



INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL



Chimenea

OUTDOOR GAS FIREPLACE MODELS CHR-2 CHG-2



**EFFECTIVE DATE
JUNE, 2001**

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

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

WARNING: For Outdoor Use Only.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

AVERTISSEMENT: Si les informations dans ce manuel ne sont pas exactement suivies, un feu ou une explosion peut en résulter causant des dommages à la propriété, des blessures corporelles ou la mort.

- Ne pas entreposer ou employer de la gazoline ou d'autres vapeurs ou liquides inflammables à proximité de cet appareil ou tout autre appareil.
- Que faire si vous sentez le gaz.
 - N'essayer pas d'allumer un appareil.
 - Ne toucher pas un interrupteur élec-trique; n'employer pas un téléphone dans le bâtiment.
 - Appeler immédiatement votre fournis-seur de gaz en employant le téléphone de votre voisin. Suivre les instructions du fournisseur de gaz.
 - Si vous ne pouvez pas contacter votre fournisseur de gaz, appeler le poste de pompiers.
- L'installation et le service doivent être exécutés par un installateur qualifié, une agence d'entretien ou un fournisseur de gaz.

AVERTISSEMENT: Pour Utilisation à l'Extérieur Seulement.

AVERTISSEMENT: Si l'installation, l'ajustement, l'altération, le service ou l'entretien est incorrectement fait, des dommages à la propriété ou des blessures peuvent s'en suivre. Lire complètement les instructions pour l'installation, le fonctionnement et l'entretien avant d'installer ou de réparer cet équipement.

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IMPORTANT WARNINGS

**For Outdoor Use Only.
If Stored Indoors, Detach and Leave Cylinder Outdoors.**

- Read instructions before lighting.
- If ignition does not immediately take place, turn the gas control knob to OFF, wait 5 minutes, and repeat the lighting procedure.
- Certain materials or items, when stored under the outdoor gas fireplace, will be subjected to radiant heat and could be seriously damaged.
- CAUTION: The LP gas pressure regulator provided with this outdoor gas fireplace must be used. This LP regulator is set for an outlet pressure of 11 inches water column.
- The gas supply must be turned off at the LP gas supply cylinder when this outdoor gas fireplace is not in use.
- The LP gas supply cylinder must be disconnected when this outdoor gas fireplace is not in use.
- Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
- Young children should be carefully supervised when they are in the area of the outdoor gas fireplace.
- Clothing or other flammable materials should not be hung from the outdoor gas fireplace, or placed on or near the outdoor gas fireplace.
- Any guard or other protective device removed for servicing the outdoor gas fireplace must be replaced prior to operating the outdoor gas fireplace.
- Installation and repair should be done by a qualified service person. The outdoor gas fireplace should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required as necessary. It is imperative that control compartment, burners and circulating air passageways of the outdoor gas fireplace be kept clean.
- DO NOT put anything around the outdoor gas fireplace that will obstruct the flow of combustion and ventilation air.
- DO keep the outdoor gas fireplace area clear and free from combustible material, gasoline and other flammable vapors and liquids.
- Do make visual check of burner flames. Clean and replace damaged parts.
- Lire les instructions avant d'allumer l'appareil.
- Si l'appareil ne s'allume pas immédiatement, tournez le bouton de commande de gaz dans la position fermée, attendez 5 minutes puis procéder de nouveau à l'allumage.
- Certains matériaux ou articles lorsqu'ils sont entreposés sous le radiateur pour patio, seront exposés à la chaleur radiante et peuvent être endommagés.
- MISE EN GARDE: Vous devez utiliser le régulateur de gaz PL de pression à gaz fourni avec ce radiateur pour patio. Ce régulateur de gaz PL est réglé pour une pression de sortie de 11 pouces de colonne d'eau.
- L'alimentation du gaz doit être fermée à la bouteille de gaz PL lorsque ce radiateur pour patio n'est pas utilisé.
- La bouteille d'alimentation en gaz PL doit être débranchée lorsque ce radiateur pour patio n'est pas utilisé.
- Les enfants et les adultes doivent être avisés des dangers des parois très chaudes et doivent rester loin pour éviter les brûlures ou l'allumage des vêtements.
- Les petits enfants doivent être surveillés étroitement lorsqu'ils sont au même endroit que le radiateur.
- Les vêtements ou d'autres matériaux inflammables ne doivent pas être suspendus, placés sur ou près du radiateur.
- Si un écran ou tout autre dispositif de sécurité est enlevé lors d'une réparation du radiateur, celui-ci doit être replacé avant de remettre l'appareil en marche.
- L'installation et la réparation doivent être faites par une personne qualifiée. Le radiateur doit être inspecté avant l'usage et au moins une fois par année par une personne qualifiée. Si cela est nécessaire, de fréquents nettoyages seront requis. Il est impératif que les compartiments de commandes, les brûleurs et les passages de circulation d'air de l'appareil soient gardés propres.
- NE RIEN mettre autour du radiateur pour patio qui pourrait obstruer la circulation d'air de combustion et de ventilation.
- Les matériaux combustibles, la gazoline ou les vapeurs et liquides inflammables ne doivent jamais être dans le même endroit que le radiateur pour patio.
- Faire une inspection visuelle de la flamme du brûleur. Nettoyer et remplacer les pièces défectueuses.

FOR YOUR SAFETY

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

AVERTISSEMENT

Ne pas entreposer ni utiliser de l'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de l'appareil, ni de tout autre appareil.

SPECIFICATIONS

Instructions to Installer

1. Installer must leave instruction manual with owner after installation.
2. The owner shall retain this instruction manual for future reference.
3. Installer must have owner fill out and mail warranty card supplied with outdoor gas fireplace.
4. Installer should show owner how to start and operate outdoor gas fireplace.

General Information

This appliance is design certified in accordance with requirement 4.96 US and CGA certification requirement CR97-003 by the Canadian Standards Association as an outdoor gas fireplace. The outdoor gas fireplace shall be installed according to these instructions.

Important

All correspondence should refer to complete Model number, Serial number and type of gas.

Any alteration of the original design, installed other than as shown in these instructions or use with a type of gas not shown on the rating plate is the responsibility of the person and company making the change.

Attention: Remove rain cap from top of stack before operating outdoor gas fireplace.

Models	CHR and CHG	
Input BTU/HR	Natural Gas	LP Gas
High	35,000	32,000
Medium	23,000	29,000
Low	20,000	27,000
Height	49"	
Width	23"	
Gas Inlet	3/8" flare	
Accessories		
GHK-12	Quick Disconnect 12 Ft. Hose LP & Nat.	
CHKN-1	Natural Gas Conversion Kit	
CHKT-1	Tank Cover for 20lb. Cylinder	

Note: This outdoor gas fireplace is not portable.

Attention: Solid fuels shall not be burned in this outdoor gas fireplace.

Do not use this outdoor gas fireplace if any part has been under water. Immediately call a qualified service technician to inspect the outdoor gas fireplace and to replace any part of the control system and any gas control which has been under water.

PROPANE (LP) GAS WARNINGS

CUSTOMER WARNING:

- Know the odor of LP Gas. If you hear, see or smell leaking LP gas, immediately get everyone away from the cylinder and call the Fire Department. Do not attempt repairs.
- LP Gas is heavier than air and may settle in low places while dissipating.
- Contact with the liquid contents of cylinder will cause freeze burns to the skin.
- Do not allow children to tamper or play with cylinder.
- When not connected for use, keep cylinder valve turned off. Self contained outdoor gas fireplaces shall be limited to a cylinder of 20 lb. capacity or less.
- Do not use, store or transport cylinder where it would be exposed to high temperatures. Relief valve may open allowing a large amount of flammable gas to escape.
- When transporting, keep cylinder secured in an upright position with cylinder valve turned off.

AVERTISSEMENTS POUR LE CONSOMMATEUR:

- Savoir reconnaître l'odeur du gaz PL. Si vous entendez un sifflement ou si vous sentez une odeur de gaz PL, éloignez immédiatement toutes les personnes qui sont près de la bouteille et appelez le service d'incendie. N'essayez pas de réparer.
- Le gaz PL étant plus lourd que l'air, il peut s'accumuler près du sol avant de se dissiper.
- Tout contact de la peau avec la phase liquide de la bouteille causera des brûlures par le froid.
- Ne laissez pas les enfants manipuler ou jouer avec la bouteille.
- Lorsque la bouteille n'est pas raccordée à l'appareil, gardez la soupape de la bouteille fermée. Les radiateurs autonomes pour patio doivent utiliser une bouteille d'une capacité maximale de 20 lb. (9kg) ou moins.
- Ne pas utiliser, entreposer ou transporter la bouteille en l'exposant à une température excessive car la soupape de sûreté risque de s'ouvrir et de laisser échapper une grande quantité de gaz inflammable.
- Pour transporter une bouteille de gaz PL, la maintenir solidement fixée en position verticale avec la soupape fermée.

LP GAS CYLINDER INFORMATION

WARNING: Inspect the fuel supply hose before each use of the outdoor gas fireplace. If it is evident there is excessive abrasion or wear, or the hose is cut, it must be replaced prior to the outdoor gas fireplace being put into operation. Contact Empire Comfort Systems, Inc. to obtain a replacement fuel supply hose.

- LP-gas supply cylinder to be used must be constructed and marked in accordance with the specifications for LP-gas cylinders of the U.S. Department of Transportation (DOT) or the National Standard of Canada, CAN/CSA-B339, *Cylinders, Spheres and Tubes for the Transportation of Dangerous Goods*.
- The cylinder supply system must be arranged for vapor withdrawal.
- The cylinder used must include a collar to protect the cylinder valve.

- This outdoor gas fireplace shall be used only outdoors in a well-ventilated space and shall not be used in a building, garage or any other enclosed area.
- If the outdoor gas fireplace is not in use, the gas must be turned off at the supply cylinder.
- Storage of an outdoor gas fireplace indoors is permissible only if the cylinder is disconnected and removed from the outdoor gas fireplace. Cylinders must be stored outdoors in a well-ventilated area out of the reach of children. Disconnected cylinders must have threaded valve plugs tightly installed and must not be stored in a building, garage or any other enclosed area.
- The pressure regulator and hose assembly supplied with the outdoor gas fireplace must be used. A replacement pressure regulator and hose assembly for this outdoor gas fireplace can be obtained by contacting Empire Comfort Systems, Inc.

OVERFILL PROTECTION DEVICE (OPD) ON 20 LB. PROPANE CYLINDER

Attention: Consumer be advised, this outdoor gas fireplace must be connected to an LP gas cylinder incorporating an OPD.

The OPD will help reduce the potential for the overfilling of the propane cylinder, thus reducing the possibility of hydrostatic relief valve discharges.

Overfill Protection Device Valve Function

1. As the cylinder is filled, the rising level of liquid propane lifts the float to the stop position to prevent dangerous overfilling. Does not affect the filling process or use of the cylinder.
2. At a safe filling level, the float cam triggers the pin to fall into the recess of the cam, sealing this path off and preventing any more liquid propane from flowing through the lower valve body into the cylinder.
3. The propane builds up pressure in the chamber (center spring) and pushes the piston up to form a seal, effectively stopping the filling process.
4. The use of the propane from the cylinder allows the OPD to reset itself for the next fill.
5. Connects to all standard or quick-connect couplings.
6. The Overfill Protection Device affects incoming liquid propane flow only. Does not affect normal propane gas discharge when properly connected to the appliance regulator.
7. All propane cylinders should be filled by qualified professionals only.

Purging

1. Due to the decreased Btu delivery, purging may take longer.
2. To increase the speed of purging, open the outage valve during release.
3. Reminder: Each new cylinder must be purged before filling.
4. For purging instructions, refer to NPGA 133-89(a).

Btu Delivery

The OPD valve has a size 56 orifice through which the propane is released for consumption. Depending on the propane's temperature and pressure, the release from the cylinder is approximately 125,000 Btu/hour.

IMPORTANT INFORMATION ABOUT YOUR NEW TYPE-1 OUTDOOR GAS FIREPLACE CONNECTION

Read all outdoor gas fireplace and related product literature before connecting or using your outdoor gas fireplace, and read the following information completely before attempting to connect your outdoor gas fireplace to a propane cylinder.

Keep these instructions in a safe place. You may need to refer to them when connecting other cylinders after filling.

Your new outdoor gas fireplace regulator is equipped with a coupling nut. Do not attempt to connect any propane cylinder not equipped with a mating **Type-1 cylinder valve**.

Connecting the Regulator to the Valve (Figure 1)

This **Type-1 cylinder valve** contains a backcheck which is designed to prevent propane from flowing until the valve is properly connecting to a regulator.

When connecting the **regulator** to the **Type-1 cylinder valve**, be sure the **pressure relief valve** is directed away from the front of the outdoor gas fireplace and away from any building. If the **pressure relief valve** should open, the propane will then be directed where it is likely to do the least harm if ignited.

WARNING: Do not insert any foreign objects into the valve outlet. You may damage the backcheck. A damaged backcheck can be the source of a leak. Leaking propane may result in explosion, fire, personal injury or death.

Regulator Coupling Nut

The **coupling nut** connects to the large outside threads on the **valve outlet**. To complete the connection, follow the steps below.

1. Be sure main burner knob is in the **OFF** position.
2. Make sure the **cylinder valve handwheel** is in the closed position. Turn clockwise (left to right) to a full stop.
3. Remove the protective caps from the cylinder valve and **coupling nut**.
4. Turn the coupling nut clockwise (left to right), to tighten to a full stop. Be sure the coupling nut is not cross-threaded.

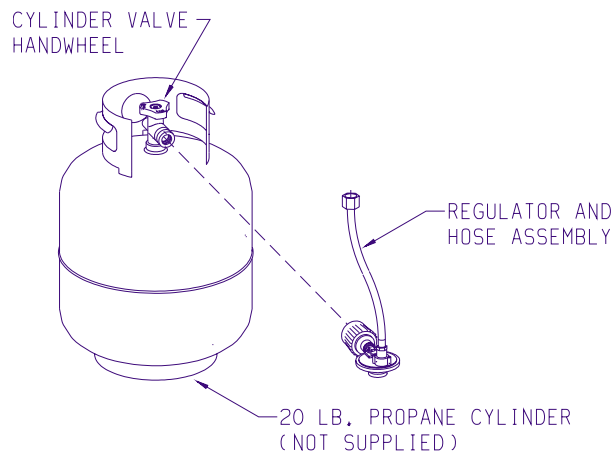


Figure 1

Qualified Installing Agency

Installation and replacement of gas piping, gas utilization equipment or accessories and repair and servicing of equipment shall be performed only by a qualified agency. The term "qualified agency" means any individual, firm, corporation or company which whether in person or through a representative is engaged in and is responsible for (a) the installation or replacement of gas piping or (b) the connection, installation, repair or servicing of equipment, who is experienced in such work, familiar with all precautions required and has complied with all the requirements of the authority having jurisdiction.

The installation must conform with local codes or, in the absence of local codes, with either the American National Standard (National Fuel Gas Code) known as NFPA 54 and ANSI Z223.1 or CAN/CGA-B149.1 NATURAL GAS INSTALLATION CODE or CAN/CGA-B149.2 PROPANE INSTALLATION CODE.

**Available from the American National Standards Institute, Inc., 11 West 42nd St., New York, NY 10036.*

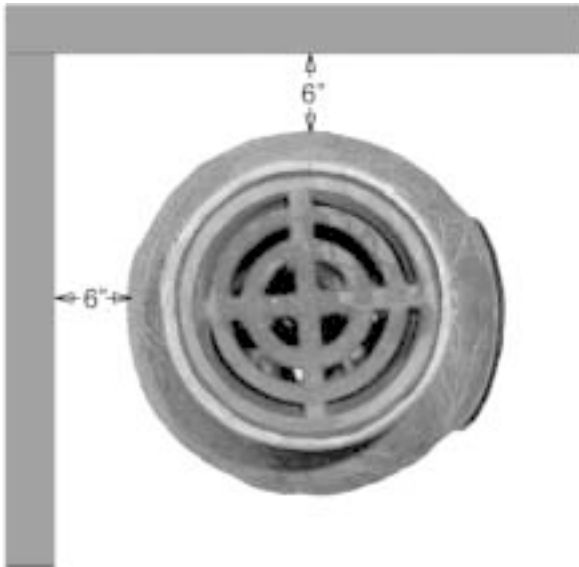


Figure 2

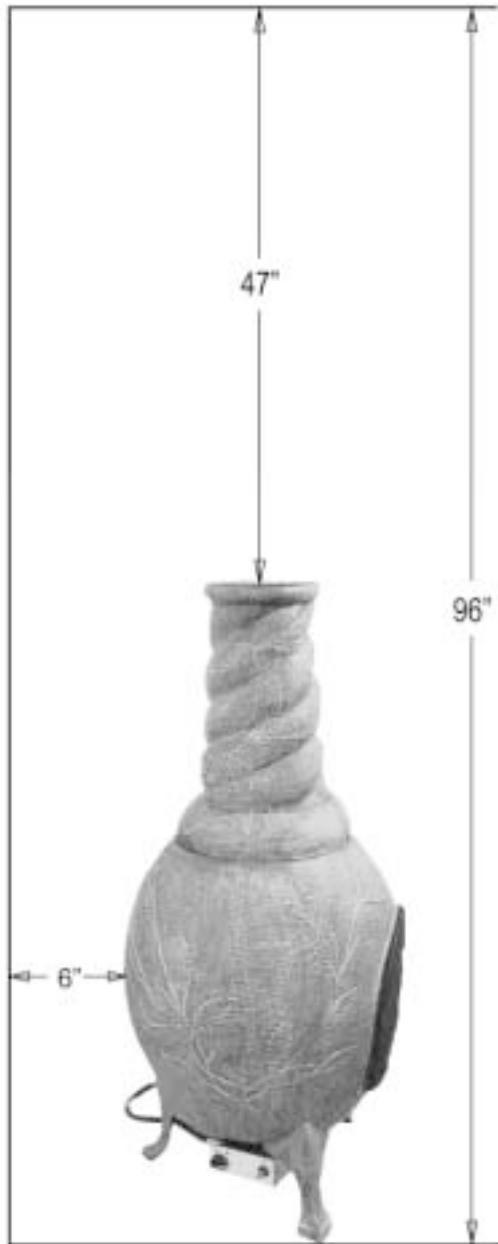


Figure 3

CLEARANCES

Minimum Clearances From Combustible Construction (Figures 2 and 3)

Side	6"
Rear	6"
Top	47" from top of unit or 96" from floor
Floor	Combustible

Minimum Clearances From Combustible Construction with 20 lb. Propane (LP) Tank Attached to Outdoor Gas Fireplace (Figure 4)

Side	6"
Side, Corner Installation	7"
Top	47" from top of unit or 96" from floor
Floor	Combustible

Warning: When selecting a location for your outdoor chimenea, it is important to consider that any ceiling, overhang or other surface located above the chimenea can discolor due to heat or carbon particles generated while unit is operating.

Attention: Rain cap must be placed on outdoor chimenea when not in use. Rain cap will prevent rain from entering top of chimenea. Without rain cap in place, rain can wash soot off logs on burner. Soot from logs will stain your patio or deck.

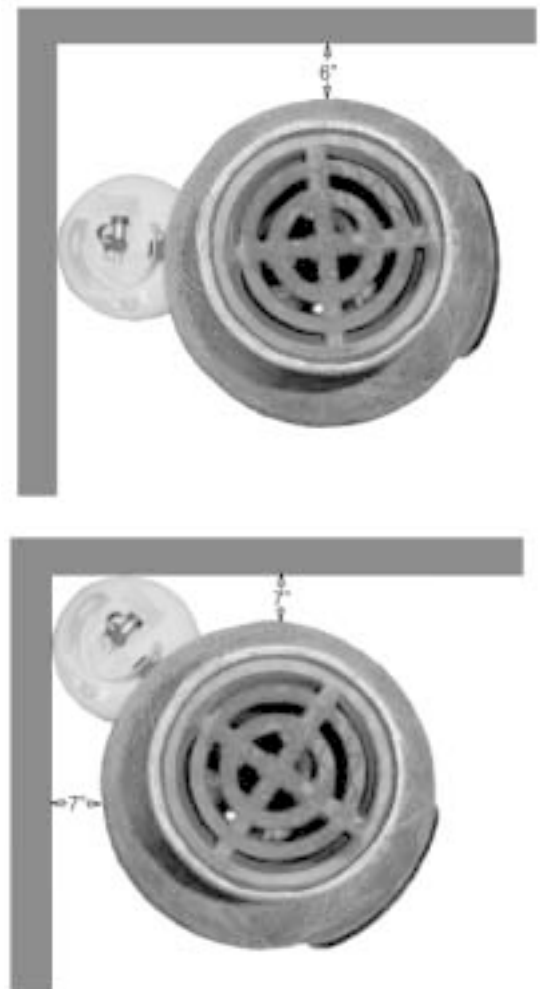


Figure 4

SET-UP INSTRUCTIONS

1. Remove packing material from top of box.
2. Lift chimney section out and set aside.
3. Remove remaining items and packing from inside outdoor gas fireplace firebox.
4. Lift firebox out of box and sit on flat surface near desired final location. Leave adequate room around outdoor gas fireplace to work. Locking ring for chimney should be facing down.

Figure 5

5. Remove washers and nuts from three legs. Install the three legs using the bolts, washers and nuts provided. Reach through the opening in the outdoor gas fireplace to tighten the leg bolts securely.



Figure 5

6. Invert the outdoor gas fireplace firebox to sit on its legs.
7. Remove the 4 5/8" bolt and 5/16 nut that are holding the burner in place. Carefully remove the burner from the firebox. Remove the 2 screws and nuts that are holding the hold down bar in place. Remove the packing materials from the burner. Unpack the cast iron logs and set aside.

Figures 6 and 7

8. Holding the burner assembly securely with two hands, tip the burner to a position where it will fit through the front door opening. The gas inlet plumbing, control panel and regulator hose assembly should be pointing to the left and somewhat down as you maneuver the burner through the door. Guide the regulator hose and control panel through the large hole in the bottom of the outdoor gas fireplace. The burner should come to rest on the three flat tabs that protrude from the firebox wall and the control panel should be approximately centered between the left front leg and the rear leg. The burner should be repositioned if needed so that there is an equal gap of approximately 1/2" between the outer curved perimeter of the burner and inner firebox wall. The flat edge on the rear of

the burner should be parallel with an imaginary line connecting the front legs.

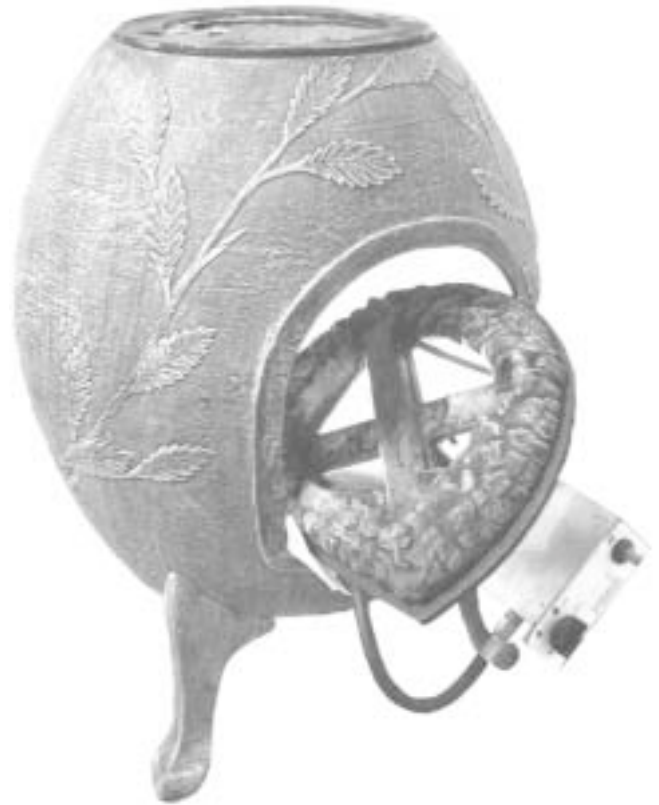


Figure 6



Figure 7

Figure 8

9. The installation sequence is to interlock the flicker shield halves first to prebend the tabs. Place the left half under the outdoor gas fireplace with the cut-out around the pipe. Interlock the right half with the left half.

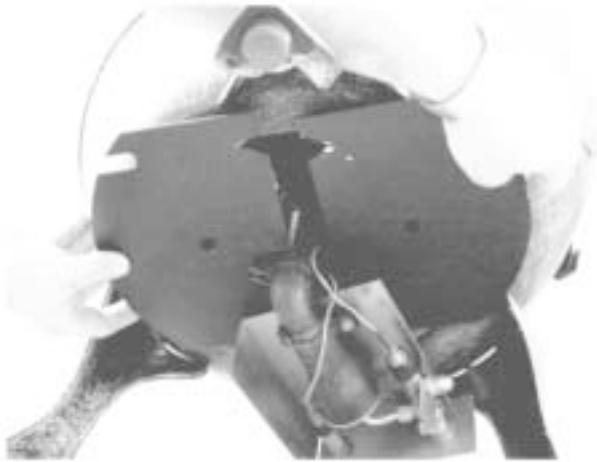


Figure 8

10. Place the hold-down bar under the flicker shield. Push the flicker shield and hold-down bar up to the bottom of the outdoor gas fireplace.

Figure 9

11. Insert the 4 5/8" hold down bolt through the hole in hold down bar and flicker shield and rear burner cross support. Secure with 5/16" nut from inside of firebox.



Figure 9

12. Move the outdoor gas fireplace to its permanent location. Follow installation instructions to determine the proper distances to adjacent combustible materials. Adequate room must be left behind the outdoor gas fireplace for the LP tank and to the left side for access to the control panel.

Figure 10

13. Install the three cast iron logs. Install the diagonal center bottom (#1) log first. Holes in (#1) log are to be positioned closer to front of burner assembly. Add the left cross (#3) log and then the right cross (#2) log. Recesses, tabs and holes are provided to locate the logs properly. See Figure 10 for proper placement. Installation of logs is completed.

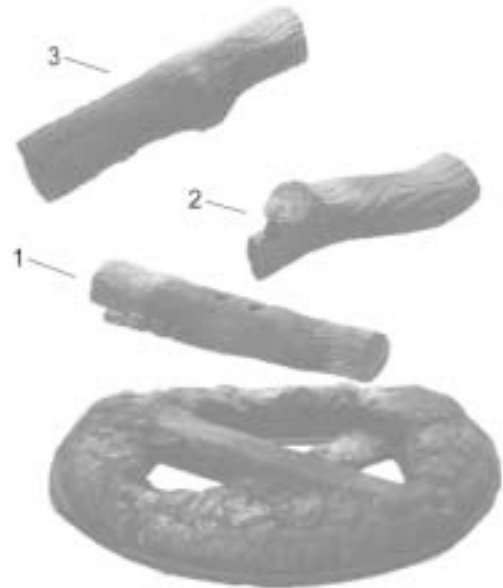


Figure 10

Refer to the following warning.

Warning: Failure to position the parts in accordance with this photograph or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

Figure 11

14. Attach the 20 lb. LP tank support hook to the hole located in the rear center of the outdoor gas fireplace firebox wall. This hole is approximately 18" from the floor. Use the bolt, washer and nut provided and tighten by reaching into the firebox.



Figure 11

15. Set the LP tank in place. The gas outlet fitting on the tank should be facing toward the left when viewed from the front. The alternate is to face the outlet connection toward the rear. Lift the tank slightly and hook onto the tank support hook. One of the holes in the tank handle will fit over the hook.
16. Connect the QCC-1 fitting on the regulator hose to the fitting on the tank and tighten securely by hand.

Figure 12



Figure 12

17. Located on bottom of stack are two securing bolts. Unscrew securing bolts approximately 1/2". **Attention:** Do not remove securing bolts from bottom of stack. Place the stack on top of the body aligning the two securing bolts on the chimney with the large end of the "keyhole" slots on the securing ring. Once the chimney is in place, twist to lock it down. Note that aesthetic pattern on the chimney should align with that on the firebox section. If it doesn't, remove the chimney, rotate 180 degrees and reinstall.
18. Insert the cast iron stack restrictor plate in the top of the chimney.
19. To install door screen, hook top of door screen onto firebox. Raise door screen upward. Pivot bottom of door screen inward to hook bottom of door screen, and then lower screen.
20. You are now ready to light your outdoor gas fireplace. See the lighting instructions before proceeding.

WARNING: Failure to read and follow those instructions may result in a fire or explosion causing property damage, personal injury or loss of life.

GAS CONVERSION INSTRUCTIONS

Warning: Conversion must be done by a qualified service technician.

Conversion Instructions from Propane (LP) gas to Natural gas.

1. If installed, turn off gas supply to outdoor gas fireplace.
2. If installed, remove Propane (LP) gas hose from gas valve.
3. Remove electrode wire piezo ignitor.
4. Remove thermocouple from gas valve.
5. Remove two (2) bolts and two (2) nuts from valve bracket at bottom of outdoor gas fireplace.
6. Carefully remove valve bracket from outdoor gas fireplace. As the valve bracket is being removed from outdoor gas fireplace an air shutter and spring will be removed with the main burner orifice from the end (venturi) of main burner. **Do not lose the spring or air shutter.**
7. Remove Propane (LP) main burner orifice and tubing from gas valve.
8. Attach Natural gas main burner orifice **MARKED 38** and tubing onto gas valve.
9. Place **1/2" diameter air shutter washer** inside air shutter.
10. Place small diameter end of spring over Natural gas main burner orifice. Hold spring in place as you place air shutter (with lip of air shutter facing away from main burner orifice) over main burner orifice.
11. Continue to hold air shutter and spring as you insert Natural gas main burner orifice into end (venturi) of main burner.
12. Attach valve bracket at bottom of outdoor gas fireplace with two (2) bolts and two (2) nuts from Step 5.
13. Adjust air shutter to **closed** position.
14. Attach thermocouple into gas valve.
15. Insert electrode wire into piezo ignitor.
16. Attach **conversion label** onto top portion of rating plate.
17. Attach 3/8" flared fitting from Natural gas supply line or hose kit onto gas valve.
18. Turn on Natural gas supply to outdoor gas fireplace and check all gas connections for leaks with soap solution, watching for bubbles on all gas connections.
19. The Natural gas inlet supply pressure to the gas valve on outdoor gas fireplace will be from a minimum of 7.0" w.c. (1.743 kPa) for the purpose of input adjustment to a maximum of 10.5" w.c. (2.615 kPa).
20. Ignite and operate outdoor gas fireplace according to lighting instructions on Page 9.
21. **Attention:** The main burner flame must be checked for proper flame characteristics, as outlined on Page 10.
22. Gas conversion is completed.

LEAK TESTING

WARNING! Before lighting your outdoor gas fireplace be sure to read this section carefully.

Turn gas valve knob to the OFF position. Inspect the gas supply piping or hose prior to turning the gas ON. If there is evidence of cuts, wear, or abrasion, it must be replaced prior to use. The replacement pressure regulators and hose assembly must be the type specified by the manufacturer. Do not use the outdoor gas fireplace if the odor of gas is present.

For LP gas, the pressure regulator and hose assembly supplied with the unit must be used. Install the regulator into the 20 lb. propane cylinder and check the hose and regulator connections for leakage with a soap and water solution before operating your outdoor gas fireplace. Be sure there is gas in the 20 lb. propane cylinder.

- 1. Before lighting your outdoor gas fireplace, check all connections for leaks using a mild soapy water solution. DO NOT use matches, lighters or flame to check for leaks, — you could cause an explosion. With the outdoor gas fireplace burner control turned OFF, slowly open the cylinder valve by turning the handwheel counterclockwise (right to left). Apply mild soapy water to the connection. If bubbles appear, a leak is indicated.** Do not put the product in service! **Immediately close the cylinder valve handwheel for propane gas or the manual shutoff valve for natural gas. A qualified service person must be contacted to make the needed repairs.**
- 2. DO NOT SMOKE WHILE LEAK TESTING!**
3. For LP gas (propane) models, leak test with a full propane cylinder.
- 4. For systems other than self-contained LP gas (propane) systems:**
 - A. The outdoor gas fireplace and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5kPa).
 - B. The outdoor gas fireplace must be isolated from the gas supply piping system by closing its own manual shut off valve during any pressure testing of the gas supply piping system at pressures equal to or less than 1/2 psig (3.5kPa).

5. After the installation of all gas-related items: i.e. hose, regulator, LP gas cylinder, natural gas hose or natural gas regulator; the outdoor gas fireplace control valve should be turned OFF and the gas turned ON. This is known as "charging the system." All gas connections must be checked with a soapy solution while the whole system is under pressure. To make a soap solution, mix together an equal amount of liquid detergent and water.
6. Apply soap mixture to all gas connections. Soap bubbles will appear if there is a leak. Tighten connections to make a proper seal.

If you cannot stop a gas leak turn off the gas supply and call your local gas utility, or the dealer from whom the outdoor gas fireplace was purchased.

Only those parts recommended by the manufacturer should be used on the outdoor gas fireplace. Substitutions will void the warranty. Do not use the outdoor gas fireplace until all connections have been checked and do not leak.

A gas system MUST be tested yearly, or whenever the LP gas cylinder is replaced, or any other gas system part.

WARNING: Locate the gas hose out of pathways where people may trip over it or in areas where the hose may be subject to accidental damage.

When lighting your outdoor gas fireplace always keep your face and body as far away from the burner housing screen as possible.

GAS PRESSURE

Natural Gas



The Natural gas models will have an inlet pressure to the gas valve from a minimum of 7.0" w.c. (1.743kPa) for the purpose of input adjustment to a maximum of 10.5"w.c. (2.615kPa).

Propane Gas

The Propane gas models will have a manifold pressure of approximately 11.0"w.c. (2.739kPa) at the orifice holder with the inlet pressure to the gas valve from a minimum of 11.0"w.c. (2.739kPa) for the purpose of input adjustment to a maximum of 13.0"w.c. (3.237kPa).


A 1/8" (3mm) N.P.T. plugged tapping, accessible for test gauge connection, is located on the orifice holder.

LIGHTING INSTRUCTIONS


1. Push in gas control knob slightly and turn clockwise  to "OFF". Note: Knob cannot be turned from "HIGH" to "OFF" unless knob is pushed in slightly. Do not force.
2. Wait five (5) minutes before attempting to light the burner from a cold start or when a hot outdoor gas fireplace is relit.
3. Turn knob on gas control counterclockwise  to "HIGH".
4. Push in control knob all the way and hold in. Immediately light the burner with the piezo ignitor. Continue to hold the control knob in about one (1) minute after the burner is lit. Release knob, and it will pop back up. Burner should remain lit. If it goes out, repeat steps 1 through 4.

If knob does not pop up when released, stop and immediately call your service technician or gas supplier.

If the burner will not stay lit after several tries, turn the gas control knob to OFF and call your service technician or gas supplier.

5. Turn gas control knob counterclockwise  from "HIGH" to "MED." or to "LOW".

To Turn Off Gas to Outdoor Gas Fireplace

1. Push in gas control knob slightly and turn clockwise  to "OFF". Do not force.
2. Turn off gas supply to outdoor gas fireplace when not in use.

MAINTENANCE AND SERVICE

ADJUSTING FOR PROPER FLAME

Air Shutter (Figure 13)

Each burner is tested and adjusted at the factory prior to shipment. However, variations in the local gas supply may make it necessary to adjust the burner. The flames of the burner should be visually checked. The burner flames should be yellow. If the burner does not operate correctly, check if the air shutter or burner ports are blocked by dirt, debris, spider webs, etc. and proceed with air shutter adjustment. The amount of air which is drawn into a burner is governed by a metal cup at the inlet of the burner called an air shutter.

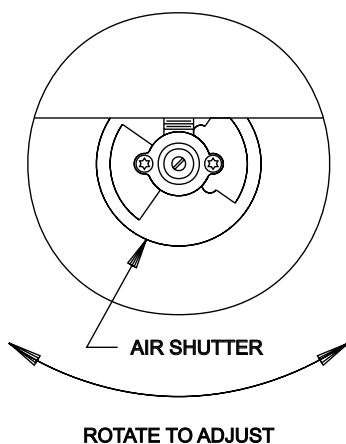


Figure 13

Air Shutter Adjustment

Be careful as the burner may be very HOT! The air shutter is located behind the valve cover. There is an access area at the bottom of the valve cover where you can adjust the air shutter, with your fingers. A sooty, yellow flame indicates insufficient air. Open the air shutter to allow more air to the burner. If flame is noisy, blows out, or lifts away from burner or will not light, this indicates too much air. Close the air shutter to decrease the amount of air to the burner.

BURNER MAINTENANCE AND CLEANING

Inspect the burner before each use of the outdoor gas fireplace. The burner must be replaced prior to the outdoor gas fireplace being put into operation if it is evident that the burner is damaged. A replacement burner for this outdoor gas fireplace can be obtained by contacting Empire Comfort Systems, Inc.

Flashback from Spiders (Figure 14)

In some areas of the country, spiders or small insects have been found to create "flashback" problems. The spiders spin webs and/or insects build nests in the burner venturi tube. The web and/or nests can lead to gas flow obstruction which results in a "flashback" (a fire in the venturi tube). Clean interior of burner with a flexible, soft bristle, bottle brush in order to remove spiders, spider webs and debris. Apply air pressure to burner ports to remove debris.

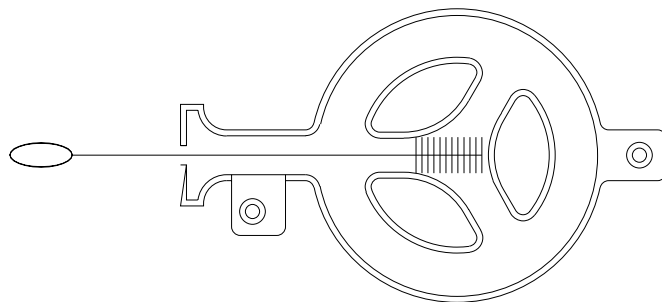


Figure 14

Burner Orifice Cleaning

Apply air pressure into the burner orifice and orifice tubing to remove spiders, spider webs, dust, lint and debris. A flexible, soft bristle, bottle brush can be used to clean the orifice tubing.

MAIN BURNER FLAME PATTERN (Figure 15)

Refer to the following photograph for proper main burner flame characteristics.



Figure 15

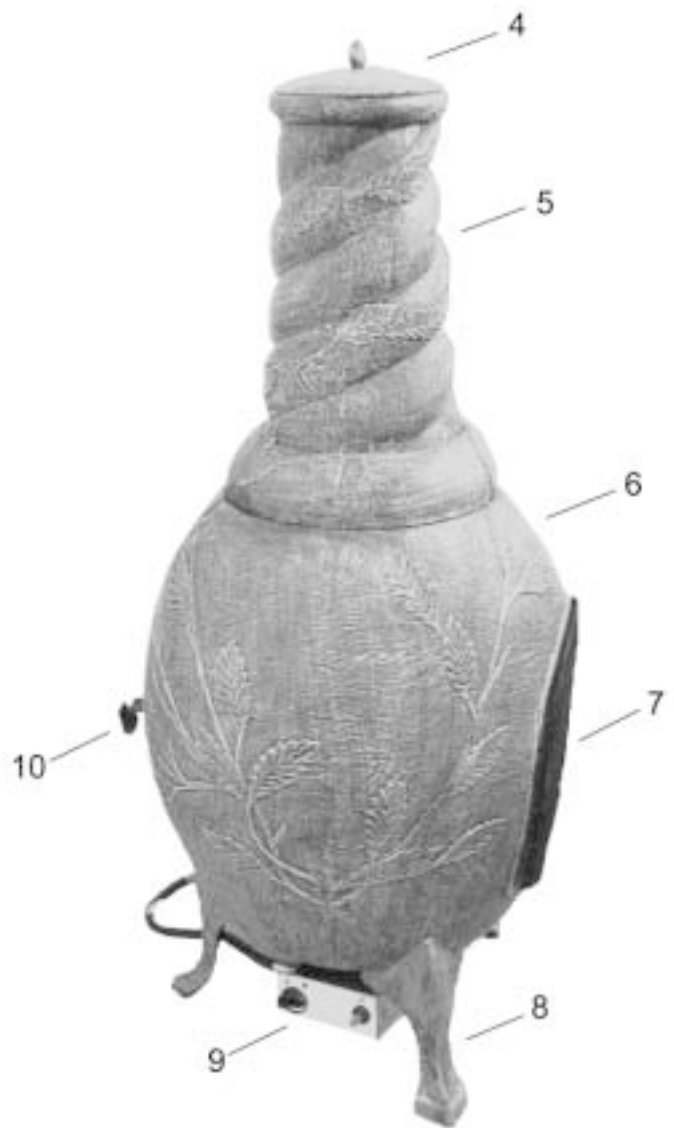
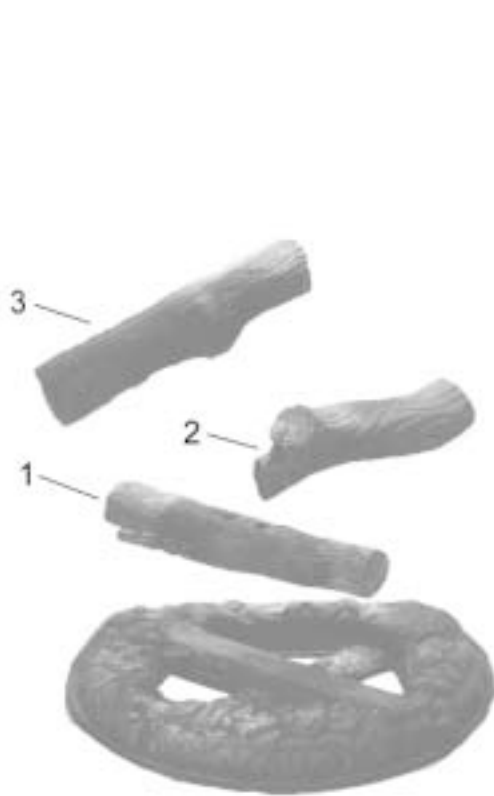
TROUBLE-SHOOTING

If your outdoor gas fireplace does not function properly, use the following checklist for possible solutions.

- 1. Fireplace won't light when the piezo ignitor is depressed.**
 - a. With the gas tuned off depress the piezo ignitor to check the spark. You should see a spark jump from tip of the electrode. If there is a spark, check the gas supply. Is the tank full? Is the line purged of air? Can you light the burner with a match?
 - b. Check air shutter adjustment, close as needed.
 - c. Check the orifice for blockage.
 - d. Is the electrode tip clean and free from debris?
 - e. Clean electrode tip.
- 2. Burner flame is yellow or orange and there is a smell of gas.**
 - a. Check the burner inlet for obstructions.
 - b. Check the air shutter for proper adjustment.
 - c. Check for spiders, spider webs and debris.
- 3. Low heat with control knob set on "HI."**
 - a. Is the fuel hose bent or kinked?
- 4. The smell of gas with flames appearing sooty yellow.**
 - a. Check for spiders or insects.
 - b. Spiders and insects can nest in the burner and cause a disruption in the flow of gas from the burner. This is dangerous and can cause a fire behind the valve cover, damaging the outdoor gas fireplace and making it unsafe to operate.
You should inspect the burner immediately if any of these conditions occur or persist.
- 5. The burner makes popping noises.**
 - a. Check air shutter adjustment.
 - b. Check burner for clogged ports.

PLEASE NOTE: When ordering parts, it is very important that **part number** and **description** of part coincide.

Index No.	Part Number	Description	Index No.	Part Number	Description
1	R-5647	BOTTOM LOG	9.3	R-5639	ORIFICE - LPG
2	R-5649	RIGHT CROSS LOG	9.4	R-5640	ORIFICE - NAT
3	R-5648	LEFT CROSS LOG	9.5	R-5641	SAFETY VALVE
4	R-5634	RAIN CAP WITH KNOB AND HANGER CLIP - RED	9.6	R-5642	THERMOCOUPLE
4	R-5659	RAIN CAP WITH KNOB AND HANGER CLIP - GREEN	9.7	R-3992	REGULATOR HOSE ASSEMBLY - LPG (26")
5	R-5631	CHIMENEA STACK CASTING - RED	9.8	R-2708	PIEZO IGNITOR
5	R-5657	CHIMENEA STACK CASTING - GREEN	9.9	R-5908	ELECTRODE AND WIRE ASSEMBLY
6	R-5630	CHIMENEA BODY CASTING - RED	9.10	R-5644	LABEL SET ON CHAIN (ATTACHED TO VALVE COVER)
6	R-5656	CHIMENEA BODY CASTING - GREEN	9.11	R-3357	VALVE SPRING
7	R-5651	DOOR SCREEN	9.12	R-3358	AIR SHUTTER
8	R-5633	LEG WITH RUBBER FEET - RED (3 REQ'D)	9.13	R-5645	VALVE KNOB
8	R-5658	LEG WITH RUBBER FEET - GREEN (3 REQ'D)	10	R-5653	TANK SECURING HOOK WITH BOLT, WASHER AND NUT
9	R-5636	BURNER ASSEMBLY	NOT SHOWN	R-5635	STACK RESTRICTOR PLATE
9.1	R-5909	CAST BURNER ASSEMBLY WITH PIPE AND VENTURI	NOT SHOWN	R-5646	BURNER MOUNTING BAR
9.2	R-5638	VALVE COVER	NOT SHOWN	R-5650	FLICKER SHIELD (2 REQUIRED)
			NOT SHOWN	R-5913	IGNITOR BRACKET



HOW TO ORDER REPAIR PARTS . . .

All parts listed in the Parts List have a Part Number. When ordering parts, first obtain the Model Number from the nameplate on your equipment. Then determine the Part Number (not the Index Number) and the Description of each part from the appropriate illustration and list. Be sure to give all this information . . .

Fireplace Model Number _____ Part Description _____
 Fireplace Serial Number _____ Type of Gas (Propane or Natural) _____
 Part Number _____

Do not order bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store. Order parts through your local dealer.

Shipments contingent upon strikes, fires, and all causes beyond our control.