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## ESPRESSO COFFEE MACHINE

Use and maintenance manual. Instructions for the user.

ENGLISH



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## Read carefully

all parts of this manual before using the product.

The espresso coffee machine that you have purchased has been designed and manufactured with innovative methods and technology which ensure long lasting quality and reliability.

This manual will guide you in discovering the advantages of selecting this product. You will find information on how to get the best out of your machine, how to always keep it efficient and what to do if you should have any problems.

Keep this manual in a safe place. If you lose it, you can ask the manufacturer for another copy.

ENJOY YOUR READING ... AND YOUR COFFEE

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## How to use this manual

The manufacturer reserves the right to make any improvements and/or modifications to the product. We also guarantee that this manual reflects the technical state of the product at the time it is marketed.

We would like to take this opportunity to invite customers to make any suggestions to improve the product or the manual.

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## General warnings

- After removing the packaging, check the condition of the appliance. If in doubt, do not use it but contact the retailer directly.
- The packaging material must not be left within the reach of children since it is a potential source of danger. It is advisable to keep the packaging until after the guarantee has expired.
- Before using the machine, make sure that the mains voltage corresponds to the information on the data plate of the machine.
- The installation must be done in accordance with the safety standards in force and by qualified and trained personnel. Incorrect installation may be harmful to people, property or animals.
- This appliance is completely safe only if it is connected to an effective grounding system, executed as required by current safety standards. The electric system must be equipped with a suitable differential circuit breaker. It is important to have compliance with these requirements checked. If in doubt, have the system carefully checked by qualified personnel. The manufacturer cannot be considered responsible for any damage caused by an inadequate electric system.
- Upon installation of the machine, qualified personnel will be required to install a main switch as required by current safety regulations, with a distance of contact aperture greater than or equal to 3 mm.
- It is not advisable to use extensions or electrical adaptors with multiple outlets. If their use is indispensable, use only simple or multiple plug adaptors and extensions which are in accordance with the safety standards in force. Never exceed the power value in kW indicated on the simple adaptor and on the extensions and the maximum power value indicated on the adaptor.
- The espresso coffee machine is intended for the preparation of hot beverages such as coffee, tea or warm milk. This appliance is to be used only for its intended purpose. Any other use is considered improper and therefore dangerous. The manufacturer cannot be responsible for any damage caused by incorrect and unreasonable use.

- When using the electrical appliance, several safety standards must be observed:
  - do not touch the appliance when hands or feet are wet or damp;
  - do not use the appliance in bare feet;
  - do not use extensions in rooms where there are showers or baths;
  - do not pull on the power cord to disconnect the appliance from the power outlet;
  - do not leave the appliance exposed to atmospheric agents (rain, sun, etc.);
  - do not allow the appliance to be used by children or the disabled.
- Make sure that the machine is used in a room that is sufficiently lit, aerated, and hygienic.
- The spaces accessing the machine and the main switch must be left clear, in order to allow the user to intervene without any constriction and to be able to leave the area immediately in the case of necessity.
- Do not spray water on the machine to clean it. Clean daily following the instructions given in this manual.
- Before any maintenance, disconnect the appliance from the electrical mains through the main switch.
- For daily cleaning, follow the instructions in this manual.
- In case of breakdowns or poor functioning, turn off the appliance and unplug it. Do not attempt any repairs; call for specialised technical service.
- Any repairs must be done only by the manufacturer or an authorised service centre using original spare parts only. If this requirement is not observed, the safety of the appliance is compromised and the guarantee becomes void.
- The power cord of the appliance must not be replaced by the user. If the cord is damaged, turn the machine off and contact professionally qualified personnel only.
- Inside the device is a lithium button battery to prevent programming data loss.
- If you should decide not to use the appliance any longer, unplug it and have it drained of water by qualified personnel.
- To guarantee that the machine is efficient and to keep it operating correctly, it is indispensable to follow the manufacturer's instructions, having periodical maintenance and a check of all the safety devices performed by qualified personnel.
- Do not expose your hands or other body parts in the direction of the coffee dispensing spouts or in the direction of the steam and hot water dispensing terminals. The steam and the water that exit the nozzles can cause burns.
- When in operation, the steam and water nozzles and the filter-holder cups are extremely hot and should be handled with care only in the indicated parts.
- Cups must be placed on the special cup-heating surface only after having been thoroughly dried.
- The dishes belonging to the machine itself are to be placed on the cup-heater surface. It is incorrect to place any other object on this surface.
- The appliance must not be used by people (including children) with reduced physical, sensorial or mental capacities or by people without experience or knowledge, unless they can be supervised by or receive instructions regarding appliance use from a person who is responsible for their safety.
- Children must be supervised, to make sure they do not play with the appliance.
- The coffee machine must be used at a temperature between 5°C and 40°C.
- Any unauthorised tampering with any parts of the machine renders any guarantee null and void.

**GUARANTEE**

15 months on all components except electrical and electronic components and expendable pieces.

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## Presentation

This product has been manufactured in compliance with the regulations for foodstuff machinery according to par. 2.1 of Directive 2006/42/EC.

The espresso coffee machine is strictly for professional use only. It is designed for the preparation of hot drinks such as tea, cappuccinos and long, short and espresso coffee, etc.

If the model has two or more groups, it can be used by two or more people simultaneously. This characteristic, together with the fact that the machine is able to deliver drinks continuously without any problems, guarantees its intensive use.

The instructions for a proper use of the machine are provided below.



The user must be sufficiently informed to operate the machine correctly. It is recommended not to carry out any operations on the machine which may modify or alter its operation.

WHEN THE MACHINE IS IN OPERATION, THE BOILER CONTAINS STEAM AND HOT WATER UNDER PRESSURE.

## 1. Warnings for the installer

### 1.1 Power

The water supply of the appliance must be carried out with water which is suitable for human consumption, in compliance with the regulations in force in the place of installation. The owner / manager of the system must confirm to the installer that the water meets the above listed requirements.

### 1.2 Materials to be used

During the installation of the appliance the components and materials that were provided with the appliance are to be used. Should the use of other components be necessary, the installer must verify their suitability to be used in contact with water used for human consumption.

### 1.3 Hydraulic connections

The installer must carry out the hydraulic connections in accordance with the hygiene norms and the hydraulic safety norms for environmental protection in force in the place of installation.

### 1.4 Installation report

When installation is complete, the appliance has to be started, brought to the nominal working condition and left for 30 minutes in the "ready to operate" condition.

Afterwards, the appliance has to be turned off and emptied of the first water introduced in the whole hydraulic circuit, to eliminate possible initial impurities.

Then the appliance must be once again loaded and brought to the nominal working conditions.

After having reached the "ready to operate" condition, the following deliveries have to be performed:

- For each coffee unit, carry out a continuous delivery, in order to release at least 0.5 liters of the coffee circuit. In the case of several dispensing points matched with the same exchanger/coffee boiler, divide the volume on the base of the number of the dispensing points;
- Release the whole volume of hot water inside the boiler (3 liters for 1GR, 6 liters for 2GR, 8 liters for 3GR, 11 liters for 4GR), by performing a continuous delivery from the appropriate nozzle. In the case of several dispensing points, divide the volume on the base of the number of the dispensing points;
- Continuously release steam for at least 1 minute for each steam dispensing point;



After installing the machine, the installer is required to fill in the "Installation Form" that goes with the machine.

On this form must be met the hygiene and safety requirements in force on the installation site and must be reported any notes relating to changes or interventions necessary for the proper functioning of the equipment.

Filled copies of the Installation form must be kept by the user and by the installer until the end of life of the machine.

In case of withdrawal of the machine, the installer must also provide for the withdrawal of the user's Installation form.

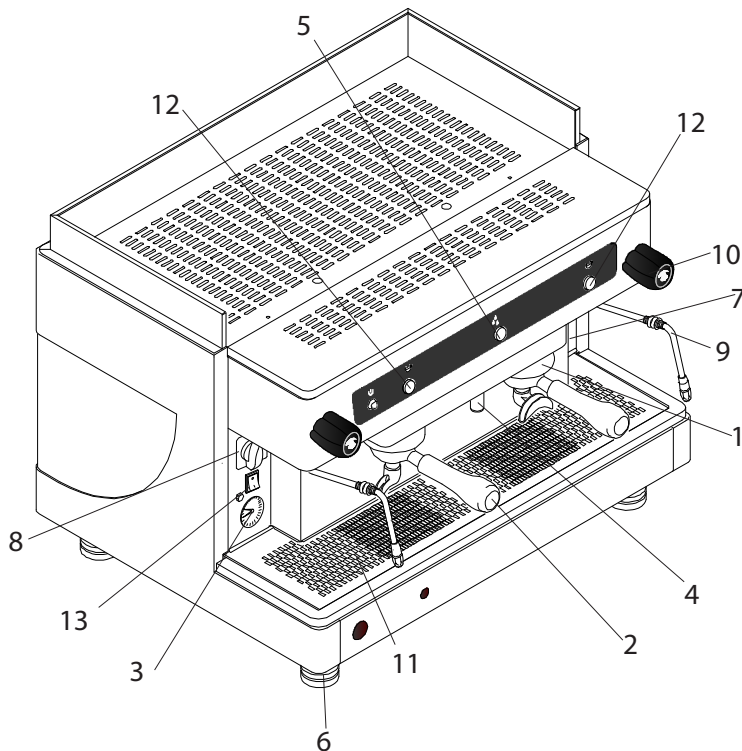
### 1.5 Maintenance and repairs

After a maintenance and/or repair intervention, the components used must ensure that the hygiene and safety requirements initially foreseen for the appliance are still met. These are met by using original spare parts only.

After a repair or a substitution of components related to parts in direct contact with water and food, a washing procedure has to be carried out, as in the case of first installation.

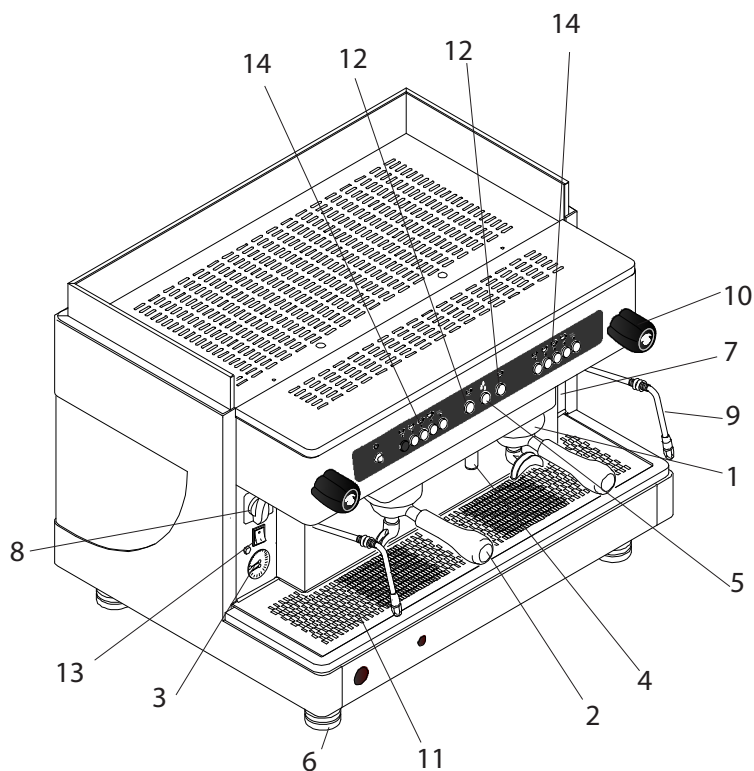
## 2. General description

### AEP



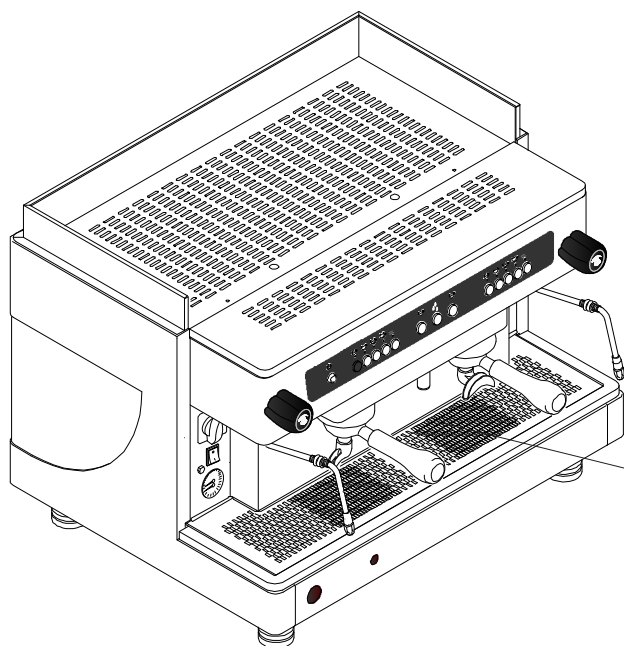
1. Delivery group
2. Filter holder
3. Boiler/pump pressure gauge
4. Hot water nozzle
5. Hot water button
6. Adjustable feet
7. Water level indicator (\*)
8. Main switch
9. Steam nozzle
10. Steam knob
11. Cup placing plane
12. Switch for coffee delivery
13. Cup heater switch (optional)
14. Volumetric delivery push-button

### SAE



(\*) In some versions the optical level is replaced by a green light.





The nameplate of the machine is fixed on the base of the frame under the drain pan.  
The data of the appliance can be seen also on the label located on the package of the machine.

## TECHNICAL DATA

| VERSION                        |            | 1 GROUP                       | 2 GROUPS           | 3 GROUPS           |
|--------------------------------|------------|-------------------------------|--------------------|--------------------|
| Power supply voltage           | V          | 120-230<br>240-400            | 120-230<br>240-400 | 120-230<br>240-400 |
| Absorbed power                 | W          | 2.300<br>3.000                | 3.700<br>3.900     | 5.300              |
| Steam boiler capacity          | L / gal UK | 6-8 / 1.3-1.7                 | 10.5-14 / 2.3-3.1  | 17-21 / 3,7-4.6    |
| Safety valve calibration (bar) | bar / psi  | 1.9 / 27.6                    |                    |                    |
| Boiler operating pressure      | bar / psi  | 0.8-1.4 / 11.6-20.3           |                    |                    |
| Feedwater pressure             | bar / psi  | 1.5-5 (MAX) / 21.8-72.5 (MAX) |                    |                    |
| Coffee dispensing pressure     | bar / psi  | 8-9 / 116-130.5               |                    |                    |
| Operating conditions           | °C / °F    | 5-40 / 41-104                 |                    |                    |

### 3. Preparation of the machine

The preparation of the machine and the installation operations must be carried out by qualified personnel only. The installer must strictly follow the indications provided in chap. 1 "Warnings for the Installer".



Use of the machine without all the installation operations having been carried out by technical personnel could damage it seriously.

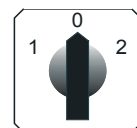
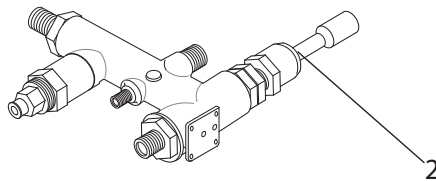
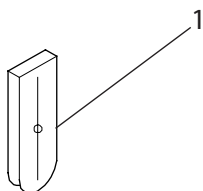
### 4. Start - up of the machine

Before starting the machine, make sure that the level of water in the boiler is higher than the minimum level on the level-check window (1).

If there is no water (first installation or after boiler maintenance), it is necessary to fill the boiler in advance, so as to prevent overheating of the heating element.

Proceed as follows:

- Open the water tap of the water mains and of the softener;
- Using manual fill (2), fill the boiler with water until the waterlevel is above the minimum.
- Turn the switch to position "1" (electrical power supplied to the pump for automatic boiler filling and machine services) and wait for the boiler to be automatically filled with water.
- Turn the switch to position "2" (full electrical power supplied, including the heating element in the boiler) and wait for the machine to warm up completely.



- During the machine's warm-up phase (roughly 20 minutes), the anti-eddy pressure valve will release steam for a few seconds until the valve itself closes.
- Before using the machine, run deliveries dry with the filter holder attached for a few seconds to release any air which may be in the circuit, so that the brewing groups are completely heated.
- Before constant use of the machine, dispense a few servings of coffee to test the grinding and to check the operating pressure of the machine.

## 5. Coffee preparation

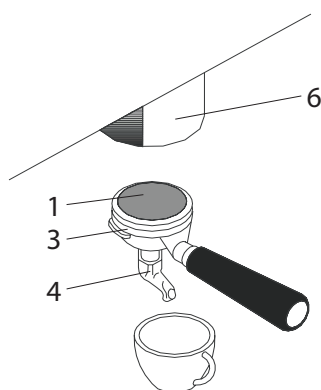
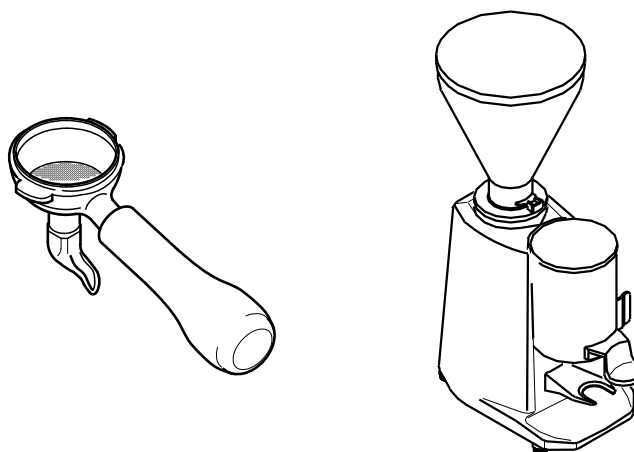
### 5.1 Grinding and dosing

It is important to have a dosing-grinding device next to the machine with which to grind the coffee to use daily. The grinding and the dosing of the coffee must be done according to that indicated by the manufacturer of the dosing-grinding device. The following points are also to be kept in mind:

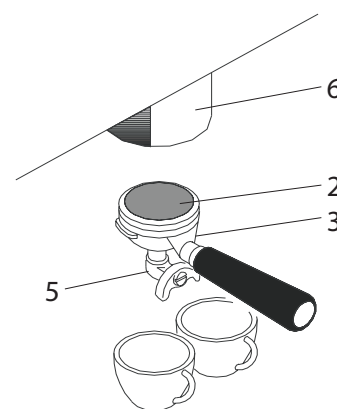
- to obtain a good espresso it is recommended not to keep large stocks of coffee grains. Observe the expiry date indicated by the producer.
- never grind large volumes of coffee, it is advisable would be to have the quantity contained in the dosing device and use it if possible by the end of the day.
- if possible, never buy coffee that is already ground as it expires quickly. if necessary, to buy it in small vacuum-sealed packages.

### 5.2 Coffee preparation

- Fill the filter with a dose of ground coffee (circa 6-7 gr.) and press it with the press;
- hook the filter-holder to the unit without closing it too tightly in order to avoid excessive wear of the gasket;
- for the same reason it is recommended to clean the edge of the filter before attaching the filter holder to the dispensing unit;
- follow the procedures specified by the manufacturer of the grinder.



1. Filter for 1 cup
2. Filter for 2 cups
3. Filter holder (piston)
4. Outlet for 1 cup
5. Outlet for 2 cups
6. Socket of the brewing group



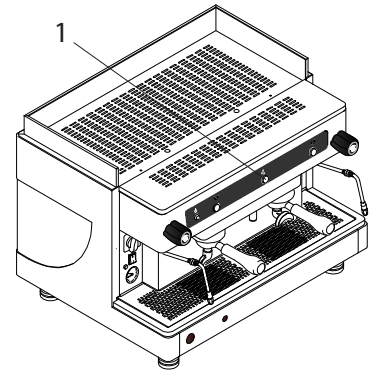
## 6. Water renewal

In case of breaks longer than 1 week, it is necessary to perform the changing of the 100% of the water contained in the hydraulic circuits of the machine, by using the appropriate dispensing points, as described in the Par. 1.4 "Installation report".

## 7. Use of the machine

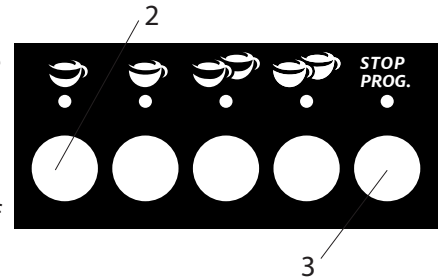
### 7.1 AEP version

- fill the filter holder with a portion of ground coffee and press it with the pressing appliance.
- fix the filter holder to the socket.
- press push-button (1). The coffee starts pouring and can be stopped using the same push-button, when the desired amount of coffee has been delivered.



### 7.2 SAE version

- fill the filter holder with a portion of ground coffee and press it with the pressing appliance.
- fix the handle to the socket.
- press one of the selection keys (2). Press Stop (3) or the same button, if you want to stop brewing coffee. In case of abnormal operation or blocking of the panel, press the button for manual brewing (1).



Each time a key is pressed the respective indicator will be activated until the operation is completed. If more than one indicator is lit simultaneously, call for service.

## Programming

Each cup of coffee must be prepared with a new portion of coffee, not with a used one.

If you have a machine with two or three brewing groups, you have to program the selection keys on the panel starting with the right panel first, the rest is programmed automatically. In any case it is recommended to program each group separately, always starting from the right side panel.

The switch for programming of the cup volume is to be found on the front of the machine.

Proceed as follows:

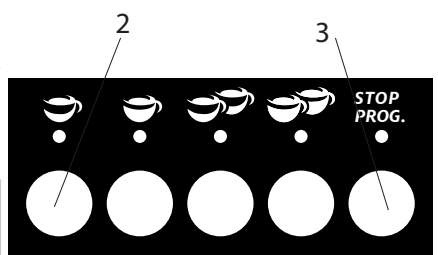
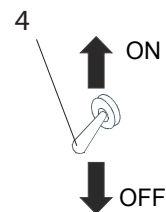
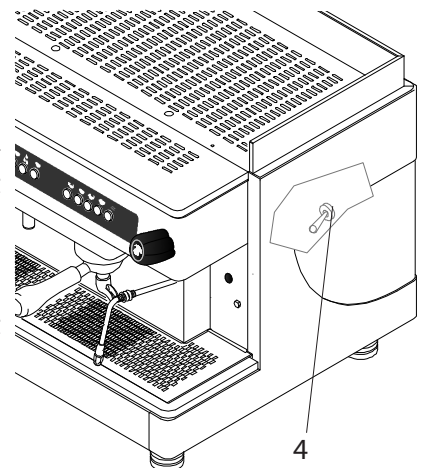
- Turn the programming mode switch (4) to position ON. Be careful not to touch the steam outlet, which may be hot.
- Carry out the programming as described in the paragraph below.
- Turn the switch back (4).

Program according to the following instructions:

- Press programming key "Progr." (3) for at least 5 seconds (all indicators will light on).
- Press one of the selection keys (2): the coffee starts pouring.
- In order to confirm the portion, press either the selection key again or press programming key "Progr." (3).
- Repeat this sequence for the other selection keys.



The system will automatically exit from the program mode in about 5 seconds after the last operation.

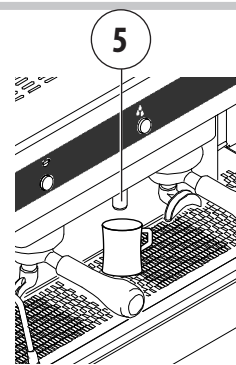


## 8. Preparing hot beverages

### 8.1 Dispensing of hot water

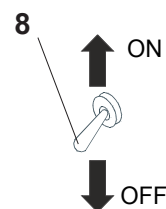
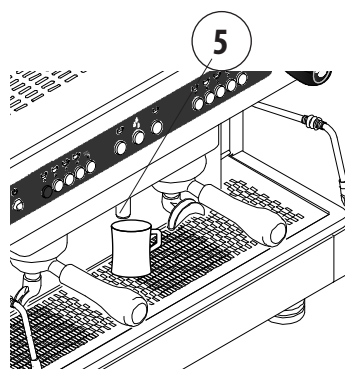
#### AEP version

- place the jug under the hot water nozzle (5);
- press the hot water dispensing button (☉);
- to stop delivery in advance, press the hot water button again.



#### SAE version

##### Programming



- Turn the programming key (8) to the **ON** position;
- place the jug under the hot water nozzle (5);
- Press the **STOP/PROG.** (STOP PROG.) button. of the right push-button panel until all the dose button leds light up;
- press the hot water dispensing button (☉);
- upon reaching the desired dose, confirm by pressing the hot water dispensing button (☉) again ;
- upon completion of the programming, press the **STOP/PROG.** (STOP PROG.) button to exit the programming phase and turn the programming key (8) to the **OFF** position.

##### Dispensing

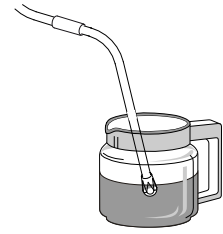
- place the jug under the hot water nozzle (5);
- Press the hot water button (☉): wait for the water to be dispensed.
- to stop delivery in advance, press the hot water delivery button (☉) again or press the **STOP/PROG.** (STOP PROG.) button.



Do not touch the hot water nozzle: contact with the nozzle or the steam may be harmful to people, animals or property.

## 8.2 Dispensing steam

- immerse the steam-dispensing nozzle in the liquid to heat;
- turn the tap knob counterclockwise: the steam coming out of the nozzle will be proportional to the opening of the tap;
- to interrupt the steam dispensing turn the knob counter-clockwise.



The use of the steam dispensing point (steam nozzle), must always be preceded by the performance of the condensation draining operation for at least 2 seconds.



Leave the steam nozzle immersed in the milk only for the time required for heating. Do not open the steam tap with the steam nozzle immersed in milk while the machine is off.



Carefully operate the steam nozzle using the anti-burn rubber **(6)**: contact with the steam may be harmful to people, animals or property.

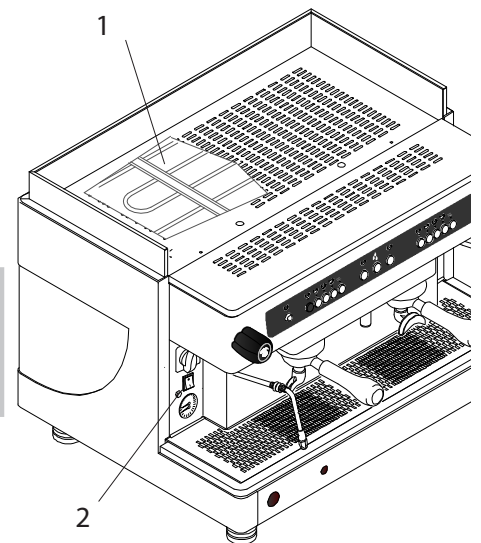
## 9. Cup heater (where available)

The cup heating device is for heating cups before they are used.

- place the cups on the upper surface (1) of the coffee machine;
- start the electric heating element with the switch (2).



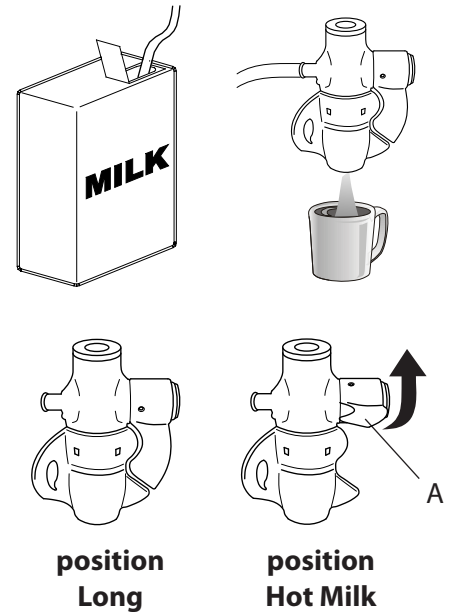
For safety reasons we advise against putting cloths or other objects on the upper surface of the machine as they could obstruct normal air circulation.



## 10. Accessories

### 10.1 Cappuccino maker

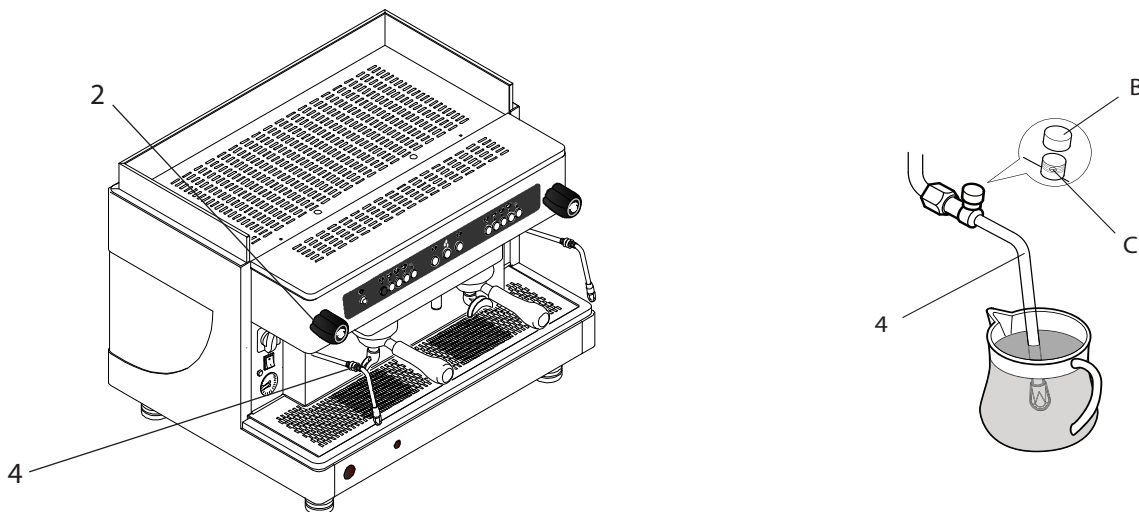
- Put the suction tube inside the milk;
- place the jug under the spout of the cappuccino maker;
- turn the steam tap counterclockwise, when the desired amount is reached close the steam tap;
- pour the latte into the cups with the coffee.



**i** To obtain delivery of warm milk without foam, lift the tab **(A)** upwards.  
 For better results, we suggest not dispensing directly into the coffee cup, but into a jug or pot, then pouring the foamed milk on the coffee.  
 Make sure the cappuccino maker is kept clean as described in the chapter "**Cleaning**".

### 10.2 Milk foaming nozzle

- Insert the nozzle **(4)** in the milk so that the sprayer is completely covered;
- turn the steam tap **(2)** counter-clockwise;
- wait for the milk to heat and foam;
- upon reaching the desired temperature and foaming, turn the steam tap **(2)** clockwise;
- To adjust the foaming of the milk: unscrew the cap **(B)** of the regulator and use a screwdriver on the screw **(C)**. To increase foaming, turn counterclockwise; to reduce foaming, turn clockwise.



**i** To keep the milk foaming device in perfect working order, it is advisable to carry out a delivery dry run after each use.  
 Keep the ends of the nozzle clean at all times by means of a cloth dampened in lukewarm water.  
 Use the utmost caution with the milk foaming nozzle, as high-temperature steam is present.



## 11. Softener

Mains water contains insoluble salts, which cause the build-up of lime scale deposits in the boiler and in other parts of the machine. The softener makes it possible to eliminate or substantially reduce the presence of these mineral salts.

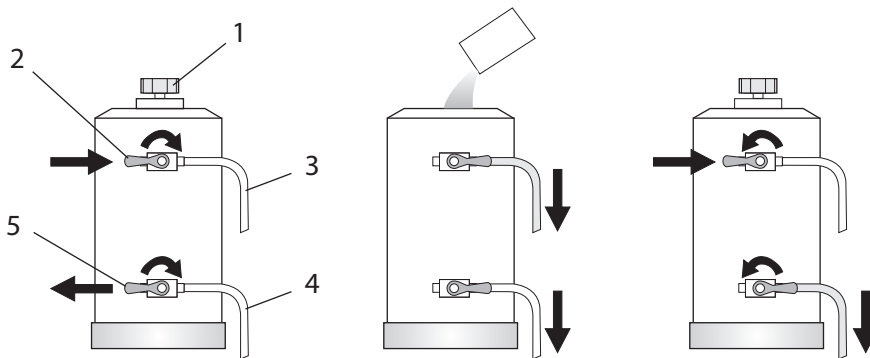
The resin softener has the property of retaining the calcium contained in the water. For this reason, the resins become saturated after a certain period and must be regenerated with coarse kitchen salt (NaCl, sodium chloride) or special water softening salt. It is very important to regenerate the softener within the established times.

The regeneration is to be done regularly every 15 days. However, in locations with very hard water, it will be necessary to regenerate more frequently. The same rule can be applied to places where there is a large consumption of hot water for tea or other uses.

### Softener regeneration

Proceed as follows:

- move levers **(2)** and **(5)** from left to right;
- Remove the lid by loosening the knob **(1)**;
- Release enough water through the pipe **(3)** to make room for the amount of salt as required depending on the model (see table);
- clean any salt or resin residue from the gasket located on the lid;
- put the lid back in place by screwing the knob **(1)** down securely and move the lever **(2)** back from right to left;
- let the salt water drain from the small tube **(4)** until the water is no longer salty (about 30-60 minutes). The salt allows the accumulated mineral salts to be released;
- bring the lever **(5)** from right to left back to its initial position.



| Model softener | Amount of salt |
|----------------|----------------|
| 8 litres       | 1.0 kg         |
| 12 litres      | 1.5 kg         |
| 16 litres      | 2.0 kg         |

**i**

The build-up of lime scale deposits in the hydraulic circuit and boiler inhibits thermal exchange, thus compromising proper operation of the machine. Heavy incrustation in the boiler may cause long machine shutdowns and in any case invalidate any guarantee, because this symptom indicates that regeneration has been neglected.

In order to keep the softener and hence the machine in perfect operating condition, it is necessary to perform regeneration periodically based on the use of the softener and the hardness of the water that is used.

The table alongside shows the quantity of softened water based on the hardness of the water in the various units of measure:

- f°: French degree
- D°: German degree = 1.8 °f
- mg CaCO<sub>3</sub>

For further information on installation, start-up and regeneration of the softener, refer to the relative instruction manual.

| Amount of softened water based on hardness |         |         |         |         |        |
|--|---------|---------|---------|---------|--------|
| f°   | 30°     | 40°     | 60°     | 80°     | salt   |
| D°   | 16.5°   | 22°     | 33°     | 44°     |        |
| mg CaCO <sub>3</sub>                       | 30      | 40      | 60      | 80      |        |
| 8 litres                                   | 1000 lt | 900 lt  | 700 lt  | 500 lt  | 1.0 kg |
| 12 litres                                  | 1500 lt | 1350 lt | 1050 lt | 750 lt  | 1.5 kg |
| 16 litres                                  | 2100 lt | 1800 lt | 1400 lt | 1000 lt | 2.0 kg |



## 12. Checks and Maintenance

Maintenance must be carried out in order to ensure perfect safety and efficiency of the machine over time. In particular, it is advisable to ask the Technical Service to carry out an overall check of the machine at least once a year.

| Intervention  | Weekly | Monthly |
|---|--------|---------|
| GAUGE<br>Keep the boiler pressure between 0.8 and 1.4 bar.  | X      |         |
| GAUGE<br>Periodically check water pressure during coffee delivery: check the pressure indicated on the gauge, which must be between 8 and 9 bar inclusive.  |        | X       |
| FILTERS and PORTAFILTERS<br>Check the condition of the filters. Check for any damage on the edge of the filters and check whether any coffee grounds settle in the coffee cup.  |        | X       |
| GRINDER-DOSER<br>Check the dose of ground coffee (between 6 and 7 gr. per stroke) and check the degree of grinding. The grinders must always have sharp cutting edges. Their deterioration is indicated by the presence of too much powder in the grounds. You should replace the flat grinders after every 400/500 kg of coffee. For conical grinders, replace every 800/900 kg. |        | X       |
| SOFTENER<br>The build-up of lime scale deposits in the hydraulic circuit of the machine indicates that regeneration has been neglected. Use care in areas where the water is very hard. It will be necessary to regenerate at more frequent intervals, likewise if there is high consumption of hot water for tea and so forth.   |        | X       |



If the problem cannot be resolved, turn the machine off and contact Technical Service. Do not attempt any sort of repairs.



The descaling of the machine must be carried out by professional technicians to ensure that such operation does not lead to release of hazardous materials for food use.

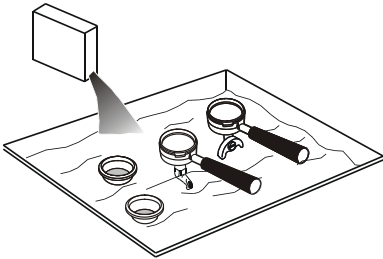
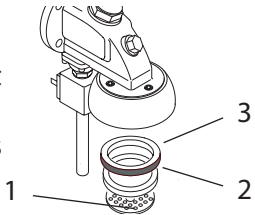
## 13. Suggestions on how to obtain a good cup of coffee

- To obtain high-quality coffee, it is important that the hardness of the water used does not exceed 4-5 °f (French degrees). If the water hardness exceeds these values, it is advisable to use a water softener.
- avoid using a water softener if the water hardness is less than 4 °f.
- if the taste of chlorine in the water is particularly strong, a special filter should be installed.
- it is not advisable to keep large stores of coffee beans. Never grind large amounts of coffee. Use the amount the doser holds and if possible use it by the end of the day. Never purchase ground coffee as it expires quickly.
- after the machine has not been used for a period of time (2-3 hours) make a few dry runs.
- make sure to carry out regular cleaning and maintenance.

## 14. Cleaning

For perfect cleaning and efficiency of the appliance, several simple cleaning operations are necessary on the functional parts and accessories as well as the body panels. The indications given here are applicable for normal use of the coffee machine. If the machine is used continuously, then cleaning should be performed more frequently.

Before cleaning the machine, turn it off the machine and let it cool off.

| Cleaning  | Daily    | Weekly   |
|---|----------|----------|
| <p><b>FILTERS and PORTAFILTERS</b><br/>           The filters and filter-holders must be cleaned daily in hot water.<br/>           The best thing to do is to let them soak in hot water overnight so that the fatty coffee deposits can dissolve. It is advisable to add special detergent to the water, and then to rinse everything off with water.<br/>           Failure to clean the filter holders daily will compromise the quality of the coffee and the filterholder correct operation.</p>  | <b>X</b> |          |
| <p><b>BODY</b><br/>           Clean the panels of the body with a cloth dampened in lukewarm water.<br/>           Do not use abrasive detergents which may scratch the surface of the body.</p>  | <b>X</b> |          |
| <p><b>STEAM NOZZLE</b><br/>           Clean the steam nozzles making a quick delivery till empty after each use and clean with a cloth dampened with warm water.</p>  | <b>X</b> |          |
| <p><b>DELIVERY GROUP</b><br/>           Wash the units as indicated:<br/>           1. use the solid portafilter;<br/>           2. pour the special detergent (see spare parts) into the solid filter and attach the filter holder;<br/>           3. carry out a series of deliveries until the water comes out clean;<br/>           4. remove the portafilter from the unit and carry out at least one delivery so as to eliminate the detergent residue.</p>   | <b>X</b> |          |
| <p><b>PERFORATED DISK and CONTAINMENT RING</b><br/>           Clean the perforated disk <b>(2)</b> and its containment ring <b>(3)</b> in hot water.<br/>           To do this, loosen the screw <b>(1)</b> and remove the two elements from the dispensing unit.</p>   |          | <b>X</b> |
| <p><b>STEAM NOZZLE</b><br/>           Check and clean the terminals of the steam nozzles, using a small needle to reopen the exit holes.</p>  |          | <b>X</b> |
| <p><b>GRINDER-DOSER</b><br/>           Every week clean the bell jar and the dosing device with a cloth soaked in lukewarm water, both inside and out, then dry it.</p>   |          | <b>X</b> |

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- When cleaning, always use cloths that are completely clean and hygienic.
- To guarantee the correct operation and hygiene of the hot beverages dispenser, it is necessary to use the cleaning methods and products suitable for this purpose.
- Do not immerse the machine into water.
- Never use alkaline detergents, solvents, alcohol or aggressive substances.
- The descaling of the machine has to be performed by specialized technicians, by dismantling the components with deposits, so that no descaling debris are put into circulation. The used products/ detergents have to be suitable for this purpose and must not corrode the materials of the hydraulic circuits.

## Cappuccino maker

Use special care in cleaning the cappuccino maker, following the procedures indicated below:

1. perform a first washing by immersing the suction tube in water and run a delivery for a few seconds;
2. turn the rotating body **(1)** 90° to **pos. B** (closure of milk outlet duct);
3. holding the milk suction tube in the air, dispense steam (cappuccino maker dry run);
4. wait about 20 seconds to allow for internal cleaning and sterilisation of the cappuccino maker;
5. close the steam and put the rotating body back in **pos. A**;
6. if the air intake hole **(2)** is blocked, clear it gently with a pin.



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It is advisable to clean the cappuccino maker after each use so as to avoid malfunctions and to ensure the hygiene of the system  
Do not unscrew the cappuccino maker from the steam tube.

## 15. Malfunctions and solutions

| Problem   | Cause   | Solution  |
|---|---|---|
| MACHINE LACKING POWER                           | The machine is off  | Turn on the machine   |
| NO WATER IN BOILER                              | The water mains tap is closed   | Open the water mains tap  |
| TOO MUCH WATER IN BOILER                        | Malfunction of the electrical system or hydraulic system  | Contact Technical Support   |
| STEAM DOES NOT COME OUT OF STEAM SPOUTS         | 1) The nozzle sprayer is clogged<br>2) The machine is off   | 1) Clean the steam nozzle sprayer<br>2) Turn on the machine   |
| STEAM MIXED WITH WATER COMES OUT OF THE NOZZLES | Malfunction of the electrical system or hydraulic system.   | Contact Technical Support   |
| NO DISPENSING                                   | The water mains tap is closed   | Open the water mains tap  |
| WATER LEAKS FROM THE MACHINE                    | 1) The tub does not drain<br>2) The drain tube is broken or detached or has an obstruction in the water flow              | 1) Check the sewer drain<br>2) Check and restore the connection of the drain tube to the tub  |
| COFFEE IS TOO HOT or TOO COLD                   | Malfunction of the electrical system or hydraulic system  | Contact Technical Support   |
| COFFEE DISPENSED TOO QUICKLY                    | Coffee is ground too finely   | Adjust the grinding of the coffee   |
| COFFEE DISPENSED TOO SLOWLY                     | Coffee is ground too finely   | Adjust the grinding of the coffee   |
| WET COFFEE GROUNDS                              | 1) Dispensing group dirty<br>2) The dispensing unit is too cold<br>3) Coffee is ground too finely<br>4) Coffee is too old | 1) Wash the unit with the solid filter<br>2) Wait for the machine to heat up completely request<br>3) Adjust the grinding of the coffee<br>4) Replace with fresh coffee |
| THE GAUGE SHOWS AN UNACCEPTABLE PRESSURE        | Failure in the hydraulic system   | Contact Technical Support   |
| GROUNDS IN CUP                                  | 1) The filter holder is dirty<br>2) The filter holes are worn<br>3) The coffee is not ground evenly                       | 1) Clean the filter holder<br>2) Replace the filter<br>3) Adjust the grinding suitably  |

| Problem   | Cause   | Solution  |
|---|---|---|
| THE CUP IS DIRTY WITH SPLASHED COFFEE   | 1) Coffee is ground too coarsely<br>2) The filter edge is damaged   | 1) Adjust the grinding of the coffee<br>2) Replace the filter           |
| for SAE:<br>ALL THE LED'S OF ALL THE PUSH BUTTON PANELS ARE FLASHING<br><br>for AEP:<br>THE FRONT LED IS FLASHING | After a few minutes, automatic filling with water is stopped<br>1) Time control device has cut in<br>2) No water in mains | 1) Turn the machine off and then back on<br>2) Open the water mains tap |
| INCORRECT COFFEE DELIVERY<br>THE COFFEE DOSE IS NOT MET<br>THE LED OF THE DOSE BUTTON FLASHES                     | Coffee is ground too finely   | Adjust the grinding of the coffee                                       |
| COFFEE DELIVERY OCCURS ONLY USING THE MANUAL BUTTON   | Failure in the electronic system  | Contact Technical Support   |
| SHUTDOWN OF THE ELECTRONIC SYSTEM   | Malfunction of the electrical system or hydraulic system.   | Contact Technical Support   |
| THE PUMP LEAKS WATER  | Pump malfunction.   | Contact Technical Support   |
| THE MOTOR STOPS SUDDENLY OR THE THERMAL PROTECTOR INTERVENES DUE TO OVERLOAD                                      | Pump malfunction.   | Contact Technical Support   |
| THE PUMP FUNCTIONS BELOW NOMINAL CAPACITY   | Pump malfunction.   | Contact Technical Support   |
| THE PUMP IS NOISY   | Pump malfunction.   | Contact Technical Support   |



If the problem cannot be resolved, turn the machine off and contact Technical Service. Do not attempt any sort of repairs.

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## 16. List of hazards

This chapter describes possible hazards for the user if the specific safety standards (described in this manual) are not adhered to.

### **The appliance must be connected to an efficient grounding system**

If this is not done, the appliance can be a source of dangerous electrical discharges as it is no longer able to discharge electricity to earth.

### **Do not use running water for washing**

The use of pressurized water directly on the machine can seriously damage the electrical equipment. Never use water jets to wash any part of the appliance.

### **Be careful of the steam and hot water nozzles**

During use, the steam and hot water nozzles become very hot and are thus a potential source of danger. Handle these parts carefully. Never direct steam or hot water jets directly on parts of the body.

### **Do not work on the machine when it is supplied with electrical power**

Before carrying out any maintenance or repair work on the machine you must turn it off using the main switch or, better yet, disconnecting the mains connection terminals. Never remove any body panel when the machine is supplied with electrical power.

### **Never work on the hydraulic system before having emptied it**

All work regarding the hydraulic system and the related boiler is to be avoided when there is still water and pressure in the system. Thus you must empty it beforehand by closing the mains tap and dry-running the delivery group for a short time. Switch off the machine and turn on all the steam and water taps. When the pressure is zero, empty the boiler completely by unscrewing the special pipe fitting located on the lower part of boiler.

If the above procedure is not carried out correctly, opening any part of the hydraulic system can cause a sudden outburst of superheated water under pressure.

### **Lever machines**

Never lower the lever if there is no coffee in the filter, or if the filter holder is not installed on the group: the sudden upwards movement of the lever may damage the appliance and injure individuals.

### **Gas machines**

Periodically check for gas leaks in the system by applying a soapy solution to the ducts.

For safety reasons, close the gas heating system when the machine is not in use (at night or during hours of closure)

### **Use of the appliance**

This espresso coffee machine is an appliance for professional use only. Any other type of use is considered incorrect and therefore dangerous. Never allow children or people not familiar with it to use the machine.

Non-observance of the above-described standards can cause serious harm to people, property or animals.

Never work on the electronic apparatus when the machine is still supplied with electrical energy.

Shut down the machine completely by disconnecting it from the mains before carrying out any operation.



