



GRILLWERK

KENiA

Instruction Manual

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KENIA

Congratulations on the purchase of your Kenia designed and manufactured by Grillwerk! The Kenia should meet all your barbecue expectations, give you a lot of pleasure and last a lifetime. In order to achieve all this, please read this manual carefully, even if the Kenia seems to be self-explanatory.



1. Warnings

First of all, you must be aware that the Kenia heats up to much higher temperatures than conventional barbecue devices because of the very efficient ventilation of the charcoal grate! Therefore, use coal sparingly and fill the charcoal grate only up to about 1/3 of its height. When you put the hood on - which should be avoided during the ignition process - you must always make sure that the temperature does not exceed the maximum range of the thermometer of 350° C. The hood can deform at higher temperatures and make it unusable. After cooling deformations disappear and the original shape is restored.

Please always follow the safety instructions according to DIN EN 1860-1:

- The grill must be placed on a safe, level surface before use.
- ATTENTION: This grill becomes very hot and must not be moved during operation!
- Do not use in closed rooms! This grill may only be used outdoors in well-ventilated places.
- Do not operate the grill in closed and/or habitable rooms, e.g. buildings, tents, caravans, mobile homes, boats. There is danger to life due to carbon monoxide poisoning.
- ATTENTION! Do not use spirit or gasoline for lighting or relighting! Only use ignition aids according to EN 1860-3!
- ATTENTION! Keep children and pets away!
- Do not put food on the grill until the fuel (charcoal) is covered with a layer of ashes!
- Do not move the grill until the fuel (charcoal) has completely cooled down!
- Let the charcoal cool down for at least 12 hours before disposing charcoal residuals and ashes.

2. Unpacking and assembly

The Kenia is delivered in a wooden no-nail box on a one-way pallet. Firstly, please check there is no visible external transport damage. If so, please contact us immediately at info@grillwerk.eu, stating your name, address and the serial number of the grill. The serial number is also noted on the outside of the no-nail box. Then remove the packaging and dispose it properly.

Your Kenia grill is basically completely assembled when delivered. You only have to remove the entire transport protection and mount the crank for height adjustment.

The standard delivery includes

- one Kenia grill device, consisting of the individual parts as illustrated on the explosion photograph below,
- the tools for lifting the charcoal grate and
- a 3 mm hex-wrench for the installation of the crank.

A waterproof cover is available as accessory at www.grillwerk.eu.

First mount the crank by pushing it onto the shaft of the height adjustment and tighten the grub screw with the hex-wrench supplied.

Then move the crown upwards by turning the crank clockwise until it stops. Now remove the transport protection as follows:

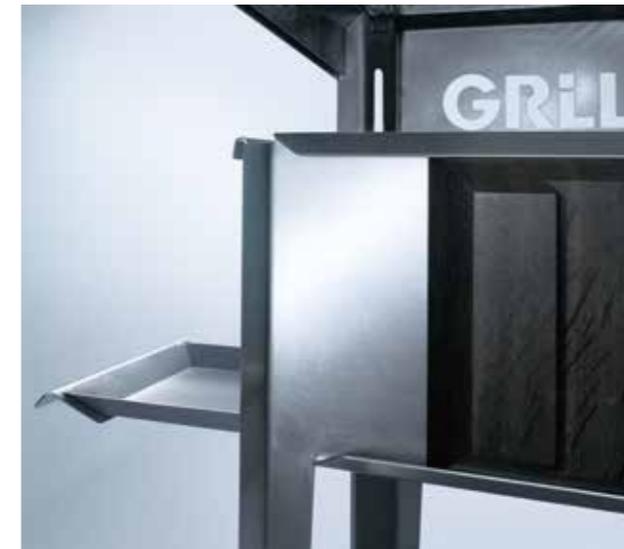
Remove the duct tape that secures the ash drawer and take out the ash drawer. Then loosen the fastenings of the cooking grate and remove it.

Now lift out the charcoal grate with the tools provided. To do this, you have to tilt it - seen from the front in front of the grill - diagonally to the side and lift it out at the top. The inclined position is important to get past the support points of the cooking grate.

You can now remove the cardboards on which the coal grate rests. Then lift up the ash hopper and again remove the cardboard on which it rests.

Then replace the charcoal grate in the opposite way and push the ash drawer back into the ash hopper.

Now the Kenia is ready for use. But before starting, you should read on and familiarize yourself a little more with the functions of the Kenia.





1. Hood with handle, thermometer and ventilation controller
2. Charcoal grate
3. Ash hopper/diffuser with ash drawer
4. Chassis with finished height adjustment including crown
5. Crown with back
6. Ash drawer
7. Cooking grate
8. Wooden ventilation slide

3. The Kenia and its functions in detail

Except for the charcoal grate and a few individual parts, the Kenia is made entirely of high-quality stainless steel.

The chassis supports the ash hopper with ash drawer, the charcoal and cooking grate. The crown with back and height adjustment mechanics are mounted to it. The ash hopper collects the ashes and transfers them into the ash drawer. At the same time, the ash hopper also serves as a diffuser that allows air oxygen to pass through the charcoal grate at equal velocity in order to flow evenly over and against the glow. This creates a uniform temperature profile over the entire cooking grate.

The pre-installed height adjustment mechanics is based on the commonly known scissors principle. It is self-locking, heat-resistant and infinitely variable.

After removal of the transport protection it becomes obvious, all parts lie fixed on each other stabilized only by gravity and can easily be removed when the crown is cranked up.

The charcoal grate is made of carbon steel and not stainless. Unlike stainless steel, certain carbon steel alloys hardly expand under the influence of heat and are therefore the more suitable material for the charcoal grate.

The charcoal grate features wide slots which, in combination with the ash hopper / diffuser, ensure intensive but uniform ventilation of the charcoal from below (no „hotspots“). It ensures the charcoal is getting

red-hot evenly and particularly quickly. Cooking temperatures above 500°C can easily be generated but should be avoided.

The cooking grate has two handles and raised corners that make it easier to put the hood on. It also prevents food from falling off.

You can use the crank handle to move the crown and the cooking grate continuously upwards by about 15 centimeters to set the temperature.

Setting the temperature also works for indirect grilling. If you crank the cooking grate up, the temperature is reduced by up to 80° Celsius.

You use the hood for indirect grilling and generally also as weather protection for the grill. The hood has a „double bottom“ in the upper part, which creates an air cushion below the surface of the hood, limiting the radiation and heat to the top. The clear height between the grill grid and the underside of the hood is about 12 cm. This limits the thickness or height of the food that is cooked during indirect grilling process.

Use the thermometer to measure the temperature inside the hood when the hood is in place. Under the thermometer there is an adjustable ventilation opening with which you can vent the grill when the hood is on.

The slider on the front of the Kenia is used to regulate the air supply to the charcoal grill. The slider is made

of smoked oak and therefore a natural product. The slider can expand in high humidity or when exposed to rain. This can influence the movability. When the slider has reached a residual moisture of around 12% after drying, the phenomenon should disappear. In rare cases, it may happen that the slider warps when exposed to heat and then also cannot be moved as desired. Please inform us in such a case and we will send you a replacement part immediately.

The trolley has four lockable rollers. Please always make sure that the castors are locked and set radial towards the outside of the grill center for a safe stand.



4. And finally – the barbecue starts

No grilling without coal – Not all barbecue charcoal is of the same kind. The use of high-quality charcoal and charcoal briquettes contributes significantly to the desired grilling result.

Charcoal

Barbecue charcoal with the best quality characteristics is made from hardwood species such as beech and oak. „Mixed woods“ burn less well and have a lower carbon content. Charcoal made of softwood also causes undesirable flying sparks, which are caused by the heating of enclosed resin.

Charcoal is made of wood that is heated up in the absence of air. Two different methods are common, either traditional in the so-called charcoal kiln or in an industrial oven. The industrial production is superior to the traditional process in terms of results, but also for environmental reasons. Because higher process temperatures are achieved in the industrial process, more by-products such as acids and tars are burned or extracted during the carbonization process and the carbon content of the end product charcoal is significantly higher. Finally, in the kiln or traditional charcoal process, more by-products are released into the environment.

From a chemical point of view, charcoal differs in the level of carbon content, residual moisture and ash content. The higher the carbon content and the lower the residual moisture, the faster the charcoal is getting red-hot and burns at higher temperatures. However, these factors can also lead to a shorter burning time and a faster (uncontrol-

led) drop in temperature. Both can influence the results as one may lose control over the cooking process.

All in all the lower ash content (white residue) remains a decisive advantage, which does not hinder the heat radiation from the ember during direct grilling and ensures that there is little ash residue overall.

In addition the grain size also plays a role. The smaller the coal pieces are, the larger the specific (reaction) surface area, which in turn means that more carbon reacts with air at the same time and generates more heat. The disadvantage is that during ignition, the supply of air that drives the reaction is hindered by the denser bulk and smaller pieces of coal burn off faster than larger ones.

Charcoal briquettes

Charcoal briquettes consist of charcoal dust which is pressed into shape with binders and other substances. In terms of carbon and ash content, charcoal briquettes are inferior to „natural“ charcoal. However, charcoal briquettes feature a longer burning time and temperature constancy.

DIN-EN 1860-2

In Germany, the minimum requirements for charcoal and briquettes are standardized by the DIN-EN 1860-2 standard as follows

| Test criteria | Requirements Charcoal | Requirements Charcoal briquettes |
|----------------|---|----------------------------------|
| Carbon content | > 75 % | > 60 % |
| Ash content | < 8 % | < 18 % |
| Humidity | < 8 % | < 8 % |
| bulk density | 130kg/m ³ | - |
| Grain size | between 0 und 150 mm max. 10 % > 80 mm at least 80 % > 20 mm max. 7% 0 – 10 mm | max. 10% > 20mm |

Good quality charcoal clearly exceeds the requirements of the DIN-EN 1860-2 standard and achieves carbon contents of over 85% with an ash content of less than 2%. The same applies to good charcoal briquettes.

Burning time and heat

The burning time depends on the type and grain size of the charcoal or briquettes used, the grill used and the amount of air supplied to the charcoal grate. As already noted, it is generally true that charcoal briquettes burn slower than charcoal. Charcoal briquettes are therefore more suitable for slower indirect grilling than for fast direct grilling. Also mixtures of charcoal and briquettes can be the means of choice.

As a guideline, good charcoal on the Kenia is glowing through after about 15 minutes and after reduction of the air supply remains ready for grilling for a good hour, whereby the maximum temperature of 300-500° C is only maintained for the first 30 minutes and then

drops. For charcoal briquettes, these times should be approximately doubled; in addition, the temperature attainable with charcoal briquettes remains below the temperature attainable with charcoal.

Environmental protection

Grillwerk strongly advocates not to use charcoal and charcoal briquettes from non-sustainable forestry, in particular products that originate from rainforest logging.

According to the Federal Statistical Office (Destatis), around 215,000 tons of charcoal were imported to Germany in 2017. The most important supplier countries were Poland (79 000 tons), Paraguay (32 000 tons) and the Ukraine (23 000 tons). According to the WWF, Poland itself imports a lot of charcoal from Nigeria and Paraguay. It can be assumed that the proportion of tropical wood-containing charcoal is

higher than direct imports would suggest. The WWF's 2017 market analysis has confirmed this: 40 percent of the charcoal tested came from tropical or subtropical countries.

Grillwerk therefore recommends the use of charcoal from verifiably sustainable production such as FSC and PEFC certified products. The WWF charcoal market analysis also offers insights to products that should not be purchased.

Product recommendations

Grillwerk particularly recommends products from Profagus (www.profagus.de) and Nero (www.nero-grillen.de). Charcoal and briquettes from these manufacturers exceed the requirements of the DIN standard, come from sustainable production and are FSC or PEFC certified.



¹ https://www.destatis.de/DE/PresseService/Presse/Pressemitteilungen/zdw/2018/PD18_12_p002.html.

² http://www.wwf.de/fileadmin/fm-wwf/Publikationen-PDF/WWF_Holzkohle_Marktanalyse_Deutschland_2017.pdf.

5. How to proceed now

(In the following, the term coal is used synonymously for charcoal and briquettes.)

During and after manufacturing the grill was cleaned thoroughly. Nevertheless, you should heat up the device prior to the first barbecue session and let the coal glow for at least 30 minutes.

First remove the cooking grate and fill the charcoal grate with coal. The necessary amount certainly depends on your barbecue plans.

For standard use, fill the charcoal grate over the entire surface up to about 1/3 of its depth, or about 1.2 kg if you use charcoal. For briquettes, a single layer filling or a quantity of about 1.5kg is generally sufficient. Not more! Due to the strong ventilation of the charcoal grate from below the Kenia heats up much higher than conventional grills and requires very little charcoal. Be aware, that closing the wooden slider will only moderately reduce temperature.

In case you intend to grill indirectly and only sear the food beforehand, much less coal is sufficient (only about 1/3 - 1/4 of the charcoal grate surface).

Now open the wooden slider on the front to let air pass the coal grate for the ignition process.

Then ignite the coal utilizing ignition aids in accordance with EN 1860-3, whereby the lighting-up process is particularly fast when using a liquid grill lighter or paste.

In general, the charcoal will get red hot more quickly if you pile it up a little. A stove shovel, for example, is suitable for this purpose and for the subsequent arrangement of the glowing charcoal.

Do not place the hood on the grill during the ignition process, i.e. when the coal is igniting.

Stainless steel expands under the influence of heat. When using the hood, make sure that the maximum temperature does not exceed 350° C, i.e. the maximum of the thermometer display! The hood can deform at higher temperatures, so that removal from the top or the re-placement becomes difficult. However, such deformations will disappear after the hood cooled down.

When it is covered with a light grey layer of ash the charcoal is ready for grilling. This is usually the case after about 15 minutes if high quality charcoal is used (see above).

At the end of the ignition process, close the slider again. The air supply from the top and external air from the side is usually sufficient. Only if you want to reach particularly high temperatures and grill without hood, leave the slider open.

For direct grilling proceed as usual. Be aware, however, that the Kenia operates at higher temperatures than many other common charcoal barbecues, especially when the cooking grate is at the lowest position. As a rule of thumb, the temperature is suitable for grilling steaks or the like if you can hold your hand over the cooking grate and just count to four before you have

to pull your hand away. If the temperature is too high, crank the cooking grate up a little. Sausages need less heat from the start, you can start with the grill slightly cranked up.

Larger pieces of meat are best cooked „indirectly“ after you have fried them directly and at high temperature. To do this, pile up the charcoal on one side of the grill and place the food on the opposite side. You should also place a fireproof bowl directly on the charcoal grate underneath the food to catch dripping fat and liquids. If you lift up the cooking grate, you can easily add coal or remove the collected liquid that down during the grilling process.





When grilling indirectly, you should always keep the air vent slightly open so that the air can circulate inside the hood. Check the temperature with the thermometer. Avoid peak temperatures for too long. Even frying only requires temperatures not exceeding 250° C. And as described above, the temperature must not exceed 350° C, otherwise the hood may deform.

Depending on the time available, size of the meat piece and „style“, the temperature can be reduced considerably after frying, but should not fall below 80° C. By cranking up the cooking grate, you can reduce the temperature considerably (in a range of approx. 80° C). As the charcoal burns, the temperature slowly decreases over time. You can easily readjust by cranking down the cooking grate.

In the case of medium-sized meat pieces, a combination of direct and indirect grilling works well: After searing it, place the piece on the side on either the cooking grate or in a fireproof bowl. Then put on the hood to reach the desired core temperature.

6. Maintenance

The Kenia is designed for a lifetime of use. In order to enjoy it for that long, you must follow these instructions.

The Kenia, especially the wooden parts, should always be parked under a roof or under the optionally available cover. A longer stay outside on the terrace or in the garden even under open sky does not harm, only in this case the wooden parts should be oiled more often.

Charcoal residues can be removed simply by emptying the ash drawer and occasionally sweeping out the charcoal grate and ash hopper.



To sweep out the ash hopper, you have to lift the charcoal grate out of the grill chassis using the lifting tools supplied. To do this, stand on the back of the grill where the GRILLWERK logo is located. First you crank the crown to the highest position. Take the tools in your hands and insert them into the slots in the charcoal grate. Then turn the tools 90° and check if you have a save position. Lift the charcoal grate in such a way that the corners that face you will be lifted first - in inclined position towards the front. Try to keep this inclined position, as it is easier to lift the grate through the crown without collision. Reinsert the charcoal grate in the reverse order.



Only clean the cooking grate when hot using a commercially available wire brush.

The charcoal grate is deliberately made of carbon steel, as this expands less under the influence of heat than stainless steel. The carbon grate is pre-corroded at the factory. Due to the material thickness of 5mm,

rusting through is not to be feared in the foreseeable future. If you want to prevent any rusting during storage, brush the carbon rust with a wire brush before storage and then oil it with ordinary cooking oil. Before the next barbecue, the grill must be preheated until the oil residue has burned off.

The scissor mechanism should be relubricated with graphite about once a year. To do this, lubricate the shaft at the support points. You can reach them from behind through the Grillwerk logo on the back by cranking the height adjustment up and down. Lubrication using oil or grease can start smoking when exposed to heat.

The oak wood handles should be impregnated with a high-quality wood care oil at least once per grilling season. The same applies to the ventilation slide, but this may only be oiled from the outside, not on the inside facing the grill device as it could heat up and develop smoke.

Cleaning the surfaces: Warm water, washing-up liquid and a soft sponge or cloth are sufficient to loosen light soiling. For coarse soiling such as burnt-in fat and meat juice, first use a commercially available oven spray and remove it with water after it has soaked in. Finally, use a high-quality stainless steel polish (care milk). It is best to use kitchen paper as a cloth. Grease stains are best removed with acetone.

Never clean the Kenia with sharp or granular cleaning agents, as these could leave scratches and sand marks on the surfaces.

Stainless steel discolors when exposed to heat above approx. 200° C (so-called tarnish or tempering colors). The color depends on the temperature (white yellow from 200° C, changing to darker yellow, brown and red tones up to blue and gray tones at temperatures around and above 300° C. Tarnish discoloration is a normal, unavoidable process and not a quality defect. Discoloration in the yellow area can be removed by polishing.

In case of stronger discolorations or other strong traces of use, Grillwerk offers on request a reprocessing against payment, at the end of which - of course depending on the initial condition - an almost new appearance can be restored.

If you do not expose your Kenia regularly to rain and weather, it is important to clean the grill from dust with water from time to time, because otherwise even stainless steel can be corroded by dust.

The grill thermometer does not require any special maintenance or care and is designed for outdoor use. There is a black plug on the back of the housing. If the glass pane inside the thermometer should ever become steamed up with condensation water, remove the plug until the condensation water has evaporated. The function of the thermometer is not affected when the plug is removed.

It is not recommended to remove the height adjustment.

7. Dimensions & weights

Dimensions:

HxWxD = 951x672x461 mm (with trolley);
821x672x461 mm (without trolley)

Cooking surface:

LxW = 515x350 mm

Stroke cooking grate approx. 150mm

Clear height under hood approx. 120mm

Weight (with hood):

- without trolley = 53kg

- with trolley = 63,2kg

Stainless steel 1.4301 / 1-4mm



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