# **Broîl Kîng** BUILT-IN RANGE BURNER

### **OWNER'S MANUAL**

### FOR USE WITH BUTANE OR PROPANE GAS

CATEGORIA I3+(28-30/37), CATEGORIA I3B/P(30) CATEGORIA I3B/P(37), CATEGORIA I3P(50)

### FOR USE WITH NATURAL GAS

CATEGORIA I2E(20), CATEGORIA I2H(20)

# CONTENTS

SAFETY	2
INSTALLATION	3
LP GAS CYLINDER	10
HOSE & REGULATOR	11
NATURAL GAS	12
LEAK TESTING	13
VENTURI TUBES	14
LIGHTING	15
OPERATION	16
MAINTENANCE	16
TROUBLESHOOTING	17
WARRANTY	18

### READ ALL INSTRUCTIONS CAREFULLY BEFORE OPERATING YOUR GAS GRILL. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.

nwand **SINCE 1906** MANUFACTURING COMPANY 585 KUMPF DRIVE L WATERLOO, ONTARIO, CANADA LIMITED

70094-S200EU REV A 07/23

# SAFETY

This appliance is designed in accordance with CE Standards.

Use outdoors only.

Read the instructions before using the appliance.

Warning: accessible parts may be very hot. Keep young children away.

Use caution when handling or transporting this product. Metal edges can present a hazard. Use appropriate gloves when lifting or handling.

Turn off the gas supply after use.

Use protective gloves when handling hot components.

The aeration adjustments on the main burners, rear burner and side burner have been adjusted, set and sealed at the factory and should not be adjusted.

Any modification of the appliance may be dangerous.

In the event of a gas leak, shut off gas supply.

Keep electrical supply cord away from hot surfaces and water.

#### **IF YOU SMELL GAS:**

- 1) SHUT OFF GAS TO THE APPLIANCE.
- 2) EXTINGUISH ANY OPEN FLAME.
- 3) OPEN LID.
- 4) IF ODOR CONTINUES, IMMEDIATELY CALL YOUR GAS SUPPLIER.

#### **MODEL SPECIFICATIONS**

MODEL	TOTAL HEAT INPUT (kW)	TOTAL HEAT INPUT (g/h)	JET SIZE SIDE BURNER
802762	3.9	284	0.95
802763	3.9	284	1.02
802763PL	3.9	284	0.96
802766	3.9	284	1.55
803762	7.8	567	0.95
803763	7.8	567	1.02
803763PL	7.8	567	0.96
803766	7.8	567	1.55

				1	-	
FOR USE IN	CATEGORY	SUPPLY PRESSURE BUTANE	SUPPLY PRESSURE PROPANE	SUPPLY PRESSURE NATURAL GAS	REGULATO R MUST COMPLY WITH	GAS HOSE MUST COMPLY WITH
BE	l <sub>3+(28-30/37)</sub>	28-30 mbar	37 mbar			
СН	l <sub>3+(28-30/37)</sub>	28-30 mbar	37 mbar			
ES	I <sub>3+(28-30/37)</sub>	28-30 mbar	37 mbar			
FR	I <sub>3+(28-30/37)</sub>	28-30 mbar	37 mbar		NF M 88765 OR NF M 88776	NF D 36107
GB	l <sub>3+(28-30/37)</sub>	28-30 mbar	37 mbar		BS3016	BS3212/2/8
IE	l <sub>3+(28-30/37)</sub>	28-30 mbar	37 mbar			
IS	l <sub>3+(28-30/37)</sub>	28-30 mbar	37 mbar			
IT	I <sub>3+(28-30/37)</sub>	28-30 mbar	37 mbar			
PT	l <sub>3+(28-30/37)</sub>	28-30 mbar	37 mbar			
CZ	<sup>I</sup> 3B/P(30)	30 mbar	30 mbar			
DK	<sup>I</sup> 3B/P(30)	30 mbar	30 mbar			
FI	I <sub>3B/P(30)</sub>	30 mbar	30 mbar			
GR	I <sub>3B/P(30)</sub>	30 mbar	30 mbar			
HU	I <sub>3B/P(30)</sub>	30 mbar	30 mbar			
LT	<sup>I</sup> 3B/P(30)	30 mbar	30 mbar			
LU	I <sub>3B/P(30)</sub>	30 mbar	30 mbar			
LV	I <sub>3B/P(30)</sub>	30 mbar	30 mbar			
NL	I <sub>3B/P(30)</sub>	30 mbar	30 mbar			NEN 5654
NO	<sup>I</sup> 3B/P(30)	30 mbar	30 mbar			
RO	<sup>I</sup> 3B/P(30)	30 mbar	30 mbar			
SE	I <sub>3B/P(30)</sub>	30 mbar	30 mbar			
PL	<sup>I</sup> 3B/P(37)	37 mbar	37 mbar			
AT	<sup>I</sup> 3P(50)		50 mbar			
DE	<sup>I</sup> 3P(50)		50 mbar			
DE	<sup>I</sup> 2E(20)			20 mbar		
PL	<sup>I</sup> 2E(20)	<u> </u>		20 mbar		
AT	<sup>I</sup> 2H(20)			20 mbar		
BE	<sup>I</sup> 2H(20)			20 mbar		
СН	<sup>I</sup> 2H(20)			20 mbar		
CZ	<sup>I</sup> 2H(20)			20 mbar		
DK	<sup>I</sup> 2H(20)			20 mbar		
ES	<sup>I</sup> 2H(20)			20 mbar		
FI	<sup>I</sup> 2H(20)			20 mbar		
GB	<sup>I</sup> 2H(20)			20 mbar		
GR	<sup>I</sup> 2H(20)		T	20 mbar		
IE	<sup>I</sup> 2H(20)			20 mbar		
IT	<sup>I</sup> 2H(20)			20 mbar		
NO	<sup>I</sup> 2H(20)			20 mbar		
PT	l <sub>2H(20)</sub>			20 mbar		
SE	<sup>I</sup> 2H(20)			20 mbar		

GAS SPECIFICATIONS

## INSTALLATION



- A. BURNER
- B. TRIVET
- C. CONTROL KNOB
- D. IGNITOR
- E. LIGHT SWITCH
- F. ACCESS DRAWER

### **CONFIGURATION OPTIONS**

There are many options for designing an outdoor kitchen for your new built-in range burner. It can be a technically challenging project requiring skilled labor to plan and build.

The Installation and construction should be done by qualified professionals.

- The range burner and all other accessory units should be on site before construction begins.
- If the range burner will be connected to gas supply shared with a grill. You must use the supplied "Y" connector and position the range burner to the left of the grill.

#### **POSITIONING YOUR RANGE BURNER**

Ensure there is adequate ventilation for heat and smoke to dissipate.

### WHEN DETERMINING THE POSITION OF THE RANGE BURNER, GIVE THOUGHT TO:

- Exposure to wind.
- Proximity to traffic.
- Keeping gas lines and electrical connections as short as possible and away from heat sources.

#### LOCATE THE RANGE BURNER:

- To provide enough room to safely evacuate the area in the event of a fire.
- In a well-ventilated area.

#### NEVER LOCATE THE RANGE BURNER:

- In a garage, breezeway or shed, or any other enclosed area.
- Under overhead unprotected combustible construction.

**WARNING:** Wind blowing at the range burner can disrupt the proper flow of air though the range burner, leading to reduced performance, or in certain cases, cause excess heat buildup in the control panel area. This can lead to a burn hazard if the control panel surface and knobs become too hot to touch.

During high wind conditions, do not to use the range burner.

Damage to the range burner resulting from use in windy conditions, such as melted knobs or igniter wires, or valve panel discoloration from heat build-up, are excluded from warranty coverage.

If located in a consistently windy area, a wind break will be required.

#### **CONSTRUCTION MATERIALS**

Materials appropriate for outdoor construction should be chosen to build any enclosure and cabinetry for your range burner. All construction materials can be divided into two groups: combustible and non-combustible. You must follow the clearance specifications (pg4-6) for distances from the range burner to either combustible or non-combustible materials.

### **DEFINITION OF COMBUSTIBLE MATERIAL**

Any building structure or decorative structure made of wood, compressed paper, plant fibers, vinyl/plastic or other materials that are capable of transferring heat or being ignited and burned. Such material shall be considered combustible even though flameproofed, fire-retardant treated or surface-painted, or plastered.

#### **DEFINITION OF NON-COMBUSTIBLE MATERIAL**

Material which is not capable of being ignited and burned, such as materials consisting entirely of, or a combination of, steel, iron, brick tile, concrete, slate, and plaster.

#### COUNTERTOP

All Installations require a non-combustible countertop surface. The countertop surface must be constructed from solid materials and must be level and smooth. For information on dimensions for openings in the countertop see (pg 09).

## **INSTALLATION – CLEARANCES ABOVE COUNTERTOP**

- A) Minimum clearance between the range burner and noncombustible wall above the countertop surface is
  - 6" [150mm] to the left, right and rear.



B) Minimum clearance between the range burner and a protected combustible wall above the countertop surface is 12" [300mm] to the left, right and rear.

A protected combustible wall has a 1" (25mm) ventilated space between a non-combustible surface and the combustible surface extending 15" (375mm) above the countertop surface.

C) Minimum clearance between the range burner and a combustible wall above the countertop surface is 16" (400mm) to the left, right and rear.

## **INSTALLATION – CLEARANCES BELOW COUNTERTOP**

- D) Minimum clearance between the range burner and any non-combustible wall below the countertop surface is 1/4" (6mm) to the left, right and rear.
- E) Minimum clearance between the range burner and any protected combustible wall below the countertop surface is 4" (100mm) to the left, right and rear.

A protected combustible wall has a 1" (25mm) ventilated space between a non-combustible surface and the combustible surface extending the full height below the countertop surface.

The non-combustible enclosure should be vented in accordance with guidelines on (pg 8) "Grill enclosures without gas cylinder".



# **INSTALLATION – CLEARANCES OVERHEAD**

WARNING: Do not install or use the grill under unprotected combustible construction without a fire safe ventilation system.

# OVERHEAD CONSTRUCTION AND EXHAUST HOOD REQUIREMENTS

A minimum 60" [1500mm] clearance is required between the grilling surface and the overhead construction.

When installed under combustible overhead construction, the area above the cooking surface of the grill must be covered with an exhaust hood. The exhaust hood provides protection for the combustible overhead construction.

When installed under overhead non-combustible construction, an exhaust hood is highly recommended.

### EXHAUST HOOD

When using an exhaust hood, the area above the cooking surface of the grill must be covered with a hood larger than the cooking area of the grill, and with a minimum of 1200CFM (cubic feet per minute) for proper outdoor application.



# **INSTALLATION - ENCLOSURES**

#### GAS CYLINDER ENCLOSURE

Liquefied Petroleum (LP) Propane / Butane gas cylinder enclosures must meet the requirements for venting and separation of the gas cylinder from a heat source as outlined in BS EN 498:2012.

### FOR LP GAS CYLINDER ENCLOSURES HAVING FOUR SIDES, A TOP AND A BOTTOM:

- Gas supply shut off valves must be readily accessible for hand operation.
- A door may be installed on the cylinder storage structure provided it is unlocked and can be opened without the use of tools.
- A minimum clearance of 50mm is required between the floor of an gas cylinder enclosure and the ground.
- The remote gas cylinder enclosure must isolate the gas cylinder from the grill compartment, so that it provides shielding from radiation, be a flame barrier and provide protection from foreign material such as hot drippings.
- At least one unobstructed ventilation opening shall be provided on the exposed exterior side of the enclosure located within 125mm of the top of the enclosure.
- Ventilation totaling a minimum free area of 1/100 of the base area of the compartment is required at the top on the exposed exterior wall of the enclosure. (As per BS EN 498:2012)
- At least one unobstructed ventilation opening shall be provided on the exposed exterior side of the enclosure located within 25mm of the bottom of the enclosure. The upper edge shall be no more than 125mm above the bottom of the enclosure.
- Ventilation totaling a minimum free area of 1/50 of the base area of the enclosure is required at the bottom on the exposed exterior wall of the enclosure. (As per BS EN 498:2012).

#### WARNING: Do not store a spare cylinder in an enclosure.



#### **VENTS FOR LP GAS CYLINDER ENCLOSURE** WARNING: Vents are required in the LP gas cylinder enclosure to provide ventilation in the event of a gas leak.

Ventilation reduces moisture and provides cooling in the enclosures.

Note: The drawings are for reference only.

- Each vent shall have minimum openings to allow the entrance of a 1/8 inches (3.2mm) diameter rod.
- Make sure the vents are not blocked by interior supports.
- Keep vents clean and clear of obstructions.
- Vent(s) can be located in low visibility areas and should be protected by screens to prevent rodents and insects from entering the enclosure.
- Vents that meet these requirements are available from your dealer.
  - $_{\odot}$   $\,$  20 square inches (130 square cm) Item # 71282-50  $\,$
  - 10 square inches (65 square cm) item # 71281-50



WARNING: Ventilation openings should only communicate with the outside of the enclosure, so that the gas can dissipate outside of the enclosure.

 If a gas leak should occur or the LP gas cylinder should vent out of the LP gas cylinder enclosure, the gas should not be allowed to vent or migrate into empty or "hollow" areas of the enclosure.

# **INSTALLATION - ENCLOSURES**

# ENCLOSURE <u>WITH</u> A LP GAS CYLINDER

- A remote gas cylinder enclosure is required for installations that use a gas cylinder as outlined on the previous page.
- Construct enclosure with four sides, a top and a bottom with minimum inside dimensions of:
  - Height 20 inch (50.0cm)
  - Width 15 inch (38.5cm)
  - Depth 14 inch (36.0cm)
- Enclosure must not allow space for a spare tank to be stored inside the enclosure.
- A non-combustible isolation wall is required between the gas cylinder enclosure and the grill enclosure.
- The remote gas cylinder enclosure must isolate the gas cylinder from the burner compartment, so that it provides shielding from radiation, be a flame barrier and provide protection from foreign material such as hot drippings.

Gas cylinder enclosure:

- At least one unobstructed ventilation opening shall be provided on the exposed exterior side of the enclosure located within 5 inches (125mm) of the top of the enclosure.
- Ventilation totaling a minimum free area of 1/100 of the base area of the compartment is required at the top on the exposed exterior wall of the enclosure. (As per BS EN 498:2012)
- At least one unobstructed ventilation opening shall be provided on the exposed exterior side of the enclosure located within 1 inch (25mm) of the bottom of the enclosure. The upper edge shall be no more than 5 inches (125mm) above the bottom of the enclosure.
- Ventilation totaling a minimum free area of 1/50 of the base area of the enclosure is required at the bottom on the exposed exterior wall of the enclosure. (As per BS EN 498:2012).
- Do not obstruct these vents.

Grill enclosure:

- At least one unobstructed ventilation opening shall be provided on the exposed exterior side of the enclosure located within 1 inch (25mm) of the bottom of the enclosure. The upper edge shall be no more than 5 inches (125mm) above the bottom of the enclosure.
- Ventilation totaling a minimum free area of 1/50 of the base area of the enclosure is required at the bottom on the exposed exterior wall of the enclosure. (As per BS EN 498:2012).
- Do not obstruct the vent.



#### DANGER

Failure to build a remote LP gas cylinder enclosure for a single 15 kg. LP gas cylinder only, following the requirements for ventilation and separation of the LP gas cylinder from a heat source, listed in BS EN 498:2012, could be dangerous, and result in a fire or an explosion causing serious bodily injury or death and damage to property.

# ENCLOSURE <u>WITHOUT</u> A LP GAS CYLINDER

- At least one unobstructed ventilation opening shall be provided on the exposed exterior side of the enclosure located within
- 1 inch (25mm) of the bottom of the enclosure. The upper edge shall be no more than 5 inches (125mm) above the bottom of the enclosure.
- Ventilation totaling a minimum free area of 1/50 of the base area of the enclosure is required at the bottom on the exposed exterior wall of the enclosure. (As per BS EN 498:2012).
- Do not to obstruct the vent.



ENCLOSURE MINIMUM DIMENSIONS			
	S100 S200		
Α	14" [350mm]	-	
В	24 1/2" [615mm]	24 1/2" [615mm]	
С	-	11" [280mm]	
D	-	17 1/2" [438mm]	

NOTE: It is recommended to make the enclosure larger than the countertop opening (pg 10). It is suggested to overlap the enclosure with the countertop by 1" [25mm].

# **INSTALLATION – CYLINDER & GRILL**

# SPECIFICATION FOR CONNECTING TO A 11 kg. LP GAS CYLINDER

- A 14" (350 mm) corrugated hose with a 3/8" SAE 45 degree fitting is connected to the manifold of the grill.
- Do not use pipe sealant on the 3/8" SAE 45 degree fitting
- The 3/8" SAE 45 degree fitting must be attached to rigid permanent construction.
- If you choose to use a corrugated gas hose other than the one supplied, the connector must comply with EN ISO 228-1 or EN 10226-1 and EN 10226-2.



### **COUNTERTOP OPENING DIMENSIONS**



DIMENSIONS		
	S100	S200
Α	20 5/8" [525mm]	-
В	11 5/8" [295mm]	-
С		23 1/4" [590mm]
D		16 3/8" [415mm]
Е		11" [280mm]

# GAS CYLINDER

# HOSE

LP gas cylinders up to and including the 15 kg size may be used. Do not use LP gas cylinders larger than 15 kg.

Always treat a LP gas cylinder with care. Never store it on its side because the valve could become damaged, resulting in a leak which could be serious. Always use the LP gas cylinder upright. Horizontally, liquid fuel could get into the supply pipes with damaging results.

Always place the LP gas cylinder in an accessible location to facilitate changing and emergency shut off.

Never subject a LP gas cylinder to heat. The pressure inside the LP gas cylinder could build up and exceed the designed safety limit.



### STORAGE

Never store butane or propane LP Gas cylinders indoors, in an enclosure, in cellars, adjacent to open drains and basement areas or below ground level. Propane is heavier than air. If there is a leak, the gas will collect at low level and become dangerous in the presence of a spark or flame. Store spare LP Gas cylinders outdoors in a well vented place.

### SERVICING

This gas appliance should not be altered or interfered with. Any adjustment or servicing should be carried out by a qualified engineer. Regular maintenance is recommended. See maintenance instructions.

### REGULATOR

This appliance must be fitted with a regulator complying with the local/national standards and/or norms with a nominal outlet pressure of:

CATEGORY I3+(28-30/37)	Propane 37 mbar.	
``	Butane 28-30 mbar.	
CATEGORY I3B/P(30)	Propane/Butane 30 mbar.	
CATEGORY I3B/P(37)	Propane/Butane 37 mbar.	
CATEGORY I3P(50)	Propane 50 mbar.	
NEVER use an unregulated gas supply.		

### **PROPANE / BUTANE GAS HOSE**

This appliance must be fitted with a gas hose complying with local/national standards and/or norms.

The gas hose connecting the appliance to the gas container should not be more than 600mm long.

Position the gas hose away from any hot surface, including the bottom of the barbecue.

Be sure the gas hose is not subjected to twisting.

Inspect the gas hose when replacing the gas cylinder or once per year whichever is more frequent.

If the gas hose is cracked, cut, abraded or damaged in any way, the appliance must not be operated.

The gas hose must be replaced if damaged and when national conditions require it. Contact your dealer for replacement.



# **CHANGING A GAS CYLINDER**

**NEVER** use an unregulated gas supply or a regulator with an operating pressure different then specified on the rating label. **WARNING:** Changing a cylinder must be carried out in a flame free environment.

#### SCREW-ON CONNECTION

Some screw on connections have a hand wheel to tighten and some require a spanner to tighten. Tighten firmly (left hand thread). When using a spanner, do not over tighten as this can damage the washer. If the connection has a black sealing washer. Always check that it is present and not damaged when changing cylinders.



#### CONNECTING

- 1. Check that the cylinder valve is OFF by turning clockwise.
- 2. Remove protective cap and keep for later use.
- 3. Inspect the black washer for damage before connecting.



4. Fit the connecting nut to the cylinder, using the correct spanner or connecting hand wheel (Left hand thread). Do not over tighten Butane cylinder connectors.



5. When gas is required turn the cylinder valve anti-clockwise.





DISCONNECTING

1. Turn the cylinder valve OFF

 Turn off the gas taps on the appliance. WAIT until the burner has gone out.

IF THE FLAME DOES NOT GO OUT-TURN THE VALVE OR SWITCH BACK TO ON. LEAVE THE APPLIANCE ALIGHT AND CALL YOUR GAS SUPPLIER.

- 3.NEVER REMOVE the regulator (or connecting nut) with the cylinder valve open.
- 4.REMOVE the regulator (or connecting nut) with the spanner or connecting hand wheel. (Left hand thread).



5.REPLACE the plug or cap onto the empty cylinder or part full cylinder if not in use.

Leak test all connections before operating the grill

#### SWITCH-ON CONNECTION

No tools are required for this type. On/Off control of the gas supply is provided by a switch on the Regulator or on a special adapter. If you use an adapter with an old type threaded regulator, please ensure that the union nut is tightened firmly to the adapter with a spanner.



DISCONNECTING

1. Turn the switch to the OFF (3

2. Turn off the gas taps on the

has gone out.

at the same time.

appliance. WAIT until the burner

IF THE FLAME DOES NOT GO

SWITCH BACK TO ON. LEAVE

THE APPLIANCE ALIGHT AND

CALL YOUR GAS SUPPLIER.

3. Remove the "Quick On" regulator

by pressing horizontally on the

switch (1) and pulling upwards (2)

OUT-TURN THE VALVE OR

o'clock) position.

#### CONNECTING

- 1. Remove the orange safety cap by pulling the lanyard out, then up. Do not use tools, leave the cap hanging.
- 2. Make sure that all taps on the gas appliance are closed and the switch is in the off position.



 Place the "Quick On" regulator on to the valve and push down firmly. A "click" sound should be heard to ensure the switch is securely latched.



4. When gas is required turn the switch upward to the ON (12 o'clock) position.



4.REPLACE the seal cap onto the empty cylinder, or part full cylinder if not in use.



## FIXED PIPE PROPANE, BUTANE OR NATURAL GAS LINE

#### GAS LINE LOCATION

Propane, Butane and Natural Gas supply lines should be installed by a qualified professional.

**Note:** Provide access in the enclosure for gas supply and regulator service.

**Note:** Area should be kept clear of sharp or abrasive surfaces to avoid damage to gas supply lines. Exercise caution when pulling gas lines through the built-in enclosure.

### SPECIFICATIONS FOR PIPING

- Installation must use rigid pipe, semi-rigid tubing, or a connector suitable for outside installation.
- The gas connections must be firmly attached to rigid, permanent construction.
- A 3/8 inch SAE 45 degree flare connection has been provided. Do not use pipe sealant on this connection.
- A manual shut-off valve must be installed outdoors, and be accessible from outside of the built in enclosure.
- For bulk propane, butane and natural gas, an additional indoor manual shut-off valve should be installed in the branch fuel line in an accessible location near the supply line.

#### CONNECTION TO A REMOTE SELF CONTAINED PROPANE OR BUTANE GAS SUPPLY

- Propane gas grills are designed to operate at a regulated pressure of 30-37 or 50 mbar. Check the rating plate.
- Butane gas grills are designed to operate at a regulated pressure of 28-30 or 37 mbar.
- An in-line pressure regulator suitable for bulk propane or butane installations is required to maintain the correct pressure. (not supplied).
- The gas supply connection from the grill manifold to the gas supply bulkhead must not exceed 180cm.
- When the grill is not in use, turn off the gas supply at the shut off valve.

### CONNECTION TO NATURAL GAS SUPPLY

- If grill is designed for use with natural gas, do not use with liquid propane or butane (bottled gas). The valves, orifices, and hoses are for natural gas only.
- Natural gas grills are designed to operate at a regulated pressure of 20 mbar.
- The gas supply hose from the grill manifold to the gas supply bulkhead must not exceed 300cm.
- When the grill is not in use, turn off the natural gas supply at the shut off valve.

#### **GAS SUPPLY TESTING**

- 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 3.5kpa.
- 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 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.
- On models equipped with the "quick disconnect" coupling, close "shut off valve" before disconnecting coupling.
- "quick disconnect" coupling must be kept clean and free of dirt and debris.
- Protect the hose from dripping grease and do not allow the hose to touch any hot surface, including the base casting of the barbecue.
- Inspect the hose at least once per year. If the hose is cracked, cut, abraded or damaged, the appliance must not be used.
- For replacement of hose assembly, contact your dealer or approved service center.

### SHUT-OFF VALVE OPEN POSITION





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

# LEAK TESTING

All factory-made connections have been thoroughly tested for gas leaks and the burner has been flame tested. However, shipping and handling may have loosened a gas fitting.

### AS A SAFETY PRECAUTION:

- Test all fittings for leaks before using your range burner.
- Test the cylinder valve for leaks each time the cylinder is filled.
- Test for leaks every time you disconnect and reconnect a gas fitting.
- Do not smoke!
- Never test for leaks with a lighted match or open flame.
- Test for leaks outdoors.

### TO TEST FOR LEAKS

- 1. Assemble and install the range burner as per the assembly instructions.
- 2. Prepare a soap solution of one-part water, one-part liquid detergent.
- 3. Extinguish any open flame or cigarettes.
- 4. Make sure that the control knobs are "OFF:
- 5. Make sure that the gas cylinder valve is "OFF"
- 6. With a full gas cylinder, open the gas cylinder slowly.
- 7. Brush the soap solution on each connection.
- 8. A leak is identified by a flow of bubbles from the area of the leak.
- 9. If a leak is detected, close the gas source, turn burner control to "OFF". Tighten the connection and retest (Step 5).
- 10. If the leak persists, contact your barbecue dealer for assistance. Do not attempt to operate appliance if a leak is present.



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



### S200 Range Burner gas assembly



# **VENTURI TUBES**

• Always keep venturi tubes clean.

Blockages in the venturi tubes caused by spiders, insects and nests can cause a flashback fire.

Although the gas grill may still light, the backed-up gas can ignite and cause a fire around the venturi tubes at the control panel.



- A. Range Burner
- B. Venturi Tube
- C. Spider Web
- D. Wire Mesh Spider Guard

If a flashback fire occurs, turn off gas at the source immediately.

### Inspect and clean the venturi tubes if any of the following symptoms occur:

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

#### **INSPECTING & CLEANING VENTURI TUBES**

- 1. Turn off gas by closing the main supply valve. Turn control knob "OFF".
- 2. When the range burner is cool, remove the burner fasteners. Lift the burner(s) from the range burner frame.



3. Clean the venturi tubes with a pipe cleaner or venturi cleaning tool (Accessory #64310).



- 4. Lower the burners into position in the range burner frame, making sure that the venturi tubes are correctly aligned and fitted on the gas orifices.
- 5. Secure burners with burner fasteners.

# LIGHTING

### LIGHTING INSTRUCTIONS

- The range burner must be assembled and installed as per the assembly and installation instructions.
- Ensure the range burner is properly connected to the LP or Natural Gas supply.
- Ensure there are no gas leaks in the gas supply system. See: "Leak Testing." (pg 13).
- Never light the range burner with the stainless-steel cover in-place above the burners.
- Ensure that the ignition wire is connected.
- Check that the battery has been installed in the electronic ignition.
- 1. Open lid before lighting.
- 2. Do not lean over the range burner while lighting.
- 3. Set control knobs to "OFF" and turn on the gas supply.

### LIGHTING THE RANGE BURNER:

To light burner with the Ignitor:

- 4. Push and turn control knob to "HIGH."
- 5. Push and hold the ignitor button.
- 6. The range burner should ignite within 5 seconds.

#### To light burner with a match:

- 4. Apply lit match to burner ports.
- 5. Push and turn control knob to "HIGH."
- 6. The range burner should ignite within 5 seconds.

### IF BURNER DOES NOT IGNITE:

- Turn control knob to "OFF." Wait 5 minutes then try again with control knob set at "MEDIUM".
- If burner will not light, see "Troubleshooting" on (pg 17). If the problem persists, do not attempt to operate the range burner, contact OMC, your dealer or an approved service center.

### SHUTDOWN:

- 1. Turn off cylinder valve.
- 2. Turn control knobs to "OFF".



# OPERATION

### FIRST TIME USE

Before cooking on your range burner for the first time, clean the components and preheat the range burner to rid it of any odors or foreign matter in the following manner:

- 1. Remove and clean the trivet(s) with mild soap and water and then rinse and dry with paper towel; never air-dry grids or use a dishwasher.
- 2. With the trivet(s), light the range burner following lighting instructions (pg 15) and operate the range burner for 10 minutes. Next, turn gas source off then turn range burner control knob to the "OFF" position.
- Season the trivet(s) by coating with an organic cold pressed cooking oil with a high smoke point, light the range burner and operate on Med/Low for 30 minutes.
   Becommended cooking oils:

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Avocado Oil	smoke point	500°F(260°C)
Rice Bran Oil	smoke point	490°F(255°C)
Canola Oil	smoke point	400°F(204°C)
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4. You are ready to use the range burner.

#### WARNING:

If the range burner is hot, use caution and oven mitts while handling the trivets.

Do not attempt to heat sealed containers on the range burner. Pressure may build and cause the container to explode.

Never use charcoal or any other solid fuel in the range burner.

When using the range burner always use a well-constructed cooking vessel that is in good repair.

Do not cook food directly over the flame of the range burner.

Pots on the range burner must not be less than 1" (2.5 cm) or exceed 9" (23 cm) in diameter or 15 lbs. (7 kg) in weight.

# MAINTENANCE

### **REGULAR MAINTENANCE**

To ensure optimal performance and safety, the following components should be inspected and cleaned as required before use of your range burner.

For optimum performance:

Before first use and after long periods of storage, wash trivet(s) with mild soap and water and then rinse and dry with paper towel; never air-dry grids or use a dishwasher.

Immediately after washing, season cooking trivet(s) by coating with an organic cold pressed cooking oil with a high smoke point, light the range burner and operate on Med/Low for 30 minutes. Recommended cooking oils:

	in gener	
Avocado Oil	smoke point	500°F(260°C)
Rice Bran Oil	smoke point	490°F(255°C)
Canola Oil	smoke point	400°F(204°C)

During long periods of inactivity, grid should be seasoned, then stored in a dry place. The grid may be wrapped in protective plastic food wrap. After periods of storage, Burn-Off grid, wash, dry with paper towel and re-season with a high smoke point cooking oil.

#### WARNING:

If the range burner is hot, use caution and oven mitts while handling the trivets. Inspect the grid carefully after brushing to ensure there are no broken bristles left on the grid.

#### GENERAL CLEANING

When the range burner is cool, remove the trivet(s). Clean the interior of the range burner as necessary with mild soap and water and dry.

Rust is a natural oxidation process and may appear on internal stainless-steel parts. Rust will not affect the performance of the range burner.

### 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

Inspect for cracks and deterioration. Clean venturi tubes using a pipe cleaner or venturi brush to eliminate any blockages. Clean the interior as necessary with mild soap and water and dry.

#### HOSE

Inspect and replace if necessary.

#### REPLACEMENT PARTS

If a problem is found with the regulator, hose, burner, or control valves, 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 BROIL KING® replacement parts.

#### LEAK TEST

When reconnecting a gas cylinder on propane models, be sure to check for leaks. See "Leak Testing." (pg 13)

# TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION		
SMELL OF GAS	SHUT OFF LP CYLINDER VALVE AT ONCE. DO NOT USE THE APPLIANCE UNTIL LEAK IS SEALED.			
Leak detected at cylinder, regulator or other connection.	<ol> <li>Regulator fitting loose.</li> <li>Gas leak in hose/regulator or control valves.</li> </ol>	<ol> <li>Tighten fitting and "Leak Test." (pg 3)</li> <li>See authorized service center.</li> </ol>		
Flickering Burner Flame or Low Temperatures on HIGH Setting	<ol> <li>Excess flow safety device has been activated in connection between cylinder and barbecue.</li> </ol>	<ol> <li>Turn LP cylinder valve off then turn all burners to OFF position. Disconnect the regulator from the cylinder. Wait two minutes. Re-attach regulator to the cylinder. Open the cylinder valve slowly. Wait one minute. Light grill as per "Lighting" (pg 4)</li> </ol>		
Burner Not Lighting	<ol> <li>Out of LP gas, gas supply not connected.</li> <li>Ignitor issue.</li> </ol>	<ol> <li>Refill LP gas cylinder, check connections to supply.</li> <li>Try manually lighting burner with a match. See "Lighting" (pg 4). If burner lights successfully, it is an ignitor issue. See "Ignitor not Working" below.</li> </ol>		
	3. Excess flow safety device has been activated.	<ol> <li>Follow "Flickering Flame or Low Temperatures on HIGH setting" solution above.</li> </ol>		
	4. Regulator is not fully connected to the cylinder valve.	4. Tighten the regulator hand wheel.		
	5. A leak in the system causing the excess flow device to activate.	<ol> <li>Leak test connections to determine loose fitting. Tighten fitting. Leak test the whole system.</li> </ol>		
	6. Orifice(s) blocked.	<ol> <li>Remove burner, clean orifices with a pin or fine wire. Do not drill orifices.</li> </ol>		
	7. Hose is twisted.	7. Straighten hose.		
Ignitor Not Working	<ol> <li>Ignitor battery is dead</li> <li>Ignitor wire(s) not connected</li> </ol>	<ol> <li>Replace battery</li> <li>Ensure main burner and range burner electrode wires are all connected</li> </ol>		
	3. Electrode misaligned on burner	<ol> <li>Realign electrode and clear any surrounding debris from area</li> </ol>		
	4. Ignitor malfunction	4. Use "Match Lighting" procedure. (pg 4)		
Decreasing Heat, "Popping Sound"	<ol> <li>Out of LP Gas.</li> <li>Venturi blocked.</li> </ol>	<ol> <li>Refill LP Gas Cylinder.</li> <li>Remove burner, clean venturi.</li> </ol>		
Regulator Humming Noise	1. Cylinder valve opened too quickly.	1. Open cylinder valve slowly.		

# WARRANTY

The BROIL KING<sup>®</sup> 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 BROIL KING<sup>®</sup> Distributor. (Consult your Dealer for name of BROIL KING<sup>®</sup> 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. (Different types of gas used in different countries require appropriate valves, orifices and regulators.)

#### WHAT IS COVERED

Stainless Steel Cook box	15 Years
Cast Stainless / Stainless Steel Grids	15 Years
Stainless Steel Flav-R-Wave™	15 Years
Range Burner	15 Years
Infra-Red Side Burner (Excluding Mesh Screen)	15 Years
Stainless Steel Components	15 Years
Remaining Parts & Paint	15 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, including but not limited to damage caused by insects within the burner tubes, 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 to 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.

Gas grills deemed to be used as a communal amenity or gas grills not directly used and maintained by the purchaser.

#### **REPLACEMENT PARTS**

"Genuine BROIL KING<sup>®</sup> Gas Barbecue Parts" must always be used for replacement. Use of any other parts will automatically nullify the above warranty.

#### BURNERS

The life of BROIL KING<sup>®</sup> burners depends almost entirely on proper use, cleaning and maintenance This warranty does not cover failure due to improper use and maintenance.

#### LP GAS CYLINDER

BROIL KING<sup>®</sup> does not manufacture LP Gas Cylinders. The LP Gas Cylinder manufacturer is responsible for the materials, workmanship, and performance of the cylinder. If the cylinder has a defect, malfunctions, or you have a question regarding the cylinder, contact your dealer or the cylinder manufacturer.

#### FREIGHT

Courtesy shipping is provided for warranty orders during the six (6) months after the original date of purchase. After this period, a freight charge will be applied to all warranty orders.

#### **REGISTER YOUR GRILL**

You can register your grill's warranty online at www.omcbbq.com or by calling 1-800-265-2150.

#### WARRANTY CLAIMS

All warranty is handled directly by BROIL KING<sup>®</sup>. Parts must be returned to BROIL KING<sup>®</sup> Warranty Department, shipping charges prepaid, accompanied by Model Number, Serial Number, and if your grill is not registered, proof of purchase (copy of sales slip or invoice). If inspection confirms the defect, BROIL KING<sup>®</sup> will repair or replace such part in accordance with the terms of the warranty.

On receipt of letter or fax (not by phone) BROIL KING<sup>®</sup> may at its option not require part or parts to be returned.

#### NON AMERICAN/CANADIAN RESIDENTS

The above warranty is administered by the BROIL KING® distributor in your country. Contact your dealer for the name of your BROIL KING<sup>®</sup> distributor.

Name	Model #	
Address	Serial #	
City, State/Province	Date of purchase	
Postal/Zip Code	Name of dealer	
Phone #	Part # (see assembly manual)	
Fax #		
Problem		