



**INSTRUCTIONS HANDBOOK**

**PASTOMASTER 30/60/120  
RTX**

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 9001-94 .

Moreover, Carpigiani machines comply with following European Directives:

- Directive "Appliances": 89/392/EEC, 91/368/EEC, 93/44/EEC;
- Directive "Low Voltage": 73/23/EEC;
- Directive "EMC": 89/336/EEC, 91/263/EEC, 92/31/EEC, 93/97/EEC;
- Directive "Foodstuffs hygiene": 93/43/EEC;
- Directive "Pressure Equipment(PED)": 97/23/EEC, (76/67/EEC);
- Directive "Building products": 89/106/EEC;
- Directive "Food-contact materials and equipment": 89/109/EEC;
- Directive "Food-contact materials and plastic materials": 90/128/EEC, 92/39/EEC, 93/9/CEE, 95/3/EEC, 96/11/EEC.

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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.
- A skilled technician involved in the installation, maintenance, repair, etc., of the machine must read all parts of this handbook.

## ADDITIONAL DOCUMENTATION

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

- **Part list:** A list of spare parts which is delivered together with the machine for its maintenance.
- **Wiring diagram:** A diagram of wiring connections is placed in the machine.

### ATTENTION

**Before using the machine read carefully the instruction handbook.  
Pay attention to the safety instructions.**



## CONVENTIONAL SYMBOLS



### CAUTION: 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



### CAUTION: 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



### MACHINE OPERATOR

He/she is an unskilled person, who has no specific expertise and can only carry out easy chores, such as the machine operation by means of controls available on the push-button panel, and filling and drawing of products used during operations.



### MAINTENANCE ENGINEER

He/she is a skilled engineer for the operation of the machine under normal conditions, he/she is able to carry out interventions on mechanical parts and all adjustments, as well as maintenance and repairs. He/she is qualified for interventions on electrical and refrigeration components.



### 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

Who is in charge of plant safety must be on the look-out that

- An 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)

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

## QUALIFICATION OF THE STAFF

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

### OPERATOR

- A person who has not necessarily a high technical knowledge, just trained for ordinary operation of the machine, such as: startup, stop, filling, basic maintenance (cleanout, simple blocking, instrumentation checkings, etc.).

### SKILLED ENGINEER

- A person engaged on more complicated operations of installation, maintenance, repairs, etc.

### 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.

### 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. Before carrying out any maintenance operation, make sure that the machine is in "STOP" position and main switch has been cut out.
- 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.
- **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.







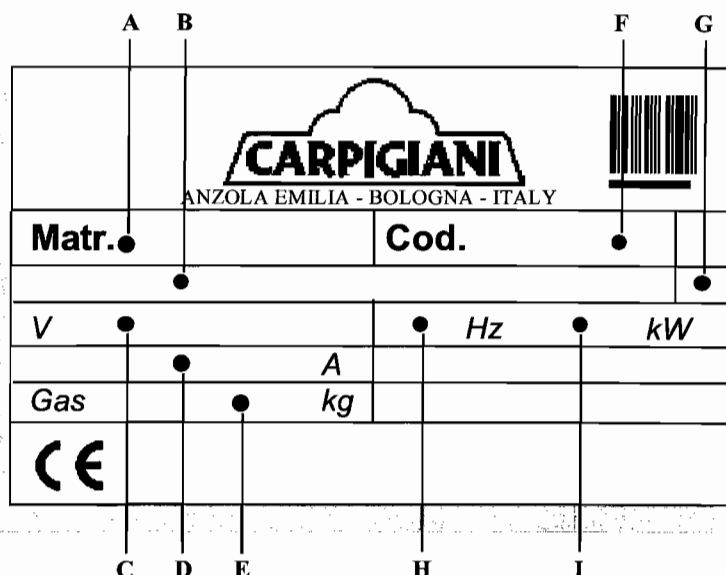
# 1 GENERAL INFORMATION

## 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.



#### Legend:

- A= Serial number
- B= Machine type
- C= Voltage
- D= Main-switch amperometric value
- E= Gas type and weight
- F= Machine code
- G= Condensation
- H= Frequency
- I= Power input

### 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.
- In case of need, please call the local distributor, or the manufacturer if no distributor is available.
- 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

PASTOMASTER RTX are pasteurizers which prepare, pasteurize, homogenize, age and transfer ice cream mixes to other units.

An electronic microprocessor steadily checks each working cycle selected.

Two alphanumerical monitors display all steps of a working cycle and send audio-visible messages.

The following are the main components:

- three-speed heat pump;
- ergonomic display console with low voltage 24V controls;
- electrical, freezing and soundproofing units complying with international standards;
- graduated tank, with inside water dispenser for wash;
- high resistant steel frame, treated with rust inhibitors; glazed stainless steel panels.

CARPIGANI recommends to always use high quality ingredients for the preparation of confectionery products, in order to satisfy your customers, even the most hard-to-please ones.

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:

- Choose high quality natural ingredients or buy semifinished products from reliable companies.
- Follow closely instructions given by your supplier .
- Do not alter your supplier's recipes, by adding, for instance, water or sugar.
- Taste your products before serving and start selling only if entirely satisfactory.
- Make sure your staff always keeps the machine clean.
- Have your machine serviced always by companies authorized by CARPIGANI.

**1.2.2 Technical features**

MODEL	Production in 2 hours***	Tank capacity		Electric power*			Installed power	Condenser	Water consumption	Net Weight kg	Dimensions		
	kg	MIN. litres	MAX. litres	volts	Hz	Ph	kW		litres/h		Width mm (W)	Depth mm (D)	Height mm (H)
PASTOMASTER 30	30	15	30	380 o 220	50	3	3,3	Acqua**	150	150	350	915	1070
PASTOMASTER 60	60	15	60	380 o 220	50	3	6,4	Acqua**	300	300	350	915	1070
PASTOMASTER 120	120	30	120	380 o 220	50	3	9	Acqua**	450	450	600	915	1070

\* Other voltages and cycles available.

\*\* Also available in aircooled versions

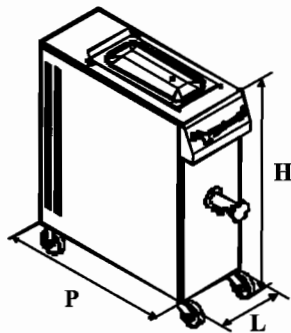
\*\*\* The complete production cycle consists of two parts: heating and cooling which require about 1 hour time.



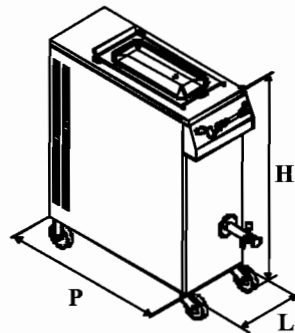
**NOTE:**

*Dimensions herebelow reported may change depending on type of condensation.*

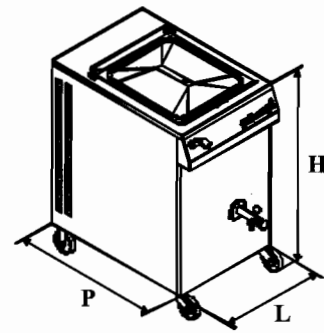
Performances featured by a 25°C room temperature and 20°C cooling water temperature.



Pastomaster 30 RTX



Pastomaster 60 RTX

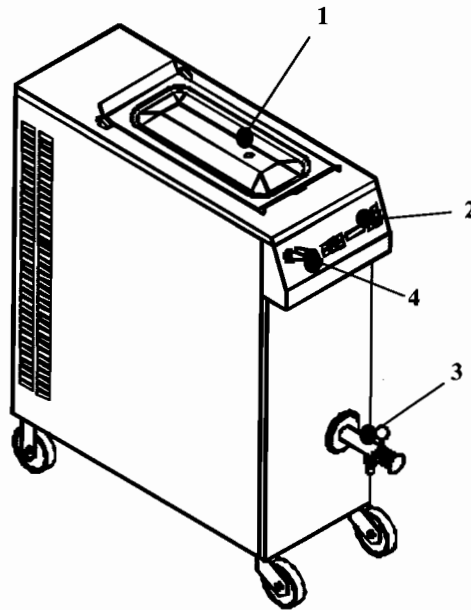


Pastomaster 120 RTX

### 1.2.3 Machine groups location

Caption

- 1 Tank with cover
- 2 Control panel
- 3 Dispensing spigot
- 4 Spout



*Note : this drawing refers to Pastomaster 60 RTX*



### 1.3 INTENDED USE

PASTOMASTER RTX, models 30, 60, 120 must only be used conforming with contents of paragraph 1.2.1 "General Information", within the functional limits hereunder reported:

Voltage:	±10%
Air min. temperature	10°C
Air max. temperature	43°C
Water min. temperature	10°C
Water max. temperature	30°C
Water min. pressure	0.1 MPa (1 bar)
Water max. pressure	0.8 MPa (8 bar)
Max air 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 steady acoustic pressure level weighed A in a working place alike by watercooled and by aircooled machines is less than 70 dB(A).

### 1.5 STORING A MACHINE

The machine must be stored in a dry and damp-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 packing crate, divide packing stuffs per type and get rid of them according to laws in force in machine installation country.



## 2. INSTALLATION

### 2.1 ROOM NECESSARY TO THE MACHINE USE

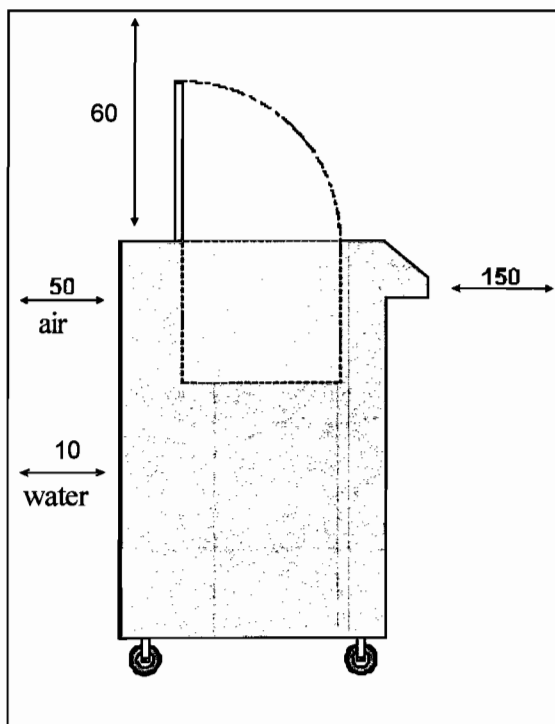
The machine must be installed in such a way that air can freely circulate all around. Rooms for the approach to the machine must be left free in order to enable the operator to act without constraint and also to immediately leave working area, if need be. The minimum approach room to working area should be at least 150 cm in consideration of space taken by opened doors.

#### ATTENTION

**Machines with aircooled condenser must be installed no closer than 50 cm to any wall in order to allow free air circulation around the condenser.**

#### NOTE

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



### 2.2 WATER SUPPLY CONNECTION

The machine must be connected to running water which pressure must not be higher than 0,8 MPa (8 bars).

By aircooled machines, water connection for drinking water (for machine wash) is placed under the machine.

By watercooled machines water connections (for machine wash and gas cooling) are placed on upper panel.

### 2.3 MACHINE WITH AIRCOOLED CONDENSER

Machines with aircooled condenser must be installed no closer than 50 cm to any wall in order to allow free air circulation around the condenser.

#### NOTE

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



## 2.4 MACHINES WITH WATERCOOLED CONDENSER



To make the machine run, a watercooled machine must be connected to running water supply, or to a cooling tower.

Water must have a pressure of 0.1 MPa and 0.8 MPa (1-8 bar) at least, and a delivery at least equal to the estimated hourly consumption.

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

### 2.4.1 Water valve adjustment

#### IMPORTANT

If water valve needs to be reset, this operation will have to be carried out by skilled personnel, only.

Valve adjustment must be carried out in such a way that no water flows when machine is off and lukewarm water flows when machine is on.

#### NOTE

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

#### ATTENTION:

**Do not leave the machine in a room with temperature below 0°C without first draining water from the condenser.**

## 2.5 ELECTRIC CONNECTION

Before connecting the machine to the mains, check that machine voltage indicated in data plate corresponds with the mains.

Insert a differential magnetothermal protection switch adequately sized to absorption capacity required and with contact opening of 3 mm at least.

The machines are delivered with a 5 wire cable: blue wire must be connected to the neutral lead.

#### IMPORTANT

**Yellow/green ground wire must be connected to an adequate ground plate.**

### 2.5.1 Replacing the power cable

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

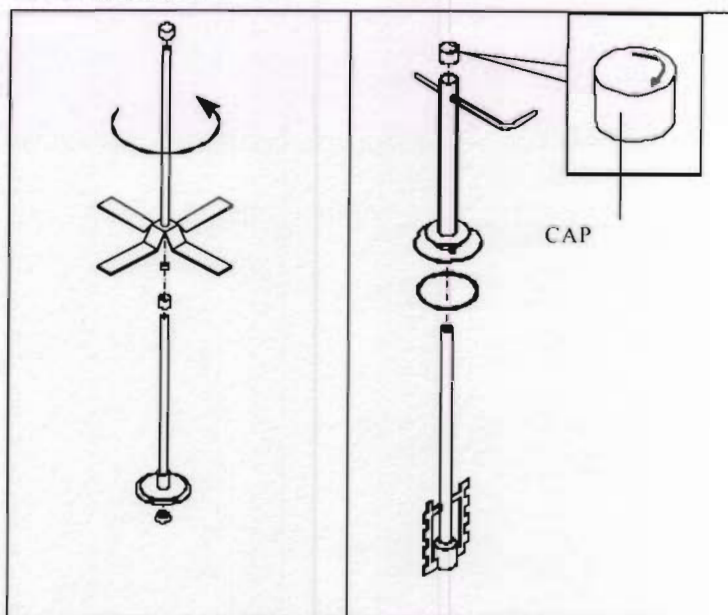
#### Direction of rotation

Direction of rotation of the BEATER in *Pastomaster 30 RTX* is anticlockwise.

By *Pastomaster 60 120 RTX* beater rotation direction is, instead, *clockwise* and it is indicated on the CAP covering the beater in its upper part.

**Reversal of rotation direction**

If the beater rotation is not correct, reverse it by interchanging two of the three leads coming from the circuit breaker.

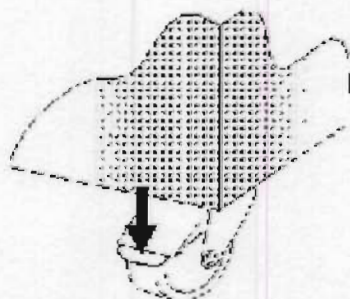


Beater  
Pastomaster 30 RTX

Beater  
Pastomaster 60 120 RTX

**2.6 LOCATION**

The machine is provided with castors for an easy positioning, a mechanical block system, once engaged, prevents machine from moving and keeps it standstill



**2.7 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.



**2.8 MACHINE TESTING**

A postproduction test of the machine is carried out at CARPIGANI premises, operation and output functionality of the machine are thoroughly tested

Machine test at end user's must be carried out by skilled technicians or by one of CARPIGANI engineers.

After the machine positioning and correct connections, also carry out all operations necessary to functional check and test of the machine







### 3. INSTRUCTIONS 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 damages to persons and things.

Who is in charge of plant safety must be on the look-out that

- an incorrect use or handling is avoided
- Safety devices are neither removed nor tampered
- Only are original spare parts to be used especially as far as those components with safety functions are concerned (ex.: protection microswitches, thermal relays).

To achieve the above, the following is necessary:

- At working place an instruction manual relevant to the machine should be available.
- Such documentation must be carefully read and regulations must consequently be followed.
- Only must adequately skilled personnel be assigned to electrical equipment.

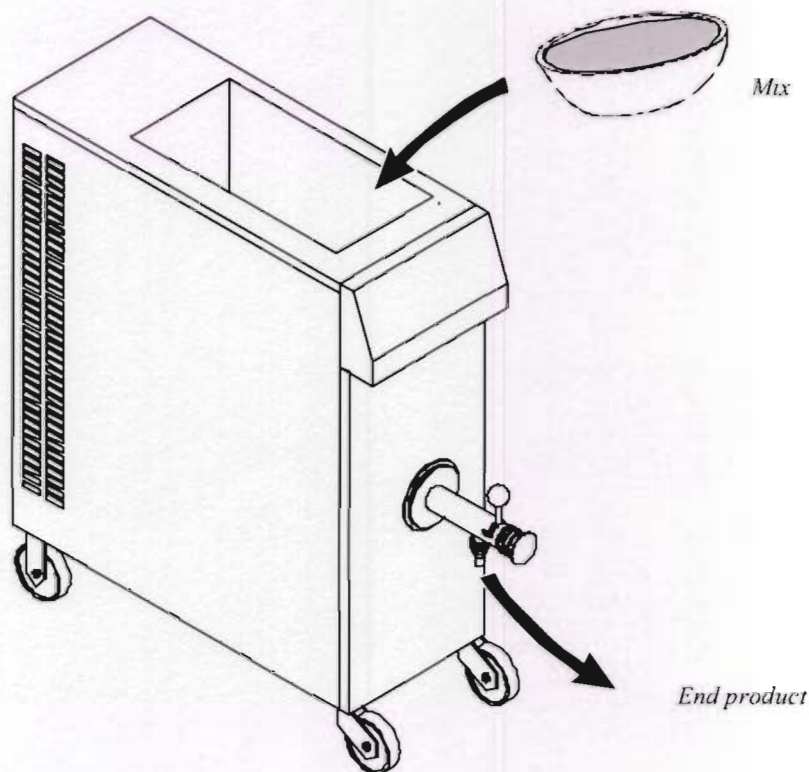
#### 3.2 MACHINE CONFIGURATION

The machine consists of a transmission of movement for beater assembly, a heating and cooling system with aircooled or watercooled condenser.

The product is prepared by pouring a mix into the tank and starting the production cycle, while referring to minimum and maximum quantities reported in Section 1.

As the machine is provided with specific programs for the preparation of various products, one must set the program relevant to the selected product before starting the cycle.

When the cycle ends, the product can be taken out from the special spigot.

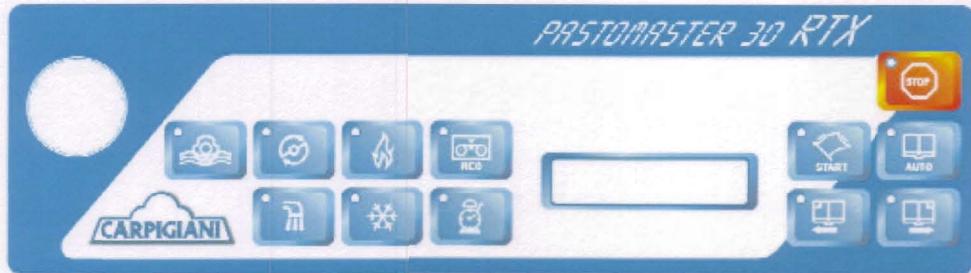


### 3.3 CONTROLS

#### 3.3.1 Control panel



For a correct use of the buttons on the electronic control unit, press on symbol or in the middle of the button.



#### 3.3.2 Common functions

##### Function insert leds

When one of the leds on top left side of each push button switches on, it means the the function corresponding with the symbol next to the same led, has been inserted, posto in alto a sinistra di ogni pulsante, indica l'inserimento della funzione corrispondente



##### DISPLAY

Pastomaster RTX is provided with an alphanumeric display usually displaying a series of messages as soon as the machine is switched on and during its operation. When in STOP, the display shows time and day of the week.



##### STOP push-button

When inserting STOP function, relevant warning light is on. From STOP you can enter AUTO or manual functions, directly. In order to change or to stop any AUTOMATIC and MANUAL working program, you will have just to press STOP. STOP push-button is also used to reset motors thermal relays if they have tripped.

#### 3.3.3 Manual functions

In order to enter manual functions, it is necessary to set the machine to the STOP position. Press thence the push-button relevant to the manual function yu want to insert.



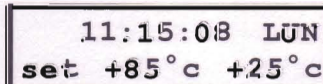
##### Beating

The function insert is indicated by relevant led which switches on. By pressing the **BEATING** push-button, the beater motor starts and keeps on running until **STOP** is pressed.



##### Heating

The function insert is indicated by relevant led which switches on. Automatic mixing start is indicated by the "beating" check lamp and the monitor displays the following message:



Down on the right side one can read the **ACTUAL TEMPERATURE** of the product inside the tank, whereas down on the left side the **TEMPERATURE TO BE REACHED** (set) set by the user and last, on top, time and day of the week.

The product is mixed and heated up to its temperature set value (set) and held at that temperature by a continuous beating process.

With "**decrement**" and "**increment**" ARROWS you can increase and decrease the temperature set value (set).

A 10' fixed sound signal and the blinking of the display indicate that the temperature set value has been reached.



### Cooling

The function insert is indicated by relevant led which switches on and the display shows following message:

11:15:08	LUN
set +04°C	+76°C

Down on the right side you see the ACTUAL TEMPERATURE of the product inside the tank, whereas down on the left side, one reads THE TEMPERATURE TO BE REACHED (set) which was set by the user, on top you will last read time and day of the week

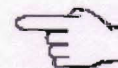
The product is mixed and cooled till the temperature set value is reached (set) and then HELD. The beater stops at the same time with the compressor and, during the storage, if the temperature goes up and the compressor starts again, the beater, too, will restart. The beater anyway starts every 30' and runs 10"

You might wish the mix to be kept mixing during storage and independently of compressor starting, then, besides "Beating", also press "Cooling"

With "decrement" and "increment" ARROWS you can decrease and increase the temperature set value (set). A 10' fixed sound signal and the blinking of the display indicate that the temperature set has been reached.

#### Note:

In **HEATING** and **COOLING** steps at 50°, 60° and 70°C, the beater stops 2 seconds so that the tank will be completely filled with mix, this will avoid that, especially by very thick mixes, air locks are formed



### Timer

When pressing the **TIMING** push-button, relevant led will switch on and following message will be displayed

14:15:08	MAR
set 30'	30:00

On top, you will always read time and day of the week. Down on the left side, you will read the set total time and, down on the right side, you see time decreasing value. Time always starts from 30' and can be changed 1' to 99 minutes with **increment** and **decrement** ARROWS.

When count is over, a sound signal will be emitted for 10" the timer will set to zero as at the starting point.



### Wash water

The function insert is indicated by its led, which will switch on. Water inlet starts by pressing relevant push-button. By pressing the push-button you start water inlet through the nozzle on the machine front side.

Water inlet ends by pressing "wash water" or by pressing "stop".

The machine is provided with an automatic block system after 3 minutes water inlet.

### 3.4 AUTOMATIC WORKINGS

Pastomaster 30 RTX and Pastomaster 120 RTX have 2 types of automatic workings:

- **Ice cream mix workings:** 7 automatic workings
- **Free workings:** 9 workings that can be personalized by the user for realizing his own workings.

Pastomaster 60 RTX has 3 types of automatic workings:

- **Ice cream mix workings:** 7 automatic workings
- **Special workings:** 10 "special" automatic workings
- **Lavorazioni libere:** 9 workings that can be personalized by the user for realizing his own workings.

#### 3.4.1 Automatic working start procedure

- Press "**auto**".
- Select type of working between "**ice cream mix workings**", "**special workings**" (by Pastomaster 60, only), "**free working**", through the arrow push-buttons.
- Press "**auto**".
- The last program used will be display; through the arrow buttons select the desired working.
- Press "**start**" in order to start the working.

Working will start and, during the production, the display will show you the cooking temperature, cooling temperature, pause times, recommended ingredients to be poured into the machine, always after a sound warning .

When the program is complete, working name will alternate with date and time of process end on display .

#### IMPORTANT

**When, in any working step, it is possible to change the value, arrow leds will switch on. If, during the working, you change the value, this will be stored and by next executions of the same working will be left unchanged.**

#### Note:

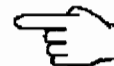
To skip a step, press "**auto**" a few seconds.

### 3.5 ICE CREAM MIX WORKINGS

The electronic memory has been added with 6 essential and fully automatic workings which are described hereafter.

#### 3.5.1 Working Nr 1 HIGH PASTEURIZATION at 85°C

1. Mix sugar with stabilizing agents and skimmed powder milk, separately.
2. Press **AUTO** and select "**ICE CREAM MIX WORKINGS**" through the arrow push-buttons.
3. Press **AUTO** and select "**HIGH PASTEURIZATION**" through the arrow buttons.
4. Press **START** and following instructions on display, pour "**Milk**" into.
5. On a sound warning, indicating the temperature of **40°C** has been reached, pour "**Sugar + Stabiliz.**" into, and other ingredients, if any, such as powder milk.
6. Next acoustic signal means filling with "**Cream**".
7. Once the temperature of **85°C** has been reached, the cooling step will start.
8. Next acoustic signal at **65°C** calls operator's attention to the addition of "**cream**", if any, during cooling step.
9. When a new acoustic signal warns that the temperature of **4°C** has been reached, the display shows the message "**OK High Pasteuriz.**" alternated with "**Ageing 00:00**" and the ageing time count, essential to a high quality ice cream, will start. While mix is aged, it is also mixed at electronically pre-set intervals.



### 3.5.2 Working Nr 2 Low Pasteurization at 65°C

1. Mix sugar with stabilizing agents and skimmed powder milk, separately.
2. Press **AUTO** and select "**ICE CREAM MIX WORKINGS**" through the arrow push-buttons.
3. Press **AUTO** and select "**LOW PASTEURIZATION**" through the arrow buttons.
4. Press **START** and following instructions on display, pour "**Milk**" into.
5. On a sound warning, indicating the temperature of **40°C** has been reached, pour "**Sugar + Stabiliz.**" into, and other ingredients, if any, such as powder milk.
6. Next acoustic signal means filling with "**Cream**".
7. Once the temperature of **65°C** has been reached, the cooling step will start.
8. Next acoustic signal at **65°C** calls operator's attention to the addition of "**cream**", if any, during cooling step.
9. When a new acoustic signal warns that the temperature of **4°C** has been reached, the display shows the message "**OK Low Pasteuriz.**" alternated with the message "**Ageing 00:00**" and the ageing time count, essential to a high quality ice cream, will start. While mix is aged, it is also mixed at electronically pre-set intervals.

### 3.5.3 Working Nr 3 Mid Pasteurization

1. Mix sugar with stabilizing agents and skimmed powder milk, separately.
2. Press **AUTO** and select "**ICE CREAM MIX WORKINGS**" through the arrow push-buttons.
3. Press **AUTO** and select "**MID PASTEURIZATION**" through the arrow buttons.
4. Press **START** and following instructions on display, pour "**Milk**" into.
5. This pasteurization program makes it possible to choose the final heating temperature through the arrow buttons.
6. On a sound warning, indicating the temperature of **40°C** has been reached, pour "**Sugar + Stabiliz.**" into, and other ingredients, if any, such as powder milk.
7. Next acoustic signal means filling with "**Cream**".
8. Once the temperature of **65°C** has been reached, the cooling step will start.
9. Next acoustic signal at **65°C** calls operator's attention to the addition of "**cream**", if any, during cooling step.
10. When a new acoustic signal warns that the temperature of **4°C** has been reached, the display shows the message "**OK Mid Pasteuriz.**" alternated with the message "**Ageing 00:00**" and the ageing time count, essential to a high quality ice cream, will start. While mix is aged, it is also mixed at electronically pre-set intervals.

### 3.5.4 Working Nr 4 Chocolate pasteurization at 90°C

1. Mix sugar with stabilizing agents and skimmed powder milk, separately.
2. Press **AUTO** and select "**ICE CREAM MIX WORKINGS**" through the arrow push-buttons.
3. Press **AUTO** and select "**CHOCOLATE PASTEURIZATION AT 90°**" through the arrow buttons.
4. Press **START** and following instructions on display, pour "**Milk**" into.
5. On a sound warning, indicating the temperature of **40°C** has been reached, pour "**Sugar + Cocoa + Stabiliz.**" into, and other ingredients, if any, such as powder milk.
6. Next acoustic signal means filling with "**Cream**".
7. Once the temperature of **90°C** has been reached, the cooling step will start.
8. Next acoustic signal at **65°C** calls operator's attention to the addition of "**cream**", if any, during cooling step.
9. When a new acoustic signal warns that the temperature of **4°C** has been reached, the display shows the message "**OK High Pasteuriz.**" alternated with the message "**Ageing 00:00**" and the ageing time count, essential to a high quality ice cream, will start. While mix is aged, it is also mixed at electronically pre-set intervals.

### 3.5.5 Working Nr 5 COOLING/AGEING

This program can be used to either cool the mix or to continue ageing if this was accidentally broken in one of workings described above.

1. Press **AUTO** and select "**ICE CREAM MIX WORKING**" through the arrow push-buttons
2. Press **AUTO** and select "**COOLING/AGEING**" through the arrow push-buttons
3. Press **START** and select the temperature of **4°C**.

### 3.5.6 Working Nr 6 Sugar syrup

1. Press **AUTO** and select “**ICE CREAM MIX WORKING**” through the arrow push-buttons
2. Press **AUTO** and select “**SUGAR SYRUP**” through the arrow push-buttons
3. Press **START** and following instructions on display, pour “**Water**” into
4. On a sound warning, indicating the temperature of **40°C** has been reached, pour “**Glucose Syrup**” into, and other ingredients, if any.
5. Next acoustic signal at **50°C** calls operator's attention to the addition of “**Sugar**”.
6. Once the temperature of **85°C** has been reached, the cooling step will start.
7. When a new acoustic signal warns that the temperature of **35°C** has been reached, the display shows the message “**OK Sugar Syr.**” alternated with the message “**Extraction**”. The acoustic signal will go on ringing a few minutes and will stop by pressing the push-button **BEATING**.

## 3.6 SPECIAL WORKINGS (BY PASTOMASTER 60, ONLY)

The electronic memory of PASTOMASTER 60 RTX, only, has been added **10** automatic workings more which are hereafter described.

### 3.6.1 Working Nr 1 INVERT SUGAR

#### WARNING

We recommend you not to fill Pastomaster RTX beyond half tank in order to avoid overflows during the operation

Sugar	17 kg
water	6 L
citric acid	64 g
baking soda	20 g

#### Procedure:

1. Press **AUTO** and select “**SPECIAL WORKINGS**” through the arrow push-buttons.
2. Press **AUTO** and select “**INVERT SUGAR**” through the arrow push-buttons.
3. Press **START** and following instructions on display, pour “**Water**” into.
4. On a sound warning, indicating the temperature of **40°C** has been reached, pour “**Sugar**”.
5. Once the temperature of **90°C** has been reached, the display advises you to pour “**Citric acid**” into and a **5 minutes** pause will start so as to make it possible citric acid melts.
6. Next step includes a 6 hours pause at 90°C. This pause time can be changed from a minimum of 4 hours to a maximum of 8 hours.
7. Next acoustic signal means that the first working step is complete.
8. The displays advises you to add “baking soda” previously dissolved in water. Reaction to the addition of baking soda is effervescence and also overflow in case of tank overfilling.
9. Next cooling bring the temperature down to 35°C.
10. When a new acoustic signal warns that the temperature of **35°C** has been reached, the display shows the message “**OK Invert sugar**” alternated with the message “**Extraction**”. The acoustic signal will go on ringing a few minutes and will stop by pressing the push-button **BEATING**.

#### Use:

Invert sugar is used, as a rule, to prepare both ice-cream (with cream) and sorbets, according to quantities recommended in the recipes.

### 3.6.2 Working Nr 2 Cream sauce

Water	5,4 L
Sugar	3,8 kg
Egg-yolks	5 kg

#### Procedure:

1. Prepare ingredients.
2. Press **AUTO** and select “**SPECIAL WORKINGS**” through the arrow push-buttons.
3. Press **AUTO** and select “**CREAM SAUCE**” through the arrow push-buttons.



4. Press **START** and following instructions on display, pour "*Water+ Egg-yolks*" into.
5. On a sound warning, indicating the temperature of **40°C** has been reached, pour "*Sugar*" into.
6. Next acoustic signal means the temperature of **65°C** has been reached and held for **30 minutes** before cooling starts.
7. When a new acoustic signal warns that the temperature of **4°C** has been reached, the display shows the message "*OK Cream sauce*" alternated with the message "*Date/time end*". The temperature is kept at **4°C** to allow the product be preserved.

**Use:**

Cream sauce 250 g  
white base 1 kg

**3.6.3 Working Nr 3 Zabaione sauce**

"Marsala" wine 8,5 L  
Sugar 3,4 kg  
Egg-yolks 2,4 kg  
Maize meal 250 g  
Jelly 60 g

**Procedure**

1. Prepare ingredients and soften the jelly in cold water.
2. Press **AUTO** and select "**SPECIAL WORKINGS**" through the arrow push-buttons.
3. Press **AUTO** and select "**ZABAIONE SAUCE**" through the arrow push-buttons.
4. Press **START** and following instructions on display, pour "*Marsala+ Egg-yolks*" into.
5. On a sound warning, indicating the temperature of **40°C** has been reached, pour "*Sugar+ maize meal (starch)*" into.
6. Next acoustic signal means the temperature of **80°C** has been reached, pour "*Jelly*" into after well wringing it out.
7. When a new acoustic signal warns that the temperature of **25°C** has been reached, the display shows the message "*OK Zabaione sauce*" alternated with the message "*Extraction*". The acoustic signal will go on ringing a few minutes and will stop by pressing the push-button **BEATING**.

**Use:**

Zabaione sauce 200 g  
Whitebase 1 kg

**Note:**

It is also possible to obtain best quality **ZABAIONE TOPPING** by selecting the same working program and using following recipe:

"Marsala" wine 8 L  
Sugar 3,2 kg  
Egg-yolks 2,2 kg  
Maiz meal 240 g

**3.6.4 Working Nr 4 Chocolate sauce**

Water 8 L  
Sugar 3,4 kg  
Cocoa 4 kg

**Procedure:**

1. Prepare ingredients.
2. Press **AUTO** and select "**SPECIAL WORKINGS**" through the arrow push-buttons.
3. Press **AUTO** and select "**CHOCOLATE SAUCE**" through the arrow push-buttons.
4. Press **START** and following instructions on display, pour "*Water+ 50% cocoa*" into.
5. On a sound warning, indicating the temperature of **48°C** has been reached, pour "*50% cocoa +Sugar*" into.
6. Next acoustic signal means the temperature of **70°C** has been reached cooling step starts.
7. When a new acoustic signal warns that the temperature of **25°C** has been reached, the display shows the message "*OK Choc. sauce*" alternated with the message "*Extraction*". The acoustic signal will go on ringing a few minutes and will stop by pressing the push-button **BEATING**. The product must be taken out to avoid itsolidifies inside the tank.

**Use:**

Chocolate sauce	300 g
White base	1 kg

**Note:**

It is also possible to obtain a first quality **CHOCOLATE TOPPING**, by selecting the same working program and using following recipe:

cream	5 L
sugar	2,4 kg
water	2 L
Glucose	500 g
dark choc. surrogate	10 kg
dark choc. coating	1 kg

Surrogate and coating shall be added at 70°C. This sauce will be taken out at 40°C.

**3.6.5 Working Nr 5 Fruit sauce**

water	1,6 L
sugar	5,7 kg
fruit pulp	8 kg

**Procedure:**

1. Prepare ingredients.
2. Press **AUTO** and select "**SPECIAL WORKINGS**" through the arrow push-buttons.
3. Press **AUTO** and select "**FRUIT SAUCE**" with arrow push-buttons.
4. Press **START** and following instructions on display, pour "**Fruit purée+ Water**" into.
5. On a sound warning, indicating the temperature of 40°C has been reached, pour "**Sugar**" into.
6. Next acoustic signal means the temperature of 65°C has been reached and held for 30 minutes before cooling starts.
7. When a new acoustic signal warns that the temperature of 4°C has been reached, the display shows the message "**OK Fruit sauce**" alternated with the message "**Date/time end**". The temperature is kept at 4°C to allow the product be preserved.

**Use:**

Fruit sauce	2 kg
sugar syrup	290 g
water	1,2 L

We obtain a SORBET at 30% fruit and 30% sugar contents

**Note:**

It is also possible to obtain a first quality **FRUIT TOPPING**, by selecting the same working program and using following recipe:

Pectine	76 g (to melt in sugar contents)
citric acid	30 g (to be added on cooling process start, after the 30' minutes pause at 65°C)

**3.6.6 Working Nr 6 Pudding**

Milk	6 L
Cream	1 L
Preparation for puddings	1,3 kg

**Procedure:**

1. Prepare ingredients and soften the jelly in cold water.
2. Press **AUTO** and select "**SPECIAL WORKINGS**" through the arrow push-buttons.
3. Press **AUTO** and select "**PUDDING**" through the arrow push-buttons.
4. Press **START** and following instructions on display, pour "**Milk+cream+thickening agent**" into.
5. On a sound warning, indicating the temperature of 40°C has been reached, pour "**Sugar**", into, if any, as per recipe directions.
6. Next acoustic signal means the temperature of 85°C has been reached, pour "**Jelly**" into, if any, after wringing it out thoroughly.
7. A few minutes after reaching 85°C, you can take the pudding out and pour it in the special molds.
8. The acoustic signal will go on ringing a few minutes and the beater will keep on running; it will stop by pressing the push-button **BEATING**. The product must be taken out to avoid it solidifies inside the tank.



**3.6.7 Working Nr 7 Panna cotta**

Milk	5 L
Cream	5 L
Sugar	3 kg
Jelly	300 g

**Procedure:**

1. Prepare ingredients and soften the jelly in cold water.
2. Press **AUTO** and select "**SPECIAL WORKINGS**" through the arrow push-buttons.
3. Press **AUTO** and select "**PANNA COTTA**" through the arrow push-buttons.
4. Press **START** and following instructions on display, pour "**Milk+cream**" into.
5. On a sound warning, indicating the temperature of **40°C** has been reached, pour "**Sugar**", into.
6. Next acoustic signal means the temperature of **90°C** has been reached, pour "**Jelly**" into, after wringing it out thoroughly.
7. The cooling step will start a few minutes later.
8. When a new acoustic signal warns that the temperature of **25°C** has been reached, the display shows the message "**OK Panna cotta**" alternated with the message "**Extraction**". The acoustic signal will go on ringing a few minutes and the beater will keep on running; it will stop by pressing the push-button **BEATING**. The product must be taken out to avoid it solidifies inside the tank.

**3.6.8 Working Nr 8 Bavarian cream**

Milk	10 L
sugar	4 kg
egg yolks	1,8 kg
Jelly	450 g

**Procedure:**

1. Prepare ingredients and soften the jelly in cold water.
2. Press **AUTO** and select "**SPECIAL WORKINGS**" through the arrow push-buttons.
3. Press **AUTO** and select "**BAVARIAN CREAM**" through the arrow push-buttons.
4. Press **START** and following instructions on display, pour "**Milk+egg yolks**" into.
5. On a sound warning, indicating the temperature of **40°C** has been reached, pour "**Sugar**", into.
6. Next acoustic signal means the temperature of **70°C** has been reached, pour "**Jelly**" into, after wringing it out thoroughly.
7. The temperature is held at **70°C** for the time necessary to full pasteurize the product before cooling starts.
8. When a new acoustic signal warns that the temperature of **25°C** has been reached, the display shows the message "**OK Bavarian cream**" alternated with the message "**Extraction**". The acoustic signal will go on ringing a few minutes and the beater will keep on running; it will stop by pressing the push-button **BEATING**. The product must be taken out to avoid it solidifies inside the tank.

**3.6.9 Working Nr 9 liquid Yogurt**

High quality milk	15 L
natural whole yogurt	2 kg
or lactic ferments according to instructions' maker	

**Procedure**

1. Press **AUTO** and select "**SPECIAL WORKINGS**" through the arrow push-buttons.
2. Press **AUTO** and select "**LIQUID YOGURT**" through the arrow push-buttons.
3. Press **START** and following instructions on display, pour high quality "**milk**" into.
4. This working process includes milk pasteurization at **90°C** and following cooling at the inoculation temperature, which reaching means that "**lactic fermetns**" are to be added.
5. After the inoculation of lactic ferments, a fermentation step will start during which **Pastomaster RTX** keep the temeprature steady at **42°C** for a time of **6 to 7 hours**.
6. The operator directly sets the fermentation time through the arrow push-buttons; the longer the fermentation time lasts, the higher the compactness of end-product is.
7. When fermentation process is complete, the product is cooled down to **4°C**: at this temperature the working is complete. The display will show the message "**OK liquid Yogurt**" alternating with "**date/time end**". The temperature is kept at **4°C** to allow the product to be preserved.

### 3.6.10 Working Nr 10 Thick yogurt

High quality milk            15 L  
 natural whole yogurt        2 kg  
 or lactic ferments according to instructions' maker

#### Procedure:

1. Press **AUTO** and select "**SPECIAL WORKINGS**" through the arrow push-buttons.
2. Press **AUTO** and select "**THICK YOGURT**" through the arrow push-buttons.
3. Press **START** and following instructions on display, pour high quality "**milk**" into.
4. This working process includes milk pasteurization at **90°C** and following cooling at the inoculation temperature, which reaching means that "*lactic ferments*" are to be added.
5. After the inoculation of lactic ferments, a fermentation step will start during which **Pastomaster RTX** keep the temperature steady at **42°C** for a time of **6 to 7 hours**.
6. The operator directly sets the fermentation time through the arrow push-buttons; the longer the fermentation time lasts, the higher the compactness of end-product is.
7. When fermentation process is complete, the working is complete. The operator can cool yogurt statically, by just deactivating beating function.

### 3.7 FREE WORKINGS

N. 9 workings are available to add personalize mix treatment programs, which once stored can be recalled and automatically executed.

To program a personalized working not included among the ones described in paragraphs 3.4 and 3.5, follow the procedure below:

1. From Stop, press "record": the machine will automatically set to the first free working. Display will be (if first available working is Nr 1) the following:

<b>LAVORAZIONE No. 1</b>	
<b>set</b>	<b>P. 01</b>

2. Select the first working operation by pressing the push-button relevant to the operation itself (Beating, Heating, Cooling, Timer) The function choice will activate led relevant to the function and it indicates the first step P.01 of the program you are going to create.
3. Press "**record**" in order to store this operation; on display you will read "**P.02**", which the second step of the working you are going to insert.
4. Select the second operation you desire, thence repeat STORING procedure in order to store it.
5. Go ahead as described above up to reach the last step desired (if, among the function selected, you have also included a timing function, the display will show time set value.
6. To complete storing and to leave personalized programming, press "**record**" idling (it means, without first selecting any function) . Machine will go to STOP, now.
7. To recall this free working, press "**auto**" and "**decrement**" or "**increment**" buttons, in order to display nr 1.
8. To start this free working automatically, press "**start**".

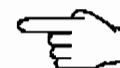
#### Note

Maximum step number for each working is 25. If you go beyond it, the display will show "NO STEPS" and will go back to STOP so deleting the working.

#### Note

For a thermostatic control on an indefinite time:

- set the last but one step , such as heating or cooling, at the desired temperature;
- set the last step with timer at "0 minutes", i.e., at NON determined time .





### 3.7.1 Example of personalized programming

Mixing and heating to 90°C, temperature holding for 5 minutes, cooling to 2°C, holding at 2°C (by thermostatic control) for an indefinite time.

Sequential operations	Push-button	Display
1) Press "RECORD" to start working programming		<b>WORKING Nr 1</b> set P.01
2) Press "HEATING" (beating will automatically be inserted)		<b>WORKING Nr 1</b> set +85° P.01
3) Press "INCREMENT" up to 90°C		<b>WORKING Nr 1</b> set +90° P.01
4) Press "RECORD"		<b>WORKING Nr 1</b> set P.02
5) Press "TIMER"		<b>WORKING Nr 1</b> set 0:30 P.02
6) Press "DECREMENT" up to 5'		<b>WORKING Nr 1</b> set 0:05 P.02
7) Press "RECORD"		<b>WORKING Nr 1</b> set P.03
8) Press "COLLING" (beating will automatically be inserted)		<b>WORKING Nr 1</b> set +04° P.03
9) Press "DECREMENT" up to 2°C		<b>WORKING Nr 1</b> set +02° P.03
10) Press "RECORD"		<b>WORKING Nr 1</b> set P.04
11) Press "TIMER"		<b>WORKING Nr 1</b> set 0:30 P.04
12) Press "DECREMENT" up to 0'		<b>WORKING Nr 1</b> set 0:00 P.04
13) Press "RECORD"		<b>WORKING Nr 1</b> set P.05
14) Press "RECORD" without any function		14:15:08 MAR 10/06 +02°

### 3.7.2 Notes to read the flow of a personalized program

- Press push-button "auto".
- Select working type (ice cream mixes, special, free workings) with "increment" e "decrement" push-buttons
- Press push-button "auto"
- Select working with "increment" e "decrement" push-buttons
- Press push-button "record"

This procedure will enable you to page through any program and each program step with no need of executing it. While reading the steps, temperature and time values can be changed by means of the ARROW push-buttons (relevant leds will switch on).

**The new value will be stored.**

To page up the following step, press "record" again. When you finish reading, press "stop".

The maximum number of workings personalized by the user is 9. If you exceed this number, the message "NO WORKINGS" will be shown on the display. To get memory space for a new program you will have to erase one.

### 3.7.3 Deleting personalized programs

To delete a personalized program:

- Press push button "auto"
- Select working type (ice cream mixes, special, free workings) with "increment" e "decrement" push-buttons.
- Press push button "auto"
- Select working with "increment" e "decrement" push-buttons
- Press push-button "record" in order to highlight it.
- Press push-button "record" again and hold it down 5 seconds.

On display "SURE? [Y/N]"

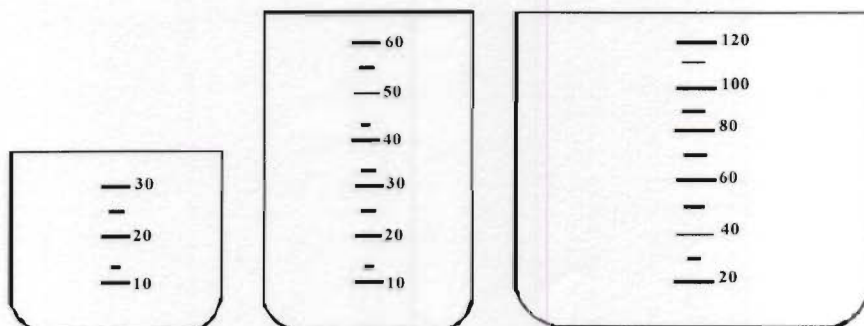
If you press push-button "start" you confirm program deletion (Yes)

If you press push-button "auto" you quit the operation (No).

## 3.8 MACHINE STARTING

After washing, sanitizing and thoroughly rinsing the machine right before its use, as per previous descriptions, pour the mix into the tank according to the quantity desired and respecting the minimum and maximum values shown in the table (Sec 1.2.2), the tank is provided with an inside graduation for an approximate indication of mix quantity therein contained (see picture below).

Before pouring the mix, make sure that the dispensing spigot is perfectly closed.




*Note: a non perfectly closed tank cover hinders the machine functioning*






### 3.8.1 Automatic operation

In a pasteurizer, a program with AUTOMATIC and FREE WORKINGS starts from the STOP position insert (led is on) 

- Press push-button "auto": the name of the working you last used will be displayed.
- Select the type of working desired through "decrement" and "increment" arrow buttons.
- Press push-button "auto" per confermare
- Select the type of working desired through "decrement" and "increment" arrow buttons..
- When the working you wish to use is displayed on the screen, press push-button "start".
- The working ends when you read "END" on display, soon followed by end-of-cycle time.

### 3.8.2 Manual operation

Manual operation starts after inserting STOP (led is on) 

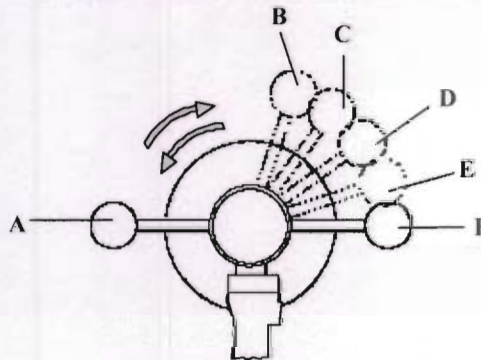
- Press the push-button relevant to the manual function you want to insert (Beating, Heating, Cooling, Timer).
- The function you have inserted will end after pressing push-button "stop" or the push-button for any other manual function.

### 3.8.3 Use of the dispensing spigot (Pastomaster 60 and 120)

The dispensing spigot is closed when its lever is fully on the right side (position F)  
To take the mix out, turn the spigot lever to the left, see the picture below (position A)

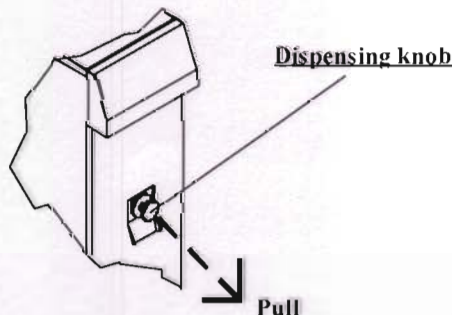
**NOTICE**

The dispensing spigot allows a proper mix beating depending on the mix thickness.  
Beating gradually increases by moving the lever from left to right, so having different beating speeds.



*Note*

Model Pastomaster 30 RTX is not provided with 3 beating positions because the mix is taken out by pulling the special dispensing knob



## 4. SAFETY DEVICES

### 4.1 MACHINE SAFETY DEVICES

The Pastomaster RTX has been provided with a series of safety devices to protect both machine and the operators. The tripping of each safety device comes up to an alarm on control unit display. Please find herebelow the mentioned ALARMS:



#### **ALARM BLACK-OUT**

A power failure has occurred. The machine is provided with an Electronic Memory which is active even during a possible power failure.

On power return, the Electronic Memory will only restart the function in progress, if temperature and time values can grant that the mix has not been altered during black-out, otherwise a new Pasteurization restarts and the operator receives the warning message of BLACK-OUT.

If the machine had to pasteurize the mix again because of a black-out and the program is complete, the message on display will be the following:

High pasteurization  
set=+50°C +28°C

alternately with

BLK 28/09 13:16  
set=+50°C +28°C

**BLK 28/09 13:16** means power return on 28/09 at 13:16 and reexecution of the program. If more power failures occur during the execution of the same cycle, the power failure in memory will be the last one occurred.

#### **ALARM RTA - THERMAL RELAY TRIPPING**

It takes the beater motor overheating; reaching the highest setting value brings about the machine stopping: the machine will set to STOP, and on the display it is shown **Alarm RTA**. To reset this alarm state, it is necessary to press STOP/RESET: the machine remains in Stop position and it is ready for use.

#### **ALARM RTC - THERMAL RELAY TRIPPING**

It takes the compressor motor overheating; reaching the highest setting value brings about the machine stopping: the machine will set to STOP, and on the display it is shown **Alarm RTC**. To reset this alarm state, it is necessary to press STOP/RESET. the machine remains in Stop position and it is ready for use.

#### **ALARM PR - SAFETY PRESSURE SWITCH TRIPPING**

It protects the cooling unit and stops the freezing compressor if there is no water inside the circuit itself (watercooled machine) or if no air circulates inside the condenser (aircooled machines). Reset is automatic, so that when the alarm disappears the machine will be ready for use.

Check water inlet and outlet pipes so that water can circulate unhindered, when the compressor runs. By aircooled units check that the condenser fan runs when the compressor is on or that the aircooled condenser is not obstructed; in that case, clean it with a jet of compressed air.

#### **WARNING**

**Too a long running of the compressor or its repeated stops and restarts mean that condensation is not sufficient; check where troubles originate.**



#### **ALARM OPEN COVER**

**Pastomaster 30:** Whenever the tank cover is opened during the machine operation, beater and compressor will stop. Once the cover is closed, functions are reset.

**Pastomaster 60 and 120:** If the mix inside the tank is under 50°C and you open the tank cover, the machine will keep on running and the display will only show the alarm "open cover".

This will allow the ingredients to be mixed properly.

If the temperature is the same as 50°C or over and you open the tank cover, beater and compressor will stop for safety reasons. Once the cover is closed, functions are reset.

**ALARM IMS - SPIGOT BODY DOVER (Ppastomaster 60 and 120, only)**

If this alarm activates, the machine sets to STOP.

**ALARM TEV - TEMPERATURE SENSOR "TEV" INTERRUPTED OR SHORT-CIRCUITED**

Call an engineer.

**ALARM TEC - TEMPERATURE SENSOR "TEC" SHORT-CIRCUITED OR INTERRUPTED**

Call an engineer.

## 5. CLEAN OUT, DISASSEMBLING AND REASSEMBLING OF PARTS IN CONTACT WITH PRODUCT

### IMPORTANT

*Cleaning and sanitizing must be carried out at the end of every working day with utmost care in order to guarantee quality of production in the respect of all hygienic rules.*

### 5.1 EXTERIOR CLEAN OUT

Eliminate dust from your machine and also the protective film which, before delivery, it was covered with.

Use water, only, with addition of a mild soap-detergent and a soft cloth, if need be.

### WARNING

**Do not use solvents, alcohols or detergents that can damage the machine parts or pollute those parts involved in the production.**

### 5.2 PRELIMINARY CLEAN OUT

With machine off and **STOP** led on, make sure that the mix dispensing tap is closed; pour thence water into the tank, according to the quantity necessary for the machine wash, by pressing "**water inlet**" push-button and adjusting the wash nozzle.

Press the "**beating**" push-button and leave in that position a few minutes.

Press "**stop**" push-button.

Drain all water from the tank through the mix dispensing spigot.

Disassemble then the machine by removing its parts.

### 5.3 DISASSEMBLING THE SPIGOT PISTON

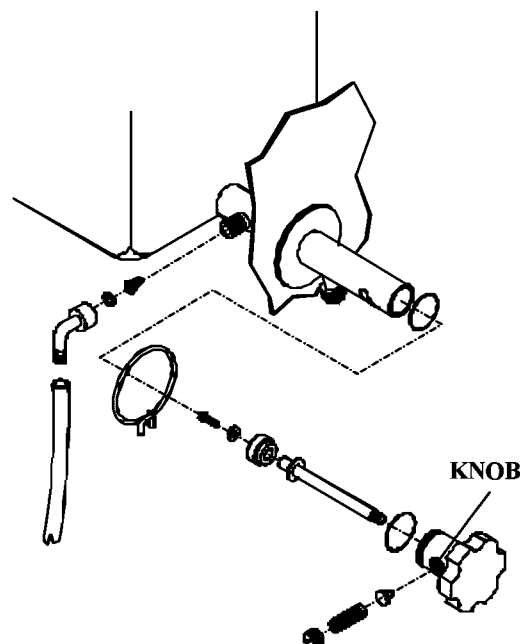
#### *PASTOMASTER 30 RTX*

Remove spigot knob, by turning it anticlockwise.

Disassemble all other parts of the spigot.

Wash them in water and cleansing solution with the special brush you find in the accessories kit, then rinse.

Reassembling the parts.

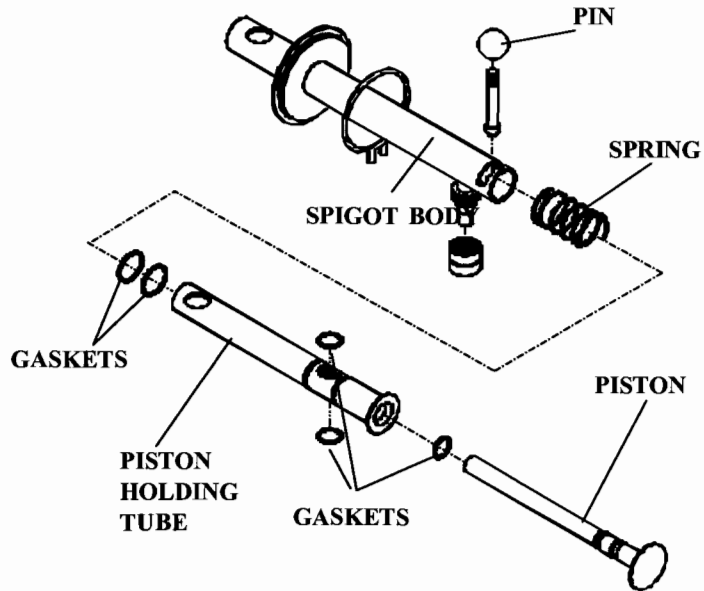




**PASTOMASTER 60-120 RTX**



To disassemble the spigot, it is necessary to unscrew the PIN and withdraw the PISTON from its seat, as well as the PISTON HOLDING TUBE.  
 Disassemble all other spigot parts, as shown in the picture.  
 Wash all parts in water and cleansing solution, then rinse.  
 When reassembling the parts, do not forget to lubricate all gaskets with edible fat.



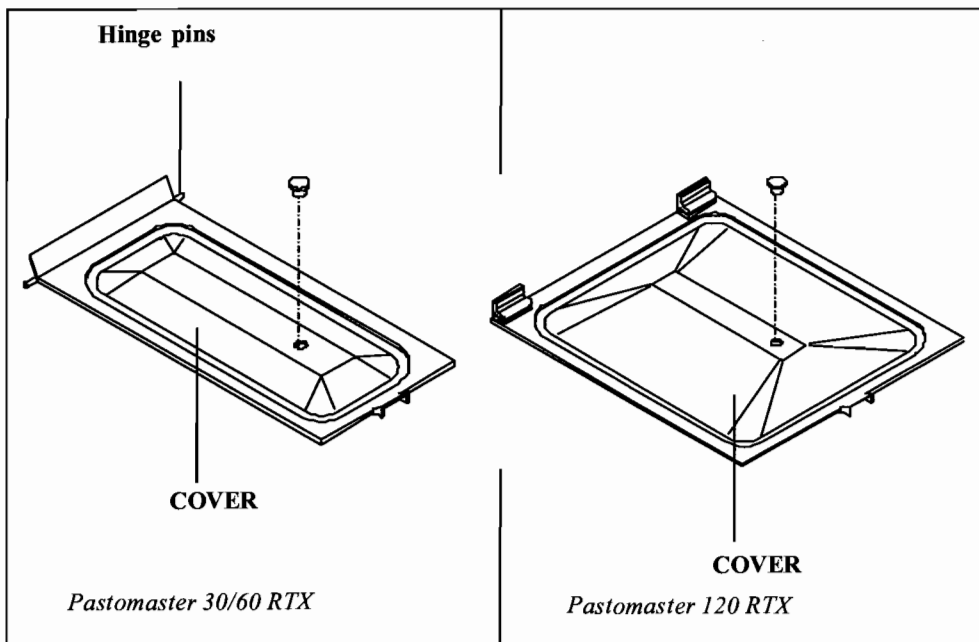
**5.4 DISASSEMBLING OF TANK COVER**



*Note: The machine is provided with a safety device on its cover; every time you lift the cover while the machine is running, the machine will stop.*



The tank cover is completely removable, whereas the hinges are fastened to the machine.  
 Place the cover vertically; deeply push on cover until a pin comes out.  
 Withdraw the cover by lifting it vertically and pushing forward on the fixed hinges.  
 Wash in water and cleansing solution, then rinse.



## 5.5 DISASSEMBLING THE BEATER

### PASTOMASTER 30 RTX

Remove the CAP and the BEATER by slightly pulling upwards and minding not to damage the blades.

**WARNING**

Act with utmost care, as a fall to the ground might damage the beater.

Wash all the disassembled parts with water and detergent, then rinse.  
Re-assemble the parts in the opposite way to disassembly operations

### PASTOMASTER 60/120 RTX

Turn the CAP anticlockwise (opposite to the arrow), so that you can take it out.  
Turn the BEATER BODY CAP till you loose it from its seat, thence withdraw.

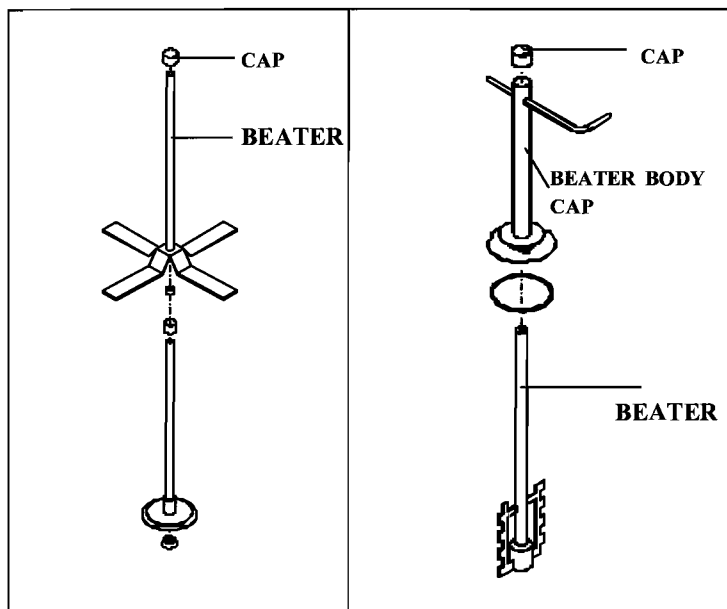
Remove the BEATER by slightly pulling it upwards.

**WARNING**

Act with utmost care, as a fall to the ground might damage the beater.

Wash all beater parts thoroughly in water and cleansing solution, as well as the bater and the beater body cap inside, using the special brush you will find in the accessories kit then rinse.

Reassemble the beater, now, following the reverse procedure.



Beater  
Pastomaster 30 RTX

Beater  
Pastomaster 60/120 RTX

## 5.6 HYGIENE



Mix fat contents are ideal fields for proliferation of mildew and bacteria. To eliminate them, parts in contact with mixes and creams must be thoroughly washed and cleaned.

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.

## 5.7 SANITIZATION



With machine off, after reassembling the beater and checking that spigot pos. 505 is closed, fill the tank with a NON CORROSIVE sanitizing solution.

Press the button "beating" and let the beater run one minute.

Press STOP and leave the solution 10 minutes into th machine.



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### WARNING

**Too a long running in "BEATING" position with empty tank or just filled with water and sanitizing solution, brings about a quick wear of the beater .**

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Drain all sanitizing solution by opening the spigot.



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### ATTENTION

**Do not touch the sanitized parts with hands, napkins, or else.**

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### WARNING

**Before starting again with production, rinse thoroughly with just water, in order to remove any residue of sanitizing solution.**

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## 6. MAINTENANCE

### 6.1 SERVICING TYPOLOGY

#### ATTENTION

**Any servicing operation requiring the opening of machine panels must be carried out with machine set to stop and disconnected from main switch!**

**Cleaning and lubricating moving parts is forbidden!**

**Repairs of electrical and freezing plants must be carried out by skilled engineers!**

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 serving operations required.

Herebelow you can find a list of routine servicing operations

**- Cleanout of tank and cover**

At the end of every working day

**- Cleanout of beater assembly**

At the end of a working day

**- Cleanout of panels**

To be carried out daily with neutral soap, seeing to it that no cleansing solution reaches the beater assembly at its inside.

**- Cleanout and sanitization**

At the end of every working day, according to procedures described in section 6.

#### WARNING

**Never use abrasive sponges to clean machine and its parts, as you might scratch their surfaces.**

### 6.2 WATERCOOLING

By machines with watercooled condenser, water must be drained from condenser at the end of selling season in order to avoid troubles in the event that the machine is stored in rooms where temperature may fall under 0°C

- After closing water inlet pipe, disconnect the drain pipe from its seat and let water flow out from circuit

### 6.3 AIRCOOLING

Clean the air filter, periodically, in order to remove dust and impurities that may hinder air circulation to the condenser.

Use a brush with long bristles or a bolt of compressed air.

#### ATTENTION!

**When using compressed air, put on personal protections in order to avoid accidents; wear protective glasses!**

**NEVER USE SHARP METAL OBJECTS TO CARRY OUT THIS OPERATION. GOOD WORKING OF A FREEZING PLANT MOSTLY DEPENDS ON CLEANING OF CONDENSER.**

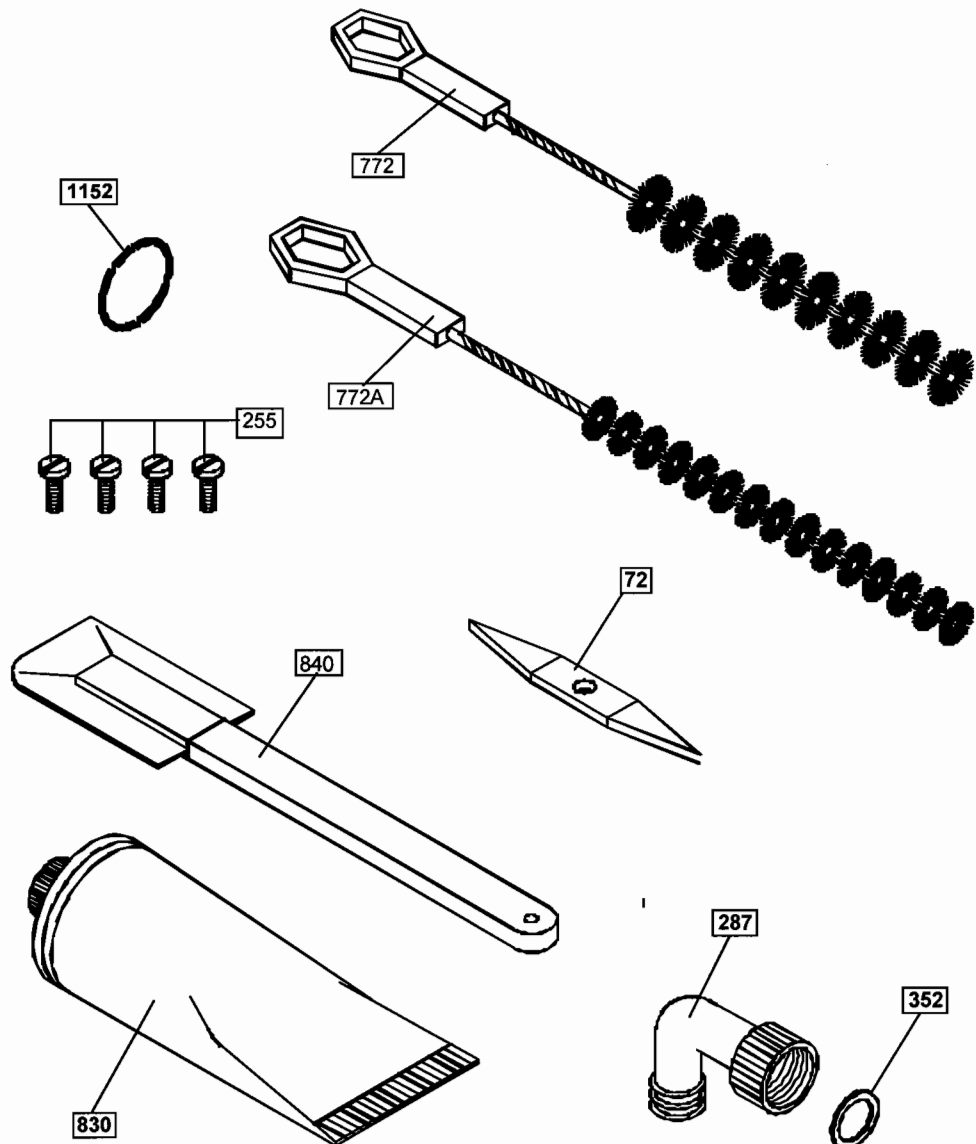
### 6.4 ORDERING SPARE PARTS

In the event of breaking or wear of one or more parts, request the new ones directly to a Carpigiani Engineer, always detailing machine type and serial number printed on data plate you will find on the rear of the machine



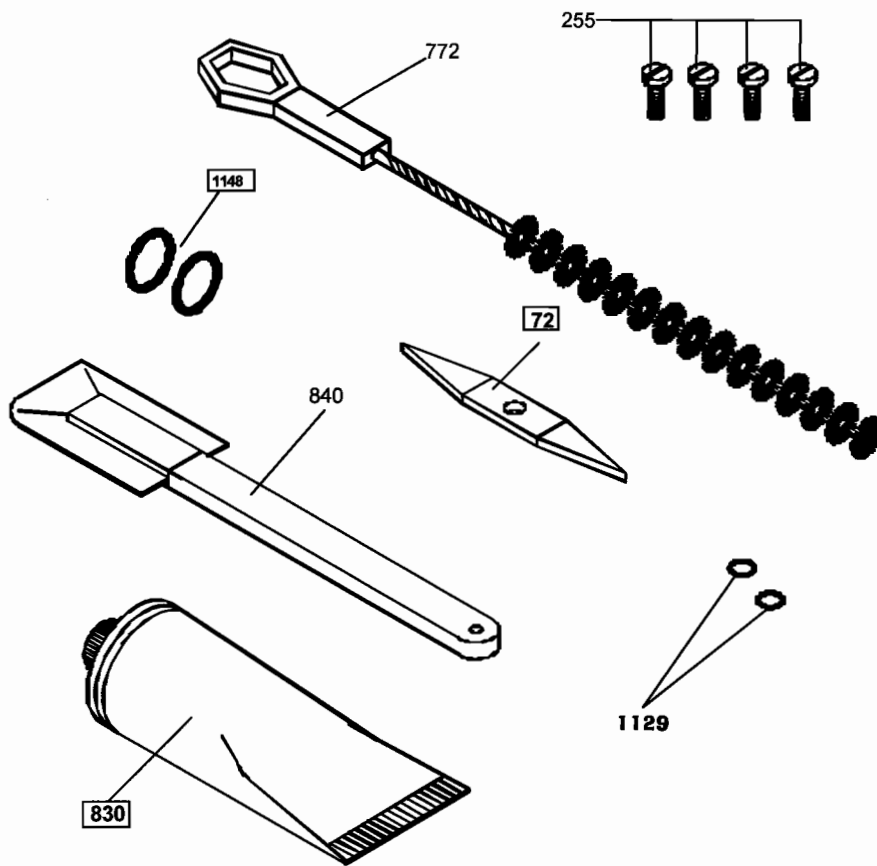
## 6.5 TABLE OF EQUIPMENT

### PASTOMASTER 30 RTX



#### ACCESSORIES TO PASTOMASTER 30 RTX

Q.ty	Description	Position	Nr
Nr 1	OR extractor	72	
Nr 4	Screws	255	
Nr 2	Rubber pipe fitting 3/4 x 20	287	
Nr 5	Pipe fitting gasket	352	
Nr 1	Swab D 30x640	772	
Nr 1	Swab D 12x35x280	772A	
Nr 1	Gelilube tube	830	
Nr 1	Cleaning brush	840	
Nr 2	OR	1152	



ACCESSORIES TO PASTOMASTER 60/120 RTX

Q.ty	Description	Position Nr
Nr 1	OR extractor	72
Nr 4	Screws	255
Nr 3	OR	303
Nr 1	Swab D 30x640	772
Nr 1	Gelilube tube	830
Nr 1	Cleaning brush	840



## 7. TROUBLESHOOT GUIDE

TROUBLE	CAUSE	CURE
<b>Machine does not start</b>	The main switch is off	Turn it on
	Machine is unplugged	Check and plug in
<b>Control unit does not accept a control</b>	Control unit	Replace the control unit Call after-sale service
<b>Product coming out from dispensing spigot</b>	Gasket is strained, cut, etc.,	Check and replace through a new one
<b>Inside noise</b>	Gearmotor or compressor	Call after-sale service
<b>Bacteria test shows too high level</b>	Too many bacteria in the mix	Improve preparation procedure, by sanitizing all containers, spoons, etc.
	Machine not clean and sanitized enough	Empty and clean the machine with care. Sanitize as per section 4.



