

USE AND MAINTENANCE MANUAL

BVM 303 GAIA

CERT. N° 9191 BNVN

CSQ

CONNECTOR

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:

"BVM 303 GAIA"

is complying with the safety measures foreseen by the directives:

1. Low Voltage Directive EEC $73/23 \Rightarrow$ EEC $93/68 \Rightarrow$ EEC2006/95 - LV -

2. Electromagnetic compatibility EEC 89/336 \Rightarrow EEC 91/263 \Rightarrow EEC 92/31 \Rightarrow

 $93/68 \Rightarrow EEC 2004/108$ -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 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 \Rightarrow 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), 01/05/2008

CHIEF EXECUTIVE OFFICER

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).



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



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.

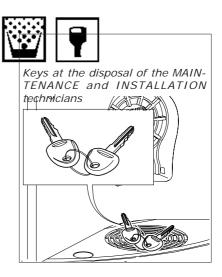


INSTALLATION TECHNICIAN

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.





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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1.0

PREMISE

1.1 Important notices

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



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

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

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

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

1.2 General Instructions



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

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

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

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

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

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



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

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

***** +39 035 4502111

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

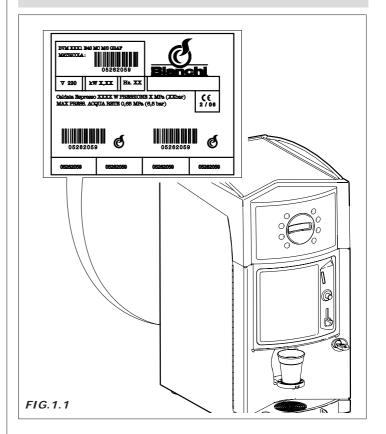
- Incorrect installation
- Inappropriate electrical and/or water connection.
- Inadequate cleaning and maintenance
- Not authorized modifications
- Improper use of the distributor
- Not original spare parts
- Under no circumstances is Bianchi Vending Group S.p.A. obliged to compensate for eventual damage 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.).

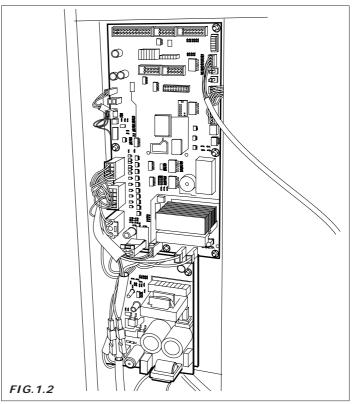
Do not use water jets to clean the machine.

- 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.

This device is not intended for use by individuals (including children) with reduced physical, sensorial or mental capacities, or by individuals without the required knowledge and experience, unless said individuals have been instructed on the use of the device and are duly supervised by a person responsible for their safety. Children must be monitored to ensure that they do not play with the device, or use it as though it were a toy.

Access to the service area is allowed only by personnel that have been specifically trained accordingly and that have acquired practical experience on the devices.



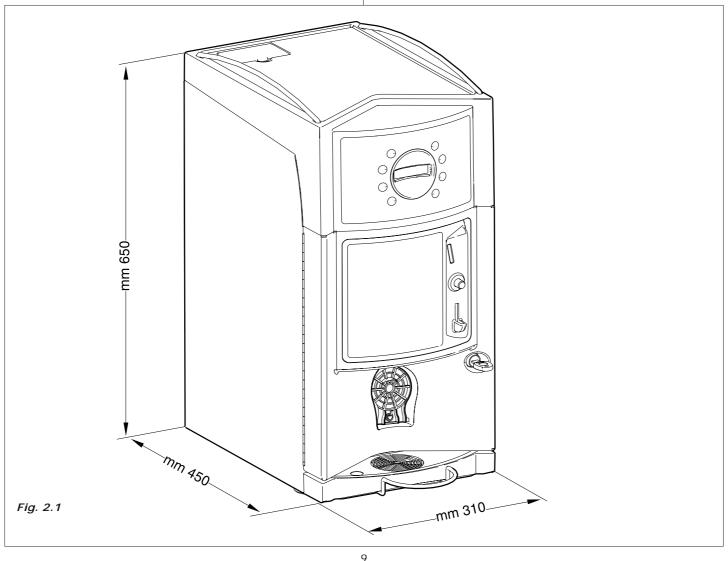




2.0 TECHNICAL CHARACTERISTICS

Height (A)	mm 650		
Width (B)	mm 310		
Depth (C)	mm 450		
Weight	kg 25		
Power Supply	V 230 - V110		
Power frequency	Hz. 50 - Hz. 60		
Installed power (1)	From 1,5 kW to 2,5 kW		
Nominal current	7,42 A		
AVERAGE CONSUMPTIONS:			
Water supply connection	3/8" gas		
Electrical supply connec.	Schuko plug		
WATER SUPPLY			
from main supply with pressure between 0.5 and 6.5 bar			
BOILER RESISTANCES			
of armoured type:			
1500 W for the single espresso boiler version			
2500 W for the double espresso boiler version			
2000 W for the instant powder boiler version			

CONTAINER CAPACITY		
Coffee bean container	kg 0,8	
Single instant powder container	1,75 lt.	
Double instant powder container	3,5 lt.	



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



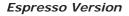
3.0 GENERAL TECHNICAL DESCRIPTIONS

3.1 Machine description (Fig.3.1)

3.1.1 Espresso version

- 1 Coffee group and grinder
- 2 Container units for soluble drinks
- 3 Coffee bean container
- 4 Self-feeding tank
- 5 Switching
- 6 Keyboard cards

- 7 Pre-heating boiler (for the double boiler version)
- 8 Dispensing chamber
- 9 Keyboard
- 10 Master board
- 11 Cup holder
- 12 Espresso boiler
- 13 Jug holder (accessory)



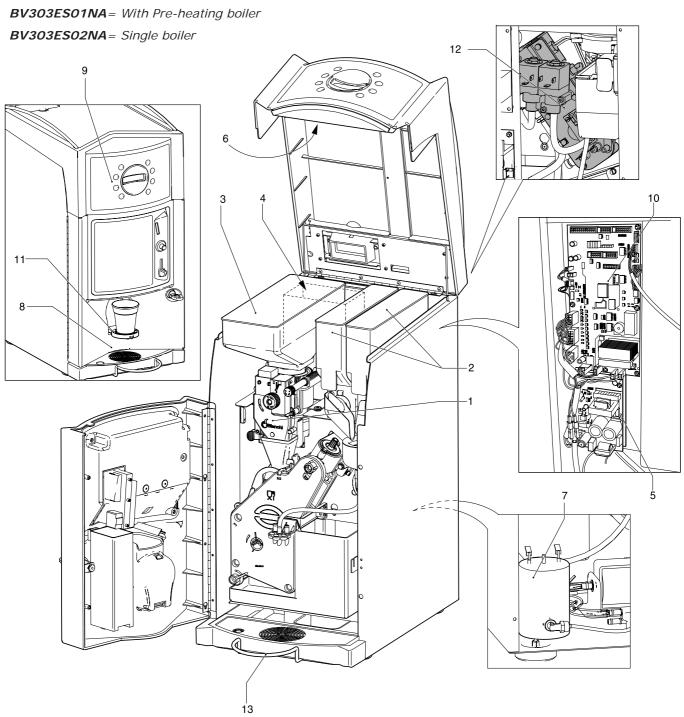


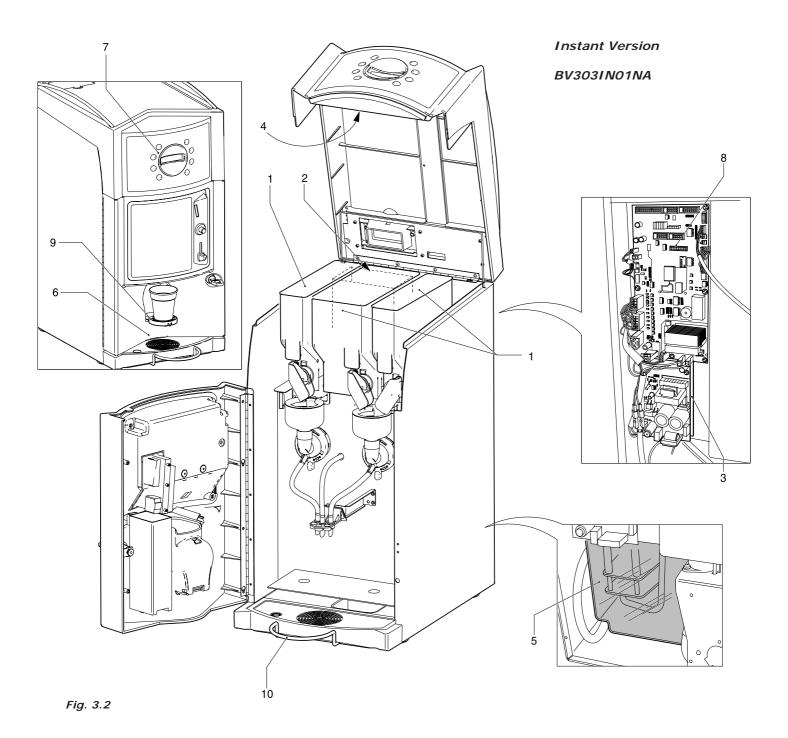
Fig. 3.1



3.1.2 Instant version (Fig.3.2)

- 1 Container units for soluble drinks
- 2 Self-feeding tank
- 3 Switching
- 4 Keyboard cards
- 5 Instant boiler

- 6 Dispensing chamber
- 7 Keyboard
- 8 Master board
- 9 Cup holder
- 10 Jug holder (accessory)



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 mod. BVM303 Gaia Distributor.

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



3.3 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

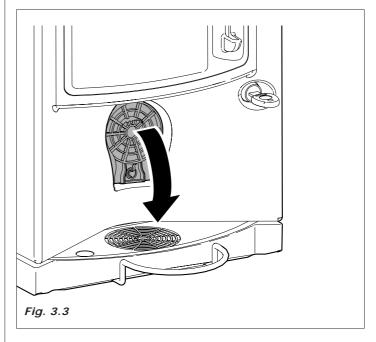
The mod. BVM303 Gaia automatic distributor does not feature an automatic cup and spoon distributor.

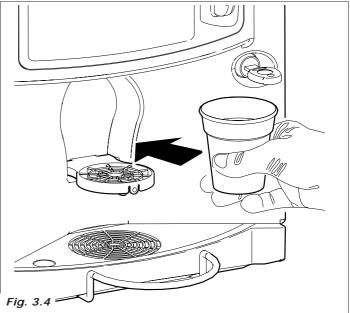
The user shall therefore independently see to obtaining them via the appropriate dispenser available in the vicinity of the vending machine and shall ensure that they are correctly positioned in the dispensing compartment (fig. 3.3 and 3.4).

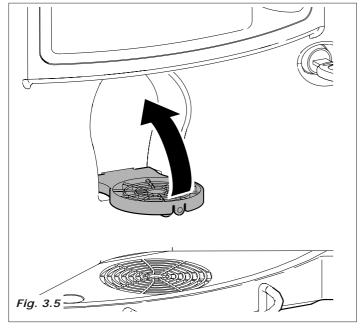
It is furthermore possible to request supply of a support element enabling the positioning of a jug (both available on request) inside the dispensing compartment, as illustrated in figures 3.5 and 3.6.

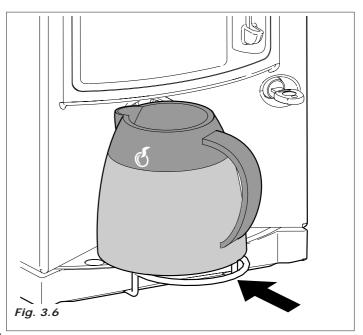


The automatic vending machine version BVM303 Gaia in its standard version, is not provided with a sugar dispensing option. The user himself will therefore have to see directly to sugaring the drinks personally.











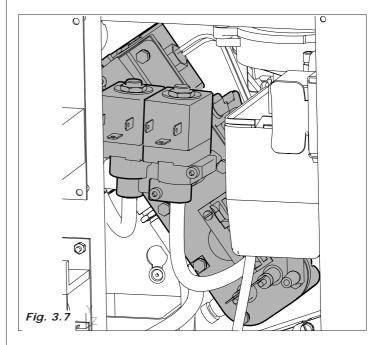
INSTANT DRINKS

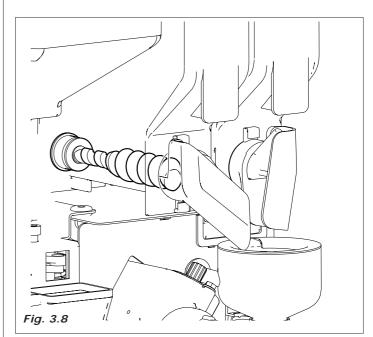
According to the type drink requested and to the distributor model, several of the various processes described here below can be activated.

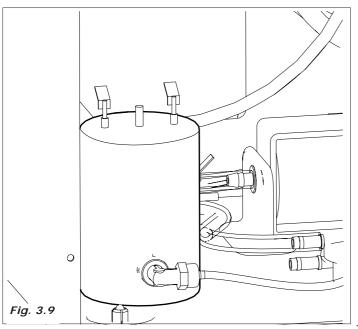
- The solenoid valve fixed to the espresso boiler is engaged in order to deliver the required quantity of water into the mixer (fig. 3.7).
- The pump that dispenses the quantity of programmed water is activated and is controlled by an appropriate electronic device. (volumetric counter).
- The instant 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. 3.8)
- once the preset quantity of water and powder is dispensed, the whipper motor is switched off.

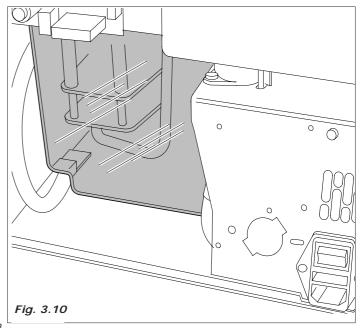
Fig. 3.9 - Pre-heating boiler

Fig. 3.10 - Instant powder boiler in polysulfone.









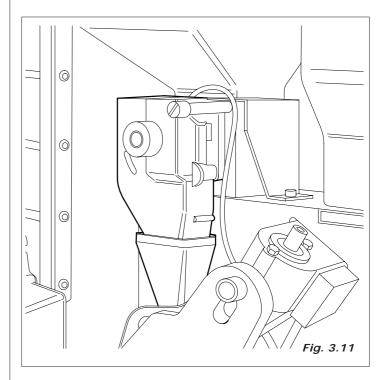


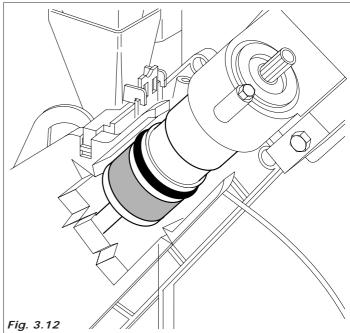
ESPRESSO COFFEE

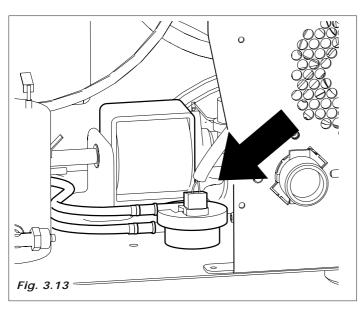
This process only occurs for the versions provided with an express coffee group.

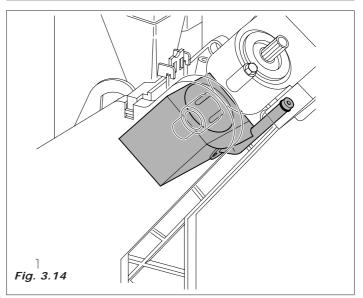
- the grinder is activated until it reaches the dose of ground coffee set by the doser (Fig. 3. 11)
- the doser electromagnet is activated, causing the opening of the door and consequent fall of the coffee into the brew chamber
- the rotation group geared motor brings it into the dispensing position and simultaneously compresses the ground coffee (Fig. 3.12).
- 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. 13).
- 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. 14).

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













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:

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

4.4 Reception

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

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

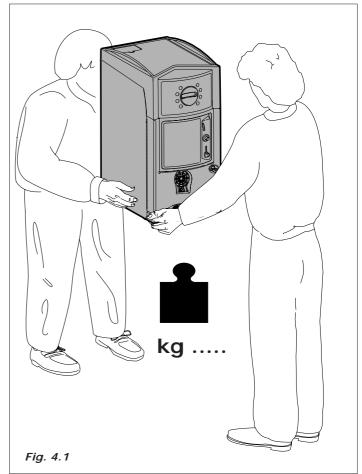


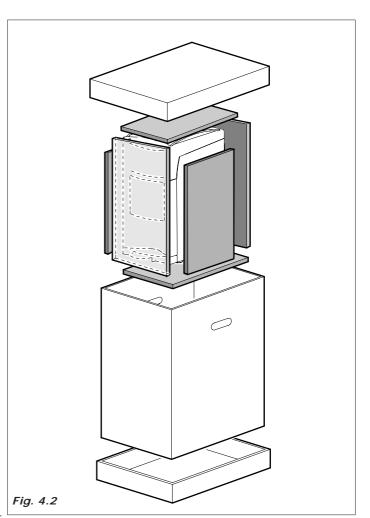
At the end of the transport the packing must result without damages which means it must not :

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

4.5 Unpacking

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



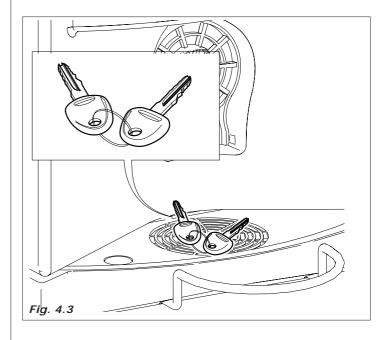




- remove the key from the drink dispensing chamber (Fig.4.3)
- open the door of the distributor and remove the adhesive tape from the components listed here below:
- coin mechanism cover / keyboard cards
- product containers



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.





5.0 SAFETY NORMS



ATTENTION!

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



Always disconnect the POWER CABLE before maintenance or cleaning interventions.



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

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

6.0 INSTALLATION



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 group 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).

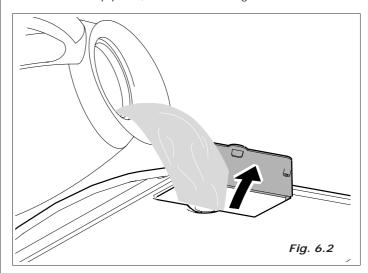
So as to avoid that the floor gets dirty, due to accidental spilling of the products, use, if necessary, under the distributor, a protection sufficiently wide to cover the distributors' operating space.

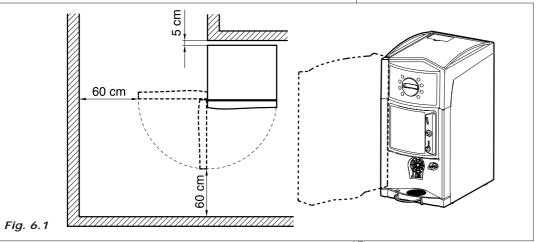
6.2 Self-feeding tank (standard supply)

The water tank that is provided to the rear of the dispenser must be filled directly by the operator in charge of maintenance.

The tank's maximum capacity amounts to 3.8 litres.

Fill up the self-feeding tank by lifting the tank cover positioned on the machine's top panel, as illustrated in figure 6.2.





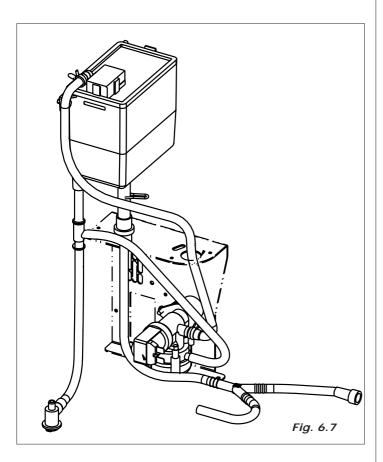


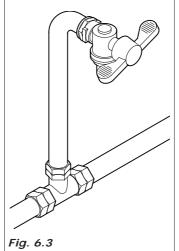


6.3 Connection to the main water supply kit (optional)

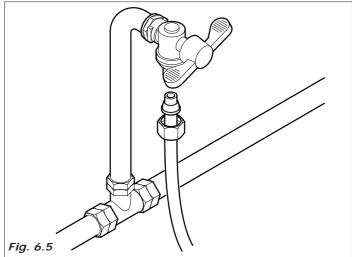
Before proceeding with the connection of the distributor to the water main supply verify the following water characteristics:

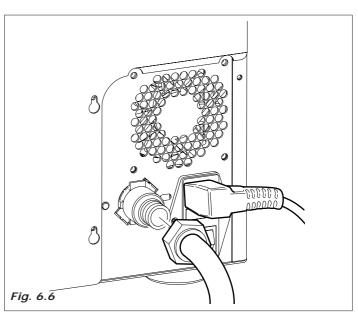
- that it is drinkable (eventually through an laboratory's analysis certification)
- it has a pressure comprised between 0.5 and 6.5 bar (if this should not be the case, use a pump or a water pressure, reducer according to the case).
- install, if not present, a tap in an accessible position to isolate the machine from the water mains should it be found to be necessary (Fig. 6.3).
- before making water connections, make some water flow out of the tap so as to eliminate possible traces of impurities and dirt (Fig.6.4)
- connect the cock to the distributor, using a pipe in nylon material suitable for food products and suitable for the mains pressure.
 In the event of the use of a flexible pipe it is necessary to fit the reinforcement bush supplied inside (Fig. 6.5).
- the foreseen connection is a 3/8 gas (Fig. 6.6).













6.4 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 mm², with SCHUKO plug (Fig. 6.8).
- The sockets that are not compatible with that of the machine must be replaced. (Fig.6.9).
- The use of extension, adapters and/ or multiple plugs is forbidden.

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



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

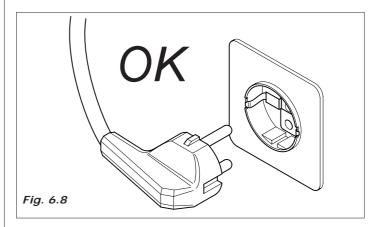


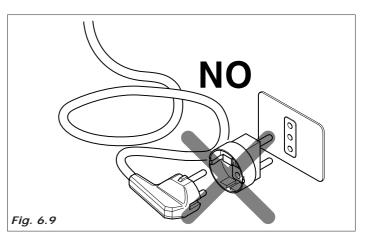
6.5 Starting up of the unit

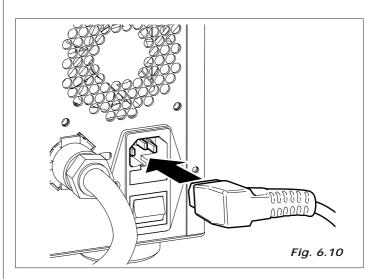
The distributor is provided with a connection cable for connection to the mains water supply (fig.6.10) and a switch which cuts off the power from all users each time that it is operated (fig.6.11).

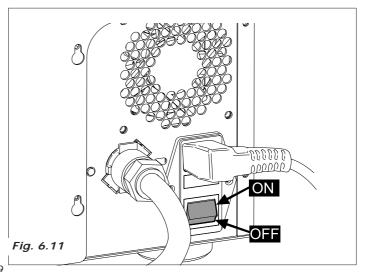
Should it be necessary to operate inside the distributor for any ordinary or special maintenance operates, it is necessary to isolate the user appliances by activating the switch (fig.6.11), bearing in mind that with the electrical connection engaged, the power terminals are live.

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.













6.6 Installation

6.6.1 Filling the water circuit

The appliance undertakes automatic filling of the water supply circuit.

The sequence:

Machine starting up.

First self installation mode.

At the first machine start up will be performed a self installtion.

The aim of this procedure is to avoid the manual connections of wires on the boards after the filling of the Hydraulic cyrcuit.

- filling will stop when the maximum level is reached.

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at the end of the water filling (Fig. 6.13), effect a cleaning cycle
of the mixer group so as to fill all the circuits and remove eventual residues from the boiler.

First self installation mode

For Espresso single boiler:

When the distributor is started up the airbreak is filled with water.

When the floater is in the upper position the machine will start loading water automatically and this will go on until 300cc of water are counted by the fan (coffee will therefore be dispensed via the coffee electro valve).

The procedure will be carried out with resistance off.

At the end a date will be shown on the display.

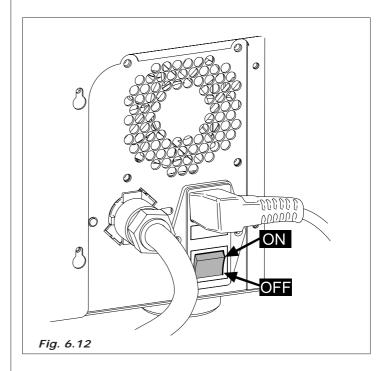
For Instant boiler:

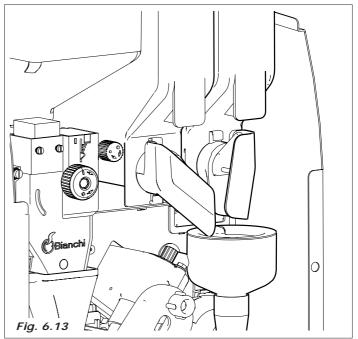
Upon switching on of the dispenser, the polysulfone boiler starts filling up until it reaches the probe's maximum level.

The pump starts up for 5 sec, the system requests entry of the date, then the heat-up process begins.



Before connecting up the machine's power supply, check to ensure that you have connected the dispenser up to the water supply mains and that you have opened the water supply tap.







6.6.2 Cleaning of the parts in contact with food substances

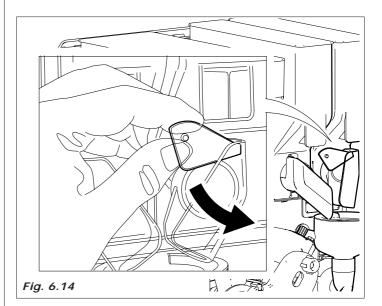
With distributor switched on effect a cleaning of the mixers pressing the buttons according to what is described in the service functions so as to eliminate any dirt from the coffee boiler and the instant boiler.

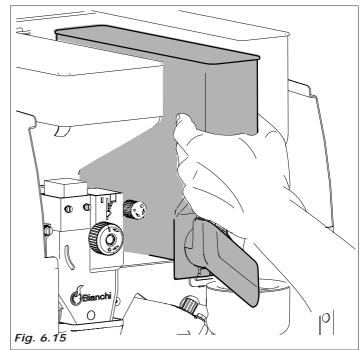
- wash your hands carefully
- prepare an anti-bacterial cleaning solution with a chlorine base (products that can be purchased in pharmacies) following the concentrations given on the product instruction labels.

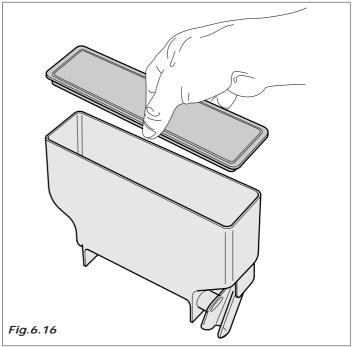


Before removing the container lower the flap in order to prevent the accidental escape of the soluble product inside the same (fig. 6.14).

- remove all the product containers from the distributor (fig. 6.15).
- remove the lids from the product containers covers and product chutes (Fig. 6.16). Dip all in the solution previously prepared









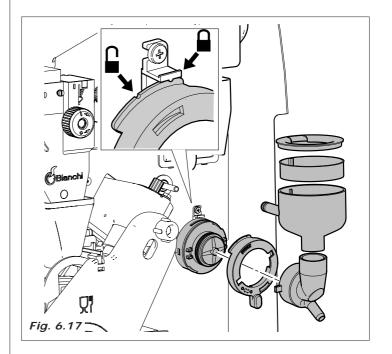
- remove all the powder chutes, water funnels, mixing bowls and whippers and silicone tubes and dip these parts also in the prepared solution (Fig. 6.17)
- with a cloth soaked with the solution clean the whipper assembly base (Fig. 6.18)
- the parts must soak in the solution for the time indicated on the solutions' instruction label.
- Recover all the parts, rinse them abundantly, dry them perfectly and proceed with the re-assembly in the distributor.

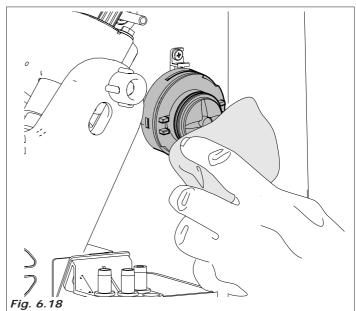


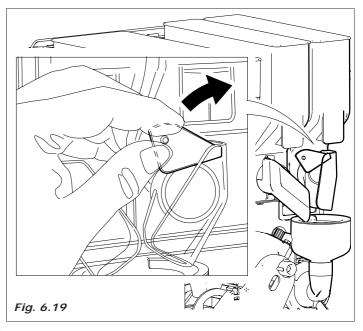
After re-positioning the container undertake to raise the flap in order to reset the correct function (fig. 6.19).



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













6.7 Product container loading (with machine off)

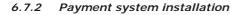
6.7.1 Loading containers

Filling is possible keeping the containers inserted, and by raising the upper flap of the distributor (*Fig. 6.20*) or by extracting each container.

For granulated coffee in particular it is necessary to close the closure plat before extracting the container. (Fig. 6.21).

- remove the covers of each container and load the product according to the product indicated on the label (Fig. 6.22-Fig. 6.23).
- 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.

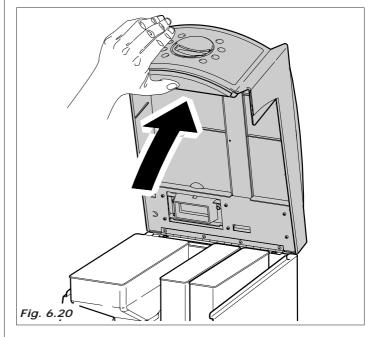


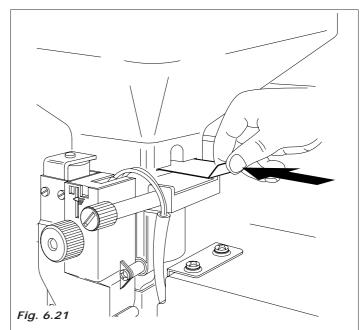
The distributor does not have a payment system; any possible damages to the distributor itself and/or objects and/or people deriving from its incorrect installation are responsibility of who installs the payment system.

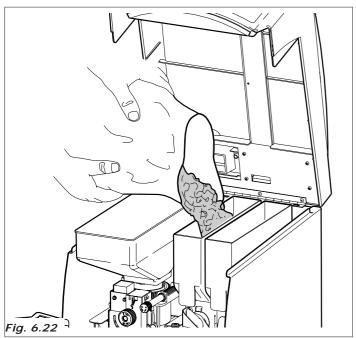
The switches are to be directly connected to the keyboard card, the executive serial systems require the payment system kit supplied separately.

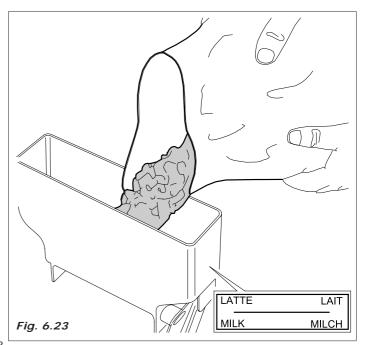
Then go into programming for the correct settings.

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











7.0 SOFTWARE INSTRUCTIONS

CONFIGURATION

The machine con be configured as the BVM303E espresso version, or as the BVM303S instant version.

The machine version is programmable only via the Windows application tool. The following management functions are implemented for all the BVM303 machine versions:

- . GSM modem interface
- . Irda interface
- . VSPS management with firmware programming function, settings data, audit data and messages.
- . Settings data key, audit data key
- . Chip card
- . Parallel, Executive, Executive ECS, Executive PH, MDB payment systems.
- . Clock chip.
- . Cup sensor input
- . Jug management
- . Free function input management.
- . Maximum 4 electro valves, including the water inlet electro valve.

Only for BVM303E:

- . Flow meter.
- . Group.
- . Grinder
- . Management of an espresso type boiler.
- . Maximum of 3 motor reducers.
- . Maximum of 1 mixer.
- . Fixed-set coffee electro valve on OUT3 pin 3.
- . Coffee release on OUT2 pin 9.

Only for BVM303S:

- . Threshold probe input
- . Management of a polysulfone type boiler
- . Maximum of 4 motor reducers.
- . Maximum of 2 mixers.
- . Instant powder 4 on OUT5 pin 1
- . 24V rotary pump on OUT2 pin2
- . Water inlet pump 220 V AC on OUT4.

STANDARD MODE

PUSHBUTTON PANEL

The pushbuttons provided are meant for:

Key 1: Selection 1

Key 2: Selection 2

Key 3: Selection 3

Key 4: Selection 4

Key 5: Selection 5

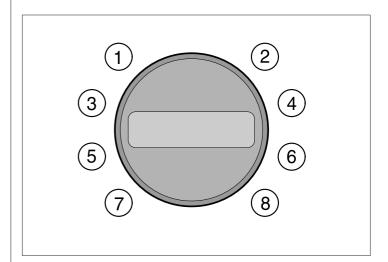
Key 6: Selection 6

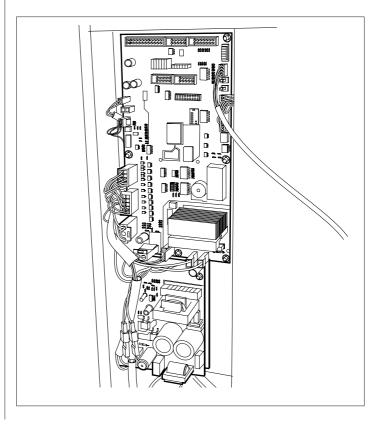
Key 7: Selection 7

Key 8: Selection 8

On the rear of the board:

Key **P**: Programming Key **M**: Maintenance







1. BLOCKING ALARMS

Out of order Alarm

In these circumstances, the machine is blocked. It will be possible to access the maintenance or the programming mode.

2. RESET

Diagnosis Reset

Upon machine start-up a machine reset cycle is run and the reset message stays on display until cycle-end.

3. WARM-UP

Please wait for warm up This message is displayed at machine switch-on after the reset cycle if the boiler temperature has gone under the minimum temperature.

4. CLEANING

Cleaning

The above message is displayed once the washing procedure is started up and stays on display until the end of the washing operations.

For further details refer to the washing management paragraph under the operation section.

5. DISPENSING

Please wait machine dispensing dispensing cycle.

This message is displayed during the drink

6. READY

Select product Ready

Line 1: the four messages programmed under MS0014, MS0015, MS0016, MS0017 are displayed in sequence and alternated by a

2sec interval each.

If the payment system that has been activated to give change is currently not capable of doing so, message MS0017 is replaced by message MS0018.

Line 2: permanent message MS0030 is di-

splayed.

7. STAND-BY

Off Line 1: permanent message " Off "

15:38 Line 2: the clock time is displayed, if pre-

sent.

ITEMS THAT CAN BE ACCESSED FROM THE DISPEN-SER

The programming mode is accessed by keeping pushbutton P pressed in. The pushbuttons provided are meant for:

Key 1: Increment

Key 2: Esc

Key 3: Decrement

Key 4: -

Key 5: Cursor

Key 6: -

Key 7: Enter

Key 8: -

ACCESS MENU

Code 00000

A password entry code is requested to access the programming menu for the special functions management. The available passwords are as follows:

- 1. Complete menu programming password: this pw will access all the menu items that are worth programming and as actually needed. Programmable parameter.
- 2. Limited menu programming password: this pw will access only the items enabled via the reduced menu options present in the WinBianchi windows program, i.e. only the items that are worth programming and as actually needed. Programmable parameter.
- 3. Sales menu access password: this pw will access the relative sales menu. If this password is the same as that provided for complete menu programming or for the limited menu programming, the sales menu is displayed also via said menus. Programmable parameter.

MENU (MENU SELECTION)

Menu Selection Configuration

The sub menus available for selection are as follows:

1. Configuration (" Configuration ") 2. Options Options Temperature ") 3. Temperature 4. Time and thresholds ("Time and thresholds ") Preselections ") 5. Preselections 6. Doses Doses 7. Extra motors Extra Motors ") 8. Item number Item Number 9. Payment systems ("Payment sys. ") 10 Prices Prices 11. Price-Selections ("Price-Selections") 12. Discounts Discounts 13. Sales Sales 14. Preventive action ("Prev. Action") ")

15. Instant powders decounters (" Decounters ")

16. Clock (" Clock Visible if clock is present.

17. Remote connection (" Remote Connec. ") Visible only if the modem is present.

18. Default data ("Default data")

MENU 1 (CONFIGURATION)

Cup sensor Enables cup sensor.

No The entry data allowed here is: No or Yes.

Espr. sugar Enables sugar for the espresso.

The entry data allowed here is: No or Yes. No Sets the water load management mode. Self-feeding tank No The entry data allowed here is: No or Yes.

MENU 2 (OPTIONS)

Machine number

00000000

Sets the V.M. lease number

Is memorised on the master board's and the

main slave's memory boards.

The entry data allowed here is: 0 to

99999999

Lease number 00000

Sets the V.M. lease number

The entry data allowed here is: 0 to 65535.

Customer number

00000

Sets the V.M. customer number

The entry data allowed here is: 0 to 65535.

Language Sets the V.M. language.

Italian 9 languages are available. The message displayed

in line 2 is no. 169 in the message file.

Currency code

000

Sets the currency code. The entry data allowed here is: 0 to 999.



Sets password for accessing the Code 1

00000 complete menu.

The entry data allowed here is: 0 to 99999.

Code 2 Sets password for accessing the

00001 reduced menu.

The entry data allowed here is: 0 to 99999.

Code 3 Sets password for accessing the

00002 sales menu.

The entry data allowed here is: 0 to 99999.

EVA-DTS level Sets the EVA-DTS data level for download

via handheld, via Modules and via PC. The entry data allowed here is: 1 to 3

Instant grind Enables the instant grind function.

The entry data allowed here is: No or Yes.

Cleaning Enables wash cycle.

The entry data allowed here is: No or Yes. No

Wash cycle Enables periodical wash cycle.

The entry data allowed here is: No or Yes. Nο

MENU 3 (TEMPERATURE)

Sets the temperature for the cartridge boiler. Boiler temp.

90 °C The first number in line 1 is permanent. The

entry data allowed here is: .70 to 110 °C

MENU 4 (TIMING AND THRESHOLDS)

Grinder timeout Sets grinder timeout.

13.0 s The entry data allowed here is: 0.0 to 25.5 s.

Grinder threshold Sets maximum current value

absorbed by the grinder. 11.0 A

The entry data allowed here is: 0.0 to 25.5A.

Group timeout Sets group timeout.

The entry data allowed here is: 0.0 to 25.5s. $10.0 \, s$

Pump timeout Sets the maximum activation time timeout by the pump. 60 s

The entry data allowed here is: 0 to 90 s.

Load timeout Sets the maximum water load time timeout The entry data allowed here is: 5 to 240 s. 90 s

Cleaning cycle time Sets cleaning cycle time/cc, based on $10.0 \, s$

flow meter presence.

The entry data allowed here is: 0.0 to 25.5s.

or 0 to 255 cc.

Fan Sets fan speed for

60 when drink is not being dispensed.

The entry data allowed here is: 60-100%

MENU 10 (PAYMENT SYSTEMS)

Payment sys. The sub menus available for selection are as General param. follows:

1. Generated param. ("Gener. Parameters") 2. Coins/Line ("Coins/Line")

3. Banknotes/Line ("Banknotes/Line") 4. Enable coins ("Enable coins")

5. Enable banknotes ("Enable bankno-

: Executive system

tes")

MENU 10.1 (GENERATED PARAMETERS)

Parallel Sets the type of payment system.

Protocol Available options are: Parallel :coin selector Executive

Diff. ECS :Executive system with

differentiated ECS

Price Holding :Executive system with

Price Holding

MDB coin/token box: MDB system

Decimal point

Sets the decimal point as per the 000.00 parallel protocol.

The entry data allowed here is: 00000,

0000.0, 000.00, 00.000.

Visible only if the parallel protocol has been

Credit timeout Sets credit timeout.

000 sThe entry data allowed here is: 0 to 180 s.

Visible only if the Parallel or the MDB protocol

has been set.

Multivend Sets multivending management.

The entry data allowed here is: NO or YES. No

Visible only if the Parallel or the MDB protocol

have been set.

Price timeout Sets price timeout.

The entry data allowed here is: 02.0 to 25.0 10.0 s

Visible only if the Executive ECS or PH pro-

tocol has been set.

Immediate change Enables the immediate change function.

The entry data allowed here is: NO or YES. Not visible if the Parallel protocol has been

set.

Sets maximum change amount. The entry Maximum change

data allowed here is:

00.00 is: 0 to 9999 and display depends on the

decimal point.

Visible only if the MDB protocol has been

Max. coin credit

000.00

Sets the maximum coin credit enabled. The entry data allowed here is: 0 to 65535 and display depends on the decimal point.

Visible only if the MDB protocol has been

Max. key credit

000.00

Sets the maximum key credit enabled. The entry data allowed here is: 0 to 65535 and display depends on the decimal point. Visible only if the MDB protocol has been

set.

Coin changer

Enables the coin changing function. No The entry data allowed here is: NO or YES.

Visible only if the MDB protocol has been

set.

Ignore ExChg

No

Enables the ignore exact change function. The entry data allowed here is: NO or YES. Visible only if the MDB protocol has been

set.

Enab. Token No

Enables token management.

The entry data allowed here is: NO or YES. Visible only if the MDB protocol has been

set.

Change for Token

No

Enables the possibility of giving change for tokens. The entry data allowed here is: NO

Recharge Token

No

Enables the possibility of recharging key systems with credit from tokens. The entry data allowed here is: NO or YES. Visible only

if the MDB protocol has been set.



ExChg & Token

Enables the exact change plus token function. The entry data allowed here is: NO or YES. Visible only if the MDB protocol has been

set.

Key recharging

Enables the possibility of recharging key systems. The entry data allowed here is: NO

Visible only if the MDB protocol has been

Rech. with bankn. Nο

Enables the possibility of recharging key systems with banknotes. The entry data

allowed here is: NO or YES.

Visible only if the MDB protocol has been

Min tube x level

10

Sets the minimum coin level for tube x. Where " \times " = 1 to 5

The entry data allowed here is: 1 to 20. Visible only if the MDB protocol has been set.

Token x 000.00

Sets the value to be associated with token x. Where \times = 1to 3. The entry data allowed

here is:

0 to 65535 and display depends on the decimal point. Visible only if the MDB protocol

has been set.

MENU 10.2 (COINS/LINE)

Sets the value to be associated with coin xx. Coin xx

000.00 Where xx = 1 to 16

The entry data allowed here is: 0 to 65535 and display depends on the decimal point.

MENU 10.3 (BANKNOTES/LINE)

Banknote xx 000 00

Sets the value to be associated with

hanknote xx. Where xx = 1 to 16

The entry data allowed here is: 0 to 65535 and display depends on the decimal point.

MENU 10.4 (ENABLE COIN)

Enab. coin xx Enables the coin specified with xx.

Where xx = 1 to 16 Yes

The entry data allowed here is: NO or YES.

MENU 10.5 (ENABLE BANKNOTE)

Enab. Bankn. xx Enables the banknote specified with xx.

Yes Where xx = 1 to 16

The entry data allowed here is: NO or YES.

MENU 11 (PRICES)

Price ×× For price setting. Characters ××× specify 001.00

the reference number of the price amount being programmed, that can go from 1 to 50.

The entry data allowed here is: 0 to 65535 and display depends on the decimal point.

MENU 12 (PRICE-SELECTIONS)

All at price 1 Sets that all selections are to be associated

with price 1. The entry data allowed here is: No

NO or YES.

Price P## Associates price to relative selection.

Meaning of the fields: nn -vvvvvv ##

stands for the selection stands for the price associated \/\/\/\/

with parameter nn

is the parameter to be set. nn

Values allowed (1 to 50)

JugP## price Associates price to relative jug.

Meaning of the fields: nn -vvvvvv

stands for the selection stands for the price associated VVVVV

with parameter nn

is the parameter to be set. nn

Values allowed (1 to 50)

Sect. A## price nn -vvvvvv

Meaning of the fields:

stands for the sector ##

VVVVV stands for the price associated

Associates price to the relative Vega sector.

with parameter nn nn is the parameter to be set.

Values allowed (1 to 50)

MENU 13 (DISCOUNTS)

Discount xxx 000 00

Setting discounts. Characters ×××

Specify the number of the price amount being programmed, that can go from price 1 to 50. The entry data allowed here is: 0 to 65535 and display depends on the decimal point.

Key discount xxx 000.00

Setting key discounts. Characters $\times \times \times$ Specify the number of the price amount being programmed, that can go from price 1 to 50.

The entry data allowed here is: 0 to 65535 and display depends on the decimal point.

Discount for no cup

000.00

Sets discount for dispensing without cup. The entry data allowed here is: 0 to 65535 and display depends on the decimal point.

MENU 14 (SALES)

Sales Tot. Coll. Hot, n.r. The sub menus available for selection are as

follows:

1. Total cash collected for hot drinks ("Tot.

Coll. Hot")

2. Total collect. snack ("Tot. Coll. Snack ")

3. Total collected ("Total collected")

4. Discount (" Discount ")

5. Overpay (" Overpay ")

6. Total selections (" Total selections ")
7. Paid selections (" Paid selections ")

8. Free (" Free ")
9. Jug (" Jug ")
10.Test (" Test ")

11.Preselections (" Preselections ")

12.Coins (" Coins ")

13.Banknotes (" Banknotes") 14. Sales code (" Sales code ")

15.Coin/token box audit ("Coin/token box

audit")

MENU 14.1 (TOTAL COLLECTED HOT)

Tot. Coll. Hot, n.r. 0.00

Displays the counter related to the total collected for hot drinks, non resettable. The maximum value enabled here is 16777251. Display depends on the decimal

point.

Tot call hat

0.00

Displays the counter related to the total collected for hot drinks, resettable.

The maximum value enabled here is 16777251. Display depends on the decimal

point.

MENU 14.3 (TOTAL COLLECTED)

Tot. collected n.r. 0.00

Displays the counter related to the overall total collected, non resettable.

The maximum value enabled here is

4294967295. Display depends on the decimal

point.



Total collected

0.00

Displays the counter related to the overall

total collected, resettable

The maximum value enabled here is 4294967295. Display depends on the decimal

point.

MENU 14.4 (DISCOUNT)

Discount Displays the discount counter.

The maximum value enabled here is 0.00

16777251. Display depends on the decimal

point.

MENU 14.5 (OVERPAY)

Overpay Displays the overpay counter. The maximum

0.00 value is 16777251.

Display depends on the decimal point.

MENU 14.6 (TOTAL SELECTIONS)

Total selections n.r. Displays the total selections counter, non re

settable. The maximum value is 16777251.

Total selections Displays the total selections counter, resettable.

The maximum value is 16777251.

MENU 14.7 (SELECTIONS PAID)

Paid selections n.r. Displays the total selections paid counter,

non resettable. The maximum value is

16777251.

Paid selections Displays the total selections paid counter,

resettable.

The maximum value is 16777251.

Selections P## Displays counter of the number of selections

entered.

The maximum value is 65535.

Meaning of the fields:

stands for the selection

Selections A##

Displays counter of the number of Vega

selections entered.

The maximum value is 65535. Meaning of

the fields:

stands for the sector

MENU 14.8 (FREE)

Tot. Free n.r. Displays the total free selections counter, non

resettable.

The maximum value is 16777251.

Total Free Displays the total free selections counter,

resettable.

The maximum value is 16777251.

Free P## Displays counter of the number of free

selections entered.

The maximum value is 65535.

Meaning of the fields:

stands for the selection

Displays counter of the number of free Vega Free A## \cap

selections entered.

The maximum value is 65535. Meaning of the fields:

stands for the sector

MENU 14.9 (JUG)

Tot. Jug n.r. Displays the total jug selections counter, non

resettable.

The maximum value is 16777251.

Displays the total jug selections counter, Total jug

resettable. 0

The maximum value is 16777251. Displays counter of the number of jug Jug P##

selections entered.

The maximum value is 65535. Meaning of

the fields:

stands for the selection

MENU 14.10 (TEST)

Tot. Test n.r. Displays the total test selections counter, non

resettable.

The maximum value is 16777251.

Total Test Displays the total test selections counter,

resettable.

The maximum value is 16777251.

Test P## Displays counter of the number of test

selections entered.

The maximum value is 65535.

Meaning of the fields:

stands for the selection

Test A## Displays counter of the number of Vega test

selections entered.

The maximum value is 65535. Meaning of

the fields:

stands for the sector ##

MENU 14.11 (PRESELECTIONS)

Preselection xx

The maximum value is 65535.

MENU 14.12 (COINS)

Displays the coin xx counter. Coin xx

Where xx = 1 to 16

The maximum value is 65535.

MENU 14.13 (BANKNOTES)

Banknote xx Displays the banknote xx counter.

Where xx = 1 to 16

The maximum value is 65535.

MENU 14.14 (SALES CODE)

Sets new password for accessing the Sales code

00002 sales menu.

The entry data allowed here is: 0 to 99999

Code Password entry is requested for 0000

accessing the cancellation procedure relative to non resettable sales data. With permanent

password 9999, not only the resettable data but the non resettable data is cancelled as

well

Replace code? Asks for confirmation of possible replacement No

of the password entry code required to access the resettable sales data cancellation

procedure.

The entry data allowed here is: NO or YES.

Code Set the new password entry code for access 0001 to the resettable sales data cancellation

procedure.

The entry data allowed here is: 0 to 9999. Said value has precedence over permanent password 9999 for the cancellation of non

resettable data.

Set to zero? Confirm only if the sales data must be reset Nο

to zero.

The entry data allowed here is: NO or YES.

Sales data cancellation waiting time. Only Clearing...

when cancellation is complete will the OK!!! Message come up on line 2 and it will be

28



possible to proceed.

MENÙ 14.15 (COIN/TOKEN BOX AUDIT)

Aut. tube Value of the coins inserted automatically into the tubes. The maximum value enabled here 0.00

is 16777251. Display depends on the decimal

point.

Value of the coins inserted manually into the Man, tube 0.00

tubes. The maximum value enabled here is 16777251. Display depends on the decimal

Aut. Emp. Value of the coins emptied automatically out 0.00

of the tubes. The maximum value enabled here is 16777251. Display depends on the

decimal point.

Man. Emp. Value of the coins emptied manually out of 0.00

the tubes. The maximum value enabled here is 16777251. Display depends on the decimal

point.

Load CP Value of coins loaded onto the card.

0.00 The maximum value enabled here is

16777251. Display depends on the decimal

point.

Value of coins discharged from the card. Unload CP 0.00

The maximum value enabled here is 16777251. Display depends on the decimal

point.

Code Password entry code is requested to access

0000 the coin/token box audit data cancellation

procedure.

Replace code?

No

of the password required to access the coin/ token box audit data cancellation procedure. The entry data allowed here is: NO or YES.

Asks for confirmation of possible replacement

Sets a new password entry code for access Code 0001 to the coin/token box audit data cancellation.

The entry data allowed here is: 0÷9999

Set to zero? Confirm only if the coin/token box audit

data must be reset to zero. Nο

The entry data allowed here is: NO or YES.

Clearing... Audit data cancellation waiting time. Only

when cancellation is complete will the OK!!! Message come up on line 2 and it will be

possible to proceed.

MENU 15 (PREVENTIVE ACTION)

Water treatment Water treatment unit decounter Decremented 00000

at every dispensing cycle requiring the supply

of unit water.

Entry data allowed: 0-65535

Boiler Boiler decounter. Decremented at every 00000 dispensing cycle requiring the supply of water.

Entry data allowed: 0-65535

HACCP Sanitization HACCP sanitization de-counter

00000 Decremented at every dispensing cycle re-

quiring the supply of water. Entry data allowed: 0-65535

Electro valves Electro valves decounter Decremented at 00000

every dispensing cycle requiring the supply

of water. Entry data allowed: 0-65535

Seals Seals decounter Decremented every time the

00000 group is closed. Entry data allowed: 0-65535

Coffee grinders Coffee grinders decounter. Decremented

every time the grinder is activated.

Entry data allowed: 0-65535

Coffee filters Coffee filters decounter. Decremented every 0000

time coffee is dispensed.

Entry data allowed: 0-65535

Coffee grounds recharge value. Grounds recharge

Entry data allowed: 0-255 050

Coffee grounds Coffee grounds decounter. Decremented 000

every time coffee is dispensed. Entry data allowed: 0-255

MENU 16 (DECOUNTERS)

Decounters The sub menus available for selection are as

follows:

General param. 1. General parameters ("General param. ")

> (" Decount. Val. ") 2. Decounter value 3. Reserve Reserve ") 4. Reload

Reload ")

MENU 16.1 (GENERAL PARAMETERS)

Enab.Decounters Enables decounter management. Entry data allowed: No or Yes.

00000

Enable reset Enables reset.

Entry data allowed: No or Yes. Nο

Enable chip card

Enables chip card Entry data allowed: No or Yes.

MENU 16.2 (DECOUNTER VALUES)

Powder x decnt.

00000

Instant powder × decounter value, where x=1 to max no. of instant powders provi-

ded. Entry data allowed: 0-65535

Decount. Beans

00000

Beans decounter value. Entry data allowed: 0-65535

Decount.

cups Cups decounter value.

00000 Entry data allowed: 0-65535

Sect. $A \times \times$ decount.

00000

No

Veqa sector $\times\times$ decounter value, where $\times\times=1$

to max no. of sectors.

Entry data allowed: 0-65535

MENU 16.3 (RESERVE)

Enab.Powd.Res. Nο

Enables instant powder decounter reserve

Enables beans decounter reserve management.

management.

Entry data allowed: No or Yes.

Enab.BeansRes. Nο

Entry data allowed: No or Yes.

Enab.CupRes. Enables cup decounter reserve management.

Entry data allowed: No or Yes.

Enab.Sect.Res. Enables sectors decounter reserve

management for Vega. Entry data allowed:

No or Yes.

Powders Reserv. x Instant powders x decounter reserve value

00000

with x=1-max. number of instant powders.

Entry data allowed: 0-65535

Beans reserve 00000

Beans decounter reserve value. Entry data allowed: 0-65535

CupsReserve Cups decounter reserve value.



Entry data allowed: 0-65535

Sect. Axx reserve 00000

Vega sector xx decounter reserve value with xx=1-max. number of sectors. Entry data allowed: 0-65535

MENU 16.4 (RECHARGE)

Enab.Powd.Rech. Enables instant powder decounter recharge

management.

Entry data allowed: No or Yes.

Enab.BeansRech.

Nο

Enables beans decounter recharge

management.

Entry data allowed: No or Yes.

Enab.CupsRech.

Enables cups decounter recharge

management.

Entry data allowed: No or Yes.

Enab.Sect.Rech.

Enables sectors decounter recharge

management for Vega. Entry data allowed:

No or Yes.

Powd. Recharge ×

Instant powders x decounter recharge value

with x=1-max. number of instant powders.

Entry data allowed: 0-65535

Beans recharge

00000

00000

Beans decounter recharge value. Entry data allowed: 0-65535

Cup Recharge

Cups decounter recharge value. Entry data allowed: 0-65535

Sect.A××Recharge

00000

00000

Vega sector xx decounter recharge value with xx=1-max. number of sectors.

Entry data allowed: 0-65535

MENU 17 (CLOCK)

Clock The sub menus available for selection are as

follows:

Set hours/minutes Sets hours and minutes

("Set hour/minutes")

Visible only if the clock chip is provided.

2. Date (" Date ")

Visible only if the clock chip is provided.

3. Switch ON-switch OFF ("Switch on")

4. Wash cycles (" Wash cycles ")

MENU 17.1 (SET HOURS AND MINUTES)

Sets hours/minutes Changes the clock chip time.

1:40 The format provided is: hours: minutes.

The hours go from 0 to 23 and the minutes

go from 0 to 59.

MENU 17.2 (DATE)

Date Changes the clock chip date.

We 23/11/05 The format provided is: weekday dd/mm/yy.

Where: weekday is Su, Mo, Tu, We, Th, Fr, Sa

dd is 0 to 31 mm is 0 to 12 yy is 0 to 99

MENU 17.3 (SWITCH ON-SWITCH OFF)

V.M. Off Enables machine boiler switch-off to machine

off Entry data allowed: No or Yes. No

Start x Sets the start time for time slot x.

00.00 Where x = 1 or 2

> The format provided is: hours: minutes. The hours go from 0 to 23 and the minutes

go from 0 to 59.

Sets the ending time for time slot x. End ×

00:00 Where x = 1 or 2

The format provided is: hours: minutes. The hours go from 0 to 23 and the minutes go from 0 to 59.

The programmed time slot relates to the switch-on time slot and switch-off time slot functions based on activation of the machine's "switch-off" parameter that can be set via the windows

If the start value is bigger or equal to the end value, the time-slot is not activated.

MENU 17.4 (CLEANING CYCLES)

Cleaning cycle x

×

nn

Sets the "x" cleaning cycle time.

Where x = 1 to 2 00:00

The format provided is: hours: minutes. The hours go from 0 to 23 and the minutes

go from 0 to 59.

MENU 18 (REMOTE CONNECTION)

SIGNAL INTENS. Displays data related to the GSM signal and the

GPRS service.

Meaning of the fields: GSM signal intensity nn connection mode

G whether the GPRS service is present

or not

Sets the type of telemetry to be implemented. Telemetry NONE

Available options are:

NONE : no telemetry Bianchi : Bianchi telemetry The message are permanent messages.

MENU 19 (DEFAULT DATA)

Code Password entry is requested for

0000 access to the menu for re-entry of the default

The password is constant, whereby 6666 is

valid.

Reset? Confirm only if the data must be reactivated No

with the default data.

The entry data allowed here is: NO or YES.



8.0 MAINTENANCE

KEY FUNCTIONS

The maintenance mode is accessed by pressing on pushbutton M. The pushbuttons provided are meant for:

Key 1: Alarms scroll-down 2nd level function

Key 2: Alarm reset Alarm reset

Key 3: Complete test run

_

Key 4: Only water test

-

Key 5: Mixer test

-

Key 6: Group movements

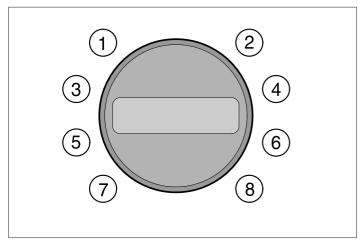
-

Key 7: View total selections

MDB tube filling

Key 8: Cleaning

MDB tube emptying



When in the maintenance mode, the following messages come up on display:

1Maintenance 90

In the event that any alarms have tripped off or there are any warnings, the relative alarm message or signal is displayed in line two. The last three character of the line are reserved to viewing the boiler temperature. If no alarms are present, key 1 activates the second level function key and the following is displayed:

2Maintenance 90

To exit the second level functions it will be sufficient to press on key 1 again.

To exit the maintenance mode it will be sufficient to press on the maintenance key.

ALARM RESET

Upon pressing the key all alarms and warnings are reset, then the reset procedure is activated.

If the instant grinder function is not enabled (menu 4) the micro doser is verified for possible activation of the grinder for filling of the doser unit.

The factory data are restored only if the Eeprom alarm is triggered off as well. During reset, the following message comes up on display: *Maintenance*

Reset

ALARMS AND WARNINGS SCROLL-DOWN

This function can be implemented if there are alarm or signal messages present. If there are, pressing the relative scroll-down key it is possible to scroll through the list of alarms and warnings that are displayed in line 2.

COMPLETE TEST RUN

This function allows the operator to run test selections of the possible drinks available. Once the function is activated it will be necessary to press the key relative to the selection to be tested. During the test run servings, the preventive action menu decounters are managed whilst the sales menu counters will not be increased.

If the complete test run mode is accessed and you wish to exit without entering any test selections, simply press the Maintenance pushbutton. The following message comes up on display in line 1:

Test run complete

ONLY WATER TEST

This function allows the operator to run test selections of the possible drinks available without the powders being dispensed. Once the function is activated it will be necessary to press the key relative to the selection to be tested. During the test run servings, the preventive action menu de-counters are managed whilst the sales menu counters will not be increased.

If the only water test run mode is accessed and you wish to exit without entering any test selections, simply press the Maintenance pushbutton. The following message comes up on display in line 1:

Only water test

MIXER TEST

This function enables in-sequence activation of the mixers for a time interval of 4 seconds each. The following message will come up on display:

Mixer test Dispensing

GROUP ROTATION

The coffee group reset procedure consisting in activating the group exit function for a complete rotation run, is activated. During group rotation, the following message comes up on display in line 2: Reset

CLEANING

The wash procedure is activated (please consult the washing/cleaning management paragraph under the operation section). During the wash cycle, the following message comes up on display in line 2: Cleaning

SELECTION DISPLAY

The selection counter display procedure is activated. Below is a list of the selection counters that are displayed. The two line description on the display will have the following meanings:

Total selections Displays the total selections counter,

resettable.

Total hot drinks Displays the hot drinks selection counter,

resettable.

Total snacks Displays the total snacks selections counter,

resettable.

For the alarms and signals present, please consult chapter 11.0.

0



9.0 MAINTENANCE AND INACTIVITY



9.1 Cleaning and Loading



So as to guarantee the correct functioning of the distributor during time it is necessary to effect some operations periodically, some of which are indispensable for the observance of the health standard norms. These operations must be done with the distributor open and switched off.

The cleaning operations must be effected before the loading of the products. In order to guarantee normal operation, the machine must be installed in areas that the environmental temperature is between a minimum of -1° C and a maximum of $+32^{\circ}$ C end humidity of not over 70%. Must not be installed in places where cleaning is done with water hoses(ex. big kitchens.). Do not use water jets to clean the machine.

9.1.1 Procedure for distributor cleaning

Recommended equipment:

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

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

Never use:

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

To ensure hygiene:

- Use disinfectants

For cleaning:

- Use detergents and/or detersive products

The purpose of the disinfectants is to destroy any surface bacteria which may be present. The detergents act to eliminate the dirt. Products exist on the market which are both detergents/ disinfectants and are usually sold at the chemist's.

On application of the HACCP certain hygienic regulations are laid down for company self-checking procedures concerning :

- Cleaning of the premises
- Product transportation
- Machinery maintenance
- Waste disposal
- Drinking water procurement
- Personnel hygiene
- Food product characteristics
- Personnel training
- (Directive 93/43 CEE)

The cleaning operations may be undertaken:

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

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

The person responsible for machine hygiene, before opening the distributor must check the cleanliness of the surrounding environment and put up a sign to tell any potential consumers that:

- the machine is "out of use as maintenance is in progress"
- it is important that the person responsible for cleaning never has to interrupt his work in order to operate the machine.

9.1.2 Periodic cleaning by the maintenance technician

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

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

9.1.3 Daily cleaning recommended

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



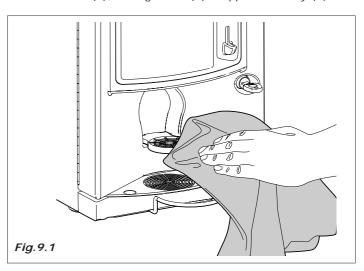
For all cleaning operations follow the instructions indicated in paragraph 9.1.1.

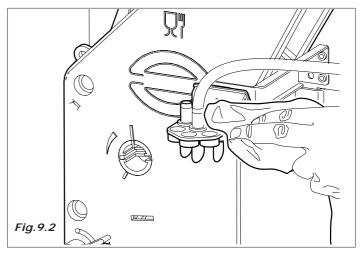
Operate as follows:

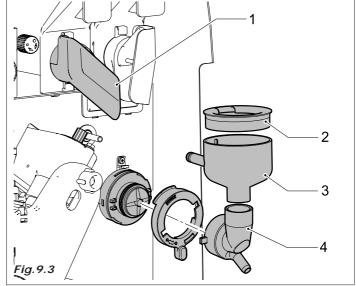
- clean all the visible parts in the dispensing area. (Fig. 9.1 e Fig. 9.2)

remove and clean carefully:

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





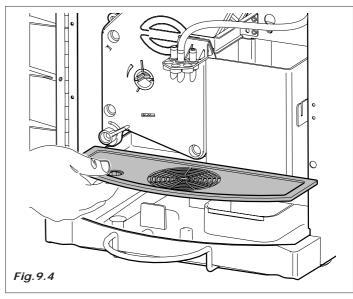


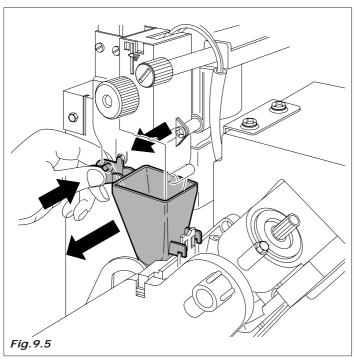


- silicone water dispensing tubes.
- dispensing chamber (Fig. 9.4)
- coffee funnel and chute (Fig. 9.5)

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

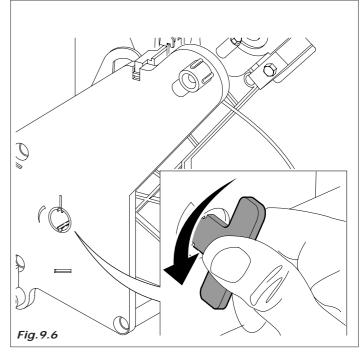
 remove all coffee powder residue; the unit can be removed from its housing to make the task easier (Fig. 9.6)





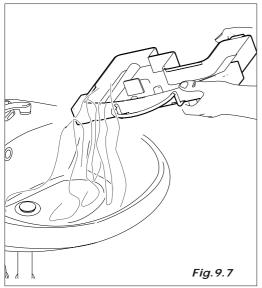
- empty the waste liquids bin clean it and/or substitute it (Fig. 9.7).
- substitute the coffee spent grounds container (coffee in beans versions) (Fig. 9.8).

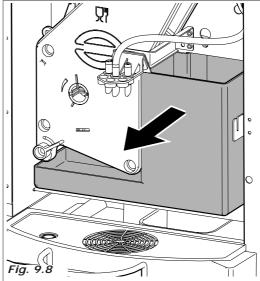
Last step: coin collection.



9.1.4 Weekly cleaning

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









9.1.5 Product loading

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





9.2 Recommended maintenance

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

^{*} Bianchi Vending Group has prepared specific kits expressly designed for every distributor mode

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 6.6.3*.



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.

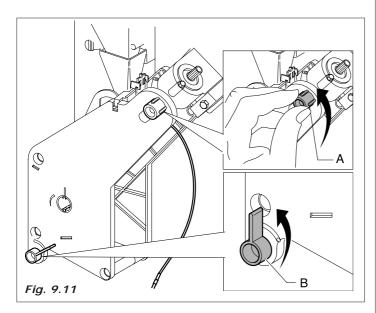
Then detach the pipe indicated in Fig. 9.10, unscrew knob ${\bf A}$, rotate lever ${\bf B}$ (Fig. 9.11) and then remove the entire coffee unit.

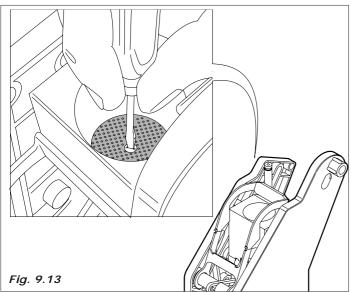
Every 5000 vends and anyhow monthly, it is advisable to lubricate all the mobile parts of the group, using silicone grease for alimentary use *Fig. 9.12*):

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

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

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

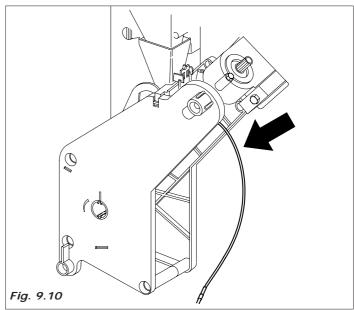


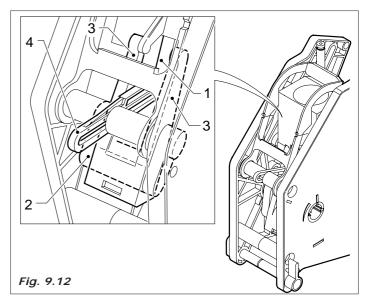


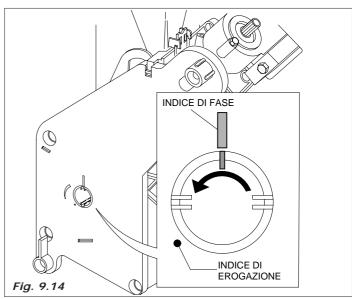
COFFEE MACHINE TIMING CHECK PROCEDURE

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.

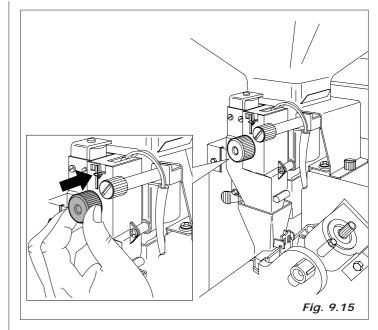
Turn clockwise for fine grinding, turn anti-clockwise for coarser grinding.

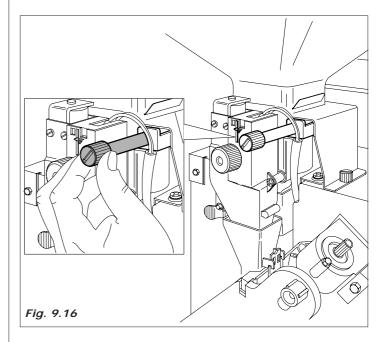
After regulation, three product regulations must be carried out in order to assess the efficiency of the regulation, the finer the granules the greater the time required for product delivery.

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 SOFTWARE INSTRUCTIONS.

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



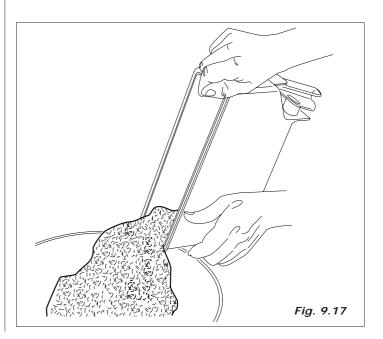




9.4 Inactivity

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 outisde 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.





10.0 DISMANTLEMENT

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

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

Subsequently entrust to specialised companies the parts divided in this manner.

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

11.0 ALARMS AND WARNINGS

SYSTEM-STORED ALARMS

EBI translator unit

Translator unit alarm. This alarm is displayed if the translator unit time-out expires during relative exit cycle. Said alarm is removed by running the alarm reset procedure.

NON-STORED ALARMS

ECM Eeprom# Err.

the board is programmed with a firmware version different to the previous one. Said alarm is removed by running the alarm reset procedure. Further to the elimination of the alarm, this also entails re-entry of all the related default data. Meaning of the fields:

Eeprom alarm. This alarm is triggered when

means that there is a board alarm, with

M = Master, A = Vega A

EAM No Token.

Coin/token box missing alarm This alarm is triggered if either an MDB or an Executive payment system is programmed and then the connection with said system is cut off. The alarm is auto-resetting therefore it will reset itself immediately as soon as the serial connection is restored.

ECF No Slave

Alarm due to no slave board picked up at reset. This alarm occurs if at machine switch-ON, no power board is detected. It is necessary to switch the V.M. off and to verify the power board.

No heat-up by EC1C

No heating alarm relative to the main boiler unit. It occurs if boiler 1 does not reach the programmed temperature within the maximum set time of 15 minutes. Said alarm is removed by running the alarm reset procedure.

EAJ Scale Factor

Scale factor alarm. This alarm relates to the Executive and Executive ECS payment systems. This alarm is triggered when at least one programmed price divided by the payment system's basic currency amounts to more than 250. The alarm is auto-resetting and it will therefore disappear as soon as the price that is higher than the test parameter, is reprogrammed.

Cup(s) alarm This alarm is triggered if the cups release motor is activated for longer than 10 seconds. Said alarm is removed by

running the alarm reset procedure.

EDP Water Level

EBB Cups

Water level alarm. This alarm is triggered if the water load management system detects anomalies in the water load levels (for details, please refer to the water load mana-

gement description).

EDF_1 Sug.Conv.

Sugar conveyor alarm.

ECK No Expan.

No expansion alarm.

EGN too full.

Liquid collector tray too full alarm. This alarm is triggered when the input related to the collector tray micro remains at a high logic level for more than 2 seconds. The management of said alarm does not occur during dispensing cycles. The alarm is auto-resetting therefore it will reset itself immediately as soon as the

input is restored.

ECE Slave O.O.O.

Salve out of order alarm. Triggered when during standard operations, communication is lost between a CPU board and a Vega power



board. The alarm is auto-resetting therefore it will reset itself immediately as soon as the serial connection is restored.

SYSTEM-STORED WARNINGS

EDT_1 Grinder b Grinder warning. This warning occurs when

grinder operations last longer than the maximum programmed time. Said warning alarm is removed by running the alarm reset

procedure.

Doser unit warning. This warning occurs if EDU_1 Doser b

doser unit operations does not detect doser micro release after one second from the actual release. Said warning alarm is removed

by running the alarm reset procedure.

EFN_1 Pump This is a pump warning. This warning occurs

when pump operations last longer than the maximum programmed time. Said warning alarm is removed by running the alarm reset

procedure.

EEK Group This is group unit warning. This warning oc-

> curs when group unit operations last longer than the maximum programmed time. Said warning alarm is removed by running the

alarm reset procedure.

Machine Vega board NTC probe failure war-EJK_A Vega NTC

EJJ_A Saf.Delta Vega safety delta warning.

EJL_A VegaSens. Vega product delivery sensor warning.

NON-STORED WARNINGS

unit

EDM_1 NTC probe Boiler NTC probe warning. Occurs if an

anomaly is detected on the NTC probe. The warning is auto-resetting therefore it will reset itself immediately as soon as the NTC

probe is restored.

EDF_2 Stirrers Stirrer warning. This warning alarm occurs

if the stirrer release motor is activated for longer than 10 seconds. Said warning alarm is removed by running the alarm reset pro-

cedure.

EEJ No group This is a group unit not present warning. This

> warning occurs if the group unit presence micro is detected as open. Said warning alarm is auto-resetting therefore it will reset itself immediately as soon as the input is

restored

Water treatment Water treatment unit decounter not blocking

warning. Occurs if the water treatment unit decounter is null. Said warning alarm is auto-resetting therefore it will reset itself

immediately as soon as the decounter value

is programmed.

Boiler Water boiler decounter not blocking warning.

Occurs if the boiler decounter is null. The alarm warning is auto-resetting therefore it will reset itself immediately as soon as the

decounter value is programmed.

HACCP Sanitization HACCP sanitising decounter not blocking war-

ning. Occurs if the HACCP decounter is null. The alarm warning is auto-resetting therefore it will reset itself immediately as soon as the

decounter value is programmed.

Electro valves Electro valve decounter not blocking warning.

Occurs if the electro valve decounter is null. The alarm warning is auto-resetting therefore it will reset itself immediately as soon as the

decounter value is programmed.

Seals Seals decounter not blocking warning. Occurs if the seals decounter is null. The alarm war-

> ning is auto-resetting therefore it will reset itself immediately as soon as the decounter

value is programmed.

Coffee grinder Coffee grinder decounter not blocking warning.

Occurs if the coffee grinder decounter is null. The alarm warning is auto-resetting therefore it will reset itself immediately as soon as the

decounter value is programmed.

Coffee filters Coffee filters decounter warning. Occurs

> if the coffee filters decounter is null. The alarm warning is auto-resetting therefore it will reset itself immediately as soon as the

decounter value is programmed.

Coffee grounds Coffee grounds de-counter warning. Occurs

if the coffee grounds decounter is null. The alarm warning is auto-resetting therefore it will reset itself immediately as soon as the

decounter value is programmed.

OMNIFET ALLARMS

ECQ Omnifet ## Omnifet alarm

displays the relative alarm number (as

per the table hereunder)

ECQ Omnifet A## Vega spiral motor alarm.

Meaning of the fields: ## stands for the sector

For the corresponding meaning of the omnifet ## alarms related

to the master board, check the following

table:

ECQ Omnifet ##	Relative output	
0	OUT2:2	Rotary pump assembly
1	OUT2:3	Mixer 1
2	OUT2:4	Fan
3	OUT2:7	Instant powder 1
4	OUT2:8	Instant powder 2
5	OUT2:9	Coffee release/mixer 2
8	OUT3:2	Water entry EV
9	OUT3:3	Ev. 1 - Espresso coffee EV
10	OUT3:4	Ev. 2
11	OUT3:7	Ev. 3
12	OUT3:8	Cup Station Lighting
13	OUT3:9	Instant powder 3

SPIRALS OUT OF SERVICE WARNING

EJB A VegaSetA## Vega spirals out of order stands for the sector

ALARMS/WARNINGS LOG

The alarms/warnings that are displayed, are stored in logs listing 15 events. Obviously, as soon as a new alarm/warning occurs, the oldest alarm on the log will be overwritten. Said alarm and warnings log can be viewed via Windows application tools or by downloading the EVA-DTS data.



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