

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 on



ATTENTION: hot parts in contact!

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

PICTOGRAMS**IMPORTANT NOTICES****USER**

The user is defined as the person authorized to collect drinks from the automatic distributor.
The user is not allowed to undertake any maintenance operations either ordinary or extraordinary.
In the event of a fault the user is obliged to notify the maintenance technician or the person responsible for running the automatic distributor.

MAINTENANCE TECHNICIAN

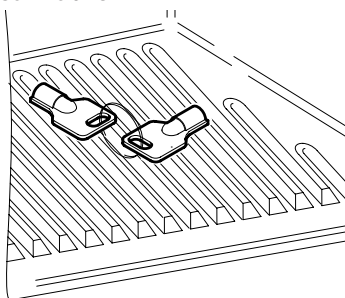
The maintenance technician is defined as being the person responsible for filling up the containers with soluble products, sugar, coffee, stirrers and cups.
The maintenance technician is also responsible for cleaning the distributor (see operations indicated in chapter 9.0). In the event of a fault the maintenance technician must call the installation technician.

INSTALLATION TECHNICIAN

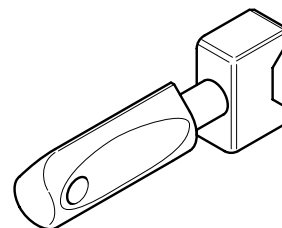
The installation technician is defined as the person responsible for the installation of the automatic distributor, the starting up operations and the function settings.
Each regulation operation is the exclusive responsibility of the installation technician who also holds the programming access password.



Keys at the disposal of the
MAINTENANCE and INSTALLATION
technicians



Key at the disposal of the
INSTALLATION technician



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

EPROM EXTRACTOR

P3000

INDEX

1.0 PREMISE

- 1.1 Important notices
- 1.2 General Instructions

2.0 TECHNICAL CHARACTERISTICS

3.0 DESCRIPTION OF THE MACHINE'S TECHNICAL CHARACTERISTICS

- 3.1 Description of the machine
- 3.2 Scheduled Use
- 3.3 Models
- 3.4 Basic instructions for the machine operation

4.0 TRANSPORTING THE AUTOMATIC VENDING MACHINE

- 4.1 Moving and Transport
- 4.2 Stocking
- 4.3 Packing
- 4.4 Reception
- 4.5 Unpacking

5.0 SAFETY RULES

6.0 INSTALLATION

- 6.1 Positioning
- 6.2 Water supply connection
- 6.3 Power supply connection
- 6.4 Machine starting up
- 6.5 Installation
 - 6.5.1 Regeneration of water softener resins
 - 6.5.2 Filling of water circuit
 - 6.5.3 Cleaning of parts in contact with food substances
- 6.6 Product loading
 - 6.6.1 Product container loading
 - 6.6.2 Label application
 - 6.6.3 Cup loading
 - 6.6.4 Spoon loading
 - 6.6.5 Spent coffee grounds bag insertion
 - 6.6.6 Payment system installation

7.0 PROGRAMMING

- 7.1 Function description

8.0 MAINTENANCE

9.0 MAINTENANCE AND INACTIVITY

- 9.1 Cleaning and loading procedures
 - 9.1.1 Procedure for distributor cleaning
 - 9.1.2 Periodic cleaning by the maintenance technician
 - 9.1.3 Daily cleaning procedures
 - 9.1.4 Weekly cleaning procedures
 - 9.1.5 Product Loading instructions
 - 9.1.6 Product storage advice
- 9.2 Maintenance - inactivity
 - 9.2.1 Ordinary and extraordinary Maintenance
 - 9.2.2 Coffee Group maintenance
- 9.3 Regulations
 - 9.3.1 Dosage and grinding regulation
 - 9.3.2 Instant electrovalve water flow regulation
- 9.4 Resing regeneration
- 9.5 When the unit is not working

10.0 DISMANTLEMENT

11.0 TROUBLESHOOTING GUIDE FOR THE FAILURES OR MOST COMMON ERRORS

12.0 ACCESSORIES KIT



1.0 PREMISE

1.1 Important notices

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.

1.2 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 its 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, adaptmets that are done the machine and that are subsequently commercialized do not oblige **NUOVA BIANCHI** neither to intervene on the machine previously supplied, nor, neither to update the relative technical documentation supplied together with the machine.
- It is however **NUOVA BIANCHI'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 Nuova Bianchi's Technical Service at the following numbers:

☎ ++39 35 419 67 20

fax ++39 2 700 483 32

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

- The data registered on the serial number label (Fig.1.1)
- The version of the programme contained in the EPROM (adhesive label applied to the component the assembled on the C.P.U. board) (Fig.1.2).

Nuova Bianchi S.p.A. 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 Nuova Bianchi 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.
- 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.

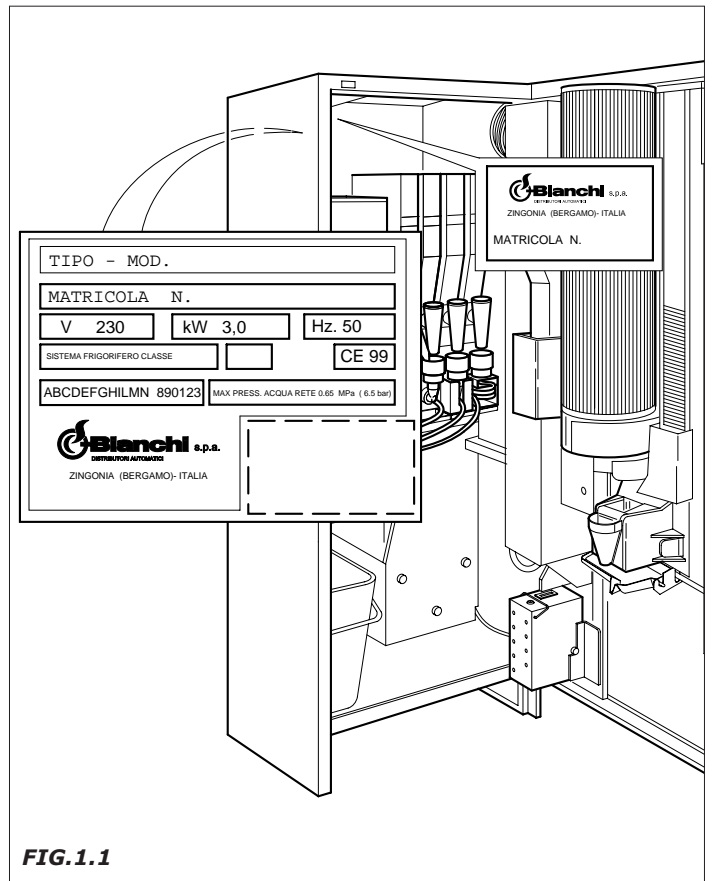


FIG.1.1

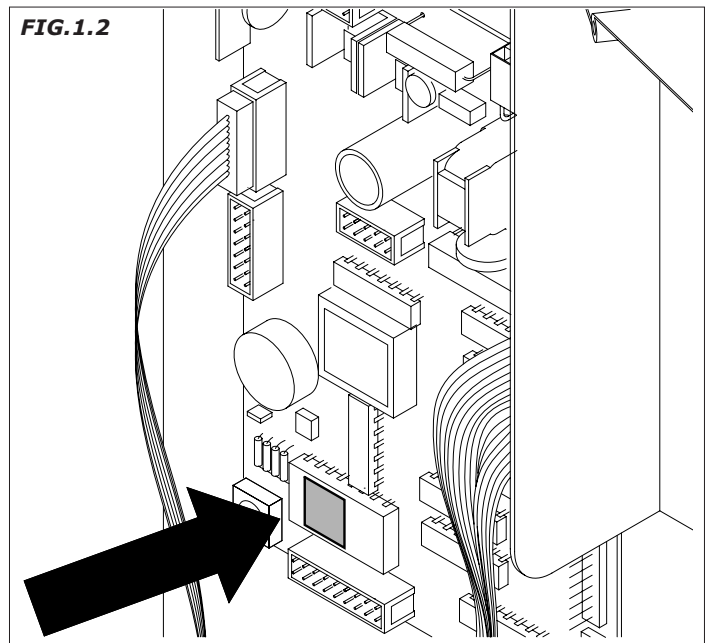


FIG.1.2

2.0 TECHNICAL CHARACTERISTICS

Height	mm 1830
Width	mm 657
Depth	mm 730
Weight	from 140 kg to 190 kg
Power Supply	V 230
Power frequency	Hz. 50
Installed power ⁽¹⁾	from 1,45kW to 3 kW

AVERAGE CONSUMPTIONS:

In standby	100 W/h
For 50 drinks	300 W/h
Water connection	3/8" gas hook-up
Electric connection	SCHUKO plug

WATER SUPPLY

from main supply with pressure between 0.5 and 6.5 MPa (bar)

CUP DISPENSER

Suitable for cups with diameter mm 70-71

BOILER RESISTANCES

of armoured type:

of 1500 W for the coffee boiler

of 1300 W for the instant boiler

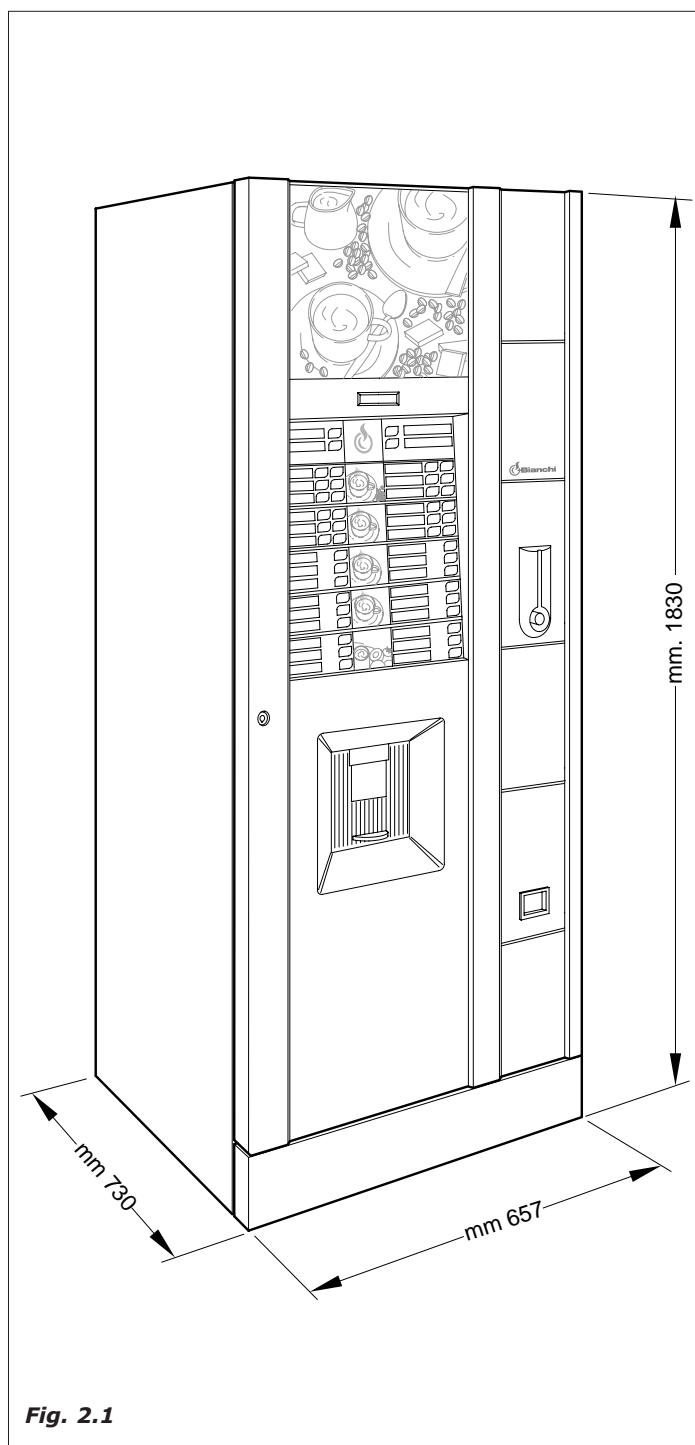
PRODUCT CONTAINER CAPACITY

Coffee in beans	kg 5
Instant coffee	kg 1,4
Powder milk	kg 2,2
Chocolate	kg 4,8
Tea	kg 5,2
Frozen-dry tea	kg 2,4
Broth	kg 3,8
Instant cold beverages	kg 4,0
Sugar	kg 4,0
Cups	700
Spoons	540

cooling unit ⁽²⁾	N class
cooling gas	R134a
Type of light and power	2 fluorescent lights of 6 W

⁽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.



3.0 GENERAL TECHNICAL

3.1 Machine description (Fig.3.1)

- 1 Coffee group and grinder
- 2 Drink dispensing group
- 3 Sugar dispenser group
- 4 Electronics board
- 5 Cup turred
- 6 Cooling unit
- 7 Coin mechanism

3.2 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.


3.3 Models

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

SIRIO E (version with espresso coffee and instant beverages)

SIRIO 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.

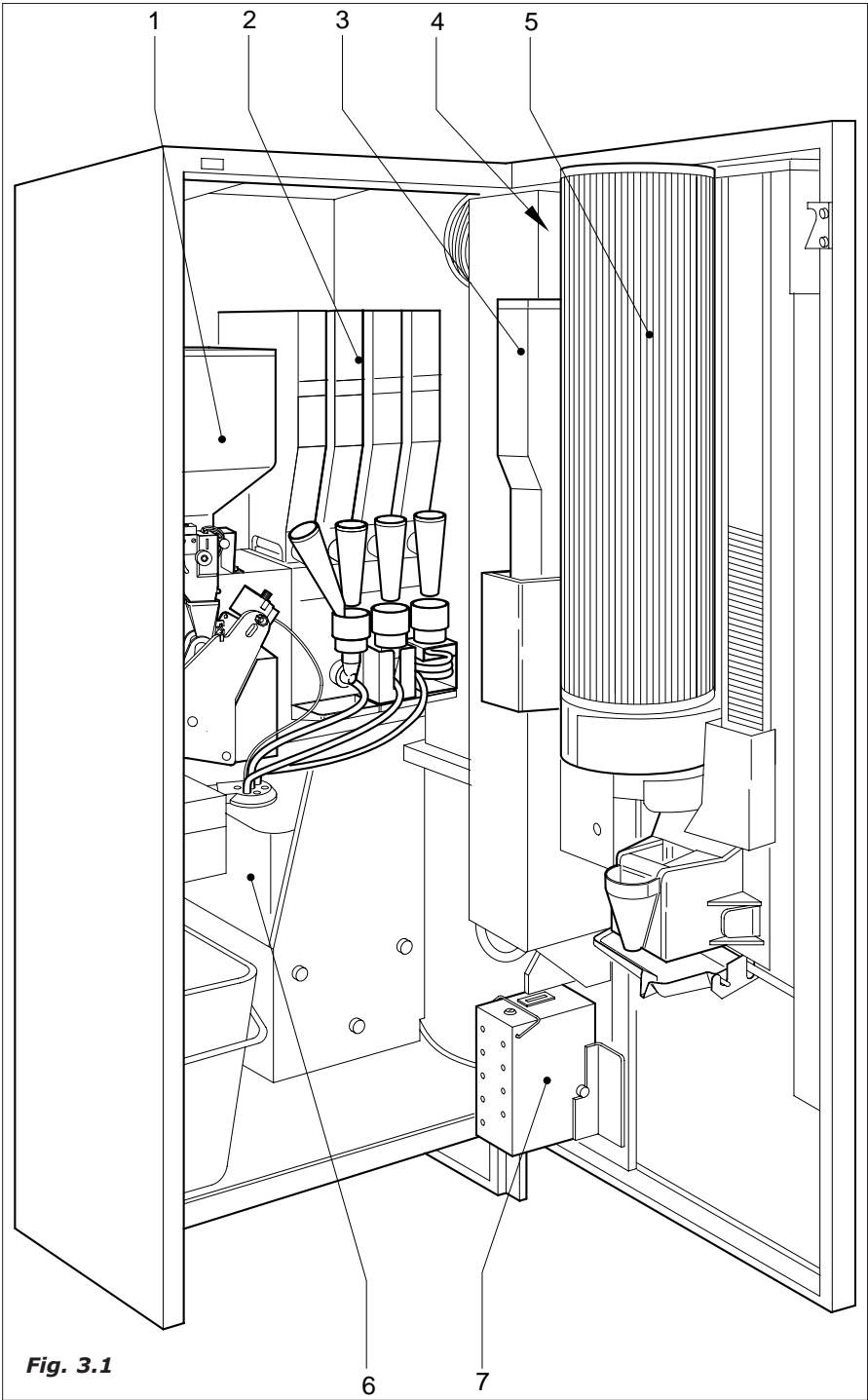


Fig. 3.1

ART. CODE	ARTICLE DESCRIPTION
SIE14AZ	SIRIO E3S GB MC BLUE
SIE14GG	SIRIO E3S GB MC GRAPHITE
SIE14AR	SIRIO E3S GB MC SILVER
SIE15AZ	SIRIO E4S GB MC BLUE
SIE15GG	SIRIO E4S GB MC GRAPHITE
SIE15AR	SIRIO E4S GB MC SILVER
SIE16AZ	SIRIO E4S GB DC BLUE
SIE16GG	SIRIO E4S GB DC GRAPHITE
SIE16AR	SIRIO E4S GB DC SILVER
SIE17AZ	SIRIO E4S GB DC BLUE SA
SIE17GG	SIRIO E4S GB DC BLUE SA

ART. CODE	ARTICLE DESCRIPTION
SIE17AR	SIRIO E4S GB DC BLUE SA
SIE18AR	SIRIO E4S GB DC SILVER IVS
SIFB01AZ	SIRIO FB7S BLUE NE
SIFB01GG	SIRIO FB7S BLUE NE
SIFB01AR	SIRIO FB7S BLUE NE
SII02AZ	SIRIO I7S BLUE NE
SII02GG	SIRIO I7S BLUE NE
SII02AR	SIRIO I7S BLUE NE
SII06	SIRIO I7S BLACK NS
SII08	SIRIO I7S BLACK CA
SII09AZ	SIRIO I5S BLUE FR

ART. CODE	ARTICLE DESCRIPTION
SII09GG	SIRIO I5S GRAPHITE FR
SII09AR	SIRIO I5S SILVER FR
SII10AZ	SIRIO I7S BLUE
SII10GG	SIRIO I7S GRAPHITE
SII10AR	SIRIO I7S SILVER
SII11AZ	SIRIO I7S BLUE AS
SII07	SIRIO I7S BLACK IS
SII12NE	SIRIO I7S BLACK IS
SIIP03AZ	SIRIO I7S/F BLUE
SIIP03GG	SIRIO I7S/F GRAPHITE
SIIP03AR	SIRIO I7S/F SILVER

SIRIO **ENS** (version with espresso coffee and instant beverages)
where: **E** = Espresso
NS = Number of boxes of instant product

SIRIO **INS** (version only with instant products)
where: **I** = Instant
NS = Number of boxes of instant product

3.4 Basic operation concepts

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:

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.3.2).

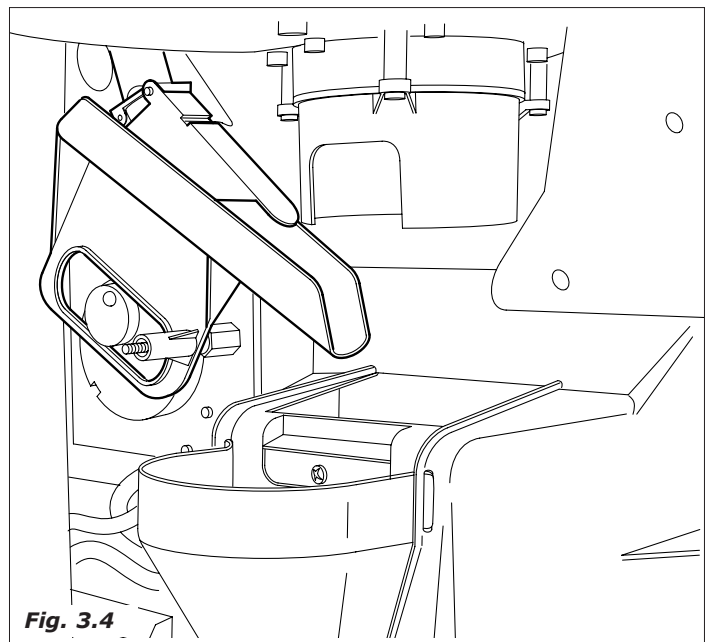
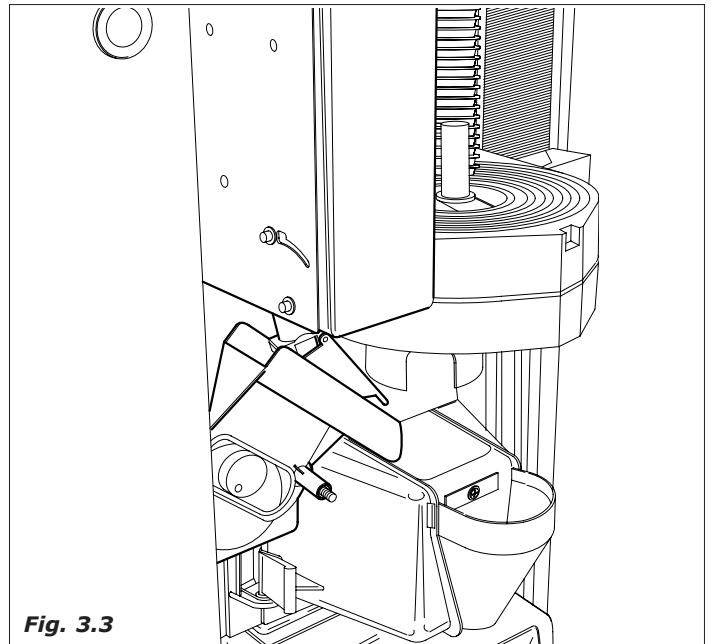
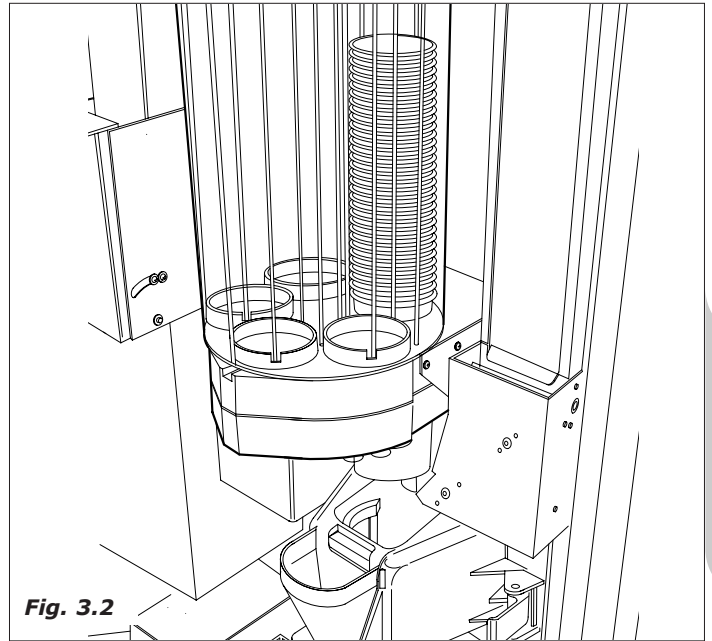
SUGAR DISPENSER

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.3.3)
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. 3.4).



SPOON DISPENSING

This process is activated only in the versions where the spoon dispenser is foreseen (**E**); 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.3.5).

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.3.6)
- The electrovalve assembled on the instant boiler (Fig.3.7) or fixed to the instant coffee (Fig.3.8) is activated in order to introduce the set quantity of water into the mixer.

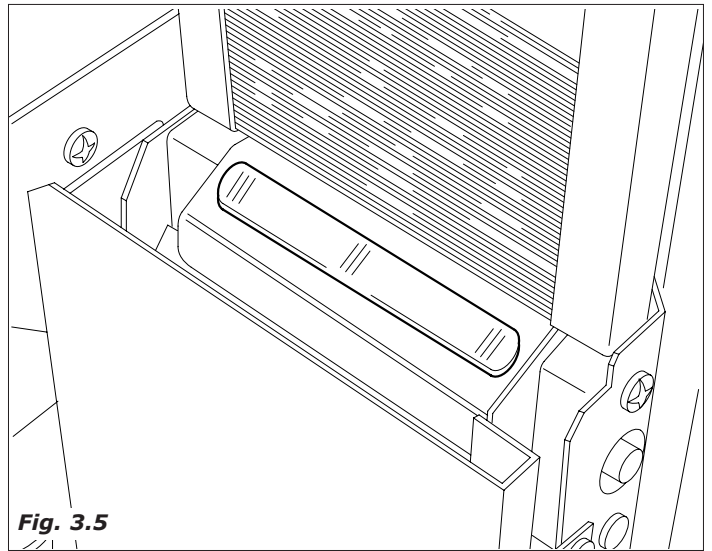
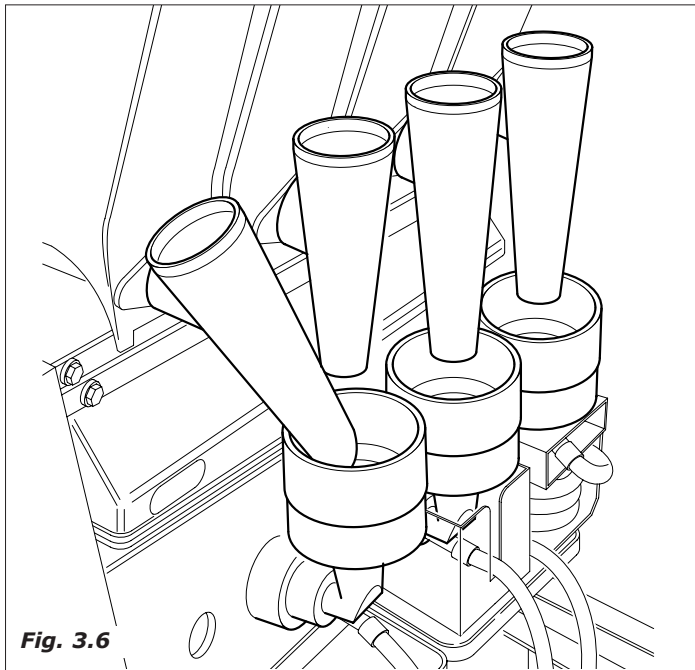


Fig. 3.5

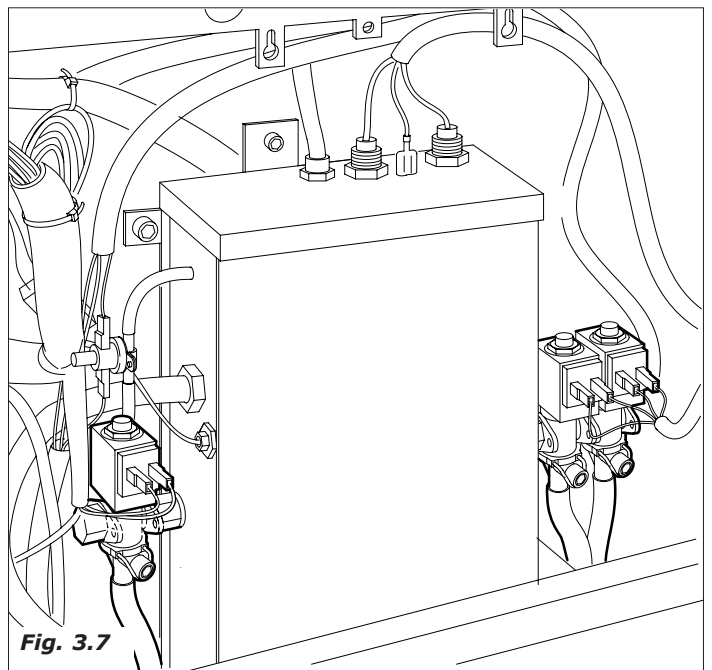


Fig. 3.7

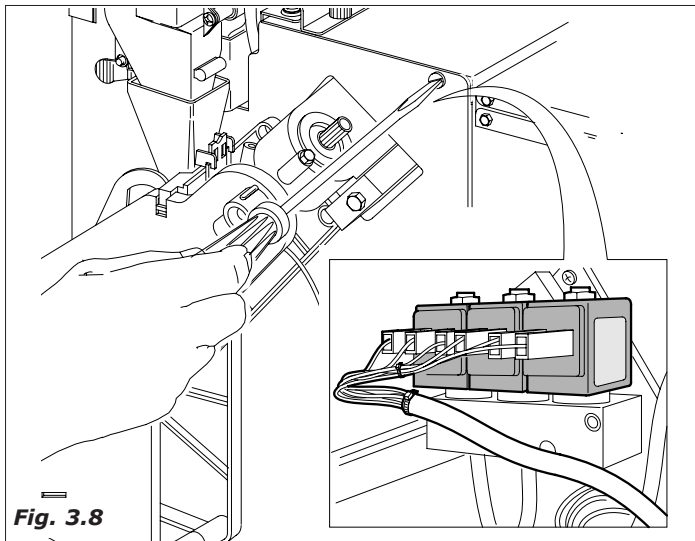


Fig. 3.8

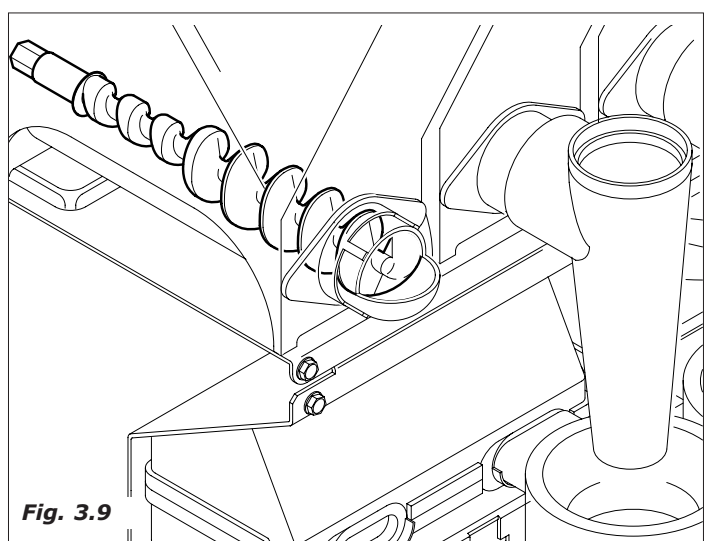


Fig. 3.9

- 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 more than one product can be conveyed into the same mixer) (Fig.3.9)
- once the preset quantity of water and powder is dispensed, the whipper motor is switched off.

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.3.10)
- the doser electromagnet is activated , causing the opening of the door and consequent fall of the coffee into the brew chamber (Fig.3.11).
- the rotation group geared motor brings it into the dispensing position and simultaneously compresses the ground coffee (Fig.3.12).
- 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.3.12).
- 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.3.13)

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

INSTANT COLD BEVERAGES

Only in the versions equipped with cooling unit (F), this process, is the same as that for the preparation of the instant hot beverages, except that the dispensing of the water that is withdrawn through the activation of an electrovalve assembled on the cooling unit (Fig.3.14).

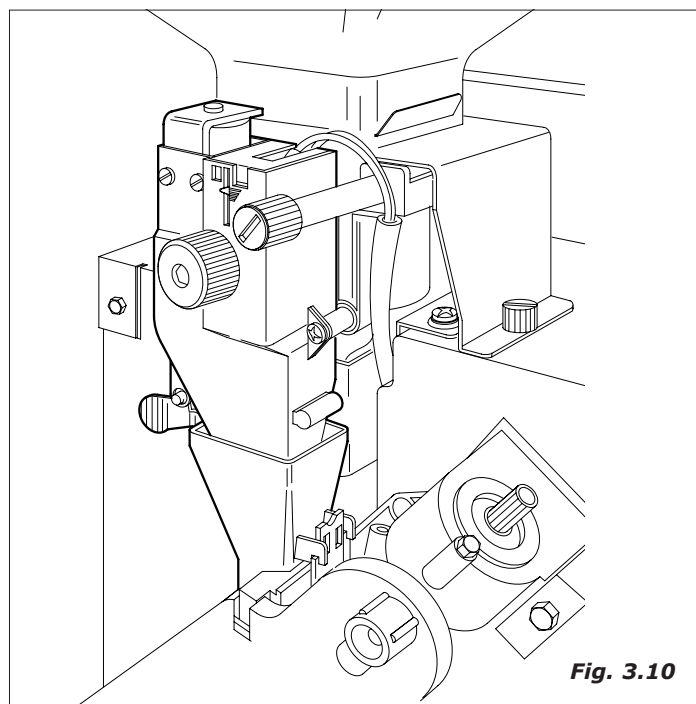


Fig. 3.10

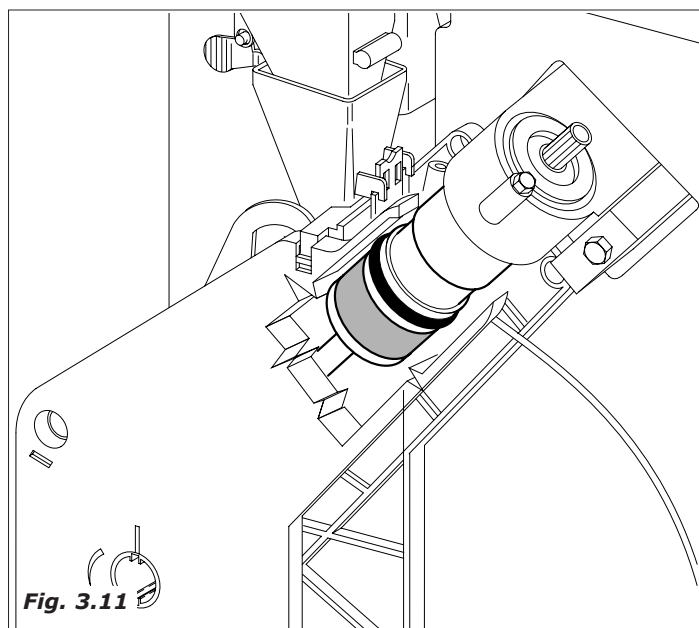


Fig. 3.11

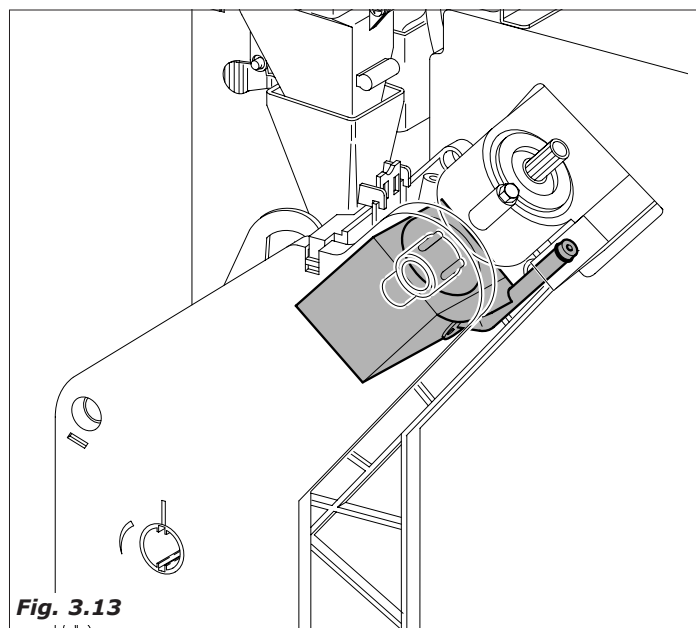


Fig. 3.13

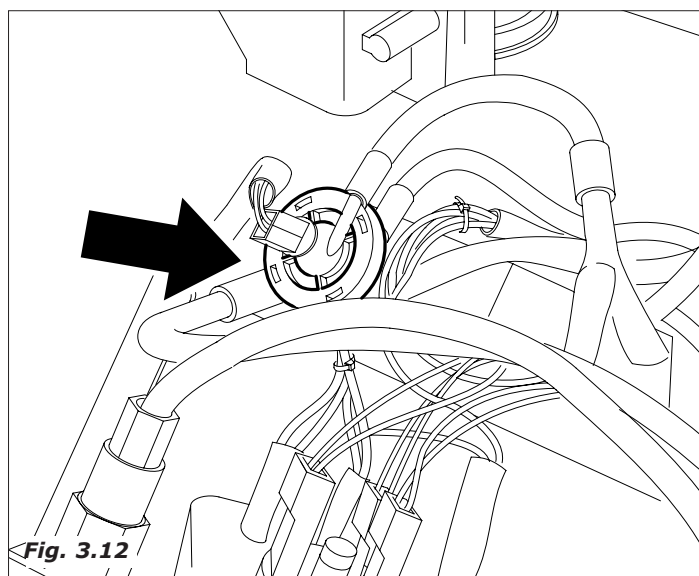


Fig. 3.12

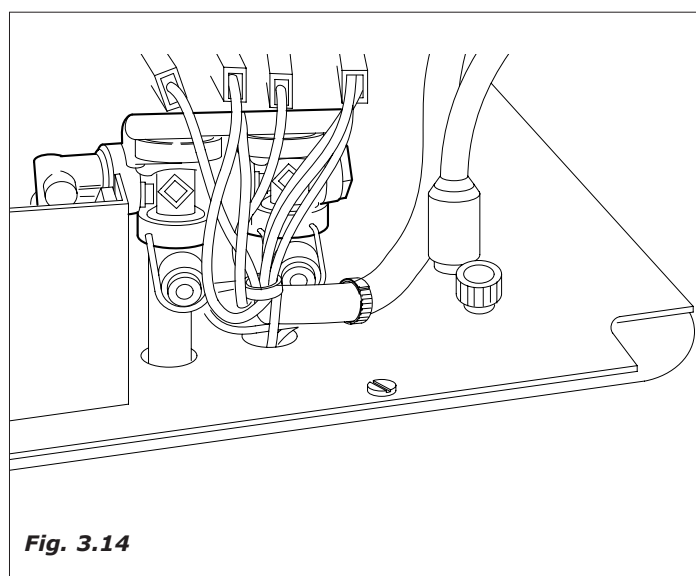


Fig. 3.14



4.0 MOVING AN AUTOMATIC VENDING MACHINE

4.1 Moving and transport (Fig.4.1)

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.

4.2 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.4.2).

4.3 Packing

The distributor is protected with polystyrene angles and by a transparent film in polypropylene (Fig.4.2).

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:

- manoeuver 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.

4.4 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.



At 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

4.5 Unpacking

- Free the distributor from the packaging, cutting the protective film in which it is wrapped, along one of the protection angles (Fig.4.3).

Remove the distributor from transport pallet, unscrewing the screws (A) that block the fixing cross staff heads to the pallet (Fig.4.4).

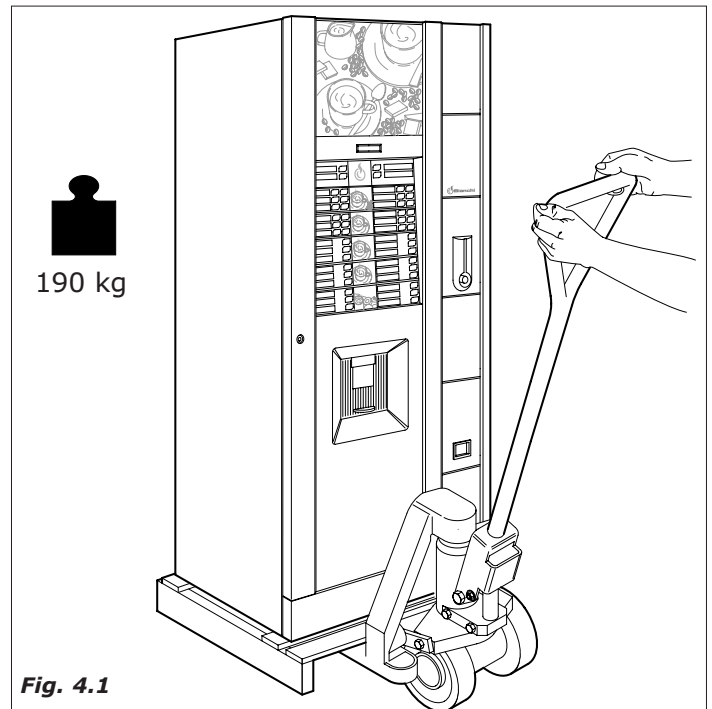


Fig. 4.1

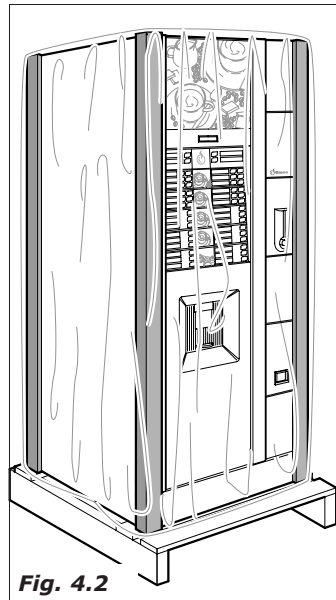


Fig. 4.2

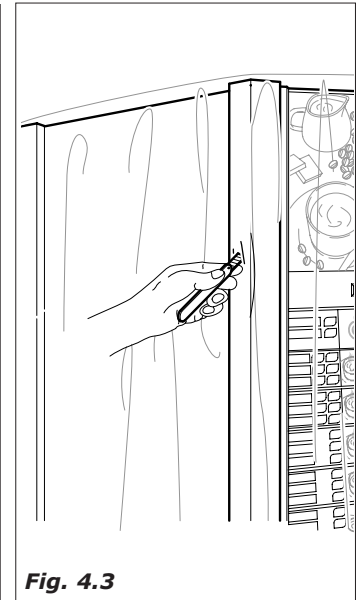


Fig. 4.3

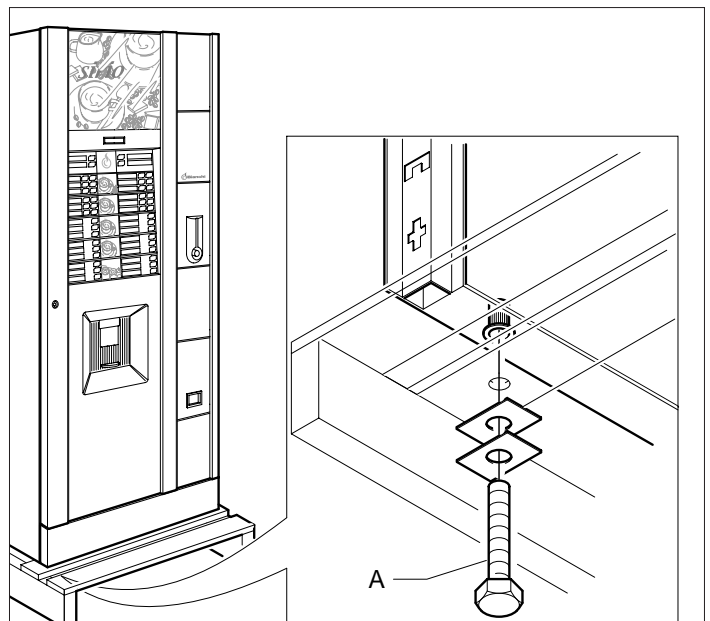


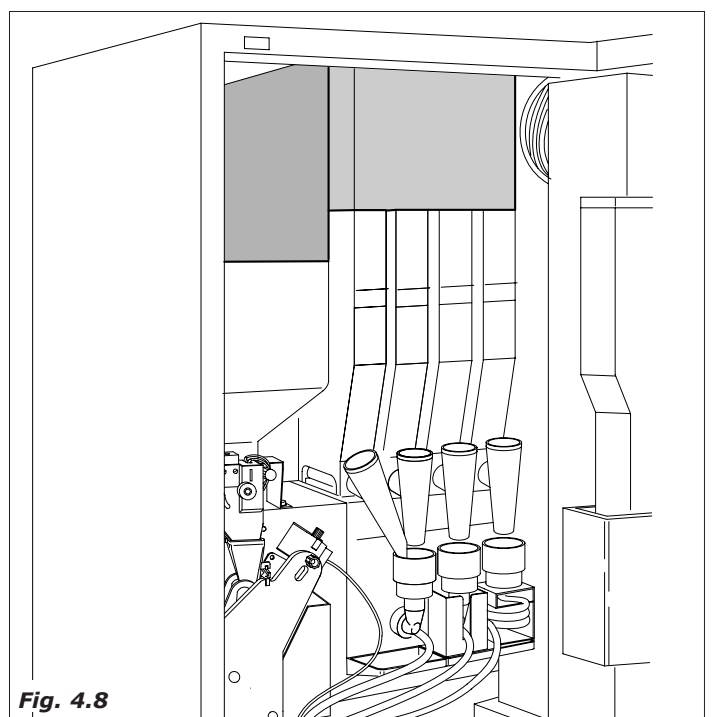
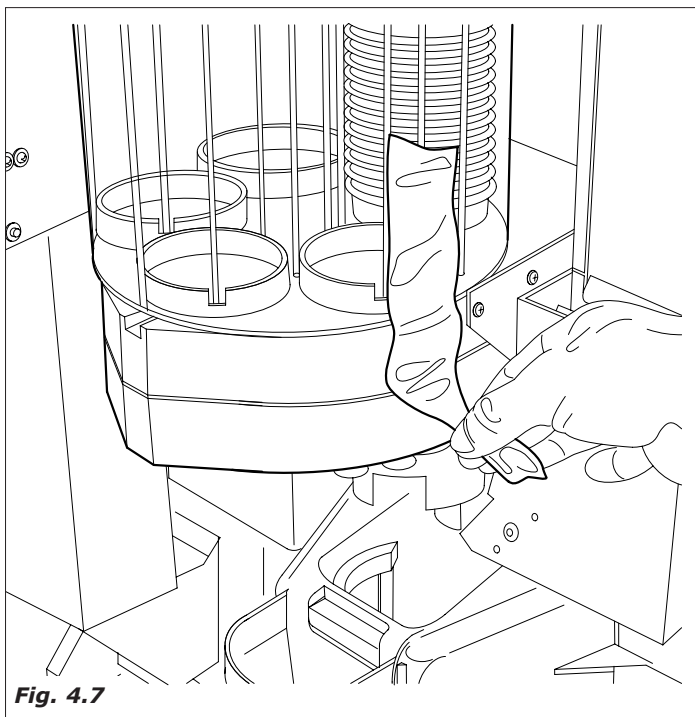
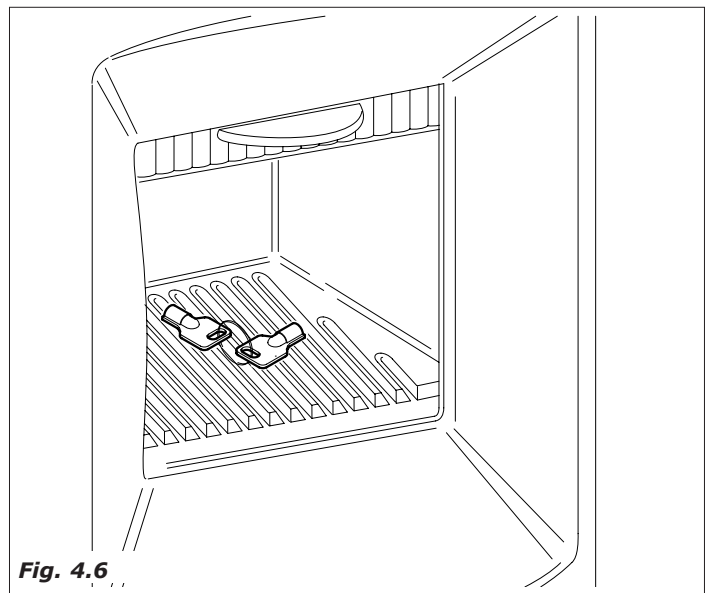
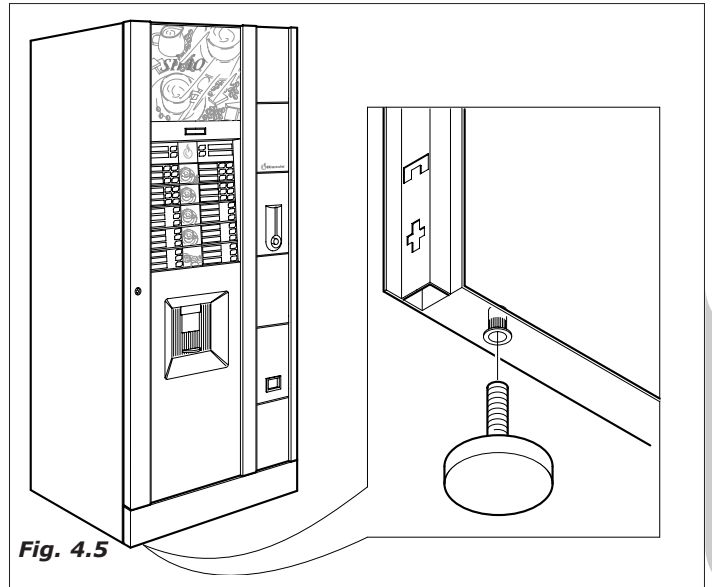
Fig. 4.4

- Release the pallet and insert the 4 feet into the threaded slots (fig. 4.5) freed of the screws (A)
- remove the key from the drink dispensing chamber (Fig.4.6)
- open the door of the distributor and remove the adhesive tape from the components listed here below:

- cup turret (example in Fig.4.7)
- coin box
- sugar container
- weight on the spoon dispenser column
- coin mechanism cover / C.P.U. board
- product containers
- water bin float mechanism
- bottom skirting-board
- water bin
- remove the polystyrene that that blocks the product containers (Fig.4.8)



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.



5.0 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.
- **The distributor is not suitable for external installation. The machine must be connect 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.**
- 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 and humidity of not over 70%.
- In order to guarantee a regular operation, always maintain the automatic distributor in perfect cleaning conditions
- **Nuova Bianchi S.p.A.** declines all responsibility for damages product 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
- Furthermore verify observance of any other eventual local and national standards.

6.0 INSTALLATION



6.1 Positioning

As already specified in paragraph 5.0, "Safety regulations", the distributor is not suitable for external installation. The machine must be connect 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.) . It must be installed in places without danger of explosions or fires.

- If positioned near to a wall, there must be a minimum distance from the wall of at least 5 cm. (Fig.6.1) 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 (Fig.6.2). 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.

Nuova Bianchi 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.6.1).

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.



6.2 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 MPa (bar) (if this should not be the case, use a pump or a water pressure, reducer according to the case).

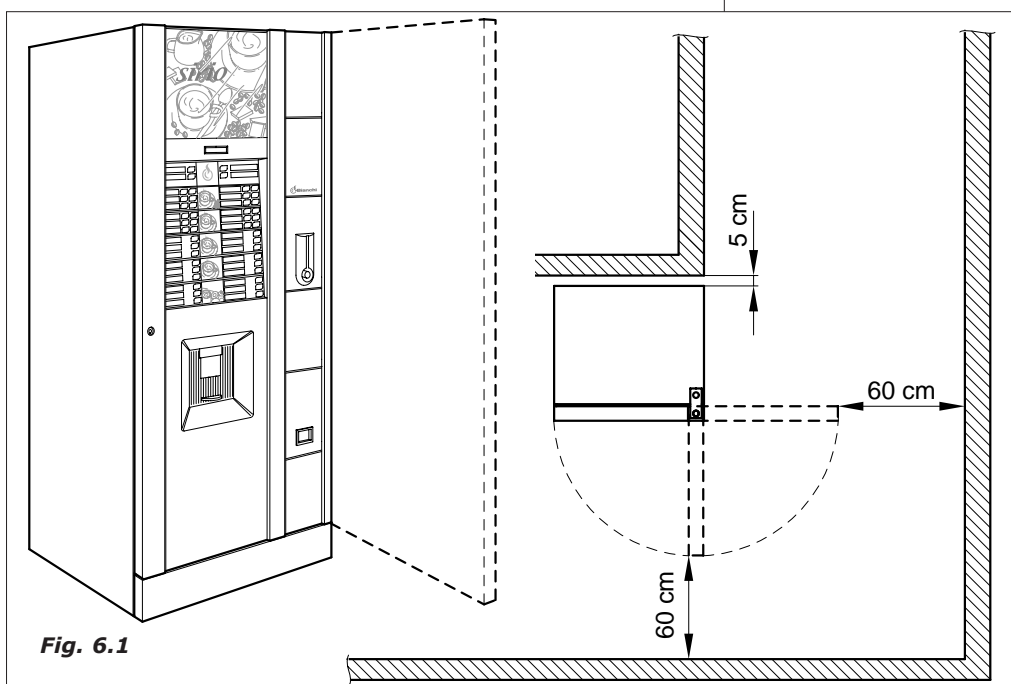


Fig. 6.1

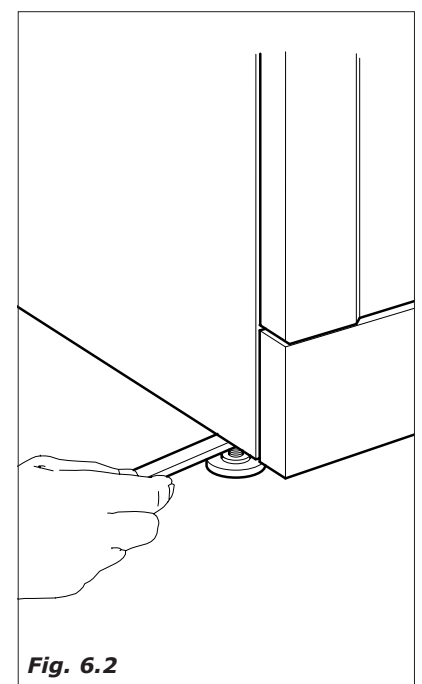


Fig. 6.2

- 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.6.3).
- before making water connections, make some water flow out of the tap so as to eliminate possible traces of impurities and dirt (Fig.6.4)
- 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. 6.5).
- the foreseen connection is a 3/ 8 gas (Fig.6.6).

6.3 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 $\pm 6\%$
- 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.6.7).
- The sockets that are not compatible with that of the machine must be replaced. (Fig.6.8).
- The use of extension, adapters and/ or multiple plugs is forbidden.
- Models SIE17AR-SIE17AZ-SIE17GG are fitted with specific plugs for ARGENTINA.

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



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

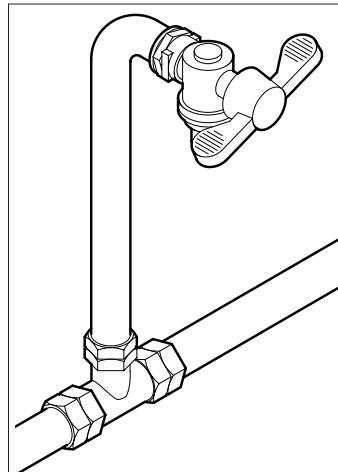


Fig. 6.3

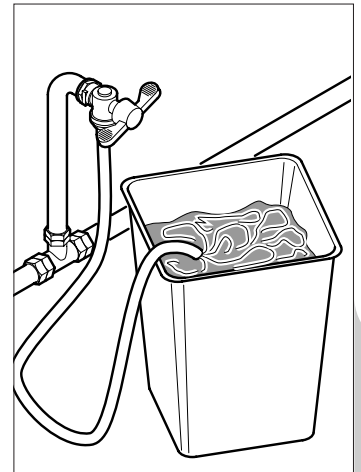


Fig. 6.4

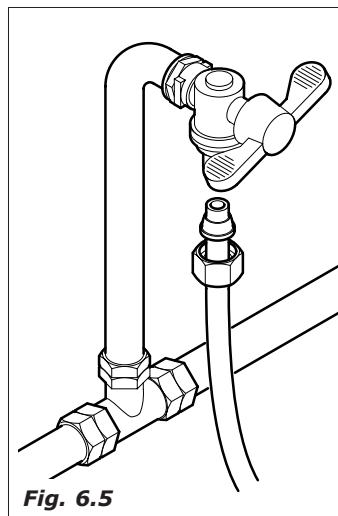


Fig. 6.5

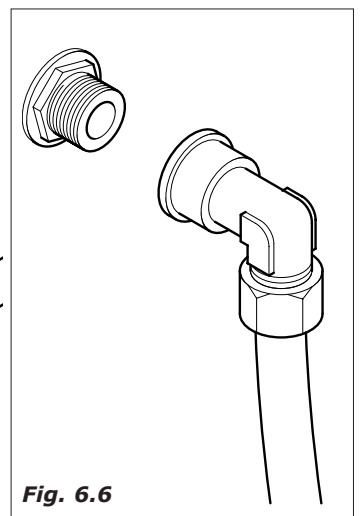


Fig. 6.6

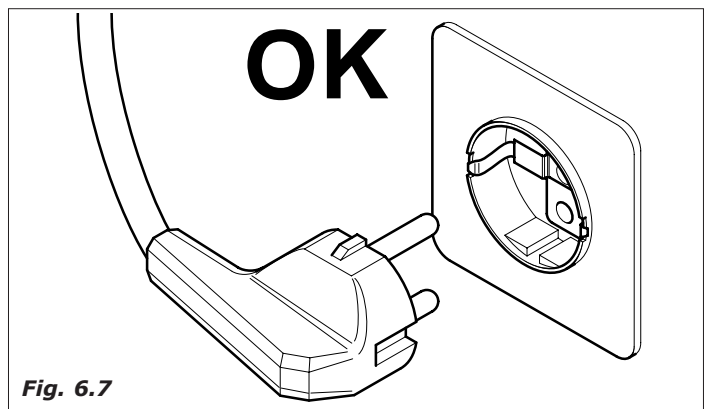


Fig. 6.7

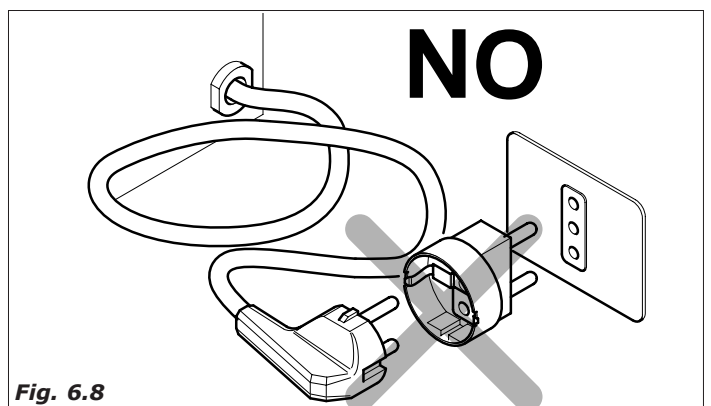


Fig. 6.8



6.4 Starting up of the unit

The distributor is equipped with a safety switch (Fig.6.9) 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.6.10-pos.1) as well as the service switch inside the distributor. (Fig.6.11-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.6.12).

The opening and the possible connection with the distributor's door open (if not only for cleaning reasons) 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.

Each time the distributor is switched on a diagnosis cycle is performed in order to verify the position of the mobile parts and the presence of water and of some products.

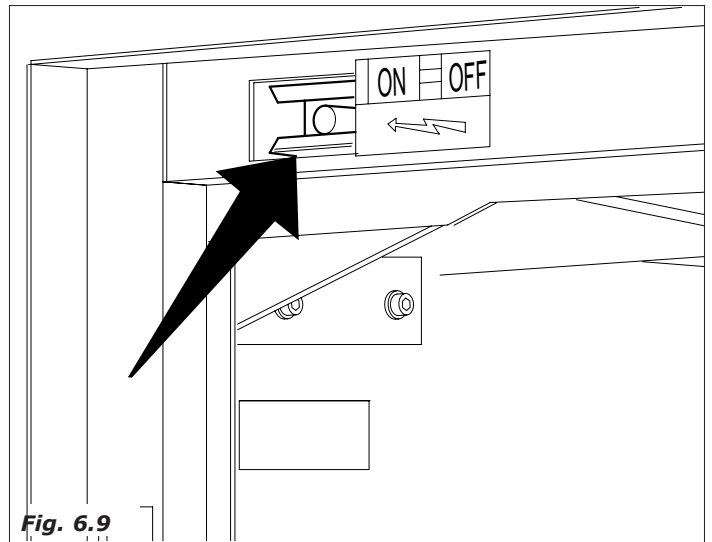


Fig. 6.9

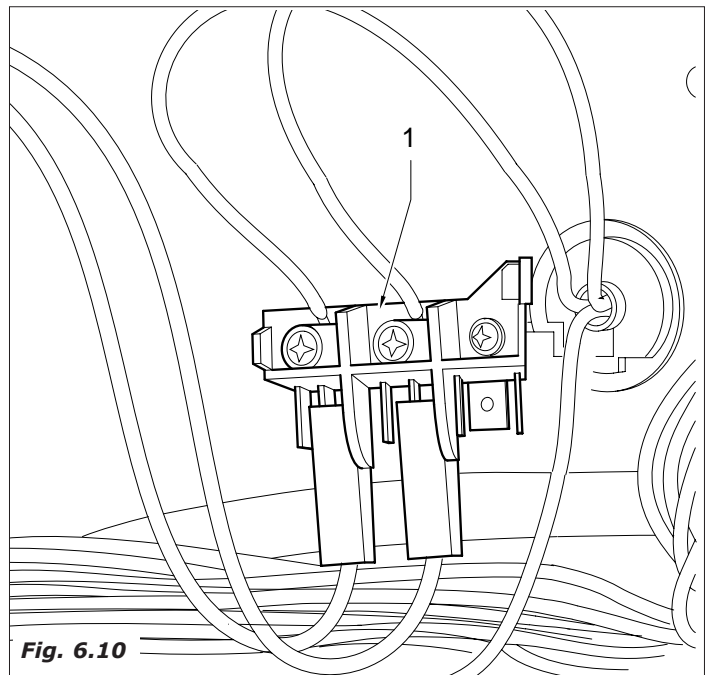


Fig. 6.10

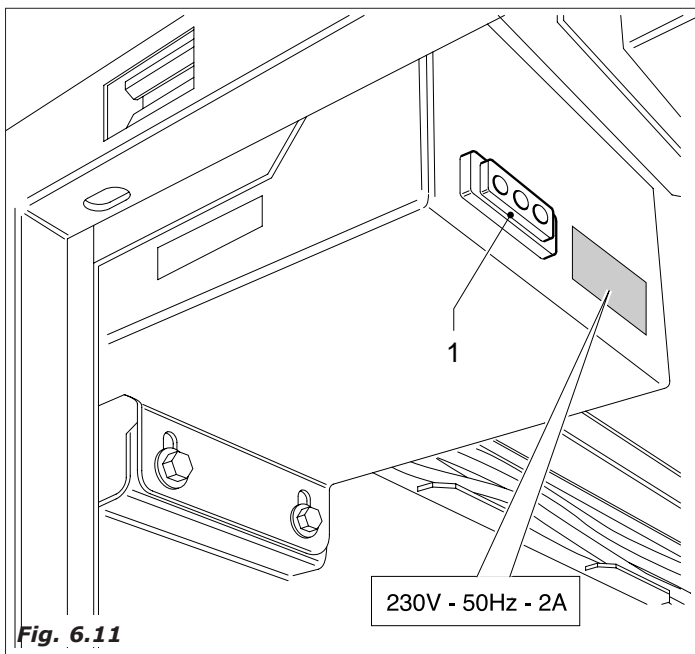


Fig. 6.11

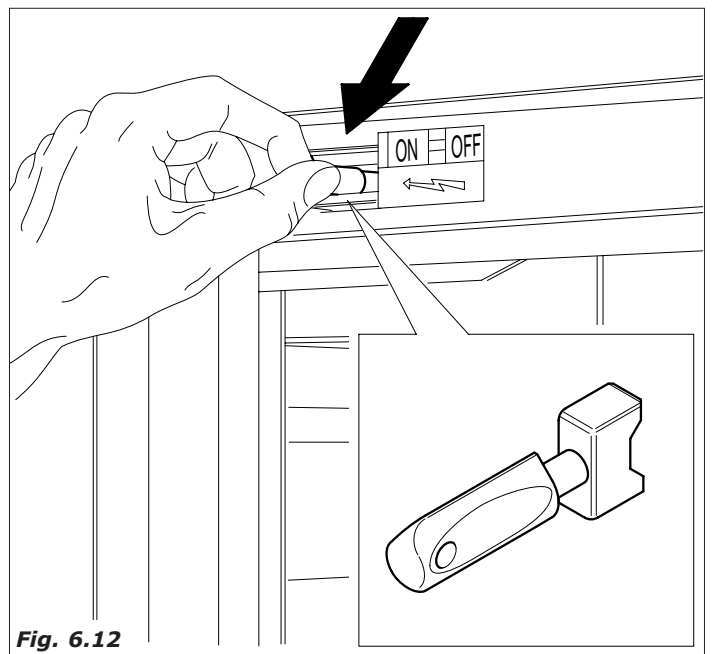


Fig. 6.12



6.5 Installation

6.5.1 Water Softener Resin regeneration

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.6.13)
- insert the key in the door switch (Fig.6.12)
- Let the water flow until it is clear (Fig. 6.14).
- Take out the key and close the faucet.

6.5.2 Filling the water circuit

The machine fills the water circuit automatically. Remove the boiler protections (Fig. 6.15) and the power circuit board and insert the key into the door switch.

The sequence of the operations will be:

- filling of the floater water reservoir
- at the same time the instant boiler will be filled (if installed). We suggest to sometimes compress the tube that connects the boiler to the water reservoir so as to eliminate eventual air bubbles that could be created, (Fig.6.16).
- when the level set by the floater is reached inside the water reservoir, (Fig. 6.17) the following parts will start operating and i.e.: the cup turret will start to be filled and the coffee group will start and make a test run.
- Once the maximum level is reached, the filling will stop.
- 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.6.18).

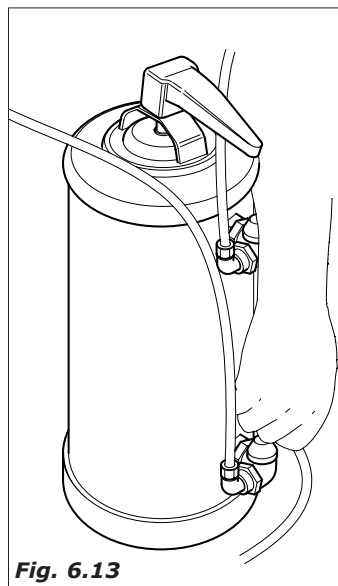


Fig. 6.13

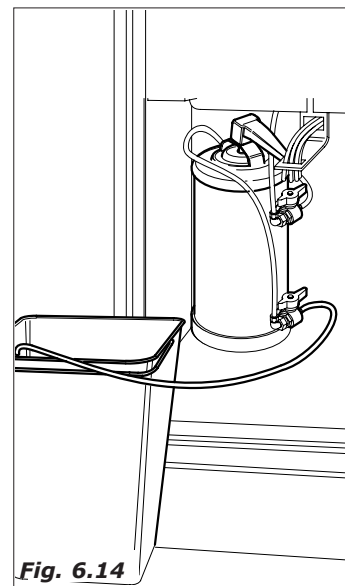


Fig. 6.14

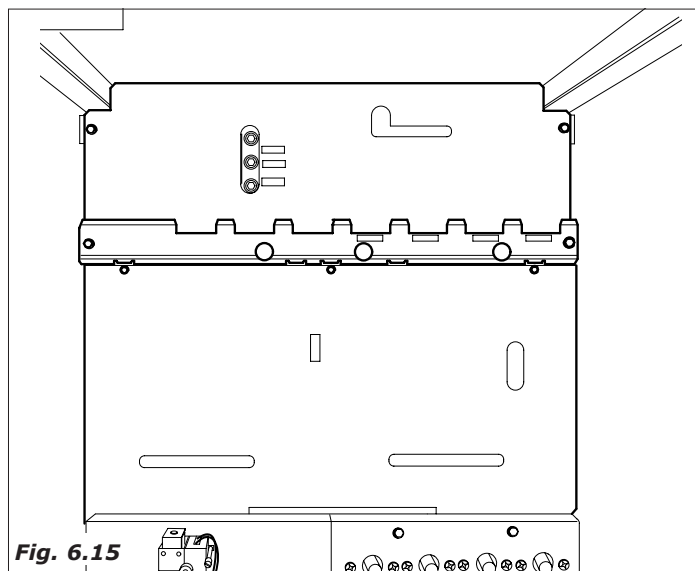


Fig. 6.15

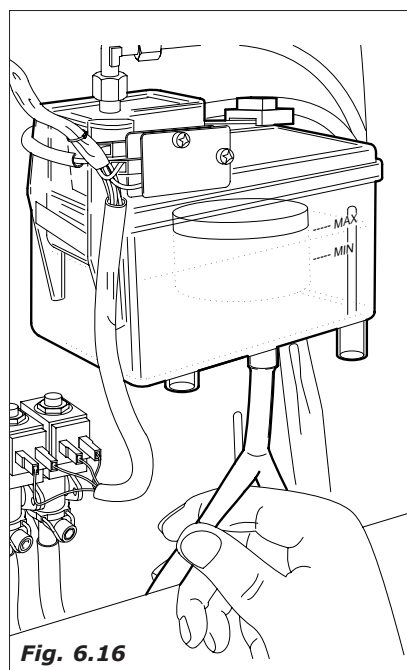


Fig. 6.16

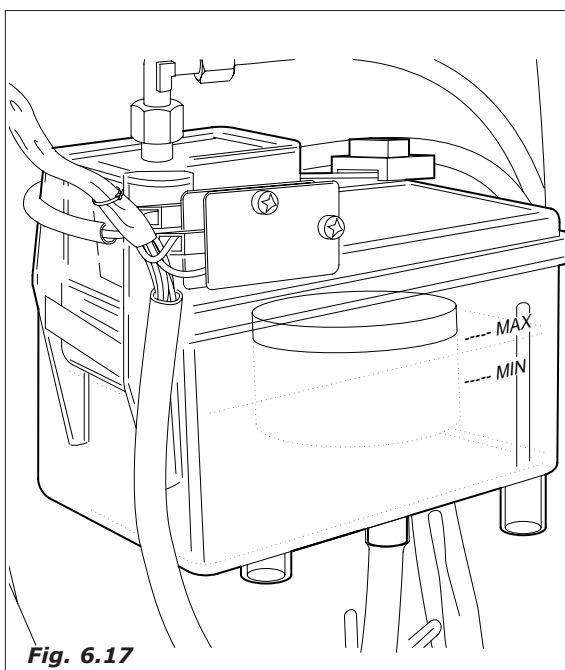


Fig. 6.17

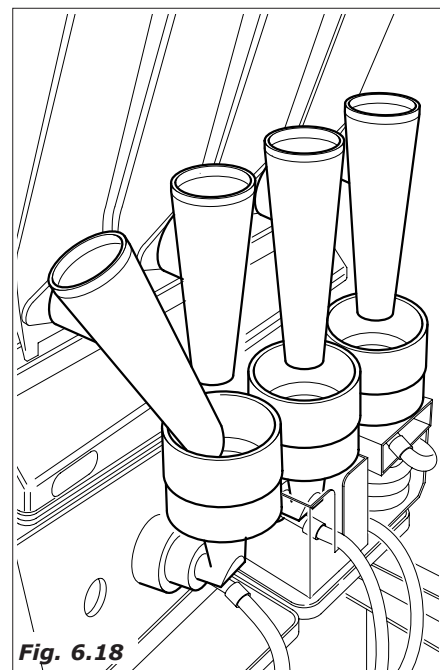


Fig. 6.18

- Make some test selections with water only, on the espresso coffee selections so as to fill the boiler and facilitate the activation of the pump.
- When these operations have been effected, connect the two resistor connectors (Fig. 6.19-pos.1 soluble - Pos.2 espresso) to the power circuit boards and wait about ten minutes until the operating temperature is reached.

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.

6.5.2.1 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.6.20).
- Position the reservoir drain hose in the liquid waste bin, in the (Fig.6.21).
- Insert the key in the door switch (see Fig.6.12) 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. 6.22)
- 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

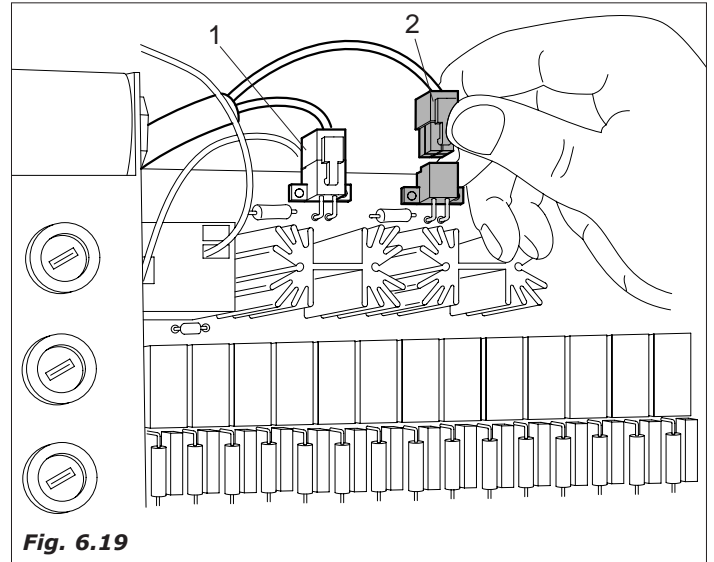


Fig. 6.19

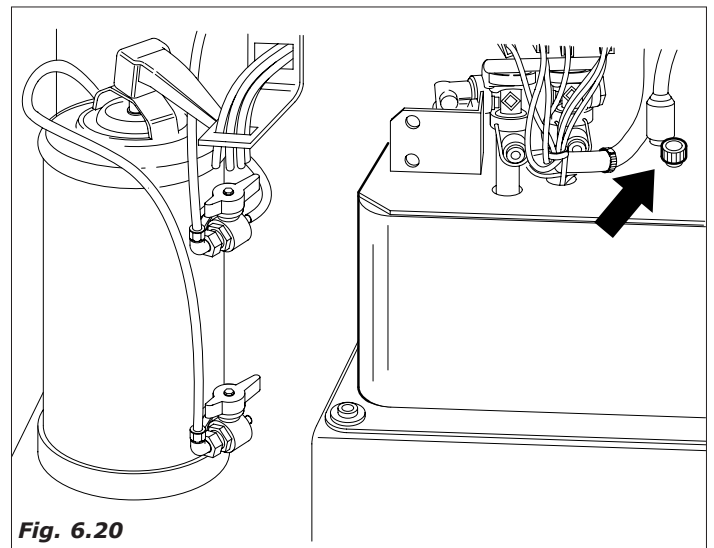


Fig. 6.20

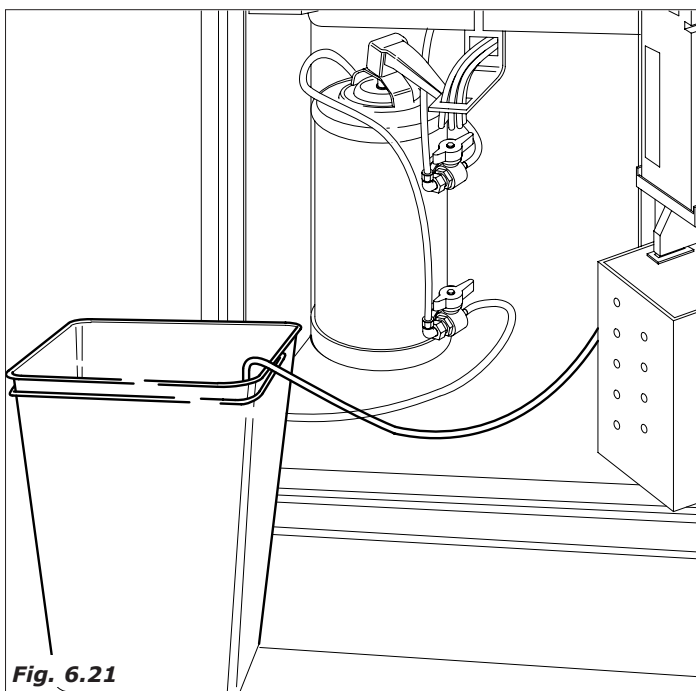


Fig. 6.21

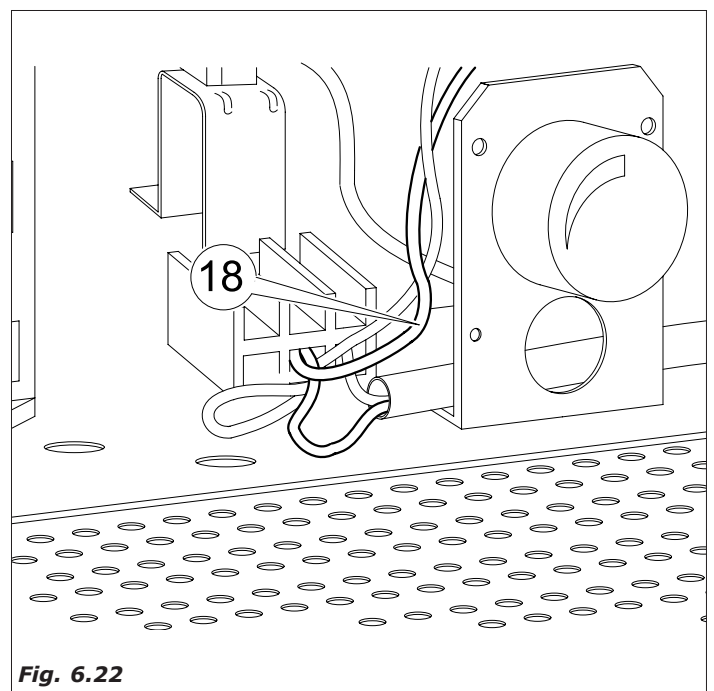


Fig. 6.22

6.5.3 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.6.23)
- remove the lids from the product containers covers and product chutes (Fig.6.24). 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.6.25)
- with a cloth soaked with the solution clean the whipper assembly base (Fig.6.26)
- 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.



6.6 Product container loading (with machine off)

6.6.1 Loading containers

- so as to effect the loading is necessary remove each container (Fig.6.27). 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.6.28)
- pay attention that there are no clots, avoid pressing the product and using an excessive quantity, so as to avoid its aging in relation to the consumption foreseen in the time period between two loadings.

Check the container product capacity in the section TECHNICAL CHARACTERISTICS.

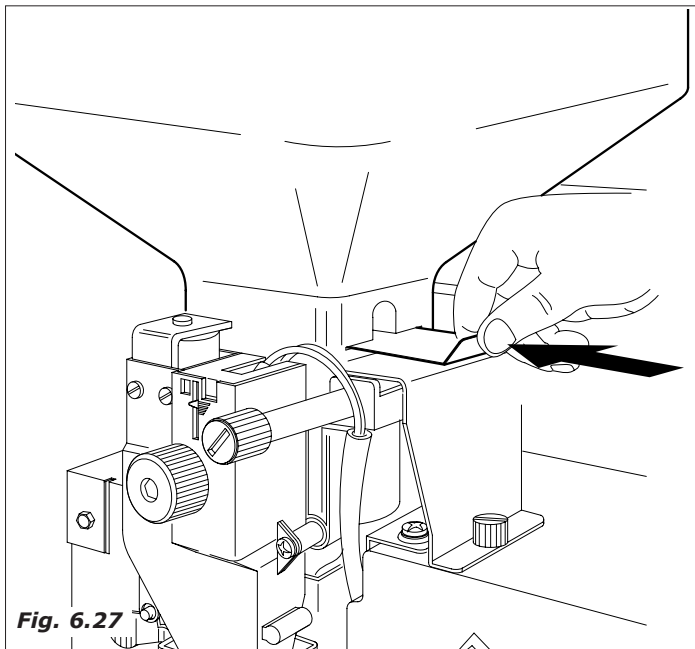


Fig. 6.27

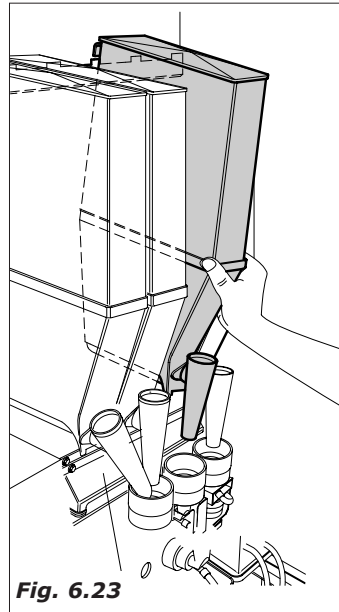


Fig. 6.23

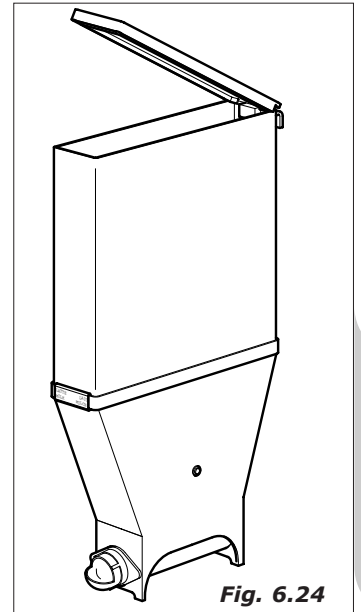


Fig. 6.24

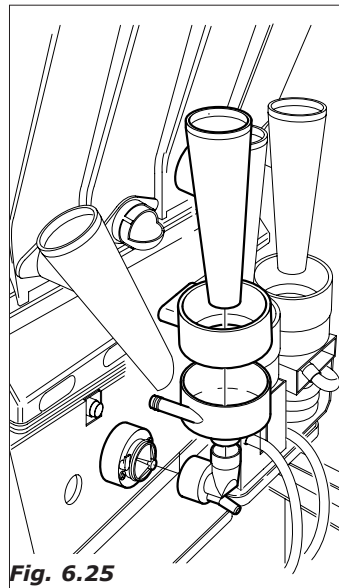


Fig. 6.25

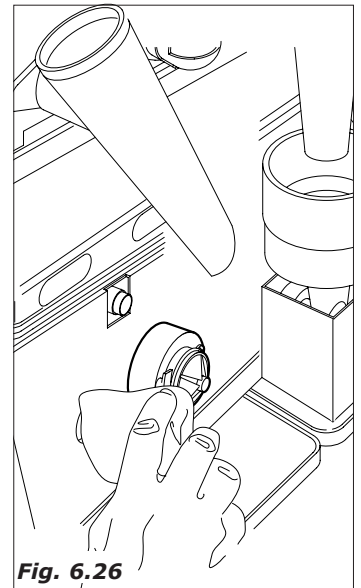


Fig. 6.26

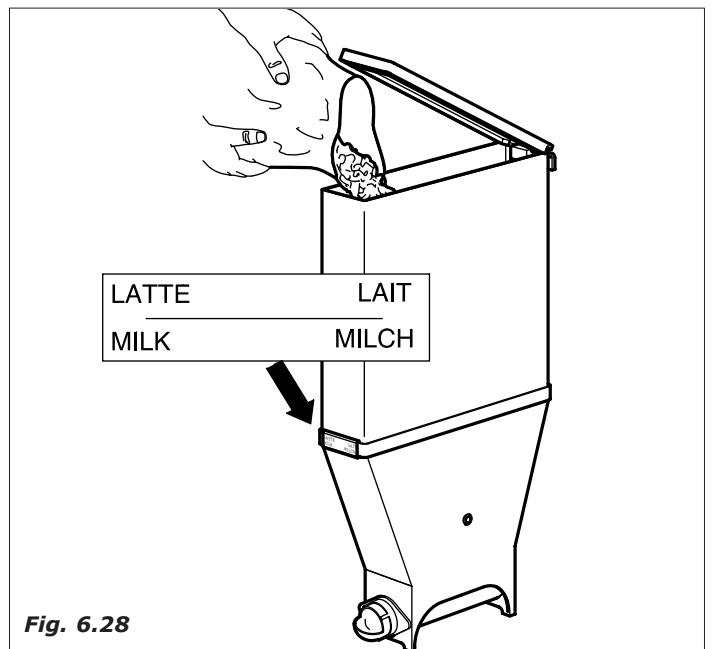


Fig. 6.28

6.6.2 Product selection label application

- the labels indicating the product selections must be inserted in the special slots according to the order indicated (*Chapter "8.0 MAINTENANCE"*).

Perform the operation as follows:

- lift the cup turret's spring band (Fig. 6.29)
- remove the cup turret (Fig. 6.30)
- insert the labels in the order according to the selections used on the vending machine (Fig. 6.31)
- re-assemble the whole in inverse order.

6.6.3 Cup loading

Use only cups suitable for automatic vending machines, with a diameter of more than 70-71 mm, 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.6.32)
- Put the cup turret's lid back on and snap in the spring band (Fig. 6.33).

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.

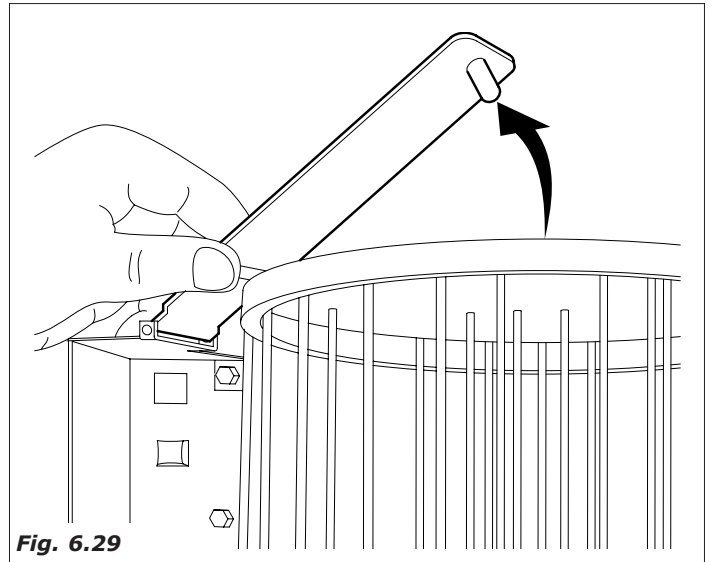


Fig. 6.29

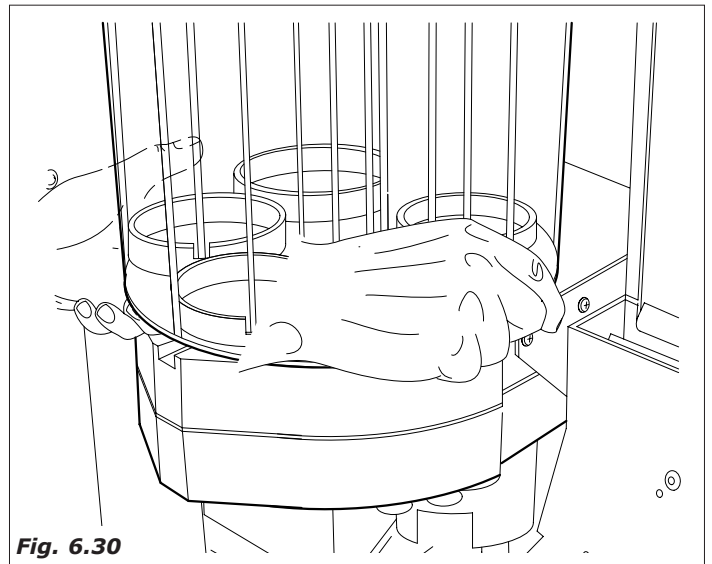


Fig. 6.30

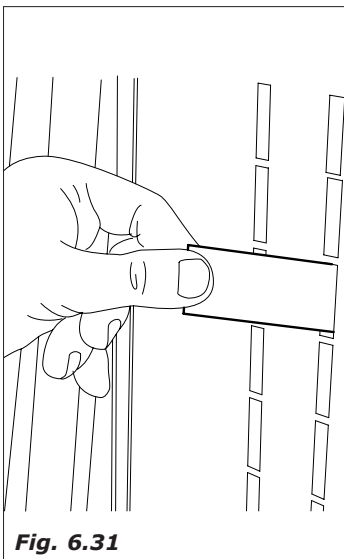


Fig. 6.31

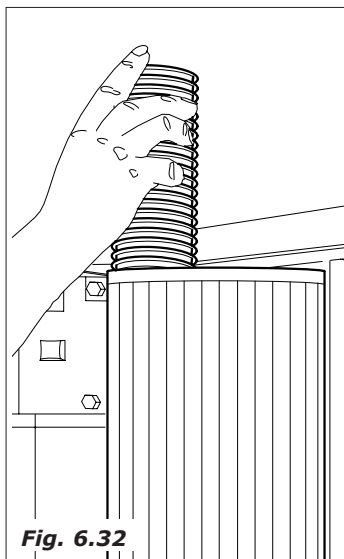


Fig. 6.32

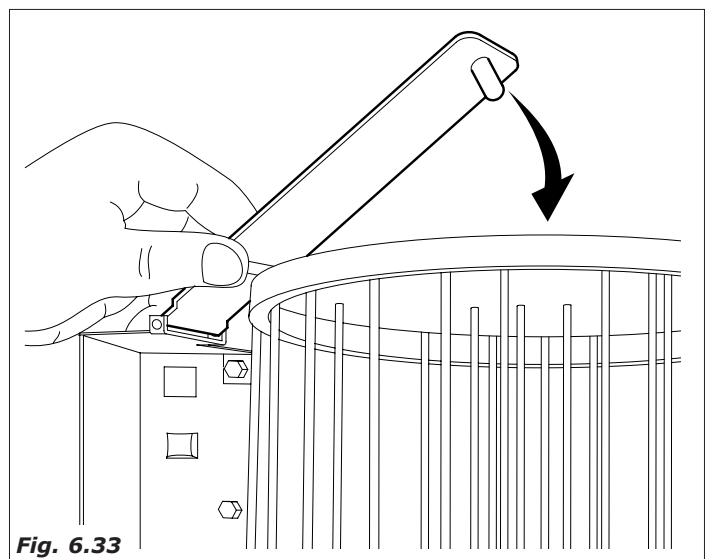


Fig. 6.33

6.6.4 Spoon loading

- Remove the metal weight from the spoon dispensing column (Fig. 6.34)
- insert the spoons with their pack wrapping in the column and when they are positioned on the bottom cut and remove the wrapping (Fig. 6.35)
- 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. 6.36).

The **SIRIO I** and **I/F** models do not have the spoon dispensing column as the sugar is mixed directly with the products.

6.6.5 Insertion of waste grounds bag

- Only for the "coffee in beans version"
- remove the supporting ring from its seat (Fig. 6.37)
- insert the plastic bag wrapping it on the support itself
- replace the support in the guide
- Use plastic bags that are sufficiently long so that they touch the bottom of the distributor

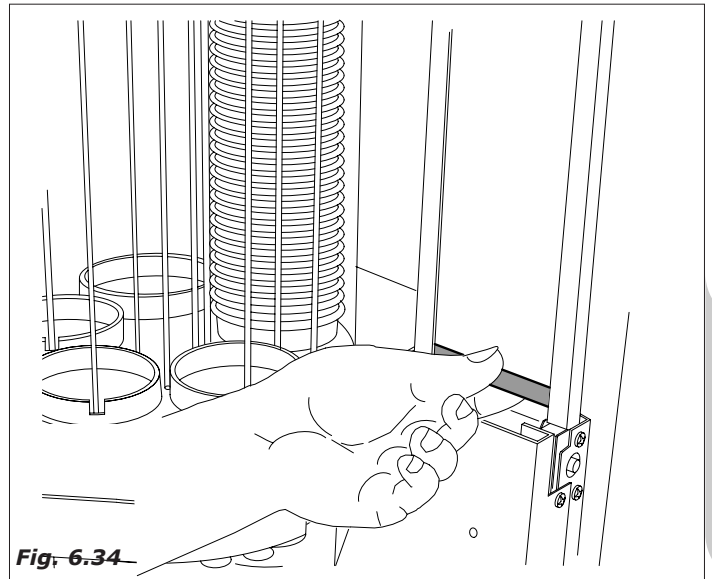


Fig. 6.34

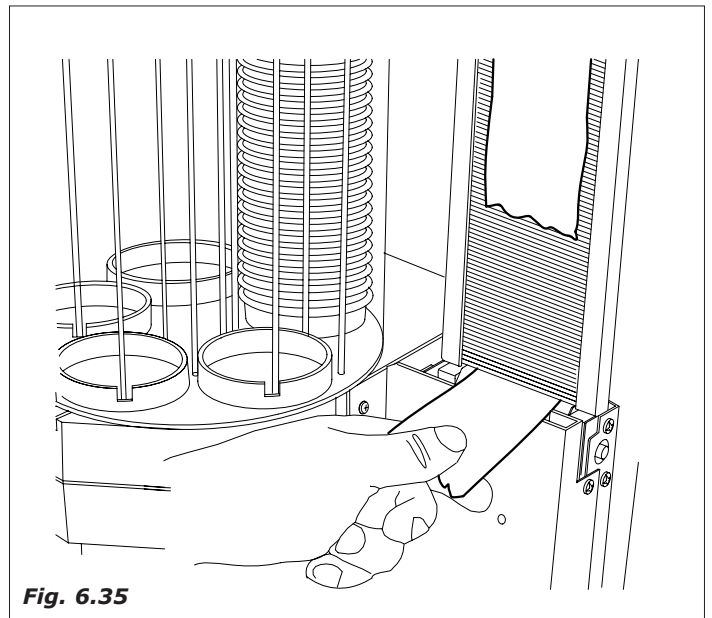


Fig. 6.35

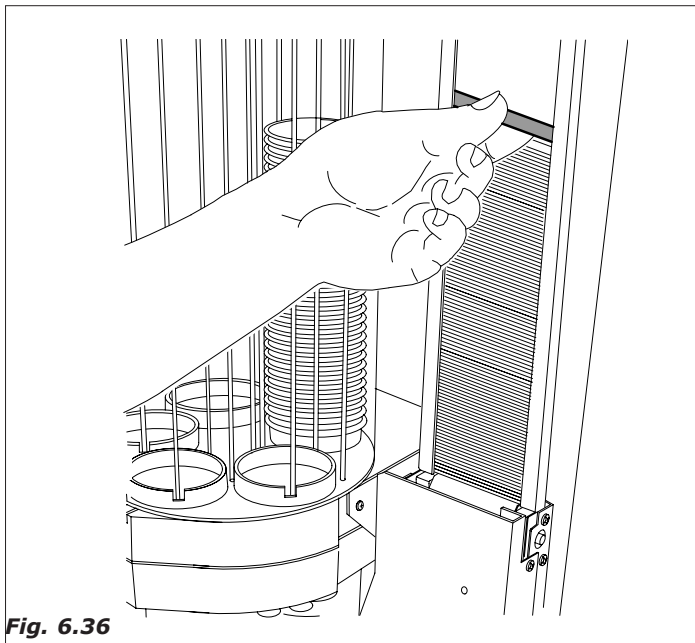


Fig. 6.36

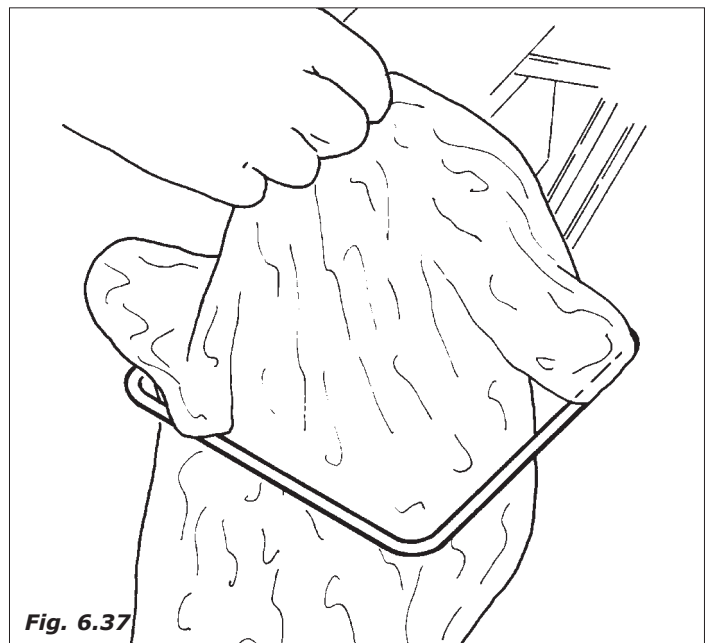


Fig. 6.37

6.6.6 Payment system installation

The distributor is supplied without any payment system:

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

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

- open the board and coin mechanism protection door (Fig. 6.38)
- remove the support bracket from the machine (Fig. 6.39)
- hook the coin mechanism on to the support brackets (Fig. 6.40)
- 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 CPU board and the serial executive systems through the interface cable supplied with the machine.

Then go into programming for the correct settings.

Consult chapter "7.0 PROGRAMMING" so as to verify setting of the parameters, that must be coherent with the system used.

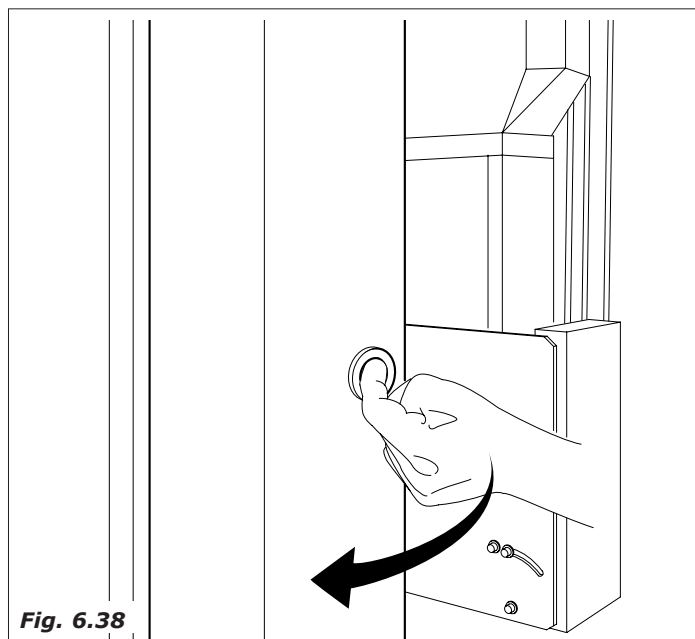


Fig. 6.38

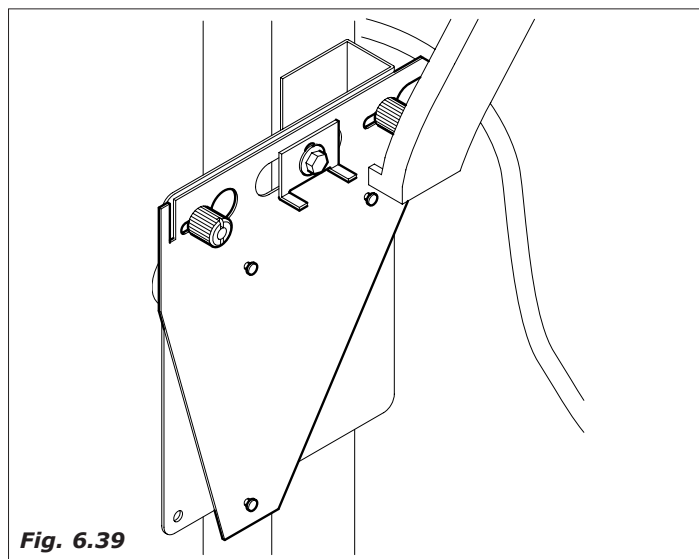


Fig. 6.39

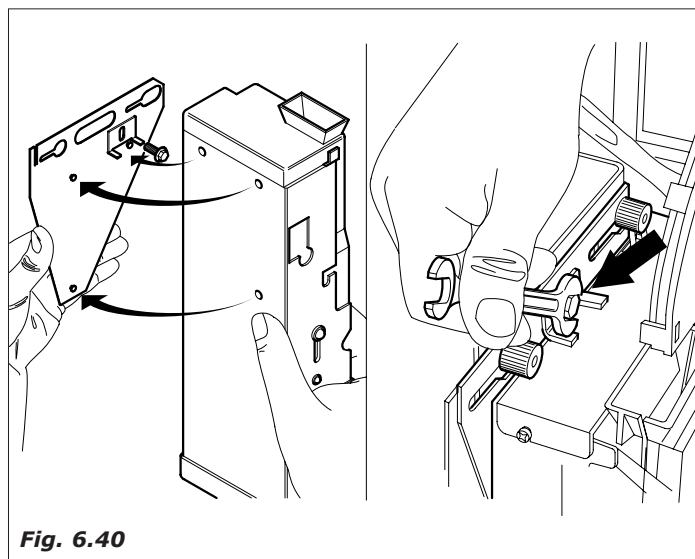


Fig. 6.40

PROGRAMMING INDEX

7.1 General description and preliminary operations

7.1.1 Language selection

7.2 Function description

7.2.1 TIME-DOSES

7.2.2 PRICES

7.2.3 DISCOUNTS

7.2.4 PRICE SELECTION

7.2.5 INCLUDE-SELECTIONS

7.2.6 INCLUDE-JUG

7.2.7 OPTIONS

7.2.8 COINS

7.2.9 SALES

7.2.10 TEMPERATURE

EXTRA SUGAR			NO CUP
EXTRA MILK			SUGAR STOP
BLACK COFFEE			ESPRESSO COFFEE
WHITE COFFEE			CAFFE LATTE
CAPPUCCINO			ESPRESSOCHOC
BLACK COFFEE			ESPRESSO COFFEE
WHITE COFFEE			CAFFE LATTE
CAPPUCCINO			ESPRESSOCHOC
WHITENER			STRONG CHOCOLATE
MILK AND CHOC			CHOCOMILK
CHOCOLATE			
WHITE TEA			
HOT WATER			
CAP ONLY			

7.0 PROGRAMMING

With the programming procedures described in this section it is possible to set all the parameters relative to the configuration of the machine, to the setting of the single doses, the prices of the drinks and extract all the vending statistical data.

The "dialogue" between the operator and the machine occurs by means of the 16 digit liquid crystal display and the use of the selection key touch pad.

The distributor is regulated with standard values from the testing stage with Coffee temperature, soluble drink temperature, selections combined with price number "0".

Product regulation = quantity of water and powder, for improved results it is possible to regulate the degree of grinding and dosing.

7.1 General description and preliminary operations

PROGRAMMING KEY

The programming function is accessed by pressing the button positioned on the C.P.U board. (Fig. 7.1); the request to input an access code to be entered by means of the key touchpad, will appear on the display.

– The display messages are in five different languages that can be selected at choice by the operator during the installation phase (Fig.7.2).

– The programming data can be of two kinds:

● NUMERICAL DATA

This is all the data that refers to the water , powder, prices, time and date settings.

● LOGICAL DATA

This is all the data that refers to the logical status of the OPTION menus that describe the status (enabled or disabled) of a specific function.

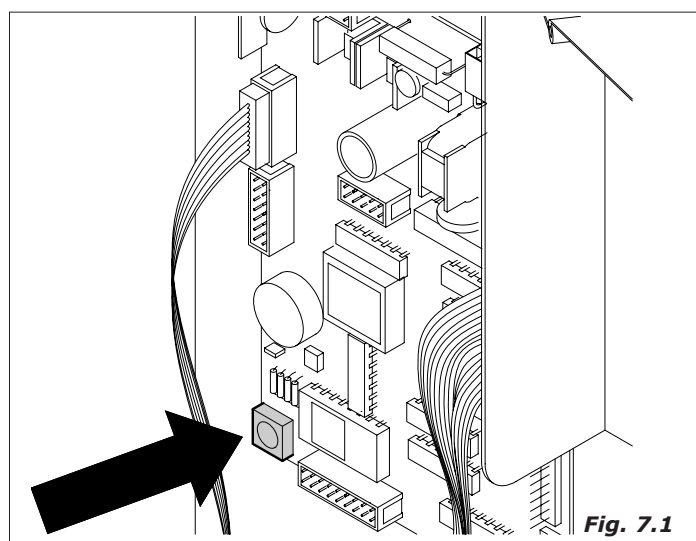


Fig. 7.1

WARNING: The programming diagrams shown refer to an automatic SIRIO distributor with double heater; therefore in the case of diverse machine configuration the programming diagrams may also be subject to variation.

Programming panel

PROG	A	C	COMPLETE TESTING OF TIMES AND DOSES
	B	D	ESCAPE
1 INCREASE +	1		2
2 DECREASE -	3		4
3 NUMBER ↵	5		6
ENTER ↩	21		22
	23		24
	25		26
	7		8
	9		10
	11		12
	13		14
	15		16
	17		18
	19		20
	27		28
	29		30

Maintenance panel

TEST W/O SUGAR	A	C	TEST
ONLY WATER TEST	B	D	RESET ERROR
UNIT OR SLIDE WASHING ERRORS	1	CLEANING TEA MIX	2
CLEANING CHOCOLATE MIX	3	CLEANING DECAFF. MIX	4
CLEANING SOUP MIX	5		6
	21	SELECTION DISPLAY	22
	23		24
	25		26
	7	NOZZLE MOVEMENT	8
	9		10
	11		12
	13		14
	15		16
	17		18
	19		20
	27		28
CUP DISPENSING	29		30

For the programming some of the keys of the selection key touchpad are used and i.e.:

■ key **EXTRA SUGAR** "PRG"

exits from the current programming sub-menu to go back to the original sub-menu.

■ key **BLACK COFFEE** "+"

Has the double function of increasing the value of a selected figure (for ex: the value of a dose) and/or go through the list of the functions available in the sub menu.

■ key **WHITE COFFEE** "-"

or decrease key, has the function of decreasing the value of a selected figure

■ key **CAPPUCCINO** "NUMBER"

Allows to move the display cursor in correspondence with the digit that has to be changed by means of the previous keys + and -.

■ key **BLACK COFFEE (DECAFF.)** "ENTER"

is used to confirm the changes done or to go through the OPTION menu.

Once the parameter modifications are concluded, you can exit from programming mode by pressing again the key on the C.P.U. board.

KEYBOARD

The drink selection panel besides being used for the SELECTIONS is also partially used for programming and maintenance.

In particular the keys and their functions are:

Programming

a = presel. EXTRA SUGAR	prg
1 = BLACK COFFEE	+ (increase)
2 = WHITE COFFEE	- (decrease)
3 = CAPPUCCINO	clear (cancel)
4 = BLACK COFFEE (DECAFF.)	enter (confirm)

Maintenance

presel. extra sugar	Test without cup, sugar and spoon
extra milk	water test
without cup	test
stop sugar	failure reset
black coffee	Unit or slide washing Errors
espresso coffee	tea mixer cleaning
coffee with milk	chocolate mixer cleaning
cappuccino	broth mixer cleaning
caffè latte	decaff. mixer cleaning
strong chocolate	nozzle movement
espresso coffee decaff.	count

7.1.1 Language selection

So as to go into programming again it is necessary to know the access code or password.

cod. 00000

The code to be entered is composed of five digits. The cursor appears under the first; with the keys "+" and "-" (1st and 2nd of the keyboard) increase or decrease the number; with the 3rd key ("number") move the cursor. Repeat the operations until the access code is composed.

Once the code is composed, press the key "Enter" (4th) so as to accede to programming.

the default code is 00001

On the display, after entering the code, the first function is displayed:

- pressing ENTER you accede to the latter.
- pressing + the next function will be displayed.
- pressing PRG you exit from the sub menu of operation.

N.B.: If you are in selection mode you can pass to programming mode.

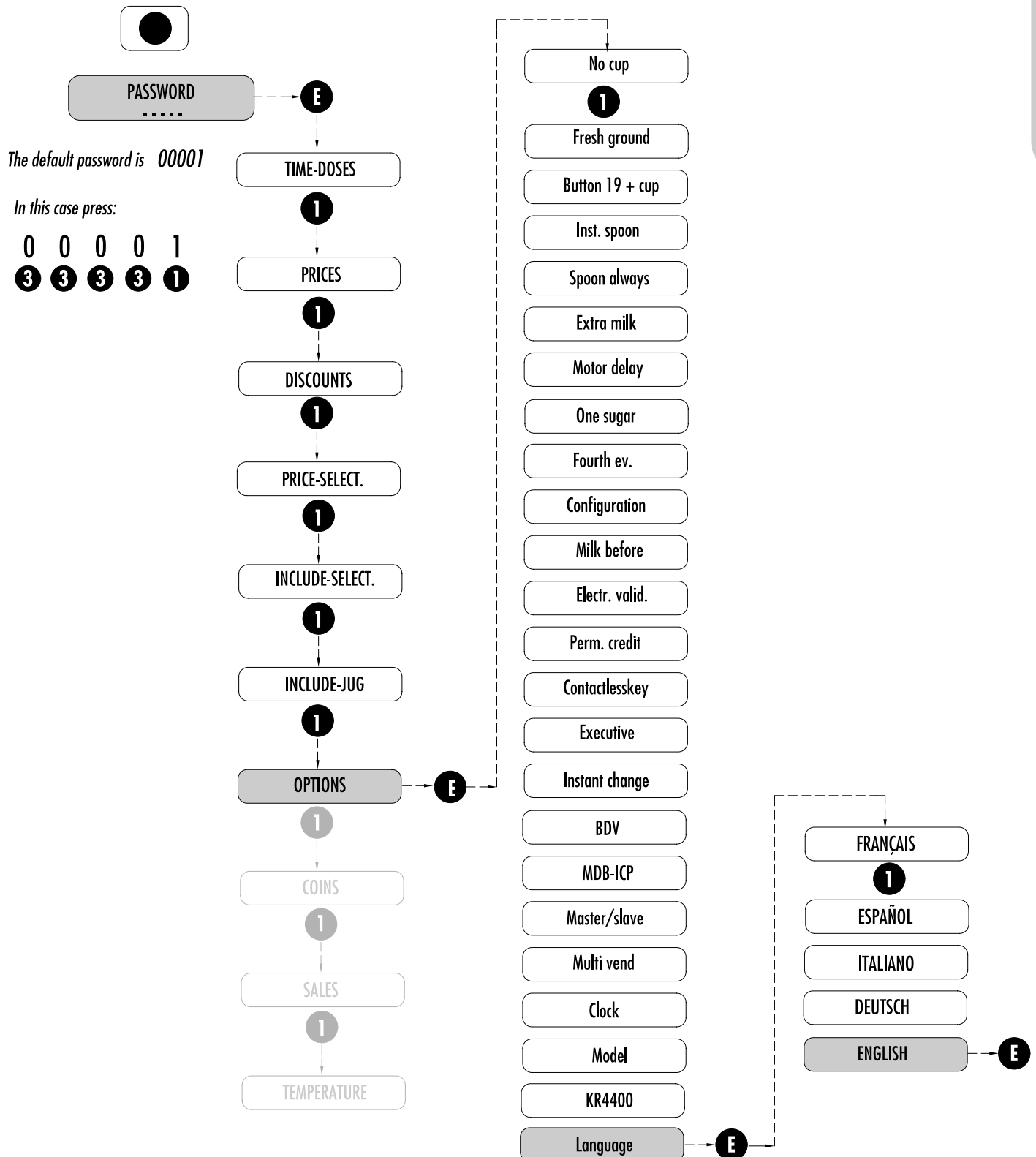


Fig. 7.2

And are in SERVICE mode, after which go first into SELECTION mode and then accede to the PROGRAMMING.

The main menu is composed of:

TIME-DOSAGES

PRICES

DISCOUNTS

PRICES -SELECTIONS

INCLUDE-SELECTIONS

INCLUDE-JUG

OPTIONS

COINS

VENDS

TEMPERATURE

So as to exit from programming mode press "**PROG**" until one of the above listed functions appears, then press the programming button placed on the C.P.U. board and return to the selection mode.

After having done the setting of a machine, it is possible to memorise the data in a portable programmer, (FAGE P 3000), and use the same settings for other machines of the same model.

The connection between the C.P.U. and the programmer P 3000 is effected by means of a flat cable; verify the position of the connector on the board for the connection (*Fig.7.3*).

Data is stored in the programmer until a new configuration reading is carried out or when the programmer's batteries run out.

- For the reading of the configuration press in sequence:

F ⇒ 1 ⇒ 1 ⇒ F ⇒ 1 ⇒ F

- To update the machines' memory :

F ⇒ 1 ⇒ 2 ⇒ F ⇒ 1 ⇒ F ⇒ 1 ⇒ F

Connect and disconnect the programmer from the C.P.U. board with the distributor switched off.

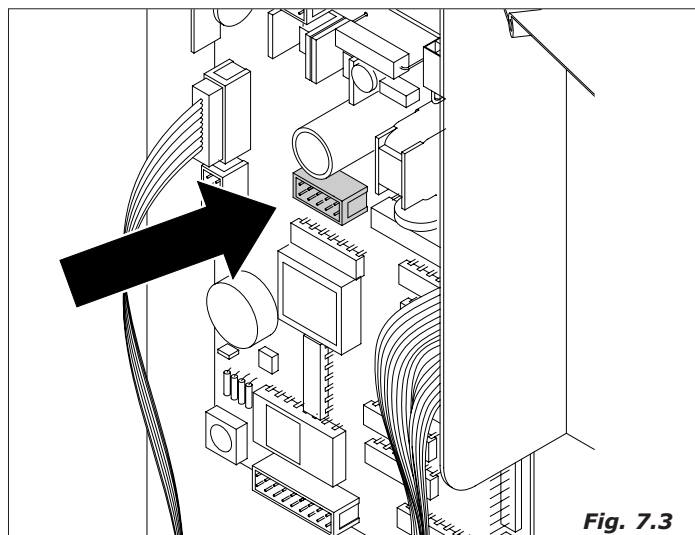
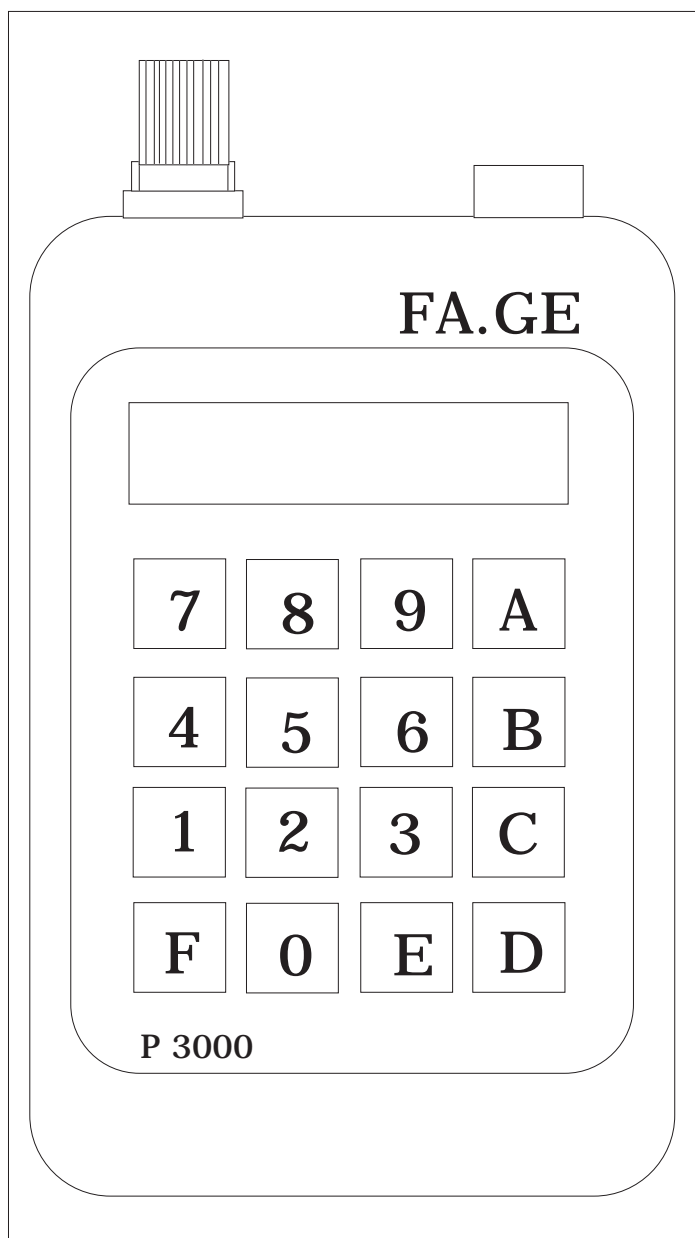


Fig. 7.3



7.2 Function description

7.2.1 TIME-DOSES (Fig. 7.4)

This menu gives access to the water and product powder dose settings for each available drink.

Press ENTER once ,on the display appears:

"Key 01 coffee"

press ENTER again to start the dose setting operation for the first selection:

"water 065"

to indicate the water dose.

With the keys "+", "-", "number", the value of the water dose relative to the espresso coffee selection n. 1 is changed.

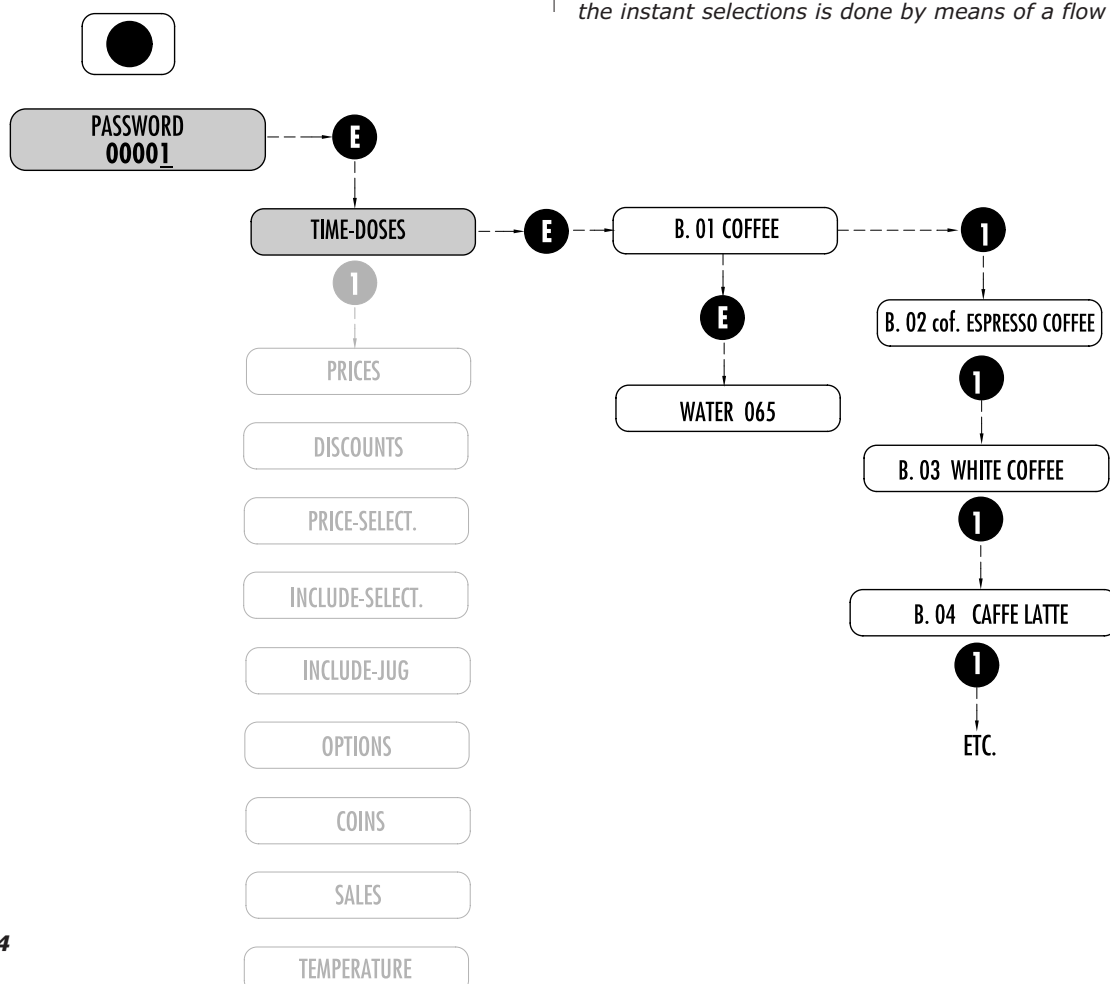
Pressing ENTER again confirms the dose set and on the display the subsequent setting appears if it is foreseen (in the case of instant SELECTIONS the powder product) or, in the contrary case, the programme returns automatically to the starting point; on the display appears:

"Key 01 coffee"

with the key "+" you can go through the menu and choose the next selection to be changed.

Here below is the combination of the keys and the selections indicated in programming:

- Key **A** = extra sugar
- Key **B** = extra milk
- Key **C** = without cup
- Key **D** = stop sugar
- Key **01** = strong coffee
- Key **02** = long coffee
- Key **03** = coffee with milk



Key **04** = cappuccino

Key **05** = cappuccino with chocolate

Key **06** = moccaccino

Key **07** = milk

Key **10** = strong chocolate

Key **11** = chocolate

Key **12** = milk and cocoa

Key **13** = lemon tea(instant)

Key **17** = hot water

Key **29** = cup

coffee group time out:

maximum activation time of the coffee group motor (do not change)

sugar time:

time for the sugar dose

extra sugar time:

time for the extra sugar dose

extra milk time:

time for the extra milk dose

tea pause time:

pause in the dispensing of the tea in leaves water

grinder time-out:

maximum grinding time

The control of the coffee water flow is done by means of a flow meter ; the control of the instant SELECTIONS water dose is done by a time setting. The powder dosing of the instant powder products is expressed in seconds.

NB.: in the single boiler versions, the control of the water dose in the instant selections is done by means of a flow meter.

Fig. 7.4

7.2.2 PRICES (Fig.7.5)

Up to 10 prices are available and singularly applicable to each selection.

Press Enter to accede to the price table programming; on the display appears:

"Price 0 0000"

with the same procedure used for the dose settings, the vending prices are set using the keys "+", "-", "number".

For free vends it is sufficient to set the vending price at zero.

Press ENTER again to confirm the value set and on the display the next price appears:

"Price 01 0000"

Press PROG to return to the PRICE menu.

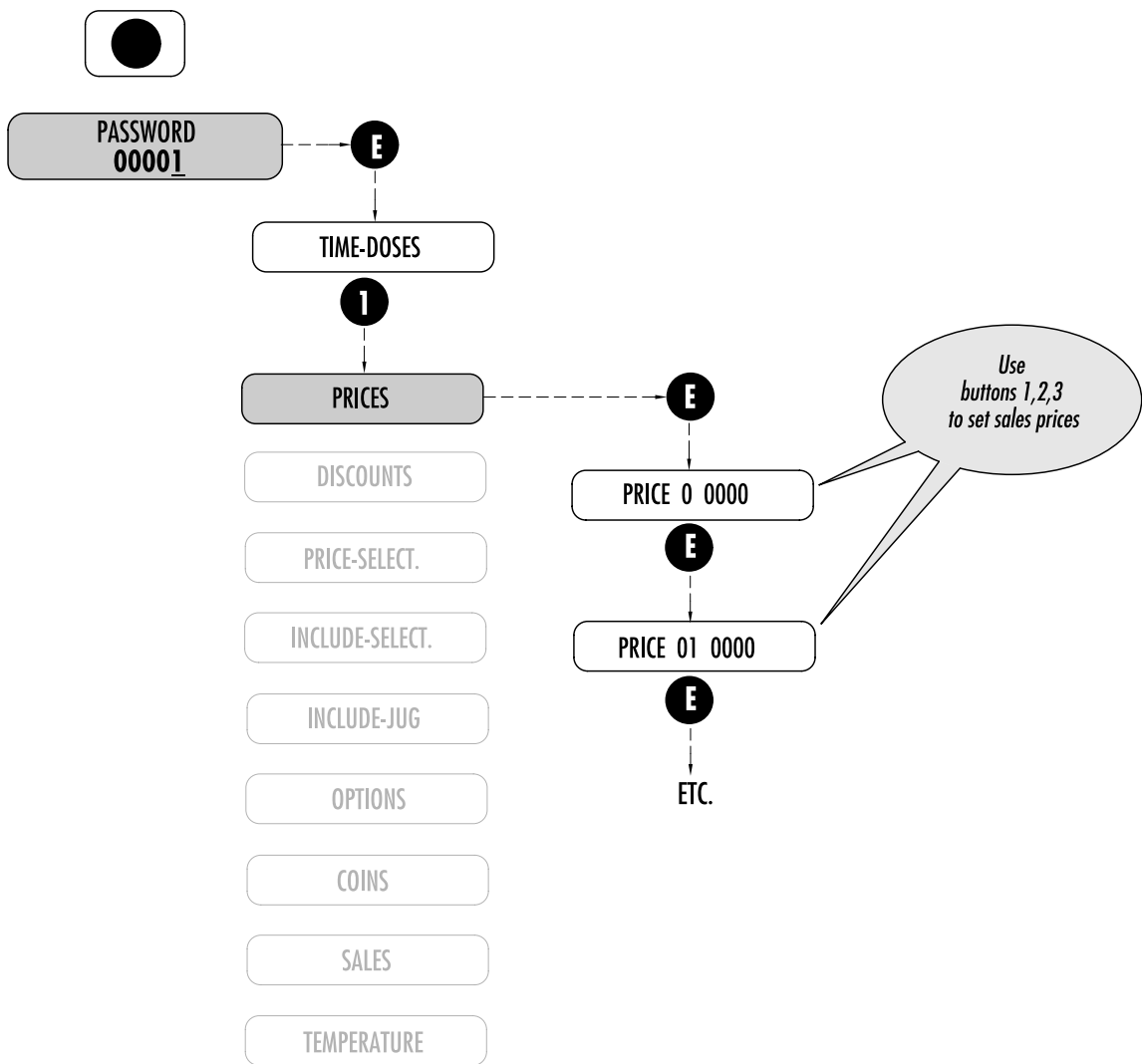


Fig. 7.5

7.2.3 DISCOUNTS (Fig. 7.6)

Up to a maximum of 10 discounts can be programmed (from Discount 0 to Discount 9) as many as the vending prices. Furthermore it is possible to programme a special discount for the exclusion of the cup (indicated with SB).

N.B.: the discounts S0-S9 are tied to the time periods and consequently to the presence of the clock interface on the C.P.U. board.

The discount for the cup is available without the presence of the clock interface.

Press ENTER once, on the display appears:

"Discount 0 0000"

with the keys "+", "-", "number", the discount setting is effected.

Press ENTER to confirm the value set, and on the display the next discount is visualised :

"Discount 1 0000"

Press "PROG" to return to the DISCOUNT menu.

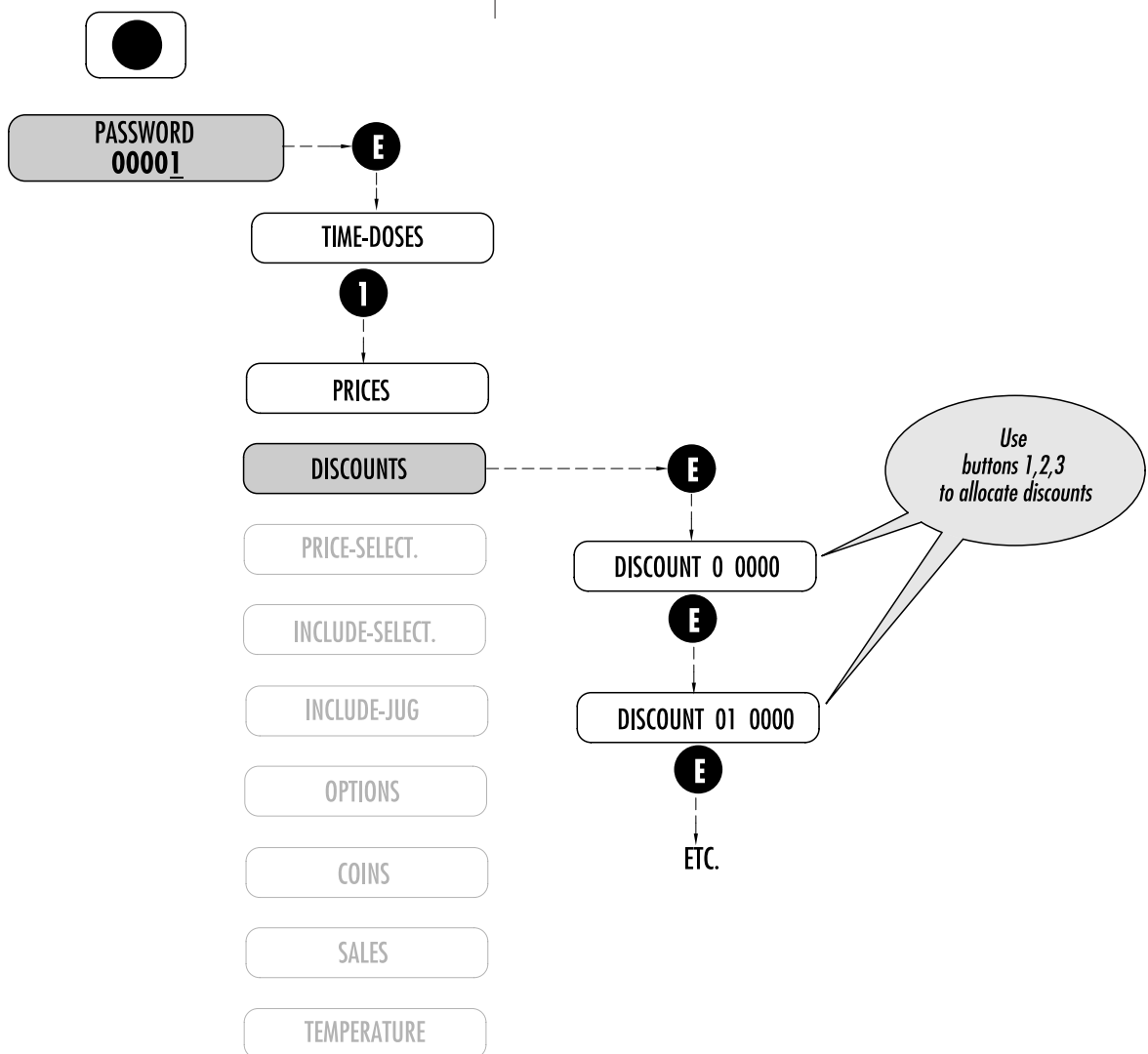


Fig. 7.6

7.2.4 PRICE SELECTION (Fig. 7.7)

This menu allows the combination of each single selection (indicated as Key 1, Key 27) to the prices previously set (indicated with Price 0 ÷ Price 9).

Press ENTER to go to the sub menu that programmes all the SELECTIONS at the price P0; on the display appears:

"All at price 0 ? Y/N"

Using the key "+" the desired option is chosen :

Y (= yes) or **N** (= no)

Selecting the option Yes and pressing ENTER gives access to the programming of:

"Price extra-milk = 0000"
"Price extra sugar = 0000"

these regard eventual price increases for the pre-SELECTIONS **extra milk** and **extra sugar**.

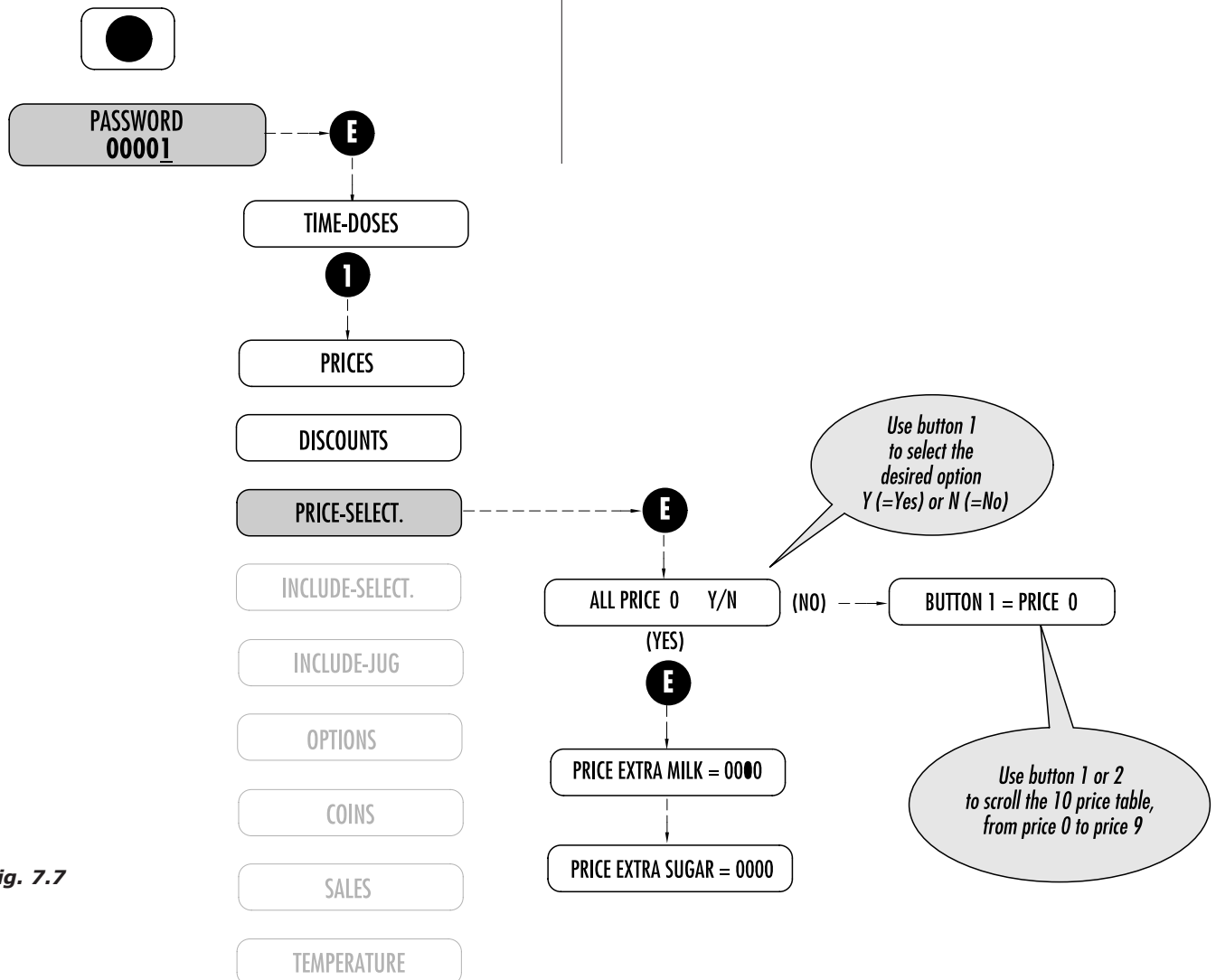
Vice versa, selecting the option NO gives access to the programme of the single price for each single selection as follows:

"Key 1 = Price 0"

using the key "+" or "-" you can go through the 10 prices, from Price 0 to Price 9; once the desired price is chosen, it must be confirmed with ENTER passing in this manner directly to the programming of the next drink.

Of course it is possible to combine more than one selection to the same price.

As always , to exit from the sub menu press the PROG key.



7.2.5 INCLUDE -SELECTIONS (FIG.7.8)

Allows to exclude the SELECTIONS not wanted (from Key 01 to Key 27), rendering them not available.

Pressing ENTER once, on the display appears:

"INCLUDE key 01 = Y"

with the keys "+" and "-", the desired option is selected:
DIGITING "N" THE SELECTION IS EXCLUDED.

Press ENTER again to confirm the value and go ahead to the next selection.

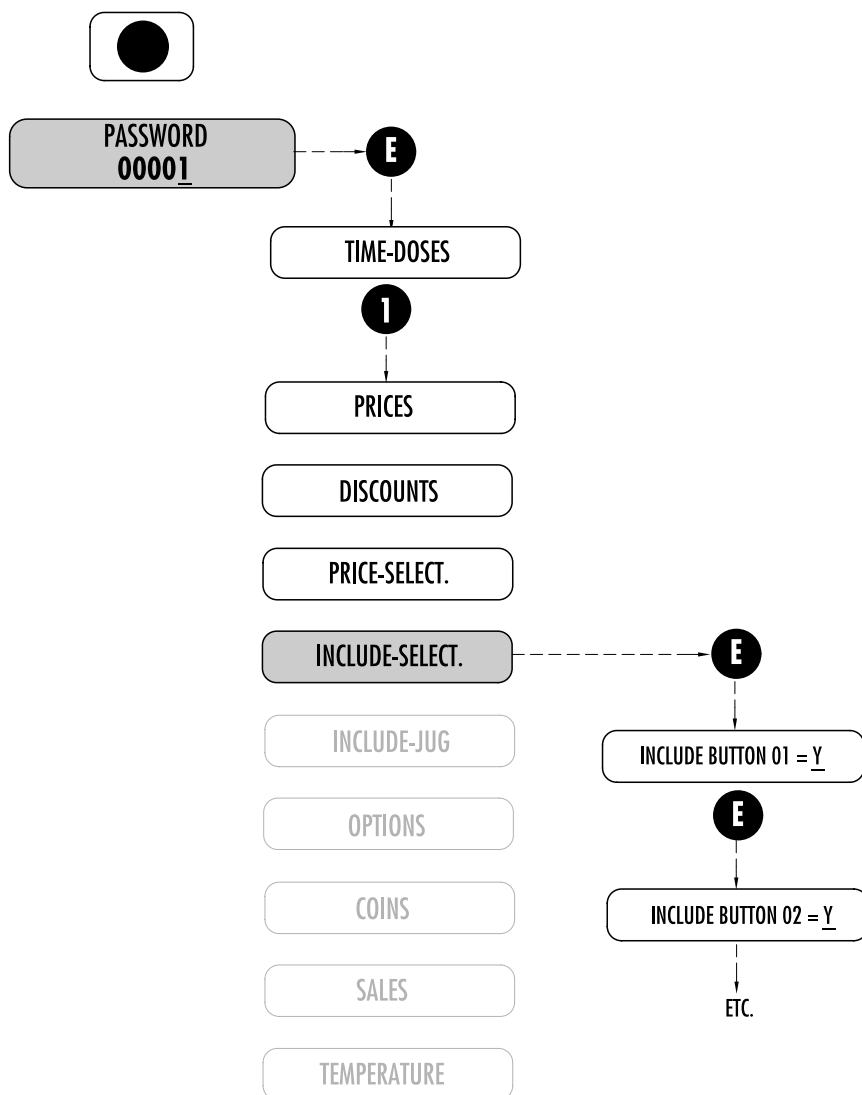


Fig. 7.8

7.2.6 INCLUDE-JUG (Fig. 7.9)

The function JUG allows to dispense consecutively a drink selection without cup for the number of times programmed (available with a kit).
In particular INCLUDE-JUG permits to enable to the JUG function all the drink selections desired.

Pressing ENTER once, on the display appears:

"Selection 01 JUG Y"

with the keys "+" and "-" the desired option is selected in the same manner as the previous menu:

DIGITING "Y" THE SELECTION IS INCLUDED

The number of consecutive drinks dispensed for the JUG can be set in the menu OPTIONS; JUG 1 is combined with selection 1; JUG 2 is combined with all the other SELECTIONS.

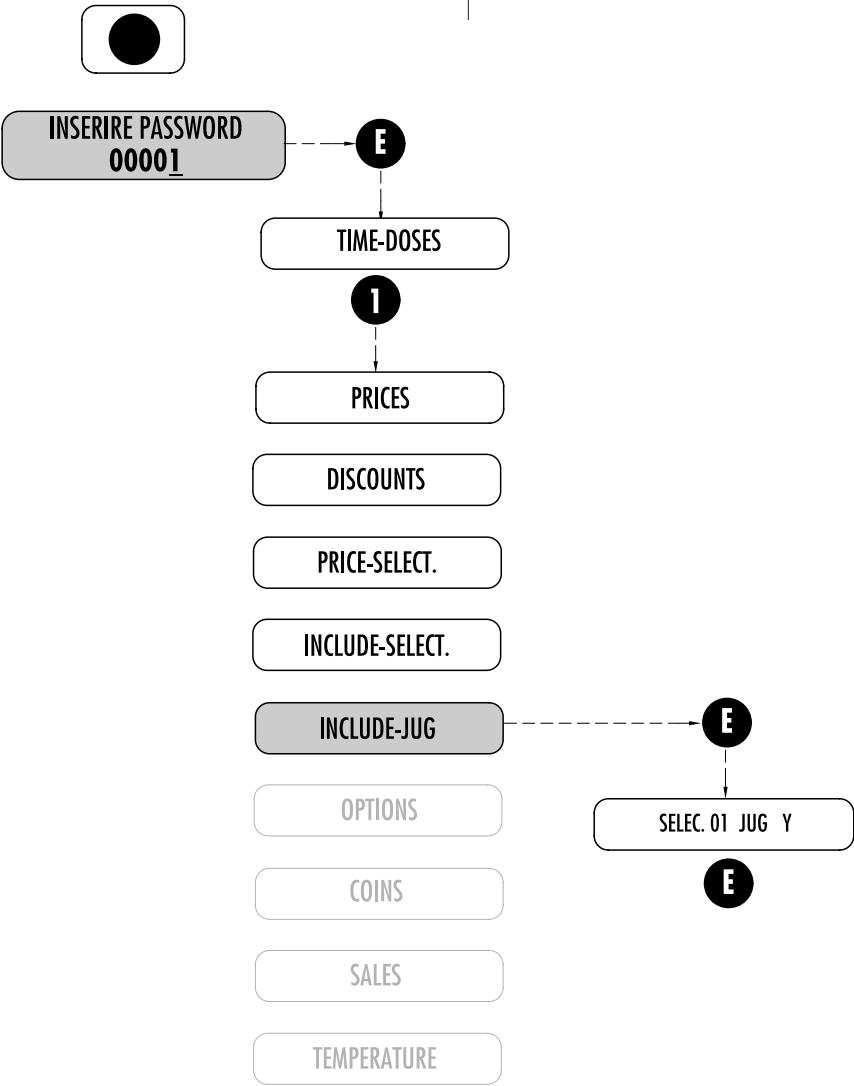


Fig. 7.9

7.2.7 OPTIONS (Fig.10)

This function renders available in sequence a series of OPTIONS as listed below; the ENTER key gives access to the sub menus visualising the first option.

For each OPTION it is necessary to set the logical status "Y" or "N" that does or does not enable the function.

Cup function = enabling of the cup exclusion key

Fresh ground = option for fresh ground coffee

Key 19 + cup = key 19 with (Y) or without cup (N)

Spoons for instant drinks = option to dispense the spoon also for the instant drinks(Y)

Spoon always = option to dispense the spoon also for the drinks without sugar.

Extra milk = enabling of the extra milk pre-selection key

Motor delay = option to introduce a delay on the powder product motors

Single sugar = when switched to "N" each single selection can be set with the "Sugar" and "Extra sugar" options. When switched to "S" there will be one setting for the "Sugar" option and one setting for the "Extra sugar" option.

Fourth EV = option to have selection of hot water and the additional water of the long coffee directly through the nozzle support without passing through the mixing bowl

Configuration = for the selection of the type of configuration in which the distributor is programmed (see table)

milk first = option for the dispensing of the milk for the coffee with milk first (Y) or after (N)

Electr. Validator = coin acceptor- selector

Permanent credit² = option for the choice of visualising the credit until the same is finished (Y) (set the multivend option at Y)

Contactless keys = option for the connection of FAGE contactless keys

Executive = Executive coin mechanism (set Y also for the electronic option)

Change giver = change giving option (with the COGES systems - set Y)

BDV system = enabling for BDV coin mechanisms.

WARNING ! Should the BDV system not be connected the distributor will not work and the wording "PERMANENT DIAGNOSIS" appears, in which case it is necessary to repeat the entire programming operation by means of P3000 (available with kit)

MDB-ICP system = enabling for MDB coin mechanisms (available with kit)

Master/slave = possibility of controlling 2 dispenser with 1 token slot

Multi-vend¹ = option to visualise the remaining credit for 3 minutes (Y) or zeroing out of the same at the end of the drink dispensing (N).

Clock = clock enabling (available by kit). For the on/off programming according to pre-set times and eventual washing operations.

Model = option for the choice of the machine on which the eeprom is assembled.

It includes: **1CGP** = function not available

2CGP = function not available

1CGN = Nuova Bianchi single-boiler unit

2CGN = Nuova Bianchi double boiler unit

1AGP = function not available

1AGN = Nuova Bianchi single-boiler unit Austria

KR 4400 = engages the payment system

Language = language used for all messages on the display (5 languages available)

Decimal point = display of the amount with the decimal point

Rinsing = enabling automatic rinsing (available with a clock kit)

Automatic cleaning = enables, without need of interfaces, a mixer cleaning cycle 30 minutes after the machine has been switched on. A second cleaning cycle will follow if within the 12 subsequent hours no drinks have been dispensed; at this point the cleaning

Configuration	Installed solenoid valves		Product for containers	Type and installed mixer
1		1	chocolate	
	a	2	milk	Mixer
	b	3	Instant coffee	Mixer
	c	4	tea	coil
2		1	chocolate	
	a	2	milk	Mixer
	b	3	chocolate	
	c	4	tea	coil
3		1	chocolate	
	a	2	milk	Mixer
	b	3	milk	
	c	4	tea	coil
4a		1	chocolate	
	a	2	milk	Mixer
	b	3	milk	
	c	4	Instant coffee	Mixer
4b		1	chocolate	
	a	2	milk	Mixer
	b	3	chocolate	
	c	4	Instant coffee	Mixer
5		1	chocolate	
	a	2	milk	Mixer
	b	3	Instant coffee	Mixer
	c	4		Mixer
6		1	chocolate	
	a	2	milk	Mixer
	b	3	cold (16)	Mixer
	c	4	cold (17)	Mixer
7a		1	chocolate	
	a	2	milk	Mixer
	b	3	Instant coffee	Mixer
	c	4	tea	coil
7b		1	chocolate	
	a	2	milk	Mixer
	b	3	milk	
	c	4	Instant coffee	Mixer
7c		1	chocolate	
	a	2	milk	Mixer
	b	3	chocolate	
	c	4	Instant coffee	Mixer

time starts again from the last drink dispensed. Consequently one mixer cleaning cycle per day is guaranteed.

JUG 1 = number of consecutive STRONG COFFEE drinks to be dispensed in JUG mode.

JUG 2 = number of consecutive drinks to be dispensed, except for STRONG COFFEE, in JUG mode.

Water filter * = descaler, with indication for the water softener resin regeneration.

Change Blades * = counter, with indication for the substitution of the blades.

Coffee Filter* = counter, with indication for the filter regeneration.

¹ The two functions are related; digiting "N" for the Multi vend option, any Permanent Credit operation will result null.

* do not however stop the functioning of the distributor.

With the keys "+" and "-", the logical values status can be changed from "yes" (Y = enabled) to "no" (N = disabled) or with the keys "+", "-", "number" the numerical values can be changed.

Press ENTER again to confirm the value set and on the display the next operation is visualised; press PRG to return to the OPTIONS menu.

Specific OPTIONS for SIRIO I/IF

Single coffee/milk = option to have the same setting of coffee powder and milk powder for all coffee and milk selections (S) or to have an independent setting of the two powders for each coffee and milk selection.

2 mixers = not available

With 9 containers = not available

Machine type

= option for selecting the machine where to install the EPROM

It includes:

SOL = standard "sirio" for instant drinks

S2C = "sirio" for instant drinks with the option of two chocolate containers

S2L = "sirio" for instant drinks with the option of two milk containers

SAU = "sirio" for instant drinks; version for Austria

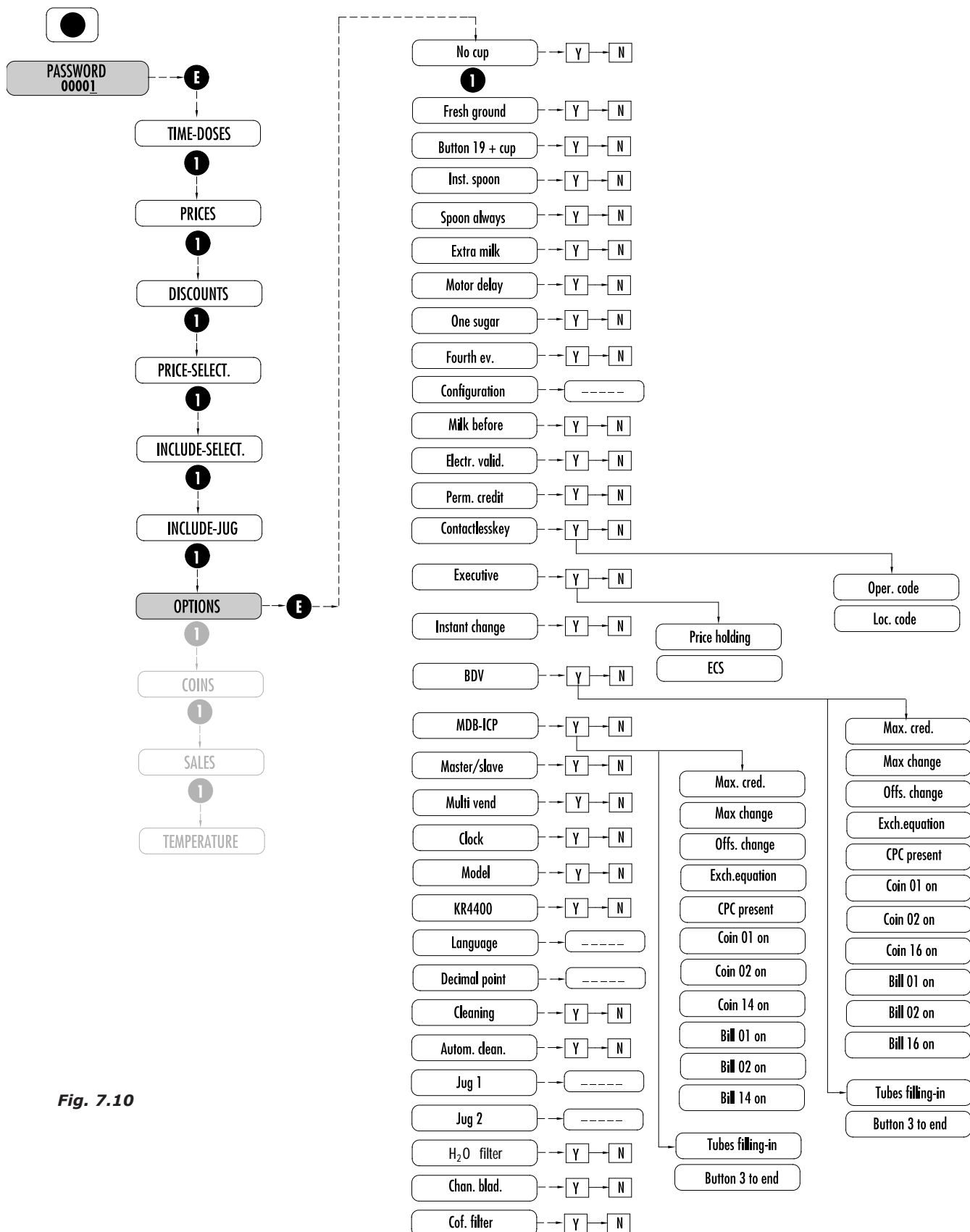


Fig. 7.10

7.2.8 COINS (Fig.7.11)

Access to this menu permits the programming of the coins (from coin 1 to coin 8) in order to make them compatible with the system used ; subsequently verify that the coin mechanism channels correspond to the same vending machine channels.
Press ENTER once, on the display appears:

"Coin 1 0050"

with the keys "+", "-", e "number" the value is changed.
Press ENTER to confirm the set modification and anyhow the value visualised on the display and passes on to the next coin and i.e.:

"Coin 7 0000"

this channel is used for setting the value for the obliterator cut or for the token using the specific interface kit.

Press PRG to return to COINS menu.

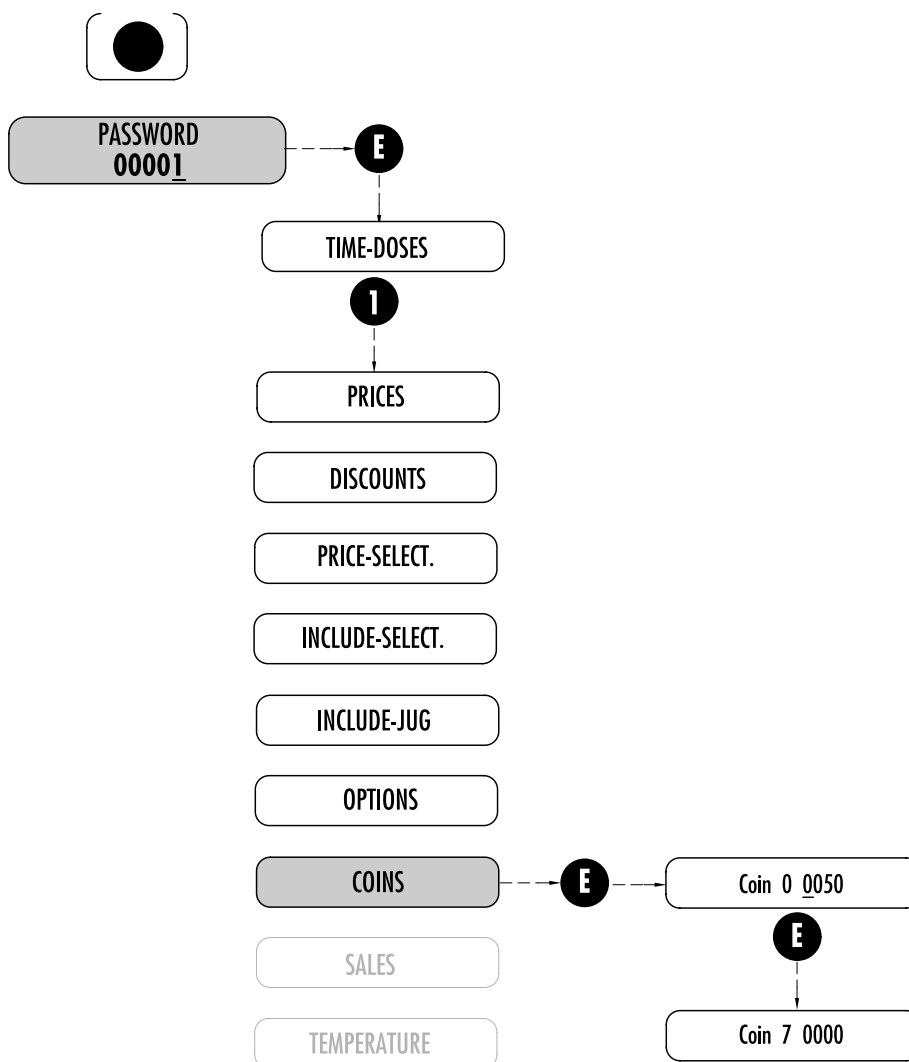


Fig. 7.11

7.2.9 SALES (Fig.7.12)

Gives access to all the selling statistics audited by the machine
Confirming with the ENTER key, gives you access in sequence to the following menus for statistical data and the processing of the same:

- CASH** = total per sales price; it is reset with the "cancel" function
- DISCOUNT** = discounted value total
- OVERPAY** = total cash without sales
- COUN** = total count of the SELECTIONS made (vends + tests) and total count per each selection; it is reset with the "cancel"
- FREE** = total count and count per each singl selection of the free SELECTIONS (with the option free vend key)
- JUG** = total count and count per each single selection of the JUG SELECTIONS (with the option JUG key).
- TEST** = total count and count per each single selection of the test SELECTIONS.
- COINS** = total of each single coin introduced.
- BILLS** = total of each single Bill introduced (only with MDB)
- ERASE ALL** = function for resetting the auditing data

Pressing the key "+" will take you through the menu up to the desired function; pressing the enter key gives access to the first data of the function selected; by pressing ENTER again gives you access to the other data, if present.

Pressing the PROG key takes you back to the original menu.

To reset the data operate as follows:

- go to CANCEL
- press ENTER key
- COD 0000 will appear on the display
- input the resetting code using the same criteria.
- press ENTER
- request if you wish to change the resetting code will appear.
- press the key + if you do not wish to change the code.
- RESET ? will appear on the display
- confirm with the CURSOR key

at the end of the resetting, pressing the PROG key takes you back to the original menu.
The data resetting code (4 digits) can be different from the programming access code (5 digits).

The default code is 0001

N.B. If you want to change the default code proceed as follows:

- when the request if you want to change the code appears, press ENTER
- the old code will be displayed
- use the keys "+", "-" to compose the new code.
- confirm with ENTER at the end

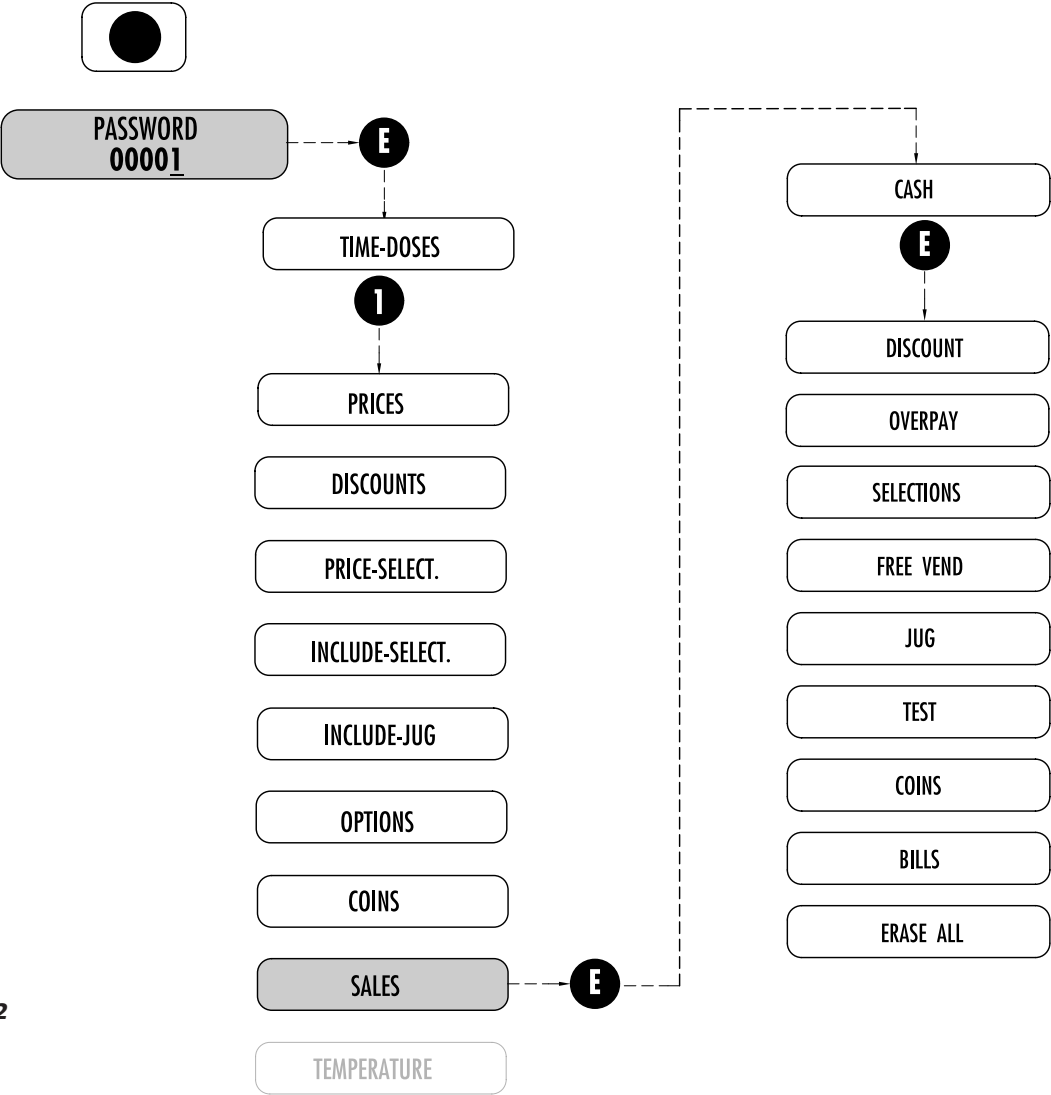


Fig. 7.12

7.2.10 TEMPERATURE (Fig.7.13)

This menu allows the regulation of the coffee boiler and instant boiler operating temperature.

Pressing ENTER appears:

"temp. water sol. C.079

repressing ENTER appears:

"temp. water coff. C.077

with the keys "+", "-" and "cursor" increases or decreases the TEMPERATURE of the water in the boiler.

There is however a security on the maximum TEMPERATURE that can be setted that does not allow to go above 099 as setted value.

Pressing ENTER again to confirm the variation, will display the two coefficients of each of the temperature probes assembled on the group and on the instant boiler for example:

"k1 00200" "k2 00485"
"k1 00220" "k2 00525"

N.B. It is possible that these two values be different from one machine to another.

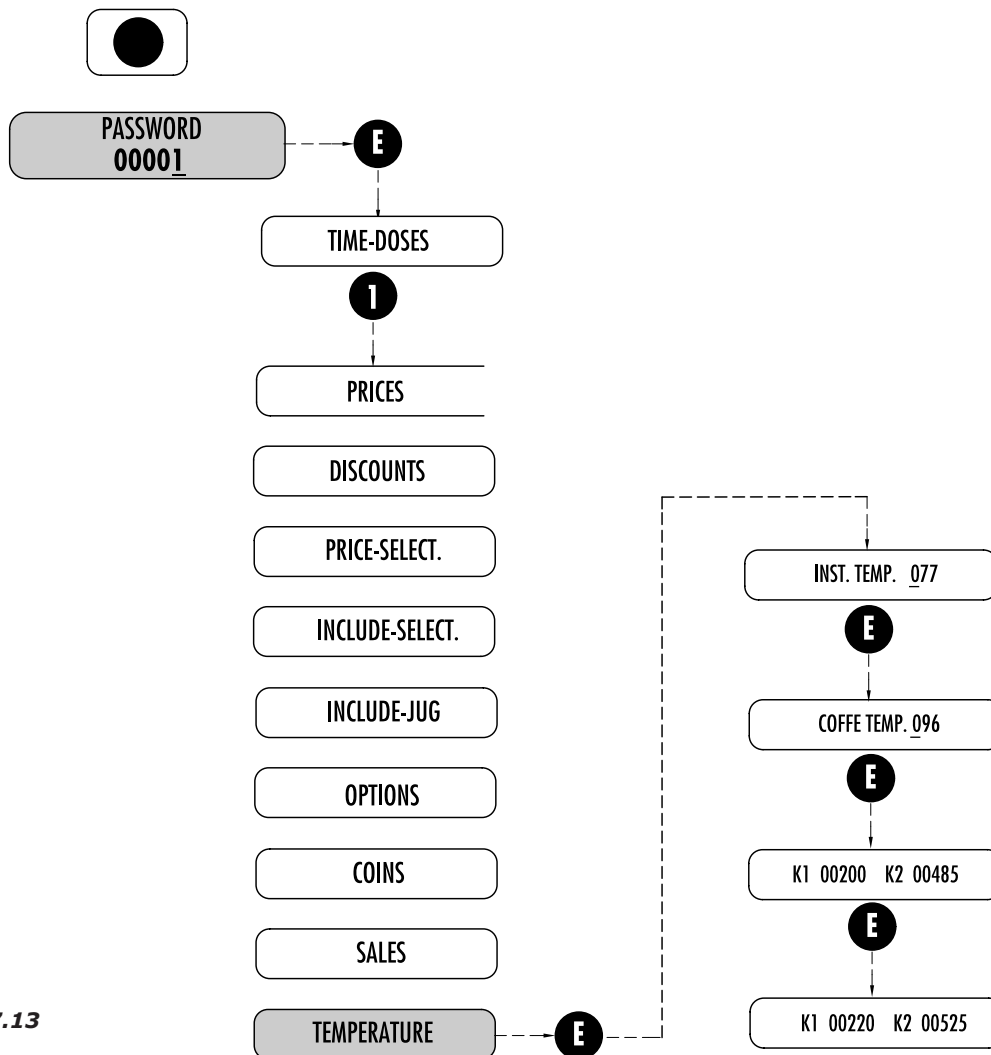


Fig. 7.13

8.0 MAINTENANCE

The service functions are accessed by pressing the service button located inside the distributor's door as indicated in *fig. 7.1*.

On the display appears **"SERVICE"**

In service mode the keys of the external keypad adopt the functions illustrated in drawing and i.e.:

- **"TEST WITHOUT SUGAR"**: after pressing the key it is possible to use the keypad as in normal service so as to dispense any selection without the dispensing of the cup, sugar and spoon.
- **" WATER TEST"**: after pressing the key it is possible to use the keypad as in normal service, so as to dispense any selection with water only.
- **"TEST"**: after pressing the key it is possible to use the keypad as in normal service so as to dispense any complete selection (counted as a test drink dispensing)

NOTE: so as to cancel a test pre-selection without dispensing drinks it is sufficient to press the service key inside the door again. In this case the distributor will remain in SERVICE mode.

- **"FAILURE RESET"**: has the function to reset the failures registered by the distributor and start a subsequent diagnosis control so as to verify that other failures are not present.
Use button 1 (COFFEE UNIT WASHING or ERROR SCROLL) to scroll and visualize the anomalies memorized by the distributor.
- **"GROUP CLEANING"**: has the function to effect a turn of the coffee group (**E** version or a cleaning of the coffee mixer (**I** version);
Also displays error list (see "FAULT RESET").
- **"MIXER CLEANING MILK- CHOCOLATE"** : has the function of effecting a cleaning of the MILK- CHOCOLATE mixer.
- **"MIXER CLEANING TEA"** : has the function of effecting a cleaning of the TEA mixer.
- **"MIXER CLEANING SOUP"** : has the function of effecting a cleaning of the SOUP mixer.
- **"TOTAL VENDS "**: allows the display of the number of drinks dispensed (general meter). So as to return to the service mode it is necessary to press the service key inside the door again.
- **"NOZZLE MOVEMENT"**: allows to move the nozzles when you want to open the boiler support.

Maintenance panel

TEST W/O SUGAR	A	C	TEST
ONLY WATER TEST	B	D	RESET ERROR
UNIT OR SLIDE WASHING ERRORS	1	CLEANING TEA MIX	2
CLEANING CHOCOLATE MIX	3	CLEANING DECAFF. MIX	4
CLEANING SOUP MIX	5		6
	21	SELECTION DISPLAY	22
	23		24
	25		26
	7	NOZZLE MOVEMENT	8
	9		10
	11		12
	13		14
	15		16
	17		18
	19		20
	27		28
CUP DISPENSING	29		30

9.0 MAINTENANCE AND INACTIVITY



9.1 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 and 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.

9.1.1 Procedure for distributor cleaning

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.

To ensure hygiene:

- Use disinfectants

For cleaning:

- Use detergents and/or deterative products
- The purpose of the disinfectants is to destroy any surface bacteria which may be present. 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. On application of the HACCP certain hygienic regulations are laid down for company self-checking procedures concerning :
- Cleaning of the premises
 - Product transportation
 - Machinery maintenance
 - Waste disposal
 - Drinking water procurement
 - Personnel hygiene
 - Food product characteristics
 - Personnel training
 - (Directive 93/43 CEE)

The cleaning operations may be undertaken:

- 1 at the site of installation of the automatic distributor
- 2 at the premises of the company that provides the service

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.

9.1.2 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.

9.1.3 Daily cleaning

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 9.1.1.

Operate as follows:

- clean all the visible parts in the dispensing area. (Fig. 9.1 e Fig. 9.2)

remove and clean carefully:

- funnels and powder chutes (Fig. 9.3-pos.1)
- water funnel (2), mixing bowls (3) whipper assembly (4)

Fig.9.1

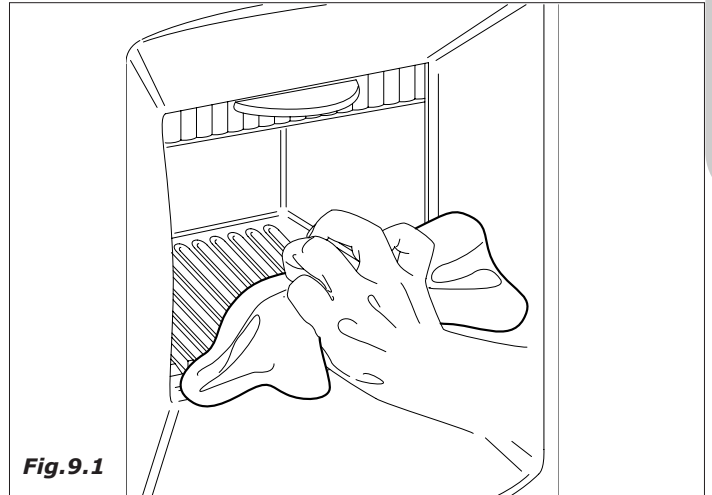


Fig.9.2

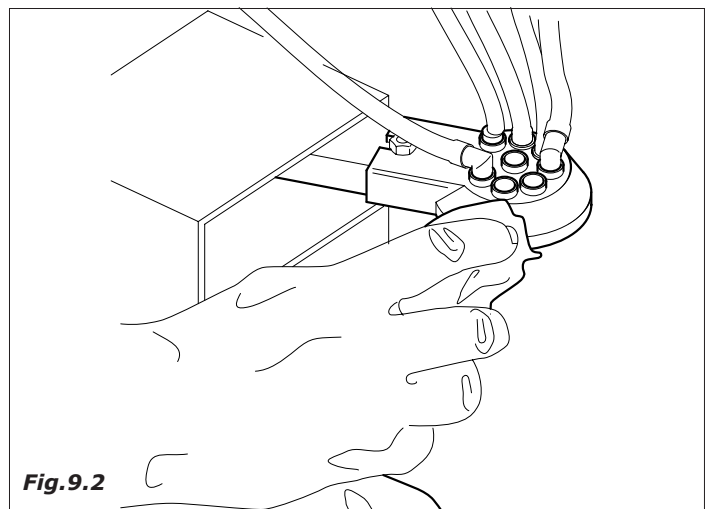
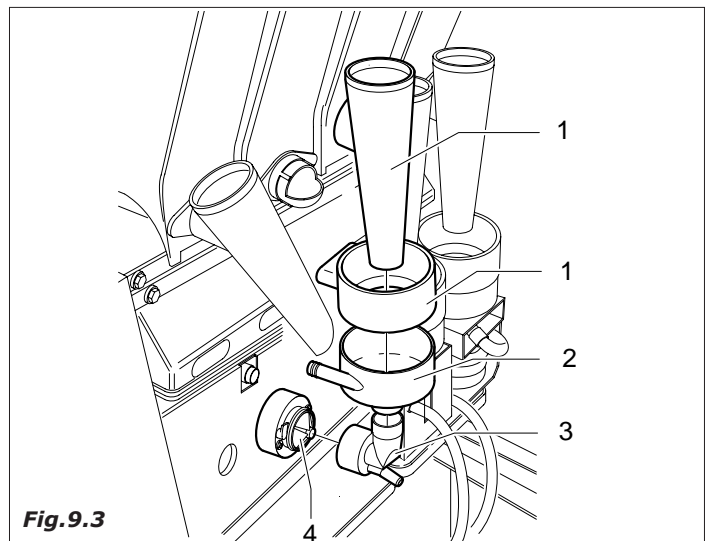


Fig.9.3



- silicone water dispensing tubes.
- dispensing chamber (Fig. 9.4)
- coffee funnel and chute (Fig. 9.5)

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. 9.6)

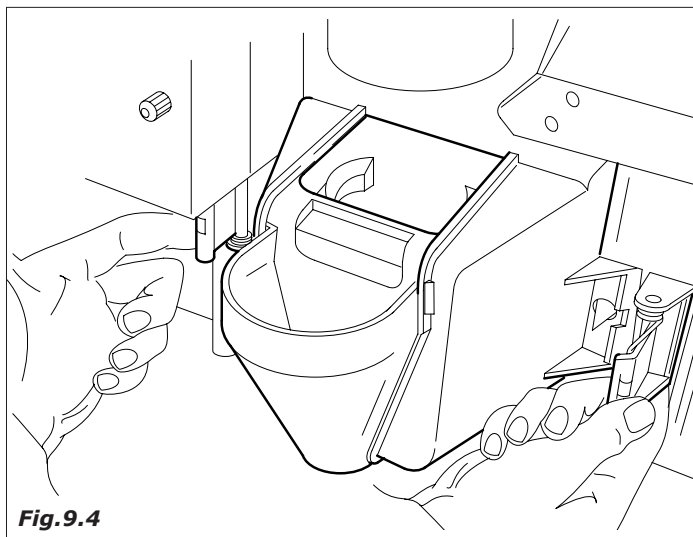


Fig.9.4

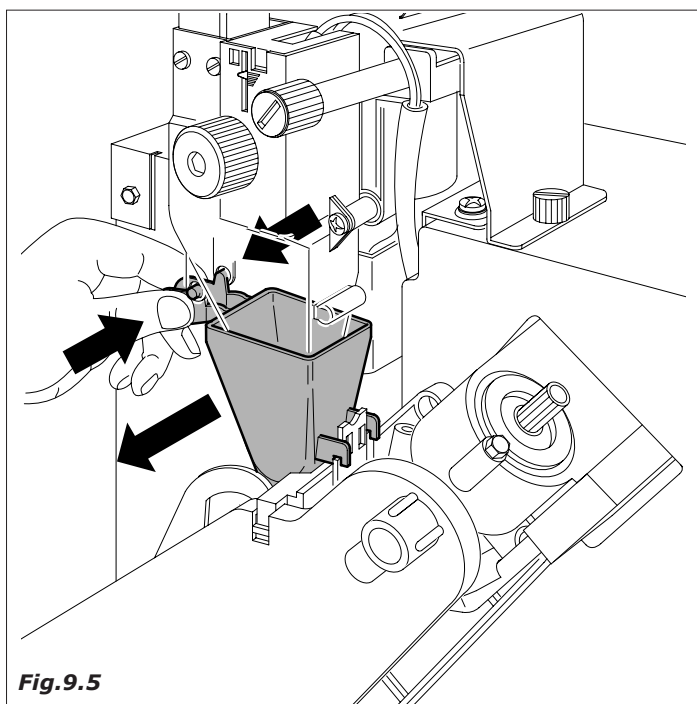


Fig.9.5

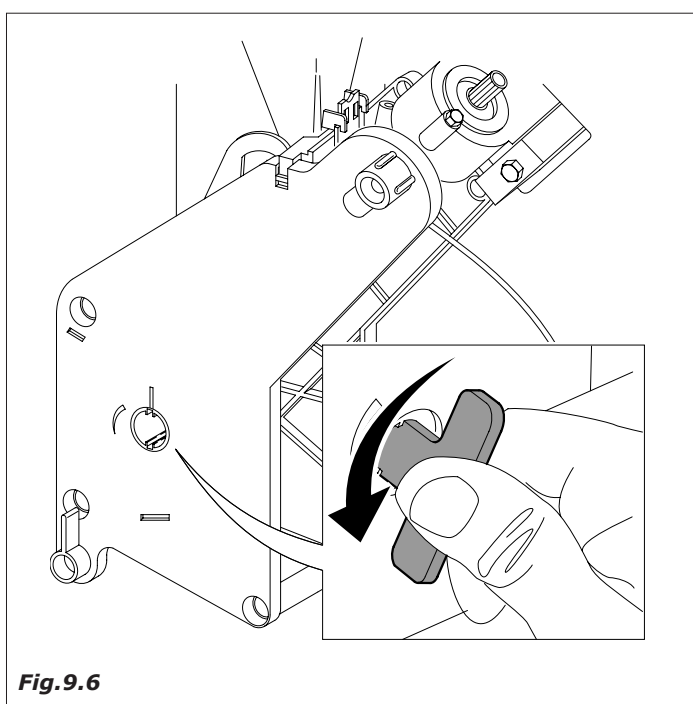


Fig.9.6

- empty the waste liquids bin clean it and/or substitute it (Fig. 9.7).
- substitute the coffee spent grounds bag . (coffee in beans versions) (Fig. 9.8)

Last step: coin collection.

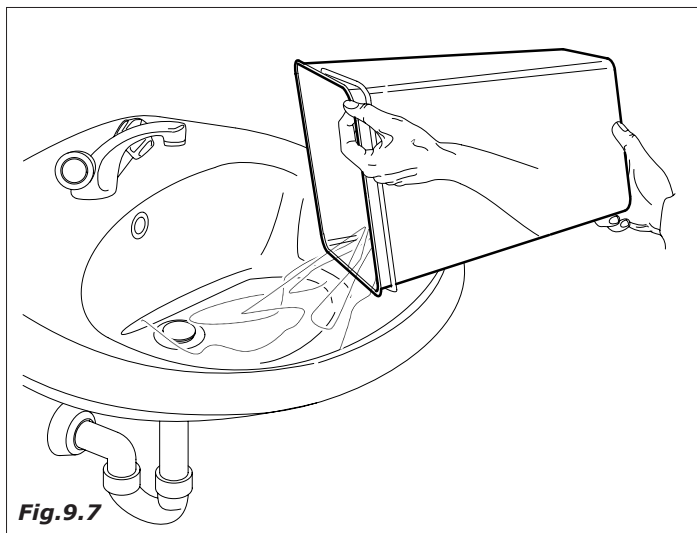


Fig.9.7

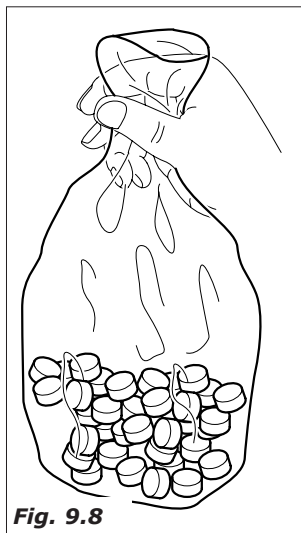


Fig. 9.8

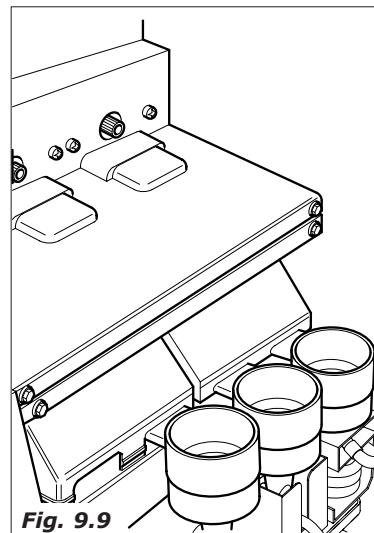


Fig. 9.9

9.1.4 Weekly cleaning

Remove all the containers and clean with a wet cloth all the container support parts, as well as the bottom of the distributor and the outside of the distributor, in particular the dispensing area. (Fig. 9.9).

9.1.5 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 6.0 (first installation).









9.1.6 Product storage advice

Conservation temperatures and times for some of the automatically distributed products.

PRODUCT TYPE	CONSERVATION T. °C	CONSERVATION TIME
Canned, bottled drinks	+ 5 °C	until expiry date
Fresh filled rolls	Max + 4°C	1 day
Long life filled rolls	Max + 4°C	until expiry date
Packed snacks	+ 20 °C	in accordance with D.L. 109/92*
Cold dishes	Max + 4°C	1 day
Dishes for reheating	Max + 4°C	1 day
Hot dishes	+ 65 °C	5 hours
Frozen products	- 18 °C	until expiry date
Soluble powder products		
Granulated coffee		
Sugar		
* AND SUBSEQUENT AMENDMENTS		



9.2 MAINTENANCE

	EVERY DAY	EACH WEEK	EACH MONTH	EVERY SIX MONTHS	EVERY 10.000 DRINKS
Remove and clean all the visible parts in the dispensing zone.					
Empty the waste liquid bins, clean them and/or substitute them.					
Substitute the spent coffee grounds bag.					
Remove all the containers and clean with a wet cloth all the support parts of the containers, as well as the bottom of the distributor and the outside of the distributor, in particular the dispensing area.					
Effect the debacterisation of the all the food zone parts.					
Substitute the water contained in the cooling unit.					
Remove and rinse the coffee group lubricate all the mobile parts using silicone grease for alimentary use.					
Substitute the filter gaskets.					

9.2.1 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 6.5.

- 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. (Fig. 9.10)
- lift the copper tube and wait for the complete drainage of the tank. (Fig. 9.11)
- once empty re-insert the drain hose and fill the tank again as described under paragraph 6.5.2.1 filling of the cooling unit.

9.2.3 Nuova Bianchi Coffee group maintenance

Monthly extraction of the unit and thorough rinsing in hot water is recommended.

To do this, use the spanner provided turning it in the direction indicated by the arrow (*Fig. 9.10*), so as to detach the lower filter from the upper one that is attached to the heater unit.

Then detach the pipe indicated in *Fig. 9.11*, unscrew knob **A**, rotate lever **B** (*Fig. 9.12*) and then remove the entire coffee unit.

Every 5000 vends and anyhow monthly, it is advisable to lubricate all the mobile parts of the group, using silicone grease for alimentary use (*Fig. 9.13*):

- lower filter piston (1)
- connecting bar (2)
- piston guide (3)

Every 10000 vends we advise to substitute the gaskets and the filters.

- gaskets
- Loosen the screw (*Fig. 9.14-pos.1*), wash the filter and replace if necessary.
- re-assemble everything in the inverse order.

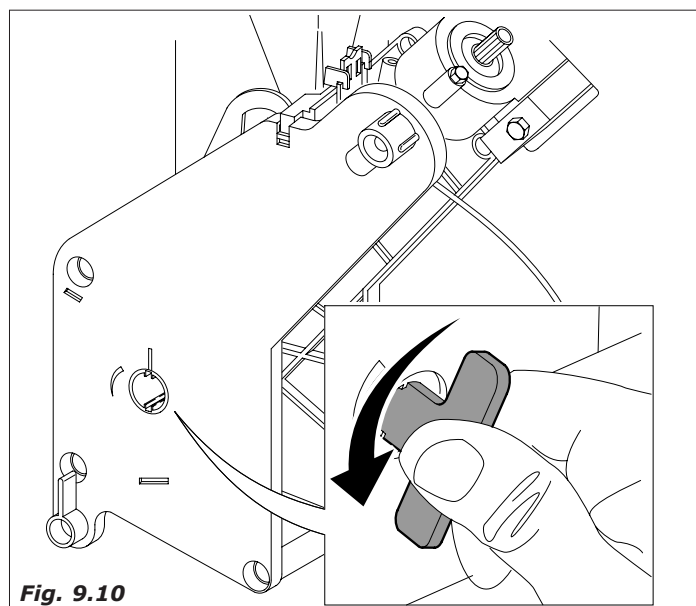


Fig. 9.10

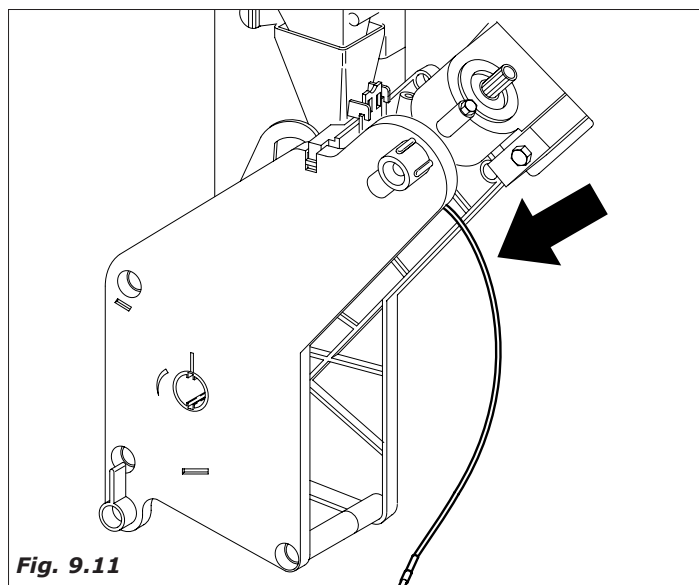


Fig. 9.11

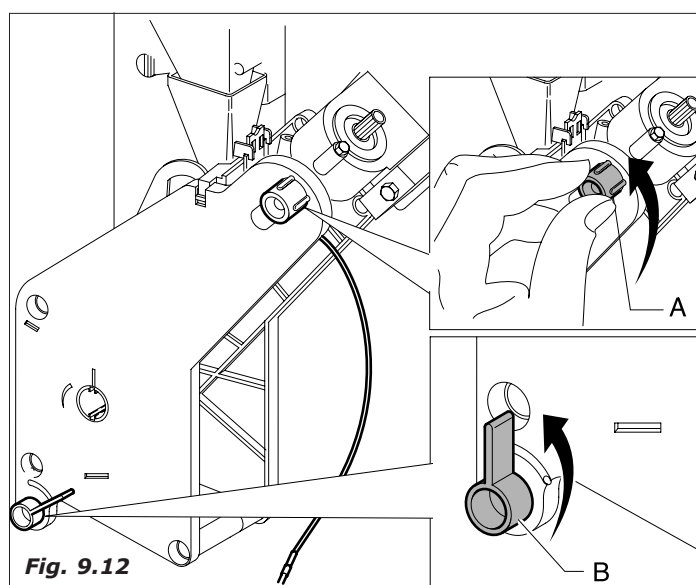


Fig. 9.12

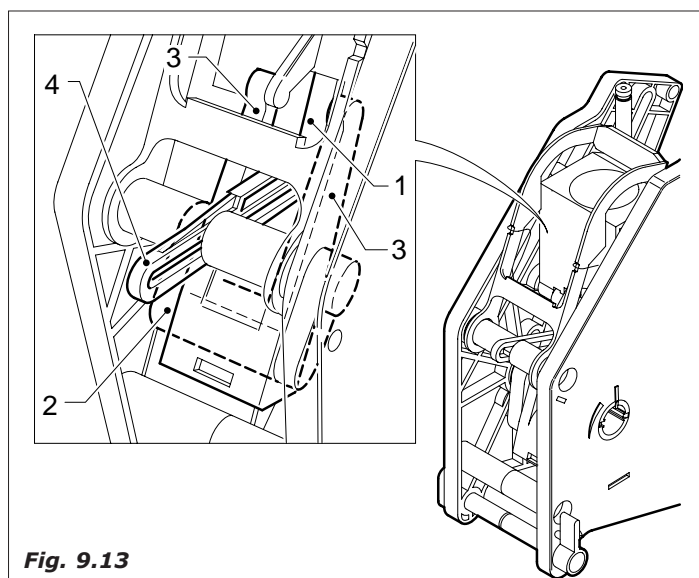


Fig. 9.13

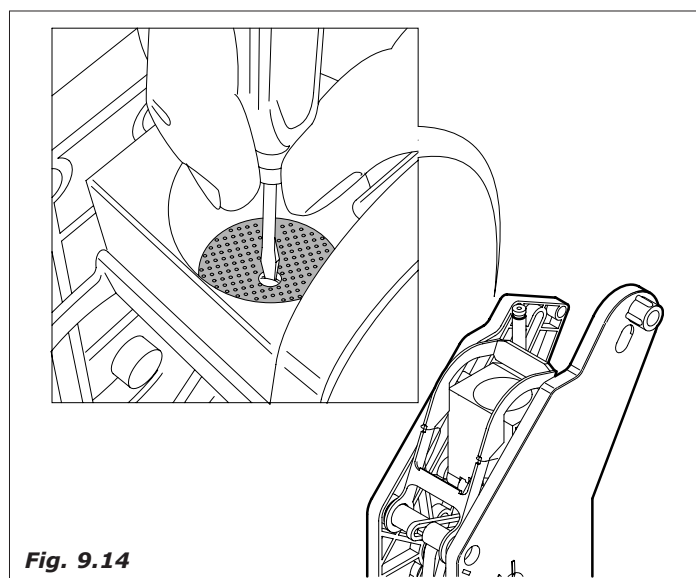


Fig. 9.14

NUOVA BIANCHI COFFEE MACHINE TIMING CHECK PROCEDURE

Ensure that during the idle state, the rotating index is aligned with the stage index (see fig.9.15)

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).



9.3 Regulations

9.3.1 Dosage and grinding regulations

The distributor is supplied regulated with standard values and i.e.:

- TEMPERATURE of the coffee in the cup of about 78°C for 38 cc of dispensed product
- TEMPERATURE of the instant products in the of about 73°C
- grams of coffee powder, about 7,0 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.9.16). 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 9.16)

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

- *Regulation of the degree of grinding.* Turn the screw (fig.9.17) 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.

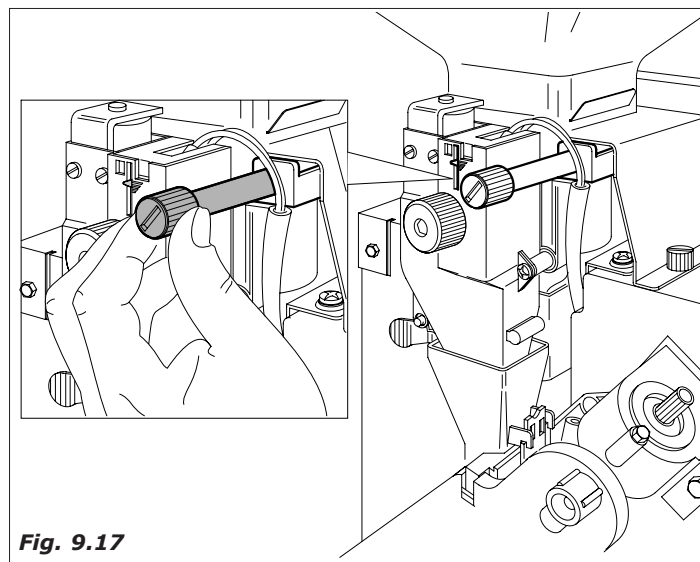


Fig. 9.17

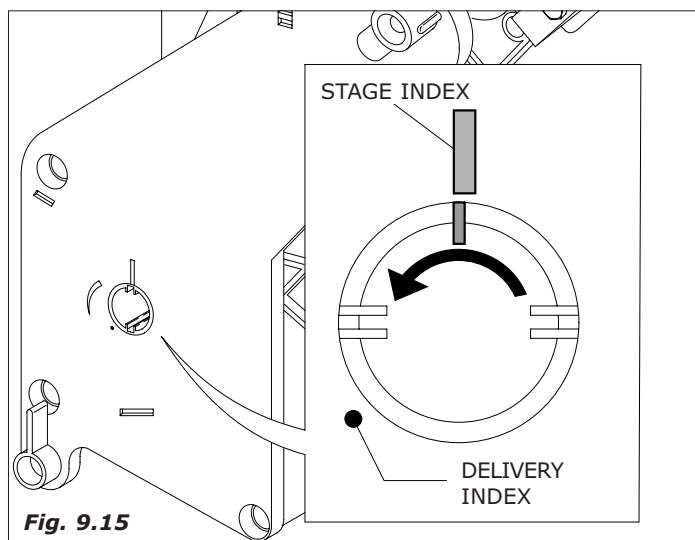


Fig. 9.15

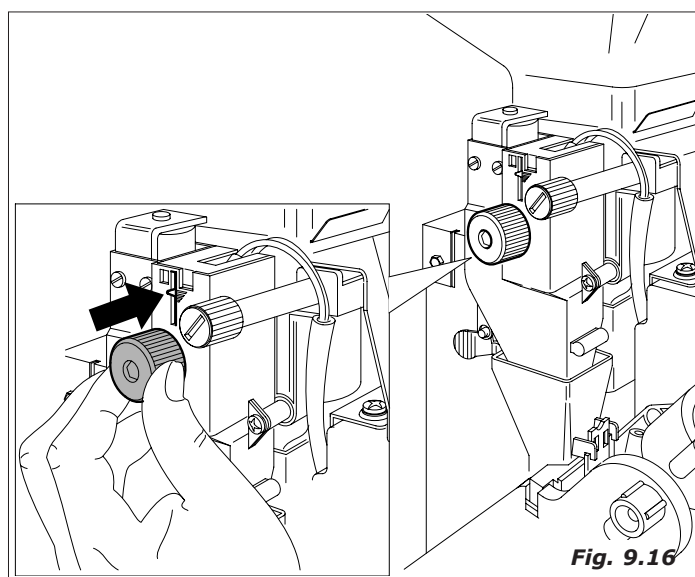


Fig. 9.16

9.3.2 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 7.0 PROGRAMMING.

Due to problems caused by the formation of lime scale the instant solenoid valves can have a reduced water delivery.

- So as to obtain a thorough rinsing of the bowls eventually turn the solenoid valves water delivery screw. (Fig. 9.18).

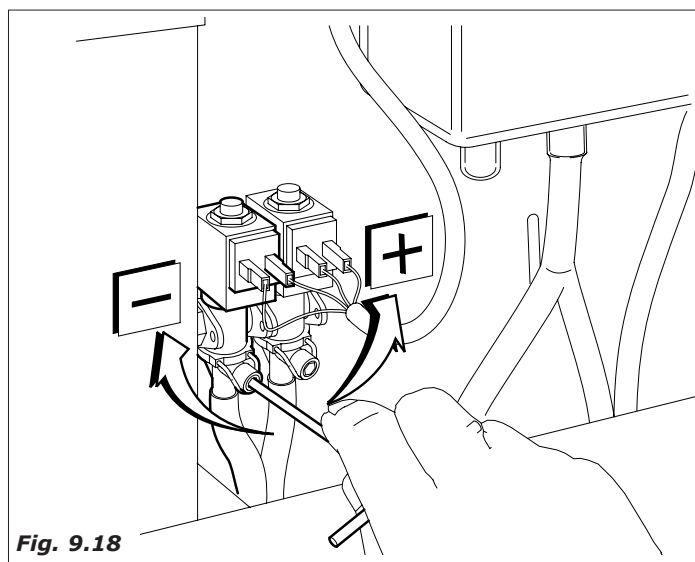


Fig. 9.18



9.4 Resin regeneration of the water softner

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	9500	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. 9.19*).
- remove the cover and introduce 1,5 kg of normal cooking salt. (*Fig. 9.20*)
- replace the cover.
- switch on the machine and let the water pour out until it is no longer salty. (*Fig. 9.21*).
- switch off the machine and close the faucet.

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



9.5 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 float reservoir removing the plug located on the hose along the drain chute.
- Put the plug back in once the draining has been done. (*Fig. 9.22*).
- 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 outside of the machine with a plastic film wrapping or bag (*fig. 9.23*)
- stock in a dry and protected place where the temperature is not less than 1° C.

10.0 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.

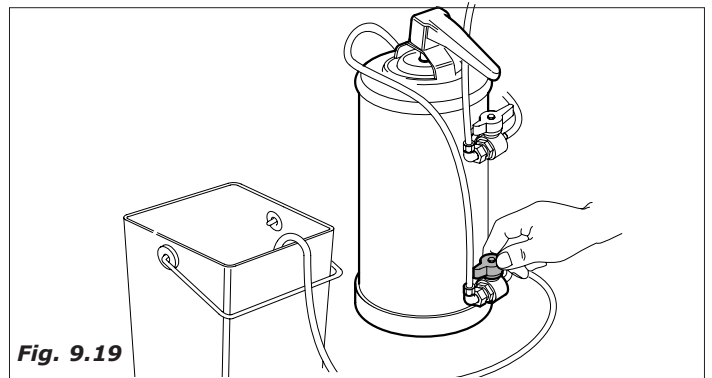


Fig. 9.19

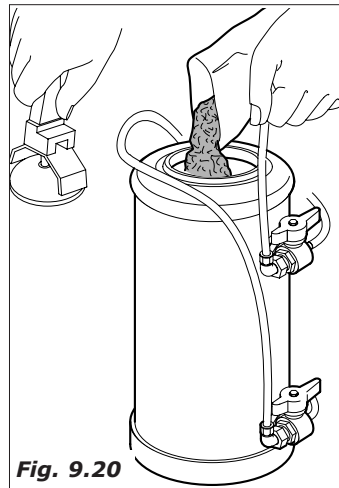


Fig. 9.20

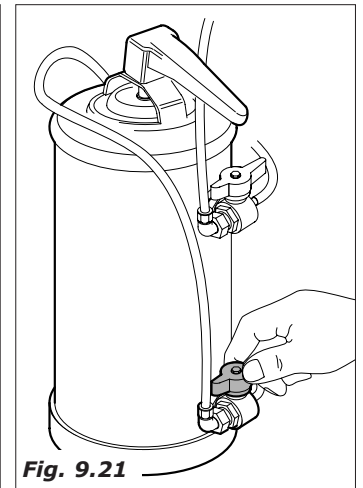


Fig. 9.21

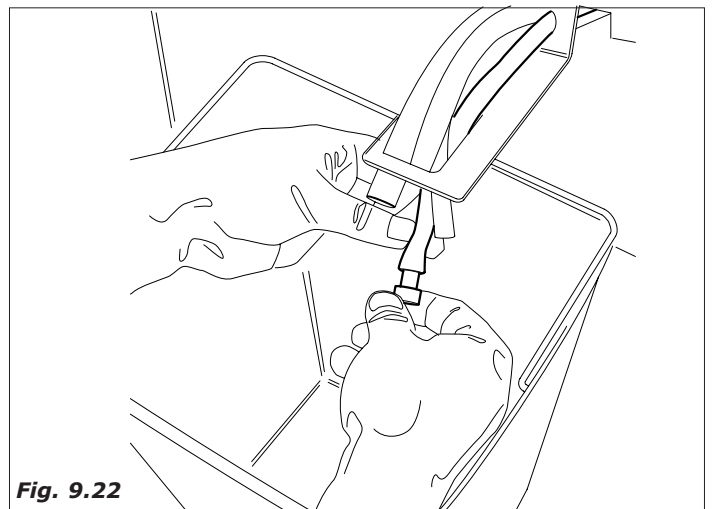


Fig. 9.22

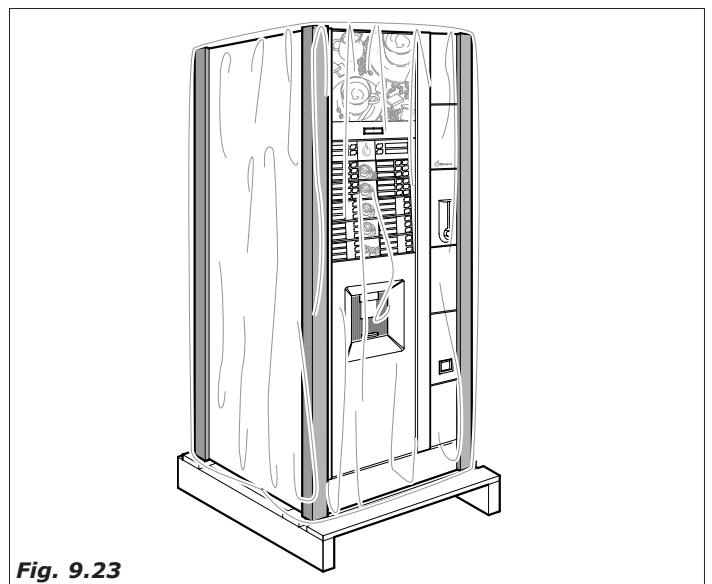




































Fig. 9.23

11.0 TROUBLESHOOTING GUIDE FOR THE FAILURES OR MOST COMMON ERRORS

In the function SERVICE, the failures, when present are immediately displayed in the follow manner:

Display message	Probable cause	Remedy
E01 CUPS	No cup	 Fill up the relative column
	Faulty cup presence micro-switch	 Check micro-switch and replace if necessary
E02 GRINDER	No coffee	 Fill up the container
	Grinder blockage	 Check that there is nothing obstructing the grinders. Motor electricity supply
E03 COFFEE GROUP	Unit motor blockage	 Check for any breakage Motor electricity supply
	Motor position micro-switch fault	 Check the micro-switch and replace if necessary
E04 ESPRES. PUMP	Pump fault	 Check and replace if necessary
	Coffee solenoid	 Check and replace if necessary
	Volumetric counter	 Check and replace if necessary
E05 INSTANT PUMP	Pump fault	 Check and replace if necessary
	Soluble solenoid valve	 Check and replace if necessary
	Volumetric counter	 Check and replace if necessary
E06 COFFEE DOSER	Coffee measurer fault	 Check
	Measurer micro-switch fault	 Check and replace if necessary
E07 SCALING	Error in the setting of the scale factor (base coin) in the coin slot	 Check the coin slot programming parameters for the correct base coin value
E08 LACK WATER	Lack of water	 Check the water mains capacity Water input solenoid valve Efficient function of the tank micros
	Liquid dreg bucket full	 Empty
	Faulty tank micro	 Replace micro
E09 EEPROM MEM.	EEPROM fault	 Replace with equivalent Eeprom version Release or update with P3000
E10 SPOON MOTOR	Stirrer release motor fault	 Check
	Motor micro switch fault	 Check and replace if necessary
E11 HEAT SENSOR	Coffee unit probe indicator interruption or short circuited	 Check
E12 COF-TEM<70C°	Indicates the non-heating of the coffee heater	 Check the programming parameters Check clixon
E13 INS. TEM<70C°	Indicates the non-heating of the soluble heater	 Check the programming parameters Check clixon

Display message	Probable cause	Remedy
E14 LEAF TEA (only on certain versions)	Faulty tea leaf unit motor	 Check
	Motor positioning micro-switch fault	 Check and replace if necessary
E15 CLOCK ERROR	Clock card fault	 Check flat cable connections Replace CPU card
	Incorrect programming	 Check and programme correctly
E16 VOLUME	Indication of reduction in the capacity of the water circuit	 See note ⁽¹⁾ .
E17 NECKS MOTOR	Spout motor fault	 Check
	Motor position micro-switch fault	 Check and replace if necessary
E18 SUGAR DESC.	Conveyor motor fault	 Check
	Motor position micro-switch fault	 Check and replace if necessary
NO LINK	Wait/absence of connection with serial coin slot	 Check the programming connections power supply of the coin slot

⁽¹⁾ The alarm E16-VOLUME is a mere signal, that does not cause a block, but that indicates a progressive reduction of the water flow in the PUMP-electrovalve circuit or an inefficiency of the volume meter, this signal pre-announces an imminent failure E04 - PUMP.

Other signals that do not block are foreseen and have the objective of advising that the regeneration of the descaler resins, of the blades or filters is necessary.

The number of vends beyond which the regeneration is deemed necessary is set in the OPTIONS menu; the display messages foreseen are:

- * to indicate the error **E16 VOLUME**
- α to indicate the resin regeneration
- & to indicate the substitution of the filters
- \$ to indicate the substitution of the grinder blades
- # to indicate the substitution of the filters and of the grinder blades
- % to indicate the resin regeneration and the substitution of the grinder blades
- Ω to indicate the resin regeneration and the substitution of the filters
- π to signal the regeneration of the resins, substitution of the resins and the grinder blades

If one of the above mentioned symbols are displayed, going into **SERVICE** mode instead, the message **ALARM** will appear followed by the signal for which the regeneration is necessary.

A safety disposition is foreseen "group present" (A Micro switch assembled on the boiler-group support) in the versions with plastic group; in the absence of the group the machine indicates to SELECT DRINKS WITHOUT ESPRESSO COFFEE.

The presence of the following is also indicated:

- coffee unit
- water
- coffee
- cups
- dreg container empty

safety elements:

- coffee heater thermostat
- door switch
- mechanical anti- flooding
- pump, grinder, coffee delivery unit motor (timed regulation)

12.0 ACCESSORIES KIT

- PUMP KIT
- COOLING UNIT KIT
- CLOCK AUDIT KIT
- MDB KIT
- MONO-HEATER 3 BOX HEATED CHAMBER KIT
- HOT WATER SOLENOID VALVE
- STAINLESS STEEL CASING MONO-HEATER
- ELECTROMECHANICAL STROKE COUNTER
- OVERSIZED PRODUCT CONTAINERS
- PURIFIER MONO-HEATER