

# CROWN VERITY

## OWNER'S MANUAL

MODELS: MCB30, MCB36, MCB48, MCB60 & MCB72

REVISED DECEMBER, 2014

\*PLEASE RETAIN FOR FUTURE REFERENCE



Intertek

**CONGRATULATIONS!** You are the proud new owner of the finest commercial mobile charbroiler available. CROWN VERITY Inc. charbroilers are designed to last a lifetime...or more! With proper care and maintenance, your charbroiler will provide unparalleled performance and countless years of outdoor cooking.

Please read this manual carefully to ensure safe operation and to maximize your cooking enjoyment. It is your responsibility to see that your grill is properly assembled, installed, and cared for. Failure to follow instructions in this manual could result in serious bodily harm and/or property damage.

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

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**FOR YOUR SAFETY****IF YOU SMELL GAS:**

- 1) Shut off gas supply to appliance.
- 2) Extinguish any open flame.
- 3) Open lid or remove storage cover(s).
- 4) If odour continues, immediately call your gas supplier.

**DO NOT** store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.

- Never check for leaks with a match or open flame.
- An LP cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.
- This appliance shall only be used in a well ventilated space and shall not be used in a building, garage, or any other enclosed area.

**WARNING!** Keep any electrical supply cord and fuel supply hose(s) away from any hot surfaces.

**DO NOT** use your charbroiler if there is evidence of damage (cuts, cracks, burns) or excessive wear to the hose.

**DO NOT** obstruct the flow of combustion and ventilation air to the charbroiler.

**DO NOT** place combustibles on undershelf. Do not stand on the undershelf, it could result in injury or irreparable damage.

**DO NOT** store a spare LP (propane) cylinder under or near your charbroiler.

**DO NOT** leave your charbroiler unattended while in operation.

**DO NOT** allow children to play on or near your charbroiler.

**DO NOT** use under the influence of alcohol or drugs.

**DO NOT** use this charbroiler until you have read and understood all of the information in this manual.

**This appliance has been tested according to**  
**ANSI Z83.11/CSA1.8 - 2009**

This outdoor cooking gas appliance is not intended to be installed in or on recreational vehicles and/or boats.

## **INSTALLATION**

THE INSTALLATION OF THIS APPLIANCE MUST BE IN ACCORDANCE WITH:

- 1) All applicable local codes, or in the absence of local codes;
- 2) i) Canada: must conform to current National Standard CAN/CGA B149.1&.2 - natural gas/propane installation code.  
ii) U.S.A.: must conform to national Fuel Gas Code, ANSI Z223.1/NFPA 54 edition.
- 3) Use only hoses, regulators and quick disconnects supplied by Crown Verity. Regulators supplied with your charbroiler must be used.

### **WARNING!**

**DO NOT** operate this appliance under overhead, unprotected construction. This appliance shall be used only in a well ventilated space and shall not be used in a building, garage, or any other enclosed area.

Minimum clearance to adjacent combustible materials:

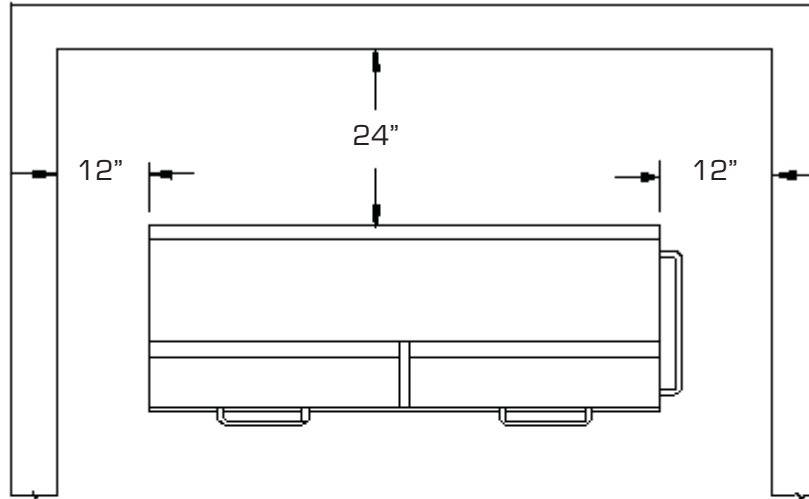
- 12 inches from side(s)
- 24 inches from back (See Fig. 1 pg. 3.)
- This appliance is suitable for use on combustible floors.
- Always level your MCB front to back & side to side.
- Always keep the area surrounding your charbroiler clear of all combustible materials, gasoline, or other flammable liquids.
- Use your charbroiler OUTDOORS in a well-ventilated space, preferably 10 ft. from dwellings or outbuildings.
- Casters must be locked when appliance is in operation.
- Fill water pans to avoid excessive flare-ups.

### **CAUTION: FOR FIXED FUEL SUPPLY SYSTEMS**

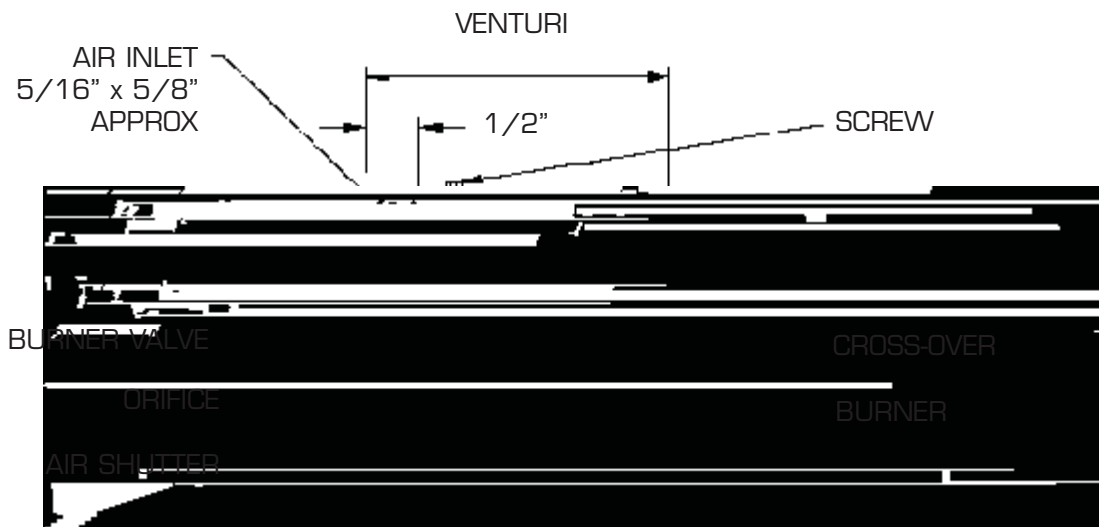
#### **RE: PRESSURE TESTS**

1. The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi. (3.45 kPa).
2. The appliance must be isolated from the gas supply piping system by closing it's 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 psi. (3.45kPa).

**FIG 1 CLEARANCES TO COMBUSTIBLES**



**FIG 2 BURNER ASSEMBLY DETAIL**



## **STORAGE**

### **DAY TO DAY STORAGE:**

- Always turn off the gas supply valve and disconnect supply hose.
- If you have not purchased the roll top(s) with your unit, your charbroiler is supplied with a protective cover(s). Install the cover(s) to protect your grill from the elements. Never attempt to light your charbroiler unless the lid(s) are open or the cover(s) are removed. Replace covers when not in use.

### **LONG TERM STORAGE:**

To prepare your charbroiler for long term storage, follow these steps:

#### **Preparation:**

- Clean the inside of your charbroiler.
- Clean the burner(s), then lightly oil.
- Clean the cooking grids, lightly oil, (cooking oil) store indoors.
- Store LP cylinders outdoors out of reach of children, away from sources of heat, and sources of ignition.
- Cover the charbroiler if left outdoors.
- Cover the supply hose connection(s) with cap(s) or plastic bag and elastic.

### **FIXED L.P./NATURAL GAS MODELS:**

(Equipped with quick-connect hose)

When the charbroiler is not in use, the gas must be turned off at the shut-off valve and the hose must be disconnected from the charbroiler. Install plastic caps to quick connect fittings. The charbroiler may then be stored indoors or outdoors.

For long term storage, follow the storage instructions above.

## **CYLINDERS AND REGULATORS**

**LP GAS CYLINDER:** - self-contained Propane Gas System

The self-contained propane system charbroiler is designed for use with a 9.1 kg. (20 lb.) propane cylinder, equipped with a Type I cylinder valve. This charbroiler cannot be connected to a standard Type II valve (with internal left-hand threads only).

**DO NOT CONNECT TO A PROPANE GAS CYLINDER EXCEEDING THIS CAPACITY, OR USE A CYLINDER WITH ANY OTHER TYPE OF VALVE.**

The Type I (Q.C.C.1) valve is recognizable by the large external thread on the outlet part of the valve. Standard valves do not have these exterior threads. Any attempt to fit the regulator(s) with anything other than the mating Type I (Q.C.C.1) connector, (recognized by the large black coupling nut) will negate the important safety features designed into the Type I (Q.C.C.1) system. Fitting a standard #510 P.O.L connector, will not provide the flow control or temperature shut-off safety features built into the complete Type I (Q.C.C.1) system.

The cylinder should not exceed 472 mm (18-1/2") in height and 317 mm (12-1/2") in diameter. Some models may be supplied with a propane cylinder. If purchasing a cylinder for your gas charbroiler, it must be constructed and marked in accordance with the specifications of:

- a) Canada - The Canadian Transport Commission - CAN/CSA B339
- b) U.S.A. - The U.S. Department of Transportation

Propane cylinder application chart by model						
Size/type	MCB-30/P	MCB-36/P	MCB-48/P	MCB-60/P	MCB/CCB-72/P	RPS
20lb	X	X	X	X	X	
30lb horizontal				X	X	
30 lb vertical						X
40 lb						X
50 lb						X
100 lb						X

**The cylinder must also be equipped with:**

- a) A shut-off valve terminating in a proper cylinder valve outlet specified in current standards:
  - 1) Canada: CAN/CGA - 1.6 - M88 - Outdoor Gas Grills - Amend. 1.
  - 2) U.S.A.: ANSI/CGA-V-1-1977: Compressed gas cylinder valve outlet and inlet connections.
- b) A safety relief valve having direct communication with the vapour space of the cylinder.
- c) A collar to protect the cylinder shut-off valve.
- d) An arrangement for vapour withdrawal.
- e) A bottom ring for securing to the cylinder support assembly.

**WARNING!**

- Always turn off the cylinder valve when your charbroiler is not in use.
- Handle cylinder valves with care.
- Never connect an unregulated LP gas cylinder to the charbroiler.
- Never store a spare cylinder under or near your charbroiler, or subject any cylinder to excessive heat.
- Always keep cylinder(s) securely fastened in an upright position.

## **TRANSPORTATION AND STORAGE OF LP CYLINDERS**

Although safe to use when properly handled, careless handling of a propane gas cylinder could result in fire, explosion, and/or serious injury.

### **THEREFORE:**

Always use the protective cap provided with your cylinder whenever it is not connected to your charbroiler.

- **Do not** store in a building, garage or any other enclosed area. Store only in a well ventilated area.
- **Do not** store in the vicinity of any gas burning apparatus or in any high heat area such as a closed car or trunk.
- **Do not** smoke while transporting a cylinder in your vehicle.
- **Do** transport and store cylinder(s) in an upright position. Do not tip on its side. Remove all cylinders from broiler during transportation.
- **Do** store out of reach of children.

### **WARNING!**

FILLING: For safety reasons, the LP gas cylinder, if supplied with your charbroiler, has been shipped empty. The cylinder must be purged of air and filled prior to using on your charbroiler. When getting your cylinder filled:

- Allow only qualified LP gas dealer to fill or repair cylinder(s).
- Do not allow the cylinder to be over filled.
- Make sure the LP gas dealer checks the cylinder for leaks after filling.

## **HOSES AND REGULATORS**

**WARNING!** - Propane Gas Models: Your charbroiler is designed to operate on L.P. (propane) gas at a pressure regulated at 11" water column. The regulator(s) supplied with this charbroiler is/are set to this pressure and must be used.

This regulator is equipped with the Type I (Q.C.C.1), quick closing connection system, which incorporates the following features:

- 1) Will not allow gas to flow until a positive seal has been made.
- 2) Has a thermal element that will shut off the flow of gas if subjected to temperatures between 115° and 150°C (240° & 300°F).
- 3) Has a flow limiting device which, when activated, will restrict the flow of gas to 10 cubic feet per hour (25000 BTUs).



### **TYPE I CYLINDER CONNECTIONS:**

If the large black thermally sensitive coupling nut is exposed to temperatures above 115° - 150°C, it will soften and allow the regulator probe to disengage from the cylinder valve, thereby shutting off the flow of gas. Should this occur: do not attempt to reconnect the nut. Remove the entire regulator assembly and replace it with a new one (see parts list). The cause of the excessive heat should be determined and corrected before operating your grill again. The regulator probe also contains a flow-sensing element, which will limit the flow of gas to the regulator to a manageable amount (10 cubic feet per hour) in the event of a hose or regulator failure, or a leak.

If it is evident that the flow-limiting device has activated, the cause of the excessive flow should be determined and corrected before using your grill again.

**NOTE: Improper lighting procedures can cause the flow-limiting device to activate, resulting in reduced heat output. If this is suspected, shut off all burner controls and cylinder valve, and carefully repeat lighting instructions step by step.** Do not remove the nut and probe and do not attempt to connect to anything other than a mating Type I (Q.C.C.1) cylinder valve.

- Never connect a propane gas grill to an unregulated propane gas supply or other gas. **Do not attempt to alter the hose or regulator** in any way.
- **Do not** allow the hose to come in contact with any hot surfaces of the charbroiler.
- Visually inspect the entire length of the hose assembly before each use for any evidence of damage (cuts, cracks, burns) or excessive wear. If found, replace the assembly before using your charbroiler. Only a hose assembly as specified in the parts list for your charbroiler should be used.
- The connection fitting must be protected when disconnected from the propane cylinder. If the fitting is allowed to drag on the ground, damage to the fitting may occur resulting in leaks or an incomplete connection. Dirt could also enter the small inlet hole, blocking gas flow completely.

### **NATURAL GAS AND FIXED LP MODELS:**

#### **RE: HOSES**

Crown Verity Inc. charbroilers that are equipped for use with natural gas or fixed LP systems require care and attention to the hose.

- Inspect the hose, clean quick-connect coupling, and keep protected.
- Always disconnect hose at quick-connect coupling when storing charbroiler.
- The gas supply hose must be a minimum of 10-ft. (3.1 m) and must be equipped with a shut-off valve, and must be installed by a certified technician.
- The appliance must be disconnected from the gas supply piping during any pressure testing of the system at test pressures in excess of 1/2 PSIG (3.5 kPa).
- The outlet pressure setting for the pressure regulator provided with the appliance is 4.0" water column for natural gas.  
10" water column for propane.

## **LEAK TESTING**

Leak testing must be performed:

- i) before lighting your charbroiler for the first time.
- ii) every time the propane cylinder is refilled, or any gas component is changed, or
- iii) at least once per year.

Perform the leak test outdoors in a well-ventilated area, away from any open flame, heat or ignition sources. **DO NOT SMOKE!** Use only a 50/50 mixture of liquid soap and water for leak testing. Do not use a match or open flame.

### **THE FOLLOWING MUST BE CHECKED:**

- Cylinder valve including threads into tank.
  - All cylinder welds.
  - Regulator fitting(s) and cylinder connection.
  - All hose connections.
  - All valve connections.
- 1) Open gas supply valve to the charbroiler.
  - 2) Brush soap solution on all connections and components listed above.
  - 3) Observe each place for growing bubbles, which indicate a leak is present.
  - 4) Tighten any leaking connection until a repeat test shows no evidence of leakage (shut off gas supply while correcting the leaks).

**DO NOT USE THE CHARBROILER IF ANY LEAKS CANNOT BE STOPPED. TURN OFF THE GAS SUPPLY VALVE, REMOVE ANY GAS CYLINDER, AND CALL A QUALIFIED GAS APPLIANCE SERVICE PERSON FOR PROPER REPAIRS.**

**WARNING! - NATURAL HAZARD - SPIDERS** Spiders and other insects are attracted by the smell of gas and could make webs or nests in the burners. This could partially or completely block the flow of gas through the venturis and is indicated by a smoky, yellow flame, and/or a burner that is difficult or impossible to light. Ultimately, it may cause the gas to burn outside the venturis, which can seriously damage your grill. If this happens: immediately shut off the propane at the cylinder, or natural gas at the main shut-off valve. To prevent and/or correct this occurrence, periodically check the venturis for obstructions by inserting a pipe cleaner or flexible wire through the air inlet of the burner, and twisting it (see fig. 2, pg.3). Ensure venturi tubes are properly "seated" over the orifices.

## **PRIOR TO USE AND LIGHTING INSTRUCTIONS**

### **WARNING!**

Do not use your charbroiler until you have read and understood all the information in this manual, and you are assured:

- There are no leaks in the gas supply system (see “Leak Testing” section).
- The burner is properly assembled with the venturi tubes seated over the valve outlets (orifices) (Fig. 2, page 3).
- That any electrical supply cords and/or gas supply hoses are kept away from all hot surfaces.
- Your charbroiler is positioned in a safe location (see “Installation” section).

### **CAUTION!**

- Always open the lid(s) or remove storage cover(s) before attempting to light your charbroiler.
- Do not bend directly over the grill when lighting.
- Make sure all valves are OFF. Slowly open LP cylinder valve. Do not snap open. Wait 15 seconds before opening a burner valve. This will allow the pressure to stabilize in the system, allowing the flow-limiting device to reset itself.
- If ignition does not immediately occur, turn off all burner and pilot valves, wait 5 minutes, and repeat.

### **LIGHTING INSTRUCTIONS:**

- 1) Open all lids on the charbroiler.
- 2) Ensure that all valve handles are in the OFF position (clockwise).
- 3) Turn on the gas supply valve. WAIT 15 SECONDS.
- 4) Turn the lighter tube (pilot) valve to the ON position. (Note: two lighter tubes are provided on larger models - one for the left side and one for the right side).
- 5) Insert a match or barbeque lighter into the hole(s) located behind the wing door(s) on the face of the charbroiler (if equipped) or the hole(s) located at the end(s) of the charbroiler.
- 6) Visually check to ensure the lighter tube is burning.
- 7) Once the lighter tube has been lit, any other main burners can be lit. (Push in and turn to “high”) The unlit burners will then light automatically.
- 8) Visually check to ensure that all burners that are intended to be ON are lit.
- 9) Adjust individual burners as desired.

## **OPERATING AND SHUT DOWN INSTRUCTIONS**

### **OPERATING:**

- Fill water pans to avoid excessive flare-ups.

Main burner valves are adjustable over a full range from completely ON to completely OFF. Note: burner valves lock when shut off. To open burner valves, you must push in and turn counter clockwise. Do not force the controls, damage to the valves or knobs may result.

Note: If the heat output from the charbroiler seems abnormally low; it may be caused by the regulator flow-limiting device being activated by (i) improper lighting procedures, or (ii) a substantial leak in the gas system. If the former is suspected; shut off the cylinder valve and all burner valves, then carefully follow lighting procedures step by step, ensuring all valves (including pilot) are OFF before beginning. If the latter is suspected; perform the leak test procedure to determine if a leak has caused the flow-limiting device to activate.

- If the burner flames go out when your charbroiler is in operation; immediately turn off all control valves. Wait 5 minutes to clear the gas before attempting to re-light the charbroiler. If the problem persists: check the troubleshooting guide (pg.13)
- Visually check the flames every time you light your charbroiler. A good flame should be mostly blue. If the flame is abnormally small or mostly yellow: shut off the charbroiler and check the venturi tubes for blockage, (Fig. 2, page 3) then check the troubleshooting guide (pg.13).

### **SHUT DOWN INSTRUCTIONS:**

- 1) Turn all burner and pilot valve knobs to the OFF position.
- 2) Turn the LP supply valve to the OFF position.  
For natural gas systems, turn the gas supply valve to the OFF position.
- 3) Ensure all burners are extinguished.
- 4) Close lid(s) or install protective cover(s) until future use.
- 5) Disconnect LP cylinder(s) from the charbroiler when not in use.
- 6) Take care; your charbroiler is still hot.

## **TIPS AND TECHNIQUES**

### **BREAKING IN YOUR GRILL:**

Before cooking on your Crown Verity Inc. charbroiler for the first time; operate it on high for 10 minutes with the lid(s) open, then with the lids closed for a further 10 minutes to ensure any dirt or protective oil has burned off. This will ensure the flavour of your food. For best cooking results, always preheat your charbroiler.

### **CONTROLLING FLARE-UPS:**

Some flare-up during grilling is desirable since the burning juices from the meat creates the smoke which gives barbecued food its unique flavour and appearance. However, excessive flare-up can not only ruin your food, it may lead to a dangerous condition, particularly if a build-up of grease in your charbroiler ignites, resulting in an uncontrolled grease fire. We suggest adding about 1" of water to the grease tray(s) prior to cooking. This will cool the falling grease and facilitate clean-ups.

#### **To Minimize flare-ups:**

- Trim excess fat from meats before cooking.
- Cook fatty meats (chicken and pork) on low setting or by indirect method (see section below).
- Check that grease tray(s) is in place & add 1" of water.
- Do not cover cooking grids with foil, or use broiling pans. Allow drippings to fall into the grease tray(s).

### **COOKING TECHNIQUES:**

There are several ways to cook on your Crown Verity Inc. charbroiler, here are but a few:

#### **Lid Up or Lid Down**

Although keeping the lid up or down when grilling directly on the grids is a matter of personal choice, you'll find your charbroiler will keep a more constant temperature, and your food will cook in less time, using less energy with the lid down. For cooking which requires a long cooking period over a low flame, keep lid down.

#### **Direct or Indirect Method**

Now you can sear meats over a high flame on one side of the charbroiler while you slow cook a roast in a roasting pan on the other. The multiple cooking arrangement also makes it possible for you to turn your charbroiler into an outdoor baking oven. Light one side of the grill and place the food on the grill above the unlit side. Close the lid and turn the control(s) to low. The heat from the lit burner(s) gently circulates throughout the charbroiler, cooking the food by indirect heat. A thermometer in the roll top(s) will help you monitor the inside temperature.

## **CLEANING AND MAINTENANCE**

All Crown Verity Inc. charbroilers are easily cleaned because of their stainless steel construction. For minor clean-ups, we suggest a general-purpose mild cleansing formula. For heavy grease build-up, apply an oven cleaner to stainless steel surfaces only, following the manufacturer's instructions.

MCB's can be thoroughly cleaned inside and out with the use of a pressure washer. Do not expose regulators, control valves, or decals to high-pressure spray.

### **Cooking Grids:**

Prior to each use, apply a light coating of cooking oil to the grids to prevent food from sticking. After each use, scrub the grids with a stiff nylon pad, or brass brush. Do not use steel brushes. Grids can also be washed with mild detergent or baking soda. Exercise caution when cleaning hot surfaces.

### **ADJUSTING AIR SHUTTERS:**

Crown Verity Inc. charbroilers are equipped with adjustable air shutters on the burner/venturi assembly. The air shutters are factory set for use with both natural gas and LP gas and should not need adjustment. However, if adjustment becomes necessary, they may be adjusted as follows: (should be performed by a qualified technician)

- Light the charbroiler and leave on high setting.
- Check that the flame is mostly blue - some random yellow flecks are normal, as is a muffled "pop" when the burner is turned off. If the flames are mostly yellow, or the flames are noisy and lift off the burner ports, venturi air shutters require adjusting as follows:
  - a) Loosen air shutter screw.
  - b) Increasing the amount of air opening will reduce the amount of yellow flame, producing the desired short blue "cones".
  - c) Decreasing the amount of air opening will "soften" the flame and correct a noisy, lifting flame condition (however, should still be mostly blue in colour).

Note: Due to the location of the air shutters, you will have to make the adjustments while the burners are off, re-light and observe the flames.

**USE CAUTION WHEN WORKING AROUND HOT SURFACES**

## TROUBLESHOOTING GUIDE

WHAT HAPPENS	WHAT TO LOOK FOR
1) Burners will not light	Out of propane? Improper lighting procedures? Is cylinder valve turned on? Regulator assembly not fully tightened to cylinder valve? Gas piping system is full of air - Bleed out system, wait five minutes and repeat lighting procedures. Large black nut on cylinder connector is cracked or has been overheated and is not making a gas tight seal inside cylinder valve - Replace regulator and hose assembly.
2) Flames blow out on low	Has charbroiler been sufficiently preheated before turning to low? Is the venturi properly seated over the orifice? - Inspect both venturis and burner holes for obstructions and check for proper air shutter opening on venturis.
3) Burners are not hot enough	Leaving burner valve open before opening cylinder valve or leak in system causing flow control device to activate. - Follow proper lighting sequence or correct leak in system. Inspect venturi for obstructions and alignment. Make sure burners are clean.
4) Flashback (flame coming up venturi around console/control knobs)	Immediately shut off gas supply at cylinder valve. Allow charbroiler to cool. Check venturis and orifices for obstructions. (See fig. 2, pg. 3.) Excessive grease build-up around control valves has caused a grease fire. - Clean charbroiler. If problem persists, contact qualified service person.
5) Grease dripping from base	Has grease tray been installed? Is charbroiler level? Excessive grease build-up - Clean unit.
6) Charbroiler goes out after a period of time	The cylinder pressure has dropped below operating pressure due to freeze-up. Long periods of "full open" operation will cause this. Remedy: exchange cylinder with a new full one.
7) Excessive flare-up	Overload of fatty meat. - Clean charbroiler. Add water to grease tray(s) (Level unit first). See tips and techniques page 11.

## **CONVERSION**

### **FIXED LP AND NATURAL GAS SYSTEMS**

MOST Crown Verity mobile charbroilers are factory-equipped for use with a propane cylinder(s). If your unit is factory converted for connection to a fixed supply piping system, the rating plate will reflect the type of gas to be used. The burner orifice sizes are indicated on the rating plate.

**WARNING!** Never use a gas grill with any gas other than that indicated on the rating plate.

Due to the numerous possible arrangements, it is recommended that you call the factory for technical assistance and instruction on proper conversion procedures.

The manufacturer supplies all conversion equipment kits. **Note: To order conversion kit(s)**, call Crown Verity Inc. at (519) 751-1800, or fax (519) 751-1802. Technical help is available during most weekday business hours. When ordering your conversion kit(s), please state the type of gas to be used and the model number of your charbroiler.

**WARNING!** A certified technician must perform all conversions and installations. Crown Verity Inc. accepts no responsibility for property damage or personal injury as a result of improper installation, maintenance, adjustment, or otherwise.

#### **INSTALLATION & CONVERSION INSTRUCTIONS TO THE INSTALLER:**

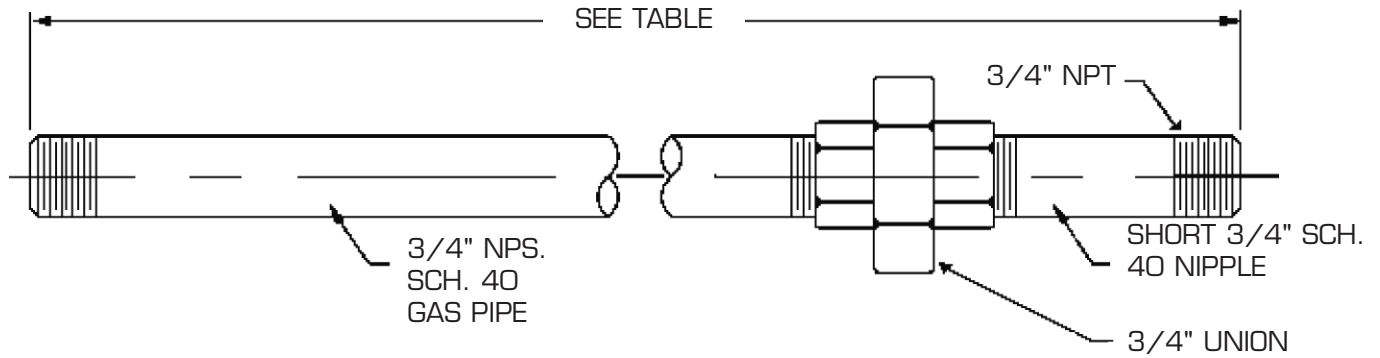
The supply piping for natural gas or LP gas shall be sized correctly to meet the input requirement of the appliance. Manifold pressures shall be checked and adjusted, if necessary, to the pressures stated on the rating plate, i.e. 11" W.C. propane, 3.5" W.C. natural gas.

Models MCB-60 and MCB-72 have two manifolds. When connecting to a natural gas supply or fixed LP supply, the manifolds must be coupled together. A typical set-up and dimensions are illustrated on page 15. A one-piece manifold for MCB-48 is available (single inlet).

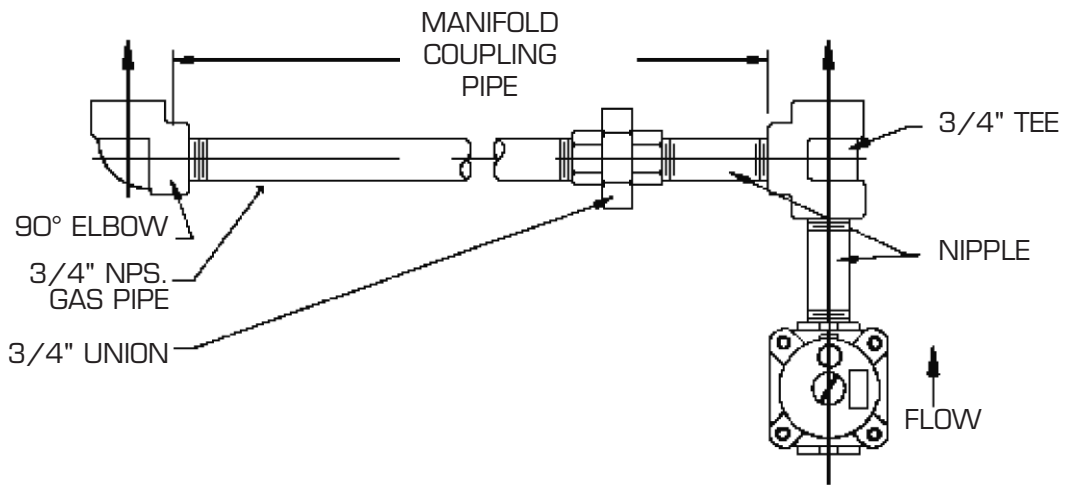
Quick Disconnect Devices: Any quick disconnect devices and hoses used in the supply arrangement shall be sized correctly to meet the input requirement of the appliance and shall comply with any other hose requirements mentioned earlier in this manual and national and local codes. They shall also be equipped with a suitable shut-off valve located as close as practical to the appliance.



**MANIFOLD COUPLING PIPE DETAIL**



**MCB 60 AND MCB 72 MANIFOLD COUPLING PIPE**



**MCB 60 AND MCB 72 CONVERSION SET-UP**

**TABLE**

<b><u>MODEL</u></b>	<b><u>SERIAL NUMBER</u></b>	<b><u>DIM.</u></b>
MCB-72	961001 - 961371	59-1/2"
MCB-72	961373 - 961450	63-1/2"
MCB-72	961451 & UP	56-1/4"
MCB-60	961001 - 961450	51-1/2"
MCB-60	961451 & UP	44-1/4"

## **FREQUENTLY ASKED QUESTIONS ABOUT MCB'S**

**Q.** My charbroiler works great when it's completely lit but I have problems getting all the burners to light. Do I have a gas leak in the system causing the flow-limiting device to activate?

**A.** Not likely. Make sure all burner valves (including pilot valve) are OFF (clockwise). Open the LP cylinder valve. Wait 15 seconds before attempting to light pilot. This will allow the pressure in the gas piping system to equalize and will allow the flow-limiting device to reset itself. The device will activate every time the cylinder valve is opened to a non-pressurized piping system, and it takes a few seconds to re-set itself before it can handle the large amounts of gas required to run an MCB. Remember: when this device activates it still allows a small amount of gas to pass through (enough to run the pilot tube and one burner adequately). The reason the flow-limiting device activates is because when an LP cylinder valve is opened to a non-pressurized piping system, the rate of gas flow exceeds (for a split second) the capacity of the device. All MCB piping systems will equalize within 15 seconds prior to lighting attempts. However, if a burner or pilot valve is left open, the device cannot reset itself because it has no back-pressure with which to do so.

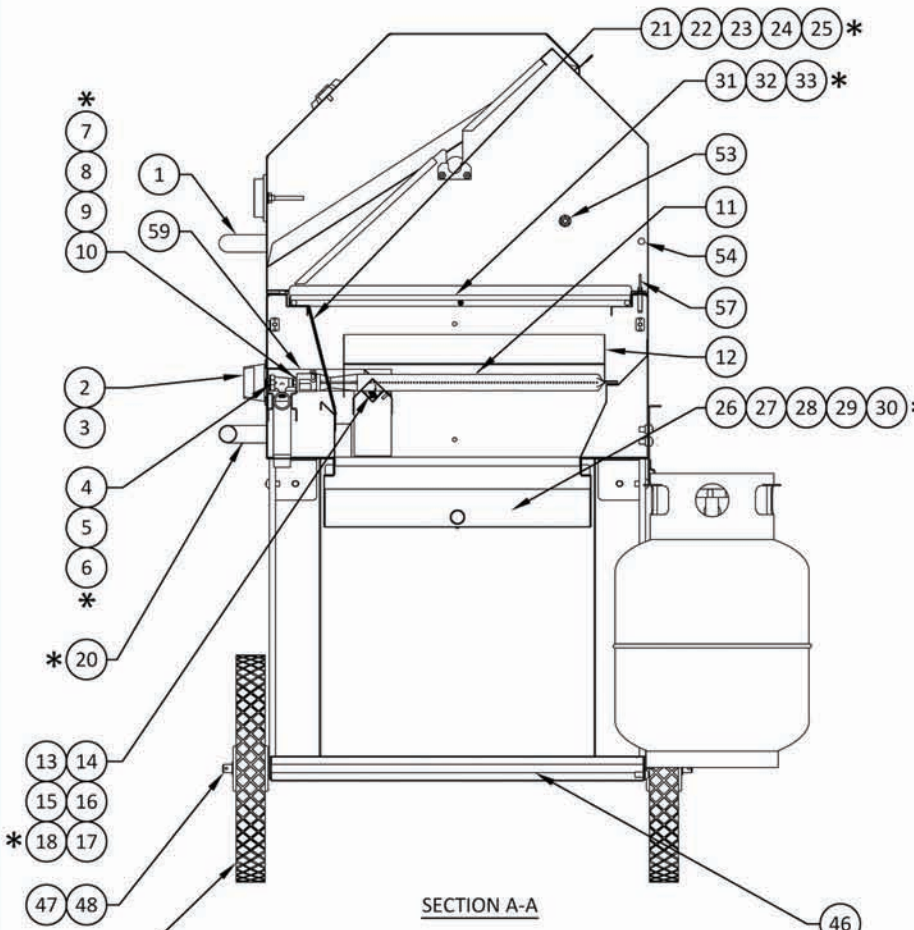
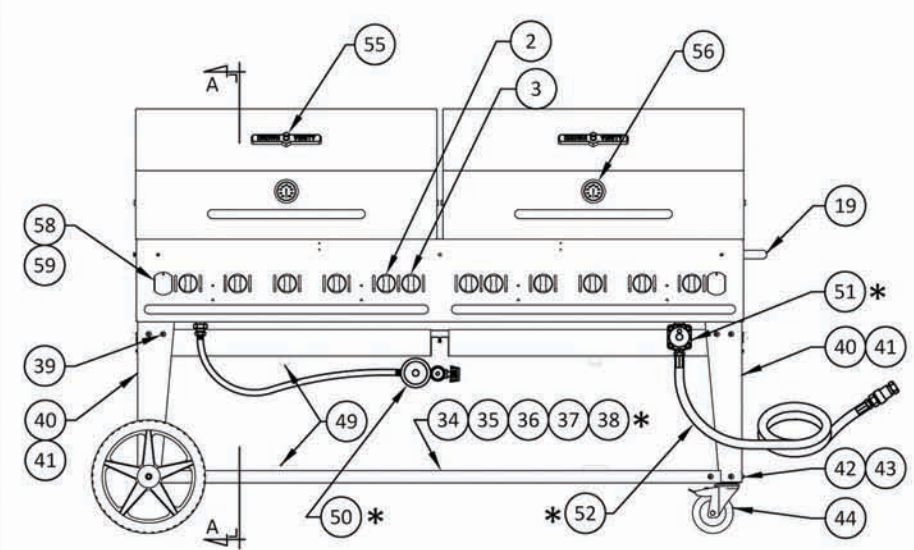
**Q.** My charbroiler takes forever to light. Why is that?

**A.** The piping system fills with air when cylinders or supply hoses are disconnected, and it takes some time to bleed the air out of the system through the small pilot orifice holes. Be patient.

**Q.** How long will my L.P. cylinder last?

**A.** Good question, the formula used to calculate this accounts for only two thirds of the cylinder's capacity. Not to say that MCB's won't work after the first two thirds of the propane are used up, but that the pressure in the cylinder begins to drop significantly at that level. Using this formula, With a twenty pound cylinder (full) and using the average maximum input (amount of gas used) for MCB's. We came up with an average cylinder life of 3 to 3-1/2 hrs.

**PARTS AND COMPONENTS**



**FOR ORDERING PARTS PLEASE CONTACT  
CROWN VERITY AT 519-751-1800**

**\* NOTES:**








- 1) PLEASE SPECIFY MODEL NUMBER, TYPE OF GAS AND SERIAL NUMBER WHEN ORDERING REPLACEMENT PARTS  
EXAMPLE: MCB-48, PROPANE, #####
- 2) NEW STYLE FRONT LIGHTING STARTED AT S/N 20087

DUE TO A CONTINUOUS PROGRAM OF PRODUCT IMPROVEMENT CROWN VERITY INC. RESERVES THE RIGHT TO MAKE CHANGES IN DESIGN AND IN SPECIFICATIONS WITHOUT NOTICE








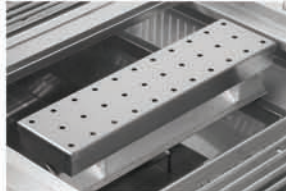
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ITEM	PART No.	DESCRIPTION
1	2005 2105	ROLL DOME HANDLE - 12" ROLL DOME HANDLE - 18"
2	2080	BURNER KNOB
3	2090	PILOT KNOB
4	2030	CONTROL VALVE - PROPANE
5	2050	CONTROL VALVE - NATURAL GAS
6	2040	CONTROL VALVE - PILOT
7	2032	BURNER ORIFICE - PROPANE
8	2052	BURNER ORIFICE - NATURAL GAS
9	2042	PILOT ORIFICE - PROPANE
10	2044	PILOT ORIFICE - NATURAL GAS
11	2060	BURNER
12	2070	RADIANT
13	ZCV-3032-BI	LIGHTER TUBE - 36"&LH 72" MCB
14	ZCV-4032-BI	LIGHTER TUBE - LH 48" MCB
15	ZCV-4033-BI	LIGHTER TUBE - RH 48" MCB
16	ZCV-8032-BI	LIGHTER TUBE - 30"&LH 60" MCB
17	ZCV-6033-BI	LIGHTER TUBE - RH 60" MCB
18	ZCV-7033-BI	LIGHTER TUBE - RH 72" MCB
19	2105	PUSH HANDLE - 18"
20	2208 2209 2210	27" BUMPER (30&60 MCB) 33" BUMPER (36&72 MCB) 45" BUMPER (48 MCB)
21	3023	HEAT SHIELD - 36"&LH 72" MCB
22	4023	HEAT SHIELD - 48" MCB
23	6023	HEAT SHIELD - 30"&LH 60" MCB
24	6024	HEAT SHIELD - RH 60" MCB
25	7024	HEAT SHIELD - RH 72" MCB
26	8025	GREASE TRAY - 30" MCB
27	3025	GREASE TRAY - 36" MCB
28	4025	GREASE TRAY - 48" MCB
29	6025	GREASE TRAY - 60" MCB
30	7025	GREASE TRAY - 72" MCB
31	2170	COOKING GRATE - 12" X 20 1/2"
32	2160	COOKING GRATE - 14" X 20 1/2"
33	2150	COOKING GRATE - 22" X 20 1/2"
34	8071	UNDER SHELF - 30" MCB
35	3071	1/2" UNDER SHELF - 36" MCB
36	4071	UNDER SHELF - 48" MCB
37	6071	UNDER SHELF - 60" MCB
38	7071	UNDER SHELF - 72" MCB
39	2142	LEG BOLT
40	2213	LEG - RIGHT HAND
41	2212	LEG - LEFT HAND
42	2211	CASTER MOUNT
43	2220	CASTER MOUNT STIFFENER
44	2216	CASTER - 5"
45	2141	SPOKE WHEEL - 14" PLASTIC SPOKE
46	2215	AXLE
47	2146	AXLE WASHER
48	2148	AXLE PIN
49	2214	CYLINDER BRACKET ASSEMBLY
50	2200	HOSE&REGULATOR ASS'Y - PROPANE
51	2180 2189	1/2" REGULATOR - NAT. GAS (30, 36&48 MCB) 3/4" REGULATOR - NAT. GAS (60 &72 MCB)
52	5110 5120	1/2" N.G. HOSE C/W Q/D (30, 36&48 MCB) 3/4" N.G. HOSE C/W Q/D (60 &72 MCB)
53	2205	ROLL DOME PIVOT ASSEMBLY
54	2206	ROLL DOME STOP ASSEMBLY
55	2003	BRONZE NAME PLATE ASSEMBLY
56	2004	THERMOMETER ASSEMBLY
57	2020	ROLL DOME PIN/RING ASSEMBLY
58	ZCV-2303	WING DOOR
59	ZCV-2302	PILOT SHIELD/COVER

**OPTIONS & ACCESSORIES**

	Model	Description	Dimensions	Actual Wt. (lb)	# Req'd
	RD-30	Roll Dome for MCB-30, BI-30 or 1/2 of MCB-60	30"l x 23"d x 16"h	41	1 or 2
	RD36/72	Roll Dome for MCB-36, BI-36, or 1/2 of MCB-72	36"l x 23"d x 16"h	45	1 or 2
	RD-48	Roll Dome for MCB-48 & BI-48	48" l x 23" d x 16"h	53	1
	RD-60	Roll Dome for MCB-60	61" l x 23" d x 16"h	80	1
	Note: Roll domes c/w handle & thermometer				
	ABR-30	S.S. Adjustable Bun Rack Assy. for RD-30 - 9 1/4"w		9	1 or 2
	ABR-36/72	S.S. Adjustable Bun Rack Assy. for RD-36/72 - 9 1/4"w		11	1 or 2
	ABR-48	S.S. Adjustable Bun Rack Assy. for RD-48 - 9 1/4"w		15	1
	ABR-60	S.S. Adjustable Bun Rack Assy. for RD-60 - 9 1/4"w		20	1
	RES	S.S. Removable End Shelf	14" w x 23" d	8	1 or 2
	RFS-30	Removable Front Shelf for MCB-30	9 1/2" w	7	1
	RFS-36	Removable Front Shelf for MCB-36	9 1/2" w	9	1
	RFS-48	Removable Front Shelf for MCB-48	9 1/2" w	11	1
	RFS-60	Removable Front Shelf for MCB-60	9 1/2" w	13	1
	RFS-72	Removable Front Shelf for MCB-72	9 1/2" w	16	1
	BC-30	BBQ Cover for MCB-30 w/ roll dome option only		6	1
	BC-30-BI	BBQ Cover for BI-30 w/roll dome option only		3	1
	BC-36	BBQ Cover for MCB-36 w/ roll dome option only		7	1
	BC-36-BI	BBQ Cover for BI-36 w/ roll dome option only		4	1
	BC-48	BBQ Cover for MCB-48 w/ roll dome option only		8	1
	BC-48-BI	BBQ Cover for BI-48 w/ roll dome option only		5	1
	BC-60	BBQ Cover for MCB-60 w/ roll domes option only		9	1
	BC-72	BBQ Cover for MCB-72 w/roll domes option only		10	1
BMC	BBQ Cover for BM-60		7	1	
	WG-30	Wind Guard for MCB-30, BI-30 or 1/2 of MCB-60		10	1 or 2
	WG-36/72	Wind Guard for MCB-36, BI-36 or 1/2 of MCB-72		12	1 or 2
	WG-48	Wind Guard for MCB-48 & BI-48		14	1
	SB-MCB	S.S. Side Burner for MCB Models (Propane Only) (15,000 BTU)	12" x 25 1/2"d x 10 1/4" h	22	
	<b>Note: SB-MCB Side Burners are NOT installed.</b>				
	SB-BI	S.S. Side Burner FOR BI MODELS ONLY (Propane) (15,000 BTU) or (Natural Gas)	15" x 27"d X 11 3/4" h	25	

**OPTIONS & ACCESSORIES**

	Model	Description	Dimensions	Actual Weight	# Req'd
	PGT-1117	Stainless Steel Veggie/Fish Tray 16 Gauge 304	11 1/2" w x 17 1/2" l	4lb	
	G1222	Removable Griddle Plate	12"w x 20 1/2" d	35 lb	
	G2022	Removable Griddle Plate * carbon steel plate	21 3/4"w x 20 1/2" d	50 lb	
	PGRID-30	Removable griddle - Professional Series for MCB-30 or 1/2 MCB-60	30"w x 23 1/2"d x 7 1/2"	75 lb	1 or 2
	PGRID-36	Removable griddle - Professional griddle for MCB-36 or 1/2 MCB-72	36"w x 23 1/2"d x 7 1/2"	90 lb	1 or 2
	PGRID-48	Removable griddle - Professional Series for MCB-48	48"w x 23 1/2"d x 7 1/2"	120 lb	1
Griddles are constructed of 5/16" thick cold rolled steel with stainless steel splash guards and removable stainless steel grease tray. <b>Note: Roll Domes must be removed</b>					
	RT-30	Rotisserie Assembly for MCB-30, BI-30 or left side of MCB-60 c/w 1 set of 5" forks		18 lb	1
	RT-36	Rotisserie Assembly for MCB-36, BI-36 or left side of MCB-72 c/w 1 set of 5" forks		19 lb	1
	RT-48	Rotisserie Assembly for MCB-48 & BI-48 c/w 1 set of 5" forks		20 lb	1
	RT-60	Rotisserie Assembly for MCB-60 c/w 2 sets of 5" forks		23 lb	1
	RT-72	Rotisserie Assembly for MCB-72 c/w 2 sets of 5" forks		25 lb	1
<b>Note: When ordering RT, please specify whether it is for an MCB or BI Model</b>					
	FA-5 (shown)	Fork Assembly 5" - set of 2 for Heavy duty RT			1
	FA-8	Fork Assembly 8" - set of 2 for Heavy duty RT			1
	CTP	Perforated Charcoal Tray Allows all MCB or BI models to be used with charcoal	13 1/2" w x 20" l x 2"h	6 lb	
	SBK	Stainless Steel Smoker Box 2 piece design, used to enhance the flavour of all foods	4 1/2" w x 11" l x 2 3/8" h	4 lb	

**OPTIONS & ACCESSORIES**

Model	Description	Dimensions	Actual Wt. (lb)	# Req'd
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SPA Steamer Pan Adapter  
(Pans not included)

13" w x 21" d x 6 1/2" h

7



RHS S.S. Removable Hand Sink  
Single faucet, 20 litre waste water tank, drain hose

14" w x 23" d

12

1



CYL-20 20 lb. Propane Tank  
- for standard MCB's, Patio Heaters & Steamer/Griddles

20

1 or 2

CYL-50 50 Lb. Propane Tank - for remote propane cart only  
-cannot be mounted on standard models  
**(compatible with # 5131 hose & reg only)**

44

1 or 2



CYL-30H 30 lb. Horizontal Propane Tank - for Club Grill only

29

1 or 2

CYL-30 30 lb. Propane Tank  
- for TG-1, TG-2, TG-4, PF-1, PF-2 & Patio Heaters

26

1 or 2








RPS-486072 Remote Propane Cart c/w securing chains  
c/w securing chains & two 25' hoses & regulators  
for use with MCB-48, 60 & 72 **tank(s) not included**

93

1

Note: This system is CGA & AGA approved when used with any MCB Model. The RPS system is designed to be used with our 50 lb or larger cylinders. It will provide uninterrupted, problem-free fuel supply to any of our MCB's, even in cold weather.

**OPTIONS & ACCESSORIES**

	Model	Description	Dimensions	Actual Wt. (lb)
	5006	Utility lighter - case of 24		3
	Ribpro-10	Stainless Steel Rib Rack	12"w x 20.5"l x 3.25"h	11
	528	Long Handle red BBQ brush w/scraper - 19"L		
	BBQ-EZ1	BBQ Cleaner 16 oz (500 ml) w/sprayer		
	BBQ-EZ12	BBQ Cleaner 16 oz (500 ml) w/sprayer - 12/case		16
	BBC-1	Beer Butt Chicken Holder		
	BBC-12	Beer Butt Chicken Holder - 12/case		7

# CROWN VERITY

## CROWN VERITY INC. LIMITED WARRANTY PROGRAM

This limited warranty program is the only one that applies to this product, and it sets forth all the responsibilities of Crown Verity Inc., regarding this product. There is no other warranty, other than described.

All Crown Verity Inc., products must be registered within 30 days of purchase to activate this warranty. Warranty is Non-transferable Please send the completed registration form to:

Warranty Registration Crown Verity Inc.  
37 Adams Blvd.  
Brantford, Ontario, N3S 7V8

Or, better yet go to [www.crownverity.com](http://www.crownverity.com) and under the support tab register your BBQ on - line, follow us on facebook or receive twitter feeds on new products, accessories, recipes, and information on how to "Work your Grill."

[www.crownverity.com/mcb-60-training-video](http://www.crownverity.com/mcb-60-training-video)



Please check if you would like to receive information on new products/services via e-mail:

Name: \_\_\_\_\_

Street Address: \_\_\_\_\_ City: \_\_\_\_\_

Province/State: \_\_\_\_\_ Postal Code: \_\_\_\_\_ Serial #: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Company Purchased From: \_\_\_\_\_



## **CROWN VERITY INC. LIMITED WARRANTY**

**WHAT IS COVERED** This warranty covers products manufactured by Crown Verity Inc. and defects in material and workmanship under normal use, and applies only to the original purchaser providing that:

- The equipment has not been accidentally or intentionally damaged, altered or misused;
- The equipment is properly installed, adjusted, operated and maintained in accordance with National and local codes, and in accordance with the installation instructions provided with the product;
- The serial number rating plate affixed to the equipment has not been intentionally defaced or removed.

**COVERAGE PERIOD** All products: One (1) Year limited parts and labour coverage.  
Warranty period begins the date of dealer invoice to customer or ninety (90) days after shipment date from Crown Verity Inc. (except Patio Heaters : 120 days)

**WARRANTY COVERAGE** This warranty covers on-site labour, parts and shipping of replacement parts within Canada and Contiguous United States; and reasonable travel time and travel expenses of the authorized service representative up to (100) miles, round trip, and (2) hours travel time.

**EXCEPTIONS** Stainless steel cooking grates and gas burners, are warranted to the original purchaser for 10 years against rust through and burn through for gas grills purchased and shipped, January 1, 2001 or after.

### **EXCLUSIONS**

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>- Negligence or acts of God</li><li>- Air and Gas adjustments</li><li>- Light bulbs, batteries and other wearable items</li><li>- Door adjustments and or lid adjustments</li><li>- Fuses</li><li>- Tightening of screws of fasteners</li><li>- Adjustments and or cleaning of main burners, pilot burners, or orifices</li><li>- Alteration, misuse or improper installation</li><li>- Normal discoloration of materials</li><li>- Ordinary wear and tear</li><li>- Damage caused by insects within the burner tubes</li></ul> | <ul style="list-style-type: none"><li>- Failures caused by erratic voltages or gas supplies</li><li>- Unauthorized repair by anyone other than a Factory Authorized Service Center</li><li>- Damage in shipment</li><li>- Accessories – brushes, spatulas, cylinders, etc.</li><li>- Freight- other than ground UPS Charges within Canada and Contiguous United States.</li></ul> |
|---|---|

**INSTALLATION** Proper installation and testing of all new equipment – per appropriate installation codes is not the responsibility of the manufacturer.

**REPLACEMENT PARTS** Crown Verity Inc. genuine factory OEM parts receive a (90) day materials warranty effective from the date of installation.

This Warranty is in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on the manufacturer's part. Crown Verity Inc. shall in no event be liable for any special, indirect or consequential damages, or in any event for damages in excess of the purchase price of the unit. The repair or replacement of proven defective parts shall constitute a fulfillment of all obligations under the terms of this warranty.

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