



Model SP20



Model #: _____

Serial #: _____



Instruction Manual for Globe Mixers
Models SP10, SP20, SP25, SP30, SP30P,
SP40, SP60, SP62P and SP80PL

For Service on Your Mixer:

1. Visit our website at www.globeslicers.com
(select the Support / Parts drop down).
2. Or call the Globe service department at 937-297-7247 and ask for contact information for your local service company.

Visit our website for information on additional products available from Globe.

www.globeslicers.com

Slicers, Mixers, Vegetable Cutters, Meat Choppers and Scales

- IMPORTANT SAFETY NOTICE -

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

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GLOBE FOOD EQUIPMENT COMPANY
2153 DRYDEN RD.
DAYTON, OH 45439
PHONE: 937-299-5493
TOLL FREE: 800-347-5423
FAX: 937-299-4147
E-MAIL: globeinfo@globeslicers.com
WEBSITE: www.globeslicers.com

Attention Owners and Operators

Globe's 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, strictly follow all the instructions contained in this manual and the requirements of local, state or federal law.

Owners should not permit anyone to touch this equipment unless they are over 18 years old, are adequately trained and supervised, and have read and understood 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 the English language on its mixers. French labels are also available and can replace the English labels at the owner's discretion. If the warning labels or this manual are misplaced, damaged, or illegible, or if you require additional copies, please contact your nearest representative or Globe directly for these items at no charge.

Please remember that this manual or the warning labels do not 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

- Stop Button
- Start Button
- Attachment Hub
- Planetary Grease Fitting
- Planetary Shaft
- Bowl Handle
- Bowl Clamp
- Timer
- Attachment Hub Thumbscrew
- Bowl Lift Lever
- Bowl Guard Handle

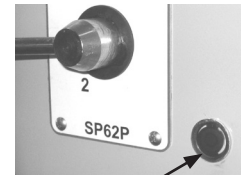


Power Bowl Lift Controls
(Models SP62P and SP80PL)



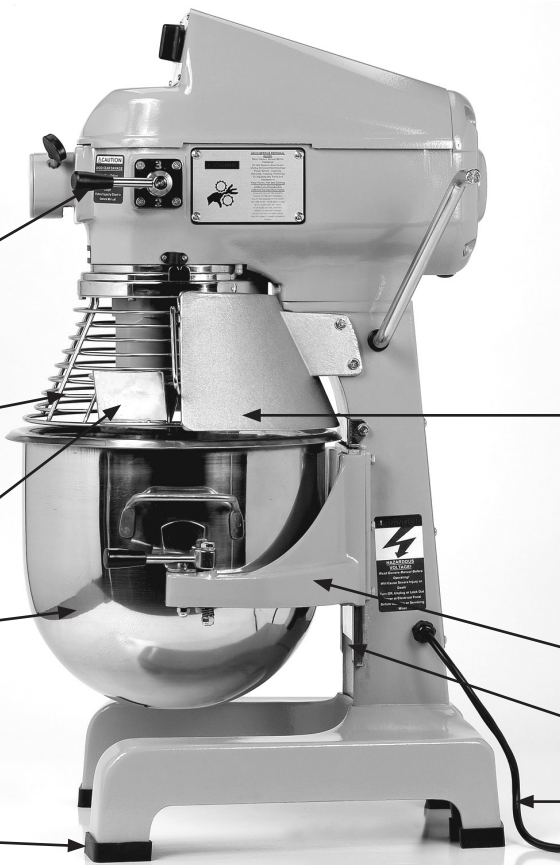
SP20 FRONT VIEW

Bowl Lift Wheel
(Models SP40 and SP60)



Gear Oil Meter
(Models SP62P and SP80PL)

- Speed Control
- Bowl Guard
- Built in Ingredient Chute
- Bowl
- Rubber Feet
- Splash Guard
- Bowl Cradle
- Bowl Slides
- Power Cord



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 to damage after fifteen (15) days.**



TO AVOID SERIOUS PERSONAL INJURY:

- **ALWAYS** install equipment in work area with adequate light and space.
- **ONLY** operate the 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 may create hazards and will void warranty.
- **NEVER** operate the mixer without all warnings attached to it.
- **DO NOT** attempt to lift the mixer alone.

INSTALLATION

1. Read this manual thoroughly before installation and operation. **DO NOT** proceed with installation and operation if you have any questions or do not understand anything 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 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.
 - Ensure rear ventilation outlet of mixer is not blocked.
5. Use at least two other people to tilt the unit and install the rubber feet.
6. A bolt down template and bolts are available for the SP10, SP20, or SP25. Contact Globe if this is needed.
7. Inspect the mixer to ensure all parts have been provided (i.e. bowl, beater, whip, and dough hook). The SP62P only has a bowl and dough hook.
8. Read the electrical information found on the data plate located at the rear of the machine. The incoming power should 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 any adapter plug. Never use an extension cord. Low amp supply could damage the mixer or cause a fire.

Installation

CONNECTING TO ELECTRICAL POWER cont'd.



Units Without Power Cord or Plug: Have a licensed electrician connect the unit to the power supply.

Three Phase Units: Have a licensed electrician wire the machine correctly to ensure that the planetary shaft is rotating in the same direction as the arrow sticker located on the front of the machine. Check the rotation of the planetary shaft prior to first use. When standing in front of the mixer, the planetary shaft should be moving in a clockwise direction (i.e., the planetary shaft should appear to move from right to left). If the unit is operated backwards (counterclockwise) damage will occur to the mixer!

9. Complete the warranty card and mail it to Globe or register online at www.globeslicers.com/warranty.asp.
10. Clean the mixer prior to using it. Follow the cleaning instructions on page 11. NOTE: It is normal for the factory to apply a generous amount of grease in and on the machines before initial use. 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) may also be found on the planetary shaft and some drippings may be found in the bowl.

Operating Instructions

TO AVOID SERIOUS PERSONAL INJURY:

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



ABOUT THE REMOVABLE BOWL GUARD (if applicable)

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 guard is open or not properly installed, the mixer will not operate.

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

Opening / Rotating the Bowl Guard:

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

1. When the separated handles are lined up together and pushed securely to the right of the mixer, the bowl guard is in the locked position and ready. (See fig. 6-1)



fig. 6-1

Operating Instructions

2. To rotate the bowl guard to its open position, grasp the separated handles on the bowl guard and move them, together as one, clockwise to open/rotate the bowl guard. To close the 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 the 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. (see fig. 7-1)
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 on the mixer. (see fig. 7-2)
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.

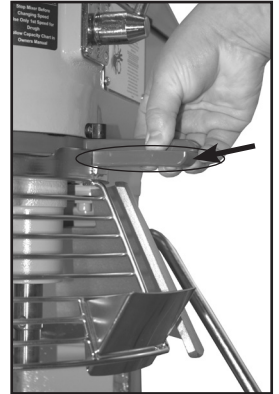


fig. 7-1



fig. 7-2

ATTACHING THE BOWL TO THE MIXER

NOTE: Install the bowl BEFORE attaching the agitators.

1. Lower the bowl by pulling the 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 and SP80PL press the down arrow (blue button) to lower the bowl until it stops.
2. Lift the bowl by the bowl handles and
 - a. slowly position the locking pin (located on the rear of the bowl) into the hole in the middle rear of the cradle (see fig 7-3).
 - b. lower the bowl onto the pins located on either side of the bowl cradle.
3. Once the bowl is positioned on the cradle, secure the bowl by pulling each bowl clamp forward until the bowl is locked tight (see fig 7-4).

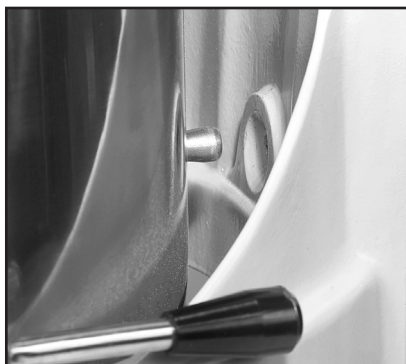


fig. 7-3



fig. 7-4

Operating Instructions

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

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

1. Rotate the bowl guard to the left so it rests in the open position (see fig 8-1).



fig. 8-1

CAUTION

Excessive force used to open and close the bowl guard may 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 (see fig 8-2).
3. Rotate the agitator clockwise to secure it onto the planetary shaft.



fig. 8-2

MIXING INGREDIENTS

CAUTION

Follow the capacity chart located on page 13 in this manual. Overloading or not following this chart will damage the mixer and void the warranty.

CAUTION

Agitators should always rotate in a clockwise direction around the bowl. If the agitator moves counterclockwise, contact a licensed electrician immediately to remedy incorrect wiring.

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

1. Add the appropriate mixing ingredients into the bowl.
2. Lift completely up on the bowl lift lever until the bowl locks into position. On the SP40 and SP60 rotate the bowl lift wheel clockwise until the bowl is all the way up into position. For the SP62P and SP80PL press the up arrow (blue button) until the bowl is up into position.
3. Rotate the bowl guard to the right so it locks into the closed position (see fig 8-3). A clicking sound will be heard.



fig. 8-3

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

4. Set the timer for the appropriate mixing time or set the mixer for non-timed operation.
 - a. **Timed Operation:** Turn the timer knob in a clockwise direction at least five minutes past "0" to the desired time. NOTE: To set the time for less than five minutes turn the timer knob clockwise to six then counterclockwise back to the desired time.
 - b. **Non-Timed Operation:** Turn the timer knob in a counterclockwise direction to the green "on" position. NOTE: Heavy loads should not be mixed longer than fifteen (15) minutes at this setting without an equal amount of rest time for the mixer. Failure to adhere to these instructions may cause the mixer to automatically shut off due to overloading.

Operating Instructions

5. 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 located on page 13 of this manual.

6. Press the green start button located on the middle of the control panel.

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

7. To change the speed while mixing
 - a. press the red stop button
 - 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 and SP80PL will automatically shut off if the speed is changed while the mixer is in operation.

NOTE: The mixer is equipped with a motor overload protection. If the 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.
- b. Larger models: Wait **two** minutes. Press the stop button then press the start button.

NOTE: 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 doughs.

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

IMPORTANT: For heavier loads, the mixer should not run longer than fifteen minutes without pausing for a cool down period of at least fifteen minutes or more before resuming mixing. For lighter loads the mixer should not run longer than thirty minutes without pausing for a cool down period of at least thirty minutes or more before resuming mixing.

8. When the ingredients have been thoroughly mixed, press the red stop button to stop the mixer.
NOTE: If the timer was used the mixer will automatically stop when the time has expired.
9. Lower the bowl by pulling the 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 models SP62P and SP80PL press the down arrow (blue button) until the bowl stops.
10. Rotate the bowl guard to the left so it is in the open position.
11. 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 planetary shaft.

Operating Instructions

12. Push each bowl clamp backwards to unlock the bowl from the bowl cradle.
13. Lift up slightly on the bowl so it clears the pins on the bowl cradle.

WARNING

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 should be used to unload bowls containing more than 50 lbs. per batch.

HOW TO USE THE ATTACHMENT HUB

WARNING

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

The mixer must be OFF before installing attachments! Do NOT use attachments while mixing!

1. Loosen and remove the attachment hub thumbscrew (see fig 10-1).
2. Remove the plastic cover from the attachment hub (see fig 10-1).
3. Lubricate the attachment shaft with a food quality grease or mineral oil.
4. Insert the attachment shaft into the hub making sure to line up the alignment pin with the hub hole.
5. Tighten the thumbscrew back into the hub and securely tighten it.
6. Select the appropriate speed setting by lifting or lowering the speed control lever.

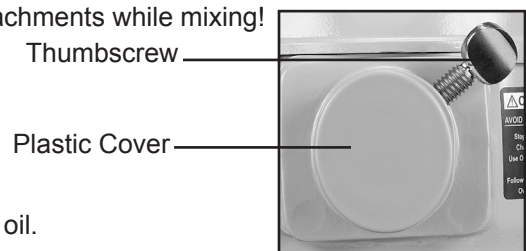


fig. 10-1

Recommended Speed while using attachments:

<u>Attachment</u>	<u>Recommended Speed</u>
Vegetable Slicer	1 or 2
Cheese Shredder/Grater	2 or 3
Meat Grinder	1 only

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

7. Turn the timer knob in a counterclockwise direction to the green "on" position.
8. Press the green start button located on the middle of the control panel.

CAUTION

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

9. To change the speed while using mixer attachments:
 - a. press the red stop button
 - 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 and SP80PL will automatically shut off if the speeds are changed while the mixer is in operation.

Cleaning Instructions

CAUTION

- Dilute detergent per supplier's instruction.
- **DO NOT** hose down or pressure wash any part of the mixer.
- **NEVER** use a scrubber pad, steel wool, or abrasive material to clean the mixer.
- **NEVER** use bleach (sodium hypochlorite) or bleach based cleaner.
- **ALWAYS** remove the agitator after each batch. If not, the agitator can become stuck on the shaft and 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 the mixer and to follow the instructions on the quaternary sanitizer container to ensure proper sanitation is achieved.



ALWAYS DISCONNECT OR UNPLUG THE 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 ensure 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

Your new Globe mixer will provide years of uninterrupted service, but only 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 the mixer prior to changing speeds.
- Follow the capacity chart on page 13, especially for mixing dough.
- Use only first (1) speed for mixing dough. 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 doughs.
- If the unit shuts off during mixing (overload protection trips), reduce the batch size.

Maintenance

- Add **only** 2 pumps of grease to the planetary grease fitting once a year.

Recommended Maintenance

PART	REQUIRED ACTION	FREQUENCY
Planetary Ring	Reapply grease (e.g. black axle grease). Inject grease (2 pumps only) into zerk fitting on the side of planetary. DO NOT overfill!	Once a year.
Bowl Slide Rods	Apply Globe oil (mineral oil) on the bowl slide rods. Raise and lower the bowl to distribute the oil onto the rods.	If the bowl becomes difficult to raise or lower.
Gear Oil Meter (SP62P and SP80PL only)	Contact a Globe authorized servicer to change the gear oil.	Once a year. When the gear oil meter shows the oil being 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	SP80PL
Waffle or Hotcake Batter	Flat Beater	2 qts.	3 qts.	5 qts.	8 qts.	10 qts.	12 qts.	16 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.	----	16 qts.
Mashed Potatoes	Flat Beater	4 lbs.	4 lbs.	8 lbs.	15 lbs.	18 lbs.	23 lbs.	30 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.
Meringue (Qty. of Water)	Wire Whip	¼ pts.	½ pts.	¾ pts.	1½ pts.	1¾ pts.	1 qt.	1¼ 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.	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.	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.
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)	50 lbs. 35 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)	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.	100 lbs.
Fondant Icing	Flat Beater	4 lbs.	3 lbs.	6 lbs.	12 lbs.	15 lbs.	18 lbs.	25 lbs.	36 lbs.	----	60 lbs.
Cake	Flat Beater	5 lbs.	6 lbs.	10 lbs.	20 lbs.	25 lbs.	30 lbs.	40 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.	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.	50 lbs.

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

Do not use attachments on hub while mixing!

Troubleshooting

Problem	Possible Causes	Action Required
Mixer will not run.	Bowl guard not in closed position.	Rotate guard to the right until fully closed.
	Bowl not raised.	Raise bowl to highest position.
	Timer is not engaged.	Turn timer at least five minutes past "0", then to desired time or set time to the green "on" 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. <u>Larger models:</u> Wait two minutes. Press stop button then press start button. <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.	Internal overload tripped.	<u>SP25 & smaller models:</u> Press stop button then press reset button. <u>Larger models:</u> Wait two minutes. Press stop button then press start button. <i>(If overload continues to trip, reduce batch size and/or adjust recipe!)</i>
	Damaged or broken transmission belt.	<u>SP25 & larger models:</u> 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.	Ensure 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>(See Capacity Chart)</i>
	Damaged or worn belt.	Replace belt.
	Planetary ring gear needs more grease.	Technician to inspect for source of noise. Reapply high-pressure grease. Contact technician.
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.

Troubleshooting

Problem	Possible Causes	Action Required
Mixing time is too long.	Three-phase mixer is wired wrong.	Agitators should 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 raise 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 raise 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, always 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. Items too firm, speed too high.	Reduce batch size. (<i>See Capacity Chart</i>) Adjust recipe. Reduce speed.
	Hand utensil dropped into bowl while mixing.	Stop mixer before working on mixture.
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>See Capacity Chart</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 (refer to page 11).

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 on parts (excludes wear/expendable parts). The labor warranty is 1 year on labor from original installation, or 18 months from actual shipment date, whichever date occurs first. Mixer attachments have a 1 year replacement warranty from invoice date. There is no labor warranty for mixer attachments. The vegetable slicing assembly, shredder/grater assembly, and meat grinder are considered mixer attachments.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED. GFE EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR EXPRESS 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.

This warranty is not in force until such time as a properly completed and signed installation/warranty registration or an online registration form has been received by GFE within 30 days from the date of installation. Register online at www.globeslicers.com/warranty.asp.

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.

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.