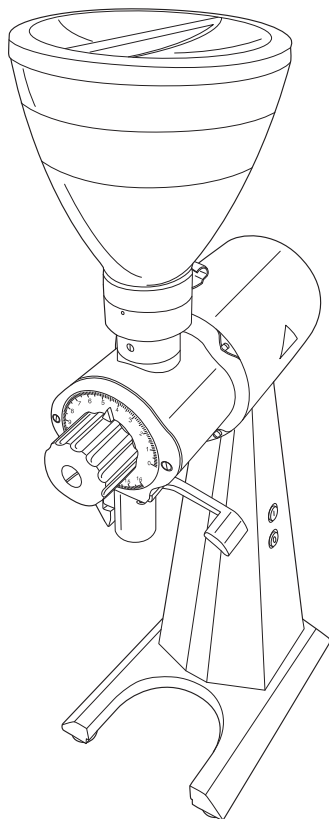


Original instruction manual

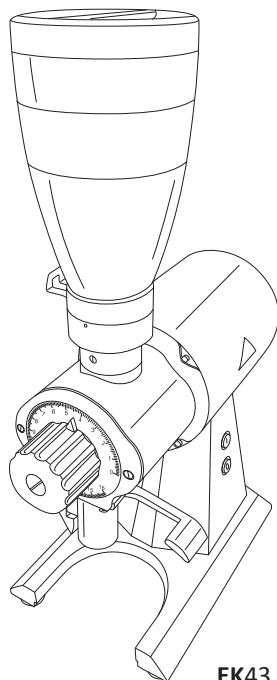


Commercial coffee grinder

EK43 | EK43 S

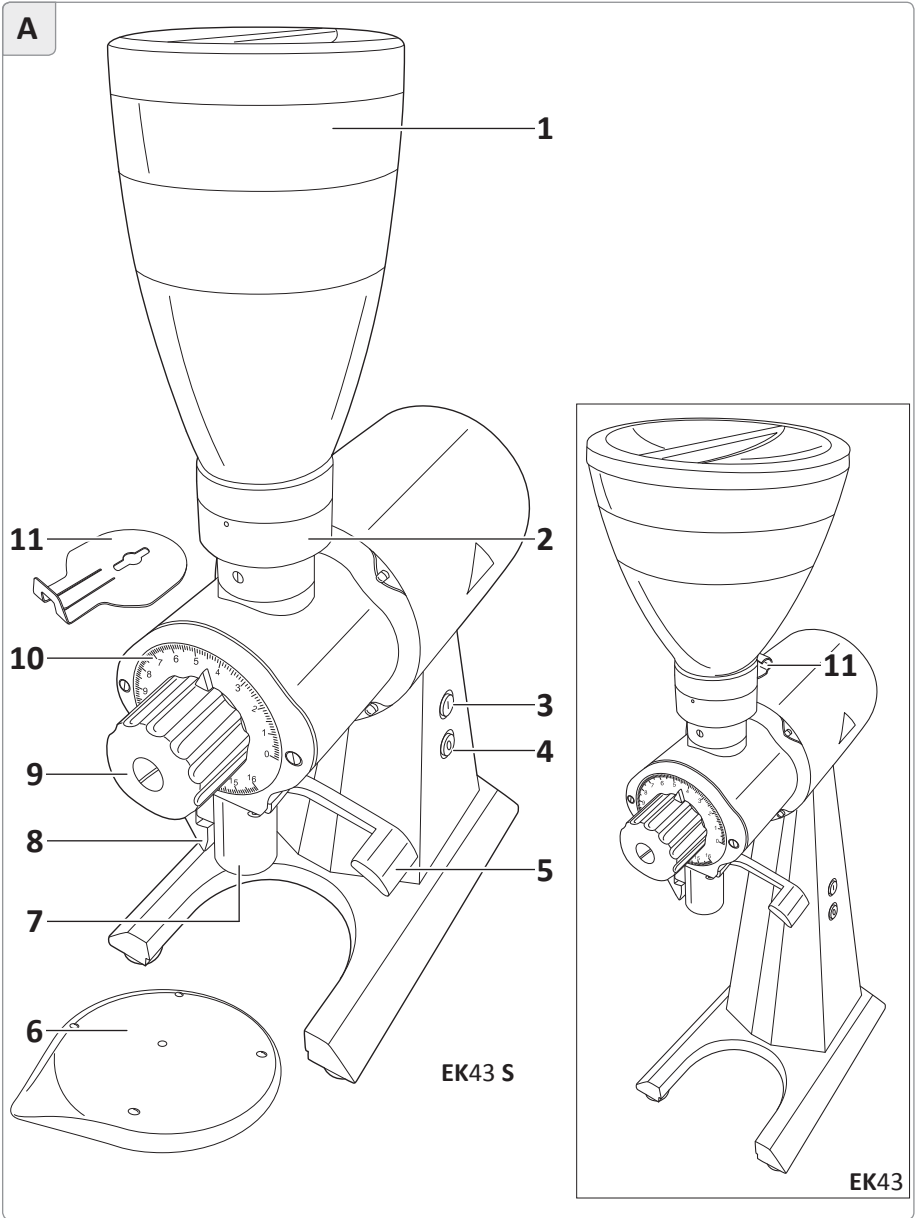


EK43



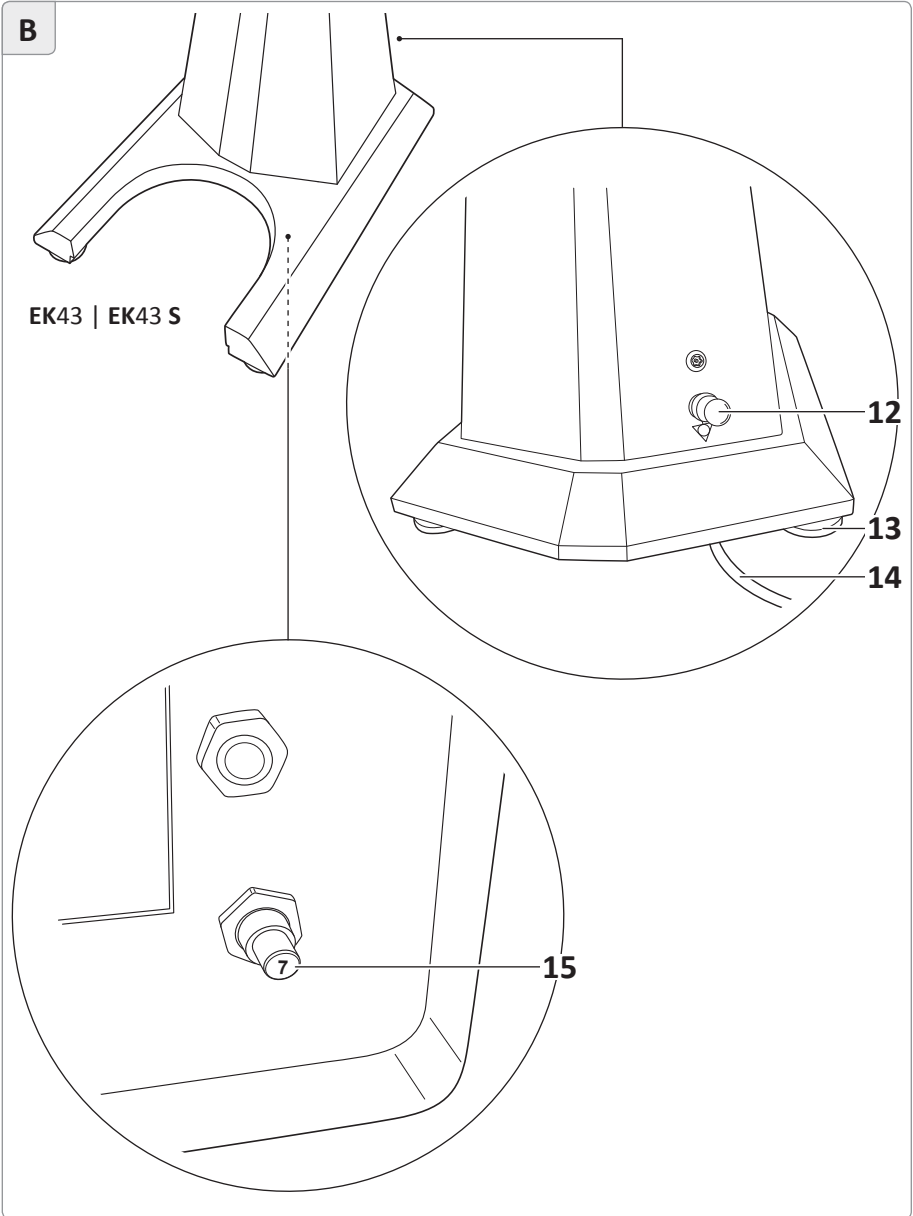
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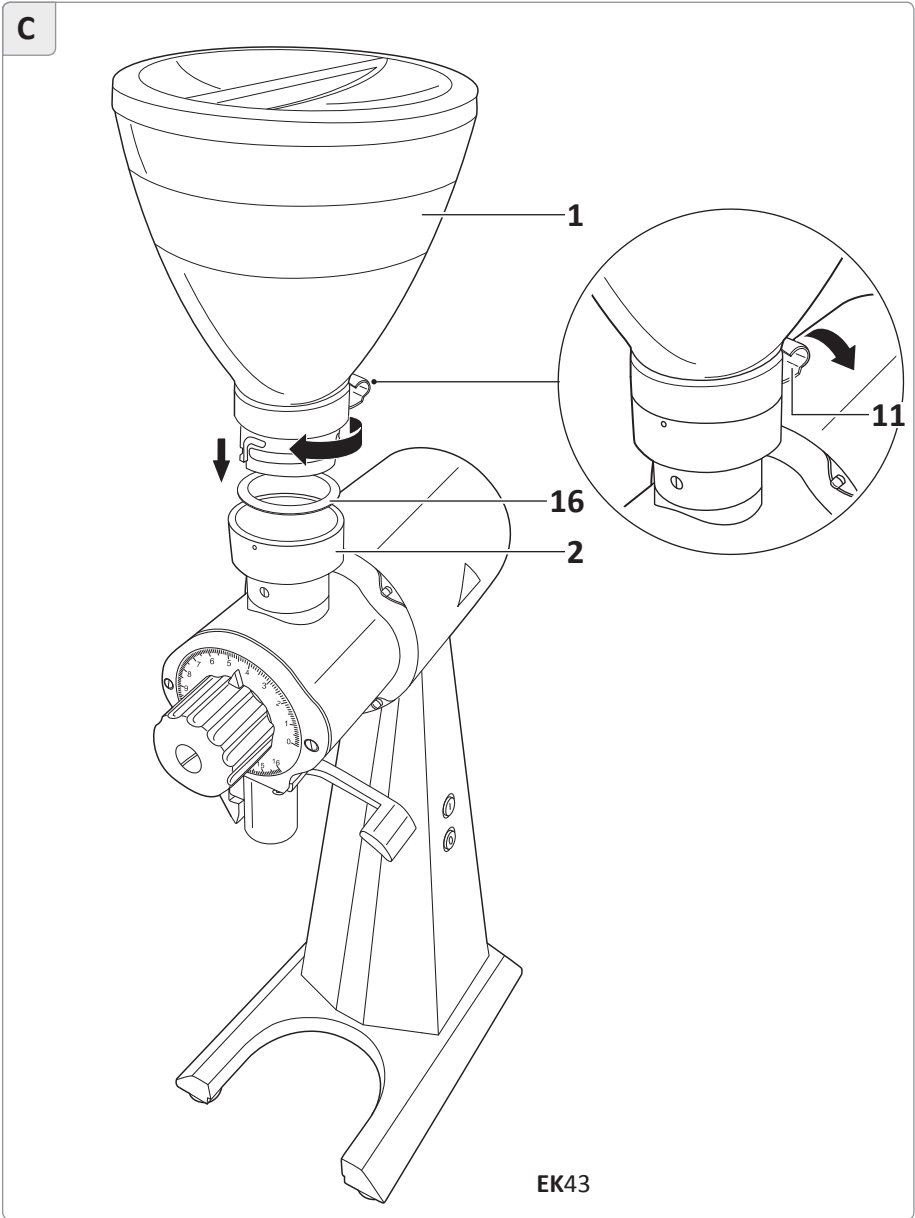
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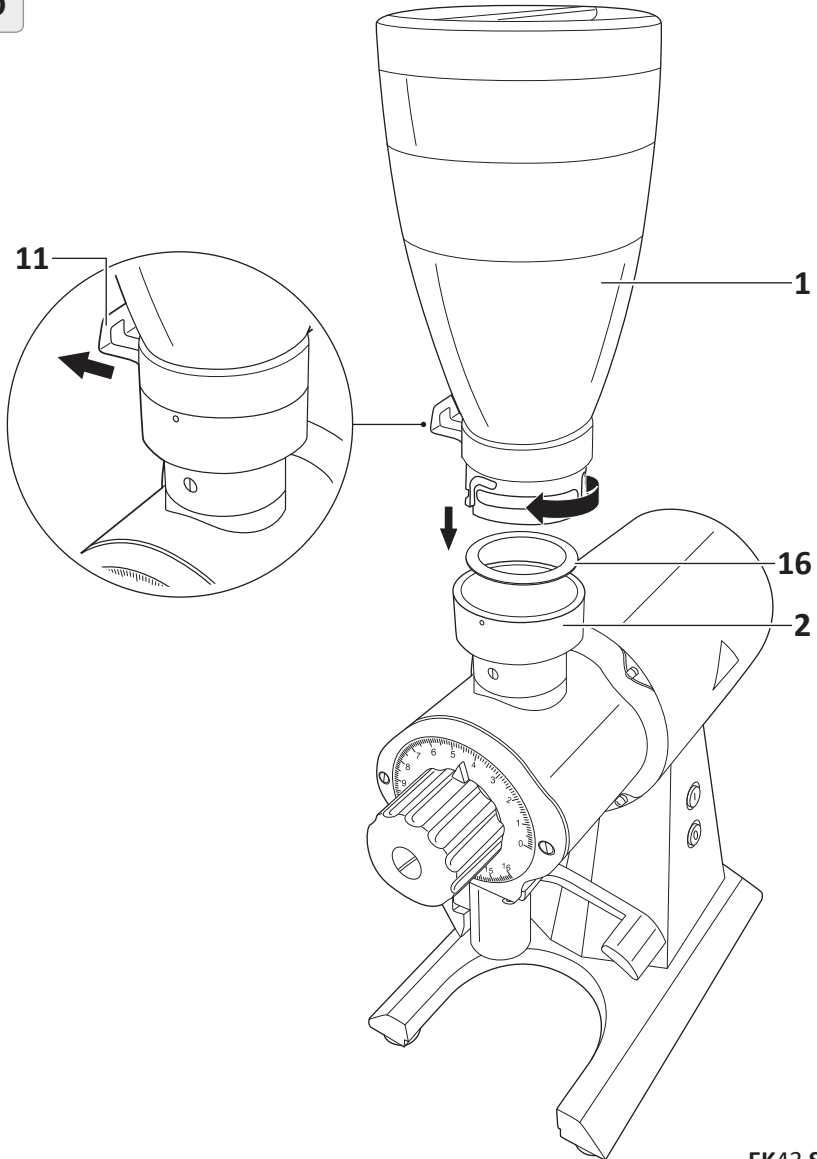
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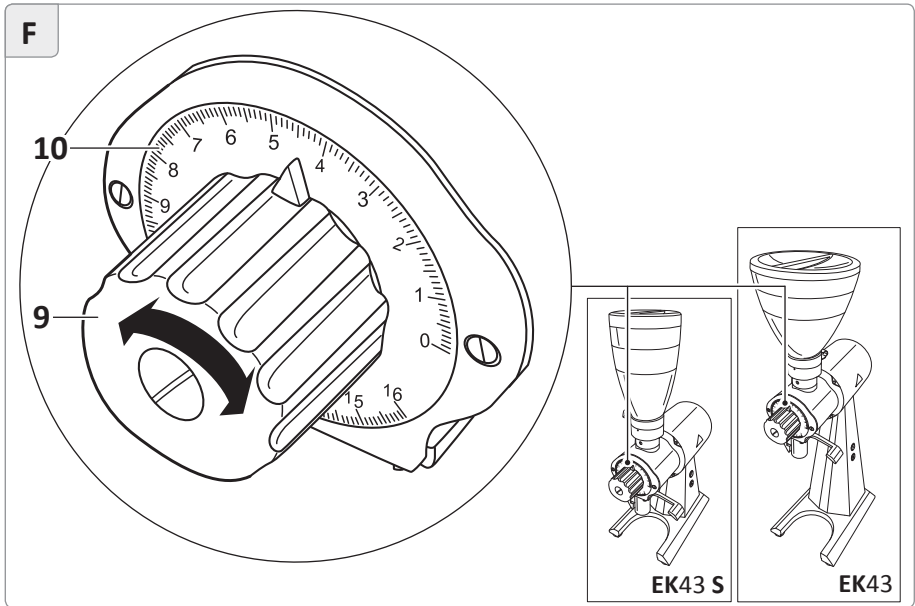
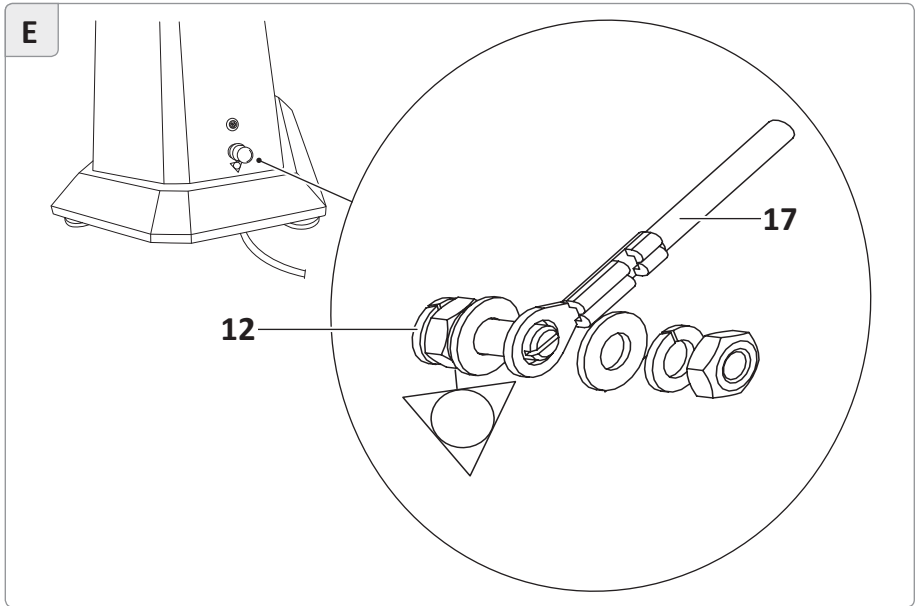


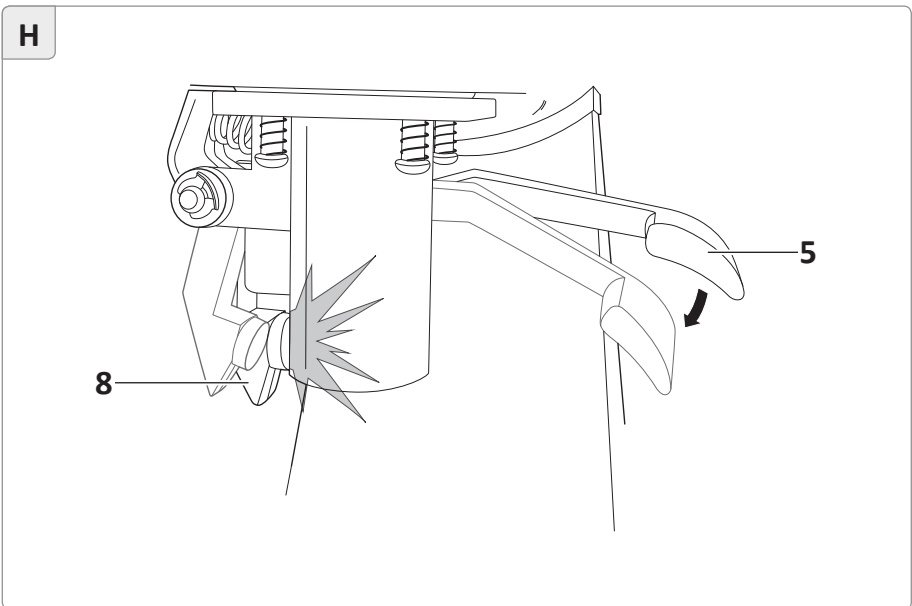
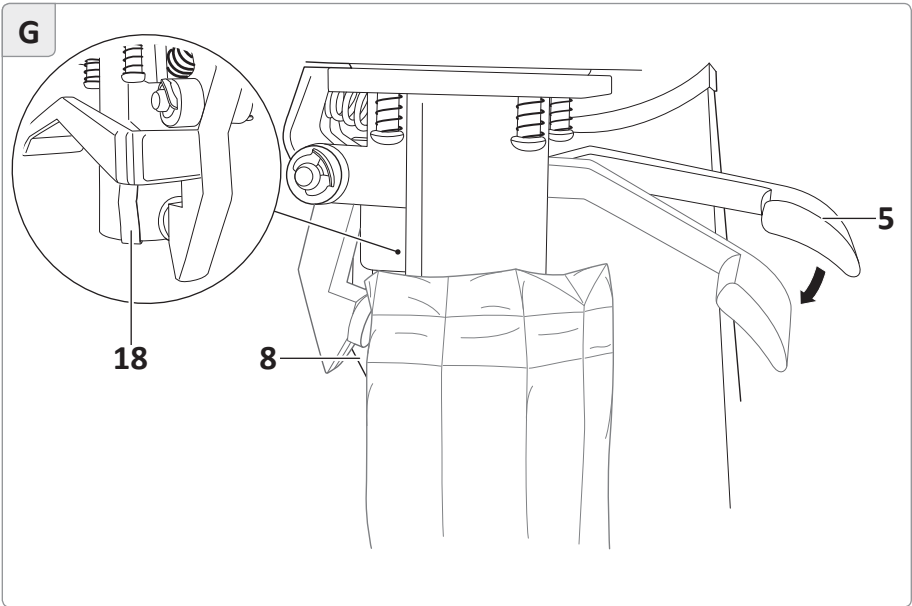


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EK43 S





EK43 | EK43 S**Contents**

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Scope of delivery

No.	Name
1	Bean container with lid
2	Bean container feeder
3	On switch I
4	Off switch 0
5	Lever for bag clamp / knocker
6	Spill tray
7	Outlet
8	Bag clamp / knocker
9	Hand wheel (grind adjustment)
10	Grinding degree scale
11	Sliding valve
12	Connection for potential equalization
13	Feet, 4x
14	Power cable with power plug
15	Release button / thermal overcurrent circuit breaker
16	Rubber ring (seals bean container feeder)
17	Potential equalization conductor (not included with delivery)
18	Contact strips (outlet)

General information

Read operating instructions and keep safe



Before you start using the EK43 (S) commercial coffee grinder, carefully read through this original instruction manual and the safety information. Only then will you be able to use the commercial coffee grinder safely and without danger.

For better clarity, the EK43 (S) commercial coffee grinder shall be referred to hereinafter simply as the “grinder”.

Please keep this original instruction manual safe for later queries.

Please also hand this original instruction manual on to later owners and users of the grinder.

Explanation of symbols used

The following symbols and signal words are used in this original instruction manual, on the grinder or on the packaging.

WARNING!



This signal word / symbol indicates a risk with medium risk level, which, if it is not avoided, can lead to death or serious injury.

CAUTION!



This signal word / symbol indicates a risk with a low risk level, which, if it is not avoided, can lead to mild or moderate injury.

INFORMATION!

This signal word warns against possible material damage.



This symbol provides you with important information concerning operation or handling.



Conformity declaration (see chapter “Conformity declaration”): Products marked with this symbol fulfil all applicable community provisions of the European Economic Area.



ETL Listed seal of approval:

Products marked with this symbol meet the requirements for electrical product safety of the United States of America.



Products marked with this symbol meet the required criteria of the NSF (National Sanitation Foundation) regarding cleanliness and hygiene in the food industry.



Products marked with this symbol are only permitted for use in interior spaces.



This symbol indicates a danger of electric shock.



This symbol indicates that the grinder conforms to protection class I.



This symbol indicates the connection for potential equalization.

Safety

Intended use

The grinder is designed to grind whole roast coffee beans. If necessary, you can convert the grinder so that it can be used to grind other foods such as certain types of grain. Contact your dealer for information on this. The grinder may only be used to grind the materials for which it has been designed. In general, make sure that only cleaned, unground material is used. Do not use the grinder to grind other products or objects.

The grinder is intended for commercial use and may only be serviced by trained personnel. It may, however, be operated by other persons in a place where use is supervised.

Any other use is considered contrary to the intended use and may result in material damage or even personal injury. Do not make any changes to the grinder. The manufacturer or the supplier shall not be held liable for any injury or damage resulting from non-compliance with the safety instructions.

Safety information

WARNING!

Danger of electrocution!

Improper use, incorrect electrical installation or a voltage that is too high can all lead to electrocution.

- Connect the grinder only if the mains voltage of the socket complies with the information indicated on the nameplate.
- Only connect the grinder to a socket with good accessibility, so that you can disconnect the grinder quickly from the power supply in the event of any hazardous incident.
- Do not use the grinder if you notice any visible damage or if the power cable or plug is faulty.
- If the power cable for the grinder is damaged, it must be replaced by the manufacturer or by qualified personnel in order to avoid hazards.
- Connect the grinder only to a power supply with a 16 A-slow back-up fuse.

In the event that the power connection at the site of installation of the grinder is not secured in this way, have a 16 A-slow back-up fuse fitted by a qualified electrician.

- Install the grinder only in places where the handling of the grinder can be supervised by trained personnel.
- Do not immerse the grinder or the power cable / power plug in water or any other liquids.
- Do not clean the grinder with a water jet.
- Never touch the power plug with wet hands.
- Never unplug the mains plug from the wall socket by pulling on the power cable; always grip the power plug.
- Never use the power cable as a handle to carry the grinder.
- Keep the grinder and power cable / power plug away from open flames and hot surfaces.
- Do not position the power cable in such a way that it could create a tripping hazard.
- Do not bend the power cable and do not place it over sharp edges.
- Use the grinder in indoor areas only. Never operate the grinder in damp rooms or in the rain.
- Keep children away from the grinder.
- Make sure that children do not insert any objects into the grinder.
- If you are not currently using or cleaning the grinder, or if a disruption occurs, switch the grinder off and remove the power plug from the socket.
- Do not open the grinder casing; leave repairs to the experts. If repairs are required, please contact a specialist workshop. In the event of independent repairs being carried out, or of faulty connection or incorrect operation, all liability and guarantee claims are excluded. In the event of a repair, only parts that comply with the original appliance specifications may be used. This grinder contains electrical and mechanical parts that are essential for protection against potential hazards.

 **WARNING!**

Danger for children and persons with reduced physical, sensory and mental abilities (e.g. partially disabled persons, older persons with limited physical and mental abilities) or a lack of experience and knowledge (e.g. older children).

- This grinder may be used by children older than eight years and by persons with reduced physical, sensory or mental disabilities or a lack of experience and knowledge if they are supervised or instructed on the safe use of the grinder and have understood the possible resulting dangers. Children are not permitted to play with the grinder. Cleaning and user maintenance may not be carried out by children without supervision.
 - Do not leave the grinder unsupervised when in operation.
 - Do not let children play with the packaging film. Children can become entangled and choke while playing.
 - Do not let children play with the small parts. They can be life-threatening if swallowed.
-

 **CAUTION!**

Risk of tipping and injury!

Incorrect handling of the grinder can result in injury.

- Position the power cable so that nobody can become entangled in it, causing the grinder to fall down.
 - Place the grinder on a level and stable surface to prevent it from falling off.
-

INFORMATION!

Risk of damage!

The grinder can become damaged through improper handling.

- Never tilt or tip the grinder more than 10° in any direction.
-

Before using

Checking grinder and scope of delivery

INFORMATION!

Risk of damage!

The grinder can become damaged if the packaging is opened carelessly with a sharp knife or other pointed object.

- Be very careful when opening.

1. Remove the grinder from its packaging.
2. Check if the delivery is complete (see **Fig. A** and **B**).
3. Check if the grinder or any of the individual parts are damaged.
If this is the case, do not use the grinder. Contact your supplier (see chapter “Maintenance and service”).

Setting up the grinder



The grinder's power cable (**14**) can be moved to any side of the grinder and positioned between two of the feet (**13**) to suit the area in which the grinder has been set up, or rather the availability of a socket.

1. Place the grinder on a level and stable surface that does not vibrate to prevent it from falling off.
2. Make sure that the rubber ring (**16**) has been properly placed in the bean container feeder (**2**) and is lying flat (see **Fig. C** and **D**).
3. Place the bean container (**1**) onto the bean container feeder.
In doing so, make sure that the pins in the bean container feeder catch the corresponding grooves on the bean container.
4. Rotate the bean container clockwise to lock it into place on the grinder.
5. Insert the mains plug (**14**) into a properly installed wall socket.
6. Push the spill tray (**6**) into the corresponding opening under the outlet (**7**).

Connecting the potential equalizer

The connection for potential equalization (**12**) is located on the back of the grinder (see **Fig. B**). The electrical connection and testing of electronic functionality must be carried out by an electrician.

1. Loosen and remove the lock nut (see **Fig. E**).
2. Remove the lock ring and the flat washer.
3. Connect the potential equalization conductor (**17**) to the potential equalizer.



The potential equalization conductor is not included with delivery.

Use a copper potential equalization conductor with a minimum cross-section of 10 mm².

If you have questions about this, contact an authorized service partner or electrician.

4. Secure the potential equalization conductor by reattaching the nut, flat washer and lock ring.

Operation

INFORMATION!

Risk of damage!

The operator has no influence on the thermal overcurrent circuit-breaker. If the thermal overcurrent circuit-breaker has been triggered several times, a service partner must be contacted for advice as the motor winding can become damaged.



- The grinder has a thermal overcurrent circuit-breaker which interrupts the electric circuit of the grinder in case of electrical overload. To put the grinder into operation again, first press the off switch **0 (4)** and disconnect the power plug (**14**). Then press the release button (**15**). You can now plug the power plug back into the socket and put the grinder into operation (see chapter "Setting up the grinder").
- The grinder also has a motor protector, which switches off the grinder when the motor becomes too hot. As soon as the motor has cooled down, the grinder can be put into operation again (see chapter: "Troubleshooting").

Switching on the grinder and adjusting the grind



- The pointer on the hand wheel **(9)** displays the current grinding degree on the grinding degree scale **(10)**.
The finest setting is “0” and the coarsest setting is “16”.
 - Reduce the grinding degree only while the grinder is in operation.
1. Make sure that you have inserted the power plug **(14)** into a properly installed safety socket and that the sliding valve **(11)** encloses the bean container **(1)** in the direction of the burr assembly.
 2. Press the on switch **I (3)** to switch on the grinder.
 3. Rotate the hand wheel **(9)** clockwise or counterclockwise until the pointer displays the desired grinding degree on the grinding degree scale **(10)** (see **Fig. F**). Turn the hand wheel towards “0” for fine coffee grinding and in the opposite direction for coarse coffee grinding.

Adding coffee beans and clamping coffee bag or grounds container

1. Remove the lid of the bean container **(1)**.
2. Pour whole roasted coffee beans into the bean container from above.
The maximum filling quantity should be approx. 1 cm below the edge of the bean container.
3. Close the bean container again with the lid.
4. Hold down the lever **(5)**.
The bag clamp **(8)** rises up around the sides of the outlet **(7)** (see **Fig. G**).
5. Put a coffee bag over the outlet or position a suitable grounds container underneath it.



- Due to its height, the **EK43 S** model is not designed for bag grinding. Use a suitable grounds container instead (not included with delivery).
 - When clamping a grounds container that is made of conductive material, make sure that the grounds container rests against the contact strip **(18)** on the back of the outlet. This reduces the electrostatic charge of the ground coffee.
6. Release the lever.
The bag clamp will close around the outlet and hold the coffee bag or grounds container.
 7. Continue with the subchapter “Starting grinding”.

Starting grinding

1. Start grinding by pulling out the sliding valve **(11)** and thus opening the bean container in the direction of the burr assembly (see **Fig. C** or **D**). The grinder will grind the filled volume of coffee beans.
2. The grinding is completed as soon as the grinder is idling and no grinding noises are audible.

After the grinding process

1. Close the bean container **(1)** by pushing in the sliding valve **(11)**.
2. Using one hand, steady the coffee bag or grounds container and let the knocker **(8)** tap against the outlet a few times using the lever **(5)** to shake out any remaining grind residue from the outlet (see **Fig. H**).
3. Hold down the lever and remove the coffee bag or grounds container containing the ground material from the outlet**(7)**.
4. Press the off switch **O (4)** to switch off the grinder.

Changing coffee variety

- Grind about 1 gram of the new coffee variety to remove residue from the previous coffee beans and prevent the two grinds from mixing.

Cleaning



CAUTION!

Risk of injury!

The grinder can fall over when moved and cause injury.

- Place the grinder on a stable, tilt-proof surface.
 - Only move or transport the grinder with the help of another person.
-

INFORMATION!

Risk of short-circuit!

Water penetrating the grinder can cause a short-circuit.

- Never immerse the grinder in water or any other liquids.
 - Never clean the grinder with a water jet.
 - Also ensure that no water or other liquids make their way into the casing.
-

INFORMATION!

Risk of damage!

Improper handling can lead to the grinder being damaged.

- Do not use any harsh cleaning products or sharp or metallic cleaning objects such as knives, metal scouring pads or similar. These can scratch the surface.
 - Do not put the spill tray or the bean container into the dishwasher. Otherwise, the color may fade and the bean container attachments may corrode.
 - Do not lift the grinder by the bean container; lift only by the casing and always with both hands.
-

Cleaning the grinder installation surface

1. Switch off the grinder and remove the power plug **(14)** from the socket.
2. Lift the grinder by the casing with both hands and place the grinder onto a clean surface.
3. Clean the surface and the underside of the grinder with a damp cloth and dry the surfaces.
The surfaces must be dry and free of oil and grease.
4. Place the grinder back onto the cleaned surface.

Cleaning the casing

1. Switch off the grinder and remove the power plug **(14)** from the socket.
2. Let the knocker **(8)** tap against the outlet **(7)** a few times using the lever **(5)** to shake out any remaining grind residue from the outlet (see **Fig. H**).
3. Carefully clean the outlet with a brush.
4. Wipe the casing and the spill tray with a damp cloth as required, but at least once per week.

Cleaning the bean container



The bean container **(1)** must be cleaned daily to remove any coffee oil residue, as this can have a negative effect on taste. The manufacturer recommends the use of bean container cleaner. For more information about the cleaner, visit www.mahlkoenig.de.

1. Rotate the bean container **(1)** counterclockwise to loosen it from the grinder and remove it from the grinder by lifting upwards.
2. Spray the bean container inside and out a few times with bean container cleaner.
3. Clean the bean container inside and outside with a cloth and then dry the bean container.
4. Clean the bean container feeder **(2)** with a damp cloth and then dry the bean container feeder.
5. Place the bean container back onto the bean container feeder (see **Fig. C** or **D**). In doing so, make sure that the rubber ring **(16)** lies flat in the bean container feeder and that the pins catch the corresponding grooves on the bean container.
6. Rotate the bean container clockwise to lock it into place on the grinder.

Cleaning the burr assembly



- The manufacturer recommends using the grinder cleaner GRINDZ™. For more information about GRINDZ™, visit www.mahlkoenig.de.
- The burr assembly should be cleaned every 2–5 days.

1. Make sure that the sliding valve **(11)** encloses the bean container **(1)** in the direction of the burr assembly.
2. Press the on switch I **(3)** to switch on the grinder.
3. Rotate the hand wheel **(9)** until the pointer displays the coarsest grind on the grinding degree scale **(10)** (see chapter “Switching on the grinder and adjusting the grind”).
4. Pour the grinder cleaner into the bean container. Pay attention to the quantities indicated by the manufacturer of the grinder cleaner you are using.
5. Place a collecting container underneath the outlet **(7)** to collect the grinder cleaner.
6. Open the sliding valve to start grinding the grinder cleaner (see **Fig. C** or **D**).

The grinding of the grinder cleaner is completed as soon as the grinder is idling.


7. Close the bean container **(1)** by pushing in the sliding valve **(11)**.
8. Remove the residue from the outlet by tapping the knocker a few times.
9. Press the off switch O **(4)** to switch off the grinder.
10. Wipe the bean container with a dry, lint-free cloth.
11. Grind a volume of coffee beans equal to the volume of grinder cleaner used in order to remove leftover cleaning particles. Set the grind to the desired setting during the grinding process.
12. Dispose of the ground grinding cleaner and the ground coffee beans in commercial/domestic waste.

Troubleshooting

Error	Cause	Remedy
The grinder is humming but not grinding.	• The outlet is clogged.	<p>→ Using the hand wheel, set the grinding degree setting to the coarsest grind and trigger the grinding process. The grinder will grind itself clear.</p> <p>Then use the hand wheel to set the desired grinding degree during operation.</p> <p>→ Let the knocker bounce against the outlet a few times to clear the clog.</p>
	• The grind is too fine.	<p>→ Using the hand wheel, set the grinding degree setting to the coarsest grind and trigger the grinding process. The grinder will grind itself clear. Then use the hand wheel to set the desired grinding degree during operation. Should the problem persist, contact your supplier (see chapter “Maintenance and service”).</p>
	• A foreign object is in the burr assembly.	<p>→ Clean the burr assembly as described in the “Cleaning” section and remove the foreign object at the same time. If the foreign object cannot be removed, contact your supplier (see chapter “Maintenance and service”).</p>

Error	Cause	Remedy
The grinder is not grinding or buzzing.	• The power plug is not plugged into a socket.	→ Insert the mains plug into a properly installed wall socket.
	• The thermal overcurrent circuit-breaker has been triggered.	→ Check whether the release button has popped out. Push it back in if necessary. If the circuit-breaker repeatedly pops out, contact your supplier (see chapter "Maintenance and service").
	• The electrical fuse has tripped.	→ Check the electrical fuse. Bring it back to its original state or replace the electrical fuse. Check whether other loads are connected to this fuse and if so, pull their plugs. If the back-up fuse trips repeatedly, contact your supplier (see chapter "Maintenance and service").
The grinder is not grinding fine enough.	• The grinding discs are worn out.	→ Contact your supplier (see chapter "Maintenance and service").
	• The grinding discs are not aligned correctly.	→ Contact your supplier (see chapter "Maintenance and service").

Technical data

Model:	EK43 EK43 S
Voltage / frequency:	100-120 V; 50 Hz 100-120 V; 60 Hz 220-240 V; 50 Hz 220-240 V; 60 Hz
Protection type:	IPX1
Protection class:	I 
Fuse:	16 A-slow
Idle speed:	
50 Hz	1,480 rpm
60 Hz	1,740 rpm
Sound emission values:	
Idle:	60 dB(A)
Grinding:	87 dB(A)
Grinding capacity:	1.5 kg/min*
Max. grinding time:	40 min.
Max. daily output, kg:	240 kg
Dimensions (WxH xD), mm	
EK43	230 x 410 x 830
EK43 S	230 x 410 x 680
Weight (net), kg:	
EK43	24.4
EK43 S	23.4
max. funnel filling quantity, kg:	
EK43	1.5
EK43 S	0.8

*depends on the coffee beans and the selected grinding degree.

Disposal

Disposing of the packaging



Dispose of the packaging by correctly sorting the recyclable materials. Dispose of card and cardboard as waste paper, and film as recyclable materials.

Disposing of the grinder



Old appliances may not be thrown into commercial/domestic waste! If you can no longer use your grinder, you are **legally obliged** as a user to dispose of your old appliance separately from commercial/domestic waste, e.g. at a collection point in your community/district. This ensures that old appliances are recycled correctly and reduces the impact on the environment. For this reason, electrical appliances are labelled with the symbol opposite.

Maintenance and service

In the event of service or maintenance, contact an Authorized Service Center for Mahlkönig products. Customer Service can answer your questions about repairing and maintaining your product and spare parts.

Exploded diagrams and information on spare parts are also available at:

www.mahlkoenig.de

www.mahlkoenig.de/retailers



Our application consulting team will be happy to help you with questions concerning our products and their accessories.

For all inquiries and spare parts orders, please be sure to include the article and serial number as stated on the grinder nameplate.

EC DECLARATION OF CONFORMITY



The manufacturer:

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 Tilsiter Straße 142, 22047 Hamburg, Germany
 Tel.: +49 40 69 69 40 0
 Fax: +49 40 69 39 72 1

Hereby declares that the below mentioned product:

Product: Device for food processing
Machine model: Coffee grinder
Types of machine: EK 43 / EK 43T / EK 43S / EKK 43 / EKK 43/1 TT

Following directives, regulations and standards have been applied:

2006/42/EG	The provisions of the Machinery Directive
2014/35/EU	The Low Voltage Directive
2014/30/EU	The EU Electromagnetic Compatibility Directive (EMC)
2011/65/EU	The RoHS Directive on the restriction of use of certain hazardous substances in electrical and electronic equipment
(EG) No. 1907/2006	The EU chemicals regulation (REACH – Regulation)
2012/19/EU	WEEE Regulation - Waste of Electrical and Electronic Equipment

EN 60335-1:12+A11:14	Safety of electrical appliances for household, general requirements
EN 60335-2-64:00+A1:02	Safety of electrical appliances for household, particular requirements for commercial use
EN 62233:08	Measurement methods for electromagnetic fields
EN 55014-1:12	Electromagnetic compatibility, Emission (EMC)
EN 55014-2:16	Electromagnetic compatibility, Immunity (EMC)
EN 61000-3-2:15	Electromagnetic compatibility, Emission (EMC)
EN 61000-3-3:14	Electromagnetic compatibility, Emission (EMC)

Supplements in Europe:

Regulation 1935/2004	Requirements for materials and the objects with food comes into contact
Regulation 2011/10/EU	Requirements on plastic materials and articles intended to come into contact with food
Regulation 2023/2066	Regulation on good manufacturing practice for materials and articles intended to come into contact with food

Documentation agent:	Metin Makinaci
Address of the proxy documentation:	See the address of the manufacturer
Done in Hamburg on:	03/06/2017
Function of subscriber:	General Manager
Signatory name:	Philipp Baumberger

Signature

Notes



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