



# OWNER'S MANUAL

## ABSFBM-200T



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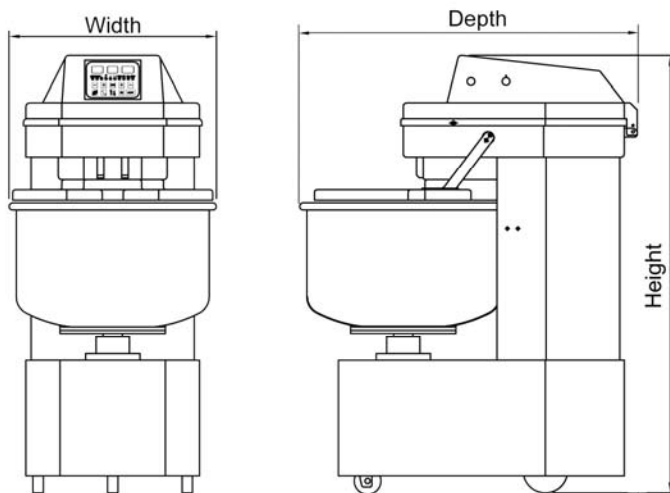
## Introduction

The ABSFBM-200T is a Spiral Mixer with a Three-Timer control panel and two motors; one motor drives the hook while the other drives the bowl. The hook and bowl are made of stainless steel for long life and ease of cleaning. The full bowl cover keeps flour dust down and protects the operator from the hook while operating.

Owners and operators should carefully read and familiarize themselves with this entire manual before attempting to operate or service this machine. Complying with this manual will ensure years of safe and trouble-free operation.

All of the information, illustrations and specifications contained in this manual are based on the latest product information available at the time of printing. American Baking Systems reserves the right to make changes at any time without notice. If questions arise during the operation or servicing, please contact us before proceeding.

## Specification



Model		ABSFBM-200T
Capacity (Pounds)	Flour	242
	Dough	440
Power	Spiral	12
	Bowl	1.5
Spiral Speed (rpm)	1st speed	98
	2st speed	196
Bowl speed (rpm)		11
Dimension (inches)	Width	39
	Depth	63
	Height	63
Machine weight (lbs)		2,870

### **Installation**

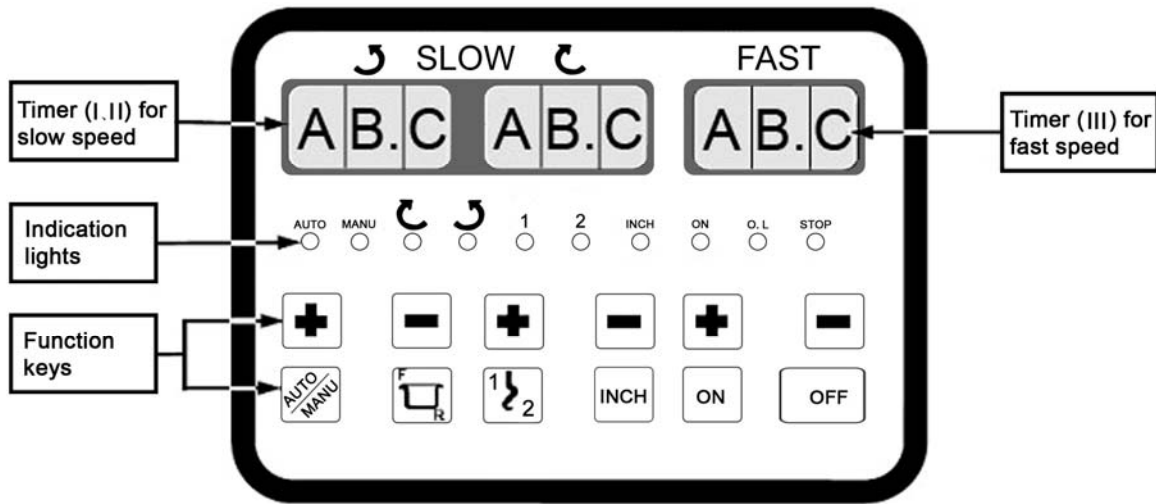
The machine is ready for installation. After uncrating your spiral mixer, inspect the machine for any damage that might have occurred during shipment. Report any damage to us before proceeding. Never attempt to operate this mixer with damaged parts.

- 1). Position the mixer in its appropriate working position, the mixer must be installed on a horizontal and solid floor.
- 2). Adjust the mixer feet to ensure that the mixer is level, and seat it firmly on all four corners. Ensure that no wheels touch the ground. The axles are not designed to support the unit while mixing.
- 3). Connect the correct power supply to the machine as indicated on the machine nameplate.

### **Commissioning**

- 1). Start the mixer to check the direction of rotation of the kneading spiral and the bowl. When viewed from above, both kneading spiral and bowl should rotate clockwise. The arrow on the bowl indicates the correct direction of the bowl. If the rotation direction is incorrect, swap two phases in the plug (white and black wires) to reverse the rotation direction.
- 2). Test the function of the safety emergency stop button. The machine must stop immediately when you press this button.
- 3). Test the function of the limit switch for the bowl safety guard. When the guard is lifted, the machine must stop immediately.





**Control Panel**






**1. Timers**

On top of the operation panel, there are three timers: Timer I , II is for slow speed; Timer III is for fast speed. Each Timer has three digits.

The unit of A and B is minute while C is 10 seconds, for example: 0.1 is 10 seconds, 1.2 is 1 minute and 20 seconds.

The timers are set by  and  buttons. Press  button to increase time, the maximum set time is 20 minutes. After 20 minutes is reached, the timer returns to 0 minute again. Press  button to lessen the time on the timer.

When the spiral mixer is switched ON, timers will show the set time. The timer will only be operative when mixer is in AUTO mode. The timer will start automatically when the ON button is pressed. The slow speed timer  will run first and then the slow speed time  II , the fast speed timer begin to run when the time  , runs to zero. When all timers reach zero, the machine will stop mixing.

When the spiral mixer safety guard is lifted, the timer will stop with the mixer and resume when the guard is moved down and the ON button is pressed.

When the OFF button is pressed, the timers will reset to the original set time.

2. Indication lights


Indication lights indicate the running state of the spiral mixer:


A). AUTO/MANUAL lights:

When “AUTO” lamp lights up, spiral mixer is in AUTO operation.

When “MANU” lamp lights up, spiral mixer is in MANUAL operation.

B). Bowl direction lights:

When  lamp lights up, the bowl is in forward direction.

When  lamp lights up, the bowl is in reverse direction.

C). Mixer speed lights:

When 1 lamp lights up, the hook is in the slow speed state.

When 2 lamp lights up, the hook is in the fast speed state.

D). Bowl inching light:

When “INCH” lamp lights up, spiral mixer is in manual inch mode. This button is also operative when the safety guard is lifted.

E). On model light:

When “ON” lamp lights up, spiral mixer is in mixing mode.

F). O.L. Light:

When “O.L.” (OVERLOAD) lamp lights up, the overload relay is on. It inform you that the mixer is overload, please switch off the mixer and decrease the mixing weight and restart the machine again.

G). Stop mode light:

When “STOP” lamp lights up, safety cover has been raised during mixing mode.

3. Function keys



AUTO / MANUAL selection



Speed selection button



Bowl direction selection



Inching button



Start button



Stop button

### Initial start-up (DAILY)











Check the machine's bowl is clear of all foreign objects, all switches are off and work area should be clear of bystanders.

Safety guard should be raised and pushed back fully against stop to avoid it falling onto operator. The mixer has safety interlocks to prevent mixer operation when the safety guard is lifted.

Complete ingredient should be checked to ensure accuracy in scale.





### Operation Steps

#### 1. Auto operation

- A). Press   buttons below I timer to set the desired time for reverse bowl slow mixing speed.
- B). Press   buttons below II timer to set the desired time for forward bowl slow mixing speed.
- C). Press   buttons below III timer to set the desired time for forward bowl fast mixing speed.
- D). Press  button until the "AUTO" lamp lights up.
- E). Press  button until the  lamp lights up.
- F). Press  button to start machine.




### 2. Manual operation

- A). Press  button until the “MANU” lamp lights up.
- B). Press  buttons to select the desired direction.
- C). Press  to start.
- D). Press  button when you want to stop the machine.

The timer will stop function under manual operation.

The mixer will always start with slow speed even if you have selected fast speed to start. When the mixer is running at slow speed, you can press

 button to let mixer run at fast speed.

### 3. Control Buttons

When digital panel is damaged, the mixer can be operated by manual switch located at left side of top cover. You can select slow speed or fast speed manually without timer.

- A). Press “ON” to start the machine
- B). “1” means slow speed, “2” means fast speed.

In this state, the bowl can only rotate clockwise. And you can stop the machine by pressing the emergency button or opening the safety guard.



## CAUTION

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1. Use the machine with great care and never be distracted.
2. Do not wear loose fitting clothes or clothing with wide or open sleeves.
3. Do not remove, cover or alter the warning stickers or machine safety covers placed on the machine body.
4. Use machine only for what it was intended.
5. Do not set dough knives or scrapers atop machine, they could fall in during operation and ruin the machine or injure the operator.
6. Do not use the machine with temporary electrical connections or non-insulated cables.
7. Periodically check the state of the power cord and the cable clamp on the machine body, replace it if necessary by an authorized service provider.
8. Discontinue use of the machine if there are broken or missing covers, a damaged cord, or loud or odd noises coming from the machine..
9. Before cleaning or carrying out maintenance, isolate the machine from the power supply first.
10. For all extraordinary maintenance, consult with the manufacturer or authorized personnel.
11. Never insert hands or other objects into the bowl when the machine is in operation. Keep hands and clothing away from bowl rollers while bowl is turning.

## CLEANING AND MAINTENANCE

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1. Brush off all external surfaces. Use a soft brush and work from the top to the bottom.
2. Remove all old dough using a plastic scraper.
3. Scrape the mixing bowl, the breaker bar, the dough spiral, under the bowl cover inside the mixing bowl, and behind the mixing bowl.
4. Wipe all surfaces with warm water.
5. Apply a detergent/sanitizer and leave on all surface.
6. Scrub to loosen and remove residues.
7. Rinse the bowl and dough spiral mixer tool thoroughly with hot water on a damp rag. **DO NOT POWER WASH OR HOSE OFF MACHINE!**
8. Remove excess moisture with clean towels. Dry all surfaces.

## TROUBLE SHOOTING

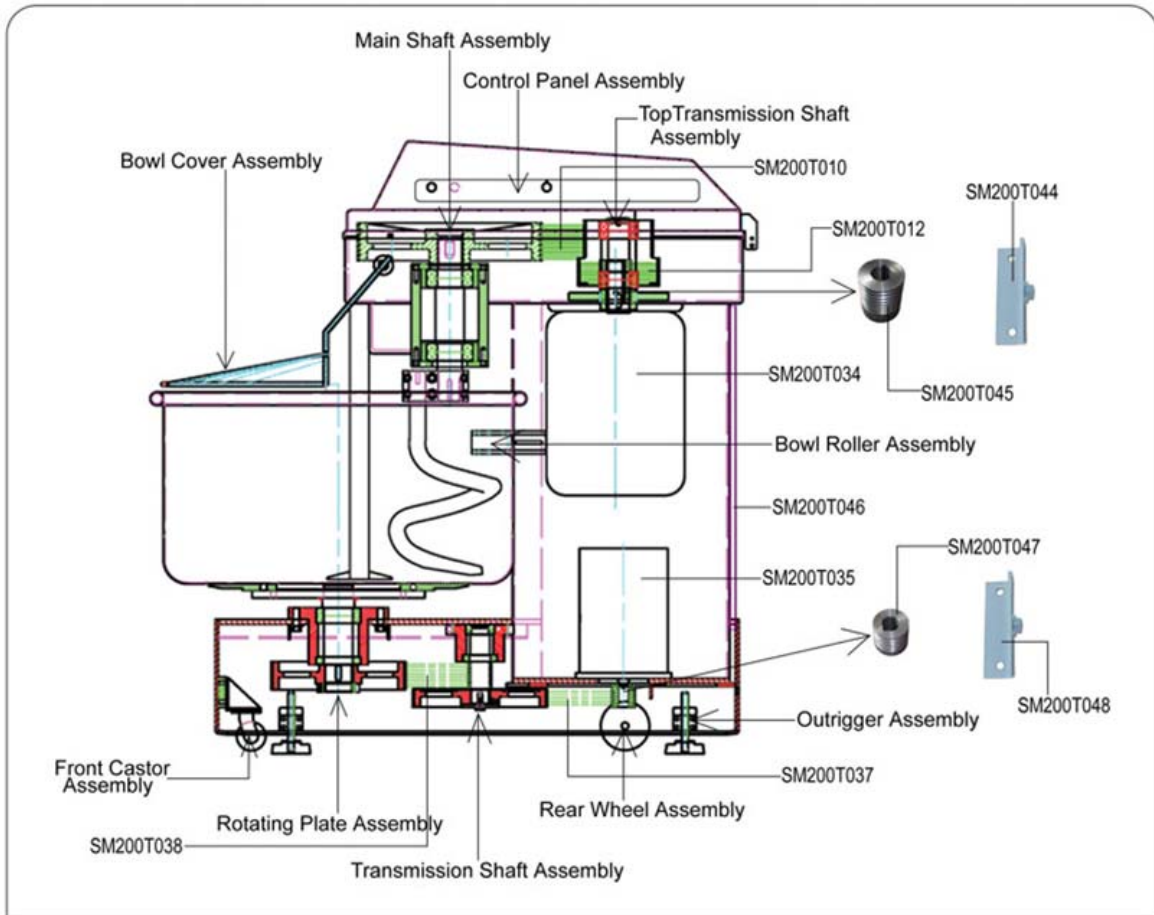
Fault	Possible Cause	Remedy
The mixer does not operate /start.	<p>Not plugged in.</p> <p>The main switch is "off".</p> <p>The bowl safety cover is open.</p> <p>The mixer overload has been tripped.</p> <p>Stop button is still locked in the down position.</p>	<p>Plug in and switch on.</p> <p>Turn the switch on.</p> <p>Place it down position.</p> <p>Contact supervisor / service agent.</p> <p>Release by rotating and pulling out.</p>
The mixer starts and then stops.	<p>Both high and low speed timers are set to zero.</p> <p>The mixer overload has been activated.</p> <p>Fuse blown internally.</p>	<p>Set mixing time on both timers.</p> <p>Contact supervisor / service agent.</p> <p>Contact supervisor / service agent.</p>
The mixer labors under load. Belts screech.	<p>Dough too stiff / tight.</p> <p>Machine malfunction.</p>	<p>Review and adjust dough consistency, eg. Add more liquid.</p> <p>Contact supervisor / Service agent.</p>
The mixer moves or rocks during operation.	Floor not level or the adjustable feet are located incorrectly.	Readjust level and stabilize by means of adjustable foot.
Excessive flour dust coming from mixer.	First speed timer set too short.	Extend first speed mix / blending cycle.
The mixer bowl and dough hook operate in the wrong direction.	Mixer is plugged into a new electrical socket after cleaning or moved in bakery. Polarity of 3 phase plug reversed.	<p>Return to original position in bakery.</p> <p>Consult authorized electrical service to rewire plug; swap white and black wires in plug.</p>

## TROUBLE SHOOTING

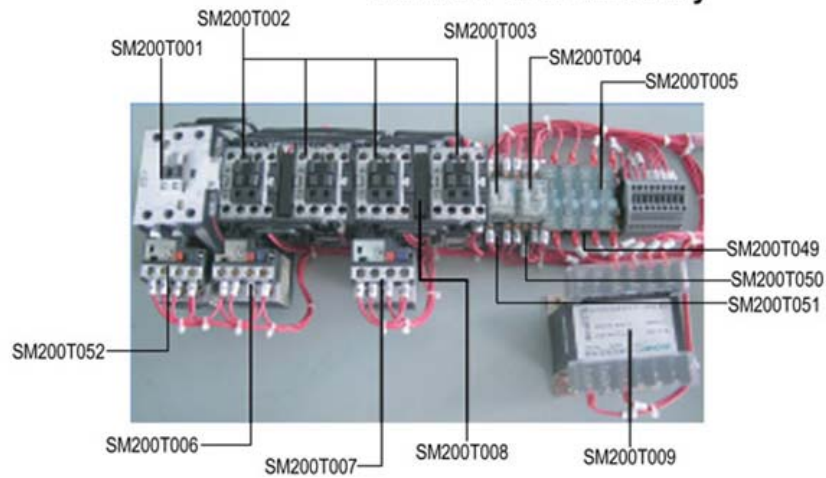
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Fault	Possible Cause	Remedy
The mixer does not stop	Electrical / mechanical malfunction.	Switch off power at main switch. Isolate mixer by unplugging machine.  Attach warning tag to machine, contact service agent.
Bread dough too soft.	Excessive water used in dough (human error).  Incorrectly metered / measured through water meter (equipment error).  Over-mixed dough	Review recipe and adjust dough consistency.  Contact authorized maintenance.  Review /check /change mix cycle.
Final dough temperature too hot.	Water temperature too hot.  Dough mixed too long.	Reduce water temperature.  Shorten mix cycle.
Final dough temperature too cold.	Water temperature too cold.  Dough mixed too short.	Increase water temperature.  Lengthen mix time.

# PARTS LIST



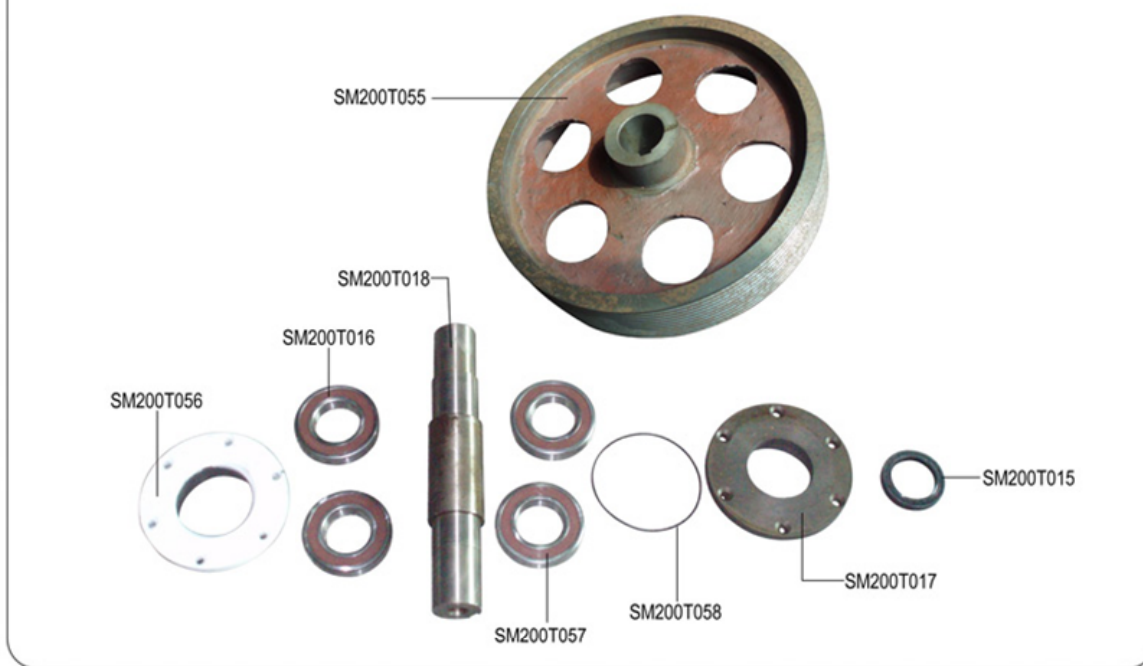
## Control Panel Assembly



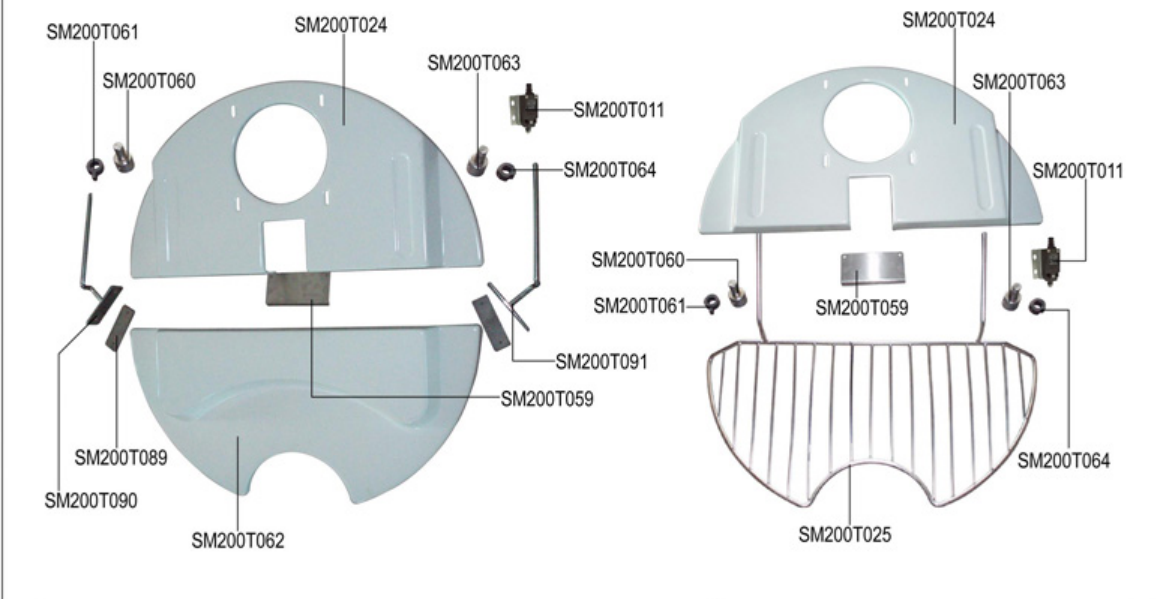
# PARTS LIST



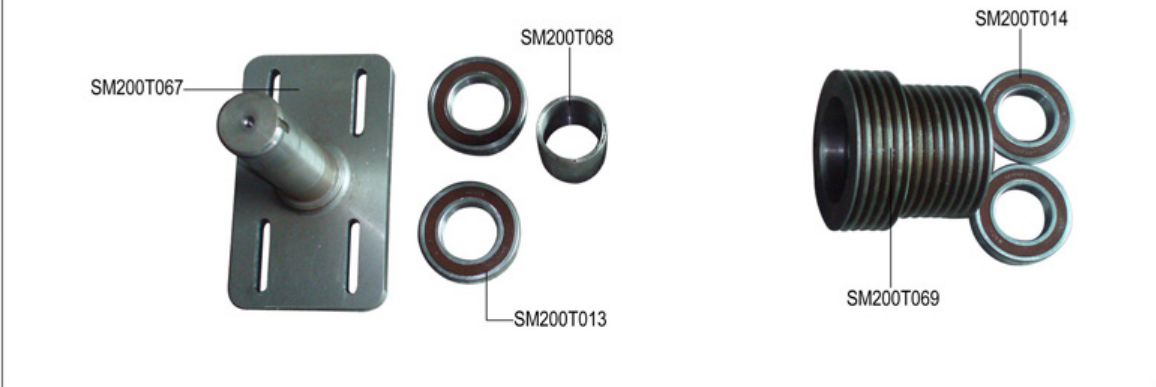
## Main Shaft Assembly



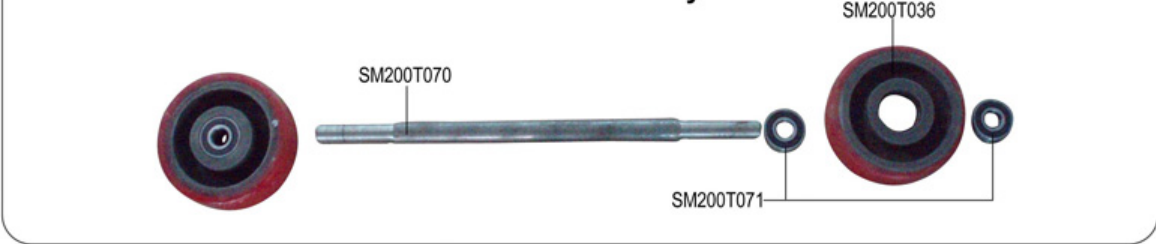
**Bowl Cover Assembly**



**Top Transmission Shaft Assembly**



**Rear Wheel Assembly**

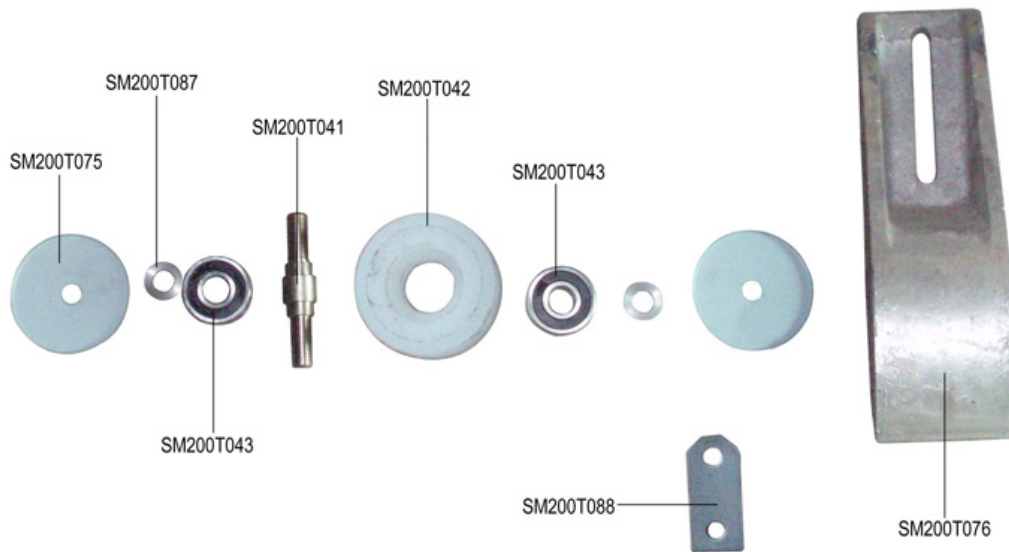




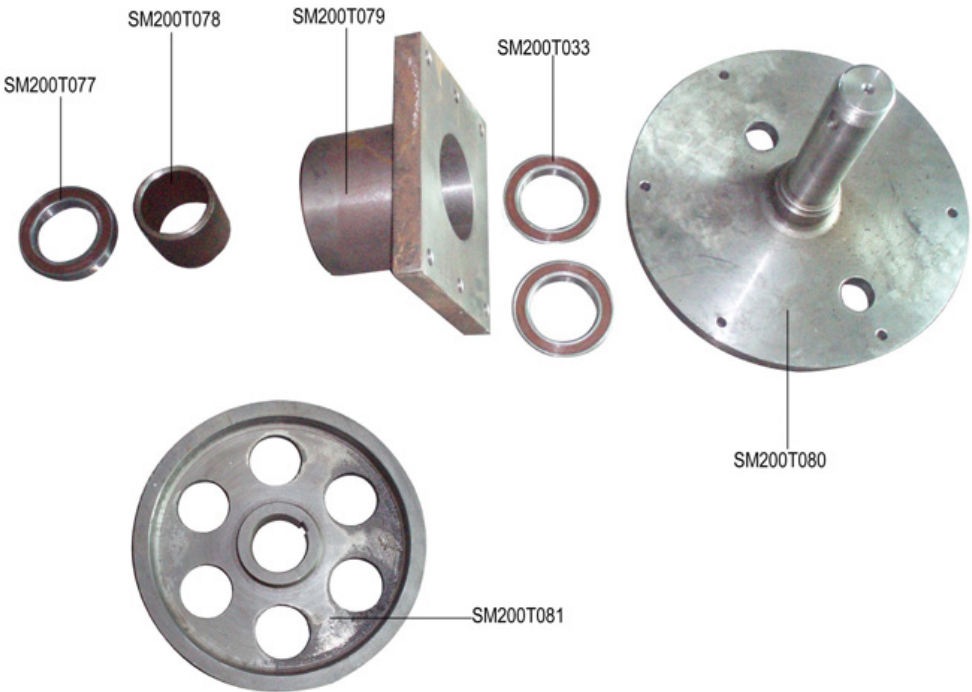
**Transmission Shaft Assembly**



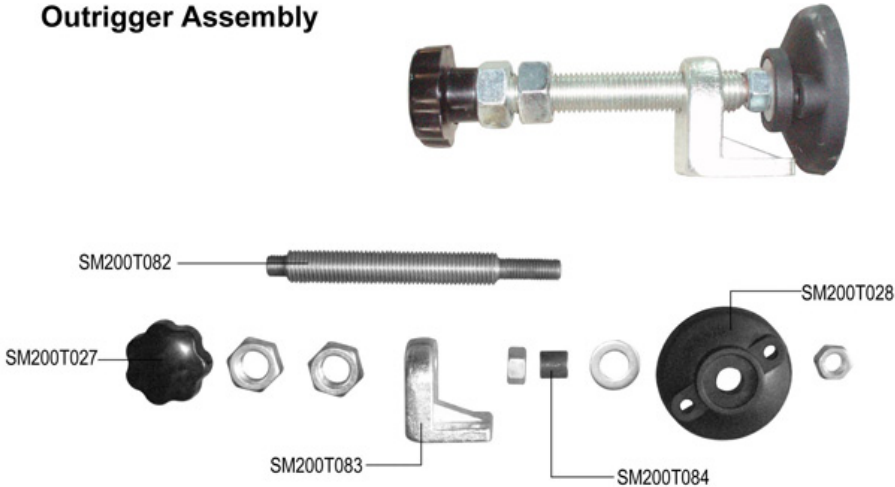
**Bowl Roller Assembly**



Rotating Plate Assembly



Outrigger Assembly



## PARTS LIST

Parts Number	Parts Code	Parts Name	Specification
SM200T001	16JCQCN25-1	Contactora	CU-27 24V 3A1a1b
SM200T002	16JCQCN16-1	Contactora	CU-16 3A1b 24V/50HZ (4pcs)
SM200T003	16JDQMY2-110V	Relay	
SM200T004	16JDQMY4-24V	Relay	
SM200T005	16BXSG111B	Fuse Cover	
SM200T006	16JDQRHN10A-5	Thermal Relay	RHN10A 12.5-18A
SM200T007	16JDQRHN10A-3	Thermal Relay	RHN-10A 5.5-8.5A
SM200T008	16LSLCI-18	Mechanical Interlock	
SM200T009	16BYQJBK100-1	Transformer	380V-220V/110V 30W-26V 70W
SM200T010	15PDL2060	Belt	7M-2060 (10pcs)
SM200T011	16KGLMEA9112G	Microswitch	
SM200T012	15PDL1120	Belt	7M-1120 (7pcs)
SM200T013	15ZCL6211VV	Bearing	6211VV
SM200T014	15ZCL6211VV	Bearing	6211VV
SM200T015	15YFL07	Oil Seal	
SM200T016	15ZCL6213VV	Bearing	6213VV
SM200T017	14M360-04	Bottom Housing Bearing	
SM200T018	14M370-20	Main Shaft	
SM200T019	16MBLOMX-004-02	Control Panel	Three-Timer
SM200T020	16KGLAR22PR-322B	Select Switch	
SM200T021	16KGLBE101	Cover for Manual Switch	
	16KGLZA-BD3	Manual Switch	
SM200T022	16KGLZA2-BS54	Emergency-Stop Switch	
SM200T023	16KGLOT63ET3	Main Power Switch	
SM200T024	13RB210-01	Safety Cover	
SM200T025	11M750-20	Safety Grills	
SM200T026	11Y800	Bowl	
SM200T027	15BSLHY01	Screw Handle	HY8314.4, B-M16 *63
SM200T028	14D9016150-01	Foot Pad	
SM200T029	11M444-20	Machine Top Cover	
SM200T030	13M640-07	Clamping Block	

## PARTS LIST

SM200T031	14M630-07S	Stainless Steel Hook	
SM200T032	13M650-08	Central Pillar	
SM200T033	15ZCL6015VV	Bearing	6015VV
SM200T034	16MDL200AS-1	Top Motor	B5YD160M-4/8 Y160M 12HP 4/8P 380V-50HZ-3PH 12KW
SM200T035	16MDL200TX-1	Bottom Motor	B5Y132S-12 1.5KW-12P-380-50HZ
SM200T036	15LZL5	Rear Wheel	
SM200T037	15PDL1450	Belt	7M-1450
SM200T038	15PDL1450	Belt	7M-1450
SM200T039	15ZCL6011VV	Bearing	6011VV
SM200T040	15ZCL6009VV	Bearing	6009VV
SM200T041	14M850-03	Shaft for Bowl Roller	
SM200T042	14M840-05	Bowl Roller	
SM200T043	15ZCL6304VV	Bearing	6304VV
SM200T044	11M270-20	Adjusting Plate for Top Motor	L50 *5T *240 Q235
SM200T045	14M320-20-02	Top Motor Pulley	For 50HZ
SM200T046	11M870-20-01	Machine Rear Cover	1.5T *788 *524 SPCC
SM200T047	14M330-20	Bottom Motor Pulley	
SM200T048	11M290-20	Adjusting Plate for Bottom Motor	L50 *5T *200 Q235
SM200T049	16BXSZD	Fuse Seat	
SM200T050	16JDQPYF-14	Relay Seat	
SM200T051	16JDQPYF-08	Relay Seat	
SM200T052	16JDQRHN80A2-2	Thermal Relat	RHN80A2 30-40A
SM200T053	14M461-03	Connector for Top Cover	SPCC 6T
SM200T054	14M471-03	Connector for Top Cover	SPCC 6T
SM200T055	14M380-20-02	Big Pulley	
SM200T056	14M350-20	Top Bearing Housing	
SM200T057	15ZCL6213VV	Bearing	6213VV
SM200T058	15OXQ-145	O-Ring	Φ2.62 *145.7 HARP25M145
SM200T059	12M803-05	Plate for Safety Cover	SUS304/HL 1.5t *99 *165
SM200T060	14M670-20	Mount Clip	Left

## PARTS LIST

SM200T061	14M700-01	Adjust Wheel for Bowl Cover	
SM200T062	13RB215-01	Bowl Safety Cover	
SM200T063	14M680-20	Mount Clip	Right
SM200T064	14M710-01	Adjust Wheel for Microswitch	
SM200T065	11M150-20	Front Castor Seat	
SM200T066	15LZLS4-3312	Front Castor	
SM200T067	14M190-20-01	Top Transmission Shaft	
SM200T068	14M240-20	Bush	
SM200T069	14M250-20-02	Pulley	
SM200T070	14M180-20	Shaft for Rear Wheel	
SM200T071	15ZCL6203VV	Bearing	6203VV
SM200T072	14M400-20	Pulley	
SM200T073	14M410-20	Transmission Shaft	
SM200T074	14M420-20	Fixing Seat	
SM200T075	14M845-04	Watertight Cover	
SM200T076	13M830-20	Bowl Roller Cover	
SM200T077	15ZCL6015VV	Bearing	6015VV
SM200T078	14M540-20	Bush	
SM200T079	14M530-20	Bearing Housing	
SM200T080	14M560-20	Rotating Plate	
SM200T081	14M590-20	Pulley	
SM200T082	14M145-20A	Screw Rod	
SM200T083	14M140-20	Support Strut	
SM200T084	14D9016150-03	Bush	
SM200T085	14RB420-01	Handle on Top Cover	3pcs
SM200T086	11M880-02	Machine Side Cover	SPCC 2T*340*150
SM200T087	14M846-03	Gasket	
SM200T088	14M860-03	Gasket	SS41 4T*35*70
SM200T089	12M820-04	Fixed Piece	SUS304 4t*128*40
SM200T090	14M810-20-01	Bowl Cover Bracket	
SM200T091	14M811-20-01	Bowl Cover Bracket	

# WIRING DIAGRAM

