APPLICARE

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CARATTERISTICHE

INSTRUCTION HANDBOOK

Pastochef RTX

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FOREWORD

INSTRUCTION HANDBOOK

Editing this handbook, it was taken into due account community directions on safety standards as well as on free circulation of indstrial products within E.C. (R.E.C. Council direction 89/392 and subsequent, known as "Machines Direction".

AIM

This handbook was edited while taking into due account needs of machine users.
Topics relevant to a correct use of the machine have been analyzed in order to keep unchanged in the long run quality features of the worldwide CARPIGIANI machines.
A significant part of this handbook refers to the conditions necessary to the machine use and to the necessary behaviour during cleanout as well as routine and special maintenance.
Nevertheless, this handbook cannot meet in details all demands; in case of doubts or failing information, please apply to:

CARPIGIANI GROUP Via Emilia, 45 - 40011 Anzola Emilia (Bologna) - Italy
Tel. 051 6505111 - Fax 051 732178

HANDBOOK STRUCTURE

This handbook is structurilized in sections, chapters and subchapters in order to consult it more easily.

Section

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

Chapter

A chapter is that part of section describing a group 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 running reads and clearly understands those parts of the handbook of own concern, and particularly:

- The Operator must have a look at chapters concerning the machine start-up and the operation of machine groups.
- A skilled technician employed in installation, maintenance, repair, etc., must read all parts of this handbook.

ADDITIONAL DOCUMENTATION

Along with an instruction manual, each machine is also supplied complete with further documentation:
- **Machine equipment**: A list of spare parts delivered together with the machine for its maintenance.
- **Wiring diagram**: A diagram of wiring connections put into the machine.

ATTENTION!!

Before using the machine read carefully the instruction handbook.

Pay attention to the safety instruction

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 damages to persons and things.
Who is in charge of plant safety must be on the look-out that

- an uncorrect use or handling is avoided
- Safety devices must neither be removed nor tampered
- 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 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 adequately skilled personnel will have to be assigned to electrical equipment.

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 enganged 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 konwledge 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.

CONVENTIONAL SYMBOLS

ATTENTION: ELECTRIC SHOCK DANGER
The staff involved is warned that the inobsevance of safety rules in carrying out the operation described may cause an electric shock.

ATTENTION: GENERAL DANGER
The staff involved is warned that the operation described may do harm if not carried out in the observarnce of safety rules.

NOTE
It points out significant information for the staff involved.

WARNINGS
The staff involved is warned that the inobservance of information may cause a loss of data and damages to the machine.

MACHINE OPERATOR
It deals with an unskilled person , who has no specific competences and can only carry out easy functions, such as the machine operation by means of controls available on push-button panel , and filling and drain of products used during production.

MAINTENANCE ENGINEER
He is a skilled engineer for operation of the machine under regular conditions; he is able to carry out interventions on mechanical parts and all regulations, as well as maintenance and repairs. He is qualified for interventions on electrical and freezing plants.

CARPIGIANI ENGINEER
It deals with a skilled engineer the manufacturer puts at clients' disposal for complicated interventions und particular conditions or anyhow in accordance with agreements taken with the machine's user.

PROTECTIONS
This symbol placed by description side means that the operator must use personal protections against an implicit risk of accident.

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.

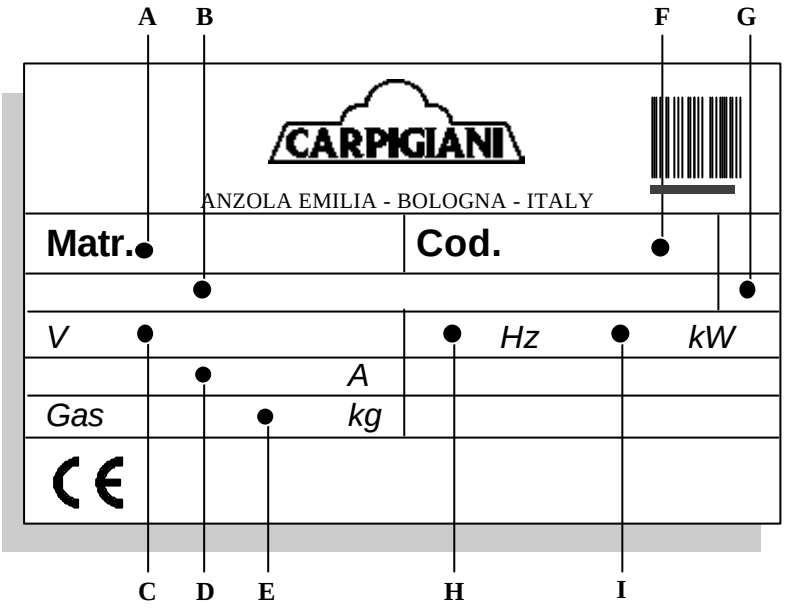
- Never put your hand into the machine, alike during production and cleaning operations. Before carrying out any maintenance operation, make sure that the machine is in "**STOP**" position and main switch has been cut out.
- It is forbidden to wash the machine by means of a bolt of water under pressure.
- It is forbidden to remove panels in order to reach the machine inside before disconnecting 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

1.1 GENERAL INFORMATION

1.1.1 Manufacturer's identification data

The machine has a data plate carrying manufactuer's data, machine type and identification number given when it is manufactured.



A = Serial number
B = Machine type
C = Voltage
D = Fuse Current
E = Gas type and weight
F = Machine code
G = Condensation
A=Air W=Water
H = Frequency
I = Power input

1.1.2 Client/user's identification data

CLIENT:.....
ADDRESS: .....
TELEPHONE: .....
Machine serial number: .....
Machine delivered on: .....
Instr. handbook delivered on: .....

1.1.3 Information about service

All operations of routine maintenance are described in section "Maintenance" of this handbook; any further operation requiring radical interventions on the machine must be agreed with the manufacturer, who will also examine the possibility of a direct action on the spot.

1.1.4 Information to the user

- The manufacturer of the machine here described is at user's disposal for any explanation and information about the machine operation.
- In case of need, the interlocutor is the distributor being present in user's country, or the manufacturer if no distributor is in that market.
- Manufacturer's service department is at clients' disposal for any information about operation, and requests of spare parts and service.
- The manufacturer reserves the right to carry out all machine changes deemed as opportune without previous notice.
- Descriptions as well as pictures contained in this handbook are not binding.
- Reproduction rights are reserved to CARPIGIANI GROUP S.p.A.

1.2 INFORMATION ABOUT THE MACHINE

1.2.1 General information

PASTOCHEF RTX is an electronic machine to produce, pasteurize and store custards for fillings and coatings, chocolate hardening for pralines, jams, and doughs for biscuits and cakes, "mandorlato" (almond cake) and fruit jellies, ice cream and shake mixes, bechamels and sauces.

The machine is provided with a tank with an exclusive system for indirect heating, which can reach high cooking temperatures.
At the inside a beater for mixing of hard and liquid creams is lodged and can run according to an uninterrupted or alternate beating.
Last, **Pastochef RTX** is provided with a cooling system to complete the pasteurization cycle of products under process, thus allowing them to be stored in the machine, when the cycle ends.

CARPIGIANI recommends to always use high quality ingredients for confectionery products in order to satisfy your customers, even the hardest-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 them from reliable companies.
- Closely follow instructions given by your supplier.
- Do not alter your supplier's recipies, by adding, for instance, water or sugar.
- Taste your product before serving and start selling it if only entirely satisfactory.
- Make sure your staff always keeps the machine clean.
- Have your machine always serviced by companies authorized by CARPIGIANI.

RESIDUAL RISKS

Danger of thermal nature
By opening the cover of the tank containing high temperature product, the operator runs the risk of being caught in hot steam.

Act with utmost care and use proper protections before opening the tank cover.

1.2.2 Technical information

MODEL	Prod. in 2 hours	Custard		Chocolate		Electric power*			Installed power	Condenser	Water consumption	Dimensions			Weight
		Tank capacity		Tank capacity											
	Kg.	Min. Litres	Max. Litres	Min. Kg.	Max. Kg.	Volt	Cycles	Ph	kW		litres/hour	Width mm. (A)	Depth mm. (B)	Height mm. (C)	Net Kg.
PASTOCHEF RTX 18	**15**	**7**	**15**	**5**	**12,5**	**400**	**50**	**3**	**2,1**	**Water****	**120**	**450**	**614**	**1110**	**150**
PASTOCHEF RTX 32	**30**	**15**	**30**	**7,5**	**25**	**400**	**50**	**3**	**4**	**Water****	**280**	**658**	**716**	**1110**	**198**
PASTOCHEF RTX 55	**50**	**25**	**50**	**10**	**40**	**400**	**50**	**3**	**5,6**	**Water****	**410**	**658**	**720**	**1190**	**251**

* Other voltages and cycles available

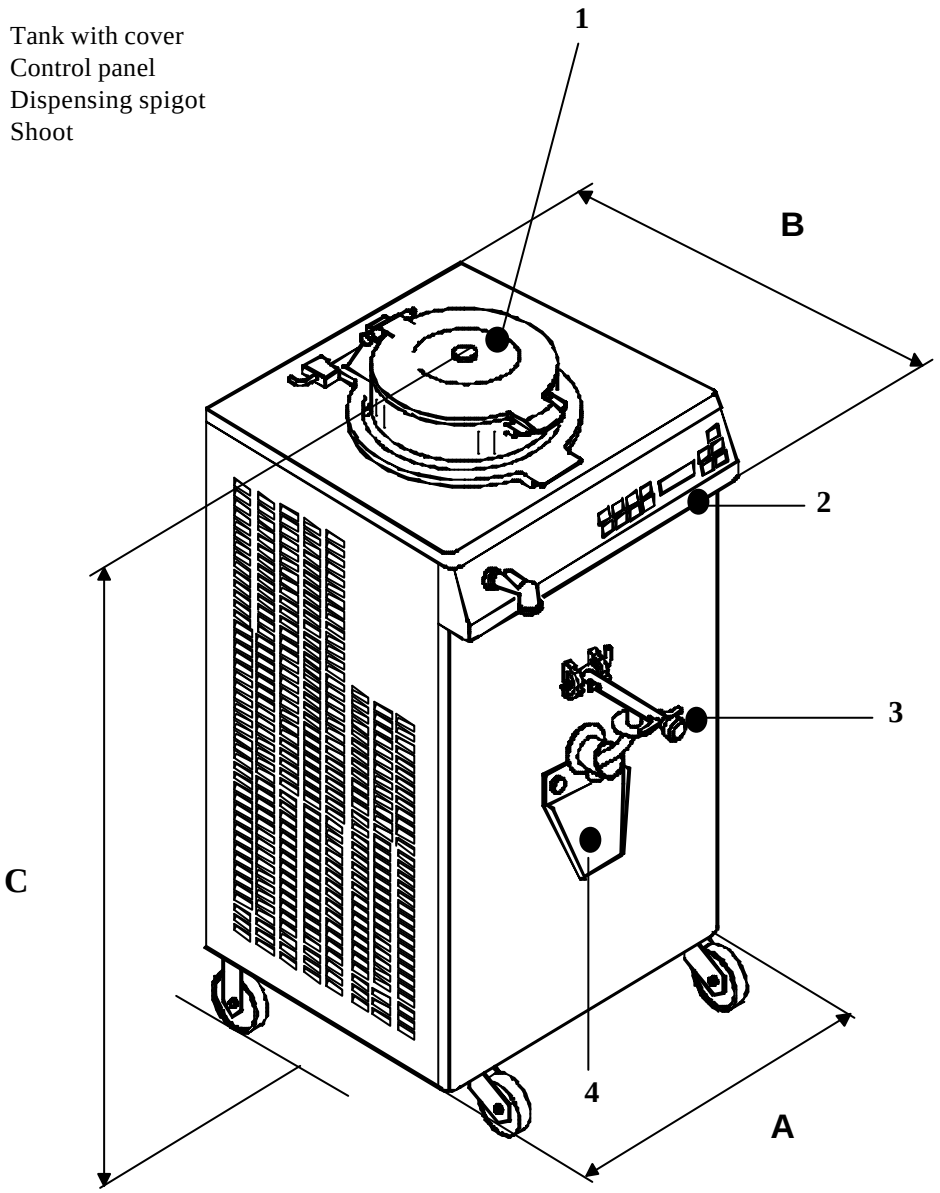
** Models also available in aircooled execution

Performances refer to a room temperature of 25°C and to 20°C temperature of condensing water

1.2.3 Location of the machine groups

Caption:

1 Tank with cover
2 Control panel
3 Dispensing spigot
4 Shoot



1.3 INTENDED USE

PASTOCHEF RTX models 18, 32, 55 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 being not subject to explosion-proof laws; its use is thus bound to complying rooms and normal atmosphere.
- The machine must not be used in the open air, at the risk of rain.
- The machine must be used in lying flat and with castors locks engaged.
- The machine must only be used by the operators.
- The machine may not be washed with any direct water spray.

1.4 NOISE

The continuous level of acoustic radiation pressure, which has been weighed and called A on working place, turns to be lower than 70 dB(A), both by aircooled and by watercooled units.

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.

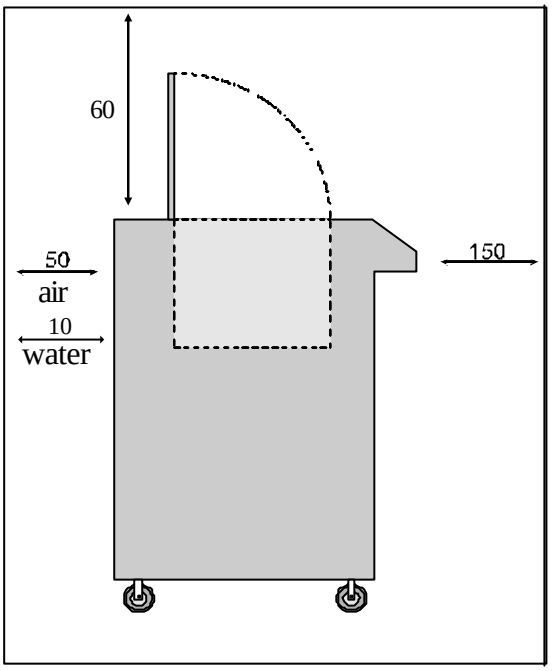
1.6 DISPOSAL OF PACKING STUFFS

When opening the 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 may only run indoors.
The machine must be installed in lying flat, so 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.



2.2 MACHINE LOCATION

The machine is provided with wheels for its easy location; two castors are provivded with mechanical locks, which once engaged, lock the wheels and so keep the machine standstill.

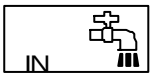
2.3 MACHINES WITH AIRCOOLED CONDENSER

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.
Frequently clean the floor beneath and near to the machine, to avoid that paper and else obstruct a regular airflow. Further, condenser needs to be cleaned monthly, so eliminating dust , paper and what else can obstruct it and affect a regular operation.

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

2.3.1 Water supply connection for wash

The machine must be connected to running water which pressure must not be higher than 0,8 MPa (8 bar).
By aircooled machines, water connection for drinking water (for machine wash), marked by the plate herebelow , is placed under the machine.
Connect this tube to drinkable water,only.

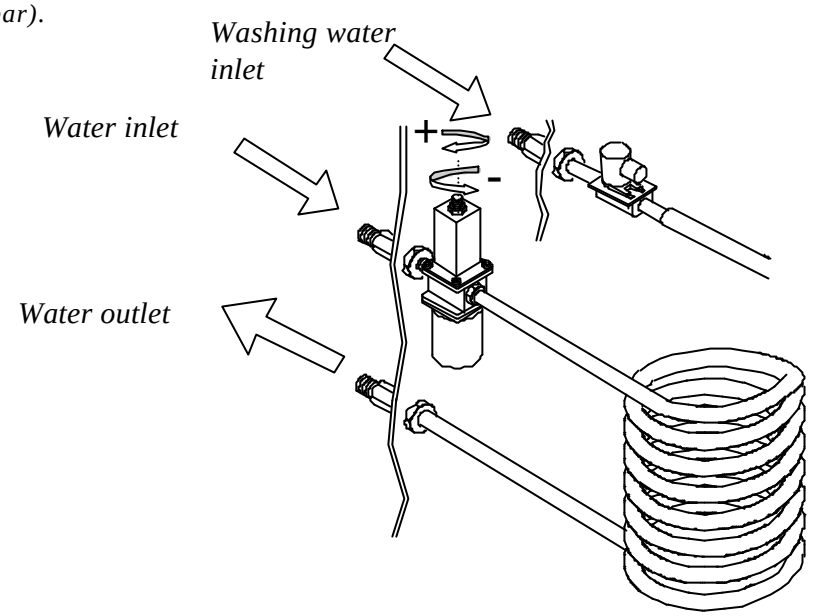


For an easy cleaning, we advise you to install a shut-off valve between machine and warm water used in laboratory.

2.4 MACHINES WITH WATER COOLED CONDENSER

By watercooled machines wash water and gas cooling connections are on the back panel.
There are three connections aligned on the same vertical.
Watercooled machines can only run when connecting them to running water supply or to cooling towers.
Water must have a pressure o 0,1 MPa (1bar) at least, and a deliver at least eequal to the estimated hourly consumption.
Connect inlet pipe marked by the plate "Entrata Acqua" (water inlet) to water supply, instlaling a shut-off valve and the outlet pipe marked by "Uscita Acqua" (water outlet) to a drain pipe, installing a shut-off valve, too.

We recommend to use rubberized canvas tubes with a working pressure up to 0,8 MPa (8 bar).



2.4.1 Water valve adjustment

IMPORTANT
If water valve needs to be reset, such an operation must be carried out by skilled personnel, only.
Set water valve so that, with machine off no water comes out and lukeawarm water flows out when on.
Water consumption
Estimated water consumption per hour is shown in the table.

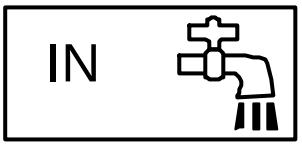
NOTE:
Water consumption increases if temperature of entering water is above 20°C.

Model	**Water consumption** litres/hour per cooling cycle
PASTOCHEF RTX 18	**120**
PASTOCHEF RTX 32	**280**
PASTOCHEF RTX 55	**410**

ATTENTION
Do not leave the machine in a room with temperature below 0°C without first draining water from condenser (see Section 5).

2.4.2 Water supply connection for machine wash

Alike aircooled and watercooled machines have been provided with a separate inlet pipe for washing water. Only has drinking water to be connected to this pipe, which is marked by the plate shown herebelow.



To make clean out easy, we recommend to connect warm water used in your laboratory directly to wash pipe, installing a shut-off valve.

2.5 ELECTRICAL CONNECTION

Before connecting the machine to the mains, check that the voltage is the same as the one stated on its plate.
Power cable by machines on 400 V, 50 Hz, threephase is made up of 5 wires: 3 wires for phases, the blue one for neutral and the green/yellow one for earthing.
By machines with other voltages, power cable is made up of 4 wires, without the neutral one.
Between the machine and the mains, insert a magnetothermic differential sectioning switch properly dimensioned to the input required, and having a contact opening of 3 mm, at least.

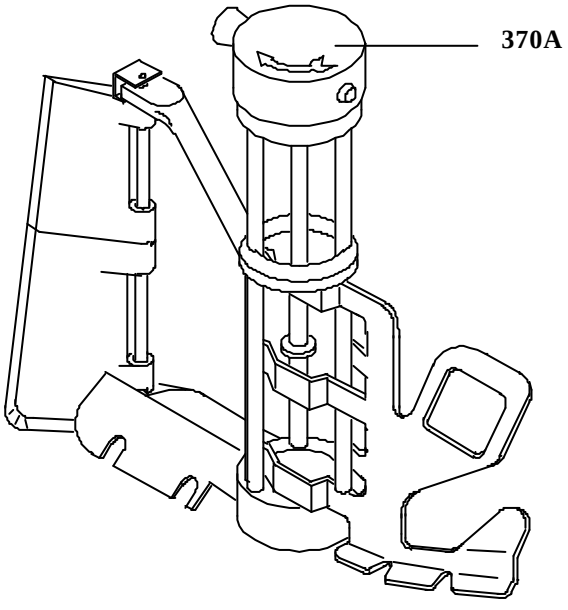
Model	Installed power kW
PASTOCHEF RTX 18	2,1
PASTOCHEF RTX 32	4
PASTOCHEF RTX 55	5,6

IMPORTANT
Yellow/green ground wire must be connected to a good ground plate.

2.5.1 Replacing the input cable

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

Rotation direction
Direction of beater rotation is shown on the plastic cap covering the beater on its upper part.



Reversal of rotation
If the rotation direction is wrong, reverse it by interchanging two of the three leads coming from the circuit breaker .

2.6 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 CARPIGIANI works during machine postproduction testing .
If a gas addition happens to be made, this must be carried out by skilled technicans, only , who can also find out trouble origin.

2.7 MACHINE TESTING

A postproduction test of the machine is carried out at Carpigiani 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 CARPIGIANI engineers.
After the machine positioning and correct connections, also carry out all operations necessary to functional check and test of the machine.

2.8 MOVEMENT - TRANSPORT

Should the machine need be moved from its original location, it is necessary to turn to skilled personnel.

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 damages to persons and things.
Who is in charge of plant safety must be on the look-out that

- an uncorrect use or handling is avoided
- Safety devices must neither be removed nor tampered
- 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:

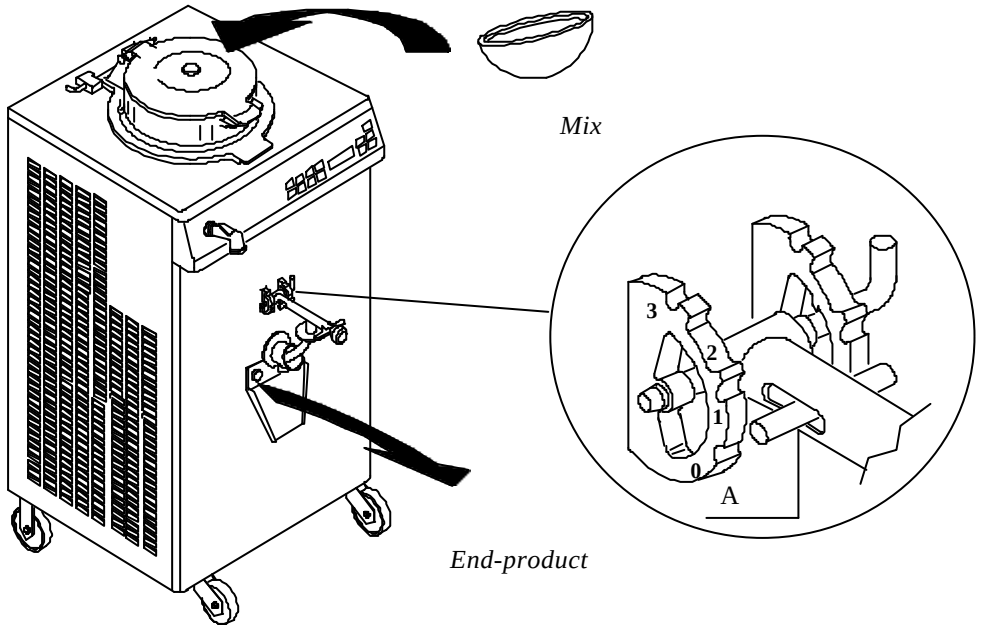
- At working place an instruction manual relevant to the machine should be available.
- Such documentation must be carefully read and regulations must consequently be followed.
- Only adequately skilled personnel will have to be assigned to electrical equipment.

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, table on page 49.
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 drawn out from the special spigot.

The spigot can be adjsuted in relation to the product to be taken out.
There are four positions marked by notches having following numbers: **0,1,2,3**.
If the product to be taken out is thick or it is a custard, the spigot pin **A** shall be put to notch 3.
For fluid products, adjust the pin to notch **2.**

Closing position: to close the dispensing spigot, adjust pin **A** to notch **0**.



3.3 CONTROLS

3.3.1 Pushbutton panel

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

3.3.2 Common functions

Function insert led
When a led is on, it means that the function relevant to the symbol next to the led has been selected.
Example in the picture sideways : Led L7 on , HEATING function selected.

11:15:08	LUN
28/09	+07°c

DISPLAY
The Pastochef RTX is provided with an aalphameric display giving a series of messages when turning the machine on and also during its operation.
In STOP position, the display indicates time, day of the week, date and tank temperature.

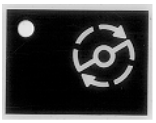
STOP pushbutton
When the STOP function is inserted, relevant led is on.
From the STOP position one can access AUTO or manual functions, directly. To change or to stop any working process, either an AUTOMATIC or a MANUAL one, it is enough you press STOP.
STOP pushbutton is also used to reset motors thermal relays after they trip.

3.3.3 Automatic functions

These functions switch on automatically during the execution of a RECIPE, so as to identify the working process in progress.

Continuous slow beating

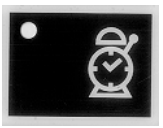
Continuous fast beating



Intermittent beating (slow or fast)

Heating

Cooling



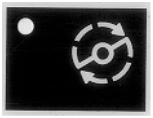
Timer

3.3.4 Manual functions

Access to the machine manual functions is allowed from STOP position.
Press the push button relevant to the manual function you want to select.

Uninterrupted slow beating
When this function is selected, relevant led is on.
Pressing the button for **UNINTERRUPTED SLOW BEATING** the beater starts and runs at low speed until STOP is pressed.

Uninterrupted fast beating
When this function is selected, relevant led is on.
Pressing the button for **UNINTERRUPTED FAST BEATING**, the beater starts and runs at high speed until **STOP** is pressed.



Intermittent beating
When this function is selected, relevant led is on.
This function shall be used after selecting slow or fast beating function.
In this function the beater runs at low or high speed for 5 seconds and it stops for 25 seconds at intervals; the beating functions will remain inserted till you press **STOP**.

Heating
The function insert is indicated by switching on of relevant led and following message is displayed:

```
  11:15:08 LUN
set +85°c  +25°c
```

Down on the right side one can see the **ACTUAL TEMPERATURE** of the product inside the tanks, whereas down on the left the **TEMPERATURE TO BE REACHED** (set value) set by the user and on top, time and day of the week.
The product is heated up to its temperature set value (set) and held at that temperature by continuous beating .
HEATING can be activated with any beating mode.

If no beating mode is selected, heating function will be executed on a continuous slow beating process, which can be deactivated by pressing the pushbutton **SLOW BEATING** again; you will have thence a **STATIC HEATING** up to the temperature set value (set), which will be held according to static mode.

By means of **BACKWARD**  or **FORWARD**  ARROWS you can decrement or increment the temperature set value (set).
When the temperature set value is reached, a fixed 10" acoustic signal will be emitted and the display will blink.

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 yuo can see the **ACTUALE TEMPERATURE** of the product insde the tank, whereas down on the left side, one can read the **TEMPERATURE TO BE REACHED** (set) set by the user; on top you will read time and day of the week.
The product is cooled up to the temperature set value and held at that temperature by continuous beating.
COOLING function can be activated with any beating mode.
If no beating mode is selected, cooling will be executed on a continuous slow beating mode, which can be deactivated by pressing **SLOW BEATING** pushbutton again; you will thence have a **STATIC COOLING** up to the temperature set value (set) which will be held according to static mode.

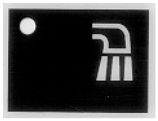
With **BACKWARD**  or **FORWARD**  ARROWS you can decrement or increment the temperature set value (set).
When the temperature set value is reached, a fixed 10' acoustic signal will be emitted and the display will blink.

Timer
When pressing the **TIMING** pushbutton, relevant led will switch on and following messae will be displayed:

```
  14:15:08  MAR
set 0:30 0:29:59
```

On top, you will always read time and day of the week. Down, on the left you will read the set total time and down on the right you see time decreasing. Time always starts from 30' and can be changed 1' to 9h with **BACKWARD**  and **FORWARD**  ARROWS.

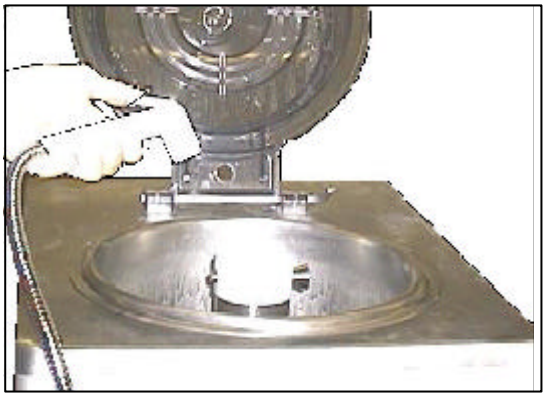
when count is over, a sound signal will be emitted for 10" ; the timer will set to zero as at its starting point.

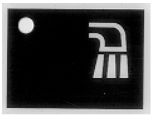


Wash water

When selecting this function, its led is on.

Water inlet occurs by pressing relevant push-button. when pressing this push-button you select the distribution function which starts by also pressing the nozzle trigger, as shown in the picture. If you lift the trigger to the opposite way, water will come out with no need of always pressing.



Water inlet stops either by pressing pushbutton  or by pressing push button  .

The system is provided with an automatic stop system which stops water inlet after 3 minutes.

Note

It is advised to connect shower to hot water used in your laboratory directly.

3.4 AUTOMATIC PROGRAMS

The electronic memory of Pastochef RTX has been provided with 3 automatic programs.

- **CONFECTIONERY PROGRAMS :** There are 20 important programs which are ready for use in high confectionery field.
- **GASTRONOMY PROGRAMS:** There are 5 important programs which are ready for use of some gastronomic specialties.
- **PERSONALIZED PROGRAMS:** There are 9 programs that can be programmed by the user in order to create personalized recipes.

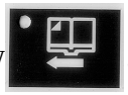
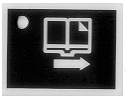
3.4.1 Automatic program start procedure

To execute an automatic program:

- Press **AUTO** 

, **AUTO** as well as ARROWS leds will switch on.
- On display:

Nr 20 CONFECTIONERY PROGRAMS	or	Nr 5 GASTRONOMY PROGRAMS	or	Nr 9 PERSONALIZED PROGRAMS

- Select program type with ARROW  and  .
- To execute a CONFECTIONERY program select

Nr 20 CONFECTIONERY PROGRAMS

by arrow push-button , thence press **AUTO** 

.

- Last used CONFECTIONERY program will be on display ; through the ARROWS you can select the new program you may wish and following programs will be on DISPLAY sequentially:

CONFECTIONARY PROGRAMS

PROGRAM NR1	CUSTARD 1
PROGRAM NR2	CUSTARD 2
PROGRAM NR3	CUSTARD 3
PROGRAM NR4	ICE CREAM MIX PASTEURIZATION
PROGRAM NR5	DARK CHOCOL. HARDENING
PROGRAM NR6	MILK CHOCOL. HARDENING
PROGRAM NR7	COLOURED CHOCOL. HARDENING
PROGRAM NR8	CHOCOL. HARD. STORAGE
PROGRAM NR9	GANACHE CREAM
PROGRAM NR10	COMPOTE
PROGRAM NR11	CREAMY FRUIT
PROGRAM NR12	JAM
PROGRAM NR13	FRUIT JELLIES
PROGRAM NR14	BAVARIAN CREAM
PROGRAM NR15	COOKED CREAM
PROGRAM NR16	BUTTER CREAM
PROGRAM NR17	TIRAMISU'
PROGRAM NR18	CREAM PUFF PASTRY
PROGRAM NR19	YOGURT
PROGRAM NR20	EGGS PASTEURIZATION

- Press START, after selecting your PROGRAM. 

The program starts and during the production, following information will be DISPLAYED:

- **COOKING temperature**
- **COOLING temperature**
- **PAUSE times**
- During the processing, an acoustic signal always forewarns INGREDIENTS recommended to be poured into the machine.

IMPORTANT

- When ARROWS leds switch on during any program step, such as HEATING, COOLING, TIMER, it means you can change that value.
- In order to skip a step during the program execution, press AUTO a few seconds.
- During a program carrying out, at the end of each step of HEATING, COOLING, PAUSE, etc., the buzzers sounds 10 seconds and the display blinks 3 minutes while indicating by turns the program name and the INGREDIENT advised to be poured into the machine
- **When the program is over, the PROGRAM name and STORAGE increasing time will by turns be on display; or in case the product shall immediately be used , the message DISTRIBUTION will be displayed.**

IMPORTANT

If you modify your program during its execution, new values will be stored. If you execute the same program again, active values will be the new ones.

DISTRIBUTION

To make product distribution easier, you can select a slow or fast beating mode at the end of any program.

STORAGE

If, on program end, a storage cycle with thermostatic control has been programmed, you can select a slow or fast beating function, which can also be eliminated if you select a static thermostatic temperature control by pressing the same pushbutton. If you select a beating function and then you select the intermittent mode, the thermostatic control will follow with activation of the beating function selected, which will start together with the compressor.

GASTRONOMY PROGRAMS

PROGRAM NR1	GASTRONOMIC CUSTARD
PROGRAM NR2	BECHAMEL
PROGRAM NR3	SALT DOUGH
PROGRAM NR4	POLENTA (MAIZED PORRIDGE)
PROGRAM NR5	ITALIAN RAGOUT

PERSONALIZED PROGRAMS

In case you select PERSONALIZED PROGRAMS and no program was previously stored, following message

NO PERSONALIZED PROGRAM

will be displayed.
If you have instead previously stored one program, the message

PROGRAM N 1

will be on display.

3.5 Description of automatic programs

3.5.1 CONFECTIONERY PROGRAMS

3.5.1.1 Custard 1 with dynamic cooling up to 10°C

Program description:

- CONTINUOUS FAST BEATING for 5 minutes (time can be modified 5 to 10 minutes).
- CONTINUOUS FAST BEATING for 3 minutes.
- CONTINUOUS SLOW BEATING and HEATING up to 85°C (the temperature can be modified 70°C to 105°C).
- COOLING with CONTINUOUS FAST BEATING for 3 minutes (time can be modified 1 to 7 minutes).
- COOLING with INTERMITTENT SLOW BEATING up to 10°C (the temperature can be modified 4°C to 15°C).
- STATIC COOLING up to 1°C (the temperature can be modified 1°C to 4°C).
- Custard ready.
- It is possible to insert CONTINUOUS SLOW BEATING.
- Static storage to 1°C (the temperature can be modified 1°C to 4°C).

3.5.1.2 Custard 2 with dynamic cooling up to 4°C

Program description:

- CONTINUOUS FAST BEATING for 5 minutes (time can be modified 5 to 10 minutes).
- CONTINUOUS FAST BEATING for 3 minutes.
- CONTINUOUS SLOW BEATING and HEATING up to 85°C (the temperature can be modified 70°C to 105°C).
- COOLING with CONTINUOUS FAST BEATING for 3 minutes (time can be modified 1 to 7 minutes).
- COOLING with INTERMITTENT SLOW BEATING up to 4°C (the temperature can be modified 1°C to 4°C).
- Custard ready.
- Storage INTERMITTENT SLOW BEATING to 4°C (the temperature can be modified 1° to 4°C).
- It is possible to insert CONTINUOUS SLOW BEATING.
- Static STORAGE at 1°C.

3.5.1.3 Custard 3

Program description:

- CONTINUOUS SLOW BEATING and HEATING up to 95°C (the temperature can be modified 70° to 105°C).
- CONTINUOUS FAST BEATING (THERMOSTATIC) for 3 minutes (time can be modified 1 to 7 minutes)
- COOLING with INTERMITTENT SLOW BEATING up to 25°C (the temperature can be modified 15° to 30°C).
- COOLING with INTERMITTENT SLOW BEATING up to 10°C (the temperature can be modified 4° to 15°C).
- STATIC COOLING up to 4°C (the temperature can be modified 1°C to 4°C).
- Custard ready.
- It is possible to insert CONTINUOUS SLOW BEATING.
- Static storage at 1°C (the temperature can be modified 1°C to 4°C).

3.5.1.4 Ice cream mix pasteurization

Program description:

- CONTINUOUS FAST BEATING for 5 minutes (setting time is 1 to 10 minutes).
- HEATING with CONTINUOUS SLOW BEATING up to 65°C (setting temperture is 65°C to 95°C).
- (THERMOSTATIC) CONTINUOUS SLOW BEATING for a time which is automatically reckoned between 1 and 30 minutes.
- COOLING with CONNTINUYOUS SLOW BEATING up to 4°C (setting temperature 2°C to 4°C).
- Storage with INTERMITTENT SLOW BEATING up to 4°C (setting temperature 2°C to 4 °C).
- It is possible to insert CONTINUOUS SLOW BEATING.
- Every 30 minutes the SLOW BEATING runs 10 seconds.

3.5.1.5 Dark chocolate hardening

Program description:

- STATIC HEATING without beating for 3 minutes (setting time is 3 to 10 minutes).
- HEATING with CONTINUOUS SLOW BEATING up to 48°C (settint temperature is 43°C to 53°C).
- Thermostatic pause for 5 minutes (time can be modified 1 to 10 minutes) with CONTINUOUS SLOW BEATING.
- COOLING up to 29°C (the temperature can be modified 28°C to 30°C) with CONTINUOUS SLOW BEATING.
- CONTINUOUS SLOW BEATING for 1 minute.
- HEATING with CONTINUOUS SLOW BEATING up to 31°C (the temperature can be modified 28°C to 32°C).
- Thermostatic STORAGE with CONTINUOUS SLOW BEATING, at 31°C (the temperature can be modified 28°C to 32°C).

NOTE

Once it has been hardened, chocolate can be stored into the machine for 2 hours. After that time, it is advisable to take it out or set the machine to MANUAL HEATING up to 45°C in order to melt chocolate again and have it ready for a new hardening program, when needed.

3.5.1.6 Milk chocolate hardening

Program description:

- STATIC HEATING without beating for 3 minutes (setting time is 3 to 10 minutes).
- HEATING with CONTINUOUS SLOW BEATING up to 43°C (setting temperature is 43°C to 53°C).
- Thermostatic pause for 5 minutes (time can be modified 1 to 10 minutes) with CONTINUOUS SLOW BEATING.
- COOLING up to 28°C (the temperature can be modified 27°C to 29°C) with CONTINUOUS SLOW BEATING.
- CONTINUOUS SLOW BEATING for 1 minute.
- HEATING with CONTINUOUS SLOW BEATING up to 30°C (the temperature can be modified 27°C to 31°C).
- Thermostatic STORAGE with CONTINUOUS SLOW BEATING at 30°C (the temperature can be modified 27°C to 31°C).

NOTE

Once it has been hardened, chocolate can be stored into the machine for 2 hours. After that time, it is advisable to take it out or set the machine to MANUAL HEATING up to 45°C in order to melt chocolate again and have it ready for a new hardening program, when needed.

3.5.1.7 Coloured chocolate hardening

Program description:

- STATIC HEATING without beating for 3 minutes (setting time is 3 to 10 minutes).
- HEATING with CONTINUOUS SLOW BEATING up to 43°C (settint temperature is 43°C to 53°C).
- Thermostatic pause for 5 minutes (time can be modified 1 to 10 minutes) with CONTINUOUS SLOW BEATING.
- COOLING up to 27°C (the temperature can be modified 26°C to 28°C) with CONTINUOUS SLOW BEATING.
- CONTINUOUS SLOW BEATING for 1 minute.
- HEATING with CONTINUOUS SLOW BEATING up to 29°C (the temperature can be modified 26°C to 30°C).
- Thermostatic STORAGE with CONTINUOUS SLOW BEATING at 29°C (the temperature can be modified 26°C to 30°C).

NOTE

Once it has been hardened, chocolate can be stored into the machine for 2 hours. After that time, it is advisable to take it out or set the machine to MANUAL HEATING up to 45°C in order to melt chocolate again and have it ready for a new hardening program, when needed.

3.5.1.8 Storing hardened product

Program description:

- Thermostatic CONTINUOUS SLOW BEATING at a temperature that can be set 26°C to 45°C.
- This program is SOLELY used when hardening program has been completed.
- Chocolate was in storage condition and your Pastochef RTX had acciddentally turned off by pressing STOP.

3.5.1.9 Ganache Cream

Program description:

- CONTINUOUS FAST BEATING with heating up to 85°C.
- COOLING with CONTINUOUS FAST BEATING up to 60°C (setting temperature is 45°C to 65°C).
- Pause at this temperature for 10 minutes.
- COOLING with CONTINUOUS SLOW BEATING up to 30°C.

3.5.1.10 Compote

Program description:

- STATIC HEATING for 15 minutes (setting time is 5 to 30 minutes)
- HEATING with INTERMITTENT SLOW BEATING up to 52°C.
- Thermostatic INTERMITTENT SLOW BEATING at 52°C for 6 hours, (setting time is 3 to 99 hours).
- during aa.m. ageing time the beater runs 10 seconds every 30 minutes.
- HEATING with INTERMITTENT SLOW BEATING up to 65°C.
- Thermostatic INTERMITTENT SLOW BEATING at 65°C for 30 minutes.
- COOLING with INTERMITTENT SLOW BEATING up to 4°C.
- Static storage with thermostatic control at 4°C.

3.5.1.11 Creamy fruit

Program description:

- HEATING with CONTINUOUS FAST BEATING up to 80°C, (setting temperature is 75°C to 90°C).
- Pause at this temperature for 3 minutes (time can be modified 1 to 5 minutes).
- COOLING with CONTINUOUS FAST BEATING up to 70°C (setting temperature is 60°C to 75°C).
- COOLING with INTERMITTENT SLOW BEATING up to 8°C (setting temperature is 6°C to 10°C).
- Static storage.

3.5.1.12 Jam

Program description:

- HEATING with CONTINUOUS SLOW BEATING up to +100°C, (setting temperature is 95°C to 105°C).
- 1st buzzer at 85°C, that can be modified between 80°C and 90°C (sugar).
- 2nd buzzer at 95°C, that can be modified between 90°C and 100°C (liqueur).
- Thermostatic CONTINUOUS SLOW BEATING at 105°C (setting temperature 100°C to 110°C), for 15 minutes, (setting time is 10 to 60 minutes).
- Program end. Continuous slow beating without heating.

3.5.1.13 Fruit jellies

Program description:

- HEATING with CONTINUOUS SLOW BEATING up to +105°C, (setting temperature is 103°C to 110°C).
- 1st buzzer at 40°C, that can be modified between 30°C and 50°C (sugar, pectin).
- Thermostatic CONTINUOUS SLOW BEATING at 105°C (setting temperature 105°C to 110°C), for 5 minutes, (setting time is 1 to 15 minutes).
- Program end. Continuous slow beating without heating.

3.5.1.14 Bavarian cream

Program description:

- CONTINUOUS FAST BEATING for 5 minutes (setting time is 1 to 5 minutes).
- HEATING with CONTINUOUS SLOW BEATING up to 70°C.
- Pause at 70°C for 23 minutes.
- COOLING with CONTINUOUS SLOW BEATING up to 20°C (setting temperature is 15°C to 30°C).
- Thermostatic STORAGE with CONTINUOUS SLOW BEATING at 20°C (the temperature can be modified 15°C to 30°C).

3.5.1.15 Cooked cream

Program description:

- HEATING with CONTINUOUS FAST BEATING up to 90°C.
- Thermostatic CONTINUOUS FAST BEATING at 90°C for 5 minutes (setting time is 1 to 5 minutes).
- COOLING with CONTINUOUS SLOW BEATING up to 20°C (setting temperature is 15°C to 30°C).

3.5.1.16 Butter cream

Program description:

- CONTINUOUS FAST BEATING for 3 minutes (setting time is 1 to 10 minutes).
- HEATING with CONTINUOUS SLOW BEATING up to 90°C, (setting temperature is 85°C to 95°C).
- Pause at 90°C, for 15 minutes, (setting time is 5 to 20 minutes) with CONTINUOUS FAST BEATING.
- Buzzer at 83°C (it can be set between 80°C and 90°C).
- COOLING with CONTINUOUS SLOW BEATING up to 15°C (setting temperature is 10°C to 30°C).
- HEATING with CONTINUOUS FAST BEATING up to 25°C, (setting temperature is 20°C to 30°C).
- Pause at 25°C, for 15 minutes, (setting time is 5 to 20 minutes), with CONTINUOUS FAST BEATING.
- Product ready.
- Storage with thermostatic, CONTINUOUS FAST BEATING at 25°C, (setting temperature is 20° to 30°C).

3.5.1.17 Tiramisù (cake with "mascarpone", Italian soft cheese)

Program description:

- CONTINUOUS FAST BEATING for 5 minutes (setting time is 1 to 10 minutes).
- CONTINUOUS SLOW BEATING for 5 minutes (setting time is 1 to 10 minutes).
- HEATING with CONTINUOUS FAST BEATING up to 88°C, (setting temperature is 80°C to 95°C).
- COOLING with CONTINUOUS FAST BEATING up to 35°C (setting temperature is 30°C to 40°C).
- Pause at 35°C, for 30 minutes, (setting temperature is 10°C to 30°C), with CONTINUOUS SLOW BEATING.
- COOLING with INTERMITTENT SLOW BEATING up to 4°C (setting temperature is 2°C to 10°C).
- Product ready.
- STATIC storage (4°C).

3.5.1.18 Cream puff pastry

Program description:

- HEATING with CONTINUOUS SLOW BEATING up to 100°C.
- Pause at 100°C for 8 minutes, (setting time is 3 to 15 minutes), with CONTINUOUS FAST BEATING.
- COOLING with CONTINUOUS FAST BEATING up to 60°C.
- Pause at 60°C, for 10 minutes, (setting time is 3 to 15 minutes), with CONTINUOUS FAST BEATING.
- COOLING with CONTINUOUS SLOW BEATING up to 40°C, (setting temperature is 40°C to 50°C).
- Product ready.
- THERMOSTAT at 40°C with CONTINUOUS SLOW BEATING, (setting temperature is 40°C to 50°C).

3.5.1.19 Yogurt

Program description:

- HEATING with CONTINUOUS SLOW BEATING up to 90°C, (setting temperature is 85°C to 95°C).
- Pause at 90°C, for 15 minutes, (setting time is 1 to 20 minutes), with CONTINUOUS SLOW BEATING.
- COOLING with CONTINUOUS SLOW BEATING up to 42°C.
- Pause at 42°C, for 3 minutes, with CONTINUOUS FAST BEATING.
- Pause at 42°C, for 4 hours, (setting time is 1 to 10 hours), STATIC.
- COOLING up to 4°C, STATIC.
- Product ready.
- STATIC THERMOSTAT at 4°C.

3.5.1.20 Egg pasteurization

Program description:

- HEATING with CONTINUOUS SLOW BEATING up to 59°C.
- Pause at 59°C, for 10 minutes, with CONTINUOUS SLOW BEATING.
- HEATING with CONTINUOUS SLOW BEATING up to 64°C.
- COOLING up to 20°C, with CONTINUOUS FAST BEATING.
- COOLING up to 10°C, with CONTINUOUS SLOW BEATING.
- COOLING up to 4°C, with CONTINUOUS SLOW BEATING.
- Product ready.
- THERMOSTAT at 4°C with CONTINUOUS SLOW BEATING.

3.5.2 GASTRONOMY PROGRAMS

3.5.2.1 Gastronomic custard

Program description:

- HEATING with CONTINUOUS FAST BEATING up to 32°C, (setting temperature is 25°C to 35°C).
- HEATING with CONTINUOUS SLOW BEATING up to 82°C, (setting temperature is 80°C to 90°C).
- COOLING up to 76°C, (setting temperature is 70°C to 80°C), with CONTINUOUS FAST BEATING.
- COOLING up to 20°C, (setting temperature is 15°C to 55°C), with INTERMITTENT SLOW BEATING.
- Product ready.
- THERMOSTAT at 20°C with INTERMITTENT SLOW BEATING, (setting temperature is 15°C to 55°C).

3.5.2.2 Bechamel

Program description:

- HEATING with CONTINUOUS FAST BEATING up to 65°C, (setting temperature is 60°C to 70°C).
- HEATING with CONTINUOUS FAST BEATING up to 90°C.
- Pause at 90°C, for 3 minutes, (setting time is 1 to 5 minutes), with CONTINUOUS SLOW BEATING.
- COOLING up to 85°C, with CONTINUOUS FAST BEATING..
- Pause at 85°C, for 10 minutes, (setting time is 1 to 15 minutes), with CONTINUOUS FAST BEATING.
- COOLING up to 10°C, (setting temperature is 5°C to 20°C), with INTERMITTENT SLOW BEATING.
- Product ready.
- THERMOSTAT at 10°C with INTERMITTENT SLOW BEATING, (setting temperature is 5°C to 20°C).

3.5.2.3 Salt dough

Program description:

- HEATING with CONTINUOUS FAST BEATING up to 30°C, (setting temperature is 25°C to 40°C).
- COOLING up to 28°C, (setting temperature is 20°C to 35°C), with CONTINUOUS FAST BEATING.
- Pause at 28°C, (setting temperature is 20°C to 35°C), for 5 minutes, (setting time is 1 to 10 minutes), with CONTINUOUS FAST BEATING.
- COOLING up to 25°C, (setting temperature is 20°C to 30°C), with CONTINUOUS FAST BEATING.
- THERMOSTAT at 25°C with CONTINUOUS SLOW BEATING, (setting temperature is 20°C to 30°C), for 5 minutes, (setting time is 3 to 10 minutes).
- Product ready.
- STOP .

3.5.2.4 Polenta (maized porridge)

Program description:

- CONTINUOUS FAST BEATING for 3 minutes, (setting time is 1 to 10 minutes).
- HEATING with CONTINUOUS FAST BEATING up to 100°C, (setting temperature is 90°C to 110°C).
- Pause at 100°C for 40 minutes, (setting time is 10 to 60 minutes), with CONTINUOUS FAST BEATING.
- Product ready.
- CONTINUOUS FAST BEATING.

3.5.2.5 Italian ragout

Program description:

- HEATING with CONTINUOUS FAST BEATING up to 95°C.
- Pause at 95°C, for 3 minutes, (setting time is 1 to 5 minutes), with CONTINUOUS FAST BEATING.
- HEATING with CONTINUOUS FAST BEATING up to 100°C, (setting temperature is 100°C to 110°C).
- Pause at 100°C, for 10 minutes, (setting time is 1 to 15 minutes), with CONTINUOUS FAST BEATING.
- Pause at 100°C, for 3 minutes, (setting time is 1 to 5 minutes), with CONTINUOUS FAST BEATING.
- Pause at 100°C, for 2 hours, (setting time is 1 to 4 hours), with CONTINUOUS SLOW BEATING.
- COOLING up to 4°C, with INTERMITTENT SLOW BEATING.
- Product ready.
- Static storage at 4°C.

3.6 PERSONALIZED PROGRAMS

Within PERSONALIZED PROGRAMS storage it is possible to store up to 9 user's personal programs.

The pushbutton RECORD 

has several functions relevant to reading, personalizing and creating programs by the user.

3.6.1 Creating personalized programs

From Stop press RECORD 

, the machine will automatically set to the first available program 1 to 9, where one can insert a new personalized working cycle. Display will be as follows (when the first free step is Nr 12):

```
PROGRAM Nr. 12
set      P.01
```

All working steps are now inserted and stored one at a time (heating, cooling, etc.) and they are called cycle STEPS . Press REC in order to store every step and then pass to the next step.
Steps for each program can be a maximum of 25. Beyond this limit, the message "STEPS OVER" will be displayed and it will return to STOP after deleting the cycle.

To complete the program with the thermostatic control of cycle end temeprature for an indefinite time (THERMSOTATIC CONTROL), it is enough you set the last step with a TIMER at "0" (with no pressing of cooling or heating pushbuttons).

If, beside THERMOSTATIC CONTROL for an indefinite time, that has by now stored, you press INTERMITTENT BEATING, the beater will run parallel to the compressor.
In this case, only, beating function will NOT follow the intermittent mode, but it will only start when cooling ist still needed.

For a THERMSOTATIC CONTROL at a definite time, you will instead have to insert TIME in a steep following to preselected heating or cooling step.

To complete storing the cycle press the pushbutton REC "void" (without selecting any function). The machine sets to STOP, now.
Free programs an operator can persolanize are 9 in all. Exceeding this limit, the message “NO FREE PROGRAMS” will be displayed. In order to have free space for a new program, it is necessary to delete an old one.

The user's personalized program, that has now been stored, can be recalled the same ways as all other automatic programs, by pressing AUTO and selecting the section of the 9 PERSONALIZED PROGRAMS through the ARROWS buttons. Press AUTO, now to enter into the group of personalized programs and with ARROWS buttons select the program Nr (number) you have decided. Confirm starting with START.

3.6.2 Example of personalized programming

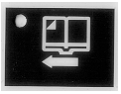
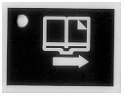
Heating to 90°C, with CONTINUOUS FAST BEATING, temperature holding through thermostatic control at 90°C for 5 minutes with CONTINUOUS SLOW BEATING, cooling up to 2°C with CONTINUOUS SLOW BEATING, temperature holding with thermostatic control for indefinite time at 2°C.

Sequential operations	Push-button	Display
1) press REC		PROGRAM Nr 12 set P.01
2) Press Heating (continuous slow beating is automatically inserted)		PROGRAM Nr 12 set +85° P.01
3) press Increment up to 90°C		PROGRAM Nr 12 set +90° P.01
4) press continuous fast beating		PROGRAM Nr 12 set +90° P.01
5) press REC		PROGRAM Nr 12 set P.02
6) press TIMER		PROGRAM Nr 12 set 0:30 P.02
7) press Decrement up to 5’		PROGRAM Nr 12 set 0:05 P.02
8) press REC		PROGRAM Nr 12 set P.03
9) press Cooling (continuous slow beating is automatically inserted)		PROGRAM Nr 12 set +04° P.03
10) press Decrement up to 2°C		PROGRAM Nr 12 set +02° P.03
11) press REC		PROGRAM Nr 12 set P.04
12) press TIMER		PROGRAM Nr 12 set 0:30 P.04
13) press Decrement up to 0’		PROGRAM Nr 12 set 0:00 P.04
14) press REC		PROGRAM Nr 12 set P.05
15) press REC without any function (void)		14:15:08 MAR 10/06 +02°

3.6.3 Reading automatic and personalized programs

For a sequential reading of program steps :

- Press AUTO 

.
- Select the specific cycle through ARROWS  and  .
- Press REC 

This way any program step can be paged up and down with no need of execution.

To upshift from step to step press REC 

.

When READING the steps, it is possible to change temperature and time values through ARROWS buttons (relevant leds will switch on).
While EXECUTING a cycle, too, it is possible, to change temperature and time values thruogh ARROWS buttons (relevant leds will switch on).

The new value will be stored.

When you finish reading, press STOP.

3.7 DELETING PERSONALIZED PROGRAMS

To delete a personalized program:

- Press AUTO 

.
- Through ARROWS buttons select the personalized program.
- Press REC 

. Through ARROWS buttons select the personalized program Nr you want to delete.
- Hold REC 5 seconds 

down.

On display :

SURE S/Start N/Auto

- When pressing the pushbutton 

recipe deletion will be confirmed (S). SI.

- When pressing the pushbutton 

recipe deletion will be negated. NO.

3.8 MACHINE START

After washing, sanitizing and thoroughly rinsing the machine right before its use, according to directions in section CLEANOUT, pour the mix into the tank in the desired quantity, while respecting minimum and maximum quantities given in table Section 1, page 49).
Before pppuring the mix, make sure that the product outlet is perfectly closed.

Note:
Open or not perfectly closed tank cover prevents the machine from running.

Machine operation modes are two:

3.8.1 Automatic operation

Procedure to automatically start and execute a Confectionery, Gastronomy and Personalized recipe is described on page 60.

3.8.2 Manual operation

PASTOCHEF RTX can produce many specialities that require heating, cooking, cooling, storing,
mixing, stirring and else.
The machine, with the manual functions described on page 57, can carry out any recipe, perfectly and in the observance of hygiene.

4. SAFETY DEVICES

4.1 MACHINE SAFETY DEVICES

ALARMS ON DISPLAY

Any alarm causing the machine to set to STOP is displayed on the first two lines of the monitor.
Example (RTL alarm):

RTL ALARM
RTL ALARM

The message down indicates that the alarm is still active and it disappears when the alarm is cancelled.
The message on top remains displayed to remind us that an alarm has been activated.

To cancel the message, press START 

.

An alarm that does not cause the machine to set to STOP, such as:

Pressure switch al.
set +04°c +28°C

is displayed on the upper line , whereas the lower line keeps on giving temperature or time values. When an alarm is cancelled, the machine restarts and the message on the upper line remains on display to remind us that an alarm has been activated, till you press the button

.

Herebelow a list of the mentioned ALARMS:

***ALARM* BLACK-OUT**

A power failure has occurred. The machine is provided with an Electronic Memory which is active even during any possible black-out.
In the event of a black-out during ice cream mix or custard pasteuriszation, on power return the Electronic Memory will only restart the function if temperature and time values can grant that the mix has not been altered during the black-out, otherwise a new Pasteurization cycle restarts and the operator receives a warning message (AL01-BLACK-OUT)

Press STOP in order to cancel the alarm message on display.

***ALARM RTL* - THERMAL RELAY TRIPPING**

It takes overheating of the beater motor at low speed; reaching the highest setting value brings about the machine stopping: the machine will set to STOP and on display you can see the message **ALARM RTL.**
To reset this alarm state, press STOP.

***ALARM RTV* - THERMAL RELAY TRIPPING**

It takes overheating of the beater motor at high speed; reaching the highest setting value brings about the machine stopping: the machine will set to STOP and on display you can see the message **ALARM RTV.**
To reset this alarm state, press STOP.

***ALARM RTC* - SAFETY PRESSURE SWITCH TRIPPING**

It protects the cooling unit and stops the freezing compressor if there is no water inside the circuit itself (watercooled machines) or if no air circulates inside the condenser (aircooled machines).
Reset is automatic.
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.

***ALARM PR* - PRESSURE SWITCH TRIPPING**

It protects the cooling unit and stops the compressor in the event that pressure exceeds its setting value. This may occur when no water is in the circuit itself (by watercooled units) or no air is in the condenser (by aircooled units).

WARNING

Too long running of the compressor or its repeated stops and restarts mean that condensation is not sufficient.

TANK OPEN

Whenever one opens the tank cover during the machine operation, the latter will immediately stop and will only re-start after the tank cover is placed back to closing position (automatic reset 2 seconds after the alarm signal).

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

Call an engineer.

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

Call an engineer.

***ALARM TGEV* - TEMPERATURE SENSOR "TGEV" SHORT-CIRCUITED**

Call an engineer.

5. CLEANING, DISASSEMBLING AND REASSEMBLING PARTS IN CONTACT WITH THE PRPODUCT

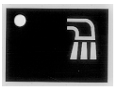
ATTENTION

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.**

IMPORTANT

Cleaning and sanitizing are to be carried out as a habit, at the end of every working day with utmost care, in order to gaurantee high quality as well as the observance of all healthy rules.

5.1 PRELIMINARY CLEANING

Make sure that the product dispensing tap is closed; hence let water necessary to wash in the tank through the nozzle, by pressing WATER INLET  .

Press pushbutton for CONTINUOUS SLOW BEATING  and leave the machine in that position a few minutes.

Press "STOP" 

.

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

Disassemble the machine by removing its parts.

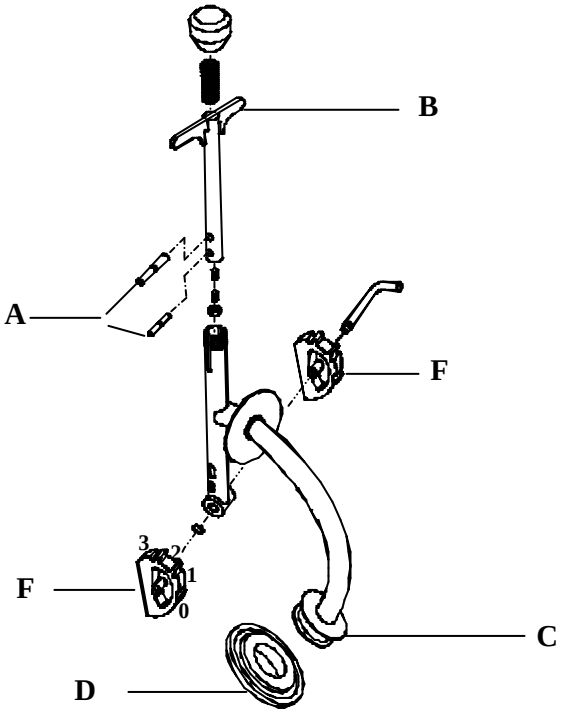
5.2 DISASSEMBLING THE SPIGOT

To disassemble the spigot it is necessary to push rod **B** down in order to release pin **A** from notch 0.

Remove OR- ring **D** from drain pipe **C.**

Disassemble all other parts of the spigot.

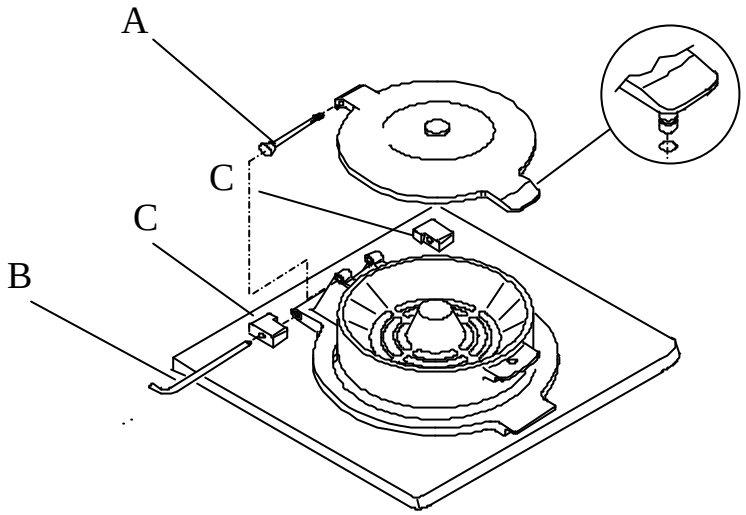
Wash well in water and reassemble the parts.



5.3 DISASSEMBLING THE TANK COVER

Note: *The machine is equipped with a safety device on the cover; the machine will stop every time one lifts the cover during its operation.*

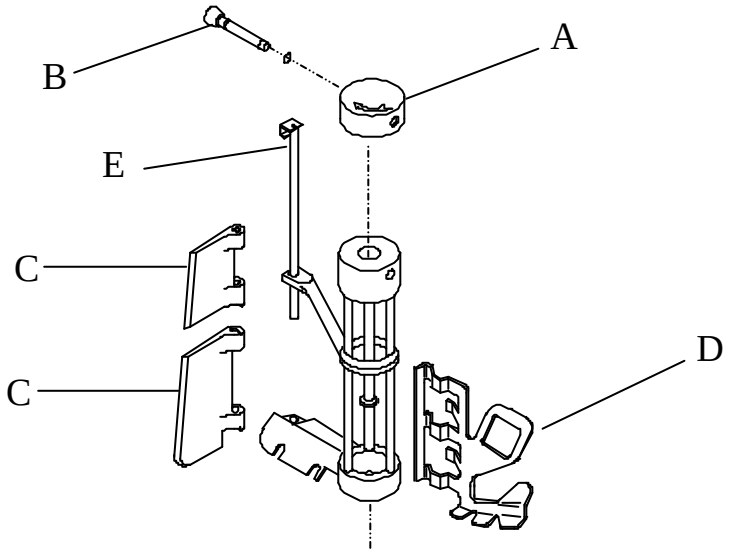
In order to disassemble the upper part of the cover, remove pin A, whereas, to remove its lower part, withdraw lever B from both hinges C which are fixed to the machine top.
Wash all parts in water and reassemble.



5.4 DISASSEMBLING THE BEATER

Withdraw beater pin **B** and remove cover **A**.

Remove the beater by slightly pulling it up and minding blades **C** and scraping blades **D**, as they might be damaged.



WARNING
Act with utmost care: beater fall to the ground can damage it.

Remove blades **C**, sliding pin **E** and the scraping blade **D** and all other beater components.

Wash and then reassemble all disassembled beater parts according to a reverse procedure.

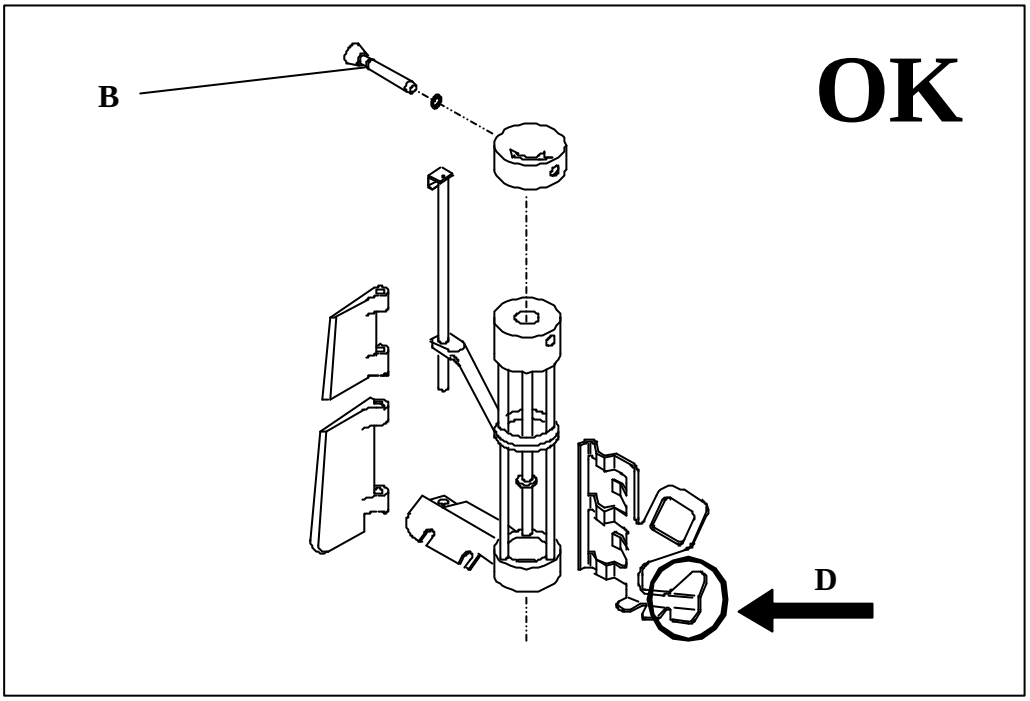
5.5 REASSEMBLING THE BEATER

To reassemble the scraping blade **D** see the picture below.

Reassemble the beater complete with its parts and place it in its seat, by getting hold of it with both hands and pushing it down.

Slip pin **B** in its seat.

IMPORTANT: *Pay attention to correctly place the beater blades in their position not to affect the machine operation and to get a perfect scraping of product from tank wall.*



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 SANITATION

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

Press the button UNINTERRUPTED SLOW BEATING  and let the beater run about five minutes.
Let the solution act 30 minutes, at least, depending on manufacture'rs instructions.
Drain all the sanitizing solution through the dispensing spigot.

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

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

ATTENTION

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.**

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 the machine production cycle.
Servicing operations, such as cleaning of parts in contact with the product, 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:

- **Cleanout of tank and cover**
  At the end of a working day.
- **Cleanout of spigot**
  At the end of a 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 cleansing solution never reaches beater assembly at its inside.
- **Cleanout and sanitation**
  At the end of a working day, according to procedures described in section 5 of this manual.

WARNING

Never use abrasive sponges to clean machine and its parts, as it 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, withdraw drain pipe from its seat and let water flow out from circuit.

6.3 AIRCOOLING

Clean the air filter 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.

CAUTION!

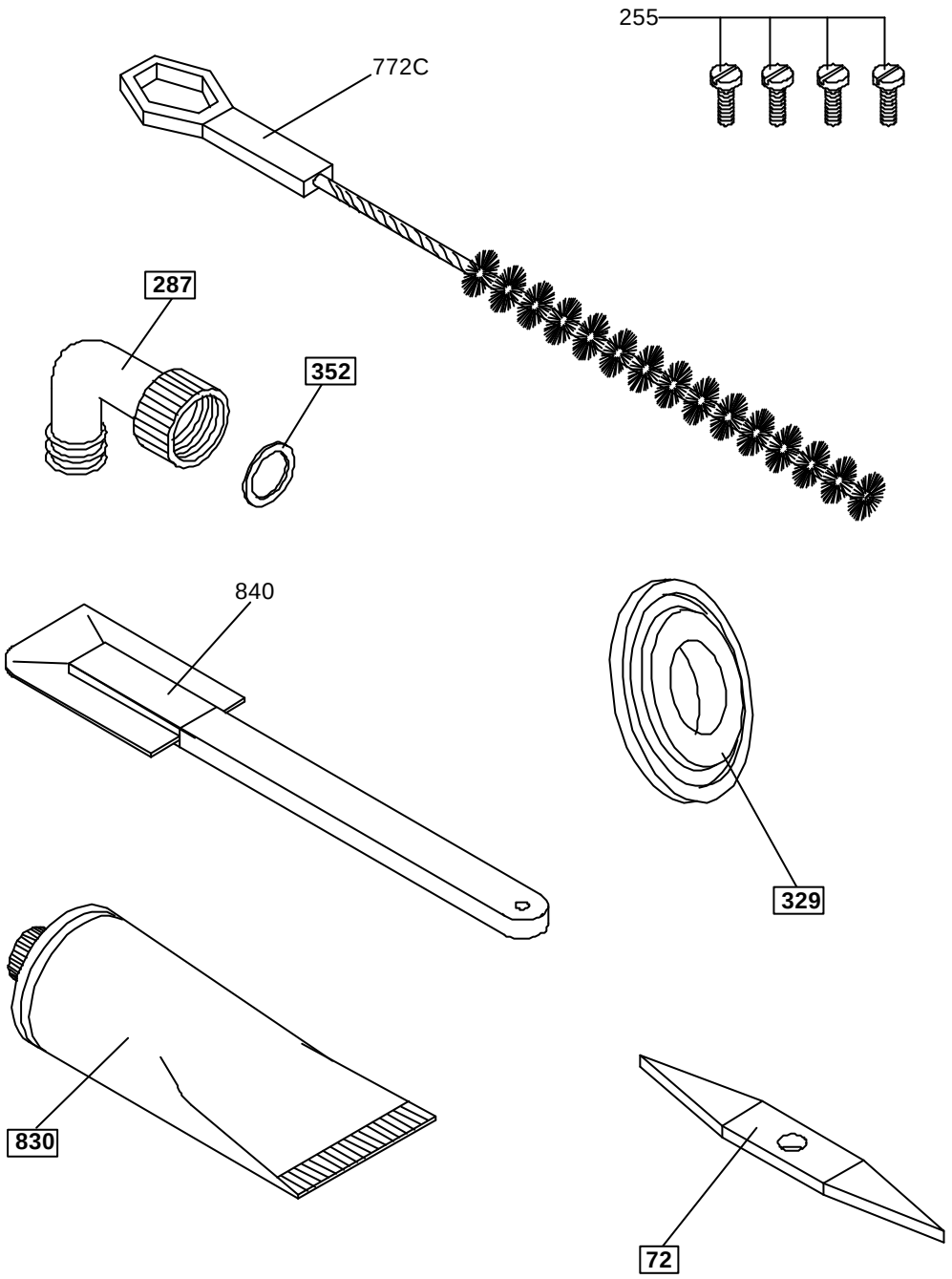
When using compressed air, put on personal protections in order to avoid accidents; put on protective glasses!

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

6.4 ORDERING SPARE PARTS

In the event of breaking or wear of one or more parts, request the new ones directly to your local distributor, who will replace the part and will test the new one.

6.5 TABLE OF SPARES EQUIPMENT



ACCESS. KIT PASTOCHEF RTX

Q.ty	Description	Position Nr
Nr 4	Screws TCCI M5x10	255
Nr 1	Special OR	329
Nr 1	Brush D. 40x100	772C
Nr 1	Gelilube tube	830
Nr 1	Carpigiani spatula	840
Nr 1	Rubber pipe fitting	287
Nr 1	Pipe fitting gasket	352
Nr 1	OR extractor	72

7 TROUBLESHOOT GUIDE

7.1 TROUBLESHOOT GUIDE

TROUBLE	CAUSE	CURE
Machine does not start	The main switch is off	Turn it on
	Machine is unplugged	Check and plug in
Control unit does not accept a control	Control unit	Replace the control unit Call after-sale service
Product coming out from dispensing spigot	Gasket is strained, cut, etc.	Check and replace through a new one
Inside noise	Gearmotor or compressor	Call after-sale service
Bacteria test shows too high level	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 the machine with care. Sanitize as per chapter 5.