

BATCH FREEZER USER GUIDE (OPERATION MANUAL)

EMC 212

Manual Number: V001 – 29.01.2019

1. TABLE OF CONTENTS

1. TABLE OF CONTENTS.....	1
2. CONGRATULATIONS AND THANK YOU!	2
3. SYMBOLS IN MANUAL.....	3
4. CONTACT DETAILS & HELP DESK.....	3
5. ELECTRICAL CONNECTION NOTICE	5
6. TECHNICAL SPECIFICATIONS	6
7. WARNINGS & SAFETY.....	6
8. LIFTING AND TRANSPORTATION	8
9. PARTS IDENTIFICATION	9
9.1 Exploded View of Machine	9
9.2 Exploded View of Front Cover	10
9.3 Exploded View of Beater	11
9.3.2 EMC212	11
10. MACHINES WITH WATER-COOLED CONDENSER	13
11. OPERATING PROCEDURE.....	14
12. CONTROL PANEL	14
12.1 MAIN SCREEN.....	14
12.2 PRODUCTION SCREEN.....	17
12.3 DISPENSE SCREEN.....	18
12.4 MIXING SCREEN	18
13. BEATER ASSEMBLY	21
14. FRONT COVER ASSEMBLY	22
15. BEATER-MACHINE ASSEMBLY	24
16. FRONT COVER-MACHINE ASSEMBLY.....	25
16.1 FRONT COVER LOCKING.....	25
16.2 ICE CREAM OUTLET COVER OPENING	26
17. MAKING ICE CREAM	27
18. DISPENSING THE ICE CREAM	28
18. CLEANING and SANITIZING THE MACHINE.....	28
19. REGULAR MAINTENANCE INSPECTION PLAN	30
19. POSSIBLE FAILURES AND SOLUTIONS	30
WARRANTY DOCUMENT AND CONDITIONS	0

2. CONGRATULATIONS AND THANK YOU!

Congratulations and thank you for acquiring a Batch Freezer Machine.

If you encounter a problem with the Batch Freezer Machine, please contact your local service technician.



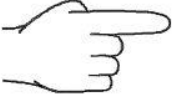



Please familiarize yourself with the machine by taking some time to study this manual. If you get to know this little ice-cream factory, it has the potential of making good profit.

Notice and no warrantee: These pages are provided as a service and informational purpose only, and on the assumption that the recipient of the Batch Freezer and the operator of the Batch Freezer is competent to perform the required tasks, including, but not limited to operation and/or repair of power equipment, for which the information is provided, and that person is knowledgeable and mindful of proper safety precautions. Neither the manufacturer nor any of their respective employees make any claims about the suitability or fitness of the information contained herein which is provided strictly on an "as-is" basis, without any express or implied warranty, guarantee, assurance of quality, conformity of specifications, reliability, functionality, or suitability. In no event shall the manufacturer and/or its employees be held liable, whether in contract or tort, to any party for any direct, indirect, punitive, or consequential damages, including, but not limited to lost profits and business interruption, arising out of any errors, typographical or otherwise, inaccuracies, omissions, or delays arising out of or pertaining to the use, reliance on, or inability to use any type of information, part, or good, even if notified in advance about the possibility of such action. Information in this manual is subject to change without notice. All rights reserved.



**BEFORE USING THE MACHINE READ CAREFULLY THIS
MANUAL. PAY ATTENTION TO THE SAFETY INSTRUCTIONS.**

3. SYMBOLS IN MANUAL

	<p style="text-align: center;">WARNING</p> <p>When you see this symbol on your freezer or in this manual, be alert to the potential for personal injury. Follow recommended precautions and safe operating practices.</p>
	<p style="text-align: center;">ELECTRIC DANGER</p> <p>This symbol indicates the presence of electric shock hazards.</p>
	<p style="text-align: center;">NOTE</p> <p>It points out significant information for the stuff involved.</p>
	<p style="text-align: center;">PROTECTIONS</p> <p>This symbol means that operator must use protection against an implicit risk of accident.</p>
	<p style="text-align: center;">MACHINE OPERATOR</p> <p>He/She is the person who has no specific expertise and she/he will operate the freezer.</p>
	<p style="text-align: center;">MAINTENANCE ENGINEER</p> <p>He/She is a skilled engineer for the operation of the machine under normal conditions; he/she is able to carry out interventions on mechanical parts and all adjustments, as well as maintenance and repairs. He/She is qualified for interventions on electrical and refrigeration components.</p>

1. Freezer Serial Number: You can find the specifications of the product on the ID label.

- manufacturer
- manufacturers address
- model
- ID number
- manufacturer type
- power supply voltage
- nominal frequency
- maximum current
- cooling gas type
- cooling gas weight
- power

3. A brief description of the problem

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5. ELECTRICAL CONNECTION NOTICE



1. Please make sure that the power supply conforms to the electrical data label (Rating Plate).
2. Check the data label (Rating Plate) for the required circuit breaker amperage. Only plug into an electrical wall socket that complies with the required amperage of the machine.
3. Machine should be installed according to the local authority electrical code/regulations it is used in, as well as to other work health and safety requirements. If you are not sure, please contact your local authority for details.



4. This symbol indicates the presence of electric shock hazards. Inside the enclosures of the machine there are electrical shock hazards, therefore, **DO NOT** remove any panels if you are not a qualified technician of an authorized service provider.



5. **WARNING:** To avoid risk of injury from electric shock, if you are not a qualified and duly authorized service technician, do not open the enclosure panels on the sides and back of the machine.

6. The power supply must be properly grounded to prevent electrical shock. Check with a qualified installer for compliance.

6. TECHNICAL SPECIFICATIONS

Model	Net Weight (kg)	Dimensions (cm)	Power (kW)	Voltage (V)
PROFI 90/70	350	53 x 73 x 142	11,2	400

Table 1

7. WARNINGS & SAFETY



Read and understand all safety messages in this manual. Read and understand the safety decals on your freezer. Take notice of the location of all decals on the freezer and keep the safety decals in good condition. Check them periodically and replace missing, damaged or illegible safety decals. The safety decals must remain in place and legible for the life of the freezer.

Keep your Freezer clean and tidy! When it needs repairing, work with an authorized service agent.

the manufacturer is concerned about the safety of the person/s using the machine. Therefore please take note and abide by amongst others, the following WARNINGS:



- Always follow local authority food safety and other health codes.
- Always follow in-store operating and food hygiene safety and other health code
- Do not clean the machine with high-pressure water.
- Use potable water to clean the parts.
- **Do NOT** use the Machine before studying this User Guide. Failure to follow this instruction may result in equipment damage, poor performance, health hazards or personal injury.





- Only use food-grade lubricant when changing or replacing the O-rings on dispensing cover.
- A potential risk exists if the User Guide instructions and other safety precautions are not strictly followed.
- **Do NOT** allow anyone to attempt any repairs to the machine, unless the main power supply to it has been disconnected from the power supply point.
- Never open the panels to reach inside the Freezer body. (Only by authorized technicians)



- Technical maintenance must be done by authorized technicians.
- **Do NOT** allow untrained personnel to operate the Batch Freezer.
- **Do NOT** insert or remove the beater from the freezing barrel while the Machine is connected to the power supply. First isolate the power supply.



- **Do NOT** switch ON the Machine at the wall socket switch when the following has not yet been done: (a) the beater is inserted properly (b) the barrel head is fitted correctly and the nuts screwed on correctly and tightly, and (c) the barrel is flooded with Mix.
- When removing, replacing or cleaning the removable parts do so with caution because the beater blades and front cover have sharp edges that can easily cause injury.
- To make product dispensing easier, only use the plastic spatula supplied. Never use metal spatulas as these could damage the machine.

WINTER STORAGE



If the place of business is to be closed and the machine won't run during the winter months, it's important to protect the freezer.

Disconnect the freezer from the main power source to prevent possible electrical damage.

For **WATER-COOLED** freezers, disconnect the water supply. Use the air pressure on the outlet side to blow out any water remaining in the system. This is extremely important. Failure to follow this procedure may cause severe and costly damage to the refrigeration system.



NOTICE: the manufacturer will not take any responsibility if the users do not follow all the instructions as described in this User Guide.

8. LIFTING AND TRANSPORTATION

WARNINGS FOR SAFE OPERATION



Pay due attention to legally required safety measures.

At work wear suitable clothing. Do not wear ties, jeweler's chains or belts, which could get caught in the machine.



Do not shift or dislocate the safety switches or protective parts. Make sure that the lifting device is in good condition and that its load Capacity exceeds the weight of the appliance (refer to the technical specifications data sheet).

Lift the appliance following the instructions for its use and maintenance, Pay attention to the handling and handgrip locations. The use of a suitable lifting device is recommended.



While lifting or moving the appliance do not stand under the machine. Do not turn the appliance after holding the cables or the water hose has lifted it.

If you have to attend to any work higher up above the appliance, you should use a suitable ladder and not the appliance for support.

9. PARTS IDENTIFICATION

9.1 Exploded View of Machine

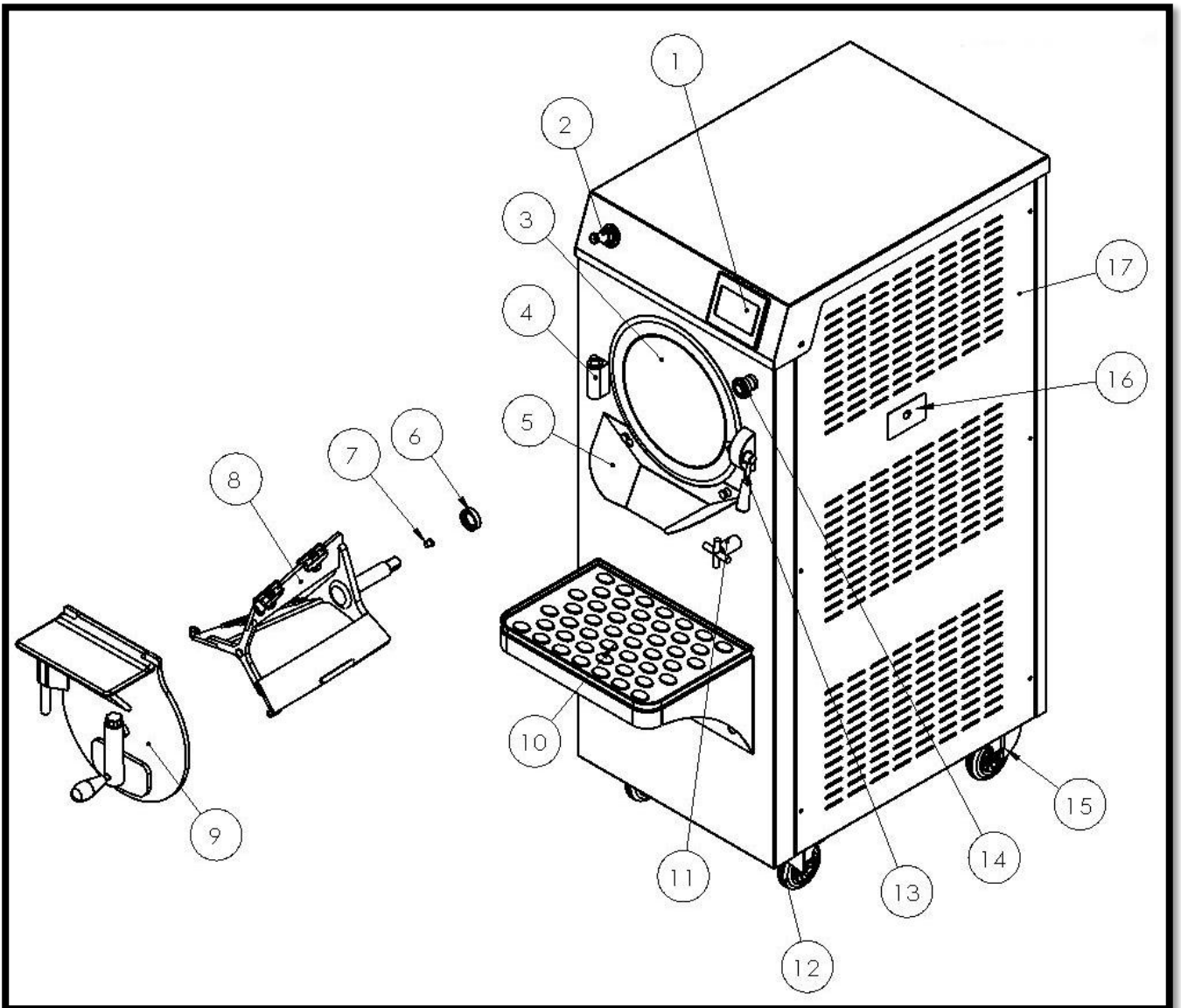


Figure 1

NO	PART NAME	QUA.
1	Control Panel	1
2	Water Dispenser	1

3	Barrel (Cylinder)	1
4	Front Cover Hinge	1
5	Ice-cream Output Chute	1
6	Beater Seal	1
7	Plug Seal	1
8	Beater Group	1
9	Front Cover Group	1
10	Pan Shelf	1
11	Water Regulator Valve	1
12	Rotating Wheel	2
13	Front Cover Handle	1
14	Emergency Stop	1
15	Fixed Wheel	2
16	Drip Drawer	1
17	Side Panel (Right)	1

Table 2

9.2 Exploded View of Front Cover

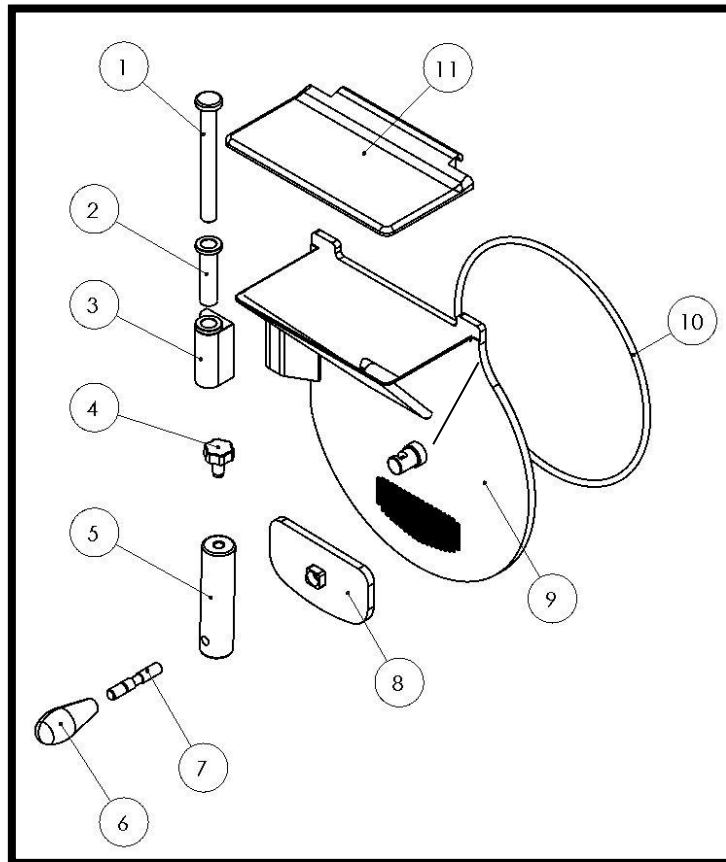


Figure 2

Table 3

*o-ring dimensions 272,4x6,99 mm for EMC212

9.3 Exploded View of Beater

9.3.1 EMC212

NO	PART NAME	QUA.
1	Hinge Pin	1
2	Front Cover Hinge - Bush	1
3	Front Cover Hinge	1
4	Ice Cream Dispensing Handle Screw	1
5	Ice Cream Dispensing Handle	1
6	Outlet Cover Tapered Handle M12	1
7	Dispensing Handle Stud	1
8	Ice Cream Outlet Cover	1
9	Front Cover Body	1
10	Silicon O-Ring*	1
11	Feedbox Cover	1

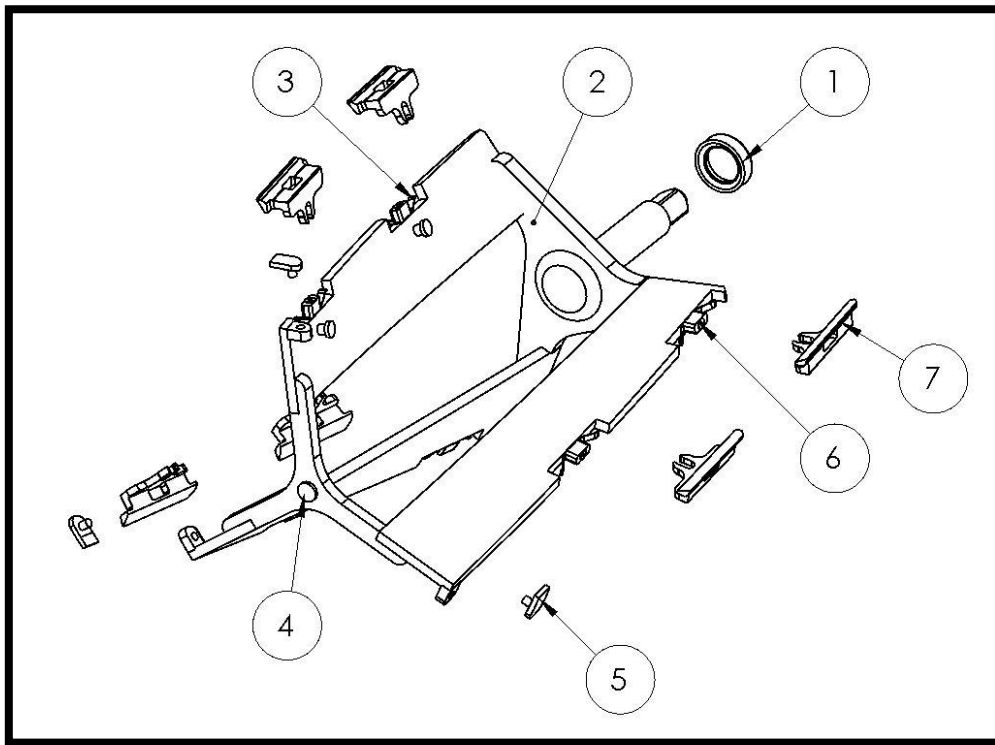


Figure 3

NO	PART NAME	QUA.
1	Beater Seal	1
2	Beater Body	1
3	Scraper Springs	6
4	Beater Centering Support Pin	1
5	Beater Centering Support Pad	3
6	Spring Fasteners	6
7	Scraper Blades	6

Table 4

10. MACHINES WITH WATER-COOLED CONDENSER

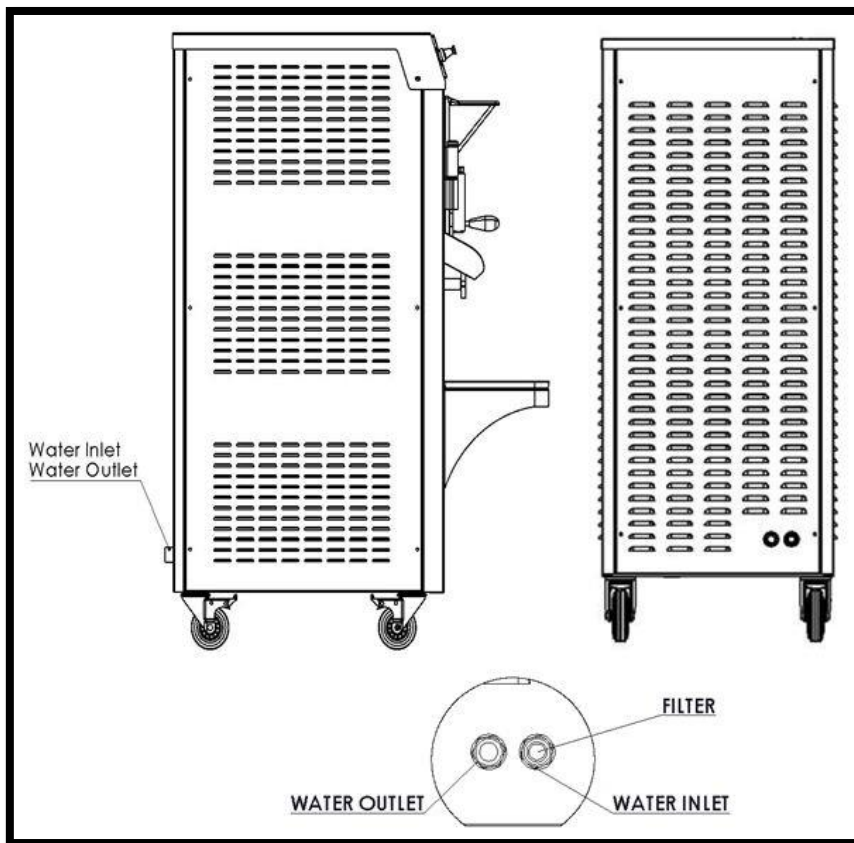


Figure 9



Water-cooled machine must be connected to running water supply, or a cooling tower. Water must have a pressure between **1-10 bar** and a delivery at least equal to the estimated hourly consumption.

Connect inlet pipe marked by plate “Water Inlet” to water supply installing a shut-off valve, and outlet pipe marked by plate “Water Outlet” to a drain pipe, installing a shut-off valve.



If water valve is retarded, this operation will have to be carried out by skilled personnel. Valve adjustment must be carried out in such a way that no water flows when machine is off and lukewarm water flows when machine is on.

Water consumption increases if temperature of entering water is above 20°C.



The filter should be cleaned every 3 months.

The use of potable water in the cooling system is recommended.

11. OPERATING PROCEDURE

1. Always wash your hands with soap and potable water before assembling the machine.
(Preferably use new paper towels to dry your hands)
2. Only use the removable parts after they have been washed sanitized and air-dried.
3. Fit the beater assembly only when the machine is powered off.
4. Follow all the instructions of this manual and the operating procedures of the store owner, and at all times follow recognized in-store hygiene procedures, in particular those in respect of dairy products.
5. Repairs must be done by the persons who are authorized by the manufacturer, if not, any product failure warrantee will become invalid and void.

12. CONTROL PANEL

12.1 MAIN SCREEN

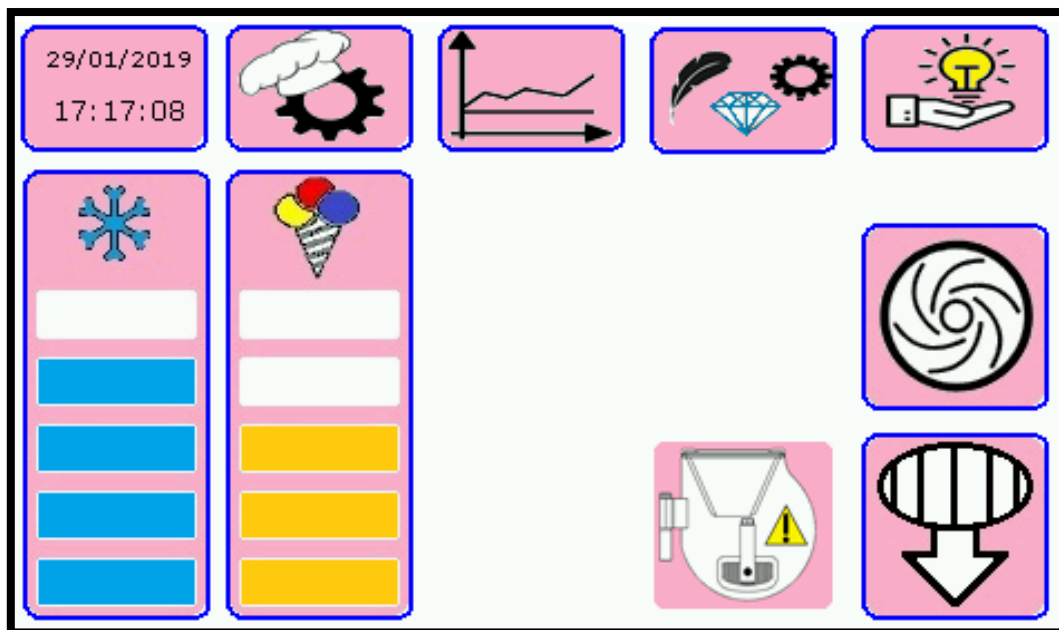


Figure 10: Main Menu

The descriptions of the icons on the main screen are as follows.



MIXING

In the MIXING mode, the barrel will be agitated, however no refrigeration will occur.

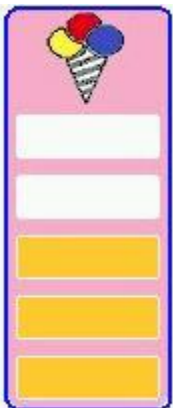


TEMPERATURE SETTING

The icon shows the set temperature, at which the machine produces the ice cream.

The temperature setting must be increased or lowered according to the ice cream mixture.

As the setting go upward, the coolness of the ice cream mixture increases.



ICE CREAM PRODUCT SETTING

The product setting must be increased or lowered according to the filling ratio of the cylinder.

The higher button corresponds to the larger quantity of ice cream mass poured into the machine.

In the product mode, the barrel will be agitated and refrigeration will occur. As the material spilled into the machine increases the setting should be higher.

After entering the temperature settings and product settings, the PRODUCT SCREEN appears.

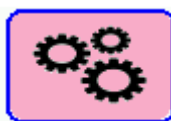


SETTING PRODUCTION HARDNESS

By touching this button, we can adjust the machine to stop or continue to work when the ice cream has reached the desired consistency.



By touching this button, we ensure that the machine automatically stops after reaching the hardest level where the ice cream mixture can come.



By touching this button, we can manually adjust the consistency of the ice cream. The machine does not stop automatically, it needs manual intervention. This setting remains the same unless changed.



DISPENSE

In the DISPENSE mode, the barrel will be agitated faster for dispensing the ice cream easily.



FRONT COVER WARNING

If the front cover is open or if you disassemble the front cover while machine is running, the machine stops and warning appears on the screen.



RECORDED DATA - GRAPH

Pressing this icon, you can see the "Temperature-Time" graph. (Figure 13)

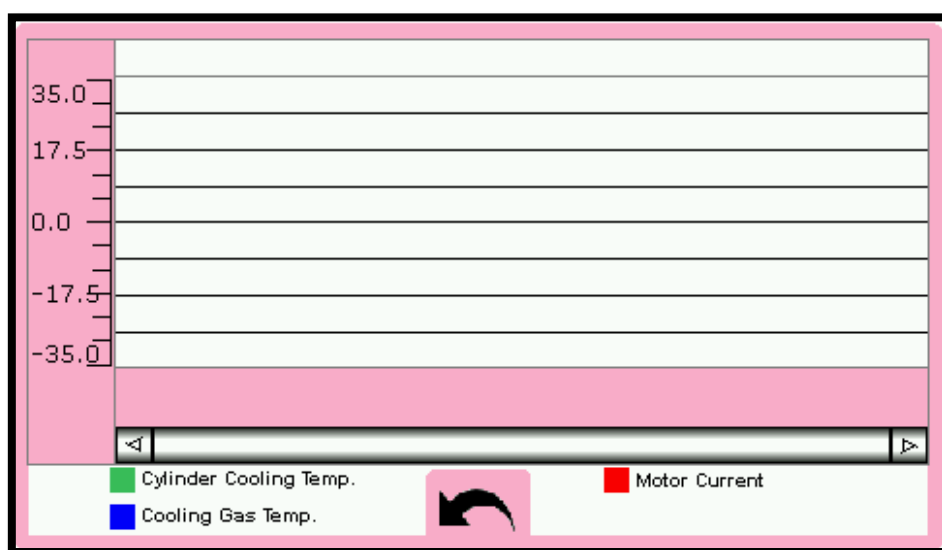


Figure 11

12.2 PRODUCTION SCREEN

After entering the temperature settings and product settings, the machine starts to make ice cream and the PRODUCT SCREEN appears, as shown in Figure 14.

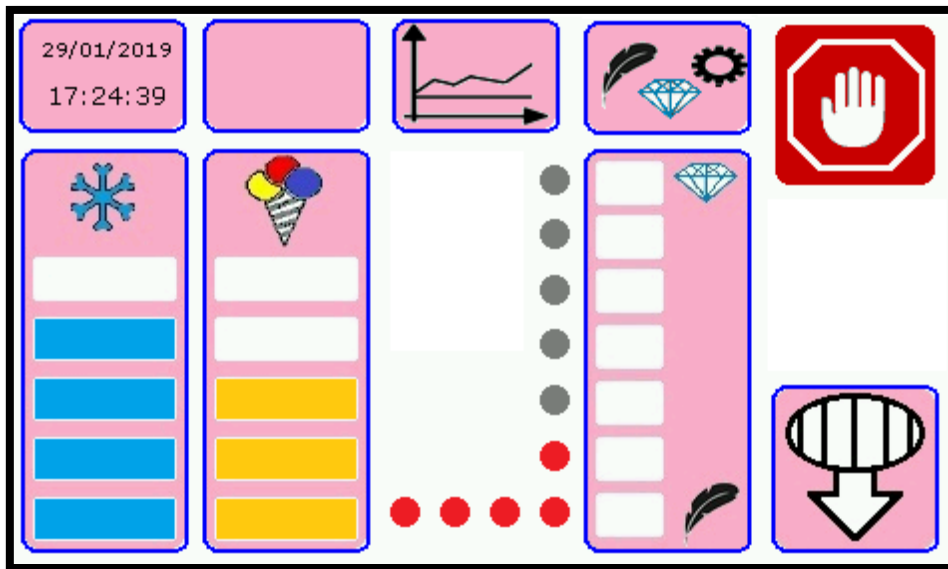


Figure 12: Product Screen



STOP

The touching of this button stops the machine. The main menu appears on the display. When you touch the product setting, the operation resumes.



DISPENSE

In the DISPENSE mode, the barrel will be agitated faster for dispensing the ice cream easily.

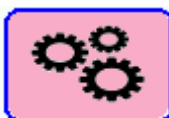


SETTING PRODUCTION HARDNESS

By touching this button, we can adjust the machine to stop or continue to work when the ice cream has reached the desired consistency.



By touching this button, we ensure that the machine automatically stops after reaching the hardest level where the ice cream mixture can come.



By touching this button, we can manually adjust the consistency of the ice cream. The machine does not stop automatically, it needs manual intervention. This setting remains the same unless changed.

12.3 DISPENSE SCREEN

After touching the icon, machine starts to dispense ice cream and the DISPENSE SCREEN appears, as shown in Figure 15.

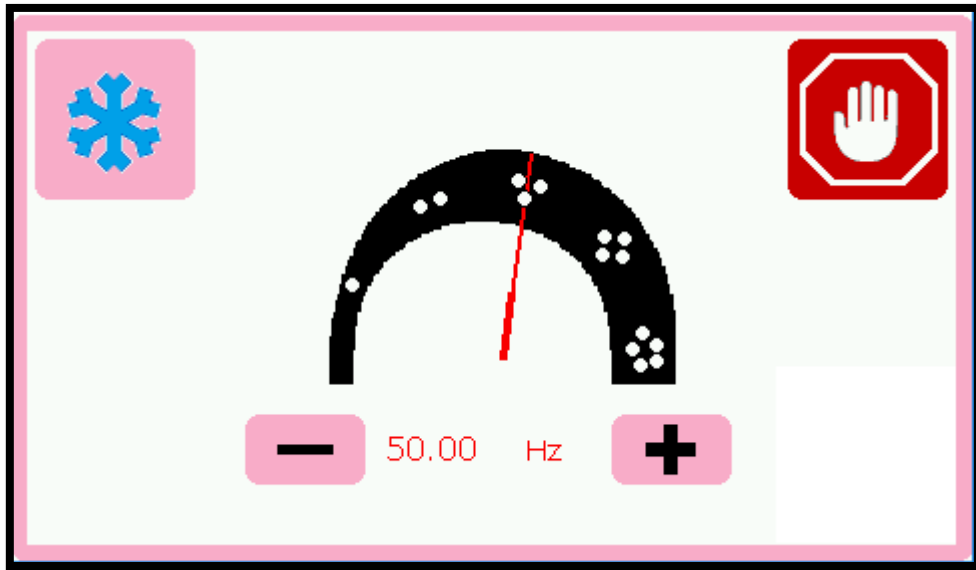


Figure 13: Dispense Screen



STOP

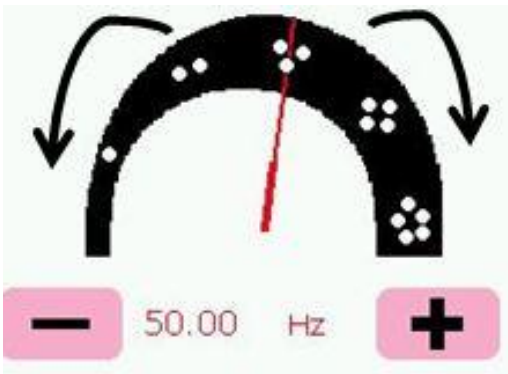
The touching of this button stops the machine.



START COMPRESSOR

If you wish, you can continue the cooling process by touching this icon while in dispense mode.

DISPENSE SPEED



This picture shows the speed of the beater. You can increase or decrease the speed settings by touching the + or - buttons. Moving the pointer to the left and right will allow the mixing speed to be adjusted.

12.4 MIXING SCREEN

After touching the icon, machine starts to mix the mass and the MIXING SCREEN appears, as shown in Figure 16. In this mode, the barrel will be agitated, however no refrigeration will occur.

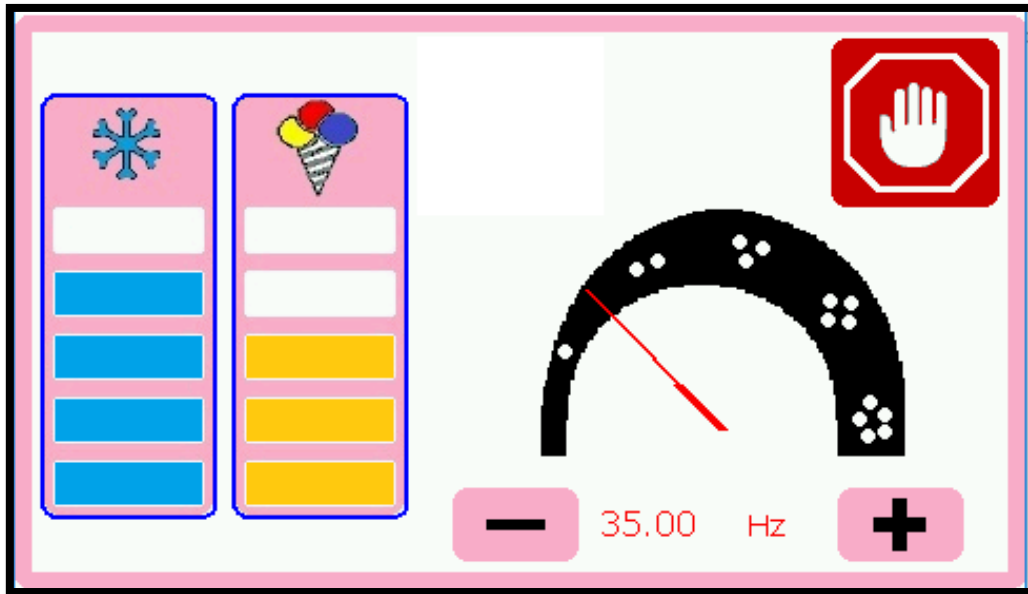


Figure 14: Wash Screen



STOP

The touching of this button stops the machine.

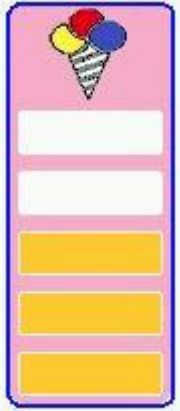


TEMPERATURE SETTING

The icon shows the set temperature, at which the machine produces the ice cream.

The temperature setting must be increased or lowered according to the ice cream mixture.

As the setting go upward, the coolness of the ice cream mixture increases.

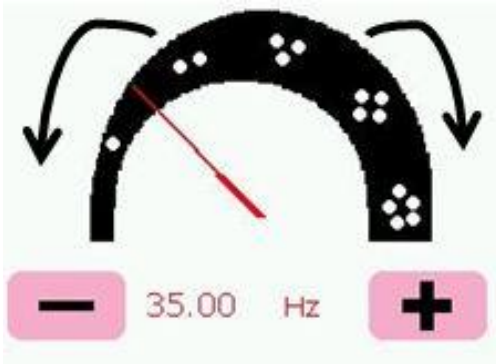


PRODUCT

In the product mode, the barrel will be agitated and refrigeration will occur. As the material spilled into the machine increases the setting should be higher.

After entering the temperature settings and product settings, the PRODUCT SCREEN appears.

MIXING SPEED



This picture shows the speed of the beater. You can increase or decrease the speed settings by touching the + or - buttons. Moving the pointer to the left and right will allow the mixing speed to be adjusted.

13. BEATER ASSEMBLY

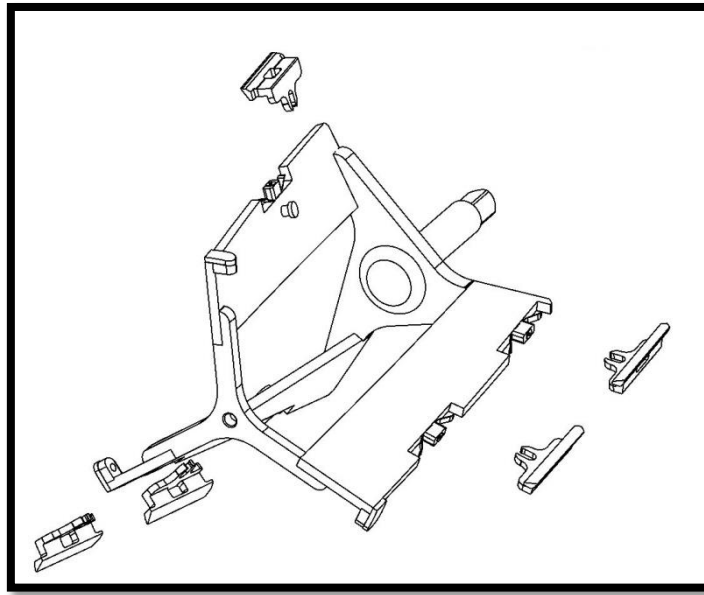


Figure 15

Fit the scraper blades properly. Scraper blades have a chamfer. It must be at the back (seal) side of the beater shaft.

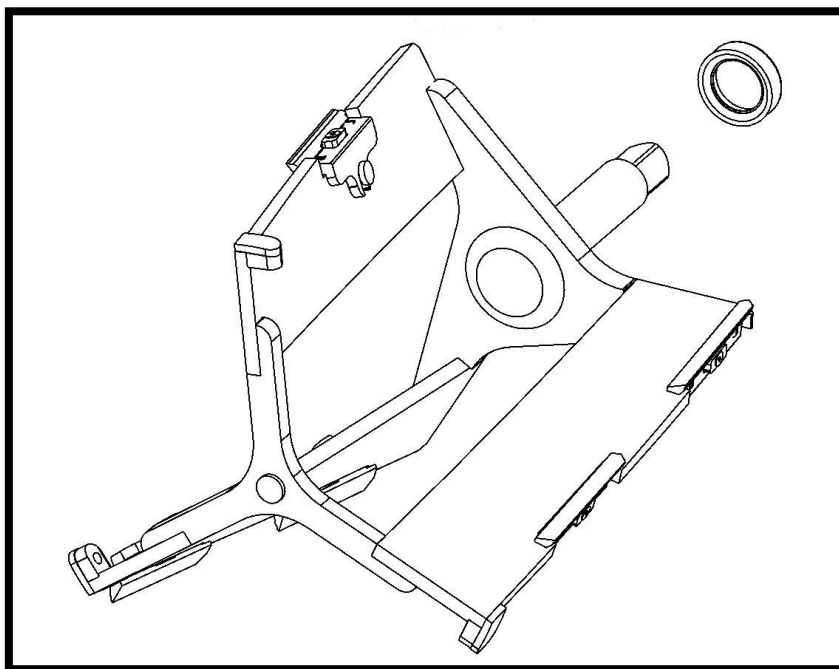


Figure 16

Lubricate the TWO faces of the Beater Seal with food grade lubricant and slip over the beater shaft.

14. FRONT COVER ASSEMBLY

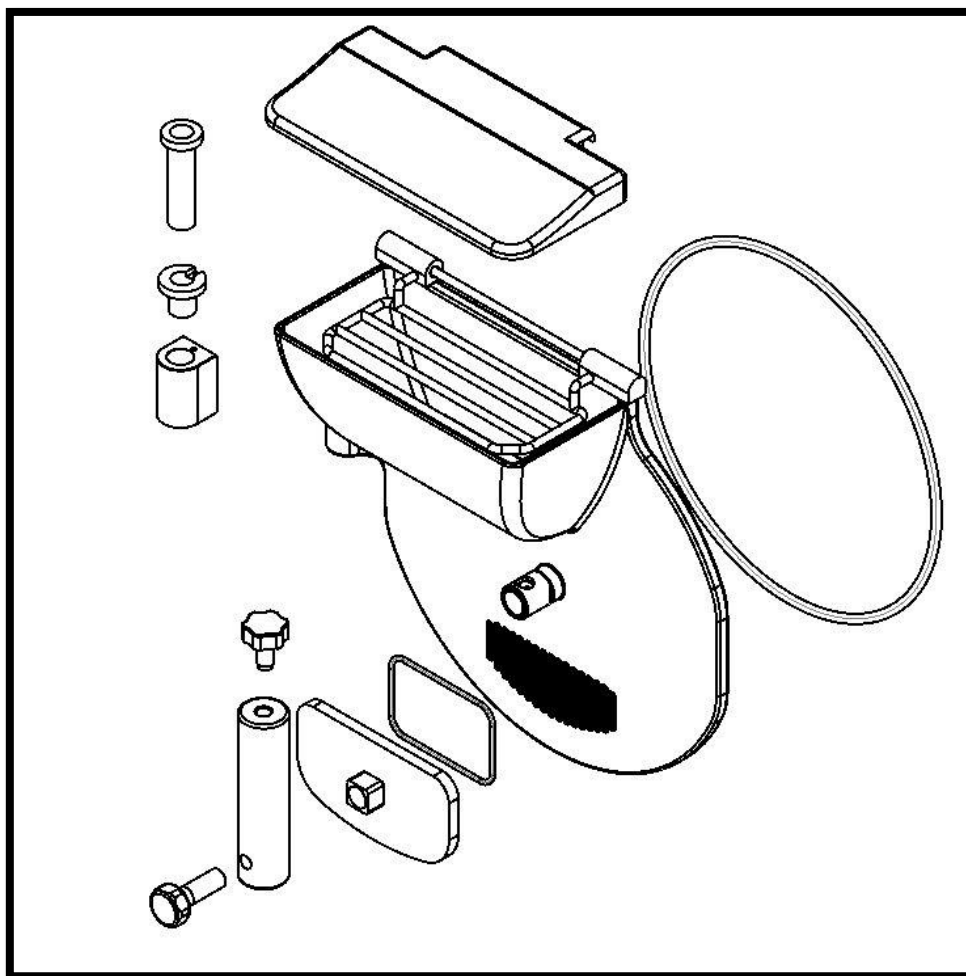


Figure 17

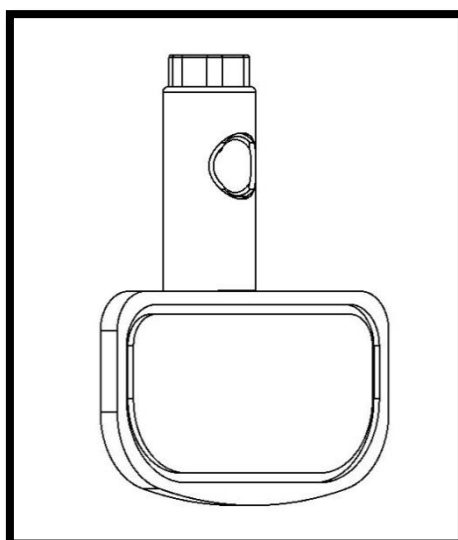


Figure 18

Assemble the ice cream outlet cover with its lubricated o-ring (with food-grade grease) and ice cream dispensing handle.

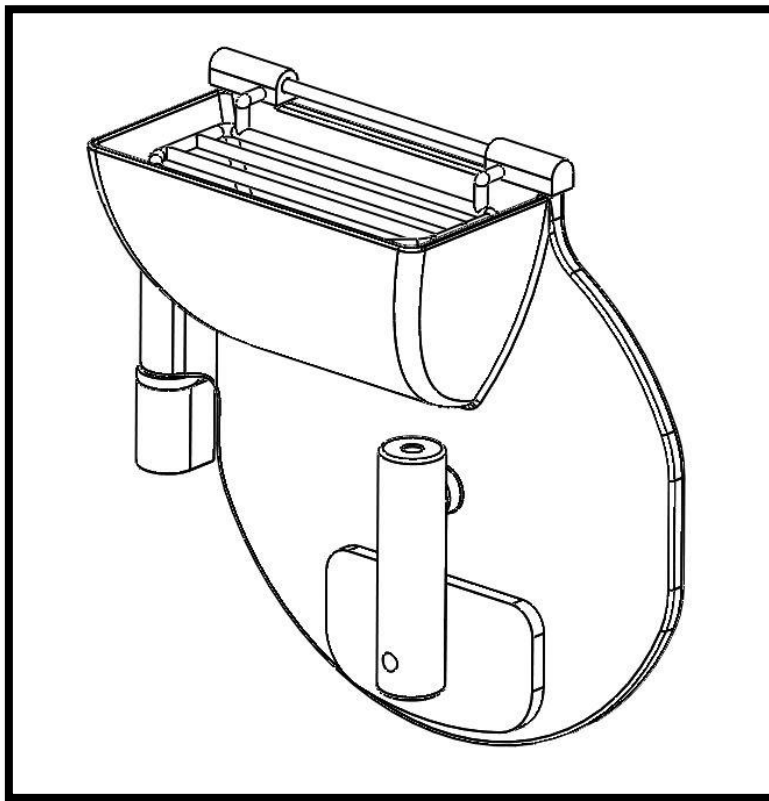


Figure 19

Fit the assembled parts to the front cover. Place the hinge pin as seen in the picture.

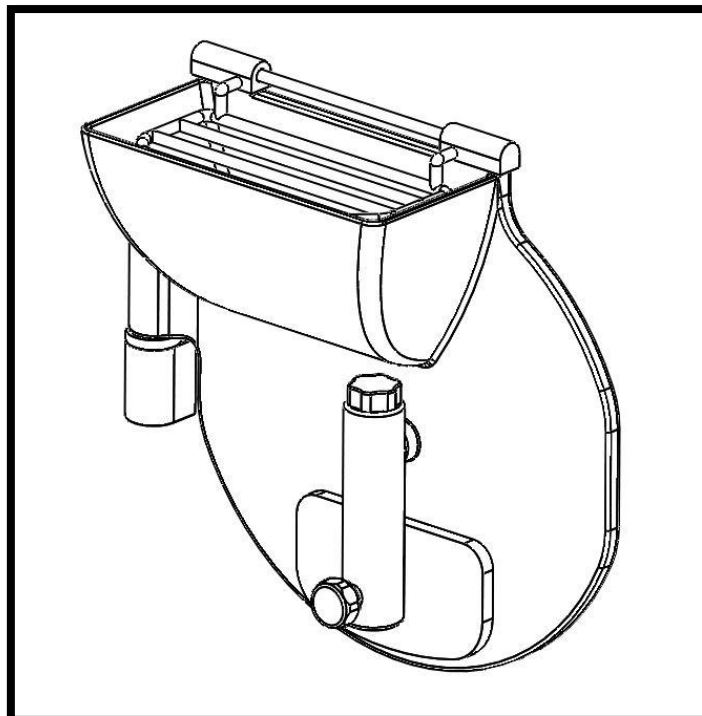


Figure 20

Tighten the ice cream outlet cover and ice cream front cover handle.

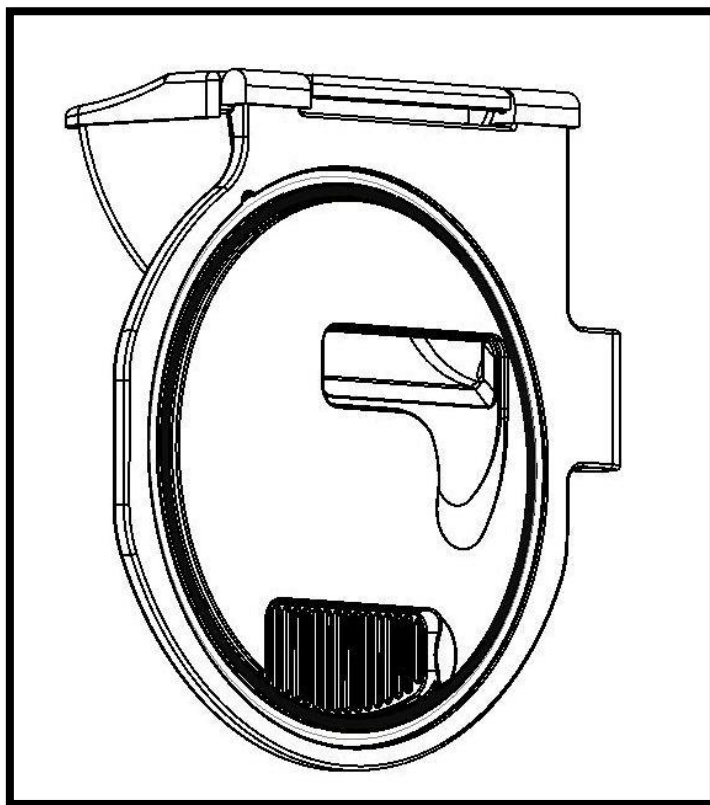


Figure 21

Place the front cover o-ring and feedbox cover.

15. BEATER-MACHINE ASSEMBLY

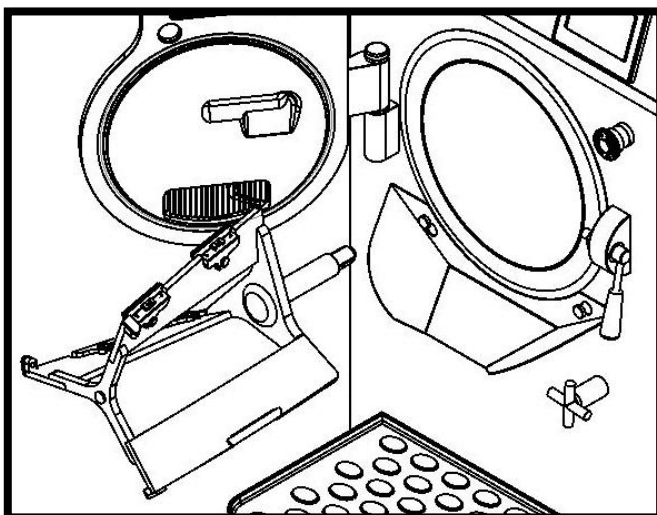


Figure 22

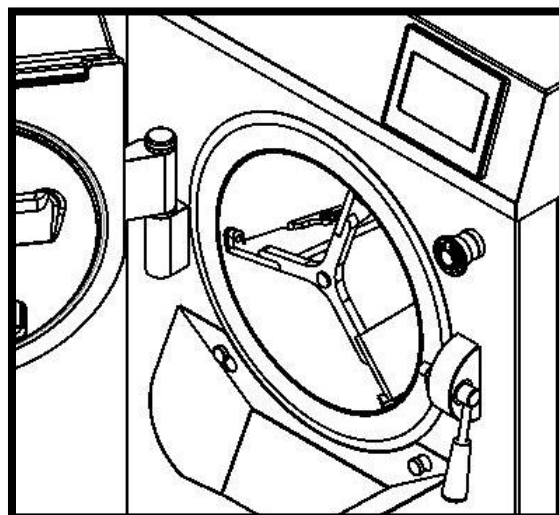


Figure 23

Push the beater inside of the cylinder. Be sure that beater seal is assembled.

When it is pushed in the silicon seal will push it out a few millimeters like a spring.

16. FRONT COVER-MACHINE ASSEMBLY

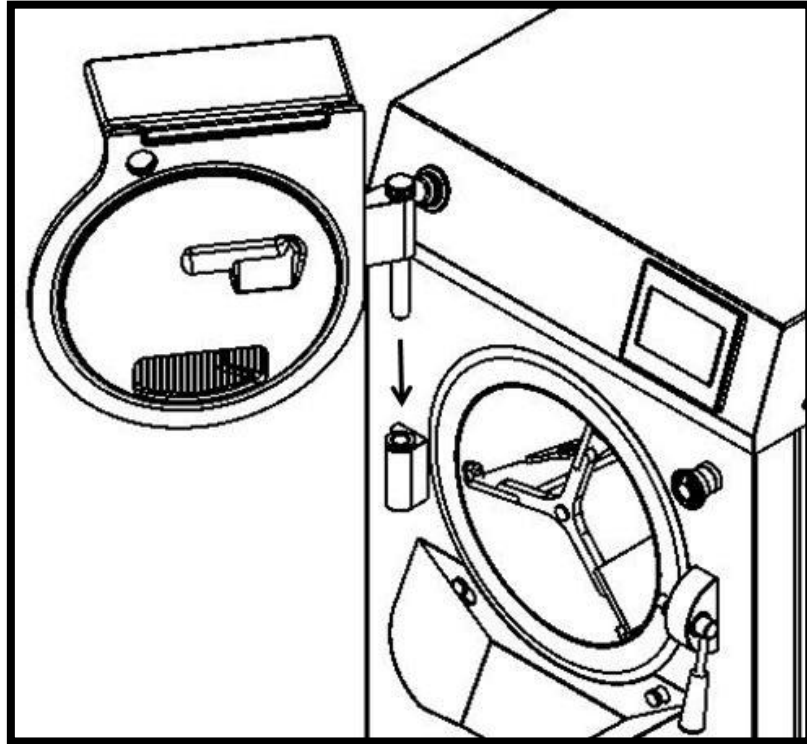


Figure 24

Fit the cover o-ring and place the front cover to the machine by aligning hinge pin to the hinge.

16.1 FRONT COVER LOCKING

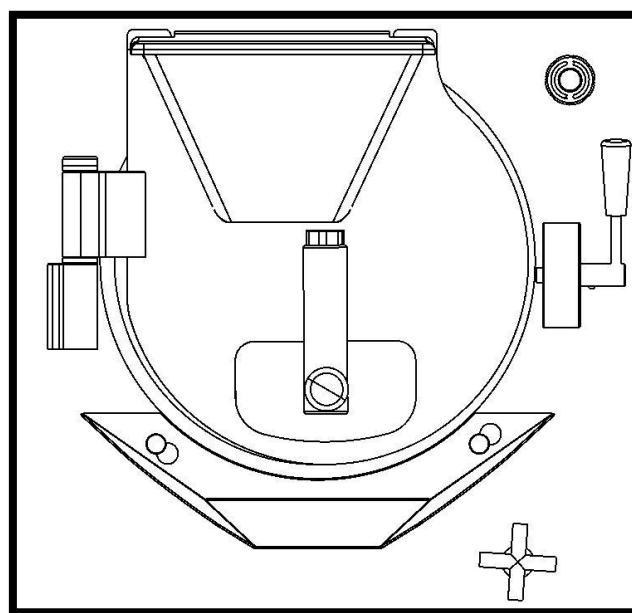


Figure 25

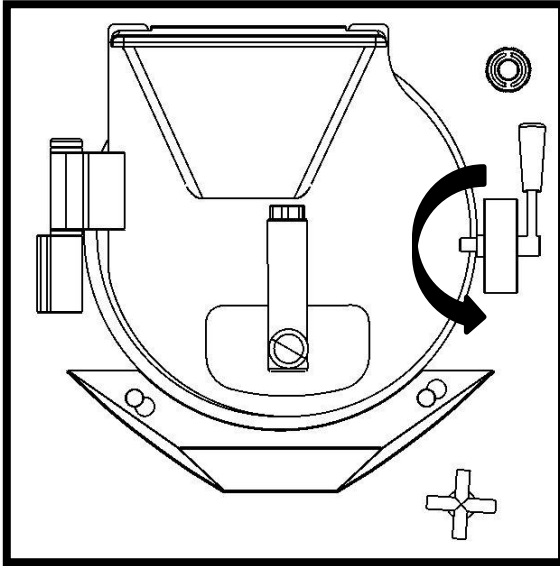


Figure 26

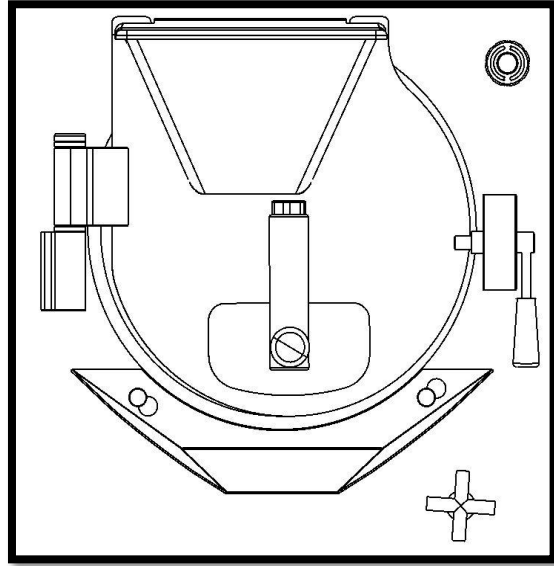


Figure 27

Close the front cover. Then lock it by pushing the handle left and pulling down. (Figure 25-26-27)

16.2 ICE CREAM OUTLET COVER OPENING

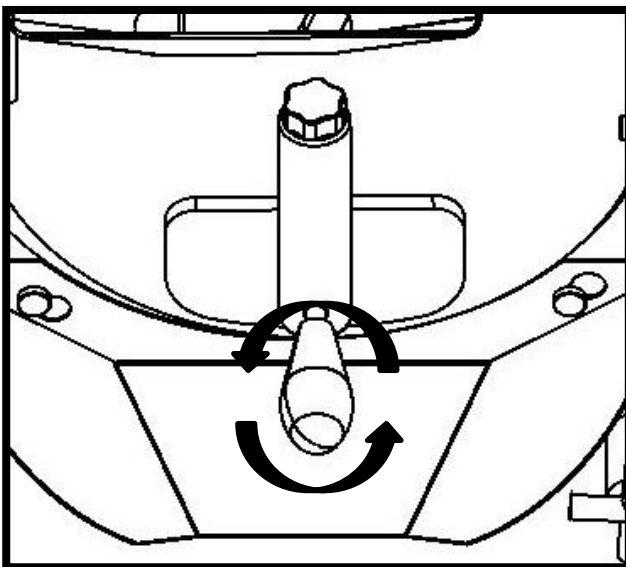


Figure 28

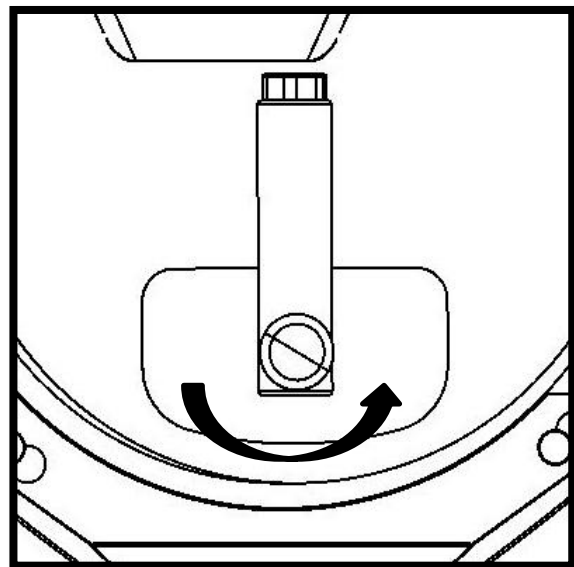


Figure 29

Turn the knob clockwise to open the ice cream outlet cover. After loosening the knob, slide the cover to the right.

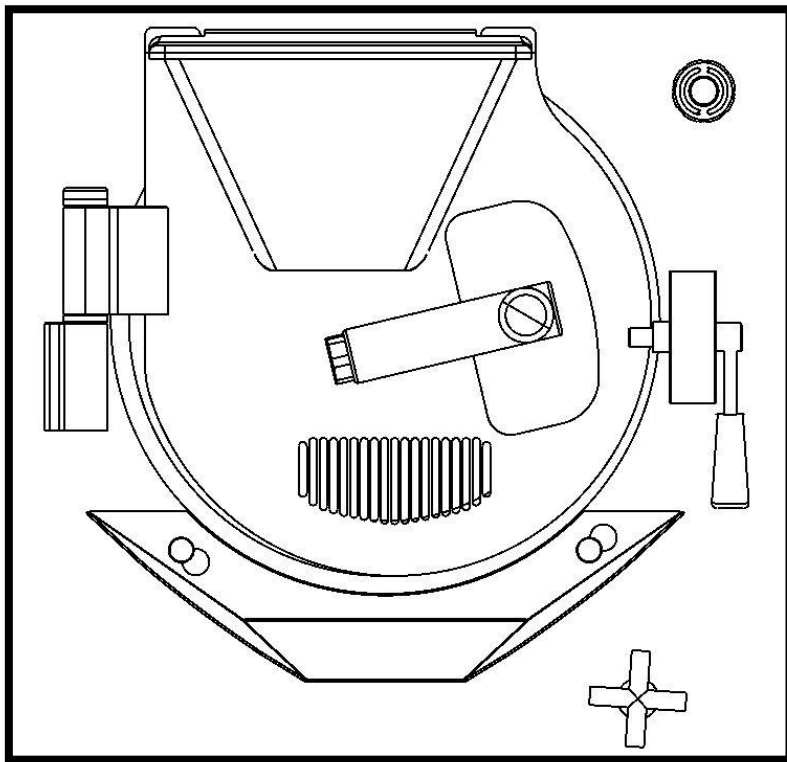


Figure 30

17. MAKING ICE CREAM

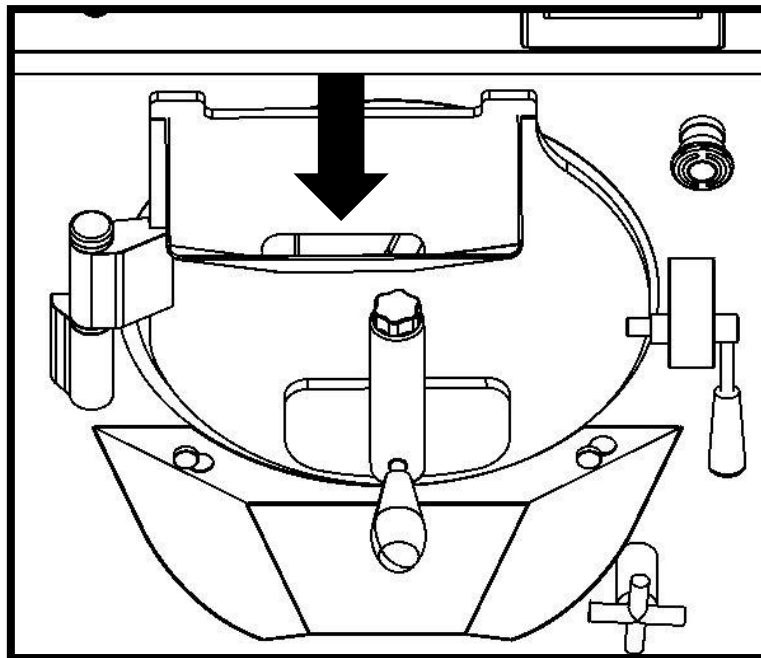


Figure 31

Close the front cover and lock it by pulling down the handle. Also tight the ice cream outlet cover screw and nut.

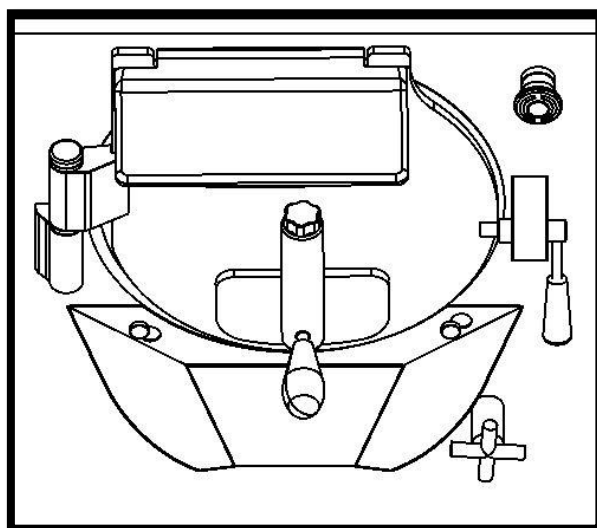


Figure 32

Remove the feedbox cover and charge the ice cream mix to the hopper (the bottom line of the hopper is the maximum mix capacity of cooling cylinder, so do not charge any mix above this line)

Then close the feedbox cover, set the suitable time and press “production” button.



To make product dispensing easier, only use the plastic spatula supplied. Never use metal spatulas as these could damage the machine.

18. DISPENSING THE ICE CREAM

When the product is ready, the machine will alert you by voice. After hearing the buzzer, press “dispense” button to dispense the ice cream.

Model	Mix Added Min - Max (kg)	Gelato Produced Min - Max (lt)
POFI 90/70	2 - 12	3 - 17

Table 5

19. CLEANING and SANITIZING THE MACHINE

After using, you have to clean and sterilize the machine. When you want to wash the machine, be sure front cover and ice cream outlet cover is closed. Then charge the water from the hopper and then press wash button. Open the ice cream outlet cover slowly and remove waste water. After that open the front cover, clean and sanitize all the parts.

- 1- Be sure front cover and ice cream outlet cover is closed. Place an empty container or bucket under the front cover.
- 2- Charge water from the hopper and then press wash button. Allow the machine to run 1 minute before draining the water into the bucket.
- 3- Open the ice cream outlet cover slowly and remove waste water.
- 4- Repeat step 2 and 3 until the water runs clean.
- 5- Disassemble the front cover, clean and sanitize all the front cover and beater parts as per your local requirements and allow the parts to air-dry. Do not use any chemicals other than the approved sanitizer during the cleaning process.
- 6- Assemble all the parts. Lubricate the beater seal and slip it onto the beater shaft.
- 7- Place the beater into the barrel and turn it slowly until it locks into position.
- 8- Place the front cover back onto the machine.

If your machine is air-cooled; for optimal machine-performance, the condenser must be cleaned from dust and dirt regularly by an authorized technician.

Notice: During cleaning and maintenance, follow all instructions given in this User Guide, otherwise, the manufacturer will not take any responsibility of unwanted results.



*Make sure the beater and the beater seal is assembled to the machine during cleaning process of the barrel. If beater and seal is not mounted **DO NOT** wash the barrel.*

20. REGULAR MAINTENANCE INSPECTION PLAN

All maintenance and servicing must be carried out by technicians authorized by the manufacturer.

Maintenance inspection	WEEKLY	MONTHLY	EACH THREE MONTHS	ANNUALLY
Security systems	x			
Electricity connections			x	
Tightness of the screws and seals/o-rings			x	
Belts tension			x	
Beater scraper blades			x	
Lubrication of bearing				x
Gas				x

Table 6

21. POSSIBLE FAILURES AND SOLUTIONS

Attention: DO NOT ALLOW ANY TECHNICAL MAINTENANCE OR REPAIRS BEFORE DISCONNECTING THE FREEZER FROM THE POWER SUPPLY.

If the solutions listed below in the Trouble Shooting guide do not resolve your operational problems, call an authorized service agent for further assistance.

TROUBLESHOOTING GUIDE

	PROBLEM	CAUSE	SOLUTION
1	Machine does not run	No electricity//power	Check if plugged in and switch on at wall socket
2	Compressor starts, then stops after a few seconds.	No air circulation (air-cooled)	Check the clearances around the machine and ensure that it is at least 50cm.
		No water circulation (water-cooled)	Ensure that the machine is connected to mains water.
3	Machine works, but no product comes from the Dispense Cover.	Over refrigeration	Use less time to run the production
		The beater is rotating clockwise	Call the manufacturer authorized service
4	Machine runs, but Product is too soft	Low refrigeration	Use more time to run the production
5	Mix leaks from the Front Cover	Front Cover O-ring is missing	Drain the machine and add O-rings
		Front cover is not tightened sufficiently or tightened unevenly	Tighten Front cover evenly and properly



**WARRANTY DOCUMENT AND CONDITIONS
MANUFACTURER**

WARRANTY

Invoice Date/No:
Delivery Date:

SEAL&SIGNATURE

This warranty given by the manufacturer does not apply in the following cases:

- 1) The failures results from misuse of product or usage of other applications.
- 2) After the delivery, the failures resulted from moving, carrying of the machine.

On the condition that any distortions made on warranty or on the serial number the product will be out of the warranty.