

OPERATOR MANUAL

Original instructions / Translation of the original instructions

9100

ES 2FB



EN

USA

H0532EN00

03 - 2017

The symbol indicates that the machine may not be disposed of as ordinary waste; it must be disposed of in accordance with the provisions of the European directive 2002/96/CE (Waste Electrical and Electronics Equipments - WEEE) and of any resulting national laws, for preventing any possible adverse effects on the environment and on human health.

For correct disposal of the machine, contact the dealer from whom you have purchased the machine or our after sales service.

All packing materials shall be disposed of in a manner which is safe for the environment.

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INTRODUCTION

According to the requirements of the customer, the service technician can program different functions into the vending machine.

The machine dispenses
hot espresso drinks
hot instant drinks
hot water.

or
hot espresso drinks
hot/cold instant drinks
hot water.

Use only fresh coffee beans or instant products made for vending machines.

The machine is delivered with electronic touch screen. All communication with the machine, such as drink selection, rinsing functions, data retrieval and settings, is carried out by using the touch screen selection buttons.

All parts to be cleaned are designed in a light blue colour (for regular cleaning) and in a dark blue colour (for deep cleaning). All parts of action are supplied in a green colour.

If the vending machine is not used according to its purpose, the manufacturer cannot take on any liability.

This operator manual is valid for several variants of the vending machine. Therefore, it is possible that in this operator manual you may find instructions for operating elements that are not installed in your vending machine.

This technical documentation is part and parcel of the vending machine and must always follow the machine in case it is moved or by transfer of ownership.

This appliance 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 given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

SAFETY

- Before starting installation and using the machine, it is first necessary to carefully read and understand the instructions contained in this manual, as they offer important information on installation safety, operating instructions and maintenance.

- This manual describes the loading and routine maintenance operations which are

carried out in areas of the machine accessible with simple use of the door key, without using any other tools.

- The vending machine may not be subject to frost during operation, storage and transport.

- If there is the risk of frost in the area of the installation site of the machine, voltage to the machine may not be disconnected.

- If there is the danger of damage due to frost, the service technician must check and replace boiler, hoses and valves if required prior to reconnecting the vending machine and he should additionally carry out a functional test.

- The vending machine may not be installed outside.

- The vending machine should only be installed and repaired by qualified personnel, who are trained in the correct use of the machine according to the standards in force and who have the specific knowledge of the machine functioning from a point of view of electrical safety and health regulations.

- Safety devices must not be bridged or put out of function.

- The vending machine must be connected to the drinking water line and to the electric line in compliance with local regulations.

- The vending machine has to be placed in a horizontal position.

- The vending machine must be connected to a secured electric circuit. We recommend to install a fault current safety switch. The connections must be made using an earthed safety plug socket complying with valid regulations.

- After the machine has been installed, the power supply plug must be accessible. Never touch the power supply plug with wet hands or plug it in if the plug itself is wet.

The liquids dispensed by the vending machine are very hot! To prevent scalding, hands (and/or other parts of the body) must be kept away from the outlets while drinks are being prepared and dispensed.

- If the power supply cable of the vending machine is damaged it may only be replaced by a service technician.

- Do not attempt to fill several cups by pressing the pot button. There is danger of injuries.
- Only authorised and qualified personnel may clean, fill up and set the vending machine.
- The vending machine may not be cleaned under a water jet and is not suitable for installation on surfaces next to which water jets are being used (e.g. for cleaning).
- Use only original spare parts.
- Observe the local regulations!
- Regular cleaning of the vending machine is necessary for functional and hygienic reasons. When cleaning, take care of sharp edges. There is danger of injuries!
- To clean the cabinet only use cleaning agents approved by the food industry.
- Clean the inside and outside of the vending machine by using a damp cloth and do not splash it.

- After cleaning, make sure that all components are correctly reinstalled.
- Every machine is identified by its own serial number indicated on the rating plate attached at the rear of the vending machine. This plate is the only one acknowledged by the manufacturer as identification of the machine. The technical data of the vending machine are given on the rating plate. When the yellow special key is inserted in the slot of the door switch, the voltage is re-established to the machine. The door can be closed only after removing the key from the door switch.

If power is turned on, be careful not to touch moving parts and electrical components.

Door switch:

When the door is opened, a special switch ensures that there is no access to energized or moving parts. Any operation requiring the machine to be energized with the door opened must be carried out exclusively by qualified personnel informed about the specific risks of such situation.

The machine may be energized by qualified personnel by inserting a special yellow key into the door switch.

Before starting any maintenance operation requiring parts of the espresso brewer unit to be removed, the machine must always be switched off.

By means of class 1 LEDs. LEDs are generally shielded by a glass front or an aesthetic panel. The light of LEDs may be noxious if you directly look at it without these panels.

TECHNICAL DATA

The technical data of the vending machine are given on the rating plate

Dimensions	Height:	875 mm (with feet) 1005 mm (with external canister)
	Width:	450 mm
	Depth:	525 mm
Weight		165 lb
Electric connection	Power supply	120 V
	Power consumption	1+N



The vending machine must be earthed! In addition, it is recommended to install a fault current safety switch.

Water connection	Power consumption:	1260 W Heating element: 1100 W
	Connecting cable:	Approx. 1.8-3.5 m (varies, depending on local requirements).
	Fuse:	Switching power supply, input: T2A, output: T12.5A
	Water system connection:	The vending machine must be connected with the potable water system according to the provisions in force in the place of installation of the equipment.
	Min. back pressure: Max. pressure:	without chiller: 11.6 psig 123.2 psig
Capacities	Hose connection:	Connect the water network with the 3/4" gas union of the water inlet solenoid valve by means of a tube that can support the network pressure and of a type suitable for foodstuffs (min. inner diameter 6 mm.). It is recommended to apply a water tap on the water network outside the machine in an accessible position. Let water come out of the water network until it is clear and free of any trace of dirt.
	Boiler capacity:	0,8 l
	Solid waste container:	Approximately 422.7 oz

Drip tray:	Approximately 30.4 oz
Standard external espresso coffee bean canister (with capacity reducer):	Approximately 105.8 oz (6.6 lb)
InternalCoffee canister full volume :	Approximately 28.8 oz (1.8 lb)
Standard Instant ingredient canister:	Approximately 91.3 oz

Further system requirements

Ambient temperature. Min. 39.2 F - max.89.6 F (-2/+0) at 80% RH

Noise level: The A-weighted sound pressure level is below 70 dB.

When the vending machine is not provided with credit mechanism and it shall be installed in field, the following markings shall be added permanently:

- The credit mechanism can be used are one at the following: manufacturer MARS and designation MEI CF7512, or manufacturer MARS and designation MEI VN2712U, or manufacturer MARS and designation MEI VN2762RU5M, or manufacturer USA Technologies and designation G9, and
- Vender is not to be operated without credit mechanisms.

Before starting the installation:

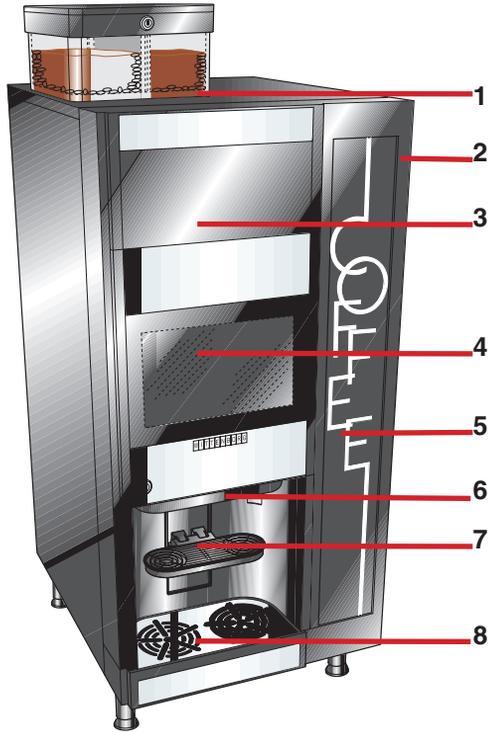
Check for adequate space for correct ventilation.
 A distance of ~55 mm is required from the rear side of the machine to the wall.
 Check for clear space of 525 mm in front of the machine to allow the door to be opened.
 Ensure that the supply voltage corresponds to the voltage indicated on the rating plate which is located on the rear wall of the machine.
 Check the connections and make sure that the national voltages and tolerances are provided.
 The machine must be earthed.
 Ensure that the fuse of the group to which the machine is connected is in accordance with the national regulations.
 If required, ask for detailed information on voltage.

Subject to changes.

THE MACHINE MUST BE POSITIONED AT A SAFE DISTANCE OF 100 MM (AT LEAST) FROM ITS BACK PANEL

PRODUCT PRESENTATION

EXTERNAL CABINET



- 1- Cabinet
- 2- Door
- 3- Coffee canister
- 4- Touch screen panel
- 5- Advertising poster
- 6- Door lock
- 7- Cup holder (drip tray)
- 8- Pot platform

Fig. 1

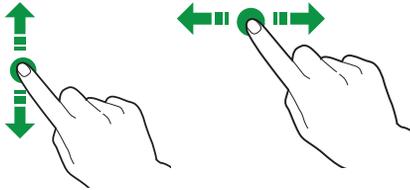
INTERACTIVE GESTURES

To navigate and interact with the equipment, the following interactive gestures are required:



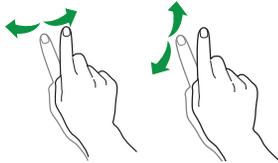
TAP

Tap icons, features and objects to activate or open contextual menus.



MOVE / DRAG

To move / drag icons and objects touch and move / drag to another location.



SCROLL

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

OPERATION IN NORMAL USER STATUS

The representation and arrangement of icons/screens in this manual is approximate and may vary from the one displayed on the machine depending on the configuration (layouts, themes, and/or icons)

In normal operation, the machine displays the screen with the available selections.

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

Some selections may be disabled with some types of failures (for example, empty powder containers, ...)

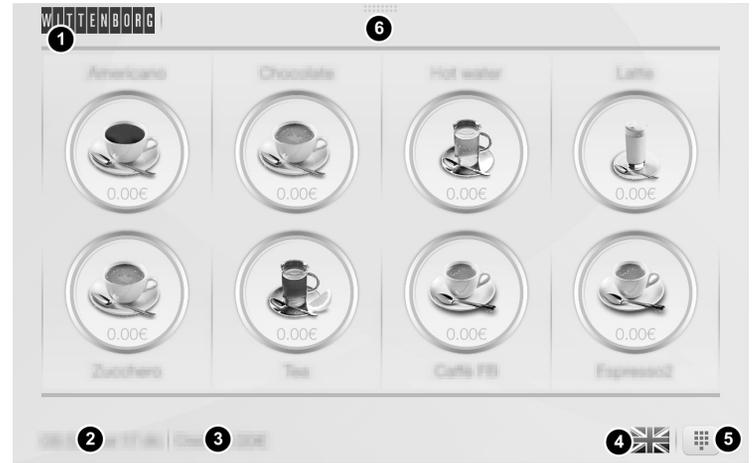


Fig. 2

- 1- Access to the status panel
- 2- Date and time display area
- 3- Available credit display area
- 4- Language change icon
- 5- Keypad

REQUEST BEVERAGE

Touch the desired beverage.

The screen with beverage customizations is displayed



Fig. 3

- 1- Beverage name
- 2- Beverage quantity
- 3- Beverage intensity (only for coffee-based beverages)
- 4- "Dispense" button
- 5- "Jug" button
- 6- Beverage nutritional information
- 7- "Cancel beverage" button
- 8- Beverage price (if applicable)

Therefore, to:

BEVERAGE IN THE CUP

- Place the cup under the nozzles
- Customize the beverage according to your taste
- Touch the "Dispense" button
- The beverage is dispensed

FILL A JUG

- Place the pitcher under the nozzles
- Customize the beverage according to your taste
- Touch the "Jug" button
- Touch the "Dispense" button
- The beverage is dispensed a few times in a row.

When the drink is being dispensed, a screen with the animation indicating the stage of preparation of the beverage is shown. Touch the entertainment icons to change the displayed content (video, weather, news, ...).

At the end, the message “Pick beverage” will be displayed. The “Stop” button (if enabled) allows to instantly stop dispensing.



Fig. 4

- 1- Beverage preparation animation
- 2- Entertainment content area
- 3- Entertainment icons
- 4- “Stop” button

MACHINE STATUS

You can view the status of the machine (eg residue containers level, containers level, ...) using the status panel.

To open the status panel, touch the top of the touch screen and drag down.

The status panel displays the status of trays and containers:

- Text or symbol in green color if there aren't “alarms”
- Text or symbol in red color the canisters or waste containers which are in “pre alarm” (e.g low powder products, full solid waste,..)

To hide the status panel, touch the bottom of the touch screen and drag up.



MACHINE CABINET

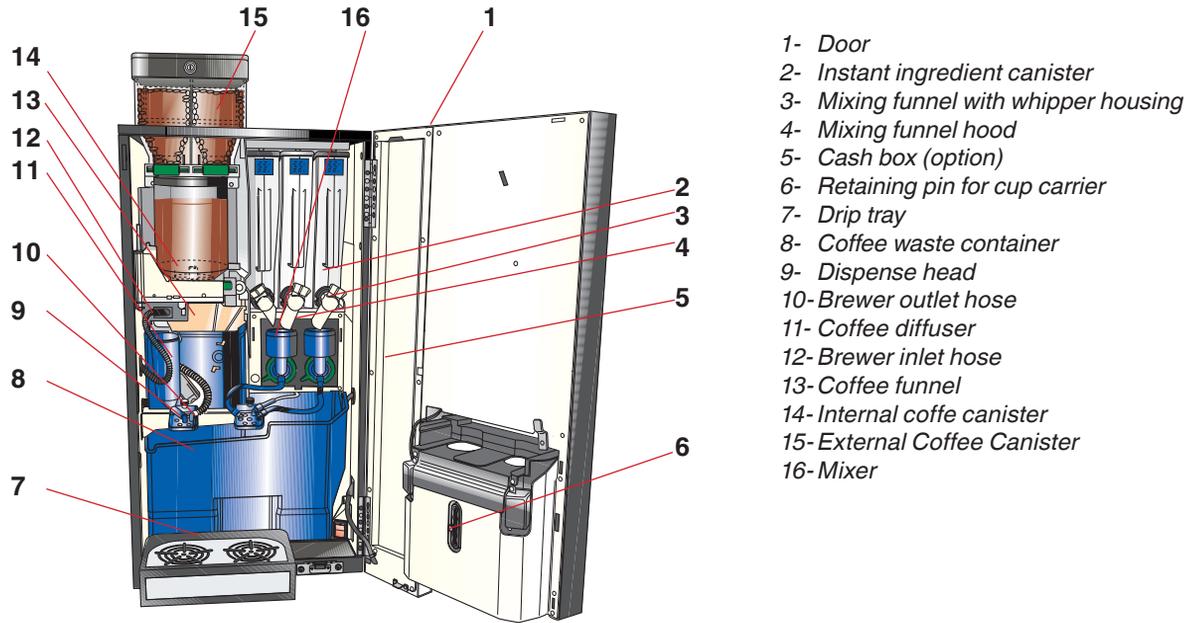


Fig. 5

MAINTENANCE

MAINTENANCE ROUTINES

Interval	Type of work / Check	Tools / Materials for the job
Regular: Every time replenishing of ingredients is required	Opening and disconnecting the machine Removing the waste containers Filling the instant ingredient canisters Filling the coffee bean canister Cleaning the cup carrier Cleaning the drip tray Cleaning the machine interior and exterior Mounting the cleaned parts Rinsing machine Last check	1 bucket of hot water (140-176 F) with cleaning agent. 1 bucket of clean warm (min. 104 F) water Soft clean cloths or paper towels Ingredients

Interval	Type of work / Check	Exchange kit (hygiene kit)
Occasional	Cleaning the instant ingredient canisters.	
Once a month	Cleaning the coffee bean canister.	



Fig. 6

WEEKLY

OPENING AND DISCONNECTING MACHINE

Turn the door key clockwise in keyhole and open door.



If power is turned on, be careful not to touch moving parts and electrical components

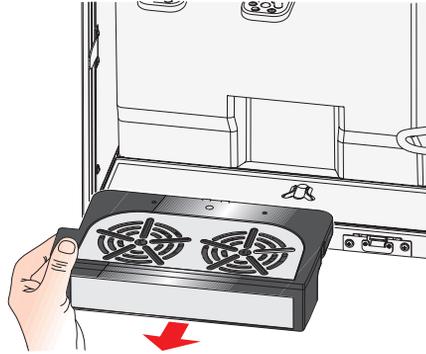


Fig. 7

PREPARING FOR FILLING OF CANISTERS

Remove lower drip tray and the upper plate, clean the parts with a sprayed wipe.

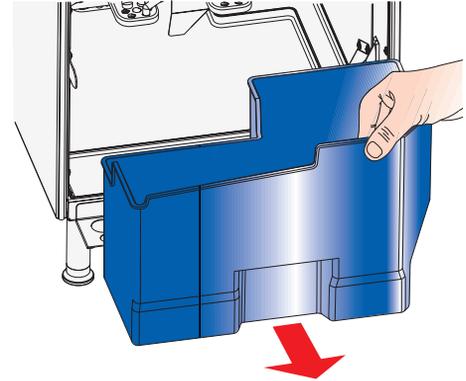


Fig. 8

Remove waste bucket and lower plate, empty coffee waste. Clean all the removed parts and the base of the machine with a sprayed wipe.

Ensure that the sensors in the liquid container are not covered by the plastic liner in solid waste container.



Fig. 9

Reset drip tray counter. Tap “Empty solid waste”.

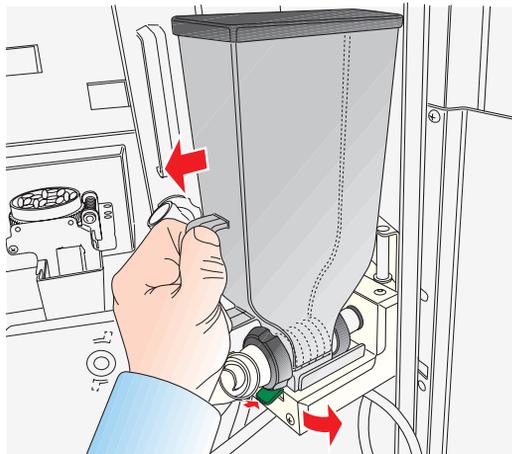


Fig. 10

FILLING THE INSTANT INGREDIENT CANISTERS

Remove sugar canister(optional): turn it up pull it outward then press the green lever below. Put it on a table.

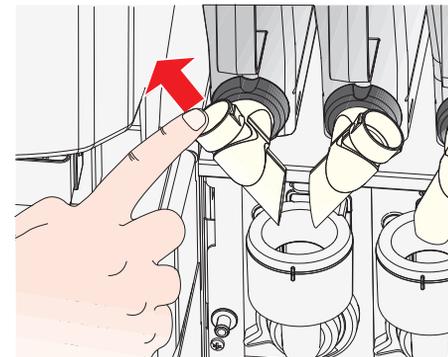


Fig. 11

Pull up instant canister outlets.

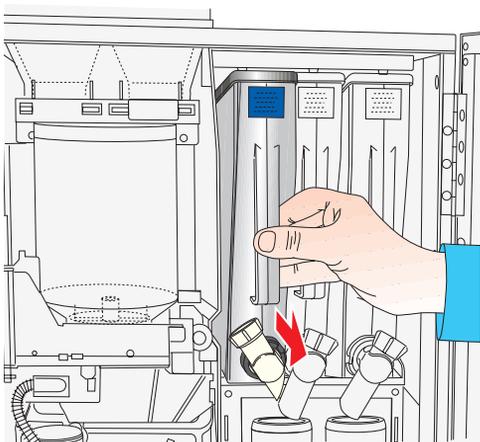


Fig. 12

PULL UP PRODUCT OUTLET THEN REMOVE INSTANT CANISTER (ONE AT TIME).



The instant ingredient canisters should be labelled to avoid ingredients being poured into wrong canisters.

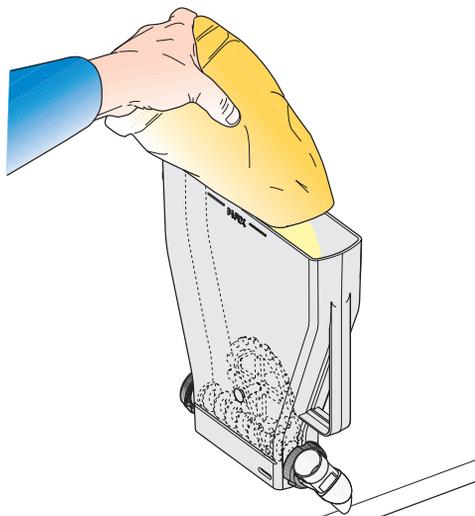


Fig. 13

Put canisters on a table, open lids then fill them with products. Clean outside canisters before place them back into machine.

Repeat procedure until the required number of canisters have been filled.

Clean instant canister table, and place canisters back.

FILLING THE COFFEE CANISTERS



Fill according to use of ingredient and only through open lid with canister still inside machine. When filled in this way, the capacity of the waste containers and the coffee bean canister are balanced.

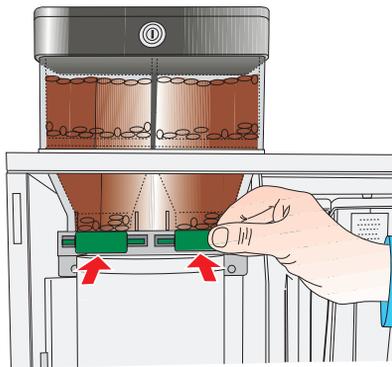


Fig. 14
Close upper coffee outlets.

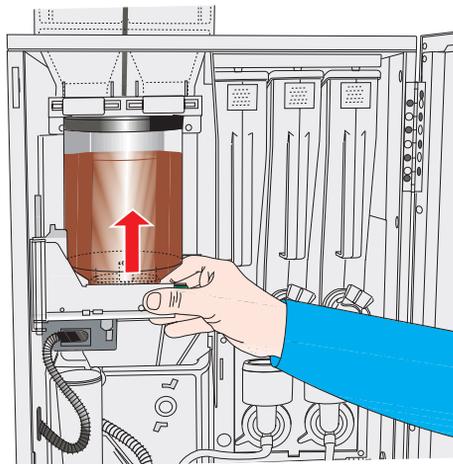


Fig. 15
Lift internal coffee shelf up.

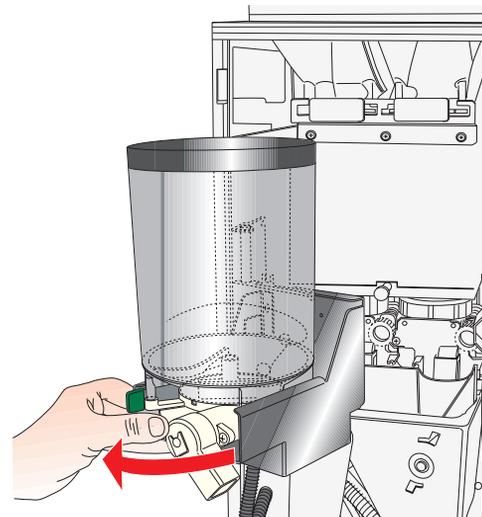


Fig. 16
Pull internal coffee shelf outward.

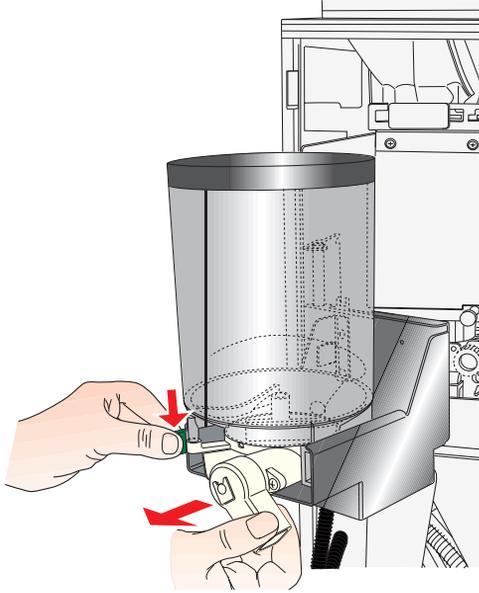


Fig. 17

Close internal coffee shelf outlet. Pull out canister and place it on a table.

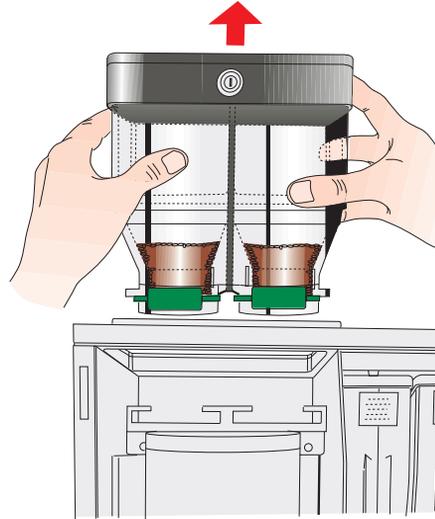


Fig. 18

Pull out external coffee canister. Place it on a table.

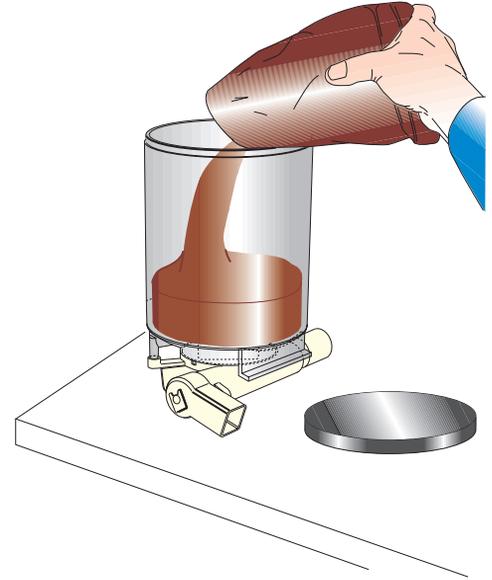


Fig. 19

Open internal canister lid, cut product bag, fill coffee and close lid. Clean inside coffee canister once a month.

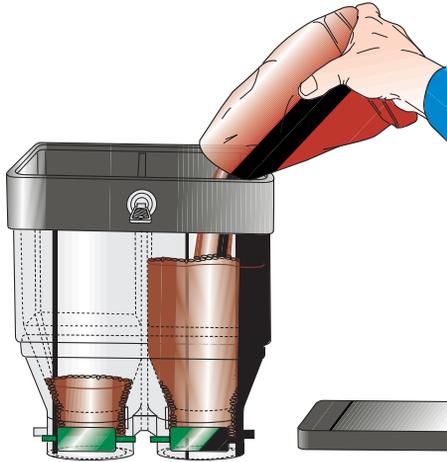


Fig. 20

Open external canister lid, cut product bag, fill coffee and close lid. Clean inside coffee canister once a month.

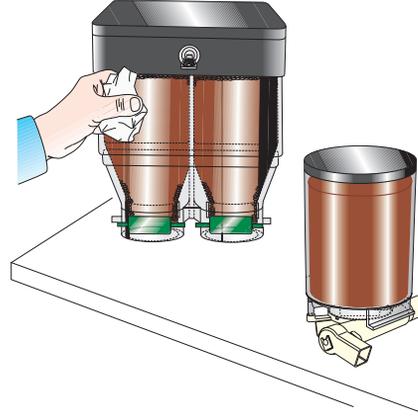


Fig. 21

Clean outside coffee canisters. Place them back.

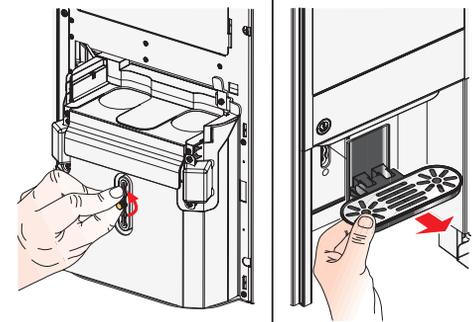


Fig. 22

CLEANING DRIP TRAY

Unscrew the knurl that fix external drip tray, clean external drip tray with a wet wipe.

Place it back

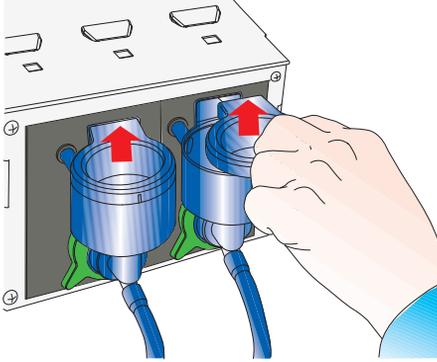


Fig. 23

DEEP CLEANINGS

CLEAN ALL THE OTHER PARTS

Remove head of mixing bowls, spray into the m, clean with wipe and replace the head of mixing bowls.

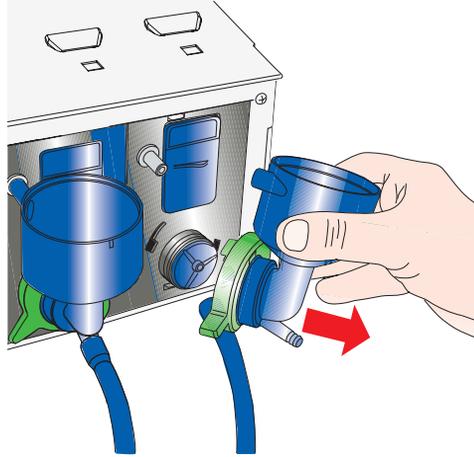


Fig. 24

Remove mixing bowls and pipes, exhaust system area and mixer plates.

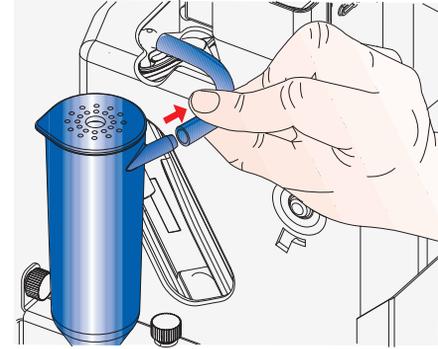


Fig. 25

Remove hot water and diffuser hoses, remove them from the frontal arm, remove diffuser from nozzle support.

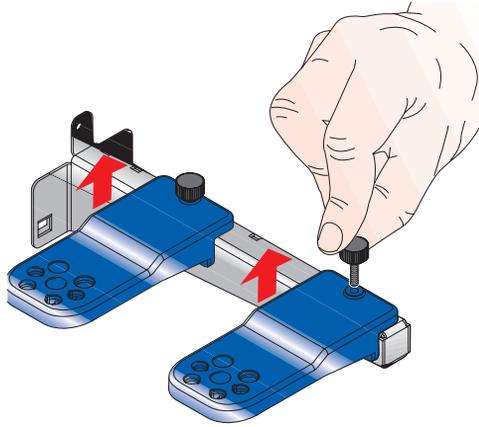


Fig. 26

Unscrew the knurls that fix nozzle supports to frontal bar.

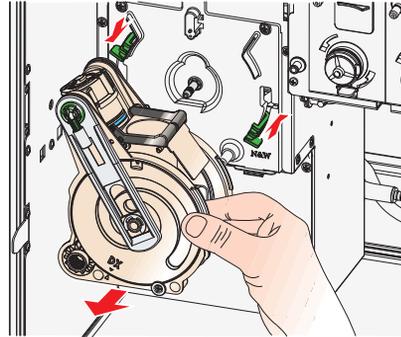


Fig. 27

Remove all the hoses, brewer cover and funnel for the coffee powder. Remove brewer.

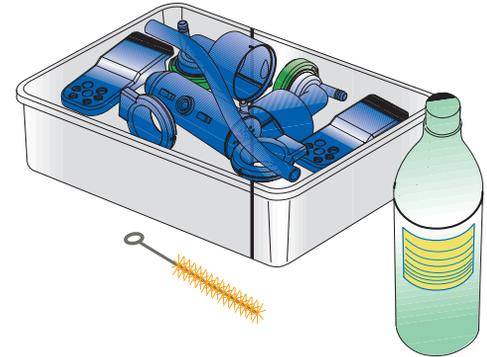


Fig. 28

Wash parts using cleaning materials, finally wash with clean water. Dry the parts accurately: head of mixers, exhaust system parts, funnel for coffee powder and brewer. Reassemble dried parts. Be careful with proper positioning of hoses. Place back all the canisters, open coffee shutters. Push down instant canister outlets.



Fig. 29

RINSING MACHINE

For rinsing: close the door (or simulate door closing by placing the yellow key into its slot) select "Wittenberg" then "Maintenance" and "Daily operations".

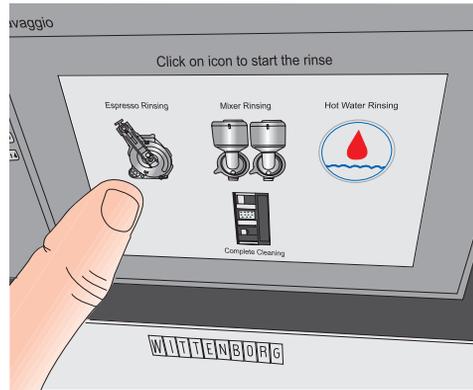


Fig. 30

Chose the to be rinsed then press O

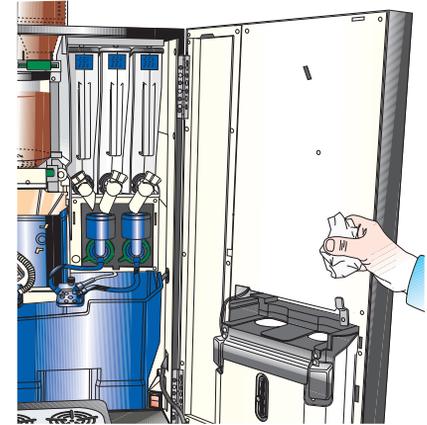


Fig. 31

Clean internal and external side of the door with wet wipe.

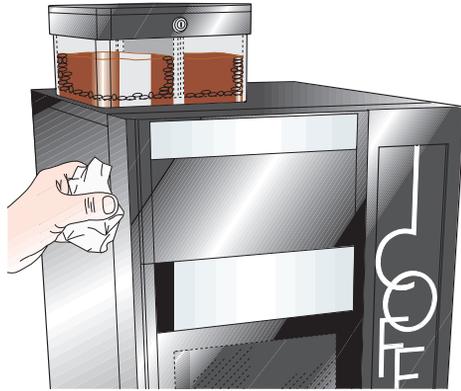


Fig. 32
Clean the whole cabinet with wet wipe.



Fig. 33
Fill in the HACCP documentation book.
Remove the yellow key, close the door
and start up.

GENERAL INSTRUCTIONS

Before starting any adjusting operations requiring parts of the unit to be removed, the machine must always be switched off.

- The operations described in the proceeding pages should be carried out only by qualified personnel, who are trained in the correct use of the machine according to the standards in force and who have the specific knowledge of the machine functioning from a point of view of electrical safety and health regulations.

The grinder is fitted with a sensor that counts the number of rotations of the grinding wheels, allowing the control software of the machine to determine the number of rotations and thus the grams of coffee for each single selection.

With the programming procedure, it is possible to set the grams (6 to 15 gr) of ground coffee (rotations of the grinder) for each selection.



Important

Never touch the adjusting knob of the grinder. Always call a technician for adjustment / calibration of grinder!



The grinder requires a period of 50 selections to allow the grinder to “run in”. After this period the coffee empty detection becomes stable. A complete coffee bean canister contains 250 - 300 selections so the grinder should be correctly “run in” by the time the coffee bean canister is empty for the first occasion.

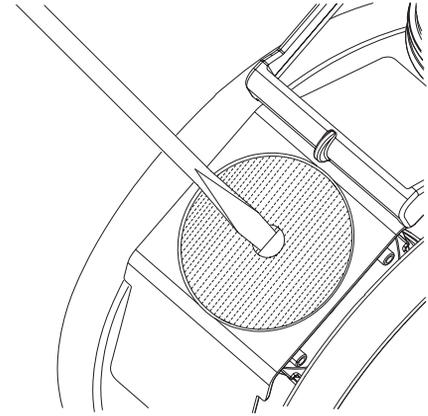


Fig. 34

PREVENTIVE MAINTENANCE

REPLACE BREWER LOWER O RING AND LOWER COFFEE FILTER

- Remove the brewer.
- Rotate the brewer unit in position to remove the filter.
- Unscrew the lower metal filter.

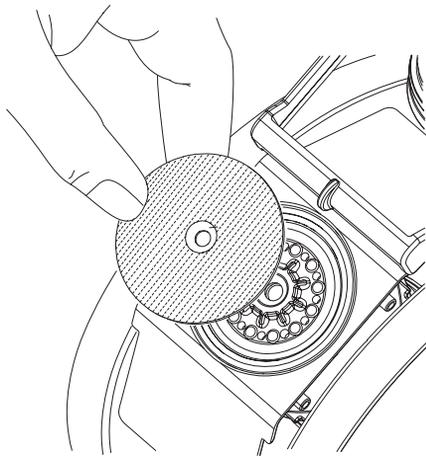


Fig. 35

- Unscrew the lower metal filter.

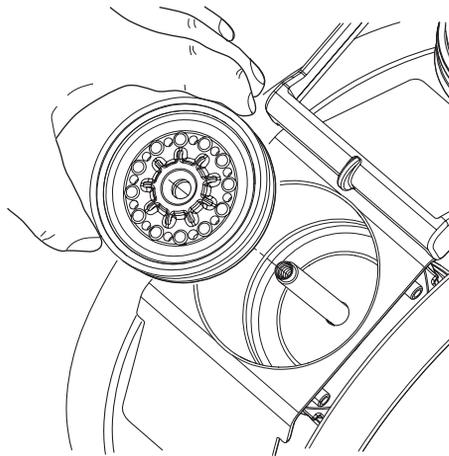


Fig. 36

- Remove the lower filter holder (keep pressed lower piston at the bottom).

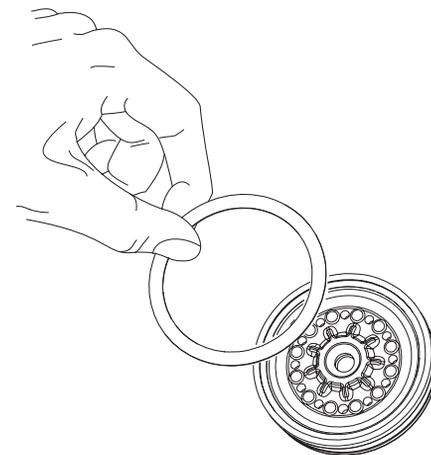


Fig. 37

- Remove O-Ring.

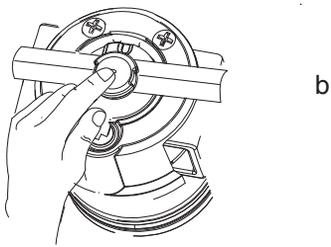
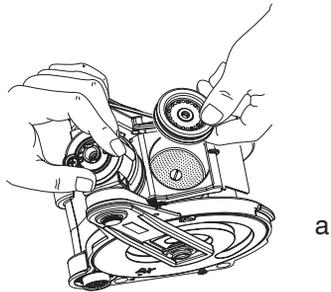


Fig. 38

- Fit back the lower filter holder.

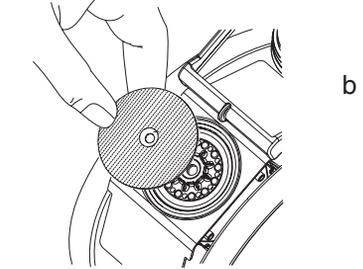
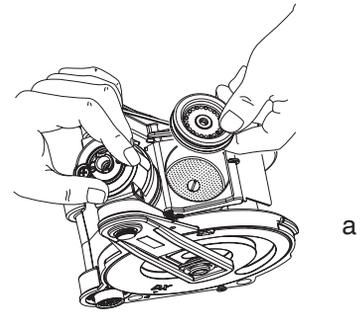


Fig. 39

- Fit a new metal filter, a new screw with sealing and fasten it.

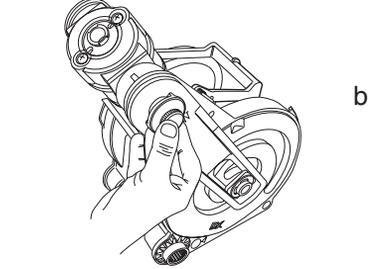
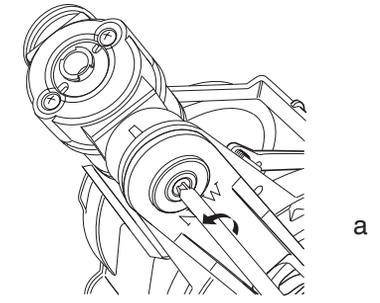


Fig. 40

**REPLACE UPPER COFFEE FILTER
BREWER UPPER O RING AND O RING
BREWER OUTLET**

- Remove the brewer.
- Loosen the hand screw of upper piston and pull the plastic key out of its slot.

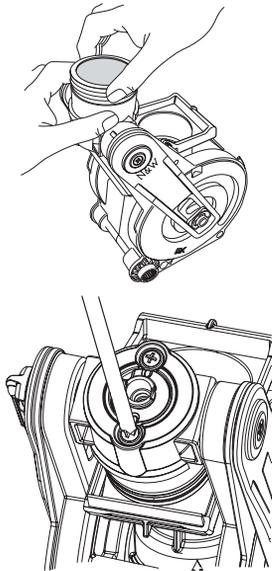


Fig. 41

- Rotate piston and unfasten the two screws alternately on both sides.

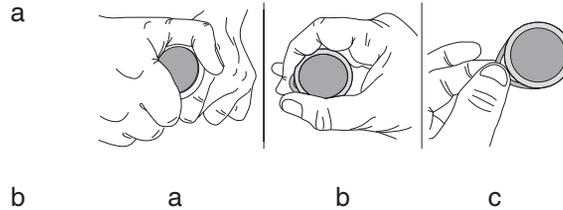


Fig. 42

- Unscrew the green plastic ring and remove the filter and the blue O ring.

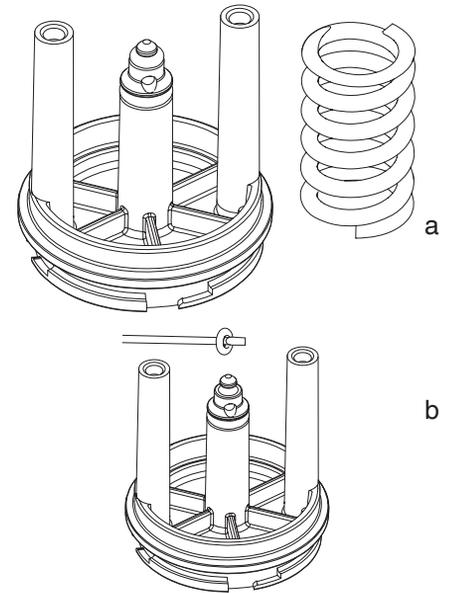
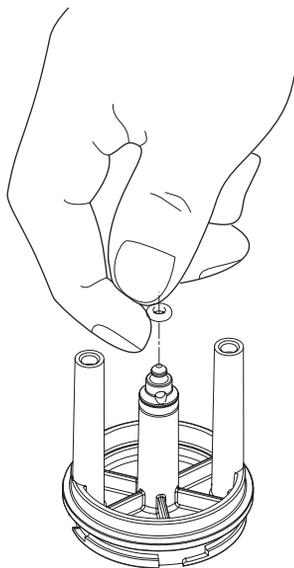


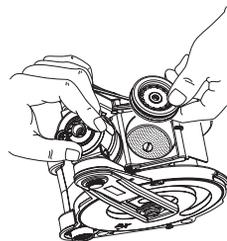
Fig. 43

- Remove the small sized O-Ring with a small screwdriver.



a

b



TOP
↓
BOTTOM

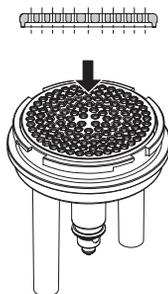
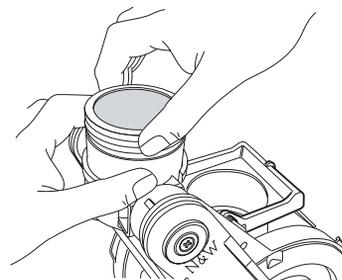
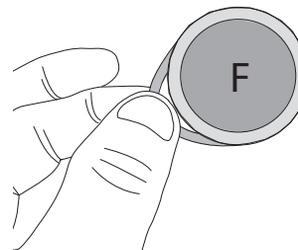


Fig. 45

- Reposition the upper filter holder on brewer, make sure that it is placed correctly, flat face upwards.



a



b

Fig. 46

- Fit a new metal filter on green ring and then turn the ring on piston until it stops. (fig. 41 - a) Take care that the letter „F“ engraved on the filter is on the outside face (Fig. 41 - b)

Fig. 44

- Fit a new O-Ring.

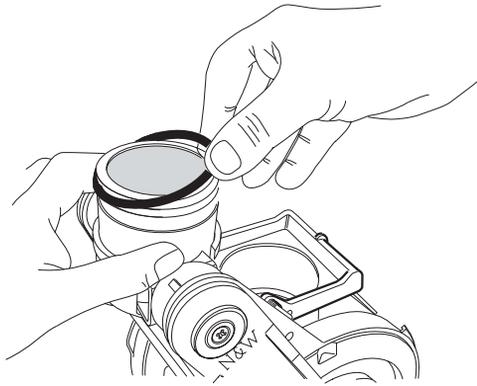


Fig. 47

- Refit the blue O ring or fit a new blue O ring

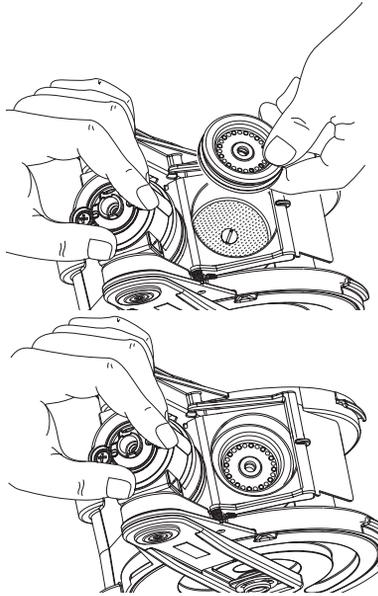


Fig. 48

- Insert the spacer inside the infusion chamber.

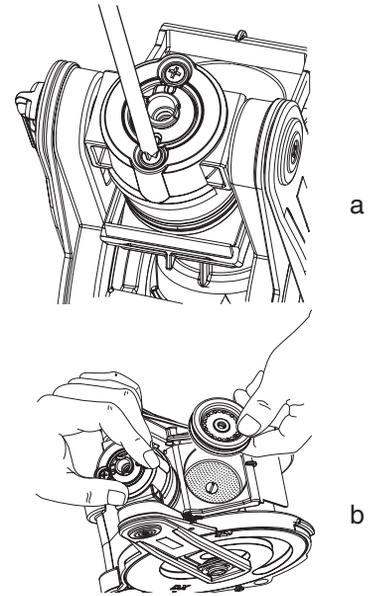


Fig. 49

- Rotate the side handles of brewer in order to close it; keep the unit in that position with one hand and fasten alternatively the 2 screws on top. Ensure that the screws are well tightened.

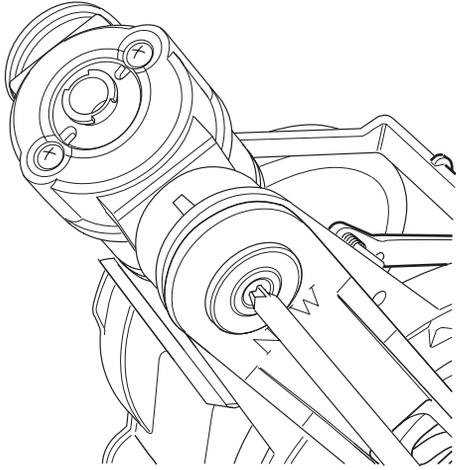


Fig. 50

- Move the upper piston holder in 'home' position, secure it with the side green key and fasten the knurl.

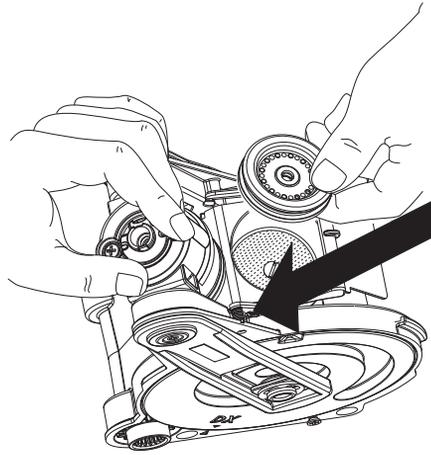


Fig. 51

- In case the spring of the scraper falls off, reposition as indicated.

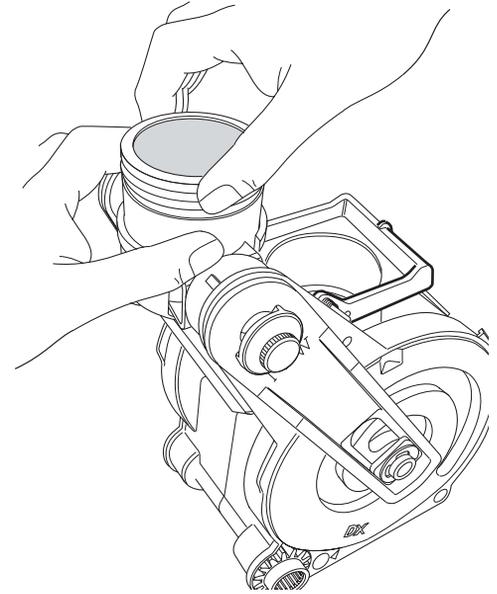


Fig. 52

- Reposition the upper filter holder on brewing unit.

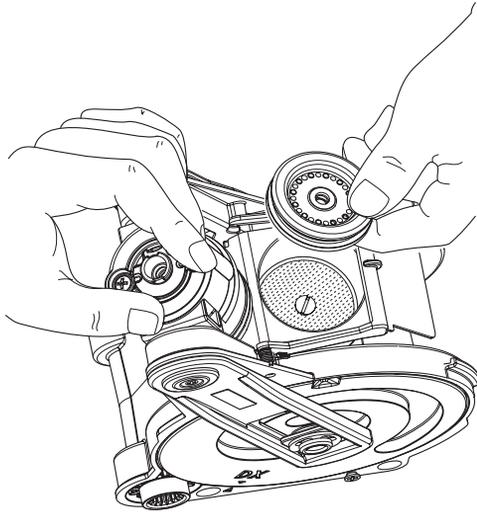


Fig. 53

- Open the brewer and pull out the spacer manually.
- Fit back the brewer unit.

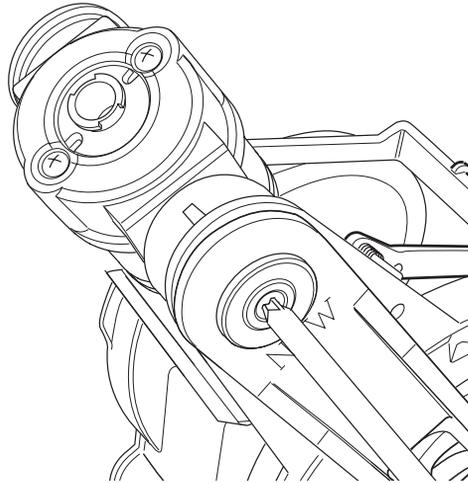


Fig. 54

REPLACE GRINDER BLADES

- Remove the grinder bracket from machine:
- Close the shutter.
- Pull outward the coffee canister.
- Remove the bracket.
- Disconnect electrical cables.

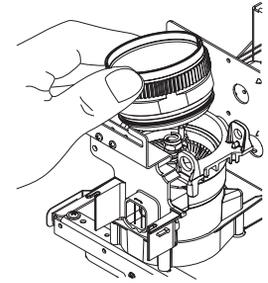
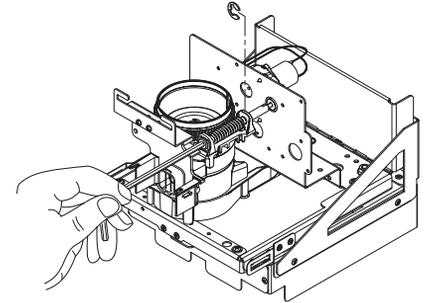


Fig. 55

- Remove with Allen key the self adjusting screw.
- Unscrew and remove the upper disk holder.

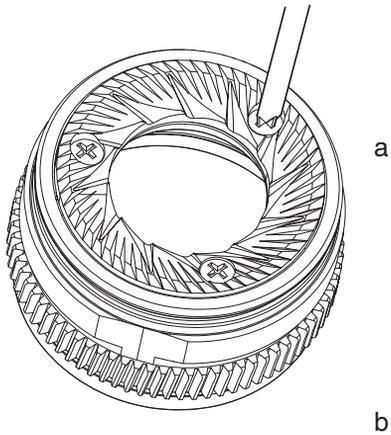


Fig. 56

- Unfasten the 3 screws fixing the disk and pull it out.

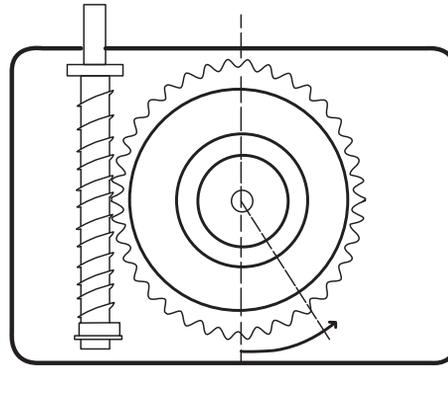


Fig. 57

- Fit back and tighten the upper disk holder, close it and open ten teeth backward from the lower grinder position.
- Fit back with Allen key the self adjusting screw.
- Fit and secure the back circlip on self adjusting screw.

Notes

FAILURE LIST

PUMP FAULT 1...7

If the current absorption of a pump is not between the range of default values, all the selections in which the pump is involved are disabled.

FAULTY MIXER 1...6 (WHIPPER FAULT)

If the current absorption of a mixer motor is not between the range of default values, all the selections in which that mixer is involved are disabled.

SOLENOID VALVE 1...7 (VALVE FAULT)

If the current absorption of a solenoid valve is not between the range of established values, all the selections in which that solenoid valve is involved are disabled.

SHORT CIRCUIT MOSFET

The machine fails if a device intended to control direct current motors on the actuation board (mosfet) remains active.

SHORT CIRCUIT

This failure is displayed if the software should detect a short-circuit on one of the direct current motors connected with the actuation board. A failure may be simultaneously detected on one of the direct current motors.

VOLUMETRIC COUNTER

No counting of the volumetric counter within a maximum time.

INSTANT BOILER

The machine stops if the instant boiler water has not reached the temperature after having heated for 20 minutes since you powered on the machine or last made a selection.

COFFEE UNIT FAILURE

The position control microswitch of the coffee unit is read during the whole dispensing cycle.

According to the micro readout and the dispensing phase of the unit, any failure is declared by locking the selections based on espresso coffee.

COFFEE UNIT - MICRO UNIT FAILURE -

While the brew unit is being handled, the control micro is not operated within a certain time limit.

This failure may be associated with another positioning failure of the coffee unit.

COFFEE UNIT - START UNIT FAILURE -

The microswitch signals the coffee unit has not moved from the stand-by position.

COFFEE UNIT - BREW UNIT FAILURE -

The control micro signals that the coffee unit has not reached the brew position.

COFFEE UNIT - DISPENSING UNIT FAILURE -

During the brew phase, the control micro signals that the espresso unit is being handled.

COFFEE UNIT - DISCHARGE UNIT FAILURE -

At the end of the brewing phase, the control micro signals that the coffee unit has not reached the “used dose discharge” position.

COFFEE UNIT - STANDBY UNIT FAILURE -

The control micro signals that the brew unit has not moved back to the stand-by position after having discharged the coffee dose.

ESPRESSO BOILER

The machine stops if the boiler water has not reached the temperature after having heated for 10 minutes since you powered on the machine or last made a selection.

COIN MECHANISM

The machine stops if it should receive an over 2-sec. pulse on a validator line or if the communication with the serial coin mechanism is not longer than 30 seconds (Executive protocol) or 75 seconds (BDV protocol).

FB BRUSH

It is due to a positioning error of the scraper. The machine is not locked, but the selections based on fresh product are disabled.

DRIP TRAY FULL

The liquid residue container float operates the “Liquid residue container full” micro-switch. Empty the liquid residue container and reposition it to reset the fault.

DRIP TRAY NOT PRESENT

The liquid residue container does not operate the micro switch indicating the presence of the container. Check that the liquid residue container is correctly positioned inside the machine.

WATER TANK EMPTY

Lack of water from the mains or self-feeding tank. Make sure that the machine is connected to the water mains and that the tap is open or the tank is full of water. Touch the “Reset” button to restore the operation of the machine.

EMPTY COFFEE

The grinder exceeds the normal speed for more than 5 seconds. Instant beverage products remain available. Make sure the coffee bean container is full.

MACHINE BOARD

Lack of communication between the machine board and the CPU board.

Check the electrical connections between the two boards.

ESPRESSO LOW TEMPERATURE

The espresso boiler temperature is lower than the minimum temperature programmed to dispense espresso.

Wait for the minimum dispensing temperature to be reached.

EMPTY DOSER 1...7

The minimum level of instant powder in the container associated with motor-doser has been reached.

The signal is active if they controls on instant powder containers are activated.

Check the level of instant powder in the containers.

EMPTY ESPRESSO DISPENSER 1...2

The minimum level of coffee beans in the container has been reached.

The signal is active if they controls on coffee beans containers are activated.

Check the level of coffee beans in the containers.

WATER LEAKAGE

The Air-break micro switch signals the lack of water continuously following the opening of the water inlet solenoid valve or the activation of the self-feeding pump (filling of the air break).

Check that there are no water leaks in the hydraulic circuit of the machine (disconnected hoses, ...)

MACHINE DATABASE NOT AVAILABLE

The database that manages the machine configurations is not present on the machine, it cannot be loaded or created.

AIR-BREAK FILLING TIME OUT

The air-break micro switch does not report the achievement of the water level in the Air-break in the allotted time during filling.

Check the water network.

ELECTRIC PANEL

To access the electrical panel, remove the instant products containers.

Remove the containers and the metal cover to access the components of the electrical panel.

The fuses are accessible from the door of the electrical panel cover.

The electronic boards are designed to be used on several models of machines.

In case of replacement, it will be necessary to verify the configuration of the board and load the adequate software.

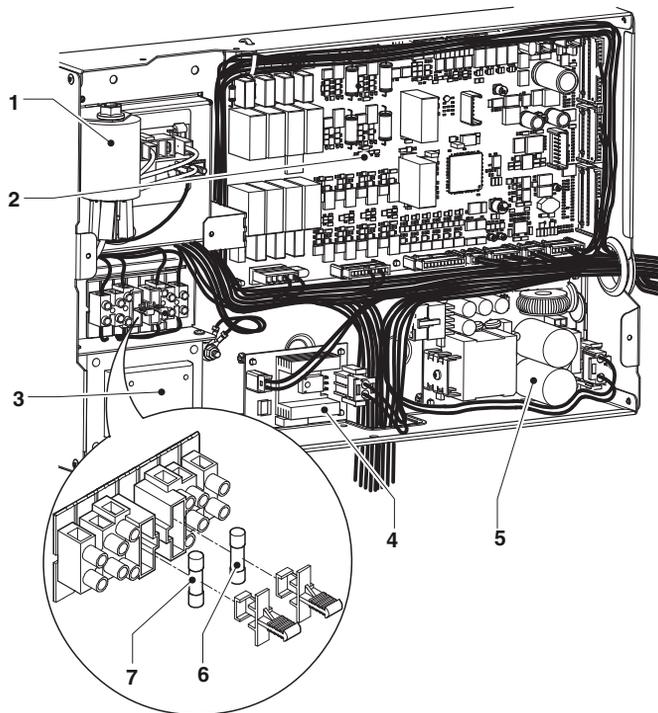


Fig. 58

- 1- Noise filter
- 2- Activation board
- 3- EXECUTIVE coin mech transformer (if present)
- 4- Boiler control board
- 5- Power supply board
- 6- Transformer primary fuse
- 7- Transformer secondary fuse

ACTIVATION BOARD

Board is powered in 24 V.

Power is supplied from the power supply board.

The board is placed in the electrical panel of the equipment and manages:

- the activation of the various users.
- sensors control signals (level, presence,...)

The LEDs indicate:

- DL1 (18) green LED
- DL2 (30) green LED flashes during normal operation
- DL3 (15) yellow LED that indicates the presence of +5Vdc
- DL4 (29) yellow LED flow meter pulses
- DL5 (28) not used
- DL6 (33) not used
- DL7 (32) red LED indicates the operation of the heating elements of the boiler

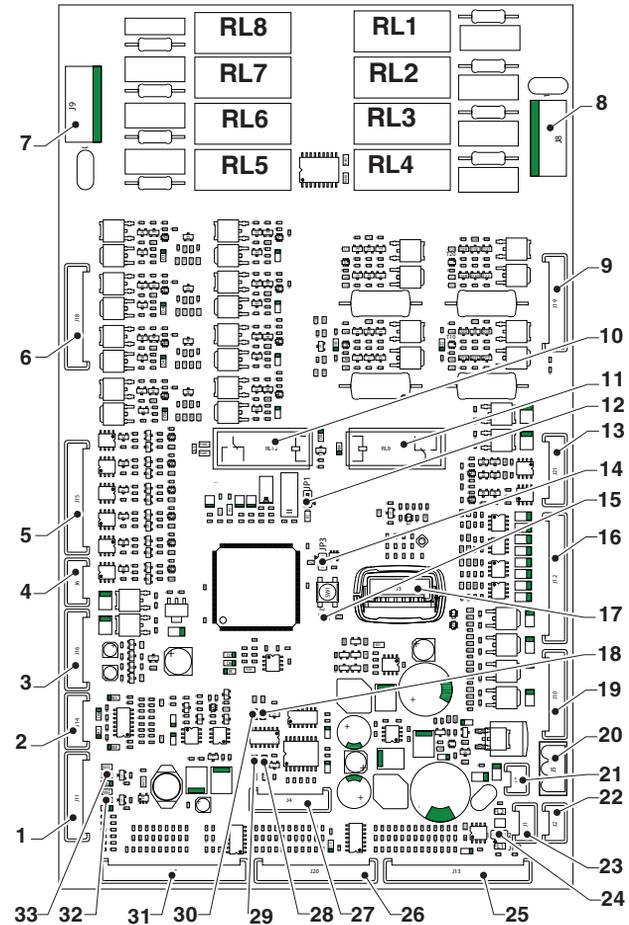


Fig. 59

- 1- (J11) Boiler control board / boiler sensor
- 2- (J14) Top panel switch
- 3- (J16) Coin mech engine
- 4- (J6) Fan / level sensors power supply
- 5- (J15) Not used
- 6- (J18) Motor-dispensers / grinding adjustment engine
- 7- (J9) Vibration pump
- 8- (J8) Grinder / coffee release electromagnet
- 9- (J19) Tea motor-doser/ Infuser unit engine
Infuser unit engine control
- 10- 24V Safety Relay
- 11- 24V Safety Relay
- 12- (JP1) Not used
- 13- (J21) Refrigeration unit (if present)
- 14- (JP3) WATCHDOG INPUT jumper (closed)
- 15- (DL3)
- 16- 5V presence YELLOW LED
- 17- (J12) Solenoid valves (instant and main) / Mixer
- 18- (J3) Upkey
- 19- (DL1) Green LED
- 20- (J10) Liquid residue container contact / dispensing compartment lighting
- 21- (J5) Board power supply 24V
- 22- (J7) Not used
- 23- (J2) CAN BUS
- 24- (J1) CAN BUS
- 25- (JP2) CAN BUS jumper (open)
- 26- (J13) Flow meter / level sensors
- 27- (J20) Coin mech button / coin mech engine cam
- 28- (J4) Not used
- 29- (DL5) Not used
- 30- (DL4) Yellow LED FLOW METER PULSES
- 31- (DL2) Green LED RUN
- 32- (J17) Tea infuser unit engine cam / Air-break microswitch
Liquid residue container micro presence
- 33- (DL7) Not used
- 34- (DL6) WATER BOILER HEATING RED LED

RELAY FUNCTION

	user
RL1	Grinder
RL2	Coffee release electromagnet (if present)
RL3	Grinder 2*
RL4	Coffee release electromagnet 2 (if present)*
RL5	Pump
RL6	not used
RL7	not used
RL8	not used

* Models with double coffee beans

TOUCH SCREEN CPU BOARD

Board is powered in 24 V.

Power is supplied from the power supply board.

The board is placed on the door and manages:

- touchscreen
- payment systems (if present)
- mechanical stroke counter (if present)
- machine lighting
- cup sensors
- Ethernet connection
- Wi-Fi and/or Bluetooth module (if present)
- IrDA board (if present)

The board has three LEDs for indicating:

- The board is powered (led POWER 24V)
- The board is in service (led RUN)
- The board has been restarted (led RESET)

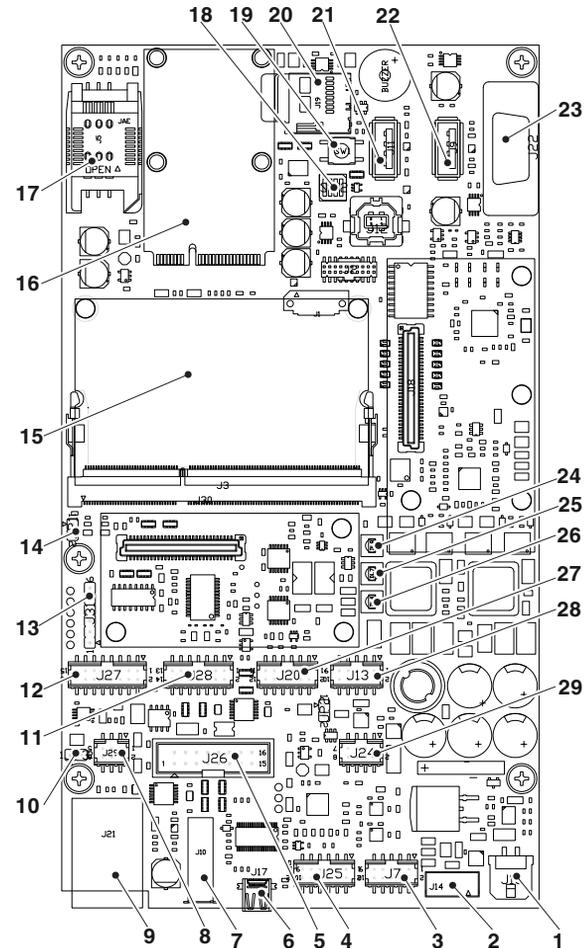


Fig. 60

- 1- (J16) 24 Vdc Power supply
- 2- (J14) Not used
- 3- (J7) Not used
- 4- (J25) Not used
- 5- (J17) Not used
- 6- (J26) Not used
- 7- (J10) Not used
- 8- (J29) CAN BUS
- 9- (J21) Ethernet connector
- 10- (JP3) jumper
- 11- (J28) Not used
- 12- (J27) Cup Sensors / LED lighting / mechanical stroke counter
- 13- (J31) Not used
- 14- (JP1) closed jumper
- 15- Touchscreen management module
- 16- Wi-Fi and/or Bluetooth module (if present)
- 17- SIM CARD slot
- 18- (SW2) Microswitch
- 19- (SW1) Button
- 20- SD card slot
- 21- (J11) Not used
- 22- (J9) USB CONNECTOR
- 23- (J22) RS232 serial connector
- 24- Led RUN
- 25- Led RESET
- 26- Led POWER 24V
- 27- (J20) Not used
- 28- (J13) Payment systems
- 29- (J24) IrDA board
- 30-

SOFTWARE UPDATE

The device software can be updated with a USB stick or via remote connection (for networked equipment).
The software is updated from the programming menu.

UPDATE VIA USB

- Insert the USB stick with the new software
- Tap “browse” to open the navigation window of the USB stick file system
- Select the file with the software update.
- Tap “Check” to check that the file is “intact”
- Tap “Validate” to perform a compatibility check
- Tap “Update” to update

UPDATE VIA INTERNET

- Enter the address of the FTP server with the software updates and the credentials for access to the FTP server (username and password).
- Tap “Check” to check that the file is “intact”
- Tap “Validate” to update

POWER SUPPLY BOARD

Board is powered with 120 V~.

The board provides power to the control electronics (24V) and the touch screen

The board is placed in the electrical panel of the equipment.

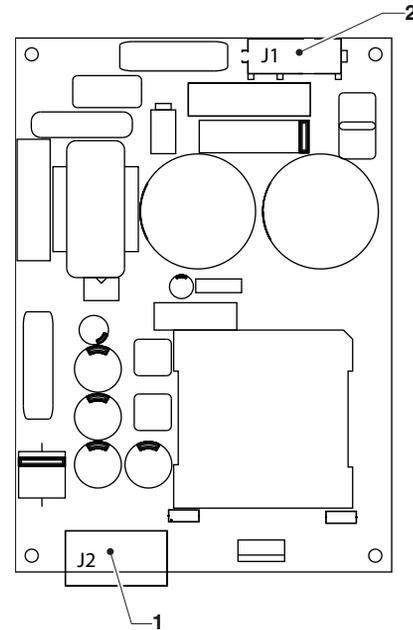


Fig. 61

1- (J2) 24Vdc connector

2- (J1) 120Vac power supply connector

BOILER CONTROL BOARD

The board controls the activation and deactivation of the heating elements of the boiler.

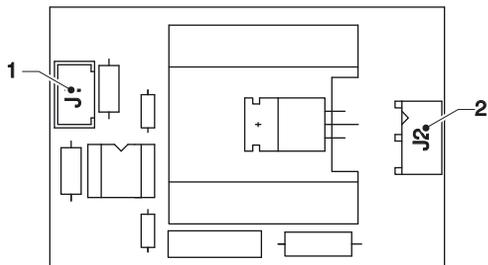


Fig. 62

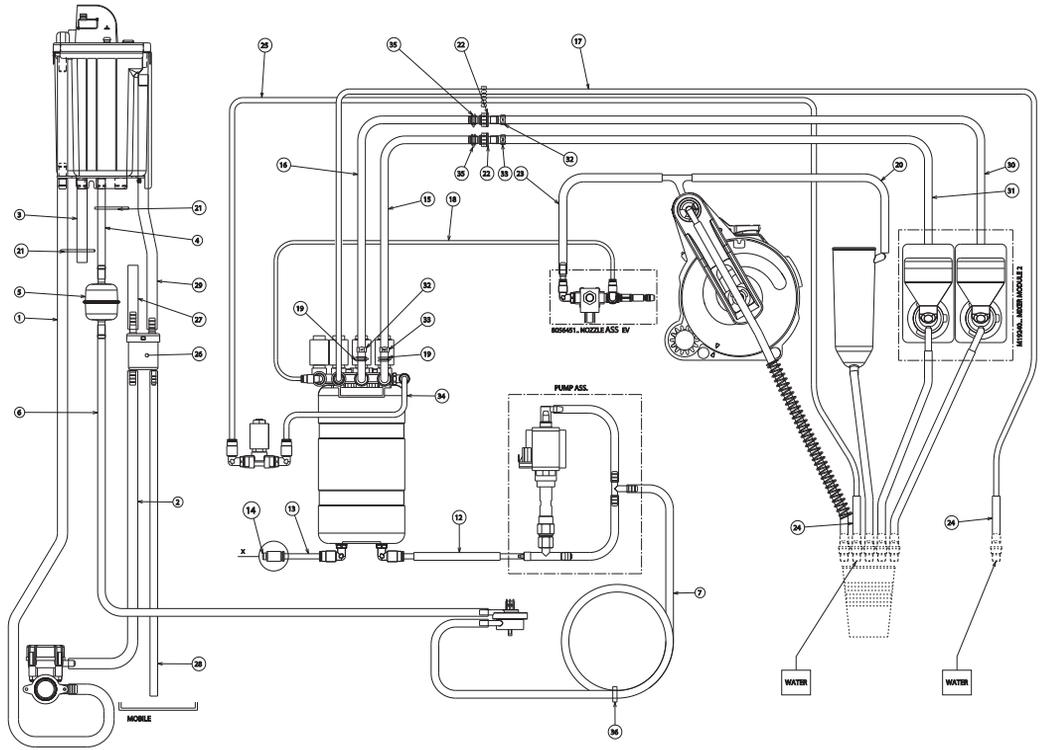
- 1- (J1) board control connector
- 2- (J2) boiler heating element supply connector.
- 3-

Appendix

<i>CM</i>	<i>MOTOR CAM</i>
<i>CM1-..</i>	<i>COFFEE UNIT MOTOR CAM</i>
<i>CMR</i>	<i>COIN RETURN CAM</i>
<i>CV</i>	<i>VOLUMETRIC COUNTER</i>
<i>EEA</i>	<i>WATER INLET SOLENOID VALVE</i>
<i>ER</i>	<i>COFFEE DISPENSING SOLENOID VALVE</i>
<i>ESC1-..</i>	<i>COFFEE RELEASE ELECTROMAGNET</i>
<i>EV1-..</i>	<i>INSTANT SOLENOID VALVES</i>
<i>EVH2O</i>	<i>WATER SOLENOID VALVE</i>
<i>EX</i>	<i>EXECUTIVE COIN MECH CONNECTORS</i>
<i>FA</i>	<i>RADIO INTERFERENCE SUPPRESSOR</i>
<i>ICM</i>	<i>MOTOR CONTROL SWITCH</i>
<i>ID1-..</i>	<i>COFFEE DOSE SWITCH</i>
<i>IG</i>	<i>MAIN SWITCH</i>
<i>IPF</i>	<i>FULL WASTE SWITCH</i>
<i>IPS</i>	<i>TOP PANEL SWITCH</i>
<i>ISER1.</i>	<i>SLIDER COFFEE CONTAINER SENSOR</i>
<i>IVA</i>	<i>EMPTY WATER SWITCH</i>
<i>KC1-..</i>	<i>COFFEE BOILER CUTOUT</i>
<i>KS1-..</i>	<i>SAFETY CUTOUT</i>
<i>M</i>	<i>COFFEE UNIT MOTOR</i>
<i>MAC1-..</i>	<i>COFFEE GRINDER</i>
<i>MD1-..</i>	<i>INGREDIENT MOTORS</i>
<i>MF1-..</i>	<i>INSTANT WHIPPER MOTORS</i>
<i>MFB</i>	<i>FRESH-BREW MOTOR</i>
<i>MMA1-..</i>	<i>GRINDING REGULATION MOTOR</i>
<i>MR</i>	<i>COIN RETURN MOTOR</i>
<i>NTC</i>	<i>TEMPERATURE PROBE</i>
<i>PM</i>	<i>PUMP</i>
<i>PRR</i>	<i>COIN RETURN BUTTON</i>
<i>RCC</i>	<i>COFFEE BOILER HEATING ELEMENT</i>
<i>SALIM</i>	<i>POWER SUPPLY UNIT BOARD</i>
<i>SLED</i>	<i>LED BOARD</i>
<i>STRC1</i>	<i>BOILER HEATING TRIAC BOARD</i>
<i>TX....</i>	<i>DELAYED FUSE (X=CURRENT)</i>
<i>V1-..</i>	<i>LEVEL SENSOR</i>
<i>VENT</i>	<i>FAN</i>

BDV *BDV COIN MECH CONNECTOR*
CCG *GENERAL COUNTER*
EX *EXECUTIVE COIN MECH CONNECTORS*

FREE *FREE VEND SWITCH*
IRDA *IRDA BOARD*
JUG *JUG FACILITIES SWITCH*
MDB *MDB COIN MECH CONNECTOR*
RS232 *SERIAL PORT*
SALIM *POWER SUPPLY UNIT BOARD*
SLED *LED BOARD*
SM *MACHINE BOARD*
SUC *C.P.U. BOARD*
TZ *CUP SENSOR*



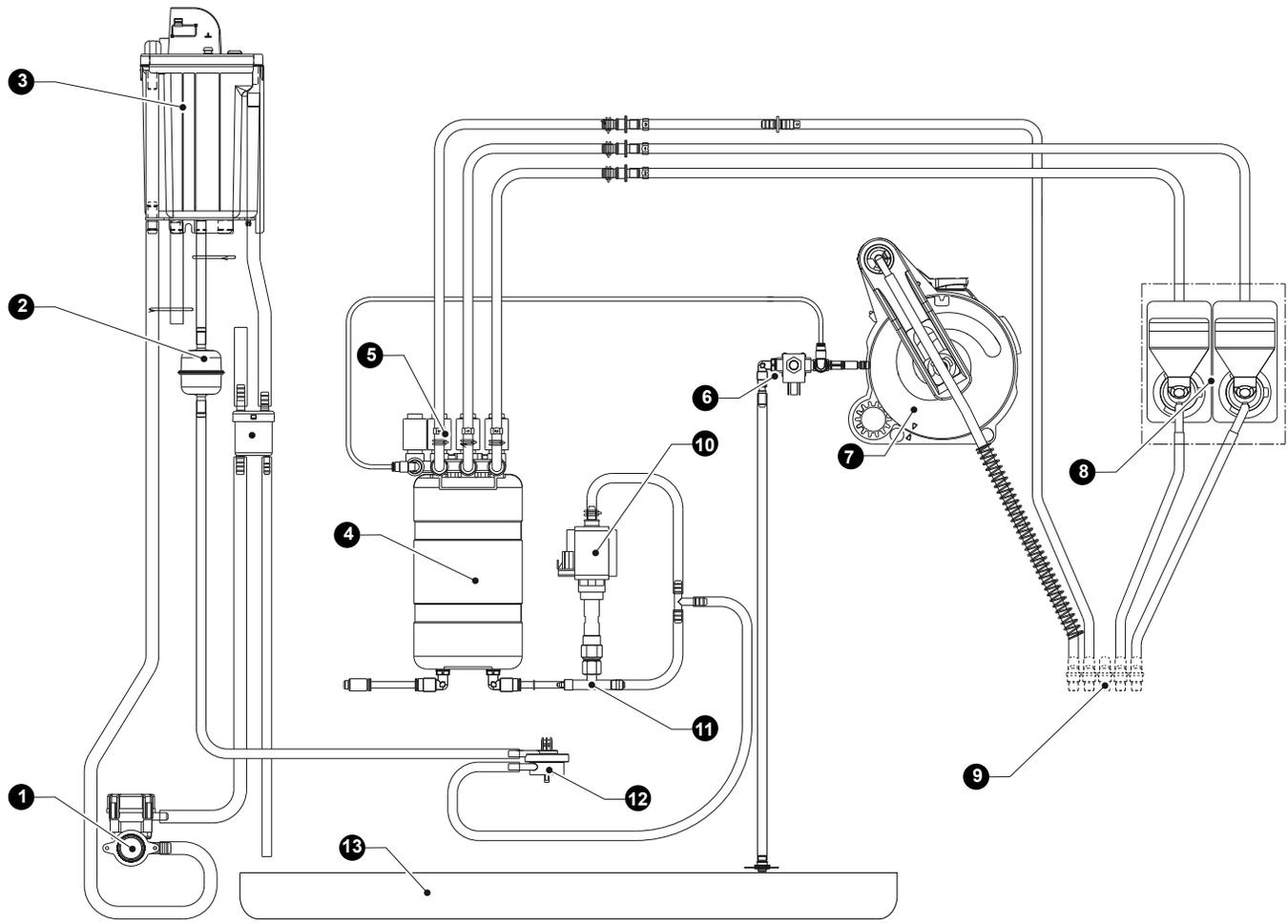
Date: X
**SECURING THE ESTATE WITH A SPECIAL TOOL
 AFTER ENTERING THE TUBE**

HYDRAULIC CIRCUIT

Z4000 ES-FB MODEL

Fig. 63

- 1- WATER INLET SOLENOID VALVE
- 2- FILTER
- 3- AIR-BREAK
- 4- BOILER
- 5- SOLENOID VALVE GROUP
- 6- BREWER UNIT SOLENOID VALVE
- 7- BREWER UNIT
- 8- DIFFUSER NOZZLE
- 9- MIXER
- 10- PUMP
- 11- BY-PASS
- 12- DISPENSING NOZZLES
- 13- FLOW METER
- 14- DRIP TRAY

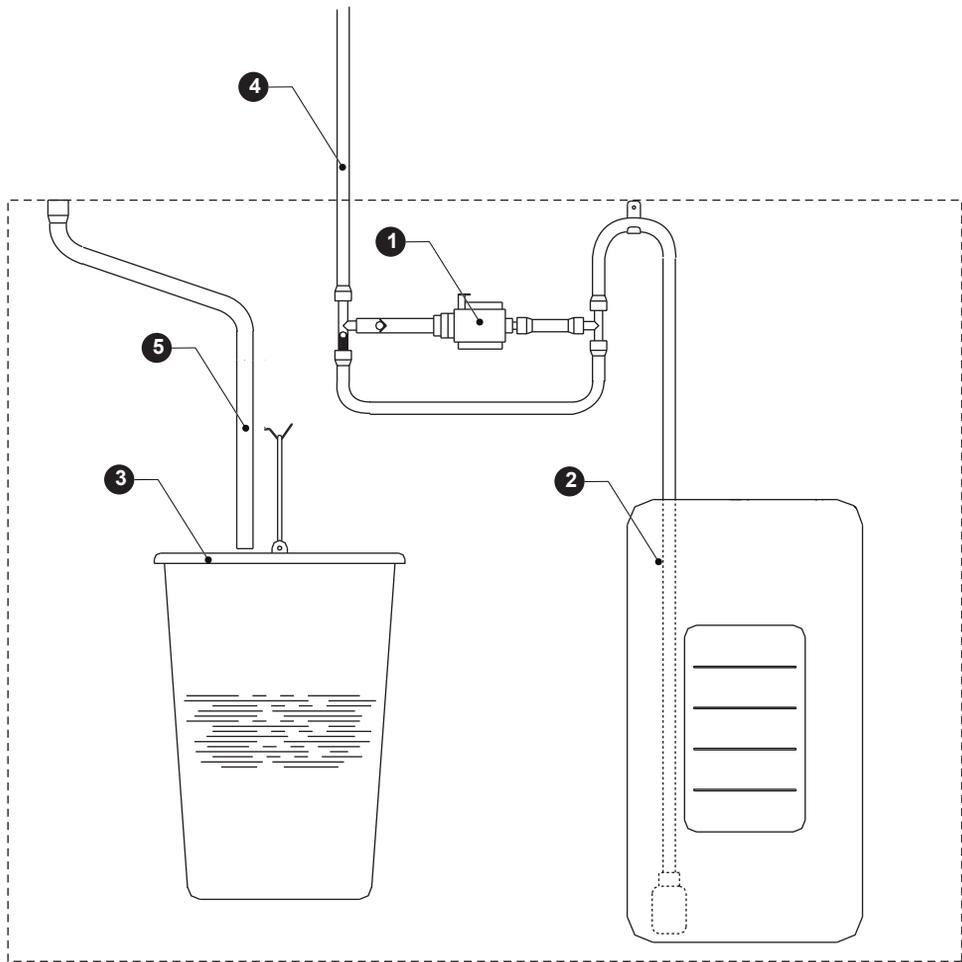


HYDRAULIC CIRCUIT

MODEL WITH Z4000

Fig. 64

- 1- WATER INLET SOLENOID VALVE
- 2- FILTER
- 3- AIR-BREAK
- 4- BOILER
- 5- SOLENOID VALVE GROUP
- 6- BREWER UNIT SOLENOID VALVE
- 7- BREWER UNIT
- 8- MIXER
- 9- PUMP
- 10- BY-PASS
- 11- DISPENSING NOZZLES
- 12- FLOW METER
- 13- DRIP TRAY



HYDRAULIC CIRCUIT

CABINET

14- SUCTION PUMP

15- TANK

16- LIQUID WASTE CONTAINER

17- TO THE DEVICE

18- LIQUID RESIDUE CONTAINER DRAIN PIPE

Notes on programming

The functions envisaged are described hereunder.

Those that are not used for the specific model layout, or which depend on the user profile, are also included.

Described below is a summary of the main functions which are useful for managing the operation of the machine, not necessarily in the order in which they are displayed in the menu.

The software version can be updated using the appropriate systems (PC, USB sticks, etc.)

The representation and arrangement of icons/screens in this manual is approximate and may vary from the one displayed on the machine depending on the configuration (layouts, themes, and/or icons)

ACCESS TO THE PROGRAMMING MENUS.

To access the equipment menus (with door closed) touch and keep pressed for 3 seconds the logo in the top left of the selection screen.

Upon opening the door, the equipment can request the entering of a password to access the programming menus.

Enter password to access the enabled menus.

The password (default) are:

- Technician (4444),
- Distributor (3333),
- Charger (2222)
- User (1111)

The main page is displayed.

The touch screen tries to display the side navigation menu and function parameters in the same screen.

With several personalised settings (e.g. a larger font size) some functions and/or parameters may not be displayed: it is sufficient to scroll the screen.

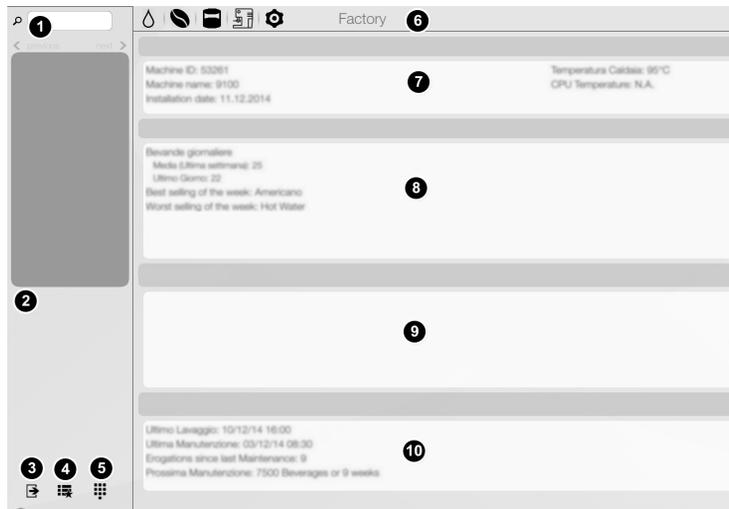


Fig. 1

- 1- Search field
- 2- Navigation side menu
- 3- Icon "EXIT"
- 4- Icon "PREFERRED"
- 5- Keypad
- 6- Message bar
- 7- Information area
- 8- Message area
- 9- Fault area
- 10- Maintenance and cleaning information area

SEARCH FIELD

Allows to search for the function by name.

Tap to view the keyboard.

Enter the function name; while entering, the functions containing the text entered will be displayed.

From the search results displayed, touch the desired function.

NAVIGATION SIDE MENU

Displays the functions available for the current user profile and the "next / previous" buttons

EXIT ICON

Exits from the programming menu without saving.

The selections page is displayed.

FAVOURITES ICON

The “preferred” are connections to frequently utilised functions. After having added a function to the “preferred” it will be sufficient to display the “preferred” and to tap the relevant function to access it rapidly.

The icon displays a screen with the functions used frequently and saved as “preferred”.

ADD A FUNCTION TO THE “PREFERRED”

From the function, tap icon ★ displayed in the messages bar; the icon will change colour (activates)

REMOVE A FUNCTION FROM THE “PREFERRED”:

- From the preferred, tap the function that has to be remove, so the function gets accessed.
- tap icon ★ displayed in the messages bar; the icon will change colour (deactivates)

KEYPAD

Use the keypad to enter the password to access the menu according to the user profile.

User profiles enable users to access only certain specific functions enabled for their user profile.

MESSAGE BAR

Shows:

- notification icons (water level, solid residues level, powders level, ...).
Tap the icons to have an indication on the status.
- The access profile to the menus (Technician, ...).
Menu functions are available according to the profile utilised. Functions pertaining to a profile may not be available in another.
- “Language” icon
The messages display language can be changed by tapping the relevant icon with the flag.
- The “add / eliminate preferred” icon

INFORMATION AREA

Displays information relative to the equipment

MESSAGE AREA

Displays messages of an informative nature, e.g. statistics on most required selections,...

FAULT AREA

Displays the faults present on the equipment.

MAINTENANCE INFORMATION AREA

Displays information about the deadline for the maintenance Buttons :

- "Maintenance notification": sets the current date/time as the date of last maintenance.

ENTERING THE VALUES

Within the programming menus to enter / modify values, the following methods are envisaged:

KEYBOARD

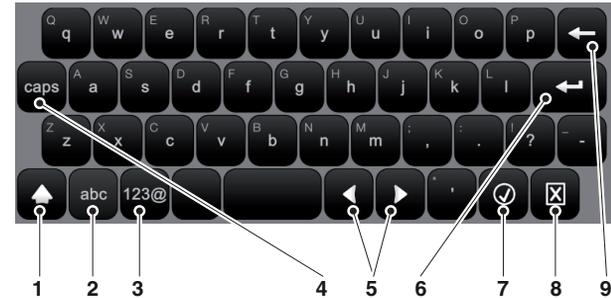


Fig. 2

- 1- Enters the next character in capitals (SHIFT)
- 2- Switches the keyboard from "numbers/symbols" to "letters"
- 3- Switches the keyboard from "letters" to "number/symbols"
- 4- All characters in capitals (CAPS LOCK)
- 5- Shifts the cursor in the text
- 6- Inserts a new line (text over two lines)
- 7- Confirms values
- 8- Cancels the entered values and closes the keyboard
- 9- Cancels the previous character (back space)

KEYPAD

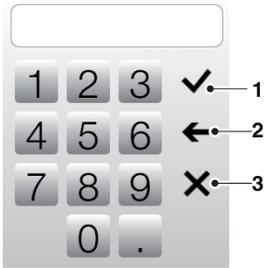


Fig. 3

- 1- Confirms values
- 2- Cancels the previous value (back space)
- 3- Cancels the entered values and closes the keyboard

CHECKBOX

tap the checkbox to enable / disable the option.

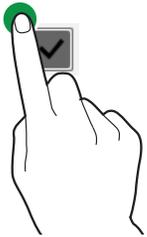


Fig. 4

DROP-DOWN LISTS

tap to open the drop-down list and to select the value.



Fig. 5

VALUE PICKERS

Scroll to pick the wanted value

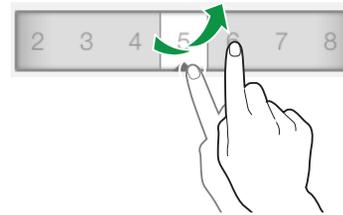


Fig. 6

DAILY ACTIONS

Includes all the functions that affect daily operations (washing, residue counters reset, ...)

CLEANING AND WASHING

Automatic washing and rinsing functions of the equipment functional units (infuser, mixer, ...).

Select the components that have to get washed.

FILLING

Should the containers level check be deactivated, the function is inaccessible.

The function allows the correct managing of pre-alarms or the signalling of empty containers (if so enabled).

After every product charging, the quantity of product charged must be specified..

SOLID RESIDUE CONTAINER

Resets the counter which handles the reporting of “residues full” of the solid residue container.

To ensure the right management of the warnings, you must reset the counter any time the solid residue container is emptied.

MONEY MANAGEMENT

Enabled only for models with payment systems.

With this function you can:

- Empty the coins from the coin-box change-giver tubes
- Charge coins in the coin-box change-giver tubes to activate the change-giver function
- Check the money total in the coin-box

-

SELECTION SETTINGS

LAYOUT DISPLAY

Select the layout of the selections displayed in normal operation from the default ones.

To change the selections order, drag the selection icon to the new position.

To make a selection available or unavailable under normal usage, drag the selection icon from the available selections and vice versa.

DISPLAY LAYOUT OF THE SELECTION CATEGORIES

With the management by categories, the selections can be grouped by typology.

For each category, a selection layout can be chosen.

To change the selections order, drag the selection icon to the new position.

To make a selection available or unavailable in a category, drag the selection icon from the available selections and vice versa.

SELECTION CATEGORIES

Allows the creation, modification of the description and to eliminate the selection categories.

The categories are displayed in normal usage and they allow the grouping of selections by typology.

From the function, the available categories can be enabled / disabled.

Categories created are empty. To associate selections to the category, use the Display layout function

BEVERAGES

From the screen you can:

- Create new beverages and associate a recipe. The software check that there is compatibility between the recipe and the equipment's configuration (layout).

If  is displayed it means that an incompatibility has been detected

- Delete a beverage

- Duplicate and customize the beverage

EDIT BEVERAGE

It is possible to:

- Assign / modify the name of beverages displayed under normal usage.
- Select which recipe to use in preparing the beverage.
Software checks that there is compatibility between recipe and equipment configuration (layout).
If  is displayed it means that an incompatibility has been detected.
- Change the picture associated to the beverage.
- Associate a multimedia content playlist to be displayed during dispensing.
- Enable the “stop dispensing” function
- Enable the “pitcher” function for multiple consecutive dispensing to fill a pitcher.
Define the dispensing interval; under normal usage, allow change of the beverage quantity to fill a Pitcher.
- Dispense the test beverage..

RECIPES

It is possible to:

- Modify the selection recipes (displayed, available and not available).
- Delete a recipe
- Duplicate and customize a recipe
- Create a new recipe.
The newly created recipe gets saved in the “not available category”.
Then, associate the recipe to the beverage.
Software checks that there is compatibility between recipe and equipment configuration (layout).
If  is displayed it means that an incompatibility has been detected
- Search recipes by name

CREATE A NEW RECIPE

The guided procedure allows a new recipe to be created.

A screen is displayed in which:

- a name can be assigned to the new recipe
- in , a wait time (in seconds) can be assigned for message “Take beverage” at the end of dispensing.
The wait time allows the hoses to be emptied and drip into the cup.
- during dispensing, enable the option of interrupting the beverage dispensing before the end.
The “Stop” Button will be displayed in the dispensing screen.
- set the capacity of the cup used to obtain a representation indicative of the quantity of beverage in the cup.
If the quantity of beverage exceeds the set size of the cup, an error message is displayed.
- Number of continuous dispensing to fill a Pitcher

- tap “Add preparation” to add the products making up the recipe (e.g. Coffee, Chocolate, ...)

The parameter screens vary according to the product added (espresso coffee, fresh brew coffee, soluble powders, ...)

- if necessary, add personalisations to the beverage (e.g. total quantity, intensity, ...)

For each personalisation various parameters can be set.

- save the settings and return to the main screen.

From the main screen, with “Test recipe” a test selection can be dispensed to check the created recipe.

Following the test selection, the recipe can be modified.

EDIT RECIPE

From the recipe screen you can:

- change the name of the recipe
- set a wait time (in seconds) for the “Pick Beverage” message to be displayed after dispensing.
The wait time allows the hoses to be emptied and drip into the cup.
- enable, during dispensing, the ability to stop dispensing the drink before the end.
The “Stop” button will appear on screen.
- set the capacity of the cup used to obtain a representation indicative of the quantity of beverage in the cup.
If the amount of the beverage exceeds the set size of the cup, an error message is displayed.
- Set the number of dispensing cycle to fill a jug
- add more instant products to the recipe (e.g. chocolate milk ...)
- if necessary, add presets to the drink (such as sugar) and set the possible increase in the price of the drink.

To edit the settings of individual products (for example amount of water, powder, ...):

- tap the bar corresponding to the product (such as milk, chocolate, ...) to change the basic and advanced parameters.
- tap “Edit” to change the parameters of the product

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

From the main screen with “Test recipe” you dispense a selection to test the edited recipe.

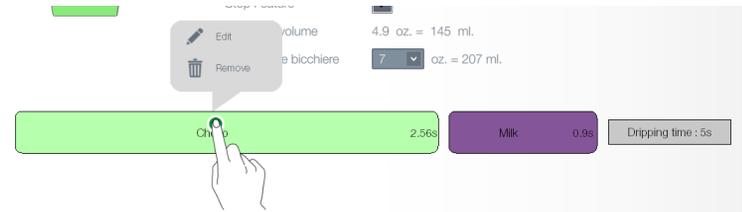


Fig. 7

BASIC PARAMETERS

You can set:

- the name of the ingredient
- the doses (water and ingredient)
- the dispensing a test beverage

Personalisations can be added to the recipe (e.g. Intensity of chocolate, variation in sugar, total quantity of water ...).

For each personalisation, specific parameters must be set.

For equipment laid out with a payment system , the selection price change can be set.

ESPRESSO ADVANCED PARAMETERS

INITIAL DELAY

Set a time delay of the ingredient; the delay is useful if recipes composed of multiple ingredients are created.

For example, when creating the recipe “Espresso with milk” a time delay between the dispensing of espresso and milk can be set.

It can be helpful to obtain a better presentation of the beverage

COFFEE CAKE SQUEEZING

The coffee cake is squeezed by the upper piston that helps removing water from the coffee cake before discharge in the solid waste tray by mechanically compressing the coffee cake.

- ON: coffee cake squeezing enabled
- OFF: no coffee cake squeezing

SQUEEZE DOWN FORCE

sets the coffee cake squeezing force exerted by the top piston at the end of dispensing.

SQUEEZE REST FORCE

it sets the safety value of the coffee cake squeeze down force.

Warning !!!

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

PRE-INFUSION DOSE

Sets the amount of water (ml) to be used during the pre-infusion.

PRE-INFUSION TIME

Sets the pre-infusion time before the infusion.

CURRENT PROFILE

Set 3 pressure profiles for the espresso infusion:

- High
- Medium
- low

With “Low” the machine shows parameters for the infusion at low pressure (see parameters fresh brew).

FRESH BREW ADVANCED PARAMETERS

INITIAL DELAY

Set a time delay of the next ingredient; the delay is useful if recipes composed of multiple ingredients are created. For example, when creating the recipe “Coffee fresh brew” a time delay between the dispensing of coffee and milk can be set.

COFFEE CAKE SQUEEZING

The coffee cake is squeezed by the upper piston that helps removing water from the coffee cake before discharge in the solid waste tray by mechanically compressing the coffee cake.

- ON: coffee cake squeezing enabled
- OFF: no coffee cake squeezing

SQUEEZE DOWN FORCE

sets the coffee cake squeezing force exerted by the top piston at the end of dispensing.

SQUEEZE REST FORCE

it sets the safety value of the coffee cake squeeze down force.

Warning !!!

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

SQUEEZE START

This parameter (in % of the delivery time) allows to establish for how long the infusion takes place at low pressure (freshbrew) and how long at high pressure (espresso.)

The modification of the parameter results in the absence or the variation of the amount of cream in the beverage.

For example:

- A value of 100% indicates that the infusion is at low pressure (fresh brew) for 100% of the time of delivery (no cream in the cup)
- A value of 80% indicates that the infusion is at low pressure (fresh brew) for 80% of the time of delivery, while the remaining 20% of the time the infusion is at high pressure (presence of cream in the cup)

K CONVERSION FACTOR

It sets the FB valve opening delay time (to lower extraction pressure) compared to the time of activation of the solenoid valve / pump.

A higher value implies a higher initial infusion pressure.

The value “0” disables the function.

VALVE OPEN PERIOD

It sets how often to open the FB valve to lower the extraction pressure.

VALVE OPEN DUTY

Only for fresh brew selections.

It sets the opening time of the FB valve to lower the extraction pressure.

Value expressed in % of the value open period

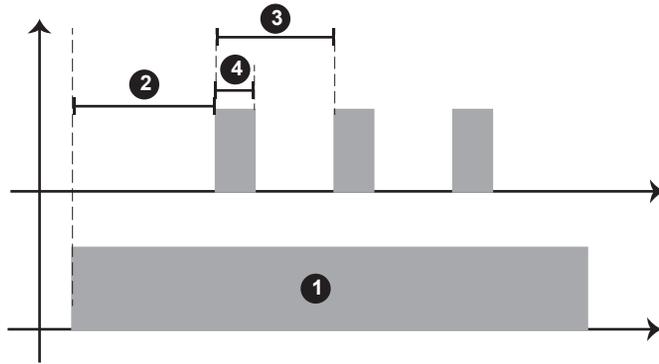


Fig. 8

- 1- Delivery time
- 2- K conversion factor
- 3- Value open period
- 4- Valve open duty

LIMIT TACHO VALUE

It sets the height of the upper piston in the chamber during infusion at low pressure (fresh brew)

Default value 430.

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

Warning !!!

A value lower than the default may result in the leakage of hot water from the brewing unit.

PRE-INFUSION DOSE

Sets the amount of water (ml) to be used during the pre-infusion.

PRE-INFUSION TIME

Sets the pre-infusion time before the infusion.

CURRENT PROFILE

Set 3 pressure profiles for the espresso infusion:

- High
- Medium
- low

With "Low" the machine shows parameters for the infusion at low pressure (see parameters fresh brew).

INSTANT ADVANCED PARAMETERS

INITIAL DELAY

Set a time delay of the ingredient; the delay is useful if recipes composed of multiple ingredients are created.

For example, when creating the recipe “Chocolate with milk” a time delay between the dispensing of chocolate and milk can be set.

It can be helpful to obtain a better presentation of the beverage

MIXER DELAY

Sets the delayed start of the mixer after the supply of water.

MIXER ABSOLUTE MIX TIME

You can set the duration of the mixing independent of the pump / valve operation time.

The duration of the mixing is set in milliseconds and is calculated from the moment of activation of the pump / solenoid valve.

RELATIVE MIXER TIME

You can set the duration of the mixing increasing or decreasing it compared to the stopping time of the pump / solenoid valve

The duration of the mixing is set in milliseconds and is calculated from the moment of activation of the pump / valve.

MIXING SPEED (LOW / MEDIUM / HIGH)

You can define the mixing speed according to the product quality you wish.

WATER QUEUE

Extends the dispensing of water in the mixer at the end of the mixing to allow adequate rinsing of the mixer.

Set the water amount (pulses of the volumetric meter).

POWDER SPEED

Set the working speed of the motor-doser to define its scope.

POWDER DELAY

You can set a delay time to dispense instant powder after the water has been dispensed in the mixer (activation of the pump / solenoid valve).

STEP

The instant powder is dispensed at regular intervals simultaneously to water dispensing.

Set how often to dispense the powder.

DECAFFEINATED CYCLE

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

Enabling this option is recommended for instant coffee.

INGREDIENT CONTAINERS

According to the machine layout, it displays the screen with the product containers.

You can enter nutritional information and a picture (such as a logo,...) for each ingredient.

Tap a container to change:

- The pairing ingredient / container (Chocolate, Espresso, Espresso 2, ...)
- Set the maximum capacity of the container to manage the “product running out” pre-alarms.
- Change the colour associated with the container.
Tap “Change colour” to modify the colour associated to that container; the preview of the new colour gets displayed
-

LAYOUT

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

It shows the arrangement of the containers and main functional groups.

You can indicate to the software the new mechanical settings of the equipment.

You can indicate:

- product within the container
- infuser unit type
- if the TEA BREWER group is present in place of a mixer or vice versa
- presence of additional containers attached to the inside door
- orientation of the jets conveying instant powder to the mixer / tea brewer

Make sure your settings match the actual configuration of the equipment.

The device adjusts the operating cycles of the functional groups according to the choices made.

Settings that do not meet the actual configuration can be dangerous and cause damage..

TYPE OF CUP

From the screen it is possible to:

- Create a new cup typology
- Under normal usage, decide whether to display the icon of the cup with relative description.
- Set the unit of measure of the cups capacity (ml, ...)
- Eliminate a cup
- Duplicate and personalise a cup.

MACHINE SETTINGS

CONFIGURATION

SELECT CONFIGURATION

Allows to manage the configuration provided by the software of the device.

You can delete and duplicate configurations and/or groups of configurations.

When using a new configuration, you can decide whether to clear the statistical data, calibrations, and maintenance counters.

Warning !!!

Before loading the configuration from another machine (cloning) ensure settings compatibility between devices.

BACKUP

Allows to save machine settings in a backup file.

RECOVERY

Allows to recover machine settings from a backup file.

The device can be reset to:

- factory settings
- custom settings previously saved.

After resetting the settings from the configuration file, enable the configuration from the “Select configuration” menu

IMPORT FROM USB

Allows to import machine settings from a saved configuration file.

Warning !!!

Import can be used to clone settings from another machine; ensure settings compatibility between devices.

EXPORT TO USB

Allows to export machine settings to a saved configuration file.

Warning !!!

Export can be used to clone current settings to another machine; ensure settings compatibility between devices.

EDIT INTERFACE STRINGS

For the available languages, you can change the names of beverages, recipes, containers, nutritional information, ... displayed on screen.

You cannot change the programming menu strings.

GRAPHIC PERSONALIZATION

EDIT / MODIFY

Allows to set some user interface graphics such as Logos, icons, colours, ...
Touch the items on a page to open the navigation window of the file system and select the new item.

CUSTOM GRAPHICS

Allows to choose the file with custom graphics to be applied to the user interface.
Displays the files loaded with the “import” function.

IMPORT

Allows to browse and select files from a USB stick with custom graphics to be imported into the machine.

EXPORT

Allows to save custom graphics to a USB stick.

GENERAL DISPLAY SETTINGS

Enable / disable the display of:

- multimedia contents available in normal usage during dispensing.
- Display of the number of dispensing cycles completed from equipment switch-on.
- price of selections in normal usage (for models with payment system)
- date and time
- boiler temperature
- screen saver, enabling it allows the entering of how long to wait for the screen saver activation.
Select whether to display a screen saver or a *playlist*
- set the touch screen's brightness; value 100 sets maximum brightness..

PLAYLIST

Allows the creation and management of a *playlist* of entertainment contents.

A *playlist* contains videos and/or image sequences that are played during beverage preparation.

Adding videos or images to the.

To a new *playlist* a name must be assigned.

The *playlist* contents can be display in modality:

- casual 

or

- cyclic  .

RSS FEED AND WEATHER

in normal operation and during the delivery of the selection, you can watch the rss feed (news) and weather reports.

To watch the news and weather reports, the machine must be connected to the Internet.

WEATHER

- indicate the city for the weather forecast and select the URL of the weather service to use.

FEED / TEXT

By default, the machine is set to show fixed text messages (the machine is not connected to the internet).

Type the text that you want to be displayed in normal operation. You can add more fixed text messages, touching “Add New”.

With the Internet connection is enabled you can watch the news using an RSS feed.

Choose the Internet address of the RSS feeds from the default ones or enter a custom address.

INPUT SENSORS SETTINGS

The function group allows to set the operation of some of the equipment sensors.

CONTAINERS LEVEL

Enables / disables the level sensors of the containers.
Displays the various containers with filling levels and adjustable parameters:

- Calculated amount: enables the counter that manages the “product running out” prealarms.
- Sensor: enables the sensor signalling “Empty canister”
- Total capacity: set the grams of the maximum capacity of the canister
- Threshold value: set the grams of the prealarm limit

You can check the level of canisters in the Machine status window

If the filling percentage of canister is shown in red, means that canister is in pre alarm.

SOLID WASTE

Enables / disables the solid residue count that manages the “residues full” warning.

- Set the maximum capacity of the solid residue container; the capacity is expressed in number of selections.
- Set the prealarm threshold value (number of selections)

You can check the level of solid waste canister in the Machine status window

If the filling percentage of solid waste container is shown in red color, means that solid waste container is in pre-alarm.

CUP SENSOR

Enables / disables the cup sensor.

With the sensor cup enabled the machine delivers the drink only with in the Presence of the cup.

If you request a selection without placing the cup the machine shows message “place cup “.

- Set “high” sensitivity for glasses / cups small and semi - transparent .
- Set “ low” sensitivity for glasses / cups large and colorful

CALIBRATIONS

FLOW METER CALIBRATION

The flow meter calibration allows to obtain the correct amount of water provided from the recipes.

To calibrate the flow meter, proceed as follows:

- Dispense and pick up the preset amount of water
- Measure the amount of water dispensed (in cc.)
- Enter the measured value.

You may need to use an adjustment value (positive or negative) of the calibration for beverages dispensed by the brewing unit.

GRINDING CALIBRATION

Calibration allows adjustment of the grinder working speed according to the grams to be ground

To calibrate, proceed as follows:

1. Start the calibration procedure: a dose of coffee beans gets ground and released
2. Weigh the product to be ground
3. Enter the weight value just measured.

SOLUBLE PRODUCTS MOTOR-DOSER CALIBRATION

The calibration of soluble products and pre-ground coffee motor-dosers allows adjustment of the motor-doser operating speed to define the capacity in gr/sec.

To calibrate, proceed as follows:

1. Dispense powder at minimum speed.
2. Weigh the soluble powder dispensed.
3. Enter the value of the weight measured.
4. Dispense the powder at maximum speed.
5. Weigh the soluble powder dispensed.
6. Enter the value of the weight measured.

PUMPS / SOLENOID VALVES CALIBRATION

The calibration allows adjustment of the flow capacity in cc/sec.

To calibrate, proceed as follows:

1. Dispense water at minimum flow capacity.
2. Measure and enter the dispensed water quantity.
3. Dispense water at maximum speed.
4. Measure and enter the dispensed water quantity.

OUTPUT CONFIGURATION

INFUSER UNIT

- Empty coffee: a sensor detects the rotation of the grinder during the grinding; in case of block (e.g. foreign bodies), or excessive speed (grinder empty), the control blocks the selections using the grinder.
- Allows position setting of the infusion chamber's infuser unit. Set the infusion chamber's position to allow the Coffee powder to be arranged more evenly in the infusion chamber.

FANS PARAMETERS

Enables / disables operation of the equipment fans.

VAPOUR SUCTION

- OFF: the fan gets activated only during the preparation of beverages and for 30 seconds from the end of the beverage preparation.
- ON: the fan is always active.

CPU FAN

enables / disables automatic management of the CPU fan.

LIGHTING

Allows to set the lighting parameters of the machine.

COLD WATER PARAMETERS

Only for models dispensing cold water.

The cold water calibration allows the correct quantity of water in the recipes to be obtained.

The calibration procedure:

- Dispenses a pre-set quantity of water
- Then, measure the quantity of water dispensed (in ml)
- Enter the measured value.

TEA INFUSER

TEA INFUSER “SERVICE” POSITION

Only for models with tea infuser.

Sets the tea infuser unit to the “service” position.

This “service” position is useful when operations are needed that require dismantling of the tea infuser unit from the equipment.

CLEANED TEA BREWER MOUNTED

Zeroes the counters managing the signalling that “cleaning of tea infuser” must be carried out.

Confirm after having carried out the cleaning and reassembled the tea infuser in the equipment.

MAINTENANCE

WASH / RINSE

You can enable / disable the machine automatic rinse cycle programming.

Set:

- the type of wash / rinse to be performed (complete, mixers only, brewing unit only, ...)
- the day to perform the wash / rinse cycle
- the time of execution of the wash / rinse cycle.

You can add and remove wash / rinse automatic cycles.

The automatic washes/rinses use hot water: danger of burns.

During the wash/rinse, a message appears.

NEXT MAINTENANCE

Set the number of days and / or the number of dispensed beverages after which the equipment displays “perform maintenance”.

MAINTENANCE ALERT

Resets the counter which handles maintenance alerts.

Reset the counter only after completing all maintenance.

WASHING NOTIFICATION

Set the number of hours and/or dispensing cycles reached, when the equipment displays a message to “carry out a washing” of the various units fitted.

The performance of a washing can be made compulsory by enabling the relative parameter.

GENERA CONFIGURATION

TANK

The machine can be supplied by mains or internal tank. With this function you can define whether the device is powered from the mains (tank = OFF), from tank with water level sensor (tank = ON).

ENABLING THE END OF DISPENSING BUZZER

enables / disables end of dispensing buzzer

POWER SUPPLY

Allows to set the type of electric connection or the voltage supply used for powering the equipment.

Check the type of electrical connection used before making your choice.

The setting allows correct management of electrical components and optimising of all the equipment operating cycles.

BOILER PARAMETERS

- Temperature: sets the operating temperature of the boiler
- Minimum temperature for dispensing beverages: sets the minimum temperature to enable beverages

With the parameters “Temperature Threshold” and “Minutes” you can set the temperature maintenance cycle of the boiler. For example, if no beverages have been dispensed for the set minute, the boiler water temperature is increased by the degrees set in the “Temperature threshold”.

BOILER LOSS PARAMETERS

These parameters allow control over the displaying of the “boiler loss” fault.

The fault is displayed in stand-by mode:

- When the overall time (plus activations) of the water inlet solenoid valve reaches the set value

or

- When the activation time (single activation) of the water inlet solenoid valve reaches the set value.

MIXER ANTI-LOCK

Sets how long after the last selection with instant beverages the mixer is briefly turned on (anti-lock function)
This function is useful when residues of instant powder remain in the mixer.

MACHINE INFORMATION

FAULTS

The machine has a number of sensors for keeping the various functional groups under control. When an anomaly is detected, the machine displays the type of fault and the machine (or part of it) is put out of service. Detected faults get recorded in special counters.

FAILURE HISTORY FILE

Use this function to display the failure history file. The history file shows the failure with the corresponding date and time.

EVENT HISTORY

This function allows to view and filter the events recorded from the equipment by:

- All events
- Access to the programming menus.
- Changing parameters
- Cleaning

Touch the “Delete” button to delete the displayed events.

FAULTS

Displays the machine faults.
If there are no faults the list is empty

PUMP FAULT 1...7

If the current absorption of a pump is not between the range of default values, all the selections in which the pump is involved are disabled.

FAULTY MIXER 1...6 (WHIPPER FAULT)

If the current absorption of a mixer motor is not between the range of default values, all the selections in which that mixer is involved are disabled.

SOLENOID VALVE 1...7 (VALVE FAULT)

If the current absorption of a solenoid valve is not between the range of established values, all the selections in which that solenoid valve is involved are disabled.

SHORT CIRCUIT MOSFET

If a control device for the DC motors on the activations board (mosfet) remains active, the machine will signal a fault.

SHORT CIRCUIT

If the software detects a short circuit in one of the DC motors connected to the activations board, this fault will be displayed. It is possible that at the same time of this, a fault is also detected on one of the DC motors.

VOLUMETRIC COUNTER

No counting of the volumetric counter within a maximum time.

WATER LEAKAGE

The Air-break micro switch signals the lack of water without a previous dispensing and opens the water inlet solenoid valve, or activates the self-feeding pump (attempt to fill the air break). Check that there are no water leaks in the hydraulic circuit of the machine (disconnected hoses, ...)

AIRBREAK MICRO

The Air-break microswitch never signals the lack of water following a dispensing.

AIR-BREAK FILLING TIME OUT

The air-break micro switch does not report the achievement of the water level in the Air-break in the allotted time during filling.

COFFEE UNIT FAILURES

The position control microswitch of the coffee unit is read during the whole dispensing cycle.

According to the micro readout and the dispensing phase of the unit, any failure is declared by locking the selections based on espresso coffee.

COFFEE UNIT - MICRO UNIT FAILURE -

While the brew unit is being handled, the control micro is not operated within a certain time limit.

This failure may be associated with another positioning failure of the coffee unit.

COFFEE UNIT - START UNIT FAILURE -

The microswitch signals the coffee unit has not moved from the stand-by position.

COFFEE UNIT - BREW UNIT FAILURE -

The control micro signals that the coffee unit has not reached the brew position.

COFFEE UNIT - DISPENSING UNIT FAILURE -

During the brew phase, the control micro signals that the espresso unit is being handled.

COFFEE UNIT - DISCHARGE UNIT FAILURE -

At the end of the brewing phase, the control micro signals that the coffee unit has not reached the “used dose discharge” position.

COFFEE UNIT - STANDBY UNIT FAILURE -

The control micro signals that the brew unit has not moved back to the stand-by position after having discharged the coffee dose.

BOILER ERROR

The operating temperature of the boiler is not reached after several temperature measurements in a given time.

The device is taken out of service.

BOILER LEAKAGE

Signaling a possible loss of the boiler pressure during a “pressurization cycle”.

THOROUGH MACHINE CLEANING

Reports the need to perform a thorough cleaning of the machine.

This message is displayed when the time limit or the configured number of selections are reached.

WASHING OF THE ESPRESSO UNIT WITH TABLETS

Reports the need to wash the espresso unit using sanitizing tablets.

This message is displayed when the time limit or the configured number of selections are reached.

WASHING OF THE MIXERS

Reports the need to wash the mixers.

This message is displayed when the time limit or the configured number of selections are reached.

WASHING OF THE TEA BREWER

Reports the need to wash the tea brewer unit.

This message is displayed when the time limit or the configured number of selections are reached.

COIN BOX

if it receives a pulse for more than 2 seconds on a line of the validator or if the dialog with the coin box is interrupted for more than 30 seconds (Executive protocol) or 75 seconds (BDV protocol).

LIQUID RESIDUE CONTAINER FULL

Closing the contact of the liquid waste tray displays the message "Liquid residue container full".

Empty the liquid residue container and reposition it to reset the fault.

DRIP TRAY NOT PRESENT

The liquid residue container does not operate the micro switch indicating the presence of the container.

Check that the liquid residue container is correctly positioned inside the machine.

WATER TANK EMPTY

Lack of water from the mains or self-feeding tank.

Make sure that the machine is connected to the water mains and that the tap is open or the tank is full of water.

Touch the “Reset” button to restore the operation of the machine.

EMPTY COFFEE

The grinder exceeds the normal speed for more than 5 seconds.

Instant beverage products remain available.

Make sure the coffee bean container is full.

WATER LOW PRESSURE

The pressure switch detects low water pressure inside the machine.

GRINDER SHUTDOWN

A sensor detects the effective rotation of the grinder 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.

This option can be used to enable/disable the check of the grinder rotation.

MACHINE BOARD

Lack of communication between the machine board and the CPU board.

Check the electrical connections between the two boards.

ESPRESSO LOW TEMPERATURE

The espresso boiler temperature is lower than the minimum temperature programmed to dispense espresso.

Wait for the minimum dispensing temperature to be reached.

EMPTY DOSER 1...7

The minimum level of instant powder in the container associated with motor-doser has been reached.

The signal is active if they controls on instant powder containers are activated.

Check the level of instant powder in the containers.

TEA BREWER

It is due to a positioning error of the tea brewer piston.

The piston position is indicated by the microswitch located on the tea brewer unit.

Only selections with tea are disabled.

TEA BREWER SCRAPER BRUSH

Scraper brush position error due to the ejection of residues from the tea brewer unit.

The scraper brush position is indicated by the microswitch located on the tea brewer unit.

Only selections with tea are disabled.

EMPTY ESPRESSO DISPENSER 1...2

The minimum level of coffee beans in the container has been reached.

The signal is active if they controls on coffee beans containers are activated.

Check the level of coffee beans in the containers.

MACHINE DATABASE NOT AVAILABLE

The database that manages the machine configurations is not present on the machine, it cannot be loaded or created.

Make sure there is sufficient memory space.

STATISTICS

SHOW STATISTICS

- Displays statistics on selections
Displays selections statistics showing:
- the number of dispensed selections
 - date and time of last dispensing

STATISTICS RESET

Touch the “Delete” button to delete the selections statistics.

SHOW AUDIT

- Displays the total number of payments and the total deliveries since last statistics reset, for each selection.
The audit data can be displayed by:
- sold dispensing
 - free dispensing
 - test dispensing
 - value

BEVERAGES NUMBERING

Allows the assigning of an identification number for each selection.
The identification number associated to the selection gets recorded in the statistics.

FAVOURITES

The “favourites” are shortcuts to frequently used functions.
After a function is added to the “favourites”, it will be enough to view the “favourites” and touch the function for quick access.

FAVOURITES

Displays all frequently utilised functions that were saved as “preferred”
Tap the selected function to access it.

REMOVE A FUNCTION FROM THE “PREFERRED”:

- From the preferred list, tap the “basket” icon
- Tap the function to be removed from preferred.

DELETE FAVOURITES

Removes all functions from the “favourites”

MACHINE ID

Allows you to enter a number and the name that identifies the machine.

The code can be used for the identification of the machine for the analysis of the statistics.

INSTALLATION DATE

Stores the current date as the date of installation .

Before storing the date make sure you have set the correct date and time.

The date is used for the management of maintenance intervals.

TECHNICAL SUPPORT CONTACT INFORMATION

Allows to enter the contact information (name and phone number) of the technical support in case of failure.

This information will be displayed in case of failure.

You can decide whether the information should be displayed for faults that block the equipment and/or faults that do not block the equipment.

ENERGY SAVING

The energy saving function allows to enable, change the parameters, and set the time frames of the machine energy saving.

SETTINGS

Enables / disables power saving features.

The machine allows to manage a few energy saving profiles. Some parameters of each energy saving profile can be customized.

“SOFT MODE” PROFILE

This profile enables energy saving after a period of inactivity of the equipment.

Upon a request for a selection the machine exits the energy saving mode.

It is possible to:

- set the number minutes of equipment inactivity after which the profile is to be activated
- set the maintenance temperature of the boiler in the energy saving phase
- enable / disable the door's lighting
- Select the brightness level of touch screens among those pre-defined.

“DEEP MODE”PROFILE

This profile is active on the set time frames.

In the set time frames, the boiler temperature is lowered and the maintenance temperature is set.

It is possible to:

- set the maintenance temperature of the boiler in the energy saving phase
- set by how many minutes to advance the boiler’s heating before the end of the of the time band.
e.g. 5 minutes: 5 minutes before the end of the time band, the boiler heating cycle to reach the operating temperature gets activated.
- enable / disable the door’s lighting
- Select the brightness level of touch screens among those pre-defined.

TIME FRAMES

Allows to set the energy saving profiles time frames.

- Tap the day when to set the time frames.
- Tap the “+ Add” button then the line of the profile to position a rectangle indicating the time.
- Drag the rectangle to precisely define the time.

To eliminate a rectangle, tap the “- remove” button, then tap the rectangle to be eliminated.

Settings made for all days of the week or per single day can be copied.

Tap “Copy day profile” to be able to:

- Copy the set time bands in a single day of the week; tap the day in which to set energy saving then tap “paste daily profile”
- Copy the set time bands for all days of the week; tap “paste daily profile into all days”

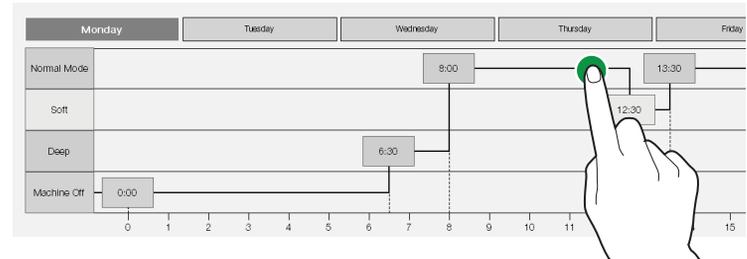


Fig. 9

PAYMENT SYSTEMS

You can decide which protocols to enable for the payment systems available and manage the relative functions..

Some parameters shared by several payment systems keep the set point even if you change the type of system.

COMMON PARAMETERS

IMMEDIATE CHANGE

The amount relative to a selection is generally cashed after the machine has sent the “Successful selection” signal.

If you enable this function, which is disabled by default, the cash signal is sent at the start of the dispensing cycle.

The setup of this parameter is compulsory.

DECIMAL POINT POSITION

To set up the decimal point position, i.e.:

- 0 decimal point disabled
- 1 XXX.X (one decimal digit after the point)
- 2 XX.XX (two decimal digits after the point)
- 3 X.XXX (three decimal digits after the point).

TYPE OF DISPENSING

To set the operation mode by multiple or single dispensing. In case of multiple dispensing, the change is not automatically given at the end of a successful delivery, but the credit will remain available for further dispensing. If you press the coin return button, the remaining credit will be returned if its value is lower than the maximum change value.

OBLIGATION TO BUY

To enable/disable the operation of the coin return button before dispensing a product.

- ON: the change is returned after having selected a product
- OFF: the change is returned just after having pressed the coin return key (the machine is acting as a coin changer)

VALIDATOR

DECIMAL POINT POSITION

To set up the decimal point position, i.e.:

- 0 decimal point disabled
- 1 XXX.X (one decimal digit after the point)
- 2 XX.XX (two decimal digits after the point)
- 3 X.XXX (three decimal digits after the point).

CREDIT PROGRAMMING (OVERPAY)

You can decide whether:

- to cash the credit exceeding the selection amount after a well-defined time interval in seconds (parameter “deleted 000”)
- to leave the credit exceeding the selection amount at disposal for a subsequent selection (parameter “maintained”)

OVERPAY TIMEOUT

Allows the setting of the timeout after which to release the credit without having requested a selection.

MDB

CREDIT PROGRAMMING (OVERPAY)

You can decide whether:

- to cash the credit exceeding the selection amount after a well-defined time interval in seconds (parameter “deleted 000”)
- to leave the credit exceeding the selection amount at disposal for a subsequent selection (parameter “maintained”)

OVERPAY TIMEOUT

Allows the setting of the timeout after which to release the credit without having requested a selection.

MAXIMUM CREDIT

Use this function to define the maximum accepted credit for inserted coins.

MAXIMUM CHANGE

You can set a limit on the total amount of the change the coin mechanism will pay as soon as you press the change button or after one single dispensing.
The credit exceeding the amount you have programmed by this function will be cashed.

ACCEPTED COINS

To define which coins shall be accepted among those recognised by the validator when the change tubes are full.

For the coin/value correspondence check the coin mechanism configuration.

COINS ACCEPTED FOR EXACT CHANGE

To define which coins shall be accepted among those recognised by the validator when the machine is in the “exact amount” mode.

For the coin/value correspondence check the coin mechanism configuration.

RETURNED COINS

To define which coins shall be used to give the change among those available in the tubes. This parameter is active only with the coin mechanisms not intended to manage the choice of the tube in use automatically (Auto changer payout).

For the coin/value correspondence check the coin mechanism configuration.

EXACT CHANGE ALGORITHM

Allows to choose the control algorithm so that the machine is able to give change at the end of the selection.

Each algorithm verifies a set of conditions, (the amount of coins in the tubes or the empty or full status) of the tubes which will be used by the coin box to return the change.

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

For simplicity reasons the combination is described with reference to the 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

E.g.: algorithm “6” will display message “Doesn’t give change” when all tubes (A,B and C) are at minimum level.
Algorithm “04” will display message “Doesn’t give change” only when tube A (coin of least value) will have reached minimum coin level.

PRICES

CURRENCY SYMBOL

Set up the currency symbol during the credit display.

SELLING PRICES

The equipment is able to manage up to 4 different prices for each selection.

The prices can be active according to the set time band (standard or promotional).

Prices are grouped in 4 lists, for each of the 4 lists the price can be set both in a global way (same price for all selections) or per single selection.

PASSWORD FREE VEND

enables / disables the free dispensing of one or more selections through the use of a password.

Set:

- the password for a single free dispensing

or

- the password for free dispensing of multiple selections

PRICE BY TIME BAND

Allows the setting in time bands (standard or promotional) for sales at differentiated prices.

- Touch the day when to set the time frames.
- Tap the "+ Add" button then tap the band's line to position a rectangle showing the time.
- Drag the rectangle to precisely define the time.

To eliminate a rectangle, tap the "- remove" button, then tap the rectangle to be eliminated.

Settings made for all days of the week or per single day can be copied.

Tap "Copy day profile" to be able to:

- Copy the set time bands in a single day of the week; tap the day in which to set energy saving then tap "paste daily profile"
- Copy the time bands set for all days of the week; tap "paste daily profile to all days"

IMPORT / EXPORT

Includes all the functions to export and import statistics, machine settings, graphics packages, ...

EVADTS

Allows the exporting of EVADTS data to USB pen drive and/or to data acquisition devices (RS232, IrDA, telemetry, ...).

COMMUNICATION PROTOCOL

Through this function a decision is possible as to the communication protocol to be used for communicating with data acquisition devices.

DDCMP - EDDCMP

with the following configurable parameters:

- **Baudrate:** is the transmission speed to be used in communications between the equipment and data acquisition devices.
- **Pass code:** this is an alphanumeric code (0-9; A-F) which must be equal to the one of the data transfer terminal for permitting its identification.
Default setting 0
- **Security code:** this is an alphanumeric code for mutual recognition between machine and EVA DTS terminal.
Default setting 0
- **End of transmission:** if enabled, can recognise the end of transmission signal (EOT) that is sent upon the last packet and can interrupt data transmission.

DEX/UCS

with the following configurable parameters:

- **Baudrate:** is the transmission speed to be used in communications between the equipment and data acquisition devices.

VIDEO

Allows the importing / exporting of videos from the equipment through a USB pen drive.
A directory and/or file can be created / deleted.

SUPPORTED VIDEO FORMATS

- MP4 codes H264 and 25 frames/sec
- AVI codes XVID, MPEG2 and 25 frames/sec
- MOV codes MPEG4 and 25 frames/sec
- maximum screen saver resolution 1200x800
- entertainment video resolution 640x480.

Using high quality contents affects general performance.

IMAGES

Allows the importing / exporting of images from the equipment through a USB pen drive.
A directory and/or file can be created / deleted.

IMAGE FORMATS SUPPORTED

- JPG, PNG

Using high quality contents affects general performance.

ERRORS LOGFILE

Exports the errors in the machine to a log file.
The logfile is saved on a USB device.

SYSTEM

COMPONENTS TEST

Allows to check the main components of the machine.
The components that can be checked are displayed.
Tap the component to be tested on the touch screen.

INFUSER UNIT

Starts the handling of the brewing unit

ESPRESSO CONTAINER

A dose of coffee beans is ground

MOTOR-DOSERS

The instant powder motor-doser associated with the selected powder is activated for 2 seconds.

MIXER

The mixer is activated for two seconds

SOLENOID VALVES / PUMPS

The solenoid valve or the pump is activated for 2 seconds.

TEA INFUSER UNIT

Handling of the tea infuser unit gets started

LIGHTING

The equipment lighting gets activated

SENSORS AND INPUT DEVICES TEST

A screen appears with the status of the equipment control devices (sensors, microswitches,...).

The status of the ON/OFF devices is shown in green if the device is active/enabled, in red if inactive/disabled.

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

CUP SENSOR TEST

Place a cup in front of the / cup to the sensors to verify the operation .

The machine shows the values measured by the cup sensor. The function is useful for checking the sensitivity value of the cup sensor.

TEST OF OUTPUT DEVICES

Allows checking operation of the equipment's main components.

Components that can be activated get displayed.

For safety reasons the test must be carried out with door closed.

Keep the device button pressed to activate it and to check its operation.

Upon releasing the button, the device will be deactivated.

TOUCH SCREEN TEST

Allows testing of the touch screen.

Tap and drag finger on the touch screen, during testing traces are left on the touch screen.

BOILER FILLING AND EMPTYING

You can fill and empty the boiler.

The hydraulic circuit filling is automatic.

In case of maintenance at the hydraulic circuit or if one were to form significant water voids: perform the manual filling of the hydraulic circuit.

With the emptying boiler function is open a solenoid valve to allow air to enter into the boiler

BOILER FILLING

The boiler is filled when the machine is installed.

Use this function to fill the boiler after maintenance of the hydraulic system or if consistent water voids are formed.

BOILER EMPTYING

The boiler must be emptied by technical personnel.

The boiler water is very hot and causes burns.

Before emptying the boiler, wait for the water in the boiler to cool down.

The equipment includes a procedure for “quick cooling” of the boiler.

The emptying function opens a solenoid valve of the boiler to allow the entry of air in the boiler.

MACHINE PARAMETERS TEST

Sets the activation time of the components during the self-test.

FACTORY RESET

Allows to restore the device to factory settings.

Warning !!!

All statistical data, failure list, containers level control, and settings are lost.

DATE TIME

Date and time are used to record events (for example faults, ...), for the management of programmed wash and for maintenance warnings.

Set current date and time.

LANGUAGE

The language used in the pre-defined message-displaying, user interface and menus can be changed.

Some languages are not available for the “change language” function; to add other languages the flag icon must be shifted to “Languages used”

To eliminate a language from the “change language” function it is sufficient to drag the flag icon to the “Disabled languages”.

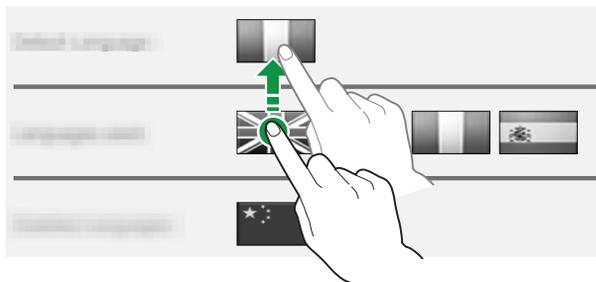


Fig. 10

USER PROFILES

The use of some programming functions can be enabled / disabled by utilising the access profiles.

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

Each user profile has a password.

Default passwords are:

- Technician (4444),
- Distributor (3333),
- Charger (2222)
- User (1111)

Advanced programming functionalities must only be reserved for persons with specific knowledge of the equipment (technical personnel) and of hygiene regulations.

With this function you can change:

- the name of the user profile; tap the profile name to change it
- the access password for each user profile; tap “change password” under the user profile name to modify.

NETWORK / NETWORK

ETHERNET

Allows to enable and configure the network card of the equipment.

The device supports TCP/IP.

It shows all network parameters that can be changed.

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

- assigned automatically (DHCP)

or

- manually.

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

The MAC address is a unique address assigned by the manufacturer that identifies the network card of the equipment.

The MAC address cannot be changed.

WI-FI

Allows to enable and configure the wi-fi connection of the equipment.

The equipment supports leading wi-fi security protocols.

Enter the identifier of the Wi-Fi network (SSID) to connect to.

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

- assigned automatically (DHCP)

or

- manually.

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

The MAC address is a unique address assigned by the manufacturer that identifies the network card of the equipment.

The MAC address cannot be changed.

BLUETOOTH

Allows to enable and configure the Bluetooth connection and exchange data (short distance) between the equipment and other devices.

To connect to a Bluetooth device you need to:

- enter the equipment identifier.

- make the equipment visible when searching for Bluetooth devices

- enter the authentication code and associate the Bluetooth device to communicate.

In discovery mode a wireless signal is transmitted that allows the device to be detected by other devices.

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

SOFTWARE UPDATE

Shows the software version of the machine.
It also allows to update the machine software with a USB stick or via network connection.

UPDATE FROM USB

- You can update the machine software with a USB stick.
- insert the USB stick with the new software
 - In the navigation window of the USB stick file system and select the file with the software update.

INTERNET UPDATE

- Only for devices set for internet connection.
You can update the machine software via connection to an FTP server with software updates available.
Enter:
- the address of the FTP server with software updates
 - the credentials for access to the FTP server (username and password).

INFORMATION

Allows to view all the information about the device software (version, theme used, machine configuration, ...)

CONNECTIVITY

E-MAIL NOTIFICATIONS

In order to send notifications via e-mail the networks settings must have been configured.
Enable the function to allow the setting of parameters for sending e-mails.
Configure the parameters according to the ISP (Internet Service Provider) used.

The equipment sends notifications via e-mail. It is impossible to receive e-mails on the equipment.

Select which events and/or faults can be notified via e-mail.
The sending of notifications via e-mail at pre-defined days and times can be programmed.

N&W GLOBAL VENDING S.p.A.

ad unico socio
Sede amministrativa e operativa: Via Roma 24
24030 Valbermo (BG) Italia
Telefono +39 035 5061111
Fax +39 035 5061112
www.nwglobalvending.com

Sede legale: Via Tommaso Grossi 2
20121 Milano (MI) Italia

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**DICHIARAZIONE DI CONFORMITÀ
DECLARATION OF CONFORMITY
DECLARATION DE CONFORMITE
CONFORMITÄTSERKÄRÄRUNG
FÖRSÄKRAN OM ÖVERENSSTÄMMELSE
ÖVERENSSTEMMELSEERKLÄRUNG
VERKLARING VAN OVERENSTEMMING**

Italiano Si dichiara che la macchina, descritta nella targhetta di identificazione, è conforme alle disposizioni legislative delle Direttive Europee elencate a lato e successive modifiche ed integrazioni.

English The machine described in the identification plate conforms to the legislative directions of the European directives listed at side and further amendments and integrations

Fransais La machine decrite sur la plaque de d'identification est conforme aux dispositions legales des directives europeennes entronees ci-contre et modifications et integrations successives

Deutsch Das aut dem Typenschild beschriebene Gerät entspricht den rechts aufgeführten gesetzlichen Europäischen Richtlinien, sowie anschließenden Änderungen und Ergänzungen

Svenska Maskinen som beskrivs på märkskylten överensstämmer med de lagliga föreskrifterna, Europadirektiven som anges i listan bredvid och följande ändringar och integreringar

Dansk Maskinen beskrevet på identifikationspladen stemmer overens med lovgivningerne, der er indeholdt i de Europæiske direktiver listet til højre, og med de efterfølgende ændringer og tillæg

Nederlands De machine beschreven op het identificatieplaatje is conform de wetsbepalingen van de Europese Richtlijnen die hiernaast vermeld worden en latere amendementen en aanvullingen

Italiano Le norme armonizzate o le specifiche tecniche (designazioni) che sono state applicate in accordo con le regole della buona arte in materia di sicurezza in vigore nella UE sono:

English The harmonised standards or technical specifications (designations) which comply with good engineering practice in safety matters in force within the EU have been applied are:

Fransais Les normes harmonisées ou les spécifications techniques (designations) qui ont été appliquées conformément aux règles de la bonne pratique en matière de sécurité en vigueur dans l'UE sont :

Deutsch Die harmonisierten Standards oder technischen Spezifikationen (Bezeichnungen), die den Regeln der Kunst hinsichtlich den in der EU geltenden Sicherheitsnormen entsprechen, sind:

Svenska De harmoniserade standarderna eller de tekniska specifikationerna (be-teckningar) som tillämpas i överensstämmelse med sunda tekniska principer ifråga om säkerhet som gäller inom EU är

Dansk Produkter er produceret i henhold til følgende harmoniserede EU-standarder eller tekniske specifikationer (belegnelser), og er produceret i overensstemmelse med god fremstillingspraksis vedrørende sikkerhed:

Nederlands De geharmoniseerde normen of technische specificaties (aankwijzingen) die toegepast werden volgens de in de EU van kracht zijnde eisen van goed vakmanschap inzake veiligheid zijn de volgende:

**Targhetta di Identificazione
Identification label**

Directive europee/ European directives	Sostituita da Replaced by
2006/95/CE	2014/35/EU
2006/42/CE	
97/23/EC	
2004/108/EC	2014/30/EU
90/128/EC	2002/72/CE+ 2008/39/CE
80/580/EEC and 89/109/EEC	EC 1935/2004
EC 10/2011	
2002/95/EC	2011/65/EC
2002/96/CE	2012/19/UE

Nome armonizzate / Specifiche tecniche

Harmonised standards / Technical specifications

EN 60335-1:2002 + A1:2004 + A11:2004 + A12:2006
+ A2:2006+ A13:2008
EN 60335-2-75:2004 + A1:2005 + A11:2006 +
A2:2008 + A12:2010
EN 62233:2008
EN 55014-1:2006 + A1:2009 + A2:2011
EN 55014-2-1997 + A1:2001 + A2:2008
EN 61000-3-2:2014
EN 61000-3-3:2013

Il fascicolo tecnico è costituito presso:

N&W GLOBAL VENDING S.p.A.

The technical file is compiled at:

ANDREA ZOCCHI

C.E.O