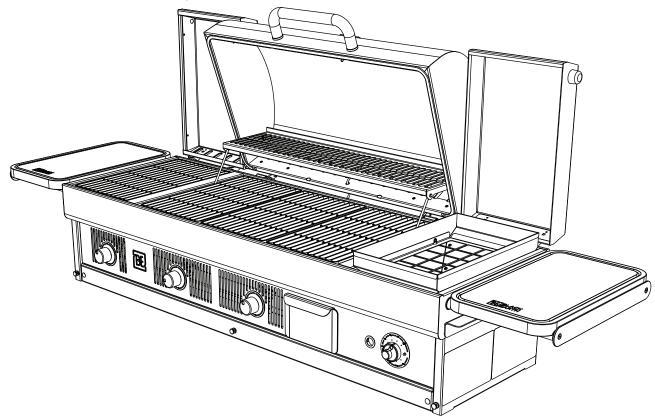


FOR USE WITH PROPANE (L.P.) OR NATURAL GAS, AND NATURAL 1/4"(6mm) DIA HARDWOOD PELLETS

THIS GRILL IS FACTORY CONFIGURED FOR USE WITH LIQUID PROPANE (LP) GAS OR NATURAL GAS AND 1/4"(6mm) DIA NATURAL HARDWOOD PELLETS.

USER MAY WISH TO CHANGE FROM L.P. GAS TO NATURAL GAS, OR N.G. GAS TO L.P. GAS, DEPENDING ON INITIAL FACTORY CONFIGURATION, BUT A CONVERSION KIT MUST BE INSTALLED BY A PROFESSIONAL TECHNICIAN.

CONFORMS TO: ANSI Z21.58-2015, CSA C22.1 AND UL SUBJECT 2728-2009



- READ ALL INSTRUCTIONS CAREFULLY BEFORE OPERATING YOUR GAS & PELLET GRILL.
- THIS OUTDOOR COOKING GAS APPLIANCE IS NOT INTENDED TO BE INSTALLED IN, OR ON BOATS OR RECREATIONAL VEHICLES
- FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN PROPERTY DAMAGE, BODILY INJURY OR EVEN DEATH.
- CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.
- SAVE THESE INSTRUCTIONS.

FOR PARTS REPLACEMENTS, PLEASE SEE YOUR REPLACEMENT PARTS MANUAL





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DANGER

IF YOU SMELL GAS:



- 1. SHUT OFF GAS TO THE APPLIANCE
- 2. EXTINGUISH ANY OPEN FLAME
- 3. OPEN LID
- 4. IF ODOR CONTINUES, KEEP AWAY FROM THE APPLIANCE AND IMMEDIATELY CALL YOUR GAS SUPPLIER OR YOUR FIRE DEPARTMENT

WARNING

1. DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE LIQUIDS OR VAPORS IN THE VICINITY OF THIS APPLIANCE



2. A LP CYLINDER NOT CONNECTED FOR USE SHALL NOT BE STORED IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE

PLEASE RECORD YOUR MODEL NUMBER, SERIAL NUMBER AND DATE OF PURCHASE HERE.

This information can be found on the Name Plate Label on the side of your grill.

BLACK EARTH GAS & PELLET BARBECUE

MODEL	BLACK EARTH BUILT-IN					
SERIAL NUMBER						
Date of Purchase	mm dd yy	уу				





INTRODUCTION

READ ALL INSTRUCTIONS BEFORE INSTALLING AND USING THE APPLIANCE!

Congratulations on your purchase of The Black Earth Hybrid Grill.

This grill is built with pride in Winnipeg, Manitoba, Canada by Crystal Spring Hog Equipment who is committed to offer you an outdoor cooking product you will be proud to own for many years.

WARNING! Read this manual carefully and completely before using your grill to ensure proper operation, proper installation, proper servicing and to reduce the risk of fire, burn hazard and/ or other injury.

This unique and high quality product is a dual fuel combustion outdoor appliance that can use propane gas (L.P.) or natural gas (N.G.) and hardwood pellets. Fuels can be used separate or both at the same time.

For using the wood pellet fuel or the combination of gas and wood pellets, the unit requires to be plugged into a 115VAC/2.3A/60Hz grounded power outlet, equiped with GFCI protection.

A ground fault circuit interrupter (GFCI) or Residual Current Device (RCD) is a device that shuts off an electric power circuit when it detects that current is flowing along an unintended path, such as through water or a person.

GFCIs are usually required by local laws to be installed to any outdoor outlets.

For **PROPANE GAS FUEL**, your Black Earth Hybrid Grill is designed to be used with a 20 lb. (9 kg) LP gas cylinder, equipped with the QCC°-1 Quick Closing Coupling system.

Gas fuel type and LP Gas cylinder specifications are explained in detail in the next chapters.

For **WOOD PELLET FUEL**, your Black Earth Hybrid Grill can use only all natural hard wood pellets specially formulated for grilling. These pellets look very similar to the heating pellets but do not contain any additives or other harmful substances for cooking. We recommend the use of only Black Earth brand BBQ pellets, which are specifically made to work in our Grills. Black Earth Wood Pellets are rated for 8500 BTU per LBS with an ash content of 2%.

Improper Use Can Cause Uncontrolled Fire. To Reduce Fire Risk:

WARNING! Use only Hardwood pellets for grilling. Never use heating pellets or charcoal pellets with this unit!

CAUTION! Always store wood pellets in a dry location, away from heat-producing appliances and other fuel containers.

CAUTION! Keep the Grill clean – See the cleaning Instructions in this Owner's Manual.

CAUTION! Do not use accessories not specified for use with this Grill.

DANGER! Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or

similar liquids to start or 'freshen up' a fire in this appliance. Keep all such liquids well

away from the appliance when in use.

If Fire Occurs:

Call Fire Department

Do Not: Try To Move Appliance, Try To Smother Fire, Or Put Water On The Fire.

With proper set-up, operation and maintenance, the Black Earth Hybrid Grill will provide you with delicious food and years of professional cooking enjoyment.

This unique hybrid bbq can sear, smoke, bake, broil and grill - to competition standards, at your own convenience.

SAVE THESE INSTRUCTIONS!





SAFETY

Your new Black Earth Built-In grill is a convenient and safe appliance when assembled and used properly. As with all gas or pellet-fired products, however, certain safeguards must be observed.

Failure to follow these safeguards may result in serious injury or even death.

If you have questions concerning assembly or operation, consult your dealer, gas & pellet appliance specialist, gas company or our direct customer service line at 1-855-234-1373. / www.blackearthgrills.com

CAUTION

- FOR OUTDOOR USE ONLY. IF STORED INDOORS, DETACH AND LEAVE CYLINDER OUTDOORS.
- NOT INTENDED TO BE INSTALLED IN OR ON BOATS OR RECREATIONAL VEHICLES
- THIS APPLIANCE MUST NOT BE OPERATED UNATTENDED.
- SPECIAL CARE MUST BE TAKEN TO KEEP SMALL CHILDREN AWAY FROM HEATED SURFACES.

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



WARNING

- USE ONLY WITH GFCI PROTECTED CIRCUIT. USE ONLY EXTENSION CORDS APPROVED FOR OUTDOOR USE MARKED WITH W-A AND RATED FOR THE POWER OF THIS APPLIANCE.
 In the absence of local codes, the following standards apply:

 (Canada) CSA C22.1 Canadian Electrical Code and
 (U.S.A.) ANSI/NFPA No. 70-Latest Edition
- 2. Do not cut or remove the grounding prong from the plug.
- 3. Keep the electrical supply cord and the fuel supply hose away from any heated surface.
- 4. To protect against electric shock, do not immerse cord or plugs in water or other liquids
- 5. Unplug from the outlet when not in use and before cleaning. Allow to cool before putting on or taking off parts.







INSTALLATION

A MAJOR CAUSE OF FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIALS. IT IS OF UTMOST IMPORTANCE THAT THIS PRODUCT BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

INSTALL AND OPERATE ONLY ON NONCOMBUSTIBLE FLOORS OR FLOORS PROTECTED WITH NONCOMBUSTIBLE SURFACES WHERE THE PROTECTIVE SURFACE HAS BEEN APPROVED FOR SUCH USE BY THE AUTHORITY HAVING JURISDICTION.

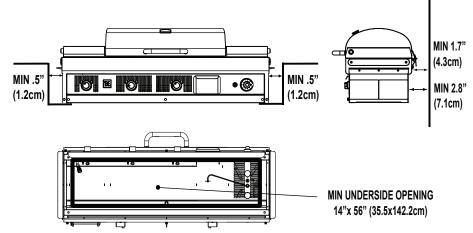
- 1. In Canada, this appliance must be installed in accordance with the local code and the relevant CSA standards: CSA-B149.1 Natural Gas and Propane installation Code
- 2. In the U.S.A., this appliance must be installed in accordance with the local code and the relevant national code:

 ANSI Z223.1/NFPA 54 Latest Edition National Fuel Gas Code and Latest Local Codes where Applicable
- 3. The appliance must be located away from combustible surfaces by at least 1.2cm / 0.5" from each side, and 4.3cm / 1.7" from the rear.

Do not use this appliance under any combustible surfaces!



- MINIMUM CLEARANCE OF UNIT TO COMBUSTIBLE CONSTRUCTION



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

LP GAS CYLINDER PLACEMENT

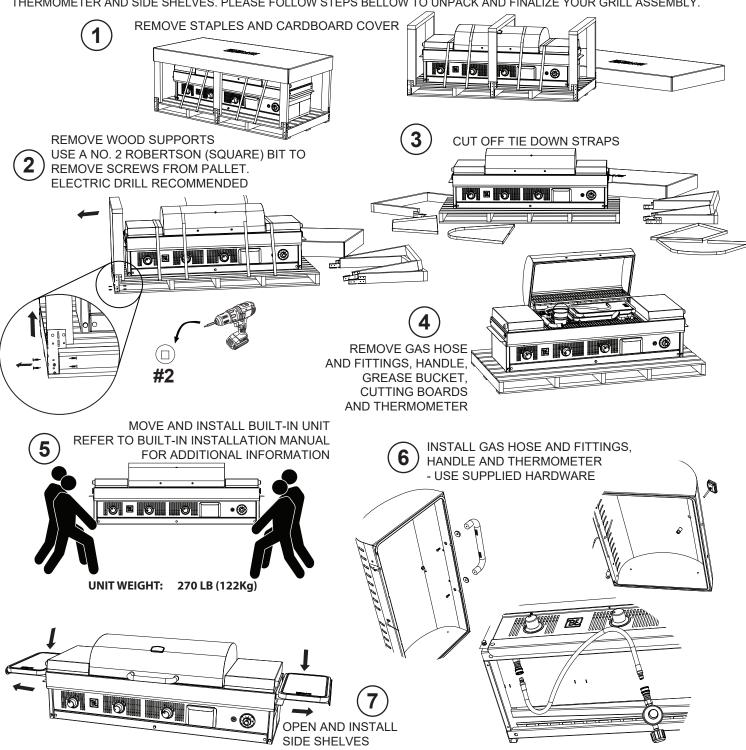
LP gas cylinders must be installed according to assembly instructions. Do not store a spare cylinder under or near this appliance.





SHIPPING AND ASSEMBLY

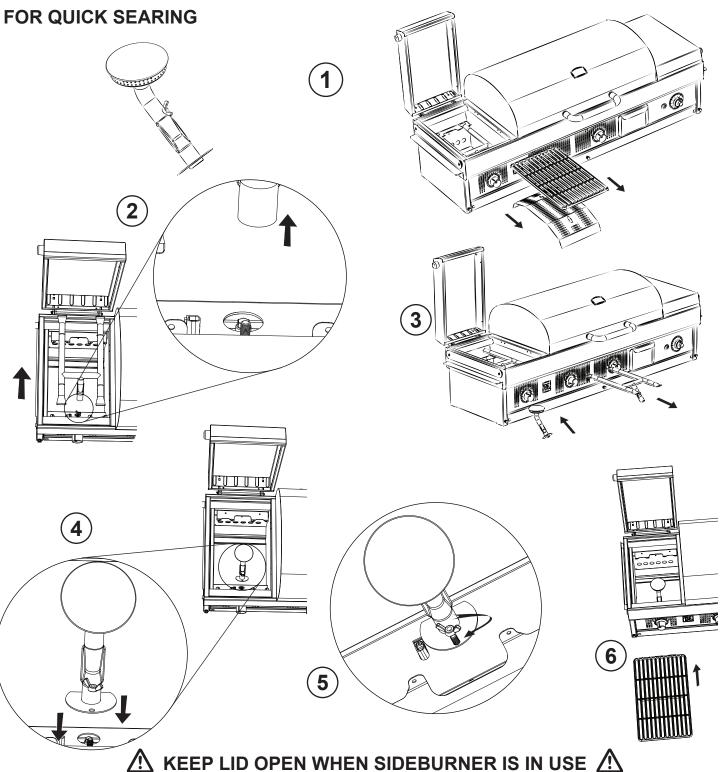
THIS APPLIANCE COMES FULLY ASSEMBLED WITH THE EXCEPTION OF THE HANDLE, GAS HOSE AND FITTINGS, GREASE BUCKET, THERMOMETER AND SIDE SHELVES. PLEASE FOLLOW STEPS BELLOW TO UNPACK AND FINALIZE YOUR GRILL ASSEMBLY.







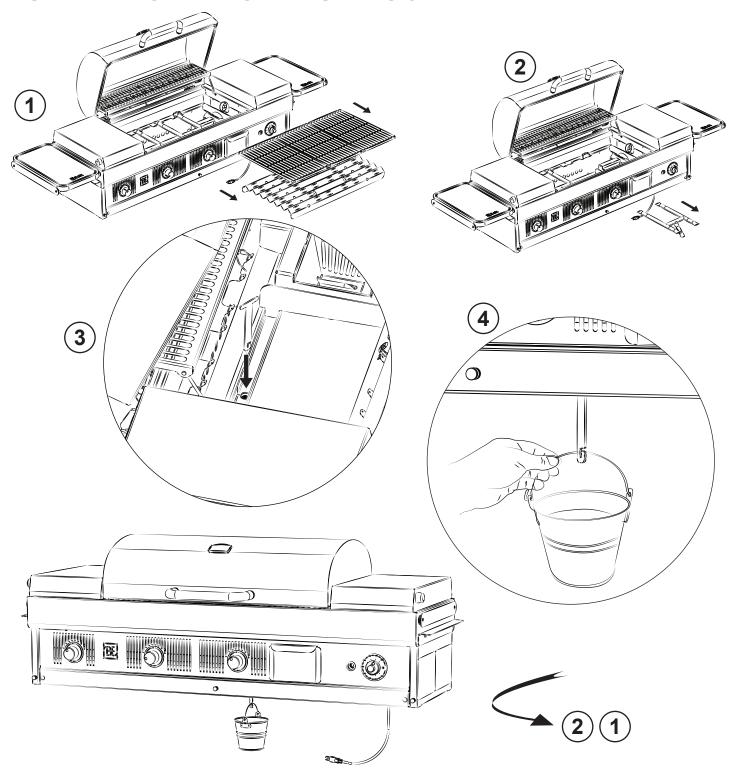
OPTIONAL SEAR STATION CONCENTRATED GAS BURNER





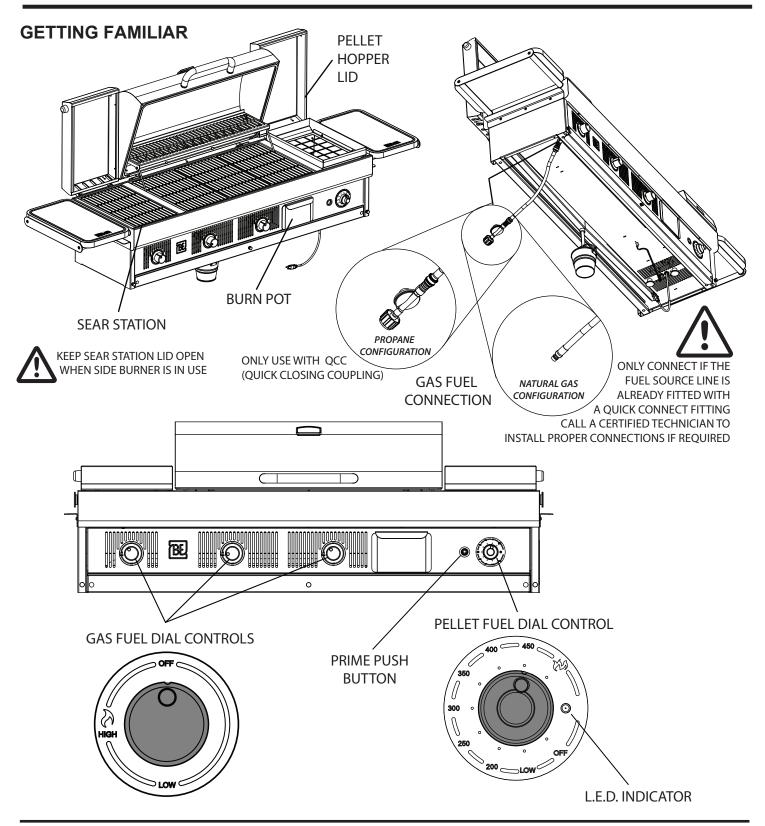


INSTALLING THE GREASE BUCKET



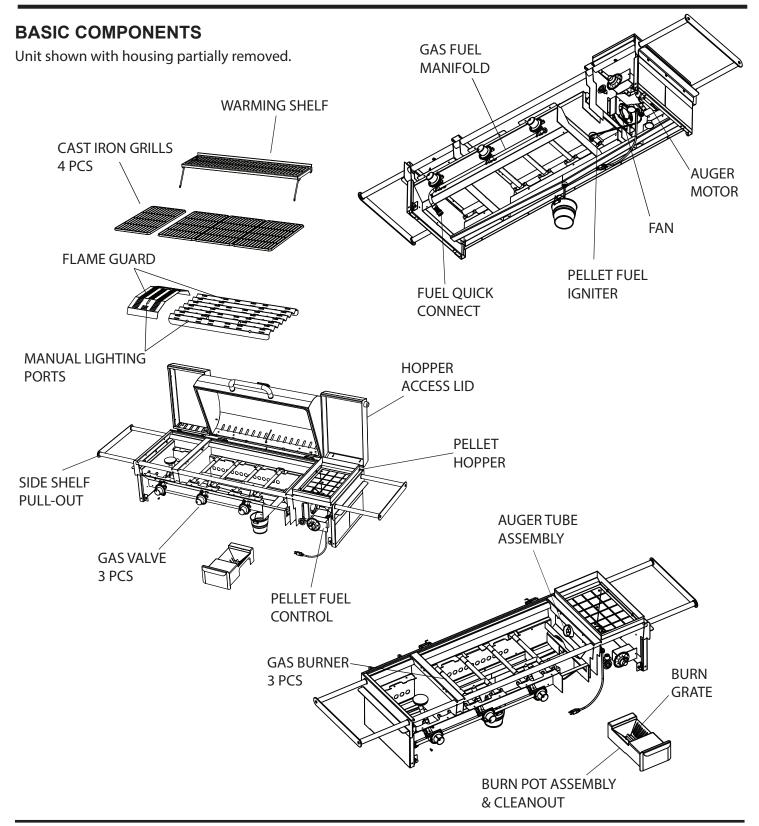
















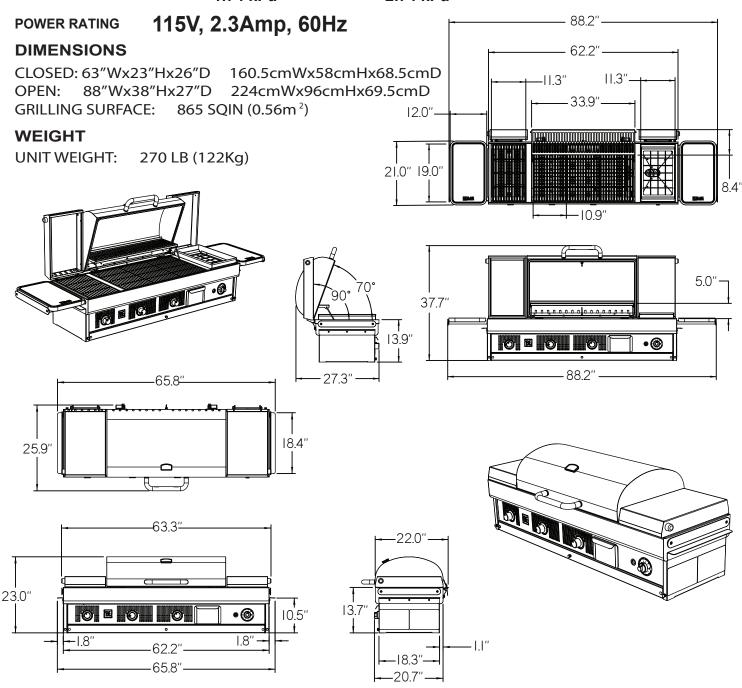
SPECIFICATIONS

BURN RATE 48,000 Btu/hr (L.P. or Natural Gas) PELLET FEED RATE 3.3lb/hr WOOD PELLETS

I4.1 kWh 1,5Kg /hr

SUPPLY PRESSURE 7.0"wc Natural Gas; 11.0"wc Propane (L.P.)

1.74 kPa 2.74 kPa





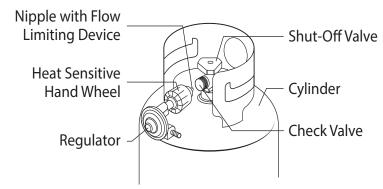
For more information contact:



LP GAS CYLINDER (PROPANE CONFIGURATION)

QCC® - 1 QUICK CLOSING COUPLING

- 1. The Black Earth Hybrid grill is designed to be used with an LP gas cylinder equipped with the QCC®-1 Quick Closing Coupling system.
- 2. The QCC®-1 system incorporates safety features required by the American National Standards Institute (ANSI) and the Canadian Standards Steering Committee.
 - Gas will not flow until a positive connection has been made.
 - When activated, a Flow Limiting Device will limit the flow of gas to 10 cubic feet / hour.
 - A thermal element will shut off the flow of gas between 240° and 300° F.



3. The LP Gas Cylinder is not included with the Gas Grill.

Be sure to purchase one with the QCC® valve. This valve is recognized by the external threads on the inlet port of the valve. QCC® equipped cylinders are available from your Gas & Pellet Grill Dealer.

WARNING:

Any attempt to connect the regulator, by use of adapters or any other means, to any other valve could result in damage, fire or injury and may negate the important safety features in the QCC°-1 system.

SPECIFICATION

- 1. All LP gas cylinders used with this appliance must be constructed and marked in accordance with the Specifications for LP Gas Cylinders of the U.S. Department of Transportation (D.O.T.) or the National Standard of Canada, CAN/CSA-B339, Cylinders, Spheres and Tubes for Transportation of Dangerous Goods; and Commission, as applicable.
- 2. The LP gas cylinder used for this appliance must not have a capacity exceeding 20 lb. (9 kg).
 - Approximately 18" (46cm) high and 12" (31cm) diameter
- 3. All LP gas cylinders used with this appliance should be inspected at every filling and re qualified by a licensed service outlet at the expiry date (10 years), in accordance with the DOT (USA) and Canadian Transport Commission (Canada) codes for LP Gas Cylinders.
- 4. All LP gas cylinders used with this appliance must be provided with a shutoff valve terminating in a cylinder valve outlet No. 510, specified in the Standard for Compressed Gas Cylinder Valve Outlet and Inlet Connection (USA) ANSI/CGA-V-1-1977 (Canada) CSA B96.
- 5. The cylinder supply system must be arranged for vapor withdrawal.





- 6. The cylinder must include a collar to protect the cylinder valve.
- 7. The cylinder must be installed as per assembly instructions.
- 8. Never fill the cylinder beyond 80% full. A fire causing death or serious injury may occur.
- 9. The cylinder valve must include a safety relief device having direct communication with the vapor space of the cylinder.

HANDLING

- Government regulations prohibit shipping full LP gas cylinders. You must take your new cylinder to a LP gas dealer for filling.
- 2. A filled LP gas cylinder is under very high pressure. Always handle carefully and transport in the upright position. Protect the valve from accidental damage.
- Do not tip the LP gas cylinder while connecting it to the regulator. Fasten the cylinder securely during transport, use and storage.
- 4. If the cylinder is tipped after it is connected to the regulator, shut off the gas, disconnect the regulator and have it checked before using it again.

STORAGE

- 1. Store the LP gas cylinder outdoors in a well-ventilated place.
- 2. Do not store the LP gas cylinder in direct sunlight, near a source of heat or combustion.
- 3. If you intend to store the grill indoors, disconnect and remove the LP gas cylinder first. Disconnected cylinders must have a dust cap installed and must not be stored in a building, garage or any enclosed area.
- 4. Keep out of the reach of children.
- 5. When the LP gas cylinder is connected to the gas grill, the gas grill and LP gas cylinder must be stored outside in a well-ventilated place.

OPERATION

- 1. Never connect your gas grill to an LP gas cylinder without the regulator provided, and **NEVER TO AN UNREGULATED LP GAS SUPPLY.** The regulator supplied with the barbecue must be used.
- 2. Always leak test the LP gas cylinder to regulator connection when connecting the LP gas cylinder to the appliance. See "Leak Testing." (page 16)
- **3. Do not** operate appliance if the smell of LP gas is present. Extinguish all flame and determine source of LP gas before proceeding. **Do not** ignite the appliance until the LP gas leak has been found and sealed.
- 4. Always shut off LP gas cylinder valve when the appliance is not in use.

OPD EQUIPPED CYLINDER

OVERFILL PREVENTION DEVICE

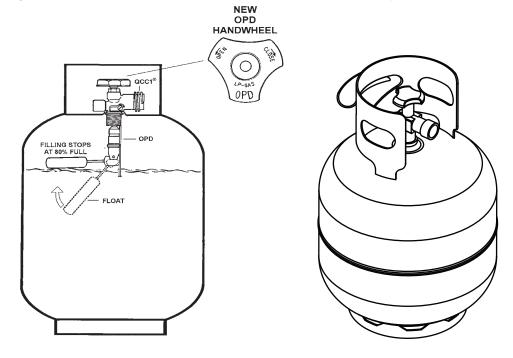
- The standard for outdoor gas appliances, ANSI Z21.58/ CAN/CGA-1.6, requires that appliances be used with cylinders equipped with an Overfill Prevention Device (OPD).
- The OPD is designed to reduce the potential for the overfilling of propane cylinders, thus reducing the possibility
 of relief valve discharges of raw propane. The OPD causes a slower purge/ fill operation. Some consumers
 have been advised by filling stations that these cylinders are "defective." This is not a defect.
- 3. New OPDs coming onto the market have technology that allows for much greater BTU outputs which will decrease the amount of time it takes to purge a cylinder.





IDENTIFICATION

To identify these cylinders, the OPD handwheel has been standardized to the shape shown.



HOSE & REGULATOR

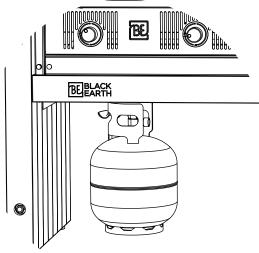
- 1. Propane configuration models are equipped with a hose and regulator with a QCC®-1 Quick Closing Coupling.
- 2. The QCC® coupling contains a magnetic Flow Limiting Device which will limit the flow of gas should there be a leak between the regulator and the appliance valve. This device will activate if the cylinder valve is opened while the appliance valves are open. Be sure the appliance valves are off before the cylinder valve is opened to prevent accidental activation.
- 3. The QCC° coupling incorporates a heat sensitive hand wheel that will cause the back check module in the QCC° cylinder valve to close when exposed to temperatures between 240° and 300°F. Should this occur, do not attempt to reconnect the hand wheel. Remove hose/regulator assembly and replace with a new one.
- 4. The pressure regulator is set at 11 inches WC (water column) and is for use with LP gas only. The hose and hose couplings comply with CGA Standard CAN 1.83. No modifications or substitutions should be attempted.
- 5. Protect the hose from dripping grease and **do not allow the hose to touch any hot surface**, including the base housing of the barbecue head.
- 6. Inspect the seal in the QCC[®] cylinder valve when replacing the LP gas cylinder or once per year whichever is more frequent. Replace the seal if there is any indication of cracks, creases, or abrasion.
- 7. Inspect the hose before each use. If the hose is cracked, cut, abraded or damaged in any way, the appliance must not be operated.
- 8. For repair or replacement of the hose/regulator assembly, contact customer service.



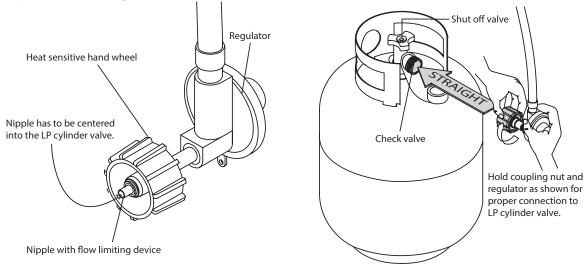


CONNECTING YOUR GAS CYLINDER

- 1. Be sure cylinder valve and appliance valves are "OFF."
- 2. Place and secure full LP gas cylinder under Built-In Grill in stand's designed tank storage location. Black Earth Built-In Wood Stand shown as example in drawing below.



3. Center the nipple in the cylinder valve and hold it in place. Using other hand, turn the hand wheel clockwise until there is a positive stop. Do not use tools. Hand tighten only. When making the connection, hold the regulator in a parallel with the cylinder valve, so as not to cross thread the connection.



- 4. Leak test connections. See "Leak Testing." (page 16)
- 5. Refer to lighting instructions. To avoid activating the Flow Limiting Device when lighting, open cylinder valve slowly with the appliance valves off. If the Flow Limiting Device is accidentally activated, turn off cylinder valve and appliance valves, wait 10 seconds to allow the device to reset, open cylinder valve slowly, then open the appliance valve.

DISCONNECTION

Always close LP cylinder valve and remove coupling nut before moving cylinder from specified operation position.





LEAK TESTING

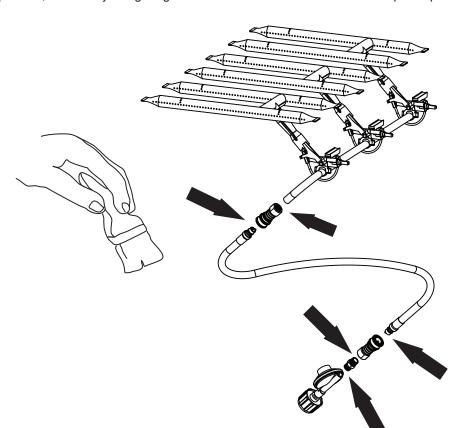
All factory-made connections have been rigorously tested for gas leaks. However, shipping and handling may have loosened a gas fitting.

AS A SAFETY PRECAUTION:

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

TO TEST FOR LEAKS:

- 1. Extinguish any open flame or cigarettes in the area.
- 2. Be sure that cylinder valve and gas grill valves are "OFF."
- 3. Connect LP gas cylinder. See "Hose and Regulator."
- 4. Prepare a soap solution of one part water, one part liquid detergent.
- 5. With a full gas cylinder, open cylinder slowly.
- 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 "shut-off" 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.







GAS BURNERS CLEANING AND MAINTENANCE

Always keep grill area clear and free from combustible materials, gasoline and other flammable vapors and liquids. Do not obstruct the flow of combustion and ventilation air.

Visually check burner flames every time you light up your gas and pellet grill.

Over time the performance of your grill can diminish if has not been maintained properly. Low temperatures, uneven heat, and food sticking to grates are all possible side effects of poor grill cleaning and conditioning.

A simple monthly maintenance plan is an easy and inexpensive way to keep your BlackEarth Hybrid grill in shape.

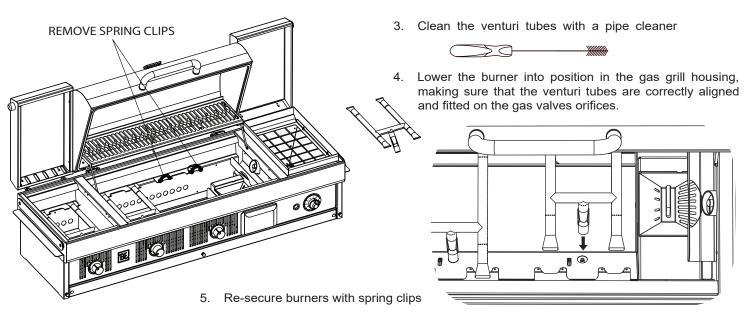
- •Wipe outside and inside of the grill lid with a paper towel and cleaner
- •To clean grill parts use a mild dish detergent and warm water.
- •Cleaning a cook box may seem tricky, but it's actually simple and can have a big impact on the way your grill performs.

Disconnect the Power Cord! Turn Off Gas at the Source!

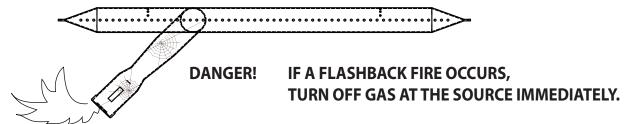
When your grill is completely cool, remove your Cast Grids and Flame Guard. Remove Gas Burners as shown bellow. Using a stiff, nonmetallic tool, whipe up all excess grease and debris from inside the cook box. Inspect and clean Gas Burners (Venturi Tubes):

- 1. Turn off gas at the source by closing the propane cylinder valve or gas valve for natural gas units.
- 2. When grill is cool, remove cast grills and flame deflector to access burners.

 Remove and save spring clips. Proceed to lift the burners from the gas grill housing.



Always keep venturi tubes clean. Blockages in the venturi tubes caused by spiders, insects and nests can cause a flashback fire. In fact, 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.





For more information contact:



GAS BURNERS LIGHTING INSTRUCTIONS



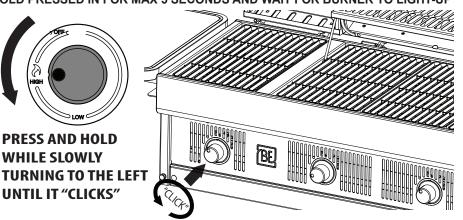
- 1. READ ALL PREVIOUS CHAPTERS BEFORE LIGHTING.
- 2. OPEN LID DURING LIGHTING
- 3. IF IGNITION DOES NOT OCCUR WITHIN 5 SECONDS (GAS), TURN THE KNOBS OFF, CHECK GAS , WAIT FOR 5 MINUTES AND REPEAT PROCEDURE.

GAS BURNERS START-UP:

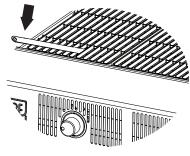




- TURN BOTH GAS TEMPERATURE VALVES (TOP DIAL KNOBS) TO THE OFF POSITION
- MAKE SURE YOUR PROPANE BOTTLE, (L.P. GAS BOTTLE) IS CONNECTED AND IT IS NOT EMPTY. (PROPANE CONFIGURATION)
- OPEN GAS SOURCE VALVE TO FULLY OPEN (COUNTERCLOCKWISE).
- OPEN GRILL LID AND LEAVE OPEN UNTIL COMPLETELY LIT.
- PUSH ONE OF THE GAS DIAL KNOBS IN AND HOLD PRESSED WHILE SLOWLY TURNING TO THE LEFT UNTIL IT "CLICKS" AND VALVE TORCH FIRES-UP.
- HOLD PRESSED IN FOR MAX 5 SECONDS AND WAIT FOR BURNER TO LIGHT-UP









- VISUALLY CHECK THE BURNER FLAME AND MAKE SURE IT IS FULLY LIT.
- TURN OFF GAS SOURCE IMMEDIATELY IF IGNITION DOES NOT OCCUR IN GIVEN TIME FRAME (5 SECONDS).
- AFTER THE FIRST BURNER IS LIT, REPEAT PROCEDURE FOR THE SECOND GAS BURNER.

TO LIGHT BURNER WITH A BBQ LIGHTER OR A PAPER MATCH:

- USING BBQ LIGHTER OR PROVIDED MATCH HOLDER. INSERT LIT MATCH OR LIGHTER TIP THROUGH BURNER PORTS
- THERE IS NO NEED TO REMOVE THE GRIDS OR FLAME DEFLECTOR TO ACCESS THE BURNER PORTS
- PUSH IN THE BURNER CONTROL KNOB AND TURN TO "HIGH".
- BURNER SHOULD IGNITE WITHIN 5 SECONDS.

TO SHUT OFF GAS BURNERS, TURN BOTH VALVES (TOP DIAL KNOBS) TO *OFF*.

TURN *OFF* GAS VALVE AT THE SOURCE. FOR PROPANE CONFIGURATION, DISCONNECT PROPANE BOTTLE AND STORE OUTSIDE THE UNIT IF APPLIANCE IS NOT USED FOR LONGER PERIODS.





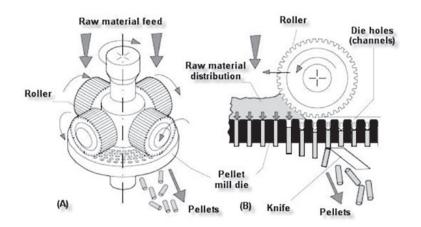
HARDWOOD PELLET FUEL

Wood pellets are made from material that might otherwise be wasted.

This includes sawmill residues -- sawdust, planer shavings, and sometimes even some bark

In some regions, this also includes under-utilized species or tree segments that are not suited for other applications. Our industry turns this waste into clean, renewable, carbon-neutral solid biofuel.

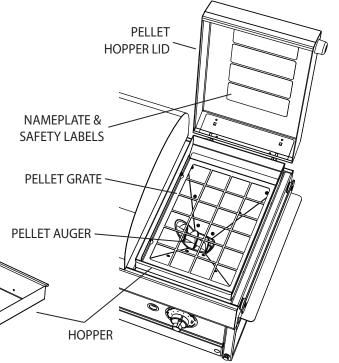
Pellets are produced by compressing the wood material which has first passed through a hammer mill to provide a uniform dough-like mass. This mass is fed to a press, where it is squeezed through a die having holes of the size required (normally 6 mm diameter). The high pressure of the press causes the temperature of the wood to increase greatly, and the lignin plasticizes slightly, forming a natural "glue" that holds the pellet together as it cools.





FILLING THE PELLET HOPPER

Your Black Earth Hybrid BBQ is designed to use pellet fuel. Lift the hopper lid open to expose the pellet grate as shown in the picture on the right. Carefully pour pellets into the hopper through the pellet grate until desired fullness. Cover the grate with the lid after filling making sure the lid closes properly to prevent moisture from entering the hopper.





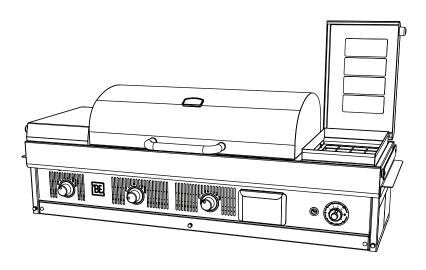
CAUTION!

DO NOT overfill the hopper. DO NOT Remove Hopper Lid to Fill More Pellets

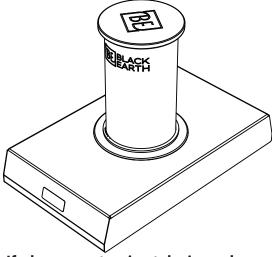




Pellet Hopper and Auger Tube Assembly can be accessed by lifting the right side lid as shown bellow. Pellet lighting information can also be found on the underside of the lid.



A hopper extension kit (shown below) can be purchased directly online at **www.blackearthgrills.com** or from your gas & pellet appliance dealer.



If a hopper extension tube is used, DO NOT remove it or lift the lid unless there are no more pellets in the tube. Be Sure the Cap Makes a Proper Seal After Covering.



FOR USE WITH RECOMMENDED PELLETIZED, ALL NATURAL, HARDWOOD FUEL ONLY.

DO NOT USE SPIRIT, PETROL, GASOLINE OR LIGHTER FLUID FOR LIGHTING OR RE-LIGHTING YOUR GRILL!

WARNING

- DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE LIQUIDS OR VAPORS IN THE VICINITY OF THIS APPLIANCE
- 2. SPARE PELLET BAGS OR OTHER PELLET CONTAINERS
 SHALL NOT BE STORED IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE



WARNING

IF AN UNCONTROLLED FIRE DOES OCCUR: CALL THE FIRE DEPARTMENT DO NOT: try to move appliance, try to smother the fire, or put water on the fire.







In order for the pellet system to operate, pellet fuel has to reach inside the burn grate and be lit.

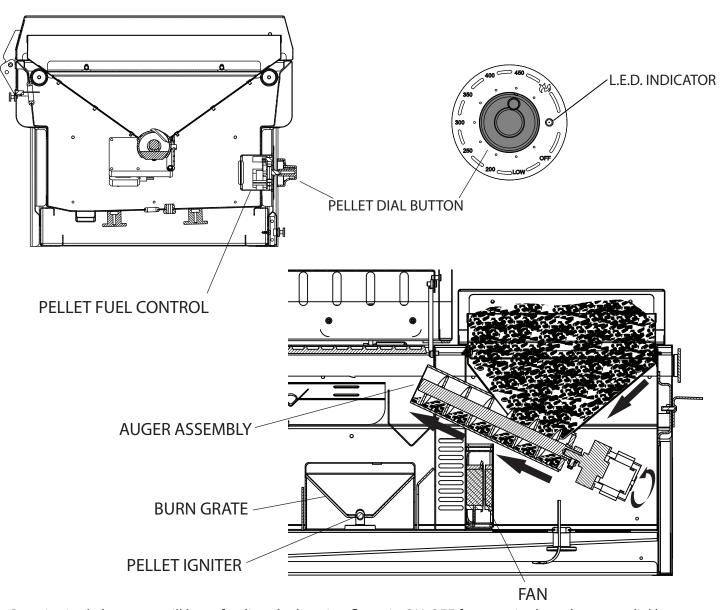
This is an automatic process and will be initiated by the turning of the Pellet Dial Button.

Make sure unit is plugged in and pellet hopper is filled with wood pellets.

Please refer to the previous chapters for safety and details.

The turning of the Pellet Fuel Dial will also start the Combustion & Cooling Fan.

Contact Black Earth Support for more details. BLACK EARTH SUPPORT / 1.855.234.1373/ www.blackearthgrills.com



Once ignited, the auger will keep feeding the burning flame in ON-OFF frequencies based on your dial button setup and temperature control.

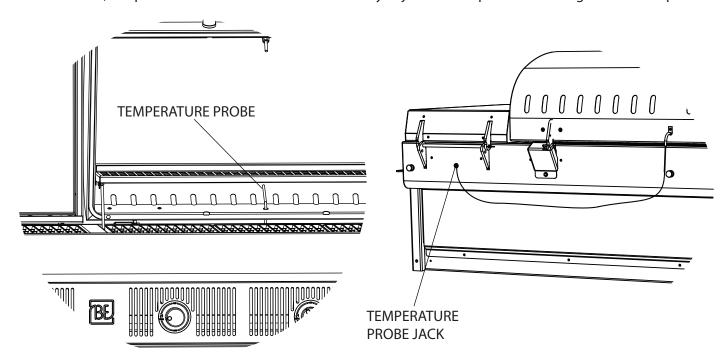




This unit is equipped with a temperature probe located inside the lid as shown in the images bellow.

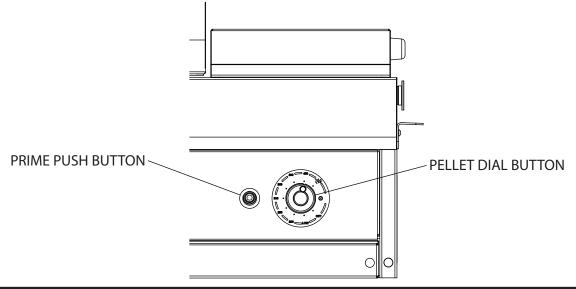
Make sure to plug in the temperature probe jack before operating your unit.

If temperature probe is unplugged or faulty, pellet system will switch from an automatic mode to a manual mode. In manual mode, the pellet controller does not automatically adjust the temperature of the grill to the set point



In order to ensure proper operation of your Grill, you must first allow the Auger Tube to be charged with Pellets. This is required on initial firing or anytime the Grill runs out of Pellets.

To speed up the process this unit is equiped with a prime button located to the left of the pellet dial button.







Initial set-up of your Black Earth Hybrid is the most important step to ensure the efficient and satisfactory operation of your barbecue for many years to come.

Be diligent in your cleaning and maintenance program. Taking care of your grill will add years of life and keep it safe. Use only all natural wood pellets designed to burn in pellet grills.

Ensure your pellet fuel stays free of moisture. Open fuel packages should be stored in a dry location. Unplug the unit and remove the pellets from the hopper if you are not using the grill over longer periods of time. Moist or frozen pellets can clog your auger assembly and make the unit un-operatable.

If this does occur, please contact BLACK EARTH SUPPORT / 1.855.234.1373/ www.blackearthgrills.com

PELLET BURNER LIGHTING INSTRUCTIONS

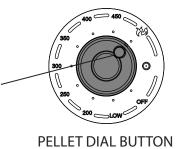


- 1. READ SAFETY INSTRUCTIONS BEFORE LIGHTING.
- 2. OPEN LID DURING LIGHTING
- 3. IF IGNITION DOES NOT OCCUR IN 5 MINUTES (WOOD PELLETS ONLY) THE ASH TRAY MAY HAVE EXCESSIVE ASH FROM THE PREVIOUS COOK. CLEAN OUT THE ASH TRAY, CHECK THE PELLET HOPPER AND TRY AGAIN.

INITIAL FIRING INSTRUCTIONS (OR ANYTIME GRILL RUNS OUT OF PELLETS)

- PLUG GRILL INTO POWER OUTLET (USE ONLY WITH GFCI PROTECTED CIRCUIT).
- USE ONLY EXTENSION CORDS APPROVED FOR OUTDOOR USE RATED FOR THE POWER OF THIS APPLIANCE.
- FILL THE PELLET HOPPER (USE ONLY 1/4" DIA HARDWOOD PELLETS).
- OPEN GRILL LID AND LEAVE OPEN UNTIL COMPLETELY LIT.
- TURN THE WOOD PELLET DIAL (RIGHT-MOST DIAL) ON TO ANY TEMPERATURE SETTING.
- PUSH THE PRIME BUTTON AND KEEP IT PRESSED TILL YOU SEE THE PELLETS AT THE OPENING OF THE AUGER (ABOUT 90 SECONDS)
- RELEASE THE PRIME BUTTON AND TURN THE PELLET DIAL KNOB TO OFF.
- TURN THE WOOD PELLET DIAL KNOB ON TO THE DESIRED TEMPERATURE.
- THE GRILL WILL NOW LIGHT AUTOMATICALLY.

Note: Before cooking your first meal in your Grill, you will need to season the Grill. Turn the Temperature/Dial to HIGH and run for 30 minutes at this setting with the Lid closed. This must be done before cooking any food on the Grill.







SUBSEQUENT WOOD PELLET START-UP, REGULAR USE (AUGER CHARGED)

- MAKE SURE YOUR BLACK EARTH HYBRID IS PLUGGED INTO A POWER OUTLET (ONLY WITH GFCI PROTECTED CIRCUIT)
- CHECK THE LEVEL OF WOOD PELLETS IN THE PELLET HOPPER, ADD IF NECESSARY.
- OPEN GRILL LID AND LEAVE OPEN UNTIL COMPLETELY LIT.
- TURN THE WOOD PELLET DIAL BUTTON *ON* TO THE DESIRED TEMPERATURE.
- VISUALLY CHECK BURN POT FIRE THROUGH THE FLAME DEFLECTOR OPENINGS.

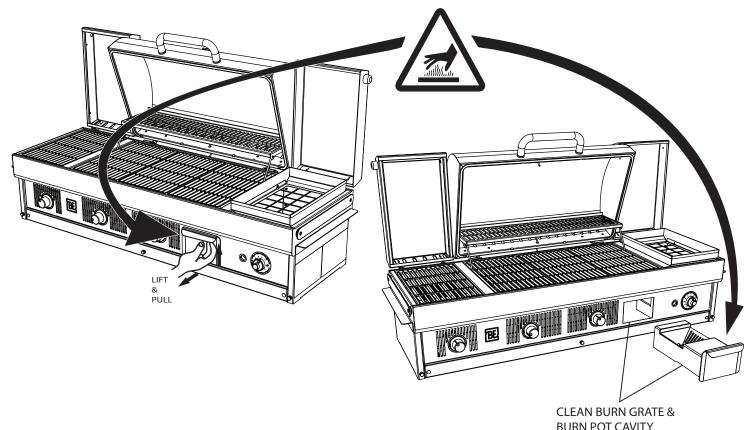
WARNING! If at any time, the Grill fails to light or the fire in the Burn Grate goes out while cooking or smoking, when sufficient pellets are still in the Pellet Hopper, it is important to follow these steps.

Failure to do so may cause a hazardous "over-firing" of your grill due to an excess of unburned pellets in the Burn Grate.

- 1) Turn the Pellet Dial to OFF
- 2) Open the Lid. If the Grill is still hot, allow it to thoroughly cool.
- 3) Remove Burn Pot as shown in the image bellow.

CAUTION! HOT WHILE IN OPERATION! DO NOT TOUCH!

Keep children and clothing away; contact may cause skin burns, see name plate and instructions. Keep furnishings and other combustible materials at a considerable distance away from appliance.



- 4) Clean all unburned pellets and ash from inside the Burn Grate and Burn Pot Cavity.
- 5) Replace the Burn Pot and secure by lifting and pushing all the way in.
- 6) Restart the Grill. Pellets should fall into the Burn Grate and the Ignitor should light up the pellets.
- 7) If this procedure is not successful, contact Black Earth Technical Support

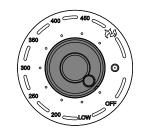




SHUTDOWN CYCLE

TO SHUT OFF PELLET BURNER, TURN DIAL KNOB TO OFF.

YOUR GRILL IS EQUIPPED WITH AN AUTO COOL DOWN FEATURE THAT WILL BURN RESIDUAL PELLETS OFF AND COOL THE UNIT.



DO NOT UNPLUG POWER CORD WHILE APPLIANCE IS IN COOLING MODE!

SIDE SHELVES

Black Earth Hybrid Grill is equipped with two Pull-Out Side shelf supports to accommodate the optional BEH Cutting Boards.

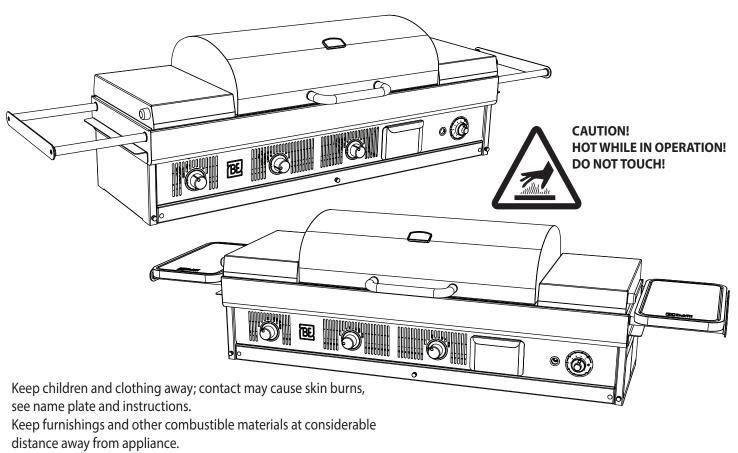
WARNING!

DO NOT LIFT OR CARRY UNIT USING THE EXTENDED PULL-OUT SHELF SUPPORTS.

DO NOT SIT, STEP ON OR OVERLOAD THE BBQ SIDE SHELVES.

SIDE SHELVES SUPPORTS ARE RATED FOR A MAX 40LB LOAD/ SIDE.

SHELF SUPPORTS CAN GET HOT WHILE UNIT IN OPERATION. DO NOT EXTEND WITHOUT APPROPRIATE PROTECTION







OPERATION AND PERFORMANCE

FIRST TIME USE

Before cooking on your gas & pellet grill for the first time, burn it off to sterilize in the following manner:

- With cooking grids installed in position, light the gas section following lighting instructions (see Page 18) and operate the gas grill on "HIGH" for 15-20 minutes. Next, turn all control knobs to the "OFF" position and wait for the unit to cool.
- When gas & pellet grill is cool, thoroughly season cooking grids by spraying or wiping olive or vegetable oil on them. Ensure that the entire surface is generously coated including the corners.

 - For cast iron cooking grids, light seasoning should be done before every usage.
- Light the pellet section following instructions (see Page 22).
 - Turn the Temperature Dial to "HIGH" and operate for 30 minutes at this setting with the Lid closed.
- 4. Next, turn pellet dial to "OFF" position and wait for the unit to cool. See Shutdown Cycle (Page 25).
 - Your grill is equipped with an auto cool down feature that will burn residual pellets off and cool the unit. Fan will keep running for 15 minutes after dial turned to "OFF".
- You are ready to grill. Proceed to "Preheating."

PREHEATING

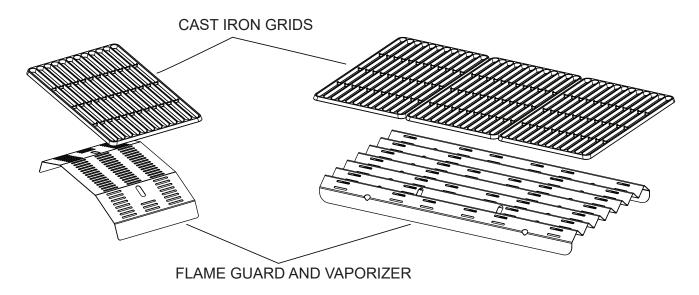
Preheat the grill on HIGH for 10 min. with the lid closed, using propane gas only, wood pellets only or both fuels at the same time. Reduce heat as appropriate for what you are grilling. Firmly but carefully scrub grids with a wire grill brush. Next, brush or spray the grids with vegetable or olive oil to prevent food from sticking.

LID POSITION

The position of the lid during cooking is a matter of personal preference, but the 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.

FLAME GUARD AND VAPORIZER

Your grill is designed for use with the included flame guard and vaporizing system. Do not use lava rock, ceramic briquettes or any other auxiliary vaporization system on top of the existing flame guard.







OPERATION AND PERFORMANCE

COOKING TEMPERATURES

HIGH SETTING: Produces temperatures at the cooking grid of approximately **500-600°F (260-315°C)**. This can be achieved by using the gas system only or the combination of gas and pellet systems. If using only the pellet system, grill can produce maximum temperatures of approximately **350-400°F (175-205°C)**.

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

Use this setting only for fast warm-up or for burning food residue from the cooking grids after cooking.

This setting is also ideal for quickly searing steaks before reducing the temperature. Rarely, if ever, do you use the HIGH setting for extended cooking.

LOW & MEDIUM: Produces temperatures inside the grill of approximately 200 - 350°F (95-175°C).

Use this settings for all smoke cooking, ribs, large cuts of meat, delicate fish and for dough and pastry such as quesadillas.

The Temperature Dial can be changed at any time to increase or decrease the cooking temperature of the Grill.

The HIGH/HIGHER temperature settings are for Grilling and Searing.

The MEDIUM and LOW RANGE temperature settings are for Regular or Slow Cooking.

The LOW RANGE and settings under 200F on the pellet dial are for hot smoking and adding Smoke Flavor to foods being cooked.

COLD SMOKING (PELLET ONLY) - SET PELLET DIAL ON MINIMUM AND UNPLUG TEMPERATURE PROBE JACK (see page 22) This setting produces temperatures inside the grill of approximately 100°F (38°C).

Cold Smoking is done over a much longer period of time, e.g. 12-24 hours, over a smoldering fire (below 120°F). Since foods are held in the temperature danger zone (40-140°F), rapid microbial growth could occur. Therefore, only those meat products that have been fermented, salted, or cured, should be cold-smoked. **Most cold-smoked products should be cooked later to an internal temperature of minimum 160°F before they are eaten.** However, not all cold-smoked foods are treated this way, e.g., smoked salmon and cold smoked mackerel, which are very delicately smoked for a long period of time and remain raw even when eaten.

Most food scientists cannot recommend cold-smoking methods because of the inherent risks and as such, at-risk consumers are encouraged to avoid these foods unless cooked at a later time.

DIRECT GRILLING & SEARING

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 & pellet grill while cooking.
- 3. Bring meat to room temperature prior to grilling. Trim excess fat from meat to aoid "flare-ups" that are caused by dripping grease.
- 4. Pre-heat the gas&pellet 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. 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.

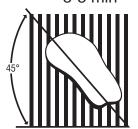
Finally, flip the steak again.

3-5 min

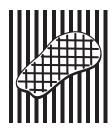
3-5 min

3-5 min

3-5 min









For more information contact:



OPERATION AND PERFORMANCE

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. Convection cooking is achieved by using the combination of pellet and gas grilling or pellet grilling only. Lid must be closed. Convection Fan, will circulate the hot air and smoke inside the closed lid, allowing a uniform heat and smoke penetration of the meat. Close attention must be paid to avoid the risk of grease fire. Remove and clean drip trays before every cooking. Before placing the meat on the grids, baste the meat with vegetable oil. This will enhance browning on the outside of the meat.

CONVECTION 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

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.
- 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.

HOT AND COLD SMOKING

Hot smoking and cold smoking are two different processes.

Cold smoking is part of a method of preservation that allows meat products to be kept for extended periods.

Hot smoking is a cooking technique that uses heat and smoke to produce ready to eat meat and even some vegetable dishes.

Hot smoking temperatures are well in excess of the Temperature Danger Zone's ceiling of 140° F and is usually used to prepare un-cured fresh cuts of meat that will be served immediately. Sometimes an additional step is used where the meat is shredded, sliced, or pulled and then simmered in sauce. Pulled pork is made this way. The meat is typically seasoned with salt, sugar, and various herbs and spices applied as a marinade, rub, or pump injection and then held under refrigeration for an hour or two but sometimes up to as long as 24 hours to allow the seasonings to aromatize and flavor the meat.

Chicken, ribs, and heavy cuts such as beef brisket, pork butts, and pork loins are good choices for hot smoking.

The key to successfully hot smoking meats is temperature and duration, "Low and Slow" as they say.

A cooking temperature range of between 190° F and 250° F is used depending upon the kind of meat being smoked.

Poultry is usually cooked at the higher end while beef and pork cuts cook best at the mid to lower end of the range.

Cold smoked meats are or should always be cured with a sodium nitrite or sodium nitrate cure.

Depending on the method of curing, some products can be kept safely for months or even years without refrigeration.

Ham, bacon, salami, summer sausage, and smoked sausage are some examples of cold smoked meats.

Cold smoked meats may be smoked for up to several hours or even days and are almost always smoked at temperatures **between 90°F** and 120°F, well within the Temperature Danger Zone. It is for this reason these products must be always cured prior to cold smoking. For more details and diverse recipes, please consult our website at www.blackearthgrills.com.

RECIPE SAMPLE (PORK RIBS)

Pre-heat the grill using gas burners for 10 minutes on "HIGH" dial settings.

Turn gas burners off, and turn pellet control dial at 250F.

Coat your pork ribs with your favorite rubs and place them on the grill. Keep bone side down.

Maintain temperature at 250F for one hour.

Remove ribs from grill and wrap individual cuts in aluminum foil. Add a few ounces of apple juice in each package.

Place packages back on the grill and turn the gas burners on to low. Shut the pellet control dial off and cook ribs for an extra hour. Remove the ribs from the foil and place them back on the grill. Coat with a thin layer of your favorite sauce.

Cook for approximately 15 more minutes or until sauce has caramelized and the rib is ready to serve. Enjoy!



For more information contact:



MAINTAINING YOUR GRILL

CARBON MONOXIDE

WARNING! Follow these guidelines to prevent this colorless, odorless gas from poisoning you, your family or others.

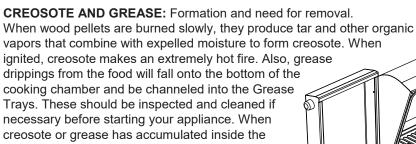
- Know the symptoms of carbon monoxide poisoning: headache, dizziness, weakness, nausea, vomiting, sleepiness and confusion. Carbon monoxide reduces the blood's ability to carry oxygen. Low blood oxygen levels can result in loss of consciousness and death.
- See a doctor if you or others develop cold or flu-like symptoms while cooking or in the vicinity of this Grill. Carbon monoxide poisoning, which can easily be mistaken for a cold or flu, is often detected too late.
- Alcohol consumption and drug use increase the effects of carbon monoxide poisoning.
- Carbon monoxide is especially toxic to mother and child during pregnancy, infants, the elderly, smokers and people with blood or circulatory problems, such as anemia or heart disease.

GREASE FIRES

DANGER! Grease fires are caused by not properly maintaining the Grill and overheating your grill for extended periods of time. In the unlikely event of a grease fire while cooking, turn all dials to OFF. Shut off gas to the appliance and carefully remove food from your grill. Use gloves and tools. Close lid until fire is completely out.

Do not use water to extinguish the fire! Wait until appliance has completely cooled before cleaning and restarting.

Keep away and immediately Call Fire Department if fire goes out of control.



burning chamber, it should be removed to reduce the risk of grease fires. We recommend cleaning these locations regularly.

CLEANING INSIDE COOKING CHAMBER

- 1. Disconnect the Power Cord.
- Turn off gas by closing the propane cylinder valve
- When grill is cool, remove cast grills and flame deflector to access burners. Remove and save spring clips.

- Clean grease bucket from pellet sides of the appliance
- Clean creosote and all grease deposits. Scrape accumulation using a stiff, nonmetallic tool. Wipe up remaining grease residue with paper towels or disposable rags.
- Re-secure burners with spring clips making sure that the venturi tubes are correctly aligned

Proceed to lift the burners from the gas grill housing.

Re-place flame guard, cast iron grids and grease trays





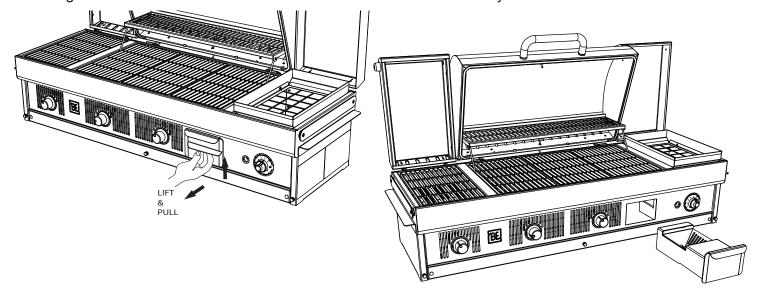
MAINTAINING YOUR GRILL

CLEANING THE ASH FROM INSIDE AND AROUND THE BURN POT

DANGER! Turn Gas Valve OFF and disconnect the Power Cord. **WARNING!** Make sure that the Grill is **COLD** before cleaning the ash.

WARNING! Disposal of ashes should be done only per the following instructions.

Excess ash in the Burn Grate may cause your fire to go out, especially in the low settings of the pellet dial. The Burn Grate should be inspected occasionally, and cleaned to remove the ash buildup. Cleaning the ash from in and around the Burn Grate should be done only when the Grill is **COLD**.



Remove the Burn Pot as shown in the image above. Much of the ash outside of the Burn Pot can be swept to the open area using a small whisk broom.

Dispose of the ashes per the following instructions.

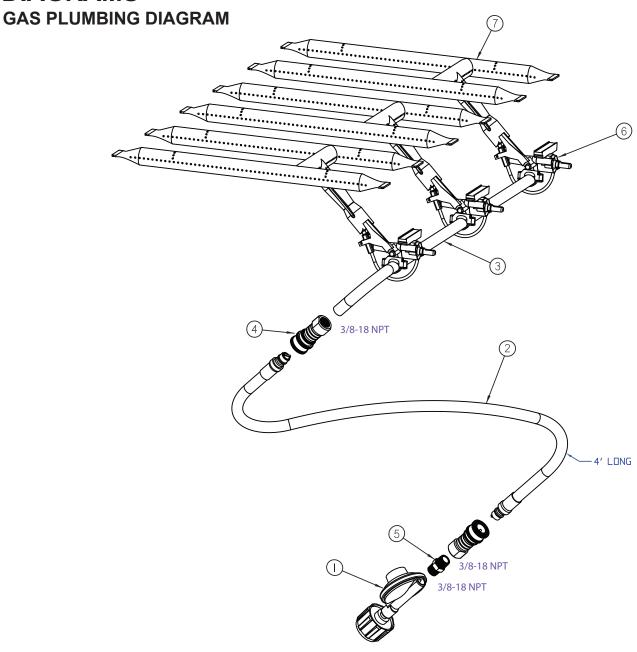
DISPOSAL OF ASHES:

WARNING! Ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal. When the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.





DIAGRAMS

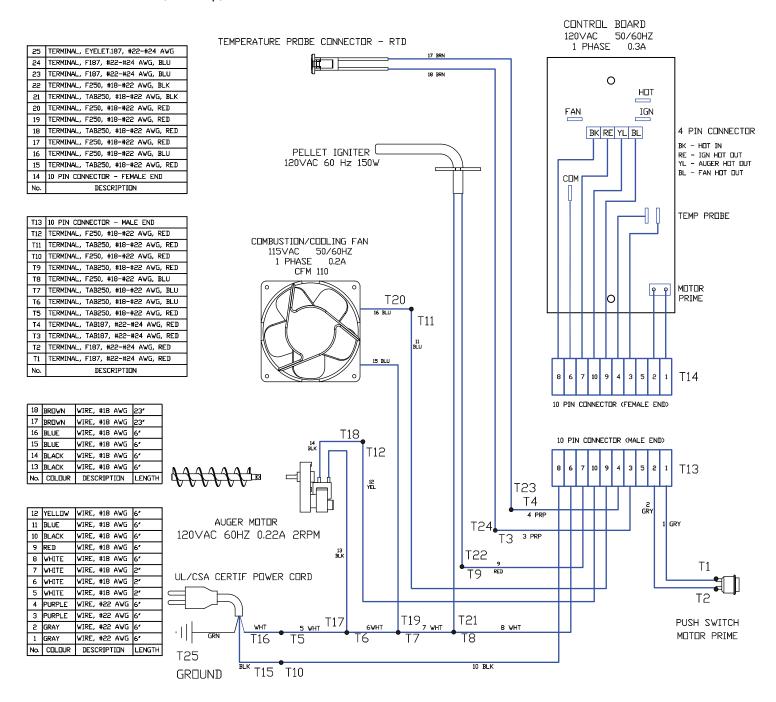


7	B7-2117	GAS BURNER - HYBRID	3
6	B7-2007	GAS VALVE GL-3B 45	3
5	B7-2204	NIPPLE 3/8" NPT	1
4	B7-2201	GAS QUICK DISCONNECT	2
3	B7-2371	GAS MANIFOLD - 3 VALVES	1
2	B7-2202	GAS HOSE MALE-MALE	1
1	B7-2203	GAS REGULATOR	2



WIRING DIAGRAM

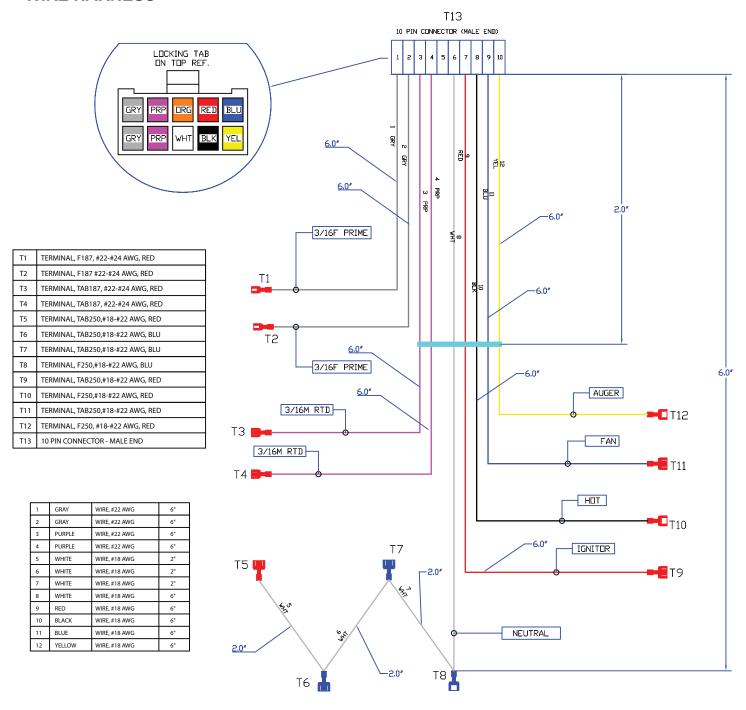
POWER RATING: 115V, 2.3Amp, 60Hz







WIRE HARNESS





WARRANTY

LIMITATION AND EXCLUSIONS

Black Earth Grill has the following limitations to its warranty:

- 1. This limited warranty is non-transferable and becomes void if used for commercial or rental purposes.
- 2. This warranty applies only when barbecue is used in noth America.
- 3. Warranty is in lieu of all warranties, expressed or implied, and all other obligations or liabilities related to the sale or use of its grill products.
- 4. Black Earth Grills shall not be liable for incidental, consequential, special or contingent damages resulting from its breach of this written warranty or any implied warranty.
- 5. Black Earth Grills will repair or replace parts, at its option, proven defective under normal use and service and which on examination during the applicable warranty period. (See exclusions to warranty coverage below)
- 6. Shipping and handling charges are the responsibility of the original consumer-purchaser for all in/out of warranty part orders.
- 7. This limited warranty will not reimburse you for the cost of any inconvenience, food, personal injury or property damage.
- 8. Black Earth Grils does not authorize any person or company to assume for it any other obligation or liability in connection with the sale, installation, use, removal, return, or replacement of its equipment; and no such representations are binding on Black Earth Grills.
- 9. Visit us at www.blackearthgrills.com to register your product on line. The purchaser shall retain a copy of the purchase invoice for future claims.

Black Earth Grills excludes from its warranty the following:

- a. Accidental damage, abuse, tampering or misuse, misapplication, vandalism, careless handling,
- b. Damages caused by improper assembly or installation, alteration, clearance to combustible materials, and failure to follow proper usage, safety and maintenance instructions presented throughout this manual,
- c. Failure to perform regular maintenance, safety checks and service, including but not limited to removal of insects from venturi tubes, resulting in a flash-back fire, damage caused by grease fires, flare-up fires or fires resulting from improper connection of hose to gas source,
- d. Part failure due to lack of cleaning and maintenance, part failure due to use of improper cleaning products, such as any corosive cleaners, abrasive and chemical cleaners, porcelain oven cleaner and other chemical cleaners which can cause damage to surfaces,
- e. Normal wear and tear, chipping and scratching on painted or surfaces, dents, discoloration caused by environment or heat, surface corrosion, rust or rust perforation, chemical exposure in the atmosphere and other damages which result with normal use and are otherwise uncontrollable by the manufacturer.

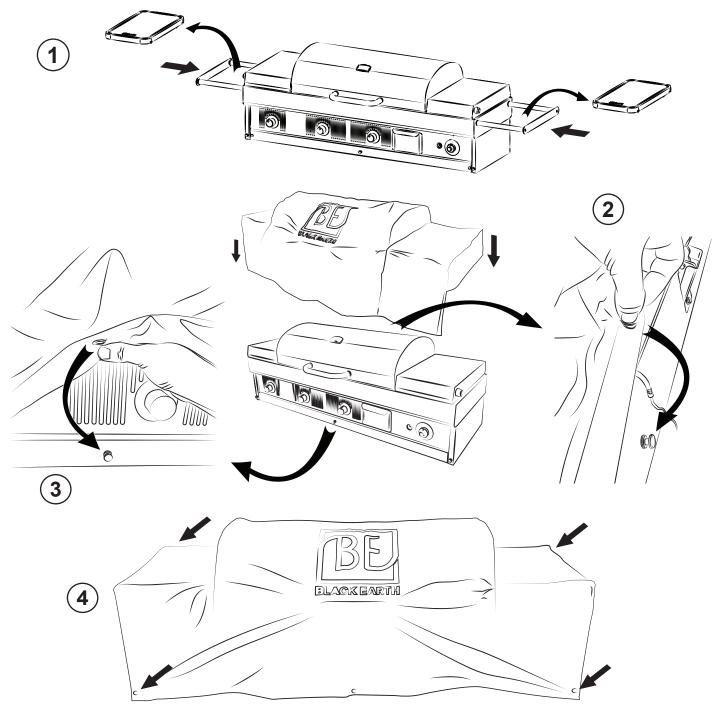
There are no other express warranties except as set forth herein and any applicable implied warranties of merchantability and fitness are limited in duration to the period of coverage of this express written limited warranty.





BUILT-IN GAS & PELLET BARBEQUE OWNER'S MANUAL - ANNEX -

SUMMER COVER INSTALLATION GUIDE



COMPLETE STEPS IN REVERSE TO REMOVE COVER

NOTE: SLOTS MAY BE STIFF FOR THE FIRST FEW INSTALLATIONS UNTILL STRETCHED TO FIT YOUR GRILL

