



## Hibachi Grill

BBQ10900

### OWNER'S MANUAL

United States and Canada



© 2010 LMS, Inc.

Cal Spas Home Resort™

[www.calflamebbq.com](http://www.calflamebbq.com)

## **Installation / Assembly**

<b>Cabinet Cut-out Dimensions</b> . . . . .	<b>5</b>
<b>LP Gas</b> . . . . .	<b>6</b>
<b>Natural Gas</b> . . . . .	<b>8</b>
<b>Leak Testing Procedure</b> . . . . .	<b>9</b>
<b>Installing the Grill in a Barbecue Island</b> . .	<b>10</b>
<b>Griddle Placement</b> . . . . .	<b>11</b>
<b>Grill Lid</b> . . . . .	<b>11</b>

## **Using Your Grill**

<b>Grill Controls</b> . . . . .	<b>12</b>
<b>Basic Grill Operation</b> . . . . .	<b>13</b>
<b>Electronically Lighting the Grill</b> . . . . .	<b>14</b>
<b>Manually Lighting the Grill</b> . . . . .	<b>15</b>

## **Cleaning and Maintenance**

<b>Stainless Steel Care and Cleaning</b> . . . . .	<b>16</b>
<b>Covering Your Grill</b> . . . . .	<b>20</b>

## **Appendix**

<b>Removing and Replacing Burners</b> . . . . .	<b>21</b>
<b>Troubleshooting</b> . . . . .	<b>22</b>
<b>Converting from LP to NG</b> . . . . .	<b>25</b>
<b>Warranty</b> . . . . .	<b>28</b>
<b>Locating the Product Serial Number</b> . . . . .	<b>30</b>

### **Save these instructions!**

Copyright 2010 LMS, Inc. All rights reserved. Duplication without written consent is strictly prohibited.

Cal Flame ® is a registered trademark.

Due to continuous improvement programs, all models, operation, and/or specifications are subject to change without prior notice.

LTR50001096, Rev. A  
8/26/10

#### **CONTACT INFORMATION**

For customer service, please contact your authorized dealer immediately. If you need additional information and/or assistance, please contact:  
Customer Service Department  
1462 East Ninth Street  
Pomona, CA 91766  
Toll Free: 1-800-CAL-SPAS  
Fax: 1-909-629-3890

**[www.calflamebbq.com](http://www.calflamebbq.com)**

# Safety Instructions

**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.

## Placement and Location

**The Cal Flame hibachi grill is designed for outdoor use only.**

- Never locate this appliance in an enclosed room, under a sealed overhead structure, or in any type of enclosed area such as a garage, shed, or breezeway. Keep clear of trees and shrubs.
- Do not place this grill under or near windows or vents that can be opened into your home.
- Cal Flame hibachi grills are not intended for installation in or on recreational vehicles or boats.
- Maintain sufficient distance as to not overheat any overhead combustible material such as a patio cover.
- The area surrounding your new hibachi grill should be kept clean and free from flammable liquids and other combustible materials such as mops, rags or brooms, as well as solvents, cleaning fluids, and gasoline.
- Do not use the hibachi grill or area surrounding the grill as a storage area for flammable or plastic items. Do not store the liquid propane (LP) cylinder in the vicinity of this or any other appliance when it is not being used.

## Set-Up

- Before installing a built-in hibachi grill in an enclosure, copy all product information such as model number, serial number and gas type (LP) to page 30 of this manual. This information is located on a plate located on the right side of the chassis.
- We recommend that a licensed contractor install your Cal Flame hibachi grill. Installation must conform to local codes, or in the absence of local codes, with either the *National Fuel Gas Code*, ANSI Z223.1 / NFPA54, *Natural Gas and Propane Installation Code*, CSA B149.1, or *Propane Storage and Handling Code*, B149.2), as applicable.
- To prevent fire and smoke damage, remove all packaging material before operating your hibachi grill.

- Before you start cooking, clean the entire grill thoroughly with hot, soapy water. This is necessary to remove residual solvents, oil and grease used in the manufacturing process.

## Operation

- Do not use the hibachi grill for other than intended use.
- Never use the hibachi grill if the drip pan is not properly installed. Drip pan should be pushed all the way in under the grill. Fire or explosion can result from an improperly installed drip pan.
- Keep all electrical supply cords away from the heated areas of the hibachi grill.
- Never use the hibachi grill in windy conditions. If used in a consistently windy area a windbreak will be required. Always adhere to the specified clearances listed in this manual.
- When the unit is not in use, be sure to turn off the gas at the LP tank.
- Do not install or operate your hibachi grill in such a manner that the cross ventilation openings are blocked. Fresh air must be able to pass through installed vents to safeguard against residual gas accumulation. Failure to allow proper ventilation may cause fire or explosion.
- Do not use fuel such as charcoal briquettes in gas grills.
- Gas sources to the hibachi grill must be regulated. Do not operate grill if regulators have been removed, fire or explosion can occur.
- Never leave the grill burners unattended when in use.
- Do not use water on grease fires. Turn the appliance off and smother the flaming pan with a tight-fitting lid, a cookie sheet or a flat tray. For flaming grease outside of the pan, smother it with baking soda or use a dry chemical or foam-type fire extinguisher.
- Never allow clothing, pot holders or other flammable materials come in contact with or be close to any grate, burner or hot surface until it has fully cooled. Never wear loose fitting or hanging garments while using your grill. Fabric may ignite and result in personal injury.
- When using the hibachi grill, do not touch the grill surface immediate surroundings as these areas become extremely hot and can cause burns.
- Only use dry pot holders and do not use a towel or other bulky cloth in place of pot holders. Moist or damp pot holders used on hot surfaces can cause burns.

- Do not heat any unopened glass or metal container of food on the hibachi grill. Pressure may build up and cause the container to burst, possibly resulting in serious personal injury or damage to the grill.
- Do not reach over your hibachi grill or any other surfaces when hot or in use.

## Maintenance and Repair

- Spiders and other insects can nest in the burners and block the gas and airflow to the burner ports. This creates a dangerous condition that can result in a fire behind the valve panel. Inspect and clean the burners periodically and follow the guidelines in the Cleaning and Maintenance section of this manual.
- Unless specifically recommended in this manual, do not repair or replace any part of the hibachi grill. A qualified technician should perform all service. Any repairs made by a non-LMS approved dealer technician will void your warranty.

## Storage

- When your hibachi grill is not in use, turn off the gas at the supply cylinder.
- Storage of a grill indoors is permissible only if the supply cylinder is disconnected and removed.

## Precautions Regarding Children

- Never leave children unattended in the area where the hibachi grill is being used. Close supervision of children is necessary when any appliance is use near children.
- Do not store items of interest to children around or below the hibachi grill.
- Never allow children to sit or stand on any part of the hibachi grill.

## Installation / Assembly

Most cities and counties require permits for exterior construction. In addition, some communities have codes requiring residential barriers such as fencing and/or self-closing gates on property to prevent unsupervised access to the property by children under the age of five. Your dealer can provide information on which permits may be required and how to obtain them prior to the delivery of your equipment.

We recommend the installation, adjustment and service of your new hibachi grill be performed by LMS qualified installers and service technicians to ensure proper operation and prevent accidents.

When planning your grill location, access to a gas line should be considered. The location with the shortest gas line run is recommended.

When determining a suitable location, consider factors such as exposure to wind, proximity to traffic paths, and windows that open into the home.

Locate the hibachi grill only in a well-ventilated area.

If you do not have an updated filler valve on your existing propane tank, you will need to purchase one at your local hardware store. Without it you will not be able to attach your tank to your grill or refill the tank at your local propane refill station.

### Converting the Hibachi Gas Grill

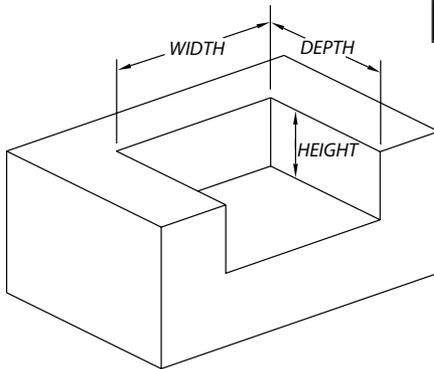
**IMPORTANT:** Cal Flame hibachi grills are manufactured to operate on liquid propane (LP). However, they can be converted to operate on natural gas (NG) by an authorized service technician. Consult your Cal Flame dealer for information on converting your gas grill.

**Owners must not convert their grills themselves. Attempting to convert the grill from LP to NG may result in serious injury and will void the warranty coverage.**

## Cabinet Cut-out Dimensions

Your Cal Flame hibachi grill is designed for easy installation into a non-combustible enclosure. The supporting deck or counter must be flat and level. When determining the final location of your hibachi grill, adequate cross ventilation must be present to prevent gas from being trapped in the event of a leak.

The drawings below show the different types of cabinet cut-out dimensions for the hibachi grill.



Width	Depth	Height
22 7/8"	22 1/4"	9 1/4"

## LP Gas

### Tank Requirements

For plumbed-in LP installation, use a convertible regulator and set it for LP gas.

Maximum line pressure for plumbed-in propane is 14" WC (3.5 kPa). Minimum line pressure for propane is 11" WC.

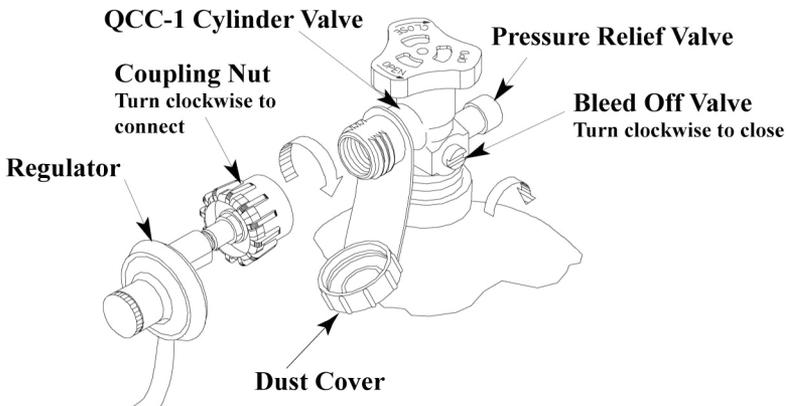
The grill unit must be used with the gas pressure regulator. The regulator will control and maintain a uniform gas pressure in the manifold. The burner orifices have been sized for the gas pressure delivered by the regulator.

**WARNING:** Attempting to operate the grill unit without the gas regulator installed could cause an explosion and possible death.

### Cylinder Specification

Any LP gas supply cylinder used with this grill must be:

- Constructed and marked in accordance with the *Specifications for LP-Gas Cylinders* of the U.S. Department of Transportation or the National Standard of Canada, *CAN/CSA-B339, Cylinders, Spheres and Tubes for Transportation of Dangerous Goods; and Commission*, as applicable.
- Approximately 12 inches in diameter and 18 inches high.



The maximum fuel capacity is 20 lbs. of propane, or 5 gallons. Full cylinder weight should be approximately 38 lbs. (43.7 lbs. nominal water capacity.) Never fill the cylinder beyond 80% full.

Place the dust cap on the cylinder valve outlet whenever the cylinder is not in use. Only install the type of dust cap on the cylinder valve outlet that is provided with the cylinder valve. Other types of caps or plugs may result in leakage of propane.

## LP Gas Hook Up

An enclosure for an LP gas cylinder shall be vented by openings at the level of the cylinder valve and at floor level. The effectiveness of the openings for purposes of ventilation shall be determined with the LP-gas supply cylinder in place. This shall be accomplished in one of the following manners:

1. One side of the enclosure shall be completely open.
2. Enclosures that have four sides, complete with a top and bottom:
  - a. At least two ventilation openings at cylinder valve level shall be provided in the sidewall, equally sized, spaced at  $180^\circ$  (3.14 rad), and unobstructed. Each opening shall have a total free area of not less than one square inch per pound (7.1 cm<sup>2</sup>/kg) of stored fuel capacity, and not less than a total free area of 10 square inches (64.5 cm<sup>2</sup>).
  - b. Ventilation openings shall be provided at floor level and shall have a total free area of not less than one square inch per pound (7.1 cm<sup>2</sup>/kg) of stored fuel capacity and not less than a total free area of 10 square inches (64.5cm<sup>2</sup>). If ventilation openings at floor level are in a sidewall, there shall be at least two openings. The bottom of the openings shall be at floor level and the upper edge no more than 5 inches (127 mm) above the floor. The openings shall be equally sized, spaced at  $180^\circ$  (3.14 rad) and unobstructed.
  - c. Every opening shall have minimum dimensions so as to permit the entrance of a 1/8 inch (3.2 mm) diameter rod.

## Transporting and Storing LP Gas

Transport only one cylinder at a time. Ensure the cylinder is secured in an upright position with the control valve turned off and the dust cap in place. Store cylinders outdoors and out of reach of children. Do not store cylinders in a building, garage, or any other enclosed area.

# Natural Gas

## Requirements

Always check the rating plate to make sure the gas supply you are hooking up to is the gas type the grill is manufactured for.

**IMPORTANT:** Never connect the grill to an unregulated gas supply.

The installation of this appliance must conform with local codes or, in the absence of local codes, to the national fuel gas code, ANSI Z223.1a-1998. Installation in Canada must be in accordance with the standard CAN/CGA-B149.2, Propane Installation Code.

A licensed contractor or local gas company representative must perform all natural gas connections.

Ensure that the service supplying the grill is fitted with a shut off valve conveniently positioned near the grill and giving ease of access.

The grill must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 0.5 psi (3.5 kPa).

The grill and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 0.5 psi (3.5 kPa).

Your Cal Flame grill for use with natural gas comes equipped with its own regulator that **MUST NOT** be removed. If this regulator needs to be replaced, use only the type specified by Cal Flame for this appliance.

## Connection

1. Slide the grill forward to gain access to the regulator and gas connection point in the rear.
2. Connect a suitable flex connector to the grill regulator.
3. Check the grill controls to ensure all control valves are in the full OFF position.
4. Turn on the main gas supply and check all connections for leaks using soapy water as described in the leak testing procedure section.

**Warning:** If you see bubbles in the soapy solution at any of the connections, turn off the gas supply and tighten the connection. If tightening the connection does not seal the leak, it may be necessary to replace the flex hose.

## Leak Testing Procedure

Perform a leak test at least once a year whether the gas supply cylinder has been disconnected or not. In addition, whenever the gas cylinder is connected to the regulator or whenever any part of the gas system is disconnected or replaced, perform a leak test.

As a safety precaution, remember to always leak test your grill outdoors in a well-ventilated area. Never smoke or permit sources of ignition in the area while doing a leak test. Do not use a flame, such as a lighted match to test for leaks. Use a solution of soapy water.

1. Prepare a leak testing solution of soapy water by mixing in a spray bottle one part liquid soap to one part water.
2. Make sure all the control knobs are in the OFF position.
3. Turn on the gas.
4. Apply the leak-testing solution by spraying it on joints of the gas delivery system. Blowing bubbles in the soap solution indicates that a leak is present.
5. Stop a leak by tightening the loose joint or by replacing the faulty part with a replacement part recommended by the manufacturer. Do not attempt to repair the cylinder valve if it is damaged. The cylinder must be replaced.
6. Turn all control knobs back to the full OFF position.

If you are unable to stop a leak:

1. Turn all control knobs back to the full OFF position.
2. Shut off the gas supply to the grill and release pressure in the hose and manifold by pushing in and turning any of the control valves one quarter turn counter-clockwise.
3. On LP systems, remove the cylinder from the grill.
4. Call an authorized gas appliance service technician or an LP gas dealer.

Do not use the appliance until the leak is corrected.

## Installing the Grill in a Barbecue Island

**You may need a second person to help you to avoid damaging the grill or your barbecue island.**

Before installing a grill in any island or cut out, make sure that the opening is not bigger than the outside frame of the grill unit. The grill should rest on the lip of the frame.

Pay careful attention to the location of the gas line. It should be routed away from sources of heat and should make as few bends as possible.

Check to see if the gas line connection will be accessible when the grill is installed.

- If the gas line connection is not easily accessible when the grill is installed, support the grill above counter level and attach the gas line to the grill. When the gas connection is made, slide the grill into the cut out.
- If the gas line connection is accessible when the grill is installed, slide the grill into the cut out and then attach the gas line.

Be very careful not to kink the gas line when lowering the grill into the cut out.

Keep your fingers away from where the grill will be supported on counter. Your fingers could become trapped and serious injury could occur.

Check to make sure the grill is level and is supported around the entire outside edge. If the grill is not level or is unstable, use non-combustible shims under the outside lip to stabilize it.

Perform the leak test procedure as described earlier in this manual.

## Griddle Placement

If you need to remove the griddle for cleaning or maintenance, you need to replace it as shown below.

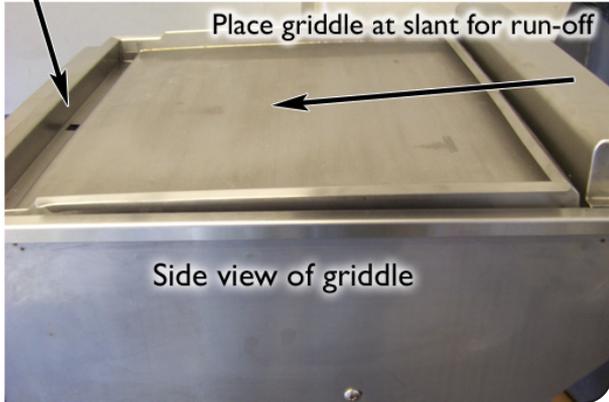
The griddle is positioned at a slight incline to allow grease to run off to the drain.

Ensure grease drain is clear

Place griddle at slant for run-off

Front of grill

Side view of griddle



## Grill Lid

The grill lid is attached to the unit by two hinges on each side. Each hinge has a detachable hinge pin that removes easily when pulled out.

Always keep the grill lid up while burners are lit. Never put the lid down when using the grill. This will cause the lid to warp and discolor.



## Using Your Grill

### Read all instructions before you operate your hibachi grill.

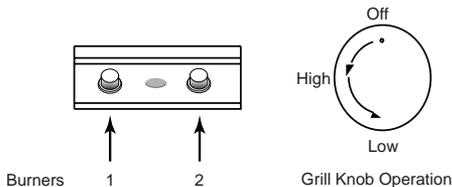
We recommend you wash your entire grill with soap and water prior to lighting it for the first time. Oils are used during the manufacturing process and some residual oil may still be on the stainless steel parts of your grill. Washing will reduce the possibility of discoloration. We also recommend you keep your grill covered when not in use. This will minimize the amount of dust and dirt that accumulates on your grill and extend the life of your grill.

Remember to use your grill safely by following these reminders:

- It is dangerous to use a grill in any manner other than for what it is designed for.
- Do not use charcoal in a gas grill.
- Do not heat sealed containers such as cans or jars on grills. Explosion may result resulting in injury or death.
- Never put combustible material such as paper, cloth, or flammable liquids on your grill at any time. Do not use grill or any area around grill to store flammable materials.
- Never spray water on a hot gas unit. This may damage porcelain or cast iron components.

### Grill Controls

The controls shown below are for the hibachi grill. Familiarize yourself with these controls before using your Cal Flame grill.



## Basic Grill Operation

Before lighting, make sure all burner controls are off. Do not attempt to light the burners if the smell of gas is present. Check the connection with a soap and water solution after attaching the hose. For LP units, make sure there is gas in the tank and it is sitting upright. For natural gas units, make sure the shut off valve is on.

1. Make sure the drip tray is in place.
2. Light the grill burners using the instructions on the next page.
3. Turn the control knob to HIGH and preheat the grill for 15 minutes. Close the top cover during the appliance preheat period.
4. Place the food on the grill and cook to desired completion. Adjust heat setting if necessary. You may set the control knob to any position between HIGH and LOW.
5. Allow the grill to cool and clean the drip tray after each use.

Do not leave the grill unattended while cooking.

- When using propane gas:
  - **Keep the special ventilation openings in the enclosure free and clear of debris.**
  - **If connected to a propane cylinder, carefully inspect the rubber hose attached to the regulator before each use.**
  - **Ensure the propane cylinder, regulator, and rubber hose are installed in a location not subject to heating above 125° F (51° C).**

Each time you light the grill, check the following:

- Inspect the hose before using the grill. If there is excessive abrasion or wear, or if the hose is cut, it must be replaced prior to using the grill. If you need a replacement hose, contact your Cal Flame dealer.
- Ensure the area around the grill is clear of flammable substances such as gasoline, yard debris, wood, etc.
- Ensure there is no blockage of the airflow through the vent space located below the face of the unit.
- Ensure the burner flames burn evenly along both sides of each burner with a steady flame (mostly blue with yellow tipping). If burner flames are not normal, check the orifice and burner for insects or insect nests.
- Ensure the in-line gas valve or gas cylinder valve is always shut OFF when the barbecue is not in use.

## Electronically Lighting the Grill

1. Lift the cover.
2. Keep your face as far away from the burners as possible.
3. Rapidly rotate the burner knob counter clockwise past the light position to HIGH. You will hear a loud click as the electronic lighter produces a spark.
4. Listen for the sound of the gas igniting. If the burner does not light on the first try, repeat immediately.
5. If the burner does not light after three attempts, turn the control knobs to the OFF position. Wait five minutes until the gas clears before attempting to light it again.
6. Repeat the procedure or try the manual lighting procedure below.
7. Upon successful lighting, repeat the process on the other burners you wish to light.
8. To shut off the burners, rotate the knob and turn to OFF. It is normal to hear a popping sound when the burners are turned off.

## Manually Lighting the Grill

**WARNING:** Do not use standard matches or cigarette lighters to perform match lighting procedures. Serious burns can occur and lighters can explode.

1. Lift the cover.
2. If you have just attempted to light the burner, allow five minutes for any accumulated gas to dissipate.
3. Slide out the drip tray from the grill.
4. Keep your face as far away from the burners as possible.
5. Light and insert a long stem match, holding it near the burner ports.
6. Push in and turn the control knob just past the LIGHT position to HIGH.
7. Listen for the sound of the gas igniting. If the burner does not light after five seconds, turn the control knobs to the OFF position. Wait five minutes until the gas clears before attempting to light it again.
8. If the burner does not light after several attempts see Troubleshooting Guide in the back of this manual.

### **DANGER**

#### **What To Do If You Smell Gas**

- Shut off gas to the appliance.
- Extinguish any open flame.
- Open lid.
- If odor continues, keep away from the appliance and immediately call your gas supplier or your fire department.

## Cleaning and Maintenance

To ensure safe and proper maintenance, we recommend you follow these directions carefully.

Clean internal parts of the grill regularly as determined by the amount of use and foods cooked. The entire grill should be cleaned at least once a year.

In addition, keep the area around your grill clear and free from combustible materials, gasoline, and other flammable vapors and liquids. Do not obstruct the flow of combustion and ventilation air.

These instructions describe the best way to care for your stainless steel.

Although stainless steel grills will discolor and accumulate grime with regular use, they can keep their original shine with periodic cleaning. We strongly recommend using a surface protectant to prevent smudging and surface rust from accumulating.

The easiest way to clean the grill is immediately after cooking is completed. Doing so will extend the life of your grill, prevent grease fires, and present a pleasant appearance while you grill.

### Stainless Steel Care and Cleaning

All exposed stainless steel surfaces require special attention if you want to keep them looking clean and bright. Following these simple instructions will help avoid scratching or damaging the finish and keep your stainless steel attractive.

## Cleaning Products and Materials

Avoid using these common cleaning products and materials – they will damage the surface of your stainless steel.

- CLR
- Lime-Away
- Oven cleaner
- Cleansers such as Ajax or Comet
- Ammonia
- Bleach
- Chlorine
- Steel wool pads
- Wire brushes
- Scrapers
- Pumice

We recommend these products for cleaning your stainless steel:

- Mild dish detergent such as Dawn
- Formula 409
- Fantastik
- Sheila Shine (exterior ONLY)
- WD-40 (exterior ONLY)

We have had best success with Sheila Shine, but WD-40 works very well too. Sheila Shine is available in some hardware stores; WD-40 is widely available.

Some people have reported that using baking soda, lemon oil, olive oil, vinegar, or club soda can be effective for cleaning light soil on all stainless steel surfaces.

Do not use steel wool or wire brushes to scrub your grill. For light soil, use a damp sponge or cloth. For heavier stains, use a Scotch-Brite scrubber or similar product.



### Caution

Do not use WD-40 or Sheila Shine near food or on food preparation surfaces as it is a health hazard. This includes the interior of the grill, the griddle, stainless steel sinks, the inside of cabinets, warming drawers, and ovens.

## 1. Clean

Thoroughly clean stains, food, and grime using a sponge or damp cloth with warm water and a mild dish soap. Use Fantastik or Formula 409 to remove heavier soil.

## 2. Rinse

Thoroughly rinse all surfaces and dry them completely with a clean towel. Do not allow stainless steel to air dry.

## 3. Polish

We strongly recommend that you apply a surface protectant to all exposed stainless steel surfaces.

Spray a small amount of WD-40 or Sheila Shine on a piece of paper towel and rub with the grain over the surface of the appliance. Using a clean terry cloth or paper towel, polish the appliance by rubbing with the grain until excess liquid is removed and the surface shines. It should not be oily to the touch, however some residue is acceptable.

Some people have reported that using lemon oil products such as Old English furniture polish is effective for polishing stainless steel and protecting the surface.



### Fire Hazard

NEVER spray WD-40 or Sheila Shine near an open flame! These products are extremely flammable while in their aerosol forms.

## Griddle

To prevent burns or injury, make sure the griddle is completely cool before cleaning.

The griddle is made from non-magnetic, 304 grade stainless steel. There are various stainless steel cleaners available. Always use the mildest cleaning procedure first, and always scrub in the direction of the grain. Use soapy water for most cleaning. A non-abrasive scrubber may also be helpful in removing grime and food deposits. Steel wool may be used for especially difficult spots. Wipe all areas dry before storing.



### Note

Do not use a wire brush or stainless steel on any other part of your grill or any other stainless steel surface except the the griddle!

## Rust Removal

It is a common misconception that stainless steel does not rust. It does not stain, corrode, or rust as easily as ordinary steel (it *stains less*), but it is not stain-proof. If not properly protected and maintained, it can corrode, pit, and discolor.



### Important

Because salt will accelerate rust and corrosion, grill owners who live near the beach need to be diligent in maintaining their stainless steel hardware. You need to clean and polish your stainless steel frequently, apply a protectant, and ensure water does not collect and puddle.

Periodically clean exterior stainless steel surfaces with WD-40 or Sheila Shine and wipe down with a dry cloth or paper towel until surface is free of rust. If there is significant rust or corrosion, use a Scotch-Brite scrubber.

Both of these products will act as a surface protectant and help resist smudges, stains, and rust.



### Caution

Although nitric acid (also called aqua fortis) can be effective for rust removal, it is a highly corrosive chemical. Because of the potential for injury or damage to your stainless steel, we do not recommend using nitric acid.

## Burners

Spiders and small insects occasionally inhabit or make nests in the burner tubes, obstructing the gas flow. Sometimes this results in a type of fire in and around the gas tubes called "flashback". To reduce the risk of flashback, this procedure should be followed at least once a month or when your grill has not been used for an extended period of time.

**IMPORTANT:** Prior to starting this procedure, turn OFF all of the gas control knobs, shut off the fuel supply, and disconnect the fuel line.

The burners can be removed by removing the keeper pins and lifting them out. The keeper pins are located under the grill toward the back. They are used to keep the burners in place during shipping and are not necessary to operate your grill. Remove burners from the grill by carefully lifting each burner up and away from the gas valve orifice.

Use a wire brush to clean the outer surface of each burner to remove food residue and dirt. Clean any clogged ports with a stiff wire such as an opened paper clip.

Inspect each burner for damage (cracks and holes). If any damage is found, replace the burner and discontinue grill usage.

Upon reinstallation, inspect the gas valve orifices for cleanliness and condition and the location of the igniters. When you replace the burners, you do not need to replace the keeper pins.

### **Drip Pan**

The full width drip pan will collect grease from the main grill area. The pan should be cleaned after every use to avoid the possibility of a grease fire. Be sure to allow the drip pan to cool prior to cleaning. You may clean the drip pan with a solution of warm soapy water. Make sure to rinse thoroughly to avoid staining.

### **Steam Cleaning Your Grill**

Steam cleaning your grill is very effective and will not void your warranty. Portable hand-held steam cleaners are inexpensive and do not require chemicals. You can steam clean all parts of your Cal Flame grill, including the burners. When you are finished, make sure you wipe all surfaces down.

If you spray the burners, ignite them and let them burn for about 10 minutes to prevent any water from accumulating inside them.

## **Covering Your Grill**

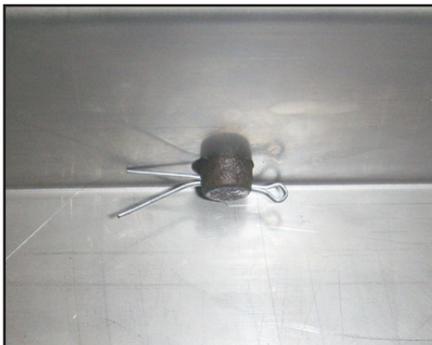
When not in use and after cooling, cover your grill with our canvas cover. (See your local Cal Flame dealer for details.) The cover will help protect your grill from detrimental effects of weather and environmental pollutants. Never put a cover on a hot grill. Allow the grill to cool before covering.

To order a replacement cover, contact Cal Spas customer service at 1-800-CAL-SPAS.

# Appendix

## Removing and Replacing Burners

1. Disconnect or shut off the gas line connect to the grill. Wait until the grill and burners are cool.
2. Remove the cover and the griddle.
3. Pull the grill forward partly out of the cut-out.
4. Through the access behind the grill, find the round stud and locking pin that locks the burner you want to remove. (See picture at right.)
5. Carefully remove the locking pin.
6. Lift the burner, raising the stud from the locking hole and pull the burner back carefully to release it from the ignition and gas supply valve.
7. Take the burner out of the grill and store it in a safe and dry place.
8. To replace burners, follow these steps in reverse.



## Troubleshooting

**Problem: Smell of gas is present**

**Solution:** Check for loose connections in the gas line. Perform a leak test following the procedure described in this manual.

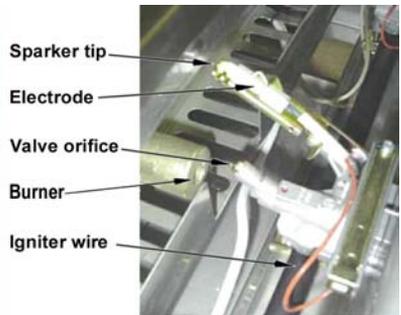
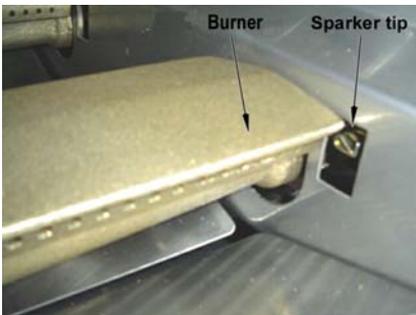
**Problem: Burner does not ignite**

**Solution:** Use the following procedure with the figure below.

Check the position of the sparker tip. It should be pointing forward towards the front of the burner.

- Make sure there is a blue spark at the electrode tip to the burner.
- Make sure the igniter wire is connected firmly to the valve ignition device and the electrode.
- Make sure the valve orifice is free of any debris, dust or grease.
- Make sure the valve orifice is aligned inside the front hole of the burner.
- If there is no spark at all, replace the electrode or igniter wire.

Note: Turn off the gas at the source while troubleshooting.



**Problem: Plugged orifice****Solution:** Unplug the orifice as follows:

- Remove griddle and grease tray.
- Remove burners from the bottom of the firebox by pulling the cotter pin from beneath the burner peg using a standard screwdriver or needle nose pliers.
- Carefully lift each burner up and away from the gas orifice.
- Remove the orifice from the control valve.
- Gently clear any obstruction with a fine wire.
- Reinstall the orifice, reinstall the burners over the orifices, and seat each burner peg into position hole at the bottom ledge of the firebox.
- Replace all cotter pins.
- Replace cooking components and grease collectors.

If an obstruction is suspected in the control valve, contact your local Cal Flame dealer for assistance.

**Problem: Burner tube is misaligned over the orifice****Solution:** Reposition the burner tube so that it is properly seated over the orifice.**Problem: Obstruction in the gas line****Solution:** Remove the fuel line from grill. (Do not smoke or perform any maintenance in the vicinity of an open flame.) Open the gas valve for one second to blow out any debris. Close off the gas valve and reconnect the fuel line securely.

**Problem: Yellow Flame**

**Solution:** Once the entire burner is operating, check the flame color to be sure that it is mostly blue. Some yellow at the tips may be present due to impurities in the fuel. If the flame is golden or yellow in color, the reason could be seasoning salts, oil film, or other foreign matter on the burner.

**Problem: Misalignment of Igniter on Burner**

- Solution:**
- Check for proper position of the electrode tip, which should be pointing forward towards the front of the burner and free of grease to allow proper sparking.
  - The ignition wire should be connected firmly to the valve ignition device and electrode. Replace the ignition wire if it is frayed or cracked.
  - With the gas supply closed and all control knobs set to the off position, check each position igniter individually for the presence of a spark at the electrode. Push each knob in fully and rotate it about 1/4 turn to the left (counter-clockwise) until you hear a loud click. The trigger hitting the strike block should produce a blue spark at the electrode tip. Return control knob to the off position before checking the next igniter.
  - While the grill is still hot, wait for a minimum of five minutes before commencing re-ignition. (This allows accumulated gas fumes to clear.) If all checks / corrections have been made and the gas grill still fails to operate properly, contact your local Cal Flame dealer.

**Problem: Flashback**

**Solution:** When fire occurs in and around the burner tubes, immediately turn off gas at its source and turn the control knobs clockwise to the 'OFF' position. Wait until the grill has cooled off and then clean the burner tubes and burners as described on page of this manual.

# Converting from LP to NG

**WARNING! You must have an authorized service technician perform this procedure. If these instructions are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life. LMS Inc. will not be held responsible for an improperly converted gas grill.**

All Cal Flame grills are manufactured as standard liquid propane (LP) grills and can be converted to burn natural gas (NG). There are two steps required to convert a grill from LP to NG.

***You must perform both steps.***

## **Step 1: Switching the regulator behind the grill**

## **Step 2: Changing the burner orifices**

The kit contains two orifices to convert main burners. Your kit will have only the parts you need to convert your grill.

Before you begin, make certain the LP gas source has been disconnected from the grill. If you have a cart, you do not need to remove the grill from the cart.

To gain access to the NG regulator, tilt the grill forward.

## Step 1: Switching the regulator behind the grill

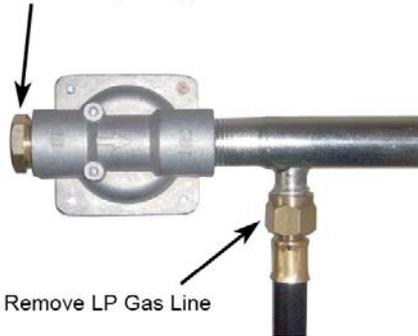
The regulator in the image below has been removed from a grill to illustrate this procedure.

1. Remove the LP gas line.
2. Remove the cap fitting from the end of the NG gas regulator.
3. Place the cap fitting over the LP gas inlet.
4. Insert a male flared fitting (**not provided**) in the NG gas regulator.

You will need:

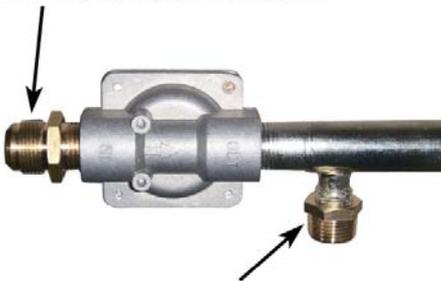
- 13 mm open end wrench
- Male flared fitting (**not provided**)
- Pipe compound suitable for natural gas

Remove Cap Fitting



Remove LP Gas Line

Insert Cap Fitting in NG Regulator



Place Cap Fitting on LP Inlet

**NOTE: A flared fitting is NOT included with your grill.**

If you are attaching a flex hose to the regulator, you will need a fitting. The fitting requires a male flare on the input end with a 1/2" MPT on the output end. The flared male input end needs to be the size of your flex tubing. You can also connect the regulator directly to your NG gas service, which will not require a flared fitting.

## Step 2: Changing the burner orifices

1. Remove the griddle from the grill.
2. Remove the cotter pins from the end of the burners. The cotter pins are accessible from underneath the grill in the back in the accessory cabinet.
3. Carefully remove the burner.
4. Using a 6mm socket or nut driver, remove the orifice for the burner.
5. Apply a small amount of pipe compound to the orifice threads.
6. Screw in the orifice until it is finger tight.
7. Tighten the orifice with the 6mm wrench.
8. Repeat the above steps for the remaining burners.
9. Replace the burners and griddle. (You do not need to replace the cotter pins if you do not wish to.)

### You will need:

- 6 mm socket or nut driver
- Two 1.9 mm orifices
- Pipe compound suitable for natural gas

### Mark the rating plate

After conversion has been completed, mark the rating plate as NG with an indelible marker.

# LIMITED WARRANTY

LMS warrants the hibachi grill and associated hardware from defects in material and workmanship for a period of one year from the original date of purchase. This includes deterioration and corrosion of burners, griddle, mountings, and grill lid and body.

## Extent of Warranty

This Cal Flame Warranty is only valid on Cal Flame models delivered in the United States or Canada and extends through the selling dealer to the original purchaser at the original site of installation. This warranty becomes valid at time of purchase and ends either by specified time-frame listed above or upon owner transfer or relocation.

## Manufacturer Warranty

All Cal Flame models are manufactured with the highest quality appliances and are warranted to be free from defects in material and workmanship at time of delivery. The appliance warranty is extended through the manufacturer of the product.

## Warranty Performance

In the event of a malfunction or defect covered under the terms of this warranty, a factory authorized service agent of LMS will perform the necessary repairs. To obtain service, contact the selling dealer. In the event the consumer is unable to obtain satisfactory customer service from the selling dealer or service agent, written notification must be given to the LMS Customer Relations Department within 30 days of the reported failure.

There will be no charge for parts on a covered item. Cost of labor is the responsibility of the owner. Shipping and handling charges will apply to all warranted replacement parts. The service technician may assess a reasonable travel or mileage charge per service call.

If LMS determines that repair of a covered item is not feasible, LMS reserves the right to replace the defective merchandise with merchandise equal in value to the original purchase price. Warranty repair and / or replacement is the sole discretion of LMS and this warranty does not cover costs therein, including but not limited to: freight, removal, re-installation, etc. This warrant is non-transferable and may not be extended beyond the above mentioned time frames under any circumstances, by any of LMS's representatives.

## Warranty Limitations

This warranty is void if the hibachi grill has been subject to negligence, alteration, misuse, repairs, dings, dents, scratches, or incorrect and / or prohibited applications, as specified in the owner's manual. Gas lines must be installed by a licensed plumber only or local gas company agent. Service by non-LMS authorized representatives, acts of God and other cases beyond the control of LMS are not covered by this warranty. Please refer to the owner's manual for examples of exclusions and common acts invalidating this warranty. This limitation is retroactive and applies to all grills and hardware manufactured from 2000 and hereafter.

Examples of common acts invalidating this warranty include but are not limited to:

- Scratches caused by normal use.
- Damage caused by extreme weather conditions (hot, cold, etc.)
- Damage caused by dirt, sand, and/or water damage.
- Damage caused by continued operation of the barbecue with either known or unknown problems.
- Damage caused by direct sunlight.
- Damage caused as a result of failure to follow the operating instructions as defined in the owner's manual.

This Limited Warranty applies only to hibachi grills normally used for personal, family, or household purposes and specifically excludes commercial use of the hibachi grill.

## Disclaimers

LMS shall not be liable for loss of use of the hibachi grills or related hardware or other incidental or consequential costs, expense or damages, which may include, but are not limited to, removal of permanent deck or other custom fixtures or the necessity for crane removal. Any implied warranty shall have duration equal of the applicable warranty stated above.

## Legal Remedies

This limited warranty gives you specific legal rights. You may have other rights, which may vary from state to state.

## Customer Service

For customer service, contact the authorized selling dealer immediately. If you need additional information or assistance, please contact the LMS Customer Relations Department at 1462 E. Ninth St., Pomona CA 91766 or call (800) 225-7727.

See your Cal Flame barbecue dealer for a copy of the applicable warranty, details and any questions you may have regarding the warranty coverage on your barbecue.

## Locating the Product Serial Number

The serial number of your Cal Flame hibachi grill is located on the side and is visible before you place it in the barbecue island cut-out. You will need this number to properly register your grill or cart and activate coverage. Write this information in the space provided below.

Grill model: BBQ10900

Grill serial number: \_\_\_\_\_

Type of fuel (circle one):      Liquid propane      Natural gas

Date purchased: \_\_\_\_\_

Date installed: \_\_\_\_\_

Cal Flame dealer's phone number: \_\_\_\_\_

Cal Flame dealer's address: \_\_\_\_\_

**Don't forget to register your new product at  
[www.calflamebbq.com](http://www.calflamebbq.com).**

California Proposition 65 Warning: Chemicals known to the State of California to cause cancer, birth defects or other reproductive harm are found in and/or created by the combustion of natural gas, propane, butane and other fuels. Always operate this unit as described in the owner's manual and in well ventilated areas.