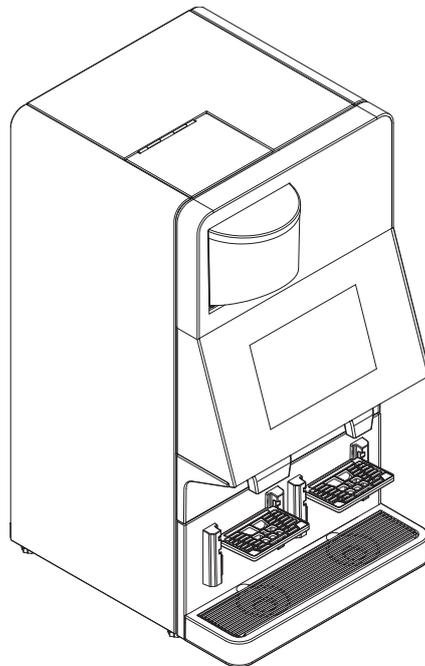
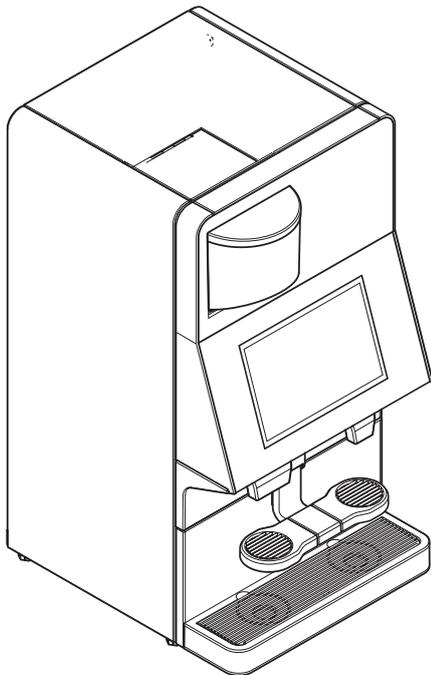


# W100 / W100 C GS Master brew



EN

English

original instructions



Doc. No. T0642EN00





## DEFINITIONS

### **MANUFACTURER**

A natural or legal person who manufactures radio equipment and/or electric material or has it engineered, manufactured or marketed by putting its own trademark or name on it.

### **IMPORTER**

Any natural or legal person, who places on the market a product within the scope of application of the rules originating from a third country.

### **DISTRIBUTOR**

Any natural or legal person in the supply chain, other than the manufacturer or the importer, who offers a product within the scope of application of the rules on the market.

### **TECHNICAL SUPPORT PERSON**

Qualified personnel performing open door operations where there is a risk of access to live or moving parts.

The technical support personnel must be informed on the specific risks involved.

The technical support personnel are in possession of the Access Key and the Override Key.

### **MAINTENANCE PERSON:**

Qualified personnel performing operations intended to fill canisters and clean the equipment.

The maintenance personnel must have been properly trained on the safety and hygiene requirements of the equipment.

The maintenance personnel have an Access Key to access the inside of the machine for maintenance operations.

The maintenance personnel are NOT in possession of the Override Key.

## GENERAL WARNINGS

- ☞ **Before starting to install and operate the machine, it is necessary to carefully read and understand the content of the technical documentation of the equipment since it can supply important information on installation safety, operation rules and maintenance operations**
- ☞ An importer or distributor who places radio equipment or electric material on the market by putting its own name or trademark becomes the manufacturer.
- ☞ An importer or distributor who makes any change to radio equipment or electric material already placed on the market to such an extent that the said change may condition the compliance with the listed directives is held to be the manufacturer and it must therefore assume the relative obligations according to the said directives.
- ☞ **This document is an integral part of the equipment and it must therefore accompany the equipment whenever it is either moved or transferred to allow consultation at any time.**
- ☞ The technical documentation is intended for the technical personnel and it is made available in its electronic format.  
It can be downloaded from the website at the following URL:

<https://store.evocagroup.com/it/downloads>

or by contacting us and filling in the form on the “Contacts” page.  
The documentation is in the PDF (Portable Document Format) electronic format and it can be displayed by using any programme for reading PDF files or a compatible web browser.  
The technical documentation may be filed electronically and/or printed by a common A4 printer, according to one’s own needs.



1. Frame the optical code shown here to access the documentation page
2. Enter the machine code in the search field “MACHINE CODE”.  
The machine code is shown on the label in the declaration of conformity
3. You will be shown the documentation available for the machine code you have entered

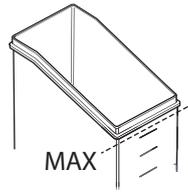


- ☞ The machine may be used by children of at least 8 years of age and by persons with reduced physical, sensory or mental capabilities, or lack of experience or the necessary knowledge, provided that they are supervised or have received instructions concerning the safe use of the machine and understanding of the dangers involved. Children must be supervised to ensure that they do not play with the machine. Cleaning and maintenance intended to be carried out by the user must not be done by unsupervised children.
- ☞ This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been supervised or instructed in its use by a person responsible for their safety.

## GENERAL SAFETY WARNINGS

- ☞ The installation and any subsequent maintenance and cleaning operation shall be carried out by the personnel skilled and trained on the utilisation of the machine according to the safety and hygiene rules in force.
- ☞ The machine is intended for use in domestic and similar applications such as: personal kitchens, shops, offices and other work environments, farms and hotels as well as other residential environments, home and breakfast environments, catering and similar non-retail applications.
- ☞ The machine is not suitable for installation outdoors.
- ☞ The machine cannot be installed in a room where water jets are used for cleaning (e.g. large kitchens, etc...) and/or exposed to direct sun rays.
- ☞ The machine is to be installed in a dry room and far from any source of heat, at a temperature between 4°C (39.2°F) and 34°C (93.2°F).
- ☞ If the equipment is frozen, it must be conditioned to an ambient temperature of 20°C (68°F) for at least 6 hours.
- ☞ The power supply cable shall be neither damaged nor crushed by the equipment; if damaged, the cable must be replaced by the manufacturer or by its authorised technical assistance centre or by qualified personnel.
- ☞ The power supply cable must not be connected to a multiple socket.
- ☞ The equipment must be supplied with drinkable water according to the provisions in force in the country of installation of the equipment.
- ☞ Use only new gaskets and water connection hoses supplied with the machine, do not reuse old ones.
- ☞ The pressure values for machines connected to the water supply network must be between the values mentioned on the data label on the equipment.
- ☞ The sound pressure level is below 70 dB.
- ☞ **Only technical support personnel who have been trained on the safety and hygiene requirements of the equipment are allowed inside the equipment.**
- ☞ The machine may be used by children of at least 8 years of age and by persons with reduced physical, sensory or mental capabilities, or lack of experience or the necessary knowledge, provided that they are supervised or have received instructions concerning the safe use of the machine and understanding of the dangers involved. Children must be supervised to ensure that they do not play with the machine. Cleaning and maintenance intended to be carried out by the user must not be done by unsupervised children.
- ☞ This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or instructed in its use by a person responsible for their safety.
- ☞ The vending machines of drinks in open canisters may be only used for selling and dispensing food drinks the manufacturer will declare to be “suitable for vending” in open canisters.
- ☞ Always refer to the pull date, storage specifications and holding temperature of the product. All products are to be consumed immediately. Under no circumstance shall they be preserved and/or packed for later consumption.

- ☞ When filling/loading products, ensure that powders and liquids do not exceed the maximum level. The maximum level on canisters is generally indicated with a reference notch or mark; in other cases, it coincides just below the point where the lid rests.



## WARNINGS FOR INSTALLATION

- ☞ Before starting to install and operate the equipment, it is necessary to carefully read and understand the content of the documentation since the manual can supply important information on installation safety.
- ☞ **Installation and any subsequent maintenance operation for technical support must be carried out when the machine is live and, therefore, by the personnel skilled and trained on the use of the machine as well as aware of the specific risks such a condition may involve.**
- ☞ **Installation and any subsequent testing operation must be carried out by qualified personnel who have a specific knowledge of the machine operation from the point of view of electric safety and hygiene standards.**
- ☞ **The equipment shall only be installed in an environment where it can be supervised by qualified maintenance personnel.**
- ☞ The equipment must be placed on a flat and horizontal surface.
- ☞ The equipment can be installed near a wall; however, it must be min. 4 cm. far from the wall in order to provide for ventilation.
- ☞ The machine is equipped with automatic washing functions. If the machine is not used for some time (e.g. weekends, etc.), even for pauses longer than two days, it is recommended to enable automatic washing functions (e.g. before starting to use it).
- ☞ After installing the equipment, it is necessary to sanitise the water circuits and the parts in contact with foodstuffs in order to remove any bacteria that may have built up during the storage of the machine.
- ☞ The use of kits and/or accessories not type-approved by the manufacturer can not guarantee the observance of safety standards, in particular for live parts.
- ☞ The installer will be the sole person responsible for any damage improper installation may cause to the machine or to things and people.
- ☞ Some illustrations in this manual may show details that differ from those on the equipment, but do not change the essential information.
- ☞ The manufacturer declines all responsibility for the use of non type-approved components.
- ☞ Never cover the machine with cloths or similar items.

- ☞ After unpacking, make sure that the equipment is intact; in case of doubt, never use the equipment.
- ☞ No packing material (plastic bags, foam polystyrene, nails, etc.) must be left within the reach of children since they are potential sources of danger.
- ☞ Packing materials shall be disposed of in respect of the environment, in authorised dump sites, and recyclable ones shall be collected by specialised companies.
- ☞ **Technical support personnel shall check the machine intactness and its compliance with the rules in force for relevant installations at least once a year.**

## WARNINGS FOR HYGIENE AND CLEANING

- ☞ The manual shows the potential weak points and gives the instructions necessary to control any bacterial proliferation.
- ☞ The vending machines of drinks are to be used exclusively for selling and dispensing food drinks obtained by: brewing products, such as coffee and/or tea; reconstituting instant or freeze-dried packed products.  
These products shall be declared as “suitable for vending” in open canisters by the manufacturer. Dispensed products shall be consumed just after the dispensing cycle. Under no circumstance shall they be preserved and/or packed for later consumption.
- ☞ Before cleaning and loading, wash your hands and wear disposable gloves: the use of gloves is not removing the need for hand hygiene.
- ☞ According to the health and safety rules in force, the operator of the vending machine shall apply the self-control procedures established in compliance with the provisions of the HACCP (Hazard Analysis Critical Control Point) directive and the national laws.
- ☞ Never forget to power off the machine before carrying out any maintenance operation requiring the disassembly of components.
- ☞ Whenever products are loaded or more frequently, according to the use of the machine, the inlet water quality and the products in use, sanitise the machine carefully to guarantee the hygiene of dispensed products.
- ☞ Sanitisation is carried out by using disinfection products while taking care to mechanically remove visible residues and films, by using the accessories provided (pipe cleaners and/or brushes if any) and by following the instructions in the manual section on cleaning.
- ☞ It is allowed to use cleaning products suitable for food contact; for dosage and application times refer to the instructions supplied by the product.
- ☞ It is good practice to also sanitise the surfaces not directly in contact with the foodstuffs inside the equipment.
- ☞ Never use solvents and/or detergents that are too much flavoured.
- ☞ Some parts of the machine can be damaged by aggressive detergents. The producer disclaims all responsibility for any damage caused by the non-observance of the above or by the use of aggressive or toxic chemical agents.
- ☞ Never use water jets for cleaning the equipment.

## WARNINGS FOR THE ENVIRONMENT

- ☞ Some tricks will help you to protect the environment:
- ☞ Use biodegradable products to clean the machine;
- ☞ Properly dispose of all the packages of the products used to fill and clean the equipment;
- ☞ Power off the machine during inactivity for considerable energy saving.

## WARNINGS FOR DISMANTLING AND DISPOSAL

When dismantling the machine, it is recommended to destroy its rating plate.



This symbol shows that the machine can not be disposed of as common waste, but it must be disposed of as it is established by the laws in force and by the relevant national laws in order to prevent any negative consequence for environment and human health.

The differentiated collection of the machine at the end of its life is organised and managed by the manufacturer.

The proper differentiated collection of the parts composing the machine promotes the re-utilisation and/or recycling of the materials building the equipment.

For the correct disposal of the machine contact the sales point where you have purchased the machine or our after-sales service.

The unlawful disposal of the machine by its owner has a negative impact on environmental and health conditions and it implies the enforcement of the administrative sanctions provided for by the rules in force.

## WARNINGS FOR PRIVACY

Only for the machines having a video camera and/or webcam.

The video camera and/or webcam for factory settings is disabled; if enabled, it shoots soundless images without being able to store them.

The Customer acknowledges that he/she will become the Holder of the personal data acquired if the video camera and/or webcam built in the equipment is activated.

Starting from that time, the Holder will assume all the relative rights and duties according to the provisions in force on the matter.

## WARNINGS FOR SPARE PARTS

- ☞ It is recommended to use original spare parts available on the manufacturer's e-commerce site.
- ☞ Use original spare parts only to guarantee maximum reliability and product quality. Original parts have been specifically designed and tested to operate with the equipment to reduce the risk of failures, malfunctions and incompatibility to a minimum.
- ☞ Original spare parts are designed to fulfil the safety standards established by the manufacturer. The use of non-original parts and/or not authorised by the manufacturer compromises the safety of the equipment, it may cause damage to persons, things and animals as well as harm the end user's health.
- ☞ Non-original spare parts might be not compatible with the equipment, thus causing malfunctions or making further changes necessary.
- ☞ The manufacturer disclaims all responsibility for the use of non-original components and/or not authorised by the manufacturer.

## INCORPORATION OF RADIO MODULES

In compliance with Article 17 of Directive 2014/53/EU (RED), the manufacturer checks whether the radio equipment is in compliance with the essential requirements of article 3 of the Directive.

The procedure used to check compliance is at the manufacturer's discretion.

If a radio module is built in a "non-radio" equipment, the subject incorporating the module will become the manufacturer of the end product and it must therefore check the end product compliance with the essential requirements of the 2014/53/EU (RED) Directive.

As a matter of fact, the incorporation of radio modules in other products can influence the end product compliance with the essential requirements of the Directive.



# English

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## Introduction

**The technical documentation is an essential component of the appliance and must be included whenever it is moved or ownership is transferred. This is necessary to enable operators to access and refer to the material as needed.**

**The manual is structured as follows:**

- The first chapter gives a brief explanation of the loading and cleaning operations.
- The second chapter lists a brief explanation of installation notes.
- The third chapter lists a summary explanation on the functioning of the main functional groups of the equipment.
- The fourth chapter lists a brief explanation of the main software functions that can be used to better manage the operation of the appliance, not necessarily in the order in which they are displayed in the menus. The representation of the icons/screens in this manual is indicative and may differ from those displayed by the device depending on the settings made (layout, themes and/or icons).
- The fifth chapter describes maintenance operations involving the use of tools for access to potentially hazardous areas.

# SWITCHES AND SAFETY DEVICES

## MAIN SWITCH

The main switch (manual type), located at the bottom right (under the mixer shelf), de-energises the appliance.

When carrying out normal cleaning and product loading tasks, the appliance does not have to be switched off.

## DOOR SENSOR

When the door is opened, a special switch disables the connectivity components of the appliance so that the below-described loading and routine cleaning operations can safely be carried out.

**⚠ All operations which require the appliance to be live with the door open, must be performed EXCLUSIVELY by qualified personnel who are aware of the specific risks that the machine entails in this condition.**

## CONNECTIVITY SWITCH

When the door is opened, a specific switch deactivates the appliance's connectivity components.

With the door open, the connectivity and remote function group drives are disabled.

**⚠ All operations that require the appliance to be live with the door open and the connectivity functions active, must be performed EXCLUSIVELY by qualified personnel who are aware of the specific risks involved when the machine is in this condition.**

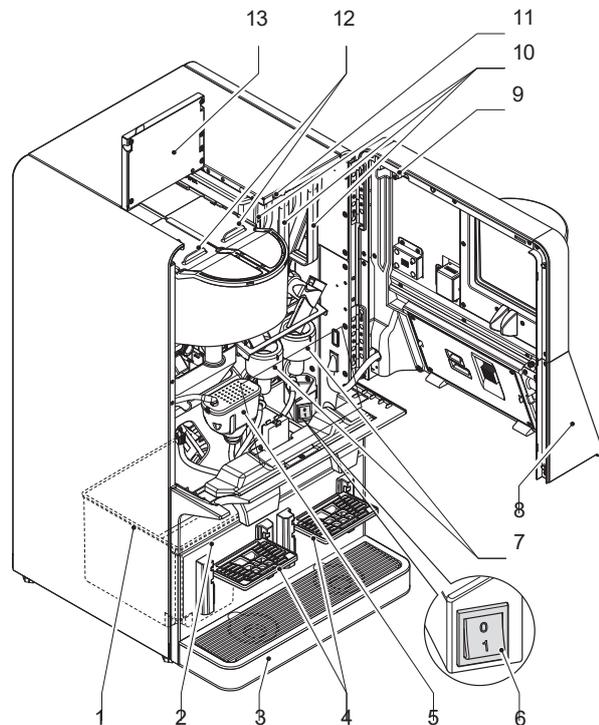
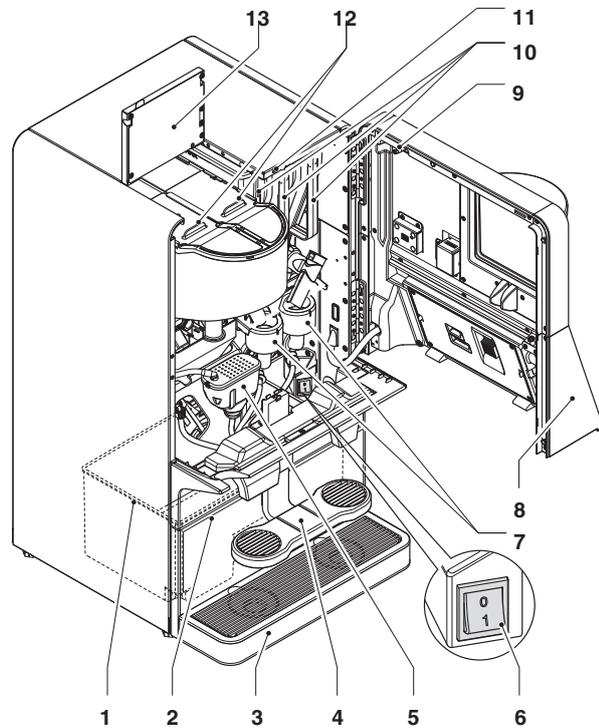


Fig. 1

1. Solid residue tray
2. Lower door
3. Liquid residue tray
4. Cup support
5. Diffuser
6. Main switch
7. Mixer
8. Door
9. Connectivity switch
10. Handle for instant powder container
11. Door sensor
12. Coffee container lid handles
13. Upper door

## SAFETY DEVICES IN THE PRESENCE OF COFFEE CONTAINER

When the coffee container is removed, the safety mechanism disables the movement of the grinders and brewing unit.

## SAFETY DEVICES IN THE PRESENCE OF SOLIDS TRAY

When the solid residues tray is removed, the safety mechanism disables the movement of the grinders and the brewing unit.

## USING HOT BEVERAGE VENDING MACHINES

Vending machines that dispense beverages into open containers must be used exclusively for the sale and distribution of drinks which are produced via:

- Brewing of coffee beans or pre-ground coffee.
- The reconstitution of instant or freeze-dried products.

These products must be declared by the manufacturer as “suitable for automatically dispensing” into open containers.

**⚠ The products dispensed must be consumed immediately. Under no circumstances should they be stored and/or packaged for later consumption.**

Any other use is considered improper and therefore potentially dangerous.

## KNOWLEDGE OF THE APPLIANCE

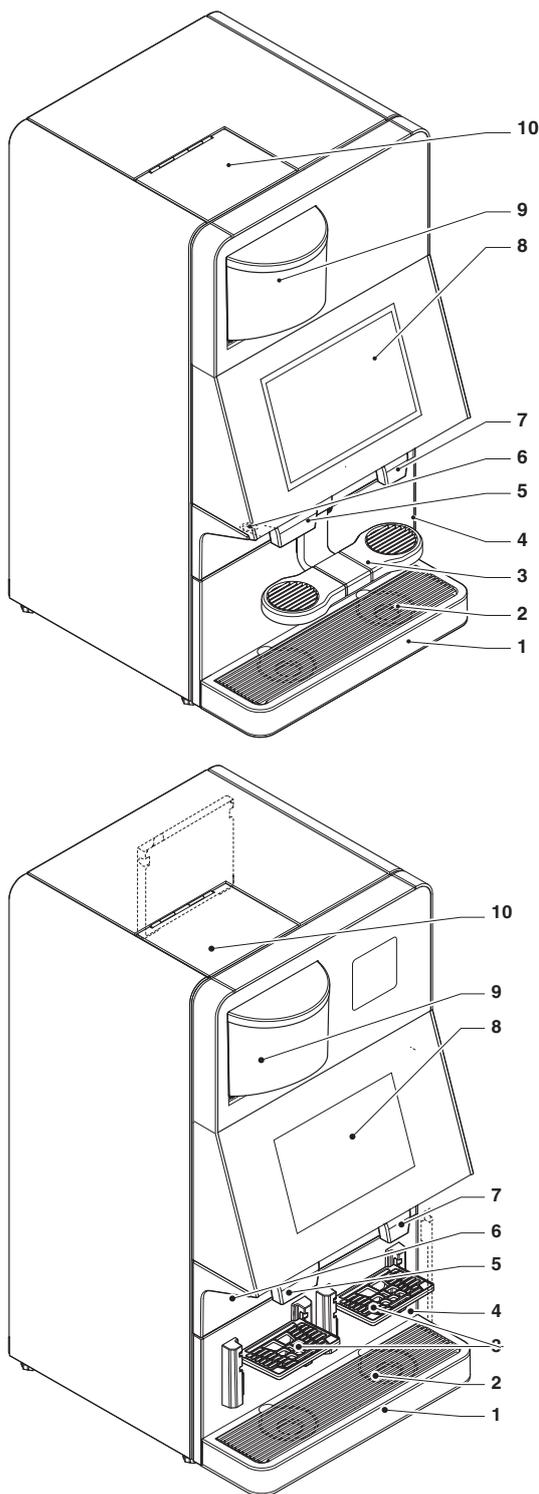


Fig. 2

1. Liquid residue tray
2. Grill
3. Cup support
4. Lower door
5. Nozzles beverages
6. Lock
7. Hot water nozzle
8. Touchscreen
9. Coffee container
10. Upper panel

## TOUCHSCREEN

**Only use fingers to interact with the touchscreen; do not use sharp objects.**

If the touchscreen is not used and displays the same screen for a long period of time, residual images or movements may appear: turn off the touchscreen (energy saving) or set an animated screen saver for when it is not in use.

The touchscreen can play promotional videos.

Using high-quality content will affect the general performance and use up memory space.

### TOUCH

Tap icons, functions and objects to activate or open context menus.



Fig. 3

### MOVE AND DRAG

To move and drag icons and objects, tap and drag them to a new location.

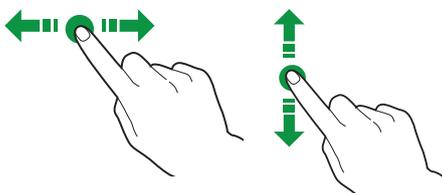
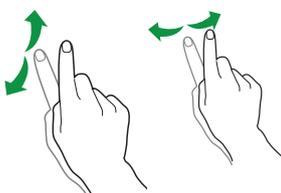


Fig. 4

### SCROLL

Slide a finger to the right, left, up or down on the touchscreen to scroll through the values, screens and functions.



## NORMAL OPERATION

In operation in normal user status, the appliance displays the screen with the selections available.

In the event that an anomaly is detected, a message will be displayed indicating the type of fault/error.

Some selections may be disabled when certain types of faults occur (e.g. product containers empty, etc.).

With some customised settings (e.g. a different beverage arrangement) some selections may not be displayed. In such cases, simply scroll left or right to view additional selections.

### DISPENSING A BEVERAGE

Select a beverage.

The screen with the beverage customisations can be displayed (Length, coffee intensity, etc.).

**i** Depending on the beverage selected, the appliance will give an indication of where to place the cup.

Whilst the beverage is being prepared, the preparation status is shown; Alternatively it is possible to see the entertainment contents (e.g. a video)

If enabled from the menu, it is possible to interrupt the preparation of the drink ("abort dispensing" function).

## LOADING PRODUCTS

**ⓘ Before loading the products, check that they have been stored in compliance with the manufacturer instructions regarding storage and the storage temperature.**

**ⓘ Before loading the products, check the expiration date.**

The products must be declared by the manufacturer as “suitable for automatically dispensing” into open containers.

Products may also be loaded with partially-full containers.

**ⓘ If the product level control function is active on the appliance, the quantity of product loaded must be indicated by the "Daily Operations" function.**

## COFFEE BEANS

It is recommended to use high-quality coffee beans in order to prevent appliance failure resulting from the presence of impurities.

1. Open the appliance door.
2. Raise the upper panel of the appliance to access the coffee container covers.
3. Slide the container lid backwards.
4. Fill the container with coffee beans.
5. Check that the container lock is open.

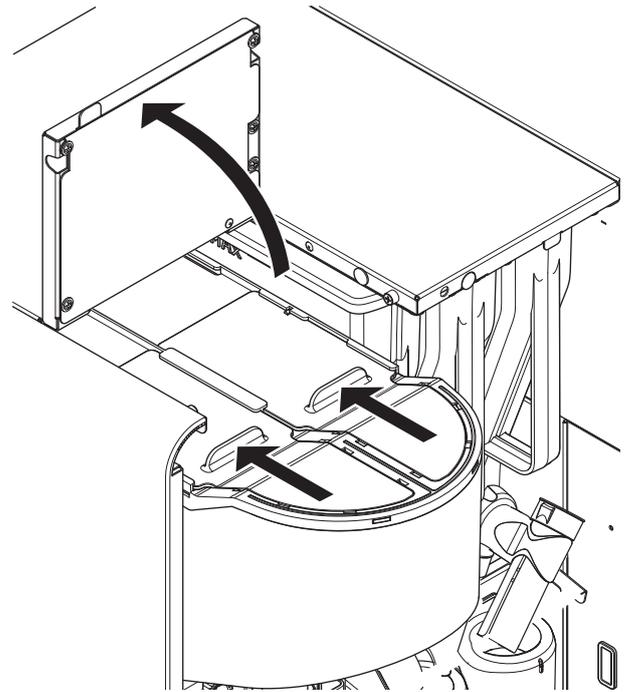


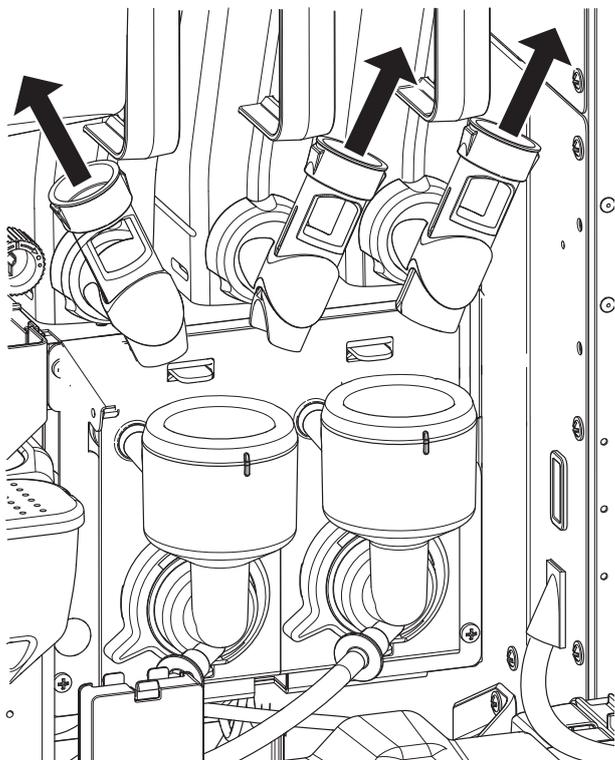
Fig. 5

**ⓘ A micro switch disables the grinders and the brewing unit in the absence of the coffee container**

## INSTANT PRODUCTS

Use of quality instant products is recommended to avoid appliance malfunctions resulting from the presence of impurities.

1. Open the door.
2. Lift the instant powder conveyor.



3. Remove the container from the shelf.
4. Open the instant powder container lid and fill it with the product.
5. Close the lid carefully.

6. Reposition the container, taking care to insert it into the guide.

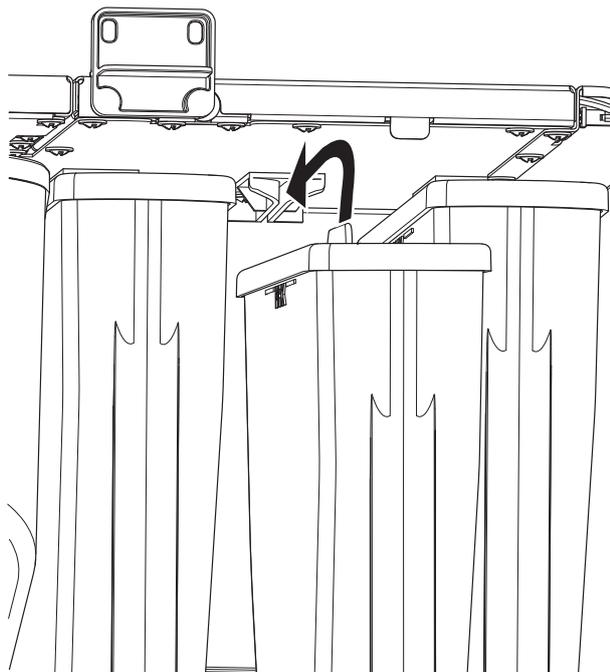


Fig. 6

7. Lower the soluble powder conveyors.



Fig. 7

**ⓘ** To avoid packing do not compress the powder of instant products.

**ⓘ** Make sure that the instant products do not contain any lumps.

## PERIODICAL OPERATIONS

**This manual shows the potential critical points and includes information about controlling the possible growth of bacteria.**

**Under the current health and safety regulations, the operator of the appliance must apply the self-control procedures, identified in accordance with the HACCP (Hazard Analysis Critical Control Point) Directive.**

With each product load, or more frequently, and depending on the use of the appliance, the quality of the incoming water and the products used, it is essential to clean the appliance and the parts that come into contact with foodstuffs, proceeding as described in the following paragraphs.

**Cleaning products suitable for contact with foodstuffs may be used. For dosage and application times refer to the instructions on the product.**

It is good practice also to use sanitising products for cleaning surfaces not directly in contact with food (e.g. cup holders etc.). The manufacturer shall not be held responsible for any damage caused due to the non-observance of the above or the use of aggressive or toxic chemical products.

**Always switch off the appliance before starting any maintenance work which requires disassembling components.**

**Do not under any circumstances use jets of water directly on the appliance when cleaning.**

## CLEANING THE MIXERS AND FOOD PRODUCT CIRCUITS

The mixers must be sanitised at each load and/or weekly or more frequently depending on the use of the appliance, the quality of the incoming water and the products used.

**Under no circumstances should jets of water be used for cleaning.**

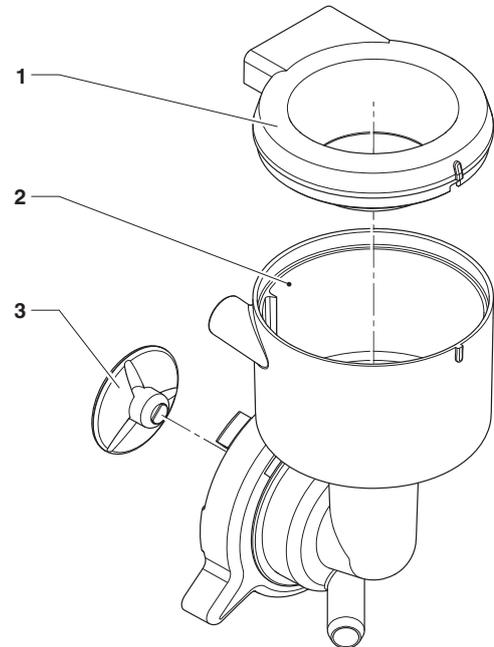


Fig. 8

1. Splash guard
2. Water funnel
3. Mixer fan

To clean the mixer, proceed as follows:

1. Lift the dust nozzles up to the stop.
2. Disconnect the hose from the water funnel connection.
3. Turn the water funnel locking ring anti-clockwise and remove the mixer from the appliance.
4. Separate all components.
5. Remove the mixer fan.

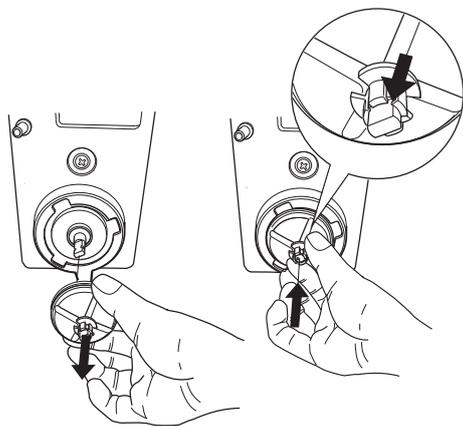


Fig. 9

6. Wash and rinse the parts under a jet of warm water, taking care to remove residues and visible films mechanically using clean tube cleaners or brushes.
7. Dry the parts with a cloth.
8. Reassemble the fans.
9. Reposition the mixer and check that the water funnel is correctly engaged.
10. Turn the water funnel locking ring clockwise in order to secure the mixer to the appliance.

**After installing the components, it is necessary to:**

- Wash the mixer and add a few drops of the sterilising solution into the various funnels.
- Thoroughly rinse the components in order to remove any residue of sterilising solution.

**All operations that require the appliance to be live, must be performed ONLY by qualified personnel who are aware of the specific risks involved when the machine is in this condition.**

## CLEANING THE NOZZLES AND THE DIFFUSER

### NOZZLE CLEANING

The nozzles should be removed periodically.

1. Raise the nozzle cover.
2. Raise the nozzle support.
3. Remove nozzles from holder.
4. Disconnect tubes from nozzles.
5. Wash and rinse the nozzles and the support under a jet of warm water, using a clean brush and, if necessary, a food-safe detergent.

After drying the nozzles and their mounts, reassemble them in reverse order.

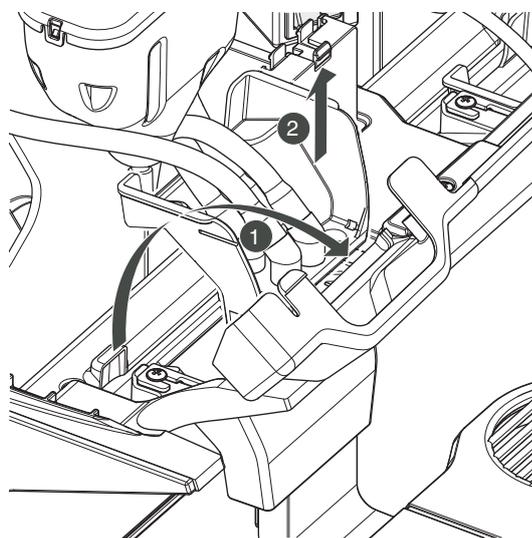


Fig. 10

### CLEANING THE DIFFUSER

The diffuser should be disassembled periodically:

1. Disconnect the inlet and outlet pipes of the diffuser.
2. Unhook the diffuser from the cover, by simply rotating it slightly to the left.

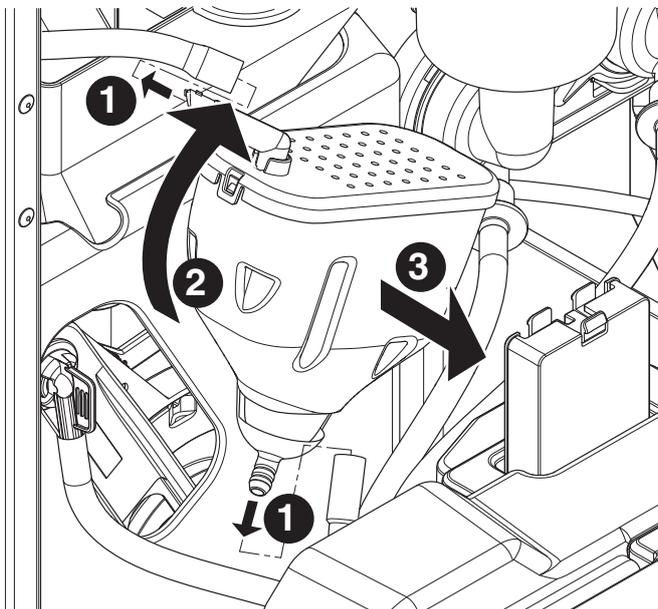


Fig. 11

3. Separate all parts of the diffuser.
4. Wash and rinse the parts under a jet of warm water, using a clean brush and, if necessary, a food-safe detergent.
5. Dry the parts with a paper towel.
6. Reassemble the diffuser by placing first the small chute and then the large one.
7. Close the diffuser.

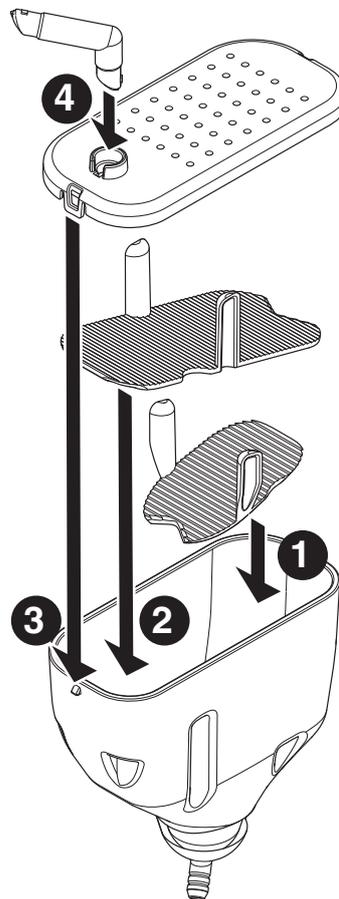


Fig. 12

### CLEANING PRODUCT CONTAINERS

It is recommended to clean a container when it has reached a very low level of product or is about to be filled with product. Proceed as follows:

1. Remove the containers from the appliance.
2. Remove the product outlet nozzles and slide out the augers from the back of the container.
3. Wash and rinse the containers under a jet of warm water, using a clean brush and, if necessary, a food-safe detergent.

## CLEANING THE RESIDUE TRAYS

The residue trays are easily removable for quick emptying and cleaning.

The cleaning operations of the residue trays must be done without disconnecting the machine from the electric mains.

**Cleaning products suitable for contact with foodstuffs may be used. For dosage and application times refer to the instructions on the product.**

### LIQUID RESIDUES

When the residue tray is full, a message is displayed on the touchscreen.

It is advisable not to wait for the full report but to empty it regularly.

To remove the liquid residue tray proceed as follows:

1. Grasp the sides of the liquid residue tray, lift it slightly and pull it.
2. Separate the parts of the tray and empty the liquid residues; wash and rinse the parts under a jet of warm water, taking care to remove residues and visible films mechanically using clean tube cleaners or brushes.

**On completion dry the parts with a cloth.**

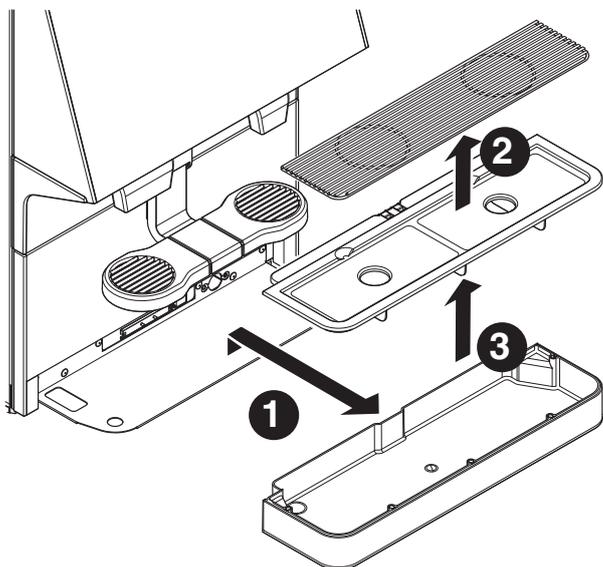


Fig. 13

### SOLID RESIDUES

When the number of selections set has been reached, the appliance will be blocked and it will be necessary to empty the solid residue tray and reset the residue counter.

**ⓘ A micro switch disables the grinders and the brewing unit in the absence of the residue tray.**

To remove the solid residue tray it is necessary to:

1. Remove the liquid tray.
2. Lift the cup support upwards.
3. Open the bottom door to gain access to the solid tray.
4. Wash and rinse the tray under a jet of warm water, taking care to remove residues and visible films mechanically using clean tube cleaners or brushes. On completion dry the parts with a cloth.

Cleaning of the liquid residue tray is also recommended.

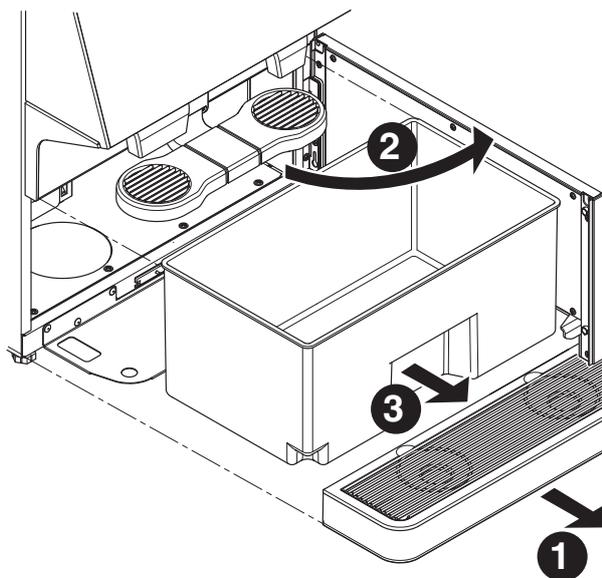


Fig. 14

## TEA BREW UNIT

For models with tea brew unit only.  
Whenever you load and once a week, clean the outer parts, the scraper and perform the automatic wash cycle.

### SCRAPER CLEANING AND AUTOMATIC WASHING

Act as follows:

1. remove the waste conveyor

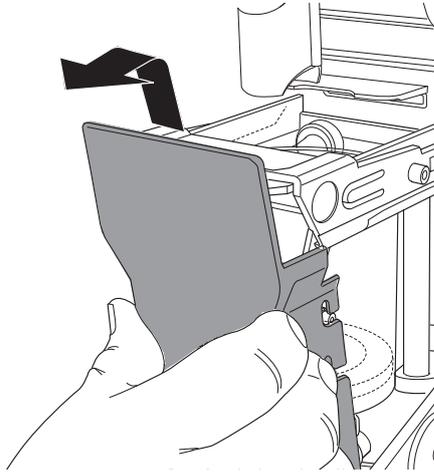


Fig. 15

2. unhook the scraper from the support

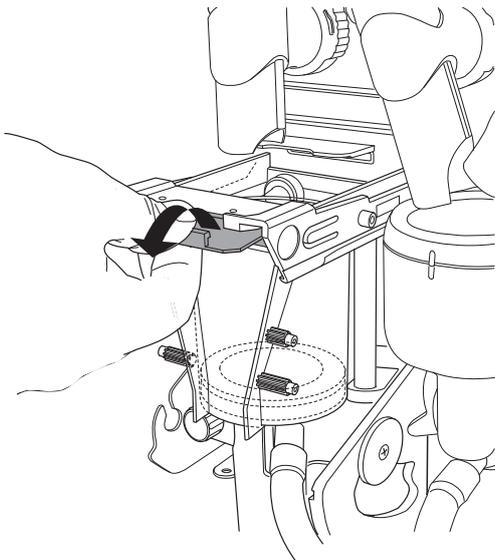


Fig. 16

3. use a brush and/or a piece of clean cloth to remove the tea residues from the components and the scraper
4. hook the scraper on its support
5. carry out the automatic wash cycle from the programming menus

Disassemble and sanitise the components of the unit every 500 tea selections, every month or according to use conditions.

### DISASSEMBLE AND CLEAN COMPONENTS

Act as follows:

1. remove conveyor, scraper and scraper support
2. detach the tube

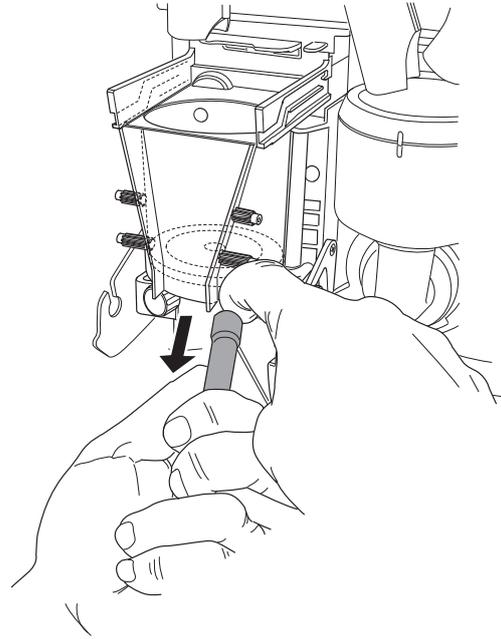


Fig. 17

3. unscrew the knurl intended to secure the piston stem cover

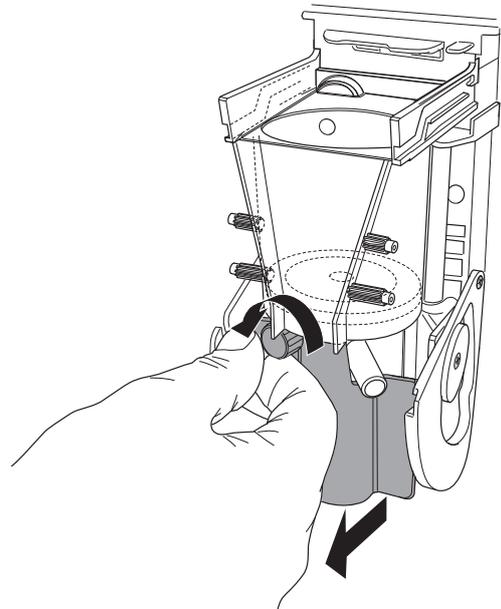


Fig. 18

4. unscrew the piston stem knurl

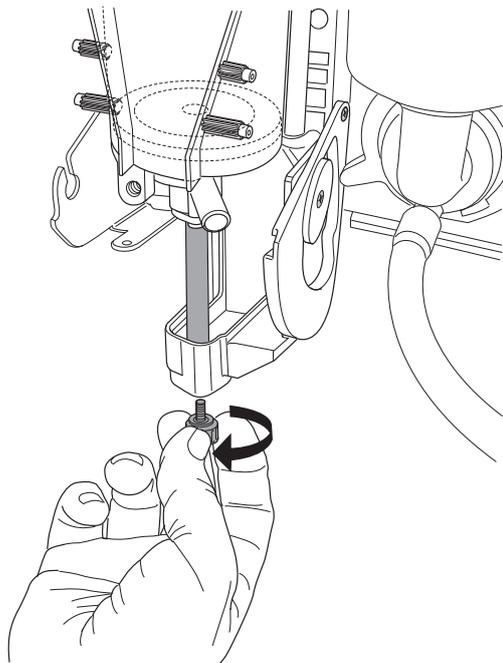


Fig. 19

5. lift the piston so as to reach the top dead center

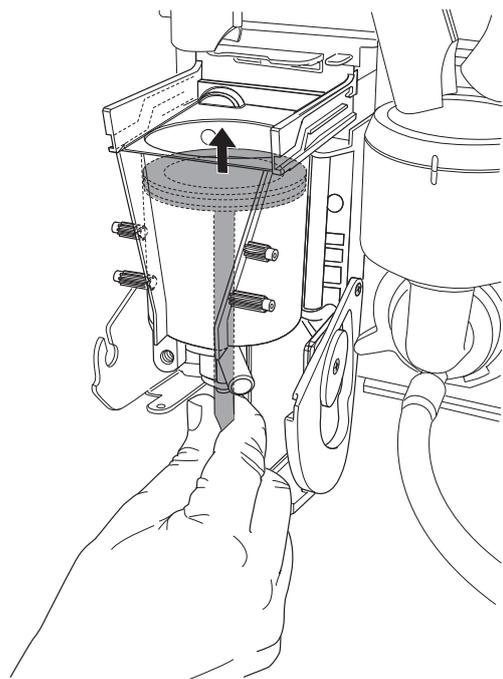


Fig. 20

6. rotate the brew chamber upwards and release it

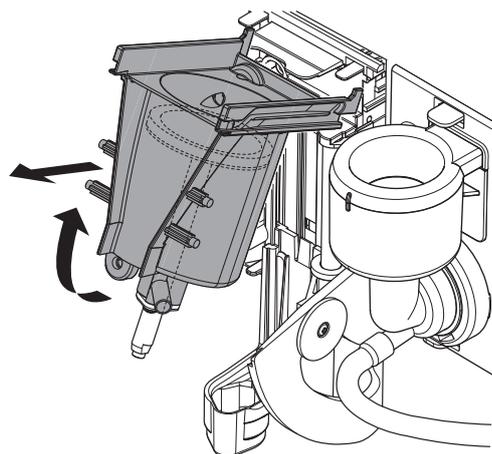


Fig. 21

7. extract the piston completely

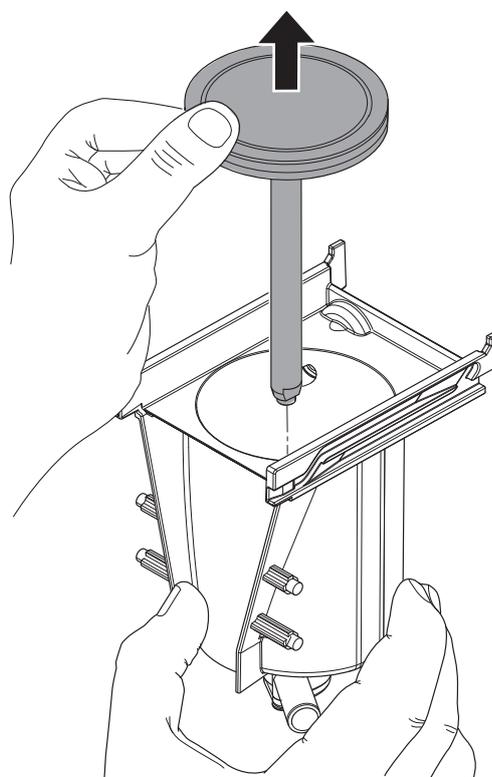


Fig. 22

**After having disassembled all pieces, wash them carefully by using a detergent solution specific for tea brewers<sup>1</sup> and let the components immersed for one night.**

<sup>1</sup> Product tested Evoca detergent powder/tannin remover (de-tan)

To avoid leaving the equipment out of service (for too long), use components in the place of those to be sanitised (hygiene kit). The parts replaced are to be sanitised and then made available as a hygiene kit. After having carefully washed, rinsed and dried the parts, start assembling. Check the state of the filter and/or gaskets; components must be any way replaced at regular intervals.

## ASSEMBLY

Act as follows:

1. Re-position the piston.

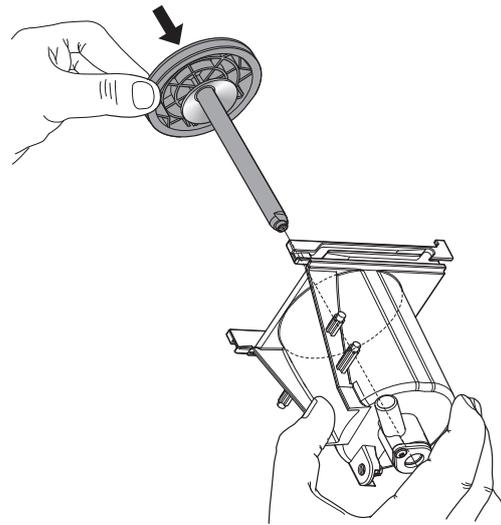


Fig. 23

2. hook the brew chamber, make sure that the water coupling is properly inserted.

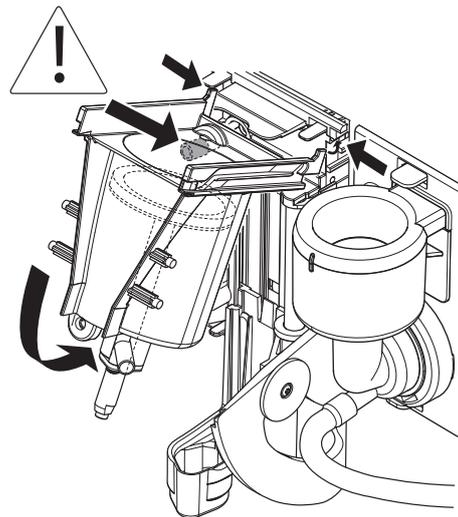


Fig. 24

3. screw the piston stem knurl

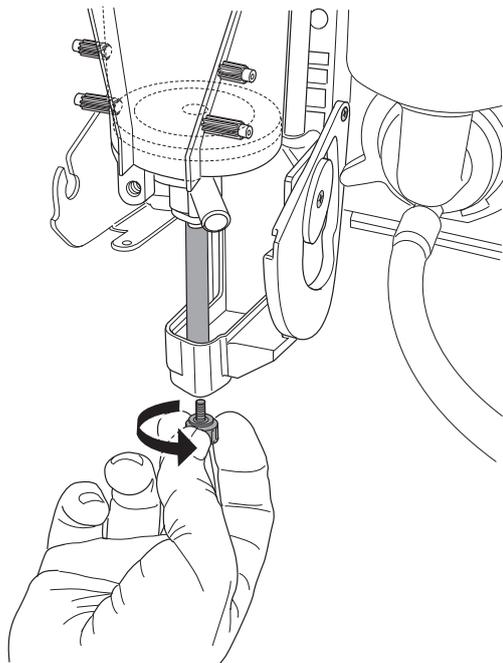


Fig. 25

4. screw the piston stem cover knurl.

**⚠ It is absolutely necessary to reassemble the cover before setting the machine at work once again.**

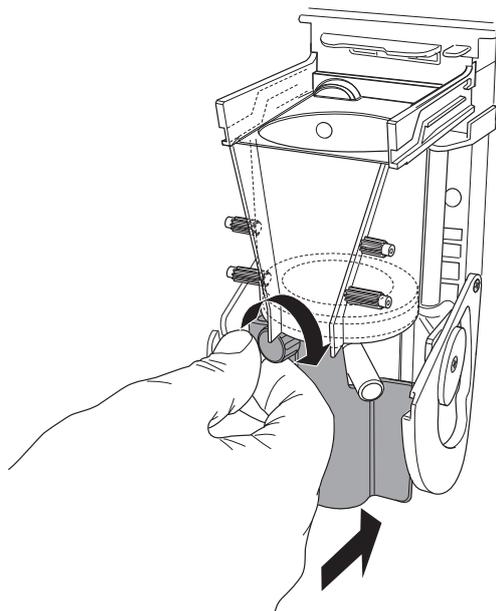


Fig. 26

5. connect the tube

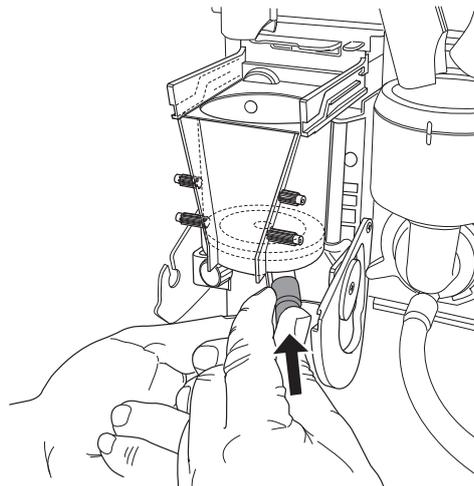


Fig. 27

6. hook the scraper on its support, insert the support into the lower guides

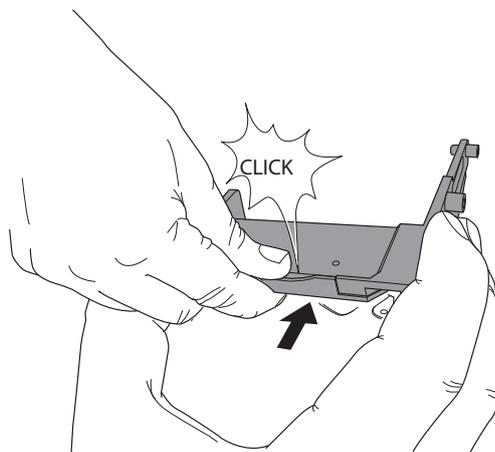


Fig. 28

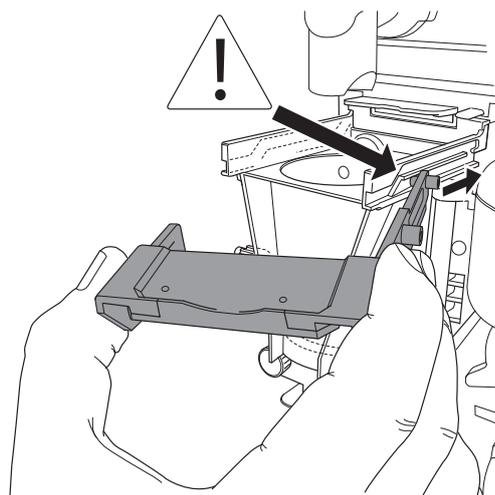


Fig. 29

7. push the scraper support as far as the limit stop and put it back in its home position

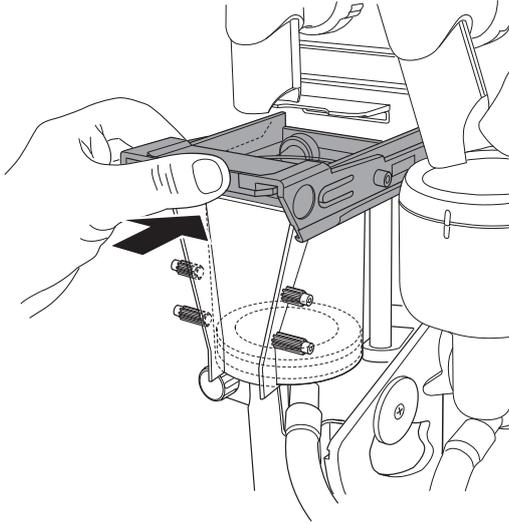


Fig. 30

8. Hook the waste conveyor

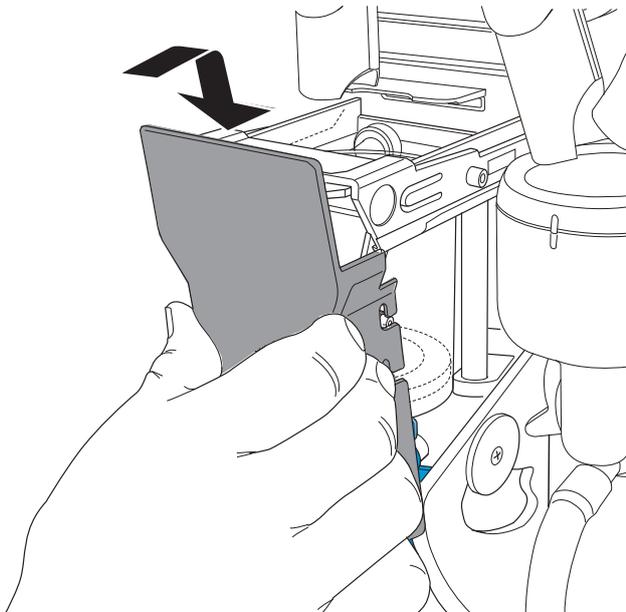


Fig. 31

9. wash automatically

The automatic repositioning of the tea brewer guarantees the correct position for the brew cycle.

Reset any message prompting the operator to clean the tea brewer (signal counter).

## SHELF CONTAINERS

Periodically, the funnels and the support surface of the containers must be cleaned of any residual dust using a small vacuum cleaner or a brush.

Surfaces can be cleaned with a damp cloth.

## CLEANING THE BREWING UNIT

At each charge, or at least once a week, it is good practice to clean the outside of the brewing unit of any powder residues, especially in the area of the coffee funnel, filters and scrapers.

It is a good idea to disassemble the coffee chute periodically. To release it, simply pull it towards you.

## CLEANING THE WATER SUPPLY TANK

Only for models with water self-supply.

Every day, at the end of the service, the water supply tank must be emptied of residual water and sanitised, taking care to remove residues and visible films mechanically, using tube cleaners or brushes if necessary.

## SWITCHING THE MACHINE ON

Every time it is switched on, the appliance performs initial checks by emitting hot water from the nozzles.

The heating status of the heating units is displayed.

The selections are not available until the appliance has reached its operating temperature.

## CLEANING THE TOUCHSCREEN

The touchscreen is sensitive to the touch; the reduction in sensitivity and/or changes in operation are caused by the accumulation of dirt on the touchscreen.

**Use a soft, dry cloth when cleaning and avoid using abrasive products that contain solvents or alcohol.**

Clean the touchscreen with a light pressure.

## SUSPENSION OF THE SERVICE

If, for any reason, the appliance needs to be switched off for a long period of time, the following must be carried out:

1. Completely empty the containers and wash them carefully with the sterilising products.
2. Completely empty the grinder by dispensing until the empty warning appears.
3. Empty the tray of liquid and solid residues; proceed with their sanitisation.
4. Sanitise the mixers, brewing unit and foodstuff circuits.
5. Close the tap positioned upstream of the water hose and completely empty the hydraulic circuit.
6. Disconnect the appliance from the electric mains.

**The cleaning and sanitisation operation must be performed before restarting the appliance.**

## ACCESS TO DAILY OPERATIONS MENU

In the daily operations menu, it is possible to:

- Start automatic washing cycles of the various components.

- Indicate the quantity of products loaded.

- Reset the fund counters.

The daily action menu can be accessed in one of the following ways:

- Open the door of the appliance.

- Touch and hold the brand logo for 2 seconds (if enabled in the menu).

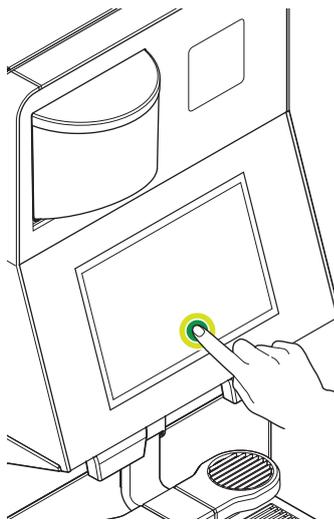


Fig. 32

Enter the password (1111) to gain access.

## WASHING AND RINSING CYCLES

The appliance has been designed to perform washing and/or rinsing cycles on the main functional units.

**⚠ During the washing cycles, hot water comes out of the nozzles and this can be a potential safety hazard.**

**⚠ Scalding hazard! Do not put your hands in the dispensing area during the washing cycles.**

**ⓘ The washing cycles do not replace the need to regularly disassemble the components for sanitisation.**

The wash cycles can be programmed to run automatically or display a warning message for washes that require operator intervention (e.g. brewing unit wash).

## FILLING CONTAINERS

If, when installing the appliance, the container level control is switched off, the function is not accessible.

The function allows the correct handling of pre-alarms or container empty signalling (if enabled).

**ⓘ After each product load, the quantity of product loaded must be indicated.**

The installation and the subsequent maintenance operations shall be carried out with the **appliance connected to the power supply** and therefore by specialised personnel, who are trained to use the appliance and have been informed of the specific risks deriving from such a situation.

The appliance must be installed in a dry environment, with a temperature of between 2°C and 32°C and cannot be installed in environments where jets of water are used for cleaning (e.g. large kitchens, etc.).

**⚠ When the appliance has been installed, the hydraulic circuits and the parts that come into contact with the food products need to be sterilised in order to eliminate any bacteria which could have formed while the machine was in storage.**

## UNPACKING THE APPLIANCE

After the packaging has been removed, check the condition of the appliance.

If any doubts should arise, do not use the appliance.

**The packaging materials (plastic bags, expanded polystyrene, nails, etc.) must be kept out of the reach of children as they are a potential source of danger.**

The packaging materials need to be disposed of in authorised waste disposal centres. Recyclable materials should be given to specialised recycling companies.

**⚠ The appliance must be positioned so that the maximum slope does not exceed 2°.**

## HYGIENE AND CLEANING

**When the appliance has been installed, the hydraulic circuits and the parts that come into contact with the food products need to be sterilised in order to eliminate any bacteria which could have formed while the machine was in storage.**

**Perform the cleaning operations reported in the previous chapter.**

**The appliance is equipped with an automatic flushing system for the mixers with their hydraulic circuit and the brewing unit.**

If the use of the appliance is subject to breaks in use (weekends, etc.) of even less than two days, it is good practice to enable the automatic washing functions (e.g. before the start of service).

## SWITCHES AND SAFETY DEVICES

### MAIN SWITCH

The main switch (manual type), located at the bottom right (under the mixer shelf), de-energises the appliance.

**⚠ With the main switch turned off, the terminal of the electric cable and the noise filter remain live.**

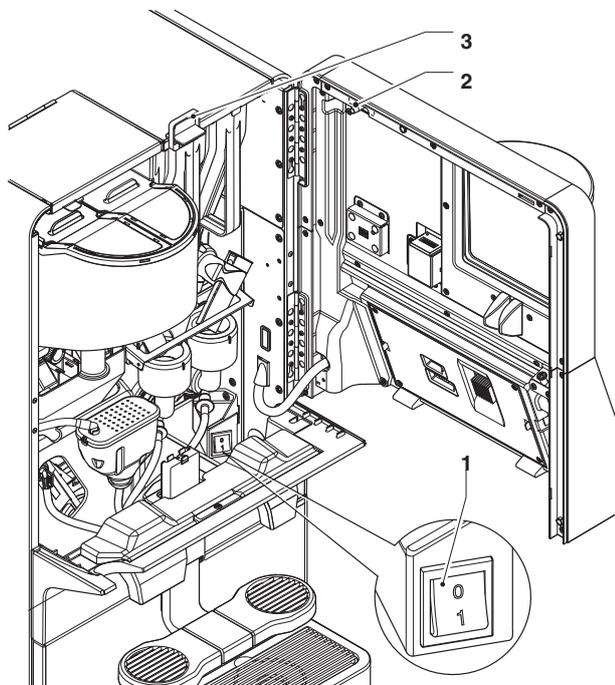


Fig. 33

1. Main switch
2. Connectivity switch
3. Door sensor

### DOOR SENSOR

When the door is opened, a specific switch disables the moving components of the appliance so that the below-described loading and routine cleaning operations can safely be carried out.

To enable component movement with the door open, simply insert the yellow key into the door switch slot.

**⚠ All operations which require the appliance to be live with the door open, must be performed EXCLUSIVELY by qualified personnel who are aware of the specific risks that the machine in this condition entails.**

### CONNECTIVITY SWITCH

When the door is opened, a specific switch deactivates the appliance's connectivity components.

When the door is open, the remote operation of the functional units and/or the remote control are disabled.

**⚠ All operations that require the appliance to be live with the door open and the connectivity functions active, must EXCLUSIVELY be performed by qualified personnel who are aware of the specific risks involved when the machine is in this condition.**

To activate the connectivity components (i.e. for a communication test) with the door open, simply pull the connectivity switch pin.

If the switch is activated and deactivated within a short period of time, the appliance disables the connectivity components; the appliance will need to be restarted to restore these.

### SAFETY DEVICES IN THE PRESENCE OF COFFEE CONTAINER

When the coffee container is removed, the safety mechanism disables the movement of the grinders and brewing unit.

### SAFETY DEVICES IN THE PRESENCE OF SOLID RESIDUE TRAY

When the solid residue tray is removed, the safety mechanism disables the movement of the grinders and the brewing unit.

## CONNECTIVITY

The appliance has the ability to communicate via the network and to send notifications via it.

The device also allows short distance communication with Bluetooth

**ⓘ In order to use the connectivity functions and send email notifications, an active network connection is needed as is an active email account.**

**ⓘ The appliance sends email notifications. It is impossible to receive emails on the appliance.**

The connectivity functions must be enabled from the menu.

The machine can be networked via Ethernet and Wi-Fi; the appliance uses Bluetooth for short distance communications.

**ⓘ The appliance cannot be used to access the internet from other devices connected to the network.**

The appliance supports the main Wi-Fi encryption systems (cryptography).

A network that uses a more recent encryption system is safer.

**ⓘ The appliance connectivity functions are disabled when the door is open.**

## INSTRUCTIONS FOR NETWORK CONNECTIONS

### ETHERNET

- The connection must be made in accordance with the regulations in force and all rules defined by the Ethernet standard (cable type, maximum line lengths, etc.) must be observed.

- Connect the appliance to a mains socket via a Cat5e Ethernet cable (not supplied). The appliance's mains connector is located at the rear of the appliance.

- Configure network settings from the appliance's connectivity menu.

### WI-FI

- Position the appliance where there is a strong Wi-Fi signal.

- Always enable security (encryption) features to protect communications from unauthorized access.

A network that uses a more recent encryption system is safer.

“Open” encryption does not guarantee any type of protection.

**ⓘ Wi-Fi networks in public areas or “hotspots” (such as coffee shops and airports, etc.) may not guarantee any kind of protection.**

- Configure the Wi-Fi settings from the appliance's connectivity menu and set the encryption used by the network to which the appliance will be connected.

**ⓘ Contact the local network administrator (system administrator) for the appropriate network parameters to which the appliance will be connected.**

**Ethernet and Wi-Fi connections cannot be enabled at the same time.**

### BLUETOOTH

Check that the Bluetooth function is active on the appliance and the second device.

To enable communication between the appliance and a Bluetooth device, the two devices need to be paired (see the “network” function).

**ⓘ The appliance boasts a (non-configurable) firewall that blocks unwanted access to the appliance when connected; it is advisable to enable the firewall from the programming menus.**

## INITIAL START-UP

The first time the appliance is switched on, a wizard sequence for preliminary settings (model, language, appliance name, etc.) is displayed.

The hydraulic circuit will then be filled up (installation).

The installation procedure varies depending on whether the appliance obtains its water supply from a tank or the water mains.

### MAINS WATER SUPPLY

- Upon start-up, the mains solenoid valve is automatically opened until the air break is filled;
- The heating unit's solenoid valve opens to release the air into the heating unit and the hydraulic circuit.

**N.B.: If there is a lack of water during the installation cycle, the appliance will stop and wait for the water.**

**If substantial water pockets form in the hydraulic circuit, then the hydraulic circuit must be filled using the special "manual installation" function.**

After filling the hydraulic circuit, the device rotates the brewing unit to allow correct positioning; the display shows in sequence:

- The software version of the appliance.
- The heating cycle status of the heating units.

When the heating cycle has finished, the beverages will be available.

### WATER SUPPLY FROM A TANK

- Upon start-up, the internally-supplied pump is activated for 10 seconds. The "no water" message is shown on the display.
- Enter Programming and use the filling up/emptying the heating unit function of the "System" menu.
- When the installation cycle terminates, reset the fault message "no water"

## FIRST SANITISATION

When installing the appliance, thorough disinfection of the mixers, instant beverage delivery pipes and the tank (if present) must be carried out to ensure the hygiene of the dispensed products.

**Under no circumstances should jets of water be used for cleaning.**

The sanitisation is performed using sanitising products.

Wash the mixers and add a few drops of sanitising solution.

Then proceed with a thorough rinsing of the mixers to remove any possible residue of the solution used.

**ⓘ The appliance is equipped with an automatic wash system for the mixers, relative hydraulic circuit and brewing unit.**

If the use of the appliance is subject to breaks in use (weekends, etc.) of even less than two days, it is practical to enable the automatic washing functions (e.g. before the start of use of the appliance).

## VARIABLE COMBINATION LOCKS

### RS1 SERIES

The lock is supplied with a silver-coloured key that has a standard combination. It is used for opening and closing the lock.

The locks can be customised using a kit (available as an accessory) in order to change the lock's combination.

The kit consists of a change key (black) for changing the standard combination, in addition to change keys (gold) and use keys (silver) for changing and using the new combination.

Sets of change and use keys with other combinations can be supplied on request. Furthermore, additional use key sets (silver) can be requested if you specify the combination printed on the keys themselves.

**Avoid using the programming key to regularly open the lock as this may damage the lock.**

To change the combination:

1. Open the appliance door in order to avoid having to force the rotation.
2. Lightly lubricate the inside of the lock with a lock spray.
3. Insert the current change key (black) and rotate it to the change position.
4. Remove the current change key and insert the change key (gold) with the new combination.
5. Slightly turn the change key several times without fully rotating the key.
6. Turn the key to the closing position and remove the change key.

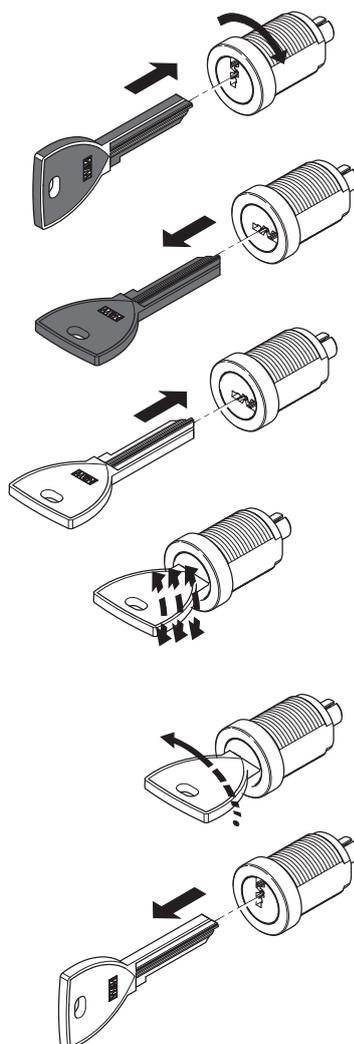
The lock will now use the new combination.

The keys with the old combination can no longer be used.

**We recommend that the lock is lubricated every 6 months to ensure that it functions correctly over time.**

**Use spray lubricants for locks.**

**Other types of lubricants can trap dirt and dust, causing the lock to become jammed.**



### BREWING UNIT

Every time the appliance is switched on, the brewing unit carries out a full rotation before performing the normal cycle in order to ensure that the device is in the correct initial position.

The brewing unit is capable of dispensing espresso-type (high infusion pressure) and fresh brew-type (low infusion pressure) beverages

#### DISPENSING CYCLE

For models with coffee beans, when a selection with coffee is requested the grinder runs until the dose set by the recipe is reached.

The dose of ground coffee falls into the brewing chamber (vertically arranged) of the unit.

Alternatively, for models with pre-ground coffee, when a selection with coffee is requested, the dose is dispensed into the brewing unit.

The pinion-engaged gearmotor lets the cranks rotate, which cause the brewing chamber to rotate by 30°.

The upper piston aligns itself with the brewing chamber and descends inside it.

The piston stop position for infusion will be:

- for espresso-type selections, depending on the amount of ground coffee in the brewing chamber

or

- for fresh brew selections, fixed and in the highest possible position in the brewing chamber (low brewing pressure)

Depending on the required selection, the beverage will come out of the espresso nozzle or the fresh brew nozzle respectively.

When the beverage has been dispensed, the upper piston lowers in order to mechanically compress the coffee pod which causes excess water to be drained via the 3rd route of the dispensing solenoid valve.

At the end of the cycle the gearmotor is activated in the opposite direction, lifting the upper piston and rotating the brewing chamber towards the emptying side, on the opposite side of the dispensing side; the lower piston rises.

Once the emptying position is reached, the gearmotor inverts its rotation direction again, bringing the brewing chamber back to the idle position.

The scraper holds the coffee pod and lets it fall, while the lower piston returns to the idle position.

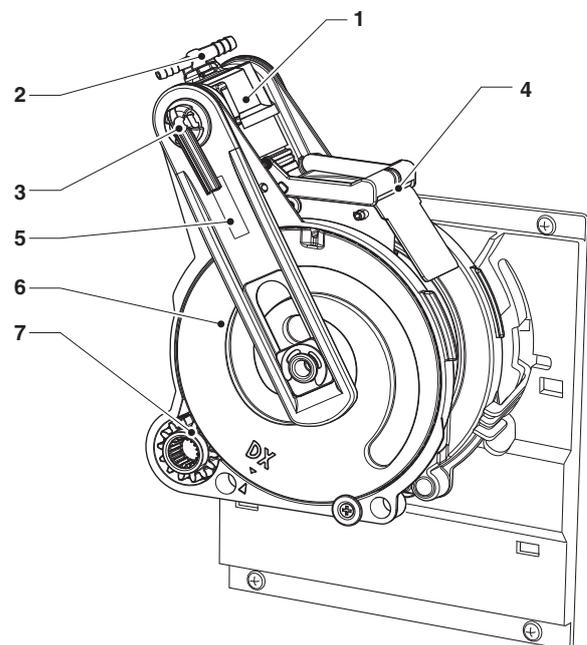


Fig. 34

1. Upper piston
2. Fresh Brew Nozzle\*
3. Espresso nozzle
4. Scraper
5. Connecting rods
6. Cranks
7. Sprocket
8. \*. ESFB models only

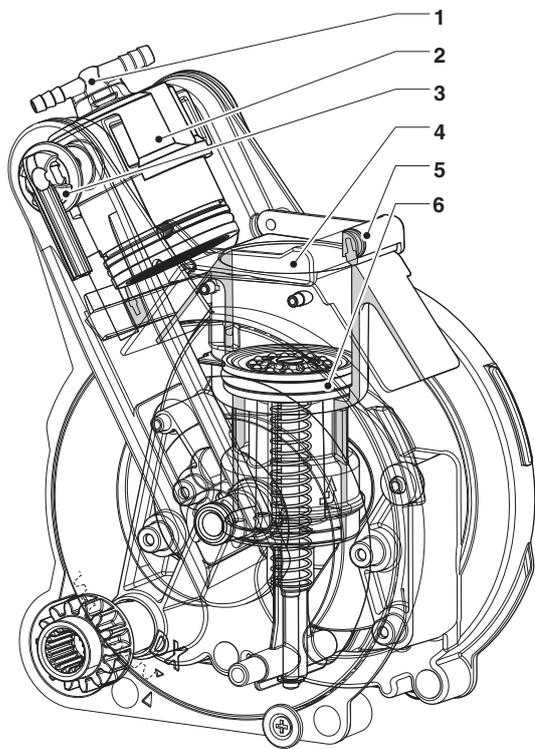


Fig. 35

1. Fresh Brew Nozzle\*
2. Upper piston
3. Espresso nozzle
4. Brewing chamber
5. Scraper
6. Lower piston
7. \*. ESFB models only

#### VOLUME OF THE BREWING CHAMBER

Brewing unit	doses
Z4000 ESFB (Ø 46)	7 - 14 g
Z4000 NE(Ø 43)	7 - 13.5 g
Z4000 HRC (Ø 46)	7.5 - 15 g

The upper piston automatically positions itself according to the required selection.

## CUP SENSOR

The appliance is equipped with two cup sensors that detect the presence of glasses or cups on the cup holder in the drink and hot water dispensing areas respectively. For proper functioning, the emitters must be kept clean.

## DISPENSING INSTANT BEVERAGES

The dispensing cycles of the various selections are designed to obtain the best result in terms of productivity and beverage quality. Instant beverages are dispensed according to a recipe in which the ingredients (maximum 4) are identified with a number and the product name and are described by quantity of water, product and dispensing and whipping times.

These values are programmable via software with special functions.

The dispensing order of the individual ingredients within a recipe can also be programmed

The powder for hot chocolate-based selections is dispensed intermittently, whereas the powder for instant coffee-based selections is dispensed before the water.

### Warning!

**Ensure that the mixer is rinsed properly without leaving any powder residue.**

## TEA BREWER

### For models with tea brew unit only.

Whenever you power on the machine, the tea brew unit will perform an initialisation cycle.

### DISPENSING CYCLE

- the piston is arranged in the bottom dead center while the gasket is keeping the drink outlet hole closed.
- the powder quantity is dispensed in the brew chamber
- the solenoid valve is opened and the water quantity required by the selection is dispensed
- after some seconds, the piston is lifted to let the drink flow out of the outlet hole of the brew chamber  
If a larger water quantity is required by the selection, water is added during the dispensing cycle.
- the piston remains up to let the drink flow out
- the motor operates the crank, the piston is lifted as far as the top dead center, thus operating the scraper and letting used powder fall into the solid waste.  
The position of the scraper and piston is signalled by microswitches

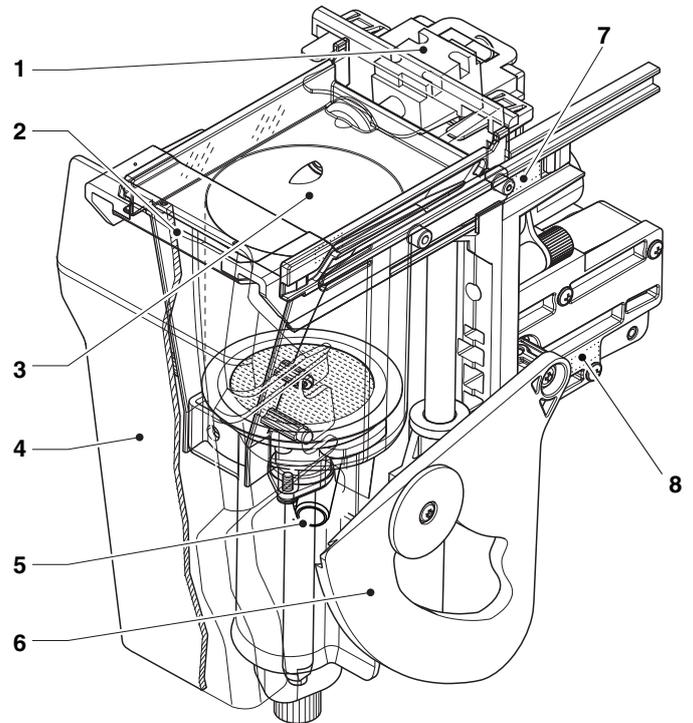


Fig. 36

1. brew water solenoid valve
2. scraper
3. brewing chamber
4. used powder chute
5. tea outlet hole
6. crank
7. microswitch "SCRAPER POSITION"
8. microswitch "PISTON POSITION"

## CONNECTIVITY

The appliance can communicate across the network and send email notifications. The appliance also allows for short-range Bluetooth communication.

**i In order to use the connectivity functions and send email notifications, an active network connection is needed, as is an active e-mail account.**

**i The appliance sends email notifications. It is impossible to receive emails on the appliance.**

The connectivity functions must be enabled from the menu.

The machine can be networked via Ethernet and Wi-Fi; the appliance uses Bluetooth for short distance communications.

**i The appliance cannot be used to access the internet from other devices connected to the network.**

The appliance supports the main Wi-Fi encryption systems (cryptography).

A network that uses a more recent encryption system is safer.

**i The appliance connectivity functions are disabled when the door is open.**

## TOUCH SCREEN

**Only use fingers to interact with the touchscreen; do not use sharp objects.**

If the touchscreen is not used and displays the same screen for a long period of time, residual images or movements may appear: turn off the touchscreen (energy saving) or set an animated screen saver for when it is not in use.

The touchscreen can play promotional videos.

Using high-quality content will affect the general performance and use up memory space.

### TOUCH

Press icons, functions and objects to activate or open context menus.



Fig. 37

### MOVE AND DRAG

To move and drag icons and objects, press on them and drag them to a new location.

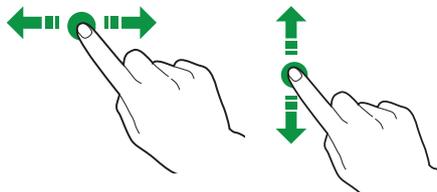
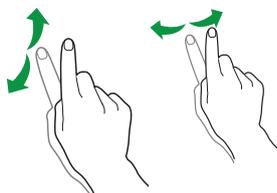


Fig. 38

### SCROLL

Slide a finger to the right, left, up or down on the touchscreen to scroll through the values, screens and functions.



## SOFTWARE ARCHITECTURE

In order to work, the appliance requires an operating system and application software. The settings/customisations are managed by the application software.

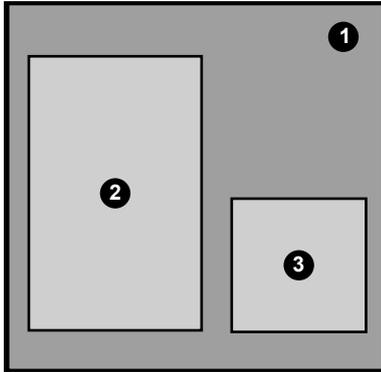


Fig. 39

1. Operating system
2. Application software
3. Settings/customisations

### OPERATING SYSTEM

The operating system provides the basic functionalities for managing resources, communicating with peripheral devices and coordinating the various activities.

The operating system is necessary in order to install the application software and use the appliance.

**ⓘ The operating system update completely deletes the CPU memory, including application software, customisation settings and statistical data.**

### APPLICATION SOFTWARE

The application software allows the appliance features to be used and the settings to be changed via the graphical user interface (GUI).

The application software does not work without the operating system.

**ⓘ Updating the application software does not delete the operating system or any settings/customisations.**

**Software is updated by following the instructions in the maintenance chapter.**

### SETTINGS AND CUSTOMISATIONS

The application software makes it possible to set and customise recipes, calibrations and the graphic interface.

Settings/customisations also include the machine configuration database (layout).

These settings can be saved and then imported and used on other appliances.

**ⓘ Before using the settings/customisations on other appliances, it is necessary to check the software versions of the application and operating system.**

**Check that they are up to date or at least the same version from which they were exported.**

**The settings/customisations are not compatible with previous software versions.**

## Chapter 4 Programming

A brief explanation of these main functions is listed below. They are useful for better managing the appliance's operation but are not necessarily in the same order as they are displayed in the menu.

The layout of the icons/screens in this manual is approximate and may vary from those displayed on the appliance, depending on the settings (layouts, themes, and/or icons).

### ACCESS TO THE PROGRAMMING MENU

The programming menu can be accessed in one of the following ways:

- Open the door of the appliance
- Touch and hold the brand logo for 2 seconds (if enabled in the menu)

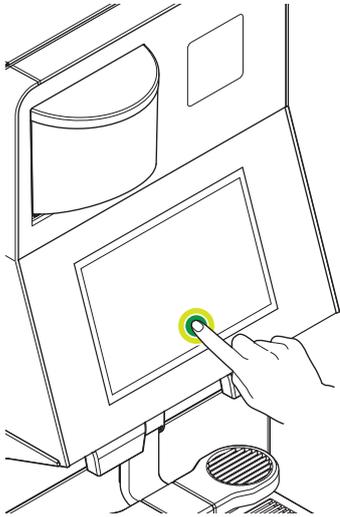


Fig. 40

A password is required to access the programming menu.

Enter the password to access the enabled menu.

The (default) passwords are:

- Technician (4444)
- Distributor (3333)
- Loader (2222)
- User (1111)

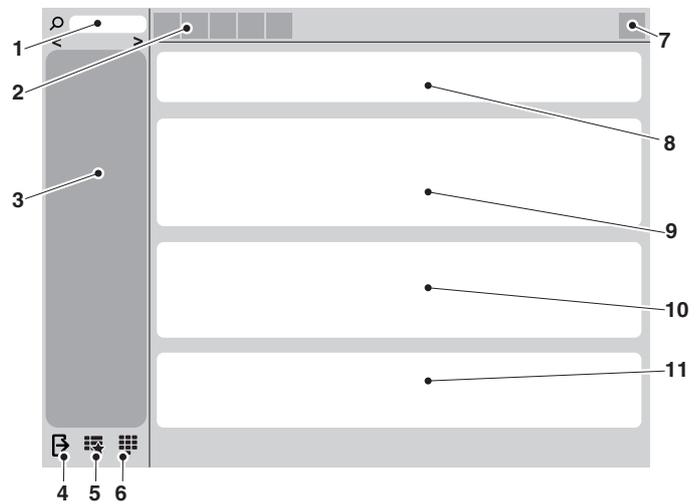


Fig. 41

1. search field
2. machine status icons
3. function menu
4. exit
5. favourites
6. password keypad
7. icon for language change
8. information area
9. message area
10. fault area
11. maintenance information area

### MENU

Tap menu  to view the appliance's menu functions.

The functions available for the current user profile are displayed.

Some of the functions and/or parameters may not be displayed: simply scroll through the screen.

### EXIT

Tap exit  to come out of the programming menu.

The selections page will be displayed.

## FAVOURITES

The favourites  are links with the functions frequently used.

After adding a function to the “favourites”, simply view the “favourites” and tap the function for quick access.

Tap the “favourites”  icon to access the functions used frequently and stored as favourites.

### ADD A FUNCTION TO “FAVOURITES”

From the function screen, tap ; it will change colour (  is activated).

### REMOVE A FUNCTION FROM “FAVOURITES”:

- From the favourites screen, tap the function to be removed in order to access it.

- Tap : it will change colour (  is disabled).

## NUMERIC KEYPAD

Tap  to display the numeric keypad

## INFORMATION AREA

Displays information regarding the appliance (software version, etc.).

## MESSAGE AREA

Displays messages of an informative nature, e.g. statistics on the most requested selections, etc.

## FAULT AREA

Displays the faults found on the appliance.

## MAINTENANCE INFORMATION AREA

Displays information regarding the maintenance deadlines.

MAINTENANCE NOTIFICATION sets the current date/time as the last date of maintenance.

## WASHING AREA

Displays the washes that are available for the appliance.

## ENTERING VALUES

The values in the programming menu can be entered/modified as follows:

### KEYPAD

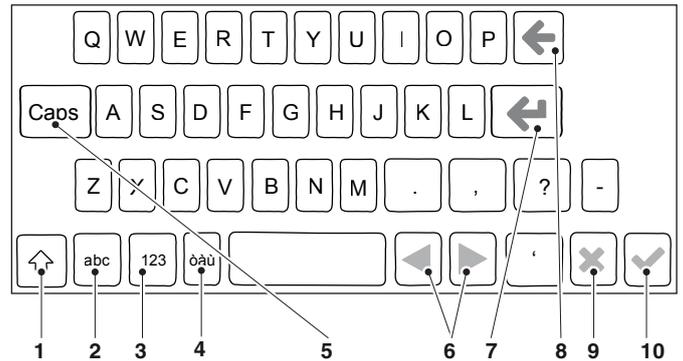


Fig. 42

1. upper-case (shift)
2. button to switch the “number/symbol” keypad to the “letter” keypad
3. button to switch the “letter” keypad to the “number/symbol” keypad
4. caps lock
5. moves the cursor in the text
6. new line (text over two lines)
7. clear (back space)
8. confirm
9. cancel

### NUMERIC KEYPAD

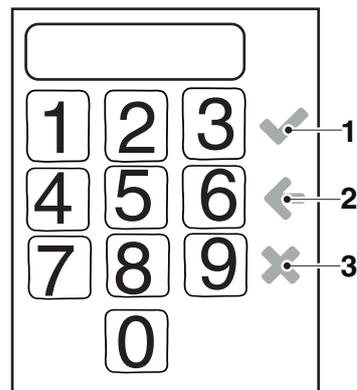


Fig. 43

1. confirm
2. clear (back space)
3. closes the keypad

## CHECK BOX

Press the check box to enable/disable the option.



Fig. 44

## DROP-DOWN LIST

Press to open the drop-down list and select the value or the setting.

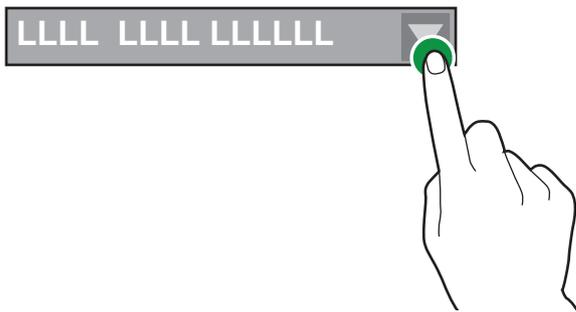


Fig. 45

## VALUE PICKERS

Scroll and select the desired value.  
To enter a value quickly (without scrolling), press  and enter the numeric value

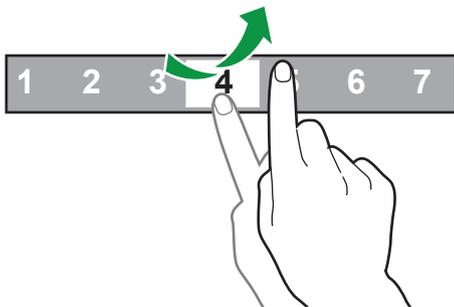


Fig. 46

## DAILY ACTIONS

Groups together all of the functions that are used on a daily or more frequent basis (washes, resetting the residue counters, etc.)

### CLEANING AND WASHES

Automatic washing and rinsing functions of the appliance's functional units (brewing unit, mixer, etc.).

Select the components that require washing. Some washes might require parameters to be set (e.g. the amount of water to use, etc.).

### FILLING CONTAINERS

If the container level control is switched off, the function is not accessible.

The function allows the correct handling of pre-alarms or container empty signalling (if enabled).

**i** After each product load, the quantity of product loaded must be indicated.

### EMPTYING THE SOLID TRAY

Each time the solid tray is emptied, the signal counter must be reset.

Enter the function to see the indicative filling of the tray.

Press the "reset" button to reset the counter.

### MONEY MANAGEMENT

Enabled only for models with a payment system.

With this function, it is possible to:

- Empty the coins from the coin mech's change-giver tubes.
- Insert coins into the coin mech tubes to activate the change-giver function.
- Check the total amount of money in the coin box.

---

## SELECTION SETTINGS

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### SELECTION LAYOUT DISPLAY

Select the layout of the selections from the default ones which are displayed in normal user mode.

- ❗ To change the order of the selections, drag the selection icon to the new position.
- ❗ To make a selection available or unavailable when the appliance is in normal user mode, drag the selection icon from the available selections and vice versa.

### SELECTION CATEGORIES

Allows you to change the categories of pre-defined selections.

The selection categories are displayed during normal user mode and they allow the selections to be grouped by their beverage type (e.g. "coffee", "other beverages", etc.).

The function allows:

- A new category to be created +.
- Duplication  and customisation .
- A category to be deleted .
- The available categories to be enabled/disabled.

### MODIFYING A CATEGORY

It is possible to modify:

- The name.
- The description.
- The representative image of the category displayed in normal operation.
- The type of category (beverages, etc.).
- The icon representing the category displayed in the selection menu.

## BEVERAGES

The selections currently used, those available and those not compatible with the configuration used (layout) but compatible with other configurations (layout) are displayed.

From the screen, it is possible to:

- Create new beverages and associate a recipe +.  
The software checks that there is compatibility between the recipe and appliance layout.  
If ❗ is displayed, this means that an incompatibility has been detected.
- Delete a beverage .
- Duplicate  and customise  the beverage.

### CREATING OR MODIFYING A BEVERAGE

It is possible to:

- Assign/modify the name of beverages displayed during normal user mode.
- Choose which recipe to use for preparing the beverage.  
The software checks that there is compatibility between the recipe and the configuration (layout) of the appliance.  
If ❗ is displayed, it means that an incompatibility has been detected.
- Change the image associated with the drink.  
Press the image to choose the new image.
- Associate a multimedia content *playlist* to be displayed whilst dispensing.
- Enable the option to prematurely stop the preparation of the beverage ("stop dispensing" function).
- Dispense a test beverage.

## RECIPES

The recipes currently used, those available and those not compatible with the configuration used (layout) but compatible with other configurations (layout) are displayed. It is possible to:

- Create a new recipe .  
The newly created recipe is saved in the “not available” category.  
Then associate the recipe to the beverage.  
The software checks that there is compatibility between the recipe and appliance the layout.  
If  is displayed, it means that an incompatibility has been detected.
- Delete a recipe .
- Duplicate  and customise  a recipe.

## CREATING OR MODIFYING A NEW RECIPE

The guided procedure allows a new recipe to be created.

A screen is displayed where:

- A name can be assigned to the new recipe.
- Set a wait time (in seconds) for the “remove beverage” message to appear when the beverage has been dispensed.  
The wait time allows the tubes to be emptied and drip into the cup.
- Press  then “Add preparation” to add the products which make up the recipe (e.g. coffee, chocolate, etc.).  
The parameter screens vary according to the added product (coffee, instant powders, etc.).
- To add customisation, touch  and then “Add Customisation”.  
It is possible to set various parameters for every customisation.
- Save the settings and return to the main screen.

“Test recipe” on the main screen allows a test selection to be dispensed in order to check the created recipe.

After the test selection, the recipe can be modified.

## MODIFYING A RECIPE

From the recipe screen, it is possible to:

- Change the name of a recipe.
- Set a wait time (in seconds) for the “remove beverage” message to appear when the beverage has been dispensed.  
The wait time allows the tubes to be emptied and drip into the cup.  
Other ingredients and/or customisations can be added to the recipe.  
To change the settings of individual ingredients (e.g. the amount of water, powder, etc.), press the ingredient bar to open the context menu.

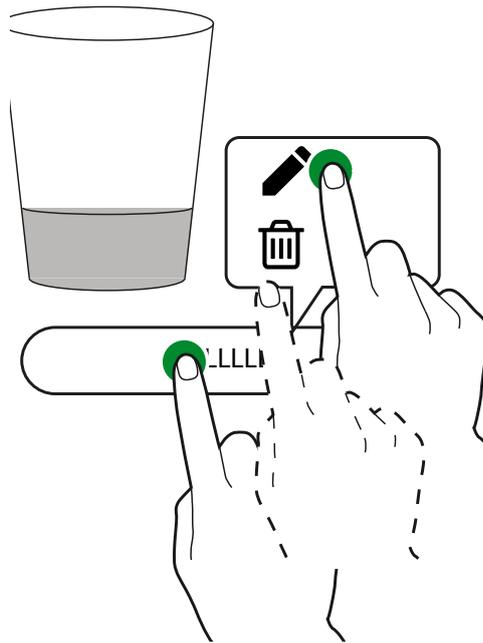


Fig. 47

-  changes the ingredient
-  eliminates the ingredient

To move an ingredient before or after another ingredient, simply drag the bar of the ingredient.

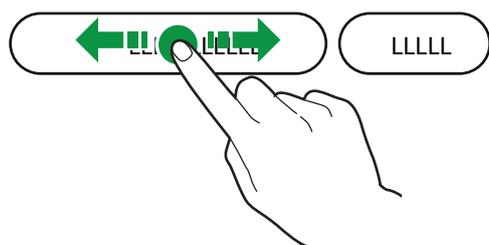


Fig. 48

After changing the parameters, save the settings and return to the main screen.

“Test recipe” on the main screen allows a test selection to be dispensed in order to check the modified recipe.

#### **BASIC PARAMETERS FOR COFFEE BEANS**

It is possible to set:

- The name of the ingredient.
- The water dose.
- The coffee dose.
- Dispense a test beverage.

Customisations can be added (e.g. intensity, total amount of water, etc.).

Specific parameters must be set for each customisation.

For appliances with a payment system, it is possible to set the change in the price of the selection.

#### **BASIC INSTANT BEVERAGES PARAMETERS**

It is possible to set:

- The name of the ingredient.
- The water dose.
- The dose of instant powder.
- Dispense a test beverage.

Customisations can be added (e.g. intensity, total amount of water, etc.).

Specific parameters must be set for each customisation.

For appliances with a payment system, it is possible to set the change in the price of the selection.

#### **BASIC WATER PARAMETERS**

You can set:

- Initial delay
- Dispensing speed
- Enable the addition of cold water
- Set the temperature of the drink in the cup; the appliance automatically adds cold water to reach the set temperature.

#### **ADVANCED ESPRESSO PARAMETERS**

##### **START DELAY**

Sets an ingredient time delay; the delay is useful if a recipe consisting of multiple ingredients is created.

For example, when creating the “Espresso with milk” recipe, a time delay can be set between when the coffee and the milk is dispensed.

It can help the beverage be presented better.

##### **POD SQUEEZING**

The squeezing is carried out by the upper piston which, by mechanically compressing the pod, favours the expulsion of the water from the pod before it is discarded into the solid residue tray.

- ON: the pod squeezing is enabled.
- OFF: the pod is not squeezed.

##### **PRE-BREWING DOSE**

Sets the quantity of water to be used for the pre-brewing.

##### **PRE-BREWING TIME**

Sets the pre-brewing time before the actual infusion takes place.

##### **COFFEE POD COMPRESSION**

Set the coffee pod compression level while brewing coffee beans:

- High
- Medium
- Low

##### **PUMP POWER**

Sets the power level of the pump during dispensing (in %).

## FRESH BREW ADVANCED PARAMETERS

### START DELAY

Sets a delay from the following ingredient; the delay is useful if a recipe is created composed of several ingredients.

For example, by creating the “Fresh brew coffee with milk” recipe between the dispensing of the coffee and the milk, a period of delay can be entered between the deliveries.

### POD SQUEEZING

The squeezing is carried out by the upper piston which, by mechanically compressing the pod, favours the expulsion of the water from the pod before it is discarded into the solid residue tray.

-ON: the pod squeezing is enabled.

-OFF: the pod is not squeezed.

### SQUEEZE DOWN FORCE

Sets the force of the pod squeezing exercised by the upper piston at the end of dispensing.

### SQUEEZE REST FORCE

Sets the safety value of the pod squeezing force.

## Warning!

**This value must be greater or equal to the “squeeze down force” value.**

### SQUEEZE START

The parameter (as % of the dispensing time) permits establishing for how long the brewing occurs at low pressure (fresh brew) and how long at high pressure (espresso).

The change of the parameter entails the absence or change in the quantity of cream in the beverage.

For example:

- The value 100% indicates that the brewing is at low pressure (fresh brew) for 100% of the dispensing time (no cream in the cup)

- The value 80% indicates that the brewing is at low pressure (fresh brew) for 80% of the dispensing time, while the remaining 20% of the time the brewing is at high pressure (presence of cream in the cup)

### K CONVERSION FACTOR

Sets the time of delay in the opening of the FB valve (to lower the extraction pressure) relative to the activation time of the solenoid valve / pump.

A higher value entails a higher pressure of initial brewing.

The value 0 disables the function.

### VALVE OPEN PERIOD

Sets how often to open the FB valve to lower the extraction pressure.

## VALVE OPEN DUTY

Only for fresh brew selections.

Sets the opening time of the FB valve to lower the extraction pressure.

Value expressed as % of the open period value.

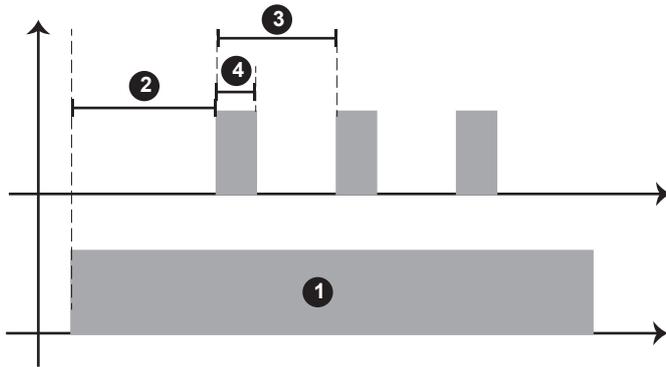


Fig. 49

1. Dispensing time
2. K conversion factor
3. Valve open period
4. Valve open duty

## LIMIT TACHO VALUE

Sets the height of the upper piston in the chamber during the low pressure infusion (fresh brew)

Default value 450.

A value close to 1023 indicates that the upper piston is very close to the lower piston.

## Warning!

**A lower value than the default one can entail hot water leaking out of the brewing unit.**

## PRE-BREWING DOSE

Sets the quantity of water (in ml) to be used during pre-brewing.

## PRE-BREWING TIME

Sets the pre-brewing time before the actual infusion takes place.

## BREWING UNIT POSITION

Sets 3 pressure profiles for espresso brewing:

- FB
- Middle
- ES

## WATER SPEED

Allows the operator to set the pump flow rate during dispensing (in cc/sec)

## ADVANCED INSTANT PARAMETERS

### START DELAY

Sets an ingredient time delay; the delay is useful if a recipe consisting of multiple ingredients is created.

For example, by creating the recipe "Hot chocolate with milk" a time delay can be set between the dispensing of chocolate and milk. It can help the beverage be presented better.

### MIXER DELAY

Sets a start delay time for the mixer, compared to when the water is dispensed.

### ABSOLUTE MIXER MIX TIME

The whipping duration can be set independently from the pump/valve operation time.

The whipping duration is set in tenths of a second and calculated from the moment the pump/solenoid valve is activated.

### RELATIVE MIXER TIME

The whipping duration can be set differently, by stopping it before or after the pump/solenoid valve stops.

The whipping duration value is set in milliseconds and calculated from the moment the pump/valve is activated.

### WHIPPING SPEED

The whipping speed can be defined according to the desired presentation of the product.

### WATER QUEUE

Extends the amount of water dispensed into the mixer after the whipping stage has finished, in order to adequately rinse the mixer. Set the desired amount of water.

#### POWDER DELAY

An instant powder time delay can be set so that it starts after the water has been dispensed into the mixer (activation of the pump/solenoid valve).

#### STEP

The instant powder is dispensed at regular intervals at the same time as the water.

Set how many intervals are required to dispense instant powder whilst the water is being dispensed.

Set the intervals (steps) according to the powder used, in order to obtain a high-quality and well-presented beverage.

#### DEC DUST CYCLE

The instant powder is dispensed before the water to improve the presentation of the beverage.

It is recommended to enable this option for instant coffee.

#### POWDER SPEED

Sets the dispensing speed of the instant powder.

#### WATER SPEED

Allows the operator to set the pump flow rate during dispensing (in cc/sec)

#### INGREDIENT CONTAINERS

According to the machine layout, how the product containers have been arranged can be shown.

Choose a container in order to:

- Assign a name to the container.
- Associate an ingredient to the container (Chocolate, Coffee, Coffee 2, etc.).
- Set the container's maximum capacity so that the "product running out" check can be managed.
- Change the colour associated with the container.
- Set up product images (e.g. manufacturer's logo).  
These images are displayed next to the selection that uses the ingredient.
- Enter/delete and edit nutritional information to be displayed and/or products that may cause allergies.

#### MECHANICAL LAYOUT

It is the mechanical layout of the configuration used by the appliance.

It shows the set-up of the containers and main functional units.

The appliance's new mechanical settings can be indicated to the software.

**Make sure that your settings correspond with the appliance's actual configuration.**

**The appliance adjusts the operating cycles of the functional units according to the choices that have been made.**

**Settings that do not comply with the actual configuration can be dangerous and cause damage to the appliance.**

#### BEVERAGE PLAYLIST

##### GLOBAL PLAYLISTS

Allows the playback of a playlist to be set globally to a category of drinks.

##### BEVERAGE PLAYLIST

Allows you to set up a playlist play during the preparation of a single beverage.

# MACHINE SETTINGS

## CONFIGURATION

### SELECT CONFIGURATION

It allows the appliance's group and individual configurations (for example, by nation) to be managed.

A group of configurations contains multiple individual layouts.

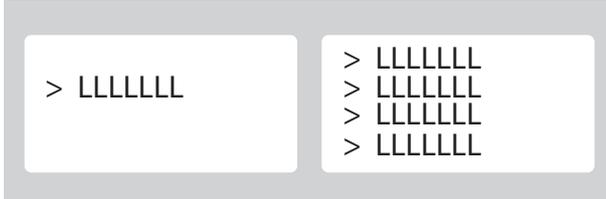


Fig. 50

Groups of layouts and individual layouts can be deleted and duplicated.

When using a new layout, the user can decide whether or not to reset the statistical data, calibrations and maintenance counters.

**ⓘ Before loading the configuration of another piece of equipment (cloning), ensure the mechanical and software compatibility of the appliances.**

To use another (factory) configuration, it must be loaded from the "Backup and Restore" function.

To display the loaded factory configuration, enable the "display all" parameter from the select configuration function.

## BACKUP AND RESTORE

The backup function allows current machine settings to be saved in a backup.

Backups are saved in the memory of the CPU board.

The restore function allows machine settings to be restored from a previously made backup.

The appliance can be restored to its:

- Factory settings.

- Customised settings previously saved with the backup function.

**After having restored the settings from the configuration file, enter the configuration from the menu "Select configuration".**

## IMPORTING FROM A USB

Allows the new machine settings to be imported from a configuration file that has been saved onto a USB memory stick.

**ⓘ The import function can be used to clone the settings of another appliance; make sure that the two appliances' settings are compatible.**

## EXPORTING USING A USB

Allows the machine settings to be exported into a configuration file on a USB memory stick.

**ⓘ The export function can be used to clone current settings onto another appliance; make sure that the two appliances' settings are compatible.**

## MODIFYING INTERFACE STRINGS

Allows you to change the names of beverages, recipes, containers, nutritional information, etc. displayed in the available screens and languages.

The appliance groups the various strings by category, facilitating their identification.

**i** The programming menu strings cannot be changed.

## DISPLAY SETTINGS

### CUSTOMISING THE USER INTERFACE

#### EDIT

Allows some user interface (UI) graphics to be set, such as backgrounds, text size, colours, etc.

#### SELECT CUSTOM GRAPHICS

Allows the choice of the file with the custom graphics to apply to the user interface.

The files uploaded via the “import” function will be displayed.

#### IMPORT CUSTOMISED GRAPHICS

Allows the file with customised graphics to be imported from a USB memory stick.

#### EXPORT CUSTOMISED GRAPHICS

Allows you to save a file with the graphic customisations made on a USB memory stick.

#### USER INTERFACE BLOCK

Enables certain locking functions of the user interface (e.g. a password to lock/unlock the touchscreen)

#### GRAPHIC PACKAGE

Provides information on the graphical interface used.

#### INTERFACE LOCK SETTINGS

Allows passwords to be set for locking and unlocking the touch screen.

An unlock button (displayed in normal operation) can be enabled from the function.

## GENERAL DISPLAY SETTINGS

Allows you to choose which content to display whilst dispensing (video, news, other)

Enables/disables the display of:

- Number of dispensing cycles completed since the appliance has been switched on.
- Setting the touchscreen’s brightness; 100 sets the maximum brightness.
- View the price of drinks (only models with payment systems).
- View date and time.
- Screen saver, enabling allows the user to enter after how long to activate the screen saver.  
Select whether to display a screen saver or a *playlist*.
- Displays the nutritional information of the selections.

## PLAYLIST

Allows *playlists* with entertainment content to be created and managed.

A *playlist* contains videos and/or image sequences that are played whilst the selection is being dispensed.

With **+** videos or images are added to the *playlist*.

With  you create a copy of the *playlist*.

With  the *playlist* is deleted.

A name must be assigned to a new *playlist*.

The *playlist* contents can be played in the following modes: random  or cyclical .

**i** If a *playlist* only contains images, the user can indicate after how long (in seconds) to show the next image.

## TEXT MESSAGE AND RSS FEED

RSS feeds (news) can be displayed in normal use and while the selection is being dispensed.

In order to display RSS feeds, the appliance must have a network connection.

### FEED/TEXT

The appliance, by factory settings, is set to show fixed text messages (appliance not connected to the internet).

Create and enter the texts you want to show in normal operation.

With an enabled network connection it is possible to display news using an RSS FEED.

**i** An RSS FEED enables short news items to be displayed during normal operation.

Choose the address of the RSS FEED from the predefined ones or enter a customised address.

From the function, it is also possible to enable the display of web pages or a screen saver from web addresses.

Once enabled, proceed to enter the web address from which to take data and/or screen savers.

### QUESTIONNAIRE

Allows you to activate a questionnaire (e.g. enjoyment of beverages)

Set the amount of dispensed beverages after which the questionnaire can be viewed.

## DRINK CUSTOMISATION ORDER

Allows the operator to order/move drink customisations to the drink customisation screen of your choice.

For example, it is possible to place the milk customisation before the coffee strength

## INPUT SENSOR SETTINGS

The functional unit allows the operation of some of the appliance's sensors to be set.

### CONTAINER LEVEL

Enables/disables container level control.

**i** The level of the containers is calculated. The amount of product used in the recipe is subtracted from the set container capacity for each selection made.

**i** For correct handling, indicate (at each product load) the quantity of product loaded into the container.

The various containers with fill levels and editable parameters are displayed:

- Calculated quantity: enables/disables the counter that handles "product running out" warnings
- Total capacity: set the grams of the maximum container capacity
- Threshold value: set pre-alarm threshold grams

### SOLID RESIDUE SETTING

Enables/disables the management of the solid residue counter.

Set the quantity of selections that use coffee that the tray is to be considered full.

Set the number of selections at which to display a warning message on approaching tray filling.

## CUP/GLASS SENSOR

The cup/glass sensor can:

- Be disabled for all selections; the selection is also dispensed without the presence of the glass/cup under the nozzles.
- Be enabled for all selections; the selection is only dispensed with the presence of the glass/cup under the nozzles.
- Be disabled only for selections to fill a jug.

It is also possible to define the sensitivity of the sensor (high, medium, low).

It is possible to set the force to dispense the drink:

- With confirmation and with cup/glass detected.
- With confirmation even without detecting the glass/cup.

**Depending on the cup and/or glass, their shape and surface, it may be necessary to adjust the sensitivity.**

**Small and/or reflective and/or transparent cups may not be picked up.**

## CALIBRATIONS

### CALIBRATING THE FLOW METER

The flow meter calibration allows the correct amount of water to be obtained for the recipes.

The flow meter calibration procedure is as follows:

1. Dispense and withdraw the preset amount of water;
2. Measure the amount of water dispensed (in cc);
3. Enter the value measured.

### GRINDER CALIBRATION

The calibration allows the grinder working speed to be adjusted, according to the grams to be ground.

To calibrate, proceed as follows:

1. Start the calibration procedure: a dose of coffee beans will be ground and released.
2. Weigh the ground coffee.
3. Enter the measured weight.

### MOTOR-DOSER CALIBRATION

The calibration of instant products and pre-ground coffee in the motor-dosers allows the motor-doser operating speed to be adjusted and the flow rate to be defined in g/s.

To calibrate, proceed as follows:

1. Dispense the powder at the lowest speed.
2. Weigh the dispensed instant powder.
3. Enter the measured weight.
4. Dispense the powder at maximum speed.
5. Weigh the dispensed instant powder.
6. Enter the measured weight.

### PUMP/SOLENOID VALVE CALIBRATION

Full instant version only

The calibration allows the flow capacity to be adjusted in cc/sec.

To calibrate, proceed as follows:

1. Dispense the water at the minimum flow rate.
2. Measure and enter the amount of dispensed water.
3. Dispense the water at the maximum flow rate.
4. Measure and enter the amount of dispensed water.

** make sure you set the correct mixer nozzle before calibrating.**

## **COLD WATER CALIBRATION**

For models that dispense cold water only. The cold water is calibrated in order to obtain the correct quantity of water in the recipes.

To calibrate, proceed as follows:

1. Dispense a pre-set amount of water.
2. Then, measure the amount of water dispensed (in ml).
3. Enter the value measured.

## **OUTPUT SETTINGS**

### **ESPRESSO UNIT SETTING**

- No coffee: a sensor detects the rotation of the grinder when it is grinding; if a block (e.g. foreign bodies) or excessive speed (grinder empty) occurs, the control blocks the selections which use the grinder;
- Allows the position of the brewing unit's brewing chamber to be set. Set the brewing chamber's position to allow the coffee powder to be arranged more evenly in the brewing chamber.
- Enables repositioning of the brewing unit when the machine is switched on. Repositioning the brewing unit ensures that it is in the correct position before dispensing. Choose from the available options.

### **FAN PARAMETERS**

Enables/disables operation of the vapour extraction fan during dispensing.

### **STEAM SUCTION**

- ON: the fan is always active.
- OFF: the fan is switched on during beverage preparation.

### **LIGHTING**

Allows the appliance's lighting parameters to be set (if present).

It is possible to choose between:

- Dispensing compartment lighting only during dispensing.
- Dispensing compartment lighting always on.
- Dispensing compartment lighting always off.

## MAINTENANCE

### PROGRAMMING AUTOMATIC WASHES/RINSES

It is possible to enable/disable the programming of automatic washing and/or rinsing cycles of the appliance.

Programme the type of wash and/or rinse to be performed on the day and time that has been set.

Automatic wash/rinse cycles can be added and removed.

**⚠ The automatic washes/rinse use hot water. Scalding hazard! Do not put your hands in the dispensing area.**

**ℹ The wash cycles do not replace the need to regularly disassemble the components for sanitisation.**

During the washes and rinses, a message appears showing the progress of the operation.

### NEXT MAINTENANCE

Enable and set the number of days and/or the number of dispenses.

When one of the set values has been reached, the appliance will display a “perform maintenance” message.

### RESET MAINTENANCE COUNTER (MAINTENANCE NOTIFICATION)

Reset the counter that manages the maintenance alerts.

**ℹ In order to correctly manage the notifications, only reset the counter to zero after all of the maintenance work has been carried out.**

## WASHING NOTICE

Set the intervals (number of hours and/or selections) for each type of wash/rinse.

When the set values have been reached, the appliance will display a wash/rinse message.

Each wash/rinse can be made compulsory: the appliance or some functional units will not work until a wash/rinse has been performed.

### NEXT WASHES

Displays when the next wash/rinse will be required for each type of wash/rinse.

## GENERAL APPLIANCE SETTINGS

### TANK

The appliance can be supplied by mains (OFF) or a tank (ON).

### ACOUSTIC SIGNALLING

Enables or disables the acoustic signal at the end of dispensing.

### POWER SUPPLY

Allows the type of connection and power supply chosen during initialisation to be displayed.

**Ensure that the circuit chosen is the one in the appliance.**

**ℹ The setting enables correct management of all electrical components and optimisation of heating unit cycles.**

## HYDRAULIC CIRCUIT

Displays the configuration of the hydraulic circuit chosen during initialisation of the appliance

**Ensure that the circuit chosen is the one in the appliance.**

**ⓘ The setting enables correct management of all electrical components and optimisation of heating unit cycles.**

## RESTARTING THE APPLIANCE

Allows you to set the restart of the appliance when exiting the programming menu (only when the door is open).

## GLOBAL QUANTITY RECIPES

Allows you to vary globally (positively or negatively) the amount of beverages per cup. The value is expressed as % of the total quantity in each recipe

## ACCESS TO THE CLOSED-DOOR PROGRAMMING

Enables access to the programming menus when the door is closed.

To enter programming, press and hold the brand logo on the main screen

## HEATING UNIT PARAMETERS

Sets the operating parameters of the heating unit(s).

- Standard temperature: sets the operating temperature of the heating unit.
- Minimum temperature: sets the minimum heating unit temperature from which the appliance can dispense beverages.
- Low temperature threshold: sets the temperature from which the "low temperature" error message is cleared

With the parameters "Maximum temperature threshold" and "Minutes", the heating unit temperature maintenance cycle can be set.

For example, if no beverages are dispensed during the set minutes, the temperature of the water in the heating unit is increased by the degrees set in the "Temperature threshold".

With "eco mode" activated, it is possible to:

- set a waiting time before dispensing.
- set the time at which the threshold temperature is deemed to be reached.
- set an extra temperature (in addition to the operating temperature) for the first drink dispensed.
- set how many minutes after the last delivery the next drink is considered as "first drink" (the extra temperature is activated)

## MIXER ANTI-LOCK

Sets how long after the last instant selection to briefly activate the mixers (anti-lock function).

The function is useful if instant powder residues remain in the mixer.

## **QUICK LINKS**

This function enables and configures quick links (up to 10) to frequently used functions.

Quick links are displayed when accessing the programming menu.

Full access to the menus remains available from the screen by entering the relevant password.

Enable the button and then choose from the function tree the function for which you want to create quick access.

It is also possible to associate an image with the quick link.

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## **MACHINE INFORMATION**

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### **FAULTS**

The appliance has a number of sensors that keep the various functional units under control.

When an anomaly is detected, the appliance displays the type of fault and the appliance (or part of it) is put out of service.

Detected faults are stored in specific counters.

### **FAULT HISTORY**

This function makes it possible to view a list of the fault history; the fault history contains the name of the fault with the date and time.

The function shows whether the fault is still present and/or has been solved.

With this function, the list of reported faults can be reset to zero.

### **EVENT HISTORY**

This function allows the events reported by the appliance to be viewed and filtered.

An event could be, for example, accessing menus, changing parameters, etc.

With this function, the list of reported events can be reset to zero.

### **FAULTS**

Displays the faults found on the appliance.

If there are no faults, the list will be empty.

### **DOSER FAULT X**

If the current absorption of a motor-doser does not fall within the range of preset values, all the selections which involve that motor-doser will be disabled.

**MIXER FAULT X**

If the current absorption of a mixer motor does not fall within the range of preset values, all the selections which involve that mixer will be disabled.

**VALVE FAULT X**

If the current absorption of a solenoid valve does not fall within the range of preset values, all the selections which involve the solenoid valve will be disabled.

**SHORT CIRCUIT MOSFET**

One of the mosfets on the activation board remains active.

The mosfets control the switching on/off of the DC motors.

**SHORT CIRCUIT**

A short circuit is detected on one of the DC motors connected to the activation board.

It is possible that a fault will also be detected on one of the DC motors at the same time.

**FLOW METER**

The flow meter is used to count the amount of water required to prepare a selection.

If the actuator card does not detect the volumetric meter pulses generated by the passage of water within a preset time, the appliance is taken out of service.

**AIR BREAK WATER LEAKAGE**

The microswitch of the air break (operated by the float) signals the lack of water without a slider.

The water inlet solenoid valve opens or activates the self-feeding pump (air break filling attempt).

If the air break does not fill up, the appliance is taken out of service.

**MICROSWITCH AIR BREAK**

The microswitch of the air-break (operated by the float) never signals a lack of water following a delivery.

**TIME OUT AIR-BREAK FILLING**

The microswitch of the air-break (operated by the float) does not signal that the water level in the air-break has been reached in the prescribed time during filling.

**HEATING UNIT FILLING TIMEOUT**

The heating unit was not filled within the allotted time.

The amount of water for filling the heating unit is detected by the flow meter.

**COFFEE UNIT -UNIT MICROSWITCH FAULT-**

Whilst the brewing unit was moving, the control microswitch was not activated within a certain time limit.

It is possible that this fault is combined with another coffee unit positioning fault.

**COFFEE UNIT -UNIT START FAULT-**

The microswitch indicates that it is still in the idle position.

**COFFEE UNIT -BREWING UNIT FAULT-**

The control microswitch indicates that the coffee unit is not in the infusion position.

**COFFEE UNIT -DISPENSING UNIT FAULT-**

During the infusion phase, the control microswitch signals the movement of the brewing unit.

**COFFEE UNIT -DISCHARGE UNIT FAULT-**

At the end of the infusion, the control microswitch signals that the coffee unit does not reach the "used pod discharge" position.

**COFFEE UNIT -UNIT IDLE FAULT-**

The control microswitch indicates that the brewing unit did not go back to the idle position after the pod was emptied.

#### **HEATING UNIT ERROR**

The heating unit operating temperature is not reached after several temperature measurements in a given time.

The appliance has been taken out of service.

#### **HEATING UNIT LEAK**

Signals a possible loss of heating unit pressure during a “pressurised” cycle.

#### **FULLY CLEANING THE MACHINE**

Signals that the appliance needs to be fully cleaned.

The warning is displayed when the set time limit or number of selections is reached.

#### **WASHING THE MIXER**

Signals that the mixer need to be washed.

The warning is displayed when the set time limit or number of selections is reached.

#### **COIN MECH**

For models with a payment system only.

The machine will lock if it receives a pulse lasting more than 2 seconds on a validator line or if the communication with the serial coin mech is interrupted for longer than 30 (Executive protocol) or 75 (BDV protocol) seconds.

#### **NO WATER**

Lack of water from the mains or internally-supplied tank.

Check that the appliance is connected to the water supply and that the tap is open or the tank is full of water.

Request a drink to restore the water level.

#### **RAM DATA**

One or more areas of the RAM memory contain altered data which was corrected with the default values.

The machine continues to work, but it is preferable to proceed with the initialisation as soon as possible.

#### **COFFEE EMPTY**

A sensor detects the rotation of the grinder when it is grinding; if a block (e.g. foreign bodies) or excessive speed (grinder empty) occurs, the control blocks the selections using coffee beans from the respective grinder.

#### **GRINDER LOCK**

A sensor detects the grinder’s actual rotation during the grinding time.

In the event of a blockage (due to foreign bodies, etc.), the grinder is shutdown and the espresso-based selections are disabled.

#### **MACHINE BOARD**

Failed communication between the machine board and the CPU board.

Communication between the two boards is via CAN BUS.

Check the CAN BUS connections between the two boards.

#### **LOW TEMPERATURE**

The heating unit temperature is lower than the minimum programmed temperature for dispensing.

Wait for the set minimum dispensing temperature to be reached.

#### **MACHINE DATABASE NOT AVAILABLE**

The machine database that groups together and manages the machine configurations (layout) is missing on the appliance or it cannot be loaded or created.

Make sure there is enough memory space.

The appliance has been taken out of service.

#### **NO SYRUP 1 AND 2**

For models with a syrup kit only.

The syrup used in the selections has run out.

## STATISTICS

### SHOW STATISTICS

Displays the selection statistics (e.g. the number of deliveries carried out, time and date of the last delivery, etc.).

For appliances connected in master/slave with a snack machine, it is also possible to see the statistics of the snack selections.

### STATISTIC RESET

Resets the stored statistics of the selections.

For appliances connected in master/slave with a snack equipment, it is possible to reset the statistics of the master appliance or the slave appliance or both.

Set the counter reset mode:

- auto mode: total resetting of partial counters at each statistics acquisition.
- save mode: reset only with command from the statistics acquisition device.

### SHOW AUDIT

Displays the total number of dispenses, the total dispenses since the last statistics reset, and the cash collection for each selection.

The function allows the audit data that is shown to be filtered by category.

For appliances connected in master/slave with a snack machine, it is also possible to see the statistics of the snack selections.

### NUMBERING SELECTIONS

Allows the selections to be numbered and match the selection number-beverage in the statistics.

- ❗ Each selection must have a unique number.

## CUSTOMISED EVA-DTS

Enables/disables customisation of EVA-DTS fields.

- ❗ From the drop-down menu, choose the customisation profile.

## FAVOURITES

“Favourites” are shortcuts to frequently used functions.

After having added a function to the “favourites,” simply view the “favourites” and tap the function for quick access.

### FAVOURITES LIST

Displays all frequently used functions that have been saved as “favourites”.

Tap the function to access it.

### CLEAR THE LIST OF FAVOURITES

Allows you to remove functions that have been stored as “favourites”.

It is possible to remove the individual function or all functions (delete all).

To delete an individual function: touch the function button and confirm deletion from the list.

## MACHINE IDENTIFICATION

Allows you to enter a numerical code and name to identify the appliance.

The code can be used to identify the appliance when analysing the statistics.

- ❗ This information is not saved when making a full backup.

## INSTALLATION DATE

Allows setting of the date the appliance was installed.

Use  to set the date.

- ❗ The date is used to manage and programme maintenance intervals and automatic wash/rinse cycle intervals.

## TECHNICAL SUPPORT CONTACT INFORMATION

Allows the contact information (name and phone number) of technical support to be entered that should be contacted in case of breakdown.

This information will be displayed should a fault occur.

It is possible to decide whether information is to be displayed with faults that take the appliance out of service or with faults that do not take the appliance out of service or with faults that cannot be reset in normal operation.

Use  to edit the contact information.

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## ENERGY SAVING MODE

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The appliance's energy saving function can be enabled. Its parameters can also be modified and its time frames can be set.

### SETTINGS

Enables/disables the energy saving function. The appliance can manage various energy saving profiles.

Some of the parameters in every energy saving profile can be customised.

### “SOFT MODE” PROFILE

This profile enables the energy saving mode after the appliance has a period of inactivity.

When a selection is requested, the machine exits the energy saving mode.

It is possible to:

- Set after how many minutes of appliance inactivity to activate the energy saving profile.
- Set the maintenance temperature of the heating unit(s) in the energy saving mode.
- Select the brightness level of the touch-screen from those that have been pre-defined.

### “DEEP MODE” PROFILE

This profile is active during the set time frames.

During the set time frames, the heating unit temperature is lowered and the maintenance temperature is set.

It is possible to:

- Set by how many minutes to advance the heating of the heating unit before the end of the time frame.  
E.g. 5 minutes: 5 minutes before the end of the time frame, the heating unit heating cycle is activated in order to reach the operating temperature.
- Set the heating unit holding temperature in the energy-saving phase, or switch off the heating unit.
- Enable/disable the lighting of the appliance in the energy-saving range.
- Switch off the vapour extraction fan.
- Select the brightness level of the touchscreen from those that have been pre-defined.

### “SELF MODE” PROFILE

This profile allows switching from energy-saving soft mode to normal operation in automatic mode by setting the threshold of drinks sold in one hour.

### TIME FRAMES

Allows the time frames of the energy saving profiles to be set.

- Select the day for which the time frames will be set.
- Tap the “Add” button, then the line of the profile in order to position a rectangle indicating the time.
- Drag the rectangle to precisely define the time.

To delete a rectangle, tap the “Remove” button, then tap the rectangle to be deleted. Settings made for the entire week or a single day can be copied.

Tap “Copy day” to be able to:

- Copy the time frames that have been set for a single day of the week; tap the day to set the energy saving mode to and then tap “paste day profile”.
- Copy the set up time frames for all days of the week; touch “paste daily profile to all days”.

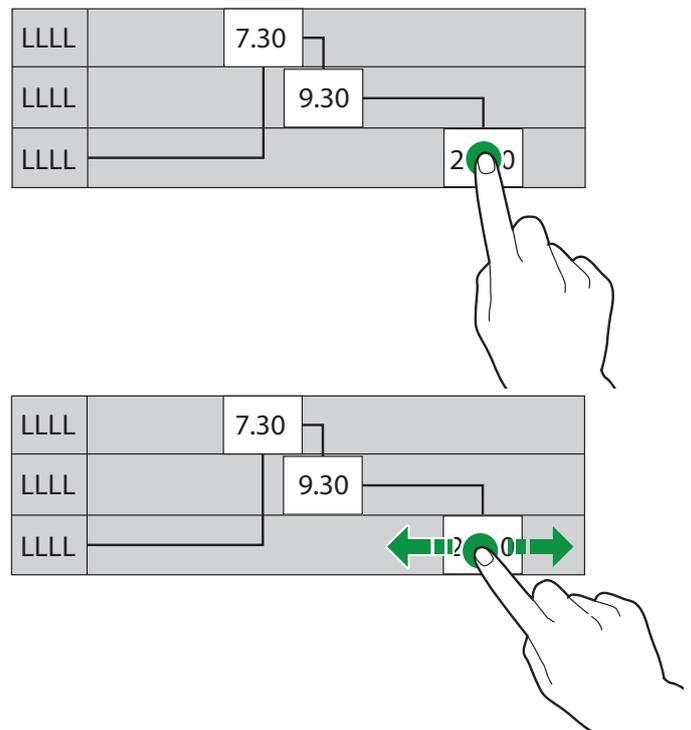


Fig. 51

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## PAYMENT SYSTEMS

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These functions are only available for certain versions and/or models.

Some of the parameters are used in numerous payment systems and keep the set value even if the system type is changed.

### COMMON PARAMETERS

#### IMMEDIATE CHANGE

Usually the amount for a selection is cashed in after the appliance sends the "Selection made" signal.

By enabling this function, which is disabled by default, the payment signal is sent when the beverage starts being dispensed.

#### DECIMAL POINT POSITION

Set the decimal point position, i.e.:

0: decimal point is disabled.

1: one decimal place after the point (XXX.X).

2: two decimal places after the point (XX.XX).

3: three decimal places after the point (X.XXX).

#### DISPENSING TYPE (MULTI SALE)

This allows you to set the operating mode for multiple or single dispenses. With multiple dispensing, the change is not automatically returned when one beverage has finished being dispensed; it remains available for further dispenses. When the return coins button is pressed, the remaining credit will be returned if its value is less than the maximum change value.

#### OBLIGATION TO BUY

This enables/disables the return coins key before a product is dispensed.

-ON: the change is returned after a product has been selected.

-OFF: the change is returned immediately when the coin recovery key is pressed (the appliance works as a change machine).

#### RESERVATION TIME

For cash payment it is possible to set how long to display the residual credit to be entered in order to dispense the selection.

### VALIDATOR

#### DECIMAL POINT POSITION

Set the decimal point position, i.e.:

0: decimal point is disabled.

1: one decimal place after the point (XXX.X).

2: two decimal places after the point (XX.XX).

3: three decimal places after the point (X.XXX).

#### OVERPAY

You can decide whether to:

-Collect any credit in excess of the selection amount after a certain time.

-Keep and leave available any credit in excess of the selection amount for a subsequent selection.

#### OVERPAY TIMEOUT

Makes it possible to set after how long to release or collect the credit without having requested a selection.

#### VALIDATOR LINE VALUE

Allows you to set the value of the 6 coin lines (A to F) of the validator.

### EXECUTIVE

#### VERSION

For the Executive system, you must choose from the following payment systems:

-Standard.

-Price holding/price display.

-Price holding with alignment.

#### SYNCHRONISE PRICES

With the setting "Price holding with alignment", the set prices can be synchronised:

-From the coin mech to the appliance and vice versa.

-From the coin mech/cashless system to the appliance and vice versa.

Synchronisation takes place each time the appliance is switched on.

## **MDB**

### **COIN MECH**

#### **OVERPAY**

You can decide whether to:

- Collect any credit in excess of the selection amount after a certain time.
- Keep and leave available any credit in excess of the selection amount for a subsequent selection.

#### **OVERPAY TIMEOUT**

Makes it possible to set after how long to release or collect the credit without having requested a selection.

#### **MAXIMUM CREDIT**

Allows you to set the maximum value accepted (with cash) to limit having to return high values of change.

#### **MAXIMUM CHANGE**

It is possible to set a limit for the total amount of change that the coin mech will give when the return change button is pressed or after a single dispensed beverage.

**i** Any credit exceeding the amount that has been programmed with this function will be cashed in.

### **CONFIGURATION FOR COINS**

#### **ACCEPTED COINS**

It is possible to define which coins that are recognised by the validator shall be accepted when the change-giver tubes are full.

For the coin/value correspondence, the configuration of the coin mechanism needs to be checked.

#### **EXACT CHANGE ACCEPTED COINS**

It is possible to define which coins that are recognised by the validator shall be accepted when the machine is in "exact amount" mode.

For the coin/value correspondence, the configuration of the coin mechanism needs to be checked.

### **COINS RETURNED**

It is possible to define which coins among those available in the tubes shall be used for giving change. This parameter is only active with coin mechanisms that do not automatically choose which tube to use (Auto changer payout).

For the coin/value correspondence, the configuration of the coin mechanism needs to be checked.

#### **EXACT CHANGE ALGORITHM**

This allows the control algorithm to be chosen so that the machine is able to give change when the selection has been made.

Each algorithm checks a set of conditions (the amount of coins in the tubes or the empty or full status) in the tubes which is then used by the coin mech to give change.

The "Doesn't give change" condition occurs when the tubes combined with the chosen algorithm have reached the minimum level of coins.

For the sake of simplicity, the combination is described in reference to tubes A, B and C, where tube A receives the lower value coins and tube C the higher value coins.

0 = A or (B and C)

1 = A and B and C

2 = only A and B

3 = A and (B or C)

4 = only A

5 = only A or B (default)

6 = A or B or C

7 = only A or B

8 = only A or C

9 = only B and C

10 = only B

11 = only B or C

12 = only C

For example: with algorithm "6" the machine will display the message "No change" when one of the tubes (A, B, C) is at the minimum level.

With algorithm "04" the appliance will only display the "Doesn't give change" message when tube A (coin with the least value) has reached its minimum coin level.

## **CASHLESS SETTINGS**

### **HIDE KEY CREDIT (PRIVATE CASHLESS)**

To protect the users' privacy, this function makes it possible to display "-----" instead of the credit remaining on the cashless system.

### **UNDEFINED CREDIT ACCEPTANCE**

This function allows you to accept or reject the cashless payment systems (key or card) if the cashless system credit is not defined.

### **CASH-SALE COMMANDS**

Enables/disables the cash-sale function.

Makes it possible to show that the transactions made in cash took place through a cashless system.

The available values are:

- 0: the cash transactions are recorded as such (standard operation).
- 1: the cash transactions are recorded as transactions performed by the first cashless system.
- 2: the cash transactions are recorded as transactions performed by the second cashless system.

### **REVALUE**

Enables / disables the banknotes reader exclusively for recharging the credit on the cashless system (key or card).

### **SECOND CASHLESS**

Enable / disable the operation of a second cashless system.

## **BILL VALIDATOR**

### **CASHLESS RECHARGE WITH BILLS**

Enables/disables the possibility of reloading cashless systems (key or card) with a validator or banknote reader.

### **ACCEPTED BANKNOTES**

It is possible to define which banknotes among those recognised by the validator shall be accepted.

In relation to the banknote/value correspondence, the configuration of the reader needs to be checked.

### **EXACT CHANGE ACCEPTED BANKNOTES**

It is possible to define which banknotes among those recognised by the validator shall be accepted when the machine is in "exact change" mode.

For the banknote/value correspondence, the configuration of the reader needs to be checked.

## PRICES

### CURRENCY SYMBOL

The function allows the currency symbol to be set from those available when displaying credit and prices.

### PRICES

The appliance (depending on the payment method) can manage up to 4 different prices for each selection, promotion, promotion etc.

The prices (individual and global) can be active according to the time frame that has been set (standard or promotional).

The prices are grouped into 4 lists.

For each of the 4 lists, the price can be set both in a comprehensive manner (same for all selections) or an individual manner (for each single selection).

It is possible to set a discount on the selection if one's own cup is used.

### FREE VEND PASSWORD

Enables/disables the free dispensing of one or more selections via a password.

Set:

- the password for one free dispensed beverage or
- the password to dispense multiple selections for free.

## PRICE PER TIME FRAME

Allows the time frames (standard or promotional) to be set for sales at differentiated prices.

- Tap the day for which the time frames will be set.
- Tap the "Add" button, then the line of the time frame in order to position a rectangle indicating the time.
- Drag the rectangle to precisely define the time.

To delete a rectangle, tap the "Remove" button, then tap the rectangle to be deleted. Settings made for the entire week or a single day can be copied.

Tap "Copy day" to be able to:

- Copy the time frames that have been set for a single day of the week; tap the day to set the energy saving mode to and then tap "paste day".
- Copy the time frames that have been set for all days of the week; then touch "paste days".

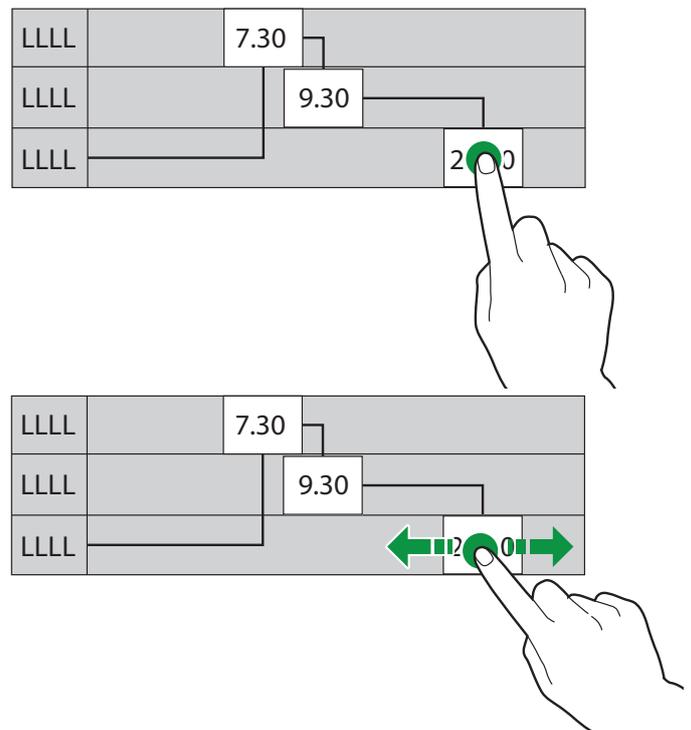


Fig. 52

## COIN MECH EMPTIER

Allows the coin mech to be emptied to collect the takings.

From the function it is possible to see the amount in the coin mech.

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## IMPORT/EXPORT

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Includes all the export and import statistic functions, machine settings, graphics packages, etc.

**The appliance recognises USB memory sticks with a FAT32 file system.**

**ⓘ Compatibility with all USB memory devices available on the market is not guaranteed.**

## EXPORT EVA-DTS

Allows EVA-DTS data to be exported onto a USB memory stick and/or onto data transmission devices (RS232, IrDA, telemetry, etc.).

## FILE

Saves a EVA-DTS file onto the USB memory stick.

## SERIAL PORT

From this function it is possible to decide which communication protocol to use for communication with the data acquisition devices.

## DDCMP - EDDCMP

These have the following configurable parameters:

- **Baud rate:** is the transmission speed to be used in communications between the appliance and data acquisition devices.
- **Pass code:** a code that must be the same as the data transfer terminal, in order to be identified.  
The default setting is 0
- **Security code:** an alphanumeric code for mutual recognition between machine and EVA-DTS terminal.  
Default setting: 0
- **End of transmission:** if enabled, it can identify the end of transmission signal (EOT) which is sent with the last packet and interrupt the data transmission.
- **Extend timeout ack:** if enabled, the time to signal the successful reception of a data packet is increased.  
The function is useful if one of the devices in communication is slower.
- **Synchronise date/time:** if enabled, allows synchronisation of date and time between communicating devices.

## DEX/UCS

These have the following configurable parameters:

- **Baud rate:** is the transmission speed to be used in communications between the appliance and data acquisition devices.

## VIDEOS

Allows videos to be imported/exported from the appliance via a USB memory stick.

### SUPPORTED VIDEO FORMATS

- MPEG 4 H264 video codec 25 frames/sec and AAC audio codec.
- WEBM VP8 video codec 25 frames/sec and VORBIS audio codec;
- OGG THEORA video codec 25 frames/sec and VORBIS audio codec;
- 1280x800 maximum resolution.

**⚠ To enable video playback, the file name must NOT contain spaces and/or other special characters.**

**ℹ The use of high-quality content will affect the overall performance of the appliance and use up memory space.**

**⚠ Playing videos may require the authorisation of the copyright owner or other rights related to the content itself.**

**Make sure to comply with the copyright laws that are in force in the country where the appliance is installed.**

## IMAGES

Allows images to be imported/exported from the appliance via a USB memory stick.

### SUPPORTED IMAGE FORMATS

- JPEG, JPG, PNG (recommended format), BMP, GIF
- maximum resolution 600x570

**ℹ The use of high-quality content will affect the overall performance of the appliance and use up memory space.**

**⚠ Showing images may require the authorisation of the copyright owner or other rights related to the content itself.**

**Make sure to comply with the copyright laws that are in force in the country where the appliance is installed.**

## BACKUP

It allows a complete backup of the settings of the appliance to be exported/imported onto a USB memory stick.

The configuration groups (with relative layouts), the customisations of the user interface, videos and images used for the playlists and prices are saved in the backup.

**ℹ The machine parameters and settings made can be exported and used on other appliances or after an update of the application software.**

**The statistical data, the network settings, emails, machine name, installation date etc., are not saved.**

## PLAYLIST

Allows export/import of created content playlists onto a USB memory stick.

## LOG FILE ERRORS

Exports the errors found on the machine into a log file.

It is stored onto a USB memory stick.

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## SYSTEM

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### DEVELOPMENT

#### EXPORT TREE MENU

Allows a text file of the tree menu of the appliance software functions to be exported (on to a USB memory stick).

#### VIEW LOG FILE

It allows the log file to be viewed.

The log file is the sequential and chronological record of operations that have been carried out by the appliance.

Enable events to be recorded in the log file from the “advanced functions” in the “development” menu.

#### EXPORT LOG FILE

It allows the log file to be exported onto a USB memory stick.

The log file is the sequential and chronological record of operations that have been carried out by the appliance.

Enable events to be recorded in the log file from the “advanced functions” in the “development” menu.

#### FINGER SIMULATOR

Allows operations performed on the touch screen to be recorded and then played back cyclically.

This function is useful if, for example, the same actions are to be performed cyclically (e.g. sequential test dispensing of the same selection).

To end the recording, enter programming and touch X at the top right of the touchscreen.

### SYSTEM INFORMATION

It contains main information regarding the system, such as the used and available memory space, the connectivity firmware versions, etc.

#### IMPORT/EXPORT STRING TRANSLATIONS

It allows the user to import/export the user interface string translations via a USB memory stick.

#### EXPORT RECIPE SETTINGS

It allows the recipe settings (dose tables) to be exported onto a text file.

#### EXPORT THE MACHINE DATABASE

It allows the appliance database to be exported onto a file.

#### ADVANCED FEATURES

Allows the advanced features to be enabled, in order to diagnose application and/or operating system malfunctions.

Activating these functions will slow down the appliance’s operation.

This menu is for the exclusive use of the manufacturer.

### TECHNICAL SPECIFICATIONS

#### COMPONENT TESTING

Allows the appliance’s main components to be tested.

The components that can be tested are displayed.

Select the component that you want to test.

#### MOTOR-DOSERS

The instant powder motor-doser is activated for a few seconds.

#### MIXER

The mixer is activated for a few seconds.

#### BREWING UNIT

Starts moving the brewing unit.

#### LIGHTING

The lighting (if present) of the dispensing compartment is activated for a few seconds.

#### SOLENOID VALVES

The selected solenoid valve for the mixer chosen is activated for a few seconds.

**⚠ During the test, hot water is dispensed: do not put your hands in the dispensing area.**

#### SENSOR AND INPUT DEVICE TESTS

Displays the screen with the status of the control devices of the appliance (probes, microswitch, etc.).

The function is useful for having a general overview of the various sensors of the machine.

For the ON/OFF devices, the status is shown using the colour green if the device is active / powered, with the colour red if deactivated / not powered.

For the sensors, the detected value is displayed (e.g. the temperature).

#### OUTPUT DEVICE TESTS

Allows the operation of the appliance's various components to be checked.

The components that can be checked are displayed.

Choose the component to be tested.

**ⓘ For safety reasons, the tests must be carried out with the door closed.**

Press and hold down the component button to activate it and check that it is working.

When the button is released, the component will be turned off.

#### TOUCHSCREEN TEST

Allows the touch operation to be checked.

Tap and drag your finger across the touchscreen.

Each tap leaves a different-coloured trace.

The test allows any touchscreen areas with little or no sensitivity to be identified.

#### CUP SENSOR TEST

Allows the functioning of cup/glass sensors to be checked.

#### CUP SENSOR SENSITIVITY

Allows the sensitivity of the cup/glass sensors to be set.

The factory values were determined experimentally by the manufacturer and cover most cases.

#### FILLING AND EMPTYING THE HEATING UNIT

The heating unit can be filled and emptied.

The hydraulic circuit is automatically filled.

If work is performed on the hydraulic circuit or if significant water pockets start forming, manually fill the hydraulic circuit.

The heating unit emptying function opens a solenoid valve to allow air to enter the heating unit.

**The heating unit must be emptied by technical personnel.**

**⚠ The heating unit water is very hot and can cause burns.**

**ⓘ Before emptying the heating unit, wait for the water in the heating unit to cool down.**

The appliance has a procedure for the rapid cooling of the heating unit.

The emptying function opens a solenoid valve to allow air to enter the heating unit.

#### EMPTYING AIR BREAK

**The air break must be emptied by technical personnel.**

The air break emptying procedure is initiated.

## COMPLETE SELECTIONS

It allows you to dispense drink test selections. Select the beverage that you want to test.

## RESTORE FACTORY SETTINGS

Allows the appliance to be restored to its factory settings.

**i All the statistical data, fault lists and settings will be lost.**

## RESTARTING THE APPLIANCE

Allows the appliance's automatic restart to be programmed.

This function can be used to immediately restart the appliance.

## PWM PUMP TEST

Allows the pump to be tested by setting speed and/or activation percentage.

Allows the user to start the test with or without PID control.

## RINSING WATER VELOCITY ES/FB

Allows the operator to set the rinse water speed of the brewing unit for FB and ES selections.

## SELF-LEARNING COUNTERS

Allows you to view the number of beverages dispensed for each day of the week and in individual time frames.

Information is available for the current week and the two previous weeks.

## SETTING THE DATE AND TIME

The date and time are used to record events (for example faults, etc.), manage programmed washes and produce maintenance warnings.

Set the current date and time.

## LANGUAGE

The predefined language used to display messages on the user interface and in the menus can be changed.

Some languages (used languages) are available for the "change language" function.

To make other languages available, the flag icon will need to be moved (from disabled languages) to "Used languages".

To delete a language from the "Change language" function, simply drag the flag icon to "Disabled languages".

## USER ACCESS PROFILES

Some programming functions can be enabled/disabled via the access profiles.

The access profile ensures that only the functions linked to it can be used.

If access profile management is disabled, access to the programming menus takes place without a password.

Each user profile has an access password.

The default passwords are:

- Technician (4444)
- Distributor (3333)
- Loader (2222)
- User (1111)

**Advanced programming functions must only be used by people with specific knowledge of the appliance (technical personnel) and hygiene regulations.**

With this function, it is possible to:

- Enable/disable the menu functions for every access profile.
- Change the access password for each user profile: tap “change password”.
- Change the profile name: tap the profile name to change it.

Expand/collapse main function levels to display/close sub-functions.

Tick to make the function available in the profile or not.

## **NETWORK**

The Ethernet and Wi-Fi configurations vary according to the network to which you would like to connect the appliance and the adopted network protections.

**ⓘ Contact your local network administrator (system administrator) for the appropriate network parameters to which the appliance will be connected.**

The appliance supports the TCP/IP protocol.

**Ethernet and Wi-Fi connections cannot be enabled at the same time.**

The configuration of the mobile network data connection varies according to the chosen telephone service provider.

**ⓘ Contact your chosen telephone service provider for the suitable parameters for data connection.**

## **ETHERNET**

Enable and configure the connection to the appliance’s LAN.

Enable the network connection to connect the appliance to the LAN.

All network parameters that can be changed are displayed.

The network parameters (such as the IP address, etc.) can either be:

- assigned automatically (DHCP)
- or
- manually.

**ⓘ To automatically assign network parameters, there must be a DHCP server on the LAN network.**

If you choose to manually set the parameters, the following must be entered:

- The IP address that you want to assign to the appliance.
- The subnet mask to which the IP address belongs.
- The gateway (router) IP address.
- The IP address of the resolving name server (DNS server).

**⚠ If an error is made when manually entering the parameters or an IP address that is already in use on the LAN network is used, the appliance cannot communicate with the network.**

You can check if the network connection is working from this function.

The MAC address is a unique address assigned by the manufacturer that identifies the appliance’s network card.

The MAC address cannot be changed.

## WI-FI

Allows the Wi-Fi connection of the appliance to be enabled and configured.

Enable the Wi-Fi connection to connect the appliance to a Wi-Fi network.

The appliance supports the main Wi-Fi protection systems (cryptography).

**i** “Open” encryption does not guarantee any type of protection.

On activation of the Wi-Fi connection, the appliance displays the Wi-Fi networks available.

Choose the name of the Wi-Fi network (SSID) to which to be connected; should the Wi-Fi network be hidden it is necessary to know the name (SSID) and enter it manually.

The network parameters (such as the IP address, etc.) can either be:

- assigned automatically (DHCP)

or

- manually.

**i** **To automatically assign network parameters, there must be a DHCP server on the network.**

**i** **The parameters relative to the protections and the access password to the Wi-Fi network must be set manually.**

If you choose to manually set the parameters, the following must be entered:

- The IP address that you want to assign to the appliance.

- The subnet mask to which the IP address belongs.

- The gateway (router) IP address.

- The IP address of the resolving name server (DNS server).

**⚠** **If an error is made when manually entering the parameters or an IP address that is already in use on the Wi-Fi network is used, the appliance cannot communicate with the network.**

You can check if the connection is working from this function.

The MAC address is a unique address assigned by the manufacturer that identifies the appliance's network card.

The MAC address cannot be changed.

## BLUETOOTH

It enables and configures the Bluetooth connection and allows short-range data exchange (a maximum of 10 metres) between the appliance and other devices.

To connect to a Bluetooth device you need to:

- Enter a name so that the appliance can be identified.

- Make the appliance detectable when searching for Bluetooth devices. In detection mode, a wireless signal is transmitted which allows the appliance to be detected by other devices.

- Enter the authentication code in order to be able to associate the Bluetooth device.

When a device can be detected, the pairing mode is also usually enabled.

All of the appliance's linked devices are shown.

## MOBILE NETWORK DATA CONNECTION SETTINGS

Enables and configures the mobile network data connection parameters.

Enable the data connection in order to view and configure the parameters.

The parameter values (e.g., PIN, APN address, access data such as the username and password, etc.) vary according to the chosen telephone service provider: request these from your service provider.

The signal strength of the mobile network can be seen from this function.

## FIREWALL

It allows the appliance's protection to be increased to prevent unwanted access when connected to the network.

We recommend enabling the firewall.

The appliance's firewall cannot be configured.

## INFORMATION

Allows all of the information regarding the appliance's software to be viewed (version, graphic theme used, machine configuration, etc.).

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## CONNECTIVITY

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### EMAIL SETTINGS

The appliance is able to send notifications (via email) regarding events and faults.

**❗ In order to send notifications via email, you must have an active network connection and a SMTP outgoing mail server with an active email account.**

An outgoing mail server (SMTP: Simple Mail Transfer Protocol) is a server that sends emails.

**❗ The appliance sends email notifications. It is impossible to receive emails on the appliance.**

Enable the function so that you can set the parameters for sending emails, in addition to the email addresses of notification recipients.

The parameters vary depending on the SMTP server used (internet email service provider or an email server on an internal or proprietary LAN network).

The appliance provides a set of preconfigured parameters for the major email service providers on the internet.

It is possible to enter the email parameters manually for the other internet email service providers or for email servers on internal or custom LAN networks.

**❗ For email servers on the internal LAN network, contact the network administrator (system administrator) for the appropriate parameters.**

**❗ For internet-based email service providers, it is necessary to contact the support or assistance services of the email service provider to find out the appropriate email parameters.**

It is possible to enter and delete the email addresses to which to send notifications.

After setting the parameters, you can send a test email to check that it has been configured correctly.

### EMAIL PARAMETERS

Enter:

- The name that will be used as the sender name, e.g. *Brio...*
- The host name (address) of the SMTP outgoing mail server, e.g. *smtp.example.com*.
- The port number used by the outgoing mail server. The most common port numbers are: 25, 465 and 587.
- SMTP user: the sender's email address, e.g. *vendingmachine@domain.com*
- SMTP password to authenticate on the SMTP server and allow email to be sent. Enter the password if it is required for authentication on the SMTP server.
- Indicate whether the outgoing mail server uses the secure SMTPS connection.

### EVENT NOTIFICATION

Enable the events for which you want to receive notifications (e.g. access to menus, sanitisation operations, etc.).

### FAULT NOTIFICATION

Enable the faults you want to receive notifications for (e.g. no coffee, no water, etc.).

### EVA-DTS NOTIFICATIONS

It allows the user to schedule the sending of emails with the data in EVA-DTS format.

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## CLOUD

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### AMICLO

#### CONFIGURATION

Enables/disables Amiclo cloud functionality  
It is possible to:

- Enable remote reboot of the appliance.
- Activate the restart of the remote appliance application
- Activate remote fault reset

#### AMICLO STATUS

Displays information on the active Amiclo version

#### AMICUS CREDITS

Allows you to view information on Amiclo credits.

#### VIEW AMICLO LOGFILE

Allows you to view the amiclo logfile; the logfile allows you to view the messages exchanged between the equipment and Amiclo.

### INTEGRATED CONNECTIVITY BOX

Allows enabling and configuring of the appliance's connectivity box.

The required parameters are provided by the manufacturer.

#### STATUS

Displays connectivity box version information

#### VIEW LOGFILE

Allows viewing of the logfile related to the integrated connectivity box; the logfile allows viewing of the messages exchanged between the appliance and the connectivity box.

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## TOUCHLESS OPTIONS

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Enables functions and configuration for requesting beverages in touchless mode (remote mode).

Touchless functionality requires the use of a remote beverage selection application (CoffeeAPPeal).

**i The application is available from the digital distribution platforms of the major smartphone operating systems.**

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## LICENCES

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Allows the licences of third-party software components or plug-ins used in the appliance application to be displayed.

The integrity of the apparatus and its compliance with the corresponding system regulations must be checked, at least once a year, by specialised personnel.

❗ Always disconnect the appliance from the electric mains before starting any maintenance work which requires disassembling components.

The operations described below must solely be carried out by personnel with specific knowledge of the appliance's operation, both from an electrical safety and hygiene point of view.

## GENERAL INTRODUCTION

In order to ensure that the appliance operates correctly over time, it shall be subjected to periodical maintenance.

Listed below are the operations to be carried out and the frequency with which they should be carried out; they are evidently indicative because they depend on the conditions of use (i.e. water hardness, environment humidity and temperature, type of product used, etc.).

The operations described in this chapter do not include all of the maintenance work.

More complex interventions must be carried out by a technician with specific knowledge of the appliance.

In order to generally avoid risks of oxidation or chemical aggressions, the painted and stainless steel surfaces need to be kept clean using neutral cleaning products (avoid using solvents).

**Under no circumstances should jets of water be used to wash the appliance.**

## SWITCHES AND SAFETY DEVICES

### MAIN SWITCH

The main switch (manual type), located at the bottom right (under the mixer shelf), de-energises the appliance.

❗ With the main switch turned off, the terminal of the electric power cable and the noise filter remain live.

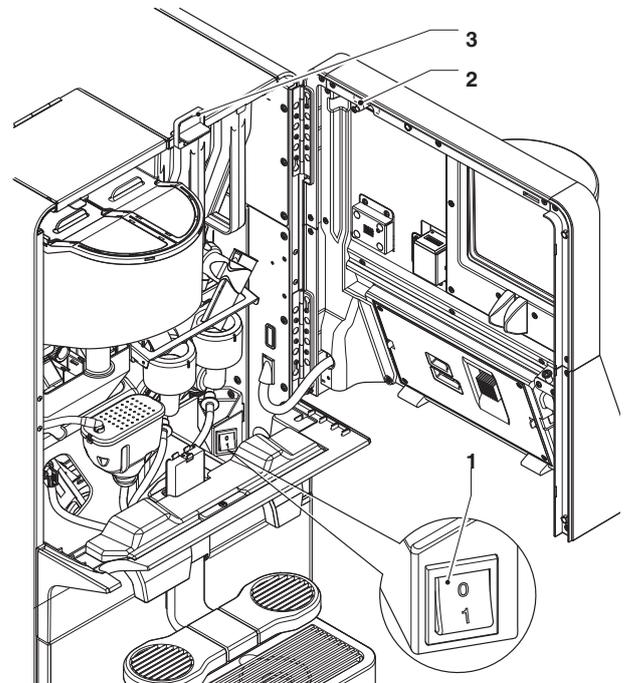


Fig. 53

1. Main switch
2. Connectivity switch
3. Door sensor

## DOOR SENSOR

When the door is opened, a special switch de-energises the moving components of the appliance.

To energise the components with the door open, simply insert the yellow key into the door switch slot.

**▲ All operations which require the appliance to be live with the door open, must EXCLUSIVELY be performed by qualified personnel who are aware of the specific risks that the machine in this condition entails.**

## CONNECTIVITY SWITCH

When the door is opened, a specific switch deactivates the appliance's connectivity components.

When the door is open, the remote operation of the functional units and/or the remote control are disabled.

**▲ All operations that require the appliance to be live with the door open and the connectivity functions active, must EXCLUSIVELY be performed by qualified personnel who are aware of the specific risks involved when the machine is in this condition.**

To activate the connectivity components (i.e. for a communication test) with the door open, simply pull the connectivity switch pin. If the switch is activated and deactivated within a short period of time, the appliance disables the connectivity components; the appliance will need to be restarted to restore these.

## SAFETY DEVICES IN THE PRESENCE OF COFFEE CONTAINER

When the coffee container is removed, the safety mechanism disables the movement of the grinders and brewing unit.

## SAFETY DEVICES IN THE PRESENCE OF SOLIDS TRAY

When the solid residues tray is removed, the safety mechanism disables the movement of the grinders and the brewing unit.

## BREWING UNIT MAINTENANCE

### z4000 ESFB

After 10,000 dispensed beverages or every 6 months, the brewing unit requires a small amount of maintenance work in order to optimise its performance over time.

To perform the maintenance work, the brewing unit needs to be removed:

1. Disconnect the espresso coffee outlet nozzle from the unit by rotating it 90° away from the connecting rod and pull it outwards.
2. Disconnect the fresh brew coffee outlet nozzle from the unit by turning it 90° and pull it out.
3. Turn the unit end stop lever, rotating it until it is in a horizontal position.
4. Remove the brewing unit.

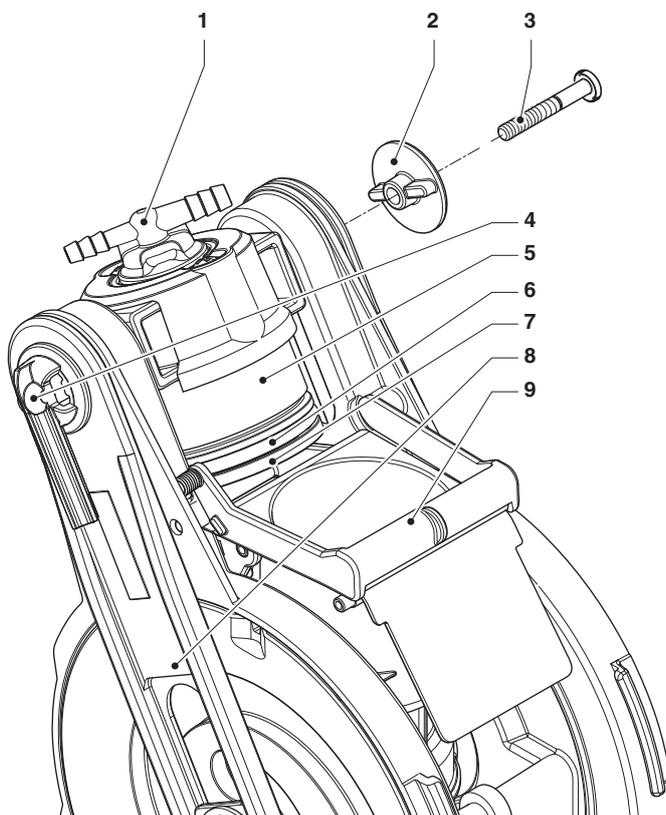


Fig. 54

1. Fresh Brew Nozzle
2. Key
3. Lateral screw
4. Espresso nozzle
5. Upper piston
6. Upper piston seal
7. Upper filter
8. Connecting rod
9. Lower scraper

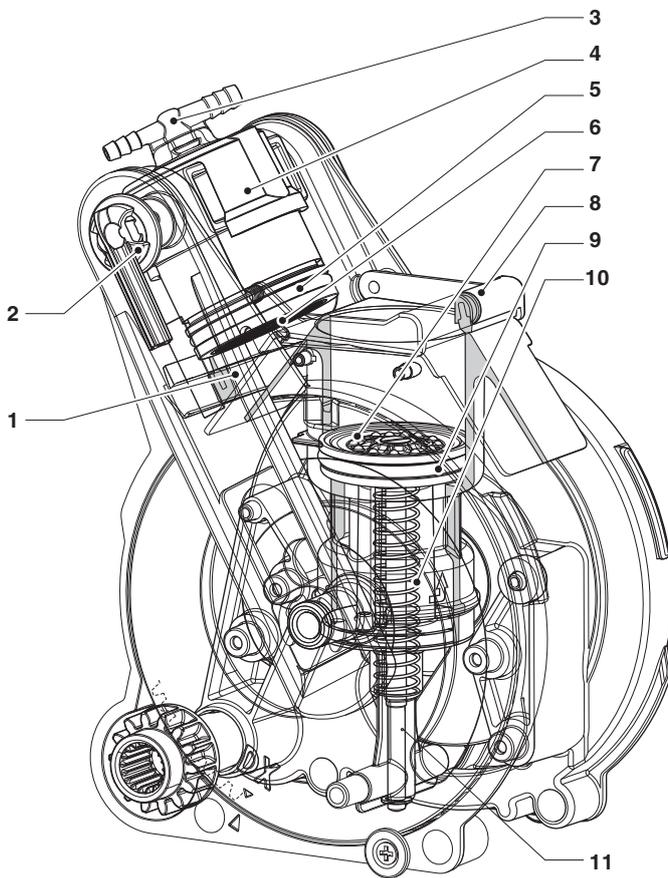


Fig. 55

1. Upper scraper
2. Espresso nozzle
3. Fresh Brew Nozzle
4. Upper piston
5. Upper piston seal
6. Upper filter
7. Lower filter
8. Lower scraper
9. Lower piston seal
10. Lower piston spring
11. Piston rod

## UPPER FILTER DISASSEMBLY

In order to remove or replace the upper filter and seal, proceed as follows:

1. Unscrew the fixing screw of the side key.
2. Turn the piston so that the screws are accessible and the upper piston can be pulled out.
3. Remove the two fixing screws.
4. Slide the piston out, paying attention to the spring thrust.

**ⓘ Check the OR seals; if they are worn and/or damaged and/or lose elasticity, they must be replaced.**

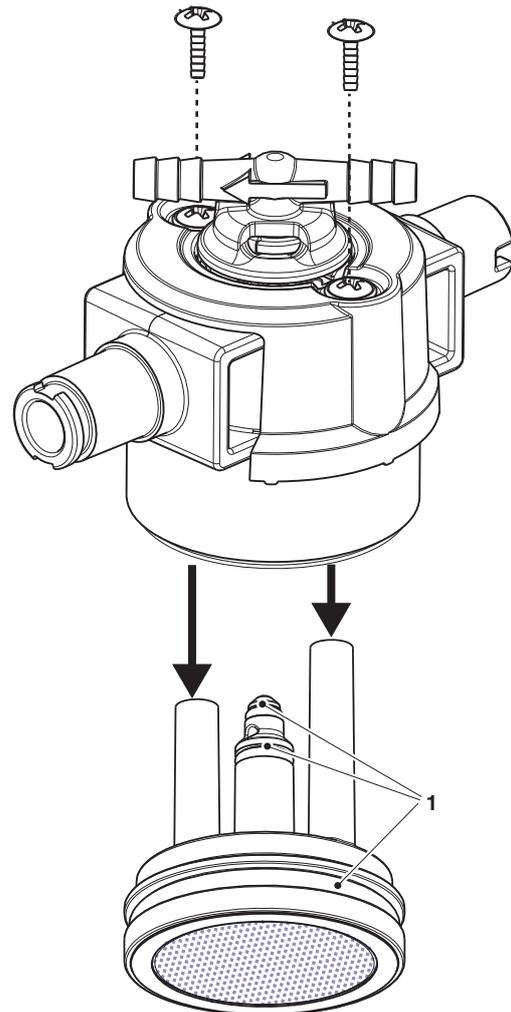


Fig. 56

1. OR seals

## REMOVING/REPLACING THE LOWER FILTER AND SEAL

In order to remove or replace the lower filter and seal, proceed as follows:

1. Manually bring the unit to the discharge position with the lower piston in a high position.
2. Unscrew the central fixing screw to remove the filter.
3. Press on the end of the piston guide ring to obtain an extra stroke from the lower piston.
4. Using a small screwdriver, pry and slide the lower piston out from the piston rod whilst being careful not to damage the piston or the sealing elements.
5. Remove and replace the lower seal.

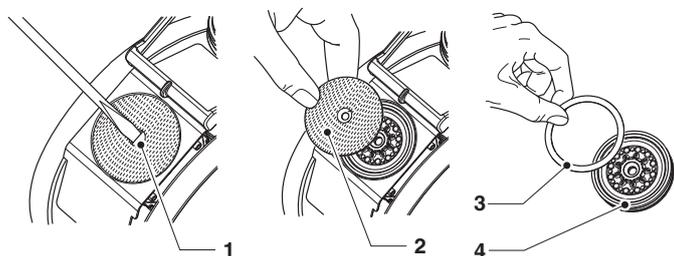


Fig. 57

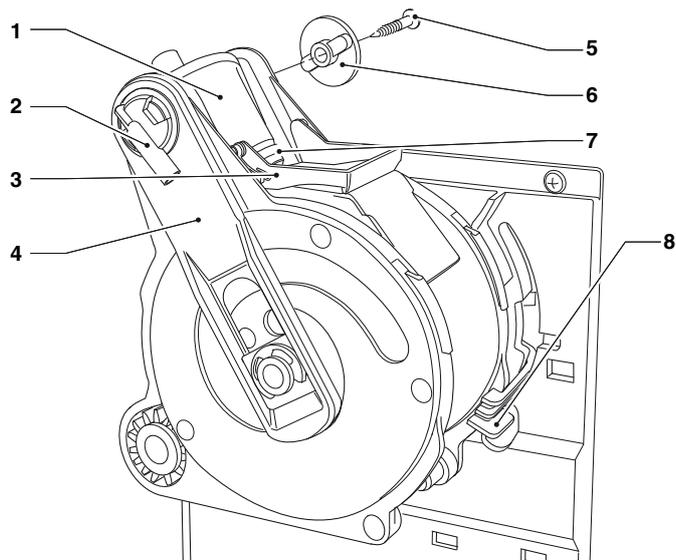
1. Screw
2. Filter
3. Seal
4. Filter support

## Z4000 (NE / HRC)

After 10,000 dispensed beverages or every 6 months, the coffee unit requires a small amount of maintenance work in order to optimise how it works over time.

To perform the maintenance work, the unit needs to be removed as follows:

1. Disconnect the coffee outlet nozzle from the unit by rotating it 90° away from the connecting rod and pull it outwards.
2. Turn the unit end stop lever, rotating it until it is in a horizontal position.
3. Remove the coffee unit.



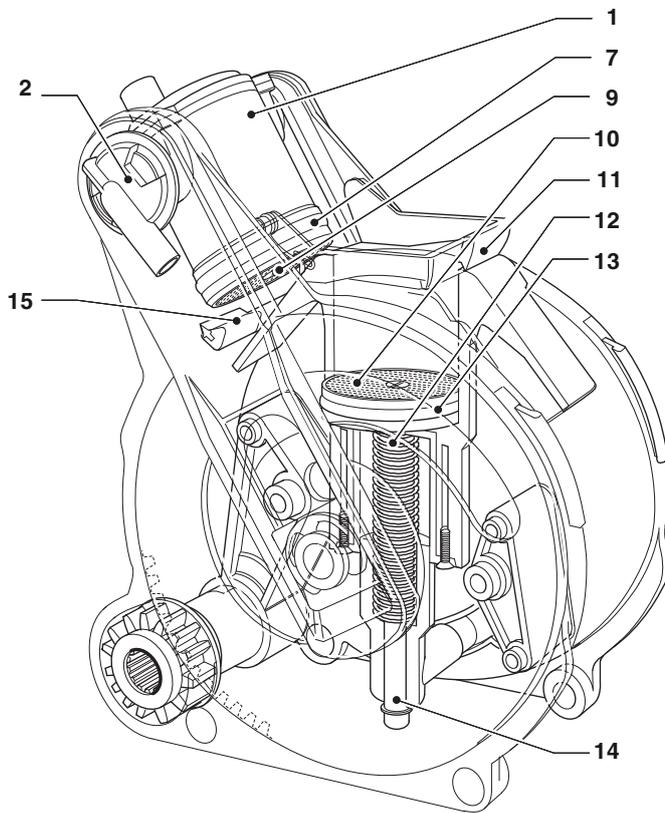


Fig. 58

1. Upper piston
2. Coffee outlet nozzle
3. Lower scraper
4. Connecting rod
5. Lateral screw
6. Key
7. Upper seal
8. Unit stop lever
9. Upper filter
10. Lower filter
11. Lower scraper
12. Lower piston
13. Lower seal
14. Piston guide ring
15. Upper scraper
16. Unit cover

### REMOVING/REPLACING THE UPPER FILTER AND SEAL

In order to remove or replace the upper filter and seal, proceed as follows:

1. Unscrew the lateral fixing screw (5) of the upper piston key (6).
2. Rotate the upper piston (1) upwards.
3. Remove and replace the upper seal (7).
4. Unscrew the upper filter (9) so that it can be removed and replaced.

### REMOVING/REPLACING THE LOWER FILTER AND SEAL

In order to remove or replace the lower filter and seal, proceed as follows:

1. Manually bring the unit to the discharge position with the lower piston (12).
2. Unscrew the central fixing screw to remove the filter (10).
3. Press on the end of the piston guide ring (14) to obtain an extra stroke from the lower piston (12).
4. Using a small screwdriver, pry and slide the lower piston (12) out from the piston rod (14) whilst being careful not to damage the piston or the sealing elements.
5. Remove and replace the lower seal (13).

## TEA BREW UNIT

For models with tea brew unit only.

Every 6 months or 2500 tea dispensing cycles and according to the use of the machine, the water quality and the product in use, check / replace the piston filter, the gaskets and clean the powder/vapour suction conduit

### DISASSEMBLY

act as follows:

1. remove the waste conveyor

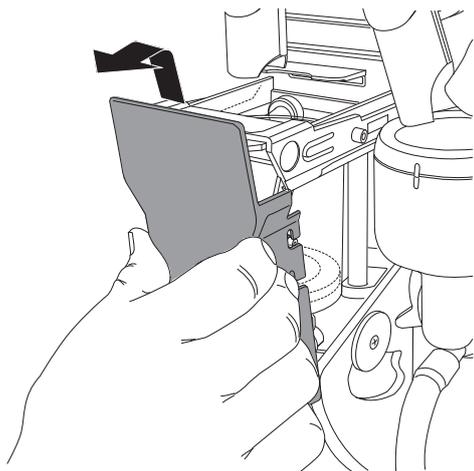


Fig. 59

2. remove the scraper from the support and remove the scraper

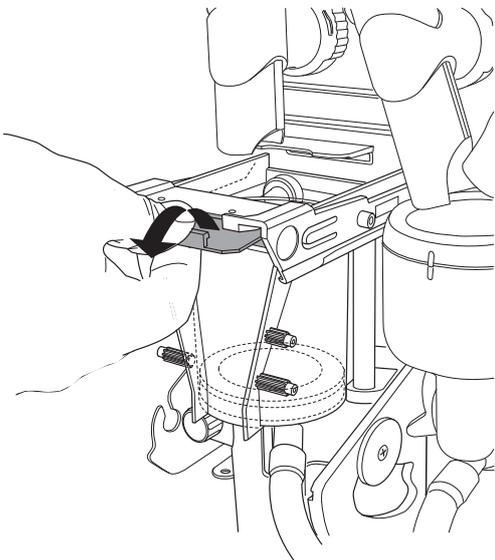


Fig. 60

3. detach the tube and the relative nozzle

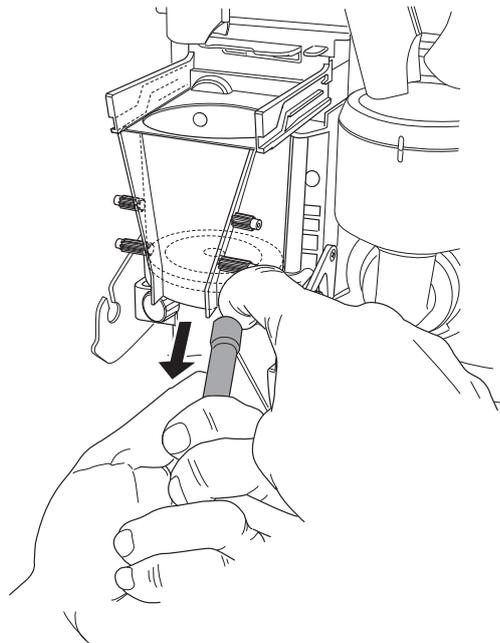


Fig. 61

4. unscrew the knurl intended to secure the piston stem cover

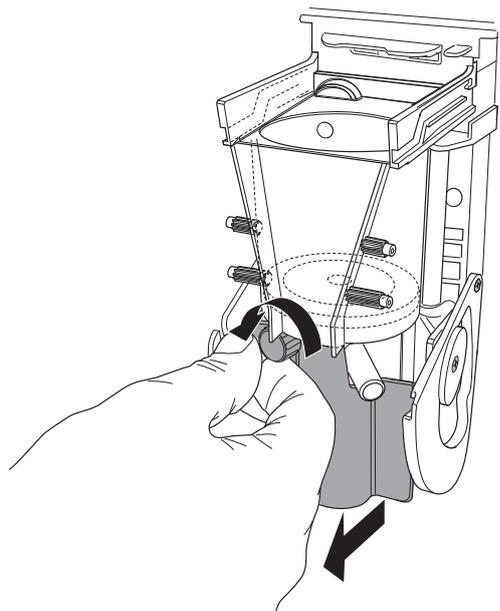


Fig. 62

5. unscrew the piston stem knurl

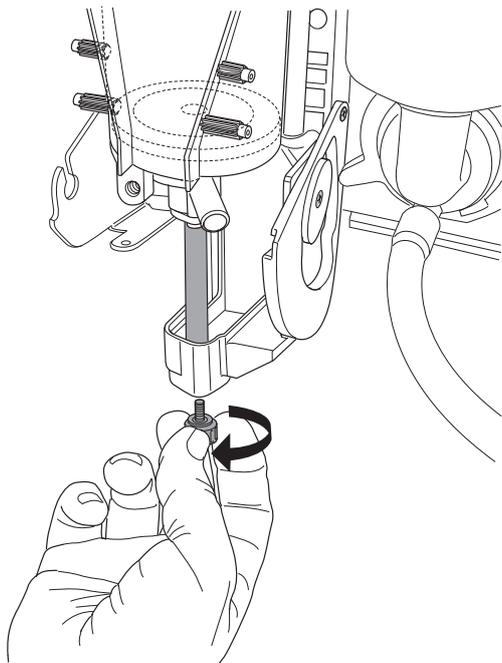


Fig. 63

6. lift the piston so as to reach the top dead center

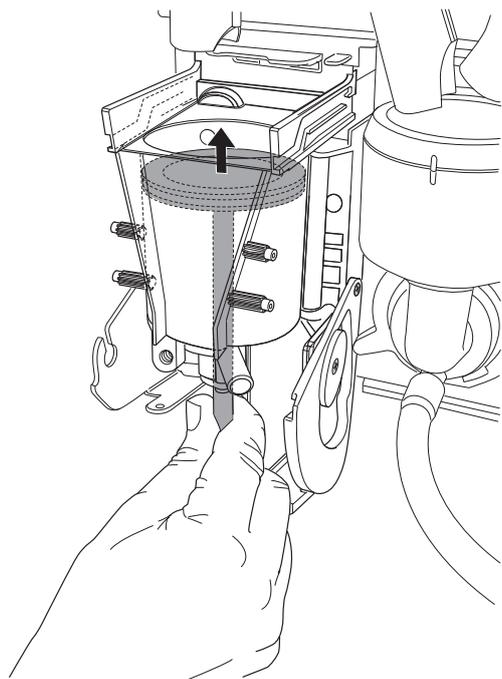


Fig. 64

7. rotate the brew chamber upwards and release it

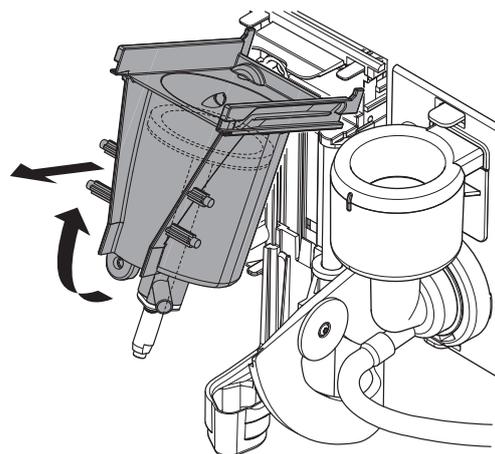


Fig. 65

8. extract the piston completely and check the status of the filter and/or the gaskets.

**The piston filter must be replaced every 6 months or after 2,500 dispensing cycles.**

**Replace the gaskets at regular intervals.**

**If torn and/or no longer elastic, gaskets may negatively affect the performance of the unit and the tea quality.**

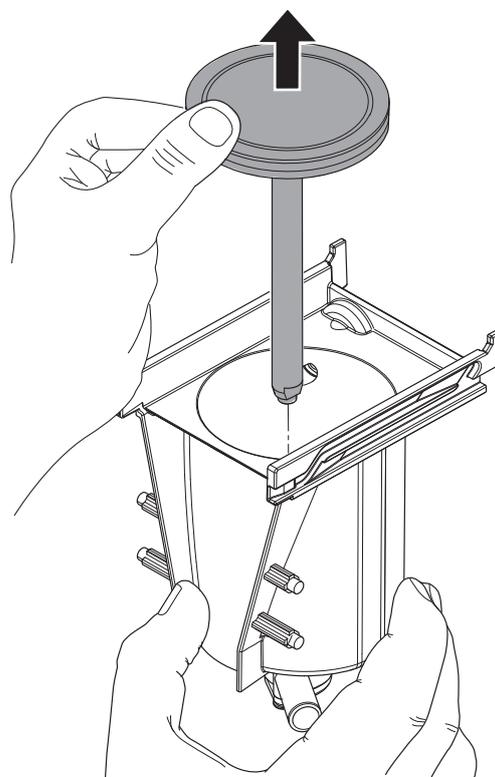


Fig. 66

The filter is secured to the stem by means of a bayonet connection.

To facilitate the removal of the filter seal ring and of the filter, use the piston retainer.

1. Insert the piston retainer on the piston
2. Turn the filter seal ring slightly.

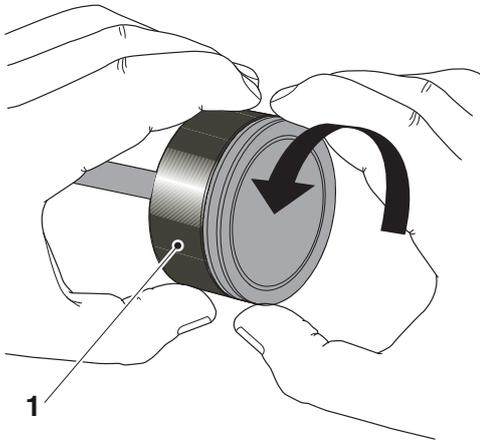


Fig. 67

1. Piston retainer

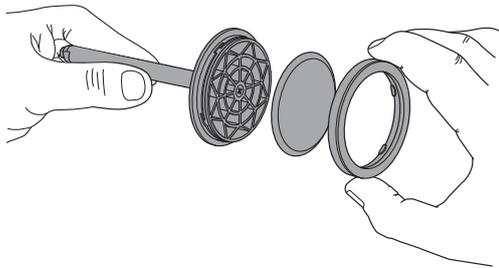


Fig. 68

**Wash the components carefully by using a specific detergent solution for tea brewers<sup>2</sup>.**

**Let the components immersed for one night.**

To avoid leaving the equipment out of service (for too long), use components in the place of those to be sanitised (hygiene kit).

The parts replaced are to be sanitised and then made available as a hygiene kit.

## ASSEMBLY

Act as follows:

1. re-mount the filter and the seal ring on the piston.
2. re-position the piston.  
**Pay attention while positioning:** the gasket must close the drink outlet hole. Use some fat (for food use) to grease the piston stem.

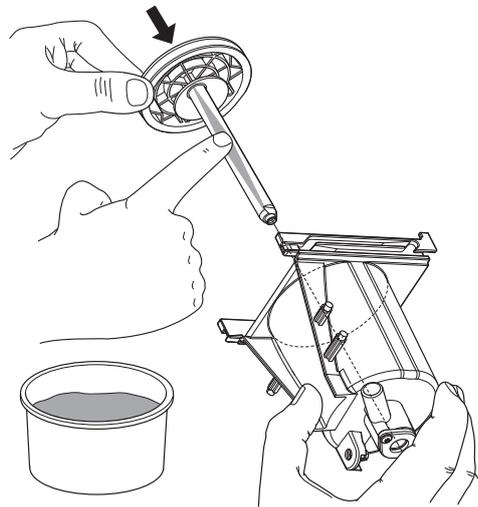


Fig. 69

3. hook the brew chamber, make sure that the water coupling is properly inserted.

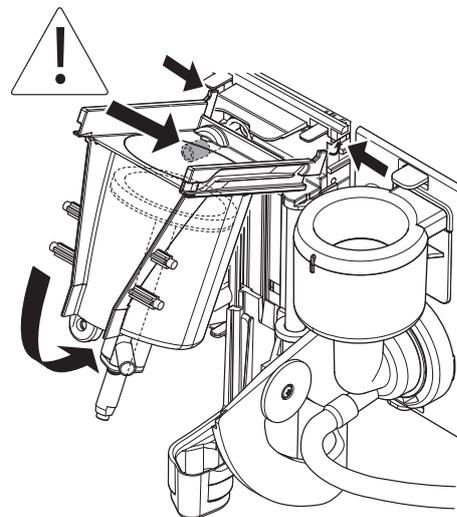


Fig. 70

4. screw the piston stem knurl

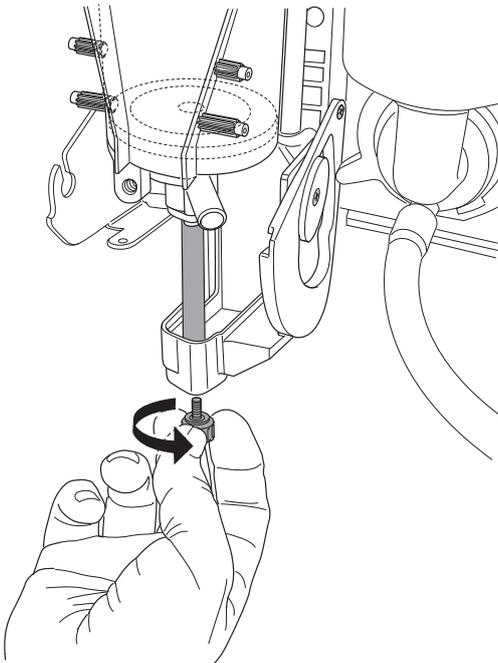


Fig. 71

5. screw the piston stem cover knurl.

**Attention!**  
It is absolutely necessary to reassemble the cover before setting the machine at work once again.

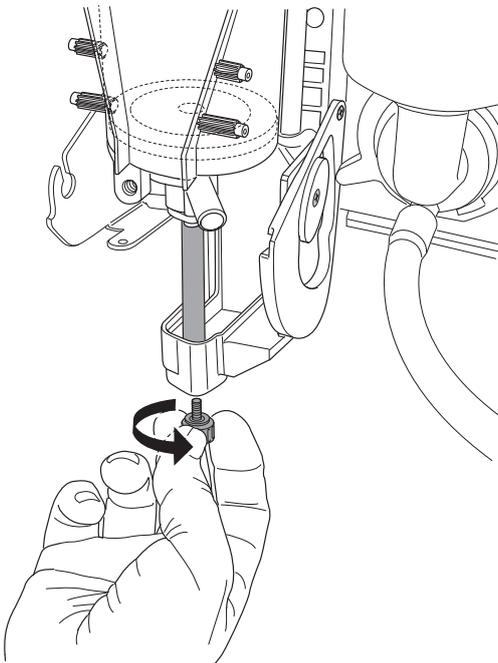


Fig. 72

6. connect the tube

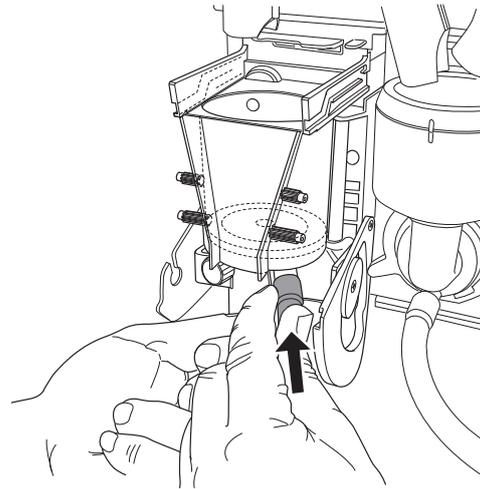


Fig. 73

7. hook the scraper on its support, insert the support into the lower guides

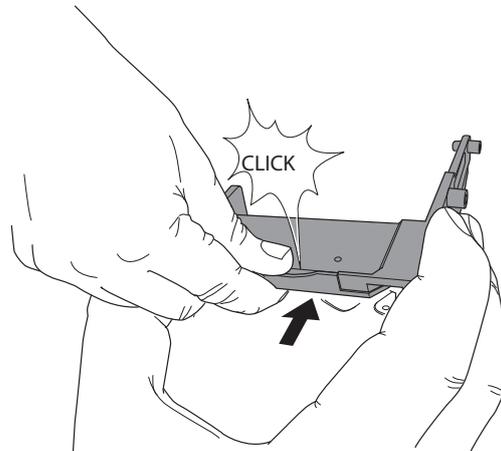


Fig. 74

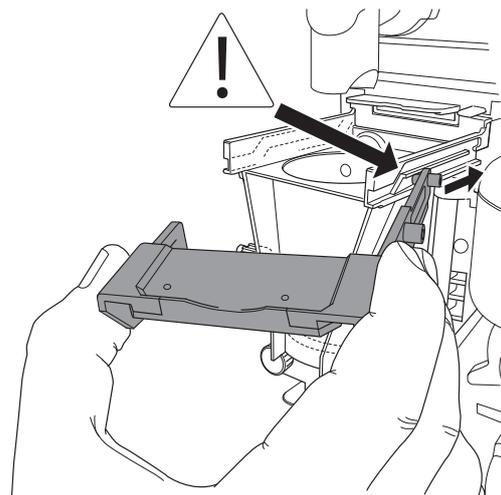


Fig. 75

- push the scraper as far as the limit stop and put it back in its home position

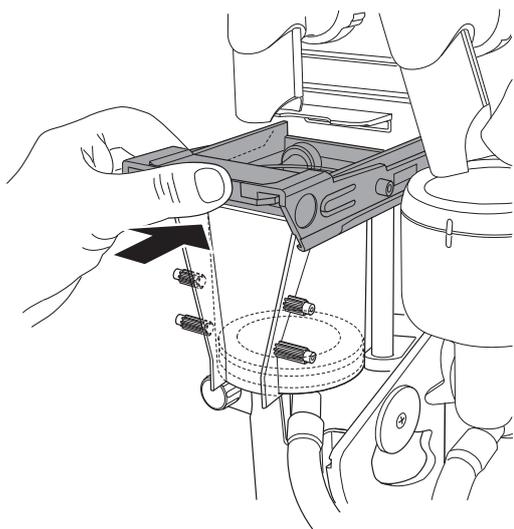


Fig. 76

- Hook the waste conveyor

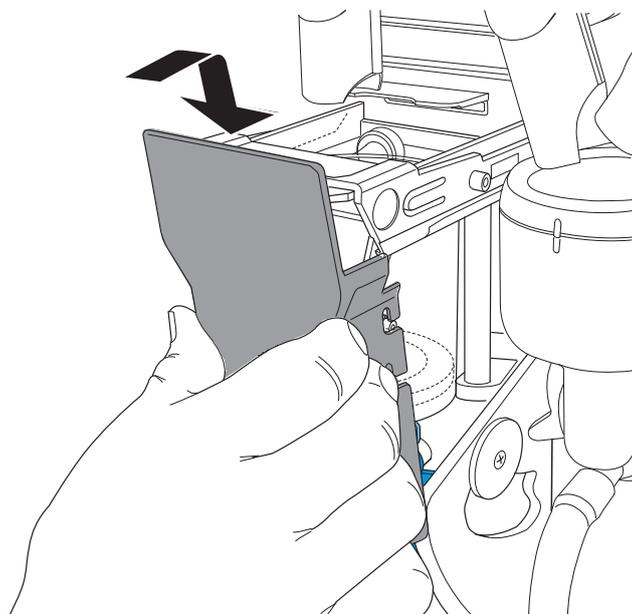


Fig. 77

- wash the unit automatically

The automatic repositioning of the tea brewer guarantees the correct position for the brew cycle.

Reset the counter managing the message "clean the tea brewer"

## PERIODICAL OPERATIONS

This manual shows the potential critical points and includes information about controlling the possible growth of bacteria.

Under current health and safety regulations, the operator of the appliance must apply the self-control procedures, identified in accordance with the HAC-CP (Hazard Analysis Critical Control Point) Directive and national legislation.

Cleaning products suitable for contact with foodstuffs may be used. For dosage and application times refer to the instructions on the product.

It is good practice also to use sanitising products for cleaning surfaces not directly in contact with food (e.g. cup holders, etc.).

The manufacturer shall not be held responsible for any damage caused due to the non-observance of the above or the use of aggressive or toxic chemical products.

Always switch off the appliance before starting any maintenance work which requires disassembling components.

**Do not under any circumstances use jets of water directly on the appliance when cleaning.**

## SANITISATION

- All the components that come into contact with food products, including the tubes, must be removed from the appliance and all of their parts disassembled;
- All residues and visible films must be mechanically removed using swabs and brushes if necessary;
- Wash and rinse the parts under a jet of warm water, taking care to remove residues and visible films mechanically using clean tube swabs or brushes.
- The internal surfaces of the appliance need to be cleaned with the same sterilising solution.
- Cleaning the cup holder.
- Thoroughly rinse and reassemble the various components.

**Before restarting the seal appliance, the sterilising operations need to be carried out again with the installed components, as described in the “Sanitising the mixer and food product circuits” chapter.**

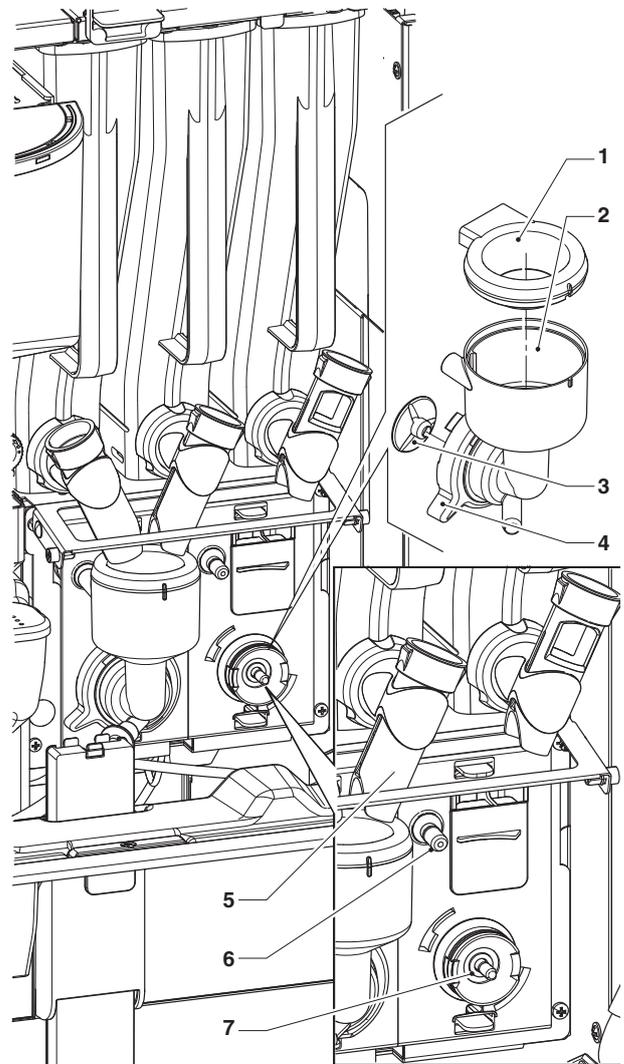


Fig. 78

1. *Splash guard ring*
2. *Water conveyor*
3. *Mixer fan*
4. *Mixer-securing flange*
5. *Instant powder funnel*
6. *Mixer water inlet nozzle*
7. *Stuffing box seal*

## MIXER AND SEAL CHECK

For devices dispensing instant beverages, proceed to dismantle the parts:

1. Disconnect the hoses from the mixer connections.
2. Turn the mixer locking ring anticlockwise and remove the mixer. Take special care to fully lock it when reassembling it.
3. Separate the instant powder funnel, the powder tray and water funnel.
4. Disassemble the fans: exert a slight pull to free them;

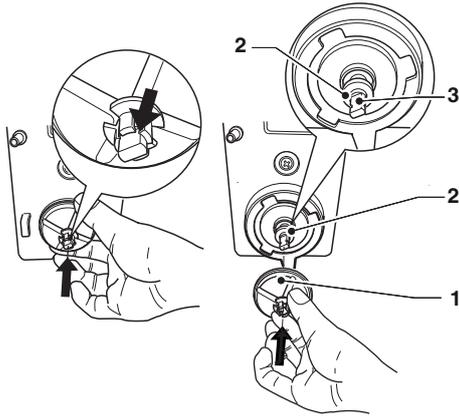


Fig. 79

1. Fan
2. Stuffing box seal
3. Shaft discharge

5. Wash and rinse the parts under a jet of warm water, taking care to remove residues and visible films mechanically using clean tube swabs or brushes.
6. Check the wear & tear condition of the motor blender shaft seal.

**If it is worn, torn and lacks elasticity, replace it.**

7. Reassemble the powder trays and powder funnels after having thoroughly rinsed and dried them.
8. Reposition the mixer and check that the water funnel is correctly engaged.
9. Turn the water funnel locking ring clockwise in order to secure the mixer to the appliance.

**After the components have been reassembled, it is necessary to:**

Wash the mixer and add a few drops of the sanitising solution into the various funnels and rinse thoroughly to remove any solution residue.

## CLEANING THE DIFFUSER

ESFB version only.

The diffuser should be disassembled periodically. Disconnect the inlet and outlet pipes of the diffuser.

To release the diffuser from the cover, simply rotate it slightly to the left.

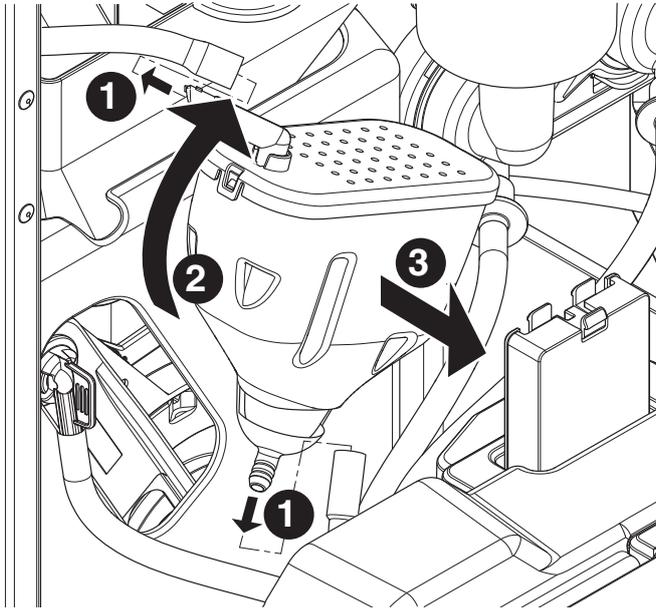


Fig. 80

Separate all parts of the diffuser.

Wash and rinse the parts under a jet of warm water, taking care to remove residues and visible films mechanically using clean tube swabs or brushes.

Reassemble the diffuser by placing first the small chute and then the large one. Close the diffuser

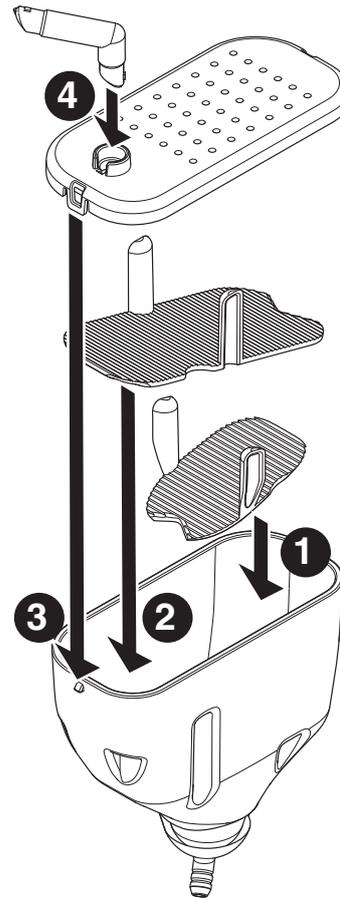


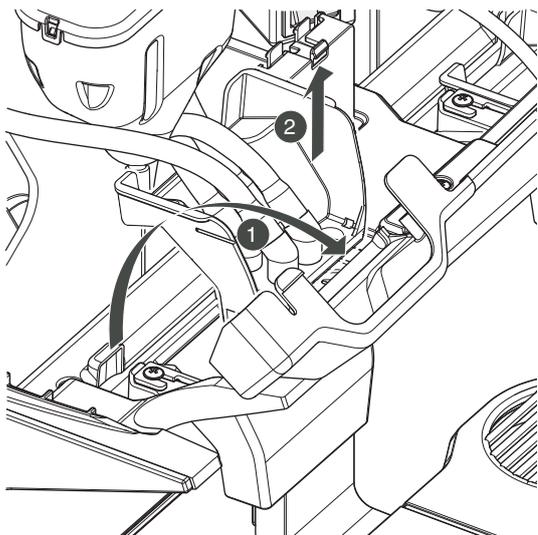
Fig. 81

## NOZZLE CLEANING

The nozzles should be removed periodically.

1. Raise the nozzle cover
2. Raise the nozzle support
3. Remove nozzles from holder
4. Disconnect tubes from nozzles.
5. Wash and rinse the nozzles under a jet of warm water, using a clean brush and, if necessary, a food-safe detergent.

After drying the nozzles, reassemble them in reverse order.



## CLEANING PRODUCT CONTAINERS

Proceed as follows:

1. Remove the containers from the appliance.
2. Remove the product outlet nozzles and slide out the augers from the back of the container.
3. Wash and rinse the containers under a jet of warm water, using a clean brush and, if necessary, a food-safe detergent.

## ELECTRONIC BOARDS

The electronic boards are designed to be used on several appliance models.

If the boards need replacing, the electronic board configuration must be checked and the suitable software must be loaded.

**ⓘ The covers must be removed with the appliance disconnected from the electric mains.**

## ELECTRICAL PANEL

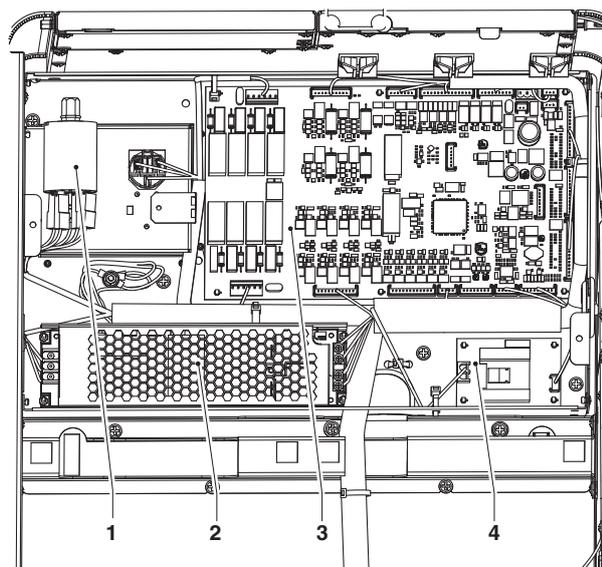


Fig. 82

1. Noise filter
2. Power supply
3. Activation board
4. Heating unit control board

## CPU BOARD

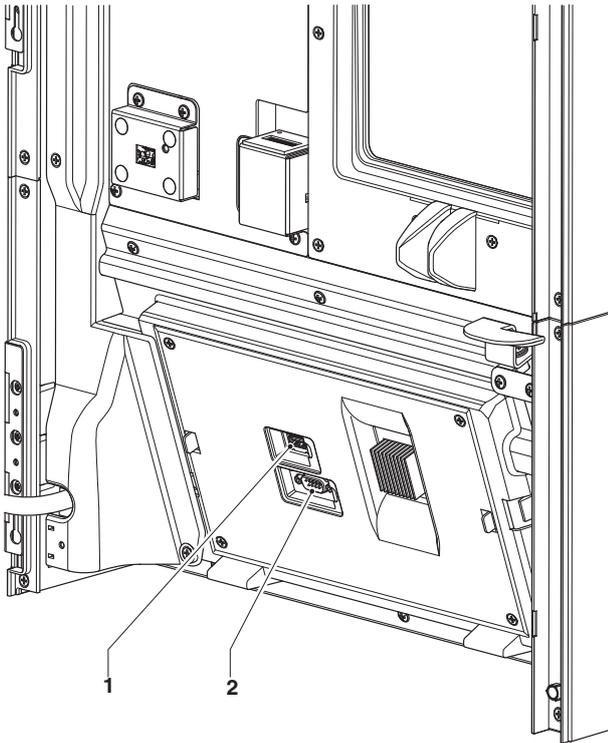


Fig. 83

1. USB port
2. serial door RS232

# CPU BOARD

The CPU board (Central Process Unit) manages the user interface (touchscreen) and the operation of the equipment. The machine's application software is installed on the CPU board.

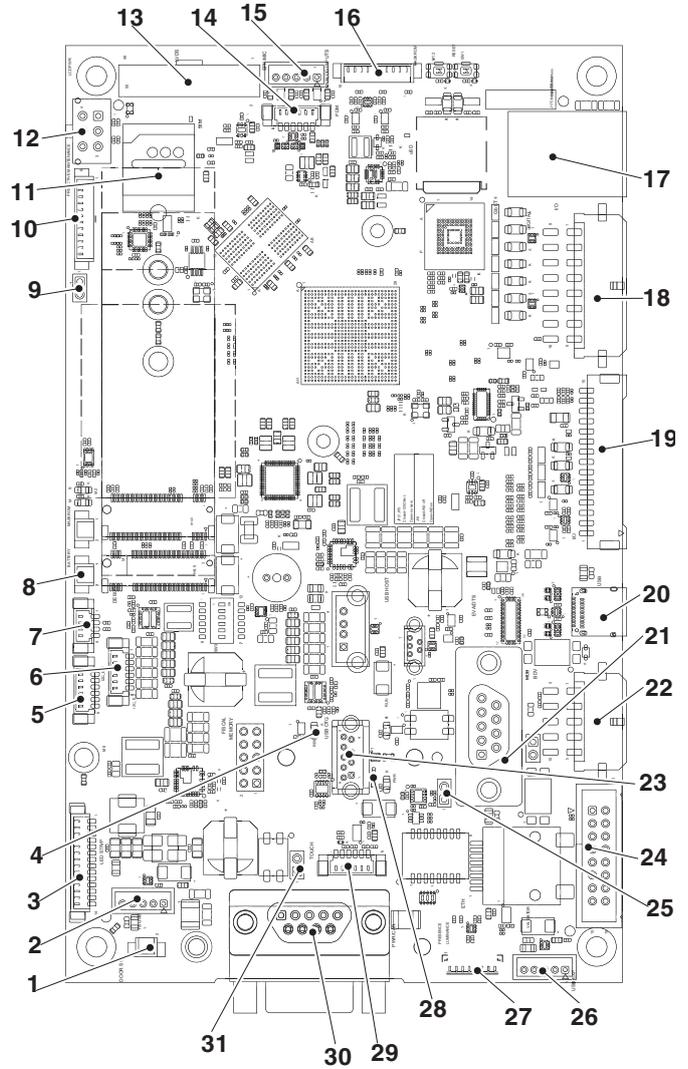


Fig. 84

1. (J2) door opening switch
2. (CN30) Touchscreen lighting
3. Not used
4. Led RESET
5. (J45) Not used
6. (J48) Not used
7. Not used
8. (J13) Battery
9. (J16)WATCHDOG jumper (closed)
10. (J14) Not present
11. SIM slot
12. (CN31) Not present
13. (J18) Touch screen
14. (J1) Not used
15. (J5) Not used
16. (J9) photocells and lighting
17. Ethernet
18. (J42) digital input and output
19. (J43) Bluered \*
20. USB type C
21. RS232 door
22. (J35) payment system\*
23. (CN23) USB OTG
24. (J36) Validator
25. (JP5) CAN BUS jumper (closed)
26. (CN9) Not used
27. (J47) Not used
28. POWER LED
29. (CN34) Not used
30. (CN29) CAN BUS and board power supply
31. (JP2) CAN BUS jumper closed  
\*if present

# ACTIVATION BOARD

Via relay, this board activates the 230 V~ users, and directly activates the DC motors. It manages the signals originating from the cams and/or microswitches on the various users. Also checks the soluble relays of the heating unit. The board is powered with 24 Vcc.

- DL1 indicates a board reset.
- Green DL2 flashes during normal board operation (RUN);
- Green DL3 indicates +5V presence
- DL4 flow meter pulses
- (DL5) not used
- DL6 (heating unit in heating mode) red indicates the operating state of the heating unit.
- DL7 (heating unit in heating mode) red indicates the operating state of the expressed heating unit resistance. (if the second heating unit is present)
- LED 1 "power 3.3V"

## RELAY FUNCTION

- RL1: MAC
- RL2: ESC (some models)
- RL3: MAC2 (some models)
- RL4: ESC2 (some models)
- RL5: PM
- RL9: safety relay
- RL11: Reversing the direction of rotation of regulating motors

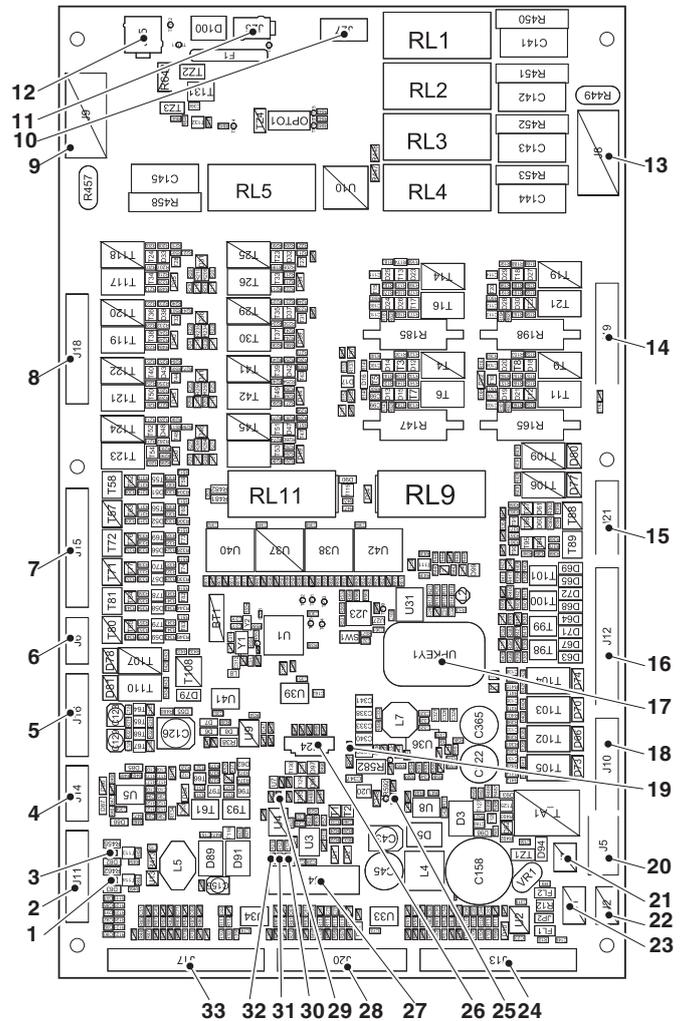


Fig. 85

1. DL7 heating unit operation LED
2. (J11) heating unit control and probe
3. DL6 heating unit operation LED
4. (J14) signalling microswitch
5. (J16) not used
6. (J6) steam suction fans
7. (J15) not used
8. (J18) motor-dosers
9. (J9) relay power supply
10. (J27) not used
11. (J26) pump
12. (J25) power supply
13. (J8) users
14. (J19) brewing unit (motor and signals)
15. (J21) cold unit (if fitted)
16. (J12) solenoid valves - mixer motors (EV-MF)
17. Upkey
18. (J10) lighting
19. DL3 "presence 5V"
20. (J5) power supply
21. (J7) not used
22. (J2) not used
23. (J1) CAN BUS
24. (J13) digital input signals, volumetric meter
25. LED1 "power 3.3V"
26. (J24) not used
27. (J4) serial
28. (J20) not used
29. DL2 "run" LED
30. (DL5) not used
31. DL4 flow meter pulses
32. DL1 "reset" LED
33. (J17) digital inputs

## HEATING UNIT CONTROL BOARD

The board controls when the heating unit heating element kicks in.

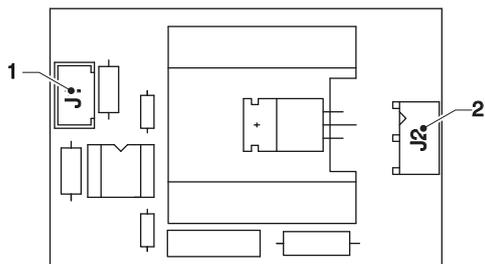


Fig. 86

1. J1 To the activation board
2. J2 To the heating unit heating element

## HEATING UNIT THERMAL PROTECTION

The heating unit has thermal protectors (thermostats) that intervene at different levels in the event of a failure of the heating unit control system.

**In case of intervention of one or more thermostats, the cause of the breakdown must be identified and eliminated.**

**The restoration of the thermostats must be done manually with the specific button located on the thermostats.**

**In the event of intervention of the thermostats, without water, the components of the heating unit and the control components could be damaged.**

### Important!!!

If, for any reason, the heating system should operate without water (dry) before being put back into service:

- Check the correct functioning of the temperature probe and/or replace it.
- Check the tightness of the seals of the fittings on the heating unit itself.

## SOFTWARE INSTALLATION AND/OR UPDATING

**ⓘ** When the operating system is installed or updated, the application software, statistical data, settings and programmed customisations are deleted. Videos/images for playlists are deleted.

Use the USB memory stick backup functions (import/export menu) to save the settings, customisations and videos/images for playlists.

The software must be installed and/or updated via a USB memory stick (when the appliance starts up).

**ⓘ** The USB memory stick must be formatted with the FAT32 file system and only contain the files needed for the update.

Compatibility with all USB memory devices available on the market is not guaranteed.

### KEY 1 “KEY SYSTEM” OPERATING SYSTEM

Proceed as follows:

1. Copy the single operating system files onto the main directory of the USB memory stick.
2. Turn off the appliance,
3. Insert the USB memory stick into the USB OTG of the CPU board.
4. Turn on the appliance.
5. Some messages regarding the progress of the update are displayed. The update takes a few minutes.
6. Once the update has finished, a message will appear prompting for the USB memory stick to be removed.
7. After the USB memory stick has been removed, the appliance will restart automatically.
8. Install the application software

### KEY 2 “UPDATE KEY” APPLICATION

Proceed as follows:

1. Copy the single application files onto the main directory of the USB memory stick.
2. Turn off the appliance.
3. Insert the USB memory stick into the USB OTG of the CPU board.
4. Turn on the appliance.
5. Some messages regarding the progress of the update are displayed. The update takes a few minutes.
6. Once the update has finished, a message will appear prompting for the USB memory stick to be removed.
7. After the USB memory stick has been removed, the appliance will restart automatically.
8. The wizard for the initial settings will start (appliance model, message language, machine name, etc.).

**ⓘ** The application software update keeps the settings, set customisations and videos/images for playlists.



# HYDRAULIC CIRCUIT ESFB

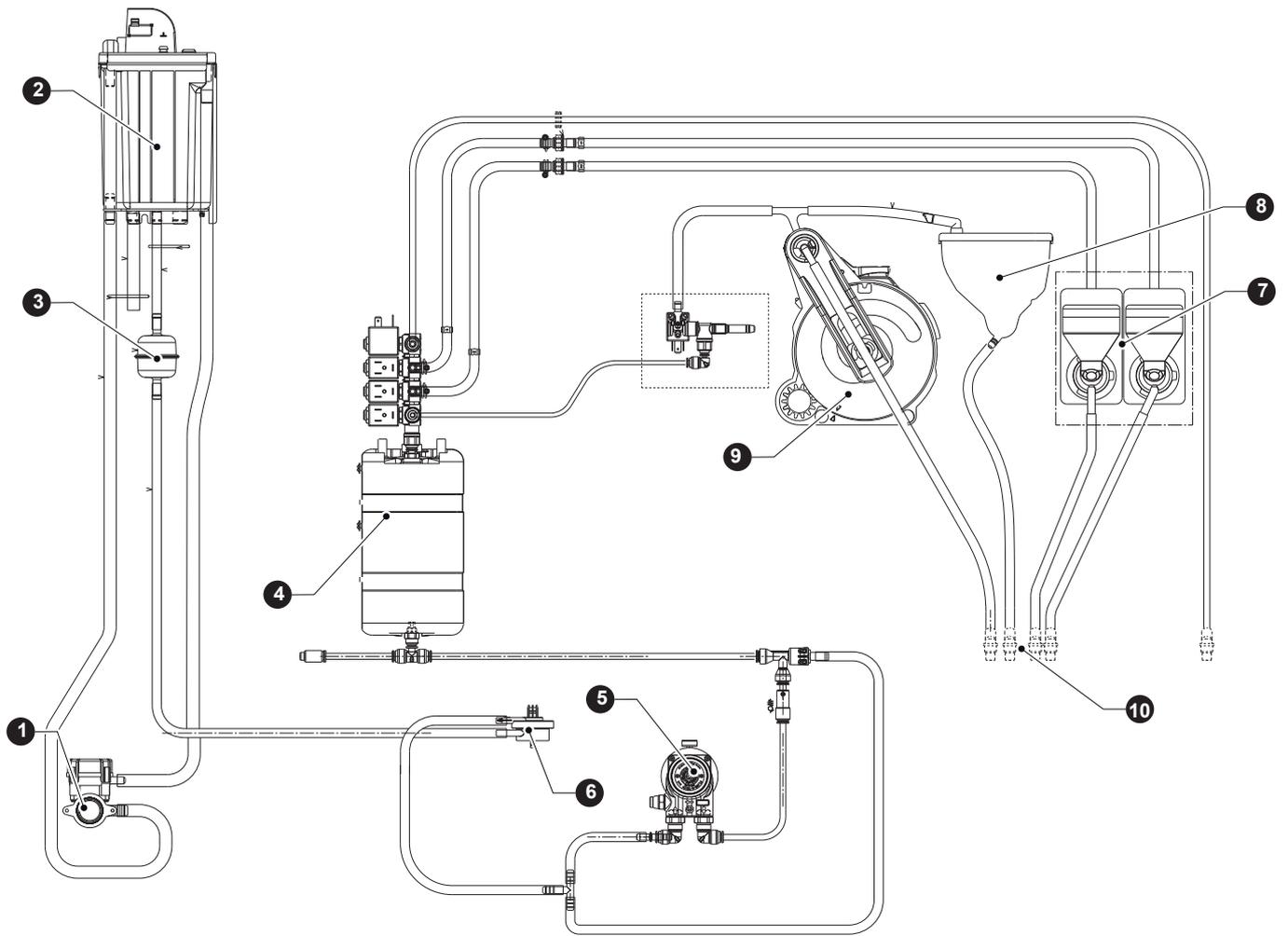


Fig. 87

- 1. Water inlet solenoid valve
- 2. Air break
- 3. Damping filter
- 4. Liquid collection tray
- 5. Heating unit
- 6. Pump
- 7. Flow meter
- 8. Mixer
- 9. Diffuser nozzle
- 10. Brewing unit ESFB
- 11. Dispensing nozzles

## HYDRAULIC CIRCUIT ES

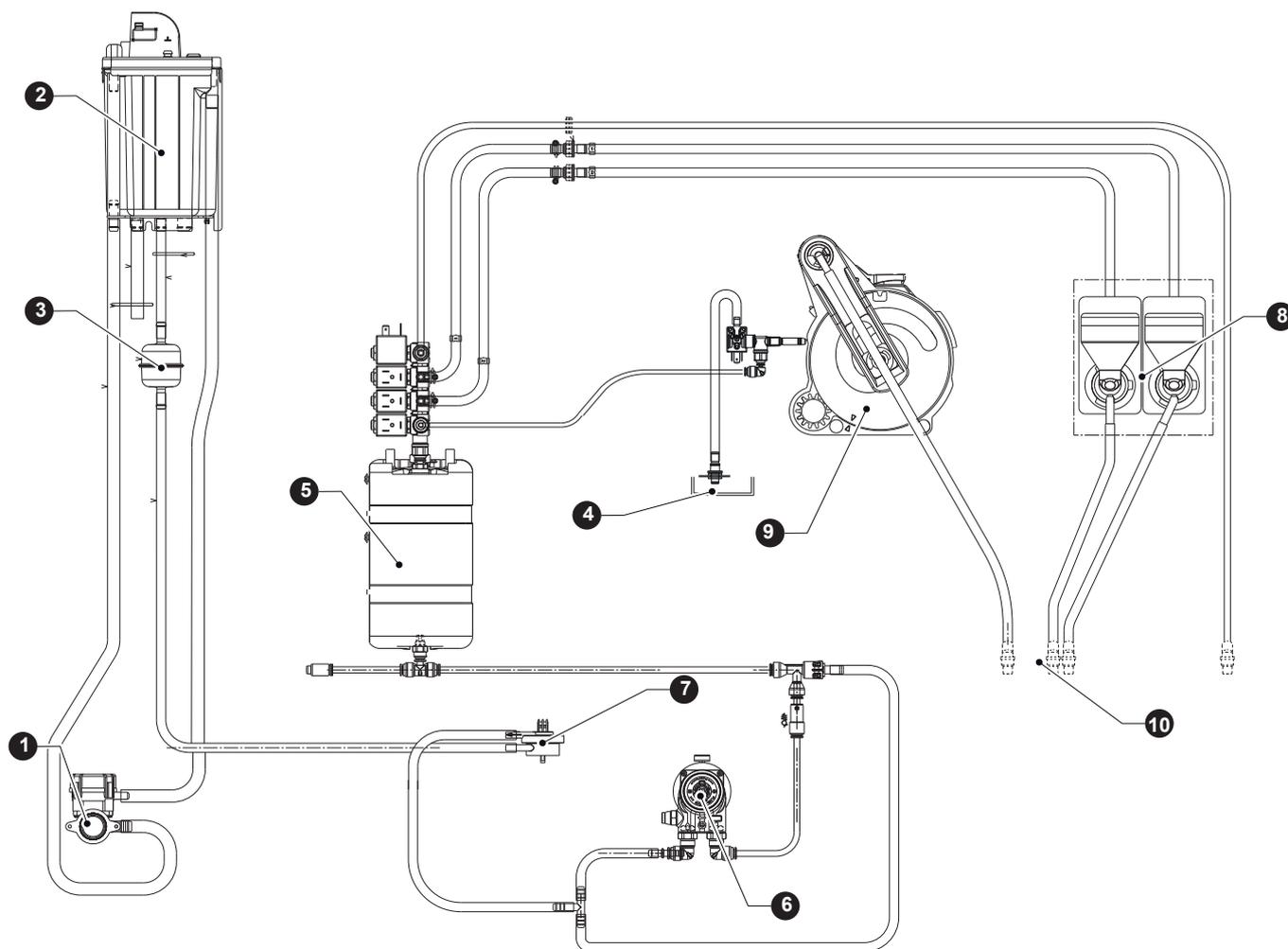


Fig. 88

1. Water inlet solenoid valve
2. Air break
3. Damping filter
4. Liquid collection tray
5. Heating unit
6. Pump
7. Flow meter
8. Mixer
9. Brewing unit ES
10. Dispensing nozzles

## HYDRAULIC CIRCUIT ESFB + WATER FROM MAIN

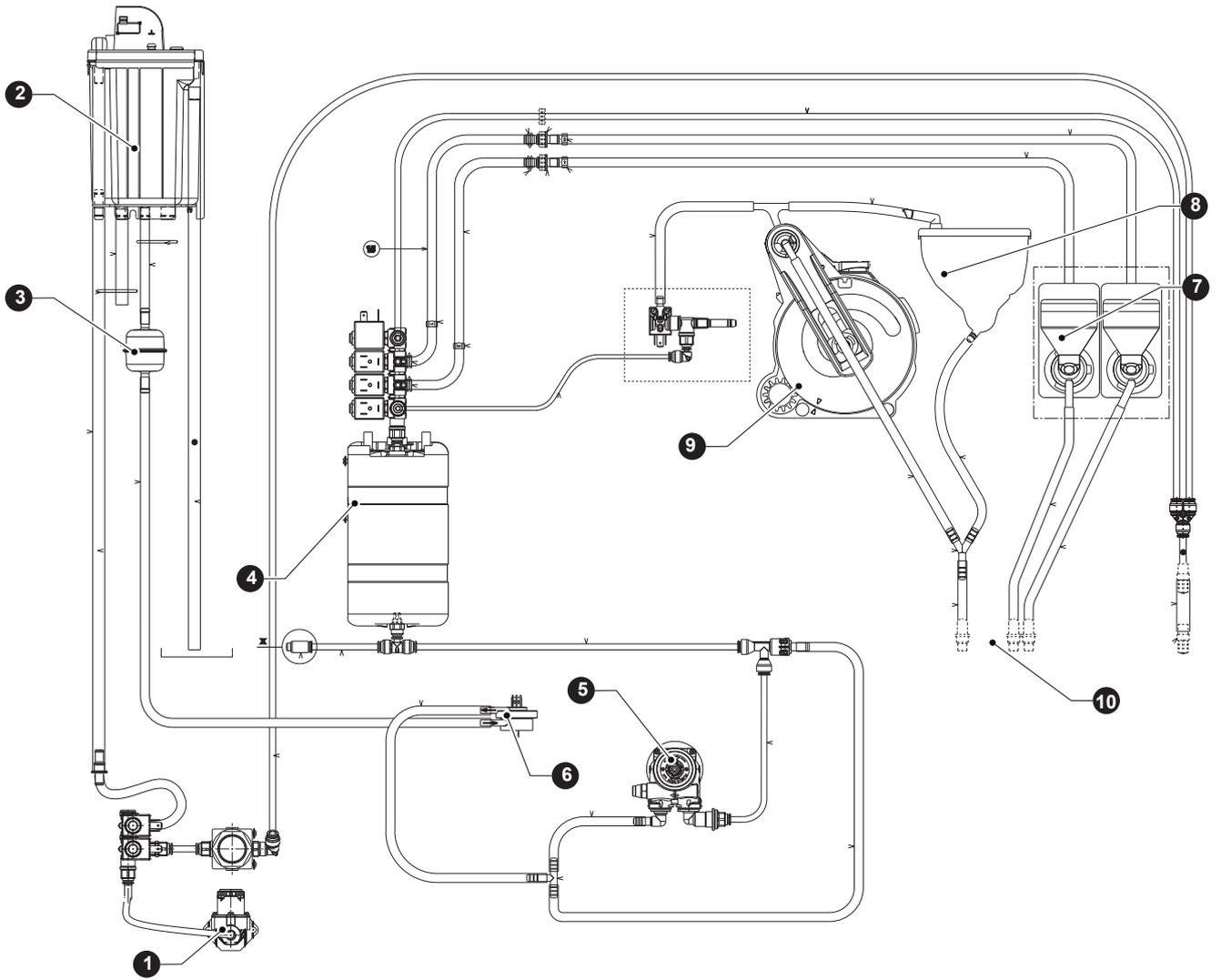


Fig. 89

1. Water inlet solenoid valve
2. Air break
3. Damping filter
4. Liquid collection tray
5. Heating unit
6. Pump
7. Flow meter
8. Mixer
9. Diffuser nozzle
10. Brewing unit ESFB
11. Dispensing nozzles

# HYDRAULIC CIRCUIT WITH TEA BREWER

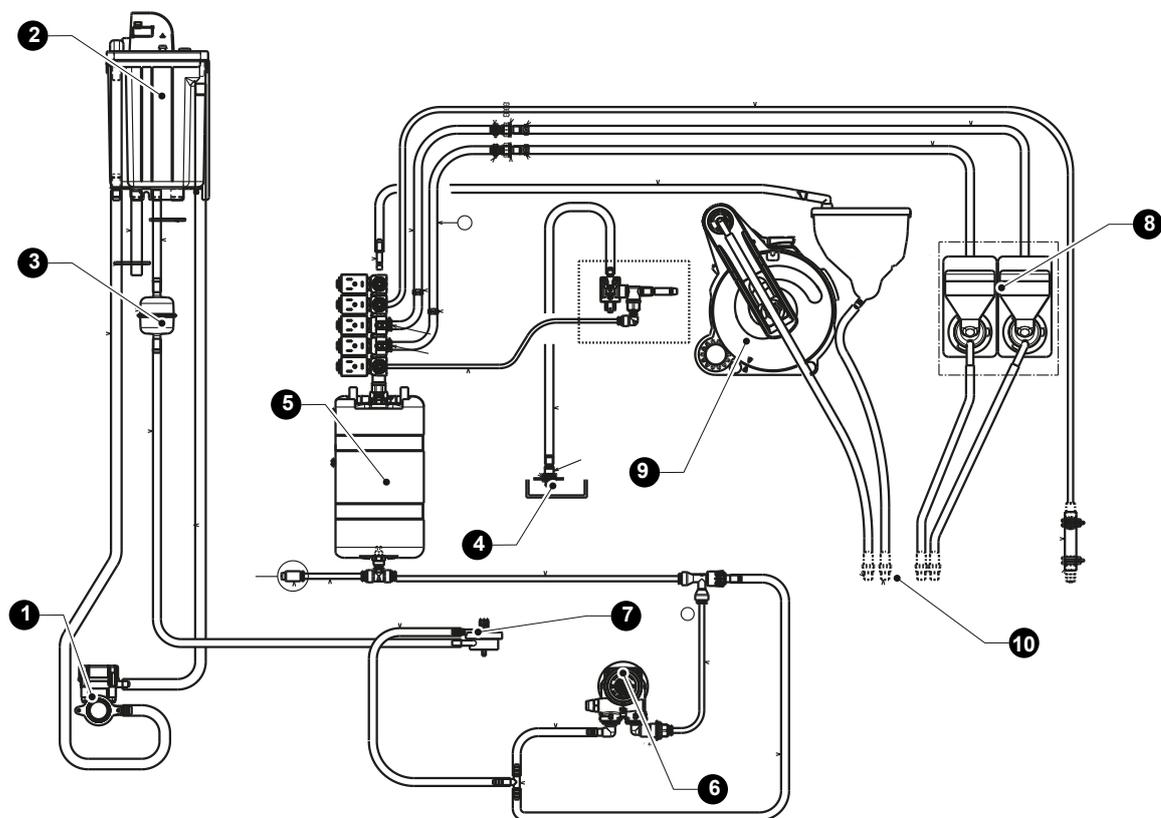
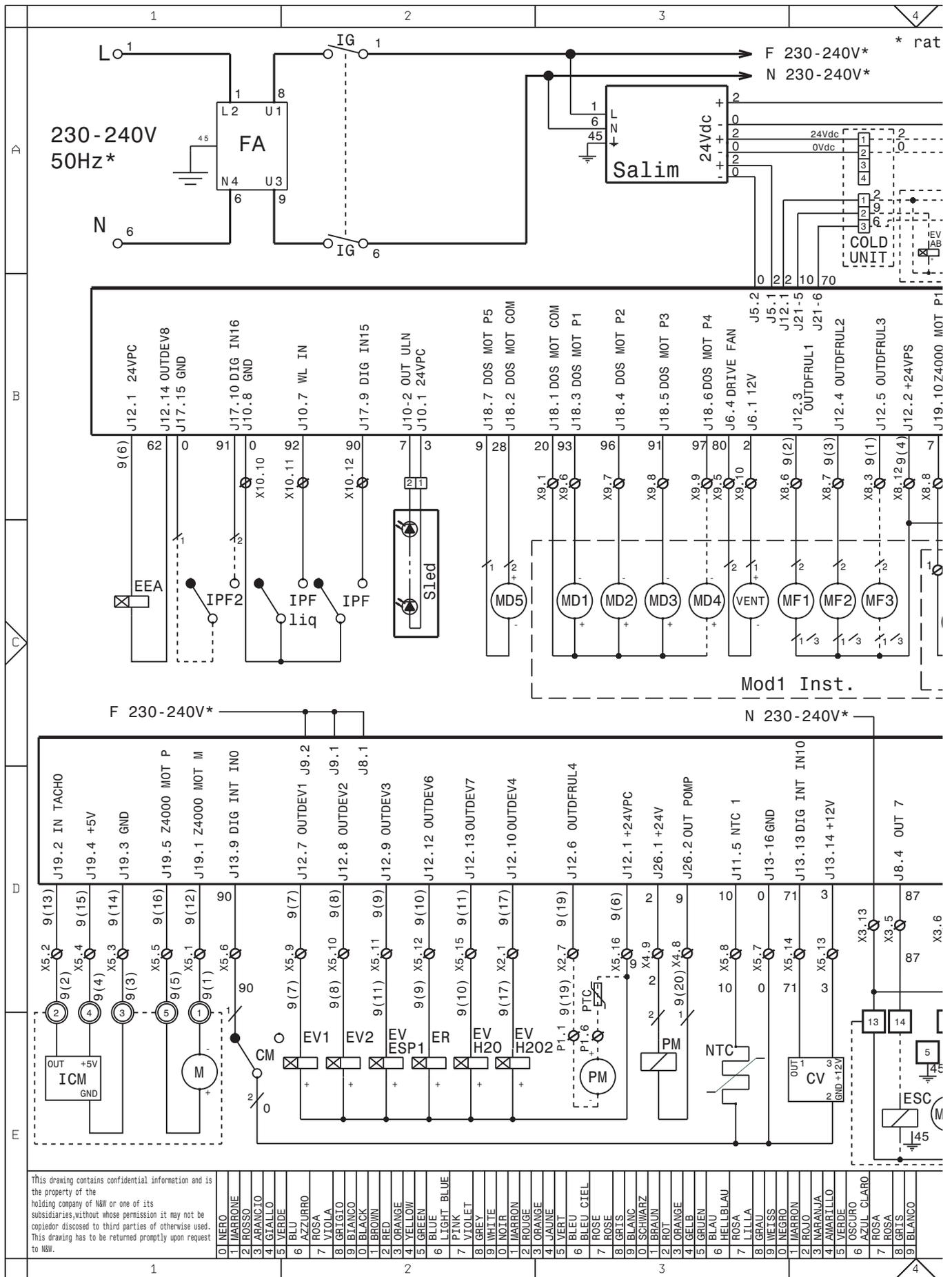


Fig. 90

- 1. Water inlet solenoid valve
- 2. Air break
- 3. Damping filter
- 4. Liquid collection tray
- 5. Heating unit
- 6. Pump
- 7. Flow meter
- 8. Mixer
- 9. Brewing unit ES
- 10. Dispensing nozzles

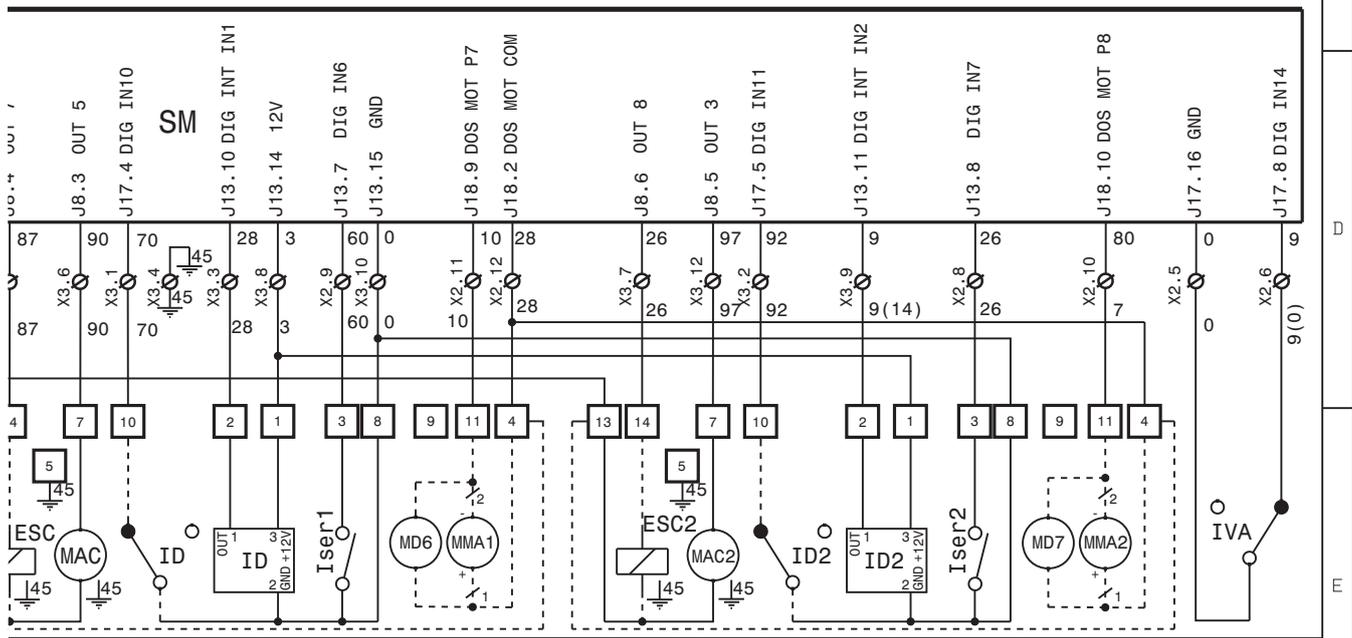
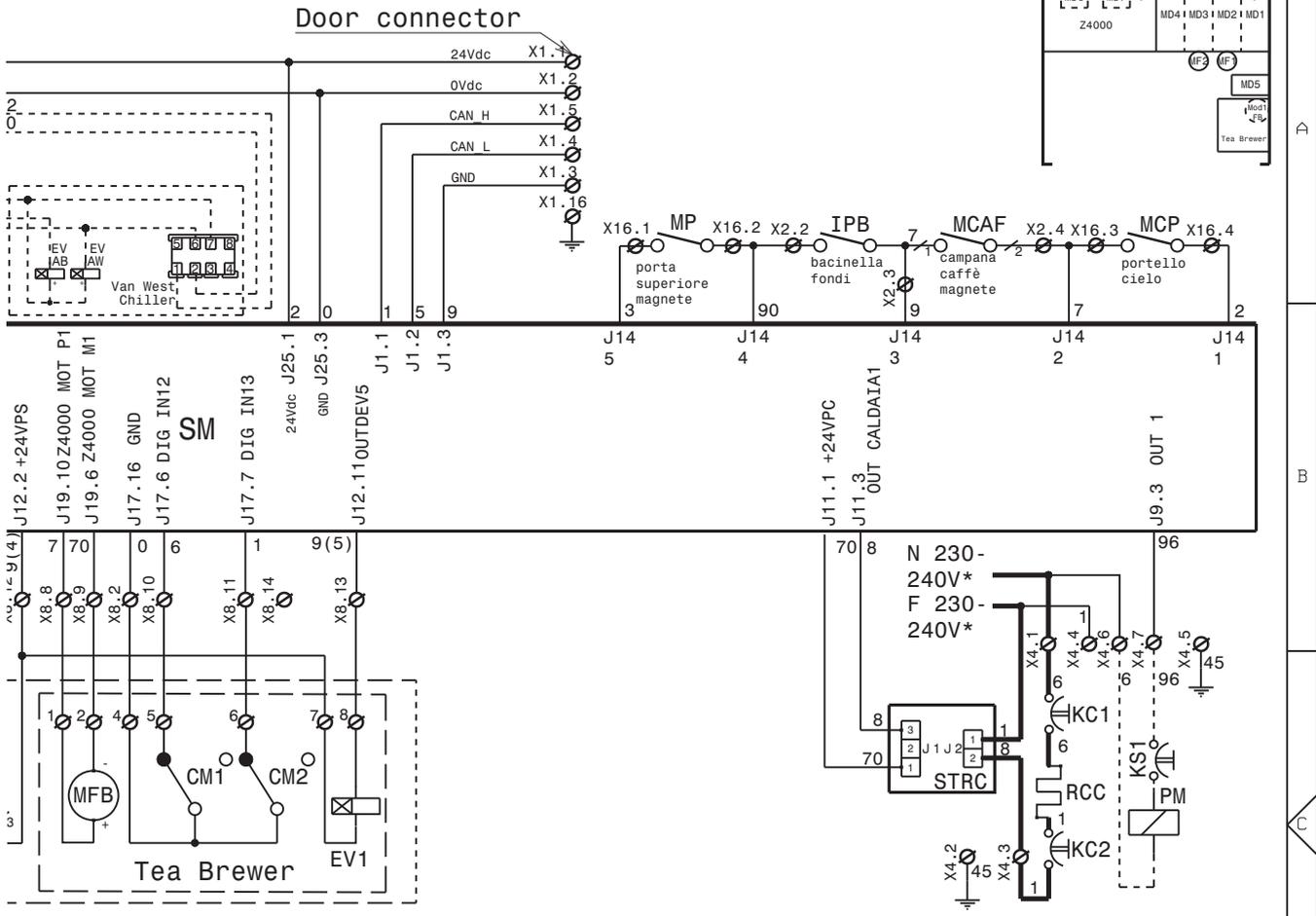




**CM** MOTOR CAM  
**CV** VOLUMETRIC COUNTER  
**EEA** WATER INLET SOLENOID VALVE  
**ER** COFFEE DISPENSING SOLENOID VALVE  
**ESC1-** COFFEE RELEASE ELECTROMAGNET  
**EV1-** INSTANT SOLENOID VALVES  
**EVAB** AIRBREAK SOLENOID VALVE  
**EVAV** SOLENOID VALVE ADDITIONAL WATER MAIN  
**EVH20** WATER SOLENOID VALVE  
**FA** RADIO INTERFERENCE SUPPRESSOR

**ICM** MOTOR CONTROL SWITCH  
**ID** COFFEE DOSE SWITCH  
**IPB** DRIP TRAY PRESENCE SWITCH  
**IPF1-** WASTE CONTAINER FULL SWITCHES  
**ISER1** SLIDER COFFEE CONTAINER SENSOR  
**IVA** EMPTY WATER SWITCH  
**KC** THERMAL PROTECTOR  
**KS** BOILER CUTOFF SWITCH  
**M** COFFEE UNIT MOTOR  
**MAC** GRINDER

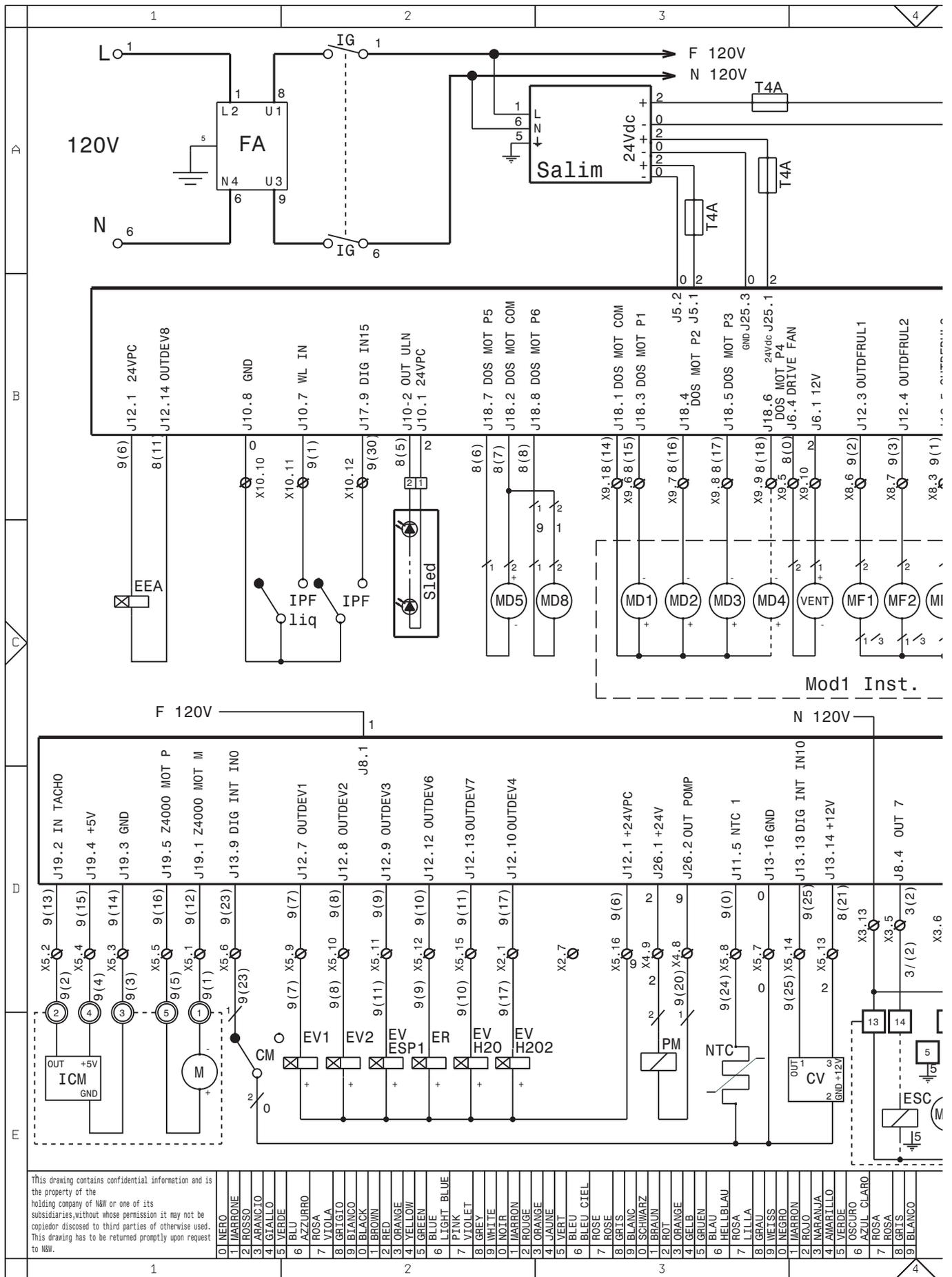
\* rated voltage may be also 220V 60Hz

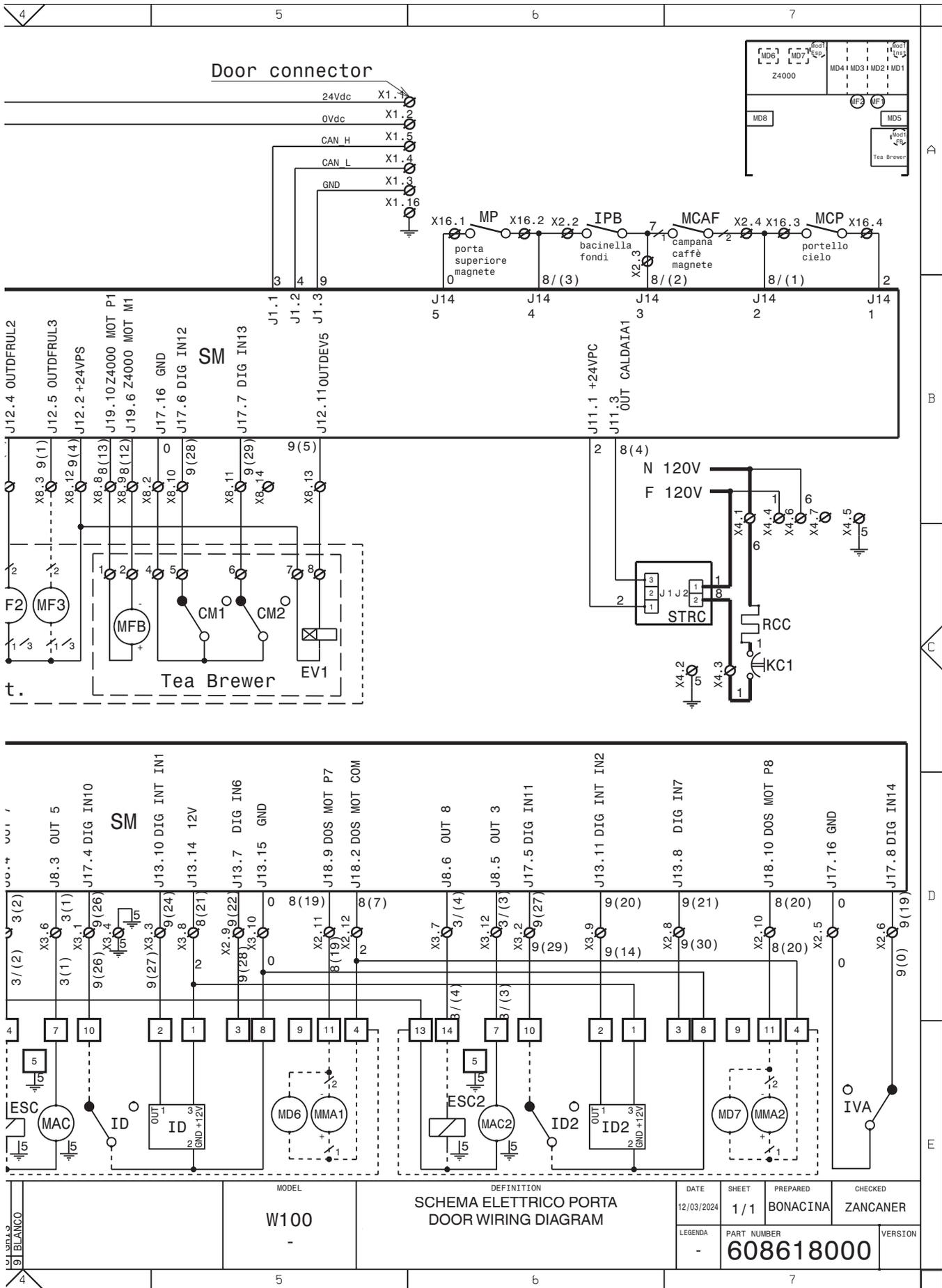


91 BLANCO MODEL <b>W100</b>	DEFINITION W100	DATE	SHEET	PREPARED	CHECKED
		14/04/2022	1/1	BONACINA	ZANCANER
		LEGENDA	PART NUMBER		VERSION
		608616801		A	

- MCAF1. COFFEE CONTAINER PRESENCE MICRO
- MCP FLAP CLOSURE MICRO
- MD1.. INGREDIENT MOTORS
- MF1.. INSTANT WHIPPER MOTORS
- MFB FRESH-BREW MOTOR
- MMA GRINDING REGULATION MOTOR
- MP OPEN DOOR SIGNALLING MICRO
- NTC TEMPERATURE PROBE
- PM PUMP
- RCC COFFEE BOILER HEATING ELEMENT

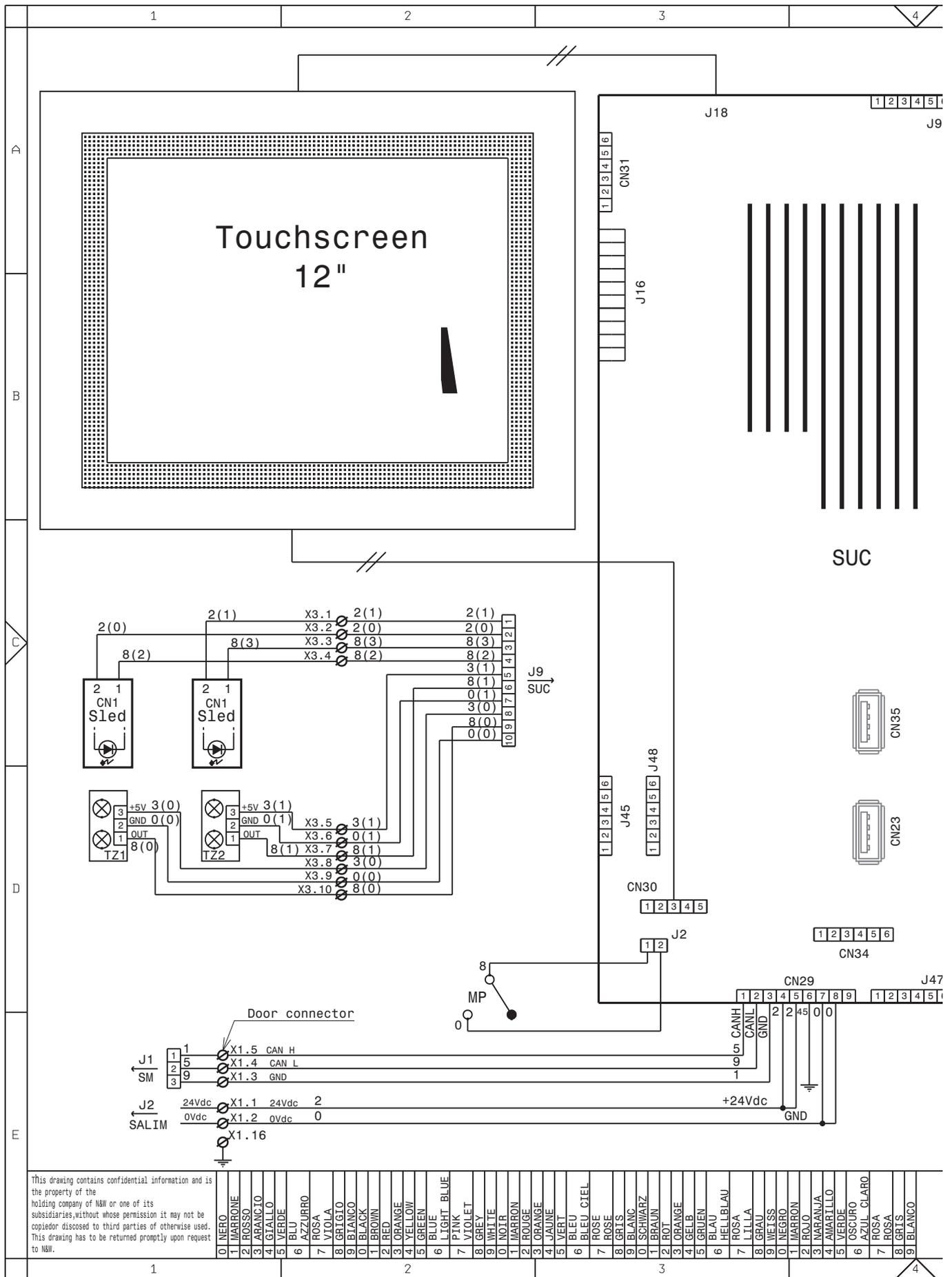
- SALIM POWER SUPPLY UNIT BOARD
- SLED LED BOARD
- SM MACHINE BOARD
- STRC1 BOILER HEATING TRIAC BOARD





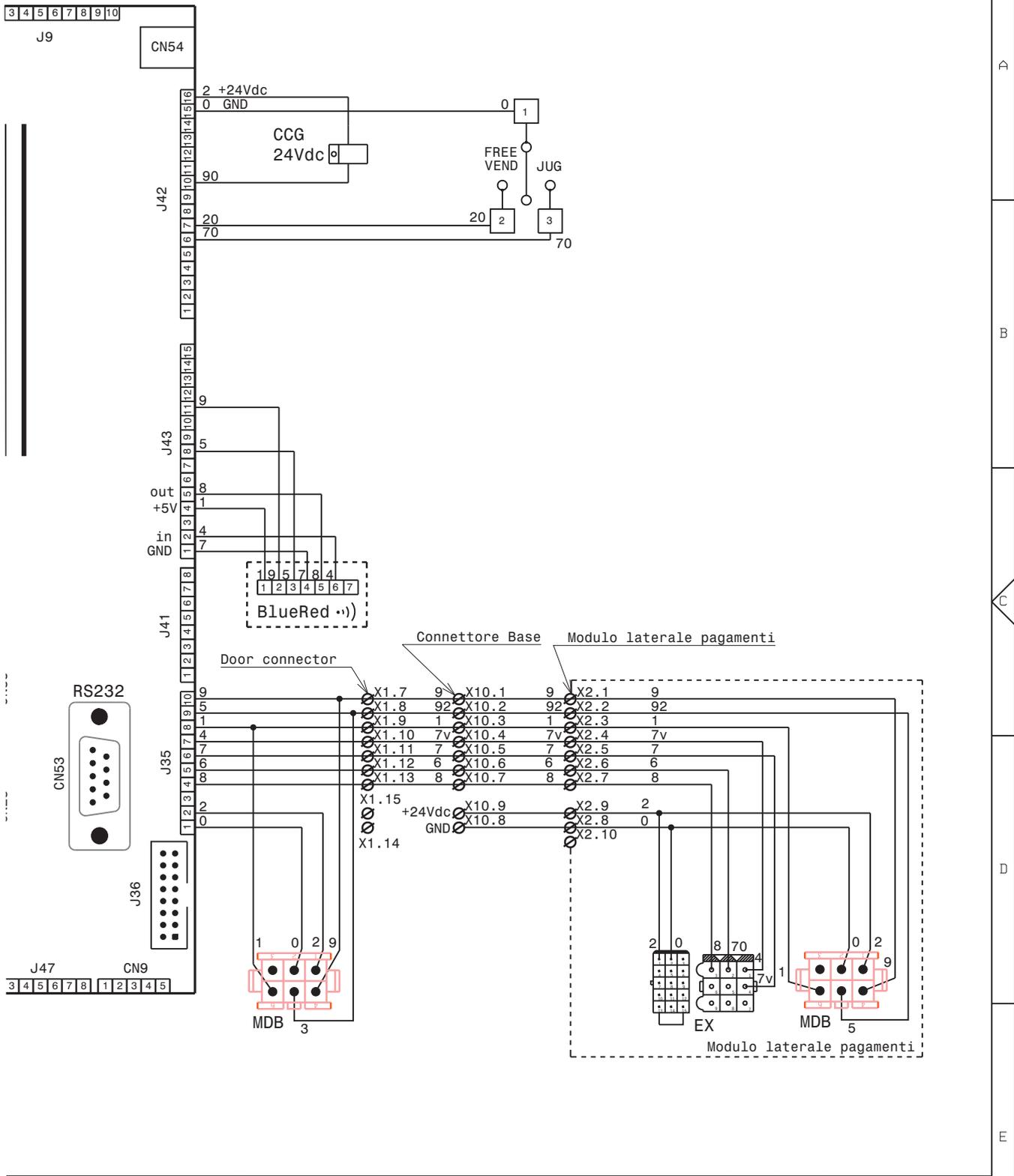
- MD1.. INGREDIENT MOTORS
- MF1.. INSTANT WHIPPER MOTORS
- MFB FRESH-BREW MOTOR
- MMA GRINDING REGULATION MOTOR
- MP OPEN DOOR SIGNALLING MICRO
- NTC TEMPERATURE PROBE
- PM PUMP
- RCC COFFEE BOILER HEATING ELEMENT
- SALIM POWER SUPPLY UNIT BOARD
- SLED LED BOARD

- SM MACHINE BOARD
- STRC1 BOILER HEATING TRIAC BOARD



CCG GENERAL COUNTER  
 EX EXECUTIVE COIN MECH CONNECTORS  
 FREE FREE VEND SWITCH  
 JUG JUG FACILITIES SWITCH  
 MDB MDB COIN MECH CONNECTOR  
 MP OPEN DOOR SIGNALLING MICRO  
 LED LED BOARD  
 SUC C.P.U. BOARD

TR TRANSFORMER  
 TZ CUP SENSOR



9 BLANCO	MODEL	DEFINITION	DATE	SHEET	PREPARED	CHECKED
	W100	SCHEMA ELETTRICO PORTA DOOR WIRING DIAGRAM	20/04/2022	1/1	BONACINA	ZANCANER
			LEGENDA	PART NUMBER	VERSION	
				608616901		



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