

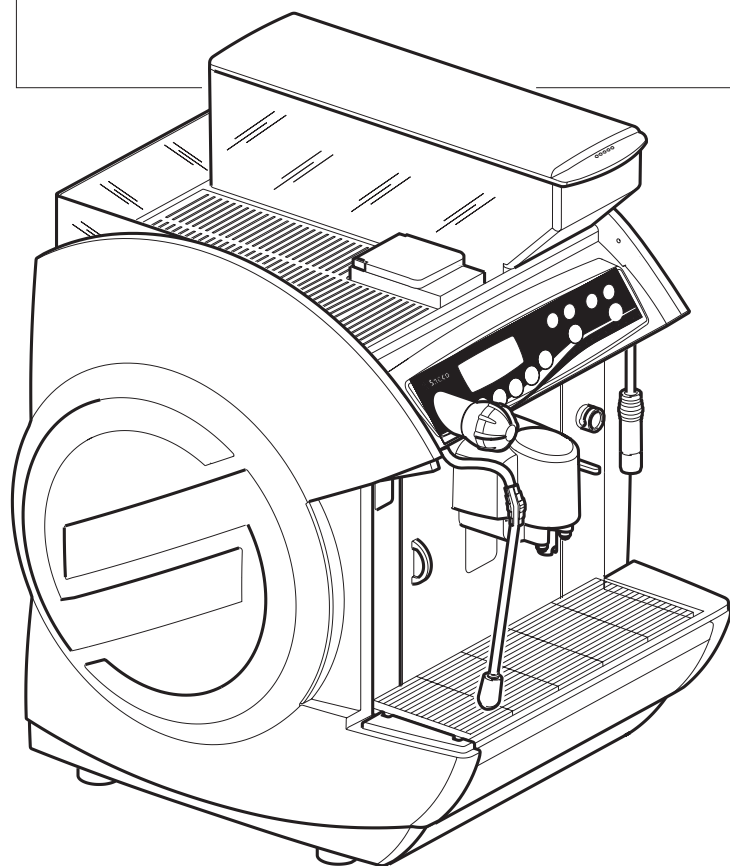


**Automatic espresso coffee machine**

**Model**

**IDEA**

Type: CAP002/A/B



**INSTRUCTION AND MAINTENANCE MANUAL**

## INTRODUCTION

- This manual is an integral part of this machine and it must be kept in a handy place, in good conditions, for as long as the machine will be operating (including any transfer of ownership). It aims at giving the necessary information about a correct and safe use of this machine.
- In case of lost or deterioration of this brochure, please ask a copy to the Authorized customer Service Center, specifying the model and the year of construction of your machine.
- The Authorized Customer Service Centers, are also available for any technical explanation, information on its operation, technical assistance and spare parts supply.
- The subjects mentioned aim, in an exclusive way, at ensuring the proper use of the machine, in the safest way for users, the very machine and the environment. This is made through a simple diagnostics of troubles and anomalous functioning, and by carrying out some simple checks and maintenance operations, always respecting the precautions explained in the following pages and the current Safety and Health Regulations
- Before any intervention read very carefully and be sure to have completely understood the subject of this brochure.
- If several persons use (individually) this machine, everyone must previously and very carefully study the Instruction Manual.
- The manufacturer reserves the right to modify and improve the described models, without being bound to give any notice.
- For any particular need contact the Distributor or your Country Importer (if any) or the Constructor.
- All the rights of this brochure are reserved to SAECO International Group. Any copy or even partial divulgation, not expressly authorized in writing, are strongly forbidden.



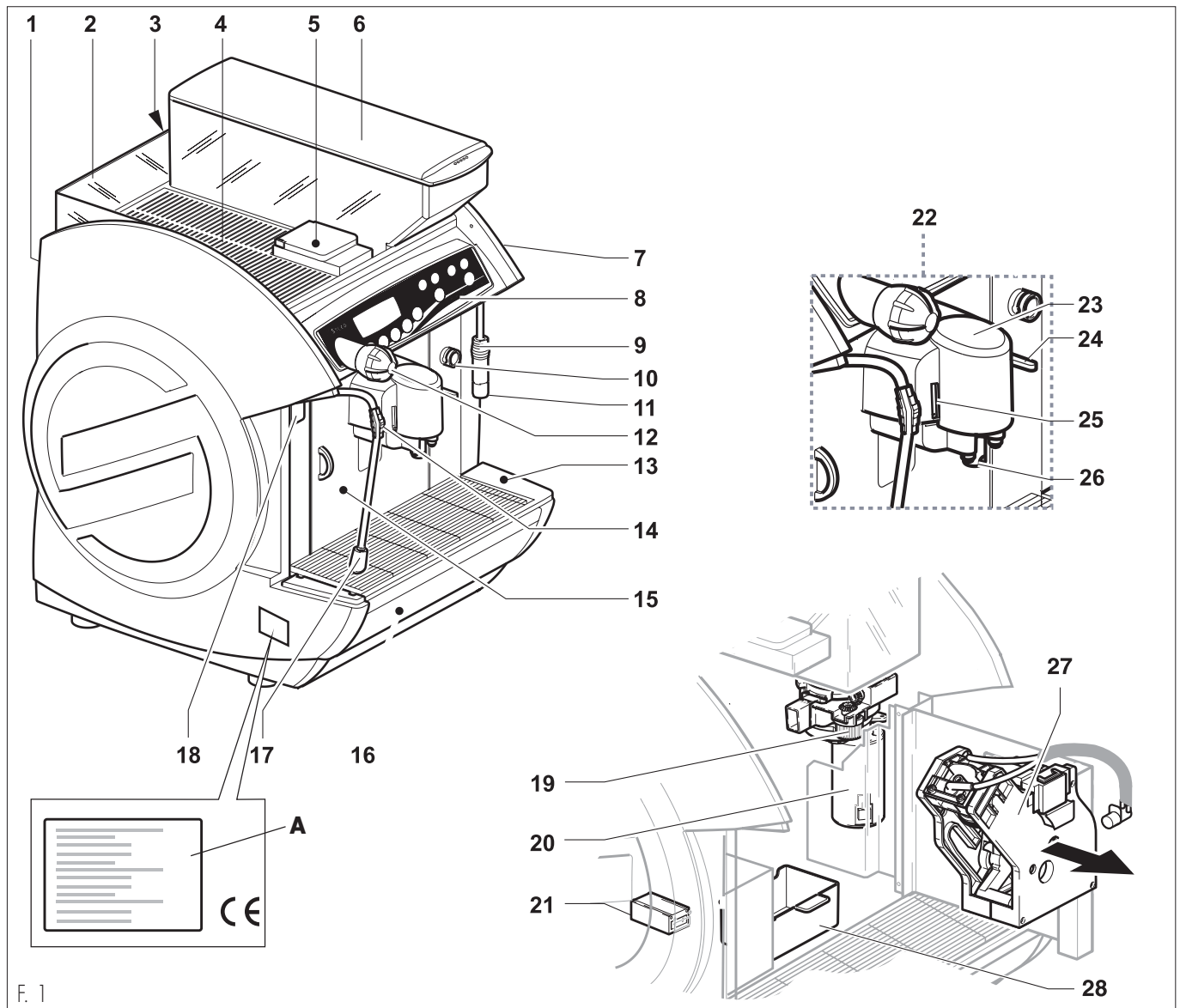
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# 1 - MACHINE COMPOSITION

**NOTE** - If not differently indicated by the text, the position numbers of the parts of the machine always refer to this figure.



F. 1

- |           |                                        |           |                                                                                 |
|-----------|----------------------------------------|-----------|---------------------------------------------------------------------------------|
| <b>A</b>  | CE label                               | <b>16</b> | Dump box                                                                        |
| <b>1</b>  | Left hand side panel                   | <b>17</b> | Steam spout (except COFFEE set-up)                                              |
| <b>2</b>  | Glass                                  | <b>18</b> | Main switch                                                                     |
| <b>3</b>  | Back panel                             |           | " " - Electrical functions enabled – Machine on – Pilot light on.               |
| <b>4</b>  | Cup warming plate                      |           | "O" - Electrical functions disabled – Machine off - "I" button pilot light off. |
| <b>5</b>  | Pre-ground coffee door                 | <b>19</b> | Grind adjustment knob                                                           |
| <b>6</b>  | Coffee bean hopper                     | <b>20</b> | Grinder unit                                                                    |
| <b>7</b>  | Right hand side panel                  | <b>21</b> | Mechanical pulse counter                                                        |
| <b>8</b>  | Control panel                          |           | It displays the number of brewings.                                             |
| <b>9</b>  | Rubber protector                       | <b>22</b> | Brew group                                                                      |
| <b>10</b> | Spout clamp (CAPPUCCINO set-up)        | <b>23</b> | Brew group cover                                                                |
| <b>11</b> | Hot water spout (except COFFEE set-up) | <b>24</b> | Milk cream adjustment (CAPPUCCINO equipment)                                    |
| <b>12</b> | Steam knob (except COFFEE set-up)      | <b>25</b> | Temperature setting (CAPPUCCINO equipment)                                      |
|           | Clockwise: steam jet open              | <b>26</b> | Milk dispenser (CAPPUCCINO equipment)                                           |
|           | Counterclockwise: steam jet closed     | <b>27</b> | Coffee unit                                                                     |
| <b>13</b> | Drip tray                              | <b>28</b> | Powder tray                                                                     |
| <b>14</b> | Rubber protector                       |           |                                                                                 |
| <b>15</b> | Door                                   |           |                                                                                 |





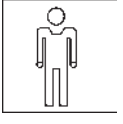
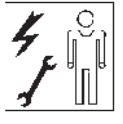
## 2 - REFERENCE NOTES

### 2.1 Abbreviations

- F. = Figure
- P. = Page
- Pr. = Paragraph
- T. = Table

### 2.2 Editorial symbols

*WARNING! Pay the utmost attention to the meaning of symbols. They are aimed at drawing the attention of the reader on technical notions or safety warnings. Therefore they have to be considered as real "memoranda". Refer to the list of symbols every time any doubt about their meaning arouses.*

	<b>WARNING!</b> - Information about the user's safety and the machine integrity.
	<b>WARNING!</b> - Operations that are potentially dangerous for the <b>maintenance technician</b> .
	<b>IMPORTANT!</b> - It draws the attention on a particularly important subject.
	<b>Machine off</b> - Operations to be done without power supply .
	<b>User</b> - Actions concerning the machine user.
	<b>Maintenance technician</b> - Operations strictly concerning personnel in charge of unscheduled maintenance or repairs.

## 3 - USER



- The adult to whom the following operations are strictly reserved:
  - Operating, protecting and switching off the machine.
  - Coffee beans supply.

- Brewing parameters adjustment.
- Grounds and liquids tray draining.
- External cleaning of the machine.



*The use of this machine **is strictly forbidden** to children, teenagers and non self-sufficient persons.*

## 4 - MAINTENANCE TECHNICIAN



- Person in charge of the following operations:
  - Installation, machine starting, adjustment and setting up.
  - Unscheduled maintenance, repairs and spare parts replacement.

## 5 - INTENDED USE OF THE MACHINE


- The machines described in this manual have been designed, manufactured and protected for the automatic programmable brewing of the following beverages:
  - instantly-ground coffee bean-based;
  - pre-ground coffee-based;
  - milk and instantly-ground coffee bean-based (CAPPUCCINO set-up).
  - hot water and steam (except COFFEE set-up) for beverage preparation and heating.
  - hot milk (CAPPUCCINO set-up).



*The Manufacturer disclaims any responsibility for the improper use of the machine and any damage resulting. The improper use also implies the cancellation of any warranty.*

## 6 - WARNINGS AND CARES

- In routine maintenance, never use detergents, diluents, solvents, etc...
- Cleaning has to be limited at parts of the machine being not powered and must be carried out with mild and biodegradable products. Moreover the main switch or the all-pole switch have to be on the "O"(OFF) position, or the plug has to be disconnected from the power point.

- The routine maintenance has to be carried out only by competent or adequately trained personnel, having the necessary psychophysical requirements, in the whole respect of the instructions mentioned below and according to the current Safety and Health Regulations.
- It is strictly forbidden to place and/or leave on the machine tools or anything which could potentially be prejudicial to the people safety and to the integrity of the machine.
- Changing and adjustments (even if slight) as well as the use of non original spare parts, release the Manufacturer from any responsibility for any type of damage and implies the cancellation of any warranty right.
- Use only drinking water.
- The milk to be used for the CAPPUCCINATORE must be put in a fridge at a temperature not over 4° C; do not leave it outside the fridge for more than 30 minutes.
- If the CAPPUCCINATORE is not used for more than an hour, carry out a cleaning cycle of the spouts before re-using.  
To clean the spouts:
  - immerse the milk supply tube in a container of water;
  - press the milk key ;
  - wait until the water has been dispensed.

**PLEASE NOTE:** Do not use hot water.


## 7 - GENERAL PRECAUTIONARY MEASURES

- Before operating the machine, be previously sure not to have any doubt about the contents of this manual. Non respecting the rules explained in it releases the Manufacturer from any responsibility for any type of injury to persons and/or damage to things.
- Keep this brochure for any further reference.
- Previously verify (in case of a new installation), the respect of the minimal regulations of safety, positioning and machine operating conditions, checking the environment conditions (temperature, humidity, light) and the suitability of the place of operation.
- Any damage to the electric power cord requires the intervention of the Technical Authorized Customer Service or of the maintenance technician.
- Do not use the machine on the outside.
- In case of bad functioning, always ask for the intervention of the maintenance technician.
- Do not use water jets to clean the machine.

## 8 - INFORMATION ABOUT THE MACHINE

### 8.1 Identification data

In the (A) plate the following identification data of the machine are mentioned:

- Manufacturer and  marking
- model
- serial number
- manufacturing year
- mains electric voltage (V) and frequency (Hz)
- electrical power consumption (W)
- number of phases of the electric line (PH)
- pressure allowed in the water network (MPa)

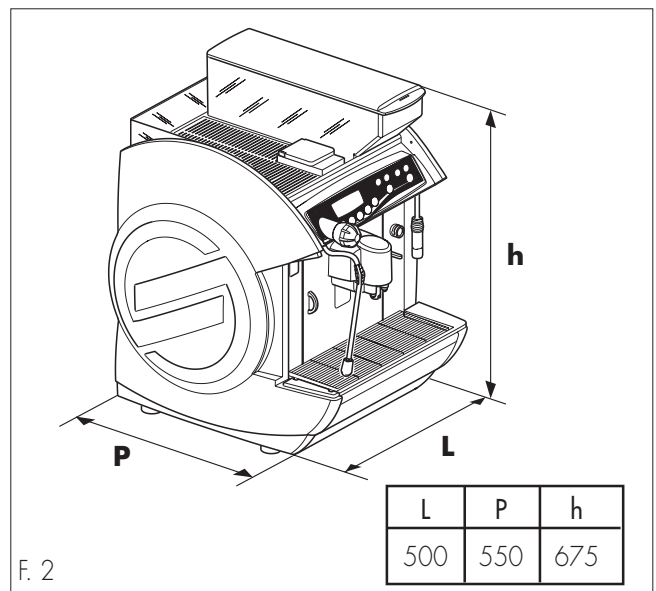
**NOTE -** In case of any request to the **Authorized Customer Service Centers**, model and serial number must be specified.

### 8.2 Technical characteristics

Mains voltage .....	230V/400V 2N
Length of the power cord .....	1,500 mm
Installed power	
Mod. LUXE .....	3,250 kW
Mod. COFFEE .....	1,650 kW
Mod. CAPPUCCINO .....	3,250 kW
Water pressure .....	0.1±0.8 MPa (1±8 bar)
Weight .....	kg 60
Bean hopper capacity .....	kg 2

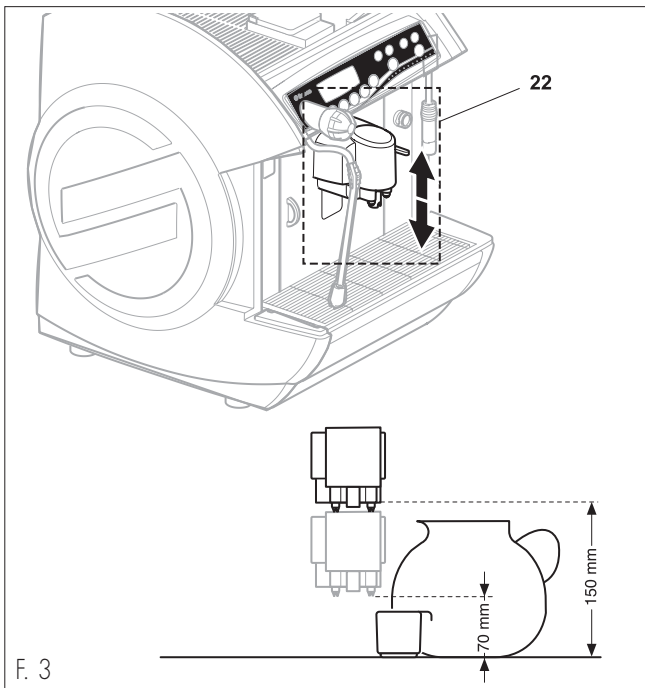
**NOTE -** The machines can be programmed for any type of dosing. Most electric parts are powered by 24 Vdc.

### 8.3 Overall dimensions



### 8.4 Brew group

The position of this group (22) can be adjusted according to the height of the container used .  
It is possible to position the brew group on the top or on the bottom.  
Many brewing heights can be thus obtained.

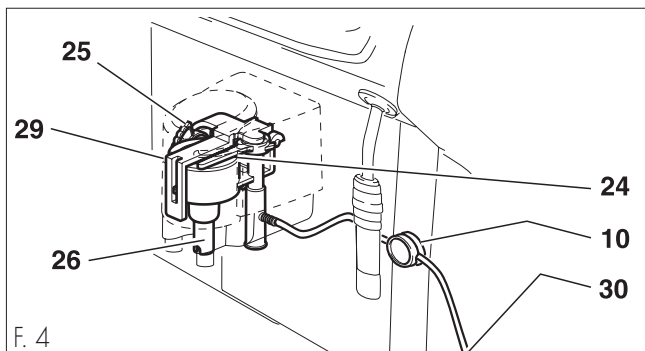


F. 3

### 8.5 Cappuccinatore Group (F. 4)

The cappuccinatore group, is composed of:

- milk suction tube (30);
- spout clamp (10);
- cappuccinatore group(29);
- cream quality adjustment (24);
- temperature setting (25);
- Milk dispenser (26).



F. 4

## 9 - SAFETY DEVICES

**NOTE** - The machines described in this brochure are in conformity with the specific current European Regulations and therefore all their potentially dangerous parts are protected .


- Any overpressure in the water plant that produces steam and hot water, is detected by 3 safety valves.
- A thermostat avoids boilers overheating.
- The position of the dump box (16) and of the door (15), is controlled by two microswitches that stop the running of the machine if one of the two components is not properly in place; (the display will show the component out of place).
- An electrical pulse counter and a mechanical one, record the number or brewings and allow to schedule the routine maintenance.

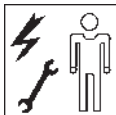
### 9.1 Hot water and steam spouts (except COFFEE set-up) (F. 1)

Steam spouts (17) and hot water spouts (11) are equipped with special rubber protectors (9 and 14) so that they can be grabbed and adjusted even when hot.

### 9.2 Residual risks

- The structural characteristics of the machines described in this brochure, do not protect the user from the direct steam or hot water spouts (except COFFEE set-up).
- Danger of burns – During hot water and steam brewing do not turn the spouts towards yourself or someone else. Grab the spout only by the respective anti-burns protectors (9 - 14).

 Do not use containers that are not made of food materials.



## 10 - INSTALLATION

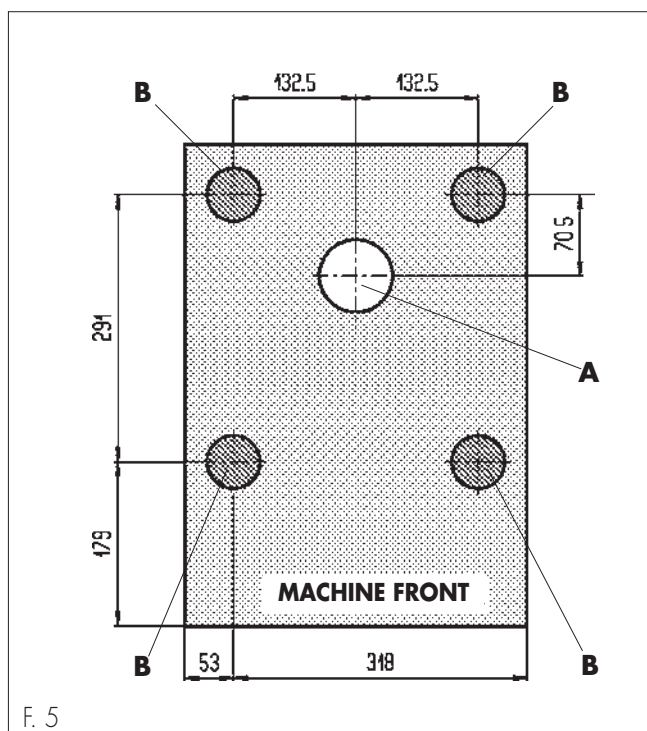
### 10.1 Location notes

- The machine has to be installed in a dry and protected place, at the following ambient temperature : 10° C - 40° C; maximum humidity: 90%.

### 10.2 Machine positioning

**NOTE -** Check if the surface where the machine is installed has the adequate dimension and solidity to support the machine safely.

- Make a  $\varnothing$  100 mm (A - F. 5) hole on the supporting surface.
- Place definitely the machine on the support (the circles **B** - F. 5, indicate the suitable position of the adjustable feet).
- Level off the machine using the adjustable feet (**F** - F. 7).




F. 5

### 10.3 Water connection

 Warning! Water hardness should not be less than 8°f.

We recommend that the machine be supplied with water treated by a descaling device, particularly for water with high content of calcium and magnesium (hard water). Make sure the water network provides drinkable water, with pressure ranging between 1 and 8 bars.

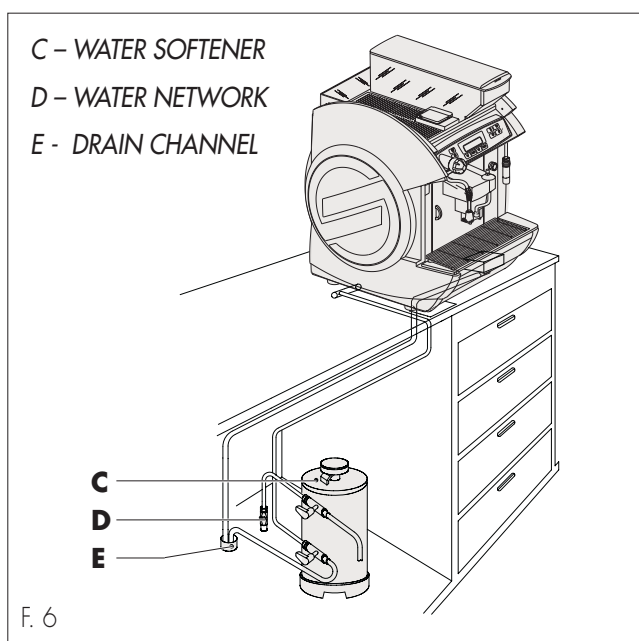
- Connect the water softener (C) to the water network (D).

 **NB** before connecting the water softener to the machine, wash the machine until the water is clear.

C - WATER SOFTENER

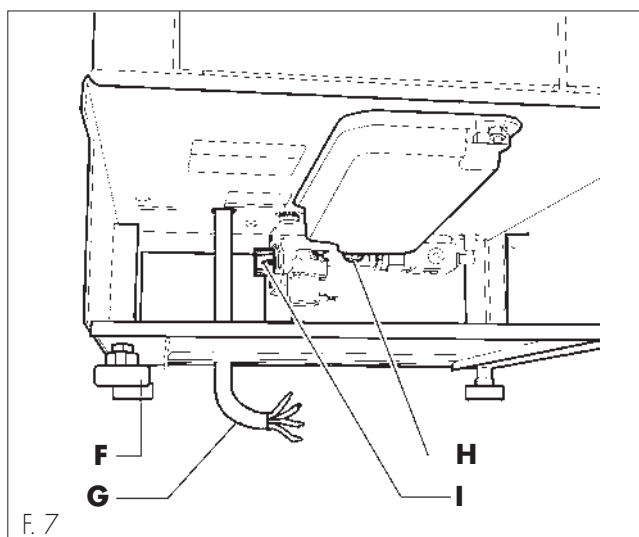
D - WATER NETWORK

E - DRAIN CHANNEL



F. 6

- Connect a drain tube to the coupling (**H** - F. 7) and fix it with a rack clamp.
- Connect (using tube and coupling made of food materials only) the machine to the drinking water network, through the coupling (**I** - F. 7).
- Insert the draining and filling pipes into hole **A**.



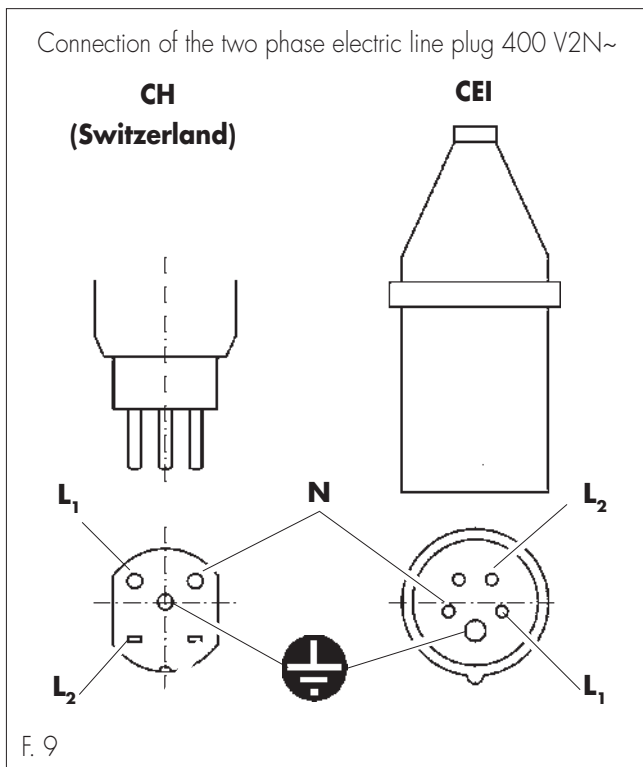
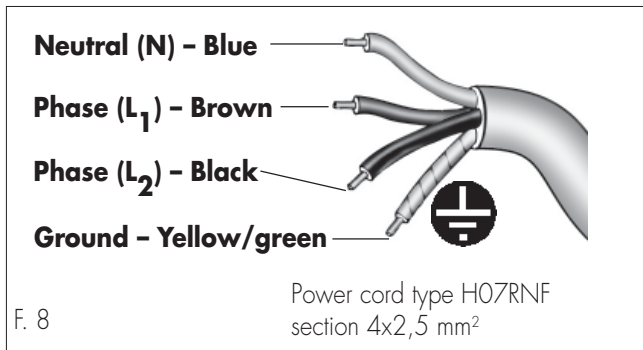
F. 7



### 10.4 Electric connection

**NOTE -** In case of plants with a 400 V two-phase current, use the two phases to supply the machine with 230 V single phase current (F. 8). As for the 230 V single-phase connection, require the special installation kit (code %1034.R09).

- Place the machine on the support and insert the electric power cord (G - F. 7) in the hole (A).



**!** Depending on the current regulations of the Country where the machine operates, the cable connecting the electric line has to be pre-set or equipped with an all-pole switch (with a minimum contact opening of **3 mm**), (or with a plug in accordance with the same regulations).

- The all-pole switch has to be adequate to the machine power consumption and must be able to intercept every voltage polarity.

- Check if the electric cables of the system are proportioned to the machine power consumption.

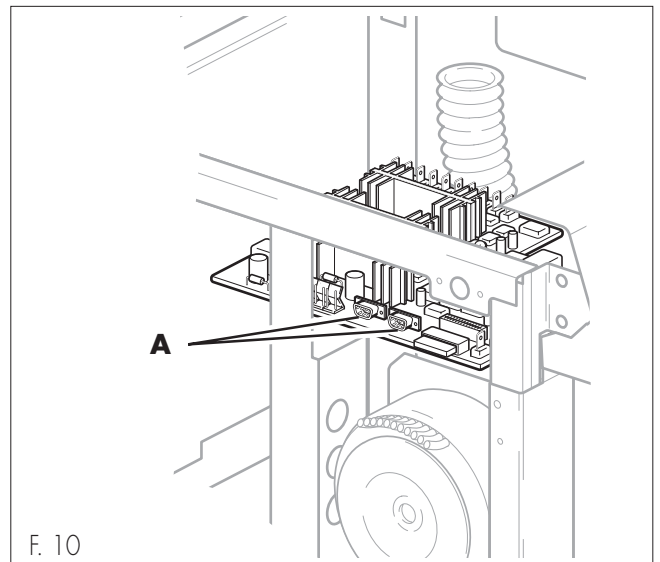


The connection point (electric plug or all-pole switch) must be located in an easily reachable place, in order to disconnect the machine from the electric line in case of need.

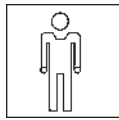
- Connect the cord (G - F. 7) to the electric network.

### 10.5 Serial port connection

Through the serial port the machine can be connected to the AUTHORIZED CUSTOMER SERVICE CENTER's equipment, for checks or programming operations (A - F. 10).









## 11 - FIRST SWITCHING-ON


- Fill the hopper (6) with the selected coffee beans blend.


 *Be sure the coffee does not contain foreign bodies which could be dangerous for grinders.*

- Check if the removable components (13 and 16) are in the right position and if the door (15) is closed.  
If they are not, when the machine is switched-on, the display will indicate which component is in the wrong position.
- Turn the all-pole switch on "I".
- Switch on the machine through the switch (18);  
the message "WARMING UP" will be displayed.
- When the message "READY FOR USE" is displayed :
  - Adjust the brew group (22) to obtain the suitable height depending on the container used (Pr. 8.4).
  - Place one or two containers under the brew group.
- Select the beverage and press the corresponding button.

 *Although buttons are previously programmed on a standard base, check your beverage has the selected features. If not, they must be reprogrammed (Pr. 12.6).*

## 12 - USE OF THE MACHINE

 *Read carefully this brochure until you get a good understanding of the machine, before starting to operate it.*

 *After a long time of machine inactivity, read the previous paragraph "First switching-on" before re-operating the machine.*

### 12.1 Machine statuses

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

#### Off and electrically insulated

- Main switch (18) and all-pole switch on the "0" position (or plug disconnected).
- Only the memory for the programmed data storing is enabled.

#### On

- Main switch (18) and all-pole switch on the "I" position (or plug connected).
- All the functions are enabled and the display (8a) is on.

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

- Main switch (18) is on "I" position.
- The following functions are enabled: "AUTOM. SWITCHING-ON", "ANTI-FREEZING", if selected, and "CLOCK", as well as the display and the memory for the programmed data storing.
- The display's backlight is off.

### 12.2 Manual switching-on

This switching-on is necessary when the machine is in the "off and electrically insulated" status (Pr. 12.1). Proceed as explained in Pr. 11 excluding, in case, the beverage brewing check.

### 12.3 Programmed automatic switching-on

The machine has to be on "STANDBY" and the function "AUTOM. SWITCHING-ON" has to be enabled.

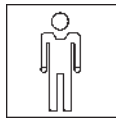
The machine will automatically switch-on at the programmed time.

### 12.4 Stand-by temporary switching-on

Manual switching-on when the machine on "STANDBY".

Press and hold the button  for 3 seconds.

The machine will automatically return on "STANDBY", 60 minutes after the last operation.

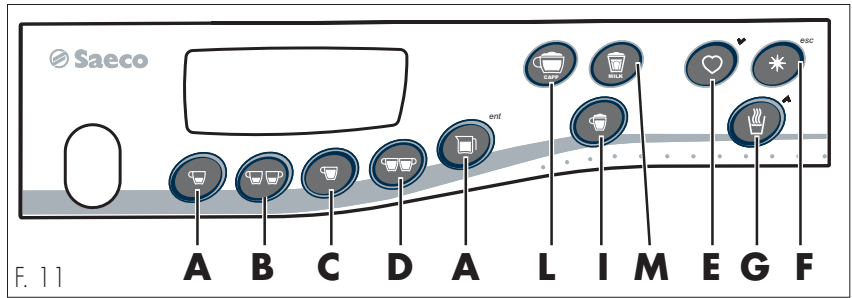


## 12.5 Control panel

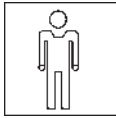
The brewing buttons have to be pressed for less than 1 second.



It switches the machine temporarily on ("STANDBY") and confirms the buttons (H - G) selection.




<b>COFFEE</b>	Brewing obtained from instantly-ground coffee
<b>1 strong coffee</b> <sup>A</sup>	<ul style="list-style-type: none"> <li>The definitions "Strong coffee" - "Weak coffee" mean two different levels of brewing.</li> <li>When sold, the machines are programmed on a standard base.</li> </ul>
<b>2 strong coffee</b> <sup>B</sup>	
<b>1 weak coffee</b> <sup>C</sup>	
<b>2 weak coffee</b> <sup>D</sup>	
<b>PREGROUND COFFEE</b>	Brewing obtained from pre-ground coffee doses.
<b>Strong</b> <sup>E</sup> + <sup>A</sup>	<ul style="list-style-type: none"> <li>This brewing is programmed only for a single pre-ground coffee dose introduced instantly in the machine.</li> </ul>
<b>Weak</b> <sup>E</sup> + <sup>C</sup>	
<b>LIGHT COFFEE</b>	Brewing obtained from pre-ground coffee doses and instantly-ground coffee
<b>Strong</b> <sup>E</sup> + <sup>E</sup> + <sup>A</sup>	<ul style="list-style-type: none"> <li>Press the button (once for "Pre-ground Coffee", twice for "Coffee light") and introduce one coffee dose through the door (5).</li> <li>To obtain light coffee, a small quantity of ground coffee will be added.</li> </ul>
<b>Weak</b> <sup>E</sup> + <sup>E</sup> + <sup>C</sup>	
<b>COFFEE IN JUG</b>	Multiple automatic coffee brewing.
<sup>H</sup> 1-8 <sup>F</sup>	<ul style="list-style-type: none"> <li>Up to 8 brewings can be programmed in the same container, (max 2.5 liters). To set the number of brewings press the button  repeatedly. The number of programmed doses will be displayed. After a 2.5 liter brewing, wait 2 minutes before programming a new brewing.</li> </ul>
<b>COFFEE WITH A DASH OF MILK</b>	Brewing obtained from ground coffee and a small milk dose
<sup>(*)</sup> <sup>I</sup> <sup>(**)</sup>	<ul style="list-style-type: none"> <li>This beverage consists in instantly ground coffee and a small dose of hot milk.</li> </ul>
<b>CAPPUCCINO</b>	Brewing obtained from hot milk and one ground coffee dose
<sup>(*)</sup> <sup>L</sup> <sup>(**)</sup> <sup>e</sup> <sup>(***)</sup>	<ul style="list-style-type: none"> <li>This beverage consists in instantly ground coffee and hot milk.</li> </ul>
<b>HOT MILK</b>	Brewing obtained from milk
<sup>(*)</sup> <sup>M</sup> <sup>(**)</sup> <sup>e</sup> <sup>(***)</sup>	
<b>HOT WATER</b> (except COFFEE set-up)	Brewing obtained from water.
<sup>G</sup> 1-8 <sup>F</sup>	<ul style="list-style-type: none"> <li>Up to 8 brewings in the same container can be programmed (max 1 liter). Push the button  several times. The number of programmed doses will be displayed.</li> </ul>



## STEAM

(Except COFFEE set-up)

- Immerse the spout (17) in the beverage to be heated.
- Turn the knob counterclockwise (12). When the required temperature is reached, close the knob (clockwise).

 *After every operation, clean the steam spout with a (damp and clean) cloth/sponge from the residues of the previously heated beverage.*

(\* ) Before any brewing, place the milk suction tube (30 - F. 4) inside the milk container.




(\* \*) Adjust the cream quantity using the pin (24 - F. 4) (Pr. 12.8).

### 12.6 Brewing buttons programming

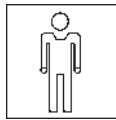
The beverage quantities linked to the respective buttons, can be directly programmed by keypad.

To program and re-program the buttons follow these instructions:

- Switch on the machine and prepare it for the use
- Place the container under the selected spout
- Push and hold the button. The message **“PROGRAMMING”** will be displayed
- Release the button and set the dose to be brewed

(\* \*) N.B.: Keys ,  and  can be preset for brewing beverages with any possible combination of milk and coffee. Please refer to an authorized customer service center to change default settings.

Here is the button programming scheme.



### COFFEE



to program the other coffees follow the above instructions via the following buttons:



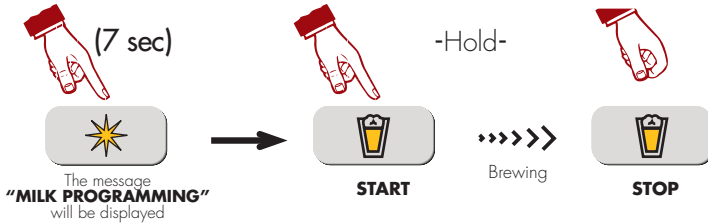
### COFFEE WITH A DASH OF MILK



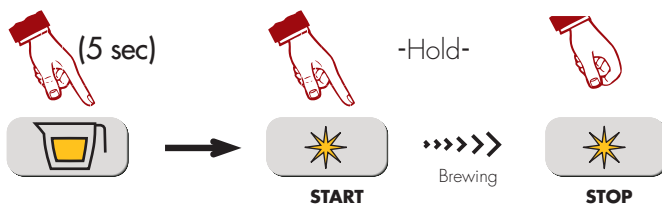
### CAPPUCCINO



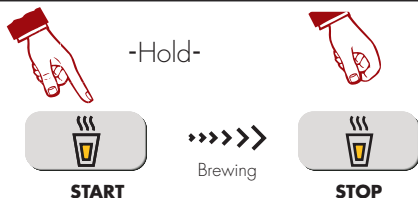
### HOT MILK



### COFFE IN JUG



### HOT WATER








**NOTE -** This programming is only possible if the function "PROGRAMM. HOT WATER" is on the "ON" mode (Pr. 12.7.1).

## 12.7 Menu programmable functions





**NOTE** - The machine allows some adjustments and setting-ups through the menu programming, in order to meet all customer requirements.

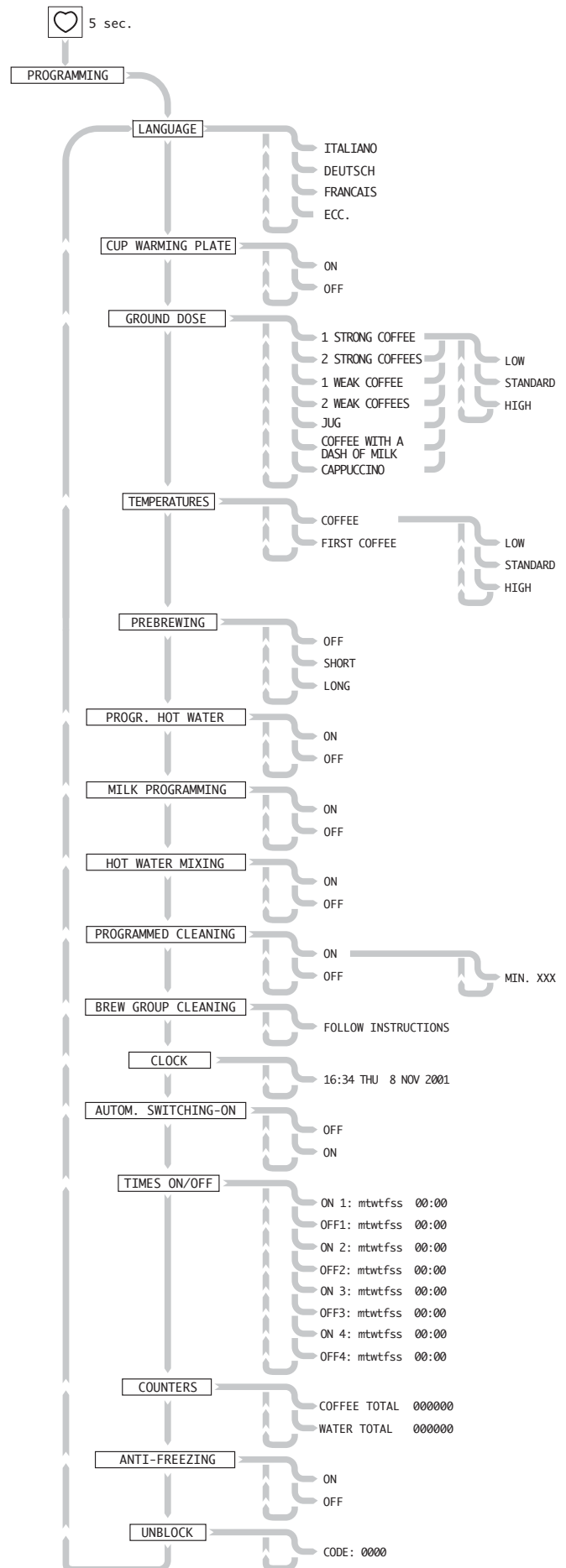
**!** During the programming the following buttons take on a different function from the one they usually have during the use of the machine

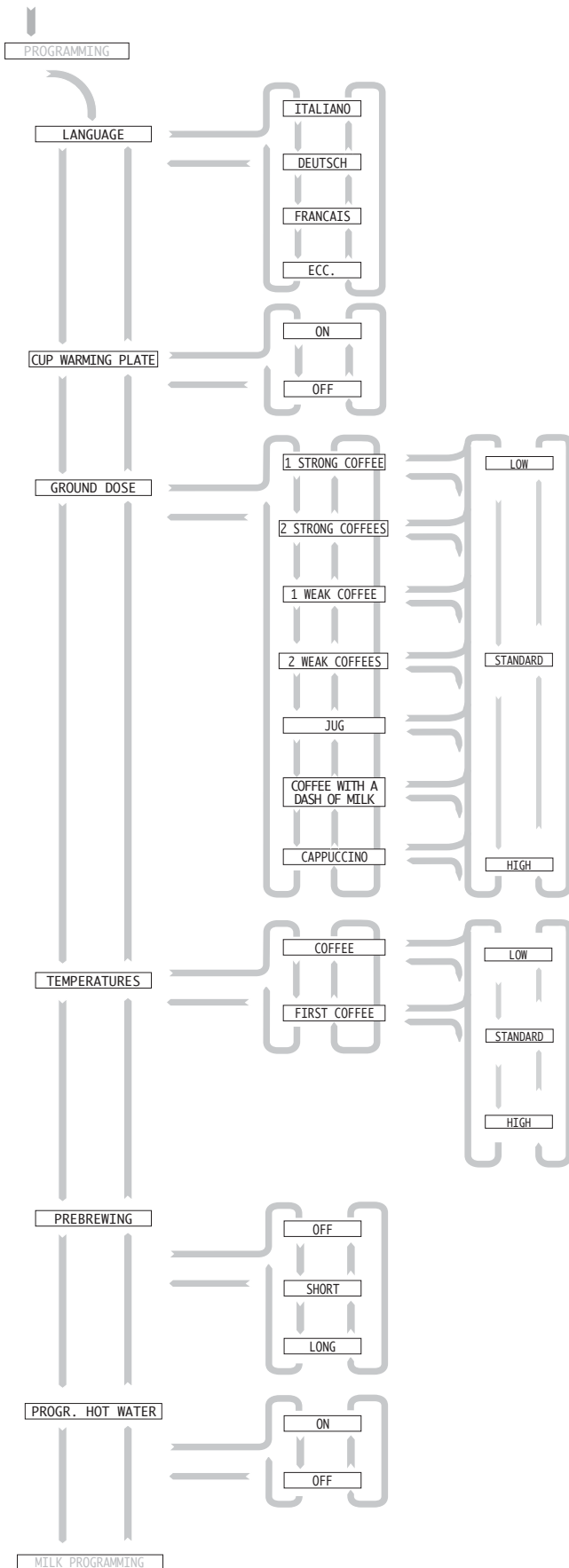
	(programming access)	to enter the programming menu hold it for 5 sec. (the message: <b>"PROGRAMMING"</b> will be displayed);
	(Enter)	to switch from one menu level to the following; to prepare a datum for the adjustment; to confirm a datum or a function;
	(Escape)	to cancel the non-confirmed adjustments; to go back to the previous level, up to the menu exit.
	(Down)	go to the following item in the same programming level; increase the value of the datum to be adjusted.
	(Up)	go to the previous item in the same programming level; decrease the value of the datum to be adjusted.

Some functions also enable the programming of one or more data (already programmed on standard figures).

To adjust the figures to be re-programmed:

- Select the function.
- Confirm the function through the button  (Enter).
- The cursor will blink under the figure to be adjusted.
- Press the buttons  (Up) or  (Down) to adjust its value.
- Confirm the adjustment through the button  (Enter).






functions explanation follows in the next page

## 12.7.1 Description of functions

### LANGUAGE

- Language can be selected through the “LANGUAGE” menu .

### CUP WARMING PLATE

- By selecting “ON”, the cup warming plate is switched on together with the machine.
- By selecting “OFF”, the cup warming plate remains off.

### GROUND DOSE

The quantity of ground coffee, programmed during the installation, can be adjusted at every brewing.

- By selecting “LOW” or “HIGH”, the dose is decreased or increased by 1 g.
- By selecting “STANDARD”, the machine will brew the dose initially programmed by the Maintenance Technician.

### TEMPERATURES

The brewing temperature of water, programmed during the installation, can be adjusted at every brewing.

- 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.

**NOTE** - The temperature “first coffee” is selected at the first brewing, when the machine is switched on.



### PREBREWING

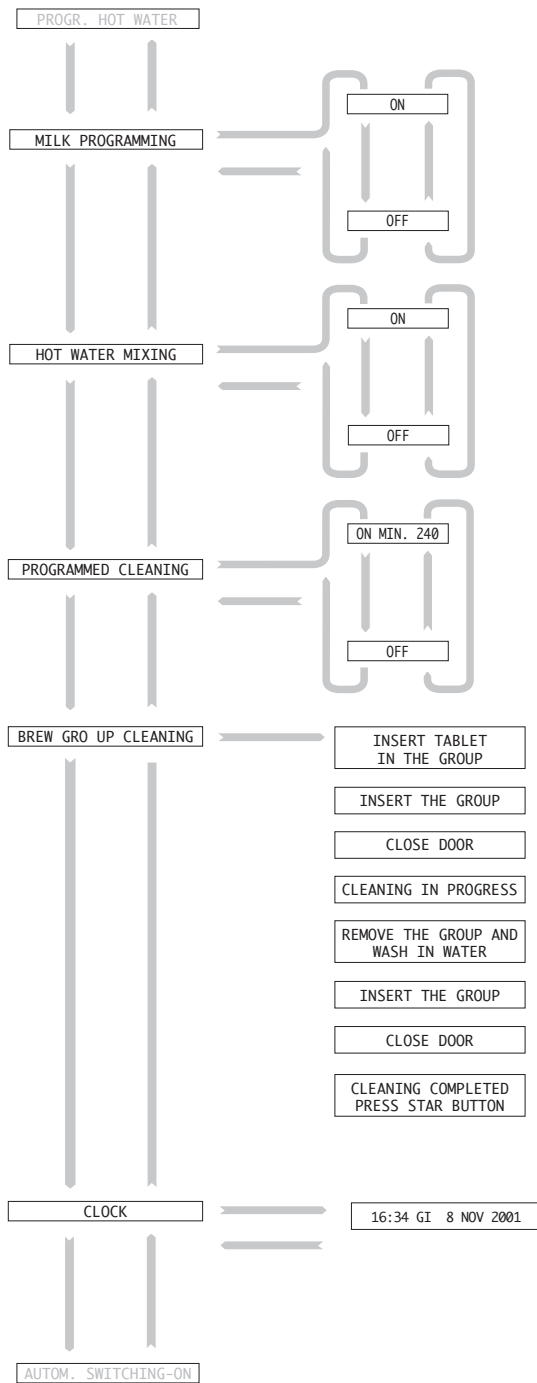
This function allows a short dwell time during the first brewing phase. This can improve the quality of the coffee which, during the dwell, has the time to “infuse” into the first part of water received. Selecting:

- “OFF”, no pre-brewing is performed.
- “SHORT”, the “pre-brewing” programmed by the Maintenance Technician is performed.
- “LONG”, the “pre-brewing” is extended by 1 sec.

### PROGR. HOT WATER



This function enables to set the quantity of brewed hot water. By selecting:

- “ON”, the button  (Pr. 12.6) can be programmed.
- “OFF”, the button  cannot be programmed, therefore the quantity of hot water has to be manually adjusted.



### MILK PROGRAMMING

The milk quantity programming can be enabled by selecting:

- "ON", the button  (Pr. 12.6) is programmed.
- "OFF", the button  cannot be programmed, and the dose has to be manually adjusted.

### HOT WATER MIXING

While the different types of beverages are brewed, the machine adds a certain amount of hot water, according to the programming. By selecting:


- "ON", the mixing is performed
- "OFF", NO hot water will be added to the beverage.

**NOTE** - If the function is disabled the programmed figures remain unchanged and ready to be used when the function is re-activated.

### PROGRAMMED CLEANING

This function enables the brewing of a small hot water quantity (abt 5 cc), in order to avoid any deposits in the brew group. This cleaning starts automatically after the programmed time (20÷240 minutes), from the last coffee brewing. By selecting:


- "ON", the adjustment cursor blinks under the last right figure, and the value can be increased or decreased by 10 min; every adjustment must always be confirmed.
- "OFF", no cleaning is performed.


**NOTE** - During the cleaning, the message "**PROGRAMMED CLEANING**" will be displayed; cleaning can also be activated manually by holding the button  for 3 seconds.

### BREW GROUP CLEANING

This function enables the cleaning of the brew group (**27**) using the provided tablets (for any information about tablets ask to an Authorized Customer Service Center).

Procedures:

- The process begins from: "**BREW GROUP CLEANING**".
- Press ; on display: "**INSERT TABLET IN THE GROUP**".
- Remove the brew group; on display: "**INSERT THE GROUP**".
- Put the tablet inside the brew group and refit the group; on display: "**CLOSE DOOR**".
- Close the door; on display: "**CLEANING IN PROGRESS**". The cleaning cycle begins; at the end of the cycle the message on display will be "**REMOVE THE GROUP AND WASH IN WATER**".
- Remove the brew group; on display: "**INSERT THE GROUP**".
- Wash the brew group in running water.
- Refit the brew group; on display: "**CLOSE DOOR**".
- Close the door; on display: "**CLEANING COMPLETED. PRESS STAR BUTTON**";

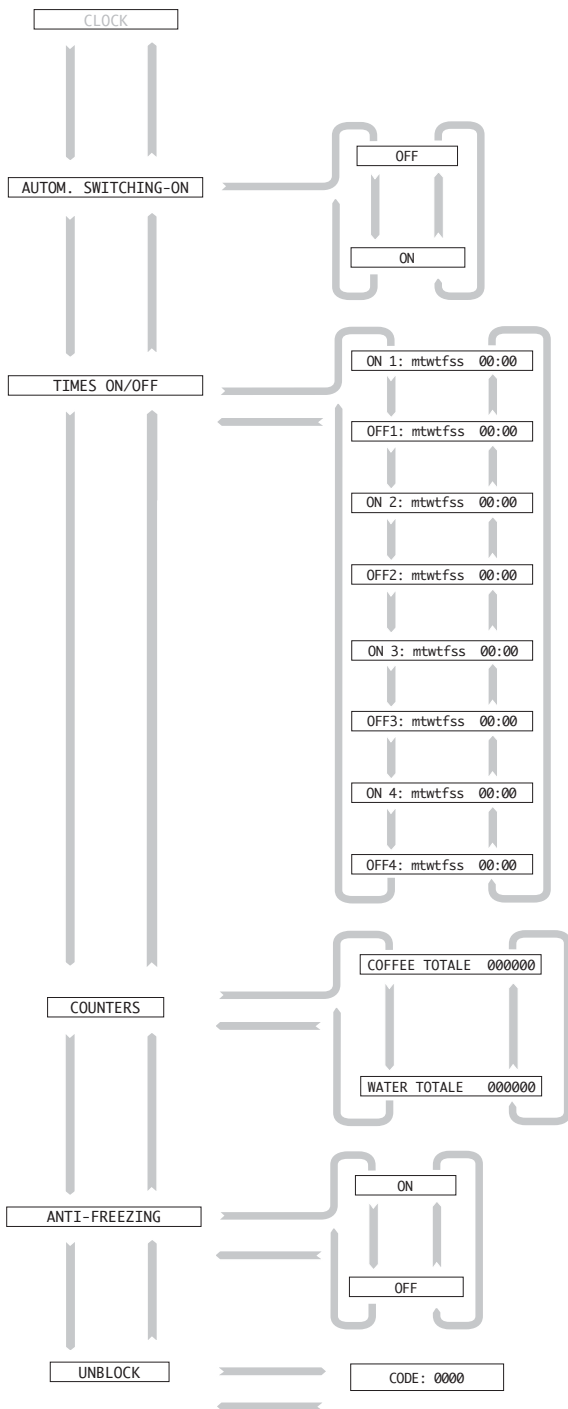
Press  to exit the menu definitely and make the machine ready to be used.

### CLOCK

This function enables the clock and calendar set-up.

- By selecting "**CLOCK**", the cursor blinks on the hours, that can thus be adjusted.
- After confirming the hour setting, the cursor moves on the next figure to be adjusted (the minutes, then the day, the month and finally the year).





**AUTOM. SWITCHING-ON**

This function enables the programming of automatic switching-on and off of the machine, in two different time ranges, every day of the week. By selecting:

- "ON", the function can be programmed .
- "OFF", the machine can only be switched on and off manually, through the main switch (18). Any automatic switching-on and off times previously set, remain stored anyway.
- To program the time ranges and the days see the following function "TIMES ON/OFF".

**NOTE -** The automatic switching-on of the machine is possible only if the main switch (18) is on the "I" position.

**TIMES ON/OFF**

This function enables to program the automatic switching-on and off times over a whole week.

- By selecting "TIMES ON/OFF", the cursor blinks on the day to be modified.
- Enter the day, using the button ♥ (down), turning the small letter into a capital one.
- Remove the day from the setting, using the button ☹ (up), turning the capital letter into a small one.
- Confirm the adjustment.

To set the time use the same procedure followed to set the clock.

**Example:** the function explanation scheme shows a machine programming which schedules the machine switching-on at 08:00 and the switching-off at 18:00 from Monday to Friday. The switching-on at 09:00 and off at 12:30 on Saturday, and a stop over the whole Sunday.

**COUNTERS**

One of these two functions indicates the total number of coffee brewing cycles; the other indicates the number of hot water brewing cycles.

If the automatic dosing of hot water is disabled (see "HOT WATER PROG." function), one cycle will be counted every time the electrovalve is switched-on.

**NOTE -** Both functions cannot be reset and are just reference functions.

**ANTI-FREEZING**

When the machine on "STANDBY" is exposed to low temperatures, the anti-freezing function is important to prevent the damages caused by icing-up in boilers. This function keeps the boilers temperature at the minimum value to prevent freezing.

- By selecting "ON", the function is enabled.
- By selecting "OFF", the function is disabled.

**NOTE -** This function can only be enabled if also function "AUTOM. SWITCHING-ON" is on and if the machine is on "STANDBY". When the function is enabled the message "ANTI-FREEZING" will be displayed.

**UNBLOCK**

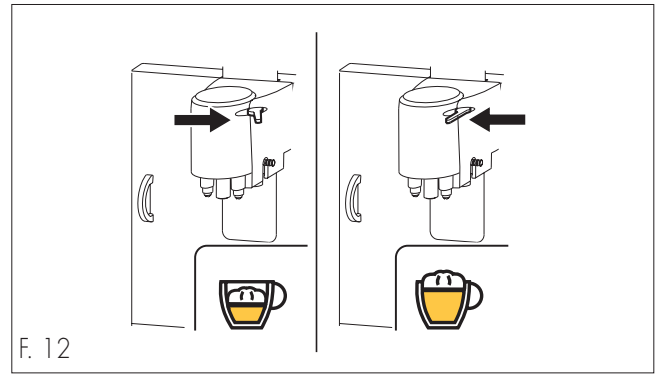
This function enables to temporarily unblock the machine when the number of cycles programmed for maintenance and descaling has been reached. To get the unblock code refer to the firm that has installed the machine or that supplies maintenance. Then enter the code into the function:

- Select "UNBLOCK"; the cursor will blink under the first figure to be modified;
- enter the datum and confirm;
- after every confirmation, the cursor blinks under the following figure and goes on until the code is completed.

## 12.8 Cream adjustment

The quality of the cream in the beverages depends on the use of the adjustment lever (24).

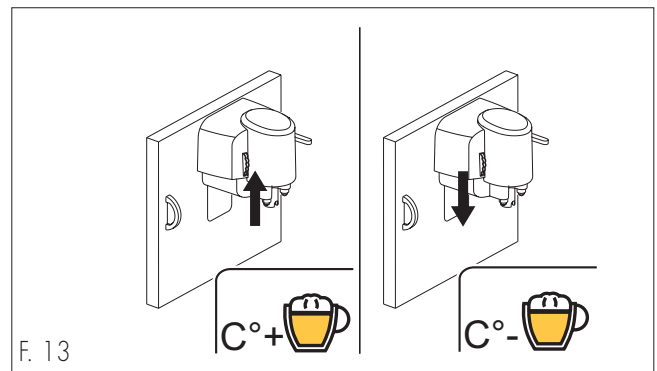
- By turning the lever clockwise, there will be a greater quantity of cream.
- By turning the lever anti-clockwise, there will be a smaller quantity of cream.



## 12.9 Temperature setting

Milk temperature is adjusted through lever (25).

- By turning the lever upward, the temperature will grow.
- By turning the lever downward, the temperature will lower.



## 12.10 Grind adjustment

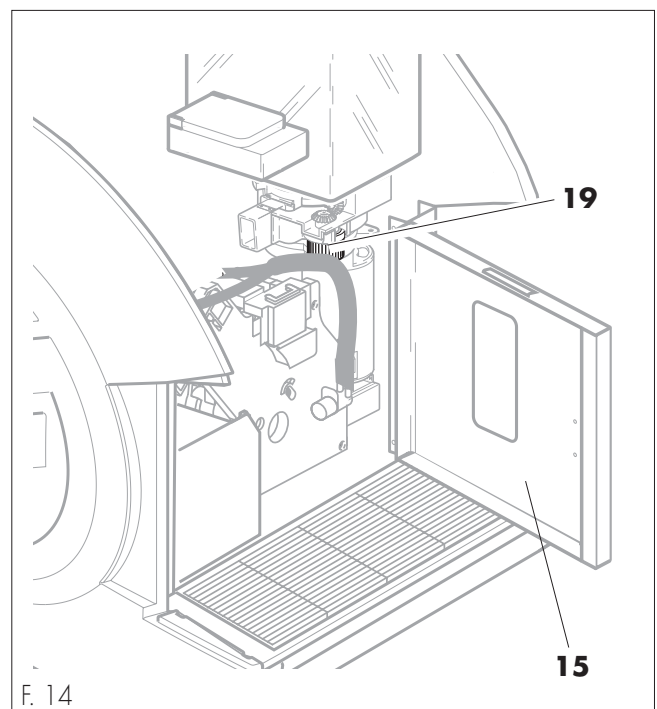
**!** Whatever the coffee blend is, a **very fine** grinding (notch on **low values**) increases the density, the cream quantity and the brewing time of the beverage. On the contrary a **coarse** grinding (notch on **high values**) decreases the density, the cream, as well as the brewing time.

**!** Do not turn the knob counterclockwise to the limit stop (19 - F. 14); this action causes the grinders tightening and the consequent machine block.

If any foreign body in the coffee blend should cause the block of grinders and the subsequent block of the machine (on display: "GRINDER ERROR"), refer to an Authorized Customer Service Center.

**NOTE** - The grinding is preset by the Manufacturer on standard values, but it can be adjusted in the following way:

- Open the door (15 - F. 14), turn the knob (19 - F. 14) anticlockwise to obtain a finer grinding (the notch moves onto lower values), and clockwise to obtain a coarser grinding (the notch moves onto higher values).



## 12.11 Display messages


**NOTE** - Here follows a list of alarm messages (in addition to those explained before) that can be displayed and the relative machine conditions.

**STANDBY**: the machine is switched off (the main switch is on "I") and the automatic switching-on/off functions enabled (Pr. 12.7.1).

**ANTI-FREEZING**: the machine is switched off (the main switch is on "I") and the function protecting boilers from icing-up is enabled (Pr.12.7.1).

**PROGRAMMED CLEANING**: it is displayed when the machine is performing the automatic cleaning of the brew group (Pr. 12.7.1).

**COFFEE EMPTY, GUILLOTINE CLOSED**: the machine, during the grinding, detects the lack of coffee beans in the relative container (6), or that the guillotine is closed.

**FILL CIRCUIT**: this message is displayed if the machine detects the lack of water in the boilers during a beverage brewing. After checking if there is actually water in the supply network, press the button  ( ^ in the COFFEE version), until water comes out properly from the spout (11) and from the brew group (22). In the "COFFEE" version the water comes out only from the brew group

**PROGRAMMING**: it is displayed during the machine programming (Pr. 12.6).

**REMOVE GROUNDS**: it is displayed if the dump box (16) is almost full (the machine performed the programmed number of brewings). More brewings can anyway be performed.

**OUT OF SERVICE – REMOVE GROUNDS**: the dump box (16) is completely full (the machine performed the programmed number of brewings). The machine is blocked and no more brewings can be performed until the dump box is emptied.

**CLOSE DOOR**: the door (15) is not properly closed.

**INSERT BOX**: the dump box (16) is not properly inserted.

**INSERT DRIP TRAY**: the powder tray (12) is not properly in place.

**INSERT GROUP**: the brew group (27) is not properly inserted.

**GROUP ERROR**: the brew group (27) is not properly performing his working cycle; switch the machine off and call the AUTHORIZED CUSTOMER SERVICE CENTER.

**PUMP ERROR**: one of the pumps is damaged. Switch the machine off and call the AUTHORIZED CUSTOMER SERVICE CENTER.

**SENSOR ERROR 01**: is displayed when a temperature sensor fails. Switch the machine off and call the AUTHORIZED CUSTOMER SERVICE CENTER.

**TEMPER. ERROR 01**: is displayed when one of the boilers resistance is damaged. Switch the machine off and call the AUTHORIZED CUSTOMER SERVICE CENTER.

**DESCALING**: it is displayed when the machine needs a descaling intervention, and after performing the programmed number of brewings. Switch the machine off and call the AUTHORIZED CUSTOMER SERVICE CENTER.

The descaling interventions are set on working cycles of the machine, and can be programmed by the maintenance technician.

**MAINTENANCE**: it is displayed when the machine needs maintenance and after performing the programmed number of brewings. Switch the machine off and refer to the AUTHORIZED CUSTOMER SERVICE CENTER.

The maintenance interventions are set on working cycles of the machine, and can be programmed by the maintenance technician.

## 12.12 Machine switching-off

### Programmed automatic switching-off

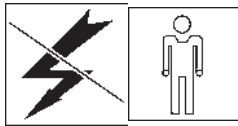
This is possible when the function "AUTOM. SWITCHING-ON" (Pr. 12.7.1) is enabled and the function "TIMES ON/OFF" (Pr. 12.7.1) has been programmed .

At the programmed time the machine goes on "STANDBY".

### Manual switching-off

This switching-off is necessary if the function "AUTOM. SWITCHING-ON" (Pr. 12.7.1) is not enabled.

It can be obtained by switching both the main switch (18) and the all-pole switch on the "0" position or by disconnecting the plug.




## 13 - ROUTINE MAINTENANCE




### Warning

- **In case of troubles**, usually indicated on display, switch the machine immediately off, disconnect the power supply through the all-pole switch or by disconnecting the plug, and call the nearest CUSTOMER SERVICE.
- **Before intervening** with any type of maintenance or cleaning, disconnect the power supply through the main switch (18) and the all-pole switch (or disconnecting the plug).
- **Any operation** must be done when the machine is cool.
- **Never perform** any cleaning operation when the machine is on "STANDBY".
- **Never wash** any part of the machine in the dishwasher.
- **Do not use** direct water jets.

### 13.1 Machine cleaning

 If you need to open the machine door, position the brew group at the bottom. Any different position of the brew group would make the door opening impossible.

- The cleaning must be done every day and before an extended out-of-service times, in order to avoid the solidification of residues in containers, trays and brew groups.
- The removable parts of the machine which have to be cleaned, must be washed and rinsed in running water.
- To clean coatings, panels and the machine controls, use soft cloths moderately soaked in warm water.
- To clean the fixed parts and the very machine, use only cold or warm water, non-abrasive sponges and damp cloths.
- All the parts to be cleaned are easily reachable and do not require the use of any tool.

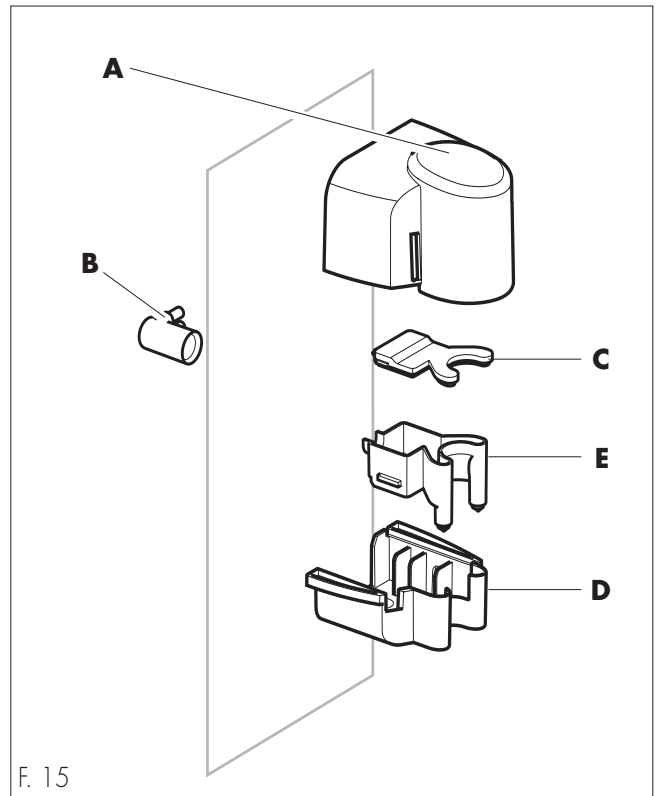
 Routine maintenance and cleaning preserve and extend the machine efficiency and durability, as well as granting the respect of the hygienic standard regulations.

The machine automatically indicates when maintenance and descaling operations are required. The exact number of brewings is indicated by the mechanical counter or by the machine display. If the Maintenance Technician fails to intervene, the machine could block.

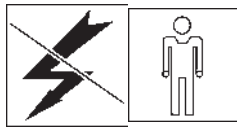
### 13.1.1 Brew group (F. 15)

The following can be removed:

- the upper protection cover (A), of the dispenser by pulling it outwards;
- the lower protection cover (D) of the dispenser, by unscrewing the bottom knob;
- the brew group (C-E) by pulling it outwards;
- the coffee fitting (B) by turning it approx. 90 degrees.



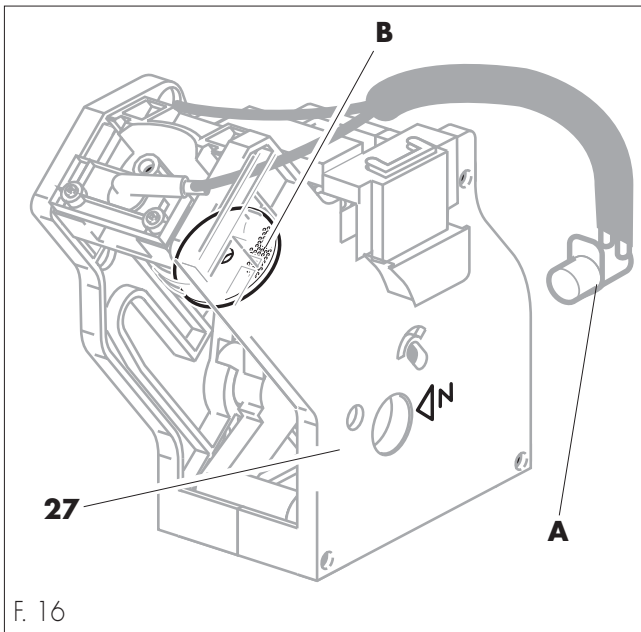
F. 15



### 13.1.2 Brew group (F. 16)

**!** Cleaning must be carried out with the group empty.

- Periodically clean the brew group using the special tablets (Pr. "12.7.1 Explanation of functions – CLEANING GROUP").
- Remove the brew group (28) pulling the appropriate handle (A) and pressing the button marked by "PRESS".
- Wash abundantly with warm water. Do not use detergents.
- Delicately scrape the upper filter (B) with a plastic coffee spoon.



### 13.1.3 Drip tray and relative grill

Remove the drip tray (13) from the machine and wash it with running water, paying particular attention to the grill.

### 13.1.4 Dump box

Remove the drip tray (13), remove the dump box (16) from its place and then wash it with running water.

### 13.1.5 Steam and hot water spouts (except COFFEE set-up)

Clean the spouts (11-17) with a non-abrasive damp cloth. If the nozzles are clogged the final section of the spouts can be unscrewed, and the nozzles can be cleared with a pin.

### 13.1.6 Cup warming plate

Use a non-abrasive damp cloth to clean the cup warming plate (4).

### 13.1.7 Coffee bean hopper

Use a non-abrasive damp cloth to clean the coffee bean hopper (6).

### 13.1.8 Cappuccinatore cleaning

**!** Never clean the cappuccinatore when the machine is on "standby".

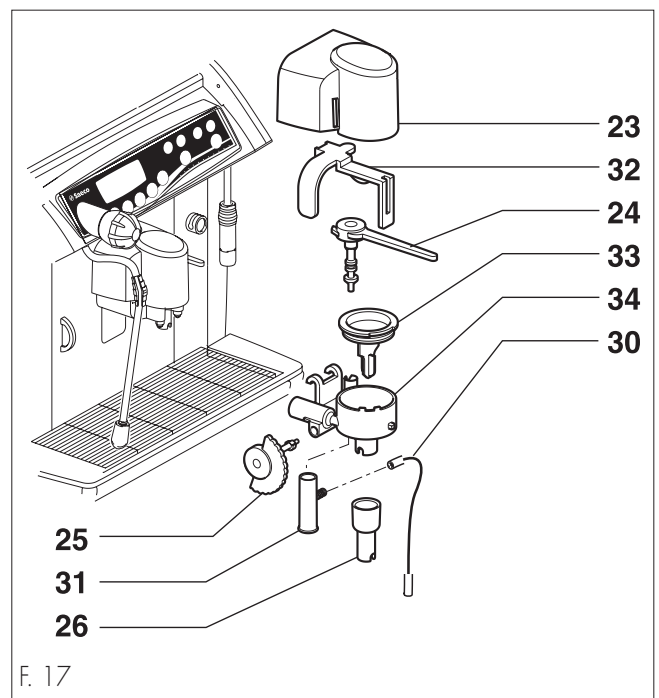
Every time the CAPPUCINATORE is used, it must be cleaned in order to avoid the solidification of residues.

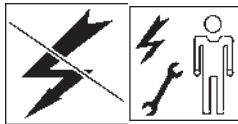
All the removable parts must be washed and rinsed in running water.

### 13.1.9 Cappuccino brew group (F. 17)

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

- the top protection cover (23), by pulling it outwards;
- remove the cappuccinatore (29) by pulling it outwards;
- the fork (32);
- the cream adjustment lever (24);
- the temperature setting lever (25);
- the cappuccinatore body cap (33);
- the fitting (31) connecting the suction pipe to the body of the cappuccinatore;
- the milk dispenser (26);
- milk suction tube (30)





## 14 - UNSCHEDULED MAINTENANCE

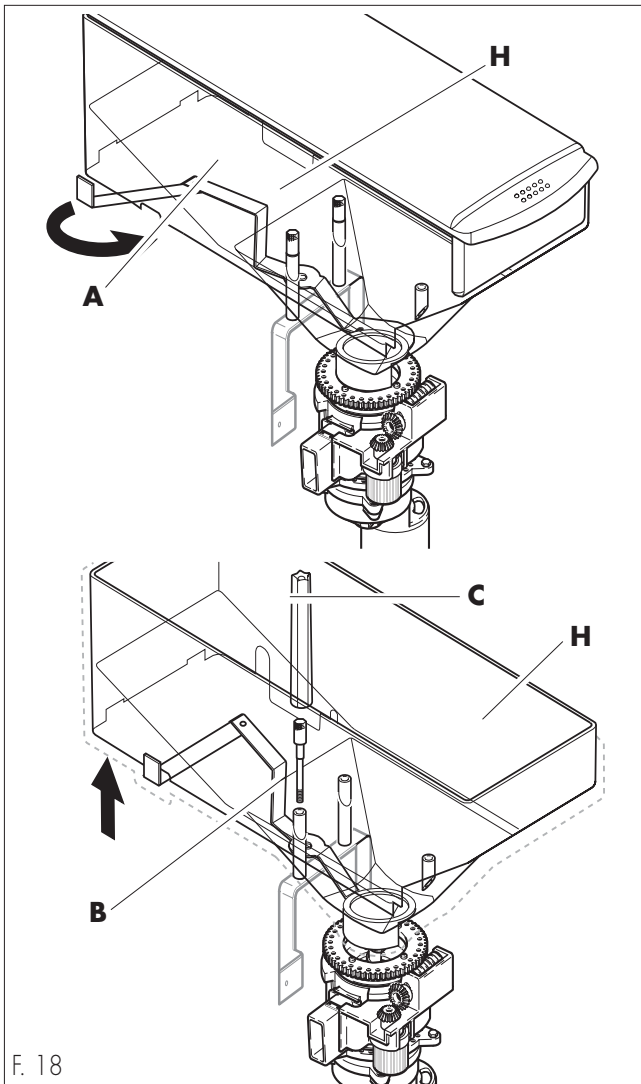
**NOTE-** *Unscheduled maintenance includes every repairing or part replacing. The **Maintenance Technician** is the only person authorized to perform these operations.*

### 14.1 Jamming of the coffee grinder unit

- A foreign body among the coffee beans can cause the grinders jamming and the subsequent machine block; the message “GRINDER ERROR” will be displayed.
- In this case open the coffee grinder unit (20) and remove the foreign body.

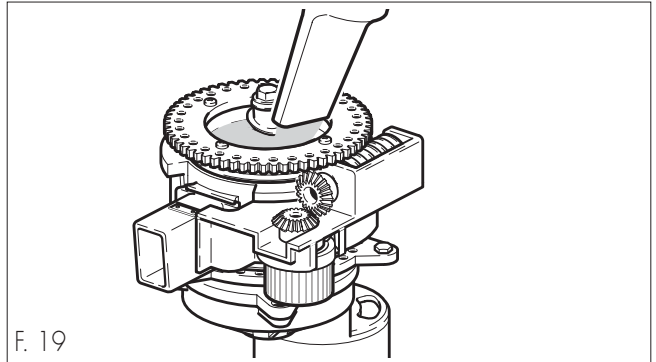
#### 14.1.1 Grinder unit assembly/disassembly

- Close the bean hopper (H) bulkhead (A)
- Remove the screws (B) from the container using the appropriate tool (C). Remove the container from the machine pulling upwards.



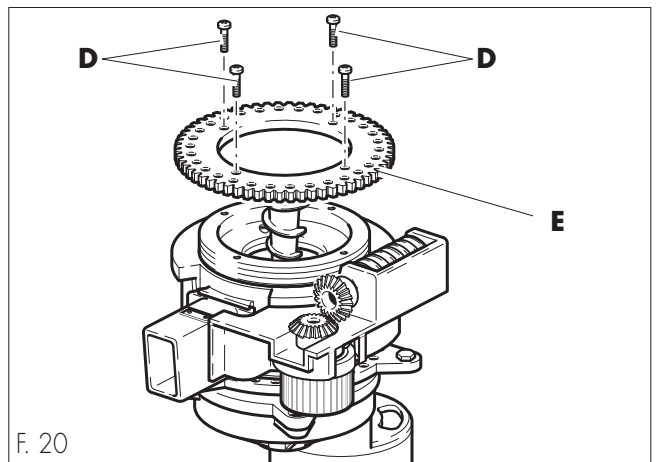
F. 18

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



F. 19

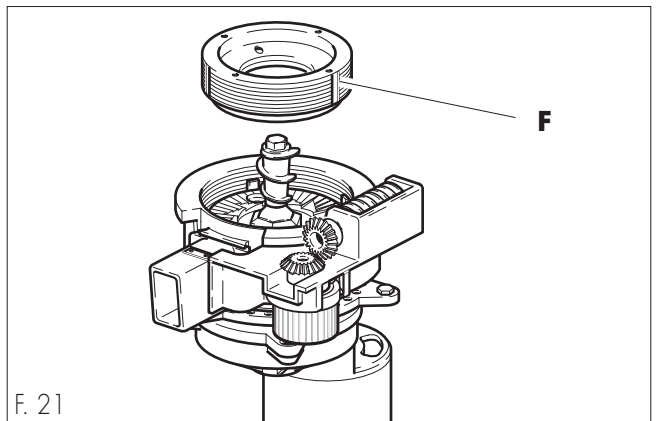
- Remove the screws (D).
- Remove the gearwheel (E).



F. 20

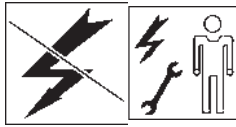
- Unscrew and remove the adjustment ring nut (F) and clean both grinders with a vacuum cleaner and a brush.

**!** *Check the grinder's degree of wear. In case of manifest damages, they must be replaced.*



F. 21

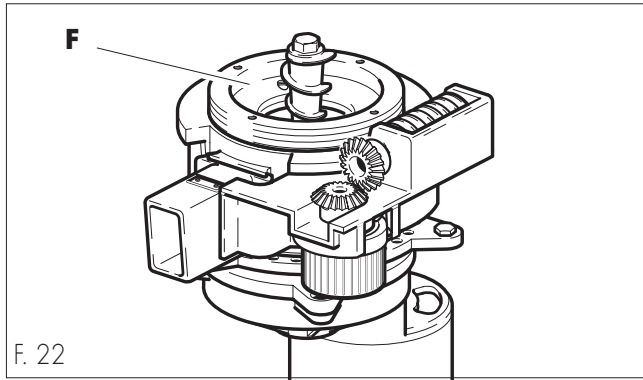




To re-assemble the coffee grinder unit, do as follows:

- Screw fully the adjustment ring nut (F), then unscrew it by 1/2 turn.

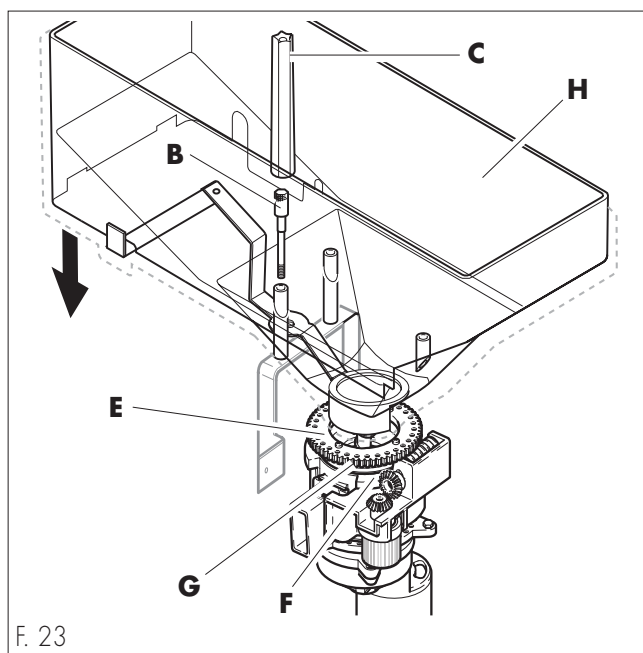
**!** This 1/2 turn untightening of ring nut is necessary to avoid grinders jamming and damage.



- Replace the gearwheel (E) and fix it tightening the screws (D).
- Replace the coffee bean hopper (H).

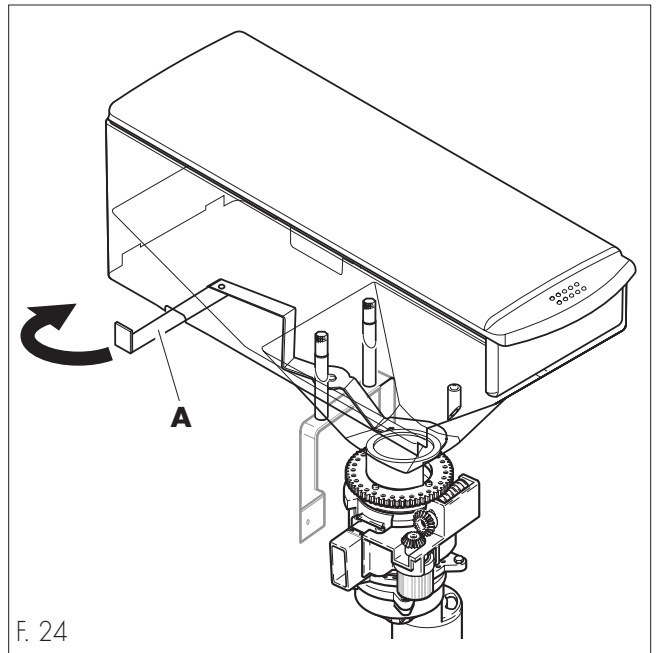
**!** Be careful to place the gasket properly (G). It has to correctly engage with the gearwheel (E) and the ring nut (F).

- Fix the container (H) tightening the screws (B) with the appropriate tool (C).



- Open the bulkhead (A).

**!** Before re-operating the machine, a new **grind adjustment** is required.



## 15 - OUT OF SERVICE

In case you will put the machine out of service, disconnect the power and the water supply, empty the drip trays, boilers and piping and clean the machine (Pr. "13.1 Machine cleaning").




If the machine is scrapped, the different materials composing the machine have to be separated and disposed of according to their composition and to the current State regulations.



## 16 - TROUBLES, CAUSES AND CURES

Here is a list of the possible machine troubles.

The symbol  in the "cure" box means that the operation must be carried out by the Maintenance Technician only.

TROUBLE	CAUSE	CURE
<b>The machine does not start</b>	No voltage	Check: - if the plug is connected
		- if the all-pole switch (if any) is on
		- the system fuses
		- the electric connections 
<b>Display message: "DUMP BOX FULL"</b>	Dump box full	Empty the dump box and reintroduce it properly
<b>Grinder error</b>	Coffee grinder unit blocked	Clean the coffee grinder (Pr. "14.1 Jamming of the coffee grinder unit") 
<b>Instead of coffee only water is brewed</b>	The button selecting pre-ground coffee has been pressed but the relative container has not been filled with instant coffee.	Place the coffee dose in the relative hopper and restart the cycle
<b>No water or steam supply</b>	The steam/hot water spout's hole is clogged	Clean it with a thin needle
<b>Coffee flows too rapidly</b>	Grinding is too coarse	Set a finer grinding
<b>Coffee flows too slowly</b>	Grinding is too fine	Set a coarser grinding
<b>Coffee is not hot enough</b>	The cup has not been preheated	Preheat the cup on the cup warming plate
	The machine has not yet reached the suitable temperature	Wait for the machine to reach the suitable temperature
<b>Coffee has not enough cream</b>	The coffee blend is not appropriate, coffee is not fresh off the roasting, the coffee powder has been ground too finely or too coarsely.	Change the coffee blend or check its grinding (if pre-ground)
<b>The machine requires too much time to warm up, the water quantity is reduced</b>	The machine circuit is clogged by scale	Descale the machine 
<b>The brew group cannot be removed</b>	The brew group is not in the right position (N)	Switch the machine on and off through the main switch
<b>The brew group cannot be refit</b>	The brew group is not in the right position (N)	Manually turn the group onto the standard position (N), matching the reference mark placed on the structure with the arrow N (F. 16)
<b>The cappuccinatore does not dispense milk</b>	The milk used is not cold enough (see warnings)	Move the temperature adjusting lever downward
	No more milk in the container	Fill milk container