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ESPRESSO COFFEE MACHINE

USE AND MAINTENANCE MANUAL Instructions for the user

ENGLISH

DICHIARAZIONE
DI CONFORMITÀ 

DECLARACION
DE CONFORMIDAD 

DECLARATION
DE CONFORMITE 

DECLARATION
OF COMPLIANCE 

KONFORMITÄTS-
ERKLÄRUNG 

CMA s.p.A. Via Condotti Bardini, 1 - 31058 Susegana (TV) - ITALY

IT come costruttore di MACCHINE PER CAFFÈ, dichiara che il prodotto

ES como fabricante de CAFETERAS, declara que el producto

FR en tant que constructeur de MACHINES A CAFE, déclare que le produit

GB USA being the manufacturer of COFFEE MACHINES, hereby declares that the product

DE erklärt als Hersteller von KAFFEEMASCHINEN, daß das Gerät

MODELLO	MODELO	MODELE	MODEL	MODELL _____
TIPO	TIPO	TYPE	TYPE	TYP _____
N°DI SERIE	MATRICULA	N°DE SERIE	SERIAL NO	SERIENNUMER _____

IT al quale si riferisce questa dichiarazione è conforme ai requisiti previsti dalle seguenti

- DIRETTIVE CEE: 98/37/CE - 89/336/CEE - 97/23/CE
- DIRETTIVA BASSA TENSIONE: 73/23/CEE

ES al que se refiere esta declaración es conforme con lo que disponen las siguientes

- DIRECTIVAS CEE: 98/37/CE - 89/336/CEE - 97/23/CE
- DIRECTIVA BAJO VOLTAJE: 73/23/CEE

FR auquel se réfère cette déclaration est conforme aux exigences essentielles de

- DIRECTIVES CEE: 98/37/CE - 89/336/CEE - 97/23/CE
- DIRECTIVES BASSE TENSION: 73/23/CEE

GB USA to which this declaration refers, complies with the requirements set forth by the following

- EEC DIRECTIVES: 98/37/EC - 89/336/EEC - 97/23/EC
- LOW VOLTAGE DIRECTIVES: 73/23/EEC

DE auf welches sich diese Erklärung bezieht, folgenden Vorschriften entspricht

- EG-VORSCHRIFTEN: 98/37/EG - 89/336/EEG - 97/23/EG
- NIEDERSPANNUNG VORSCHRIFT: 73/23/EG

Susegana _____

Review

Rev 04 - 05/2005 - General review

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GENERAL INSTRUCTIONS

Please read the instructions carefully before using the machine!

The espresso coffee machine that you have purchased was designed and constructed in compliance with the requirements of contemporary technologies, which provide quality and reliability.

These instructions will help you to get acquainted with the advantages of this machine. Here you will find information how to operate the machine in the most efficient way and about how to react if a malfunction would occur.

Store these instructions carefully. If you should lose them, you can ask for an additional copy from the manufacturer.

HAVE A PLEASANT READING AND... NICE COFFEE!

ABOUT THE MANUAL

The manufacturer reserves the right to add additional details to the product. We guarantee that these instructions reflect the actual state of the product at the moment of its sale on the market.

We also would like use this occasion to invite you to offer suggestions regarding possible improvements of the product or the instructions themselves.

Safety instructions

- The packaging elements should not be left within the reach of children. It is recommended to store the packaging until the expiration of the warranty period.
- The packaging material must not be left in the reach of children in that they are a potential source of danger. Keep the packaging until the guarantee has expired.
- Before using the machine, make sure that the values indicated on the data plate correspond to those in the electrical network. The data plate is located on the front or side panel of the machine.
- The installation must be performed by qualified and prepared staff and in accordance with local safety requirements. Improper installation may result in accidents with people or animals, or damage of furniture.
- The safety of this product is guaranteed only if it is connected to proper electrical mains. If you are not sure about this, please refer to specialized staff. The manufacturer does not take any responsibility for damages caused by improper connection of the machine.
- Qualified personnel should install a general protection fuse, as required by safety standards; the diameter of the contact elements should be equal to or bigger than 3 mm.
- The use of connection-blocks and cable extensions is not recommended. If their use is inevitable, use only a one-socket connection block in compliance with safety standards. Do not exceed the kilowatts rating indicated on the connection blocks.
- The machine is designed for the preparation of hot drinks such as coffee, tea and milk. The machine should be used only to prepare drinks, for which purpose it has been designed. Any other use may lead to hazards. The manufacturer does not take any responsibility for damage caused by improper and unreasonable use.
- Safety Instructions regarding electrical appliances:
 - Do not touch the machine with wet hands and feet!
 - Do not use the machine barefooted!
 - Do not use cable extensions in wet areas!
 - Keep the machine away from children and unauthorized persons!
 - Do not switch off from the mains!;



- Before the specialized personnel carries out any maintenance operation deactivate the appliance from the electrical network through the omni-polar switch.
- Follow the instructions for everyday cleaning as given in this manual.
- In case of damage or improper functioning switch off the machine. Do not try to repair it yourself, but refer to specialized staff.
- Repairs can be performed only by the manufacturer or by authorized service, using genuine spare parts only. If these conditions are not observed, the guarantee will be cancelled.
- The original power plug should not be replaced by the user. In case the plug gets damaged, switch off the machine and refer to a professional.
- In case you decide not to use the machine for a long time, it is recommended to switch it off from the mains and to drain the water.
- For the proper functioning of the coffee machine it is necessary to follow the instructions of the manufacturer strictly and also to have specialized staff perform periodical maintenance.
- Do not expose your hands or other parts of your body in the direction of the coffee, the steam or hot water outlets. Steam and hot water may cause injuries.
- During operation the steam and hot water outlets are very hot; handle them very carefully and only in the places specified for that purpose.
- Place cups upon the cup heater plateau especially designed for them and only after they have well dried. Do not place other objects on this plateau.
- The dishes belonging to the machine itself are to be placed on the cup-heater plane. It is incorrect to place any other object.
- Any unauthorized handling of any part of the machine renders any guarantee null and void.

WARRANTY

12 months on all components, excepting electrical and electronic components and wear-and-tear parts.

INTRODUCTION

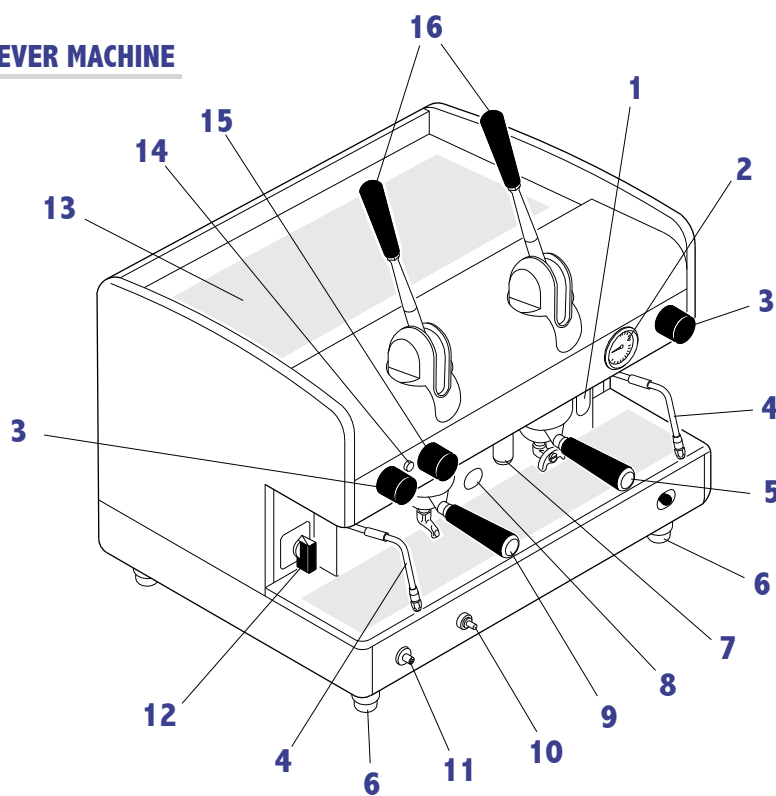
The espresso coffee machine is intended for professional use. It is designed to prepare hot drinks such as tea, cappuccino, coffee (at various strengths and volumes) and espresso. Additional accessories are available which have been designed for optimum use of the machine. If the machine has two or more groups, it can be operated by two or more persons at the same time. These characteristics, together with the fact that the machine is capable of non-stop preparation of drinks, guarantee extensive and efficient use.

WARNING

The user must be provided with instructions in order to use the machine properly. It is recommended not to take actions which may disturb the functions of the machine. WHEN THE MACHINE IS SWITCHED ON, ITS BOILER CONTAINS STEAM AND WATER under pressure.

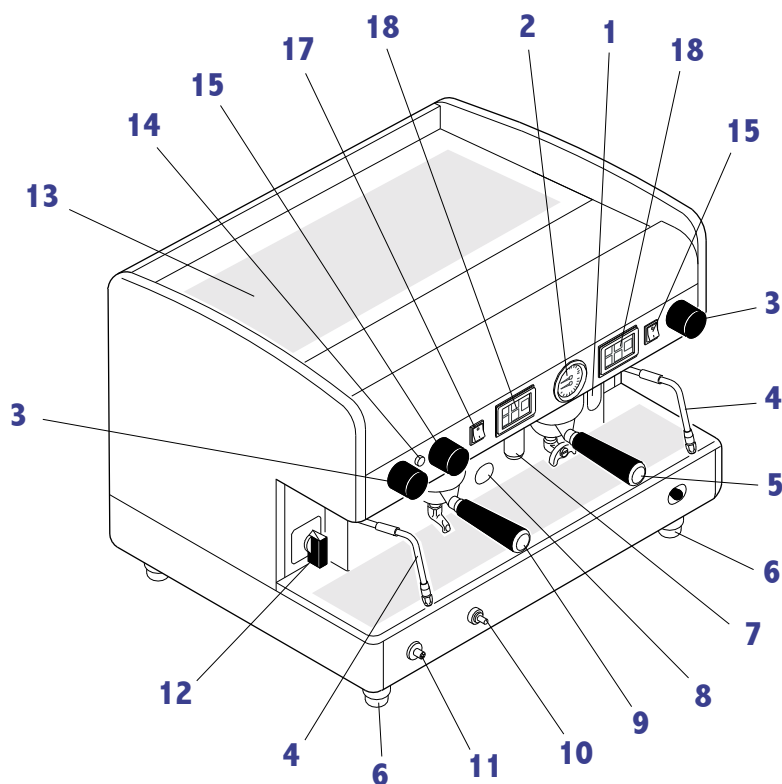
1. MACHINE DESCRIPTION

LEVER MACHINE



- 1** Boiler level-check window
- 2** Gauge
- 3** Steam gauge
- 4** Steam nozzle
- 5** 2-cup filter holder
- 6** Adjustable foot
- 7** Hot water dispensing spout
- 8** Gas burner viewing window (if included)
- 9** 1-cup filter holder
- 10** Gas safety (if included)
- 11** Gas ignition push button (if included)
- 12** Machine main switch/commutator
- 13** Cup rest grille
- 14** Machine on indicator light
- 15** Hot water knob
- 16** Lever groups
- 17** Manual delivery switches
- 18** Push button panels

DISTRIBUTION MACHINE



2. PREPARATION OF THE MACHINE

The preparation of the coffee machine and its installation must be performed by qualified staff.

WARNING

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

3. STARTING THE MACHINE

3.1 ELECTRICAL HEATING

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:

Switch

Open the water tap of the water mains and of the softener.

Using manual fill **(2)** fill the boiler with water until the optimal level is restored.

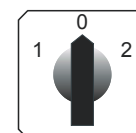
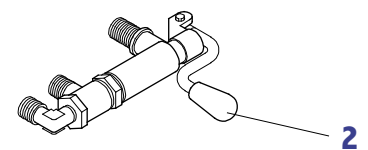
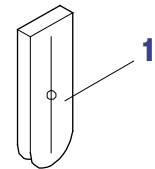
Turn the switch to position “**1**” and wait for the machine to warm up completely.

Commutator

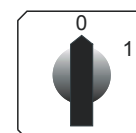
Open the water tap of the water mains and of the softener.

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.



Switch



Commutator

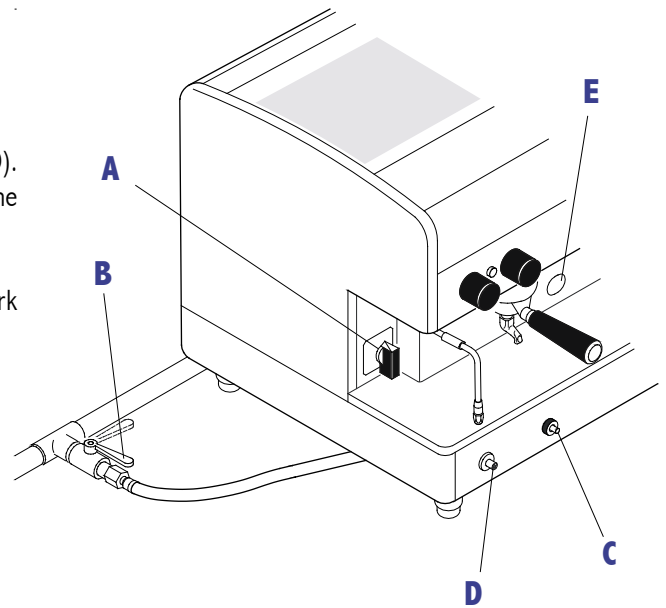
WARNING

- during the machine’s warm-up phase (roughly 20 minutes), the negative 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 delivery groups are completely heated
- before using the machine, dispense a few servings of coffee to test the grinding and to check the operating pressure of the machine



3.2 GAS HEATING (if included)

- Turn the switch **(A)** round to position **1**;
- Open the gas cock **(B)** placed on the network;
- Keep knob **(C)** pressed while simultaneously pressing the ON button **(D)**. When the flame is lit, keep knob **(C)** pressed for a few seconds for the thermocouple to warm up;
- Check for the ignition of the flame, through the small window **(E)**;
- Wait for the exercise pressure indicated on the gauge to reach the work value 1-1,2 bar.



3.3 MIXED GAS+ELECTRICAL HEATING (if included)

- Proceed as above "GAS HEATING";
- After having checked the flame ignition rotate the switch **(A)** to position **2**. In this way the resistance of the boiler is fed and the exercise pressure will be reached in a shorter amount of time;
- Wait for the exercise pressure indicated on the gauge to reach the work value 1-1,2 bar.

WARNING

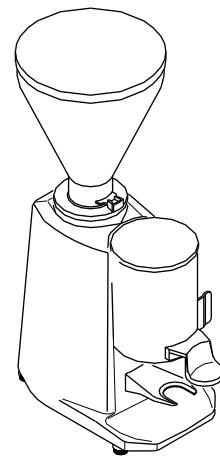
For safety reasons gas heating must be deactivated during long periods that the machine is inactive (night-time or when the place is closed). It is not advisable to place cloths or other objects on the surface of the cup heater. This would obstruct normal air flow.

4. BREWING COFFEE

4.1 GRINDING AND DOSING

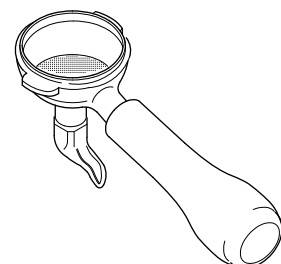
It is necessary to have a coffee grinder with a dosing unit to grind coffee every day. Grinding and dosing of coffee must be performed according to the instructions of the manufacturer of the coffee grinder. Please observe also the following:

- In order to get a nice espresso, do not store large amounts of coffee beans. Also check the expiry date!
- Never grind large amounts of coffee!
- Do not purchase ground coffee as it may lose its fragrance before soon! If necessary, purchase ground coffee only in vacuumed packages.



4.2 PREPARING THE COFFEE

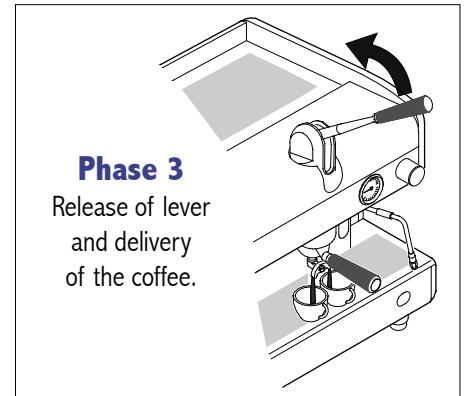
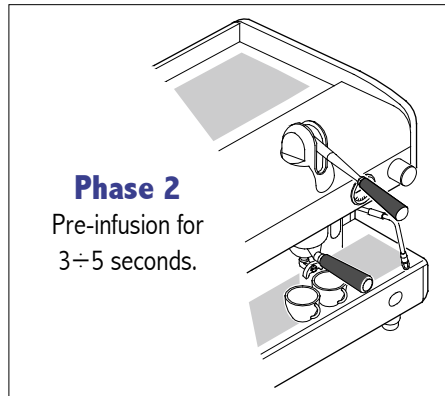
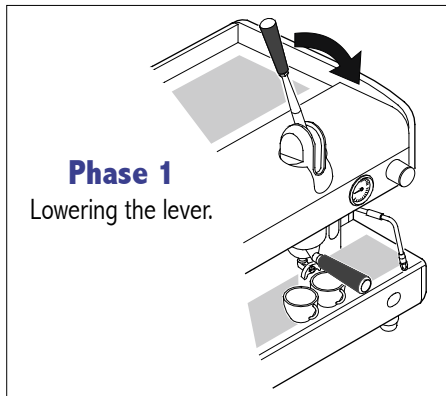
- Fill the piston with 1 portion of ground coffee (about 6 ~ 7 grams) and press it with the special pressing appliance.
- Fix the handle of the piston to the brewing group. Do not tighten too hard to avoid damaging the thread.
- For the same reason it is good to clean the edges of the filter holder before fixing the handle to the socket of the brewing group.
- Follow the instructions provided by the manufacturer of the grinder-doser.



5. USE

5.1 AL - SMMA VERSION

- put the coffee cup under the dispensing spout;
- pull the lever all the way down;
- wait briefly (3 to 5 seconds);
- raise the lever until you encounter some resistance, then release it;
- wait for dispensing to finish.

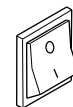


WARNING

*NEVER carry out the above-described operations without the coffee in the filter or without the filter-holder assembled in the group; the sudden return of the lever upwards can damage the appliance and injure people.
The time of delivery depends on the grinding and the quantity of coffee in the filter holder.*

5.2 AEP - SMSA VERSION

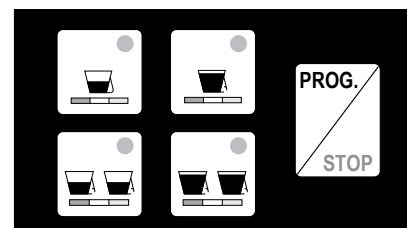
- put the coffee cup under the dispensing spout;
- press the desired dose key: the coffee starts pouring and can be stopped using the same push-button, when the desired amount of coffee has been delivered.



5.3 JUNIOR VERSION

Dispensing coffee

- put the coffee cup under the dispensing spout;
- press the desired dose key: wait for dispensing to finish (LED comes on);
- to stop coffee delivery in advance, press the delivery key again or press the STOP key;
- if the push button panel malfunctions or is locked, use the manual switch.



Programming

- put the coffee cup under the dispensing spout.
- press the PROG/STOP key for at least 5 seconds until all dose key LED are on.
- press the desired dose key.
- to confirm the dose press the dose key or the PROG/STOP key again.
- repeat this operation for the other dose keys.
- programming will be terminated automatically after a few seconds.

WARNING

The programming of every dose must be done with ground coffee and not with previously used grounds.



5.4 AEAP - SMAT VERSION

Dispensing coffee

- put the coffee cup under the dispensing spout;
- press the desired dose key: wait for dispensing to finish (LED comes on);
- to stop coffee delivery in advance, press the delivery key again or press the STOP key;
- to obtain continuous delivery of coffee select the CONT key. To interrupt delivery press CONT again or the STOP key;
- if the push button panel malfunctions or is locked, use the manual switch located near the push button panel.

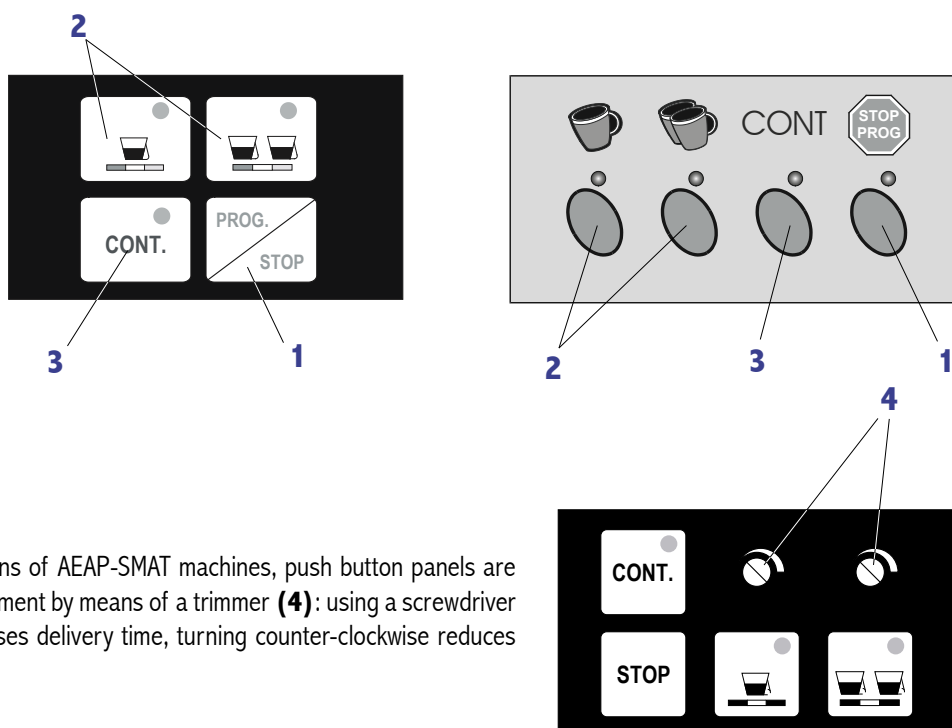


NOTE

The timer measures the time and not the amount of coffee in the cup. The same programming may provide different amounts of coffee depending on how the coffee is ground.

Programming

- 1) Press and hold down the STOP/PROG key **(1)** for 5 seconds and check that all of the LED on the push button panel come on. This confirms correct entry into the programming phase.
- 2) Press on of the two dose keys **(2)** to program. The LED corresponding to the CONT key (continue) and to the key of the dose being programmed stay on.
- 3) When the desired amount of coffee in the cup has been reached, press the STOP/PROG key **(1)** or the key of the dose being programmed to stop delivery and memorize the new value (the duration of the dose of coffee is calculated in seconds). At the same time, the LED for the dose which is still to be programmed comes back on, while the LED for the programmed dose stays off.
- 4) Proceed with the programming of the other coffee dose by pressing the other dose key. Once the desired amount of coffee in the cup has been reached, press the dose key or the STOP/PROG again **(1)**.
- 5) To exit programming, press and hold down the STOP/PROG **(1)** key for more than 5 seconds.



In some previous versions of AEAP-SMAT machines, push button panels are installed with time adjustment by means of a trimmer **(4)**: using a screwdriver to turn clockwise increases delivery time, turning counter-clockwise reduces delivery time.

NOTE

It is possible to re-program the coffee dose that you have just finished programming (LED off) without necessarily having to turn the system off and back on or exiting the programming phase.

The programming of every dose must be done with ground coffee and not with previously used grounds.
The system automatically exits programming status approximately 10 seconds after the last operation.

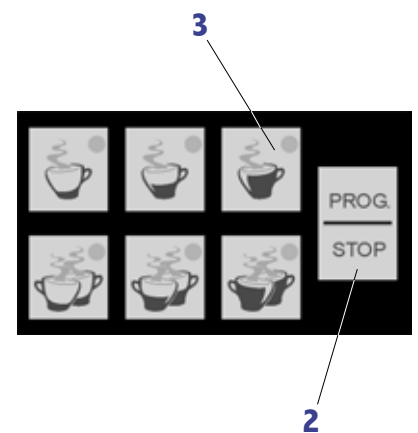
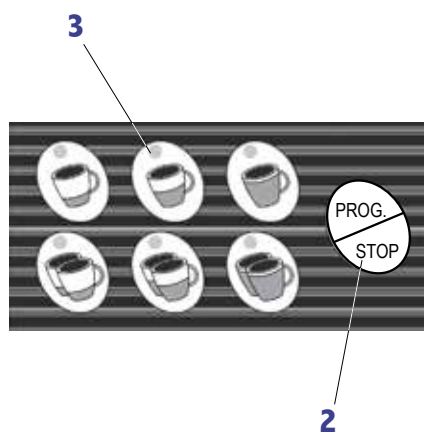
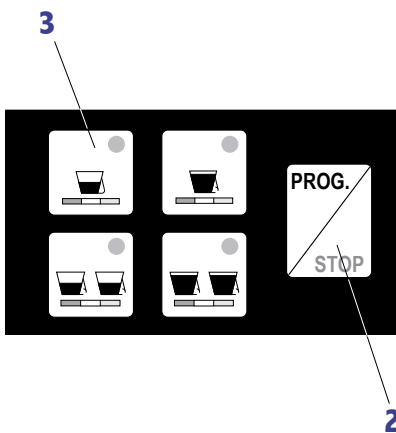
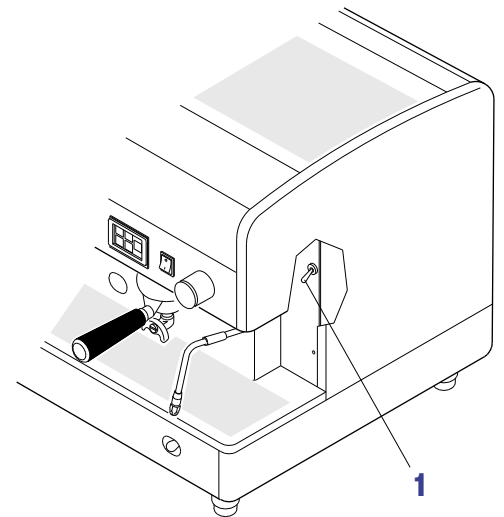
5.5 SAE - SME VERSION

Dispensing coffee

- put the coffee cup under the dispensing spout;
- press the desired dose key: wait for dispensing to finish (LED comes on);
- to stop coffee delivery in advance, press the delivery key again or press the STOP key;
- if the push button panel malfunctions or is locked, use the manual switch.

Programming

- Place the programming lever **(1)** in the ON position. It is located under the front right-hand panel of the body;
- put the coffee cup under the dispensing spout.
- press the PROG/STOP key **(2)** and all dose key LED will come on;
- press the desired dose key **(3)**;
- when the desired dose has been attained, confirm by pressing the PROG/STOP key **(2)**;
- Repeat this operation for the other dose keys.
- upon completion of programming, place the programming lever **(1)** back in the OFF position.



In some models, the programming lever has been eliminated because to access program, and it is enough to press the PROG/STOP key for at least 5 seconds with all push button panel LED coming on. Also, confirmation of the dose can be given by pressing either the PROG/STOP key or the selected dose key.

In other models (for example GLORIA), to access programming it is necessary to use a special key switch.

To exit programming it is sufficient to wait a few seconds.

NOTE

The programming of every dose must be done with ground coffee and not with previously used grounds. With machines having two or three groups, by first programming the right-hand push buttons the others are automatically programmed. It is however both possible and advisable to program the push button panels independently, always starting from the right-hand push button panel.

6. PREPARATION OF HOT DRINKS

6.1 DISPENSING HOT WATER MANUALLY

To dispense hot water, turn the tap knob counter-clockwise **(1)**: the amount of water which comes out of the hot water nozzle **(2)** will be proportional to the opening of the tap.

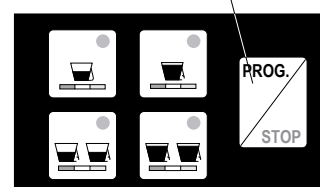
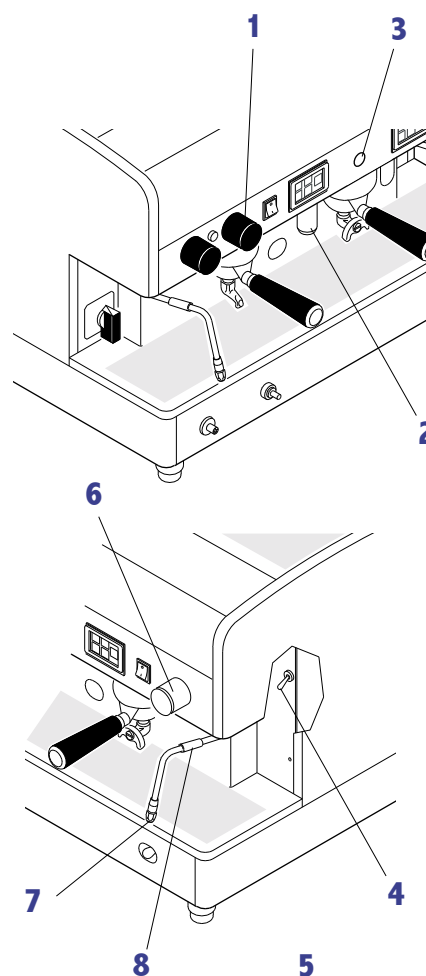
6.2 DISPENSING HOT WATER AUTOMATIC

Programming

- Place the programming lever in the ON position **(4)** It is located under the front right panel of the body (in some models, to access programming you only need to press PROG/STOP **(5)** for 5 seconds or to turn the programming key);
- put the cup under the hot water nozzle;
- press the PROG/STOP key **(5)** and all dose key LED will come on;
- press the key to dispense hot water **(3)**;
- when the desired dose has been attained, confirm by pressing the PROG/STOP key **(5)**;
- Repeat this operation for the other dose keys.
- upon completion of programming, place the programming lever **(4)** back in the OFF position.

Dispensing hot water

- Put the cup under the hot water nozzle;
- press the hot water key. Wait for water to be dispensed;
- to stop delivery in advance, press the hot water delivery key again **(3)** or press the STOP key.



6.3 DISPENSING STEAM

To dispense steam, turn the tap knob counter-clockwise **(6)**: the amount of steam which comes out of the steam nozzle **(7)** will be proportional to the opening of the tap.

WARNING

Handle the steam nozzle with care using the rubber anti-burn handle **(8)** and do not touch the hot water nozzle. Contact with steam and hot water may be harmful to people, property or animals.

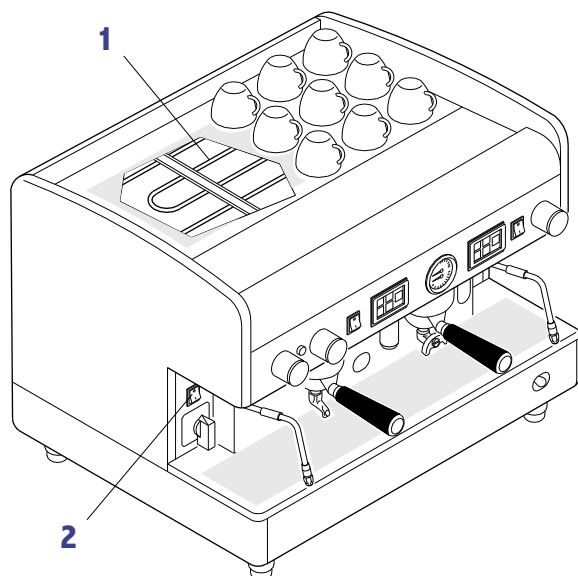
7. CUP HEATING DEVICE (if included)

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)** or with the push button panel.

WARNING

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.



8. ACCESSORIES

8.1 THERMO-RESERVE

It is practically composed of a receptacle in which a considerable quantity of coffee (2,5 lt.) is produced which constitutes a reserve in case there is a great demand for such a drink (for example, breakfast, conferences, etc.).

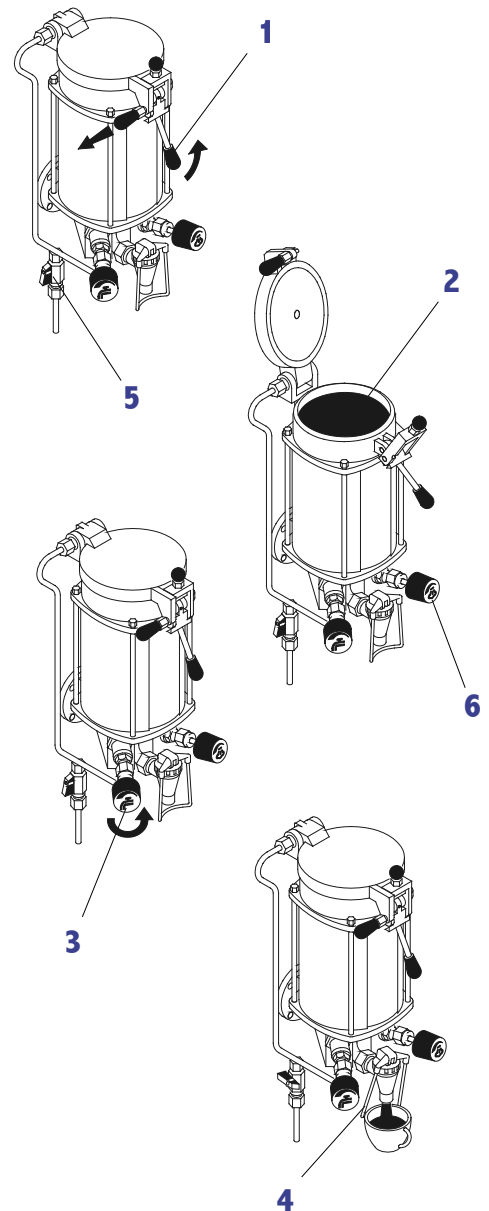
Preparation

- Lift the cover by pulling the knob **(1)**;
- Put the quantity of ground coffee (about 130 grams) in the special filter and close it again, making the knob click **(2)** into the safety position;
- Open the water cock **(3)** making it rotate counterclockwise. Once the desired quantity has been reached (maximum capacity: 2.5 litres), close the cock;
- Once the operation has been done the residual pressure must be discharged with the help of a drain cock **(5)** placed on top of the thermo-reserve group.

Delivery

The removal of the coffee from the container is done by activating the dispenser lever **(4)** placed in the lower central part.

The coffee remaining in the container can be heated by means of a vaporizer cock **(6)** placed on the right part of it.



WARNING

Always open the exhaust valve **(5)** before opening the cover. Non-observance of this operation causes serious damage to things, people and animals.

8.2 CAPPUCCINO MAKER

- Put the suction tube in the milk;
- place the pitcher under the spout of the cappuccino maker;
- turn the steam tap counter-clockwise. When the desired level is reached, close the steam tap;
- pour the foamed milk into the cups with the coffee.

NOTE

To obtain warm milk without foam, lift the tab **(1)** upwards. For best results, we recommend not dispensing directly into the coffee cup, but rather into a pitcher. From there, pour the foamed milk into the coffee.

WARNING

Be sure to keep the cappuccino maker clean at all times as described in the chapter "Cleaning".

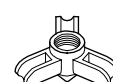
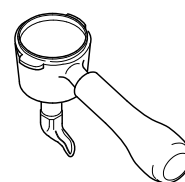


8.3 GIANT FILTER-HOLDER

When long deliveries, use the extra-large filter holder with its capacity of 50 g of ground coffee.

8.4 SPOUT FOR THREE CUPS

To dispense 3 coffees at the same time, use the three-cup spout (requires roughly 21 g of ground coffee).



9. 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.

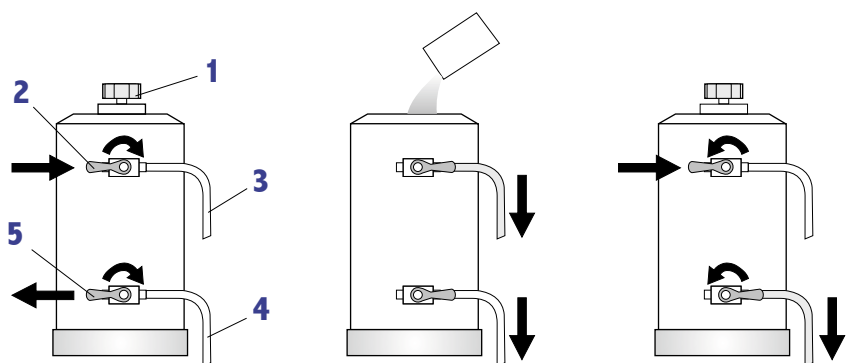
The resin softener has the property of retaining the calcium contained in the water. For this reason after a certain period the resins are saturated and are to be regenerated with coarse kitchen salt (NaCl, sodium chloride) or special water softening salt. It is very important to regenerate the softener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

WARNING

The build-up of lime scale in the hydraulic circuit and boiler inhibit 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 values of 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 CaCO₃

Amount of softened water based on hardness					
F°	30°	40°	60°	80°	salt
D°	16,5°	22°	33°	44°	
mg CaCO ₃	30	40	60	80	
8 litri	1000 lt	900 lt	700 lt	500 lt	1,0 kg
12 litri	1500 lt	1350 lt	1050 lt	750 lt	1,5 kg
16 litri	2100 lt	1800 lt	1400 lt	1000 lt	2,0 kg

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

10. 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.

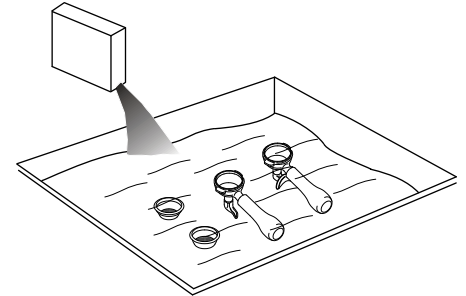
The indications given here are applicable for normal use of the coffee machine. If the machine is heavily used then cleaning should be performed more frequently.

Filter and filter-holder

The filters and the relative filter-holders must be cleaned daily in hot water. The best thing to do is to let them soak in hot water overnight so that the fatty coffee deposits can dissolve.

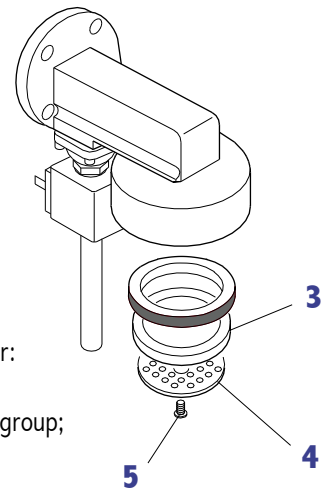
It is advisable to add an envelope or tablet of special detergent to the water, and then to rinse everything off with water.

Failure to clean the filters and filter holders daily will compromise the quality of the coffee and will also cause problems such as bad extraction and coffee grounds at the bottom of the cup.



Perforated disk and containment ring

Both the shower plate (4) and its containment ring (3) should be cleaned weekly in hot water. To do this loosen the screw (5) and remove the two elements from the dispensing unit.



Steam nozzles

The steam pipes must be kept clean at all times. Check the ends of the steam nozzles and clean them monthly, clearing out the exit holes with a small needle.

Delivery groups (except for AL - SMMA version)

The cleaning of the internal parts of the delivery groups is to be performed weekly in the following manner:

- replace the normal filter of the filter-holder with a solid one;
- pour a teaspoon of a suitable detergent powder on the solid filter, and attach the filter-holder to the group;
- use the delivery switch to set the group in operation;
- repeat the above operations until the water comes out clean;
- turn off and remove the filter-holder from the group;
- rinse a final time, so as to remove any residual detergent.

WARNING

Do not use a solid filter to clean the machines with a lever group (AL-SMMA)

Body

The body panels should be cleaned with a cloth soaked in warm water. Do not use abrasive detergents since the panels could get scratched.

Grinder-doser

Every week clean the bell jar and the dosing device with a cloth soaked in lukewarm water, both inside and out.

Thermo-reserve

Once there is not more coffee in thermal reserve, clean as follows :

- remove the filter with a cloth, avoiding direct contact with the hot parts;
- empty the coffee grounds out of the filter and wash it in lukewarm water;
- remove the plastic funnel and wash it in lukewarm water;
- clean the container with a damp cloth and dry it;
- replace the funnel and the filter.

NOTE

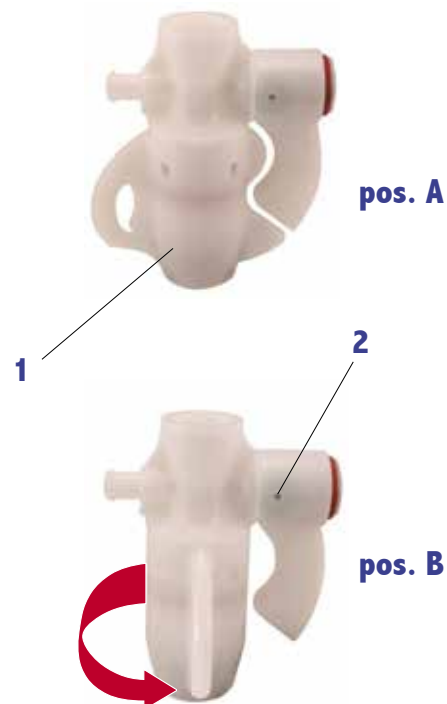
When cleaning, always use perfectly clean and sanitized cloths.



Cappuccino maker

Special care is advised when cleaning the cappuccino maker. Follow these instructions:

- wash initially by immersing the suction tube in water and then dispensing for a few seconds;
- turn the rotating body **(1)** 90° to **pos. B** (milk outlet tube closed);
- hold the milk suction tube in the air. Release the steam (dry run of cappuccino maker);
- wait about 20 seconds to allow for of the cappuccino maker;
- shut off the steam and place the rotating body back in **pos. A**;
- if the air intake hole is clogged **(2)**, carefully unclog it with a pin.



WARNING

It is advisable to clean the cappuccino maker each time it is used for a period of time. This will help to avoid malfunctions and ensure a high level of sanitation of the system.

11. CHECKS AND MAINTENANCE

To ensure perfect safety and efficiency of the machine over time, it is necessary to carry out routine, preventive and special maintenance. In particular, it is advisable to carry out an overall check of the machine at least once a year.

Machine

Periodically check the following items:

- check the pump pressure with a gauge which should indicate a value of between 8 and 9 bar. In case of malfunctions, request the assistance of technical service;
- still using the pressure gauge, check that the boiler pressure is roughly 0.8-1.2 bar. The assistance of technical service may also be required in this case;
- check the condition of the filters for any damage along the edges and see if there are any coffee grounds in the cup. If necessary replace the filters.

Grinder-doser

Periodically check the following items:

- check the dose, which should be about 6-7 g. per stroke and adjust the amount;
- always monitor the degree of grinding and modify as required;
- check the condition of wear of the grinders. They must be replaced when there is too much powder in the ground coffee (the grinders have a life cycle of approximately 600 kg of coffee).

Softener - Electronic anti-lime scale system

Perform the following steps on a weekly basis:

- perform regeneration of the softener as described in chapter 9 (for the manual softener version);
- check that there is salt in the appropriate container (for the version with automatic softener);
- check the LEDs come on properly (anti-lime scale system version)
 - green LED system OK
 - red LED system partially out of order (*)
 - LED off system completely out of order (*)

(*) request assistance from technical service

12. SUGGESTIONS FOR OBTAINING GOOD COFFEE

To obtain coffee of satisfactory quality, it is important for the water used to have a value of 4-5 °F (French degrees). If the water hardness is greater, the use of a softener is advisable.

Avoid using the softener if the water hardness is less than 4 °F.

If the taste of chlorine in the water is especially noticeable, a special filter should be installed.

It is not advisable to keep large amounts of coffee beans, nor to grind large amounts of coffee. Set aside the amount in the container and if possible use it before the end of the day. Do not purchase pre-ground coffee as it expires in a short amount of time.

After the machine has not been used for a relatively long period of time (2-3 hours) cycle through a few dry runs.

Always carry out periodic cleaning and maintenance.

13. LIST OF HAZARDS

This chapter describes possible hazards for the user if the specific safety standards described in this booklet 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 in that it is no longer able to discharge electricity to earth.

Do not use running water to wash

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

Be careful with the steam nozzles and hot water

During use, the steam nozzles and hot water may overheat, thus becoming a source of danger. Handle such parts carefully. Never direct steam or hot water jets directly on parts of the body.

Do not intervene on the machine when it is supplied with electrical power.

Before carrying out any intervention on the machine you must turn it off by means of the main network switch or better yet, disconnecting the connection terminals in the network. 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 relative boiler are to be avoided when there is still water and pressure in the system. You must therefore empty it beforehand, closing the mains cock and dry-running the delivery group for a short time. Switch off the machine and open all the steam and water cocks and taps. With the pressure zero, completely empty the boiler, unscrewing the special pipe fitting situated on the lower part of it.

If the above procedure is not correctly carried out, opening any part of the hydraulic system can cause a sudden outlet of overheated 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 exclusively for professional use. Any other type of use is considered wrong and therefore dangerous. Never allow children or incapable persons to use the machine.

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

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

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



14. MALFUNCTIONS AND CORRESPONDING SOLUTIONS

Indication	Cause	Solution
NO POWER TO MACHINE	1) The machine commutator is in position "0" or "1" 2) The mains power supply switch is in the OFF position	1) Turn the machine commutator to position "2" 2) Place the mains switch in the ON position
NO WATER IN BOILER	1) The water mains tap is closed	1) Open the water mains tap
EXCESSIVE WATER IN BOILER	1) Malfunction in the electrical or hydraulic system	1) Request assistance from technical service
STEAM DOES NOT COME OUT OF NOZZLES	1) The nozzle sprayer is clogged 2) Machine switch in position "1"	1) Clean the steam nozzle sprayer 1) Turn the machine switch to position "2"
STEAM MIXED WITH WATER COMES OUT OF THE NOZZLES	1) Malfunction in the electrical or hydraulic system	1) Request assistance from technical service
NO DELIVERY	1) The water mains tap is closed	1) Open the water mains tap
WATER LEAKS FROM THE MACHINE	1) The tub does not drain 2) The drain tube is detached or broken or has obstruction to water flow	1) Check the sewer drain 2) Check and restore the connection of the drain tube to the tub
COFFEE IS TOO COLD / HOT	1) Malfunction in the electrical or hydraulic system	1) Request assistance from technical service
DELIVERY OF COFFEE IS TOO FAST	1) The coffee is ground too coarsely	1) The coffee is ground too coarsely
DELIVERY OF COFFEE TOO SLOW	1) Coffee is ground too finely	1) The coffee is ground too coarsely
COFFEE GROUNDS ARE WET	1) Dispensing assembly dirty 2) The delivery group is too cold 3) Coffee is ground too finely	1) Wash the assembly with the solid filter 2) Wait for group to heat up completely 3) Adjust the grinding of the coffee
THE GAUGE SHOWS AN UNACCEPTABLE PRESSURE	1) Malfunction in the electrical or hydraulic system	1) Request assistance from technical service
GROUNDS IN CUP	1) The filter holder is dirty 2) The filter holes are worn 3) The coffee is not ground evenly	1) Clean the filter holder 2) Replace the filter 3) Replace the grinders



Indication	Cause	Solution
for SAE-SME: ALL THE LED OF ALL THE PUSH BUTTON PANELS FLASH for AEP-SMSA AEAP-SMAT: THE FRONT LED FLASHES	After a few minutes, automatic filling with water is stopped: 1) Time control device has cut in 2) No water in mains	1) Turn the machine off and then back on 2) Open the water mains tap
INCORRECT COFFEE DELIVERY THE COFFEE DOSE IS NOT MET THE LED OF THE DOSE PUSH BUTTON FLASHES	1) Coffee is ground too finely	1) The coffee is ground too coarsely
COFFEE DELIVERY ONLY BY MEANS OF MANUAL KEY	1) Malfunction in the electrical or hydraulic system	1) Request assistance from technical service
THE PUMP WORKS ONLY WITH THE MANUAL DELIVERY KEY	1) Malfunction in the electrical or hydraulic system	1) Request assistance from technical service
SHUTDOWN OF ELECTRONIC SYSTEM	1) Malfunction in the electrical or hydraulic system	1) Request assistance from technical service
THE PUMP LEAKS WATER	1) Pump malfunction	1) Request assistance from technical service
THE MOTOR STOPS SUDDENLY OR THE THERMAL PROTECTION CUTS IN DUE TO AN OVERLOAD	1) Pump malfunction	1) Request assistance from technical service
THE PUMP FUNCTIONS BELOW THE NOMINAL CAPACITY	1) Pump malfunction	1) Request assistance from technical service
THE PUMP IS NOISY	1) Pump malfunction	1) Request assistance from technical service

WARNING

If the problem is not solved, turn the machine off and contact technical service for assistance. Do not attempt to undertake any repairs.

C.M.A. S.p.A.

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