HCM450 CUTTER MIXER

MODEL

HCM450
ML-134170
ML-134172
ML-134207
ML-134208
ML-134209
ML-136137
ML-136138
GENERAL

The HCM450 Cutter Mixer cuts, mixes or blends foods quickly and efficiently. A transparent lid allows the operator to inspect the product during the mix-cut-blend process. The unit operates continuously, momentarily or with a timer control which shuts off the machine automatically after the set time has elapsed. The HCM450 bowl has a liquid capacity of 45 quarts.

The motor on HCM450 is rated 5 HP, 1140 RPM and has thermal overload protection. The motor is totally enclosed with external fan cooling.

The cut mix shaft assembly is used for cutting meat products, vegetables, cheese, pastry, cake products and some doughs that require both cutting and mixing.

The knead mix shaft assembly is used for applications where cutting is not required. It is especially good for kneading yeast doughs.

The strainer basket may be used when cutting vegetables in water. After cutting, the strainer basket is raised to allow the water to drain away from the food.

The bowl is locked in its vertical position during processing with the lock arm on HOLD. After processing, when you move the lock arm from HOLD to TILT, the bowl can pivot to allow easy pouring.

When cutting certain products, a hand-operated mixing baffle may be used to stir or move the product into the knives. The mixing baffle may be removed when it is not needed.
UNPACKING
Immediately after unpacking, check for possible shipping damage. If the cutter mixer is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

Prior to installation, verify that the electrical service agrees with the specifications on the machine data plate located on the frame behind the control box.

ASSEMBLY
Remove the cutter mixer from the skid and install rubber feet as follows: Apply a bead of silicon sealant (not provided) around the edge of each leg. Insert a rubber foot onto each leg and fasten with bolts and washers provided. Match the shape of the foot to conform to the shape of the leg. Two of each style are included.

NOTE: Optional right and left casters (with rubber caster pads) are available for installation on the two legs on the control panel side. Assemble with the bolts and washers provided for the rubber feet.

Place cutter mixer in the desired location.

ELECTRICAL CONNECTIONS

**WARNING** Electrical and grounding connections must comply with applicable portions of the national electrical code and/or other local electrical codes.

**WARNING** Disconnect electrical power supply and place a tag at the disconnect switch, indicating that the circuit is being worked on.

Machines are shipped from the factory with a 6-foot cord and plug. A mating receptacle is furnished with the machine as standard equipment.

| ELECTRICAL DATA |
|-----------------|------------------|-----------------|
| Model           | V/Hz/Ph          | Minimum Circuit Ampacity |
|                 |                  | Maximum Circuit Breaker Size AMPS |
| HCM450          | 200/60/3         | 30               |
|                 | 230/60/3         | 30               |
|                 | 460/60/3         | 20               |

Check Motor Rotation
Check bowl to make sure it is empty, and remove the cut mix shaft assembly or the knead mix shaft assembly. Close and latch the lid. Connect the power cord to its receptacle.

Set the timer on JOG. Press START and then release.

The motor should rotate in a clockwise direction as indicated by the arrow (Fig. 1).

If the motor rotation is incorrect, unplug the power cord, disassemble the plug and interchange any two of the power leads (red, white or black). Do not change the green ground wire. Then reassemble the plug and recheck.

Fig. 1
ASSEMBLING BOWL SEAL AND ATTACHMENTS

Refer to the handbook accompanying the cutter mixer for recipe guidelines and advice regarding the appropriate selection of attachments for the desired application.

**WARNING** Before installing bowl seal and attachments, be sure the power cord is unplugged.

Bowl Seal: Insert the two black seal rings in the grooves of the white seal retainer so the thin black edge is out (Fig 2). Then install the seal retainer onto the motor shaft (Fig 3). Seat seal securely against the bottom of the bowl with a ¼ turn. Store the extra seal shipped with the machine in a location where you can find it, if necessary.

![Fig. 2](image1)

![Fig. 3](image2)

![Fig. 4](image3)

Strainer Basket: If needed, insert basket in bowl over the motor shaft.

**NOTE:** Never use strainer basket and mixing baffle at the same time.

Cut Mix Shaft Assembly or Knead Mix Shaft Assembly: Place on motor shaft, seat square drive at base and tighten hand knob by turning counterclockwise.

Lid Scraper: Insert on bar opposite mixing baffle. Lid scraper is used to clean the inside of the bowl cover.

Mixing Baffle: Insert shaft of mixing baffle into hole in the center of the lid. With baffle paddle down, hold baffle handle at an angle so lock handle hangs down and insert onto shaft. Then tighten lock handle (Fig. 4).
OPERATION

Move bowl tilt handle to HOLD to lock bowl in vertical position (Fig. 5).

Close and latch the lid by grasping the lid handle with the left hand. Press lid handle down while turning the latch until lid lock is engaged (Fig. 5).

CONTROLS (FIG. 5)
The Timer has three mode settings: Run, Jog or Timer.

RUN – Machine runs continuously after START is pushed until STOP is pressed.

JOG – Machine jogs momentarily while START is held down; the machine turns off when you release START.

TIMER – After you set the time and push START, the machine will run for the amount of time on the timer. After the set time has lapsed, the machine automatically stops.

START – Turns the machine on.

STOP – Turns the machine off.

UNLOADING
Push the STOP switch. After the shaft has stopped, open the cover. NOTE: When the baffle is not in place, the lid opens a few inches upon release.

Remove the cut mix shaft assembly before emptying bowl. The knead mix shaft assembly may stay in place while emptying the bowl.

Scrape lid (when necessary) before tipping bowl.

For products cut in water, lift out the strainer basket while the bowl is in the vertical position. Allow water to strain through holes in bottom of strainer basket.

Move the bowl tilt handle to TILT.

The bowl may be tilted to any desired position, depending upon the type of product. Grasp the lid handle and cautiously tilt the bowl by pulling toward you as the contents empty into a container.

After product has been removed, return bowl to vertical position. Return bowl tilt handle to HOLD position and proceed to run another load or clean the machine.
Fig. 5
CLEANING

**NOTICE** Damage to the lid can result if it is exposed to certain chemicals. Do not use harsh abrasives, such as powdered or liquid cleansers, steel wool or other abrasive pads; cleaners containing ammonia, such as window sprays; cleaners containing chlorine, solvents, chemical adhesives; and highly caustic chemicals, such as drain cleaners or commercial dishwasher detergents.

**PREWASH**

Before disassembling, put 1 gallon of warm water and 1 or 2 tablespoons of a mild liquid household dishwashing detergent, such as Joy, Ivory or Palmolive Green in the bowl. Close and latch the lid. Turn the timer to JOG and run for three bursts of 3 seconds each so the solution is thoroughly mixed.

**WASH BOWL AND COMPONENTS**

**WARNING** Unplug unit before cleaning.

Remove cut mix shaft assembly or knead mix shaft assembly and, if necessary, the mixing baffle. Do not leave attachments on motor shaft for storage.

Wash the inside of the bowl and the underneath side of the lid using a soft, clean cloth or sponge. Use a soft, plastic spatula to scrape the inside of the bowl if food soil adheres to the side of the bowl.

Hand wash the attachments.

Remove the wash water from the bowl.

**RINSE**

Pour 1 gallon of warm rinse water into the bowl.

Rinse attachments and mixing baffle with water in bowl and remove them to dry. Thoroughly rinse the inside of the lid and bowl.

Remove the rinse water from the bowl and dry with a clean cloth.

**REMOVE BOWL SEAL**

Remove the bowl seal by lifting seal retainer up and off of the motor shaft. Separate seals from retainer. Wash, rinse and dry all three parts.

Reassemble seals and retainer (Figs. 2 and 3). Be sure bowl area is properly cleaned before reinstalling seal. Thin black edge is out. Replace seal retainer on shaft, push down firmly and seal it against the bottom of the bowl with a 1/4 turn.

**NOTE:** The bowl seals should be cleaned after every third batch or whenever the product is changed.

Leave the lid unlatched when machine is not in use.

**NOTE:** It is recommended that you do not store extra accessories in the bowl to prevent damage in case the unit gets turned on.
MAINTENANCE

The prelubricated motor bearings should be checked by a Hobart service technician every 3 to 4 years under normal use. No other lubrication is required.

TROUBLESHOOTING

SERVICE

Contact your local Hobart-authorized Service Office for any repairs or adjustments needed on this equipment.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Cause</th>
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<tbody>
<tr>
<td>Cutter mixer won't operate.</td>
<td>1. Electrical power not connected.</td>
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<tr>
<td></td>
<td>2. Circuit breaker tripped or fuse blown.</td>
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