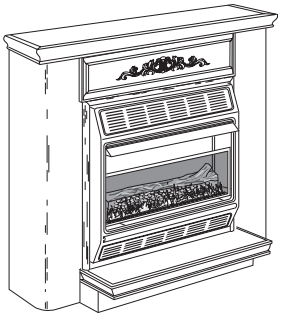
DESA™
HEATING PRODUCTS

VENT-FREE HEATER
OWNER'S OPERATION AND INSTALLATION MANUAL



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

Shown with Optional Mantel Which Features a Built-in Base

RFN30TA, RFP30TA
VMH3000TNA, VMH3000TPA
15,000 to 30,000 Btu/Hr with Thermostat

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

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

Save this manual for future reference.
For more information, visit www.desatech.com

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 7 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**

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.

TABLE OF CONTENTS

SAFETY INFORMATION

⚠ WARNING: This product contains and/or generates chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.

IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate or service this heater. 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 heater may not be working properly. **Get fresh air at once!** Have heater serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol and those at high altitudes.

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

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

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

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

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

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

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

Surface of heater becomes very hot when running heater. Keep children and adults away from hot surface to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surface to cool before touching.

Carefully supervise young children when they are in the room with heater.

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

1. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.
2. Do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors (propane/LP units only).
3. If you smell gas
   - shut off gas supply
   - do not try to light any appliance
   - do not touch any electrical switch; do not use any phone in your building.
   - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
   - if you cannot reach your gas supplier, call the fire department

SAFETY INFORMATION
Continued

4. This heater shall not be installed in a bedroom or bathroom.
5. This heater needs fresh, outside air ventilation to run properly. This heater has an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS shuts down the heater if not enough fresh air is available. See *Air for Combustion and Ventilation*, page 7.
6. If heater shuts off, do not relight until you provide fresh, outside air. If heater keeps shutting off, have it serviced.
7. To prevent the creation of soot, follow the instructions in *Cleaning and Maintenance*, page 19.
8. Before using furniture polish, wax, carpet cleaner or similar products, turn heater off. If heated, the vapors from these products may create a white powder residue within burner box or on adjacent walls or furniture.
9. Do not run heater
   - where flammable liquids or vapors are used or stored.
   - under dusty conditions.
10. Do not use heater if any part has been under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.
11. Turn off and unplug heater and let cool before servicing. Only a qualified service person should service and repair heater.
12. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lb. capacity (propane/LP units only).
13. Operating heater above elevations of 4,500 feet may cause pilot outage.
14. Provide adequate clearances around air openings.

LOCAL CODES

Install and use heater 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

PRODUCT IDENTIFICATION

***Note:* Do not remove Lighting and Warning Plates from heater**

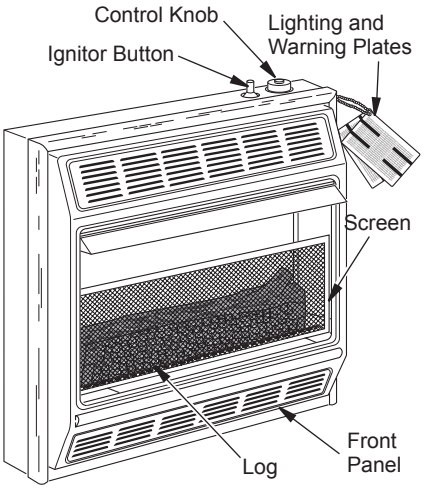


Figure 1 - Vent-Free Gas Space Heater

UNPACKING

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

1. Remove heater from carton.
2. Remove all protective packaging applied to heater for shipment.
3. Make sure your heater includes two hardware packets.
4. Check heater for any shipping damage. If heater is damaged, promptly return to dealer where you bought heater.

PRODUCT FEATURES

SAFETY PILOT

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

PIEZO IGNITION SYSTEM

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

THERMOSTATIC HEAT CONTROL

This heater has a thermostat sensing bulb and a control valve. This results in the greatest heater comfort. This can also result in lower gas bills.

ASSEMBLING HEATER

Tools Required:

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

REMOVING FRONT PANEL OF HEATER

1. Remove two screws near bottom corners of front panel with Phillips screwdriver.
2. Pull bottom of front panel forward, then down (see Figure 2).

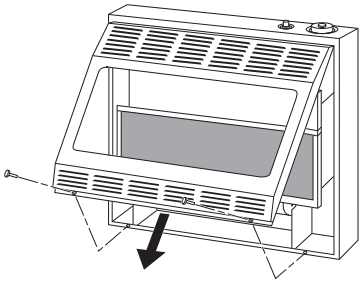


Figure 2 - Removing Front Panel of Heater

INSTALLING HOOD

1. Remove hood from protective tray.
2. Locate 4 black sheet metal screws from hardware pack.
3. Place hood on deflector and line up holes (see Figure 3).
4. Secure hood to deflector with 4 black sheet metal screws.

Note: Side of hood should be on the outside flange of deflector.

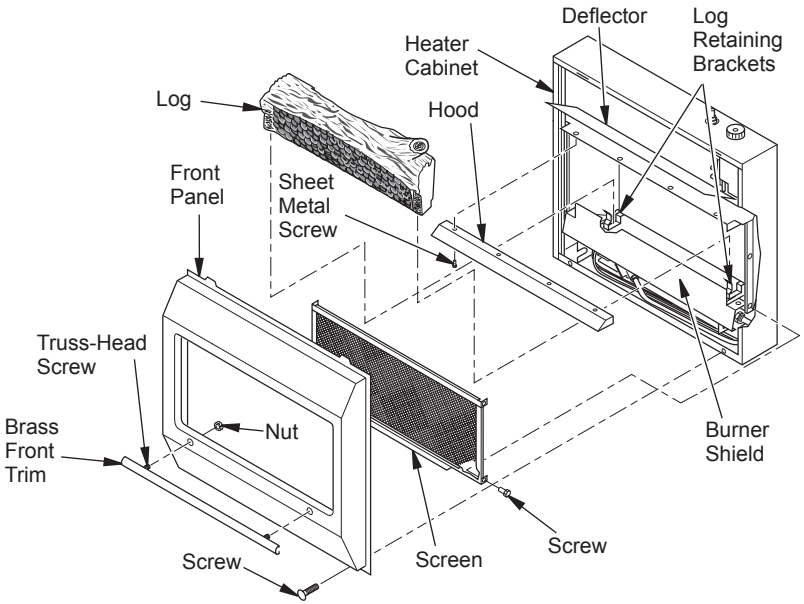


Figure 3 - Assembling Heater

ASSEMBLING HEATER
Continued

INSTALLING LOG

Note: For easier installation, lay heater on its back.

1. With Phillips screwdriver, remove two screws holding screen in place. Remove screen.
2. Remove log from inside of deflector. Discard protective packaging.
3. Gently slide log between log retaining brackets on deflector assembly (see Figure 3, page 5). The log should fit firmly against bottom of log retaining brackets.
4. Reattach screen using two screws removed in step 1.

⚠ WARNING: Always have burner shield and screen in place before operating heater. This prevents excessive temperatures on heater surfaces.

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.

ATTACHING BRASS FRONT TRIM TO FRONT PANEL

1. Locate brass front trim in brass trim package.
2. Slide the head of two truss-head screws from hardware packet into each end of brass front trim (see Figure 4).
3. Line up screws with holes in front panel (see Figure 3, page 5). Insert screws in holes. Attach nuts from inside of front panel. Tighten with wrench.

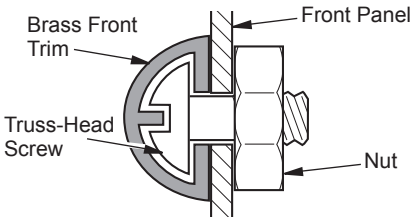


Figure 4 - Attaching Brass Front Trim to Front Panel

ASSEMBLING AND ATTACHING BRASS TRIM

1. Remove packaging from remaining 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. Place the assembled trim on front of heater cabinet. Attach on top and sides with four brass screws included in hardware package (see Figure 6).
9. Reattach front panel to heater if you are going to mount the heater to the base. Do not reattach front panel at this time if you are going to mount heater to wall.

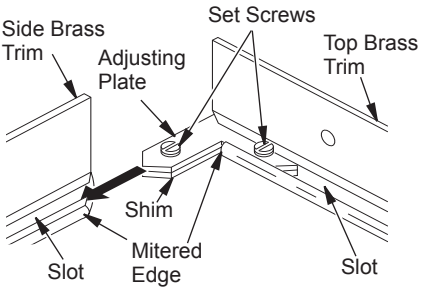


Figure 5 - Assembling Brass Trim

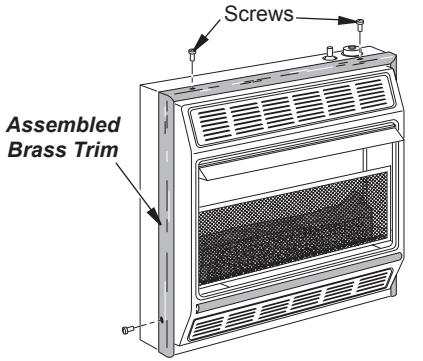


Figure 6 - Attaching Brass Trim to Heater

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, 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 7 through 9 will help you classify your space and provide adequate ventilation.

Unusually Tight Construction

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

Unusually tight construction is defined as construction where:

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

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

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

If your home meets all of the three criteria above, you must provide additional fresh air. See *Ventilation Air From Outdoors*, page 9.

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

Confined and Unconfined Space

The National Fuel Gas Code, ANS Z223.1 defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour (4.8 m^3 per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 Btu per hour (4.8 m^3 per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed*, through openings not furnished with doors, are considered a part of the unconfined space.

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

DETERMINING FRESH-AIR FLOW FOR HEATER 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 heater plus any adjoining rooms with doorless passageways or ventilation grills between the rooms.

AIR FOR COMBUSTION AND VENTILATION
Continued

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

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

   Example: Space size 20 ft. (length) x 16 ft. (width) x 8 ft. (ceiling height) = 2560 cu. ft. (volume of space)

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

2. Multiply the space volume by 20 to determine the maximum Btu/Hr the space can support.

   _____ (volume of space) x 20 = (Maximum Btu/Hr the space can support)

   Example: 2560 cu. ft. (volume of space) x 20 = 51,200 (maximum Btu/Hr the space can support)

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

Vent-free heater		_____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 heater	+	30,000 Btu/Hr
Total	=	60,000 Btu/Hr

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

   _____Btu/Hr (maximum the space can support)

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

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

   60,000 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 worksheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms. See *Ventilation Air From Inside Building*.

B. Vent room directly to the outdoors. See *Ventilation Air From Outdoors,* page 9.

C. Install a lower Btu/Hr heater, 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 7, page 9). You can also remove door into adjoining room (see option 3, Figure 7, page 9). 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.

AIR FOR COMBUSTION AND VENTILATION

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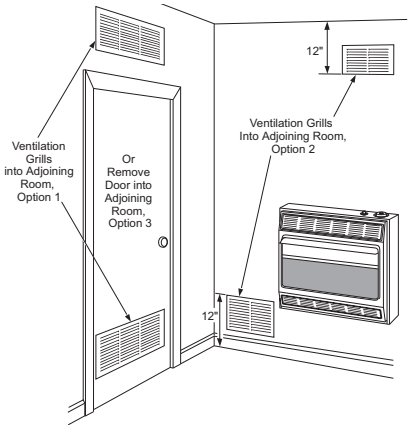


Figure 7 - Ventilation Air from Inside Building

Ventilation Air From Outdoors

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

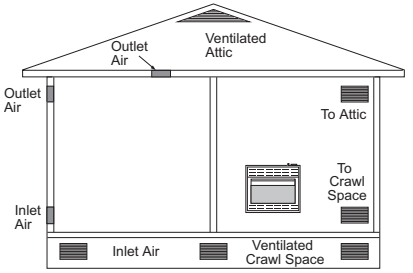


Figure 8 - Ventilation Air from Outdoors

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 heater. Follow all local codes.

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 heater. Call dealer where you bought heater for proper type heater.

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

INSTALLATION ITEMS

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

- piping (check local codes)
- sealant (resistant to propane/LP gas)
- equipment shutoff valve *
- ground joint union
- test gauge connection *
- 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 26.

INSTALLATION
Continued

LOCATING HEATER

⚠ WARNING: Maintain the minimum clearances shown in Figure 9. If you can, provide greater clearances from floor, ceiling and joining wall.

You can locate heater on floor. The optional hearth base is needed. You can also install the optional decorative mantel on the heater (some mantels require hearth base). *IMPORTANT:* Only use optional mantel and hearth base specified in this manual. Purchase the optional mantel and hearth base from your dealer. See *Accessories*, page 26.

The heater may also be mounted on a wall. You cannot use optional mantel if mounting heater on a wall.

⚠ WARNING: Never install the heater
- **in a bedroom or bathroom**
- **in a recreational vehicle**
- **where curtains, furniture, clothing or other flammable objects are less than 36 inches from the front, top or sides of the heater**
- **as a fireplace insert**
- **in high traffic areas**
- **in windy or drafty areas**

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

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

⚠ CAUTION: If you install the heater in a home garage
- **heater pilot and burner must be at least 18 inches above floor.**
- **locate heater where moving vehicle will not hit it.**

For convenience and efficiency, install heater
- where there is easy access for operation, inspection and service.
- in coldest part of room.

An optional fan kit is available from your dealer. See *Accessories*, page 26. If planning to use fan, locate heater near an electrical outlet.

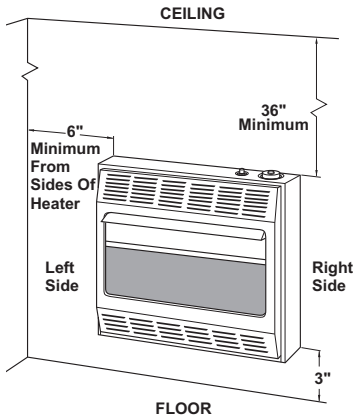


Figure 9 - Mounting Clearances As Viewed From Front of Heater

THERMOSTAT SENSING BULB

The thermostat sensing bulb has been placed inside the heater for protection during shipping.

Locating Thermostat Sensing Bulb

1. Remove front panel of heater (see Figure 2, page 5).
2. Locate thermostat sensing bulb just under burner assembly.

IMPORTANT: Attach thermostat sensing bulb to back of heater for proper operation.

INSTALLATION
Continued

Attaching Thermostat Sensing Bulb

1. Remove thermostat sensing bulb from holders inside heater. Route through slot opening in bottom of heater.
2. Place clamp on thermostat sensing bulb as shown in Figure 10. Clamp is provided in hardware package.
3. Snap clamp into upper mounting hole as shown in Figure 10. Mounting hole is located on lower left edge on back of heater. Make sure the thermostat sensing bulb is pointing up.

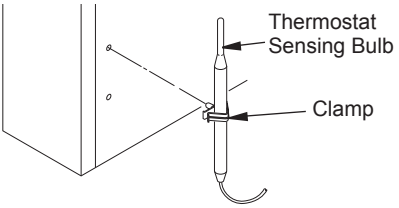


Figure 10 - Attaching Thermostat Sensing Bulb

INSTALLATION OPTIONS

There are three options for mounting this heater.

A. Mounting heater to wall
B. Mounting heater to optional hearth base
C. Mounting heater with optional hearth base to optional mantel.

A. MOUNTING HEATER TO WALL

Mounting Bracket

The mounting bracket is located in the package tray. Remove mounting bracket from tray.

Methods For Attaching Mounting Bracket To Wall

Only use last hole on each end of mounting bracket to attach bracket to wall. These two holes are 16 inches apart from their centers. Attach mounting bracket to wall in one of two ways.

1. Attaching to wall stud
2. Attaching to wall anchor

Attaching to Wall Stud: This method provides the strongest hold. Insert mounting screws through mounting bracket and into wall studs.

Attaching to Wall Anchor: This method allows you to attach mounting bracket to hollow walls (wall areas between studs) or to solid walls (concrete or masonry).

Decide which method better suits your needs. Either method will provide a secure hold for the mounting bracket.

Marking Screw Locations

1. Tape mounting bracket to wall where heater will be located. Make sure mounting bracket is level.

⚠ WARNING: Maintain minimum clearances shown in Figure 11. If you can, provide greater clearances from floor and joining wall.

2. Mark screw locations on wall (see Figure 11).
   Note: Only mark last hole on each end of mounting bracket. Insert mounting screws through these holes only.
3. Remove tape and mounting bracket from wall.

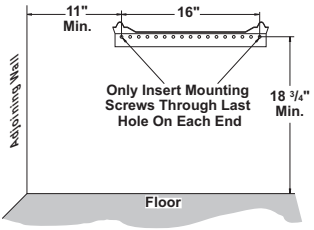


Figure 11 - Mounting Bracket Clearances

Attaching Mounting Bracket To Wall

Note: Wall anchors, mounting screws and spacers are in hardware package. The hardware package is provided with heater.

Attaching To Wall Stud Method

For attaching mounting bracket to wall studs.

1. Drill holes at marked locations using 9/64" drill bit.
2. Place mounting bracket onto wall. Line up last hole on each end of bracket with holes drilled in wall.
3. Insert mounting screws through bracket and into wall studs.
4. Tighten screws until mounting bracket is firmly fastened to wall studs.

Attaching To Wall Anchor Method

For attaching mounting bracket to hollow walls (wall areas between studs) or solid walls (concrete or masonry).

1. Drill holes at marked locations using 5/16" drill bit. For solid walls (concrete or masonry), drill at least 1" deep.
2. Fold wall anchor as shown in Figure 12, page 12.
3. Insert wall anchor (wings first) into hole. Tap anchor flush to wall.

INSTALLATION
Continued

4. For thin walls (1/2" or less), insert red key into wall anchor. Push red key to "pop" open anchor wings. *IMPORTANT:* Do not hammer key! For thick walls (over 1/2" thick) or solid walls, do not pop open wings.
5. Place mounting bracket onto wall. Line up last hole on each end of bracket with wall anchors.
6. Insert mounting screws through bracket and into wall anchors.
7. Tighten screws until mounting bracket is firmly fastened to wall.

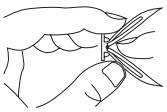


Figure 12 - Folding Anchor

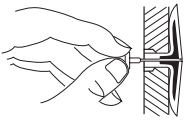


Figure 13 - Popping Open Anchor Wings For Thin Walls

Placing Heater On Mounting Bracket

1. Locate two horizontal slots on back panel of heater.
2. Place heater onto mounting bracket. Slide horizontal slots onto stand-out tabs on mounting bracket.

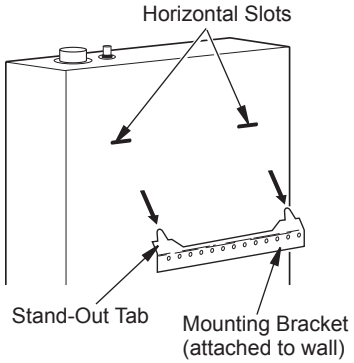


Figure 14 - Mounting Heater Onto Mounting Bracket

Installing Bottom Mounting Screws

1. Locate two bottom mounting holes. These holes are near bottom on back panel of heater (see Figure 15).
2. Mark screw locations on wall.
3. Remove heater from mounting bracket.
4. If installing bottom mounting screws into hollow or solid wall, install wall anchors. Follow steps 1 through 4 under *Attaching To Wall Anchor Method*, page 11. If installing bottom mounting screw into wall stud, drill holes at marked locations using 9/64" drill bit.
5. Replace heater onto mounting bracket.
6. Place spacers between bottom mounting holes and wall anchor or drilled hole.
7. Hold spacer in place with one hand. With other hand, insert mounting screw through bottom mounting hole and spacer. Place tip of screw in opening of wall anchor or drilled hole.
8. Tighten both screws until heater is firmly secured to wall. Do not over tighten. *Note:* Do not replace front panel at this time. Replace front panel after making gas connections and checking for leaks (see pages 14 through 16).

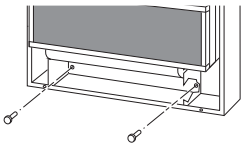


Figure 15 - Installing Bottom Mounting Screws

B. MOUNTING HEATER ON OPTIONAL HEARTH BASE

Tools needed

- #2 Phillips screwdriver
- Slotted screwdriver
- Electric drill (if securing base to floor)

The optional hearth base kit includes the following:

- Hearth base
- 4 wood screws
- 4 sheet metal screws
- Brass base trim
- Hearth insert
- 4 anchors
- 2 brass screws

Note: You must secure the GHB802B, GHB802C or GHB38 series model hearth base to floor. To secure hearth base to floor, follow instructions under *Securing Hearth Base to Floor*, page 13. If not securing hearth base to floor, proceed to *Mounting Heater to Optional Hearth Base,* page 13.

INSTALLATION
Continued

Securing Hearth Base to Floor

1. Position hearth base in desired location. Mark holes for drilling (see Figure 16). Remove hearth base.
2. For carpeted floor, make a small cut with a sharp knife at marked locations before drilling. If securing to a wood floor, drill a 3/4" deep hole using a 1/8" diameter drill bit. Do not use anchors in wood floors. If securing to a concrete floor, drill a 13/8" deep hole using a 1/4" diameter concrete drill bit. Completely insert anchors into each hole.
3. Mount heater to hearth base following steps under *Mounting Heater to Optional Hearth Base*. After mounting heater, position heater and hearth base over drilled holes. With slotted screwdriver, secure hearth base to floor with four wood screws.

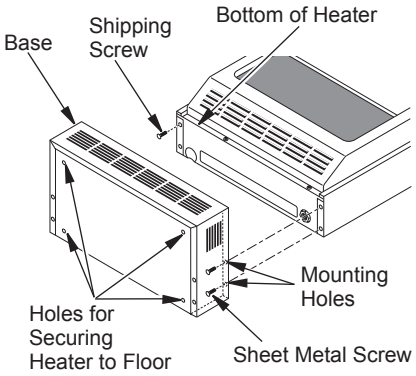


Figure 16 - Attaching Heater to Hearth Base

Mounting Heater to Optional Hearth Base

1. Lay heater on its back on a table with the bottom of heater overhanging the edge of the table.
2. Remove 2 shipping screws in bottom of heater. Discard shipping screws.
3. Line up mounting holes on top of hearth base with holes in bottom of heater (see Figure 16).
4. Using a Phillips screwdriver, secure hearth base to heater with four sheet metal screws (see Figure 16).
5. Stand heater up on base.
6. Place hearth insert in hearth base as shown in Figure 17.
7. Assemble brass trim (see steps 1 through 7 under *Assembling and Attaching Brass Trim*, page 6).
8. Slide base trim on heater base. Attach brass trim to base with two brass screws included as shown in Figure 17.

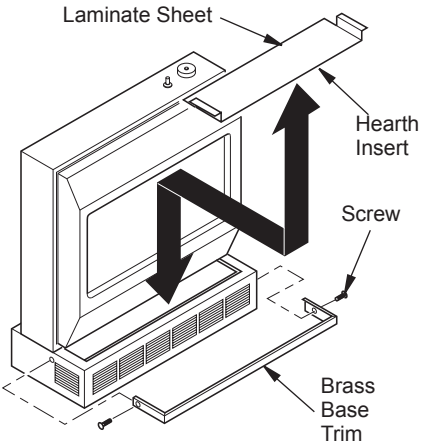


Figure 17 - Placing Hearth Insert on Heater Base and Attaching Brass Base Trim

C. MOUNTING HEATER WITH OPTIONAL HEARTH BASE (IF APPLICABLE) TO OPTIONAL MANTEL

See Instructions Included With Mantel Kit.

Assembling Mantel

IMPORTANT: Only use the optional mantels specified in this manual. See *Accessories*, page 26 for proper mantel kits. This heater is only approved for use with models GMF800 series / GMU801 series, GM900F series / GM901U series, GM700F/GM701U series, GMC22F/GMC23U/GMC24U series, GMC32F/GMC33U series, GMC34F/GMC35U series and GMC26F/GMC27U/GMC28F series mantel kits. Using any other mantel will void the CSA approval for this heater. Do not use models GMF800/GMU801 series, GM900F/GM901U series, GM700F/GM701U series, GMC22F/GMC23U/GMC24U series, GMC32F/GMC33U series, GMC26F/GMC27U/GMC28F series and GMC34F/GMC35U series mantels with any other product. If the metal base is required with your mantel, the heater must be mounted on the base first.

INSTALLATION
Continued

CONNECTING TO GAS SUPPLY

⚠ WARNING: This appliance requires a 3/8" NPT (National Pipe Thread) inlet connection to the pressure regulator.

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

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

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

IMPORTANT: Check gas line pressure before connecting heater to gas line. Gas line pressure must be no greater than 14 inches of water. If gas line pressure is higher, heater regulator damage could occur.

For propane/LP gas only, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11 and 14 inches of water. If you do not reduce incoming gas pressure, heater regulator damage could occur. Install external regulator with the vent pointing down as shown in Figure 18. Pointing the vent down protects it from freezing rain or sleet.

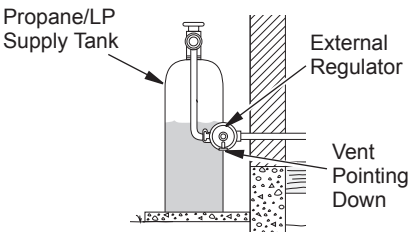


Figure 18 - External Regulator with Vent Pointing Down (Propane/LP Only)

⚠ 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 heater. 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 19, page 15).

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 heater.

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 heater valves.

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

We recommend that you install a sediment trap in supply line as shown in Figure 19, page 15. 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 heater controls. If sediment trap is not installed or is installed wrong, heater may not run properly.

IMPORTANT: Hold pressure regulator with wrench when connecting it to gas piping and/or fittings.

INSTALLATION
Continued

Note: Burner bracket not shown for clarity

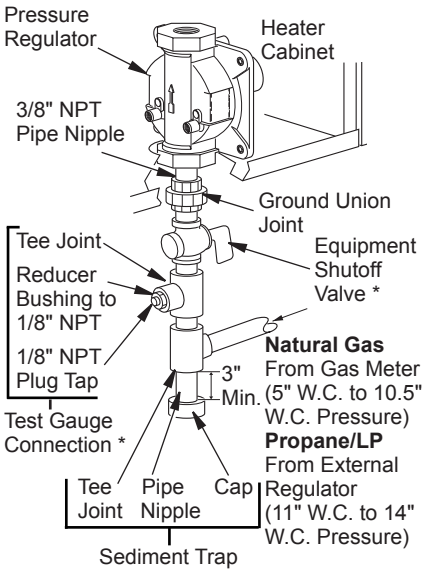


Figure 19 - Gas Connection

* 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 26.

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 noncorrosive leak detection fluid 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 (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 a noncorrosive leak detection fluid to gas joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Reconnect heater 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 20).
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 (see Figure 21, page 16) for natural gas or to propane/LP supply tank (see Figure 22, page 16). Apply a noncorrosive leak detection fluid to gas joints. Bubbles forming show a leak.
4. Correct all leaks at once.

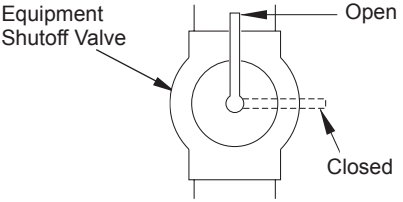


Figure 20 - Equipment Shutoff Valve

INSTALLATION

Continued

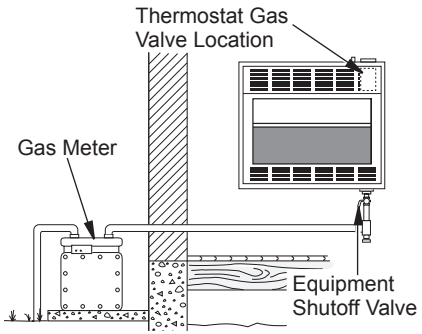


Figure 21 - Checking Gas Joints (Natural Gas)

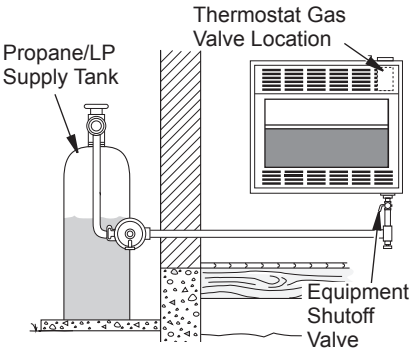


Figure 22 - Checking Gas Joints (Propane/LP Gas)

PRESSURE TESTING HEATER GAS CONNECTIONS

1. Open equipment shutoff valve (see Figure 20, page 15).
2. Open main gas valve located on or near gas meter for natural gas or open propane/LP supply tank valve for propane/LP gas.
3. Make sure control knob of heater is in the OFF position.
4. Check all joints from equipment shutoff valve to thermostat gas valve (see Figure 21 or 22). Apply a noncorrosive leak detection fluid to gas joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light heater (see *Operating Heater*). Check all other internal joints for leaks.
7. Turn off heater (see *To Turn Off Gas to Appliance*, page 17).
8. Replace front panel.

OPERATING HEATER

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

1. STOP! Read the safety information above.

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 above. If you don't smell gas, go to the next step.

OPERATING HEATER
Continued

5. **Turn control knob counterclockwise to the PILOT position. Press in control knob for five (5) seconds (see Figure 23).**

   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. This will allow air to bleed from the gas system.**

6. **With control knob pressed in, push down and release ignitor button. This will light pilot. The pilot is attached to the front of burner. If needed, keep pressing ignitor button until pilot lights.**

   Note: **If pilot does not stay lit, refer to *Troubleshooting*, page 20. 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*.**

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

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

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

8. **Turn control knob counterclockwise to desired heating level. The main burner should light. Set control knob to any heat level between HI and LO.**

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

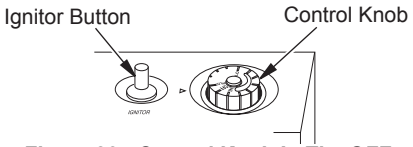


Figure 23 - Control Knob In The OFF Position

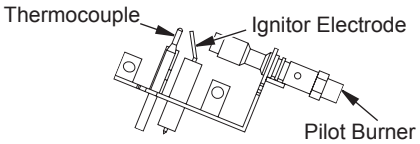


Figure 24 - Pilot (Natural Gas)

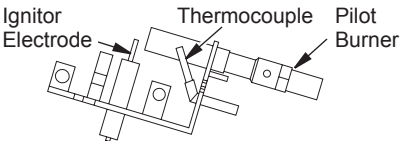


Figure 25 - Pilot (Propane/LP Gas)

TO TURN OFF GAS TO APPLIANCE

Shutting Off Heater

1. **Turn control knob clockwise to the OFF position.**
2. **Turn off all electric power to the appliance if service is to be performed.**

Shutting Off Burner Only (pilot stays lit)

Turn control knob clockwise to the PILOT position.

THERMOSTAT CONTROL OPERATION

The thermostatic control used on this heater differs from standard thermostats. Standard thermostats simply turn on and off the burner. The thermostat used on this heater senses the room temperature. The thermostat adjusts the amount of gas flow to the burner. This increases or decreases the burner flame height. At times the room may exceed the set temperature. If so, the burner will shut off. The burner will cycle back on when room temperature drops below the set temperature.

The control knob can be set to any heat level between HI and LO.

Note: **The thermostat sensing bulb measures the temperature of air near the heater cabinet. This may not always agree with room temperature (depending on housing construction, installation location, room size, open air temperatures, etc.). Frequent use of your heater will let you determine your own comfort levels.**

MANUAL LIGHTING PROCEDURE

1. **Remove front panel (see Figure 2, page 5).**
2. **Follow steps 1 through 5 under *Lighting Instructions*, page 16.**
3. **With control knob pressed in, strike match. Hold match to pilot until pilot lights.**
4. **Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow step 8 under *Lighting Instructions*.**
5. **Replace front panel.**

INSPECTING BURNERS

Check pilot flame pattern and burner flame pattern often.

PILOT FLAME PATTERN

Figure 26 shows a correct pilot flame pattern. Figure 27 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 heater will shut down.

If pilot flame pattern is incorrect, as shown in Figure 27

- turn heater off (see *To Turn Off Gas to Appliance, page 17*)
- see *Troubleshooting*, page 20

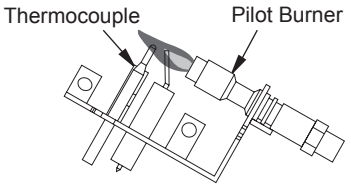


Figure 26 - Correct Pilot Flame Pattern

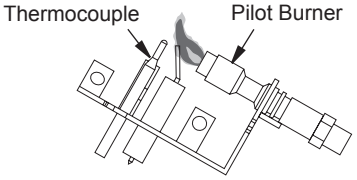


Figure 27 - Incorrect Pilot Flame Pattern

BURNER FLAME PATTERN

Figure 28 shows a correct burner flame pattern. Figure 29 shows an incorrect burner flame pattern. The incorrect burner flame pattern shows yellow tipping of the flame. It also shows the flame higher than one inch above the log.

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

⚠ WARNING: If yellow tipping occurs, your heater could produce increased levels of carbon monoxide. If burner flame pattern shows yellow tipping, follow instructions on this page.

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

If burner flame pattern is incorrect, as shown in Figure 29

- turn heater off (see *To Turn Off Gas to Appliance,* page 17)
- see *Troubleshooting*, page 20

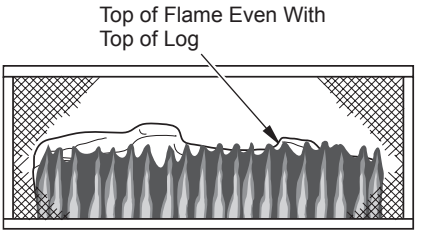


Figure 28 - Correct Burner Flame Pattern

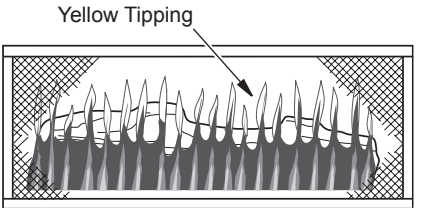


Figure 29 - Incorrect Burner Flame Pattern

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, bedding material, etc.

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

BURNER INJECTOR HOLDER AND PILOT AIR INLET HOLE

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

We also recommend that you keep the burner tube and pilot assembly clean and free of dust and dirt. To clean these parts we recommend using compressed air no greater than 30 PSI. Your local computer store, hardware store or home center may carry compressed air in a can. 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 30).
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. 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 31). 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.

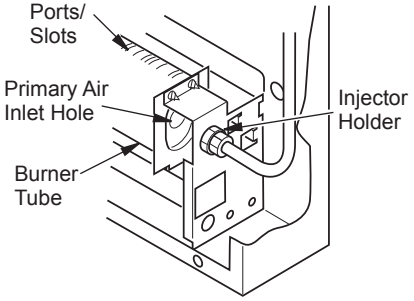


Figure 30 - Injector Holder On Outlet Burner Tube

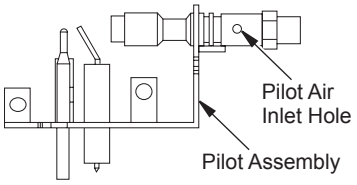


Figure 31 - Pilot Inlet Air Hole

CABINET

Air Passageways

- Use a vacuum cleaner or 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 heater and let cool before servicing. Only a qualified service person should service and repair heater.

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

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

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at ODS/pilot	1. Ignitor cable pinched or wet	1. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry
	2. Ignitor electrode not connected to ignitor cable	2. Reconnect ignitor cable
	3. Piezo ignitor nut is loose	3. Tighten nut holding piezo ignitor to base panel of log set. Nut is located behind base panel
	4. Broken ignitor cable	4. Replace ignitor cable
	5. Ignitor electrode broken	5. Replace ignitor
	6. Bad piezo ignitor	6. Replace piezo ignitor
	7. Ignitor electrode positioned wrong	7. Replace ignitor
When ignitor button is pressed, there is spark at ODS/pilot but no ignition	1. Gas supply turned off or equipment shutoff valve closed	1. Turn on gas supply or open equipment shutoff valve
	2. Control knob not in PILOT position	2. Turn control knob to PILOT position
	3. Control knob not pressed in while in PILOT position	3. Press in control knob while in PILOT position
	4. Air in gas lines when installed	4. Continue holding down control knob. Repeat igniting operation until air is removed
	5. ODS/pilot is clogged	5. Clean ODS/pilot (see *Cleaning and Maintenance*, page 19) or replace ODS/pilot assembly
	6. Gas regulator setting is not correct	6. Replace gas regulator
ODS/pilot lights but flame goes out when control knob is released	1. Control knob not fully pressed in	1. Press in control knob fully
	2. Control knob not pressed in long enough	2. After ODS/pilot lights, keep control knob pressed in 30 seconds
	3. Safety interlock system has been triggered	3. Wait one minute for safety interlock system to reset. Repeat ignition operation
	4. Equipment shutoff valve not fully open	4. Fully open equipment shutoff valve
	5. Thermocouple connection loose at control valve	5. Hand tighten until snug, then tighten 1/4 turn more
	6. 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. A) Contact local natural gas company B) Clean ODS/pilot (see *Cleaning and Maintenance*, page 19) or replace ODS/pilot assembly
	7. Thermocouple damaged	7. Replace thermocouple
	8. Control valve damaged	8. Replace control valve

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Burner does not light after ODS/ pilot is lit	1. Burner orifice is clogged	1. Clean burner (see *Cleaning and Maintenance*, page 19) or replace burner orifice
	2. Burner orifice diameter is too small	2. Replace burner orifice
	3. Inlet gas pressure is too low	3. Contact local natural gas company
Delayed ignition of burner	1. Manifold pressure is too low	1. Contact local natural gas company
	2. Burner orifice is clogged	2. Clean burner (see *Cleaning and Maintenance*, page 19) or replace burner orifice
Burner backfiring during combustion	1. Burner orifice is clogged or damaged	1. Clean burner (see *Cleaning and Maintenance*, page 19) or replace burner orifice
	2. Burner damaged	2. Replace burner
	3. Gas regulator defective	3. Replace gas regulator
Yellow flame during burner combustion	1. Not enough air	1. Check burner for dirt and debris. If found, clean burner (see *Cleaning and Maintenance*, page 19)
	2. Gas regulator defective	2. Replace gas regulator
Slight smoke or odor during initial operation	1. Residues from manufacturing processes	1. Problem will stop after a few hours of operation
Heater produces a whistling noise when burner is lit	1. Turning control knob to HI position when burner is cold	1. Turn control knob to LO position and let warm up for a minute
	2. Air in gas line	2. Operate burner until air is removed from line. Have gas line checked by local natural gas company
	3. Air passageways on heater blocked	3. Observe minimum installation clearances (see Figure 9, page 10)
	4. Dirty or partially clogged burner orifice	4. Clean burner (see *Cleaning and Maintenance*, page 19) or replace burner orifice
White powder residue forming within burner box or on adjacent walls or furniture	1. When heated, vapors from furniture polish, wax, carpet cleaners, etc. turn into white powder residue	1. Turn heater off when using furniture polish, wax, carpet cleaners or similar products

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 heater 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.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Heater produces a clicking/ticking noise just after burner is lit or shut off	1. Metal expanding while heating or contracting while cooling	1. This is common with most heaters. If noise is excessive, contact qualified service person
Heater produces unwanted odors	1. Heater burning vapors from paint, hair spray, glues, etc. (see *IMPORTANT* statement above) 2. Gas leak. **See Warning statement at top of page**	1. Ventilate room. Stop using odor causing products while heater is running 2. Locate and correct all leaks (see *Checking Gas Connections*, page 15)
Heater 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 *Cleaning and Maintenance*, page 19)
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 *Checking Gas Connections*, 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 *Checking Gas Connections*, page 15)
Moisture/condensation noticed on windows	1. Not enough combustion/ventilation air	1. Refer to *Air for Combustion and Ventilation* requirements (page 5)

SPECIFICATIONS

	RFN30TA VMH3000TNA	RFP30TA VMH3000TPA
BTU (Variable)	15,000/30,000	15,000/30,000
Type Gas	Natural Only	Propane/LP Only
Ignition	Piezo	Piezo
Pressure Regulator Setting	3" W.C.	8" W.C.
Inlet Gas Pressure (in. of water) *		
Maximum	10.5"	14"
Minimum	5"	11"
Dimensions, Inches (H x W x D)**		
Heater	23.75 x 25.9 x 8.5	23.75 x 25.9 x 8.5
Carton	26 x 27.75 x 10.25	26 x 27.75 x 10.25
Weight (pounds)		
Heater	29	29
Shipping	35	35

* For purposes of input adjustment

**Measurement includes knobs and hood

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), either contact your nearest Parts Central (see page 27) or 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 heater
- how heater 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), either contact your nearest Parts Central (see page 27) or call DESA Heating Products at 1-866-672-6040 for referral information.

When calling DESA Heating Products, have ready:

- model number of your heater
- the replacement part number

SERVICE HINTS

When Gas Pressure Is Too Low

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

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

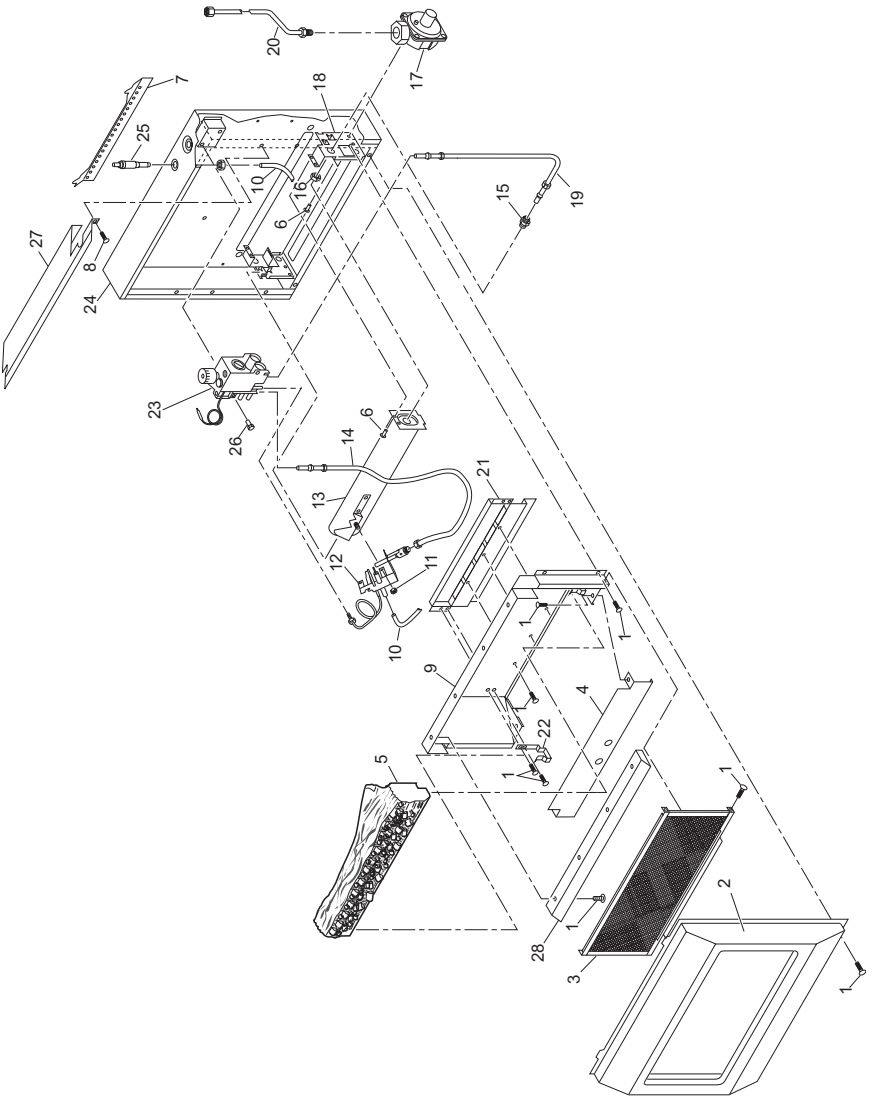
TECHNICAL SERVICE

You may have further questions about installation, operation or troubleshooting. If so, contact DESA Heating Products' Technical Service Department at 1-866-672-6040.

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

ILLUSTRATED PARTS BREAKDOWN

RFN30TA
RFP30TA
VMH3000TNA
VMH3000TPA



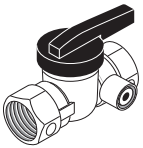
PARTS LIST

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

KEY NO.	PART NUMBER RFN30TA VMH3000TNA	PART NUMBER RFP30TA VMH3000TPA	DESCRIPTION	QTY.
1	098304-01	098304-01	Screw, #10 x 3/8"	19
2	100566-01CK	100566-01CK	Front Panel	1
3	100573-01BR	100573-01BR	Screen Assembly	1
4	100568-02	100568-02	Burner Shield	1
5	107122-01	107122-01	Log, Service Kit	1
6	098303-02	098303-02	Screw, #8 x 3/8"	4
7	099066-01	099066-01	Mounting Bracket	1
8	107992-01	107992-01	Screw, #10 x 3/8"	3
9	107058-01	107058-01	Deflector Unit	1
10	098271-03	098271-03	Ignitor Cable	1
11	098249-01	098249-01	Nut, M5	2
12	107485-01	107486-01	ODS/Pilot Assembly	1
13	103447-01	103447-01	Burner	1
14	099387-03	099387-03	3/16" Pilot Tubing	1
15	103845-12	103845-10	Injector	1
16	NJF-8C	NJF-8C	Nut, Hex	1
17	099415-11	099415-06	Pressure Regulator	1
18	103408-01	103408-01	Burner Bracket	2
19	103255-01	103255-01	3/8" Outlet (Burner) Tubing	1
20	103256-01	103256-01	3/8" Inlet Tubing	1
21	107218-01	107218-01	Deflector Baffle	1
22	107060-01	107060-01	Log Strap	2
23	098522-12	098522-13	Thermostat Gas Valve	1
24	105556-02	105556-02	Cabinet	1
25	097159-04	097159-04	Piezo Ignitor	1
26	099211-01	099211-01	Screw, #10 x 2.5"	2
27	104373-02	104373-02	Baffle	1
28	107061-01	107061-01	Hood	1
PARTS AVAILABLE — NOT SHOWN				
	100562-01	100562-01	Lighting Instructions Plate	1
	100563-01	100563-01	Warning Plate	1
	101899-01	101899-01	Brass Trim Assembly	1
	100769-02	100769-02	Brass Trim Hardware	1
	100642-01	100642-01	Hardware Package	1
	100565-01	100565-01	Warning Plate Fastener Kit	1

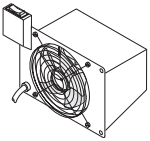
ACCESSORIES

Purchase these heater accessories from your local dealer. If they can not supply these accessories, either contact your nearest Parts Central (see page 27) or call DESA Heating Products at 1-866-672-6040 for information. You can also write to the address listed on the back page of this manual.



EQUIPMENT SHUTOFF VALVE GA5010

Equipment shutoff valve with 1/8" NPT tap.

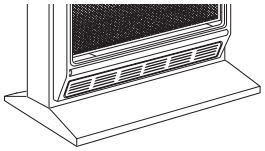


FAN KIT GA3100 - MANUALLY-CONTROLLED OR GA3200TA - THERMOSTATICALLY-CONTROLLED

Provides better heat distribution. Makes heater more efficient. Complete installation and operating instructions included.

CLEANING KIT - CCK (Not Shown)

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.

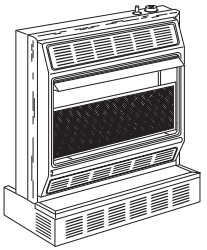


FLOOR BASE - GHB30 SERIES

For locating heater on the floor. Complete installation instructions included.

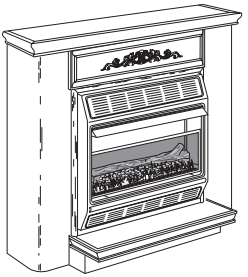
OAK STAINED MANTEL - GMC30F (Not Shown)

For use with heater. Sturdy hardwood construction. Complete assembly and installation instructions included.



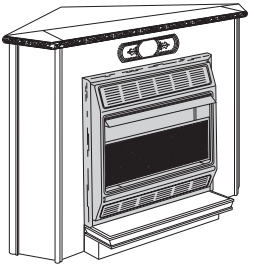
HEARTH BASE - GHB38 SERIES, GHB802 SERIES

For locating heater on the floor. Includes brass trim. Complete installation instructions included.



PRESTIGE MANTEL WITH BUILT-IN BASE Finished - GMC26F Series Finished Oak - GMC28F

For use with heater. Features built-in base, sturdy hardwood construction with classic styling and attractive molding. Available in light oak finish, walnut finish, or an unfinished hardwood, ready to stain or paint. Complete assembly and installation instructions included.



CORNER MANTEL Unfinished - GMC35U Series Finished - GMC34F Series

For use with heater. Features built-in base. Space-saving corner design featuring clean, classic lines. Available in a walnut finish or an unfinished hardwood, ready to stain or paint. Complete assembly and installation instructions included.

PARTS CENTRALS

These Parts Centrals are privately owned businesses. They have agreed to support our customer's needs by providing original replacement parts and accessories

Tool & Equipment Company
5 Manila Ave.
Hamden, CT 06514-0322
1-800-397-7553
203-248-7553

Portable Heater Parts
342 N. County Rd. 400 East
Valparaiso, IN 46383-9704
All States
219-462-7441
1-888-619-7060
www.portableheaterparts.com
sales@portableheaterparts.com
techservice@portableheaterparts.com

FBD
1349 Adams Street
Bowling Green, KY 42103-3414
270-846-1199
1-800-654-8534
Fax: 1-800-846-0090
franktalk@aol.com

Master Parts Dist.
1251 Mound Ave NW
Grand Rapids, MI 49504-2672
616-791-0505
1-800-446-1446
Fax: 616-791-8270
www.nbmc.com

Washer Equipment Co.
1715 Main Street
Kansas City, MO 64108-2195
KS, MO, AR
816-842-3911
www.washerparts.com

East Coast Energy Products
10 East Route 36
W. Long Branch, NJ 07764
732-870-8809
1-800-755-8809
www.njplaza.com/ecep

21st Century
2950 Fretz Valley Road
Perkasie, PA 18944-4034
215-795-0400
800-325-4828

Laporte's Parts & Service
2444 N. 5th Street
Hartsville, SC 29550-7704
843-332-0191
Parts Department

Cans Unlimited, Inc.
P.O. Box 645
Taylor, SC 29687-0013
All States
803-879-3009
1-800-845-5301
cuisales@aol.com

Model _____

Serial No. _____

Date Purchased _____

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

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