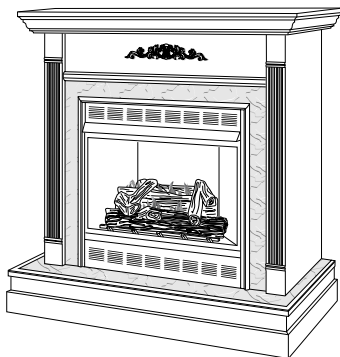


# **DESA™**

## **HEATING PRODUCTS**

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



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

**CGEFP33PR, CGEFP33NR, EFP33PR, AND EFP33NR  
GAS FIREPLACE WITH TOTAL CONTROL SYSTEM (TCS)**

**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.

Save this manual for future reference.  
For more information, visit [www.desatech.com](http://www.desatech.com)

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

**WARNING:** This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to *Air for Combustion and Ventilation* section on page 5 of this manual.

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

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

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

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

**⚠ DANGER:** Carbon monoxide poisoning may lead to death!

**Carbon Monoxide Poisoning:** Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, or nausea. If you have these signs, the fireplace may not be working properly. **Get fresh air at once!** Have fireplace serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

**Natural and Propane/LP Gas:** Natural and Propane/LP gases are odorless. An odor-making agent is added to these gases. The odor helps you detect a gas leak. However, the odor added to the gas can fade. Gas may be present even though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this fireplace.

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

**⚠ WARNING:** Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns. Ceiling fans can create drafts that alter burner flame patterns. Altered burner patterns can cause sooting.

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

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

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

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

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

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

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

## SAFETY INFORMATION

### Continued

1. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.
2. Do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors (propane/LP units only).
3. If you smell gas
  - shut off gas supply
  - do not try to light any appliance
  - do not touch any electrical switch; do not use any phone in your building
  - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
  - if you cannot reach your gas supplier, call the fire department
4. This fireplace shall not be installed in a bedroom or bathroom.
5. Do not use this fireplace as a wood-burning fireplace. Use only the logs provided with the fireplace.
6. Do not add extra logs or ornaments such as pine cones, vermiculite, or rock wool. Using these added items can cause sooting. Do not add lava rock around base. Rock and debris could fall into the control area of fireplace.
7. To prevent the creation of soot, follow the instructions in *Cleaning and Maintenance*, page 29.
8. Before using furniture polish, wax, carpet cleaner, or similar products, turn heater off. If heated, the vapors from these products may create a white powder residue within burner box or on adjacent walls or furniture.
9. This fireplace needs fresh air ventilation to run properly. This fireplace has an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS shuts down the fireplace if not enough fresh air is available. See *Air for Combustion and Ventilation*, pages 5 through 7. If fireplace keeps shutting off, see *Troubleshooting*, pages 30 through 33.
10. Do not run fireplace
  - where flammable liquids or vapors are used or stored
  - under dusty conditions
11. Do not use this fireplace to cook food or burn paper or other objects.
12. Do not use fireplace if any part has been exposed to or under water. Immediately call a qualified service technician to inspect the fireplace and to replace any part of the control system and any gas control which has been under water.
13. Do not operate fireplace if any log is broken. Do not operate fireplace if a log is chipped (dime-sized or larger).
14. Turn fireplace off and let cool before servicing. Only a qualified service person should service and repair fireplace.
15. Operating fireplace above elevations of 4,500 feet could cause pilot outage.
16. To prevent performance problems with propane/LP units, do not use propane/LP fuel tanks of less than 100 lb. capacity (propane/LP units only).
17. Provide adequate clearances around air openings.

## PRODUCT IDENTIFICATION

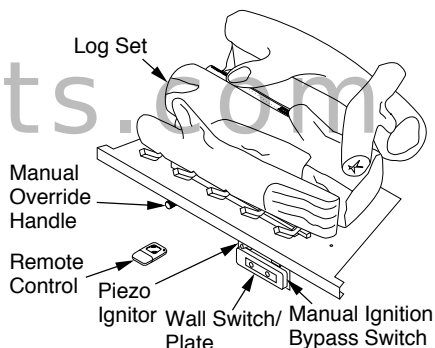


Figure 1 - Fireplace Floor Assembly (EFP33PR Shown)

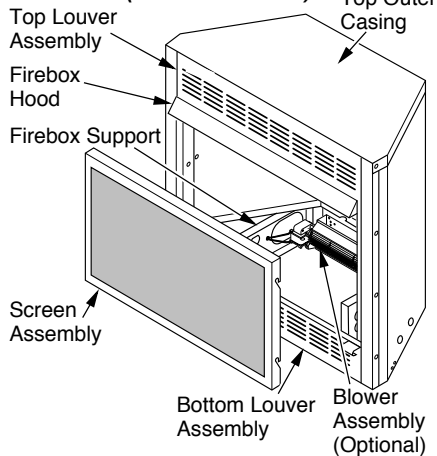


Figure 2 - Fireplace (EFP33PR Shown)

## LOCAL CODES

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

\*Available from:


American National Standards Institute, Inc.

1430 Broadway  
New York, NY 10018

National Fire Protection Association, Inc.

Batterymarch Park  
Quincy, MA 02269

## UNPACKING

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

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

## PRODUCT FEATURES

### OPERATION

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

### SAFETY DEVICE

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

## PIEZO IGNITION SYSTEM

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

## WIRELESS REMOTE CONTROL

This fireplace features an infrared wireless remote control. This control system can be used to automatically light the pilot and adjust the burner flame height at the push of a button.


## WIRED WALL-MOUNTED REMOTE CONTROL

This fireplace features a two-button wall switch and wall plate with glowing LED's. The wall switch performs the same functions as the wireless handheld remote control with the added feature of LED's for visual feedback of operation and status.

## OPTIONAL BLOWER ASSEMBLY ACCESSORY

This fireplace accepts an optional blower assembly (not included). The GA3650T/GA3700T Series blower operates thermostatically and features a variable speed control. The GA3700/GA3750 Series operates manually and also features a variable speed control. The blower circulates heated air from the fireplace into the room. Use of blower is optional. See *Accessories*, page 41.

## AIR FOR COMBUSTION AND VENTILATION

 **WARNING: This fireplace 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.

# AIR FOR COMBUSTION AND VENTILATION

## Continued

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

## PROVIDING ADEQUATE VENTILATION

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

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

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

The information on pages 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 ( $6 \times 10^{-11}$  kg per pa-sec-m<sup>2</sup>) 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 these three criteria, 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 Fireplace Location*, column 2.

## Confined and Unconfined Space

The *National Fuel Gas Code, ANSI Z223.1/NFPA 54* defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour (4.8 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.

## DETERMINING FRESH-AIR FLOW FOR FIREPLACE LOCATION

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

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

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

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

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

*Example:* Space size 20 ft. (length) x 18 ft. (width) x 8 ft. (ceiling height) = 2880 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:* 2880 cu. ft. (volume of space) x 20 = 57,600 (maximum Btu/Hr the space can support)

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

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

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

# AIR FOR COMBUSTION AND VENTILATION

## Continued

### Example:

|                     |          |        |
|---------------------|----------|--------|
| Gas water heater    | 40,000   | Btu/Hr |
| Vent-free fireplace | + 33,000 | Btu/Hr |
| Total               | = 73,000 | 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:** 57,600 Btu/Hr (maximum the space can support)

73,000 Btu/Hr (actual amount of Btu/Hr used)

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

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

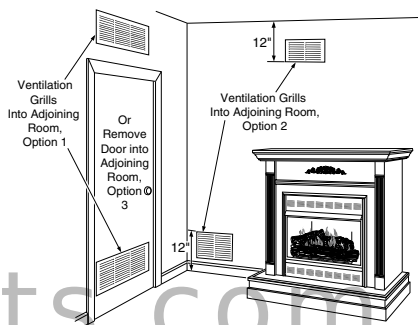
If the actual Btu/Hr used is less than the maximum Btu/Hr the space can support, the space is an unconfined space. You will need no additional fresh air ventilation.

**⚠ WARNING:** If the area in which the fireplace may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1/NFPA 54 Section 5.3* or applicable local codes.

## VENTILATION AIR

### Ventilation Air From Inside Building

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

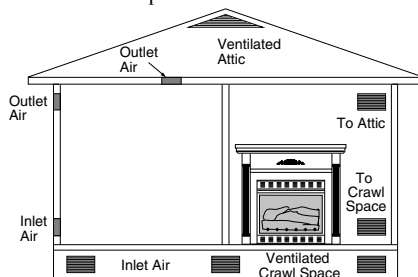


**Figure 3 - Ventilation Air from Inside Building (EFP33PR Shown)**

### Ventilation Air From Outdoors

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

**IMPORTANT:** Do not provide openings for inlet or outlet air into attic if attic has a thermostat-controlled power vent. Heated air entering the attic will activate the power vent.



**Figure 4 - Ventilation Air from Outdoors (EFP33PR Shown)**

## INSTALLATION

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

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

**⚠ WARNING:** Never install the fireplace

- in a bedroom or bathroom
- in a recreational vehicle
- where curtains, furniture, clothing, or other flammable objects are less than 42 inches from the front, top, or sides of the fireplace
- in high traffic areas
- in windy or drafty areas

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

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

Use the dimensions shown for rough openings to create the easiest installation (see *Built-In Fireplace Installation*, pages 21 and 22).

**IMPORTANT:** Vent-free heaters add moisture to the air. Although this is beneficial, installing fireplace in rooms without enough ventilation air may cause mildew to form from too much moisture. See *Air for Combustion and Ventilation*, pages 5 through 7.

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

### CHECK GAS TYPE

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

### ELECTRICAL HOOKUP

This fireplace normally operates under 120 VAC/60 Hz line voltage. The electrical cord supplied with your fireplace is five feet in length. You must locate fireplace within reach of a 120 volt grounded electrical outlet. If not, you must install an electrical outlet within reach of the fireplace power cord. The GA3555 outlet accessory may be used for built-in applications.

### 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 5, page 9.

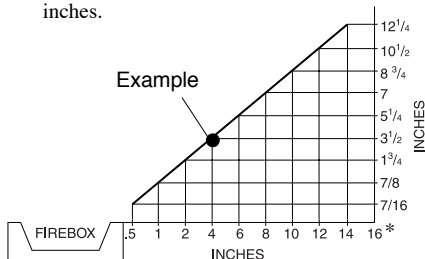
Example: The face of a mantel, bookshelf, etc. is made of combustible material and protrudes 3 1/2" from the wall. This combustible material must be 4" from the side of the fireplace cabinet (see Figure 5, page 9).



# INSTALLATION

## Continued

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



\*Minimum 16 inches from Side Wall

**Figure 5 - Minimum Clearance for Combustible to Wall**

## INSTALLATION SEQUENCE

After unpacking fireplace (see *Unpacking*, page 5), we suggest that you install your fireplace system in the following sequence:

1. Removal of fireplace floor assembly (required)
2. Electrical connections for power cord (required)
3. Relocating wall switch (optional)
4. Installing blower accessory (optional)
5. Connecting fireplace to gas supply (required)
6. Checking gas connections (required)
7. Firebox installation, conventional or built-in (required)
8. Installing brass perimeter trim (optional)
9. Installing fireplace hood (required)
10. Installing logs (required)
11. Installing fireplace screen (required)

Use the following instructions to complete each step.

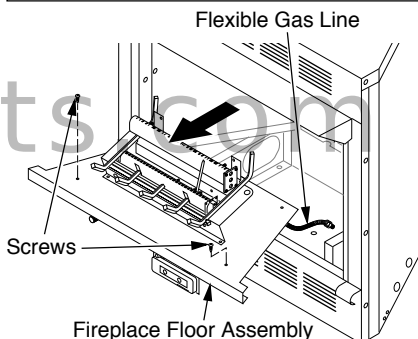
## REMOVING FIREPLACE SCREEN AND FLOOR ASSEMBLY

**NOTICE: Shutoff gas supply and disconnect heater from gas supply if installing blower into previously installed fireplace. Contact a qualified service person to do this.**

1. Remove fireplace screen. Remove two screws that hold fireplace screen in place for shipping. These screws are located near top of screen. Discard screws. Lift fireplace screen up and pull out to remove.
2. If logs are installed, carefully remove the logs and set aside, noting the properly mounted location of each.
3. Remove screws that attach fireplace floor assembly to fireplace. Open lower louver door. Carefully lift up fireplace floor assembly and remove from fireplace, taking care to pull flexible gas line through the access holes (see Figure 6). Note: Be careful of all wires on underside of log base.



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



**Figure 6 - Removing Fireplace Floor Assembly**

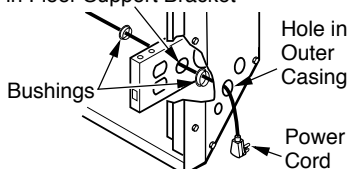
## ELECTRICAL CONNECTIONS FOR POWER CORD

This fireplace operates on 120 VAC, 60 Hz power. An electrical power cord is supplied with this unit.

### For Mantel Installation

1. Determine from which side of the fireplace the power cord will exit. Locate the 1.5" diameter hole near the center of floor support bracket on appropriate side of lower cavity (see Figure 7).

Hole in Floor Support Bracket



**Figure 7 - Routing Power Cord**

## INSTALLATION

### Continued

2. Locate power cord. Remove wire tie or tape holding plug end of power cord.
3. Power cord has 2 plastic hole bushings threaded onto it. Route cord's 3-prong plug through the 1.5" diameter hole in appropriate floor support bracket.
4. Push first plastic bushing completely through hole. Squeeze bushing as needed to do this.
5. Install the second plastic bushing into the hole in the floor support bracket by snapping into place.
6. Route the 3-prong plug through the 1.5" hole in fireplace outer casing.
7. Install the first plastic bushing into this hole by snapping into place.
8. After you have connected to gas supply and checked your gas connections (see pages 17 through 19), plug power cord into any convenient 3-prong grounded wall receptacle near fireplace.

### For Recessed Installation

If an outlet is not installed in fireplace, install model GA3555 - Outlet Kit with Cover. This kit will supply a convenient 3-prong grounded electrical outlet for power. Refer to installation manual provided with this optional accessory for instructions on wiring. **Note:** A qualified installer must make all electrical connections.

### RELOCATING WALL SWITCH

**Note:** The decorative wall switch plate supplied is white. The wall switch plate may be painted to match your decor.

The push-button switch and decorative wall plate assembly supplied with your fireplace is pre-mounted at the factory in the lower cavity of the fireplace. You may relocate this switch/plate assembly to a more convenient location such as the side of your mantel or directly onto the wall near the fireplace. To mount the wall switch/plate assembly, you must first cut openings in the mantel or wall where the switch will be located.

**Note:** If you choose to relocate the wall switch, do so before final installation into a mantel or recessing into a wall. If you are installing an optional blower accessory, install it at the same time you relocate the wall switch.

**⚠ CAUTION:** The wall switch must never be mounted directly above the fireplace where heat may damage it. If you relocate wall switch from lower fireplace cavity, it must be mounted either on side wall of mantel or on wall to side of fireplace.

### For Recessed Installation

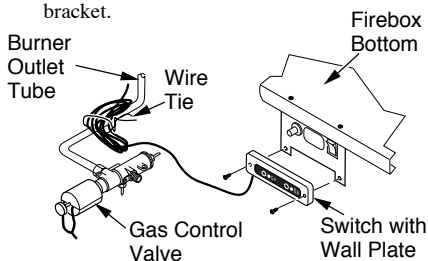
If fireplace is to be recessed into a wall (see *Built-In Fireplace Installation*, pages 21 and 22), we recommend mounting wall switch to left side of fireplace. The wall switch should be mounted approximately 12" from left edge of fireplace, and less than 60" from the floor. **IMPORTANT:** Do not locate wall switch directly in front of wall stud - there must be room behind wall board for wires from switch. If you choose to locate wall switch to right side of fireplace, the length of the cord restricts you to less than 6" from right edge of fireplace and less than 48" from floor.

### For Mantel Installation

If fireplace is to be installed into a mantel, (see *Conventional Fireplace Installation*, page 20) the wall switch may be mounted on either side of the mantel, facing to the side. Do not locate wall switch anywhere on the front face of the mantel.

**⚠ CAUTION:** Be careful of gas lines and wiring when moving floor.

1. Determine the new location for the wall switch. The wires attached to switch are six feet long.
2. Remove 2 screws securing plastic wall plate to bracket in fireplace lower cavity. Save screws.
3. Remove wire tie holding coiled wire attached to wall switch (see Figure 8).
4. Remove wall switch/plate assembly from bracket.



**Figure 8 - Relocating Switch and Wall Plate**

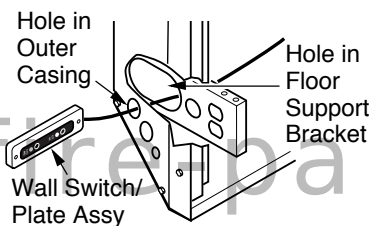
# INSTALLATION

## Continued

5. Carefully pass wall plate and cord through large elongated hole in rear of either left or right floor support bracket, depending on desired location of switch. Pass wall plate and cord through 1.5" diameter hole in side of fireplace outer casing (see Figure 9).
6. Pull wall plate and cord from fireplace making sure wall switch/plate assembly will reach desired mounting location without straining cord assembly.

If you are mounting wall switch to a wall, continue reading. If you are mounting your wall switch to the side of the mantel, see page 12.

**⚠ CAUTION: Do not apply excessive pull on cord.**

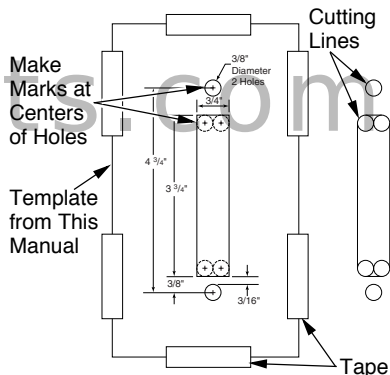


**Figure 9 - Routing Wall Switch/Plate Through Fireplace for Relocation**

### Mounting Wall Switch to Wall for Recessed Fireplace

7. Create three openings in wall according to *Template 1*, page 39. This is best done by making a pattern to work with on your wall. Carefully cut page 41/42 from manual and tape paper template vertically onto wall at preferred location. Pierce the paper at the centers of the 2 holes with a nail or sharp pencil, leaving a mark on the wall. Do the same at centers of the four circles near the corners of the rectangle.
8. Remove paper template from wall.
9. Drill 3/8" holes at each mark.
10. Using a straight edge and pencil, connect the outer edges of the 4 holes for the rectangle (see Figure 10). This will give you cutting lines for the rectangle you will cut in the wall.
11. Using a keyhole saw, hack saw blade, drill, file, or other suitable tool, carefully cut out the rectangular opening. **Note:** The corners of the rectangle may be round. **IMPORTANT:** Do not exceed the size of the rectangle on template.

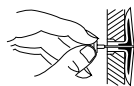
12. From inside the recessed opening for the fireplace, carefully pass switch/plate assembly through the rectangular opening to the outside of the wall.
13. Using wall anchors supplied in hardware package, fold wall anchor as shown in Figure 11.
14. Insert wall anchor, wings first, into hole. Tap anchor flush to wall.
15. For thin walls (1/2" or less), insert red key into wall anchor. Push red key to "pop" open anchor wings. See Figure 12. **IMPORTANT:** Do not hammer key! For thick walls (over 1/2" thick), do not pop open wings.
16. Position switch/plate assembly vertically over wall openings with decal lettering upright (see Figure 13).
17. Insert mounting screws, removed in step 2 of *Relocating Wall Switch* on page 10, through holes in wall plate and into wall anchors.
18. Tighten screws until wall plate is firmly attached to wall. Do not overtighten.



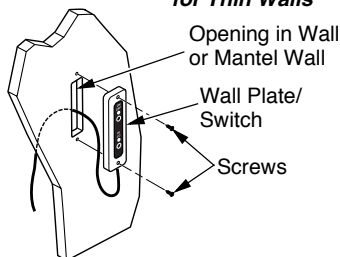
**Figure 10 - Using Template for Wall Switch Installation**



**Figure 11 - Folding Wall Anchor**



**Figure 12 - Popping Open Anchor Wings for Thin Walls**



**Figure 13 - Securing Wall Switch**

## INSTALLATION

### Continued

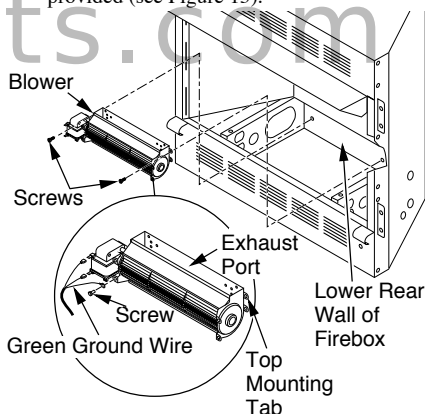
#### Mounting Wall Switch to Side of Mantel

7. Create three openings in the mantel wall according to *Template 2*, page 39. This is best done by making a pattern to work with on the mantel. Carefully cut page 41/42 from manual and tape paper template vertically onto mantel wall at preferred location. Pierce the paper at the centers of the 2 holes with a nail or sharp pencil, leaving a mark on the wall. Do the same at centers of the four circles near the corners of the rectangle.
8. Remove paper template from mantel wall.
9. Drill 1/8" pilot holes at each mark for top and bottom screw holes. Drill 3/8" holes at each mark for centers of four circles near corners of rectangle.
10. Using a straight edge and pencil, connect the outer edges of the 4 holes for the rectangle (see Figure 10, page 11). This will give you cutting lines for the rectangle you will cut in the mantel wall.
11. Using a keyhole saw, hack saw blade, drill, file, or other suitable tool, carefully cut out the rectangular opening. **Note:** The corners of the rectangle may be round. **IMPORTANT:** Do not exceed the size of the rectangle on template.
12. Carefully pass switch/plate assembly through rectangular opening from inside mantel (see Figure 13, page 11).
13. Position switch/plate assembly vertically over opening with decal lettering upright. Make sure wires freely pass through wall without binding. Align holes in wall plate with 1/8" pilot holes in mantel wall.
14. Drive mounting screws, removed in step 2 of *Relocating Wall Switch* on page 10, through wall plate holes and into pilot holes in mantel wall.
15. Tighten screws until wall plate is firmly attached to mantel. Do not overtighten.

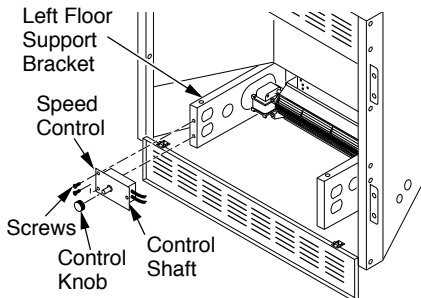
#### INSTALLING VARIABLE SPEED BLOWER ACCESSORY

**NOTICE:** Shut off gas supply and disconnect heater from gas supply if installing blower into previously installed fireplace. Contact a qualified service person to do this.

1. If fireplace screen and floor are still installed, see *Removing Fireplace Screen and Floor Assembly*, page 9.
2. Attach the power cord to the blower motor by firmly pushing the two female terminals at the end of the power cord onto the two spade terminals on the blower motor.
3. Attach green ground wire from power cord to blower housing using screw provided (see Figure 14). Tighten screws securely.
4. Place the blower against lower rear wall of 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 14). Using 2 screws provided, mount blower and tighten screws securely.
5. 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.
6. Place control knob provided on plastic control shaft of speed control.
7. Mount the speed control on the front leg of the left floor support bracket using 2 screws provided (see Figure 15).



**Figure 14 - Mounting Blower to Firebox**



**Figure 15 - Attaching Speed Control to Firebox**

## INSTALLATION

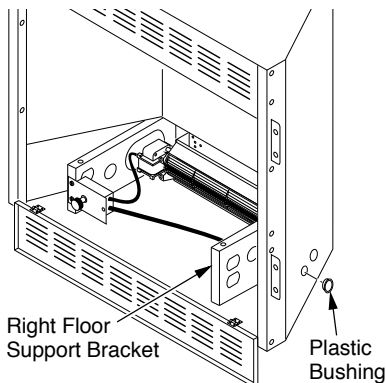
### Continued

8. Plug in blower power cord.
  - a. **If your fireplace system is installed as a free-standing unit with an accessory mantel**, determine whether the power cord will exit the left side or the right side of the firebox. Install 1 plastic bushing provided into the 1.5" hole in the floor support bracket on the exit side (see Figure 16). Install the second plastic bushing provided into the 1.5" hole in the outer casing through which the power cord will exit. Route power cord through both plastic bushings and plug the power cord into a properly grounded 3-prong wall receptacle near the firebox.
  - b. **If your fireplace system installation is recessed and if an outlet is not installed in your fireplace**, you must install the GA3555 Outlet kit with cover in your fireplace which will supply a convenient 3-prong grounded electrical outlet for your blower. Refer to the installation manual provided with the model GA3555 accessory for instructions on wiring the duplex outlet.

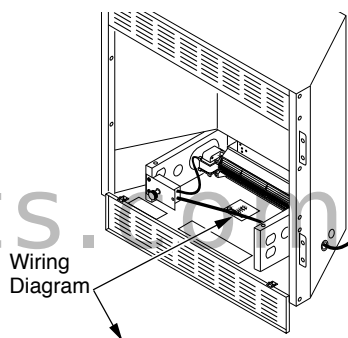
**Note:** A qualified installer must make all electrical connections.
9. Check to make sure that all electrical cords are completely clear of the blower wheel and that there are no other foreign objects in blower wheel. Turn blower on and check for operation. Turn blower off by rotating knob fully counterclockwise before continuing.

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

10. Peel off backing paper and stick supplied wiring diagram decal near center of firebox bottom (Figure 17).
  11. If gas connections have been made and checked, replace fireplace floor assembly. Feed flexible gas supply line into fireplace base area while replacing fireplace floor assembly. Make sure the entire flexible gas line is in fireplace base area.
- IMPORTANT:** Do not pick up fireplace floor assembly by burners. This could damage burners. Only handle base by grates. **Note:** Be careful of all wires and components on underside of floor assembly.



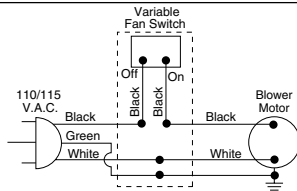
**Figure 16 - Installing Plastic Bushing for Power Cord**



**WARNING:** Never attempt to service heater while it is plugged in, operating, or hot. Burns and electrical shock could result. Only a qualified service person should service or repair heater.

If any of the original wire as supplied with the appliance must be replaced, it must be replaced with 105°C wire or it's equivalent.

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



120 Vac. 60 Hz. 78 Amps  
DESA Heating Products, Bowling Green, KY 101584-05

**Figure 17 - Location of Wiring Diagram Decal 3" from Blower**

## INSTALLATION

### Continued

12. Reattach fireplace floor assembly with screws removed in step 3 of *Removing Fireplace Screen and Floor Assembly*, page 9. **Note:** Discard the remaining hardware items. After assembly, make sure all wires are completely clear of blower wheel.
13. Install logs (see *Installing Logs*, pages 23 through 25) and fireplace screen (see *Installing Screen*, page 25).

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

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

### Operating the Blower

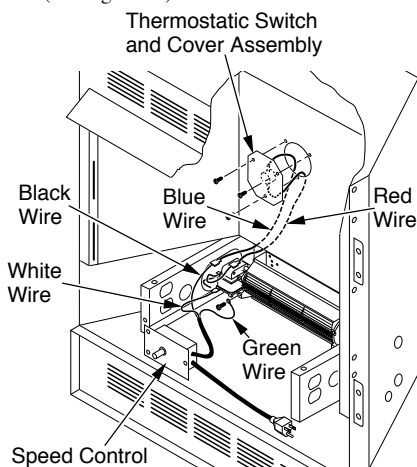
Light your gas appliance with the blower off. After about 15 minutes, turn the blower on to deliver heated air at the top louvers. The blower features a variable control which allows you to select the speed you desire. **Note:** Periodically check the louvers of the firebox and remove any dust, dirt, or other obstructions.

### INSTALLING THERMOSTATIC BLOWER ACCESSORY

**NOTICE:** Shut off gas supply and disconnect heater from gas supply if installing blower in previously installed fireplace. Contact a qualified service person to do this.

1. If fireplace screen and floor are still installed, see *Removing Fireplace Screen and Floor Assembly*, page 9.
2. Using screw provided, attach green ground wire from speed control cord to blower housing. Tighten screw securely (see Figure 18).

3. Place the blower against lower rear wall of 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 19, page 15). Using two #8 screws provided, mount blower and tighten screws firmly.
4. Remove the three screws (do not discard) and cover plate from center of firebox wrapper rear wall. Discard this cover plate (see Figure 18).
5. Mount the supplied thermostatic switch and cover assembly into firebox wrapper wall. Do this by feeding terminal ends of wire harness into the hole. Allow wires to fall to bottom of firebox cavity (see Figure 18).
6. Using three screws from step 7, attach switch and cover assembly to firebox wrapper rear wall. Tighten screws firmly (see Figure 18).
7. Firmly attach red wire from the thermostatic switch and cover assembly to either of the terminals on the blower motor (see Figure 18).
8. Firmly attach black wire from speed control cord to blue wire from thermostatic switch and cover assembly (see Figure 18).
9. Firmly attach white wire from speed control cord to remaining terminal on blower motor (see Figure 18).



**Figure 18 - Installing Switch and Cover Assembly, and Speed Control**

## INSTALLATION

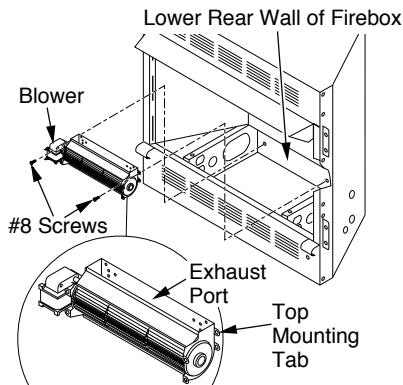
### Continued

10. Place control knob provided on plastic control shaft of speed control (see Figure 20).
11. Mount the speed control onto the front leg of the left floor support bracket using 2 screws provided (see Figure 20).

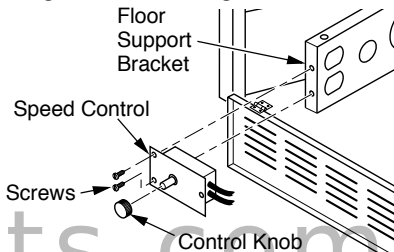
**⚠ WARNING: Failure to connect all wires properly as indicated may cause electrical short circuit or personal injury. A qualified electrician should check that all connections are made properly.**

12. Plug in blower power cord.
  - a. **If your firebox is installed as a freestanding unit with an accessory mantel**, determine whether the power cord will exit the left side or the right side of the firebox. Install one plastic bushing provided into the 1 1/2" hole in the floor support on the exit side. Install the second bushing provided into the 1 1/2" hole in the outer casing through which the power cord will exit (see Figures 21 and 22). Route power cord through plastic bushings and plug the power cord into a properly grounded three-prong wall receptacle near the firebox.
  - b. **If your fireplace system installation is recessed and if an outlet is not installed in your fireplace**, you must install the GA3555 Outlet kit with cover in your fireplace which will supply a convenient 3-prong grounded electrical outlet for your blower. Refer to the installation manual provided with the model GA3555 accessory for instructions on wiring the duplex outlet.
- Note:* A qualified installer must make all electrical connections.
13. Check to make sure that the power cord and all wires are completely clear of the blower wheel and that there are no other foreign objects in blower wheel.

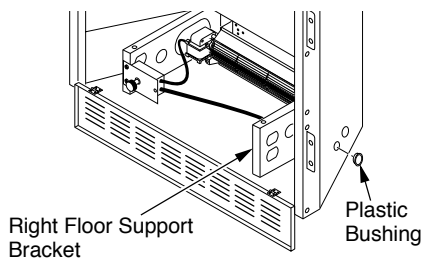
**⚠ CAUTION: Never touch the blower wheel while in operation.**



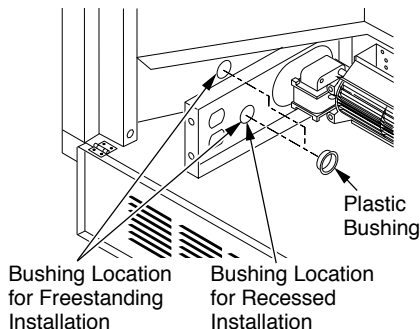
**Figure 19 - Mounting Blower to Firebox**



**Figure 20 - Attaching Speed Control**



**Figure 21 - Installing Plastic Bushing for Power Cord (Right Side Exit Shown)**



**Figure 22 - Installing Bushings (Left Side Exit shown)**

## INSTALLATION

### Continued

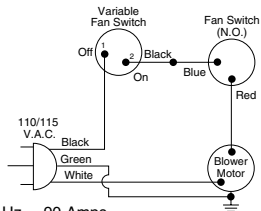
14. Peel off backing paper and stick supplied wiring diagram decal near center of firebox bottom (see Figure 23).
15. If gas connections have been made and checked, replace fireplace floor assembly in fireplace. Feed flexible gas supply line into fireplace base area while replacing fireplace floor assembly. Make sure the entire flexible gas line is in fireplace base area. **IMPORTANT:** Do not pick up fireplace floor assembly by burners. This could damage burners. Only handle base by grates. **Note:** Be careful of all wires and components on underside of floor assembly.
16. Reattach fireplace floor assembly with screws removed in step 3 of *Removing Fireplace Screen and Floor Assembly*, page 9. **Note:** Discard the remaining hardware items. After assembly, make sure all wires are completely clear of blower wheel.
17. Install logs (see *Installing Logs*, pages 23 through 25) and fireplace screen (see *Installing Screen*, page 25).

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

**WARNING:** Never attempt to service heater while it is plugged in, operating, or hot. Burns and electrical shock could result. Only a qualified service person should service or repair heater.

If any of the original wire as supplied with the appliance must be replaced, it must be replaced with 105°C wire or it's equivalent.

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



120 Vac. 60 Hz. 90 Amps

DESA Heating Products, Bowling Green, KY

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

If any of the original wire as supplied with the appliance must be replaced, it must be replaced with 105°C wire or it's equivalent.

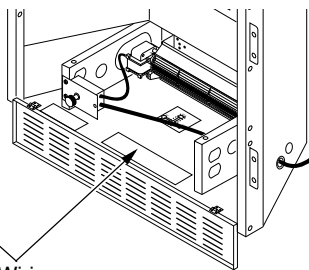
### Operating the Blower

After final installation of your fireplace, 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. In the OFF position, the blower will not operate. In the ON position, the blower will start when the thermostat senses a sufficient increase in firebox temperature (approximately 10 to 20 minutes depending on heat setting).

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

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

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



**Figure 23 - Location of Wiring Diagram Decal 3" from Blower (actual heater may vary from illustration)**



## INSTALLATION

### Continued

#### INSTALLING GAS PIPING TO FIREPLACE LOCATION

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

**⚠ WARNING:** For propane/LP units, never connect fireplace directly to propane/LP supply. This fireplace requires an external regulator (not supplied). Install the external regulator between the heater and propane/LP supply.

**⚠ WARNING:** For natural gas units, never connect fireplace to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

#### Installation Items Needed

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

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

\* A CSA design-certified equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the optional CSA design-certified equipment shutoff valve from your dealer. See *Accessories*, page 41.

For propane/LP connections only, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11

and 14 inches of water. If you do not reduce incoming gas pressure, heater regulator damage could occur. Install external regulator with the vent pointing down as shown in Figure 24. Pointing the vent down protects it from freezing rain or sleet.

**⚠ CAUTION:** Use only new, black iron or steel pipe. Internally-tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2" diameter or greater to allow proper gas volume to fireplace. If pipe is too small, undue loss of volume will occur.

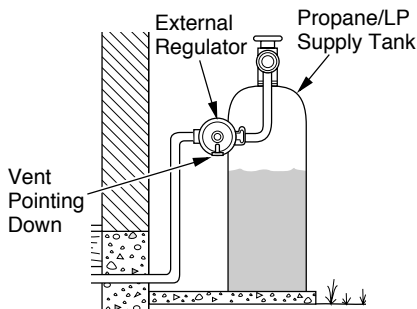
Installation must include an equipment shutoff valve, union, and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from fireplace (see Figure 24).

**IMPORTANT:** Install equipment shutoff valve in an accessible location. The equipment shutoff valve is for turning on or shutting off the gas to the appliance.

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

Apply pipe joint sealant lightly to male NPT threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged fireplace valves. Never use sealant on flare threads.

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

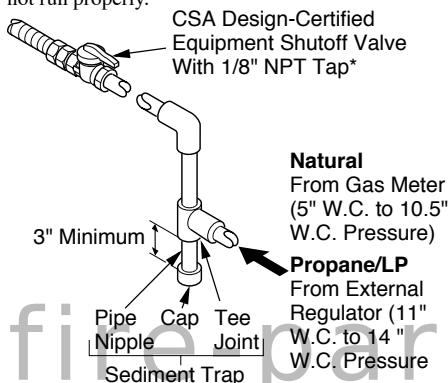


**Figure 24 - External Regulator with Vent Pointing Down**

## INSTALLATION

### Continued

We recommend that you install a sediment trap in supply line as shown in Figure 25. Locate sediment trap where it is within reach for cleaning. Install in piping system between fuel supply and fireplace. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into fireplace gas controls. If sediment trap is not installed or is installed wrong, fireplace may not run properly.



**Figure 25 - Gas Connection**

\* Purchase the optional CSA design-certified equipment shutoff valve from your dealer. See *Accessories*, page 41.

## CONNECTING FIREPLACE TO GAS SUPPLY

### Installation Items Needed

- 5/16" hex socket wrench or nut-driver
- Phillips screwdriver
- sealant (resistant to propane/LP gas, not provided)

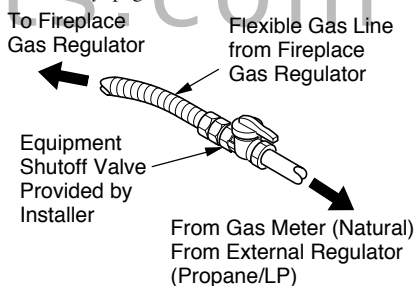
1. If fireplace screen and floor are still installed, see *Removing Fireplace Screen and Floor Assembly*, page 9.
2. Route gas line (provided by installer) from equipment shutoff valve to fireplace. Route flexible gas supply line through one of the access holes.

**NOTICE:** Most building codes do not permit concealed gas connections. A flexible gas line is provided to allow accessibility from the fireplace (see Figure 26). The flexible gas supply line connection to the equipment shutoff valve should be accessible.

3. Attach the flexible gas line to gas supply (see Figure 26). Check tightness of flexible gas line attached to gas regulator of fireplace (see Figure 26).
4. Check all gas connections for leaks. See *Checking Gas Connections*.

5. Replace fireplace floor assembly. Feed flexible gas line into fireplace base area while replacing fireplace floor assembly. Make sure the entire flexible gas line is in fireplace base area.

**Note:** Be careful of wires and components on underside of fireplace floor. Reattach fireplace floor assembly with screws removed in step 3 of *Removing Fireplace Screen and Floor Assembly*, page 9.



**Figure 26 - Attaching Gas Lines Together**

## CHECKING GAS CONNECTIONS

**WARNING:** Test all gas piping and connections, internal and external to unit, for leaks after installing or servicing. Correct all leaks at once.

**WARNING:** Never use an open flame to check for a leak. Apply a noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Correct all leaks at once.

# INSTALLATION

## Continued

**⚠ WARNING: For propane/LP units, make sure external regulator has been installed between propane/LP supply and heater. See guidelines under *Installing Gas Piping to Fireplace Location*, page 17.**

### Pressure Testing Gas Supply Piping System

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

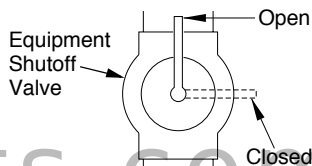
1. Disconnect appliance with its appliance main gas valve (control valve) and equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig will damage fireplace gas regulator.
2. Cap off open end of gas pipe where equipment shutoff valve was connected.
3. Pressurize supply piping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

#### Test Pressures Equal To or Less Than 1/2 PSIG (3.5 kPa)

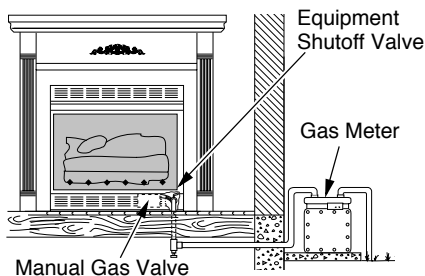
1. Close equipment shutoff valve (see Figure 27).
2. Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas or opening main gas valve located on or near gas meter for natural gas, or using compressed air.
3. Check all joints from gas meter for natural or propane/LP supply to equipment shutoff valve (see Figures 28 or 29). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
4. Correct all leaks at once.

### Pressure Testing Fireplace Gas Connections

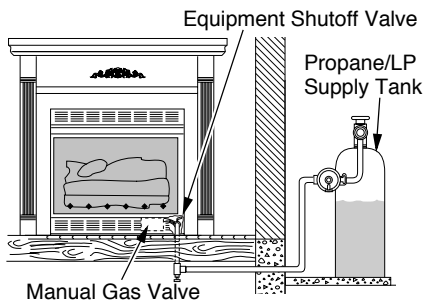
1. Open equipment shutoff valve (see Figure 27).
2. Open main gas valve located on or near gas meter for natural gas or open propane/LP supply tank valve.
3. Place manual ignition switch in the OFF position.
4. Check all joints from equipment shutoff valve to gas valve (see Figure 28 or 29). Apply non-corrosive leak detection fluid to all joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light fireplace (see *Operating Fireplace*, pages 26 through 28). Check all other internal joints for leaks.
7. Turn off fireplace (see *To Turn Off Gas to Appliance*, page 27 or 28).



**Figure 27 - Equipment Shutoff Valve**



**Figure 28 - Checking Gas Joints for Natural Gas Fireplace**



**Figure 29 - Checking Gas Joints for Propane/LP Gas Fireplace**

# INSTALLATION

## Continued

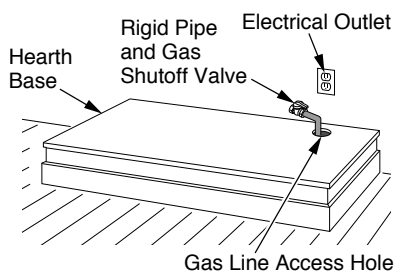
### CONVENTIONAL FIREPLACE INSTALLATION

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

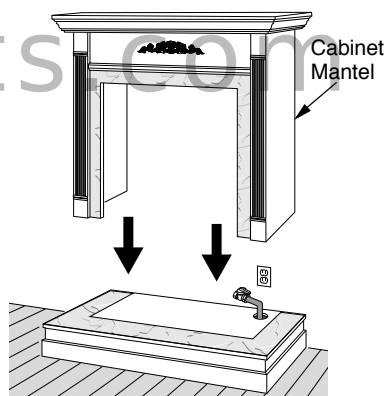
**Note:** The instructions below show installation using the cabinet mantel and hearth base accessories (see *Accessories*, page 41). The hearth base accessory shown is optional for this installation. You can install fireplace and cabinet mantel directly on the floor. The corner mantel accessory cannot be installed with the hearth bases. You must install corner mantel directly on the floor.

1. Assemble cabinet mantel, hearth base, and trim accessories. Assembly instructions are included with each accessory.
2. When installing blower, install a properly grounded, 120 volt three-prong electrical outlet at fireplace location if an outlet is not there. If possible, locate outlet so cabinet mantel will cover it when installed (see Figure 30).
3. If not already completed, install gas piping to fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the equipment shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Installing Gas Piping to Fireplace Location*, page 17.
4. Place hearth base accessory against wall at installation location. Cut an access hole in hearth top to run flexible gas line to fireplace (see Figure 30). 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 31). Make sure mantel is flush against wall.
7. Break off nailing flanges (see Figure 32) with hammer or pliers.
8. Place cardboard or other protective material on top of hearth base. Carefully set fireplace on protective material, with back of fireplace inside mantel opening.
9. Attach flexible gas line to fireplace gas regulator. See *Connecting Fireplace to Gas Supply*, page 18.
10. Route electrical cord(s) through access holes in either side of fireplace with bushing. Plug electrical cord(s) into electrical outlet.

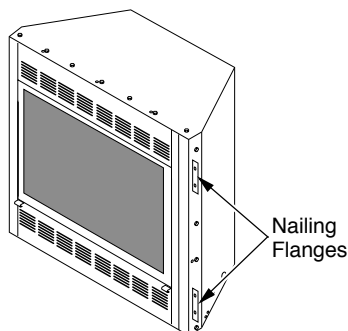
11. Carefully insert fireplace into cabinet mantel (see Figure 33, page 21). Be careful not to scratch or damage hearth base, cabinet mantel, or any laminate trim on hearth base. Remove protective material from top of hearth base and from front of fireplace (if any). **Note:** You can secure fireplace to hearth or floor. Open lower louver. Locate screw holes in bottom of base. Tighten wood screws through these holes and into hearth or floor.



**Figure 30 - Placing Hearth Base Accessory Against Wall**



**Figure 31 - Installing Cabinet Mantel**

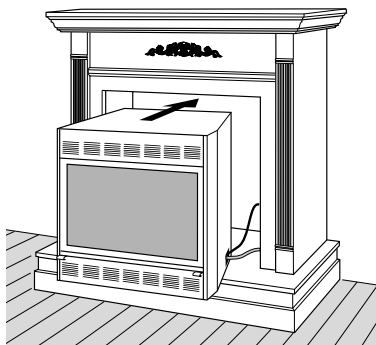


**Figure 32 - Location of Nailing Flanges (EFP33PR Shown)**

# INSTALLATION

## Continued

12. Check all gas connections for leaks. See *Checking Gas Connections*, pages 18 and 19.



**Figure 33 - Inserting Fireplace Into Cabinet Mantel (EFP33PR Shown)**

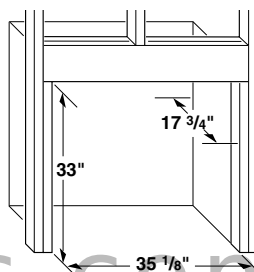
## BUILT-IN FIREPLACE INSTALLATION

Built-in installation of this fireplace involves installing fireplace into a framed-in enclosure. This makes the front of fireplace flush with wall. If installing a mantel above the fireplace, you must follow the clearances shown in Figure 37, page 22. Follow the instructions below to install the fireplace in this manner.

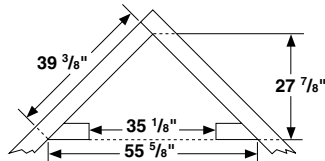
|             | Actual                             | Framing                          |
|-------------|------------------------------------|----------------------------------|
| Height      | 32 <sup>3</sup> / <sub>8</sub> "   | 33"                              |
| Front Width | 34 <sup>5</sup> / <sub>16</sub> "  | 35 <sup>1</sup> / <sub>8</sub> " |
| Depth       | 16 <sup>11</sup> / <sub>16</sub> " | 17 <sup>3</sup> / <sub>4</sub> " |

1. Frame in rough opening. Use dimensions shown in Figure 34 for the rough opening. If installing in a corner, use dimensions shown in Figure 35 for the rough opening. The height is 33" which is the same as the wall opening above.
2. Install and properly ground GA3555, three-prong 120 volt electrical outlet, in fireplace. Follow instructions included in kit (see *Accessories*, page 41).
3. If not already completed, install gas piping to fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the equipment shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Installing Gas Piping to Fireplace Location*, page 17.

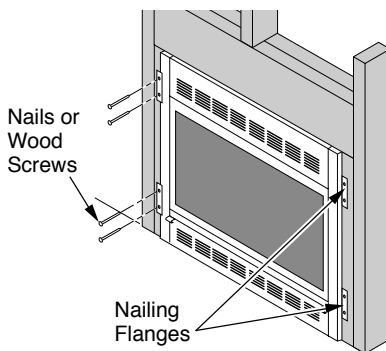
4. Carefully set fireplace in front of rough opening with back of fireplace inside wall opening.
5. Attach flexible gas line to gas supply. See *Connecting Fireplace to Gas Supply*, page 18.
6. Plug electrical cord(s) into electrical outlet installed in step 2.
7. Carefully insert fireplace into rough opening.
8. Attach fireplace to wall studs using nails or wood screws through holes in nailing flange (see Figure 36).
9. Check all gas connections for leaks. See *Checking Gas Connections*, pages 18 and 19.
10. Install brass trim. See *Assembling and Attaching Optional Brass Trim*, page 22.



**Figure 34 - Rough Opening for Installing in Wall**



**Figure 35 - Rough Opening for Installing in Corner**



**Figure 36 - Attaching Fireplace to Wall Studs (EFP33PR Shown)**

## INSTALLATION

### Continued

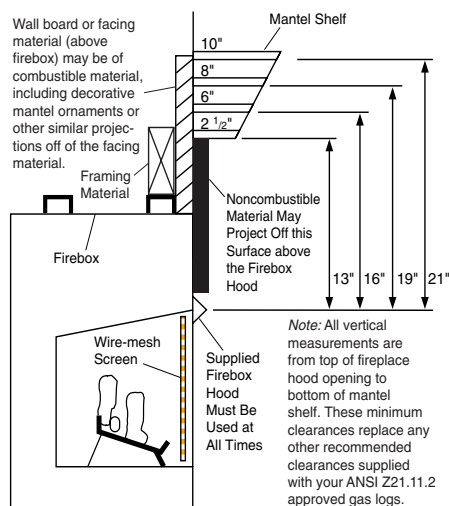
#### Mantel Clearances for Built-In Installation

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

**NOTICE: Surface temperatures of adjacent walls and mantels become hot during operation. Walls and mantels above the firebox may become hot to the touch. If installed properly, these temperatures meet the requirement of the national product standard. Follow all minimum clearances shown in this manual.**

**NOTICE: If your installation does not meet the minimum clearances shown, you must do one of the following:**

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

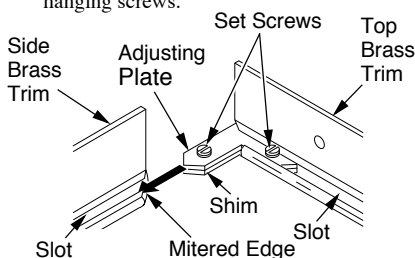


**Figure 37 - Minimum Mantel Clearances for Built-In Installation**

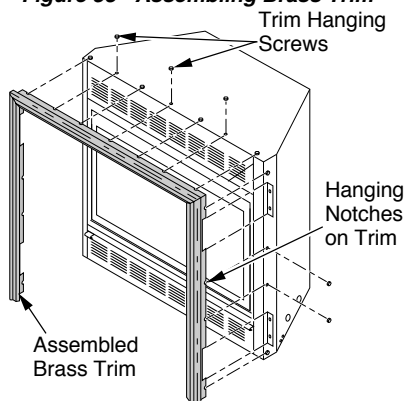
#### ASSEMBLING AND ATTACHING OPTIONAL BRASS TRIM (Included with Mantel Accessory)

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

1. Remove packaging from three pieces of brass trim.
2. Locate four brass screws, two adjusting plates with set screws, and two shims in the hardware packet.
3. Align shim under adjusting plate as shown in Figure 38.
4. Slide one end of adjusting plate/shim in slot on mitered edge of top brass trim (see Figure 38).
5. Slide other end of adjusting plate/shim in slot on mitered edge of side brass trim (see Figure 38).
6. While firmly holding edges of brass trim together, tighten both set screws on the adjusting plate with slotted screwdriver.
7. Repeat steps 1 through 6 for other side.
8. Tighten trim hanging screws (#10 x 6.25 shoulder) into holes in cabinets. Place the assembled trim onto fireplace cabinet. Align hanging notches on trim with hanging screws on side of fireplace (see Figure 39). Push trim firmly into place, sliding hanging notches over hanging screws.



**Figure 38 - Assembling Brass Trim**



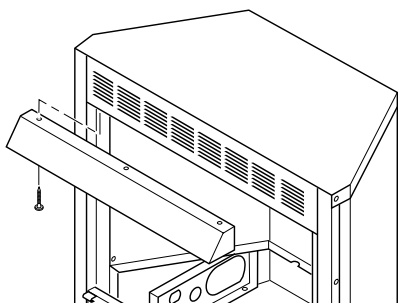
**Figure 39 - Attaching Brass Trim to Fireplace (EFP33PR Shown)**

# INSTALLATION

## Continued

### INSTALLING HOOD

Install hood to top of firebox as shown in Figure 40. Use 3 Phillips screws provided.



**Figure 40 - Installing Hood to Firebox (EFP33PR Shown)**

### INSTALLING LOGS (CGEFP33PR/ CGEFP33NR)

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

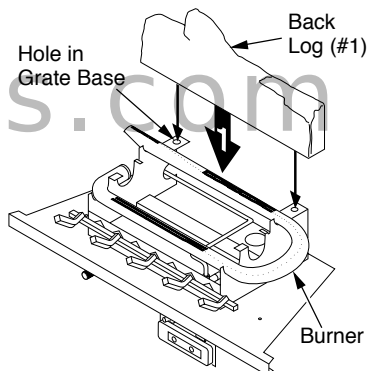
**CAUTION:** Do not remove the warning and instruction labels attached to the heater base assembly. These markings contain important warranty information.

**CAUTION:** After installation and periodically thereafter, check to ensure that no flame comes in contact with any log. With the heater set to HI, check to see if flames contact any log. If so, reposition logs according to the log installation instructions in this manual. Flames contacting logs will create soot.

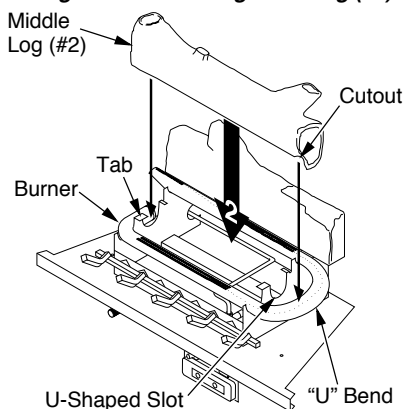
Each log is marked with a number. These numbers will help you identify the log when installing. It is very important to install these logs ex-

actly as instructed. Do not modify logs. Only use logs supplied with heater.

1. Locate pegs on the bottom of back log (#1). Slide these pegs into the holes in the grate base behind the burner (see Figure 41).
2. Place the base of the middle log (#2) in the U-shaped slots of the grate base in front of the back log. The cutout on the right of the middle log should fit over the burner (see Figure 42). Make sure the front of the middle log is resting on the tabs of the grate base and the cutout area is centered over the burner "U" bend.
3. Locate the recesses on the back of the front log (#3). Fit these recesses between the posts of the grate base (see Figure 43, page 24).
4. Locate the notches in the bottom of the crossover log (#4). Place the crossover log on top of the middle log and front log. Make sure the notches of the crossover log lines up with rectangular knobs on top of the middle and front logs (see Figure 44, page 24).



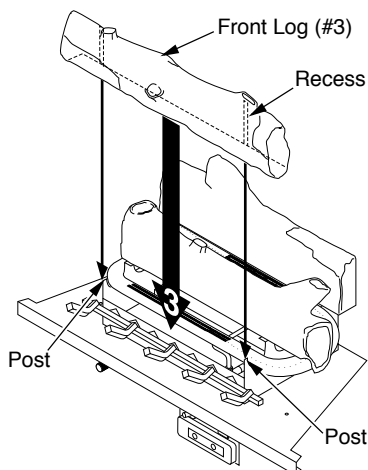
**Figure 41 - Installing Back Log (#1)**



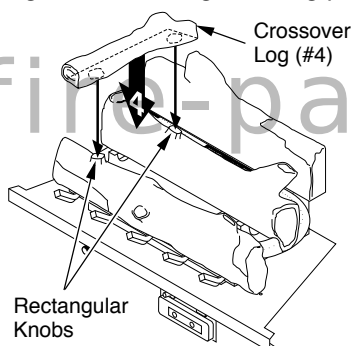
**Figure 42 - Installing Middle Log (#2)**

## INSTALLATION

*Continued*



**Figure 43 - Installing Front Log (#3)**



**Figure 44 - Installing Crossover Log (#4)**

### INSTALLING LOGS (EFP33PR/ EFP33NR)

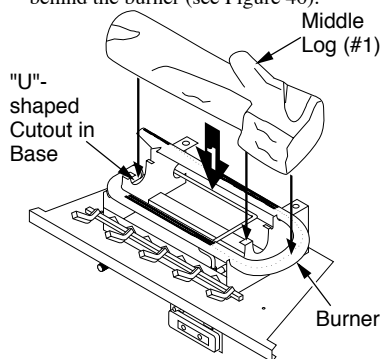
**⚠ WARNING:** Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this heater may result in property damage or personal injury.

**⚠ CAUTION:** Do not remove the warning and instruction labels attached to the heater base assembly. These markings contain important warranty information.

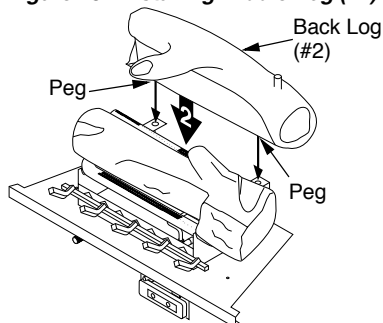
**⚠ CAUTION:** After installation and periodically thereafter, check to ensure that no flame comes in contact with any log. With the heater set to HIGH, check to see if flames contact any log. If so, reposition logs according to the log installation instructions in this manual. Flames contacting logs will create soot.

Each log is marked with a number. These numbers will help you identify the log when installing. It is very important to install these logs exactly as instructed. Do not modify logs. Only use logs supplied with heater.

1. Place the base of the middle log (#1) in the U-shaped slots of the grate base. The cutout on the right of the middle log should fit over the burner (see Figure 45). Make sure the front of the middle log is resting on the tabs of the grate base and the cutout area is centered over the burner "U" bend.
2. Locate pegs on the bottom of back log (#2). Slide these pegs into the holes in the grate base behind the burner (see Figure 46).



**Figure 45 - Installing Middle Log (#1)**



**Figure 46 - Installing Back Log (#2)**



## INSTALLATION

### Continued

3. Locate the notches in the bottom of the front log (#3). Place the front log on the grate fingers. Make sure the notches of the front log line up with the grate fingers (see Figure 47).
4. Place crossover log (#4) onto the peg (right) on back log (#2) and into the recess of the middle log (#1) (see Figure 48).

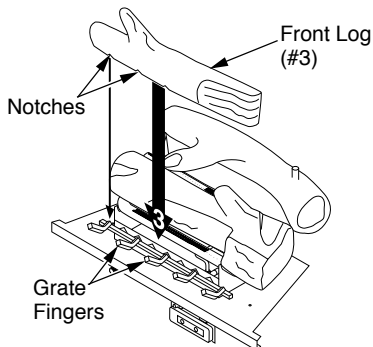


Figure 47 - Installing Front Log (#3)

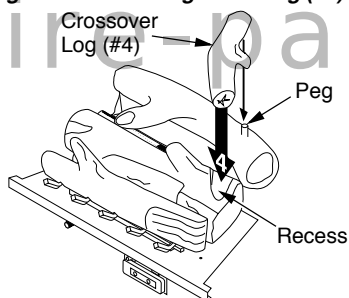


Figure 48 - Installing Crossover Log (#4)

## INSTALLING BATTERY INTO REMOTE

1. Locate slot at bottom of remote control (see Figure 49). Firmly insert tool such as a small screwdriver, butter knife, or dime into the slot and lift up to remove cover.
2. Insert supplied battery into remote control. Positive and negative are marked inside remote control casing. **Note:** Remote will not function if battery is not installed correctly.
3. Slide tab on cover into remote housing and snap cover back into place.

**IMPORTANT:** Use only A23 12 volt battery in remote. DO NOT use AAA battery.

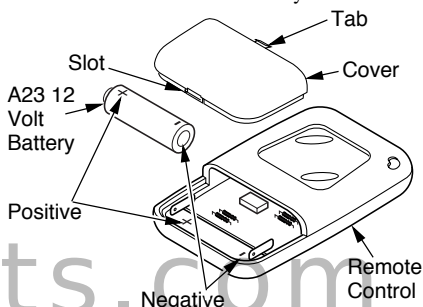


Figure 49 - Installing Battery

## INSTALLING SCREEN

Install fireplace screen by slipping notches of fireplace screen over screws on front of fireplace (see Figure 50).

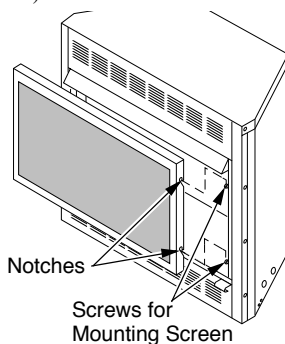


Figure 50 - Installing Fireplace Screen (EFP33PR Shown)

## OPERATING FIREPLACE

### FOR YOUR SAFETY READ BEFORE LIGHTING

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

- A. This appliance has a pilot which lights automatically when using the supplied wall switch or remote control. If you have a power outage, the pilot may be lighted by hand with push-button piezo ignitor. When lighting the pilot, the following warnings must be followed.
- B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

#### WHAT TO DO IF YOU SMELL GAS

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

### NORMAL LIGHTING INSTRUCTIONS

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

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

1. **STOP!** Read the safety information, column 1.
2. Make sure equipment shutoff valve is fully open.
3. Wait five (5) minutes to clear out any gas. Smell for gas around heater and near floor. If you smell gas, **STOP!** Follow "B" in the safety information on warnings plate. If you don't smell gas, go to the next step.

#### A. Using Supplied Wall Switch

1. Set manual ignition bypass switch on the control panel to the OFF position (automatic ignition position).
2. Press ON/OFF button. Hold for 6 seconds. Gas valve will open and electronic ignition will begin sparking to light pilot. LED will light. **Note:** You may be running this heater for the first time after connecting to gas supply or at the start of your heating season. If so, the ON/OFF button may need to be pressed again. This will allow air to bleed from gas system. If several attempts to light pilot fail, contact a qualified service person or gas supplier for repairs. Until repairs are made, light and operate manually (see *Manual Lighting Instructions for Electric Power Outage*, page 27).
3. When pilot flame is lit, the thermocouple is heated by the flame. When thermocouple becomes hot (5 to 15 seconds), main burner will automatically light on high flame.
4. To lower flame, push HI/LO button on wall switch once. **Note:** This fireplace does not have a pilot-only mode.

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

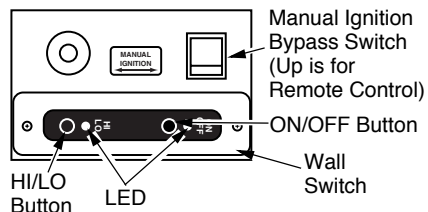


Figure 51 - Control Locations

# OPERATING FIREPLACE

## Continued

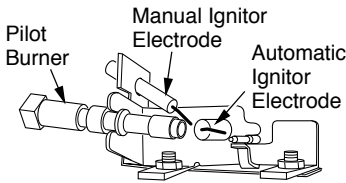


Figure 52 - Pilot (Natural Gas)

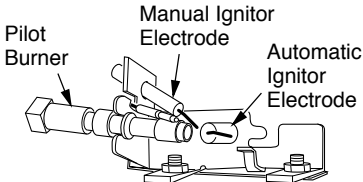


Figure 53 - Pilot (Propane/LP Gas)

### B. Using Hand-Held Wireless Remote Control

1. Set manual ignition bypass switch on control panel to OFF position (automatic ignition position).
2. Wait five (5) minutes to clear out any gas. Smell for gas around heater and near floor. If you smell gas, STOP! Follow "B" in the safety information on warnings plate. If you don't smell gas, go to the next step.
3. Point remote control toward the lower front of fireplace and push both buttons at the same time. Hold for 6 seconds. The gas valve will open and electronic ignition will begin sparking to light the pilot. **Note:** You will be able to hear a clicking sound during this process. LED on wall switch will light. **Note:** You may be running this heater for the first time after connecting to gas supply or at the start of your heating season. If so, the ON button may need to be pressed again. This will allow air to bleed from gas system. If several attempts to light pilot fail, contact a qualified service person or gas supplier for repairs. Until repairs are made, light and operate manually (see *Manual Lighting Instructions for Electrical Power Outage*).
4. When pilot flame is lit, the thermocouple is heated by the flame. When thermocouple becomes hot (5 to 15 seconds), main burner will automatically light on high flame.
5. To lower flame, point remote control toward lower front of fireplace and push HI/LO button once.

**Note:** This fireplace does not have a pilot-only mode.

## TO TURN OFF GAS TO APPLIANCE

### Shutting Off Heater - Wall Switch

Push ON/OFF button on wall switch once.

### Shutting Off Heater - Wireless Remote Control

Point remote control toward lower front of fireplace and push both buttons at the same time.

## MANUAL LIGHTING INSTRUCTIONS FOR ELECTRICAL POWER OUTAGE

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

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

Because this fireplace has an electronic ignition system, in the event there is a loss of power, it will be necessary to manually light the pilot with the piezo ignitor. After the pilot is lit, the main burner will light automatically.

1. Follow steps 1 through 3 under *Normal Lighting Instructions*, pages 26.
2. Set manual ignition bypass switch on control panel to ON position (manual ignition position). See Figure 54.
3. The pilot is attached to the rear of the front burner. You will be able to see the pilot and spark electrode without removing the screen or logs.

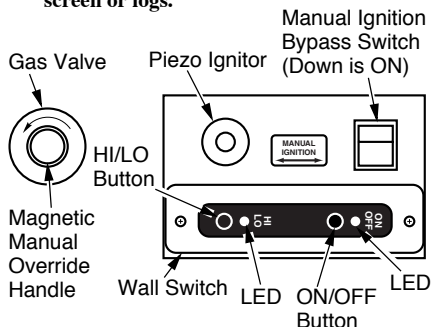



Figure 54 - Control Locations

## OPERATING FIREPLACE

### Continued

4. Place the magnetic manual override handle, provided with this unit, on the end of the gas valve stem (see Figure 54, page 27).
5. Turn the override handle fully counter-clockwise  to the PILOT position. The handle will not stop but will begin to slip when you have fully turned to the PILOT position.
6. While holding the valve handle in the PILOT position, press and release piezo ignitor button (see Figure 54, page 27). This will light the pilot. If needed, keep pressing ignitor button until pilot lights.
7. When pilot flame is lit, hold manual override handle until thermocouple heats (approximately 5 to 15 seconds). If pilot goes out, repeat process. If several attempts to light the pilot fail, contact a qualified service person or gas supplier for repairs.
8. When thermocouple is heated, release override handle. The main burner will immediately light on high flame. Adjust flame size by turning override handle.

### TO TURN OFF GAS TO APPLIANCE

Shutting Off Heater When Manually Lit  
Set manual ignition bypass switch on control panel to OFF (automatic ignition position). This will cause the controls to shut down the fireplace.

### OPTIONAL BLOWER OPERATION

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

The GA3650T/GA3700T Series thermostat-controlled blower has a variable speed control with an ON/OFF switch. The blower will start when the thermostat senses a sufficient increase in firebox temperature. The GA3700/GA3750 Series variable speed blower also has an ON/OFF switch built into the variable speed control.

**Note for GA3650T/GA3700T Series Only:**  
If you are using this series blower, your fireplace and blower will not turn on and off at the same time. The fireplace may run for several minutes before the blower turns on. After the heater modulates to the pilot position, the blower will continue to run. The blower will shut off after the firebox temperature decreases.

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

Follow installation instructions included with the blower accessory.

## INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

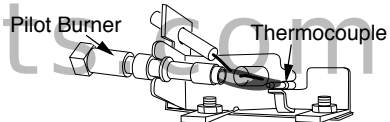
### PILOT FLAME PATTERN

Figure 55 shows a correct pilot flame pattern. Figure 56 shows an incorrect pilot flame pattern. The incorrect pilot flame is not properly heating the thermocouple. When the thermocouple cools, the heater will shut down.

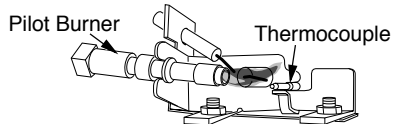
If pilot flame pattern is incorrect, as shown in Figure 56

- turn heater off (see *To Turn Off Gas to Appliance*, page 27 or 28)
- see *Troubleshooting*, pages 30 through 33

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



**Figure 55 - Correct Pilot Flame Pattern  
(Natural Gas Pilot Assy Shown)**



**Figure 56 - Incorrect Pilot Flame Pattern  
(Natural Gas Pilot Assy Shown)**

### MAIN BURNER

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

## CLEANING AND MAINTENANCE

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

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

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

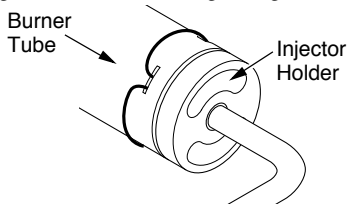
### BURNER INJECTOR HOLDER

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

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

1. Shut off the unit, including the pilot. Allow the unit to cool for at least thirty minutes.
2. Inspect burner, pilot, and primary air inlet holes on injector holder for dust and dirt (see Figure 57).
3. Blow air through the ports/slots and holes in the burner.

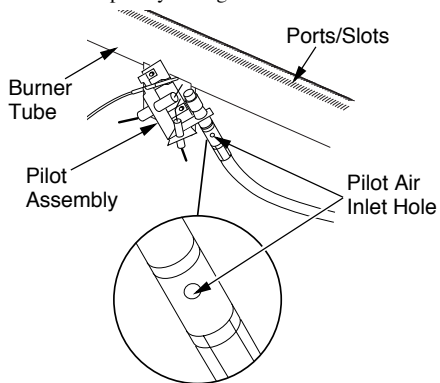
4. Check the injector holder located at the end of the burner tube again. Remove any large particles of dust, dirt, lint, or pet hair with a soft cloth or vacuum cleaner nozzle.
5. Blow air into the primary air holes on the injector holder.
6. In case any large clumps of dust have now been pushed into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



**Figure 57 - Injector Holder On Outlet Burner Tube**

### PILOT AIR INLET HOLE

Clean the pilot assembly also. A yellow tip on the pilot flame indicates dust and dirt in the pilot assembly. There is a small pilot air inlet hole about two inches from where the pilot flame comes out of the pilot assembly (see Figure 58). With the unit off, lightly blow air through the air inlet hole. You may blow through a drinking straw if compressed air is not available. You may also clean the pilot air inlet hole by pushing a common pipe cleaner completely through the air inlet hole once.



**Figure 58 - Pilot Inlet Air Hole (Natural Gas Model Shown)**

### LOGS

- If you remove logs for cleaning, refer to *Installing Logs*, pages 23 through 25, to properly replace logs.
- Replace log(s) if broken or chipped (dime-sized or larger).

## TROUBLESHOOTING

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

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

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

| OBSERVED PROBLEM  | POSSIBLE CAUSE   | REMEDY   |
|---|--|--|
| When buttons on remote control are pressed, there is no response from fireplace | <ol style="list-style-type: none"> <li>1. Battery in remote control is either missing or has low power</li> <li>2. Remote control is not pointed toward fireplace</li> <li>3. Manual ignition bypass switch not in OFF position</li> <li>4. No power available to fireplace</li> <li>5. Ignitor electrode not connected to ignitor cable</li> <li>6. Broken ignitor cable</li> <li>7. Ignitor electrode broken</li> <li>8. Ignitor electrode positioned wrong</li> </ol> | <ol style="list-style-type: none"> <li>1. Replace battery in remote control</li> <li>2. Point remote control toward lower front panel of fireplace when operating</li> <li>3. Place manual ignition bypass switch in OFF position</li> <li>4. Make sure power cord is plugged into electrical outlet and outlet has power</li> <li>5. Reconnect ignitor cable</li> <li>6. Replace ignitor cable</li> <li>7. Replace pilot assembly</li> <li>8. Replace pilot assembly</li> </ol> |
| When wall switch button is pressed, there is no response from fireplace         | <ol style="list-style-type: none"> <li>1. No power available to fireplace</li> <li>2. Manual ignition bypass switch not in OFF position</li> <li>3. Wall switch wire harness is disconnected</li> </ol>  | <ol style="list-style-type: none"> <li>1. Make sure power cord is plugged into an electrical outlet and outlet has power</li> <li>2. Place manual ignition bypass switch in OFF position</li> <li>3. Check continuity of wall switch wire harness. Make sure plug on wall switch wire harness is fully inserted into socket on circuit board in fireplace. Replace if necessary</li> </ol>   |
| Burner does not light after ODS/pilot is lit                                    | <ol style="list-style-type: none"> <li>1. Burner orifice clogged</li> <li>2. Inlet gas pressure is too low</li> </ol>  | <ol style="list-style-type: none"> <li>1. Clean burner (see <i>Cleaning and Maintenance</i>, page 29) or replace burner orifice</li> <li>2. Contact local gas company</li> </ol>   |
| Delayed ignition burner   | <ol style="list-style-type: none"> <li>1. Manifold pressure is too low</li> <li>2. Burner orifice clogged</li> </ol>   | <ol style="list-style-type: none"> <li>1. Contact local gas company</li> <li>2. Clean burner (see <i>Cleaning and Maintenance</i>, page 29) or replace burner orifice</li> </ol>   |
| Burner backfiring during combustion   | <ol style="list-style-type: none"> <li>1. Burner orifice is clogged or damaged</li> <li>2. Damaged burner</li> <li>3. Gas regulator defective</li> </ol>   | <ol style="list-style-type: none"> <li>1. Clean burner (see <i>Cleaning and Maintenance</i>, page 29) or replace burner orifice</li> <li>2. Replace damaged burner</li> <li>3. Replace regulator</li> </ol>  |

# TROUBLESHOOTING

## *Continued*

| OBSERVED PROBLEM   | POSSIBLE CAUSE  | REMEDY  |
|--|---|---|
| Slight smoke or odor during initial operation  | <ol style="list-style-type: none"> <li>1. Not enough air</li> <li>2. Gas regulator defective</li> <li>3. Residues from manufacturing processes and logs curing</li> </ol>   | <ol style="list-style-type: none"> <li>1. Check burner for dirt and debris. If found, clean burner (see <i>Cleaning and Maintenance</i>, page 29)</li> <li>2. Replace regulator</li> <li>3. Problem will stop after a few hours of operation</li> </ol>   |
| Moisture/condensation noticed on windows   | <ol style="list-style-type: none"> <li>1. Not enough combustion/ventilation air</li> </ol>  | <ol style="list-style-type: none"> <li>1. Refer to <i>Air for Combustion and Ventilation</i> requirements (page 5)</li> </ol>   |
| Heater produces a whistling noise when burner is lit   | <ol style="list-style-type: none"> <li>1. Turning control knob to HI position when burner is cold</li> <li>2. Air in gas line</li> <li>3. Air passageways on heater blocked</li> <li>4. Dirty or partially clogged burner orifice</li> </ol>  | <ol style="list-style-type: none"> <li>1. Turn control knob to LO position and let warm up for a minute</li> <li>2. Operate burner until air is removed from line. Have gas line checked by local natural gas company</li> <li>3. Observe minimum installation clearances (see page 8)</li> <li>4. Clean burner (see <i>Cleaning and Maintenance</i>, page 29) or replace burner orifice</li> </ol>   |
| When ignitor button is pressed, there is no spark at ODS/pilot (manual ignition mode)              | <ol style="list-style-type: none"> <li>1. Ignitor electrode not connected to ignitor cable</li> <li>2. Ignitor cable pinched or wet</li> <li>3. Piezo ignitor nut is loose</li> <li>4. Broken ignitor cable</li> <li>5. Bad piezo ignitor</li> <li>6. Ignitor electrode broken</li> <li>7. Ignitor electrode positioned wrong</li> </ol>    | <ol style="list-style-type: none"> <li>1. Reconnect ignitor cable</li> <li>2. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry</li> <li>3. Tighten nut holding piezo ignitor to base panel of log set. Nut is located behind base panel</li> <li>4. Replace ignitor cable</li> <li>5. Replace piezo ignitor</li> <li>6. Replace pilot assembly</li> <li>7. Replace pilot assembly</li> </ol>  |
| When ignitor button is pressed, there is spark at ODS/pilot but no ignition (manual ignition mode) | <ol style="list-style-type: none"> <li>1. Gas supply turned off or equipment shutoff valve closed</li> <li>2. Control knob not in PILOT position</li> <li>3. Air in gas lines when installed</li> <li>4. Depleted gas supply (propane/LP only)</li> <li>5. ODS/pilot is clogged</li> <li>6. Gas regulator setting is not correct</li> </ol> | <ol style="list-style-type: none"> <li>1. Turn on gas supply or open equipment shutoff valve</li> <li>2. Turn control knob to PILOT position full counterclockwise</li> <li>3. Continue holding control knob in full counterclockwise position. Repeat igniting operation until air is removed</li> <li>4. Contact local propane/LP gas company</li> <li>5. Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 29) or replace ODS/pilot assembly</li> <li>6. Replace gas regulator</li> </ol> |

# TROUBLESHOOTING

## Continued

| OBSERVED PROBLEM   | POSSIBLE CAUSE   | REMEDY  |
|--|--|---|
| ODS/pilot lights but flame goes out when control knob is released (manual ignition mode) | <ol style="list-style-type: none"> <li>Control knob not fully turned counterclockwise</li> <li>Control knob not held long enough</li> <li>Equipment shutoff valve not fully open</li> <li>Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following: <ol style="list-style-type: none"> <li>Low gas pressure</li> <li>Dirty or partially clogged ODS/pilot</li> </ol> </li> <li>Thermocouple connection loose at control valve</li> <li>Thermocouple damaged</li> <li>Control valve damaged</li> </ol> | <ol style="list-style-type: none"> <li>Turn control knob fully counterclockwise</li> <li>After ODS/pilot lights, hold control knob for 30 seconds</li> <li>Fully open equipment shutoff valve</li> <li> <ol style="list-style-type: none"> <li>Contact local natural or propane/LP gas company</li> <li>Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 29) or replace ODS/pilot assembly</li> </ol> </li> <li>Hand tighten until snug, then tighten 1/4 turn more</li> <li>Replace pilot assembly</li> <li>Replace control valve</li> </ol> |

Fireplace produces a clicking/ticking noise just after burners are lit or shut off

1. Metal expanding while heating or contracting while cooling

1. This is common with most fireplaces. If noise is excessive, contact qualified service person



### **WARNING: If you smell gas**

- **Shut off gas supply.**
- **Do not try to light any appliance.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

**IMPORTANT:** Operating fireplace where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors. These odors will disappear over time.

Fireplace produces unwanted odors

- Fireplace burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. (see **IMPORTANT** statement above)
- Gas leak. **See Warning statement above**

- Open window and ventilate room. Stop using odor causing products while fireplace is running
- Locate and correct all leaks (see *Checking Gas Connections*, pages 18 and 19)

Fireplace shuts off in use (ODS operates)

- Not enough fresh air is available
- Low line pressure
- ODS/pilot is partially clogged

- Open window and/or door for ventilation
- Contact local gas company
- Clean ODS/pilot (see *Cleaning and Maintenance*, page 29)



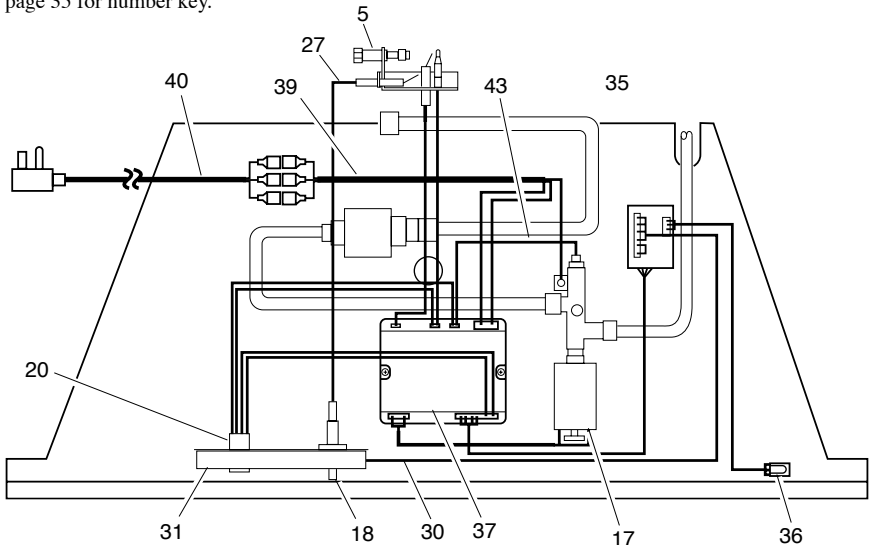
# TROUBLESHOOTING

Continued

| OBSERVED PROBLEM   | POSSIBLE CAUSE  | REMEDY  |
|--|---|---|
| Gas odor even when wall switch and remote control buttons and switches are in OFF position | <ol style="list-style-type: none"> <li>1. Gas leak. <b>See Warning statement on page 33</b></li> <li>2. Control valve defective</li> </ol>  | <ol style="list-style-type: none"> <li>1. Locate and correct all leaks (see <i>Checking Gas Connections</i>, pages 18 and 19)</li> <li>2. Replace control valve</li> </ol>  |
| Gas odor during combustion   | <ol style="list-style-type: none"> <li>1. Foreign matter between control valve and burner</li> <li>2. Gas leak. <b>See Warning statement on page 33</b></li> </ol>  | <ol style="list-style-type: none"> <li>1. Take apart gas tubing and remove foreign matter</li> <li>2. Locate and correct all leaks (see <i>Checking Gas Connections</i>, pages 18 and 19)</li> </ol>  |
| Dark residue on logs or inside of fireplace  | <ol style="list-style-type: none"> <li>1. Improper log placement</li> <li>2. Drafts or other air currents affecting flame pattern</li> <li>3. Air holes at burner inlet blocked</li> <li>4. Burner flame holes blocked</li> </ol> | <ol style="list-style-type: none"> <li>1. Properly locate logs (see <i>Installing Logs</i>, pages 23 through 25)</li> <li>2. Eliminate source of drafts around heater</li> <li>3. Clean out air holes at burner inlet. Periodically repeat as needed</li> <li>4. Remove blockage</li> </ol> |
| White powder residue forming within burner box or on adjacent walls or furniture           | <ol style="list-style-type: none"> <li>1. When heated, vapors from furniture polish, wax, carpet cleaners, etc. may turn into white powder residue</li> </ol>   | <ol style="list-style-type: none"> <li>1. Turn heater off when using furniture polish, wax, carpet cleaners, or similar products</li> </ol>   |

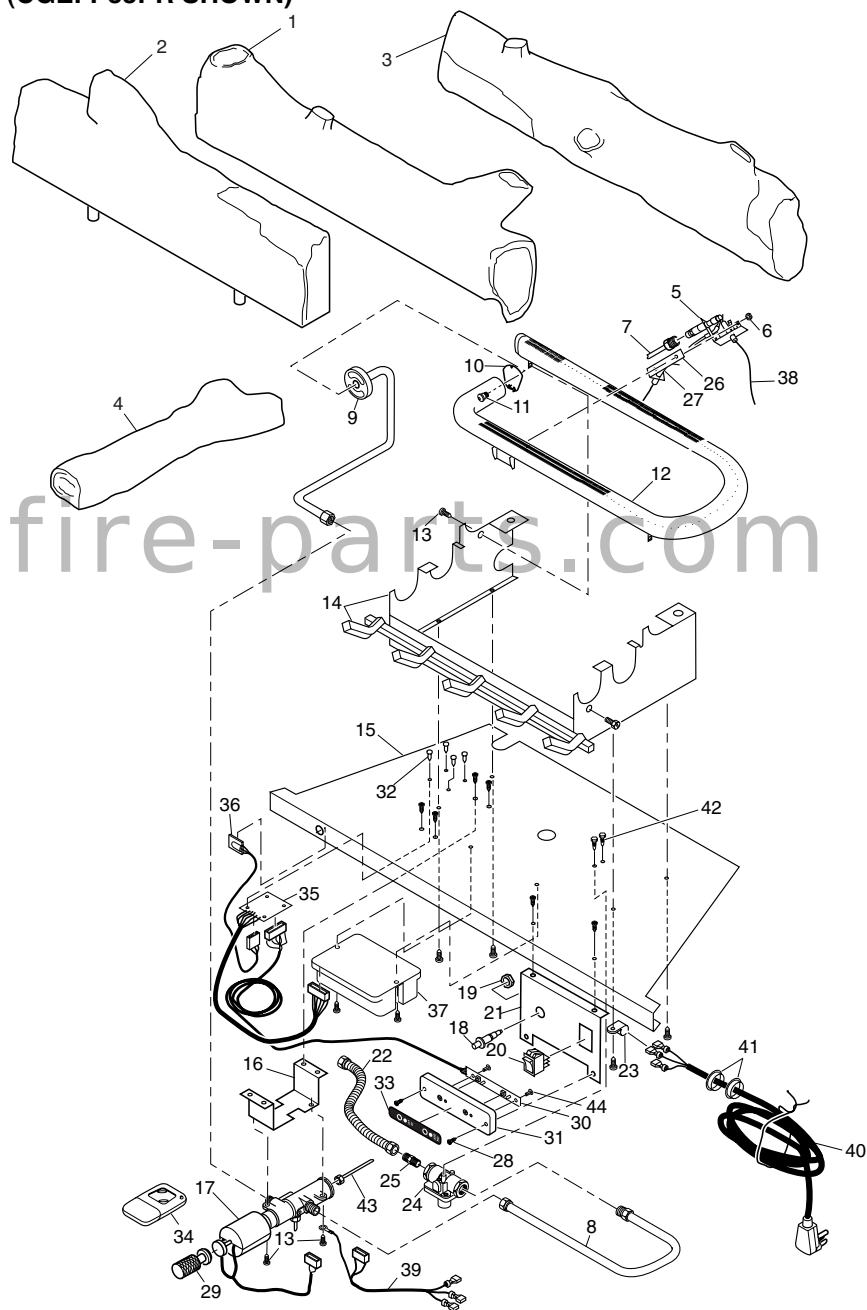
## WIRING DIAGRAM

**Note:** For proper operation, the wires must be connected exactly as shown in wiring diagram. See page 35 for number key.



## ILLUSTRATED PARTS BREAKDOWN

REMOTE CONTROL LOG BASE ASSEMBLY MODELS  
EFP33PR/NR AND CGEFP33PR/NR  
(CGEFP33PR SHOWN)



## PARTS LIST

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 38 of this manual.

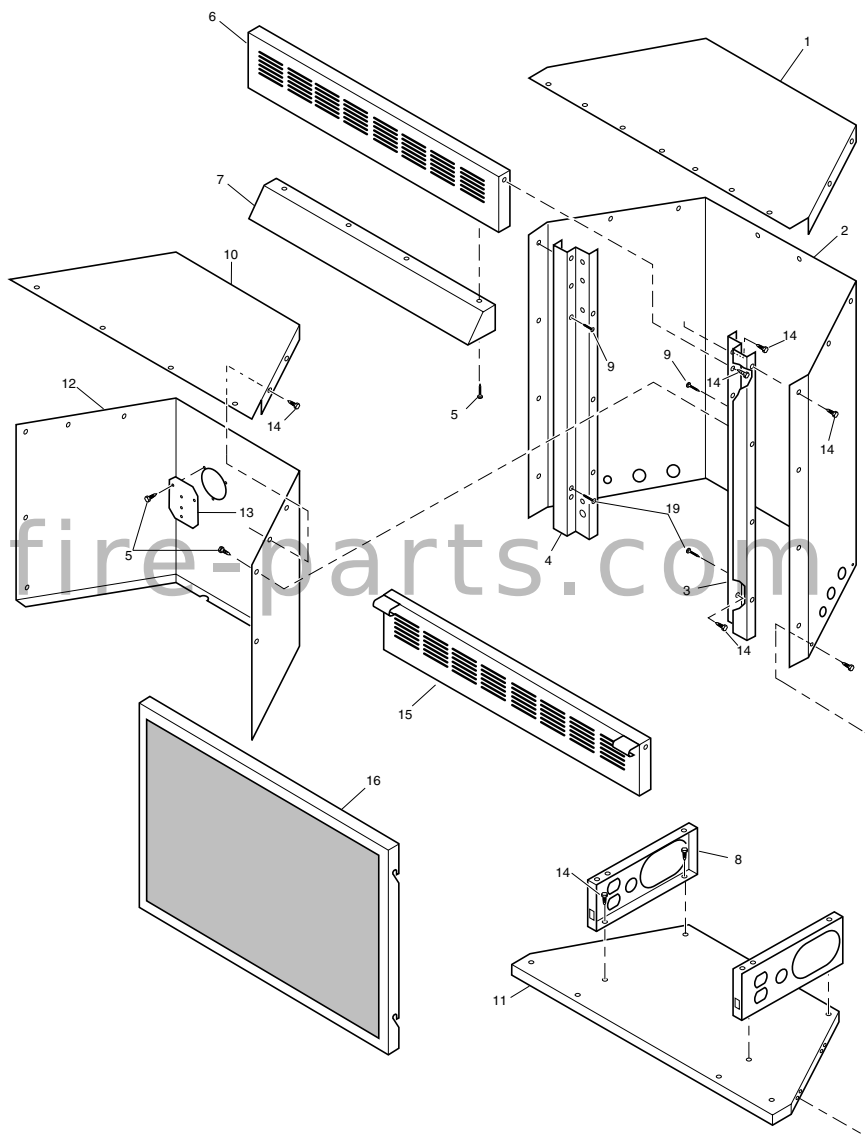
| KEY NO.                            | PART NUMBER |             | DESCRIPTION   | QTY. |
|------------------------------------|-------------|-------------|---|------|
|                                    | EFP33       | CGEFP33     |   |      |
| 1                                  | 109072-01   | 110346-02   | Middle Log (#1)   | 1    |
| 2                                  | 109073-01   | 110346-03   | Back Log (#2)   | 1    |
| 3                                  | 109074-01   | 110346-01   | Front Log (#3)  | 1    |
| 4                                  | 109075-01   | 110346-04   | Crossover Log (#4)  | 1    |
| 5                                  | 104286-02   | 104286-02   | ODS Pilot (Propane/LP)  | 1    |
|                                    | 104285-02   | 104285-02   | ODS Pilot (Natural)   | 1    |
| 6                                  | 098249-01   | 098249-01   | ODS Nut   | 2    |
| 7                                  | 099387-05   | 099387-05   | Pilot Tube  | 1    |
| 8                                  | 101973-02   | 101973-02   | Inlet Tube  | 1    |
| 9                                  | 107572-01   | 107572-01   | Burner Outlet Tube  | 1    |
| 10                                 | 111124-01   | 111124-01   | Burner Retainer Spring  | 1    |
| 11                                 | 099056-19   | 099056-19   | Burner Orifice Injector (Propane/LP)                            | 1    |
|                                    | 099056-26   | 099056-26   | Burner Orifice Injector (Natural)                               | 1    |
| 12                                 | 102772-01   | 102772-01   | Burner  | 1    |
| 13                                 | M10908-2    | M10908-2    | Screw, Self-Tapping   | 2    |
| 14                                 | 104236-01CK | 104236-01CK | Painted Base Assy   | 1    |
| 15                                 | **          | **          | Firebox Bottom  | 1    |
| 16                                 | 107573-01   | 107573-01   | Valve Bracket   | 1    |
| 17                                 | 107559-02   | 107559-02   | Gas Control Valve (Propane/LP)                                  | 1    |
|                                    | 107559-01   | 107559-01   | Gas Control Valve (Natural)                                     | 1    |
| 18                                 | 102445-01   | 102445-01   | Piezo Ignitor   | 1    |
| 19                                 | 102334-01   | 102334-01   | Palnut Fastener   | 1    |
| 20                                 | 107562-01   | 107562-01   | Switch and Wire Assembly  | 1    |
| 21                                 | 107685-01   | 107685-01   | Bracket, Switch and Piezo                                       | 1    |
| 22                                 | 101628-03   | 101628-03   | Flexible Connector  | 1    |
| 23                                 | 098544-01   | 098544-01   | Wire Support Clip   | 1    |
| 24                                 | 099415-18   | 099415-18   | Pressure Regulator (Propane/LP)                                 | 1    |
|                                    | 099415-12   | 099415-12   | Pressure Regulator (Natural)                                    | 1    |
| 25                                 | 097809-03   | 097809-03   | Fitting 3/8" Flare to 1/2" NPT                                  | 1    |
| 26                                 | 107687-01   | 107687-01   | Electrode Bracket   | 1    |
| 27                                 | 103904-02   | 103904-02   | Electrode   | 1    |
| 28                                 | 100694-01   | 100694-01   | Screw, #6 x 1 1/4" PH   | 2    |
| 29                                 | 107560-01   | 107560-01   | Magnetic Manual Override Handle                                 | 1    |
| 30                                 | 107563-01   | 107563-01   | Wall Switch and Cord  | 1    |
| 31                                 | 107558-01   | 107558-01   | Wall Switch Decorative Plate                                    | 1    |
| 32                                 | 102349-02   | 102349-02   | Support, PCB  | 4    |
| 33                                 | 107561-01   | 107561-01   | Wall Plate Decal  | 1    |
| 34                                 | 107564-01   | 107564-01   | Remote Control  | 1    |
| 35                                 | 107565-01   | 107565-01   | Receiver Assembly   | 1    |
| 36                                 | 107565-02   | 107565-02   | Sensor Assembly   | 1    |
| 37                                 | 107566-01   | 107566-01   | Module, Control Board   | 1    |
| 38                                 | 098271-08   | 098271-08   | Ignitor Cable   | 1    |
| 39                                 | 107568-01   | 107568-01   | Main Power Cable  | 1    |
| 40                                 | 098219-37   | 098219-37   | Power Cord  | 1    |
| 41                                 | 101629-01   | 101629-01   | 1.5" Bushing  | 2    |
| 42                                 | 098303-02   | 098303-02   | Screw, #6   | 2    |
| 43                                 | 107743-01   | 107743-01   | Thermocouple Wire   | 1    |
| 44                                 | 107847-01   | 107847-01   | Screw, #6019 x 1/4"   | 2    |
| <b>PARTS AVAILABLE — NOT SHOWN</b> |             |             |   |      |
|                                    | 19724000    | 19724000    | Cable Tie   | 4    |
|                                    | 901056-01   | 901056-01   | Fitting, 3/8" NPT   | 1    |
|                                    | 107736-01   | 107736-01   | Wall Plate Assembly Kit<br>(Contains Items 31, 33, 44)          | 1    |
|                                    | 107737-01   | 107737-01   | Wall Switch Assembly Kit<br>(Contains Items 28, 30, 31, 33, 44) | 1    |
|                                    | 107766-01   | 107766-01   | Battery, 12V/23A Remote   | 1    |

\*\* Not a field replaceable part.

## ILLUSTRATED PARTS BREAKDOWN

### FIREBOX MODELS

### EFP33PR/NR AND CGEFP33PR/NR



## PARTS LIST

### FIREBOX MODELS

### EFP33PR/NR AND CGEFP33PR/NR

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 38 of this manual.

| KEY NO.                            | PART NUMBER | DESCRIPTION                  | QTY. |
|------------------------------------|-------------|------------------------------|------|
| 1                                  | 101357-03   | Top Outer Casing             | 1    |
| 2                                  | **          | Outer Casing                 | 1    |
| 3                                  | **          | Right Front Side             | 1    |
| 4                                  | **          | Left Front Side              | 1    |
| 5                                  | 098304-01   | Phillips Pan Head Screw, #10 | 9    |
| 6                                  | 104239-01CK | Top Front Louver             | 1    |
| 7                                  | 101712-02   | Firebox Hood                 | 1    |
| 8                                  | **          | Firebox Support              | 2    |
| 9                                  | 099230-02   | Shoulder Screw               | 4    |
| 10                                 | **          | Firebox Top                  | 1    |
| 11                                 | 101346-01   | Outer Base                   | 1    |
| 12                                 | **          | Firebox Wrapper              | 1    |
| 13                                 | 101514-01   | Cover                        | 1    |
| 14                                 | M11084-26   | Hex Screw, #10               | 45   |
| 15                                 | 110466-01   | Bottom Louvered Door         | 1    |
| 16                                 | 101727-02   | Screen Assembly              | 1    |
| <b>PARTS AVAILABLE — NOT SHOWN</b> |             |                              |      |
|                                    | 101386-02   | Louvered Door Hinge          | 2    |
|                                    | 101784-01   | Magnet Catch                 | 2    |
|                                    | 102307-01   | Strike Plate                 | 2    |

\*\* Not a field replaceable part.

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## SPECIFICATIONS

|                                   |                         |                       |
|-----------------------------------|-------------------------|-----------------------|
| Btu (Variable)                    | 20,000/33,000           |                       |
| Type Gas                          | Natural: (CG)EFP33NR    |                       |
|                                   | Propane/LP: (CG)EFP33PR |                       |
| Ignition                          | Electronic (Automatic)/ |                       |
|                                   | Piezo (Manual)          |                       |
|                                   | <u>Natural Gas</u>      | <u>Propane/LP Gas</u> |
| Manifold Pressure                 | 3.5" W.C.               | 8.0" W.C.             |
| Inlet Gas Pressure (in. of water) |                         |                       |
|                                   | Maximum                 | 10.5" 14"             |
|                                   | Minimum*                | 5" 11"                |
| Shipping Weight                   | 122 lbs.                | 122 lbs.              |

\* For input adjustment

## SERVICE HINTS

### When Gas Pressure Is Too Low

- pilot will not stay lit
- burners will have delayed ignition
- heater will not produce specified heat
- for propane/LP units, propane/LP gas supply may be low

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

## TECHNICAL SERVICE

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

You can also visit DESA Heating Products' technical service web site at **[www.desatech.com](http://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 Heating Products' Technical Service Department at 1-866-672-6040.

When calling DESA Heating Products, have ready

- your name
- your address
- model and serial numbers of your fireplace
- how fireplace was malfunctioning
- type of gas used (propane/LP or natural gas)
- purchase date

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

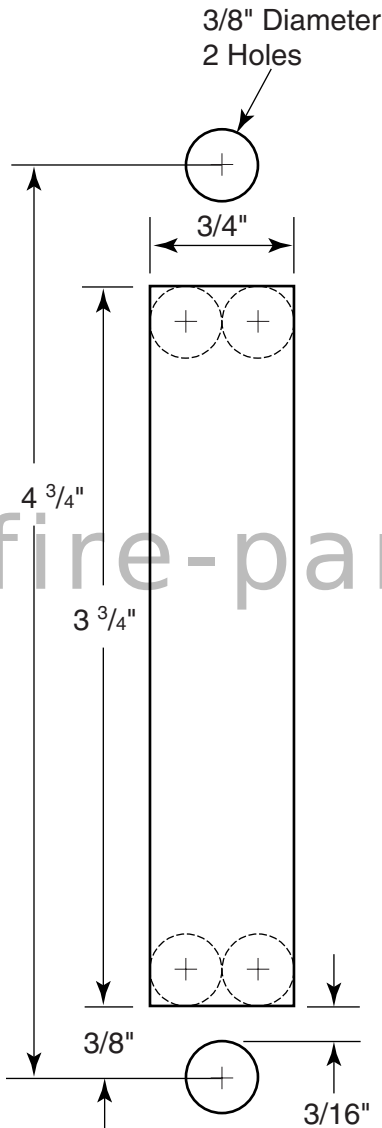
### PARTS NOT UNDER WARRANTY

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

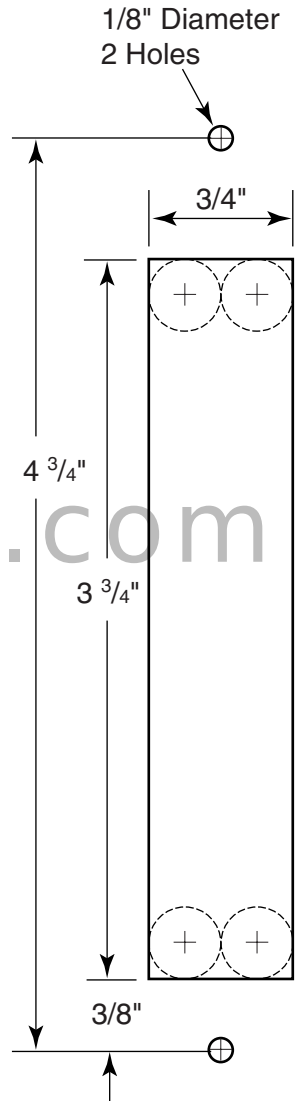
When calling DESA Heating Products, have ready

- model number of your fireplace
- the replacement part number

## TEMPLATES



**Template 1 - Relocating Wall Switch to Hollow Room Wall**



**Template 2 - Relocating Wall Switch to Side Wall of Mantel**

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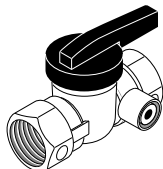
fire-parts.com



## ACCESSORIES

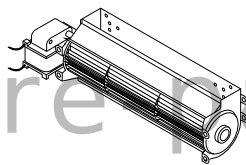
**NOTICE: All accessories may not be available for all fireplace models.**

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



### EQUIPMENT SHUTOFF VALVE GA5010

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



### BLOWER ACCESSORIES GA3750 & GA3650T SERIES

**For all models.** Manual variable control and automatic thermostat variable control. A blower will increase air flow to maximize heat distribution.

### DUPLEX OUTLET KIT - GA3555 (Not Shown)

**For all models.** Use for built-in installations when hard wiring your fireplace.

### BRASS TRIM ACCESSORY (Not Shown)

**GA7090 - Polished Brass**  
**PT32PB - Polished Brass**  
**PT32 - Black**  
**PT32P - Platinum**  
**PT32B - Brushed Brass**

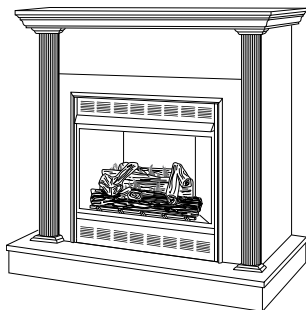
**For all models.** Optional with built-in installation. Provides a finished appearance covering rough and/or unfinished mantel or wall opening, edges, etc. (Included with mantel accessory.)

### INFORMATION VIDEO - 108917-01

**For all models.** A care and maintenance video is available by calling 1-866-672-6040. You may also email your request to [productsupport@desaint.com](mailto:productsupport@desaint.com).

### CLEANING KIT - CCK/GCK (Not Shown)

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



### CABINET MANTEL AND BASE ACCESSORY WITH FIREPLACE PERIMETER TRIM

**CMA300F Series - Medium Stained Oak**  
**CMA302F Series - Cherry Stained Birch**  
**CMA305U Series - Unfinished Birch,**  
**Ready to Stain or Paint**

**GMC10CF Series - Stained Oak**  
**For all models.** Mantel and base feature moldings, fluted sides, and medallion.

### CORNER MANTEL AND BASE ACCESSORY WITH FIREPLACE PERIMETER TRIM (Not Shown)

**CMA303U Series - Unfinished Birch**  
**For all models.** Mantel and base feature moldings, fluted sides, and medallion.

### FIREBOX BRICK LINER - G8005 SERIES (Not Shown)

**For all models.** Ceramic fiber firebox liner adds the look of real brick.

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## NOTES

fire-parts.com

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## NOTES

fire-parts.com

fire-parts.com



2701 Industrial Drive  
P.O. Box 90004  
Bowling Green, KY 42102-9004  
[www.desatech.com](http://www.desatech.com)



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NOT A UPC

108117-01  
Rev. K  
03/04