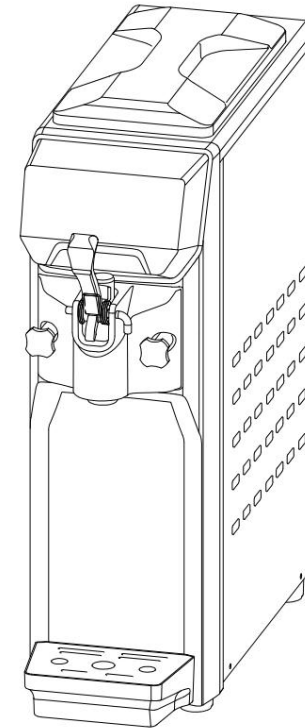


# ROVSUN

## Ice Cream Machine Instruction Manual



Product pictures are subject to actual conditions

Thanks for your purchase. Any questions please don't hesitate to contact us, we will handle all your problem ASAP. Your feedback is vital to us! And we will always try to do better.

MADE IN CHINA

READ ALL INSTRUCTIONS BEFORE USING

## SAFETY INFORMATION



This is the safety alert symbol. This symbol alerts you to potential hazards that can kill or hurt you and others. All safety messages will follow the safety alert symbol and the word “WARNING” or “CAUTION”. These words are defined as:



Indicates a hazardous situation which, if not avoided, could result in death or serious injury.



Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



To reduce the risk of fire, explosion, electric shock, exposure to UV radiation, or injury when using your ice cream machine, follow these basic safety precautions:



The appliance must be grounded and use a 110-120V~/60Hz power supply.

- This product must be properly installed and located in accordance with the Installation instructions before using.
- When using electrical appliances, please follow basic safety precautions to reduce the risk of fire, electric shock and injury to persons or property. Read all instructions before using any appliance.
- High humidity environment will increase the risk of short circuit or electric shock. If in doubt, please cut off the power supply of the ice cream machine.
- Do not exceed power outlet ratings. It is recommended to connect the ice cream machine to its own circuit. Only use standard electrical supply that is properly grounded in accordance with the National Electric Code and local codes and ordinances.
- The machine is intended for the following applications such as:
  - kitchen areas in shops,offices and other working environments;
  - farm houses
  - by clients in hotels, motels and other residential type environments;
  - Catering industry and similar non-retail industry.
- Children and disabled people must be supervised to use this machine
- Avoid direct sunlight, and ensure that the machine is used at home with no obstacles and good ventilation. There must be at least 50cm between the four sides of the machine with the wall.
- Do not tip the machine over.
- We do not recommend the use of an extension cord, as it may overheat and become a risk of fire.
- Do not immerse any part of the product in water.
- To avoid risk of injury, place the power cord where children cannot pull it or cause tripping hazards.
- Do not operate if any component, including the cord or plug, is damaged.

## Warm Tips:

- 1.Check whether all below accessories are there.
- 2.Install the machine according to the manual.
- 3.Allow the machine to stand 24hours after you get it.

Accessories list				
NO	Description	Picture	Usage	Quantity
1	Manual		Operation manual	1PC
2	Assembled puff tube		Install in the hopper	1PC
3	Outlet valve seal ring		Spare	1PC
4	Beater seal		Spare	2PCS
5	Handle valve seal ring		Spare	2PCS
6	Styling cap		Spare	9PCS
7	Handle and bolt		Need to assemble by customer	1SET
8	Drip tray		Need to assemble by customer	1SET
9	Lubricant oil		Lubricating the beater and handle valve	1PC
10	Ice cream stickers		Decorating your machine if needed	1PC
11	Brush		Clean the machine if needed	1PC
12	Spring		Spare	1PC

		4、Compressor noise	1、 The condenser is too dirty	Clean the condenser by professionals
			2、 Inner tubes become deformed	Operate by professionals
			3、 Compressor itself	Contact after sales service
			4、 The screws which fasten the compressor are loose or too tight	Operate by professionals
		5、 Fan noise	1、 Check the fan is clear or not, the fan cover is installed well or not.	Operate by professionals
			2、 whether the fan blades rub the fan cover or not	Operate by professionals
3、 The fan motor itself	Contact after sales service			
6	Ice cream is too soft or scarce	Too many times	Can't be more than 6 cups when the foaming ratio reaches to 100%	Debug by yourself
		There is a problem with the ratio of ice cream	Readjust	Debug by yourself
		Hardness was set too low	Increase the hardness properly	Debug by yourself
		Refrigeration system is damaged	Refrigerant leak or the compressor stoppage	Operate by professionals
		Lack of ice cream	The ice cream mix should be at least 2/3 of the hopper	Debug by yourself
		The feed holes of the puff tube weren't aligned correctly	Adjust according to the puff tube instruction	Debug by yourself
7	No ice cream or too soft after not working for a long time	The handle didn't pressed to the right position	The machine didn't work	Debug by yourself
		Just the first cup of ice cream after not working for a long time	Normal	
		Hardness was set too low	Increase the hardness properly	Debug by yourself
		The proximity switch is damaged or loose	Check whether the switch is damaged or loose?	Contact after sales service
		There is no magnet at the top of the handle valve	Check whether there is magnet or not	Operate by professionals
8	The beater can't be installed in the cylinder	The holes are not aligned or matched	Change another side to match	Debug by yourself
9	The beater can't be took out.	The machine was stored with water inside of the cylinder	The beater was soaked for long time and become deformed	Operate by professionals
		There is no liquid or water in the cylinder, but press the cleaning button for a long time to run the machine	The heat generated by friction make the beater become deformed	Operate by professionals

- Unplug the product before cleaning or repairing, and when not in use. (Note: If the machine needs maintenance, it is strongly recommended that the operation be carried out by professionals.)
- Do not plug or unplug product with wet hands.
- Do not place the power cord on carpet or other heat sources.
- Do not attempt to disassemble, repair, modify, or replace any part of your product.
- Use this product only for its intended purpose as described in this user manual.
- If the power cord is damaged, it must be replaced by the manufacturer or similar professionals in order to avoid danger.
- Do not use any accessories not recommended by the manufacturer.
- Do not pull the cable to unplug the plug, pull the plug is a must.
- The beater must be replaced by original one.
- Do not spray water to clean the machine in order to avoid danger.
- The hopper must be covered when the machine is working to prevent people from touching the liquid inside, and it is not allowed to stir with hands in order to avoid danger.
- If a gas leak, do not touch the machine and the leakage circuit breaker, open the window for good ventilation, otherwise it may cause an explosion.
- Do not use flammable stuff near the machine to avoid fire. Do not store any explosive stuff in the machine, like combustion adjuvant.
- Do not touch any component or switch of the machine with wet hands to avoid electric shock.
- The machine must be operated by professionals to avoid danger.
- Do not allow children to climb, stand or hang on the the machine. They could seriously injure themselves.
- Do not place any heavy weight on the machine.
- Do not insert hands or any other stuff in the air outlet to avoid danger or affect ventilate.

## Unpack the machine

**⚠ WARNING** Do not use foam and other packaging materials as toys for children and persons with intellectual disabilities in order to avoid danger.

**⚠ CAUTION** Remove all the package before operate the machine.

- Unwrap and check the machine is normal or not;
- Check whether there are all the below accessories in the package or not.

**Please check the accessories list on the back cover**

## Installation and setup

**Caution: Installation must be installed by professionals.**

### ⚠ WARNING

- The machine should be used indoors, and can't be put or used in rain.

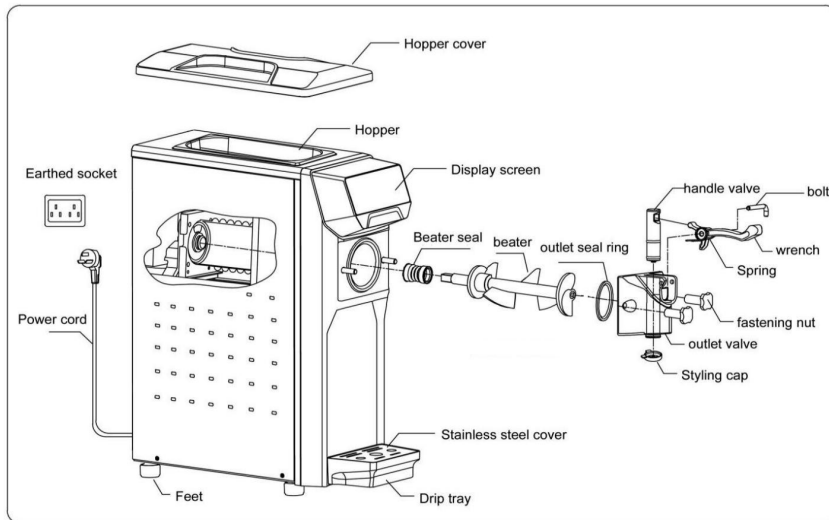
Ensure a minimum of 15cm clearance around the side and back walls of the ice cream machine for proper air circulation.

- The machine should be placed on a level and firm place, otherwise it may cause tilt, noise, and excessive vibration.
- Please do not overturn or tilt the machine 45°, it may cause abnormal noise and danger to the machine.

### ⚠ WARNING

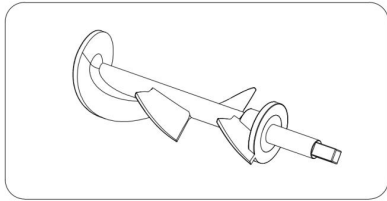
1. The machine must be grounded, or else, accidental creepage can lead to electric shock or serious damage.
2. Do not exceed power outlet ratings. It is recommended that the ice cream machine is connected to its own circuit in order to avoid fire. The residual Current Circuit Breaker must be  $\geq 20A$
3. Do not operate if any component, including the cord or plug, is damaged to avoid fire or electric shock.

## Components



## COMMON MALFUNCTION ANALYSIS

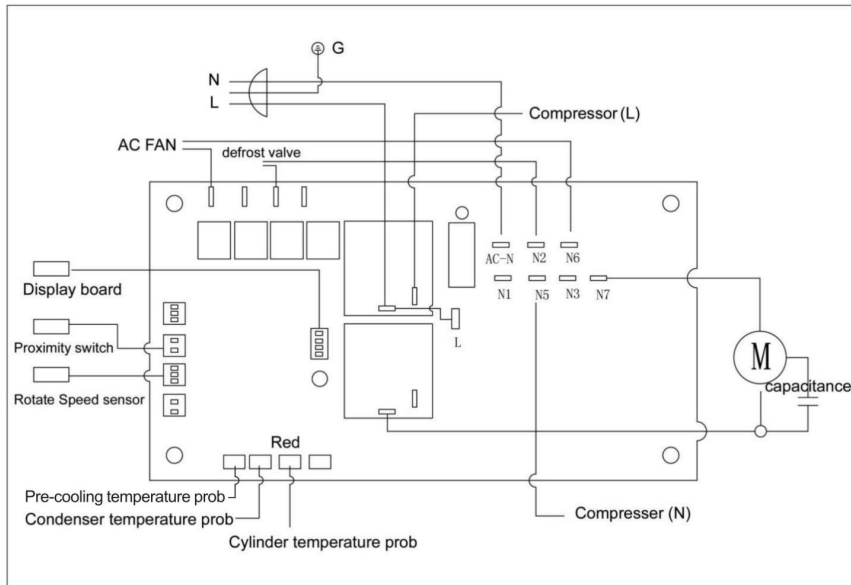
No.	Stoppage	Possible reasons	Solutions	Remark
1	No display	Power supply is correct or not	Check by professional electrician	Require: 120VAC,60Hz
		Internal wire is loosen or damaged.	Replace or fix by professional electrician	
		Control board malfunction	Contact after sales service	
2	The switch is trip	Input power or switch load is on the low side	Replace by professional electrician	Which will cause the machine damage or cause fire. Operate by professionals
		Internal wire is damaged.	Replace by professional electrician	
		Hardness was set too high which caused the machine to be overloaded	Lower the hardness properly	
		Voltage instability cause the machine damaged	Check by professional electrician	
3	Leakage of electricity	Short circuit	Contact after sales service	
		You will feel electricity leak if you touch the metal part	Check the socket is earthed or not	
4	Outlet valve leak	The seal of handle valve didn't install or damaged	Install or replace it	Debug by yourself
		The two fastening nuts weren't tightened	Tighten them	Debug by yourself
		The seal of outlet valve didn't install or damaged	Install or replace it	Debug by yourself
5	Loud noise	Noise become low after pouring ice cream inside		Normal
		The machine wasn't placed on a flat place		Debug by yourself
		The screws of wall panels were loose		Operate by professionals
	Motor noise	Abnormal motor or reducer noise		Contact after sales service
		Lack of ice cream, will become low if add ice cream		Normal
		Hardness was set too high		Lower the hardness
Motor noise	Hardness was set too high	2、 Motor itself		Contact after sales service
		3、 The screws which fasten the motor are loose		Operate by professionals



## 2) Long-term storage of the machine

- a) Unplug the power plug, dry the surface of the machine and the water on the power cord. Pack up the power cord but can't not excessively twisted.
- b) Put the machine in a safe place and cover the machine to keep it away from dust.
- c) The place where the machine is placed must not be accessible to children and persons with intellectual disabilities

## Circuit diagram



## Installation and use

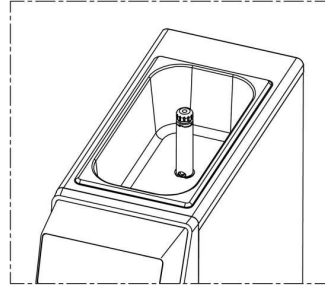
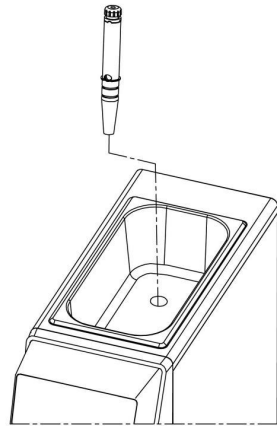
1. Place the machine on a flat place

2. Take away the cover and take all accessories out

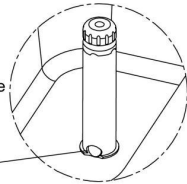
3. Installation

1. Insert the handle valve into the outlet valve
2. Install the spring and put the wrench into the hole of the handle valve
3. Put the wrench with spring in the outlet valve, align the hole of the wrench to the hole of handle valve, which make the wrench was fixed into the outlet valve.
4. Put the styling hat on the outlet
5. Screw the fastening nut to fix the outlet valve and the machine together.
6. Install the drip tray
7. Cover the tray.

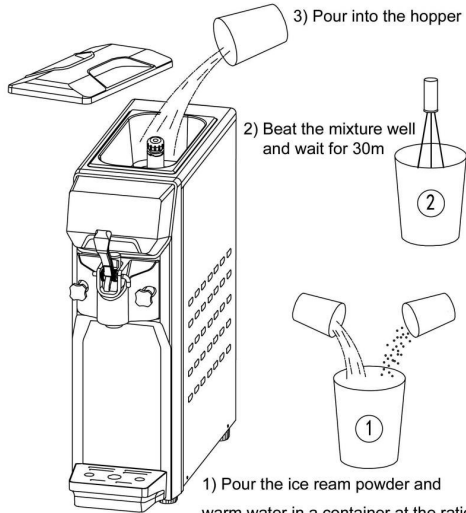
4. Insert the puff pipe into the hole of the hopper



The bigger hole of inner tube should aim at the hole of the external tube.



5. Pour the mixed ice cream into hopper

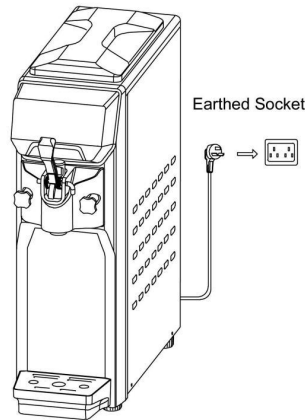


1) Pour the ice cream powder and warm water in a container at the ratio

2) Beat the mixture well and wait for 30m

3) Pour into the hopper

6. Cover it and plug into a socket

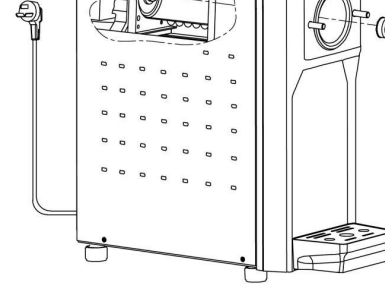


Earthed Socket

3. Cleaning

2) Clean and dry the hopper

1) Unplug



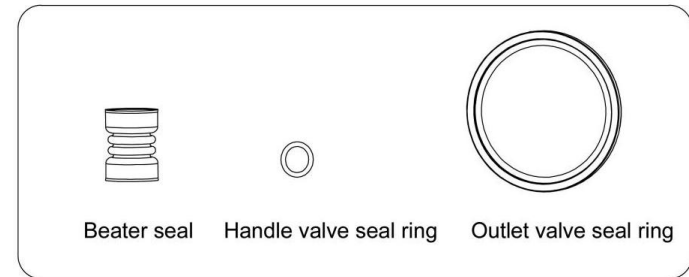
3) Disassemble the outlet and beater, clean and dry.

4) Clean the drip tray

## Replace the easily damaged parts

### 1. Seals

Even if there are scars on the seal that are invisible to the naked eye, the ice cream may leak. Therefore, it is recommended to replace the seals every 3 months.



### 2. Beater

If the beater is damaged, the material in the cylinder will be inconsistent in hardness and part of the ice cream will not be able to be discharged. Therefore, it is recommended to replace it every 6 months.

If there is serious wear and tear within 6 months, please replace it in time.

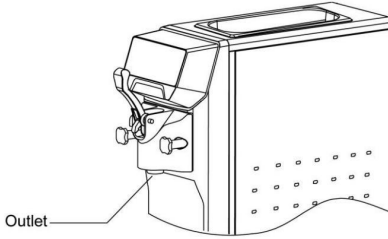
## Care and cleaning

- Do not spray water to clean the machine in order to avoid danger.
- Unplug the product before cleaning or repairing.
- Do not clean the machine with alcohol which will make plastic component crack

### 1. Clean the outlet

Clean and spray the outlet with disinfectant

1. Clean the outlet with water first
2. Repeat until it is cleaned. Then spray with disinfectant.
3. Rinse with water for 3 times to remove the residual disinfectant.



### 2. Clean the external


Clean external everyday, do not clean the machine with alcohol which will make plastic component crack.

Clean the external with soft cloth, don't spray water to the machine to clean.

### 3. Clean internal

1. Cleaning

2) Pour suitable warm water into the hopper



1) Put suitable bucket on the drip tray

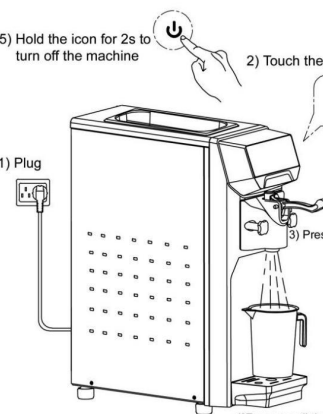
2. Cleaning

5) Hold the icon for 2s to turn off the machine

2) Touch the "clean" icon

3) Press down handle

4) Repeat until the water is clean



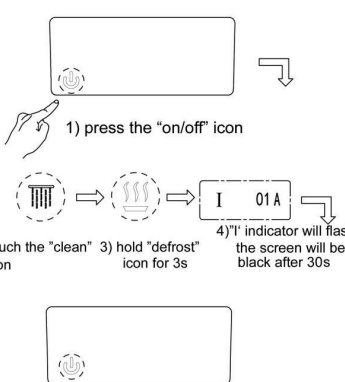
7. Adjust the electric current

1) press the "on/off" icon

2) Touch the "clean" icon 3) hold "defrost" icon for 3s

4) "I" indicator will flash the screen will be black after 30s

5) After self-adjustment, the screen be black, start the machine to work.

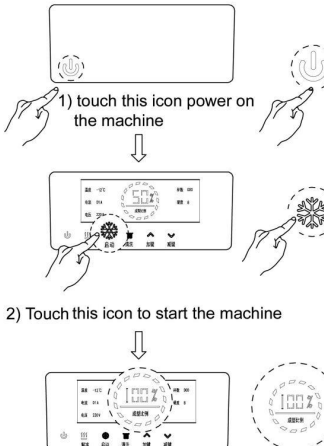


8-A Make ice cream

1) touch this icon power on the machine

2) Touch this icon to start the machine


3) When the number get to 100%, ready to enjoy the ice cream.



8-B Make ice cream

4) Press the handle down

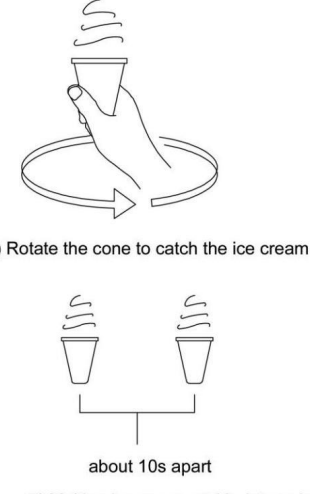
5) Put the cone under the outlet



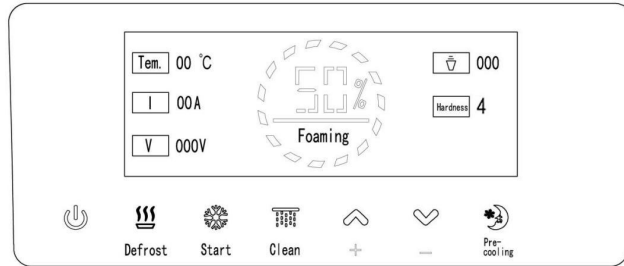
6) Rotate the cone to catch the ice cream

7) Making ice cream at 10s intervals

about 10s apart



## Understanding the control screen



Icon	Description
	You can enjoy the ice cream when the figure reaches to 100%
Temp	Temperature of refrigerant return tube. FYI
Electric current	Working current, the harder the ice cream, the higher current. FYI
Voltage	Working voltage
	Cone count
DH	Hardness of ice cream, the default is 4

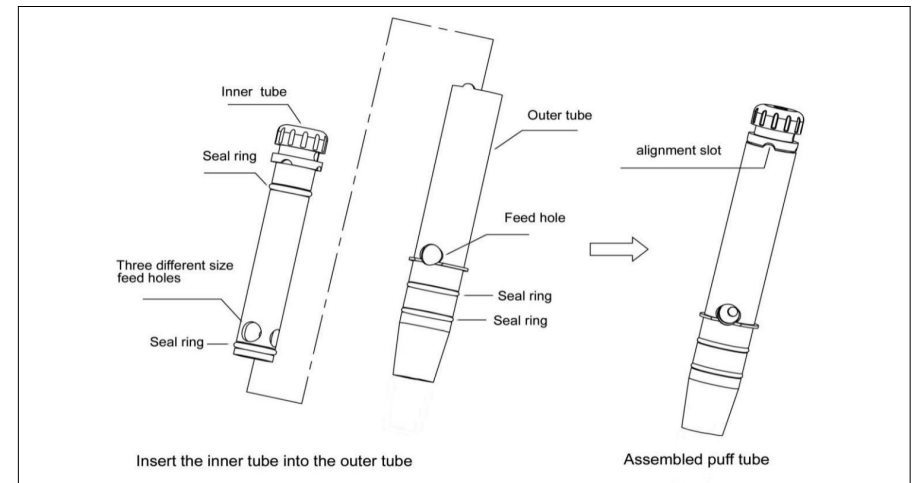
Description	Icon	Function
ON/OFF		Touch this icon to make the machine enter standby mode. Touch again to turn off the machine.
Defrost		If you feel that is getting harder and harder to make ice cream, press the icon to defrost the cylinder until you can get ice cream freely.
Start		Touch this icon, the indicator starts to flash, and the number begins to increase until it reaches 100%. Press down on the handle to start making ice cream Hold the icon for 2 seconds, the compressor will stop working
Clean		Pour water into the hopper, press the icon to enter clean mode, press down the handle to make the water drain until the machine is cleaned. Hold the icon for 3s to force the remaining ice cream to be dispensed. (this function is only applicable to the time when there is not too much ice cream in the hopper and the ice cream can't be dispensed in normal.) NOTE: To dispense easier, the hardness may need to be adjusted appropriately due to the difference in ice cream materials.)
+		Press the icon to increase the hardness, the maximum is 6. Long press the icon for 3 seconds, the counting will be cleared up.
-		Long press the icon for 3 seconds, and number starts to flash, through “∨” or “∧” to decrease or increase the hardness.
Pre-cooling		Touch the icon during working time to make the machine enter pre-cooling mode, the indicator starts to flash. Touch again to cancel the pre-cooling and the indicator will be always on.

7

## Error code

Error code	Reasons
E1	The condenser probe is damaged or it detected the temperature is above 70°C
E2	The cylinder probe is damaged
E3	Working current is above 5A
E4	Rotate speed of motor is too slow
E5	Compressor - High pressure protection
E6	Handle didn't return to right position or the handle sensor is damaged
E7	Without load current is more than 1.8A or less than 0.4A
E8	The temperature in cylinder is too low. Lack of ice cream or the puff tube was blocked

## How to use the puff tube?



Feed holes of inner tube	Feed holes of out tube	Speed of feed
L		Fast
M		slow
S		Slower
NONE		None

8