

HWA YIH GIN MACHINE CO., LTD.

HY-910L-C

Large Automatic Continuous Injera Machine

Manual

Contents

(1) <u>Introduction</u>	3
Automatic Continuous Waffle Machine (HY-910).....	3
Control Panel.....	4
Temperature Control Panel.....	5
(2) <u>Installation</u>	6
Unpacking the Machine.....	6
Connect the power.....	6
Assembling the Machine.....	6
Install the Filler.....	7
Put the plates and lids in place.....	9
Moving the Machine.....	10
(3) <u>Using Operation</u>	11
Turning on Power.....	11
Setting the Temperature.....	11
Setting the Speed of Turntable.....	12
Setting the Forming Machine.....	12
(4) <u>Cleaning</u>	13
Clean the Baking Plate.....	13
Clean the Forming Unit.....	13
Wash the Solenoid Valve.....	15
Clean the Rotator.....	16
(5) <u>Troubleshooting</u>	18
The Forming Machine.....	18
The Baking Machine.....	19

1. Introduction

To help familiarize you with the major parts of your HWA YIH Automatic Continuous Cone Cookie Machine, please study the photographs below.

Noise information:

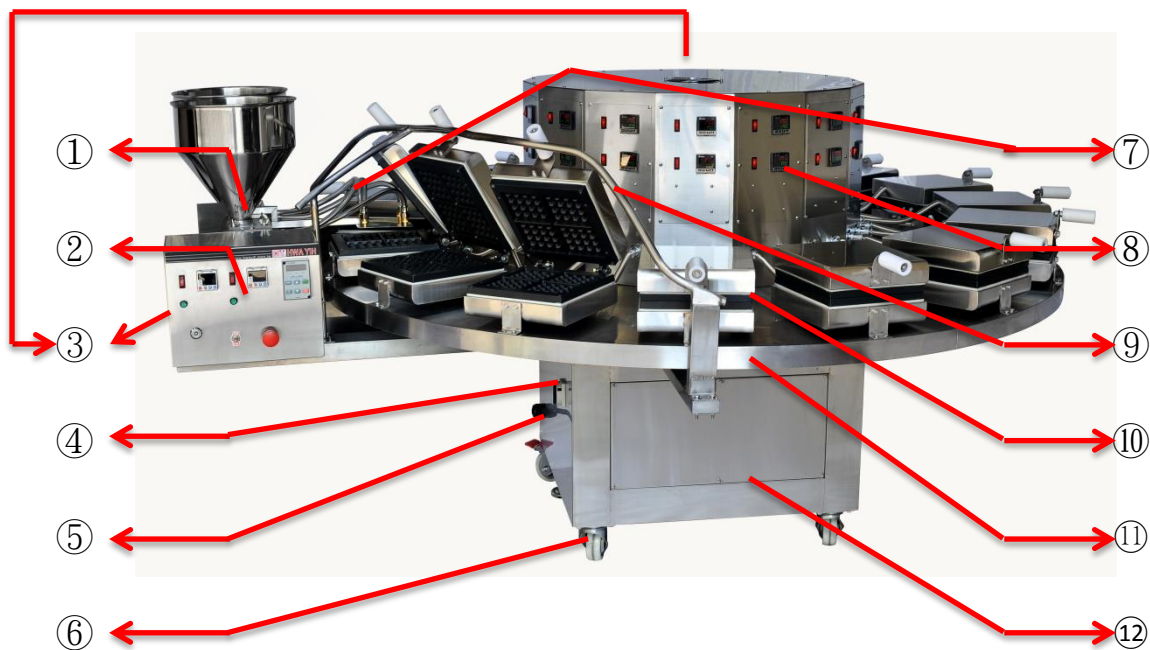
A-weighted sound pressure level measuring:

The noise values of the above listed model is less than 70 dB(A)

Associated uncertainty K = 4 dB acc. to ISO 4871

Measured made in accordance with EN ISO 3746:1995

Automatic Continuous Waffle Machine



- | | |
|------------------------|--------------------------|
| ① Forming machine | ⑦ Flattening rail |
| ② Control panel | ⑧ Temperature controller |
| ③ Fan of control panel | ⑨ Rail |
| ④ Can Switch | ⑩ Baking plate |
| ⑤ Wire | ⑪ Turntable |
| ⑥ Wheels | ⑫ Turntable drive box |

Control Panel



- ① Forming 1 Switch
- ② Forming 1 Manual forming button
- ③ Forming 1 Timer
- ④ Forming 2 Switch
- ⑤ Forming 2 Manual forming button
- ⑥ Forming 2 Timer
- ⑦ Locker
- ⑧ Connection Switch
- ⑨ Emergency Stop Button
- ⑩ Baking Speed controller

Temperature Control Panel



- ① Top Temperature controller
- ② Top Temperature controller Switch

2. Installation

To help familiarize you with the major parts of your HWA YIH GIN Automatic Continuous Cone Cookie Machine, please study the photographs below.

Unpacking the Machine

To unpack the equipment, first transport all the pieces to the work area. :

1. Remove all crating and packing material from the equipment.



WARNING

To avoid electrocution or damaging the machine, never allow water, steam, cleaning solution, or other liquid to enter the machine.

Connect the power

1. Make sure if the power voltage is match to machine and connect with ground wire to ensure its safety.

Assembling the machine

1. Place the machine on a flat, stationary surface.
2. Depress the brake of wheels, so the machine cannot be moved.



- A. Install the forming machine as follows:

- B. Find the Forming mold in the part carton.



- C. Put the Forming mold on Forming 1.



- D. If the gear of Forming mold is not fit with Forming machine, turn on the forming switch and press the Manual forming button on the Control Panel. The forming machine will work to fit the gear.



- E. Twisting the forming pipe to set it on the Forming mold.



Install the Filler

- F. Install the Filler.



- G. Install the connection to the Solenoid valve.



- H. Install the Rotator to the Solenoid valve.



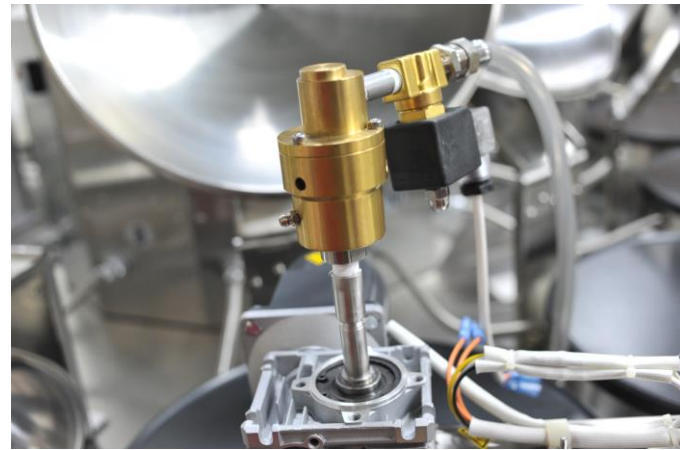
- I. Install the nut cover to the filler nozzle.



- J. Install the tube.



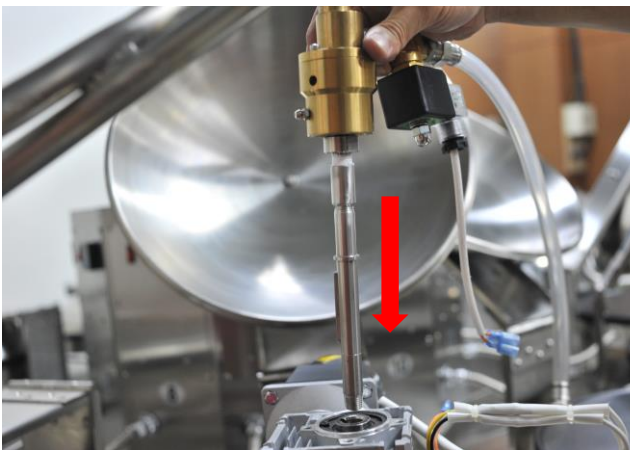
K. Install the iron tube to the Rotator.



N. Connect the wire of Solenoid valve.



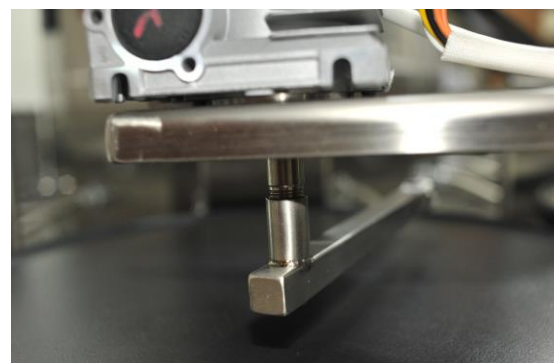
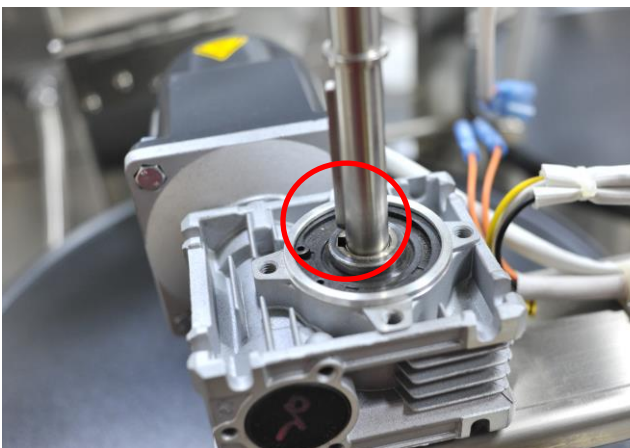
L. Put the iron tube in to the gearbox.



O. Install the filler nozzle to the iron tube under the gearbox.



M. Match the iron part to the gap on the gearbox.



P. Then you complete the installing of filler.



2. Loose the screws behind the plates but don't remove the screws, too.



Put the plates and lids in place

The plates will be like this when you receive the machine.



3. Pull the plate out completely.



1. Loose the screws under the plates but don't remove the screws with a wrench.



4. Remove the screws behind the plates.



5. Install the stand of the cover with the same screws.



6. Tight the screws under the plates.



Moving the Machine

If you ever want to move the Automatic Continuous Cone Cookie Machine to a different workstation, follow this procedure:

1. Turn off the machine and disconnect it from the power source.
2. Allow the machine to cool.

WARNING

Do not touch hot baking plate. It can cause serious burns.

WARNING

Thoroughly clean and dry the floor if paste is spilled. Materials on the floor can cause people to slip or fall, resulting in serious injury or loss of life.

3. To prevent tripping, coil the power cord.
4. Install the Automatic Continuous Cone Cookie Machine to its new location.
5. Level and secure the Automatic Continuous Cone Cookie Machine.

3. Using Operation

Read each step **completely** before doing what it tells you to do, and follow each step carefully.

Turning on power

1. Make sure if the power voltage matches to the machine and connect it with ground wire to ensure your safety.
2. Turn on the cam switch on the control panel.



Setting the Temperature

1. The oven is using computerize temperature regulator, top heat and bottom heat can be adjusted respectively.
2. Set all temperature at 160 ~ 180°C by following steps:
 - A. Put on the switch both of the top and bottom temperature controller.



- B. Press ◀ to start to set temperature. The green number is setting temperature and the red one is actual oven temperature.



- C. Press ▼ and ▲ to lower and higher the temperature,



- D. Then "SET".



- E. Set the temperature you want, the regulator indicator green light is on. The heat is rising (till get to your setting

temperature the light will turn red).
 When the setting temperature and indicate temperature make big difference (e.g. Set 180°C, but the actual temperature is up to 190°C or down to 175°C). You can reset the temperature to make the actual temperature fix on setting temperature.

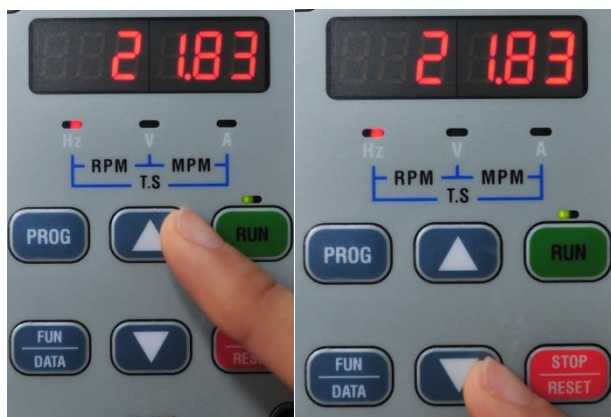
3. Wait until the indicate temperature reach the setting temperature, the machine is ready to bake waffles.

Setting the Speed of Turntable

4. The machine is equipped with electronic speed controller. First, set connection switch to “No forming”.



5. Adjust the speed by pressing ∇ and \triangle to .



6. After setting temperature and speed, you can start to bake your product.

7. After the power on about 5 minutes, when body temperature is higher than 50°C, the fan will be start so as not to damage the parts. Please check if the fan is in function, if not, replace it immediately to maintain the cooling function normal.

Setting the Forming Machine

1. The machine is equipped with electronic speed controller. First, set connection switch to “off”.



2. You can set filling quantity by adjusting timer. Longer the time, more injection. To set the time, turn on the power switch first. Press “SWITCH” to start to adjust the digit. The machine supply 1/100 sec. setting, for example when it appear “1.30” means “1.30 sec.”. Press “UP” or “LOWER” buttons to the number you need then “SET” to finish the setting.



WARNING

1. Using water to put off the fire may get electric shock and cause serious injured or loss of life.
2. After turning off the machine, the fans would be still working to cool the parts. Disconnect the power resource after the fans stop.

4. Clean

4.1 Baking Plate

Daily cleaning

1. Set the temperature at 80°C . As the temperature reaches (the heating indicator light turns off), ready for cleaning the mold.
2. Pour proper water on the bottom mold and wait for about 5 minutes to let the hot water soften the sugar and batter which stick to the mold.
3. Brush or scrub the sugar and batter with soft brush or clothes.

WARNING

Be care for the hot mold while cleaning.

4. Remove water carefully after cleaning.
5. Clean the top molds with wet kitchen paper thoroughly.

Carbon Deposition Cleaning

Prepare high temperature grill cleaner.

(It's available for HWA YIH GIN.)

1. Set the temperature at 160°C for best cleaning effect. As the temperature reaches (the heating indicator light turns off), reset to zero.
2. Pour grill cleaner evenly on the molds then add less water. ※Reminder: No need to dilute the cleaner with water.
3. Use soft brush to clean the molds along with the mold grooves thoroughly and wait for about 5 seconds. ※Reminder: Do not clean the mold with sharp tools.
4. Clean the solution with wet kitchen paper thoroughly. ※Reminder: Do not flush the machine directly.

4.2 Forming Unit

Daily cleaning

1. Removing the forming unit by moving away the taggers as the red circle shows.



2. Take off the forming unit.



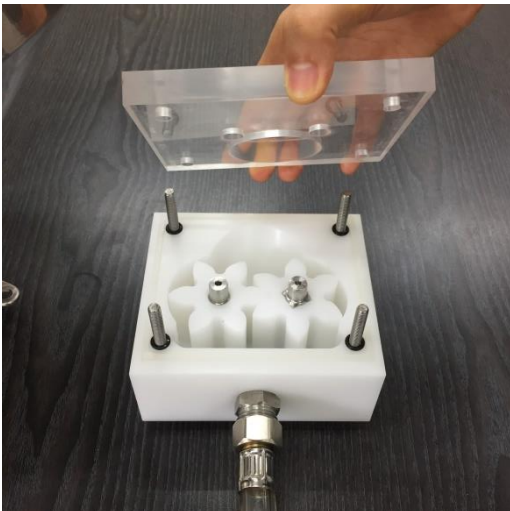
3. Loosen four screws.



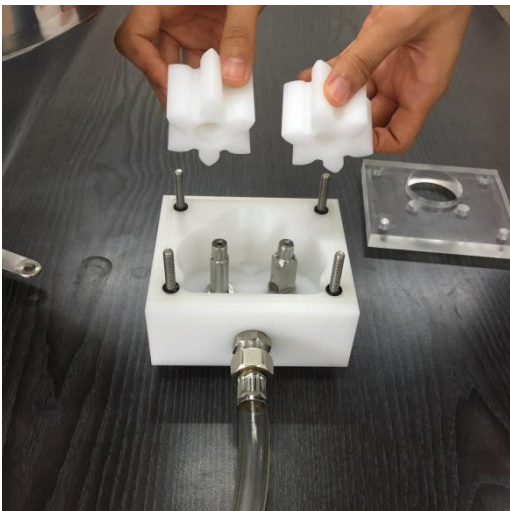
4. Take off the hopper and wash it with Soft Cleaner.



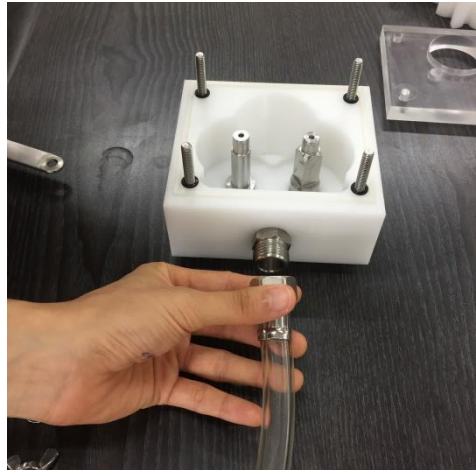
5. Take off the cover.



6. Take off two gears.



7. Loosen the nut of forming tube.



8. Wash the tube.



9. Clean the parts with sponge and neutral cleaners. Dry all parts before putting them back. ※Reminder: Flush the control box is strictly prohibited.



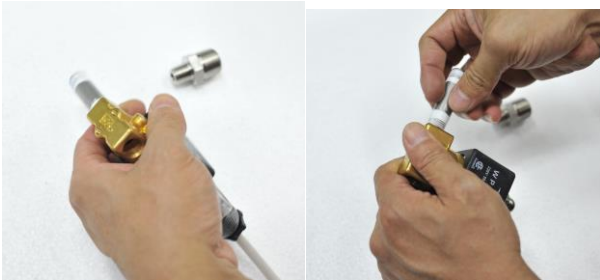
10. Make sure four small black rubber rings and one white rectangle rubber are all placed well before putting parts back.

4.3 Solenoid Valve

11. Remove the electromagnetic valve from tube.



12. Remove the connection on the Solenoid Valve.



13. Use a wrench to remove the holder.



14. Take out the electromagnetic part.



15. Loosen the nut.



16. Open the valve.



17. Take out the iron part and spring part.



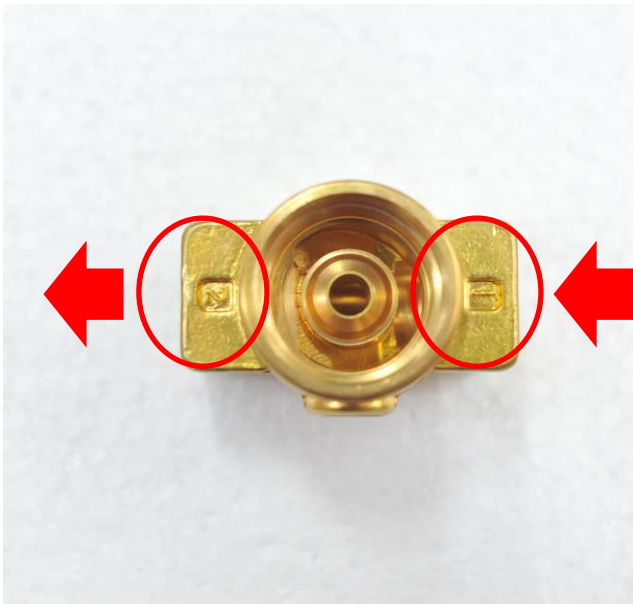
18. Clean the parts with sponge and neutral cleaners.



19. **DO NOT** wash the parts below. ※Reminder:
Flush the electromagnetic part is strictly prohibited.



20. Dry all parts before putting them back. Please note that this part is directional when you install this part. 1 is IN, 2 is OUT.



4.4 Clean the Rotator

21. Clean the Rotator.



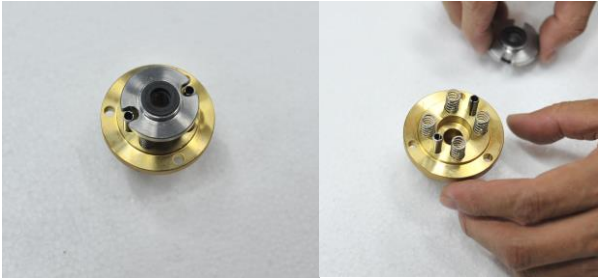
22. Use a Allen wrench to open the rotator.



23. Open the rotator.



24. Take out the ceramic connector. Ceramic connector is very important and fragile, do not break it to avoid the leaking.



25. Remove the spring and keep it.



26. Wash all the parts of the rotator.



27. Wait for it to dry naturally, then install it according to the original steps.



5. Troubleshooting

Try to find your problem in this section. If you cannot find the solution here or you need repair service, call your dealer. If your dealer cannot help you, please call HWA YIH GIN. We can provide factory service.

The Forming Machine

Product can't be injected by the machine.	
Possible Causes	What To Do
Product is too light that can't fall into the mold.	Use heavier product.
Product is too hard that can't flow into the mold.	<ol style="list-style-type: none"> 1. Use softer product. 2. Use HWA YIH GIN Pressure machine to push product into the mold and change the double piping tips to single one.
There are big solid pieces in the product.	<ol style="list-style-type: none"> 1. Use smaller solid pieces in the product. 2. Use HWA YIH Gin Pressure machine to push product into the mold and change the double piping tips to single one. 3. Remove the big solid pieces in the product.
The liquid product leaks out from the piping tips.	Install solenoid valve.

The timer fails to work on the proper time.	
Possible Causes	What To Do
The input voltage is incorrect.	Supply the correct voltage as specified on the data plate.
The timer is defective.	Replace the timer.

Timer worked, but motor doesn't work.	
Possible Causes	What To Do
The electric capacity is defective.	Replace the electric capacity.
The wiring harness of motor is not connected.	Check the connection of the pin connector from the power to the motor. Make sure the pins in the pin housing are securely seated in the housing.

The motor is defective.	Replace the motor.
-------------------------	--------------------

The timer worked, but volume of each time is not the same.	
Possible Causes	What To Do
The relay is defective.	Replace the relay.
The gears are worn.	Replace the gears.
There is air in the stuffing mold and the stuffing mold isn't filled with product.	Keep pressing the manual switch until there is no air in the stuffing mold and fill with product.

The timer and motor don't work.	
Possible Causes	What To Do
The input voltage is incorrect.	Supply the correct voltage as specified on the data plate.
The wiring harness of motor is not connected.	Check the connection of the pin connector from the power to the motor. Make sure the pins in the pin housing are securely seated in the housing.
The foot switch is defective.	Replace the foot switch.
The touch switch is defective.	Replace the touch switch.
The power switch is defective.	Replace the power switch.

The Baking Machine

THE PRODUCT IS UNDERCOOKED.	
Possible Causes	What To Do
The temperature is not high enough.	Increase the temperature setting.
The baking plate is turning too quickly.	Decrease the speed of the baking plate, using the speed controller located on the baking control panel.
The temperature controller reads inaccurately.	Reset temperature to make the actual temperature fix on setting temperature.
THE PRODUCT IS OVERCOOKED.	
Possible Causes	What To Do
The temperature is too high.	Decrease the temperature setting.
The baking plate is moving too slowly.	Increase the speed of the baking plate, using the speed controller located on the baking control panel.
The temperature controller reads	Reset temperature to make the actual

inaccurately.	temperature fix on setting temperature.
---------------	---

THE HEATER FAILS TO MAINTAIN THE PROPER TEMPERATURE.

Possible Causes	What To Do
The input voltage is incorrect.	Supply the correct power as specified on the data plate.
The temperature controller is defective.	Replace the temperature controller.
The temperature controller reads inaccurately.	Reset temperature to make the actual temperature fix on setting temperature.
The SSR is defective.	Replace the SSR.
The temperature sensor is defective.	Replace the temperature sensor.

THE MOTOR OVERHEATS.

Possible Causes	What To Do
The power requirements of the machine do not match the power source.	Supply the correct power as specified on the data plate.
	WARNING To avoid being burned, electrocuted, or otherwise injured, before doing the following, turn off the machine, allow the shortening to cool, and disconnect the machine from the power source.
The fuse of the motor blows.	Replace the fuse.
The motor is binding or defective.	Replace the motor.

THE BAKING PLATE DOES NOT HEAT, BUT THE BAKING PLATE TURNS.

Possible Causes	What To Do
	WARNING To avoid being burned, electrocuted, or otherwise injured, before doing any of the following, turn off the machine, allow the shortening to cool, and disconnect the machine from the power source.
The temperature controller is defective.	Replace the temperature controller.
The connections of temperature controller are bad.	Reinstall the temperature controller.

The SSR is defective.	Replace the SSR.
The temperature sensor is defective.	Replace the temperature sensor.

THE BAKING PLATE HEATS, BUT DOES NOT TURNS.

Possible Causes	What To Do
The fuse of motor blows.	Replace the fuse.
The wiring harness in the baking plate drive assembly is not connected.	Check the connection of the pin connector from the power to the motor. Make sure the pins in the pin housing are securely seated in the housing.
The electric capacity is defective.	Replace the electric capacity.
The couplings are not engaged.	Engage the couplings.
The screws on the baking plate are slipping.	Tighten the screws.

THE BAKING PLATE DOES NOT HEAT, AND DOES NOT TURN.

Possible Causes	What To Do
The fuse blows.	Replace the fuse.
The power cord is not plugged in, or the outlet has no power.	Connect the machine to a good power source.
The input voltage is incorrect.	Supply the correct power as specified on the data plate.
	WARNING To avoid being burned, electrocuted, or otherwise injured, before doing any of the following, turn off the machine, allow the shortening to cool, and disconnect the machine from the power source.
The power cord is defective.	Replace the power cord.
The fuse has blown	Replace the fuse.
There is a short circuit	Find it and repair it.