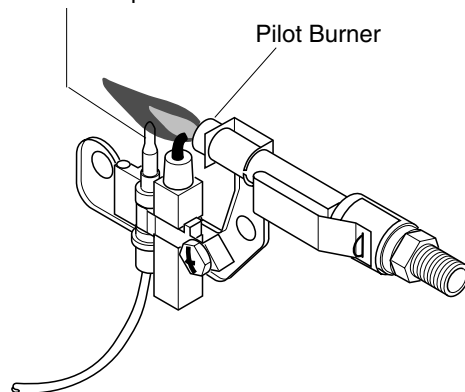


Figure 32 - Correct Pilot Flame Pattern

Thermocouple

Pilot Burner

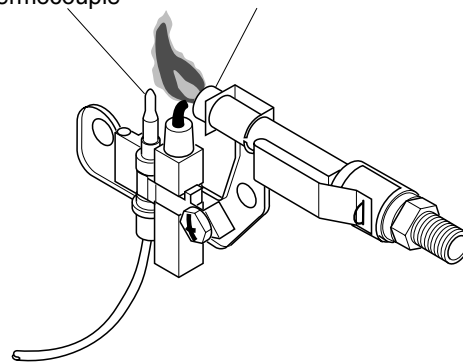


Figure 33 - Incorrect Pilot Flame Pattern

If pilot flame pattern is incorrect, as shown in Figure 33

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 23 [Thermostat-controlled models] or page 25 [Manually-controlled models])
- see *Troubleshooting*, pages 28 through 31

INSPECTING BURNERS

Continued

FRONT BURNER FLAME PATTERN

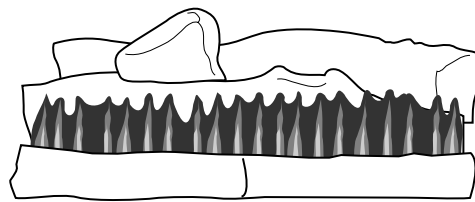
Figure 34 shows correct front burner flame pattern. Figure 35 shows incorrect front burner flame pattern. The incorrect burner flame pattern shows yellow tipping at top of blue flame.

WARNING

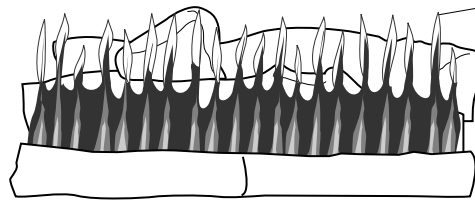
If front burner flame pattern shows yellow tipping, your fireplace could produce increased levels of carbon monoxide. Follow instructions at bottom of this page. Yellow flame on rear burner is normal.

NOTICE

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



CORRECT FLAME PATTERN AT HIGH POSITION
Figure 34 - Correct Front Burner Flame Pattern



INCORRECT FLAME PATTERN AT HIGH POSITION
Figure 35 - Incorrect Front Burner Flame Pattern

If front burner flame pattern is incorrect, as shown in Figure 35

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 23 [Thermostat-controlled models} or page 25 [Manually-controlled models])
- see *Troubleshooting*, pages 28 through 31

CLEANING AND MAINTENANCE

TROUBLE- SHOOTING

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

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, etc.

ODS/PILOT AND BURNERS

- Use a vacuum cleaner or small, soft bristled brush to clean.

LOGS

- If you remove logs for cleaning, refer to *Installing Logs*, pages 20 and 21, to properly replace logs.
- Replace log(s) if broken or chipped (dime-sized or larger).

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

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

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 ignitor
7. Replace ignitor

TROUBLE- SHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
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 manual 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. ODS/pilot is clogged 6. Gas regulator setting is not correct 	<ol style="list-style-type: none"> 1. Turn on gas supply or open manual 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. Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 28) or replace ODS/pilot assembly 6. 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. Manual 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: 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 manual shut-off valve 4. Hand tighten until snug, then tighten 1/4 turn more 5. A) Contact local natural gas company B) Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 28) or replace ODS/pilot assembly 6. Replace thermocouple 7. Replace control valve 8. Wait one minute for safety interlock system to reset. Repeat ignition operation
One or both burners do not light after ODS/pilot is lit	<ol style="list-style-type: none"> 1. Burner orifice(s) clogged 2. Burner orifice(s) diameter is too small 3. Inlet gas pressure is too low 4. Mislocated crossover tube 	<ol style="list-style-type: none"> 1. Clean burner(s) (see <i>Cleaning and Maintenance</i>, page 28) or replace burner orifice(s) 2. Replace burner orifice(s) 3. Contact local natural gas company 4. Contact qualified service person

Continued

TROUBLE- SHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
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 gas company 2. Clean burner(s) (see <i>Cleaning and Maintenance</i>, page 28) 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 28) 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 28) 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 propane gas company 3. Observe minimum installation clearances (see page 11) 4. Clean burners (see <i>Cleaning and Maintenance</i>, page 28) or replace burner orifice(s)
Moisture/condensation noticed on windows	<ol style="list-style-type: none"> 1. Not enough combustion/ventilation air 	<ol style="list-style-type: none"> 1. Refer to <i>Air for Combustion and Ventilation</i> requirements (page 6)

TROUBLE- SHOOTING

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> , page 18)
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 natural gas company 3. Clean ODS/pilot (see <i>Cleaning and Maintenance</i> , page 28)
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> , page 18) 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> , page 18)
Moisture/condensation noticed on windows	1. Not enough combustion/ventilation air	1. Refer to <i>Air for Combustion and Ventilation</i> requirements (page 6)

TECHNICAL SERVICE

SERVICE HINTS

You may have further questions about installation, operation, or troubleshooting. If so, contact DESA International's Technical Service Department at 1-800-DESA LOG (1-800-337-2564).

When gas pressure is too low

- pilot will not stay lit
- burners will have delayed ignition
- fireplace will not produce specified heat

When gas quality is bad

- pilot will not stay lit
- burners will produce flames and soot
- fireplace will backfire when lit

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

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

Parts Under Warranty

Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA International's Technical Service Department at 1-800-DESA LOG (1-800-337-2564).

When calling DESA International, have ready

- your name
- your address
- model number of your fireplace
- how fireplace was malfunctioning
- type of gas used (propane or natural gas)
- purchase date

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

Parts Not Under Warranty

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

When calling DESA International, have ready

- model number of your fireplace
- the replacement part number

REPLACEMENT PARTS

SPECIFICATIONS

Btu (Low/High)	20,000/28,000
Type Gas	Natural Gas Only
Ignition	Piezo
Manifold Pressure	3.4" W.C.
Inlet Gas Pressure (in. of water)	
Maximum	10.5"
Minimum	5"
Shipping Weight	128 lbs. Thermostat Model 122 lbs. Manual Model

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.

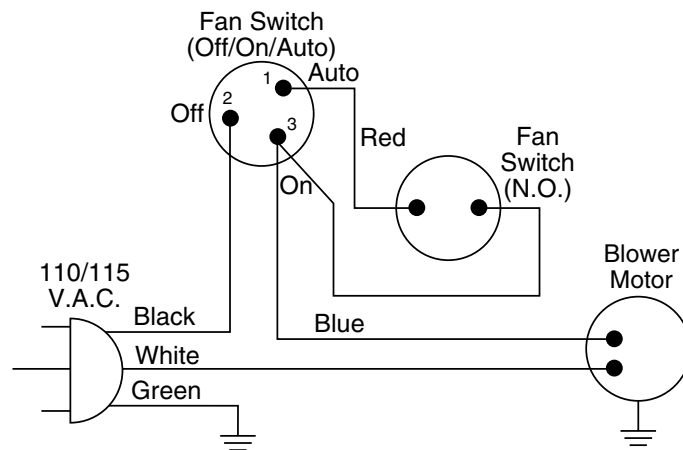


Figure 36 - Blower Wiring Diagram for Thermostat-Controlled Models

ACCESSORIES

Purchase these fireplace accessories from your local dealer. If they can not supply these accessories, call DESA International's Sales Department at 1-800-432-2382 for information. You can also write to the address listed on the back page of this manual.

CABINET MANTEL

GM100F Series - Walnut Finished

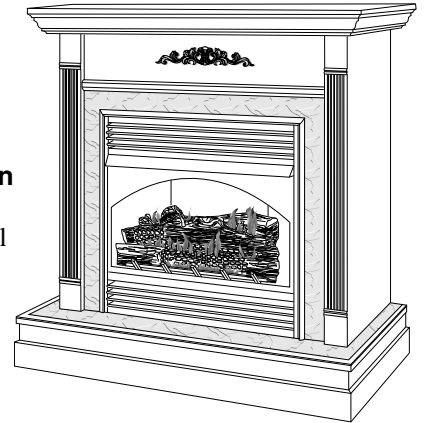
GM101U Series - Unfinished

GM106F Series - Oak Finished with Medium Stain

GM107U Series - Unfinished

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

Dimensions (WxHxD): 56-3/4" x 48-3/4" x 20-5/8"



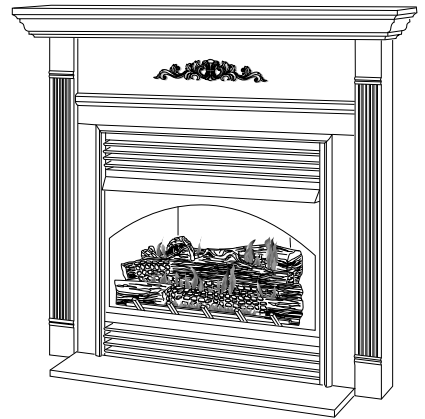
FACE MANTEL

GM400F Series - Walnut Finished

GM401U Series - Unfinished

Shown with optional slim base.

Dimensions (WxHxD): 56-3/4" x 48-3/4" x 7"



HARDWOOD HEARTH BASE

G3000F Series- Walnut Finished

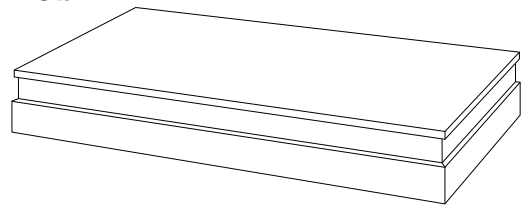
G3001U Series - Unfinished

G3006F Series - Oak Finished with Medium Stain

G3006U Series - Unfinished Oak

The hearth base creates a handsome riser for the fireplace (cannot be used with corner mantel or face mantel).

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



SLIM HEARTH BASE

G3005J Series - Jade Marble Laminate

G3005S Series - Sandstone Marble Laminate

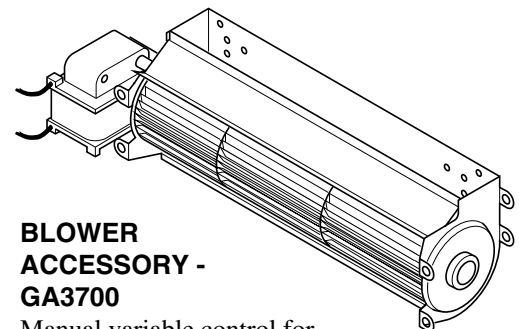
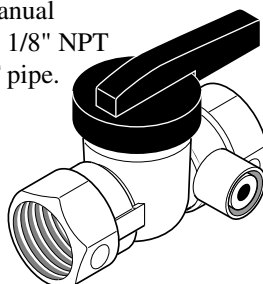
G3005B Series - Black Onyx Marble Laminate

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

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

MANUAL SHUTOFF VALVE - GA5010

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

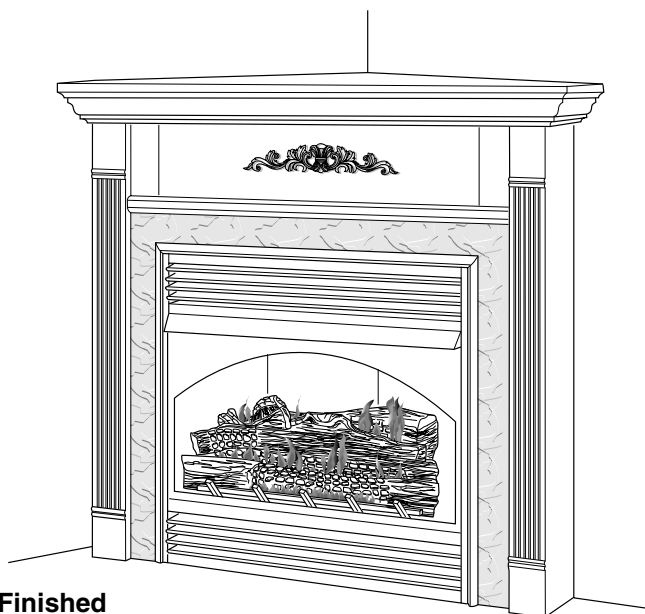


BLOWER ACCESSORY - GA3700

Manual variable control for VSGF28NV only

ACCESSORIES

Continued



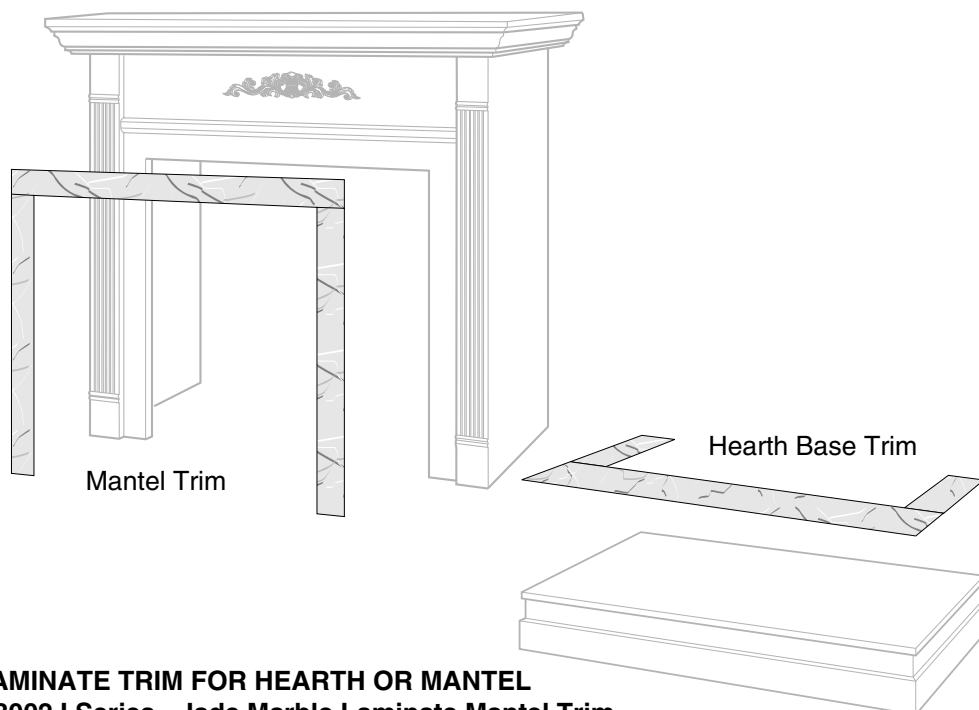
CORNER MANTEL

GM200F Series - Walnut Finished

GM201U Series - Unfinished

Shown with optional laminate mantel trim accessory.

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



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, face, or corner mantel. Hearth base trim for hardwood hearth bases.

FIREBOX BRICK LINER - G8000 Series

Ceramic fiber firebox liner adds the look of real brick.

BRASS TRIM ACCESSORY - GA6090

Included with accessory mantels

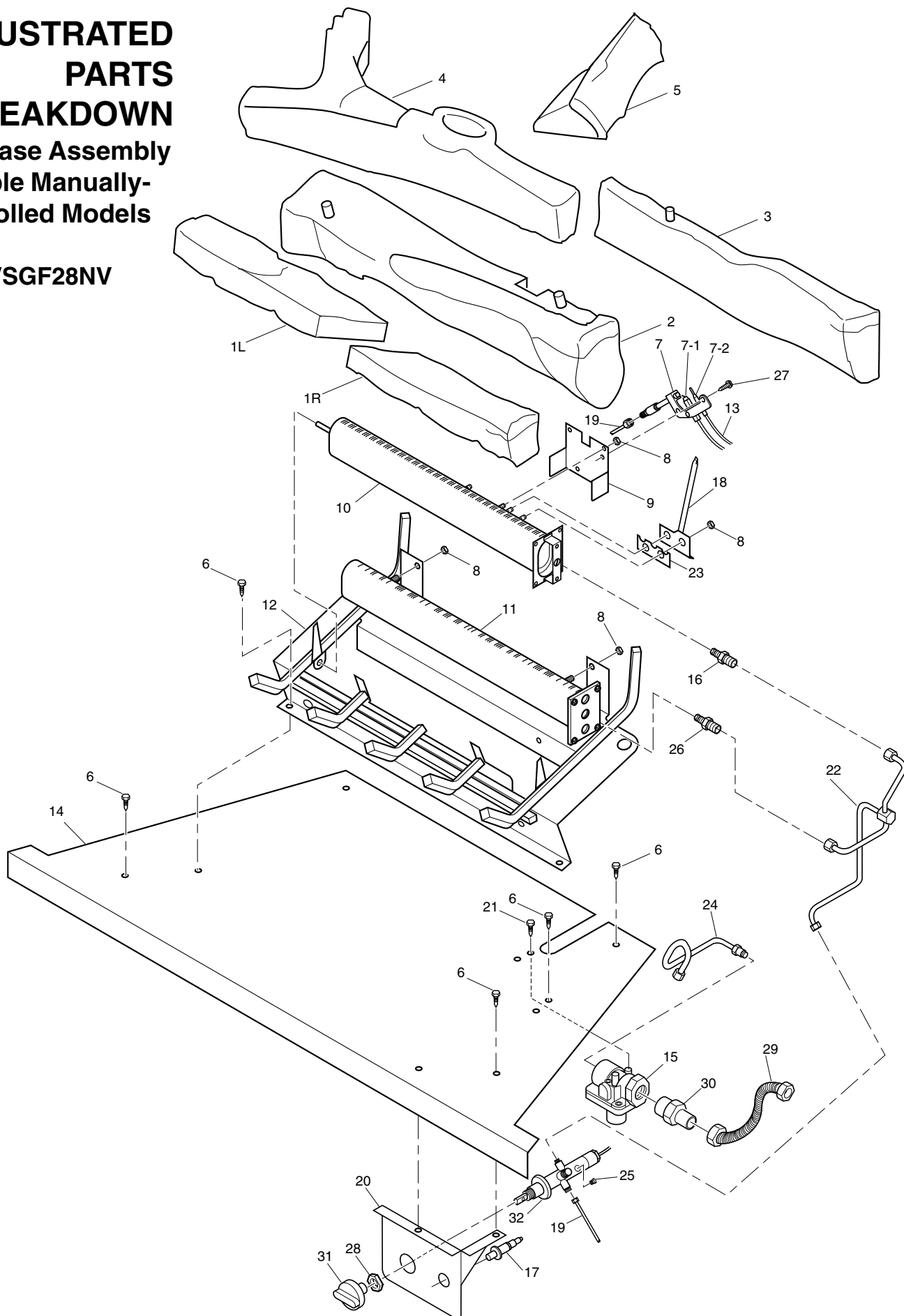
DUPLEX OUTLET KIT - GA3555

For built-in installation

ILLUSTRATED PARTS BREAKDOWN

Log Base Assembly
Variable Manually-
Controlled Models

VSGF28NV



PARTS LIST

Log Base Assembly

Variable Manually- Controlled Models

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 32 of this manual.

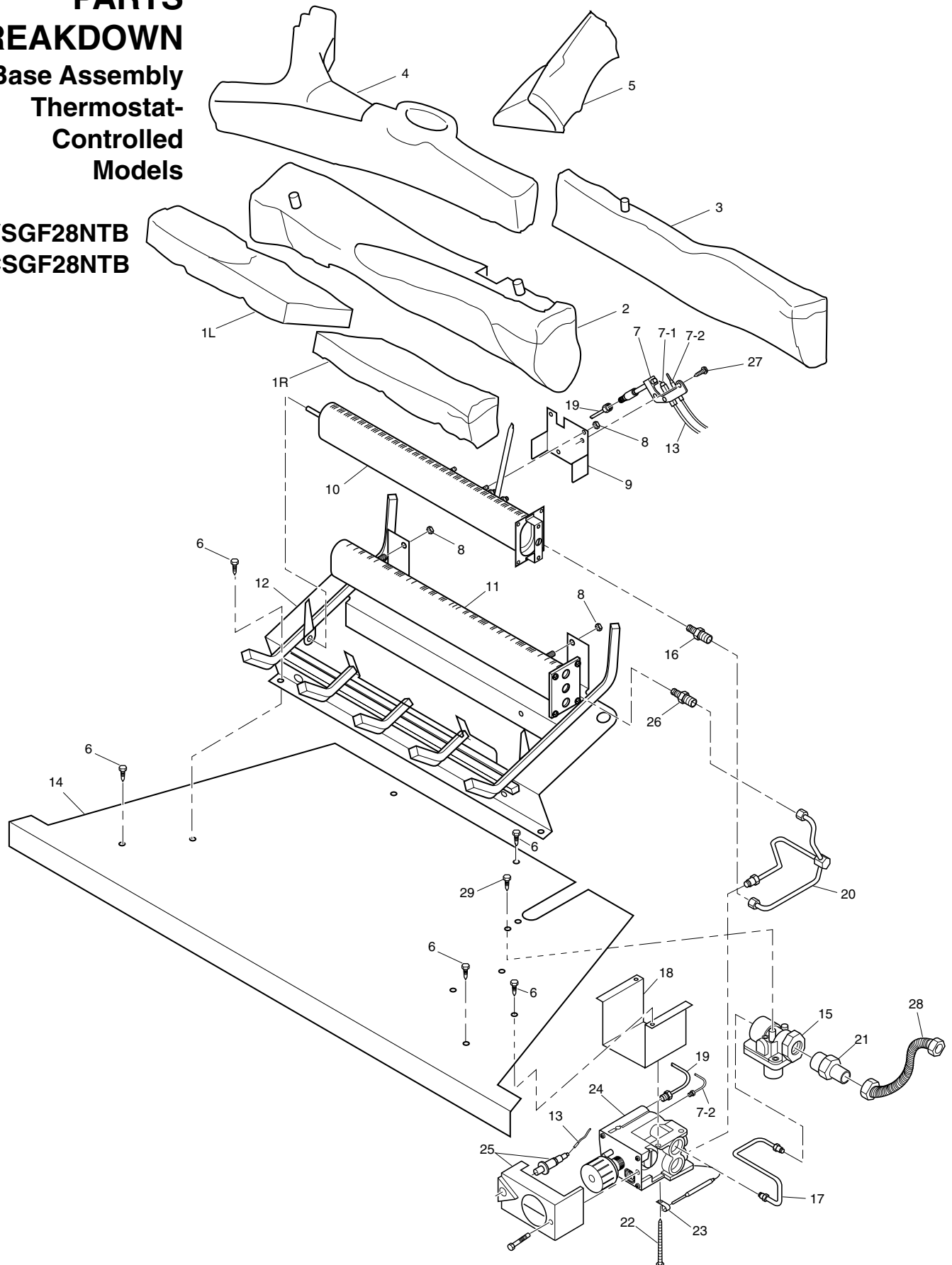
VSGF28NV

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1L	103580-01	Left Front Log (#1L)	1
1R	103580-02	Right Front Log (#1R)	1
2	103576-02	Bottom Middle Log (#2)	1
3	103577-01	Rear Log (#3)	1
4	103578-01	Top Middle Log (#4)	1
5	103579-01	Crossover Log (#5)	1
6	098304-01	Screw, #10 Phillips, Black	8
7	103042-01	O.D.S. Pilot	1
7-1	098594-01	Ignitor	1
7-2	098593-01	Thermocouple	1
8	098249-01	Nut	6
9	101006-01	Pilot Bracket	1
10	101330-02	Front Burner	1
11	100999-05	Rear Burner Assembly	1
12	102257-08CJ	Base Assembly	1
13	098271-06	Ignitor Cable	1
14	103410-01CK	Firebox Bottom	1
15	098867-09	Gas Regulator	1
16	101004-04	Front Burner Injector	1
17	102445-01	Piezo Ignitor	1
18	101007-01	Crossover Tube	1
19	099387-05	Pilot Tube	1
20	101972-01	Valve and Piezo Bracket	1
21	M11084-38	Regulator Hex Screw	2
22	102668-01	Front Burner Tube	1
23	101008-01	Gasket	1
24	101973-01	Inlet Tube	1
25	098276-01	1/8" Plug	1
26	101004-11	Rear Burner Injector	1
27	M11084-26	Hex Screw, #10	2
28	098508-01	Valve Retainer Nut	1
29	101628-01	Flex Hose	1
30	097809-02	Adapter	1
31	098354-01	Control Knob	1
32	102568-01	Control Valve	1
PARTS AVAILABLE — NOT SHOWN			
	100563-01	Warning Plate	1
	101055-02	Lighting Instructions Plate	1
	100565-01	Warning Plate Fastener	1
	101416-26	Information Video	1
	101976-02	Control Position Decal	1

ILLUSTRATED PARTS BREAKDOWN

Log Base Assembly
Thermostat-
Controlled
Models

VSGF28NTB
CSGF28NTB



PARTS LIST

Log Base Assembly

Thermostat- Controlled Models

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 32 of this manual.

VSGF28NTB

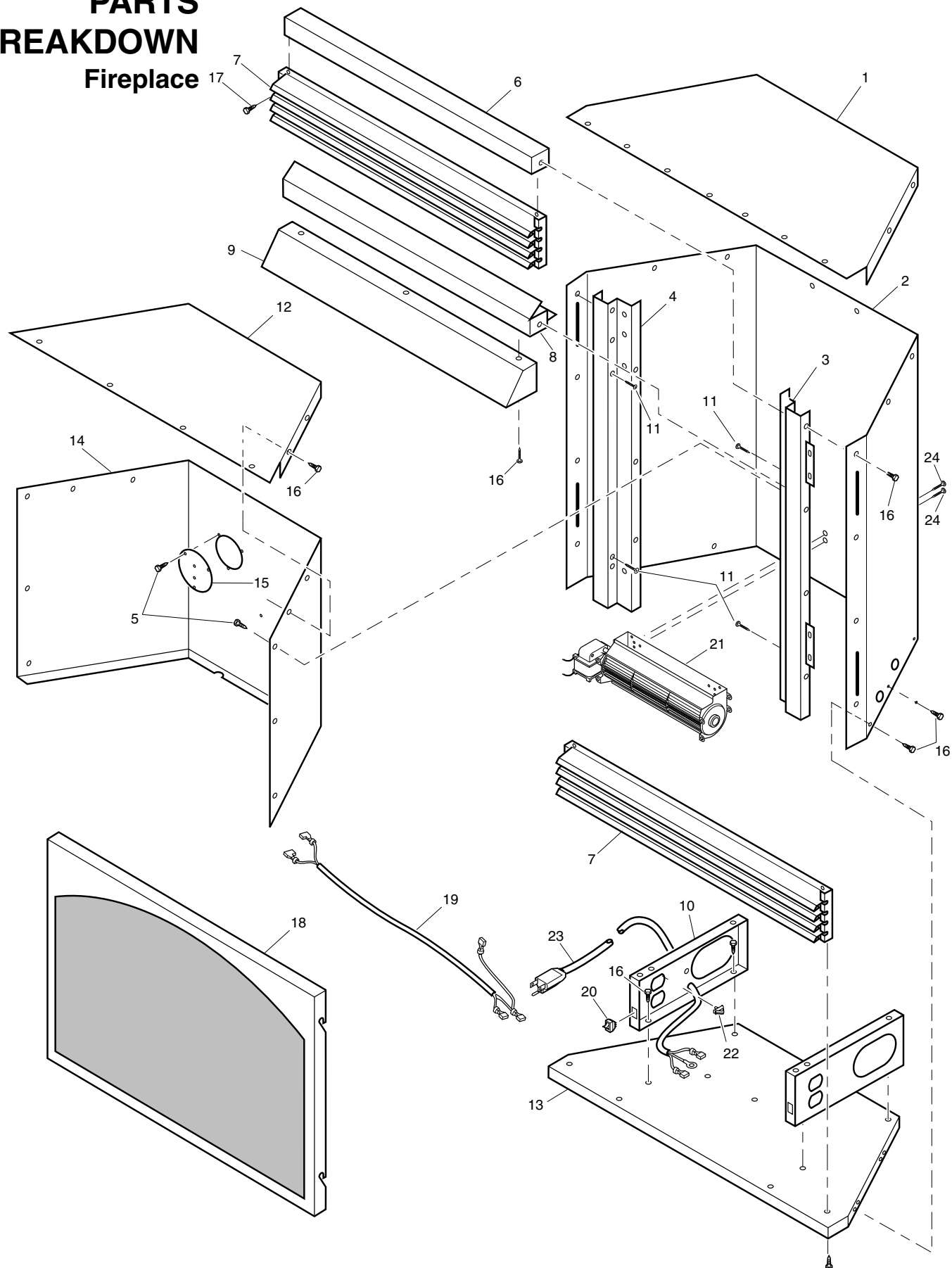
CSGF28NTB

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1L	103580-01	Left Front Log (#1L)	1
1R	103580-02	Right Front Log (#1R)	1
2	103576-02	Bottom Middle Log (#2)	1
3	103577-01	Rear Log (#3)	1
4	103578-01	Top Middle Log (#4)	1
5	103579-01	Crossover Log (#5)	1
6	098304-01	Screw, #10 Phillips, Black	8
7	103042-01	O.D.S. Pilot	1
7-1	098594-01	Ignitor	1
7-2	098593-01	Thermocouple	1
8	098249-01	Nut	4
9	101006-01	Pilot Bracket	1
10	101330-02	Front Burner Assembly	1
11	100999-05	Rear Burner Assembly	1
12	102257-08CJ	Base Assembly	1
13	098271-06	Ignitor Cable	1
14	103410-01CK	Firebox Bottom	1
15	098867-09	Gas Regulator	1
16	101004-04	Front Burner Injector	1
17	102845-01	Inlet Tube	1
18	101382-01	Therموالve Bracket	1
19	099387-03	Pilot Tube	1
20	102846-01	Burner Tube	1
21	097809-02	Adapter	1
22	099211-01	Screw	2
23	098544-01	Thermostat Clamp	1
24	101329-16	Thermostat Gas Valve Assembly	1
25	101381-01	Cover and Piezo	1
26	101004-01	Rear Burner Injector	1
27	M11084-26	Hex Screw, #10	2
28	101628-01	Flex Hose	1
29	M11084-38	Screw	2
PARTS AVAILABLE — NOT SHOWN			
	100563-01	Warning Plate	1
	101054-01	Lighting Instructions Plate	1
	100565-01	Warning Plate Fastener	1
	101416-26	Information Video	1

ILLUSTRATED PARTS BREAKDOWN

Fireplace

VSGF28NTB
CSGF28NTB



PARTS LIST

Fireplace

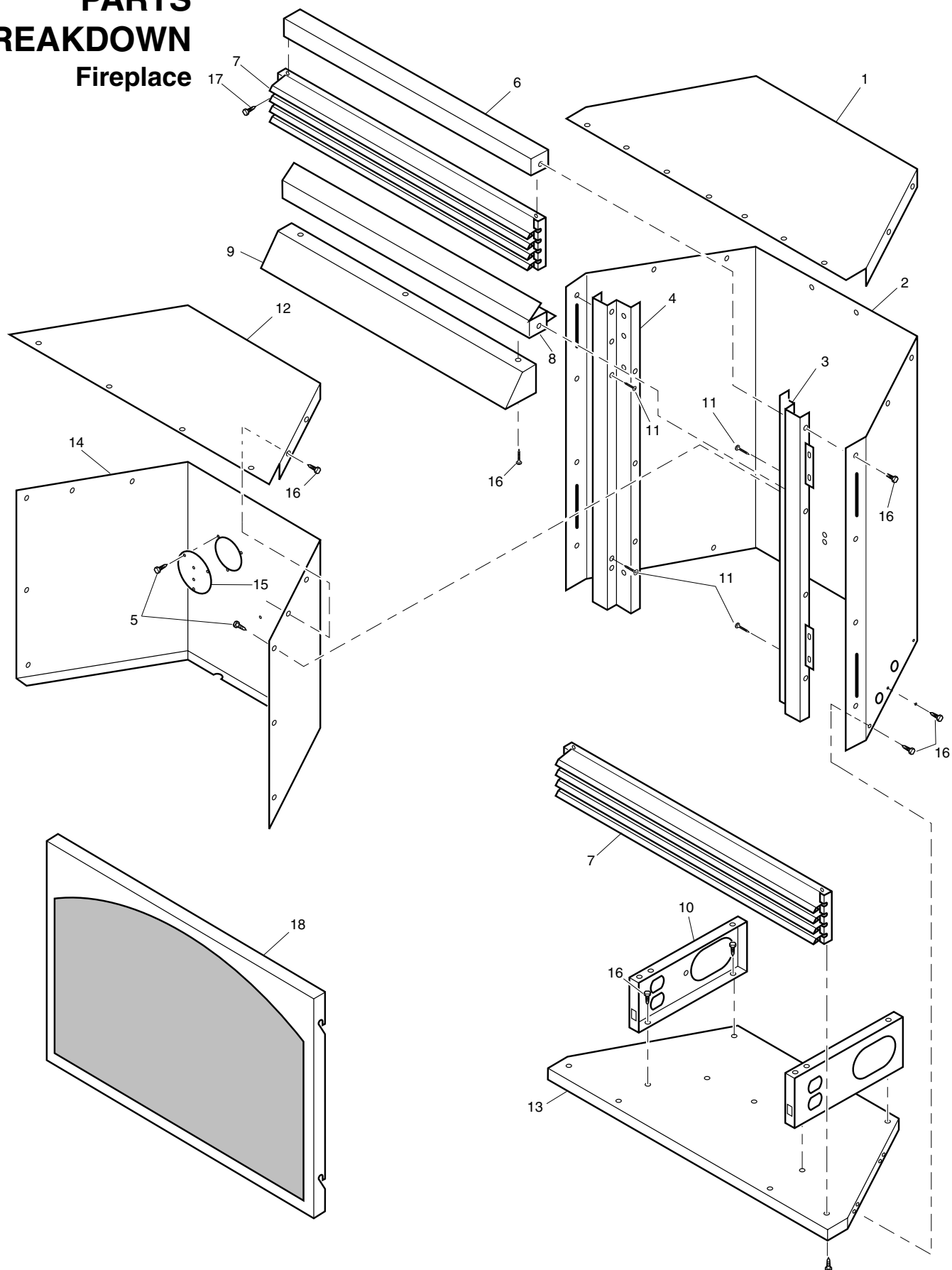
This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 32 of this manual.

VSGF28NTB/CSGF28NTB

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	101357-01	Top Outer Casing	1
2	103207-01	Outer Casing	1
3	102758-01CK	Right Front Side	1
4	102759-01CK	Left Front Side	1
5	098304-01	Phillips Pan Head Screw, #10	9
6	101351-01CK	Top Front	1
7	102455-01	Top Louver Assembly	2
8	101353-01CK	Middle Front	1
9	101712-02	Firebox Hood	1
10	101348-01	Firebox Support	2
11	099230-01	Shoulder Screw	4
12	101872-03	Firebox Top	1
13	103208-01	Outer Base	1
14	101838-03CJ	Firebox Wrapper	1
15	101614-02	Limit Switch (thermal disk) Assy.	1
16	M11084-26	Hex Screw, #10	55
17	098304-03	Phillips Pan Head Screw, #8	4
18	101727-03	Screen Assembly	1
19	101398-02	Wire Harness	1
20	099998-01	Fan Switch	1
21	103581-01	Blower Assembly	1
22	099123-01	Wire Clip	4
23	098219-35	Power Cord Assembly	1
24	M11084-38	Hex Screw, 8-18x.38"	4
PARTS AVAILABLE — NOT SHOWN			
	102032-01	Louvered Door Hinge	2
	099038-01	Strain Relief Bushing	1
	100639-01	Caution Decal	1
	103590-01	Decal Strip	1

ILLUSTRATED PARTS BREAKDOWN Fireplace

VSGF28NV



PARTS LIST

Fireplace

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 32 of this manual.

VSGF28NV

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	101357-01	Top Outer Casing	1
2	103207-01	Outer Casing	1
3	102758-01CK	Right Front Side	1
4	102759-01CK	Left Front Side	1
5	098304-01	Phillips Pan Head Screw, #10	9
6	101351-01CK	Top Front	1
7	102455-01	Top Louver Assembly	2
8	101353-01CK	Middle Front	1
9	101712-02	Firebox Hood	1
10	101348-01	Firebox Support	2
11	099230-01	Shoulder Screw	4
12	101872-03	Firebox Top	1
13	103208-01	Outer Base	1
14	101838-03CJ	Firebox Wrapper	1
15	101514-01CJ	Cover	1
16	M11084-26	Hex Screw, #10	55
17	098304-03	Phillips Pan Head Screw, #8	4
18	101727-03	Screen Assembly	1
PARTS AVAILABLE — NOT SHOWN			
	102032-01	Louvered Door Hinge	2
	100639-01	Caution Decal	1
	103590-01	Decal Strip	1

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 NATURAL GAS FIREPLACE

DESA International warrants this product to be free from defects in materials and components for three (3) 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 International 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 THREE (3) YEARS ON ALL COMPONENTS AND FIVE (5) YEARS ON STAINLESS STEEL BURNERS FROM THE DATE OF FIRST PURCHASE; AND DESA INTERNATIONAL'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA INTERNATIONAL SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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

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

For information about this warranty write:

DESA
INTERNATIONAL

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

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Rev. A
02/97