

# At Your Service

Cal Flame Service Procedures

For barbecue islands and grills



See next page to start  
troubleshooting  
**immediately!**

# Start Here!

This guide is intended for service technicians who have a basic knowledge of propane fuel appliances and electrical theory.

You must be able to use basic hand tools, small power tools, and a volt meter.

For basic troubleshooting for beginners to go page 1.

To troubleshoot by symptom, go to page 3.

For information on attending Cal Spas University,  
see page 48.



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# Service and Troubleshooting

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# 1.0 Troubleshooting Guidance

## 1.1. Before you start troubleshooting

- Collect this information about the barbecue grill or island before you start:
  - Model number
  - Serial number
  - Type of fuel
- Read the table of contents to locate the symptom.
- Follow the troubleshooting flowcharts in this guide.

## 1.2. For additional assistance from Cal Flame Technical Service

Dealers and service technicians are welcome to call us. We are ready to help you whenever we can. You can also contact us by email:

For technical support:	<a href="mailto:tech@calspas.com">tech@calspas.com</a>
For claims and warranty:	<a href="mailto:claims@calspas.com">claims@calspas.com</a>
For parts assistance:	<a href="mailto:parts@calspas.com">parts@calspas.com</a>
For returned goods authorizations:	<a href="mailto:rga@calspas.com">rga@calspas.com</a>
For all other customer concerns:	<a href="mailto:customerservice@calspas.com">customerservice@calspas.com</a>

In addition to developing this service and troubleshooting guide, we offer Cal Spas University (CSU), a unique intensive two-day training session that provides in-depth instruction on service repair for all Cal Spas and Cal Flame products.

You can find the most current CSU schedule and the enrollment form at [www.calspas.com/dealers/CSU](http://www.calspas.com/dealers/CSU).

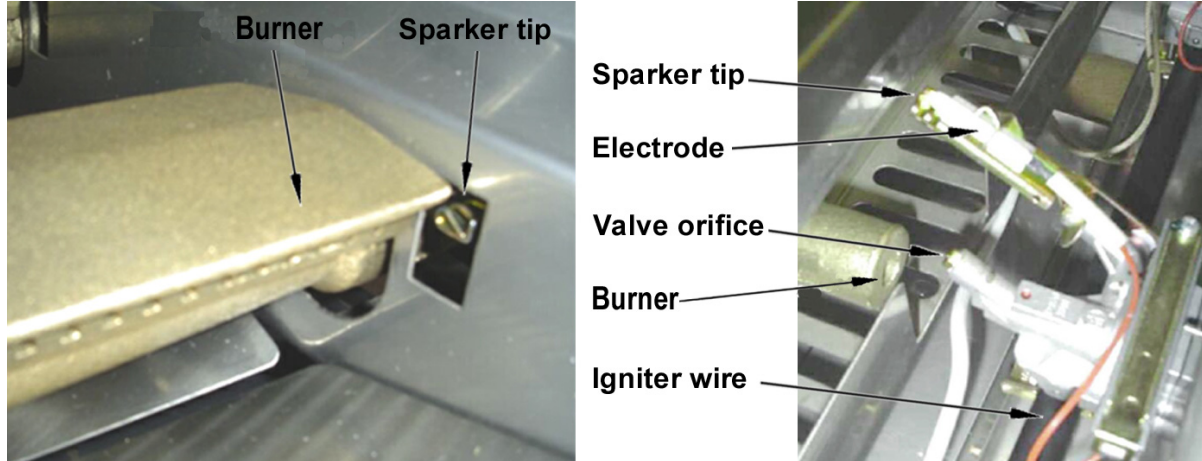


## 2.0 Service and Troubleshooting

### 2.1. Grill, Fireplace, and Firepit Troubleshooting

Refer to the figure at right for locations of referenced grill items.

Turn off gas at the source while troubleshooting.



#### 2.1.1. Gas odor is present

<b>During set up</b>	Possible gas leak. Check all gas line connections.
<b>Before first ignition</b>	<ul style="list-style-type: none"> <li>• Check all gas connections.</li> <li>• Make sure the connections are not leaking.</li> <li>• Check for leaks. Use a spray bottle with soap, and spray it onto the connections.</li> </ul>

#### 2.1.2. Burner does not light

<b>Is gas reaching the burner?</b>	<p>If using LP:</p> <p>Ensure the tank is not empty, that it is turned on, and that controls necessary for operation are turned on.</p> <p>Ensure the regulator's coupling nut is fully seated to the LP tank valve. Turn the coupling nut to a full stop.</p> <p>No gas flow may be due to vapor lock at the regulator's coupling nut. To remedy, turn the knobs off, remove the regulator, reattach and slowly open tank valve.</p>
	<p>If using LP:</p> <p>Ensure all gas supply valves are on the open position.</p>
	<p>If using either LP or NG:</p> <p>Ensure there is no obstruction in the burner. To remedy, remove the burner and look inside for spider webs or other blockage near the opening. Carefully remove any blockages and replace the burner.</p>

<p><b>Is there a spark from the igniter?</b></p>	<p>If NO: Replace the electrode or igniter wire. Verify ignition wire is not shorting to another piece of metal.</p> <p>If YES: Ensure the location of spark to the burner is not out of adjustment. Spark adjustment is set at the factory and generally needs no adjustment. If you suspect it is out of adjustment, make sure that the gas is flowing through the spark gap to properly ignite.</p>
<p><b>Will the burner light with a match?</b></p>	<p>If YES:</p> <ol style="list-style-type: none"> <li>1. Clean wires and electrode with rubbing alcohol and clean swab.</li> <li>2. Wipe dry with cloth.</li> <li>3. Replace electrodes.</li> </ol> <ul style="list-style-type: none"> <li>• Reconnect wires or replace electrode / wire assembly or igniter.</li> <li>• Check for proper position of sparker tip should be pointing forward towards the front of the stainless steel burner.</li> <li>• Make sure there is a blue spark at the electrode tip to the stainless steel burner.</li> <li>• Make sure igniter wire is connected firmly to the valve ignition device and electrode.</li> <li>• Make sure valve orifice is free of any debris, dust or grease.</li> <li>• Make sure valve orifice is aligned inside the front hole of the stainless steel burner.</li> </ul> <p>If NO: If your grill will not light with a match then you may have a gas flow problem.</p>
<p><b>One burner doesn't light off the other burners</b></p>	<ol style="list-style-type: none"> <li>1. Clean all the burners and valves with a wire brush.</li> <li>2. Check all connections with soapy water.</li> </ol>
<p><b>Delayed ignition</b></p>	<p>Possible causes include:</p> <ul style="list-style-type: none"> <li>• Low gas pressure</li> <li>• A clogged or dirty burner ports</li> <li>• Blocked orifice</li> <li>• Faulty valve</li> </ul> <p>Check gas supply pressure and clean the burner ports with a metal brush. If the same problem continues, the valve is probably faulty. Replace the valve and try again.</p>



### 2.1.3. Grill burns erratically or burner flames

<b>Sudden drop in gas</b>	<p>Check for gas in LP tank or valve on NG line.</p> <p>Turn off the knobs and the LP tank valve. Disconnect the regulator, reconnect the regulator and perform a leak check.</p> <p>Turn the valve, wait 30 seconds, and then light the grill.</p>
<b>Yellow Flame</b>	<p>Once the entire burner is operating, check the flame color to be sure that flame color 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.</p>
<b>Flashback</b>	<p>When fire occurs in and around the burner tubes, immediately turn off gas at its source and turn the control knob(s) 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.</p>
<b>Flames blow out</b>	<ol style="list-style-type: none"> <li>1. Turn the front of the grill to face the wind or increase the flame height.</li> <li>2. Refill the LP tank.</li> <li>3. Refer to the section on sudden drop in flow.</li> </ol>
<b>Flare up</b>	<ol style="list-style-type: none"> <li>1. Clean the grill.</li> <li>2. Lower the temperature.</li> </ol>
<b>Persistent grease fire</b>	<p>A persistent grease fire can damage the appearance of the steel panels. To prevent this, turn knobs to the OFF position, turn the gas off at the LP tank, leave the lid in open position, and let fire burn out. After the grill cools, remove and clean all parts with a metal brush.</p>
<b>Flashback</b>	<p>Turn all knobs to the OFF position. Clean the burners and tube with a metal brush.</p>
<b>There a loud humming sound coming from the grill</b>	<p>Humming is caused by small periodic changes of flow across the diaphragm located inside the grill and is more likely to occur when in high flow conditions. Occasionally it can affect regulators, but is not harmful to you or the operation of the product.</p>
<b>Flames come out of the carry over tube</b>	<p>This is normal and provides adequate lighting of the other burner.</p>
<b>Burner lights but does not stay lit</b>	<p>Possible causes include:</p> <ul style="list-style-type: none"> <li>• Low gas pressure</li> <li>• Faulty valve</li> <li>• Clogged or dirty burner ports</li> <li>• Faulty regulator</li> <li>• Windy conditions</li> </ul> <p>Check the gas pressure then clean the burner. If the problem continues, replace the regulator or the valve.</p>

<p><b>Incorrect burner flame</b></p>	<p>Possible causes include:</p> <ul style="list-style-type: none"> <li>• Incorrect gas supply or pressure for NG hook up</li> <li>• Incorrect primary air mix for LP gas – Turn air adjustment counterclockwise to adjust. Do not remove!</li> <li>• Blocked orifice</li> <li>• Faulty valve</li> <li>• Faulty regulator</li> <li>• Clogged or dirty burner</li> <li>• High altitude</li> </ul> <p>Check gas supply pressure, adjust the air mixer, and check the burner port. If problem continues replace the regulator.</p>
<p><b>Backfire of burner</b></p>	<p>Possible causes include:</p> <ul style="list-style-type: none"> <li>• Blocked orifice</li> <li>• Clogged, dirty, or faulty regulator</li> <li>• Incorrect primary air mix for LP gas</li> </ul> <p>Check the orifice opening, clean burner ports, or adjust air mix for LP gas.</p>

**2.1.4. Grill does not get hot enough**

<p><b>The temperature never exceeds 350°F.</b></p>	<p>If your grill is natural gas, there could be a low gas line pressure or there could be an increase in the gas demand thus causing low gas pressure.</p> <p>If you own a natural gas grill and you are experiencing low pressure please contact your local gas company.</p> <p>If your grill uses a LP tank, you may also be experiencing low gas pressure which may be caused by a near empty tank, a leak in tank or hose leading from your LP tank to your grill. First check to ensure that the tank is not empty, it is turned on and that controls necessary for operation are turned on.</p>
<p><b>The burner does not get hot enough, even with burners on high</b></p>	<p>The flow-limiting device may be activated. This safety feature restricts the gas flow in the event of a gas leak. The flow-limiting device can be activated by improper lighting procedure. This may happen if you open the LP tank valve rapidly or if more than one burner control knob is in an open position when opening the LP tank valve. The flow-limiting device can also be activated if there is a gas leak. If this is suspected, perform the following:</p> <ol style="list-style-type: none"> <li>1. Shut off LP tank valve and turn all burner valves to the OFF position.</li> <li>2. Perform a leak test to determine if a gas leak has caused the flow-limiting device to activate.</li> </ol>

## 2.2. Cleaning Barbecue Burners

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. Turn the gas control knobs to the OFF position and disconnect the fuel line prior to starting this procedure.

1. Remove the pin from the bottom of the burners.
2. Remove burners from grill by carefully lifting each burner up and away from the gas valve orifice.
3. Wire brush outer surface of burner to remove food residue and dirt. Clean any clogged ports with a stiff wire such as an opened paper clip.
4. Inspect the burner for damage (cracks and holes). If any damage is found, replace burner and discontinue grill usage.
5. Upon reinstallation, inspect the gas valve orifices for cleanliness and condition and the location of the igniters.

## 2.3. Light Bulb Replacement

Never attempt to replace a light bulb when the grill is in use. Serious burns will result.

Never touch halogen bulbs with your bare fingers. Use a tissue or a small piece of paper to handle bulbs. Oils from your hands will damage halogen bulbs.

### Light Removal

1. Open the grill hood and locate the glass light covers at the back of the grill.
2. Using a small screwdriver, gently pry the light cover away from the housing. Be extremely careful prying off the light cover. You may damage the light cover as a result.
3. Unscrew the two screws located at the side of the white plastic light fixture.
4. Pull the burnt bulb out of the socket.



### Light Replacement

1. Using a tissue or small piece of paper, carefully push a new bulb into the socket, making sure both wires on the bulb go into the light socket evenly.
2. Tighten the two screws on the side white plastic light fixture.
3. Carefully replace the light cover by snapping it in place.



## **2.4. Stereo Troubleshooting**

### **2.4.1. Power does not turn on**

- Check the fuse. If the fuse is blown, replace it with a fuse of the same amperage.
- If the fuse blows again, check the wiring from the power supply. Make sure it's wired correctly

### **2.4.2. Compact disc cannot be loaded**

- Make sure there is no other disc loaded.
- Eject the compact disc and reload a new disc.
- If the same problem occurs, replace the stereo.

### **2.4.3. Sound skips or is noisy**

- Compact disc could dirty. Make sure it is clean.

### **2.4.4. Sound is bad directly after power is turned on**

- Water droplets may form on the internal lens when a barbecue island is placed in humid areas.
- Let it dry for about an hour with the power on.

### **2.4.5. Nothing happens when buttons are pressed, or display is not accurate**

- Microprocessor may have a malfunction due to noise.
- Turn off the power and open the door by the hook.
- Press the RESET button for about two seconds with a thin rod.

### **2.4.6. Clarion Stereo Error Codes**

<b>Error Code</b>	<b>Description</b>
2	CD error message. Mechanism may have an eject problem, or takes to long time to select CD.
3	CD error message. The pick-up is out of focus during play mode due to scratches on the disc or contamination. Try using a new disc. If problem persists, replace stereo.
4	Indicates a connection problem. Reconnect the data cable.
6	CD error message. Could not read data from disc because it is up side down. If inserting new disc and same problem occurs, replace stereo.
9	Weak RF. Try an alternate frequency.

## 2.5. 20” Television Troubleshooting

### 2.5.1. The remote is not working

- Make sure there is no barrier between the remote and the remote sensor.
- Use at a range of 20 – 25 feet meters and about 30” in each direction of the front of the TV sensor.
- The lifespan of the batteries is generally about six months. Change the batteries if the remote control does not work .
- If the remote control has not been used for a long time, remove and replace the batteries to prevent battery leakage.

### 2.5.2. There is no video

- Check for secure connection.
- Make sure you are operating the TV correctly.
- Make sure you set the color system correctly.

### 2.5.3. There is no sound and no picture when DVD is playing

- Check if the unit is correctly secured.
- Make sure you are operating the TV correctly.
- Make sure the source (DVD unit) is set to DVD signal output.
- Make sure the source (stereo AUX) is set to receive audio output.
- Check the video connection and make sure the TV is set on video for viewing DVD.

### 2.5.4. There is no power to the TV or stereo

- Using a volt meter, make sure that there is 120 Volts going to the power supply and 12V coming out.
- If you get 120 Volts in but you do not have 12 Volts coming out of the power supply, check the fuse for continuity. If there isn't any continuity, replace the fuse.
- If you get power to the TV but it does not power up, check the fuse from the TV.

### 2.5.5. There is video but no sound

- Make sure the DVD is on all the time.
- On the DVD remote, press the A/V button for sound.
- On the TV, do the same thing to set the TV. Press the TV button for TV mode and then press the A/V button again to get the sound.

## 2.6. 42" Plasma TV Troubleshooting

### 2.6.1. Self-diagnostic indication (when something abnormal occurs)

Signal reception is indication on screen. Source of input flashes in the top left corner when switched. (Letters will appear in white.)

“AV, COMPONENT, S VIDEO, PC1, PC2, DVI”

### 2.6.2. There is no power

Is the power cord disconnected or is the breaker off? If so, power the breaker to the ON position. Ensure the cord is plugged in firmly

### 2.6.3. Power suddenly goes off or comes on

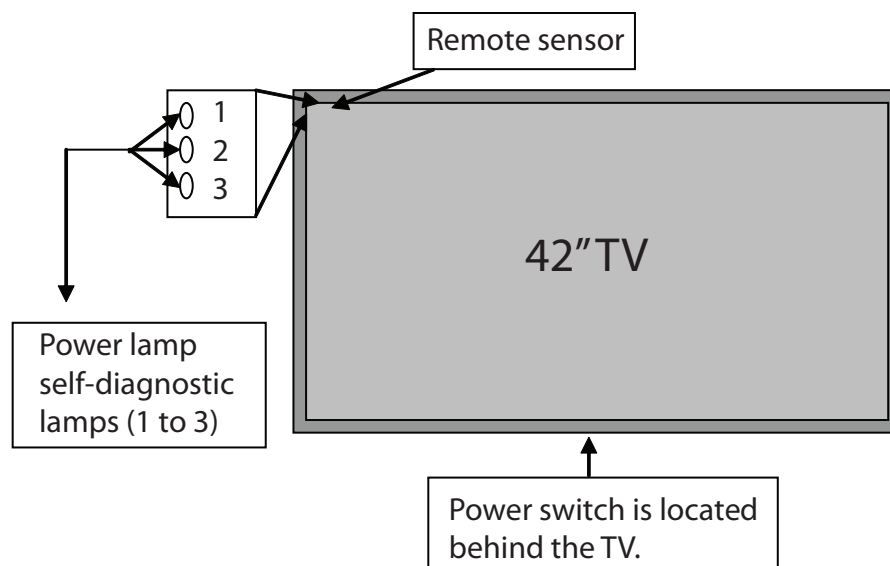
Is the power on / off timer activated? Set the timer to OFF on the menu.

### 2.6.4. There is no video, or there is no audio

Check connections on both ends at TV and at source

Check input setting. Press “Source” button to rotate around input sources on TV.

Check volume setting on TV and on source. Check for proper audio settings and connections.



## 2.7. Waterfall Troubleshooting

- Make sure 110V power is connected to the barbecue island input line.
- Make sure the pump cord is connected to a 110V outlet line.
- Check the water level before turning the pump on.
- Maintain the water level above the submersible pump at all times. Do not exceed the water level above the barbecue island pond.
- Check the plug to ensure the GFCI breaker is not tripped.

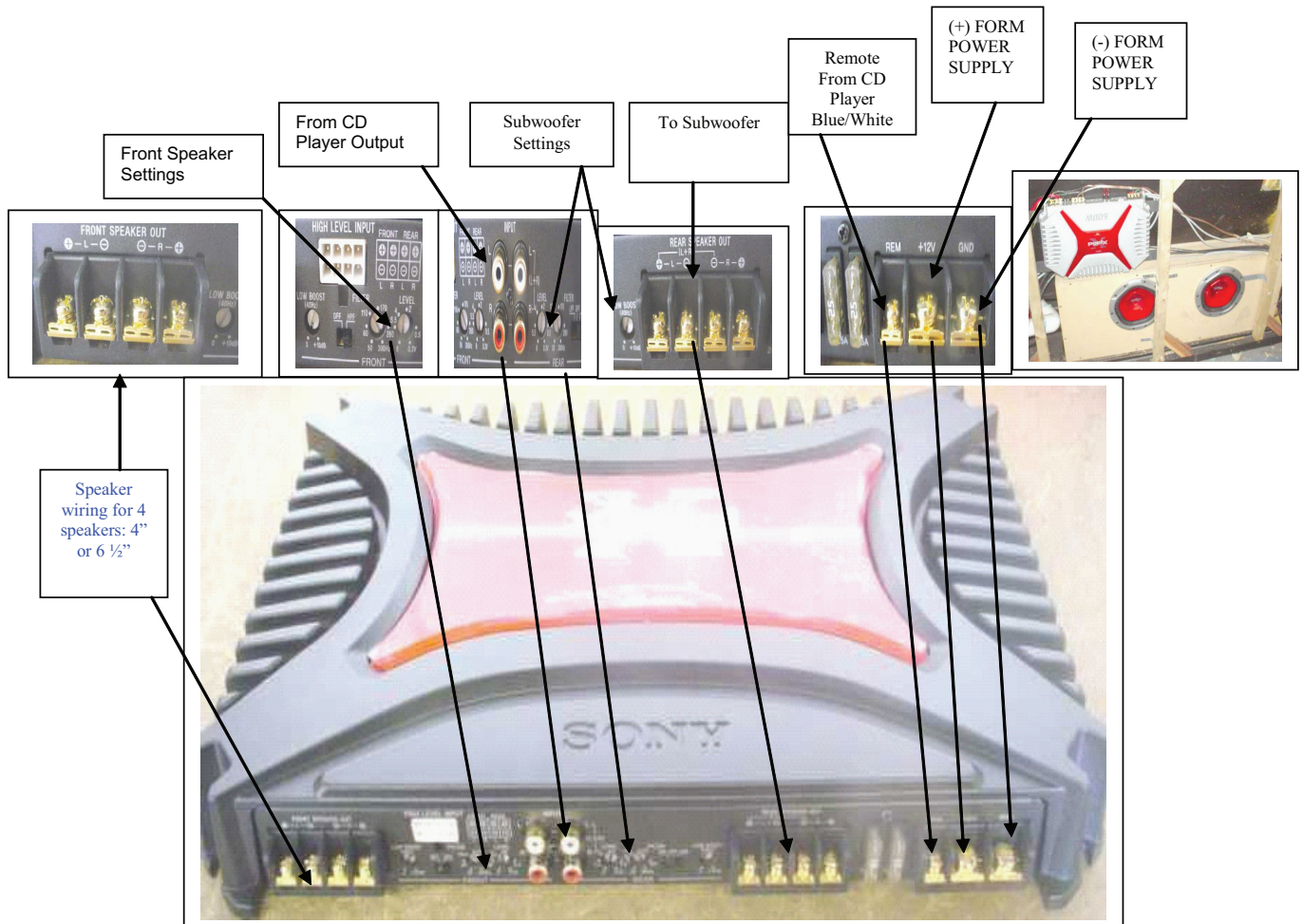
### Waterfall Pump Replacement

- Disconnect the main power source to the barbecue island.
- Disconnect the submersible pump from the barbecue outlet line.
- Remove the submersible pump from the barbecue island pond.
- Pull out the pump power cord.
- Insert the power cord of the new submersible pump through the flex pipe.
- Connect the power cord of the submersible pump to the barbecue outlet line.
- Connect the main power source to the barbecue island.



## 2.8. Amplifier

1. Locate the amplifier. You will find it on top of the subwoofer box.
2. Once you located amplifier remove the wire, make sure you label the wires before removing them.
3. Remove the screws from the amplifier to replace it.
4. Once you remount the amplifier make all your connection with the labels to the correct terminals wires.



## 2.9. LED Light Replacement

1. Place the lens removal key in the LED housing. Make sure the pins of the removal key are placed inside the lens.
2. Turn the removal key and pull the lens from the housing.
3. Pull out the LED light lamp from the socket.
4. Insert the new LED light into the socket. Make sure both connector pins are seated firmly in the socket.
5. Turn on and off the lights to test its performance before the LED light lens is replaced.

## 3.0 Assembly and Installation

### 3.1. Natural Gas Hook Up

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

**Important Warning:** Cal Flame barbecue grills are manufactured to operate on either liquid propane (LP) or natural gas (NG) and cannot be converted. (Firepits and fireplaces can be converted.) To verify the operating fuel, check the serial number label on the back. Either LP or NG will be marked on the operating tab, indicating the proper operating fuel.

**Attempting to convert a Cal Flame barbecue grill from one fuel to another may result in serious injury and void the warranty coverage.**

Never connect the barbecue grill, firepit or fireplace 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. Natural gas connection must be performed by a licensed contractor or local gas company representative.

Ensure that the service supplying the barbecue grill, firepit or fireplace is fitted with a conveniently positioned shut off valve with easy access.

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

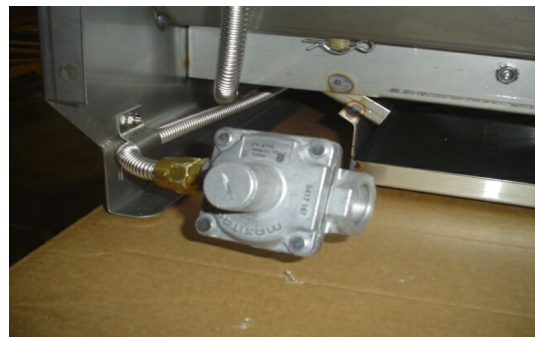
#### Connection

NG is connected with a stainless steel hose. The regulator is already connected behind the grill on the left side. See figures below.

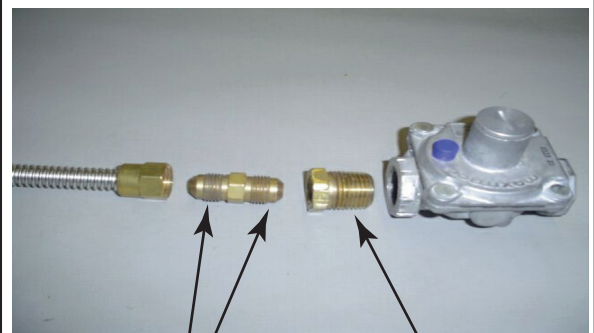
- Remove the rear panel to gain access to the regulator and gas connection point.
- Connect a suitable flex connector to the regulator.
- Make sure the arrow marked on the bottom of the regulator point toward the grill inlet gas line. Connect the NG source line to the NG regulator.
- When making the gas connection make sure you test the fitting. Use a soapy water mix.
- To see if there are any leaks, connect a 3/8" to 3/8" coupling to the grill inlet gas line.
- Connect a 1/2" coupling to the 3/8" coupling.
- Connect the NG regulator to the 1/2" coupling.

If the gas line is plumbed from the house regulator, no regulator is needed.

**Regulator located behind grill**



**Coupling connections**



Never use Teflon tape or paste on flare fittings

OK to use Teflon tape or paste

### 3.2. 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. Enclosures will have one side completely open.
2. Enclosures that have four sides, complete with a top and bottom, will comply with the following conditions:
  - At least two ventilation openings at cylinder valve level shall be provided in the sidewall, equally sized, spaced at 180° (3.14 rad), and unobstructed. Each opening shall have a total free area of not less than ½” 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>).
  - Ventilation opening(s) shall be provided at floor level and shall have a total free area of not less than ½ 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° (3.14 rad) and unobstructed.
  - Every opening shall have minimum dimensions so as to permit the entrance of a 1/8 inch (3.2 mm) diameter rod.



#### LP Gas Manifold Pressure

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

#### LP Gas Supply Pressure

Maximum line pressure for plumbed-in propane is 14” W.C psi (3.5 kPa). Minimum line pressure for propane is 11” W.C.

#### Gas Pressure Regulator

The 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.

#### Cylinder Specification

Any LP gas supply cylinder used with the firepit or fireplace should be approximately 12 inches in diameter and 18 inches high to fit through the access door. Always use the cylinder dust cap on the cylinder valve outlet during transport and when the cylinder is not connected to the firepit or fireplace.

#### Transporting the LP Gas Supply Cylinder

Only one cylinder should be transported at a time. Transport cylinder in an upright and secure manner with control valve turned off and the dust cap in place.

### **Liquid Propane Installation**

From the back part of the propane grill you install the LP gas regulator that attaches to the same location on the left side of the grill then to the LP tank. See figure at right.

### **Method of Gas Line Removal**

When removing make sure the main gas is on the OFF position then make your removal just the opposite of the installation.

### **Tip**

To identify the type of grill, see the ETL label located at the back of the grill.

### 3.3. Electrical Installation

The grill requires a permanent, grounded, 120 Volt outlet with a dedicated 15 amp GFCI breaker.

All electrical installation should be performed by a contractor.

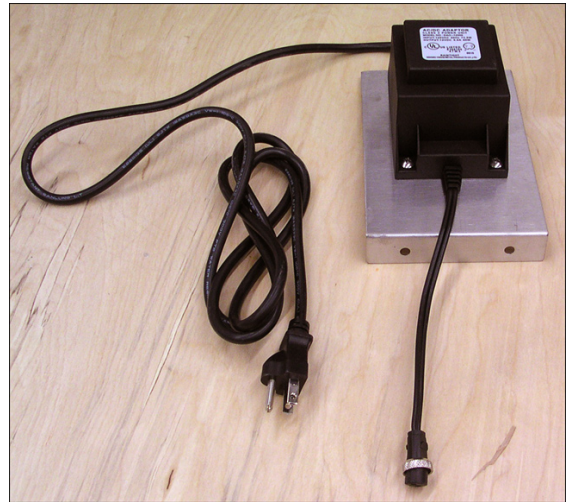
Once complete make sure the power is off before making the connections, then power the breaker to test any lighting or any other options that barbecue island comes with.

The four and five burner convection grill comes supplied with a separate J-box and transformer assembly (part # ELE09019111).

#### Installing the Transformer

All grills with electrical components such as lights or a convection fan will require the transformer to be installed and plugged in before you can use it. This needs to be done before the grill is inserted in the island or modular cart. When the transformer is attached to the grill chassis, use care in placing the grill in the island cutout to avoid hitting the transformer.

1. Remove the transformer and the metal screws from the plastic bag.
2. Place the grill on a sturdy surface and tilt it back to show the underside of the grill.
3. Using the metal screws, attach the transformer to the left side of the grill near the internal electrical connection. Attach the metal plate to the outside surface of the grill as shown in the figure below.
4. When you have firmly tightened the screws and nuts, connect the plug from the transformer to the grill. Screw on the stainless steel retainer.



### 3.4. Testing for Leaks

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

As a safety precaution, remember to always leak test your barbecue grill, firepit or fireplace 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 only a leak testing solution as specified below.

1. Prepare a leak testing solution of sudsy water by mixing in a spray bottle half-liquid soap and half water.
2. Check all the control knobs to make sure they are in the OFF position.
3. Turn the cylinder valve knob counterclockwise one turn to open it.
4. Apply the leak-testing solution by spraying it on the 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 should become damaged. The cylinder must be replaced.
6. If you are unable to stop a leak, shut off the gas supply at the cylinder valve. Call an authorized gas appliance service technician or LP gas dealer. Do not use the appliance until the leak is corrected.
7. Push in and turn any control knob to release pressure in the hose and manifold.
8. Turn off the control knob.

## 3.5. Information on Fireplaces and Fireplaces

### **What do I need to know about setting up my fireplace or firepit once it arrives?**

You will need to have two people to set up your fire pit. We recommend two or more people. Either you or your plumbing / HVAC professional can hook up your fire pit to your gas line. Our units have an 18-inch flexible hose with a standard 3/8-inch flare fitting, which will attach to a valve or fitting on your gas line.

### **Where can I put my fireplace or firepit?**

Cal Flame fireplaces and firepits are recommended for the patio, the poolside, the deck, or the lawn. If using on either the deck (please check your local fire codes) or the lawn, we recommend running a course of firebricks beneath the fireplace or firepit. For the lawn, it's best to have your pad of fire bricks an inch or two wider than the fire pit. This keeps your lawnmower or weed eater from marring the finish on your fire pit.

### **Can I move my fire pit if I don't like where I decided to put it?**

Yes. In fact, some people like their fireplace or firepit by the pool in the summer, and on the patio in the winter. Gravity is the only thing that holds the fireplace or firepit down, so you're free to move it anywhere you like (once the gas line is detached).

### **Can I put my fireplace or firepit inside my house?**

No. They are designed for outside use only. It could cause severe injury or death.

### **Can I use either natural gas or LP with my fireplace or firepit?**

Yes and no. Each type of gas requires a different brass fitting and orifice. When you order, you need to tell us which type of gas you'll be using, and we'll install the appropriate orifice before shipping. But if you should change gas types later, you can purchase a conversion kit from us for \$30.

### **Where is the burner located?**

The stainless steel burner assembly is hidden beneath the lava rocks and gravel.

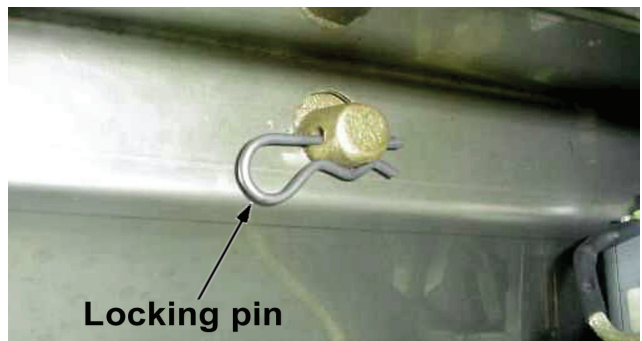
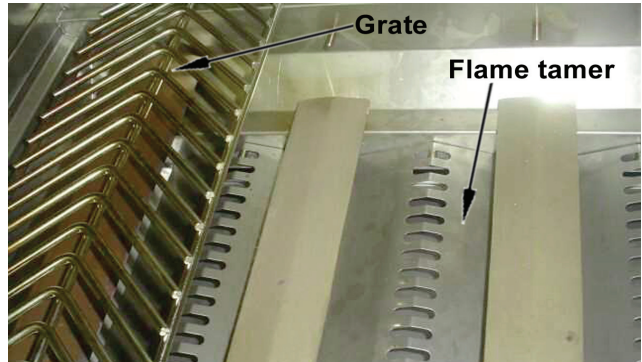
### **Can I burn wood in my fire pit?**

NO. Because of the intense heat generated by a wood fire, your fire pit will crack and the warranty will be void.



### 3.6. Installing Gas Burners and Sear Zone Burners

1. Disconnect or shut off the LP or natural gas line connected to the grill. Wait until the burners cool down.
2. Open the hood and remove the grate and flame tamer on top of the stainless steel burner you want to replace.
3. Through the access door underneath the grill, find the round stud and locking pin that locks the burner you want to replace.
4. Carefully remove the locking pin with your fingers.
5. Raise the stud from the locking hole and carefully move the burner forward to release it from the igniter and gas supply valve.
6. Take the burner out of the grill and store it in a safe and dry place.
7. Install the Sear Zone burner. Align the gas inlet on the burner with the gas supply valve on the grill and torch tube with the igniter. Make sure they align perfectly. Slide the stud at the other end into the locking hole.
8. Adjust the Sear Zone burner, make sure the burner is aligned and in position.
9. Install the locking pin. Through the access door underneath the grill, find the stud to lock the burner in place, install the locking pin. Make sure the locking pin is secured correctly.
10. Repeat steps 2 through 9 if you want to replace other burners.
11. Put back the grate you just removed. (You don't need flame tamers for Sear Zone burners.)
12. Reconnect or turn on the gas line.



If you want to change back to regular burners, just follow the above procedure above in a similar way.

One Sear Zone burner installed



Multiple Sear Zone burners installed



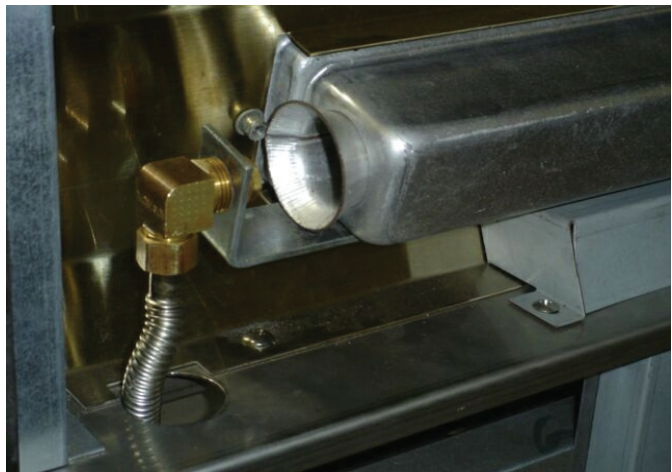
### 3.7. Infrared Back Burners

1. To remove the back burner you need to remove six screws from the back panel to get in the back.
2. Once you have removed the screws, disconnect the gas line to replace the back burner. Be careful not to damage the front part of the burner -- it's very easy to damage.
3. Once you have replaced the burner, connect the gas line. Make sure it's very secure so there is no gas leak.
4. Make sure the electrode wire is connected properly.

#### Tip

Once you have installed the back burner and sealed the back part of the grill, open the gas valves to check for gas flow.

Turn the knob about  $\frac{1}{4}$  turn, allowing three to five seconds for the back burner to fill up with gas. Once it is filled, turn the knob full way for it to click, then it will light.



### 3.8. New Access Doors

1. Provide a cut out and a door jamb with inside dimensions as follows:

16 1/4" X 19 " for a single door

28 1/4" x 19 3/8" for double doors

2. Secure the steel frame with 16 #10 x 1" truss head Phillips screws.

3. Attach doors to frame.

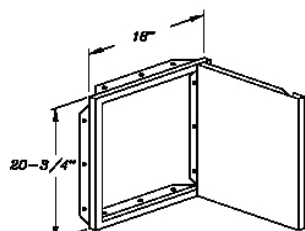
4. Adjust doors as follows:

For height adjustment, loosen the two screws attached to each mounting plate.

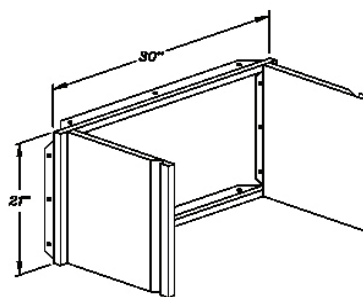
Snap off hinge and secure mounting plate with #6 X 1" flat Phillips screws.

For side adjustment, turn the screws to increase or decrease door overlay.

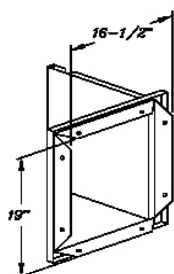
For depth adjustment, loosen screws, adjust the door to the desired position and retighten the screws.



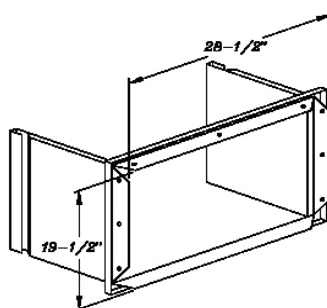
**SINGLE ACCESS DOOR  
FRONT DIMENSIONS**



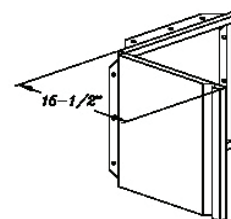
**DOUBLE ACCESS DOOR  
FRONT DIMENSIONS**



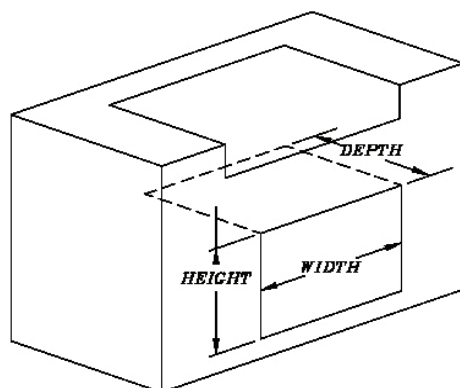
**SINGLE ACCESS DOOR  
REAR CUT OUT DIMENSIONS**



**DOUBLE ACCESS DOOR  
REAR CUT OUT DIMENSIONS**



**CUT OUT DIMENSIONS**



<b>SINGLE DOOR</b>	
<b>WIDTH</b>	16-1/2"
<b>HEIGHT</b>	19"
<b>DEPTH</b>	2-1/2"
<b>DOUBLE DOOR</b>	
<b>WIDTH</b>	28-1/2"
<b>HEIGHT</b>	19-1/2"
<b>DEPTH</b>	2-1/2"

## 3.9. Drop-In Grills

### Installation

When installing the grill, have someone help you lift the grill on top of the island. Once the grill is set into the cut-out, connect the gas line behind the grill.

After connecting the line to the gas source, turn the valve to the OPEN position. Perform a leak check using a spray bottle with soapy water.

### Removal

1. Make sure the gas is shut off.
2. Disconnect the gas line from behind the grill. On LP gas tanks, disconnect the line from the tank by turning the knob counter clockwise to remove from the tank.
3. Have someone help you remove the grill by sliding it forward.

### 3.10. Beer Tap Installation



This procedure describes the step-by-step procedure for installing a beer tap on the countertop of a Cal Flame barbecue.

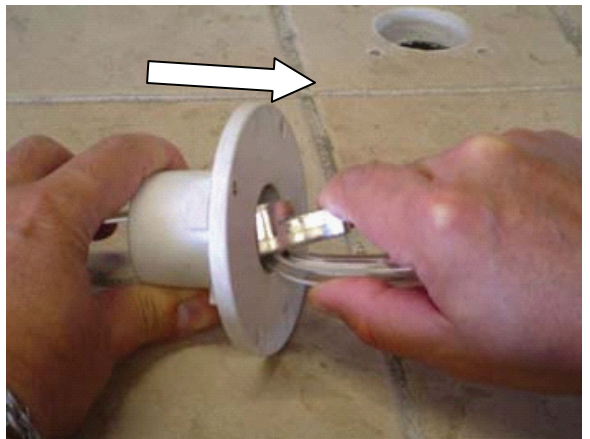
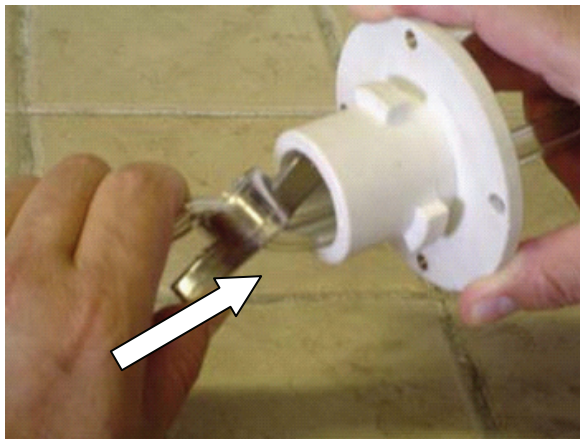
Before beginning, conduct an inventory of the parts that came with the Cal Flame barbecue and refrigerator to ensure everything you need is present.

#### Remove the white plastic cap

1. Ensure your beer tap has a clear vinyl hose with a white plastic cap and a metal ring on it.
2. Bend the vinyl hose flat against the metal ring as shown.



3. Push the metal ring into and through the white plastic cap.
4. Pull the metal ring from the opposite side of the white plastic ring.



**Attach the beer tap**



- 5. Drop the end of the vinyl hose with the metal ring on it through the hole in the countertop.



- 6. Place the beer tap on the countertop with the screw holes positioned over the holes drilled in the countertop.

Place four screws in the screw holes.



- 7. Screw the four nuts onto the metal screws and tighten them with a screwdriver and a wrench.

Note: You may need a second person to help you with this step.

### Attach the cap to the refrigerator



8. Place the white plastic cap on top of the refrigerator.

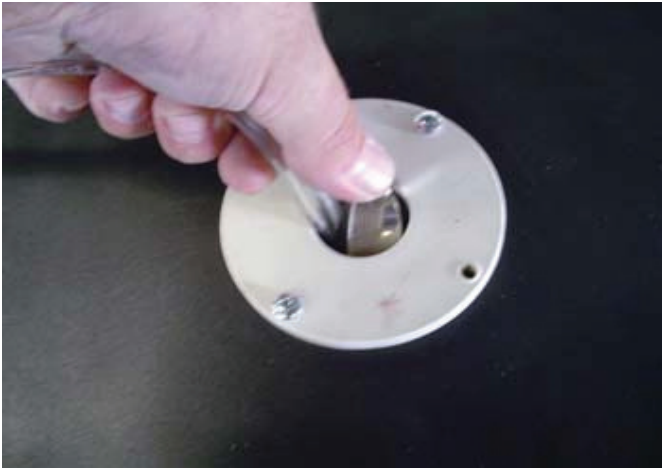


9. Insert two metal screws. Tighten with a screwdriver.

### Insert the refrigerator in the cut-out



10. Compress the vinyl hose against the metal ring as you did earlier and push it into the white plastic cap.



11. Push the metal ring completely through the ring until it comes out the opposite side.



12. Slide the refrigerator into the cut-out.

The beer tap is ready for use.



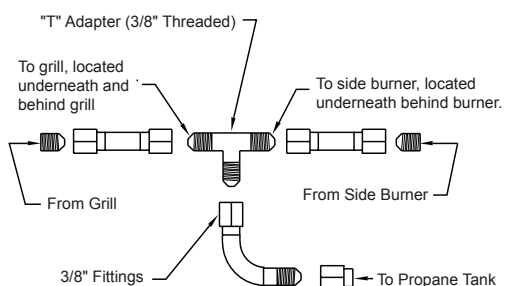
### 3.11. Side Burners

This procedure describes how to install a side burner into an area of 17-1/2" long, 11" wide and 3" deep.

1. Assemble a 3/8" pipe nipple to the 3/8" pipe tee using Teflon tape or pipe sealant. Use only sealant that is approved for use on LP gas.
2. Install the pipe tee assembly to the grill intake pipe with pipe sealant. Tighten assembly and align the branch opening of the tee with the hole of the cabinet.
3. Connect the flexible hose (male end) to the pipe tee with pipe sealant.
4. Install and secure the side burner into the island by simply setting it in place.
5. Connect the female end of the flexible hose to the side burner intake pipe with pipe sealant.
6. Connect gas supply to the grill.
7. Check for gas leaks using soap water solution.

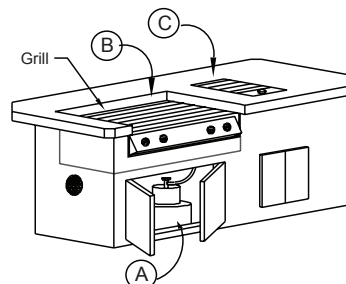
Items Included with Barbecue

- 1) "T" adapter (3/8")
- 2) 2 each Hose 3/8" Fittings
- 3) Regulator/ Hose

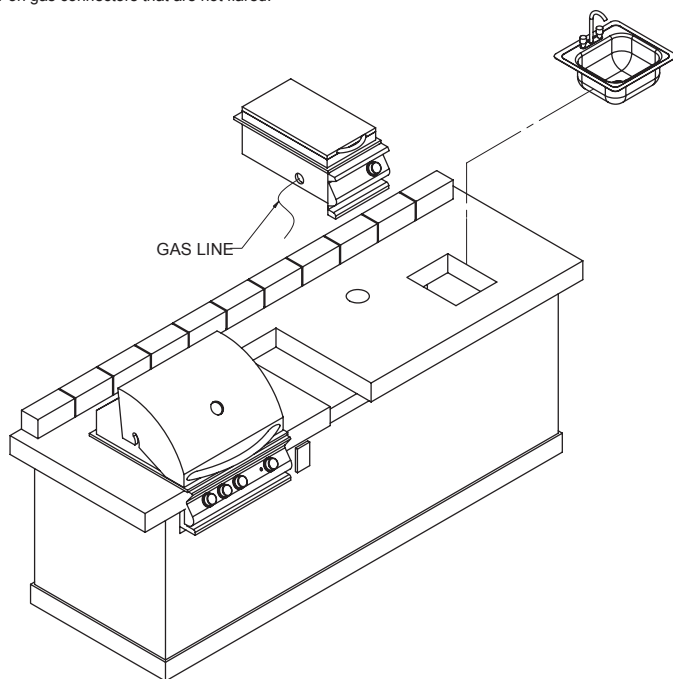


NOTE: You will need to use a gas rated sealer on gas connectors that are not flared.

- (A) Open barbecue door. Install hose with regulator on propane tank. Then connect other end to "T" adapter. Make sure to use gas rated tape seal when installing adapter to insure proper seal.



- (B) Then take other end of "T" adapter with hose attached and connect to end of male located underneath and at the back of the grill. (Use gas rated tape seal on all connections).
- (C) Connect the last open line to the side burner (Use gas rated tape seal on all connections)



### 3.12. Barbecue Cart End Shelves

This applies to barbecue carts manufactured prior to 2006.

1. Prepare the installation of handle: 2 hex screws, 2 washers
2. Thread the hex screws and washers onto the threads on both ends of the handle.
3. Use a ratchet to tighten the hex screws on both ends.
4. Take the three screws off on both sides of the cart to install the mounting bracket.
5. Install the mounting brackets on both sides. Make sure the mounting brackets are in the correct orientation.
6. Slide the shelf into the brackets from bottom. Make sure to slide into the brackets on both sides evenly.
7. Slide the shelf fully onto the mounting brackets.
8. Lift and rotate the shelf so it slides back into the brackets. Keep the shelf in the normal open position.
9. Install the stop brackets under the mounting brackets on both sides.
10. Remove one screw and loosen the another screw so the stop bracket can be placed. Tighten both screws to hold the stop bracket.

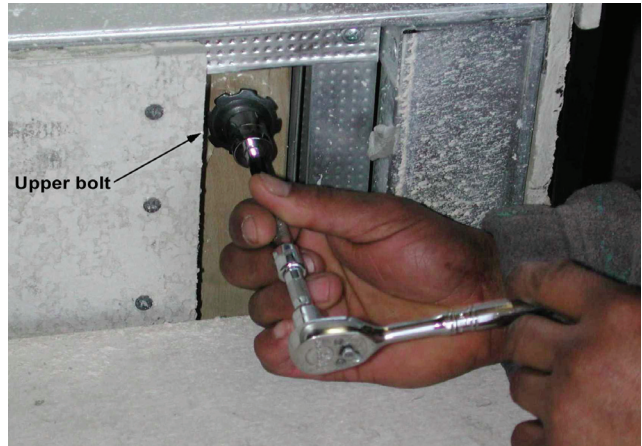
## 3.13. Barbecue Modules Seam and Joint Installation

### Stucco Assembly

1. Place the island sections together on the ground.
2. Make sure the ground where the barbecue is placed is as level as possible for best alignment. If the ground is not level, use shims to level out the island sections. This needs to be done before you place the bolts.
3. Connect the speakers, lights, and main power cables before sliding the sections together.



4. Insert the bolts through the pre-drilled holes from the inside of the barbecue island (total of four bolts on each side).
5. Insert the upper bolts as shown. Tighten the bolts all the way using a 9/16" wrench.



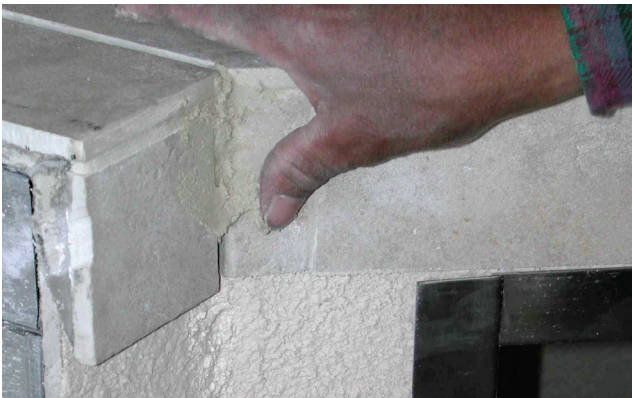
6. Prepare and fill the gap or seam line with speed set.
7. Using your fingertips, push and flatten out the speed set into the seam line.  
Allow the speed set to dry before proceeding with the next step.



8. Using a small brush or hopper gun, apply stucco to the seam line.
9. Mix grout with water in a container.
10. Fill the tile seam line with grout using a small spatula or your finger.



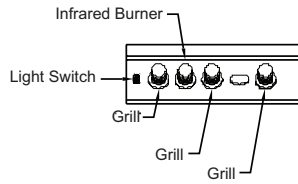
11. Clean the grout with a damp rag.
12. Let the grout and stucco dry for at least three hours.



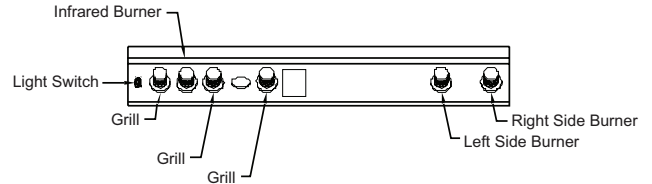
# 4.0 Operation

## 4.1. Cal Flame Familiarization

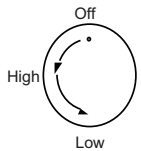
The following controls are for the Cal Flame™ drop-in grills, stainless steel carts, Chef Series, Master Chef Series and Gourmet Series Islands. Familiarize yourself with these controls prior to operating and servicing Cal Flame™ barbecues.



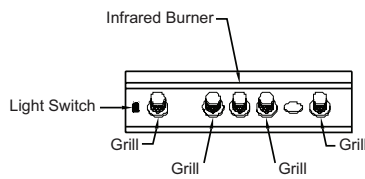
Three Burner Grill and Cart



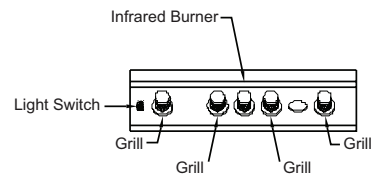
Three Burner Cart with Sideburner



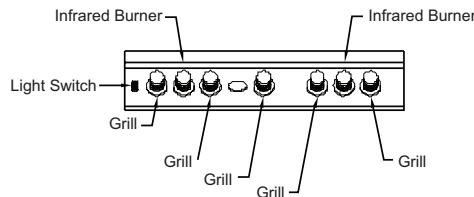
Grill Knob Operation



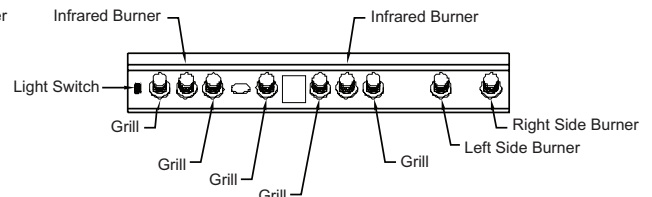
Four Burner Grill and Cart



Four Burner Flat Drop-in Grill



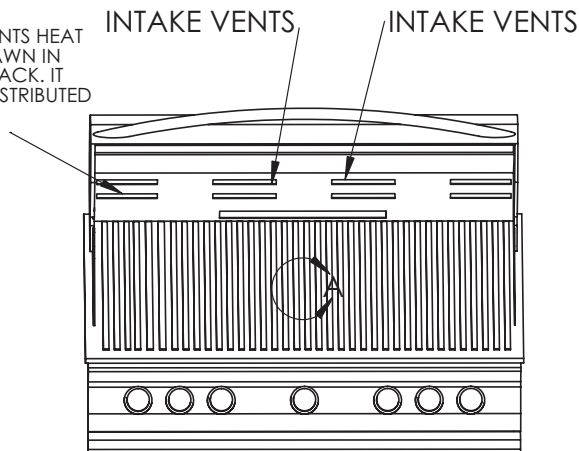
Five Burner Grill



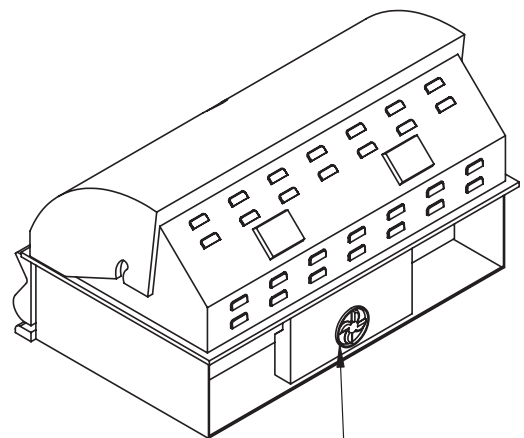
Five Burner Cart with Double Side Burners

Rear rotisserie burner lighting suggestion: Since its location requires gas to travel farther, ignition is achieved by slowly turning the knob to allow initial gas flow.

EXHAUST VENTS HEAT THAT IS DRAWN IN FROM THE BACK. IT IS THEN REDISTRIBUTED



FRONT VIEW OF GRILL



Intake/Recirculation Fan

## 4.2. Turning on and off the Lights

The ON / OFF switch controlling the halogen light is located at the control panel on the front lower left side.



The Cal Flame grill is equipped with either one or two halogen lights. This feature is added for safety and convenience when cooking in poorly illuminated areas and provides an inviting display of deliciously grilled food.

The grill is equipped with a grounded (3 prong) 120 VAC plug located in the lower left rear corner of your cart and must be plugged into a permanent grounded 120 VAC outlet with a dedicated 15amp GFI breaker. DO NOT cut or remove the ground prong as this may result in fire, electrical shock or other personal injury. This electrical source provides power to the lights, refrigerator and rotisserie.

## 4.3. Operating the Grill

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

## 4.4. Electronically Lighting Grill and Infrared Burners

1. Open the hood.
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.

## 4.5. Manually Lighting the Grill

1. Open the hood.
2. If you have just attempted to light the burner, allow five minutes for any accumulated gas to dissipate.
3. Light and insert a long stem match, holding it near the burner ports. Keep your face as far away from the burners as possible.
4. Push in and turn the control knob just past the LIGHT position to HIGH.
5. 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.
6. If the burner does not light after several attempts see Troubleshooting Guide in the back of this manual.

## 4.6. Manually Lighting Infrared Burners

1. Open the hood.
2. If you have just attempted to light the burner, allow five minutes for any accumulated gas to dissipate.
3. Light and insert a long stem match, holding it along side the ceramic burner.  
**Keep your face as far away from the burners as possible!**
4. Push in and turn the control knob just past the LIGHT position to HIGH.
5. 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.
6. If the burner does not light after several attempts see Troubleshooting Guide in the back of this manual.

## 4.7. Manually Lighting the Main Burner with a Match

Before proceeding with these instructions, familiarize yourself with the safety precautions in the first section of this manual.

Ensure the lid is open before lighting the flame.

1. Set all barbecue grill control knobs to OFF and open the gas supply.
2. Remove the cooking grid from the burner you wish to light.
3. Insert the lighted match, placing the flame near the burner ports.
4. Press the control knob and turn it to the HIGH setting, releasing gas into the burner. The burner should light immediately.
5. If more than one burner is needed, repeat the procedure with each burner.
6. Replace the cooking grids.
7. Turn off unneeded burners and adjust other burners to the desired cooking temperature.

## 4.8. Charcoal Grill Lighting Instructions

Use a high quality hardwood charcoal to ensure a good flame. Charcoal briquettes made from maple, oak, birch, or elm woods will burn cleanly, minimizing smoke and unpleasant odors.

Open the hood. Remove cooking grates. Place charcoal on the ashtray at the bottom of grill and arrange charcoal in a pyramid shaped stack. Add charcoal lighting fluid according to manufacturer's instructions. Let stand for about a minute to let fluid penetrate charcoal. Carefully light charcoal and allow it to burn approximately 15 to 20 minutes or until a light gray ash develops.

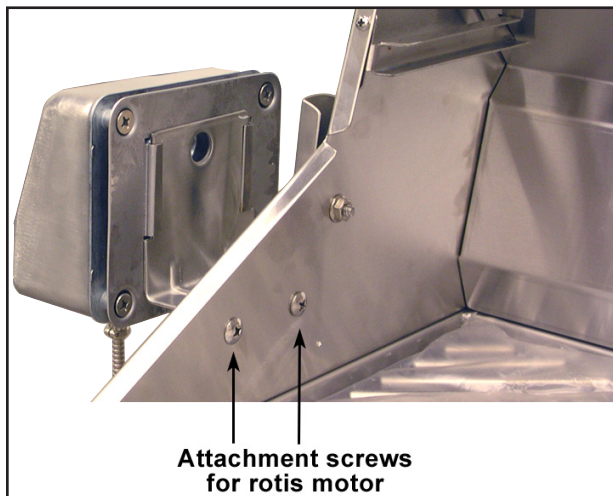
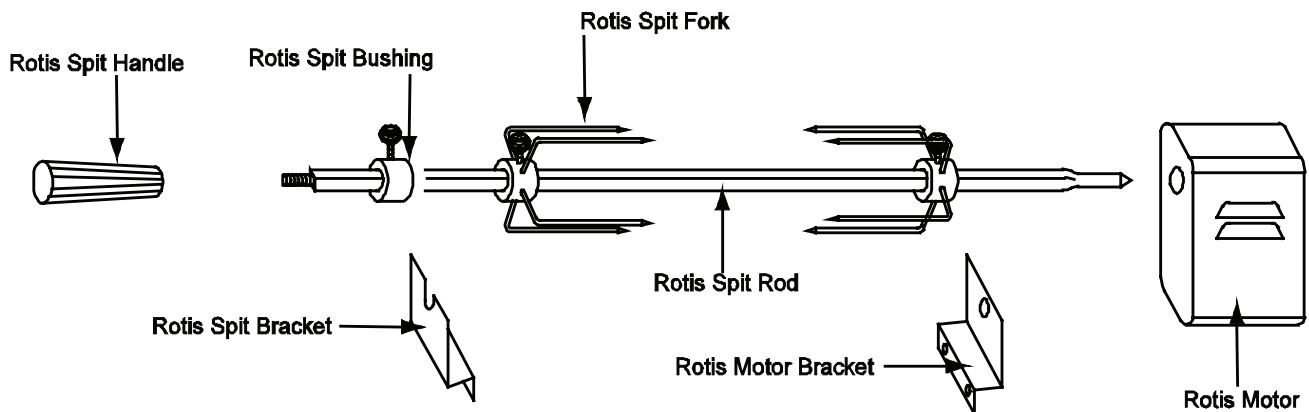
Do not allow ash to accumulate and remain in the barbecue. Clean regularly.



## 4.9. Operating the Rotisserie

1. To load the rotisserie rod, hold the handle firmly while sliding one of the fork assemblies (prongs facing away from the handle) onto the rod. Push the rod through the center of the food, then slide the other holder (prongs toward the food) onto the rod. Center the meat on the rod and push the fork assemblies firmly together. Tighten the thumbscrews. To secure any loose portions of your meat, use butcher string (never use nylon or plastic string). Place basting pan under the food to collect the drippings.
2. To use the rotisserie, first mount the motor on the left side of the grill. Place securely onto support bracket.
3. The rod of the rotisserie system is assembled into the motor by placing the pointed end into the motor and resting the threaded end on the support at the side of the grill. Once the rod is pushed as far as possible into the motor, the grooved end of the rod should rest on the right side bracket.
4. If necessary, to offset unbalanced loads, slide the counter weight on to the rod. With the counter weight loose, allow the loaded rod to rotate and come to a stop. Now rotate the counter weight above the rod in a vertical position and tighten the thumbscrew. You can slide the counter weight away from or closer to the rotisserie rod as needed for balanced operation. Once lit, the rotisserie burner will reach cooking temperature in about one minute. The orange/red glow will even out in about five minutes.

When operating the rotisserie, use only the rotisserie burner. Do not operate the main burners.



## 4.10. Using the Griddle

This drawer style griddle fits perfectly with all Cal Flame™ series grills for your cooking convenience. It slides into the enclosure for easy storage.

When sliding the griddle out of the enclosure, always do it slowly as the heavy weight may cause you to suddenly drop the griddle. Lift the griddle out of the enclosure instead of sliding it all the way out.

Remove two cooking grates for the griddle space. Leave grease in the front drain when cooking. Wait until the griddle cools down when done cooking. Use both hands when removing the griddle and draining the grease.

Before storing the griddle, make sure it is clean and dry. Slide the griddle into the enclosure for safe and easy storage.

## 4.11. Using the Drop-In Food Warmer

Attach this three-pan food warmer to your favorite bartending center or grill and serve a variety of hot, fresh hors d'oeuvres and side dishes. The food warmer has three steamer pans and a built-in fuel drawer.

1. Remove one steamer pan and fill the container pan with approximately 2"-3" warm water. Gently place the steamer pan back on to the container pan.
2. Open the sterno fuel drawer. Remove the sterno fuel can holder covers. Place two sterno fuel cans into the can holder.
3. Using a butane lighter or long stem match, light the sterno fuel. For safety, the rear one first.
4. Close the drawer.
5. Place food to be warmed into the steamer pans and cover with pan lids.
6. To extinguish the sterno fuel flame, open the drawer and carefully replace the fuel holder covers. Flames will go out.

## 4.12. Using the 30" Warming Drawer

### Preheating Instructions

The warming drawer is designed to keep foods at a safe temperature (above 140°F) when used according to the operating instructions. The drawer must be pre-heated for at least 1 hour on the highest setting. If the warming drawer isn't pre-heated, the internal temperature of the food being warmed could fall below the minimum safe level and bacteria could develop. Always pre-heat the drawer according to instructions described in this manual.

Be certain to use only dry potholders. Moist or damp potholders on a hot surface may cause burns from steam. Do not use a towel or other bulky cloth in place of potholders.

1. Never store anything in the warming drawer. Flammable materials can catch fire, plastic items may melt or ignite and other types of items could be ruined.
2. Do not hang articles from any part of the appliance or place anything against the drawer. Some fabrics are quite flammable and could catch on fire.
3. For safety reasons and to avoid damage to the appliance, never sit, stand, or lean on the warming drawer door.

4. For personal safety reasons, wear proper apparel. Loose fitting garments or hanging sleeves should never be worn while using this appliance. Some synthetic fabrics are highly flammable and should not be worn while using this appliance.
5. Do not use aluminum foil to line any part of the warming drawer. Using a foil liner can be a fire hazard and can obstruct of the flow of heat and ventilation air. Foil is an excellent heat insulator and heat will be trapped underneath it. This trapped heat can upset the performance of the warming drawer parts.

### **Temperature Settings**

The dial on the right of the unit is the on/off and temperature control adjustment. When the dial is turned clockwise from the off position to the low position, the unit will maintain a temperature approximately 175°F. By rotating the dial clockwise to the high position, the drawer will reach a temperature of approximately 230°F.

To use, turn the thermostat dial to a temperature setting:

High	210°F – 230°F
Medium	190°F – 210°F
Low	175°F – 190°F

- If you use the tray, preheat it while preheating the warming drawer.
- Preheat any empty serving dishes to be used while preheating the drawer.
- Add cooked, hot food in its cooking container or heat a safe container.
- You may use aluminum foil to cover food containers.

## **4.13. Using the Cal Entertainment System™**

Some barbecue islands may be equipped with audio/visual entertainment options. Several options are available and include marine grade CD players and DVD players. Two different TV monitors are also available. Each Cal Flame™ unit equipped with an audio/visual system is delivered with the manufacturer's operating instructions. We ***strongly*** recommend that you read these instructions prior to operating the unit.

The instructions contained in this manual describe only basic functions. See the manufacturer's operating instructions for other features and functions. These instructions are delivered with the Cal Flame™ owner's manual in a clear plastic bag.

Observe the following precautions for your entertainment system:

- Make sure that hands and CDs / DVDs are dry before coming in contact with this or any electronic option.
- Always close the CD / DVD protection door.
- Do not place wet CD's or DVD's into this unit at any time.
- Water damage is not covered by Cal Spas or the manufacturer's warranty.

Although the marine grade entertainment system is encased in a plastic housing with weather seals, the system is water resistant and NOT waterproof. You must take every precaution to keep this system dry! Water damage is not covered by Cal Spas or the manufacturer's warranty.

WARNING! Although the TV monitor is water-resistant, make sure that hands are dry before coming in contact with this or any electronic option. DO NOT SPLASH WATER ON THE TV MONITOR!

### **Operating the CD Player**

The manufacturer's operating instructions are delivered with your barbecue island. We strongly recommend that you read these instructions prior to operating this unit. Press the POWER button on the unit or the remote control to turn the system on. The system automatically starts in the mode it was in when it was last shut off.

### **Listening to the Radio**

1. Press the MODE button to switch to the radio mode.
2. Press the left and right arrows located at the far right of the panel to tune the radio to a station.

### **Inserting a Disk**

1. Press the OPEN button on the unit. The faceplate will gently lower and expose the disk drive.
2. Insert a disk in the disk drive.
3. Flip up the faceplate.

### **Playing a CD**

You can play CDs with any of the media systems (Aquatic CD, Aquatic DVD, Poly Planar, and JBL CD player).

1. Insert a disk in the disk drive as described above. The player will identify the type of disk and begin playing it.
2. Use either the remote control or the buttons on the faceplate to start and stop the player and to jump to selections.
3. To remove the disk, press the EJECT button.

### **Raising and Lowering the 20" TV**

Press the TV button on the auxiliary control panel to raise and lower the TV monitor. Press the button once to raise the TV. Press it again to lower the TV.

You can also press the OPT.1 button on the universal remote.

The TV monitor will automatically lower after two hours of non-operation.

### **Playing a Movie**

1. Press the OPT.1 button to raise the TV.
2. Turn on the TV using the universal remote control.
3. Insert a disk in the DVD player as described above. The player will identify the type of disk and begin playing it. Either the DVD menu will appear on the TV screen or the movie will begin playing automatically.
4. Use the remote control to navigate the DVD menu using the fast forward and fast reverse buttons located at the lower part of the universal remote.

- To remove the disk, press the OPEN button on the DVD player. The faceplate will gently open. Press the small EJECT button located to the left of the disk drive slot.

### **Using the Universal Remote Control**

Everything you want to do with your entertainment system can be controlled with the universal remote. All of the commands are organized into five areas.

Device selection buttons	Selects among six devices: TV, VCR, CD player, DVD player, stereo receiver, and satellite
Navigation and menu selection buttons	Selects among set-up, menu, and channel guide functions
Channel and volume control	Adjusts the volume up and down and
Keypad	Used to enter TV channels
CD and DVD controls	Use to control a CD or DVD player



**OPERATION**

### **Programming the Universal Remote Control**

The Cal Spas universal remote has been pre-programmed to function with the entertainment system the spa has been configured with. However, in case you need to re-program the remote, use the device list below for the programming code.

- Turn on the device (TV, CD player, DVD player) with the manufacturer's remote control.
- Press the button on the remote for the device you want to program (TV, CD, DVD, etc.)
- Press and hold the SETUP button until the LED blinks twice.
- Enter the device code. If you perform this procedure correctly, the LED will blink twice. If not, repeat steps 2 and 3.

Device Manufacturer	Device Type	Code
Samsung 42" plasma	TV	1312
River Park 20"	TV	1530
Aquatic	CD	1867
Aquatic	DVD	1866
Poly Planar	DVD	N/A
JBL	CD	N/A

## 4.14. LED Lights

The switch for the LED lights is located in a covered utility box on the side of the barbecue island. Flip it up to turn all the lights on.



## 4.15. Barbecue Island Waterfall

Although the canopy waterfall and the barbecue island waterfall have different appearances and locations, they operate in the same manner.

- Fill the tank with water and make sure the water level is above the submersible pump.
- Ensure the pump is connected to 110V GFCI outlet.
- Make sure that there is no debris in the filler pan for the waterfall.
- Maintain a consistent water level, as dry pumping will burn out the pump motor.
- Turn on the waterfall by flipping up the switch to the ON position.

## 5.0 Effective Service Calls

### 5.1. Responding to an incoming service call

1. Phone personnel
  - Which staff member(s) takes the initial call? This person is responsible for handling the call, writing up and making sure that the service technician receives all the information the same day.
2. Determine the customer complaint.
  - Determine whether this is a service call or a maintenance issue that can be handled over the phone.
3. Verify the model number, serial number and confirm that this is the original owner of the grill or island.
  - The original owner is the only one covered under the terms of the warranty.
  - Know what components are covered under the terms of the warranty, the length of time of the warranty and then confirm that the owner understands what will and won't be covered in the event of a service visit.
4. Question the homeowner to determine, if possible, what specific component is not functioning.
  - Become familiar with the components and their names. This will help when speaking to technical service.
  - Keep the owner's manuals in an accessible place.
5. Set up an appointment.
  - Make sure you verify the name, address, phone number and where the customer can be reached if not at home.
  - Ask if there is access to the spa if the owner is not going to be present.
  - Ask about anything that may bar your access to the spa such as locked gates, locked electrical boxes, vicious dogs, etc.
6. Make sure there is access to the fuel line and to the main circuit breaker.

### 5.2. Preparing for a service call

1. Know what each call is asking of you.

Determine whether or not the extent of service can be handled with a simple phone call or if it requires a visit.

Determine whether the call is warranty or non warranty. Make sure the customer is aware that the manufacturer will not cover out-of-warranty service.

If you plan to charge the customer for travel expenses, make sure that they are aware of the costs before you show up.
2. Make sure all of your testing devices are functioning properly and extra batteries are on hand.
  - Always bring a meter; when calling technical support, please ensure that you have all of the pertinent information, such as the spa's serial number, model number, the system you are working on, etc.

3. Prepare your route so you may complete the maximum number of service calls each day.
  - A map book or a large map of your service area will greatly increase your efficiency.
4. Bring all the tools needed to properly perform service calls.
  - Always have your vehicle properly stocked with replacement parts.
5. Properly prepare for the day's service calls.
  - When reviewing your calls, think of every possible component and tool that you may need.
  - Prepare for the worst possible scenario and plan to be able to satisfy the subsequent problems that may arise.
6. Dress and act appropriately.
  - Although this is one job where shorts are acceptable, to maintain your credibility as a professional, leave the half shirts and shirts with derogatory or obscene comments at home.
  - Finish your cigarette before speaking with the spa owner and remember - no drugs or alcohol!
7. Be on time for your appointments.
  - If you are going to be late or can't make the appointment, call the customer to inform them of what's happening.
  - Call your office and ask them to call the people on your schedule to tell them you are running late.
8. Always support the product that you service.
  - **Do not criticize the product in front of the homeowner.** It is essential to maintain the integrity and reputation of the product, and berating the product may affect your credibility as an authorized service professional.
  - If you feel there is a problem that needs special attention, call us or complete a quality alert. Remember, this is a partnership between you and the manufacturer - we want to provide the best quality product possible, with your business providing the best service possible!
9. Make professional repairs.
  - Make repairs look as good as or better than when you started.
10. Make sure you leave the customer's home as clean as you found it.
  - Most customers don't mind if you are having lunch in their backyard, as long as you remove the evidence! Make sure to pick up any trash that you may have generated through repairs as well as break times, lunch, etc.
11. Leave a work order with the customer explaining what you found to be the problem and how you corrected it.
  - Make sure the customer understands the work order.
12. Suggest to the customer any improvements they can make in maintaining their spa.



## **Before calling Technical Support**

Make sure you have followed this troubleshooting guide, especially the troubleshooting guidance on page 1. Technical Support can help you best if you follow troubleshooting procedures and document symptoms before you call.

## **Before leaving the customer**

If this is a warranty repair, the information will be needed when your office fills out the “Returned Goods/Labor Tag”. In any case, it will help you spot trouble before it happens.

## **Satisfying the customer**

Most customers do not care what work you have done or what parts you have replaced, but they always care whether or not their problem goes away. When you are done, show them that their problem is gone. If they ask how you did it, take a few minutes to explain. Show them the bad parts and explain or show why it is bad.

- Develop the habit of examining the products you service. Compliment customers on the things they are doing right. Tell them how their care and attention can stop trouble before it starts.
- Mention if you noticed any adverse conditions. Can the customer correct the problem? Would they like you to correct it? Can you recommend someone? Would they like an estimate?
- Think of yourself and the customer as a “team” trying to keep the product up and running as cost-effective and time-efficient as possible. That’s good for the customer, and it’s good for your business.

**SERVICE CALLS**



# Make plans to attend Cal Spas University



## And discover the value of a university education!

- Receive one-on-one, hands-on training with knowledgeable spa and barbecue engineers and technicians
- Become more efficient with both repair techniques as well as claims and warranty procedures
- Learn better repair and troubleshooting methods.
- Meet with some of our top vendors.
- Become an expert with our web site for your administrative requirements – from parts ordering to claims management.
- Build a better relationship with Cal Spas service and support personnel.
- Receive service and repair material only available through this unique training experience.
- Tour our new state-of-the-art facility.

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- Increase customer satisfaction
- Add goodwill to your business

**Call our Customer Care Department, or go to our web site at [www.calspas.com/dealers/CSU](http://www.calspas.com/dealers/CSU) to enroll in the next scheduled class.**

### **We want your comments and feedback!**

Tell us how to make this service guide better for you. Send your suggestions and ideas to [tech@calspas.com](mailto:tech@calspas.com). *We can help make your job easier.*

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