



Commercial Soft Ice Cream Equipment

Milkshake machine **TG 927**

Instructions

SYSTEM SERVICE PROVIDER FOR ICE CREAM

Service Hotline:

Sales Hotline:

website:

- Thank you for choosing series soft ice cream equipment.
- This manual will give you a detailed description of the operation and maintenance of the equipment.

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Safety precautions

- ◆ Please read and understand the safety precautions carefully before use.
- ◆ Please comply with the safety-related contents described below.
- ◆ The meaning of the logo is stated as follows.

Notes: The equipment should use the power lines of more than 4 square meters.


Pls entrust the electrician to connect the ground wire in advance, otherwise it is easy to cause the electricity leakage and electric shock hazard of personnel.



Ground


It is recommended to install the air switch if the rated power supply is 220V.

Please connect 16A high-power socket if the plug is needed. The blue line N is zero line for 380V. Red, white and black L-lines are live lines. The yellow-green colorlines are ground wire.




Caution

Do not damage the power line, or process, stretch, bundle and bend it, otherwise it may cause electric shock or fire accident.






Forbidden

Do not connect the live line and the zero line in a wrong way, otherwise, it will burn out the equipment main board or transformer. If three live lines are connected incorrectly, the screen will display "Phase Error" alarm. You need to change the position of each two wires. (Suitable for 380V model)




Forbidden

 <p>Danger! Electric shock!</p>	It is easy to cause electrical shock hazards if you fail to follow the circuit connection in the instructions.
 <p>No disassembly!</p>	The disassembly of equipment by non-professionals may lead to equipment damage.
 <p>Grounding</p>	The equipment must be grounded, otherwise it will easily lead to static electricity.

Equipment installation


⚠ Warning

Please entrust the professionals for the equipment installation, otherwise, it is easy to cause the abnormal use of the equipment due to the improper installation.




Entrust professionals

Please install it on a horizontal and firm ground. Otherwise, it may cause equipment dumping, noise and vibration.




Please install horizontally

Do not use the equipment in extremely humid environment, otherwise it is easy to cause equipment electricity leakage and personnel electric shock and other accidents.



Forbidden

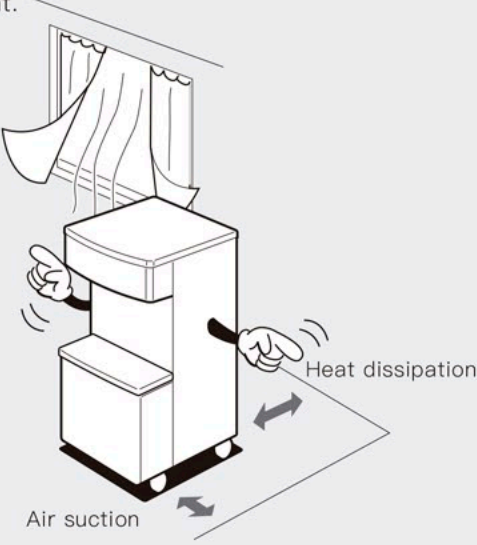
Do not use the machine in the places full of sulfates like hot springs or other salty places like bays and salt fields. Otherwise, it may cause internal corrosion and equipment malfunction.



Forbidden

User notes

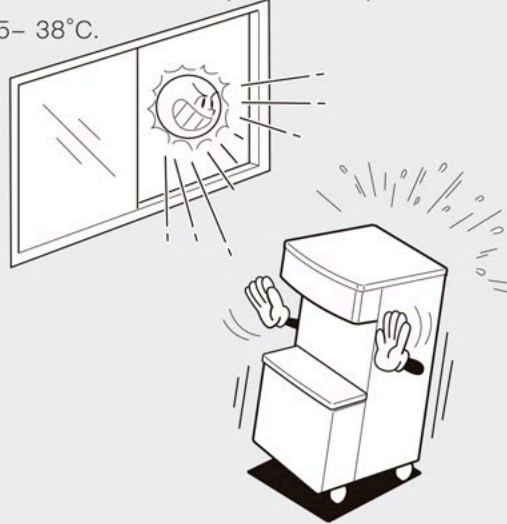
- Please install it in a well ventilated place. Please reserve more than 30cm for air suction and more than 50cm for heat dissipation for the equipment.



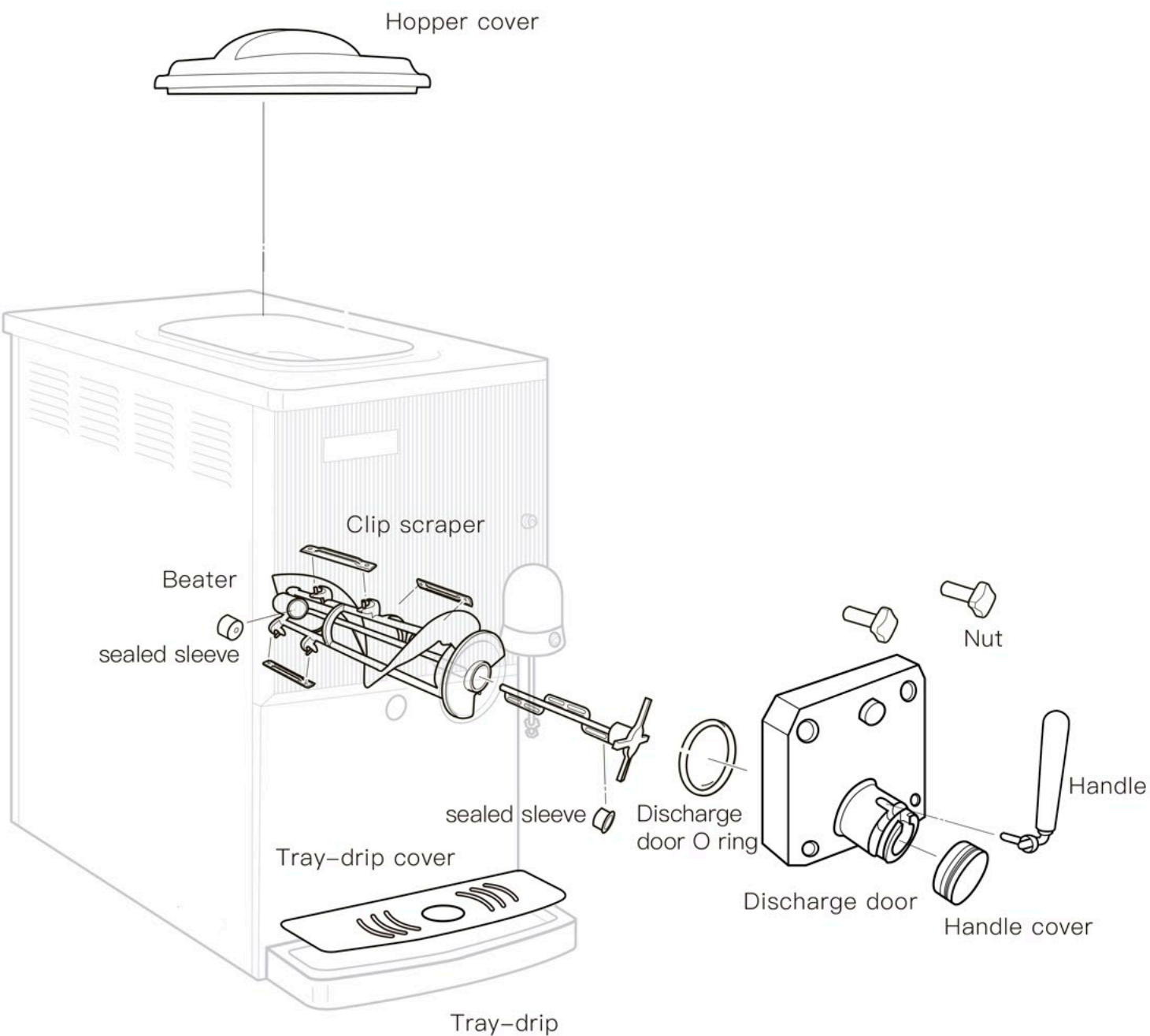
Air suction

Heat dissipation

- Do not install in the place which under the direct sunlight or has heating devices nearby. It will result in production capacity decline if it is used under the environmental temperature beyond the range of 5- 38°C.



Equipment parts



Introduction for the control panel

Display screen

For detailed digital explanation, please refer to page5

【Wash button】

Short press this button, the main motor works only, which is only for cleaning.
Press this button long to activate the function of [Screen Lock]; press this button long again to unlock.

【Stop button】

Press this button for 5 seconds to stop the current working mode and enter into standby state.

【Refrigeration button】

Press this button to enter into the refrigeration mode. The screen displays [Do not serve!];when the screen displays [Product is ready!], you can make ice cream. When making the first batch of ice cream, do not touch the photoelectric sensor switch, otherwise the refrigeration will stop and the operation will be resumed automatically after your hand moves out from the sensor switch.

【Mix low alarm】

If the signal light is on, it means the mixture level in the hopper is too low , and the temperature will be kept between 1~5 °C. The actual preservation period will depend on the real material property used.

【RESET Pre-cooling】

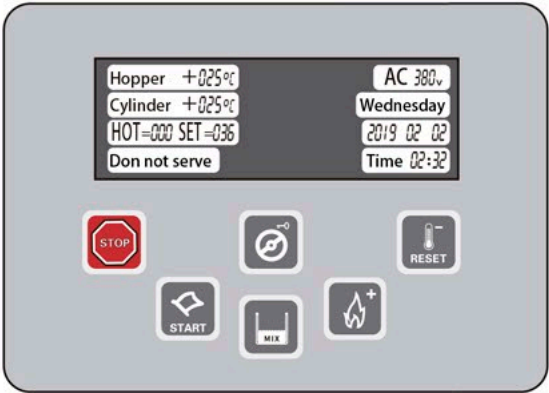
Press this button, the machine enters into pre-cooling mode, and the temperature of the unused raw materials left inside the hopper will be kept between 1~5 °C . The preservation period will be different for the different mixture,it depends on the actual situation.Under refrigeration mode, short press this button to decrease the hardness.

【Heating button】

Under refrigeration mode, short press this button to increase the hardness.

Display screen content explanation

Digital displays (status display) →



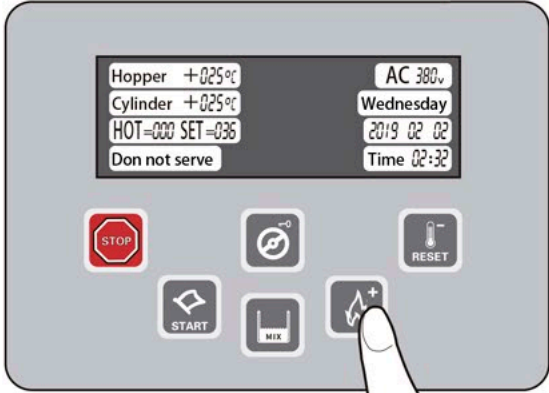
Display	Contents
「Temperature」 Hopper +025°C	It indicates the current temperature of hopper.
「Temperature」 Cylinder +023°C	It indicates the current temperature of the cylinder.
「Hardness 」 HOT=000 SET=099	It indicates that the machine is in refrigeration mode. HOT indicates the current hardness value , and SET indicates the setting hardness value .
「Working mode」 Don' t serve	It indicates that the current hardness value has not reached the setting hardness value. When the HOT value rises to the setting hardness value, the screen will display “Product ready” and the ice cream can be made.
「Voltage」 AC 380V	It indicates the current voltage. If the voltage is too low or too high, the machine protection program will be triggered and the machine will be stopped automatically.
「 Date」 Wednesday	It indicates the current time.
「Calender」 2019/02/02	
「Time」 02:32	



Adjusting method of the hardness value


Each raw material has an optimum hardness value corresponding to itself. It is recommended to set the hardness value to 100. The hardness value should not be set too high, otherwise it may cause Frozen Cylinder. Please strictly follow the instructions below.




Note



1 In refrigeration mode, press   this button to adjust the hardness value.Now SET=092

2 Press  this button to increase the current hardness value, each time it will be increased by the value “1”. SET=093

3 Press  this button to decrease the current hardness value, each time it will be decreased by the value “1”. SET=092

SET=035

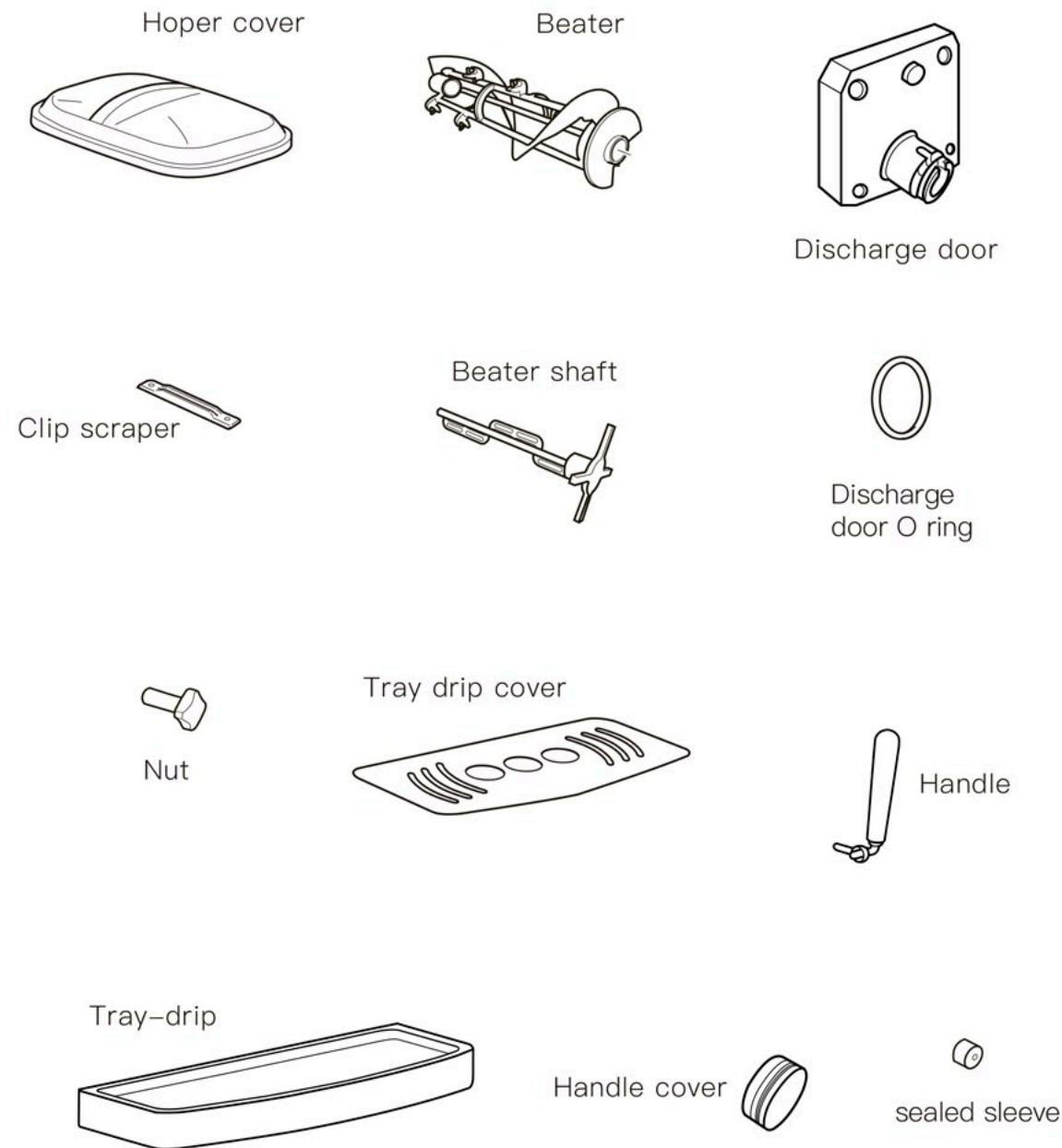


SET=036



SET=037

Washing parts

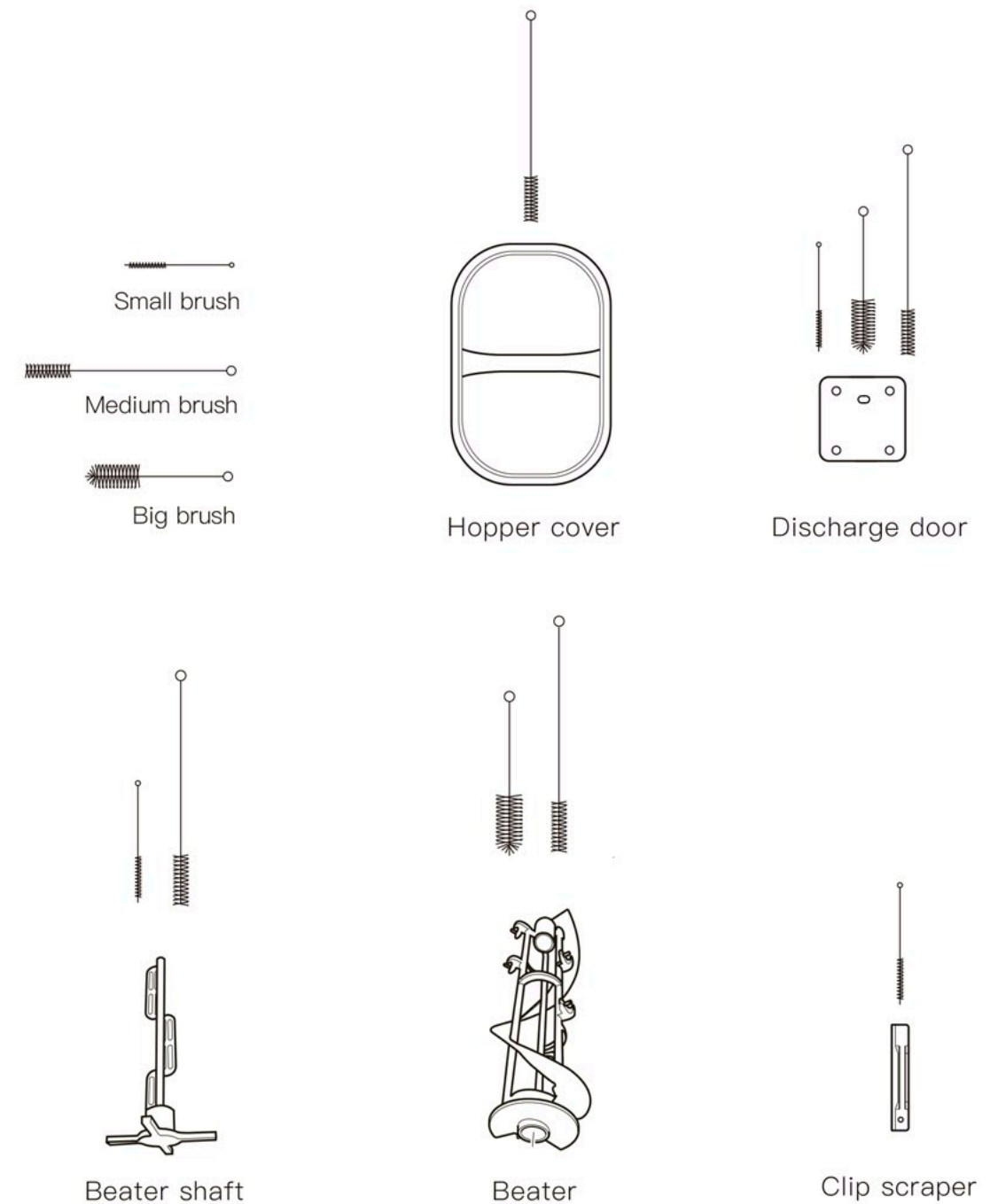


User notes

- Please handle the parts gently and contact the manufacturers for timely replacement if it is damaged or lost.
- Do not wash parts with hot water above 40°C to prevent parts from deformation.
- Do not immerse parts in sterilizing water for more than 30 minutes.

Brush usage recommendation

Please use the brush attached to the kit for parts washing.

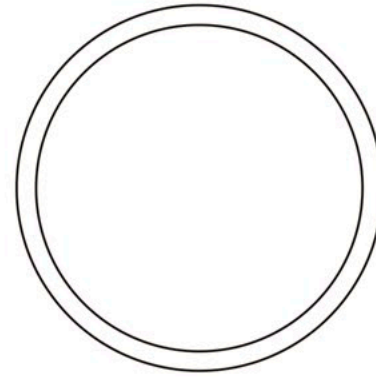


User notes

- Please wash the parts which are connected with the raw materials carefully.
- Pls be careful when washing the clip scrapers because the cutting edge is sharp. It is recommended as well to use special disinfectant powder for washing the equipment.
- The inside of the agitator blade needs to be washed carefully.

Recommendations for wearing parts replacement

- The invisible scratches on the gasket ring may cause the problem of "ice cream leakage". Therefore, it is recommended to replace the o-rings every 3 months. Please replace them right away once you find scratches on them.



Discharge door o-ring

- The clip scraper wear may cause the ice cream to be too soft and frozen cylinder. Therefore, it is recommended to be replaced every 6 months. Please replace it right away if it's found seriously worn.



Clip scraper

- Please refer to page 15 for the use of disinfectant powder.



Disinfection powder

- The gasket rings shown above need to be coated with proper amount of lubricant before installation.



Food grade lube

- If the washing brush is worn or fallen off, it may cause problems such as 'poor washing'. When this happens, please replace with the new brush in time.



Small brush



Medium brush



Big brush

Suggestion for purchasing the accessory products

- Height is 153cm, large ice cream lamp model



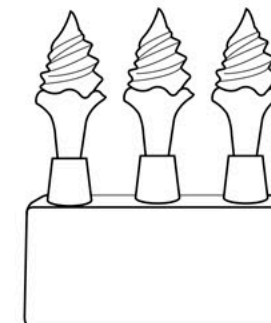
- Height is 136cm, medium ice cream lamp model



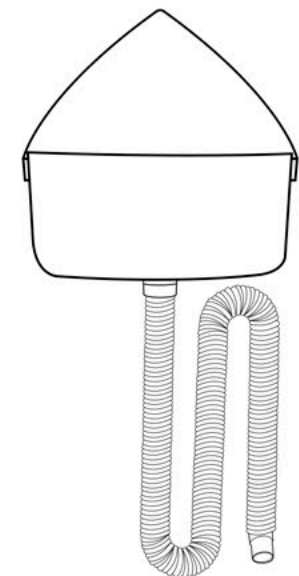
- Height is 45cm, small ice cream lamp model



- Desktop ice cream model



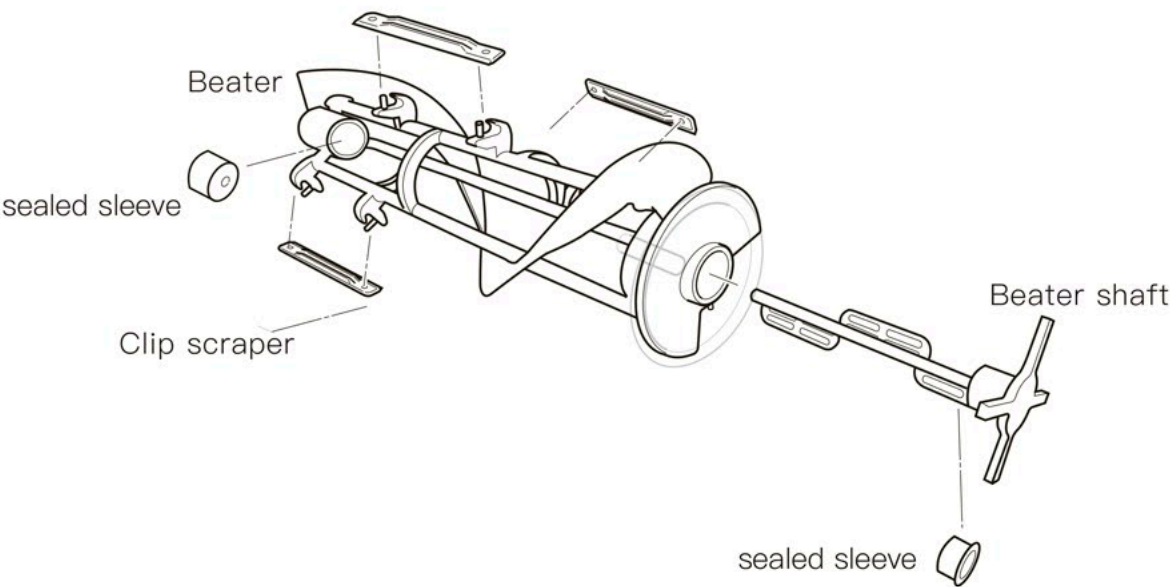
- Usage for the drainage box, please refer to the page 16



Assembly method of key parts

1 Assembly of beater

Please install the clip scraper and beater shaft on the beater according to the method below.

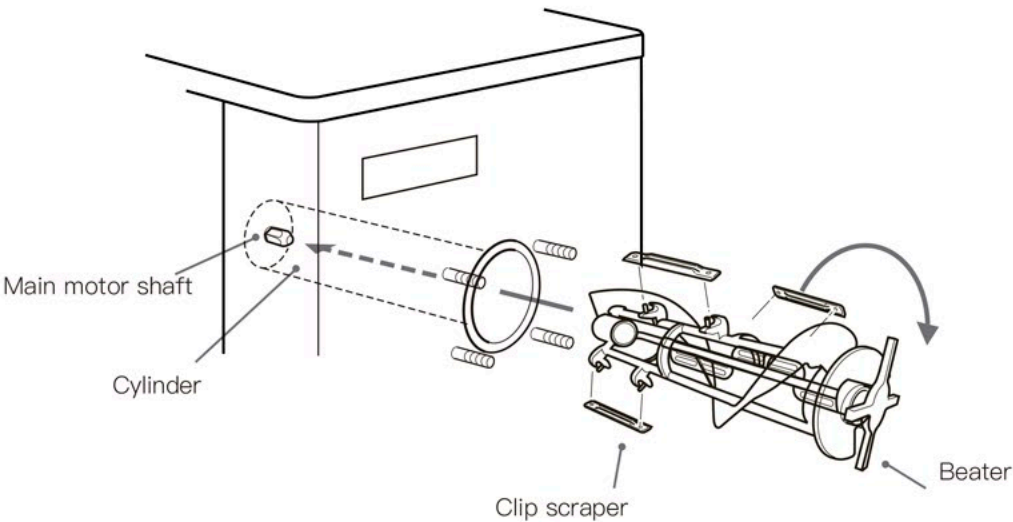


User notes

- The clip scraper has two sides. The side with alphabet is facing upward and fixed through two fixed holes on the blade.
- The clip scraper has a sharp cutting edge. Please be careful during installation. Don't install it in the reversed direction. Otherwise, it may lead to poor taste and frozen cylinder.

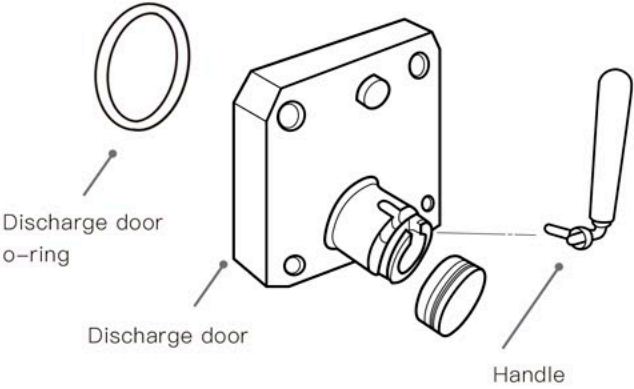
2 Beater installation (* Note: Make sure the power switch is off before installation)

Please insert the beater into the cylinder. Slowly rotate with hand while inserting it to the beater motor shaft.



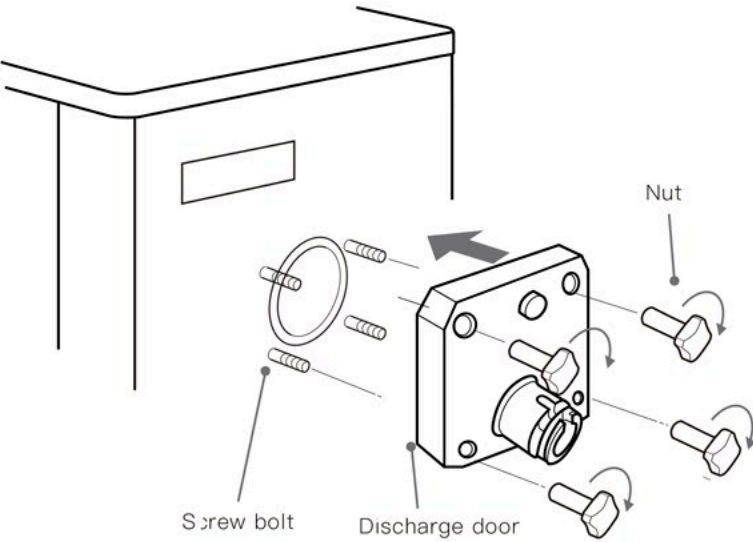
3 Discharge Door Installation

Add some lube on the discharge door o-ring



4 Discharge door installation

- ① Make the four fixed holes on the discharge door align with the bolts on the machine and install the discharge door carefully
- ② Install fixed nuts and tighten the four nuts diagonally.



User notes

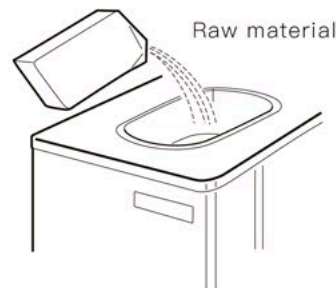
- 1.Tighten the nuts diagonally, otherwise it may lead to poor sealing of the discharge door.
- 2.Poor sealing may lead to ice cream leakage from the crack.

Ice cream making process

1 Prepare 5L raw materials

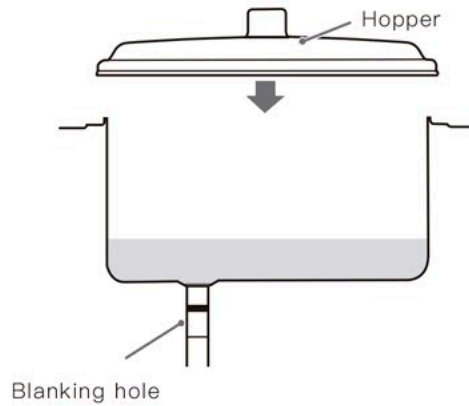
Caution: Do not pour anything other than water or raw materials, otherwise, it will cause failure for the equipment. Make sure that the hopper does not have any water remaining before pouring the material.

- ① Before pouring the material, make sure that the storage hopper does not have any water remaining.
- ② If the raw material contains particles such as non-meltable fibers, please contact with PASMO.



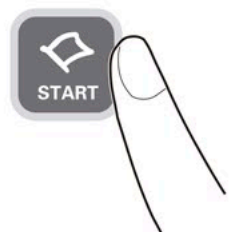
2 Pour the raw materials into the hopper , ensure that the raw material level exceeds the level meter

Cover the chute cover



3 Making milkshake machine

Press the [START] button to wait for the milkshake machine to be ready. When it is show' Product Ready' on the screen.it means milkshake is ready,you can dispense



Daily operation (* Applicable to gravity model)

Washing of equipment accessory

- Sterilize and wash three times a week.

Installation of equipment accessorie

- Turn off the power supply.

Quantity requested for raw material

- Pour enough material to make the level higher than the level meter.

Ice cream refrigeration and making

- Making milkshakes

Close of business

Few raw materials remaining in the hopper. (Lower than the level meter)

- Discharge out the remaining ice cream and mixture.
- Wash equipment and accessories.

* Notes: Few mixture will reduce the effcet of pre-cooling function.

Excess materials remaining in the hopper. (Higher than the level meter)

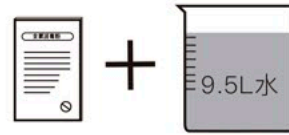
- Clean the residual mixture on the hopper wall,then press Standby.

Operation of the next day

- Please refer to Page 13 for the detailed operation after the equipment washing.
- After Standby:Press Auto

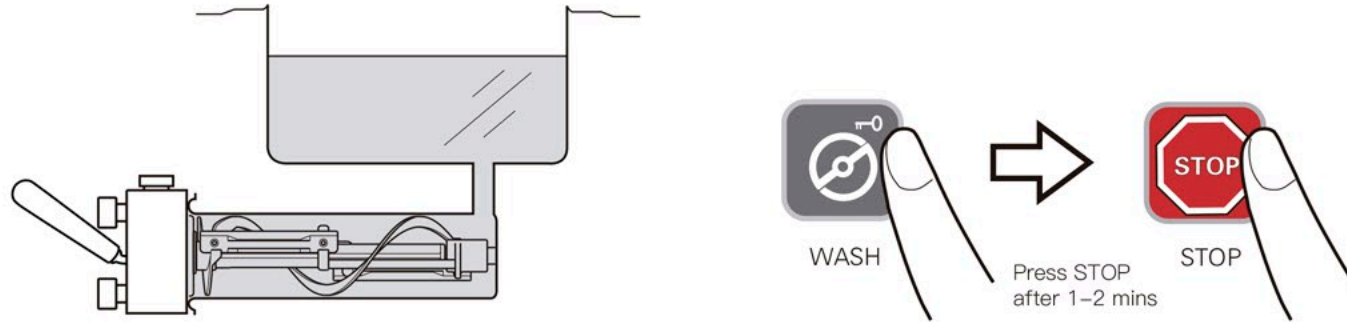
Washing process

- 1** Ratio of food-grade disinfectant powder for machine washing and disinfection.
The ratio is 1:9.5L (1 bag of sanitizer and 9.5L water).



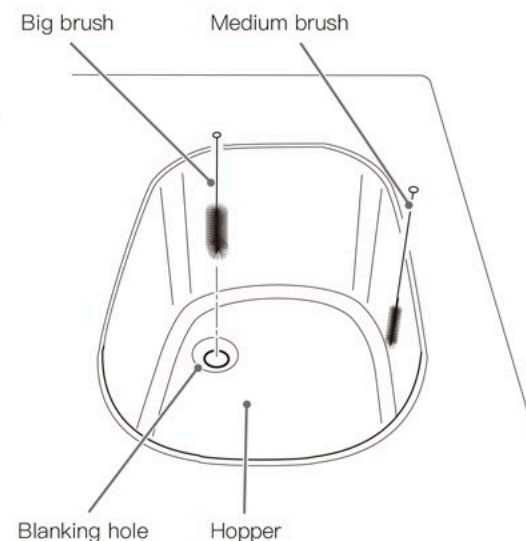
- 2** Turn on the power switch. Do not press the WASH button if there is no water or raw materials in the cylinder to prevent the clip scrapers from wearing.

- 3** Pour 5L disinfectant water in total into the hopper. Press the WASH key to start the device.
Press the STOP button to stop after working for 1–2 minutes.



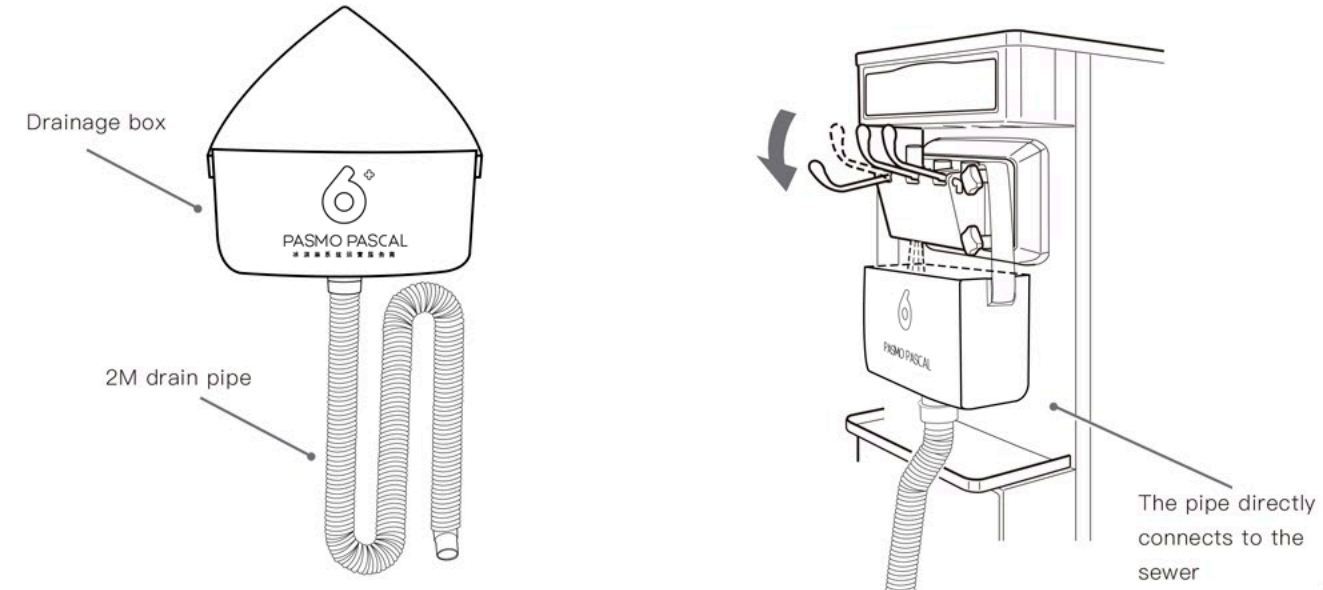
- 4** Please wash the hopper with the brush and disinfectant water for 2–3 times.

- Please clean the blanking hole with big brush carefully.
- Please wash the level meter with medium brush.



- 5** Please discharge the remaining disinfectant water in the equipment by using the drainage box.

- Fix the contraction band of the drainage box on the top two nuts of the discharge door.
- Press the handle down to discharge the disinfectant water.



- 6** Please pour a proper amount of clean water into the hopper after the discharge of disinfectant water and repeat the above steps for 2 to 3 times.

- 7** Please disassemble the drainage box after drainage and wipe inner drainage box clean with a towel and keep it in a cool place.
Please wipe the refrigeration cylinder and hopper with a clean towel.

Solution For Abnormal Situation

Error on screen	Solution
Beater overload	<p>①380V Model:If this alarm is displayed after pressing any button in the first time, please check whether the null line is normally connected;</p> <p>②If the alarm appears after "frozen cylinder", please press the "STOP" button to exit the current refrigeration mode ,wait for 5~10 minutes ,then restart.</p> <p>③If this alarm is still displayed when machine is empty, please disassemble the panel and check whether the motor protector and control board are damaged.</p>
Mix out	Add the mixture until submerge the mix low sensor . If still displays an alarm, you can adjust the T31 parameter and check whether the mix low sensor is damaged.
IMS	① Please check whether the discharge door has been installed and whether the magnet on the discharge door has fallen off; ②If there is no indication above, the machine still shows alarm, please check whether the switch line of the discharge door is disconnected.
Compressor overload	①Please long press the "STOP" button to exit the current refrigeration mode.Under OFF mode, shortly press the "STOP" button to remove the alarm. After 3~5 minutes, press the "HOT" button ,wait until the "Heating Mode" stops automatically.②Please contact TECH GELATO after-sales staff to solve the problem.
Phase error	Please adjust the position of any two fire wires
Lack of phase	Please check whether the fire line has been connected.
Agitator motor fault	Please check whether the temperature difference between TEV and TGV is higher than 45°C.(Normally happen during pasteurization when add frozen mixture or mixture is too less.

Error on screen	Solution
Photoelectric covered	①Do not block the infrared sensor for a long time; ②If there is no human occlusion, please check whether there are foreign bodies or whether there are reflective objects in front, such as glass and mirror.
Er. Mix	Please check whether the mix low sensor is stuck with foreign matter or rusted off.
High voltage/Low voltage	Please check whether the voltage is too high/too low. If the alarm cannot be removed by adjusting parameters, you can increase/reduce the number of electrical appliances used in the same power supply or add a voltage regulator.
<210V,heating failed	Please check whether the voltage is lower than 210V. You can adjust the parameters to remove the alarm.
Er. TEC	①Please check whether the cylinder sensor falls off or damaged; ②Please contact TECH GELATO after-sales staff to solve the problem.
Er.TE1	①Please check whether the evaporation temperature sensor on the cylinder is broken or not; ②Please contact TECH GELATO after-sales staff to solve the problem.
Er. TGV	①Please check whether the evaporation temperature sensor on the hopper is broken or not; ②Please contact TECH GELATO after-sales staff to solve the problem.
Al. Cylinder	This alarm may be displayed on the 380V model when use pasteurization. Please check whether the hopper is lack of material.
PR	①Please check whether the heat dissipation space is enough; ②Please check whether the pressure switch line is loose; ③Please contact TECH GELATO after-sales staff to solve the problem.
Timeout	①Please check whether the heat dissipation space is enough; ②If the temperature is low and the HOT value is always 0, the problem might be the motor; ③If the temperature stays the same or drops slowly, the problem is refrigerant leaks,Please contact TECH GELATO after-sales staff to solve the problem.