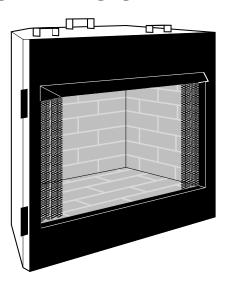
# **VANGUARD** UNVENTED (VENT-FREE) LogMate<sup>®</sup> UNIVERSAL FIREBOX OWNER'S OPERATION AND INSTALLATION MANUAL





#### FB36NCA, NLFB36NC, and FB42NC Non-circulating 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.

- 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.

#### FB36CB, NLFB36C, and FB42CA Circulating Models

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

This firebox has been tested and approved by I.A.S. under their REQ. 2-97 for use with any ANS Z21.11.2 approved gas logs.

This firebox 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 (i.e. Installation of this product is permitted after the manufactured (mobile) home is sited).

#### Save this manual for future reference.

### SAFETY INFORMATION

### 

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.

A CAUTION: Carefully review the instructions supplied with the decorative type unvented room heater for the minimum fireplace size requirement. Do not install the appliance in this firebox unless this firebox meets the minimum dimensions required for the installation.

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

- 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.
- 5. You must operate this fireplace with the provided fireplace screen, hood, and brick liner in place. Make sure these parts are in place and screens are closed before running firebox. The supplied hood may not be replaced with a hood which may be provided with a log heater.
- 6. 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.
- 7. Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this heater. Do not use blower accessory with Models FB36NCA, NLFB36NC, or FB42NC. Use only the provided hood, or appropriate polished brass hood accessory. See *Accessories* on page 15.
- 8. Vent-free gas log heaters installed in these fireboxes require fresh air ventilation to run properly. See *Air for Combustion and Ventilation*, pages 5 through 7.
- 9. Do not run firebox
  - where flammable liquids or vapors are used or stored
  - under dusty conditions

- 10. Do not use this firebox to cook food or burn paper or other objects.
- 11. Never place any objects in the firebox or on logs.
- 12. Firebox front and screen becomes 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.
- 13. Carefully supervise young children when they are in the room with firebox.
- 14. Turn firebox off and let cool before servicing. Only a qualified service person should service and repair firebox.
- 15. Operating firebox above elevations of 4,500 feet could cause pilot outage.
- 16. Do not use the firebox if it has been under water due to the shock hazard that could result with the blower accessary (if installed) in place.

### 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 ANS Z223.1*, also known as NFPA 54\*. Firebox must be electrically grounded in accordance with the *National Electrical Code*, *ANS/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

- 1. Use utility knife to cut carton all the way around above the staples on the bottom tray. Lift carton off the firebox and discard.
- 2. Remove all protective packaging from inside firebox. Carefully lift the firebox off the bottom corrugated tray.
- 3. Check carton contents for the following:
  - Screen assembly
  - Screen support rod
  - Hardware and parts bag containing the following:
    - Owner's Operation and Installation Manual
    - 2 Black #10 x 3/8" Phillips screws for mounting screen support rods

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

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

Notice: The firebox identification label (including model number, serial number, clearances, etc.) is located either on the left front edge of the firebox or behind the left side firebrick panel. See Figure 18, page 12.

### PRODUCT FEATURES

#### OPERATION

This firebox is designed for use with approved ANS Z21.11.2 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 FB36CB, NLFB36C or FB42CA only), the firebox requires no electricity making it ideal for emergency back-up heat.

#### BLOWER ACCESSORY

The FB36NCA, NLFB36C, or FB42CA fireboxes 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.

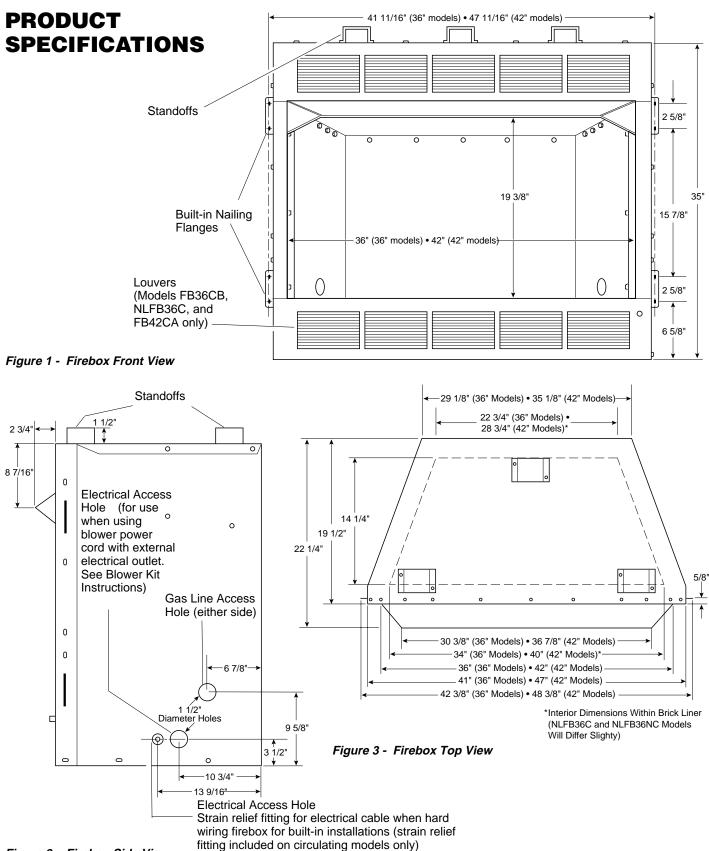
#### **BRICK LINER**

Your firebox may feature a concrete brick liner. As with all concrete liners, this liner may develop slight cracks when exposed to heat. These cracks will not affect the performance of the fireplace or vent-free gas logs.

### LOCATING FIREBOX PLANNING

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

- 1. Where the firebox will be located. Allow for wall and ceiling clearances (see *Installation Clearances*, pages 8 and 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 (page 5).



### 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 fuelburning appliances.

# PROVIDING ADEQUATE VENTILATION

The following are excerpts from *National Fuel Gas Code*. *NFPA 54/ANS 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 5 through 7 will help you classify your space and provide adequate ventilation.

#### **Unusually Tight Construction**

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

Unusually tight construction is defined as construction where:

- a. walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm (6 x 10<sup>-11</sup> kg per pa-sec-m<sup>2</sup>) or less with openings gasketed or sealed <u>and</u>
- weather stripping has been added on openable windows and doors <u>and</u>
- c. caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

If your home meets all of the three criteria above, you must provide additional fresh air. See *Ventilation Air From Outdoors*, page 7.

If your home does not meet all of the three criteria above, proceed to *Determining Fresh-Air Flow for Firebox Location*, page 6.

#### **Confined and Unconfined Space**

The National Fuel Gas Code (ANS 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 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.

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

\* 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 FIREBOX 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 firebox 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 firebox		_ Btu/Hr				
Gas water heater*		Btu/Hr	Example:		40.000	
Gas furnace		Btu/Hr	Gas water heater	-	40,000	Btu/Hr
Vented gas heater		Btu/Hr	Vent-free firebox with log heater	+	39,000	Btu/Hr
Gas firebox logs		Btu/Hr	Total	=	79.000	Btu/Hr
Other gas appliances*	+	Btu/Hr	1000	-	//,000	
Total	=	_ 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)

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 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 7.
- B. Vent room directly to the outdoors. See Ventilation Air from Outdoors, page 7.
- C. Install a lower Btu/Hr firebox, if lower Btu/Hr size makes room unconfined.

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

A WARNING: If the area in which the 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, ANS Z223.1, 1992, Section 5.3* or applicable local codes.

### AIR FOR COMBUSTION AND VENTILATION

Continued

#### **VENTILATION AIR**

### Ventilation Air From Inside Building

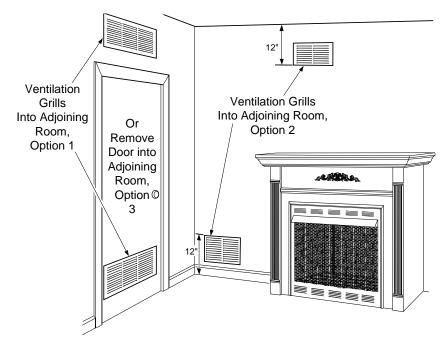
This fresh air would come from an adjoining unconfined space. When ventilating to an adjoining unconfined space, you must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor on the wall connecting the two spaces (see options 1 and 2, Figure 4). You can also remove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

#### **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.





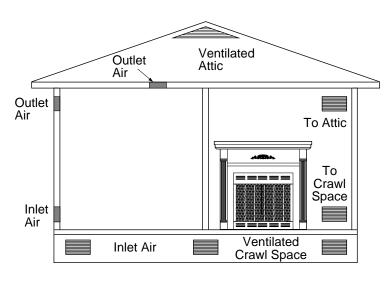


Figure 5 - Ventilation Air from Outdoors

### INSTALLATION

NOTICE: 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

A CAUTION: Log heaters installed in this firebox create warm air currents. These currents move heat to wall surfaces next to firebox. Installing firebox next to vinyl or cloth wall coverings or operating firebox where impurities (such as tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist, may discolor walls.

*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*, pages 5 through 7.

*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 against any exterior surface on the rear, sides or top of your firebox, except where stand-off spacers are integrally attached. If stand-off spacers are attached to your firebox, these spacers can be placed directly against wall or framing materials. Use the dimensions shown for rough opening to create the easiest installation.

Use dimensions shown for rough openings to create the easiest installation (see *Built-In Firebox Installation*, page 9).

#### 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 6)

- A. Clearances from the side of the firebox opening to any combustible wall should not be less than 16 inches.
- B. Clearances from the top of the firebox opening to the ceiling should not be less than 42 inches.

- C. When the firebox is installed on carpeting or other combustible material, other than wood flooring, the firebox should be installed on a metal or wood panel extending the full width and depth of the enclosure.
- D. Clearances from the bottom of firebox to the floor is 0 inches.

These fireboxes can be installed as freestanding units against a wall with the approved, optional cabinet mantels (see *Accessories*, page 15) or as a built-in unit. The clearances are the same for either installation method.

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

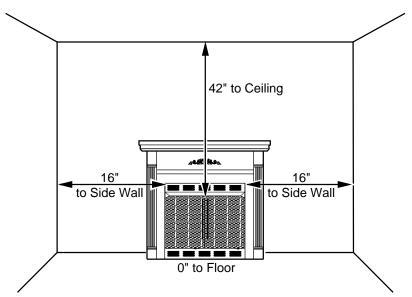


Figure 6 - Minimum Clearance to Wall, Ceiling, and Floor

### INSTALLATION

Continued

# Mantel Clearances for Built-In Installation

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

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

If your installation does not meet the above minimum clearances in Figure 7, you must:

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

# BUILT-IN FIREBOX

Built-in installation of this firebox involves installing firebox into a framed-in enclosure. This makes the front of firebox flush with wall. Optional brass trim accessories are available (see *Accessories*, page 15). The brass trim will extend past sides of firebox approximately 1/2 inch. This will cover the rough edges of the wall opening. If installing a mantel above the firebox, you must follow the clearances shown in Figure 7. Follow the instructions below to install the firebox in this manner.

- 1. Frame in rough opening. The firebox framing should be constructed of 2 x 4 lumber or heavier. Use dimensions in Table 1 and rough opening layout in Figure 8a. Adjust framing so that firebox flushes with finished wall surface. If installing in a corner, use dimensions in Figures 8b and 8c for rough opening.
- 2. Install gas piping to firebox location. See *Installing Gas Line* on page 11 and *Connecting to Gas Supply* in log set owner's manual.

*IMPORTANT:* If installing blower accessory (Models FB36CB and FB42CA), see *Hard-Wiring Firebox*, page 12.

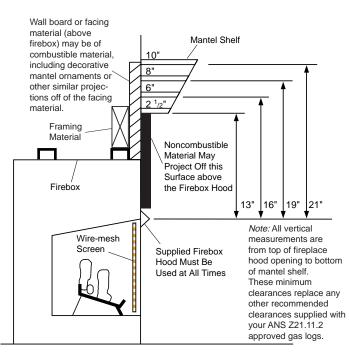


Figure 7 - Minimum Mantel Clearances for Built-In Installation TABLE 1

ROUGH OPENING DIMENSIONS FOR BUILT-IN INSTALLATION					
MODEL #	FRONT WIDTH (Inside to Inside)	HEIGHT	DEPTH (Minimum)		
FB36NCA	<b>41</b> <sup>1</sup> / <sub>4</sub> "	37"	20"		
FB36CB	<b>41</b> <sup>1</sup> / <sub>4</sub> "	37"	20"		
NLFB36NC	<b>41</b> <sup>1</sup> / <sub>4</sub> "	37"	20"		
NLFB36C	<b>41</b> <sup>1</sup> / <sub>4</sub> "	37"	20"		
FB42NC	<b>47</b> <sup>1</sup> / <sub>4</sub> "	37"	20"		
FB42CA	47 <sup>1</sup> / <sub>4</sub> "	37"	20"		

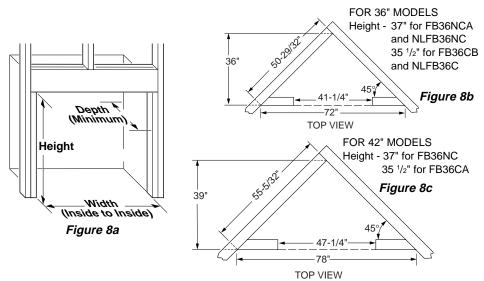


Figure 8 - Rough Opening for Installing in Wall

Continued

### INSTALLATION

#### Continued

- 3. Carefully set firebox in front of rough opening with back of firebox inside wall opening. *IMPORTANT:* If installing Brass Trim Kit GA6091 or GA6092, see instructions included with brass trim accessory. You must install shoulder screws from brass trim kit now.
- 4. Carefully insert firebox into rough opening.
- 5. Attach firebox to wall studs using nails or wood screws through holes in nailing flange (see Figure 9).
- If using optional GA6091 or GA6092 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.
- 7. Install and properly test gas log heater. Follow installation instructions included with the vent-free gas log heater that is being installed.

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

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

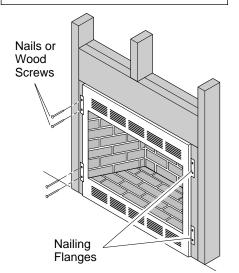


Figure 9 - Attaching Firebox to Wall Studs

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

WARNING: Do not allow noncombustible materials to cover any necessary openings like louvered slots.

WARNING: Never modify or cover the louvered slots on the front of the firebox except when using approved Vanguard brass accent trim (see *Accessories*, page 18).

WARNING: Use only noncombustible mortar or adhesives when overlapping the front facing with noncombustible facing material.

#### INSTALLING FIREBOX USING OPTIONAL ACCESSORY MANTELS

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

This firebox may be installed using a cabinet mantel accessory against a wall in your home. The firebox and cabinet mantel can be installed directly on the floor. A brass trim kit is included with the mantel accessory GM103U or GM105U (see Accessories, page 15).

- 1. Assemble cabinet mantel accessory and the brass trim kit. Assembly instructions are included with each accessory.
- 2. If using an optional GA3700 Blower (circulating models only), install a properly grounded, 120 volt threeprong 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 10).
- 3. Install gas piping to firebox location. See *Installing Gas Line*, page 11. You may have to cut an access hole in the floor or wall to run gas line to firebox. Make sure to locate access hole so cabinet mantel will cover it when installed (see Figure 10).

- 4. Place cabinet mantel on floor in desired location. Make sure mantel is flush against wall.
- 5. Break off nailing flanges with hammer or pliers (see Figure 11).

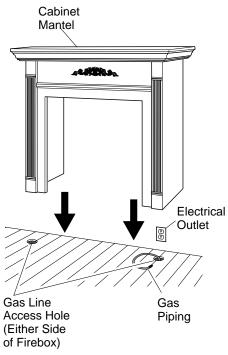
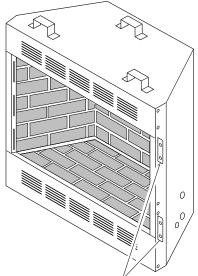


Figure 10 - Installing Cabinet Mantel



Nailing Flanges Figure 11 - Location of Nailing Flanges (Two on Each Side)

#### **INSTALLATION** Continued

- 6. Install the brass trim kit furnished with mantel. See instruction sheet included with the mantel now.
- 7. If installing the optional GA3700 Blower (circulating models only), see *Installing Optional Blower Accessory*, column 3.
- 8. Carefully insert firebox into cabinet mantel. Be careful not to scratch firebox, cabinet mantel, flooring, etc. when installing (see Figure 12).
- 9. Install and properly test gas log heater. Follow installation instructions included with the vent-free gas log heater that is being installed.

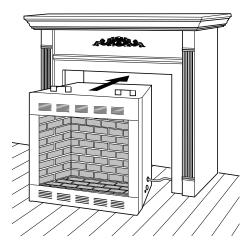


Figure 12 - Inserting Firebox Into Cabinet Mantel

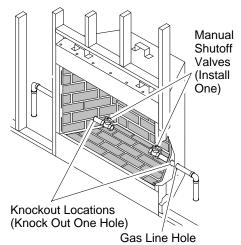
#### **INSTALLING GAS LINE**

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

*IMPORTANT:* See *Connecting to Gas Supply* in your log set owner's manual for details on gas hookup.

You may run the gas line from either side of the firebox (see Figure 13). Decide which side you want to run the gas line from.

*Note:* This is one option for installing shutoff valve. Check local codes for shutoff valve location requirements.



#### Figure 13 - Installing Gas Line and Manual Shutoff Valve

Locate the recessed knockout in one of the firebrick sidewall liners (see Figures 13 and 14). Firmly tap the center of the knockout with a chisel until it is released. Carefully chisel the rough edges of the hole you have made to smooth edges. This hole will line up with the hole in the outer casing.

A CAUTION: Do not use excessive force to remove the knockout. Too much force may damage the firebrick concrete insert.

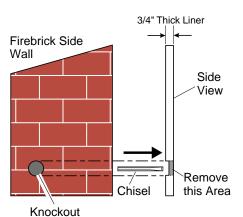


Figure 14 - Location of Knockout for Gas Line

#### INSTALLING OPTIONAL BLOWER ACCESSORY

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

- 1. If your firebox has a concrete firebrick liner, remove liner (see *Hard-Wiring Firebox*, page 12, steps 1 through 3).
- Remove the firebox bottom.
  a. Remove the 4 screws that secure the bottom of the firebox (see Figure 15).
  - 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.

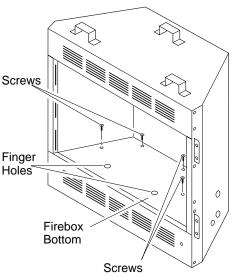


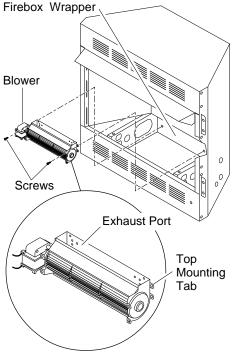
Figure 15 - Removing Firebox Bottom

### INSTALLATION

#### Continued

- 3. Place the blower against the lower rear wall of the firebox outer wrapper with the exhaust port directed upward. Align the holes in top mounting tabs of blower with holes in wall of wrapper (see Figure 16). Using 2 screws provided, mount blower and tighten screws securely.
- 4. 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.
- 5. Locate the plastic hole plug installed in the 3/8" diameter opening in the lower right side of the firebox front panel (see Figure 17). Remove the plastic plug and discard.

#### Lower Rear Wall of



#### Figure 16 - Mounting Blower to Firebox

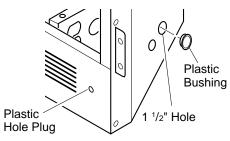


Figure 17 - Installing Plastic Bushing for Power Cord

#### HARD-WIRING FIREBOX For Built-in Installation of Circulating Models Only

Models FB36CB, NLFB36C, and FB42CA can be hard-wired to the duplex outlet located inside the firebox bottom if desired. This allows the GA3700 Blower Accessory to be plugged into the duplex outlet.

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

1. If your firebox has a brick liner use a Phillips screwdriver, remove the screw and retainer bracket at the top of the firebrick liner panel on the left side. Carefully remove the left panel from the firebox. Repeat for firebrick liner panel on right side.

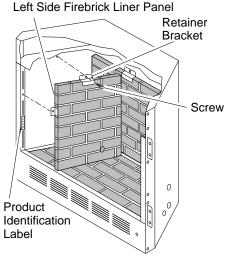
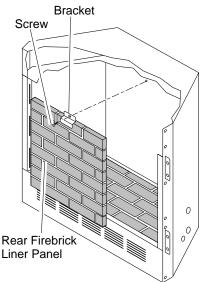


Figure 18 - Removing Side Panel

2. Remove the screw and retainer bracket at the top of the brick liner panel in the back of the firebox. Do not let the panel fall after the bracket is removed. Carefully remove the rear firebrick liner panel from the firebox.

#### **CAUTION:** Do not let the firebrick liner panel fall after the bracket is removed.

- 3. Carefully lift and remove the bottom firebrick floor from bottom of firebox.
- 4. Remove the four Phillips screws in firebox bottom.



#### Figure 19 - Removing Rear Firebrick Liner Panel

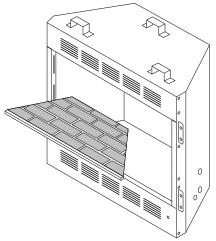


Figure 20 - Removing Bottom Firebrick Floor

### INSTALLATION

#### Continued

- 5. Use the two finger holes in the firebox bottom to carefully lift up and remove the firebox bottom.
- 6. Locate duplex outlet mounted to support bracket in lower right hand side of firebox. Remove screw holding duplex outlet to support bracket in bottom of firebox. Remove duplex outlet (see Figure 22).
- 7. Clamp electrical cable hard-wiring into firebox through smallest hole using strain relief fitting provided (see Figure 23).
- 8. Connect electrical cable to duplex outlet. Match wire colors to those on duplex outlet. Be sure to connect ground wire.
- 9. Replace duplex outlet with screw.
- 10. You may now install GA3700 Blower Accessory if desired, see Installing Optional Blower Accessory, page 11.
- 11. Replace firebox bottom with four Phillips screws.
- 12. If applicable carefully replace firebrick panels in reverse order (see Figures 18 through 20, page 12).

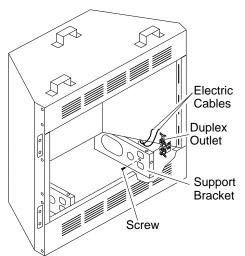


Figure 22 - Removing Duplex Outlet

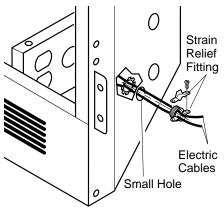


Figure 23 - Installing Strain Relief Fitting into Electrical Access Hole

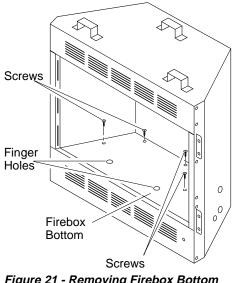
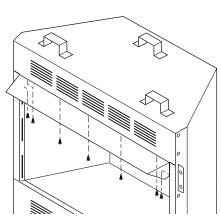


Figure 21 - Removing Firebox Bottom

#### INSTALLING FIREPLACE HOOD AND SCREEN

 Attach hood to firebox using (7) #10 x 3/8" phillips screws provided (see Figure 24).



2. Insert each rod through all rings located at top of screen.

- Insert first rod into rear hole in left side of firebox. Fasten rod to rear hole near center of firebox using #10 x 3/8" Phillips screw provided (see Figure 25).
- 4. Insert other rod into front hole on right side of firebox and fasten using remaining Phillips screw.

### TECHNICAL SERVICE

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).

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

### 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 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 firebox
- how firebox 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

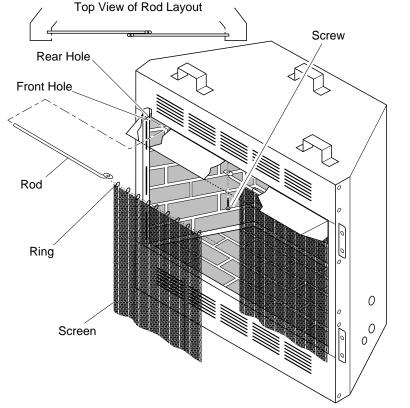
Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA International's Parts Department at 1-800-972-7879 for referral information.

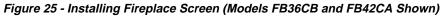
 $When \ calling \ DESA \ International, have \ ready$ 

- model number of your firebox
- the replacement part number

*Note:* The firebox identification label (including model number, serial number, clearances, etc.) is located behind the left side firebrick panel. See Figure 18, page 12.

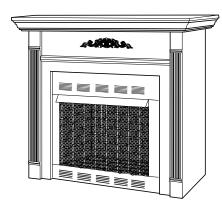
Figure 24 - Screw and Hood Placement for Hood





### ACCESSORIES

Purchase these firebox 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.

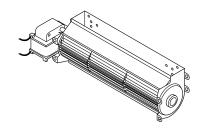


#### CABINET MANTEL ACCESSORY WITH FIREBOX PERIMETER BRASS TRIM GM103U Series - Unfinished Birch Veneer (36" Models)

Dimensions (WxHxD): 63" x 51" x 24 1/2"

GM105U Series - Unfinished Birch Veneer (42" Models)

Dimensions (WxHxD): 69" x 51" x 24 1/2"



#### BLOWER ACCESSORY -GA3700

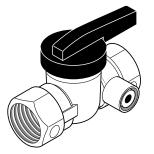
Use with Models FB36CB, NFLB36C, or FB42CA only. The variable blower allows you to select the desired speed. The blower circulates heated air from the fireplace into the room.

#### BRASS TRIM ACCESSORY (Not Shown) GA6091 (36" Models) GA6092 (42" Models)

Optional with built-in installation. Provides a finished appearance covering rough and/ or unfinished mantel or wall opening edges.

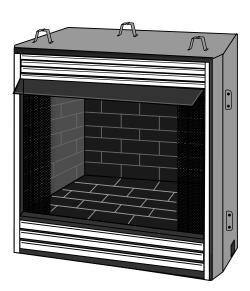
#### BRASS HOOD ACCESSORY (Not Shown) GA6097 (36" Models) GA6098 (42" Models)

Decorative polished brass hood enhances the appearance of the firebox.



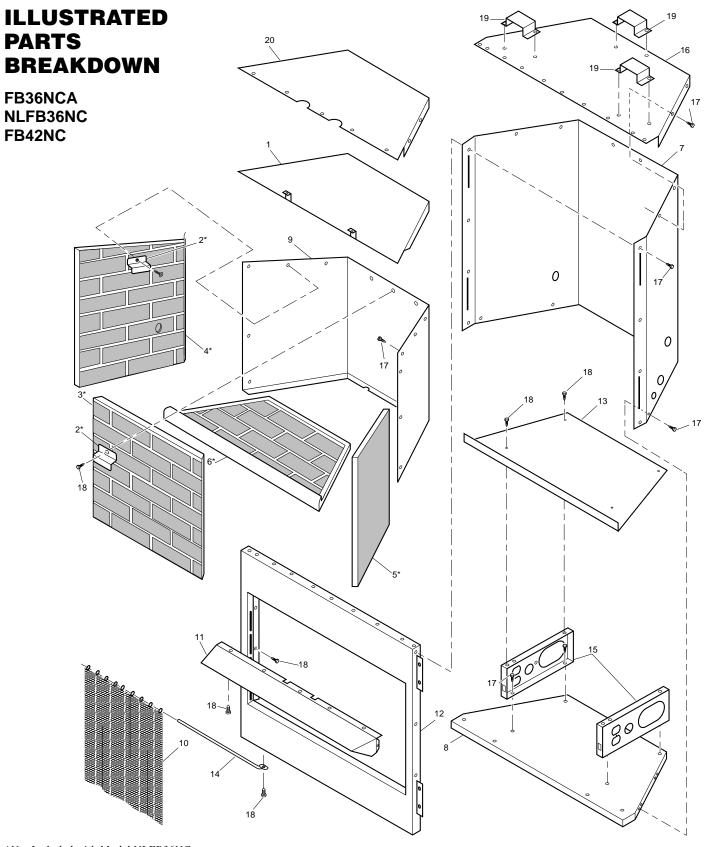
#### MANUAL SHUTOFF VALVE -GA5010

Manual shutoff valve with 1/8" NPT tap.



BRASS ACCENT TRIM ACCESSORY GA6088 (36" MODELS) GA6089 (42" Models)

Seven piece magnetic polished brass trim enhances the appearance of the firebox.



\*Not Included with Model NLFB36NC

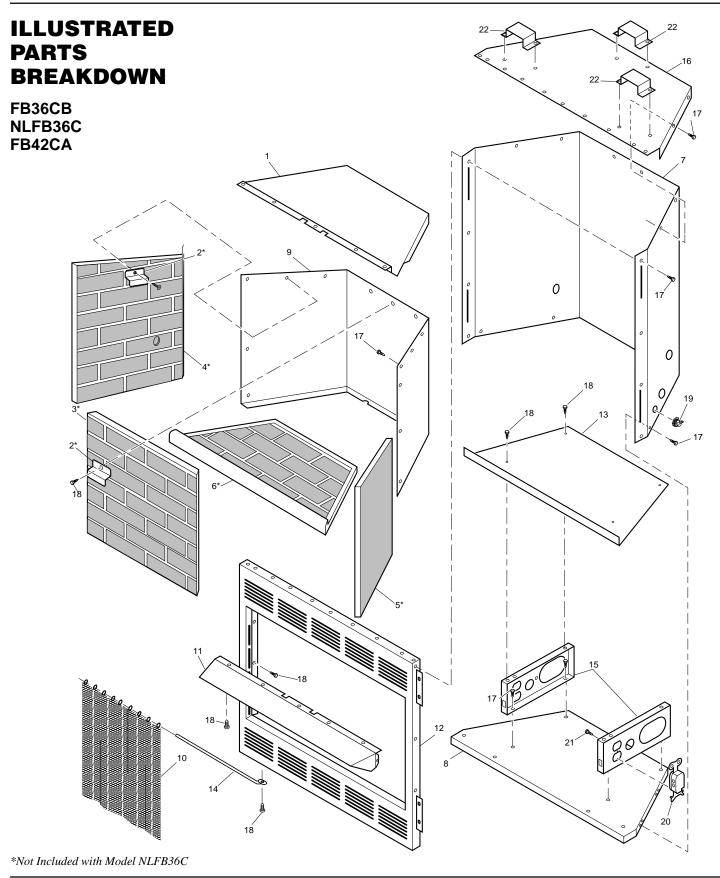
### PARTS LIST

This list contains replaceable parts used in your firebox. When ordering parts, follow the instructions listed under *Replacement Parts* on page 13 of this manual.

#### FB36NCA NLFB36NC FB42NC

KEY	PART NUMBER				
NO.	FB36NCA	NLFB36NC	FB42NC	DESCRIPTION	QTY.
1	103437-01	103437-01	103437-02	Firebox Top	1
2	103608-01	*	103608-01	Firebrick Retainer	3
3	105164-01	*	105164-02	Rear Firebrick	1
4	105165-01	*	105165-01	Left Side Firebrick	1
5	105166-01	*	105166-01	Right Side Firebrick	1
6	105167-01	*	105167-02	Bottom Firebrick	1
7	103796-01	103796-01	103796-02	Outer Casing	1
8	103440-01	103440-01	103440-02	Outer Casing Bottom	1
9	103797-01	103797-01	103797-02	Firebox Wrapper	1
10	103297-02	103297-02	103297-02	Screen Assembly	2
11	103444-01CK	103444-01CK	103444-02CK	Hood	1
12	103442-02CK	103442-02CK	103442-04CK	Front Assembly	1
13	103445-01	103445-01	103445-02	Firebox Bottom	1
14	103452-01	103452-01	103452-02	Screen Rod	2
15	101348-01	101348-01	101348-01	Firebox Supports	2
16	103438-01	103438-01	103438-02	Outer Casing Top	1
17	M11084-26	M11084-26		Hex Head Screw, #10-16	57
			M11084-26	Hex Head Screw, #10-16	60
18	098304-01		098304-01	Phillips Pan Head Screw	22
		098304-01		Phillips Pan Head Screw	19
19	098194-02	098194-02	098194-02	Standoff Bracket	3
20	103436-01	103436-01	103436-02	Deflector	1

\*Not Included with Model NLFB36NC



### **PARTS LIST**

This list contains replaceable parts used in your firebox. When ordering parts, follow the instructions listed under *Replacement Parts* on page 13 of this manual.

#### FB36CB NLFB36C FB42CA

KEY	PART NUMBER				
NO.	FB36CB	NLFB36C	FB42CA	DESCRIPTION	QTY.
1	103437-03	103437-03	103437-04	Firebox Top	1
2	103608-01	*	103608-01	Firebrick Retainer	3
3	105164-01	*	105164-02	Rear Firebrick	1
4	105165-01	*	105165-01	Left Side Firebrick	1
5	105166-01	*	105166-01	Right Side Firebrick	1
6	105167-01	*	105167-02	Bottom Firebrick	1
7	103796-01	103796-01	103796-02	Outer Casing	1
8	103440-01	103440-01	103440-02	Outer Casing Bottom	1
9	103797-01	103797-01	103797-02	Firebox Wrapper	1
10	103297-02	103297-02	103297-02	Screen Assembly	2
11	103444-01CK	103444-01CK	103444-02CK	Hood	1
12	103442-01CK	103442-01CK	103442-03CK	Front Assembly	1
13	103445-01	103445-01	103445-02	Firebox Bottom	1
14	103452-01	103452-01	103452-02	Screen Rod	2
15	101348-01	101348-01	101348-01	Firebox Supports	2
16	103438-01	103438-01	103438-02	Outer Casing Top	1
17	M11084-26	M11084-26		Hex Head Screw, #10-16	50
			M11084-26	Hex Head Screw, #10-16	53
18	098304-01		098304-01	Phillips Pan Head Screw	22
		098304-01		Phillips Pan Head Screw	19
19	103771-01	103771-01	103771-01	Strain Relief Fitting	1
20	103769-01	103769-01	103769-01	Duplex Outlet	1
21	M12461-2	M12461-2	M12461-2	Outlet Mounting Screw	1
22	098194-02	098194-02	098194-02	Stand-off Bracket	8

\*Not Included with Model NLFB36C

### 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 International 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 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. As with all concrete liners, this liner may develop slight cracks when exposed to heat. This cracking is considered normal. 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 INTERNATIONAL'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA INTERNA-TIONAL 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:





NOT A UPC

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