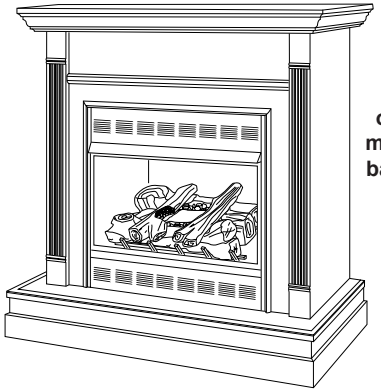
DESA™
HEARTH PRODUCTS

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



Shown with optional cabinet mantel and hearth base accessories.

Patent Pending

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

CGEFP33NRC, CGEFP33PRC, LMFP33NRC AND LMFP33PRC REMOTE CONTROL GAS FIREPLACE SYSTEMS

⚠ 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.**

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.

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SAFETY

⚠ 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**

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

SAFETY
Continued

⚠ 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 heater may not be working properly. **Get fresh air at once!** Have heater serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol and those at high altitudes.

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

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

⚠ 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 heater.

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 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 optional 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 heater.

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

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

SAFETY
Continued

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 25.
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 enough fresh air is not available. See *Air for Combustion and Ventilation*, page 5. If fireplace keeps shutting off, see *Troubleshooting*, page 26.
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 in propane/LP units, do not use propane/LP fuel tanks of less than 100 lbs. capacity (propane/LP units only).
17. Provide adequate clearances around air openings.

PRODUCT IDENTIFICATION

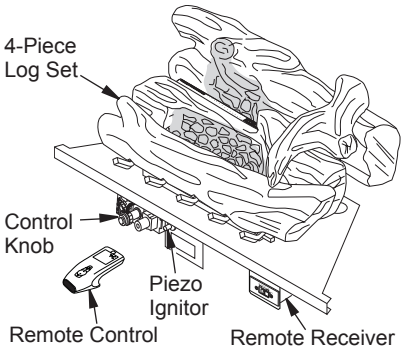


Figure 1 - Log Base Assembly (LMFP33PR Shown)

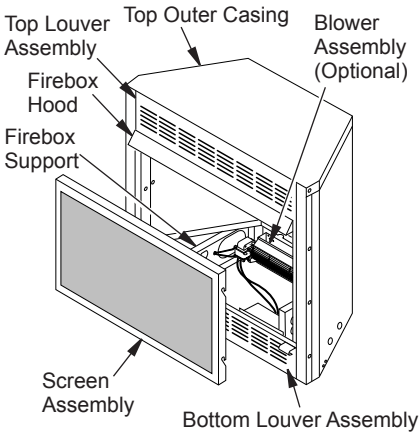


Figure 2 - Fireplace

LOCAL CODES

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

Note: Where listed vented decorative logs are required, thermostat operation is not permitted.

LOCAL CODES
Continued

State of Massachusetts: The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

Sellers of unvented propane or natural gas-fired supplemental room heaters shall provide to each purchaser a copy of 527 CMR 30 upon sale of the unit.

Vent-free gas products are prohibited for bedroom and bathroom installation in the Commonwealth of Massachusetts.

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 heater for any shipping damage. If heater is damaged call DESA Heating, LLC at 1-866-672-6040 for replacement parts before returning to dealer.

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. When used without the blower, the fireplace requires no electricity making it ideal for emergency back-up heat. This heater is designed for vent-free operation. It has been tested and approved to ANSI Z21.11.2 standard for unvented heaters. State and local codes in some areas prohibit the use of vent-free heaters.

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.

OPTIONAL BLOWER ASSEMBLY (GA3750 SERIES & GA3650TB SERIES)

This fireplace accepts an optional blower assembly (not included). The GA3650TB Series blower operates thermostatically and features a variable speed control. The GA3750 Series blower operates manually and also features a variable speed control. The blower circulates heated air from the fireplace into the room. See *Accessories,* page 31.

AIR FOR COMBUSTION AND VENTILATION

⚠ WARNING: This heater shall not be installed in a room or space unless the required volume of indoor combustion air is provided by the method described in the *National Fuel Gas Code, ANSI Z223.1/NFPA 54,* the *International Fuel Gas Code,* or applicable local codes. 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, Air for Combustion and Ventilation.*

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

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

The information on pages 5 through 7 will help you classify your space and provide adequate ventilation.

Unusually Tight Construction

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

Unusually tight construction is defined as construction where:

a. walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm (6 x 10^{-11} kg per pa-sec-m^2) or less with openings gasketed or sealed and

b. weather stripping has been added on openable windows and doors and

c. caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and at other openings.

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

If your home does not meet all of the three criteria above, proceed to *Determining Fresh-Air Flow For Heater Location*.

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^3 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^3 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 16 ft. (width) x 8 ft. (ceiling height) = 2,560 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: 2,560 cu. ft. (volume of space) x 20 = 51,200 (maximum Btu/Hr the space can support)

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

Vent-free 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.

AIR FOR COMBUSTION AND VENTILATION
Continued

Direct-vent draws combustion air from the outdoors and vents to the outdoors.

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

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

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

A. Rework worksheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms. See *Ventilation Air From Inside Building*.

B. Vent room directly to the outdoors. See *Ventilation Air From Outdoors*.

C. Install a lower Btu/Hr fireplace, if lower Btu/Hr size makes room unconfined.

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

⚠ WARNING: If the area in which the heater may be operated does not meet the required volume for indoor combustion air, combustion and ventilation air shall be provided by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1/NFPA 54,* the *International Fuel Gas Code,* 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, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

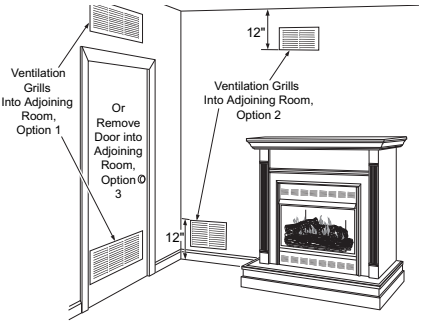


Figure 3 - Ventilation Air from Inside Building

Ventilation Air From Outdoors

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

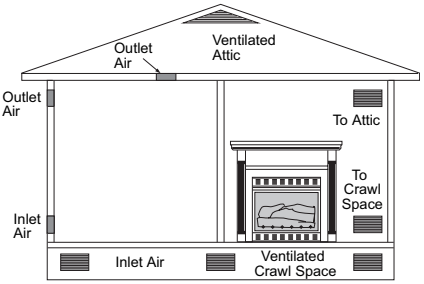


Figure 4 - Ventilation Air from Outdoors

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 36" from the front and 42" top of fireplace. For side clearances see Figure 8, page 9**
- **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 heater where impurities (such as, but not limited to, tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist, may discolor walls or cause odors.

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

Use the dimensions shown for rough openings to create the easiest installation. See *Built-In Fireplace Installation*, page 11.

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*, page 5. *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 fireplace. If your gas supply is not correct, do not install fireplace. Call dealer where you bought fireplace for proper type fireplace.

⚠ WARNING: This appliance is equipped for either natural gas or propane/LP gas but not both. Gas type is indicated on the rating plate. Field conversion is not permitted.

ELECTRICAL HOOKUP

(Models GA3750 Series and GA3650TB Series Blower Accessories and GA3555 Internal Duplex Kit)

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

INSTALLING HOOD

Install hood to top of firebox as shown in Figure 5, page 9. Use 3 Phillips screws provided.

INSTALLATION
Continued

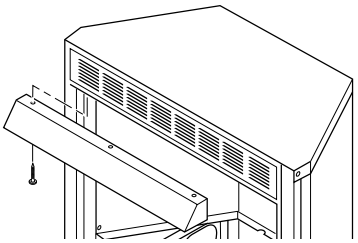


Figure 5 - Installing Hood to Firebox

ASSEMBLING AND ATTACHING BLACK TRIM

IMPORTANT: If you are recessing the firebox in a wall, do not attach trim at this time. See page 11.

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

1. Remove packaging from 3 pieces of trim.
2. Locate 4 brass screws, 2 adjusting plates with set screws and 2 shims in the hardware packet.
3. Align shim under adjusting plate as shown in Figure 6.
4. Slide one end of adjusting plate/shim in slot on mitered edge of top trim (see Figure 6).
5. Slide other end of adjusting plate/shim in slot on mitered edge of side trim (see Figure 6).
6. While firmly holding edges of 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 assembled trim onto fireplace cabinet. Align hanging notches on trim with hanging screws on side of fireplace (see Figure 7). Push trim firmly into place, sliding hanging notches over hanging screws.

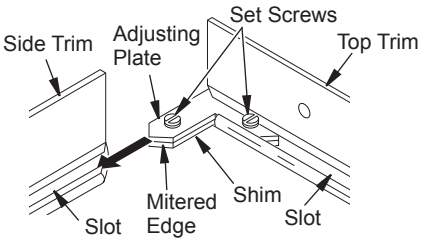


Figure 6 - Assembling Trim

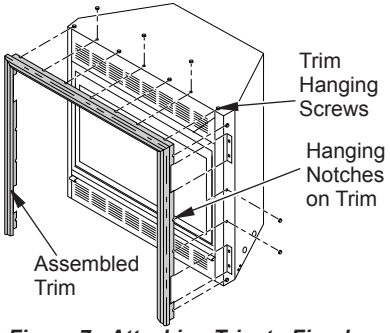


Figure 7 - Attaching Trim to Fireplace

INSTALLATION CLEARANCES

⚠ WARNING: Maintain the minimum clearances. If you can, provide greater clearances from floor, ceiling and adjoining wall.

Carefully follow the instructions below. This will ensure safe installation.

Minimum Clearances For Side Combustible Material, Side Wall and Ceiling

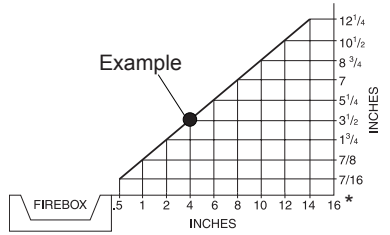
A. Clearances from the side of the fireplace cabinet to any combustible material and wall should follow diagram in Figure 8.

Example: The face of a mantel, bookshelf, etc. is made of combustible material and protrudes 3 1/2" from the wall. This combustible material must be 4" from the side of the fireplace opening (see Figure 8).

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

MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS

Top 42"; Left and Bottom 16"; Right Side and Rear 0"; Front 36"



*Minimum 16" from Side Wall

Figure 8 - Minimum Clearance for Combustible to Wall

INSTALLATION
Continued

CONVENTIONAL FIREPLACE INSTALLATION

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

Note: The instructions in this section show installation using the cabinet mantel and hearth base accessories. The hearth base accessory shown is optional for this installation. You can install fireplace and cabinet 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 9).
3. Install gas piping to fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the equipment shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Installing Gas Piping to Fireplace Location*, page 13.
4. Place hearth base accessory against wall at installation location. Cut an access hole in hearth top to run flexible gas line to fireplace (see Figure 9). Make sure to locate access hole so cabinet mantel will cover it when installed. *Note:* You can secure base to floor using wood screws. Countersink screw heads and putty over.
5. Route flexible gas line through access hole in hearth base.
6. Center cabinet mantel on hearth base (see Figure 10). Make sure mantel is flush against wall.

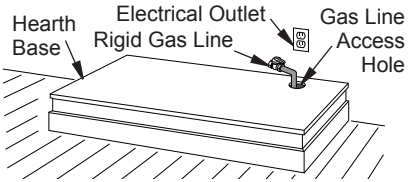


Figure 9 - Placing Hearth Base Accessory Against Wall

7. Break off nailing flanges (see Figure 11) with hammer or pliers.
8. Place cardboard or other protective material on top of hearth base. Carefully set fireplace on protective material, with back of fireplace inside mantel opening.
9. Attach flexible gas line from fireplace gas regulator to gas supply. See *Connecting Fireplace to Gas Supply*, page 15.
10. If blower is installed, route blower electrical cord through access holes in either side of fireplace. *Note: Bushing may be moved if necessary. Plug electrical cord into electrical outlet.*
11. Carefully insert fireplace into cabinet mantel. Be careful not to scratch or damage hearth base or cabinet mantel. Remove protective material from top of hearth base and from front of fireplace (if any).
    Note: You can secure fireplace to hearth or floor. Open lower louver. Locate screw holes in bottom of base. Tighten wood screws through these holes and into hearth or floor.
12. Check all gas connections for leaks. See *Checking Gas Connections*, page 16.

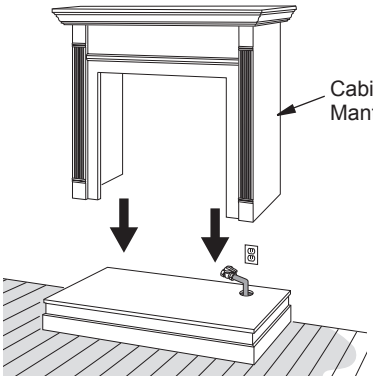


Figure 10 - Installing Cabinet Mantel

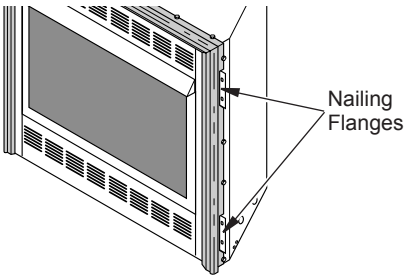


Figure 11 - Location of Nailing Flanges

INSTALLATION
Continued

BUILT-IN FIREPLACE INSTALLATION

Built-in installation of this fireplace involves installing fireplace into a framed-in enclosure. This makes the front of fireplace flush with wall. If installing a mantel above the fireplace, you must follow the clearances shown in Figure 17, page 13. Follow the instructions below to install the fireplace in this manner.

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

⚠ WARNING: A qualified electrician must connect electrical wiring to duplex outlet for built-in installation. Follow all local codes.

1. Frame in rough opening. Use dimensions shown in Figure 12 for the rough opening. If installing in a corner, use dimensions shown in Figure 13 for the rough opening. The height is 33" which is the same as the wall opening above.

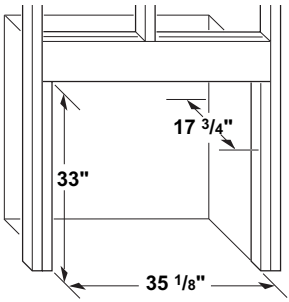


Figure 12 - Rough Opening for Installing in Wall

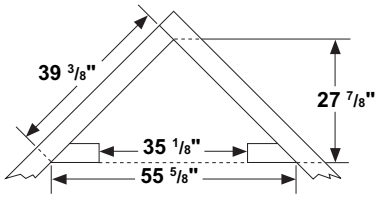


Figure 13 - Rough Opening for Installing in Corner

2. If using blower, install duplex outlet to the right support bracket in the bottom of firebox (see Figure 14). See *Accessories*, page 31. If not using blower, go to step 7.
3. Route wires from electrical box through smallest hole in outer casing using strain relief fitting provided (see Figure 14).
4. Connect wires from the electrical box to duplex outlet. Match wire colors to those indicated on duplex outlet. Be sure to connect ground wire.
5. Install shield to end of right support bracket and behind the firebox wrapper with 2 screws provided (see Figure 15, page 12).
6. Plug blower cord into duplex outlet.
7. Replace bottom of firebox and reconnect remote receiver module to valve.
8. 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 13.
9. Carefully set fireplace in front of rough opening with back of fireplace inside wall opening.
10. Attach flexible gas line to gas supply. See *Connecting Fireplace to Gas Supply*, page 15.

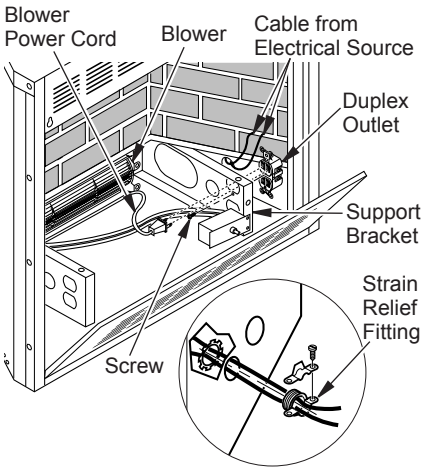


Figure 14 - Connecting Duplex Outlet

INSTALLATION
Continued

11. Plug electrical cord into electrical outlet installed in step 2 if using blower.
12. Carefully insert fireplace into rough opening.
13. Attach fireplace to wall studs using nails or wood screws through holes in nailing flange (see Figure 16).
14. Check all gas connections for leaks. See *Checking Gas Connections*, page 16.
15. Install trim after final finishing and/or painting of wall (see Figure 7, page 9).

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

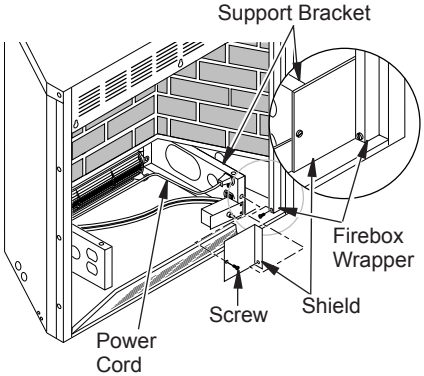


Figure 15 - Installing Shield to Support Bracket

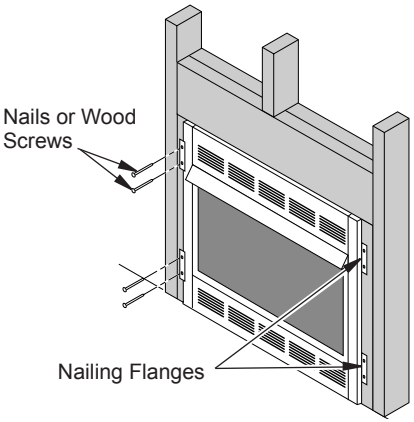


Figure 16 - Attaching Fireplace to Wall Studs

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

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

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

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

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: If your installation does not meet the minimum clearances shown, you must do one of the following:
- **raise the mantel to an acceptable height**
- **remove the mantel**

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.

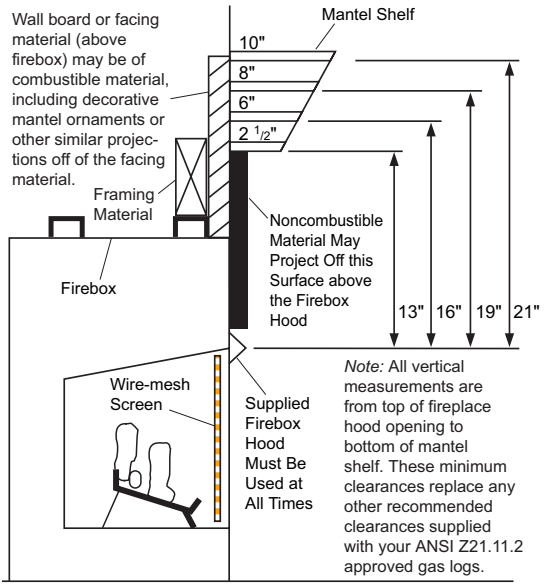


Figure 17 - Minimum Mantel Clearances for Built-In Installation

INSTALLING GAS PIPING TO FIREPLACE LOCATION

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

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

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

⚠ WARNING: Never connect natural gas fireplace to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

Installation Items Needed

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

- external regulator for propane/LP unit only (supplied by installer)
- piping (check local codes)
- sealant (resistant to propane/LP gas)
- equipment shutoff valve *
- test gauge connection *
- sediment trap (optional)
- tee joint
- pipe wrench
- 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.

For propane/LP units, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11" and 14" 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 18. 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 19).

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.

We recommend that you install a sediment trap in supply line as shown in Figure 19. 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.

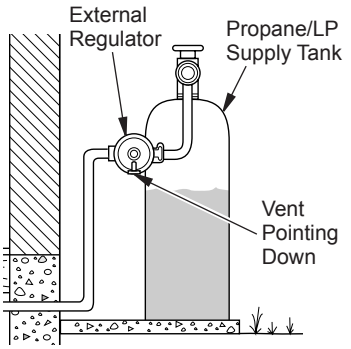


Figure 18 - External Regulator on Propane/LP Supply Tank with Vent Pointing Down

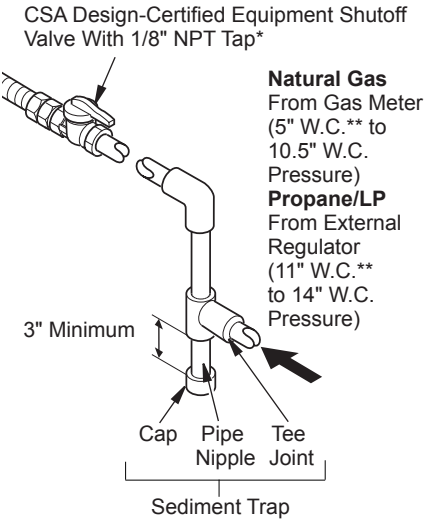


Figure 19 - Gas Connection

* Purchase the optional CSA design-certified equipment shutoff valve from your dealer.

** Minimum inlet pressure for purpose of input adjustment.

CONNECTING FIREPLACE TO GAS SUPPLY

Installation Items Needed

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

1. Remove 2 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. Open lower louver door. Carefully pull straight out on the wire harnesses attached to right side and front of remote receiver module (see Figure 20).
3. Remove screws that attach log base assembly to fireplace (see Figure 20). Carefully lift up log base assembly and remove from fireplace (see Figure 20).

Note: If adding the G8000A series brick liner accessory, install it now. Follow instructions in G8000A accessory kit.

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

4. 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 21). The flexible gas supply line connection to the equipment shutoff valve should be accessible.

5. Attach the flexible gas line to gas supply (see Figure 21). Check tightness of flexible gas line attached to gas regulator of fireplace (see Figure 21).
6. Check all gas connections for leaks. See *Checking Gas Connections*, page 16.
7. Replace log base assembly back into fireplace. Feed flexible gas line into fireplace base area while replacing log base assembly. Make sure the entire flexible gas line is in fireplace base area. Reattach log base assembly to fireplace with screws removed in step 2.

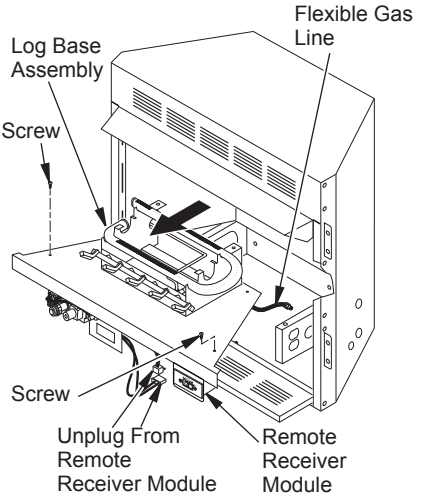


Figure 20 - Removing Log Base Assembly From Fireplace

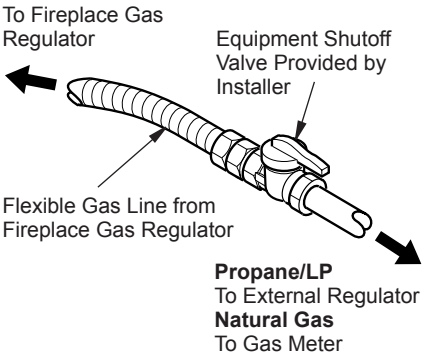


Figure 21 - Attaching Flexible Gas Lines Together

INSTALLATION
Continued

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.

⚠ CAUTION: Make sure external regulator has been installed between propane/LP supply and fireplace. See guidelines under *Connecting Fireplace to Gas Supply*, page 15.

PRESSURE TESTING GAS SUPPLY PIPING SYSTEM

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

1. Disconnect fireplace with its appliance main gas valve (control valve) and equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig will damage fireplace 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 22).
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 to equipment shutoff valve for natural gas or propane/LP supply to equipment shutoff valve for propane/LP (see Figures 23 or 24). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
4. Correct all leaks at once.

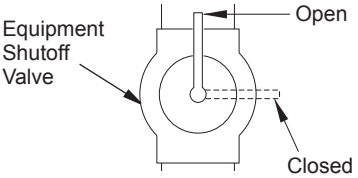


Figure 22 - Equipment Shutoff Valve

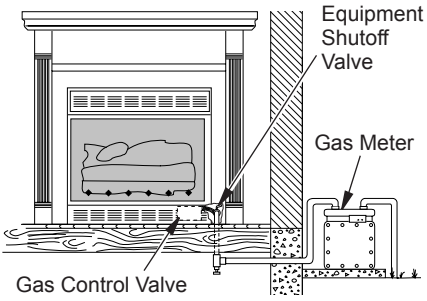


Figure 23 - Checking Gas Joints for Natural Gas

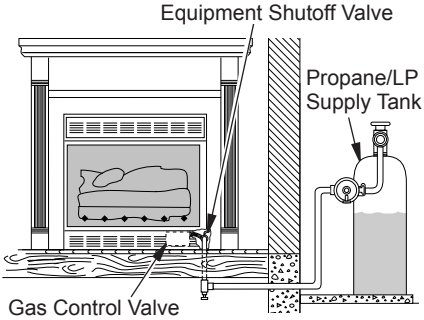


Figure 24 - Checking Gas Joints for Propane/LP Gas

INSTALLATION
Continued

PRESSURE TESTING FIREPLACE GAS CONNECTIONS

1. Open equipment shutoff valve (see Figure 22, page 16).
2. Open main gas valve located on or near gas meter for natural gas or open propane/LP supply tank valve.
3. Make sure control knob of fireplace is in the OFF position.
4. Check all joints from equipment shutoff valve to gas control valve (see Figures 23 or 24, page 16). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light fireplace (see *Operation*, page 20). Check all other internal joints for leaks.
7. Turn off fireplace (see *To Turn Off Gas to Appliance*, page 21).

INSTALLING LOGS

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

⚠ 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.

⚠ WARNING: 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 flame contact any log. If so, reposition logs according to the log installation instructions in this manual. Flames contacting logs will create soot.

LMFP33NRC and LMFP33PRC Models

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 base of middle log (#1) in U-shaped slots of grate base. Cutout on right of middle log should fit over burner (see Figure 25). Make sure front of middle log is resting on tabs of grate base and cutout area is centered over burner "U" bend.
2. Locate pegs on bottom of back log (#2). Slide these pegs into holes in grate base behind burner (see Figure 26).
3. Locate notches in bottom of front log (#3). Place front log on grate fingers. Make sure notches of front log line up with grate fingers (see Figure 27, page 18).
4. Place crossover log (#4) onto pin (right) on back log (#2) and into recess of middle log (#1) (see Figure 28, page 18).

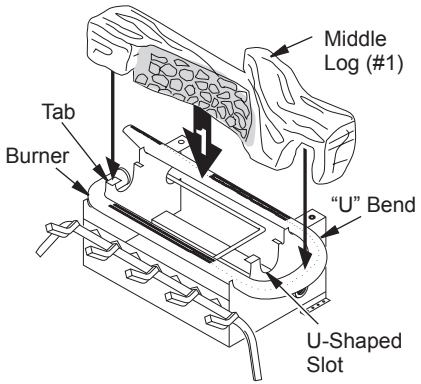


Figure 25 - Installing Middle Log (#1)
(Base may vary from illustration)

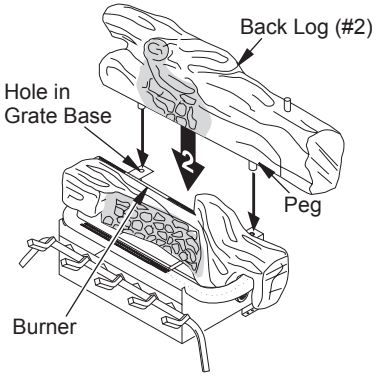


Figure 26 - Installing Back Log (#2)
(Base may vary from illustration)

INSTALLATION
Continued

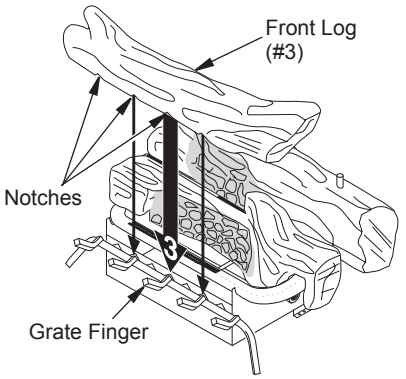


Figure 27 - Installing Front Log (#3)
(Base may vary from illustration)

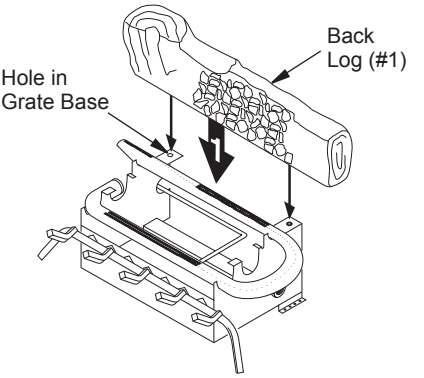


Figure 29 - Installing Back Log (#1)
(Base may vary from illustration)

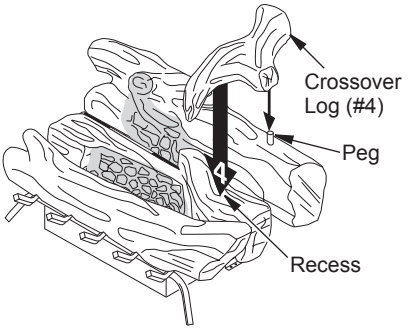


Figure 28 - Installing Crossover Log (#4)
(Base may vary from illustration)

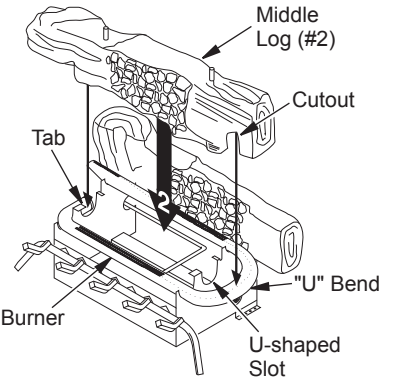


Figure 30 - Installing Middle Log (#2)
(Base may vary from illustration)

CGEFP33NRC and CGEFP33PRC Models

1. Locate pegs on bottom of back log (#1). Slide these pegs into holes in grate base behind burner (see Figure 29).
2. Place base of middle log (#2) in U-shaped slots of grate base in front of back log. Cutout on right of middle log should fit over burner (see Figure 30). Make sure front of middle log is resting on tabs of grate base and cutout area is centered over burner “U” bend.
3. Locate the notches in bottom of front log (#3). Place front log on grate fingers. Make sure notches of front log line up with grate fingers (see Figure 31).

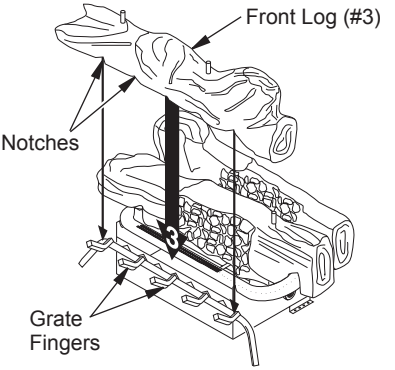


Figure 31 - Installing Front Log (#3)
(Base may vary from illustration)

INSTALLATION
Continued

4. Place left crossover log (#4) across logs #1, #2 and #3 fitting holes on bottom of log #4 onto pin on front and middle logs as shown in Figure 32.
5. Place right crossover log (#5) in the same manner on right side of logs (see Figure 32).

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

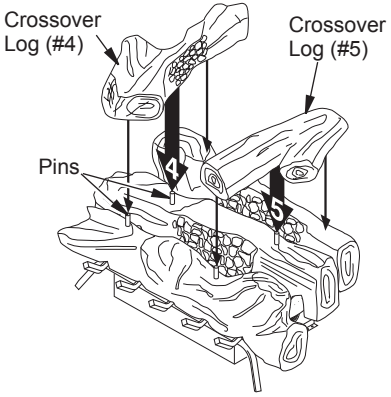


Figure 32 - Installing Crossover Logs (#4 & #5) (Base may vary from illustration)

INSTALLING BATTERIES IN REMOTE CONTROL AND RECEIVER

⚠ WARNING: Make sure your selector switch is in OFF position before installing or changing batteries in your hand-held remote or receiver.

Installing Battery into Remote

1. Remove battery housing cover from back of hand-held remote.
2. Install 3 AAA batteries.
3. Replace battery housing cover.

When batteries are installed, the "little house" icon with current room temperature will be displayed (see Figure 34). This icon will always show in the control window as long as the batteries have power.

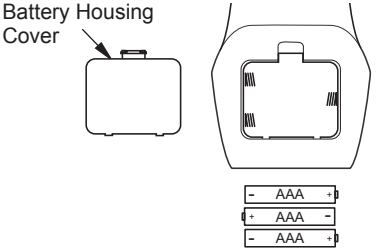


Figure 33 - Battery Install Hand-Held Remote Control

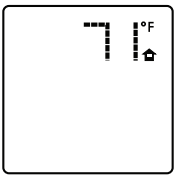


Figure 34 - Remote Display

Installing Battery into Remote Receiver

1. Open lower louver to gain access to receiver.
2. Remove screws from cover plate.
3. Remove battery housing cover.
4. Install 4 AA batteries.
5. Replace battery housing cover.
6. Replace cover plate.
7. Close louver panel.

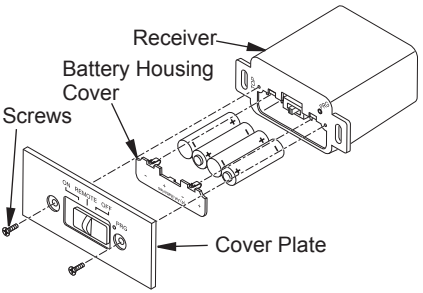


Figure 35 - Battery Install Remote Control Receiver

Installing Cover Plate Onto Remote Receiver

1. Locate and remove cover plate from packaging.
2. Make sure sliding selector switch fits over switch on receiver.
3. Attach cover plate to receiver with 2 screws as shown in Figure 35.
4. See page 23 for instructions on programming remote receiver to hand-held remote control.
   Note: For hand-held remote control to work, programming (synchronizing) remote to receiver must be completed.

OPERATION

FOR YOUR SAFETY READ BEFORE LIGHTING

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

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

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

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician or gas supplier. Force or attempted repair may result in a fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

⚠ WARNING

- **If fireplace has glass doors, never operate this heater with glass doors closed. If you operate heater with doors closed, heat buildup inside fireplace will cause glass to burst. Make sure there are no obstructions across opening of fireplace.**
- **You must operate this heater with a fireplace screen in place. Make sure fireplace screen is closed before running heater.**

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

Note: Home owners generally prefer to operate their heater with the chimney damper closed. This will put all the heat into the room. However, there may be times you will desire the full flames of the highest heat setting but will find the heat output excessive. You can open the chimney damper (if you have one) fully or partially to release some of the heat.

⚠ WARNING: Damper handle will be hot if heater has been running.

⚠ WARNING: Burners will come on automatically within one minute when the control valve is in the ON position after the pilot is lit.

1. STOP! Read the safety information, column 1.
2. Make sure equipment shutoff valve is fully open.

OPERATION
Continued

3. Set remote selector switch in the AUTO position (see Figure 36).
4. Press in and turn control knob clockwise ↷ to the OFF position (see Figure 32).
5. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information on page 20. If you don't smell gas, go to the next step.
6. Press in and turn control knob counterclockwise ↶ to the PILOT position. Press in control knob for five (5) seconds (see Figure 36).

   Note: You may be running this heater for the first time after hooking up to gas supply. If so, the control knob may need to be pressed in for 30 seconds or more. This will allow air to bleed from the gas system.
7. With control knob pressed in, press and release ignitor button. This will light pilot. The pilot is attached to the rear of the front burner. If needed, keep pressing ignitor button until pilot lights.

   Note: If pilot does not stay lit, contact a qualified service person or gas supplier for repairs. Until repairs are made, light pilot with match. To light pilot with match, see Manual Lighting Procedure.
8. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.
   - If control knob does not pop out when released, contact a qualified service person or gas supplier for repairs.

   Note: If pilot goes out, repeat steps 4 through 8.

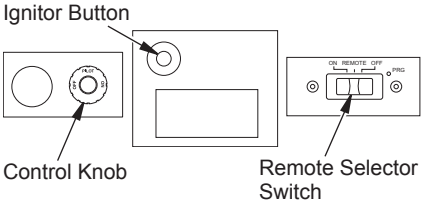


Figure 36 - Remote Selector Switch, Control Knob and Ignitor Button

9. Slightly push in and turn control knob counterclockwise ↶ to the ON position.
10. Press the on/off key on the remote control to turn on appliance main burner. Wait at least 5 seconds before setting desired flame height.
11. Select manual flame height function by pressing MODE button on remote until a flame is shown in lower left corner of display. Use the UP/DOWN arrow button to set desired flame height (see Figure 41, page 22).
12. To leave pilot lit and shut off burners only, turn control knob clockwise ↷ to the PILOT position, or use remote control ON/OFF button

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

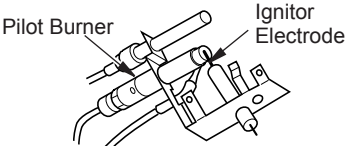


Figure 37 - Pilot (Propane/LP)

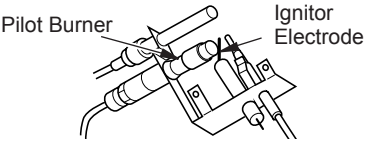


Figure 38 - Pilot (Natural)

TO TURN OFF GAS TO APPLIANCE

1. Press on/off key on remote control and turn control knob clockwise ↷ to the OFF position (see Figure 36).
2. Close equipment shutoff valve (see Figure 22, page 16).

MANUAL LIGHTING PROCEDURE

1. Follow steps 1 through 7 under *Lighting Instructions*, page 20.
2. Depress control knob and light pilot with match.
3. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow steps 9 through 11 under *Lighting Instructions*.

OPERATION
Continued

HAND-HELD REMOTE OPERATION

BATTERIES

⚠ WARNING: Make sure your selector switch is in OFF position before installing or changing batteries in your hand-held remote or receiver.

For installing or replacing batteries in remote control or receiver, see *Installing Batteries in Remote Control and Receiver* on page 19.

Low Battery - Hand-Held Remote Control

When batteries in hand-held remote control are low, an icon will appear on display (see Figure 39).

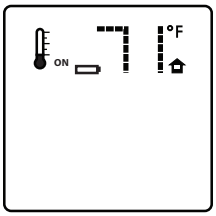


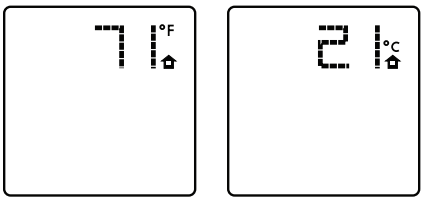
Figure 39 - Low Battery Display

Low Battery - Remote Receiver

When batteries in receiver are low, no acoustic signal will be given when ON/OFF button is pressed. If batteries in receiver are low, fireplace can be switched on manually by moving remote selector switch to ON (see Figure 36, page 20).

FAHRENHEIT/CELSIUS INDICATOR

You can set your hand-held remote control to display the temperature in either Fahrenheit or Celsius. With remote control off, press Thermostat button and Mode button at the same time. This will toggle the display from °F to °C.



MINIMUM MAXIMUM

Figure 40 - Remote Control Display of Flame Height Minimum and Maximum

OPERATING REMOTE CONTROL

⚠ WARNING: Fireplace can turn on suddenly. Keep away from burner.

After lighting pilot, let pilot flame burn for about one minute. Slide remote selector switch to REMOTE position. You can now turn the burner on and off with the remote.

IMPORTANT: Do not leave selector switch in the REMOTE or ON position when pilot is not lit. This will drain batteries.

When any button is pushed on remote control, the LCD display will glow blue. The blue glow will go off after several seconds if no action is being taken with remote.

ON/OFF

Push ON/OFF button and burners will come on in high position (see Figure 41). A beep from the receiver confirms the command.

Push ON/OFF button again and burners will turn off. A beep from the receiver confirms the command.

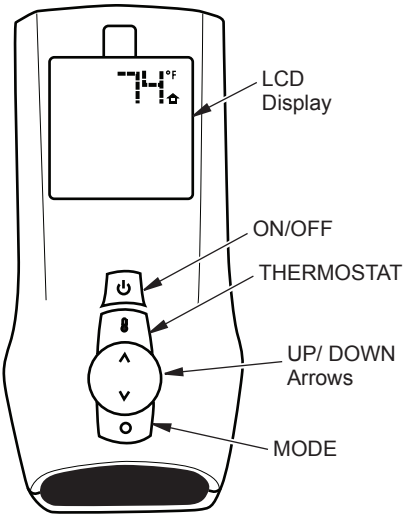
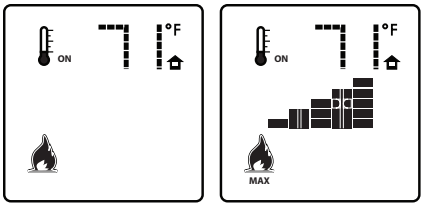


Figure 41 - Hand-Held Remote Control

OPERATION
Continued

FLAME HEIGHT

This function allows you to control the height of the flames through 5 levels. Select manual flame height function by pressing MODE button until a flame is shown in lower left corner of display. Use the UP/DOWN arrow button to set desired flame height (see Figure 41, page 22). A beep from the receiver confirms the command.



MINIMUM MAXIMUM

Figure 42 - Remote Control Display of Flame Height Minimum and Maximum

ROOM THERMOSTAT

The remote control can operate as a room thermostat. The thermostat can be set to a desired temperature to control the comfort level in the room.

To activate, press THERMOSTAT button on remote control (see Figure 41, page 22). The word ON will appear to the right of temperature bulb graphic on display (see Figure 43). Use UP/DOWN arrow button to set desired room temperature. Control system will cycle fireplace on or off to maintain selected temperature.

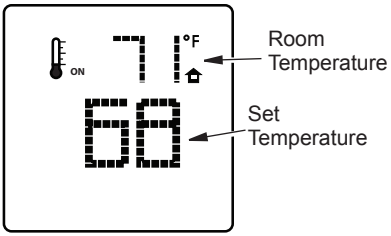


Figure 43 - Room Temperature Setting

SMART THERMOSTAT

The Smart Thermostat adjusts flame height in accordance to differences between set temperature and room temperature. As room temperature gets closer to set temperature the smart function will modulate the flame lower. As room temperature cools, it will modulate the flame higher.

To activate this function, press THERMOSTAT button until the word SMART appears to the right of temperature bulb graphic on display. Use UP/DOWN arrow button to set desired room temperature. The control system will cycle the fireplace on or off to maintain selected temperature.

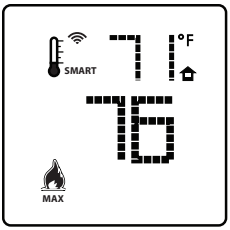


Figure 44 - Smart Thermostat Setting

CHILD SAFETY LOCK-OUT

This function lets you deactivate the remote control buttons. It is active when the lock icon is lit on the display.

To activate, press MODE button and UP arrow button at the same time. To deactivate, press again.

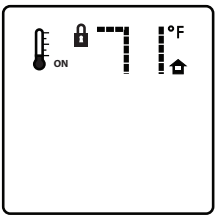


Figure 45 - Child Safety Lock-Out

PROGRAMMING HAND-HELD REMOTE CONTROL TO RECEIVER

If your remote ever needs to be replaced you will not need to replace the receiver.

To program receiver with a new hand-held remote, insert a small pin or paper clip into hole on receiver face plate marked PRG. The receiver will beep 3 times to indicate it is ready to accept a new remote transmitter. Press the ON/OFF button on your remote and the receiver will beep 4 times to confirm it receives commands from the new remote.

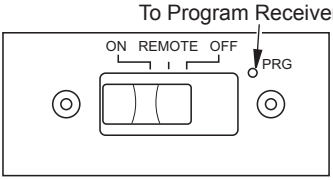


Figure 46 - Programing Remote Control to Receiver

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

PILOT FLAME PATTERN

Figure 47 shows a correct pilot flame pattern. Figure 44 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 48

- turn heater off (see *To Turn Off Gas to Appliance*, page 21)
- see *Troubleshooting*, page 26

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

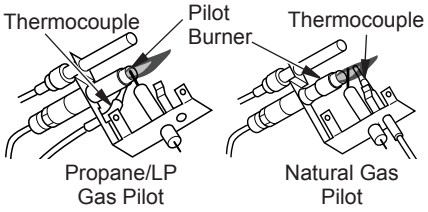


Figure 47 - Correct Pilot Flame Pattern

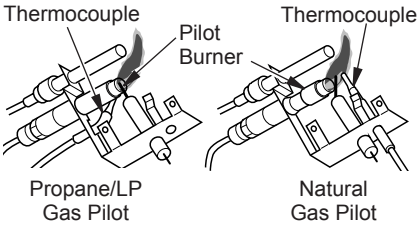


Figure 48 - Incorrect Pilot Flame Pattern

BURNER PRIMARY AIR HOLES

Air is drawn into the burner through the holes in the fitting at the burner entrance. These holes may become blocked with dust or lint. Periodically inspect these holes for any blockage and clean if needed. Blocked air holes will create soot.

MAIN BURNER

Periodically inspect all burner flame holes with the fireplace running. All slotted burner flame holes should be open with yellow 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 fireplace and let cool. Remove blockage. Blocked burner flame holes will create soot.

BURNER FLAME PATTERN

⚠ WARNING: If yellow tipping occurs, your fireplace could produce increased levels of carbon monoxide.

NOTICE: Do not mistake orange flames with yellow tipping. Dirt or other fine particles enter the fireplace and burn causing brief patches of orange flame.

Figure 49 shows a correct burner flame pattern. Figure 50 shows an incorrect burner flame pattern. The incorrect burner flame pattern shows the flame consistently higher than 1 inch above the logs.

If burner flame pattern is incorrect, as shown in Figure 50

- turn heater off (see *To Turn Off Gas To Appliance*, page 21)
- see *Troubleshooting*, page 26

Figure 49 - Correct Burner Flame Pattern

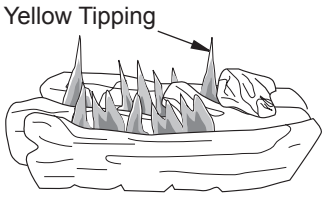


Figure 50 - Incorrect Burner Flame Pattern

CLEANING AND MAINTENANCE

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

⚠ CAUTION: You must keep control areas, burner 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 AND PILOT AIR INLET HOLE

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

We also recommend that you keep the burner tube and pilot assembly clean and free of dust and dirt. To clean these parts we recommend using compressed air no greater than 30 PSI. Your local computer store, hardware store or home center may carry compressed air in a can. 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 unit, including pilot. Allow 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 Figures 51 and 52).
3. Blow air through the ports/slots and holes in the burner.
4. Check injector holder located at the end of 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.

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 2" from where the pilot flame comes out of the pilot assembly (see Figure 52). With the unit off, lightly blow air through the air inlet hole. You may blow through a drinking straw if compressed air is not available.

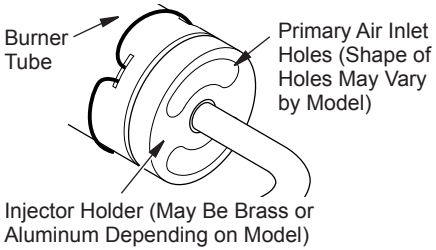


Figure 51 - Injector Holder On Outlet Burner Tube

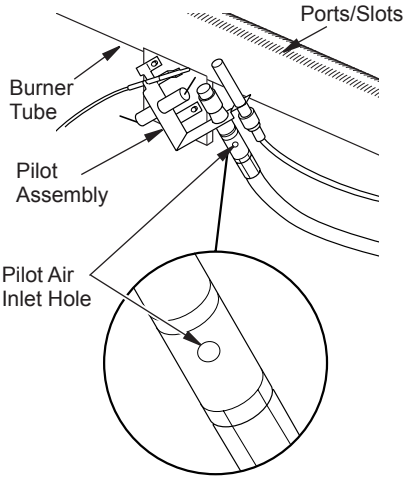


Figure 52 - Pilot Inlet Air Hole

LOGS

- If you remove logs for cleaning, refer to *Installing Logs*, page 17, to properly replace logs.
- Replace log(s) if broken or chipped (dime-sized or larger).

TROUBLESHOOTING

⚠ 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.

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

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at ODS/ pilot	1. Ignitor electrode not connected to ignitor cable	1. Reconnect ignitor cable
	2. Ignitor cable pinched or wet	2. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry
	3. Piezo ignitor nut is loose	3. Tighten nut holding piezo ignitor to base panel of log set. Nut is located behind base panel
	4. Broken ignitor cable	4. Replace ignitor cable
	5. Bad piezo ignitor	5. Replace piezo ignitor
	6. Ignitor electrode positioned wrong	6. Replace pilot assembly
	7. Ignitor electrode broken	7. Replace pilot assembly
When ignitor button is pressed, there is spark at ODS/pilot but no ignition	1. Gas supply turned off or equipment shutoff valve closed	1. Turn on gas supply or open equipment shutoff valve
	2. Control knob not in PILOT position	2. Turn control knob to PILOT position
	3. Control knob not pressed in while in PILOT position	3. Press in control knob while in PILOT position
	4. Air in gas lines when installed	4. Continue holding down control knob. Repeat igniting operation until air is removed
	5. Depleted gas supply (propane/LP only)	5. Contact local propane/LP gas company
	6. ODS/pilot is clogged	6. Clean ODS/pilot (see *Cleaning and Maintenance*, page 25) or replace ODS/pilot assembly
	7. Gas regulator setting is not correct	7. Replace gas regulator

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
ODS/pilot lights but flame goes out when control knob is released	1. Control knob not fully pressed in	1. Press in control knob fully
	2. Control knob not pressed in long enough	2. After ODS/pilot lights, keep control knob pressed in 30 seconds
	3. Equipment shutoff valve not fully open	3. Fully open equipment shut-off valve
	4. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following: A) Low gas pressure B) Dirty or partially clogged ODS/pilot	4. A) Contact local natural or propane/LP gas company B) Clean ODS/pilot (see *Cleaning and Maintenance*, page 25) or replace ODS/pilot assembly
	5. Thermocouple connection loose at control valve	5. Hand tighten until snug, then tighten 1/4 turn more
	6. Thermocouple damaged	6. Replace pilot assembly
	7. Control valve damaged	7. Replace control valve
Burner does not light after ODS/pilot is lit	1. Inlet gas pressure is too low	1. Contact local natural or propane/LP gas company
	2. Burner orifice(s) clogged	2. Clean burner(s) (see *Cleaning and Maintenance*, page 25) or replace burner orifice(s)
	3. Thermopile leads disconnected or improperly connected	3. Reconnect leads (see *Wiring Diagram*, page 30)
	4. Burner will not come on in remote position	4. Replace battery in transmitter and receiver
Delayed ignition of one or both burners	1. Manifold pressure is too low	1. Contact local natural or propane/LP gas company
	2. Burner orifice(s) clogged	2. Clean burner(s) (see *Cleaning and Maintenance*, page 25) or replace burner orifice(s)
Burner backfiring during combustion	1. Burner orifice is clogged or damaged	1. Clean burner (see *Cleaning and Maintenance*, page 25) or replace burner orifice(s)
	2. Damaged burner	2. Replace damaged burner
	3. Gas regulator defective	3. Replace gas regulator

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Slight smoke or odor during initial operation Moisture/condensation noticed on windows	1. Not enough air 2. Gas regulator defective 3. Residues from manufacturing processes and logs curing	1. Check burner for dirt and debris. If found, clean burner (see *Cleaning and Maintenance*, page 25) 2. Replace gas control 3. Problem will stop after a few hours of operation
Heater produces a whistling noise when burners are lit	1. Not enough combustion/ventilation air	1. Refer to *Air for Combustion and Ventilation* requirements (page 5)
	1. Turning control knob to HI position when burners are cold 2. Air in gas line 3. Air passageways on heater blocked 4. Dirty or partially clogged burner orifice(s)	1. Turn control knob to LO position and let warm up for a minute 2. Operate burners until air is removed from line. Have gas line checked by local natural or propane/LP gas company 3. Observe minimum installation clearances (see page 9) 4. Clean burners (see *Cleaning and Maintenance*, page 25) or replace burner orifice(s)
White powder residue forming within burner box or on adjacent walls or furniture	1. When heated, vapors from furniture polish, wax, carpet cleaners, etc. may turn into white powder residue	1. Turn heater off when using furniture polish, wax, carpet cleaners or similar products
Remote does not function	1. Battery is not installed. Battery power is low 2. Wire connection loose or wire broken	1. Replace 4 AA batteries in receiver and 3 AAA batteries in hand-held remote control 2. Check wiring connections (see *Wiring Diagram*, page 30). Replace wiring harness if necessary
Fireplace produces a clicking/ticking noise just after burner is lit or shut off	1. Metal expanding while heating or contracting while cooling	1. This is normal with most heaters. If noise is excessive, contact qualified service person

TROUBLESHOOTING

Continued

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

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

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces unwanted odors	1. Heater burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. (See *IMPORTANT* statement above) 2. Low fuel supply (propane/LP only) 3. Gas leak. **See Warning statement above**	1. Open window to ventilate room. Stop using odor causing products while heater is running 2. Refill supply tank (propane/LP only) 3. Locate and correct all leaks (see *Checking Gas Connections*, page 16)
Fireplace shuts off in use (ODS operates)	1. Not enough fresh air is available 2. Low line pressure 3. ODS/pilot is partially clogged	1. Open window and/or door for ventilation 2. Contact local natural or propane/LP gas company 3. Clean ODS/pilot (see *Cleaning and Maintenance*, page 25)
Gas odor even when control knob is in OFF position	1. Gas leak. **See Warning statement above** 2. Control valve or gas control defective	1. Locate and correct all leaks (see *Checking Gas Connections*, page 16) 2. Replace control valve or gas control
Gas odor during combustion	1. Foreign matter between control valve and burner 2. Gas leak. **See Warning statement above**	1. Take apart gas tubing and remove foreign matter 2. Locate and correct all leaks (see *Checking Gas Connections*, page 16)
Dark residue on logs inside of their fireplace *Note:* After removing all causes of residue deposits, completely clean fireplace and appliance off residue before reusing appliance	1. Improper log placement 2. Drafts or other air currents affecting flame pattern 3. Air holes at burner inlet blocked 4. Burner flame holes blocked	1. Properly locate logs (see *Installing Logs*, page 17) 2. Eliminate source of drafts around heater 3. Clean out air holes at burner inlet. Periodically repeat as needed 4. Remove blockage

SPECIFICATIONS

CGEFP33NRC, LMFP33NRC

- Rating (Variable): 23/33,000 Btu/Hr
- Gas Type: Natural Gas
- Ignition: Piezo
- Pressure Regulator Setting: 3.5" W.C.
- Inlet Gas Pressure (in. of water): Maximum - 10.5" W.C., Minimum* - 5.5" W.C.
- Shipping Weight - 122 lbs.

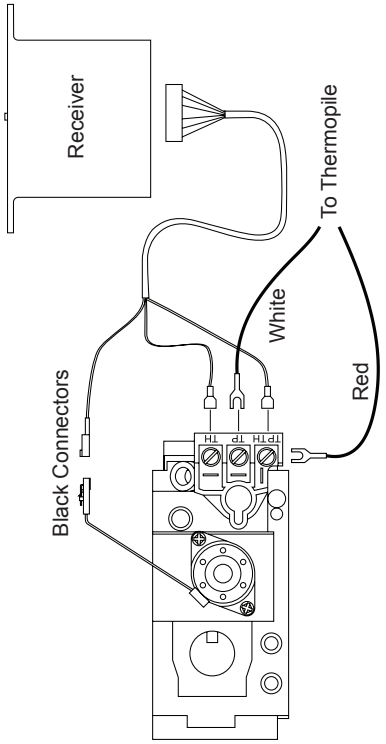
* For purposes of input adjustment

CGEFP33PRC, LMFP33PRC

- Rating (Variable): 23/33,000 Btu/Hr
- Gas Type: Propane/LP Gas
- Ignition: Piezo
- Pressure Regulator Setting: 7.9" W.C.
- Inlet Gas Pressure (in. of water): Maximum - 14" W.C., Minimum* - 11" W.C.
- Shipping Weight - 122 lbs.

* For purposes of input adjustment

WIRING DIAGRAM



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, LLC at 1-866-672-6040.

When calling DESA Heating, LLC, have ready:

- your name
- your address
- model and serial numbers of your heater
- how heater was malfunctioning
- 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, LLC at 1-866-672-6040 for referral information. A list of authorized dealers can be found by visiting **www.desatech.com.**

When calling DESA Heating, LLC, have ready:

- model and serial numbers of your heater
- the replacement part number

TECHNICAL SERVICE

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

You can also visit DESA Heating, LLC's web site at **www.desatech.com**.

SERVICE HINTS

When Gas Pressure Is Too Low

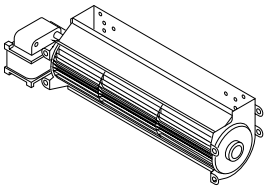
- pilot will not stay lit
- burner will have delayed ignition
- fireplace will not produce specified heat
- for propane/LP unit, propane/LP gas supply may be low

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

ACCESSORIES

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

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



BLOWER ACCESSORY - GA3750A AND GA3650TB SERIES

For all models. Manual variable control and automatic thermostat variable control. A blower will increase air flow to assist heat distribution from the firebox.

FIREBOX BRICK LINER - HFL300 Series

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

CABINET MANTEL AND FULL HEARTH BASE

W32AU - Unfinished Oak, Traditional
W32AOS - Oak Finished, Traditional
CMA311WA - Painted White, Traditional with Dentil Molding
CMA306FA - Oak Finished, Traditional with Dentil Molding
CMA312FB - Red Oak Finished, Classic
W32KPA - Painted White, Neo-Classical
CMA305UA - Unfinished Oak , Georgian
GMC90FA - Oak Finished, Georgian
W32DS - Red Oak Finished, Keystone
W32GOSA - Dark Oak Finished, Mission

For all models. Three-sided perimeter trim included.

CORNER CABINET MANTEL AND FULL HEARTH BASE

C32AU - Unfinished Oak, Traditional
C32AOS - Oak Finished, Traditional
C32HS - Dark Oak Stained, Classic

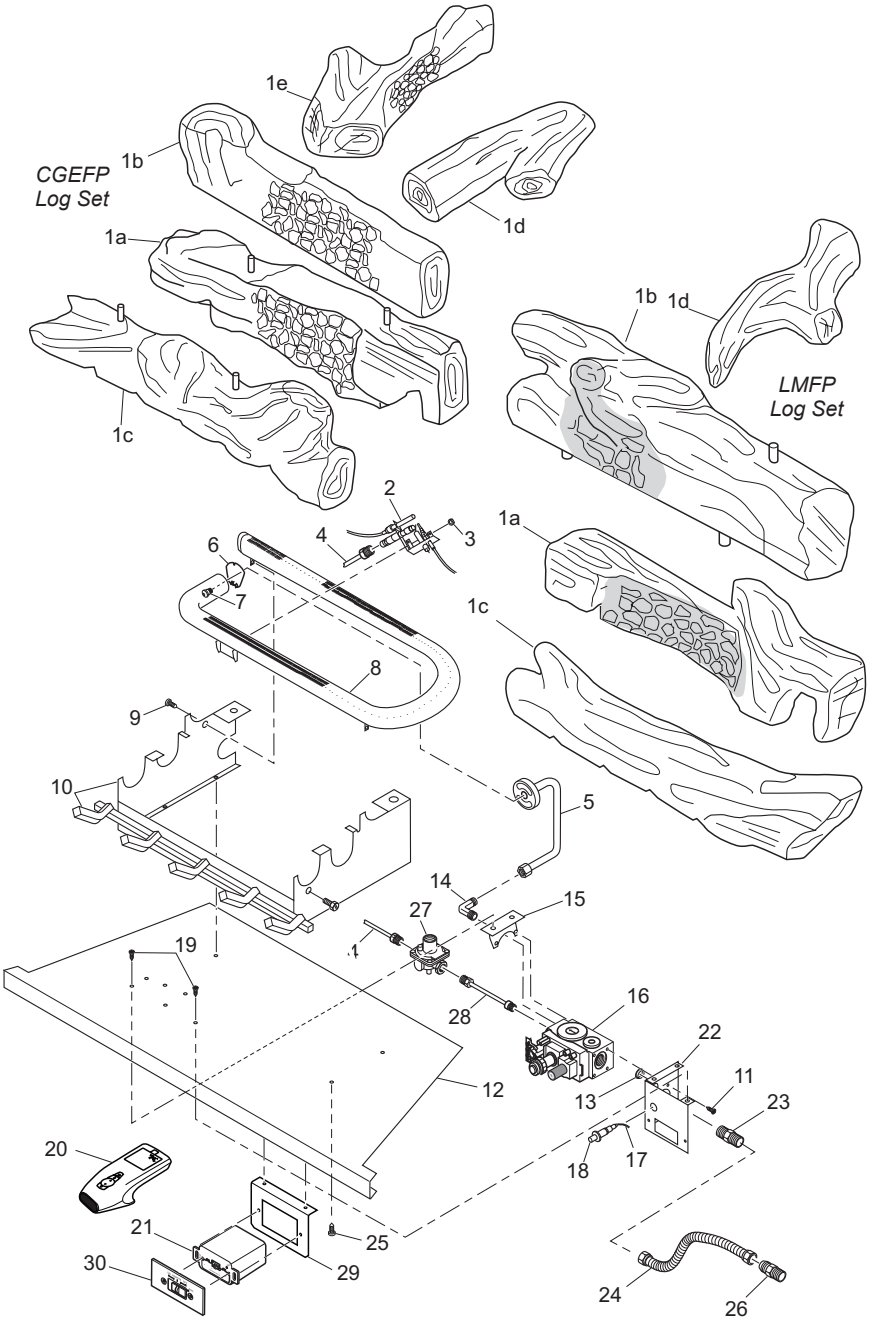
For all models. Three-sided perimeter trim included.

DUPLEX OUTLET KIT - GA3555

For all models. For built-in installation when accessory blowers are used.

PARTS

MODELS
CGEFP33NRC, CGEFP33PRC, LMFP33NRC AND LMFP33PRC



PARTS

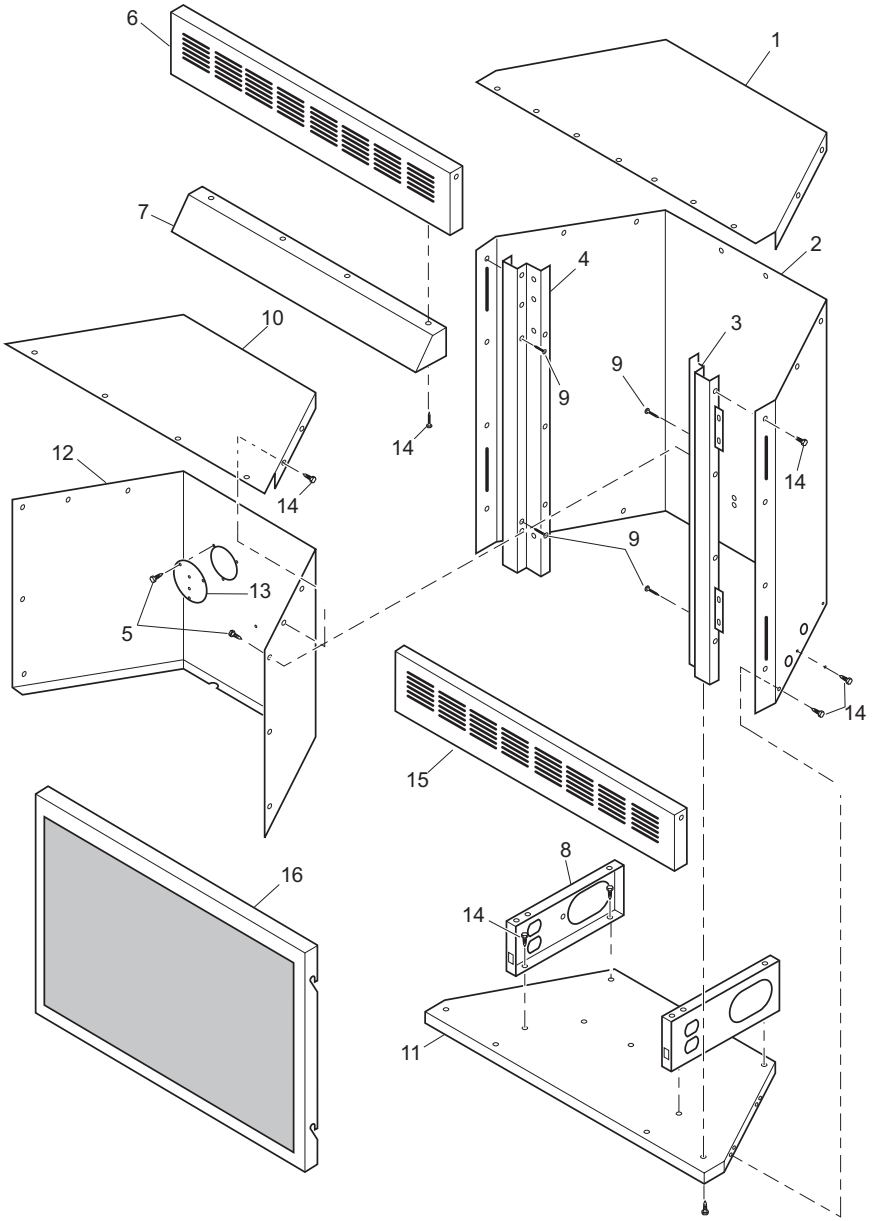
This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 30 of this manual.

KEY NO.	PART NO.	DESCRIPTION	CGEFP33PRC	LMFP33PRC	CGEFP33NRC	LMFP33NRC	QTY.
1a	109072-01	Middle Log		•		•	1
	111625-03	Middle Log	•		•		1
1b	109073-01	Rear Log		•		•	1
	111625-04	Rear Log	•		•		1
1c	109074-01	Front Log		•		•	1
	111625-02	Front Log	•		•		1
1d	109075-01	Right Crossover Log		•		•	1
	111625-08	Right Crossover Log	•		•		1
1e	111625-06	Left Crossover Log	•		•		1
2	103778-01	ODS Pilot	•	•			1
	103779-01	ODS Pilot			•	•	1
3	098249-01	ODS Nut	•	•	•	•	2
4	099387-09	Pilot Tube	•	•			1
	099387-07	Pilot Tube			•	•	1
5	104229-03	Burner Outlet Tube	•	•			1
	111331-13	Burner Outlet Tube			•	•	1
6	111124-01	Burner Retainer Spring	•	•	•	•	1
7	099056-31	Burner Orifice Injector	•	•			1
	099056-26	Burner Orifice Injector			•	•	1
8	102772-01	Burner	•	•	•	•	2
9	M11084-38	Screw, #8-16 x 0.38	•	•	•	•	4
10	104236-01CK	Painted Base Assembly	•	•	•	•	1
11	M12461-26	Screw, #10-32 x 0.38	•	•	•	•	4
12	**	Firebox Bottom	•	•	•	•	1
13	M50104-02	Bushing	•	•	•	•	1
14	098265-02	Elbow, Male	•	•	•	•	1
15	103782-01	Valve Bracket	•	•	•	•	1
16	111440-04	Gas Valve, Remote	•	•			1
	111440-03	Gas Valve, Remote			•	•	1
17	098271-10	Ignitor Cable	•	•	•	•	1
18	102445-01	Piezo Ignitor	•	•	•	•	1
19	098304-01	Screw	•	•	•	•	7
20	121129-01	Proflame Remote Control	•	•	•	•	1
21	121129-02	Proflame Receiver	•	•	•	•	1
22	104241-04	Valve Bracket	•	•	•	•	1
23	097809-02	Male Connector	•	•	•	•	1
24	101628-03	Flexible Connector (Hose)	•	•	•	•	1
25	M11084-26	Screw, #10-16 x 0.38	•	•	•	•	4
26	901063-01	3/8" Flare x 1/2" NPT	•	•	•	•	1
27	099918-02	Pilot Regulator			•	•	1
28	099387-07	Pilot Tube			•	•	1
29	120657-01	Receiver Bracket	•	•	•	•	1
30	121129-03	Remote Cover Plate	•	•	•	•	1
		PARTS AVAILABLE — NOT SHOWN					
	097555-01	Caution Decal	•	•	•	•	1
	121129-04	Proflame Wiring Harness	•	•	•	•	1

** Not a field replaceable part.

PARTS

FIREBOX
CGEFP33NRC, CGEFP33PRC, LMFP33NRC AND LMFP33PRC



PARTS

FIREBOX

CGEFP33NRC, CGEFP33PRC, LMFP33NRC AND LMFP33PRC

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 30 of this manual.

KEY NO.	PART NO.	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, #10-16 x 0.38	9
6	104239-01CK	Top Front Louver	1
7	119521-01BR	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	101514-01CK	Cover	1
14	M11084-26	Hex Screw, #10-16 x 0.38	45
15	104237-01CK	Bottom Louvered Door	1
16	101727-02	Screen Assembly	1
		PARTS AVAILABLE — NOT SHOWN	
	101386-02	Louvered Door Hinge	2
	101784-01	Magnet Catch	2
	102307-01	Strike Plate	2
	113140-01	32" Perimeter Trim Kit, Black	1

** Not a field replaceable part.

WARRANTY

KEEP THIS WARRANTY

Model (located on product or identification tag)_____

Serial No. (located on product or identification tag)_____

Date Purchased _____

Keep receipt for warranty verification.

DESA HEATING, LLC LIMITED WARRANTIES

New Products

Standard Warranty: DESA Heating, LLC warrants this new product and any parts thereof to be free from defects in material and workmanship for a period of one (1) year from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with DESA Heating, LLC's warnings and instructions.

For products purchased for commercial, industrial or rental usage, this warranty is limited to 90 days from the date of first purchase.

Factory Reconditioned Products

Limited Warranty: DESA Heating, LLC warrants factory reconditioned products and any parts thereof to be free from defects in material and workmanship for 30 days from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with DESA Heating, LLC's warnings and instructions.

Terms Common to All Warranties

The following terms apply to all of the above warranties:

Always specify model number and serial number when contacting the manufacturer. To make a claim under this warranty the bill of sale or other proof of purchase must be presented.

This warranty is extended only to the original retail purchaser when purchased from an authorized dealer, and only when installed by a qualified installer in accordance with all local codes and instructions furnished with this product.

This warranty covers the cost of part(s) required to restore this product to proper operating condition and an allowance for labor when provided by a DESA Heating, LLC Authorized Service Center or a provider approved by DESA Heating, LLC. Warranty parts must be obtained through authorized dealers of this product and/or DESA Heating, LLC who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty.

Travel, handling, transportation, diagnostic, material, labor and incidental costs associated with warranty repairs, unless expressly covered by this warranty, are not reimbursable under this warranty and are the responsibility of the owner.

Excluded from this warranty are products or parts that fail or become damaged due to misuse, accidents, improper installation, lack of proper maintenance, tampering, or alteration(s).

This is DESA Heating, LLC's exclusive warranty, and to the full extent allowed by law; this express warranty excludes any and all other warranties, express or implied, written or verbal and limits the duration of any and all implied warranties, including warranties of merchantability and fitness for a particular purpose to one (1) year on new products and 30 days on factory reconditioned products from the date of first purchase. DESA Heating, LLC makes no other warranties regarding this product.

DESA Heating, LLC's liability is limited to the purchase price of the product, and DESA Heating, LLC shall not be liable for any other damages whatsoever under any circumstances including indirect, incidental, or consequential damages.

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

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

For information about this warranty contact:

DESA Heating, LLC
2701 Industrial Drive
Bowling Green, KY 42101
www.desatech.com
1-866-672-6040

121308 01
NOT A UPC

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Rev. E
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