INSTRUCTIONS



D340 MIXER

D340 MIXERS

D340	*ML - 134254*
D340 W/Electronic Timer	*ML - 134256*

HOBART
CORPORATION

701 S. RIDGE AVENUE
TROY, OHIO 45374-0001

937 332-3000

www.hobartcorp.com

F34926 (June 2005)



MODEL D340 MIXER

© HOBART 2005

Installation, Operation and Care of MODEL D340 MIXERS

SAVE THESE INSTRUCTIONS

GENERAL

The D340 Mixer is a medium-duty mixer which develops 1 1/2 horsepower and features a timer, thermal overload protection and a #12 Attachment Hub as standard equipment. A variety of agitators are available for use on either the standard 40-quart bowl or the optional 30-quart bowl. A special 20-quart bowl and agitators are available options.

Programmable Timer Controller is optional on D340 models.

A variety of attachments and accessories are available for all mixers. These are described in a separate *Use and Applications Handbook,* which is furnished with each mixer.

INSTALLATION

UNPACKING

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

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

LOCATION

Place the mixer in its operating location. There should be adequate space around the mixer for the user to operate the controls and to install and remove bowls. The area above the mixer should allow the top cover to be removed for routine maintenance and servicing.

Holes are provided in the base for permanent bolting to the floor, although this is not necessary in normal installations. Four plastic plugs are supplied with the mixer to plug these holes if they are not used.

ELECTRICAL CONNECTION

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

WARNING: DISCONNECT THE ELECTRICAL POWER TO THE MACHINE AND FOLLOW LOCKOUT / TAGOUT PROCEDURES.

Models	Volts /Hz/Ph	Rated Amps	Circuit Size (Amps)	Fuse Size (Amps)	60 C Copper WIre Size	Circuit Size (Amps)	Circuit Breaker (Amps)	60 C Copper Wire Size
D340	120/60/1	12.4	20	20	12	20	20	12
D340	208/60/1	8.0	15	10	14	20	20	12
D340	240/60/1	6.2	15	10	14	15	15	14
D340	208/60/3	3.8	15	6	14	15	6	14
D340	240/60/3	3.4	15	6	14	15	6	14
D340	480/60/3	1.7	15	3	14	15	6	14

A hole for 1/2 trade size conduit is located at the top of the pedestal (Fig. 1). Make electrical connections per the wiring diagram located on the inside of the top cover.

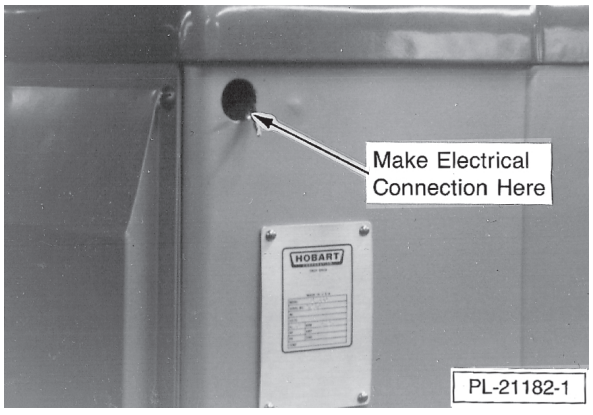


Fig. 1

Check Rotation (Three-Phase Machines Only)

Three-phase machines must be connected so the planetary rotates in the direction of the arrow on the Drip Cup. To check rotation:

1. Set the Gear Shift Lever on 1.
2. Apply power to the mixer, set the Electromechanical Timer on hold; or, if equipped with a Programmable Timer Controller, set it on [-- : --]. With the Bowl Support all the way up, momentarily run the machine by pushing the START and then STOP buttons.
3. If rotation is incorrect, disconnect electrical power supply and interchange any two of the incoming power supply leads.

OPERATION

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

Every D340 mixer is equipped with either an Electromechanical Timer Control (described at the bottom of this page) or a Programmable Timer Controller (described on page 6). Also, become familiar with the other operating parts (Fig. 2) and their functions, which are referenced throughout the Operation section.

The Bowl Guard must be in the Front-Center Position or the mixer will not operate (see page 10).

If the Bowl Support is not all the way up, the mixer will not operate unless the START button is held in.

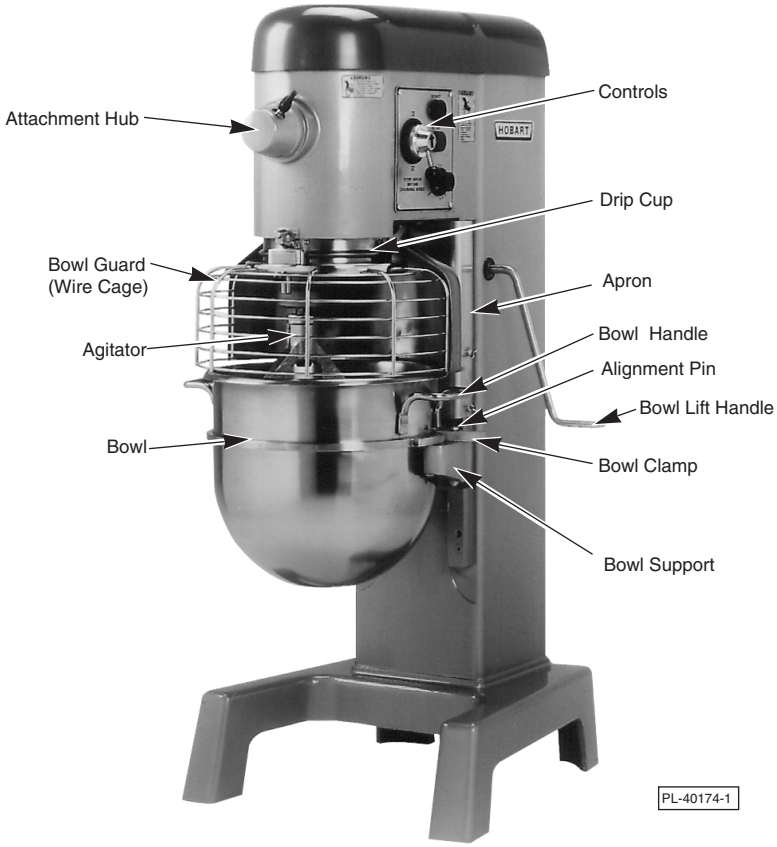


Fig. 2

ELECTROMECHANICAL TIMER CONTROLS (When Equipped, Fig. 3)

The START button is used to start the mixer.

The STOP button is used to stop the mixer.

The TIMER is used in conjunction with the START button for timed mixing operations and will stop the mixer when a preset time has elapsed.

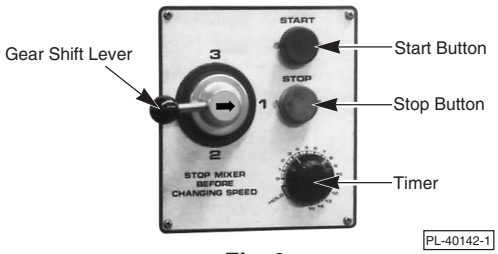


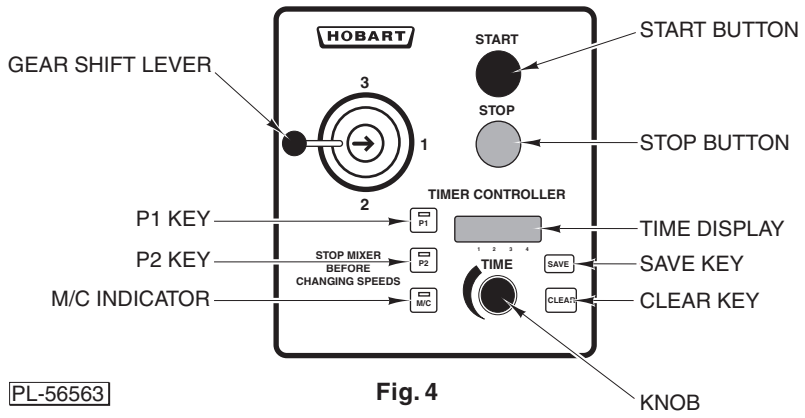
Fig. 3

Non-timed Mixing

Set the timer on hold and use the START and STOP buttons to operate the mixer.

PROGRAMMABLE TIMER CONTROLLER (When Equipped)

At idle, the TIME DISPLAY [--:--] shows that no time has been set (Fig. 4).



PL-56563

Fig. 4

Timer Keys	**Programming Function** (if the mixer is not mixing)
P1	Contains up to four preset times. Displays each preset time sequentially.
P2	Contains up to four additional preset times. Displays each preset time sequentially.
TIME Knob	Turn the TIME knob until the desired time is shown on the TIME DISPLAY.
SAVE	Replaces the preset time with the indicated time.
CLEAR	Returns to idle from a programming function.

Continuous Mixing

START and STOP buttons control mixing operation.

Beginning from the idle display [-- :--], press START to begin mixing. The M/C Indicator will be lit, and the total mixing time will be indicated (minutes and seconds).

Press STOP when mixing is done. The M/C Indicator light goes off and the idle display [-- :--] returns.

Set Mixing Time (Using TIME Knob)

Beginning from the idle display [-- :--], turn the TIME knob to set the mixing time. The M/C Indicator will be lit.

START and STOP buttons control mixing operation.

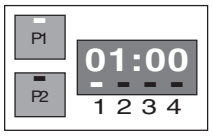
Press START to begin mixing. The timer will count down from the set time to [00 : 00].

If STOP is pressed, both mixing and timer countdown will be interrupted. After pressing STOP, press START to resume both mixing and timer countdown; or, press CLEAR to return to the idle display.

When the timer reaches [00 : 00], the mixer will stop and the M/C Indicator will be lit. A tone will sound for 2 seconds and the idle display [-- :--] will return.

Set Mixing Time (Preset Keys P1 or P2)

Each preset key has four time settings. The indicator lights above the number 1, 2, 3 or 4 and the P1 or P2 indicator light identify which preset time is being displayed. The chart below shows the default settings. The next page shows how to revise these preset times. The TIME Knob can be used to adjust the mixing time if it is turned prior to pressing START.



▭ Indicators above P1 and 1 indicate the first preset time contained in P1.

Beginning from the idle display [-- :--], press P1 or P2 to display the #1 preset mixing time. (Pressing P1 or P2 again will display the next preset time, etc.)

☞ The TIME knob can adjust the time.

START and STOP buttons control mixing operation.

Press START to begin mixing. The timer will count down from the set time to [00 : 00].

If STOP is pressed, both mixing and timer countdown will be interrupted. After pressing STOP, press START to resume both mixing and timer countdown; or press CLEAR to return to the idle display.

When the mixer is stopped, you can perform the following tasks: add ingredients, change speed, reset the timer, continue mixing or unload.

When the timer reaches [00 : 00], the mixer stops. A tone sounds for 2 seconds and the next preset mixing time displays. When the last preset time reaches [00 : 00], the P1 or P2 indicator light is lit and the idle display [-- : --] returns. Repeat from ☞ to complete four preset times.

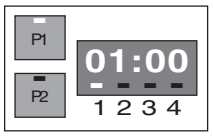
The timer reverts to the factory-programmed preset times after any power interruption.

FACTORY-PROGRAMMED PRESET TIMES

Preset Key	Indicator			
	1	2	3	4
P1	01:00	02:00	10:00	00:00
P2	02:00	01:00	05:00	03:00

Revise Preset Mixing Times (Preset Keys P1 or P2)

Each preset key has four preset time settings. The indicator lights above the number 1, 2, 3 or 4 and the P1 or P2 indicator light identify which preset time is being displayed.



▭ Indicators above P1 and 1 indicate the first preset time contained in P1.

Beginning from the idle display [-- :--], press P1 or P2 to display the #1 preset mixing time. (Pressing P1 or P2 again will display the next preset time, etc.)

☞ Turn the TIME knob to change the time for the indicated preset.

Press SAVE to retain the revised time and move to the next preset time.

Repeat from ☞ for each preset time (1, 2, 3 and 4 contained in P1 or P2).

Press CLEAR to retain the saved times and return to the idle display [-- : --].

The timer reverts to the factory-programmed preset times after any power interruption.

FACTORY PROGRAMMED PRESET TIMES

Preset Key	Indicator			
	1	2	3	4
P1	01:00	02:00	10:00	00:00
P2	02:00	01:00	05:00	03:00

CHANGING SPEEDS

The Gear Shift Lever is used to change speeds. Always stop the mixer before changing speeds.

1. Push the STOP button.
2. Move the Gear Shift Lever to the desired speed.
3. Push the START button to restart the mixer.

NOTE: If you do not stop the mixer to change speeds, it will automatically shut itself off and you will have to restart it after changing speeds.

Mixer Speeds

Speed 1 (Low) — This speed is for heavy mixtures such as bread dough, heavy batters and potatoes.

Speed 2 (Medium) — This speed is for light dough (which must rise quickly), cake batters, mashing potatoes and some whipping operations.

Speed 3 (High) — This is a fast speed for light work, such as whipping cream, beating eggs and mixing thin batters.

BOWL LIFT

D340 models are equipped with a Bowl Lift Handle (see Fig. 2). Mixers equipped with Bowl Lift Handle must be turned off to lower the bowl.

- Raise the bowl by rotating the lift handle *downward.*
- Lower the bowl by rotating the lift handle *upward*.

MIXING

This section explains operation of the mixer and how to install bowls, agitators and attachments. A separate *Use and Applications Handbook,* provided with the mixer, contains information on mixing procedures and outlines specific uses for agitators, attachments and accessories.

Bowl

New mixer bowls and agitators (beaters, whips and dough arms) should be thoroughly washed with hot water and a mild soap solution, rinsed with either a mild soda or vinegar solution, and thoroughly rinsed with clear water before being used. This cleaning procedure should also be followed for bowls and agitators before whipping egg whites or whole eggs.

The bowl must be installed before the agitator is installed.

To install the bowl, fully lower the Bowl Support (Fig. 2). Position the bowl so the alignment bracket on the back of the bowl is in the bowl retainer on the Bowl Support and the alignment pins on the front of the Bowl Support fit in the holes in the bowl. Lock the bowl in place by rotating the Bowl Clamps (Fig. 2) over the ears of the bowl.

Agitator

To install an agitator, the bowl must be installed and fully lowered. Place the agitator in the bowl, push the agitator up on the agitator shaft and turn the agitator *clockwise* to seat the shaft pin in the slot of the agitator shank.

To Raise the Bowl While Mixing

To raise the bowl while the agitator is mixing the product (when required by recipe or when using the bowl scraper attachment):

1. Load ingredients.
2. Close the wire cage assembly.
3. Select low speed.
4. To begin mixing, press and hold the START button; then raise the bowl.

BOWL GUARD

The Wire Cage Assembly can be rotated out of the way to add ingredients or to access the bowl and agitator.

Rotate the Wire Cage Assembly

Push the Latch in to release the Centering Pin from the Centering Ramp. Note how the grooves on the nylon retainers allow the Wire Cage to ride around the circular Ridge on the Planetary Drip Cup. The Wire Cage can rotate 360° left or right. When the Wire Cage returns to the Front-Center Position, the Centering Pin is captured and held by the Centering Ramp, restricting rotation of the Wire Cage until the Latch is pressed again.

The Wire Cage must be in the Front-Center Position for the mixer to operate.

Remove Wire Cage Assembly

Lower the bowl. Rotate the Wire Cage to the rear. Remove both agitator and bowl. Return the Wire Cage to the front.

While holding the Wire Cage securely with both hands, use your thumb to push down on the Black Release Knob. Lower and remove the Wire Cage. Wash it in a sink, rinse with clear water and dry with a clean cloth.

The stainless steel Splash Guard can be wiped off or washed easily with a cloth or sponge and warm, soapy water. Rinse with clear water and dry with a clean cloth.

Reinstall Wire Cage Assembly

Hold the Wire Cage so its top ring is positioned around the Drip Cup with the grooves in both nylon Rear Retainers straddling the Ridge on the Drip Cup. Push in the Front-Center Retainer until it stays in and its grooves straddle the Ridge on the Drip Cup. The Wire Cage is properly assembled when all three Retainers straddle the Ridge on the Drip Cup in the three opposed locations.

Rotate the Wire Cage to the rear to install or remove the agitator and bowl or to add ingredients.

Return the Wire Cage to the Front-Center Position to operate the mixer.

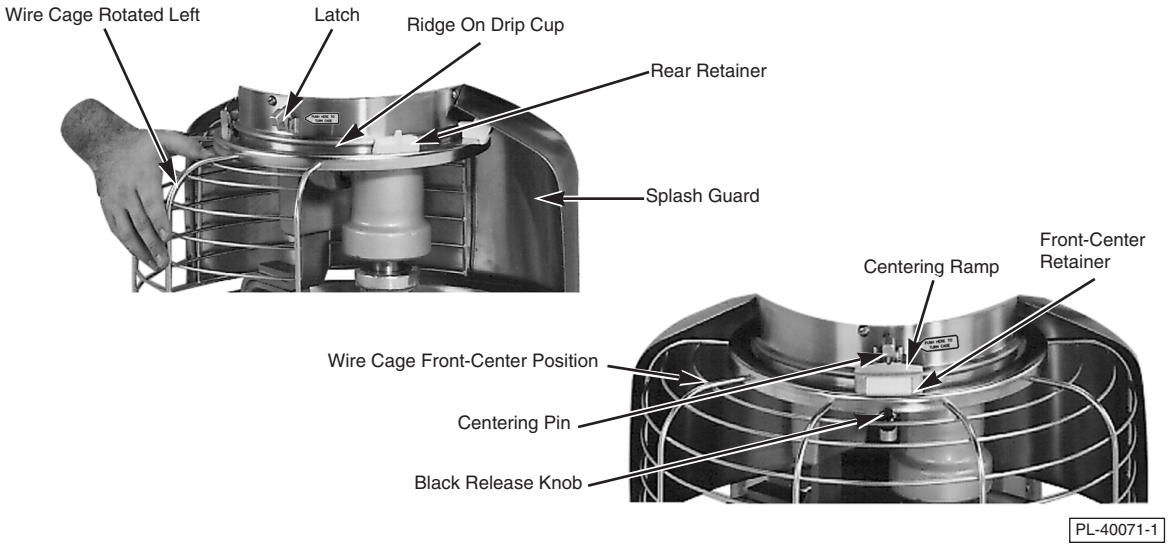


Fig. 5

ATTACHMENTS

To install an attachment, loosen the Attachment Hub thumb screw (Fig. 2) and remove the plug. Insert the attachment into the Attachment Hub, making certain that the square shank of the attachment is in the square driver of the mixer. Secure the attachment by tightening the thumb screw.

Move the Gear Shift Lever to the desired speed. With the Bowl Support all the way up and the Wire Cage in the Front-Center Position (Fig. 5), start the mixer to operate the attachment.

The meat and food chopper attachment should be operated in second or third speed. If material in the cylinder stalls the mixer, push the STOP button at once. Do not attempt to restart the mixer in a lower speed; remove the adjusting ring, knife, plate and worm and clear any obstruction.

Note: This attachment must not be used to chop bread crumbs.

Bowl Scraper Attachment

The Mixer bowl scraper attachment (when ordered) is provided with a separate instruction manual covering its installation, operation, use and care.

CLEANING

WARNING: DISCONNECT THE ELECTRICAL POWER TO THE MACHINE AND FOLLOW LOCKOUT / TAGOUT PROCEDURES.

A flat scraper and a brush are furnished to aid in cleaning bowls and agitators.

The mixer should be thoroughly cleaned daily. Do not use a hose to clean the mixer; wash with a clean, damp cloth. The base allows ample room for cleaning under the mixer. The apron may be removed by loosening the thumb screws. Behind this apron is an access cover which may be removed for cleaning.

The Drip Cup-Splash Guard Assembly (Fig. 5) should be removed periodically and wiped clean.

MAINTENANCE

WARNING: DISCONNECT THE ELECTRICAL POWER TO THE MACHINE AND FOLLOW LOCKOUT / TAGOUT PROCEDURES.

LUBRICATION

Bowl Clamps

The bowl clamp area of the bowl support should be lubricated twice a year. Lightly coat with Lubriplate 630AA (supplied).

BOWL LIFT SLIDE-WAYS

The Slideways (Fig. 8) should be lubricated once each month. Remove the apron (secured by four thumb screws) from the front of the pedestal. Lightly coat both Slideways with Lubriplate 630AA (supplied). Replace the apron and thumbscrews.

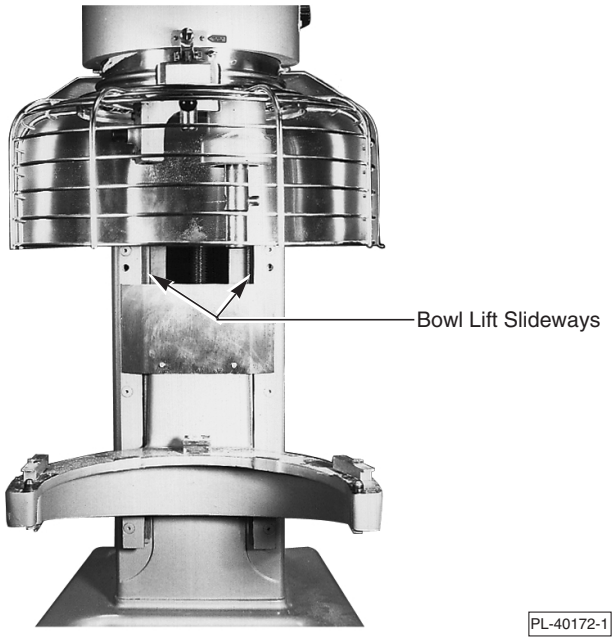


Fig. 8

TROUBLESHOOTING

SYMPTOMS	POSSIBLE CAUSES
Mixer will not start.	1. Gear Shift Lever between gears (not fully engaged). 2. Circuit protector in open position — check fuse or disconnect switch. 3. Bowl not all the way up. 4. Wire Cage Assembly is not in the Front-Center Position. 5. Mixer or attachment overloaded.

SERVICE

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