

# HOBART

## LEGACY™



### Models

HL120	ML-134296
HL200	ML-134331
HL200	ML-134289
HL200	ML-134450

PRIOR ML'S COVERED IN THIS CATALOG

HL200	ML-134308
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## INSTRUCTION MANUAL

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# Installation, Operation and Care of Legacy™ 12 & 20-Quart Mixers

## SAVE THESE INSTRUCTIONS

### GENERAL

The Legacy 12-quart mixer is a bench-type mixer which features a SmartTimer™, a manual bowl lift and a #12 attachment hub as standard equipment.

The Legacy 20-quart mixer is a bench-type mixer which features a SmartTimer™, a manual bowl lift and a #12 attachment hub as standard equipment. With the use of special agitators, a 12 quart bowl may be used on the HL200 mixer.

A variety of attachments, agitators and accessories are available. These are described in a separate *Use and Applications Handbook*, which is furnished on the Legacy Mixer Operator Training CD provided with each mixer.

### INSTALLATION

#### UNPACKING

Immediately after unpacking the mixer, check for possible shipping damage. If this machine is found to be damaged after unpacking, save the packaging material and contact the carrier within 15 days of delivery.

#### LOCATION

Prior to installation, test the electrical service to assure that it agrees with the specifications on the machine data plate.

Place the mixer on a suitable sturdy level surface. There should be adequate space around the mixer for the user to operate the controls and to install and remove bowls.

Holes are located in the base to permanently secure the mixer, although this is not necessary in normal installations.

## **ELECTRICAL CONNECTIONS (Cord Connected Mixers)**

**WARNING:** THE ELECTRICAL CORD ON THIS MACHINE IS EQUIPPED WITH A THREE-PRONGED GROUNDING PLUG WHICH MUST BE CONNECTED TO A PROPERLY GROUNDED RECEPTACLE. IF THE RECEPTACLE IS NOT THE PROPER GROUNDING TYPE, CONTACT AN ELECTRICIAN. DO NOT REMOVE THE GROUNDING PRONG FROM THE PLUG.

**WARNING:** ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTION OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

### **Check Initial Operation**

1. Apply power to the mixer by inserting the cord plug into a properly grounded outlet.
2. Install the bowl and raise into mix position, with the bowl support up and bowl guard wire cage closed.
3. Turn the SPEED dial pointer to STIR.
4. Momentarily run the machine by pushing the START and then STOP buttons.

# OPERATION

**WARNING:** MOVING AGITATOR IN BOWL. KEEP HANDS, CLOTHING, AND UTENSILS OUT OF BOWL WHILE IN OPERATION. DO NOT USE WITHOUT INTERLOCKED GUARD.

The Legacy mixer is equipped with SmartTimer™ controls. Refer to Fig. 1 for operating parts and OPERATION section for their functions.

The bowl guard wire cage must be in closed position or the mixer will not operate.

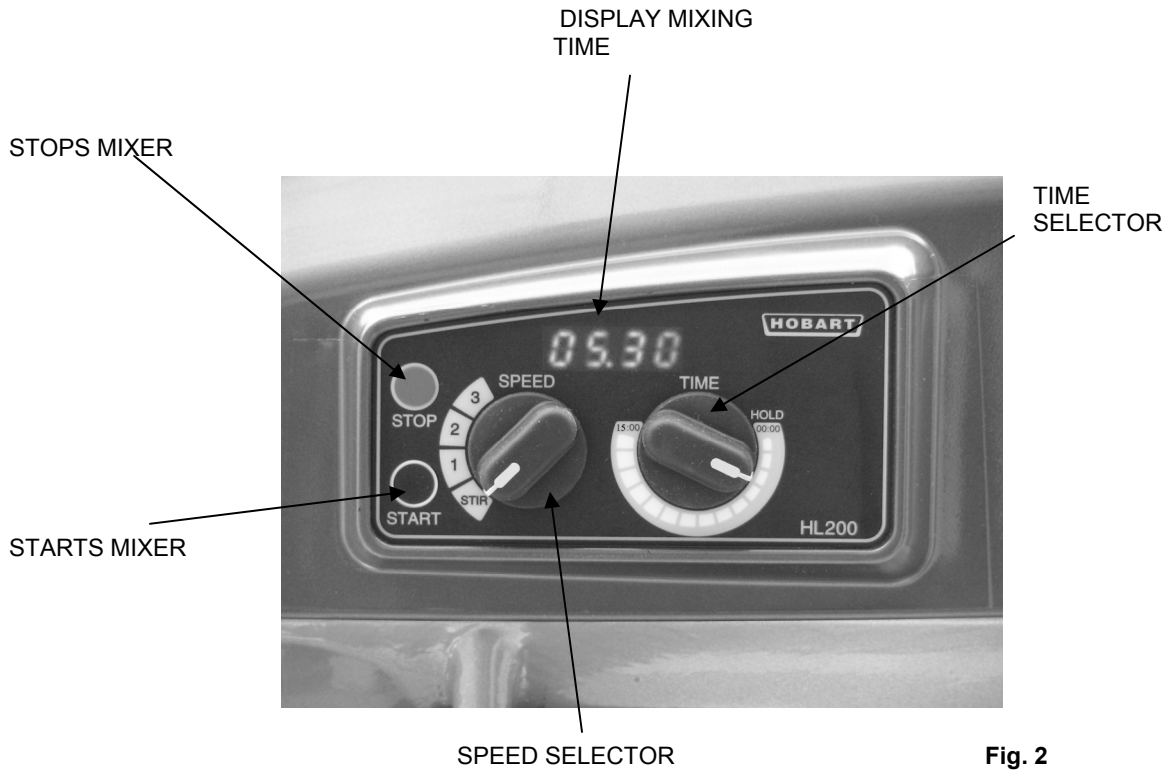
The bowl must remain in mix position on bowl support and the bowl support must be raised (mix position) or the mixer will not operate.



Fig. 1

## Standard Controls

### Models HL120/HL200 (With Three Mix Speeds Plus Stir Speed)



### HL120/HL200 Mixer Speeds

STIR (Slow)	The lowest speed is for incorporating ingredients.
SPEED 1 (Low)	This speed is for heavy mixtures such as pizza dough, heavy batters and potatoes.
SPEED 2 (Medium)	This speed is for mixing cake batters, mashing potatoes and developing bread dough.
SPEED 3 (High)	This speed is for incorporating air into light batches, as well as finishing whipped items

## Recipe Timer (Optional)

Models HL120/HL200 (With Three Mix Speeds Plus Stir Speed)



Fig. 15

The SmartPlus2™ recipe timer has two operating modes, Standard (STD) and RECIPE.

### Standard Mode

Operates exactly as the standard controls utilizing continuous and timed mixing.

### Recipe Mode

- Use mode buttons to switch mixer operation between recipe and standard timed operation.
- Up to 4 recipes can be stored in memory
- Each recipe can contain 5 steps
- Each step can be programmed to operate with the following speeds and time.

#### SPEED SETTINGS

SPd 1 (DEFAULT)  
SPd 2  
SPd 3  
Stir  
PAUS (pause – no mixing)

#### TIME SETTINGS

00:00 – 15:00 minutes (10 second increments)  
End (default)

## **BOWL PLACEMENT**

The bowl must be installed before the agitator is installed.

To install the bowl, lower the bowl support and position bowl so the alignment pins on the left side of the bowl support fit in the holes in the bowl tab. (Fig. 3) Place the slotted tab on bowl into the lower part of the pin. Swing the bowl into the mix position on bowl support. (Fig. 4)



**Fig. 3**



**Fig. 4**

## **AGITATOR**

To install an agitator, the bowl must be on the bowl support.

### **To Install**

1. Lower the bowl.
2. Open the bowl guard wire cage.
3. Place the agitator inside the bowl and align the horizontal slot on the agitator with the agitator shaft pin.
4. Slide the agitator up the agitator shaft until it stops and latches. An audible click should be heard when the agitator locks in position.

### **To Remove**

1. Open the bowl guard wire cage.
2. Lower the bowl.
3. Hold the agitator and pull the plunger of the agitator out (Fig. 5). Slide agitator down off the agitator shaft.



**Fig. 5**

## PREPARE FOR MIXING

1. Place the mixing bowl on the bowl support.
2. Pour ingredients into the bowl.
3. Swing the bowl back to the mix position.
4. Place the agitator inside the bowl, and then attach it to the agitator shaft (Fig. 6).
5. Lift bowl support.
6. Correctly close the bowl guard wire cage.
7. The mixer is now ready for mixing. (See TIMER OPERATION.)



Fig. 6

## STANDARD TIMER OPERATION

### Using the Count-Up Mode (Continuous Mixing)

1. Turn the SPEED dial to select a mix speed (the SPEED setting can be changed at any time during the mixing operation).  
**NOTE:** STIR is to be used for incorporating ingredients. Do not use to develop dough products.
2. Set the timer on hold by turning the TIME selector counterclockwise until HoLd appears in the TIME window.
3. Press the START button to begin mixing. The timer starts counting forward from 00:00.  
**NOTE:** If the wire cage is opened at any time, the mixing operation will stop. To resume the mixing operation, close the wire cage and press the START button.
4. Use the STOP button to stop the mixer; the mixing time is displayed in the TIME window.
5. Press the START button to resume mixing if needed.  
**NOTE:** When the timer reaches 15:00 minutes, the beeper will sound momentarily and timer will rollover to 00:01 and continue counting until the STOP button is pressed.

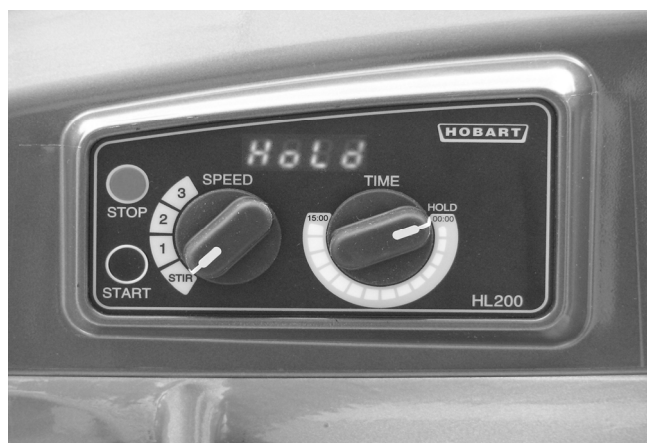


Fig. 7

## Using the Count-Down Mode (Timed Mixing)

1. Turn the SPEED dial to select a mix speed.
  - a. If the count-up mode was used for the previous batch, the desired time needs to be entered.
  - b. If the count-down mode was used for the previous batch, the previous time will be displayed. If a different time is needed, turn the TIME selector to the desired time in 10 second increments.
2. Press the START button to begin mixing; the timer starts counting down from the set time.
  - a. To stop the mixer at any time, press the STOP button. To resume mixing, press the START button. For example: The mixer is started at SPEED 1 for 30 seconds and is stopped after 10 seconds. Pressing the START button will resume the mixing operation.
  - b. If the mixer is stopped and a new time setting is entered, pressing the START button saves the new time setting on the current speed selection.

For example: The mixer is started at SPEED 1 for 30 seconds and is stopped after 10 seconds. A new time is entered by turning the TIME selector. The new time will replace the initial 30 seconds for SPEED 1 after the START button is pressed.
  - c. If the time is changed while mixing, the mixer will operate until the new time expires. The adjustment to the time will not be stored.
  - d. If speed is changed while mixing, the time will change to the previous time for the selected speed and count down.

**NOTE:** If the wire cage is opened at any time, the mixing operation will stop. To resume the mixing operation, close the wire cage and press the START button.
3. When the timer reaches 00:00, the mixer stops; a beeper sounds for 1 second. The count-down timer then displays the last-stored time.

## OPERATING NOTES

- STIR is to be used for incorporating ingredients. Do not use it to develop dough products.
- If the mixer is stopped during a mixing operation, the timer also stops. The timer starts again (with the time remaining) when the START button is pressed.
- Turn the TIME selector clockwise to take the mixer out of the hold mode.

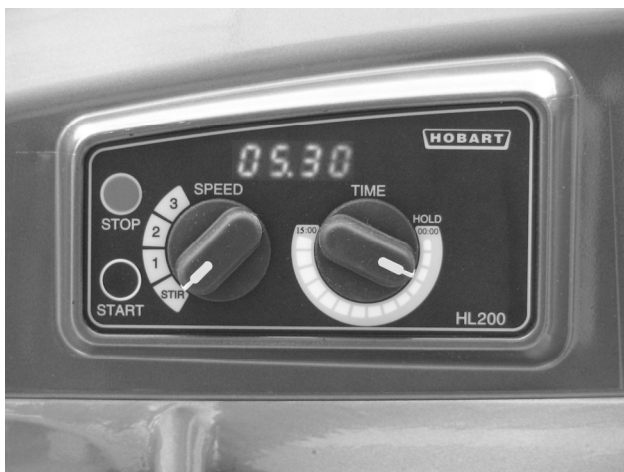


Fig. 8

## RECIPE TIMER OPERATION



### Recipe Timer Notes

- If pause is selected as a mix speed, the mixer START button must be pressed to advance to the next recipe step after the pause time has expired.
- If pause has been selected, the bowl guard can be opened and the time will continue to count down.
- The recipe step can be interrupted and then resumed by pressing the STOP button and then the START button.

**NOTE:** If PAUSE has been selected, the STOP button is disabled.

- The recipe can be terminated by stopping the mixer and pressing the STD button.

### Using The Recipe Timer

1. Press Recipe mode button.
2. Turn the RECIPE selector to select a recipe.
3. Press START; mixer will operate at the programmed speed for the programmed time.
  - a. Speed is displayed momentarily.
  - b. Remaining time for the operating step will be displayed and the step light is flashing.

**NOTE:** Recipe and Time selectors are disabled.

4. Mixer will continue to perform the programmed speeds and times until the recipe steps are completed.

**NOTE:** If pause has been programmed for a step speed, the mixer START button must be pressed to advance to the next recipe step after the pause time has expired.

5. When the timer reaches the end of the last programmed recipe step, the mixer stops; the beeper sounds; the selected recipe is displayed.

## View Recipe

When the mixer is in RECIPE mode, you can view the step settings of any recipe.

1. Press the SELECT/SAVE button.
  - A. Display will alternate between speed and time.
  - B. The LED of the step being displayed will flash.
2. Use the arrow buttons to view the next step.
3. Use the Recipe selector to view other recipes.
4. Press PGM button to return to the RECIPE mode.

**NOTE:** If the mixer is performing a recipe, the recipe will continue to operate in normal recipe mode sequence.

## PROGRAMMING RECIPE TIMER



Fig. 16

HL200 is powered with display showing a mix time (Standard Mode) or recipe number (Recipe Mode).

1. If a mix time is displayed, Press RECIPE mode button. Display corresponds with position of recipe (speed) selector.
2. Press and hold TIME. Continue holding TIME, then press PGM and hold until rP1 is displayed (with step 1 blinking), buzzer sounds and programmed step LEDs are lit.
3. Use arrows to select recipe number (1-4) for programming.
4. Press SELECT/SAVE to enter program mode for the recipe number selected.  
Buzzer sounds and display alternates between speed and time to indicate programming mode.

## NOTES:

- If a value has been assigned for a step number, that LED will be lit.
- The LED for the selected step will blink.
- If the default value is still assigned to a step, the LED will not be lit.
- When programming, the Recipe and Time Selectors are disabled.

## SPEED SETTINGS

SPd 1 (DEFAULT)

SPd 2

SPd 3

Stir

PAUS (pause – no mixing)

## TIME SETTINGS

00:00 – 15:00 minutes (10 second increments)

End (default)

5. Use arrows to select step number (1 – 5).
6. Press SPEED. All characters will blink and buzzer will sound.
  - A. Use arrows to select the mixing speed for selected step.
  - B. Press SELECT/SAVE to set the speed. SAVE displayed momentarily and buzzer sounds.
7. Display alternates between speed and time to indicate programming mode.
8. Press TIME. Third digit will blink and buzzer will sound.
  - A. Use arrows to select the mixing time (increments of 10 seconds) for selected step.

**NOTE:** If all 5 steps are programmed, the recipe will terminate at the end of step 5. If fewer than 5 steps are used, the default time setting of END will terminate the recipe.

  - B. Press SELECT/SAVE to set the time for the step. SAVE momentarily displayed and buzzer sounds.
9. Display alternates between speed and time to indicate programming mode.

**NOTE:** LED of step programmed will be flashing.
10. Use arrows to select next step.
11. Repeat setting speed and time for additional steps and use SELECT/SAVE to save settings.
12. After all steps for recipe are programmed, press PGM to exit programming mode. Buzzer sounds and display will show recipe number that was programmed with the number blinking.
13. Press PGM to enter run mode. (Buzzer sounds)
14. Press STD to return to standard mode or set recipe selector to the desired recipe.
15. Select the recipe that you programmed and verify proper operation.

## UNLOADING

1. Open the bowl guard wire cage assembly.
2. Lower bowl support.
3. Remove the agitator from the agitator shaft.
4. Slightly lift the bowl off the pin (right side), pull bowl to the front and remove from the bowl support (left side).

## WIRE CAGE

The bowl guard wire cage can be rotated out of the way to add ingredients or to access the bowl and agitator.

Note how the plastic carriers allow the wire cage to ride around the circumference of the planetary drip cup.

- Open the bowl guard wire cage: rotate it to your left (Fig. 9).
- Close the bowl guard wire cage: rotate it to your right until it stops, closed position (Fig. 10).

**NOTE:** The bowl guard wire cage must be returned to the closed position for the mixer to operate.



Fig. 9



Fig. 10

### **Remove and Clean Bowl Guard Wire Cage (Fig. 11)**

1. Rotate wire cage to your left until the three carriers align with the carrier escape slots in the circular ridge of the planetary drip cup.
2. Lift the wire cage straight up so the carriers escape from the slots on the drip cup. The bowl guard wire cage can now be removed by pulling toward you.



**Fig. 11**

3. Wash the bowl guard wire cage in a sink, rinse with clear water, and dry with a clean cloth.
4. The splash guard can be wiped off and/or washed with a cloth or sponge using warm, soapy water. Rinse with clear water and dry with a clean cloth.

### **Reinstall Bowl Guard Wire Cage**

1. Position the ring of the bowl guard wire cage so the carriers are positioned above the slots in the planetary drip cup.
2. Lower the bowl guard wire cage so the carriers pass through the slots.
3. Rotate the bowl guard wire cage to your right until it contacts the stop, closed position.

## AGITATORS AND ATTACHMENTS

Attachments for attachment hub and agitators are covered in a separate Hobart Legacy Mixer Use and Application Handbook on the Mixer Operator Information CD. Follow the instructions accordingly.

### Available Agitators and Attachments



**12 & 20 Qt. B Flat Beater**



**12 & 20 Qt. D Wire Whip**



**12 & 20 Qt. ED Dough Hook**



**20 Qt. E Dough Hook**



**12 & 20 Qt. SST Bowl**



**12 & 20 Qt. Scraper**



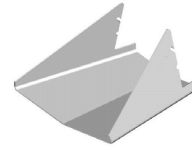
**12 & 20 Qt. Splash Cover**



**12 & 20 Qt. C Wing Whip**



**12 & 20 Qt. P Pasty Knife**



**12 & 20 Qt. Ingredient Chute**



**12 & 20 Qt. Table**

## **CLEANING**

**WARNING:** UNPLUG MACHINE POWER CORD BEFORE BEGINNING ANY CLEANING PROCEDURES.

The mixer should be thoroughly cleaned daily. DO NOT use a hose to clean the mixer; it should be washed with a clean, damp cloth. The base allows ample room for cleaning under the mixer. The apron (Fig. 1) may be removed for cleaning by loosening the screws. The drip cup (Fig. 1) should be removed (which is secured with 3 screws) periodically and wiped clean. For cleaning the bowl guard wire cage refer to page 15.

# MAINTENANCE

**WARNING:** UNPLUG MACHINE POWER CORD BEFORE BEGINNING ANY MAINTENANCE PROCEDURES.

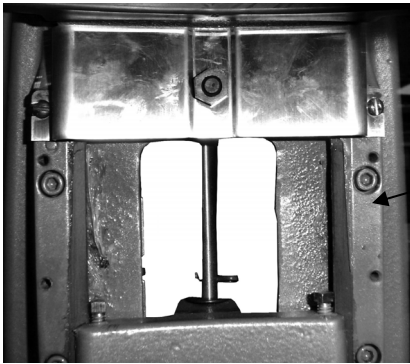


Fig. 12

Slideway



Fig. 13

Planetary Seal

## LUBRICATION

### Slideways

The slideways (Fig. 12) should be lubricated approximately twice a year. To reach these areas, fully lower the bowl support and remove the apron, which is secured by slotted screws. Wipe a thin coat of Lubriplate 630AA on the bowl pad area of the bowl supports and on each slideway. Install the apron.

### Planetary Seal

Occasionally, the planetary seal (Fig. 13) may become dry and begin to squeak. To correct this, work a little lubrication (mineral oil) under the lip of the seal.

## ADJUSTMENTS

### Agitator Clearance

The agitator clearance should be checked periodically. The agitator must not touch the bowl and the maximum clearance between the bottom of the bowl and the B flat beater is 1/8" (3 mm); the maximum clearance between the bottom of the bowl and the ED dough arm is 5/16" (8 mm).

Install a bowl and agitator (e.g., beater). If the bowl and beater come into contact before the bowl support reaches its stop, adjust the stop screws. Refer to Adjust the Bowl/Agitator Clearance.

### Measure Clearance

Pour enough flour in the bowl to cover the bottom of the bowl where the beater travels. With the bowl fully raised (beater should not touch the bottom of the bowl), briefly run the mixer at the lowest speed.

Turn off the mixer, disconnect the electrical power supply, and measure the depth of flour where the beater has traced a path. This measurement should be taken at several points around the bowl to assure accuracy.

### Adjust the Bowl/Agitator Clearance

- Remove the apron (which is secured by screws).
- Adjust the clearance by moving the stop screws counterclockwise to increase the clearance or clockwise to decrease the clearance.
- After the adjustments are made, replace the apron and secure it with the screws.
- Carefully operate the bowl lift several times to check the adjustment.

Stop  
Screw



Fig. 14

# TROUBLESHOOTING

Symptoms	Possible Causes
Mixer will not start	Flashing Time Display – See Below Branch circuit protector is in open position - check fuse or disconnect switch. Mixer is overloaded. Wire cage is not in the closed position. Bowl is not in closed (mix) position or if Bowl is not in up position.
Agitator touches bowl	Bowl is not in closed (mix) position. Improper agitator clearance - see Maintenance for adjustment procedure. Agitator is not installed properly
Planetary seal squeaks	Seal requires occasional lubrication - see Maintenance
Timer displays flashing alarm code (Ex. “OL1” – Motor overload)	If the error code is flashing – unplug machine until display is blank then plug back in. If symptoms still exist, contact your local Hobart Service office.

## SERVICE

If service is needed on this equipment, contact your local Hobart Service office.

1-888-4HOBART