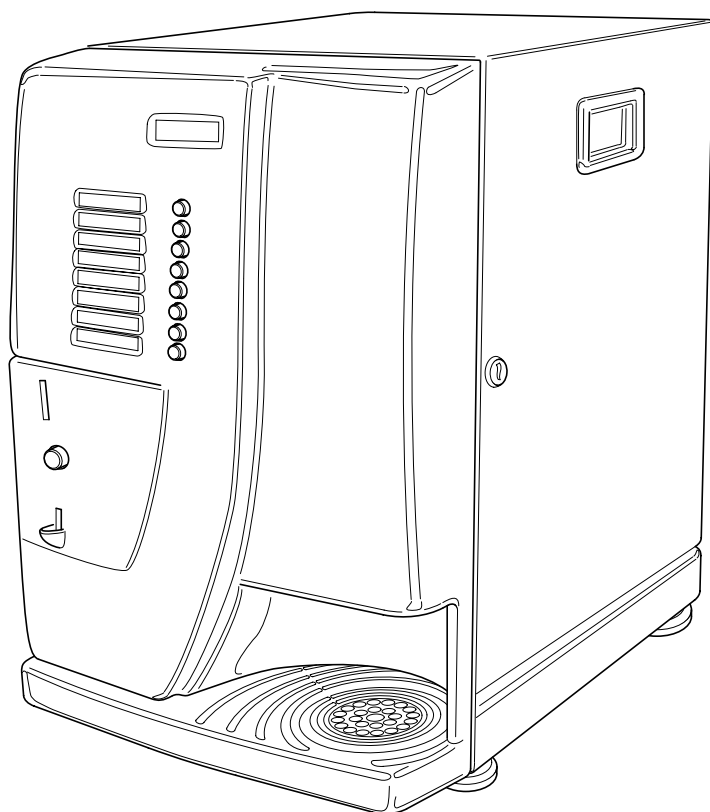




## USE AND MAINTENANCE MANUAL



# *Sprint*

CERT. N° 9105 BNVD



UNI EN ISO 9001:2000

CERT. N° 9191.BNVN



UNI EN ISO 14001:2004

## DECLARATION OF CONFORMITY

La **BIANCHI VENDING GROUP S.p.A.**  
Corso Africa, 9 - 24040 Zingonia di VERDELLINO (BG) Italia

hereby declares under its own liability that the family of automatic vending machines - model:

**" IRIS "**

**is complying with the safety measures foreseen by the directives:**

- 1. Low Voltage Directive** EEC 73/23 ⇒ EEC 93/68 ⇒ EEC2006/95 - LV -
- 2. Electromagnetic compatibility** EEC 89/336 ⇒ EEC 91/263 ⇒ EEC 92/31⇒  
93/68 ⇒ EEC 2004/108 -EMC-
- 3. MATERIALS AND ARTICLES IN CONTACT WITH FOOD**  
(1) REG. (EC) 1935/2004 on materials and articles intended to come into contact with food  
(2) REG. (EC) 1895/2005 on the restriction of use of certain epoxy derivatives in materials and  
articles intended to come into contact with food  
(3) DIR. 2002/72 EC relating to plastic materials and articles intended to come into contact  
with foodstuffs

The tests have been made in accordance with the Harmonized European Standards

### 1) LOW VOLTAGE (Electrical safety LV):

EN 60335-1 : 2002 + A1+ A11 (Safety of Household and Similar Electrical Appliances)  
EN 60335-2-75: 2004+ A1 (Safety for Vending and dispensing Machines)  
EN ISO 11201 + EN ISO 3744 Measurement of acoustic noise  
Sound Pressure Level: LpA < 70 dB(A)

### 2) ELECTROMAGNETIC COMPATIBILITY (EMC)

EN 55014-1:2000+A1+A2  
EN 55014-2:1997+A1  
EN 61000-3-2: 2000+A2  
EN 61000-3-3:1995+A1+A2

EN 61000-4-4  
EN 61000-4-5  
EN 61000-4-6  
EN 61000-4-11  
EN 61000-4-2

EN 50366:2003 +A1 Measurement of Electromagnetic field

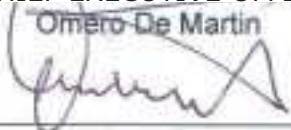
### 3) MATERIALS AND ARTICLES IN CONTACT WITH FOOD

D.M. 21-03-1973 and its amendements ⇒ D.M. 2006 May 4th nr. 227, and receiptment of European Directives:82/711/EEC, 85/572/EEC, 93/8/EEC, 97/48/EC, 2002/72/EC, 2004/13/EC, 2004/19/EC, 2005/79/EC, Reg. EC n. 1935/04 e Reg.EC n. 1895/2005.

Zingonia di Verdellino (BG), 01/05/2009

CHIEF EXECUTIVE OFFICER

Omero De Martin



## INFORMATION TO THE USERS

Under Legislative Decree 25 September 2007, no.185 and art. 13, Legislative Decree 25 July 2005, no.151 "Implementation of Directives **2002/95/EC**, **2002/96/EC** and **2003/108/EC**, regarding the reduction of use of hazardous substances in electrical and electronic equipment as well as waste disposal".



The barred waste container symbol on the equipment means that the product, at the end of its service life, must be disposed of separately from the other types of waste.

The user must therefore convey the equipment, at the end of its service life, to the appropriate separate collection centres for electronic/electrotechnical waste products or return it to the dealer when purchasing a new equivalent equipment.

The appropriate separate collection and the following sending of the used equipment to recycling, treatment and eco-friendly disposal will help avoid negative effects on the environment as well as on health along with an easier recycling of the materials forming the equipment.

Any unauthorized disposal of the product by the user will imply the enforcement of the administrative sanctions as set out in Legislative Decree no. 22/1997 (article 50 and following articles, Legislative Decree no. 22/1997).

### Bianchi Vending Group S.p.A.

Società Unipersonale - Cap. Soc. € 5.000.000,00 i.v.

www.bianchindustry.com Info@bianchindustry.com

PI./C.F./Reg.Impr.BG 01945980223 IT - n° iscrizione R.A.E.E. IT08020000001049

**Sede Legale** - C.so Africa 9, 24040 Loc. Zingonia, Verdellino, BG, Italia, tel. +39.035.45.02.111, fax +39.035.883.304

**Stab. Bergamo** - Viale Parigi 5, 24040 Loc. Zingonia, Verdellino, BG, Italia, tel. +39.035.45.02.111, fax +39.035.883.304

**Stab. Latina** - Via Civitona 6/8, 04010 Loc. Le Castella, Cisterna di Latina, LT, Italia, tel. +39.035.45.02.111, fax +39.06.968.91.107

**Stab. Pescara** - Via Piano di Sacco 52, 65013 Contrada S. Agnese, Città S. Angelo, PE, Italia, tel. +39.035.45.02.111, fax +39.085.969.177

CERT. N° 9105.BNVD



CERT. N° 9191.BNVD



## Declaration of Conformity

### RoHS Directive

DIRECTIVE 2002/95/EC OF THE  
EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003  
on the restriction of the use of certain hazardous  
substances in electrical and electronic equipment

Bianchi Vending Group S.p.A. declares:

Starting from July 1st 2006 any product manufactured by "Bianchi Vending Group Spa" on the European market is RoHS Directive compliant and do not contain concentrations exceeding limits allowed for the following substances:

- Lead (Pb)
- Mercury (Hg)
- Cadmium (Cd)
- Hexavalent Chromium (Cr(VI))
- Polybrominated Biphenyls (PBB)
- Polybrominated Diphenyl ethers:
  - o Polybrominated diphenyl ethers (PBDE)
  - o Octabromodiphenyl ether (OctaBDE)
  - o Decabromodiphenyl ether (DecaBDE)
- Perfluorooctane sulfonate (PFOS)
- PolyChloro Naphthalenes (PCN)
- Bis(tribromophenoxy)ethane Polychlorinated biphenyl (PCB)
- Benzene

CHIEF EXECUTIVE OFFICER

Zingonia di Verdellino (BG), 12 January 2009

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



**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!



**CAUTION!** Parts in motion



PE

Earthing indication



## IMPORTANT NOTICES

### MAINTENANCE TECHNICIAN

The maintenance technician is defined as being the person responsible for filling up the containers with soluble products, sugar, coffee, stirrers and cups.

The maintenance technician is also responsible for cleaning the distributor (see operations indicated in chapter 7.0). In the event of a fault the maintenance technician must call the installation technician.



### INSTALLATION TECHNICIAN

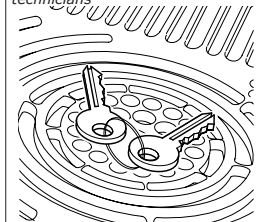
The installation technician is defined as the person responsible for the installation of the automatic distributor, the starting up operations and the function settings.

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



*Tools necessary for undertaking  
interventions on the automatic dispenser.*

**SOCKET SPANNERS**

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

**SPANNERS (fork type)**

n° 7  
n° 8  
n° 10  
n° 12  
n° 14

**SCREWDRIVERS**

Small size  
Medium size  
Large size

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

**RATCHET SPANNER no.14**

**TESTER**

**ELECTRICIAN'S SCISSORS**

**PROGRAMMING KIT**

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- 1.2 General Instructions

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

### 4.0 TRANSPORTING THE AUTOMATIC VENDING MACHINE

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

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### 11.0 DISMANTLEMENT

### 12.0 ACCESSORIES

- 12.1 Cup fork kit



### 1.0 PREMISE

#### 1.1 Important notices

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



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

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

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

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



#### 1.2 General Instructions

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

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

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

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

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

- *This manual is an integral part of the equipment and as such must always remain inside of the same, so as to allow further consultations on the part of the various operators, until the dismantlement and/or scrapping of the machine.*
- *In case of loss or damage of the present manual it is possible receive a new copy making application to the manufacturer, with prior indication of the data registered on machines' serial number.*
- *The functional reliability and optimization of machine's services are guaranteed only if original parts are used.*
- *Modifications to the machine not previously agreed on with the construction company and undertaken by the installation technician and/or manager, are considered to be under his entire responsibility.*

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

- Any manipulations or modifications made to the machine that are not previously authorized by the manufacturer, relieve the latter from any responsibility for damages deriving from, and will automatically result in the cancellation of the machine guarantee terms.
- This manual reflects the status at the moment of the emission of the automatic vending machine on the market; possible modifications, upgrading, adaptmets that are done the machine and that are subsequently commercialized do not oblige **Bianchi Vending S.p.A.** neither to intervene on the machine previously supplied, nor, neither to update the relative technical documentation supplied together with the machine.
- It is however **Bianchi Vending S.p.A.** faculty, when deemed opportune and for valid motives, to adjourn the manuals already present on the market, sending to their customers adjournment sheets that must be kept in the original manual.

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

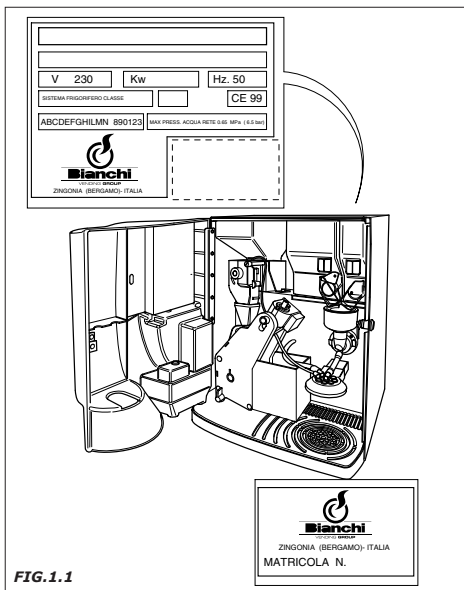
**☎ +39 035 88 22 25**  
**Fax + 39 035 88 33 04**

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

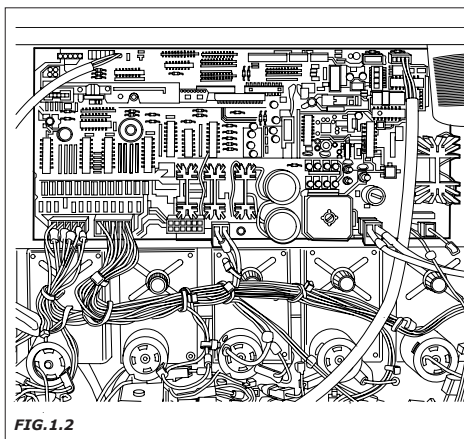
- The data registered on the serial number label (Fig.1.1)
- The version of the programme contained in the microprocessor (adhesive label applied to the component the assembled on the Master board ) (Fig.1.2).

**Bianchi Vending 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 **Bianchi Vending S.p.A.** obliged to compensate for eventual damage resulting from the forced suspension of drink deliveries as the result of faults.
- Installation and maintenance operations , must be done exclusively by qualified technical personnel with prior training for carrying out these duties.
- For refilling use only food products that are specific for automatic vending machines.
- The automatic distributor is not suitable for external installation. The machine must be installed in dry places, with temperatures that never go below 1°C it must not be installed in places where cleaning is done with water hoses (ex. big kitchens.).  
Do not use water jets to clean the machine.
- If at the moment of the installation, if conditions differing from those indicated in the present manual, or should the same undergo changes in time, the manufacturer must be immediately contacted before use of the machine.
- Also check that any other eventual norms or regulations as laid down by national or local legislation are taken into account and applied.



**FIG.1.1**



**FIG.1.2**

## 2.0 TECHNICAL CHARACTERISTICS

Height	mm 530
Width	mm 445
Depth	mm 385
Weight	kg 32,2
Power Supply	V 230 - V110
Power frequency	Hz. 50 - Hz.60
Installed power <sup>(1)</sup>	from 1,8 kW to 2,1 kW

### AVERAGE CONSUMPTIONS:

Water connection	3/8" gas
Electric connection	SCHUKO plug

### WATER SUPPLY

from main supply with pressure between 0.5 and 6.5 bar

### BOILER RESISTANCES

of armoured type:

of 2000 W for the coffee boiler

### PRODUCT CONTAINER CAPACITY

Coffee in beans	kg 0,8
Instant coffee	kg 0,35
Powder milk	kg 0,5
Powder milk (Double unit)	kg 1,0
Chocolate	kg 1,0
Chocolate (Double unit)	kg 2,0
Lemon tea	kg 1,4
Natural tea	kg 0,85
Broth	kg 1,2
Sugar	kg 1,3

<sup>(1)</sup> Check the rated output indicated on the data plate applied by the distributor.

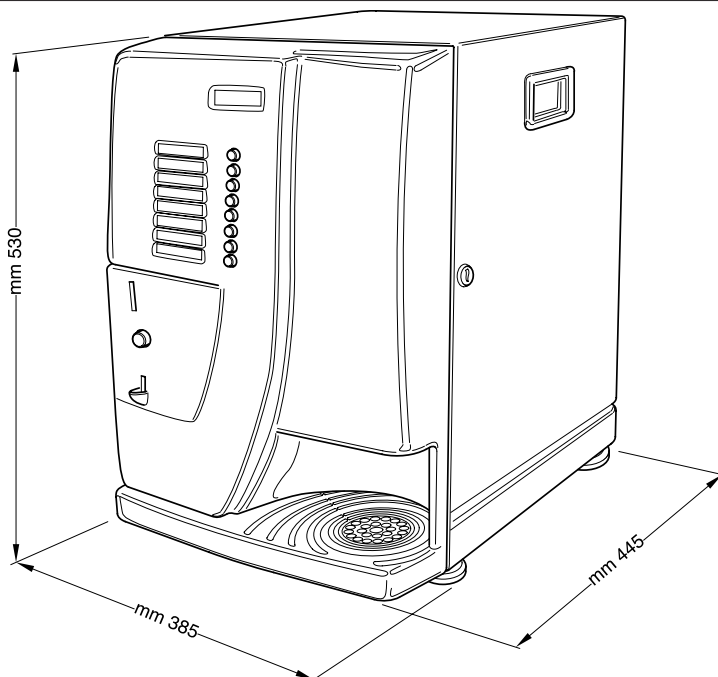


Fig. 2.1



### 3.0 GENERAL TECHNICAL DESCRIPTIONS

#### 3.1 Machine description (Fig.3.1)

- 1 Coffee group and grinder
- 2 Container units for soluble drinks and sugar
- 3 Coin-acceptor group
- 4 Master board
- 5 Keyboard cards
- 6 Instant boiler

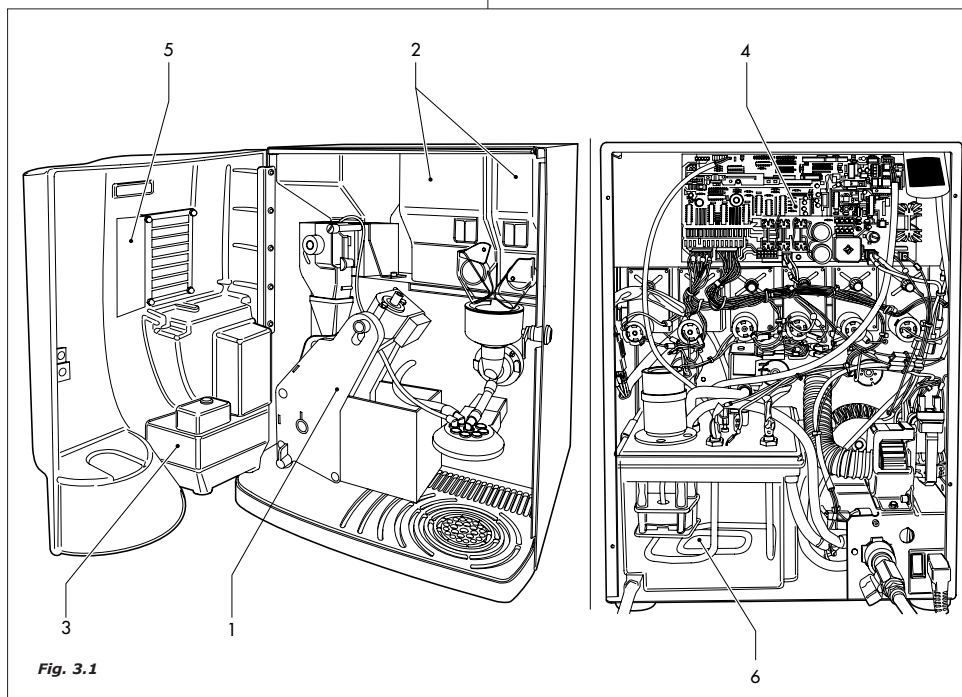


Fig. 3.1

#### 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.

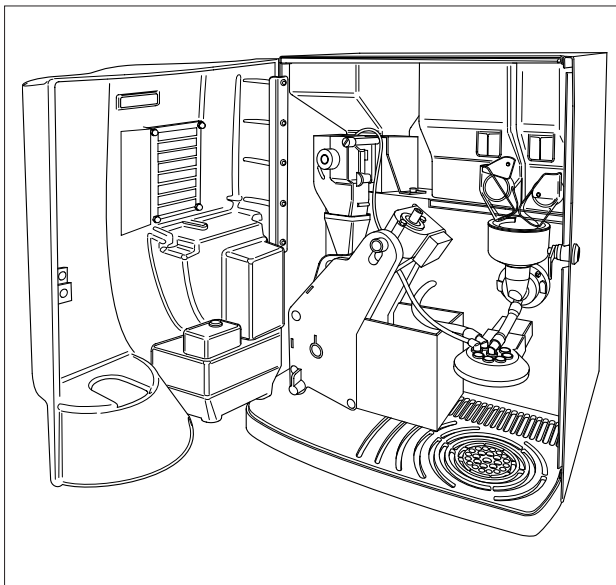
The plastic cups and the stirrers for sugar mixing will be placed at the disposal of the user as they are not automatically dispensed by the Sprint mod. Distributor.

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

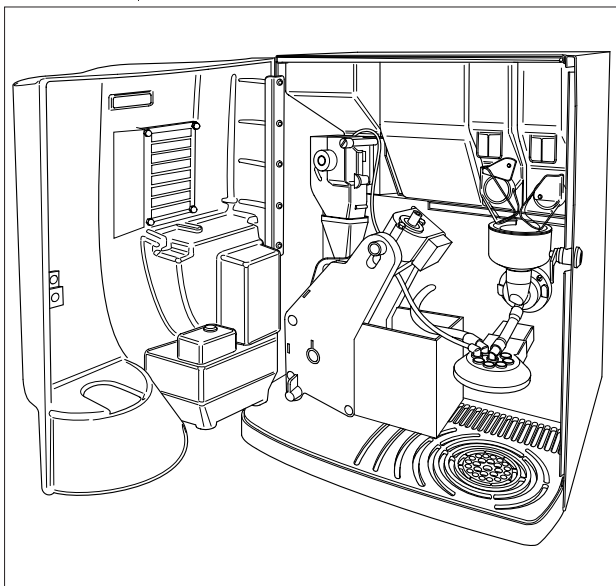
### 3.3 Models

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

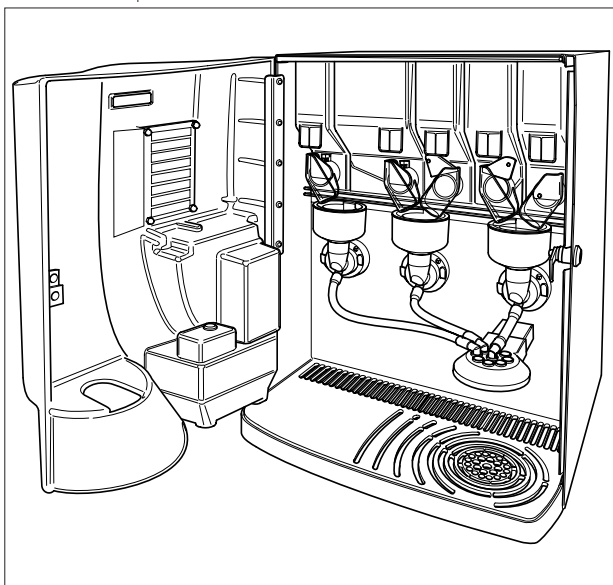
**SPRINT E/R :** (version with espresso coffee and soluble drinks connected to the main water supply)



**SPRINT E/A** (version with espresso coffee, soluble drinks and independent tank)



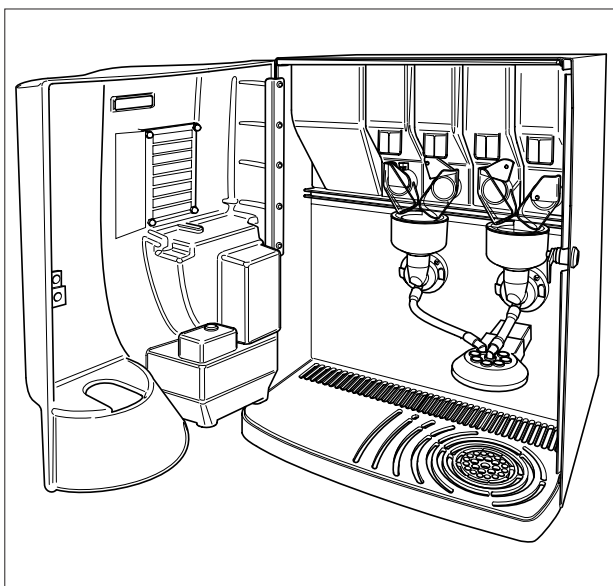
**SPRINT SOLUBLE S/R** (version with soluble drinks and connected to the mains water supply)



**SPRINT SOLUBLE S/A** (version with soluble drinks and independent tank)



*The manual is compiled for the most complete model: it is therefore possible, to find descriptions or explanations not related to your 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 AND SPOON COLLECTION

The mod. Sprint automatic distributor does not feature an automatic cup and spoon distributor. The user must therefore procure the same in an independent manner from the special distributors placed at disposal in the vicinity of the distributor, and must undertake to position them correctly in the delivery compartment (fig. 3.2)

#### SUGAR DISPENSER

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

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

The delivery procedure is as follows:

The geared motor operates the sugar container volute, pouring the required amount inside the powder conveyor (fig.3.3).

#### INSTANT DRINKS

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

- The solenoid valve fixed to the instant boiler is engaged in order to deliver the required quantity of water into the mixer (fig.3.4).
- The pump that delivers the required amount of water is activated; and controlled by a special electronic device (volumetric counter), which withdraws from the instant boiler.
- 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.3.5)
- once the preset quantity of water and powder is dispensed, the whipper motor is switched off.

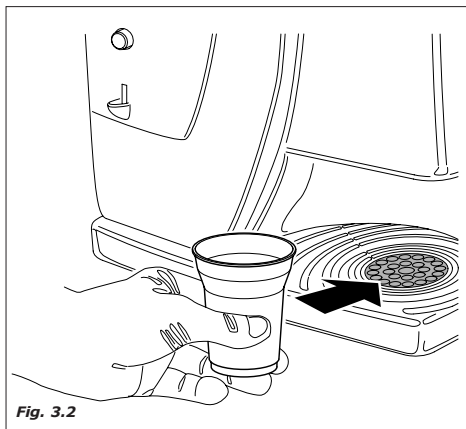


Fig. 3.2

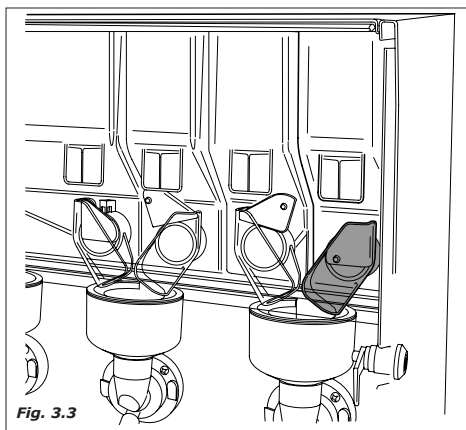


Fig. 3.3

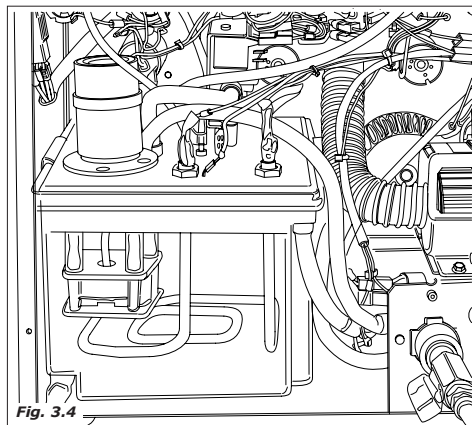


Fig. 3.4

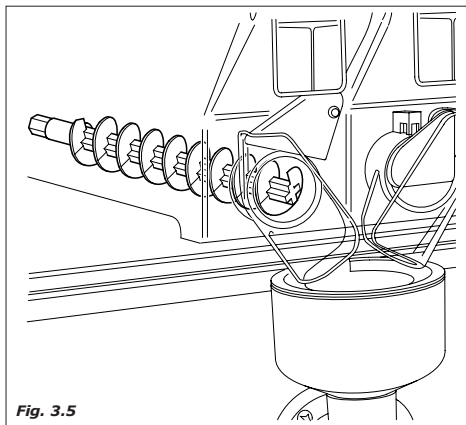


Fig. 3.5

### 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.3.6)
- 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.3.7).
- 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.3.8).
- 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.3.9).

The operational sequence (coffee grinding and release) may occur in an inverse order according to the type of programming involved.

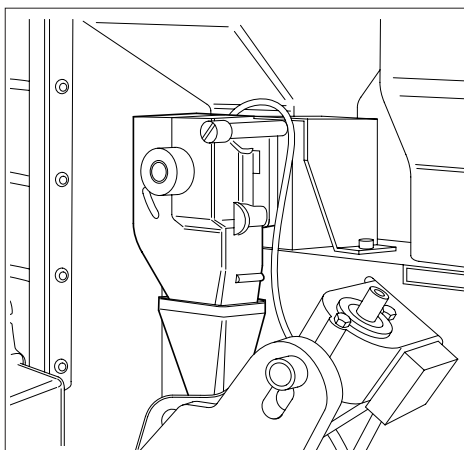


Fig. 3.6

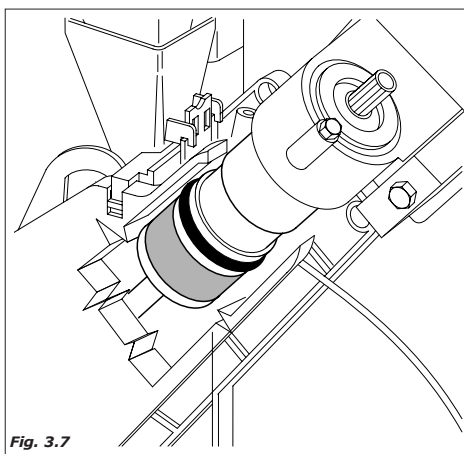


Fig. 3.7

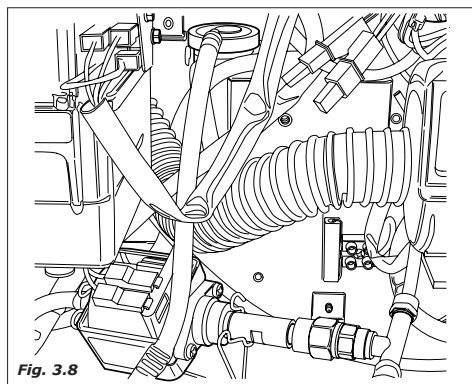


Fig. 3.8

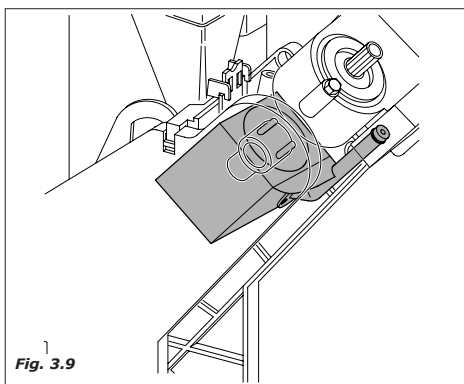


Fig. 3.9



## 4.0 MOVING AN AUTOMATIC VENDING MACHINE

### 4.1 Moving and transport (Fig.4.1)

The distributor must be shifted by 2 people (Fig.4.1).



Avoid :

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

Prevent the distributor from:

- being knocked
- Stacking other objects on it
- Being exposed to the elements
- Positioned 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 supplied in a cardboard box protected by polystyrene packaging (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:

- manoeuvre 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

Remove the distributor from its packaging, lifting the polysterene panels and removing it from the box (Fig.4.2)

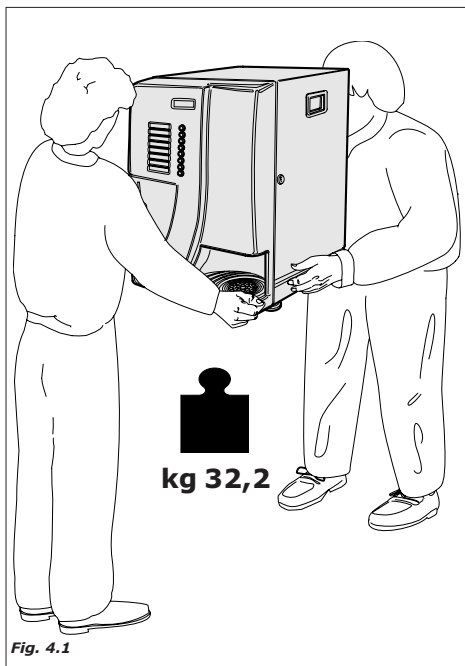


Fig. 4.1

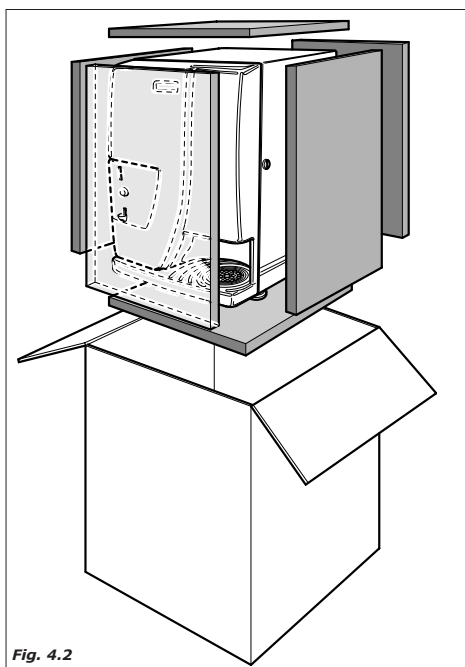


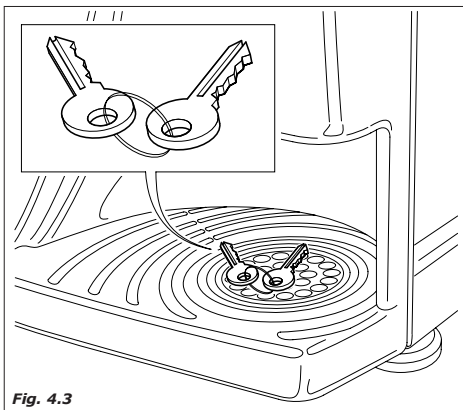
Fig. 4.2

- remove the key from the drink dispensing chamber (Fig.4.3)
- open the door of the distributor and remove the adhesive tape from the components listed here below:

- coin box
- coin mechanism cover / keyboard cards
- product containers



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



**Fig. 4.3**

## 5.0 SAFETY NORMS



### ATTENTION!

- before using the automatic distributor, read this manual carefully.
- The installation and maintenance operations must be performed exclusively by qualified technical personnel.
- The user must not in any circumstance be able accede to those parts of the automatic distributor that are protected and require a tool in order to be accessible.
- The knowledge and the absolute respect, from a technical point of view of the safety instructions and of the danger notices contained in this manual, constitute the basis for the operation, in conditions of minimum risk, of the installation, starting and maintenance of the machine.



Always disconnect the **POWER CABLE** before maintenance or cleaning interventions.



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

- The functional reliability and optimization of machine's services are guaranteed only if original parts are used.
- **The distributor is not suitable for external installation. The machine must be connect in dry places, with temperatures that never go below 1°C it must not be installed in places where cleaning is done with water hoses (ex. big kitchens). Do not use water jets to clean the machine.**
- In order to guarantee normal operation, the machine must be installed in areas that the environmental temperature is between a minimum of -1°C and a maximum of +32°C and humidity of not over 70%.
- In order to guarantee a regular operation, always maintain the automatic distributor in perfect cleaning conditions
- **Bianchi Vending S.p.A.** declines all responsibility for damages product to people or belongings in consequence to:
  - Incorrect installation
  - Inappropriate electrical and/or water connection.
  - Inadequate cleaning and maintenance
  - Not authorized modifications
  - Improper use of the distributor
  - Not original spare parts
- Furthermore verify observance of any other eventual local and national standards.

## 6.0 INSTALLATION



### 6.1 Positioning

- As already specified in paragraph 5.0, "Safety regulations", the distributor is not suitable for external installation. The machine must be connect in dry places, with temperatures that never go below 1°C it must not be installed in places where cleaning is done with water hoses(ex. big kitchens.) . It must be installed in places without danger of explosions or fires.
- If positioned near to a wall, there must be a minimum distance from the wall of at least 5 cm. (Fig.6.1) so as to allow a regular ventilation. In no case cover the distributor with cloths or similar.



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

**Bianchi Vending S.p.A.** declines all responsibility for inconveniences due to the non observance of the above mentioned installation norms.

If the installation is made in safety evacuation corridors make sure that with the distributor door open there is anyhow sufficient space to pass by (Fig.6.1).

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



### 6.2 Connection to the main water supply

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

- that it is drinkable (eventually through an laboratory's analysis certification)
- it has a pressure comprised between 0.5 and 6.5 bar ( if this should not be the case, use a pump or a water pressure, reducer according to the case).

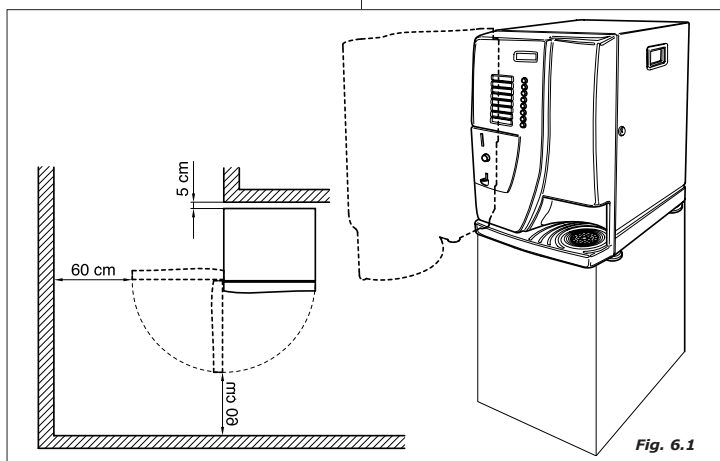


Fig. 6.1



- 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.6.2).
- before making water connections, make some water flow out of the tap so as to eliminate possible traces of impurities and dirt (Fig.6.3)
- 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. 6.4).
- 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, 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 suitable for operation at single-phase voltage of 230 volt and is protected by 2 12.5 A fuses and by a 10A fuse on the MASTER card.

#### We suggest to check that:

- the tension of net of 230 V doesn't have a difference of more than  $\pm 10\%$
- 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 mm<sup>2</sup>, with SCHUKO plug (Fig.6.6).
- The sockets that are not compatible with that of the machine must be replaced. (Fig.6.7).
- The use of extension, adapters and/ or multiple plugs is forbidden.

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

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

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

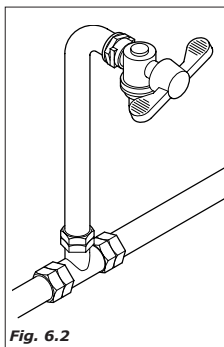


Fig. 6.2

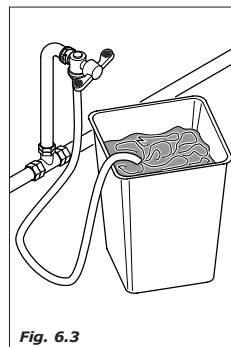


Fig. 6.3

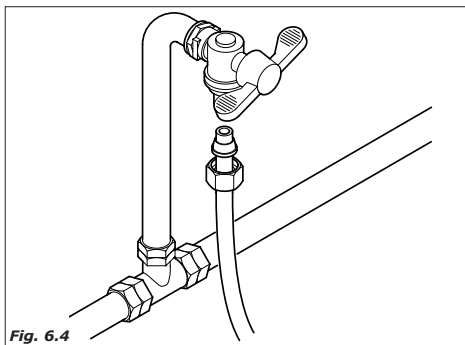


Fig. 6.4

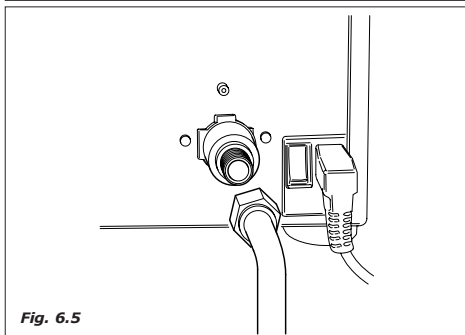


Fig. 6.5

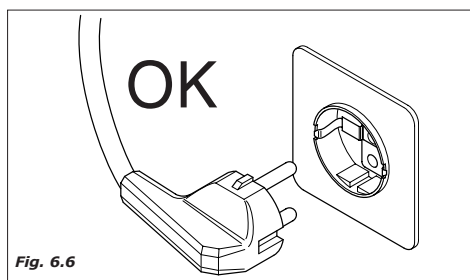


Fig. 6.6

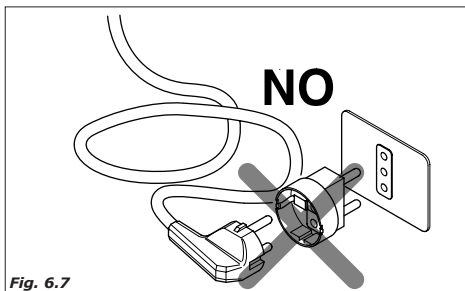


Fig. 6.7



#### 6.4 Starting up of the unit

The distributor is provided with a connection cable for connection to the mains water supply (fig.6.8) and a switch which cuts off the power from all users each time that it is operated (fig.6.9).

Should it be necessary to operate inside the distributor for any ordinary or special maintenance operates, it is necessary to isolate the user appliances by activating the switch (fig.6.10), bearing in mind that with the electrical connection engaged, the power terminals are live.

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

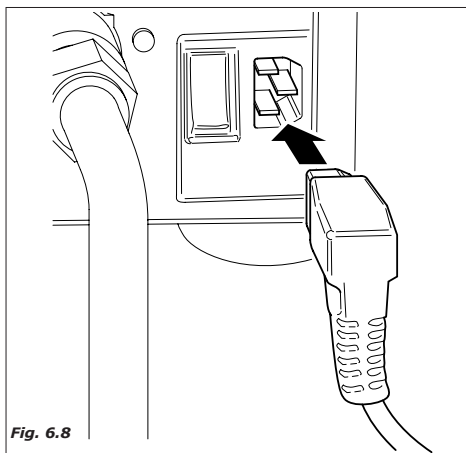


Fig. 6.8

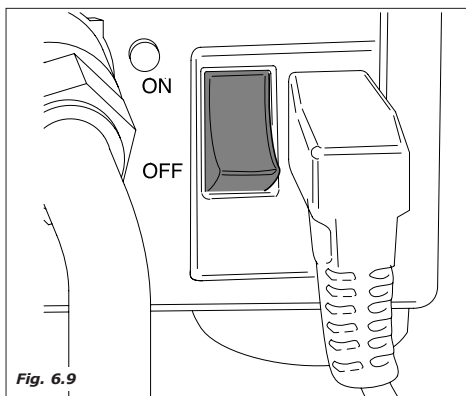


Fig. 6.9

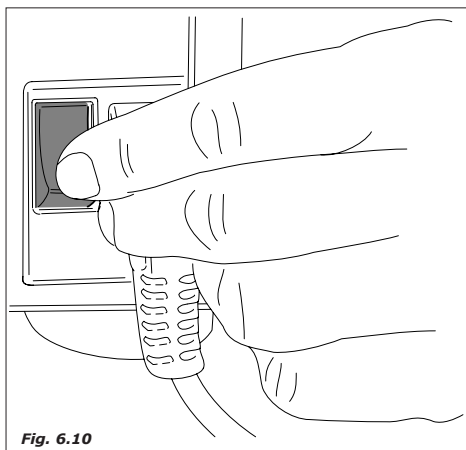


Fig. 6.10



## 6.5 Installation

### 6.5.1 Filling the water circuit

The appliance undertakes automatic filling of the water supply circuit.

Switch off the machine by operating the rear switch and remove the rear guard element (Fig.6.11) for access to the heater.

Boiler filling:

- Switch on the machine and turn on the water inlet tap; by pressing key P8 the filling time is doubled
- filling will stop when the maximum level is reached.
- at the end of the water filling (Fig.6.12), effect a cleaning cycle of the mixer group so as to fill all the circuits and remove eventual residues from the boiler.



*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.*

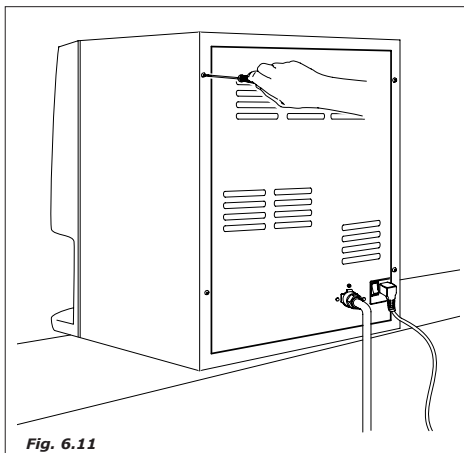


Fig. 6.11

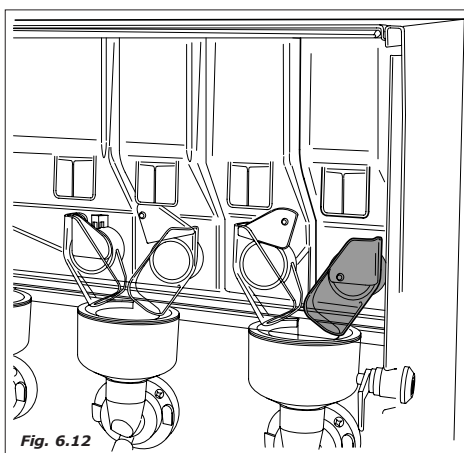


Fig. 6.12



### 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.



Before removing the container lower the flap in order to prevent the accidental escape of the soluble product inside the same (fig. 6.13).

- remove all the product containers from the distributor (fig. 6.14).
- remove the lids from the product containers covers and product chutes (Fig.6.15). Dip all in the solution previously prepared

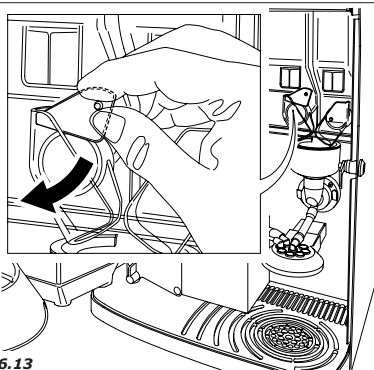


Fig. 6.13

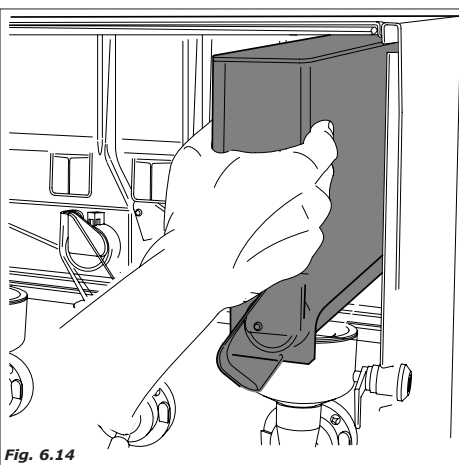


Fig. 6.14

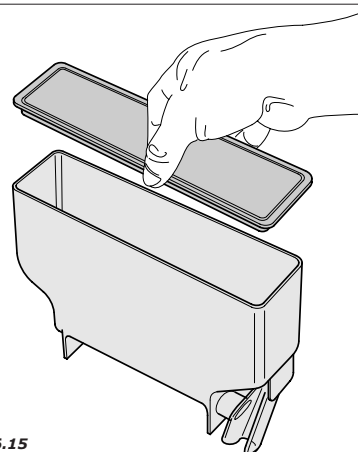
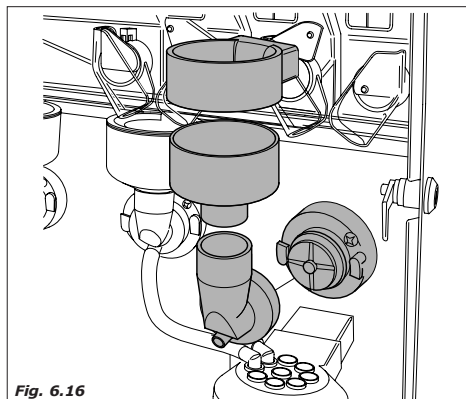


Fig. 6.15

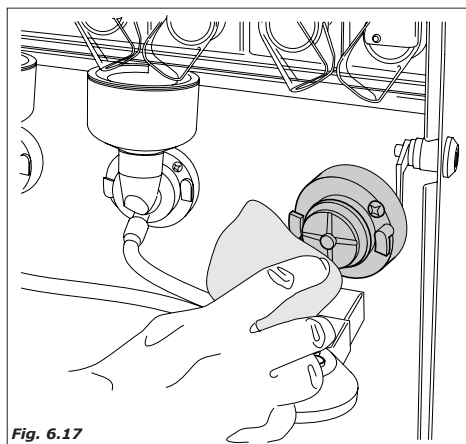
- remove all the powder chutes, water funnels, mixing bowls and whippers and silicone tubes and dip these parts also in the prepared solution (Fig.6.16)
- with a cloth soaked with the solution clean the whipper assembly base (Fig.6.17)
- the parts must soak in the solution for the time indicated on the solutions' instruction label.
- Recover all the parts, rinse them abundantly, dry them perfectly and proceed with the re-assembly in the distributor.

**!** After re-positioning the container undertake to raise the flap in order to reset the correct function (fig. 6.18).

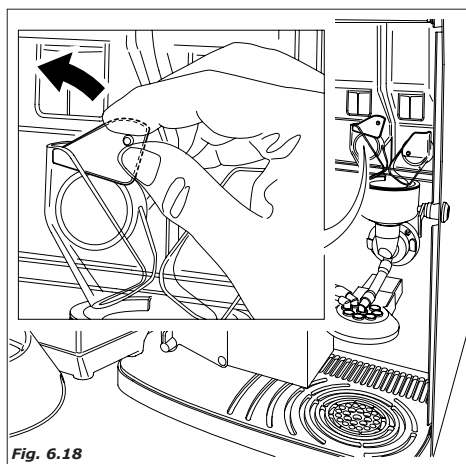
**!** For further safety after the assembly of the parts, effect some automatic cleaning cycles so as to eliminate any eventual residues.



**Fig. 6.16**



**Fig. 6.17**



**Fig. 6.18**



## 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. 6.19) or by extracting each container.

For granulated coffee in particular it is necessary to close the closure plat before extracting the container.(Fig.6.20).

- remove the covers of each container and load the product according to the product indicated on the label (Fig.6.21-Fig.6.22).
- 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 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.

The switches are to be directly connected to the keyboard card, the executive serial systems require the RS232 payment system kit supplied separately.

Then go into programming for the correct settings.

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

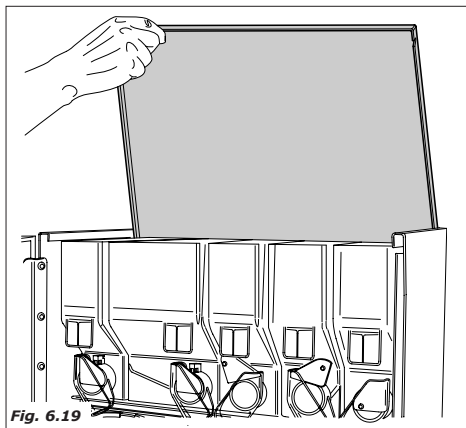


Fig. 6.19

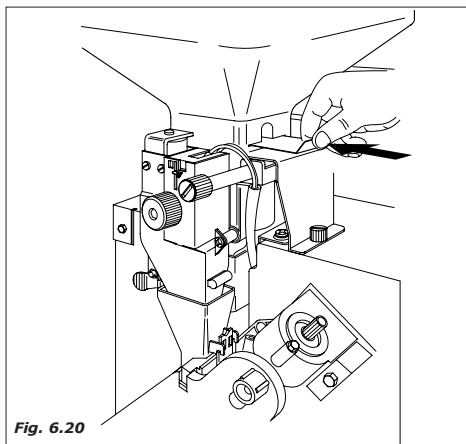


Fig. 6.20

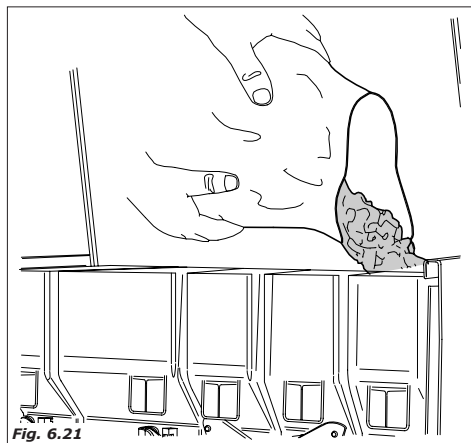


Fig. 6.21

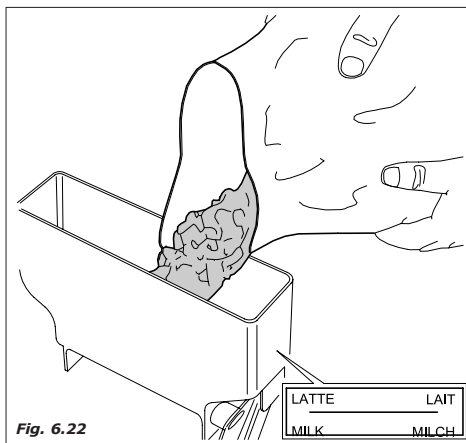


Fig. 6.22



## 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 touch 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.

### PROGRAMMING INDEX

#### 7.1 General description and preliminary operations

##### 7.1.1 Language selection

#### 7.2 Function description

##### 7.2.1 SALES

##### 7.2.2 OPTIONS

##### 7.2.3 BEVERAGES

##### 7.2.4 PRICE-KEYS

##### 7.2.5 COINS

##### 7.2.6 PRICES

##### 7.2.7 CODE

##### 7.2.8 DEFAULT DATA

##### 7.2.9 DISCOUNTS

##### 7.2.10 INCLUDE-JUG

##### 7.2.11 EURO

##### 7.2.12 CLOCK

#### 7.1 General description and preliminary operations

##### Programming key

The programming function is accessed by pressing the button P10 positioned on the keyboard cards. (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).

The programming data can be of two kinds:

##### ● NUMERICAL DATA

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

##### ● LOGICAL DATA

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

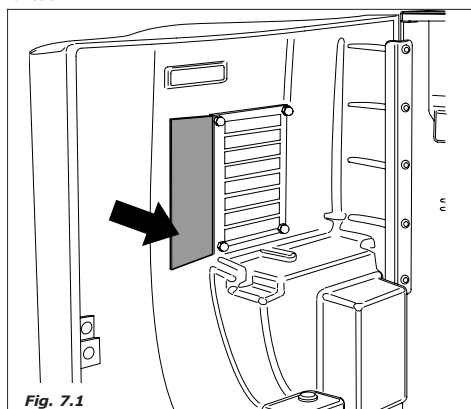
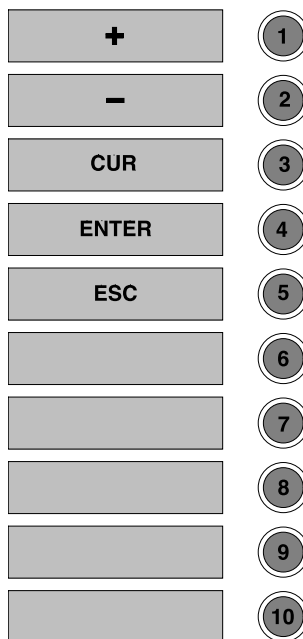


Fig. 7.1

#### Programming panel



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

##### ■ Key 1 "+"

It acts to increase the value of a selected digit (i.e. Dose figure), and/or to scroll forward the list of the functions available in the submenu.

##### ■ Key 2 "-"

or DECREASE key , has the function of decreasing the value of a selected digit.

##### ■ Key 3 "CUR"

For moving of the display cursor to the digit to be modified using the previous + and – keys.

##### ■ Key 4 "ENTER"

Used to confirm the variations made or to scroll the options menu.

##### ■ Key 5 "ESC"

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

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

#### Programming

<b>Key 1</b>	+	(increase)
<b>Key 2</b>	-	(decrease)
<b>Key 3</b>	<b>number</b>	(cursor)
<b>Key 4</b>	<b>Enter</b>	(confirm)
<b>Key 5</b>	<b>ESC</b>	

### Maintenance panel (version espresso)

COMPLETE TEST	1
WATER TEST	2
ALARM RESET	3
COFFEE UNIT ROTATION	4
CHOC./MILK MIXER WASHING.	5
ALARM SCROLL	6
	7
TOTAL STROKES	8
RETURN TO SERVICE FUNCTION (ON KEYBOARD)	9
	10

### Maintenance panel (version soluble)

COMPLETE TEST	1
WATER TEST	2
ALARM RESET	3
COFFEE MIXER WASHING	4
CHOC./MILK MIXER WASHING	5
TEA MIXER WASHING	6
ALARM SCROLL	7
TOTAL STROKES	8
RETURN TO SERVICE FUNCTION (ON KEYBOARD)	9
	10

### MAINTENANCE (version espresso)

KEY 1	COMPLETE TEST
KEY 2	WATER TEST
KEY 3	ALARM RESET
KEY 4	COFFEE UNIT ROTATION
KEY 5	CHOC./MILK MIXER WASHING.
KEY 6	ALARM SCROLL
KEY 7	NOT USED
KEY 8	TOTAL STROKES
KEY 9	FOR RETURN TO NORMAL STATE
KEY 10	NOT USED

### MAINTENANCE (version soluble)

KEY 1	COMPLETE TEST
KEY 2	WATER TEST
KEY 3	ALARM RESET
KEY 4	COFFEE MIXER WASHING
KEY 5	CHOC./MILK MIXER WASHING
KEY 6	TEE MIXER WASHING
KEY 7	ALARM SCROLL
KEY 8	TOTAL STROKES
KEY 9	FOR RETURN TO NORMAL STATE
KEY 10	NOT USED



### 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 P1 and P2 increase or decrease the number; with P3 key ("cur") move the cursor. Repeat the operations until the access code is composed.

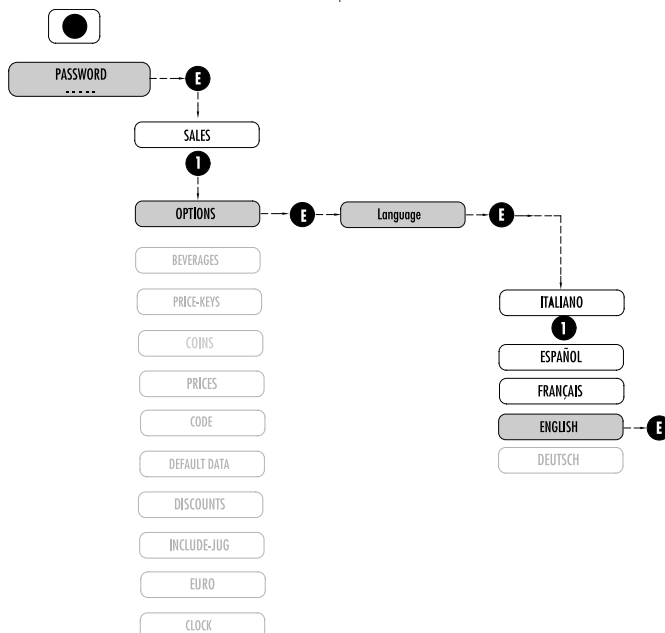
Once the code is composed, press the key "Enter" (P4) so as to accede to programming.

**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.



**Fig. 7.2**

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

The main menu bears the wording Menu choice on the first line, the second line bears the wording of the program menu relating to the following list:

**SALES**  
**OPTIONS**  
**BEVERAGES**  
**PRICE-KEYS**  
**COINS**  
**PRICES**  
**CODE**  
**DEFAULT DATA**  
**DISCOUNTS (only of clock chip is inserted)**  
**INCLUDE-JUG**  
**EURO**  
**CLOCK (only of clock chip is inserted)**

So as to exit from programming mode press "ESC" until one of the above listed functions appears, then press the programming button placed on the keyboard card and return to the selection mode.

The display is on two lines.

It is also possible to reverse the programming using a PC and the programming kit supplies separately.

## 7.2 Function description

### 7.2.1 SALES (Fig.7.3)

Permits access to all the sales statistics calculated by the machine. On confirming with the ENTER key, it is possible to enter the following menu in sequence which contains the relative statistic and data processing data:

<b>Total takings</b>	Total sum which cannot be cancelled [0..16777215]
<b>Takings</b>	Total sum which cancelled [0..16777215]
<b>Discount</b>	Total discount [0..16777215]
<b>Overpay</b>	Total overpay [0..16777215]
<b>Drink x digits</b>	x=1.8 indicates the relative drink to which it refers for the sum as shown on line 2
<b>n</b>	no. of entries relative to the drink associated with key x
<b>Entries</b>	reference for the total cancellable entries
<b>n</b>	total no. of cancellable entries
<b>Total entries</b>	reference for the total non cancellable entries
<b>n</b>	total no. of entries that are not cancellable
<b>Free</b>	total cancellable free entries [0..16777215]
<b>Jug</b>	total cancellable jug [0..16777215]
<b>Test</b>	total cancellable test [0..16777215]

**Line x coin** x=1.8 indicates the coin to which it refers for the display of the value displayed in line 2 [0..65535]

**Cancel?** To cancel the entries of the sales menu enter YES and press ENTER, [Yes/No]

On pressing "P1" the menu is scrolled until the required function is reached; on pressing the ENTER key access is provided to the data of the selected function, if you continue to press ENTER access is provided for the reading of the other data, if present.

Return ESC to return to the menu of origin

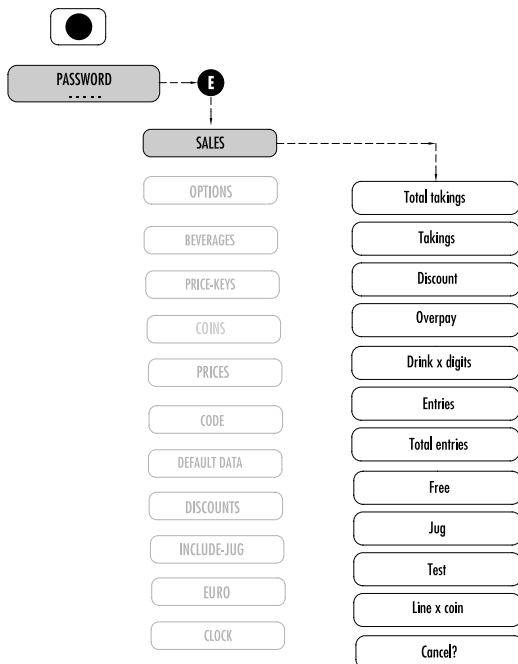


Fig. 7.3

### 7.2.2 OPTIONS (Fig. 7.4)

This functions provides a sequence access to a series of options listed below, on pressing ENTER access is provided to a sub-menu in which the first option is displayed. For each OPTION the logical "Y" or "N" must be entered with engages the function or not.

<b>Language</b>	Chosen language for message display. There are 4 languages which can be updated with the message program.
<b>Payment system</b>	Sets the payment system used [G13/Executive/MDB]
<b>ECS diff.</b>	Only if the executive payment system has been set. Set the differentiated ESC option (ON/OFF)
<b>Price holding</b>	Only if the executive payment system has been entered. Sets the price holding option [On/Off]
<b>Max change</b>	Only if MDB payment system has been set. Sets the maximum change for the MDB coin box
<b>Coin change</b>	Only if MDB system has been set. To set the coin change option [On/Off]
<b>Heater time</b>	Heater temperature setting [70 °C ... 96 °C]
<b>Instant. Grind.</b>	To set grinding type, YES for instant grinding and NO for traditional grinding [S/NO]
<b>Grinder threshold</b>	Sets the power threshold for the grinder [05.0 ... 18.0]
<b>Grinder timeout</b>	Sets the grinder timeout [00.0 s ... 25.5 s]
<b>Unit timeout</b>	Sets the unit timeout [00.0 s ... 25.5 s]
<b>Pump timeout</b>	Sets the pump timeout [00.0 s ... 25]
<b>Purifier</b>	Sets the purifier value [0 ... 50000]
<b>Coffee grind</b>	Sets the coffee grind value [0 ... 50000]
<b>Coffee filter</b>	Sets the coffee filter values [0 ... 50000]
<b>Permanent credit</b>	Engages the credit timeout function for 3 minutes. Yes to engage the option and NO to disengage it [YES/NO]
<b>Credit recovery</b>	This option engages credit recovery in the event of unsuccessful drink dispensing operation. The credit is not recovered if there is a capacity signal or in the presence of other signals hot water delivery is requested. YES to engage. NO to deactivate [YES/NO]
<b>Reintegration</b>	Enables reintegration. YES to engage and NO to disengage [YES/NO]
<b>Milk first</b>	Engages the delivery of soluble ingredients before coffee delivery, Yes to engage and NO to deactivate [YES/NO]
<b>Sugar key</b>	Engages the key for sweet or very sweet drink selection (0..8) 0 means no sugar key
<b>Single sugar</b>	Engages the option for a quantity of sugar the same for all drinks [On/Off]
<b>Sugar time</b>	Sets the quantity of sugar relative to standard sugar option and with sweet pre-selection. Is not displayed in the event of single sugar = Off, [00.0 s ... 25.5 s]
<b>T extra sugar</b>	Sets the amount of additional sugar relative to the very sweet selection, [00.0 s ... 25.5 s]
<b>Water integration T</b>	Sets the amount of water integration, [0.0 s ... 6.0 s]
<b>Multisales</b>	Multi-sales engagement. YES engages and NO deactivates [YES/NO]

<b>Machine number</b>	Machine number [0..999999]
<b>Rental number</b>	Rental number [0..65535]
<b>Decimal point</b>	To define the display of the decimal point, P1 and P2 for selection and P4 for confirmation. [0000 / 0000.0 / 000.00 / 00.000]
<b>Washing</b>	Engages washing cycle with clock. [On/Off]
<b>Washing cycle</b>	Engaged the washing cycle. [On/Off]
<b>Aug 1</b>	Number of deliveries of drinks associated to key 1. [2..99]
<b>Aug 2</b>	Number of deliveries of drinks associated to keys 2..8 . [2..99]
<b>Min probe sens.</b>	Sets the sensitivity of the minimum level probe (20....200). A sensitivity value is associated to the level probes used on the machine.  Probe sensitivity is to be reduced in the presence of low-conductivity water.
<b>Max prove sens.</b>	Sets the sensitivity of the maximum level probe (20...200). A sensitivity value is associated to the level probe used on the machine.  Probe sensitivity is to be reduced in the presence of low-conductivity water.

Use keys P1 and P2 to vary the logical values like change of state from yes (Y=engaged) to no (deactivated) or use keys P1,P2 and P3 to alter the numeric values.

On pressing ENTER the set value is confirmed and the following option appears: on pressing ESC again we return to the OPTIONS menu.

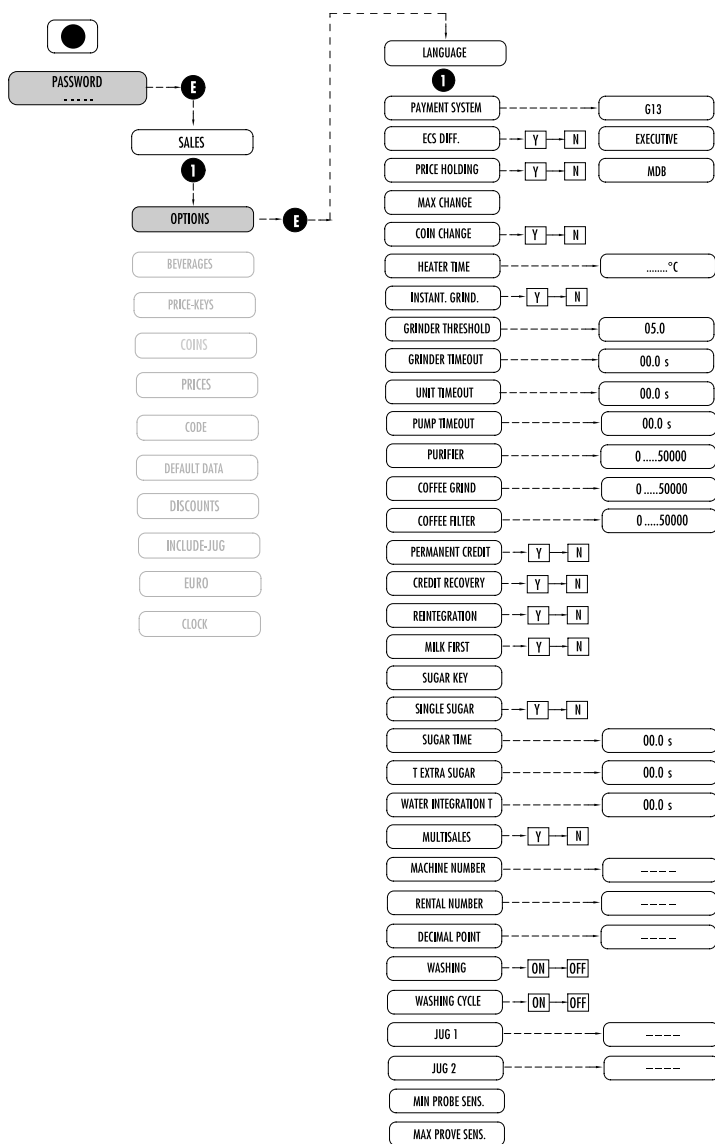


Fig. 7.4

## 7.2.3 BEVERAGES

### Soluble drink version (Fig. 7.5)

The beverage menu structure is repeated according to the number of drinks, so that the same structure will be repeated for a single drink indicating an x instead of the number of drinks, so that it is sufficient to replace x with the corresponding drink number.

Important: the drink menu is not displayed if the selection key number has been set in the drinks menu, which means that if pre-selection key n.1 is set drink 1 is not displayed.

The following combinations have been made for the soluble drinks:

1	=	Lemon tea
2	=	peach tea
3	=	hot chocolate
4	=	milk
5	=	coffee
6	=	sugar

Line 1 indicates the engagement key, measures and times appear on line 2, parameters which are listed below:

<b>On</b>		engages drink function
<b>Ev.1</b>	<b>00.0 s</b>	water measure relative to solubles 1 and 2, [00.0 s ... 25.5 s]
<b>Del.1</b>	<b>00.0 s</b>	water measure delay relative to solubles 1 and 2, [00.0 s ... 25.5 s]
<b>Sol.1</b>	<b>00.0 s</b>	soluble 1 measure, [00.0 s ... 25.5 s]
<b>Del.Sol.1</b>	<b>00.0 s</b>	soluble 1 measure delay, [00.0 s ... 25.5 s]
<b>Ton so.1</b>	<b>00.0 s</b>	soluble 1 gear motor on time, [00.0 s ... 25.0 s]
<b>Toff so.1</b>	<b>00.0 s</b>	soluble 1 gear motor off time, [00.0 s ... 25.0 s]
<b>Sol.2</b>	<b>00.0 s</b>	soluble 2 measure, [00.0 s ... 25.5 s]

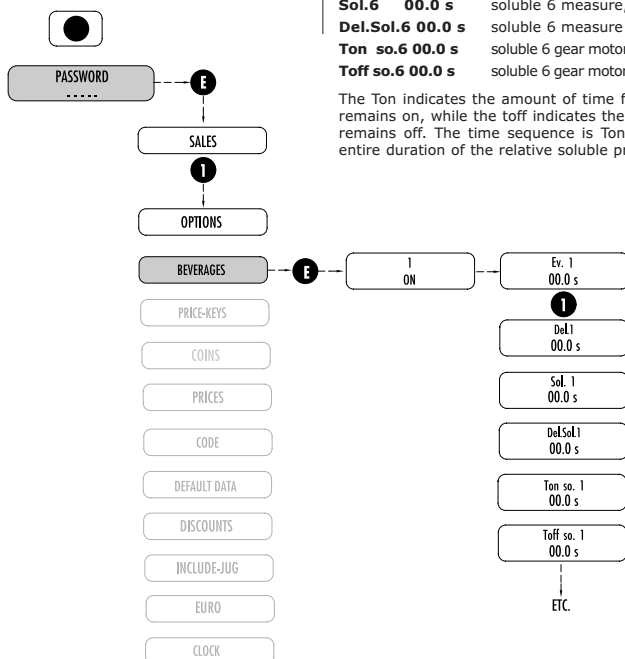


Fig. 7.5

<b>Del.Sol.2</b>	<b>00.0 s</b>	soluble 2 measure delay, [00.0 s ... 25.5 s]
<b>Ton so.2</b>	<b>00.0 s</b>	soluble 2 gear motor on time, [00.0 s ... 25.0 s]
<b>Toff so.2</b>	<b>00.0 s</b>	soluble 2 gear motor off time, [00.0 s ... 25.0 s]
<b>Ev. 2</b>	<b>00.0 s</b>	water measure relative to solubles 3 and 4, [00.0 s ... 25.5 s]
<b>Del. 2</b>	<b>00.0 s</b>	water delay time relative to solubles 4 and 3, [00.0 s ... 25.5 s]
<b>Sol.3</b>	<b>00.0 s</b>	solubles 3 measure, [00.0 s ... 25.5 s]
<b>Del.Sol.3</b>	<b>00.0 s</b>	soluble 3 measure delay, [00.0 s ... 25.5 s]
<b>Ton so.3</b>	<b>00.0 s</b>	soluble 3 gear motor on time, [00.0 s ... 25.0 s]
<b>Toff so.3</b>	<b>00.0 s</b>	soluble 3 gear motor off time, [00.0 s ... 25.0 s]
<b>Sol.4</b>	<b>00.0 s</b>	soluble 4 measure, [00.0 s ... 25.5 s]
<b>Del.Sol.4</b>	<b>00.0 s</b>	soluble 4 measure delay, [00.0 s ... 25.5 s]
<b>Ton so.4</b>	<b>00.0 s</b>	soluble 4 gear motor on time, [00.0 s ... 25.0 s]
<b>Toff so.4</b>	<b>00.0 s</b>	soluble 4 gear motor off time, [00.0 s ... 25.0 s]
<b>Ev.3</b>	<b>00.0 s</b>	water measure relative to solubles 5 and 6, [00.0 s ... 25.5 s]
<b>Del.3</b>	<b>00.0 s</b>	water delay time relative to solubles 5 and 6, [00.0 s ... 25.5 s]
<b>Sol.5</b>	<b>00.0 s</b>	soluble 5 measure, [00.0 s ... 25.5 s]
<b>Del.Sol.5</b>	<b>00.0 s</b>	soluble 5 measure delay, [00.0 s ... 25.5 s]
<b>Ton so.5</b>	<b>00.0 s</b>	soluble 5 gear motor on time, [00.0 s ... 25.0 s]
<b>Toff so.5</b>	<b>00.0 s</b>	soluble 5 gear motor off time, [00.0 s ... 25.0 s]
<b>Sol.6</b>	<b>00.0 s</b>	soluble 6 measure, [00.0 s ... 25.5 s]
<b>Del.Sol.6</b>	<b>00.0 s</b>	soluble 6 measure delay, [00.0 s ... 25.5 s]
<b>Ton so.6</b>	<b>00.0 s</b>	soluble 6 gear motor on time, [00.0 s ... 25.0 s]
<b>Toff so.6</b>	<b>00.0 s</b>	soluble 6 gear motor off time, [00.0 s ... 25.0 s]

The Ton indicates the amount of time for which the gear motor remains on, while the toff indicates the amount of time which it remains off. The time sequence is Ton-Toff-Ton-Toff etc for the entire duration of the relative soluble product.

## 7.2.3 BEVERAGES

### Espresso version (Fig. 7.6)

The beverage menu structure is repeated according to the number of drinks, so that the same structure will be repeated for a single drink indicating an x instead of the number of drinks, so that it is sufficient to replace x with the corresponding drink number.

The only exception is the drink associated with key 8 which can deliver only hot water and therefore will have a different menu that the other keys.

The following combinations have been established for the solubles

<b>1</b>	=	Milk
<b>2</b>	=	Chocolate

For keys 1 to 7 on line 1 the key to which engagement refers is indicated, the measures and times which appear on line 2 are indicated here below:

<b>On</b>		activates drink dispensing operation
<b>Ev.1 000 cc</b>		amount of water for the coffee, [000 cc ... 999 cc]
<b>Add. Wat. 000 cc</b>		Amount of additional water for coffee, [000 cc ... 999 cc]
<b>Ev.2 000 cc</b>		amount of water for solubles 1 and 2, [000 cc ... 999 cc]
<b>Del.Ev.2 00.0 s</b>		delay in water measure for solubles 1 and 2, [00.0 s ... 25.5 s]

<b>Sol.1 00.0 s</b>		soluble 1 measure, [00.0 s ... 25.5 s]
<b>Del.Sol.1 00.0 s</b>		soluble 1 measure delay, [00.0 s ... 25.5 s]
<b>Ton so.1 00.0 s</b>		soluble 1 gear motor on time, [00.0 s ... 25.0 s]
<b>Toff so.1 00.0 s</b>		soluble 1 gear motor off time, [00.0 s ... 25.0 s]
<b>Sol.2 00.0 s</b>		soluble 2 measure, [00.0 s ... 25.5 s]
<b>Del.Sol.2 00.0 s</b>		soluble 2 measure delay, [00.0 s ... 25.5 s]
<b>Ton so.2 00.0 s</b>		soluble 1 gear motor on time, [00.0 s ... 25.0 s]
<b>Toff so.2 00.0 s</b>		soluble 1 gear motor off time, [00.0 s ... 25.0 s]

Ton indicates the amount of time that the gear motor remains on while Toff indicates the time for which it remains off. The time sequence is Ton-Toff-Ton-Toff-etc for the entire duration of the relative soluble product.

The menu is as follows for key 8

<b>On</b>		engages drink dispensing
<b>Ev. Water 000 cc</b>		amount of water delivered, [000 cc ... 999 cc]

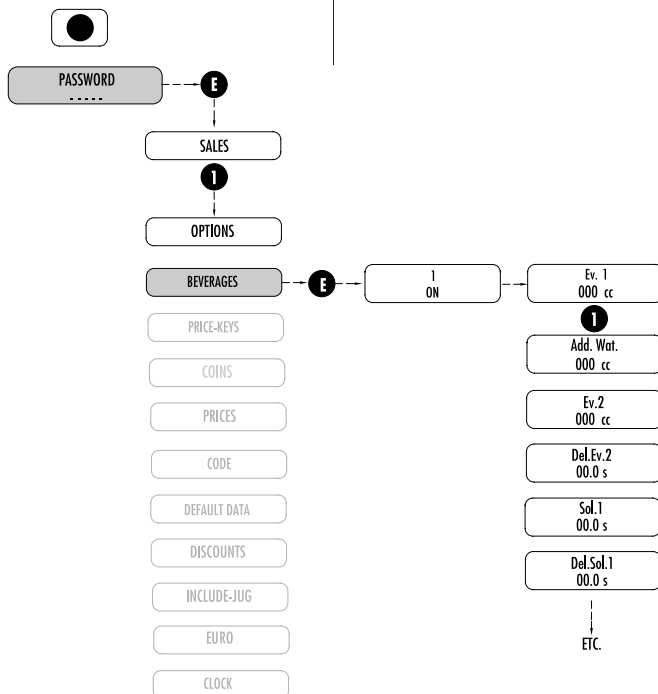
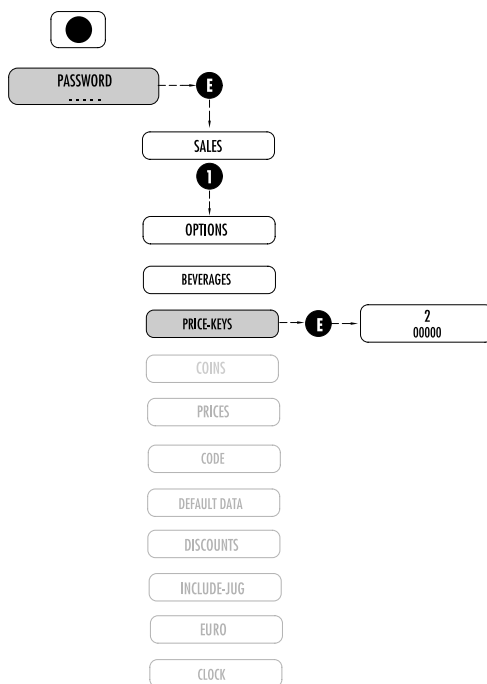


Fig. 7.6

#### 7.2.4 PRICE-KEYS (Fig. 7.7)

This menu indicates the association of a price with a key.  
Line 1 indicates the key to which it refers while the desired price no. is to be set on line 2.

To change the number press keys P1 or O2 to increase or decrease respectively, key P4 (Enter) saves the selection.



**Fig. 7.7**





### 7.2.6 PRICES (Fig.7.9)

Up to 8 prices are available and singularly applicable to each selection.

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

**"Price 0 0000"**

with the same procedure used for the dose settings, the vending prices are set using the keys P1, P2 and P3.

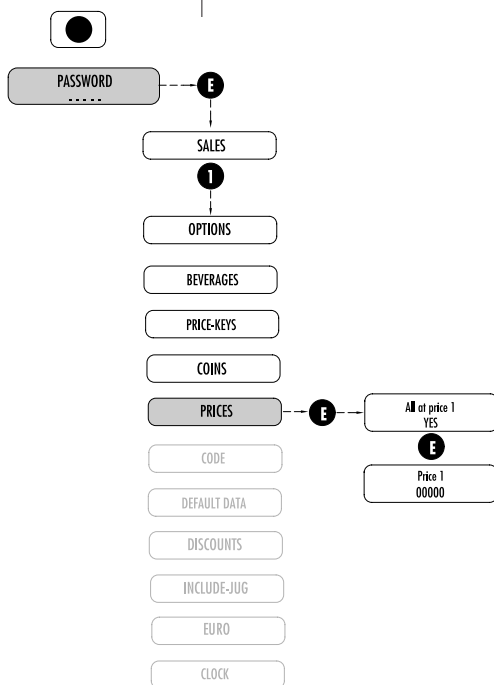
For free vends it is sufficient to set the vending price at zero.

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

**"Price 01 0000"**

Press ESC to return to the PRICE menu.

**Fig. 7.9**



### 7.2.7 CODE (Fig.7.10)

#### Code

for the entering of a new code,  
[00000 ... 99999]

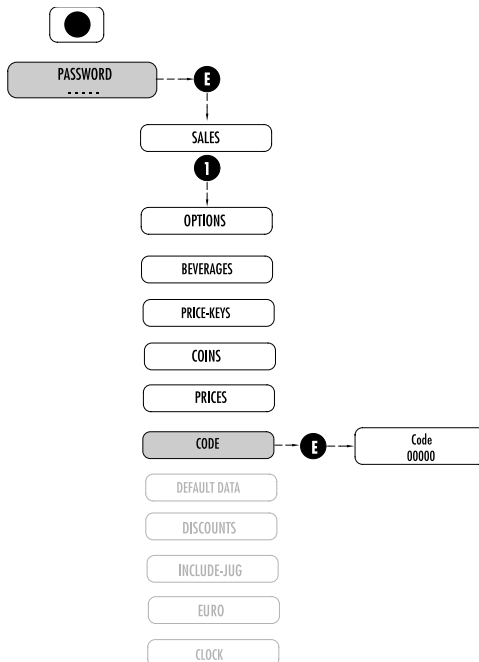


Fig. 7.10

### 7.2.8 DEFAULT DATA (Fig.7.11)

This functions permits the entering of the all default data.

Which as well as the times and measures also include the password, coins, prices, key-price association, general programming, engagement function, decouters, sales data or other.

#### Default data?

To re-enter the default data press YES and press ENTER, [Yes/No]

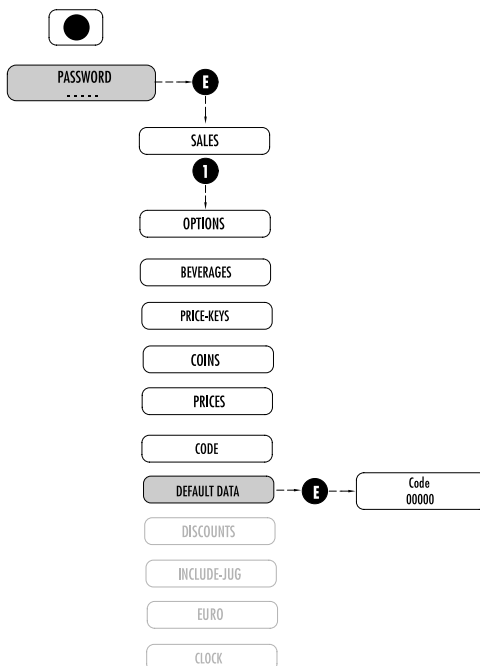


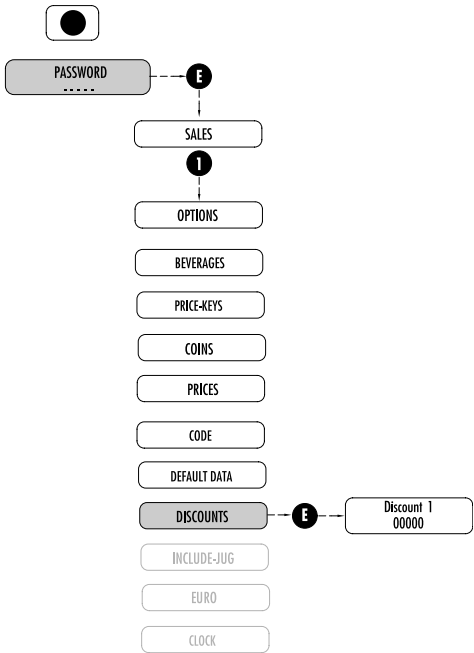
Fig. 7.11

### 7.2.9 DISCOUNTS (Fig.7.12)

#### Discount x

Indicates the discount associated with drink x (x=1..8), [00000 ... 65535]

Fig. 7.12

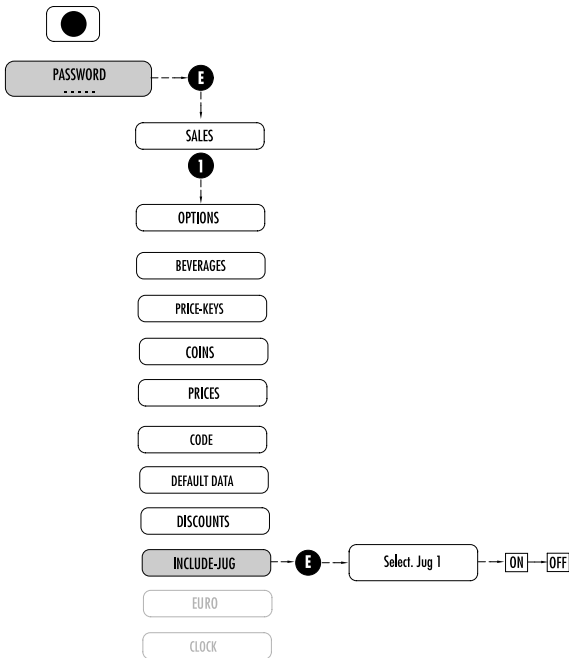


### 7.2.10 INCLUDE JUG (Fig.7.13)

#### X select. Jug

Engages the jug option for selection x (x=1..8), [On/Off]

Fig. 7.13



### 7.2.11 EURO (Fig.7.14)

**Display** engages the conversion display function [On/Off]

**Conv.fact. pos:** position of the conversion factor point [0..6 decimals]

**Conv. Fact.** conversion factor [0..999999]

**Currency/Euro conv.** Selects conversion either from currency into euro, or from euro into currency [On/Off]

**Display point** Position of the decimal point in the euro-currency conversion display [00000,0000.0,000.00]

Note: the "Point display" parameter is displayed only if the currency/euro conversion is off.

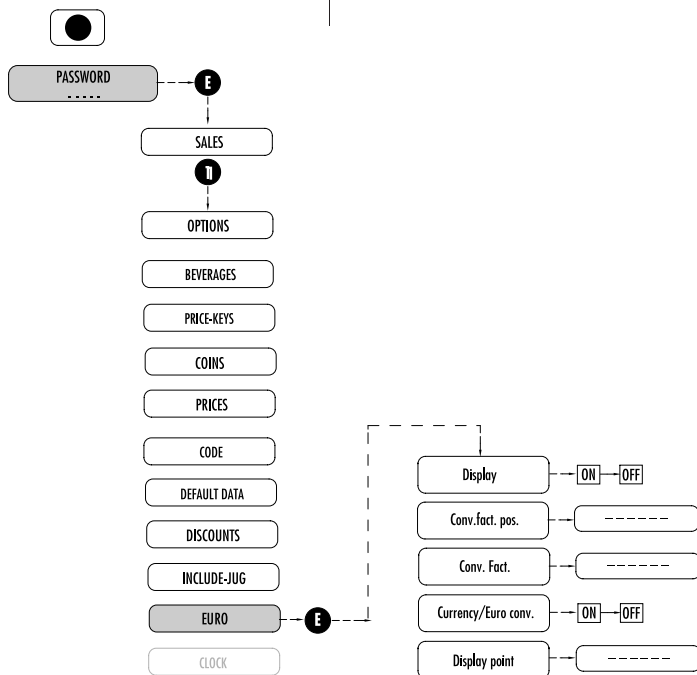


Fig. 7.14

## 7.2.12 CLOCK (Fig.7.15)

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.

### 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]

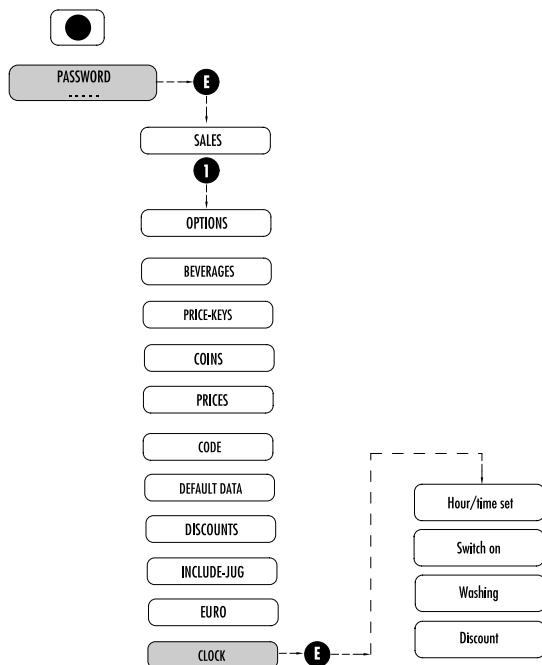
End 1 sets the end time for discounted prices 1  
[00:00..23:59]

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 is not engaged.

Fig. 7.15



## 8.0 MAINTENANCE

Press key P9 for access to this maintenance menu which is positioned on the components side of the keyboard card.

On entering this menu the coin box function is deactivated, the wording maintenance xxx will appear on line 1, in which xxx stands for the heater temperature, while line 2 is blank.

In this state the keyboard keys assume the following significance:

### Version soluble:

- **Key 1: Complete testing of a selection.** After pressing this key on line 2 the word TEST appears and the machine awaits a selection, at the end of the delivery function the machine escapes from its testing condition and returns to a maintenance condition. To return to the maintenance state, without any selection, simply press key P9.
- **Key 2: Testing of the water of a selection.** On line 2 the wording Water test appears and the machine awaits selection. Selection will be made by placing all the solubles at zero, and at the end of the delivery operation the machine escapes from its testing state and return to its maintenance state. To return to maintenance state without making any selection, simply press key P9.
- **Key 3: Alarm reset.** Cancels all alarms. The reset message is displayed on line 2 for two seconds.
- **Key 4: Coffee mixer washing.** On pressing this key the coffee solenoid is engaged, after 0.5" the pump is activated and after 0.5" the coffee mixer for 10", at the end of which there is a pause of 6". During this time the washing message is displayed on line 1 and on line 2. Wait for the message. At the end of this operation we escape from the washing condition and return to the maintenance state.
- **Key 5: Milk/chocolate mixer.** The same as key 4 with the only difference being that the solenoid valve and the milk/chocolate mixer is engaged.
- **Key 6: Tea mixer washing.** The same as key 4 with the only difference being in the activation of solenoid valve and mixer.
- **Key 7: Alarm scroll.** Used to scroll the alarms and signals if present. Any signals are displayed on line 2 as soon as we enter maintenance mode, the line remains blank if there are no signals. Display during the maintenance state is not automatically updated, the key should be pressed again to update it.
- **Key 8:** The total number of non-cancellable entries are displayed for a period of 2 seconds after which we return to maintenance state.
- **Key 9:** To return to normal condition.
- **Key 10:** not used.

### Maintenance panel (version soluble)

COMPLETE TEST	1
WATER TEST	2
ALARM RESET	3
COFFEE MIXER WASHING	4
CHOC./MILK MIXER WASHING	5
TEA MIXER WASHING	6
ALARM SCROLL	7
TOTAL STROKES	8
RETURN TO SERVICE FUNCTION (ON KEYBOARD)	9
	10

## Version espresso

- **Key 1: Complete testing of a selection.** After pressing this key on line 2 the word TEST appears and the machine awaits a selection, at the end of the delivery function the machine escapes from its testing condition and returns to a maintenance condition. To return to the maintenance state, without any selection, simply press key P9.
- **Key 2: Testing of the water of a selection.** On line 2 the wording Water test appears and the machine awaits selection. Selection will be made by placing all the solubles at zero, and at the end of the delivery operation the machine escapes from its testing state and return to its maintenance state. To return to maintenance state without making any selection, simply press key P9.
- **Key 3: Alarm reset.** Cancels all alarms. The reset message is displayed on line 2 for two seconds.
- **Key 4: Coffee unit rotation.** Undertakes rotation of a coffee unit.
- **Key 5: Milk/chocolate mixer washing.** On pressing this key the milk/chocolate solenoid valve is operated and the pump and after 1" the milk/chocolate mixer with the equivalent of 100 cc of water, after which there is a 6" wait period. During which time the washing message is displayed and on line 2 the wording Message wait. At the end of which we escape from the washing condition and return to maintenance state.
- **Key 6: Alarm scroll.** Used to scroll the alarms and signals if present. Any signals are displayed on line 2 as soon as we enter maintenance mode, the line remains blank if there are no signals. Display during the maintenance state is not automatically updated, the key should be pressed again to update it.
- **Key 7:** not used.
- **Key 8:** The total number of non-cancellable entries are displayed for a period of 2 seconds after which we return to maintenance state.
- **Key 9:** To return to normal condition.
- **Key 10:** not used.

## Maintenance panel (version espresso)





## 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  $-1^{\circ}\text{C}$  and a maximum of  $+32^{\circ}\text{C}$  and humidity of not over 70%. Must not be installed in places where cleaning is done with water hoses (ex. big kitchens.). Do not use water jets to clean the machine.

#### 9.1.1 Procedure for distributor cleaning

##### Recommended equipment:

For those responsible for filling up and maintenance of the machine the recommended equipment is as follows:

- Tool carrier case
- Clean uniform
- Disposable gloves
- Clamp for closing the
- Roll of kitchen paper
- Wood or plastic stick
- Bottle of detergent
- Bottle of disinfectant
- "Distributor out of action" sign
- Small table for resting items (optional)

##### Never use:

- Sponges, scourers, cloths
- Brushes
- Screwdrivers or metallic objects.

##### To ensure hygiene:

- Use disinfectants

##### For cleaning:

- Use detergents and/or 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)

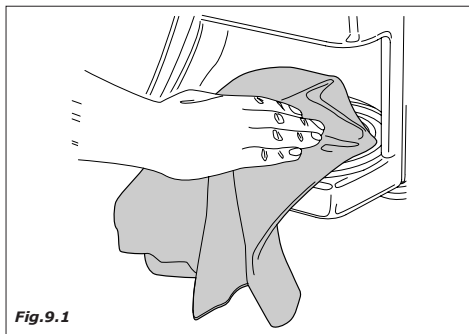


Fig.9.1

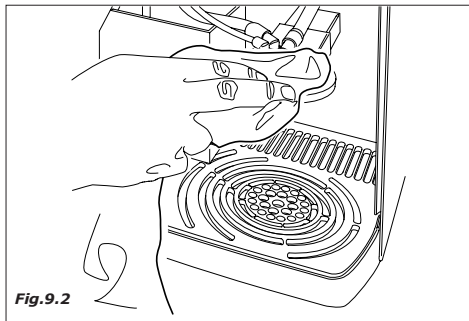


Fig.9.2

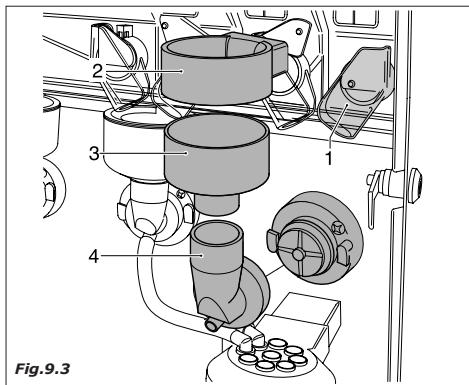


Fig.9.3



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

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

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

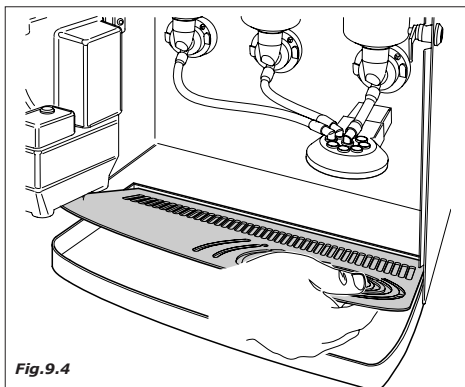


Fig.9.4

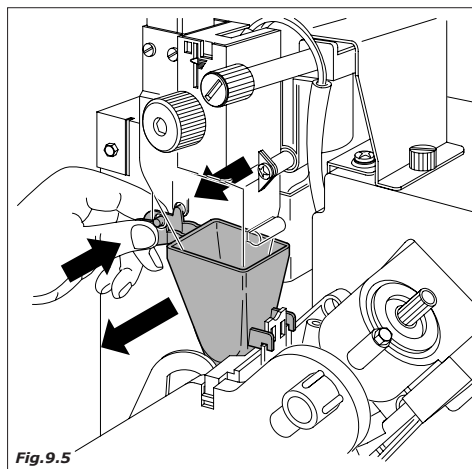


Fig.9.5

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

**Last step:** coin collection.

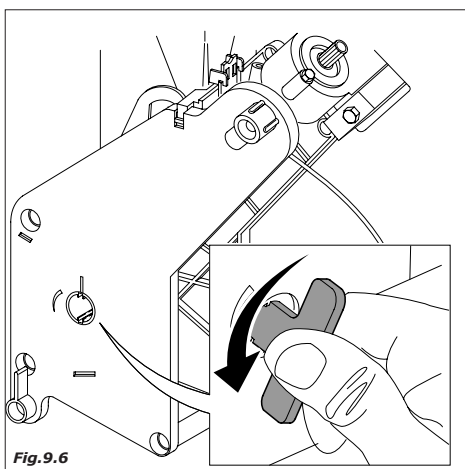


Fig.9.6

#### 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).

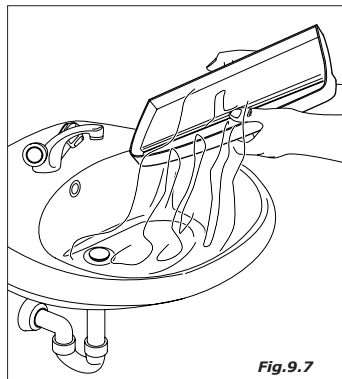


Fig.9.7

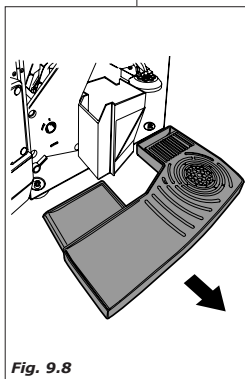


Fig. 9.8

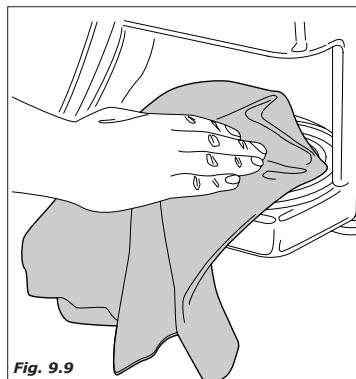











Fig. 9.9

### 9.1.5 Product loading

When necessary provide for the loading of the products and/or consumption materials of the automatic vending machine. For these operations please refer to the operations described under chapter 6.0 (first installation).

  <b>9.2 Recommended maintenance</b>	<b>EVERY DAY</b>	<b>EACH WEEK</b>	<b>EACH MONTH</b>	<b>EVERY SIX MONTHS</b>	<b>EVERY 10.000 DRINKS</b>
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.					
Substitute the filter gaskets.					

### 9.2.1 Ordinary and Extraordinary Maintenance

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



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

Entrust the operations mentioned here below to qualified personnel. If the operations require that the distributor be switched on, entrust them to specially trained personnel.

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

Monthly effect the debacterisation of all the parts in contact with food substances using chlorine based solutions following the operations already described under chapter 6.5.

### 9.2.3 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 **A**, rotate lever **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.

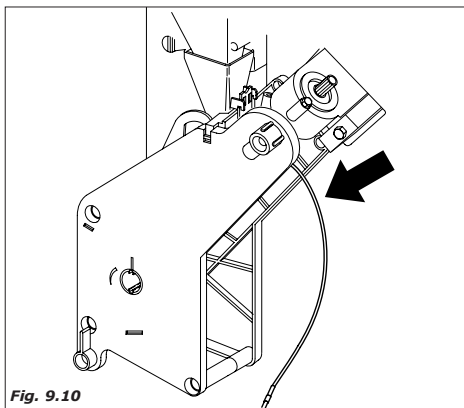


Fig. 9.10

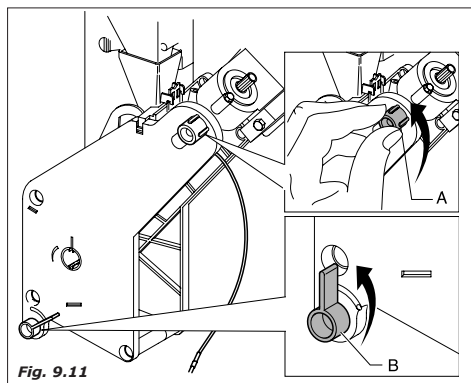


Fig. 9.11

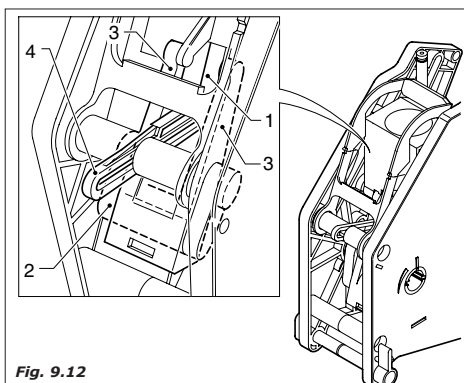


Fig. 9.12

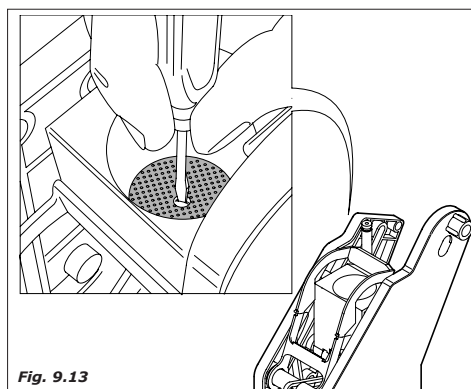


Fig. 9.13

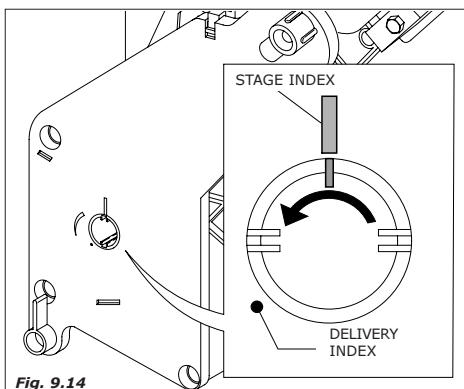


Fig. 9.14

### 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 (version soluble only)

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.

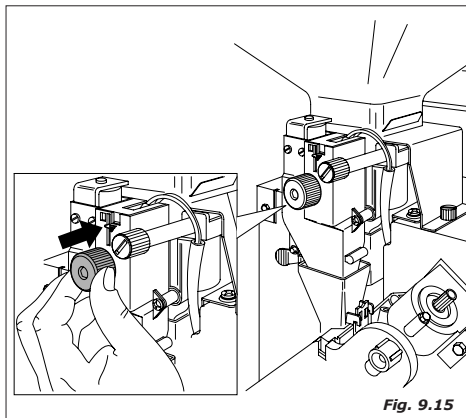


Fig. 9.15

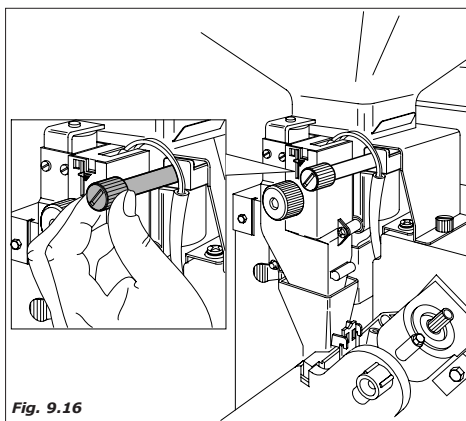


Fig. 9.16



## 9.4 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. 9.17)
- perform a thorough cleaning of all the parts in contact with food substances according to what has already been described.
- empty the liquid waste bin carefully
- eliminate the spent grounds bag
- clean with a cloth all the internal and external surfaces of the machine.
- protect the outside of the machine with a plastic film wrapping or bag.
- stock in a dry and protected place where the temperature is not less than 1° C.

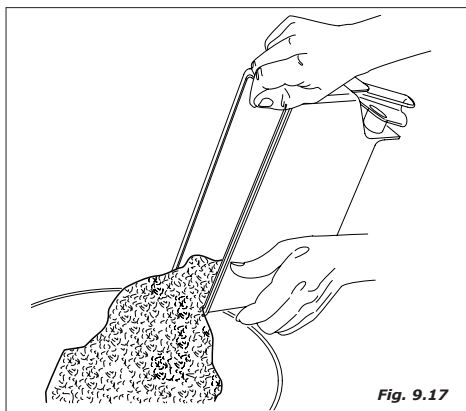




































Fig. 9.17

## 10.0 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
Alarm Eprom error	<i>Is engaged in the event of an eprom error. The message eprom error appears on line 2. On engaging the reset message the missing default data will also be recharged on the eprom (only if this alarm is present).</i>	 Undertake alarm reset.
Alarm - Fails to heat	<i>Is engaged if the heater resistance remains on for over 5 consecutive minutes and the heater temperature is over 10°C under the set temperature. This alarm conditions switches off all the delivery outputs involved, and deactivates the coin box. The message Heating failure appears on line 2.</i>	 Check the programming parameters. Check clixon and reset is necessary.
		 Check the NTC probe and relative connections and replace if necessary.
		 Check the power supply at the ends of the heating resistance element.
		 Check the Ohms value of the resistance with distributor off.
Alarm - Coinbox error	<i>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.</i>	 These alarms are self-resetting.
Alarm - Scale factor	<i>In the use of the Executive coin box function (not on price holding mode) if a price value is set which multiplied by the base currency of the coin box exceeds the permitted price range a scale factor message appears. This alarm condition is self-resetting, as soon as the set level returns to within the permitted limits.</i>	 Check the correct base currency value in the programming parameters of the coin box.
<b>Memorized alarms</b>		
ALARM - DRINK NOT AVAILABLE	<i>Is engaged in the event of E05 signal and in the event of any of the following signals E02, E03, E04, E06 y E025.</i>	 Check signals
<b>Non memorized alarms</b>		
<b>E08 WATER EMPTY</b>	<i>Is engaged 2 seconds after the sensing of the water empty micro. It switches off the resistance and re-starts the timeout for E12. For the first 4 seconds the water filling signal appears, while the water filling solenoid valve is open then water empty message is displayed. This message deactivates the coin box and drink delivery function. It is self-resetting</i>	 Check the water capacity of the mains supply. Water inlet solenoid valve Efficient function of the tank micro.
		 Empty the liquid dregs bucket
		 Check the tank micro and replace if necessary
<b>E12 TEMP. &lt;60C</b>	<i>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.</i>	 Check the programming parameters. Check the clixon
<b>Memorized signals</b>		
<b>E02 GRINDER</b>	<i>Is engaged if the programmed grinder time out is engaged. The display shows the signal "lacks coffee". The sum is credited only in the case of instant grinding.</i>	 Undertake to fill the container
		 Check that there is no impediment between the grinders. Check the electric motor connections.
<b>E03 COFFEE UNIT</b>	<i>Is engaged if the programmed coffee unit timeout is engaged. The display shows the message "no coffee". The sum is recredited</i>	 Check for any possible faults and motor electrical power supply
		 Check the micro-switch and replace if necessary.

DISPLAY MESSAGE	PROBABLE CAUSE	REMEDY
<i>Memorized signals</i>		
<b>E04 ESPRESSO PUMP</b>	<i>Is engaged during the coffee water deliver function unless at least 10 cc is delivered in the programmed pump timeout. The display shows the message "no coffee". The sum is re-credited</i>	 Check the pump and replace if necessary.
		 Check the coffee solenoid and replace if necessary.
		 Check the volumetric counter and replace if necessary
<b>E05 SOL. PUMP</b>	<i>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 water is not being delivery.</i>	 Check the pump and replace if necessary
		 Check the soluble product solenoid valve and replace if necessary
		 Check the volumetric counter and replace if necessary
<b>E06 COFFEE MEASURER</b>	<i>Is engaged in the event that during the coffee release stage the measure dose remains pressed. The display shows the message "no coffee". The sum is re-credited</i>	 Check the measure micro-switch and replace if necessary
		 Check for any obstructions and remove if necessary
<b>E11 NTC PROBE</b>	<i>Engaged if the temperature probe short circuits or the circuit is open. The resistance is switched off if the NTC short circuits or is open. On ignition a delay of 30 seconds is envisaged before alarm condition is ascertained.</i>	 Check the NTC probe resistance and replace if necessary
		 Check the electrical connections.
<b>E16 CAPACITY</b>	<i>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 °° as the last character. This signal prevails over those of the de-counters (the three subsequent ones).</i>	 See note (1)
<b>E22 PURIFIER</b>	<i>Is engaged when the value of the purifier decounter is equivalent to zero.</i>	 Regenerate the purifier. Reset the programmed purifier decounter.
<b>E23 GRINDERS</b>	<i>Is engaged when the value of the grinder decounter is equivalent to zero.</i>	 Replace the grinders. Reset the programmed grinder decounters.
<b>E24 FILTERS</b>	<i>Is engaged when the value of the coffee filter decounter falls to zero.</i>	 Replace the filters. Reset the programmed grinder decounter.
<i>Omnifet memorized signals</i>		
<b>E30 - OMNIFET XX</b>	<i>Is engaged in the event of a fault on the omnifet xx.</i>	 Check for any short circuits relative to the omnifet. Remedy the cause and switch off the distributor for a few minutes. Undertake alarm reset operation
<b>xx Omnifet controlled output (soluble version)</b>		
0	Hot water solenoid	8 milk gear motor
1	(not used)	9 peach tea gear motor
2	milk/chocolate solenoid	10 chocolate gear motor
3	(not used)	11 milk/chocolate beater
4	tea solenoid	12 (not used)
5	sugar gear motor	13 coffee beater
6	coffee solenoid	14 tea beater
7	lemon tea gear motor	15 (not used)

DISPLAY MESSAGE	PROBABLE CAUSE	REMEDY
<b>xx Omnifet controlled output (espresso version)</b>		
0 water entry solenoid		8 milk gear motor
1 (not used)		9 stroke counter
2 chocolate milk solenoid		10 chocolate gear motor
3 (not used)		11 milk/chocolate beater
4 hot water solenoid		12 (not used)
5 (not used)		13 (not used)
6 coffee solenoid		14 coffee magnet
7 (not used)		15 (not used)
PUMP OMNIFET	Is engaged when an omifet pump fault is revealed	 Check for any short circuits on the OMNIFET PUMP. Eliminate the cause, and then switch off the distributor for a few minutes. Carry out alarm reset operations.
		 Check the pump and replace if necessary
Non memorized signals		
E25 NO UNIT	Senses no unit condition. This alarm deactivates the coin box and drink selection. This alarm is self-resetting.	 Check the unit presence micro-switch and replace if necessary.

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

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

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

- \* to indicate the error **E16 VOLUME**
- α to indicate the **purifier** regeneration
- & to indicate the substitution of the **filters**
- \$ to indicate the substitution of the **grinder blades**
- # to indicate the substitution of the **filters** and of the **grinder blades**
- % to indicate the **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 **filters** 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.

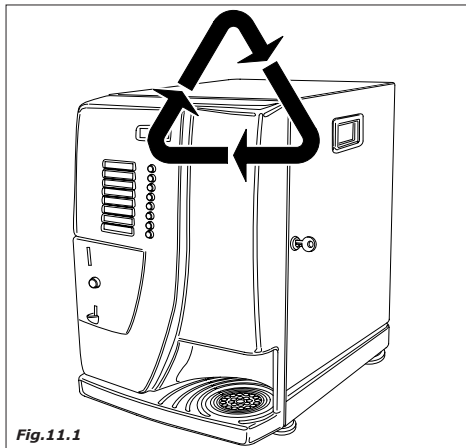
A safety disposition is foreseen "**group present**" (A Micro switch assembled on the boiler-group support) in the versions with plastic group; in the absence of the group the machine indicates to SELECT DRINKS WITHOUT ESPRESSO COFFEE.

## 11.0 DISMANTLEMENT

Proceed with the emptying of the products and of the water as described in the previous paragraph.

For the dismantlement we advise to disassemble the machine dividing the parts according to their composition (plastic, metal etc.).

Subsequently entrust to specialised companies the parts divided in this manner. If there is a cooling unit, give the latter, without disassembling, it to specific companies authorised for the scrapping of the unit in question.



**Fig.11.1**

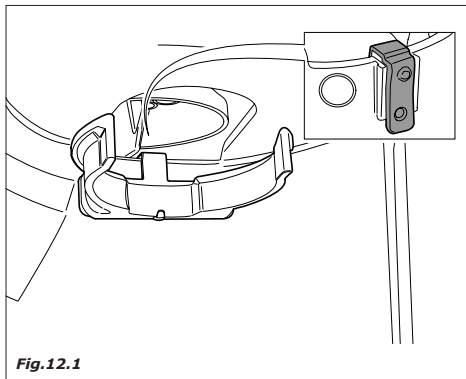
## 12.0 ACCESSORIES

### 12.1 Cup fork kit

A cup fork element is available on request which can be assembled inside the delivery compartment (*Fig.12.1*) which can be used to secure the cup in place on delivery of the drink.

The kit consists of:

- Fork element
- Fixture screw
- Soluble coffee injector



**Fig.12.1**





## FIRST INSTALLATION FORM

### WARRANTY ACTIVATION

Dear Customer, The hereby form is a necessary feed-back for the Bianchi Vending Group S.p.A. Considered this form as formal report of first installation, the BVG, kindly, asks you to fill this form in, once the process of first installation of the unit has been performed and to return it back to us. Please send it via FAX or e-mail as specified below. Should anything go wrong during the first installation process, please, specify the matter occurred with relative brief description of the fact in the dedicated box then send this form to the same fax n° or e-mail address as below. Bianchi Vending Group S.p.A. will activate the 1 (one) year warranty, starting from the moment the hereby form is received correctly filled in all voices. Therefore, in addition to what said, in case the hereby form is not returned to the BVG, automatically the company will start the warranty from the date of sale of the unit.

Warranty policy available in the Use & Maintenance manual attached to machines and on the: [www.bianchindustry.com](http://www.bianchindustry.com)

To be sent FAX: +39 035 883304 or e-mail: [customercare@bianchivending.com](mailto:customercare@bianchivending.com)

Model:		Serial Number	
Sender:		Sender tel. N°	
(company title)		(eventual call back by the BVG)	
Installation Date		Sender E-mail/ Fax N° (to confirm the warranty being activated)	

MATTER DURING THE FIRST INSTALLATION?

YES

NO

IF YES, WRITE HERE A DESCRIPTION

--

MATTER DURING FIRST INSTALLATION, SPECIFY PARTS REQUIRED

	Code	Qty
Missing parts		
Wiring/cable		
Electronics		
Power supply		
Keypad		
Hydraulic circuit		
Pump		
Electrovalve		
Motor/electromagnet		
Microswitch		
Coffee Group		
Grinder / doser		
Cup dispenser		
Stirrer Dispenser		
Refrigerator group		
Water filter		
Other		

Satisfaction note

(write eventual notes  
about product and/or  
service provided by the  
BVG. This to improve  
and better satisfy Your  
needs in the future)

--





## WARRANTY CLAIM

Dear Customer, The hereby form is a formal warranty claim to be sent via fax or e-mail as specified below. Please, to describe the matter occurred in the dedicated box. Beware, the BVG, could ask to return the faulty component back for quality inspection purposes. On top of that, to verify the right claiming

Warranty policy available in the Use & Maintenance manual attached to machines and on the: [www.bianchindustry.com](http://www.bianchindustry.com)

To be sent FAX: +39 035 883304 or e-mail: [customercare@bianchivending.com](mailto:customercare@bianchivending.com)

Model:		Serial number	
Sender (company title)		Customer tel No. (eventual call back by the BVG)	
Date		Sender E-mail/ Fax N° (to confirm the warranty being activated)	

MATTER OCCURED

--

PARTS REQUIRED

	Code	Qty
Missing parts		
Wiring/cable		
Electronics		
Power supply		
Keypad		
Hydraulic circuit		
Pump		
Electrovalve		
Motor/Electromagnet		
Microswitch		
Coffee Group		
Grinder/doser		
Cup Dispenser		
Stirrer Dispenser		
Refrigerator group		
Water filter		
Other		

Satisfaction note

(write eventual notes about  
product and/or service provided  
by the BVG. This to improve and  
better satisfy Your needs in the  
future)

--





Here below are the STANDARD configurations of the selection labels to insert into the keyboard of the indicated machine.

### *Keyboard Sprint E2S*



### *Keyboard Sprint I4S*



### *Keyboard Sprint I5S*



### *Keyboard Sprint I6S*





1	26.11.2008	nuovo preso interruttore, portafusibili, filtro a rete


35	34	21
31	33	32
30	20	20

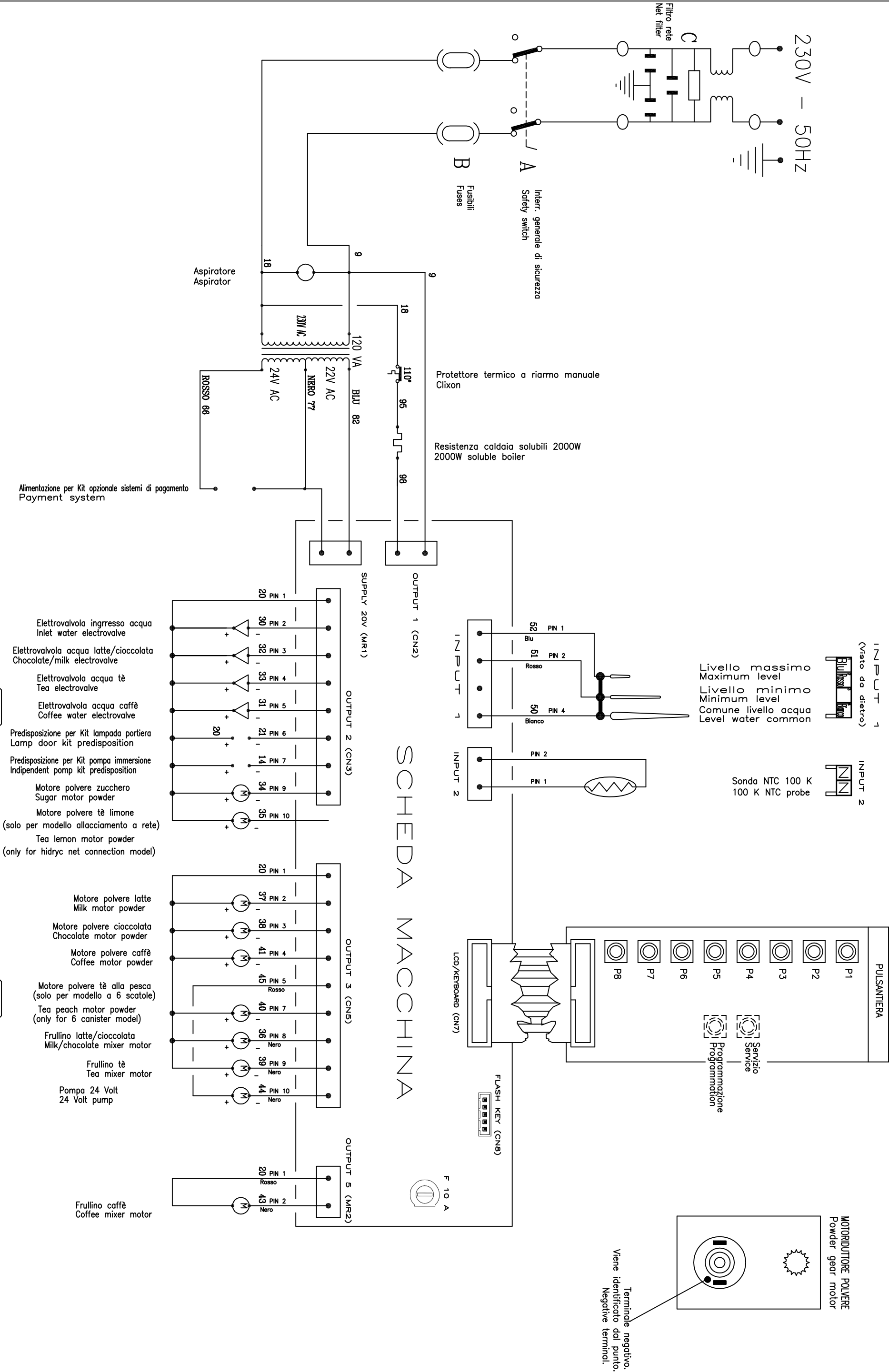
OUTPUT 2 (CN3)  
(Visto da dietro)

44	39	36	40
45	41	38	37
20	20	20	20

OUTPUT 3 (CN5)  
(Visto da dietro)

32	31	44
33	20	45

CONNETTORE CORDONE ELETTROVALVOLE  
(Visto da dietro)  
ELETTROVALVE CONNECTION





# SCHEMA IDRAULICO HYDRAULIC SCHEME SCHEMA HYDRAULIQUE

Cod. 11105621-01  
Data 12.10.2009 Dis. Bertola  
Ediz. 1

## ITALIANO

- 1 Scatola dosatrice cioccolato
- 2 Scatola dosatrice latte
- 3 Vaschetta raccoglifondi
- 4 Caldaia
- 5 Elettrovalvola tre vie caffè
- 6 Gruppo caffè
- 7 Blocchetto elettrovalvole solubili
- 8 Serbatoio autonomo estraibile
- 9 Raccordo a "Y"
- 10 Raccordo pass-paratia
- 11 Filtro acqua
- 12 Vaschetta riserva acqua
- 13 Bypass
- 14 Rilevatore di flusso
- 15 Pompa
- 16 Cup station
- 17 Vaschetta raccogliliquidi
- 18 Raccordo di scarico
- 19 Frullino

## ENGLISH

- 1 Chocolat canister
- 2 Lait canister
- 3 Waste bin
- 4 Boiler
- 5 Coffee valve
- 6 Coffee unit
- 7 Instant valve
- 8 Water canister estr.
- 9 "Y" Junction
- 10 Pipe - fitting
- 11 Water filter
- 12 Water canister
- 13 Bypass
- 14 Flussimeter
- 15 Pump
- 16 Cup station
- 17 Waste bin
- 18 Junction for waste bin
- 19 Mixer

## FRANCAIS

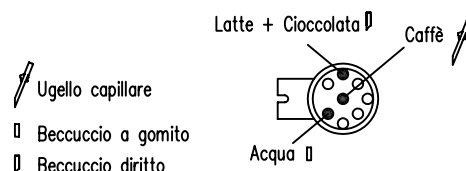
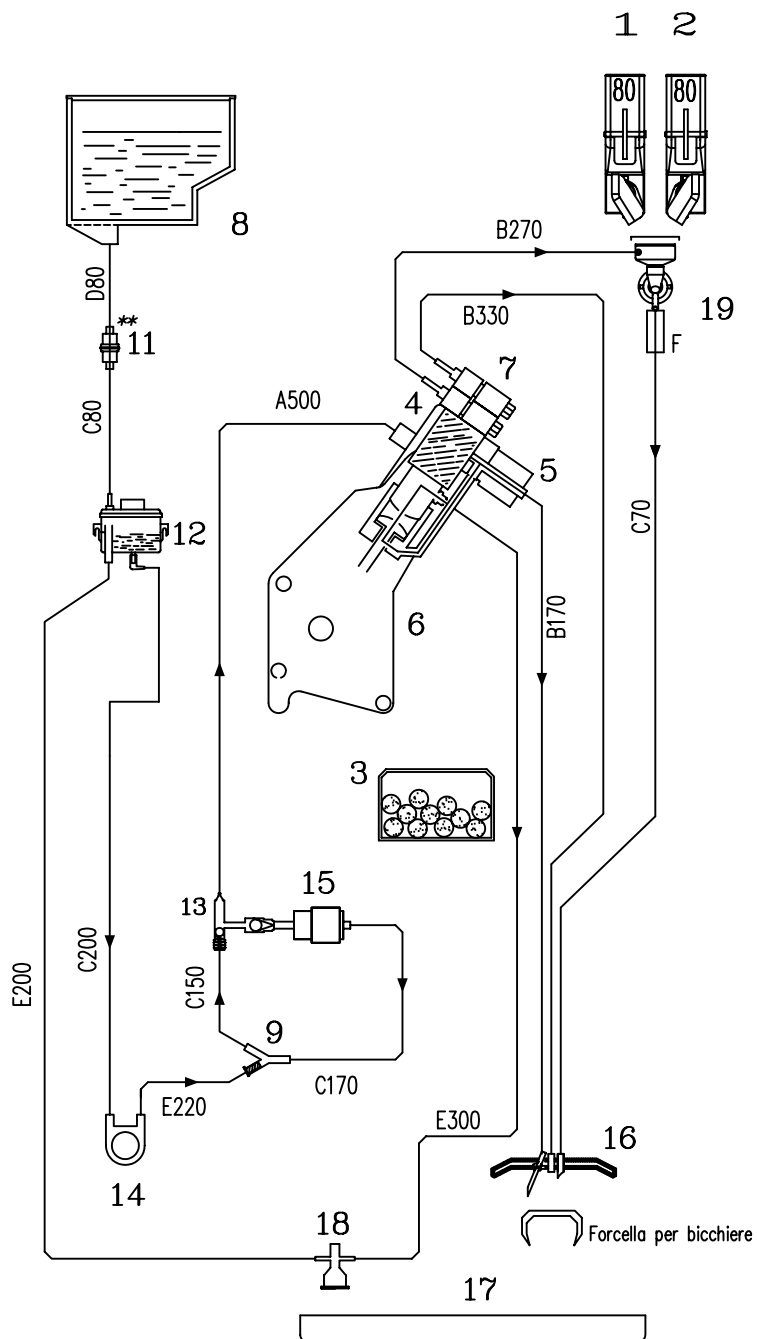
- 1 Trémie doseuse chocolat
- 2 Trémie doseuse lait
- 3 Cuvette fonds café
- 4 Chaudière
- 5 Soupape eletrique 3 voies
- 6 Groupe café
- 7 Pompe
- 8 Cuvette eau estr.
- 9 Raccord 3 voies
- 10 Passe - paroi
- 11 Filter de l'eau
- 12 Cuvette eau
- 13 Bypass
- 14 Indicateur de flux
- 15 Pompe
- 16 Cup station
- 17 Cuvette ramasse liquide
- 18 Raccord de déchargé
- 19 Mixer

A = Tubo teflon 4x6  
B = Tubo silicone 3x6 AM (C)  
C = Tubo silicone 5x9 AM (C)  
D = Tubo silicone 8x12  
E = Tubo silicone 5x9  
F = Riduzione latte

\* = Vite + rondella per ferma tubo  
(cod.vite.32010226 cod.rondella.35155216)

\*\* = Aggiunta tubo 5x9  
come spessore su filtro

DENOMINAZIONE  
SPE 09 NB  
SPE 12 NB





## ITALIANO

- 1 Scatola dosatrice cioccolata
- 2 Scatola dosatrice latte
- 3 Vaschetta raccoglifondi
- 4 Caldaia
- 5 Elettrovalvola tre vie caffè
- 6 Gruppo caffè
- 7 Blocchetto elettrovalvole solubili
- 8 Vaschetta acqua
- 9 Raccordo a "Y"
- 10 Tappo
- 11 Filtro acqua
- 12 Depuratore
- 13 Elettrovalvola ingresso acqua
- 14 Rilevatore di flusso
- 15 Pompa
- 16 Cup station
- 17 Vaschetta
- 18 Raccordo di scarico
- 19 Frullino
- 20

## ENGLISH

- 1 Chocolat canister
- 2 Lait canister
- 3 Waste bin
- 4 Boiler
- 5 Coffee valve
- 6 Coffee unit
- 7 Instant valve
- 8 Water canister
- 9 "Y" Junction
- 10 Tap
- 11 Water filter
- 12 Depurator
- 13 Valve inlet water
- 14 Flussimeter
- 15 Pump
- 16 Cup station
- 17 Waste bin
- 18 Junction for waste bin
- 19 Mixer
- 19

## FRANCAIS

- 1 Trémie doseuse chocolat
- 2 Trémie doseuse lait
- 3 Cuvette fonds café
- 4 Chaudière
- 5 Soupape eletrique 3 voies
- 6 Groupe café
- 7 Pompe
- 8 Cuvette eau
- 9 Raccord 3 voies
- 10 Bouchon
- 11 Filter de l'eau
- 12 Epurateur
- 13 Soupape eletrique entrée eau
- 14 Indicateur de flux
- 15 Pompe
- 16 Cup station
- 17 Cuvette ramasse liquide
- 18 Raccord de déchargé
- 19 Mixer
- 19

A = Tubo teflon 4x6  
B = Tubo silicone 3x6 AM (C)  
C = Tubo silicone 5x9 AM (C)  
D = Tubo silicone 8x12  
E = Tubo silicone 6x9  
F = Tubo pvc crist. 12x16  
G = Tubo pvc crist. 9x12  
H = Riduzione latte  
I = Riduzione caffè

L = Tubo silicone 5x9

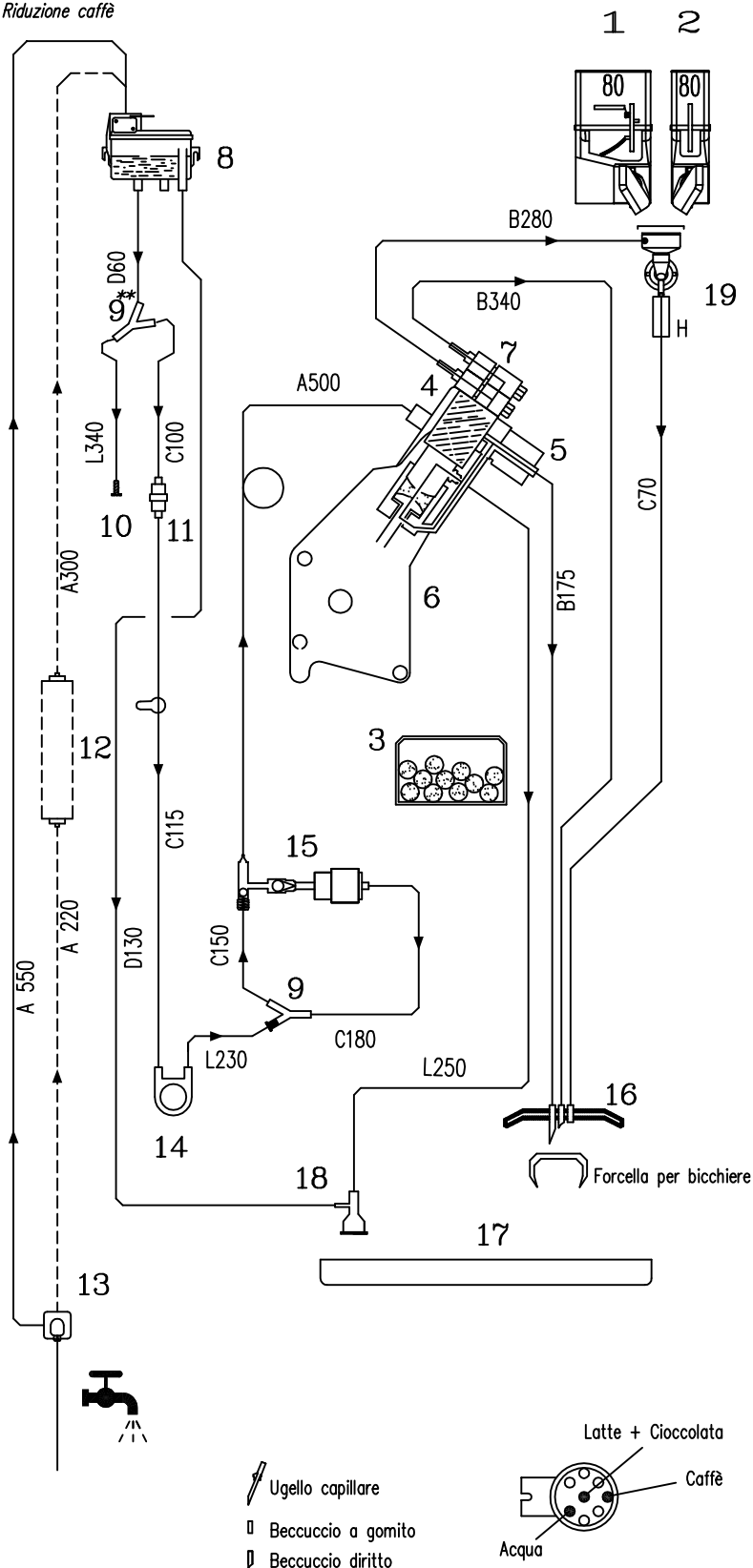
\* = Vite + rondella per ferma tubo  
(cod.vite.32010226 cod.rondella.35155216)

\*\* = Aggiunta tubo 6x9  
come spessore su filtro

## DENOMINAZIONE

SPE 05 NB

SPE 10 NB



## ITALIANO

- 1 Scatola polvere tè
- 2
- 3 Scatola dosatrice doppia cioccolata
- 4 Scatola dosatrice latte
- 5 Scatola dosatrice caffè
- 6 Scatola dosatrice zucchero
- 7 Blocchetto elettrovalvole solubili
- 8 Caldaia
- 9 Clixon antiebollizione
- 10 Strozatura per elettrovalvola antitrabocco
- 11 Supporto ugelli erogazione
- 12 Vaschetta raccogliliquidi
- 13 Elettrovalvola ingresso acqua acqua con protezione antitrabocco
- 14 Raccordo di scarico
- 15 Raccordo per tubo
- 16 Riduttore di portata da 12 cc/sec  $\varnothing$  1,6 mm

## ENGLISH

- 1 Tea product box
- 2
- 3 Double chocolate or milk box
- 4 Milk product box
- 5 Coffee product box
- 6 Sugar product box
- 7 Instant valve
- 8 Boiler
- 9 Antibolling system (safety heat sensor)
- 10 "T" junction for inlet valve
- 11 Cup station
- 12 Waste bin
- 13 Inlet valve with waterblock
- 14 Junction for waste bin
- 15 Pipes junction
- 16 Water flow reductor by 12 cc/sec  $\varnothing$  1,6 mm

## FRANCAIS

- 1 Trémie doseuse "The"
- 2
- 3 Double trémie doseuse "Chocolat"
- 4 Trémie doseuse "Lait"
- 5 Trémie doseuse "Café"
- 6 Trémie doseuse "Sucre"
- 7 Soupape eletrique solubles
- 8 Chaudière
- 9 Clixon
- 10 Etranglement pour soupape eletrique entrée eau
- 11 Cup station
- 12 Cuvette ramasse liquide
- 13 Soupape eletrique entrée eau
- 14 Raccord de Déchargé
- 15 Raccord pour tube
- 16 Gicleur de 12 cc/sec  $\varnothing$  1,6mm

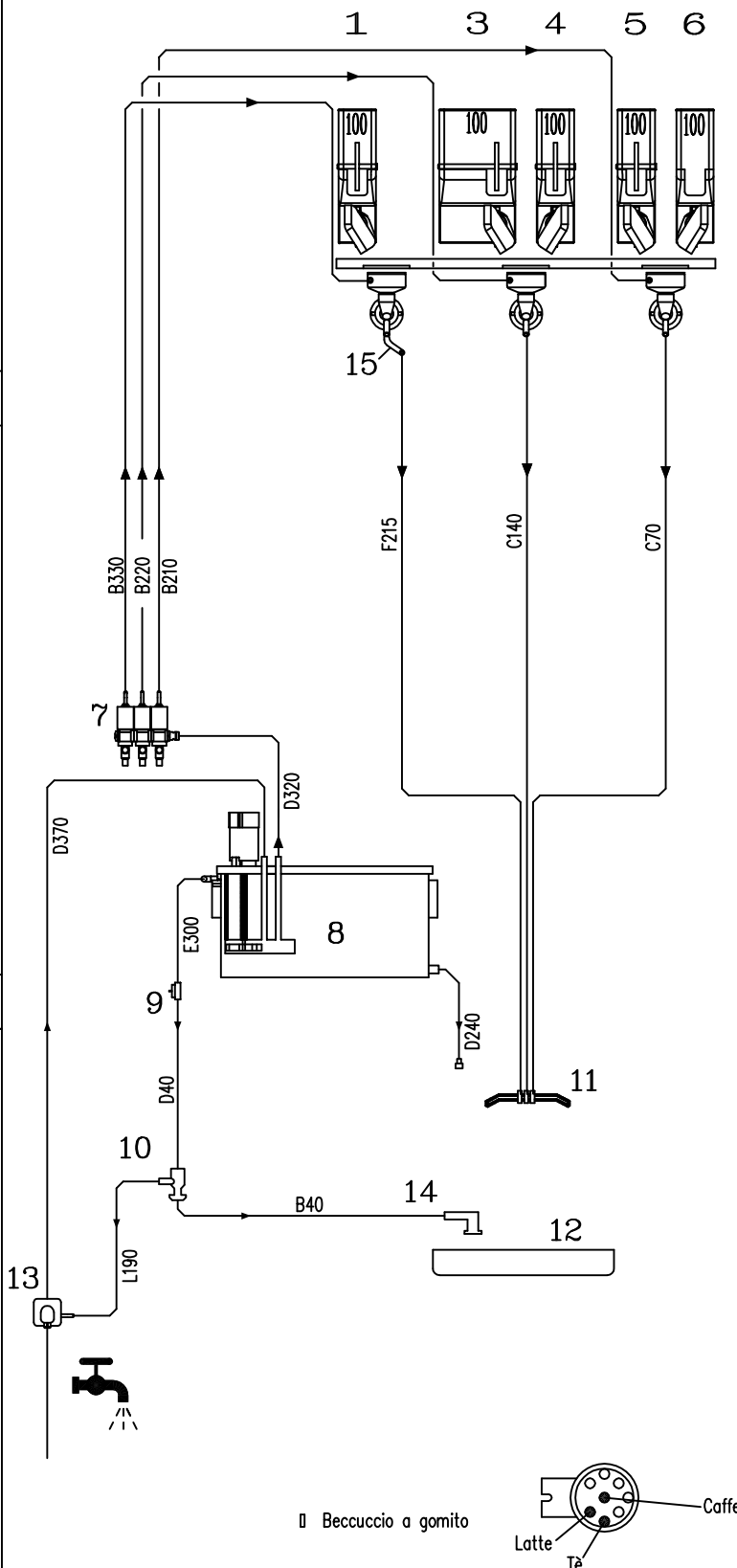
A = Tubo teflon 4x6  
B = Tubo silicone 3x6 AM (C)  
C = Tubo silicone 5x9 AM (C)  
D = Tubo silicone 8x12  
E = Tubo silicone 8x11  
F = Tubo silicone 7x11 AM(C)  
G = Tubo pvc crist. 9x12  
H = Riduzione latte  
I = Riduzione caffè

L = Tubo silicone 5x9

\* = Vite + rondella per ferma tubo  
(cod.vite32010226 cod.rondella35155216)

\*\* = Aggiunta tubo 6x9  
come spessore su filtro

DENOMINAZIONE		
SPI	07	STD
SPI	10	STD



## ITALIANO

- 1 Serbatoio autonomo estraibile
- 2 Fermaglio
- 3 Scatola dosatrice cioccolato
- 4 Scatola dosatrice latte
- 5 Scatola dosatrice caffè
- 6 Scatola dosatrice zucchero
- 7 Bloccetto elettrovalvole solubili
- 8 Caldaia
- 9 Clixon antiebollizione
- 10 Riduttore di portata da 12 cc/sec Ø 1,6 mm
- 11 Supporto ugelli erogazione
- 12 Vaschetta raccogli liquidi
- 13 Elettrovalvola
- 14 Raccordo di scarico
- 15 Flangia di miscelazione
- 16 Tappo per sfiato
- 17 Tappo
- 18 Strozzatura per EV antitrabocco
- 19 Raccordo pass-paratia
- 20 Camera di miscelazione

## ENGLISH

- 1 Water tank estr.
- 2 Pipe holder
- 3 Chocolate or milk canister
- 4 Chocolate or milk canister
- 5 Coffee product canister
- 6 Sugar product canister
- 7 Instant valve
- 8 Boiler
- 9 Antiboiling system (safety heat sensor)
- 10 Water flow reductor by 12 cc/sec Ø 1,6 mm
- 11 Erogation system
- 12 Waste bin
- 13 Inlet valve
- 14 Junction for waste bin
- 15 Mixer support
- 16 Tap
- 17 Tap
- 18 "T" Junction for inlet valve
- 19 Pipe fitting
- 20 Mixer

## FRANCAIS

- 1 Réservoir autonome estr.
- 2 Broche
- 3 Trémie doseuse "Chocolat"
- 4 Trémie doseuse "Lait"
- 5 Trémie doseuse "Café"
- 6 Trémie doseuse "Sucre"
- 7 Soupape électrique solubles
- 8 Chaudière
- 9 Clixon 75°
- 10 Gicleur 12cc/sec Ø1,6mm
- 11 Cup station
- 12 Cuvette ramasse liquide
- 13 Soupape électrique entrée eau
- 14 Raccord de déchargé
- 15 Support pur mixer
- 16 Bouchon pour soupape électrique
- 17 Bouchon
- 18 Etranglement a "T"
- 19 Passe paroi
- 20 Batteurs

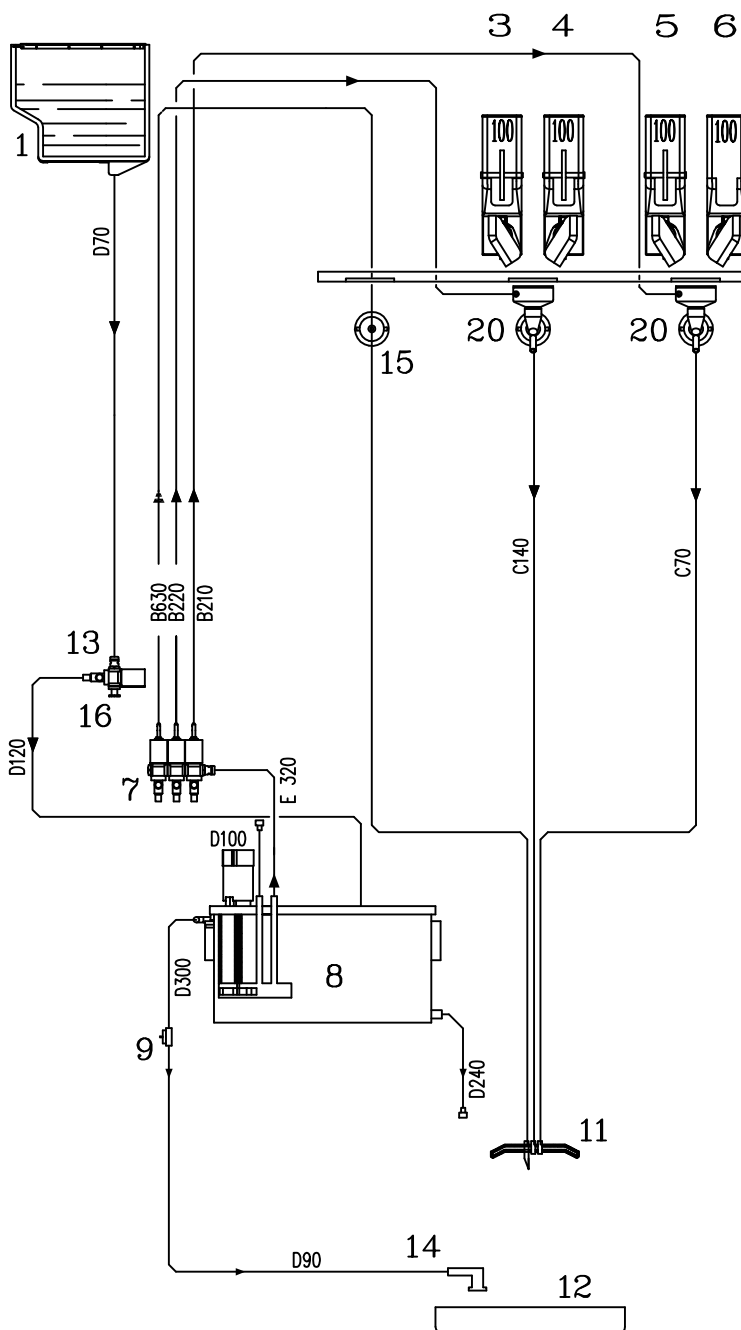
A = Tubo teflon 4x6  
B = Tubo silicone 3x6 AM (C)  
C = Tubo silicone 5x9 AM (C)  
D = Tubo silicone 8x12  
E = Tubo silicone 6x9  
F = Tubo pvc crist. 12x16  
G = Tubo pvc crist. 9x12  
H = Riduzione latte  
I = Riduzione caffè

L = Tubo silicone 5x9

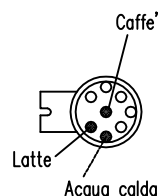
\* = Vite + rondella per ferma tubo  
(cod.vite.32010226 cod.rondella.35155216)

\*\* = Aggiunta tubo 6x9  
come spessore su filtro

DENOMINAZIONE
SPI09NB
SPI13NB



□ Beccuccio a gomito  
□ Beccuccio diritto smussato  
Cod. 05096035





**BIANCHI VENDING GROUP S.p.A.**

*Corso Africa 9 - 24040 Località Zingonia, Verdellino (BG) - ITALIA  
tel. +39.035.4502111- fax +39.035.883.304*