

DESATM

HEATING PRODUCTS

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



**Shown with Optional
Cabinet Mantel/Hearth
Base Accessory**

MANUAL MODELS CGMFN AND CGMFP REMOTE-READY MODELS VGMRN AND VGMRP

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 INFORMATION


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

SAFETY INFORMATION

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

Natural and Propane/LP Gas: Natural and propane/LP gases are odorless. An odor-making agent is added to 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.

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

⚠ 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.

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

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

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

Carefully supervise young children when they are in the room with fireplace. When using the hand-held remote accessory (Remote-Ready Models Only), 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 in place. Make sure fireplace screen is closed before running fireplace.

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.
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 INFORMATION

Continued

4. This fireplace shall not be installed in a 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 soot-ing. Do not add lava rock around base. Rock and debris could fall into the control area of fireplace.
7. 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.
8. To prevent the creation of soot, follow the instructions in *Cleaning and Maintenance*, page 24.
9. Before using furniture polish, wax, carpet cleaner or similar products, turn fireplace off. If heated, the vapors from these products may create a white powder residue within burner box or on adjacent walls or furniture.
10. This fireplace needs fresh air ventilation to run properly. This fireplace has an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS shuts down the fireplace if not enough fresh air is available. See Air for Combustion and Ventilation, page 6. If fireplace keeps shutting off, see *Troubleshooting*, page 25.
11. Keep all air openings in front and at bottom of heater clear and free of debris. This will insure enough air for proper combustion.
12. Do not run fireplace
 - where flammable liquids or vapors are used or stored.
 - under dusty conditions.
13. Do not use this fireplace to cook food or burn paper or other objects.
14. Never place any objects in the fireplace or on logs.
15. Do not use fireplace if any part has been under water. Immediately call a qualified service technician to inspect the room fireplace and to replace any part of the control system and any gas control which has been under water.
16. Turn off fireplace and let cool before servicing. Only a qualified service person should service and repair fireplace.
17. Operating fireplace above elevations of 4,500 feet could cause pilot outage.
18. Do not operate fireplace if any log is broken. Do not operate fireplace if a log is chipped (dime-sized or larger).
19. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity.
20. Provide adequate clearances around air openings.

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

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 data plates from grate assembly. Data plates contain important warranty and safety information.

1. Remove fireplace and hood from carton. Log is wrapped and inside fireplace. Do not remove at this time.
2. Remove all protective packaging applied to fireplace for shipment.
3. Make sure fireplace includes one hardware packet.
4. Check fireplace for any shipping damage. If fireplace is damaged, promptly inform dealer where you bought fireplace.

PRODUCT IDENTIFICATION

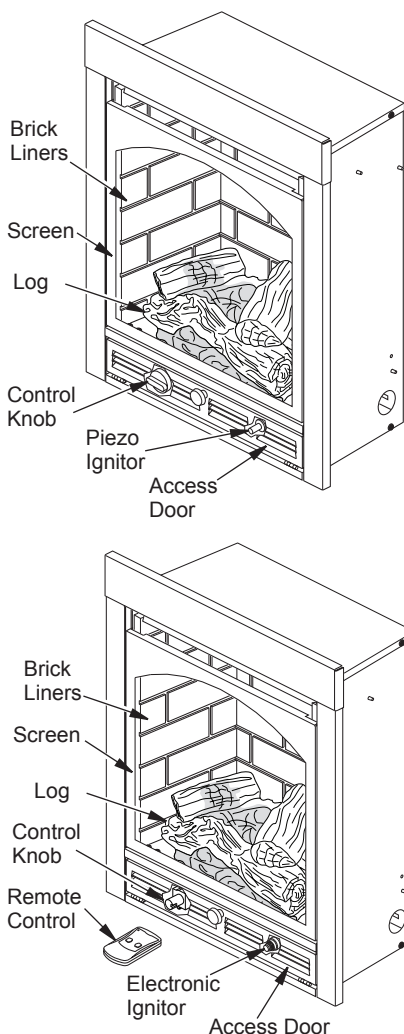


Figure 1 - Vent-Free Mini Compact Fireplace

PRODUCT FEATURES

SAFETY PILOT

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 fireplaces. The ODS/pilot shuts off the fireplace if there is not enough fresh air.

ELECTRONIC IGNITOR

(Remote-Ready Models Only)

This heater has an electronic ignitor to light heater fuel supply.

OPTIONAL REMOTE CONTROL ACCESSORIES

(For Remote-Ready Models Only)

There are four optional remote controls that can be purchased separately for Remote-Ready Models only:

- wall switch
- hand-held ON/OFF remote
- wall thermostat
- hand-held thermostat remote

See *Accessories*, page 34.

ASSEMBLY

⚠ WARNING: Always have screen in place before operating fireplace. This prevents excessive temperatures on fireplace surfaces.

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

ASSEMBLING FIREPLACE

Tools Required:

- Phillips screwdriver
- 5/16" hex wrench
- slotted screwdriver
- scissors

1. 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 (see Figure 2, page 6). Set screen aside until installation has been completed.
2. Remove all packaging from inside of unit.
3. Remove bubble wrap from logs and discard.

ASSEMBLY

Continued

4. Check installation of brick liners. Brick liners are in four pieces: 2 sides, 1 back and 1 top.
5. Place hood under top edge of firebox opening. Use 3 screws from hardware kit to mount hood to firebox (see Figure 3).

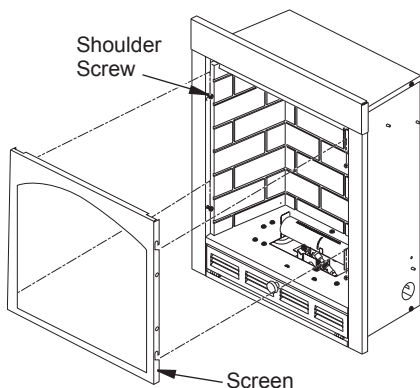


Figure 2 - Removing and Replacing Screen

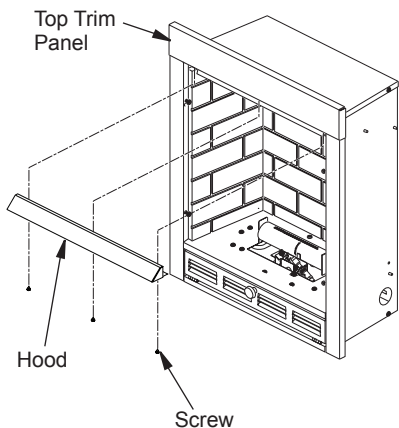


Figure 3 - Assembling Hood

AIR FOR COMBUSTION AND VENTILATION

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

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

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

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

PROVIDING ADEQUATE VENTILATION

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

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

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

The information on pages 6 through 8 will help you classify your space and provide adequate ventilation.

AIR FOR COMBUSTION AND VENTILATION

Continued

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:

- 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
- weather stripping has been added on openable windows and doors and
- caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and at other openings.

If your home meets all of these three criteria, you must provide additional fresh air. See *Ventilation Air From Outdoors*, page 8.

If your home does not meet all of the three criteria above, proceed to *Determining Fresh-Air Flow For Fireplace 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 ft³ per 1,000 Btu/hr (4.8 m³/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 ft³ per 1,000 Btu/hr (4.8 m³/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.

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

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

Example: Space size 16 ft. (length) x 14 ft. (width) x 8 ft. (ceiling height) = 1792 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.

- 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: 1792 cu. ft. (volume of space) x 20 = 35,840 (maximum Btu/Hr the space can support)

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

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

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

Example:

Gas water heater	30,000	Btu/Hr
Vent-free fireplace	+ 10,000	Btu/Hr
Total	= 40,000	Btu/Hr

- 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: 35,840 Btu/Hr (maximum the space can support)

40,000 Btu/Hr (actual amount of Btu/Hr used)

AIR FOR COMBUSTION AND VENTILATION

Continued

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:

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

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

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

VENTILATION AIR

Ventilation Air From Inside Building

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

Ventilation Air From Outdoors

Provide extra fresh air by using ventilation

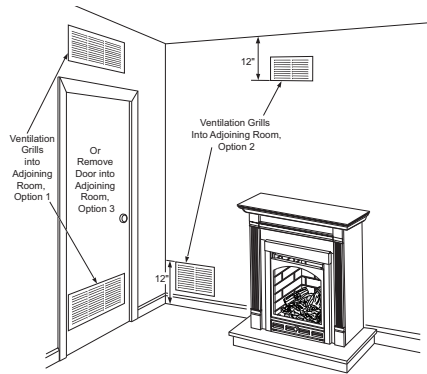


Figure 4 - Ventilation Air from Inside Building

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

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

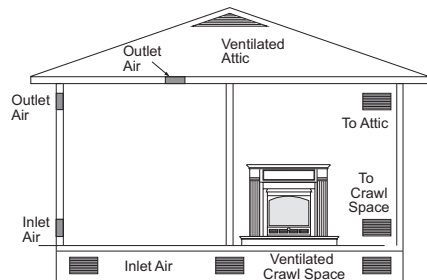


Figure 5 - Ventilation Air from Outdoors

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 bathroom
- in a recreational vehicle
- where curtains, furniture, clothing or other flammable objects are less than 36" from the front, top or sides of the fireplace
- as a fireplace insert
- in high traffic areas
- in windy or drafty areas

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

IMPORTANT: Vent-free fireplaces 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 6.

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.

Note: When installing fireplace directly on carpeting, tile or other combustible material, other than wood flooring, the fireplace shall be installed on a metal or wood panel extending the full width and depth of the fireplace.

Use the dimensions shown for rough openings to create the easiest installation (see *Built-In Fireplace Installation*, page 10).

CHECK GAS TYPE

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

⚠ WARNING: This appliance is equipped for natural or propane/LP gas but not both. Field conversion is not permitted.

INSTALLATION ITEMS

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

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

* A CSA design-certified equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the optional CSA design-certified equipment shutoff valve from your dealer. See *Accessories*, page 34.

INSTALLATION

Continued

FIREPLACE CLEARANCES

⚠ WARNING: Maintain the minimum clearances shown in Figure 6. If you can, provide greater clearances from floor, ceiling and joining wall.

NOTICE: If you install the fireplace in a bedroom, some building codes require that the fireplace/mantel system be secured to (or within) a wall. You can position fireplace in an optional cabinet or corner mantel. You can also recess fireplace into the wall.

If your fireplace is to be used with an optional mantel, the installation instructions included with your mantel shows an CSA approved method of attaching the fireplace/mantel system to a wall. **IMPORTANT:** Only use optional cabinet or corner mantels specified in this manual. Purchase the optional mantel from your dealer (see *Accessories*, page 34).

If your fireplace is to be recessed into the wall, see *Built-In Fireplace Installation* to secure your fireplace into the wall.

⚠ CAUTION: If you install the fireplace in a home garage

- fireplace pilot and burner must be at least 18" above floor.
- locate fireplace where moving vehicle will not hit it.

For convenience and efficiency, install fireplace

- where there is easy access for operation, inspection and service
- in coldest part of room

Minimum Clearances For Side Combustible Material, Side Wall and Ceiling

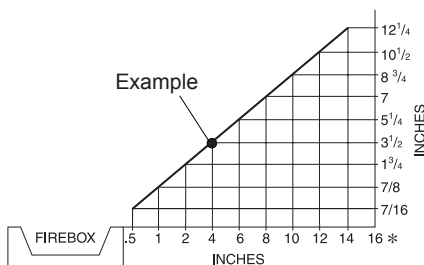
A. Clearances from the side of the fireplace cabinet to any combustible material and wall should follow diagram in Figure 6.

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

B. Clearances from the top of the fireplace opening to the ceiling should not be less than 36".

C. For mantel clearances, see Figure 9 on page 12.

MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS			
Top	Left and Right Sides	Bottom and Rear	Front
36"	6"	0"	36"



*Minimum 16" from Side Wall

Figure 6 - Minimum Clearance for Combustible to Wall

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. Fireplace face will extend past sides and top of fireplace approximately 1". This will cover the rough edges of the wall opening. If installing a built-in mantel above the fireplace, you must follow the clearances shown in Figure 9, page 12. To install the fireplace in this manner, use the following instructions.

INSTALLATION

Continued

	Actual	Framing
Height	23 $\frac{3}{4}$ "	22 $\frac{1}{4}$ "
Front Width	19 $\frac{3}{4}$ "	17 $\frac{1}{2}$ "
Depth	8 $\frac{7}{8}$ "	8 $\frac{7}{8}$ "
Bottom	0"	0"

1. Frame in rough opening. Use dimensions shown in Figure 7 for the rough opening. If installing in a corner, use dimensions shown in Figure 8 for the rough opening. The height is 22 $\frac{1}{4}$ " which is the same as the wall opening above.
2. 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.
3. If you have not assembled firebox, follow instructions on page 6.
4. Carefully set fireplace in front of rough opening with back of fireplace inside wall opening.
5. Attach flexible gas line to fireplace gas regulator. See *Connecting Fireplace to Gas Supply*, page 14.
6. Check all gas connections for leaks. See *Checking Gas Connections*, page 15.

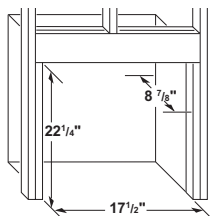


Figure 7 - Rough Opening for Installing in Wall

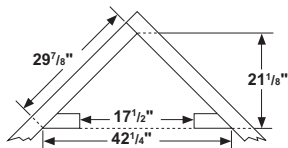


Figure 8 - Rough Opening for Installing in Corner

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 edge of the firebox. Combustible materials should never overlap the firebox front facing.

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

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

⚠ WARNING: Never modify or cover the louvered slots on the front of the firebox.

Mantel Clearances for Built-In Installation

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

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

NOTICE: If your installation does not meet the minimum clearances shown in Figure 9, page 12, you must do one of the following:

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

INSTALLATION

Continued

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

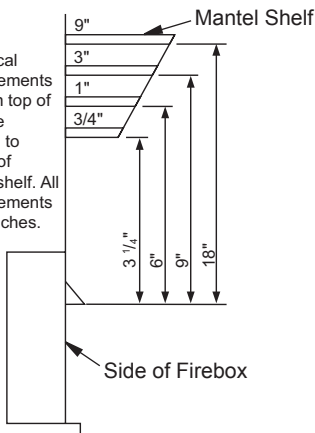


Figure 9 - Minimum Mantel Clearances for Built-In Installation

OPTIONAL MANTEL INSTALLATION

Refer to instructions provided with the mantel for assembly. Refer to the following instructions for system installation. Refer to instructions on page 6 for hood assembly.

1. Assemble cabinet mantel as shown in accessory instruction sheet.
2. Place hearth base against wall at installation location. Cut an access hole in hearth base to run gas line to fireplace (see Figure 10). 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.
3. Route flexible gas line through access hole in hearth base.
4. Center cabinet mantel on hearth base (see Figure 11). Make sure mantel is flush against wall and centered left to right on base.
5. Use hardware provided with mantel accessory to attach mantel assembly to base (see mantel instruction sheet).
6. Attach flexible gas line to fireplace gas regulator. See *Connecting to Gas Supply*, page 13.
7. Check all gas connections for leaks. See *Checking Gas Connections*, page 15.
8. Carefully insert fireplace into cabinet mantel (see Figure 12). Be careful not to scratch or damage hearth base or cabinet mantel (see manual instruction sheet).

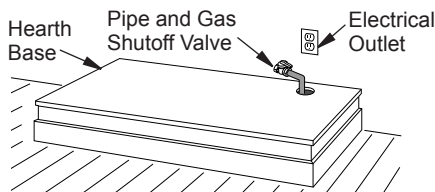


Figure 10 - Placing Hearth Base Against Wall

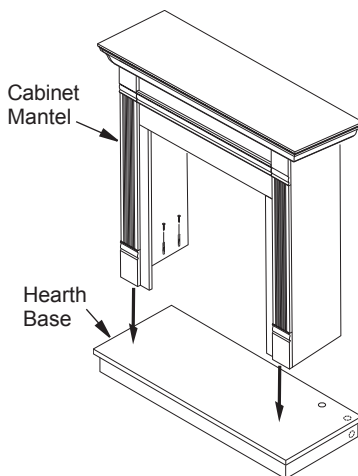


Figure 11 - Installing Cabinet Mantel onto Hearth Base

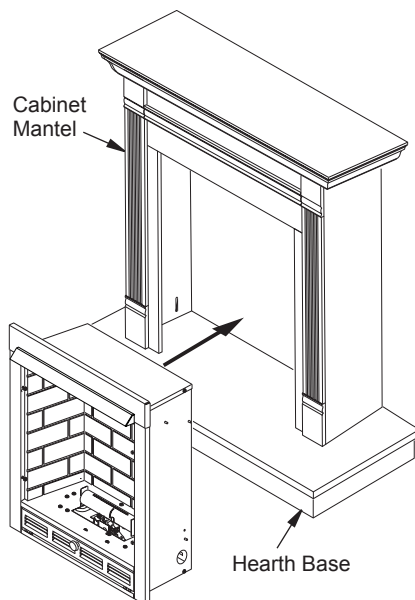


Figure 12 - Installing Fireplace into Mantel Assembly

INSTALLATION

Continued

CONNECTING TO GAS SUPPLY

⚠ WARNING: This appliance requires a 45° male flare fitting 5/8"-18 UNF (Unified National Fine Thread) inlet connection and the flexible gas line provided.

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

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

IMPORTANT: For natural gas, check gas line pressure before connecting fireplace to gas line. Gas line pressure must be no greater than 14" of water. If gas line pressure is higher, heater regulator damage could occur.

⚠ 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.

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, fireplace regulator damage could occur. Install external regulator with the vent pointing down as shown in Figure 13. Pointing the vent down protects it from freezing rain or sleet.

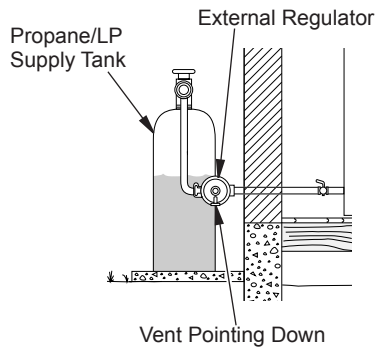


Figure 13 - External Regulator With Vent Pointing Down

⚠ 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" or greater diameter 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 heater (see Figure 14, page 14).

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.

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

INSTALLATION

Continued

We recommend that you install a sediment trap in supply line as shown in Figure 14. Locate sediment trap where it is within reach for cleaning. Install in piping system between fuel supply and heater. 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 controls. If sediment trap is not installed or is installed wrong, fireplace may not run properly.

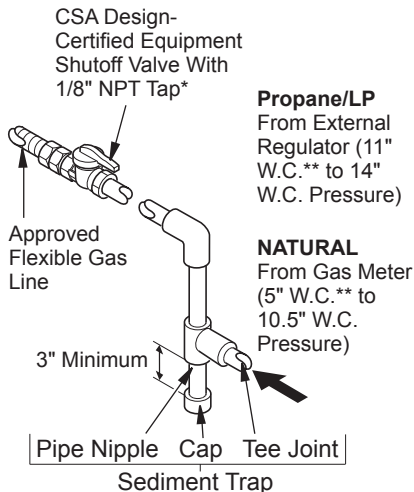


Figure 14 - Gas Connection

* Purchase the optional CSA design-certified equipment shutoff valve from your dealer. See *Accessories*, page 34.

CONNECTING FIREPLACE TO GAS SUPPLY

Installation Items Needed

- Phillips screwdriver
- sealant (resistant to propane/LP gas, not provided)

NOTICE: Most building codes do not permit concealed gas connections. A flexible gas line is provided to allow accessibility from the fireplace (see Figure 1, page 5). The flexible gas supply line connection to the equipment shutoff valve should be accessible.

1. Route flexible gas line, included, from fireplace control to equipment shutoff valve through side or rear access holes in outer casing (see Figure 1, page 5).
2. Apply pipe joint sealant lightly to male threads of gas connector attached to flexible gas line/equipment shutoff valve (see Figure 15).

⚠ CAUTION: Avoid damage to regulator. Hold gas regulator with wrench when connecting it to gas piping and/or fittings (Manual-Controlled Models Only).

⚠ CAUTION: Avoid damage to gas control. Hold gas control with wrench when connecting it to gas piping and/or fittings (Remote-Ready Models Only).

3. Check all gas connections for leaks. See *Checking Gas Connections*.
4. Feed flexible gas line into fireplace base area while replacing branch support. Make sure the entire flexible gas line is in fireplace base area.

To Gas Regulator (Manual-Controlled Models) or Control Valve (Remote-Ready Models)

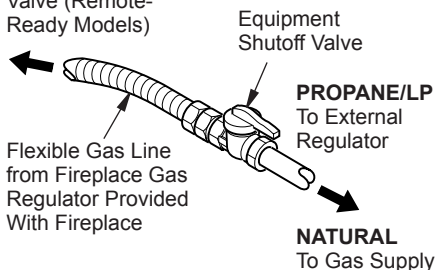


Figure 15 - Attaching Flexible Gas Line to Equipment Shutoff Valve

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 to Gas Supply*, page 13.

PRESSURE TESTING GAS SUPPLY PIPING SYSTEM

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

1. Disconnect appliance with its appliance main gas valve (control valve) and equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig will damage heater 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 16).
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 17 or 18). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
4. Correct all leaks at once.

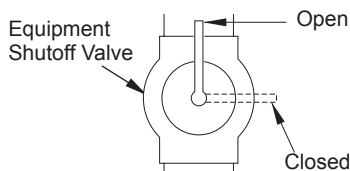


Figure 16 - Equipment Shutoff Valve

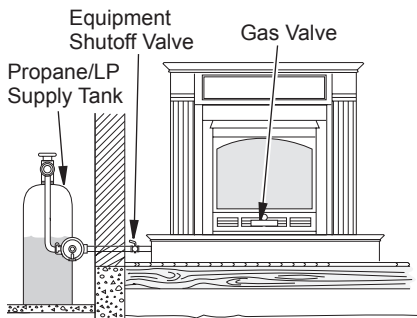


Figure 17 - Checking Gas Joints (Propane/LP Only)

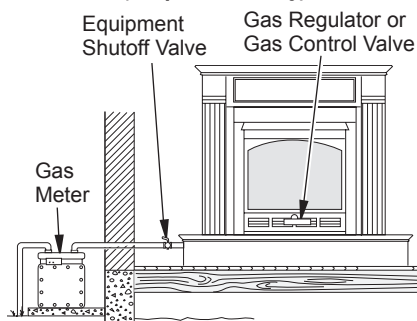


Figure 18 - Checking Gas Joints (Natural Gas Only)

INSTALLATION

Continued

PRESSURE TESTING FIREPLACE GAS CONNECTIONS

1. Open equipment shutoff valve (see Figure 16, page 15).
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 regulator (Manual-Controlled Models) or to gas control valve (Remote-Ready Models) (see Figures 17 or 18, page 15). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light fireplace (see *Operating Fireplace*, page 18). Check all other internal joints for leaks.
7. Turn off fireplace (see *To Turn Off Gas to Appliance*, page 20 for Manual-Controlled Models or page 21 for Remote-Ready Models).

OPTIONAL WIRELESS HAND-HELD REMOTE CONTROL ACCESSORIES

Remote-Ready Models Only

(HRC100 & HRC200 Series)

Installing Receiver

1. Disconnect jumper wire from control valve (see Figure 19).
2. Locate battery clip mounted on back of receiver (see Figure 20).
3. Slide 9-volt battery (not included) through clip.
4. Attach terminal wires to battery (see Figure 20).

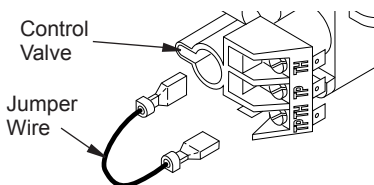


Figure 19 - Disconnecting Wires From Control Valve

5. Connect wires from remote receiver to control valve as shown in Figure 21.
6. Install remote receiver unit onto remote bracket using screws provided (see Figure 21).

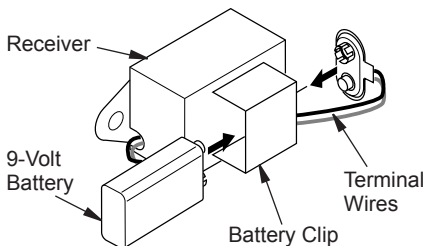


Figure 20 - Attaching Battery to Receiver

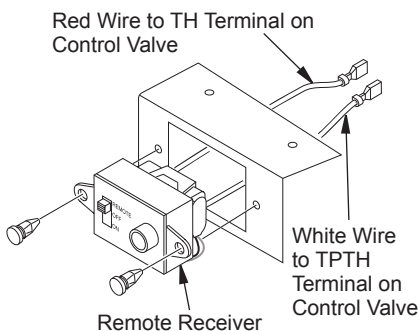


Figure 21 - Installing Remote Receiver

Installing 9-Volt Battery in Hand-Held Remote Control Unit

1. Remove battery cover on back of remote control unit.
2. Attach terminal wires to the battery (not included). Place battery into the battery housing.
3. Replace battery cover onto remote control unit.

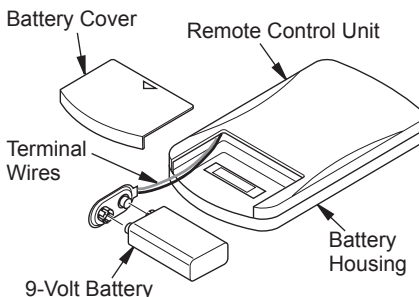


Figure 22 - Installing Battery in Hand-Held Remote Control Unit

INSTALLATION

Continued

OPTIONAL WALL MOUNTED THERMOSTAT - GWMT1

(Remote-Ready Models Only)

⚠ WARNING: Read and follow installation instructions. Installation should be done by a qualified installer familiar with low-voltage wiring procedures.

⚠ WARNING: Do not connect this thermostat to any electrical source! Electrical shock and/or fire hazard will occur.

1. Disconnect jumper wire from control valve (see Figure 23).
2. Connect one terminal of 25 ft. wire to "TPTH" terminal on control valve (see Figure 23).
3. Connect remaining wire terminal to the "TH" terminal on the control valve. Make sure that wire terminals are in the positions on your unit as pictured in Figure 23.
4. Route the 25 ft. wire to a convenient location to mount your thermostat (no outside wall). **IMPORTANT:** The wire may be shortened but must not be lengthened. The thermostat should be mounted 54" above the floor in a location where there is good air circulation. Avoid heat sources such as lamps, direct sunlight, fireplace or heat and air conditioning ducts.
5. Gently remove the cover of the thermostat from the base. Grasp the sides of the cover firmly and pull to separate from the base.
6. Feed the electrical wires through the rectangular slots on each side of the base (see Figure 24).

⚠ WARNING: Do not connect the thermostat to a power source. Electrical shock and/or a fire hazard will occur.

7. Connect one bare wire end to each terminal ("W" and "R") of the thermostat base (see Figure 25).

8. Install the base onto the wall with the provided screws.
9. Move the temperature adjustment back and forth to insure the bimetal is free from restrictions.
10. Replace the cover onto the base. (Upon installation, the thermostat must be allowed to stabilize at room temperature for a minimum of 30 minutes for proper operation).
11. Set switch on fireplace to Auto position.
12. Set the temperature adjustment to the desired setting. This thermostat has been electronically calibrated at the factory. No adjustment or leveling is necessary.

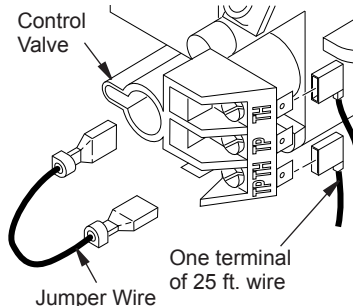


Figure 23 - Connecting Wire Terminals

Feed wires through rectangular slots

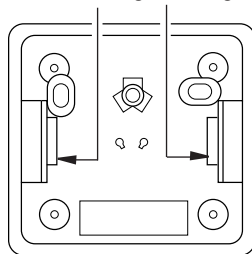


Figure 24 - Back View of Thermostat Base

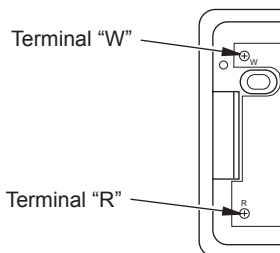


Figure 25 - Thermostat Base Terminals "W" and "R"

INSTALLATION

Continued

OPTIONAL WALL SWITCH - GWMS2 (Remote-Ready Models Only)

⚠ WARNING: Read and follow installation instructions. Installation should be done by a qualified installer familiar with low-voltage wiring procedures.

⚠ WARNING: Do not connect this switch to any electrical source! Electrical shock and/or fire hazard will occur.

1. Connect one terminal of 25 ft. wire to "TPTH" terminal on control valve (see Figure 23, page 17).
2. Connect remaining wire terminal to the "TH" terminal on the control valve. Make sure that wire terminals are in the positions on your unit as pictured in Figure 23, page 17. If wires are not "crossed" the thermostat will not work.
3. Route the 25 ft. wire to a convenient location to mount your wall switch (no outside walls).

⚠ WARNING: Do not connect the switch to a power source. Electrical shock and/or fire hazard will occur.

IMPORTANT: The wire may be shortened but must not be lengthened.

4. Connect one bare wire end to each of the terminals of the provided wall switch.
5. Install the wall switch and cover in the wall.

INSTALLING LOG SET AND SCREEN

1. Remove log packaging material and discard packaging. Gently place log over the burner (see Figure 26). Do not allow log to contact flame. If flame contacts log, soot will be created.
2. Reattach screen by placing the notches in the screen frame over the shoulder screws and pushing down.

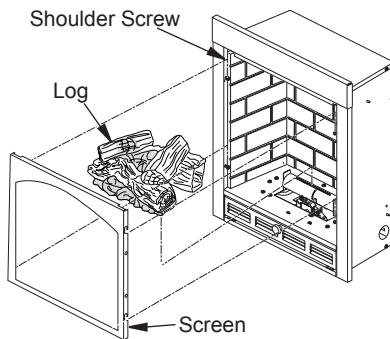


Figure 26 - Installing Log and Screen

OPERATING FIREPLACE

MANUAL-CONTROLLED MODELS

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.

OPERATING FIREPLACE



Continued

- 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 fireplace with the screen in place. Make sure fireplace screen is installed before running fireplace.

NOTICE: During initial operation of new fireplace, burning logs will give off a paper-burning smell. Open window to vent smell. Operate fireplace on HI position to burn off odor. This will only last a few hours.

1. STOP! Read the safety information, page 18.
2. Make sure equipment shutoff valve is fully open.
3. Turn control knob clockwise  to the OFF position.
4. 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, page 18. If you don't smell gas, go to the next step.
5. Turn control knob counterclockwise  to the PILOT position. Press in control knob for five (5) seconds (see Figure 27).

Note: You may be running this fireplace 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.


- If control knob does not pop out when released, contact a qualified service person or gas supplier for repairs.

6. With control knob pressed in, press and release ignitor button (see Figure 27). 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, refer to *Troubleshooting*, page 31. Also, 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 20.

7. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.

Note: If pilot goes out, repeat steps 3 through 7. This fireplace has a safety interlock system. Wait one (1) minute for system to reset before lighting pilot again.

8. Turn control knob counterclockwise  to ON position. The burner should light.

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

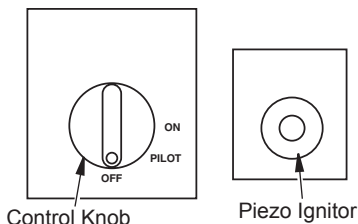


Figure 27 - Control Knob In The OFF Position

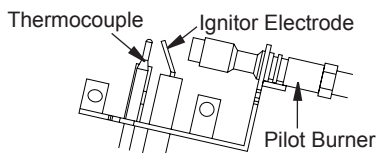


Figure 28 - Natural Gas Pilot

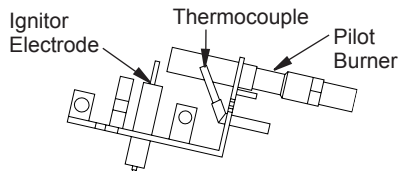




Figure 29 - Propane/LP Gas Pilot

OPERATING FIREPLACE

Continued

9. To turn off burner and leave pilot lit: Turn control knob clockwise  to the PILOT position.

TO TURN OFF GAS TO APPLIANCE

1. Turn control knob clockwise  to the OFF position.
2. Close equipment shutoff valve (see Figure 16, page 15)

MANUAL LIGHTING PROCEDURE

1. Follow steps 1 through 5 under *Lighting Instructions*, page 19.
2. With control knob pressed in, strike match. Hold match to pilot until pilot lights.
3. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow step 8 under *Lighting Instructions*, page 19.

REMOTE-READY MODELS

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 fireplace with the fireplace screen in place. Make sure fireplace screen is installed before running fireplace.

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

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

1. **STOP!** Read the safety information in column 1.
2. Make sure equipment shutoff valve is fully open.
3. Press in and turn control knob clockwise  to the OFF position (see Figure 30).

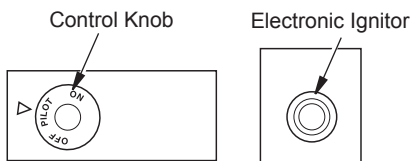


Figure 30 - Control Knob and Ignitor Button Location (Shown as Supplied - No Control Options)

OPERATING FIREPLACE

Continued

- 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, page 20. If you don't smell gas, go to the next step.

- Press in and turn control knob counterclockwise ↶ to the PILOT position. Press in control knob for five (5) seconds (see Figure 30, page 20).

Note: You may be running this fireplace 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.

- With control knob pressed in, press and hold electronic ignitor button. This will light pilot. The pilot is attached to the front of the 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*.

- 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.

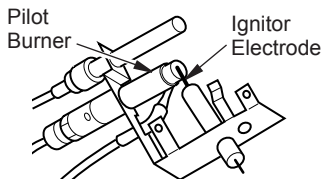


Figure 31 - Propane/LP Gas Pilot

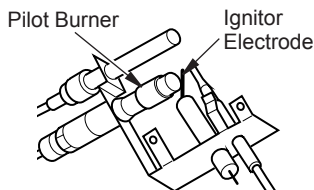


Figure 32 - Natural Gas Pilot

- Slightly push in and turn control knob counterclockwise ↶ to the ON position.

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

- To turn off burner and leave pilot lit: Turn control knob clockwise ↷ to the PILOT position. If using optional hand-held remote, set remote switch to the OFF position to prevent draining battery.

TO TURN OFF GAS TO APPLIANCE

- Turn control knob clockwise ↷ to the OFF position.
- If Using Optional Hand-Held Remote: Set remote switch to the OFF position to prevent draining battery.
- Close equipment shutoff valve (see Figure 16, page 15)

WARNING: Make sure remote sensor selector switch is in the OFF position when you are away from home for long periods of time.

MANUAL LIGHTING PROCEDURE

- Follow steps 1 through 5 under *Lighting Instructions*, page 20.
- Depress control knob and light pilot with match.
- Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow step 8 under *Lighting Instructions*, column 1.

OPTIONAL HAND-HELD REMOTE OPERATION

Note: All remote control accessories must be purchased separately (see *Accessories*, page 34). Follow instructions included with the remote control.

NOTICE: You must light the pilot before using the hand-held remote control unit. See *Lighting Instructions* on page 20.

OPERATING FIREPLACE

Continued

After lighting, let pilot flame burn for about one minute. Turn control knob to ON position. Slide the remote selector switch to the REMOTE position (see Figure 33). Note: The burner may light if hand-held remote was on when the remote selector switch was last turned off. You can now turn the burner on and off with the hand-held remote control unit.

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

Selector Switch in REMOTE Position (Optional Hand-Held Remote Control)

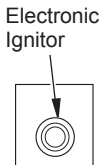
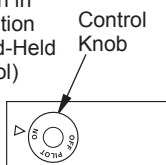
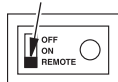


Figure 33 - Setting the Selector Switch and Control Knob for Hand-Held Remote Operation

ON/OFF SERIES (MODEL HRC100 AND HRC101)

Hold the control button on the hand-held remote until burner turns on. Hold the control button again until burner turns off (see Figure 34).

TO LOCK press both buttons on hand-held remote control until light stops flashing. Hand-held remote control is now locked. If the fire is on it will be turned off automatically. In the locked state, the light will not light up when any button is pressed.

TO UNLOCK press both buttons together on hand-held remote control until the light stops flashing. The hand-held remote is now unlocked.

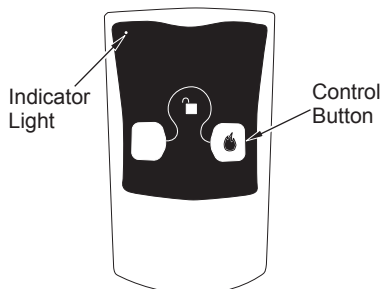


Figure 34 - On/Off Hand-Held Remote Control Unit

THERMOSTAT SERIES (MODEL HRC200 AND HRC201)

The hand-held remote can be operated using either the manual mode (MANU) or thermostatic mode (AUTO) (see Figure 35). To select Fahrenheit/Centigrade mode display, carefully press the °C/°F mode button with the end of a paper clip or similar blunt object.

Manual Mode

1. Press the POWER and LOCK buttons together to turn on the hand-held remote control.
2. Press the MANU button to turn on the fireplace.
3. Press the POWER and LOCK buttons together to turn off the fireplace.

Auto (Thermostatic) Mode

1. Press the POWER and LOCK buttons together to turn on the hand-held remote control.
2. Press AUTO button to select this mode.
3. Set the desired room temperature by pressing the TEMP + or - buttons.
4. Press the POWER and LOCK buttons together to turn off the fireplace

Note: Do not leave the hand-held remote in the AUTO mode close to the fireplace. The radiant heat from the fireplace will turn off the fireplace. Ideally, place the hand-held remote in the center of the room facing towards the fireplace.

Note: Do not hold the hand-held remote for a long time. Body temperature will affect its operation in the AUTO mode.

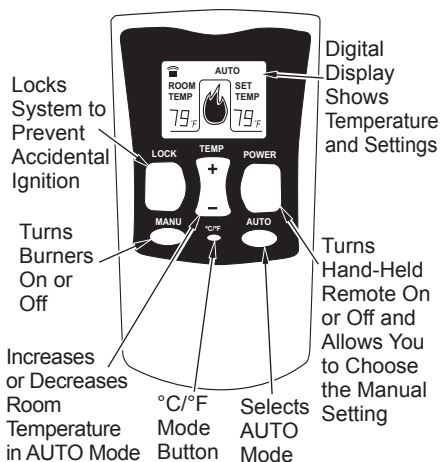


Figure 35 - Thermostat Hand-Held Remote Control Unit

OPERATING FIREPLACE

Continued

Safety Features

When away from home for an extended period of time or as a child safety feature to prevent accidental ignition of the fireplace, receiver ON/OFF/REMOTE switch should be in the OFF position.

Auto Shutoff Feature

1. If the average room temperature reaches a range of 82° F (28° C), the hand-held remote control will perform a safety override and shut the fireplace off. This feature is not available in the MANU mode.
2. The receiver continuously receives signals from the hand-held remote to control the room temperature. If the hand-held remote is misplaced, obstructed or for any reason cannot transmit to the receiver, the receiver will shut off the fireplace. This will occur in 8 or more minutes depending upon location of remote transmitter and strength of batteries.

Key Pad Lock Feature

This feature allows the user to lock/unlock the keypad on the hand-held remote in the MANU or AUTO mode to prevent inadvertent operation (i.e. children operating the hand-held remote control, etc.). The keypad is locked in either on or off. Press the POWER and LOCK buttons together to turn the unit on or off.

GWMT1 WALL MOUNTED THERMOSTAT (OPTIONAL)

Make sure the heater switch is on REMOTE and set the temperature adjustment on wall thermostat to the desired setting. The thermostat has been electronically calibrated at the factory and requires no adjustment or leveling.

Upon installation, the thermostat must be allowed to stabilize at room temperature for a minimum of 30 minutes for proper operation. See installation instructions on page 17 of this manual.

GWMS2 WALL MOUNTED SWITCH (OPTIONAL)

Make sure the heater switch is on REMOTE. This wall switch works just like the conventional light switch. Flip the switch up for on and down for off.

Note: Make sure that this switch is not in a position to be mistaken for a light switch. This may result in the fireplace being inadvertently turned on without the proper precautions being taken. See installation instructions on page 18 of this manual.

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

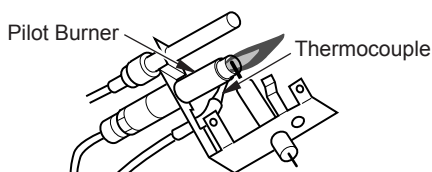
PILOT FLAME PATTERN

Figure 36 shows a correct pilot flame pattern. Figure 37 shows an incorrect pilot flame pattern. The incorrect pilot flame is not touching the thermocouple. This will cause the thermocouple to cool. When the thermocouple cools, the fireplace will shut down.

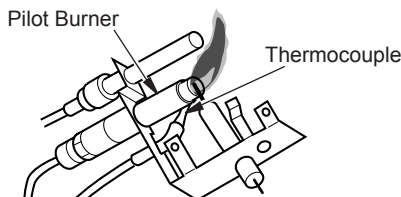
If pilot flame pattern is incorrect, as shown in Figure 37

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 20 for Manual-Controlled Models or page 21 for Remote-Ready Models)
- see *Troubleshooting*, page 31

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



**Figure 36 - Correct Pilot Flame Pattern
(Propane/LP Remote-Ready Shown)**



**Figure 37 - Incorrect Pilot Flame Pattern
(Propane/LP Remote-Ready Shown)**

BURNER FLAME PATTERN

Figure 38, page 24, shows a correct burner flame pattern. Figure 39, page 24, shows an incorrect burner flame pattern. The incorrect burner flame pattern shows sporadic, irregular flame tipping. The flame should not be dark or have an orange/reddish tinge.

INSPECTING BURNERS

Continued

Note: When using the fireplace the first time, the flame will be orange for approximately one hour until the log cures.

If burner flame pattern is incorrect, as shown in Figure 39

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 20 for Manual-Controlled Models or page 21 for Remote-Ready Models)
- see *Troubleshooting*, page 31

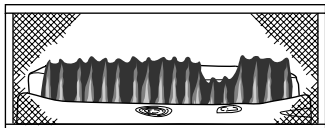


Figure 38 - Correct Burner Flame Pattern

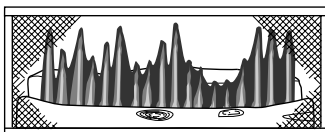


Figure 39 - Incorrect Burner Flame Pattern

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, pet hair, bedding material, 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, or as needed, and have fireplace 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 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 40, page 25).
3. Blow air through the ports/slots and holes in the burner.
4. Check the injector holder located at the end of the burner tube again. Remove any large particles of dust, dirt, lint or pet hair with a soft cloth or vacuum cleaner nozzle.
5. Blow air into the primary air holes on the injector holder.
6. In case any large clumps of dust have now been pushed into the burner repeat steps 3 and 4.

Clean the pilot assembly also. Additional cleaning may be needed for proper pilot operation based on use/lack of use. A yellow tip on the pilot flame may indicate 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 Figures 41 or 42, page 25, depending on model). 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.

CLEANING AND MAINTENANCE

Continued

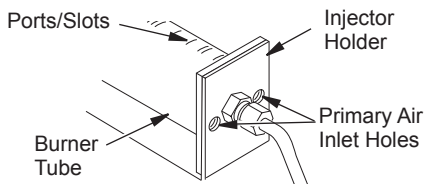


Figure 40 - Injector Holder On Outlet Burner Tube

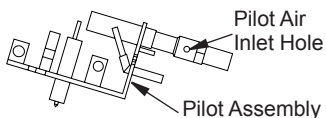


Figure 41 - Pilot Inlet Air Hole (Propane/LP Gas)

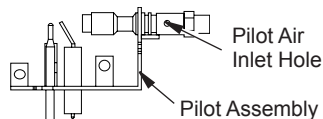


Figure 42 - Pilot Inlet Air Hole (Natural Gas)

LOG SET

- If you remove one-piece log set for cleaning, refer to *Installing Log Set and Screen*, page 18, for placement instructions.
- Replace log set if broken or chipped (dime-sized or larger).

CABINET

Air Passageways

Use pressurized air to clean.

Exterior

Use a soft cloth dampened with a mild soap and water mixture. Wipe the cabinet to remove dust.

TROUBLESHOOTING

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

⚠ 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. Broken ignitor cable	3. Replace ignitor cable
	4. Bad ignitor	4. Replace ignitor
	5. Ignitor electrode positioned wrong	5. Replace pilot assembly
	6. Ignitor electrode broken	6. Replace pilot assembly
	7. Battery not installed, battery power low or battery not installed correctly	7. Install new alkaline battery in electronic ignitor. Verify battery is installed correctly

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
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 equipment shutoff valve closed 2. Control knob not in PILOT position 3. Control knob not pressed in while in PILOT position 4. Air in gas lines when installed 5. Depleted gas supply (propane/LP only) 6. ODS/pilot is clogged 7. Gas regulator setting is not correct 	<ol style="list-style-type: none"> 1. Turn on gas supply or open equipment shutoff valve 2. Turn control knob to PILOT position 3. Press in control knob while in PILOT position 4. Continue holding down control knob. Repeat igniting operation until air is removed 5. Contact local propane/LP gas company 6. Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 24) or replace ODS/pilot assembly 7. Replace gas regulator
ODS/pilot lights but flame goes out when control knob is released	<ol style="list-style-type: none"> 1. Control knob not fully pressed in 2. Control knob not pressed in long enough 3. Safety interlock system has been triggered 4. Equipment shutoff valve not fully open 5. 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 6. Thermocouple connection loose at control valve 7. Thermocouple damaged 8. Control valve damaged 	<ol style="list-style-type: none"> 1. Press in control knob fully 2. After ODS/pilot lights, keep control knob pressed in 30 seconds 3. Wait one minute for safety interlock system to reset. Repeat ignition operation 4. Fully open equipment shutoff valve 5. A) Contact local natural or propane/LP gas company B) Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 24) or replace ODS/pilot assembly 6. Hand tighten until snug, then tighten 1/4 turn more 7. Replace pilot assembly 8. Replace control valve
Burner does not light after ODS/pilot is lit	<ol style="list-style-type: none"> 1. Inlet gas pressure is too low 2. Burner orifice is clogged 3. Thermopile leads disconnected or improperly connected (Remote-Ready Models Only) 4. Burners will not come on in remote position (Remote-Ready Models Only) 	<ol style="list-style-type: none"> 1. Contact local natural or propane/LP gas company 2. Clean burner (see <i>Cleaning and Maintenance</i>, page 24) or replace burner orifice 3. Reconnect leads (see <i>Wiring Diagram</i>, page 29) 4. Replace battery in handheld remote and receiver

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Delayed ignition of burner	<ol style="list-style-type: none">1. Manifold pressure is too low2. Burner orifice is clogged	<ol style="list-style-type: none">1. Contact local natural or propane/LP gas company2. Clean burner (see <i>Cleaning and Maintenance</i>, page 24) or replace burner orifice
Burner backfiring during combustion	<ol style="list-style-type: none">1. Burner orifice is clogged or damaged2. Damaged burner3. Gas regulator defective4. Inlet gas pressure is too low	<ol style="list-style-type: none">1. Clean burner (see <i>Cleaning and Maintenance</i>, page 24) or replace burner orifice2. Replace damaged burner3. Replace gas regulator4. Contact local natural or propane/LP gas company
Slight smoke or odor during initial operation	<ol style="list-style-type: none">1. Residues from manufacturing processes and log curing2. Not enough air3. Gas regulator defective	<ol style="list-style-type: none">1. Problem will stop after a few hours of operation2. Check burner for dirt and debris. If found, clean burner (see <i>Cleaning and Maintenance</i>, page 24)3. Replace gas regulator
Fireplace produces a whistling noise when burner is lit	<ol style="list-style-type: none">1. Turning control knob to HI position when burner is cold2. Air in gas line3. Air passageways on fireplace blocked4. 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 minute2. Operate burner until air is removed from line. Have gas line checked by local natural gas company3. Observe minimum installation clearances (see pages 10 through 13)4. Clean burner (see <i>Cleaning and Maintenance</i>, page 24) 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. may turn into white powder residue	<ol style="list-style-type: none">1. Turn fireplace off when using furniture polish, wax, carpet cleaners or similar products
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 6)

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
Remote does not function (Remote-Ready Models Only)	1. Battery is not installed. Battery power is low	1. Replace 9-volt batteries in receiver and remote control
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 normal 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 IMPORTANT statement above) 2. Low fuel supply (propane/LP only) 3. Gas leak. See Warning statement at top of page	1. Open window to ventilate room. Stop using odor causing products while fireplace is running 2. Refill supply tank (propane/LP only) 3. Locate and correct all leaks (see <i>Checking Gas Connections</i> , page 15)
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 <i>Cleaning and Maintenance</i> , page 24)
Gas odor even when control knob is in OFF position	1. Gas leak. See Warning statement at top of page 2. Control valve defective	1. Locate and correct all leaks (see <i>Checking Gas Connections</i> , page 15) 2. Replace control valve
Gas odor during combustion	1. Foreign matter between control valve and burner 2. Gas leak. See Warning statement at top of page	1. Take apart gas tubing and remove foreign matter 2. Locate and correct all leaks (see <i>Checking Gas Connections</i> , page 15)

SPECIFICATIONS

CGMFP

- Rating: 10,000 Btu/Hr
- Gas Type: Propane/LP
- Ignition: Piezo
- Manifold Pressure: 8.0" W.C.
- Inlet Gas Pressure (in. of water):
Maximum - 14", Minimum* - 11"

VGMRP

- Rating: 10,000 Btu/Hr
- Gas Type: Propane/LP
- Ignition: Electronic Ignitor
- Manifold Pressure: 8" W.C.
- Inlet Gas Pressure (in. of water):
Maximum - 14", Minimum* - 11"

* For purpose of input adjustment

CGMFN

- Rating: 10,000 Btu/Hr
- Gas Type: Natural
- Ignition: Piezo
- Manifold Pressure: 3" W.C.
- Inlet Gas Pressure (in. of water):
Maximum - 10.5", Minimum* - 5"

VGMRN

- Rating: 10,000 Btu/Hr
- Gas Type: Natural
- Ignition: Electronic Ignitor
- Manifold Pressure: 3.0" W.C.
- Inlet Gas Pressure (in. of water):
Maximum - 10.5", Minimum* - 5"

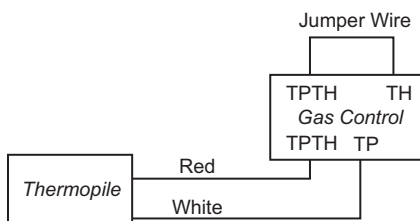
* For purpose of input adjustment

ALL MODELS

- Dimensions (HxWxD): Fireplace (including hood and screws) - 23 ³/₄" x 19 ³/₄" x 8 ⁷/₈"
- Weight: Fireplace - 30 lbs., Shipping: 33 lbs.

WIRING DIAGRAM

(REMOTE-READY MODELS ONLY)



SERVICE HINTS

When Gas Pressure Is Too Low

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

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

TECHNICAL SERVICE

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

You can also visit DESA Heating Products' technical services web site at www.desatech.com.

REPLACEMENT PARTS

Note: Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

PARTS UNDER WARRANTY

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

When calling DESA Heating Products, have ready

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

- purchase date

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

PARTS NOT UNDER WARRANTY

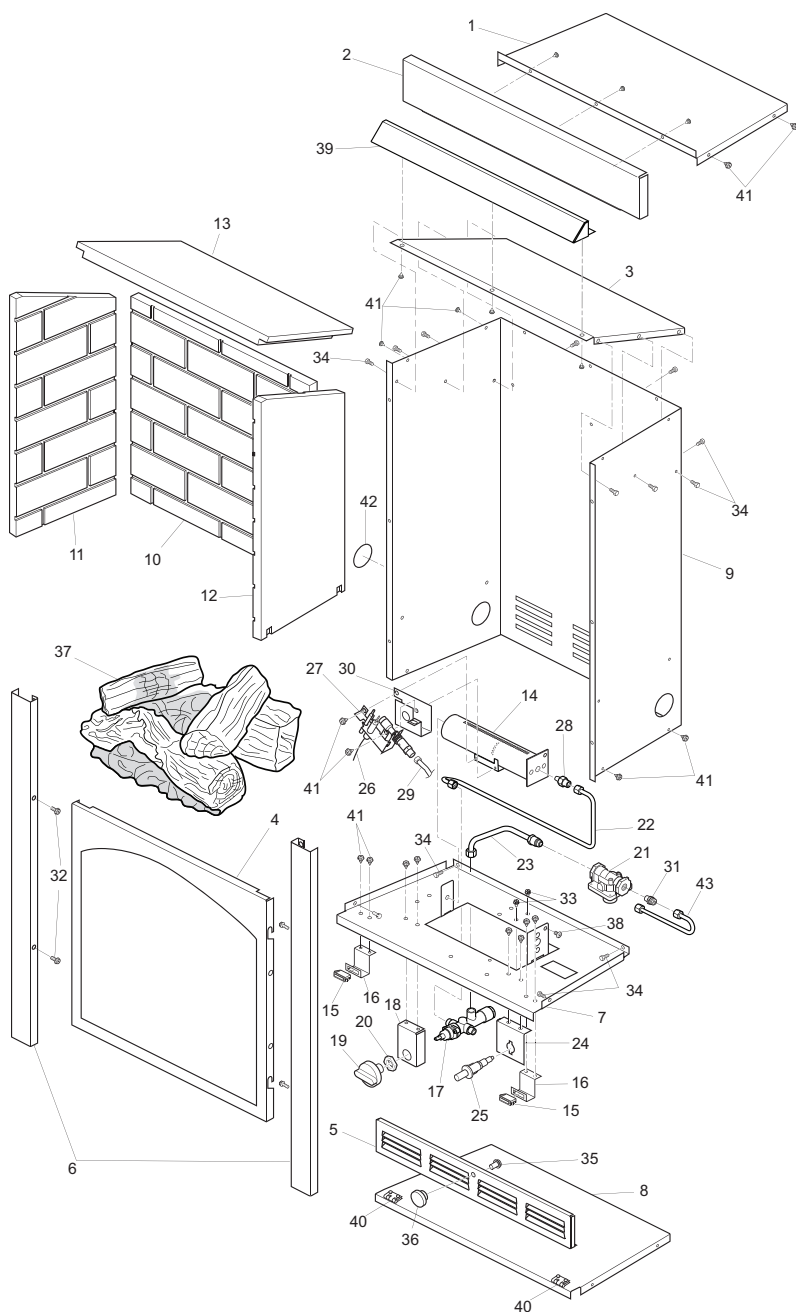
Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA Heating Products at 1-866-672-6040 for referral information.

When calling DESA Heating Products, have ready

- model number of your fireplace
- the replacement part number

ILLUSTRATED PARTS BREAKDOWN

MANUAL-CONTROLLED MODELS CGMFN AND CGMFP



PARTS LIST

MANUAL-CONTROLLED MODELS

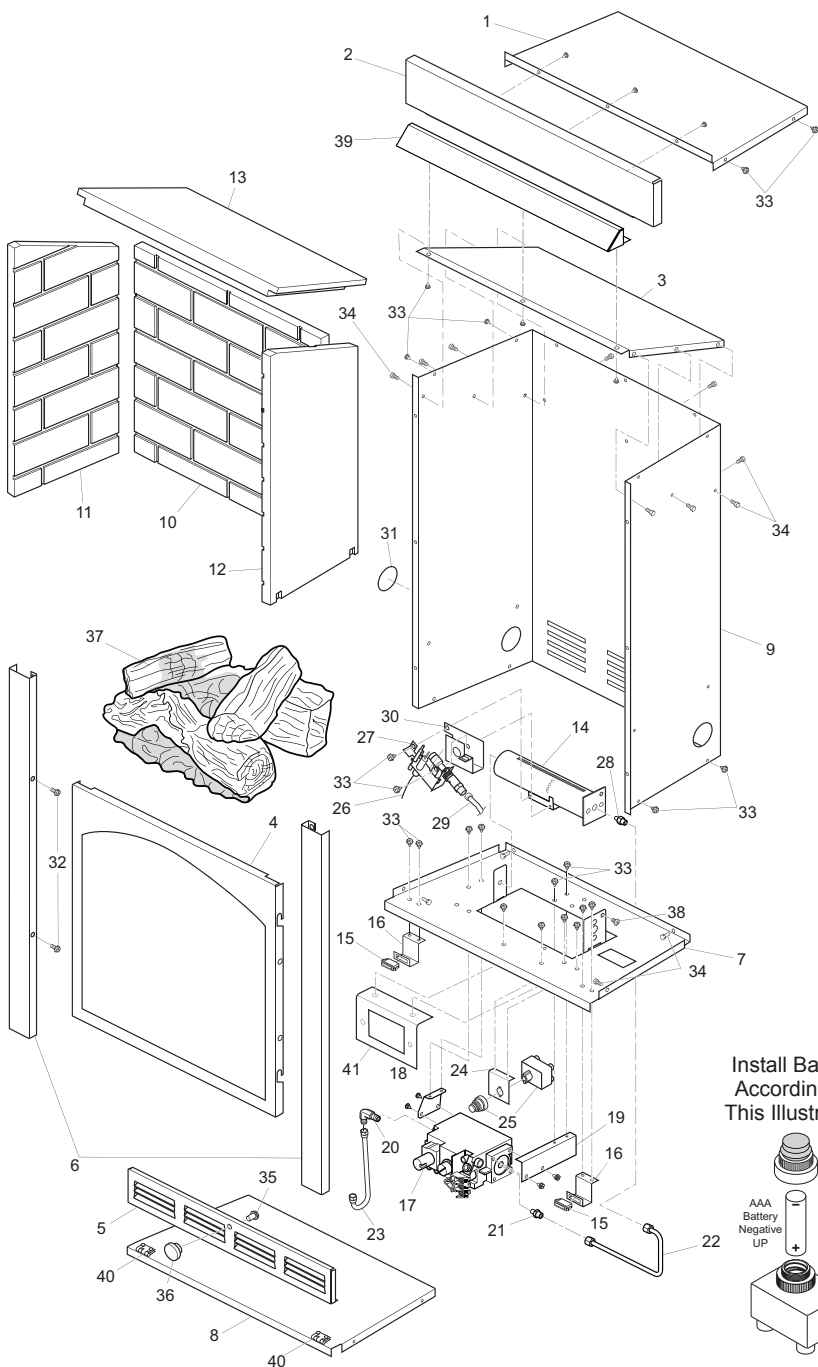
This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 29 of this manual.

KEY NO.	PART NO.	DESCRIPTION	CGMFL	CGMFP	QTY
1	118596-01	Top Panel	•	•	1
2	118573-01CK	Top Trim Panel	•	•	1
3	118574-01	Heat Deflector	•	•	1
4	118576-01CK	Screen Assembly	•	•	1
5	118577-01CK	Access Door	•	•	1
6	118578-01CK	Side Panel Trim	•	•	2
7	**	Firebox Floor	•	•	1
8	**	Bottom Panel	•	•	1
9	**	Fireplace Wrapper	•	•	1
10	118941-01	Rear Brick Liner	•	•	1
11	118941-02	Left Brick Liner	•	•	1
12	118941-03	Right Brick Liner	•	•	1
13	118941-04	Top Liner	•	•	1
14	119310-01	Burner	•	•	1
15	103158-01	Magnetic Catch	•	•	2
16	118607-01	Magnetic Catch Bracket	•	•	2
17	100829-01	Control Valve	•	•	1
18	110791-02	Manual Valve Bracket	•	•	1
19	108480-01	Knob	•	•	1
20	098508-01	Valve Retainer Nut	•	•	1
21	099415-10	Gas Regulator NG	•	•	1
	099415-09	Gas Regulator LP	•	•	1
22	118777-01	Outlet Tube	•	•	1
23	118776-01	Inlet Tube	•	•	1
24	118606-01	Ignitor Bracket	•	•	1
25	097159-04	Piezo Ignitor	•	•	1
26	098271-12	Ignitor Cable	•	•	1
27	107486-01	ODS Pilot, Propane/LP Gas	•	•	1
	107485-01	ODS Pilot, Natural Gas	•	•	1
28	119425-03	Injector, NG	•	•	1
	119425-01	Injector, LP	•	•	1
29	099387-08	Pilot Tube	•	•	1
30	112881-03	Pilot Shield	•	•	1
31	097809-03	Male Fitting	•	•	1
32	099230-02	Screw, HWH Shoulder AB 10 X .63	•	•	4
33	098303-02	Screw, SHWH AB 6-20 x .31	•	•	2
34	M15823-27	Screw, PHWH B 10-16 x .50	•	•	13
35	M12461-62	Screw, Hex SLT WSR 1/4-20 x .38	•	•	1
36	102874-01	Knob for Access Door	•	•	1
37	118938-01	Log Set	•	•	1
38	M11084-38	Screw #8-18 x 3/8	•	•	1
39	118575-01CK	Firebox Hood	•	•	1
40	101386-02	Hinge	•	•	2
41	098304-01	Screw, PPH AB 10-16 X .38	•	•	44
42	101629-02	Bushing	•	•	1
43	101628-04	Flexible Connector	•	•	1
PARTS AVAILABLE - NOT SHOWN					
	901056-01	Brass Flare Fitting	•	•	1
	101480-12	Jumper Wire	•	•	1
	103470-01	Hardware Pack	•	•	1
	101055-02	Lighting Instructions Plate	•	•	1

**Not a field replaceable part.

ILLUSTRATED PARTS BREAKDOWN

REMOTE-READY MODELS VGMRN AND VGMRP



PARTS LIST

REMOTE-READY MODELS

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 29 of this manual.

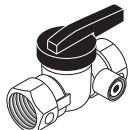
KEY NO.	PART NO.	DESCRIPTION	VGMFN	VGMFP	QTY
1	118596-01	Top Panel	•	•	1
2	118573-01CK	Top Trim Panel	•	•	1
3	118574-01	Heat Deflector	•	•	1
4	118576-01CK	Screen Assembly	•	•	1
5	118577-01CK	Access Door	•	•	1
6	118578-01CK	Side Panel Trim	•	•	2
7	**	Firebox Floor	•	•	1
8	**	Bottom Panel	•	•	1
9	**	Fireplace Wrapper	•	•	1
10	118941-01	Rear Brick Liner	•	•	1
11	118941-02	Left Brick Liner	•	•	1
12	118941-03	Right Brick Liner	•	•	1
13	118941-04	Top Liner	•	•	1
14	119310-01	Burner	•	•	1
15	103158-01	Magnetic Catch	•	•	2
16	118607-01	Magnetic Catch Bracket	•	•	2
17	103781-03	Gas Valve	•	•	1
	103781-04	Gas Valve	•	•	1
18	118657-01	Remote Valve Bracket	•	•	1
19	118657-02	Remote Valve Bracket	•	•	1
20	119416-01	Elbow, Male 1/2 MPT x 3/8 Flare	•	•	1
21	098264-03	Connector, 3/8 MPT x 1/2 Flare	•	•	1
22	119318-01	Outlet Tube	•	•	1
	099415-09	Outlet Tube	•	•	1
23	101628-04	Flexible Connector	•	•	1
24	118606-01	Ignitor Bracket	•	•	1
25	111435-01	Electronic Ignitor	•	•	1
26	098271-12	Ignitor Cable	•	•	1
27	103778-01	ODS Pilot, Propane/LP Gas	•	•	1
	112376-01	ODS Pilot, Natural Gas	•	•	1
28	119425-01	Injector, LP	•	•	1
	119425-02	Injector, NG	•	•	1
29	099387-18	Pilot Tube	•	•	1
30	112881-03	Pilot Shield	•	•	1
31	101629-02	Bushing	•	•	1
32	099230-02	Screw, HWH Shoulder AB 10 X .63	•	•	4
33	098304-01	Screw, PPH AB 10-16 X .38	•	•	44
34	M15823-27	Screw, PHWH B 10-16 x .50	•	•	13
35	M12461-62	Screw, Hex SLT WSR 1/4-20 x .38	•	•	1
36	102874-01	Knob for Access Door	•	•	1
37	118938-01	Log Set	•	•	1
38	M11084-38	Screw #8-18 x 3/8	•	•	1
39	118575-01CK	Firebox Hood	•	•	1
40	101386-02	Hinge	•	•	2
41	118658-01	Remote Control Bracket	•	•	1
PARTS AVAILABLE - NOT SHOWN					
	901056-01	Brass Flare Fitting	•	•	1
	103470-01	Hardware Pack	•	•	1
	103877-10	Lighting Instructions Plate	•	•	1

**Not a field replaceable part.

ACCESSORIES

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

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



EQUIPMENT SHUTOFF VALVE GA5010

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

CORNER CABINET MANTEL WITH FULL HEARTH BASE (Not Shown)

C21AP - White Painted Corner

C21AOS - Oak Stain Corner

For all models. Space saving mantel and hearth base corner design. Complete assembly instructions included.

CABINET MANTEL AND FULL HEARTH BASE (Not Shown)

W21AP - White Painted Wall Cabinet

W21AOS - Oak Stain Wall Cabinet

For all models. Mantel features clean, classic lines. Complete assembly instructions included.

CLEANING KIT - CCK (Not Shown)

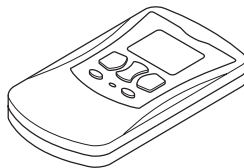
For all models. Your vent-free gas appliance requires regular cleaning and maintenance to prevent performance problems. This kit gives you the tools and instructions to make it easy to clean all critical areas of your appliance.

WALL-MOUNT THERMOSTAT SWITCH - GWMT1 (Not Shown)

For all Remote-Ready Models. The desired comfort setting can be selected on the wall thermostat and the fireplace will automatically cycle from pilot to the heat setting selected.

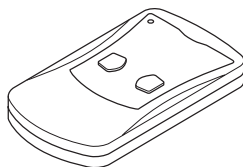
WALL-MOUNT ON/OFF SWITCH GWMS2 (Not Shown)

For all Remote-Ready Models. Allows the fireplace to be turned on and off with a wall switch.



RECEIVER AND HAND-HELD THERMOSTAT REMOTE CONTROL KIT - HRC200 & HRC201 SERIES

For all Remote-Ready Models. Allows the fireplace to be operated in a manually or thermostatically controlled mode. You can turn the fireplace on and off without ever leaving the comfort of your easy chair. A wall-mount docking station is included.



RECEIVER AND HAND-HELD REMOTE CONTROL KIT - HRC100 AND HRC101

For all Remote-Ready Models. Allows the fireplace to be turned on and off by using a hand-held remote control. A wall-mount docking station is included.

FIRE CRACKLE - CF6-A1 (Not Shown)

For all models. Creates the sound of a real burning fire.

NOTES



2701 Industrial Drive
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