

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 Z83.11a/CGA1.8a-M97
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, 1988 or latest edition.

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.

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 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 psi. (3.45kPa).

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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 barbecue lighter into the hole(s) provided on 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 unit 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:

- Minimum operational temperature of this appliance is 0°C or 32°F.

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 relight 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.

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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 unit 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.

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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.

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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.