

# **2002 Owner's Manual**

**USA and Canada**

## **Chef Series**

## **Master Chef Series**

## **Gourmet Series**

Duplication without written consent is strictly prohibited.  
This owners manual is for BBQ Grills and Outdoor Kitchens Manufactured after April 4, 2002  
Sold and Delivered in USA and Canada

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

# **Welcome**

## **To The Cal Spas Family**

Congratulations on the purchase of your new Cal Flame BBQ. Welcome to our family. You can feel confident knowing that you have purchased one of the most technologically advanced outdoor cooking environments in the industry. Your new Cal Flame BBQ is backed by the world wide recognized name in value, reliability and customer service, Cal Spas.

### **Customer Information:**

We want to learn more about you. After reading this manual, please complete and submit the attached Customer Survey and Warranty Registration Card or register online at [WWW.Calspas.com](http://WWW.Calspas.com). Your feedback will be used to help us serve you, our valued customer better, and register your new BBQ Grill or outdoor kitchen warranty.

### **Cal Spas Information:**

Cal Spas has been manufacturing home resort products since 1979, and is considered a pioneer and leader in the industry. Through our State-of -the-Art manufacturing facility in Pomona, California, we manufacture not only world class outdoor kitchens, but also an entire line of home resort products. Those products include, but are not limited to Spas, Gazebos, Saunas, jetted bathtubs, billiard tables, and much, much more. Cal Spas is devoted to bringing you a total environment of peace, tranquility, and pure enjoyment with our extensive line of Home Resort Products.

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## **Customer Service:**

Customer Service contact your local Cal Flame Dealer.  
To locate your nearest Cal Flame Dealer you can go online at [WWW.Calspas.com](http://WWW.Calspas.com) or call 800-225-7727.

# WARNINGS AND NOTICES

## General Safety Requirements:

1. Installation of this appliance must conform with local codes and with either the National Fuel Gas Code, ANSI Z223.1, or CAN/CGA-B149.1, Natural Gas Installation Code or CAN/CGA-B149.2 Propane Installation Code.

2. The utilization of an external electrical source requires that when installed, this gas appliance must be electrically grounded in accordance with local codes and the National Electrical Code ANSI/NFPA 70, or in Canada CSA C22.1.

3. This grill and side burner and inline shut off valve must be disconnected prior to performing any pressure testing of gas line above 1/2 psi (3.5kPa),

4. When using a self-contained LP-gas supply system, make sure that the tank is properly marked with either the U.S. Department of Transportation (DOT) or National Standards of Canada CAN/CSA-B339

### 5. WARNING:

California Proposition 65:

The burning of gas cooking fuel generates some byproducts that are on the list of substances which are known by the State of California to cause cancer or reproductive harm.

To minimize exposure to these substances, always operate this unit as described in this manual and only operate in well ventilated areas.

## WARNING:

**Use of this product in any other way than described in this manual, may result in fire or explosion, causing property damage, personal injury or even death.**

## WARNING:

**Always have a licensed electrician and contractor install electrical and gas lines. Incorrect installation in either case may result in fire or explosion, causing property damage, personal injury or even death.**

## IF YOU SMELL GAS:

- 1. Shut off gas to grill**
- 2. Extinguish any open flame**
- 3. Open lid**
- 4. If odor persists, immediately call your gas supplier or your fire department**

**DO NOT TRY TO FIX THE PROBLEM YOURSELF.**

# Customer Information

## Locating Products Serial Number:

### BBQ Islands Only:

Your new Cal Flame Island BBQ serial number is located on a metal plate inside the door below the grill on the floor. You will need this number to properly register you BBQ and activate warranty coverage.

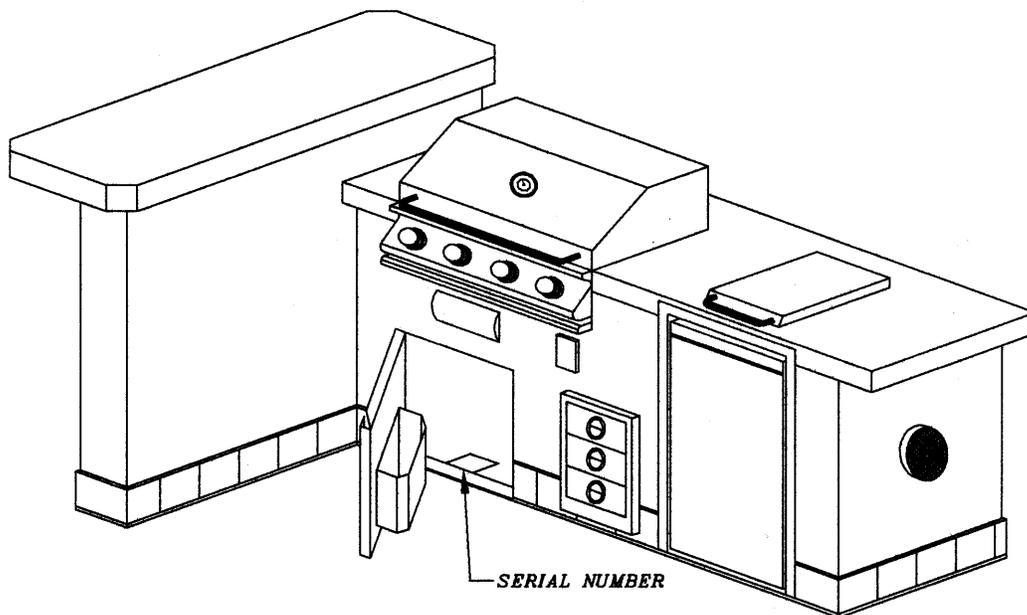
### BBQ Grill Inserts Only:

Your new Cal Flame grill serial number is located in the drip pan area on the inside left wall. You will need to pull out the drip pan to view.

Please write this number in the space provided in the back of this manual for future reference.

## Warranty Registration:

It is very important to properly register you BBQ's warranty. As mentioned on the previous pages, you can do this two ways. You may register at [WWW.Calspas.com](http://WWW.Calspas.com) or complete the enclosed Customer Survey and Registration Card. Each will only take a few minutes of your time and ensure that your purchase is registered. With this information we are able to activate your warranty and be able to offer assistance in the future for parts and accessories ordering.



# SAFETY INSTRUCTIONS

Please read before installing and operating your new Cal Flame Grill

1. Your new gas grill should be professional installed by a licensed contractor. Refer to the instruction in this manual to ensure proper and safe installation and operation.
  
2. **If You Smell Gas:**
  - 4.1 Shut off gas to grill
  - 4.2 Extinguish any open flame
  - 4.3 Open lid
  - 4.4 If odor persists, immediately call your gas supplier or your fire department  
DO NOT TRY TO FIX THE PROBLEM YOURSELF.
  
3. **Caution:**

To prevent fire and smoke damage, remove all packaging material before operating grill.
  
4. Before you start cooking:

Clean the grill thoroughly with hot, soapy water. This is necessary to remove residuals and solvents, oil and grease which may have remained from the manufacturing process. The grates should also be thoroughly cleaned in the same manner.
  
5. Spiders and other insects can nest in the burners of the grill and block the gas and airflow to the burner ports. This creates a dangerous condition that can result in a fire from behind the valve panel. Inspect and clean the burners periodically; follow guidelines in Cleaning and Maintenance section of this manual.

# SAFETY INSTRUCTIONS

(continued)

6. In the event a burner goes out and gas escapes, turn off burner knobs, open the grill hood fully and let it air out. Do not attempt to use the grill or any other island feature until the gas has had time to dissipate.
7. Unless specifically recommended in this manual, do not repair or replace any part of the grill. A qualified technician should perform all service. Any repairs made by a non-C.A.I. approved dealer technician will void your warranty.
8. Never use the grill without the drip pan in place and pushed all the way to the rack located just under the grill. Without it hot grease could leak downward and produce a fire or explosion hazard.
9. Keep any electrical supply cord, or the rotisserie motor cord away from the heated areas of the grill.
10. Never use the grill or side burner in windy conditions. If located in a consistently windy area (oceanfront, mountaintop, etc.) a windbreak will be required. Always adhere to the specified clearances listed in this manual.
11. The area surrounding your new grill should be kept clean, and free from flammable liquids and other combustible materials such as mops, rags, brooms, as well as solvents, cleaning fluids, and gasoline.
12. Do not use the grill as a storage area for flammable or plastic items, which may ignite. Do not store any materials inside or near the BBQ island. Any LPG (Propane) cylinder not in use should not be stored in the vicinity of this or any other appliance.
13. Never line grill or side burners with tin foil.
14. When the unit is not in use, be sure to turn off the gas at the LPG tank when not in use.

# SAFETY INSTRUCTIONS

(continued)

15. Never locate this appliance in an enclosed room or under sealed overhead structure any other type of enclosed area such as a garage, shed, or breeze way. Keep clear of trees and shrubs.
16. Do not place this grill under or near windows or vent that can be opened into your home.

## Precautions Regarding Children

- 1) Never leave children unattended in the area where the grill is being used.
- 2) Do not store items of interest to children around or below the grill, or island
- 3) Never allow children to sit or stand on any part of the grill or island.
- 3) Always position handles of utensils inward, so they do not extend over adjacent work areas or cooking areas. This reduces the risk of burns, ignition of flammable materials, and spillage due to accidental contact with the utensils.
- 4) Do not use water on grease fires. Never pick up a flaming pan. Turn appliance off and smother the flaming pan with a tight-fitting lid, cookie sheet or flat tray. For flaming grease outside of the pan, smother with baking soda, or use a dry chemical or foam type fire extinguisher.

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## Use Precautions

- 1) Never leave the grill and top burners unattended while using high flame settings. Boilovers cause smoking, and greasy boilovers may ignite.
- 2) Always use the proper size pan. Select utensils with flat bottoms large enough to cover the burner. The use of under sized utensils exposes the sides of the utensils to direct contact with a portion of the flame. This can scorch utensils, and hamper cleanup. Excessive flames on large stainless steel pots can result in permanent discoloration. For best results, we recommend commercial quality aluminum pans and utensils.
- 5) Never let clothing, potholders or other flammable materials come in contact with or close to any grate, burner or hot surface until it has cooled. Fabric may ignite and result in personal injury.
- 6) When using the grill, do not touch the grill rack, burner grate or immediate surroundings as these areas become extremely hot and could cause burns.
- 7) Proper apparel is a safety consideration. Never wear loose fitting or hanging garments while using your new grill.

# SAFETY INSTRUCTIONS

(continued)

- 8) Only use dry potholders - do not use a towel or other bulky cloth in place of potholders. Moist or damp potholders used on hot surfaces could cause burns from steam.
- 9) Do not heat any unopened glass or metal container of food on the grill. Pressure may build up and cause the container to burst resulting in serious harm or damage to the grill.
- 10) Do not use charcoal in this grill or side burner.

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**SAVE THIS MANUAL FOR FUTURE  
REFERENCE!**

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# INSTALLATION OF YOUR NEW GRILL

Safe and satisfactory operation of your new grill depends upon its proper installation. The installation, adjustments and service of your new grill must be performed by C.A.I qualified installers and service technicians. This is necessary to insure proper operation and also prevent accidents.

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## Location

When determining a suitable location take into account concerns such as exposure to wind, proximity to traffic paths, and windows that open into the home. Keeping in mind natural gas line runs need to be as short as possible. Locate the grill only in a well ventilated area.

Locate BBQ Islands grills in well ventilated areas and only on solid, flat foundations (I.e. Cement slab or Deck).

Do NOT place BBQ Islands / outdoor Kitchens on dirt or grass.

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## Built-in Installation

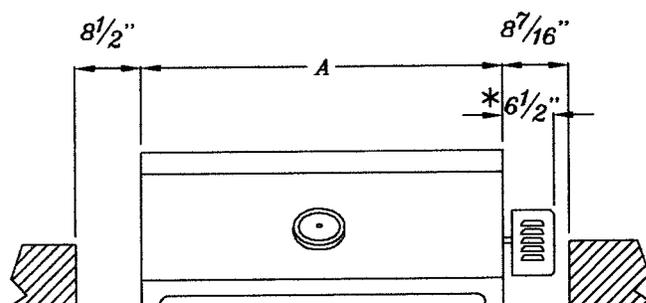
Your new grill is designed for easy installation into a non-combustible enclosure.

The supporting deck and counter must be level and flat. When determining the final location for your grill it is required that ventilation holes be provided in the enclosure so that gas will not become entrapped in the event of a leak. Make sure that you have one vent placed high and the other placed low in the inclosure for efficient air flow.

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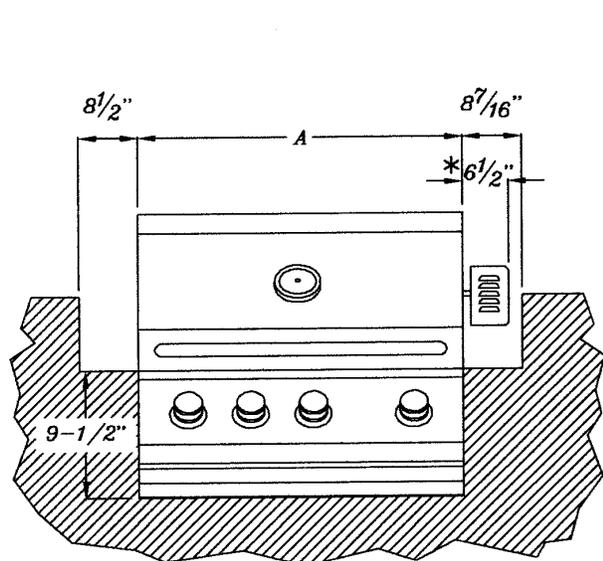
## Built-in Design Models

If using a rear wall, locate the weatherproof electrical outlet on side of the grill that the rotisserie motor will be located on. The rotisserie motor requires a 110/120-volt supply. The power supply cord on the motor is equipped with a 3 prong (grounded) plug for protection against shock hazard. Do not cut or remove the grounding prong from the plug.

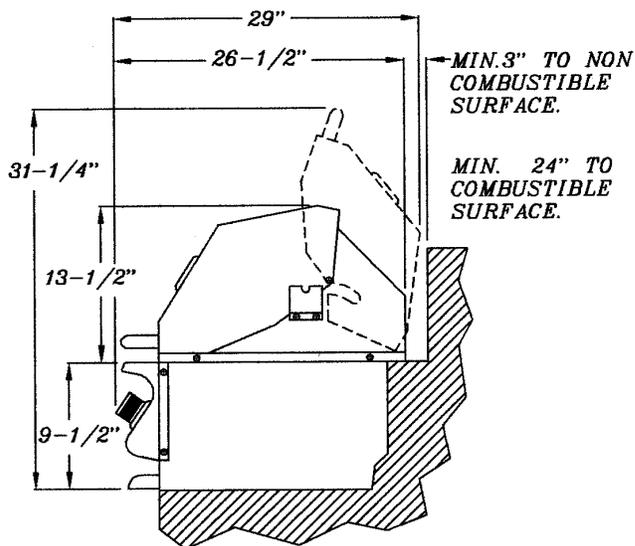


3

# CABINET CUT OUT DIMENSIONS FOR GAS GRILL AND ACCESSORIES



**CLEARANCE DIMENSIONS-FRONT**

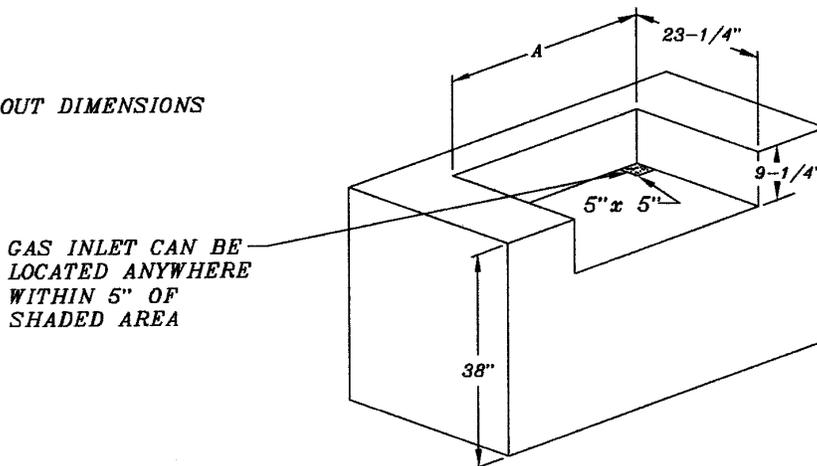


**CLEARANCE DIMENSIONS-SIDE**

\*MINIMUM CLEARANCE NEEDED FOR REMOVAL AND REPLACEMENT OF ROTISSERIE MOTOR

	3 BURNER	4 BURNER	5 BURNER
A	24-1/2"	32"	39-1/2"

**CUT OUT DIMENSIONS**

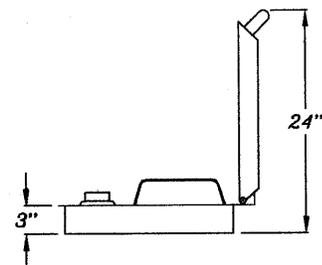
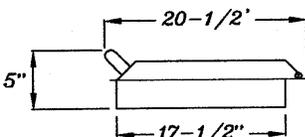
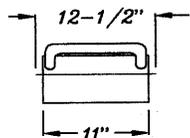


	3 BURNER	4 BURNER	5 BURNER
A	23-1/2"	31"	38-1/4"

**CUT OUT DIMENSIONS**

## Side Burner

SIDE BURNER	
WIDTH	11-1/4"
HEIGHT	3-1/4"
DEPTH	17-3/4"



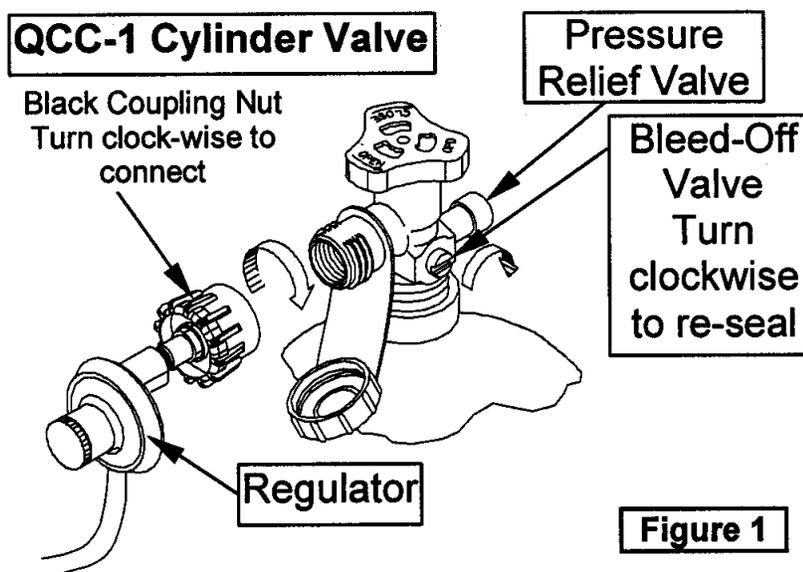
# LP GAS REQUIREMENTS

## LP Gas Requirements

Your new grill is designed to work with LPG (Liquid Propane Gas). Always check the rating plate (see page 5 for location) to make sure the gas supply you are hooking up to is the gas type the grill is manufactured for.

**IMPORTANT:** Your new grill will work on LP gas. You cannot switch a LPG system to natural gas. Please ensure you are connecting the proper gas type to your grill.

## LP Gas Hook Up



# LP GAS REQUIREMENTS

## (CONTINUED)

NOTE: 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 opening(s) for purposes of ventilation shall be determined with the LP-gas supply cylinder in place. This shall be accompanied in one of the following manners:

- 1) One side of the enclosure shall be completely open; or
- 2) Enclosure 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 degrees (3.14 rad), and unobstructed. Each opening shall have a total free area of not less than  $\frac{1}{2}$  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 opening(s) shall be provided at floor level and shall have a total free area of not less than  $\frac{1}{2}$  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 degrees (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.

### 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.,  $\frac{1}{2}$  psi (3.5 kPa).  
Minimum line pressure for propane is 11" W.C.

### LP 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.

# LP GAS REQUIREMENTS

(CONTINUED)

## LPG Cylinder Specification

Any LP gas supply cylinder used with this grill must be 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.) Always use the cylinder dust cap on the cylinder valve outlet during transport and when the cylinder is not connected to the grill.

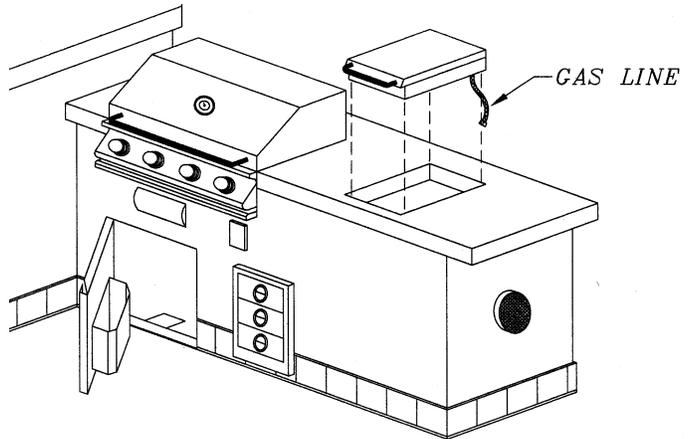
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## Transporting the LP Gas Supply Cylinder

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.

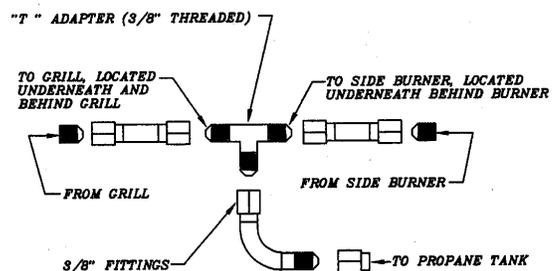
# INSTALLATION OF YOUR NEW SIDE BURNER

- 1) Install side burner into an area of 17-1/2 long, 11 inches wide and 3 inches deep. (See page 8 for size)
- 2) 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.
- 3) Install the pipe tee assembly to the grill intake pipe with pipe sealant. Tighten assembly and align the branch opening of the tee to the hole of the cabinet.
- 4) Connect the flexible hose (male end) to the pipe tee with pipe sealant.
- 5) Install and secure the Side Burner into the island by simply setting in place.
- 6) Connect the female end of the flexible hose to the side burner intake pipe with pipe sealant.
- 6) Connect gas supply to the grill following the instructions on page 9.
- 7) Check for gas leaks using soap water solution. (1 part liquid soap, 3 parts water)

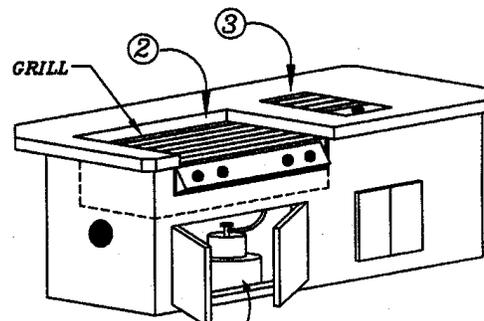


#### ITEMS INCLUDED WITH BAR-B-Q

- 1) "T" ADAPTER (3/8")
- 2) 2 EA. HOSE 3/8" FITTINGS
- 3) REGULATOR W/HOSE



- ① OPEN BAR-B-Q DOOR. INSTALL HOSE WITH REGULATOR ON PROPANE TANK THEN CONNECT OTHER END TO "T" ADAPTER MAKE SURE TO USE TEFLON TAPE WHEN INSTALLING ADAPTER TO INSURE PROPER SEAL.



- ② THEN TAKE OTHER END OF "T" ADAPTER WITH HOSE ATTACHED AND CONNECT TO END OF MALE ADAPTER LOCATED UNDERNEATH AND AT THE BACK OF GRILL. (USE TEFLON TAPE ON ALL CONNECTIONS)

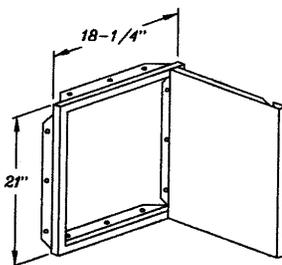
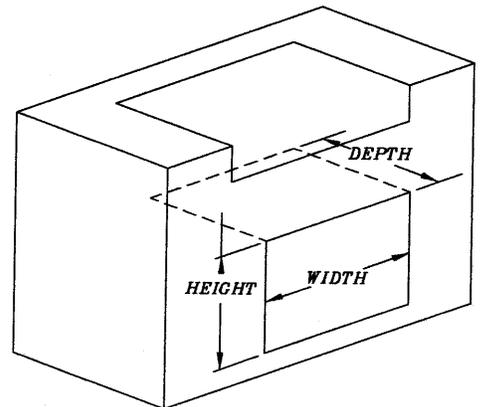
- ③ CONNECT THE LAST OPEN LINE TO THE SIDE BURNER (USE TEFLON TAPE ON ALL CONNECTIONS)

# INSTALLATION OF YOUR NEW ACCESS DOORS

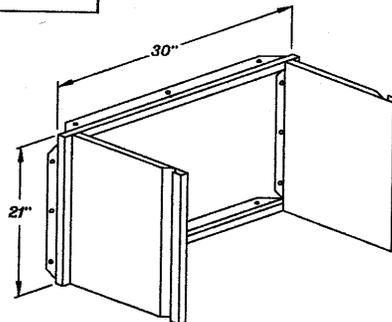
## Installing Access Doors

1. Provide cut out and door jamb with inside dimensions as follows:  
19 3/8" X 28 3/8" for DAD-30 and  
19 3/8" X 40 3/8" for DAD-48
2. Check fitting of frame against cutout.  
Mark location of rivet nuts.
3. Chisel material out to clear space for the rivet nuts.
4. Secure the steel frame with 16 screws of type #10 X 3/4 truss head phillips S/S.
5. Attach doors to frame.
6. Adjust doors as follows:
  - a) For height adjustment, loosen the two screws attached to each mounting plate.
  - b) Snap off hinge and secure mounting plate with #6 X 1 flat phillips S/S.
  - c) For side adjustment turn screw to increase or decrease door overlay.
  - d) For depth adjustment, loosen screw, adjust door to desired position and retighten screw.

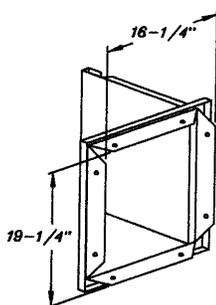
<b>SINGLE DOOR</b>	
<b>WIDTH</b>	16-1/2"
<b>HEIGHT</b>	19-1/2"
<b>DEPTH</b>	2-1/2"
<b>DOUBLE DOOR</b>	
<b>WIDTH</b>	28-1/2"
<b>HEIGHT</b>	19-1/2"
<b>DEPTH</b>	2-1/2"



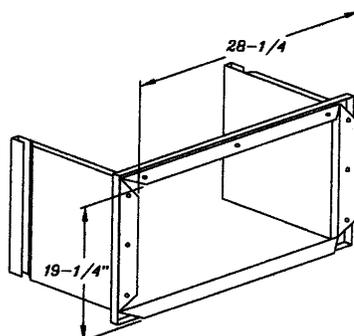
**SINGLE ACCESS DOOR  
FRONT DIMENSIONS**



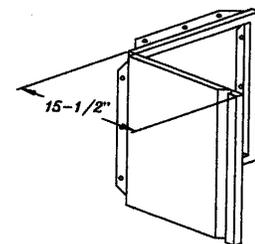
**DOUBLE ACCESS DOOR  
FRONT DIMENSIONS**



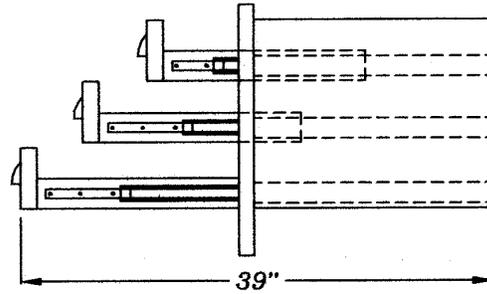
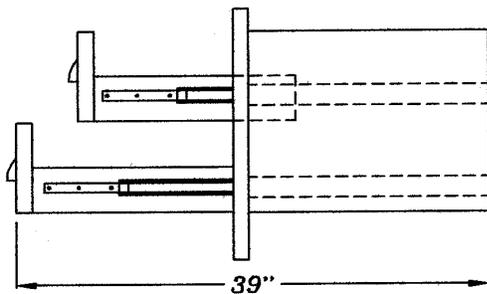
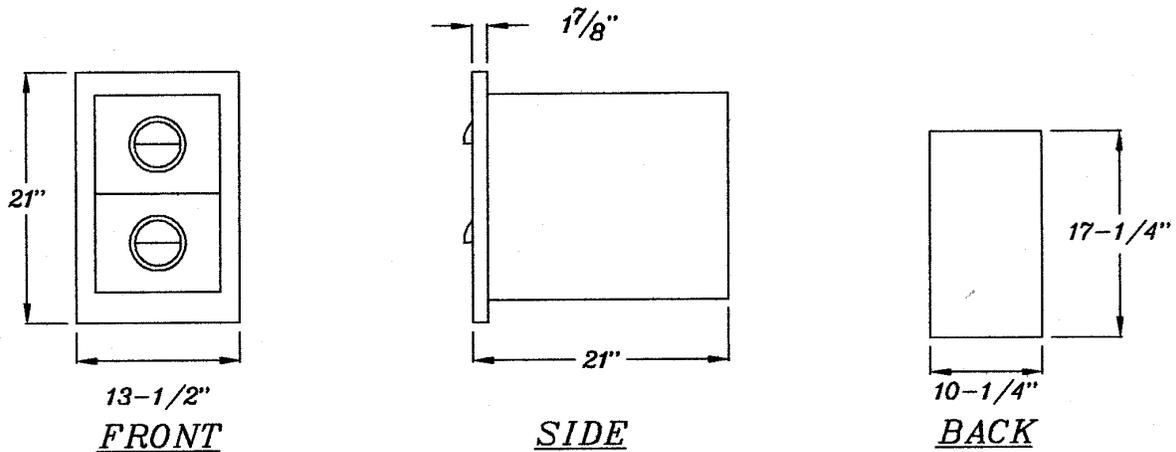
**SINGLE ACCESS DOOR  
REAR CUT OUT DIMENSIONS**



**DOUBLE ACCESS DOOR  
REAR CUT OUT DIMENSIONS**

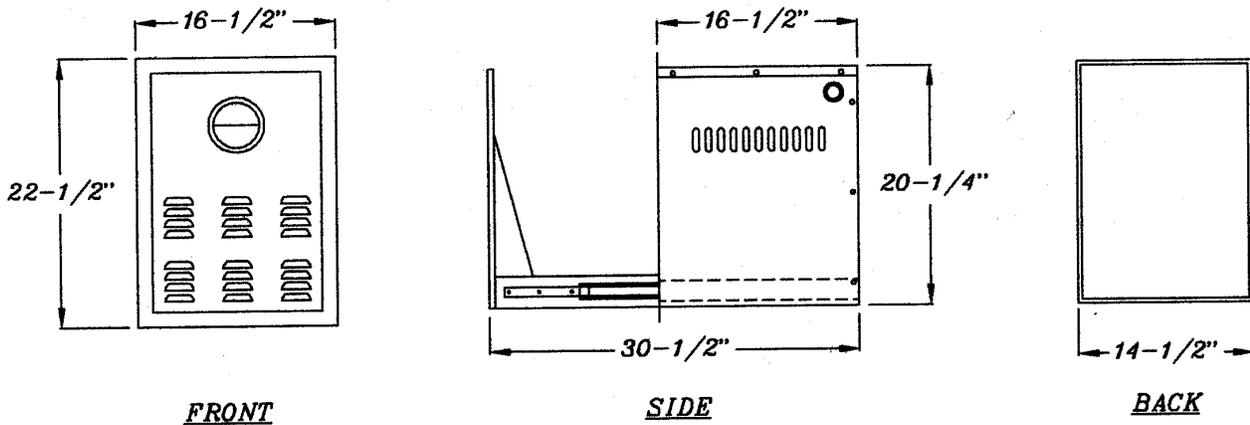


# INSTALLATION OF YOUR NEW 2 & 3 Drawer and LPG Door



## TWO AND THREE DRAWER CUT OUT DIMENSIONS:

2 & 3 DRAWER	
WIDTH	10-1/2"
HEIGHT	17-1/2"
DEPTH	19-1/8"



## LPG TANK ACCESS DRAWER CUT OUT DIMENSIONS:

TANK ACCESS DOOR	
WIDTH	14-3/4"
HEIGHT	20-3/4"
DEPTH	19-1/8"

# LEAK TESTING PROCEDURE

## Leak Testing

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

As a safety precaution, remember to always leak test your grill outdoor 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.

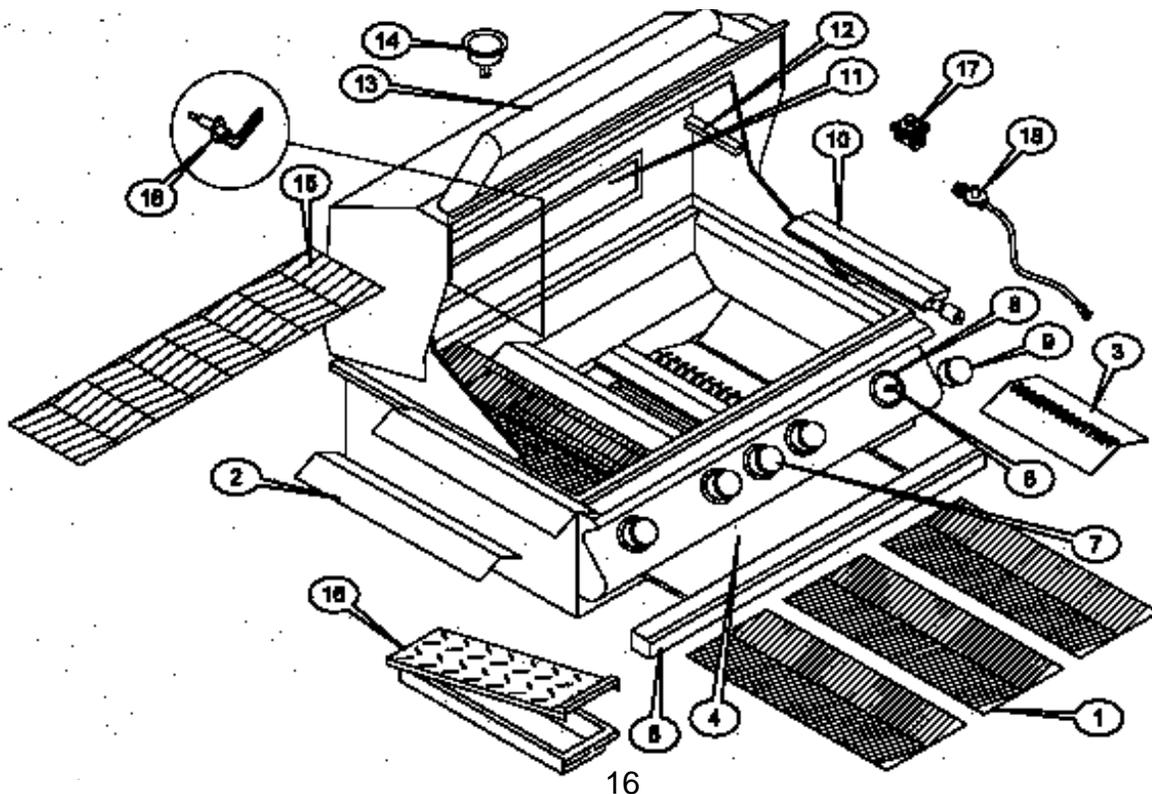
## Leak Testing Procedure

1. Prepare a leak testing solution of sudsy water by mixing in a spray bottle half-liquid soap and half water.
2. Check and make sure all the control knobs are in the OFF position.
3. Turn cylinder valve knob counter clockwise one turn to open.
4. Apply leak-testing solution by spraying on joints of the gas delivery system.
5. Blowing bubbles in the soap solution indicates that a leak is present.
6. 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.
7. If you are unable to stop a leak, shut off the gas supply at the cylinder valve. Remove the cylinder from the grill. Call an authorized gas appliance service technician or LP gas dealer. Do not use the appliance until the leak is corrected.
8. Push in and turn any control knob to release pressure in the hose and manifold.
9. Turn off the control knob.

# FEATURES OF YOUR GRILL

Item:	Part Description:	C.A.I. Part Number
1.	V Grates Cooking Grills	BBQ04100659
2.	Flavor Bars	N/A
3.	Flame Tamers	N/A
4.	Drip Tray	N/A
5.	Drip Tray Handel	N/A
6.	Control Valve	N/A
7.	Rotisserie Control Valve	N/A
8.	Knob Bezel	BBQ04101027
9.	Burner Knob	BBQ04101028
10.	Brass Burner	BBQ04100661
11.	Infrared Burner (S-14-4)	BBQ04300430
11.	Infrared Burner (S-16-64)	BBQ04300440
12.	Warming Rack Channel	N/A
13.	Hood Handle (3 Burner)	BBQ04101250
13.	Hood Handle (4 Burner)	BBQ04101251
13.	Hood Handle (5 Burner)	BBQ04101252
14.	Thermometer	BBQ04100375
15.	Warming Rack (3 Burner)	BBQ04100656
15.	Warming Rack (4 Burner)	BBQ04100657
15.	Warming Rack (5 Burner)	BBQ04100658
16.	Smoker Box	N/A
17.	Natural Gas Regulator	N/A
18.	LPG Regulator	N/A
19.	Lighting Electrode	BBQ04101809
20.	Rotis Spit Bracket	BBQ04100785
21.	Rotis Motor Bracket	BBQ04100786
22.	Rotis Spit Rod (3,4, and 5 Burner)	BBQ04100879
23.	Rotis Spit Fork	BBQ04100796
24.	Rotis Motor	N/A (Page 21)
25.	Rotis Spit Handle	N/A (Page 21)

## Four Burner With Rotisserie



# **SPIDERS AND OTHER INSECTS WARNING...**

Spiders and other insects can nest in the burners of the grill and block the gas and airflow to the burner ports. This creates a dangerous condition that can result in a fire from behind the valve panel. It is good practice to inspect burners for blockage and clean them regularly; in addition, such inspection and cleaning is absolutely necessary if any of the following conditions exists:

- a) Smell of gas in conjunction with a yellow flame.
- b) Grill does not heat completely.
- c) Grill heats unevenly.

In case any of the above conditions is present, turn off the grill immediately; after allowing it to cool, inspect and clean the burners as described on page 28 of this manual.

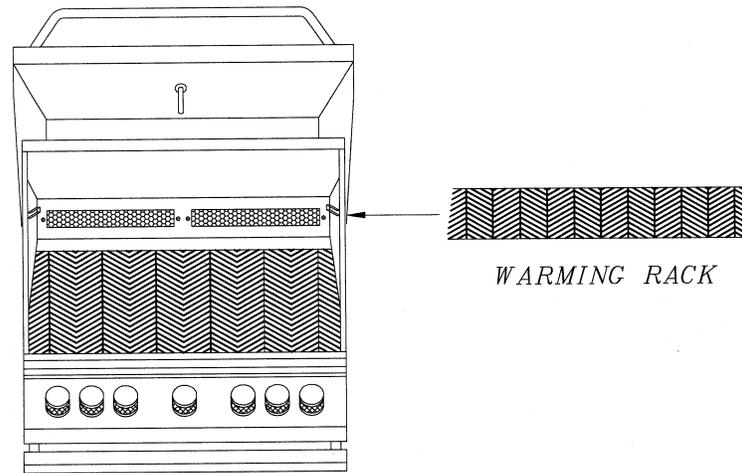
## **BEFORE USING YOUR GRILL...**

Prior to turning the gas on, inspect the gas supply piping or hose. Make sure only the supplied hose and regulator are being used. If signs of abrasion, cuts wear and tear, or other damage are noticed on the hose, it should be replaced. Contact your local Cal Spas dealer for replacement parts.

# USING YOUR GRILL

## Grilling

Grilling requires high heat for searing and proper browning. Most foods are cooked at the HI heat setting for the entire cooking time. However, when grilling large pieces of meat or poultry, it may be necessary to turn the heat to a lower setting after the initial browning. This cooks the food through without burning the outside. Foods cooked for a long time or basted with a sugary marinade may need to lower heat setting near the end of the cooking time. Warming rack is used for defrosting or for keeping food warm while grilling.



## Grilling Hints

The cooking of meat, whether rare, medium, or well done, is affected to a large degree by the thickness of the cut. Expert chefs say it is impossible to have a rare piece of meat with a thin cut.

The cooking time is affected by the kind of meat, also by the size and the shape of the cut, the temperature of the meat when cooking begins, and the cooking degree desired.

When defrosting meats it is recommended that it be done overnight in the refrigerator as opposed to a microwave. This generally yields a juicier cut of meat.

Use a spatula instead of tongs or a fork to turn the meat. A spatula will not puncture the meat and let the juices run out.

To get the juiciest meats, add seasoning or salt after the cooking is finished and turn the meat only once (juices are lost when the meat is turned several times). Turn the meat just after the juices begin to bubble to the surface.

Trim any excess fat from the meat before cooking. To prevent steaks or chops from curling during cooking, slit the fat around the edges at 2-inch intervals.

Do not leave the grill unattended while cooking.

# USING YOUR GRILL

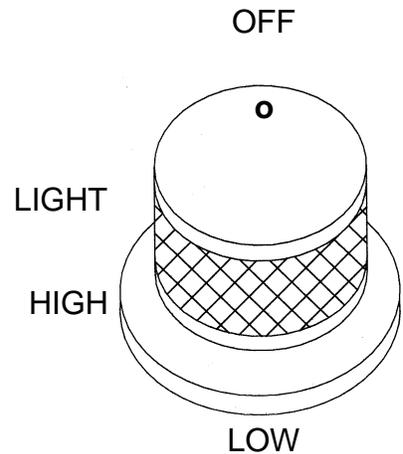
## (CONTINUED)

### Operating the Grill

Make sure all burner controls are off. Do not attempt to light the burners if the smell of gas is present.

For LP units, check the connection with a soap and water solution after attaching the hose. Make sure there is gas in the tank and it is sitting upright.

1. Make sure the drip tray is in place.
2. Light the grill burners using the instructions below.
3. Turn the control knob to HI and preheat the grill for 15 minutes. The top cover is to be closed during the appliance preheat period.
4. 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 HI and LOW
5. Allow the grill to cool and clean the drip tray after each use.



### Lighting The Grill 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 light position (You will hear a loud click) to high.
4. Listen for the "Whoosh" sound. 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 5 minutes until the gas clears before attempting to light it again.

## **Lighting The Grill Burners (continued)**

7. Repeat the procedure or try "Manual Lighting procedure" below.
8. Upon successful lighting, repeat the process on the other burners you wish to light.
9. To shut off burners rotate knob and turn to OFF. It is normal to hear a popping sound when the burners are turned off.

## **Manually Lighting The Grill Burners**

1. Open the hood.
2. If you have just attempted to light the burner, allow 5 minutes for any accumulated gas to dissipate.
3. Slide out the and the drip tray from the grill.
4. Keep your face as far away from the burners as possible.
5. Using only a long stem match, hold near the burner ports.
6. Push in and turn counter clockwise the grill's gas control knob just past the LIGHT position to HIGH.
7. Listen for the "Whoosh" sound. If the burner does not light after 5 seconds, turn the control knobs to the OFF position. Wait 5 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.

# USING YOUR ROTISSERIE

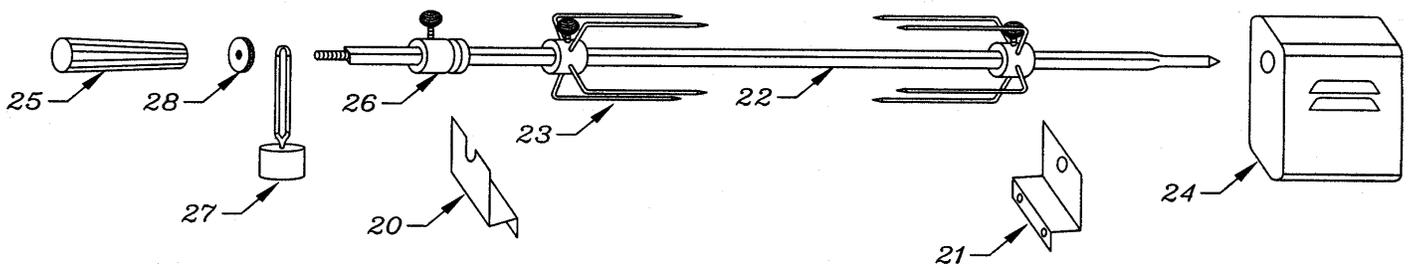
The rotisserie burner is an infrared type, which provides intense searing radiant heat. Preferred by professional chefs over other methods, this intense heat is ideal for searing in the natural juices and nutrients found in quality cuts of meat.

## Cooking with the Rotisserie

The rotisserie system is designed to cook items from the back using infrared heat. The location of the burner allows the placement of a rotisserie-basting pan (included) beneath the food to collect juices and drippings for basting and gravy. To flavor the contents of the basting pan, you can add herbs, onion, garlic, or spices.

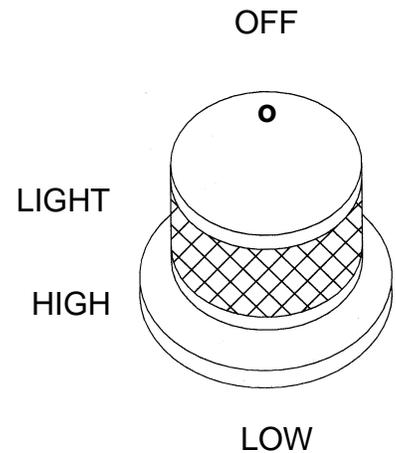
## Operating The Rotisserie

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.
- Light rotisserie burners following instructions on page 22. Once lit, the rotisserie burner will reach cooking temperature in about 1 minute. The orange/red glow will even out in about 5 minutes.



## Lighting The Infrared or Rotisserie Burner

1. Open the hood.
2. Rapidly rotate the rotisserie knob located in the center of the grill.
3. If the burner does not light on the first try, repeat immediately.
4. If the burner does not light within 5 seconds, turn the control knob to the OFF position. Wait 5 minutes until the gas clears before attempting to light it again.
5. Repeat the procedure or try "Manual Lighting procedure" as shown below.
6. Upon successful lighting, repeat the process on any other available IR burner you may wish to light.



## Manually Lighting The Infrared or Rotisserie Burner

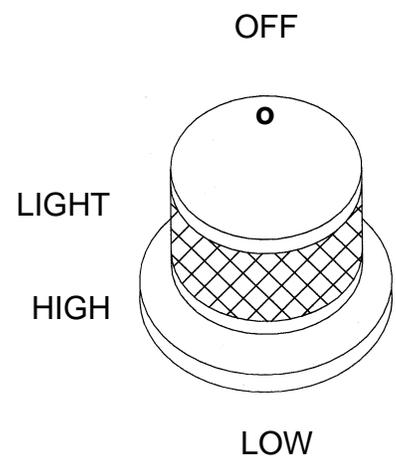
1. Open the hood.
2. Push in and turn counter clockwise the gas control knob for the IR (infrared) burner to the HI position.
3. Hold a lit long stem match next to the burner ports.
4. If the burner does not light within 5 seconds, turn the control knob to the OFF position. Wait 5 minutes until the gas clears before attempting to light it again.
5. If the burner does not light after several attempts see troubleshooting located in the back of this manual.
6. Upon successful lighting, repeat the process on any other available IR burner you may wish to light.

# USING THE SIDE BURNER

Your new grill has optional top burners equipped with rotary ignite knobs for lighting.

## Lighting The Side Burners

1. Remove the burner cover, if any, or any cooking utensils from the burner grate. Caution: The burner cover may be hot if the grill burners are in operation.
2. Rapidly rotate the side burner knob just past the LIGHT position (You will hear a loud click) to HIGH.
3. If the burner does not light on the first try, repeat immediately.
4. If the burner does not light after 5 seconds, turn the control knob to the OFF position. Wait 45 seconds until the gas clears before attempting to light it again.
5. Repeat the procedure or try "Manual Lighting procedure" below.
6. Upon successful lighting, repeat the process on any other available burner you may wish to light.



## Manually Lighting The Side Burners

1. Remove the burner cover, if any, or any cooking utensils from the burner grate. Caution: The burner cover may be hot if the grill burners are in operation.
2. Hold a long stem lit match next to the burner ports.
3. Push in and rapidly turn the control knob counter clockwise just past the LIGHT position to HIGH.

## Manually Lighting The Side Burners (continued)

4. If the burner does not light after 5 seconds, turn the control knobs to the OFF position. Wait 45 seconds until the gas clear before attempting to light it again.
5. If the burner does not light after several attempts see troubleshooting guide located in the back of this manual.
6. Upon successful lighting, repeat the process on any other available burner you may wish to light.

## Flame Height

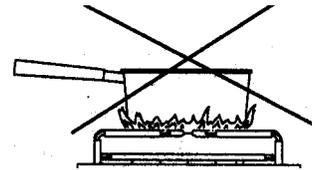
The correct height of the flame depends on the size and material of the utensil being used, the food being cooked and how much liquid is in the utensil.

Here are some basic rules for selecting the flame height.

The flame should never extend beyond the bottom of the pan.

Utensils, which conduct heat slowly (such as glass-ceramic) should be used with a low or medium flame unless you are cooking with a large amount of liquid.

When boiling, adjust the flame to the size of the cookware until boiling begins. The lower flame height to the minimum needed to maintain a gentle boil. Foods cook just as fast at a gentle boil, as they do at a vigorous boil.



# CLEANING AND MAINTENANCE

As with any piece of fine equipment, your New Grill must be kept clean and properly maintained to maximize its performance and longevity.

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.

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

## **IMPORTANT:**

DISCONNECT ELECTRICAL SUPPLY BEFORE CLEANING ANY PART OF THE GRILL

### **Cleaning the Grill Racks**

The easy way to clean the grill racks is to scrub them immediately after you have finished cooking and turned off the flame. Wear a grill mitt to protect your hand from the heat and steam. Dip a brass bristle barbecue brush in water and scrub the hot grill. Dip the brush frequently to increase the amount of steam. Steam is created as water contacts with the hot grill, assists the cleaning process by softening any food particles. The food particles will fall onto the briquette tray and burn or fall into the drip tray. If the grill is allowed to cool before cleaning, the removal of those residual particles from food will be more difficult.

If desired, when completely cool, remove the grill racks for thorough cleaning. Use soap and water for this cleaning. Specks or grease can gather on the surface of the stainless steel and bake on to the surface rack and give the appearance of rust. For removal use an abrasive pad (like Scotch Brite) in conjunction with a stainless steel cleaner. This needs to be done in extreme cases only, or before storing the grill for an extended period.

### **Cleaning the Warming Rack**

The warming rack can be cleaned using the same procedure "Cleaning the Grill Racks".

# CLEANING AND MAINTENANCE

## (CONTINUED)

### **Cleaning the Drip Pan:**

The full width drip tray 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 pane with a solution of warm soap water. Make sure to rinse thoroughly to avoid staining.

### **Cleaning the Stainless Steel:**

Your Cal Flame BBQ grill is made of #304 stainless steel. This represents that this component is of non-rusting and non-magnetic stainless steel.

There are many types of stainless steel cleaners on the market today. We recommend that you clean the external and internal stainless steel components with a cleaner that is approved for #304 Stainless Steel and only clean when grill is cool and in indirect light.

Never use steel wool to clean your grill and never clean the grill when it is hot. Be especially carefully when cleaning the Highlighted (Shinny) ares of your grill. Only clean when these areas when absolutely necessary.

### **Cleaning the Burners:**

Important:

All of the gas control knobs must be turned to the off position and the fuel should be off and fuel line disconnected prior to starting this procedure.

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 amount of time.

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

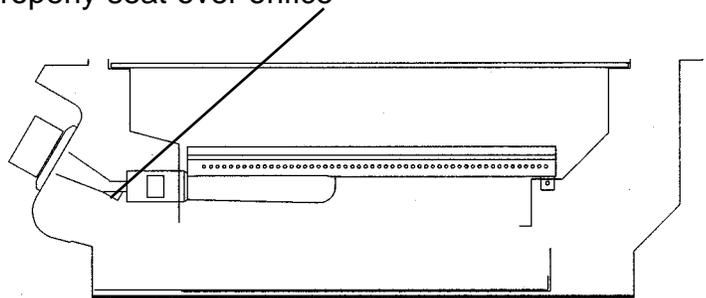
# TROUBLESHOOTING GUIDE

## If Grill fails To Operate Properly:

1. Turn off gas at source, turn Control Knobs to the off position and wait five minutes before trying again.
2. Check gas supply at connections.
3. Repeat lighting procedure and if grill still fails to operate properly, turn off gas at source, turn the control knobs to the off position and wait for the grill to cool down and check the following:

Problem: Misalignment of burner tube(s) over orifice(s)

Solution: Reposition the burner tube to properly seat over orifice



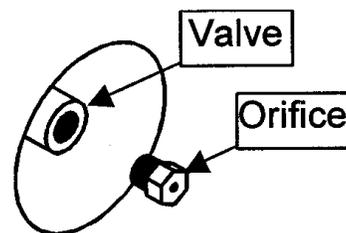
Problem: Obstruction In Gas Line:

Solution: Remove fuel line from grill. Do Not smoke or have perform any maintenance in the vicinity of an open flame. Open gas valve for one second to blow out any debris. Close of gas valve and reconnect fuel line securely.

Problem: Plugged Orifice:

Solution: Remove cooking grills, Flam Tamers and grease tray. Remove Burners from bottom of firebox by pulling cotter pin from beneath burner peg using a standard screwdriver or needle nose pliers. Carefully lift each burner up and away from gas orifice. Remove the orifice from the control valve. Gently clear any obstruction with a fine wire. Reinstall orifice, reinstall burners over orifices and seat burner peg into position hole at the bottom ledge of the firebox. Replace cotter pins. Replace cooking components and grease collectors. If an obstruction is suspected in the control valve please contact your local Cal Flame dealer for assistance.

ORIFICE CLEANING LOCATION:



# TROUBLESHOOTING GUIDE

## (CONTINUED)

Problem: Misalignment of Igniter on Burner:

Solution: Check for proper position of electrode tip. The tip of the electrode should be pointing forward towards the front of the burner and should be 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 gas supply closed and all control knobs set to the off position. Check each position igniter individually for presence of spark at electrode. In turn, push each knob in fully and rotate 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, you must 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 gas grill still fails to operate properly, contact your local Cal Flame dealer

Problem: Yellow Flame:

Solution: 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 slats, oil film, or other foreign matter on the burner.

Either wash the burner with mild detergent or operate burner at the HIGH setting with the lid closed for about ten minutes.

Problem: Flashback:

Solution: When fire occurs in and around the burner tubes, immediately turn off gas at its source and turn the control knob(s) to the off position. Wait until the grill has cooled off and then clean the burner tubes and burners as described on page 26 of this manual.