

INDEX

1. SAFETY AND WARNING2

2. DEFINITION3

3. INSTALLATION AND CONNECTIONS.....4

 3.A. HOW TO REMOVE THE MACHINE FROM THE PACKAGE.....4

 3.B. GENERAL INFORMATION ON CONNECTIONS.....4

4. OPERATING PROCEDURES5

 4.A. START UP5

 4.B. COFFEE DELIVERY DESCRIPTION.....7

 4.C. STEAM AND WATER DELIVERY7

5. CLEANING8

6. DISMANTLING.....8

1. SAFETY AND WARNING



We, at **BRASILIA**, are committed to manufacturing safe operating and serviceable equipment. The many built-in safety features that are part of all BRASILIA equipment are aimed at protecting operators and trained service technicians alike.

- **DO NOT** operate machine without reading all information given in this manual. Failure to follow this instruction may result in equipment damage, poor machine performance, health hazards, or personal injury. The manual is intended for the machine's installer and/or maintenance technician and for the machine's user.
In case of dismay or for further information, contact the local retailer or the manufacturer. This manual reflects the state of the art at the current time and cannot be considered inadequate merely because it is updated later on the basis of new developments. The manufacturer also reserves the right to modify the manual without the duty of updating earlier issues, except in exceptional cases. The pictures, in this manual, are just explanatory and they could not reflect the aesthetics of all models described.
- **DO NOT** operate the machine without complying with all local the safety regulations in force in your country of installation as well as all the rules dictated by common sense, and ensure that routine maintenance is carried out regularly and correctly.
- **DO NOT** operate machine unless it is properly grounded. Failure to follow this instruction may result in electrocution.
- **DO NOT** replace or remove safety instructions and technical data for proper and safe installation and operation, as affixed to machine.
- **DO NOT** touch the groups, the coffee spouts or the water/steam pipes during the operation of machine (pipes must be handle only through special hand-grip); the liquids/steam delivered and the machine parts are very hot and could cause burns.
- **DO NOT** touch the keys during brewing cycle.
- **DO NOT** try to remove any mechanical parts from machine and NOT perform arbitrary modifications. Contact your local authorized service agent/technician.
- **DO NOT** pull electric power cord to disconnect machine from the wall socket.
- **DO NOT** allow machine to be used by children or incapable persons.
- **DO NOT** expose machine to outdoor environment (sun, rain, snow, etc.).
- **DO NOT** operate machine unless all service panels and access door are closed.
- **DO NOT** insert spoons, forks or any other utensil into the machine if it is switched on.
- **DO NOT** operate machine without water supply.
- **DO NOT** obstruct any air intake or exhaust openings: 4" (10 cm) minimum air space behind the machine and 2" (5 cm) space on either side.
- **DO** use only ground coffee or coffee pods for models with special filter-holder.
- **DO** use only filtered and treated fresh water, or pure drinking water (Hardness approx. 7 french degrees).
- **DO** use only original BRASILIA spare parts. Failure to follow this instruction will render any warranty, expressed or implied, or guarantees by manufacturer or authorized service agent as NULL and VOID.
- Always **PERFORM** recommended daily and cleaning operations.

CLEANING:

- **DO NOT** use water sprayers or pressurized water jets to clean machine.
- **DO NOT** use detergents containing perfumes, alcohol or ammonia either directly or indirectly (damp cloth) to clean machine.
- **USE** only disinfecting detergents suitable for crockery.
- Chemical-based detergents used for cleaning machine and/or the system should be used with care so as not to deteriorate any components or cause damage to environment when discarded.

CAUTION: Improper maintenance and cleaning, use of unfiltered water, or damage to internal parts may cause possible blockages in water flow leading to unexpected jets of hot liquid or steam. This may cause serious injury. Use CAUTION while washing and servicing machine!

SANITATIONS:

Coffee and its ingredients (sugar, milk, etc.) are sensitive products and therefore the following basic hygiene processes need to be considered. The following are factors which can affect finished product quality served to the customer:

- Wash hands past elbows. Periodically wash it also throughout the day.
- Wear rubber gloves if cuts or skin conditions exist.
- Clean all parts and components thoroughly.
- Use approved sanitizing tablets.
- Store sanitizer in a cool, dry place. Use in accordance to instructions.
- Allow employee uninterrupted time to complete the cleaning procedure.
- Do not neglect daily cleaning procedures: follow "CLEANING" instructions in the User Manual.
- Rotate stock to use older date product first (FIFO). Observe product expiry date. Product must never be stacked outside or under direct sunlight. Check the indications on the confection.

ADVISE FOR INSTALLER AND MAINTENANCE TECHNICIAN:

- **BRASILIA S.p.A.** and maintenance technician decline every responsibility in the following cases:
 - ▶ if the machine is used for any other than its intended purposes, as described in this manual.
 - ▶ if the recommended maintenance and cleaning procedures are NOT performed.
 - ▶ if original BRASILIA spare parts are not used.
 - ▶ if the INSTALLER, or MAINTENANCE TECHNICIAN, it is NOT authorized and specialized.
 - ▶ if, despite the INSTALLER has obviously taken every possible precaution to guarantee user safety, the different installation and/or transport conditions could give rise to uncontrollable or unpredictable situations.
- **Authorized service agent** (installer or maintenance technician) must inform original manufacturer of POSSIBLE FAULT or wear which may affect the machine system's original safety.
- **The appliance must be installed in a place where only authorized personnel could perform its use and maintenance.**

BRASILIA

- **Check** the condition of the components and, should defects or faults arise, **stop the installation** and ask for their replacement.
 - Regularly perform the **MAINTENANCE PROCEDURES**. The **ENVIRONMENT TEMPERATURE** while performing maintenance operations must be at least 5°C and not over 30°C.
 - **Check that the shelf, on which the machine will come located, is not tilted.**
 - **Place the machine on a shelf high enough to allow the cup warmer to be located at least at 150 cm. over the floor.**
 - **Aerial noise: in the machine operating place the loudness level does not normally overcome 70 dB.**
 - **Do not install the machine in places where jets of water are normally used.**
- If the machine is NOT used for a long time, disconnect the cable to the mains line switch and close the water mains tap.

ADVICES OF USE:

- Always use heated cups: if this is cold, the abrupt temperature change of the espresso coffee will change its taste.
- Never load the filter holder without making an immediate delivery; the ground coffee would "burn" in the group and the espresso obtained would be very bitter.
- Clean regularly the dosing grinder and check the wear of the grindstones.
- The machine's operating process forces the water over the coffee at high pressure. If contact between the water and the ground coffee lasts more than 20/30 seconds, the coffee will taste unpleasant and bitter. This effect is called over-extraction.
- Ground coffee dose, for ONE espresso, between 6 and 7 g. inclusive.
- Checking the wear of the dosing grinder's grindstones.

2. DEFINITION

► **CAM SEMI-AUTOMATIC MACHINE:**

Semi-automatic espresso coffee machine with little level operation.

Automatic boiler filling.

Filter for mixed use either with ground coffee or with coffee pod upon request.

• **Boiler:** Is used to contain the hot water and steam and is made of stainless steel so that its properties do not deteriorate over the years.

• **Heat source:**

This is normally provided by an electric heating element immersed in the boiler which heat the water and provide the steam.

• **Brewing group:**

- The brewing group is the component which, when attached to the filter holder (containing the filter and the ground coffee), brews and delivers the beverages when supplied with hot water.

• **Vibration pump:** This device is used to control the pressure.

• **Steam tap:** It allows steam to be delivered to give the indispensable "froth" to the milk used for preparing cappuccino, for heating water and punches and for preparing chocolate drinks.

• **Water tap:** It allows water to be delivered for preparing hot drinks, tea and tisanes.

• **Control instruments:**

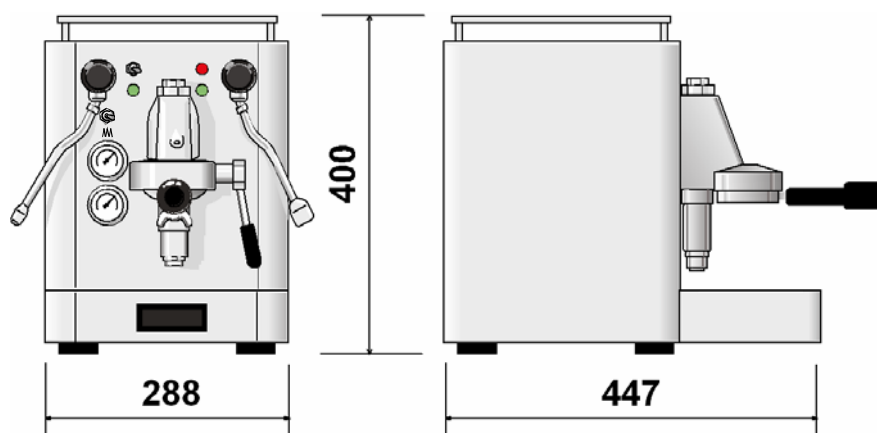
- Manometers: show the current pressure in the boiler and the pump's operating pressure.

- Pressure switch: control the pressure and the switching on of the heat sources to keep the boiler water temperature constant.

The default pressure switch calibration is done by manufacturer; any other adjustment must be performed by authorized personnel only.

- Thermostat: allow the temperature adjusting.

- Warning lights: show the boiler filling and the switching on of the heat sources.



Boiler Capacity	Tension	Power	Absorption	Hydraulic Supply
1,2 lt	V.230/50/1 V.115/60/1	1700W	A. 7,4 A. 14,8	Reservoir capacity 2,5Lt

3. INSTALLATION AND CONNECTIONS

3.A. HOW TO REMOVE THE MACHINE FROM THE PACKAGE

- 1 - Check possible damages to the package. IMMEDIATELY inform the transport agent of any possible damage.
- 2 - Pull open upper flaps of box. Fold flaps out and downward.
- 3 - Pull back cellophane wrapper. Lift machine from inside of box taking it FROM ITS BASE.
Take out accessories: manuals and equipments.
- 4 - Packing materials (cardboard, cellophane, metal staples, etc.) may cut or cause injury if not handled carefully or if used incorrectly; do not leave packaging materials accessible to children or incapable persons. Do not dispose of packing materials in the environment.
- 5 - Place machine in final location and check that:
 - a) the support cabinet is strong and stable enough, on account of the machine weight and check that is NOT tilted.
 - b) there are 4" (10 cm) minimum air space behind the machine and 2" (5 cm) space on either side.

3.B. GENERAL INFORMATION ON CONNECTIONS

HYDRAULIC SYSTEM:

- The water comes directly from the water tank and is heated in the boiler.

ELECTRIC SYSTEM:

- The machine is connected to the power mains through the supply cable with plug.
- An earthing connection is mandatory, as is the system's conformity with the regulations in force in the country of installation. The manufacturer accepts no responsibility for accidents due to non-compliance with the regulations.
- Ensure that the power supply voltage (see rating plate) is the same as that of the mains supply network to be used in the place of installation.
- The use of extensions or flying connections is prohibited. The working environment is heavily exposed to water and damp which prevent the natural conditions for insulating the system.
- **Check that ON-OFF switch is in OFF and connect the supply cable (10) to the socket.**

• ON-OFF switch:

The machine is fitted with a two-position power switch:

Position OFF: no power supply to the internal components.

Position ON: power supply to the operational electric components (boiler filling with water).

• Boiler heating element ON/OFF switch:

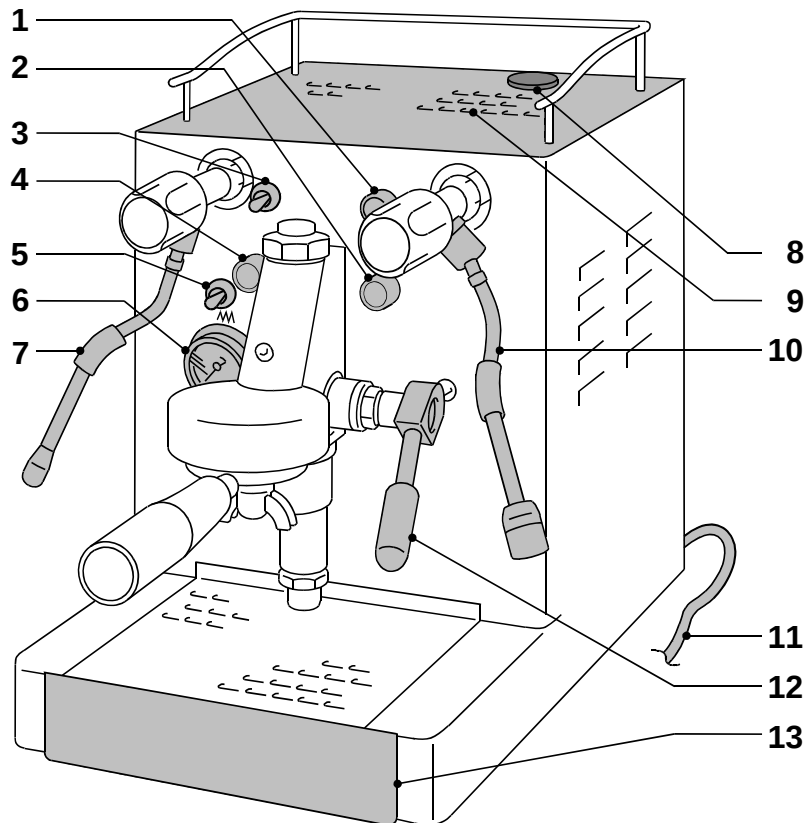
Position OFF: no power supply to the boiler heating element

Position ON: power supply to the boiler heating element

Note:

- If the SUPPLY CABLE is damaged, it must be replaced by the manufacturer or authorized and specialized installer/maintenance, to prevent all risks. Failure to follow this instruction may result in equipment damage, poor machine performance, or electrocution.

4. OPERATING PROCEDURES

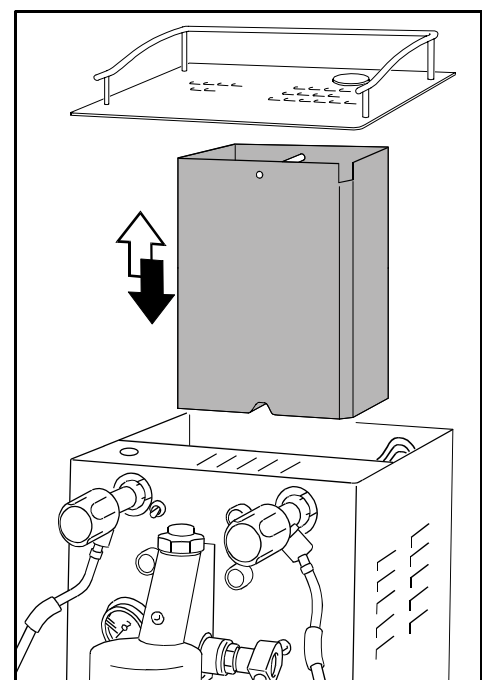


- 1 - HEATING ELEMENT WARNING LIGHT (SWITCHED OFF = MACHINE IN TEMPERATURE) "RED"
- 2 - AUTO-LEVEL WARNING LIGHT "GREEN"
- 3 - ON/OFF SWITCH
- 4 - WARNING LIGHT THAT SIGNALS THE MACHINE OPERATION "GREEN"
- 5 - BOILER HEATING ELEMENT ON/OFF SWITCH
- 6 - MANOMETERS
- 7 - STEAM PIPE
- 8 - CAP FOR HOLE TO INSPECT WATER TANK
- 9 - UPPER CUPS-WARMER
- 10 - HOT WATER PIPE
- 11 - POWER SUPPLY CABLE
- 12 - CAM GROUP LEVER
- 13 - DRAIN TRAY

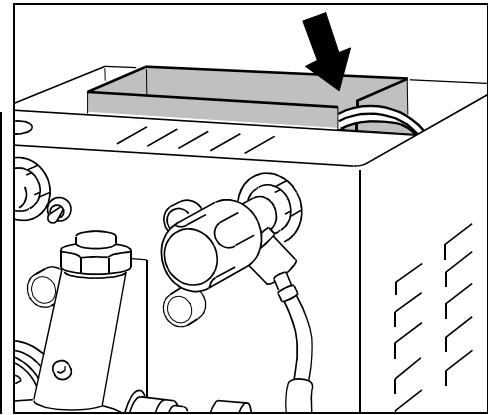
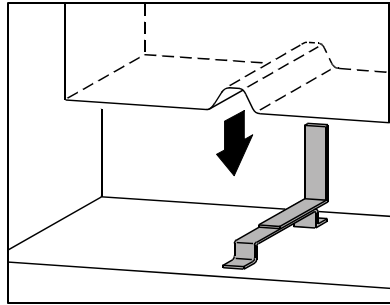
4.A. START UP

FIRST START UP:

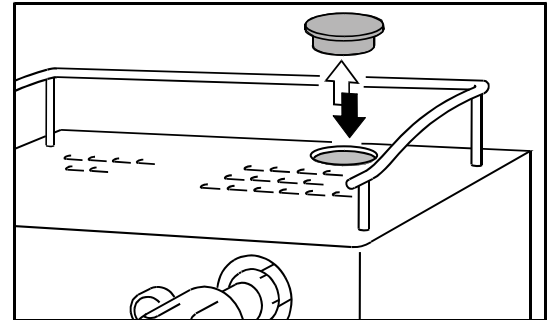
Lift cups-warmer, remove the reservoir and fill it with cold, pure drinking water. Replace the water tank full of water in its location, see picture beside.



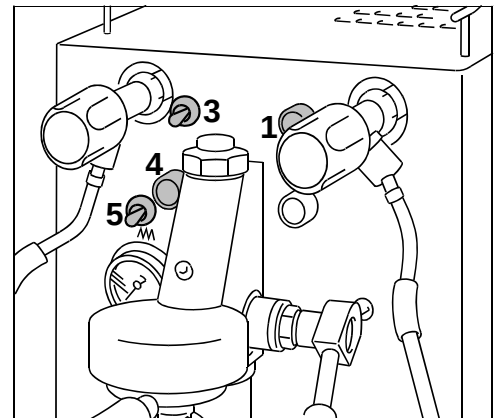
Place the water tank firmly located on the rip fence and be sure that the water aspiring pipes are inserted in their location and immersed in the water.
Replace the cups-warmer.



The water tank can also be filled by using the appropriate hole on the cups-warmer: Remove the cap, fill the water tank with cold, pure drinking water or natural mineral water.
Check the water doesn't come out of the tank and insert the cap in the hole again.



Switch the machine on, by pulling the switch lever (3) on position ON: the boiler will be filled automatically and the "green" warning light (4) will burn.
When boiler filling has been completed and the pump working noise stops, pull the switch lever (5) on position ON: the "red" warning light (1) will burn.
By reaching the working temperature, red warning light (1) will switch off: open the steam tap for a few seconds and close it again.
(Only for technicians: check pressure in the boiler).



SUBSEQUENTLY IGNITIONS:

Lift cups-warmer, remove the water tank and fill it with cold, pure drinking water or natural mineral water.
Replace the water tank full of water firmly located on the rip fence and be sure that the water aspiring pipes are inserted in their location and immersed in the water.
Replace the cups-warmer.
You can also use the appropriate hole on the cups-warmer:
Remove the cap, fill the water tank with cold, pure drinking water or natural mineral water.
Check the water doesn't come out of the tank and insert the cap in the hole again.
Switch the machine on, by pulling the switch lever (3) on position ON.

Note:

In case of machine pause for an half an hour, it is recommended to act for a couple of seconds on the delivery group lever "cam", in order to improve coffee extraction, before performing the next coffee delivery.

4.B. COFFEE DELIVERY DESCRIPTION

1) Remove the filter holder from the group (A) and dispose of the grounds by hitting the edge of the filter holder against the bar in the apposite drawer.

Do not hit the filter holder against an unprotected surface; the filter holder's seal could be damaged. A smart blow should be enough. The small quantity of powder remaining will not have a negative effect on the taste of the coffee.

2) Fill the filter holder with finely ground coffee.

If a professional coffee grinder is used: place the filter holder in the housing provided at the bottom of the grinder-doser and pulling the lever once for a single coffee and twice for a double dose.

Attention: always remember to pull the lever to its full extent; then let it return to its rest position on its own. Always ensure that there is enough ground coffee for at least one dose in the grinder-doser's reservoir.

3) When the filter holder is filled, press down the ground coffee with the special tamp, pushing the filter holder upwards.

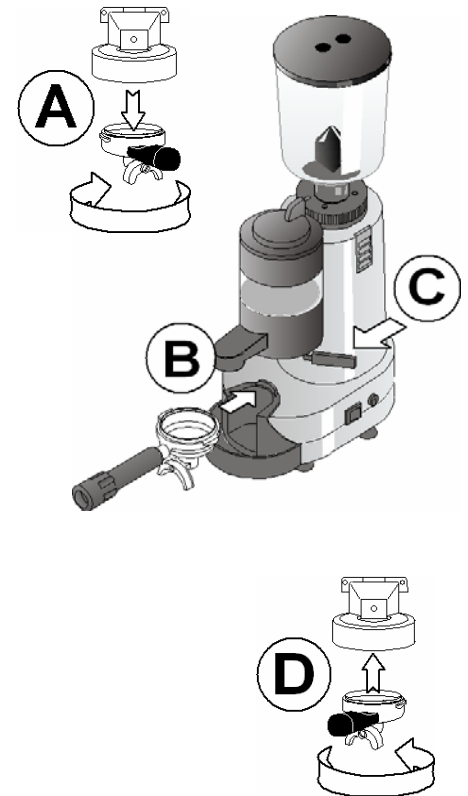
Clean the edge of the filter holder with the palm of the hand to get rid of excess coffee powder. This will ensure that the seal between the filter holder and the machine will be perfect.

If a filter for mixed use is being utilized, you can put a coffee pod instead of ground coffee in it.

4) Fit filter holder to the machine group, fixing it and turning it until it is fully in. Do not tighten too much, otherwise it will be difficult to remove after delivery.

5) After having fitted the filter holder properly put a previously heated cup under the spout. Two cups are required if a double filter holder is used

6) Put the group little level in horizontal position to start delivery. When the required quantity has been delivered, put the group little level in vertical position again.



ADVICES OF USE:

- Always use heated cups: if this is cold, the abrupt temperature change of the espresso coffee will change its taste.
- Never load the filter holder without making an immediate delivery; the ground coffee would "burn" in the group and the espresso obtained would be very bitter.
- The machine's operating process forces the water over the coffee at high pressure. If contact between the water and the ground coffee lasts more than 20/30 seconds, the coffee will taste unpleasant and bitter. This effect is called over-extraction.
- Ground coffee dose, for ONE espresso, between 6 and 7 g. inclusive.
- Checking the wear of the dosing grinder's grindstones.

4.C. STEAM AND WATER DELIVERY

- ◆ Place a cup, or a glass, under the hot water/steam pipe.
- ◆ Open the tap by turning the appropriate handgrip slowly.
- ◆ When the desired quantity is obtained, close the tap.



Warning: The steam pipes are very hot and should not be touched until they have cooled.

Handle the pipes only where protected, as indicated by the arrow "A"

Clean the milk from the pipes as soon as possible to prevent it from drying and becoming difficult to remove.

Inform the customer as soon as possible that the drink is hot.

Keep extra frothed milk for the next cappuccino.

DO NOT warm the same milk but always add COLD milk to the small quantity that remains in the jug.

NOTE: The steam temperature is adjusted in accordance with a certain quantitative of milk in the jug. For not obtaining possible temperature variations during the normal employ of the machine, the use of same quantity in a jug is recommends.

5. CLEANING

- DO NOT use water sprayers or pressurized water jets to clean machine.
 - DO NOT use detergents containing perfumes, alcohol or ammonia either directly or indirectly (damp cloth) to clean machine.
 - USE only disinfecting detergents suitable for crockery.
 - Chemical-based detergents used for cleaning machine and/or the system should be used with care so as not to deteriorate any components or cause damage to environment when discarded.
- CAUTION: Improper maintenance and cleaning, use of unfiltered water, or damage to internal parts may cause possible blockages in water flow leading to unexpected jets of hot liquid or steam. This may cause serious injury. Use CAUTION while washing and servicing machine!
- Constant cleaning of the coffee dosing grinder.

SANITATIONS:

Coffee and its ingredients (sugar, milk, etc.) are sensitive products and therefore the following basic hygiene processes need to be considered. The following are factors which can affect finished product quality served to the customer:

- Wash hands past elbows. Periodically wash it also throughout the day.
- Wear rubber gloves if cuts or skin conditions exist.
- Clean all parts and components thoroughly.
- Use approved sanitizing tablets.
- Store sanitizer in a cool, dry place. Use in accordance to instructions.
- Allow employee uninterrupted time to complete the cleaning procedure.
- Do not neglect daily cleaning procedures: follow "CLEANING" instructions in the User Manual.
- Rotate stock to use older date product first (FIFO). Observe product expiry date. Product must never be stacked outside or under direct sunlight. Check the indications on the confection.

♦ **CLEANING THE WATER RESERVOIR:** remove the water tank, fill it with cold water and pour 3 or 4 teaspoons of citric acid or vinegar; leave this mixture in the tank until it is thoroughly clean. Then empty the tank, rinse it under running water and put it in its original location. Fill the tank again with pure drinking water, making sure that the suction pipes are immersed.

♦ **CAREFULLY CLEAN THE STEAM PIPES** used for heating beverages immediately after use, so as to avoid the formation of deposits which could block the delivery nozzles and also to prevent different types of beverages heated previously from contaminating the taste of the beverage being heated.

♦ **CLEAN THE DELIVERY GROUPS' SPRAYS, underpan seals and filter holder guides** with a sponge cloth.
Rinse the filters and filter holders in hot water with the addition of a specific detergent, to dissolve the fatty coffee deposits. Fit and remove the filter holder to the group, after having installed the blind filter, and make several deliveries.

♦ **DRIP TRAY CLEANING:** remove the cup support grid, slide out the drain water tray and clean it. Also check and, if necessary, clean the plastic drain tank removing possible coffee grounds with the help of a teaspoon.

♦ **OUTER CASE CLEANING:** use a damp cloth (not abrasive). Never under any circumstances use alcohol or solvents on the written or painted parts.

6. DISMANTLING

- The dismantling of the machine must be done by authorized personnel only. For this purpose, pressure from hydraulic circuit must be completely relieved, power cord must be disconnected, and substances which are potentially harmful to the environment must be legally and properly disposed of.
- Place the machine in a suitable place, out of the reach of children or unsuitable people.
- **For dismantling the machine as refuse, take it to an authorized site for the electrical and electronic equipment recycling (*).** This instruction prevents possible damages to the environment and protects human health. For other information on recycling, contact the adherence Council offices, the domestic waste dismantling service or the dealer.
- Do not dispose of it in the environment.

(*)



Label affixed on the machine for identification of **DIRECTIVE (2002/96/EC) on Waste Electrical and Electronic Equipment (WEEE)**, destined to the European market.