Broîl Kîng®

OWNER'S MANUAL

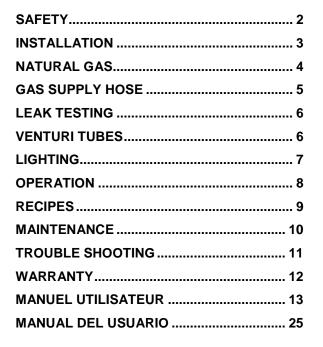
FOR USE WITH NATURAL GAS

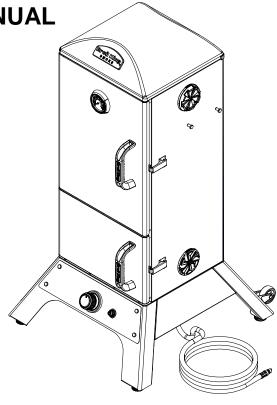




ANSI Z21.89 2013 / CSA 1.18-2013

CONTENTS





This instruction manual contains important information necessary for the proper assembly and safe use of the appliance. Read and follow all warnings and instructions before assembling and using the appliance. Follow all warnings and instructions when using the appliance.

Keep this manual for future reference.

1-800-265-2150 info@omcbbq.com

SINCE 1906

MANUFACTURING COMPANY

585 KUMPF DRIVE

WATERLOO, ONTARIO, CANADA

N2V 183

SAFETY

Your new Broil King gas smoker is a safe, convenient appliance when assembled and used properly. As with all gas-fired products, however, certain safeguards must be observed. Failure to follow these safeguards may result in serious injury or damage. If you have questions concerning assembly or operation, consult your dealer, gas appliance specialist, gas company or our direct customer service line at 1-800-265-2150. / info@omcbbq.com

∱ DANGER

IF YOU SMELL GAS:

- SHUT OFF GAS TO THE APPLIANCE.
- EXTINGUISH ANY OPEN FLAME.
- OPEN SMOKER DOORS.
- IF ODOR CONTINUES, KEEP AWAY FROM THE APPLIANCE AND IMMEDIATELY CALL YOUR FIRE DEPARTMENT.

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN FIRE OR EXPLOSION WHICH COULD CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

∱ DANGER

- NEVER OPERATE THIS APPLIANCE UNATTENDED.
- NEVER OPERATE THIS APPLIANCE WITHIN 10FT (3M) OF ANY STRUCTURE, OR COMBUSTIBLE MATERIAL.
- NEVER OPERATE THIS APPLIANCE WITH IN 25FT (7.5M) OF ANY FLAMMABLE LIQUID.
- IF FIRE SHOULD OCCUR, KEEP AWAY FROM THE APPLIANCE AND IMMEDIATELY CALL YOUR FIRE DEPARTMENT. DO NOT ATTEMPT TO EXTINGUISH AN OIL OR GREASE FIRE WITH WATER.

FAILURE TO FOLLOW THESE
INSTRUCTIONS COULD RESULT IN FIRE,
EXPLOSION OR BURN HAZARD, WHICH
COULD CAUSE PROPERTY DAMAGE,
PERSONAL INJURY OR DEATH

CAUTION

- FOR OUTDOOR USE ONLY.
- THIS APPLIANCE MUST NOT BE OPERATED UNATTENDED.
- SPECIAL CARE MUST BE TAKEN TO KEEP SMALL CHILDREN AND PETS WAY FROM HEATED SURFACES.
- DO NOT MOVE THE APPLIANCE WHEN IN USE.

Use caution when handling or transporting this product. Metal edges can be hazardous. Use appropriate gloves when lifting or handling. Before lifting, remove side shelves, grids and grates.

ELECTRICAL CAUTION

 If any accessory is used on this appliance that requires an external electrical power source, the accessory when installed must be electrically grounded in accordance with local codes. In the absence of local codes, the following standards apply:

(U.S.A.) ANSI/NFPA No. 70-Latest Edition and (Canada) CSA C22.1 Canadian Electrical Code

- 2. Do not cut or remove the grounding prong from the plug.
- 3. Keep the electrical supply cord and fuel supply hose away from any heated surface.

PROPOSITION 65 WARNING

Handling the brass material on this product exposes you to lead, a chemical known to the state of California to cause cancer, birth defects or other reproductive harm. WASH YOUR HANDS AFTER HANDLING THIS PRODUCT.

WARNING

Fuels used in gas or oil fired appliances, and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. "This warning is issued pursuant to California Health and Safety Code Sec. 25249.6

INSTALLATION

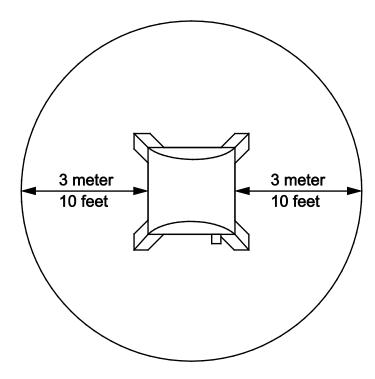
 In the U.S.A., this appliance must be installed in accordance with the local code and the relevant national code:

ANSI Z223.1/NFPA 54, National Fuel Gas Code ANSI/NFPA 58, Storage and Handling of Liquefied Petroleum Gases

In Canada, this appliance must be installed in accordance with the local code and the relevant CSA standards:

CSA-B149.1 Natural Gas and Propane installation Code CSA-B149.2 Propane Storage and Handling

 The appliance must be located away from combustible surfaces by at least 3m / 10feet from each side, and 3m / 10feet from the rear.



- 4. Do not operate this appliance under any overhead roof construction or foliage.
- 5. This appliance is for OUTDOOR USE ONLY, DO NOT operate in garage, shed, balcony or other such enclosed areas.
- 6. DO NOT restrict the flow of air to the appliance.
- 7. Keep the area surrounding the appliance free of combustible materials, gasoline, and all flammable liquids and vapors.
- 8. This appliance is not intended to be installed in, or on, recreational vehicles and/or boats.
- 9. Keep the ventilation opening(s) of the cylinder enclosure free and clear from debris.
- Keep the fuel supply hose away from any heated surface(s)
- 11. Not intended for commercial use.

NATURAL GAS

- 1. This barbecue is designed for use with natural gas. Do not use with liquid propane (bottled gas). The valves, orifices, and hoses are for natural gas only.
- 2. Do not use with charcoal.
- 3. A shut off valve must be used on the gas supply piping system.
- 4. When the appliance is not in use, turn off the natural gas supply at the shut off valve.
- 5. The appliance is designed to operate at a regulated pressure of 7 inches water column (W.C.).

STORAGE

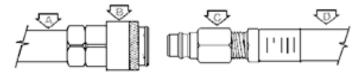
- 1. The gas must be turned off at the natural gas supply when the barbecue is not in use.
- When the barbecue is stored indoors, the gas supply must be disconnected.

GAS SUPPLY TESTING

- 1. The outdoor gas grill and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5kPa).
- 2. The outdoor gas grill must be isolated from the gas supply piping system by closing its individual manual shut off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5kPa).

GAS SUPPLY HOSE

- On models supplied with an extension hose, the hose assembly is specifically designed for your model. No modifications or additions should be attempted. Hose and hose couplings comply with CGA Standard CAN 1.83.
- 2. On models equipped with the "quick disconnect" coupling, close "shut off valve" before disconnecting coupling.
- 3. "Quick disconnect" coupling must be kept clean and free of dirt and debris.
- 4. Protect the hose from dripping grease and do not allow the hose to touch any hot surface.
- 5. Inspect the hose at least once per year. If the hose is cracked, cut, abraded or damaged, the appliance must not be used.
- 6. For replacement of hose assembly, contact your dealer or approved service centre.



- A. GAS SUPPLY PIPING
- B. QUICK DISCONNECT COUPLING
- C. ADAPTER FITTING
- D. EXTENSION HOSE ASSEMBLY

LEAK TESTING

VENTURI TUBES

LEAK TESTING

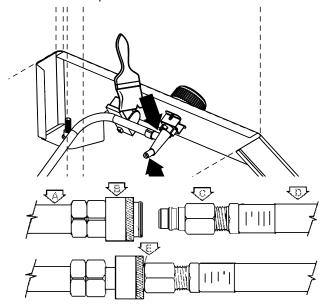
All factory-made connections have been rigorously tested for gas leaks. However, shipping and handling may have loosened a gas fitting.

AS A SAFETY PRECAUTION:

- · Test all fittings for leaks before using your gas smoker.
- · Test for leaks every time you connect a gas fitting.
- · Do not smoke at any time while testing.
- Never test for leaks with a lit match or open flame.
- · Test for leaks outdoors.

TO TEST FOR LEAKS:

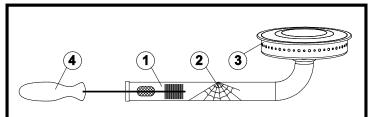
- 1. Extinguish any open flame or cigarettes in the area.
- 2. Be sure that the gas supply and gas smoker valves are "OFF."
- Prepare a soap solution of one part water, one part liquid detergent.
- 4. Open gas shut off valve.
- 5. Brush the soap solution on each connection.



- A. GAS SUPPLY PIPING
- B. QUICK DISCONNECT COUPLING
- C. ADAPTER FITTING
- D. EXTENSION HOSE ASSEMBLY
- E. LEAK TEST HERE
- 6. A leak is identified by a flow of bubbles from the area of the leak.
- 7. If a leak is detected, close the gas supply "shut-off" valve, tighten the connection and retest.
- If the leak persists, contact your gas smoker dealer for assistance. Do not attempt to operate appliance if a leak is present.

VENTURI TUBES

Always keep venturi tubes clean. Blockages in the venture tubes caused by spiders, insects and nests can cause a flashback fire. In fact, although the smoker may still light, the backed up gas can ignite and cause a fire around the venture tubes at the control panel.



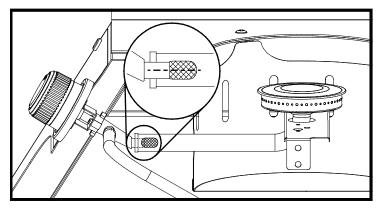
- 1. VENTURI TUBE
- 2. SPIDERWEB
- 3. BURNER
- 4. VENTURI CLEANING BRUSH

If a flashback fire occurs, turn off gas at the source immediately Inspect and clean the venturi tubes (main burner, side burner, rear burner) if any of the following symptoms occur:

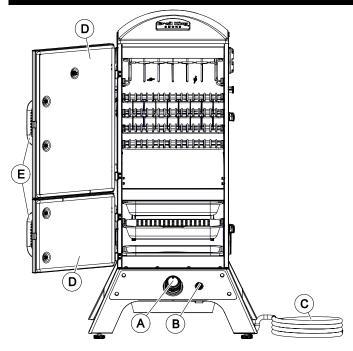
- 1. You smell gas.
- 2. Your smoker does not reach temperature.
- 3. Your gas smoker heats unevenly.
- 4. The burners make popping noises.

INSPECTING & CLEANING VENTURI TUBES

- 1. Turn off gas by closing the gas supply valve.
- 2. When the smoker is cool, remove the burner fasteners. Proceed to lift the burner from the burner housing.
- 3. Clean the venturi tubes with a pipe cleaner or venture cleaning tool (Accessory #77310).
- Lower the burner into position in the burner housing, making sure that the venturi tubes are correctly aligned and fitted on the orifices
- 5. Secure burners with burner fasteners.



LIGHTING



A. BURNER CONTROL

B. IGNITOR

C. NATURAL GAS HOSE

D. DOOR

E. HANDLE

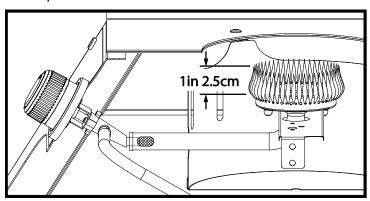
LIGHTING INSTRUCTIONS

- 1. The appliance must be assembled as per the assembly instructions.
- Ensure there are no gas leaks in the gas supply system.See: "Leak Testing." (page 6)
- 3. Ensure that the venturi tubes are properly located over the gas valve orifice. (see Venturi diagram, page 6)
- 4. Ensure that the Main Burner ignition wire is connected.
- 5. Carefully review all instructions on the information plate attached to the smoker.
- 6. WARNING: Always open the door before lighting and do not lean over the smoker while lighting.
- 7. Set control knobs to "OFF" and turn on the gas supply.

LIGHTING THE BURNER

- a. Open the smoker door and leave open until lit.
- b. Check that the battery has been installed in the electronic ignition.
- c. Push and turn the burner control knob to "HIGH."
- d. Push and hold down the ignitor button or use match to light.
- e. Burner should ignite within 5 seconds; turn off gas source immediately if ignition does not occur in this timeframe. To light burner with a match proceed below to step f
- f. Attach match to the match light chain and light.
- g. Lower lit match to the burner.
- h. Push and turn the burner control knob to "HIGH."
- i. Burner should ignite within 5 seconds.

CAUTION - Check your gas smoker after lighting. All burner ports should show a 1in / 2.5cm flame on "HIGH."



If any of the following symptoms occur there is probably a blockage in the venturi tubes. Shut off gas at once and clean the venturi tubes. See "Venturi Tubes." (page 6)

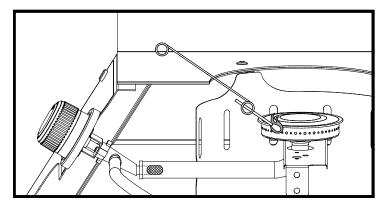
- 1. You smell gas.
- 2. A flashback fire occurs.
- 3. Your Smoker heats unevenly.
- 4. The burner make popping noises.

IF BURNER DOES NOT IGNITE OR BURNER EXTINGUISHES:

- 1. Push and turn control knob to "OFF." Wait 5 minutes then try again with control knob set at "MEDIUM."
- If the burner will not light, see "Troubleshooting" on page 11. If problems persist, do not attempt to operate the appliance; contact OMC, your dealer or an approved service center.

SHUTDOWN:

- 1. Turn off gas supply.
- 2. Turn control knobs to "OFF."



Match lighting the burner using the match light chain.

OPERATION

GETTING STARTED

Before cooking on your gas smoker for the first time, remove the grates, smoker pan, and water pan; wash thoroughly in warm, soapy water. Rinse completely and dry with a soft towel - don't air dry, and don't ever put in dishwasher.

Initial Burn-in - Before you start to cook on your Broil King® Smoke™ Vertical Propane Smoker you have to burn off the protective residues from manufacturing. Light your smoker, as outlined on page 7: "lighting your smoker", and leave the burner on high for a minimum of 30 minutes. This will burn off any of the protective coating from manufacturing and begin the process of smoke-curing the internal components of the smoker. The more you use your smoker, the better the seasoning will be.

SMOKING TECHNIQUES

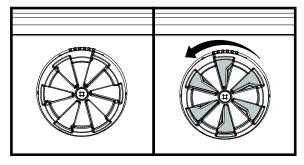
Smoking - Less than 275°f

This classic form of barbecue involves cooking of larger cuts of meat at low temperatures (less than 275°f (135°c) for a relatively long time (often 4+ hours). Using wood chips infuses slow cooked meats and other items with smoky barbecue flavor and yields incredibly tender results. Smoke roasting -275°f -400°f

Also known as indirect grilling, this is similar setup to smoking; smoke roasting is an accelerated version of the same principles. It works well for more conventional roasts, chickens and items that are frequently oven roasted. The combination of smoke and cooking time creates great flavor in a shorter time than true smoking.

CONTROLING TEMPERATURE

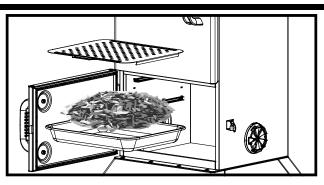
The Broil King® Smoke™ Vertical Propane Smoker allows you to control cooking temperature by adjusting the control knob and exhaust dampers. Use barbecue mitts or hot pads to protect hands while cooking or adjusting the dampers.



WOOD CHIPS

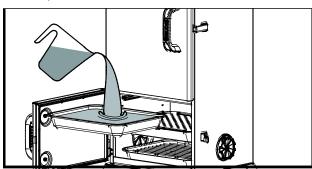
Pre-soak wood chips for 30 minutes before adding to smoker. Add wood chips after the main burner is lit, but before adding meat to the smoker. Do not place wood chips in the grease pan. Smoke flavor accumulates best on cool items that have moisture on the outside. Once the exterior of the item dries out, it will no longer take on smoke flavor.

For best results, try to maintain a temperature of 200°f to 300°f for most smoked meats. Always cook to the specified internal temperature for a given meat. That is the only way to ensure food safety.



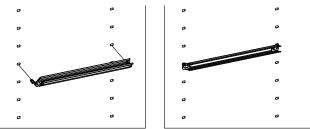
CONTROLING MOISTURE

Water pan: Your vertical charcoal smoker is equipped with a water pan to keep food from drying out. Use water, juice, and other herbs and spices to create another layer of flavor as you use your smoker.



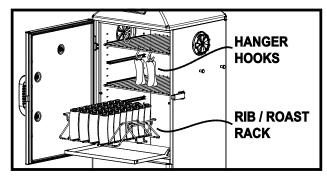
COOKING ACCESSORIES

Adjustable Racks: The rails for holding the cooking grids and trays are fully adjustable, allowing for most efficient use of your cabinet smoker.



Rib / Roast Rack: Your smoker includes a rib / roast rack that can be used in place of the stainless steel cooking grids. Maximize the space in your smoker by keeping ribs upright.

Stainless Steel Hooks: Leave the upper rack in place, and use the 16 hooks provided to hang sausage, chicken pieces, whole fish, and other items.



RECIPES

BBQ RUB

- 2 tablespoons brown sugar
- 1 teaspoon kosher salt
- 1 teaspoon freshly ground black pepper
- 1 tablespoon cumin
- 2 teaspoons dry mustard
- 2 teaspoons paprika
- 2 tablespoons chili powder
- 1 teaspoon onion salt
- 1 teaspoon celery salt
- 1 teaspoon garlic powder
- 1 tablespoon oregano

SMOKED CHICKEN

- Preheat smoker to 275°f (135°c)
- 1 whole chicken, separated, or chicken pieces thighs, wings, drumsticks, up to 5 lbs.
- Rub chicken pieces with general purpose BBQ rub, let stand 30 minutes
- Add water pan to smoker
- Add handful of apple or other wood chips to smoker tray
- Arrange chicken on cooking grids
- Cook 2.5 4 hours
- Internal temperature must reach 165°f (74°c)
- Cover, let stand 10 minutes
- Serve and enjoy

RIBS

- Preheat smoker to 250°f (121°c)
- 4 racks pork ribs
- Peel membrane from ribs
- Season liberally with barbecue rub
- Add water pan with apple juice to smoker
- Add handful of apple or other wood chips to smoker tray
- Arrange ribs on cooking grids, or in the included rib rack
- Cook 3-4 hours
- If desired, apply barbecue sauce at this time and finish using your Broil King Gas Barbecue at 400°f for 10 – 20 minutes.
- Remove from smoker, cover and let stand 10 minutes
- Serve and enjoy

PULLED PORK

- Preheat smoker to 225°f (107°c)
- 4 15 lb. Pork Shoulder (Smaller cuts will often be labelled Boston Butt or picnic shoulder)
- Season liberally with barbecue rub
- Add water pan with apple juice to smoker, set pork shoulder above pan
- Add handful of wood chips to smoker tray
- Place pork shoulder on cooking grids
- Cook 4 + hours to an internal temperature of at least 185°f (85°c)
- Remove from smoker, wrap with foil, let stand 30 minutes
- Chop using Broil King® Super Flipper (#64011) or pull using Broil King® Meat Claws (#64070)
- Apply sauce as desired
- Serve and enjoy

MAINTENANCE

REGULAR MAINTENANCE

The following components should be inspected and cleaned (as necessary) before every usage of your gas smoker to ensure optimal performance, safety and efficiency.

COOKING GRIDS

All OMC cooking grids are coated with a durable finish to protect the grids and reduce the tendency of food sticking to grids. With all OMC cooking grids instead of burning off your smoker after each usage, we recommend leaving food residue on grids and performing a Burn-Off (see below) before each use; this helps build up a protective layer of oil on the grids and will aid in preventing rust and deterioration.

SEASONING GRIDS

Cooking grids should be seasoned before every use by wiping or spraying them with vegetable or olive oil. Ensure that the whole surface of the grid is covered by a light layer of oil. This helps prevent rusting and deterioration. If rusting does occur, scrape it off gently with a scrub pad and season thoroughly. During longer periods of inactivity, grids should be seasoned, wiped dry then stored in a dry place. Before first usage and after periods of storage, grids should be washed dried with paper towel then wiped down thoroughly with vegetable or olive oil.

WATER PAN

After each cook, it will be necessary to empty the water pan. Wait for the smoker to completely cool. Carefully remove the water pan and dispose of cooking liquid and food residue. Wash the water pan with soap and water.

SMOKER BOX

After each cook, it will be necessary to empty the smoker box. Wait for the smoker to completely cool. It is a good idea to douse wood chips with water to insure they are completely extinguished. Carefully remove the smoker box and dispose of spent wood chips residue. Wash the pan with soap and water.

BURN-OFF

First make sure the water pan and smoker box has been emptied. Ignite the burners as per "Lighting" (page 7). Operate gas Smoker on HIGH with door closed for 10 min. or until smoking stops. Turn the gas source off then turn control knobs to OFF. When the smoker is completely cool. Clean the interior as necessary by scraping the sides and bottom of the cookbox and vacuuming or sweeping up debris.

ANNUAL MAINTENANCE

The following components should be inspected and cleaned at least once a year or after any period of storage over 30 days to ensure optimal performance, safety and efficiency.

BURNER

Remove burner and inspect for cracks and deterioration. Clean venturi tubes using a pipe cleaner or venturi brush to eliminate any blockages. See "Venturi Tubes." (page 6) While the burner is removed, clean the interior of cookbox by scraping the sides and bottom of the cookbox and vacuuming.

HOSE

Inspect and replace if necessary.

EXTERIOR FINISH

If white oxidation spots appear, wash the outside of the cookbox with a mild soap and water solution. Rinse the surfaces thoroughly then wipe them with a cloth dipped in cooking oil to restore the luster. For repair of paint scratches and scuffs, use a good quality HIGH temperature (600°F) spray paint for touch-up. Rusting is a natural oxidation process and may appear on cast-iron and steel parts. Rust will not affect short term performance of your smoker.

STAINLESS STEEL

Wash with soap and water. Use stainless steel cleaner to polish and remove stains or marks. Weathering and extreme heat can cause a stainless steel lid to turn a tan color. This is discoloration and is not considered a manufacturing defect.

RESIN COMPONENTS

Wash with soap and water.

REPLACEMENT PARTS

If a problem is found with the hose, burner, or control valve, do not attempt repair. See your dealer, approved service center, or contact the factory for repairs or replacement parts. To ensure optimum performance, use only original OMC replacement parts.

LEAK TEST

When reconnecting to the gas supply, be sure to check for leaks. See "Leak Testing." (page 6)

COOKING GRIDS

To wash cooking grids, use a light detergent and water and then rinse and dry with paper towel; never air dry grids or use a dishwasher. For cast iron grids, thoroughly season (see left: "Cooking Grids") after washing.

Always keep your Broil King® Smoke[™] Vertical Gas Smoker covered when not in use - use Broil King® Cover # 67240

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION	
SMELL OF GAS	SHUT OFF GAS SUPPLY AT ONCE. DO NOT USE THE APPLIANCE UNTIL LEAK IS SEALED.		
Leak detected at any connection.	 Quick disconnect coupling not seated fully. Gas leak in connection. Gas leak in hose or control valves 	Remove and reconnect coupling Tighten connection and "Leak Test". See authorized service centre	
Flames Beneath Control Panel (Flashback Fire)	1. Venturi blocked.	Remove burner and clean venturi. See "Venturi Tubes" (page 6)	
Burner Not Lighting	 Gas shut off valve closed. Ignitor issue. 	Open gas shut off valve. Try manually lighting burner with a match. See "Lighting" (page 7). If burner lights successfully, it is an ignitor issue. See "Ignitor not Working" below	
	3. Venturi blocked or misaligned with valve orifice.4. Orifice(s) blocked.5. Hose is twisted.	 Remove burner, clean venturi and realign with valve orifice. See page 6 for assistance. Remove burner, clean orifices with a pin or fine wire. Do not drill orifices. Straighten hose. Keep away from bottom casting. 	
Ignitor Not Working	 Ignitor battery is dead Ignitor wire(s) not connected Electrode misaligned on burner Ignitor malfunction 	1. Replace battery 2. Ensure main burner and side burner electrode wires are all connected 3. Realign electrode and clear any surrounding debris from area 4. Use "Match Lighting" procedure. (Page 7)	
Decreasing Heat, "Popping Sound"	1. Venturi blocked.	Remove burner, clean venturi. See "Venturi Tubes" (Page 6) for assistance.	
Yellow Flame	 Some yellow flame is normal. If it is excessive, the venturi may be blocked. Burner ports blocked. 	Remove burner, clean venturi. See "Venturi Tubes" (page 6) for assistance. Remove burner & clean with soft bristle brush (e.g. toothbrush).	
Inside of Lid Appears to be Peeling	This is a build-up of grease. The inside of lid is not painted and cannot peel.	Clean with stiff bristle brush or scraper.	
Cooking Grids Rusting	1. Porcelain enamel has been chipped	1. See "Maintenance" (page 10) for help	

If troubleshooting fails to solve any of these or any other issues, please visit www.omcbbq.com for more information including troubleshooting videos, tricks and tips or call customer service at 1-800-265-2150

WARRANTY

WARRANTY & CUSTOMER SERVICE

The OMC Warranty is effective from date of purchase and is limited to the repair or replacement of parts at no charge which prove to be defective under normal domestic use.

In Canada and the United States replacement is FOB Factory.

In all other countries replacement is FOB OMC Distributor. (Consult your dealer for name of OMC Distributor.)

All other costs are the responsibility of the owner.

This warranty is extended only to the original purchaser as indicated on the warranty registration and applies only to products sold at retail and only when used in country where purchased.

WHAT IS COVERED:

High Heat Coated Cook Box	5 years
Remaining parts & paint	2 years

WHAT IS NOT COVERED:

- Any failures or operating difficulties due to accident, abuse, misuse, alteration, misapplication, vandalism, improper
 installation or improper maintenance or service, or failure to perform normal and routine maintenance as set out in the
 owner's manual.
- Deterioration or damage due to severe weather conditions such as hail, hurricanes, earthquakes or tornadoes, discoloration due exposure to chemicals either directly or in the atmosphere.
- Shipping or transportation costs.
- · Removal or re-installation costs.
- Labor costs for installation and repair.
- · Cost of service calls.
- · Liability for indirect or consequential damages.

Replacement Parts:

"Genuine OMC Replacement Parts" must always be used for replacement. Use of any other parts will automatically nullify the above warranty.

Warranty Claims

All warranty is handled directly by OMC. Parts must be returned to OMC Warranty Department, shipping charges prepaid, accompanied by model #, Serial #, and if your grill is not registered, proof of purchase (copy of sales slip or invoice). If inspection confirms the defect, OMC will repair or replace such part in accordance with the terms of the warranty. On receipt of letter or fax (not by phone) OMC may, at is option, not require part or parts to be returned.

Outside North America

The above warranty is administered by the OMC distributor in your country. Contact your dealer for the name of your OMC distributor.