



OWNER/OPERATOR MANUAL



MODEL E-222 GRINDER

NOTICIA IMPORTANTE

Este manual contiene importantes instrucciones de seguridad que deben ser seguidas el pie de la letra cuando utilice esta maquina.

IMPORTANT NOTICE

This manual contains Important Safety Instructions which must be strictly followed when using this equipment.

BEFORE USING THIS EQUIPMENT

Berkel's grinders are designed to chop meat and other food products safely and efficiently. However, unless the operator is properly trained and supervised, there is the possibility of a serious injury. It is the responsibility of the owner to ensure that this grinder is used properly and safely, strictly following the instructions contained in this manual and any requirements of local law.

No one should use or service this grinder without proper training and supervision. All operators should be thoroughly familiar with the procedures contained in this manual. Even so, Berkel cannot anticipate every circumstance or environment in which its grinders will be used. You, the owner and operator, must remain alert to the hazards posed by the function of a grinder—particularly the sharp rotating feedscrew and knife. No one under 18 years of age should operate this equipment. If you are uncertain about a particular task, ask your supervisor.

This manual contains a number of safe practices in the General Safety Instruction Section. Additional warnings are placed throughout this manual. **WARNINGS RELATED TO YOUR PERSONAL SAFETY ARE INDICATED BY:**

WARNING

If any warning label, wall chart or manual becomes misplaced, damaged or illegible, please contact your nearest distributor or Berkel directly, for a free replacement.

Remember, however, **THIS MANUAL OR THE WARNING LABELS DO NOT REPLACE THE NEED TO BE ALERT AND TO USE YOUR COMMON SENSE WHEN USING THIS GRINDER.**

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Berkel Company • World's Leading Manufacturer of Slicers and Food Processing Equipment

BERKEL COMPANY

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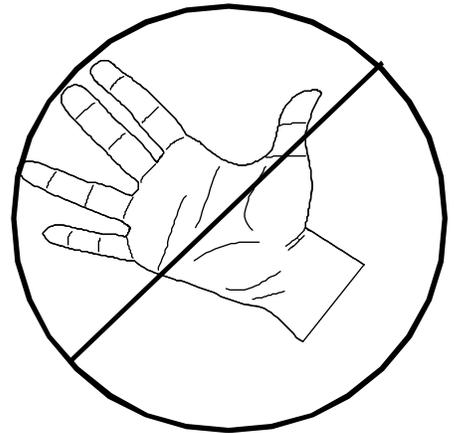
⚠ PELIGRO
CUCHILLA FILOSA
para evitar serios accidentes a su
persona siga las instrucciones de este
manual y

1. NUNCA toque esta maquina sin la capacitacion adecuada, ni sin autorizaciùn de su supervisor.
2. SIEMPRE vea que la base del recipiente este bien atornillada y bien apretada.
3. LOS PROTECTORES deben estar en su lugar ANTES de enchufar y conectar la máquina.
4. USE SIEMPRE el enchufe de tres clavijas suministrado.
5. NUNCA use nada mas ademas que el prensador para alimentar la maquina.
6. PARE LA MAQUINA INMEDIATAMENTE si algun material extraño cae entre el recipiente. Apague y desenchufe la maquina antes de remover el material extraño.
7. MANTENGA la manos, los brazos, el cabello y ropa suelta LEJOS de las partes en movimiento de la máquina.
8. NUNCA heche a andar la maquina para remover la cuchilla y el plato.
9. APAGUE Y DESENCHUFE LA MÁQUINA del tamacorriente antes de limpiar, sanitizar, o darle servicio.
10. USE SOLAMENTE los platos y cuchillas sumministradas por el fabricante.
11. EN CASO de que los membretes de ‘PELIGRO’ se desprendan de la máquina o sean ilegibles, llame al fabricante o a su representante de service Berkel para que lo reemplace sin cargo.

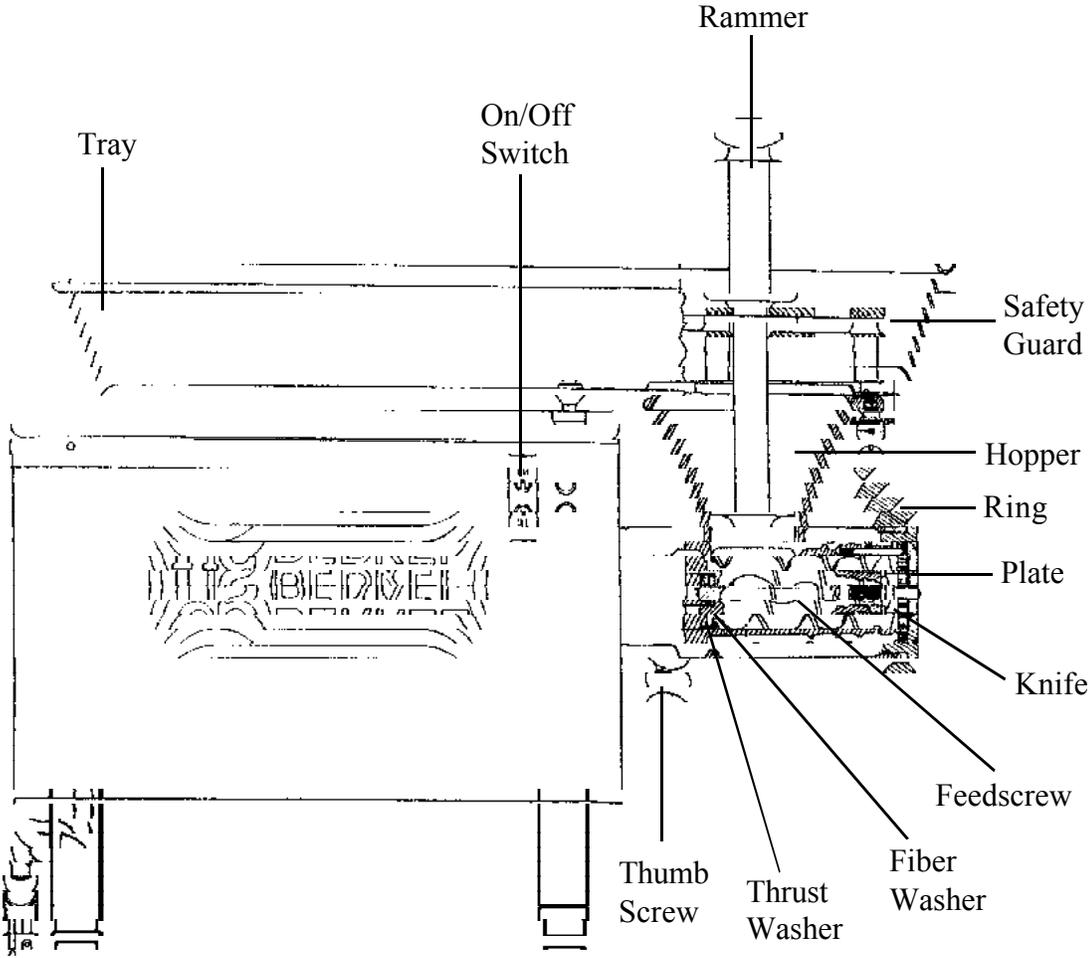


⚠️ WARNING
SHARP KNIFE BLADE
to avoid serious personal injury
follow all the instructions in this manual
and

1. NEVER touch this machine without training and authorization by your supervisor.
2. ALWAYS check to see that all bowl mounting screws are in position and tight.
3. GUARDS MUST BE in place before plugging in and turning on machine.
4. ALWAYS use three pronged plug provided.
5. NEVER use anything but the rammer to feed product into the grinder.
6. STOP the machine immediately if foreign material falls into the bowl. Turn off and unplug the machine before removing foreign material.
7. KEEP hands, arms, hair and loose clothing clear of all moving parts.
8. NEVER run the machine to remove the knife and plate.
9. TURN OFF AND UNPLUG machine from power source before cleaning, sanitizing or servicing.
10. USE ONLY the attachments provided by the manufacturer.
11. SHOULD any warning label on a machine come off or become unreadable contact the manufacturer or your Designated Berkel Service Location for a free replacement.



EQUIPMENT IDENTIFICATION



INSTALLATION

SITE SELECTION

Select a solid, level surface to install the E-222 chopper. This area should be well lit and large enough to allow easy access to all sides of the machine.

ELECTRICAL

Your E-222 chopper is manufactured with a 20-amp power cord and plug. Contact a licensed electrician to install a 20-amp outlet. Do not try to modify a standard outlet to accommodate this plug. Failure to use a correct outlet will void the warranty. Also, check that the line voltage matches the motor specifications as shown on the serial plate.

APPROVED USES

The Berkel E-222 chopper is suitable to cut and chop the following products:

- Meat
- Poultry
- Fish

NON-APPROVED USES:

The Berkel E-222 chopper is not designed to cut and chop the following products:

- Non-food products
- Dry products
- Meat with bones

TESTING PRIOR TO OPERATION

1. Make sure the chopper is unplugged and is on a solid, level surface.
2. Check that the line voltage at the outlet matches the machine specifications.
3. Choose a knife and plate to install. (If you have just removed the chopper from its shipping carton, it is greased and ready to run with a 1/8" plate from the factory.) The standard plate has 1/8" (3.2mm) holes. Optional plates are 3/16" (4.8mm), 1/4" (6.3mm), and 3/8" (9.5mm). It is recommended that a plate and knife should be matched and kept as a pair. They will wear evenly and provide the best operation of the chopper.

CAUTION

Mixing knives and plates will cause them to wear unevenly and possibly damage each other.

4. Unscrew the ring from the cylinder. Place the knife, plate surface out, onto the feedscrew, mating the square hole with the square shaft. Insert the plate over the knife with the flat edge mating with the pin in the cylinder. Screw the ring onto the body, but do not over tighten. The fineness of the cut is determined by the size of the holes in the plate, not the tension of the ring. Over tightening the ring will cause the knife and plate to wear and the motor to overheat. When the ring is overtightened, the knife and plate can become very hot and discolor the meat.

OPERATING INSTRUCTIONS

WARNING

To avoid serious personal injury, never attempt to put anything other than the rammer into the hopper. If the tray guard becomes loose, damaged or has been removed, do not attempt to operate the chopper.

CAUTION

Never operate the chopper dry. Have meat ready to cut before turning the chopper on. The natural grease and oil in the meat will lubricate the moving parts.

1. Cut the meat to a size suitable for easy feeding into the hopper. Trim out the gristle. Gristle has a tendency to wrap around the knife and will require frequent cleaning. The smaller the size of the meat, the better the chopper will operate.
2. Place the meat to be chopped onto the tray.
3. Feed a small amount of meat into the hopper and move the toggle switch to ON. Do not force the meat into the hopper with the rammer. The feed screw is designed to move the meat towards the knife at the proper speed. Forcing large quantities with the rammer will only cause pressure to the components. Greater speed is achieved by feeding smaller pieces and allowing the natural action of the feed screw to do its job.
4. As the chopper is running, continue to keep the hopper well filled, but do not force the meat.
5. Move the toggle switch to OFF as soon as the cylinder is empty.

Note: When using the rammer, only push hard enough to get the meat to the feed screw. Push the rammer all the way down and remove it slowly so that the suction does not pull meat back up into the hopper. Dipping the rammer in cold water will stop meat from sticking to it.

When chopping frozen meat, use a course plate for the first grind. A finer plate can be used for each subsequent grind.

CLEANING AND SANITIZING

DISASSEMBLY

1. Unplug the chopper and remove the rammer.
2. Loosen the ring but don't remove it. Loosen the thumbscrew and remove the entire cylinder. Take the cylinder to the sink. Unscrew the ring and pull off the plate, knife and feedscrew. Thoroughly clean each of these parts in hot water using a food grade detergent. Rinse and sanitize each part with an USDA approved sanitizer. Remember to keep the knife and plate together as a pair. Berkel recommends using approved sanitizer, part number 4975-00400.
3. Wrap a rag around the cleaning rod. Wet the rag and use the rod to clean between the pan and the housing. You can also use the rag/rod to wipe the inside of the hopper and cylinder.
4. Take a bucket and fill with hot water and good grade detergent. Take an empty bucket and place below the opening in the tray. Use the hot, soapy water to clean the tray, allowing the dirty water to drain into the empty bucket.
5. Wipe off the sides with a wet cloth. Rinse with clean water, sanitize and allow to dry.

REASSEMBLY

WARNING

In the next steps, you will be asked to use grease and oil.
To prevent contamination and possible food poisoning, use only
Berkel USDA approved grease (4675-00185) and oil (4675-00182).

1. Place a thin coat of grease on the inside of the cylinder where the feed screw is located.
2. Push the cylinder into place on the chopper aligning the pin to the hole as it is installed. Once the cylinder is back as far as it will go, tighten the thumbscrew.
3. Place a thin coat of grease on the feedscrew. Insert the feedscrew into the cylinder making sure the taper shaft mates with the gearbox.
4. Coat the knife with grease and set in place on the feedscrew. The flat side of the knife points outward.
5. Grease and place the plate on the feedscrew, matching the cutout area of the plate to the pin in the cylinder.
6. Grease the threads of the ring and screw onto the cylinder. Hand-tighten the ring. Do not use tools to tighten. Over tightening the ring will only cause the parts to wear faster than normal.

7. Plug the chopper in and run for one second. Turn off the chopper and check to see if the ring is tight. If it is loose, then tighten it. Your chopper is now ready to operate.

MAINTENANCE

The knives and plates should be kept together as a matched set. Failure to do so will result in mismatched cutting surfaces, which will lower productivity and product quality. When the knife becomes dull, have it and its matching plate sharpened together. When the plate no longer extends beyond the end of the cylinder, replace both the knife and the plate.

The threads on the cylinder and ring must be kept clean. If they become clogged, take a stiff bristle brush and clean them. Also, keep the threads coated with a thin coat of grease.

Inspect the anti-friction thrust and fiber washers located on the end of the feedscrew. If they are worn, then replace them. Failure to replace these washers when they are worn will cause premature wearing of the feedscrew.

TROUBLESHOOTING

If your chopper should fail to function, there are several things you can check before calling a service technician.

1. Check to see that the power cord is plugged in. If so, try plugging another piece of equipment into the same outlet to verify that there is power at the outlet.
2. Unplug the chopper and remove the ring, plate, knife and feedscrew. Check to see if there is any obstruction. Inspect the knife and plate for sharpness. If they are dull, sharpen or replace immediately.

If there is still a problem, contact your nearest Designated Berkel Service Location.

REPAIR PARTS/REPAIR SERVICE

Please contact your Designated Berkel Service Location for any repair parts and/or repair service required on your Berkel grinder. Additional information may be obtained from:

Service Support Center
Berkel Company
4406 Technology Drive
South Bend, Indiana 46628-9700
574/232-8222 · Fax 574/232-8116
(800) 348-0251

SPECIFICATIONS

MOTOR 115/60/1, 1hp, 18 amp

CAPACITY 15 to 20 pounds/minute (7 to 9 kg/min.)

SPEED 235 rpm

WEIGHT

Net 100 lbs. (45.5 kg)

Shipping 106 lbs. (48 kg)

DIMENSIONS

	OVERALL	FOOT TO FOOT	TRAY
<i>Height</i>	18 1/4" (464mm)		26 1/2", (673mm)
<i>Width</i>	15 3/4" (400mm)	10 1/2" (267mm)	15 1/2" (394mm)
<i>Length</i>	28 1/2" (724 mm)	16 1/2" (419mm)	3" (76mm)

PARTS

KNEE K-04022-2

PLATES

<i>1/8" (3.2mm)</i>	K-04022-1
<i>3/16" (4.8mm)</i>	K-04022-1B
<i>1/4" (6.3mm)</i>	K-04022-1D
<i>3/8" (9.5mm)</i>	K-04022-1H

THRUST WASHER E-01993

FIBER WASHER 2275-00566

STIFF BRISTLE BRUSH 4975-09237

BERKEL OIL

<i>2 oz.</i>	4675-00182
<i>16 oz.</i>	4675-00183
<i>1 gal.</i>	4675-00184

BERKEL GREASE

(3) 3 oz. Tubes 4675-00185

BERKEL SANITIZER 4975-00400

WARRANTY

Berkel Company (“Berkel”) warrants to the Buyer of new equipment that said equipment, when installed in accordance with our instructions and subjected to normal use, is free from defects in material or workmanship for a period of one (1) year from the date of sale.¹

BERKEL SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Berkel’s obligation and liability under this warranty is expressly limited to repairing or replacing equipment that proves to be defective in material or workmanship within the applicable warranty period. Berkel or a Designated Berkel Service Location will perform all repairs pursuant to this warranty. Berkel expressly excludes responsibility for incidental or consequential damages to buyer or any third party, including, without limitation, damages arising from personal injuries, lost profits, loss of business opportunity, loss of property, economic losses, or statutory or exemplary damages, whether in negligence, warranty, strict liability or otherwise.

This warranty does not apply to: periodic maintenance of equipment including but not limited to lubrication, replacement of worn blades, knives, stones, knobs, accessories, and miscellaneous expendable supply items, and other adjustments required due to installation set-up or normal wear.

These warranties are given only to the first purchaser from a Berkel Authorized Channel of Distribution. No warranty is given to subsequent transferees.

The foregoing warranty provisions are a complete and exclusive statement of the warranty between the buyer and seller. Berkel neither assumes nor authorizes any persons to assume any other obligation or liability connection with said equipment.

¹ Model 180 slicers carry a 90-day warranty.