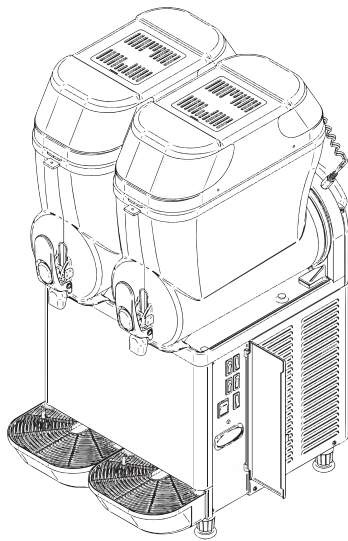


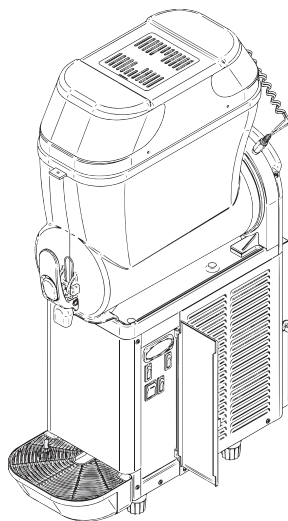
USER MANUAL



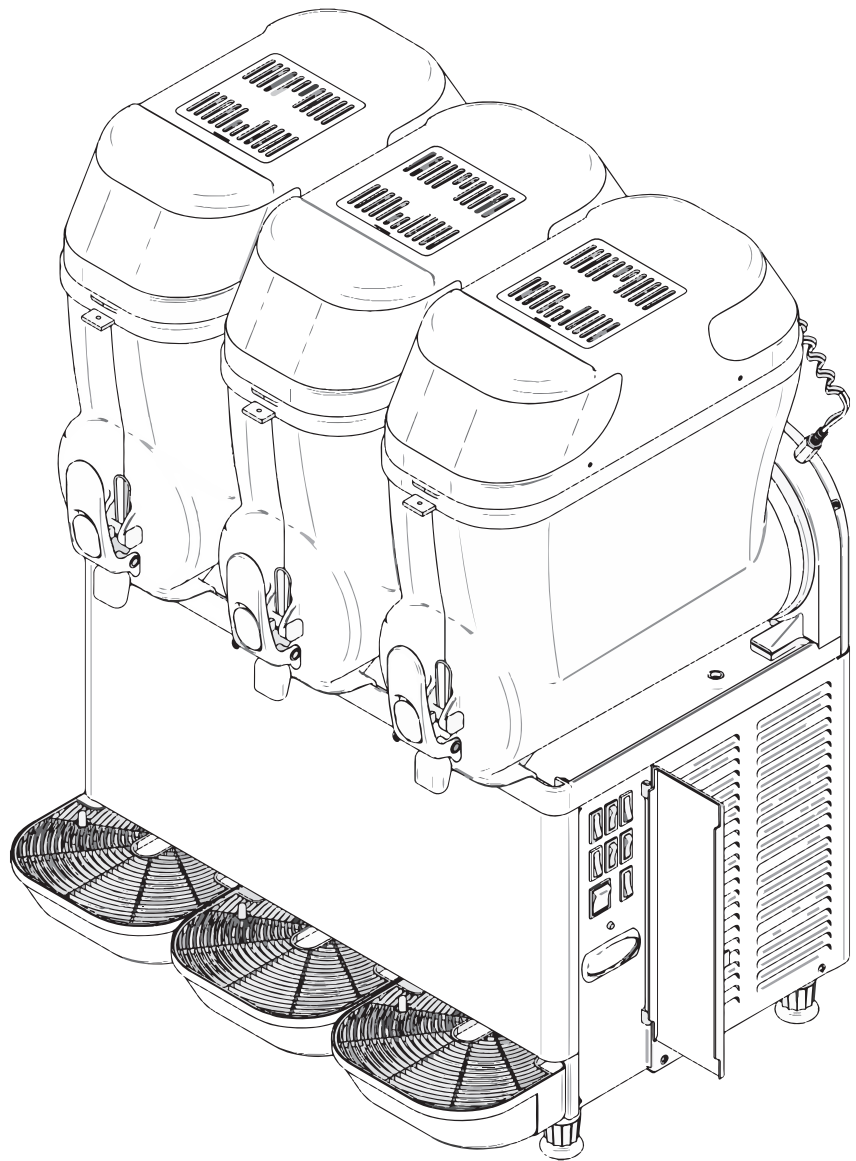
NARVON SLUSHY



#378SM2
DOUBLE BOWL



#378SM1
SINGLE BOWL



#378SM3
TRIPLE BOWL

TABLE OF CONTENTS

1. GENERAL INFORMATION	4
1.1 Manufacturer	4
1.2 Authorized persons	4
1.3 Layout of the manual	4
1.3.1 Purpose and contents	4
1.3.2 Who must read the manual	4
1.3.3 How to keep the manual	5
1.3.4 Symbols used	5
2. MACHINE DESCRIPTION	6
2.1 Main components	6
2.2 Technical data	6
2.3 Control panel description and functions	7
3. SAFETY	8
3.1 General safety rules	8
3.2 Stop functions	8
3.3 Plates	8
4. HANDLING AND STORAGE	8
4.1 Packaging	9
4.2 Conveyance and handling	9
4.3 Storage	9
5. INSTALLATION	10
5.1 List of accessories provided	10
5.2 Installation-Positioning	10
5.3 Disposal of packing materials	10
5.4 Electrical connection	11
6. OPERATION	11
6.1 Preparing the product	11
6.2 Starting a slushy machine	12
6.3 Starting #378SM1 (temperature display)	10
6.4 Starting #378SM2 and #378SM3 (temperature display)	13
6.5 Adjusting slushy consistency	13
6.6 Dispensing slushy	14

6.7 Emergency situations	15
6.8 Optional accessories	15
6.8.1 Locking System	15
6.8.2 Mechanical thermostat	16
6.8.3 High pressure alarm (pressure switch) / dirty filter signal	16
6.8.3.1 Air machines	16
6.8.3.2 Water machines	16
7. CLEANING AND MAINTENANCE	17
7.1 Emptying the bowls	18
7.2 Disassembling the dispensing tap	19
7.3 Removing the bowl and the lid	19
7.4 Washing and sanitizing the components	20
7.5 Reassembling the washed components	20
7.6 Rinsing cycle	22
7.7 Cleaning the drip tray	22
7.8 Lighted lid	22
7.8.1 Bulb replacement	23
7.9 Cleaning the condenser	23
7.9.1 Cleaning the condenser for #378SM1	23
7.9.2 Cleaning the condenser for #378SM2 and #378SM3	23
7.10 Periodic maintenance	24
8. DISPOSAL	24
9. TROUBLESHOOTING	25
10. BASIC WIRING DIAGRAMS	26

1. GENERAL INFORMATION

1.1. Manufacturer

The manufacturer's details are shown on the identification plate, illustrated on first and/or last page of the manual.

1.2. Authorized persons

Two types of people may access the machine for different purposes:

User

A person who has adequate technical training to prepare the products the machine uses to dispense slushy, in observance of current standards of hygiene.

After reading this manual, they will be capable of:

- carrying out normal product loading and/or replacement operations;
- properly dispensing the product;
- cleaning and sanitizing the machine.

Specialized technician

A person who has examined this manual and has specific training in the installation, use and servicing of the slushy machine:

- must be able to carry out repairs in the event of serious faults and be well acquainted with this manual and all the information regarding safety;
- must be able to understand the contents of the manual and correctly interpret drawings and diagrams;
- must be familiar with sanitation methods, accident prevention, technological and safety standards;
- must have specific experience in servicing slushy machines;
- must know how to behave in case of emergency, where to find individual safety equipment and how to use it properly.



Persons who do not meet the above requirements must not be allowed to use the machine.

1.3. Layout of the manual

The Purchaser must very carefully read the information contained in this manual.

1.3.1. Purpose and contents

The purpose of this manual is to provide the Purchaser with all the necessary information regarding the installation, maintenance and use of the granita machine.



Before carrying out any operation on the machine, users and specialized technicians must carefully read the instructions herein.

Should you have any doubts as to the correct interpretation of these instructions, contact the manufacturer to request the necessary explanations.



You should not carry out any type of operation until you have read and thoroughly understood the contents of this manual.

1.3.2. Who must read the manual

This manual is aimed at users and specialized technicians.

Users must not attempt to carry out any operations restricted to qualified technicians.

The manufacturer will not be liable for any damage or injury caused as a result of failure to comply with this rule.

The instruction manual is an integral part of the product purchased and must therefore be handed over to any subsequent owners.

1.3.3. How to keep the manual

This instruction manual must be kept in the immediate vicinity of the machine.

Due precautions should be taken to ensure that the manual is maintained intact and legible over time:

- Use the manual in such a way as to avoid damaging any of its contents.
- Do not for any reason remove, tear or rewrite parts of the manual.
- Keep the manual in a place that is protected against humidity and heat in order to preserve the quality of the print and the legibility of all its parts.



If the present instruction manual is damaged or lost, another copy should be immediately requested from the manufacturer or authorized distributor in the user's country.

1.3.4. Symbols used



GENERAL DANGER WARNING

This symbol indicates a danger which may also place the User at mortal risk. In such cases utmost care is required and every precaution must be taken in order to operate safely.



DANGER OF ELECTROCUTION

This symbol warns the personnel concerned that the operation described may result in an electric shock unless all the necessary safety precautions are taken.



IMPORTANT

This symbol indicates a cautionary note, a note about key functions or useful information. Very close attention should be paid to the portions of text marked with this symbol.



PROHIBITED

This symbol is used to indicate operations that must absolutely be avoided since they create hazards for the User and any other individuals present in the vicinity.



DO NOT EXTINGUISH FIRES WITH WATER

The presence of this symbol warns against attempting to extinguish fires with water or any substance containing water.



PERSONAL PROTECTION

When this symbol appears alongside a description it means that personal safety equipment must be used, as there is an implicit risk of accidents.



SPECIALIZED TECHNICIAN

This symbol identifies operations that may be performed only by qualified technical personnel.



MOVING MACHINE PARTS

This symbol identifies the danger due to moving parts existing in the machine.

2. MACHINE DESCRIPTION

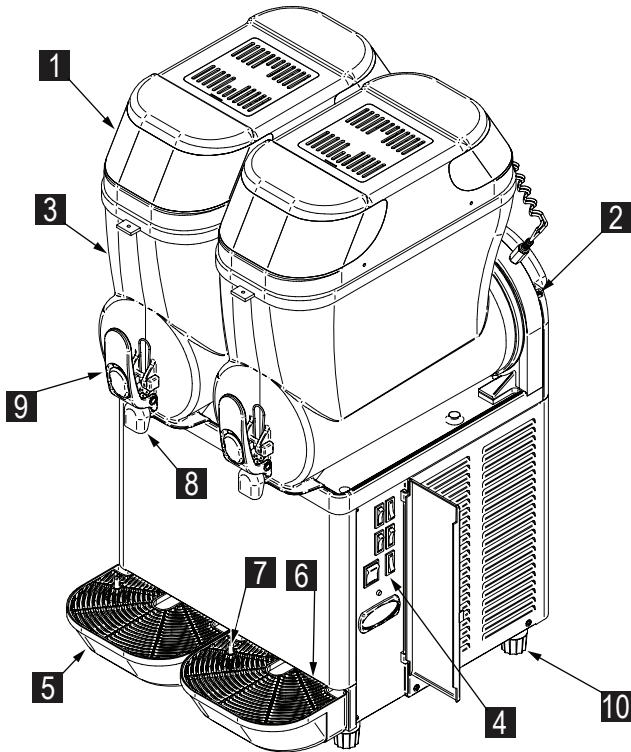
Use of the machine

The professional machine you are using is suitable for making granitas, slushies and cold beverages. If used with dairy-based products and/or when envisaged by law in according to the type of product used, it must be equipped with the optional extra of a "temperature gauge" for the product in the bowl. It is also obligatory to comply with the current regulations and standards concerning the products used.

2.1. Main components

The main components making up the machine are:

- 1 Bowl lid
- 2 Thickness regulator
- 3 Bowl
- 4 Control panel
- 5 Drip tray
- 6 Grid
- 7 Float (overflow indicator)
- 8 Product dispenser
- 9 Product dispensing lever
- 10 Feet



To make the instructions easier to read, the following abbreviations are used herein:

- #378SM1**, References the (1) bowl slushy machine
- #378SM2**, References the (2) bowl slushy machine
- #378SM3**, References the (3) bowl slushy machine
- Slushy 1 FF**, identifies a Slushy machine with one (1) bowl and Fast Freeze refrigeration system;
- Slushy 2 FF**, identifies a Slushy machine with two (2) bowls and Fast Freeze refrigeration system;
- Slushy 3 FF**, identifies a Slushy machine with three (3) bowls and Fast Freeze refrigeration system.

2.2. Technical Data

The technical data and features are listed below

Model	#378SM1	#378SM2	#378SM3
Dimensions W x D x L (in)	7.87" x 20.86" x 33.07"	15.74" x 19.68" x 33.07"	23.62" x 19.68" x 33.07"
Maximum Electrical Input (W)	2.9	4.7	6.8
		5.2	7.0
Operating voltage (V)	115		
Operating temperature (Air temp)	Min. 68°F - Max. 89°F		
Number of bowls.	1	2	3
Capacity of each bowl	3 gallons		
Sound pressure level	<< 70 dB _A		
Class	N		
Refrigeration Type	R290		



Note: The manufacturer reserves the right to make changes to the machine without notice.



Important! Any changes and/or additions of accessories must be explicitly approved and implemented by the Manufacturer.

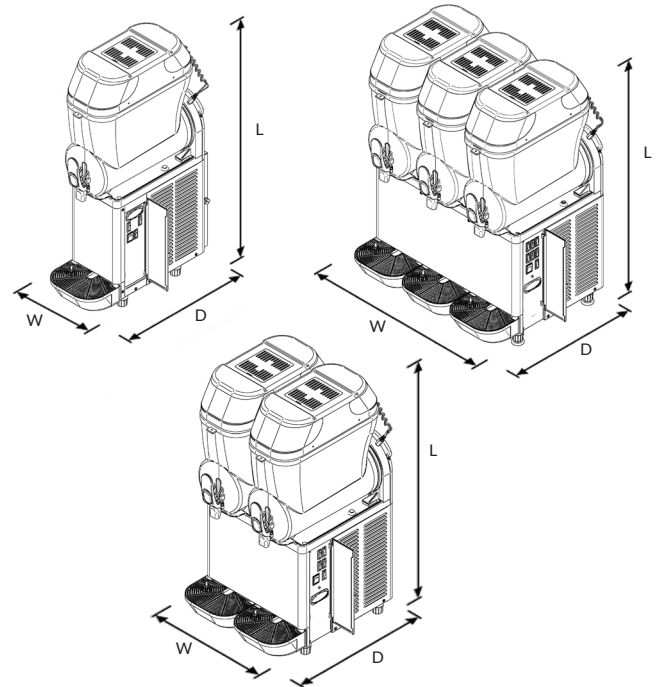
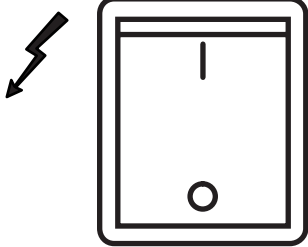
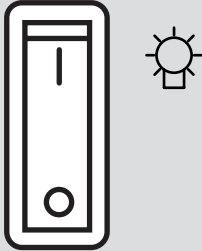
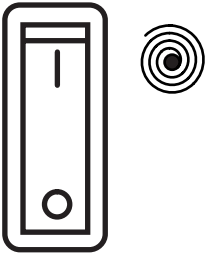
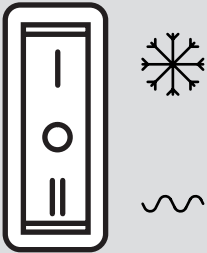



Fig. 02

2.4. Control panel description and functions

The machine controls are located on the side control panel.

Control	Machines with this control	Functions
	All	Main switch: its function is to control: <ul style="list-style-type: none"> the starting of the machine; the switching off of all the functions present on the machine.
	All	Lid light switch: to turn on/off light (if present) on the bowl lids.
	All	Bowl mixing switch (one for each bowl): it is used to switch on and off the gearmotor that drives the auger for mixing the product in the respective bowl.
	All	Refrigeration system changeover switch (one for each bowl): <ul style="list-style-type: none"> in position "0", the refrigeration system is deactivated; in position "I", the refrigeration system is activated for the production of granitas; in position "II", the refrigeration system is activated for the production of cold drinks.
	All versions with temperature display	Temperature display: <ul style="list-style-type: none"> This shows the temperature of the product inside the tank

3. SAFETY

3.1 General safety rules

- Carefully read the whole instruction manual.
- The connection to the electricity mains must comply with the current safety standards in the user's country.
- The machine must be connected to an electric outlet that is:
 - compatible with the plug provided with the machine;
 - of dimensions conforming to the data shown on the rating plate on the side of the machine.
 - properly grounded;
 - connected to a system provided with a differential switch and circuit breaker.
- The power cord must not be:
 - allowed to come into contact with any kind of liquid: this can cause electric shocks and/or fire;
 - crushed and/or brought into contact with sharp surfaces;
 - used to move the machine;
 - used if it shows any damage;
 - handled with damp or wet hands;
 - wound into a coil when the machine is on.
 - tampered with.
- DO NOT:
 - install the machine in a manner other than that described in Section 5.
 - install the machine in a place where it may be exposed to any kind of water or liquid.
 - use the machine near inflammable and/or explosive substances.
 - leave plastic bags, polystyrene, nails, or any parts within children's reach, since they are potential sources for danger.
 - allow children to play or stay near the machine.
 - use spare parts other than those recommended by the manufacturer.
 - make any technical changes to the machine.
 - immerse the machine in any kind of liquid.
 - spray water on the machine to wash it.
 - use the machine other than as directed in this manual.
 - use the machine when not in full possession of your mental and physical faculties: under the influence of drugs, alcohol, etc.
 - install the machine on top of other equipment.
 - use the machine in an explosive atmosphere or in the presence of a high concentration of dust or oily substances suspended in the air;
 - use the machine in a place where there is a risk of fire;
 - use the machine to dispense substances that are not compatible with the machine's specifications;
- Before cleaning the machine, make sure that it is unplugged; do not clean the machine with gasoline and/or solvents of any kind.

- Repair work may be performed only by a service center member authorized by the Manufacturer and/or by a specialized, trained personnel.
- Do not obstruct the grill vents on the side of the machine.
- Do not place the machine near heating equipment (stoves or radiators).
- In case of fire, use carbon dioxide (CO₂) extinguishers. Do not use water or powder extinguishers.



In the event of improper use, all warranty rights will be forfeited and the manufacturer will accept no liability for injury or damage to persons and/or property.

The following are to be considered improper use:

- any use other than the intended use and/or with methods other than those described herein;
- any operation on the machine that is in contrast with the directions provided herein;
- use of the machine after any components have been tampered with and/or safety devices have been changed;
- use of the machine after it has undergone repair with components not authorized by the manufacturer;
- outdoor installation of the machine.

3.2 Stop functions

The machine is shut down by turning off the main switch.

3.3 Plates

NONE OF THE PLATES OR LABELS APPLIED ON THE MACHINE MUST BE REMOVED, COVERED OR DAMAGED, ESPECIALLY THOSE RELATING TO SAFETY.

4. HANDLING AND STORAGE



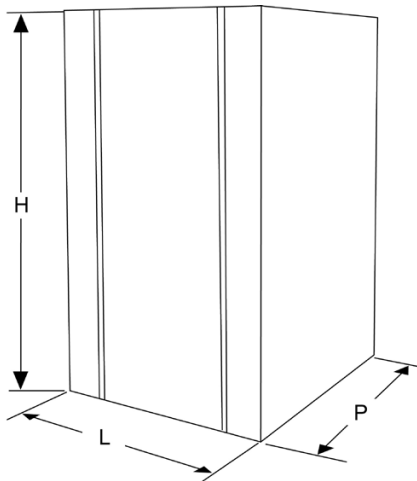
All the operations described in Section 4 may be carried out exclusively by technicians who are also specialized in the lifting and handling of packed or unpacked machines. They must organize all the operational sequences and use suitable equipment, according to the characteristics and weight of the object to be handled and in strict compliance with the applicable regulations currently in force.

4.1. Packaging

The machine is shipped ready for use in a cardboard box. The cardboard box comprises a base and a cover, which are secured together with two nylon straps.

DIMENSIONS AND WEIGHT OF PACKING CONTAINER

Model	Width (L)	Depth (P)	Height (H)	Weight
#378SM1	12 in	20.86 in	36.61 cm	68.34 lbs
#378SM2	22.83 in	21.25 in	38.18cm	112.43 lbs
#378SM3	30.31 in	21.25 in	38.18cm	147.71 lbs



Note: The dimensions and weight of the packing container are approximate.

4.2. Conveyance and handling



Make sure that no one is stationed within range of lifting and handling operations. In difficult conditions, specialized personnel should be appointed to oversee the movements of the machine.

Manual handling of the machine requires at least two people.

The machine must be moved into an upright position, only after every bowl has been emptied of product.

Lift the box and carefully convey it, avoiding routes with obstacles. Pay attention to the overall dimensions and any parts sticking out.



Warning: Do not make any additional cuts on the packing container.

The WARRANTY does not cover damage caused to the machine during its conveyance and handling.

The Purchaser will bear the cost of repairing or replacing damaged parts

4.3. Storage



Before the machine is placed in storage and whenever the machine is started up again after a period of storage, it must be thoroughly cleaned and sanitized.

Warning: Do not store more than two machines stacked on top of one another.

If the machine is to remain unused for a long period of time, due precautions must be taken with respect to the place and duration of storage:

- store the machine in a closed place;
- protect the machine from shocks and stresses;
- protect the machine from humidity and large temperature fluctuations; prevent the machine from coming into contact with corrosive substances.

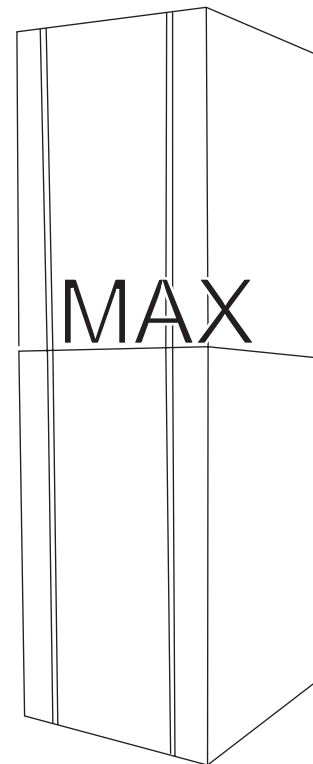


Fig. 04

5. INSTALLATION



All of the operations described in Section 5 may be carried out exclusively by specialized technicians, who must organize all the operational sequences and use suitable equipment, in strict compliance with the applicable regulations currently in force.

The machine must be installed indoors in a well-lit and well-ventilated room with a firm, solid, level floor (slope less than 2°).



The machine is of the attended type, and must be installed in places where it can be monitored by trained personnel.

Current legislation may dictate that the connection between the power cable and the mains must be permanent. Contact a specialist technician to connect/disconnect the cable to/from the mains in accordance with the current regulations.



Warning: It is forbidden to install the machine in a place where it may be reached, touched and/or operated by persons other than those specified in section 1.2.

The machine may only operate in places with an ambient temperature ranging between 20°C and 32°C (68°F - 89.6°F).

5.1. List of accessories provided

- Food grade lubricant: to lubricate all of the parts indicated in this manual after washing and sanitization operations.

5.2. Installation-Positioning

The installer must check that:

- the site has been duly prepared for machine installation;
- the surface that the machine will be installed on is firm, flat and solid;
- the room is adequately lit, ventilated and hygienic and an electric outlet is within easy reach.



Adequate clearance must be left around the machine to enable personnel to work without any constraints and also able to leave the work area immediately in case of need.

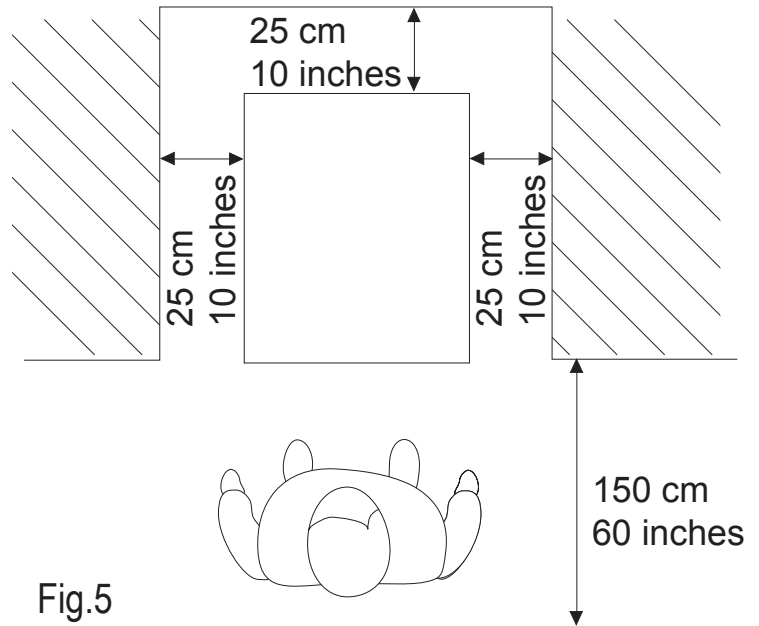


Fig.5

Figure 5 shows the minimum clearances for installation



Note: Leave a 25 cm (10 inches) space in the upper part.

Fig. 5 shows the clearances required to access:

- the control panel on the right side;
- machine parts so that they may be serviced in the event of a fault.

After positioning the packing container in the vicinity of the installation site, proceed as follows:

1. Cut the straps securing the box;
2. Lift the cardboard box;
3. Then lift the machine and position it on the prepared site.



Before the machine is used for the first time, its components must undergo thorough cleaning and the parts that will come into contact with the granita must be sanitized; for further details see the relevant section herein.

5.3. Disposal of packing materials

After opening the box, make sure to separate the packing materials according to type and dispose of them in accordance with the current regulations in the user's country.

We recommend keeping the box for future conveyance or transport.

5.4. Electrical connection



This job may be performed only by specialized technical personnel.

Before plugging in the machine, make sure that the main switch is on "0".

The Purchaser is responsible for making the electrical connection.

The machine must be connected to the electricity mains by means of the plug fitted on the power cord. Be sure to comply with:

- the technical regulations and standards in force at the time of installation;
- the data shown on the rating plate on the side of the machine.



Warning: The electric outlet must be situated in a place easily within reach of the user, so that no effort is required in order to disconnect the machine from the power supply when necessary.

If the power cord is damaged, you must have it replaced either by the manufacturer or a specialized technician



It is forbidden:

- to use extension cords of any type;
- to replace the original plug;
- to use adapters.

6. OPERATION

Before the machine may be started up for the first time, specialized technical personnel must check that it functions properly.

6.1 Preparing the product



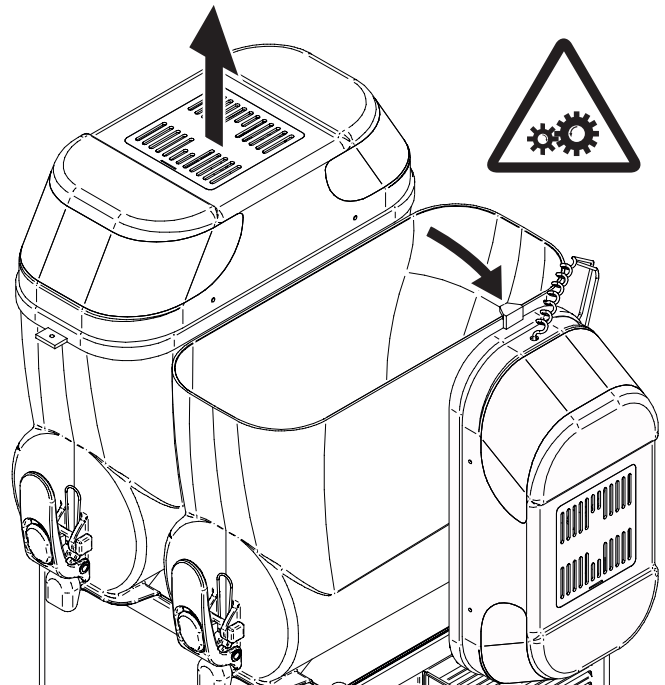
Warning: Product may be poured into the bowl only when the machine is off and unplugged.

Fig.6 Never only use water



Dilute and mix the CONCENTRATE with WATER in a suitable container, following the manufacturer's directions. THE MIXTURE OBTAINED MUST HAVE A MINIMUM SUGAR CONTENT OF 13° BRIX - A lower concentration may damage the augers and/or gearmotors.

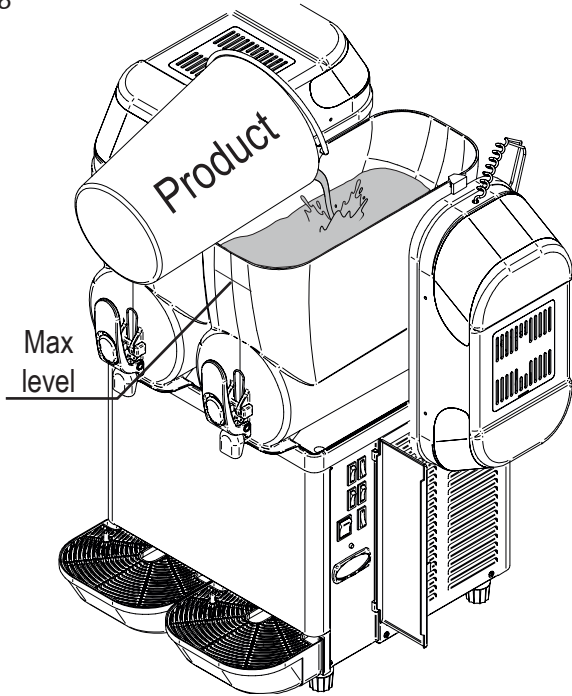
To remove the lid from the bowl, follow these instructions: 1 lift the lid;



Warning: Do not force the lid opening in case of difficulty.

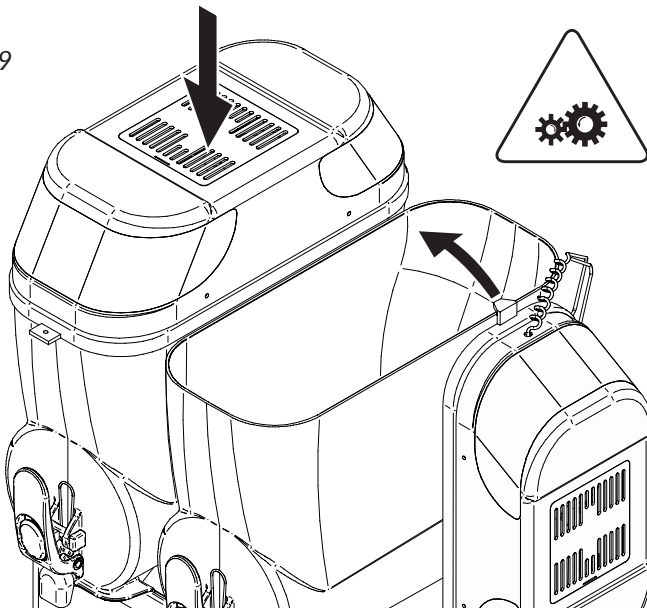
NEVER INTRODUCE HOT LIQUIDS with temperatures exceeding 25°C (77°F)

Fig.8



Pour the product into the bowl making sure that it never goes above the max level.

Fig.9



After pouring the product into the bowl, close the lid on top of the bowl.



Warning: Never switch on the machine if the lid is missing. Before removing the lid, switch off the machine and unplug it.

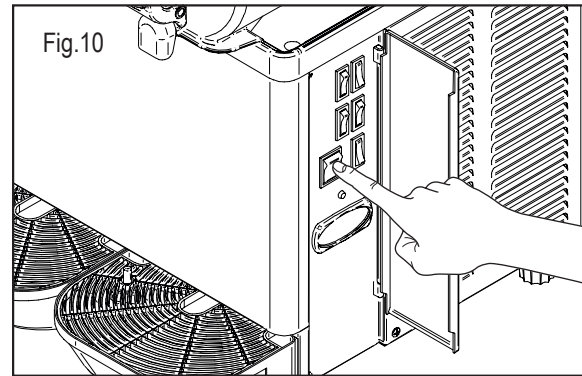


Warning: There are some moving parts inside the bowl, which may cause injuries; turn off and unplug the machine before carrying out any operation inside the bowl.

6.2. Starting a Slushy Machine

For the sake of simplicity only the operation of the right bowl will be illustrated; to operate the other bowls simply carry out the same sequence of steps on the switches of the bowl in question.

Switch ⚡ in position "I": machine powered.

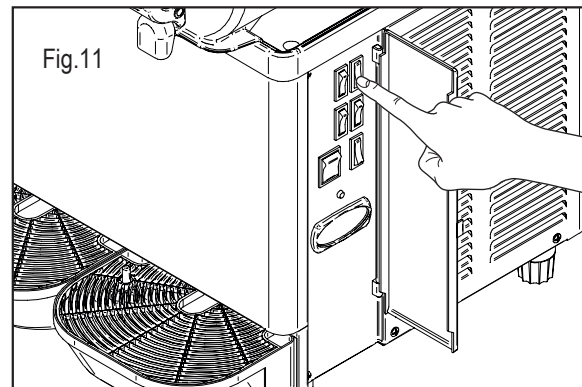


Each bowl is controlled by a switch and a changeover switch, which must be operated as follows:

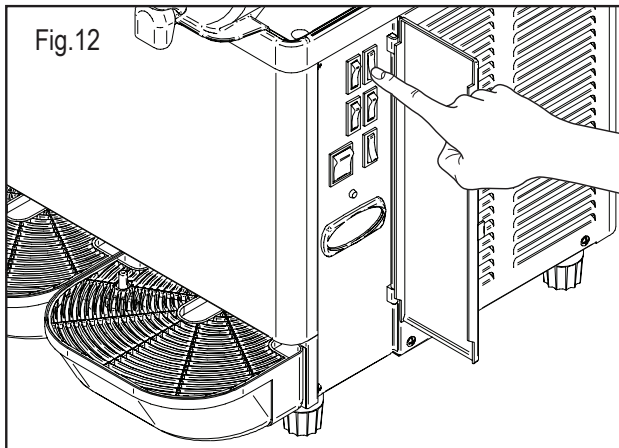
Switch ⦿ in position "I": mixer on.

To dispense Slushy:

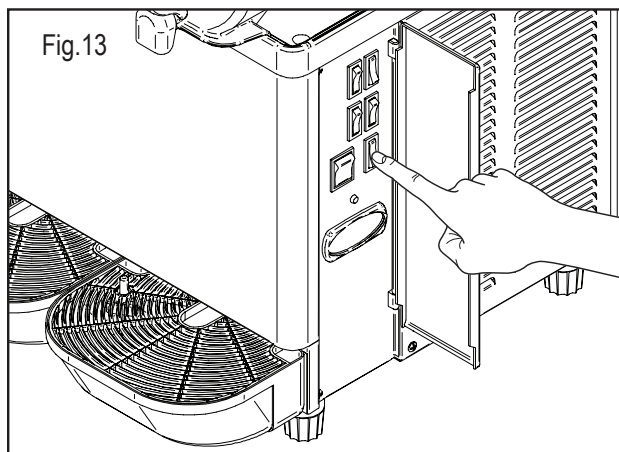
Changeover switch ❄️ : in position "I" refrigeration system on (freeze mode).



Changeover switch  : in position "II" refrigeration system on (cooling mode).



Press the switch  to turn on the machine lid light.



6.3. Starting #378SM1

(Temperature display)

The temperature display serves to view the temperature of the product inside the tank when the machine is operating in "cold drinks fridge" mode.

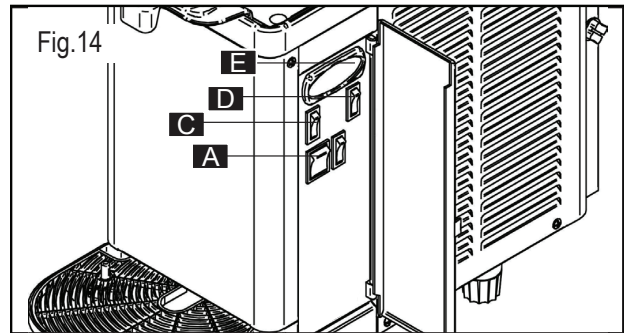
Switch (A) in position "I": power is being supplied to the machine.

Switch (C) in position "I": the mixer is operating.

To make SLUSH DRINKS (GRANITA): Switch (D) in position "I": Refrigerator system operating (slush drinks - granita).

To make COLD DRINKS: Switch (D) in position "II": Refrigerator system operating (cold drinks).

To disable the FRIDGE (mixing only): Switch (D) in position "0": Refrigerator system off (mixing only).



3 seconds after the last key is pressed, the setting is stored to memory and the display will show the temperature of the product in the tank.

ALARMS

In case of probe failure, the display will read A1. Programming and adjustment outputs will be disabled.

6.4. Starting #378SM2 and #378SM3

(Temperature display)

For the sake of simplicity, we will show how to enable the right-hand tank; for the other tanks, it is sufficient to carry out the same sequence of operations on the switches for the tank in question.

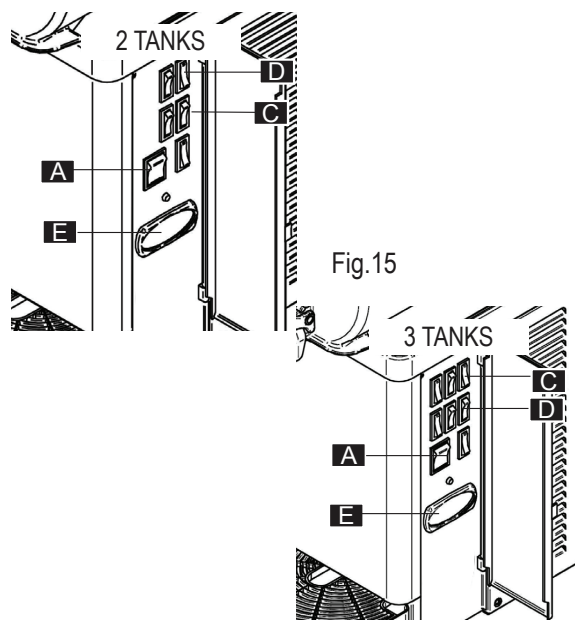
Switch (A) in position "I": Machine powered.

Switch (C) in position "I": Mixers operating.

To make SLUSH DRINKS (GRANITA): Deviators (D) in position "I": Refrigerator system operating (slush drinks - granita).

To make COLD DRINKS: Deviators (D) in position "II": Refrigerator system operating (cold drinks).

To disable the FRIDGE (mixing only): Deviators (D) in position "0": Refrigerator system off (mixing only).



ALARMS

In case of probe failure, the display will show the following alarm messages:

“A1”: Tank 1 probe disconnected

“A2”: Tank 1 probe short circuit

“A3”: Tank 2 probe disconnected

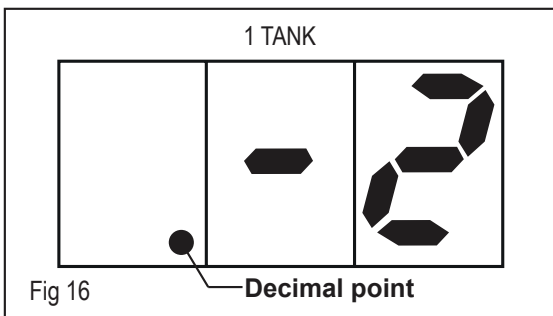
“A4”: Tank 2 probe short circuit

“A5”: Tank 3 probe disconnected

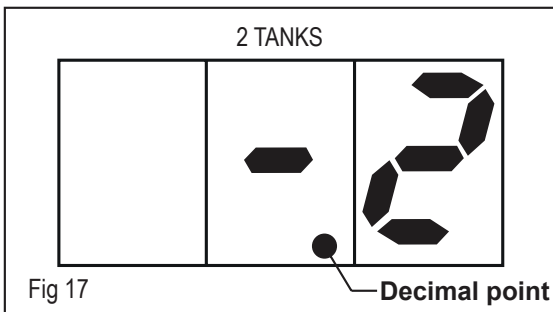
“A6”: Tank 3 probe short circuit

During operation, the temperature display shows the temperature of the product in the tanks, cyclically showing the temperature of the product first in one tank and then in the other, every 3 seconds. To see which tank is referred to with the temperature reading, it is necessary to check which decimal point is being shown.

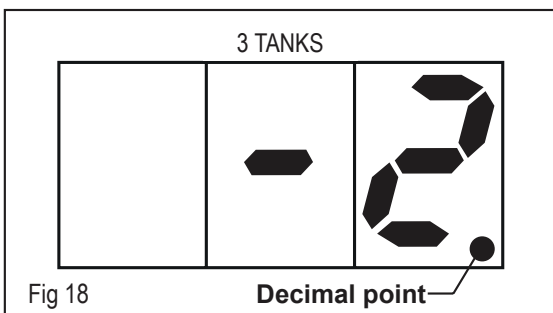
If the decimal point viewed is on the left, the temperature reading refers to the tank 1 (see Fig.2 Page 4).



If the decimal point viewed is in the centre, the temperature reading refers to the tank 2 (see Fig.2, Page 4).



If the decimal point viewed is on the right, the temperature reading refers to the tank 3 (see Fig.2, Page 4).



Note: If while using machine, the temperature display should switch off suddenly, to start it again press the . key. If the temperature display should not switch on again, switch off the machine and contact your nearest assistance center.



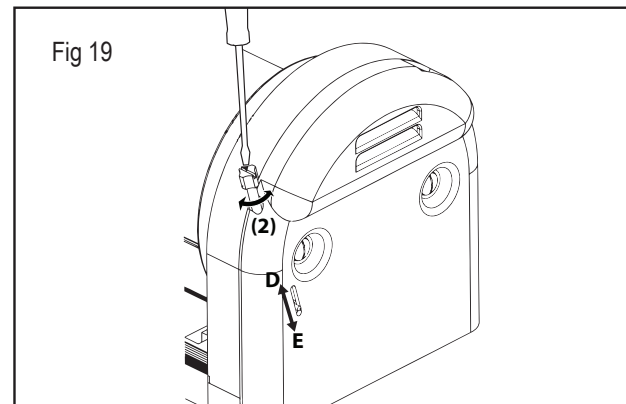
Important: While using the machine, the temperature display must always be on so as to show the temperature of the product in the tanks.

6.5. Adjusting slushy consistency

The consistency of the slushy may be adjusted (+/-) by means of the screw shown in the figure +: thicker consistency, -: thinner consistency.



The adjustment may be made by hand or with the aid of a suitable flat-tip screwdriver.



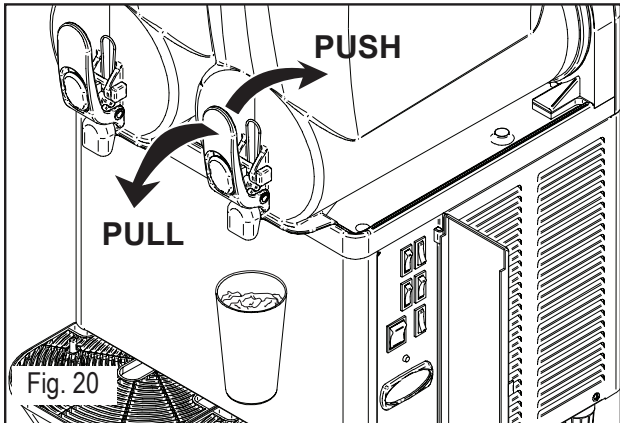
The machine comes straight from the factory with the valve (2) set in an intermediate position between the maximum (E) and minimum (D) consistency points.

If you wish to raise the consistency of the product all that is needed is to turn the valve counterclockwise (left). We can see that the tab lowers in position towards point E (point of maximum consistency).

If you wish to lower the consistency of the product all that is needed is to turn the valve counterclockwise (right). We can see that the tab moves higher in position towards point D (point of minimum consistency).

6.6. Dispensing Slushy

To dispense the beverage, pull the tap lever.



Check the temperature of the product in the hopper on a regular basis, using a sample thermometer to make sure that the product remains always under the storage temperature. For machine models equipped with temperature display, also check that the temperature of the product, as measured by a sample thermometer, corresponds to the temperature shown on the machine. If there is still product to be used up in the hopper, never disconnect the machine from the mains power or switch off the machine; leave the machine on in granita or refrigerated drinks mode.



If the machine is not used continuously, when used with milk-based products, it is necessary to:

- Spray sanitizer solution around the spigot area and on the spigot itself (alternatively, wash with a clean cloth and sanitizer); or:
- Dispense a small amount of the product from the spigot before dispensing the serving for the customer.

6.7. Emergency situations



WARNING: To shut down the machine in an emergency situation, firmly press the main switch into position -0-.

In case of freezing, switch off the machine and contact a service center or specialized technician.



If a fire breaks out, the area must be immediately cleared to make way for trained personnel provided with suitable safety equipment. Always use approved extinguishers, never use water or substances of dubious nature.

6.8. Optional accessories

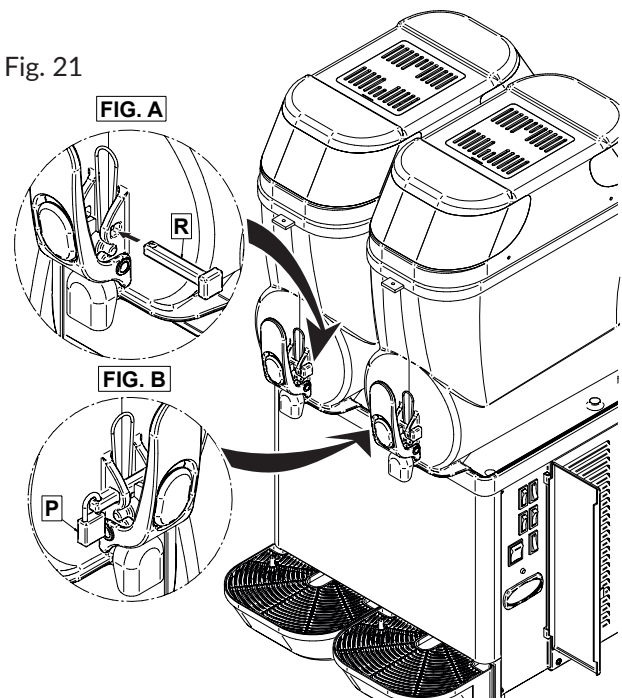
6.8.1 Locking System

Use the new tap locking system as follows:

Fig. A: When using the machine, place the rod "R" as showed in the picture.

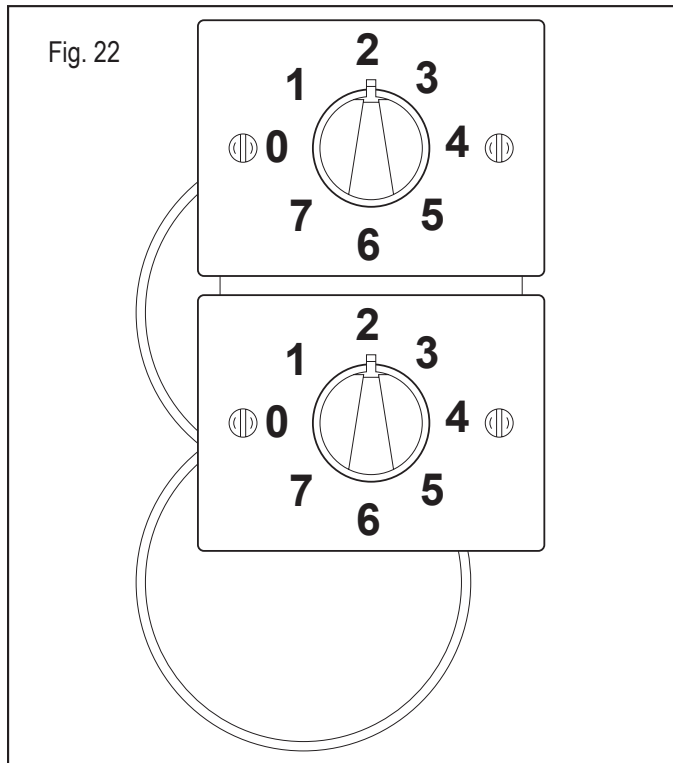
Fig. B: To lock the handle, insert the rod "R" in its hole and place the padlock as showed in the picture.

Fig. 21



6.8.2 Mechanical thermostat

It is possible to regulate the temperature of machines provided with a mechanical thermostat, when they operate in “cold drink” mode. To do so, simply adjust the refrigeration power using the potentiometer. To obtain a higher refrigeration power (lower product temperature) turn it clockwise towards higher power values.



6.8.3.2. Water machines

The machines provided with a condenser refrigerated with water include a pressure sensor, so that, when the pressure rises and reaches a safety value (factory setting) due to an insufficient water supply for proper refrigeration it sends a signal to the compressor and stops it. A red pilot light (PR) will light up automatically on the front panel.

When this happens, the operator should stop the machine, check the water connections and the water supply, turn the machine back on and press the pressure switch (R) to re-establish normal operation. The pilot light will turn off when the machine begins to operate normally once again.

6.8.3 Dirty filter signal

6.8.3.1 Air machines

When the machine is working in critical conditions, due to dirt accumulated in the condenser, the insufficient air supply at the condenser causes an increase of temperature at the cold circuit. Optionally it is possible to install a sensor that warns you about this situation. When it happens, a red pilot will flash (PR).

To reset the machine it must be disconnected, the left panel removed and the condenser cleaned (see Section 7.9). Reconnect the machine and press the restart button (R) situated on the right panel. The red pilot light (PR) on the front panel will turn off.

7. CLEANING AND MAINTENANCE



Before undertaking any cleaning and maintenance of external machine components, make sure that the main switch is positioned on -0- and that the machine is unplugged.



Before performing any cleaning and maintenance or operation on the machine, wear personal protection (gloves, glasses, etc.) which are recommended by the safety standards in force in the country where the machine is used.

When performing the Cleaning and Maintenance operations, follow these instructions:

- wear protection accident-proof gloves;
- do not use solvents or inflammable materials;
- do not use abrasive and/or metal sponges to clean the machine and its components;
- take care to avoid dispersing liquids in the surrounding area;
- do not wash machine components in a dishwasher;
- do not dry parts of the machine in a conventional and/or microwave oven;
- do not immerse the machine in water;
- do not expose the machine to direct sprays of water;
- for cleaning use only lukewarm water and a suitable sanitizing agent (conforming to current regulations in the user's country) that will not risk damaging machine components;
- on completing work, make sure that all protective covers and guards that have been removed or opened are set back in place and properly secured.

Cleaning and sanitization are operations that must be performed with utmost care and on a regular basis to guarantee the quality of the beverages dispensed and compliance with mandatory hygiene standards.

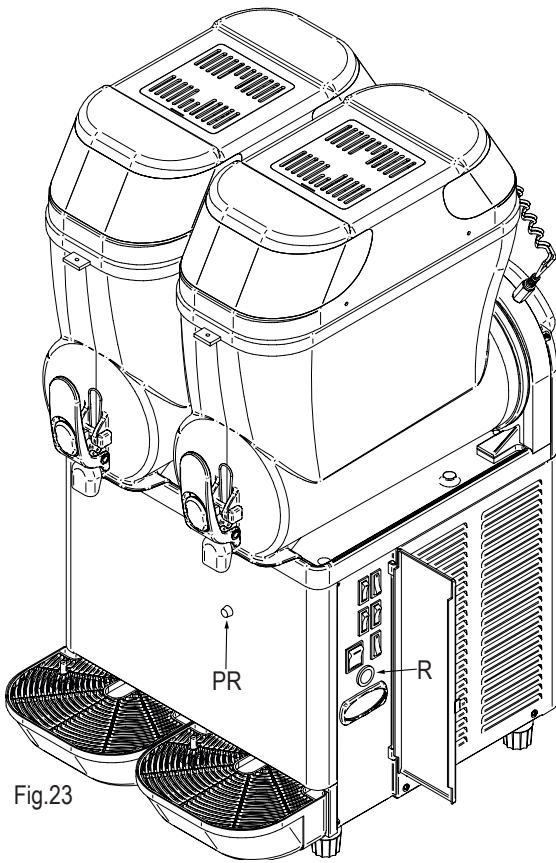


Fig.23



Before starting up a machine refrigerated by water, it is necessary to follow the following instructions.

1. Take the water input tube,
2. Put the rubber joint inside the fitting,
3. Connect the water input to the water network,
4. Connect the output pipe to the drain,
5. Open the water tap and
6. Turn on the machine.

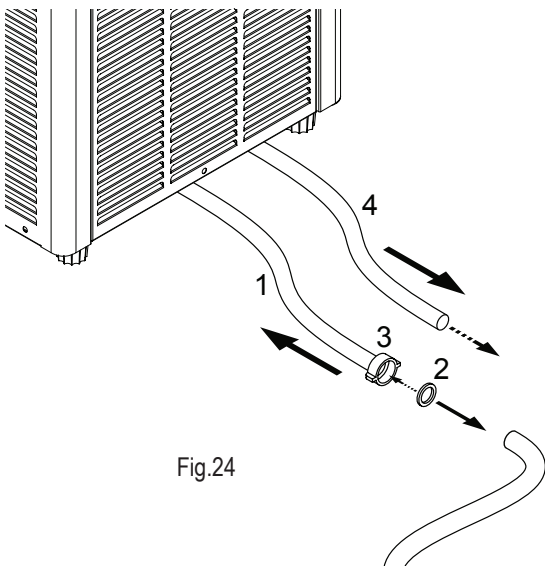


Fig.24



The bowl must be cleaned and sanitized at least once a day and in any case, in compliance with the current hygiene regulations in the country of use. These operations need to be performed more frequently if demanded by the characteristics of the product used; for more details, contact the product supplier. If the machine is not used continuously throughout the day, wipe the dispensing tap area and the product outlet pipe with a clean cloth and sanitizing fluid, as illustrated in the figure below.

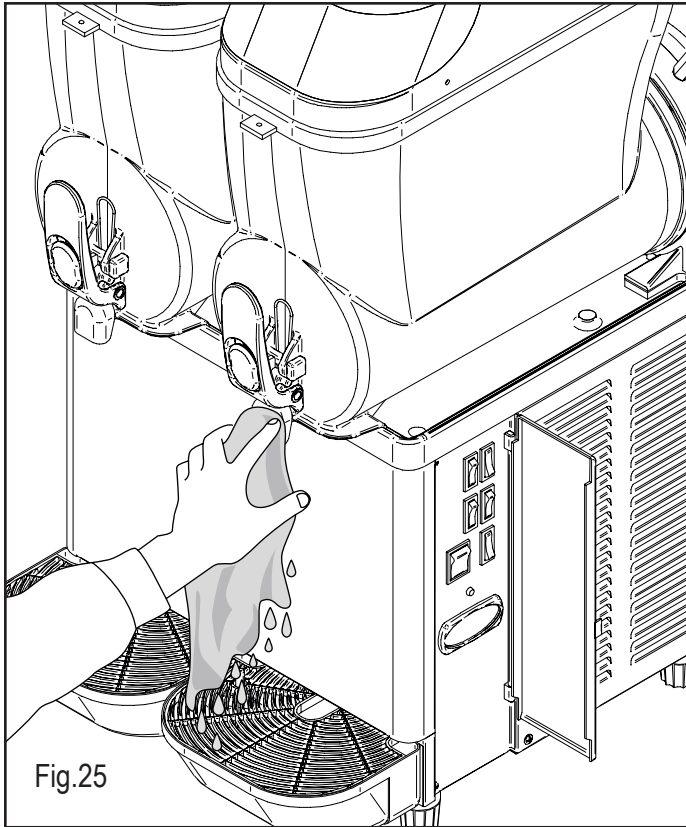


Fig.25



The stainless materials, plastic and rubber used to manufacture said parts, as well as their particular shape, make them easy to clean but do not prevent the build-up of germs and mold in the event of inadequate cleaning.



It is forbidden to clean or service the machine when it is plugged in and the main switch is positioned on 1- .


7.1. Emptying the bowls

Before a bowl may be cleaned, it must be emptied of the previously prepared product.

If the bowl is to be cleaned prior to the first use of the machine, it need not be emptied. In such a case refer directly to Section 7.2.

For the sake of simplicity only the operation of the right bowl will be illustrated; to operate the other bowls simply carry out the same sequence of steps on the switches of the bowl in question.

The procedure shown below applies to models with and without temperature display.

With the machine switched on, put the freeze/cool changeover switch  on "O", and empty the bowl of all its contents.

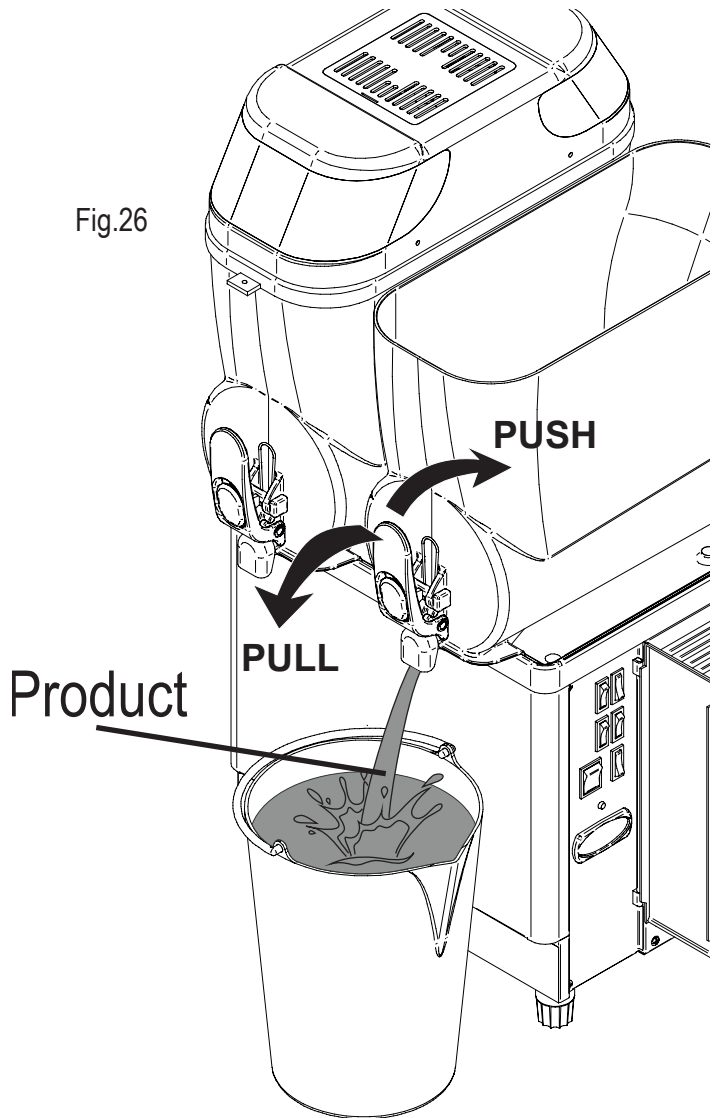


Fig.26

After that, turn off both the main switch and mixer switch and unplug the machine.

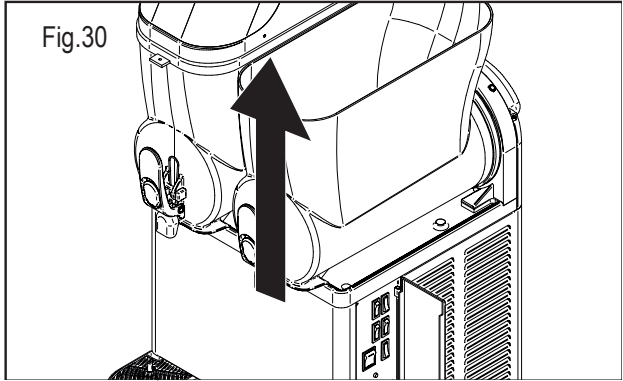
 **Never disassemble the tap if the product or any other liquid is present inside the bowl.**

7.3. Removing the bowl and the lid

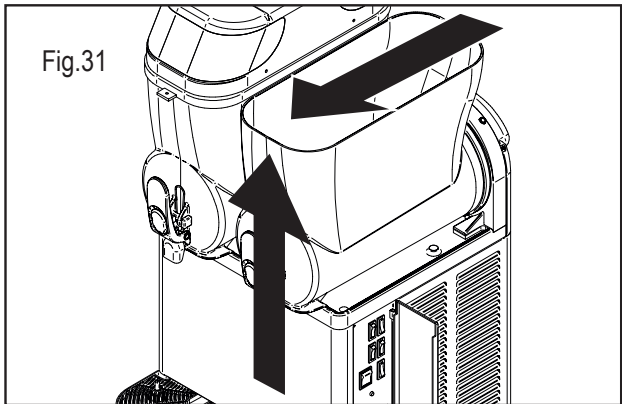
Removal of every machine bowl is fundamental to ensure correct cleaning and sanitization.

To remove a bowl correctly proceed as follows:

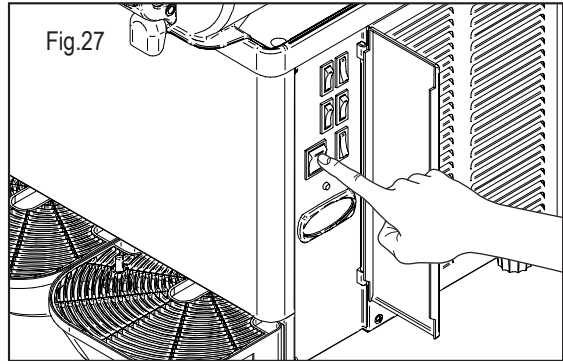
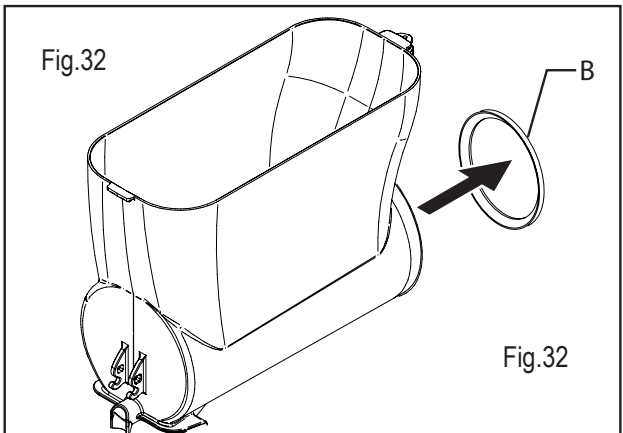
1. Remove the lid as shown in Section 6.1.;
2. Raise the front part of the bowl to release it;



3. Remove the bowl from its seat by pushing and tapping lightly on the rear part;



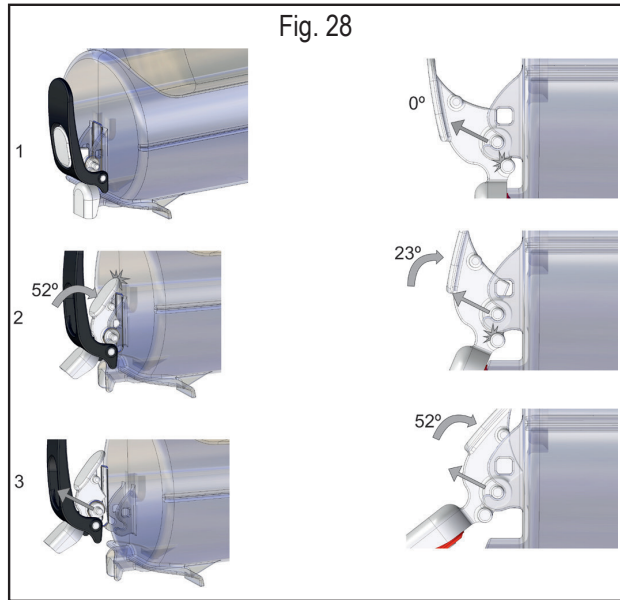
4. Remove the seal (B);



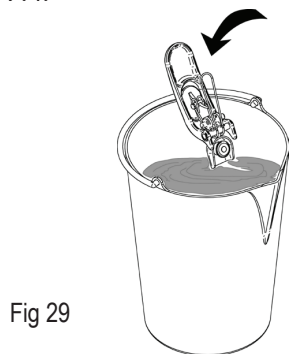
7.2. Disassembling the dispensing tap

Before removing the bowl it is recommended to disassemble the tap; after cleaning, the tap must not be reapplied until the bowl has been correctly positioned, in its seat.

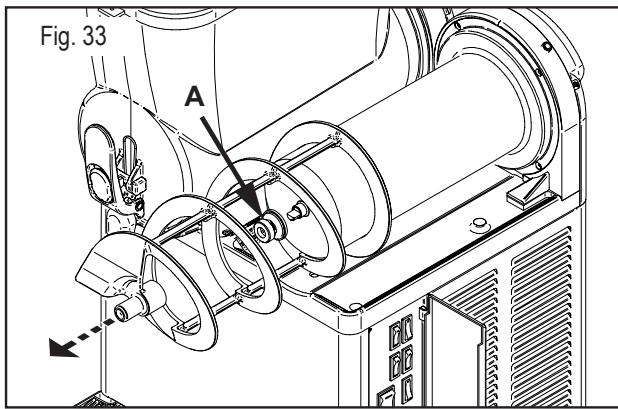
Disassemble the tap by removing the pin from its seat to release all the other parts. Push the push lever dispenser until it makes contact with the tank and pull upwards as shown.



These components may be placed in a basin containing hot water (approx. 50° C / 122° F); they must later be treated as described in Section 7.4.



5. Take out the auger and remove the seal (A).



7.4. Washing and sanitizing the components

All of the previously disassembled and removed components must be thoroughly washed and sanitized.



Important: the sanitizing solution must comply with the regulations enforced at the time the machine is used.

To carry out the procedure correctly, please use the following instructions:

1. Fill a container with a sanitizer solution mixed in water (2% of sodium hypochlorite mixed in water).
2. Thoroughly wash the tank, lid and evaporator with a sponge soaked in the sanitizer solution.
3. Thoroughly wash again with clean water.
4. Fill another container with a sanitizer solution.
5. Dip the dismantled components into the sanitizer solution.
6. Leave the dismantled components to soak in the solution for 30 minutes.
7. Thoroughly wash again with clean water.
8. Place the components on a clean surface and dry them.
9. Assemble the machine as described in Section 7.5.
10. Before using the machine again, run the rinsing cycle with clean water (Section 7.6).



Warning: Do not submerge lids equipped with lighting in any type of liquid. Before starting the cleaning and sanitizing operations of the lid, remove it from the machine as described in the previous chapter.

To clean the lighted lid correctly, proceed as follows;

1. Using a clean, damp cloth, first wipe clean the bottom part of the lid (in contact with the product);
2. Using a clean, damp cloth, wipe clean the whole outer part;

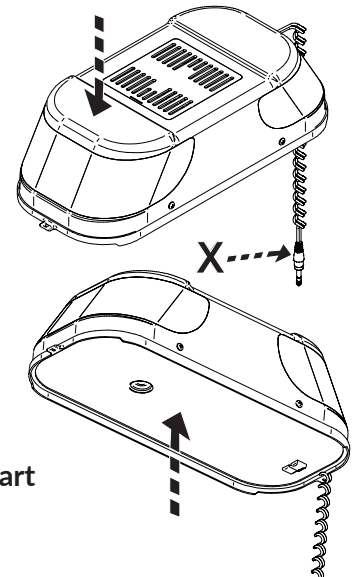


Fig. 34

Bottom Part

3. Using a sponge dipped in sanitising solution, sanitise the bottom part of the lid, taking care not to wet the contacts (X);
4. Allow to process for 30 minutes;
5. Rinse only the bottom part at least twice with a clean sponge soaked in fresh water.
6. Place the lid on a clean surface and dry it; first dry the bottom and then the outer part with a clean cloth.
7. Set the lid back in place only after having cleaned and sanitised the bowl.

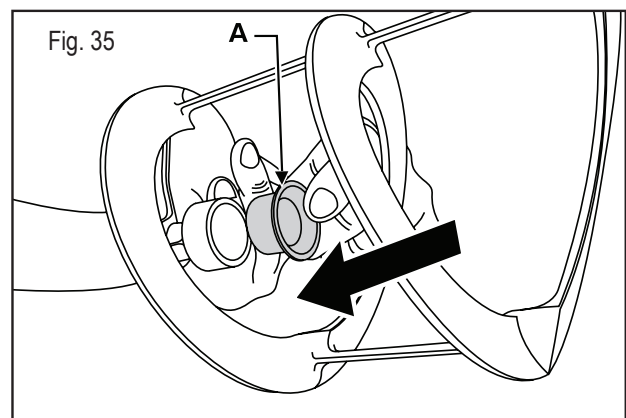


It is forbidden to wash and/or sanitise the lid while it is installed in the machine.

7.5. Reassembling the washed components.

All of the washed and sanitized components must be carefully reassembled. Some components must be adequately lubricated in order to ensure that they work efficiently.

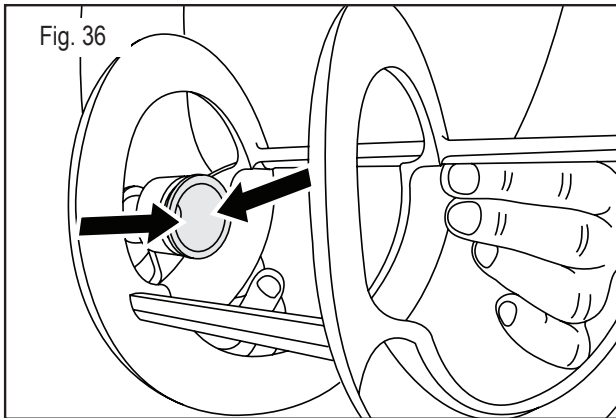
Apply the seal (A) on the auger as shown in the Fig.35.



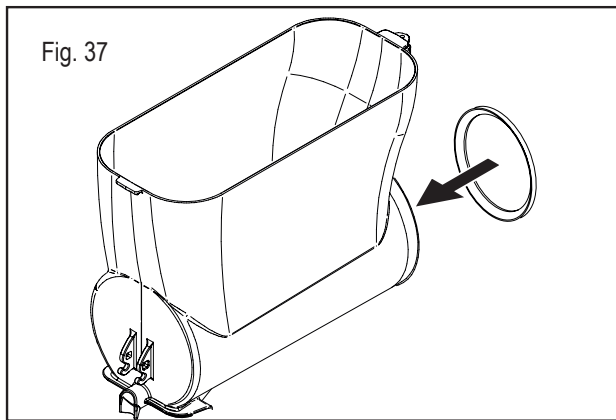


Important Note: Always check the seal integrity; should it be worn, replace it with a new one. Replace the seal (A) once a year at least.

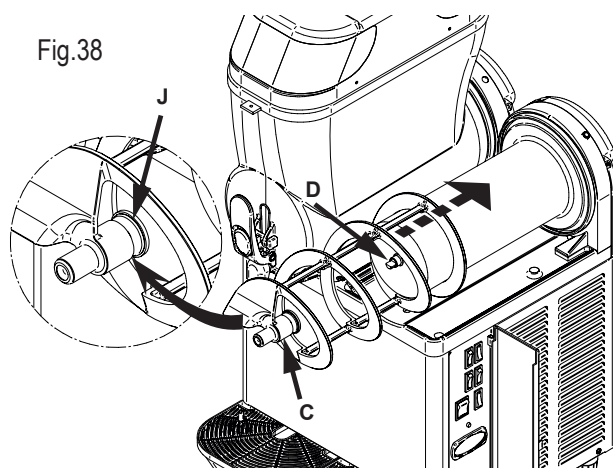
Using food safe lubricant, lubricate the seal (A) in the areas shown in the Fig.36.



Mount the seal (B) on the bowl.

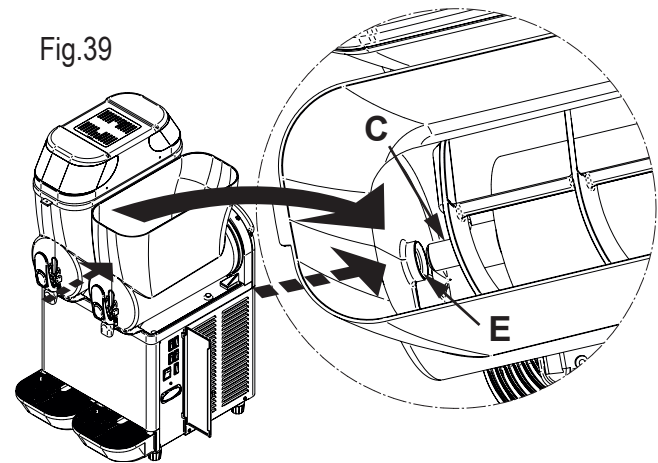


Introduce the auger, engaging head (C) with shaft (D). Check that the gasket (J) is placed in its lodging.

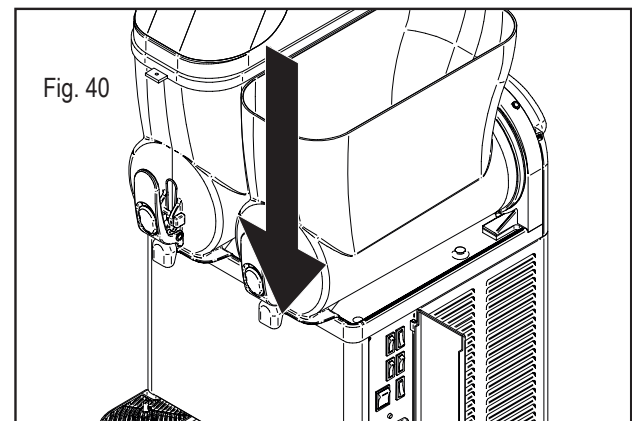


Note: Rotate the auger to engage it.

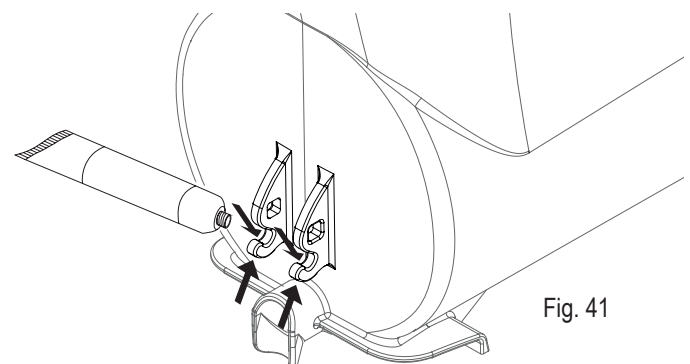
Set the bowl back in place slightly; raise head (C) of the auger so that it meets the seat provided (E) in the bowl.



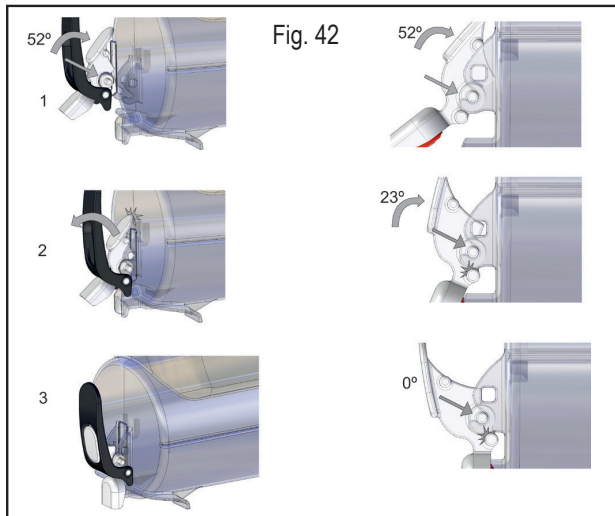
Press the bowl downward until it engages the surface as shown in the figure.



Using the food safe lubricant provided, adequately lubricate the hooks and the joint



Lean the pin on its seat and push the push lever until it is introduced to the tap



Note: Correctly install the components as shown in the figure. The non-lubrication of the cap may cause product leakage from the tap.

7.6. Rinsing Cycle

Before starting up the machine you must run the rinse cycle

Proceed as follows:

1. Fill the tank with clean water.
2. Turn the machine on for 5 minutes in the (agitation) mode only.
3. Turn off the machine and empty the tank by opening the tap.

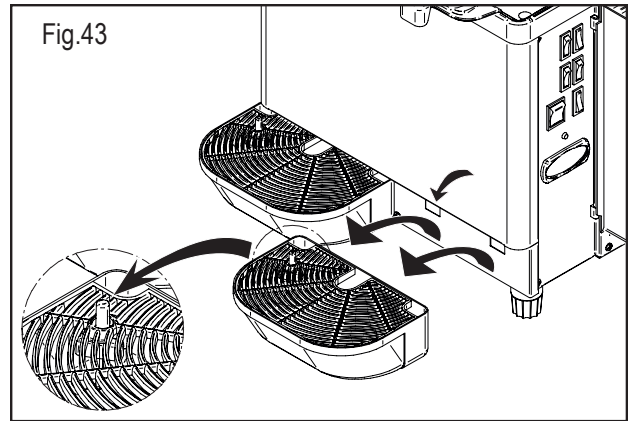
7.7. Cleaning the drip tray

The drip tray should be emptied and cleaned daily.



Note: All of the drip trays present in the machine should be cleaned. The drip tray should be emptied and cleaned every time the red float installed in the grid rises into view.

Holding the drainage hose firmly, lift the tray with the grid on top of it and pull it out.



Wash the tray and grid separately with lukewarm water. Dry all of the components. Reposition the grid on top of the tray. Position the drainage hose in the opening provided. Fit the tray back in place and press down to secure it to the machine.

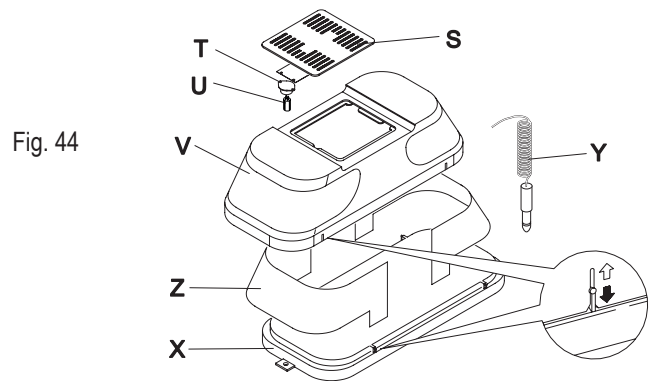
7.8. Lighted lid



Maintenance of the lighted lid must be entrusted solely to a specialized technician, who must organize all of the operational sequences and use suitable equipment, in strict compliance with the applicable regulations currently in force.



The operator is forbidden to disassemble any lid component.



Components:

- S: Cover
- T: Bulb Holder
- U: Bulb
- V: Lid Top (upper part)
- Z: Decal
- X: Lid Bottom
- Y: Cable with "male" Jack Plug



Caution! Any operation on the lid must be carried out manually. Do not use any tool, as they might damage the lid or its components. The lid top "V" is assembled to the clear bottom "X" by applying pressure with your hand. To disassemble it, hold the top "V" with one hand, while you pull the bottom "X" with the other hand.

7.8.1. Bulb replacement



The bulb must be replaced only when the main switch is in position -0- and power cord is unplugged.

Lift off cover "S" as showed in Figure 44 and 45. Remove bulb "U" from bulb holder "T" and replace it with the new one. Replace cover "S" on lid top "V", making sure it closes properly.

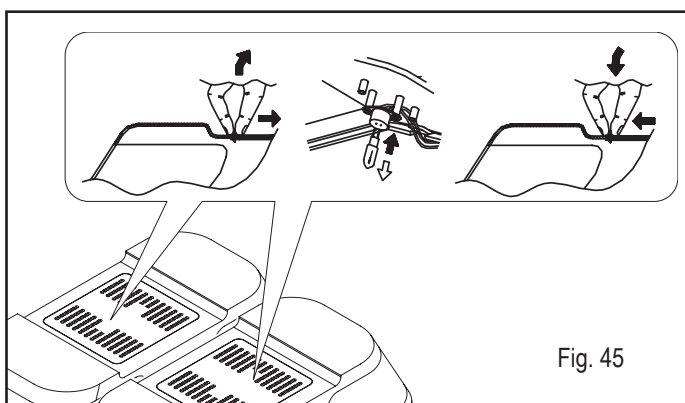


Fig. 45

7.9. Cleaning the condenser



The condenser may be cleaned solely by a specialized technician, who must organize all of the operational sequences and use suitable equipment, in strict compliance with the applicable regulations currently in force.



Periodically clean the condenser situated inside the machine.



Warning: Removing safety guards will expose some sharp surfaces of the machine.



Warning: A dirty condenser will impair machine performance.

To access the condenser, remove the safety guards.



It is forbidden to use the machine when even only one panel (front, rear or side) is not set properly in place. It is prohibited for the operator to clean the condenser.

7.9.1. Cleaning the condenser for #378SM1

The safety guards must be removed by means of a suitable screwdriver.

Remove the rear guard after taking out the screws securing it to the frame (the screws are positioned on the left and right sides).

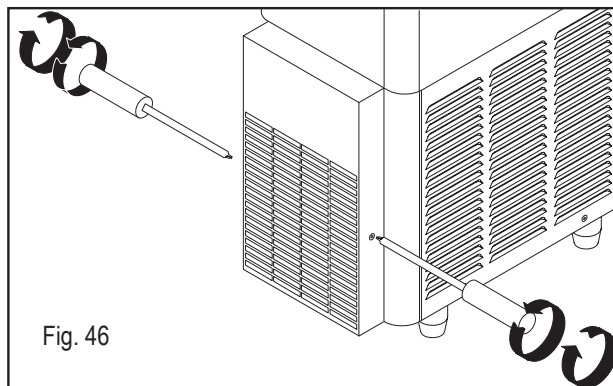


Fig. 46

After removing the guard, use a dry brush to remove the dust that has built up over time with use.

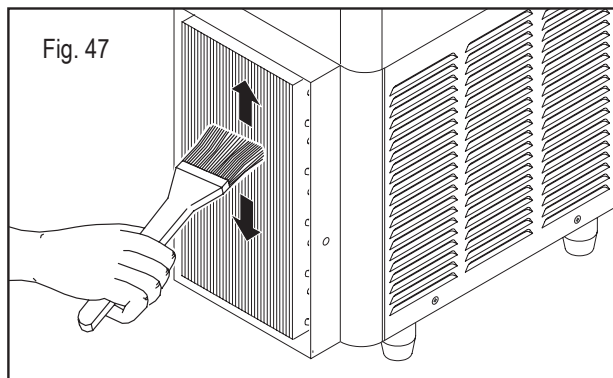


Fig. 47

Once the condenser has been thoroughly cleaned, fit all the safety guards back in position.

7.9.2. Cleaning the condenser for #378SM2 and #378SM3

The safety guard may be secured in place using mechanical clips. The guard is fastened by means of clips; remove it manually without the aid of any tool.

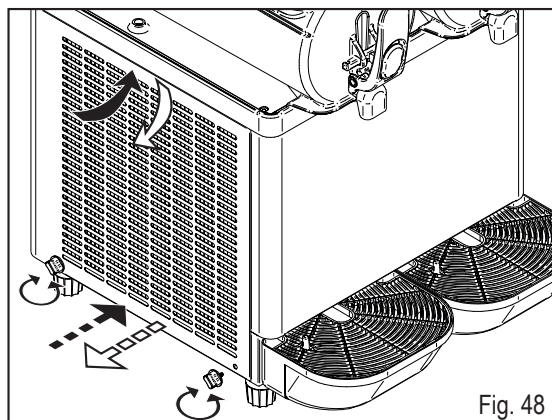
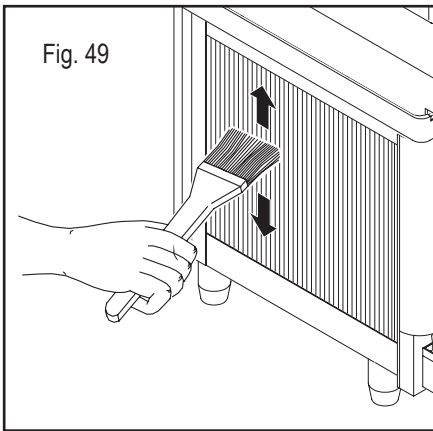


Fig. 48

After removing the guard, use a dry brush to remove the dust that has built up Fig.49 over time with use.



Once the condenser has been thoroughly cleaned, fit all the safety guards back in position.

7.10. Periodic maintenance



The machine must be periodically checked (at least once a year) by a specialised technician. This periodic check serves to ensure that all the components installed and the machine itself are maintained at a high level of safety.



Any worn components must be replaced by an original spare part.



It is forbidden to use the machine when even only one of its components is faulty or worn. Users are forbidden to perform periodic maintenance.

8. Disposal



Electric and electronic equipment must be disposed of in accordance with the EPA.





Such equipment may not be disposed of as normal municipal solid waste but must rather be separately collected to optimise recovery and recycling of the materials used to manufacture them.

All products are marked with the crossed out wheeled bin symbol as a reminder of separate collection obligations.



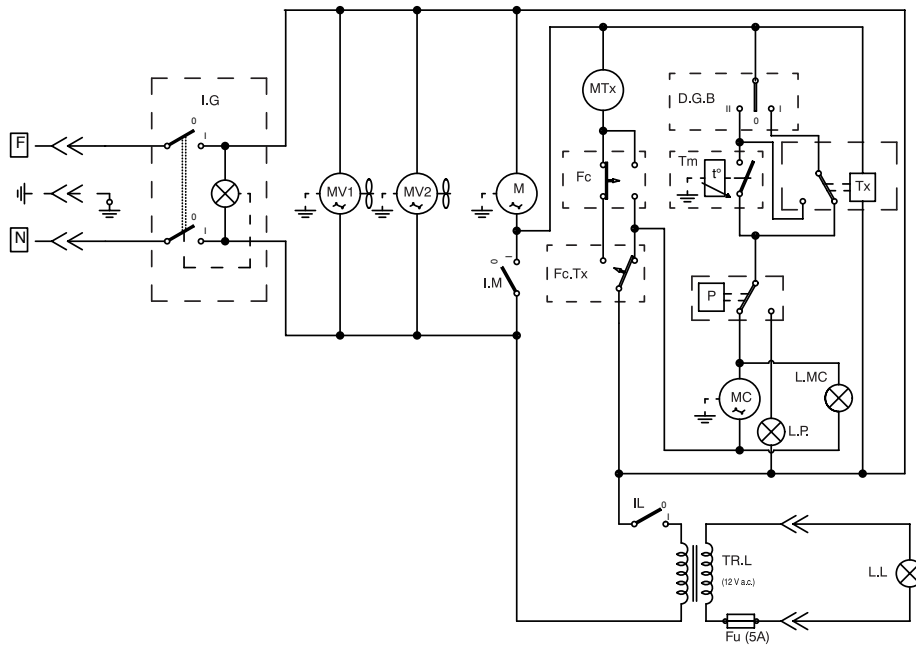
Correct observance of all of the provisions for the disposal of end-of-life products will contribute to safeguarding the environment.

9. TROUBLESHOOTING

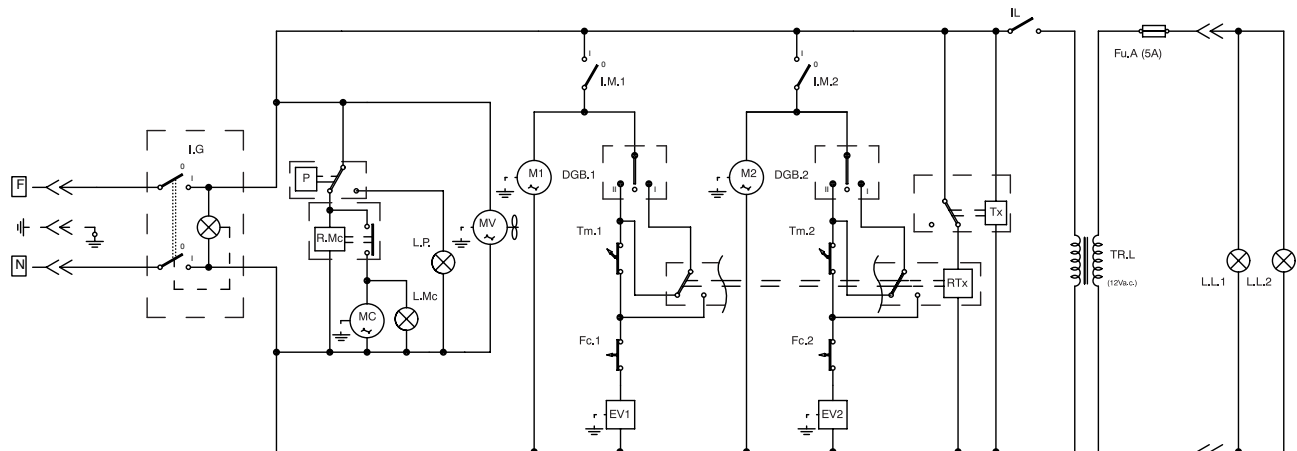
Problem	Cause	Remedy
The machine does not turn on.	The main switch is off (positioned on “O”). (Section 6)	Press the switch into position “I”.
	The machine is not plugged in	Insert the plug in a suitable outlet.
The tap leaks.	The tap plug is not lubricated. (Fig.41)	Lubricate the plug
	The plug is defective.	Replace the plug.
Product leaks from the rear part of the bowl.	The bowl is not fitted correctly in place. (Section 7.5)	Check the positioning of the bowl.
	The seal is defective.	Replace the seal.
The auger does not turn.	The switch is positioned on “O”. (Section 6)	Press the switch into position “I”.
	There are blocks of ice inside the bowl.	Switch off the machine, allow the bowl contents to melt and check that the product has been correctly diluted.
The machine does not make granitas.	The switch is positioned on “O”. (Section 6)	Press the switch into position “I”.
	The machine is near sources of heat.	Install the machine in a more suitable place.
	There is insufficient ventilation.	
	The condenser is dirty. (Section 7.9)	Call in a specialized technician to clean the condenser.
	The consistency has not been adjusted correctly. (Section 6.4)	Correctly adjust the consistency.
	Timer levers in position “  ”.	Place the levers in position “  ”. See Section 6.8.2
The auger is noisy.	The front seal has been applied incorrectly. (Fig.38)	Check that the seal is applied correctly.
	The seal is not lubricated. (Fig.36)	Lubricate the seal accordingly.
The tap does not dispense.	Blocks of ice inside the bowl.	Switch off the machine, allow the bowl contents to melt and check that the product has been correctly diluted.
<p>If the machine malfunctions due to causes other than those listed in this table or the proposed remedies do not solve the problem, contact a specialized technician.</p>		

10. BASIC WIRING DIAGRAMS

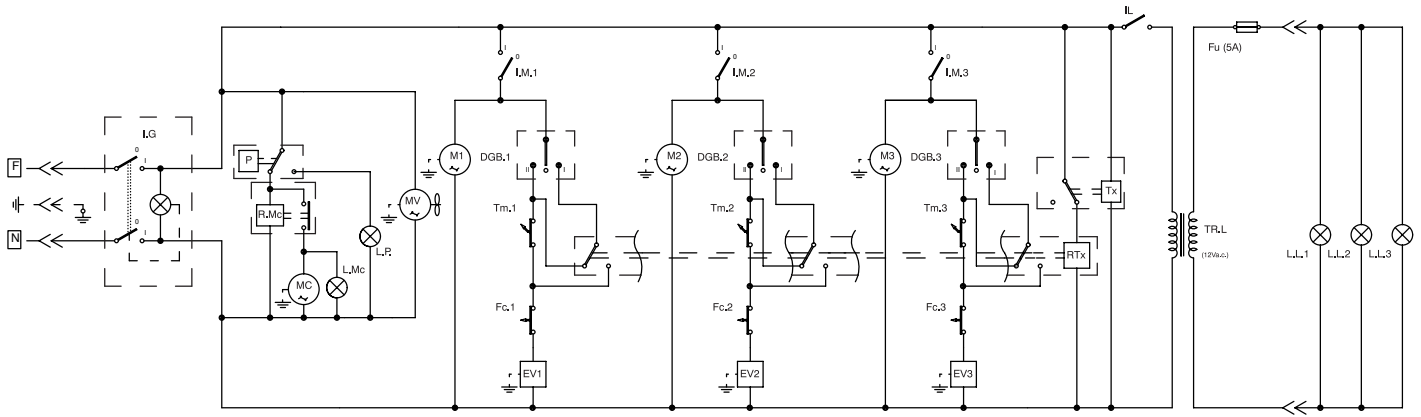
MODEL 378SM1 / 115 Volt



MODEL 378SM2 / 115 Volt



MODEL 378SM3 / 115 Volt



LEGEND

Item	Description
D.G.B	SLUSH/DRINK SWITH
DGB.1	TANK 1 SLUSH/DRINK SWITCH
DGB.2	TANK 2 SLUSH/DRINK SWITCH
DGB.3	TANK 3 SLUSH/DRINK SWITCH
EV1	TANK 1 SOLENOID VALVE
EV2	TANK 2 SOLENOID VALVE
EV3	TANK 3 SOLENOID VALVE
Fc	LIMIT SWITCH ADJUSTMENT
Fc.Tx	TIMER LIMIT SWITCH
Fc1	TANK 1 LIMIT SWITCH ADJUSTMENT
Fc2	TANK 2 LIMIT SWITCH ADJUSTMENT
Fc3	TANK 3 LIMIT SWITCH ADJUSTMENT
Fu	FUSE
Fu.A	AUXILIARY FUSE
I.G	MAIN SWITCH
I.L	LIGHTED COVER SELECTOR
I.M	IMIXING MOTOR SWITCH
I.M1	TANK 1 MIXING MOTOR SWITCH
I.M2	TANK 2 MIXING MOTOR SWITCH
I.M3	TANK 3 MIXING MOTOR SWITCH
L.L.	LIGHTED COVER LAMP
L.L.1	TANK 1 LIGHTED COVER LAMP
L.L.2	TANK 2 LIGHTED COVER LAMP
L.L.3	TANK 3 LIGHTED COVER LAMP
L.MC	COMPRESSOR INDICATOR LIGHT
L.P.	PRESSURE GAUGE LAMP
M	MIXING MOTOR
M1	TANK 1 MIXING MOTOR
M2	TANK 2 MIXING MOTOR
M3	TANK 3 MIXING MOTOR
MC	COMPRESSOR MOTOR
MV	FAN MOTOR
MV1	FAN MOTOR 1
MV2	FAN MOTOR 2
N.T.C	TANK TEMPERATURE PROBE
N.T.C 1	TANK TEMPERATURE PROBE 1
N.T.C 2	TANK TEMPERATURE PROBE 2
N.T.C 3	TANK TEMPERATURE PROBE 3
P	PRESSURE GAUGE
R.Mc	COMPRESSOR RELAY
TE	TEMPERATURE DISPLAY
Tm	TANK THERMOSTAT
Tm1	TANK 1 THERMOSTAT
Tm2	TANK 2 THERMOSTAT
Tm3	TANK 3 THERMOSTAT
TR	TRANSFORMER
TR.L	TRANSFORMER