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.

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

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

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.


**WARNING** ICON G 001

**WARNINGS**

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

**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, persons with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

**Natural Gas:** Natural gas is odorless. An odor-making agent is added to natural gas. The odor helps you detect a natural gas leak. However, the odor added to natural gas can fade. Natural 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.

---

Safety Information continues on next page
WARNING: Any change to this heater or its controls can be dangerous.

1. Use only natural gas. Do not convert heater to use different fuel type.
2. If you smell gas
   • shut off gas supply
   • do not try to light any appliance
   • do not touch any electrical switch; do not use any phone in your building
   • immediately call your gas supplier from a neighbor’s phone. Follow the
gas supplier’s instructions
   • if you cannot reach your gas supplier, call the fire department

3. This heater shall not be installed in a bedroom or bathroom.

4. Never install the heater
   • 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

5. Always run heater with control knob at LOW, MEDIUM, or HIGH locked
   positions. Never set control knob between locked positions. Poor combustion
   may result.

6. This heater needs fresh, outside air ventilation to run properly. This heater has
   an oxygen depletion sensor (ODS) pilot light safety system. The ODS shuts
down the heater if not enough fresh air is available. See Air for Combustion
   and Ventilation, pages 5 through 8.

7. If heater shuts off, do not relight until you provide fresh, outside air. If heater
   keeps shutting off, have it serviced.

8. Do not run heater
   • where flammable liquids or vapors are used or stored
   • under dusty conditions

9. Never place any objects on the heater.

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

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

12. Make sure grill guard is in place before running heater.

13. Do not use heater if any part has been under water. Immediately call a quali-
    fied 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.

14. Turn off and unplug heater and let cool before servicing. Only a qualified
    service person should service and repair heater.

15. Operating heater above elevations of 4,500 feet may cause pilot outage.
**PRODUCT IDENTIFICATION**

**LOCAL CODES**

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

*Available from:

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

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

**UNPACKING**

1. Remove heater from carton.
2. Remove all protective packaging applied to heater for shipment.
3. Check heater for any shipping damage. If heater is damaged, promptly inform dealer where you bought heater.

**PRODUCT FEATURES**

**Safety Device**

This heater has a pilot with an Oxygen Depletion Sensor Shutoff System (ODS). The ODS/pilot is a required feature for vent-free room heaters. The ODS/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.
AIR FOR COMBUSTION AND VENTILATION

This heater shall not be installed in a confined space 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 is excerpts from National Fuel Gas Code. NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation.

All spaces in homes fall into one of the three following ventilation classifications: 1. Unusually Tight Construction; 2. Unconfined Space; 3. Confined Space. The information on pages 5 through 8 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 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 8.

If your home does not meet all of the three criteria above, continue reading.

Unconfined Space

The National Fuel Gas Code, ANSI Z223.1, 1992, Section 5.3 defines unconfined space as having a minimum air volume of 50 cubic feet (127 cubic cm) for each 1000 Btu/Hr input rating of all appliances in the space (cubic feet equals length x width x height of space). Include adjoining rooms only if there are doorless passageways or ventilation grills between the rooms.

Confined Space

The National Fuel Gas Code, ANSI Z223.1, 1992, Section 5.3 defines confined space as having an air volume of less than 50 cubic feet (127 cubic cm) for each 1000 Btu/Hr input rating of all appliances in the space (cubic feet equals length x width x height of space). Include adjoining rooms only if there are doorless passageways or ventilation grills between the rooms.

Continued
DETERMINING AIR FLOW FOR HEATER LOCATION

Determining if You Have a Confined or Unconfined Space

Use this worksheet 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.

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. Divide the space volume by 50 cubic feet to determine the maximum BTU/Hr the space can support.
   
   ________________ (volume of space) ÷ 50 cu. ft. = (Maximum BTU/Hr the space can support)
   
   Example: 2560 cu. ft. (volume of space) ÷ 50 cu. ft. = 51.2 or 51,200 (maximum BTU/Hr the space can support)

3. Add the BTU/Hr of all fuel burning appliances in the space.
   
<table>
<thead>
<tr>
<th>Appliance</th>
<th>BTU/Hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vent-free heater</td>
<td>______</td>
</tr>
<tr>
<td>Gas water heater*</td>
<td>______</td>
</tr>
<tr>
<td>Gas furnace</td>
<td>______</td>
</tr>
<tr>
<td>Vented gas heater</td>
<td>______</td>
</tr>
<tr>
<td>Gas fireplace logs</td>
<td>______</td>
</tr>
<tr>
<td>Other gas appliances*</td>
<td>+ ______</td>
</tr>
<tr>
<td>Total</td>
<td>______</td>
</tr>
</tbody>
</table>
   
   Example: Gas water heater 40,000 BTU/Hr
   Vent-free heater + 18,000 BTU/Hr
   Total = 58,000 BTU/Hr

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

4. Compare the maximum BTU/Hr the space can support with the actual amount of BTU/Hr used.
   
   ________________ BTU/Hr (maximum the space can support)
   
   ________________ BTU/Hr (actual amount of BTU/Hr used)
   
   Example: 51,200 BTU/Hr (maximum the space can support)
   58,000 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*, page 7.
   B. Vent room directly to the outdoors. See *Ventilation Air From Outdoors*, page 8.
   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.
AIR FOR COMBUSTION AND VENTILATION

Continued

![Diagram of ventilation system]

**WARNING**

If the area in which the heater may be operated is smaller than that defined as an unconfined space, provide adequate combustion and ventilation air by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1, 1992, Section 5.3.*

**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 2). You can also remove door into adjoining room (see option 3, Figure 2). Follow the *National Fuel Gas Code NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

**WARNING**

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

*Figure 2 - Ventilation Air from Inside Building*
VENTILATION AIR (Continued)

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 NFPA 54/ANSI Z223.1, 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 3 - Ventilation Air from Outdoors**
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*, pages 5 through 8.

**NOTICE**
A qualified service person must install heater. Follow all local codes.

**CHECK GAS TYPE**
Use only natural gas. If your gas supply is not natural, do not install heater. Call dealer where you bought heater for proper type heater.

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

- piping (check local codes)
- sealant (resistant to propane gas)
- manual shutoff valve *
- ground joint union
- test gauge connection * (see Figure 12, page 15)
- sediment trap
- tee joint
- pipe wrench

* An A.G.A. design-certified manual shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the optional A.G.A. design-certified manual shutoff valve from your dealer. See *Accessories*, page 27.

**LOCATING HEATER**
This heater is designed to be mounted on a wall.

**WARNING**
Maintain the minimum clearances shown in Figure 4 (page 10). If you can, provide greater clearances from floor, ceiling, and joining wall.

You can locate heater on floor, away from a wall. An optional floor mounting stand is needed. Purchase the floor mounting stand from your dealer. See *Accessories*, page 27.

**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 in the air (such as tobacco smoke) exist, may discolor walls.

*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*, pages 5 through 8.
INSTALLING TO WALL

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 27. If planning to use fan, locate heater near an electrical outlet.

Figure 4 - Mounting Clearances As Viewed From Front of Heater
INSTALLING HEATER TO WALL

Mounting Bracket
The mounting bracket is located on back panel of heater. It has been taped there for shipping. Remove mounting bracket from back panel.

Removing Front Panel Of Heater
1. Remove two screws near bottom corners of front panel.
2. Lift straight up on grill guard until it stops. Grill guard will slide up about 1/4".
3. Pull bottom of front panel forward, then down.

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 7. If you can, provide greater clearances from floor and joining wall.

2. Mark screw locations on wall (see Figure 7).
   *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.

---

**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 8.

3. Insert wall anchor (wings first) into hole. Tap anchor flush to wall.
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.

![Figure 9 - Popping Open Anchor Wings For Thin Walls](image)

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.

**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 10 - Mounting Heater Onto Mounting Bracket](image)

**Installing Bottom Mounting Screws**

1. Locate two bottom mounting holes. These holes are near bottom on back panel of heater (see Figure 11).
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 12.
   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 14-16).

![Figure 11 - Installing Bottom Mounting Screws](image)
CONNECTING TO GAS SUPPLY

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

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

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.

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 large enough diameter to allow proper gas volume to heater. If pipe is too small, undue loss of pressure will occur.

Typical Pipe Diameter
- CGN18RA: 3/8" or greater
- CGN30D: 1/2" or greater

Installation must include a manual shutoff valve, union, and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from heater (see Figure 12, page 15).

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

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

Install sediment trap in supply line as shown in Figure 12, page 15. Locate sediment trap where it is within reach for cleaning. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into 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.

![Diagram of gas connection](image)

* An A.G.A. design-certified manual shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the optional A.G.A. design-certified manual shutoff valve from your dealer. See *Accessories*, page 27.

**WARNING**

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

**WARNING**

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

**PRESSURE TESTING GAS SUPPLY PIPING SYSTEM**

**Test Pressures In Excess Of 1/2 PSIG**

1. Disconnect heater and its individual manual 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 manual shutoff valve was connected.
3. Pressurize supply piping system by either using compressed air or opening main gas valve located on or near gas meter.
4. Check all joints of gas supply piping system. Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
5. Correct all leaks at once.

**Test Pressures Equal To or Less Than 1/2 PSIG**
1. Close manual shutoff valve (see Figure 13).
2. Pressurize supply piping system by either using compressed air or opening main gas valve located on or near gas meter.
3. Check all joints from gas meter to manual shutoff valve (see Figure 14). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
4. Correct all leaks at once.

**PRESSURE TESTING HEATER GAS CONNECTIONS**
1. Open manual shutoff valve (see Figure 13).
2. Open main gas valve located on or near gas meter.
3. Make sure control knob of heater is in the OFF position.
4. Check all joints from manual shutoff valve to control valve (see Figure 14). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light heater (see *Operating Heater*, pages 17 through 20). Check the rest of the internal joints for leaks.
7. Turn off heater (see *To Turn Off Gas to Appliance*, page 20).
8. Replace front panel.

---

**Figure 13 - Manual Shutoff Valve**

**Figure 14 - Checking Gas Joints**
FOR YOUR SAFETY READ BEFORE LIGHTING

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 manual shutoff valve is fully open.

3. Turn control knob clockwise to the OFF position.

Figure 15 - Control Knob In The OFF Position

Continued
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 at the top of page 17. If you don’t smell gas, go to the next step.

5. Press in control knob.
   
   Note: You may be running this heater for the first time after hooking up to gas supply. If so, you may need to press in control knob for 30 seconds. This will allow air to bleed from the gas system.

6. Keep control knob pressed in and turn it counterclockwise to the PILOT/IGN position. This will light pilot.
   
   Note: You will hear a loud “click” when the control knob reaches the PILOT/IGN position.

If pilot does not light
   
   • turn control knob clockwise to the OFF position
   • repeat steps 5 and 6

If pilot does not stay lit after several tries
   
   • refer to Troubleshooting, pages 22 through 25
   • 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, page 20.

   
   • 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.
TO SELECT HEATING LEVEL

1. Slightly press in control knob and turn counterclockwise to the LOW, MEDIUM, or HIGH positions.

**IMPORTANT:** Release downward pressure while turning control knob. Control knob will lock at the desired position.

**WARNING**
When running heater, set control knob at LOW, MEDIUM, or HIGH locked positions. Never set control knob between locked positions. Poor combustion may result.

**CAUTION**
Do not try to adjust heating levels by using the manual shut-off valve.

1. Slightly press in control knob and turn counterclockwise to the LOW, MEDIUM, or HIGH positions.

**IMPORTANT:** Release downward pressure while turning control knob. Control knob will lock at the desired position.

---

![Figure 17 - Burner Patterns](attachment:image.png)
OPERATING HEATER

Continued

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)
1. Turn control knob clockwise to the PILOT position.

MANUAL LIGHTING PROCEDURE

1. Follow steps 1 through 6 under Lighting Instructions, pages 17 and 18.
2. With control knob pressed in, strike match. Hold match to pilot until pilot lights.

Check pilot flame pattern and burner flame pattern often.

PILOT FLAME PATTERN

Figure 18 shows a correct pilot flame pattern. Figure 19 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 19
- turn heater off (see To Turn Off Gas to Appliance, above)
- see Troubleshooting, pages 22 through 25

INSPECTING BURNER
BURNER FLAME PATTERN

Figure 20 shows a correct burner flame pattern. Figure 21 shows an incorrect burner flame pattern.

If burner flame pattern is incorrect, as shown in Figure 21
• turn heater off (see To Turn Off Gas to Appliance, page 20)
• see Troubleshooting, pages 22 through 25
CLEANING AND MAINTENANCE

ODS/PILOT AND BURNER ORIFICE
• Use a vacuum cleaner, pressurized air, or small, soft bristled brush to clean.

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.

TROUBLE-SHOOTING

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

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, bedding material, etc.

ODS/PILOT AND BURNER ORIFICE
• Use a vacuum cleaner, pressurized air, or small, soft bristled brush to clean.

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.

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.

OBSERVED PROBLEM
When control knob is pressed in and turned to the PILOT/IGN position, there is no spark at ODS/pilot

POSSIBLE CAUSE
1. Ignitor electrode not connected to ignitor cable
2. Piezo ignitor nut is loose
3. Ignitor cable pinched or wet
4. Broken ignitor cable
5. Bad piezo ignitor
6. Ignitor electrode broken
7. Ignitor electrode positioned wrong

REMEDY
1. Reconnect ignitor cable
2. Tighten nut holding piezo ignitor to base panel of log set. Nut is located behind base panel.
3. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry
4. Replace ignitor cable
5. Replace piezo ignitor
6. Replace ignitor
7. Replace ignitor
<table>
<thead>
<tr>
<th>OBSERVED PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>When control knob is pressed in and turned to the PILOT/IGN position, there is spark at ODS/pilot but no ignition</td>
<td>1. Gas supply turned off or manual shutoff valve closed</td>
<td>1. Turn on gas supply or open manual shutoff valve</td>
</tr>
<tr>
<td></td>
<td>2. Control knob not pressed in while being turned to PILOT/IGN position</td>
<td>2. Press in control knob while turning to PILOT/IGN position</td>
</tr>
<tr>
<td></td>
<td>3. Air in gas lines when installed</td>
<td>3. Continue holding down control knob. Repeat igniting operation until air is removed</td>
</tr>
<tr>
<td></td>
<td>4. ODS/pilot is clogged</td>
<td>4. Clean ODS/pilot (see <em>Cleaning and Maintenance</em>, page 22) or replace ODS/pilot assembly</td>
</tr>
<tr>
<td></td>
<td>5. Gas regulator setting is not correct</td>
<td>5. Replace gas regulator</td>
</tr>
<tr>
<td>ODS/pilot lights but flame goes out when control knob is released</td>
<td>1. Control knob not fully pressed in</td>
<td>1. Press in control knob fully</td>
</tr>
<tr>
<td></td>
<td>2. Control knob not pressed in long enough</td>
<td>2. After ODS/pilot lights, keep control knob pressed in 10 seconds</td>
</tr>
<tr>
<td></td>
<td>4. Thermocouple connection loose at control valve</td>
<td>4. Hand tighten until snug, then tighten 1/4 turn more</td>
</tr>
<tr>
<td></td>
<td>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</td>
<td>5. A) Contact local natural gas company</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B) Clean ODS/pilot (see <em>Cleaning and Maintenance</em>, page 22) or replace ODS/pilot assembly</td>
</tr>
<tr>
<td></td>
<td>6. Thermocouple damaged</td>
<td>6. Replace thermocouple</td>
</tr>
<tr>
<td></td>
<td>7. Control valve damaged</td>
<td>7. Replace control valve</td>
</tr>
<tr>
<td>OBSERVED PROBLEM</td>
<td>POSSIBLE CAUSE</td>
<td>REMEDY</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------</td>
<td>--------</td>
</tr>
<tr>
<td>Burner(s) does not light after ODS/pilot is lit</td>
<td>1. Burner orifice(s) is clogged</td>
<td>1. Clean burner orifice(s) (see Cleaning and Maintenance, page 22) or replace burner orifice(s)</td>
</tr>
<tr>
<td></td>
<td>2. Burner orifice(s) diameter is too small</td>
<td>2. Replace burner orifice(s)</td>
</tr>
<tr>
<td></td>
<td>3. Inlet gas pressure is too low</td>
<td>3. Contact local natural gas company</td>
</tr>
<tr>
<td>Delayed ignition of burner(s)</td>
<td>1. Manifold pressure is too low</td>
<td>1. Contact local natural gas company</td>
</tr>
<tr>
<td></td>
<td>2. Burner orifice(s) is clogged</td>
<td>2. Clean burner orifice(s) (see Cleaning and Maintenance, page 22) or replace burner orifice(s)</td>
</tr>
<tr>
<td>Burner backfiring during combustion</td>
<td>1. Burner orifice(s) is clogged or damaged</td>
<td>1. Clean burner orifice(s) (see Cleaning and Maintenance, page 22) or replace burner orifice(s)</td>
</tr>
<tr>
<td></td>
<td>2. Inlet gas pressure is too low</td>
<td>2. Contact local natural gas company</td>
</tr>
<tr>
<td></td>
<td>3. Burner damaged</td>
<td>3. Replace burner</td>
</tr>
<tr>
<td></td>
<td>4. Gas regulator defective</td>
<td>4. Replace gas regulator</td>
</tr>
<tr>
<td>Burner plaque(s) does not glow</td>
<td>1. Plaque damaged</td>
<td>1. Replace burner</td>
</tr>
<tr>
<td></td>
<td>2. Inlet gas pressure is too low</td>
<td>2. Contact local natural gas company</td>
</tr>
<tr>
<td></td>
<td>3. Control knob set between locked positions</td>
<td>3. Turn control knob until it locks at desired setting</td>
</tr>
<tr>
<td>Slight smoke or odor during initial operation</td>
<td>1. Residues from manufacturing processes</td>
<td>1. Problem will stop after a few hours of operation</td>
</tr>
<tr>
<td>Heater produces a clicking/ticking noise just after burner is lit or shut off</td>
<td>1. Metal expanding while heating or contracting while cooling</td>
<td>1. This is common with most heaters. If noise is excessive, contact qualified service person</td>
</tr>
</tbody>
</table>
### 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.

<table>
<thead>
<tr>
<th>OBSERVED PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heater produces unwanted odors</td>
<td>1. Heater burning vapors from paint, hair spray, glues, etc. See <strong>IMPORTANT</strong> statement above</td>
<td>1. Ventilate room. Stop using odor causing products while heater is running</td>
</tr>
<tr>
<td></td>
<td>2. Low fuel supply</td>
<td>2. Refill supply tank</td>
</tr>
<tr>
<td></td>
<td>3. Gas leak. See <strong>Warning statement at top of page</strong></td>
<td>3. Locate and correct all leaks (see Checking Gas Connections, page 15)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Heater shuts off in use (ODS operates)</th>
<th>1. Not enough fresh air is available</th>
<th>1. Open window and/or door for ventilation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Low line pressure</td>
<td>2. Contact local natural gas company</td>
</tr>
<tr>
<td></td>
<td>3. ODS/pilot is partially clogged</td>
<td>3. Clean ODS/pilot (see Cleaning and Maintenance, page 22)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gas odor even when control knob is in OFF position</th>
<th>1. Gas leak. See <strong>Warning statement at top of page</strong></th>
<th>1. Locate and correct all leaks (see Checking Gas Connections, page 15)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Control valve defective</td>
<td>2. Replace control valve</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gas odor during combustion</th>
<th>1. Foreign matter between control valve and burner</th>
<th>1. Take apart gas tubing and remove foreign matter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Gas leak. See <strong>Warning statement at top of page</strong></td>
<td>2. Locate and correct all leaks (see Checking Gas Connections, page 15)</td>
</tr>
</tbody>
</table>

| Moisture/condensation noticed on windows        | 1. Not enough combustion/ventilation air.         | 1. Refer to **Air for Combustion and Ventilation** requirements (page 5) |

You may have further questions about installation, operation, or troubleshooting. If so, contact DESA International’s Technical Service Department at 1-800-323-5190.
## SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>CGN18RA</th>
<th>CGN30D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BTU (Variable)</strong></td>
<td>6,600/12,000/18,000</td>
<td>6,600/18,000/30,000</td>
</tr>
<tr>
<td><strong>Type Gas</strong></td>
<td>Natural Only</td>
<td>Natural Only</td>
</tr>
<tr>
<td><strong>Ignition</strong></td>
<td>Piezo</td>
<td>Piezo</td>
</tr>
<tr>
<td><strong>Pressure Regulator Setting</strong></td>
<td>6&quot; W.C.</td>
<td>6&quot; W.C.</td>
</tr>
<tr>
<td><strong>Inlet Gas Pressure (in. of water)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>10.5&quot;</td>
<td>10.5&quot;</td>
</tr>
<tr>
<td>Minimum</td>
<td>7&quot;</td>
<td>7&quot;</td>
</tr>
<tr>
<td><strong>Dimensions, Inches (H x W x D)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heater</td>
<td>23.5 x 18.5 x 8</td>
<td>23.5 x 25.9 x 8</td>
</tr>
<tr>
<td>Carton</td>
<td>26 x 20.5 x 9.625</td>
<td>26 x 27.75 x 9.625</td>
</tr>
<tr>
<td><strong>Weight (pounds)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heater</td>
<td>22</td>
<td>30</td>
</tr>
<tr>
<td>Shipping</td>
<td>27</td>
<td>36</td>
</tr>
</tbody>
</table>

## SERVICE HINTS

### When gas pressure is too low
- pilot will not stay lit
- burner(s) will have delayed ignition
- heater will not produce specified heat

### When gas quality is bad
- pilot will not stay lit
- burner(s) will produce flames and soot
- heater will backfire when lit

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

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

## REPLACEMENT PARTS

### 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 International’s Technical Service Department at 1-800-323-5190.

When calling DESA International, have ready
- your name
- your address
- model number 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 defective 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 International’s Parts Department at 1-800-972-7879 for referral information.

When calling DESA International, have ready
- model number of your heater
- the replacement part number
These Parts Centrals are privately-owned businesses. They have agreed to support our customer’s needs by providing original replacement parts and accessories.

**Baltimore Electric**
1348 Dixwell Avenue
Hamden, CT 06514
1-800-397-7553
203-248-7553
Parts Department

**Portable Heater Parts**
342 N. County Rd. 400 East
Valparaiso, IN 46383
All States
219-462-7441
1-800-362-6951
Parts Department

**FBD**
P O Box 1096
1720 Kummer Road
Franklin, KY 42134
502-586-1922
1-800-654-8534

**Four Flags Power Products**
1115 Stateline Road
Niles, MI 49120
616-684-2697
Parts Only

**Master Parts Distributor**
1184 Wilson NW
Walker, MI 49504
616-791-0505
Fax: 1-616-791-8270
Parts Department

**Washer Equipment Co.**
1715 Main Street
Kansas City, MO 64108
KS, MO, AR
816-842-3911
Parts Department

**East Coast Energy Products**
707 Broadway
W. Long Branch, NJ 07764
908-870-8809
1-800-755-8809
Parts Department

**Tarantin Tank Co.**
P.O. Box 6129
Freehold, NJ 07728
908-780-9340
1-800-922-0724
Parts Department

**FLOOR MOUNTING STAND**
Model CGN18RA - GA4000B and GA4500
Model CGN30D - GA4010B and GA4510
For locating heater on the floor, away from a wall. Complete installation instructions included.

**MANUAL SHUTOFF VALVE - GA5010**
Manual shutoff valve with 1/8" NPT tap.

---

You can purchase a service manual from the address listed on the back page of this manual. Send a check for $5.00 payable to DESA International.

Purchase these heater accessories from your local dealer. If they can not supply these accessories, either contact your nearest Parts Central (see above) or call DESA International’s Parts Department at 1-800-972-7879 for referral information. You can also write to the address listed on the back page of this manual.

**FAN KITS - GA3100, GA3100A, and GA3200TA**
ILLUSTRATED PARTS BREAKDOWN
Model CGN18RA

HEATER EXPLODED VIEW
This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under Replacement Parts on page 26 of this manual.

<table>
<thead>
<tr>
<th>KEY NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>098304-01</td>
<td>Screw, #10 x 3/8&quot;</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>098742-03</td>
<td>Front Panel</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>098238-06</td>
<td>Grill Guard</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>098342-01</td>
<td>Clip-Grill Guard</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>098198-03</td>
<td>Apron</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>M11084-26</td>
<td>Screw, #10 x 3/8&quot;</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>098462-01</td>
<td>Control Rod Assembly</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>098457-01</td>
<td>Reflector Assembly</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>098867-05</td>
<td>Regulator</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>M11084-38</td>
<td>Screw, #8 x 3/8&quot;</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>098455-02</td>
<td>Cabinet Assembly</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>098324-01</td>
<td>Control Knob</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>See Detail</td>
<td>Burner Assembly</td>
<td>1</td>
</tr>
<tr>
<td>13-1</td>
<td>099218-01</td>
<td>Burner</td>
<td>1</td>
</tr>
<tr>
<td>13-2</td>
<td>098508-01</td>
<td>Valve Retainer Nut</td>
<td>1</td>
</tr>
<tr>
<td>13-3</td>
<td>099056-03</td>
<td>Injector</td>
<td>3</td>
</tr>
<tr>
<td>13-4</td>
<td>099048-01</td>
<td>Tubing-Valve to plaque A</td>
<td>1</td>
</tr>
<tr>
<td>13-5</td>
<td>099049-01</td>
<td>Tubing-Valve to plaque B</td>
<td>1</td>
</tr>
<tr>
<td>13-6</td>
<td>099050-01</td>
<td>Tubing-Valve to plaque C</td>
<td>1</td>
</tr>
<tr>
<td>13-7</td>
<td>099057-01</td>
<td>Pressure Tap Fitting</td>
<td>1</td>
</tr>
<tr>
<td>13-8</td>
<td>098932-06</td>
<td>Control Valve</td>
<td>1</td>
</tr>
<tr>
<td>13-9</td>
<td>099045-01</td>
<td>Pilot Tubing-Valve to regulator</td>
<td>1</td>
</tr>
<tr>
<td>13-10</td>
<td>099051-01</td>
<td>Inlet Tubing</td>
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<tr>
<td>13-11</td>
<td>099059-01</td>
<td>ODS/Pilot</td>
<td>1</td>
</tr>
<tr>
<td>13-12</td>
<td>M11084-37</td>
<td>Screw, #8 x 1/4&quot;</td>
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</tr>
<tr>
<td>13-13</td>
<td>099046-02</td>
<td>Pilot Tubing-Regulator to pilot</td>
<td>1</td>
</tr>
<tr>
<td>13-14</td>
<td>099918-01</td>
<td>Pilot Regulator</td>
<td>1</td>
</tr>
<tr>
<td>13-15</td>
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<td>Screw, #10 x 3/8&quot;</td>
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<td>13-16</td>
<td>098593-01</td>
<td>Thermocouple</td>
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<tr>
<td>13-17</td>
<td>098594-01</td>
<td>Ignitor Electrode</td>
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</tr>
<tr>
<td>14</td>
<td>099066-01</td>
<td>Mounting Bracket</td>
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</tr>
</tbody>
</table>

**PARTS AVAILABLE - NOT SHOWN**

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>098465-01</td>
<td>Control Position Label</td>
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</tr>
<tr>
<td>100642-01</td>
<td>Assembly, Hardware</td>
<td>1</td>
</tr>
</tbody>
</table>
**PARTS LIST**

Model CGN30D

This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under *Replacement Parts* on page 26 of this manual.

<table>
<thead>
<tr>
<th>KEY NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>098304-01</td>
<td>Screw, #10 x 3/8&quot;</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>098742-03</td>
<td>Front Panel</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>098238-07</td>
<td>Grill Guard</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>101108-01</td>
<td>Clip-Grill Guard</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>098198-04</td>
<td>Apron</td>
<td>1</td>
</tr>
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<td>6</td>
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<td>Screw, #10 x 3/8&quot;</td>
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<td>7</td>
<td>098462-01</td>
<td>Control Rod Assembly</td>
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</tr>
<tr>
<td>8</td>
<td>098457-02</td>
<td>Reflector Assembly</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>098867-05</td>
<td>Regulator</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>M11084-38</td>
<td>Screw, #8 x 3/8&quot;</td>
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<td>11</td>
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</tr>
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<td>Burner</td>
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</tr>
<tr>
<td>13-2</td>
<td>098508-01</td>
<td>Valve Retainer Nut</td>
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</tr>
<tr>
<td>13-3</td>
<td>099056-02</td>
<td>Injector</td>
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</tr>
<tr>
<td>13-4</td>
<td>099052-01</td>
<td>Tubing-Valve to Plaque B &amp; D</td>
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</tr>
<tr>
<td>13-5</td>
<td>099053-01</td>
<td>Tubing-Valve to Plaque C</td>
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</tr>
<tr>
<td>13-6</td>
<td>099057-01</td>
<td>Pressure Tap Fitting</td>
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</tr>
<tr>
<td>13-7</td>
<td>099054-01</td>
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<td>098932-06</td>
<td>Control Valve</td>
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<td>13-10</td>
<td>099045-01</td>
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<td>Screw, #10 x 3/8&quot;</td>
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<td>098593-01</td>
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<td>098276-01</td>
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<td>099066-01</td>
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<td>098325-01</td>
<td>Roll Pin</td>
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**PARTS AVAILABLE - NOT SHOWN**

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<th>PART NUMBER</th>
<th>DESCRIPTION</th>
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<td>100822-01</td>
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<td>100642-01</td>
<td>Hardware Assembly</td>
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WARRANTY INFORMATION

KEEP THIS WARRANTY

Model __________________________
Serial No. ________________________
Date Purchased __________________

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

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

LIMITED WARRANTY
COMFORT GLOW VENT-FREE NATURAL GAS HEATERS

DESA International warrants this product to be free from defects in materials and components for one (1) year from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale or cancelled check must be presented.

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

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

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

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

For information about this warranty write:

DESA INTERNATIONAL
2701 Industrial Drive
P.O. Box 90004
Bowling Green, KY 42102-9004