



INSTALLATION AND MAINTENANCE MANUAL

Cod. 11081921

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.

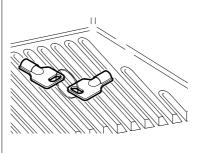
Each regulation operation is the exclusive responsibility of the installation technician who also holds the programming access password.







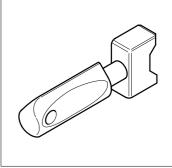
Keys at the disposal of the MAINTENANCE and INSTALLATION technicians







Key at the disposal of the INSTALLATION technician



This key can also be given to the maintenance technician exclusively authorized to undertake the operations as described in chapter 8.0

Tools necessary for undertaking interventions on the automatic dispenser.

SOCKET SPANNERS

n° 5,5 n° 7

nº 8

n° 10 n° 20 n° 22

SPANNERS (fork type)

nº 7

nº 8

nº 10 nº 12

nº 14

SCREWDRIVERS

Small size

Medium size

Large size

Normal cross

Small cross

Medium cross

Large cross

Of Teflon, small size for Trimmer regulation.

RATCHET SPANNER no.14

TESTER

ELECTRICIAN'S SCISSORS

PROGRAMMING KIT



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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 it's use are at the users charge.

- Any manipulations or modifications made to the machine that are not previously authorized by the manufacturer, relieve the latter from any responsibility for damages deriving from, and will automatically result in the cancellation of the machine guarantee terms.
- This manual reflects the status at the moment of the emission of the automatic vending machine on the market; possible modifications, upgrading, adaptments that are done the machine and that are subsequently commercialized do not oblige 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:

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

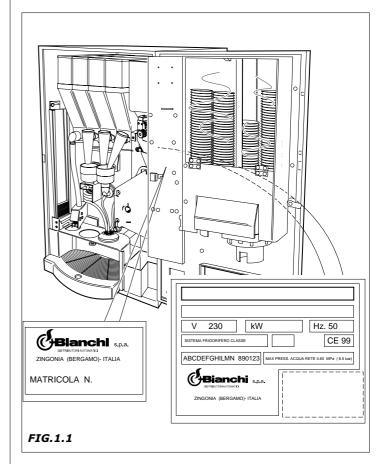
- The data registered on the serial number label (Fig.1.1)
- version of program contained in the microprocessor (adhesive label applied to the component the assembled on the Master board) (Fig.1.2).

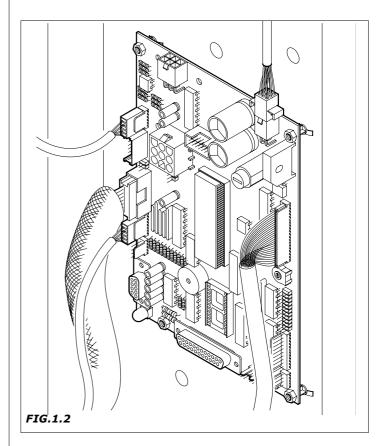
Nuova Bianchi S.p.A. declines any responsibility for damages caused to people or belongings in consequence to:

- 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.





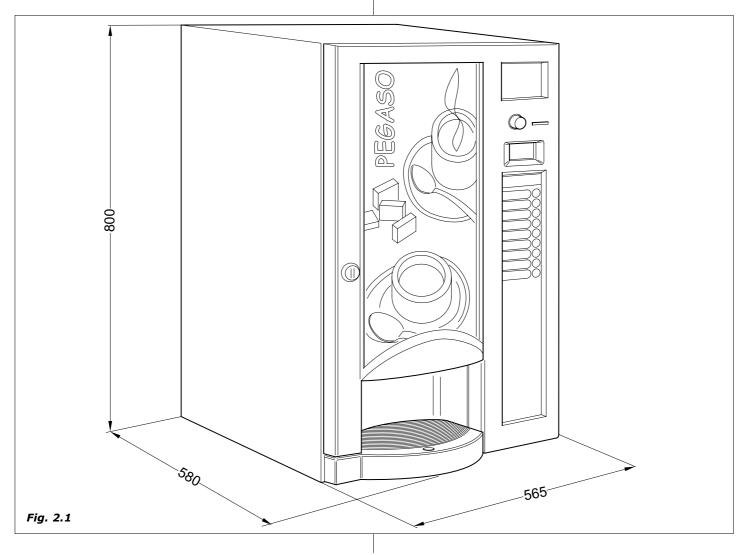


2.0 TECHNICAL CHARACTERISTICS

Height	mm 800	
Width	mm 565	
Depth	mm 580	
Weight	kg 75	
Power Supply	V 230	
Power frequency	Hz. 50	
Installed power (1)	from 1,2 kW to 1,7 kW	
Nominal current	7,42 A	
AVERAGE CONSUMPTIONS:		
In standby	100 Wh	
For 50 drinks	300 Wh	
Water connection	3/8" gas	
Electric connection	SCHUKO plug	
WATER SUPPLY		
from main supply with pressure between 0.5 and 6.5 bar		
CUP DISPENSER		
Suitable for cups with diameter mm 70-74		

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 1,8	
Instant coffee	kg 1,0	
Powder milk	kg 1,2	
Creamer	kg 2,7	
Chocolate	kg 2,5	
Lemon tea	kg 3,3	
Natural tea	kg 2,0	
Broth	kg 3,0	
Sugar	kg 3,4	
Cups	N° 270	
Spoons	N° 330	
Neon light (optional)	of 6 Watt	

 $[\]ensuremath{^{(1)}}$ Check the rated output indicated on the data plate applied by the distributor.

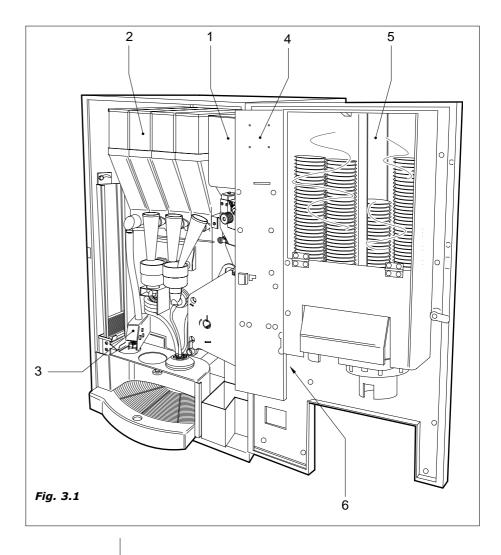




3.0 GENERAL TECHNICAL DESCRIPTIONS

3.1 Machine description (Fig.3.1)

- 1 Coffee group and grinder
- 2 Drinks distributor group
- 3 Sugar dispenser group
- 4 Electronics board (Master)
- 5 Cup dispenser
- 6 Coin-acceptor group



3.2 Foreseen use

The distributor is exclusively for the dispensing of drinks, prepared mixing food substances with water (by infusion as far as concerns 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:

PEGASO E (version with espresso coffee and instant beverages)

PEGASO E/NE (version with espresso coffee and instant beverages)

PEGASO I (version with instant beverages)

PEGASO I/NE (version with instant beverages)



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

ART. CODE	ARTICLE DESCRIPTION
PEE01XX	PEGAS0 E3S GB A/R
PEE02XX	PEGAS0 E3S GB A/R DECA
PEE04XX	PEGASO E3S GB A/R M/S
PEE06XX	PEGASO E3S GB A/R M/S DECA
PEE12CA	PEGASO E3S A/R CA
PEE13XX	PEGASO E3S A/R N.E.
PEE23XX	PEGASO E3S A/R M/S N.E.
PEE14XX	PEGASO E3S A/R IVS
PEE15XX	PEGASO E3S A/R S.A.
PEE15XX/Q	PEGASO E3S A/R S.A. IMQ
PEE22XX	PEGASO E3S A/R M/S S.A.
PEE22XX/Q	PEGASO E3S A/R M/S S.A. IMQ
PEE16XX	PEGASO E3S A/R U.S.
PEE17AK	PEGASO E3S A/R ——— AZKOYEN
PEFB01XX	PEGASO FB5S A/R N.E.
PEFB02XX	PEGASO FB5S M/S N.E.
PEI01XX	PEGASO I5S A/R FR
PEI06XX	PEGASO I5S A/R M/S FR
PEI07CA	PEGASO I 5S CA
PEI08XX	PEGASO I 5S A/R N.E.
PEI14XX	PEGASO I 5S A/R M/S N.E.
PEI09XX	PEGASO I 5S A/R A.S.

XX = Colour identification
/Q = IMQ marked machine



3.4 Basic operation concepts

During the normal functioning the distributor remains 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 different processes:

CUP DISTRIBUTION

- the cup translation device shifts from idle/dispensing position to the "cup dispenser" station (Fig. 3.2)
- the motor inside the cup dispenser moves the volutes which separates the cup making it fall into the special holder fork (Fig. 3.3)
- the cup translation device shifts again to collect the sugar
- the cup translation device then moves to return to idle position.

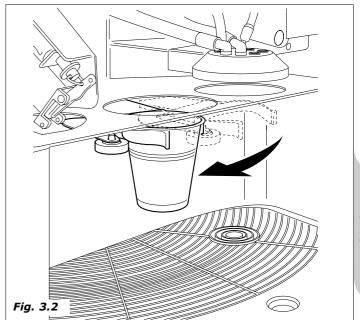
SUGAR DISPENSER

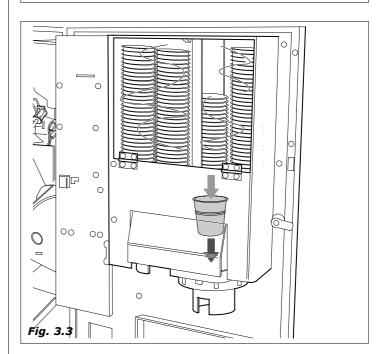
Where set and requested , an amount of sugar in the preset maximum dose is dispensed with the possibility of stopping the latter at the desired dose.

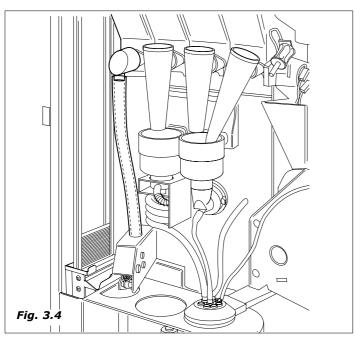
The sugar is dispensed directly in the cup in the ${\pmb E}$ versions whereas for the ${\pmb I}$ versions it is pre-mixed with the instant drinks.

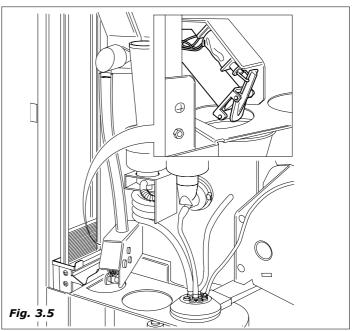
The dispensing procedure occurs according to the following phases:

- **1.** the geared motor activates the helicoidal screw conveyor of the sugar product container, dispensing the desired quantity into the product chutes (*Fig.3.4*).
- **2.** The electromagnet is engaged which will empty the sugar from the flange into the chute which will deliver it to the cup (*Fig.3.5*).











SPOON DISPENSER

This process is activated only in the versions where the spoon dispenser is foreseen; In these versions it is possible to select the spoon in the selections without sugar and/ or in the instant selections .

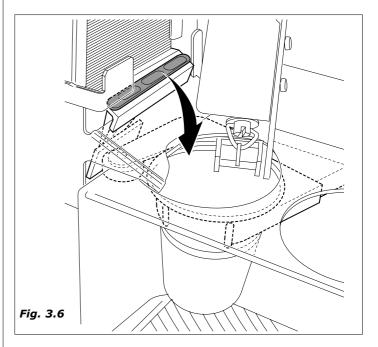
- the geared motor that operates the spoon release device is activated making the spoon fall into the cup (Fig. 3.6).

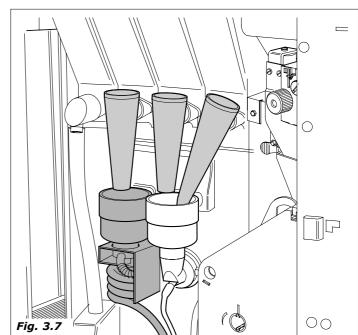
INSTANT DRINKS

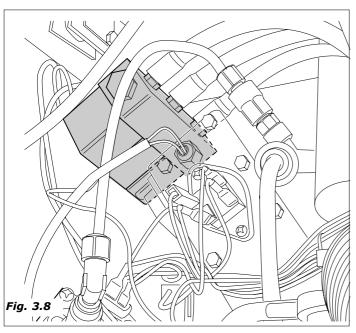
This process is activated when the cup and spoon dispensing processes (when requested) have been completed.

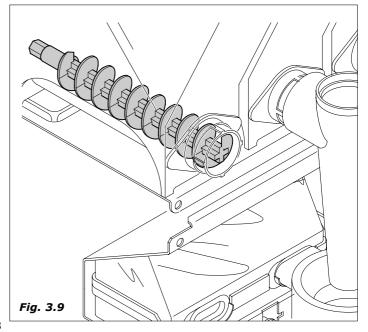
According to the type drink requested and to the distributor model, several of the various processes described here below can be activated.

- If present, the whipper motor is activated (Fig. 3.7).
- The solenoid valve fixed to the coffee boiler is engaged in order to deliver the required quantity of water into the mixer (fig. 3.8);
- the pump that delivers the required amount of water is activated; and controlled by a special electronic device (volumetric counter), which withdraws from the coffee boiler (Fig. 3.12).
- 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.







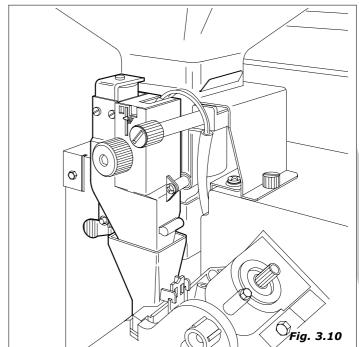


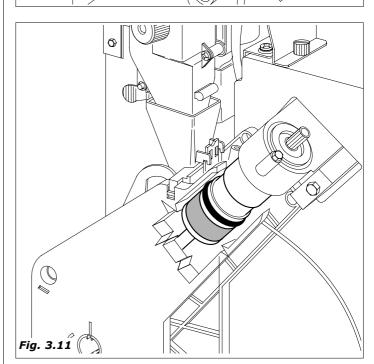


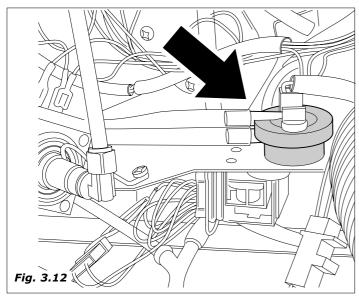
ESPRESSO COFFEE

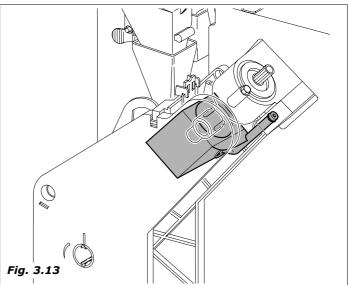
This process functions only the models equipped with the coffee espresso group, after the cup and sugar dispensing processes have been effected.

- 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
- the rotation group geared motor brings it into the dispensing position and simultaneously compresses the ground coffee (Fig. 3.11).
- the pump that dispenses the quantity of programmed water and that is controlled by a specific electronic device, (volume meter), withdrawing 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).













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:

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

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.



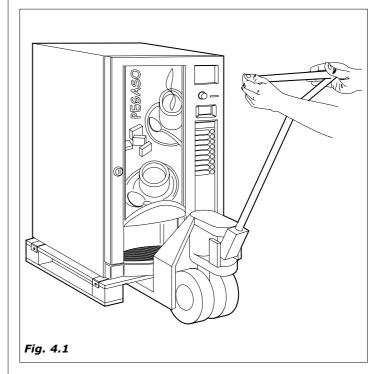
At the end of the transport the packing must result without damages which means it must not :

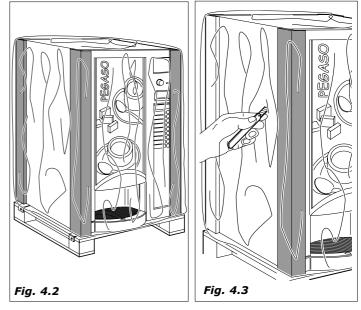
- present dents, signs of bumps, deformations or damages of the external packaging
- present wet zones or signs that could lead to suppose that the packing has been exposed to rain, cold or heat.
- present signs of tampering

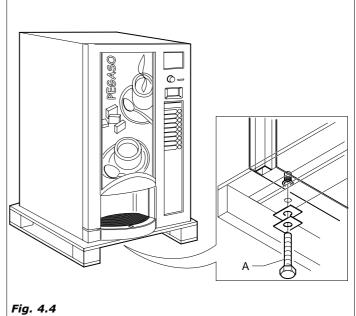
4.5 Unpacking

 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).



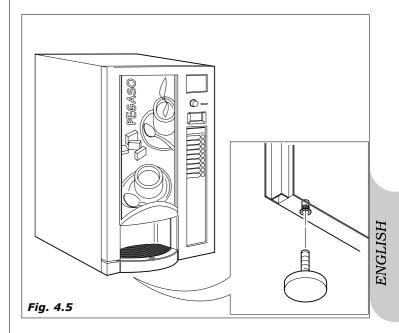


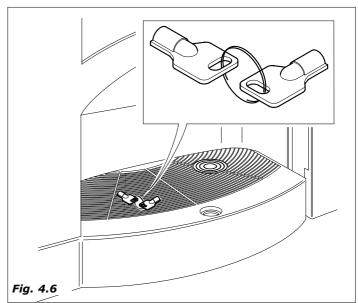


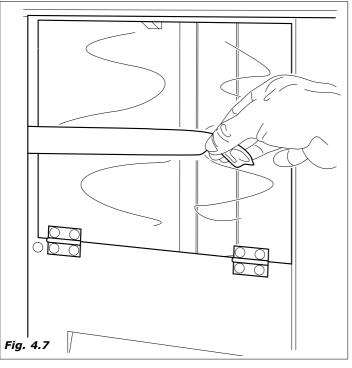
- Release the pallet and insert the 4 feet into the threaded slots (fig. 4.5) freed of the screws (A)
- remove the key from the drink dispensing chamber (Fig.4.6)
- open the door of the distributor and remove the adhesive tape from the components listed here below:
- cup turret (example in Fig.4.7)
- coin box
- sugar container
- weight on the spoon dispenser column
- coin mechanism cover / Master board
- product containers
- remove the polystyrene that that blocks the product containers (Fig.4.8)

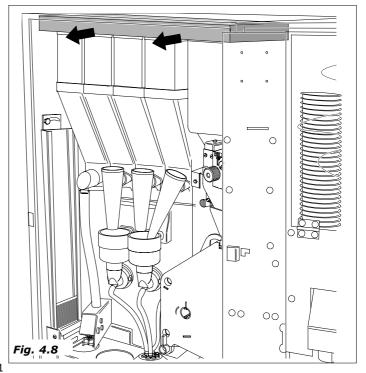


The packing material must not be left accessible to others, as it is a potential environmental pollution sources. For the disposal contact qualified companies authorized.











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 end 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
- Futhermore verify observance of any other eventual local and national standards.

6.0 INSTALLATION



Positioning

space to pass by (Fig.6.1).

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

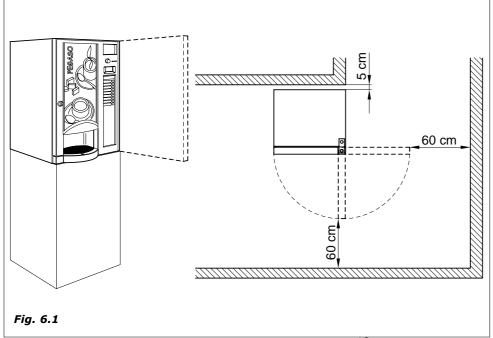
So as to avoid that the floor gets dirty, due to accidental spilling of the products, use, if necessary, under the distributor, a protection sufficiently wide to cover the distributors' operating space.

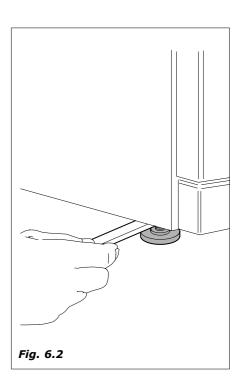


6.2 Connection to the main water supply

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







- install, if not present, a tap in an accessible position to isolate the machine from the water mains should it be found to be necessary (Fig.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.6.5).

Version with independent tank

In this version, the water tank, which is positioned next to the coffee container ($Fig.\ 6.6$), must be filled by the maintenance personnel itself.

Maximum tank capacity is of 5.6 litres.

6.3 Main Power supply connection

The distributor is predisposed to function with mono-phase 230 Volt tension and is protected with 10A and 20A fuses.

We suggest to check that:

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

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

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

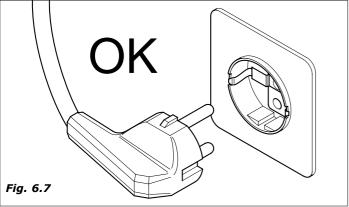
- The distributor is equipped with a power supply cable of H05VV-F 3x1,5mm², with SCHUKO plug (Fig.6.7).
- The sockets that are not compatible with that of the machine must be replaced. (Fig.6.8).
- The use of extension, adapters and/ or multiple plugs is forbidden

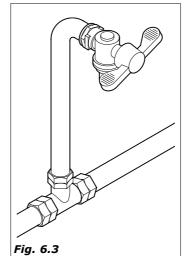
Nuova Bianchi S.p.A. declines all responsibility for damages deriving for the complete or partial failure to observe these warnings.

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

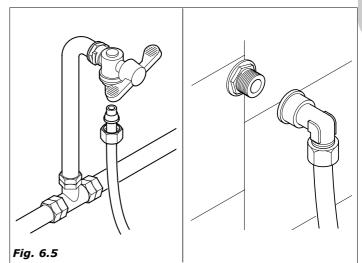


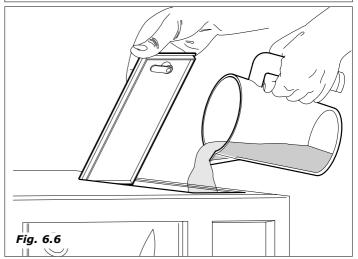
The power supply cables are to be replaced by skilled personnel.

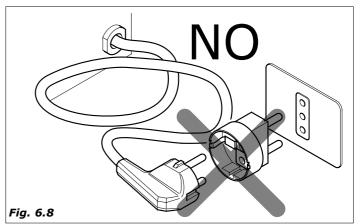
















6.4 Starting up of the unit

The distributor is equipped with 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 remove the plug of the machine from the power supply.



The clamp of the power cable junction box under tension (Fig. 6.10-pos. 1).

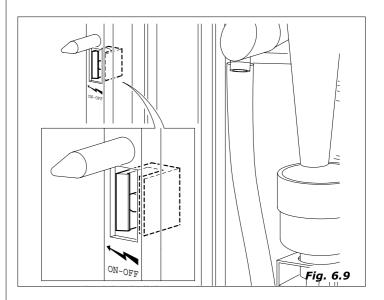
For some operations is however necessary operate with the door open but with the distributor connected.
 It is possible for qualified technical personnel, to operate in this way, by inserting the special plastic key, supplied with the distributor, into the door switch and rotating it 90° (Fig.6.11).

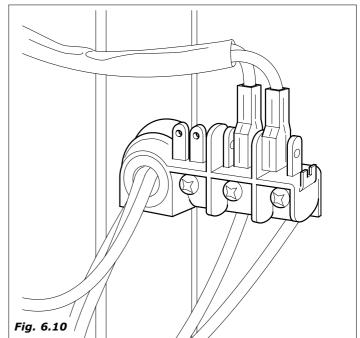


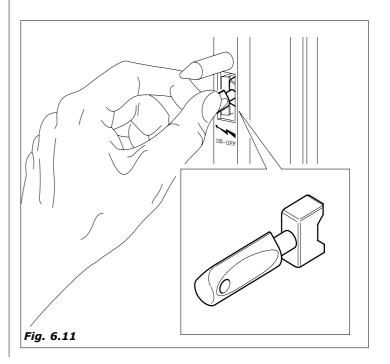
The opening and the possible connection with the distributor's door open must be performed only by authorized and technically qualified personnel. Don't leave the distributor open and unguarded.

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.









6.5 Installation



6.5.1 Filling the water circuit

The appliance undertakes automatic filling of the water supply circuit.

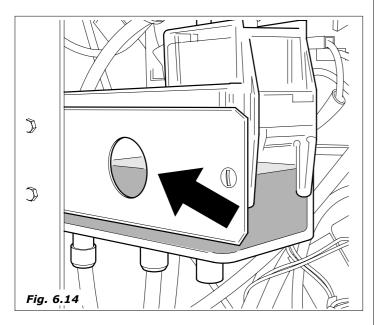
Remove the rear cover for access to the water heater (remember to loosen the screw (A) inside, accessible from the front part) (Fig. 6.12) and to insert the key into the door switch.

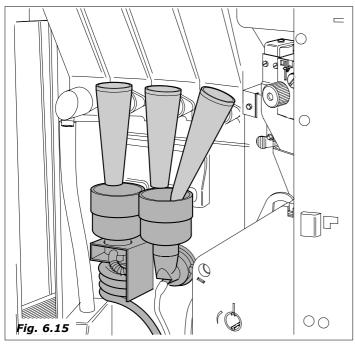
The operational sequence will be as follows:

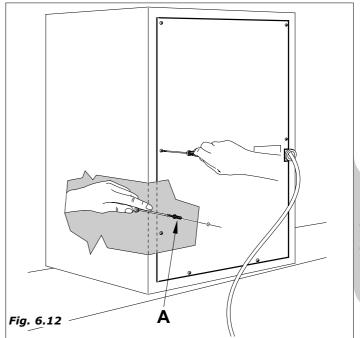
- floating tank filling.

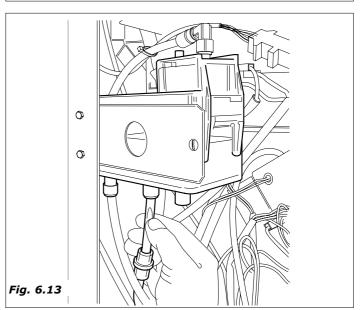
It is advisable to press the pipe that connects the heater to the water tank a few times, in order to eliminate any air bubbles that might form $(Fig.\ 6.13)$

- when the presence of water inside the tank can be seen from the inspection hole (Fig. 6.14) the cup column will start for filling and the coffee unit will undertake a trial cycle.
- filling will stop when the maximum level is reached.
- at the end of the water filling (Fig.6.15), effect a cleaning cycle
 of the mixer group so as to fill all the circuits and remove
 eventual residues from the boiler.

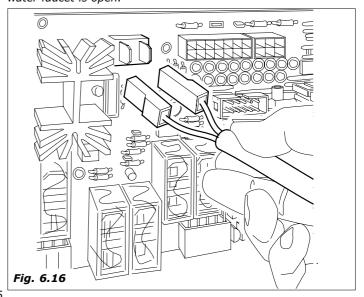








undertake the following operations: connect the resistance connector to the power card and wait for about ten minutes until the working temperature is reached (Fig. 6.16)
 In the distributor's installation phase, ascertain, before switching it on, that the same is connected to the water supply and that the water faucet is open.









6.5.2 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) following the concentrations given on the product instruction labels.
- remove all the product containers from the distributor (Fig. 6.17)
- remove the lids from the product containers covers and product chutes (Fig.6.18). 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.6.19)
- with a cloth soaked with the solution clean the whipper assembly base (Fig. 6.20)
- 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.



6.5.3 Payment system installation

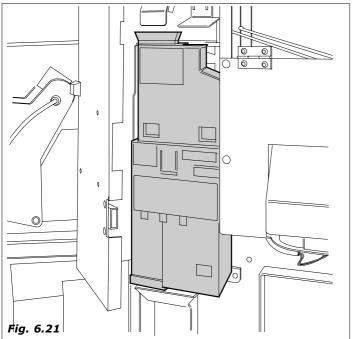
The distributor does not have a payment system; any possible damages to the distributor itself and/or objects and/or people deriving from its incorrect installation are responsibility of who installs the payment system,

- To install the payment system partially unscrew the three screws (Fig. 6.21) mount the token slot without selector.
- Tighten the three screws and mount the selector
- connect the coin mechanism to the Master board.

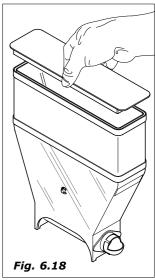
The selectors must be directly connected to the Master board the and the serial executive system through the interface cable supplied with the machine.

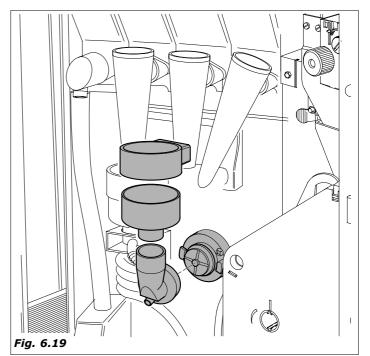
Then go into programming for the correct settings.

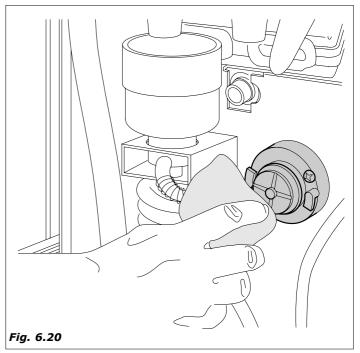
Consult chapter" 7.0 PROGRAMMING" so as to verify setting of the parameters, that must be coherent with the system used.















6.0

6.6 Product container loading (with machine off)

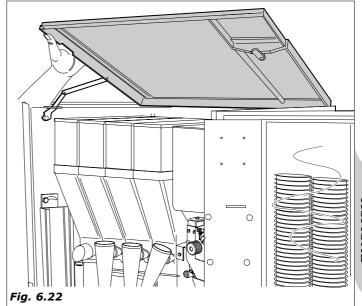
6.6.1 Loading containers

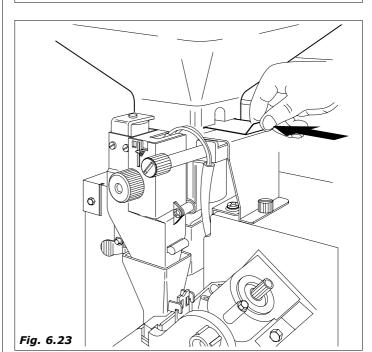
Filling is possible keeping the containers inserted, and by raising the upper flap of the distributor ($Fig.\ 6.22$) or by extracting each container.

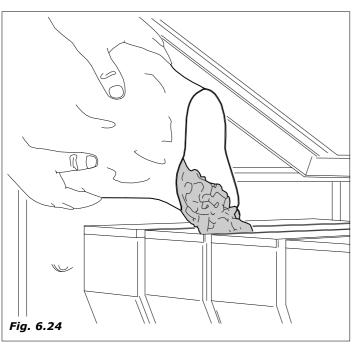
For granulated coffee in particular it is necessary to close the closure plat before extracting the container. (Fig. 6.23).

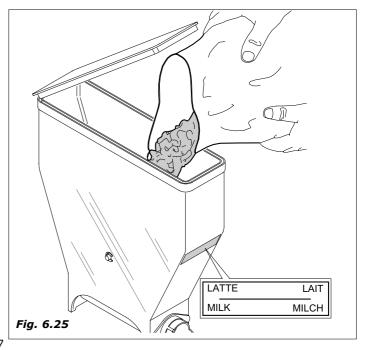
- remove the covers of each container and load the product according to the product indicated on the label (Fig.6.24-Fig.6.25).
- pay attention that they there are no clots, avoid pressing the product and using an excessive quantity, so as to avoid its aging in relation to the consumption forseen in the time period between two loadings.

Check the container product capacity in the section TECHNICAL CHARACTERISTICS.











6.6.2 Product selection label application

 the labels indicating the product selections must be inserted in the special slots.

Perform the operation as follows:

- Open the Master card flap (Fig. 6.26)
- insert the plate according to the order and the selections used by the distributor (Fig. 6.27)

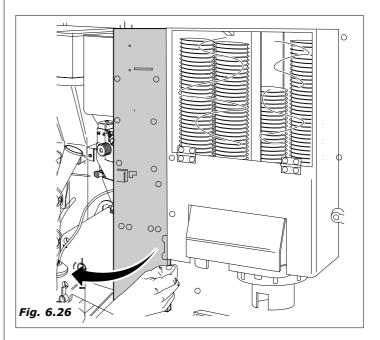
6.6.3 Cup loading

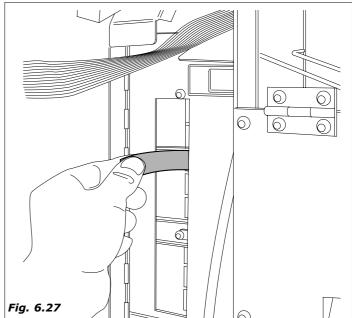
Use only cups designed for automatic vending machines, with a diameter of more than 70-74 mm, avoid compressing the cups between themselves during the loading.

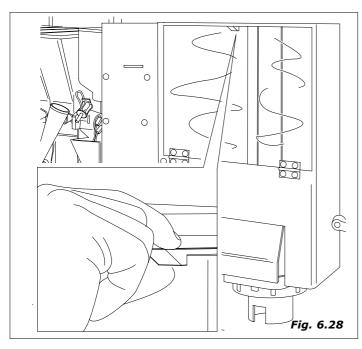
First filling

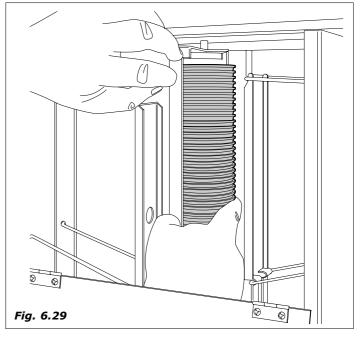
In installation phase with the cup dispenser completely empty, operate as follows:

- open the transparent flap as indicated in the figure (Fig. 6.28)
- insert the first cup column in the central- cup holder + section (Fig. 6.29)











- insert another cup column at the right of the first pressing the pusher element (*Fig. 6.30*)
- complete the loading operation by inserting two columns of cups on the left side (Fig. 6.31).

Normal filling

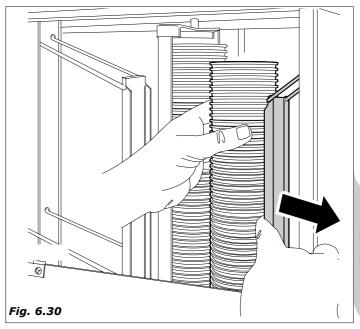
The cup column should normally filled with the machine off, simply by opening the transparent flap and inserting the missing cups.

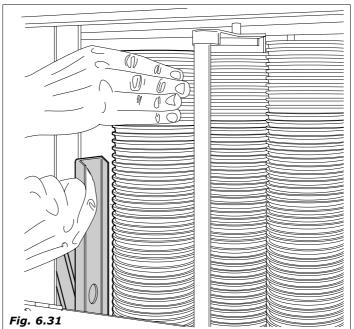
6.6.4 Stirrer filling

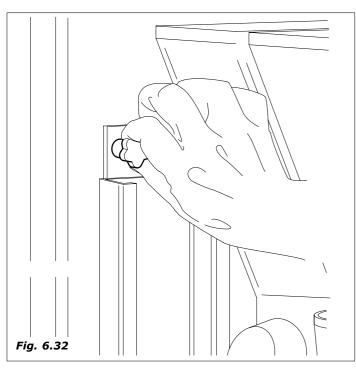


Use only stirrers specifically designed for automatic dispenser machines.

- loosen without completely unscrewing the knob that fixes the stirrer holder (*Fig. 6.32*)
- bring the stirrer holder forward as indicated in figure 6.33







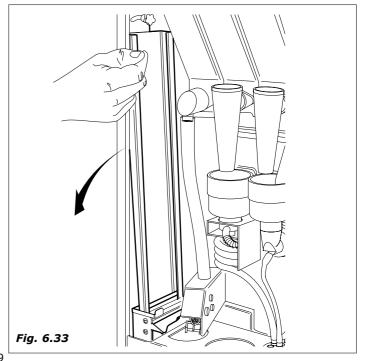
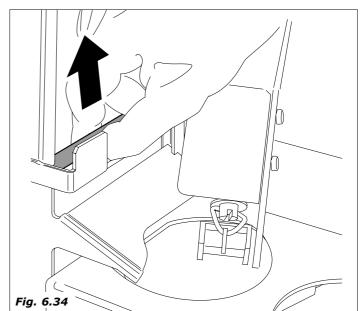


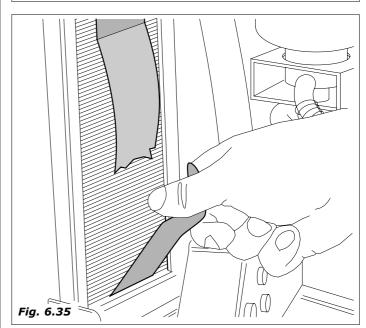
Fig. 6.37

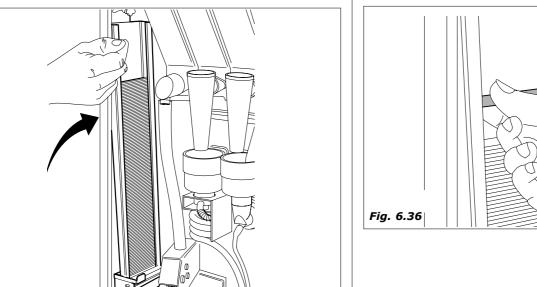


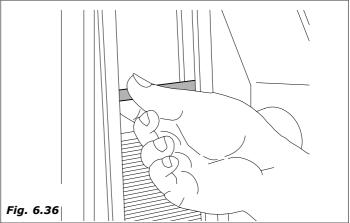
- remove the metal weight from the column device (Fig. 6.34)
- insert the stirrers still in their packaging into the columns and when positioned at the bottom cut and remove the packing strip ($Fig.\ 6.35$)
- complete filling and replace the small weight
- reposition the stirrer holder (Fig. 6.36)
- make sure that the stirrers are free of burrs and are not bent and are all horizontally positioned (Fig. 6.37)

The **PEGASO I** models are not fitted with a stirrer column as the sugar is mixed directly with the drink ingredients.













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 32 digit liquid crystal display and the use of the selection key touc pad.

The distributor is regulated with standard values from the testing stage with Coffee temperature, soluble drink temperature, selections combined with price number "1".

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 Master 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.

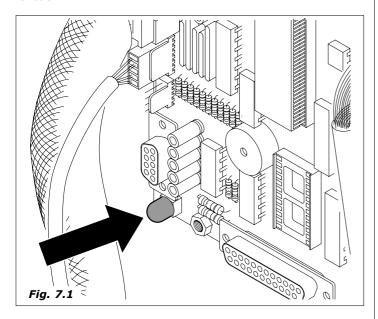
- The display messages are in four different languages that can be selected at choice by the operator during the installation phase (Fig.7.2) (suitable for hardware with potential for expansion to eight languages).
- The programming data can be of two kinds:

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.



PROGRAMMING

T1 = + (increase)
T2 = - (decrease)

T3 = number (cursor)

T4 = enter (confirm)

TA or TB = ESC

On entering the correct code (for versions I/NE-E/NE – the default code is 00001) one enters the true programming mode.

In versions I/E there are two codes: the main one which displays all the menus except for the Sales menu and the sales menu code, which displays only this latter menu.

If the two codes are the same all the programming is accessible. Default codes: main code 00001, sales menu 0000.

If the slave is missing to which the menu heading refers, the corresponding parameter is nit displayed and line 2 appears empty.

In general keys **1** and **2** modify the parameters or scroll menu entries displayed in line 2.

For programming part of the keys of the selection keyboard are used which are namely:

■ key A (versions E-I)

key B (versions E/NE - I/NE) "ESC"

Comes from the current programming submenu, and returns to the sub-menu of origin.

■ key **1** "+"

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 2 " -

or decrease key , has the function of decreasing the value of a selected figure $% \left(1\right) =\left(1\right) \left(1\right)$

■ key 3 "NUMBER"

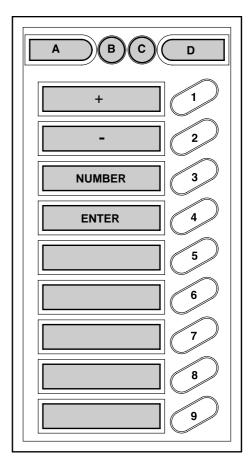
Allows to move the display cursor in correspondence with the digit that has to be changed by means of the previous keys + and -.

■ key 4 "ENTER"

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

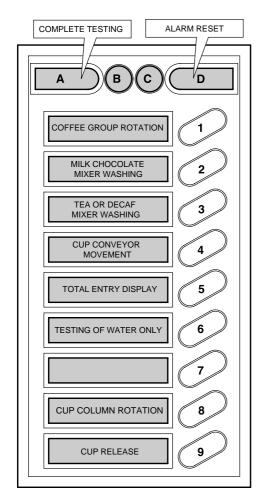
At the end of parameter modification, it is possible to escape from the programming mode by re-pressing the key on the Master board.

Programming panel

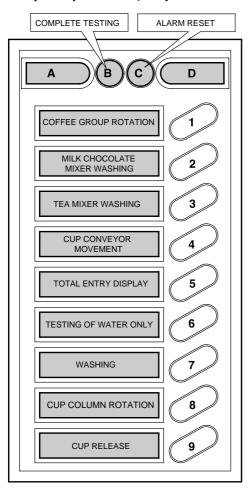




Maintenance panel (Version E)



Maintenance panel (Version E/NE)



MAINTENANCE

(Versions E - E/NE)

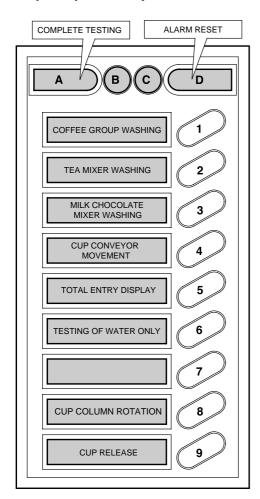
- **T1** COFFEE GROUP ROTATION OR ALARM SCROLL (if present)
- **T2** MILK CHOCOLATE MIXER WASHING.
- T3 (Version E)
 TEA OR DECAF MIXER WASHING
- **T3** (Version **E/NE**)
 TEA MIXER WASHING
- T4 CUP CONVEYOR MOVEMENT
- T5 TOTAL ENTRY DISPLAY (can be cancelled) for 5s
- TESTING OF WATER ONLY OF A SELECTION (Pegaso)/ TESTING OF A PRODUCT (Vega)
- **T7** (Version **E/NE**) WASHING
- **T8** CUP COLUMN ROTATION
- **T9** CUP RELEASE
- TA (Version E) or TB (Version E/NE)

 COMPLETE TESTING OF A SELECTION (Pegaso)/ TESTING

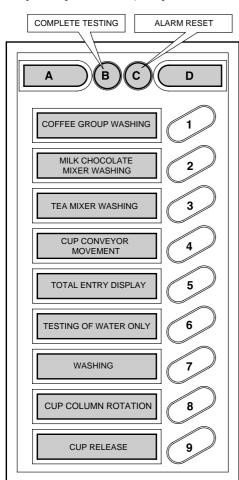
 OF A PRODUCT (Vega)
- TD (Version E) or TC (Version E/NE)
 ALARM RESET



Maintenance panel (Version I)



Maintenance panel (Versions I/NE)



MAINTENANCE

(Versions I - I/NE)

- T1 COFFEE GROUP WASHING OR ALARM SCROLL (if present)
- **T2** (Version I)
 TEA MIXER WASHING
- T2 (Version I/NE)
 MILK CHOCOLATE MIXER WASHING
- **T3** (Version **I/NE**)
 MILK CHOCOLATE MIXER WASHING
- **T3** (Version **I/NE**)
 TEA MIXER WASHING
- T4 CUP CONVEYOR MOVEMENT
- T5 TOTAL ENTRY DISPLAY (can be cancelled) for 5s
- TESTING OF WATER ONLY OF A SELECTION (Pegaso)/ TESTING OF A PRODUCT (Vega)
- **T7** (Version **I/NE**) WASHING
- **T8** CUP COLUMN ROTATION
- **T9** CUP RELEASE
- TA (Version I) or TB (Version I/NE)

 COMPLETE TESTING OF A SELECTION (Pegaso)/ TESTING

 OF A PRODUCT (Vega)
- **TD** (Version I) or **TC** (Version I/NE) ALARM RESET



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.

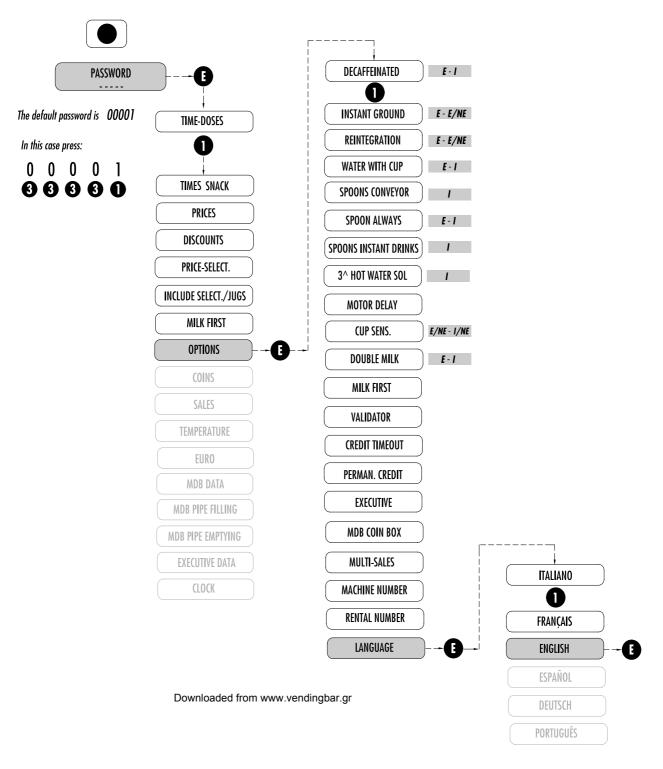
Once the code is composed, press the key "Enter" (4th) so as to accede to programming.

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 ESC you exit from the sub menu of operation.

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





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-DOSES

TIME SNACK (with Master/Slave)

PRICES

DISCOUNTS

PRICE SELECTION

INCLUDE SELECTIONS/JUGS

MILK FIRST

OPTIONS

COINS

SALES

TEMPERATURE

EURO OPTIONS

MDB DATA

MDB PIPE FILLING

MDB PIPE EMPTYING

EXECUTIVE DATA

CLOCK

Note:

- The discounts and clock menus are only displayed if the clock chip is present automatically sensed by the card.
- The menus relative to the MDB coin box (the last three) are only displayed if the MDB coin box is selected from the "Options" menu.
- The "executive data" menu is only displayed if the executive coin box is selected in the options menu.
- In the E/NE and I/NE versions the "Time/does", "Prices" and Price-selections menus are not displayed in the secondary code is entered.

The escape from the programming mode press "ESC" until return to the selected mode.

The display visualization is on two lines.

It is possible to make selection by using a programme on the "WinBianchi" PC ".

For each drink, the possible programmable does are indicated under the heading "Sxx".



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.

T = single coffee powder time (version I only)

T = single milk powder time (version **I** only)

 $\mathbf{Sxx} = \text{coffee}$

Sxx = milk+chocolate

Sxx = tea

Sxx = decaffeinated (version E and I only)

Sxx = water **Sxx** = sugar

(version E)

group time out:

maximum activation time (0÷10.0 s)



sugar time:

time for the sugar maximum dose (0÷10.0 s)

grinder time-out:

maximum grinding time (0÷25.5 s)

pump timeout:

pump timeout (0÷90 s)

(version E/NE)

group time out:

maximum activation time (0÷10.0 s)

grinder time-out:

maximum grinding time $(0 \div 25.5 \text{ s})$

pump timeout:

pump timeout (0÷90 s)

(version I)

sugar time:

time for the sugar maximum dose (0÷10.0 s)

sugar delay:

Single sugar delay (0÷25.5 s)

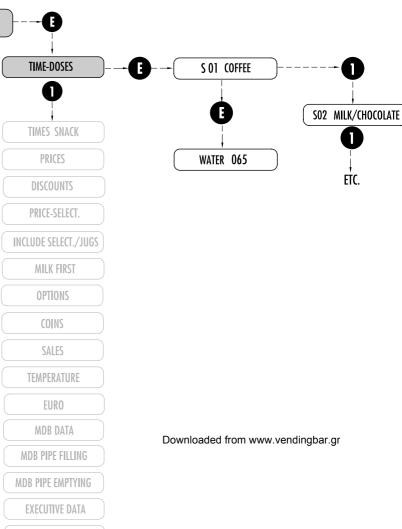
coffee time:

Coffee wait (0÷25.5 s)

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 espresso versions, the control of the water dose in the instant selections is done by means of a flow meter.

 The powder delays are engaged by the "Motor delay" parameter in the "options" menu.





7.2.2 TIMES SNACK (with Master/Slave) (Fig.7.5)

This function makes it possible to check certain parameters of the configuration of the Vega series distributor to which it is connected.

Note:

For access to the headings after "Trial", password 88000 must be entered.

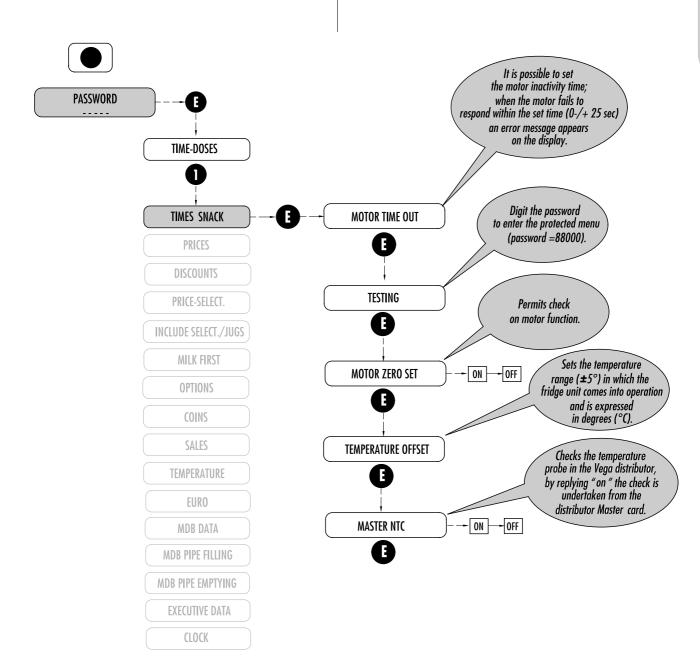


Fig. 7.5 Downloaded from www.vendingbar.gr



7.2.3 PRICES (Fig.7.6)

Up to 30 prices are available and singularly applicable to each selection.

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

"Price 0 <u>0</u>000"

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 <u>0</u>000"

Press ESC to return to the PRICE menu.

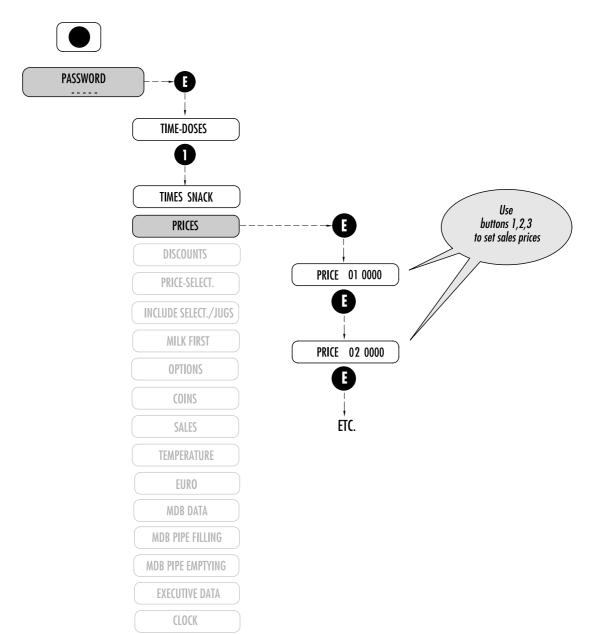


Fig. 7.6

Downloaded from www.vendingbar.gr



7.2.4 DISCOUNTS (Fig. 7.7)

This menu is displayed only if the clock chip is present, automatically sensed on the card.

Up to a maximum of 30 discounts can be programmed (from Discount 1 to Discount 30)as many as the vending prices. Furthermore it is possible to programme a special discount for the exclusion of the cup (indicated with SB).

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 "ESC" to return to the DISCOUNT menu.

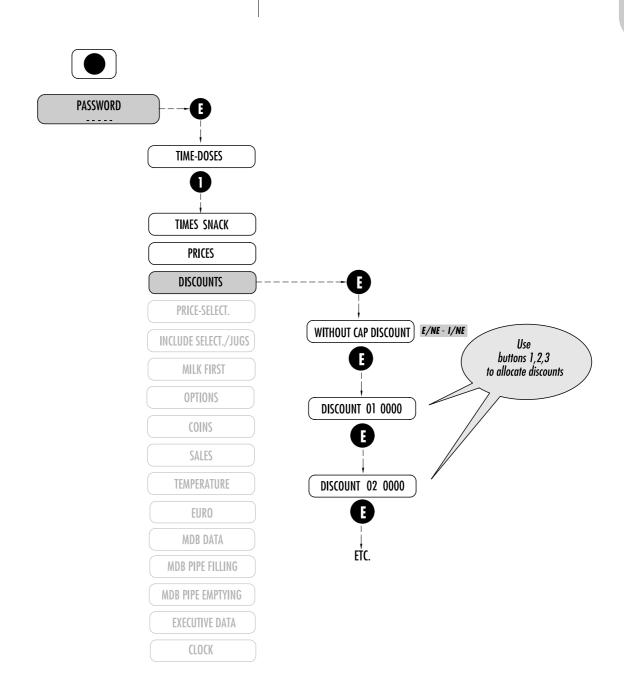


Fig. 7.7



7.2.5 PRICE SELECTION (Fig. 7.8)

This menu allows the combination of each single selection (indicated as Key 1, Key 26) to the prices previously set (indicated with Price $1 \div Price 30$).

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

"All at price 0 ? ON/OFF"

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

ON (= yes) or **OFF** (= no)

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

"Price extra sugar = $\underline{0}000$ "

these regard eventual price increases for the pre-SELECTION ${\bf extra\ sugar}.$

Vice versa, selecting the option OFF gives access to the programme of the single price for each single selection as follows:

"Key 01 = Price <u>1</u>"

using the key "+" or"-" you can go through the 30 prices, from Price 1 to Price 30; 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 ESC key.

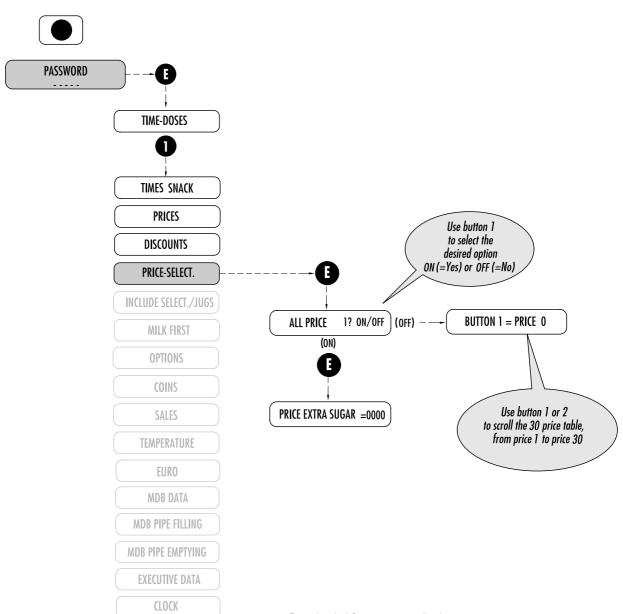


Fig. 7.8

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7.2.6 INCLUDE -SELECTIONS/JUGS (FIG.7.9)

The Selections function makes it possible to either engage or disengage the selections (from key 01 to 25)

Pressing ENTER once, on the display appears:

"INCLUDE key 01 = ON"

with the keys "+" and "-", the desired option is selected: DIGITING " ${f OFF}$ " THE SELECTION IS EXCLUDED.

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

The function JUG allows to dispense consecutively a drink selection without cup for the number of times programmed (available with a kit).

This key also makes it possible to activate the chosen selections to the JUG function.

Pressing ENTER once, on the display appears:

"Jug selec. 01 ON"

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

DIGITING "ON" 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.

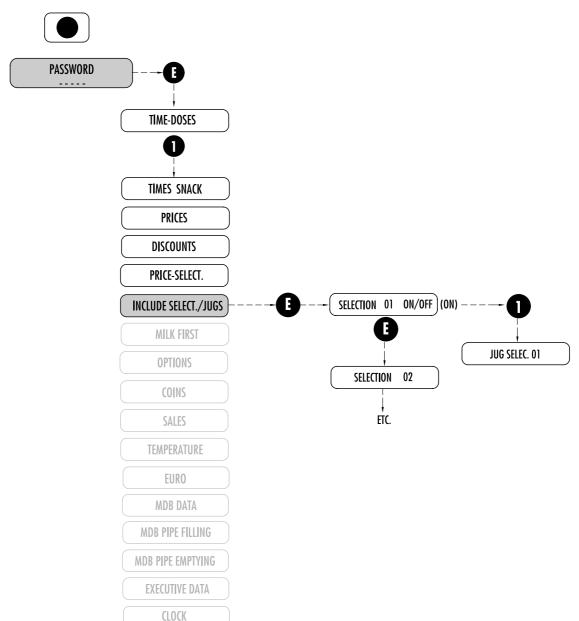


Fig. 7.9



7.2.7 MILK FIRST (Fig. 7.10)

Milk first 01 activate drink 1 milk first option 1

[On/Off]

activates drink 30 milk first option 14 [On/Off] Milk first 25

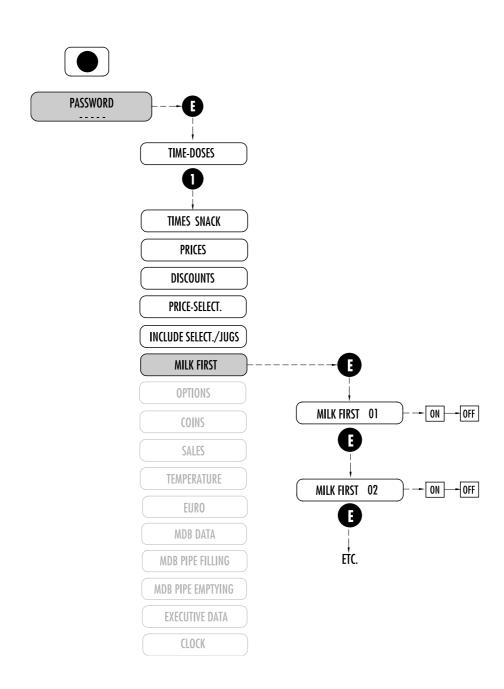


Fig. 7.10



7.2.8 OPTIONS (Fig.11)

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 "ON" or "OFF" that does or does not enable the function.

Decaffeinated =(version **E** and **I**) engages decaf pre-

selection key (ON/OFF)

Instant Ground = (version **E** and **E/NE**) option for instant

grinding (ON/OFF)

Reintegration = (version **E** and **E/NE**) reintegration

engagement (ON/OFF)

Water with cup = (version **E** and **I**) for cup with hot water

(ON/OFF)

Spoons conveyor =(version **I**) to activate the spoons conveyor

(ON/OFF)

Spoon always = (version **E** and **I**) option for spoons

dispensing even with unsweetened selections

(ON/OFF)

Solubles Spoon =(version **I**) option for spoons dispensing

for soluble products also (ON/OFF)

3^ hot water sol =(version **I**) activates third solenoid for hot

water (ON/OFF)

Motor delay = option to introduce a delay on the soluble

powder motors (ON/OFF)

Cup sens. =(version **E/NE** and **I/NE**) cup sensor

activation (ON/OFF)

Double milk =(version **E** and **I**) double milk option (ON/OFF)

Milk first = Activation of milk first option for espresso

with milk (ON/OFF)

Validator = Coin box activation option G13 (ON/OFF)

Credit timeout = For credit recovery in the event of failed

delivery operation (Vega) (ON/OFF)

Permanent credit = Activates credit timeout lasting 3 minutes

(ON/OFF)

Executive = Executive coin box

(Put the electronic option to)

MDB coin box = MDB coin box activation (coins only)

(ON/OFF)

Multi-sales = option for the selection of residual credit

visualization for 3 minutes (ON), or zeroing of the same at the end of the dispensing

operation (OFF)

Machine number = Machine number $(0 \div 9999999)$

Rental number = Rental number $(0 \div 65535)$

Washing cycle

Language = Language used for message visualization

on the display

Decimal point = Display of the sum with decimal point

(00000, 0000.0, 000.00, 00.000)

Washing = Engages automatic washing (ON/OFF)

washing = Engages automatic washing (ON/OFF)

= Engages, with the need for any expansion cards, of a mixer washing cycle 30 minutes after switching on, and second following providing that no other dispensing operations are effected in the subsequent 12 hours, to restart the cycle at least one selection is necessary. One mixer washing cycle a day is

therefore guaranteed (ON/OFF)

Jug 1 = n. consecutive CONCENTRATED COFFEE

deliveries in jug mode (0÷99)

Jug 2 = n. consecutive deliveries of all drinks,

except CONCENTRATED COFFEE in jug mode

 $(0 \div 99)$

Purifier* = de-counter, with indicator for de-scaler

resin replenishment

Coffee grinders* = (version **E** and **E/NE**) de-counter, with

indicator for grinder replacement

Coffee filters* = (version **E** and **E/NE**) de-counter, with

indicator for filter renewal

NTC from master = NTC probe read from the master card

(ON/OFF)

Grinder threshold =(version **E** and **E/NE**) threshold for the

reading of the grinder power voltage

(5.0/18.0)

Secondary code =(version E/NE and I/NE) new

programming access code (00000÷99999)

Code = new programming access code

 $(00000 \div 99999)$

Note:

- The MDB coin box has priority over the other coin boxes, followed by executive and then G13.
- In the E and I versions the "double milk" function has priority over decaf and tea.
- The "Credit timeout" functions refers solely to the Vega card.
- The "Perman. Credit" parameter operates solely in the event of the activation of "Multi-sales".
- The "Credit timeout" and the "Permanent credit" parameters are only active with coin and G13.
- The "Multi-sales" parameter is not active with executive coin box.
- The last 4 languages can only be selected if additional eproms are added to the card.
- The "Decimal point" parameter is not displayed if the executive coin box or MDB coin box are engaged.
- In version E the "Grinder threshold" parameter comes into action should the grinder exceed the programmed threshold value (after a dead time of at least 0.8 seconds after switching on), the grinder is switched off for 2.5 seconds and then switched on again for 0.8 seconds at the end of which the voltage control function is re-activated and so on.
- In the E/NE and I/NE versions the "Code" parameter is not displayed if one has entered into programming function with secondary code. If the code and the secondary code coincide, the primary code is given priority.
- * 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.

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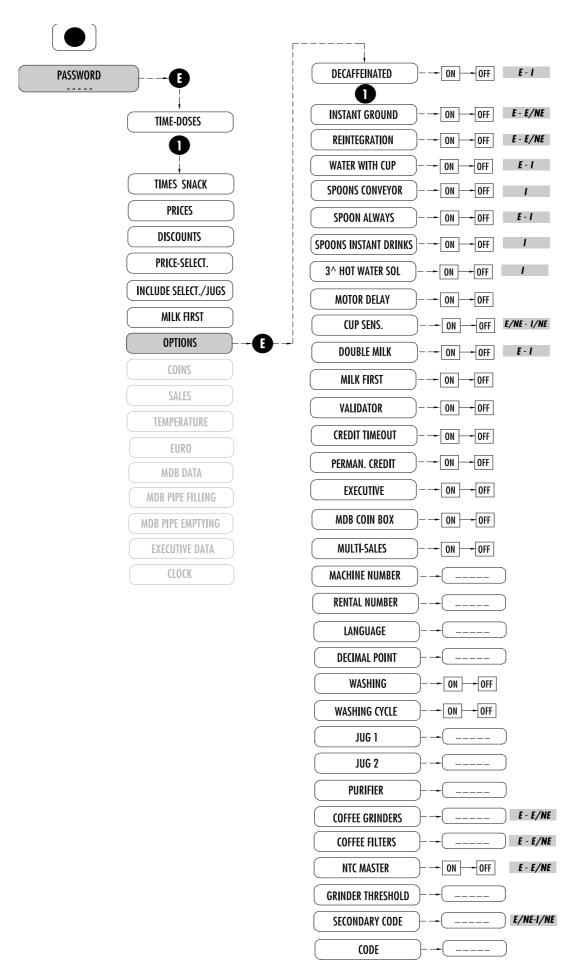


Fig. 7.11



7.2.9 COINS (Fig.7.12)

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 amd i.e.:

"Coin 8 0000"

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

Press ESC to return to COINS menu.

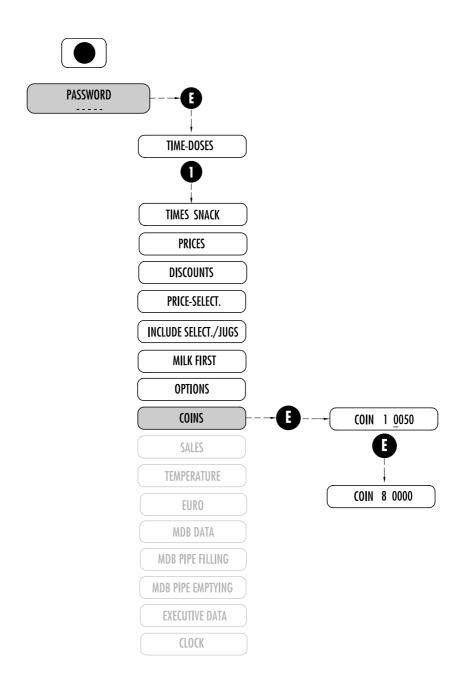


Fig. 7.12



7.2.10 SALES (Fig.7.13)

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:

TOTAL TCASH = total of the non cancellable sales prices **CASH** = total for the cancellable sales prices

DISCOUNT = discounted value total **OVERPAY** = total cash without sales

(N.B. active only for coins and G13)

TOTAL COUN = total sum of the selections made (sales *

tests) which cannot be cancelled

COUN = total sum of the selections made (sales +

tests) which can be cancelled and the total

sum of each selection.

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.

SALES CODE = (version E and I) sales code setting

ERASE ALL = function for resetting the auditing data

To reset the data operate as follows:

- go to CANCEL
- press ENTER key
- COD <u>0</u>000 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 ESC 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

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- the old code will be displayed
- use the keys "+", "-" to compose the new code.
- confirm with ENTER at the end

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 ESC key takes you back to the original menu.



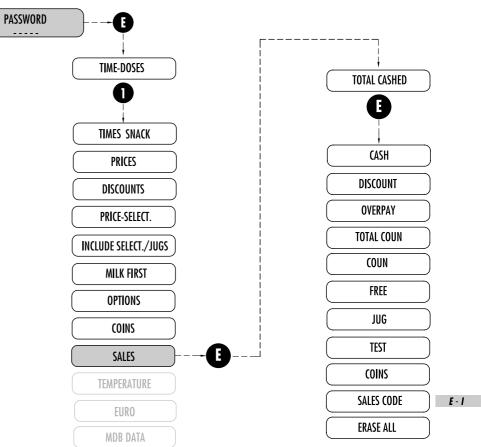


Fig. 7.13

MDB PIPE FILLING

MDB PIPE EMPTYING

EXECUTIVE DATA



7.2.11 TEMPERATURE (Fig.7.14)

Heater temp Heater temp [70÷110 °C]

Tank tempVega temperature $[8 \div 15 \text{ °C}, >15 \text{ °C} = \text{Off}]$ Temp. deltaVega temperature hysteresis $[1.0 \div 5.0 \text{ °C}]$ Defrost afterVega defrost frequency $[1 \div 12 \text{ hours}]$ Defrost forVega defrost duration $[1 \div 30 \text{ minutes}]$

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

Pressing ENTER appears:

"temp. water sol. C.077

repressing ENTER appears:

"temp. water coff. C.096

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 090 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"

 $\mbox{{\bf N.B.}}$ It is possible that these two values be different from one machine to another.

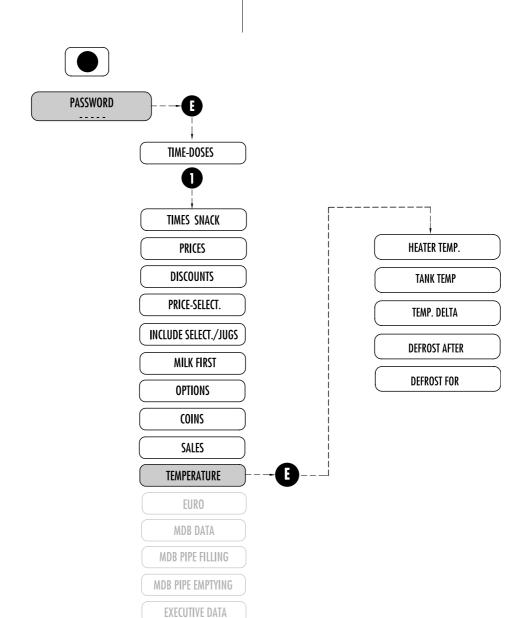


Fig. 7.14

CLOCK



7.2.12 EURO OPTIONS (Fig. 7.15)

Visualization activates conversion visualization [On/Off] **Conv.fact. point** position of the point in the conversion factor

[0÷6 decimals]

Conv. Factor conversion factor [0÷999999]

Curr/Euro conv selects whether to effect currency/euro or

euro/currency conversion [On/Off]

Visualiz. Point position of the decimal point in the euro/

currency conversion [00000, 0000.0, 000.0]

Nota: The "Visualiz. Point "parameter is only displayed if the

currency/euro conversion is OFF.

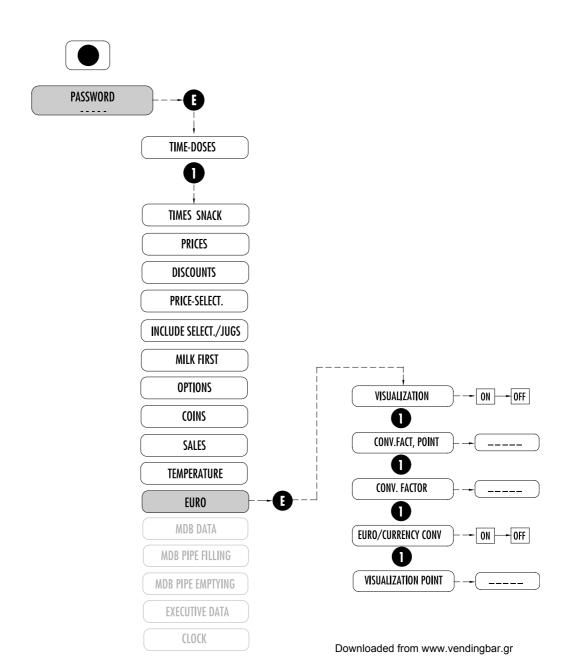


Fig. 7.15



7.2.13 MDB DATA (Fig. 7.16)

Maximum change Maximum change delivered from the coin box

[0÷9999]

Coin change Engages the change lever [On/Off]

Coin 1 engage Activates coin 1 [On/Off]

. . .

Coin 16 engage Activates coin 16 [On/Off]

Note: the programming of the coin engagement function will only come into effect after switching the coin box off and then on again and/or the cards.

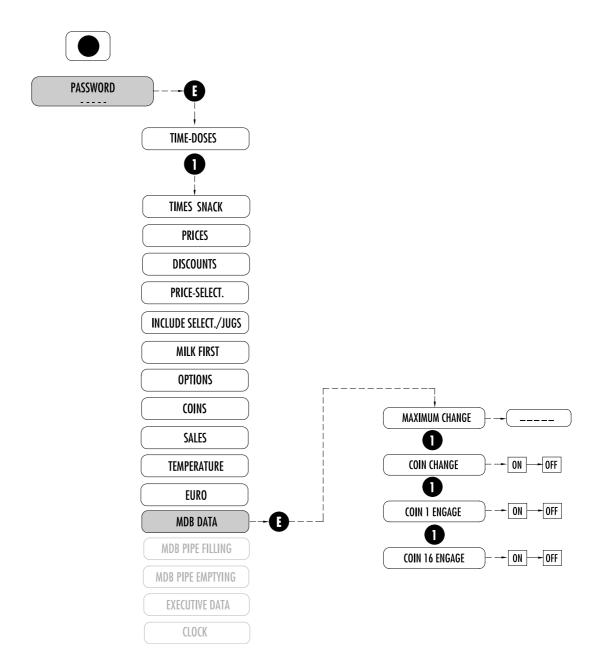


Fig. 7.16



7.2.14 MDB PIPE FILLING (Fig. 7.17)

MDB pipe filling (Esc to escape)

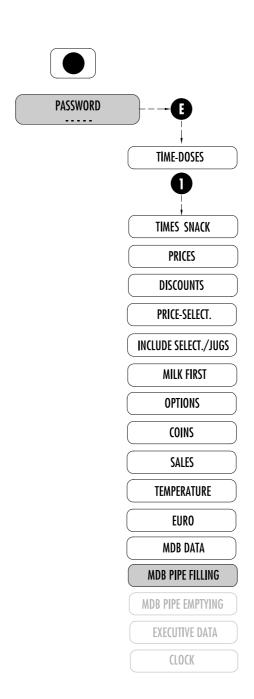


Fig. 7.17



7.2.15 MDB PIPE EMPTYING (Fig. 7.18)

Coin 1 (key 3 empty)

...

Coin 16 (key 3 empty)

On pressing key 3 the selected coin will be delivered.

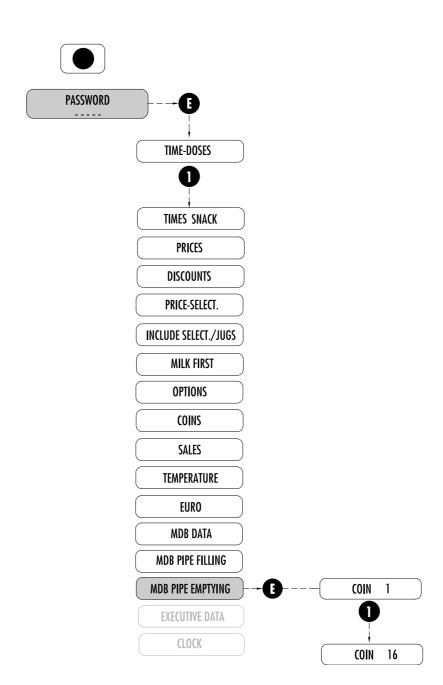


Fig. 7.18



7.2.16 EXECUTIVE DATA (Fig. 7.19)

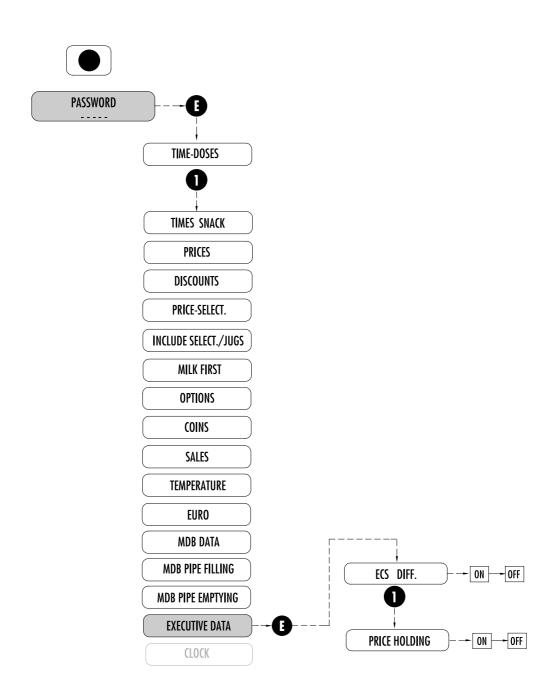
Fig. 7.19

Diff. ESC Engaged the differentiated ESC Option

[On/Off]

Price holding Engages the price holding option [On/Off]

Note: if both the parameters are ON, differentiated ESC prevails.



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7.2.17 CLOCK (Fig.7.20)

The following menus are available:

Hour/time set Switch on Washing Discount

Hour/minute set:

Hour/minute set sets the current hour and minutes

[00:00..23:59]

Switch on:

Start 1 sets the time for switch on 1

[00:00..23:59]

End 1 sets the time for switch off 1

[00:00..23:59]

Start 2 sets the time for switch on 2

[00:00..23:59]

End 2 sets the time for switch off 2

[00:00..23:59]

Note: if "start" is great or equal to "end" the switch on band is not engaged.s

Washing

Wash 1 sets the time for wash 1 [00:00..23:59]

Wash 2 sets the time for wash 2 [00:00..23:59]

Discount

Start 1 sets the start time for discounted prices 1

[00:00..23:59]

End 1 sets the end time for discounted prices 1

[00:00..23:59]

Start 2 sets the start time for discounted prices 2

[00:00..23:59]

End 2 sets the end time for discounted prices 2

[00:00..23:59]

Note: if the "start" is greater or equal to "end" the discount band

Hour/time set

Switch on

Washing

Discount

is not engaged.

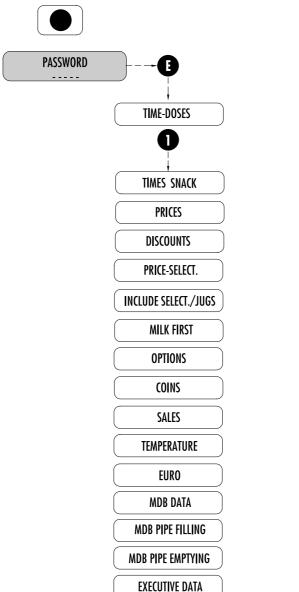


Fig. 7.20

CLOCK



8.0 MAINTENANCE







IMPORTANT! This operation is to be undertaken with the machine on, and therefore is only permitted to the technical staff authorized to carry out such operations.

Enter maintenance mode by pressing the external "service" key. The display shows "Maintenance" on line 1 and the state of the Pegaso on line 2 (if there are no alarms or indications present, in which case they will be displayed: see chapter 11.0 for further details).

In maintenance mode the keys take on the following meanings:

PEGASO maintenance version E, version E/NE

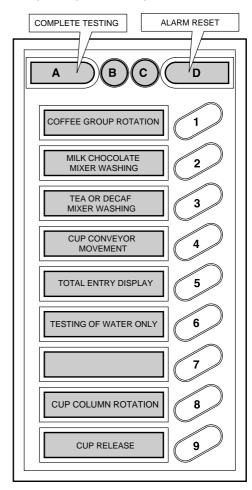
- T1 (version E- E/NE)- "COFFEE GROUP ROTATION OR ERROR SCROLL" effects a rotation of the coffee unit. Also displays the error list (see ALARM RESET).
- T2 (version E E/NE) "MILK/HOT CHOCOLATE MIXER WASHING" undertakes a washing cycle of the MILK/HOT CHOCOLATE MIXER.
- T3 (version E/NE) "TEA MIXER WASHING". Undertakes a washing cycle of the tea mixer.
- T3 (version E) "WASHING OF THE TEA OR DECAF MIXER": undertakes a washing cycle of the TEA or decaf mixer.
- T4?"CUP CONVEYOR MOVEMENT": shifts the cup conveyor unit to the cup release, stirrer or sugar delivery position to verify the correct positions.
- **T5** "**TOTAL ENTRIES DISPLAY**" (cancellable) for 5 s: permits the visualization of the number of entries made (general counter). To return to service mode. It is necessary to re-press the service key inside the door.
- T6 "WATER ONLY TESTING IN A SELECTION (Pegaso)
 PRODUCT TESTING (Vega)"on pressing the key it is possible
 to use the keyboard as a normal service element for the function
 of any selection without the delivery of water only.
- T7 (version E/NE) -"WASHING" -
- T8 "CUP COLUMN ROTATION"; permits the loading of the cup distributor
- TO "CUP RELEASE": for cup collection without having made a selection
- TA (Version E) or TB (Version E/NE) "COMPLETE SELECTION TEST" (Pegaso) - PRODUCT TEST (Vega) After pressing the key it is possible to use the keyboard as a normal service element for the effecting of any complete selection (calculated as being a trial delivery).

NOTE: In order to cancel a trial pre-selection without the any drink dispensing simply press the service key again inside the door. In this case the distributor will remain in SERVICE mode.

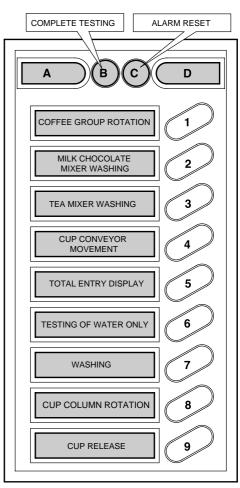
TD (Version E) or TC (Version E/NE) - " ALARM RESET":
 cancels the faults recorded by the distributor and begins a
 subsequent diagnosis check in order to ensure that no other
 faults are present.

Using key 1 (COFFEE UNIT ROTATION OR ALARM SCROLL) it is possible to scroll and visualize the anomalies recorded by the distributor.

Maintenance panel (Version E)



Maintenance panel (Version E/NE)





PEGASO maintenance version I, version I/NE

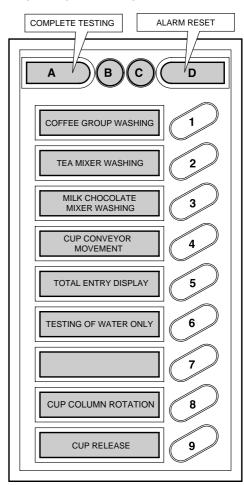
- T1 (version I- I/NE)- "WASHING OF COFFEE UNIT OR ERROR SCROLL": undertakes a washing operation of the coffee unit. Also displays the error list (see ALARM RESET").
- T2 (version I I/NE) "MILK/HOT CHOCOLATE MIXER WASHING" undertakes a washing cycle of the MILK/HOT CHOCOLATE MIXER.
- T2 (version I/NE) "TEA MIXER WASHING". Undertakes a washing cycle of the tea mixer.
- T3 (version I)- "MILK/HOT CHOCOLATE MIXER WASHING" undertakes a washing cycle of the MILK/HOT CHOCOLATE MIXER.
- T3 (version I/NE) "WASHING OF THE TEA MIXER": undertakes a washing cycle of the TEA or decaf mixer.
- T4 "CUP CONVEYOR MOVEMENT": shifts the cup conveyor unit to the cup release, stirrer or sugar delivery position to verify the correct positions.
- T5 "TOTAL ENTRIES DISPLAY" (cancellable) for 5 s: permits
 the visualization of the number of entries made (general
 counter). To return to service mode. It is necessary to re-press
 the service key inside the door.
- T6 "WATER ONLY TESTING IN A SELECTION (Pegaso)
 PRODUCT TESTING (Vega)"on pressing the key it is possible
 to use the keyboard as a normal service element for the function
 of any selection without the delivery of water only.
- T7 (version I/NE) -"WASHING" -
- T8 "CUP COLUMN ROTATION"; permits the loading of the cup distributor
- T0 "CUP RELEASE": for cup collection without having made a selection
- TA (Version I) or TB (Version I/NE) "COMPLETE SELECTION TEST" (Pegaso) - PRODUCT TEST (Vega) After pressing the key it is possible to use the keyboard as a normal service element for the effecting of any complete selection (calculated as being a trial delivery).

NOTE: In order to cancel a trial pre-selection without the any drink dispensing simply press the service key again inside the door. In this case the distributor will remain in SERVICE mode.

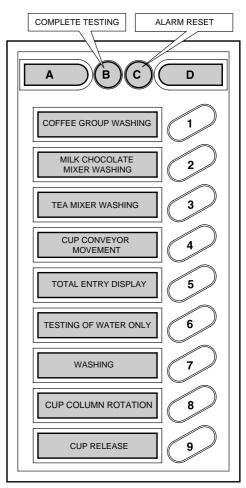
TD (Version I) or TC (Version I/NE) - "ALARM RESET":
 cancels the faults recorded by the distributor and begins a
 subsequent diagnosis check in order to ensure that no other
 faults are present.

Using key 1 (WASHING OF COFFEE UNIT OR ERROR SCROLL) it is possible to scroll and visualize the anomalies recorded by the distributor.

Maintenance panel (Version I)



Maintenance panel (Version I/NE)





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 end humidity of not over 70%. Must not be installed in places where cleaning is done with water hoses(ex. big kitchens.). Do not use water jets to clean the machine.

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 detersive 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 recommended

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



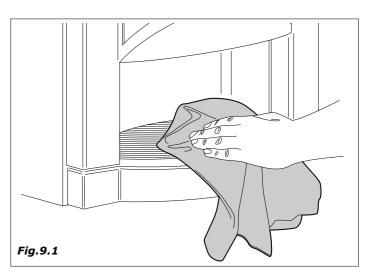
For all cleaning operations follow the instructions indicated in paragraph 9.1.1.

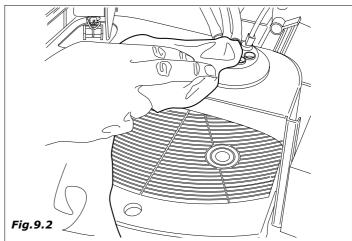
Operate as follows:

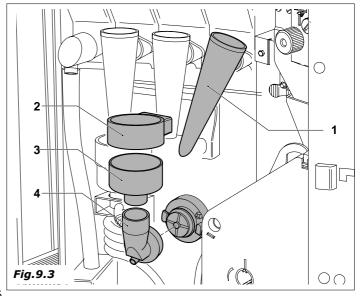
clean all the visible parts in the dispensing area. (Fig. 9.1 e Fig. 9.2)

remove and clean carefully:

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





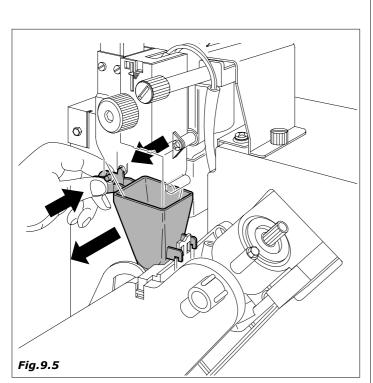




- silicone water dispensing tubes.
- dispensing chamber (Fig. 9.4)
- coffee funnel and chute (Fig. 9.5)

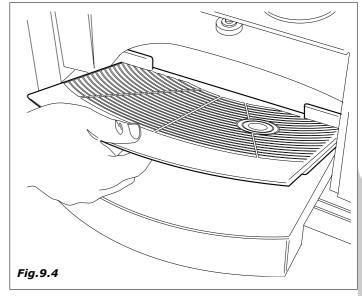
Before effecting the re-assembly operations clean all the elements carefully.

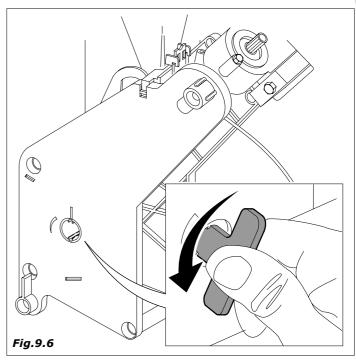
- remove all coffee powder residue; the unit can be removed from its housing to make the task easier (Fig. 9.6)



- 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)

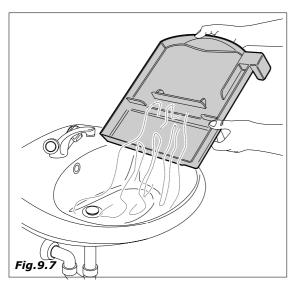
Last step: coin collection.

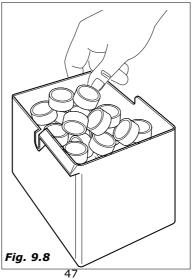


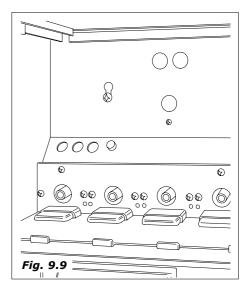


9.1.4 Weekly cleaning

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 6.6 (first installation).





9.2 MAINTENANCE RECOMMENDED

RECOMMENDED , , , , , , , , , , , , , , , , , ,					1
	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.					
Remove and rinse the coffee group lubricate all the mobile parts using silicone grease for alimentary use.			7		
Substitute the filter gaskets.					7

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*.



9.2.3 Nuova Bianchi Coffee group maintenance

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

The necessary requirement for this operation is that the coffee unit is in idle position.

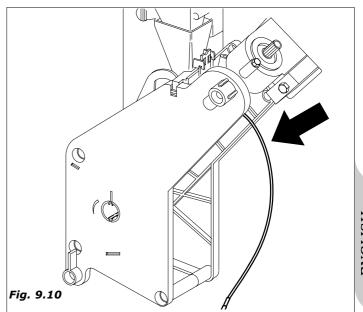
Then detach the pipe indicated in Fig.~9.10, unscrew knob ${\bf A}$, rotate lever ${\bf B}$ (Fig.~9.11) and then remove the entire coffee unit.

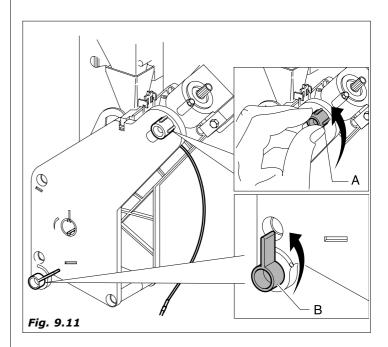
Every 5000 vends and anyhow monthly, it is advisable to lubricate all the mobile parts of the group, using silicone grease for alimentary use Fig. 9.12):

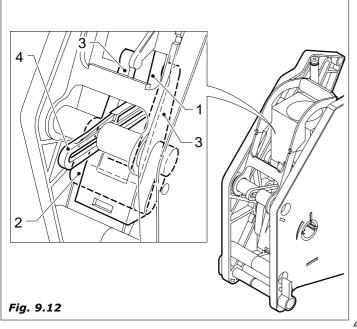
- lower filter piston (1)
- connecting bar (2)
- piston guide (3)

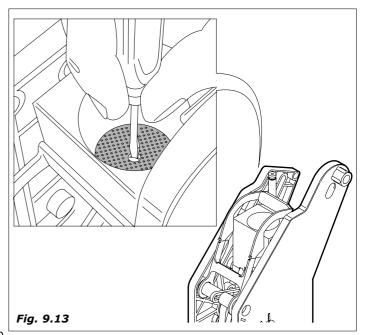
Every 10000 vends we advise to substitute the gaskets $\,$ and the filters.

- gaskets
- Loosen the screw (Fig. 9.13), wash the filter and replace if necessary.
- re-assemble everything in the inverse order.











NUOVA BIANCHI COFFEE MACHINE TIMING CHECK PROCEDURE

Ensure that during the idle state, the rotating index is aligned with the stage index (see fig.9.14)

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.9.15).

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.

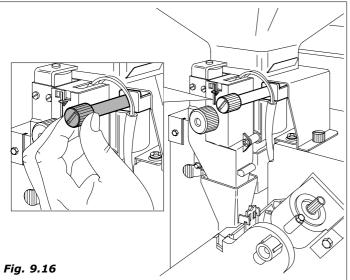
The variation in the product can be controlled by means of the reference notches on the body of the measuring unit (see figure 9.15)

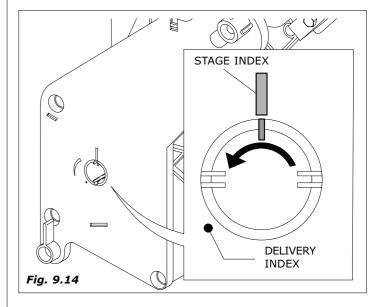
Coffee pellets must be have a compact consistency and be slightly damp.

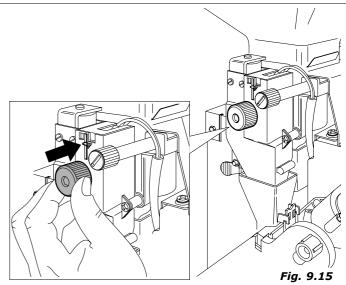
 Regulation of the degree of grinding. Turn the screw (fig.9.16) to obtain the desired results.

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.





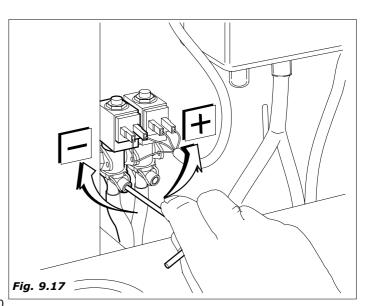


9.3.2 Regulation of the instant solenoid water delivery valves

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. 9.17).





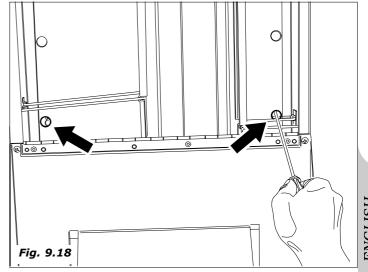


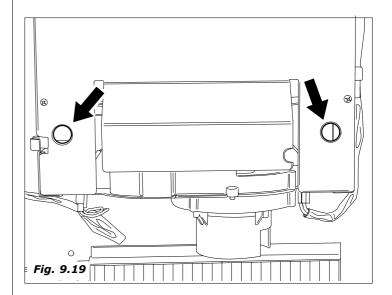
9.4 Neon light replacement.

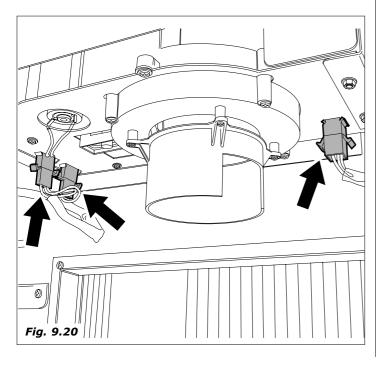


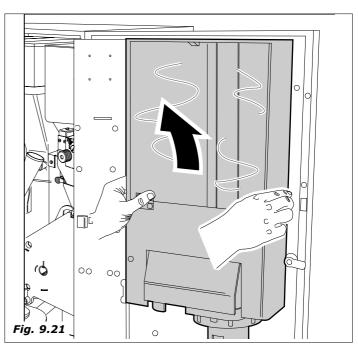
Before undertaking any work on the machine ensure that the electricity supply of the distributor has been disconnected.

- Remove the cups inside the linear cup distributor.
- Inside the cup compartment find the two lateral holes providing access to the screws (Fig. 9.18) and using a star-head screwdriver with long shaft, loosen them without extracting.
- Re-close the transparent flap and find the two screw access holes (Fig.9.19) proceed to loosen them without extracting them.
- Detach the three electrical connectors (Fig. 9.20).
- Lift and extract the cup distributor from its slot hieri (Fig. 9.21).



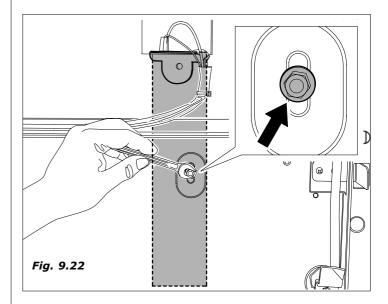


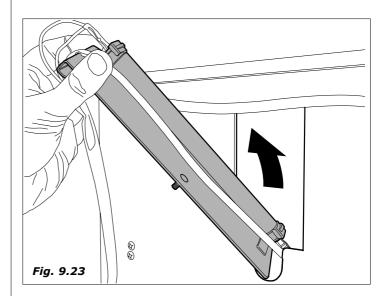


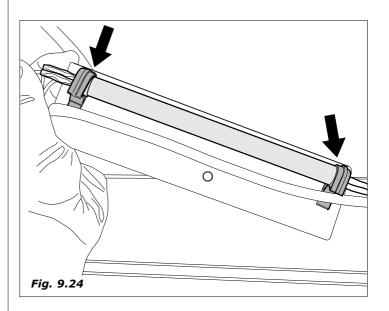




- Loosen the nut positioned on the oval slot, to remove the light holder support (*Fig.9.22*). Ensure that the rear positioned screw does not fall.
- The light holder support, positioned at the base of the window, is extracted by means of an upwards movement.
- The extraction of the light holder must be undertaken with the greatest care, by slightly turning the support taking care of the light terminals (*Fig.9.23*).
- Then replace the neon light extracting it from the relative support elements (Fig.9.24).
- Before securing the support ensure that the light is correctly positioned inside the relative supports and then secure with the nut (Fig.9.22).
- Check the correct function.
- Proceed to assembly the parts in reverse order.







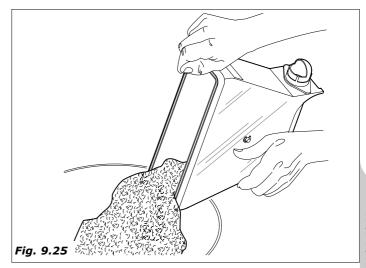


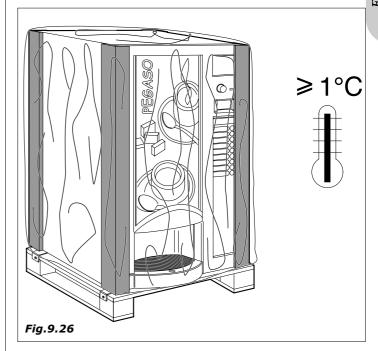


9.5 Inactivity

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 floater reservoir removing the plug located on the hose along the drain chute.
- Put the plug back in once the draining has been done.
- unload all the product from the containers (Fig. 9.25)
- perform a thorough cleaning of all the parts in contact with food substances according to what has already been described.
- empty the liquid waste bin carefully
- eliminate the spent grounds bag
- clean with a cloth all the internal and external surfaces of the machine.
- protect the outisde of the machine with a plastic film wrapping or bag (fig. 9.26)
- stock in a dry and protected place where the temperature is not less than 1° C.







10.0 ACCESSORIES



10.1 Base unit kit

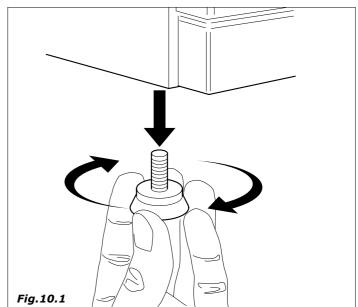
A base unit is available on request, on which to stand the PEGASO automatic distributor machine.

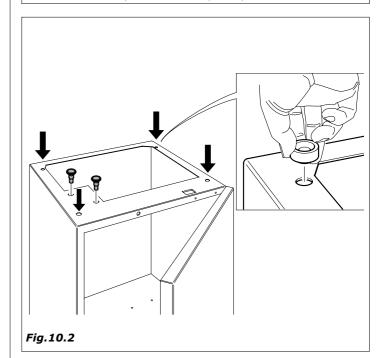
The kit contains:

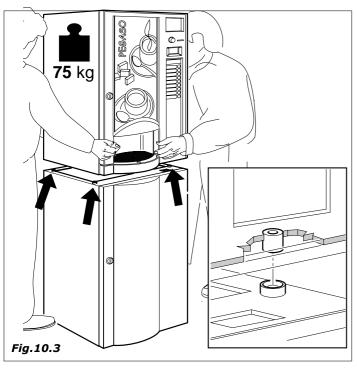
- 4 centering bushes
- coffee dregs discharge chute
- token/coin conveyance guides
- 2 discharge water collection buckets
- "Too full" microswitch and float
- coin collection box

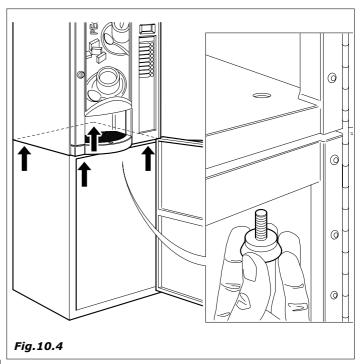
For assembly and mounting of distributor on base unit proceed as follows:

- remove the 4 feet mounted on the table version (Fig. 10.1)
- Insert the 4 centering bushes on the base unit (Fig. 10.2)
- position the distributor on top and then match up the 4 threaded inserts with the 4 centering bushes (Fig. 10.3).
- use the 4, previously loosened feet, to fix the distributor to the unit (Fig. 10.4)





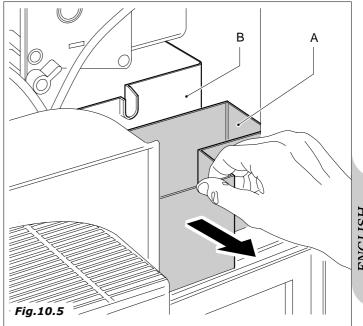


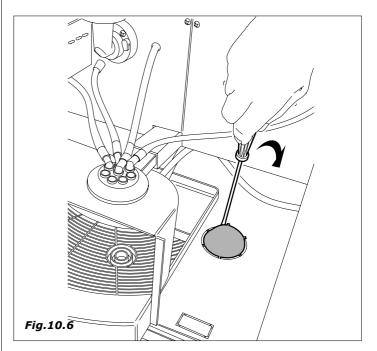


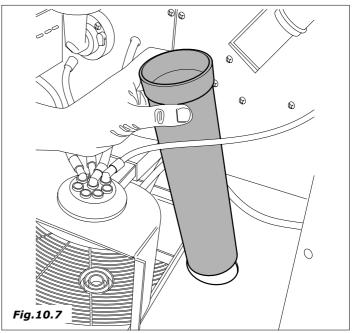


10.1.1 Coffee dregs discharge chute insertion

- Remove the coin container (Fig. 10.5 Pos. $\bf A$) and the coffee dregs container ($\bf B$) present on the table version distributor.
- Dismantle the coffee unit (see para 9.2.2)
- Remove the disc at the base of the distributor breaking the flaps which keep it together ($Fig.\ 10.6$)
- Insert the conveyor pipe into the slot which has just been created (Fig. 10.7)





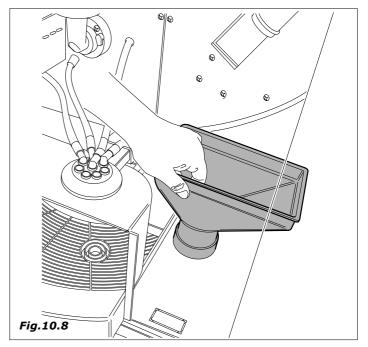


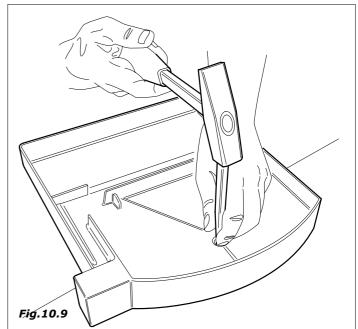


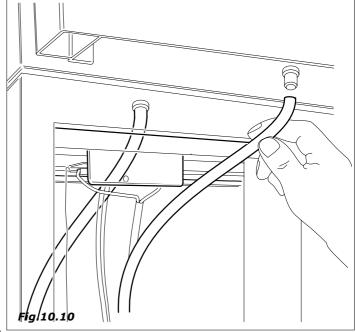
- Insert the dregs collection chute into the upper pipe slot (Fig. 10.8)
- You are now ready to reassemble the dismantled coffee unit.

10.1.2 Liquid dregs collection

- Remove the liquid dregs collection tray and pierce the drain as indicated in *Fig. 10.9*
- Connect the pipe (Fig. 10.10) supplied with the drain.

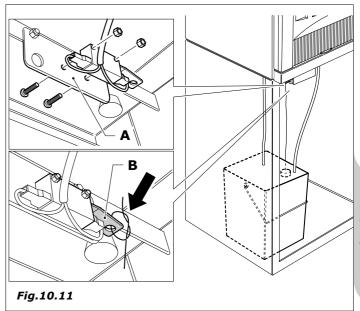


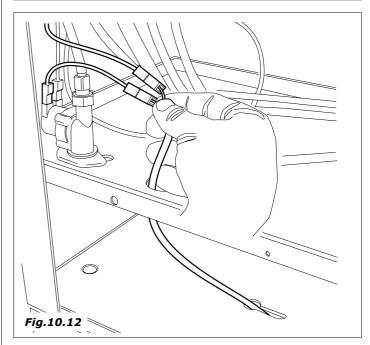


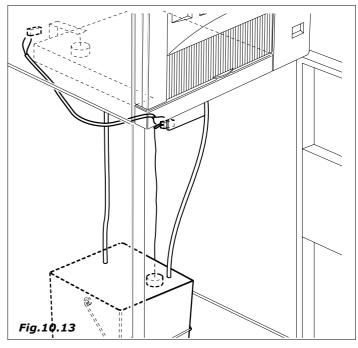




- Insert the maximum level indicator float into the bucket.
- For those distributors connected to the mains water supply, assembly the microswitch on the square indicated (Fig. 10-11 pos. A) connect it in series, using the wiring harness supplied, to the water entry solenoid valve (Fig. 10.12)
- While for those distributors equipped with independent tank, the float microswitch must be connected to the wiring harness of the microswitch already present on the liquids tray (*Fig.* 10.13)
- Knot the nylon string of the float to the micro lever (Fig. 10.11 pos. B) ensuring that the float is below the maximum level of the bucket



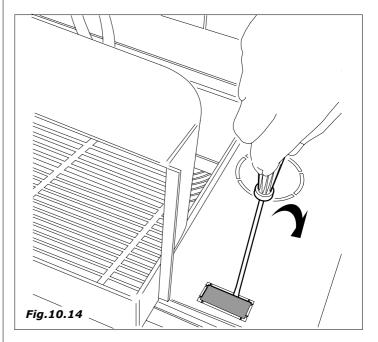


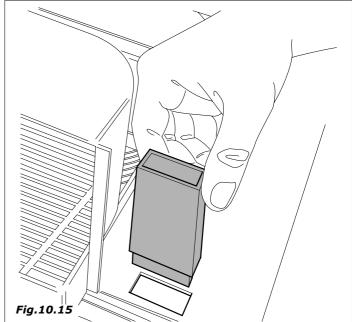


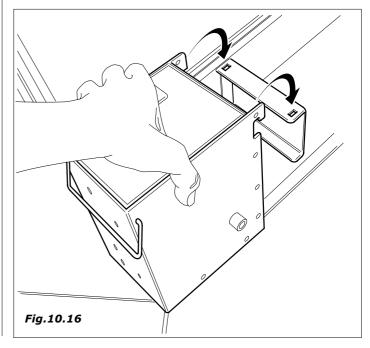


10.1.3 Chute and coin/token box assembly

- Break the rectangular base of the distributor bottom (Fig. 10.14)
- Insert the conveyor chute in the vicinity of the coin slot exit (Fig. 10.15)
- Assemble the coin box on the lower part of the unit (Fig. 10.16)









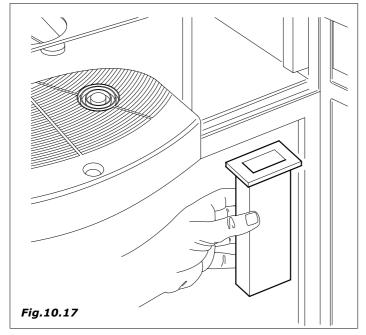
 Mount the lower chute so that the coins are able to slide easily into the box (Fig. 10.17)

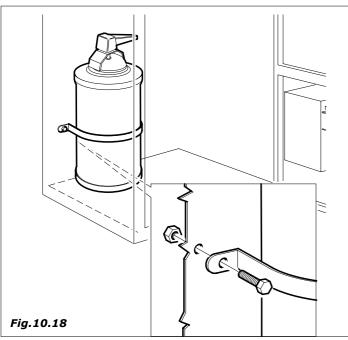
10.2 Lime scale filter (only on versions with mains water connection)

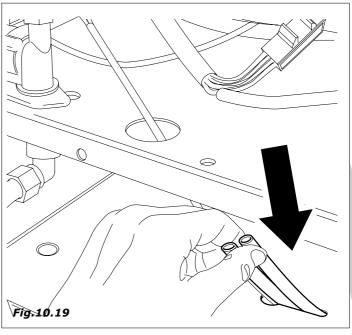
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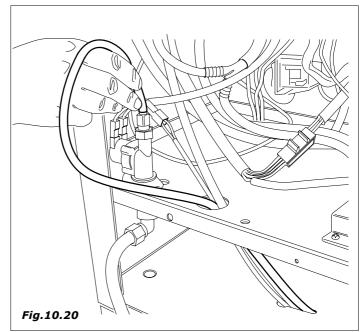
10.2.1. Installation

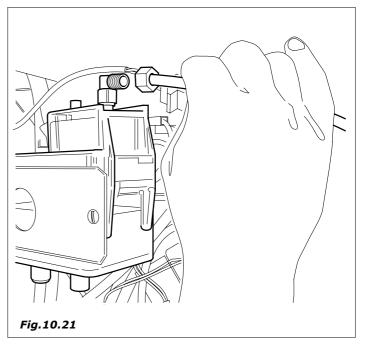
- Assemble and fix the lime scale filter to the rear wall of the base unit (Fig. 10.18)
- Thread the entry and delivery pipes through the relative openings (Fig. 10.19)
- Detach the entry solenoid valve pipe and replace it with filter entry pipe (Fig. 10.20)
- Connect the lime scale filter delivery pipe to the tray after having detached the pipe already in place (Fig. 10.21)











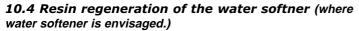


10.3 Water Softener Resin regeneration (available as a kit)

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

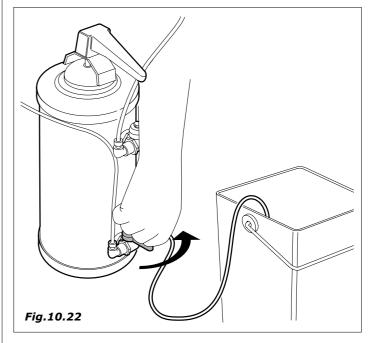
operating in the following manner:

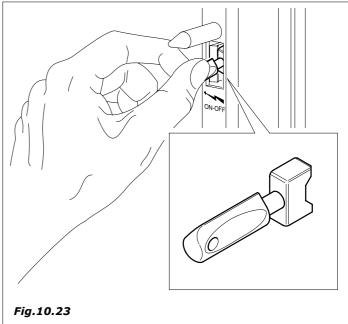
- insert the pipe of the bottom faucet in a container suitable for this use
- open the faucet (Fig.10.22)
- insert the key in the door switch (Fig.10.23)
- Let the water flow until it is clear (Fig. 10.24).
- Take out the key and close the faucet.

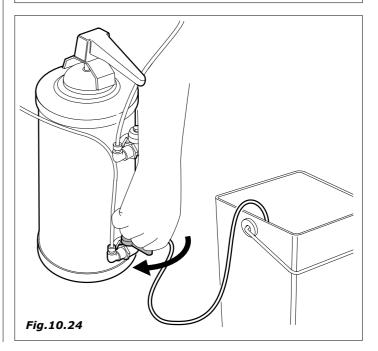


The regeneration of the resins must be executed according to the water of mains supply to which the distributor is connected. As reference the table indicated here below can be used:

Water hardness				
°french limescare degrees	60cc	130сс		
10	25000	12500		
20	12500	6000		
30	9500	4500		
40	6500	3000		
50	5000	2500		







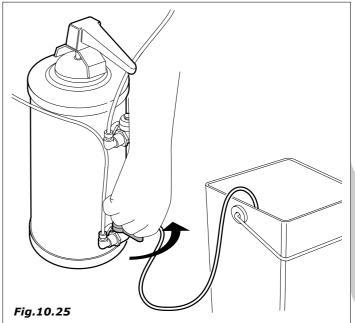


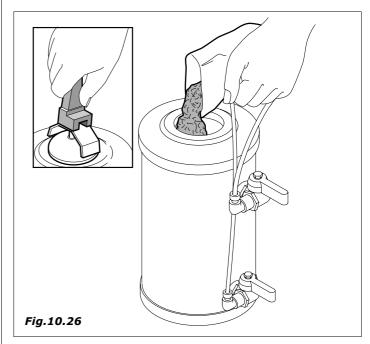
So as to verify the degree of hardness of the water and consequently the time and type of interventions, specific kits available on the market can be used.

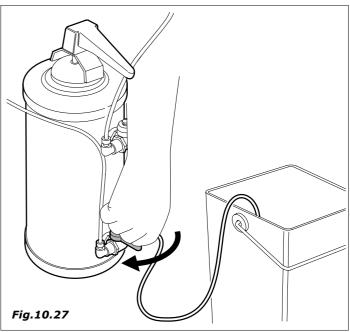
The operation can be effected on the distributor as follows:

- switch off the machine.
- turn the lower faucet being careful to put the relative hose in a bucket or better in a drain (Fig. 10.25).
- remove the cover and introduce 1,5 kg of normal cooking salt. (Fig. 10.26)
- replace the cover.
- switch on the machine and let the water pour out until it is no longer salty.
- switch off the machine and close the faucet (Fig. 10.27).

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









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			
MASTER CARD ALARMS					
Alarm Eprom error	Is engaged in the event of an eprom error. On engaging the reset message the missing default data will also be recharged on the eprom (only if this alarm is present).	Undertake alarm reset.			
Alarm - Coinbox error	This alarm is only engaged if the Executive or Mdb coin box is engaged. It comes into action in the event of a connection error between the card and the coin box or if the coin box itself is not sensed. Executive: a delay of only 60 seconds is envisaged from the time of coin box sensing failure to alarm engagement. MDB: the delay is of approx. 10 seconds on switching on and then of 2 seconds.	These alarms are self-resetting.			
CONFIGURATION ALARM	Occurs if no slave card is revealed on switching on or if the revision of at least one of the connected slaves is non compatible	Check the electrical connections between the master and power cards. Recharge FW on the power card			
OUT-OF-ORDER ALARM	This occurs if all the slaves connected to the master card are in alarm mode. No delivery is therefore possible	Check the alarms during maintenance.			
Alarm - Scale factor	This alarm is only active if the executive coin box is activated (not in price holding mode) or MDB. It occurs if the division between one of the programmed prices and the base coinage received from the coin box exceeds a value of 250. This alarm is self-resetting	Check the correct base currency value in the programming parameters of the coin box.			
POWER CARD ALARMS					
Memorized alarms E09 EEPROM	Is engaged in the event of an eprom error. By undertaking the reset operation the eprom factory details will also be recharged (only if the alarm is present).	Undertake alarm reset operations			
E17 ARM MOTOR	Occurs in the event of a 10 second timeout during the cup conveyor movement	Check and replace if necessary			
		Check the motor position micro-switch			
E21 ESP+ SOL PUMP (version E)	Engages if indications E04 and E06 are present at the same time	Check E04, E05			
E21 DRINK N.A (version E/NE)	Engages if the indication E05 is present	Check E05			
Non-memorized alarms					
EOO OUT OF ORDER	Engages in the event of an interruption in communication between the card and master	Check the alarms during maintenance			
E01 CUP	Engages in one of these cases: 1. Expiry of the 30-second timeout for cup column rotation	Undertake the filling of the relative column			
201 (6)	2. Expiry of the 10 second timeout for cup release	Check the micro-switch and replace if necessary			
	Is engaged 2 seconds after the sensing of the water empty micro. It switches off the resistance and re-starts the timeout for E12.	Check the water capacity of the mains supply. Water inlet solenoid valveEfficient function of the tank micro.			
E08 WATER EMPTY		Empty the liquid dregs bucket			
		Check the tank micro and replace if necessary			
E12 TEMP<60C°	Occurs if on reset the set temperature of under °15 is not obtained in under 15 seconds, or if during normal function the temperature remains under 60°c for 15 minutes.	Check the programming parameters. Check the clixon			

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Display message	Probable cause	Remedy		
E20 TOO FULL	Engages 2 seconds after the too-full micro senses	Empty the liquid collection tray		
	an overflow risk in the liquid collection tray	Check the too full micro		
Memorized signals				
E02 GRINDER	Is engaged if the programmed grinder time out is engaged. The display shows the	Undertake to fill the container		
(version E - E/NE)	signal "lacks coffee". The sum is credited only in the case of instant grinding.	Check that there is no impediment between the grinders. Check the electric motor connections.		
E03 COFFEE UNIT	Is engaged if the programmed coffee unit timeout is engaged. The display shows the	Check for any possible faults and moto electrical power supply		
(version E - E/NE)	message "no coffee". The sum is recredited	Check the micro-switch and replace if necessary.		
E04 ESPRESSO PUMP (version E - E/NE)	Is engaged during the coffee water deliver	Check the pump and replace if necessary.		
	function unless at least 10 cc is deliveryed in the programmed pump timeout. The display shows the message "no coffee". The sum is re-credited	Check the coffee solenoid and replace if necessary.		
		Check the volumetric counter and replace if necessary		
	Is engaged during the delivery of water for solubles or hot water unless at least half the quantity is delivered in the programmed pump timeout. The display shows the message "espresso only"The sum is re-credited if hot	Check the pump and replace if necessary		
E05 SOL. PUMP (version E - E/NE)		Check the soluble product solenoid valve and replace if necessary		
	water is not being delivery.	Check the volumetric counter and replace if necessary		
E06 COFFEE MEASURER	Is engaged in the event that during the coffee release stage the measure dose	Check the measure micro-switch and replace if necessary		
(version E - E/NE)	remains pressed. The display shows the message "no coffee". The sum is re-credited	Check for any obstructions and remove if necessary		
E11 NTC PROBE	Engaged if the temperature probe short circuits or the circuit is open. The resistance is switched off if the NTC short circuits or is	Check the NTC probe resistance and replace if necessary		
	open. On ignition a delay of 30 seconds is envisaged before alarm condition is ascertained.	Check the electrical connections.		
E16 CAPACITY (version E - E/NE)	For delivery of soluble products or hot water: occurs in the event that water delivery of only between 50-70% of the programmed measure occurs. The display visualizes the character of the last character. This signal prevails over those of the de-counters (the three subsequent ones).	See note (1)		
E22 - PURIFIER	Is engaged when the value of the purifier decounter is equivalent to zero.	Regenerate the purifier. Reset the programmed purifier decounter.		



	Display message	Probable cause		Remedy
	E23 - GRINDERS (version E - E/NE)	Is engaged when the value of the grinder decounter is equivalent to zero.	7	Replace the grinders.Reset the programmed grinder decounters.
	E24 - FILTERS (version E - E/NE)	Is engaged when the value of the coffee filter decounter falls to zero.	7	Replace the filters.Reset the programmed grinder decounter.
Omnife	t memorized signals			
	E30 - OMNIFET XX	Is engaged when a fault is sensed on the omnifet xx .	7	Check for any short circuits relative to the omnifet indicated. Remove the cause and switch off the distributor for a few minutes. Undertake alarm reset operations
ХX	Omnifet controlled or	utput (version E - E/NE)		,
0	Coffee solenoid		9	Coffee measurer
1	Water hot solenoid		10	(not used)
2	Tea mixer		11	Milk/hot chocolate mixer
3	Tea motor		12	(not used)
4	Tea solenoid		13	(not used)
5	Milk/hot chocolate sol	enoid	14	(not used)
6	Sugar motor		15	(not used)
7	Milk motor		16	Grinder
8	Chocolate motor			
ХX	Omnifet controlled or	utput (version I - I/NE)		
0	(not used)		6	Milk motor
1	(not used)		7	Coffee motor
2	Coffee mixer		8	Tea mixer
3	3 Milk/hot chocolate mixer		9	Coffee solenoid
4	4 Tea motor		10	Milk/hot chocolate solenoid
5	5 Chocolate motor		11	Tea solenoid
Non me	emorized signals			
E25 - NO GROUP (version E - E/NE)		Is engaged should the coffee group fail to be sensed through the special micro. The message "no coffee" will be displayed		Check the group presence micro-switch and replace if necessary
Vega d	ard alarms			
Memor	ized alarms			
Vega eeprom		Is engaged should an eprom error be found. By effecting a re-set operation the factory details will also be re-entered on the eprom (only if this alarm is present)		Undertake alarm reset operation.
Non me	emorized alarms			
\	700 - OUT OF ORDER	Engages in the event of interruption in communication between the vega and master cards		Check the master/slave connection. Check the alarms during maintenance
Memor	ized signals			
Vega sector xx		Engages in the event of the expiry of the motor timeout of the xx sector during delivery		Check the sector geared motor, spiral and electrical connections
	Vega NTC probe	Occurs in the event of the short circuiting of the temperature probe or in the event of open circuit. On switching on a delay of 30 seconds is envisaged before alarm occurs	7	Check NTC probe resistances and replace if necessary. Check the electrical connections



(1) The alarm E16-CAPACITY 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 CAPACITY**
- α to indicate the **purifier** regeneration
- & to indicate the substitution of the **filters**
- \$ to indicate the substitution of the grinder blades
- $\mbox{\it \#}$ to indicate the substitution of the $\mbox{\it filters}$ and of the $\mbox{\it grinder}$ blades
- % to indicate the **purifier** regeneration and the substitution of the **grinder blades**
- Ω to indicate the **purifier** regeneration and the substitution of the **filters**
- π to signal the regeneration of the **purifier**, 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 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.