Charmglow.

VENT-FREE L.P.& NATURAL
GAS STOVE

OWNER'S OPERATION AND INSTALLATION MANUAL



CGN300TQ

CGL300TQ

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▲ 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 gasfired 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.



SAVE THIS MANUAL FOR FUTURE REFERENCE

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 local gas supplier.

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

WATER VAPOR:A BY-PRODUCT OF UNVENTED ROOM HEATERS

Water vaporis a by-product of gas combustion.An unvented room heater produces approximately one(1)ounce (30)ml of water for every 1,000BTU'S (.3KW'S) OF gas input per hour,Refer to papg 6.

Consumer: please retain these instruction for future use.

Installer:Please leave these instructions with the consumer.

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

CG-QL058-03H-0504

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.

A 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, anemia, those under the influence of alcohol, and those at high altitudes.

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.

State of Massachusetts: The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts. Sellers of unvented propane or natural gas-fired supplemental room heaters shall provide to each purchaser a copy of 527 CMR 30 upon sale of the unit.

In the state of Massachusetts, unvented propane or nature gas-fired space heaters shall be prohibited in bedrooms and bathrooms.

MARNING: 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

ModelsCGN300TQ are equipped for natural gas. Field conversion is not permitted.

ModelesCGL300TQ are equipped for propane gas. Field conversion is not permitted.

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 in 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 shutoff. Allow surfaces to cool before touching.

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

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

- 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 place Propane/LP supply tank(s) inside any structure. Locate Propane/LP supply tank(s) outdoors.
- 3. If you smell gas
- Shut off gas supply.
- Do not try to light any appliance.
- Do not touch any electrical switch: do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- 4. This heater shall not be installed in a bedroom or bathroom.
- Do not use this heater as a wood-burning heater. Use only the logs provided with the heater.
- 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 heater. After servicing, always replace screen before operating heater.
- You must operate this heater with the heater screen in place. Make sure heater screen is in place before running heater.
- This heater is designed to be smokeless. If logs ever appear to smoke, turn heater off 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 in *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 burner box or on adjacent walls or furniture.
- 11. This 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 through 5. If heater keeps shutting off, see Troubleshooting, pages 15 through 17.
- 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 under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.
- Turn off and unplug heater and let cool before servicing. Only a qualified service person should service and repair heater.
- Operating heater above elevations of 4,500 feet could cause pilot outage.
- Do not operate heater if any log is broken. Do not operate heater if a log is chipped (dime-sized or larger).
- To prevent performance problems, do not use Propane/LP fuel tank of less than 100 lbs. capacity.

PRODUCT FEATURES SAFETY PILOT

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

PIEZO IGNITION SYSTEM

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

LOCAL CODES

Install and use heater with care. Follow all local codes. In the absence of local codes, use the latest edition of The National Fuel Gas Code, ANSZ 223.1, 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

This heater is designed for vent-free operation. State and local codes in some areas prohibit the use of vent-free heaters.

UNPACKING

- 1. Remove top inner pack.
- 2. Tilt carton so that stove is upright.
- 3. Remove protective side packaging.
- 4. Slide stove out of carton.
- 5. Remove protective plastic wrap.
- Remove screen by lifting and then pulling forward.
- Remove log set by cutting plastic ties.
- 8. Carefully unwrap log.
- Check for any shipping damage. If stove or log is damaged, promptly inform dealer where you bought stove.

PRODUCT IDENTIFICATION

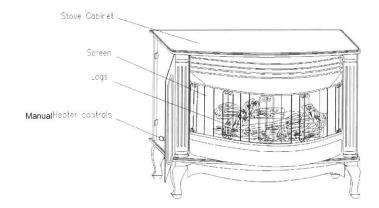


Figure 1- Vent Free LP/NG Gas Stove

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 National Fuel Gas Code, NFPA 54/ ANSZ 223.1, Section 5.3, Air for Combustion and Ventilation.

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

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

The information on pages 4 through 5 will help you classify your space and provide adequate ventilation.

Confined and Unconfined Space

The National Fuel Gas Code, ANS Z223.1 defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour (4.8 m3 per kw) of the aggregate input rating of all appliances installed in that space and an unconfining space as a space whose volume is not less than 50 cubic feet per 1,000 Btu per hour (4.8 m3 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 b) weather stripping has been added 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 (6×10-11kg per pa-sec-m2) or less with openings gasketed or sealed and
- on openable windows and doors
- 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.

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×width×height).
	Length×Width×Height=cu.ft. (volume of space)
	Example: Space size 20ft. (length)×16ft.(width)×8ft. (ceiling height)=2560cu. 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 appl	liances in the space.				
Vent-free heater	Btu/Hr	E			
Gas water heater*	Btu/Hr	Example:			
Gas furnace	Btu/Hr	Gas water heater		30,000	Btu/Hr
Vented gas heater	Btu/Hr	Vent-free heater	+	26,000	Btu/Hr
Gas heater logs	Btu/Hr	Total	=	56,000	Btu/Hr
Other gas appliances* +	Btu/Hr				
Total -	Rtu/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) 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 tight construction, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANS 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/ANS Z223.1, Section 5.3, Air for Combustion and Ventilation for required size of ventilation grills or ducts.

Ventilation Air From Outdoors

Provide extra fresh air by using ventilation 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/ANS 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.

♠ 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.

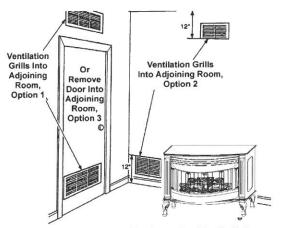


Figure 2 - Ventilation Air from Inside Bu" 'ing

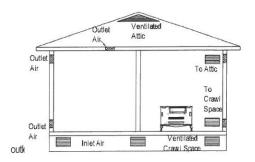


Figure 3 -Ventilation Air from Outdoors

WATER VAPOR: A BY-PRODUCT OF UNVENTED ROOM HEATERS

Water vapor is by-product of gas combustion.an unvented room heater prodrces approximately one (1) ounce (30ml) of water for every 1, 000BTU's (3kw's) of gas input per hour.

Unvented room heaters are recommended as supplemtal heat (a room) rather that a primary heat source(an entire house) in most supplemental heat applications,the water vapor does not create a problem ,in most applications the water vapor enhances the low humidity atmosphers experienced during cold weather.

The following steps will help insure that water vapor does not become a problem.

- 1. Besure the heater is sized properly for the application,including ample combustion air and circulation of the air.
- 2.If high humidity is experienced, a dehumidifier may be used to help lower the water vapor content of the air.
- 3.Do not use an unvented room heater as the primary heat source.

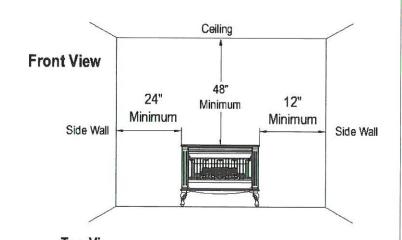
WARNING: A qualified service person must install heater. Follow all local codes.

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 42 inches from the front, top, or sides of the heater
- in high traffic areas
- in windy or drafty areas

WARNING: Maintain the minimum clearances. If you can, provide greater clearances from floor, ceiling, and adjoining side and back walls.

INSTALLATION



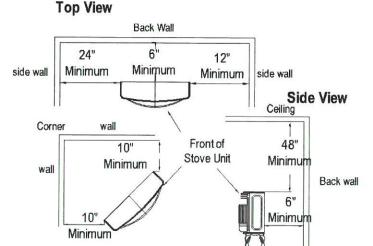


Figure 4-Minimum Clearance to Wall and Ceiling

CAUTION: This heater creates warm air currents. These currents move heat to wall surfaces next to heater. Installing heater next to vinyl or cloth wall coverings or operating heater where impurities (such as tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air 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 4 through 5.

CHECK GAS TYPE

Be sure your gas supply is right for your heater. Otherwise, call dealer where you bought the heater for proper type heater.

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 24 inches.
- B. Clearances from outermost point of stove top to any combustible back wall should not be less than 10 inches (Includes corner installations).
- C. Clearances from the stove top to the ceiling should not be less than 48 inches.

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 the items listed below.

- piping (check local codes)
- sealant (resistant to propane/LP gas)
- equipment shutoff valve*
- test gauge connection*
- sediment trap
- tee joint
- pipe wrench
- flexible gas hose (check local codes)
 *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.

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.

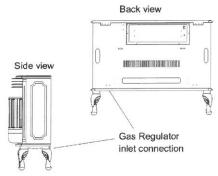


Figure 5-Gas Regulator Location and Gas Line Access Into Stove Cabinet

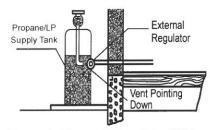


Figure 6- External Regulator With Vent Pointing Down (DO NOT OVER TIGHTRN GAS CONNECTION)

NG Models: 5"-10.5" W.C. Gas supplier provides external regulator for natural gas.

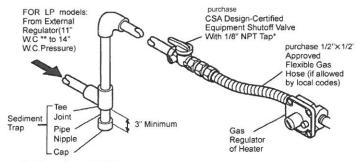


Figure 7-Gas Connection

- * 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 heater to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

CAUTION: Use only new, black iron or steel pipe. Internally-tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2" diameter or greater to allow proper 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 incorrectly, heater may not run properly.

WARING:Do not over tighten gas connections.

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.

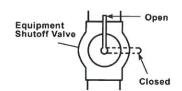


Figure 8 - Equipment Shutoff Valve

Pressure Testing Gas Supply Piping System

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

- Disconnect heater with its appliance main gas valve (control valve) and equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 PSIG will damage heater regulator.
- Cap off open end of gas pipe where equipment shutoff valve was connected.
- Pressurize supply piping system by either using compressed air or opening gas supply tank valve.
- 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.
- Reconnect heater and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

Pressure Testing Heater Gas Connections

 Open equipment shutoff valve (see Figure 8).

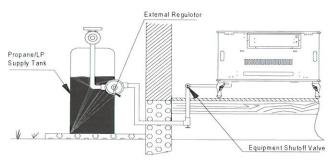


Figure 9.1 -Checking Gas Joints

- 2. Open gas supply tank valve.
- 3. Make sure control knob of heater is in the OFF position.
- 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.
- Light heater (see Operating Heater). Check all other internal joints for leaks.
- Turn off heater (see To Turn Off Gas Appliance).

Test Pressures Equal To or Less Than 1/2 PSIG(3.5 kPa)

- Close equipment shutoff valve (see Figure 8).
- Pressurize supply piping system by either using compressed air or opening natural supply tank
- Check all joints from gas meter to equipment shutoff valve(see Figure 9). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
- 4. Correct all leaks at once.

valve.

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 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.

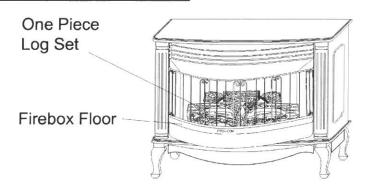


Figure 10-Installing Log Set

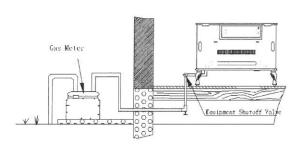


Figure 9.2 - Checking Gas Joints

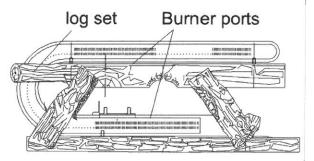


Figure 11 -Installing Log Set (Top View)

Installing Blower Accessory

BLOWER ACCESSORY MODEL PF06-YJLF-F FOR QL300TYLA. QN300TYLA NFHTX186 FOR QL220TYLA. QN220TYLA

ACCESSORY PF06-YJLF-F OR NFHTX186

Tool required: Philips screwdriver

NOTICE: Shut off gas heater during the following blower installation.

- From back of heater remove the Knock-out center panel with two brackets at the four sides with a Philips head screwdriver (see Figure12-F).
- Attach the two brackets to blower housing using four white screws provided in blower kit (2 for each bracket) (see Figure 14-F).
 Tighten screws securely. Then guide the green grounding wire and downlead of motor through the pannel.
- Then guide the four strand wire downlead through the jacket hole, connect the two yellow leads and the temperature control switch on the temperature controlled bracket together. Secure the temperature controlled bracket on the reflect panel of firebox using two self-tapping screws. (See Figure 15-F).
- Using the screws previously removed, mount blower assem-

- bly to stove by reattaching the Knock-out center panel to rear panel. Draw the four strand cable backward so as to expose the three black, green, white lines on the four strand cable at the back of rear panel. Be sure not to drop the temperature cotrolled wire off the reflect panel. Connect the green grounding means wire and four strand cable together, connect the two black motor downleads respectively and remaining two black and white wires together by the same means (see Figure 15-F). (Note: the three wires must be connected at the rear panel)
- Use the thread that bind the electrical wire previously to collect and pack the connection wire outside the cable
- Use screwdriver to loosen the three self-tapping screws at the left upper part on the rear panel. (See Figure 16-F).
- Then, secure the bracket of the control housing tightly on the back panel using self-tapping screws.
- Using two black screws that are provided in blower kit, mount blower operation control housing to the bracket (see Figure 16-F).
- Check to make sure that the power cord is completely clear of blower wheel and there are no foreign objects in blower wheel.
- jects in blower whee

Figure 13-F Installing Bushing

- Peel off the backing paper and stick the supplied wiring diagram decal on the back panel as shown in Figure 16-F.
- 11.Use screws provided in blower kit to assemble the plate which assembled with strain relief bushing and power cord on the knockout center panel.
- Plug power cord into a convenient
 3-prong grounded wall receptacle near the stove.

WARNING: 1. ELECTRICAL GROUND-ING INSTRUCTIONS: This appliance is equipped with a three-prong grounding plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle.

- Do not let the wires touch the reflect panel of the firebox, let the wires of the motor and green wire through the hole of the Knock-out panel.
- 13. Using Auto/O/Man switch, turn blower on and check for operation. Turn on Auto/O/Man switch to the desired position. In the Man position it will remain constantly on. Auto position will be controlled by the thermostat on fan blower unit. To stop the operation turn unit switch to the O position.
- All remaining parts from blower kit may be discarded.

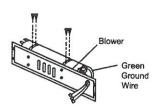


Figure 14-F Attaching Brackets To Blower

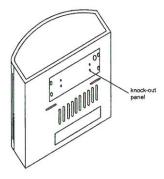


Figure 12-F -Removing stove Knock-out panel

Installing Blower Accessory BLOWER ACCESSORY MODEL PF06-YJLF-F OR NFHTX186

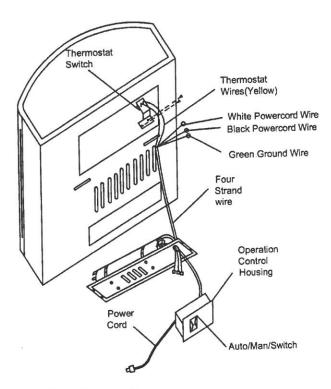


Figure 15-F Routing Power Cord

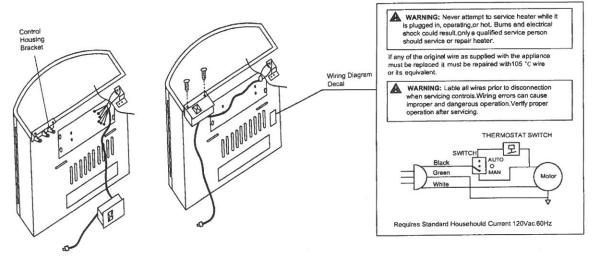


Figure 16 -F Mounting Blower And Installing Blower Control Housing

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 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.
- 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.

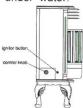


Figure 15-Control Knob and Ignitor Button Location

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.

- STOP! Read the safety information, page 12, column1.
- Make sure equipment shutoff valve is fully open.
- Open right side door throught the slot at the back, then you can see control knob and Ignitor button.(see Figure 16)
- Turn control knob clockwise
 to the OFF position.
- 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 12, column 1. If you don't smell gas, go to the next step.
- Turn control knob counterclock wise to the PIILOT 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.
- 7. With control knob pressed in, press and release ignitor button. This will light pilot. The pilot is attached to the front burner. If needed, keep pressing ignitor button until pilot lights. Note: If pilot does not stay lit, contact a qualified service person or gas supplier for

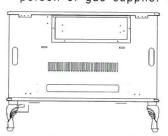


Figure 16-Open right side door throught the slot at the back

- repairs. Until repairs are made, light pilot with match. To light pilot with match, see *Manual Lighting Procedure*.
- Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds release control knob.
- If control knob does not pop out when released, contact a qualified service person or gas supplier for repairs.
 - Note: If pilot goes out, repeat steps 3 through 7. This heater has a safety interlock system. Wait one (1) minute for system to reset before lighting pilot again.
- Turn control knob counterclockwise to desired heating level. The burners should light. Set control knob to any heat level between HI and LO.

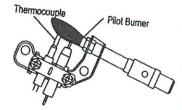


Figure 17 -Pilot

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 \bigcap to the OFF position.

Shutting Off Burners Only (Pilot stays lit)

Turn control knob clockwise to the PILOT position.

THERMOSTAT CONTROL OPERATION

The thermostat control knob can be set to any comfort level between HI and LO. The thermostat will gradually modulate the heat output and flame height from higher to lower settings, or pilot, in order to maintain the comfort level you select. The ideal comfort setting will vary by household depending upon the amount of space to be heated, the output of the central heating system, etc.

Note: Selecting the Hi setting with the control knob will cause the burners to remain fully on, without modulating down in most cases.

MANUAL LIGHTING PROCEDURE

- Follow steps 1 through 5 under lighting instruction.
- Depress control knob and light pilot with match.
- Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow Step 8.

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

PILOT FLAME PATTERN

Figure 20 shows a correct pilot flame pattern. Figure 21 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 21.

- Turn heater off (see TO TURN OFF GAS TO APPLIANCE)
- see troubleshooting

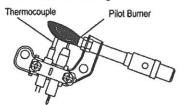


Figure 18 -Correct Pilot Flame Pattern

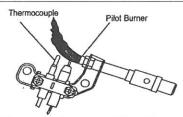


Figure 19 -Incorrect Pilot Flame Pattern

BURNER FLAME PATTERN

Figure 22 shows a correct burner flame pattern. Figure 23 shows an incorrect burner flame pattern. If burner flame is incorrect:

- Turn heater off (see TO TURN OFF GAS TO APPLIANCE)
- See troubleshooting

Approx.3-6"Above Top of logs



Figure 20-Correct Flame Pattern with Control Knob Set to High Flame

More Than 8"
Above Top of logs

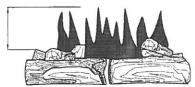


Figure 21 -Incorrect Flame Pattern with Control Knob Set to High Flame

CLEANING AND MAINTENANCE

WARNING: Turn off heater and let cool before cleaning.

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

CLEANING BURNER INJECTOR HOLDER AND PILOT AIR INLET HOLE

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

We also recommend that you keep the burner tube and pilot assembly clean and free of dust and dirt. To clean these parts we recommend using compressed air no greater than 30 PSI. Your local computer store, hardware store, or home center may carry compressed air in a can. You can use a vacuum cleaner in the blow position. If using compressed air in a can, please follow the directions on the can. If you don't follow directions on the can, you could damage the pilot assembly.

- Shut off the unit, including the pilot. Allow the unit to cool for at least thirty minutes.
- Inspect burner, pilot and primary air inlet holes on injector holder for dust and dirt (See Figure 22).
- Blow air through the ports/slots and holes in the burner.
- Check the injector holder located at the end of the burner tube again. Remove any large particles of dust, dirt, lint, or pet hair with a soft cloth or vacuum cleaner nozzle.
- 5. Blow air into the primary air holes on the injector holder.
- In case any large clumps of dust have now been pushed into the burner repeat steps 3 and 4.

Clean the pilot assembly also. A yellow tip on the pilot flame indicates dust and dirt in the pilot assembly. There is a small pilot air inlet hole about two inches from where the pilot flame comes out of the pilot assembly (see Figure 23). With the unit off, lightly blow air through the air inlet hole. You may blow through a drinking straw if compressed air is not available.

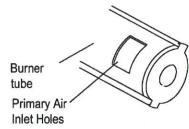


Figure 22-Injector Holder on Outlet **Burner Tube**

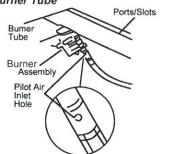


Figure 23 -Pilot Inlet Air Hole

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 CGL300TQ CGN300TQ

Btu(Variable) 20000/30,000BTU/H

Gas Type Ignition

Propane/LP or NG

Propane/LP:

Piezo

(CGL300TQ) Manifold Pressure 8.0"W.C.

Inlet Gas Pressure

(In. of water)*

Maximum 14"

Minimum 11"

NG (CGN300TQ)

Manifold Pressure 3.0"W.C.

Inlet Gas Pressure

(In. of water)*

Maximum 10.5"

Minimum 5"

Dimensions, Inches (H×W×D) Stove 25 4/5"×32 1/4" ×13"

Carton 25 1/8" × 34 1/8" × 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 (dimesized or larger).

REPLACEMENT PARTS NOTE:

Use only original replacement Equipment shutoff valve with 1/8" 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 Charmglow's Technical Service Department at 1-888-515-2585 for referral information. 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.
- Warranty card

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 Parts Department at 1-888-515-2585 for referral information.

ACCESSORIES

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



EQUIPMENT SHUTOFF VALVE-NPT tap.

FLEXILBE HOSE

Flexibe gas hose is used for connecting the heater to gas supply.

the flex hose must approved by CSA.



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 from ODS/ pilot.

- Ignitor electrode is positioned wrong.
- 2. Ignitor electrode is broken.
- Ignitor electrode is not connected to ignitor cable.
- Ignitor cable is pinched or wet.
- 5. Broken ignitor cable.
- Bad piezo ignitor.
- 7. Piezo ignitor nut is loose.
- 1. Replace ignitor.
- 2. Reconnect ignitor cable.
- Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry.
- 4. Replace ignitor cable.
- Tighten nut holding piezo ignitor to base panel of log set. Nut is located behind base panel.

ODS/pilot lights but flame goes out when control knob is released.

- Gas supply is turned off or 1. equipment shutoff valve is closed.
- Control knob is not fully pressed in 2. while in PILOT position.
- 3. Air in gas lines when installed.
- 4. ODS/pilot is clogged.
- 5. Gas regulator setting is not correct.
- 6. Control knob not in PILOT position.
- 7. Depleted gas supply.

- Turn on gas supply or open equipment shutoff valve.
- Fully press in control knob while pressing ignitor button.
- Continue holding down control knob. Repeat igniting operation until air is removed.
- Clean ODS/pilot (see Cleaning and Maintenance) or replace ODS/pilot assembly.
- 5. Replace gas regulator and
- Turn control knob to pilot position.
- 7. Replace gas regulator.

When ignitor button is pressed in, there is a spark at ODS/pilot but no ignition.

- 1. Control knob is not fully pressed in.
- Control knob is not pressed in long enough.
- Safety interlock system has been triggered.
- 4. Equipment shutoff valve is not 3. fully open.
- Thermocouple connection is loose at control valve.
- Pilot flame is not touching thermocouple, which allows 5. thermocouple to cool and causing pilot flame to go out. This 6. problem could be caused by one or both of the following:
 - A) Low gas pressure.
 - B) Dirty or partially clogged ODS/pilot.
- Thermocouple damaged.
- 8. Control valve damaged.

- 1. Press in control knob fully.
- After ODS/pilot lights, keep control knob pressed in 30 seconds.
- Wait one minute for safety interlock system to reset. Repeat ignition operation.
- Fully open equipment shutoff valve.
- 5. Hand tighten until snug, then tighten 1/4 turn more.
- A) Contact local natural or propane/LP gas company.
 - B) Clean ODS/pilot (see Cleaning and Maintenance) or replace ODS/pilot assembly.
- Replace thermocouple.
- 8. Contact Dealer or Charmglow .

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

TROUBLESHOOTING

Continued

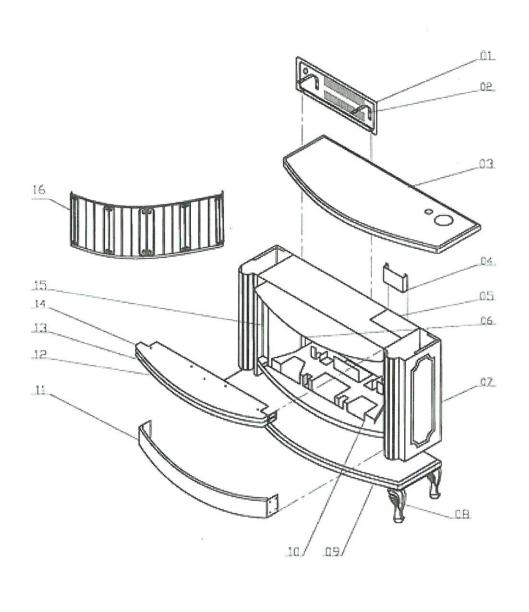
WARNING: If you smell gas

- Shut off gas supply.
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

IMPORTANT: Operating heater where impurities in the 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.	Metal is expanding while heat- ing or contracting while cooling.	This is common with most heaters. If noise is excessive, contact a qualified service person.
Heater produces unwanted odors.	 Heater is burning vapors from paint, hair spray, glues, etc. (See IMPORTANT statement above). Gas leak. See Warning Statement at top of page. 	 Ventilate room. Stop using odor causing products while heater is running. Locate and correct all leaks(see Checking Gas Connections).
Heater shuts off in use (ODS operates).	 Not enough fresh air is available. Low line pressure. ODS/pilot is partially clogged. 	 Open a window and/or door for ventilation. Contact a local natural or Propane/LP gas company. Clean ODS/pilot.
Gas odor even when control knob is in OFF position.	Gas leak. See Warning Statement at top of page. Control valve is defective.	 Locate and correct all leaks (see Checking Gas Connections). Contact Dealer or Charmglow.
Gas odor during combustion.	 Foreign matter is between control valve and burner. Gas leak. See Warning Statement at top of page. 	 Take apart the gas tubing and remove the foreign matter. Locate and correct all leaks (see Checking Gas Connections).
Moisture/condensation noticed on windows.	Not enough combustion/ventilation air.	Refer to Air for Combustion and Ventilation requirements.

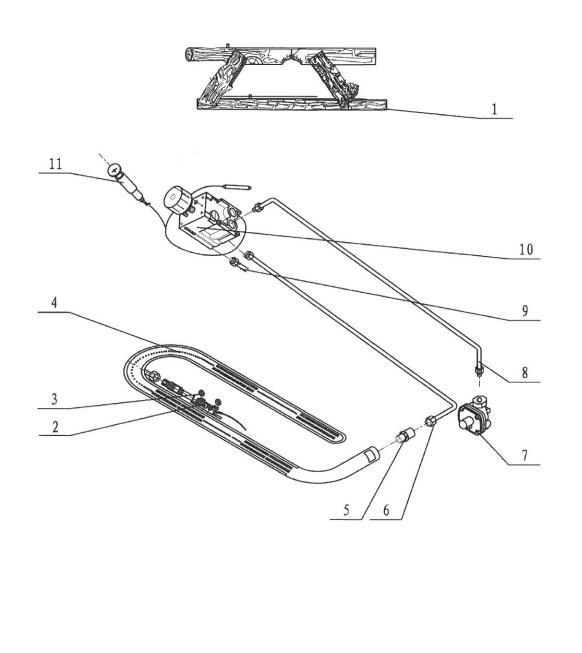
ILLUSTRATED PARTS BREAKDOWN CGN300TQ CGL300TQ



PARTS LIST CGN300TQ CGL300TQ

KEY NO	PART NO.	DESCRIPTION	OTY (NG)	OTY(LP)
1	QL016-03	Blower mount panel	1	1
2	SL005-01B	Blower bracket	1	1
3	QL012-03	Top panel	1	1
4	QL002-03	Top louver	1	1
5	QL015-03	Door	2	2
6	QL019-01A	Leg	1	1
7	QL013-03A	Pedestal	1	1
8	QL007-03	Fire box floor	1	1
9	QL009-03	Lower front panel	1	1
10	QL007-03A	fire box floor	1	1
11	QL001-03A	Column	2	2
12	QB29100	Screen	1	1

ILLUSTRATED
PARTS BREAKDOWN
CGN300TQ
CGL300TQ

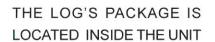


PARTS LIST CGN300TQ CGL300TQ

KEY NO.	PART NO.	DESCRIPTION	OTY(NG)	QTY(LP)
1	QB26300	Log set	1	1
0	ND1703X400X4	ODS Pilot	1	
2	ND1808X400X4	ODS Pilot		1
3	ML079-01	Self tapping screw for regulator	2	2
4	NBY28-025B3	Burner	1	
4	NBY28-160B3	Burner		1
5	QL027-01	Injector	1	
5	QL028-01	Injector		1
6	QB32300	Bumer outlet tube	1	1
7	NVR81F1-3	Regulator	1	1
8	QB31300	Inlet tube	1	1
9	QB33300	Pilot inelt tube	1	1
4.0	SIT545-218	Thermostat control valve	1	
10	SIT545-200	Thermostat control valve		1
11	ML083-02	Piezo ignitor	1	1
	SL029-01	Warning plat	1	1

PLACING INSTRUCTION

Follow the procedures below and the instruction drawings to put log sets in place to the gas stove(indoor vent-free).

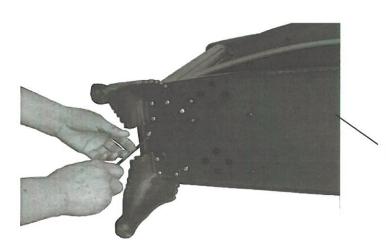


THEN REMOVE SCREEN AND TAKE OUT THE LOG'S PACKAGE





TO REMOVE SCREEN: REMOVE TWO SCREWS A TOP, LIFT UP AND THEN PULL OUTWARD

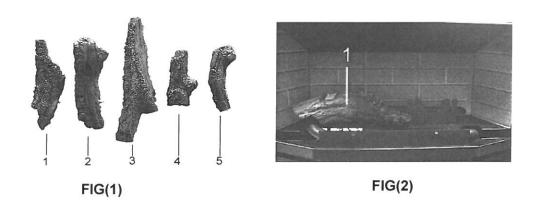


BOTTOM PANEL

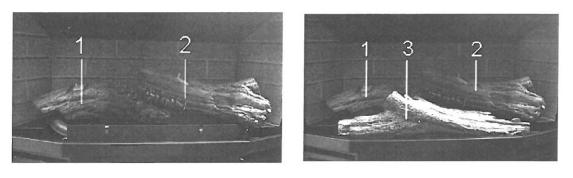
NOTICE: THE CORRECT POSITION OF THE LOGS SHOULD NOT IMPINGE ON THE FLAME.

INSTALLATION INSTRUCTIONS FOR LOG SETS

1. All logs



STEP 1: Install the log 1 on the left rear angle iron. see FIG(2)

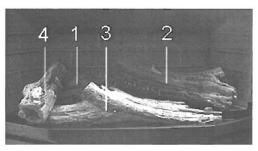


FIG(3) FIG(4)

STEP 2: Install the log 2 on the right rear angle iron. see FIG(3)

STEP 3: Install the log 3 on the front angle iron. See FIG(4).

STEP 4: Insert the pinhole on the upper part of log 4 into the pin on the left side of log 1. Place the lower part of log 4 on the flat roof at the left side of log 3 See FIG(5).





FIG(5)

FIG(6)

STEP 4: Insert the pinhole on the upper part of log 5 into the pin on the log 2. Place the lower part of log 5 on the flat roof at the left side of log 3. See FIG(6).

WARRANTY INFORMATION

KEEP THIS WARRANTY

Model	
Serial No.	4//
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 Charmglow COMPACT VENT-FREE FIREPLACE SYSTEM

Charmglow warrants this product to be free from defects in materials and components for five (5) years from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty, the Bill of Sale or cancelled check must be presented.

This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this heater to proper operating condition and an allowance for labor when provided by a Charmglow Authorized Service Center. Warranty part(s) MUST be obtained through authorized dealers of this product and/or Charmglow 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 those failed or damaged as a result of misuse, accidents, lack of proper maintenance or defects caused by improper installation. Travel, diagnostic cost, labor, transportation and any and all such other costs related to repairing a defective heater will be the responsibility of the owner.

TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT, THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES AND LIMITS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES. INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO FIVE (5) YEARS ON ALL COMPONENTS FROM THE DATE OF FIRST PURCHASE. Charmglow'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND RITE-TEMP SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow a limitation on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages. 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 please write to:

THE HOME DEPOT 2455 PACES FERRY ROAD N.W. ATLANTA, GA 30339

Patent Pending

QL058-03H