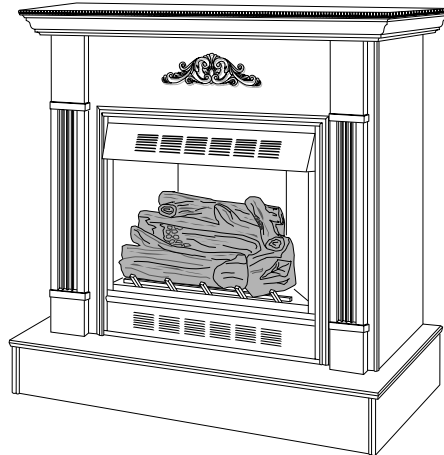


Comfort Glow®

UNVENTED (VENT-FREE) NATURAL GAS FIREPLACE

OWNER'S OPERATION AND INSTALLATION MANUAL

LFP33NR
REMOTE READY
GAS FIREPLACE
SYSTEM



Shown with optional
cabinet mantel and
hearth base.

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS**
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

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

WARNING: This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to *Air for Combustion and Ventilation* section on page 4 of this manual.

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

Save this manual for future reference.


www.DesasTech.com

UNVENTED NATURAL GAS FIREPLACE

SAFETY INFORMATION

WARNINGS


IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate, or service this fireplace. Improper use of this fireplace can cause serious injury or death from burns, fire, explosion, electrical shock, and carbon monoxide poisoning.

 DANGER: Carbon monoxide poisoning may lead to death!

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

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

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

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

1. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.
2. If you smell gas
 - shut off gas supply
 - do not try to light any appliance
 - do not touch any electrical switch; do not use any phone in your building
 - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
 - if you cannot reach your gas supplier, call the fire department
3. This fireplace shall not be installed in a bedroom or bathroom.
4. Never install the fireplace
 - in a recreational vehicle
 - where curtains, furniture, clothing, or other flammable objects are less than 42 inches from the front, top, or sides of the fireplace
 - in high traffic areas
 - in windy or drafty areas
5. Do not use this fireplace as a wood-burning fireplace. Use only the logs provided with the fireplace.
6. Do not add extra logs or ornaments such as pine cones, vermiculite, or rock wool. Using these added items can cause sooting. Do not add lava rock around base. Rock and debris could fall into the control area of fireplace.
7. You must operate this fireplace with the fireplace screen and hood in place. Make sure fireplace screen and hood are in place before running fireplace.
8. This fireplace is designed to be smokeless. If logs ever appear to smoke, turn off fireplace and call a qualified service person. *Note:* During initial operation, slight smoking could occur due to log curing and fireplace burning manufacturing residues.
9. To prevent the creation of soot, follow the instructions in *Cleaning and Maintenance*, page 18.
10. 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.
11. 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.
12. Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this heater.
13. This fireplace needs fresh air ventilation to run properly. This fireplace has an oxygen depletion sensor (ODS) pilot light safety system. The ODS shuts down the fireplace if not enough fresh air is available. See *Air for Combustion and Ventilation*, pages 4 through 6. If fireplace keeps shutting off, see *Troubleshooting*, pages 19 through 21.
14. Do not run fireplace
 - where flammable liquids or vapors are used or stored
 - under dusty conditions
15. Do not use this fireplace to cook food or burn paper or other objects.
16. Never place any objects in the fireplace or on logs.
17. Fireplace front and screen becomes very hot when running fireplace. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
18. Carefully supervise young children when they are in the room with fireplace.
19. 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.
20. Do not operate fireplace if any log is broken. Do not operate fireplace if a log is chipped (dime-sized or larger).
21. Turn fireplace off and let cool before servicing. Only a qualified service person should service and repair fireplace.
22. Operating fireplace above elevations of 4,500 feet could cause pilot outage.

OWNER'S MANUAL

PRODUCT IDENTIFICATION

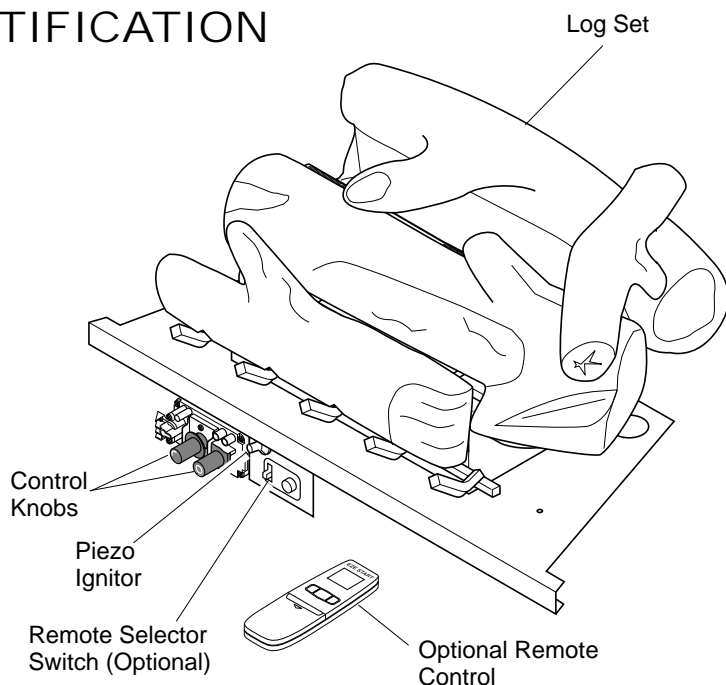


Figure 1 - Log Base Assembly

LOCAL CODES

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

*Available from:

American National Standards Institute, Inc.
1430 Broadway
New York, NY 10018

National Fire Protection Association, Inc.
Batterymarch Park
Quincy, MA 02269

UNPACKING

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

REMOTE CONTROL ACCESSORIES

The remote controls that can be purchased separately for this log heater are hand held remotes. See *Accessories*, pages 24 and 25.

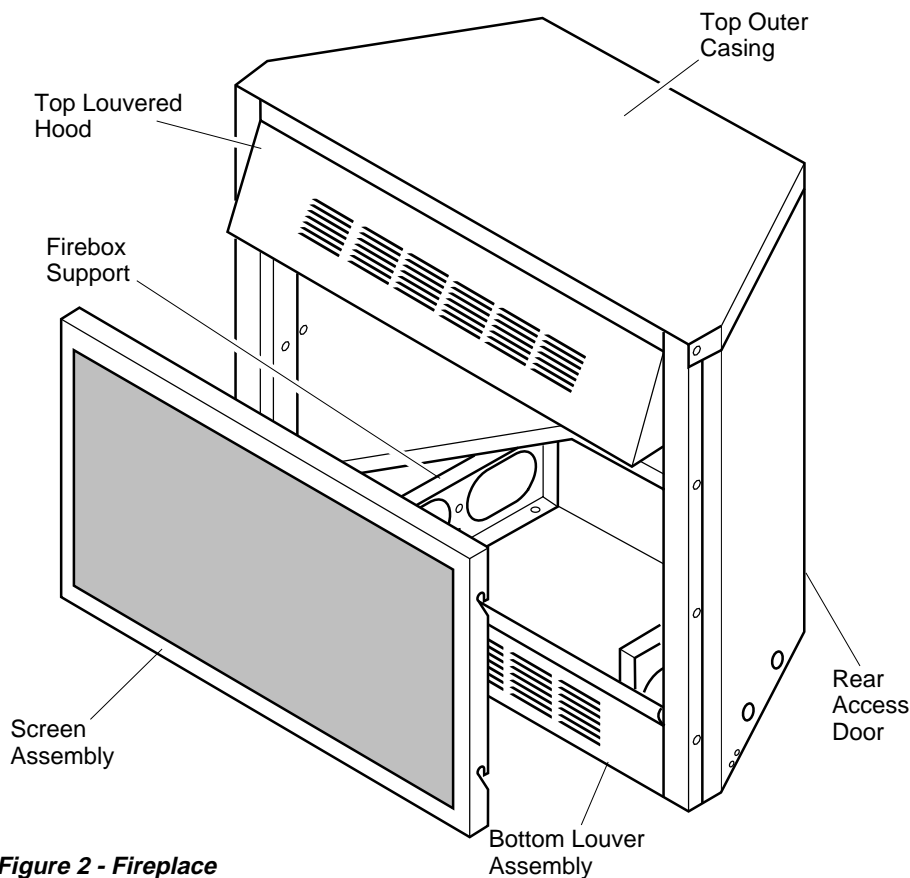


Figure 2 - Fireplace

UNVENTED NATURAL GAS FIREPLACE

PRODUCT FEATURES OPERATION

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

SAFETY DEVICE

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

PIEZO IGNITION SYSTEM

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

BLOWER ASSEMBLY (GA3750 and GA3650T)

This fireplace accepts an optional blower assembly. The GA3750 blower has a manual variable control. The GA3650T blower operates thermostatically. The blower circulates heated air from the fireplace into the room. Use of blower is optional. See *Accessories*, pages 24 and 25.

AIR FOR COMBUSTION AND VENTILATION

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

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

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

Exhaust fans, 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. NFPA 54/ANS Z223.1, Section 5.3, Air for Combustion and Ventilation*.

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

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

The information on pages 4 through 6 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 (6×10^{-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 6.

If your home does not meet all of the three criteria above, proceed to *Determining Fresh-Air Flow for Fireplace Location* on page 5.

Confined Space and Unconfined Space

The National Fuel Gas Code (ANS Z223.1, 1992 Section 5.3) defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour ($4.8 m^3$ 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.

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

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

AIR FOR COMBUSTION AND VENTILATION

Continued

DETERMINING FRESH-AIR FLOW FOR FIREPLACE LOCATION

Determining if You Have a Confined or Unconfined Space

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

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

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

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

Example: Space size 22 ft. (length) x 18 ft. (width) x 8 ft. (ceiling height) = 3168 cu. ft. (volume of space)

If additional ventilation to adjoining room is supplied with grills or openings, add the volume of these rooms to the total volume of the space.

2. Divide the space volume by 50 cubic feet to determine the maximum Btu/Hr the space can support.

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

Example: 3168 cu. ft. (volume of space) ÷ 50 cu. ft. = 63.3 or 63,300 (maximum Btu/Hr the space can support)

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

Vent-free fireplace _____ Btu/Hr

Gas water heater* _____ Btu/Hr

Gas furnace _____ Btu/Hr

Vented gas heater _____ Btu/Hr

Gas fireplace logs _____ Btu/Hr

Other gas appliances* + _____ Btu/Hr

Total = _____ Btu/Hr

Example:

Gas water heater 40,000 Btu/Hr

Vent-free fireplace + 33,000 Btu/Hr

Total = 73,000 Btu/Hr

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

4. Compare the maximum Btu/Hr the space can support with the actual amount of Btu/Hr used.

_____ Btu/Hr (maximum the space can support)

_____ Btu/Hr (actual amount of Btu/Hr used)

Example: 63,300 Btu/Hr (maximum the space can support)

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:

- A. Rework work sheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms. See *Ventilation Air from Inside Building*, page 6.
- B. Vent room directly to the outdoors. See *Ventilation Air from Outdoors*, page 6.
- 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 is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the *National Fuel Gas Code, ANS Z223.1, 1992, Section 5.3* or applicable local codes.

Continued

UNVENTED NATURAL GAS FIREPLACE

AIR FOR COMBUSTION AND VENTILATION

Continued

VENTILATION AIR

Ventilation Air From Inside Building

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

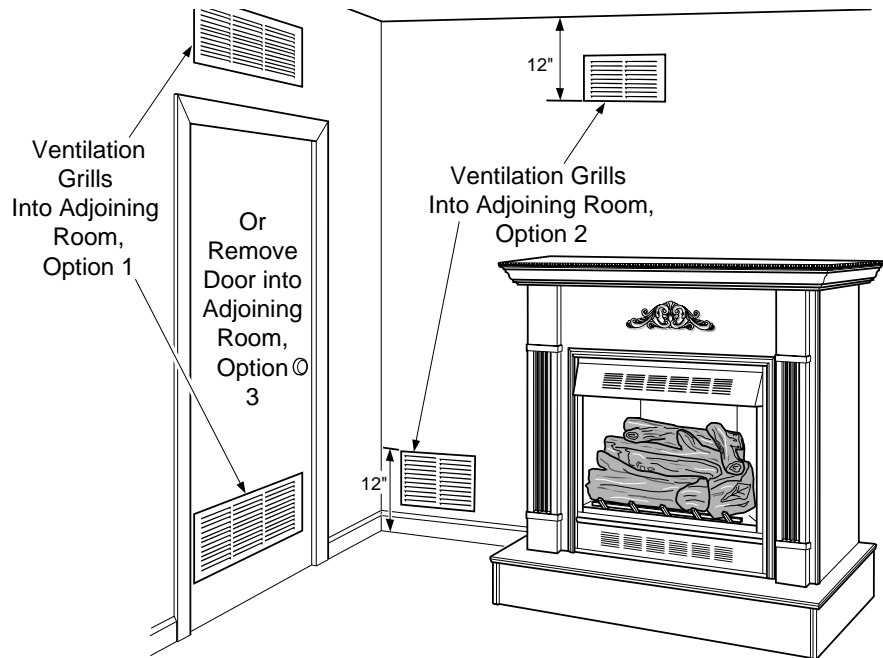


Figure 3 - Ventilation Air from Inside Building

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

Ventilation Air From Outdoors

Provide extra fresh air by using ventilation grills or ducts. You must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces.

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

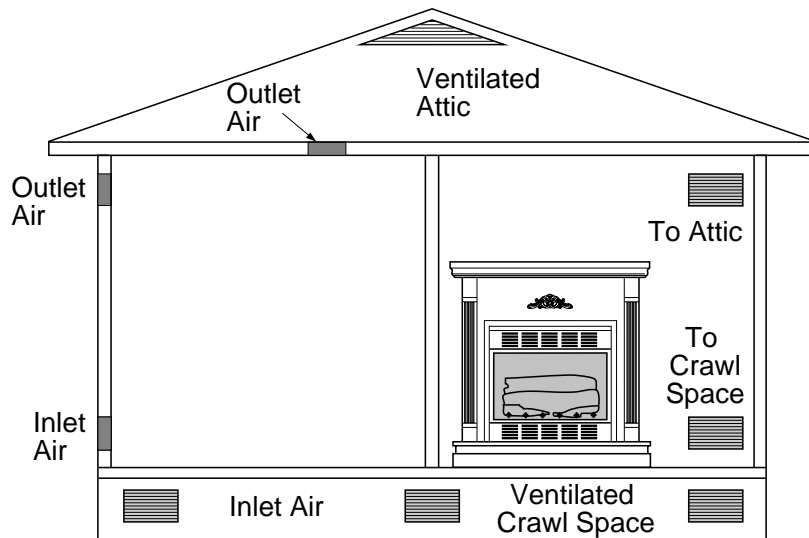


Figure 4 - Ventilation Air from Outdoors

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 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 tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist, may discolor walls.

Note: Your Comfort Glow 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 9).

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 4 through 6.

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

CHECK GAS TYPE

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

ELECTRICAL HOOKUP (Optional Blower Accessory)

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.

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

IMPORTANT: If you are recessing the firebox in a wall, do not attach brass trim at this time. See page 9.

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 5.
4. Slide one end of adjusting plate/shim in slot on mitered edge of top brass trim (see Figure 5).
5. Slide other end of adjusting plate/shim in slot on mitered edge of side brass trim (see Figure 5).

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 6). Push trim firmly into place, sliding hanging notches over hanging screws.

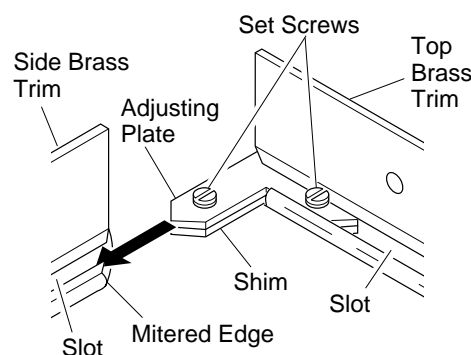


Figure 5 - Assembling Brass Trim

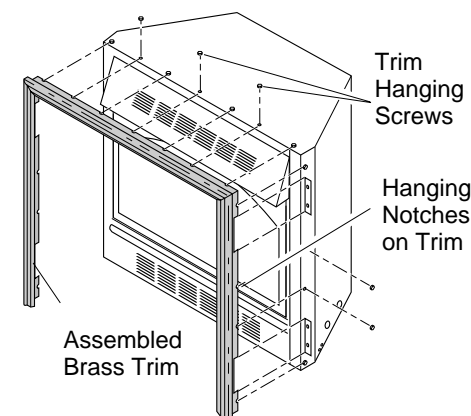


Figure 6 - Attaching Brass Trim to Fireplace

Continued

UNVENTED NATURAL GAS FIREPLACE

INSTALLATION

Continued

INSTALLATION CLEARANCES

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

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

Minimum Wall and Ceiling Clearances (see Figure 7)

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

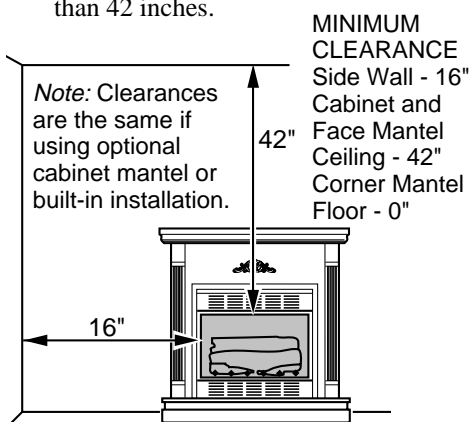


Figure 7 - Minimum Clearance to Wall and Ceiling

CONVENTIONAL FIREPLACE INSTALLATION

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

Note: The instructions below show installation using the cabinet mantel and hearth base accessories (see *Accessories*, pages 24 and 25). 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.

- Assemble cabinet mantel, hearth base, and trim accessories. Assembly instructions are included with each accessory.
- 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 8).
- Install gas piping to fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the manual shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Installing Gas Piping to Fireplace Location*, page 10.
- 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 8). 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.
- Route flexible gas line through access hole in hearth base.
- Center cabinet mantel on hearth base (see Figure 9). Make sure mantel is flush against wall.
- Break off nailing flanges (see Figure 10, page 9) with hammer or pliers.

- Place cardboard or other protective material on top of hearth base. Carefully set fireplace on protective material, with back of fireplace inside mantel opening.
- Attach flexible gas line to fireplace gas regulator. See *Connecting Fireplace to Gas Supply*, page 11.
- 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.

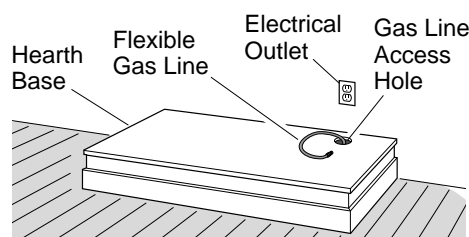


Figure 8 - Placing Hearth Base Accessory Against Wall

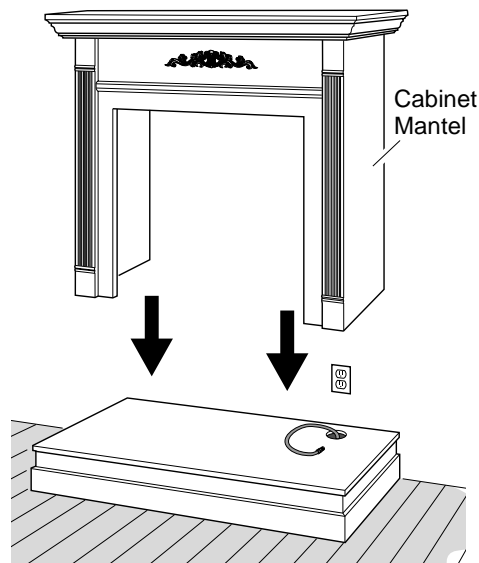


Figure 9 - Installing Cabinet Mantel

INSTALLATION

Continued

- Carefully insert fireplace into cabinet mantel. Be careful not to scratch or damage hearth base, cabinet mantel, or any laminate trim on hearth base. Remove protective material from top of hearth base and from front of fireplace (if any). **Note:** You can secure fireplace to hearth or floor. Open lower louver. Locate screw holes in bottom of base. Tighten wood screws through these holes and into hearth or floor.
- Check all gas connections for leaks. See *Checking Gas Connections*, page 12.

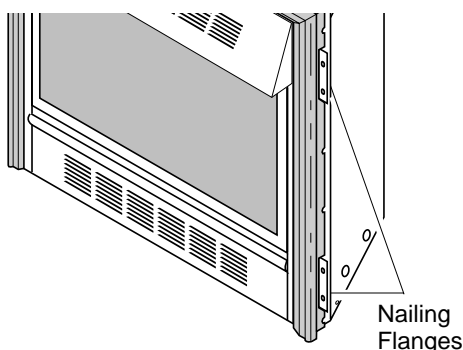


Figure 10 - Location of Nailing Flanges

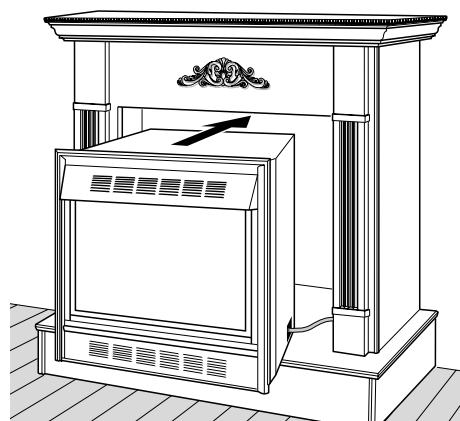


Figure 11 - Inserting Fireplace Into Cabinet Mantel

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 15, page 10. 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 / ₂ "
Depth	16 ¹¹ / ₁₆ "	17 ³ / ₄ "

- 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.

- If using blower, install and properly ground GA3555, three-prong 120 volt electrical outlet, in fireplace. Follow instructions included in kit (see *Accessories*, pages 24 and 25).
- Install gas piping to fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the manual shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Installing Gas Piping to Fireplace Location*, page 10.
- Carefully set fireplace in front of rough opening with back of fireplace inside wall opening.
- Attach flexible gas line to gas supply. See *Connecting Fireplace to Gas Supply*, page 11.
- Plug electrical cord into electrical outlet installed in step 2.
- Carefully insert fireplace into rough opening.
- Attach fireplace to wall studs using nails or wood screws through holes in nailing flange (see Figure 14).

- Check all gas connections for leaks. See *Checking Gas Connections*, page 12.
- Install brass trim after final finishing and/or painting of wall (see Figure 6, page 7).

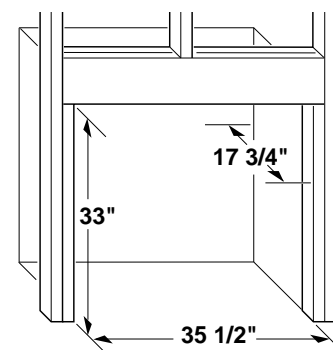


Figure 12 - Rough Opening for Installing in Wall

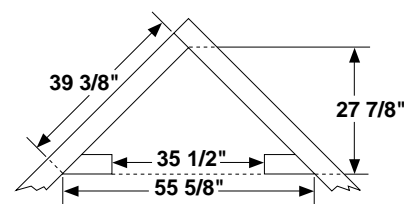


Figure 13 - Rough Opening for Installing in Corner

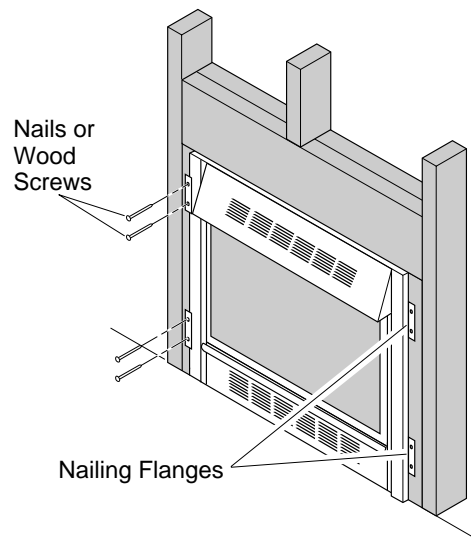


Figure 14 - Attaching Fireplace to Wall Studs

UNVENTED NATURAL GAS FIREPLACE

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.

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

- raise the mantel to an acceptable height,

OR

- remove the mantel.

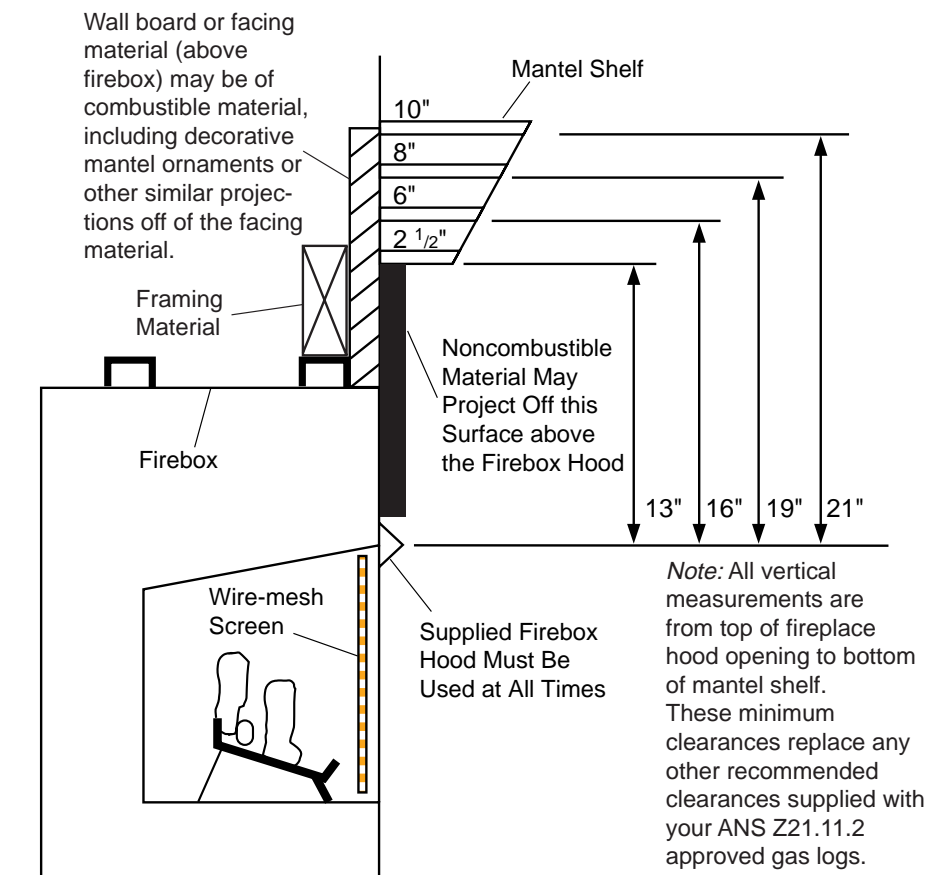


Figure 15 - Minimum Mantel Clearances for Built-In Installation

INSTALLING GAS PIPING TO FIREPLACE LOCATION

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

Installation Items Needed

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

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

* An A.G.A. design-certified manual shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the optional A.G.A. design-certified manual shutoff valve from your dealer. See *Accessories*, pages 24 and 25.

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

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

INSTALLATION

Continued

CONNECTING FIREPLACE TO GAS SUPPLY

Installation must include a manual shutoff valve, union, and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from fireplace (see Figure 16).

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

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

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

Install sediment trap in supply line as shown in Figure 16. Locate sediment trap where it is within reach for cleaning. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into fireplace gas controls. If sediment trap is not installed or is installed wrong, fireplace may not run properly.

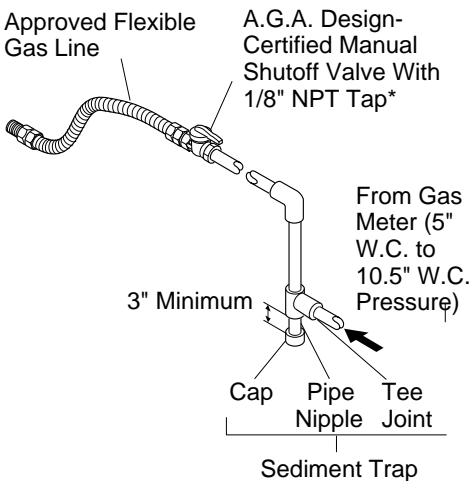


Figure 16 - Gas Connection

* Purchase the optional A.G.A. design-certified manual shutoff valve from your dealer. See *Accessories*, pages 24 and 25

Installation Items Needed

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

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. Remove screws that attach log base assembly to fireplace (see Figure 17). Carefully lift up log base assembly and remove from fireplace (see Figure 17).

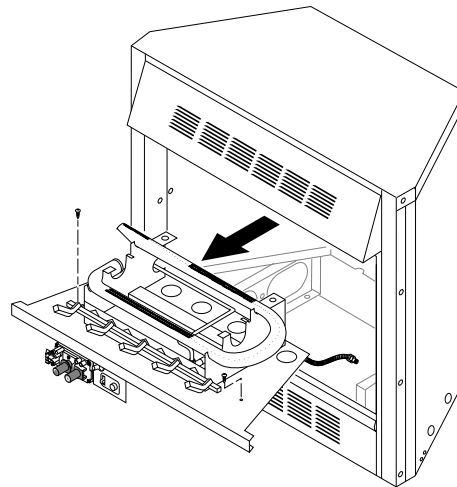


Figure 17 - Removing Log Base Assembly From Fireplace

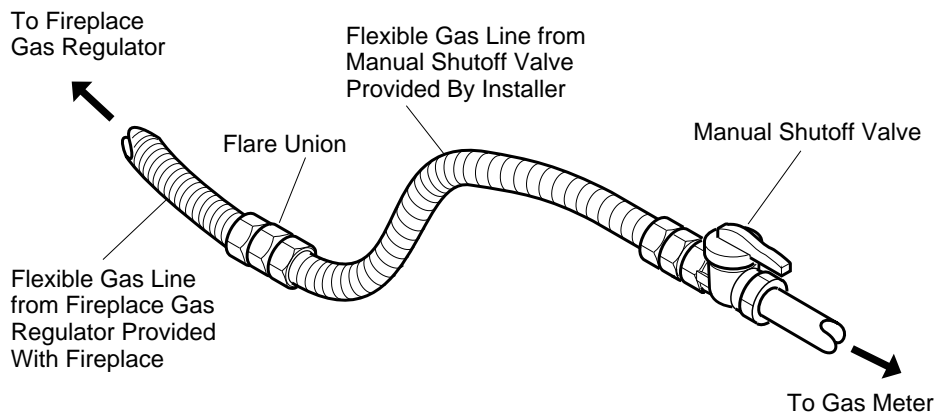


Figure 18 - Attaching Flexible Gas Lines Together

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

3. Route flexible gas line (provided by installer) from manual shutoff valve to fireplace. Route flexible gas supply line through one of the access holes.

NOTICE: Most building codes do not permit concealed gas connections. A flexible gas line is provided to allow accessibility from the fireplace (see Figure 18). The flexible gas supply line connection to the manual shutoff valve should be accessible.

4. Attach a 45° flare union gas connector to flexible gas line from gas supply (see Figure 18). Connect flare union to flexible gas line attached to gas regulator of fireplace (see Figure 18).
5. Check all gas connections for leaks. See *Checking Gas Connections*, page 12.
6. Replace log base assembly back into fireplace. Feed flexible gas line into fireplace base area while replacing log base assembly. Make sure the entire flexible gas line is in fireplace base area. Reattach log base assembly to fireplace with screws removed in step 2.

UNVENTED NATURAL GAS FIREPLACE

INSTALLATION

Continued

CHECKING GAS CONNECTIONS

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

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

Pressure Testing Gas Supply Piping System

Test Pressures In Excess Of 1/2 PSIG

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

Test Pressures Equal To or Less Than 1/2 PSIG

1. Close manual shutoff valve (see Figure 19).
2. Pressurize supply piping system by either using compressed air or opening main gas valve located on or near gas meter.
3. Check all joints from gas meter to manual shutoff valve (see Figure 20). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
4. Correct all leaks at once.

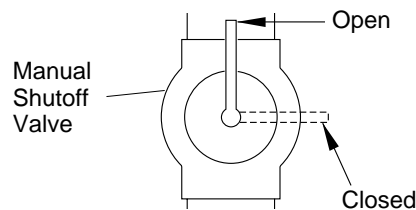


Figure 19 - Manual Shutoff Valve

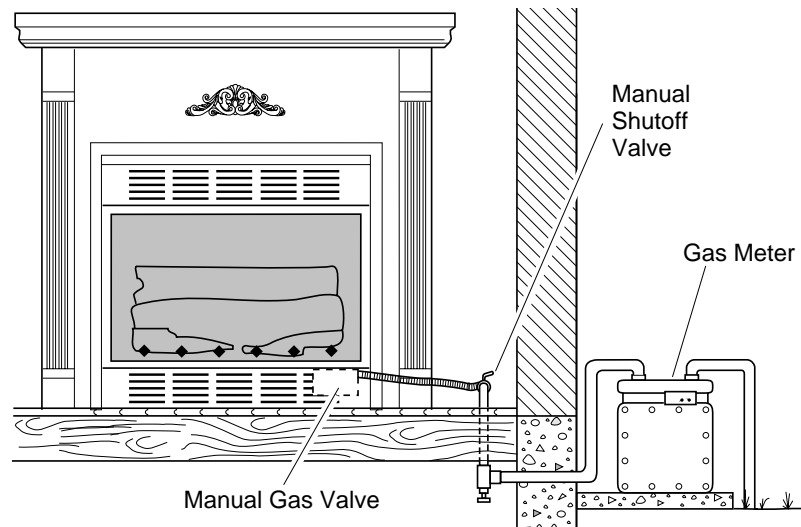


Figure 20 - Checking Gas Joints

Pressure Testing Fireplace Gas Connections

1. Open manual shutoff valve (see Figure 19).
2. Open main gas valve located on or near gas meter.
3. Make sure control knob of fireplace is in the OFF position.
4. Check all joints from manual shutoff valve to thermostat gas valve (see Figure 20). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light fireplace (see *Operating Fireplace*, pages 16 and 17). Check all other internal joints for leaks.
7. Turn off fireplace (see *To Turn Off Gas to Appliance*, page 17).

INSTALLATION

Continued

INSTALLING LOGS

⚠ 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.

⚠ 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.

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 21). 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 22).
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 23).
4. Place crossover log (#4) onto the peg (right) on back log (#2) and into the recess of the middle log (#1) (see Figure 24).

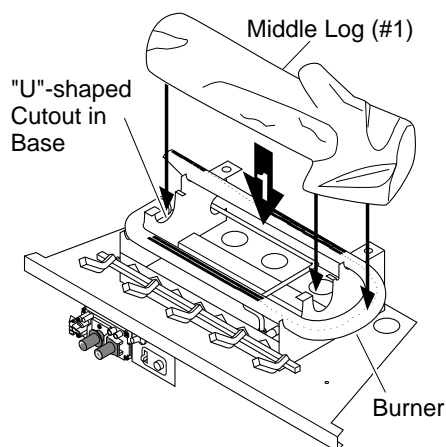


Figure 21 - Installing Middle Log (#1)

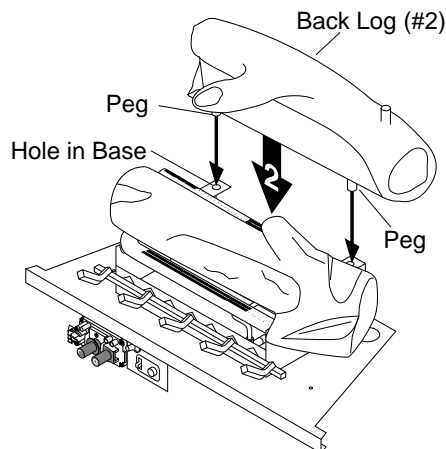


Figure 22 - Installing Back Log (#2)

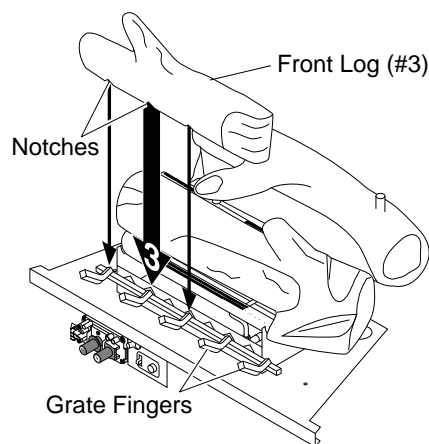


Figure 23 - Installing Front Log (#3)

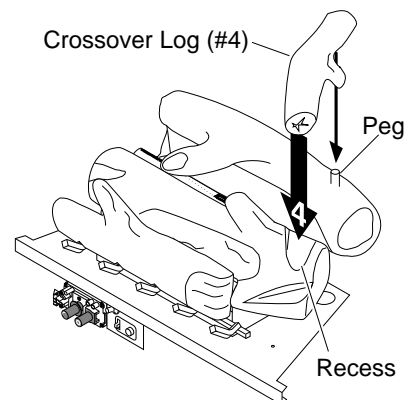


Figure 24 - Installing Crossover Log (#4)

INSTALLING SCREEN

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

Install fireplace screen by slipping notches of fireplace screen over screws on front of fireplace (see Figure 25).

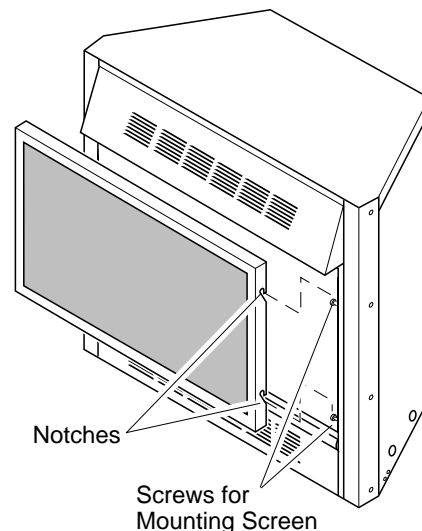


Figure 25 - Installing Fireplace Screen

Continued

Comfort Glow® LFP33NR

UNVENTED NATURAL GAS FIREPLACE

INSTALLATION

Continued

OPTIONAL WIRELESS HAND-HELD REMOTE CONTROL ACCESSORY RM4

Installing Remote Receiver Unit

1. Disconnect switch wires from the control valve.
2. Remove screws and nuts attaching switchplate. Save screws and nuts to attach receiver.
3. Remove switch plate (see Figure 26). Discard after removing.
4. Install remote receiver unit onto remote switch bracket using screws and nuts removed in step 2. See Figure 27
5. Route wires through hole in the upper portion of the switch plate (Figure 27). Connect wires as shown in Figure 28. (Black and blue wires are not used for this application.)

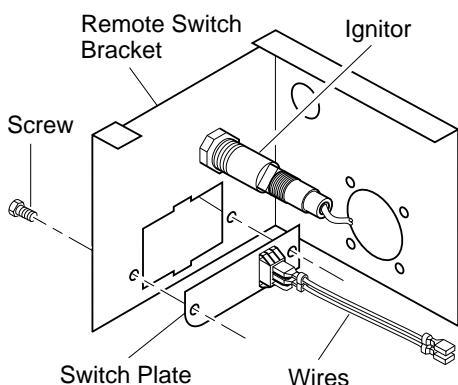


Figure 26 - Switch Plate and Wiring Harness

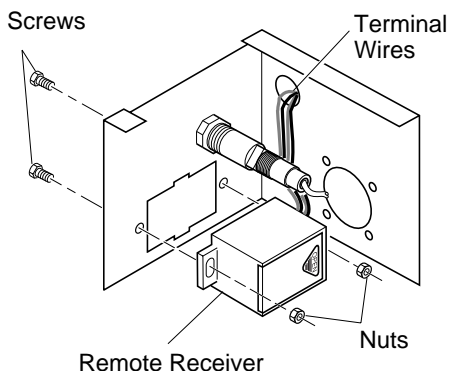


Figure 27 - Installing Remote Receiver

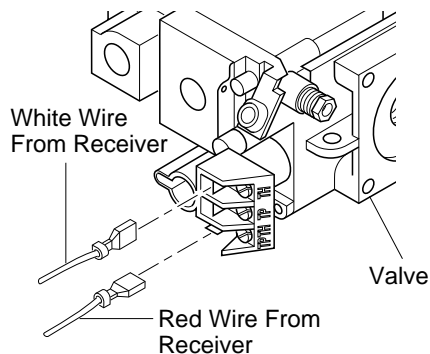


Figure 28 - Connecting Wires

INSTALLING BATTERIES FOR RM4

Four AA and two AAA batteries (not included) are required to operate this heater with the wireless hand held remote control set. AA batteries must be installed in the receiver and AAA batteries in the hand-held remote control unit. *Note:* Only use alkaline batteries.

Installing Batteries in Receiver

1. Locate back of receiver behind the remote switch bracket under the firebox bottom.
2. Slide the battery door off of the receiver in the direction of the arrow on the door.
3. Insert the four AA batteries according to Figure 29.
4. Slide the battery door back into position.

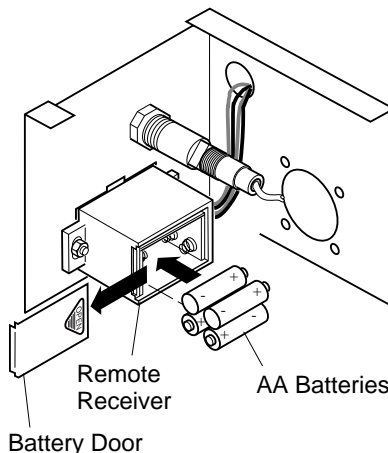


Figure 29 - Installing Battery in Remote Receiver

Installing Batteries in Hand-Held Remote Control Unit

1. Remove battery cover on front of remote control unit following direction of arrow.
2. Insert two AAA batteries following diagram in battery housing area.
3. Replace battery cover onto remote control unit.

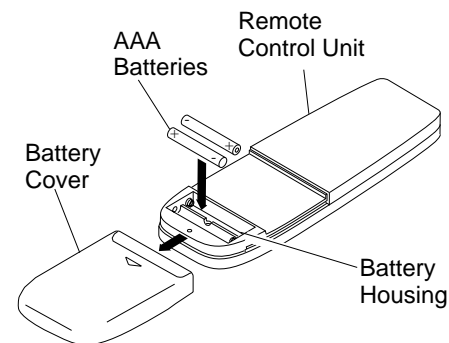


Figure 30 - Installing Battery in Hand-Held Remote Control Unit

INSTALLATION

Continued

OPTIONAL WIRELESS HAND-HELD REMOTE CONTROL ACCESSORY GHRC AND GHRCT SERIES

Installing Remote Receiver Unit

1. Disconnect switch wires from the control valve.
2. Remove screws attaching switchplate.
3. Remove switch plate (see Figure 31). Discard after removing.
4. Install remote receiver unit onto gas log heater base using mounting clips.
5. Push clips firmly into place (see Figure 32).
6. Connect wires as shown in Figure 33.

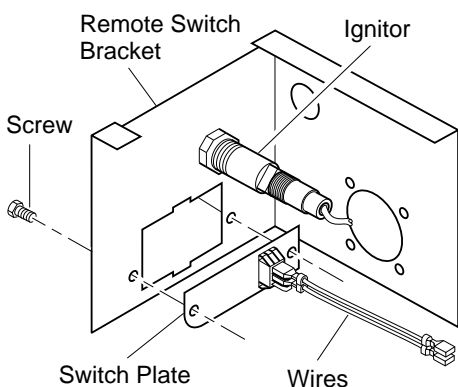


Figure 31 - Switch Plate and Wiring Harness

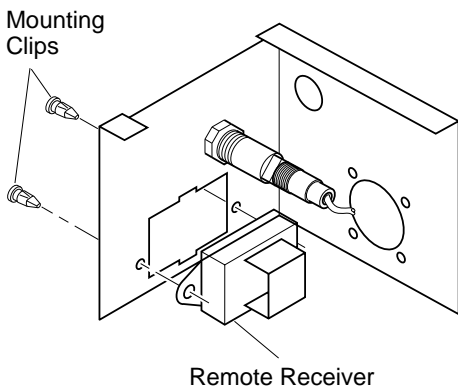


Figure 32 - Installing Remote Receiver

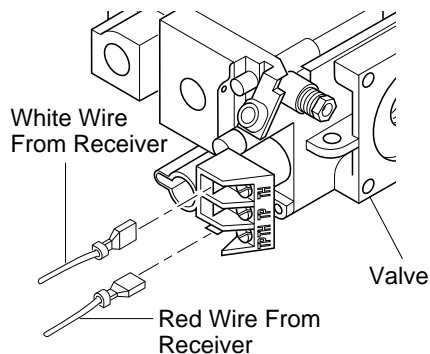


Figure 33 - Connecting Wires

INSTALLING BATTERIES FOR GHRC AND GHRCT SERIES

Two 9-volt batteries (not included) are required to operate this heater with the wireless hand held remote control set. Install one battery in the receiver and one in the hand-held remote control unit. *Note:* Only use alkaline batteries.

Installing Battery in Receiver

1. Locate back of receiver under front burner of heater.
2. Locate the battery clip mounted on the back of the receiver.
3. Slide a 9-volt battery through the clip.
4. Attach the terminal wires to the battery.

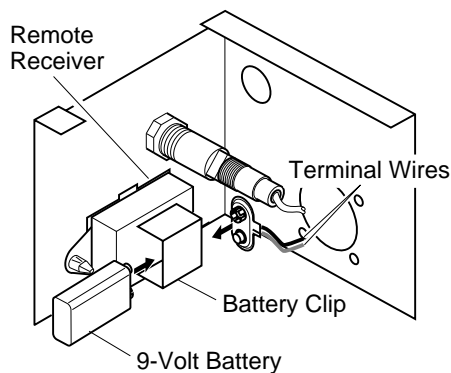


Figure 34 - Installing Battery in Remote Receiver

Installing Battery in Hand-Held Remote Control Unit

1. Remove battery cover on back of remote control unit.
2. Attach terminal wires to the battery. Place battery into the battery housing.
3. Replace battery cover onto remote control unit.

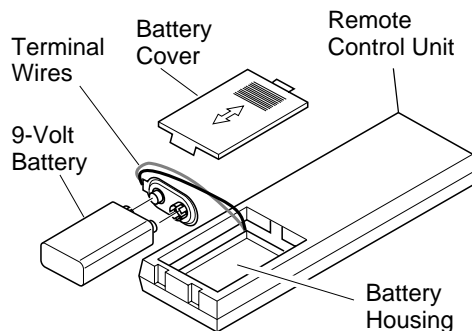


Figure 35 - Installing Battery in Hand-Held Remote Control Unit

UNVENTED NATURAL GAS FIREPLACE

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 must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

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



LIGHTING INSTRUCTIONS

⚠ WARNING: You must operate this 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 manual shutoff valve is fully open.
3. Set switch to OFF position.

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


4. Press in and turn control knob clockwise  to the OFF position.
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. 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 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* on page 17.

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.
9. Slightly push in and turn control knob counterclockwise  to the ON position.
10. Wait one minute and switch selector switch to the ON position to light burners.
11. Set flame adjustment knob to any level between HI and LO.

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

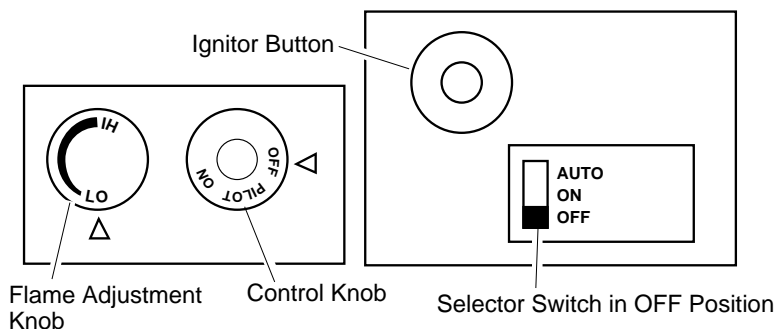


Figure 36 - Control Knob and Ignitor Button Location (Shown as Supplied, No Control Options)

Continued

OPERATING FIREPLACE

Continued

WARNING: Make sure the selector switch is in the OFF position when you are away from home for long periods of time. Heater will come on automatically with selector switch in the ON position.

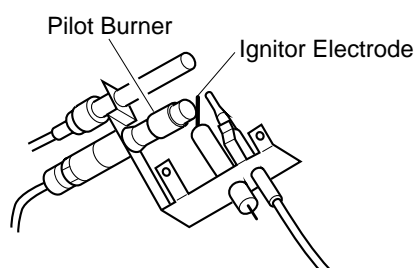


Figure 37 - Pilot

TO TURN OFF GAS TO APPLIANCE

Shutting Off Heater

1. Turn control knob clockwise to the OFF position.
- 2a. Set selector switch in the OFF position.
- 2b. If Using Optional Hand-Held Remote: Set selector switch in the OFF position to keep from draining battery.

Shutting Off Burners Only (pilot stays lit)

You may shut off the burners and keep the pilot lit by doing one of the following:

- Turn control knob clockwise to the PILOT position.
- Use remote control manual OFF button.
- Set selector switch in the OFF position.

MANUAL LIGHTING PROCEDURE

1. Follow steps 1 through 6 under *Lighting Instructions*, page 16.
2. Depress control knob and light pilot with match.
3. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow step 9, page 16.

OPTIONAL REMOTE OPERATION

Note: All remote control accessories must be purchased separately (see *Accessories*, pages 24 and 25). Follow instructions included with the remote control.

Thermostat Control Operation

The thermostat control setting on the remote control unit can be set to any comfort level between HI and LO. The burners will turn on and off automatically to maintain the comfort level you select. The ideal comfort setting will vary by household depending upon the amount of space to be heated, the output of the central heating system, etc.

NOTICE: You must light the pilot before using the hand-held remote control unit. See *Lighting Instructions* on page 16.

After lighting, let pilot flame burn for about one minute. Turn control knob to ON position. Adjust flame adjustment knob anywhere between HI and LO. Slide the selector switch to the REMOTE position. **Note:** The burners may light if hand-held remote ON button was on when selector switch was last turned off. You can now turn the burners on and off with the hand-held remote control unit. Follow the instructions supplied with the remote control for additional features.

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

IMPORTANT: Be sure to press the ON/OFF buttons on the hand-held remote control unit for up to 3 seconds to assure proper operation.

IMPORTANT: The thermostat is built into the hand-held remote. The remote should be kept several feet from the fireplace and should be pointed towards the fireplace. If placed too close to the fireplace, the remote will sense the room is too hot and turn the fireplace off.

OPTIONAL BLOWER OPERATION

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

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

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

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

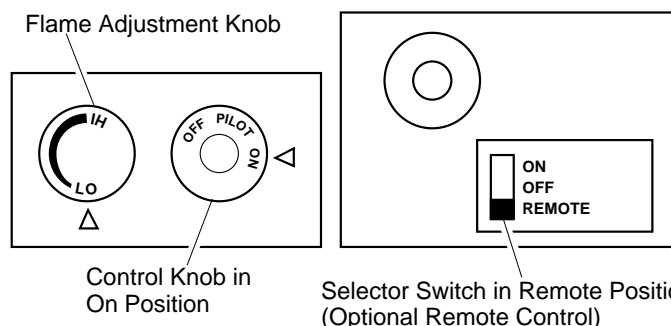


Figure 38 - Setting the Selector Switch, Control Knob, and Flame Adjustment Knob for Remote Operation

UNVENTED NATURAL GAS FIREPLACE

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

PILOT FLAME PATTERN

Figure 39 shows a correct pilot flame pattern. Figure 40 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 40

- turn heater off (see *To Turn Off Gas to Appliance*, page 17)
- see *Troubleshooting*, pages 19 through 21

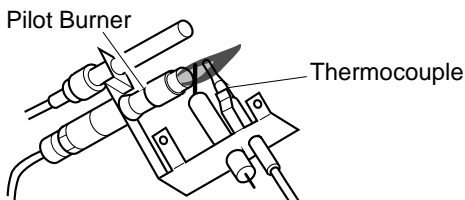


Figure 39 - Correct Pilot Flame Pattern

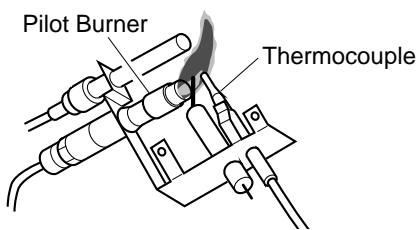


Figure 40 - Incorrect Pilot Flame Pattern

MAIN BURNER

Periodically inspect all burner flame holes with the heater 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 heater and let cool. Either remove blockage or replace burner. Blocked burner flame holes will create soot.

CLEANING AND MAINTENANCE

WARNING: Turn off heater and let cool before cleaning.

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

CLEANING 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, and lint. Clean these air inlet holes prior to each heating season. Blocked air holes will create soot. We recommend that you clean the unit every 2,500 hours of operation or every three months.

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 41).
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 hairs 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 two inches from where the pilot flame comes out of the pilot assembly (see Figure 42). 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.

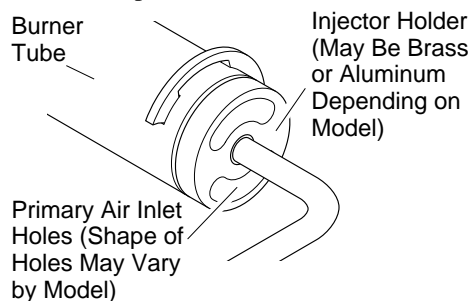


Figure 41 - Injector Holder On Outlet Burner Tube

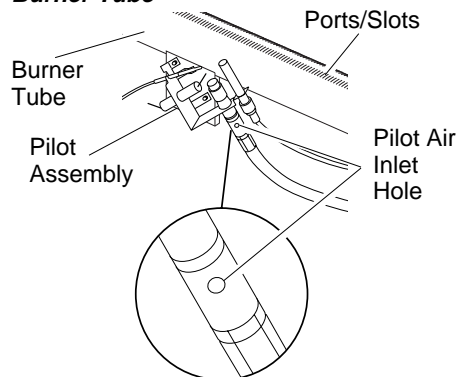


Figure 42 - Pilot Inlet Air Hole

LOGS

- If you remove logs for cleaning, refer to *Installing Logs*, page 13, to properly replace logs.
- Replace log(s) if broken or chipped (dime-sized or larger).

MAIN BURNER

Periodically inspect all burner flame holes with the heater 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 heater and let cool. Either remove blockage or replace burner. Blocked burner flame holes will create soot.

OWNER'S MANUAL

TROUBLESHOOTING

Note: For additional help, visit DESA International's Technical Service web site at www.desatech.com.

⚠ 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	<ol style="list-style-type: none">1. Ignitor electrode not connected to ignitor cable2. Ignitor cable pinched or wet3. Piezo ignitor nut is loose4. Broken ignitor cable5. Bad piezo ignitor6. Ignitor electrode broken7. Ignitor electrode positioned wrong	<ol style="list-style-type: none">1. Reconnect ignitor cable2. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry3. Tighten nut holding piezo ignitor to base panel of log set. Nut is located behind base panel.4. Replace ignitor cable5. Replace piezo ignitor6. Replace piezo ignitor7. Replace piezo ignitor
When ignitor button is pressed, there is spark at ODS/pilot but no ignition	<ol style="list-style-type: none">1. Gas supply turned off or manual shutoff valve closed2. Control knob not in PILOT position3. Control knob not pressed in while in PILOT position4. Air in gas lines when installed5. ODS/pilot is clogged6. Gas regulator setting is not correct	<ol style="list-style-type: none">1. Turn on gas supply or open manual shutoff valve2. Turn control knob to PILOT position3. Press in control knob while in PILOT position4. Continue holding down control knob. Repeat igniting operation until air is removed5. Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 18) or replace ODS/pilot assembly6. Replace gas control
ODS/pilot lights but flame goes out when control knob is released	<ol style="list-style-type: none">1. Control knob not fully pressed in2. Control knob not pressed in long enough3. Manual shutoff valve not fully open4. 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">A) Low gas pressureB) Dirty or partially clogged ODS/pilot5. Thermocouple connection loose at control valve6. Thermocouple damaged7. Control valve damaged	<ol style="list-style-type: none">1. Press in control knob fully2. After ODS/pilot lights, keep control knob pressed in 30 seconds3. Fully open manual shut-off valve4. A) Contact local natural gas company B) Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 18) or replace ODS/pilot assembly5. Hand tighten until snug, then tighten 1/4 turn more6. Replace thermocouple7. Replace control valve

UNVENTED NATURAL GAS FIREPLACE

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Burner does not light after ODS/pilot is lit	<ol style="list-style-type: none"> 1. Burner orifice clogged 2. Inlet gas pressure is too low 3. Burner orifice diameter is too small 4. Thermopile leads disconnected or improperly connected 5. Burners will not come on in remote position 	<ol style="list-style-type: none"> 1. Clean burner (see <i>Cleaning and Maintenance</i>, page 18) or replace burner orifice 2. Contact local natural gas company 3. Replace burner orifice 4. Reconnect leads (see <i>Wiring Diagram</i>, page 22) 5. Replace battery in transmitter and receiver
Delayed ignition burner	<ol style="list-style-type: none"> 1. Manifold pressure is too low 2. Burner orifice clogged 	<ol style="list-style-type: none"> 1. Contact local natural gas company 2. Clean burner (see <i>Cleaning and Maintenance</i>, page 18) or replace burner orifice
Burner backfiring during combustion	<ol style="list-style-type: none"> 1. Burner orifice is clogged or damaged 2. Damaged burner 3. Gas regulator defective 	<ol style="list-style-type: none"> 1. Clean burner (see <i>Cleaning and Maintenance</i>, page 18) or replace burner orifice 2. Replace damaged burner 3. Replace gas control
Slight smoke or odor during initial operation	<ol style="list-style-type: none"> 1. Not enough air 2. Gas regulator defective 3. Residues from manufacturing processes and logs curing 	<ol style="list-style-type: none"> 1. Check burner for dirt and debris. If found, clean burner (see <i>Cleaning and Maintenance</i>, page 18) 2. Replace gas control 3. Problem will stop after a few hours of operation
Moisture/condensation noticed on windows	<ol style="list-style-type: none"> 1. Not enough combustion/ventilation air 	<ol style="list-style-type: none"> 1. Refer to <i>Air for Combustion and Ventilation</i> requirements (page 4)
Heater produces a whistling noise when burner is lit	<ol style="list-style-type: none"> 1. Turning control knob to HI position when burner is cold 2. Air in gas line 3. Air passageways on heater blocked 4. Dirty or partially clogged burner orifice 	<ol style="list-style-type: none"> 1. Turn control knob to LO position and let warm up for a minute 2. Operate burner until air is removed from line. Have gas line checked by local natural gas company 3. Observe minimum installation clearances (see pages 8 through 10) 4. Clean burner (see <i>Cleaning and Maintenance</i>, page 18) or replace burner orifice
White powder residue forming within burner box or on adjacent walls or furniture	<ol style="list-style-type: none"> 1. When heated, vapors from furniture polish, wax, carpet cleaners, etc. turn into white powder residue 	<ol style="list-style-type: none"> 1. Turn heater off when using furniture polish, wax, cleaners, or similar products.
Remote does not function	<ol style="list-style-type: none"> 1. Battery is not installed. Battery power is low 	<ol style="list-style-type: none"> 1. Replace 9-volt batteries in receiver and remote control

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.

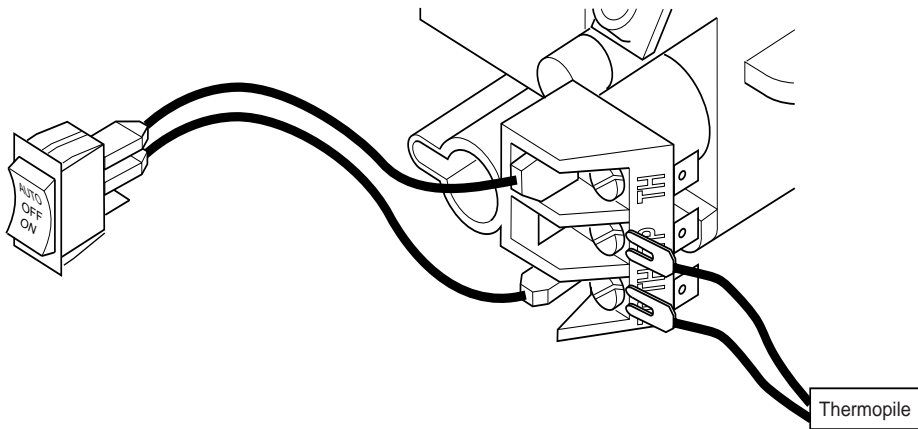
OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces a clicking/ticking noise just after burners are lit or shut off	1. Metal expanding while heating or contracting while cooling	1. This is common with most fireplaces. If noise is excessive, contact qualified service person
Fireplace produces unwanted odors	1. Fireplace burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. (see <i>IMPORTANT</i> statement above) 2. Gas leak. See Warning statement above	1. Open window and ventilate room. Stop using odor causing products while fireplace is running 2. Locate and correct all leaks (see <i>Checking Gas Connections</i> , page 12)
Fireplace shuts off in use (ODS operates)	1. Not enough fresh air is available 2. Low line pressure 3. ODS/pilot is partially clogged	1. Open window and/or door for ventilation 2. Contact local natural gas company 3. Clean ODS/pilot (see <i>Cleaning and Maintenance</i> , page 18)
Gas odor even when control knob is in OFF position	1. Gas leak. See Warning statement above 2. Control valve defective	1. Locate and correct all leaks (see <i>Checking Gas Connections</i> , page 12) 2. Replace control valve
Gas odor during combustion	1. Foreign matter between control valve and burner 2. Gas leak. See Warning statement above	1. Take apart gas tubing and remove foreign matter 2. Locate and correct all leaks (see <i>Checking Gas Connections</i> , page 12)
Dark residue on logs or inside of fireplace	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 <i>Installing Logs</i> , page 13) 2. Eliminate source of drafts around heater 3. Clean out air holes at burner inlet. Periodically repeat as needed 4. Remove blockage or replace burner

Comfort Glow® LFP33NR

UNVENTED NATURAL GAS FIREPLACE

WIRING DIAGRAM

Note: For proper operation of optional accessories, the wires from the switch to the control must be connected exactly as shown.



SERVICE HINTS

When Gas Pressure Is Too Low

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

When Gas Quality Is Bad

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

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

TECHNICAL SERVICE

You may have further questions about installation, operation, or troubleshooting.

If so, contact DESA International's Technical Service Department at 1-800-DESA LOG (1-800-337-2564).

You can also visit DESA International's Technical Service web site at www.desatech.com.

SPECIFICATIONS

LFP33NR Remote Ready

Btu (Variable)	20,000/30,000
Type Gas	Natural Gas Only
Ignition	Piezo
Pressure Manifold	3.5" W.C.
Inlet Gas Pressure (in. of water)	
	Maximum 10.5"
	Minimum* 5"
Shipping Weight	122 lbs.

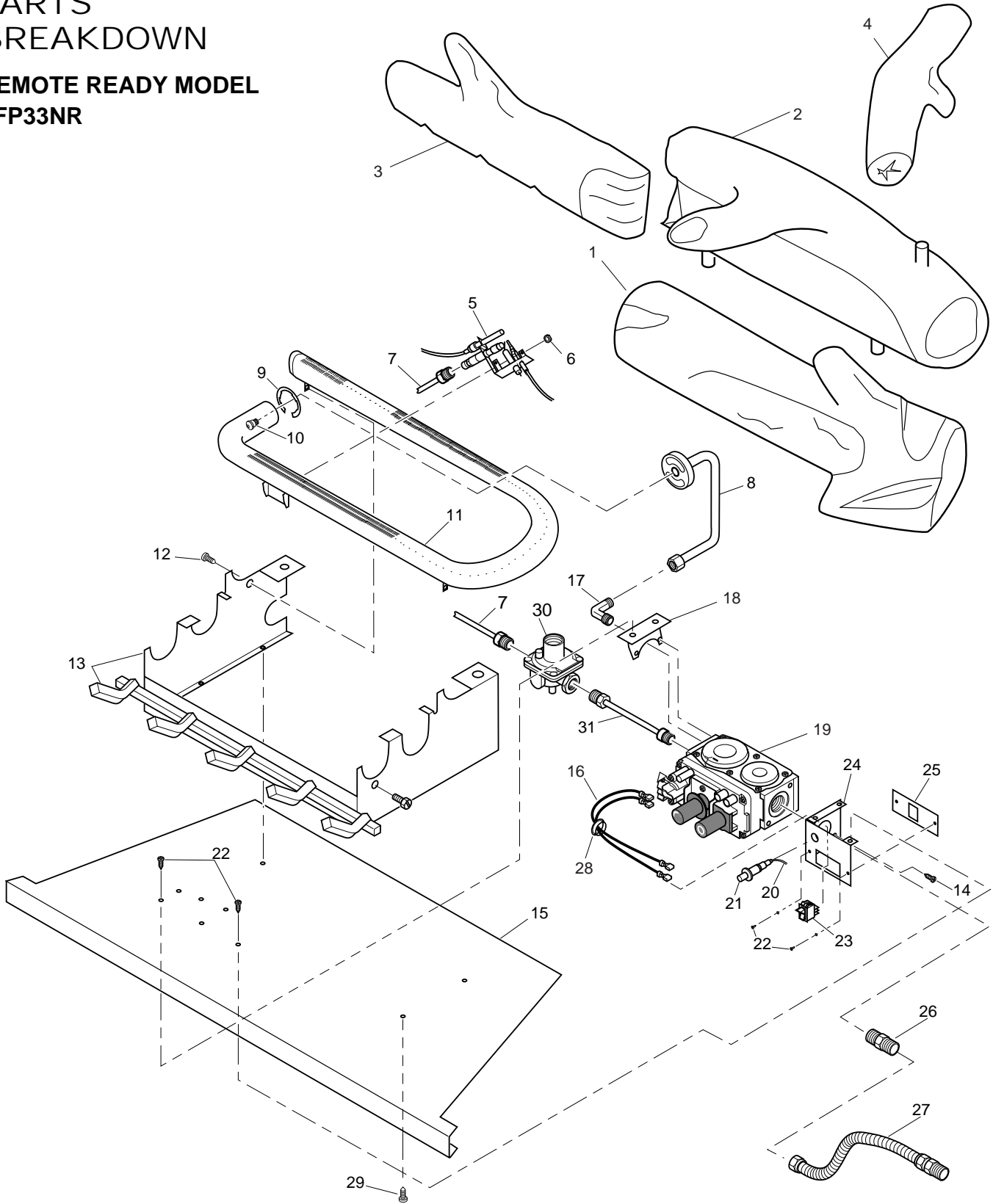
* For input adjustment

Comfort Glow® LFP33NR

UNVENTED NATURAL GAS FIREPLACE

ILLUSTRATED PARTS BREAKDOWN

REMOTE READY MODEL LFP33NR



OWNER'S MANUAL

PARTS LIST

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 23 of this manual.

REMOTE READY MODEL LFP33NR

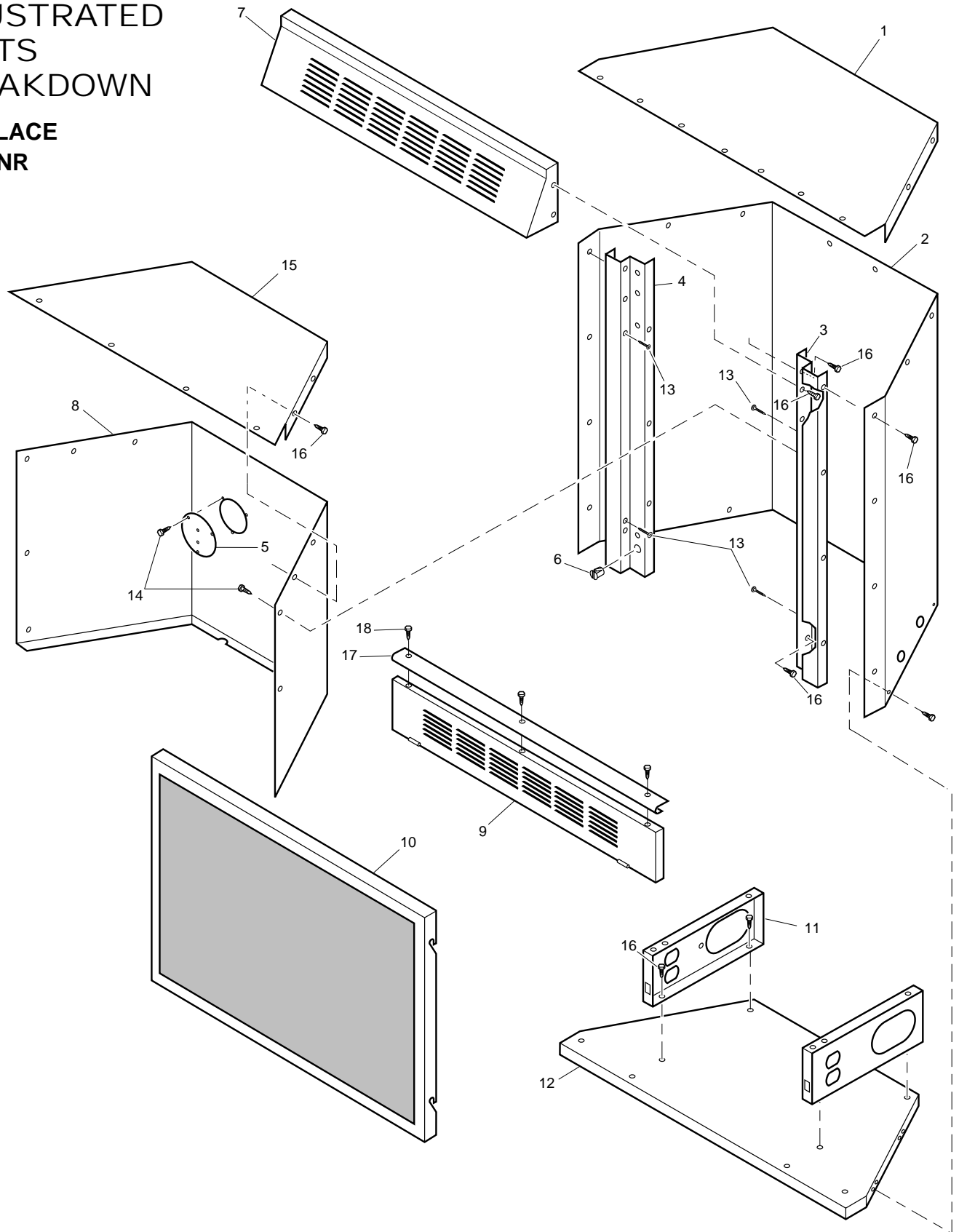
KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	104937-01	Middle Log (#1)	1
2	104938-01	Back Log (#2)	1
3	104936-01	Front Log (#3)	1
4	104939-01	Crossover Log (#4)	1
5	103779-01	ODS Pilot (NG)	1
6	098249-01	ODS Nut	2
7	100609-01	Pilot Tube (Regulator to Pilot)	1
8	104229-01	Burner Outlet Tube	1
9	102843-01	Burner Clip	1
10	099056-26	Burner Orifice Injector	1
11	102772-01	Burner	2
12	M11084-38	Screw, #8 x .38	2
13	104236-01CK	Painted Base Assy	1
14	M12461-26	Screw, #10 x .32	6
15	104238-01CK	Firebox Bottom	1
16	103284-03	Wiring Harness	1
17	098265-02	Elbow, Male	1
18	103782-01	Valve Bracket	1
19	103781-01	Gas Control Valve	1
20	098271-03	Ignitor Cable	1
21	102445-01	Piezo Ignitor	1
22	098304-01	Phillips Pan Head Screw #10	10
23	099998-01	Switch	1
24	104241-01	Remote Switch Bracket	1
25	103587-02CK	Switch Plate	1
26	097809-02	Male Connector	1
27	101628-03	Flexible Connector (Hose)	1
28	M50104-02	Bushing	1
29	M11084-26	Screw, #10 x .38	4
30	099918-02	Pilot Regulator	1
31	099387-07	Pilot Tube (Valve to Regulator)	1
PARTS AVAILABLE — NOT SHOWN			
	100693-01	Caution Decal	1
	101416-43	Information Video	1

Comfort Glow® LFP33NR

UNVENTED NATURAL GAS FIREPLACE

ILLUSTRATED
PARTS
BREAKDOWN

FIREPLACE
LFP33NR



OWNER'S MANUAL

PARTS LIST

FIREPLACE LFP33NR

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 23 of this manual.

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	101357-01	Top Outer Casing	1
2	103207-01	Outer Casing	1
3	102758-02CK	Right Front Side	1
4	102759-02CK	Left Front Side	1
5	101514-01CK	Cover	1
6	101784-01	Snap-in Magnet	2
7	103411-01CK	Louver Hood	1
8	101838-03CK	Firebox Wrapper	1
9	103412-01CK	Louver Door	1
10	101727-02	Screen Assembly	1
11	101348-01	Firebox Support	2
12	103208-01	Outer Base	1
13	099230-02	Shoulder Screw	6
14	098304-01	Phillips Pan Head Screw, #10	15
15	101872-03	Firebox Top	1
16	M11084-26	Hex Screw, #10	45
17	101746-01	Handle	1
18	100587-01	Brass Screw, #6-20x3/8"	3
PARTS AVAILABLE — NOT SHOWN			
	102307-01	Strike Plate	2
	101386-02	Hinge	2
	104355-05	AGA Information Decal	1
	104356-01	Warning Decal	1
	19724000	Cable Tie	1
	103773-03CK	Front Fireplace Assy	1

WARRANTY INFORMATION

KEEP THIS WARRANTY

Model _____
Serial No. _____
Date Purchased _____

Always specify model and serial numbers when communicating with the factory.

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We make no other warranty, expressed or implied.

LIMITED WARRANTY COMFORT GLOW VENT-FREE NATURAL GAS FIREPLACE

DESA International warrants this product to be free from defects in materials and components for two (2) years from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale or cancelled check must be presented.

This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this heater to proper operating condition and an allowance for labor when provided by a DESA Authorized Service Center. Warranty part(s) MUST be obtained through authorized dealers of this product and/or DESA International who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty. The heater MUST be installed by a qualified installer in accordance with all local codes and instructions furnished with the unit.

This warranty does not apply to parts that are not in original condition because of normal wear and tear, or parts that fail or become damaged as a result of misuse, accidents, lack of proper maintenance or defects caused by improper installation. Travel, diagnostic cost, labor, transportation and any and all such other costs related to repairing a defective heater will be the responsibility of the owner.

TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT; THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES AND LIMITS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO TWO (2) YEARS ON ALL COMPONENTS FROM THE DATE OF FIRST PURCHASE; AND DESA INTERNATIONAL'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA INTERNATIONAL SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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

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

For information about this warranty write:

DESA
INTERNATIONAL

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



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