

BRAS

FBM L/LS

ITALIANO

ENGLISH

FRANCAIS

DEUTSCH

ESPAÑOL



MANUALE D'ISTRUZIONI
OPERATOR'S MANUAL
CARNET D'INSTRUCTIONS
GEBRAUCHSANWEISUNG
MANUAL DE INSTRUCCIONES

1 TECHNICAL CHARACTERISTICS

		FBM1	FBM1P	FBM2	FBM3
Transparent removable bowls	n	1	1	2	3
Capacity of each bowl, approx.	l	10	10	10	10
Dimensions:					
width	cm	18	28	36	54
depth	cm	47	47	47	47
height	cm	69	69	69	69
Net weight, approx.	kg	26	26	37	49
Gross weight, approx.	kg	29	29	40	54
Adjustable thermostats	n	1	1	2	3
Hermetic compressor					
Air-cooled condenser					
Overload protector					
Safety pressure switch					
Noise level lower than 70 dB (A)					



IMPORTANT

Read electrical ratings written on the data plate of the individual units; the data plate is adhered on the dispensing side panel of the unit, just behind the drip tray (the right side drip tray in multiple bowl models). The serial number of the unit (preceded by the symbol #) is adhered inside the left switch box. Data plate specifications will always supersede the information in this manual.

The electric diagram of the dispenser is located in the inner part of the dispensing side panel.

Specifications are subject to change without notice.

2 INTRODUCTION

Please read all sections of this manual thoroughly to familiarize yourself with all aspects of the unit.

Like all mechanical products, this machine will require cleaning and maintenance. Besides, dispenser working can be compromised by operator's mistakes during disassembly and cleaning. It is strongly recommended that personnel responsible for the equipment's daily operations, disassembly, cleaning, sanitizing and assembly, go through these procedures in order to be properly trained and to make sure that no misunderstandings exist.

3 INSTALLATION

- 1 - Remove the corrugate container and packing materials and keep them for possible future use.



IMPORTANT

When handling the machine never grasp it by the bowls or by the evaporator cylinders. The manufacturer refuses all responsibilities for possible damages which may occur through incorrect handling.

- 2 - Inspect the uncrated unit for any possible damage. If damage is found, call the delivering carrier immediately to file a claim.
- 3 - Install the unit on a counter top that will support the combined weight of dispenser and product **bearing in mind what is stated in the preceding point 1 IMPORTANT warning.**
- 4 - A minimum of 15 cm (6 ") of free air space all around the unit should be allowed to guarantee adequate ventilation.
- 5 - Ensure that the legs are screwed tightly into the base of the machine.
Replace the standard legs originally installed with the 100 mm (4 ") legs whenever they are provided with the unit.
- 6 - Before plugging the unit in, check if the voltage is the same as that indicated on the data plate. Plug the unit into a grounded, protected single phase electrical supply according to the applicable electrical codes and the specifications of your machine. When the unit has no plug, install a proper grounded plug, in compliance with electrical codes in force in your area, suitable to at least 10 Amp 250 Volt (220-230 Volts 50-60 Hz areas) and 20 Amp 250 Volt (100-115 Volts 50-60 Hz areas) applications. Should you prefer to connect the unit directly to the mains, connect the supply cord to a 2-pole wall breaker, whose contact opening is at least 3 mm. Do not use extension cords.



ATTENTION

Failure to provide proper electrical ground according to applicable electrical codes could result in serious shock hazard.

- 7 - Each drip tray has two diaphragm plugs: if a continuous drain is needed, perforate one of the drain plugs and connect it to a flexible drain line (see figure 1).

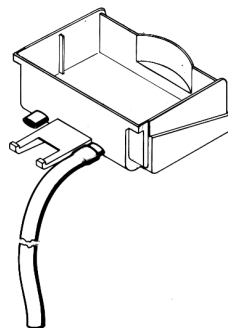


figure 1

- 8 - The unit doesn't come presanitized from the factory. Before serving products, the dispenser must be disassembled, cleaned and sanitized according to this handbook instructions (chapter 5.3 CLEANING AND SANITIZING PROCEDURES).

4 TO OPERATE SAFELY

- 1 - **Do not** operate the dispenser without reading this operator's manual.
- 2 - **Do not** operate the dispenser unless it is properly grounded.
- 3 - **Do not** use extension cords to connect the dispenser.
- 4 - **Do not** operate the dispenser unless all panels are restrained with screws.
- 5 - **Do not** obstruct air intake and discharge openings: 15 cm (6 ") minimum air space all around the dispenser.
- 6 - **Do not** put objects or fingers in panels louvers and faucet outlet.
- 7 - **Do not** remove bowls, augers and panels for cleaning or

routine maintenance unless the dispenser is disconnected from its power source.

5 OPERATING PROCEDURES

- 1 - Clean and sanitize the unit according to the instructions in this manual. See chapter 5.3 CLEANING AND SANITIZING PROCEDURES.
- 2 - Fill the bowls with product to the maximum level mark. Do not overfill.
The exact quantity of product (expressed as liters and gallons) is shown by marks on the bowl.
- 3 - In case of products to be diluted with water, pour water into bowl first, then add correct quantity of product. In case of natural squashes, it is advisable to strain them, in order to prevent pulps from obstructing the faucet outlet.
- 4 - To obtain the best performance and result, use bases designed to be run in Granita freezers. Such bases have a sugar content of 34 degrees Baum? corresponding to 64 degrees Brix .
For soft drinks the bases are to be diluted with more water, on a 1 plus 5/5.5 basis.
In any case follow the syrup manufacturer's instructions for both Granita and soft drink recipes.
If natural juices (e.g. lemon, orange) as well as sugarless products (e.g. coffee) are used, dissolve 150 - 200 grams of sugar per liter.

IMPORTANT

However Granita mix may be done, its Brix (sugar percent content) must be at least 13.

- 5 - Install the covers and check that they are correctly placed over the bowls. There must be a correct electrical connection between the bowl and the cover.

IMPORTANT

For LS models only: if the covers are not correctly installed the unit does not run, the mixer does not rotate and the refrigerator is switched off.

- 6 - Set the control switches as shown in chapter 5.1 DESCRIPTION OF CONTROLS.
- 7 - Always leave the dispenser on, as the refrigeration stops automatically when Granita reaches the proper thickness. The mixers will continue to turn.

5. 1 DESCRIPTION OF CONTROLS

The dispenser is equipped with a power switch and a light switch. In addition each bowl is individually operated by a mixer/refrigeration switch. In fact it is possible to dispense both soft drinks and Granita.
When a bowl is in Soft Drink mode the beverage temperature is controlled by the corresponding thermostat.
When a bowl is in Granita mode the mix viscosity is controlled by the corresponding adjustment screw located in the rear wall of each container (for temperature and viscosity setting make reference to chapter 5.2 OPERATION HELPFUL HINTS).
All the switches are located on the faucet side of the dispenser

in switch panels protected by switch covers (see figure 2).

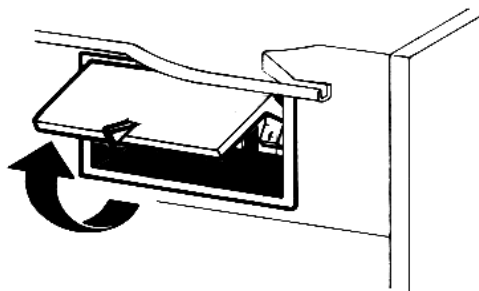


figure 2

In addition all the models except FBM 1 are equipped with an automatic safety pressure switch to prevent damages to the compressor. The lighting of the warning light at the left of the switch covers means insufficient ventilation of the unit. In this case check that all around the dispenser there is sufficient space for ventilation, at least 15 cm (6 ") on each side and that condenser filter is free from dust or other obstructions. In case the warning light is still ON even after these operations have been carried out, Service call is required. With reference to figure 3 dispenser controls functions are as follows:

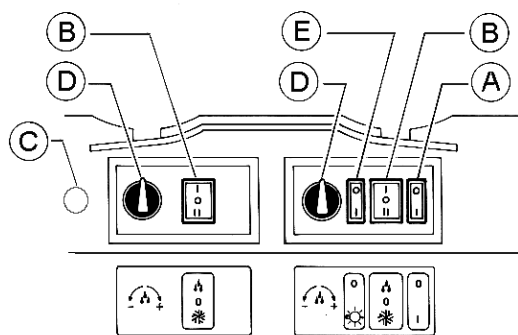


figure 3

Power switch (A)

- 0 position : power is turned OFF to all functions.
- I position : power is turned ON to all functions and the other switches are enabled. The fan motor runs.

Light switch (E)

- 0 position : all top cover lights are OFF.
- I position : all top cover lights are ON, provided that power switch (A) is set to I.

Mixer/refrigeration switch (B)

- I position : mixer and refrigeration ON. SOFT DRINK mode.
- 0 position : OFF.
- II position : mixer and refrigeration ON. GRANITA mode.

Thermostat (D)

- Turn clockwise : to decrease temperature
- Turn counterclockwise : to increase temperature

Safety pressure switch warning light (C)

Warning light ON : insufficient ventilation

To operate the unit:

- 1 - Set the power switch to I position.
- 2 - Set the mixer/refrigeration switches as follows:
 - to the I position to get soft drink.
 - to the II position to get Granita.
- 3 - Set the light switch to I position.

5. 2 OPERATION HELPFUL HINTS

- 1 - **Granita viscosity adjustment:** proper Granita viscosity is factory preset. To change the viscosity, if needed, use a standard screwdriver to turn the adjustment screw located in the rear wall of each container as follows (see figure 4):
 - towards right (clockwise) to obtain a thicker product (the indicator F will go down in opening G).
 - towards left (counterclockwise) to obtain a thinner product (the indicator F will go up in opening G).

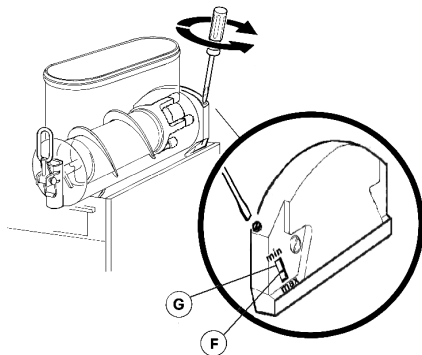


figure 4

- 2 - **Beverage temperature adjustment:** proper beverage temperature is factory preset. To reset, turn the knob located in each switch box as follows:
 - towards right (clockwise) to decrease temperature.
 - towards left (counterclockwise) to increase temperature.**Note: beverage temperature is controlled by the thermostat only when the mixer/refrigeration switch(es) are in I position, Soft Drink mode.**
- 3 - The length of time for freeze down of Granita is governed by many variables, such as ambient temperature, mix initial temperature, sugar content (Brix level) and viscosity setting.
- 4 - To shorten Granita recovery time and increase productivity, it is advisable to pre-chill the product to be used in the dispenser.
- 5 - To shorten Granita recovery time and increase productivity, the bowl should be refilled after the product level drops lower than half of the evaporator cylinder and at the start of each day.
- 6 - For good product conservation the dispenser must run overnight, at least in Soft Drink mode. If this is not possible and product is left in the bowls overnight, the mixer/refrigeration switches must be set to the I position at least one hour before the unit is switched off. This eliminates any block of iced product forming overnight, which could result in damage to mixers or to their motor when the unit is switched back on. In any case, before the unit is restarted, make sure that no blocks of ice have been formed; if so, they are to be removed before the unit is switched on. Overnight operation in drink mode also eliminates possible ice accumulation from condensation all around the bowls.
- 7 - Mixers must not be turned off when frozen product is in the bowl: if not agitated, the product may freeze to a solid block of ice. If the mixers are turned back on in this

situation, damage to the mixers and their motor may result. Therefore, mixers may be restarted only after product is melted.

- 8 - The dispenser is equipped with a magnetic coupling by which the gear motor (located outside the bowl) drives the mixers (inside the bowl). The magnetic drive operates as an "intelligent clutch" able to automatically disconnect the mixers in case they are seized by ice or other causes. This inconvenience can be soon noticed since an intermittent dull noise warns that mixers are still. In this case it is necessary to unplug immediately the dispenser, empty the bowl and eliminate the cause of seizing.
- 9 - The dispenser must be able to emit heat. In case it seems excessive, check that no heating source is close to the unit and air flow through the slotted panels is not obstructed by wall or boxes. Allow at least 15 cm (6 ") of free clearance all around the dispenser. In any case if the product in the bowls is frozen and the pressure switch warning light is OFF the unit is running properly.
- 10 - Restrictor cap: when the unit is used in Soft Drink mode it is advisable to install the restrictor cap on the faucet outlet in order to reduce the drink outflow (see figure 5).

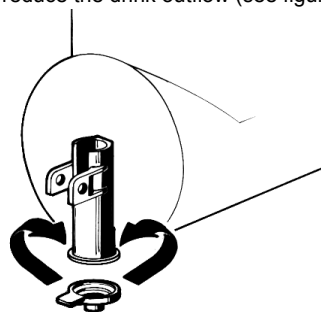


figure 5

5. 3 CLEANING AND SANITIZING PROCEDURES

- 1 - Cleaning and sanitizing of the dispenser are recommended to guarantee the conservation of the best product taste and the highest unit efficiency. This section is a procedural guideline only and is subject to the requirements of the local Health Authorities.
- 2 - Prior to the disassembly and cleaning, the machine must be emptied of product. To do this proceed as follows:
 - set the power switch to I position
 - set mixer/refrigeration switch(es) to I position (Soft Drink mode)
 - place a pail under each faucet and drain all product from bowls
 - set all control switches to the 0 position

5. 3. 1 DISASSEMBLY**ATTENTION**

Before any disassembly and/or cleaning procedure make sure that the dispenser is disconnected from its power source by unplugging it or switching off the 2-pole wall breaker.

- 1 - Remove cover from the bowl.
- 2 - On FBM 1P model remove the lateral tray by lifting its outer side up and off the hook located on the opposite side

(see figure 6).

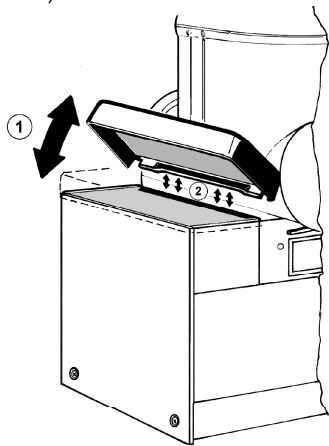


figure 6

3 - Remove the bowl by lifting its faucet side up and off the fastening hooks (see figure 7) and slide it out (see figure 8).

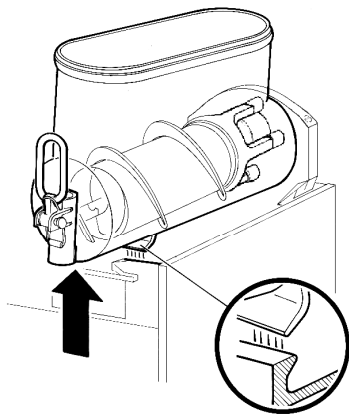


figure 7

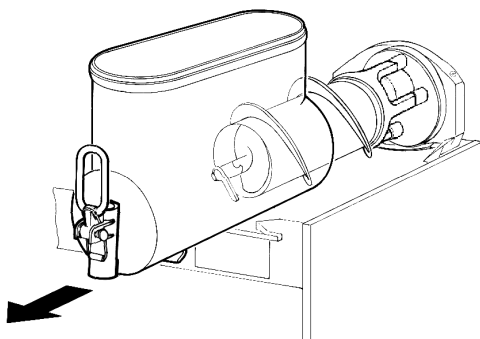


figure 8

4 - Slide the outer spiral out (see figure 9) and then the inside

auger (see figure 10).

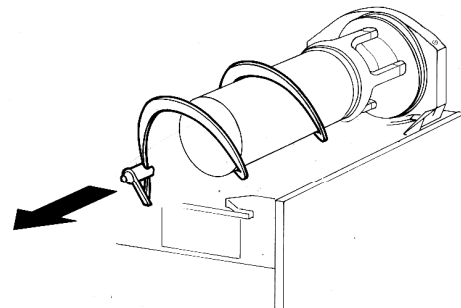


figure 9

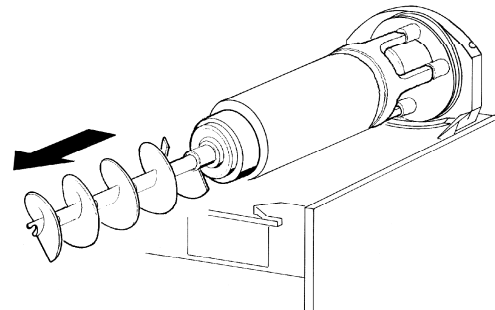


figure 10

5 - Remove the bowl gasket from its seat (see figure 11).

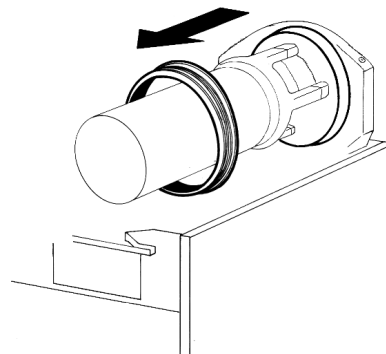


figure 11

6 - Dismantle the faucet assembly (see figure 12).

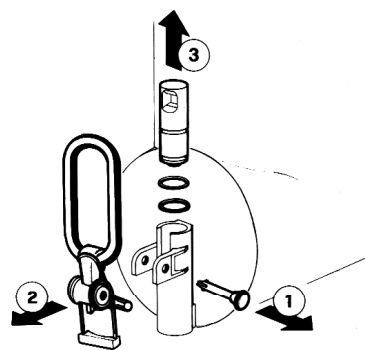


figure 12

7 - Slide the drip tray out and empty it.

5. 3. 2 CLEANING



ATTENTION

Before any disassembly and/or cleaning procedure make sure that the dispenser is disconnected from its power source.



IMPORTANT

Do not attempt to wash any machine components in a dishwasher.

- 1 - Prepare at least two gallons of a mild cleaning solution of warm (45-60 °C / 120-140 °F) potable water and dishwashing detergent. Do not use abrasive detergent. Important: if present, follow label directions, as too strong a solution can cause parts damage, while too mild a solution will not provide adequate cleaning.



IMPORTANT

In order to prevent any damages to the dispenser use only a detergent suitable with plastics parts.

- 2 - Using a brush, suitable for the purpose, thoroughly clean all disassembled parts in the cleaning solution.



ATTENTION

When cleaning the machine, do not allow excessive amounts of water around the electrically operated components of the unit. Electrical shock or damage to the machine may result.

- 3 - Do not immerse the lighted top covers in liquid. Wash them apart with the cleaning solution. Carefully clean their undersides.
- 4 - In the same manner clean the evaporator cylinder(s) using a soft bristle brush.
- 5 - Rinse all cleaned parts with cool clean water.

5. 3. 3 SANITIZING

Sanitizing should be performed immediately prior to starting the machine. Do not allow the unit to sit for extended periods of time after sanitization.

- 1 - Wash hands with a suitable antibacterial soap.
- 2 - Prepare at least two gallons of a warm (45-60 °C / 120-140 °F) sanitizing solution (100 PPM available chlorine concentration or 1 spoon of sodium hypochlorite diluted with two litres of water) according to your local Health Codes and manufacturer's specifications.
- 3 - Place the parts in the sanitizing solution for five minutes.
- 4 - Do not immerse the lighted top covers in liquid. Carefully wash their undersides with the sanitizing solution.
- 5 - Place the sanitized parts on a clean dry surface to air dry.
- 6 - Wipe clean all exterior surfaces of the unit. Do not use abrasive cleaner.

5. 3. 4 ASSEMBLY

- 1 - Slide the drip tray into place.

- 2 - Lubricate faucet piston, inside auger and outer spiral (see points A, B and C of figure 13) only with the grease supplied by the manufacturer or other **food grade approved** lubricant.

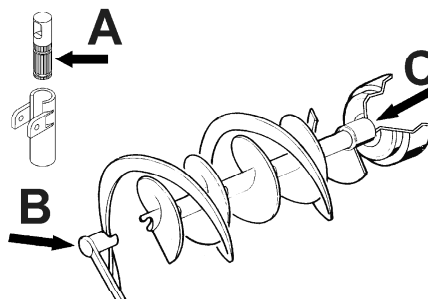


figure 13

- 3 - Assemble the faucet by reversing the disassembly steps (see figure 12)
- 4 - Fit bowl gasket around its seat. Note: the largest brim of gasket must face against the rear wall (see figure 14).

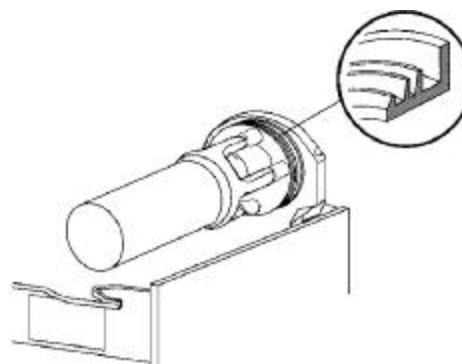


figure 14

- 5 - Insert the auger into the evaporator taking care to accompany it to the end so as to prevent it from hitting against the rear wall (see figure 15).

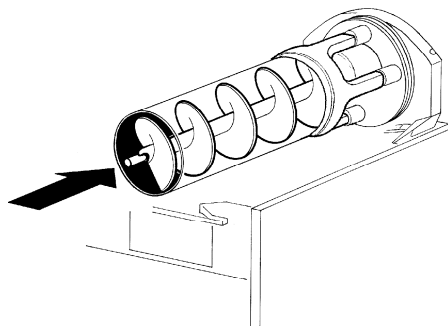


figure 15

- 6 - Install the outer spiral. Slide it over the evaporator until its front notch engages with the exposed end of the auger

shaft (see figure 16).

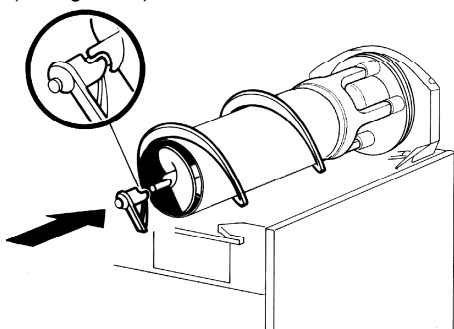


figure 16

- 7 - Push the bowl towards the rear wall of the unit until it fits snugly around the gasket and its front fastening hooks are properly engaged (see figure 17).

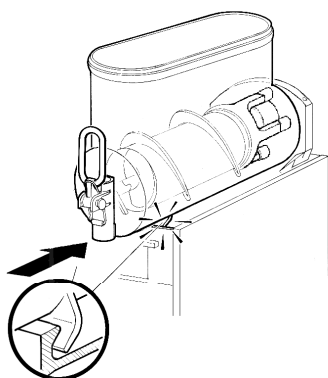


figure 17

- 8 - On FBM 1P model install the lateral tray by reversing the disassembly steps (see figure 6).
- 9 - Use fresh product to chase any remaining sanitizer from the bottom of the bowl(s). Drain this solution. Do not rinse out the machine.

5. 4 IN-PLACE SANITIZATION

The In-Place Sanitization prior to starting the machine may be performed, if needed, only as further precaution, in addition to the Disassembled Parts Sanitization described before, but never in lieu of it.

- 1 - Prepare two gallons of a warm (45-60°C, 120-140 °F) sanitizing solution (100 PPM chlorine residual) according to your local Health Codes and manufacturer's specifications.
- 2 - Pour the solution into the bowl(s).
- 3 - Using a brush suitable for the purpose, wipe the solution on all surfaces protruding above the solution-level and on the underside of the top cover(s).
- 4 - Install the top cover(s) and operate the unit. Allow the solution to agitate for about two minutes. Drain the solution out of the bowl(s).
- 5 - Use fresh product to chase any remaining sanitizer from the bottom of the bowl(s). Drain this solution. Do not rinse out the machine.

6 ROUTINE MAINTENANCE

- 1 - **Daily:** inspect the machine for signs of product leaks past seals and gaskets. If proper assembly does not stop leaks around seals or gaskets, check for improper lubrication, worn or damaged parts. Replace parts as needed.
- 2 - **Monthly on FBM 1P, FBM 2 and FBM 3 models:** remove

the dust from the condenser filter.



ATTENTION

Before any disassembly and/or cleaning procedure make sure that the dispenser is disconnected from its power source by unplugging it or switching off the 2-pole wall breaker.

Remove the only left panel (from faucet side) unscrewing the two plastic coated screws (see figure 18).

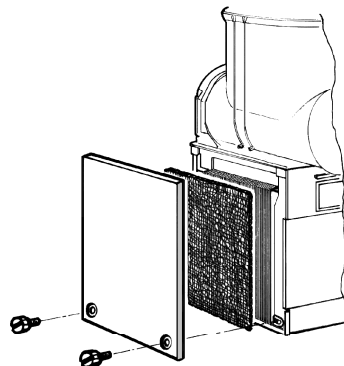


figure 18



ATTENTION

Condenser fins are very sharp. Use extreme caution when cleaning.

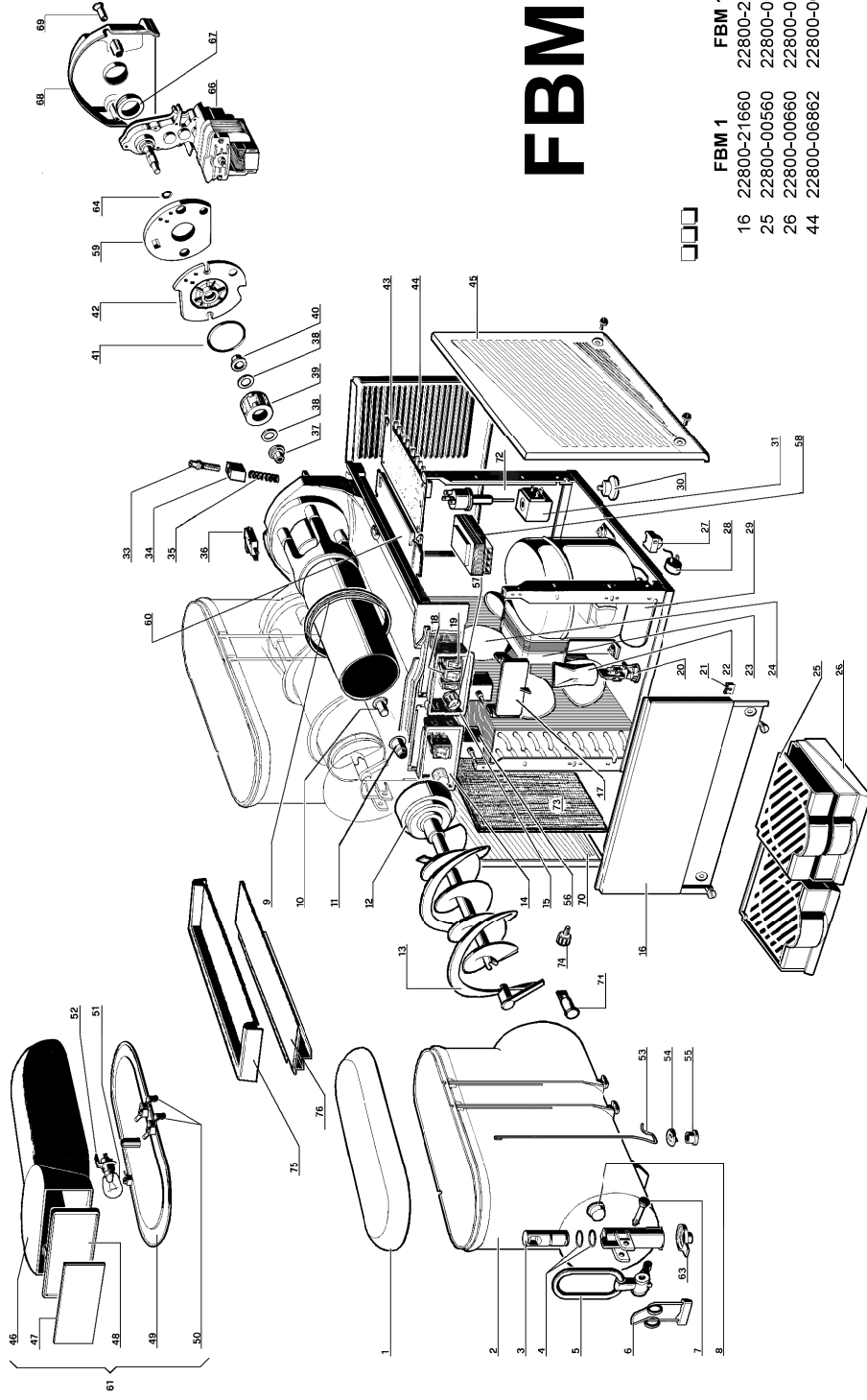
6. 1 MAINTENANCE (TO BE CARRIED OUT BY QUALIFIED SERVICE PERSONNEL ONLY)

- 1 - **Monthly on FBM 1 model:** remove the dust from the condenser. To do this unplug the unit or switch off the 2-pole wall breaker and then remove the panels.
- 2 - **Annually:** remove the panels and clean the inside of the machine including the base, side panels, condenser, etc.
- 3 - When installed, the anti-splash filters inside the slotted panels must not be removed.
- 4 - Never remove the insulating jacket from around the suction tubing of the evaporator (the copper tubing located on the right side of gear motor). In case the insulating jacket is missing replace the entire parts with original spare parts from the supplier.
- 5 - In order to prevent any damages to the dispenser, all plastics parts must be lubricated only with grease supplied by the manufacturer or with another lubricating product suitable for polycarbonate.



IMPORTANT

The electric diagram of the dispenser is located in the inner part of the dispensing side panel.



FBM L / LS



	FBM 1	FBM 1P	FBM 2	FBM 3
1	22800-23400	22800-21660	22800-21662	22800-21860
2	22800-17400	22800-00560	22800-00563	22800-00560
3	22800-14800	22800-00660	22800-00663	22800-00660
4	22800-15100	22800-00660	22800-00663	22800-00660
5	22800-14961	22800-06862	22800-06863	22800-06862
6	22800-15000			
7	22800-22161			
8	22800-23500			
9	10028-02803			
10	10028-02801			
11	33800-08001			
12	22800-16102			
13	22800-16562			
14	22800-16462			
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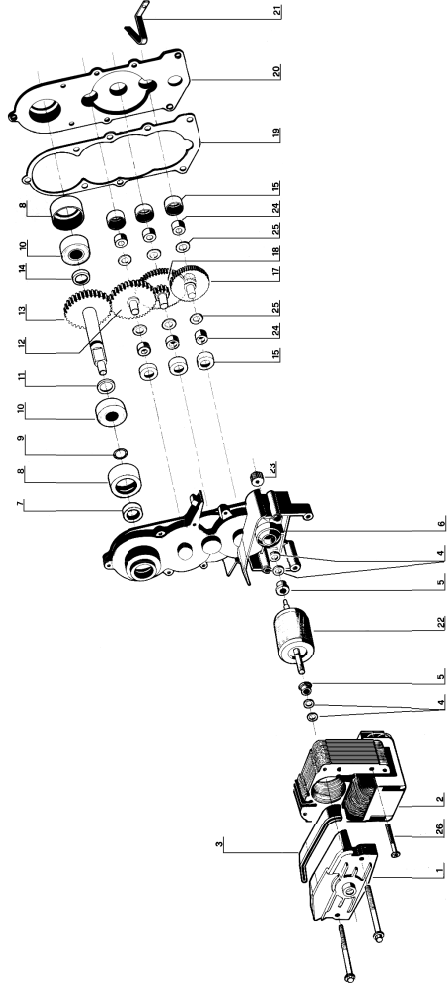
	FBM 1	FBM 1P	FBM 2	FBM 3
Deckel				
Behälter				
Kolben für Hahn				
O-ring für Hahn				
Zapfenhebel				
Hahn-Feder				
Fixierstift				
Buchse				
Behälterdichtung				
Äußere büchse				
Innere Schnecke				
Äußere Schnecke				
Schaltergehäuse				
Schaltergehäuse mit Schalter				
Front				
Couvercle transparent				
Réservoir				
Piston du robinet				
Joint OR du piston du robinet				
Lever de debit				
Ressort du livier de débit				
Pivot pour levier de débit				
Butée				
Joint du réservoir				
Douille extérieure				
Douille pour radior intérieur				
Radior intérieur				
Radior extérieur				
Boite porte-interrupteurs				
Boite porte-interrupteur général				
Panneau côté robinet				
Transparent cover				
Bowl				
Faucet piston				
Faucet piston OR				
Faucet handle				
Faucet handle spring				
Faucet handle pin				
Thrust washer				
Bowl gasket				
Rear wall front bushing				
Auger bushing				
Auger				
Outer spiral				
Switch box				
Power switch box				
Dispensing side panel				
Coperchio trasparente				
Contenitore				
Pistone per rubinetto				
OR per pistone rubinetto				
Leva rubinetto				
Molla per leva rubinetto				
Perno per leva rubinetto				
Boccola di rasamento				
Mescolatore per contenitore				
Boccola frontale per spalla				
Boccola per mescolatore interno				
Mescolatore interno				
Raschiatore esterno				
Portainterruttori senza int. generale				
Portainterruttori con int. generale				
Pannello lato rubinetto				
Tapa trasparente				
Contenedor				
Pistón del grifo				
Junta OR del pistón grifo				
Palanca grifo				
Muelle de la palanca grifo				
Pivote de la palanca				
Arandela de empuje				
Junta del contenedor				
Buje exterior				
Buje para rascador interior				
Rascador interior				
Rascador exterior				
Panel para interruptores				
Panel para interruptor general				
Panel lado grifo				

17	22800-16660	Sportello coprinterruttori	Switch panel cover	Couvercle boîte interrupteurs	Schalterabdeckung	Tapa panel interruptores
18	22800-24200	Interruttore a 3 posizioni	3-position switch	Interrupteur 3-positions	Umschalter	Interruptor de 3 posiciones
19	22800-24300	Interruttore a 2 posizioni	Switch	Interrupteur	Schalter	Interruptor
20	22800-05500	Passabloccacavo	Terminal block with cable clamp	Borne avec fixation du câble	Anschlussklemme m. Kabeleinführung	Pasacable
21	10554-45001	Clip	Clip	Clip	Clip	Clip
22	22800-12700	Protezione	Terminal block protection	Protection borne	Schutzkappe	Protección pasacable
23	000	Motore ventilatore	Fan motor	Moteur ventilateur	Lüftermotor	Motor ventilador
24	000	Ventola	Fan blade	Hélice	Lüfterflügel	Aspas
25	000	Griglia cassetto	Drip tray cover	Couvercle tiroir égouttoir	Tropfgitter	Rejilla cajón recoge-gotas
26	000	Cassetto raccogliacqua	Drip tray	Tiroir égouttoir	Tropfschale	Cajón recoge-gotas
27	****	Relé	Relay	Relais	Start-Relais	Relé
28	****	Salvamatore	Overload protector	Protège moteur	Klixon	Guardamotor
29	****	Condensatore d'avviamento	Starting capacitor	Condensateur de démarrage	Startkondensator	Condensador de arranque
30	22800-10000	Piedino	Rubber leg	Petit pied	JustiefüÙe	Pie nivelador
31	****	Bobina per elettrovalvola gas	Solenoid valve coil	Bobine électrovanne	Magnetspule	Bobine elettrovalvola
33	22800-16700	Vite di regolazione densità	Density adjustment screw	Vis de régulation densité	Regulierschraube	Tomillo regulador densidad
34	22800-16960	Bloccchetto guidamolla	Shaped nut	Ecrou-guide du ressort	Führung für Feder	Tuerca-guida del muelle
35	22800-16800	Molla	Spring	Ressort	Feder	Muelle
36	22800-09301	Microinterruttore	Microswitch	Microinterrupteur	Mikroschalter	Microinterruptor
37	10028-02802	Boccola posteriore per spalla	Rear wall rear bushing	Douille intérieure	Innere büchse	Buje interior
38	10028-02805	Ranella per rotore magnetico	Magnetic drive washer	Rondelle pour rotor intérieure	Innere Rotorscheibe	Arandela para rotor interior
39	33800-09601	Rotore magnetico	Magnetic drive	Rotée intérieure	Innere Rotor	Rotoe interior
40	10028-02800	Boccola per flangia	Flange bushing	Douille pour bride	Flanschbüchse	Buje para brida
41	10028-02804	OR 3231 per flangia	Flange OR 3231	OR 3231 pour bride	O Ring 3231 für flansch	OR 3231 para brida
42	22800-15370	Flangia di supporto motoriduttore	Gear motor flange	Bride pour moteurducteur	Motorunterstützungflansch	Brida para motoreductor
43	000	Ritardatore elettronico	Delay electronic device (PWB)	Circuit imprimé de contrôle	Elektronik	Circuito electronico
44	000	Pannello posteriore	Back panel	Panneau postérieur	Rückwand	Panel posterior
45	22800-00260	Pannello laterale destro	Right side panel	Panneau latéral droit	Seitenwand, rechts	Panel lateral derecho
46	22800-17060	Coperchio con luce (parte superiore)	Lighted top cover (upper)	Couvercle éclairé (partie super.)	Deckel mit Beleuchtung (Überteil)	Tapa con luz (superior)
47	10028-03770	Fotografia	Picture	Photo	Dia	Fotografía
48	22800-16060	Schermo	Porte screen	Porte-photo	Rahmen	Armadon
49	22800-17100	Sottocoperchio	Lighted top cover (lower)	Fond du couvercle	Deckel-Unterteil	Fondo de la tapa
50	22800-11700	Contatto per luce	Top cover light contact	Contact pour éclairage couvercle	Kontakt	Contacto para luz
51	10028-03800	Lampada 28V	28V bulb	Ampoule 28 V	Birne 28 V	Lampara 28 V
52	10028-04210	Portalamпада	Bulb socket	Douille	Lampenhalter	Portalampara
53	22800-15200	Molla contatto elettrico coperchio	Light wire	Ressort de contact	Feder	Muelle para contacto luz
54	22800-22861	Gommino con contatto	Flexible contact	Joint avec contact	Kontakt	Gomita con contacto
55	22800-23000	Anello di ancoraggio	Fixing ring	Anneau de fixation	Befestigungsring	Anillo de fijación
56	33800-08300	Termostato	Thermostat	Thermostat	Thermostat	Termostato
57	22800-14560	Manopola termostato	Thermostat knob	Pommeau du thermostat	Drehknopf für Thermostat	Pomo para termostato
58	000	Trasformatore	Transformer	Transformateur	Transformator	Transformador
59	10570-13602	Guarnizione anticondensa	Insulation foam	Couche d'isolation	Isolationschaum	Espuma aislante
60	000	Supporto circuito stampato	PWB housing	Support du circuit imprimé	Halter für Elektronik	Soporte circuito electrónico
61	33800-04860	Cappello con luce FBM L	Lighted top cover (assy.) FBM L	Couvercle éclairé (complet) FBM L	Deckel mit Beleuchtung, komplett FBM L	Tapa completa con luz FBM L
61	33800-04864	Cappello con luce FBM LS	Lighted top cover (assy.) FBM LS	Couvercle éclairé (complet) FBM LS	Deckel mit Beleuchtung, komplett FBM LS	Tapa completa con luz FBM LS
63	22800-24900	Restrittore di flusso	Restrictor cap	Réducteur du robinet	Drosselkappe	Tapa de restricción
64	10028-03217	OR per albero motoriduttore	Central shaft OR	Joint "OR" pour arbre moteur	O-ring für Zentralwelle	OR para eje central
66	000	Motoriduttore	Gear motor	Moteurducteur	Getriebemotor	Motoreductor
67	22800-22300	Boccola posteriore	Rear bushing	Douille postérieure	Büchse	Buje posterior
68	22800-17561	Coperchio posteriore	Rear cover	Cartier postérieur	Deckel	Tapa posterior
69	22800-22260	Vite di fissaggio	Rear cover fixing screw	Vis de fixation du carter	Schraube für Deckel	Tomillo de fijación de la tapa
70	22800-00360	Pannello laterale sinistro	Left side panel	Panneau latéral gauche	Seitenwand, links	Panel lateral izquierdo
71	000	Lampada spia	Warning light	Témoin	Warnlampe	Lamparilla
72	22800-07503	Pressostato di sicurezza	Safety pressure switch	Pressostat de sûreté	Sicherheitsdruckschalter	Limitador de presión de seguridad
73	10028-00905	Filtro condensatore	Condenser filter	Filter du condenseur	Kondensatorfilter	Filtro del condensador
74	10028-03360	Vite di fissaggio pannello	Panel fixing screw	Vis de fixation du panneau	Schraube für seitenwand	Tomillo fijación panel lateral
75	10028-03660	Vassoio FBM 1P	Tray for FBM 1P	Plateau pour FBM 1P	Tablett für FBM 1P	Bandeja para FBM 1P
76	10028-03500	Pannello superiore FBM 1P	Upper panel for FBM 1P	Panneau supérieur pour FBM 1P	Oberwand für FBM 1P	Panel superior para FBM 1P
	****	Ordinare con sigla riportata sul pezzo	Please order what printed on piece	Mentionner indicatif imprimé sur la pièce	Diese Teile bitte anhand der aufgedruckten Nummern bestellen	Pedir com la identificación marcada en la pieza
	000	Vedere tabella	See table	Voir tableau	Siehe Tabelle	Ver tabla
	000	Vedere tabella nella pagina seguente	See next page table	Voir tableau page suivante	Siehe Tabelle nächsten Seite	Ver tabla página siguiente



	MOD.	230V 50HZ	240V 50HZ	115V 60HZ	220V 60HZ	230V 50HZ	240V 50HZ	115V 60HZ	220V 60HZ
23	FBM 1 L / LS	33800-06910	33800-06910	33800-06911	33800-06910	FBM 3 LS	22800-05202	22800-05202	22800-05202
23	FBM 1P / 2 / 3 L / LS	33800-00600	33800-00600	33800-00602	33800-00600	FBM 1 / 1 P L / LS	22800-18200	22800-18203	22800-18200
24	FBM 2 / 3 L / LS	21488-00000	21488-00000	22800-13200	22800-13200	FBM 2 L / LS	22800-18201	22800-18204	22800-18201
24	FBM 1P L / LS	22800-13200	22800-13200	22800-13200	22800-13200	FBM 3 L / LS	22800-18202	22800-18205	22800-18202
43	FBM 1 L	21299-00000	21299-00000	21299-00001	21299-00000	FBM 2 / 3 L / LS	22800-14650	22800-14650	22800-14650
43	FBM 2 L	21299-00002	21299-00002	21299-00004	21299-00002	FBM 1 P / L / LS	22800-14651	22800-14651	22800-14651
43	FBM 3 L	21299-00003	21299-00003	21299-00005	21299-00003	FBM 1 / 1 P / 2 / 3 L / LS	33800-04770	33800-04771	33800-04772
43	FBM 1 LS	22800-05200	22800-05200	22800-05203	22800-05200	FBM 1P / 2 / 3 L	22800-07510	22800-07511	22800-07510
43	FBM 1P L / LS	22800-05203	22800-05203	22800-05204	22800-05203	FBM 1P / 2 / 3 LS	22800-07512	22800-07511	22800-07510
43	FBM 2 LS	22800-05201	22800-05201	22800-05205	22800-05201				

MOTORIDUTTORE / GEAR MOTOR / MOTOREDUCTEUR / MOTORUNTERSETZUNG / MOTORREDUCTOR



1	22800-22651	Ponticello completo di boccola	Support avec coussinet	Vorderes Lager	SopORTE con buje
2	10028-03213	Statore	Stator	Stator	Estator
3	10028-03213	Guarnizione di protezione statore	Joint protection du stator	Deckeldichtung für Stator	Junta de la cobertura estador
4	10028-03201	Ranella	Rondelle	Scheibe	Arandella
5	10028-03200	Distanziale rotore	Entretoise du rotor	Büchse	Distancia del rotor
6	33800-03802	Scatola completa di boccola	Boîte du réducteur avec coussinet	Gehäuse mit Lager	Caja reductor con buje
7	22800-22615	Anello di tenuta	Anneau d'étanchéité	Schraube	Junta de retención
8	10028-03216	Calotta porta cuscinetto Ø 28 mm	Calotte pour roulement à billes	Lagergehäuse (aus Gummi)	Tapa de goma para cojinete
9	10028-03217	OR per albero centrale	Joint OR pour arbre moteur	O-ring für Zentralwelle	OR para eje central
10	22800-22613	Cuscinetto Ø 28 mm	Roulement à billes Ø 28	Lager Ø 28	Cojinete de bolas Ø 28
11	10028-03202	Distanziale spessore 1,5 mm	Entretoise 1,5 mm	Scheibe 1,5 mm	Distancia 1,5 mm
12	22800-22611	Terza ruota dentata	Troisième engrenage	3a Zahnrad	Tercero engranaje
13	22800-22650	Quarta ruota dentata	Quatrième engrenage	4a Zahnrad	Cuarto engranaje
14	10028-03203	Distanziale spessore 3,3 mm	Entretoise 3,3 mm	Scheibe 3,3 mm	Distancia 3,3 mm
15	10028-03215	Calotta porta boccola	Calotte pour coussinet	Lagergehäuse (aus Gummi)	Tapa de goma para buje
17	22800-22639	Prima ruota dentata	Premier engrenage	1a Zahnrad	Primero engranaje
18	22800-22640	Seconda ruota dentata	Deuxième engrenage	2a Zahnrad	Segundo engranaje
19	10028-03214	Guarnizione	Joint	Dichtung	Junta
20	22800-22642	Coperchio	Carter du réducteur	Deckel	Tapa de la caja reductor
21	10028-03206	Molla di comando	Ressort pour microinterrupteur	Feder für Mikroschalter	Muelle para microinterruptor
22	22800-22602	Rotore	Rotor	Rotor	Rotor
23	22800-22634	Pignone	Pignon	Ritzel	Piñón
24	10028-03204	Bussola	Coussinet	Büchse	Buje
25	10028-03205	Ranella di rasamento	Rondelle	Scheibe	Arandella
26	10540-13532	Vite fissaggio rotore	Vis du stator	Statorschraube	Tornillo del estador

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