



OWNER /OPERATOR MANUAL

Model

PPM-60 , Mixer, 60 Qt



IMPORTANT NOTICE

This manual contains Important Safety Instructions which must be strictly followed when using this equipment.

Rev.19b

Safety Reminding



These precautions should be followed at all times. Failure to follow these precautions could result in injury to yourself and others or damage the equipment.

- Plug only into grounded electrical outlets matching the nameplate rated voltage.
- Do not modify or tamper with safety switches.
- Do not operate unattended.
- Do not operate equipment in public areas and/or around children.
- Do not use an extension cord with this equipment. Do not plug this equipment into a power strip or multi-outlet power cord.
- Non-PrepPal attachments are not recommended. They will not work properly and will void the warranty.
- Check equipment before each use to insure the equipment is clean.
- Do not use a hose to clean mixer. Use a damp cloth to wipe down the exterior of the mixer.
- Wear proper apparel! Do not wear loose fitting or hanging garments while operating this equipment.
- Have equipment installed by a qualified personnel in accordance with local codes and ordinances.
- Use equipment in a flat, level position.
- Unplug equipment, turn off and let it cool before cleaning or moving.
- Do not spray controls or outside of equipment with liquids or cleaning agents.
- Do not clean the equipment with steel wool.
- Keep equipment and power cord away from open flames, electric burners or excessive heat.
- Do not operate if equipment has been damaged or is malfunctioning in any way.
- Do not use the attachments on hub while mixing.

Important Safeguards

PPM-60 Mixers complies with all safety requirements of UL standards for commercial kitchen equipment & Canadian standards for Canada.

PPM-60 Mixers complies with NSF



USA Toll Free: 1-800-683-8660

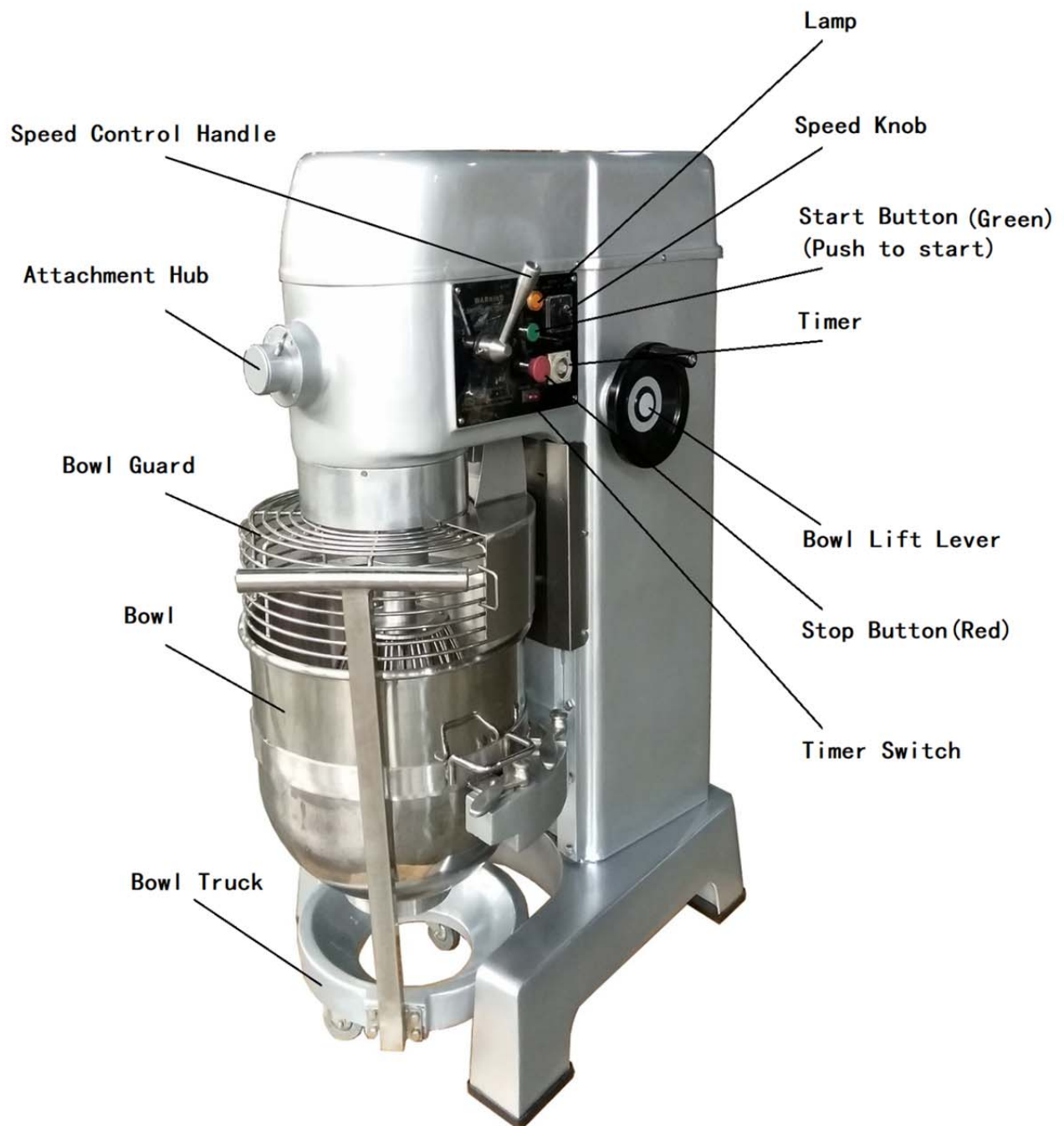
Canada Toll Free: 855-885-6518

Email: warranty@atosausa.com

www.atosa.com

www.atosausa.com

Product Description



PPM-60 Mixer

Technical Specifications

Note: Select speed according to specified accessory mode

- a) **Dough Hook** - suitable for mixing flour and bread dough on the low speed mode

Note: Mix should equal 45% to 50% of the flour weight (See Figure H)

- b) **Flat Beater** - suitable for mixing crushed, powdered and pasty food, such as stuffing on medium speed mode (See Figure I)
- c) **Wire Whip** - suitable for mixing liquid food, such as cream, egg on high speed mode (See Figure J)



Figure a

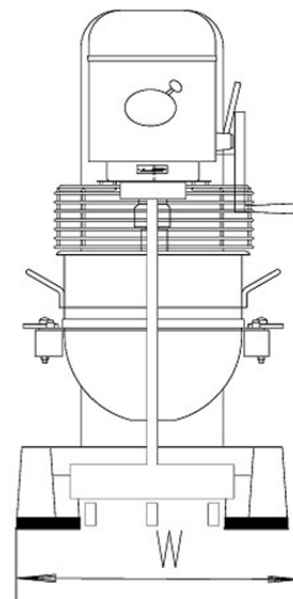
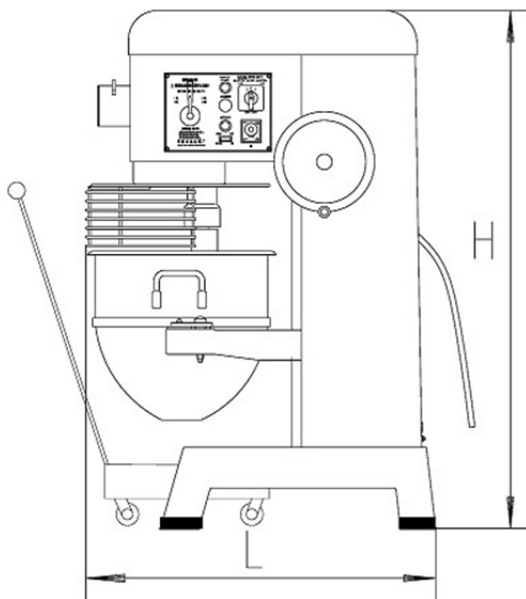


Figure b



Figure c

Model	Bowl Capacity	Voltage	Frequency	Power	Mixing Speed	Maximum Kneading Capacity	Dimensions (LXWXH)	Net Weight
PPM-60	60 qt.	240V 3 Phase	60 Hz	3.75 hp	73/109/143/216 rpm	40 lbs	41" x28" x57"	1080 lbs



Installation

Unpacking and Initial Setup:

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. Safety unpacking step as below photos:

- Step 01: Carefully remove the package material from equipment.
- Step 02: Take away the trailer.
- Step 03: Anticlockwise rotate the handle to low down the bowl and unlock it.
- Step 04: Take away the bowl.
- Step 05: Find the wrench for the M12 bolt.
- Step 06: Unscrew the M12 bolts inside the four legs.
- Step 07: Put two forks into the bottom of machine and protect the bottom.
- Step 08: Slowly lift the mixer machine up about 4" from the pallet .
- Step 09: Pull pallet away from the bottom of mixer feet.
- Step 10: Decline forklift, stand mixer on the ground.



Step 01



Step 02



Step 03



Step 04



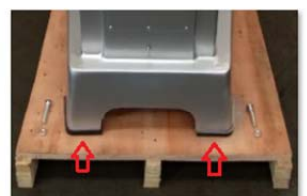
Step 05



Step 06



Step 06



Step 06



Step 07



Step 08



Step 09



Step 10

Place the mixer on a solid, level surface with sufficient space around mixer to allow for the safe cleaning and service.

Plug only into grounded electrical outlets matching the nameplate rated voltage.

Note: Do not plug mixer into a power strip or multi-outlet power cord.

Check the Planetary Shaft Rotate Direction

- Make sure there is not anything in bowl, and no mixer tool on the shaft, put speed lever on one speed and turn on the mixer.
- Observe the shaft rotate direction is comply with the arrow showed on the planetary shaft or not.
- If shaft rotates in the wrong direction, have a licensed electric technician switch the electrical connection and reset.



Shaft Rotate Direction

Operation Instruction

WARNING

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

Attaching the Agitator to the Mixer Shaft(Beater, Hook, Whip)

1. Rotate the bowl guard to the left so it rests in the open position. Excessive force used to open and close the bowl guard may damage the spring lock and bowl guard micro switch, 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 .
3. Rotate the agitator clockwise to secure it onto the planetary shaft.

Attaching the Bowl to the Mixer

1. lower the bowl by rotate the bowl lift lever counter-clockwise to its resting position.
2. lift the bowl by rotating the bowl lift lever clockwise and
 - a) slowly position the locking pin (located on the both side of the bowl) into the hole in the both side of the cradle.
 - 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.











Setting Speeding

Select the appropriate speed setting by rotating the speed control lever.

Four fixed speeds are available for use: First (1), Second (2), Third (3) and Fourth(4).

Speed setting by different type of food and ingredient as following:

Gear Speed	Product Type/ingredient	The position of the speed control lever and knob
1 (Low) Handle to (1/2) Knob to 1 73 rpm	Heavy: mixing pizza, bread, pasta and donut dough' s, waffle/cake batter, mashing potatoes 	
2 (Medium) Handle to (1/2) Knob to 2 109rpm	Medium: 2nd stage of mixing for donut dough, etc. 	
3 (Medium) Handle to (3/4) Knob to 1 143 rpm	Medium: 3th stage of mixing for donut dough, etc. 	
4 (High) Handle to (3/4) Knob to 2 216 rpm	light: whipping cream, egg whites, meringue. 	

Please follow **the capacity chart** to choose agitator and speed.

CRAWL for speed handle switch

If it is difficult to switch the speed handle at right position, you can press the button of (LAMP&CRAWL) transitorily.

Press the button of (LAMP&CRAWL) transitorily can let the planetary shaft rotate by a little angle, so gears can occlude.

Can press the button of (LAMP&CRAWL) transitorily for several times until the speed handle can be switch to right position.



Setting Timer

Timed Operation: Press the red button to the **TIMER** side. To set the time for the appropriate mixing time, turn the timer knob in a clockwise direction at the position between “0” to “30”, to get mixing time between 0 mins to 30mins.

- **Non-Timed Operation:** Press the red button to the **NON-TIME** side to set the mixer for non-timed operation.

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.



Use the Attachment Hub

- **Never** put your hand into the feed chute when using a mixer attachment.
- **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 fasten screw. Then Remove hub cover.
2. Lubricate attachment shaft with a food quality grease or mineral oil.
3. Insert attachment shaft into hub making sure to line up the alignment pin with hub hole.
4. Tighten thumbscrew back into hub and securely tighten it.
5. Select the appropriate speed setting by lifting or lowering speed control lever.
6. Use the untimed operation described on the previous page to adjust timer.
7. Press the green START button located on the control panel.



Recommended Speed while using attachments:

Attachment: Recommended Speed:

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.

Cleaning & Maintenance Instructions



1. **ALWAYS** disconnect or unplug the electrical power from the mixer before cleaning.
2. 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).
3. **NEVER** use a scrubber pad, steel wool, or abrasive material to clean the mixer.

Recommended Cleaning Action as:

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

Mixing Capacity Chart

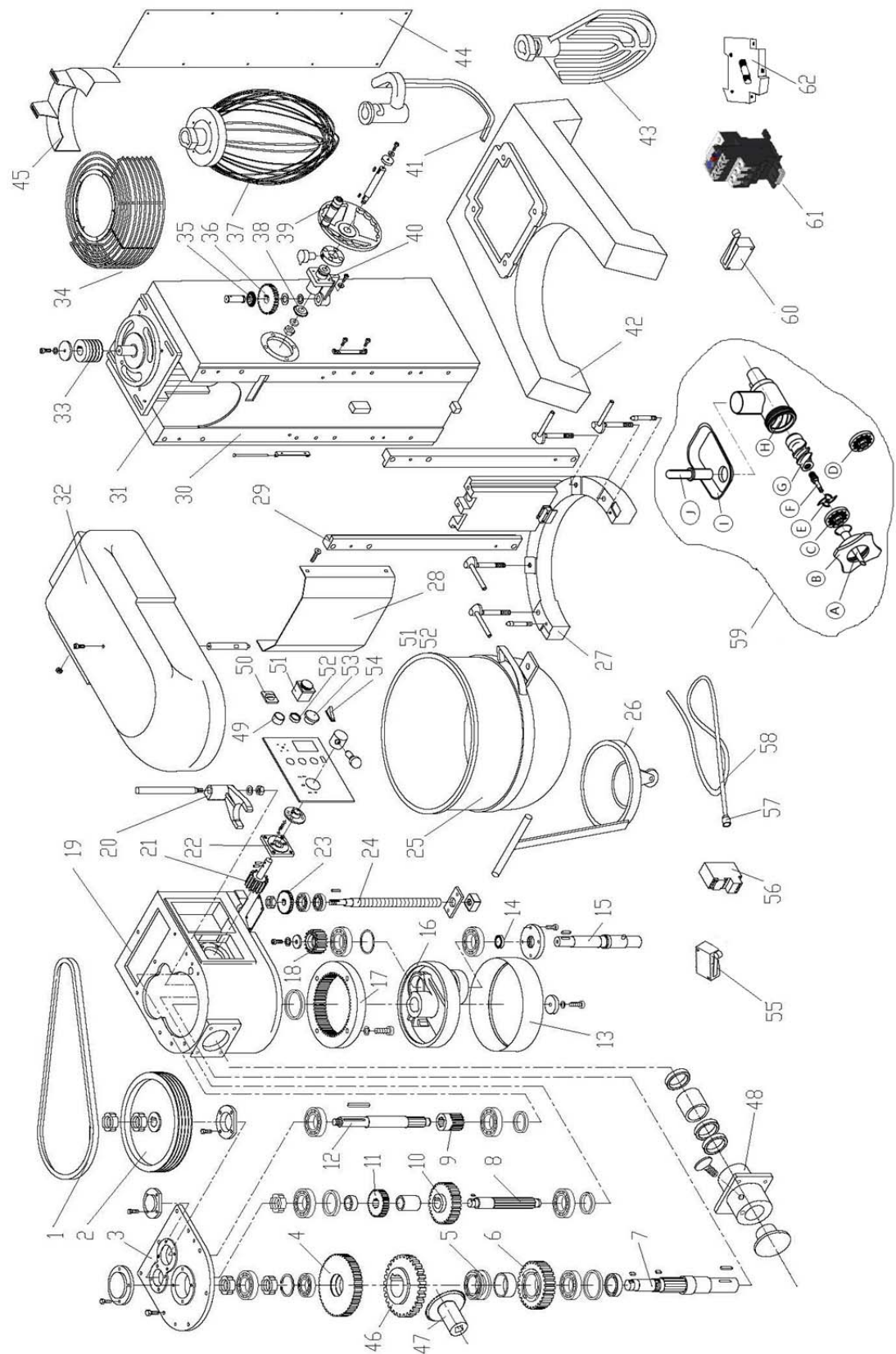
Product	Agitator	Speed	PPM-60 60Quart
Bread and Roll Dough-60% AR	Dough Hook	1 st speed only	90 lbs.
Heavy Bread Dough-55% AR	Dough Hook	1 st speed only	70 lbs.
Pizza Dough, Thin-40% AR	Dough Hook	1 st speed only	40 lbs.
Pizza Dough, Medium-50% AR	Dough Hook	1 st speed only	60 lbs.
Pizza Dough, Thick-60% AR	Dough Hook	1 st speed only	70 lbs.
Raised Donut Dough-65% AR	Dough Hook	1 st speed only	40 lbs.
Pie Dough	Flat Beater	All Speeds	60 lbs.
Mashed Potatoes	Flat Beater	All Speeds	45 lbs.
Cake	Flat Beater	All Speeds	60 lbs.
Waffle or Hot Cake Batter	Flat Beater	All Speeds	24 qts.
Eggs Whites	Wire Wish	All Speeds	3 qts.
Meringue	Wire Wish	All Speeds	3 qts.
Whipped Cream	Wire Wish	All Speeds	12 qts.
Cake, Pound	Flat Beater	All Speeds	60 lbs.
<p>When mixing dough check the “AR” (Absorption Ratio) = Water weigh divided by flour weight. The capacities listed above are based on 12% flour moisture at 70 ° F(21°C) water temperature. If high gluten flour is used reduce batch size by 10%. 1 gallon of water = 8.3 lbs. 1 quart of water = 2.1 lbs. Example : If a recipe calls for 5 lbs. of water and 10 lbs. of flour, then 5 divided by 10 = 0.50x100=50% AR. Do not use 2nd speed with mixtures with below 50% AR.</p>			

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 to desired time or set time to the “on” position.
	Power not connected properly.	check all power connections. Plug into a live socket.(Do not use extension cord!) Test socket with another item
	building circuit breaker is off.	check breaker box.
	internal overload tripped.	Press stop button then press reset button. (If overload continues to trip, reduce batch size and/or adjust recipe!)
	Gear not engaged.	Switch gear fully into position. (Mixer will not operate if the speed control lever is positioned in between speeds)
Mixer stops during mixing .	internal overload tripped.	Press stop button then press reset button. (If overload continues to trip, reduce batch size and/or adjust recipe!)
	Motor temperature is too high	Voltage is too low, or use wrong agitator or set incorrect speed.
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. (See Capacity Chart)
	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.
Agitators touching bottom or sides of bowl.	Defective or dented bowl.	remove dents or replace bowl.
	Defective agitator.	replace agitator.

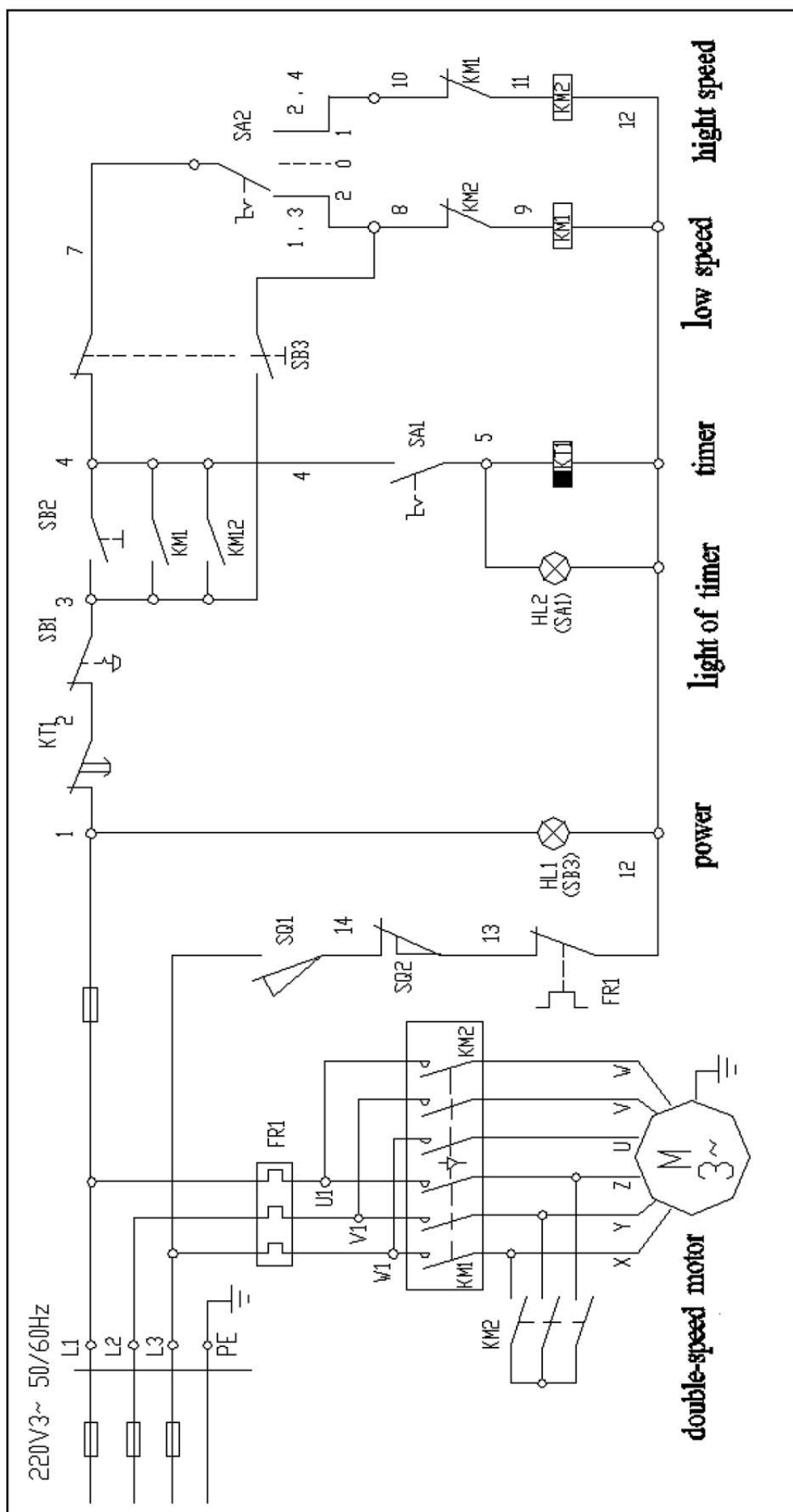
Service Parts

Exploded View of PPM-60 Mixer



PPM60 Parts List

NO.	Part NO	Name of part	Q'TY	NO.	Part NO	Name of part	Q'TY
1	PPM60-001	Belt	4	32	PPM60-032	Top cover	1
2	PPM60-002	Big belt pulley	1	33	PPM60-033	Belt pulley	1
3	PPM60-003	Case cover	1	34	PPM60-034	Protecting shield	1
4	PPM60-004	Gear Z=62	1	35	PPM60-035	Gear Z=22	1
5	PPM60-005	Jointer	1	36	PPM60-036	Gear Z=36	1
6	PPM60-006	Gear Z=48	1	37	PPM60-037	Wire whip	1
7	PPM60-007	Main shaft	1	38	PPM60-038	Gear Z=22	1
8	PPM60-008	Middle shaft	1	39	PPM60-039	Handle wheel	1
9	PPM60-009	Small gear Z=15	1	40	PPM60-040	Rack	1
10	PPM60-010	Gear Z=40	1	41	PPM60-041	Dough arm	1
11	PPM60-011	Gear Z=26	1	42	PPM60-042	Bottom base	1
12	PPM60-012	Shaft	1	43	PPM60-043	Flat beater	1
13	PPM60-013	Oil collecting tray	1	44	PPM60-044	Back cover	1
14	PPM60-014	Oil sealing	1	45	PPM60-045	Stated cover	1
15	PPM60-015	Mixing shaft	1	46	PPM60-046	Driving bevel gear	1
16	PPM60-016	Eccentricity base	1	47	PPM60-047	Driven bevel gear	1
17	PPM60-017	Annular gear Z=72	1	48	PPM60-048	Mincer connector	1
18	PPM60-018	Gear Z=22	1	49	PPM60-049	Yellow button	1
19	PPM60-019	Case	1	50	PPM60-050	Gerenal change switch	1
20	PPM60-020	Fork	1	51	PPM60-051	Timer	1
21	PPM60-021	Gear	1	52	PPM60-052	Start Switch	1
22	PPM60-022	Rack	1	53	PPM60-053	Emergency Stop button	1
23	PPM60-023	Gear Z=27	1	54	PPM60-054	Timer Switch	1
24	PPM60-024	Screw pole	1	55	PPM60-055	Protecting shield Journey switch	2
25	PPM60-025	Bowl	1	56	PPM60-056	AC contactor	2
26	PPM60-026	Trailer	1	57	PPM60-057	Waterproof Connector	1
27	PPM60-027	Bowl supporter	1	58	PPM60-058	Power Line	1
28	PPM60-028	Front cover	1	59	PPM60-059	Mincer(one set)	1
29	PPM60-029	Pressure plate	2	60	PPM60-060	Bowl Journey switch	1
30	PPM60-030	Pedestal	1	61	PPM60-061	Thermal relay	1
31	PPM60-031	Motor	1	62	PPM60-062	Motor electrical current breaker	1



Circuit Diagram of PPM-60 Mixer(UL)