

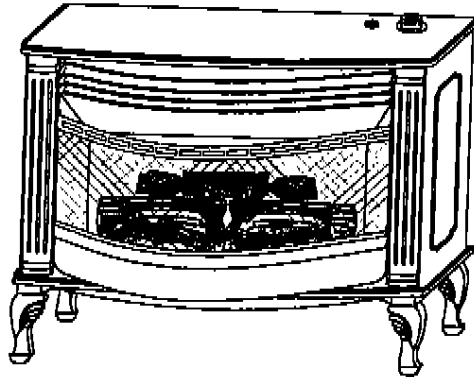


VENT-FREE  
GAS STOVE

# H E A T E R S

## OWNER'S OPERATION AND INSTALLATION MANUAL

CGN300TQ  
CGL300TQ



**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.

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

**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.

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.

Do not store or use gasoline or other flammable vapors and liquids in this vicinity of this or any other appliance.

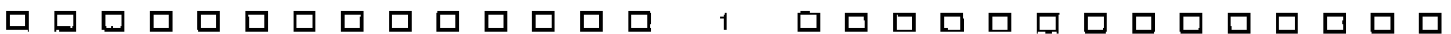
**WHAT TO DO IF YOU SMELL GAS**

- 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.

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

READ AND SAVE THIS MANUAL FOR FUTURE REFERENCE



# SAFETY INFORMATION

## 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, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitude.

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

**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.

**WARNING:** Any change to this fireplace 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 into the fireplace.

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

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

You must operate this heater with the heater screen in place. Make sure heater screen is in place before running heater.

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

1. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.
2. Do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoor.
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
4. This heater shall not be installed in a bedroom or bathroom.
5. Do not use this heater as a wood-burning heater. Use only the logs provided with the heater.
6. Do not add extra logs or ornaments such as pine cones, vermiculite, or rock wool. Using these added items can cause sooting. Do not add lava rock around base. Rock and debris could fall into the control area of the heater. After servicing, always re-place screen before operating heater.

7. You must operate this heater with the heater screen in place. Make sure heater screen is in place before running heater.

8. This heater is designed to be smokeless. If logs ever appear to smoke, turn off heater and call a qualified service person. **NOTE:** During initial operation slight smoking could occur due to log curing and heater burning manufacturing residues.

9. To prevent the creation of soot, follow the instructions of *Cleaning and Maintenance*.

10. 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 the burner box or on adjacent walls or furniture.

11. The heater needs fresh 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*, pages 4 and 5. If heater keeps shutting off, see *Troubleshooting*, pages 21 through 23.

12. Do not run heater

- where flammable liquids or vapors are used or stored
- under dusty conditions

13. Do not use this heater to cook food or burn paper or other objects.

14. Do not use heater if any part has been underwater. 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 underwater.

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

16. Operating heater above elevations of 4,500 feet could cause pilot outage.

17. Do not operate heater if any log is broken. Do not operate heater if log is chipped (dime-sized or larger).

18. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity.



## 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.

### PROVIDING ADEQUATE VENTILATION

The following are excerpts from the *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 4 and 5 will help you classify your space and provide adequate ventilation.

### Confined and Unconfined Space

*The National Fuel Gas Code, ANSI 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<sup>3</sup> 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<sup>3</sup> per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed\*, through openings not furnished with doors, are considered a part of the unconfined space.

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

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

### 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<sup>-11</sup> kg per pa-sec m<sup>2</sup>) 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 supplied 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*.

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

## DETERMINING FRESH-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.

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

Example:

Gas water heater	30,000	Btu/Hr
Vent-free heater	+ 26,000	Btu/Hr
<b>Total</b>	<b>= 56,000</b>	<b>Btu/Hr</b>

\* 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 the 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)  
 56,000 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*.
- 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 light construction, provide adequate combustion and ventilation air by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1, Section 5.3*, or applicable local codes.

### 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.

**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.

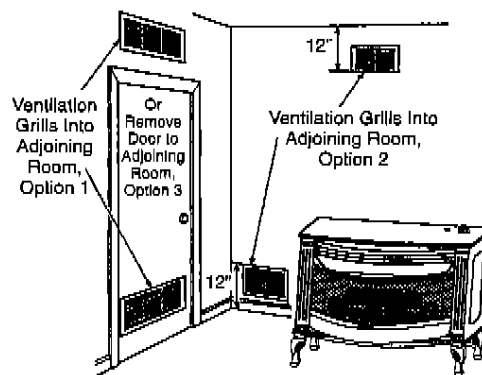


Figure 2. Ventilation Air From Inside Building

### 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, NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

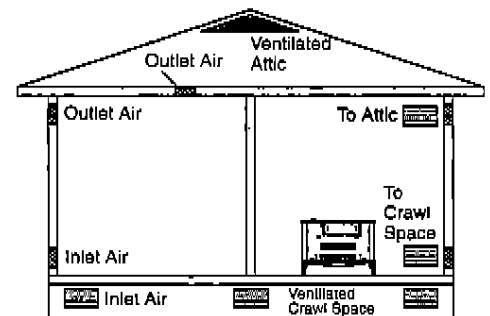


Figure 3. Ventilation Air From Outdoors

**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.



## CLEARANCES TO COMBUSTIBLES

### (Vent-Free Operation Only)

Carefully follow the instructions below. This stove is a freestanding unit designed to set directly on the floor. **IMPORTANT:** You must maintain minimum wall and ceiling clearances during installation. The minimum clearances are shown in Figure 4. Measure from outermost point of stove top.

#### Minimum Wall and Ceiling Clearances (see Figure 4)

- A. Clearances from outermost point of stove top to any combustible side wall should not be less than 12 inches.
- B. Clearances from outermost point of stove top to any combustible back wall should not be less than 6 inches (includes corner installations).
- C. Clearances from the stove top to the ceiling should not be less than 48 inches.

The installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to rating 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 6. Pointing the vent down protects it from freezing rain or sleet.

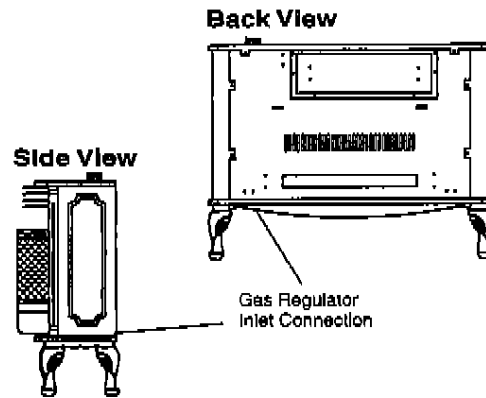


Figure 5. Gas Regulator Location and Gas Line Access Into Stove Cabinet

## CONNECTING TO GAS SUPPLY

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

**CAUTION:** Never connect heater directly to the gas supply. This heater requires an external regulator (not supplied). Install the external regulator between the heater and gas supply.

#### Installation Items Needed

Before installing heater, make sure you have items listed below:

- piping (check local codes)
- sealant (resistant to gas)
- equipment shutoff valve\*
- 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*.

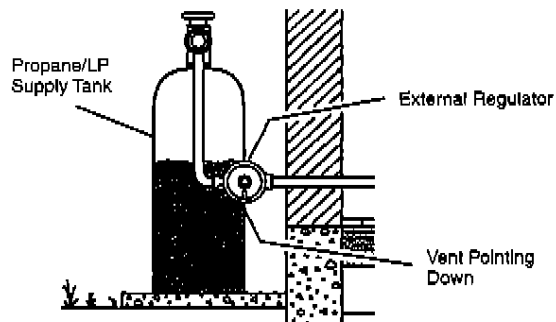


Figure 6. External Regulator With Vent Pointing Down

**NG Models:**  
5"-10.5" W.C.  
Do not need external regulator.

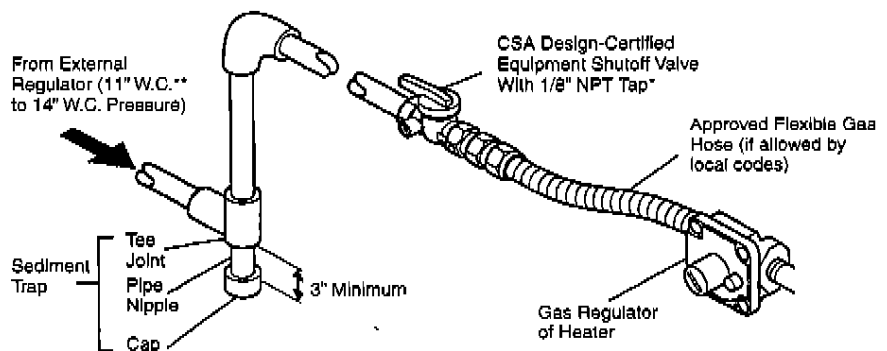


Figure 7. Gas Connection

- \* Purchase the optional CSA design-certified equipment shutoff valve from your dealer. See *Accessories*.
- \*\* Minimum inlet pressure for purpose of input adjustment.

**⚠ WARNING:** Never connect the heater to private (non-utility) gas wells. This gas is commonly known as well-head gas.

**⚠ CAUTION:** Use only new black iron or steel pipe. Internally-flinned copper tubing may be used in certain areas. Check your local codes. Use pipe 1/2" diameter or greater to allow proper volume gas to heater. If pipe is too small, undue loss of pressure 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 7).

**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. 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 gas (PROPANE or NG).

We recommend that you install a sediment trap in supply line as shown in Figure 7. 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.

**⚠ CAUTION:** Avoid damage to regulator. Hold gas regulator with wrench when connecting into gas piping and/or fittings.

## CHECKING GAS CONNECTIONS

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

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

**⚠ CAUTION:** Make sure external regulator has been installed between gas supply and heater. See guidelines under *Connecting to Gas Supply*, pages 7 and 8.

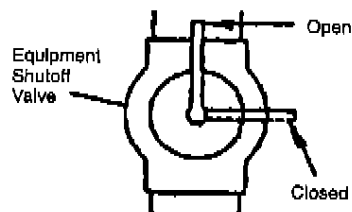


Figure 8. Equipment Shutoff Valve

## PRESSURE TESTING GAS SUPPLY PIPING SYSTEM

### Test Pressure in Excess of 1/2 PSIG (3.5 kPa)

1. Disconnect heater with the appliance main gas valve (control valve) and equipment shutoff valve from gas supply piping system. Pressure 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 using compressed air or opening gas supply tank valve.
4. Check all joints of gas supply piping system. Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Reconnect heater and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

## PRESSURE TESTING HEATER GAS CONNECTIONS

1. Close equipment shutoff valve (see Figure 8).
2. Open gas supply tank valve.
3. Make sure control knob of heater is in the OFF position.

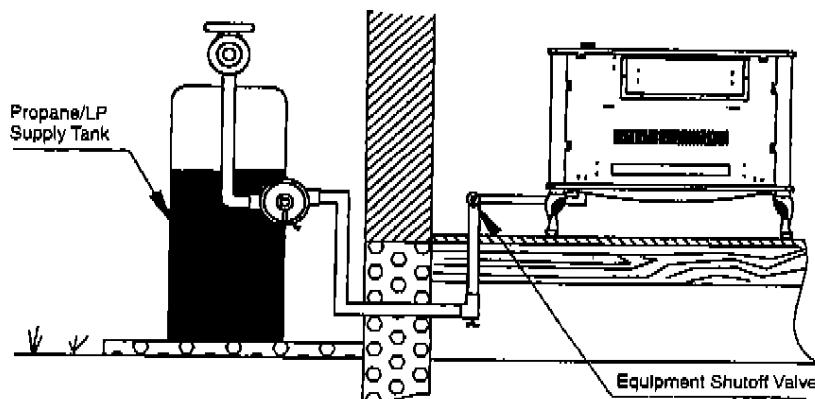


Figure 9.1. Checking Gas Joints



4. Check all joints from equipment shutoff valve to control valve (LP GAS see Figure 9.1; NATURAL GAS see Figure 9.2). 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*). Check all other internal joints for leaks.
7. Turn off heater (see *To Turn Off Gas to Appliance*).

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

**CAUTION:** After installation and periodically thereafter, check to ensure that no flame comes in contact with any log. With the heater set to HIGH, check to see if flames contact any log. If so, reposition logs according to the log installation instructions in this manual. Flames contacting logs will create soot.

**It is very important to install the logs exactly as instructed. Do not modify logs. Only use logs supplied with heater.**

Place one-piece log set on grate to fit as illustrated in Figure 10. Make sure log sits flat on firebox floor (see Figure 10).

**IMPORTANT:** Make sure log does not cover any burner ports (see Figure 11).

Also see log placing instructions, pages 28 and 29.

**Test Pressure Equal to or Less Than 1/2 PSIG (3.5 kPa)**

1. Close equipment shutoff valve (see Figure 8).
2. Pressurize supply piping system by either using compressed air or opening natural supply tank valve.
3. Check all joints from gas meter to equipment shutoff valve (see Figures 9.1 and 9.2). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
4. Correct all leaks at once.

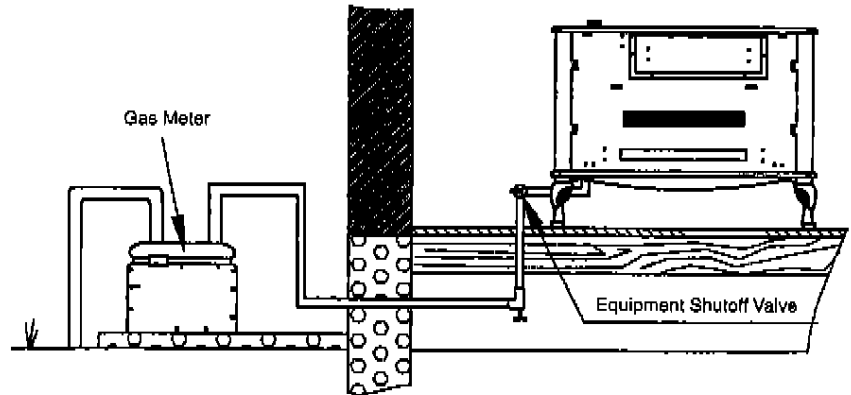


Figure 9.2. Checking Gas Joints

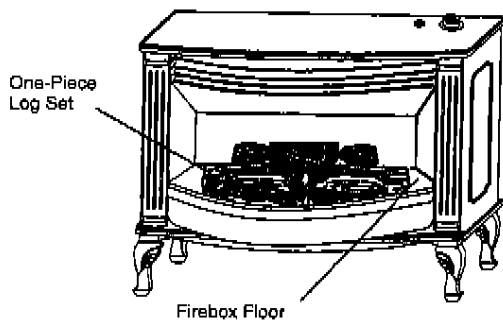


Figure 10. Installing One-Piece Log Set

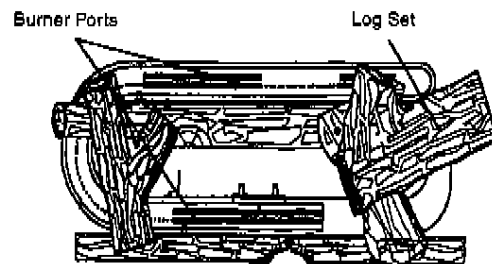


Figure 11. Installing One-Piece Log Set (Top View)



## 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 underwater. 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 underwater.

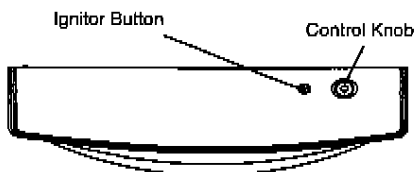




Figure 18. Control Knob and Ignitor Button Location

## LIGHTING INSTRUCTION

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

1. **STOP!** Read the safety information, page 18, column 1.
2. Make sure equipment shutoff valve is fully open.
3. Turn control knob clockwise  to the OFF position.
4. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow "B" in the safety information, page 11, column 1. If you don't smell gas, go to the next step.
5. Turn control knob counterclockwise  to the PILOT position. Press in control knob for five (5) seconds (see Figure 18).


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

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

**Note:** If pilot does not stay lit, contact a qualified service person or gas supplier for repairs. Until repairs are made, light pilot with match. To light pilot with match, see *Manual Lighting Procedure* page 12.

7. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.
  - If control knob does not pop out when released, contact a qualified service person or gas supplier for repairs.

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

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

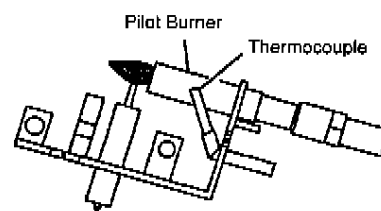



Figure 19. Pilot


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

## TO TURN OFF GAS TO APPLIANCE

### Shutting Off Heater

Turn control knob clockwise  to the OFF position.

### Shutting Off Burners Only (pilot stays lit)

Turn control knob clockwise  to the PILOT position.



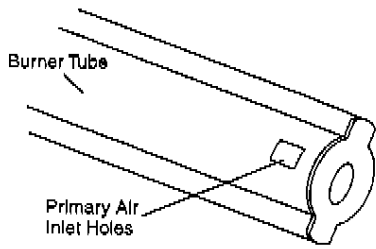


Figure 24. Injector Holder on Outlet Burner Tube

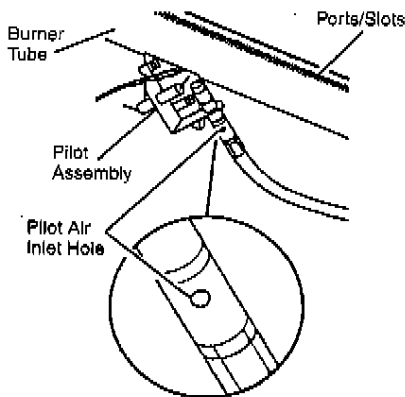


Figure 25. Pilot Inlet Air Hole

**MAIN BURNER**

Periodically inspect all burner flame holes with the heater running. All slotted burner flame holes should be open with yellow flame present. All round burner flame holes should be open with a small blue flame present. Some burner flame holes may become blocked by debris or rust, with no flame present. If so, turn off heater and let cool. Either remove blockage or replace burner. Blocked burner flame holes will create soot.

**SPECIFICATIONS**

Btu (Variable) 30,000 Btu/H  
 Type Gas Propane/LP or NG  
 Ignition Piezo

**Propane/LP:**

Manifold Pressure 8.0" W.C.  
 Inlet Gas Pressure (in. of water)\*  
 Maximum 14"  
 Minimum 11"

**NG:**  
 Manifold Pressure 3.0" W.C.  
 Inlet Gas Pressure (in. of water)\*  
 Maximum 10.5"  
 Minimum 5"  
 Dimensions, Inches (L x Hx W)  
 Stove 32 1/4 x 25 4/5 x 13  
 Carton 34 1/8 x 25 1/8 x 12 7/8  
 Weight, Pounds  
 Stove 74 lbs.  
 Shipping 83 lbs.  
 \*For purposes of input adjustment

**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.

**Logs**

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

**REPLACEMENT PARTS NOTE:**

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

**PARTS UNDER WARRANTY**

Contact authorized dealers of this product. If they can't supply original replacement part(s) call the number on the back of manual. When contacting your dealer or Charmglow, have ready

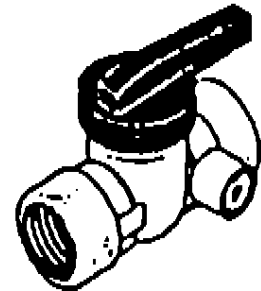
- Your name
- Your address
- Model and serial numbers of your heater
- How heater was malfunctioning
- Type of gas used (propane/LP or NG)
- Purchase date
- Usually we will ask you to return the defective part to the factory

**PARTS NOT UNDER WARRANTY**

Contact authorized dealers of this product or Parts Central. If they can't supply original replacement part(s) call Charmglow's 800# on the back.

**ACCESSORIES**

Purchase these heater accessories from your local dealer or Parts Central. This part is not currently available from Charmglow.



Equipment Shutoff Valve - Equipment shutoff valve with 1/8" NPT tap.

**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.

# TROUBLESHOOTING

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

**WARNING:** 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	Possible Cause	Remedy
When ignitor button is pressed in, there is no spark at ODS/pilot	<ol style="list-style-type: none"> <li>Ignitor electrode positioned wrong</li> <li>Ignitor electrode broken</li> <li>Ignitor electrode not connected to ignitor cable</li> <li>Ignitor cable pinched or wet</li> <li>Broken ignitor cable</li> <li>Bad piezo ignitor</li> <li>Plezo Ignitor nut is loose</li> </ol>	<ol style="list-style-type: none"> <li>Replace ignitor</li> <li>Replace Ignitor</li> <li>Reconnect ignitor cable</li> <li>Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry</li> <li>Replace ignitor cable</li> <li>Replace control valve (piezo is part of control valve)</li> <li>Tighten nut holding plezo ignitor to base panel of log set; nut is located behind base panel</li> </ol>
ODS/pilot lights but flame goes out when control knob is released	<ol style="list-style-type: none"> <li>Gas supply turned off or equipment shutoff valve closed</li> <li>Control knob not fully pressed in while in PILOT button</li> <li>Air in gas lines when installed</li> <li>ODS/pilot is clogged</li> <li>Gas regulator setting is not correct</li> <li>Control knob not in PILOT position</li> <li>Depleted gas supply</li> </ol>	<ol style="list-style-type: none"> <li>Turn on gas supply or open equipment shutoff valve</li> <li>Fully press in control knob while pressing ignitor button</li> <li>Continue holding down control knob; repeat igniting operation until air is removed</li> <li>Clean ODS/pilot (see Cleaning and Maintenance) or replace ODS/pilot assembly</li> <li>Replace gas regulator</li> <li>Turn control knob to pilot position</li> <li>Replace gas regulator</li> </ol>
When Ignitor button is pressed in, there is a spark at ODS/pilot but no Ignition	<ol style="list-style-type: none"> <li>Control knob not fully pressed in</li> <li>Control knob not pressed in long enough</li> <li>Safety interlock system has been triggered</li> <li>Equipment shutoff valve not fully open</li> <li>Thermocouple connection loose at control valve</li> <li>Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following:               <ol style="list-style-type: none"> <li>Low gas pressure</li> <li>Dirty or partially clogged ODS/pilot</li> </ol> </li> <li>Thermocouple damaged</li> <li>Control valve damaged</li> </ol>	<ol style="list-style-type: none"> <li>Press in control knob fully</li> <li>After ODS/pilot lights, keep control knob pressed in for 30 seconds</li> <li>Wait one minute for safety interlock system to reset; repeat ignition operation</li> <li>Fully open equipment shutoff valve</li> <li>Hand-tighten until snug, then tighten 1/4 turn more</li> <li> <ol style="list-style-type: none"> <li>Contact local natural or propane/LP gas company</li> <li>Clean ODS/pilot (see Cleaning and Maintenance) or replace ODS/pilot assembly</li> </ol> </li> <li>Replace thermocouple</li> <li>Replace control valve</li> </ol>

## TROUBLESHOOTING

Observed Problem	Possible Cause	Remedy
Burner(s) does not light after ODS/pilot is lit	<ol style="list-style-type: none"> <li>1. Burner orifice is clogged</li> <li>2. Burner orifice diameter is too small</li> <li>3. Inlet gas pressure is too low</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean burner orifice (see <i>Cleaning and Maintenance</i>) or replace burner orifice</li> <li>2. Replace burner orifice</li> <li>3. Contact local natural or propane/LP gas company</li> </ol>
Delayed ignition of burner(s)	<ol style="list-style-type: none"> <li>1. Manifold pressure is too low</li> <li>2. Burner orifice is clogged</li> </ol>	<ol style="list-style-type: none"> <li>1. Contact local natural or propane/LP gas company</li> <li>2. Clean burner (see <i>Cleaning and Maintenance</i>) or replace burner orifice</li> </ol>
Burner backfiring during combustion	<ol style="list-style-type: none"> <li>1. Burner orifice is clogged or damaged</li> <li>2. Burner damaged</li> <li>3. Gas regulator defective</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean burner orifice (see <i>Cleaning and Maintenance</i>) or replace burner orifice</li> <li>2. Replace burner</li> <li>3. Replace gas regulator</li> </ol>
Yellow flame during burner combustion	<ol style="list-style-type: none"> <li>1. Not enough air</li> <li>2. Gas regulator defective</li> </ol>	<ol style="list-style-type: none"> <li>1. Check burner for dirt and debris; if found, clean burner (see <i>Cleaning and Maintenance</i>)</li> <li>2. Replace gas regulator</li> </ol>
Slight smoke or odor during initial operation	<ol style="list-style-type: none"> <li>1. Residues from manufacturing processes</li> </ol>	<ol style="list-style-type: none"> <li>1. Problem will stop after a few hours of operation</li> </ol>
Heater produces a whistling noise when burner is lit	<ol style="list-style-type: none"> <li>1. Turning control knob to HI position when burner is cold</li> <li>2. Air in gas line</li> <li>3. Air passageways on heater blocked</li> <li>4. Dirty or partially clogged burner orifice</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn control knob to LO position and let warm up for a minute</li> <li>2. Operate burner until air is removed from line; have gas line checked by local natural or propane/LP gas company</li> <li>3. Observe minimum installation clearances</li> <li>4. Clean burner (see <i>Cleaning and Maintenance</i>) or replace burner orifice</li> </ol>
White powder residue forming within burner box or on adjacent walls or furniture	<ol style="list-style-type: none"> <li>1. When heated, vapors from furniture polish, wax, carpet cleaners, etc., turn into white powder residue</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn heater off when using furniture polish, wax, carpet cleaner, or similar products</li> </ol>

## TROUBLESHOOTING

**⚠ 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.

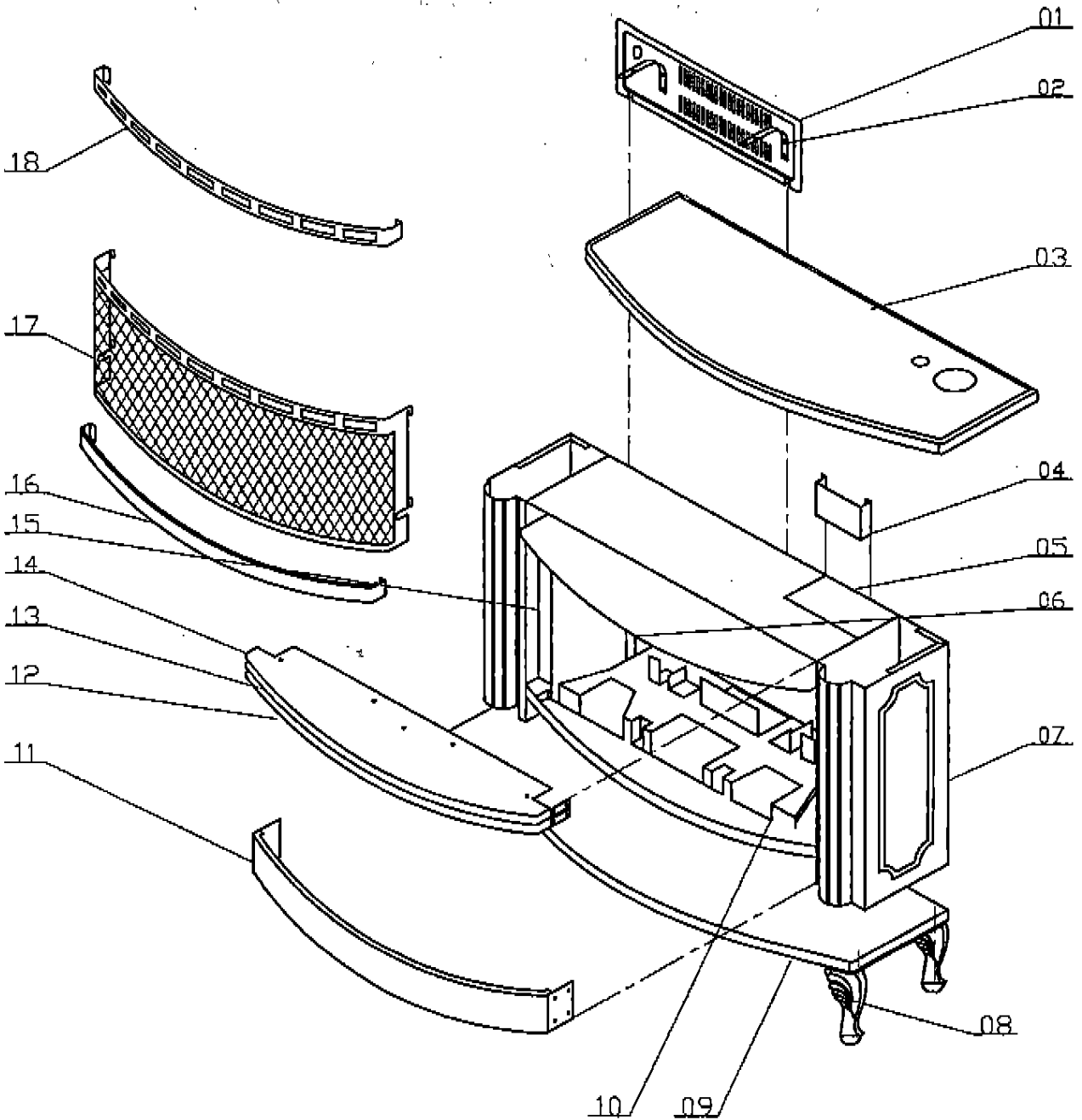
**IMPORTANT:** Operating heater where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors.

Observed Problem	Possible Cause	Remedy
Heater produces a clicking/ticking noise just after burner is lit or shut off	<ol style="list-style-type: none"> <li>1. Metal expanding while heating or contracting while cooling</li> </ol>	<ol style="list-style-type: none"> <li>1. This is common with most heaters; if noise is excessive, contact qualified service person</li> </ol>
Heater produces unwanted odors	<ol style="list-style-type: none"> <li>1. Heater burning vapors from paint, hairspray, glues, etc. (See IMPORTANT statement above)</li> <li>2. Gas leak. See WARNING statement at top of page</li> </ol>	<ol style="list-style-type: none"> <li>1. Ventilate room; stop using odor-causing products while heater is running</li> <li>2. Locate and correct all leaks (see <i>Checking Gas Connections</i>)</li> </ol>
Heater shuts off in use (ODS operates)	<ol style="list-style-type: none"> <li>1. Not enough fresh air is available.</li> <li>2. Low line pressure</li> <li>3. ODS/pilot is partially clogged</li> </ol>	<ol style="list-style-type: none"> <li>1. Open window and/or door for ventilation</li> <li>2. Contact local natural or propane/LP gas company</li> <li>3. Clean ODS/pilot</li> </ol>
Gas odor even when control knob is in OFF position	<ol style="list-style-type: none"> <li>1. Gas leak. See WARNING statement at top of page</li> <li>2. Control valve defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Locate and correct all leaks (see <i>Checking Gas Connections</i>)</li> <li>2. Replace control valve</li> </ol>
Gas odor during combustion	<ol style="list-style-type: none"> <li>1. Foreign matter between control valve and burner.</li> <li>2. Gas leak. See WARNING statement at top of page</li> </ol>	<ol style="list-style-type: none"> <li>1. Take apart gas tubing and remove foreign matter</li> <li>2. Locate and correct all leaks (see <i>Checking Gas Connections</i>)</li> </ol>
Moisture/condensation noticed on windows	<ol style="list-style-type: none"> <li>1. Not enough combustion/ventilation air</li> </ol>	<ol style="list-style-type: none"> <li>1. Refer to <i>Air for Combustion and Ventilation</i> requirements</li> </ol>



# ILLUSTRATED PARTS BREAKDOWN

CGN300TQ  
CGL300TQ



**PARTS LIST**CGN300TQ  
CGL300TQ

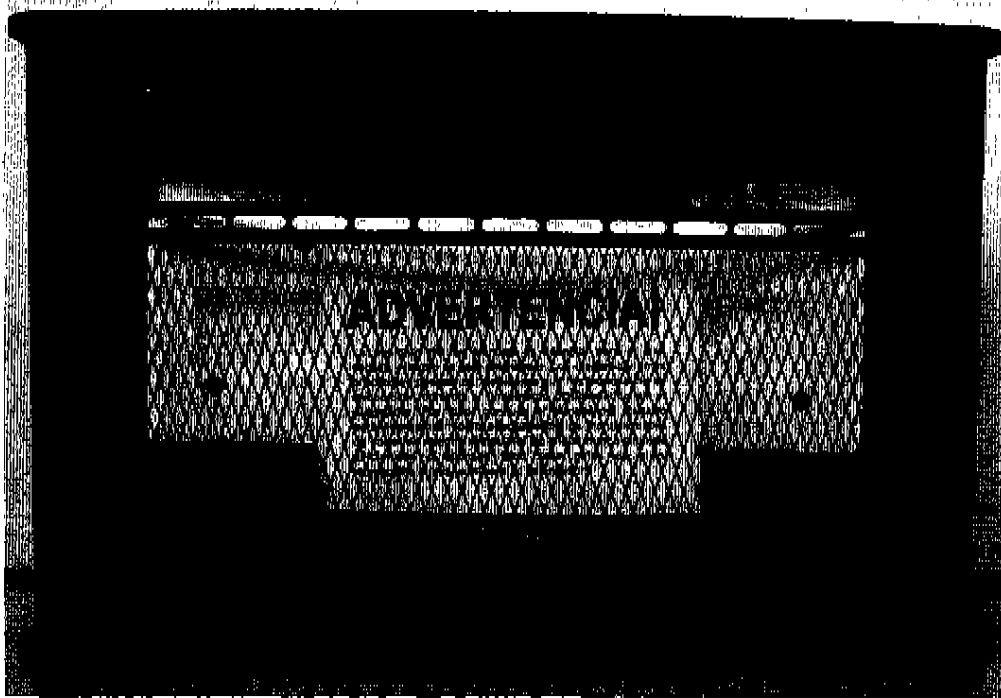
KEY NO.	PART NO.	DESCRIPTION	QTY.
1	BL016-01	Blower Mounting Plate	1
2	SL005-01	Blower Bracket	2
3	QL012-01	Top Panel	1
4	QL015-01	Control Knob Bracket	1
5	QL001-01	Body	1
6	QL005-01	Upper Reflector	1
7	QL014-01	Side Panel	2
8	QL018-01	Base Assembly	2
9	QL013-01	Pedestal	1
10	QL007-01	Firebox Floor	1
11	QL009-01	Lower Front Panel	1
12	QL004-01	Mid Louver	1
13	QL003-01	Upper Louver	1
14	QL002-01	Top Louver	1
15	QL006-01	Side Reflector	1
16	QL010-01	Bottom Brass Trim	1
17	QL008-01	Screen	1
18	QL011-01	Upper Brass Trim	1



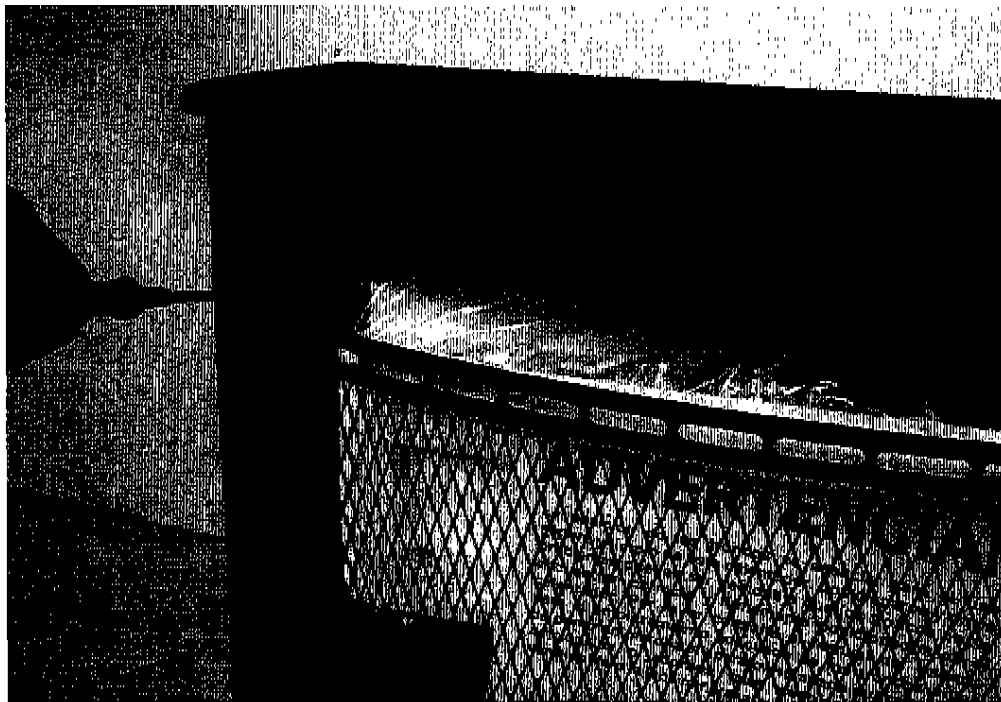


### PLACING INSTRUCTION

FOLLOW THE PROCEDURES BELOW AND THE SUCCESSIVE DRAWINGS TO PUT LOG SETS IN PLACE TO THE GAS PEDESTAL STOVE (INDOOR VENT-FREE).



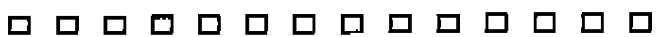
THE LOG'S PACKAGE UNDER THE SCREEN



UNSCREW THE TWO NUTS FIRST

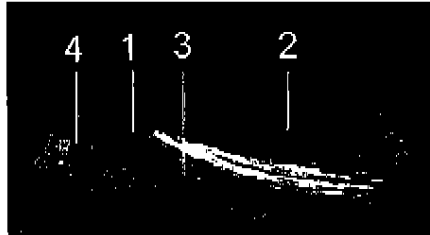
**NOTICE:** THE POSITION OF THE LOGS SHOULD AVOID FLAME.

# **Q SERIES LOG SET INSTALLATION INSTRUCTIONS**



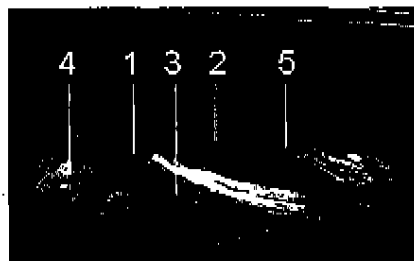


**STEP 2:** Put log D(4#) on top of log A(1#) and log B(2#), as shown in the drawing. See FIG (3).



*FIG (3)*

**STEP 3:** Put log E(#5) on top of log A(1#) and log C(3#) as shown in the drawing. See FIG (4).



*FIG (4)*



