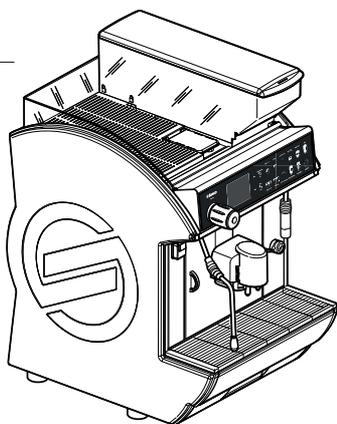
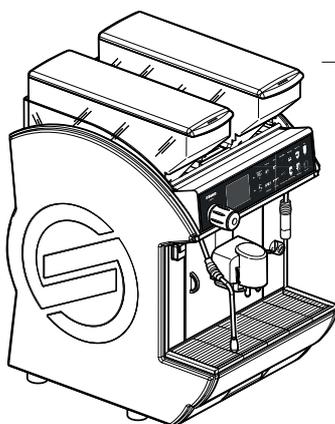


Automatic Machine for Espresso Coffee

IDEA RST



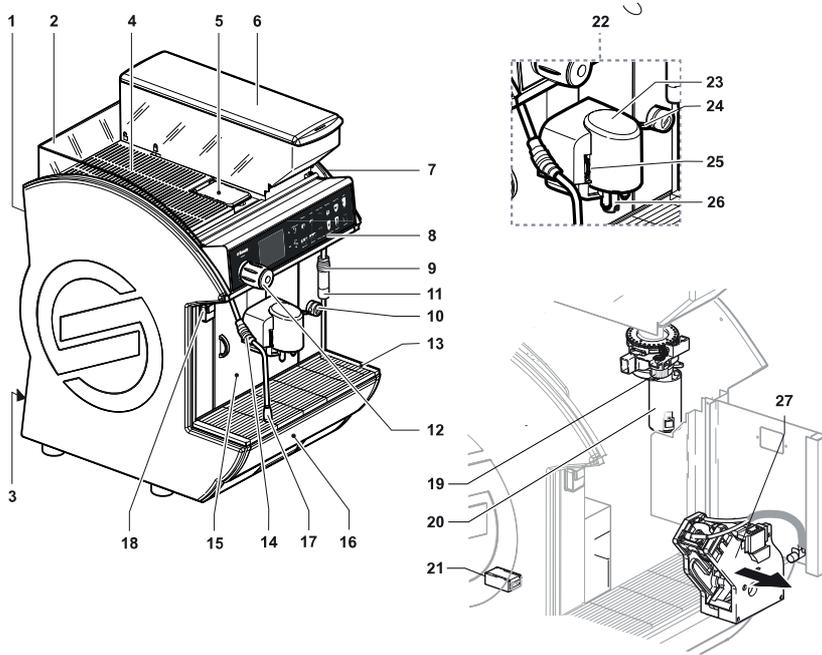
Type: CAP020/A/B



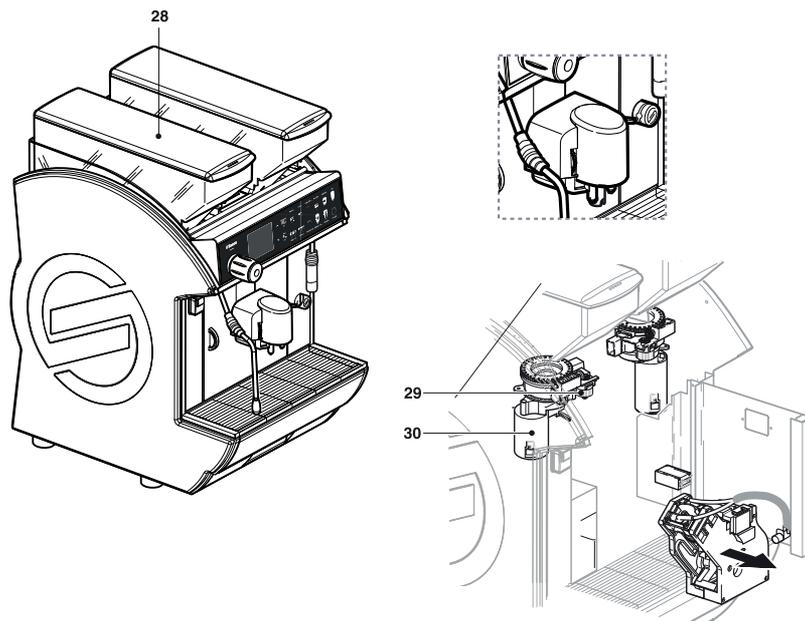
Type: CAP020B 2M

MAIN PARTS

Mod. LUXE / Mod. COFFEE / Mod. CAPPUCCINO / Mod. CAPPUCCINO USA



1	Left panel	15	Door
2	Cup shield	16	Coffee grounds drawer
3	Rear panel	17	Steam wand (except for COFFEE set-up)
4	Cup warming surface	18	Power button
5	Pre-ground coffee door (except for CAPPUCCINO USA set-up)		"I" Electrical functions enabled - Machine on - Indicator light on.
6	Right coffee bean hopper		"O" Electrical functions disabled - Machine off - "I" button indicator light off.
7	Right panel	19	Right grinder adjustment knob
8	Control panel	20	Right coffee grinder group
9	Rubber grip	21	Mechanical pulse counter
10	Hose clamp (CAPPUCCINO set-up)		It displays the number of beverages brewed by the machine.
11	Hot water wand (except for COFFEE set-up)	22	Brew group
12	Steam dispensing knob (except for COFFEE set-up)	23	Brew group cover
	Clockwise: Steam jet open	24	Milk froth adjustment (CAPPUCCINO set-up)
	Counter-clockwise: Steam jet closed	25	Temperature adjustment (CAPPUCCINO set-up)
13	Drip tray	26	Milk dispensing spout (CAPPUCCINO set-up)
14	Anti-scald steam wand rubber	27	Brew group

Mod. DUO

28	Left coffee bean hopper
29	Left grinder adjustment knob
30	Left coffee grinder group

SAFETY INSTRUCTIONS

- ⚠ For professional use only.
- ⚠ The professional appliance cannot be installed outdoors. Do not place it in areas where the temperature is lower than 2°C or higher than 32°C and in particularly humid or dusty places.
- ⚠ Do not install the appliance in a location where water jets may be used.
- ⚠ Make sure the appliance is installed on a flat surface capable of bearing its weight (see section “Technical Specifications”) and make sure to leave a clear area of at least 30 cm around the machine.
- ⚠ It is forbidden to: use jets of water for cleaning operations.
- ⚠ Only install the appliance in places where it can be supervised by qualified personnel.
- ⚠ The use by children older than 8 years or by persons with reduced physical, mental or sensory abilities or with lack of experience and skills is allowed, provided that they are supervised or instructed on how to use the appliance correctly and that they understand the hazards involved.
- ⚠ Children must not play with the appliance.
- ⚠ Children must not carry out any cleaning and maintenance operations without being monitored.

- ⚠ Before connecting the appliance to the water network, please read and follow the applicable regulations in force in your country.
- ⚠ In case of filling tube replacement, use the new set of tubes supplied with the appliance, not the old one.
- ⚠ If the power cord is damaged, it must be replaced by the manufacturer, its service centre or by adequately qualified personnel in order to avoid any risks.
- ⚠ Access to the internal area is restricted to persons having knowledge and practical experience of the appliance, in particular as far as safety and hygiene are concerned.
- ⚠ It is recommended to install a residual current device (RCD) with a rated residual current not exceeding 30 mA.
- ⚠ Never clean the internal area of the machine with power supply on or with the plug connected. In any event do not use water jets or detergents.
- ⚠ Connect the appliance to a drinking water main with pressure between 0.15 MPA and 0.8 MPA (1.5 and 8 bar); see data on the data plate.

CONTENTS

MAIN PARTS	4	13 INSTRUCTIONS FOR END OF OPERATIONAL LIFE DISPOSAL	60
1 INTRODUCTION TO THE MANUAL	9		
1.1 PREAMBLE	9		
1.2 ICONS USED	11		
2 INFORMATION ABOUT THE APPLIANCE	12		
2.1 INFORMATION FOR THE USER	12		
2.2 INTENDED USE OF THE APPLIANCE	12		
2.3 APPLIANCE IDENTIFICATION	13		
2.4 TECHNICAL SPECIFICATIONS	14		
3 SAFETY	15		
3.1 GENERAL SAFETY INSTRUCTIONS	15		
3.2 OPERATOR REQUIREMENTS	16		
3.3 SAFETY DEVICES	17		
3.4 RESIDUAL RISKS	17		
4 HANDLING AND STORAGE	18		
4.1 UNLOADING AND HANDLING	18		
4.2 STORAGE	18		
5 INSTALLATION	19		
5.1 CAUTIONS	19		
5.2 UNPACKING AND POSITIONING	20		
5.3 CONNECTION TO THE WATER NETWORK	21		
5.4 ELECTRICAL CONNECTION	22		
6 DESCRIPTION OF CONTROLS	24		
6.1 CONTROLS	24		
7 SUPPLY AND START UP	27		
7.1 COFFEE BEAN SUPPLY	27		
7.2 REFILLING WITH PRE-GROUND COFFEE	27		
7.3 CREMA ADJUSTMENT	27		
7.4 TEMPERATURE ADJUSTMENT	28		
7.5 COFFEE GRIND ADJUSTMENT	28		
7.6 FIRST APPLIANCE START-UP	29		
7.7 WASHING THE PARTS COMING INTO CONTACT WITH FOOD	29		
7.8 USING THE APPLIANCE	29		
8 PROGRAMMING AND MAINTENANCE MENU	30		
8.1 DESCRIPTION OF BUTTONS FOR PROGRAMMING PHASES	30		
8.2 PROGRAMMING MENU	31		
9 OPERATION AND USE	41		
9.1 MACHINE STATUSES	41		
9.2 MANUAL START-UP	41		
9.3 PROGRAMMED AUTOMATIC START-UP	42		
9.4 STAND-BY TEMPORARY START-UP	42		
9.5 BEVERAGE SELECTION	42		
9.6 STEAM	45		
9.7 BREW BUTTONS PROGRAMMING	46		
9.8 DISPLAY MESSAGES	46		
9.9 SWITCHING OFF THE MACHINE	47		
10 CLEANING AND MAINTENANCE	48		
10.1 GENERAL NOTES FOR CORRECT OPERATION	48		
10.2 CLEANING AND SCHEDULED MAINTENANCE	49		
10.3 UNSCHEDULED MAINTENANCE	55		
11 TROUBLESHOOTING	58		
12 STORAGE - DISPOSAL	59		
12.1 LOCATION CHANGE	59		
12.2 INACTIVITY AND STORAGE	59		

I INTRODUCTION TO THE MANUAL

I.1 Preamble

-  This manual is an integral part of this machine and it must be kept in a known and easily accessible place, in good conditions, throughout the whole service life of the machine (including any transfer of ownership). Its purpose is to provide all the necessary information for a correct and safe use of the machine.
-  In case of loss or deterioration of this manual, contact the Authorised Service Centre for a copy, specifying the model and the construction year of the machine.
-  The Authorised Service Centres are also available for any technical explanation, information on its operation, technical assistance and spare parts supply.
-  The content of the manual is exclusively meant to guarantee the use of the machine in the safest way for the users, the machine and the environment. It allows an easy troubleshooting of its faults and anomalous operating conditions by performing simple checks and servicing in compliance with the instructions given in the following pages and with the Health and Safety instructions in force.

-  Carefully read this manual and make sure to have clearly understood its content before performing any operation.
 -  Each single user of the machine must carefully read the instruction manual.
 -  The Manufacturer reserves the right to modify and improve the described models, without any prior notice.
 -  For any particular needs, contact the Distributor, your Country Importer (if any) or the Manufacturer.
-  All the rights of this manual are reserved to Saga Coffee S.p.A. Any copy or even partial disclosure, not expressly authorised in writing, are absolutely forbidden.
 -  Always refer to this manual before carrying out any operation.

Manufacturer: SaGa Coffee S.p.A.
Località Casona, 1066 - 40041 Gaggio Montano
Bologna, Italy

This product has been manufactured by SaGa Coffee S.p.A. and sold under its own responsibility. SaGa Coffee S.p.A. is the guarantor of the product. Saeco is a registered trademark of Koninklijke Philips N.V. and its use is licensed by Koninklijke Philips N.V.

1.2 Icons Used

Various kinds of warnings are contained in this manual to highlight the different hazard or competence levels.

Each icon is followed by a message describing the procedure and providing useful information.

Warning

Information about user safety and machine integrity.

Prohibition

It is used to highlight actions/operations not to be performed.

Important

It draws attention on a particularly important subject.

Macchina spenta

Operations to be done with power supply off.

User

Operations to be carried out by the machine user.

Maintenance technician

Operations to be carried out exclusively by the personnel responsible for unscheduled maintenance and repairs.

2 INFORMATION ABOUT THE APPLIANCE

2.1 Information for the User

 The appliance must be installed in a well-lit, sheltered and dry place and on a table suitable to bear its weight.

To ensure its correct operation and reliability over time, comply with the following recommendations:

- ambient temperature: from +2°C to +32°C;
- maximum humidity allowed: 80% (non-condensed).

For special installations, not covered by this manual, please contact the dealer or the local importer. If this is not possible, please contact the Manufacturer.

For any particular need contact the Distributor or your Country Importer. If this is not possible, contact the Manufacturer.

The Manufacturer customer service is available to clarify any doubts concerning the correct operation of the appliance.

If the power cord is damaged, it must be replaced by the Manufacturer or by its Service Centre, or alternatively, by a person with similar qualifications.

The AUTHORISED SERVICE CENTRE is available for any explanation or information regarding the correct operation of the appliance and to satisfy any request for spare parts supply or technical assistance.

The Manufacturer reserves the right to make any modifications to the appliance without prior notice.

All rights of reproduction of this manual are reserved to the Manufacturer.

The Maintenance Technician must carefully read and observe the safety warnings contained in this manual to ensure that installation, start-up, use and maintenance operations are performed in complete safety.

2.2 Intended Use of the Appliance

The machines described in this manual have been designed, manufactured and protected to automatically brew (in a programmable way) the following beverages:

- instantly-ground coffee bean-based;
- pre-ground coffee-based (except for DUO and AMERICA set-up);
- milk and instantly-ground coffee bean-based (CAPPUCCINO and CAPPUCCINO USA set-up).
- hot water and steam (except for COFFEE set-up) for beverage preparation and heating.
- hot milk (CAPPUCCINO and CAPPUCCINO USA set-up).

Using the machine for any other purpose is considered dangerous and as a misuse.

 Do not place inside the appliance any product that may become dangerous as a result of unsuitable temperatures.

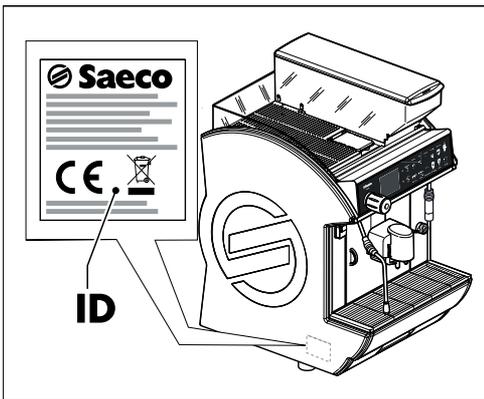
 Misuse voids all forms of warranty, releasing the Manufacturer from any responsibility for damage to property and/or personal injury.

 The following are also considered misuse:

- any use other than the intended use and/or employing methods other than those described in this manual;
- any operation on the appliance in breach of the instructions provided in this manual;
- any tampering with parts and/or safety devices not previously authorised by the Manufacturer and performed by unauthorised personnel;
- placing the appliance in any locations other than those indicated in this manual.

2.3 Appliance Identification

The appliance is identified by the model name and serial number shown on the special plate.



The plate contains the following data:

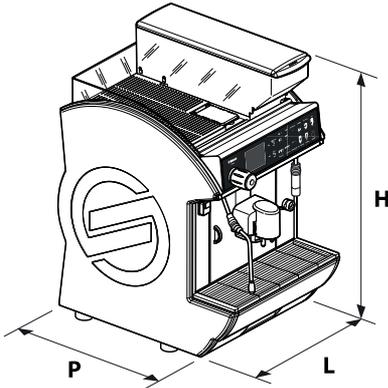
- name of the Manufacturer;
- marks of conformity;
- model;
- serial number;
- year and month of manufacture;
- supply voltage (V);
- supply frequency (Hz);
- electrical power consumption (W);
- number of phases of the power supply (PH);
- pressure allowed in the water network (MPa);
- appliance code.

 It is strictly forbidden to tamper with or modify the data plate.

 When contacting the technical service, always refer to this plate by indicating the technical data shown on it.

 When getting in touch with the authorised service centres, please indicate the model and serial number.

2.4 Technical Specifications

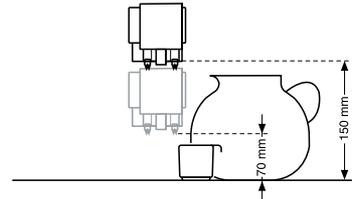
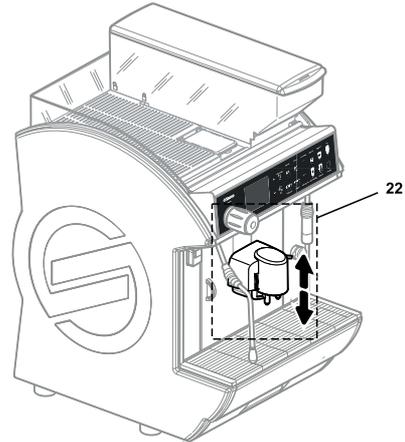


Size (w x h x d)		410 x 695 x 550 mm
Supply Voltage		208 V 60 Hz
Power cord length		1,500 mm
Power consumpt	Mod. LUXE	See the data plate
	Mod. COFFEE	See the data plate
	Mod. CAPPUCCINO	See the data plate
	Mod. DUO	See the data plate
	Mod. CAPPUCCINO USA	See the data plate
Water network pressure		See the pressure data plate
A-weighted sound pressure level		less than 70 dB
25 capsules	Mod. LUXE	53 kg
	Mod. COFFEE	45 kg
	Mod. CAPPUCCINO	54 kg
	Mod. DUO	58,5 kg
	Mod. CAPPUCCINO USA	54 kg
Coffee bean hopper capacity		2 kg

NOTE

The machines can be pre-set for every single type of brewing. Most electric parts are powered by 24 V DC.

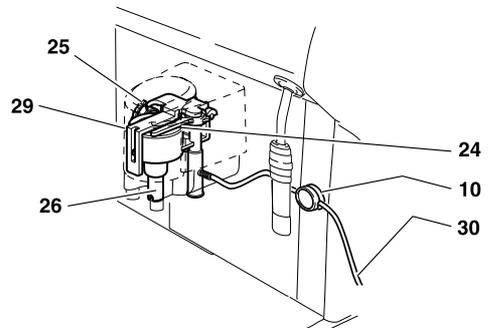
Brew group



22 Brew group

The position of this group can be adjusted according to the height of the container used. It is possible to move the dispensing spout in the high or low position. Thus, many brewing heights can be obtained.

Cappuccinatore Group



The Cappuccinatore group is made up of:

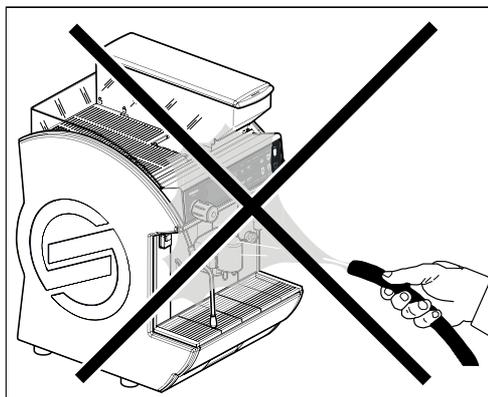
- 10 hose clamp
- 24 crema quality adjustment
- 25 Temperature Adjustment
- 26 milk dispensing spout
- 29 Cappuccinatore
- 30 milk suction tube

3 SAFETY

3.1 General Safety Instructions

It is forbidden to:

- disable the safety devices installed on the appliance;
- service the machine prior to unplugging the power cord;
- install the appliance outdoors. It is advisable to place it in a dry place where the temperature does not drop below 2°C, in order to prevent any possible freezing.
- use the appliance for purposes other than those indicated in the sale contract and in this manual;
- electrically connect the appliance using multi-sockets or adapters;
- use jets of water for cleaning operations.



It is mandatory to:

- check conformity of the power supply;
- use original spare parts;
- carefully read the instructions contained in this manual and in the attached documents;
- use personal protective equipment when performing installation, testing and maintenance operations.
- Use a new gasket kit each time you disconnect and connect the machine again to the water system.

Precautionary measures to prevent human errors:

- make the operator aware of safety issues;
- handle the appliance, either packaged or unpackaged, in complete safety;
- deeply know the installation procedures, its correct operation and its limits;
- dismantle the appliance in complete safety, in accordance with the workers' health and environmental protection regulations in force.

 To prevent machining residues from coming into contact with the beverages, dispense about 0.5 l of water for each dispensing path before definitely starting the machine. The dispensed beverages can be drunk only after performing this operation.

 Do not install the appliance in a location where water jets may be used.

 Only install the appliance in places where it can be supervised by qualified personnel.

 In case of failure or malfunctioning, please refer only to the qualified personnel of the technical service.

 The manufacturer is not liable for damage to persons or property resulting from failure to follow the safety instructions provided in this section.

3.2 Operator Requirements

Two operators with different skills are required in order to guarantee the appliance's safety:

User

Person in charge of using and attending the appliance. The user is allowed to: start the appliance, adjust the operating parameters, stop the appliance, refill the appliance, empty the trays and clean the outside of the appliance. On detection of appliance malfunctions, the user must request the assistance of the Maintenance Technician.

 The user is not allowed to carry out operations indicated in this manual as competence of the Maintenance Technician.

Maintenance technician

Person in charge of installation, adjustment, set-up and, in general, maintenance operations on the appliance.

 Access to the internal area is restricted to persons having knowledge and practical experience of the appliance, in particular as far as safety and hygiene are concerned.

3.3 Safety devices

 The machines described in this manual have been manufactured in compliance with the relevant European Regulations in force and all its potentially dangerous parts can be thus considered safe.

- Any overpressure in the water system that produces steam and hot water is detected by 3 safety valves.
- A thermostat avoids boilers overheating.
- The position of the coffee grounds drawer and of the door (see section "Main Parts"), is controlled by two microswitches that stop the machine if one component is not properly placed (the display will show the component out of place).
- An electrical pulse counter and a mechanical one store the number of beverages brewed and allow programming the scheduled maintenance.

Hot water and steam dispensing spouts

(Except for COFFEE set-up)

- Hot water and steam dispensing spouts are equipped with special rubber grips so that they can be grabbed and adjusted even when hot (see section "Main Parts").

3.4 Residual Risks

 Only use containers made of materials that are suitable "for food".

 The technical specifications of the machines described in this manual do not protect the user from direct steam or hot water jets (except for COFFEE set-up).

 Danger of burning.

 When dispensing hot water and steam, do not turn the jets towards other people or yourselves.

 Hold the wand using only the relevant anti-burn protections.

 If the cup warming surface is activated, its surface may be hot.

4 HANDLING AND STORAGE

4.1 Unloading and Handling

Unloading from the transport vehicle and handling operations of the appliance must be carried out by qualified personnel only and using suitable equipment.

 The appliance must always be kept in upright position.

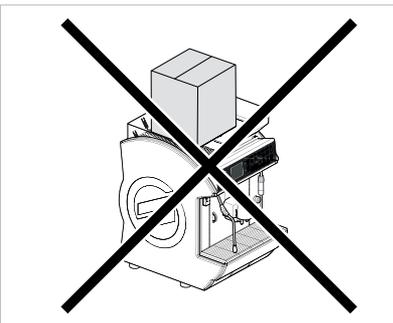
 Do not:

- drag the appliance;
- overturn or lay down the appliance during transport and handling;
- shake the appliance;
- leave the appliance exposed to bad weather, in humid areas or close to heat sources.

4.2 Storage

If the appliance is not installed within a short time, but is to be stored for a long time, it shall be kept in a sheltered place according to the following instructions:

- the packaged appliance shall be stored in a closed, dry area at a temperature between 1°C and 40°C;
- do not put other appliances or boxes on the appliance;
- in any case, it is good practice to protect the appliance from possible deposits of dust or other substances.



5 INSTALLATION

5.1 Cautions

 The appliance cannot be installed in external areas. Avoid installing it in areas where the temperature is lower than +2°C or higher than 32°C and in particularly humid or dusty places. It should neither be installed in places where water jets are used for cleaning operations nor where there is a risk of fire or explosion.

Make sure that the installation place is compatible with the following specifications, before unpacking the appliance:

- the electric socket or the all-pole switch which the appliance is connected to must be easily accessible for the user, so that the user will easily disconnect the machine from the electric mains when necessary;
- the socket voltage must correspond to that indicated on the appliance data plate.
- the gradient of the supporting surface should NOT exceed 2°;

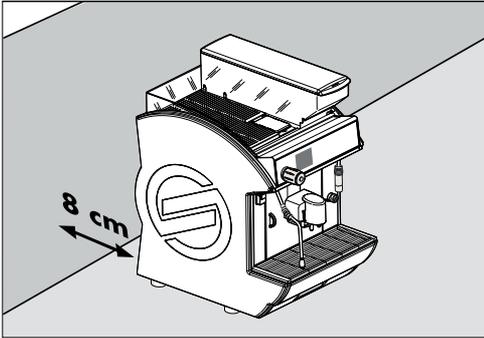
 Check that the size and strength of the surface where the machine is installed are appropriate to safely bear it.

 For a correct and ergonomic use of the machine, it is recommended to install it onto a surface which is at least 1 m high.

 The appliance must be installed on a horizontal surface.

The appliance must only be installed in places where it can be used and serviced by qualified staff only.

If the appliance needs to be positioned close to a wall, it is necessary to leave a space of at least 8 cm between the appliance's back and the wall, in order to make sure that the air outlet grill at the back of the appliance is unobstructed.



5.2 Unpacking and Positioning

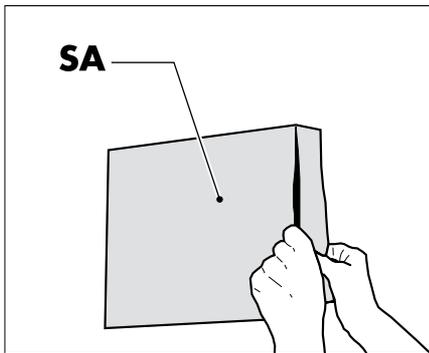
On receipt of the appliance, make sure that it has not suffered any damage during transport or that the packaging has not been unduly opened with consequent stealing of the components contained in it.

If damage of any kind is found, the courier must be informed and notice must be immediately given to the importer or to the seller.

If these are not in the purchaser's country, please contact the manufacturing company directly.

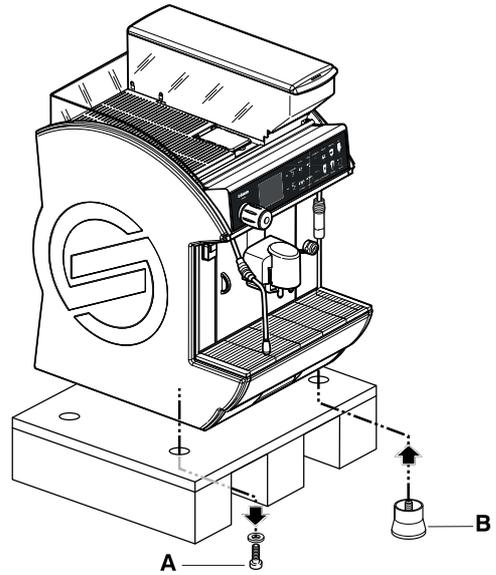
A bag called "ACCESSORY BOX" is supplied with the appliance. It contains the following items:

- Instruction manual.
- Screws and plates.



SA Accessory box

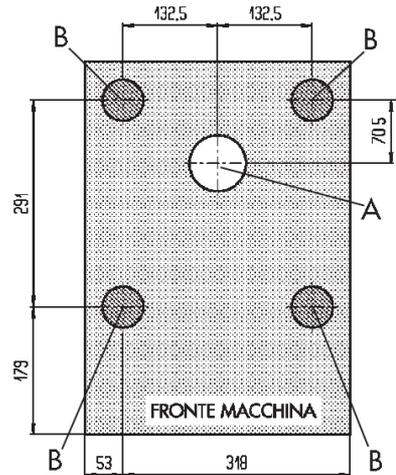
Lift the pallet in order to remove the fixing screws. Screw the 4 supporting feet.



- A** Fixing screws
- B** supporting feet

Check that the surface where the appliance shall be positioned is steady.

Drill a hole with a 100 mm Ø on the surface.



- A** 100 mm Ø hole
- B** Ideal position of the adjustable feet

Definitely place the machine on the supporting surface.

Install the appliance on the surface and level it by adjusting the height of the feet.

5.3 Connection to the Water Network

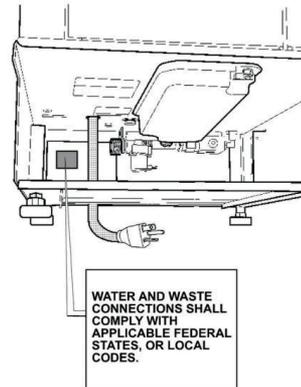
 Before connecting the appliance to the water network, please read and follow the applicable regulations in force in your country.

 Make sure the water network provides drinking water, with pressure ranging between 0.15 MPA and 0.8 MPA (1.5 and 8 bars).

 Water hardness should not be lower than 8°F.

 The machine should be supplied with water treated with a descaling device, particularly in case of water with high content of calcium and magnesium salts (hard water).

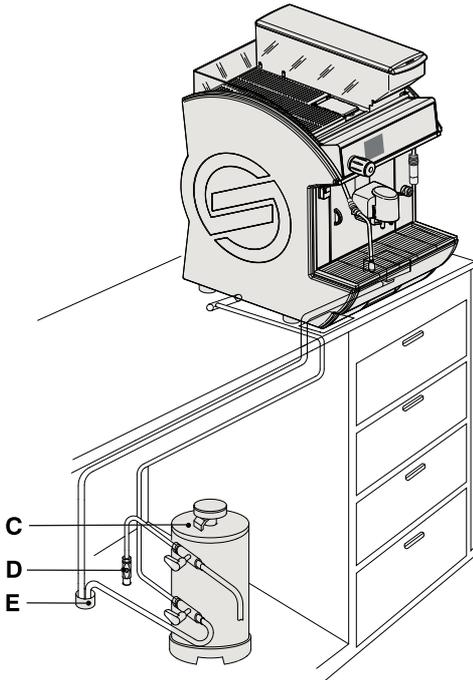
 Before connecting the water filter to the machine, perform a wash cycle until the water is clear. Then connect the water filter to the machine.



 The water network hose must be certified according to the IEC 61770 standard.

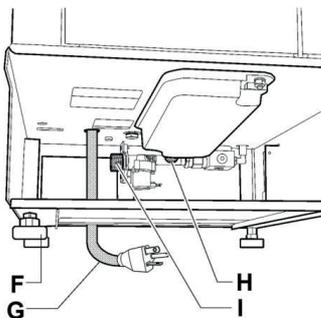
 In case you need to move the machine to a different place, the old fitting unit must be replaced with a new one (water network connecting hose).

- Connect the filter to the water network.



- C** Water Filter
- D** Water Net
- E** Drain pipe

- Connect a drain pipe to the fitting and fix it with a serrated clamp.
- Connect the machine to the drinking water network through the fitting (using tube and fitting made of materials suitable for food).

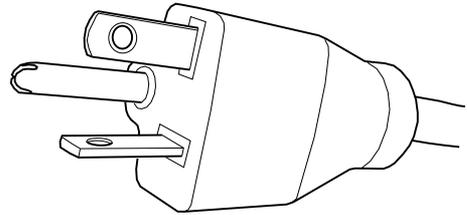


- H** Drain fitting
- I** Dispensing fitting
- G** electric power cord
- F** supporting feet

- Insert the drain and filling pipes into the proper hole (see chapter "Unpacking and Positioning").

5.4 Electrical connection

 The machine must be connected to a system-mono phase 208V 60Hz.



 According to the laws in force in the country of use of the machine, the power cable must be equipped with an all-polar switch (with minimum distance of 3 mm between contacts).

- The all-polar switch must be suitable to the machine supply voltage and able to monitor all voltage polarities.
- Check that the size of the cables is suitable for the machine's absorption.

 The connection point (socket or all-polar switch) must be located in an easily accessible place for the user to be able to disconnect the machine from the power supply line, if necessary.

6 DESCRIPTION OF CONTROLS

6.1 Controls

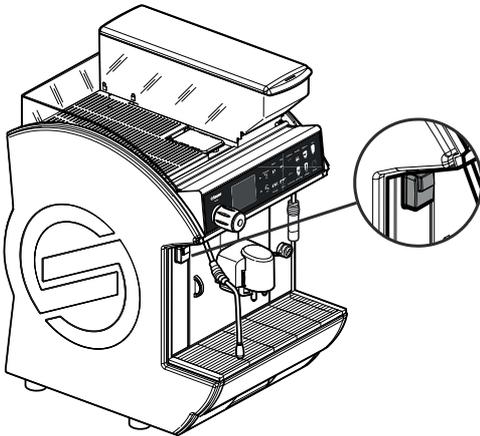
The appliance is equipped with the following controls:

- Power button
- Control panel

6.1.1 Power button

When the machine is connected to the electric network and the all-pole switch is set to "I", the following situations may happen when operating the power button:

- Power button set to "0", the control panel is off.
- Power button set to "I", the control panel is on.



 The fact that the power button is set to "0" does not represent a guarantee that the machine is not powered.

 When performing any kind of cleaning or maintenance operations inside the machine, disconnect it from the mains and set the all-pole switch to "0".

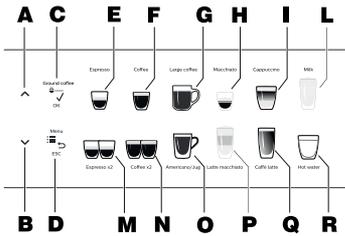
6.1.2 Control panel

The control panel comprises a touch keypad and a display showing messages during normal operation, programming and maintenance phase.

 The function of some buttons changes according to the appliance phase (ordinary dispensing or programming mode) change.



6.1.3 Button Description during Normal Operation



Press these buttons to dispense the programmed beverages or to perform the required operations.

BUTTON		BUTTON	
A	Selection button UP	G	Large coffee / Ice Americano
B	Selection button DOWN / PowerSteam	O	Americano Jug (1)
C	Pre-ground Coffee / OK (1)(2)	H	macchiato (3)
D	Menu	P	Latte Macchiato (3)
E	Espresso	I	Cappuccino (3)
M	Espresso x2	Q	Caffè Latte (3)
F	Coffee	L	Hot Milk (3)
N	Coffee x2	R	Hot Water (1)

- (1) Button sequence described at chapter "Beverage Selection"
- (2) Functions described at chapter "Ok Button"
- (3) Beverages with milk and coffee (any possible combination).

Please contact an authorised service centre to activate settings other than the default ones.

The machines are delivered with factory standard settings.

6.1.3.1 OK Button

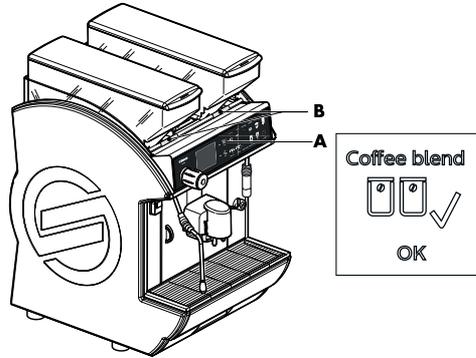
Press the OK button to select the pre-ground coffee or the coffee bean hopper according to the machine version. (except for DUO model)



6.1.3.2 Container Selection

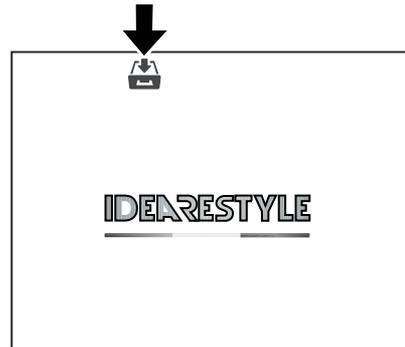
(for DUO model only)

The Duo version is equipped with 2 coffee bean hoppers and 2 coffee grinders. This allows you to double the products that can be dispensed or insert a different product quality. Press the button to select a container.



- A container selection button
- B selected container indicator light

The display shows - by means of a lit icon - the active container.



In case of beverage dispensing with a preset container, the manual selection of the container is not valid.

6.1.3.3 Automatic steam wand function

(for models with automatic steam wand only)

Press the button shown in the figure for 2 seconds to activate the steam by means of the automatic steam wand. Steam dispensing will automatically stop when the pre-set temperature is reached.

Steam dispensing can be stopped at any time by pressing the button again.

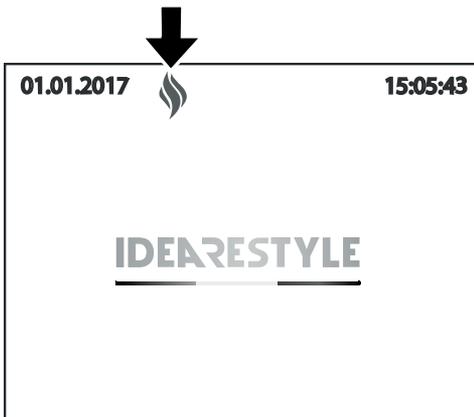
Power steam



The temperature for steam dispensing end can be set through the Beverages Setup menu 19. Autosteam. As an alternative, the dispensing end temperature can be set by immersing the steam wand in milk or in water to be heated, and by pressing and holding pressed the button shown in the figure until the desired temperature is reached. The temperature reached when the button is released will be stored for the following steam dispensing cycles.

When the Auto Steam function is active, the display shows the icon as shown in the figure.

The same icon flashes while programming temperature.



7 SUPPLY AND START UP

7.1 Coffee Bean Supply

- Remove the container cover.
- Pour the coffee beans into the hopper.
- Put the cover back on the container.

 Check that there are no foreign bodies in the coffee which could damage the grinders.

The “DUO” version of the appliance is equipped with two coffee bean hoppers, which means that two different types of coffee quality can be used.

7.2 Refilling with Pre-ground Coffee

(except for Cappuccino USA model)

 This operation can only be performed with the machine switched on.

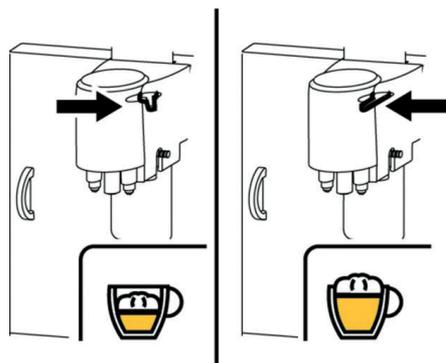
- Press the “Ground Coffee” button
- Open the pre-ground coffee door and pour no more than 7 grams of powder.
- Close the door
- Select the beverage to be dispensed

 It is not possible to dispense all beverages with the dose of pre-ground coffee. Refer to the dispensing table at chapter OPERATION AND USE for the available combinations.

7.3 Crema Adjustment

Crema quantity in beverages depends on the adjustment of the adjusting lever.

- By turning the lever rightwards, a greater quantity of crema is obtained.
- By turning the lever leftwards, a smaller quantity of crema is obtained.

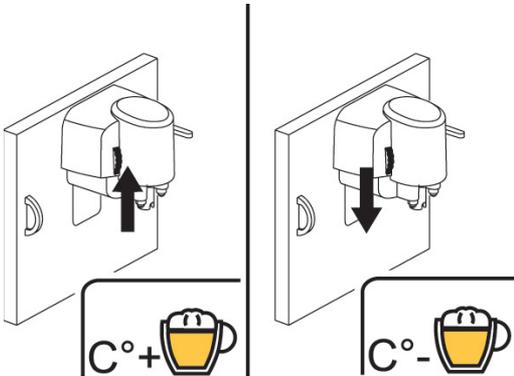


7.4 Temperature Adjustment

 The milk to be used for the Cappuccinatore must be stored in a fridge at a temperature not higher than 4° C. If not used, do not leave it outside the fridge for more than 30 minutes.

Milk temperature depends on the adjustment of the adjusting lever.

- By turning the lever upwards, the temperature will increase.
- By turning the lever downwards, the temperature will decrease.



7.5 Coffee Grind Adjustment

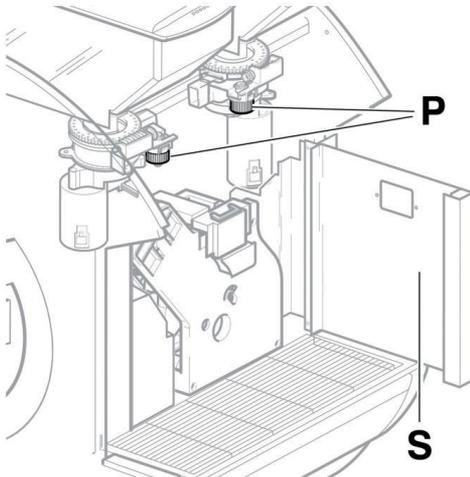
 Regardless of the coffee blend, a very fine grind (notch on low values) increases the density, the crema quantity and the brewing time of the beverage. On the contrary, a coarse grind (notch on high values) decreases the density, the crema and the brewing time.

 Do not turn the knob counter-clockwise to the limit stop. This operation causes the grinders tightening and the consequent machine block.

 In case a foreign body in the coffee blend causes the grinders block and, subsequently, the block of the machine (the display will show: “Grinder error”), contact an Authorised Service Centre.

The grinding is pre-set by the manufacturer on standard values, but it can be changed with the following procedure:

- Open the door, rotate the knob counter-clockwise to set a finer grind (the notch moves on a lower value), or clockwise to set a coarser grind (the notch moves to a higher value). Use the 10 mm wrench supplied as an accessory to perform adjustment.



- P** Adjustment knob
S Door

7.6 First Appliance Start-up

- Check if the removable components are correctly placed and if the door is closed.

Otherwise, when the machine is switched-on, the display will indicate which component is in the wrong position.

- Refill the appliance (follow the instructions above) and connect the plug to the electric network (see section "Connection to the Electric Network").
- Turn the all-pole switch to "I".
- Switch on the machine by means of the power button.

The message "HEATING WAIT" will be displayed. Once the warm-up phase is over, the display will show: "READY FOR USE".

- Adjust the dispensing spout so as to obtain the suitable height for the containers used.
- Place one or two containers under the dispensing spout.
- Press the button corresponding to the beverage selected.

Although all buttons are previously programmed on standard values, check if the dispensed beverage has the desired features.

If not, brew buttons must be reprogrammed (see chapter "Brew Buttons Programming").

7.7 Washing the Parts coming into Contact with Food

Wash all appliance parts coming into contact with food.

- Thoroughly wash your hands.
- Prepare a chlorine-based, antibacterial disinfecting solution (the products can be purchased at the chemist's) following the concentrations indicated on the product.
- Remove all product containers from the appliance.
- Remove the container lids and product chutes. Immerse all these parts in the previously prepared solution.

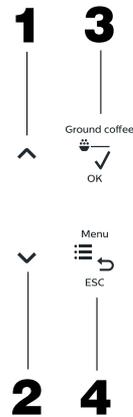
7.8 Using the Appliance

The beverage selection modes are indicated in chapter "Operation and Use".

8 PROGRAMMING AND MAINTENANCE MENU

 This chapter contains instructions on how to set and change the programming parameters of the appliance.

 Therefore it is necessary to carefully read it and to understand the exact sequence of operations before performing them.



Some functions also enable to program one or more data (already programmed on standard values).

8.1 Description of Buttons for Programming Phases

Use the buttons described below to scroll the appliance menus.

 During programming the following buttons have a different function than the one they usually have during machine use.

BUTTON	Description	FUNCTION
1	Up	Go back to the previous option inside the same programming level; Increase the value of a datum to be changed.
2	Down	Go on to the following option inside the same programming level; Decrease the value of the datum to be changed.
3	OK	Move from a menu level to another one; Prepare a datum for the change; Confirm a datum or a function.
4	Menu/Esc	Enter the programming menu; Confirm the changes and go back to the previous menu level until exiting the menu.

To adjust the data values to be re-programmed:

- Select the function.
- Confirm the function with the “OK” button.

The cursor moves under the value to be changed.

- Press the “Up” or “Down” buttons to change its value.
- Confirm the modified datum with the “OK” or “Esc” button.

8.2 Programming Menu

The structure of the programming menu is indicated in section "Structure of the Programming Menu".

The section "Description of Messages in the Programming Menu" describes all the items in the programming menu.

8.2.1 Access to the Programming Menu



Press the button shown in the figure to enter the programming menu

Enter the Password by pressing the UP or DOWN buttons to select a number.

Press OK to confirm and move on to the following box. Press ESC to confirm and exit.

Once the password has been entered, it remains active for 5 minutes after exiting the menu.

If you switch off the machine, it will be necessary to enter the password again in case you want to enter the menu.

After entering the password the display will show the following options:

GENERAL SETTING
Beverage set-up
Maintenance
Technical
Washing Menu
MILK PROGRAMMING
Test menu

The "Technical" and "Test menu" menus cannot be accessed and are reserved to the maintenance technician

8.2.2 Structure of the Programming Menu

GENERAL SETTING	
OPTIONNO.	MENU ITEM
1	Language
	ITALIANO
	DEUTSCH
	ENGLISH
	FRANÇAIS
	ESPAGNOL
	PORTUGUES
	NEDERLANDS
	한국어
	Polski
2	CUP WARMING SURFACE %
	0...100%
3	Clock
3.1.	Time
3.2.	Date
3.3.	FORMAT
4	On/Off time
4.1.	Automatic start-up
	Deact.
	Act.
4.2.	ON TIME 1
4.3.	OFF TIME 1
4.4.	ON TIME 2
4.5.	OFF TIME 2
4.6.	ON TIME 3
4.7.	OFF TIME 3
4.8.	ON TIME 4
4.9.	OFF TIME 4
5	Display Backlight
	Display
	20...100%
6	MESSAGES
6.1.	SERVICE MESSAGE
6.2.	DESCALING MESSAGE
7	User Password
Beverage set-up	
OPTIONNO.	MENU ITEM
1	Espresso
1.1.	GRINDER SETTING
	Low
	Standard
	High
1.2	WATER QUANTITY
	27...2702
2	Espresso x2
2.1.	GRINDER SETTING
	Low
	Standard
	High
2.2.	WATER QUANTITY
	27...2702
3	coffee
3.1.	GRINDER SETTING

	Low
	Standard
	High
3.2.	WATER QUANTITY
	27...2702
4	Coffee x2
4.1.	GRINDER SETTING
	Low
	Standard
	High
4.2.	WATER QUANTITY
	27...2702
5	LARGE COFFEE
5.1.	GRINDER SETTING
	Low
	Standard
	High
5.2.	WATER QUANTITY
	27...2702
6	AMERICANO/JUG
6.1.	GRINDER SETTING
	Low
	Standard
	High
6.2.	WATER QUANTITY
	27...2702
7	macchiato
7.1.	GRINDER SETTING
	Low
	Standard
	High
7.2.	WATER QUANTITY
	27...2702
7.3.	MILK QUANTITY
	3...180
8	Latte Macchiato
8.1.	GRINDER SETTING
	Low
	Standard
	High
8.2.	WATER QUANTITY
	27...2702
8.3.	MILK QUANTITY
	3...180
9	Cappuccino
9.1.	GRINDER SETTING
	Low
	Standard
	High
9.2.	WATER QUANTITY
	27...2702
9.3.	MILK QUANTITY
	3...180
10	Caffè Latte
10.1.	GRINDER SETTING
	Low
	Standard
	High
10.2.	WATER QUANTITY

	27...2702
10.3.	MILK QUANTITY
	3...180
11	milk
11.1.	MILK QUANTITY
	3...180
12	FLAT WHITE
12.1.	GRINDER SETTING
	Low
	Standard
	High
12.2.	WATER QUANTITY
	27...2702
12.3.	MILK QUANTITY
	3...180
13	HOT WATER
13.1.	WATER QUANTITY
	24...2487
14	Temperature
14.1.	Coffee
	Low
	Standard
	High
14.2.	FIRST COFFEE
	Low
	Standard
	High
15	Prebrewing
	Off
	SHORT
	LONG
16	Hot Water programm.
	Deact.
	Act.
17	MILK BUTTON
	Deact.
	Act.
18	Hot Water mixing
	Deact.
	Act.
19	Power Steam
	20...100
Maintenance	
OPTIONNO.	MENU ITEM
1	Cappuccinatore Rinsing
2	GROUP RINSING
3	CLEAN BREWING UNIT
3.1.	Cleaning enabling
	Deact.
	Act.
3.2.	Cleaning delay
	10...240
4	WATER FILTER
4.1.	ALARM THRESHOLD
4.2.	STOP THRESHOLD
4.3.	ACTUAL COUNTER
5	Counters
5.1.	TOTAL COFFEE
5.2.	TOTAL WATER
Technical	

WASHING MENU	
OPTION NO.	MENU ITEM
1	Cappuccinatore Rinsing
2	CLEAN BREWING UNIT
3	GROUP RINSING

MILK PROGRAMMING
Test menu

8.2.3 Description of Messages in the Programming Menu

GENERAL SETTING		
OPTION NO.	DISPLAY	Description
1	Language	Press "OK" from the "LANGUAGE" menu to select the language.
	ITALIANO	
	DEUTSCH	
	ENGLISH	
	FRANÇAIS	
	ESPAGNOL	
	PORTUGUES	
	NEDERLANDS	
	한국어 Polski	
2	CUP WARMING SURFACE %	(except for DUO model) This function allows you to activate the cup warming surface by adjusting it from 0 to 100% at intervals of 10.
	0....100%	
3	Clock	This function allows setting the machine clock and calendar.
3.1.	Time	
3.2.	Date	
3.3.	FORMAT	
4	On/Off time	This function allows programming the automatic switch on and off times of the machine over a whole week.
4.1.	Automatic start-up	It activates and deactivates the automatic switch on
	Deact.	
	Act.	
4.2.	ON TIME 1	Confirm "ON/OFF TIME" and use the "Down" and "Up" button to move on the days of the week, hour and minute.
4.3.	OFF TIME 1	Once the cursor is positioned on the days of the week, press OK to enter the edit mode.
4.4.	ON TIME 2	Press the "Down" and "Up" button to select the day to be changed.
4.5.	OFF TIME 2	Press the OK button to activate (day letter underlined) or deactivate (letter not underlined) the day.
4.6.	ON TIME 3	Press the "Menu/ESC" button to confirm and quit the edit mode for the days of the week.
4.7.	OFF TIME 3	Once the cursor is positioned on the hours or minutes, press OK to enter the edit
4.8.	ON TIME 4	Press the "Down" and "Up" button to edit the value.
4.9.	OFF TIME 4	Press the "Menu/ESC" or "OK" button to confirm and quit the edit mode for the days of the week.
5	Display Backlight Display	This function allows you to adjust the display backlighting from 20 to 100%.
	20....100%	
6	MESSAGES	It allows to change the phone number to contact.
6.1.	SERVICE MESSAGE	Press OK to enter the message. Press the UP or DOWN buttons to select a number or the space. Press OK to confirm and move on to the following box.
6.2.	DESCALING MESSAGE	Press ESC to confirm and exit.
7	User Password	It allows changing the user password. The pre-set password is 0000
		Press the UP or DOWN buttons to select a code number. Press OK to confirm and move on to the following box. Press ESC to confirm and exit. Contact the authorised service centre in case you forgot the password.
Beverage set-up		

OPTION NO.	DISPLAY	Description
1	Espresso	<p>The quantity of water and ground coffee used during the dispensing process and programmed upon installation can be changed for each beverage.</p> <p>By selecting "LOW" or "HIGH", the dose is decreased or increased by 1 g.</p> <p>By confirming 'STANDARD', the dose used during the dispensing process is the one programmed by the Maintenance Technician.</p>
1.1.	GRINDER SETTING	
	Low	
	Standard	
	High	
1.2.	WATER QUANTITY	
	27...2702	
2	Espresso x2	
2.1.	GRINDER SETTING	
	Low	
	Standard	
	High	
2.2.	WATER QUANTITY	
	27...2702	
3	coffee	
3.1.	GRINDER SETTING	
	Low	
	Standard	
	High	
3.2.	WATER QUANTITY	
	27...2702	
4	Coffee x2	
4.1.	GRINDER SETTING	
	Low	
	Standard	
	High	
4.2.	WATER QUANTITY	
	27...2702	
5	LARGE COFFEE	
5.1.	GRINDER SETTING	
	Low	
	Standard	
	High	
5.2.	WATER QUANTITY	
	27...2702	
6	AMERICANO/JUG	
6.1.	GRINDER SETTING	
	Low	
	Standard	
	High	
6.2.	WATER QUANTITY	
	27...2702	
7	macchiato	<p>For beverages with coffee and milk it is possible to change the quantity of milk to be used during the dispensing process</p>
7.1.	GRINDER SETTING	
	Low	
	Standard	
	High	
7.2.	WATER QUANTITY	
	27...2702	
7.3.	MILK QUANTITY	
	3...180	
8	Latte Macchiato	
8.1.	GRINDER SETTING	

	Low	
	Standard	
	High	
8.2.	WATER QUANTITY	
	27...2702	
8.3.	MILK QUANTITY	
	3...180	
9	Cappuccino	
9.1.	GRINDER SETTING	
	Low	
	Standard	
	High	
9.2.	WATER QUANTITY	
	27...2702	
9.3.	MILK QUANTITY	
	3...180	
10	Caffè Latte	
10.1.	GRINDER SETTING	
	Low	
	Standard	
	High	
10.2.	WATER QUANTITY	
	27...2702	
10.3.	MILK QUANTITY	
	3...180	
11	milk	
11.1.	MILK QUANTITY	
	3...180	
12	FLAT WHITE	
12.1.	GRINDER SETTING	
	Low	
	Standard	
	High	
12.2.	WATER QUANTITY	
	27...2702	
12.3.	MILK QUANTITY	
	3...180	
13	HOT WATER	
13.1.	WATER QUANTITY	
	24...2487	
14	Temperature	For each coffee brewed, it is possible to change the temperature of the water used during brewing and programmed during the installation phase.
14.1.	Coffee	By selecting "LOW" the temperature decreases by 3°C. By selecting "HIGH" the temperature increases by 3°C. By selecting "STANDARD" the temperature will be the one programmed by the Maintenance Technician.
	Low	
	Standard	
	High	
14.2.	FIRST COFFEE	NOTE The temperature "first coffee" is used at the first brewing process, when the machine is switched on.
	Low	
	Standard	
	High	
15	Prebrewing	This function allows a short break during the first brewing phase. This can improve the quality of the coffee which, "blends" with the first part of water received during the break. By confirming:

	Off	"OFF", pre-brewing is not performed.
	SHORT	"SHORT", the "pre-brewing" programmed by the Maintenance Technician is performed.
	LONG	"LONG", the "pre-brewing" is extended by 1 sec.
16	Hot Water programm.	This function allows changing the functioning of the hot water button.
	Deact.	"OFF"; by pressing the button, hot water is continuously dispensed until the button is pressed again.
	Act.	"ON"; by pressing the button, hot water is dispensed according to the pre-set doses and modes.
17	MILK BUTTON	This function allows changing the functioning of the hot milk button.
	Deact.	"OFF"; by pressing the button, hot milk is continuously dispensed until the button is pressed again.
	Act.	"ON"; by pressing the button, hot milk is dispensed according to the pre-set doses and modes.
18	Hot Water mixing	While the different types of beverages are dispensed, the machine adds a certain amount of hot water, according to the set programming. By confirming:
	Deact.	"OFF", NO hot water is added to the beverage.
	Act.	"ON", the mixing is performed NOTE If the function is disabled the programmed values remain unchanged and can be used again when the function is re-activated.
19	Power Steam	The steam dispensing end temperature can be set.
	20...100	
Maintenance		
OPTION NO.	DISPLAY	Description
1.	Cappuccinatore Rinsing	This function allows dispensing a quantity of steam to avoid the building up of deposits in the Cappuccinatore.
2.	GROUP RINSING	This function allows to wash the brew group by using the special tablets

	follow instructions	<p>(contact an authorised service centre for detailed information on the tablets).</p> <p>Procedure: The process starts from "GROUP RINSING" Press the "Enter" button; the display shows "PUT THE TABLET INTO THE GROUP" Remove the brew group; the display shows "INS. BREW GROUP" Insert the tablet into the brew group and put the brew group back in its place; the display shows "CLOSE SERV. DOOR" Close the door; the display shows "RINSING" The machine starts performing a wash cycle. When the cycle is complete the display shows "REMOVE THE GROUP AND RINSE IT WITH WATER" Remove the brew group; the display shows "INS. BREW GROUP" Wash the group under running water. Put the brew group back into place; the display shows "CLOSE SERV. DOOR" Close the door; the display shows "RINSING COMPLETED PRESS OK" Press the "OK" button to definitely quit the menu so that the machine is ready for use</p>
3.	CLEAN BREWING UNIT	<p>This function allows dispensing a minimum quantity of hot water (about 5 cc) to avoid the building up of deposits in the coffee dispensing spout. The wash cycle is performed automatically after the programmed time (20 - 240 minutes) from the last dispensing</p>
3.1.	Cleaning enabling	By confirming:
	Deact.	"DEACTIVATE": the machine does not perform the wash cycle
	Act.	"ACTIVATE": the machine performs the wash cycle.
3.2.	Cleaning delay	It sets the delay time of the dispensing spout wash from the last dispensing.
	10...240	
4.	WATER FILTER	<p>The "Descaling" warning is intended for the maintenance of the descaling devices (resin softeners or others). The installer or the company in charge of servicing the descaling device can program</p>
4.1.	ALARM THRESHOLD	<p>the quantity of water necessary to perform the system regeneration.</p> <p>Warning! In case ion-resin systems are used, it is extremely important to perform a proper maintenance</p>
4.2.	STOP THRESHOLD	<p>since used resins can cause the treated water to become not-drinking.</p> <p>The "DESCALING" warning is shown both when the machine indicates that descaling is required, and when it blocks definitely.</p>
4.3.	ACTUAL COUNTER	In the last case the "DESCALING" warning is shown together with the "Descaling message"
5.	Counters	These two functions represent respectively the total of the coffee brewing cycles and the total of the hot water dispensing cycles
5.1.	TOTAL COFFEE	If the automatic dosing of hot water is disabled (see function "Hot water program."), a cycle for each activation of the solenoid valve will be counted.
5.2.	TOTAL WATER	NOTE: Both functions are for reference purpose only and cannot be reset.

Technical		
WASHING MENU		
OPTION NO.	DISPLAY	Description
1.	Cappuccinatore Rinsing	This function allows dispensing a quantity of steam to avoid the building up of deposits in the Cappuccinatore.
2.	CLEAN BREWING UNIT	This function allows dispensing a minimum quantity of hot water (about 5 cc) to avoid the building up of deposits in the coffee dispensing spout.
3.	GROUP RINSING	This function allows to wash the brew group by using the special tablets
	follow instructions	<p>(contact an authorised service centre for detailed information on the tablets).</p> <p>Procedure: The process starts from "GROUP RINSING" Press the "Enter" button; the display shows "PUT THE TABLET INTO THE GROUP" Remove the brew group; the display shows "INS. BREW GROUP" Insert the tablet into the brew group and put the brew group back in its place; the display shows "CLOSE SERV. DOOR" Close the door; the display shows "RINSING" The machine starts performing a wash cycle. When the cycle is complete the display shows "REMOVE THE GROUP AND RINSE IT WITH WATER" Remove the brew group; the display shows "INS. BREW GROUP" Wash the group under running water. Put the brew group back into place; the display shows "CLOSE SERV. DOOR" Close the door; the display shows "RINSING COMPLETED PRESS OK" Press the "OK" button to definitely quit the menu so that the machine is ready for use</p>
MILK PROGRAMMING		
OPTION NO.	DISPLAY	Description
1.	MILK PROGRAMMING	It allows storing the quantity of milk by pressing the beverage button for a long time. (See section "MILK PROGRAMMING")
Test menu		

8.2.4 MILK PROGRAMMING

“MILK PROGRAMMING” is a direct control allowing to program and store the milk quantity for the beverage chosen.

Select “MILK PROGRAMMING”	The display shows the programming icon (I)
Press and hold the button corresponding to the beverage to be programmed	The machine starts dispensing milk only
Release the button corresponding to the beverage chosen as soon as the desired amount of milk is reached	The machine will stop dispensing milk.
Programming is complete	The next time you dispense the selected beverage the programmed quantity of milk will be dispensed.

(I) During milk programming the icon shown in the figure is displayed.



9 OPERATION AND USE

 Before using the machine, read this manual carefully and make sure users are familiar with the machine.

 Children must not play with the appliance. Children must not carry out any cleaning and maintenance operations without being monitored.

 After the machine has not been used for a certain time, it is recommended to read section “First Use - Use after a Long Period of Inactivity” again, before using the module again.

 The use by children older than 8 years or by persons with reduced physical, mental or sensory abilities or with lack of experience and skills is allowed, provided that they are supervised or instructed on how to use the appliance correctly and that they understand the hazards involved.

9.1 Machine Statuses

With regard to the power supply, the machine can have the following statuses:

Off and electrically insulated

- Power button and all-pole switch is set to “0” (or plug disconnected).
- Only the memory for the programmed data storing is active.

On

- Power button and all-pole switch is set to “1” (or plug connected).
- All the functions are active and the display is on.

In standby mode (machine switched off but not electrically insulated)

- Power button is set to “1”.
- The following functions are active: “AUTOMATIC START-UP”, “ANTIFREEZING”, if selected, and “Clock”, as well as the display and the memory for the programmed data storing.
- The display backlighting is off.

9.2 Manual Start-up

This start-up is necessary when the machine is in the “off and electrically insulated” status. Proceed as explained in section “First Appliance Start-up”.

9.3 Programmed Automatic Start-up

This start-up is possible when the machine is in “STANDBY” mode and the function “AUTOMATIC START-UP” is active. The machine will switch-on at the programmed time.

9.4 Stand-by Temporary Start-up

Ground coffee



Manual switching-on when the machine in “STANDBY” mode. This is possible by pressing the button shown in the figure for 3 seconds.

The machine will automatically go back to the “STANDBY” mode after 30 minutes from the last operation, if still within the programmed standby time.

9.5 Beverage Selection

The conditions necessary to select a beverage are the following:

- the appliance has reached the set temperature after the start-up. Otherwise, the display will show the message “HEATING”;
- There is no error condition that prevents brewing beverages. Otherwise, the display will show the error message;
- the selected beverage is enabled. Otherwise, the keypad shows the beverage off icon;

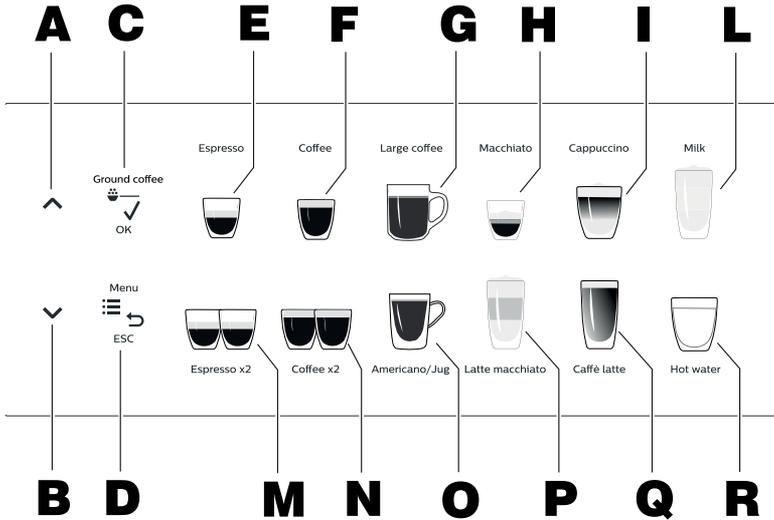


When dispensing a beverage:

- The display shows the dispensing beverage icon.

Press the button corresponding to the beverage required.

 Press brew buttons for approx. 1 second.



BREWING TABLE				
Brewing	Button sequence	Q.ty	Level	Description
Coffee Brewing obtained from instantly-ground coffee	E	1	low	The machines are delivered with factory standard settings.
	M	2	low	
	F	1	high	
	N	2	high	
Pre-ground Coffee Brewing obtained from pre-ground coffee doses	C + E	1	low	This kinds of brewing are programmed for a single-dose of pre-ground coffee only and are instantly introduced. After pressing button C once, insert one coffee dose through the pre-ground coffee door.
	C + F	1	high	
	C + G	1		Select the beverage available in the combinations with pre-ground coffee.
	C + H	1		
	C + I	1		
	C + P	1		
	C + Q	1		
Coffee in carafe Automatic brewing with several coffee brewing cycles	O (1-8 times), OK		1÷8	Up to 8 brewing cycles can be programmed in the same container (max 2.5 litres). To do this, press the O button several times. Then press the OK button. The number of programmed doses will be displayed. After brewing 2.5 litre, wait 2 minutes before requesting a new brewing.
Large coffee / Ice Americano Beverage with coffee to which hot water (Large coffee) or cold water (ICE Americano) can be added	G		1	The amount of water and coffee is set in the programming menu. However, it is possible to lock the water and/or coffee dispensing to your taste by pressing the G key during the dispensing cycle of the ingredient to be blocked.

BREWING TABLE			
Coffee with a dash of milk Brewing obtained from ground coffee and a small milk dose	(*), H	(*)	This beverage consists in instantly ground coffee and a small dose of hot milk.
Latte Macchiato Brewing obtained from hot milk and a small dose of ground coffee	(*), P	(*)	This beverage consists of hot milk and instantly ground coffee.
Cappuccino Brewing obtained from hot milk and one dose of ground coffee	(*), L	(*)	This beverage consists of instantly ground coffee and hot milk.
Caffè Latte Brewing obtained from ground coffee and a dose of milk	(*), Q	(*)	This beverage consists of instantly ground coffee and hot milk.
Hot Milk Brewing obtained from milk	(*), L	(*)	
Hot Water (Except for COFFEE set-up) Brewing obtained using water	R (1-8 times), OK	1 ÷ 8	Up to 8 brewing cycles can be programmed in the same container (max 1 litre). To do this, press the R button several times. Then press the OK button. The number of programmed doses will be displayed.

Notes:

The definitions "high = long" and "low = short", mean two different levels of brewing.

(*) = see chapter "Milk Programming"

 Although all buttons are previously programmed on standard values, check if the dispensed beverage has the desired features.

 If not, brew buttons must be reprogrammed (see chapter “Brew Buttons Programming”).

 If an anomalous condition occurs during the brewing phase, e.g. a fault or a product shortage, a message indicating the causes of the block will be displayed.

 Special messages and signals are indicated in chapter “Troubleshooting”.

9.6 Steam

(Except for COFFEE set-up)

- Immerse the steam wand into the beverage to be heated.
- Turn the steam dispensing knob counter-clockwise. Once the required temperature is reached, close the knob (clockwise).

 After each use, clean the steam wand with a damp, clean cloth/sponge from any residues of the previously heated beverage.

(*) Before any brewing cycles, insert the suction tube inside the milk container.

(**) Adjust the crema quantity (see section “Crema Adjustment”).

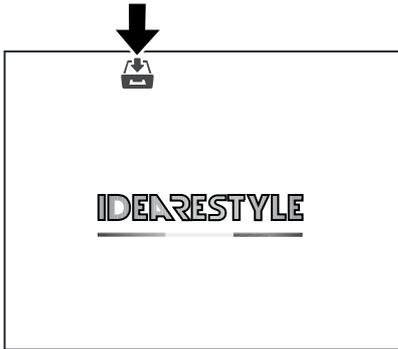
9.7 Brew Buttons Programming

The beverage quantities associated to the corresponding buttons, can be directly programmed through the keypad.

To program and re-program the buttons, follow the instructions below:

Coffee quantity:

- Switch on the machine and set it up for use.
- Place the container under the specific dispensing spout.
- Press and hold the button corresponding to the coffee beverage to be programmed
- The display shows the programming icon, as shown in the figure;



- Release the button to store the dispensed dose.

Milk quantity:

The option "MILK PROGRAMMING" is a control inside the programming menu.

Refer to chapter 8, section 8.2.6.

9.8 Display Messages



A list of alarms (in addition to those explained before) that can be displayed and the relative machine conditions is given below.

STANDBY

The machine is switched off (the power button is set to "I") and the automatic switching-on/off function is enabled (see section "Description of Messages in the Programming Menu").

LOAD THE CIRCUIT

This message is displayed when the machine detects no water in the boilers during a beverage dispensing cycle.

After checking if there is actually water in the water network, press the "Up" button (in the COFFEE version), until water comes out regularly from the wand and from the coffee dispensing spout. In the COFFEE version water comes out from the coffee dispensing spout only.

EMPTY GROUNDS

It is displayed when the coffee grounds drawer is almost full (the machine has performed the programmed number of brewing cycles).

Anyway, more brewing cycles can be performed.

OUT OF SERVICE – EMPTY GROUNDS

The coffee grounds drawer is completely full (the machine has performed the programmed number of dispensing cycles).

The machine is blocked and no more dispensing cycles can be performed until the drawer is emptied.

CLOSE SERV. DOOR

The door is not properly closed.

INS. GROUND DRAWER

The coffee grounds drawer is not properly inserted.

INS. BREW GROUP

The brew group is not properly inserted.

BREW GROUP ERROR

The brew group does not work properly; switch off the machine and contact the AUTHORISED SERVICE CENTRE.

PUMP ERROR 1-2 or 3-4

One of the pumps is faulty. The machine is still working but it is necessary to contact the AUTHORISED SERVICE CENTRE.

SENSOR ERROR 1 2

It is displayed when there is a faulty temperature sensor. Switch off the machine and contact the AUTHORISED SERVICE CENTRE.

TEMPER. ERROR

It is displayed when one of the boiler heating elements is faulty. Switch the machine off and contact the AUTHORISED SERVICE CENTRE.

Filter alarm

The machine needs this intervention after performing the programmed number of dispensing cycles. The softener maintenance is at the user's expenses, while the cartridge replacement is at the AUTHORISED SERVICE CENTRE expenses.

Interventions are set according to the machine working cycles and can be programmed by the maintenance technician.

MAINTENANCE

It is displayed when the machine needs maintenance and after performing the programmed number of dispensing cycles. Switch off the machine and contact the AUTHORISED SERVICE CENTRE.

Maintenance interventions are set according to the machine working cycles and can be programmed by the maintenance technician.

9.9 Switching Off the Machine

Programmed automatic switching-off

This is possible when the function "Automatic start-up" is active and the function "On/Off time" has been programmed.

The machine goes in "Standby" mode at the programmed time.

Manual switching-off

This switching-off is necessary when the function "Automatic start-up" is not active.

It can be obtained by setting both the power button and the all-pole switch to "0" or by disconnecting the plug.

10 CLEANING AND MAINTENANCE

-  Before performing any maintenance and/or cleaning operations, turn off the appliance by setting the switches to the “OFF” position. Disconnect the appliance from the power supply by removing the plug from the socket and wait for the appliance to cool down.
-  The Manufacturer is not liable for damage or malfunctions caused by a wrong or lack of maintenance.
-  Never perform any cleaning operation when the machine is in “standby” mode.
-  Do not use direct water jets.
-  In case of faults, immediately turn off the appliance, disconnect it from the power supply by removing the plug from the socket and contact the nearest Service Centre.
- 10.1 General Notes for Correct Operation**
-  Non-removable components and the machine itself must be cleaned, when not differently specified, only by using cold or lukewarm water, with a non-abrasive sponge and a damp cloth.
-  Never use direct water jets. Wring the damp cloth or the sponge before using it to clean the appliance.

All parts requiring cleaning are easily accessible, so no tools are needed.

Periodic maintenance and cleaning will keep the appliance in good working conditions for a longer time and ensure compliance with basic hygienic standards.

Follow the instructions and timing indicated in the "MAINTENANCE SCHEDULE" to ensure correct operation of the appliance.

If the Cappuccinatore (CAPPUCCINO set-up) is not used for more than an hour, carry out a cleaning cycle of the spouts before re-using it (see chapter "Cleaning the Cappuccinatore").

10.2 Cleaning and Scheduled Maintenance

 All parts must be washed with lukewarm water only and without using detergents or solvents that could change their shape or performance.

 All removable parts cannot be washed in the dishwasher.

 Do not clean the electric parts with wet cloths and/or with degreasing detergents. Remove any dust residues with a jet of dry compressed air or with an antistatic cloth.

10.2.1 Maintenance Schedule

COMPONENT TO BE CLEANED	Maintenance	A	B	C	D
Coffee dispensing spout	See section "Cleaning the Coffee Dispensing Spout".	x	-	-	-
Brew group	See section "Cleaning the Brew Group".	x	-	-	-
Drip tray and relative grill	See section "Cleaning the Drip Tray and Relative Grill".	x	-	-	-
Coffee grounds drawer	See section "Cleaning the Coffee Grounds Drawer".	x	-	-	-
Hot water and steam dispensing spouts	See section "Cleaning the Steam and Hot Water Wands".	x	-	-	-
Cappuccinatore	See section "Cleaning the Cappuccinatore".	x	-	-	-
Cup warming surface	See section "Cleaning the Cup Warming Surface".	-	x	-	-
Coffee bean hopper	See section "Cleaning the Containers".	-	x	-	-

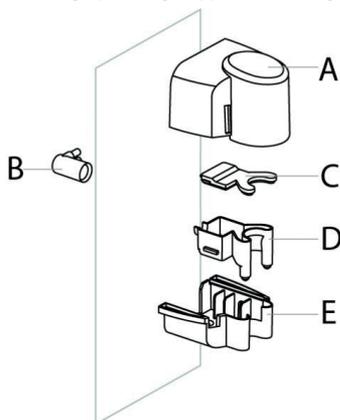
- A** Daily
- B** Weekly
- C** At each supply
- D** Every month

10.2.2 Cleaning the Coffee Dispensing Spout

10.2.2.1 Manual Coffee Dispensing Spout Cleaning

The following parts can be removed:

- the upper protection cover of the dispensing spout, by pulling it outwards;
- the lower protection cover of the dispensing spout, by unscrewing the lower knob;
- the coffee dispensing spout, by pulling it outwards;
- the coffee fitting, by turning it approx. of 90 degrees.



- A** upper protection cover
B coffee fitting
C-D Coffee dispensing spout
E lower protection cover

10.2.2.2 Automatic Coffee Dispensing Spout Cleaning

The procedure is explained in chapter "Description of Messages in the Programming Menu", option "DISPENSER RINSING".

10.2.3 Brew group cleaning

10.2.3.1 Manual Cleaning of the Brew Group

 Cleaning must be carried with no coffee beans in the machine.

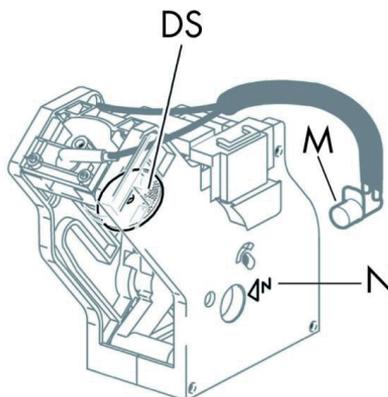
Clean the brew group periodically, using the special tablets.

- Remove the brew group by pulling the appropriate handle and pressing the button marked by "PRESS".

- Wash with lukewarm water.

Do not use detergents.

- Delicately scrape the upper screen with a plastic spoon.



- DS** Upper screen
M Handle
N Neutral position

10.2.3.2 Automatic Cleaning of the Brew Group

The procedure is explained in chapter "Description of Messages in the Programming Menu", option "GROUP RINSING".

10.2.4 Cleaning the Drip Tray and Relative Grill

Remove the drip tray from the machine and wash it under running water, paying particular attention to the grill.

10.2.5 Cleaning the Coffee Grounds Drawer

Remove the drip tray, remove the coffee grounds drawer and wash it under running water.

10.2.6 Cleaning the Steam and Hot Water Wands

(Except for COFFEE set-up)

Clean the spouts with a non-abrasive damp cloth.

If the nozzles are clogged, the final section of the dispensing spouts can be unscrewed and a pin can be used to free the nozzles.

10.2.7 Cleaning the Cup Warming Surface

Use a non-abrasive damp cloth to clean the cup warming surface.

10.2.8 Cleaning the Containers

To clean the coffee bean hopper, follow the procedure below:

- Close the coffee bean hopper partition.
- Brew a few coffee cups as a test, to remove the coffee beans from the coffee grinder;
- Remove the screws from the container by using the tool supplied.
- Lift up the container and remove the bean residues using an aspirator;
- Wash the inside of the container and dry it carefully before reassembling it.

To clean an instant products container, follow the instructions below:

- remove the container;
- wash the inside of the container and dry it carefully before reassembling it;

10.2.9 Cleaning of the Cappuccinatore

 Do not perform any cleaning operation of the cappuccinatore when the machine is in "standby".

 The CAPPUCGINATORE must be cleaned each time it is used, in order to avoid the solidification of deposits.

 All removable components must be washed and rinsed in tap water.

 **Warning! Danger of scalding.**

 Hot water, steam sprays and milk residue may spill out of the cappuccinatore during the washing cycles.

 Do not place hands or other parts of the body close to these parts until the cleaning cycle is complete.

The aim of this operation is to remove all the grease and scale deposits that have formed during the flow and emulsion of the milk.

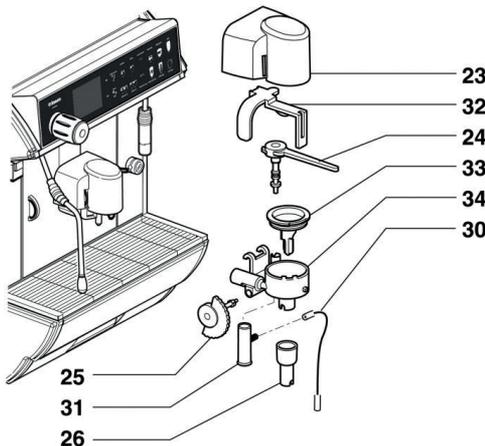
If the washing cycle is not performed, this would cause the deposits to solidify, resulting in a loss of performance for the cappuccinatore.

The aim of this operation is to remove all the grease and scale deposits that have formed during the flow and emulsion of the milk.

If the washing cycle is not performed, this would cause the deposits to solidify, resulting in a loss of performance for the cappuccinatore.

To clean each part of the Cappuccinatore group separately, remove:

- the top protection cover, by pulling it outwards;
- remove the Cappuccinatore, by pulling it outwards;
- the fork;
- the crema adjusting lever;
- the temperature adjusting lever;
- the Cappuccinatore body cap;
- the fitting connecting the suction tube to the body of the Cappuccinatore;
- the milk dispensing spout;
- the milk suction hose.



- 23 upper protection cover
- 24 Crema adjusting lever
- 25 Temperature adjusting lever
- 26 milk dispensing spout
- 29 Cappuccinatore
- 30 Milk suction hose
- 31 fitting
- 32 fork
- 33 Cappuccinatore body cap

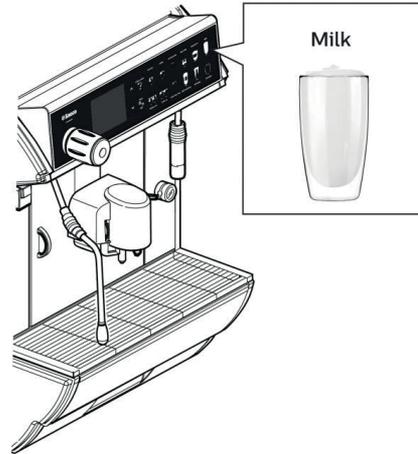
Cleaning Cycle of the Tubes

To perform a cleaning cycle of the tubes, follow the instructions below:

- immerse the milk suction tube into a container with water

 Do not use hot water.

- press the button shown in the figure



- wait until the water has been dispensed.

 The operations described below should be performed with the machine switched on and under pressure.

Periodic cleaning

This operation must be performed approximately every 30 minutes if the cappuccinatore is used continuously.

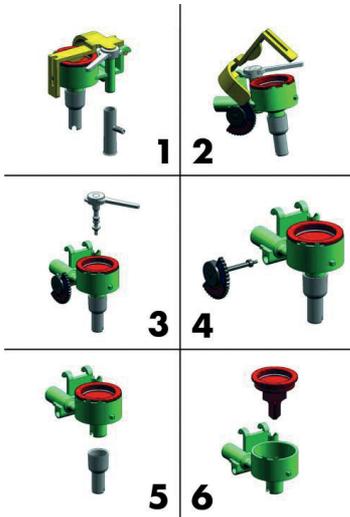
- Remove the hose from the milk container and immerse it in cold water.
- Press the milk dispensing button to clean the cappuccinatore.

 It is recommended that the abovementioned cycle is performed at least twice at intervals of one minute.

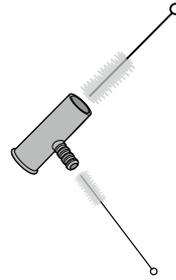
Cleaning of the cappuccinatore each evening

To be performed at the end of the working day.

- Fill a container with half litre of cold water and one dose of liquid detergent (see product instructions).
- Remove the suction tube from the milk container and immerse it in the detergent solution.
- By pressing the MILK button the water will flow out of the cappuccino dispensing head. The message MILK will appear on the display. Keep dispensing the milk beverage until the liquid has run out.
- The detergent will be drawn up automatically and flow out of the cappuccinatore head.
- Once the washing cycle is complete, remove the chromed cover.
- Remove the cappuccinatore:
 - Gently pull downwards and remove the connector of the milk tube placed at the side of the cappuccinatore.
 - Remove the cappuccinatore by pulling it from the front towards you.
 - Dismantle the cappuccinatore completely and disassemble the five parts.
 - Prepare a new dose of detergent solution (as above) and immerse the parts of the cappuccinatore.
 - Wash each part with a sponge and remove all organic residue, then re-immerses the cappuccinatore in the solution for at least two hours.
 - Replace the components.
 - Put the cappuccinatore back in the machine, insert the milk pipe connector placed at the side of the cappuccinatore and replace the chromed cover in its seat.



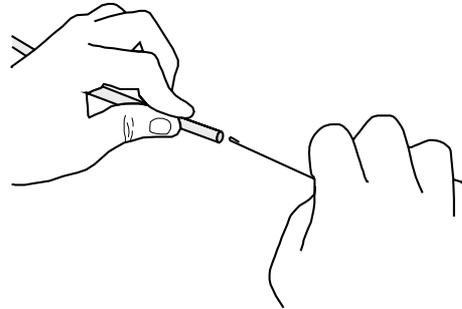
- Clean the holes A and B using the appropriate bottle brushes (see figure).



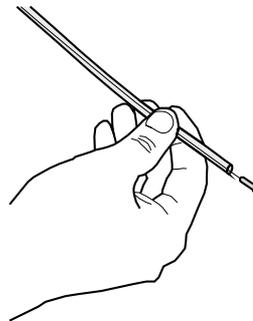
- Rinse allowing at least half litre of cold water to be pumped through the cappuccinatore.

Cleaning of the cappuccinatore tube

- Remove the tube from the cappuccinatore fitting and from the milk container.
- Insert the bottle brush into the tube (see figure).



- Pull it outwards; repeat this operation at least twice.



10.3 Unscheduled Maintenance

Unscheduled maintenance includes every repair or part replacement.

The Maintenance Technician is the only person authorised to perform these operations.

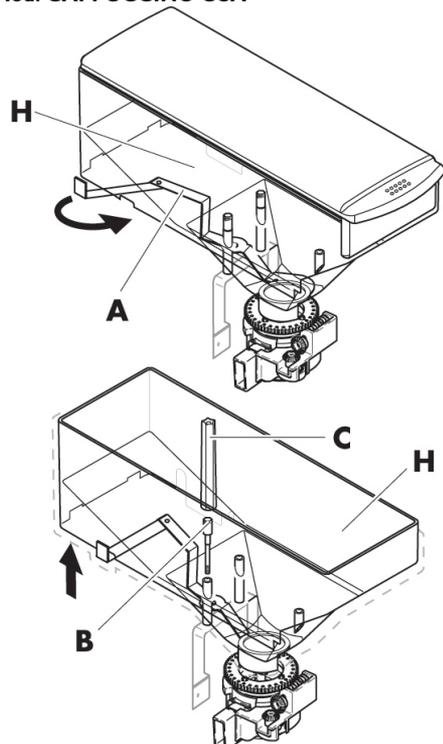
10.3.1 Coffee Grinder Block

- A foreign body among the coffee beans can cause the grinders block and, subsequently, the machine block; the message "GRINDER ERROR" is displayed.
- In this case open the coffee grinder and remove the foreign body.

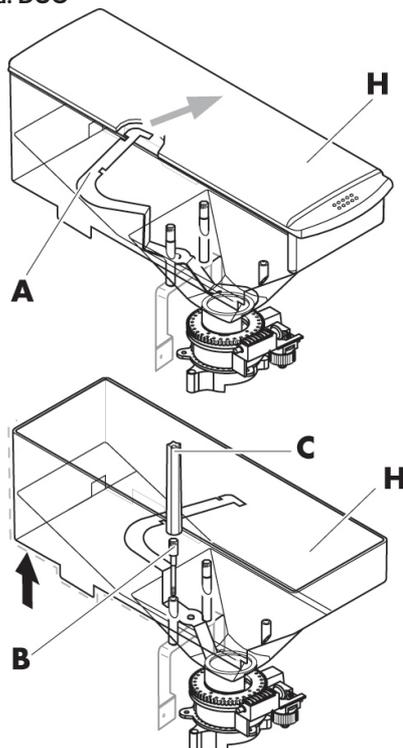
10.3.1.1 Coffee Grinder Assembly/Disassembly

- Close the coffee bean hopper partition.
- Remove the screws from the container by using the tool supplied. Remove the container from the machine by pulling it upwards.

Mod. LUXE / Mod. COFFEE / Mod. CAPPUCCINO / Mod. CAPPUCCINO USA

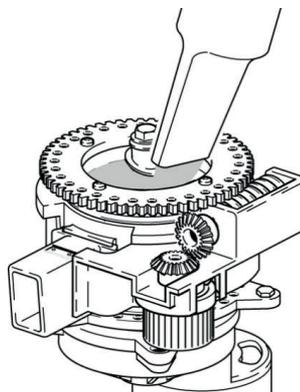


Mod. DUO

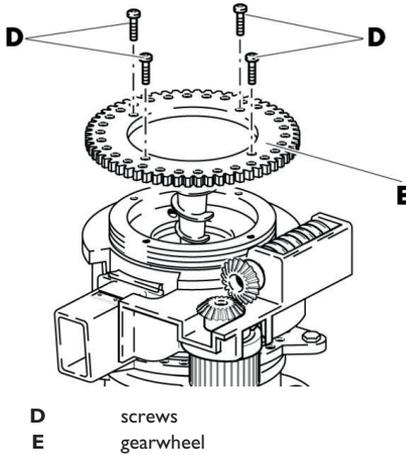


- A partition
- B screws
- C supplied tool
- H coffee bean hopper

- Remove the coffee beans on the coffee grinder top with a vacuum cleaner.

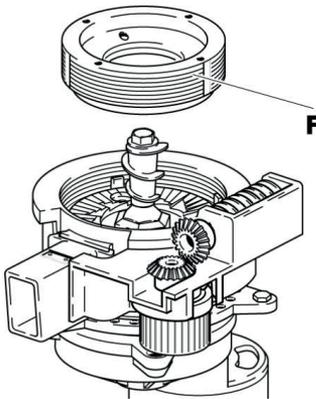


- Remove the screws.
- Remove the gearwheel.



- Unscrew and remove the adjustment ring nut and clean both grinders with a vacuum cleaner and a brush.

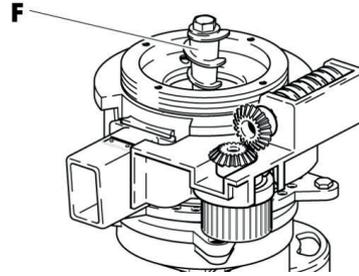
Check the grinders wear. In case of clear damages, replace them.



Follow the instructions below, to re-assemble the coffee grinder:

- Screw the adjustment ring nut until the limit stop, then loosen it by 1/2 turn.

This 1/2 turn loosening of the ring nut is necessary to avoid grinders block and damage.

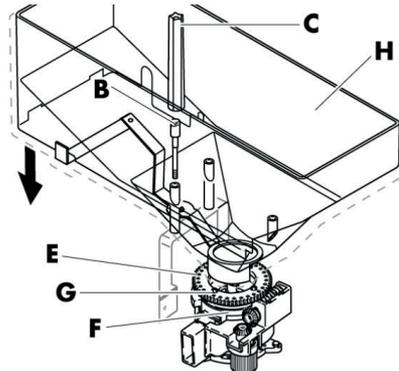


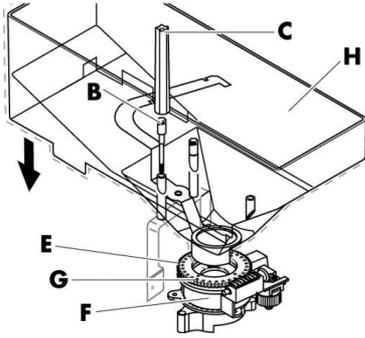
- Put the gearwheel back in its position and fix it by tightening the screws.
- Put the coffee bean hopper back in its position.

Make sure to place the gasket properly. It has to correctly engage with the gearwheel and the ring nut.

- Fix the container by tightening the screws with the appropriate tool.

Mod. LUXE / Mod. COFFEE / Mod. CAPPUCCINO / Mod. CAPPUCCINO USA

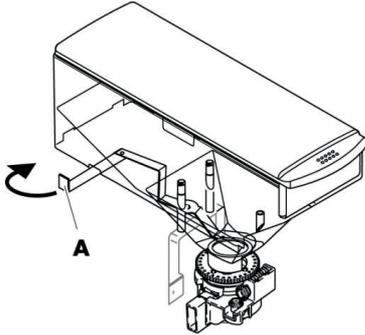
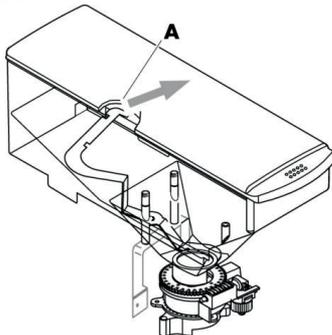


Mod. DUO

- Open the partition.



Before re-starting the machine, it is necessary to adjust the grinding again.

**Mod. LUXE / Mod. COFFEE / Mod. CAPPUCCINO
/ Mod. CAPPUCCINO USA**
**Mod. DUO**

A partition

II TROUBLESHOOTING

A list of the possible machine faults is given below.

The icon of the Maintenance Technician in the “Notes / Recommended Intervention” box means that the operation must be carried out by the Maintenance Technician only.

Fault	Cause	Notes / Recommended Intervention
The machine does not turn on	No voltage	Check:
		if the plug is connected
		if the all-pole switch (if any) is on
		the fuses of the electrical system
the electric connections		
The display shows: “Coffee grounds drawer full”	The Coffee grounds drawer is full	Empty the coffee grounds drawer and place it back properly
Grinder error	The coffee grinder is blocked	Clean the coffee grinder (see section “Coffee Grinder Block”) 
Only water is dispensed instead of coffee	The button for pre-ground coffee selection has been pressed but ground coffee has not been added into the relative container	Place the coffee dose in the container and restart the cycle
No water or steam is dispensed	The steam/hot water wand hole is clogged	Clean it with a thin needle
Coffee flows out too quickly	The grind is too coarse	Set a finer grind
Coffee flows out too slowly	The grind is too fine	Set a coarser grind
Coffee is not hot enough	The cup has not been preheated	Preheat the cup on the cup warming surface
	The machine has not yet reached the right temperature	Wait for the machine to reach the ideal temperature
Coffee does not have enough crema	The coffee blend is unsuitable, coffee is not freshly roasted, the coffee powder has been ground too finely or too coarsely	Change the coffee blend or check its grind setting (if pre-ground)
The machine requires too much time to warm up, the water quantity is reduced	The machine circuit is clogged by limescale	Descale the machine 
The brew group does not come out	The brew group is not in the neutral position	Switch the machine on and off by using the power button
The brew group cannot be inserted	The brew group is not in the neutral position	Manually turn the group until it is in the neutral position, matching the reference mark placed on the shaft with the arrow
The Cappuccinatore does not dispense milk	The milk used is not cold enough (see warnings)	Move the temperature adjusting lever downwards
	There is no more milk in the container	Fill the container with milk

12 STORAGE - DISPOSAL

12.1 Location Change

Should the machine be placed in a different location, it is necessary to:

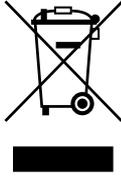
- disconnect the appliance from the supply network;
- carry out the general cleaning of the appliance as indicated in chapter "Cleaning and Maintenance";
- put the parts back into place and close the doors;
- Lift and position the appliance in the assigned location.

12.2 Inactivity and Storage

If the appliance needs to be stored or remains inactive for a long period, carry out the same operations as described in section "Location Change", therefore:

- wrap the appliance with a cloth to protect it from dust and humidity;
- make sure that the appliance is installed in a suitable place (temperature must be lower than 1°C) and be careful not to put cartons or appliances on it.

13

**INSTRUCTIONS FOR END OF OPERATIONAL LIFE
DISPOSAL****INFORMATION FOR THE USER**

in compliance with art. 13 of the Italian Legislative Decree dated 25 July 2005, no. 151 "Implementation of the directives 2002/95/EC, 2002/96/EC and 2003/108/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment, as well as waste disposal".

The crossed-out wheeled bin icon on the appliance or its packaging indicates that the product must be disposed of separately from other waste at the end of its operational life.

Separate collection of the appliance, once at the end of its operational life, is organised and managed by the manufacturer. Therefore, for an appropriate disposal, the user must contact the manufacturer and observe its separate collection management adopted for this appliance at the end of its operational life.

Separating this product for subsequent recycling, treatment and environmentally-friendly disposal will help prevent potential environmental and health risks, and allow the materials which make up the appliance to be re-used and/or recycled.

Specific administrative sanctions provided for by current regulations will be applied for illicit disposal of the product by the user.

