



Model SP20



Model #: _____

Serial #: _____



Instruction Manual for Globe Mixers

Models SP10, SP20, SP25, SP30, SP30P,
SP40, SP60, SP62P, SP62P-4 and SP80PL

For all after sales support, visit www.globefoodequip.com

- Complete the Warranty Registration
- Find an Authorized Servicer
- View Parts Catalogs

For additional Technical Support call Globe at 1-866-260-0522.

- IMPORTANT SAFETY NOTICE -

This manual contains important safety instructions which must be strictly followed when using this equipment.

Maintain and use this manual as a reference for training.

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Attention Owners and Operators

Globe equipment is designed to provide safe and productive processing of food products as long as the equipment is used in accordance with the instructions in this manual and is properly maintained. Unless the operator is adequately trained and supervised there is a possibility of serious injury. Owners of this equipment bear the responsibility to make certain that this equipment is used properly and safely, and to strictly follow all of the instructions contained in this manual and the requirements of local, state and/or federal law.

Owners should not permit anyone to touch this equipment unless they are 18 years of age or older, are adequately trained and supervised, and have read and understand this manual. Owners should also ensure that no customers, visitors or other unauthorized personnel come in contact with this equipment. Please remember that Globe cannot anticipate every circumstance or environment in which its equipment will be operated. It is the responsibility of the owner and the operator to remain alert to any hazards posed by the function of this equipment. If you are ever uncertain about a particular task or the proper method of operating this equipment, ask your supervisor.

This manual contains a number of precautions to follow to help promote safe use of this equipment. Throughout the manual you will see additional warnings to help alert you to potential hazards.

Warnings affecting your personal safety are indicated by:



or



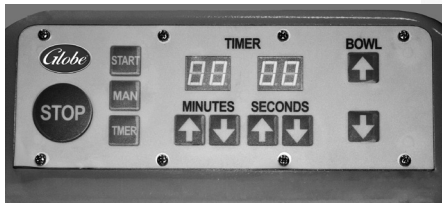
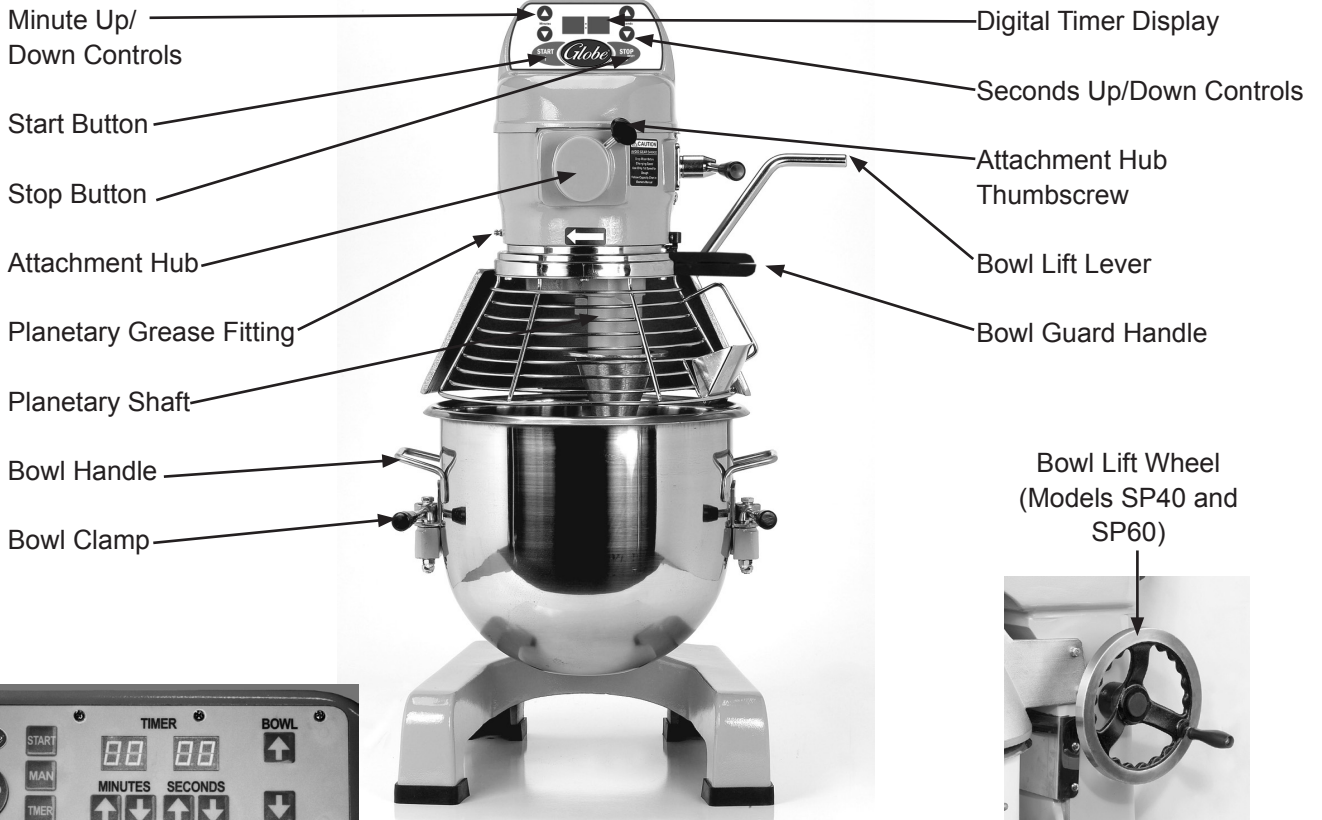
Warnings related to possible damage to the equipment are indicated by:



Globe has put several warning labels in English on its mixers. French labels are also available and can replace the English labels at the owner's discretion. If the warning labels and/or manual are misplaced, damaged, or illegible, or if you require additional copies, please contact your nearest representative or contact Globe directly to request these items at no charge.

Please remember that neither manual nor the warning labels replace the need to be alert, to properly train and supervise operators, and to use common sense when using this equipment.

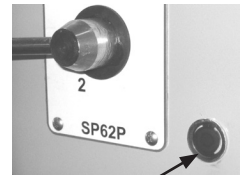
Key Components of the Mixer



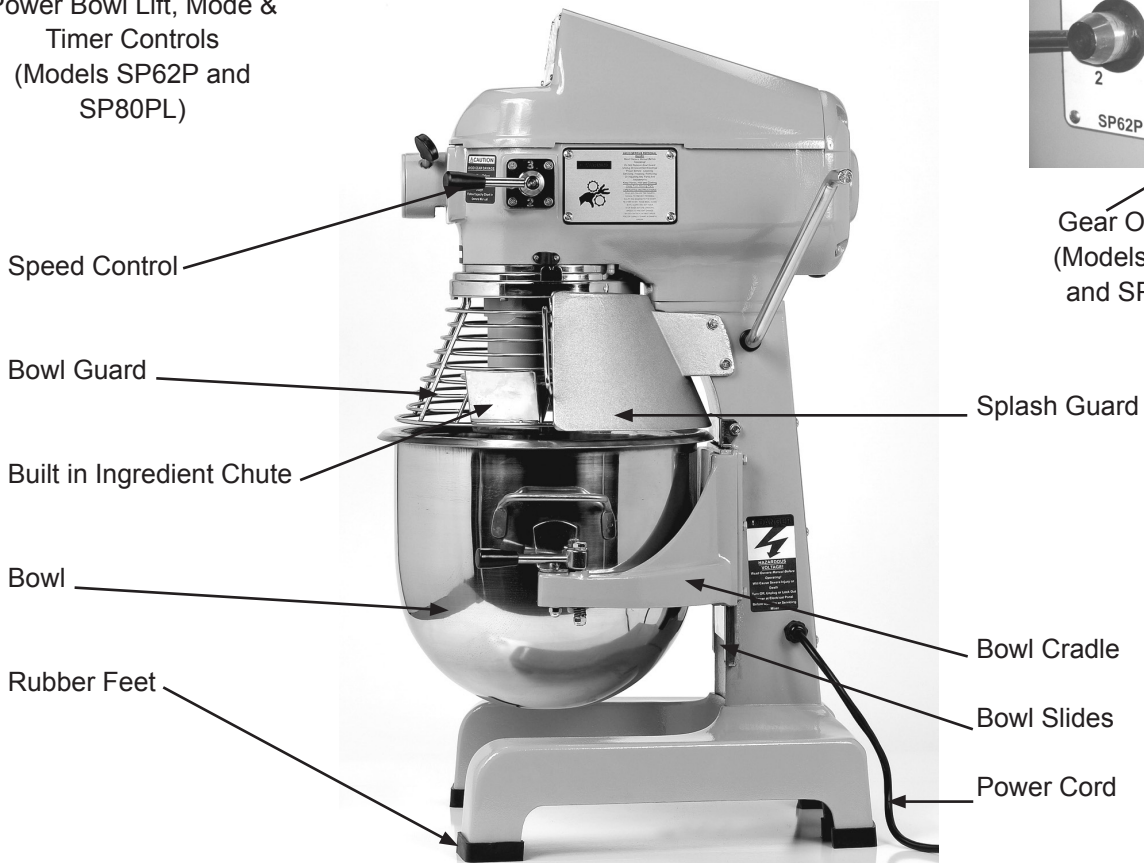
Power Bowl Lift, Mode & Timer Controls (Models SP62P and SP80PL)

SP20 FRONT VIEW

Bowl Lift Wheel (Models SP40 and SP60)



Gear Oil Meter (Models SP62P and SP80PL)



SP20 SIDE VIEW

Installation

UNPACKING

Unpack the mixer immediately after receipt. If the machine is found to be damaged, save the packaging material and contact the carrier within fifteen (15) days of delivery. Immediately contact your source of the equipment.

You have no recourse for damage after fifteen (15) days.



TO AVOID SERIOUS PERSONAL INJURY:

- **ALWAYS** install equipment in work area with adequate light and space.
- **ONLY** operate mixer on a solid, **LEVEL**, non-skid surface that is nonflammable.
- **NEVER** bypass, alter, or modify this equipment in any way from its original condition. Doing so can create hazards and will void the warranty.
- **NEVER** operate mixer without all warnings attached.
- **DO NOT** attempt to lift mixer alone.

INSTALLATION

1. Read this manual thoroughly before installation and operation. **DO NOT** proceed with installation and operation if you have questions or do not understand everything in this manual. Contact your local representative or Globe first.
2. Remove the corrugated box from the skid by removing the bands on the box. **NOTE:** The SP62P, SP62P-4 and SP80PL are shipped in a wooden crate; only the bolts at the bottom of the crate (all four sides) need to be removed.
3. Carefully unbolt the mixer from the skid using an 11/16" or 3/4" wrench.
4. Select a location for the mixer keeping these points in mind:
 - Floor or counter must be level.
 - Easy access for maintenance and service.
 - Clearance for operating controls, installing and removing agitators, bowl, or attachments.
 - Sufficient space for adding ingredients during mixing periods.
 - Make sure rear ventilation outlet of mixer is not blocked.
5. Use at least two other people to tilt the unit and install rubber feet.
6. A bolt down template and bolts are available for the SP10, SP20, or SP25. Contact Globe if needed.
7. Inspect mixer to make sure all parts have been provided (i.e. bowl, beater, whip, and dough hook). The SP60, SP62P, SP62P-4 and SP80PL only have a bowl, dough hook and bowl truck.
8. Read the electrical information found on the data plate located at the rear of the machine. The incoming power must match the rating on the data plate.

CONNECTING TO ELECTRICAL POWER



Cord Connected Units: This machine is provided with a three-prong grounding plug. The outlet that this plug is connected to must be properly grounded. If the receptacle is not the proper grounding type, contact an electrician. Do not under any circumstances cut or remove the third ground prong from the power cord or use an adapter plug. Never use an extension cord. Low power supply could damage the mixer and/or cause a fire.

Installation

CONNECTING TO ELECTRICAL POWER cont'd.



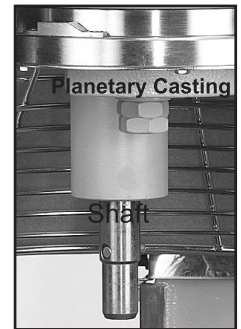
WARNING

If the unit needs to be hard-wired, have a licensed electrician connect the unit to the power supply.

Three Phase Units:

Before use, confirm proper rotation of all 3 phase mixers. There is a 50% chance your 3 phase mixer is properly rotating if you are using it on 3 phase power.

1. Make sure there is not a mixing tool on the mixer shaft and the bowl is empty.
2. Put the speed lever on one speed and turn the unit on.
3. Make sure the large, gray planetary casting is going in the direction of the arrow on the mixer as you stand in front of the mixer (clockwise). (Do not pay attention to the shaft rotation.) If it is traveling in the wrong direction, have a licensed electrician switch the electrical connection and retest.



9. Complete and register the warranty information online at:
www.globefoodequip.com/support/warranty-registration-form.

10. Before use clean the mixer. Refer to Cleaning Instructions section of this manual.

NOTE: It is normal for the factory to apply a generous amount of grease in and on the machine. Excess grease (brown in color) will be on all metal surfaces (e.g. top portion of bowl guard, speed control, bowl clamps, bowl lift lever, and attachment hub thumbscrew). Excess high-pressured grease (brownish-black) can also be found on the planetary shaft and some drippings can be found in the bowl.

Operating Instructions

TO AVOID SERIOUS PERSONAL INJURY:



WARNING

- **DO NOT** operate mixer before reading the instruction manual first.
- **ALWAYS** disconnect or unplug electrical power before cleaning, servicing, or adjusting parts or attachments.
- **ALWAYS** keep hands, hair and clothing away from moving parts.

ABOUT THE REMOVABLE BOWL GUARD

The bowl guard can be rotated or removed to accommodate the operator's function. The interlocking bowl guard is easy to remove and reattach for easy cleaning in a sink or dishwasher.

NOTE: When bowl guard is open or not properly installed, mixer will not operate.

NOTE: Rotate bowl guard clockwise (open) and counterclockwise (closed) to attach agitators to mixer.

Opening / Rotating Bowl Guard:

Rotating bowl guard clockwise (open) and counterclockwise (closed), allows the operator to easily add ingredients and to properly remove the agitator and bowl from mixer.

1. When the separated handles are lined up together and pushed securely to the right of mixer, the bowl guard is in the locked position and ready to operate (Fig. 7-1).



Fig. 7-1

Operating Instructions

2. To rotate bowl guard to its open position, grasp the separated handles on bowl guard and move them together as one, clockwise to open/rotate bowl guard. To close bowl guard, grasp the separated handles and move them together as one, counterclockwise to close/rotate the bowl guard back into a locked position.

Removing and Attaching the Bowl Guard:

NOTE: Before removing or attaching the bowl guard, make sure the bowl is in the down/ lowered position and the agitator tool is off the shaft.

1. To remove bowl guard for cleaning, push the lower part of the separated handle out (clockwise) dividing the handle and releasing the guard from the rotation ring (Fig. 8-1).
2. Once separated, take hold of the lower separated handle and continue turning the guard clockwise until the bowl guard releases from the ring catch (Fig. 8-2).
3. To reattach the bowl guard, line up the ring catch on the left of the mixer; lift guard gently into place and rotate the guard's lower handle counterclockwise until it snaps back into place with the upper part of the handle.

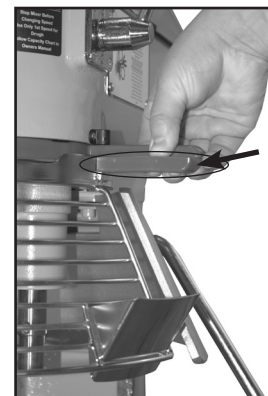


Fig. 8-1



Fig. 8-2

ATTACHING BOWL TO MIXER

NOTE: Install bowl BEFORE attaching agitator.

1. Lower bowl by pulling bowl lift lever forward and down to its resting position. For models SP40 and SP60 rotate the bowl lift wheel counterclockwise until it stops. For the SP62P, SP62P-4 and SP80PL press down arrow (blue button) to lower bowl until it stops.
2. Lift bowl by bowl handles and:
 - a. Slowly position locking pin (located on the rear of bowl) into the hole in middle rear of cradle (Fig. 8-3).
 - b. Lower bowl onto pins located on either side of bowl cradle.
3. Once bowl is positioned on cradle, secure bowl by pulling each bowl clamp forward until bowl is locked tight (Fig. 8-4).

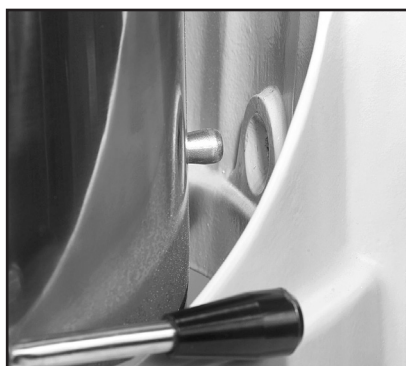


Fig. 8-3



Fig. 8-4

Operating Instructions

ATTACH AGITATOR TO MIXER (i.e., Beater, Hook, Whip)

NOTE: It is easier to install the agitator before adding the ingredients into the bowl.

1. Rotate bowl guard to the left so it rests in the open position (Fig. 9-1).

CAUTION Using excessive force to open and close bowl guard can damage the spring lock and bowl guard microswitch and will void the warranty.

2. Slide the agitator slowly upwards onto the planetary shaft, fitting the shaft pin through the slot in the agitator (Fig. 9-2).
3. Rotate agitator clockwise to secure it onto the planetary shaft.



Fig. 9-1

MIXING INGREDIENTS

CAUTION Overloading or not following the capacity chart will damage the mixer and void the warranty. Refer to Capacity Chart section.

Agitators must always rotate in a counterclockwise direction around the bowl.

CAUTION If the agitator moves clockwise, contact a licensed electrician immediately to remedy incorrect wiring.



Fig. 9-2

IMPORTANT: Make sure the speed control lever is on the first (1) speed.

1. Add the appropriate mixing ingredients into the bowl.
2. Rotate bowl lift lever up until the bowl locks into position. On the SP40 and SP60 rotate bowl lift wheel clockwise until bowl is all the way up into position. For the SP62P, SP62P-4 and SP80PL press the up arrow (blue button) until bowl is up into position.
3. Rotate bowl guard to the right until it locks into the closed position (Fig. 9-3). You will hear it 'click' into place.

NOTE: Mixer will not start if bowl guard is open or bowl is in the lowered position.

CAUTION Before starting the mixer: **Always change to the desired speed BEFORE starting the mixer. Failure to do so can damage the gears or other parts and WILL void the warranty.**



Fig. 9-3

SETTING and CHANGING SPEED

4. Select the appropriate speed setting by lifting or lowering the speed control lever. Three fixed speeds are available for use: first (1), second (2), and third (3).

NOTE: The SP62P has two speeds and the SP80PL has four fixed speeds.

<u>Gear Speed:</u>	<u>Product Type/Ingredient:</u>
1 (low)	Heavy: mixing pizza, bread, pasta and donut doughs, waffle/cake batter, mashing potatoes
2 (medium)	Medium: 2nd stage of mixing for donut dough, etc.
3 (high)	Light: whipping cream, egg whites, meringue

IMPORTANT: When mixing product always follow the recommended agitator and speed setting according to the Capacity Chart. Refer to Capacity Chart section.

5. Press the green START button to begin mixing.

Operating Instructions



Always STOP mixer BEFORE changing speeds. Failure to do so can damage the gears or other parts and WILL void the warranty!

6. To change the speed while mixing:
 - a. Press the red STOP button, then wait for the agitator to come to a complete stop.
 - b. Change the speed by raising or lowering the speed control lever.
 - c. Press the green START button to restart the mixer.

NOTE: The SP62P, SP62P-4 and SP80PL will automatically shut off if the speed is changed while the mixer is in operation.

NOTE: Mixer is equipped with motor overload protection. If mixer shuts off during operation, reduce the batch size and:

- a. SP25 and smaller models: Press the STOP button then press the overload reset button located on the back of mixer.
- b. Larger models: Wait **two** minutes then press the START button on the control panel.

NOTE: Second speed should never be used on 50% Absorption Ratio (AR) or lower with the exception of the SP60. The SP60 requires a 50% reduction in batch size to mix in speed 2 with 50% AR doughs.

NOTE: Reduce batch size by 10% if using chilled flour, water below 70°F, ice, or high gluten flour.

7. When the ingredients have been thoroughly mixed, press the red STOP button to stop the mixer.

NOTE: If the timer was used, mixer will automatically stop when time has expired.

8. Lower bowl by pulling bowl lift lever forward and down to its resting position. For models SP40 and SP60, rotate bowl lift wheel counterclockwise until it stops. For models SP62P, SP62P-4 and SP80PL, press the down arrow (blue button) until the bowl stops.
9. Rotate bowl guard to the left so it is in the open position.
10. Remove the agitator from the planetary shaft by lifting it upwards, then rotating it counterclockwise until it is unlocked. Lower the agitator and remove from the planetary shaft.
11. Push each bowl clamp backwards to unlock the bowl from the bowl cradle.
12. Lift up slightly on bowl so it clears pins on the bowl cradle.



Most batches are heavy. Always use two people to remove and transport the loaded bowl after mixing is complete. A bowl truck is included with the SP60, SP62P and SP80PL models and must be used to unload bowls containing more than 50 lbs. per batch.

Operating Instructions



Before starting mixer: **Always change speeds BEFORE starting mixer. Failure to do so can damage the gears or other parts and WILL void the warranty!**

USING MIXER'S DIGITAL CONTROLS AND TIMER

Read through this section and continue to page 13 for further operating instructions for use of the digital controls on your mixer.

Mixer is equipped with a digital timer display, minutes and seconds buttons (to adjust the timed operations) and Start / Stop buttons. Mixer can function in either timed operation or untimed operation.

Untimed Operation: For simple on/off mixing operation in an untimed operating mode, verify that bowl guard and bowl lift are closed and locked into position.

- The display should read 00:00 to operate in untimed mode. Pressing the STOP button twice within one second will reset the timer back to zero.
- Press START button to begin mixing. The display will scroll zeros across the display from left to right while mixing. Press STOP button once the desired mixing is complete.

NOTE: Pressing STOP button twice within one second to reset the timer back to zero (00.00) is a feature only available for models SP10-SP60.

Timed Operation: Timer on mixer can be set from 5 seconds to 60 minutes.

1. Set desired time. Minutes advance by one and seconds advance by fives before rolling over to zero.

NOTE: Press and continuously hold the up arrow buttons to the desired minutes and seconds. Press and continuously hold, the button scrolls through the number cycles quickly. (To slow down the selection and to better control the setting time, press the up or down arrow button do not continuously hold the button down).

2. Once the desired time is set, check that bowl guard and bowl lift are closed and locked into position, and then press START.
3. Wait for the timed cycle to end or press STOP to pause the mixing cycle.
 - Pressing the STOP button once stops the mixer and pauses the timer during operation.
 - Pressing the STOP button once while the mixer is not in operation will reset the timer to the last programmed/set time.
 - Double clicking the STOP button twice within one second while the mixer is not in operation will reset the timer back to zero (00:00).

NOTE: Pressing STOP button twice within one second to reset the timer back to zero (00.00) is a feature only available for models SP10-SP60.

NOTE: If a cycle is interrupted by the bowl guard being opened or by lowering the bowl lift lever, the mixer will stop. After bowl guard and bowl lift are closed and locked into position, START button can be pressed to continue the programmed time.

To add additional minutes or seconds to a mix time, STOP mixer and adjust the cycle mixing time.

4. Once a timed cycle ends, mixer will beep for 5 seconds and the digital display will flash for two minutes (if not reset) indicating the timed cycle is complete.

Operating Instructions

HOW TO USE ATTACHMENT HUB

WARNING Never put your hand into the feed chute when using a mixer attachment.

CAUTION Only operate the attachment hub in **MANUAL** mode.
DO NOT attempt to mix ingredients in bowl while using the hub.

Mixer must be OFF before installing attachment. Do NOT use attachments while mixing.

1. Loosen and remove attachment hub thumbscrew (Fig. 12-1).
2. Remove plastic cover from attachment hub (Fig. 12-1).
3. Lubricate attachment shaft with a food quality grease or mineral oil.
4. Insert attachment shaft into hub making sure to line up the alignment pin with hub hole.
5. Tighten thumbscrew back into hub and securely tighten it.
6. Select the appropriate speed setting by lifting or lowering speed control lever.

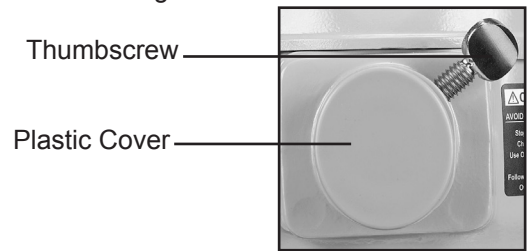


Fig. 12-1

Recommended Speed while using attachments:

<u>Attachment:</u>	<u>Recommended Speed:</u>
Vegetable Slicer	1 or 2
Cheese Shredder/Grater	1 or 2
Meat Grinder	1 only

NOTE: Make sure bowl is up and bowl guard is closed. Mixer will not start if bowl and bowl guard are not in the proper operating position.

7. Use the untimed operation described on the previous page to adjust timer.
8. Press the green START button located on the control panel.

CAUTION Always **STOP** mixer **BEFORE** changing speeds! Failure to do so can damage the gears or other parts and **WILL** void the warranty!

9. To change the speed while using mixer attachments:
 - a. Press red STOP button, then wait for the agitator to come to a complete stop.
 - b. Change speed by raising or lowering speed control lever.
 - c. Press green START button to restart mixer.

NOTE: The SP62P, SP62P-4 and SP80PL will automatically shut off if the speeds are changed while the mixer is in operation.

Operating Instructions

DIGITAL CONTROL INSTRUCTIONS

Untimed / Manual Mode instructions and controls for the SP62P, SP62P-4 and SP80PL

Mixer must be OFF before installing attachments. Do NOT use attachments while mixing.

NOTE: Make sure bowl is up and bowl guard is closed. Mixer will not start if bowl and bowl guard are not in the proper operating position.

Press BOWL “Up” arrow to activate the power bowl lift.
Set the speed control to the desired speed.

Untimed - MANUAL MODE

1. To begin operation of mixer in Manual Mode, press the “MAN” button. The display will illuminate a small dot of light in the lower right-hand corner of the seconds timer display.

NOTE: Mixer will not start if bowl is not all the way up. Additionally, the bowl guard must be completely closed.

2. Press START button to begin mixing. Press STOP to discontinue mixing.



Always STOP the mixer BEFORE changing speeds.

NOTE: The SP62P, SP62P-4 and SP80PL will automatically shut off if the speeds are changed while the mixer is in operation.

NOTE: The timer does not work in Manual Mode.
To use the timer feature, follow the Timer Mode instructions.

TIMER MODE

1. To begin operating the mixer in TIMER mode, press the TIMER button.

If starting mixer for the first time, or if power is lost, the TIMER display will only illuminate in all zeros “0”; otherwise, it will display the last mixing time that was entered.

2. Select the number of minutes and seconds by using the up and down arrows located under the timer digital display. The first set of up-down arrow buttons control the minutes and the second set of up/down arrow buttons control the seconds.

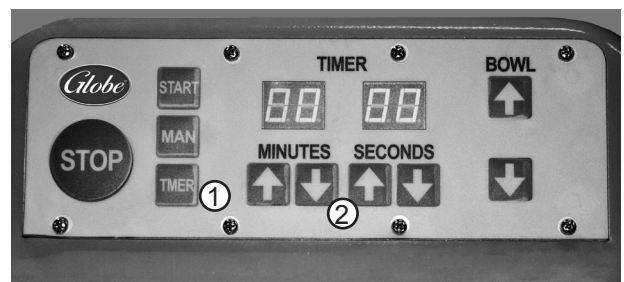
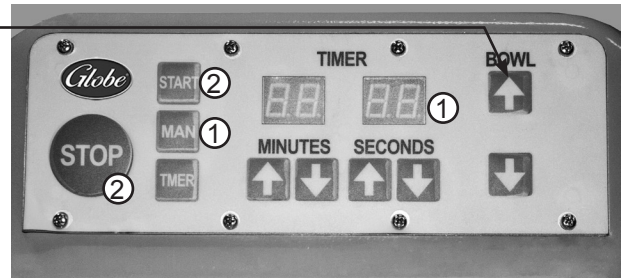
Press and continuously hold the up arrow buttons to the desired minutes and seconds. Press and continuously hold, the button scrolls through the number cycles quickly. (To slow down the selection and to better control the setting time, press the up or down arrow button do not continuously hold the button down).

3. Once the desired mix time has been set on the timer, press the START button to begin mixing.

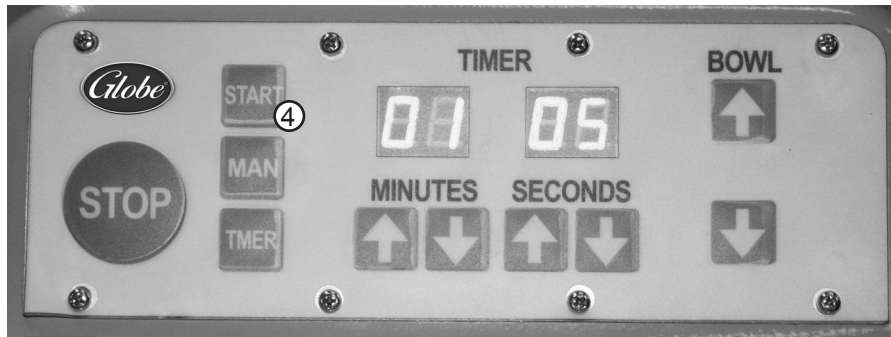


Always STOP the mixer BEFORE changing speeds.

NOTE: The SP62P, SP62P-4 and SP80PL will automatically shut off if the speeds are changed while mixer is in operation.



Operating Instructions



4. Once the START button is pressed, mixer timer numbers will begin to descend.

The timer and mixer can be interrupted at any time by pressing the STOP button. If the timer cycle is interrupted and the mixer has not yet finished its set mixing time, the mixing cycle can be continued from where it left off by pressing the START button.

NOTE: If a cycle is interrupted by the bowl guard being opened or the speed of the mixer being changed, mixer will stop. After bowl guard and bowl lift are closed and locked into position, START button can be pressed to continue the programmed time.

To add additional minutes or seconds to a mix time, STOP mixer, press TIMER and adjust the cycle mixing time.

Press START button to begin mixing once again.

5. At the end of a timed mixing cycle the timer will count down to "00" minutes and "00" seconds, mixer will stop, and the timer will return to displaying the last mix cycle time that was entered.

6. To begin another mix cycle with the same set time as the previous mix, press the START button.

If the mix cycle time needs to be adjusted up or down, set the new desired time and then press START button to begin mixing.

Mixer timer will always reset back to the last mix time that was set unless the plug or power is disconnected to the mixer. If power is lost to mixer, the mixing time will need to be reset to the desired time.

Cleaning Instructions

CAUTION

- Dilute detergent per supplier's instruction.
- **DO NOT** hose down or pressure wash mixer.
- **NEVER** use a scrubber pad, steel wool, or abrasive material to clean mixer.
- **NEVER** use bleach (sodium hypochlorite) or bleach-based cleaner.
- **ALWAYS** remove the agitator after each batch as the agitator can become stuck on the shaft and become difficult to remove.



The entire mixer, including removable parts, must be thoroughly cleaned and sanitized using the procedures identified by your local health department and the ServSafe Essentials published by the National Restaurant Association Educational Foundation (NRAEF). Visit www.servsafe.com for more details.



It is extremely important to sanitize mixer and to follow the instructions on the quaternary sanitizer container to make sure proper sanitation is achieved.



ALWAYS DISCONNECT OR UNPLUG ELECTRICAL POWER FROM THE MIXER BEFORE CLEANING.

RECOMMENDED CLEANING

PART	REQUIRED ACTION	FREQUENCY
Agitators	Hand-wash using mild soap and water; rinse, dry and sanitize.	Clean after each use.
Removable Bowl Guard	Hand-wash using mild soap and water; rinse, dry and sanitize or place in dishwasher.	Clean after each use.
Bowl	Using a sponge or cloth, mild soap and water, apply pressure to make sure the bowl is clean; rinse, dry, and sanitize. The bowl can also be placed in a dishwasher.	Clean after each use.
Rear Splash Guard	Hand-wash using mild soap and water; rinse, dry and sanitize.	Clean after each use.
Bowl Cradle	Hand-wash using mild soap and water; rinse, dry and sanitize.	Daily
Planetary Shaft	Wipe with clean damp cloth; dry and sanitize. Apply a light quantity of Globe oil (mineral oil) to the planetary shaft after cleaning.	Clean after each use.
Exterior	Hand-wash using mild soap and water; rinse, dry, and sanitize. DO NOT use a water hose.	Daily
Hub Interior	Wipe with clean damp cloth; dry, and sanitize.	Daily

Important Points

Globe mixer will provide years of uninterrupted service if you do the following:

Installation

- Do not use an extension cord to connect electrical power.
- Make sure all 3 Phase units (see data plate) run in the direction of the arrow on front of the machine.

Operation

- Turn off mixer before changing speeds.
- Follow the Capacity Chart for mixing dough. Refer to Capacity Chart section.
- Use only first (1) speed for mixing dough. 2nd speed must never be used on 50% AR or lower with the exception of the SP60. The SP60 requires a 50% reduction in batch size to mix in speed 2 with 50% AR dough.
- If the unit shuts off during mixing (overload protection trips), reduce the batch size.

Maintenance

Recommended Maintenance

PART	REQUIRED ACTION	FREQUENCY
Bowl Slide Rods	Apply Globe oil (mineral oil) on bowl slide rods. Raise and lower bowl to distribute the oil onto the rods.	If bowl becomes difficult to raise or lower.
Gear Oil Meter (SP62P, SP62P-4 and SP80PL only)	Contact a Globe authorized servicer to change the gear oil.	Once a year. When the gear oil meter shows the oil below half of the circle.

Capacity Chart

The following maximum capacities are intended as a guideline only. Varying factors such as the type of flour used, temperature of water used and other conditions may require the batch to be reduced.

Product	Agitator and Speed	SP5	SP8	SP10	SP20	SP25	SP30/ SP30P	SP40	SP60	SP62P	SP62P-4	SP80PL
Waffle or Hotcake Batter	Flat Beater	2 qts.	3 qts.	5 qts.	8 qts.	10 qts.	12 qts.	16 qts.	24 qts.	----	24 qts.	30 qts.
Whipped Cream	Wire Whip	2 qts.	2 qts.	2 qts.	4 qts.	5 qts.	6 qts.	9 qts.	12 qts.	----	12 qts.	16 qts.
Mashed Potatoes	Flat Beater	4 lbs.	4 lbs.	8 lbs.	15 lbs.	18 lbs.	23 lbs.	30 lbs.	40 lbs.	----	40 lbs.	50 lbs.
Egg Whites	Wire Whip	¾ pts.	¾ pts.	1 pt.	1 qt.	1¼ qts.	1½ qts.	1¾ qts.	2 qts.	----	2 qts.	2 qts.
Meringue (Qty. of Water)	Wire Whip	¼ pts.	½ pts.	¾ pts.	1½ pts.	1¾ pts.	1 qt.	1¼ qts.	1¾ qts.	----	1¾ qts.	3 qts.
Raised Donut Dough (65% AR) *◆	Dough Hook 1st and 2nd	2 lbs.	2 lbs.	4½ lbs.	9 lbs.	12 lbs.	15 lbs./ 20 lbs.	25 lbs.	60 lbs.	75 lbs.	75 lbs.	80 lbs.
Heavy Bread Dough (55% AR) **◆	Dough Hook 1st only	4 lbs.	3 lbs.	7½ lbs.	15 lbs.	20 lbs.	30 lbs./ 35 lbs.	40 lbs.	70 lbs.	75 lbs.	75 lbs.	80 lbs.
Bread and Roll Dough (60% AR) **◆	Dough Hook 1st only	5 lbs.	5 lbs.	12½ lbs.	25 lbs.	25 lbs.	45 lbs.	60 lbs.	80 lbs.	90 lbs.	90 lbs.	90 lbs.
Pizza Dough, Thin (40% AR) **◆□	Dough Hook 1st only	3 lbs.	2 lbs.	5 lbs.	9 lbs.	12 lbs.	16 lbs./ 25 lbs.	30 lbs.	40 lbs. (1st) 35 lbs. (2nd)	50 lbs. 35 lbs. (2nd)	50 lbs. 40 lbs. (2nd)	50 lbs.
Pizza Dough, Medium (50% AR) **◆□	Dough Hook 1st only	4 lbs.	4 lbs.	5 lbs.	10 lbs.	15 lbs.	25 lbs./ 36 lbs.	40 lbs.	70 lbs. (1st) 35 lbs. (2nd)	80 lbs. (1st) 60 lbs. (2nd)	80 lbs. (1st) 70 lbs. (2nd)	90 lbs.
Pizza Dough, Thick (60% AR) **◆	Dough Hook 1st only	5 lbs.	5 lbs.	10 lbs.	20 lbs.	25 lbs.	40 lbs./ 45 lbs.	50 lbs.	70 lbs.	90 lbs.	90 lbs.	100 lbs.
Fondant Icing	Flat Beater	4 lbs.	3 lbs.	6 lbs.	12 lbs.	15 lbs.	18 lbs.	25 lbs.	36 lbs.	----	36 lbs.	60 lbs.
Cake	Flat Beater	5 lbs.	6 lbs.	10 lbs.	20 lbs.	25 lbs.	30 lbs.	40 lbs.	60 lbs.	----	60 lbs.	90 lbs.
Pie Dough	Flat Beater	5 lbs.	4 lbs.	10 lbs.	18 lbs.	22 lbs.	27 lbs.	35 lbs.	50 lbs.	60 lbs.	50 lbs.	70 lbs.
Pasta, Basic Egg Noodle	Dough Hook	1 lb.	2 lbs.	3 lbs.	5 lbs.	6 lbs.	8 lbs./ 15 lbs.	17 lbs.	35 lbs.	40 lbs.	35 lbs.	50 lbs.

* **NOTE:** The mixer capacity depends on the moisture content of the dough. When mixing dough (pizza, bread, or bagels) check your Absorption Ratio Percentage (AR%). %AR = water weight divided by flour weight. The capacities listed above are based on flour at room temperature and 70°F water temperature.

NOTE: 1 gallon of water weighs 8.33 lbs.

✖ Maximum Mixing Time - 7 Minutes

• If high gluten flour is used, reduce the batch size by 10%.

◆ If using chilled flour, water below 70°F, or ice, reduce batch size by 10%.

□ 2nd speed should never be used on 50% AR or lower with the exception of the SP60. The SP60 requires a 50% reduction in batch size to mix in speed 2 with 50% AR dough.

Do not use attachments on hub while mixing!

Troubleshooting

Problem	Possible Causes	Action Required
Mixer will not operate	Bowl guard not in closed position.	Rotate guard to the right until fully closed.
	Bowl not raised.	Raise bowl to highest position.
	Power not connected properly.	Check all power connections. Plug into a live socket. <i>(Do not use extension cord!)</i> Test socket with another item.
	Building circuit breaker is off.	Check breaker box.
	Internal overload tripped.	<u>SP25 & smaller models:</u> Press stop button, then press reset button located on the back of mixer. <u>Larger models:</u> Wait two minutes. then press START to restart mixer. <i>(If overload continues to trip, reduce batch size and/or adjust recipe!)</i>
	Gear not engaged.	Switch gear fully into position. <i>(Mixer will not operate if the speed control lever is positioned in between speeds)</i>
Mixer stops during mixing cycle	Internal overload tripped.	<u>SP25 & smaller models:</u> Press stop button, then press reset button located on the back of the mixer. <u>Larger models:</u> Wait two minutes. then press the START to restart the mixer. <i>(If overload continues to trip, reduce batch size and/or adjust recipe!)</i>
	Damaged or broken transmission belt.	Contact a technician to replace belt.
	Speeds were changed during mixing, SP80PL only.	Return speed control lever to a speed model position and restart the mixer.
Mixer is noisy	Mixer is not installed on level surface.	Adjust surface or relocate mixer. Make sure rubber feet are installed.
	Bowl not seated correctly or clamps not in place.	Make sure bowl is seated into bowl cradle correctly and bowl clamps are locked into place.
	Agitator not fitted properly.	Remove and attach agitator into position properly.
	Overloading bowl.	Reduce batch size. <i>Refer to Capacity Chart section.</i>
	Damaged or worn belt.	Replace belt
Safety guard seized (will not move freely).	Clean & lubricate slide sheath.	Technician must drop down planetary assembly to access mat & sheath. Contact technician.
Agitators won't go onto the planetary shaft easily.	Lack of lubrication and/or cleaning of the planetary shaft.	Wipe planetary shaft with a clean damp cloth and lubricate the shaft with mineral oil or food quality grease.
Display not lit.	No power to unit	Check power
	Internal fuse blown	Call for service

Troubleshooting

Problem	Possible Causes	Action Required
Mixing time is too long	Three-phase mixer is wired wrong	Agitators must rotate clockwise around bowl. If not, electrician must rewire
	Batch size too small	Increase batch size <u>or</u> use smaller bowl adapter kit. (<i>Contact dealer for purchase</i>)
	Incorrect recipe portions <u>or</u> temperatures	Follow portions and temperatures per recipe instructions
Bowl lift sticking or not operational	Lack of lubrication on bowl slides	Lubricate bowl slides with mineral oil or food quality grease. If still sticking, technician must clean bowl-lift mechanism
One or more gears not working	Broken belt	Technician to replace belt
	Damaged or broken gear	Technician to replace gear. <i>Always stop mixer before shifting gears!</i>
Mixer will not mix medium or heavy loads.	Incorrect or low voltage	Contact electrician
	Belt slipping	Technician to replace belt
Residue leaking from hub	Contaminated hub due to build-up of meat and/or vegetable juices (especially tomatoes)	Technician to remove hub and clean interior. To avoid problem, wipe hub and dry after each use. <i>*Note: Acid from tomato juices will corrode/contaminate interior parts! Don't mix tomatoes in meat grinder!</i>
Agitators touching bottom or sides of bowl	Defective or dented bowl	Remove dents or replace bowl
	Defective agitator	Replace agitator
Broken whip wires	Batch size too large for mixer. Adjust recipe.	Reduce batch size. <i>Refer to Capacity Chart section.</i> Mixture too firm, speed too high. Reduce speed
	Hand utensil dropped into bowl while mixing	Stop mixer
Broken flat beater	Ingredients too cold or too large (e.g. frozen butter, cream cheese cut in chunks)	Wait for ingredients to reach room temperature before mixing. Reduce chunk size
Broken dough hook	Batch size too large for mixer	Reduce batch size. <i>Refer to Capacity Chart section.</i> Adjust recipe
	Ingredients too cold or too large	Wait for ingredients to reach room temperature before mixing. Reduce chunk size
Mixture climbs up dough hook	Three-phase mixer is wired incorrectly	Electrician to rewire
Discoloration of mixed product	Bowl has not been thoroughly cleaned	Clean bowl again. <i>Refer to Cleaning Instructions section.</i>
Mixer beeps when START button is pressed	Bowl guard not in closed position.	Rotate guard to the right until fully closed.
	Bowl not raised.	Raise bowl to highest position.

In the event of a power failure, the unit will shut down, and the timer display will not be illuminated. Once power has been restored, the timer will display the last programmed/set time. Pressing the START button will begin the mixing operation.

Limited Mixer Warranty

Globe Food Equipment Company (“GFE”) warrants to the original purchaser of new equipment that said equipment, when installed in accordance with our instructions within North America and subjected to normal use, is free from defects in material or workmanship for a period of 2 years. Wear parts, such as belts, are excluded. Hub attachments, such as shredders, slicers and grinders have a 1 year warranty that only covers parts. Warranty begins on date of factory shipment to an end user, or up to 6 months after factory shipment to a dealer or distributor. Payment by GFE for service under this warranty requires that service be authorized in advance. Contact Globe Technical Support to arrange for service.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED. GFE EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR EXPRESSED OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

GFE’S OBLIGATION AND LIABILITY UNDER THIS WARRANTY IS EXPRESSLY LIMITED TO REPAIRING AND REPLACING EQUIPMENT WHICH PROVES TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP WITHIN THE APPLICABLE WARRANTY PERIOD. All repairs pursuant to this Warranty will be performed by an Authorized Designated GFE Service Location during normal working hours. IN NO EVENT SHALL GFE BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES TO BUYER OR ANY THIRD PARTY, INCLUDING, WITHOUT LIMITATION, LOSS OF PROPERTY, PERSONAL INJURY, LOSS OF BUSINESS OR PROFITS OR OTHER ECONOMIC LOSSES, OR STATUTORY OR EXEMPLARY DAMAGES, WHETHER IN NEGLIGENCE, WARRANTY, STRICT LIABILITY, OR OTHERWISE.

This warranty is given only to the first purchaser from a retail dealer. No warranty is given to subsequent transferees.

This warranty does not cover product failures caused by: failure to maintain, neglect, abuse, damage due to excess water, fire, normal wear, improper set up and use. Periodic maintenance is not covered.

Example of items not covered under warranty, but not limited to just these items:

1. Acts of God, fire, water damage, vandalism, accident, theft.
2. Freight damage.
3. Improper installation or alteration of equipment.
4. Use of generic or after market parts.
5. Repairs made by anyone other than a GFE designated servicer.
6. Lubrication.
7. Expendable wear parts. (This includes the bowl, flat beater, wire whip, spiral dough hook, and the pastry knife.)
8. Cleaning of equipment.
9. Misuse or abuse.

This warranty is not in force until such time as a properly completed, digitally signed Installation/Warranty Registration has been received by GFE within 30 days from the date of installation. Register online at www.globefoodequip.com/support/warranty-registration-form.

THE FOREGOING WARRANTY PROVISIONS ARE A COMPLETE AND EXCLUSIVE STATEMENT BETWEEN THE BUYER AND SELLER. GFE NEITHER ASSUMES NOR AUTHORIZES ANY PERSONS TO ASSUME FOR IT ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SAID EQUIPMENT.

WARRANTY REGISTRATION
GO TO WWW.GLOBEFOODEQUIP.COM
TO FILL OUT AND SUBMIT YOUR WARRANTY REGISTRATION.

WWW.GLOBEFOODEQUIP.COM/SUPPORT/WARRANTY-REGISTRATION-FORM