

Broil King®

BUILT-IN GAS GRILL

OWNER'S MANUAL

FOR USE WITH BUTANE OR PROPANE GAS

CATEGORY I₃₊(28-30/37), CATEGORY I_{3B/P}(30)

CATEGORY I_{3B/P}(37), CATEGORY I_{3P}(50)

FOR USE WITH NATURAL GAS

CATEGORY I_{2E}(20), CATEGORY I_{2H}(20)

CONTENTS

SAFETY.....	2
INSTALLATION	3
GAS CYLINDER.....	11
HOSE AND REGULATOR.....	11
CHANGING A GAS CYLINDER	12
NATURAL GAS.....	13
LEAK TESTING	14
VENTURI TUBES.....	15
LIGHTING.....	16
OPERATION	17
COOKING TECHNIQUES.....	18
TRANSFORMER.....	21
OVEN LIGHTS	22
CONTROL PANEL LIGHTS	23
MAINTENANCE	24
TROUBLE SHOOTING	25
WARRANTY	26

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



585 KUMPF DRIVE
WATERLOO, ONTARIO, CANADA
N2V 1K3

SINCE 1906
LIMITED

70094-40EU REV H 03/22

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.

SPECIFICATIONS

MODEL	TOTAL HEAT INPUT	TOTAL HEAT INPUT	JET SIZE MAIN BURNER	JET SIZE SIDE BURNER	JET SIZE REAR BURNER
8856/9856-52	13.2 kW	960 g/h	0.85		
8856/9856-53	13.2 kW	960 g/h	0.91		
8856/9856-56	13.2 kW	960 g/h	1.32		
8866-52	16.0 kW	1163 g/h	0.84		
8866-53	16.0 kW	1163 g/h	0.91		
8866-56	16.0 kW	1163 g/h	1.32		
8856, 9960-72	17.6 kW	1280 g/h	0.85		0.99
8856, 9960-73	17.6 kW	1280 g/h	0.91		0.99
9960-76	17.6 kW	1280 g/h	1.32		1.61
9960-82	20.3 kW	1421 g/h	0.85	0.73	0.99
9960-83	20.3 kW	1421 g/h	0.91	0.79	0.99
9960-86	20.3 kW	1421 g/h	1.32	1.18	1.61
8866, 9980-72	20.4 kW	1483 g/h	0.84		0.99
8866, 9980-73	20.4 kW	1483 g/h	0.91		1.02
9980-76	20.4 kW	1483 g/h	1.32		1.55
9970-72	22.0 kW	1600 g/h	0.81		0.95
9970-73	22.0 kW	1600 g/h	0.87		0.99
9970-76	22.0 kW	1600 g/h	1.30		1.61
9980-82	23.1 kW	1650 g/h	0.84	0.73	0.99
9980-83	23.1 kW	1650 g/h	0.91	0.79	1.02
9980-86	23.1 kW	1650 g/h	1.32	1.18	1.55
9970-82	24.7 kW	1764 g/h	0.81	0.73	0.95
9970-83	24.7 kW	1764 g/h	0.87	0.79	0.99
9970-86	24.7 kW	1764 g/h	1.30	1.18	1.61

SPECIFICATIONS

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	I ₃ +(28-30/37)	28-30 mbar	37 mbar			
CH	I ₃ +(28-30/37)	28-30 mbar	37 mbar			
ES	I ₃ +(28-30/37)	28-30 mbar	37 mbar			
FR	I ₃ +(28-30/37)	28-30 mbar	37 mbar		NF M 88765 OR NF M 88776	NF D 36107
GB	I ₃ +(28-30/37)	28-30 mbar	37 mbar		BS3016	BS3212/2/8
IE	I ₃ +(28-30/37)	28-30 mbar	37 mbar			
IS	I ₃ +(28-30/37)	28-30 mbar	37 mbar			
IT	I ₃ +(28-30/37)	28-30 mbar	37 mbar			
PT	I ₃ +(28-30/37)	28-30 mbar	37 mbar			
CZ	I ₃ B/P(30)	30 mbar	30 mbar			
DK	I ₃ B/P(30)	30 mbar	30 mbar			
FI	I ₃ B/P(30)	30 mbar	30 mbar			
GR	I ₃ B/P(30)	30 mbar	30 mbar			
HU	I ₃ B/P(30)	30 mbar	30 mbar			
LT	I ₃ B/P(30)	30 mbar	30 mbar			
LU	I ₃ B/P(30)	30 mbar	30 mbar			
LV	I ₃ B/P(30)	30 mbar	30 mbar			
NL	I ₃ B/P(30)	30 mbar	30 mbar			NEN 5654
NO	I ₃ B/P(30)	30 mbar	30 mbar			
RO	I ₃ B/P(30)	30 mbar	30 mbar			
SE	I ₃ B/P(30)	30 mbar	30 mbar			
PL	I ₃ B/P(37)	37 mbar	37 mbar			
DE	I ₃ P(50)		50 mbar			
DE	I ₂ E(20)			20 mbar		
PL	I ₂ E(20)			20 mbar		
AT	I ₂ H(20)			20 mbar		
BE	I ₂ H(20)			20 mbar		
CH	I ₂ H(20)			20 mbar		
CZ	I ₂ H(20)			20 mbar		
DK	I ₂ H(20)			20 mbar		
ES	I ₂ H(20)			20 mbar		
FI	I ₂ H(20)			20 mbar		
GB	I ₂ H(20)			20 mbar		
GR	I ₂ H(20)			20 mbar		
IE	I ₂ H(20)			20 mbar		
IT	I ₂ H(20)			20 mbar		
NO	I ₂ H(20)			20 mbar		
PT	I ₂ H(20)			20 mbar		
SE	I ₂ H(20)			20 mbar		

SAFETY

ELECTRICAL PRECAUTIONS

WARNING! Failure to follow these instructions could lead to property damage, injury or death!

- input voltage 230-240Vac / 50Hz
- output voltage 12Vac / 1600mA
- **Danger!** Immersing cords or plugs in water or other liquids could cause electrical shock!
- unplug from power outlet when not in use and before cleaning or performing maintenance. Allow to cool before adding or removing components
- do not operate appliance if the cord, plug or any component is damaged or has malfunctioned in any manner. Contact the dealer for repair
- if the supply cord is damaged it must be replaced before continuing to use the appliance
- do not allow the cord to hang over the edge of a table or come into contact with hot surfaces
- do not use an outdoor gas appliance for any purpose other than intended
- connect the plug to the appliance before connecting to the power outlet
- only RCD (Residual-Current Device) protected circuits should be used with this outdoor cooking appliance
- do not remove the grounding plug or use with a two prong adapter
- only use extension cords with a three prong grounding plug, the correct power rating and approved for outdoor use with a W-A marking

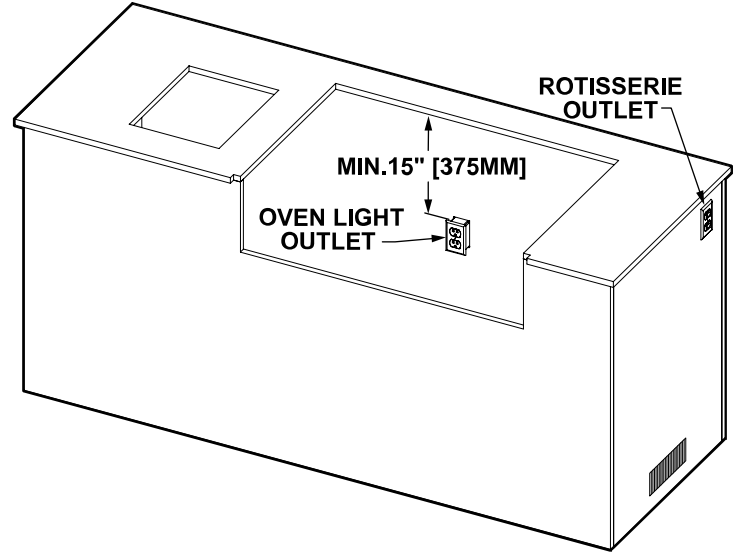
INSTALLATION

CONFIGURATION OPTIONS

The built-in grill and all other accessory units should be on site before construction begins.
There are many options for designing your Outdoor Kitchen. If the grill includes a Side Burner, remember to position the Side Burner to the left of the grill.

ELECTRICAL OUTLETS

If a Rotisserie will be used, an electrical outlet for the Rotisserie should be positioned on the rear right side of the grill. If internal lights are provided, a Residual Current Device (RCD) electrical outlet for the lights should be positioned inside the enclosure on the rear wall 380mm below the countertop.



INSTALLATION

The installation should be done by a qualified professional.

POSITIONING YOUR GAS GRILL

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

WHEN DETERMINING THE POSITION OF THE GRILL, 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 GRILL:

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

NEVER LOCATE THE GRILL:

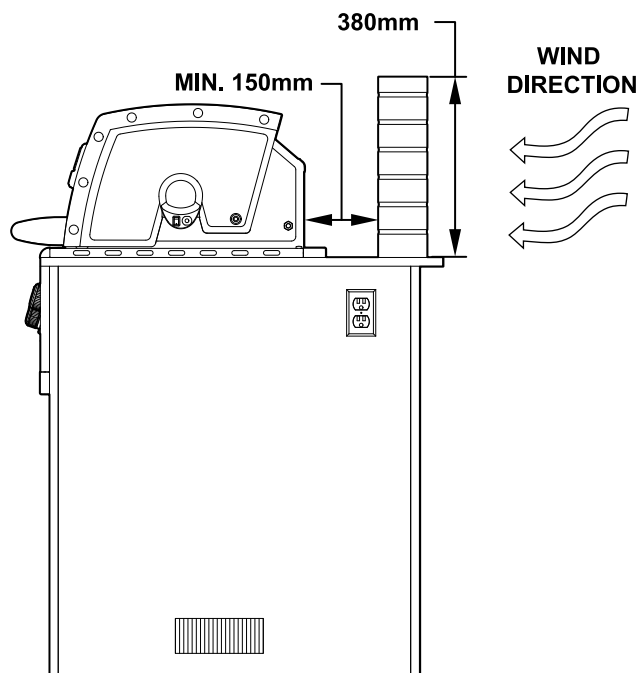
- In a garage, breezeway or shed, or any other enclosed area
- Under overhead unprotected combustible construction

The grill is designed to take air in through the control panel area and send the exhaust products out through the exhaust gap at the rear of the hood.

If locating the grill in a windy area, locate the grill so the prevailing wind will blow air at the front of the grill. A light wind blowing at the front of the grill will:

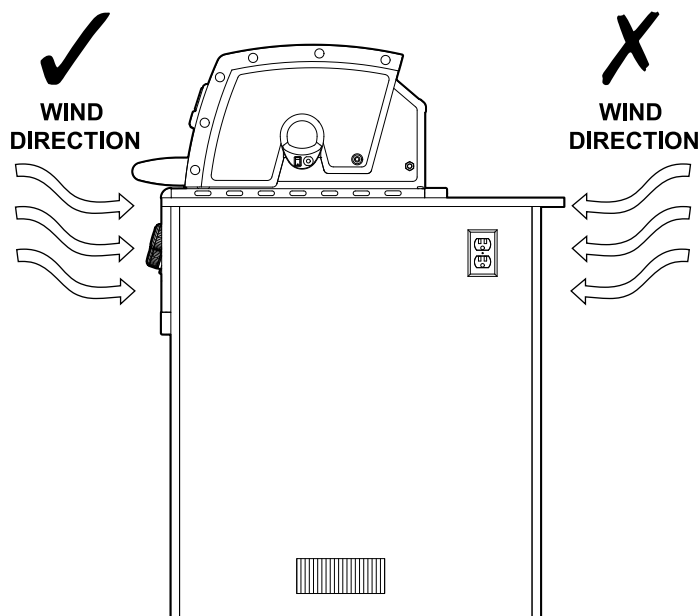
- Assist the grill in venting hot air thru the back of the grill
- Assist in keeping smoke from blowing at someone who is cooking on the grill

If the grill is located where the prevailing wind is blowing at the rear of the grill, a windbreak will need to be installed. The windbreak should be constructed to prevent wind from entering the exhaust vent in the rear of the grill and comply with the clearances specified for combustible or non-combustible construction as outlined in these instructions.



WARNING: Wind blowing in the back of the grill or along the exhaust vent can disrupt the proper flow of air through the grill, 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, it is best not to use the grill. Damage to the grill 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.



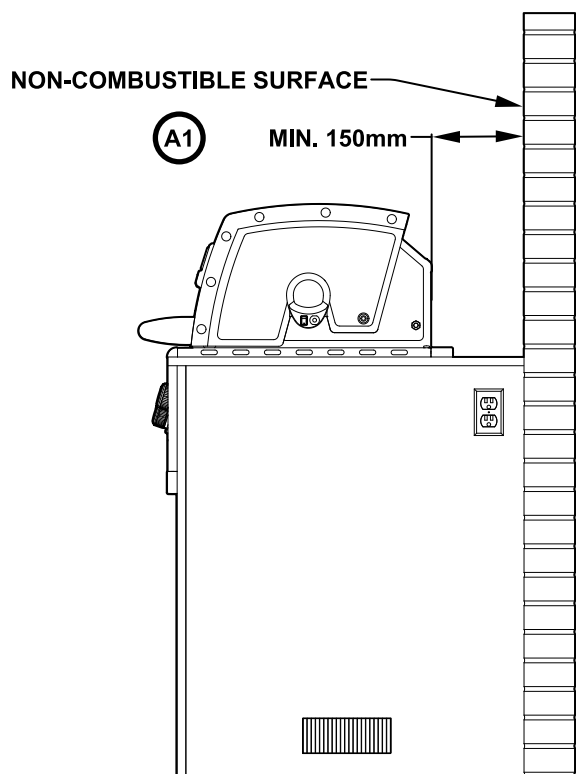
INSTALLATION - CLEARANCES

SIDE AND REAR WALL CLEARANCES

NOTE: Installation requires a non-combustible countertop surface. The countertop surface must be constructed from solid materials and must be level and smooth.

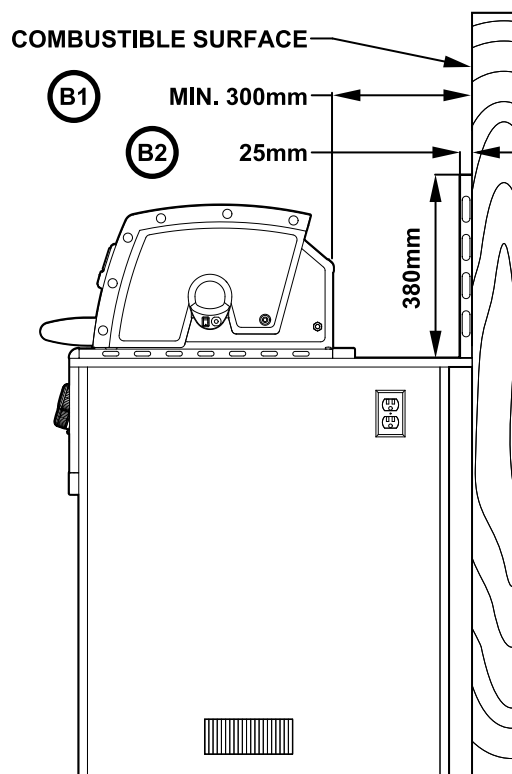
A) Clearance between grill and non-combustible wall above the counter top surface

1. The grill must have a minimum of 150mm right, left and rear clearance from any non-combustible wall to allow for proper ventilation and space for lid to open completely.



B) Clearance between grill and a protected combustible wall above the counter top surface

1. The grill must have a minimum of 300mm right, left, and rear clearance from the protected combustible wall.
2. A protected combustible wall has a 25mm ventilated space between a non-combustible surface and the combustible surface extending 380mm from the counter top surface.



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 flame-proofed, fire-retardant treated or surface-painted, or plastered.

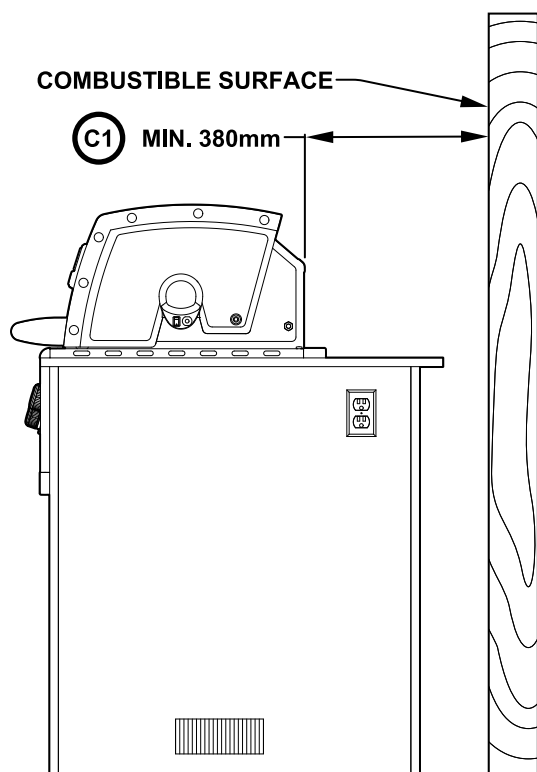
DEFINITION OF NON-COMBUSTIBLE MATERIAL

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.

INSTALLATION - CLEARANCES

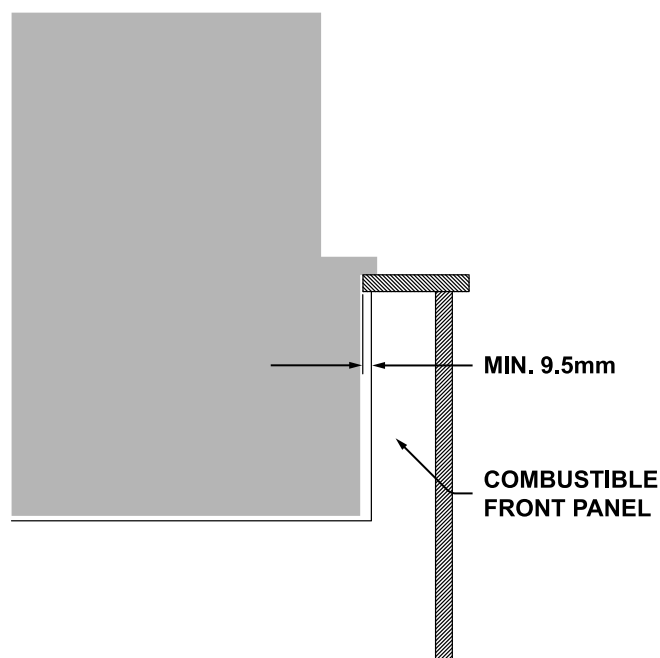
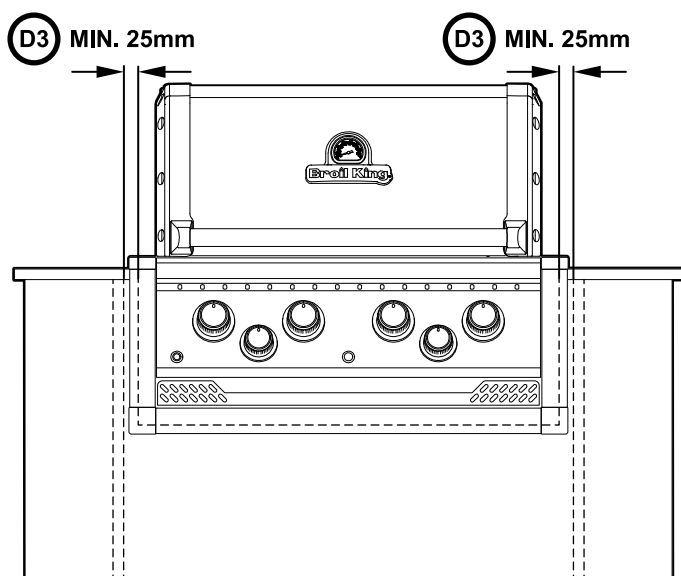
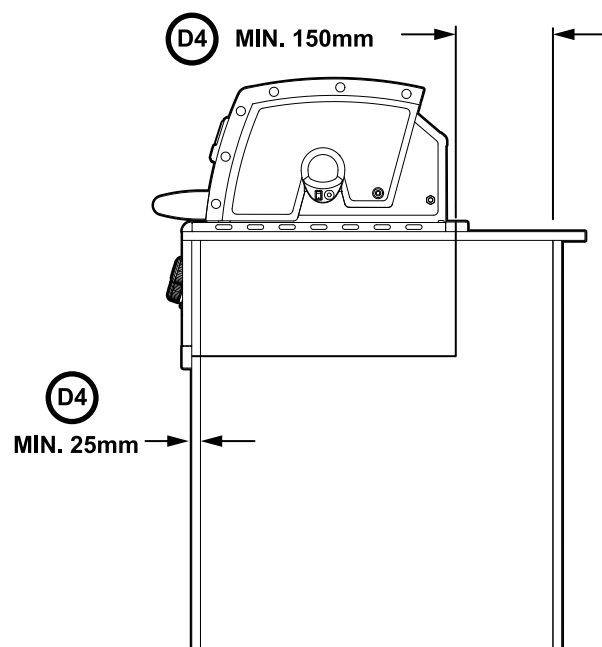
C) Clearance between grill and combustible wall above the counter top surface

1. The grill must have a minimum of 380mm right, left, and rear clearance from any combustible wall above the non-combustible counter top surface.



D) Clearance between the grill and combustible or non-combustible construction below the counter top surface.

1. "0" clearance is required below the counter top to non-combustible construction.
2. 150 mm clearance is required below the countertop to combustible construction to the rear.
3. 25 mm clearance is required below the countertop to combustible construction to the left and right sides.
4. 9 mm clearance is required below the countertop to a combustible front wall of the enclosure provided the front wall of the enclosure is less than 25 mm thick.



INSTALLATION - CLEARANCES

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

OVERHEAD CONSTRUCTION AND EXHAUST HOOD REQUIREMENTS

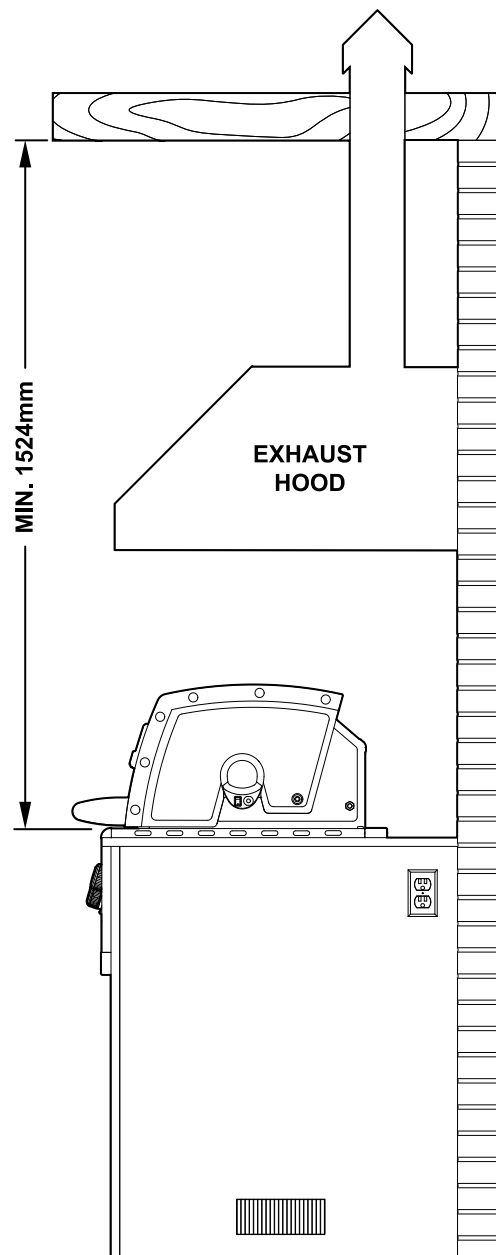
A minimum 1525mm clearance is required between the grilling surface and the overhead construction.

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 the 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 2038m³/h (cubic meter per hour) for proper outdoor application.



INSTALLATION - ENCLOSURES

ENCLOSURES FOR THE GRILL AND LP GAS CYLINDER

Grill and 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.

There are 2 types of enclosures:

1. Grill enclosure without a gas cylinder.
2. Grill enclosure with a gas cylinder.

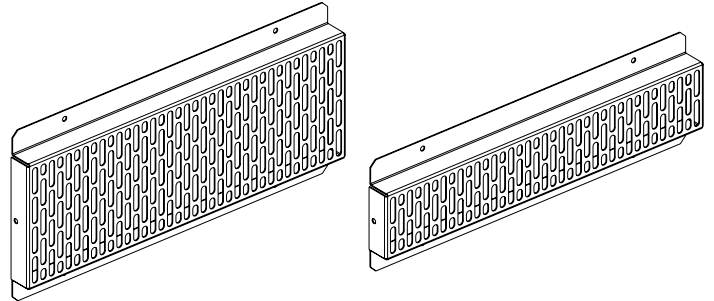
WARNING: Do not store a spare cylinder in an enclosure.

WARNING: Vents are required in the enclosures 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 3mm 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 provide a minimum free area of 65 square cm and vents that provide a minimum free area of 130 square cm are available from your dealer



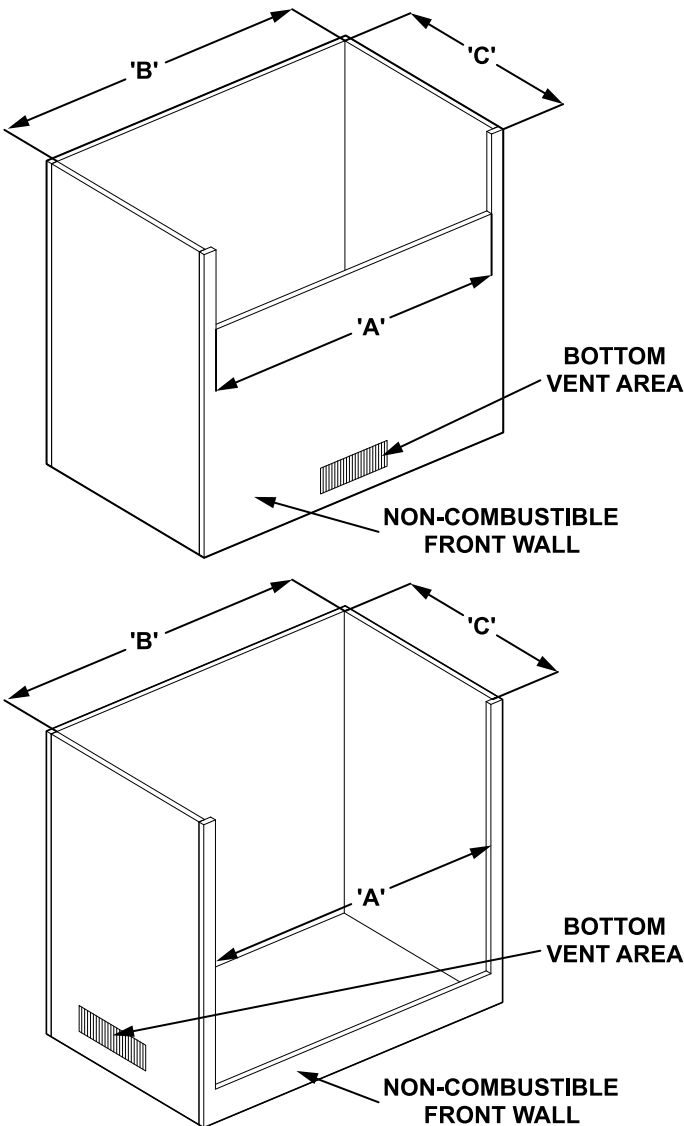
- gas supply shut off valves must be readily accessible for hand operation
- a door on the enclosure to gain access to the cylinder valve is acceptable provided it is non-locking and can be opened without the use of tools
- a minimum clearance of 50mm is required between the floor of a gas cylinder enclosure and the ground
- if a gas leak should occur or the gas cylinder should vent in the gas cylinder enclosure, the gas should not be allowed to vent or migrate into empty or "hollow" areas of the enclosure

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

INSTALLATION - ENCLOSURES

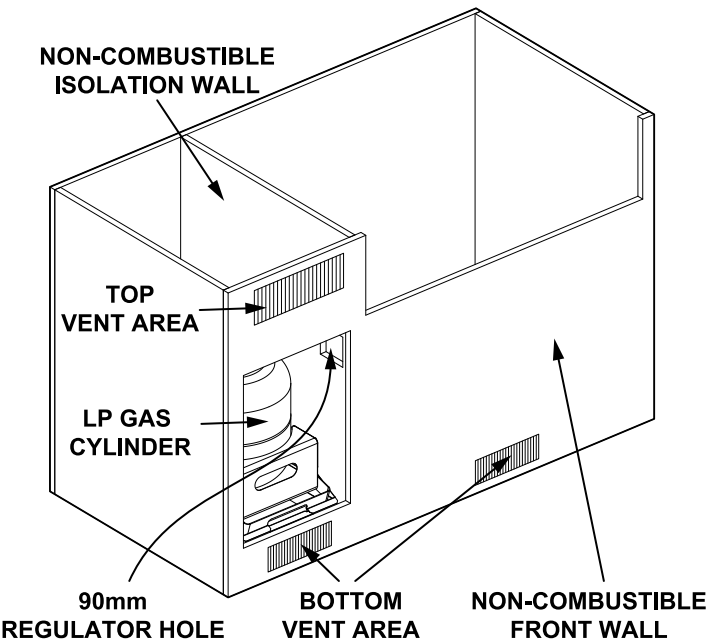
GRILL ENCLOSURE WITHOUT A LP GAS CYLINDER

- Ventilation totaling a minimum free area of 65 square cm is provided at the top of the grill through the side trim and rear trim of the grill
- Ventilation totaling a minimum free area of 30 square cm is provided at the bottom of the grill through the bottom trim of the grill
- Ventilation totaling a minimum free area of 1/50 of the base area of the enclosure is required at the bottom of the enclosure
- Position the bottom edge of vent 25mm or less from the floor level and within 125mm of the bottom of the enclosure
- Be careful not to obstruct these vents



GRILL ENCLOSURE WITH A LP GAS CYLINDER

- A remote LP gas cylinder enclosure is required for installations that use an LP gas cylinder.
- Construct enclosure with four sides, a top and a bottom with minimum inside dimensions of:
 - Height – 60cm
 - Width – 40cm
 - Depth – 35cm
- Enclosure must not allow space for a spare tank to be stored inside 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)
- 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)
- Position the top vent(s) within 130mm of the top of the enclosure.
- Position the bottom vent 25mm or less from the floor level and within 130mm of the bottom of the enclosure.
- A non-combustible isolation wall is required between the LP gas cylinder enclosure and the grill enclosure.
- The remote LP gas cylinder enclosure must isolate the LP 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.



GRILL ENCLOSURE DIMENSIONS				
		420 / 490	590	XL
A	MIN	770mm	932mm	1118mm
	MAX	774mm	936mm	1122mm
B	MIN	797mm	959mm	1146mm
C	MIN	686mm with surface mount RCD receptacle		

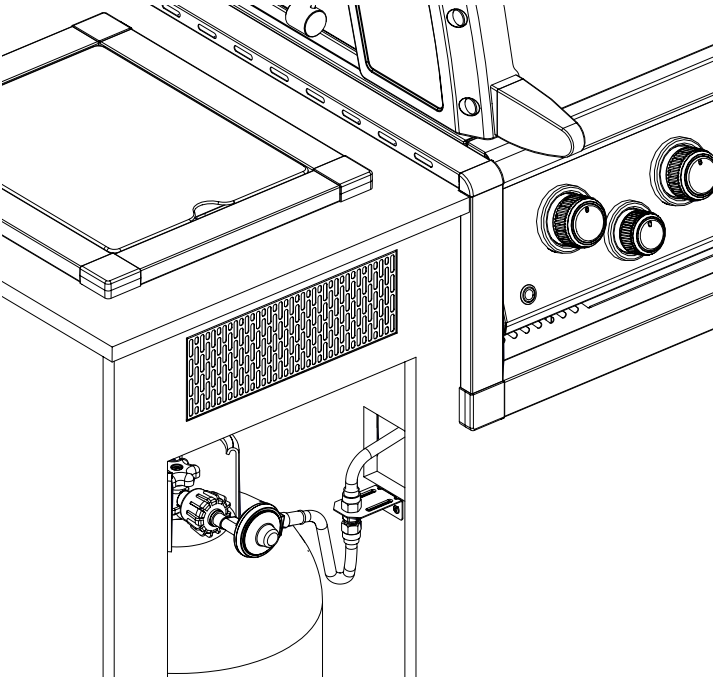
DANGER

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.

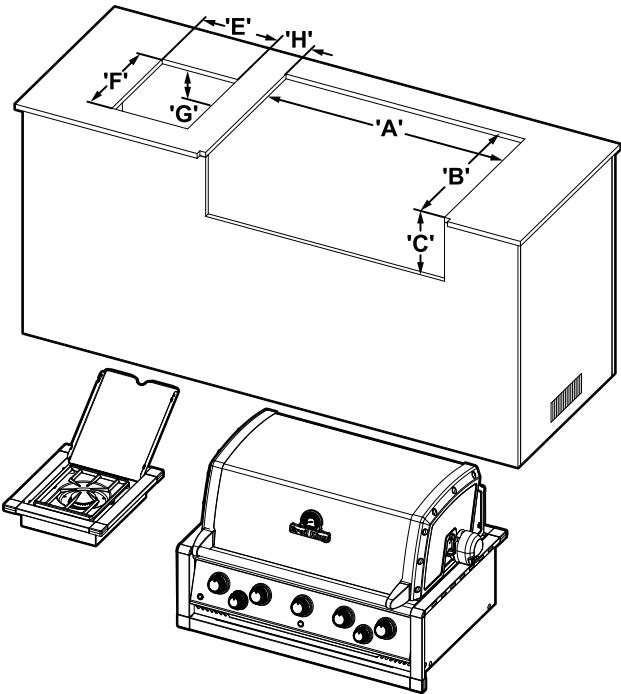
INSTALLATION – CUT OUT DIMENSIONS

SPECIFICATION FOR CONNECTING TO A 15 kg LP GAS CYLINDER

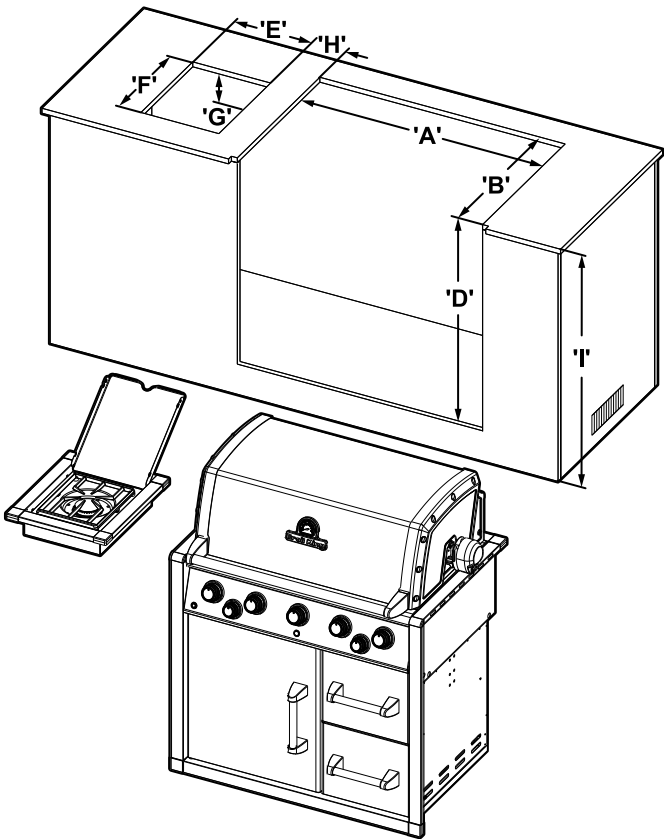
- a 356 mm corrugated hose with a 3/8" SAE 45 degree fitting is connected to the manifold of the grill
- do not use pipe sealant on the 3/8" SAE 45 degree fitting
- the 3/8" SAE 45 degree fitting must be firmly attached to rigid permanent construction
- if you choose to use a corrugated gas hose other than the one supplied, the connector must comply with EN ISO 228-1 or EN 10226-1 and EN 10226-2



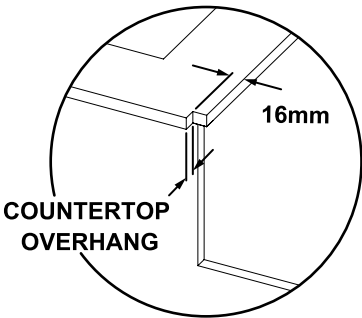
COUNTERTOP CUT OUT DIMENSIONS – BUILT-IN



COUNTERTOP CUT OUT DIMENSIONS – BUILT-IN WITH CABINET



COUNTER TOP NOTCH DETAIL



ISLAND CUTOUT DIMENSIONS			
	490	590	XL
A	MIN. 758mm MAX. 765mm	MIN. 920mm MAX. 927mm	MIN. 1108mm MAX. 1115mm
B	MIN. 590mm – MAX. 595mm		
C	MIN. 280mm – MAX. 285mm		
D	MIN. 800mm – MAX. 810mm		
E	MIN. 290mm – MAX. 300mm		
F	MIN. 370mm – MAX. 375mm		
G	MINIMUM 115mm		
H	MINIMUM 75mm – MAXIMUM 180mm		
I	MINIMUM 865mm		

SAFETY

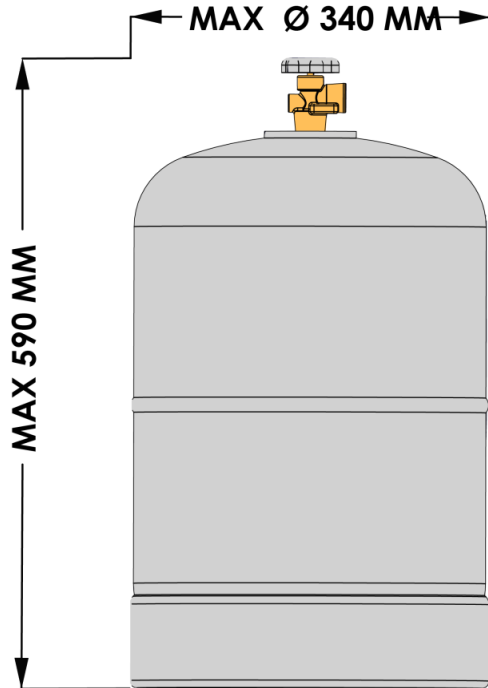
LP GAS CYLINDER

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 I_{3B/P}(30) Propane/Butane 30 mbar.

CATEGORY I_{3B/P}(37) Propane/Butane 37 mbar.

CATEGORY I_{3P}(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.

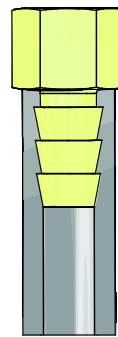
Be sure the gas hose is not subjected to twisting.

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.

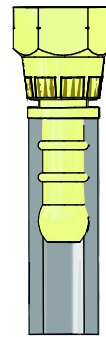
The gas hose must be replaced if damaged and when national conditions require it. Contact your dealer for replacement.

DK / ES



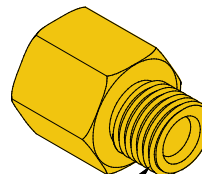
10mm

OTHER EU



6mm
8mm

DE / AT



1/4-19 NPSM
LH THREAD

NOTE:
FITTING TO MATCH
CE TYP "H" CONNECTION

CHANGING A LP GAS CYLINDER

Butane and Propane appliances may be used with butane at an operating pressure of 28-30, 37 mbar and propane at an operating pressure of 30–37 or 50 mbar. This appliance must be used with the appropriate regulator specified on the rating label. See page 2 specifications table.

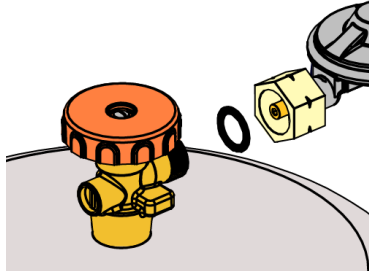
NEVER use an unregulated gas supply or a regulator for other operating pressures.

WARNING: Changing a LP gas cylinder must be carried out in a flame free environment.

Propane & Butane LP gas cylinders have various types of connections.

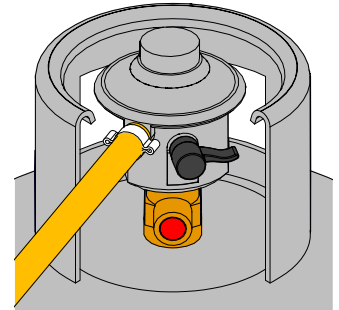
a) Screw-On Connection.

The most important part is the black sealing washer. Always check that it is present and not damaged when changing cylinders. 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.

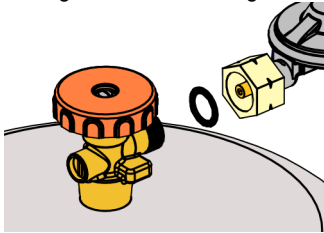
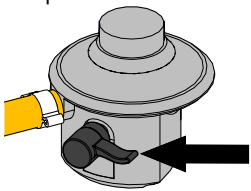
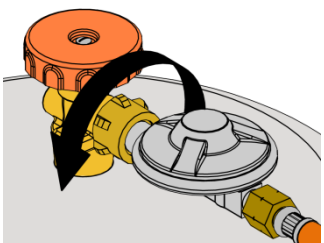
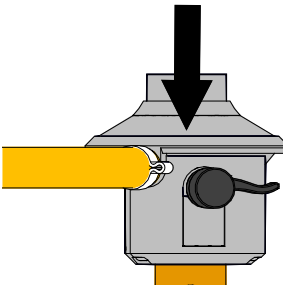
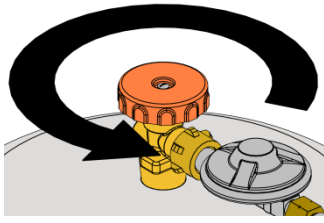
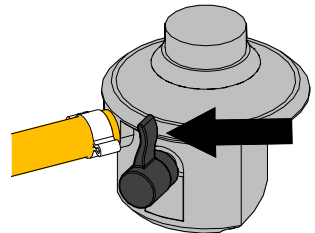


b) Switch-On Connection.

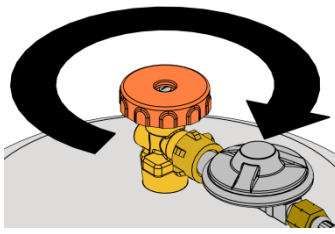
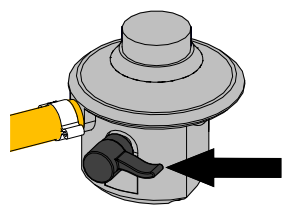
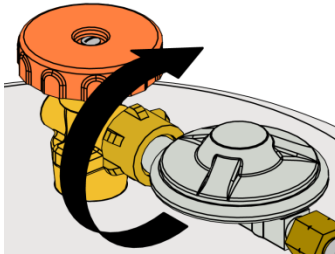
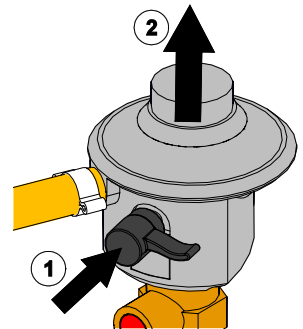
No tools are required for this type. On/Off control of the gas supply is provided by a switch on the Regulator or on a special adapter. If you use an adapter with an old type threaded regulator, please ensure that the union nut is tightened firmly to the adapter with a spanner.



Connecting a Cylinder

SCREW-ON CONNECTION	SWITCH-ON CONNECTION
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. 	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. 
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. 	3. 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. 
5. When gas is required turn the cylinder valve anti-clockwise. 	4. When gas is required turn the switch upward to the ON (12 o'clock) position. 

Disconnecting a Cylinder

SCREW-ON CONNECTION	SWITCH-ON CONNECTION
1. Turn the cylinder valve OFF (Clockwise rotation). 	1. Turn the switch to the OFF (3 o'clock) position. 
2. 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). 	3. Remove the "Quick On" regulator by pressing horizontally on the switch (1) and pulling upwards (2) at the same time. 
4. REPLACE the plug or cap onto the empty cylinder or part full cylinder if not in use.	4. REPLACE the seal cap onto the empty cylinder, or part full cylinder if not in use.

Leak test all connections before operating the appliance.

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

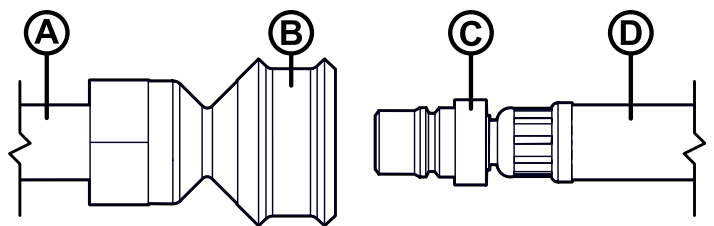
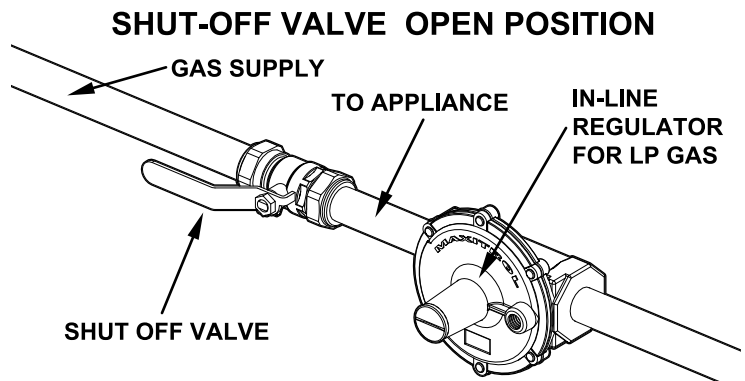
- If grill is designed for use with natural gas, do not use with liquid propane or butane (bottled gas). The valves, orifices, and hoses are for natural gas only.
- Natural gas grills are designed to operate at a regulated pressure of 20 mbar.
- The gas supply hose from the grill manifold to the gas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



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

LEAK TESTING

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

AS A SAFETY PRECAUTION:

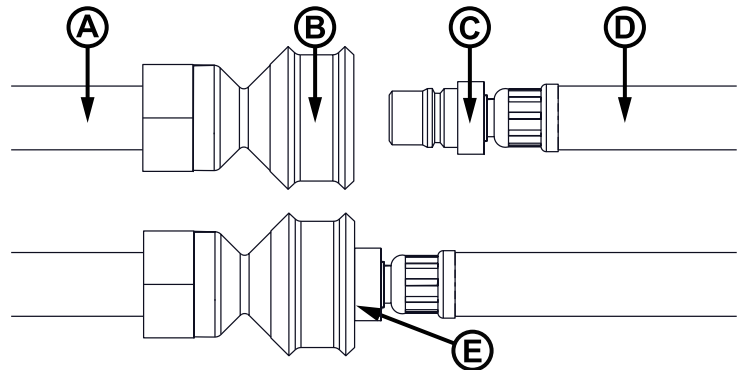
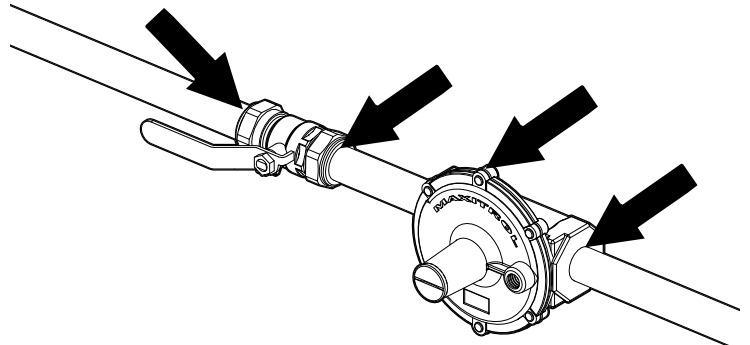
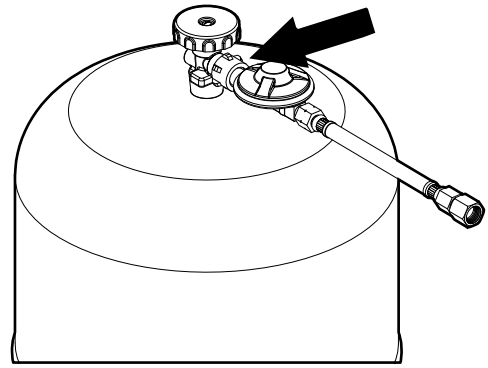
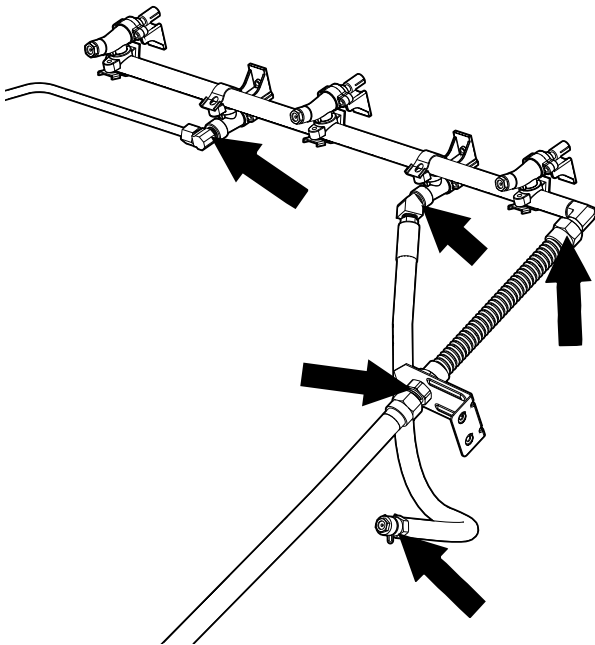
- Test all fittings for leaks before using your gas grill.
- Test for leaks every time you disconnect and reconnect a gas fitting, at least once per year or after any period of nonuse.
- Do not smoke while testing.
- Never test for leaks with a lit match or open flame.
- Test for leaks outdoors.

TO TEST FOR LEAKS:

1. Prepare a soap solution of one part water, one part liquid detergent.
2. Extinguish any open flame or cigarettes in the area.
3. Be sure that gas grill valves are "OFF."
4. Be sure that cylinder valve or the gas supply valve is "OFF."
5. With a full gas cylinder, open cylinder valve slowly or open gas supply valve.
6. Brush the soap solution on each connection.
7. A leak is identified by a flow of bubbles from the area of the leak.
8. If a leak is detected, close the gas cylinder valve or the gas supply valve, tighten the connection and retest.
9. If the leak persists, contact your gas grill dealer for assistance. Do not attempt to operate appliance if a leak is present.

If your gas grill is equipped with a side burner or rear burner:

1. Follow steps 1 - 5 above
2. Place fingertip over the opening in the orifice at the end of hose.
3. Turn "SIDE"/"REAR" control to "HIGH."
4. Brush soap solution on each connection between orifice and control valve.
5. Turn "SIDE"/"REAR" control to "OFF".



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

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 or the side burner.



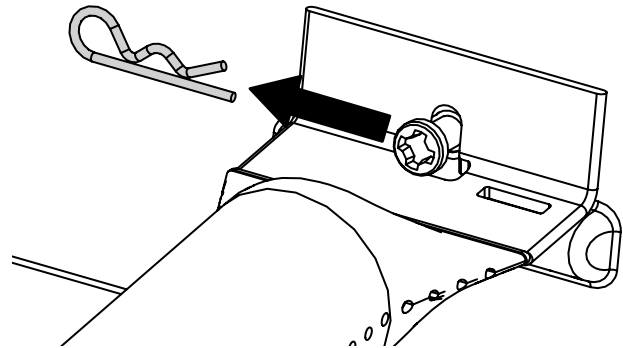
If a flashback fire occurs, turn off gas at the source immediately.

Inspect and clean the venturi tubes (main burner, side burner, rear burner) if any of the following symptoms occur:

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

INSPECTING & CLEANING VENTURI TUBES

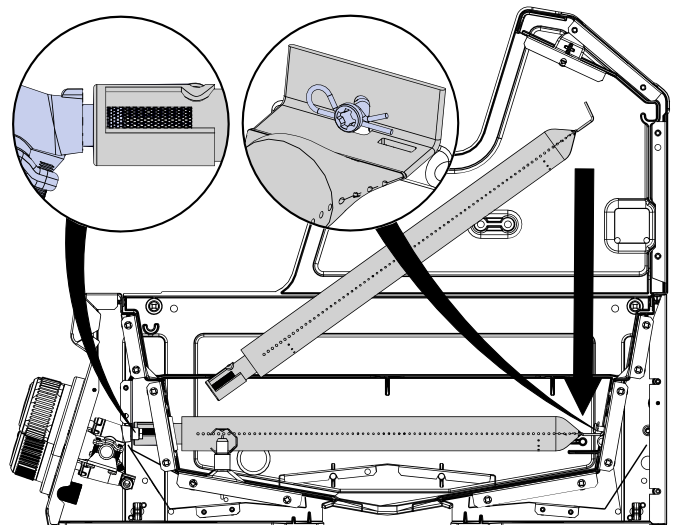
1. Turn off gas by closing the propane cylinder valve
2. When gas grill is cool, remove the burner fasteners. Proceed to lift the burners from the gas grill housing.



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



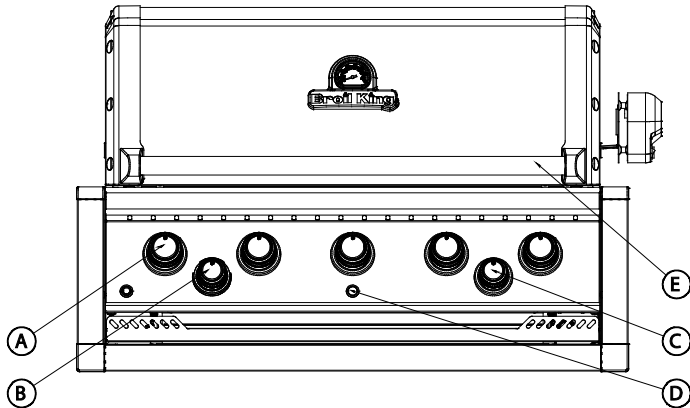
4. Lower the burner into position in the gas grill housing, making sure that the venturi tubes are correctly aligned and fitted on the orifices.



5. Secure burners with burner fasteners.

LIGHTING

BASIC GAS GRILL COMPONENTS



- A. Main burner controls
B. Side burner control
C. Rear burner control
D. Ignitor
E. Handle

LIGHTING INSTRUCTIONS

- The grill must be assembled and installed as per the assembly and installation instructions.
 - Ensure the grill is properly connected to the LP or natural gas supply. See: "hose and regulator" (page 11)
 - Ensure there are no gas leaks in the gas supply system. See: "leak testing" (page 14)
 - Ensure that the venturi tubes are properly located over the gas valve orifices. See venturi diagram. (page 15)
 - Ensure that main burner, side burner and rear burner ignition wires are connected.
 - Check that the battery has been installed in the electronic ignition.
 - Carefully review all instructions on the information plate attached to the gas grill.
1. **Open lid before lighting**
 2. **Do not lean over gas grill while lighting.**
 3. **Set control knobs to "OFF" and turn on the gas supply.**

LIGHTING THE MAIN BURNER:

To light burner with the ignitor:

4. Push and turn one main burner control knob to "HIGH."
5. Push and hold down the ignitor.
6. Burner should ignite within 5 seconds; turn off gas source immediately if ignition does not occur in this timeframe.

To light burner with a match:

4. Use the match holder and, apply lit match to burner port.
5. Push and turn right main burner control knob to "HIGH."
6. Burner should ignite within 5 seconds - turn off gas source immediately if ignition does not occur in this timeframe.
7. After the first burner is lit, push and turn the adjacent main burner control knob to "HIGH" then repeat for other burners; these burners should light automatically without the ignitor.

Note: In windy conditions, ignite each burner individually.

LIGHTING THE SIDE BURNER:

To light burner with the Ignitor:

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

To light burner with a match:

4. Apply lit match to burner ports.
5. Push in the side burner control knob and turn to "HIGH."
6. Burner should ignite within 5 seconds.

Note: Pots on the side burner must not exceed 23cm in diameter or 7kg in weight.

LIGHTING THE REAR ROTISSERIE BURNER:

Warning: do not operate the main burner simultaneously with the rear burner.

• REMOVE THE WARMING RACK

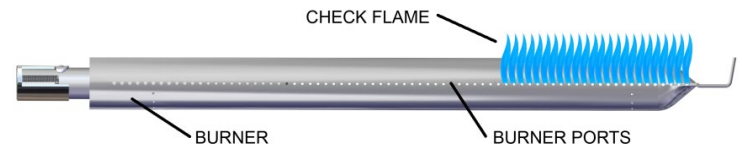
To light burner with the Ignitor:

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

To light burner with a match:

4. Apply lit match to burner ports.
5. Push in the rear burner control knob and turn to "HIGH."
6. Burner should ignite within 5 seconds.

CAUTION: Check your gas grill after lighting. All burner ports should show a 2.5cm flame on "HIGH."



If any of the following symptoms occur there is probably a blockage in the venturi tubes. Shut off gas at once and clean the venturi tubes. See "Venturi Tubes." (Page 15)

- You smell gas.
- A flashback fire occurs.
- Your gas grill heats unevenly.
- The burners make popping noises.

IF BURNER DOES NOT IGNITE:

- Push and turn control knob to "OFF." Wait 5 minutes then try again with control knob set at "MEDIUM."
- If any burner will not light, see "Troubleshooting" on page 25. If problem persists, do not attempt to operate the appliance; contact OMC, your dealer or an approved service center

SHUTDOWN:

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

OPERATION

WARNING

NEVER cover slots, holes, or passages in the front or bottom of the grill or cover an entire rack with material such as aluminum foil. Doing so blocks air flow through the grill and may cause over heating or carbon monoxide poisoning.

First Time Use

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

- Remove and clean the cooking grids and Flav-R-Waves™ with mild soap and water
- With cooking grids and Flav-R-Waves™ removed, light the gas grill following lighting instructions (see Page 9) and operate the gas grill on “**Medium**” for **30 minutes**. Next, turn gas source off then turn all control knobs to the “OFF” position
- Let grill cool, then replace the Flav-R-Waves™
- Season the cooking grids by coating grids with an organic cold processed cooking oil with a high smoke point, light the grill and operate on Med/Low for 30 minutes
- Recommended cooking oils:
 - Avocado Oil – smoke point (260C/500F)
 - Rice Bran Oil – smoke point (255C/490F)
 - Canola Oil – smoke point (204C/400F)
- You are ready to grill. Proceed to “Preheating.”

Preheating

- **Preheat the gas grill on MEDIUM** with the lid closed for 15 minutes
- Clean cold grids with a nylon grill brush (Item # 65643) or hot grids with a stainless steel wire grill brush (Item #'s 65225, 64014, 64034) and carefully inspect to ensure there are no broken bristles left on the grid
- Coat the grids with a high smoke point cooking oil
- Adjust heat as appropriate for what you are grilling

Lid Position

The position of the lid during cooking is a matter of personal preference, but the gas grill cooks faster, uses less fuel, and controls the temperature best with the lid closed

A closed lid also imparts a smokier flavor to meat cooked directly on the grid, and is essential for smoking and convection cooking

Vaporization Systems

Your gas grill is designed for use with the included Flav-R-Wave™ vaporization system. Do not use lava rock, ceramic briquettes or any other vaporization system other than the one that came with the gas grill.

COOKING TEMPERATURES

BROIL KING® gas grills are:

- High-performance appliances capable of high searing temperatures
- Designed with controlled airflow to retain heat and minimize fuel consumption

Rarely, if ever, will you require the HIGH setting for extended cooking or preheating.

High Setting

Produces temperatures at the cooking grid of approximately 370 – 400°C (700 - 750°F) with the lid down.

Use high setting only:

- For fast warm-up
- In cold or windy conditions when grilling with the lid up
- To quickly sear steaks before reducing the temperature
- To burn-off of food residue from the cooking grids and flav-r-wave before cleaning (maximum 10 minutes)

Medium/High

Produces temperatures at the cooking grid of approximately 320°C(600°F) with the lid down.

Use medium/high setting to:

- Preheat grill for steaks
- Grill steaks rare & medium rare

Medium

Produces temperatures at the cooking grid of approximately 230°C (450°F) with the lid down.

Use medium setting to:

- Grill steaks medium and medium well
- Grill chops, burgers and vegetables

Medium/Low

Produces temperatures at the cooking grid of approximately 200°C (450°F) with the lid down.

Use medium/low setting to:

- Grill chicken pieces, sausage, fish.
- Roast, bake
- Grill dough and pastry such as quesadillas

Low

Produces temperatures at the cooking grid of approximately 155 - 175°C (310 - 350°F) with the lid down.

Use low setting to:

- Slow roast and smoke large cuts of meat, delicate fish and for dough and pastry

Temperatures are approximate only and vary with the outside temperature and the amount of wind.

COOKING TECHNIQUES

DIRECT GRILLING

The direct grilling method involves cooking the food on grids directly over a lit burner. Direct grilling is the most popular method for most single serving items such as steaks, chops, fish, burgers, kebabs and vegetables.

1. Prepare food in advance to avoid delay and timing problems. If using marinade or spices, they should be applied before placing meat on the cooking grid. If basting with sauces, they should be applied in the last 2-4 minutes of grilling to avoid burning.
2. Organize the area around the gas grill to include forks, tongs, oven mitts, sauces and seasonings to allow you to stay in the vicinity of the gas grill while cooking.
3. Bring meat to room temperature just prior to grilling. Trim excess fat from meat to minimize the "flare-ups" that are caused by dripping grease.
4. Pre-heat the gas grill to the desired temperature with the lid closed.
5. Coat the grids with vegetable or olive oil to prevent food from sticking to the grids.
6. Hold the salt when cooking meats on the gas grill. The meat will stay juicier if the salt is added after cooking.
7. To prevent steaks from "drying out," use tongs rather than a fork and start on "MEDIUM/HIGH" to sear the meat and seal juices in. Reduce the heat and extend cooking times when grilling thicker cuts of meat.
8. Learn to test when the meat is done by time and feel. Meat firms up as it cooks. When the meat is soft it is rare. When it is firm, it is well done.
9. Follow the perfect steak grilling guide for most meat, fish, poultry and vegetables.

THE PERFECT STEAK GRILLING GUIDE

PLACE STEAK ON ANGLE ON HOT GRIDS.

FLIP THE STEAK AS SHOWN BELOW.

TURN AND FLIP THE STEAK AGAIN.

FINALLY, FLIP THE STEAK AGAIN.

Meat Thickness		Heat Setting	Time Per Side				Total Time
1 1/2"	1"		A	B	C	D	
Rare		High	1 1/4	1 1/4	1 1/4	1 1/4	7 minutes
Rare	Medium/Rare	Med/High	2	2	2	2	8 minutes
Medium/Rare	Medium	Med/High	2 1/4	2 1/4	2 1/4	2 1/4	9 minutes
Medium	Well	Med	2 1/2	2 1/2	2 1/2	2 1/2	10 minutes
Well		Med	3	3	3	3	12 minutes

DIRECT GRILLING GUIDE				
	1" THICK	HEAT SETTING	TIME PER SIDE	TOTAL MINUTES
CHICKEN	MED / WELL	MED / LOW	4 / 4 / 4 / 4	16
CHICKEN WINGS	MED / WELL	MED / LOW	5 / 5 / 5 / 5	20
HAMBURGER	MEDIUM	MED / LOW	3 / 3 / 3 / 3	12
HAMBURGERS 3/4" FROZEN	MEDIUM	MED / LOW	3 / 3 / 3 / 3	12
FISH FILLET	MEDIUM	MEDIUM	2 / 2 / 2 / 2	8 – 10
LOBSTER TAILS SPLIT	MEDIUM	MEDIUM	4 / 4 / 4 / 4	16 - 20
USE SAME TECHNIQUE AS THE PERFECT STEAK GRILLING GUIDE				

COOKING TECHNIQUES

INDIRECT CONVECTION COOKING

This method is ideal for cooking large cuts of meat such as roasts or poultry. The food is cooked by hot air circulating around it.

- For most applications of convection cooking with and without a rotisserie, a drip pan is recommended to catch the drippings. Place drip pan on top of the Flav-R-Wave, beneath center of food. Put half to one inch of water in the drip pan. Fruit juice, wine or marinade may also be added to enhance the flavor. Do not let the drip pan run dry
- Convection cooking without a rotisserie is best with the lid closed and the heat reduced. All burners can be set to low or the outside burners can be set to medium and the middle burner(s) can be turned off. Turning the center burner off will prevent juices in the drip pan from burning
- Prior to placing the meat on the gas grill, baste the meat with vegetable oil. This will enhance browning on the outside of the meat
- When cooking without a drip pan, close attention must be paid to avoid the risk of a grease fire and is not recommended
- Turn gas grill off and allow it to cool before removing drip pan. The fat drippings are highly flammable and must be handled carefully to avoid injury
- For convection cooking roasts and poultry without a rotisserie, put meat in a roasting rack directly on grids

ROTISSERIE COOKING

Follow the steps for Indirect Convection Cooking. (See left)



- The rotisserie can accommodate up to 7 kg (15lb) of meat with the limiting factor of rotating clearance. For best results the meat should be centered on the center line of spit to eliminate an out-of-balance condition
- The rotisserie can be used with the cooking grids in place if space allows
- Fasten the meat securely on the spit prior to placing it on the gas grill. For poultry, tie the wings and legs in tightly

REAR BURNER ROTISSERIE

- Certain models feature a rear burner for rotisserie cooking. The rear burner rotisserie method is the ultimate for cooking roasts and poultry. With the heat source located behind the food, there is no chance of a flare up caused by fat drippings. A dish or drip pan placed below the spit will collect the juices for basting or for preparing a sauce
- The spring-loaded rear burner may be easily removed when not in use
- To operate your rear burner, see "Lighting the Rear Burner." (Page 15)

INDIRECT CONVECTION AND ROTISSERIE COOKING GUIDE

BEEF ROAST	3 - 6 Lb.	MED / LOW	2 - 4 HRS
BEEF ROAST	6 - 10 Lb.	MED / LOW	3 - 5 HRS
PORK ROAST	2 - 5 Lb.	MED / LOW	2 - 4 HRS
PORK ROAST	6 - 10 Lb.	MED / LOW	3 - 5 HRS
TURKEY OR CHICKEN	2 - 5 Lb.	MED / LOW	2 - 4 HRS
TURKEY OR CHICKEN	5 - 10 Lb.	MED / LOW	3 - 5 HRS

WHEN USING ROTISSERIE BURNER, SET HEAT AT MED / HIGH

MEAT TEMPERATURE GUIDE

	RARE	MED	WELL
BEEF / LAMB / VEAL	130°F / 55°C	146°F / 63°C	160°F / 70°C
PORK		150°F / 65°C	170°F / 77°C
POULTRY			170°F / 77°C
HAMBURGER			160°F / 70°C

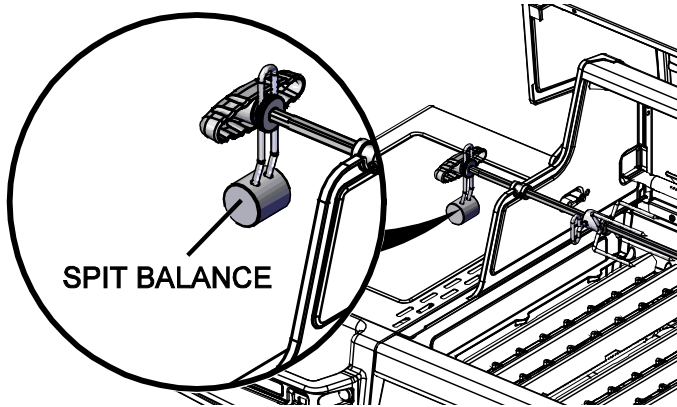
FOR BEST RESULTS, USE A MEAT THERMOMETER

COOKING TECHNIQUES

SPIT BALANCE

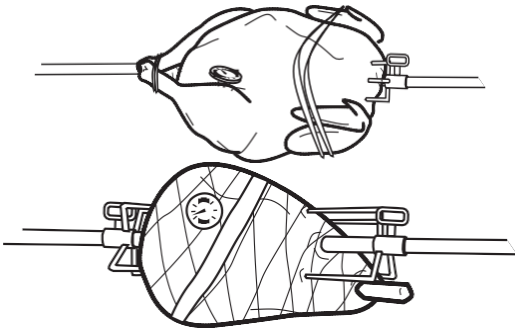
1. Loosen the rod handle to allow the balance to turn freely.
2. Set the rotisserie rod in the slots of the gas grill casting. Let the heaviest side of the meat rotate to the bottom.
3. Adjust the balance to the top of the rod, opposite the heaviest side of the meat.
4. Tighten the rod handle. Periodically, check to see if the meat turns smoothly while cooking. Adjust the spit balance as necessary.

CAUTION: Use oven mitt when adjusting spit balance.



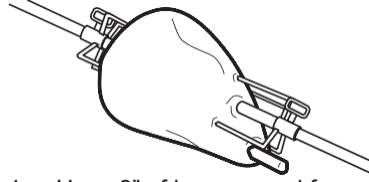
HOW TO USE A PROBE THERMOMETER

1. The accurate way to determine when a large piece of meat is done is to use a probe thermometer. Insert the thermometer at an angle so the sturdy pointed metal tip rests in the center of the thickest part of the meat. **Be careful that it doesn't touch the spit or the bone, and that the point is not resting in fat (you will notice much less resistance when probing in fat).**



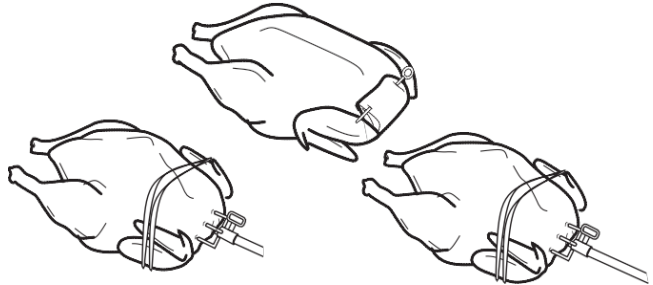
2. When the thermometer displays the desired temperature the meat is done. Add your sauces during the last few minutes of cooking time and let the meat stand about 15 minutes to firm up. Carve and serve.
- poultry: insert the tip of the thermometer in the thickest part of the thigh close to the body
 - ham or roasts: insert the tip of the thermometer in the center of the heaviest section of the meat

USING A SPIT – LEG OF LAMB



1. Have 3" of bone sawed from small end of leg.
2. Leave meat around bone intact to form a flap.
3. Put a spit fork on rod.
4. Fold flap up and run rod through flap and leg.
5. Put second fork on rod and insert forks in each end of leg. Test for balance. Tighten screws.

USING A SPIT – POULTRY



1. With breast down, bring neck skin up over cavity.
2. Turn under edges of skin; skewer to back skin.
3. Loop twine around skewer and tie.
4. Turn breast side up; tie or skewer wings to body.
5. Put a spit fork on rod. Insert rod in neck skin parallel to backbone and exit just above tail.
6. Put second fork on rod and insert forks in breast and tail. Test for balance. Tighten screws.
7. Tie tail to rod with twine. Cross legs; tie to tail.



1. Tie or skewer wings to body.
2. Put a spit fork on rod. Place chickens on rod as demonstrated in the above diagram.
3. Loop twine around tails and legs; tie to rod.
4. Put second fork on rod and insert forks in chicken. Tighten screws.

TRANSFORMER

WARNING! Unplug from power outlet before cleaning or performing maintenance. Allow to cool before adding or removing components.

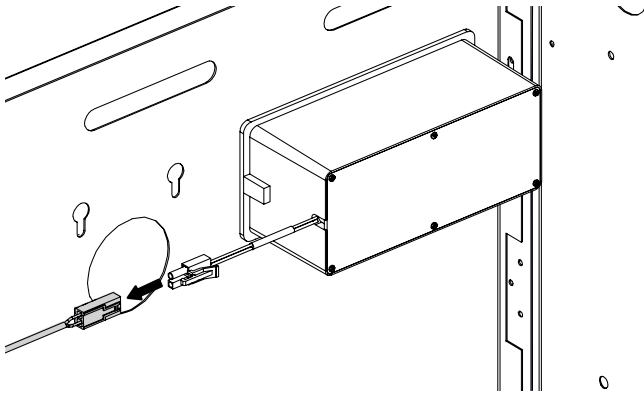
TO REPLACE A TRANSFORMER:

Only use a transformer supplied by your OMC outdoor cooking appliance distributor.

- Input voltage 230-240Vac / 50Hz
- Output voltage 12Vac / 7500mA

DISASSEMBLY:

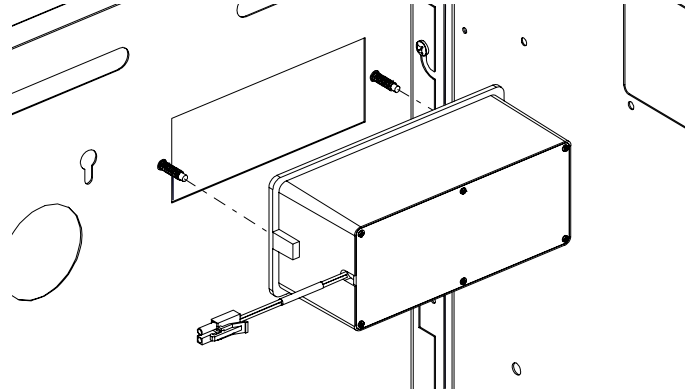
1. Unplug the transformer from the electrical source
2. Turn off gas supply and disconnect the grill from fuel source.
3. Move gas cylinders away from the grill.
4. Locate and disconnect the connector inside the grill cabinet.



5. Remove screws that attach the transformer to the rear panel.

REASSEMBLY:

1. Attach replacement transformer to rear panel using screws. Always install transformer on inside of cabinet.



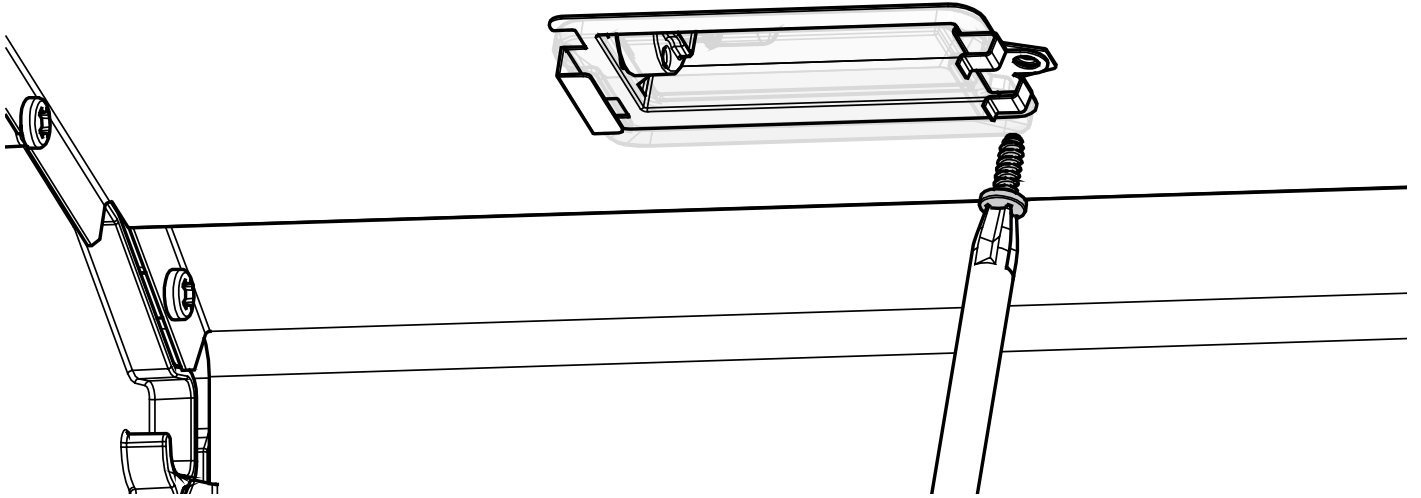
2. Reconnect the transformer connector.
3. Do not operate appliance if the cord or plug is damaged in any manner.
 - If supply cord is damaged it must be replaced.
 - Only GFI (Ground Fault Interrupter) circuits should be used with this outdoor cooking appliance.
 - Do not remove the grounding plug or use with a two prong adapter.
 - Only use extension cords with a three prong grounding plug, the correct power rating and approved for outdoor use with a W-A marking.
4. Connect the plug to the appliance before connecting to the power outlet.
5. Open the light switch and ensure the lights are working. If lights do not work contact your OMC outdoor cooking appliance distributor.

OVEN LIGHTS

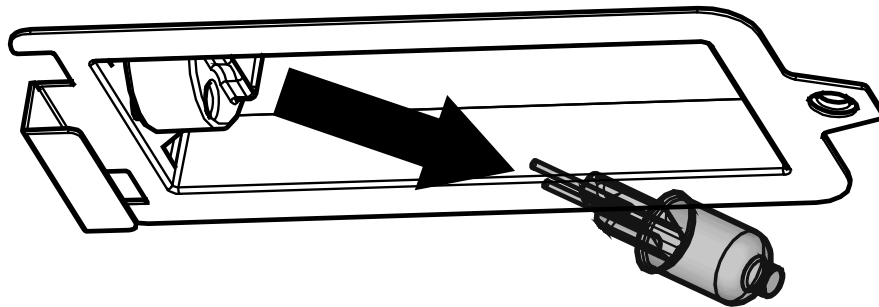
WARNING! Always wear protective gloves when changing the Halogen Oven Light Bulb.

- Only use a 12V 10W G4 Halogen bulb.
- Do not touch the Halogen bulb with bare hands.
- Oil from your fingertips will reduce the life of the bulb.

1. Remove the protective lens. Use a Phillips screwdriver and remove the screw securing the oven light housing to the light panel.



2. Snap the lens out of the housing along with the metal bracket. Taking care not to crack or damage the lens.
3. With gloved hand gently pull the old bulb from the light housing socket and replace with the new bulb.



4. Reinstall the lens by snapping it back into the light housing.
5. Use the Philips screw driver to secure the housing to the light panel.

CONTROL PANEL LIGHTS

REPLACING CONTROL PANEL LED LIGHTING

DISASSEMBLY:

1. Make note of which LED is not working and its position on the control panel.
2. Disconnect from any electrical power source (battery or plug in).
3. Turn off gas supply and disconnect grill from gas source.
4. Move gas cylinders away from the grill.
5. Remove grids
6. Remove burners
7. Remove screws located on inside of fire box along the front top edge.
8. Remove 2 screws located on bottom left and right corners of the control panel.
9. Pull the control panel away from the firebox enough to gain access to the valve assembly and LED wire assemblies.
10. Detach corrugated hose assembly at the valve.
11. Undo rear burner gas tube from valve assembly.
12. Disconnect side burner hose at the side burner and feed hose into cabinet.
13. Disconnect the wire assembly from the light switch
14. Disconnect the ignitor harness from the ignitor button
15. Disconnect the LED wire harness from the switch wire harness.
16. The control panel assembly can now be removed from the grill.

REPLACING LED WIRE ASSEMBLY:

17. Locate the section of wire that has the faulty LED.
18. Remove control knobs of affected LED assembly.
19. Remove control bezels.
20. Undo tie wraps holding the wire to the valve assembly.
21. Slide the LED bulbs up to unseat them and remove the faulty assembly.
22. Disconnect the LED wire.
23. Connect the replacement wire.
24. Insert the LED bulbs into the holes in the control panel and slide them down to seat them securely.
25. Install the control bezels.
26. Install the tie wraps to secure the new wire to the valve assembly.
27. Install the control knobs.

REASSEMBLY:

28. Place the control panel at the grill in a position that enables reconnection of the electrical components and corrugated hose assembly.
29. Connect the light switch wire to the light switch.
30. Connect the ignitor harness to the ignitor button.
31. Connect the LED wire to the Light switch.
32. Connect the corrugated hose assembly at the valve assembly. Ensure the connection is tight.
33. Connect rear burner gas tube to valve assembly.
34. Feed side burner hose back through the side panel and reconnect to side burner.
35. Push the control panel back into place on the grill.
36. Install screws along top inner firebox edge.
37. Install the two screws at bottom left and right of the control panel.
38. Install burners.
39. Install grids.
40. Connect to electrical supply.
41. Connect to gas supply

LEAK TEST ALL GAS CONNECTIONS BEFORE THE GRILL IS USED AGAIN

IT IS RECOMMENDED THAT ELECTRICAL SYSTEMS ARE REPAIRED BY AN AUTHORIZED DEALER OR APPROVED SERVICE CENTER.

MAINTENANCE

REGULAR MAINTENANCE

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

COOKING GRIDS - CAST IRON, CAST STAINLESS & HEAVY ROD STAINLESS

BROIL KING® Deep V cast iron and cast stainless cooking grids provide unsurpassed heat retention and grilling performance. BROIL KING® Heavy Rod stainless grids provide maximum durability and good heat retention and good grilling performance. BROIL KING® cast iron grids are coated with a porcelain enamel finish to protect the grids and reduce the tendency of food sticking to grids. Regular use and care improves performance and longevity of the grids.

For optimum performance:

- Before first use and after long periods of storage, wash grids using a light detergent and water and then rinse and dry with paper towel; never air dry grids or use a dishwasher
- Immediately after washing, season cooking grids by coating grids with an organic cold pressed cooking oil with a high smoke point, light the grill and operate on Med/Low for 30 minutes. Recommended cooking oils:
 - Avocado Oil – smoke point 260°C (500°F)
 - Rice Bran Oil – smoke point 255°C (490°F)
 - Canola Oil – smoke point 204°C (400°F)
- Before and after each use, brush grids with a good quality grill brush (Item #'s 65225, 64014, 64034) and lightly coat with a high smoke point cooking oil. This will continue the seasoning process
- **Use medium heat settings to preheat and grill to avoid burning off the protective seasoned coating**
- Avoid applying sugar based marinades or salt to meat before grilling, apply sugar based marinades at end of grilling and salt after grilling
- Use oil based marinades, avoid water based marinades
- Lightly coat food with cooking oil of your choice before grilling
- Turn and rotate your grids periodically
- Ensure the surface of the grid is always coated with a light layer of oil. This helps prevent rust and deterioration and improves the grids non-stick performance
- If rust does occur, Burn-Off the grid, brush with a good quality grill brush and re-season

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

WARNING:

If you brush the grids with a stainless steel bristle grill brush.

- If the grill is hot, use caution and oven mitts to protect your hands.
- Inspect the grids carefully after brushing to ensure there are no broken stainless steel bristles left on the grid.

GREASE TRAY

The grease tray is in the pull out drawer located under the control panel. Clean regularly.

FLAV-R-WAVE™

The Flav-R-Wave is designed to generate smoke and vapor from the food drippings in order to provide that authentic barbecue flavor while protecting the burner. If residue accumulates on the Flav-R-Wave™, remove the cooking grids and scrape the residue off the Flav-R-Wave™ with the grid lifter. (Part # 60745)

GENERAL CLEANING

Perform a Burn-Off (see below).

When gas grill is cool, remove grids, scrape the Flav-R-Wave™ clean with grid lifter then remove the Flav-R-Waves.

Clean the interior of the gas grill as necessary by scraping the sides and bottom of the cook box with the grid lifter and vacuum residue.

Rust is a natural oxidation process and may appear on internal stainless steel parts. Rust will not affect performance of your grill.

BURN-OFF

Ignite the burners as per "Lighting" (page 16).

Operate gas grill on HIGH with lid closed for 10 minutes maximum.

Turn the gas source off then turn control knobs to OFF.

ANNUAL MAINTENANCE

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

BURNER

Remove burner and inspect for cracks and deterioration. Clean venturi tubes using a pipe cleaner or venturi brush to eliminate any blockages. See "Venturi Tubes." (Page 15) While the burner is removed, remove the grease shields, clean the interior of cook box by scraping the sides and bottom of the cook box and vacuuming.

HOSE

Inspect and replace if necessary. For propane see "Hose and Regulator." (Page 12)

EXTERIOR ALUMINUM COMPONENTS

If white oxidation spots appear, wash the outside of the aluminum cook box with a mild soap and water solution. Rinse the surfaces thoroughly then wipe them with a cloth dipped in cooking oil to restore the luster. For repair of paint scratches and scuffs, use a good quality HIGH temperature 315°C (600°F) spray paint for touch-up.

STAINLESS STEEL & PORCELAIN COMPONENTS

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

RESIN COMPONENTS AND SIDE SHELVES

Wash with soap and water.

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." (Page 14)

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.	1. Regulator fitting loose. 2. Gas leak in hose/regulator or control valves.	1. Tighten fitting and "Leak Test." (page 14) 2. See authorized service center.
Flames Beneath Control Panel (Flashback Fire)	1. Venturi blocked.	1. Remove burner and clean venturi. See "Venturi Tubes" (page 15)
Flickering Burner Flame or Low Temperatures on HIGH Setting	1. Excess flow safety device has been activated in connection between cylinder and barbecue.	1. 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" (page 16)
Burner Not Lighting	1. Out of LP Gas. 2. Ignitor issue. 3. Excess flow safety device has been activated. 4. Regulator is not fully connected to the cylinder valve. 5. A leak in the system causing the excess flow device to activate. 6. Venturi blocked or misaligned with valve orifice. 7. Orifice(s) blocked. 8. Hose is twisted.	1. Refill LP Gas Cylinder. 2. Try manually lighting burner with a match. See "Lighting" (page 16). If burner lights successfully, it is an ignitor issue. See "Ignitor not Working" below 3. Follow "Flickering Flame or Low Temperatures on HIGH setting" solution above. 4. Tighten the regulator hand wheel. 5. Leak test connections to determine loose fitting. Tighten fitting. Leak test system. 6. Remove burner, clean venturi and realign with valve orifice. See page 8 for assistance. 7. Remove burner, clean orifices with a pin or fine wire. Do not drill orifices. 8. Straighten hose. Keep away from bottom casting.
Ignitor Not Working	1. Ignitor battery is dead 2. Ignitor wire(s) not connected 3. Electrode misaligned on burner 4. Ignitor malfunction	1. Replace battery 2. Ensure main burner and side burner electrode wires are all connected 3. Realign electrode and clear any surrounding debris from area 4. Use "Match Lighting" procedure. (Page 16)
Decreasing Heat, "Popping Sound"	1. Out of LP Gas. 2. Venturi blocked.	1. Refill LP Gas Cylinder. 2. Remove burner, clean venturi. See "Venturi Tubes" (Page 15) for assistance.
Hot spots on Cooking Surface	1. Venturi blocked 2. Debris buildup on Flav-R-Wave	1. Remove burner, clean venturi. See "Venturi Tubes" (page 15) for assistance. 2. Scrape off Flav-R-Wave and vacuum
"Flare-ups" or Grease Fires	1. Excessive grease buildup on vaporizer or in gas grill cook box 2. Excessive heat.	1. Thoroughly scrape off Flav-R-Wave and inside of cook-box then vacuum out debris 2. Turn burner controls to a lower setting
Regulator Humming Noise	1. Cylinder valve opened too quickly.	1. Open cylinder valve slowly.
Yellow Flame	1. Some yellow flame is normal. If it is excessive, the venturi may be blocked. 2. Burner ports blocked.	1. Remove burner, clean venturi. See "Venturi Tubes" (page 15) for assistance. 2. Remove burner & clean with soft bristle brush (e.g. toothbrush).
Inside of Lid Appears to be Peeling	1. This is a build-up of grease. The inside of lid is not painted and cannot peel.	1. Clean with stiff bristle brush or scraper.
Cooking Grids Rusting	1. Porcelain enamel has been chipped	1. See "Maintenance" (page 24) for help
Control panel or oven lights not working	1. Unit not connected to power. 2. Faulty transformer. 3. Loose or corroded connections. 4. Bulb blown	1. Connect GFI power cord to appliance. Plug to working power outlet. 2. Check transformer output is 12Vac. Replace if required. 3. Clean connections and ensure all connectors are pushed together firmly. 4. Replace bulbs.
If troubleshooting fails to solve any of these or any other issues, please visit www.omcbbq.com for more information including troubleshooting videos, and tips.		

WARRANTY

The BROIL KING® 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 United States and Canada replacement is FOB Factory.

In all other countries replacement is FOB BROIL KING® Distributor (Consult your Dealer for name of BROIL KING® 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 exclusively by the purchaser in country where purchased. (Different types of gas used in different countries require appropriate valves, orifices and regulators.)

WHAT IS COVERED

	IMPERIAL REGAL	BARON SIGNET MONARCH	CROWN	ROYAL GEM
STAINLESS STEEL & PORCELAIN STEEL LID COMPONENTS	Lifetime	Lifetime	10 Years	10 Years
CAST ALUMINUM COOK BOX & COMPONENTS	Lifetime	Lifetime	10 Years	10 Years
STAINLESS STEEL COOK BOX	Lifetime	Lifetime	10 Years	
STAINLESS STEEL COOKING GRIDS	15 Years	5 Years		
CAST IRON COOKING GRIDS	15 Years	2 Years	2 Years	2 Years
STAINLESS STEEL FLAV-R-WAVE™	15 Years	3 Years	2 Years	2 Years
DUAL-TUBE™ BURNERS	15 Years	10 Years		
STAINLESS STEEL MAIN BURNERS			5 Years	5 Years
SIDE BURNER	15 Years	2 Years	2 Years	2 Years
REAR BURNER	15 Years	10 Years	5 Years	
INFRA-RED SIDE BURNER (EXCLUDING SCREEN)	15 Years	5 Years		
STAINLESS STEEL COMPONENTS	15 Years	5 Years	2 Years	2 Years
REMAINING PARTS & PAINT	15 Years	2 Years	2 Years	2 Years

WHAT IS NOT COVERED

Any failures or operating difficulties due to accident, abuse, misuse, alteration, misapplication, vandalism, improper installation or improper maintenance or service, or failure to perform normal and routine maintenance, 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® Gas Grill Parts" must always be used for replacement. Use of any other parts will automatically nullify the above warranty.

BURNERS

The life of BROIL KING® burners (made of stainless steel) depends almost entirely on proper use, cleaning and maintenance. This warranty does not cover failure due to improper use and maintenance. Consult "Maintenance" (page 20) for proper burner care and cleaning instructions.

PORCELAIN-COATED COOKING GRIDS

All BROIL KING® cast iron cooking grids are coated with a durable porcelain enamel to assist in cleaning and reduce the tendency of food sticking to the grid. Porcelain is essentially a glass coating. Some chipping may occur if mishandled. This will not affect the use or performance of the grids. The grids are not warranted against chipping or rusting due to mishandling. Consult "Maintenance" (page 20) for proper cooking grid care and cleaning instructions.

VAPORIZATION SYSTEMS

BROIL KING® Gas Grills are designed for use with Flav-R-Wave™ vaporization systems. Use of any other product will nullify the warranty.

FLAV-R-WAVE™

The Flav-R-Wave™ is warranted against defects in materials or rust through for a period of 3 years from date of purchase. Surface rust will not affect the performance of the Flav-R-Wave™ and is not covered by the warranty. Consult "Maintenance" (page 24) for proper Flav-R-Wave™ care instructions.

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.broilkingbbq.com or by calling 1-800-265-2150.

WARRANTY CLAIMS

All warranty is handled directly by BROIL KING®. Parts must be returned to BROIL KING® 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® 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® 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® distributor.