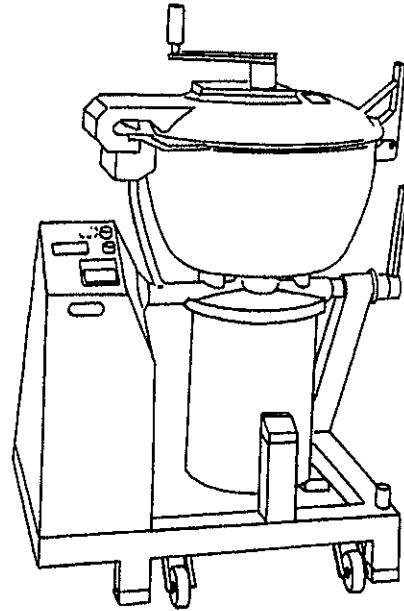




The Choice of Experience

OWNER/OPERATOR MANUAL



MODEL VCM44A/1 VERTICAL CUTTER MIXER

NOTICIA IMPORTANTE
Este manual contiene importantes
instrucciones de seguridad que
deben ser seguidas al 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 cutter/mixers are designed to cut and mix meat and other food products safely and efficiently. Unless the operator is properly trained and supervised, however, there is the possibility of a serious injury. It is the responsibility of the owner to insure that this cutter/mixer 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 cutter/mixer 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 cutter/Mixer will be used. You, the owner and operator, must remain alert to the hazards posed by the function of a cutter/mixer – particularly the sharp rotating blade. 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 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 CUTTER/MIXER**

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BERKEL COMPANY

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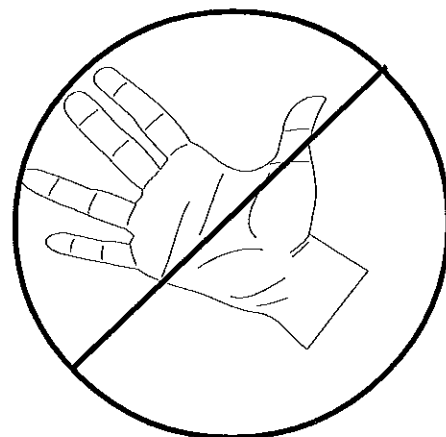
574/232-8222 • Fax 574/232-8116

(800) 348-0251

⚠ PELIGRO

**Para evitar serias lesiones personales
siga las instrucciones de este manual
y**

1. **NUNCA** utilice esta maquina sin previo entrenamiento y autorizacion de su supervisor.
2. **LA MAQUINA** debe colocarse en un lugar solido y plano.
3. **LAS PROTECTORES** deben colocarse antes de enchufar y operar la maquina.
4. **QUE LA MAQUINA** sea conectada por un electricista capacitado.
5. **NUNCA** abra la tapadera antes que la cuchilla este parada completamente.
6. **SIEMPRE** remueva la cuchilla antes de vaciar el producto de el tazon.
7. **MANTENGA** la manos, los brazos, el cabello y ropa suelta lejos de toda parte en movimiento de la maquina.
8. **EN CASO** de que la maquina se atasque, apague y desenchufe antes de remover lo que la obstruye.
9. **APAGUE Y DESENCHUFE** la maquina antes de limpiar, sanatar o darle servicio.
10. **UTILIZE SOLAMENTE** los accesorios provistos por el fabricante.
11. **EN CASO** de que la etiqueta de peligro se desprenda de la maquina o sea ilegible, llame al fabricante o a su representante de servicios Berkel para que lo reemplace sin costo alguno.

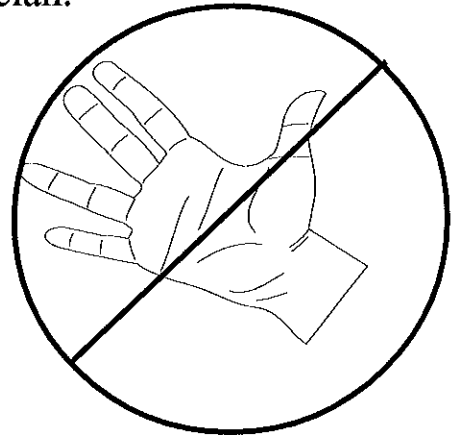


⚠ WARNING

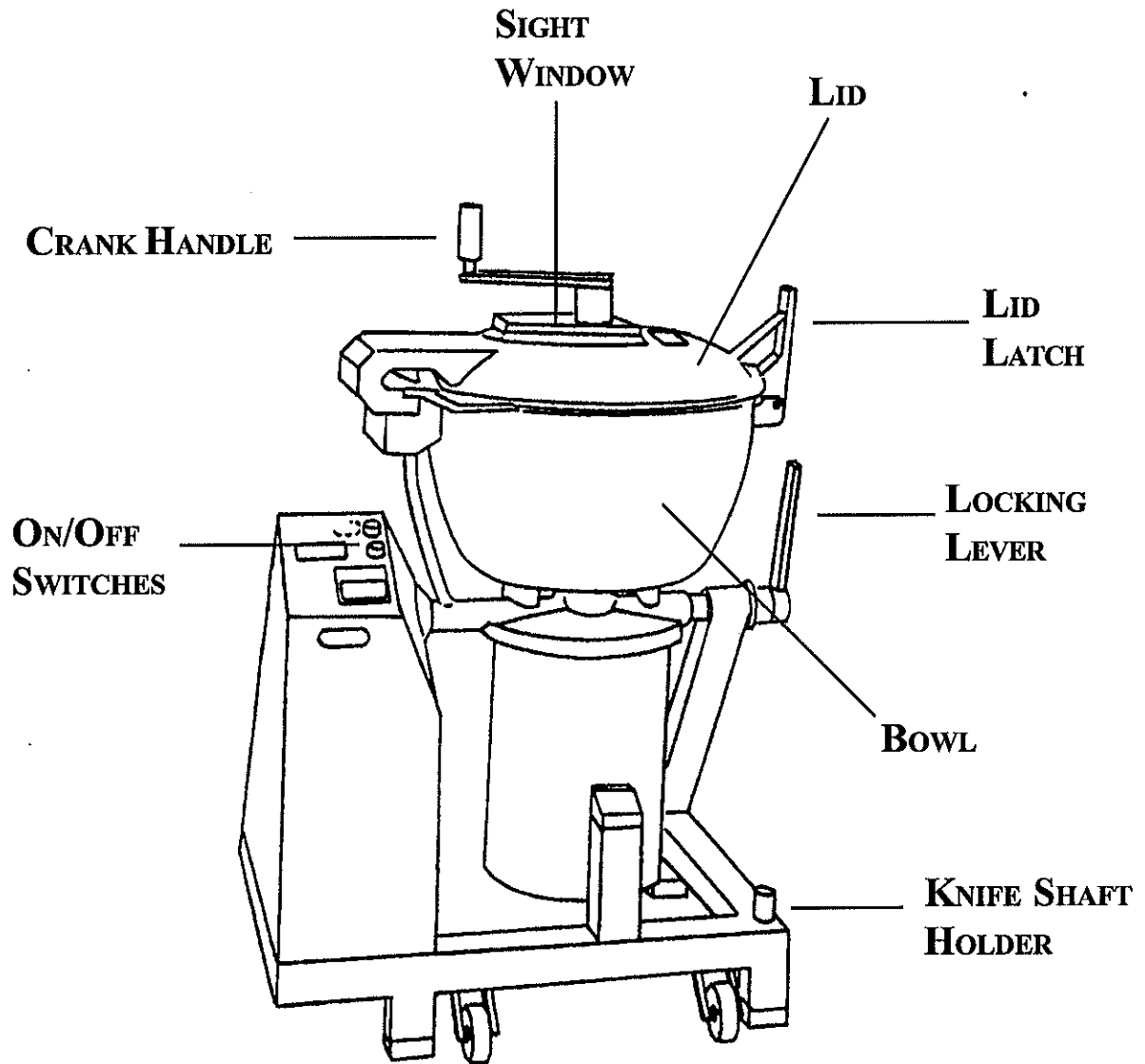
SHARP KNIFE BLADE

**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. MACHINE must be on solid, level support.
3. GUARDS must be in place before plugging in and turning on the machine.
4. ALWAYS have machine wired by a qualified electrician.
5. NEVER open lid until the knife has come to a complete stop.
6. ALWAYS remove the knife before unloading product from the bowl.
7. KEEP hands, arms, hair and loose clothing clear of all moving parts.
8. SHOULD machine jam, turn off and unplug before removing the obstruction.
9. TURN OFF AND UNPLUG the 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 Berkel or your Designated Berkel Service Location for a free replacement label.



EQUIPMENT IDENTIFICATION



INTENDED USES AND SAFETY CHARACTERISTICS

Berkel Vertical Cutter Mixers are designed to mix, blend, cut, chop, emulsify, puree, and homogenize all types of food products. It will do all of this in a matter of seconds, thus enabling you to prepare more food in less time. It is not designed for any application other than food products. It utilizes a dual interlock system on the lid, such that the lid must be in place and locked down with the lever before the machine will turn on.

INSTALLATION

To properly uncrate the VCM, remove the top cover using a pry bar and set aside. From outside the crate, pull the nails holding the top brace that supports the VCM motor and remove the brace completely. Remove the two nuts holding the lower brace which secures the VCM to the bottom of the crate. Remove this brace from the crate. Loosen the locking lever, tilt the bowl upright and tighten the lever. With the braces removed, place a strap on each side of the motor around the pivoting shaft and lift the VCM out of the crate using a mechanical lift, such as a fork lift. Place the VCM in a location where the machine will be operated. **REMOVE ALL ATTACHMENTS AND TOOLS FROM THE BOWL.**

This machine should be connected to the electrical supply only by a qualified electrician in accordance with all applicable electrical codes. Check the electrical specifications on the serial number plate located on the back of the control box for electrical supply requirements.

Attach a plug to the power cord or wire directly to a breaker box. Make sure that all parts are removed from the bowl and close the lid. Program .5 seconds into the timer and press the green start button. Observe the motor shaft rotation through the view window. Proper rotation is clockwise, as indicated by the arrow decal on the motor frame. If the rotation is wrong, then correct the wiring immediately.

OPERATING INSTRUCTIONS

WARNING

During the next steps you will be handling a knife blade.
This knife is very sharp. Only handle the attachment by the shaft.

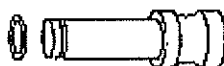
GENERAL

1. Place attachment to be used on the motor shaft, making sure the pin at the top of the attachment falls into the slot at the top of the shaft.
2. Turn the attachment to the left, or counterclockwise until it stops.
3. The attachment is now properly seated. If you fail to rotate the attachment to the left, then it will

knock during the first few seconds of operation. This will ultimately damage the shaft and/or the attachment.

4. With the lid open, insert the threaded end of the mixing baffle shaft through the hole in the center of the lid. The scraper portion of the mixing baffle is towards the bowl. Place the mixing baffle handle, with the knob up, onto the threaded shaft such that the handle is oriented in the same direction as the scraper. Secure the handle with the locking nut.

Note: The mixing baffle is not used in some applications. When the mixing baffle is not used, insert the white nylon plug as shown:



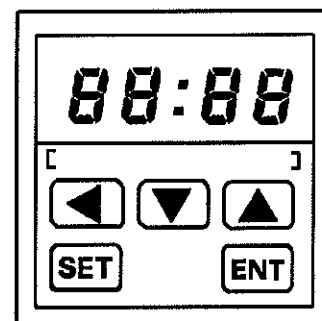
LOADING INGREDIENTS INTO BOWL

1. Be sure bowl is in an upright, locked position. If not, loosen the locking lever, rotate the bowl to the upright position and tighten the locking lever.
2. Be sure attachment is installed properly.
3. Place ingredients to be processed into bowl. When mixing a recipe using wet and dry ingredients, always load the wet ingredients first. When cutting a product like cheese that is in blocks, carefully stack the blocks onto the knife blades. Never exceed the recommended maximum capacities as shown on the chart on page 19.
4. Check that the lid gasket is in place on the lid. Close the lid, attach the inner latch and rotate the black handle into the upright position to completely seal the lid to the bowl.

Note: The On/Off push button on the switch panel is equipped with a safety interlock that will prevent operation of the VCM while the lid is open. Therefore, you must close and latch the lid before the VCM can be started.

PROGRAMMING THE TIMER

1. Press the set key to change the timer display. The keys will all become active. Once the set key is pushed, the right most digit will begin to flash.
2. Push the position key to move the flashing digit to the left. When the left most digit is flashing, pressing the position key will cause the right most digit to flash.
3. When the digit that you wish to change is flashing, press either the up or down key to adjust the digit. When the desired operating time is shown, press the enter key. The new set point will be entered into memory and the up, down and position keys will become inoperative. Pushing the start button will cause the VCM to run and the timer will count down to zero. At zero, the VCM will stop and the timer will reset back to its set point. If you press the stop button in the middle of a timing cycle, the timer will reset to the original set point.
4. During a timing sequence, pushing the set key will display the original set point without disturbing the sequence.
5. This timer also has a key pad lock. To actuate the lock, press and hold the ENT key for 5 seconds. The keypad lock disables the position, up and down keys so that no changes can be made. To unlock



the keypad, make sure the display is showing the actual value then press and hold the ENT key for 5 seconds.

JOG OPERATION

Jogging is used to prevent overworking the product. To jog the machine, program .5 seconds into the timer and then operate in a normal manner.

MIXING BAFFLE

To turn products away from the sides of the bowl and into the knives, rotate the mixing baffle one full turn clockwise and then turn backwards a quarter turn counterclockwise, which allows the product to drop into the knives. Repeat this step as necessary.

ADDING LIQUIDS

To add liquids to the bowl without opening the lid, turn the VCM off, open the sight cover, pour liquids through the sight window and then close the cover. Restart the machine.

UNLOADING PRODUCT

1. Stop the machine by pressing the red button.
2. Once the mixing or cutting assembly has stopped turning, unlatch and open the lid.
3. Rotate the attachment to the right, or clockwise, and carefully lift it out of the bowl.
4. Place a receiving container on the floor in front of the machine and loosen the locking lever.
5. Tilt the bowl forward, dumping the product into the receiving container.
6. Once the bowl is empty, return it to its upright position and lock in place.

OPERATING TIPS

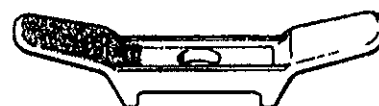
1. Once a product has been over worked, the process cannot be reversed, therefore, if you are in doubt about the run time, cut the running time short and view the product.
2. When preparing high moisture content products, such as salad dressings or batters, cut the run time short. Use a long handled spatula to scrape the bowl and lid. Then finish the run time. This will assure a better consistency through the entire batch.
3. To prevent over splash when processing liquids, do not exceed 20 quarts.
4. Keep the knives sharp to help maintain an even consistency in cutting products.
5. When pouring liquids through the view window in the lid, use a large funnel to reduce spillage.
6. To keep the shortening from smearing the bowl, add the shortening last.
7. Dissolve sugar in one of the liquids before adding other ingredients.
8. When processing products such as loaves of bread for crumbs, place a small quantity in the bowl and add more as it is processed until the machine capacity and the desired consistency is reached.
9. Most vegetables cut better in water. Fill the bowl half of cold water, add the vegetables evenly in the bowl and cut to the desired size.
10. When cutting and mixing products together, cut harder products first and then add the softer products.

CLEANING AND SANITIZING

1. Lock bowl in the upright position and install the knead mix attachment.
2. Install the mixing baffle.
3. Fill the bowl 1/3 to 1/2 full of warm (not hot) water and add a small amount of low sudsing detergent.
4. Close the lid and sight cover to prevent splashing.
5. Set timer for 90 second and start the machine. Turn the mixing baffle handle counterclockwise for approximately 10 seconds.
6. When the timer shuts off the VCM, open the lid. Set a bucket in front of the machine and loosen the locking lever. Tilt the bowl forward and empty the soapy water.
7. Repeat the above steps with a clear rinse water (warm, but not hot).
8. Remove the knead mix attachment, mixing baffle and lid gasket. Clean these items separately.
9. Clean the bowl cover and the machine frame. Never use a hose on the outside of the machine. Empty all liquids from the bowl and wipe dry.
10. Sanitize the bowl lid and all removed parts. Allow to air dry.
11. Install the clean mixing baffle and lid gasket.

PERIODIC MAINTENANCE

To extend the life of the bowl seal, periodically remove using the spanner wrench that is provided. Clean the seal thoroughly and lubricate the "O" ring using the grease that is provided (or Berkel part number 4675-00185). Install the seal and tighten securely.

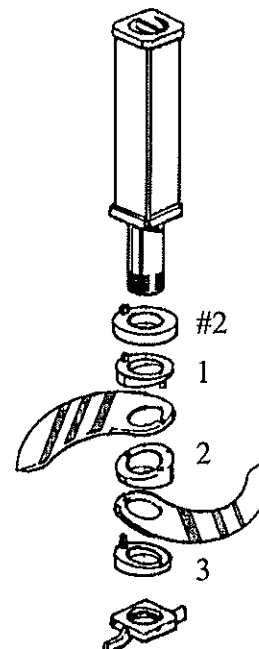


DISASSEMBLE AND SHARPEN THE KNIFE BLADES

WARNING

The knives are very sharp. Use extreme care when handling or sharpening the knives.

1. Near the right front foot is a knife shaft holder. This is used to hold the knife shaft while it is being assembled or disassembled. This should never be used as a storage location for the knife shaft.
2. Use the wrench provided and remove the nut. Remove each of the rings and blades.
3. There is a sharpening stone included with the machine. Take extreme care when you sharpen the knives.
4. To process medium or large amounts of product, the cutting knives should be in the upper position. For small amounts they should be in the lower position. Place the large flat spacer (#2) on the shaft first to lower the knives. Place the large flat washer (#2) on shaft last to raise the knives.
5. Assemble the numbered slant rings (the numbers 1, 2 or 3 are stamped on the side of the ring) so that #1 is on top, then a knife blade, #2 next, then a knife



blade and then #3. Make sure the slot in the knife mates with the pin in the slant ring. Screw the nut on last.

6. Tighten the nut with the wrench that is provided.

OPTIONAL ACCESSORIES

Item	Part Number
Complete Inserts - Used for grating hard or raw vegetables and other special functions.	3-D4038-03 - S.S. Mixing Insert 3-D4038-04 - Grating Insert
Strainer Basket - Used for ease in removing and draining cut vegetables from the bowl of water.	2-00350
Berkel USDA Approved Food Machine Oil	4675-00182 - 2 ounce bottle 4675-00183 - 16 ounce bottle 4675-00184 - 1 gallon bottle
Berkel USDA Approved Food Machine Grease	4675-00185 - Pack of 3 tubes 4975-09063 - 14 ounce tube

REPAIR PARTS/REPAIR SERVICE

Please contact your Designated Berkel Service Location (DBSL) for any repair parts and/or repair service required on your Berkel VCM. Your nearest DBSL can be found on the web at www.berkel.com. Additional information may be obtained from:

Service Support Center
Berkel Company
4406 Technology Drive
South Bend, IN 46628
(574) 232-8222
(800) 348-0251

TROUBLESHOOTING

1. **LIQUIDS LEAK OUT AT THE BOTTOM OF THE BOWL** - This is caused by a worn out shaft seal. Install a new shaft seal.
2. **LIQUIDS LEAK OUT BETWEEN THE COVER AND THE BOWL** - This is caused by a bad bowl cover gasket. Remove the old gasket. clean out the groove it fits into with a brush and dry thoroughly with

a cloth. Install a new gasket and clamp down the lid to set the new gasket.

3. **MACHINE WON'T RUN** - Make sure the machine is plugged in. Check the breakers on the wall. Make sure there is time programmed into the timer. If okay, then call your nearest Designated Berkel Service Location.
4. **PRODUCT EDGES NOT CLEANLY CUT** - This is caused by dull knives. Have the knives sharpened or replace with new knives.
5. **VCM CLICKS WHILE SPEED BUTTON IS PUSHED** - No time has been programmed into the timer. Set new time and try again.

SPECIFICATIONS

BOWL CAPACITY	47 qt. (44.7 l.)
KNIFE SPEED	1750 rpm
MOTOR	7.5 HP
ELECTRICAL	208/60/3
WEIGHT	
<i>Net</i>	320 lbs (145 kg)
<i>Ship</i>	490 lbs (223 kg)
DIMENSIONS	
<i>Length</i>	24" (610 mm)
<i>Width</i>	32" (813 mm)
<i>Height</i>	47" (1194 mm)

VCM44A/1 Capacity Chart

Product	Operating Accessory with Mixing Baffle	Method	Approximate Processing Time	Min.	Max.
Kitchen Capacities					
Chopped Cheese 28° - 30° F	NK	Continuous	10-15 seconds	15	25
Tossed Salad - Heads	KN/SB	Jog	2 seconds	4	6
Vegetables for Soup Stock (lbs.)	NK	Continuous	30 seconds	15	45
Instant Mashed Potatoes (lbs.)	NK	Jog	10 seconds	16	40
Potato Salad (lbs.)	NK	Jog	5-6 seconds	25	45
Meat Capacities					
Hamburger (28° F) (lbs.)	WK	Continuous/Jog	25 seconds	20	45
Liver Paste (lbs.)	WK	Continuous	3 minutes	20	45
Meat Loaf (lbs.)	WK	Continuous/Jog	50-60 seconds	20	40
Meat-Egg or Tuna Salad (lbs.)	WK	Continuous/Jog	20-40 seconds	20	45
Bakery Capacities					
Pizza Dough (lbs.)	K/MS OR NK	Continuous	90 seconds	18	48
Sweet Dough (lbs.)	NK	Continuous	50-60 seconds	18	48
Cookie Dough (lbs.)	NK	Continuous/Jog	20-40 seconds	16	38
Bread Dough/Light to Medium (lbs.)	K/MS OR NK	Continuous	60-90 seconds	18	48
Pie Dough (lbs.)	NK	Jog	12-20 seconds	15	35
Fruit Filling (lbs.)	NK	Continuous	2 minutes	15	50
Icing/Frosting (lbs.)	NK	Jog	12-20 seconds	15	50

Operating Accessories

NK	-	Narrow Knives
SB	-	Optional Strainer Basket - No Mixing Baffle
K/MS	-	Knead/Mix Shaft
WK	-	Wide Knives

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.