

# INSTRUCTION HANDBOOK

## FREEZE & GO



**APPLICARE  
TARGA  
CARATTERISTICHE**





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**We wish to thank you for the preference granted to us by purchasing one of CARPIGIANI machines.**

To the best guarantee, since 1993 CARPIGIANI has submitted its own Quality System to the certification according to the international Standard ISO 9001, nowadays its production has got UNI-EN-ISO 9001 Certified Quality System.

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## FOREWORD

### Instruction handbook

Editing this handbook, it was taken into due account European Community directions on safety standards as well as on free circulation of industrial products within E.C.

### Purpose

This handbook was conceived taking machine users' needs into due account.

Topics relevant to a correct use of the machine have been analyzed in order to keep unchanged in the long run quality features characterizing CARPIGIANI machines all over the world.

A significant part of this handbook refers to the conditions necessary to the machine use and to the necessary procedure during cleanout as well as routine and special maintenance.

Nevertheless, this handbook cannot meet all demands in details. In case of doubts or missing information, please apply to:



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### Handbook structure

This handbook is divided in sections, chapters and subchapters in order to be consulted more easily.

#### Section

A section is the part of the handbook identifying a specific topic related to a machine part.

#### Chapter

A chapter is that part of a section describing an assembly or concept relevant to a machine part.

#### Subchapter

It is that part of a chapter detailing the specific component of a machine part.

**It is necessary that each person involved in the machine operation reads and clearly understands those parts of the handbook of his/her own concern, and particularly:**

- The Operator must read the chapters concerning the machine start-up and the operation of machine components.
- The qualified technician employed to carry out operations of maintenance, repairs, etc. must have completely read the manual.

### Additional documentation

**Along with an instruction manual, each machine is supplied also with additional documentation:**

- Wiring diagram: a diagram of wiring connections is placed in the machine.



### WARNINGS



**Before using the machine read carefully the instruction handbook.**

**Pay attention to the safety instructions.**

## Conventional symbols



### ELECTRIC SHOCK DANGER



The staff involved is warned that the non-observance of safety rules in carrying out the operation described may cause an electric shock.



### DANGER FROM HIGH TEMPERATURES



This warns the staff involved that failure to abide by safety rules in carrying out the operation described involves the risk of burns and scalds.



### DANGER - ORGANS IN MOVEMENT



Advises concerned persons of the presence of organs in movement and the risk of physical injury if safety norms are not respected.



### CRUSHING HAZARD



This warns the staff involved that failure to abide by safety rules in carrying out the operation described involves the risk of suffering crushed fingers or hands.



### GENERAL HAZARD



The staff involved is warned that the operation described may cause injury if not performed following safety rules.



### NOTE



It points out significant information for the staff involved.



### WARNINGS



The staff involved is warned that the non-observance of warning may cause loss of data and damage to the machine.



### PROTECTIONS



This symbol on the side means that the operator must use personal protection against an implicit risk of accident.

## Qualification of the staff

Staff attached to the machine can be distinguished according to training and responsibility as follows:

### MACHINE OPERATOR



Identify unqualified personnel who have no specific technical qualifications and who can carry out only simple tasks such as operating the machine using the controls on the keyboard, loading and unloading product utilised during production, loading of any consumable materials, basic maintenance operations (cleaning, removing simple obstructions, controls of the instrumentation, etc.).

### MAINTENANCE ENGINEER



He must be a person capable of operating the machine under normal conditions and work on mechanical organs to carry out all adjustments and maintenance/repair interventions necessary. He must be capable of carrying out interventions on electrical and refrigeration installations.

### CARPIGIANI ENGINEER



He/she is a skilled engineer the manufacturer assigned to field interventions for complex jobs under particular conditions or in accordance with agreements made with the machine's owner.



## Safety

When using industrial equipment and plants, one must be aware of the fact that drive mechanisms (rotary motion), high voltage components, as well as parts subject to high temperatures may cause serious damage to persons and things.

### It is necessary to supervise so as to:

- Any incorrect use or handling shall be avoided;
- Safety devices must neither be removed nor tampered with;
- The machine shall be regularly serviced;
- Only original spare parts are to be used especially as far as those components with safety functions are concerned (ex.: protection microswitches, thermostats);
- Suitable personal protective equipment is worn;
- High care must be paid during hot product cycling.

### To achieve the above, the following is necessary:

- At the working place an instruction manual relevant to the machine should be available;
- Such documentation must be carefully read and requirements must consequently be met;
- Only adequately skilled personnel should be assigned to electrical equipment;
- only adequately skilled personnel should be assigned to electrical equipment and machinery; this appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety;
- Make sure that no technician will ever carry out interventions outside his/her own knowledge and responsibility sphere;
- Children should be supervised to ensure that they do not play with the appliance.

## IMPORTANT!

One must be on the look-out that the staff does not carry out any operation outside its own sphere of knowledge and responsibility (see "qualification of the personnel symbols").



## NOTE



**According to the standard at present in force, a SKILLED ENGINEER is who, thanks to:**

- training, experience and education,
- knowledge of rules, prescriptions and interventions on accident prevention,
- knowledge of machine operating conditions

Is able to realize and avoid any danger and has also been allowed by the person in charge of plant safety to carry out all kinds of interventions.

## Warning

When installing the machine, insert a differential magnetothermal protection switch on all poles of the line, adequately sized to the absorption power shown on machine data plate and with contact opening of 3 mm at least.

- Never put your hand into the machine, alike during production and cleaning operations. Ensure that before carrying out maintenance operations the machine is in STOP mode with the electrical plug disconnected from the electrical mains circuit.
- It is forbidden to wash the machine by means of a bolt of water under pressure.
- It is forbidden to remove panels in order to reach the machine inside before having disconnected the machine.
- The place of installation must not be exposed to water sprays, high moisture, heat or steam sources.
- Do not store explosive substances or spray cans inside the machine, nor aerosol cans containing flammable propellant.
- CARPIGIANI is not responsible for any accident that might happen during operation, cleaning and/or servicing of its units, if this warning has not been fully complied with.

# 1. GENERAL INFORMATION

## 1.1 General information

### 1.1.1 Manufacturer's identification data

The machine has a data plate carrying manufacturer data, machine type and serial number, assigned when it is manufactured.

Copy of machine data plate to be found on first page of this handbook.

Fig. 01

Model No.						
Serial No.		Fac.ID.				
Volts	Phase		Hz			
Max Breaker Fuse Size						
Minimum Circuit Ampacity						
Total Load		DESIGN PRE		OPERATING PRE		
HIGH SIDE, PSIG						
LOW SIDE, PSIG						
REFRIGERANT		AMOUNT (OZ)				
REFRIGERANT		QTY	VOLT	HP	FLA/RLA	LRA
COMPRESSOR						
BEATER (HIGH)						
BEATER (LOW)						
FAN MOTOR						

### 1.1.2 Information about service

All operations of routine maintenance are here described in section "Maintenance"; any additional operation requiring technical intervention on the machine must be cleared with the manufacturer, who will also examine the possibility of a factory technician field intervention.

### 1.1.3 Information to the user



The manufacturer of the machine is at user's disposal for any explanation and information about the machine operation

- For further clarifications refer to the manufacturer.
- Manufacturer's service department is available for any information about operation, and requests of spare parts and service.

## 1.2 Information about the machine

### 1.2.1 General data

Machines intended for indoor use only and for commercial purposes such as ice cream and pastry workshops.

The "FREEZE & GO" are machines for the production of artisan ice cream.

CARPIGIANI always recommends using top quality raw materials in the production of ice cream to satisfy your most demanding clientele.

Any saving made to the prejudice of quality will surely turn into a loss much bigger than the saving itself.

**Bearing in mind the above statements, please take heed of the following suggestions:**

- Make your mixes yourselves from high quality natural ingredients or buy them from reliable companies;
- Follow closely instructions given by your mix supplier for the preparation of the mixes;
- Do not alter your mix supplier's recipes, by adding, for instance, water or sugar;
- Taste ice cream before serving it and start selling it only if entirely satisfactory;
- Make sure your staff always keeps the machine clean.

Always refer to CARPIGIANI for any necessary repairs.

### 1.2.2 Technical features

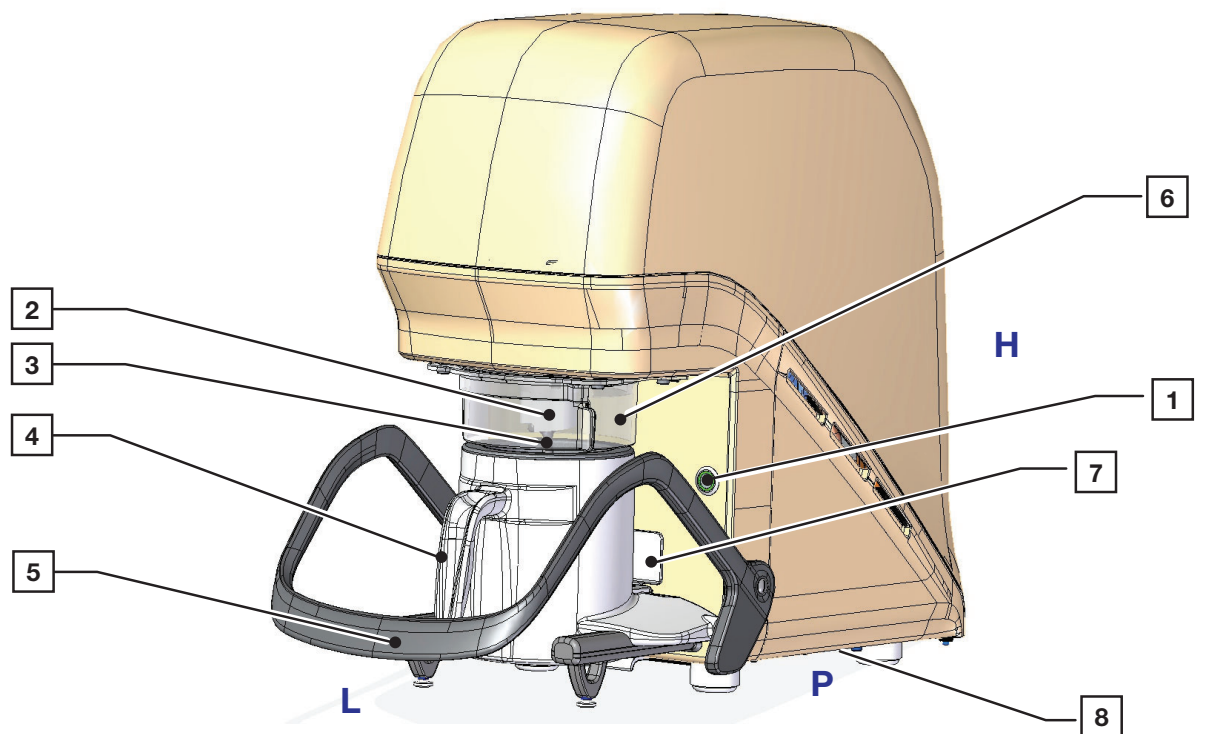
MODEL	MIX QUANTITY FOR ICE CREAM		HOURLY PRODUCTION	WEIGHT	DIMENSIONS IN FIG. 02		
	MIN	MAX	LB	LB	L	P	H
Freeze & Go	0,33 lb	1,1 lb	11	73*	11,5	[21 (with lifted handle) 24 (with lowered handle)]	21

\*without whipping chamber

**The performance figures refer to a 77°F (25°C) ambient temperature.**

### 1.2.3 Location of machine groups

Fig. 02



- |  |   |
|--|---|
| 1 Start/Stop processing key (blue/green LED) | 6 Transparent guard                           |
| 2 Beater engaged                             | 7 Freezing chamber connection protection door |
| 3 Beater                                     | 8 Air filter                                  |
| 4 Whipping chamber                           |   |
| 5 Whipping chamber engagement handle         |   |

### 1.3 Intended use

The machine must only be utilised for the production of ice cream as specified and indicated in paragraph 1.2.1 “General Conditions” and within the functioning limits reported as follows.

- Min air temperature: 50°F
- Max air temperature: 109°F
- Max relative humidity: 85%

This machine has been designed for its use in rooms not subject to explosion-proof laws; its use is thus bound to complying rooms and normal atmosphere.

### 1.4 Noise

The weighted equivalent continuous acoustic pressure value A in the work place is less than 70 dB(A).

## 1.5 Storing a machine

The machine must be stored in a dry and dump-free place.

Before storing the machine, wrap it in a cloth in order to protect it against dust and else.

## 1.6 Disposal of packing stuffs

When opening the packaging it is good practice to subdivide the packaging materials utilised per type and arrange for their disposal in accordance with the norms in force of the destination country.

## 1.7 WEEE (Waste Electrical and Electronic Equipment)



In conformity with the European Directives 2006/66/EC, on batteries and accumulators and waste batteries and accumulators, and 2002/96/EC, also known as WEEE, the presence of the symbol on the side of the product or packaging means that the product must not be disposed of with normal urban waste. Instead, it is the user's responsibility to dispose of this product by returning it to a collection point designated for the recycling/treatment of electrical and electronic equipment waste.

Differentiated collection of this waste material helps to optimize the recovery and recycling of any reclaimable materials and also reduces the impact on human health and the environment.

For more information concerning the correct disposal of this product, please contact your local authority or the retailer where this product was purchased.

## 2. INSTALLATION

### 2.1 Room necessary to the machine use

The machine must be positioned so that air can circulate freely from below upwards.

Rooms for the approach to the machine must be left free in order to enable the operator to act without constraint and also to immediately leave working area, if need be.

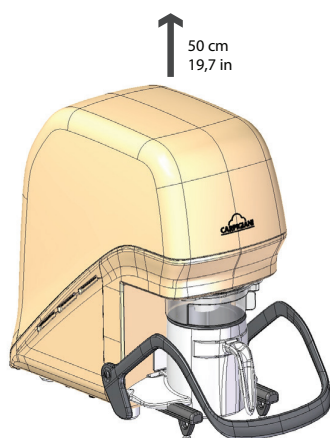


#### NOTE



**An insufficient air circulation affects operation and output capacity of the machine.**

Fig. 04



### 2.2 Electric connection

The electrical connection of the machine is realised under the care and responsibility of the customer. The machine must be connected to the electricity mains circuit by a plug correctly fitted to the electrical cable, considering:

- The laws and technical norms in force at the moment of installation;
- The data shown on the technical data nameplate positioned underneath the machine.



#### WARNINGS



**The electrical socket used for the electrical connection of the machine must be positioned within easy reach of the user so that the machine can be easily disconnected whenever necessary.**



#### NOTE



**It is forbidden to:**

- Use any type of extension lead.
- Substitute the original plug.
- Use adaptors.



#### ATTENZIONE



**The machine must be connected to the mains without the cooling chamber. For connecting proceed as described hereafter:**

- Connect the machine to the mains
- Wait for the green LED, set on STOP/START key, to switch on.
- Connect the cooling chamber to the machine.

**Should the machine be disconnected from the mains, proceed as follows:**

- If the green LED, set on STOP/START key, is on, remove the cooling chamber.
- Disconnect the machine from the mains.

### 2.2.1 Replacing the power cable



Should the machine main cable be damaged, it must be replaced immediately through one with similar features. Replacement shall be carried out by skilled technicians, only.

#### IMPORTANT

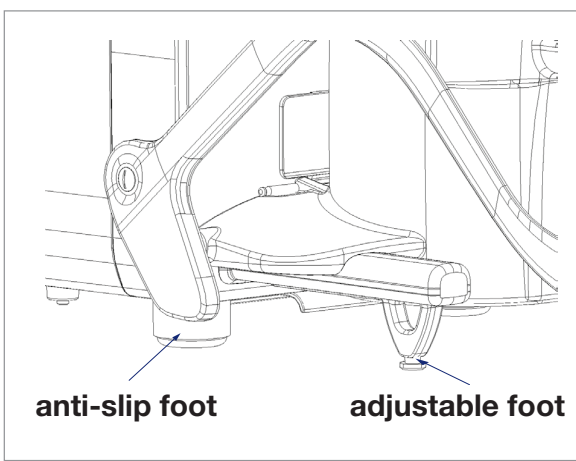
Rotational direction: the beater rotates in a clockwise direction.

### 2.3 Location



The machine is equipped with 4 non-slip feet and 2 adjustable feet located on the cooling chamber guides. When positioning the machine, make sure that the adjustable feet are correctly placed on the working surface and, if necessary, adjust them so that the machine is completely stable. The machine must be positioned at right angles on a horizontal bearing surface (max. tilt: 2°).

Fig. 03

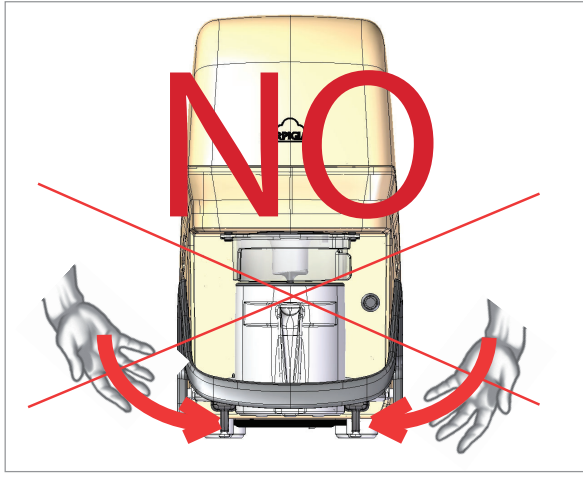


#### ATTENZIONE



**When handling the machine is forbidden to lift it from the pins and the front handle because it could be damaged**

Fig. 04



## 2.4 Refilling



Motor installed in the machine is of the type with lubrication for life; no action of checking/ replacing or topping up is necessary.

Gas filling necessary to the freezing system is carried out at CARPIGANI works during machine postproduction testing.

If a gas addition happens to be made, this must be carried out by skilled technicians, only, who can also find out trouble origin.

## 2.5 Machine testing

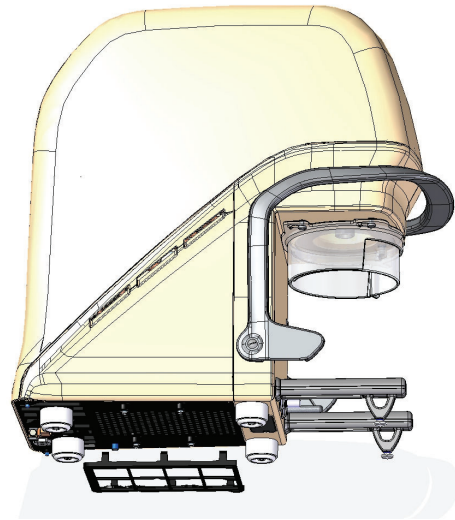


A postproduction test of the machine is carried out at CARPIGANI premises; Operation and output functionality of the machine are thoroughly tested.

## 2.6 Air filter assembly

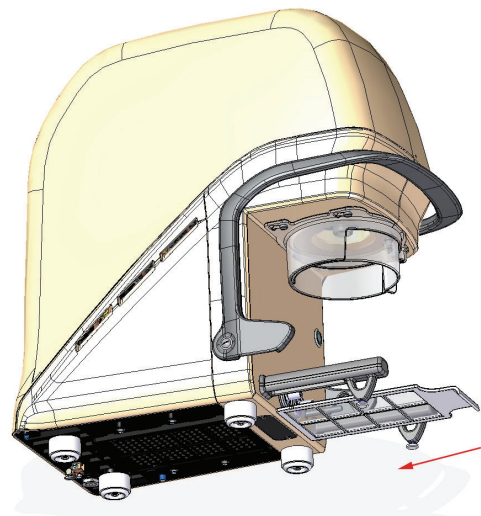
Insert the support of the air filter in the relevant hooks placed at the bottom of the machine.

Fig. 05



Insert the air filter by sliding it in the relevant guides made in the support

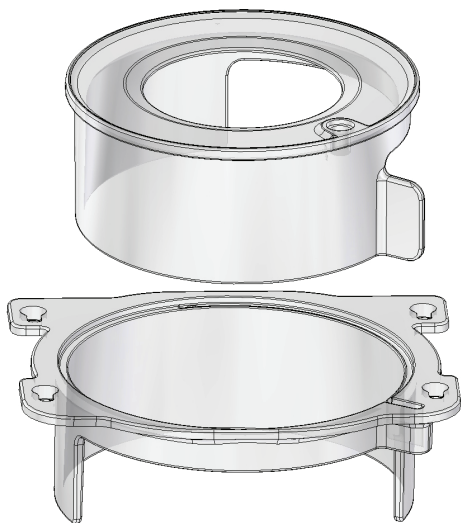
Fig. 06



## 2.7 Clear protection assembly

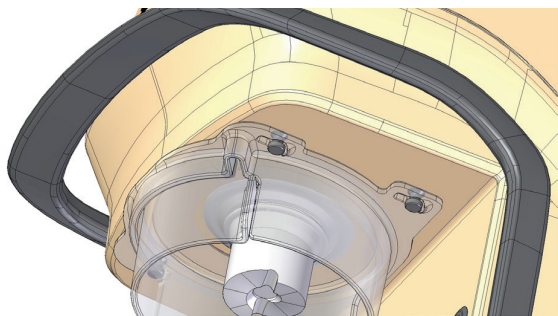
Couple the 2 parts of the clear protection by matching the tab with the recess, then insert one into the other, as shown in the figure.

Fig. 07



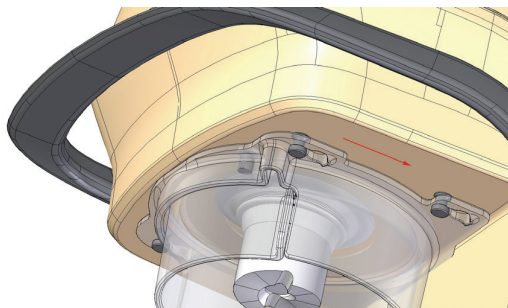
Fit the protection on the machine by matching the 4 holes in the protection with the 4 metallic guides placed in the lower side of the machine front part.

Fig. 08



Press the protection and let it slide on the guides.

Fig. 09



### 3. DIRECTIONS FOR USE

#### 3.1 Machine safety warnings

When using industrial equipment and plants, one must be aware of the fact that drive mechanisms (rotary motion), high voltage components, as well as parts subject to high temperatures may cause serious damage to persons and things.

**It must be noted that:**

- Any incorrect use or handling shall be avoided;
- Safety devices must neither be removed nor tampered with;
- The machine shall be regularly serviced;
- Only original spare parts are to be used especially as far as those components with safety functions are concerned (ex.: protection microswitches, thermostats);
- Suitable personal protective equipment is worn;

**To achieve the above, the following is necessary:**

- At the working place an instruction manual relevant to the machine should be available;
- Such documentation must be carefully read and requirements must consequently be met;
- Only adequately skilled personnel should be assigned to electrical equipment;
- Be on the look out that no technician will ever carry out interventions outside his own knowledge and responsibility sphere.

#### 3.2 Warnings for machine correct use

The machine includes two different operating modes: STOP function (machine not working) and START function (ice cream production enabled). The START/STOP key is to be pressed in order to switch from one function to the other.



#### WARNINGS



**The cooling chamber connection and removal must be performed only when green LED (on START/STOP key) is on.**

**When not using the machine, the cooling chamber must be removed.**

**Should the machine be disconnected from the mains, proceed as follows:**

- if the green LED, set on START/STOP key, is on, remove the cooling chamber.
- disconnect the machine from the mains

**When connecting the machine to the mains once again, proceed as described as follows:**

- Connect the machine to the mains
- Wait for the green LED, set on START/STOP key, to switch on.
- Connect the cooling chamber to the machine.



#### WARNINGS



**The machine is fitted with a device blocking the cooling chamber coupling handle when the machine is operating and when the machine is off. Therefore it is necessary not to force the handle opening and wait for the green LED on START/STOP key to be on.**

### 3.3 Machine configuration

The machine has a motor to drive the beater, and a cooling system with air-cooled condenser.

The product preparation is carried out by filling the cooling chamber with the mix and by starting the automatic cycle (Fig. 05). When an acoustic signal warns that the cycle is finished, the product is ready to be taken out from the cooling chamber (Fig. 06).

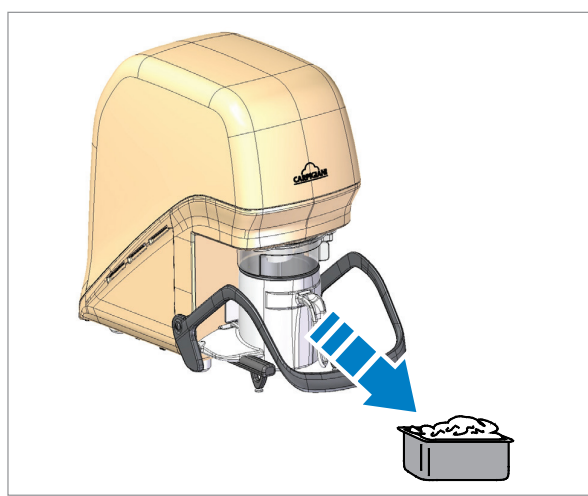


#### WARNINGS



**To make product extraction easier, only use the plastic spatula supplied. Never use metal spatulas as these could damage the cooling chamber.**

Fig. 05



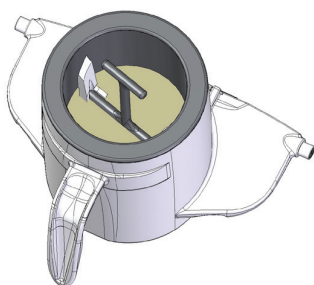
### 3.4 Ice cream production



After washing, sanitising and thoroughly rinsing the machine right before its use, according to the instructions given in section 5 "Cleaning, it is possible to start the ice cream production by following the instructions specified hereafter:

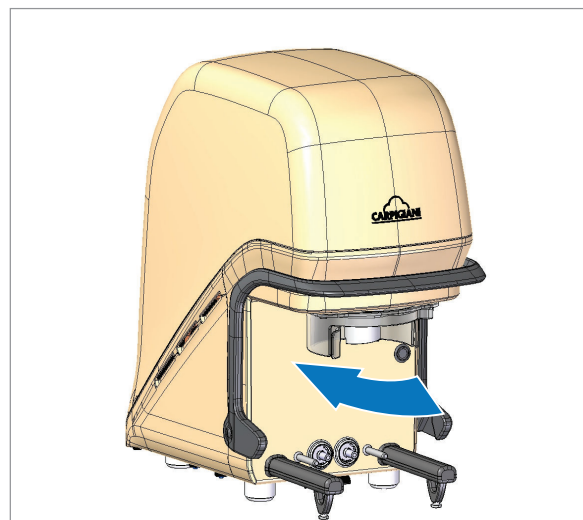
- Make sure that the beater is inside the freezing chamber.
- Pour the desired mix quantity (min. 150 g, max. 500 g) directly into the cooling chamber.

Fig. 06



- Make sure that the light on START/STOP key is green.
- Open the transparent guard by turning it outward.

Fig. 07



Lift the connection protection door on the front side of the freezing chamber

Fig. 08

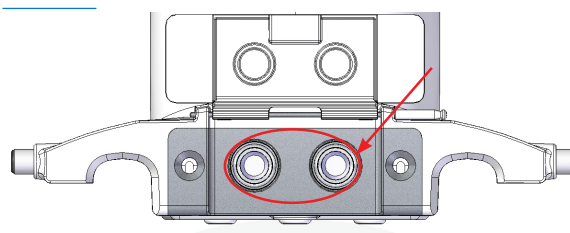


#### WARNING



**Before connecting the chamber, open the door and make sure that the connections are clean and dry. If that is not the case, dry the connections with absorbent paper.**

Fig. 10



- Insert the freezing chamber.

Fig. 09

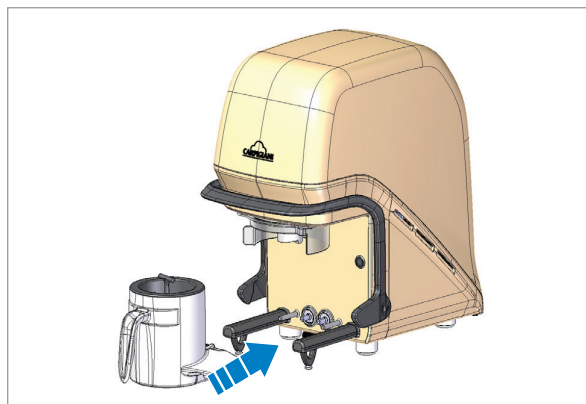


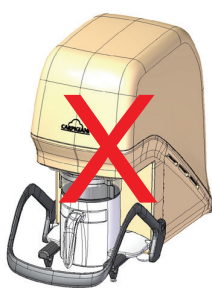
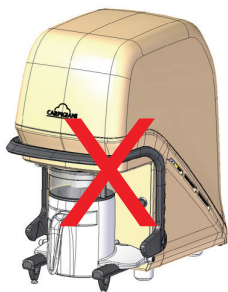
Fig. 11



### WARNINGS

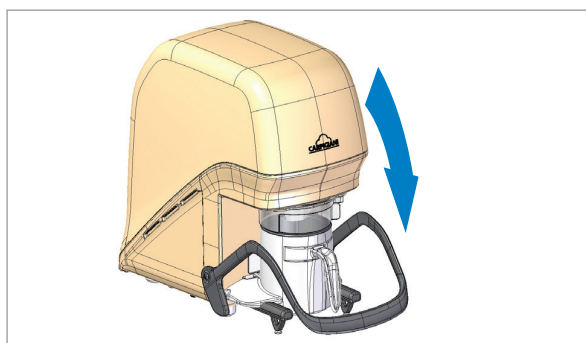


Do not move the freezing chamber when the clear protection is closed to avoid collision with the beater. Do not move the handle if the green LED is OFF.



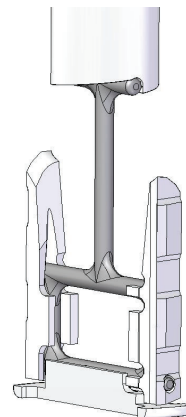
- Lower the cooling chamber coupling handle.

Fig. 13



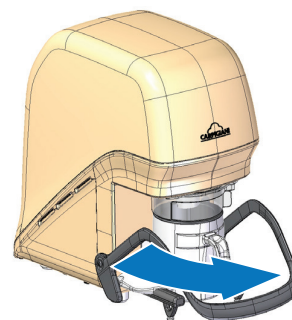
- Make sure the beater coupling has fixed the beater correctly. Otherwise, open the transparent guard, manually lift the dragging element, reposition the beater vertically and lower the dragging element. If the beater is not fixed yet, try rotating it manually.

Fig. 14



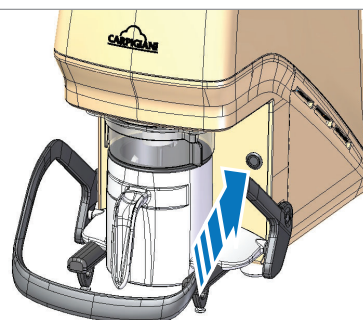
- Richiudere la protezione trasparente.

Fig. 12



- Press the "START/STOP" key to start the cycle.

Fig. 15



### 3.4.1 Ice cream dispensing



#### NOTE



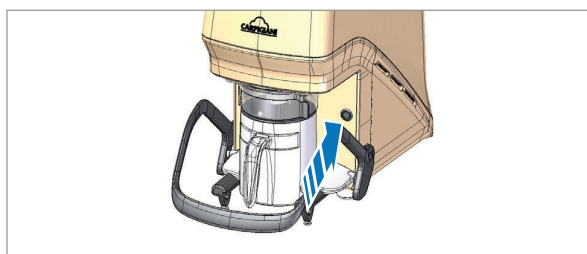
The FREEZE & GO are equipped with a system for feeling ice cream consistency. Once the correct consistency has been reached during the freezing stage, an acoustic signal activates and the refrigeration system stops. The production cycle can be interrupted at any time by pressing **START/STOP**.



When the production cycle is complete an acoustic signal activates and a blue LED flashes. At this point it is possible to extract the ice cream from the cooling chamber as follows:

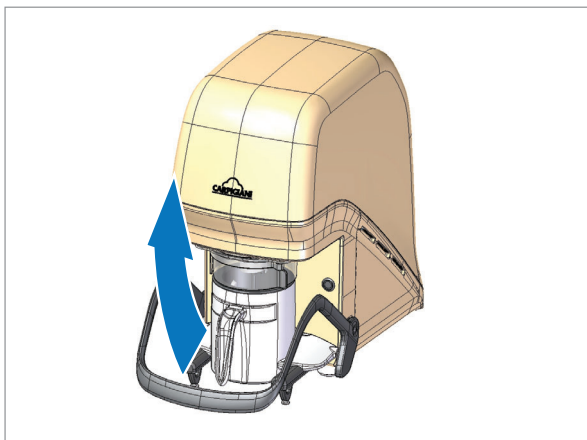
- Press the “START/STOP” key to stop the cycle.

Fig. 16



- Wait for the blue LED on the START/STOP key to switch off and the green LED to switch on.
- Lift the cooling chamber coupling handle to disconnect the machine chamber.

Fig. 17



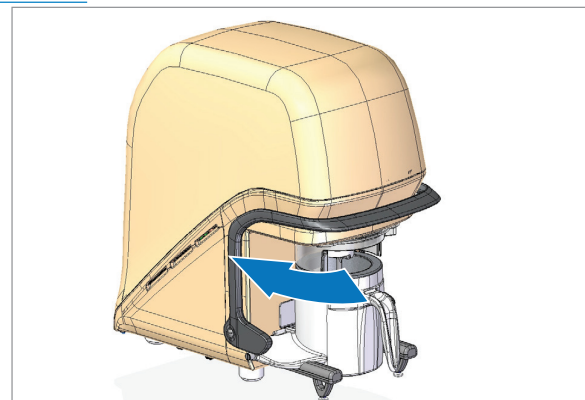
#### WARNINGS



Always open the transparent protection before removing the freeing chamber, otherwise the beater could hit and damage the protection.

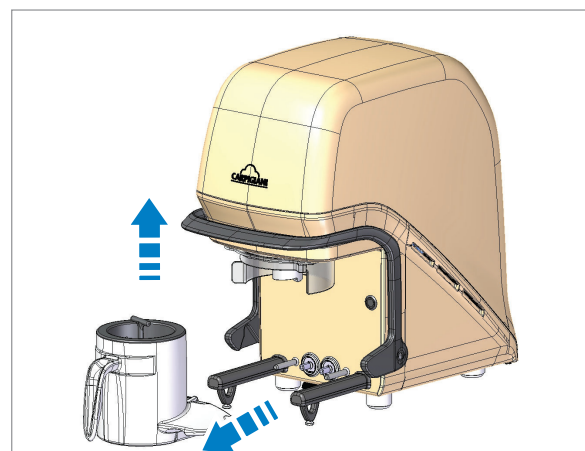
- Open the transparent guard outwards.

Fig. 18



- Slide the cooling chamber out of the guides, by pulling backwards. During the extraction phase, the connection protection door must close automatically.

Fig. 19



#### NOTE



Removing also the beater makes it easier to extract the ice cream from the chamber.



#### WARNINGS



To make product extraction easier, only use the plastic spatula supplied. Never use metal spatulas as these could damage the cooling chamber.

## **4. SECURITY DEVICES**

### **4.1 Safety microswitches**

The FREEZE & GO are equipped with a safety microswitch that detects the correct closing of the cooling chamber and the transparent guard.

If the above conditions are not satisfied, an alarm activates and the machine does not start the freezing cycle.

If during the freezing cycle the transparent guard is opened, the cycle stops and an alarm activates. When the guard is closed again, the cycle restarts.

## 5. CLEANOUT, DISASSEMBLING AND REASSEMBLING OF PARTS IN CONTACT WITH THE PRODUCT

### 5.1 General description



Cleaning and sanitisation are operations that must be carried out habitually and with maximum care at the end of each production run to guarantee the production quality and respect the necessary hygienic norms.

Giving dirt the time to dry out can greatly increase the risk of rings, marks and damage to surfaces.

Removing dirt is much easier if it is done immediately after use because there is the risk that some elements containing acid and saline substances can corrode the surfaces. A prolonged soaking is recommended.

### 5.2 Washing conditions

**Avoid using solvents, alcohol or detergents that could damage the component parts, the machine or pollute the functional production parts.**

When manually washing never utilise powder or abrasive products, abrasive sponges or pointed utensils; there is a risk of dulling the surfaces, removing or deteriorating the protective film that is present on the surface and scoring the surface.

Never ever use metal scouring pads or synthetic abrasives to stop any scouring action that could remove ferrous parts that could cause oxidation or make the surfaces vulnerable.

Avoid using detergents that contain chlorine and its composites. The use of these detergents such as bleach, ammoniac, hydrochloric acid and decalcifiers can attack the composition of the steel, marking it and oxidising it irreparably and causing damage to the "plastic" parts.

Do not use dishwashers and their detergent products.

### 5.3 Suggestions

Use a non-aggressive detergent solution to wash the parts.

Manually wash the parts in water (max. 104°F - 40°C) using a non-aggressive detergent.

To sanitize the disassembled parts leave them in the sanitizing solution for the time indicated by the solution manufacturer (use the sanitizing product following the manufacturer's instructions, the type and sanitizing agent concentration must comply with 40 CFR § 180.904) and

rinse them before refitting.

Use drinking water (bacteriologically pure) to rinse the parts.

When the washing procedure has been completed and before the reassembly of each component dry thoroughly with a clean and soft cloth that is suitable for coming into contact with foodstuffs, to avoid leaving any humidity rich in mineral salts and chlorine that could attack the metal surfaces and leave opaque traces.

Carpigiani recommends the use of a cleaning/sanitizing solution to wash the machine.

The use of a cleaning/sanitizing solution optimizes the washing and sanitizing procedures in that it eliminates two phases of the procedure (a rinse and a washing phase). Basically, the use of a cleaning/sanitizing solution saves time by facilitating and simplifying washing/sanitizing procedures.



### WARNINGS



**It is also essential that each time the machine is washed and parts in contact with the ice cream mix are removed, to make a visual check of all parts in thermosetting materials, plastics, elastomers, silicone and metal that come into contact with the product (For example, scraper tabs, beaters, etc.).**

**Each part must be whole, not worn and without cracks or splits, or opaque, if originally polished/transparent.**

**Carpigiani refuses to accept any liability for damage caused through imperfection and/or failures not found and promptly solved, including with the use of original replacement parts, and is happy to provide help and consultation for all specific customer requests.**

### 5.4 How to use xsan detergent/sanitizer



Prepare a solution of water (at a temperature between 86 and 104°F) and sanitizing detergent following the instructions shown on the label of the product being utilized.

#### Cleaning/sanitizing

- Remove larger residues by hand.
- Remove finer residues with a jet of water
- Dip the beater, blades and coupling in the cleaning/sanitizing solution
- Fill the cooling chamber with cleaning/sanitizing solution
- Let the solution react for the time indicated on the label of the product being utilized.
- Rinse the parts with care, using plenty of clean drinking water

## 5.5 Preliminary cleaning

Cleaning and sanitation must be carried out at the end of every cooling cycle as a habit and with utmost care in order to guarantee the production quality in the observance of necessary healthy rules.



### NOTE



**Make sure to have clean and sanitised hands before proceeding with the operations described below.**

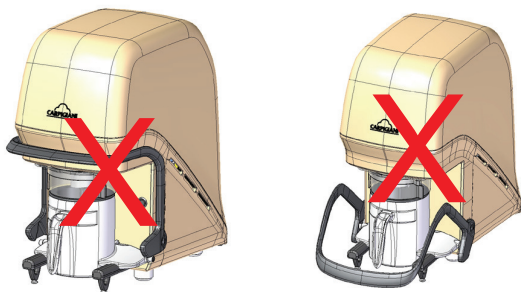
- Make sure that the LED on START/STOP key is green.



### WARNINGS

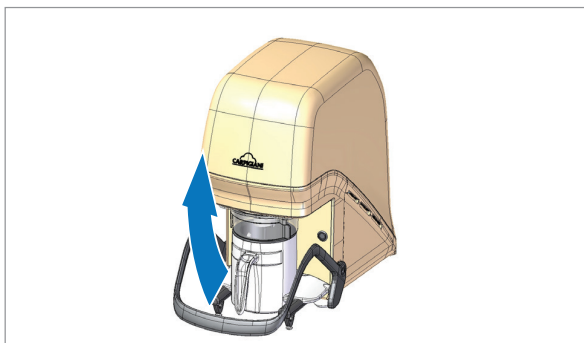


**Do not move the freezing chamber when the clear protection is closed to avoid collision with the beater. Do not move the handle if the green LED is OFF.**



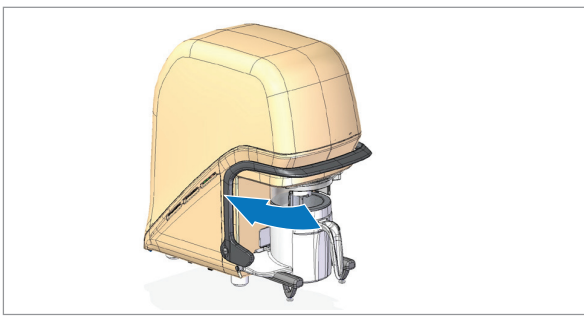
- Lift the cooling chamber coupling handle to disconnect the machine chamber.

Fig. 20



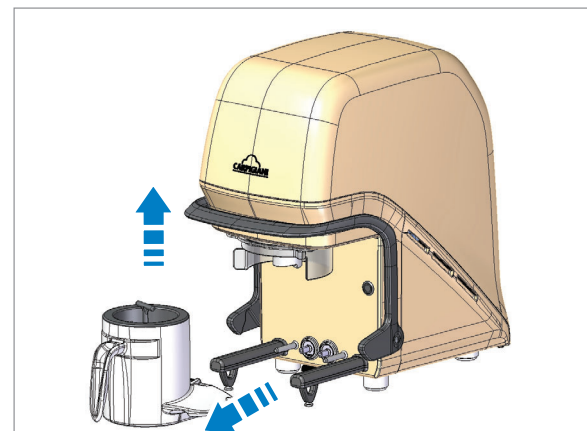
- Open the transparent guard by turning it outward.

Fig. 21



- Slide the cooling chamber out of its guides by pulling backwards.

Fig. 22



## 5.6 Beater removal

Remove the beater by pulling it gently upward and making sure not to damage the scrapers.



### WARNING



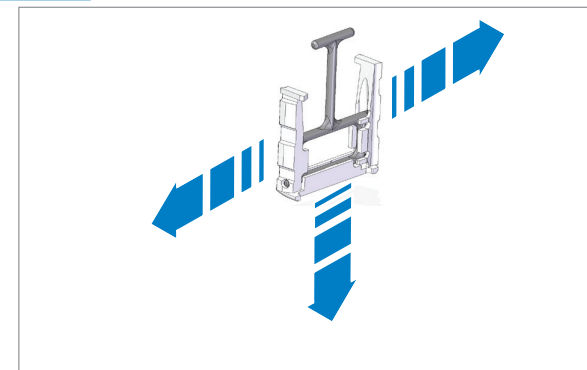
**Perform this operation with care in order not to drop the beater or the cooling chamber as this could damage them.**

Fig. 23



- Remove the scrapers completely.

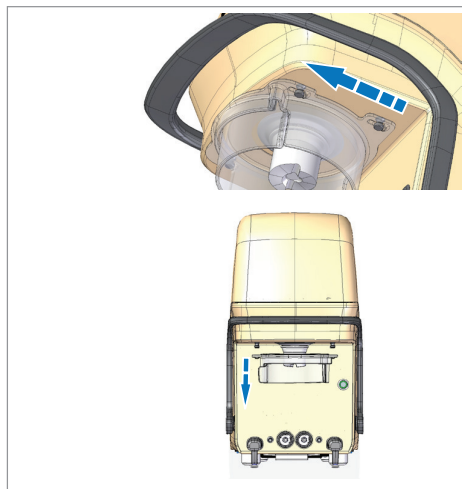
Fig. 24



## 5.7 Removal of transparent guard

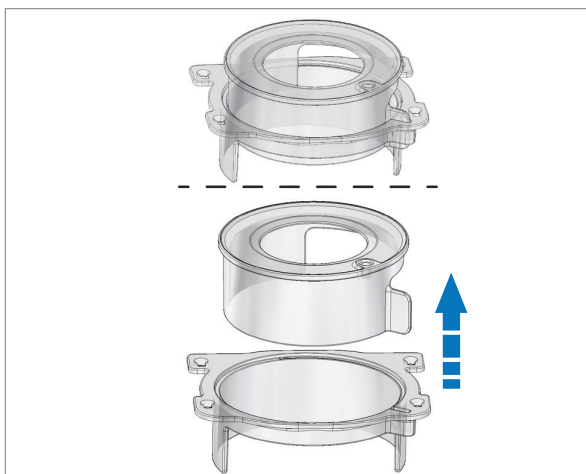
- Pull the protection outwards to release it from the hooks

Fig. 25



- Separate the two parts of the protection by rotating the mobile part until the tab matches with the relevant slit

Fig. 26



## 5.8 Washing and sanitizing components

- Fill the container with cleaning/sanitizing solution prepared following the producer instructions.
- Use the supplied brush to clean all the components and relevant holes
- Dip the parts in the cleaning/sanitizing solution and leave them there for the time specified by the manufacturer.
- Rinse the parts with care, using plenty of clean drinking water.
- Place the components on a clean and sanitized tray to air-dry.
- Wipe the exterior of machine with a wet sanitized cloth.

### 5.8.1 Chamber Washing

- Grip the chamber by the handle and **start washing it without ever plunging it completely** to remove any product residues.

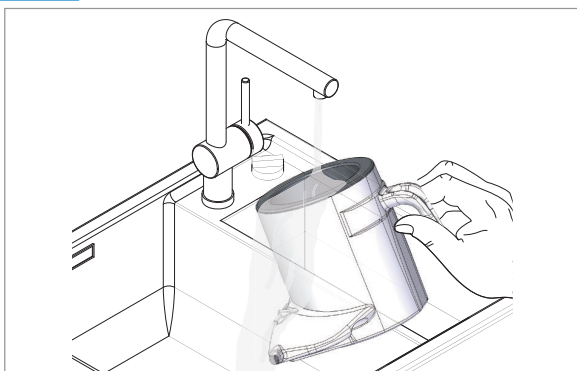


#### WARNING



**Do not pour water on the front side of the chamber where the machine connections are placed**

Fig. 27



- Fill the cooling chamber with cleaning/sanitizing solution (prepared as specified by the manufacturer) and leave it there for the time specified by the manufacturer.
- Rinse with plenty of clean water.
- Leave the cooling chamber dry on a clean and sanitized tray or dry it with a clean and sanitized cloth.
- Before using the cooling chamber again, dry it carefully with a sanitized cloth above all on the front side which is connected to the machine.



#### WARNING



**Before connecting the chamber, make sure that the connections are clean and dry. If that is not the case, dry the connections with absorbent paper.**

Fig. 28

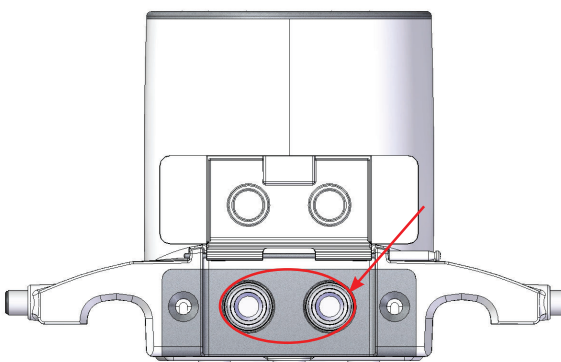
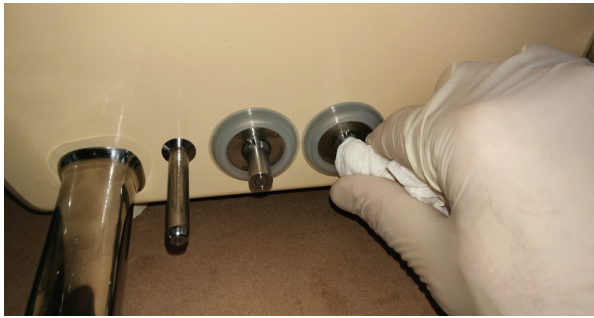


Fig. 29



### 5.8.2 Cleaning the freezing chamber connections

- Slide out the rod that works as a pin so as to remove the door

Fig. 30



- Remove the connection protection seals using the supplied puller

Fig. 31



- Clean any accumulated dirt with the suitable brush and remove any sign of humidity using absorbing paper.
- Refit the seals just by pressing on them, having care to insert them in the relevant seats

- Refit the door by refitting the rod that works as a pin

Fig. 32



### 5.8.3 Cleaning the machine-side connections

- Remove the connection protection seals using the supplied puller

Fig. 33



- Clean any accumulated dirt with the suitable brush and remove any sign of humidity using absorbing paper.
- Refit the seals just by pressing on them, having care to insert them completely in the relevant seats

### 5.8.4 Cleaning the front side of the machine

- Remove the seals that protect the beater coupling, located in correspondence of the horizontal part of the front sheet. For this operation, use the supplied puller.

Fig. 33

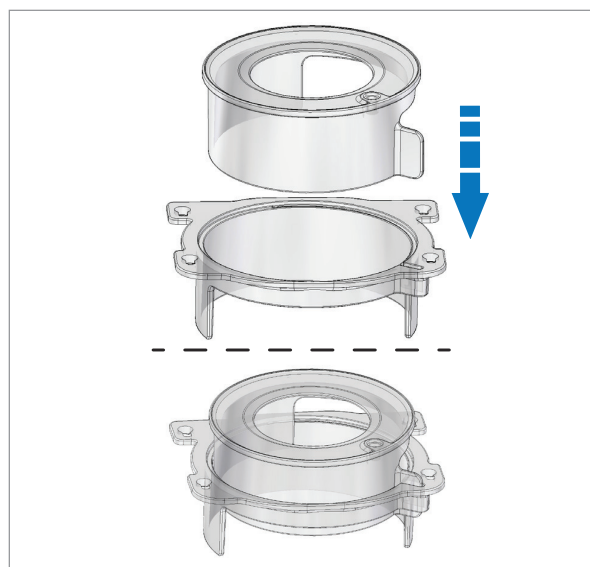


- Clean the front sheet with a wet cloth

## 5.9 Refitting of transparent guard

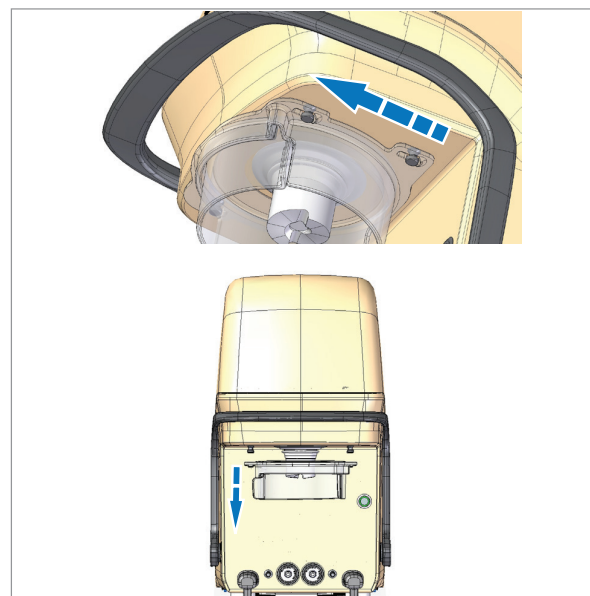
- Couple the fixed part of the protection with the rotary part.

Fig. 34



- Insert the protection by matching the 4 holes with the 4 guides placed under the front part. Then push the protection inwards to let the guides in

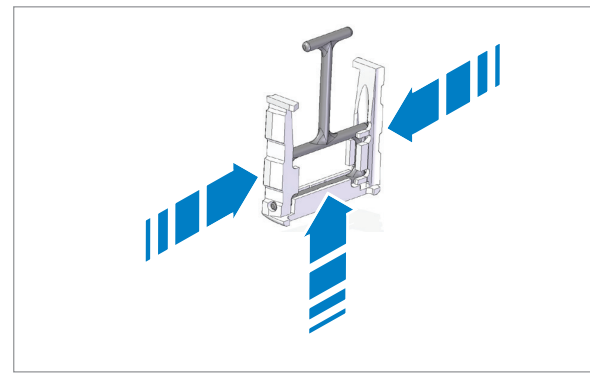
Fig. 35



## 5.10 Refitting the beater

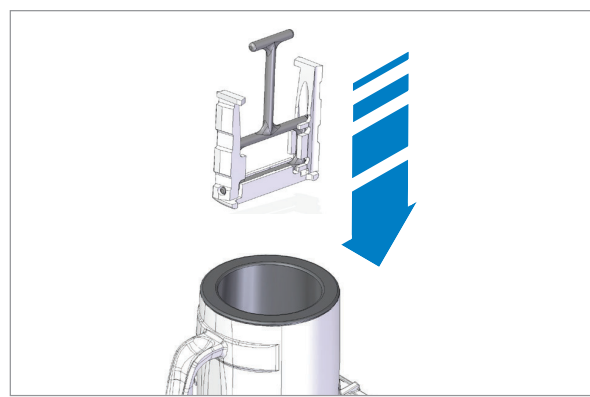
- Reposition the scrapers on the beater by simply pressing.

Fig. 36



- To reposition the beater inside the cooling chamber, grab the former on the machine pin and press it inside the chamber.

Fig. 37



## 5.11 Hygiene





Product fat contents are ideal fields for proliferation of mildew and bacteria.



To eliminate them, parts in contact with food must be thoroughly washed and cleaned as specified above.

Stainless steel materials as well as plastic and rubber ones used for the construction of these parts and their particular design make cleaning easy, but cannot prevent the growth of mildew and bacteria if not properly cleaned.

## 6. MAINTENANCE

	<b>WARNINGS</b>	
<p><b>Never intervene on the machine whilst it is carrying out whipping and cleaning operations. Before starting maintenance operations make sure that the machine is in the STOP position and the electrical plug disconnected.</b></p>		

### 6.1 Servicing typology

	<b>WARNINGS</b>	
<p><b>Every maintenance operation that requires the opening of the protective cover must be carried out with the machine in the STOP position, disconnected from the electricity mains supply and by qualified technical personnel! It is forbidden to clean and lubricate organs in movement! Repairs on the machine and parts of the electrical, mechanical and refrigeration systems must be carried out by specialised and authorised technical personnel.</b></p>		



Operations necessary to proper machine running are such that most of servicing is completed during production cycle.

Servicing operations, such as cleaning of parts in contact with the product, replacing of stuffing box, disassembling of beater assembly are to be carried out at the end of a working day, so as to speed up servicing operations required.

**Herebelow you can find a list of routine servicing operations:**

- Drying the male connection joints (machine side) and female connection joints (freezing chamber side).  
It must be carried out at the end of each production batch.
- Lubricate the rod of the male connectors (machine side) with the lubricant supplied with the machine.  
To be carried out every month.
- Cleanout of beater assembly:  
To be carried out at the end of each production run.
- Clean the scraper tabs:  
To be carried out at the end of each production run.
- Clean the whipping chamber:  
To be carried out at the end of each production run.
- Cleaning of transparent guard and beater coupling:  
At the end of every working shift, according to procedures described in section 5 of this manual.
- Clean the exterior of the machine:

To be carried out daily with neutral soap, seeing to it that cleaning solution never reaches beater assembly at its inside.

- Cleanout and sanitization:

To be carried out at the end of each work shift in accordance with the procedures indicated in Section 5 of the manual.

	<b>WARNINGS</b>	
<p><b>Never use abrasive sponges to clean machine and its parts, as it might scratch their surfaces.</b></p>		



	<b>WARNINGS</b>	
<p><b>Do not use detergents or solvents on the machine-and freezing chamber side connections</b></p>		

### 6.2 Aircooling



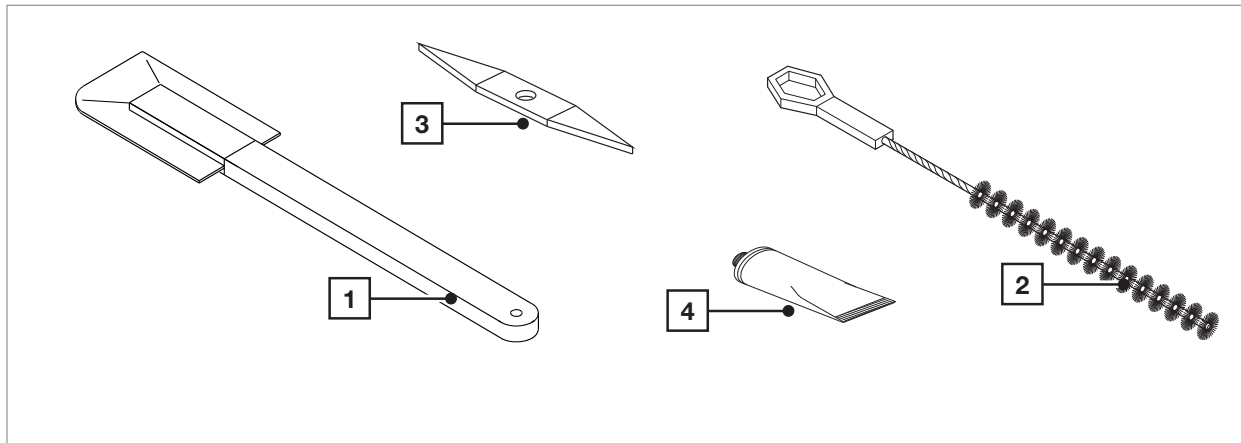
Periodically clean the sliding air filter placed at the bottom of the machine and the grill on the back removing dust, paper and any other thing hindering the air passage. For cleaning, use a brush with long bristles or a bolt of compressed air.

	<b>PROTECTIONS</b>	
<p><b>When using compressed air, put on personal protections in order to avoid accidents; put on protective glasses!</b></p>		

	<b>NOTE</b>	
<p><b>Never use sharp metal objects to carry out this operation. Good working of a freezing plant mostly depends on cleaning of condenser.</b></p>		

## 6.3 Accessories kit

Fig. 38



- 1 Ice cream spatula
- 2 Brush
- 3 O-ring puller

- 4 Lubricant

## 7. TROUBLESHOOT GUIDE

IRREGULARITY	CAUSES	PROCEDURES
Machine does not start	Main switch is off	Switch it on
	Machine unplugged	Check and plug in
	Cooling chamber or transparent guard not perfectly closed.	Check the closure of the whipping chamber
Compressor starts and then stops after a few seconds without ice cream being thick	Aircooled machine: air does not circulate	Clean the grill or filter
		Air does not exit: contact the technical assistance service
	No gas	Contact Technical Assistance
	Compressor faulty	Contact Technical Assistance
Machine runs but no ice cream comes from ice cream door	Too much sugar in the mix	Modify or replace the mix
Bacteria tests show too high bacteria charge	Too high bacteria charge in the mix	Improve preparation procedure by sanitizing all. containers, spoons, etc., and have mix analyzed before pouring it into the machine
	Machine not clean enough	Empty and thoroughly wash the machine. Carry out sanitization as per chapter 5 of manual
The freezing chamber is blocked connected to the machine	The quick connection valves have not been dried correctly yet and have formed ice	Wait for the valves to defrost and dry them
The beater does not engage correctly	The scrapers are worn out	Replace the scrapers





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