

Thanks for choosing our product. In order to safeguard your rights and interests, please carefully read this instruction before you use the product. And after reading, please keep it carefully for future reference.



Ice Cream Machine Operating Instruction

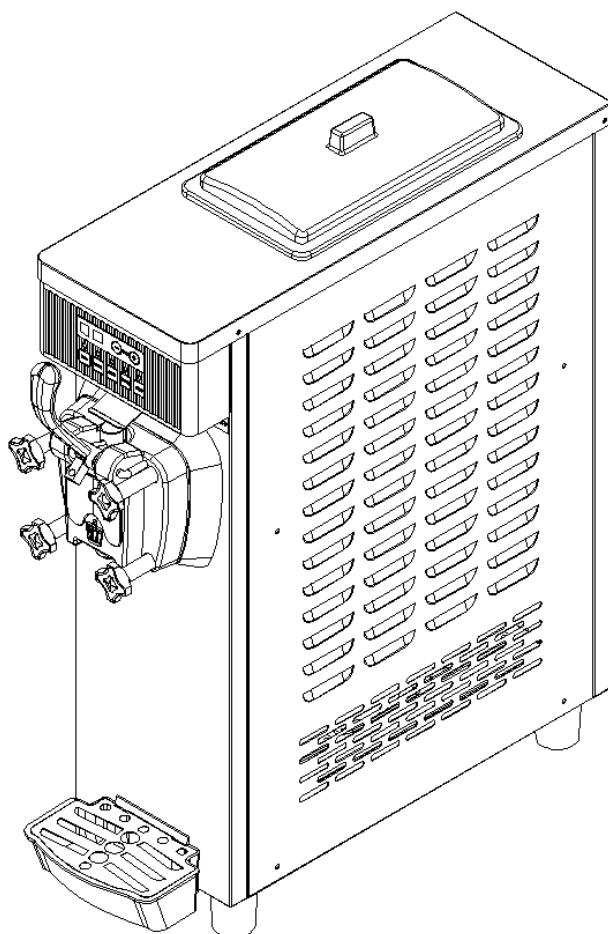


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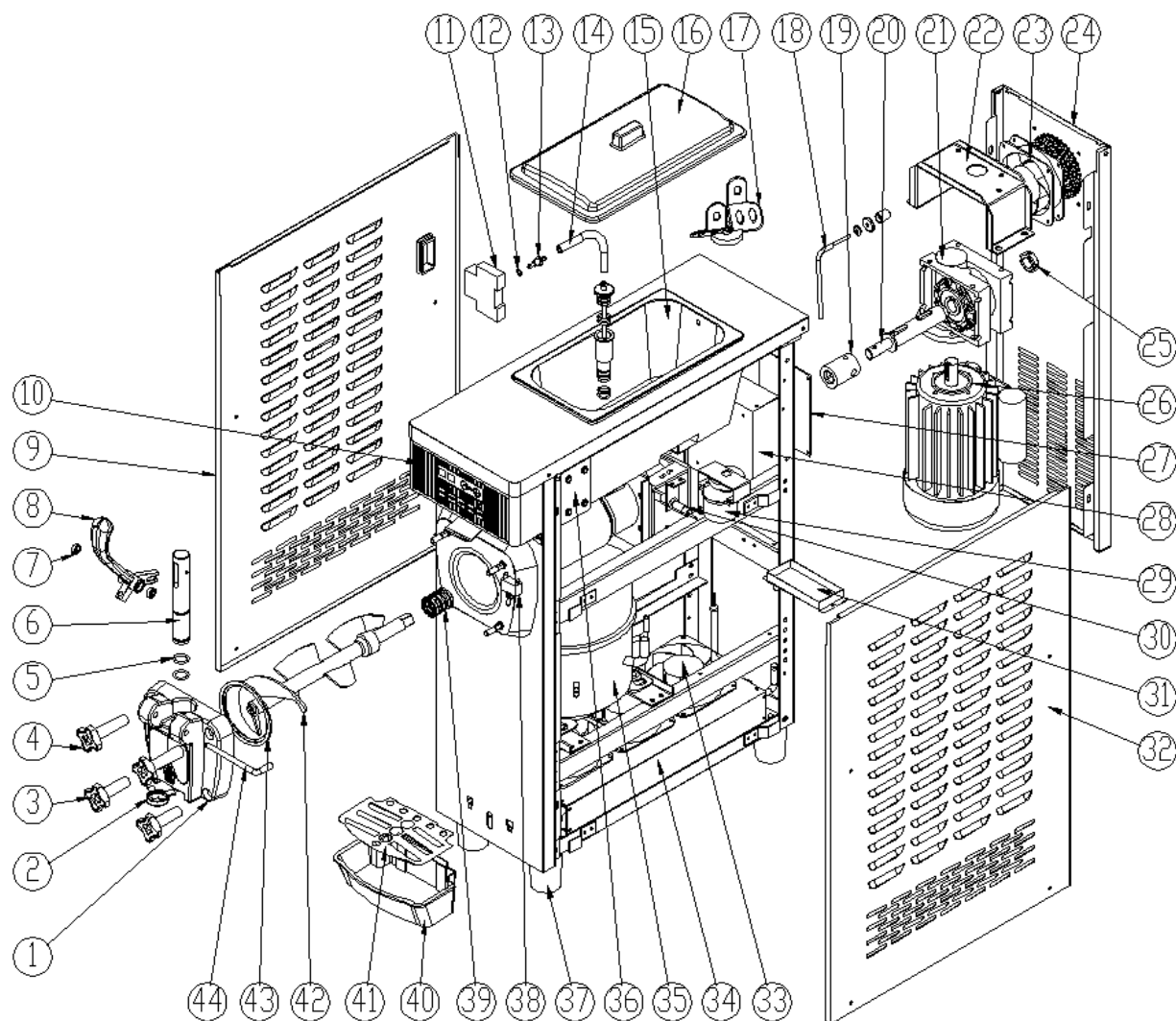
1. Usage and features

With little investment and high returns, it is a wise choice for you to purchase our product. This series of products can be used in the pubs, hotels, cold drink specialty shops, net bars, dancing halls, coffee houses, western restaurants, holiday villages, and other entertainment and leisure places. All of our commercial ice cream machines adopt the digital computer control system, with LCD or digital display. As our commercial ice cream machines are made of high quality and stable electrical elements, and matched with advanced production technology, it is easy, safe and reliable to operate. In addition, our products are equipped with compressors of world-famous brand, which ensures stable and reliable refrigerating system, large production capacity and low electricity consumption. The ice cream made by our machines tastes crispy and tender, with a high puffing rate.

2. Security precautions

1. When you carry or move the machine, the tilting angle should not be more than 45°.
2. As vibration cannot be avoided in the course of carrying the machine, it'd better place down the machine for more than 4 hours before you use it.
3. When there is water in the cylinder, it is not allowed to switch on the "AUTO" key.
4. Check the nameplate (technical parameters) on the back panel of the machine whether the voltage required is conformity with that of the local power supply.
5. Please ensure the power supply socket be effectively connected to the grounding line.
6. When stop using the machine, or dismantling its parts or cleaning the machine, please cut off the power supply.
7. To prevent electric shock, please don't make the plug, motor or other electrical parts wet or spill liquids on them.
8. If the power cord is damaged, it must be replaced by the manufacturer, or its service center or other similar qualified professionals to avoid dangers

3. Product structure diagram



No.	Name	No.	Name	No.	Name
1	Liquid outlet valve	16	Cylinder cover	31	Slag box
2	Outlet sealing ring	17	Blender	32	Right side panel
3	Fixing nuts-short	18	Level lever	33	Axial Fan 2
4	Fixing nuts-long	19	Coupling seal	34	Condenser
5	O shape seal ring	20	Reducer connection shaft	35	Compressor
6	Piston	21	Reducer	36	Air pump
7	Shock absorber ring	22	Reducer beam	37	Fixed column
8	Stainless steel handle	23	Axial Fan 1	38	Power switch
9	Left side panel	24	Rear panel	39	Bellmouth seal
10	Operation panel	25	4 Nut	40	Water receiver
11	Switch of motor	26	Motor	41	Water receiver cover
12	Intake nozzle seal ring	27	Motherboard	42	Stirring shaft
13	Intake nozzle	28	Junction box	43	Seal for liquid outlet valve
14	Intake silicone tube	29	Motor of blender	44	Handle steady pin
15	Cylinder	30	Proximity switch		

4.Installation and debugging

1) Installation

a. Cut off and dismantle the packing belt of the fastened carton. Get rid of the carton and take down the packaging bag to check whether the appearance of the machine is damaged and whether the accessories are complete with reference to the list.

b. The machine should be placed evenly and stably, and after then please lock the brake of the front wheel tight.

c. Install the handle to the liquid outlet valve against the product structure diagram, Then install the assembled liquid outlet valve on the machine, and tighten it with the fixing nuts.

d. Working conditions:

① Ambient temperature: 5-40℃; material feeding temperature: 2-35℃ (Note: The material feeding temperature will directly influence the refrigerating capacity and outputs.)

② Supply voltage: 200-400v (The deviation of rated supply voltage cannot be too high or too low. If it is too high or too low, the machine will alarm (buzzing) and the machine cannot start.).

③ Supply frequency: 50±1 Hz

e. Placing conditions:

① The machine should be placed at a cool and ventilated location and avoid heat source and direct sunshine. The distance between the air exhausting side of the machine and wall or other similar obstacles should be over 1m, and the rest sides of the machine should be over 0.3m away from the wall or other similar obstacles, so that the cool air can flow in the machine and exhaust the hot gas to ensure condensation cycle of the machine.

② The machine should not be located at a dusty place. Please keep the place clean and tidy, and regularly clear away the dust on the condenser.

f. Requirements for power supply wiring:

① Please ensure the the power supply circuit of the machine is equipped with the short-circuit protection and earth leakage protection devices.

② Please ensure the power line should not be less than 2.5mm² and be the copper core wire (excluding the exceptional high-power machine, whose power line should not be less than 4.0mm² and be the copper core wire.), and the power line shouldn't be too long. When the power line is too small or too long, its load will become too large and causes voltage drop, thus affecting the service life of the machine's components.

Debugging

a. When the machine is in use, first turn on the faucet to ensure that tap water hits the machine.

b. Switch on the power plug and push the power switch to the "ON" position. Then you will hear a "Beep" sound and the display screen at the same time is on. The machine now is entering the standby state.

c. As you press the "Wash" key, the machine enters the washing state, and the stirring system begins to run at the same time. Press the "Stop" key and the machine will stop its running.

d. As you press the "Auto" key, the machine enters the moulding stage, and the stirring system begins to run at the same time. After 10 seconds delay, the refrigerating system also begins to start. Press the "Stop" key and the machine will stop its operation.

3) Cleaning and disinfection

When the machine is used for its first time, the cleaning and disinfection work should be carefully made. The steps are as follows:

- a. Take about 10L of warm water (40-50°C) and add appropriate amount of foodstuff cleaning solution to the water, making them to the disinfectant. Then pour the disinfectant into the two material cylinders, and let the disinfectant flow into the refrigerating cylinder.
- b. Press the “Wash” key to run for 5 minutes. Pull down the handle to discharge the cleaning solution.
- c. Add clear water to the material cylinders and rinse 2-3 times. It is OK.
- d. Clean the puffed tube for use.

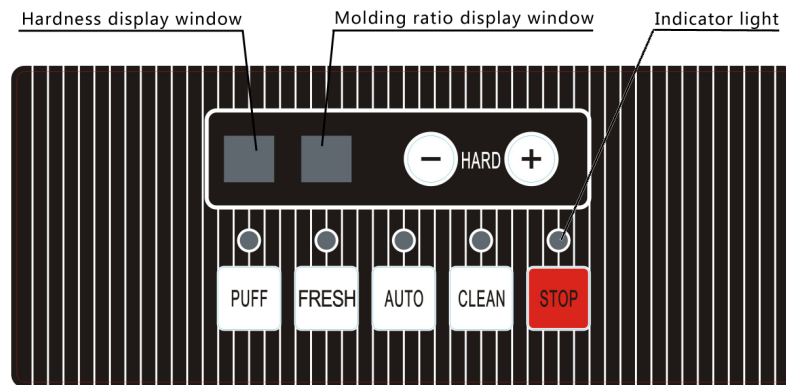


Notes: a. In the course of cleaning and disinfection, you cannot press the “Auto” key, and you must observe the the display screen.

b. After cleaning, you must discharge the water in the cylinders completely. Otherwise, the water will frozen to freeze the cylinder during refrigerating and the stirring shaft will be damaged.

5. Operating instructions

1) Operation panel



a. The “AUTO” key

As you press the “AUTO” key, the buzzer will twitter a short sound and the Auto indicating lamp be on at the same time. The machine enters the automatic working state, and the stirring motor begins to run. After 10 seconds, the compressor, draught fan and solenoid valve begins to work and the machine enters the full automatic mode. When the actual measured hardness reaches 100, the machine will automatically stop and enter the auto standby mode. When the stopping time reaches the set time, the machine begins to work again and repeats the same cycle. If you want to stop the machine, just press the “Stop” key.

b. The “CLEAN ” key

As you press the “CLEAN” key, the buzzer will twitter a short sound and the cleaning indicating lamp be on at the same time. The machine enters the cleaning state, and the stirring motor begins to run. The actual measured hardness shows the present current value of the stirring motor. When you press the “Stop” key, the machine will stop to work and enter the standby state.

c. The “FRESH” key

① As you press the "Fresh" key, the buzzer will twitter a short sound, and the compressor, fan, and solenoid valve will work after 10 seconds. The machine will enter the automatic mode, and the compressor will work continuously for 5 minutes and stop for 60 minutes. When the shutdown time reaches the restart time, the machine starts to work again, and it keeps repeating. If you want to stop, just press the "stop" key.

② As you press the "Fresh" key, the hopper will also enter the pre-cooling function, the pre-cooling compressor and fan will start to work, and it will work continuously for 10 minutes and stop for 5 minutes. When the temperature of the hopper reaches 8 degrees, the pre-cooling compressor and fan will stop working. When the temperature of the hopper is higher than 12 degrees, the pre-cooling compressor and fan will start to work, and it keeps repeating. If you want to turn off the pre-cooling function, just press the "stop" key. Only when the automatic function and the pre-cooling function are stopped, the fan will stop working.

d. The “ PUFF ” key

As you press the “PUFF” key, the puffing indicating lamp be on . In the automatic working state, press the “ PUFF” key to replenish ice cream in the case of freezing cylinder, and improve the taste of ice cream ,press the “STOP” key, and the machine stops working.

e. The “ STOP ” key

When the machine is in the working state, just press the "STOP " key, the machine will stop working and return to the standby state.

f. The hardness position setting

Press and hold the "+" or "-" button for 2 seconds, or click the "+" or "-" button twice to enter the hardness position modification state. After entering, click the “plus” or “minus” button to modify the hardness position. .

6. Ice cream making method

At present in China the ice cream is usually made by mixing the ice cream materials with water. Please mix them in strict accordance with the ratio as printed on the ice cream bag (Generally 1 kilogram of ice cream material should be mixed with 2.5-3 kilograms of purified water).

Place down the mixed ice cream pulp for 15 minutes and then evenly pour it in the material cylinder on the top of the machine. It is required that the pulp cannot caking in order that the pulp can smoothly flow into the refrigerating cylinder through the feeding hole of the puffing tube.

Pull down handle in order to let the hole flow out 2-3 cups of ice cream pulp in a natural manner. Then pour it into the top material cylinder to prevent water freezing at the discharge mouth, for it will influence the making of ice cream.

Install the feed elbows to ensure that the seal jacket is installed in place.

Turn on the power switch, the machine enters standby, press the "CLEAN" button, let the machine run for 3-5 minutes, then press the "STOP" button to stop.

Turn on the "AUTO" and "PUFF" keys, the machine enters the fully automatic cooling forming state, press the "+,-" button to adjust the softness and hardness of the ice cream as needed (recommended 8-12).

When the molding ratio reaches 70, take an egg cone or cup and place it at the outlet below the liquid valve. Pull down the material handle and squeeze the ice cream. After loosening, please push the handle back.

Maintenance and repair

Freezing cylinder cleaning

To guarantee the health of ice cream consumers, improve the service life of the machine components, and avoid unnecessary troubles, you must clean the refrigerating cylinder one time every day.

Press "CLEAN" key, remove the air pump and discharge the remaining ice cream. Press the "STOP" button and the machine stops.

Add warm water(40-50°C) and appropriate amount of disinfectant, and pour it into the tank.

Press "CLEAN" and stir for about 5-8 minutes. Press the "PUFF" button to clean and drain the cleaning solution.

Wash with water for 2-3 times and stop the machine.

Turn off the power and remove the machine spare parts.

Unscrew the four nuts that secure the liquid outlet valve and remove the outlet valve assembly.

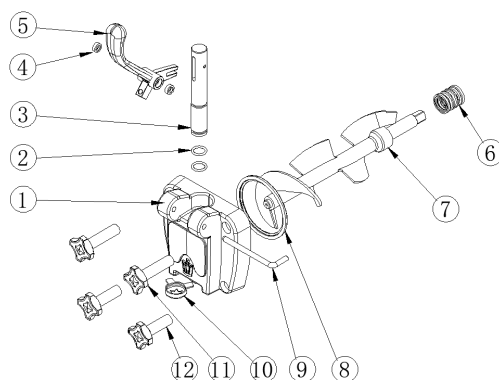
Pull out the handle fixing pin, handle, piston, and outlet valve seal ring in the outlet valve assembly.

Pull out the stirring shaft from the freezing cylinder.

Clean all parts removed, and replace if damaged.

After cleaning, apply the Vaseline to the parts to be lubricated as shown below, and reassemble the parts according to the reverse steps.

11) Stirring shaft and liquid outlet valve diagram



(5)

NO.	Name	NO.	Name	NO.	Name
1	Liquid outlet valve	5	Stainless steel handle	9	Handle fixing rod
2	O shape seal ring	6	Bellmouth seal	10	Outlet sealing ring

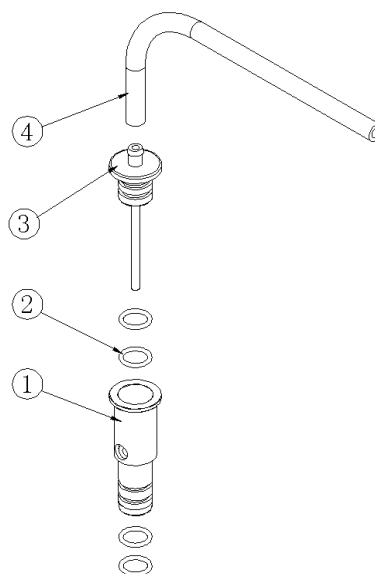
3	Piston	7	Stirring shaft	11	Fixing nuts
4	Shock absorber ring	8	Seal for liquid valve	12	Fixing nuts



Note: Daub vaseline at the corresponding places when installing the pistons, piston seals, stirring shaft and bellmouth seals, for often using vaseline can prolong the service life of the components.

Cleaning of puffed tubes

1. Turn off the power.
2. Pull out the intake silicone tube.
3. Clean all the parts of intake silicone tube, if damaged, please replace it in time
5. After cleaning, reinstall the parts .
6. Schematic diagram of intake silicone tube



Note: Daub vaseline at the corresponding places when installing the pump tube , for often using vaseline can prolong the service life of the components.

C) Body cleaning

- a. Since the consumers require beautiful appearance, clean and sanitary machine, please keep the appearance clean at any time. You can use the warm towel to scrub the body to remove the dirty and spots, but avoid washing it directly with wear in case the appliance breaks down.
- b. Do not put too much water in the material cylinder of the material cylinder cleaning machine, so as to avoid the water flowing into the expansion pump from the position of the air inlet nozzle and causing electrical failure.

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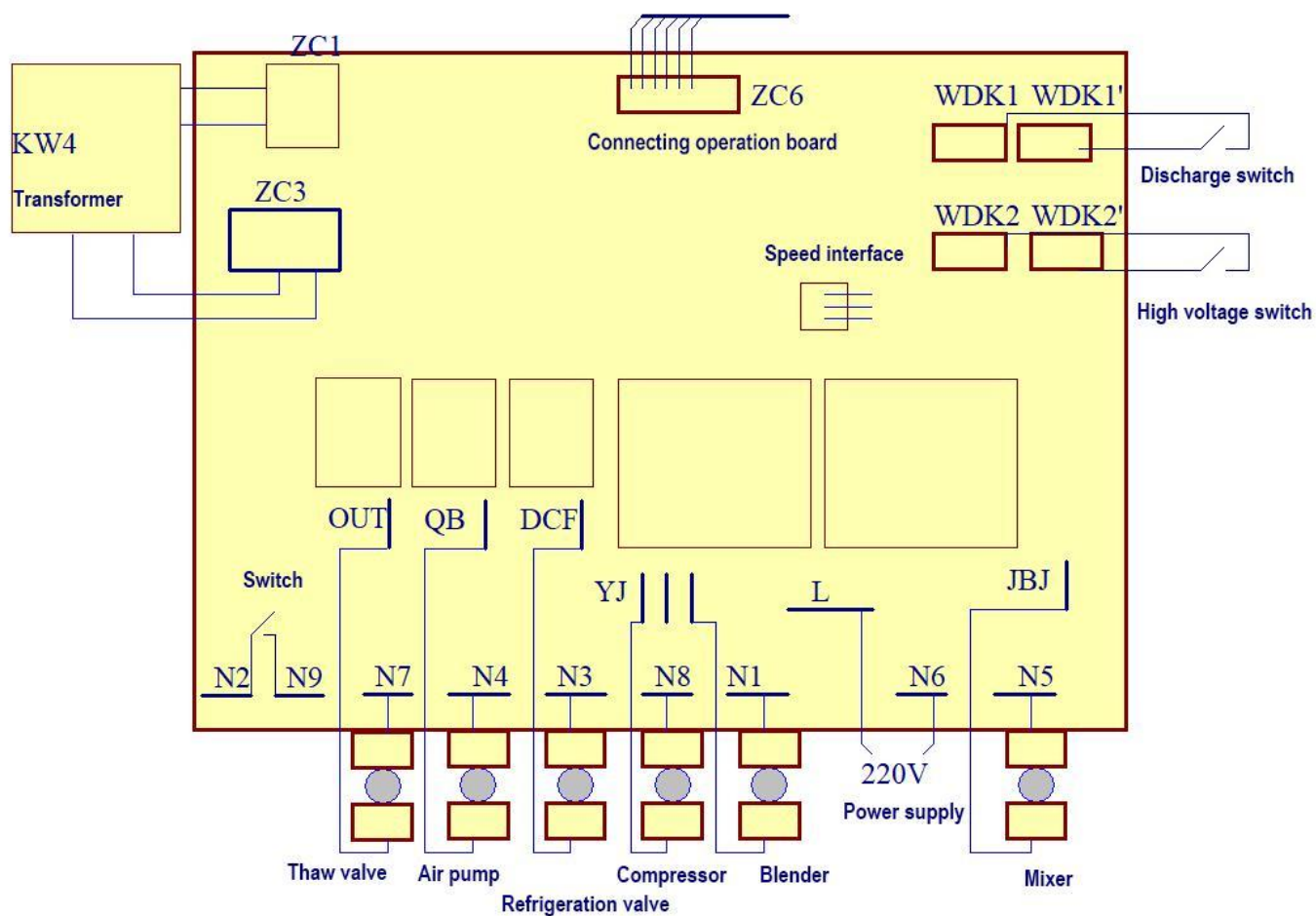
Maintenance and repair

Thank you for using our equipment very much. This ice cream machine is a mechatronics professional equipment that integrates computer program control, mechanical transmission and high efficiency refrigeration system. The following table lists the possible failure phenomena and possible causes and treatment methods of the ice cream machine. Simple faults can be handled according to the processing methods in the list. If the fault cannot be eliminated, consult the seller or the manufacturer for guidance and repair. Complex faults, immediately find professional personnel to repair.

No.	Troubles	Possible causes	Solutions
1	The machine cannot start.	Whether the power switch is on or off.	Switch on the power switch by yourself.
		The power line is not well connected.	Check the power line and connect it well.
		The protection circuit works.	Restart the machine after clear the trouble.
		The control board is problematic.	Replace the control board.
2	The cleaning function doesn't work.	The connection line is loose.	Check the connection line and connect it firmly.
		The stirring motor or capacitance is damaged.	Repair or replace the capacitance or motor.
		The ac contactor is damaged.	Replace the ac contactor.
3	The compressor doesn't run.	The connection line is loose.	Check the connection line and connect it firmly.
		The voltage is too low.	Check the power voltage.
		The contactor is damaged.	Replace the contactor.
		The control board is problematic.	Replace the control board.
		The compressor capacitance is damaged.	Replace the capacitance.
		The over-load protection for the compressor works.	Find out the causes and remove them.
		The compressor is damaged.	Replace the compressor.
4	Refrigerating don't work.	The refrigerating fluid leaks.	Find out the leakage location and repair it well. Fill the refrigerant under vacuum.
		The solenoid valve is damaged.	Replace the solenoid valve.
		The draught fan doesn't run.	Repair or replace the draught fan.
		The compressor runs abnormally.	Check the compressor.
5	The ice cream cannot come out.	No material in the cylinder	Replenish the pulp.
		The puffing tube is blocked.	Pull out the buffing pipe and clean it.
		Wrong ratio of the pulp, which causes freezing cylinder.	Make the qualified pulp again.
		The material discharge switch on the panel is damaged or the connection line is short-circuit.	Connect the line again or replace the discharge switch.
		The reducer is problematic.	Repair or replace the reducer.
		Stirring shaft wear	Replace the stirring shaft

No.	Troubles	Possible causes	Solutions
6	Poor puffing	The puffing tube is not inserted.	Insert the puffing tube again.
		The raw material of the ice cream is poor in quality.	Improve the raw material quality.
7	After starting, electric leakage occurs.	Induced electricity of the shell	Check whether the power line is firmly connected to the earth. If it is not, please have it connected by the professionals
8	The ice cream is too soft.	Wrong mixing ratio of the pulp	Make qualified pulp again.
		Improper setting of the hardness	Reset the hardness.
		Discharging too frequently	After the measured hardness value reaches 50, then put ice cream
9	Non-stop of the machine	The hardness is set too high	Adjust down the set hardness.
		Poor refrigeration	Check the refrigerating
10	Leaky material	Leaky liquid outlet valve	Replace the liquid outlet valve and lock it with the fixing nuts.
		Leaky discharge hole	Replace the piston seal.
		Leaky liquid joining pipe	Replace the bellmouth seal and lock it with the fixing nuts.
		Leaky inside the machine	Replace the cylinder's connection pipe.
11	Er 01	Compressor High voltage protection	Check whether the tap switch is on
12	Er 02	Output switch fault	Check the Output switch
13	Er 03	No running rate signal or frozen tank	Check whether the circuit breaker is turned on and whether the motor rotates
14	Er 04	Low speed	Check if the freezing cylinder or lack of material
15	Er 07	Higher voltage protection	Place voltage regulation
16	Er 08	Lower voltage protection	Place voltage regulation
17	CL	Material shortage or no material	Refill the material

Electric principle diagram



10.Attached accessories

- | | |
|-------------------------------|-------------------------------|
| 1) Seals:1 set | 2) Edible vaseline: 1 bottle |
| 3) Liquid outlet valve: 1 set | 4) Handle: 1 piece |
| 5) Water receiver: 1 set | 6) Cylinder cover: 1 piece |
| 7) Stirring shaft: 1 pieces | 8) Fixing nuts: 4 pieces |
| 9) Puffing tube: 1 set | 10) Instructions: 1 copy |
| 11) Warranty card | 12) Certificate of conformity |

11. Technical parameters

The specific technical parameters are shown on the nameplate of the machine.