TRUFROST & BUTLER

USER MANUAL

GELATO BATCH FREEZER:
GBF 10, GBF 20, GBF 40

Content

Ⅰ **Machine construction** 2

Ⅱ **Safety attention** 5

Ⅲ **Work condition** 5

Ⅳ **Installation** 6

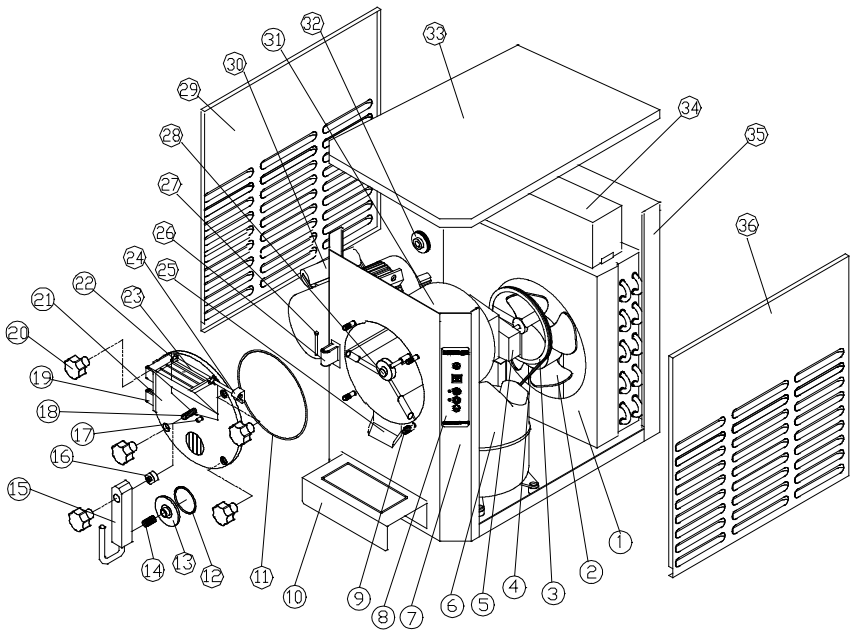
Ⅴ **Maintenance and service** 11

Ⅵ **Trouble shooting guide** 12

Ⅷ **Specification and electrical diagram** 14

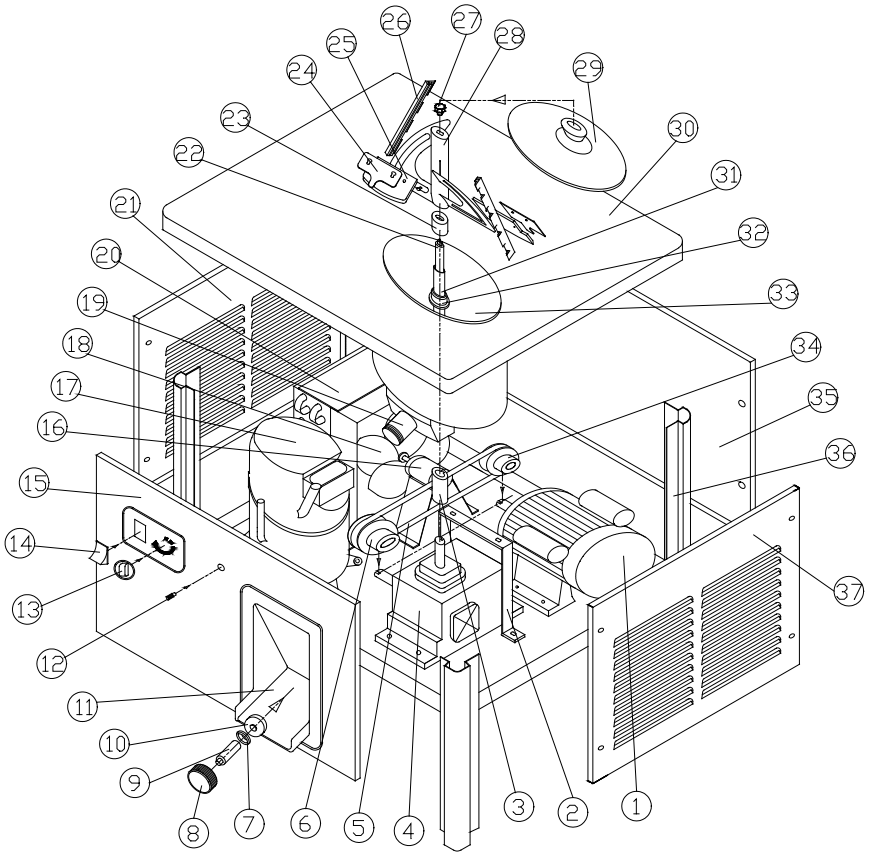
Ⅰ Machine construction

- Model GBF 20



1	Condenser	13	Discharge tank lover	25	Permanent
2	Fan motor	14	Spring	26	Seat B
3	Follower pulley	15	Handle	27	Fixed pin
4	Belt	16	Nut	28	Stirrer
5	Redactor	17	Spacer pin	29	Left side panel
6	Compressor	18	Fixed pin	30	Agitator motor
7	Front panel	19	Permanent seat	31	Evaporator
8	Operation panel	20	Discharge handle	32	Main pulley
9	Screw	21	Container cover	33	Upper plat
10	Tray	22	Permanent seat	34	Electrical box
11	O-ring for dispensing door	23	Guardrail	35	Back panel
12	O-ring for dispensing cover	24	Proximity switch	36	Right side panel

- Model GBF 10



1	Motor	14	Switch	27	Locknut
2	Support plate	15	Left side panel	28	Beater
3	Bearing sleeve	16	Fan motor	29	Hopper cover
4	Gear motor	17	Compressor	30	Top panel
5	Belt	18	Fan Blade	31	Beating tube
6	Passive wheel (big)	19	Dispensing tube	32	Supporting sleeve
7	Plug pad	20	Condenser	33	Hopper
8	Knob nut	21	Front side panel	34	Drive wheel (small)
9	Mandril	22	Beating spindle	35	Right side panel
10	Plug	23	O-ring	36	Frame

11	Dispensing plate	24	Shrapnel	37	Bank side panel
12	Protector tube	25	Rubber scraper		
13	Knob	26	Scraper		

Ⅱ Safety attention

Please read following instruction before use the machine:



Attention:

★ Do not run the machine without mixed liquid; otherwise it will damage the machine.

★ The appliance is not to be used by children or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.

★ Children being supervised not to play with the appliance.



WARNING: fill with potable water only.

★ For your safety, please make sure the machine is well grounding.

★ If the wire is damaged, it must be changed by maintenance persons.

★ Do not insert sticks into the machine when it is running.

★ Make sure to turn off power and unplug before maintenance .

Ⅲ Work condition

（1） ambient temperature：5~40℃

（2） mixing temperature：2~35℃

（3） voltage range：198~235V/1PH

（4） Hz：50/60±1Hz



Attention： Lower ambient temp, proper ventilation, steady voltage, clean conditions and the temp of the mix is as low as possible will make the machine has a higher efficiency, less electricity consume and long life.

Ⅳ Installation

Many customers summarize a lot of recipe to make different ice cream when using this machine. We suggest you make ice cream powder as follow.

A、Recipe：

◆ **Ingredient (weight ratio)**

full cream milk power (8%) white sugar (16%) flavor (a little)

emulsion stabilizer (0.5%) water (75%) food color(a little)

Attention： In this recipe, the proportion between milk power and sugar is economy type it can not be reduced any more, It will freeze and damage the machine if content of sugar is less this proportion or substitute saccharin for sugar. Stabilizer is to improve emulsification and overrun and prevent from freezing.

B、Prepare ice cream mixing:

1） t all materials as above table

2） all materials into container and mix it slowly and equality.

3） he boil water, mixing it rapidly, assure all the mixer have dissolved (the boiled water is the half of the total water)

4）into some essence, pigment and water, mixing it when put the powder, make sure all the mixer have dissolved.

Attention： The mixer should be mixer equally and dissolved completely. Be sure there is not grain in the mixing. All materials and utensil should meet the Hegelian required. Above two times input water volume should meet the Hegelian required weight.

C. unpack and inspect

1) Cut off the wrapping tape.

2) Open the wooden case by screwdriver.

3) Remove the foam.

4) Inspect carefully whether there is defective appearance or not.

5) Check the accessories with packing list.

6) Remove the fixing bolt and fixing feet that are at the bottom of the machine, push the machine, let the front-wheel drive fall to the ground, and then take out the wooden base, let the four wheels grounded. (Directly lift the machine to the ground or on the table if the machine is table type)

D. Installation

1) SELECTING LOCATION

a. Place the machine on a level counter that is stable and strong enough to safely support its weight.

b. Place the machine in a location that allows adequate space at the back and each side for proper ventilation. Keep 50cm space from all sides of ventilation. The machine should shade from the sun and should not be located too close to the units that radiate excessive heat.

2) POWER SUPPLY

a. Select the proper power supply according to the voltage and power on the nameplate.

b. Connect the power wire and the power supply, ensuring the yellow and green wire was connected with the ground wire firmly.



Caution:

- ✧ For safety, ensure the ground connection is in good condition.
- ✧ All the exterior wires and other appliances must confirm with national standard.

E. The Pre-cool of the mixer

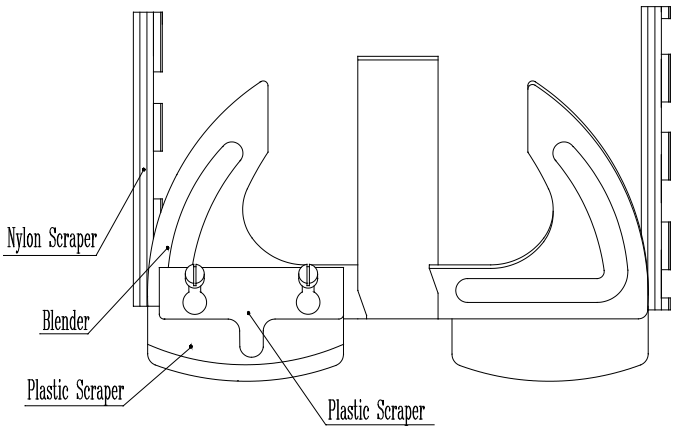
In order to let the machine run more efficiently. It is necessary to pre-cool mixing. Normally, you can put the mixing on the cool place, let the well-prepared mixing cool by itself .If you have freezer, you can put the mixing into it and pre-cool it to 0~40℃.

F. Keystroke and Direction

1）、GBF 10

Pour ice cream mixing into the hopper,2.5kg every time, turn on the machine, the mixer begin to mix the ice cream, then rotate the timer according the arrowhead direction, the refrigerate system begin to work(when the timer rotate according the arrowhead, rotate large angle will spend longer time, opposite, will spent shorter time).the timer will stop work when the ice cream make finished, if the timer didn't stop work, meaning the time of set is over long, in that case ,you can re-turn on the timer (because it need 3 minutes after restart the machine .so it 's better to set a little longer).if the ice cream have already made, but the timer still didn't stop work, this meaning the set time is so long ,you can press the off button to stop it directly, After some time practice, you can set the time accurately, press the off button as soon as the timer stop work, the mixing box can be put into the freeze. And then input mixing, turn on the machine, start to work again.

Install the blender： The plastic scraper and stainless flexible sheet are located at the bottom of the blender, the nylon scrapers at both side of the blender, as the following drawing:

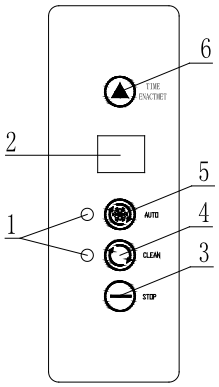


The plastic scraper is flexible, the hole on the scraper can be pull bigger to fit on the screw, and then install the flexible sheet on it, if the sheet too tight, put some Vaseline on it. When install the nylon scraper, face the tooth of the nylon scraper downwards and press it to the charging basket tightly.

ATTENTION：

Note: if the scraper direction to be opposite, it will affect blows the frost effect.

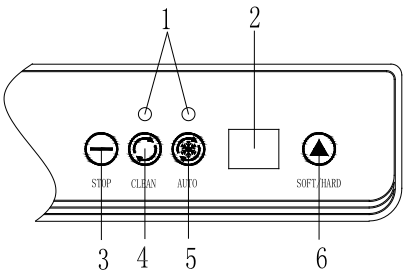
2）、GBF 20



1、 Indicator-light
2、 Display
3、 Pause-Key
4、 Clean-Key
5、 Auto-Key
6、 Time Adjust-Key

- Before making ice cream ,you adjust suitable time and press Enactment-Key 3s.Display twinkling ,the twinkling number is last-time one. If you feel too soft, you can adjust Enactment-Key. Each adjusting make the machine to work increase 1 minute. The least time is 5 minutes and the most is 25 minutes. During 5s,no any operating, the control-Microcomputer will exit. Whole course for moulding take 15 minutes and different material take different time. Pour ice cream mixing into the hopper,2kg every time for BTY7215 or BTY7420A, 2.5kg every time for BY7425.
- After adjusting suitable time, press Auto-key and then leftward Indicator-light shine, beater system start working .Waiting 3s,referentent system start running. Then number display showing reduce step by step, When it is O ,the compressor will stop. The beater continues working.
- Press Clean-key, beater system work for clean.
- Anytime, as long as you press Pause-key the machine will stop.

3）



1、Indicator-light
2、Display
3、Pause-Key
4、Clean-Key
5、Auto-Key
6、Time Adjust-Key

- Wash

Press “Wash” key ， the corresponding indicator light flashes, the beater system start to work.

- Temperature adjust button

Please set the hardness of ice cream before make it, When the machine tune on (the digital display “00”)，Press hardness adjust button more than 3 second，the digital display flashes，the flashed number means the hardness to be set different type. For example, the number is “02”, means the hardness is type 2. at first use, you should not set a high type. Generally start from type2. If the ice cream is soft, you should press button 。 to adjust the hardness, press the button one time，the hardness will add 1 type. The type display from“01”to“10”circularly，the number is bigger, means the type is higher and ice cream is harder。

- Auto

Press auto key after you adjust hardness，the corresponding indicator light flashes，the beater system start to work, three seconds later the refrigeration system start to work. The digital display will display number, which means the percentage of hardness. For example,“58”means the hardness have already reached 58%.The number will increase after the machine works a few minutes. The machine stops automatically (digital display “00”) while the ice cream hardness reach 90% of you set the hardness. That means the ice cream is ready. Different ice cream powder have different hardness, and the time to make ice cream is also different, customer can control it in practice operation.

- Stop

No matter the machine is on wash working or auto working, you just need to press “Stop” key ,the machine will stop working (digital display will indicate“00’’)

G. Keystroke and Direction

- Don't tilt it over 45℃ when shipping.
- The socket of this machine should be single phase triple holes and it should be safely earthed. Don't use with other electrical appliance in same socket.
- The power supply should be 220V±10%,that is 198~242V when the machine is running.
- To ensure it release heat correctly, keep 500mm space for the in and out wind bar when install the machine.
- BQL8Y-B、BTY7110ice cream machine restart the machine after 3 minutes when stop the compressor.
- Don't put you hands or other items into the hopper when it running.
- Shut off the power supply after finish make ice cream, clean it ;take out the mixer and use the water clean the hopper, then wipe it use towel; cleaning the outside of hopper can use the wet towel wipe it, don't use water wash it directly.

Ⅴ Maintenance and service

A、Wash the freezing cylinder

In order to ensure customer's health and improve the using life of the unit, you must to clean the freezing cylinder everyday.

1) Press wash key  , draw off the mixing in the freezing cylinder, then press stop key .

2) Pour same warm water with mild detergent into freezing cylinder .

3) Press wash key  , beater work about five minutes later , draw off the water.。Pour clean water to wash for 2-3 times, then stop machine.

4) Turn off the power. Clean the spare part.

a. Unscrew four screw of the dispensing door, then take off the dispensing door.

b. Take off the beater and o-ring of dispensing door.

c. Wash all these parts, if it has been worn out, change another one.

d. Do the opposite steps to assembly the unit. Lubricate the valve pole when assembly it.

B*、*Clean the unit

In order to attract more customers, please keep the unit clean at any time. You can use a wet towel to clean the surface of the unit. Don't wash down the unit to avoid the electrical malfunction.

C*、*Clean the condenser

Shut off the power, take off the panel, then clean the fins of condenser by cleaner, strong air or brush. Don't damage the fins of condenser.

Ⅵ Trouble shooting guide

Items	Possible reason	How to settle it
No working after turn on	No power supplies	Turn on the power
	Breaker shut off	Manual replacement then restart the unit again
	Protect circle works	Restart the unit
Wash mode doesn't work	Faulty electrical connection	Check and connect it
	Beater motor is broken	repair and change it
	Small breaker start aside	Check the reason and repair then replacement
Auto mode doesn't work	the corresponding switch line broken off	Check and connect it
	Controlling electronic board is wrong	Change the electronic board
	Low voltage	Solve the electrical voltage
	Contact organ is broken	Change the contact organ
	Controlling electronic board is	Change the electronic board

Compressor doesn't run	wrong	
	Defective over load protect	Check the over load protect and replace it
	Compressor is broken	Change the compressor
	Compressor capacitor is broken	Change the capacitor
No refrigeration	Refrigerant leakage	Check and charging refrigerant
	Fan motor doesn't work	Check or change the fan motor
	The capacitor of fan motor is broken	Change the capacitor of motor
Unit refrigerates continually	Hardness set too high	Adjust the hardness higher
	Controlling electronic board is wrong	Change the electronic board
	Bad refrigeration	Check the refrigeration system
Model is 'auto' but no output	No mixing in hopper	Add mixing
	Limited switch is broken and the connect line broken off	Change the switch or connect line
	Belt is loosen or worn to much	Adjust the nut to tighten it or change it
	Connecting bearing sleeve or beater bearing is broken	Change connecting bearing sleeve or beater bearing
Ice cream is too soft	Irrelevant mixing	Mix it relevantly
	Hardness set too low	Adjust hardness setting
Ice cream is too hard	Irrelevant mixing	Mix it relevantly
	Hardness set too high	Adjust hardness setting

Ice cream leakage	Dispenser door outlet leakage	Install or change the o-ring of piston
	Dispenser door leakage	Screw down bolt or change O-ring of dispenser door
	Connect tube leakage	Install or change the beater sleeve
	Limited switch is broken	Change the switch

Ⅷ Specification and electrical diagram

★ find the specification in the nameplate

★ find the electrical diagram in the side panel

Marketed globally by
TRUFROST AND BUTLER PRIVATE LIMITED
1215, 12th Floor, Tower B, Emaar Digital Greens, Golf Course Extn. Road,
Sector 61, Gurugram - 122011, India
T. +91-7303166766 info@trufrost.com
www.trufrost.com