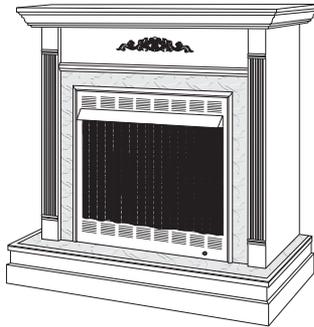


# VANGUARD

## UNVENTED (VENT-FREE) 32" LogMate® UNIVERSAL FireBOX OWNER'S MANUAL



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



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

### **FB32CA (SHOWN) AND NLFB32C CIRCULATING LOUVERED; FB32NCA AND NLFB32NC NONCIRCULATING SMOOTH FACE MODELS**

**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.

**WARNING:** For use only with a listed gas-fired unvented decorative room heater. Not to exceed 40,000 Btu/Hr. Do not build a wood fire.

Carefully review the instructions supplied with the decorative type unvented room heater for the minimum fireplace size requirement.

Do not install an appliance in this firebox unless this firebox meets the minimum dimensions required for the installation.

This firebox has been tested and approved by CSA under ANSI Z21.91 for use with any ANSI Z21.11.2 approved gas logs.

**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.**

**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

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## SAFETY INFORMATION

 **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 firebox. Improper use of this firebox can cause serious injury or death from burns, fire, explosion, electrical shock, or carbon monoxide poisoning.

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

 **WARNING:** Do not allow fans to blow directly into the firebox. 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, hood, heat exchanger insert, or other accessory not approved for use with this heater. Do not use blower accessory with Models NLFB32NC and FB32NCA. Use only the provided hood or GA6096 polished brass hood accessory (see *Accessories* on page 16).

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

Do not place clothing or other flammable material on or near firebox. Never place any objects on the firebox or logs.

Carefully supervise young children when they are in the room with firebox.

Firebox front and screen become very hot when running firebox. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Firebox will remain hot for a time after shut-down. Allow surfaces to cool before touching.

You must operate this fireplace with the provided fireplace screen (closed) and hood in place. Make sure these parts are in place before running firebox. This firebox has been tested and approved with and without the brick liner. If the liner is removed, the model number reverts to the NL (non-lined) series.

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

1. This firebox shall not be installed in a bedroom or bathroom.
2. Never install the firebox
  - 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 firebox
  - in high traffic areas
  - in windy or drafty areas
3. Do not use this firebox as a wood-burning fireplace. Use only decorative unvented room heaters (log sets).
4. Do not add extra logs or ornaments such as pine cones, vermiculite, or rock wool. Using these added items can cause sooting.

## SAFETY INFORMATION

### Continued

- Vent-free gas log heaters installed in these fireboxes require fresh air ventilation to run properly. See *Air for Combustion and Ventilation*, page 6.
  - Do not run firebox
    - where flammable liquids or vapors are used or stored
    - under dusty conditions
  - Do not use this firebox to cook food or burn paper or other objects.
  - Turn firebox off and let cool before servicing. Only a qualified service person should service and repair firebox.
  - Operating vent-free log sets in a firebox above elevations of 4,500 feet could cause pilot outage.
  - Do not use the firebox if it has been under water due to the shock hazard that could result with the blower accessory (if installed) in place.
  - Provide adequate clearances around air openings.
- Check carton contents for the following:
    - Screen assembly (2)
    - Screen support rod (2)
    - Hood
    - Hardware and parts bag containing the following:
      - Owner's Operation and Installation Manual
      - 2 - Black #10 x 3/8" Phillips screws
      - 3 - Zinc #10 x 1/2" shouldered hex screws
      - 2 - Black #10 x 5/8" shouldered hex screws

If any items are missing, inform dealer where you bought the firebox.

- Check all items for any shipping damage. If damaged, promptly inform dealer where you bought firebox.

## PRODUCT SPECIFICATIONS

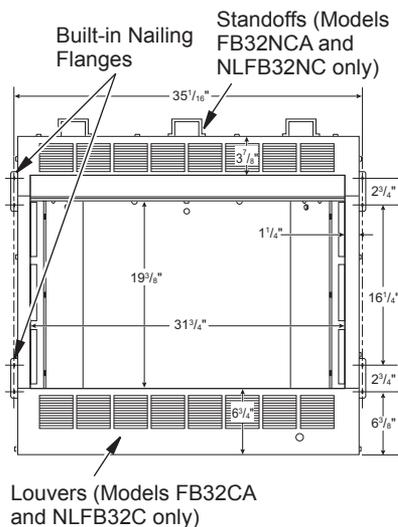


Figure 1 - Firebox Front View

## 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\**. Firebox must be electrically grounded in accordance with the *National Electrical Code, ANSI/NFPA70* (latest edition).

\*Available from:

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

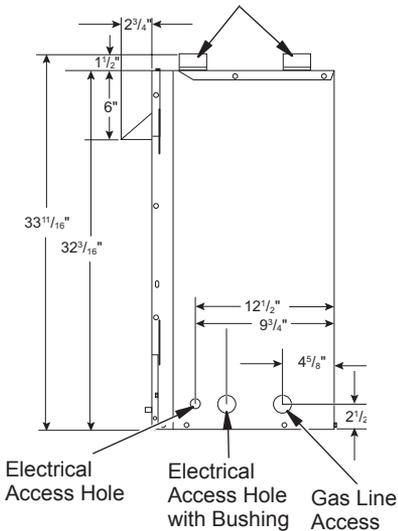
## UNPACKING

- With utility knife, cut the carton all the way around above the staples on the bottom tray. Lift the carton off the firebox. 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.

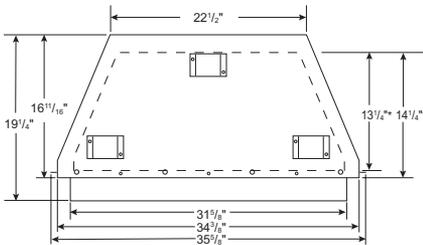
## PRODUCT SPECIFICATIONS

*Continued*

Standoffs (Models FB32NCA and NLFB32NC only)



**Figure 2 - Firebox Side View**



\*Note: 14 1/4" is total firebox cavity depth including brick liner. 13 1/4" is depth of flat floor including brick liner.

**Figure 3 - Firebox Top View**

## PRODUCT FEATURES

### OPERATION

This firebox is designed for use with approved ANSI Z21.1.2 decorative type unvented room heaters. (Physical size limitations apply. Refer to minimum firebox requirements supplied with log heater.) It requires no outside venting or chimney making installation easy and inexpensive. When used without the blower (models FB32CA and NLFB32C only), the firebox requires no electricity making it ideal for emergency backup heat.

### BLOWER ACCESSORY

The FB32CA and NLFB32C firebox will accept the GA3700 accessory. The variable blower allows you to select the fan speed you desire. The blower circulates heated air from the firebox into the room. Use of blower is optional.

### LOCATING FIREBOX

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

1. Where the firebox will be located. Allow for wall and ceiling clearances (see *Installation Clearances*, page 9).
2. Everything needed to complete installation.
3. These models CANNOT be installed in a bedroom or bathroom.
4. Proper air for combustion and ventilation (see page 6).

## AIR FOR COMBUSTION AND VENTILATION

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

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

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

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

### PROVIDING ADEQUATE VENTILATION

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

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

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

The information on pages 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 ( $6 \times 10^{-11}$  kg per pa-sec- $m^2$ ) 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 *Determining Fresh-Air Flow For Firebox Location*, page 7.

#### 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 m<sup>3</sup> 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 m<sup>3</sup> per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed\*, through openings not furnished with doors, are considered a part of the unconfined space.

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

# AIR FOR COMBUSTION AND VENTILATION

*Continued*

## DETERMINING FRESH-AIR FLOW FOR HEATER LOCATION

### Determining if You Have a Confined or Unconfined Space

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

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

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

Length x Width x Height = \_\_\_\_\_ cu. ft.  
(volume of space)

*Example:* Space size 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	<u>40,000</u>	Btu/Hr
Vent-free heater	+ <u>39,000</u>	Btu/Hr
Total	= <u>79,000</u>	Btu/Hr

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

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

- A. Rework worksheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms. See *Ventilation Air From Inside Building*, page 8.
- B. Vent room directly to the outdoors. See *Ventilation Air From Outdoors*, page 8.
- C. Install a lower Btu/Hr heater, if lower Btu/Hr size makes room unconfined.

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



**WARNING: If the area in which the firebox and gas log 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.**

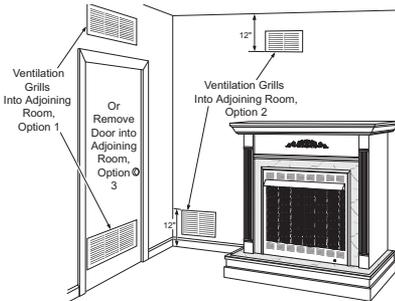
# AIR FOR COMBUSTION AND VENTILATION

*Continued*

## VENTILATION AIR

### Ventilation Air From Inside Building

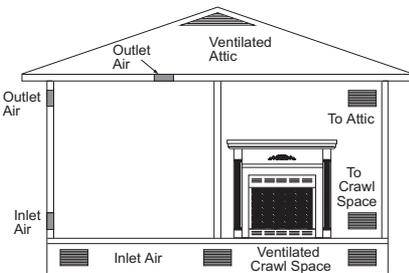
This fresh air would come from an adjoining unconfined space. When ventilating to an adjoining unconfined space, you must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor on the wall connecting the two spaces (see options 1 and 2, Figure 4). You can also remove door into adjoining room (see option 3, Figure 4). Follow the *National Fuel Gas Code ANSI Z223.1/NFPA 54, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.



**Figure 4 - Ventilation Air from Inside Building**

### Ventilation Air From Outdoors

Provide extra fresh air by using ventilation grills or ducts. You must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces. Follow the *National Fuel Gas Code ANSI Z223.1/NFPA 54, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.



**Figure 5 - Ventilation Air from Outdoors**

**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.

## 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 firebox. Follow all local codes.

**WARNING:** Never install the firebox

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

**WARNING:** Never install the firebox

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

# INSTALLATION

## Continued

**IMPORTANT:** Vent-free gas log heaters add moisture to the air. Although this is beneficial, installing firebox in rooms without enough ventilation air may cause mildew to form from too much moisture. See Air for *Combustion and Ventilation*, page 6.

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

**Note:** Your Vanguard firebox 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 firebox, except where standoff spacers are integrally attached. If standoff spacers are attached to your firebox, 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 Firebox Installation*, page 14).

## 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.

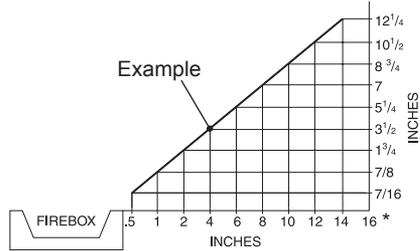
### Minimum Clearances For Side Combustible Material, Side Wall, and Ceiling

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

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

B. Clearances from the top of the fireplace opening to the ceiling should not be less than 42 inches.

MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS		
Top	Left and Right Sides	Bottom and Rear
42"	16"	0"



\*Minimum 16 inches from Side Wall

**Figure 6 - Minimum Clearance for Combustible to Wall**

### Mantel Clearances for Built-In Installation

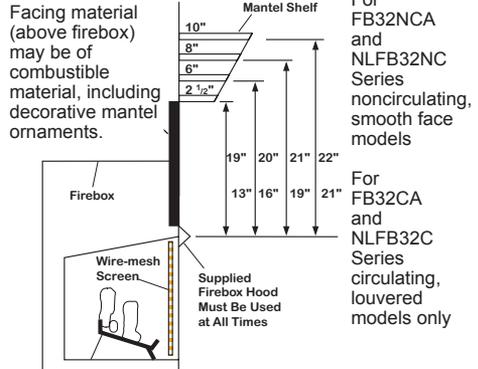
If placing custom mantel above built-in firebox, you must meet the minimum allowable clearance between mantel shelf and top of firebox opening shown in Figure 8. These are the minimum allowable mantel clearances for a safe installation. Use larger clearances wherever possible to minimize the heating of objects and materials placed on the mantel.

**CAUTION:** Close screens before operation of vent-free gas log heater. Do not allow the heater to touch or extend beyond the fireplace screen.

If your installation does not meet the minimum clearances in Figure 8, you must:

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

**Note:** All vertical measurements are from top of fireplace opening to bottom of mantel shelf. All measurements are in inches.



**Figure 7 - Minimum Mantel Clearances for Built-In Installation**

# INSTALLATION

*Continued*

## INSTALLING BLOWER ACCESSORY (Model FB32CA only)

You may install blower accessory GA3700 with conventional installation (below) or with built-in installation (page 11) with models FB32CA and NLFB32C only.

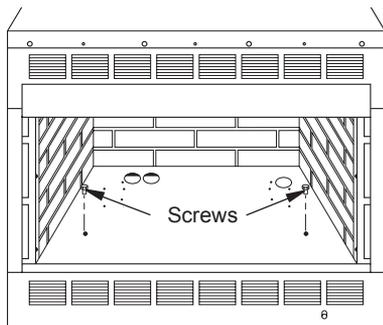
### Conventional Installation of Blower Accessory

**NOTICE: If a log set is currently installed in the firebox, disconnect log set from gas supply and remove from firebox. Contact a qualified service person to do this.**

1. Remove the firebox bottom:
  - a. Remove the 4 screws that secure the bottom of the firebox (see Figure 8).
  - b. Carefully raise and remove the firebox bottom from the firebox.

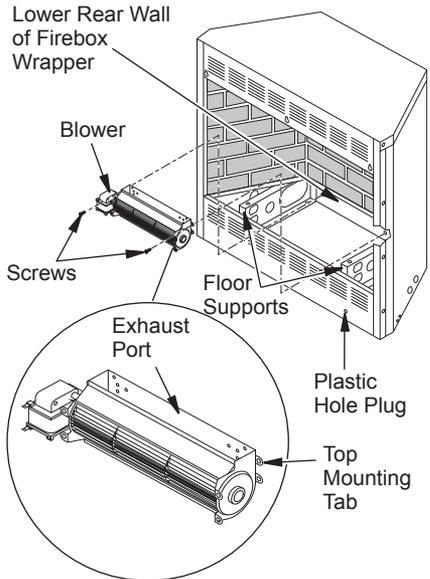
**⚠ WARNING: If there is a duplex electrical outlet installed in the right side of the bottom of the fireplace base area, be sure that the electrical power to the outlet is turned off before proceeding with blower installation. Failure to do this may result in serious injury.**

2. Place the blower against lower rear wall of firebox wrapper with the exhaust port directed upward. Align the holes in top mounting tabs of blower with holes in wall of wrapper (see Figure 9). Using 2 screws provided, mount blower and tighten screws securely.

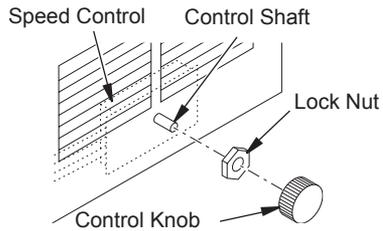


**Figure 8 - Removing Screws from Firebox Bottom**

3. Be certain that all wire terminals are securely attached to terminals on blower motor and that the screw retaining the green ground wire is tight.
4. Locate the plastic hole plug installed in the 3/8" diameter opening in the lower right side of the firebox front panel (see Figure 9). Remove the plastic plug and discard.
5. Place speed control against inner wall of front panel, pushing the plastic control shaft forward through the opening (see Figure 10).
6. While supporting speed control, secure control shaft with lock nut by pushing and turning lock nut with pliers clockwise until it is tight against front panel. Place control knob provided on shaft (see Figure 10).



**Figure 9 - Mounting Blower to Firebox**



**Figure 10 - Attaching Speed Control**

## INSTALLATION

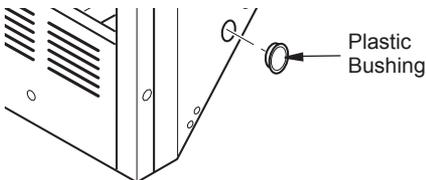
### Continued

7. Plug in blower power cord.
  - a. If your firebox is installed as a freestanding unit, determine whether the power cord will exit the left side or the right side of the firebox. Install 1 plastic bushing provided into the 1 1/2" hole in the floor support on the exit side. Install the second plastic bushing provided into the 1 1/2" hole in the outer casing through which the power cord will exit (see Figure 11). Route power cord through both plastic bushings and plug the power cord into a 3-prong grounded wall receptacle near the firebox.
  - b. If your firebox installation is recessed and/or pre-wired, see *Built-In Installation of Blower Accessory*, column 2.
8. Turn on power to duplex outlet if previously turned off per the warning in step 1.
9. Check to make sure that the power cord is completely clear of the blower wheel and that there are no other foreign objects in blower wheel. Turn blower on and check for operation.



**WARNING: Never touch the blower wheel while in operation.**

10. Peel off the backing paper and stick the supplied wiring diagram decal on the firebox bottom approximately 12" in front of the blower.
11. Replace bottom of firebox. *Note:* Make sure the back of the firebox bottom slides under the rear of the firebrick (lift the firebrick up if necessary.)
12. Reattach firebox bottom using 4 screws removed in step 1. *Note:* Discard the remaining hardware items.
13. Install the log set heater according to the installation instructions supplied with the heater.

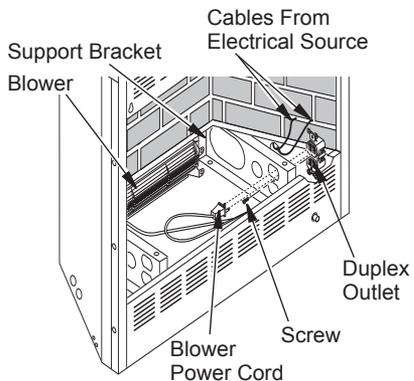


**Figure 11 - Installing Plastic Bushing for Power Cord**

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

### Built-In Installation of Blower Accessory

1. Before replacing bottom of firebox, remove screw holding duplex outlet to the support bracket in the bottom of firebox. Remove duplex outlet.
2. Clamp electrical cable into firebox through smallest hole in outer casing using strain relief provided.
3. Route wires from electrical box through hole in side of heater and hole in support bracket (see Figure 12).
4. Connect wires from the electrical box to duplex outlet. Match wire colors to those indicated on duplex outlet. Be sure to connect ground wire.
5. Replace duplex outlet with screw.
6. Plug blower power cord into duplex outlet.
7. Replace bottom of firebox.



**Figure 12 - Routing Blower Accessory Power Cord for Built-In Installation**

### Operating the Blower

Light your gas appliance with the blower off. After about 15 minutes, turn the blower on to deliver heated air at the top louvers. The blower features a variable control which allows you to select the speed you desire.

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

## INSTALLATION

*Continued*

### INSTALLING LOG HEATER IN FIREBOX

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

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

1. Remove four screws holding firebox bottom in place.
2. Lift and remove firebox bottom (see Figure 13).
3. If installing GA3700 Blower Accessory (Models FB32CA and NLFB32C only), see *Installing Blower Accessory*, page 10.
4. Route flexible gas line from manual shutoff valve into firebox through side.

**NOTICE:** Most building codes do not permit concealed gas connections. A flexible gas line is recommended to allow accessibility from the firebox. The flexible gas supply line connection to the manual shutoff valve should be accessible.

5. Install and properly test gas log heater. Follow installation instructions included with the vent-free gas log heater that is being installed.
6. Replace firebox bottom and secure with screws.

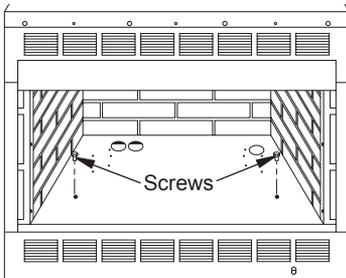


Figure 13 - Removing Firebox Bottom

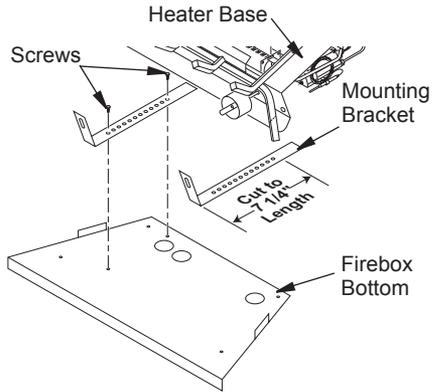


Figure 14 - Cutting Brackets

### INSTALLING FIREPLACE HOOD

**NOTICE:** The firebox canopy (hood) must not be modified or replaced with a canopy (hood) that may be provided with the unvented decorative room heater.

1. Attach three zinc-colored shoulder screws to back of hood.
2. Insert hood into hood-mounting slots on firebox.
3. Hold hood in place. Insert two black Phillips screws through bottom of hood and tighten.

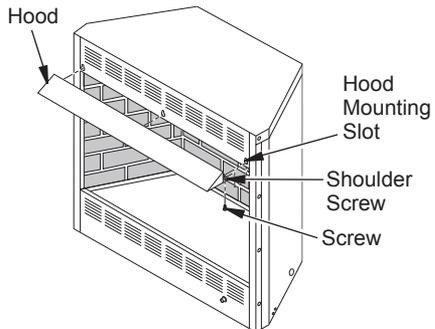


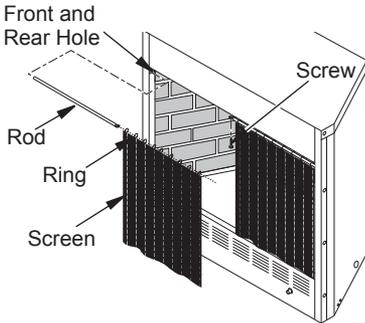
Figure 15 - Installing Fireplace Hood

# INSTALLATION

*Continued*

## INSTALLING FIREPLACE SCREEN

1. Insert each rod through nine rings located at top of screen.
2. Insert first rod into rear hole in left side of firebox. Fasten rod to rear hole near center of firebox using black shoulder screw.
3. Insert other rod into front hole on right side of firebox and fasten using remaining shoulder screw.



**Figure 16 - Installing Fireplace Screen (Shown Without Fireplace Hood for Clarity)**

## FIREBOX INSTALLATION USING OPTIONAL ACCESSORY MANTELS

This firebox may be installed using the corner or cabinet mantel with hearth base accessories against a wall in your home. You must use a GA6090 brass trim kit included with the mantel accessories (see *Accessories*, page 12). Follow the instructions below to install the firebox in this manner.

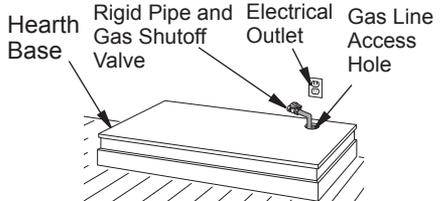
**Note:** The instructions below show installation using GM100F/GM101U/GM102W/GM106F/GM107U series cabinet mantels and the G3000F/G3001U/G3004W/G3006F/G3007U series hearth base accessories. The hearth base accessory shown is optional for this installation. You can install firebox and cabinet mantel directly on the floor. The corner mantel cannot be installed with the G3000F/G3001U/G3004W/G3006F/G3007U series hearth base. You must install corner and face mantels directly on the floor. If mounting firebox and cabinet mantel to the floor or using corner mantel, an optional G3005 Slim Base kit may be installed.

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

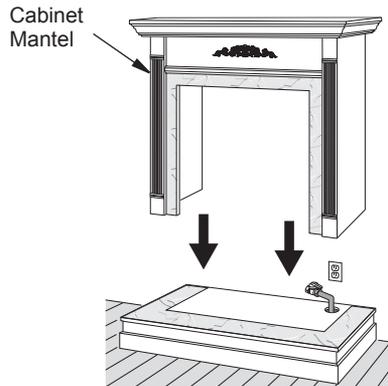
2. If using an optional GA3700 blower (FB32CA and NLFB32C models only), install a properly grounded, 120 volt three-prong electrical outlet at firebox location if an outlet is not there. If possible, locate outlet so cabinet mantel will cover it when installed (see Figure 18).
3. Install gas piping to firebox location. This installation includes an approved flexible gas line (if allowed by local codes) and a manual shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Connecting to Gas Supply* in your log set owner's manual.

**NOTICE: A qualified service person must connect firebox to gas supply. Follow all local codes.**

4. Place hearth base accessory against wall at installation location. Cut an access hole in hearth top to run flexible gas line to firebox (see Figure 17). 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 flexible gas line through access hole in hearth base.
6. Center cabinet mantel on hearth base (see Figure 18). Make sure mantel is flush against wall.



**Figure 17 - Placing Hearth Base Accessory Against Wall**



**Figure 18 - Installing Cabinet Mantel**

# INSTALLATION

## Continued

- Break off nailing flanges (see Figure 19) with hammer or pliers.  
**IMPORTANT:** When installing Brass Trim Kit, see instructions included with mantel accessory.
- Place cardboard or other protective material on top of hearth base. Carefully set firebox on protective material, with back of firebox inside mantel opening.
- Attach flexible gas line to log set. See Connecting to Gas Supply in your log set owner's manual.
- If installing GA3700 blower (FB32CA and NLFB32C models only), route blower electrical cord through bushing included with blower accessory in right side firebox support and bushing in side access opening of firebox. Plug electrical cord into electrical outlet. See *Installing Blower Accessory*, page 10.
- Carefully insert firebox 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 firebox (if any). See Figure 20.
- Install the trim after final finishing and/or painting of wall. See instructions included with mantel accessory for attaching brass trim.
- Check all gas connections for leaks. See *Checking Gas Connections* in log set owner's manual.

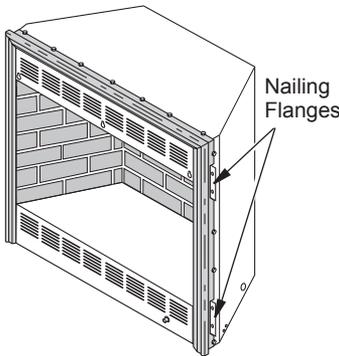


Figure 19 - Location of Nailing Flanges

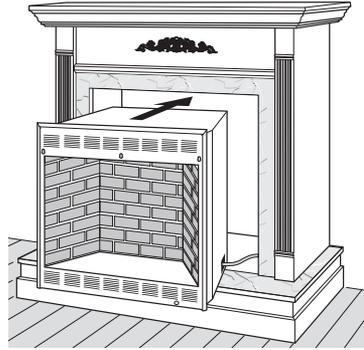


Figure 20 - Inserting Firebox Into Cabinet Mantel

## BUILT-IN FIREBOX INSTALLATION

Built-in installation of this firebox involves installing firebox into a framed-in enclosure. This makes the front of firebox flush with wall. If installing a mantel above the firebox, but you must follow the clearances shown in Figure 7, page 7. Follow the instructions below to install the firebox in this manner.

- Frame in rough opening. Use dimensions shown in Figure 21 for the rough opening. If installing in a corner, use dimensions shown in Figure 22 for the rough opening. The height is 33" (FB32CA and NLFB32CA) or 34 1/4" (FB32NCA and NLFB32NCA), which is the same as the wall opening in Figure 21.

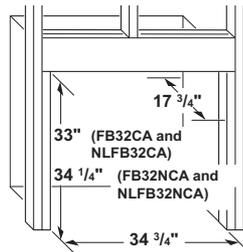


Figure 21 - Rough Opening for Installing in Wall

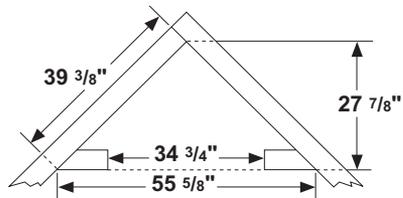
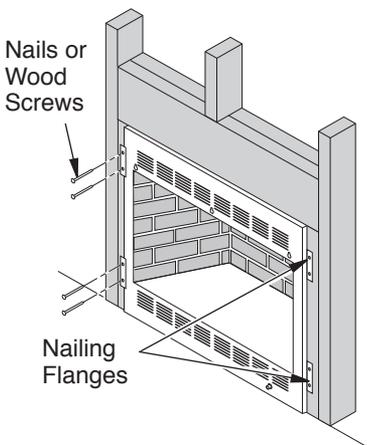


Figure 22 - Rough Opening for Installing in Corner

## INSTALLATION

### Continued

- Install gas piping to firebox 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 *Connecting to Gas Supply* in log set owner's manual.
- Carefully set firebox in front of rough opening with back of firebox inside wall opening. **IMPORTANT:** If installing Brass Trim Kit GA6090, see instructions included with brass trim accessory. You must install shoulder screws now.
- If using GA3700 blower accessory (Models FB32CA and NLFB32C only), see *Installing Blower Accessory* for built-in installation, page 11.
- Attach flexible gas line to log set. See *Connecting to Gas Supply* in log set owner's manual.
- Carefully insert firebox into rough opening.
- Attach firebox to wall studs using nails or wood screws through holes in nailing flange (see Figure 23).
- Check all gas connections for leaks. See *Checking Gas Connections* in log set owner's manual.
- If using optional GA6090 brass trim kit, install the trim after final finishing and/or painting of wall. See instructions included with brass trim accessory for attaching brass trim.



**Figure 23 - Attaching Firebox to Wall Studs**

Model #	Height		Front Width	
	Actual	Framing	Actual	Framing
FB32CA	32 <sup>3</sup> / <sub>16</sub> "	33"	34 <sup>3</sup> / <sub>8</sub> "	34 <sup>3</sup> / <sub>4</sub> "
NLFB32C	32 <sup>3</sup> / <sub>16</sub> "	33"	34 <sup>3</sup> / <sub>8</sub> "	34 <sup>3</sup> / <sub>4</sub> "
FB32NCA	33 <sup>11</sup> / <sub>16</sub> "	34 <sup>1</sup> / <sub>4</sub> "	34 <sup>3</sup> / <sub>8</sub> "	34 <sup>3</sup> / <sub>4</sub> "
NLFB32NC	33 <sup>11</sup> / <sub>16</sub> "	34 <sup>1</sup> / <sub>4</sub> "	34 <sup>3</sup> / <sub>8</sub> "	34 <sup>3</sup> / <sub>4</sub> "

Model #	Depth	
	Actual	Framing
FB32CA	16 <sup>11</sup> / <sub>16</sub> "	17 <sup>3</sup> / <sub>4</sub> "
NLFB32C	16 <sup>11</sup> / <sub>16</sub> "	17 <sup>3</sup> / <sub>4</sub> "
FB32NCA	16 <sup>11</sup> / <sub>16</sub> "	17 <sup>3</sup> / <sub>4</sub> "
NLFB32NC	16 <sup>11</sup> / <sub>16</sub> "	17 <sup>3</sup> / <sub>4</sub> "

## 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 firebox
- how firebox was malfunctioning
- type of gas used (propane/LP or natural gas)
- purchase date

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

### PARTS NOT UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA Heating Products at 1-866-672-6040 for referral information.

When calling DESA Heating Products, have ready

- model number of your firebox
- the replacement part number

## 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 Service web site at [www.desatech.com](http://www.desatech.com).

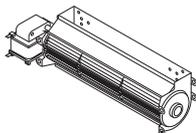
## ACCESSORIES

Purchase these firebox 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

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



### BLOWER ACCESSORY - GA3700

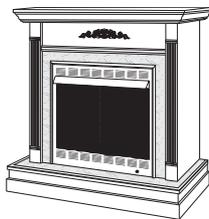
Use with Models FB32CA and NLFB32C only. The variable speed blower allows you to select the desired speed. The blower circulates heated air from the fireplace into the room.



### CABINET MANTEL AND FULL HEARTH BASE

**GMC90F Series - Oak Finished**  
**GMC91U Series - Unfinished Birch**

**GMC92F Series - Cherry Finished Birch**  
For all models. Mantel features columns, moldings, fluting and medallion. Dimensions (WxHxD): 56" x 50" x 24"



### CABINET MANTEL

**GMC11F Series - Walnut Finished**  
**GMC12U Series - Unfinished**  
**GMC13F Series - Oak Veneer Finished**  
**GM102W Series - Off White**

All models. Shown with optional base and laminate hearth and mantel trim accessories. Dimensions (WxHxD): 56 3/4" x 48" x 22 3/4"



### CORNER MANTEL

**GMC36F Series - Walnut Finished**  
**GMC37U Series - Unfinished**  
**GM202F Series - Oak Finished**  
**GMC93F Series - Oak Finished with Columns**

All models. Shown with optional laminate mantel trim accessory.

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

### HARDWOOD CORNER HEARTH BASE - (Not Shown)

**G3000F Series - Walnut Finished**  
**G3009U Series - Unfinished**  
**G3010F Series - Oak Finished**

The corner hearth base creates a handsome riser for the firebox (cannot be used with cabinet mantel or face mantel). Dimensions (WxHxD): 52 1/2" x 6 1/2" x 26"

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## ACCESSORIES

*Continued*



### HARDWOOD CABINET HEARTH BASE

**GC3333F Series - Walnut Finished**

**GC3334U Series - Unfinished**

**GC3335F Series - Oak Veneer Finished**

**GM3004W Series - Off White**

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

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

### SLIM HEARTH BASE

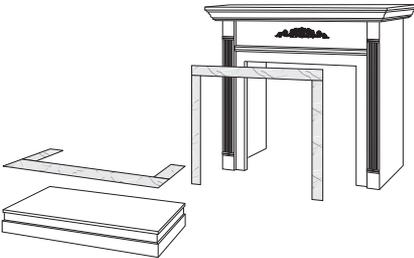
(Not Shown)

**G3005J - Jade Marble Laminate**

**G3005S - Sandstone Marble Laminate**

**G3005B - Black Onyx Marble Laminate**

The slim hearth base allows you to further customize your firebox. Dimensions (WxHxD): 41 7/8" x 5/8" x 10"



### LAMINATE TRIM FOR HEARTH OR MANTEL

**G3002J - Jade Marble Laminate Mantel Trim**

**G3003J - Jade Marble Laminate Hearth Base Trim**

**G3002S - Sandstone Marble Laminate Mantel Trim**

**G3003S - Sandstone Marble Laminate Hearth Base Trim**

**G3002B - Black Onyx Marble Laminate Trim**

**G3003B - Black Onyx Marble Laminate Hearth Base Trim**

Mantel trim for cabinet or corner mantel. Hearth base trim for hardwood hearth bases.

### PERIMETER TRIM ACCESSORY (Not Shown)

**PT32 - Black**

**PT32B - Brushed Brass**

**PT32PB - Polished Brass**

**PT32P - Platinum**

Polished brass trim included with all mantel accessories. Optional with built-in installation. Provides a finished appearance covering rough and/or unfinished mantel edges.

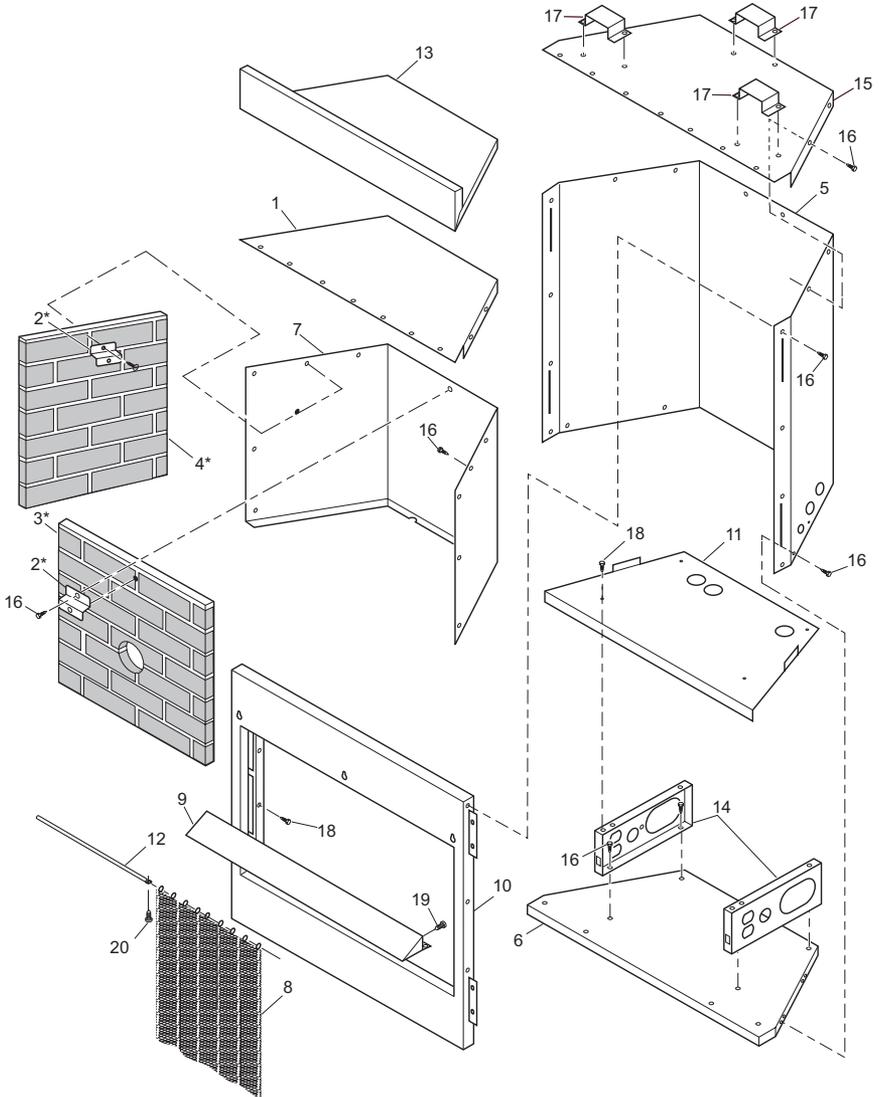
### BRASS HOOD ACCESSORY - GA6096 (Not Shown)

**All models.** Decorative polished brass hood enhances the appearance of the firebox.

# ILLUSTRATED PARTS BREAKDOWN

## MODELS

FB32NCA AND NLFB32NC



## PARTS LIST

This list contains replaceable parts used in your firebox. When ordering parts, follow the instructions listed under *Replacement Parts* on page 15 of this manual.

KEY NO.	PART NUMBER		DESCRIPTION	QTY.
	FB32NCA	NLFB32NC		
1	101872-03	101872-03	Firebox Top	1
2	101889-01	*	Firebrick Retainer	3
3	101929-04	*	Rear Firebrick	1
4	101932-04	*	Side Firebrick	2
5	103207-01	103207-01	Outer Casing	1
6	103208-01	103208-01	Outer Shell Base	1
7	**	**	Firebox Wrapper	1
8	103297-01	103297-01	Assembly Screen	2
9	103217-01CK	103217-01CK	Hood	1
10	103773-02	103773-02	Front Assembly	1
11	**	**	Firebox Bottom	1
12	103809-01	103809-01	Screen Rod	2
13	103816-01	103816-01	Firebox Insulation	1
14	101348-01	101348-01	Firebox Support	2
15	101357-03	101357-03	Outer Casing Top	1
16	M11084-26	—	Hex Head Screw, #10-16	49
	—	M11084-26	Hex Head Screw, #10-16	46
17	098194-02	098194-02	Stand Off	3
18	098304-01	098304-01	Phillips Pan Head Screw, #10	11
19	099230-01	099230-01	Hex Head Screw	3
20	099230-02	099230-02	Shoulder Screw	2

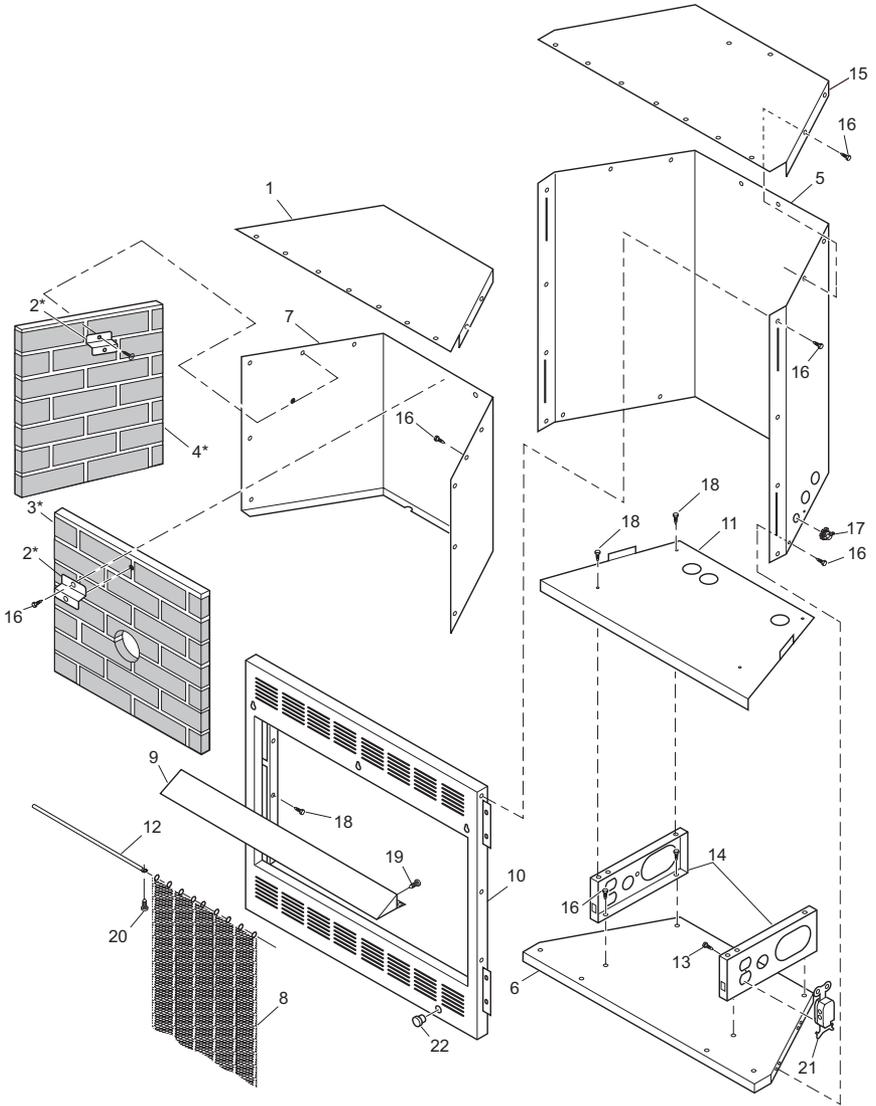
\*Not Included with Model NLFB32NC

\*\* Not available for field replacement.

# ILLUSTRATED PARTS BREAKDOWN

MODELS

FB32CA AND NLFB32C



## PARTS LIST

This list contains replaceable parts used in your firebox. When ordering parts, follow the instructions listed under *Replacement Parts* on page 15 of this manual.

KEY NO.	PART NUMBER		DESCRIPTION	QTY.
	FB32CA	NLFB32C		
1	101872-03	101872-03	Firebox Top	1
2	101889-01	*	Firebrick Retainer	3
3	101929-04	*	Rear Firebrick	1
4	101932-04	*	Side Firebrick	2
5	103207-01	103207-01	Outer Casing	1
6	103208-01	103208-01	Outer Shell Base	1
7	**	**	Firebox Wrapper	1
8	103297-01	103297-01	Assembly Screen	2
9	103217-01CK	103217-01CK	Hood	1
10	103773-01	103773-01	Front Assembly	1
11	**	**	Firebox Bottom	1
12	103809-01	103809-01	Screen Rod	2
13	M12461-2	M12461-2	Screw, Outlet Mounting	1
14	101348-01	101348-01	Firebox Support	2
15	101357-01	101357-01	Outer Casing Top	1
16	M11084-26	—	Hex Head Screw, #10-16	49
	—	M11084-26	Hex Head Screw, #10-16	46
17	103771-01	103771-01	Strain Relief Fitting	1
18	098304-01	098304-01	Phillips Pan Head Screw, #10	13
19	099230-01	099230-01	Hex Head Screw	3
20	099230-02	099230-02	Shoulder Screw	2
21	GA3555	GA3555	Duplex Outlet	1
22	103457-01	103457-01	Button Plug	1

\*Not Included with Model NLFB32C

\*\* Not available for field replacement.





# 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 FIREBOX

DESA warrants this product to be free from defects in materials and components for four (4) years from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale or cancelled check must be presented.

This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this heater to proper operating condition and an allowance for labor when provided by a DESA Authorized Service Center. Warranty part(s) MUST be obtained through authorized dealers of this product and/or DESA 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 FROM THE DATE OF FIRST PURCHASE; AND DESA'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA 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**<sup>™</sup>

**HEATING PRODUCTS**

2701 Industrial Drive

P.O. Box 90004

Bowling Green, KY 42102-9004

[www.desatech.com](http://www.desatech.com)



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