



OWNER'S MANUAL

ABSFBM-25

(Spiral Mixer)



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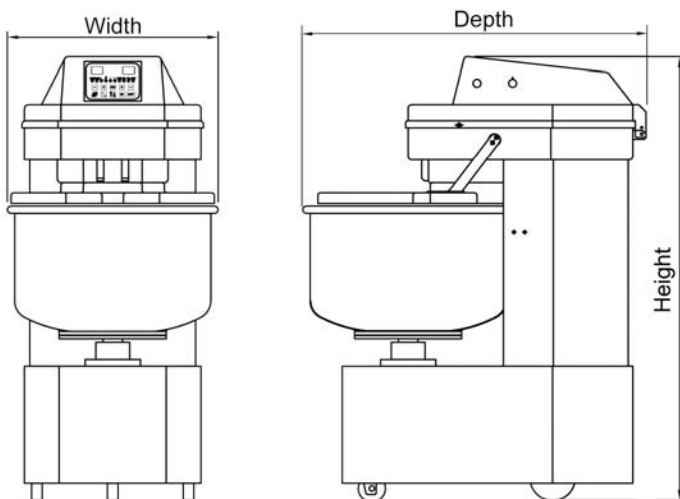
Introduction

The ABSFBM-25 is a Spiral Mixer with a two-timer control panel and a single motor that drives both the hook and 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.

Specifications



Model		ABSFBM-25
Capacity (lbs)	Flour	27.6
	Dough	55.0
Power (kw)	Spiral	2.2
	Bowl	—
Spiral Speed (rpm)	1st speed	140
	2st speed	280
Bowl Speed (rpm)	1st	12.8
	2st	25.5
Dimension (inches)	Width	22
	Depth	33
	Height	42
Machine weight (lbs)		300

Installation

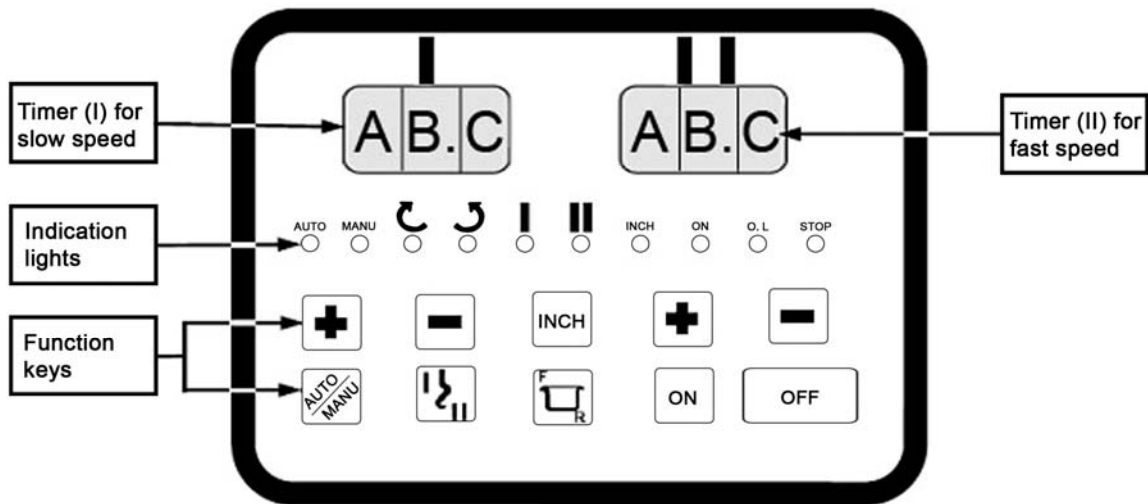
The machine is ready for installation. After uncrating your spiral mixer, inspect the machine for any damage that might have occurred during shipment. Report any damage to us before proceeding. Never attempt to operate this mixer with damaged parts.

- 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 control panel, there are two timers: Timer I is for slow speed; Timer II is for fast speed. Each timer has three digits.

The unit of A and B are minutes and C is 10 seconds, (for example: 0.1 is 10 seconds, 0.2 is 20 seconds.)

The timers are set by  and  buttons. Press  button to increase the time, the maximum set time is 20 minutes. After 20 minutes, the timer starts from 0 minutes again. Press  button for the opposite operation.

When the spiral mixer is switched ON, timers will show the set time. The timer will only work 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 fast speed timer second, the mixer stops until timer reaches 0 minute.

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

When the OFF button is pressed, the timers will return to the 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:


As this Mixer only has one motor, the hook and the bowl will rotate in the same direction.


When  lamp lights up, the bowl and hook are in forward direction.

When  lamp lights up, the bowl and hook are in reverse direction.

C). Mixer speed lights:

As the Mixer only has one motor, when you change the speed of the hook, the speed of the bowl will be also changed.

When  lamp lights up, spiral mixer is in the slow speed state.

When  lamp lights up, spiral mixer is in the fast speed state.

D). Bowl inching light:

When “INCH” lamp lights up, spiral mixer is in manual inch mode.

E). On model light:

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

F). 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

Operation Preparation

Check the mixing bowl is clear of all foreign objects, all control switches are off and operation area should be clear of bystanders.




The electrical cord should be in the appropriate socket and power turned on.

Safety guard should be raised and pushed back fully against stops to avoid injury. The mixer has safety interlocks to prevent mixer operation when the safety guard is lifted.


Weigh out and load ingredients into bowl according to recipe.



Operation Steps

1. Auto operation

A). Press   buttons below  timer to set the desired time for slow mixing speed.





B). Press   buttons below  timer to set the desired time for fast mixing speed.

C). Press  button until the "AUTO" lamp lights up.

D). Press  button until the  lamp lights up.

E). 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  button to start.
- D). Press  button when you want to stop the operation.

The timer will stop functioning 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 change mixer into fast speed while in manual mode.

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.

You can stop the machine by pressing the emergency stop button or lifting the safety guard.



CAUTION

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

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.

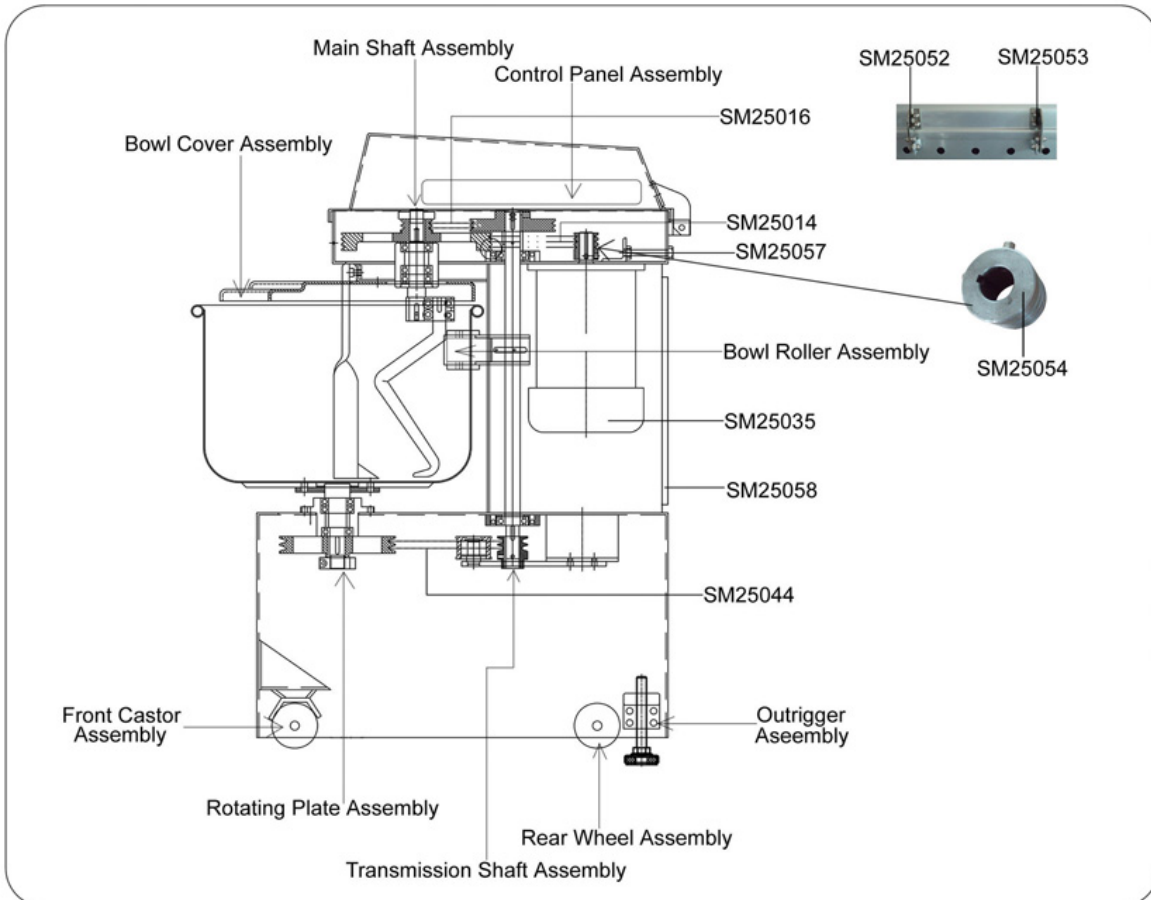
TROUBLE SHOOTING

Fault	Possible Cause	Remedy
The mixer does not operate /start.	Not plugged into the socket at main switch.	Plug in and switch on.
	The main switch is "off".	Turn on.
	The bowl safety guard is open.	Place it down position.
	The mixer overload has been activated.	Contact supervisor / service agent.
	Stop button is still locked in the down position.	Release by rotating and pulling.
The mixer starts and then immediately stops.	Both high and low speed timers are set to zero.	Reset mix cycle on both timers.
	The mixer overload has been activated.	Contact supervisor / service agent.
	Fuse overload at the power board.	Contact supervisor / service agent.
The mixer labors under load.	Dough too stiff / tight.	Review and adjust dough consistency; add more liquid.
	Machine malfunction.	Contact supervisor / Service agent.
The mixer moves or rocks during operation.	Floor not level or the adjustable feet are located incorrectly.	Re-adjust level and stabilize with 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.	Inserting the mixer plug into the incorrect socket after cleaning.	Return to correct position.
	Relocating the mixer in another position after maintenance.	Consult authorized electrical service to rewire plug.

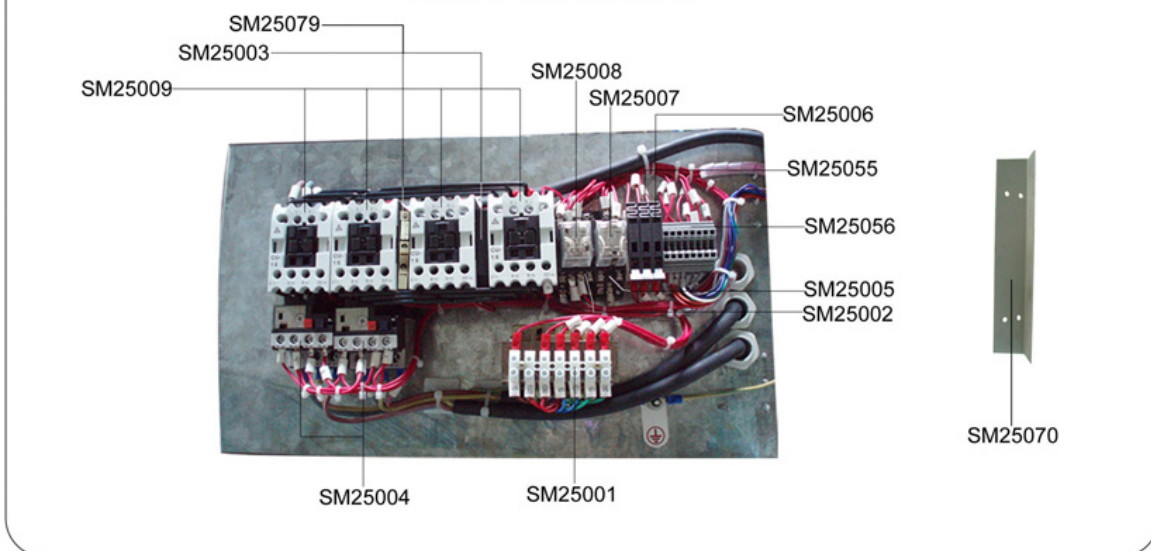
TROUBLE SHOOTING

Fault	Possible Cause	Remedy
The mixer does not stop	Electrical / mechanical malfunction.	Switch off power at main switch. Isolate mixer by removing wall plug. Attach danger 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 service agent. 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.
Dough is difficult to remove from the mixing bowl.	Dough left in bowl too long. Dough too soft. Dough over-mixed.	Remove from bowl earlier. Refer-dough too soft. Run food grade oil between dough and bowl at the end of mix cycle to stop dough sticking.

PARTS LIST



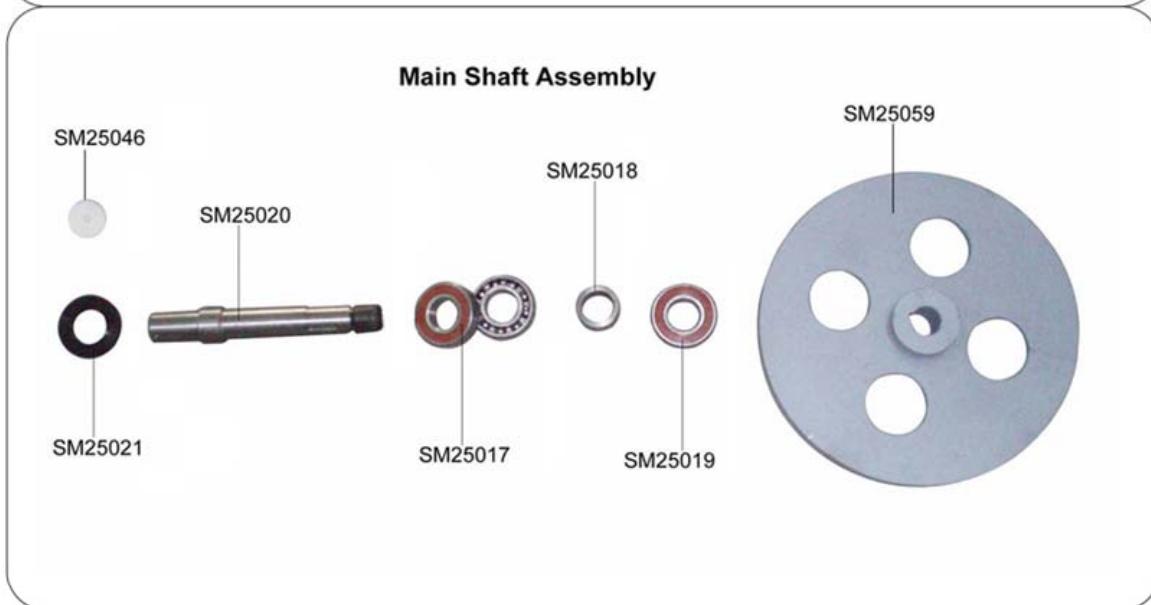
Control Panel Assembly



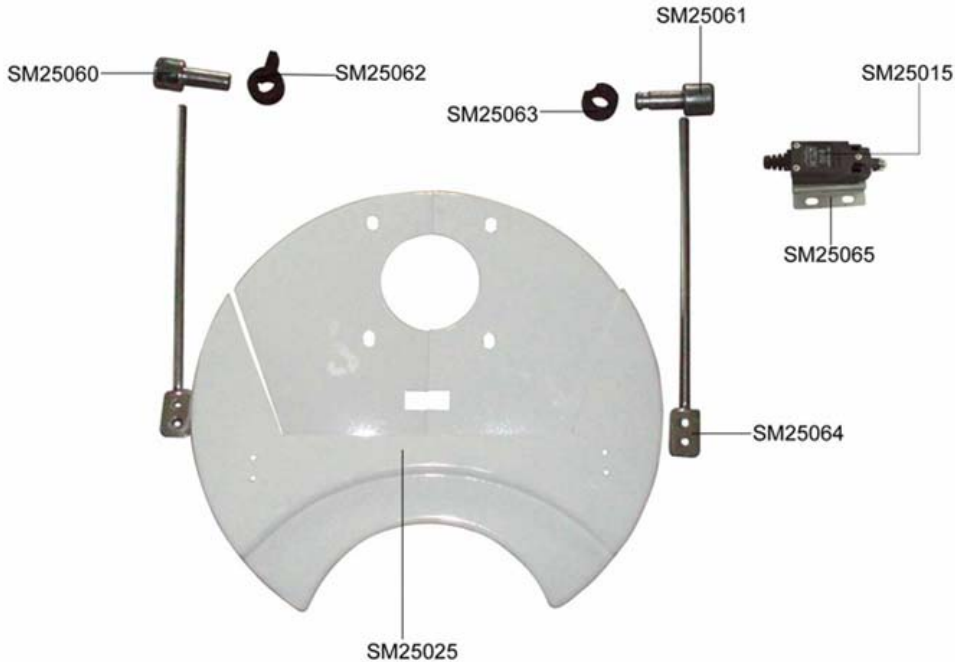
PARTS LIST



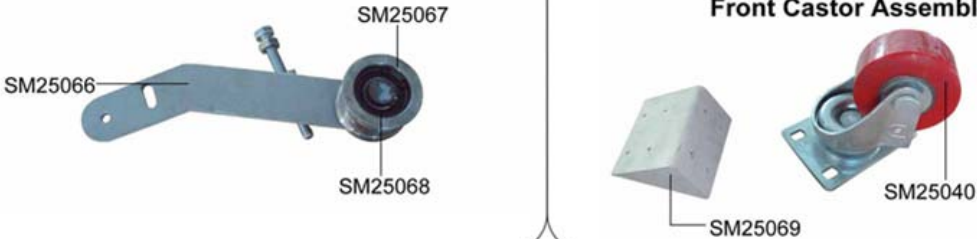
Main Shaft Assembly



Bowl Cover Assembly



Front Castor Assembly



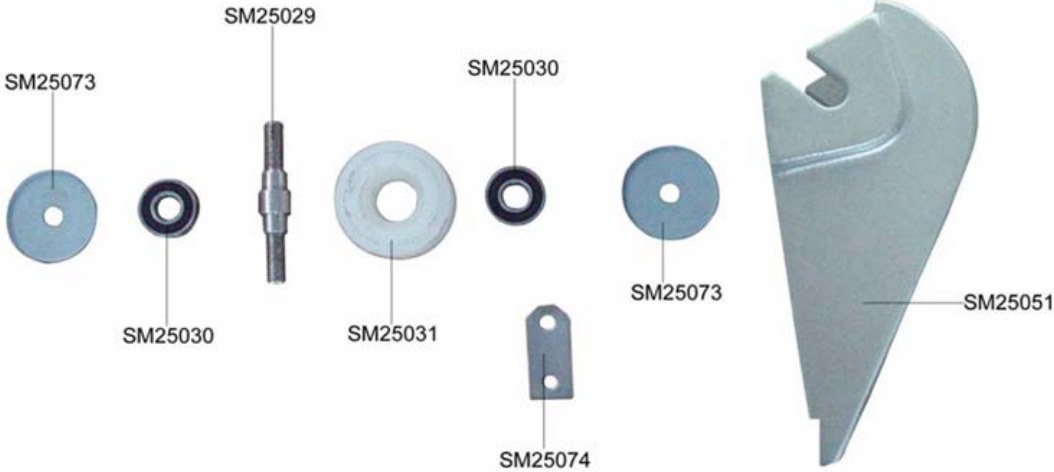
Rear Wheel Assembly



Transmission Shaft Assembly



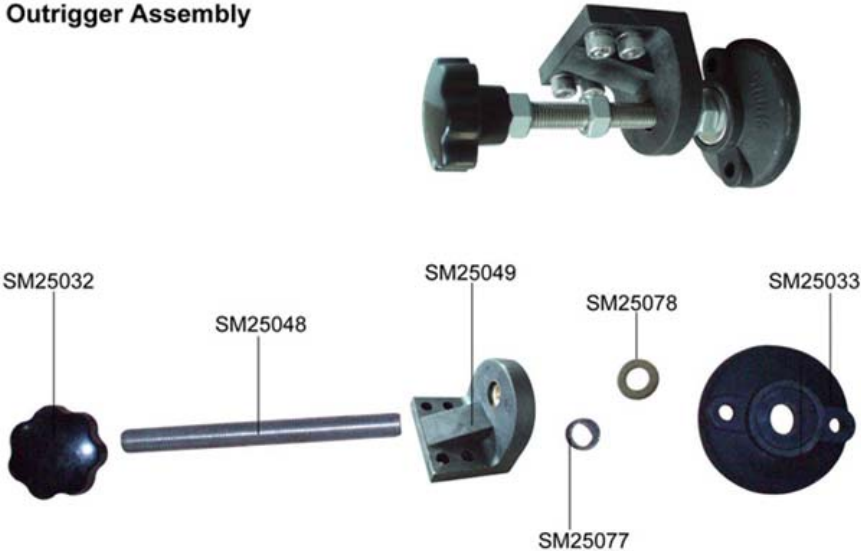
Bowl Roller Assembly



Rotating Plate Assembly



Outrigger Assembly



PARTS LIST

Parts Number	Parts Code	Parts Name	Specification
SM25001	16BYQJBK63-1	Transformer	220V/380V-26V/110V(2A)
SM25002	16JDQPYF-08	Relay Seat	
SM25003	16LSLCI-18	Mechanical Connector	
SM25004	16JDQRHN10A-3	Thermal Relay	
SM25005	16JDQPYF-14	Relay Seat	
SM25006	16BXSG111B	Fuse Cover	
SM25007	16JDQMY2-24V	Relay	
SM25008	16JDQMY4-24V	Relay	
SM25009	16JCQCN16-1	Contactors	
SM25010	16KGLZB5-AD3	Selector Switch	
	16KGLZA-BD3	Manual Switch	
SM25011	16KGLBE101	Cover for Manual Switch	
	16KGLZA-BD3	Manual Switch	
SM25012	16M446-02	Seal for Digital Control Panel	
SM25013	16MBLOMX-003	Digital Control Panel	
SM25014	15PDL1060	Belt	7M-1060 (3PCS)
SM25015	16KGLMEA9112G	Micro switch	
SM25016	15PDL7M-630	Belt	7M-630 (2PCS)
SM25017	15ZCL6205VV	Bearing	
SM25018	14M375-01	Bush	
SM25019	15ZCL6205VV	Bearing	
SM25020	14M370-07	Main Shaft	
SM25021	15YFL30*52*8	Oil Seal	30*52*8
SM25022	16KGL3P20A	Power Switch	
SM25023	16KGLZA2-BS54	Emergency -Stop Switch	
SM25024	13M444-06	Top Cover of Machine	
SM25025	13M800-01	Safety Cover of Bowl	
SM25026	13M650-09	Center Pillar	
SM25027	14M630-08S	Dough Hook	Stainless Steel
SM25028	13M640-08	Clamping Block	
SM25029	14M850-01	Bowl Roller Bolt	
SM25030	15ZCL6200VV	Bearing	
SM25031	14M840-01	Bowl Roller	
SM25032	15BSLHY01	Outrigger Screw	
SM25033	14D9016150-01	Foot Pad	
SM25034	11M620-09	Bowl	
SM25035	16MDL25-1-01	Motor	B5YD100L-4/8 YD100L-8/4 380V-50HZ-3PH 2.2KW B5

PARTS LIST

SM25036	14M190-03	Transmission Shaft	
SM25037	14M200-03	Bush for Transmission Shaft	
SM25038	14M560-06	Rotating Plate	
SM25039	14M530-04	Bearing Housing for Rotating Plate	
SM25040	15LZLHD3	Front Castor	
SM25041	15LZLH3	Rear Wheel	
SM25042	15ZCL6002VV	Bearing	
SM25043	14M590-03	Pulley for Rotating Plate	
SM25044	15PDL1390	Belt	RECMF-990
SM25045	14M260-04	Bottom Pulley	(For Transmission Shaft)
SM25046	14M371-01	Spacer for Main Shaft	
SM25047	14M220-04	Top Bearing Housing	(For Transmission Shaft)
SM25048	14M142-01	Outrigger Bolt	
SM25049	14M140-06	Support Strut for Outrigger	
SM25050	14M180-07	Shaft for Rear Wheel	
SM25051	13M830-01	Bowl Roller Cover	
SM25052	14M461-02	Fixing Piece for Top Cover	
SM25053	14M471-02	Fixing Piece for Top Cover	
SM25054	14M325-03	Motor Pulley	
SM25055	16BXSZD	Fuse Seat	
SM25056	16DZP280101	Connector	
SM25057	11M290-06	Adjusting Plate for Motor	5T*70*130
SM25058	11M870-09	Rear Cover for Machine	1.5*317*476 SPCC
SM25059	14M381-01-0	Main Shaft Pulley	
SM25060	14M670-05	Adjusting Wheel Mount Clip	LEFT
SM25061	14M680-05	Adjusting Wheel Mount Clip	RIGHT
SM25062	14M700-02	Adjusting Wheel for Bowl Cover	
SM25063	14M710-02	Adjusting Wheel for Micro switch	
SM25064	14M810-08	Bracket for Safety Cover	
SM25065	12M040-04	Bottom Plate for Micro switch	SUS304 2t*54*70
SM25066	11M425-01	Plate	Q235
SM25067	14M429-01	Wheel	
SM25068	15ZCL6004VV	Bearing	
SM25069	11M090-08D	Bracket for Front Castor	
SM25070	12M472-06	Fixing Piece for Control Panel	SPCC 1.5t*76*246
SM25071	14M250-06-0	Pulley for Transmission Shaft	

PARTS LIST

SM25072	15ZCL6205VV	Bearing	
SM25073	14M845-01	Watertight Cover	
SM25074	12M860-02	Fixing Piece for Bowl Cover	SUS304 2t*25*49
SM25075	15ZCL6205VV	Bearing	
SM25076	15ZCL6006VV	Bearing	
SM25077	14D9016150-03	Bush	
SM25078	2PDS20	Stainless Steel Gasket	Φ20
SM25079	16MKCNI-18	Interlock	

WIRING DIAGRAM

