



OWNER'S MANUAL

ABSFBM-50

(Spiral Mixer)



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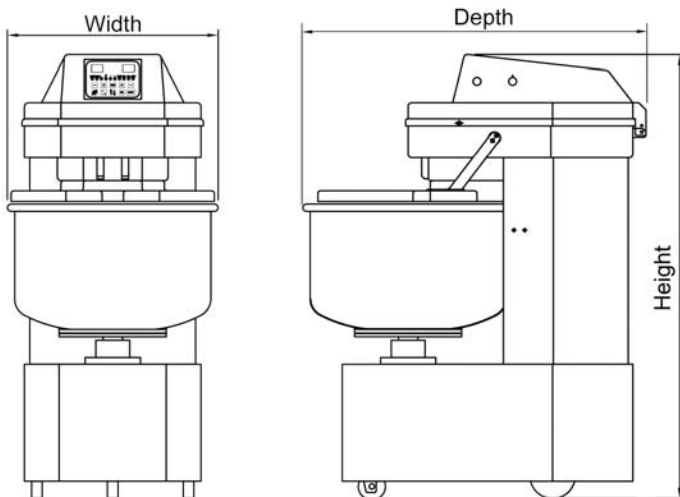
Introduction

The ABSFBM-50 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-50 |
|----------------------|-----------|-----------|
| Capacity (lbs) | Flour | 55 |
| | Dough | 110 |
| Power (kw) | Spiral | 3 |
| | Bowl | — |
| Spiral Speed (rpm) | 1st speed | 135 |
| | 2st speed | 270 |
| Bowl Speed (rpm) | 1st | 12.8 |
| | 2st | 25.5 |
| Dimension (inches) | Width | 24 |
| | Depth | 37 |
| | Height | 47 |
| Machine weight (lbs) | | 530 |

Installation

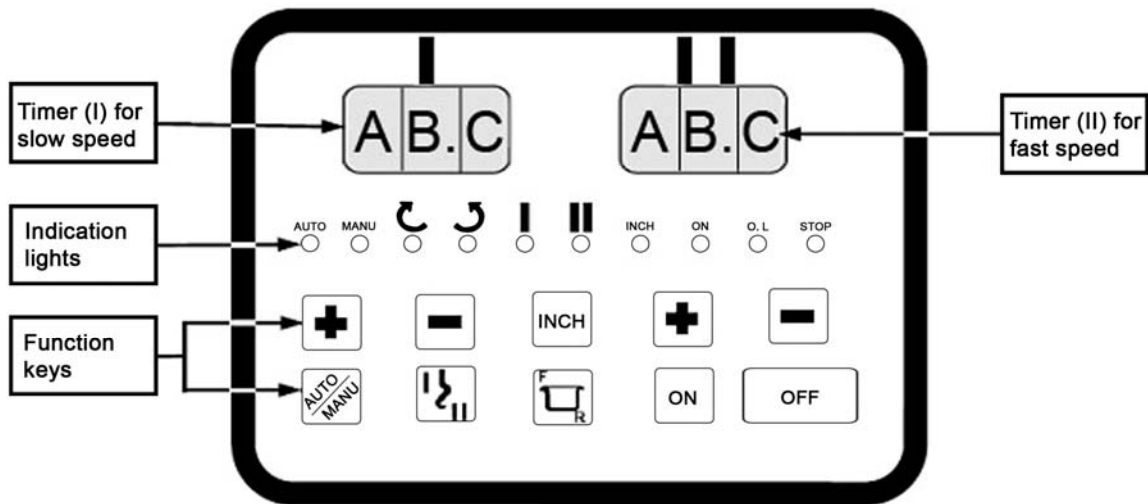
The machine is ready for installation. After uncrating your spiral mixer, inspect the machine for any damage that might have occurred during shipment. Report any damage to us before proceeding. Never attempt to operate this mixer with damaged parts.

- 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.

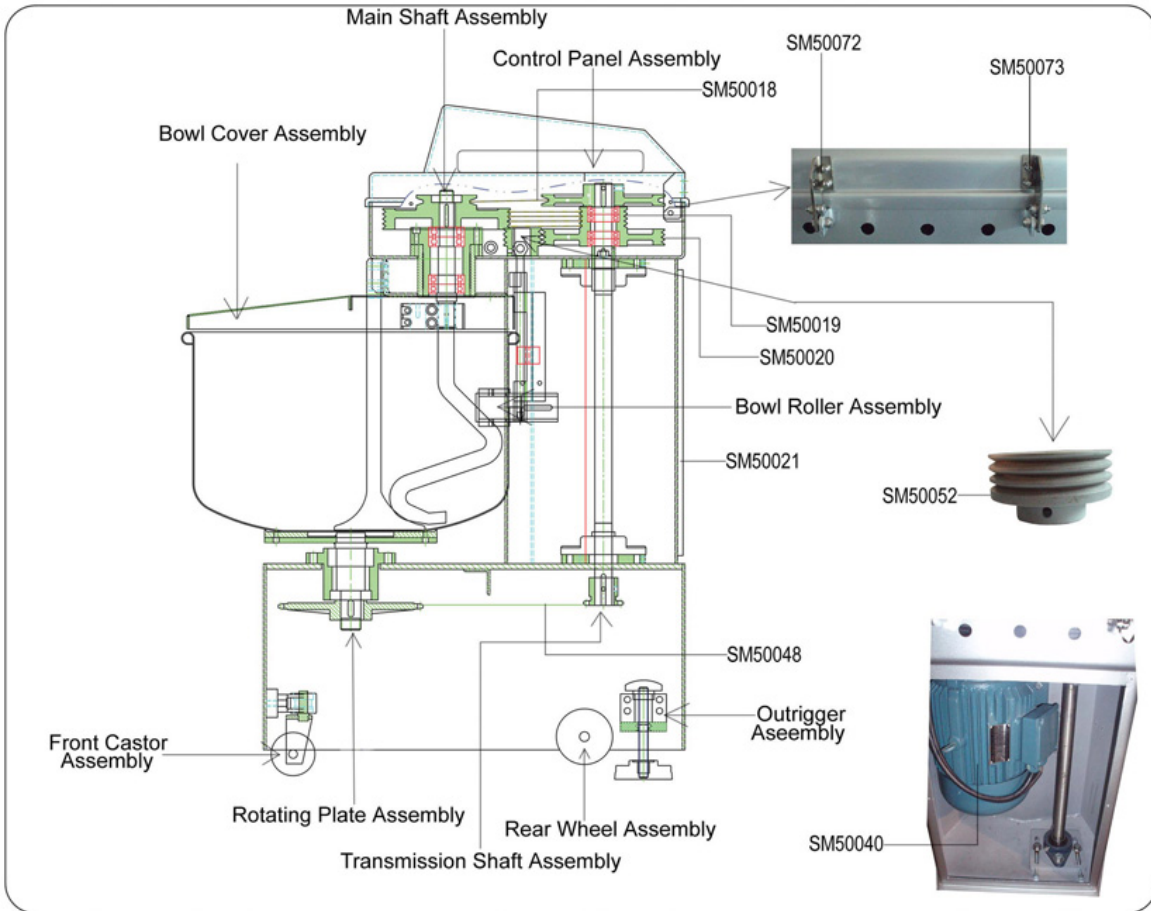
TROUBLE SHOOTING

| 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. |

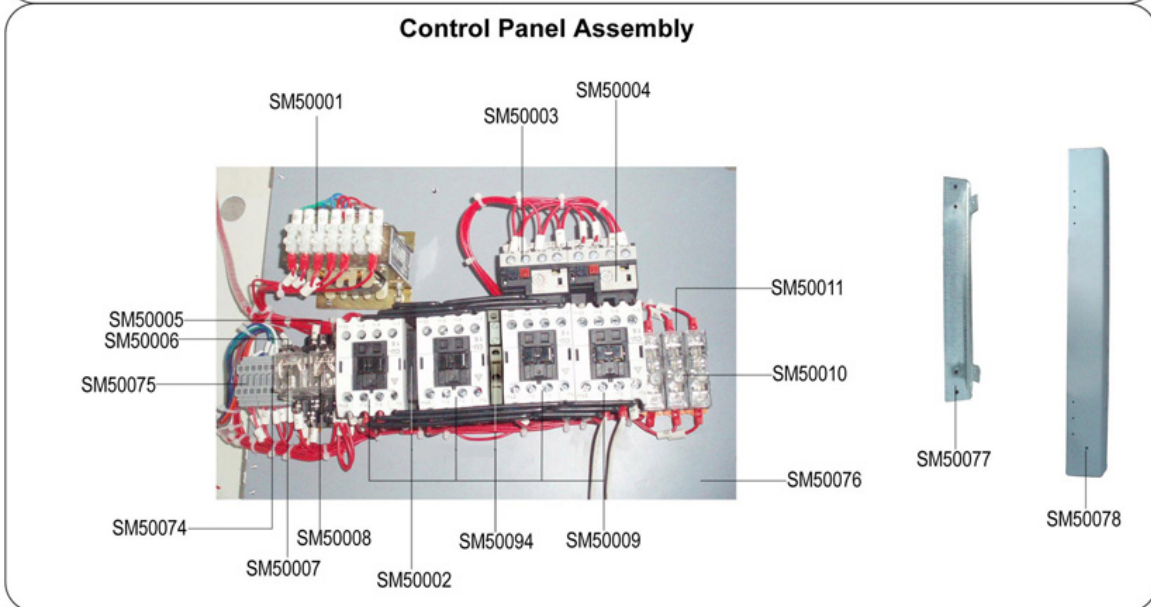
TROUBLE SHOOTING

| 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



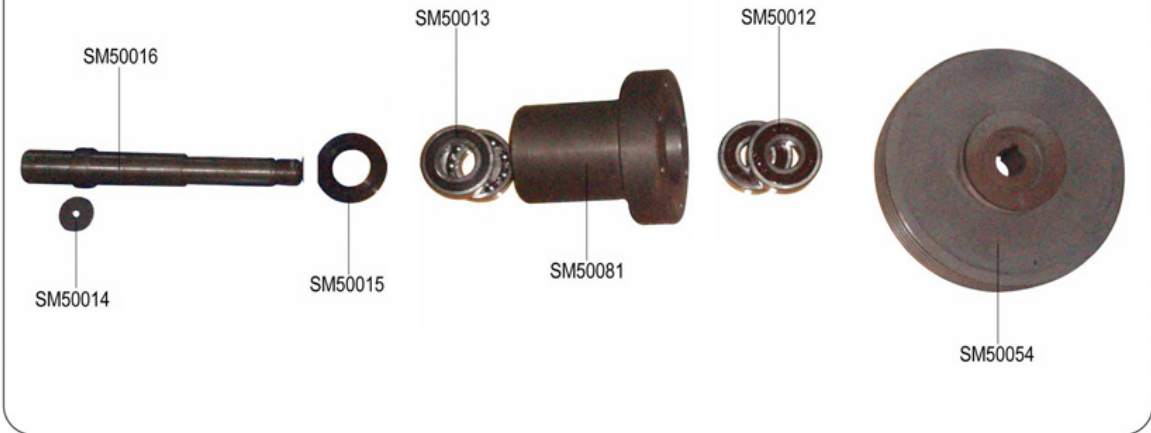
Control Panel Assembly



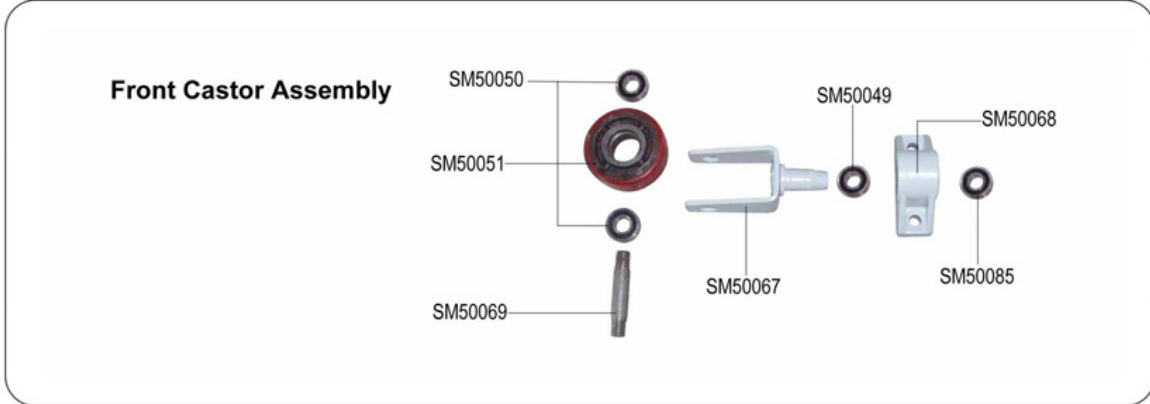
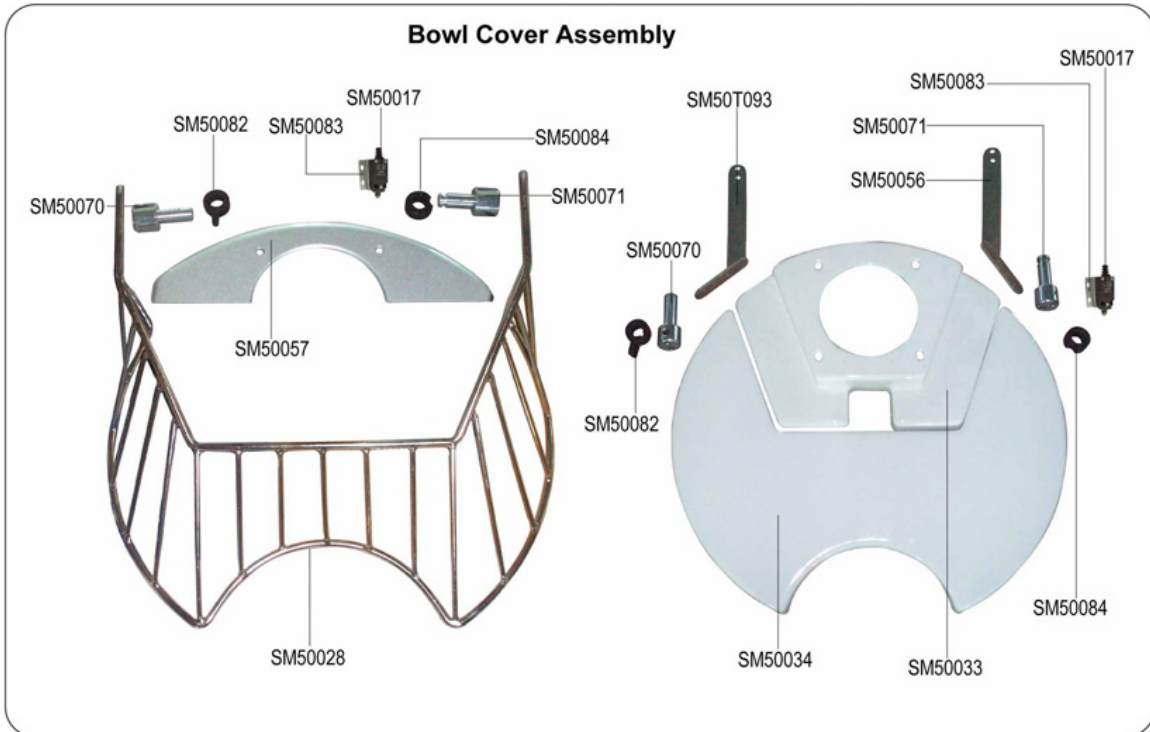
Parts List



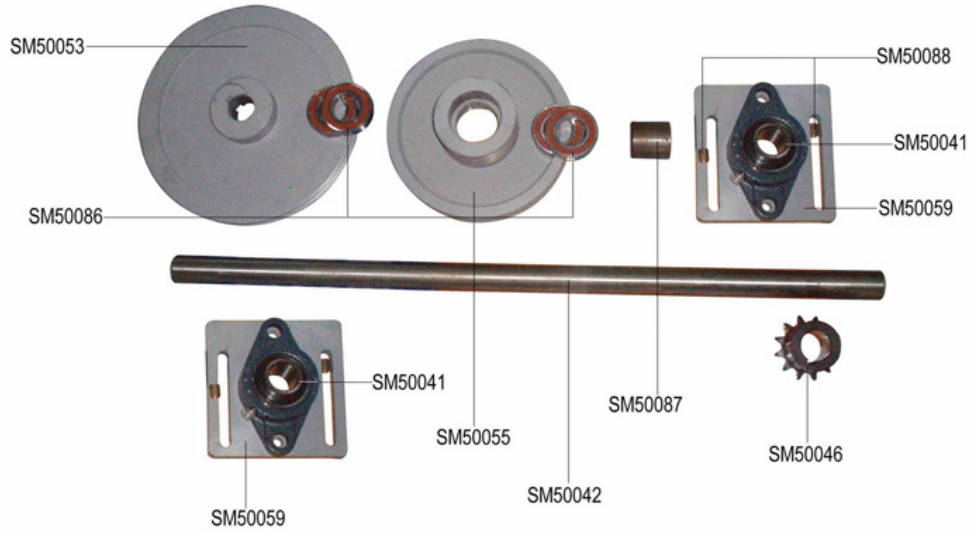
Main Shaft Assembly



Parts List

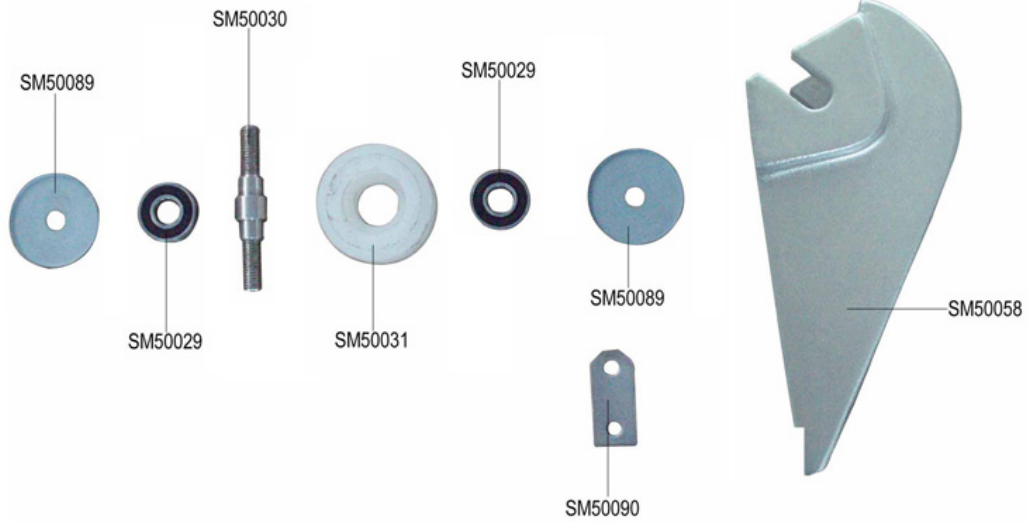


Parts List



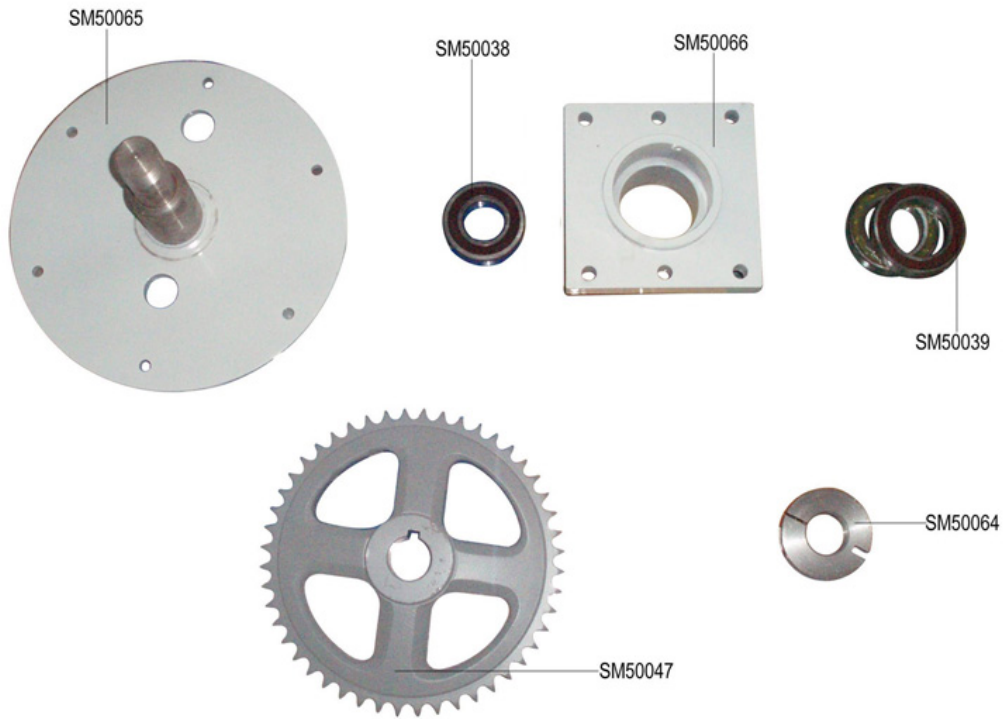
Transmission Shaft Assembly

Bowl Roller Assembly

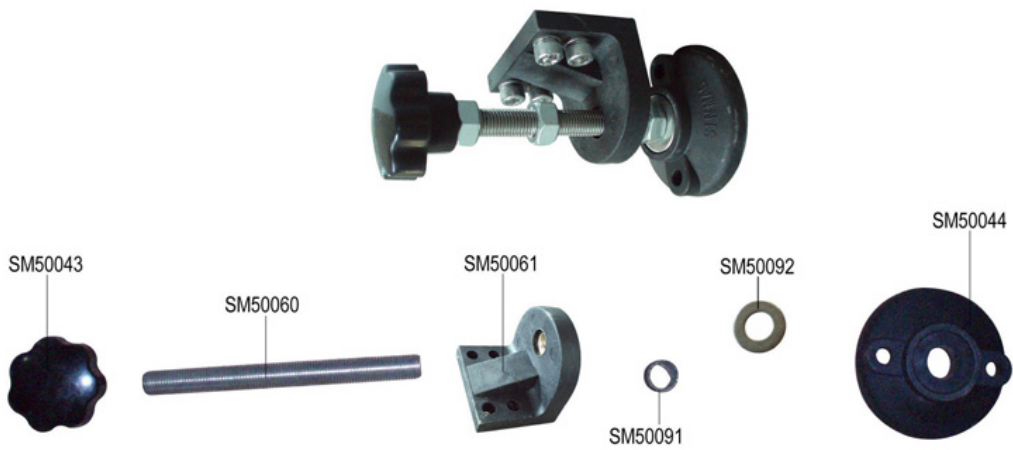


Parts List

Rotating Plate Assembly



Outrigger Assembly



Parts List

| Parts Number | Parts Code | Parts Name | Specification |
|--------------|---------------|-----------------------------|-----------------------------------|
| SM50001 | 16BYQJBK63-1 | Transformer | 220V/380V-26V/110V(2A) |
| | 16BYQJBK63-18 | Transformer | 400V-110V/26V |
| | 16BYQJBK63-16 | Transformer | O-208V-220V//110V(13VA)-26V(50VA) |
| | 16BYQJBK63-2 | Transformer | 415V-80%220V/20%26V |
| SM50002 | 16LSLCI-18 | Mechanical Connector | |
| SM50003 | 16JDQRHN10A-3 | Thermal Relay | RHN-10A 5.5-8.5A |
| SM50004 | 16JDQRHN10A-4 | Thermal Relay | RHN-10A 8.5-12.5A |
| SM50005 | 16JDQPYF-08 | Relay Seat | |
| SM50006 | 16JDQPYF-14 | Relay Seat | |
| SM50007 | 16JDQMY4-24V | Relay | |
| SM50008 | 16JDQMY2-24V | Relay | |
| SM50009 | 16JCQCN16-1 | Contactors | CU-16 3A1b 24V/50HZ |
| SM50010 | 16BXSG111B | Fuse Cover | |
| SM50011 | 16BXSZD | Fuse Seat | |
| SM50012 | 15ZCL6305VV | Bearing | 6305ZZ 2RS |
| SM50013 | 15ZCL6206VV | Bearing | 62062RS UBC |
| SM50014 | 14M371-01 | Spacer for Main Shaft | |
| SM50015 | 15YFL35*62*7 | Oil Seal for Main Shaft | 35*62*7 |
| SM50016 | 14M370-01 | Main Shaft | |
| SM50017 | 16KGLMEA9112G | Microswitch | |
| SM50018 | 15PDLA42 | Belt | 1PCS |
| SM50019 | 15PDL1030 | Belt | 7M-1030 4PCS |
| SM50020 | 15PDL825 | Belt | 7M-825, 3PCS |
| SM50021 | 11M870-01 | Machine Rear Cover | 1.5T*400*542 SPCC |
| SM50022 | 16MBOMX-005 | Digital Touch Control Panel | Two-Timer Model |
| SM50023 | 16KGLZB5-AD3 | Selector Switch | |
| SM50024 | 16KGLBE101 | Cover for Manual Switch | |
| | 16KGLZA-BD3 | Manual Switch | |
| SM50025 | 16KGLZA2-BS54 | Emergency-Stop Switch | |
| SM50026 | 16KGLLOT25ET3 | Power Switch | |
| SM50027 | 13M444-01-01 | Machine Top Cover | |
| SM50028 | 11M750-110 | Bowl Safety Grid | |
| SM50029 | 15ZCL6200VV | Bearing | |
| SM50030 | 14M850-01 | Bowl Roller Bolt | |
| SM50031 | 14M840-01 | Bowl Roller | |

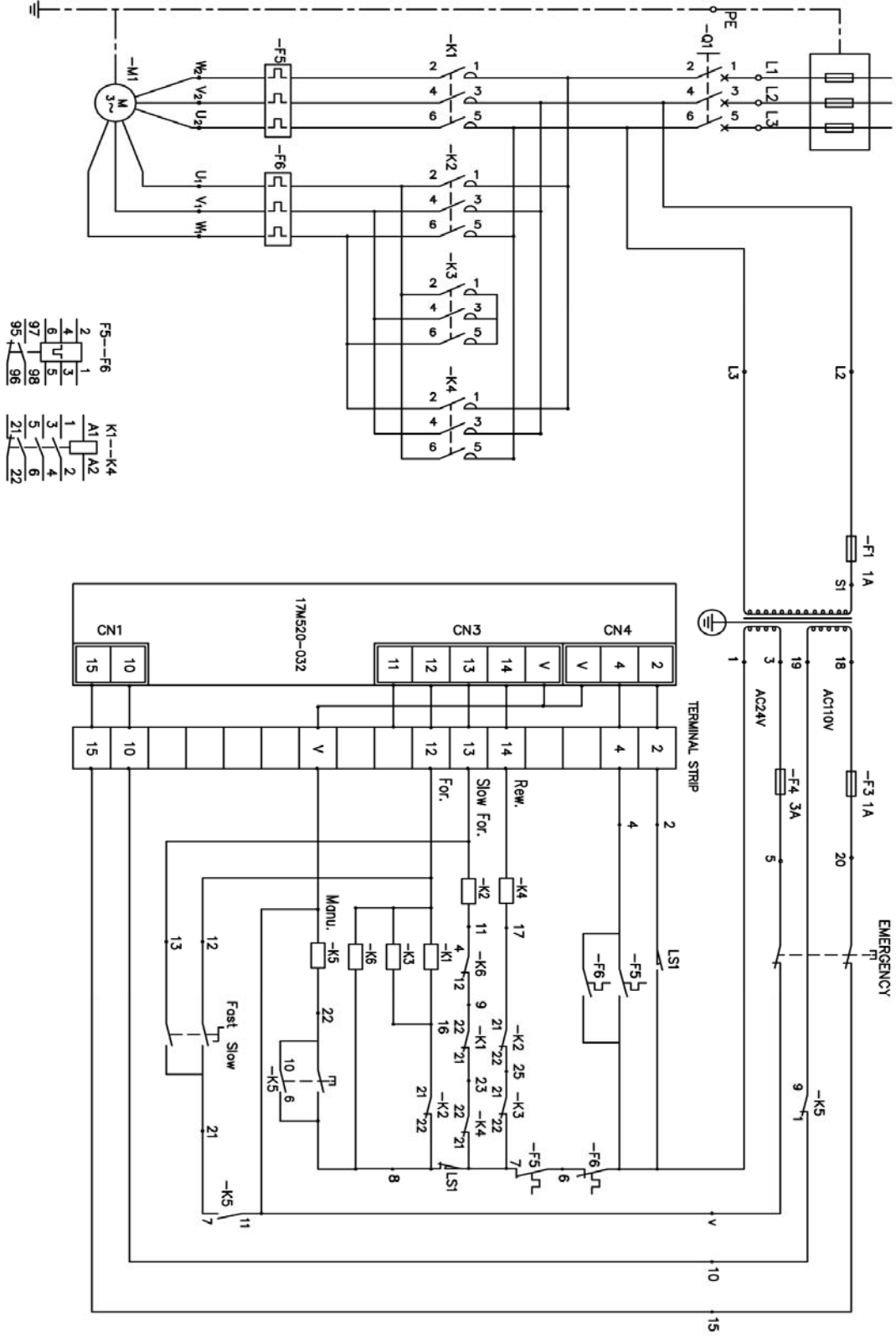
Parts List

| | | | |
|---------|---------------|--|--|
| SM50032 | 11M620-01 | Mixing Bowl | |
| SM50033 | 13M801-06 | Bowl Cover | |
| SM50034 | 13M802-06 | Bowl Cover | |
| SM50035 | 13M640-01 | Clamping Block | |
| SM50036 | 13M650-10 | Center Pillar | |
| SM50037 | 14M630-01 | Dough Hook | |
| | 14M630-01S | Dough Hook | Stainless Steel |
| SM50038 | 15ZCL6207VV | Bearing | 62072RS NACHI |
| SM50039 | 15ZCL6010VV | Bearing | 60102RS NACHI |
| SM50040 | 16MDL50-4-02 | Motor | B3YD112M-4/8 YD112M-8/4 380V-50HZ-3PH 1.5/3KW |
| SM50041 | 15ZCLUCFL206 | Bearing (with seat) | UCFL206G FYH |
| SM50042 | 14M190-01 | Transmission Shaft | |
| SM50043 | 15BSLHY01 | Outrigger Screw | HY8314.4 B-M16*63 |
| SM50044 | 14D9016150-01 | Foot Pad | |
| SM50045 | 15LZL5 | Rear Wheel | |
| SM50046 | 14M240-01 | Sprocket Wheel for Transmission Shaft | |
| SM50047 | 14M580-01 | Sprocket Wheel for Rotating Plate | |
| SM50048 | 15LTL86 | Chain | 5/8*86 |
| | 15LTJ5/8A | Connector for Chain | |
| | 15LTJ5/8B | Connector for Chain | |
| SM50049 | 15ZCL51104 | Bearing | |
| SM50050 | 15ZCL6002VV | Bearing | |
| SM50051 | 15LZLH3 | Front Castor | |
| SM50052 | 14M325-01A | Motor Pulley | FOR 50HZ |
| SM50053 | 14M250-01 | Transmission Shaft Pulley | |
| SM50054 | 14M380-01 | Main Shaft Pulley | |
| SM50055 | 14M260-01 | Bottom Pulley for Transmission Shaft | |
| SM50056 | 14M811-10 | Bowl Cover Bracket | RIGHT |
| SM50057 | 13M770-01 | Bowl Cover | |
| SM50058 | 13M830-01 | Bowl Roller Seat | |
| SM50059 | 14M220-01 | Bearing Housing for Transmission Shaft | |
| SM50060 | 14M142-01 | Outrigger Bolt | |
| SM50061 | 14M140-06 | Support Strut | |
| SM50062 | 15ZCL6203VV | Bearing | |
| SM50063 | 14M180-01 | Shaft for Rear Wheel | |

Parts List

| | | | |
|---------|---------------|---------------------------------|-----------------------|
| SM50064 | 14M600-01 | Lock Nut | |
| SM50065 | 14M560-01 | Rotating Plate | |
| SM50066 | 14M530-01 | Bearing Housing | |
| SM50067 | 14M160-03 | Seat for Front Castor | |
| SM50068 | 14M150-03 | Bracket for Front Castor | |
| SM50069 | 14M170-02 | Shaft for Front Castor | |
| SM50070 | 14M670-03 | Adjusting Wheel Mount Clip | LEFT |
| SM50071 | 14M680-03 | Adjusting Wheel Mount Clip | RIGHT |
| SM50072 | 14M461-01 | Fixing Piece for Top Cover | |
| SM50073 | 14M471-01 | Fixing Piece for Top Cover | |
| SM50074 | 16JWB280301 | End Plate for Electrical Wire | |
| SM50075 | 16DZP280101 | Connector | |
| SM50076 | 12M491-01 | Plate for Control Panel | 2t*400*420 SPCC |
| SM50077 | 12M492-50 | Fixing Piece for Control Panel | 2t*64*250 |
| SM50078 | 12M472-02 | Fixing Piece for Control Panel | 2T*386*78 SPCC |
| SM50079 | 11M880-01 | Machine Side Cover | 1.2T*142*242 SPCC |
| SM50080 | 14M780-05A | Safety Grid Stoper | |
| SM50081 | 14M340-01 | Bearing Housing for Main Shaft | |
| SM50082 | 14M700-02 | Adjusting Wheel for Bowl Cover | |
| SM50083 | 12M730-04 | Bottom Plate for Microswitch | M730-04 SPCC-2t*60*81 |
| SM50084 | 14M710-02 | Adjusting Wheel for Microswitch | |
| SM50085 | 15ZCL6202VV | Bearing | |
| SM50086 | 15ZCL6006VV | Bearing | |
| SM50087 | 14M200-01 | Bush for Transmission Shaft | |
| SM50088 | 14M230-01 | Brass Bolt | |
| SM50089 | 14M845-01 | Watertight Cover | |
| SM50090 | 12M860-02 | Fixing Piece | SUS304 2t*25*49 |
| SM50091 | 14D9016150-03 | Bushing | |
| SM50092 | 2PDS20 | Stainless Steel Gasket | φ20 |
| SM50093 | 14M810-10 | Bowl Cover Bracket | LEFT |
| SM50094 | 16MKCNI-18 | Interlock | |

Parts List



| | | | |
|--------|----|--------|----|
| F5--F6 | 1 | K1--K4 | A1 |
| | 2 | | A2 |
| | 3 | | |
| | 4 | | |
| | 5 | | |
| | 6 | | |
| | 97 | | |
| | 98 | | |
| | 95 | | |
| | 21 | | |
| | 22 | | |