



HOMMY ENTERPRISE (XINHUI) CO., LTD.



ISO9001:2008  
certificated quality  
management system



Intertek  
3170143



Intertek  
3170143



**Model:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**S/N:** \_\_\_\_\_

**(Please read the manual carefully before operating the machine.)**



Agent: \_\_\_\_\_

Address: \_\_\_\_\_

Tel.: \_\_\_\_\_

After sales service Tel.: \_\_\_\_\_

Date: \_\_\_\_\_



## CONTENTS

Chapter	Content	Page
<b>1</b>	<b>INSTALLATION NOTES</b>	<b>3</b>
	Air-cooled machine	
	Electrical connections	
<b>2</b>	<b>SAFETY MEASURES</b>	<b>3</b>
<b>3</b>	<b>MATTERS NEEDING ATTENTION</b>	<b>5</b>
	Matters needing attention before using ice cream machine	
	Matters needing attention for the power line	
<b>4</b>	<b>MACHINE STRUCTURE</b>	<b>6</b>
	HM116 Machine structure	
	Machine overall dimensions: HM116 (water-cooled model)	
	Technic parameters	
<b>5</b>	<b>BRUSH TOOL + ACCESSORY</b>	<b>8</b>
<b>6</b>	<b>HM901 MACHINE TOP VIEW</b>	<b>9</b>
<b>7</b>	<b>STAINLESS STEEL EXPANSION TUBE</b>	<b>9</b>
<b>8</b>	<b>STAINLESS STEEL STIRRING SHAFT</b>	<b>10</b>
<b>9</b>	<b>THROAT BLOCK</b>	<b>10</b>
	Throat block structure	
	Throat block disassembly	
<b>10</b>	<b>USAGE METHOD</b>	<b>13</b>
	Usage method 1 (Remove: Expansion tube, Mixer)	
	Usage method 2 (Preparation for cleaning)	
	Usage method 3 (Installation after cleaning)	
	Usage method 4 (Machine cleaning)	
	Usage method 5 (Machine disinfecting)	
	Usage method 6 (Ice cream production)	
	Usage method 7 (Heat treatment)	
	Usage method 8 (Daily startup procedure)	
	Cleaning with brush tool	
	In cleaning and disinfecting	
	Routine maintenance and checking	
<b>11</b>	<b>HM116 MACHINE KEYBOARD</b>	<b>19</b>
	Keyboard instruction	
	Warning message table	
<b>12</b>	<b>CORRECT USAGE METHOD</b>	<b>23</b>
<b>13</b>	<b>TROUBLESHOOTING GUIDE</b>	<b>24</b>
<b>14</b>	<b>REFRIGERATION SYSTEM DIAGRAM</b>	<b>27</b>
<b>15</b>	<b>ELECTRIC WIRING DIAGRAM</b>	<b>28</b>
<b>16</b>	<b>SPARE PART REPLACEMENT</b>	<b>30</b>



## INSTALLATION NOTES

To ensure the safety of the operator, ice cream machine the external power supply leakage protection device must be installed.



The machine indoor installation, please do not use water spray or damp place installation of ice cream machine, otherwise it will result in severe shock.

### ●Air-cooled machine

**All the machines must maintain at least 50 cm gap.** This will make the air flowing through the condenser enough. If there is not enough space, permanent damage to the refrigerating capacity will reduce the ice cream machine and may cause the compressor

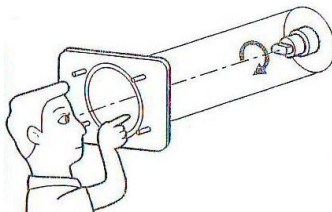
### ●Electrical connections

To install each ice cream machine according to the requirements of the rated power, current and voltage on the nameplate label electrical specifications.



Caution: This machine must be properly grounded! Otherwise it will cause an electric shock and causing serious bodily harm!

If look into the freezing cylinder, **the stirring shaft must rotate in a clockwise direction.**



Note: To perform the following steps by trained repair technicians.

## SAFETY MEASURES



Important note: not strictly abide by the safety regulations may result in heavy casualties. Failure to comply with this warning will damage the machine and parts. Component damage will increase the replacement of parts and service repair expenditure.

### Safe operation:



Do not operate ice cream machine before reading the instructions. Do not follow this instruction will cause damage to the equipment, ice cream machine performance or injuries.



- Do not operate improperly grounded ice cream machine.
- Do not perform any repair work on the ice cream machine before disconnect the mains, otherwise it will cause an electric shock. If you need to repair, please contact your local dealer or find a professional repair personnel.

**Do not follow these instructions could result in electrical shock or damage to the machine, please to electrical consulting.**



Don't rinse, wash and clean the machine under the water faucet directly, otherwise, someone would get a bad electric shock.



The machine must be placed on a level surface, otherwise it may cause injury to persons or damage to equipment.



- Do not allow to operate the machine by no training personnel.
- Before cut off the power supply, do not remove the throat block, the stirring shaft or transmission shaft.
- Do not place objects or finger into the throat block outlet

Do not follow these instructions can lead to products because of dangerous moving parts to cause serious injury to personnel.



Be especially careful when removing the stirring shaft (turn off the power before the operation), otherwise it may cause personal injury



## **MATTERS NEEDING ATTENTION**

### **●Matters needing attention before using ice cream machine:**

1. The machine is subject to shocks in the transport process, the best first place 24 hours before use.
2. Different machine has different ability to adapt to different types of environmental temperature, and must be avoid direct sunlight and away from the heat source.
3. The material temperature after pouring into the hopper is suggested to cool down to 2°C-4°C before making ice cream, so conducive to the material preservation and the taste improvement.
4. The machine should choose a place with good ventilation, and place on a level surface..
5. The rotation direction of the stirring shaft should be in clockwise.
6. The air inlet on the machine (left / right / rear plate) must keep with good ventilation.
7. The dust on the condenser to be cleaned regularly, the best cleaning once every month.
8. Matters needing attention for air-cooled machine: There are 50 cm above the space in which air flows into the machine should be on the side of machine, the bottom of the machine can not have other objects block, in order to ensure the machine cooling.
9. When the freezing cylinder has no material or lack of material, the machine can not enter the refrigeration function.
10. The machine is not used for a long time, please unplug the power line or the external power switch off.

### **●Matters needing attention for the power line:**

- a) Machine shell must be grounded.
- b) When the use of a supply voltage is 200V~240V, the cross-sectional area is not less than 4mm<sup>2</sup> power line, to ensure that the current adequacy. Because of the large starting current, so the total capacity of outside power supply line load power requirements.
- c) When the use of three-phase is 380V/50HZ power supply, the cross-sectional area is not less than 2.5mm<sup>2</sup> power line, to ensure that the current adequacy. Because of the large starting current, so the total capacity of outside power supply line.



**Note:**

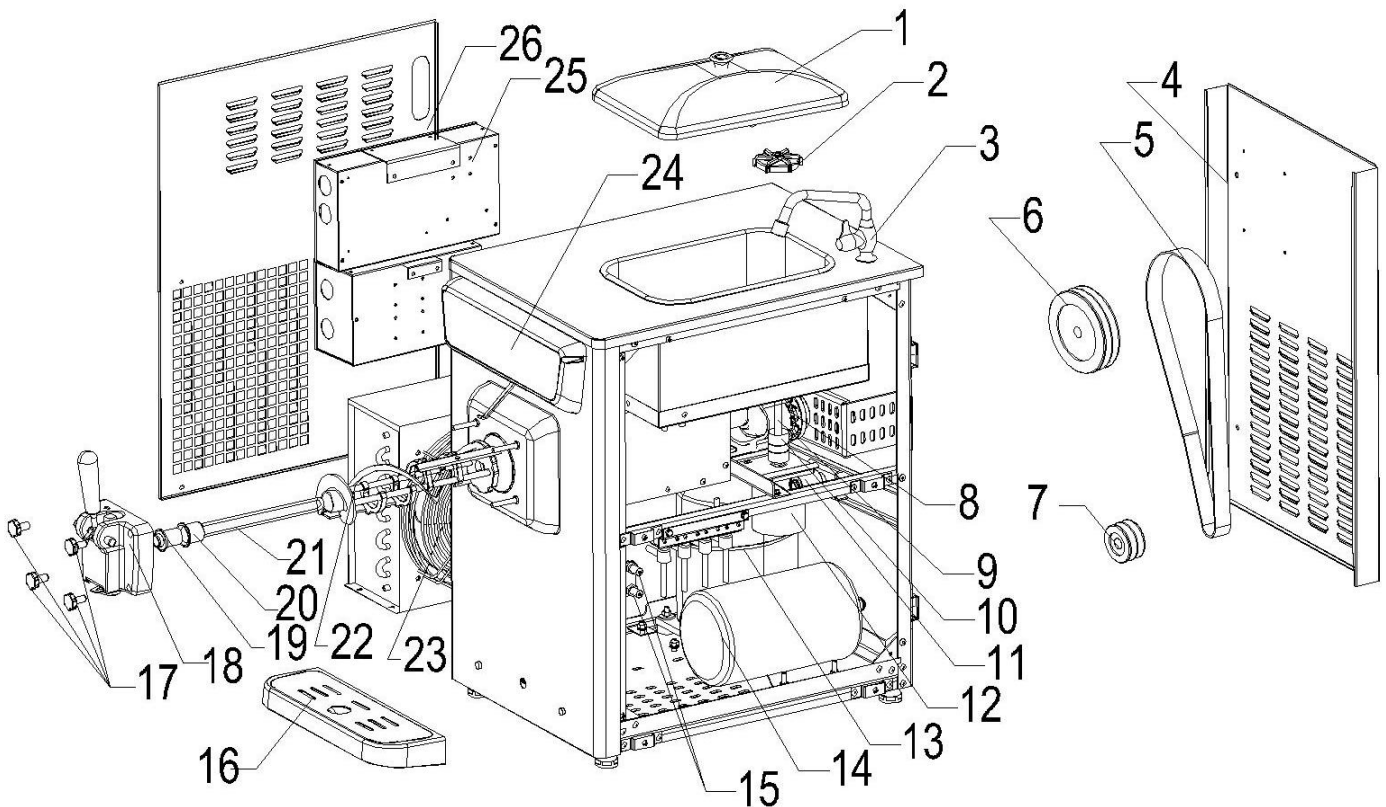
1. The power supply capacity of power line or lack of the load voltage is reduced, affect the normal use of the machine, and even damage;
2. If you are replacing the power line, must find the power line in accordance with the standard and professional electrical repair personnel replacement

**Warning:**

The design of the ice cream machine is in the room (21~28 °C) of the normal temperature operation. The machine may reduce production or the dispensing ice cream becomes softer if run successfully at 32 °C under high ambient temperature.

**MACHINE STRUCTURE**

● **HM901 Machine structure**



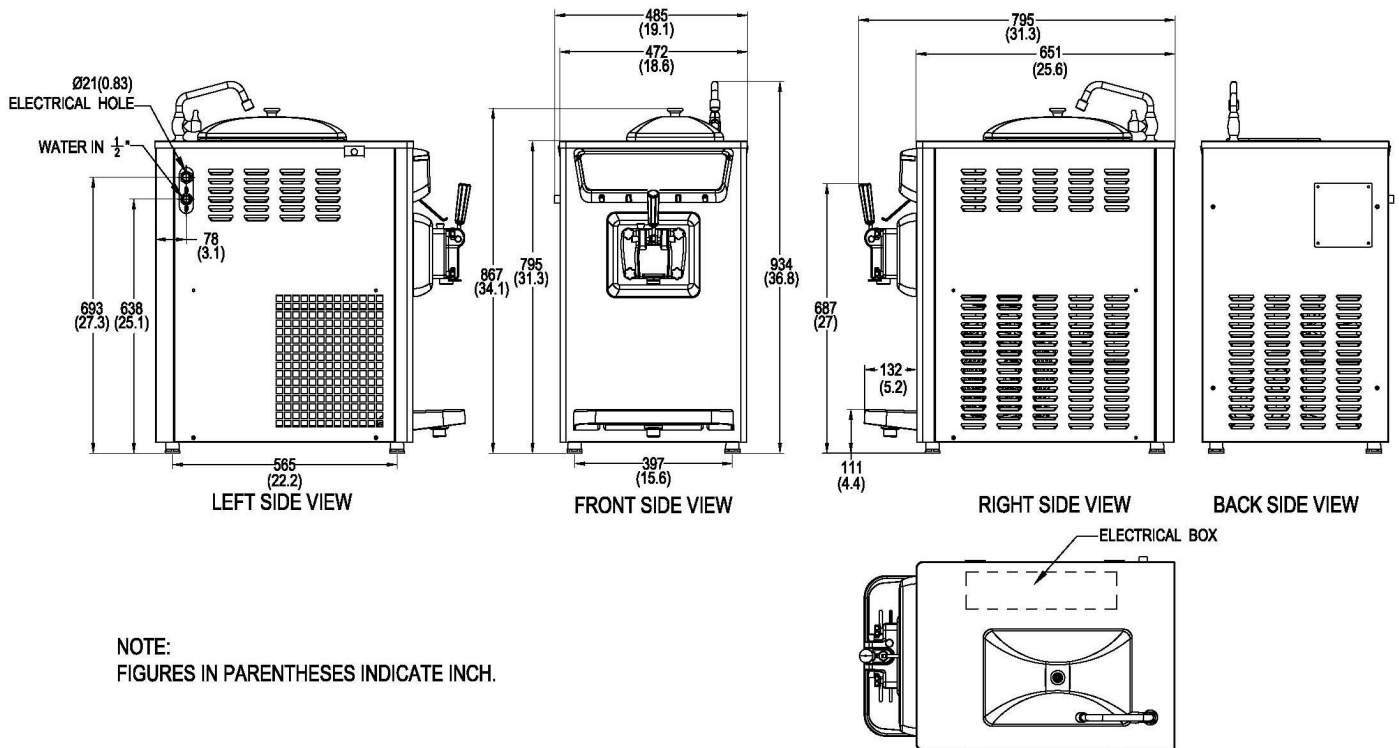
Ref.	Component	Qty.	Ref.	Component	Qty.
1	Hopper lid	1	16	Drip tray	1



HOMMY ENTERPRISE (XINHUI) CO., LTD.

2	Mixer	1	17	Fixing bolt for throat block	4
3	Tap	1	18	Throat block	1
4	Rear-side board	1	19	Fixing seat for stirring shaft	1
5	Belt	2	20	Locating sleeve for stirring shaft	1
6	Big pulley	1	21	U-rod for stirring shaft	1
7	Small pulley		22	Stirring shaft	1
8	Bearing seat	1	23	Condenser	1
9	Mixer transmission axis	1	24	Keyboard	1
10	Mixer coupling	1	25	Electric box	1
11	Tensioner	1	26	Left board	1
12	Mixer motor	1			
13	Compressor	1			
14	Motor	1			
15	Pin valve	2			

### ● Machine overall dimensions: HM901 (airr-cooled model)



### ● Technic parameters

#### Machine overall dimension / Machine weight

Model	Overall Dimension (mm)	Packing Dimension (mm)	Net Weight (kg)
HM901	485×795×934	565×930×1027	135





## Electric parameter

Model	Voltage	Fuse (Max.)	Rated current (Min.)	Power
HM901	Single phase, 220V/ 50Hz, air-cooled model	20A	15A	2150W
	Single phase, 220V/ 60Hz, air-cooled model	20A	12A	2150W
	3 phase, 380V/ 50Hz, air-cooled	20A	9A	2150W

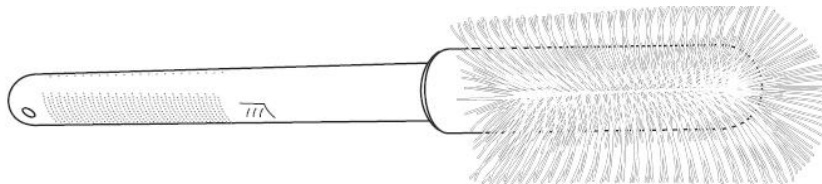
## BRUSH TOOL + ACCESSORY

(1)

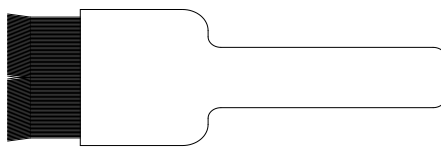
(2)



(3)



(4)



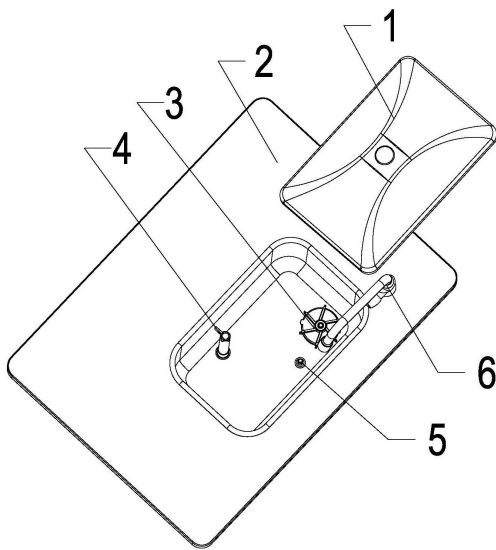
(5)



Ref.	Usage	
1	Clean: transmission axis sleeve, blanking tube	
2	Clean: throat block	
3	Clean: cylinder.	
4	Clean: hopper and throat block outlet.	
5	Lube.	



## HM901 MACHINE TOP VIEW



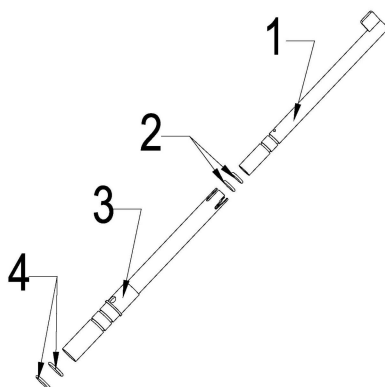
Ref.	Component	Qty.
1	Hopper	1
2	Machine top board	1
3	Upper cover for mixer	1
4	Expansion tube	1
5	Liquid level sensor	1
6	Tap	1

## STAINLESS STEEL EXPANSION TUBE

After cleaning the hopper, firstly coat a little lube on the positions of the sealing rings on the expansion tube, then insert one end into the feed opening in the hopper. The air intake on the expansion tube is adjustable as needs:  $\phi 4$ ,  $\phi 6$ , and  $\phi 8$ .

### Note:

- 1) When the first production of ice cream every day, until material is filled in 3/2 hopper, shall be closed the expansion tube the air intake at all, when ice cream is finished, the air intake can be set to adjust the position you want. (The ice cream overrun is lower from  $\phi 4$ ,  $\phi 6$  to  $\phi 8$ .)
- 2) When using the expansion tube, the material can not be dense, otherwise the material may not enter into the cylinder, causing the machine is not working properly.



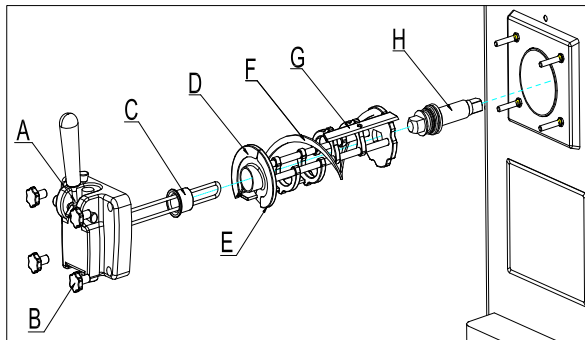
Ref.	Part name	Qty.
1	Inner pipe	1
2	Sealing ring $\phi 16 * \phi 2$	2
3	Outer pipe	1
4	sealing ring $\phi 22 * \phi 2$	2



## STAINLESS STEEL STIRRING SHAFT

When install the stainless steel stirring shaft, locate two orifices on the plastic scrapper to two locks on the shaft body, and then press enter. **Note: the sharp side of the plastic scrapper must be outward.**

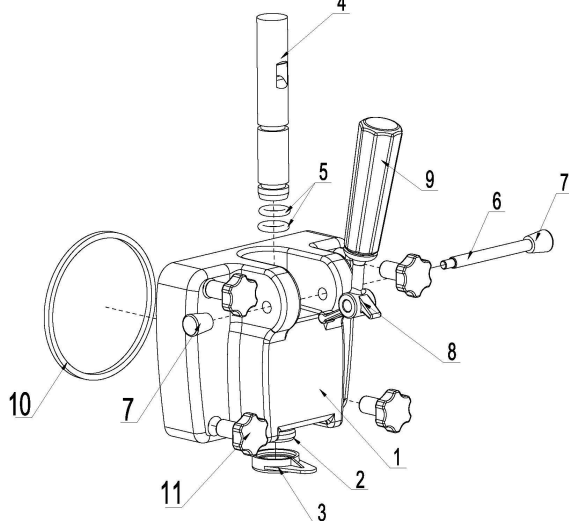
Do not exchange the position both for sheath A and sheath B, otherwise installation is failed. The locating sleeve must be inserted into the shaft core.



Ref.	Description	Ref.	Description
a	Throat block	b	Fixing bolt for throat block
c	Locating sleeve for stirring shaft	d	Sheath B for front scrapper
e	Sheath A for front scrapper	f	Stainless steel stirring shaft
g	Plastic scrapper	H	Transmission tube

## THROAT BLOCK

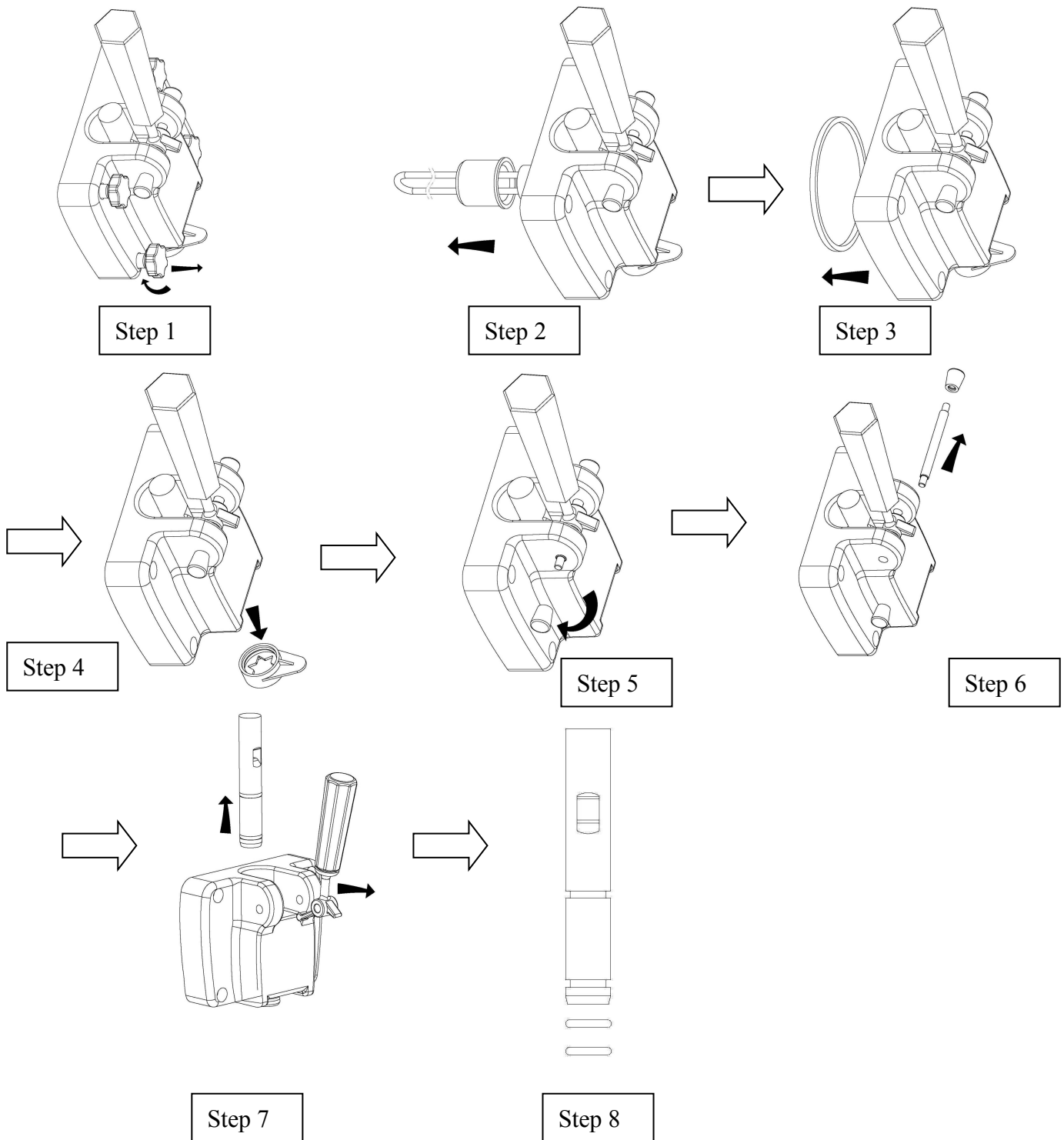
### ●Throat block structure



Ref.	Component	Qty.
1	Throat block	1
2	Outlet	1
3	Star-cover	1
4	Plug	1
5	Sealing ring for plug	2
6	Cross bard for throat block	1
7	Seal nut for cross bar	2
8	Handle rotating seat	1
9	Handle	1
10	Sealing gasket	1
11	Fixing bolt	4



### ●Throat block disassembly



Step 1: Screw out the four fixing bolts in counterclockwise.



Step 2: Pry out the Fixing seat and locating sleeve form the stirring shaft

Step 3: Pry out the two sealing gaskets from the throat block.

Step 4: Remove the star-cover.

Step 5: Screw out the sealing nut from the cross bar in counterclockwise.

Step 6: Pull out the cross bar from the throat block, and pull out the handles and the plugs.

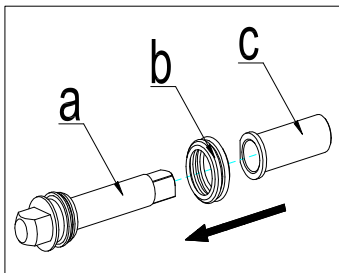
Step 7: Pull out the plug and the handle from throat block.

Step 8: Take away the sealing ring from plug.

**Note: After cleaning and re-install, don't forget to coat a little lube on the positions of the sealing rings and the sealing gaskets**

## Install stirring shaft.

(a: transmission shaft; b: Sealing gasket; c: plastic sleeve)



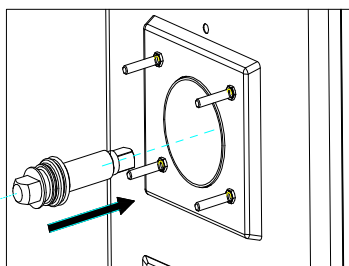
1-1) Before installing stirring shat, firstly coat a little lube on the surface of the transmission shaft, the sealing gasket and the plastic sleeve.

1-2) Insert the sealing gasket and the plastic sleeve to the transmission shaft.

Note: In installation, the bulge side of the plastic sleeve must be toward the transmission shaft.

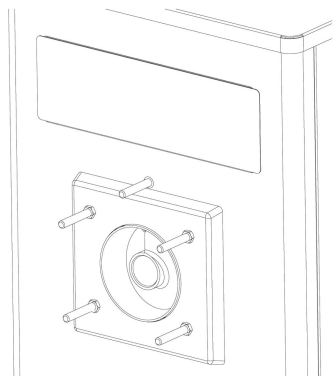
1-3) Insert the transmission shaft into the coupling. In installation, slightly turn left and right the transmission shaft, aim at the hole of the coupling, insert the shaft end into the coupling.

Note: If the transmission shaft is correctly inserted into the coupling, you will feel the rebound efforts.





1-4) Push the stirring shaft into the cylinder. To ensure the stirring shaft is located above the transmission shaft position slightly turn the stirring shaft until it is on the correct position. If the installation is correct, the stirring shaft will no extend to the cylinder.

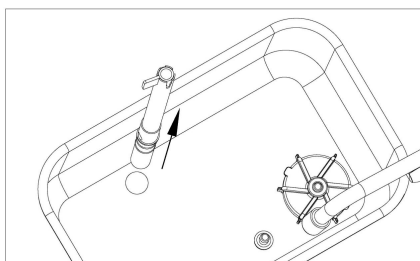


## USAGE METHOD

### ● Usage method 1 (Remove: Expansion tube, Mixer)

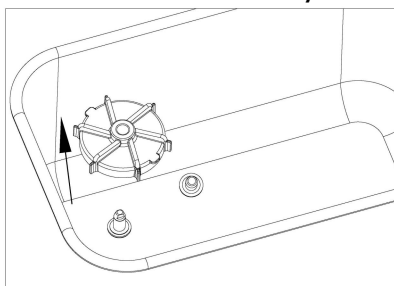
1. Remove expansion tube

Pull upward the expansion tube from hopper.



2. Remove upper cover from mixer.

Pull upward the upper cover from the mixer and take it away



### ● Usage method 2 (Preparation for cleaning)

Prepare a few qualified disinfectant, use warm water and follow the manufacturer's specifications.

- Clean all parts of the machine with disinfectant by the adjusted ratio.
- Wipe all parts with clean and disinfected towel after cleaning.

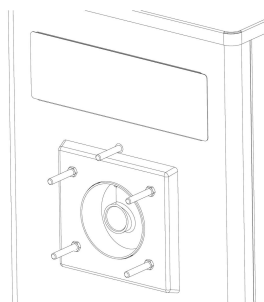
### ● Usage method 3 (Installation after cleaning)

1. Install stirring shaft.

Push the stirring shaft into the cylinder. To ensure the stirring shaft is located above the transmission shaft position slightly turn the stirring shaft until it is on the correct position.

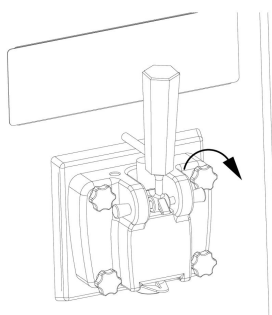


If the installation is correct, the stirring shaft will no extend to the cylinder.



2. Install throat block.

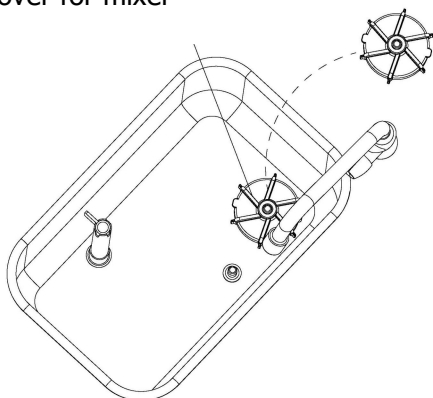
Fix and tighten the throat block assembly with the four fixing bolts in the front of the cylinders



3. Remove upper cover from mixer.

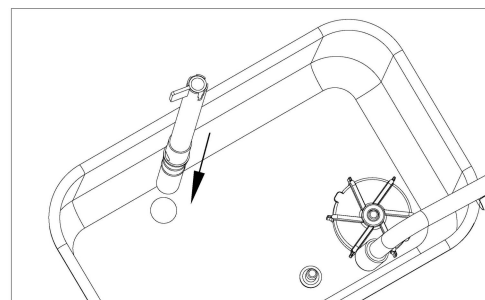
Pull upward the upper cover from the mixer and take it away.

Upper cover for mixer



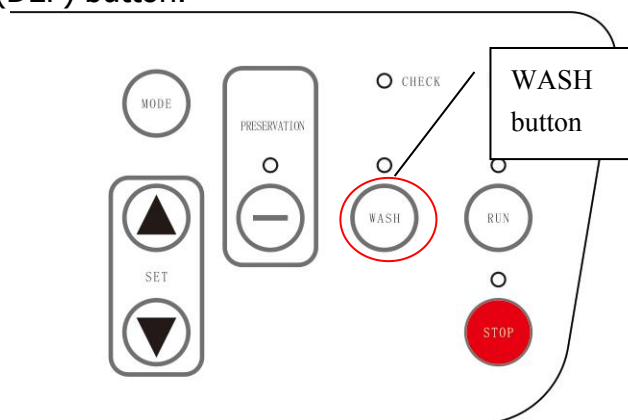
4. Install expansion tube.

Press expansion tube into the feeding hold in hopper.

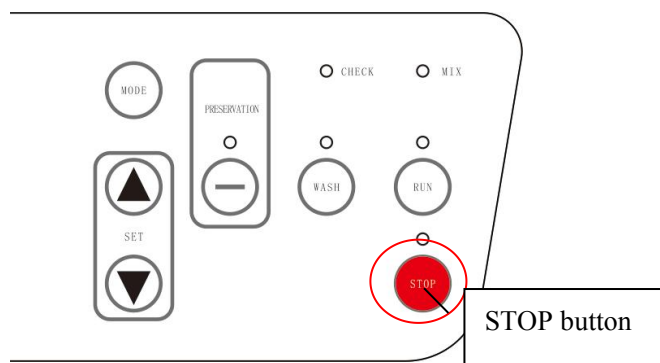


● Usage method 4 (Machine cleaning)

1. Pour clean cool water into 1/3 hopper, then press (WASH) button, or press (WASH) + (DEF) button.

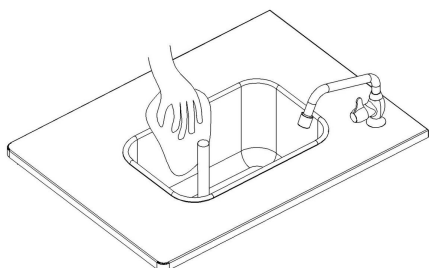


2. After about 3 minutes, or press (WASH) + (DEF) button until the water temperature in the machine reaches to 60 °C and mixer stops running automatically, or press (STOP) button to stop the current procedure working as needs.



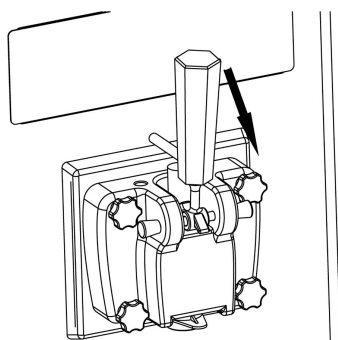


3. Be sure the machine stops working, to wipe the hopper and the area near the hopper with towel.



4. Place a bucket under the throat block outlet, pull down the handle. Press (WASH) button). Drain out the water from cylinder and hopper.

Note: In mixing (cleaning) procedure, do not press (RUN) button.

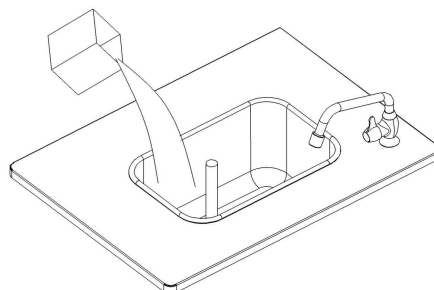


### ● Usage method 5 (Machine disinfecting)

Step 1: Prepare a few qualified disinfectant, use warm water and follow the manufacturer's specifications

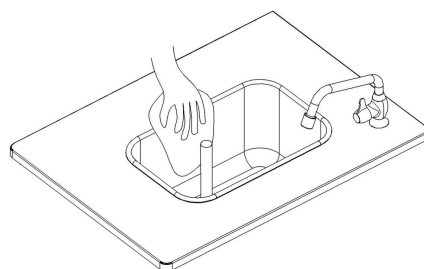


Step 2: Put the disinfectant into the hopper.



Note: You have already disinfected the hopper and the parts, therefore, before continue these steps, please must to clean and disinfect your hands.

Step 3: Clean the hopper with brushes or towel.



Step 4: Press (WASH) button to feed the disinfectant into the cylinder from hopper, let the disinfectant mixing in the cylinder for at least 5 minutes.

Step 5: Place a bucket under the throat block outlet, pull down handle drain out the disinfectant from the cylinder.

Note: If still some water can not be drained out, then must take away the expansion tube.

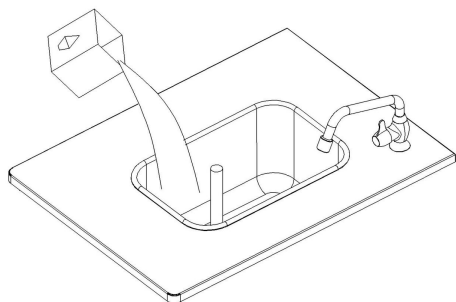
Step 6: After disinfecting the machine, pour clean cold water into the hopper, repeat the operations from step 3 to step 5.





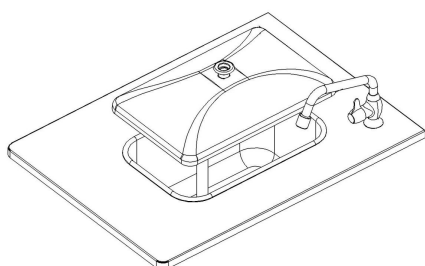
## ● Usage method 6 (Ice cream production)

Step 1: Put the mixture into the hopper.



Step 2: Press (WASH) button to start mixer (mixing function) working for at least 2 minutes, until the mixture is thoroughly feeding into the cylinder from hopper.

Step 3: Cover the lid to the hopper.



Step 4: Press keyboard (STOP) button + (RUN) button to enter into normal ICE CREAM PRODUCTION procedure.

(Note: Before enter into ICE CREAM PRODUCTION procedure, double check whether there is mixture in the cylinder, and the expansion tube works fine.)

## ● Usage method 7 (Heat treatment)

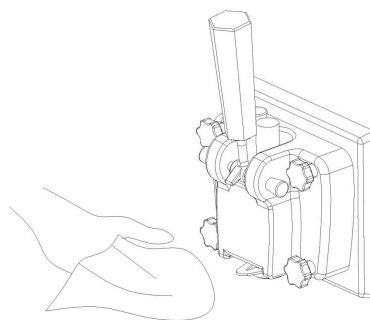
**This procedure must be worked once**

**every day.**

**Heat treatment procedure** is the function of the stirring tank and the temperature of the materials in the material storage cylinder in a certain time increases to the specified temperature to kill bacteria, and then the temperature drop low enough to prevent food from decay.

**Important notice: The mixture quantity in the hopper must be at the level of 1/3, and must be not high than the air pump installation hole on the hopper wall.**

Step 1: Wipe the throat block, the area at the bottom of the throat block, the front board and other area with water or food accumulation.



Step 2: Press keyboard (PASTEURIZING) button to start Heat treatment procedure working.

There are three cycles in Heat treatment procedure: (1) Heating up the material temperature to 60 °C , (2) Constant the heating temperature for about 30 minutes, (3) Pre-cooling overnight (Keep cooling temperature at 5°C overnight).



Do not attempt to extract product or remove the machine during the heating cycle, at that time the mixture is very hot, and the machine has high pressure.

(Note: When the heating cycle is finished, the indicator light is still on. At that time, it will enter into the last cycle "pre-cooling overnight". If needs to stop it working at once, press (STOP) button to do it.)

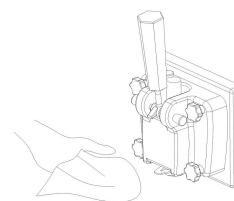
### ● Usage method 8 (Daily startup procedure)

Step 1: Prepare a few qualified disinfectant, use warm water and follow the manufacturer's specifications.

Step 2: Clean the area at the bottom of the throat block with disinfected brushes.

Note: In order to ensure the disinfection effect, use the brush to clean each part for at least 1 minute, and constantly in disinfectant for washing brush

Step 3: Wipe the throat block, the area at the bottom of the throat block, the front board and other area with water or food accumulation.



Step 4: When the machine resumes working, press (STOP) button (power switch), and check whether there is error message displaying on the keyboard (If there is, must clear it and solve it out before normal working procedures.). After troubleshooting, enter into normal refrigeration procedure to make ice cream according to the operation with Usage method 6.

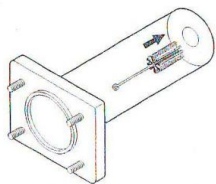
### ● Cleaning with brush tool

Step 1: Preparation of qualified cleaner / disinfectant. Use warm water and follow the manufacturer's specifications

Step 2: To thoroughly clean all disassembled parts with brushes in disinfectant and clean liquid, be sure to remove all of the oil and the slurry film. Be sure to clean the surface of all parts with brushes.

Clean all the parts with clean warm water, place these parts on a clean surface and dry all

Step 3: Take a little clean liquid into cylinder, clean the rear bearing sleeve behind the cylinder with brushes.



Step 4: Clean and wipe all the outer surface of ice cream machine with a clean and disinfected towel.

### ● In cleaning and disinfecting

Cleaning and disinfecting schedules should be managed by your local management, and must strictly abide. In the cleaning and disinfecting process, should emphasize the following points.



It must clean and disinfect every week.

1. Regular thorough cleaning and disinfecting machine, including completely remove and clean with the brushes.
2. All brushes provide a thorough cleaning.
3. Thorough cleaning the rear bearing sleeve behind the cylinder, and the air pump assembly and the throat block assembly.
4. The right to cleaning and disinfection liquid, carefully read and follow the instructions on the label. The cleaning liquid is too

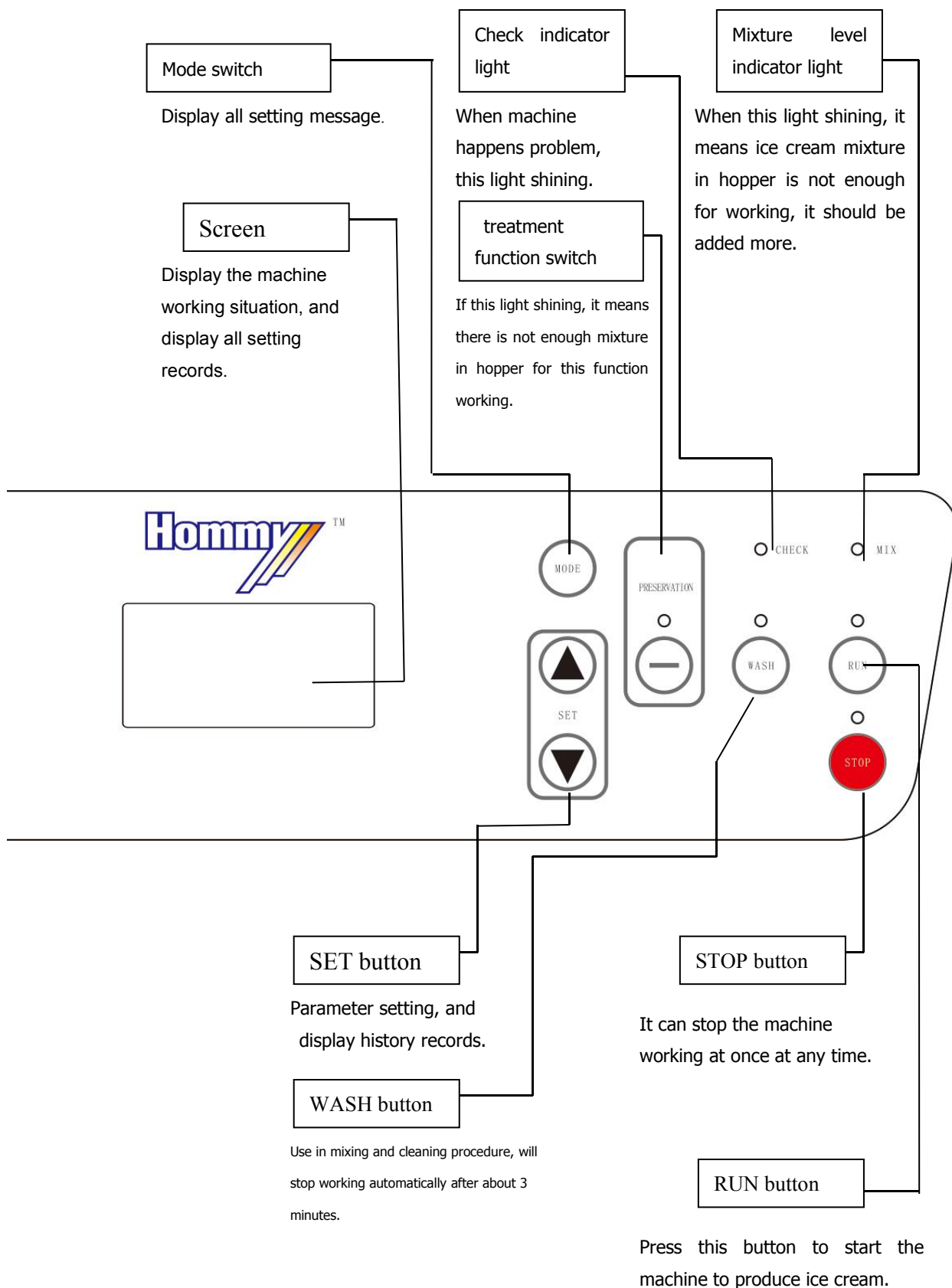
strong may damage the parts, cleaning liquid is too weak to be unable to provide adequate cleaning or disinfecting.

### ● Routine maintenance and checking

1. Replace damaged gaskets in throat block or plugs.
2. Throw away the gasket which is wear, broken or loose, and replace the new ones to work.
3. For the water cooling machine, check whether there is leakage or kink on the soft water pipe. In the cleaning and maintenance of machines when moving back and forth may happen kink, soft water pipe is damaged or broken should only be replaced by professional staff.



### HM901 MACHINE KEYBOARD





## Keyboard instruction

### 1. Switch on the machine (Stand by mode)

Switch on the machine, date and time should be shown on screen.

《Month/Date Hour : Minute (Week)》



06/09 10:15 ( Mon )  
Stop

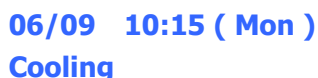
(Figure 1)

### 2. STOP button

Switch on the machine, press (STOP) button to stop the machine running at any mode, the screen will resume to stand by mode.

### 3. RUN button

Press (RUN) button, machine will enter into ice cream production procedure. In this procedure, the indicator light flash, when ice cream is finished, the light to be shining.



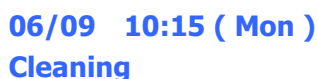
06/09 10:15 ( Mon )  
Cooling

(Figure 2)

### 4. WASH button

Under stand by mode, press (WASH) button to start mixer motor running, the indicator light flash at the same time until this procedure finishes, this procedure will run about 3 minutes and then stop running automatically, at that time, the light shining, press (STOP) button to quit, or wait for about 3 minutes when this procedure stops running automatically.

In mixing (cleaning), the screen displaying as follows:



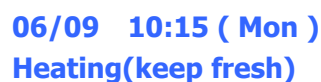
06/09 10:15 ( Mon )  
Cleaning

(Figure 3)

### 5. Pre-cooling overnight button

Pre-cooling overnight procedure, the indicator light flash at that time.

The screen displaying as follows:



06/09 10:15 ( Mon )  
Heating(keep fresh)

(Figure 6)

Note: If there is little mixture in hopper, then this function does not work, at that that, the mixture level indicator light shining, and the screen displaying (Not ready).

### 6. MODE / 【▲】 / 【▼】 button

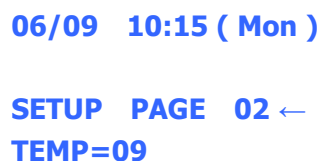
Press (MODE) button to enter into mode setting menu, and press 【▲】 / 【▼】 button to display setting items ①-⑩ on the screen, press again (MODE) button, symbol “←” displays, move it to select setting item as needs, press again 【▲】/【▼】 button to adjust parameter setting as request. When finish setting, press (STOP) button to save and quit.

#### 1 ) Ice cream hardness setting menu (parameter available: 18~80)



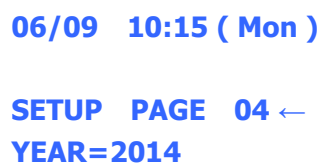
06/09 10:15 ( Mon )  
SETUP PAGE 01 ←  
S/H=30

#### 2 ) pre-cooling temperature setting menu (parameter available: 1~15)



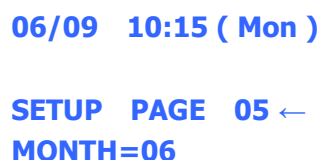
06/09 10:15 ( Mon )  
SETUP PAGE 02 ←  
TEMP=09

#### 3) Year setting menu



06/09 10:15 ( Mon )  
SETUP PAGE 04 ←  
YEAR=2014

#### 4) Month setting menu



06/09 10:15 ( Mon )  
SETUP PAGE 05 ←  
MONTH=06



**5) Date setting menu**

```
06/09  10:15 ( Mon )
SETUP  PAGE 06 ←
DAY=09
```

**6) Hour setting menu (24 hours)**

```
06/09  10:15 ( Mon )
SETUP  PAGE 07 ←
HOUR=10
```

**7) Minute setting menu**

```
06/09  10:15 ( Mon )
SETUP  PAGE 08 ←
MINUTE=15
```

**8) Week setting menu**

```
06/09  10:15 ( Mon )
SETUP  PAGE 09 ←
WEEK=Mon
```

**10) Ice cream quantity summation**

```
06/09  10:15 ( Mon )
SETUP  PAGE 10 ←
CON=1000  RES
```

**11) Parameter data displaying menu** for temperature sensor, motor running current (Press MODE button to go into the menu, press STOP button to exit the menu.)

```
06/09  10:15 ( Mon )
T1=10  T2= -5
        MA=3.0
CON=1000  EXIT ←
```

**Parameter data table:**

Hopper temperature sensor T1=10°C

Cylinder temperature sensor T2=-5°C

Motor current MA=3.0A

Ice cream dispensing quantity CON=1000

**8. Warning message**

When machine happens, the keyboard indicator light flash, error message displaying on the left-lower of the screen as follows:

```
06/09  10:15 ( Mon )
CHECK
ERROR NO: 02
```

Error Code	Description
ERROR NO: 01	Ice cream freezing in cylinder (supercool)
ERROR NO: 02	Motor current protection
ERROR NO: 03	Refrigeration system high pressure protection
ERROR NO: 04	Hopper temperature sensor faulty
ERROR NO: 05	Cylinder temperature sensor faulty
ERROR NO: 06	/
ERROR NO: 07	/
ERROR NO: 08	Phase sequence alarm
ERROR NO: 09	/

**9. Mixture level displaying**

Under normal circumstance, when little mixture in hopper, the mixture level indicator light flash, and no function when press (RUN) button, (PASTEURIZING) button and (DEF) button.

**10. Buzzer function**

- a) Beep sounds when press any operation button.
- b) Beep sounds when warning message happens.

**11: Lock keyboard function**

In (RUN + DEF) procedure, press (RUN) button for



about 5 seconds to lock keyboard, after that no function press any button, press again (RUN) button for 5 seconds to unlock the keyboard, the keyboard resumes working. In lock keyboard mode, the

screen displaying as follows:

06/09 10:15 ( Mon )  
Cooling ( LOCK )

## Warning message table

Error code	Cause	Checking	Indicator light situation
ERROR 01	Ice cream freezing in cylinder (supercool) .	1. Little mixture feeding into cylinder, or stirring shaft poor installation. 2. Ice cream hardness setting inappropriate.	Flash
ERROR 02	Motor overload.	Check motor, thermal relay.	
ERROR 03	Refrigeration system pressure too high.	Check refrigeration system.	
ERROR 04	Hopper temperature sensor faulty.	Sensor connector or sensor wiring loose or damaged.	
ERROR 05	Cylinder temperature sensor faulty.	Sensor connector or sensor wiring loose or damaged.	
ERROR 08	Reverse phase or lack phase alarm.	Reverse the power input of which two FireWire L1 and L2.	

## CORRECT USAGE METHOD

No.	Actual situation	Result	Correct usage method
1	Does not remove sealing gaskets in cleaning.	Residue and oil remaining on components can not be completely washed.	Clean the removing sealing gaskets with gauze.
2	To soak components in chlorine solution for a long time.	Components are eroded can not be used.	Use the specified lube.
3	Do not use the specified lube.	Components are difficult to remove because oil stick hardly on them.	Use the specified lube.
4	Do not coat lube on transmission shaft.	Cause abnormal noise, and cause material leaking.	Use the specified lube.
5	Do not coat lube on the sealing gaskets (for throat block and plugs).	Damage the sealing gaskets, and cause material leaking.	Use the specified lube. (Don't coat lube to the sealing gaskets on the back of throat block.)
6	Plastic scrapper is not securely installed on stirring shaft.	Damage plastic scrapper and drop down, and cause ice cream dispensing not hard enough.	Re-install plastic scrapper on stirring shaft according to the user manual.



7	Plastic scrapper excessive wear.	Cause supercool, and ice cream dispensing not hard enough.	Regular replacement.
8	Do not install axis sleeve.	Damage main components.	Installed correctly.
9	Fixing bolt on throat block is not tightening enough.	Cause material leaking from the sides of throat block.	Screw again and tighten the fixing bolts.
10	Press down RUN (ice cream production) button when there is water remaining in the cylinder.	Ice cream freezing in cylinder, and damage stirring shaft and throat block, and the main components.	Prohibit press refrigeration (ice cream production) button if there is water remaining in cylinder.
11	There is water remaining in cylinder when ice cream production procedure is running.	Machine happens abnormal noise in refrigeration (ice cream production) procedure. After the procedure, ice cream overrun is 0% and no ice cream dispensing.	To completely remove water from cylinder. To start defrost procedure working when no ice cream dispensing out.
12	Ice cream mixture is full in cylinder.	Ice cream overrun down to 0%, and expansion tube is ejected.	Pour about 2.2 liters material into hopper, close the expansion tube the air intake, dispense out 5~6 pieces of ice cream and then adjust the air intake to the minimum.
13	Do not disinfect the plugs, throat block fixing bolt with drugs.	In heat treatment procedure, some material the temperature does not heat up and rise, and leading to bacteria.	Thoroughly sterilize with alcohol and other drugs.
14	Do not clean the hopper lid.	Leading to bacteria.	After cleaning, thoroughly sterilize with alcohol and other drugs.
15	Do not check and clean the drip tray inside the machine.	Cause machine internal leakage and increase maintenance costs.	Check and clean the leaking material from the transmission shaft. If leaking material is too much and out of normal, please replace the sealing gaskets and the damaged component.
16	Do not clean the hands before replacing expansion tube.	Components contaminated again after finishing the heat treatment procedure. E. checking failed, almost all of the resulting.	Expansion tube is the place mostly caused bacteria, therefore must clean the hands before using. At work, but also disinfect with alcohol spray.

## TROUBLESHOOTING GUIDE

### ● Troubleshooting guide (1):

No.	Trouble	Possible cause	Solution
1	Completely not running, displays	① Lack phase sequence. ② Stirring shaft reverses rotation.	① Check power supply and power cable. ②、③ Replace component.





	E8 error code.	③ Main PC board bad working.	
<b>2</b>	Mixer motor can not work, and E2 error code displays on keyboard.	① Lower voltage. ② Main motor bad working. ③ Main PC board bad working. ④ AC contactor bad working. ⑤ Overload relay bad working.	① Improve power supply. ② Replace component. ③ Check wire, power supply socket, or replace main PC board. ④、⑤ Replace component.
<b>3</b>	Compressor can not work.	① Lower voltage. ② Compressor bad working. ③ Overload relay bad working. ④ Main PC board bad working.	① Improve power supply. ② Replace compressor. ③ Replace component. ④ Check wire, power supply socket, or replace main PC board.
<b>4</b>	Mixer can not run.	① Mixer motor bad working. ② Main PC board bad working. ③ Mixer cover bad working.	Replace component.
<b>5</b>	Motor constantly rotating.	① Main PC board bad working.	Replace main PC board.
<b>6</b>	Ice cream dispensing softer, or machine not stop running.	① Little material. ② ice cream staying in cylinder for long time, or new feeding material in cylinder not cool enough. ③ Plastic scrapper (for stirring shaft) damage. ④ Outside temperature above 40 °C. ⑤ Insufficient exhaust space. ⑥ Refrigerant leaking. ⑦ Incorrect ice cream hardness setting. ⑧ Temperature sensor faulty.	① Adjust bigger the expansion tube air intake, or air pump not feeding. ② Start defrost function (press refrigeration button + defrost button) to make the ice cream in the cylinder become soft, or add new material into old material. ③ Replace component. ④、⑤ Improve location condition. ⑥ After repairing and inject new refrigerant according to the guidance. ⑦ Re-adjust hardness setting. ⑧ Replace temperature sensor (for cylinder), main PC board.

## ● Troubleshooting guide (2):

No.	Trouble	Possible cause	Solution
<b>1</b>	Not refrigerating.	① Refrigerant leaking. ② Refrigerant not enough in re-injecting. ③ Compressor bad working. ④ Temperature sensor both in cylinder and hopper bad working (after checking). ⑤ Cooling solenoid valve bad working. ⑥ AC contactor (for compressor) bad working. ⑦ Main PC board bad working.	① Re-inject new refrigerant after repairing according to the guidance. ② Inject refrigerant according to the guidance. ③~⑦ Replace component. ⑧ Correct connector position.



		⑧ Temperature sensor (in cylinder, in hopper) loose (bad working).	
<b>2</b>	No ice cream dispensing when pulled down handle.	<ul style="list-style-type: none"> <li>① Little material in cylinder.</li> <li>② The expansion tube air intake close.</li> <li>③ Expansion tube (air intake) blocked with material.</li> <li>④ Ice cream too hard in cylinder.</li> <li>⑤ Bad mounting position for micro switch.</li> <li>⑥ Micro switch bad working.</li> <li>⑦ Ac contactor (for main motor) bad working.</li> <li>⑧ Main motor bad working.</li> <li>⑨ Main PC board bad working.</li> </ul>	<ul style="list-style-type: none"> <li>① Pull out the expansion tube, or air pump to drain out material from the cylinder.</li> <li>② Open the air intake to minimum position, or pull out the expansion tube.</li> <li>③④ Start defrost function working first, and produce ice cream again.</li> <li>⑤ Correct mounting position.</li> <li>⑥~⑨ Replace.</li> </ul>
<b>3</b>	There is ice on ice cream surface.	<ul style="list-style-type: none"> <li>① In working (in ice cream production procedure), there is water staying in cylinder.</li> <li>② The stirring shaft plastic scrapper damage.</li> </ul>	<ul style="list-style-type: none"> <li>① Add new material after dispensing 5~6 piece of ice cream.</li> <li>② Replace component.</li> </ul>
<b>4</b>	Material freezing on hopper wall (thickness above 10 mm).	<ul style="list-style-type: none"> <li>① Temperature sensor (in hopper) bad working (after checking).</li> <li>② The stirring shaft plastic scrapper damage, or forgot to install.</li> </ul>	<ul style="list-style-type: none"> <li>①、② Replace component.</li> <li>③ Check wire, connector and replace component (mixer connector, stirring shaft bearing, mixer motor, main PC board.)</li> </ul>
<b>5</b>	Material enough in hopper, but no message displays on keyboard.	<ul style="list-style-type: none"> <li>① Temperature sensor wiring loose.</li> <li>② The surface of power pole of temperature sensor is dirty.</li> <li>③ Main PC board bad working.</li> </ul>	<ul style="list-style-type: none"> <li>① check the wiring connection.</li> <li>② Polish the surface of power pole, or replace temperature sensor.</li> <li>③ Replace main PC board.</li> </ul>
<b>6</b>	Material leaking from stirring shaft and the bearing.	<ul style="list-style-type: none"> <li>① Annular gasket damage.</li> <li>② Bearing damage.</li> <li>③ Bearing sleeve damage.</li> <li>④ Sealing component bad working.</li> <li>⑤ Bearing fixing nut loose.</li> <li>⑥ Main shaft and the connecting shaft is bad connecting, and not on the same level.</li> </ul>	<ul style="list-style-type: none"> <li>①~④ Replace component.</li> <li>⑤ Re-screw and tighten.</li> <li>⑥ Remove and take away the gear box, main shaft and the connecting shaft, and r e-adjust them.</li> </ul>

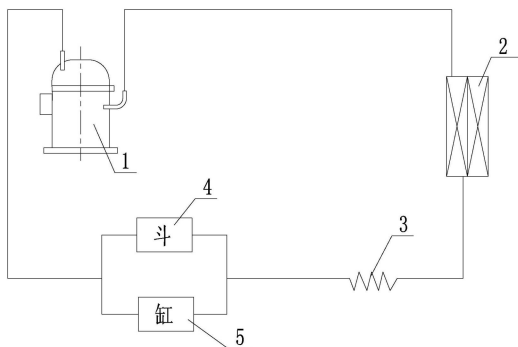


### ● Troubleshooting guide (3):

No.	Trouble	Possible cause	Solution
1	Material leaking from throat block.	<ul style="list-style-type: none"> <li>① Fixing bolt loose.</li> <li>② Throat block bad installation.</li> <li>③ O seals drop off.</li> <li>④ Sealing gasket damage.</li> </ul>	<ul style="list-style-type: none"> <li>① Screw and tighten.</li> <li>② Tighten the throat block again with fixing bolts.</li> <li>③ When installing throat block, take care to prevent the O seals drop off.</li> <li>④ Replace the sealing gasket.</li> </ul>
2	Can not remove the bearing sleeve.	<ul style="list-style-type: none"> <li>① Do not use lube.</li> <li>② In weekly inspection, does not disassemble and clean.</li> </ul>	<ul style="list-style-type: none"> <li>① Use lube.</li> <li>② Disassemble and clean.</li> </ul>
3	Can not remove the stirring shaft.	<ul style="list-style-type: none"> <li>① Stirring shaft and bearing sleeve are not on the same level.</li> </ul>	<ul style="list-style-type: none"> <li>① Adjust the positions of stirring shaft and bearing sleeve.</li> </ul>
4	Abnormal noise happens.	<ul style="list-style-type: none"> <li>① There is not enough material in cylinder.</li> <li>② Machine runs ice cream production procedure, when there is water remaining in cylinder.</li> <li>③ Bearing sleeve damage.</li> <li>④ Plastic scrapper (for stirring shaft) damage.</li> <li>⑤ Mixer motor bad working.</li> <li>⑥ Machine plates and components inside machine are vibrating.</li> <li>⑦ Material leaking into mixer motor.</li> </ul>	<ul style="list-style-type: none"> <li>①、② As per the user manual.</li> <li>③~⑤ Replace the damage component.</li> <li>⑥ Check and adjust.</li> <li>⑦ Clean the leaking material, or replace the mixer motor.</li> </ul>
5	Strange smell happens.	<ul style="list-style-type: none"> <li>① Motor belt burnt.</li> <li>② Material decays in drain inside the machine.</li> <li>③ Bad material leaking from bearing sleeve.</li> <li>④ Since the decomposition cleaning too slow, resulting rusty material in cylinder.</li> </ul>	<ul style="list-style-type: none"> <li>① Replace motor belt, or adjust the belt.</li> <li>② Clean the drain, or replace it.</li> <li>③ Clean the material leaking position, replace the bearing sleeve.</li> <li>④ Remove, disassemble, clean, and disinfect the component.</li> </ul>



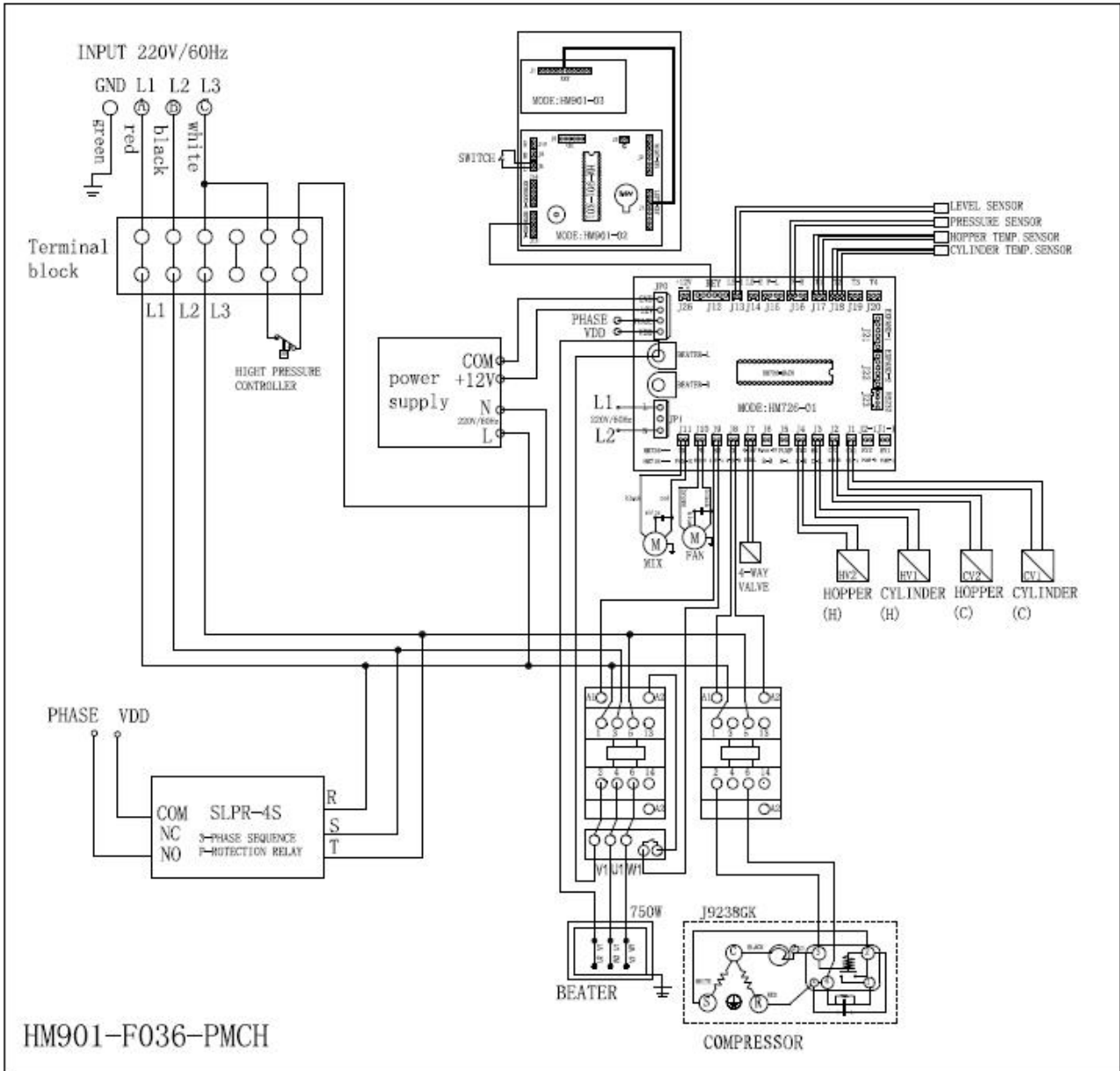
## REFRIGERATION SYSTEM DIAGRAM



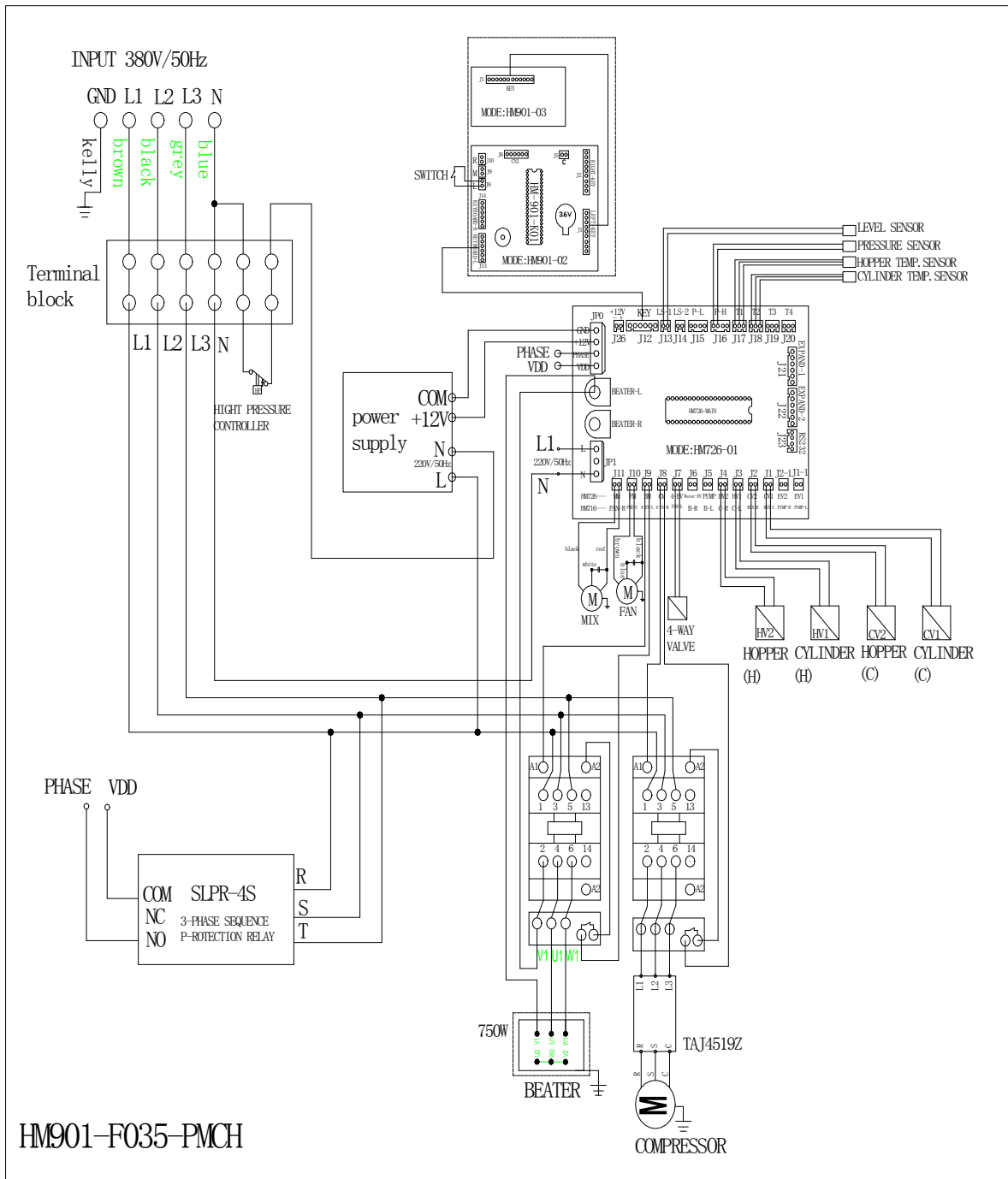
1. Compressor.    2. Condenser.    3. Throttling device.    4. Hopper.    5. Cylinder.

## ELECTRIC WIRING DIAGRAM

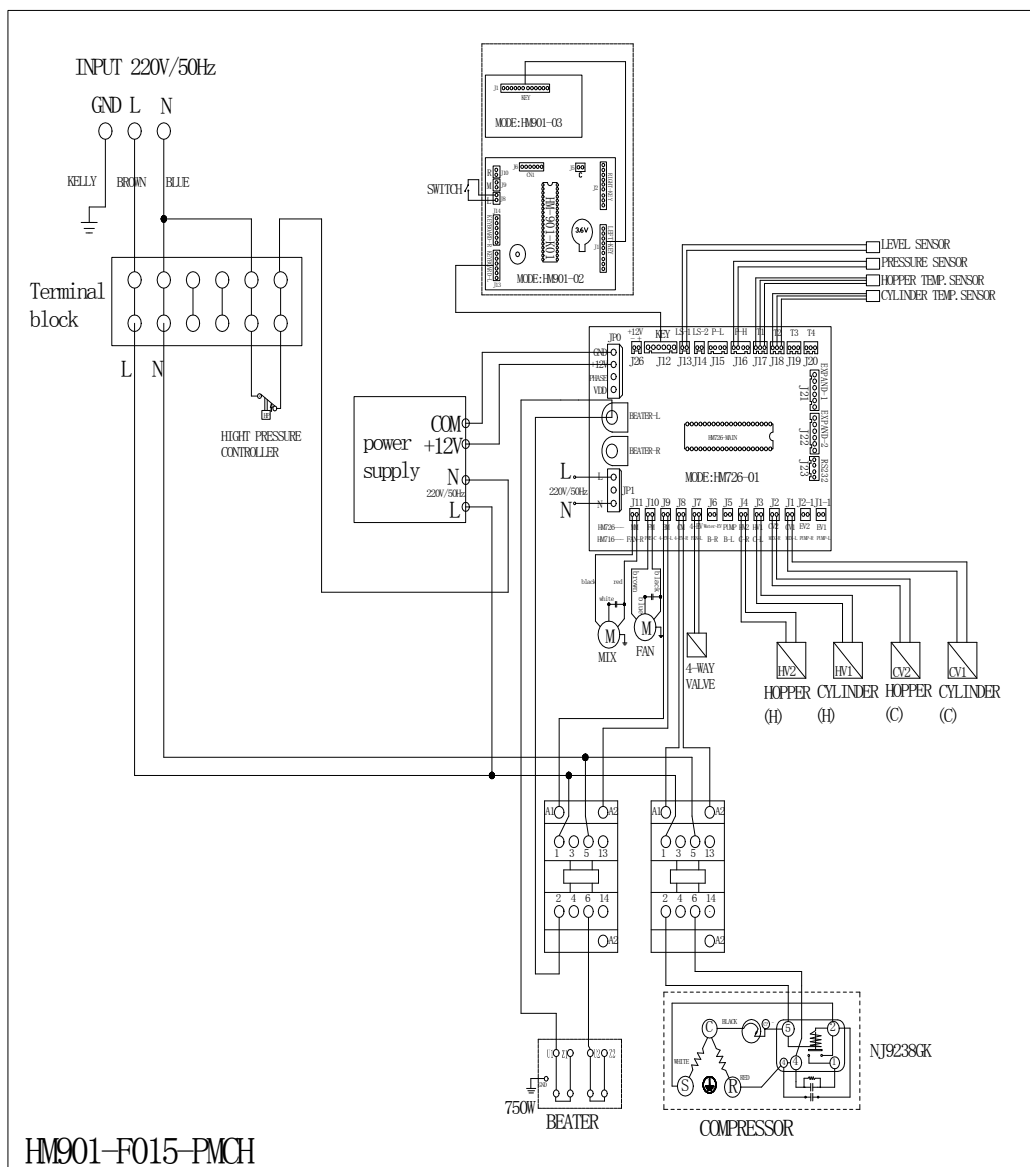
Electric wiring diagram: HM901 air-cooled model (3 phase, 220V/60Hz)



**Electric wiring diagram: HM901 air-cooled model (380V/50Hz)**



Electric wiring diagram: HM901 air-cooled model (220V/50Hz)



## SPARE PART REPLACEMENT

Spare parts	3 months	6 months	1 year
Sealing ring for plug	•		
Sealing gasket on throat block	As request		
Sealing gasket for cylinder	•		
Sheath A for front scrapper (for stirring shaft)	•		
Sheath B for front scrapper (for stirring shaft)	•		
Plastic scrapper for stirring shaft	•		
Locating sleeve for stirring shaft	•		



Plastic axis sleeve	•		
Sealing gasket (13 style) for transmission shaft	•		
Sealing ring for inner pipe (for expansion tube)	•		
Sealing ring for outer pipe (for expansion tube)	•		
Sealing gasket for hopper lid	•		
Brushes		As request	At least

The company reserves the right to the improvement of all models, subject to change, without notice!

Manufacturer: HOMMY ENTERPRISE (XINHUI) COMPANY LIMITED.

Address: NO. 36-1 INDUSTRY ROAD, HUICHENG TOWN, XINHUI AREA, JIANGMEN CITY, GUANGDONG PROVINCE, 529100 CHINA.

Post code: 529100.

Fax: (0750) 6310618

Website: <http://www.hommy.com>