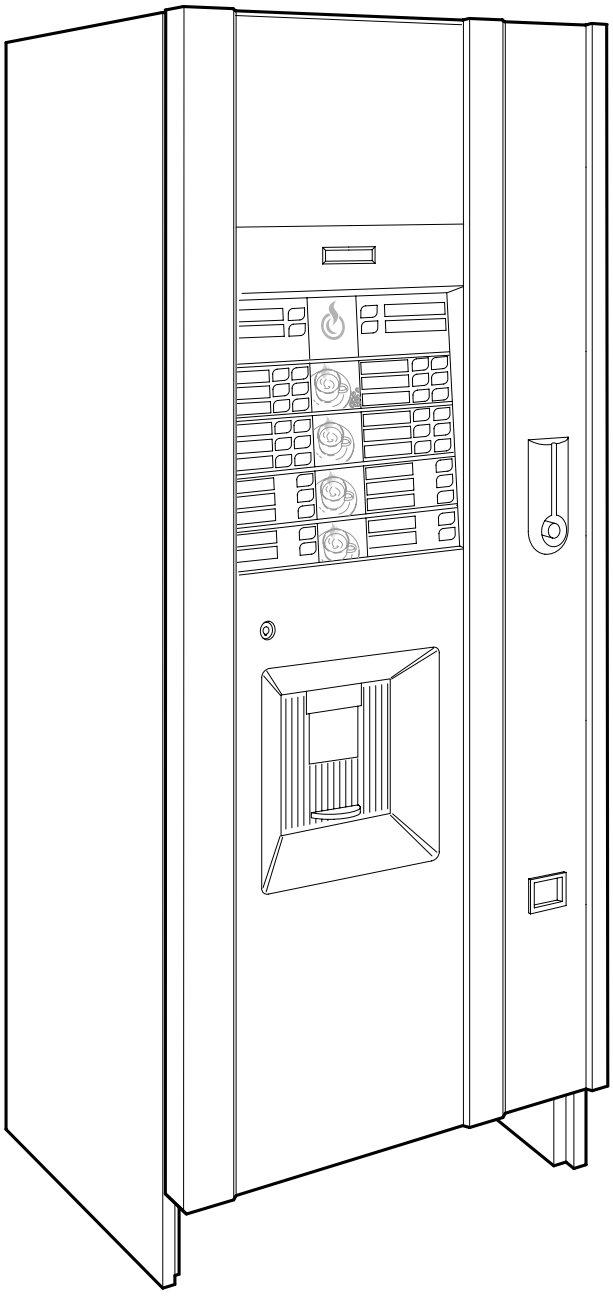
Bianchi
VENDING GROUP

USE AND MAINTENANCE MANUAL



ANTARES BASE

CERT. N° 9105 BNVD

UNI EN ISO 9001: 2000

DECLARATION OF EEC CONFORMITY

Bianchi Vending S.p.A. - situated in via Parigi n°5, Zingonia (Bergamo) Italy, represented by Mariella Trapletti - states that the vending machines model:

"ANTARES BASE"

are in conformity with the safety measures provided for by the Law nr. 98/37/EEC dated 22-06-1998 in its items n.1-2-3-4 and relative enclosures 1-2-3-5 "Safety and Health and subsequent, and 73/23/CEE and subsequent.

Bianchi Vending S.p.A. has applied the Standards for the prevention and the elimination of the radio disturbances in respect of the EEC Standards 89/336, 93/ 68 and subsequent annexes and of the D.L. nr. 476 and subsequent annexes , that are in conformity with the norms EN 55014 3a ed., EN 55104, ENV 50141 and EN 61000.

The Standards used for testing of the suitability for contact with food substances are in accordance with DM 21-03-1973 Standards and subsequent annexes.

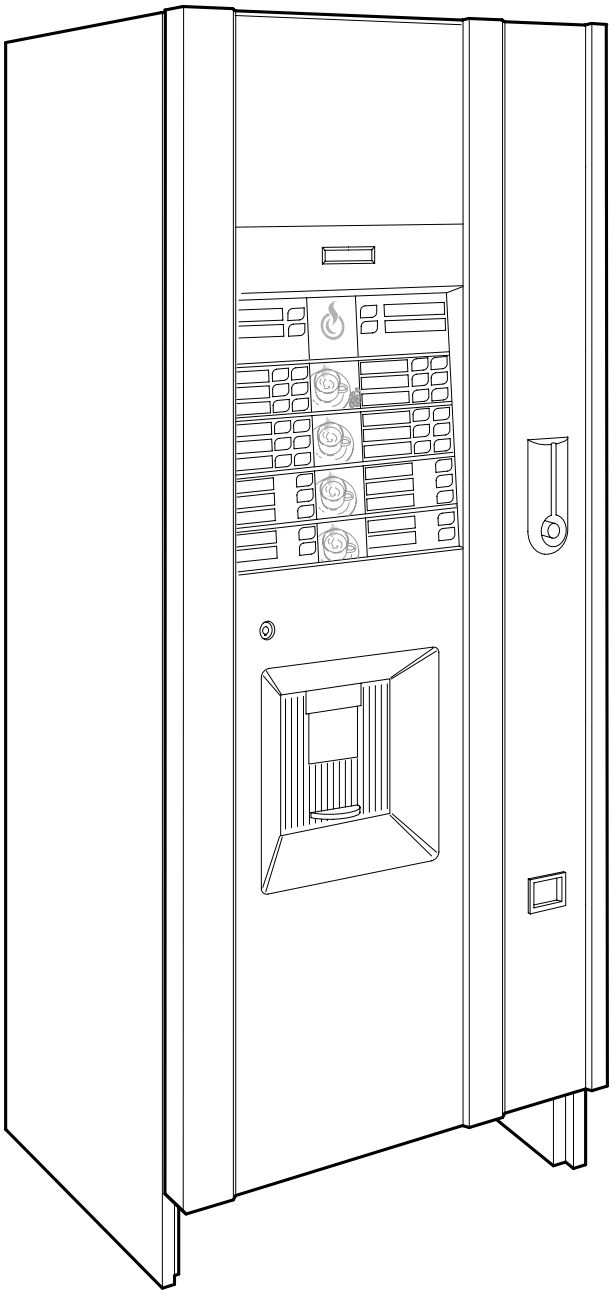
In general the rules of the Standards 90/128/EEC ,73/23/CEE and 89/336/CEE and subsequent annexes have been applied. The Standards used for the safety tests on electrical parts are in accordance, ref. IEC 335-1 and subsequent.

Legal Rapresentative

Mariella Trapletti

Zingonia (BG) - Italy
07/2004

ANTARES BASE



Bianchi
VENDING GROUP

BIANCHI VENDING S.p.A. - *Viale Parigi, 5-7-9*
24040 ZINGONIA DI VERDELLINO (BG) - ITALIA
Tel. 035 88 22 25 (ra) - Fax 035 88 33 04

BEFORE USING THE MACHINE, READ THIS MANUAL CAREFULLY FOR ITS CORRECT USE IN ACCORDANCE WITH THE CURRENT safety STANDARDS.

SAFETY SYMBOLS

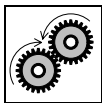
ATTENTION: *Important safety indications*

READ *the instruction manual machine carefully before using the machine*

For any service or maintenance switch off the machine

ATTENTION: *machine switched o**n***

ATTENTION: *hot parts in contact!*



CAUTION! *Parts in motion*

PE *Earthing indication*

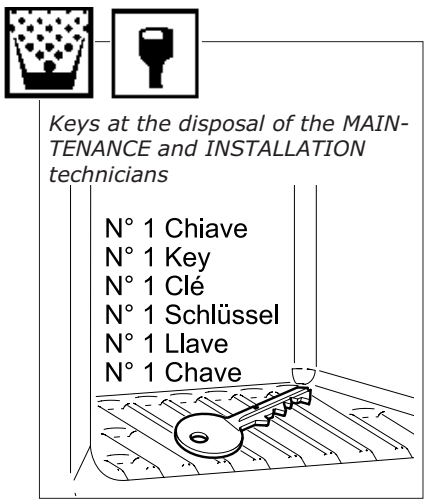
Important notices

MAINTENANCE TECHNICIAN

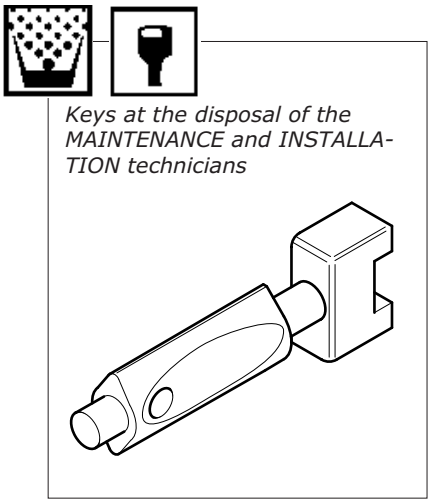
The maintenance technician is defined as being the person responsible for filling up the containers with soluble products, sugar, coffee, stirrers and cups.
The maintenance technician is also responsible for cleaning the distributor (see operations indicated in chapter 6.0). In the event of a fault the maintenance technician must call the installation technician.

INSTALLATION TECHNICIAN

The installation technician is defined as the person responsible for the installation of the automatic distributor, the starting up operations and the function settings.
Each regulation operation is the exclusive responsibility of the installation technician who also holds the programming access password.



Keys at the disposal of the MAINTENANCE and INSTALLATION technicians



Keys at the disposal of the MAINTENANCE and INSTALLATION technicians

Service key

Tools necessary for undertaking interventions on the automatic dispenser.

SOCKET SPANNERS
n° 5,5
n° 7
n° 8
n° 10
n° 20
n° 22

SPANNERS (fork type)
n° 7
n° 8
n° 10
n° 12
n° 14

SCREWDRIVERS
Small size
Medium size
Large size

Normal cross
Small cross
Medium cross
Large cross
Of Teflon, small size for Trimmer regulation.

RATCHET SPANNER no.14

TESTER

ELECTRICIAN'S SCISSORS

PROGRAMMING KIT

INDEX

PREMISE

I Important notices for operator

This automatic distributor has been designed and constructed in full accordance with current safety regulations and is therefore safe for those who follow the ordinary filling and cleaning instructions as indicated in this manual.

The user must not under any circumstances remove the guards that require a tool for removal.

Some maintenance operations (to be done solely by specialized technicians and indicated in this manual with a special symbol) require that specific safety protections of the machine must be switched off .

In accordance with the current safety regulations, certain operations are the exclusive responsibility of the installation technician, and the ordinary maintenance technician may have access to specific operations on with specific authorization.

The acquaintance and absolute respect, from a technical point of view, of the safety instructions and of the danger notices contained in this manual, are fundamental for the execution, in conditions of minimum risk, for the installation, use and maintenance of this machine.

II General Instructions

Knowledge of the information and instructions contained in the present manual is essential for a correct use of the automatic vending machine on the part of the user .

- *Interventions by the user on the automatic vending machine are allowed only if they are of his competence and if he has been duly trained.*

  The installation technician must be fully acquainted with all the mechanisms necessary for the correct operation of the machine.

- *It is the buyer's responsibility to ascertain that the users have been trained and are informed and regulations indicated in the technical documentation supplied.*

  Despite the full observance of the safety regulations by the constructor, those who operate on the automatic dispensers must be fully aware of the potential risks involved in operations on the machine.

- *This manual is an integral part of the equipment and as such must always remain inside of the same, so as to allow further consultations on the part of the various operators, until the dismantlement and/or scrapping of the machine.*

- *In case of loss or damage of the present manual it is possible receive a new copy making application to the manufacturer, with prior indication of the data registered on machines' serial number.*

- *The functional reliability and optimization of machine's services are guaranteed only if original parts are used.*

- *Modifications to the machine not previously agreed on with the construction company and undertaken by the installation technician and/or manager, are considered to be under his entire responsibility.*

  All the operations necessary to maintain the machine's efficiency, before and during it's use are at the users charge.

- *Any manipulations or modifications made to the machine that are not previously authorized by the manufacturer, relieve the latter from any responsibility for damages deriving from, and will automatically result in the cancellation of the machine guarantee terms.*

- *This manual reflects the status at the moment of the emission of the automatic vending machine on the market; possible modifications, upgrading, adaptments that are done the machine and that are subsequently commercialized do not oblige* ***BIANCHI VENDING Spa*** *neither to intervene on the machine previously supplied, nor, neither to update the relative technical documentation supplied together with the machine.*

- *It is however* ***BIANCHI VENDING's*** *faculty, when deemed opportune and for valid motives, to adjourn the manuals already present on the market, sending to their customers adjournment sheets that must be kept in the original manual.*

Possible technical problems that could occur are easily resolvable consulting this manual ; For further information, contact the distributor from whom the machine has been purchased, or contact Bianchi Vending's Technical Service at the following numbers:

☎ *035 4196711 - fax 02 70048332*

When calling it is advisable to be able to give the following information:

- *The data registered on the serial number label* (Fig.**I**)
- *version of program contained in the microprocessor (Adhesive label on the component installed on board).*

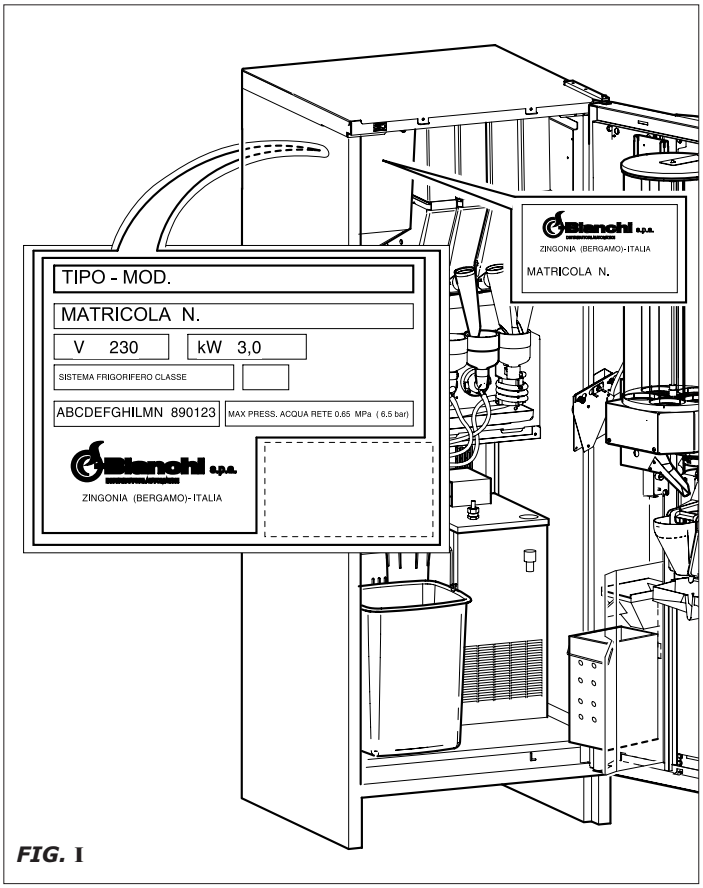


***FIG.* I**

BIANCHI VENDING Spa *declines any responsibility for damages caused to people or belongings in consequence to:*

- *Incorrect installation*
- *Inappropriate electrical and/or water connection.*
- *Inadequate cleaning and maintenance*
- *Not authorized modifications*
- *Improper use of the distributor*
- *Not original spare parts*

– *Under no circumstances is **Bianchi Vending Spa** obliged to compensate for eventual damage resulting from the forced suspension of drink deliveries as the result of faults.*

– *Installation and maintenance operations , must be done exclusively by qualified technical personnel with prior training for carrying out these duties.*

– *For refilling use only food products that are specific for automatic vending machines.*

– *The automatic distributor is not suitable for external installation. The machine must be installed in dry places, with temperatures that never go below 1°C it must not be installed in places where cleaning is done with water hoses (ex. big kitchens.).*

Do not use water jets to clean the machine.

III - SAFETY NORMS

ATTENTION!

Before using the automatic distributor, read this manual carefully.

– *The installation and maintenance operations must be performed exclusively by qualified technical personnel.*

– *The user must not in any circumstance be able accede to those parts of the automatic distributor that are protected and require a tool in order to be accessible.*

– *The knowledge and the absolute respect, from a technical point of view of the safety instructions and of the danger notices contained in this manual, constitute the basis for the operation , in conditions of minimum risk, of the installation, starting and maintenance of the machine.*

Always disconnect the POWER CABLE before maintenance or cleaning interventions.

ABSOLUTELY DO NOT INTERVENE ON THE MACHINE AND DO NOT REMOVE ANY PROTECTION BEFORE THE COOLING OF THE HOT PARTS!

– *The functional reliability and optimization of machine's services are guaranteed only if original parts are used.*

– In order to guarantee normal operation, the machine must be installed in areas that the environmental temperature is between a minimum of +1°C and a maximum of +50°C end humidity of not over 85%.

– In order to guarantee a regular operation, always maintain the automatic distributor in perfect cleaning conditions

– If at the moment of the installation, if conditions differing from those indicated in the present manual, or should the same undergo changes in time, the manufacturer must be immediately contacted before use of the machine.

– Also check that any other eventual norms or regulations as laid down by national or local legislation are taken into account and applied.

1.0 DESCRIPTION OF THE MACHINE'S TECHNICAL CHARACTERISTICS

1.1 Models

The following terminology is used so as to distinguish the various models of automatic distributors:

ANTARES BASE E (version with espresso coffee and instant beverages)

ANTARES BASE I (version with instant beverages)

N.B.: *after the lettering **E** and **I** an **F** can follow in order to countersign the machines equipped with cooling unit class N.*

The manual is compiled for the most complete model: it is therefore possible, to find descriptions or explanations not related to your machine.

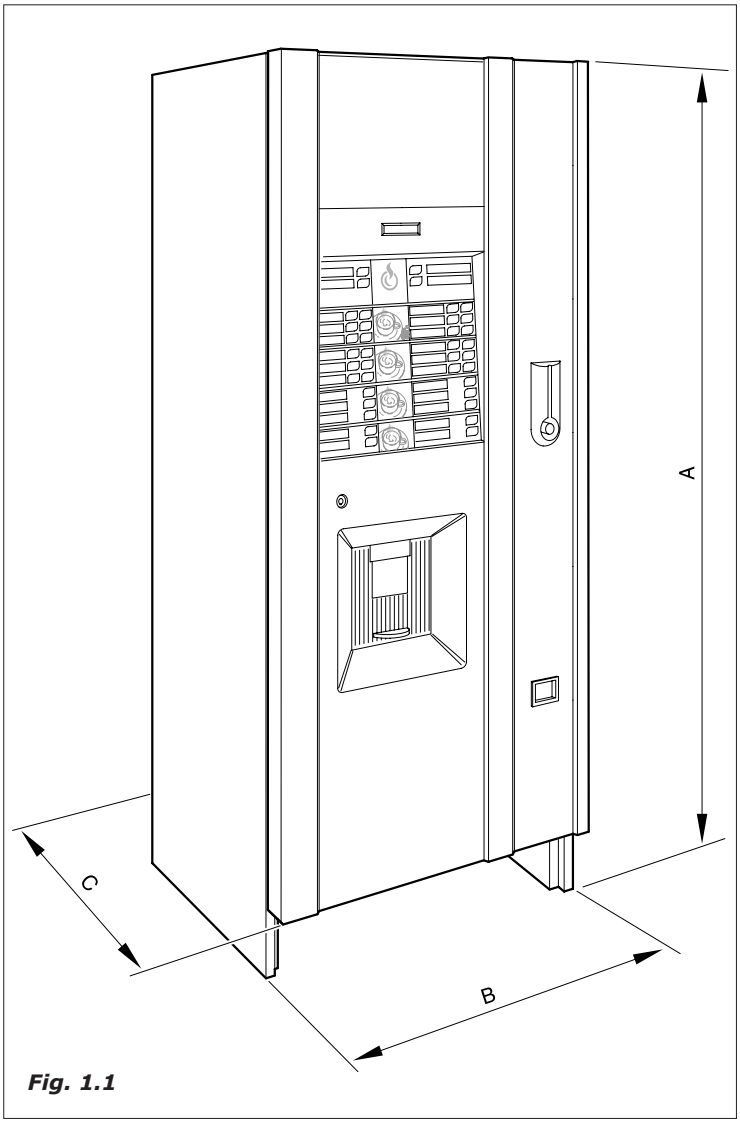


Fig. 1.1

1.2 Technical Characteristics

Height (A)	1630 mm
Width (B)	585 mm
Depth (C)	649 mm
Weight	110 kg
Power Supply	V230 – V120
Power frequency	Hz 50 ÷ Hz 60
Installed power (1)	1,8 kW ÷ 2,7 kW
Nominal current (Max)	6 A – 12 A
Water supply	0,5 ÷ 6,5 bar
AVERAGE CONSUMPTIONS:	
Keeping T° /24h	1400 W/h-2100W7h
For 60 supplies / min	90 W/h-140W/h
Water supply connection	3/4" gas
Electrical supplY connec.	Schuko plug
CUPS DISPENSER	
Caps diameter	70÷74mm
BOILER RESISTANCES	
of armoured type:	coffee boiler: 1500W
of armoured type:	instant boiler: 2000W
PRODUCT CONTAINER CAPACITY	
Coffee in beans	Kg 3,5
Instant coffee	Kg 1,2
Powder milk	Kg 1,7
Creamer	Kg 3,2
Chocolate	Kg 3,6
Tea	Kg 3,3
Frozen-dry tea	Kg 1,7
Broth	Kg 3,6
Instant cold beverages	-
Sugar	Kg 4,0
Caps N°	500
Spoons N°	400
cooling unit (2)	Class N
cooling gas	R134a – Weight 180gr

(1) Check the rated output indicated on the data plate applied by the distributor.

(2) According to the requested version and the applicable standards in the place of use.

1.3 KNOWING THE DISTRIBUTOR

1 Coffee group and grinder
2 Drink dispensing group
3 Sugar dispenser group
4 Cooling unit (optional)
5 Cup column
6 Electronics board
7 Spoons column
8 Water softener filter (optional)
9 Water bin
10 Payment system

1.4 Foreseen use

The automatic distributor is exclusively for the dispensing of drinks, prepared mixing food substances with water (by infusion as far as concerns espresso coffee).

For this purpose use products declared as suitable by the manufacturer for automatic distribution in open containers. The drinks are made in specific plastic cups automatically dispensed by the machine. Where foreseen, also the spoon for mixing the sugar is dispensed.

The drinks must be consumed immediately and in no case are to be kept for subsequent consumption.

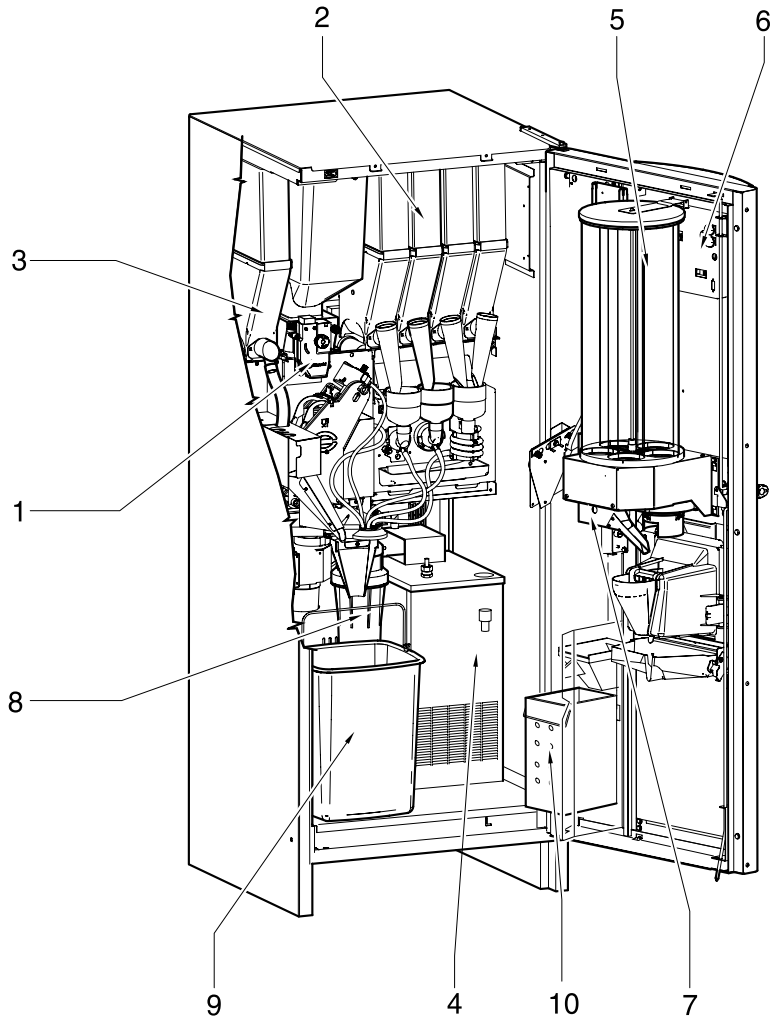


Fig. 1.2

2.0 TECHNICAL DESCRIPTION OF THE OPERATION

During the normal functioning the distributor is set in standby status.
Introducing the necessary amount, according to the set price, and after pressing the key relative to the desired drink, the drink dispensing cycle is activated and can be divided in to different processes:

2.1 BASIC PRINCIPLE OF OPERATION

CUP DISPENSING

- It is the first operation that the distributor starts (except for the selections with pre-selection "without CUP").
- the motor inside of the cup dispenser moves the plastic gear to separate and make the cup fall into the cup ring inside the cup dispenser (Fig.2.1).

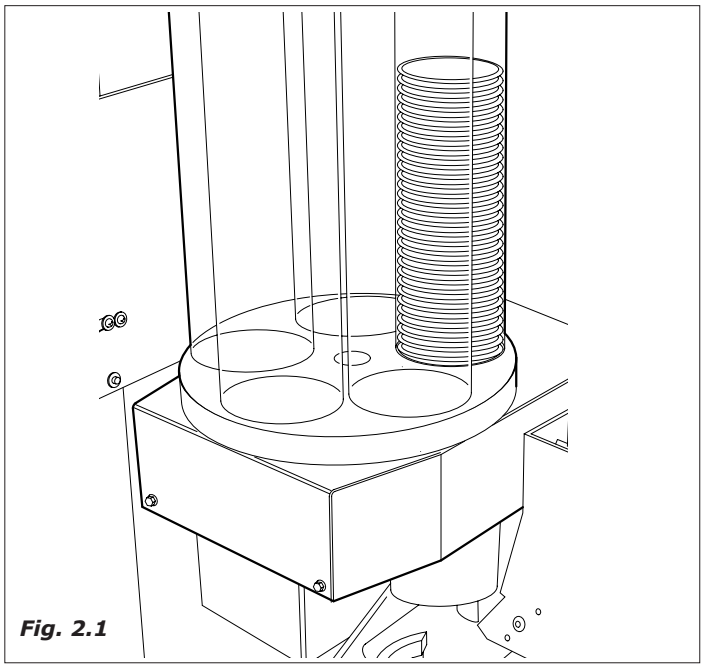


Fig. 2.1

SUGAR DISPENSER

Where set and requested , an amount of sugar in the preset maximum dose is dispensed with the possibility of stopping the latter at the desired dose.

The sugar is dispensed directly in the cup in the **E** versions whereas for the **I** versions it is pre-mixed with the instant drinks.

The dispensing procedure occurs according to the following phases:

1. the geared motor activates the helicoidal screw conveyor of the sugar product container, dispensing the desired quantity into the product chutes (Fig. 2.2)

2. The geared motor is activated and by means of the cam, it effects the movement of the product chute , in order to make sugar to fall into the cup (Fig. 2.3).

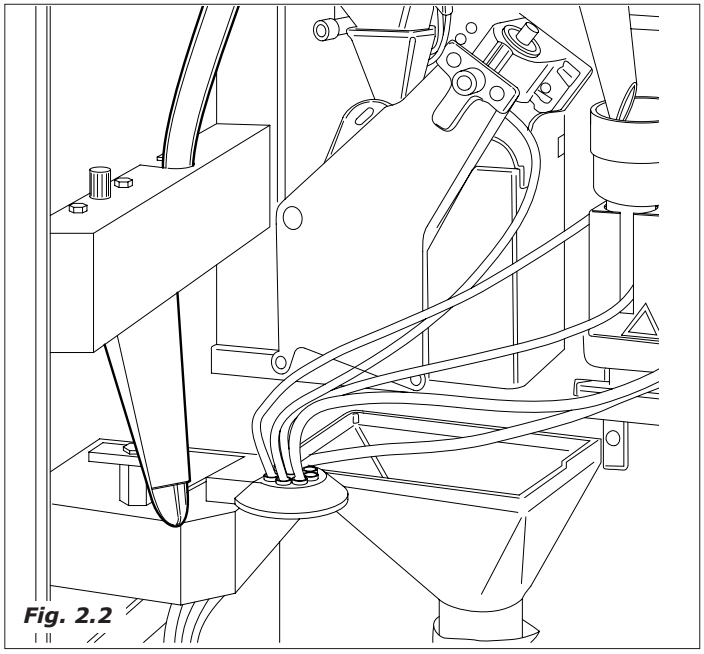


Fig. 2.2

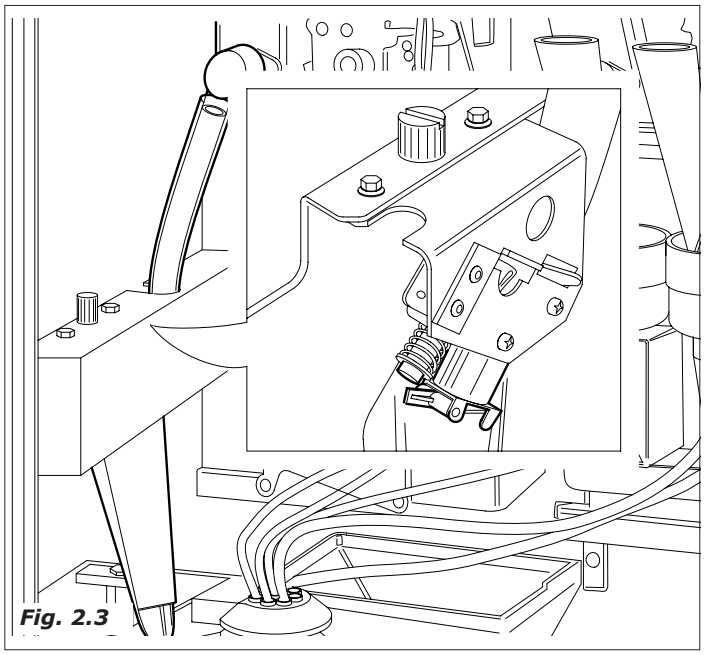


Fig. 2.3

ESPRESSO COFFEE

This process functions only the models equipped with the coffee espresso group (brass or plastic), after the cup and sugar dispensing processes have been effected.

- the grinder is activated until it reaches the dose of ground coffee set by the doser (Fig.2.4)
- the doser electromagnet is activated , causing the opening of the door and consequent fall of the coffee into the brew chamber
- the rotation group geared motor brings it into the dispensing position and simultaneously compresses the ground coffee (Fig.2.5).
- the pump that dispenses the quantity of programmed water and that is controlled by a specific electronic device, (volume meter), extracting the water from the coffee boiler(Fig.2.6).
- the coffee group geared motor is activated again so as to bring again into standby position ; during this movement the used coffee grounds are expelled (Fig.2.7)

The sequence of these operations (grinding and coffee dispensing) could occur in inverse order according to the type of programme used.

COOL SOUP DRINKS

This process, similar to the preparation of hot drinks, except for water supply which is drawn from the activation of an electrovalve located on the refrigerating group, is activated only in versions fitted with refrigerating group (Fig. 2.8).

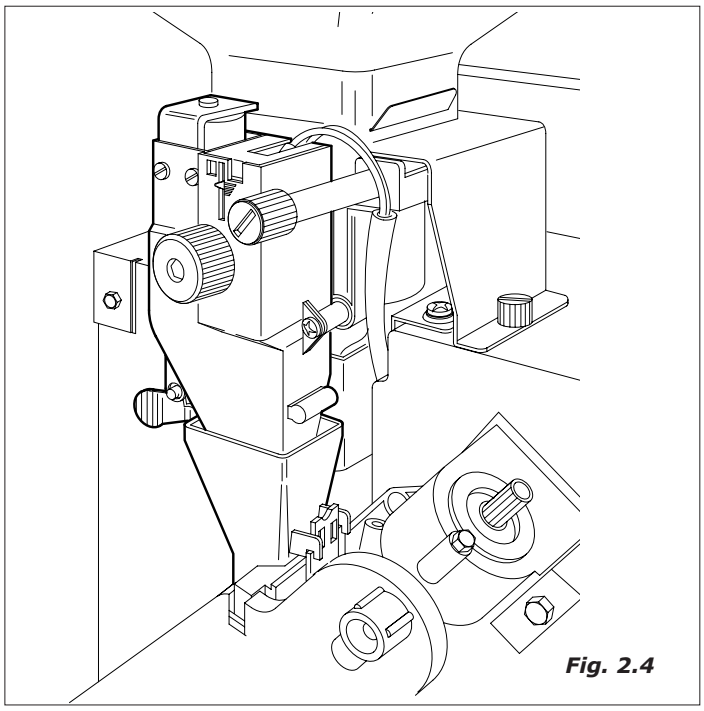


Fig. 2.4

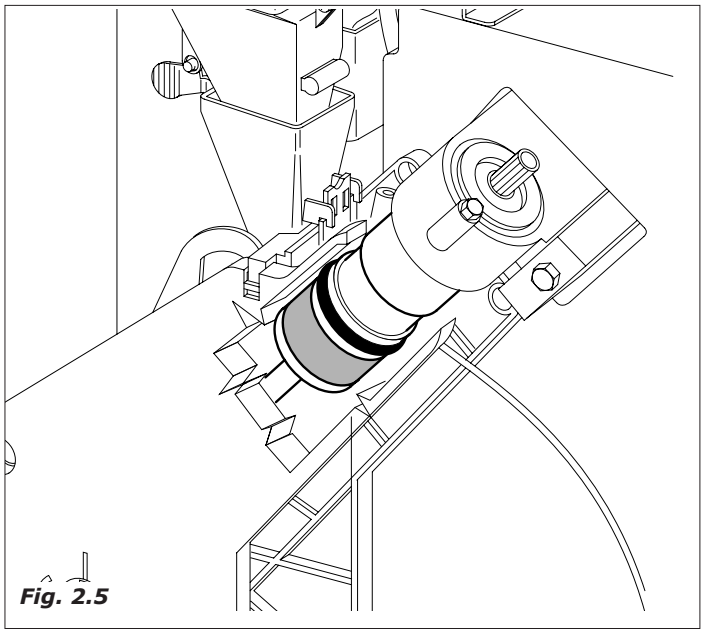


Fig. 2.5

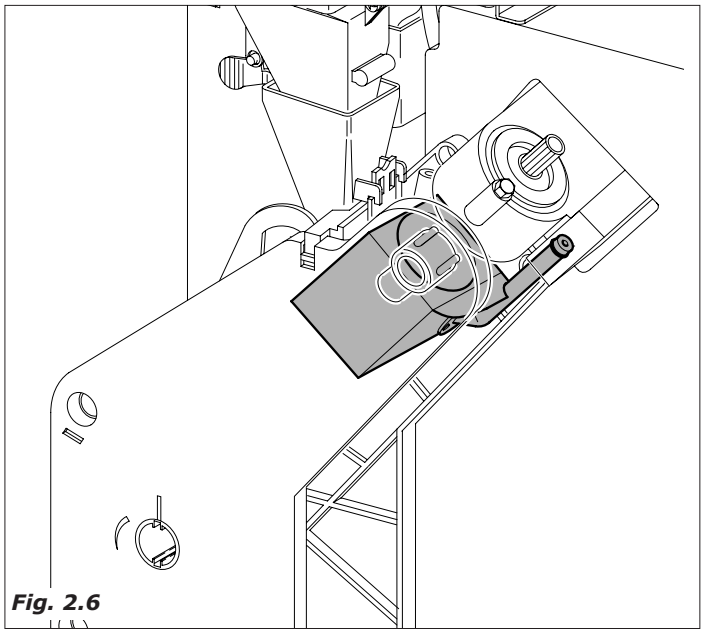


Fig. 2.6

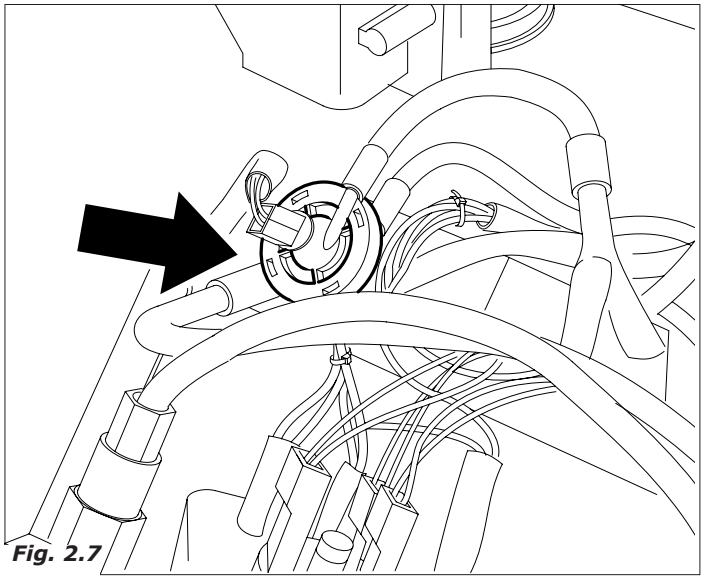


Fig. 2.7

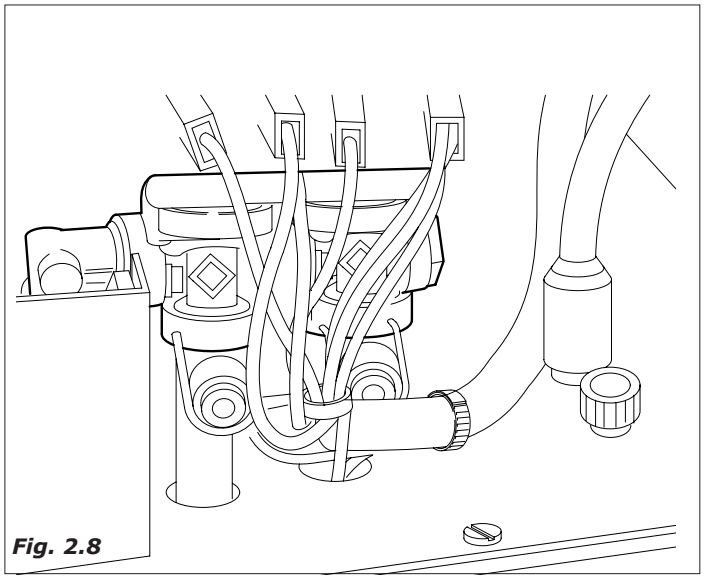


Fig. 2.8

SPOON DISPENSING

This process is activated only in the versions where the spoon dispenser is foreseen; In these versions it is possible to select the spoon in the selections without sugar and/ or in the instant selections . In the **I** models the spoon dispenser is not foreseen as the sugar comes pre-mixed with the instant beverages.

- the geared motor that operates the spoon release device is activated making the spoon fall into the cup. (Fig.2.9).

INSTANT DRINKS

This process is activated when the cup and spoon dispensing processes have been completed.
According to the type drink requested and to the distributor model, several of the various processes described here below can be activated.

– If present, the whipper motor is activated (Fig.2.10)

- The electro valve fixed on the soup boiler (Fig.2.11) or on the coffee boiler (Fig.2.12). it is activated to introduce into the mixer the programmed water quantity, according to the models: Single boiler, Double boiler or only Istant.

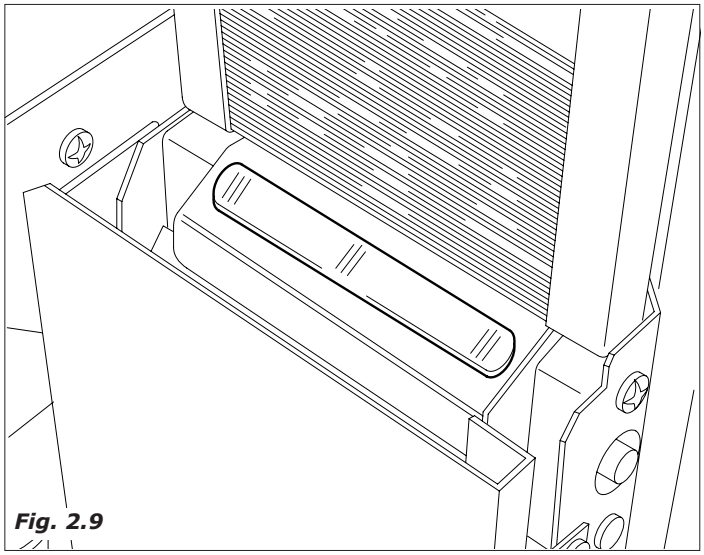


Fig. 2.9

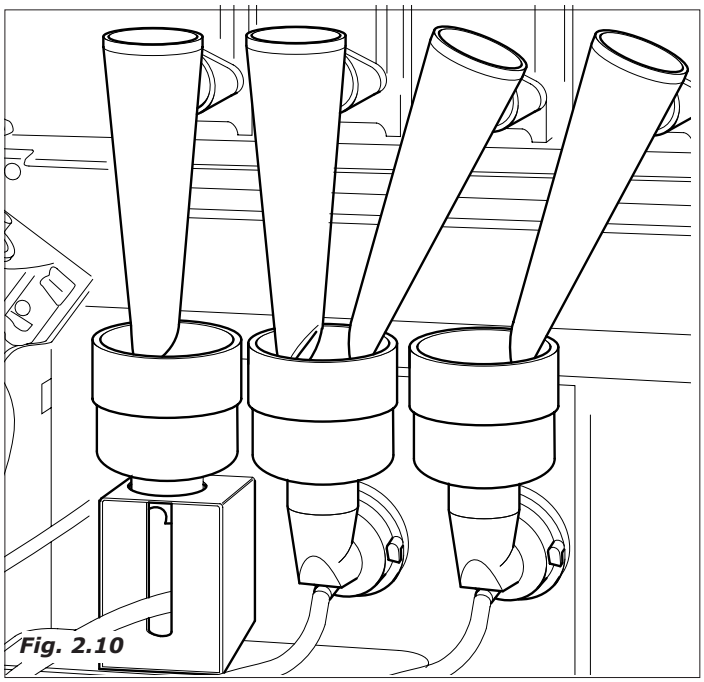


Fig. 2.10

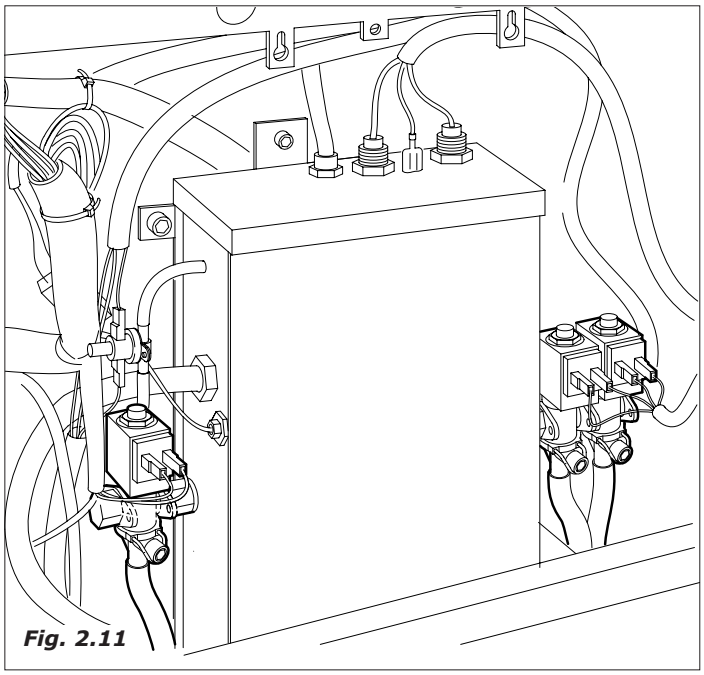


Fig. 2.11

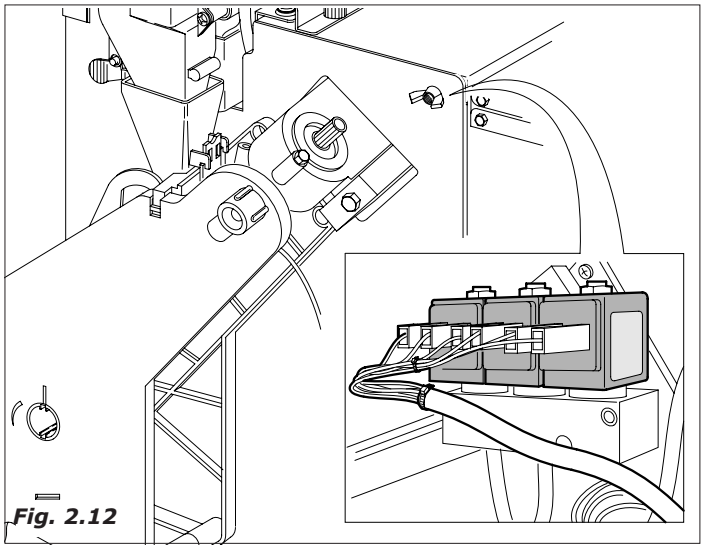


Fig. 2.12

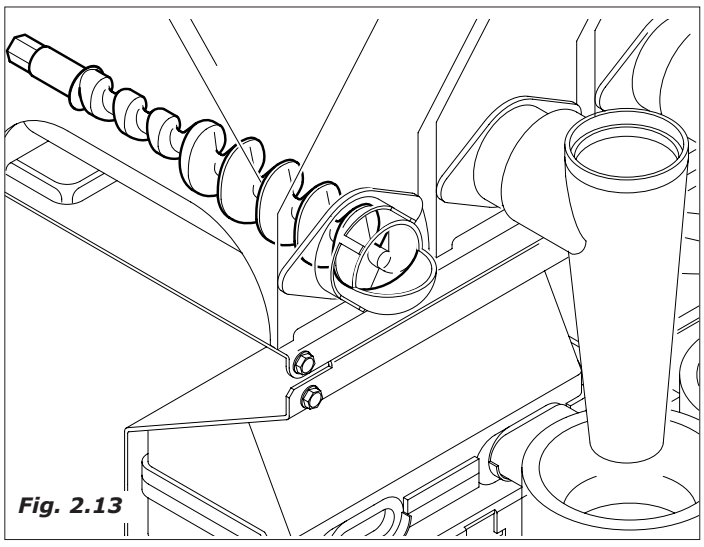


Fig. 2.13

- The instant product geared motor activates the helicoidal screw conveyor so as to dispense the quantity of product programmed into the mixer (in some versions several products can be processed in the same mixer such as milk and chocolate) (Fig.2.13).
- Once the preset water and powder quantity has been preset has been supplied, the mixer is disabled after a time (T) set during the programming.

3.0 MOVING AN AUTOMATIC VENDING MACHINE

3.1 Moving and transport *(Fig.3.1)*

The transport of the distributor must be effected by competent personnel.
The distributor is delivered on a pallet; for the shifting use a trolley and move it slowly in order to avoid capsizing or dangerous movements.

Avoid :

– *lifting the distributor with ropes or presses*
– *dragging the distributor*
– *upset or lay down the distributor during transport*
– *give jolts to the distributor*

Avoid as the distributor:
– *bumping it*
– *overloading it with other packages*
– *exposing it to rain, to cold or sources of heat*
– *keeping it in damp places*

The construction company is not liable for any damage which may be caused for the partial or complete non-observance of the warning notices indicated above.

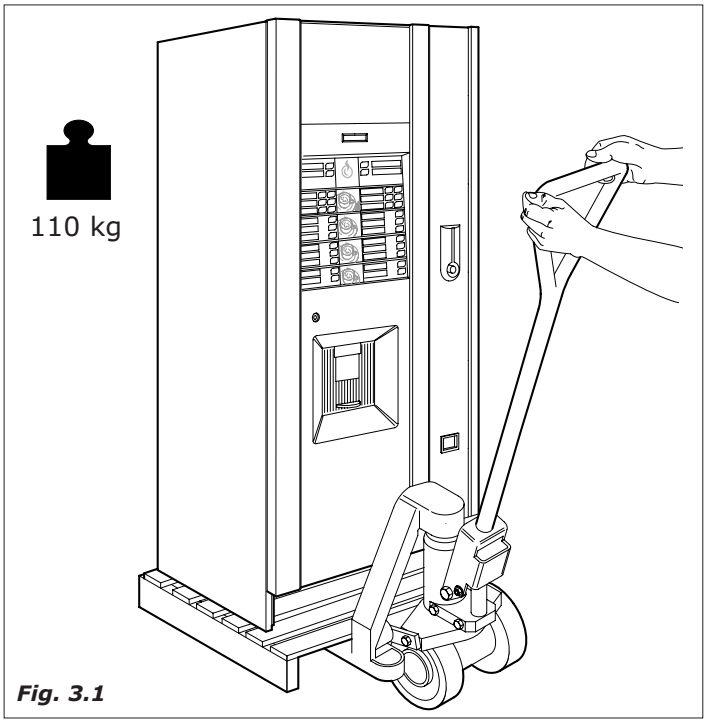


Fig. 3.1

3.2 Stocking

For eventual stocking, avoid laying several machines over each other, maintain it in vertical position, in dry places with temperatures not inferior to 1°C (Fig.3.2).

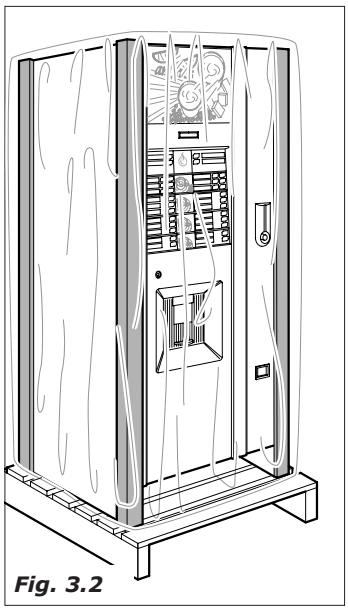


Fig. 3.2

3.3 Packing

The distributor is protected with polystyrene angles and by a transparent film in polypropylene (Fig.3.2).
The automatic distributor will be delivered packed, assuring both a mechanical protection and protection against damages from the external environment.

On the package labels are applied indicating:

- maneouver with care
- don't turn upside-down
- protect from the rain
- don't superimpose
- protect from sources of heat
- not resistant against bumps
- type of distributor and serial number.

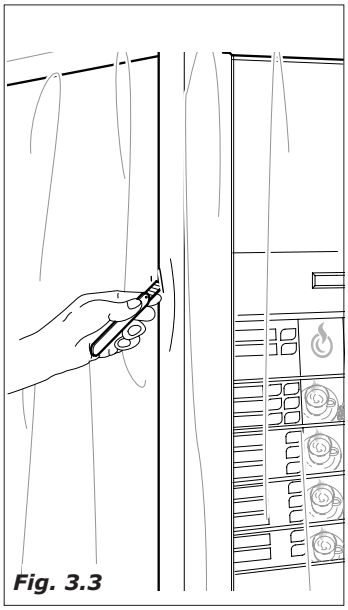


Fig. 3.3

3.4 Reception

Upon reception of the automatic distributor you need to check that the same has not suffered damages during the transport.

If damages of any nature are noticed place a claim with the forwarder immediately.

A*t the end of the transport the packing must result without damages which means it must not :*

– present dents, signs of bumps, deformations or damages of the external packaging
– present wet zones or signs that could lead to suppose that the packing has been exposed to rain, cold or heat.
– present signs of tampering

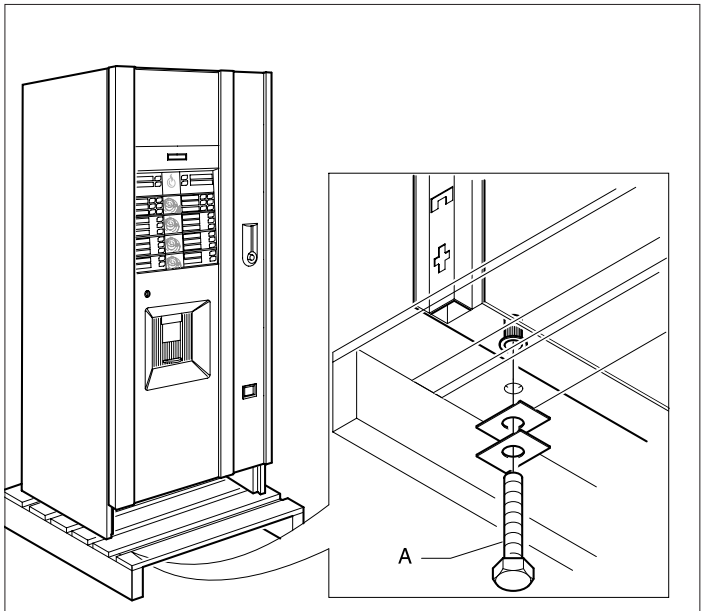


Fig. 3.4

3.5 Unpacking

- Free the distributor from the packaging , cutting the protective film in which it is wrapped, along one of the protection angles (Fig.3.3).
- Remove the distributor from transport pallet, unscrewing the screws (A) that block the fixing cross staff heads to the pallet (Fig.3.4).

– Release the pallet and insert the 4 feet into the threaded slots (fig. 3.5) freed of the screws (A)

– remove the key from the drink dispensing chamber (Fig.3.6)

Open the door of the distributor and remove the adhesive tape from the components listed here below:

- cup turret (example in Fig.3.7)
- coin box
- sugar container
- weight on the spoon dispenser column
- coin mechanism cover / Master board
- product containers
- water bin float mechanism
- water bin
- remove the polystyrene that that blocks the product containers (Fig.3.8)

The packing material must not be left accessible to others, as it is a potential environmental pollution sources. For the disposal contact qualified companies authorized.

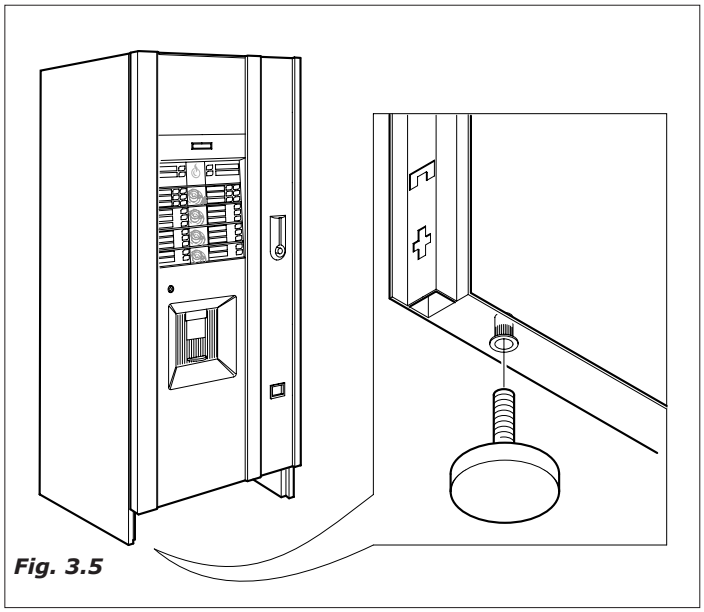


Fig. 3.5

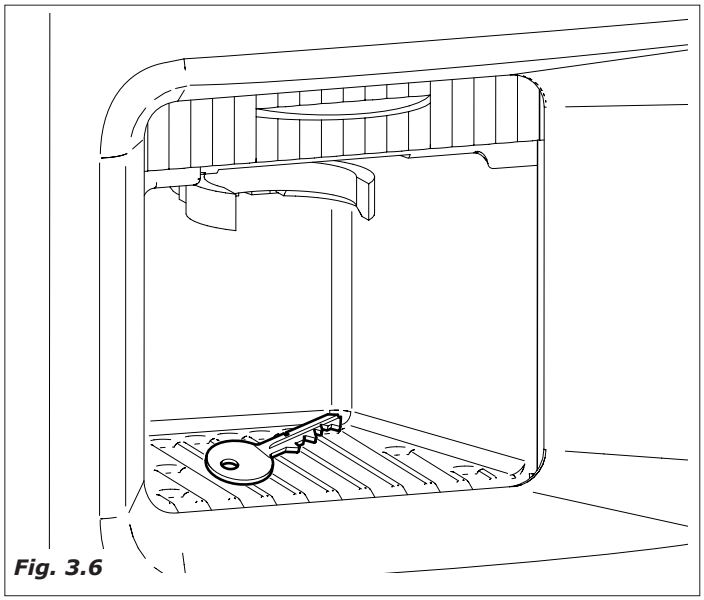


Fig. 3.6

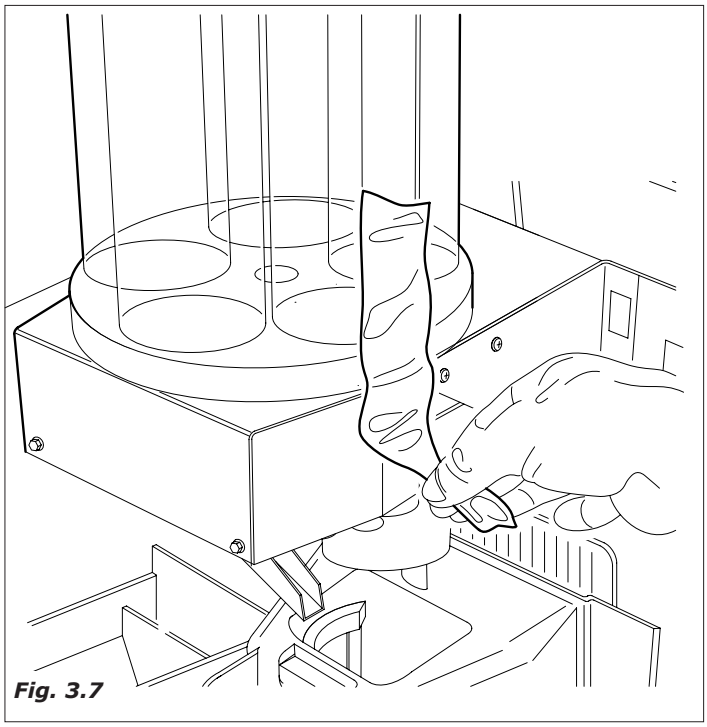


Fig. 3.7

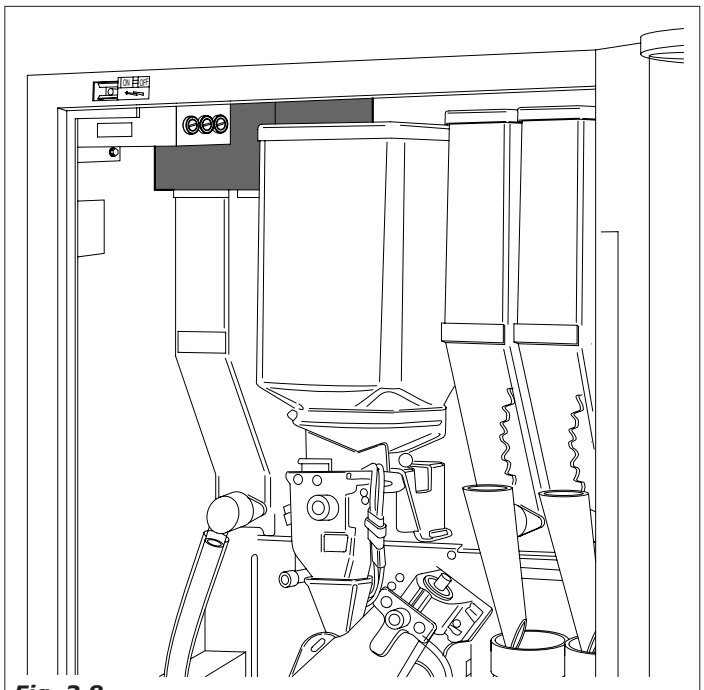


Fig. 3.8

4.0 INSTALLATION

4.1 Positioning

- If positioned near to a wall, there must be a minimum distance from the wall of at least 5 cm. (Fig.4.1) so as to allow a regular ventilation. In no case cover the distributor with cloths or similar.
- Position the distributor, checking the leveling by means of the adjustable feet already assembled on the machines (Fig4.2). make sure that the distributor doesn't have an inclination of more than 2 degrees.

WARNING! *Do not position the device near inflammable objects, keep a minimum safety distance of 30 cm.*

Bianchi Vending Spa declines all responsibility for inconveniences due to the non observance of the above mentioned installation norms.
If the installation is made in safety evacuation corridors make sure that with the distributor door open there is anyhow sufficient space to pass by (Fig.4.1).
So as to avoid that the floor gets dirty, due to accidental spilling of the products, use, if necessary, under the distributor, a protection sufficiently wide to cover the distributors' operating space.

4.2 Connection to the main water supply

Before proceeding with the connection of the distributor to the water main supply verify the following water characteristics:

- that it is drinkable (eventually through an laboratory's analysis certification)
- it has a pressure comprised between 0.5 and 6.5 (bar) (if this should not be the case, use a pump or a water pressure, reducer according to the case).
- install, if not present, a tap in an accessible position to isolate the machine from the water mains should it be found to be necessary (Fig.4.3).
- before making water connections, make some water flow out of the tap so as to eliminate possible traces of impurities and dirt (Fig.4.4)
- connect the cock to the distributor, using a pipe in nylon material suitable for food products and suitable for the mains pressure. In the event of the use of a flexible pipe it is necessary to fit the reinforcement bush supplied inside (Fig. 4.5).
- the foreseen connection is a 3/ 4 gas (Fig.4.6).

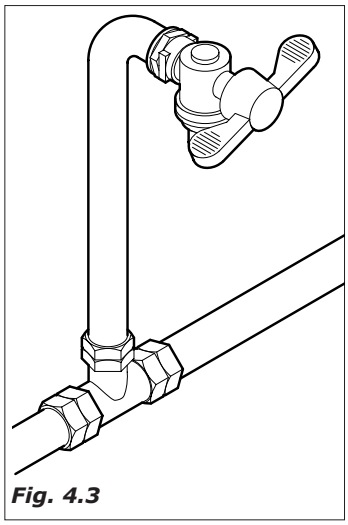


Fig. 4.3

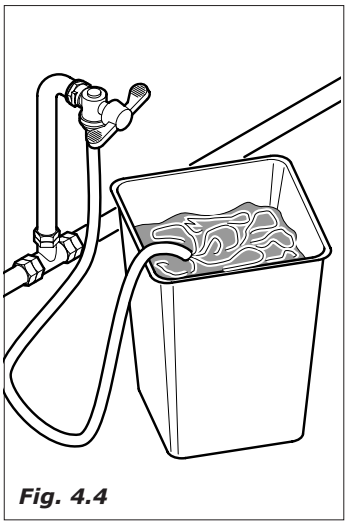


Fig. 4.4

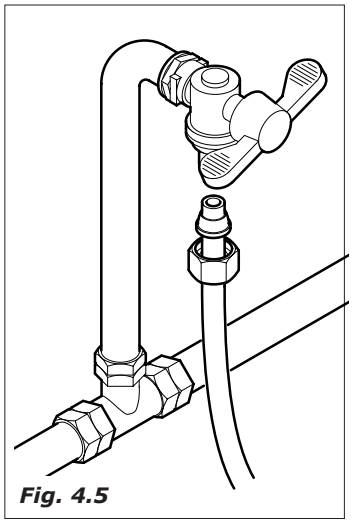


Fig. 4.5

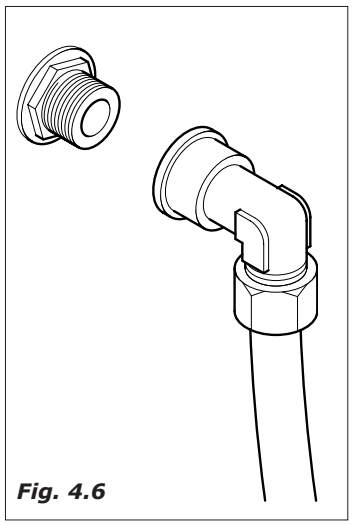


Fig. 4.6

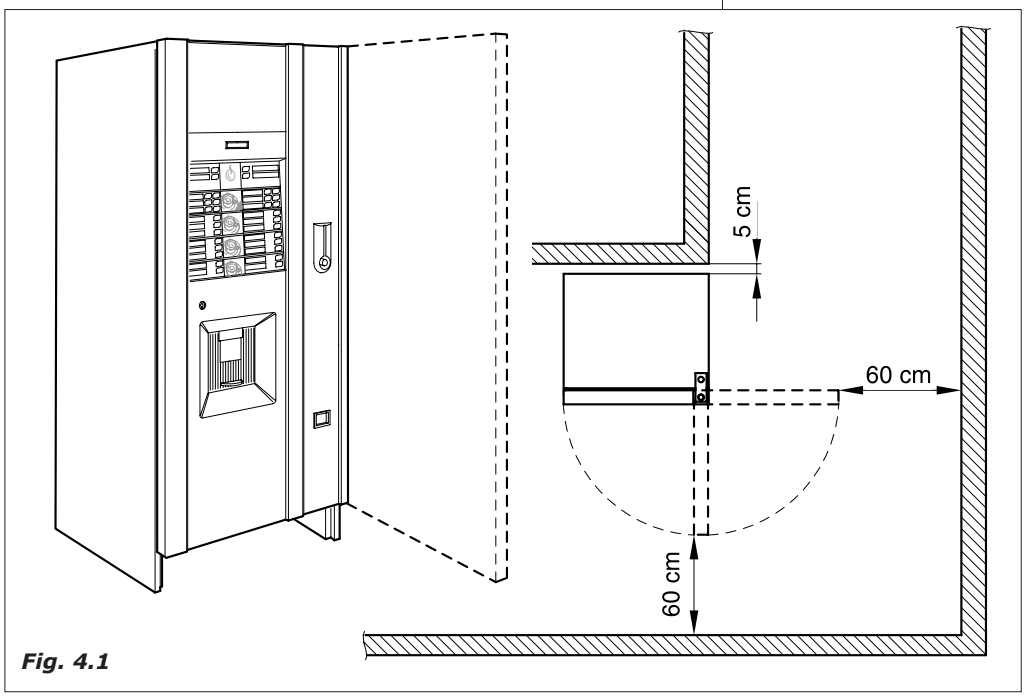


Fig. 4.1

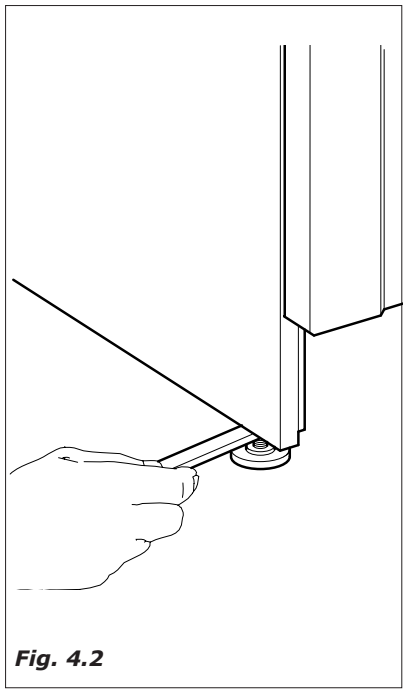


Fig. 4.2

4.3 Main Power supply connection

The distributor is predisposed to function with mono-phase 230 Volt tension and is protected with 12,5A and 20A fuses. (10A and 20A for the single boiler and instant versions and 15A and 20A for the instant hot/cold version).

We suggest to check that:

- the tension of net of 230 V doesn't have a difference of more than ± 6%
- The power supply output is able to bear the power load of the machine.
- use a system of diversified protection
- position the machine in such a way as to ensure that the plug remains accessible

The machine must be connected to earth in observance with the current safety norms.

For this reason, verify the plant's earth wire connection to ascertain that it is efficient and it answers national and European safety electric standards. If necessary require the intervention qualified personnel for the verification of the plant.

- The distributor is equipped with a power supply cable of H05VV-F 3x1,5mm², with SCHUKO plug (Fig.4.7).
- The sockets that are not compatible with that of the machine must be replaced. (Fig.4.8).
- The use of extension, adapters and/ or multiple plugs is forbidden.
- In some models, specific plugs are assembled for the destination place.

Bianchi Vending S.p.A. declines all responsibility for damages deriving for the complete or partial failure to observe these warnings.

Should the power cable be found to be damaged, immediately disconnect from the power socket.

The power supply cables are to be replaced by skilled personnel.

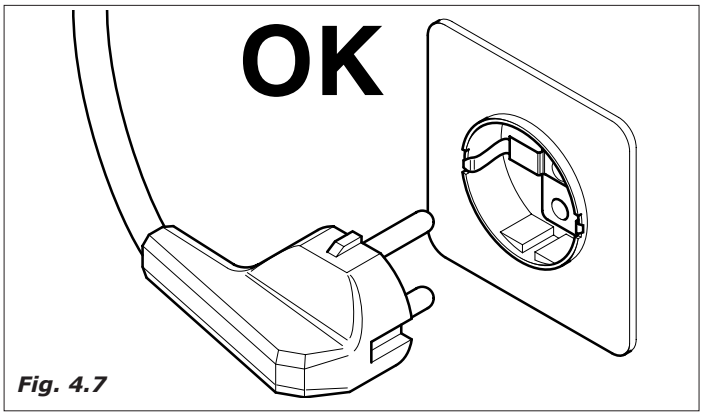


Fig. 4.7

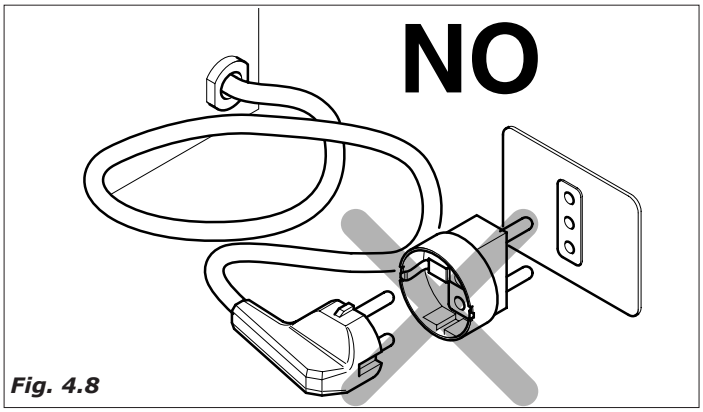


Fig. 4.8

4.4 Starting up of the unit

The distributor is equipped with a safety switch (Fig.4.9) that disconnects the machine whenever the door is opened (see electric schema).

In case of necessity, therefore, open the door or disconnect unplugging of the machine from the power supply.

The clamp of the power cable junction box remain under tension (Fig.4.10-pos.1) as well as the service switch inside the distributor. (Fig.4.11-pos.1).

– For some operations is however necessary operate with the door open but with the distributor connected.
It is possible for installation technician, to operate in this way, by inserting the special plastic key, supplied with the distributor, into the door switch and rotating it 90° (Fig.4.12).

The opening and the possible connection with the distributor's door open must be performed only by authorized in carrying out these operations.

Don't leave the distributor open and unguarded.

Give the key only to qualified personnel.

Any time the distributor is switched on there is a diagnosis cycle to check the state of DA peripherals and perform the restoration of moving parts.

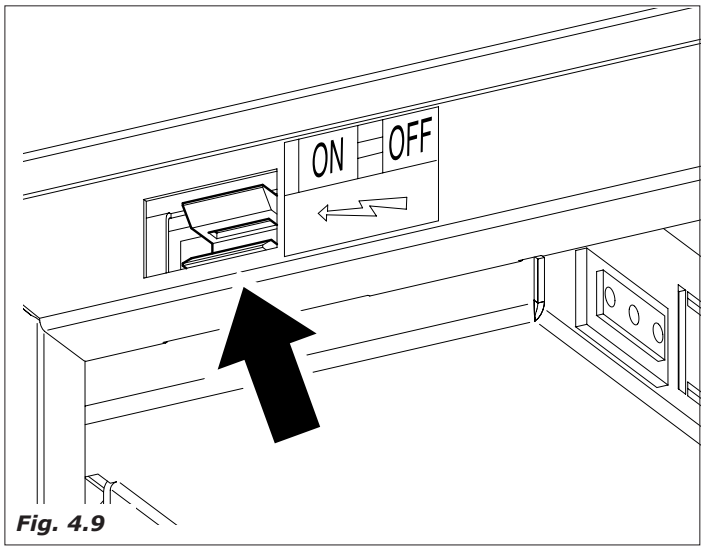


Fig. 4.9

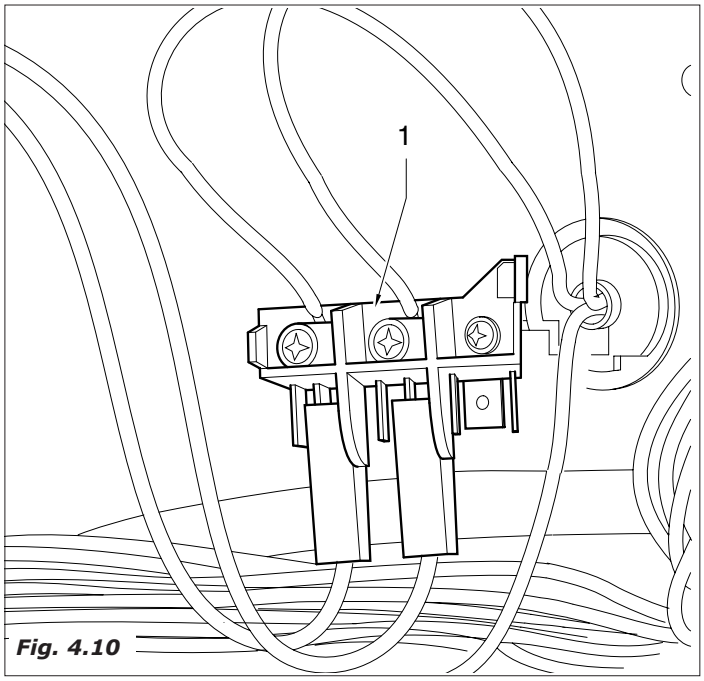


Fig. 4.10

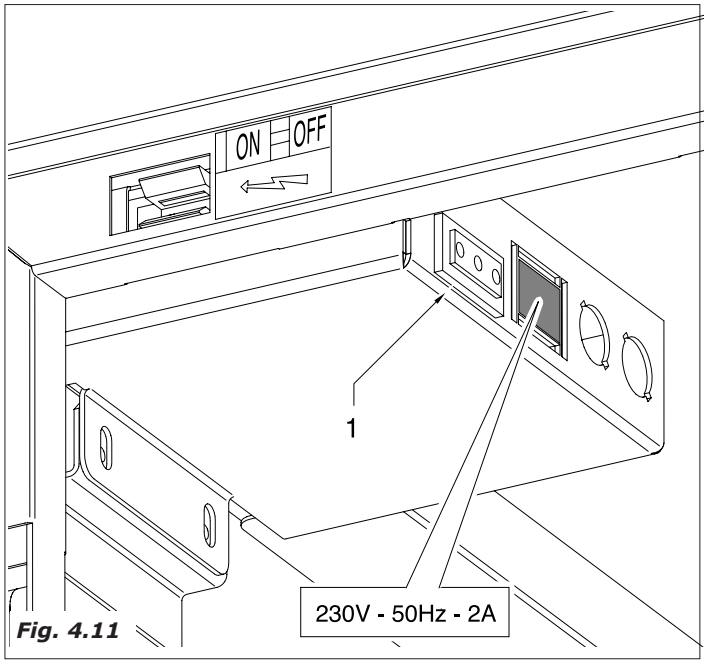


Fig. 4.11

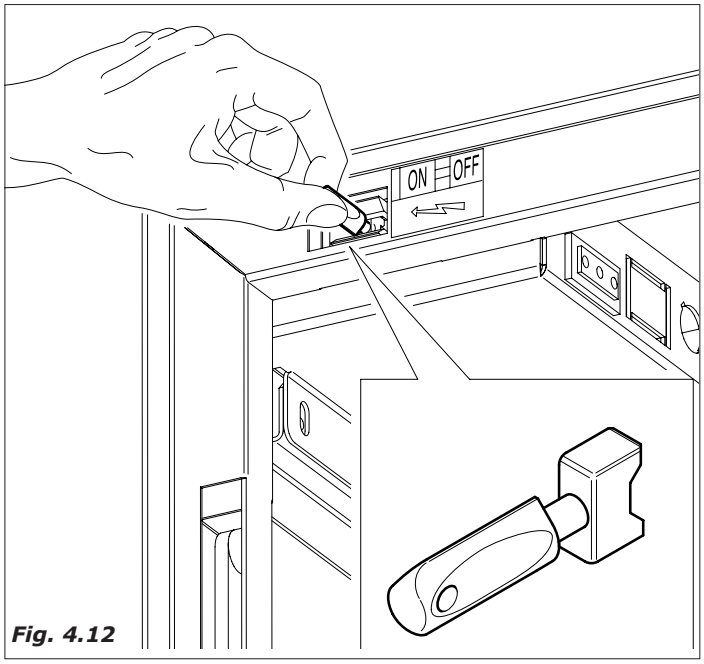


Fig. 4.12

4.5 Installation

4.5.1 Decalcificator resin washing where it is installed as accessory

First of all fill the distributor's water circuit, it is advisable effect the water softener resin regeneration (if installed)

operating in the following manner:

- insert the pipe of the bottom faucet in a container suitable for this use
- open the faucet (Fig.4.13)
- insert the key in the door switch (Fig.4.12)
- Let the water flow until it is clear (Fig. 4.14).
- Take out the key and close the faucet.

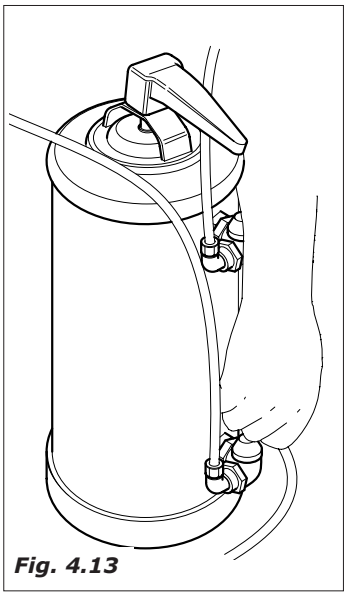


Fig. 4.13

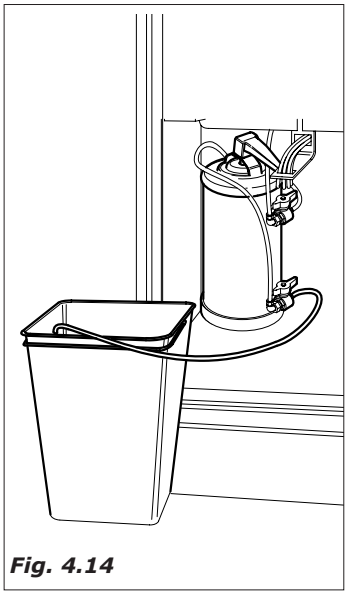


Fig. 4.14

4.5.2 Filling of water circuit

INSTALLATION PROCEDURE

The installation procedure is valid only for the single boiler distributors. In particular, expresso boiler and polisulphone boiler fitted with level probes.

EXPRESSO SINGLE BOILER

At the line output, the distributor will be put in condition of FIRST INSTALLATION. As soon as it reaches the location, the operator will link only water (both in case of water supply connection and autonomous tank) and the mains.

The distributor will automatically require water until micro lack of water reaches N.C. for at least 15 seconds. In this condition D.A. switches on the pump and, with resistance OFF, will supply 200 cc of water (measured through the fan). Following this procedure the distributor installation date is stored. Once the date has been confirmed, D.A. waits 10 seconds and soon after it will start to heat water in the boiler.

POLISULPHONE BOILER with LEVEL PROBES

At the output of BV lines the distributor will be put in condition of FIRST INSTALLATION. As soon it reaches the location the operator will link only water (both in case of water supply connection and autonomous tank) and the mains.

The distributor will automatically require water until the maximum level probes detect the presence of water. After this procedure the distributor installation date is stored. Once the date has been confirmed, D.A. waits 10 sec and soon after it will start to heat up water in the boiler.

SINGLE STAINLESS STEEL BOILER FOR SOUPS

At the output of BV lines, the distributor will be put in condition of FIRST INSTALLATION.

As soon it reaches the location the operator will link only water (both in case of water supply connection and autonomous tank) and the mains.

The distributor , in condition of OFF resistance, will automatically require water and will open the electrovalve 2 to vent air which is in the boiler.

This condition will last 200 seconds. At the end of this timeout, the distributor will close the electrovalve 2 and the input water ev for 20 sec. After this period, the water loading will last until the micro lack of water is N.C. for a time exceeding 5 sec (this operation is linked to a second timeout of 200 seconds). In this condition D.A. automatically activates the electrovalve 2 which will supply 20 s of water.

At the end of the supply, the micro lack of water returns become N.C. After this procedure the distributor installation date is stored. When the date is confirmed, D.A. waits 10 seconds and soon after it will start to heat up water in boilers.

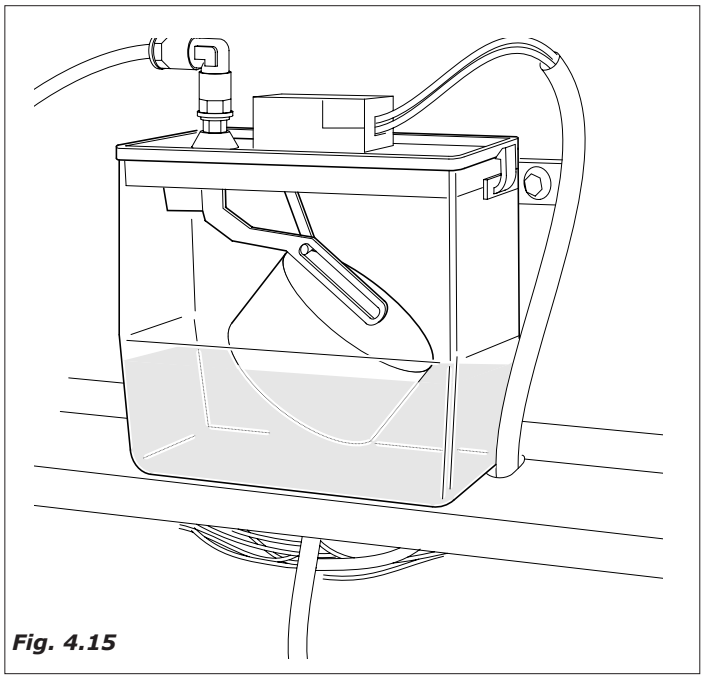


Fig. 4.15

DOUBLE BOILER

At the output of the lines, the distributor will be put in condition of FIRST INSTALLATION. As it reaches the location the operator will link only water (both in the case of linking to the mains and autonomous tanker) and the mains.

The distributor, in condition of resistances OFF, will automatically require water and will open the electrovalve 2 to vent the air which is in the stainless boiler. This condition will last 200 seconds. At the end of this timeout, the distributor will close the electrovalve 2 and the water input ev for 20 sec. After this time water loading will continue until the micro lack of water is N.C. for a time exceeding 5 sec (this operation is linked to a second timeout of 200 seconds). In this condition the D.A. activates the electrovalve 2 and will supply 20 sec of water. At the end of the supply, the micro lack shall return to N.C. After 10 sec D.A. activates the expresso pump, and, on condition of resistance OFF, it will supply 20 cc of water through the coffee ev (measured through the fan). After this procedure, the distributor installation date is stored. When the date is confirmed, D.A. waits 10 seconds and soon after it will start to heat up water in the 2 boilers.

4.5.3 Filling the cooling unit

Where foreseen , for the filling of the cooling unit operate as follows:

- Remove the cap positioned on the top plate of the cooling unit and insert the instant boiler drain hose which is positioned along the liquid waste chute.(Fig.4.17).
- Position the reservoir drain hose in the liquid waste bin, in the (Fig.4.18).
- Insert the key in the door switch (see Fig.4.12) and wait until water flows out of the drain hose.
- Remove the door switch key
- Disconnect the instant boiler tube and replacing the cap and position again along the chute.
- Connect the refrigerating group electrically (insert into the junction box the blue wire n. 18) (Fig. 4.19)
- Wait for the soluble produce heater to fill up
- Make the necessary selections in order to fill the hydraulic circuits
- Wait for thirty minutes until the temperature of the refrigerating group reaches regime and i.e.:
- The thermostat has already been calibrated by the manufacturer in order to obtain the following temperatures:

- water in the reservoir about +4°C
- drinks about +6/ 8°C

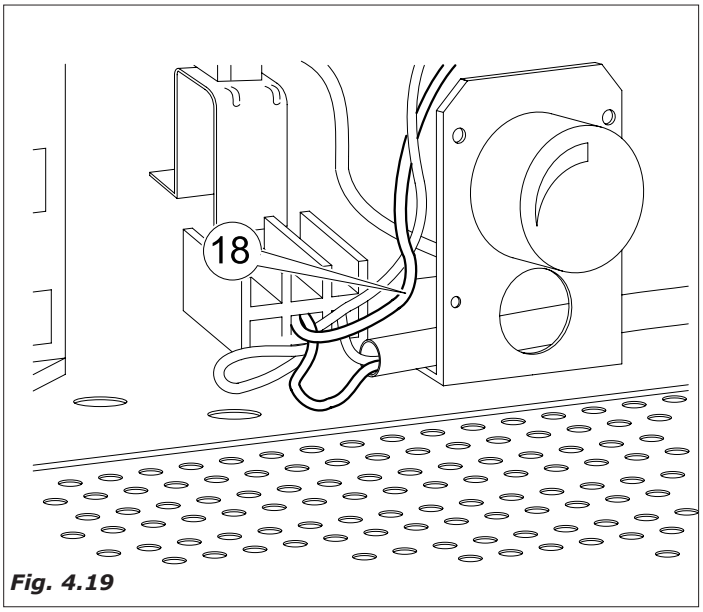


Fig. 4.19

At the end of the water filling, effect a cleaning cycle of the mixer group so as to fill all the circuits and remove eventual residues from the boiler (Fig.4.16).

Before connecting the power supply, ensure that the distributor has been connected to the water mains and that the water tap has been turned on.

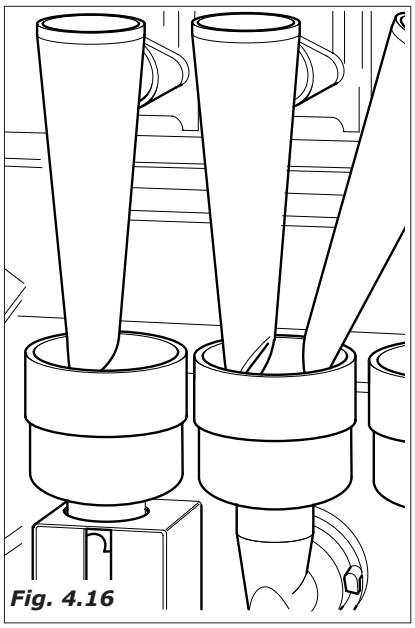


Fig. 4.16

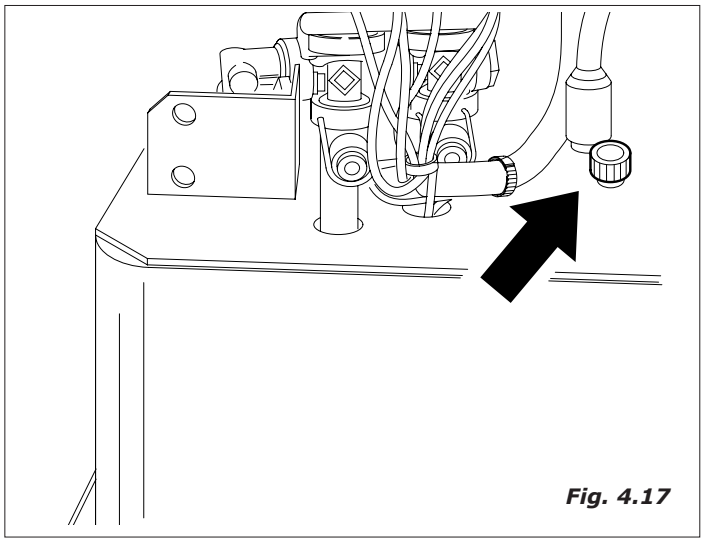


Fig. 4.17

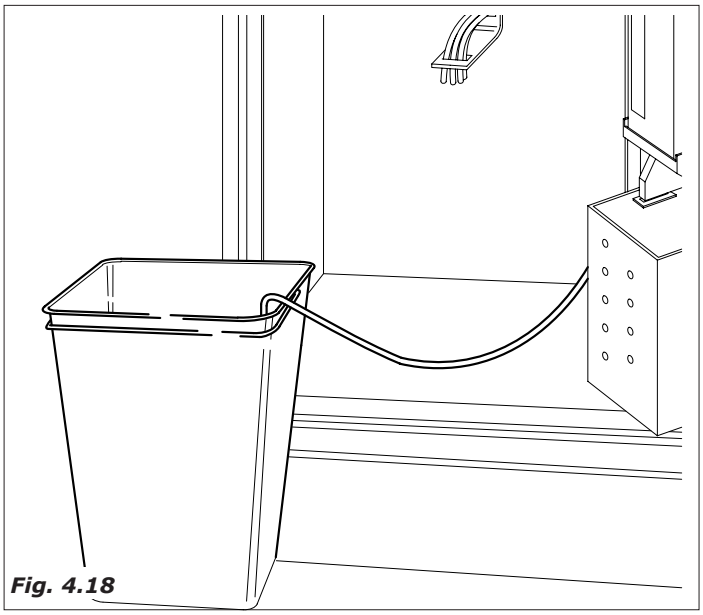


Fig. 4.18

4.5.4 Cleaning of the parts in contact with food substances

With distributor switched on effect a cleaning of the mixers pressing the buttons according to what is described in the service functions so as to eliminate any dirt from the coffee boiler and the instant boiler.

- wash your hands carefully
- prepare an anti-bacterial cleaning solution with a chlorine base (products that can be purchased in pharmacies) carefully following the indications on the product instruction labels.
- remove all the product containers from the distributor (Fig.4.20)
- remove the lids from the product containers covers and product chutes (Fig.4.21). Dip all in the solution previously prepared
- remove all the powder chutes, water funnels, mixing bowls and whippers and silicone tubes and dip these parts also in the prepared solution (Fig.4.22)
- with a cloth soaked with the solution clean the whipper assembly base (Fig.4.23)
- the parts must soak in the solution for the time indicated on the solutions' instruction label.
- Recover all the parts, rinse them abundantly, dry them perfectly and proceed with the re-assembly in the distributor.

For further safety after the assembly of the parts, effect some automatic cleaning cycles so as to eliminate any eventual residues.

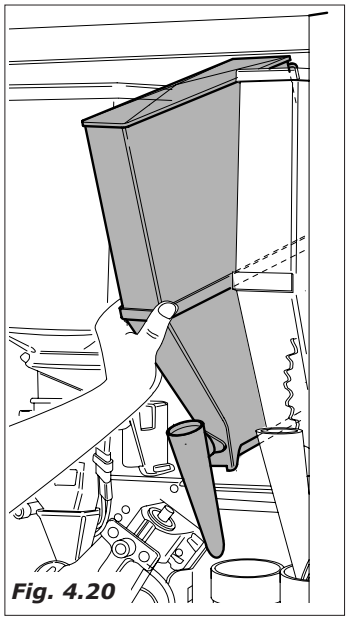


Fig. 4.20

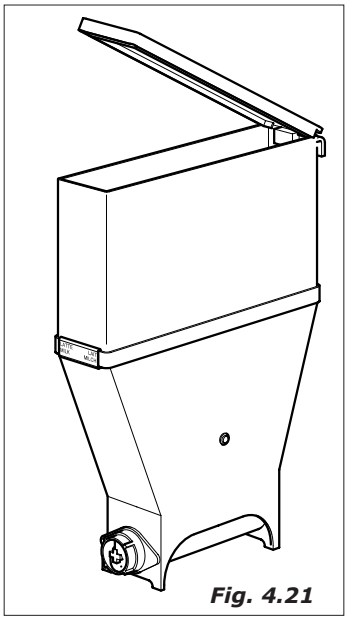


Fig. 4.21

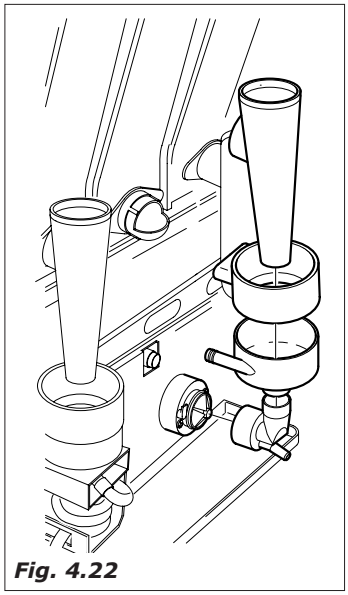


Fig. 4.22

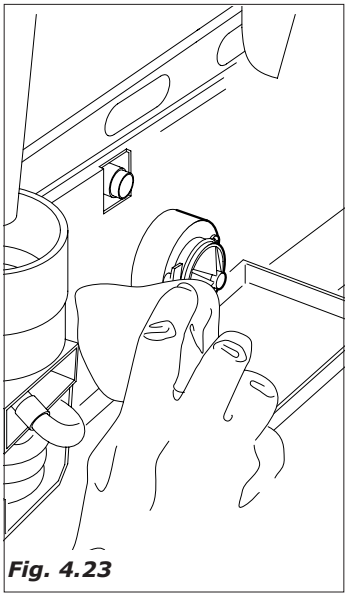


Fig. 4.23

4.5.5 Payment system installation

The distributor is supplied without any payment system:

The installation of the payment system is the responsibility of the installation technician.

Bianchi Vending will not take responsibility for any eventual damage to the machine itself and/or to things and/or persons due to incorrect installation.

- remove the support bracket from the machine (Fig. 4.24)
- hook the coin mechanism on to the support brackets (Fig. 4.25)
- fix the support with the two knobs.
- connect the coin mechanism to the C.P.U board.

The selectors must be directly connected to the Master board the and the serial executive systems through the interface cable supplied with the machine.

Then go into programming for the correct settings.

Consult chapter" 5.0 SOFTWARE INSTRUCTIONS" so as to verify setting of the parameters, that must be coherent with the system used.

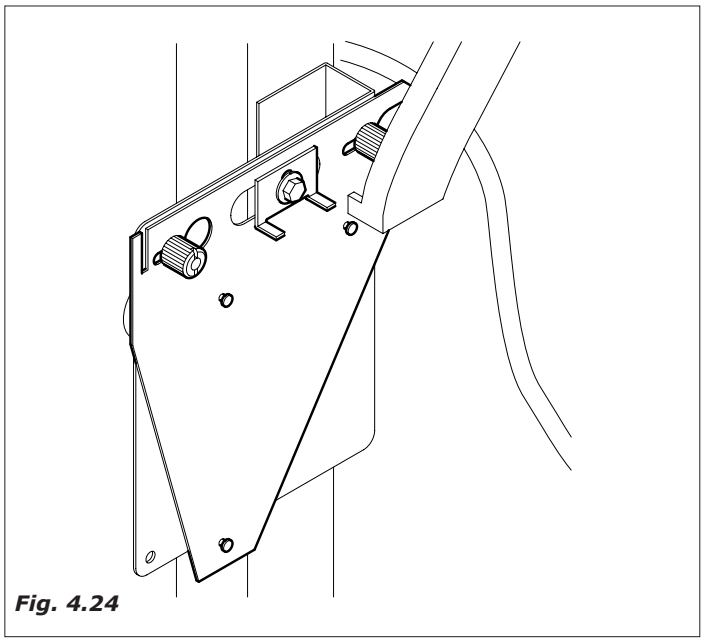


Fig. 4.24

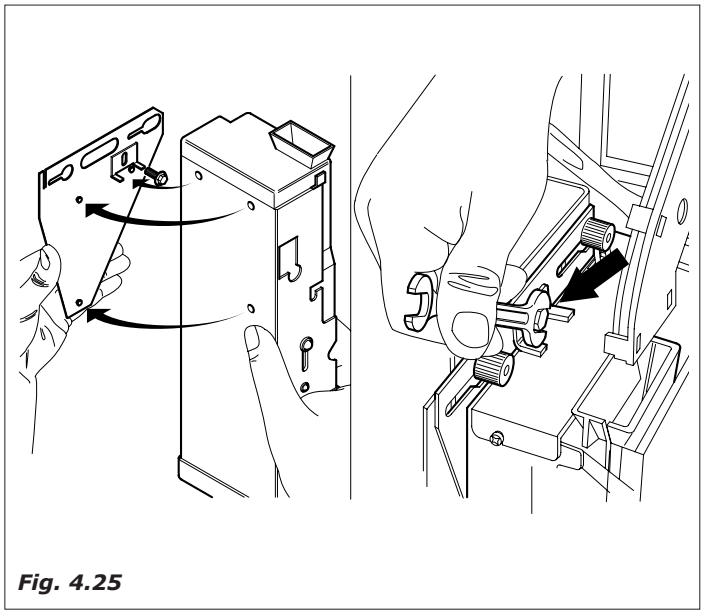


Fig. 4.25

4.6 Product container loading (with machine off)

4.6.1 Loading containers

- so as to effect the loading is necessary remove each container (Fig.4.26). Particularly, for the coffee bean container, it is necessary close the chute door before removing the container.
- remove the covers of each container and load the product according to the product indicated on the label (Fig.4.27)
- pay attention that they there are no clots, avoid pressing the product and using an excessive quantity, so as to avoid its aging in relation to the consumption forseen in the time period between two loadings.

Check the container product capacity in the section TECHNICAL CHARACTERISTICS.

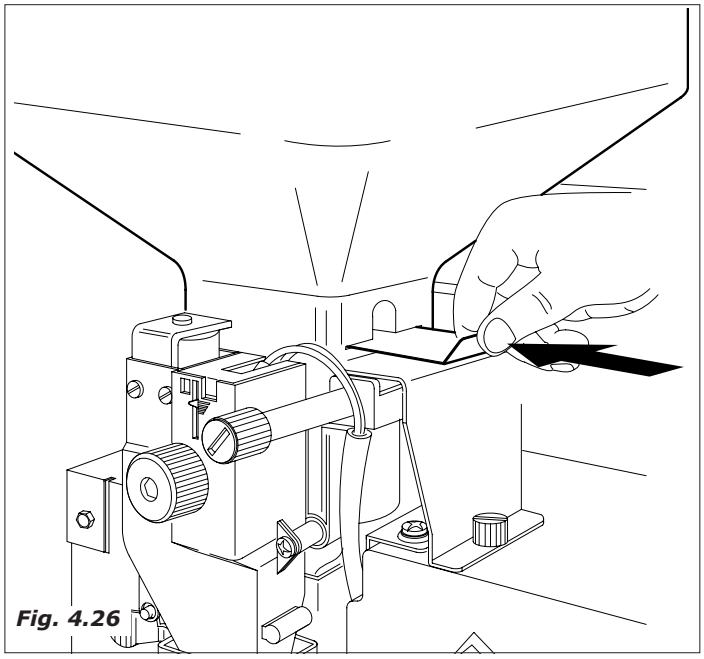


Fig. 4.26

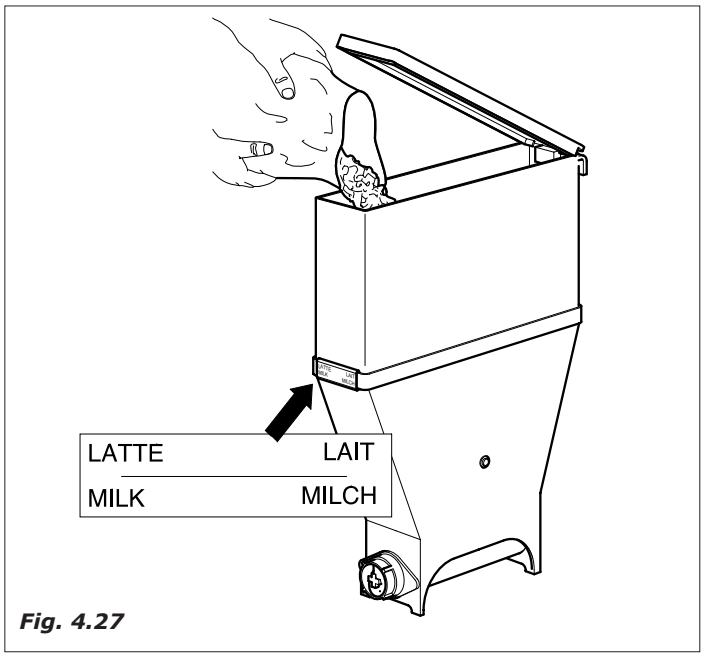


Fig. 4.27

4.6.2 Product selection label application

– The labels related to the selections and images of the respective products shall be inserted in the appropriate slots.

Perform the operation as follows:

– remove the cup turret (Fig. 4.28)

– insert the labels in the order according to the selections used on the vending machine (Fig. 4.29)

– re-assemble the whole in inverse order

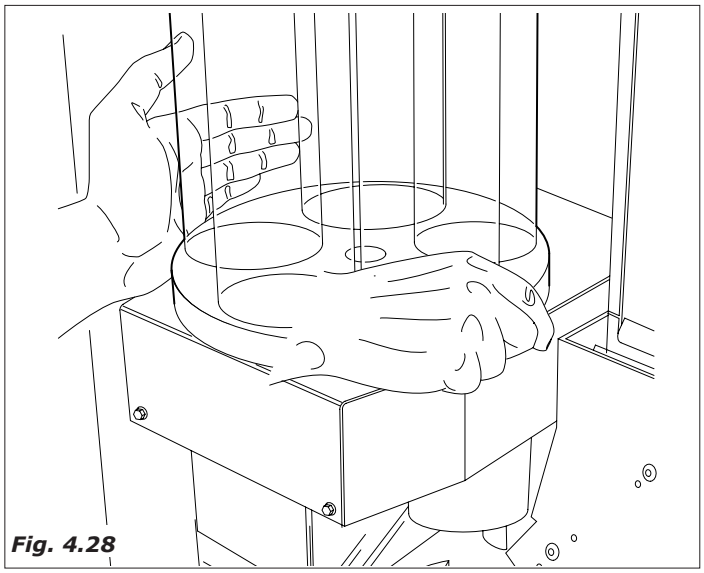


Fig. 4.28

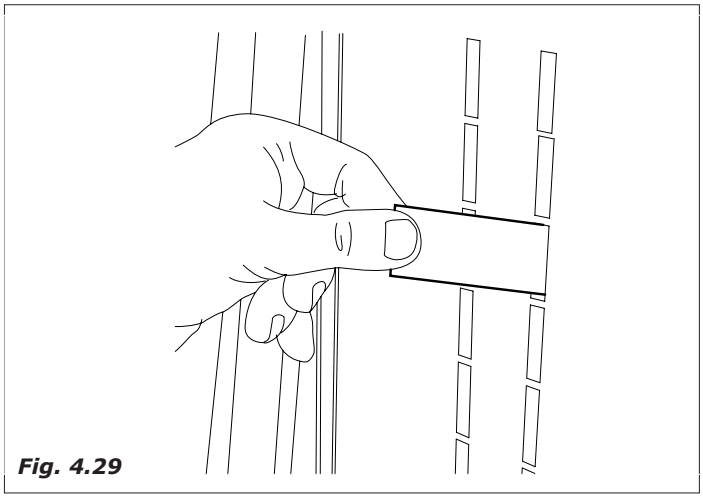


Fig. 4.29

4.6.3 Cup loading

Use only cups suitable for automatic vending machines, (check the relevant features by consulting the chapter 1.2 "Technical Specifications."), avoid compressing the cups between themselves during the loading. Don't try to rotate the turret manually.

First filling

In installation phase with the cup dispenser completely empty, operate as follows:

– Check that the cup column is not aligned with the distribution outlet, then fill all the columns proceeding in an anti-clockwise sense, opposite sense (when the column is aligned with the distribution outlet), close the door and switch on the machine so that the cup column rotates and automatically places itself in a position in which it is not aligned with the inlet and then proceed to fill (Fig.4.30)

– Put the cup turret's lid back on and snap in the spring band (Fig. 4.31).

Normal filling

The cup column should normally filled with the machine off, simply by opening the front door, lifting the lid and inserting the missing cups.

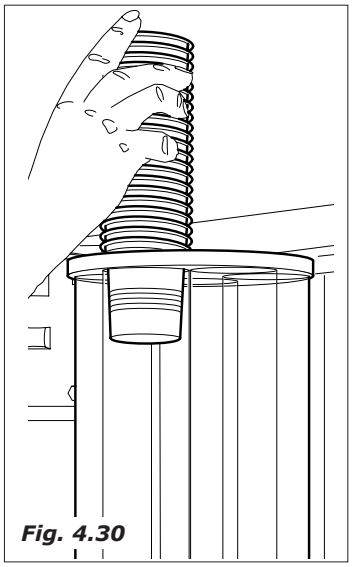


Fig. 4.30

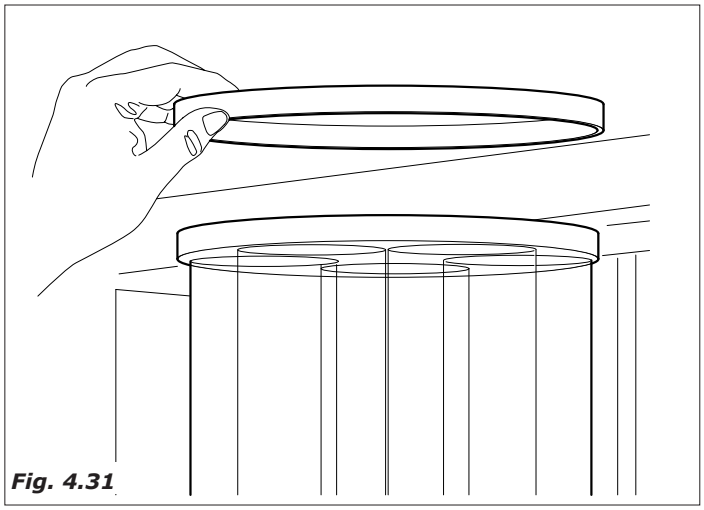


Fig. 4.31

4.6.4 Spoon loading

Attention! *Only use appropriate stirers to be used in automatic vending machines.*

- Remove the metal weight from the spoon dispensing column (Fig. 4.32)
- insert the spoons with their pack wrapping in the column and when they are positioned on the bottom cut and remove the wrapping (Fig. 4.33)
- once the loading is completed put the weight back in the spoon dispensing column.
- Check that the spoon are cut burr-free, that they are not bent and that they are all placed horizontally (Fig.4.34).

*The **ANTARES I** models do not have the spoon dispensing column as the sugar is mixed directly with the products.*

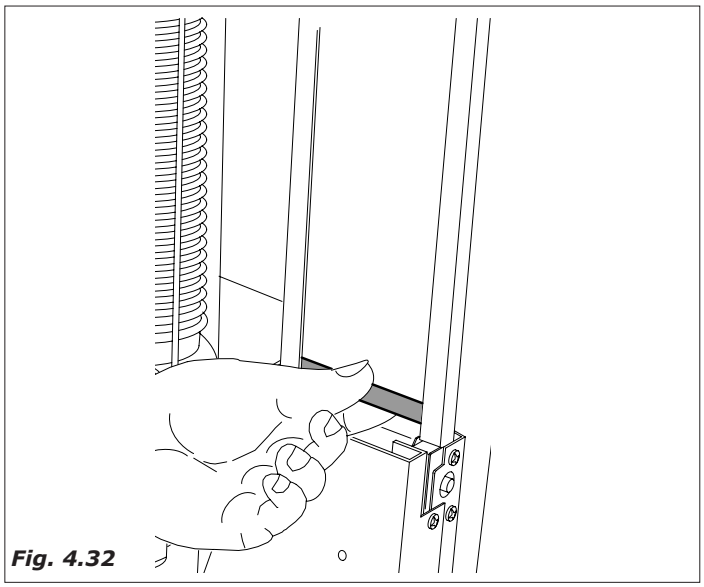


Fig. 4.32

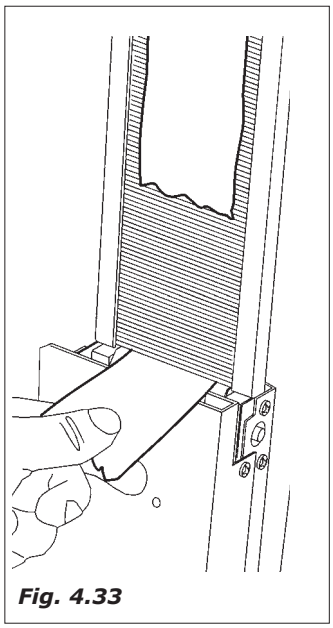


Fig. 4.33

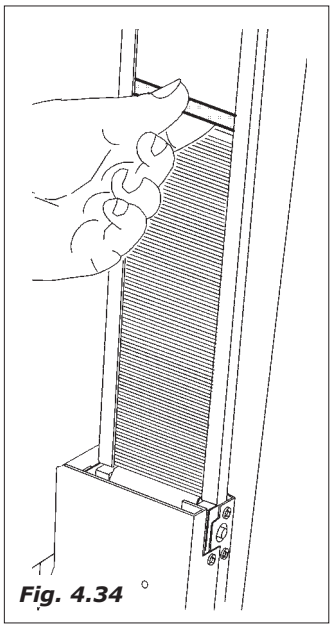


Fig. 4.34

4.6.5 Insertion of waste grounds bag

- Only for the "coffee in beans version"
- remove the supporting ring from its seat
- insert the plastic bag wrapping it on the support itself (Fig. 4.35)
- replace the support in the guide
- Use plastic bags that are sufficiently long so that they touch the bottom of the distributor.

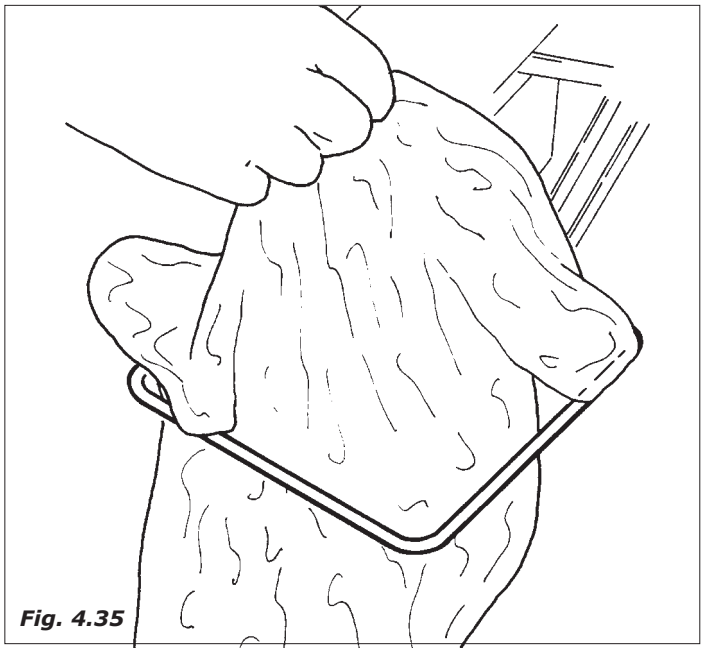
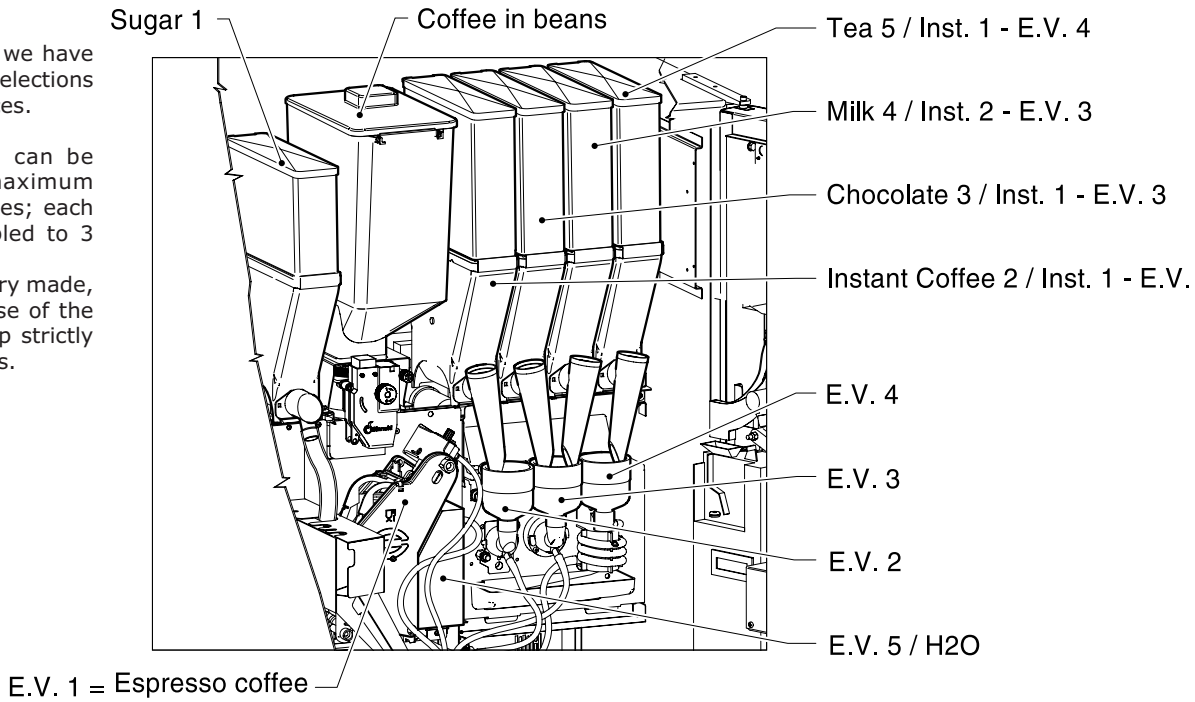


Fig. 4.35

LAYOUT ESPRESSO

With the new dose menu we have the possibility to create selections with the required sequences.

Therefore any selection can be combined, creating a maximum sequence of 3 electrovalves; each electrovalve can be coupled to 3 products at most.
These couplings are factory made, therefore, for a correct use of the distributor we should keep strictly to the following indications.

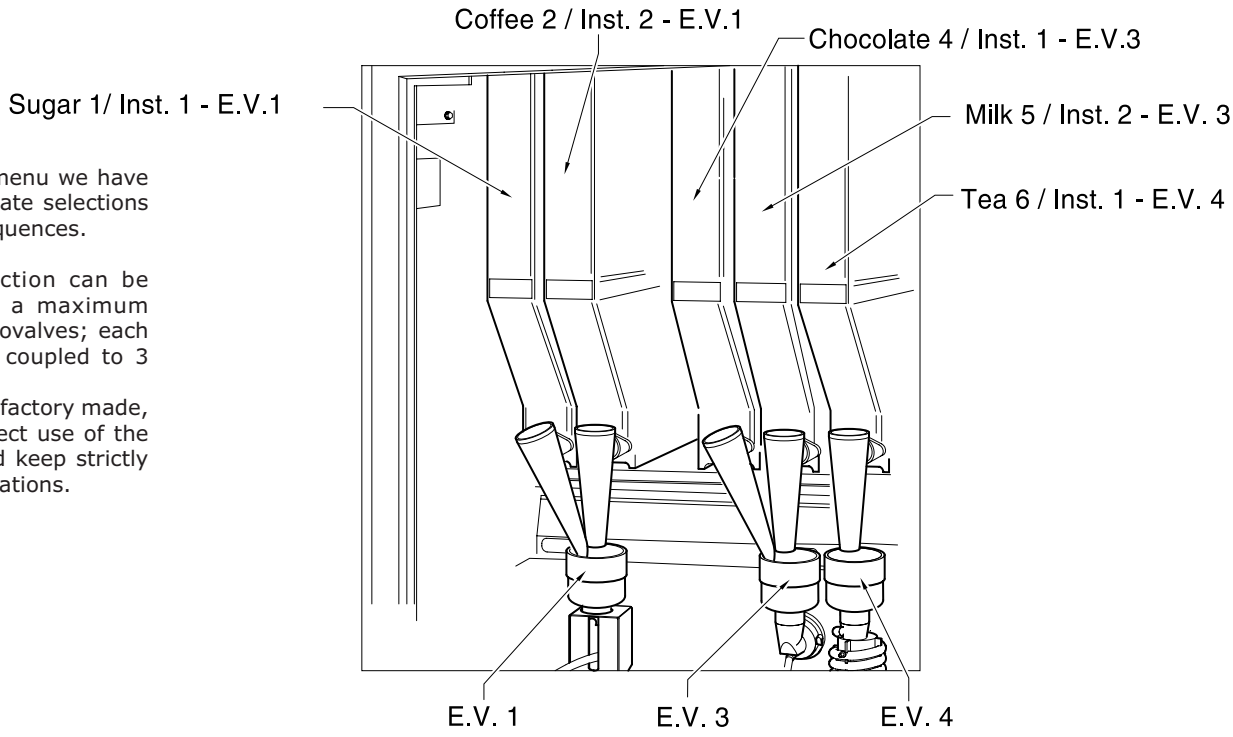


	FIRST SOUP	SECOND SOUP
EV1 Espresso coffee	0	0
EV2 Deka	DEKA	0
EV3 Milk/Choc	CHOC.	MILK
EV4 Tea	TEA	0

LAYOUT INSTANT

With the new dose menu we have the possibility to create selections with the required sequences.

Therefore any selection can be combined, creating a maximum sequence of 3 electrovalves; each electrovalve can be coupled to 3 products at most.
These couplings are factory made, therefore, for a correct use of the distributor we should keep strictly to the following indications.



	FIRST SOUP	SECOND SOUP
EV1 Coffee / Sugar	SUGAR	COFFEE
EV2 Not used	-	-
EV3 Milk/Choc	CHOC.	MILK
EV4 Tea	TEA	0

5.0 SOFTWARE INSTRUCTIONS

5.1 PROGRAMMING MENU

The PROGRAMMING mode is entered by pressing the 'PROG' key. The display will require the insertion of the Password.

Through the programming panel the following functions can be accessed :

- Powder test – Active only in the Menu Doses
- Water test – Active only in the Menu Doses
- Full test – Active only in the Menu Doses
- Increase
- Decrease
- Shift
- Enter
- Escape

Tests are relevant to Selections and Pre-Selections.

Espresso panel

EXTRA SUGAR				NO CUP	
EXTRA MILK				STOP SUGAR	
	BITTER	SWEET		BITTER	SWEET
ESPRESSO COFFEE		5	BLACK COFFEE		6
WHITE COFFEE		7	CAPPUCCINO		8
MOCACCINO		9	CAFFÈ LATTE		10
ESPRESSO COFFEE DECAF.		25	BLACK COFFEE DECAF.		26
WHITE COFFEE DECAF.		27	CAPPUCCINO DECAF.		28
MOCACCINO DECAF.		29	CAFFÈ LATTE DECAF.		30
MILK		11	MILK WITH COFFE		12
MILK AND COCOA		13	MILK WITH COFFEE DECAF.		14
CHOCOMILK		15	CHOCOLATE		16
TEA		17	STRONG CHOCOLATE		18
Not Available		19	ONLY CUP		20

Instant panel

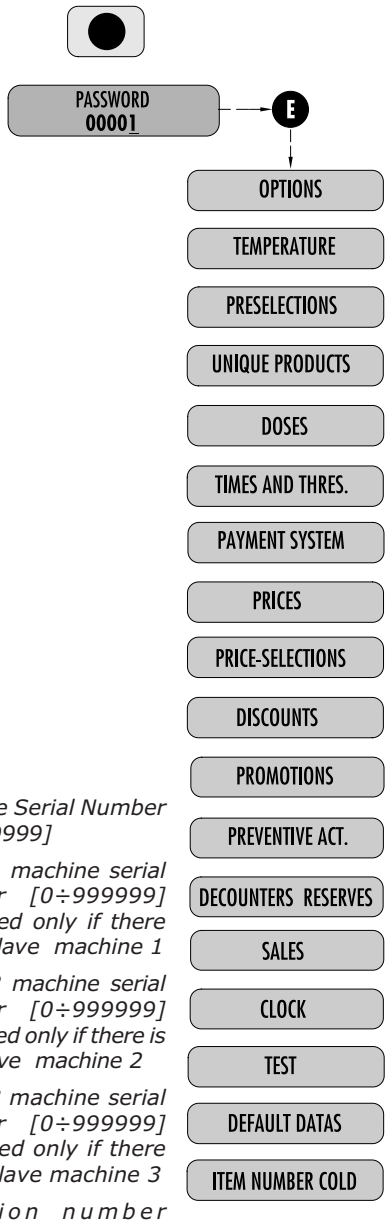
EXTRA SUGAR				NO CUP	
EXTRA MILK				STOP SUGAR	
	BITTER	SWEET		BITTER	SWEET
ESPRESSO COFFEE		5	BLACK COFFEE		6
WHITE COFFEE		7	CAPPUCCINO		8
MOCACCINO		9	CAFFÈ LATTE		10
Not Available		25	Not Available		26
Not Available		27	Not Available		28
Not Available		29	Not Available		30
Not Available		11	STRONG CHOCOLATE		12
Not Available		13	CHOCOMILK		14
CHOCOLATE		15	Not Available		16
TEA		17	HOT WATER		18
Not Available		19	ONLY CUP		20

Programming panel (Espresso / Instant)

Pre-Selections 1				Pre-Selections 2	
Pre-Selections 3				Pre-Selections 4	
	BITTER	SWEET		BITTER	SWEET
INCREASE DIGIT +		5	QUIT MENU		6
DECREASE DIGIT –		7			8
MOVE CURSOR ⌴		9			10
ENTER ↵		25			26
In the dose menu, show the box name ev or mixer		27			28
		29			30
		11			12
		13	In the dose menu, perform only powder test		14
In the dose menu, perform only water test		15	In the dose menu, perform complete test		16
		17			18
		19			20

The main programming menu, has the follwing items:

Options
Temperature
Preselection
Unoque Products
Doses
Time and Thresholds
Payment systems
Prices
Price-Selections
Discounts
Promotions
Preventive Action
Powder Decounters
Sales
Clock
Test
Default data
Cold Item Number



5.1.1 Menu 'Options'

Serial Number — *Machine Serial Number [0÷999999]*

SN slave 1 — *Slave 1 machine serial number [0÷999999] Displayed only if there is the slave machine 1*

SN slave 2 — *Slave 2 machine serial number [0÷999999] Displayed only if there is the slave machine 2*

SN slave 3 — *Slave 3 machine serial number [0÷999999] Displayed only if there is the slave machine 3*

Location no. — *Location number [0÷65535]*

Customer no. — *Customer number [0÷65535]*

Language — *Language [Italian, French, English, Spanish, German, Dutch, Portoguese, English, Catalan]*

Telephone Code — *Definition of International Telephone Country code [000]*

Insta.grind. — *Enable instantaneous grinding [Si/No]*

Boiler make-up

Expresso — *Make-up enable [Yes/No]. If ON, every 6 hours the pump is activated and the water electrovalve opened for 3" in order to make up the boiler. Moreover, all machines fitted with expresso boilers an automatic make-up is managed in order to guarantee the drink quality constant in time*

Cleaning — *Enable cleaning with clock [On/Off]*

Cleaning cycle — *Enable cleaning cycle [On/Off]. It enables a mixer cleaning after 30 minutes from the activation which is followed by a second one after 12 hours without preparations. Therefore, a daily cleaning of the mixer is ensured.*

PWD 1 — *It selects the Password 1 [00000]- Access to the complete programming menu*

PWD 2 — *It selects the Password 2 [00000] – Access to the reduced programming menu;*

The reduced menu is determined through WinBianchi.

PWD 3 — *It selects the Password 3 [00000] – Access to the Sale menu.*

2 FB coffees — *Enable double FB coffee [On/Off] Only if Fresh Brew management*

Fresh Brew Tea — *FB tea enabled [On/Off] Only if Fresh Brew managemet*

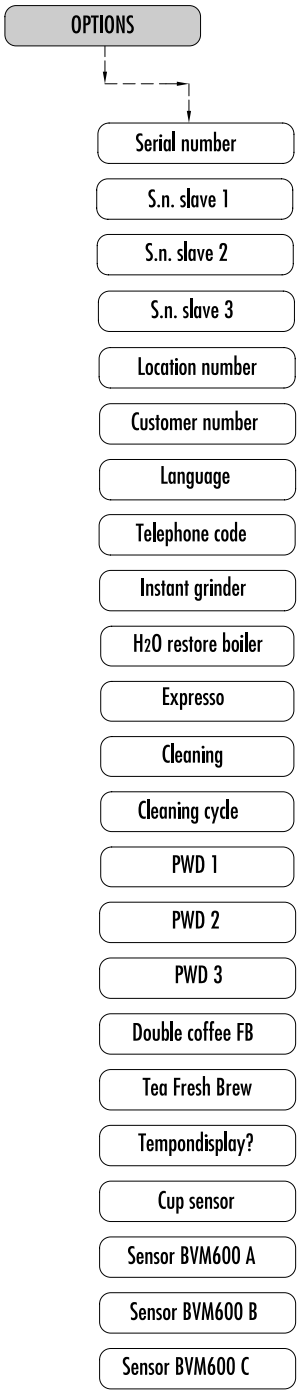
Display Temp — *It enables temperature display for BVM600 [Yes/No] Alternatively, it displays the cool slave machine temperature*

Cup Sens — *Enables cup sensor [On/Off]*

Sens. BVM600 A — *Enables Slave 1 product fall sensor [On/Off]*

Sens. BVM600 B — *Enables Slave 2 product fall sensor [On/Off]*

Sens. BVM600 C — *Enables Slave 3 product fall sensor [On/Off]*



5.1.2 Menu 'Temperature'

Boiler Temp. 1 Slave X — *Boiler 1 temperature [70÷ 110 °C] The wording Slave X indicates the slave number linked to the MASTER distributor.*

Boiler Temp. 2 Slave X — *Boiler 2 temperature temperature [70÷ 110 °C] The wording Slave X indicates the slave number linked to the MASTER distributor.*

Cool Unit temp. Slave X — *Cool water temperature [0÷ 15 ° C] The wording Slave X indicates the slave number linked to the MASTER distributor.*

Inner temp. Slave X — *Inner A temperature [5 ÷ 15 °C for the SNACK model and 1÷ 15 °C for the PAN model, > 15 °C = Off] Sets the operating temperature of D.A. The wording Slave X indicates the slave number linked to the MASTER distributor.*

Delta Temp. Slave X — *Cool temperature hysteresis A [1.0 ÷ 5.0 ° C] It determines the interval with respect to the programmed temperature to connect and disconnect the compressor. The wording Slave X indicates the slave number linked to the MASTER distributor.*

Offset temp. Slave X — *Cool Offset temperature A [-5÷ 5 ° C] The wording Slave X indicates the slave number linked to the MASTER distributor.*

Delta Safety Slave X — *Delta Cool Safety A [5÷ 50 ° C] It is enabled only in PAN configuration, it determines the safety temperature. The wording Slave X indicates the slave number linked to the MASTER distributor.*

T Safety Slave X — *Safety T Cool A [1÷ 9 hours] Interval expressed in hours within which the selections of the 2 lower cabinets are still available despite the cell temperature is higher than 7 ° C. (Safety temperature) for instance after the installation or the loading of the distributor. The wording Slave X indicates the slave number linked to the MASTER distributor.*

Defrost after Slave X — *Defrost frequency Cool A [1÷ 12 hours] Interval expressed in hours in order to defrost the radiator. The wording Slave X indicates the slave number linked to the MASTER distributor.*

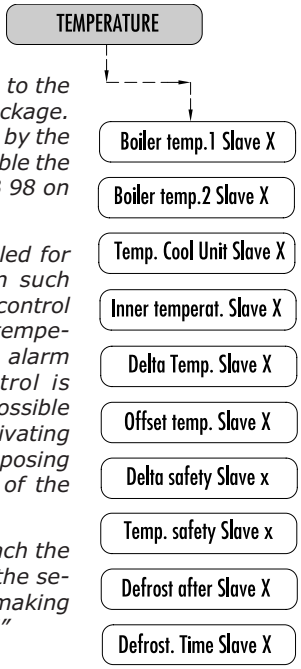
Defrost for Slave X — *Duration cool defrost A [1÷ 30 minutes] Interval expressed in minutes which determines the duration of the deactivation of the compressor for the defrosting. The wording Slave X indicates the slave number linked to the MASTER distributor.*

PAN cycle:

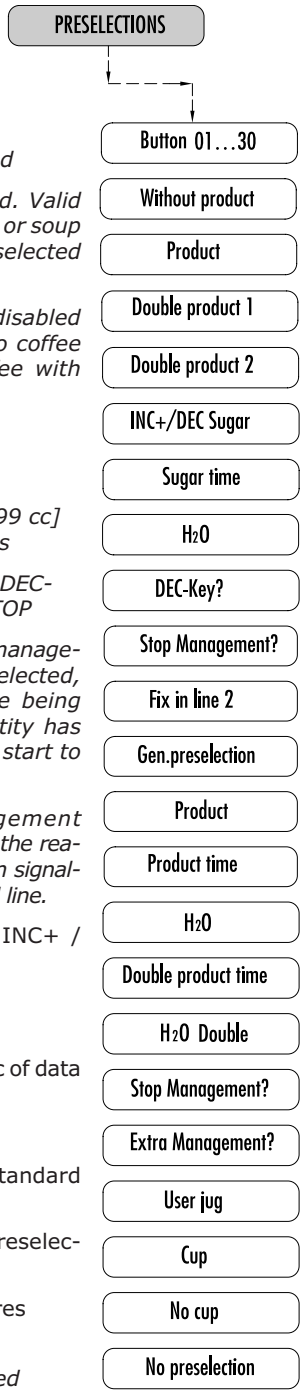
The cycle provides for the activation of the distributor, so that, if the probe detects an internal temperature ≥ to the safety one, there is the selection blockage. Within a limit time of 30 sec, signalled by the buzzer activation, it is possible to disable the alarm by entering the code A 98 or B 98 on the keyboard.

The temperature alarm will be disabled for the programmed safety time; when such time expires the safety temperature control will be enabled. If on, the detected temperature is < than the safety one (non alarm condition), such temperature control is enabled. The reset of such alarm is possible both in maintenance mode, and deactivating and activating the machine, by composing the code A98 or B98 within 30 sec of the buzzer operation.

If the inner temperature does not reach the preset value as safety temperature, the selections from 51 to 68 are blocked making them automatically "NOT AVAILABLE"



5.1.3 Menu 'Preselections'



All push buttons can be preset

Push button 01…30

Withoth product

Product — *[0…9] 0= disabled*

Double product 1 — *[0…9]0= disabled. Valid only for drinks with expresso coffee or soup coffee. It replaces coffee with selected soup.*

Double product 2 — *[0…9] 0= disabled Valid only for drinks with expresso coffee or soup coffee. It replaces coffee with selected soup.*

INC+ / DEC - Sugar

T sugar — *[0 …25.5 s]*

H_2O — *[0…25.5 s] or[0…999 cc] Only for soup drinks*

DEC-? Key — *01 …30 Choose the DEC- push button and possible STOP*

Stop Management? — *STOP preset management [On/Off] When the drink is selected, small slowly scrolling squares are being displayed. Once the desired quantity has been selected, the distributor will start to prepare the drink.*

Fixed in line 2? — *Sugar bar management always on the second line instead of the reading Ready [On/Off] If ON the alarm signallings are not displayed in the second line.*

Display management of the preset INC+ / DEC- Sugar

Line **1**: Sugar

Line **2**: ■ ■ ■ ■ ■ ■ ■ □

Each small square is equivalent to x sec of data sugar from the following equation:

= (A+B)/8 ■

A = Q.ty in seconds of sugar in the standard drink

B = Q.ty in seconds of sugar in the preselection + sugar

8 = Maximum number of small squares

Generic preset

Product — *[0…9] = disabled*

T product — *[0…25.5 s]*

H_2O — *[0…25.5 s] or [0…999 cc]*

T double product — *[0…25.5 s]*

H_2O double — *[0…25.5 s] or [0..999 cc] If 0 ++ disabled.*

Stop? Management — *Preset STOP Management [On/Off] When the drink is selected small slowing scrolling small squares are being displayed. Once the desired H2 0 Volume is selected, the distributor starts to prepare the drink.*

Extra Management? — *Extra product management [On/Off] If on it performs + and ++, if off – and --. Of course if Stop Management is Off.*

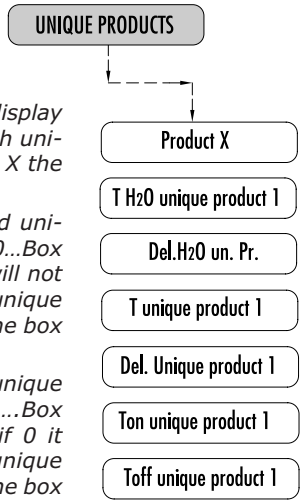
User jug — *It manages the push button as JUG PUSH BUTTON 1..12 through increase of 1. [On/Off] If ON the change of menu Doses is not displayed. The jug will be managed only on the selections which are enabled for this process.*

Cup

No Cup

No Preselection

5.1.4 Menu 'Unique Products"



Product X *It selects the first unique product for all the selections [0 …No Canisters] 0= no unique product (if 0 it will not even display the second , the third and the fourth unique product)- through push button X the box name is displayed*

Product X *It selects the second unique product for all the selections [0…Box No] 0= no unique product (if 0 it will not even display the third and fourth unique product)- through push button X the box name is displayed*

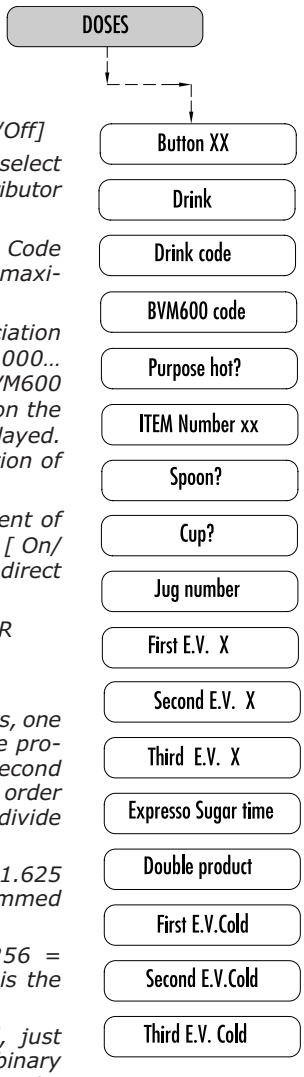
Product X *It selects the third unique product for all the selections [0….Box number] 0= no second product (if 0 it will not even display the fourth unique product) – through X push button the box name is displayed.*

T H_2O Unique product 1	*T EV relevant to product 1 [0÷99.9 s]*
D H_2O Unique product 1	*EV delay relevant tot o Product 1 [0÷ 25.5 s]*
T Unique product 1	*T Product 1 [0÷ 25.5 s]*
D Unique product 1	*Product 1 motoreductor delay [0÷25.5 s]*
Ton Unique product 1	*T on unique product 1 motoreductor [0.. 25.5 s]*
Toff Unique product 1	*T off unique product 1 motoreductor [0.. 25.5 s]*
T H_2O Unique product 2	*T EV relevant to the Product 1 [0÷ 99.9 s]*
D H_2O Unique product 2	*EV delay relevant to the Product 1 [0÷ 25.5 s]*
T Unique product 2	*T product 1 [0÷ 25.5 s]*
D Unique product 2	*Motoreductor delay Product 1 [0÷99.9 s]*
Ton Unique product 2	*T on motoreductor unique product 2 [0÷ 25.5 s]*
Toff Unique product 2	*T off motoreductor unique product 2 [0÷ 25.5 s]*
T H_2O Unique product 3	*T EV relevant to Product 3 [0÷99.9 s]*
D H_2O Unique product 3	*EV delay relevant to Product 2 [0 ÷ 25.5 s]*
T Unique product 3	*T product 3 [0 ÷ 25.5 s]*
D Unique product 3	*Motoreductor delay Product 3 [0 ÷ 25.5 s]*
Ton Unique product 3	*T on motoreductor unique 3 [0 ÷ 25.5 s]*
Toff Unique product 3	*T off motoreductor produced*

In each phase of the menu Unique Products through the X push button the box name is displayed.

The unique product is provided only if in the menu time and doses the same box having the product time set different from 0 is recalled.

5.1.5 Menu 'Doses'



Button XX *Selection of the push button to configure [1 ..30] for linear key board, [1…32] for Multibrand keyboard*

Drink *Enable drink [On/Off]*

Drink Code *XXX the user can select the selection code for the heat distributor [000… A99… B99]*

Menu enabled exclusively if it is in Code On keyboard configuration. For a maximum of 30 drinks.

Code BVM600 *Push button association for the combination BVM600 [000… A00…B00] Menu present only if BVM600 direct ON and through menu Spoon the Dose submenus are no longer displayed. If 000 it disables the direct selection of BVM600.*

Purpose Hot? *Add the management of a second hot selection at user will [On/ Off] Menu present only if BVM600 direct ON.*

ITEM Number xx *Code ITEM NUMBER [0÷254]*

ITEM NUMBER

The ITEM NUMBER is formed by 2 bytes, one byte must be destined to contain the programmed code by the user and the second one contains up to 8 preselections. In order to obtain the programmed code just divide by 256 and take the whole part:

for example: 416 --> 416:256 = 1.625 the whole part is 1 and is the programmed code

for example: 26528 --> 26528:256 = 103.625 the whole part is 103 and is the programmed code.

If the selections are to be considered, just transform the rest of division into binary and consider each bit according to the following table:

Bit	***Description***
0	*No product*
1	*Double product*
2	*INC+ / ++*
3	*DEC - / --*
4	*Stop Product*
5	*Jug*
6	*(Always 0)*
7	*Cup/No Cup*

ex:: 25984 --> 25984 : 256 = 101.5 the rest is 0.5, multiplied by 256= 128, turned into binary= 1000000 which corresponds to a hot drink without glass..

ex:: 26528 --> 26528 : 256 = 103.625 the rest is è 0.625, multiplied by r 256 = 160, turned into binary = 10100000

Spoon?	*It enables supply of spoon [Yes/No] (Only if spoon device Yes and Always Spoon No in the Configuration menu)*
Cup?	*It enables supply of cup [Yes/No] (Only if Cup Management Yes and Always Cup No in the Configuration menu)*
No Jug X	*Supply number for this selection [0÷99] (if unique jug Off in the Configuration menu) If 0 jug disabled*
First E.V. X	*Number 1^EV [0…8- Cold] 0=E.V. it is not coupled with this push button*
T first E.V.	*T opening first E.V. [0…99.9 s]*
D first E.V.	*Opening delay first E.V. [0…25.5 s]*
T Mixer 1E.V.	*T Mixer coupled with first E.V. [0…25.5 s]*
D Mixer 1^E.V.	*Mixer delay coupled with first E.V. [0…25.5 s]*

T product X	*T first box coupled with first 1st E.V. [0…99.9 s]*
D product X	*First box delay couple with 1st E.V. [0…25.5 s]*
Ton product X	*T on motoreducer first product [0…25.5 s]*
Toff product X	*T off motoreducer first product [0…25.5 s]*
T product X	*T second box coupled with 1st E.V. [0…99.9 s]*
D product X	*Second box delay coupled with1st E.V. [0…25.5 s]*
Ton product X	*T on motoreduer second product [0…25.5 s]*
Toff product X	*T off motoreducer second product [0…25.5 s]*
T product X	*T third box coupled with 1st E.V. [0…99.9 s]*
D product X	*Delay third box coupled with 1 E.V. [0…25.5 s]*
Ton product X	*T on motoreducer third product [0…25.5 s]*
Toff product X	*T off motoreducer third product [0…25.5 s]*
Second E.V. X	*Number 1st EV [0…8-lCold] 0=E.V. not coupled with this push button*
T 2nd E.V.	*T opening second E.V. [0…99.9 s]*
D 2nd E.V.	*Delay opening second E.V. [0…25.5 s]*
T Mixer 2E.V.	*T Mixer coupled with second E.V. [0…25.5 s]*
D Mixer 2ndE.V.	*Delay Mixer coupled with second E.V. [0…25.5 s]*
T product X	*T 1to box coupled with second E.V. [0…25.5 s]*
D product X	*Delay 1st box coupled to 2nd E.V.[0…25.5 s]*
Ton product X	*T on motoreducer first product [0…25.5 s]*
Toff product X	*T off motoreducer first product [0…25.5 s]*
T product X	*T 2nd box coupled with 2nd E.V. [0…25.5 s]*
D product X	*Delay 2nd box coupled with 2nd E.V. [0…25.5 s]*
Ton product X	*T on motoreducer second product [0…25.5 s]*
Toff product X	*T off motoreducer second product [0…25.5 s]*
T product X	*T 3rd box coupled with 2nd E.V. [0…25.5 s]*
D product X	*Delay third box coupled with 2nd E.V. [0…25.5 s]*
Ton product X	*T on motoreducer third product [0…25.5 s]*
Toff product X	*T off motoreducer third product [0…25.5 s]*
Third E.V. X	*Number 1st EV [0…8-Cold] 0=E.V. not coupled with this push button*
T 3rd E.V.	*T opening third E.V. [0…99.9 s]*
D 3rd E.V.	*Dealy opening third E.V. [0…25.5 s]*
T Mixer 3E.V.	*T Mixer coupled with third E.V. [0…25.5 s]*
D Mixer 3^E.V.	*Delay mixer coupled with third E.V. [0…25.5 s]*
T product X	*T 1st box coupled with third E.V. [0…25.5 s]*
D product X	*Delay 1st box coupled with third E.V. [0…25.5 s]*
Ton product X	*T on motoreducer first product [0…25.5 s]*
Toff product X	*T off motoreducer first product [0…25.5 s]*
T product X	*T 2nd box coupled with third E.V. [0…25.5 s]*
D product X	*Delay 2nd box coupled with third E.V. [0…25.5 s]*
Ton product X	*T on motoreducer second product [0…25.5 s]*
Toff product X	*T off motoreducer second product [0…25.5 s]*
T product X	*T 3rd box coupled with third E.V. [0…25.5 s]*
D product X	*Delay 3rd box coupled with third E.V. [0…25.5]*
Ton product X	*T on motoreducer third product [0…25.5 s]*
Toff product X	*T off motoreducer third product [0…25.5 s]*
T Sugar Expresso X	*T sugar expresso [0…25.5 s]*

Double Product 1	*Parameters present only if Preselection Double Product 1 ON*
E.V. X	*Number 1st EV [0…8] 0=E.V. not coupled with this push button*
T E.V. d.p.	*T opening E.V. [0…99.9 s]*
D E.V. d.p.	*Delay opening E.V. [0…25.5 s]*
T Mixer 1st E.V.	*T Mixer coupled with E.V. [0…25.5 s]*
D Mixer 1st E.V.	*Delay Mixer coupled with E.V. [0…25.5 s]*
T product X	*T first box coupled with E.V. [0…99.9 s]*
D product X	*Delay first box coupled with E.V. [0…25.5 s]*
Ton product X	*T on motoreducer double product [0…25.5 s]*
Toff product X	*T off motoreducer double product [0…25.5 s]*
Double product 2	*Parameters present only if Preselection Double Product 2 ON*
E.V. X	*Numbre 1stEV [0…8] 0=E.V. not coupled with this push button*
T E.V. d.p.	*T opening E.V. [0…99.9 s]*
D E.V. d.p.	*Delay opening E.V. [0…25.5 s]*
T Mixer 1E.V.	*T Mixer coupled with E.V. [0…25.5 s]*
D Mixer 1^E.V.	*Delay Mixer coupled with E.V. [0…25.5 s]*
T product X	*T first box coupled with E.V. [0…99.9 s]*
D product X	*Delay first box coupled with E.V. [0…25.5 s]*
Ton product X	*T on motoreducer double product [0…25.5 s]*
Toff product X	*T off motoreducer double product [0…25.5 s]*

If first EV is cold the distributor has the following menu:

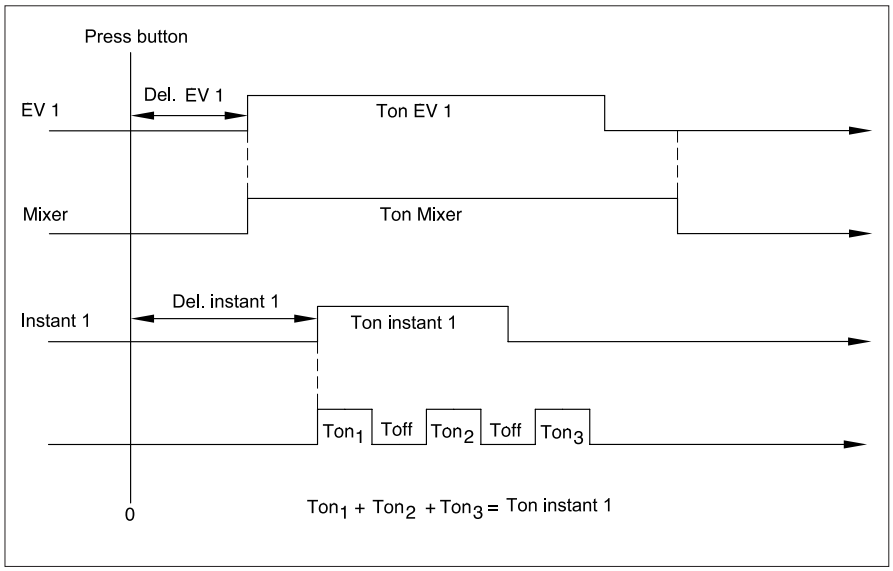
First E.V.Cold	
T OUT 1 Cold	*T opening OUT 1 Cold [0…99.9 s]*
D OUT 1 Cold	*Delay opening OUT 1 Cold [0…25.5 s]*
T OUT 2 Cold	*T opening OUT 2 Cold [0…99.9 s]*
D OUT 2 Cold	*Delay opening OUT 2 Cold [0…25.5 s]*
T OUT 3 Cold	*T opening OUT 3 Cold [0…99.9 s]*
D OUT 3 Cold	*Delay opening OUT 3 Cold [0…25.5 s]*
T OUT 4 Cold	*T opening OUT 4 Cold [0…99.9 s]*
D OUT 4 Cold	*Delay opening OUT 4 Cold [0…25.5 s]*
T OUT 5 Cold	*T opening OUT 5 Cold [0…99.9 s]*
D OUT 5 Cold	*Delay opening OUT 5 Cold [0…25.5 s]*
T OUT 6 Cold	*T opening OUT 6 Cold [0…99.9 s]*
D OUT 6 Cold	*Delay opening OUT 6 Cold [0…25.5 s]*
T Mixer 1st E.V.	*T Mixer coupled with first E.V. [0…25.5 s]*
D Mixer 1stE.V.	*Dealy Mixer coupled with first E.V. [0…25.5 s]*
T product X	*T first box coupled with 1st E.V. [0…99.9 s]*
D product X	*Delay first box coupled with 1st E.V. [0…25.5 s]*
Ton product X	*T on motoreducer first product [0…25.5 s]*
Toff product X	*T off motoreducer first product [0…25.5 s]*
T product X	*T second box coupled with 1st E.V. [0…99.9 s]*
D product X	*Delay second box coupled with1st E.V. [0…25.5 s]*
Ton product X	*T on motoreducer second product [0…25.5 s]*
Toff product X	*T off motoreducer second product [0…25.5 s]*
T product X	*T third box coupled with 1st E.V. [0…99.9 s]*
D product X	*Delay third box coupled with 1 E.V. [0…25.5 s]*
Ton product X	*T on motoreducer third product [0…25.5 s]*
Toff product X	*T off motoreducer third product [0…25.5 s]*

Second E.V.Cold

T OUT 1 Cold	*T opening OUT 1 Cold [0…99.9 s]*
D OUT 1 Cold	*Delay opening OUT 1 Cold [0…25.5 s]*
T OUT 2 Cold	*T opening OUT 2 Cold [0…99.9 s]*
D OUT 2 Cold	*Delay opening OUT 2 Cold [0…25.5 s]*
T OUT 3 Cold	*T opening OUT 3 Cold [0…99.9 s]*
D OUT 3 Cold	*Delay opening OUT 3 Cold [0…25.5 s]*
T OUT 4 Cold	*T opening OUT 4 Cold [0…99.9 s]*
D OUT 4 Cold	*Delay opening OUT 4 Cold [0…25.5 s]*
T OUT 5 Cold	*T opening OUT 5 Cold [0…99.9 s]*
D OUT 5 Cold	*Delay opening OUT 5 Cold [0…25.5 s]*
T OUT 6 Cold	*T opening OUT 6 Cold [0…99.9 s]*
D OUT 6 Cold	*Delay opening OUT 6 Cold [0…25.5 s]*
T Mixer 2E.V.	*T Mixer coupled with second E.V. [0…25.5 s]*
D Mixer 2nd E.V.	*Delay Mixer coupled with second E.V. [0…25.5 s]*
T product X	*T 1st box coupled with second E.V. [0…25.5 s]*
D product X	*Delay 1st box coupled with 2nd E.V.[0…25.5 s]*
Ton product X	*T on motoreducer first product [0…25.5 s]*
Toff product X	*T off motoreducer first product [0…25.5 s]*
T product X	*T 2nd box coupled with 2nd E.V. [0…25.5 s]*
D product X	*Delay 2nd box coupled with2nd E.V. [0…25.5 s]*
Ton product X	*T on motoreducer second product [0…25.5 s]*
Toff product X	*T off motoreducer second product [0…25.5 s]*
T product X	*T 3rd box coupled with 2nd E.V. [0…25.5 s]*
D product X	*Delay third box coupled with 2nd E.V. [0…25.5 s]*
Ton product X	*T on motoreducer third product [0…25.5 s]*
Toff product X	*T off motoreducer third product [0…25.5 s]*

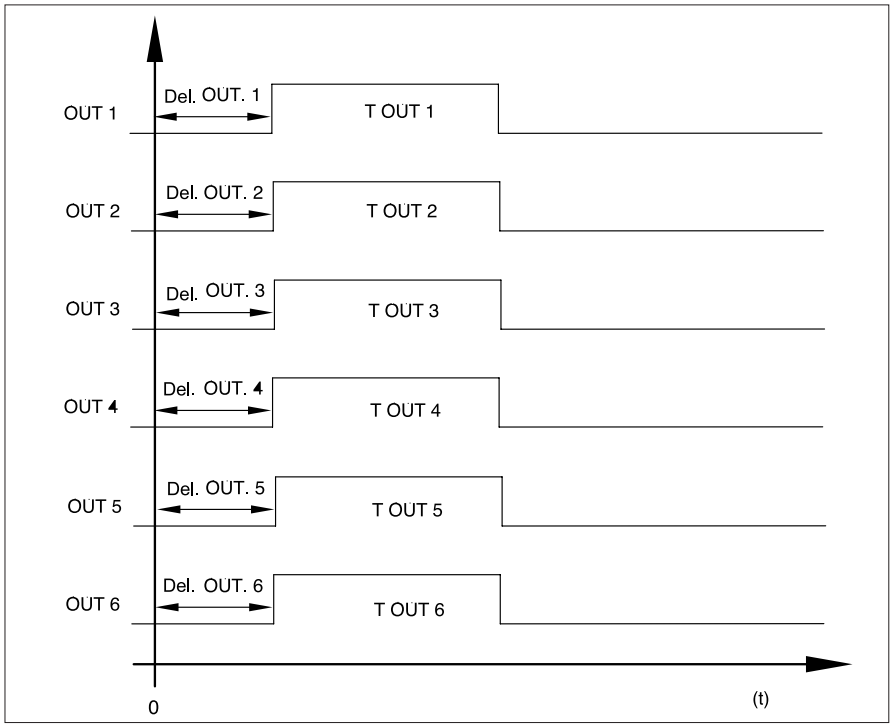
Third E.V. Cold

T OUT 1Cold	*T opening OUT 1 Cold [0…99.9 s]*
D OUT 1 Cold	*Delay opening OUT 1 Cold [0…25.5 s]*
T OUT 2 Cold	*T opening OUT 2 Cold [0…99.9 s]*
R OUT 2 Cold	*Delay opening OUT 2 Fredda [0…25.5 s]*
T OUT 3 Cold	*T opening OUT 3 Cold [0…99.9 s]*
D OUT 3 Delay	*Delay opening OUT 3 Cold [0…25.5 s]*
T OUT 4 Delay	*T opening OUT 4 Cold [0…99.9 s]*
D OUT 4 Cold	*Delay opening OUT 4 Cold [0…25.5 s]*
T OUT 5 Cold	*T opening OUT 5 Cold [0…99.9 s]*
D OUT 5 Cold	*Delay opening OUT 5 Cold [0…25.5 s]*
T OUT 6 Cold	*T opening OUT 6 Cold [0…99.9 s]*
D OUT 6 Cold	*Delay opening OUT 6 Cold [0…25.5 s]*
T Mixer 3E.V.	*T Mixer couped with third E.V. [0…25.5 s]*
D Mixer 3rd E.V.	*Delay Mixer coupled with third E.V. [0…25.5 s]*
T product X	*T 1st box coupled with third E.V. [0…25.5 s]*
D product X	*Delay 1st box coupled with third E.V. [0…25.5 s]*
Ton product X	*T on motoreducer first product [0…25.5 s]*
Toff product X	*T off motoreducer first product [0…25.5 s]*
T product X	*T 2nd box coupled with third E.V. [0…25.5 s]*
D product X	*Delay 2nd box coupled with third E.V. [0…25.5 s]*
Ton product X	*T on motoreducer second product [0…25.5 s]*
Toff product X	*T off motoreducer second product [0…25.5 s]*
T product X	*T 3rd box coupled with third E.V. [0…25.5 s]*
D product X	*Delay 3rd box coupled with third E.V. [0…25.5]*
Ton product X	*T on motoreducer third product [0…25.5 s]*
Toff product X	*T off motoreducer third product [0…25.5 s]*

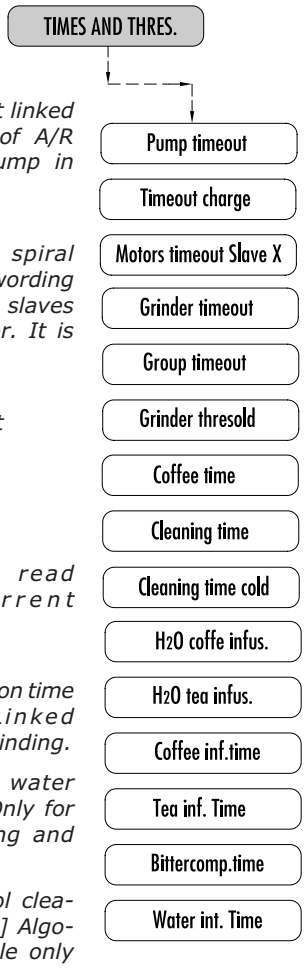


In each phase of the Doses Menu, through the push button the box name and the EV name are displayed.

Time diagram output Cold expansion



5.1.6 Menu 'Times and thresholds"



Pump timeout *Pump timeout [0÷90 s]*

Timeout charge *Timeout water charge [5÷240 s] Charge time out linked to Water Entry EV in DC in case of A/R distributor , o to the immersion pump in case of S/A distributor.*

T-out motors slave X *Timeout spiral motors BVM600 [0÷25.0 s] . The wording Slave X indicates the number of slaves linked to the MASTER distributor. It is managed only by WinBianchi.*

Grinder timeout *Grinder timeout [0÷25.5 s]*

Group timeout *Timeout group [0÷10.0 s]*

Grinder threshold *Threshold to read grinder current [5.0÷18.0]*

Coffee time *Coffee preparation time [2.9÷23.0 s]. Linked to automatic grinding.*

T cleaning *Time cleaning water [0÷25.5 s] – Only for setting Cleaning and Cleaning Cycle.*

T. clean. cool *Water time cool cleaning [0÷25.5 s] Algorithm changeable only by WinBianchi.*

H_2O coffee inf. *Time water coffe inf [0÷25.5 s] Only for models Fresh Brew*

H_20 tea inf. *Time water tea inf [0÷25.5 s] Only for models Fresh Brew*

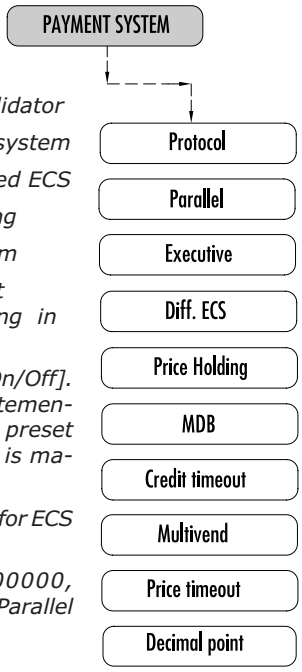
Coffe infusion *Coffee infusion time [0÷25.5 s] Only for models Fresh Brew*

Tea infusion *Tea infusion time[0÷25.5 s] Only for models Fresh Brew*

Bitter Comp. *Bitter compensation time[0÷10.0 s] Only for Fresh Brew*

Water init *Time water integration [0÷6.0 s] Only for polisulphone boilers. If in D.A. through this type of boiler drinks are performed in an interval lower than 4 minutes one from the other, when the pump starts, the amount of water required by the integration setting is loaded from the water input electrovalve . Input cool water is mixed with hot water in the boiler to avoid air bubbles in the water circuit which would cause unsteadiness for doses. This is the reason why the correct combinations should be found between water integration time and desired drink temperature in the cup.*

5.1.7 Menu 'Payment system'



Protocol *Selection of Pay sytem (Up-Down Scroll menu)*

Parallel *Enable Parallel validator*

Executive *Enable executive system*

ECS diff. *Enable differentiated ECS*

Price Holding *Enable Price Holding*

MDB *Enable MDB system*

Credit timeout *Management credit timeout before going in overpay [0…180s]*

Multivend *Enable multisale [On/Off]. If ON the credit remains permanentemently on the display by-passing the preset timeout . If off the credit timeout is managed.*

Price timeout *Timeout price (only for ECS or price holding) [2.0÷25.0 s]*

Decimal point *Decimal point [00000, 0000.0, 000.00, 00.000] Only for Parallel protocol*

Management Exact Change :
Mmax - Pmin < Cgett then I have no change and distributor in Exact Change
Mmax - Pmin > Cgett then I have change therefore distributor in Insert amount

where
Mmax = coin Max enabled
Pmin = Price Min of the price table
Cgett = Value of coins in system
If,by selecting the Validator, the distributor is always in Exact Change

If MDB has the following menus:

Maximum change *Maximum change processed by he system [0÷9999]*

Coin changer *It activates the change lever [Yes/No]*

Maxi. coins credit *Maximum credit accepted by the system [0÷65535]*

Max cred. on key . *Maximum credit that can be loaded on the key [0÷65535]*

Ignore ExChg *Ignore the coin inhibitions if in 'exact change' [Si/No]*

Immediate change *Enable preparation of instantaneous change [On/Off] Priority on Multisale.*

Min Lev tube 1 X *Select the minimum H2 0 Volume in the tube 1 [1…20]*

Min level tube 2 X *Select the minimum H2 0 Volume in the tube 2 [1…20]*

Min level tube 3 X *Select the minimum H2 0 Volume in the tube 3 [1…20]*

Min level tube 4 X *Select the minimum quantità in the tube 4 [1…20]*

Min level tubo 5 X *Select the minimum H2 0 Volume in the tube tube 5 [1…20]*

Enab. TOKEN *Enable TOKEN [On/Off]*

Token *Setting of the value of Token1[000.00÷999.99]Enabled only if Enab.Token On*

Token 2 *Setting of the value of Token 2 [000.00÷999.99] Enabled only if Enabl. Token On*

Token 3 *Setting of the value of Token 3 [000.00÷999.99] Enabled only if Abil. Token On*

Change x Token *Enables change if the value of token is > than selection [Y/N] Enabled only if Enabl. Token On*

Re-charhe Token *Enables the re-load of the value of the token on the key [Y/N] Enabled only if Enab. Token On*

Ex.Chg. & Token *Inhibit the acceptance of token when the machine is in Exact Change [Y/N] Enabled only if Enab. Token On.*

5.1.7.1 Coins/Line

Coin 1 *Coin association - line 1 [0÷65535]*
...
Coin 16 *Coin association - line 16 [0÷65535]*

5.1.7.2 Bill/Line

Bill 1 *Bill association - line 1 [0÷65535]*
...
Bill 16 *Bill - line 16 [0÷65535]*

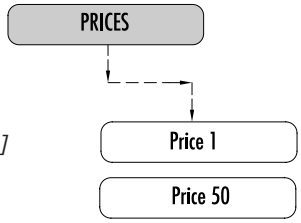
5.1.7.3 Enable Coin

Coin 1 *Enable coin 1 [On/Off]*
...
Coin 16 *Enable coin16 [On/Off]*

5.1.7.4 Enable bills

Bill 1 *Enable bill 1 [On/Off]*
...
Bill 16 *Enable bill 16 [On/Off]*

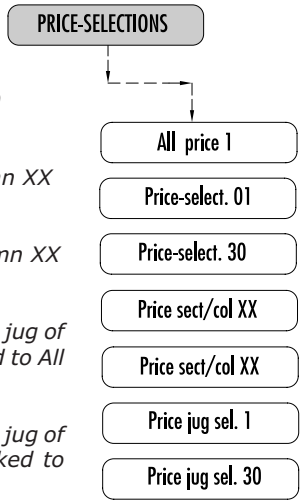
5.1.8 Menu 'Price Table'



Price 1 *Price 1 [0÷65535]*
...
Price 50 *Price 50 [0÷65535]*

5.1.9 Menu 'Price-Selection'

All price 1 *All the selections associated to price 1 [On/Off] except the preset push buttons. The price of the preset push button is associated to the relevant key*



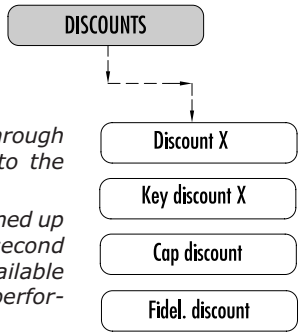
Price selec. 01 *Drink price 1 [1÷50]*
...
Price selec. 30 *Drink price 30 [1÷50]*

Price sect/col XX *Price sector/colomn XX [1÷50]*
...
Price sect/col XX *Price sector /column XX [1÷50]*

P Jug Sel 1 *Price for each single jug of the selection 1. They are not linked to All price to 1*
...
P Jug Sel 30 *Price for each single jug of the selection 30. They are not linked to All price to 1*

On the display for each line of the price table the set price will be displayed to facilitate the programming.

5.1.10 Menu 'Table discounts'



Discounts X *Discounts X=1 to 50 [0÷65535] relevant to the coins. If there is a key reader or cassless MDB enables also the second discount table .*

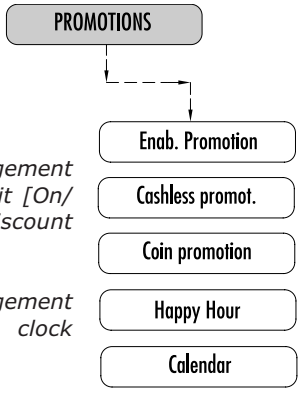
Discount Key X *Discount key X=1 to 50 [0÷65535]*

Discount cup *Discount cup both through key and coins and also relevant to the preselection No Cup*

Discount Fidelity *Discount to be summed up to the selection discount after the second selection equal to the first. It is available only for selections that have to be performed through key*

5.1.11 Menu 'Promotions'

Enable Promot *Enables promotion management [0/User/set] 0 promotions disabled*



Promo cashless *Enables the management of promotions when there is a cashless system [On/Off]*

Promo coin *Enables the management of promotion when there is credit [On/Off]. It uses discounts of the discount table*

Happy Hour *Happy Hour Management [On/Off] Available only through clock chip*

Calendar

Daily
Weekly
Monthly

If it is daily, it enables the happy hour according to the preset slots.
If it is weekly it enables the following menu:

Monday
Tuesday
Wednsday
Thursday
Friday
Saturday
Sunday

On this mode, by selecting Monday as a day of the week, happy hour is performed according to the time slots set only and exclusively each Monday of the month

If Monthly it enables the following menu:

Happy Hour 1: *OFF o XX*
Happy Hour 2: *OFF o XX*
Happy Hour 3: *OFF o XX*
Happy Hour 4: *OFF o XX*
Happy Hour 5: *OFF o XX*

By shifting the cursor UP/DOWN it is possible to select the number of the day when happy hour is to be enabled. [OFF…01…31]

Start 1 Set switch on time 1 [00:00÷23:59]
Stop 1 Set switch off time 1 [00:00÷23:59]
Start 2 Set switch on time 2 [00:00÷23:59]
Stop 2 Set switch off time 2 [00:00÷23:59]
Start 3 Set switch on time 1 [00:00÷23:59]
Stop 3 Set switch off time 1 [00:00÷23:59]
Start 4 Set switch on time 2 [00:00÷23:59]
Stop 4 Set switch off time 2 [00:00÷23:59]

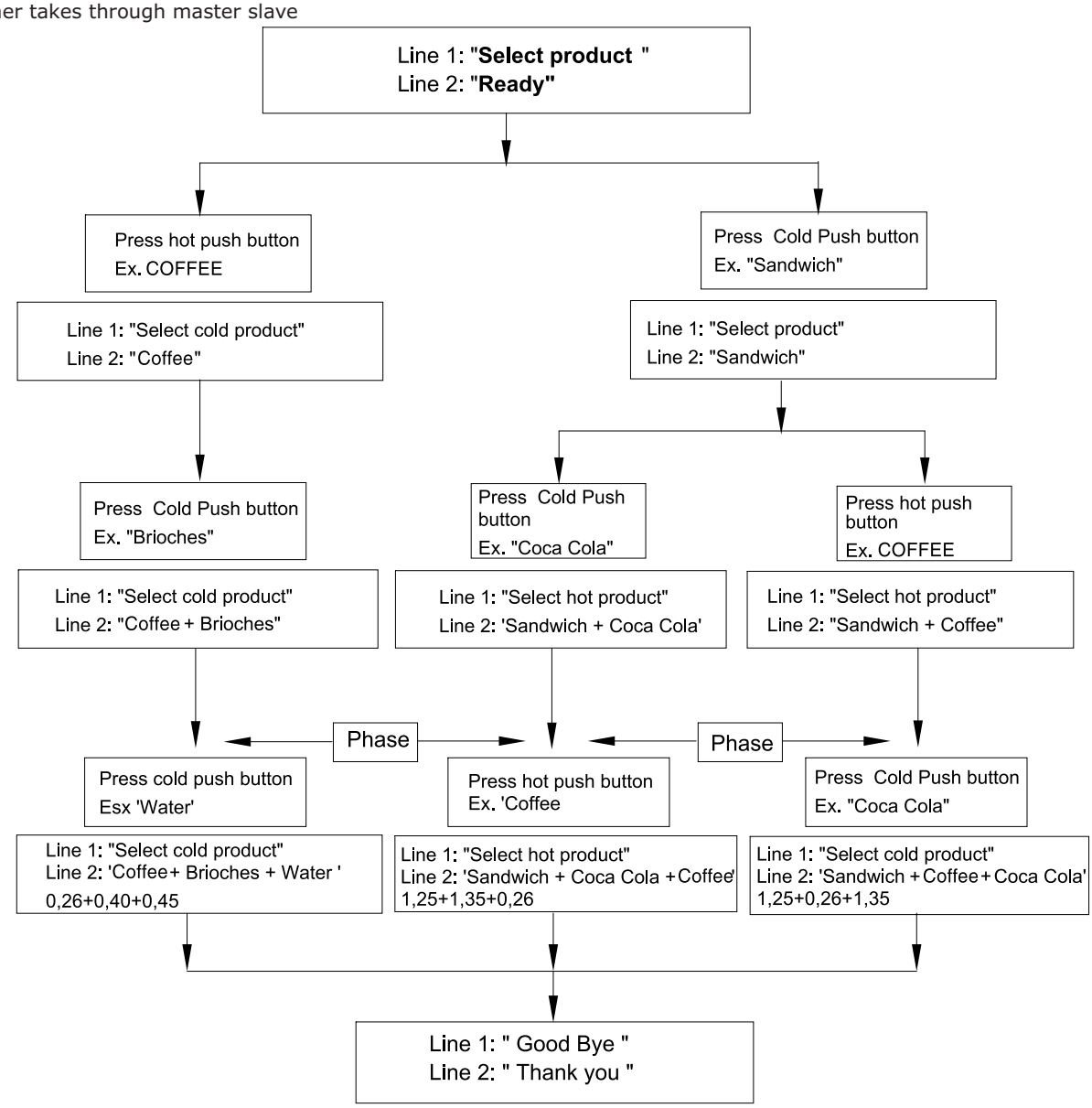
If "Start" is higher or equal to "End", the switch on time slot is not enabled.
If this is performed on both slots, the machine is not on Happy Hour promotion.

Discount H Hour Discount for all drinks in Happy Hour [0÷65535]

Example User Promotion:

Coffe price	0.30€	discount 0.04€
Price sandwich	1.35€	discount 0.10€
Price water	0.50€	discount 0.05€
Price Brioches	0.50€	discount 0.10€
Price Coca Cola	1.50€	discount 0.15€

If the customer takes through master slave



If in the PHASE 2, the user does not select the third product within the end of preparation of the second, he loses the possibility to have it in promotion.

In the User promotion, if all advised products are not taken, the performed discount is the sum of the discounts of the chosen products

Menu enabled only if the Promotion Set ON:

Select key Selection key dedicated to promotion [1..30]

Select Hot Select hot key Select hot key[1..30]

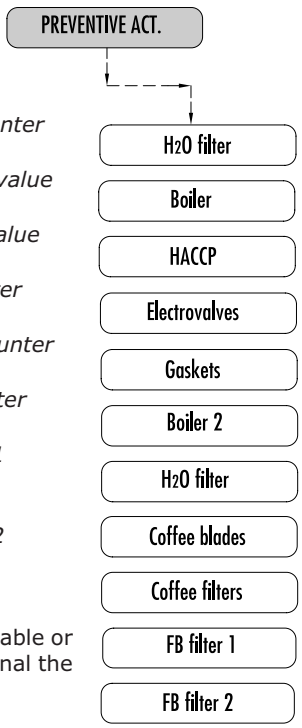
Select Cool 1 Select Code 1 [A11…B68]

Select Cool 2 Select code 2 [A11…B68]

The selected push button as Promotion shall not be displayed in the dose Menu

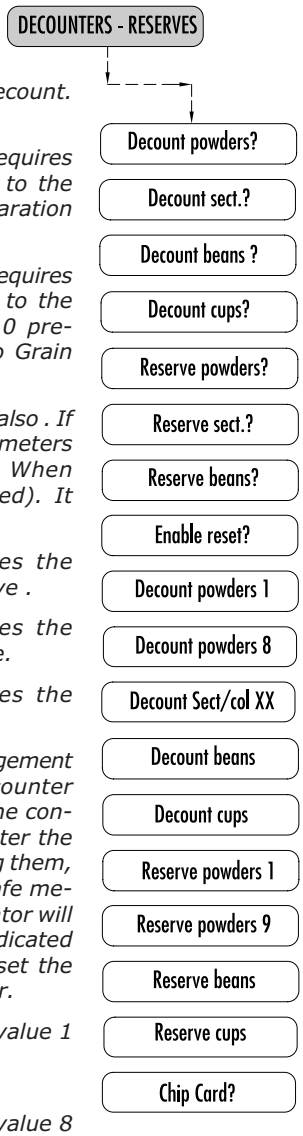
5.1.12 Menu 'Preventive action'

H_2O Filter	*H_2O Filter value [0÷99999]*
Boiler	*Boiler decounter value [0÷99999]*
HACCP	*Sanitation de counter value HACCP [0÷99999]*
Electrovalves	*Electrovalve decounter value [0÷99999]*
Gaskets	*Gasket decounter value [0÷99999]*
Boiler 2	*Boiler decounter value [0÷99999]*
H_2O Filter	*H2O Filter decounter value [0÷99999]*
Coffee grinder	*Coffe grinder decounter value [0÷99999]*
Coffe filters'	*Coffe filter decounter value [0÷99999]*
FB 1 Filter	*Fresh Brew filter 1 decounter value [0÷99999]*
FB 2 Filter	*Fresh Brew filter 2 decounter value [0÷99999]*



In WinBianchi it will be possible to enable or disable the possibility to block or signal the single Preventive Action decounters.

5.1.13 Menu 'Decounter and Reserves'



Decount powder? yes/No (If "yes" it requires the decount parameters relevant to the powders. When decount. = 0 supply disabled)

Decount sectors? Yes/No (If "Yes" it requires the decount parameters relevant to the sectors. When decount. = 0 preparation disabled)

Decount Grain? Yes/No . If "Yes" it requires the decount parameters relevant to the coffee grain. When decount. = 0 preparation disabled).It displays also Grain reserve.

Decount Cups Yes/No . It displays also . If "Yes" it requires the decount parameters relevant to the decount cups. When decount. = 0 preparation disabled). It displays also cup reserve

Reserve powder? [On/Off] It enables the management of the powder reserve .

Reserve Sectors? [On/Off] It enables the management of the sector reserve.

Reserve beans? [On/Off] It enables the management of the grain reserve.

Enable Reset? It enables the management of the reset push button of decounter under maintenance [On/Off]. At the confirmation moment of each decounter the electronics will store, by duplicating them, the values not decounted yet in safe memory locations. Any time the operator will start maintenance, through a dedicated push button,he will be able to reset the decounters to the initial parameter.

Dec. Powdwe 1 Powder decounter value 1 [0÷1677721s]

…

Dec. Powder 8 Powder decounter value 8 [0÷1677721s]

The decount value to be inserted in the Dec. Powder X is determined by measuring for each second of preparation the product grammage supplied. The result must be multiplied by the total H2 0 Volume in the container.

Example:

Chocolate 1sec = 4 g that is 1g = 0,25'sec

Chocolate in the container = 1000 g

Dec. Powder 8 = 1000g * 0,25sec = 250 sec

In WinBianchi there is a converter which will enable to insert grams and the specific weight of the powder by obtaining the seconds that will be set in the machine.

Dec. Sett/Coll XX Value of decounter Sector/Column XX[0÷25]

Dec. Beans Value of decounter relevant to coffe in beans [0÷1677721s]

Dec. Cups Value of decounter relevant to cups[0÷1000]

Reserve powder 1 Value of the reserve relevant to the Dust 1 [0÷1677721s]

…

Reserve Powder 9 Value of the reserve relevant to powder 9 [0÷1677721s]

Reserve Beans Value of the reserve relevant to coffee in grain

Reserve cups Value of the reserve relevant tot cups [0÷1000]

Chip Card? [On/Off] Enable the management of the Chip Card

Each chip-card, besides its data, has three types of stored codes: machine, location and client codes.

When the chip-card code is inserted in the appropriate connector a test is made to check that the codes on key coincide with the machines ones.

The codes which are not on the chip card are not checked, therefore if there is no code the test is not performed.

Moreover it is possible to perform sets on the chip-card (through the windows programme), which enable to choose on which codes to perform the test.

The chip-card Decounts is used to update the machine decounters by adding to the residue value, the stored fill.

To be enabled to the operation the key must have besides the three codes, if present (machine, location and customer) correct, also the fill value other than zero and a key identification code which is not present in the stored list of the machine EPROM.

This list is updated through the code of the key used, at filling operation correctly concluded.

Moreover, about this operation the cancellation of the two stored decounter filling values to counter the possibility of a key re-use.

The key disabling through code save and fill cancellation is performed only when updating is correctly over.

The early key disconnection or a sudden voltage drop does not prejudice the correct key operation; therefore when there is the restoring of the normal operation condition (key inserted and stable power supply) the operation will be correctly concluded.

Through CHIP CARD the decounters are always blocking. Without it, they are signalling.

5.1.14 Menu "Sales"

Tot. collected hot Unresettable Hot total amount [0÷16777215]

Total collected Resettable hot total amount[0÷16777215]

Total Collected Cool Unresettable total snack amount [0÷16777215]

Total snack Resettable total snack amount [0÷16777215]

Tot. Col. Not Eras Unresettable total amount [0÷16777215]

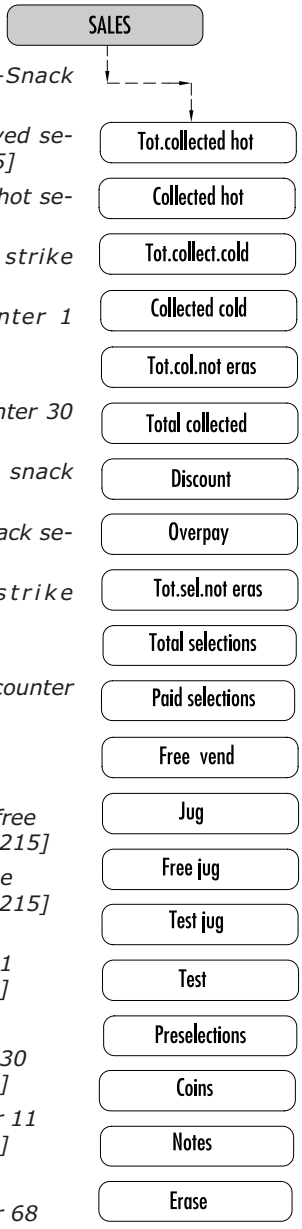
Total collected Resettable total amount [0÷16777215]

Discount Total discount sum of all discounts applicable to a preparation [0÷16777215]

Overpay Tot Overpay – Amount cashed but not used [0÷16777215]

Tot. Sel. not Eras. Payed unresettable total selections/Free/test [0÷16777215]

Total selections Resettable total selections payed /Free/Test [0÷16777215]



Paid selections

Total Selections Unresettable total selections Payed Hot+Snack [0÷16777215]

Total Selections Resettable tot payed selections Hot+Snack [0÷16777215]

Tot. hot not er. Unresettable total hot selections [0÷16777215]

Tot hot Resettable total strike [0÷16777215]

Selections sel. 01 Drink strike counter 1 [0÷65535]

...

Selections sel. 30 Drink strike counter 30 [0÷65535]

Tot. snack N.A Unresettable total snack selections [0÷16777215]

Tot snack Resettable total snack selections [0÷16777215]

Sect selections. 11 sector strike counter 11 [0÷65535]

...

Sect. 68 Selections Sector strike counter 68 [0÷65535]

Free

Tot. Free Unresettable total free [0÷16777215]

Tot. Free Resettable total free [0÷16777215]

Sel Free. 01 Free drink counter 1 [0÷65535]

...

Sel free. 30 Free drink counter 30 [0÷65535]

Sect.free. 11 Free sector counter 11 [0÷65535]

...

Gratis sett. 68 Free sector counter 68 [0÷65535]

Jug

Tot. Jug not er . Unresettable total jug [0÷16777215]

Tot.jug Resettable total jug [0÷16777215]

Jug sel. 01 Drink jug counter 1 [0÷65535]

...

Jug sel. 30 Drink jug counter 30 [0÷65535]

Free jug

Total free jug not er. Unresettable tot free jug[0÷16777215]

Free tot. jug Resettable tot free jug [0÷16777215]

Free jug sel. 01 Drink free jug counter 1 [0÷65535]

...

Free jug sel. 30 Free jug counter or drink 30 [0÷65535]

Jug test

Tot. Jug test not er. Unresettable tot just testUnresettable tot Jug test [0÷16777215]

Tot. jug test Resettable tot jug test [0÷16777215]

Jug test sel. 01 Drink jug test counter 1 [0÷65535]

...

Test jug sel. 30 Drink jug test counter 30 [0÷65535]

Test

Tot.test not eras. Unresettable tot test [0÷16777215]

Tot.Test Resettable tot test [0÷16777215]

Sel Test. 01 Drink test counter 1 [0÷65535]

...

Test select 30 Drink test counter 30 [0÷65535]

Test sector. 11 Sector test counter 11 [0÷65535]

...

Test sector . 68 Sector test counter 68 [0÷65535]

Preselections

Tot Presel 1 Tot Preselections 1 resettable [0÷16777215]

…

Tot.Presel X Tot preselections XX resettable [0÷16777215]

Coins

coin 1 Coin counter 1 [0÷65535]

...

coin 16 Coin counter 16 [0÷65535]

Bills

Bill 1 Bill counter 1 [0÷65535]

...

Bill 16 Bill counter 16 [0÷65535]

Sales code Sale code setting [00000÷99999]

Erase

Code Enter code [0000÷9999, default 0001]

Change codet? Replace code? [Si/No]

Code Code setting [0000÷9999]

Set to zero? Reset sale data resettale ? [Yes/No]

5.1.14.1 'System audit'

Aut. Tub. Value of coins automatically inserted [00000÷99999] olny for MDB

Man. Tub. Value of coins manually inserted [00000÷99999] only for MDB

Aut. Em. Value of coins automatically depleted [00000÷99999] only for MDB

Man. Em. Value of coins manually depleted [00000÷99999] only for MDB

Acc. CP. Value of coins loaded on key [00000÷99999] only for MDB

Add. CP. Value of coins unloaded through key [00000÷99999] only for MDB

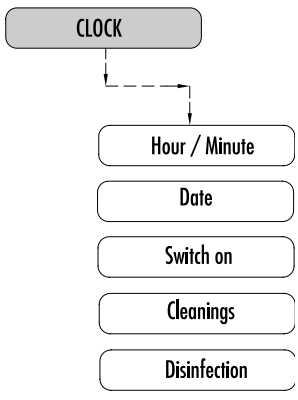
Reset Tubes

Code Enter code [0000÷9999, default 0001]

Replace code? Replace code? [Si/No]

Code Code setting [0000÷9999]

Reset? Reset tube data? [Si/No]



5.1.15 Menu 'cLOCK'

The following menu are available:

Hour/minute
Date
Switch on
Cleanings
Disinfection

5.1.15.1 'Hour/minute'

Set hour/minute *Set current hour and minute [00:00÷23:59]*

5.1.15.2 'Data'

Set Data Set current date[Lu dd/mm/yy]

5.1.15.3 'Switch on'

Start 1 *Set switch on time 1 [00:00÷23:59]*

Stop 1 *Set switch off time 1 [00:00÷23:59]*

D.A. Off 1? *If ON, it switch off the whole distributor; if OFF, let in St-by only the system [On/Off]. It is linked to slot 1*

Start 2 *Set switch on time 2 [00:00÷23:59]*

Stop 2 *Set switch off time 2 [00:00÷23:59]*

D.A. Off 2? *If ON it switches off the whole distributor, if OFF let in St-by only the system [On/Off]. It is linked to slot 2*

If 'Start' is higher or equal to 'Stop', the switch on slot is disabled. If this is performed on both slots, the machine is always on.

St-By Boiler? *It activates the boiler during st-by hours programmed in the clock menu [On/Off] If On, the boiler will keep st-by temperature according to the following algorithm. If Off, the boiler is off.*

Boiler temp X *Set temperatures of all boilers during the st-by period. According to how many boilers are in the battery the field X is updated*

5.1.15.4 'Cleanings'

Cleaning 1 *Set the time of cleaning 1 [00:00÷23:59]*

Cleaning 2 *Set the time of cleaning 2 [00:00÷23:59]*

Cleaning 3 *Set the time of cleaning 3 [00:00÷23:59]*

Cleaning 4 *Set the time of cleaning 4 [00:00÷23:59]*

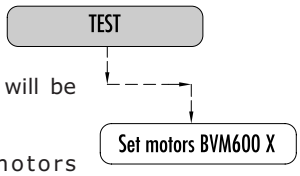
5.1.15.5 'Disinfection'

T disinfection. T disinfection [0÷120s]

Delay disinfect. Delay disinfection [0÷240s]

5.1.16 Menu ''Test" (by Password)

Entering the password 88000, it is enabled only if linked at least a power BVM 600, the motor test will be performed. Entering the pwd it will be displayed :



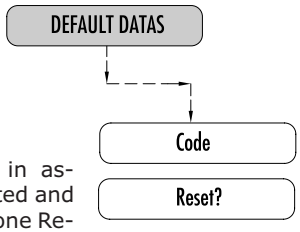
Set motors BVM600 X Reset motors BVM600 [On/Off]

X indicates the no. of BVM600 which will have the motor alignement.

5.1.17 Default data

Code *Enter code [6666]. It will be a fixed code for any one established by Bianchi.*

Reset? *Reset factory data? [Si/No]*



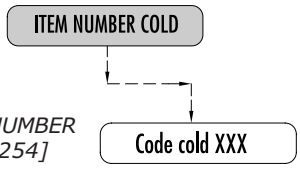
When the distributor is programmed in assemby line , std settings are duplicated and inserted in the default data table. If one Reset the configuration it obtains the same data that are loaded in Bianchi Vending Spa.

5.1.18 Menu 'Item Number Cool'

code cool XXX *Set the code ITEM NUMBER for the sector or column XXX [0÷254]*

...

code cool XXX *Set the code ITEM NUMBER for the sector or column XXX [0÷254]*

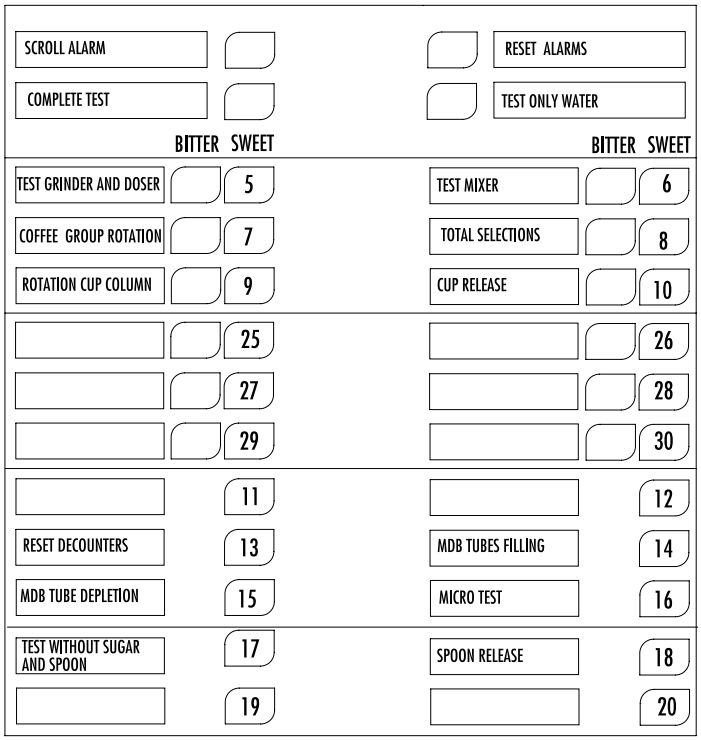


5.2 MAINTENANCE

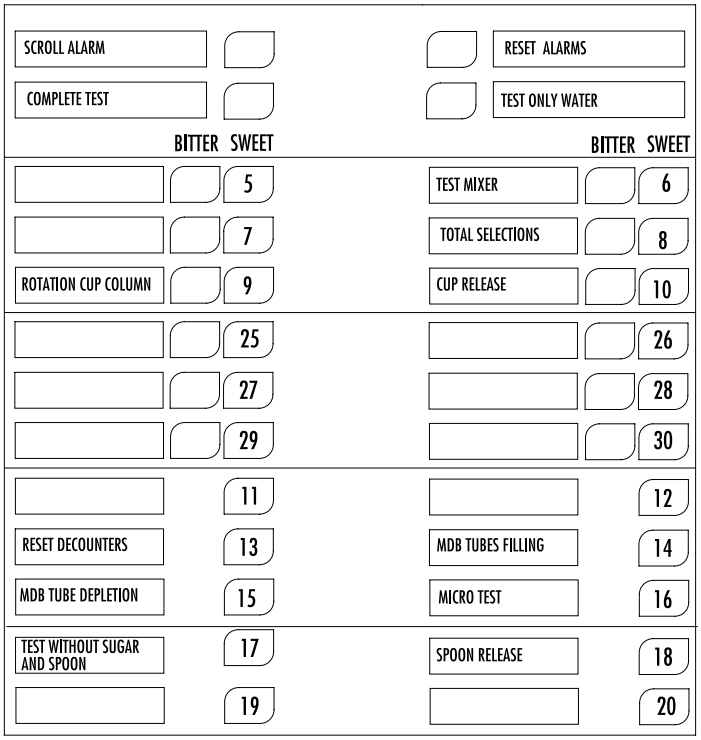
Maintenance is performed by pressing the external key 'Service'. In line 1 "Maintenance xxx" will be displayed , where xxx displays the boiler temperature, and in line 2 the possible detected alarms.
Pressing twice the key Service, the stand by heating phase will be bypassed, allowing you to perform test selections even on non regimen temperatures. Pressing a key the slave boiler temperature will be displayed in scroll.

The maintenance panel has the following functions (which can be enabled by WinBianchi):

Maintenance panel (Espresso)



Maintenance panel (Instant)



Test w/o Sugar — *It performs an option drink without sugar*

Full test — *After pressing this key in line 2 the word test is displayed and the machine is in stand by for the selection, at the end of the preparation the machine exits the test state and returns to the maintenance state.*

Water test — *In line 2, the word water Test is displayed and the machine is in stand by for selection. The selection will be performed by resetting all soup , while the test of drinks with expresso coffee is complete, at the end of preparation the machine exits the water test state and returns to the maintenance state.*

Test ground coffee — *Pressing this key, in line 2 the ground test is displayed and the distributor will perform a grinding and later the doser release. In this way the operator will check the grade and the grammace of the ground dose.*

Reset failures — *All alarms are reset and the diagnosis of Automatic distributor is performed . In line 2 the Reset message is displayed for T of 2 seconds.*

Mixer Test — *Switching of the Mixer for 5 sec. in the following order 1,2,3,4,5,6*

Group rotation — *It performs a rotation of the coffee group.*

Alarm scrolling — *It is used to scroll alarms and signallings. If there are signallings, they are displayed in line 2 as soon as maintenance starts, if there are no signallings the line 2 is white. The display during the maintenance state does not automatically update; to update it, this key must be pressed again.*

Total selections — *The total unresettable selections are displayed for a T of 2 seconds after which we return to the maintenance state*

Spoon release — *It releases a spoon*

It turns column — *It allows the rotation of the column*

Cup — *Cup release*

Clean.. 1st FB — *Cleaning 1st piston FB*

Clean. 2nd FB — *Cleaning 2nd piston FB*

Reset decount — *It allows to reset the decounters at the initial value. It must be a double pressure.*

Fill. tubes MDB — *Fill. tubes MDB*

It depletes tubes MDB — *Coin 1 (Key X depletes)...*
Coin 16 (Key X depletes)

Test Micro switches — *Pressing the key you enter the test state of micro switches. In this state, pressing the micro switch to be tested, the card master performs a BEEP confirming its operation.*

6.0 MAINTENANCE AND INACTIVITY

6.1 Cleaning and Loading

So as to guarantee the correct functioning of the distributor during time it is necessary to effect some operations periodically, some of which are indispensable for the observance of the health standard norms. These operations must be done with the distributor open and switched off. The cleaning operations must be effected before the loading of the products. In order to guarantee normal operation, the machine must be installed in areas that the environmental temperature is between a minimum of -1°C and a maximum of +32°C end humidity of not over 70%. Must not be installed in places where cleaning is done with water hoses(ex. big kitchens.).

Do not use water jets to clean the machine.

Please refer to the provisions of section 5.0 SAFETY REGULATIONS and section 4.0 INSTALLATION of this manual.

6.1.1 Recommended maintenance

***Bianchi Vending spa** guarantees the proper operation of its distributor over time only with a preventive maintenance carried out in compliance with the provisions listed below:*

TYPE OF INTERVENTION	***No. of COUN***				
	5.000	***10.000***	***20.000***	***30/40.000***	***70/80.000***
Softener regeneration (*Resins)	●				
Replacement of piston equipped with filters and gask		●			
Replacement of entire coffee group		●			
Decalcification of espresso boiler and solenoid valves				●	
Replacement of grinders					●
Decalcification of instant drink boiler and solenoid valve					●
*: if not otherwise recommended by the softener supplier.					

6.1.2 Periodic cleaning by the maintenance technician

First step: disposal of the waste inside the waste bins (used cups, stirrers, paper, tissues etc).Once the waste has been disposed of it is possible to clean the surrounding area.

- elimination of the coarse dirt
- disinfecting of the flooring and walls of the area surrounding the machine up to a radius of 1 metre around the distributor
- once this is complete proceed with opening the distributor.

6.1.3 Daily cleaning recommended

The objective is that to avoid the creation of bacteria in the food zone areas.

For all cleaning operations follow the instructions indicated in paragraph 6.3.1.

Operate as follows:

- clean all the visible parts in the dispensing area. (Fig. 6.1 e Fig. 6.2)

remove and clean carefully:

– funnels and powder chutes (Fig. 6.3-pos.1)
– water funnel (2), mixing bowls (3) whipper assembly (4)

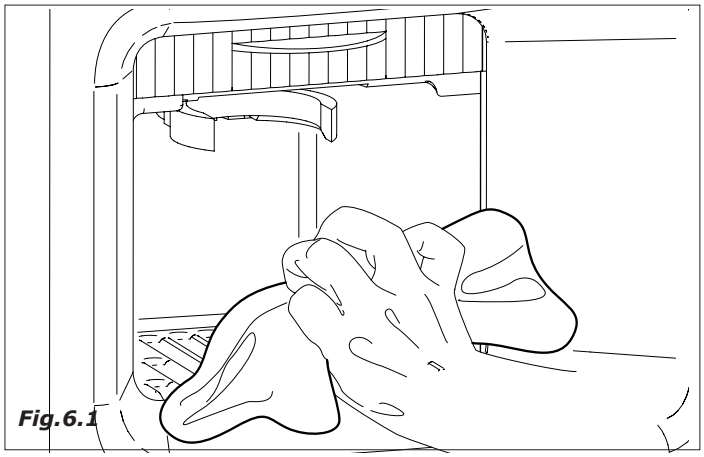


Fig.6.1

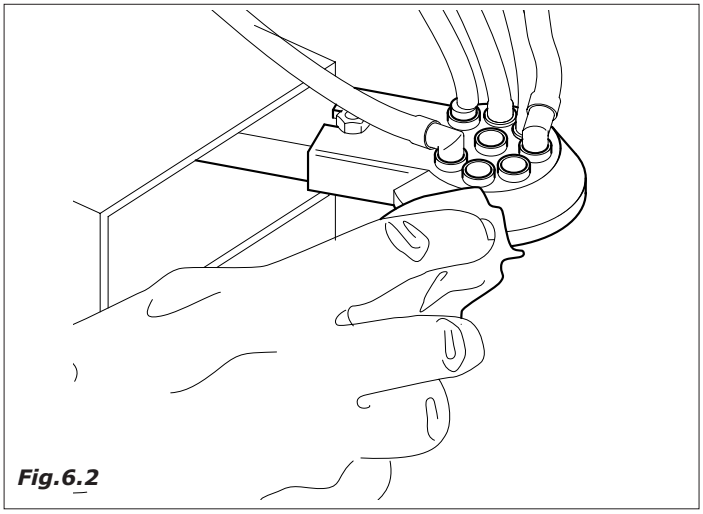


Fig.6.2

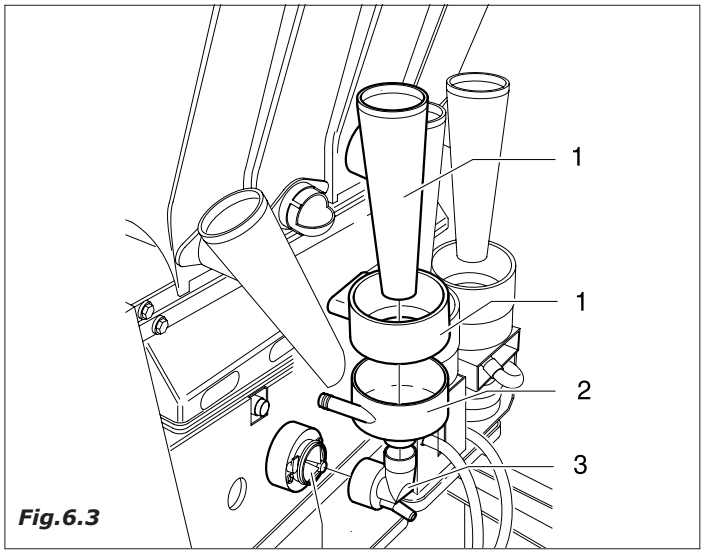


Fig.6.3

– silicone water dispensing tubes.

– dispensing chamber (Fig. 6.4)

– coffee funnel and chute (Fig. 6.5)

Before effecting the re-assembly operations clean all the elements carefully.

– remove all coffee powder residue; the unit can be removed from its housing to make the task easier (Fig. 6.6)

6.1.3 Product loading

When necessary provide for the loading of the products and/or consumption materials of the automatic vending machine. For these operations please refer to the operations described under chapter 4.6.

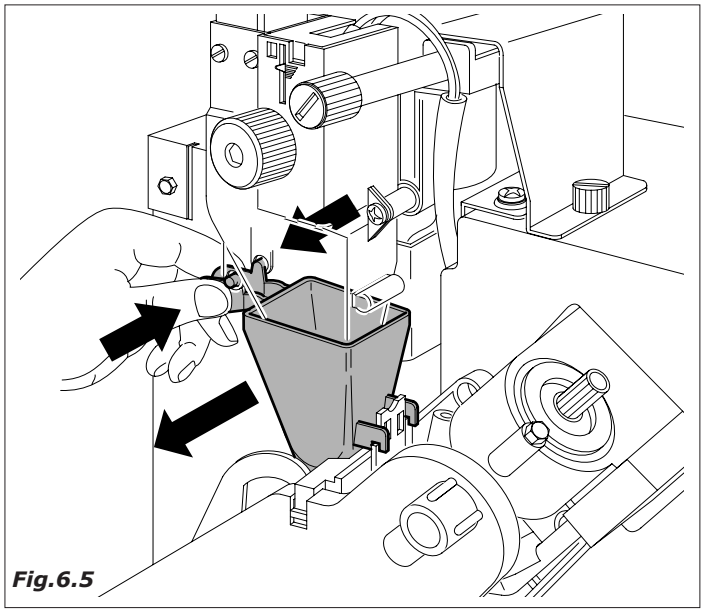


Fig.6.5

6.2 Ordinary and Extraordinary Maintenance

The operations described in this section are purely indicative as they are tied to variable factors such as the water hardness, humidity, products used and workload, etc.

For all operations that require the disassembly of the distributors' components, make sure that the latter is switched off.

Entrust the operations mentioned here below to qualified personnel.

If the operations require that the distributor be switched on, entrust them to specially trained personnel.

For more complicated interventions, such as removing the lime build-up in the boilers a good knowledge of the equipment is necessary.

Monthly effect the debacterisation of all the parts in contact with food substances using chlorine based solutions following the operations already described under chapter 6.3.1.

– Every six (6) months it is necessary to substitute the water contained in the refrigerating tank ; so as to effect this operation put the drain hose in a bucket.

– lift the copper tube and wait for the complete drainage of the tank.

– once empty re-insert the drain hose and fill the tank again as described under paragraph *4.5.3 filling of the cooling unit*.

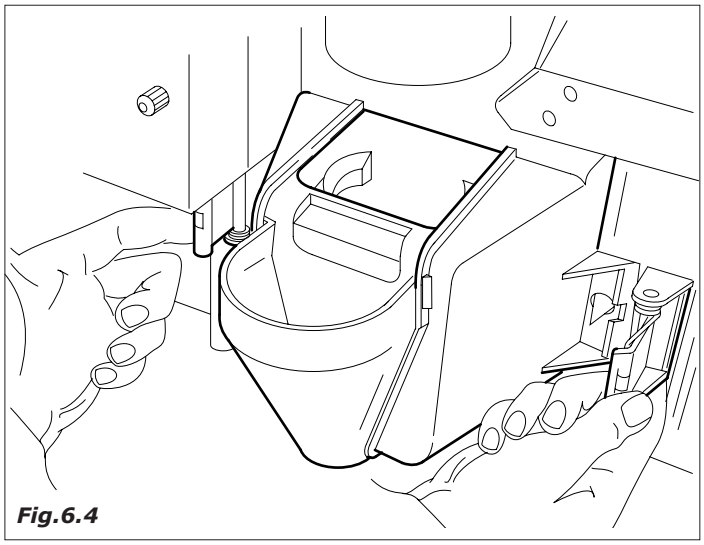


Fig.6.4

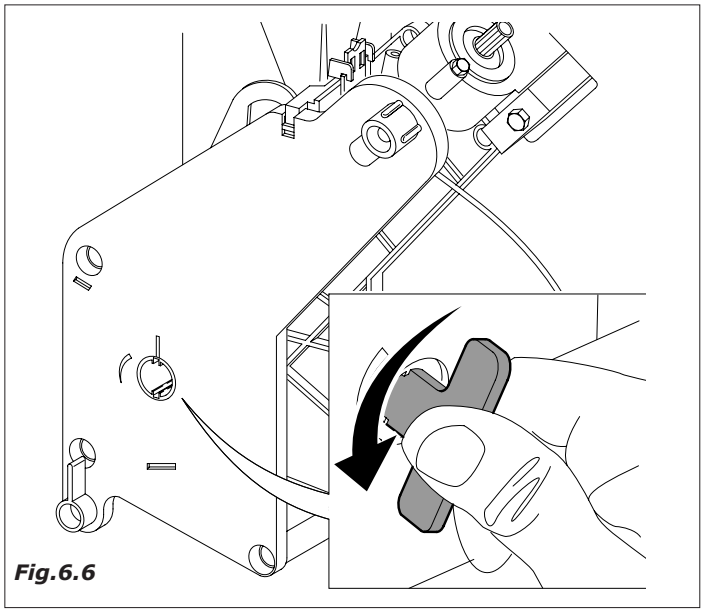


Fig.6.6

COFFEE MACHINE TIMING CHECK PROCEDURE

Ensure that during the idle state, the rotating index is aligned with the stage index (see fig. 6.7)

Ensure that during the delivery stage that the rotating index is not more than 1.5 mm in advance of the delivery reference point (the rotating index must be at a delivery position of between 0 and 1.5 mm from the delivery point).

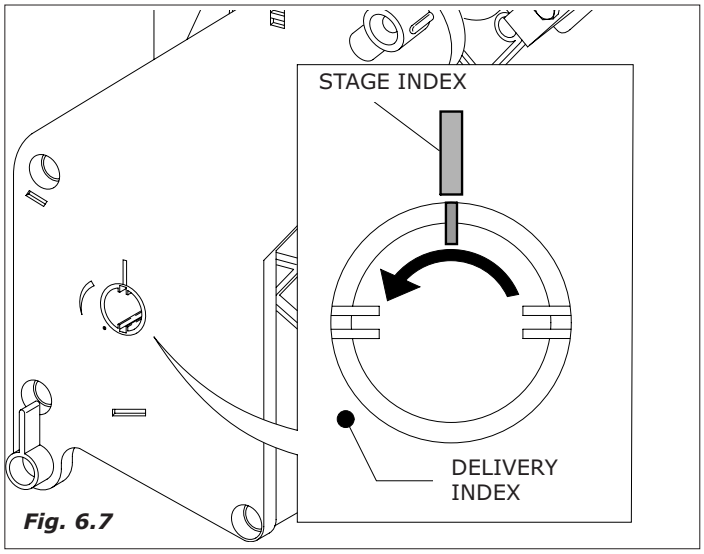


Fig. 6.7

6.3 MAINTENANCE PROCEDURES

Recommended equipment:
For those responsible for filling up and maintenance of the machine the recommended equipment is as follows:
- Tool carrier case
- Clean uniform
- Disposable gloves
- Clamp for closing the
- Roll of kitchen paper
- Wood or plastic stick
- Bottle of detergent
- Bottle of disinfectant
- "Distributor out of action" sign
- Small table for resting items (optional)

Never use:
- Sponges, scourers, cloths
- Brushes
- Screwdrivers or metallic objects.

6.3.1 Sanitization

IMPORTANT ADVICE

- Vending operators and technicians who usually get in contact with food shall pay particular attention to their personal cleaning and the cleaning of their clothes.

In particular before starting any operation on the distributor, make sure to:
- wear protection shoes or at least suitable shoes
- carefully wash your hands
- keep your hand nails short, clean and with no varnish
- keep your hair short and clean
- avoid scratching yourselves during maintenance operations
- avoid smoking and eating during work
- avoid touching hair, mouth, nose during work
- avoid wearing rings, bracelets, watches
- cover wounds (if any)
- avoid any personal strong perfume

The major food contamination passes through hands; remember to wash your hands when:
- you start working on the distributor
- after being to the toilet
- after touching your hair, blowing your nose, eating
- after touching chemical cleaning products
- after shaking hands with other people

If you use protection glove, remember to change them whenever they get in contact with polluting objects.

To ensure hygiene:

- Use disinfectants

The purpose of the disinfectants is to destroy any surface bacteria which may be present.

For cleaning:

- Use detergents and/or detersive products

The detergents act to eliminate the dirt.

Products exist on the market which are both detergents/disinfectants and are usually sold at the chemist's (chlorine-based).

For anything not mentioned in this section, refer to the HACCP regulation and in particular pay attention to the following:
- Cleaning of the premises
- Product transportation
- Machinery maintenance
- Waste disposal
- Drinking water procurement
- Personnel hygiene
- Food product characteristics
- Personnel training
- (Directive 93/43 CEE)

Important advice (ref. Directive 93/43)
- The premises where the automatic distributors are installed must be such as to prevent any accumulation of dirt, any contact with toxic materials, and the formation of condensate or mould on the surfaces of the machine.
- It is also important that the premises where the distributor is installed can guarantee a correct hygienic procedure, also preventing any cross contamination, during the operations, between food, equipment, materials, water, air recirculation or personnel interventions and excluding any external contamination agent such as insects or other harmful animals.
- Make sure that the water system complies with EEC Directive 80/778 regarding the quality of water for human consumption.
- Ensure a correct mechanical or natural aeration, avoiding any mechanical air flow from a contaminated area to a cleaned area.

The cleaning operations may be undertaken at the site of installation of the automatic distributor

Example of a recommended cleaning procedure of a hot drink automatic distributor:

The person responsible for machine hygiene, before opening the distributor must check the cleanliness of the surrounding environment and put up a sign to tell any potential consumers that:
- the machine is "out of use as maintenance is in progress"
- it is important that the person responsible for cleaning never has to interrupt his work in order to operate the machine.
- For internal cleaning use clean cloths, better if disposable.
- It is indispensable to avoid any contact between the products used for the generic cleaning of the distributor and the products to clean the parts in contact with food.
- During cleaning operations, pay attention not to transfer germs from dirty areas to already cleaned areas.

A) Use clean gloves.

B) Use hot water not taken from toilets.

C) Pay special care to clean the parts in contact with food
- Carefully remove any residual dirt before proceeding to use disinfectants.
- Carefully avoid any contact of food with dirty surfaces.
- During the cleaning operations carefully follow the instructions on the packages of chemical detergents. Absolutely avoid any contact of food with detergents.
- Make sure that your cleaning equipment is perfectly efficient.

D) At the end of the cleaning operations, place the water collecting bags in appropriate areas far from the automatic distributor areas.

The following table summarizes the recommended behaviour to reduce the risk of bacteria proliferation and contamination inside the distributor to the minimum.

TYPE OF INTERVENTION	TIME / No.of COUN		
	EVERY DAY	EVERY WEEK	20000 COUN OR MAX EVERY MONTH
Remove and wash all visible parts in the delivery area with sanitizing liquid.	•		
Empty the liquid ground collecting buckets and clean them with sanitizing liquid.			
Empty the coffee ground collecting tank and wash it with sanitizing liquid			
Remove all containers and clean with a wet cloth all container supporting parts, as well as the bottom and the outside of the distributor, in particular the delivery area; then proceed to sanitization.		•	
* Sanitization kits including plastic parts for the passage of pulverized or liquid product (cups, pipes, delivery flange, nozzles,…). For any further information, please contact directly our offices.			•
* Bianchi Vending has prepared specific kits expressly designed for every distributor mode			

6.4 Regulations

6.4.1 Dosage and grinding regulations

- Coffee temperature in the cup between 70 °and 80 °
- Temperature of soup products in the cup between 70°C and 80 °C.
- Grammage of coffee powder between 6 and 8 grams.
- grams of instant powder products according to what is indicated on the specific tables.

In order to obtain the best results with the product used we advise to check:

- **Ground coffee gram weighting:** vary the quantity using the knob positioned on the measuring device (Fig.6.8).

  Each notch of the regulation knob corresponds to a value of 0.05 grams.

  By turning in a clockwise sense the amount decreases.

  By turning in an anti-clockwise sense the amount increases.

  The variation in the product can be controlled by means of the reference notches on the body of the measuring unit (see figure 6.8)

  Coffee pellets must be have a compact consistency and be slightly damp.

- **Adjustment of the grade of manual grinding.**

  Turn the screw (fig.6.9) to obtain the desired results.

  Turn clockwise for fine grinding, turn anti-clockwise for coarser grinding.

  After regulation, three product regulations must be carried out in order to assess the efficiency of the regulation, the finer the granules the greater the time required for product delivery.

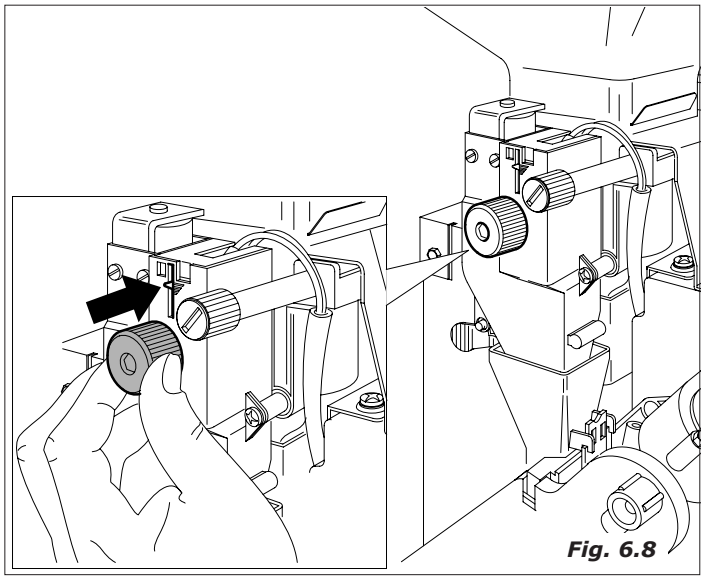


Fig. 6.8

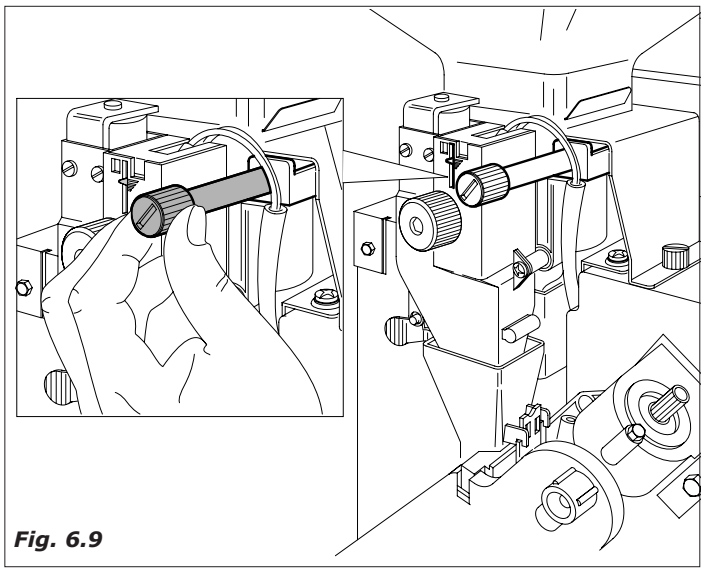


Fig. 6.9

- Automatic adjustment of grinding (Fig.6.10)

- It allows in the expresso versions to keep grinding steady, irrespective of the percentage of moisture, temperature and wear of blades.
- The first adjustment is performed with the device disconnected
- Performing the dose adjustment manually (6-7g)
- Performing the grinding adjustment manually
- Reckoning the supply time in seconds (std 18s)
- Reconnecting the device
- Setting the measured supply time, in programming
- Out of 5 expresso coffee, this parameter test will be automatically performed .The valid readings correspond with the third / fourth coffee: The first two will be ignored since they are the results of the previous adjustments, the fifth will be adjusting tests

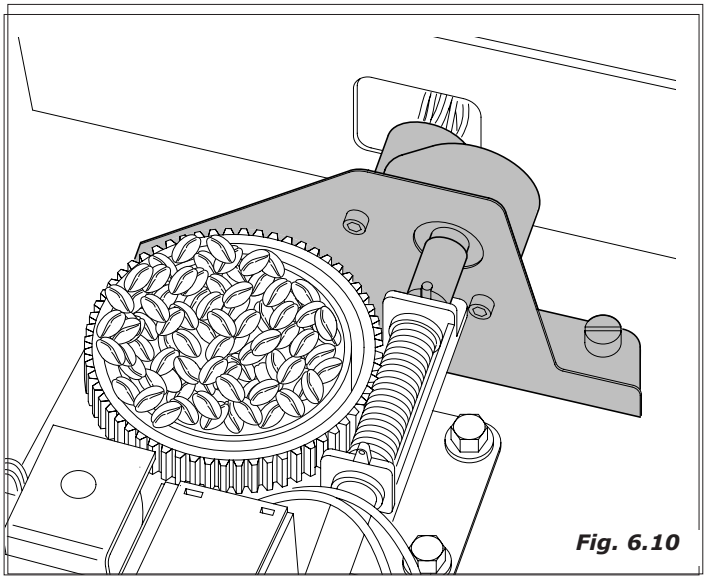


Fig. 6.10

6.4.2 Regulation of the instant solenoid water delivery valves

In the case of soluble products you can regulate the quantity of water and the powder dosage electronically by varying the standard parameter, according to the procedure indicated in chapter 5.0 SOFTWARE INSTRUCTIONS.

ATTENTION: Re-adjust water rate by acting on the soup valve adjusting screws means to compromise and alter the quantity of water supplied in cup and therefore its dose.

– To obtain a good rinsing of cups possibly act on the rate screw and then check that doses are reliable (Fig. 6.11).

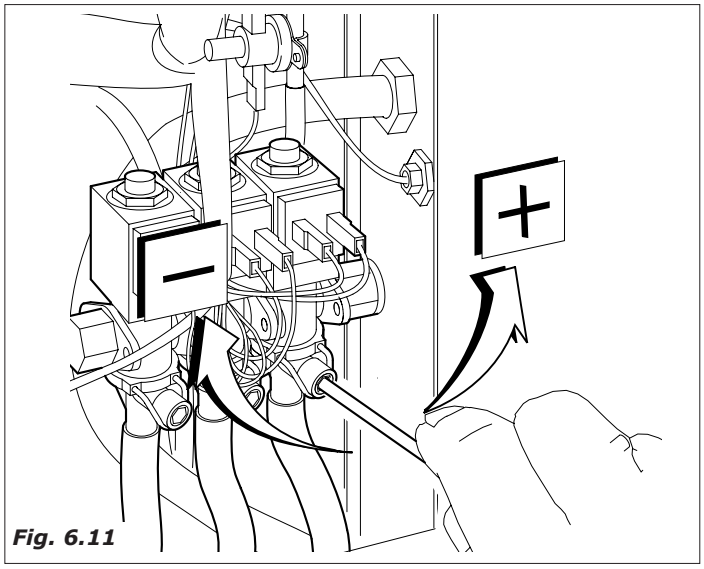


Fig. 6.11

BRITA decalcificator filter (Optional)

It performs water decarbonization, reduction of organic impurities (such as free chlorine, its compounds and pesticides).

They remove the temporary water hardness , and some heavy metals such as lead and copper.

They neutralize build up of bacteria through active carbon treatment on Silver base.

The filtering compound of the Brita filter AcquaQuell 06-B

BRITA AquaQuell filtering systems (AquaQuell 33,1,2,3) contain ionic-exchange resins and activated granular carbon with the pur pose of optimizing drinkable water.

The cationic-exchange resin (IER) is an artificial polymer with acrylic base. Groups are linked to the polymeric chains in their H+ form.

In the whole exchange process, calcium cations, magnesium, copper and lead are exchanged with protons.

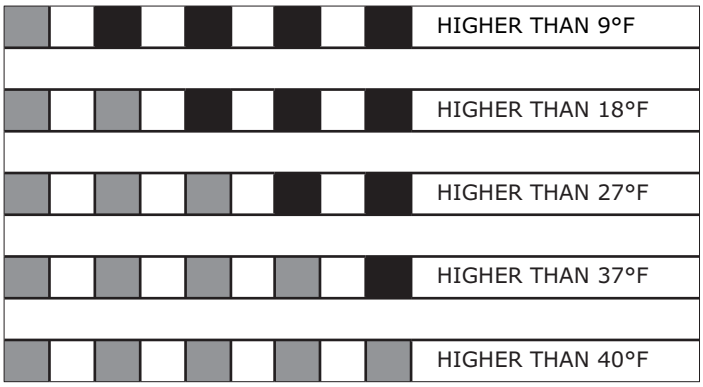
Since IER is a weekly acid resin, only the temporary hardness is removed (The grade of acidity is given by the H+ concentration). The granular active carbon (GAC) is produced by the coconut shells which are charred and activated in oven.

The activation process gives an exchange surface whose GAC can, by alloying organic impurities to it such as disinfectants, chlorine and pesticides such as lindane and atrazine, etc.

Water hardness detection systems

There are various systems to check water hardness level, from immersion stripes sensitive to calcium hydrogenate dissolved in water, to ortolidina kit which can make water colour change in presence of given percentages of Ca and Mg dissolved in it.

Through the immersion strips the darker colour shows a lower hardness of water, the lighter colour a higher hardness. (see diagram)



Set BRITA filter duration through the kit supplied with the decalcificator. Then, enter the data in the programming software so that , after a number of selections, the maintenance operator is warne

Water hardness °F	Capacity lt		No. of supplies		
			130 cc.	150 cc.	180 cc.
10,5	700		5300	4600	3800
4,5	520		4000	3400	2800
18,0	420		3200	2800	2300
21,5	350		2600	2300	1900
25,0	300		2300	2000	1600
28,5	260		2000	1700	1400
32,0	240		1800	1600	1300

6.5 Resin regeneration of the water softner
(Optional)

The regeneration of the resins must be executed according to the water of mains supply to which the distributor is connected. As reference the table indicated here below can be used:

Water hardness	**Number of selections**	
° french	***60cc***	***130cc***
10	25000	12500
20	12500	6000
30	9510	4500
40	6500	3000
50	5000	2500

So as to verify the degree of hardness of the water and consequently the time and type of interventions, specific kits available on the market can be used.

The operation can be effected on the distributor as follows:

- switch off the machine.
- turn the lower faucet being careful to put the relative hose in a bucket or better in a drain (Fig. 6.12).
- remove the cover and introduce 1,5 kg of normal cooking salt (Fig. 6.13)
- replace the cover.
- switch on the machine and let the water pour out until it is no longer salty (Fig. 6.14).
- switch off the machine and close the faucet.

The time necessary for this operation is about 30/45 minutes.

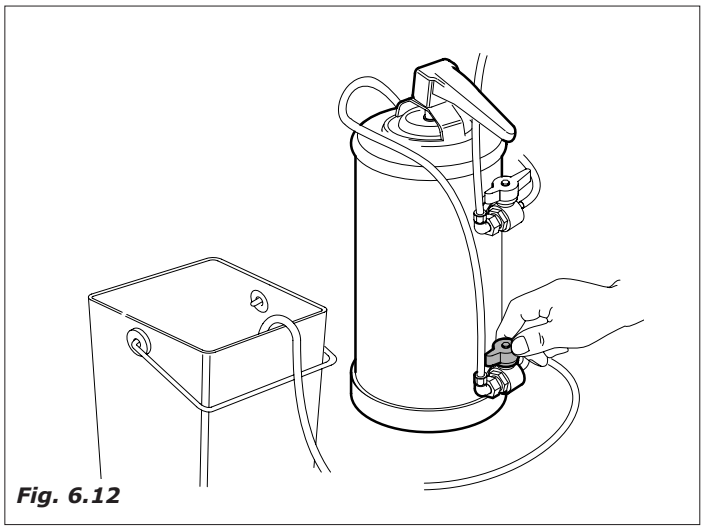


Fig. 6.12

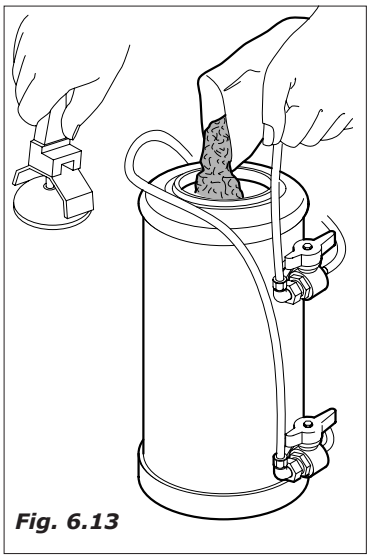


Fig. 6.13

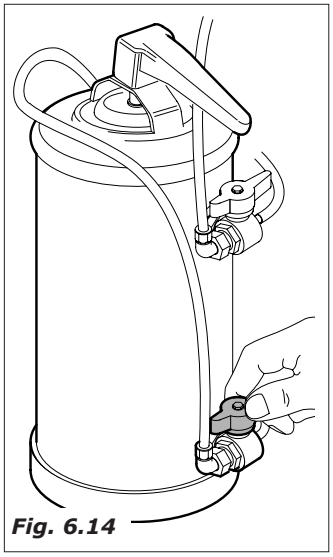


Fig. 6.14

6.6 Inactivity

If the automatic vending machine remains inactive for a long time it is necessary to perform some prevention operations:

- disconnect the machine electrically and hydraulically.
- empty completely the instant boiler and the floater reservoir removing the plug located on the hose along the drain chute (Fig. 6.15).
- Put the plug back in once the draining has been done.
- unload all the product from the containers
- perform a thorough cleaning of all the parts in contact with food substances according to what has already been described.
- empty the liquid waste bin carefully
- eliminate the spent grounds bag
- clean with a cloth all the internal and external surfaces of the machine.
- protect the outisde of the machine with a plastic film wrapping or bag (fig. 6.16)
- stock in a dry and protected place where the temperature is not less than 1° C.

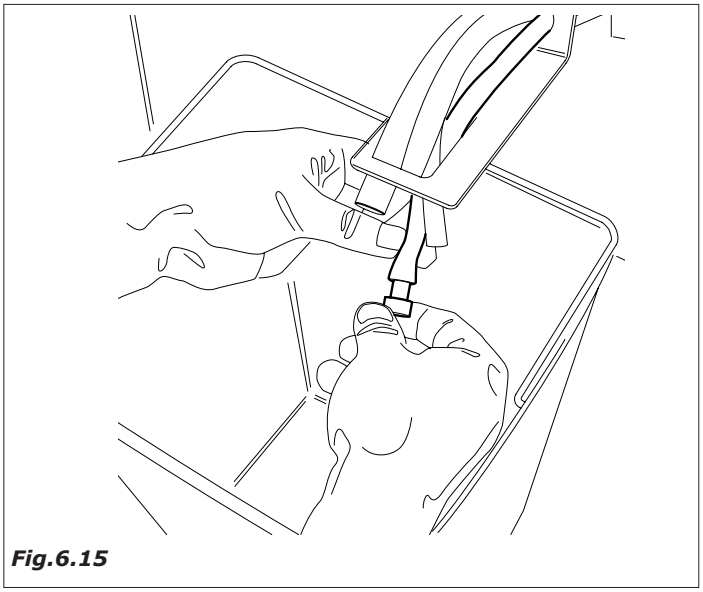


Fig.6.15

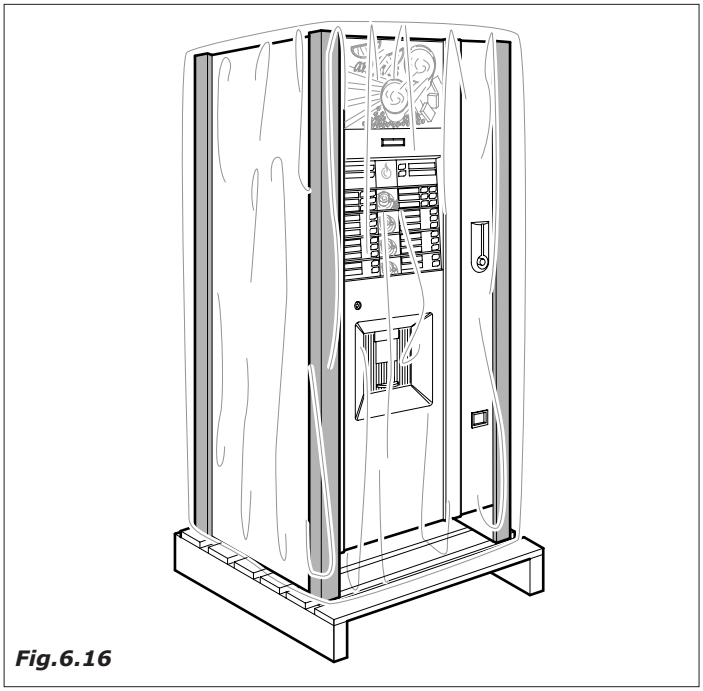


Fig.6.16

7.0 GUIDE TO THE MOST COMMON FAILURES

7.1 ALARMS

When an alarm occurs, it has generally the effect to swicth off outputs and block the possible supply. All alarms can be blocked,by going to Maintenance and pressing the Reset key. In WinBianchi there must be the possibility to block an alarm.

7.1.1 DISPLAYED BLOCKING ALARMS

RLine 1: Out of order
Line 2: EEprom Error It is activated if an error is detected in the EEprom. By performing the reset operation the factory data will be filled in the EEPROM (only if there is this alarm).

Line 1: Out of order
Line 2: Token device error This alarm is active only if the Executive or MDB token device is enabled. it occurs in case of error in the communication between card and token device or the token device is not detected.
- Executive: there is a delay of 60 seconds from the moment the token device is not detected to the moment the alarm is activated.
- MDB: the delay is of 10 seconds after switching on, therefore of about 2 seconds.
- Scale Factor : This alarm is active only if the Executive token device is enabled (not in Price Holding). It occurs if the division between a programmed piece and the base coin received from the token device exceeds the value of 250. This alarm is self-setting.

Line 1: Out of order
Line 2: Slave Alarm It occurs if all slaves linked to Master card are on alarm. Therefore, no supply is possible.

7.1.2 ALARMS DISPLAYED UNDER MAINTENANCE

Under maintenance, alarms and signallings will be displayed. Signallings are a particular type of alarm which does not interrupt the machine normal operation. For both alarms and signallings there is a further distinction between stored and not stored. The stored alarms or signallings stay also after the card switching off and on

7.1.2.1 Stored alarms

ECM EEprom error It is activated if an error is detected in the EEprom. By performing the reset operation the factory data will be loaded in the eeprom. (only if there is this alarm)

EBI Translator It occurs if the 10 second timeout expires during the spout translator movements

7.1.2.2 Unstored alarms

EAJ Scaling factor This alarm is active only if the Executive token device is enabled (not in Price Holding). It occurs if the division among one of the programmed pieces and the base coin received by the token device is self-setting.

ECE Out of order It is activated if the communication between the Mother board and and the Master is interrupted

EBA Cup It is activated in one of the following cases:

1. The 90 second timeout for the rotation of the cup column expires

2. The 10 second timeout for the cup release expires

EDP Water level It expires after 2 seconds from the detection of the micro lack of water. It switches off the resistor and reinitializes the time out for E12 and E13.

EC1C Tcaffe<60°C It refers to boiler 1. It occurs if at the reset temperature minus 15 ° C, in 15 minutes, or if during the normal operation the temperature is below 60 ° C for 15 minutes. It is valid for single boiler or coffee boiler if the double boiler is enabled

EC2C Tsoup<60°C It refers to the boiler 2. It occurs only if the double boiler is enabled and if at the reset, the set temperature minus 15 ° C is not reached. in 15 minutes, or if during the normal operation the temperature is below 60 ° C for 15 minutes.

EDF Sugar It occurs if the 10 minutes time out expires during the sugar conveyor.

EGN Too full It is activated after 2 seconds from the detection of micro too full of the liquid collecting bowl.

ECK No Espansion It occurs if components managed by any expansion are enabled.

7.1.2.3 Stored signallings

EDT Grinder X It is activated if the programmed grinder expi res. The message "No coffee" is displayed. The amount is re-credited only in case of instantaneous grinding. X = 1 or 2

EEK Group It is activated if programme coffee group timeout expires. The message "No coffee" is displayed. The amount is re-credited.

EEJ No Group It is activated if the micro group presence is NA

EFN ESP Pump It is activated during water supply of coffee if at least 10 cc are not supplied in the programmed pump timeout. The message "Only expresso" is displayed. The amount is re-credited. The amount is re-credited. The boiler resistance will be switched off up to the error reset

EFN SOL Pump It is activated during soup or hot water supply if at least half a dose in the programmed pump timeout is supplied. The message "No coffee" is displayed. The amount is re- credited if no hot water was being supplied. The boiler resistor will be switched off up to error reset.

EDU Dose vol 1 It is activated if after the release phase the micro dose is pressed. The message displayed is " No coffee". The amount is re-credited.

EDU Dose vol 2 It is activated if after the coffee release phase the micro dose is pressed. The message " No coffee" will be displayed. The amount is re-credited.

EDF Stires It is activated if the stirer timeout expires of 10 ". With this active signalling, the spoons will not be supplied any more.

EDM NTC X Slave Y It occurs if the temperature probe is short circuited or the circuit is open. The resistance is off if NTC is in short circuit or open. When on, there is an expected delay of 30 seconds before the alarm has occurred
NTC 1 – Relevant to the power card
NTC 2 – Relevant to the expansion 1
Slave Y indicates which D.A. slave belongs to.

EH1A NTC cold	It is verified if the refrigerator hot temperature probe is short circuited or the circuit is open. The resistance is off if NTC is in short circuit or open. When it is on a delay of 30 seconds delay is expected before the alarm is verified.
ELC Quantity	Soup supply or hot water : it occurs if a quantity of water between 50% and 70 % of the programmed dose is supplied. '*' The character is displayed as the last character. This signalling prevails on those of the counters (the subsequent eight ones)
EFB H2O Filter	It is activated if the H2O Filter decounter is equal to zero
EDZ Grinders	It is activated if the value of the coffee grinder decounter is equal to zero
EEC Filter FB 1	It is activated if the value of the FB1 filter decounter is equal to zero
EEC Filter FB 2	It is activated if the value of the FB2 filter decounter is equal to zero.
EEC Filter Esp	It is activated if the value of the coffe filter decounter is equal to zero
EFI Decounts Ev	It is activated if the value of EV decounter is equal to zero
EEL Gaskets	It is activated if the value of coffee gasket decounter is equal to zero
EDO Boiler 1	It is activated if the value of the boiler 1 decounter is equal to zero
OAR HACCP	It is activated if the value of the HACCP decounter is equal to zero
EDO Boiler 2	It is activated if the value of the boiler 2 decounter is equal to zero
EDJ Powders	It is activated if the value of the powder X decounter is at 000000s
EDJ Decounts Gr	It is activated if the grain decounter is at 000000s
ECQ Driver	It is activated when a failure at the omnifet of the output OUT XX (Oxx) at pin XX (Pxx) is detected. In case of intervention of the OMNIFet overcurrent protection, the Gate tension must be read after 50 ms.

7.1.3 BVM600 POWER CARD ALARMS

7.1.3.1 Stored signallings

EJB Sector xx	It is activated if the motor timeout of the sector xx is activated during the supply
EJJ Safe BVM600 X	It is activated if the safety temperature is exceeded (only for the Pan/Can). X indicates A,B, C.
EDM NTC BVM600X	It occurs if the temperature probe is short circuited or the circuit is open. When it is switched on a 30 second delay is expected before the alarm X is checked. X indicates A,B,C.
EJL Sensor X	It occurs if the BVM600 card does not detect the product fall sensor for 5 seconds. The sensor must be enabled and the option "Sens. BVM600 Master" must be "Off". If this signalling is active, the card will behave like a disabled sensor. X indicates A,B, C.

8.0 DISMANTLEMENT

Proceed with the emptying of the products and of the water as described in the previous paragraph.
For the dismantlement we advise to disassemble the machine dividing the parts according to their composition (plastic, metal etc.).
Subsequently entrust to specialised companies the parts divided in this manner.
If there is a cooling unit, give the latter, without disassembling, it to specific companies authorised for the scrapping of the unit in question.

Attention! Check that the machine disposal is perfomed with respect of environmental rules and according to the regulations in force

9.0 ACCESSORIES KIT

- Cup presence sensor
- GPRS module directly applicabile on card
- RS232 module
- Visual Smart Programmer to perform the firmware and adjustment loading and the download of adjustments and audit data without a PC
- Cold group having from 2 to 4 electrovalves to manage cold drinks
- Clock chip
- Eighth bo kit (41078110)
- Audit data key (26049316)
- Decantor key (26049416)