

Vending Machine

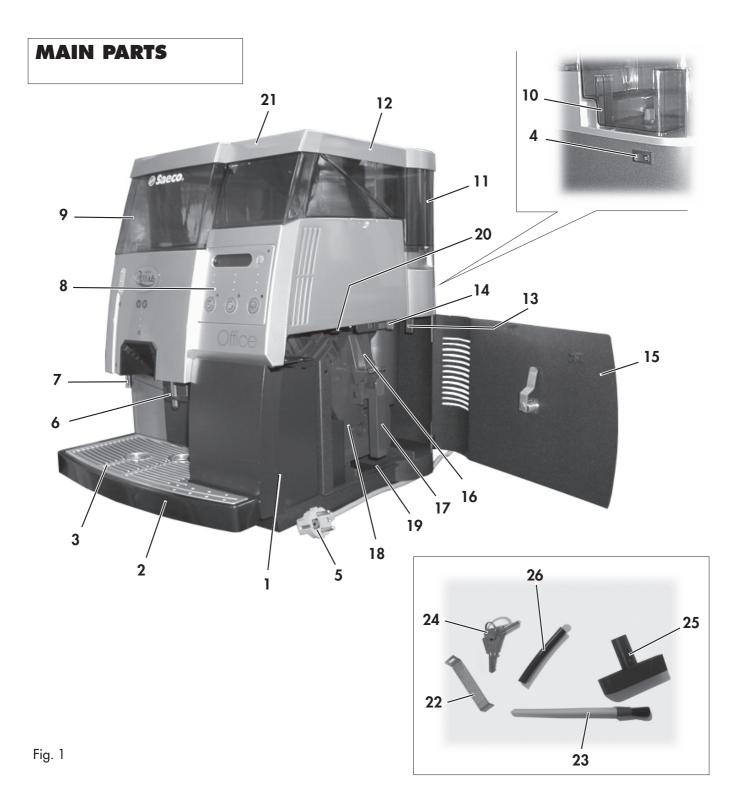
model **ROYAL OFFICE** Type SUP 015V



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- 1 Dump box
- 2 Drip Tray
- 3 Grill drip tray
- 4 Main switch (rear side of the machine)
- 5 Power cord
- 6 Coffee dispenser
- 7 Hot water spout
- 8 Control panel
- 9 Water tank

- 10 Water level gauge
 - (inside water tank)
- 11 Coffee bean hopper
- 12 Coffee bean hopper cover (under the cover with lock)
- 13 Grind adjustment lever
- 14 Coffee dosing lever
- 15 Service door with lock
- 16 Water hopper
- 17 Brew group handle

- 18 Brew group
- 19 Coffee residue drawer
- 20 Safety microswitch
- 21 Cover with lock
- 22 Cover lock plate
- 23 Cleaning panel
- 24 Locking keys (2x)
- 25 Brew group key
- 26 Silicon pipe

1 - INTRODUCTION TO THE MANUAL

1.1 Foreword

Important

This manual is an integral part of the machine and must be read carefully. It contains all the information about installation, maintenance and correct use of the ROYAL OFFICE machine.

Always refer to this manual before performing any operation.

Manufacturer: **Saeco International Group S.p.A.** Via Panigali, 39 - 40041 GAGGIO MONTANO (Bo) Italy

This manual must be preserved with care and must accompany the machine throughout its operational life including changes of ownership.

If this manual is lost or damaged, request a copy from an Approved Assistance Centre.

The manufacturer reserves all copyrights on this manual.

Important

The keys to open the water and bean hoppers, the side door and the optional coiner door are available only to the supply operator and maintenance technician.

1.2 Symbols used

A number of symbols are used in this manual to indicate danger or situations that require various degrees of expertise.

Each symbol is explained by a message.

Where no symbol is used, the information is intended for all users of the machine. The symbols used are the following:



Supply operator

Those in charge of supplying and cleaning the machine. Maintenance operations that require a specialized technician are not to be performed by supply operators.



Maintenance technician

The symbol indicates operations to be performed only by specialized maintenance technicians and servicemen.



Warning

The symbol indicates danger for operators and the machine itself.

Important

The symbol indicates operations that contribute to keep the machine in good working conditions.

2 - GENERAL INFORMATION

2.1 Foreword

This machine is an automatic coffee and hot water dispenser with programmable dosing of all beverages. If necessary, contact the nearest Distributor or National Importer or the Manufacturer when no importers are available.

APPROVED ASSISTANCE CENTERS are available for information and explanations about the machine, and to provide technical assistance and spare parts supplies.

The Manufacturer reserves the right to modify the machine without any obligation to provide advance notice.

2.2 Intended use of the machine

The ROYAL OFFICE machine automatically dispenses:

- freshly brewed coffee and espresso coffee;
- hot water for beverage preparation.

Important

Improper use of the machine determines the immediate warranty expiration and the Manufacturer declines responsibility for damages and personal injuries.

Improper use includes:

- using the machine for purposes other than that intended and/or following procedures not described in this manual;
- interventions on the machine that are against instructions included in this manual;
- using the machine after component parts have been tampered with and/or safety devices have been altered;
- installing the machine outdoors

2.3 Residual risks

The dispensing outlet has no protections against accidental hand exposure to coffee and hot water.

Machine identification 2.4



Fig. 2

The machine is identified by the model and serial numbers outlined on the specific plate (Fig. 2). The plate also contains the following specifications:

- name of Manufacturer -
- CE marking _
- machine model _
- serial number _
- manufacturing year
- technical specifications
 - -
 - Power supply voltage (V) Power supply frequency (Hz)
 - Power consumption (W) _

Important

When contacting APPROVED ASSISTANCE CENTERS always refer to the plate and the specific data it contains.

2.5 **Technical specifications**

Power rating Dimensions (l x w x h) Machine case Weight Cable length Operating system		see data plate see data plate
		electronic
		fine-grinding
		automatic
• • • • •		precision doser
		removable, transparent
Capacity		
- /		ca. 950 gr.
		ca. 1 l
Heating time	1 /	ca. 2 minutes
Preparation time		ca. 20 seconds per cup
•	-coffee	ca. 30 seconds per cup
	-hot water	ca. 60 seconds per cup
Thermal cut-out		built-in
		class protection I
		see data plate
		(see Declaration of Conformity page 29)
Warranty		see enclosed warranty certificate

3 - HANDLING AND STORAGE

Handling

During handling and transport, the machine must be kept in the upright position according to the instructions on the packaging.

Lift and position with care.

Do not shake the machine.

Storage

The machine must be stored according to the following temperatures:

- -- minimum temperature: 4°C.
- maximum temperature: 40°C
- maximum humidity: 95%

The machine packaging consists of cardboard and expanded polystyrene.



Warning

Given the overall packaging weight, do not pile up more than three machines.

The machine must be stored in its original packaging away from humidity and dust.

4 - SAFETY

4.1 General safety norms



Danger

It is extremely dangerous to put electrical parts in contact with water! Do not direct the steam or hot water jet toward body parts; handle the hot water pipe with care: danger of burns!

Use the machine for its intended use only.

Do not apply technical modifications to the machine: it can be extremely dangerous!

Warning

The machine must be used only by adults and by those familiar with it.

Do not allow children to play with the machine. Children are not aware of the danger of electrical devices.

Power supply

Do not touch electrical parts to avoid serious injuries. Plug the machine in the correct socket. Voltage must correspond to that indicated on the plate inside the machine (Fig. 2).

Power cord

If damaged, the power cord must be replaced by an Approved Assistance Centre. Do not connect the cord near corners and sharp or very hot objects. Avoid contact with oil. Do not stretch the cord when moving the machine. Do not unplug the machine by pulling the cord or touch it with wet hands. The cord must not hang from tables and shelves.

Location

Place the machine on a stable surface that cannot be knocked down. Water could pour out: danger of burns! Do not use the appliance outdoors or in low temperature environments. Do not place the machine on a very hot surface or near open flames to avoid damage to the machine casing.

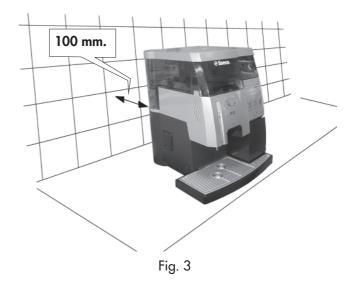
Danger of burns

Keep hands away from the hot water and coffee jet.

Positioning

For the correct functioning of the machine follow the indications below:

- select an even surface
- select a location that is sufficiently well-lit, clean and near an easily reachable power source.
- the minimum distance between the wall and the machine must be in line with the indications outlined in figure 3.



Cleaning

Before cleaning the machine, turn the main switch off and disconnect the power supply. Wait until the machine is cold. Do not soak the machine in water! Do not disassemble the machine or perform any operation on the internal components of the machine.

Repairing and maintenance

In case of failure or faults possibly after a fall, immediately unplug the machine. Do not turn the faulty machine on. The machine can be repaired only by Approved Assistance Centres. The Manufacturer declines responsibility for damage and injuries caused by incorrect repairing of the machine.

In case of failure and/or malfunctioning contact exclusively qualified **ASSISTANCE SERVICE** repairmen.

In case of fire use Carbon Dioxide extinguishers (CO2). Do not use water or dry-powder extinguishers.

4.2 Operators requirements

To guarantee the safety and good functioning of the machine two operators with different skills are required:



Maintenance technician

A specialized technician in charge of machine installation, set-up, maintenance and technical assistance.



Supply operator

An operator in charge of turning the machine on/off, supplying products, removing coins and of the internal and external cleaning of the machine.

If the machine is malfunctioning, the supply operator must request the intervention of the maintenance technician.

User

The person who uses the machine. Users must NOT perform any of the tasks of the supply operator or the maintenance technician.

If the machine is malfunctioning, users should request the intervention of the supply operator or the maintenance technician.

4.3 Safety devices

All the components that can be potentially dangerous are located inside the machine.

A microswitch (ref. 1 - Fig. 4) automatically cuts the power out if the side door is open.

4.4 Safety microswitch efficiency test

When the machine is on, open the side door and check that the display (ref. **8** - Fig. 1) and LEDs on the control panel keypad (rif.**8** - Fig. 1) turn off.

If the display and LEDs are off the machine is turned off and the microswitch is working correctly.

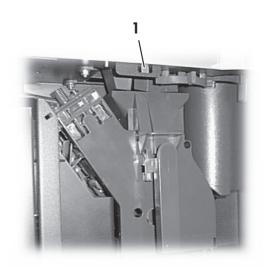


Fig. 4

5 - CONTROLS DESCRIPTION

Important

The dispensing keys of the machine are programmed with pre-set values.

5.1 Main controls

Main switch (Fig. 5)

Located in the rear side of the machine, centre-left. When in the "I" position, the machine is on (electrical functions on).

When in the " \bullet " position, the machine is off (electrical functions off).



Fig. 5

Control panel (Fig. 6)

It consists of 4 keys with different functions according to the machine mode (standard running or setting mode).

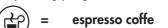


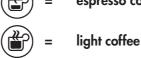
Fig. 6

Dispensing mode

In this normal running mode, the following operations can be performed by pressing the keys as indicated in figure 6:











In this service mode, the following operations can be performed by pressing the keys as indicated in figure 6:

E ENT key - "Espresso coffee"

Confirm modified parameters. Return to lower settings level

C ESC key

Return to higher settings level without saving new parameters.

∧ UP key - "Coffee"

Scroll Menu and increase the displayed value for resetting.

∨ DOWN key - "Hot water"

Scroll Menu and decrease the displayed value for resetting.

Dispensing LEDs

Dispensing LEDs are green LEDs located inside the three selection keys. During beverage dispensing, only the LED corresponding to the selected beverage remains on. After beverage dispensing, all three LEDs turn back on.

Display

It consists of 2 15-character lines and it displays messages about operations under way or programmed and about the machine status.

6 - INSTALLATION

Warning

The presence of nearby magnetic fields or electric devices generating interference may cause malfunctioning in the electronic control of the machine.

13 Important

Do not install the machine outdoors and in environments where water or steam jets are used.

13 Important

When the temperature is approaching 0°C internal components containing water are subject to freezing.

Do not use the machine in such conditions.

To guarantee the correct functioning and durability of the appliance, follow the indications below:

- 10°C ÷ 40°C room temperature:
- maximum humidity : 90%.
- make sure that the machine has not been tampered with during transport by verifying the package sealing;
- verify the machine conditions and model inside the packaging;
- verify the content of the accessories envelope enclosed to the machine (see "6.1 List of supplied accessories");
- remove the machine from the original packaging that should be preserved for future use (e.g. change of location);
- remove all the remaining packaging.

13 Important

Disposal of packaging should be carried out according to existing laws and regulations and in line with environmental considerations.

6.1 List of supplied accessories

- N. 1 brew group key (ref. 25 Fig. 1).
- N. 1 Instruction and Maintenance Manual
- N. 1 cleaning brush for coffee grinder (ref. 23 Fig. 1). •
- N. 1 water hardness test strip
- N. 1 silicon pipe (ref. 26 Fig. 1).

6.2 Positioning

For correct functioning of the appliance follow the indications below:

- select an even surface
- select a location that is sufficiently well-lit, clean and

near an easily reachable power source;

- the distance from the walls must be as shown in Fig.3;
- the maximum angle of inclination of the supporting surface must not exceed 2°

Electric connection 6.3



Warning

This operation must be performed by the maintenance technician.

The machine requires single-phase voltage according to the value contained in the identification plate (2.4 Machine identification).



Warning

The socket should be easily accessible to the supply operator, so that the machine can be easily unplugged when necessary.

Before connecting the machine check the following points:

- the line voltage of the socket must correspond to that indicated on the machine plate;
- the electrical system must be in line with existing laws and regulations and must have the load capacity indicated on the plate.

When in doubt, request professional assistance to determine the characteristics of the electrical system.

Warning

The use of extensions and adapters is forbidden.

Applying the 'Instructions 6.4 in brief' adhesive plate

To apply the adhesive plate it is necessary to:

- remove the top cover by inserting the key in the appropriate lock;
- remove the bean hopper cover;
- unfasten the 2 screws of the bean hopper;
- remove the bean hopper;
- apply the adhesive plate in the front inside the bean hopper;
- place the bean hopper back;
- fasten the 2 screws of the bean hopper;
- reinsert the bean hopper cover;
- reinsert the top cover and lock it.

3 Important

This plate must be applied only when the machine is equipped with a coiner (i.e. not free-of-charge)

7 - SETTINGS



This chapter illustrates how to set up or modify the machine programmable parameters.

The chapter should therefore be read carefully, to fully understand the correct sequence of operations to be performed.

To access the settings function, press the \bigvee (Hot water) and **C** (Esc) keys and then press the main switch.

The main settings options are the following:

- VENDING
- LANGUAGE
- **RINSING**
- WATER HARDNESS
- TEMP. S. ESPRESSO
- TEMP. COFFEE
- PREBREWING
- PREGRINDING
- PROGR. QUANTITY
- DESCALING
- SIGN. DESCAL.
- TIMER
- **RINSING**

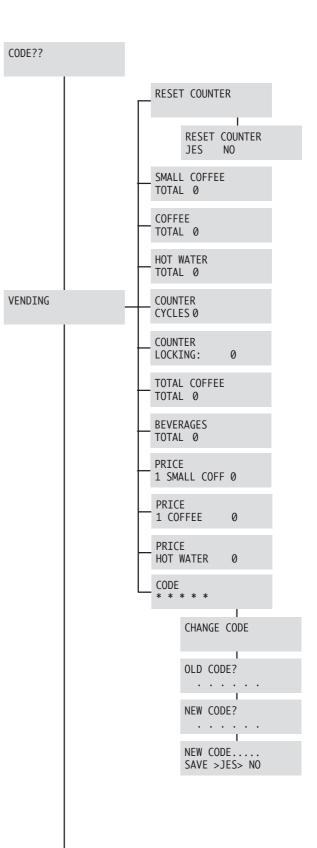
To exit the settings menu press ${\bf C}$ (Esc). The machine is in standard running mode.

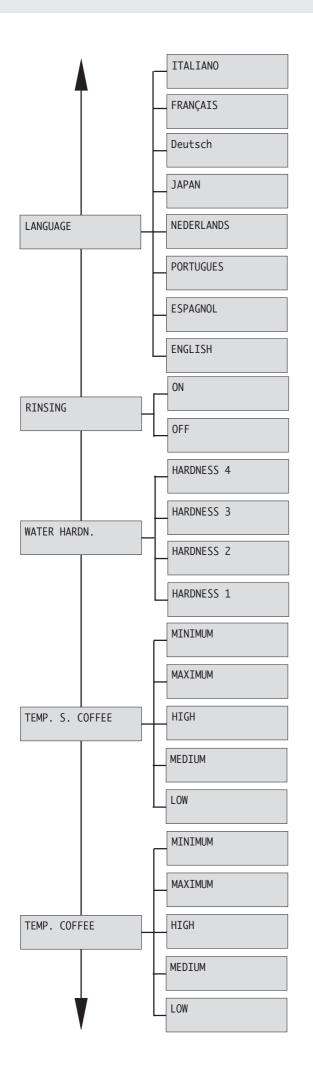
Menu selection

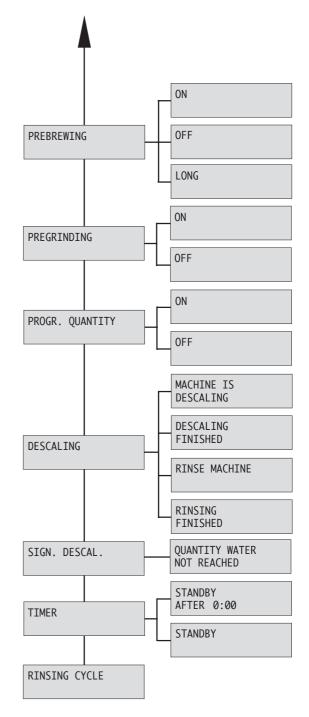
Select menus using the various $\wedge V$ keys and select options by pressing the **E** key. The parameters of each menu can be modified by pressing $\wedge V$ keys. To save the desired setting press the **E** key (e.g., "ON" for "SET **DOSE**").

If a value has wrongly been modified, the menu can be exited by pressing the C (Esc) ΛV key without saving the new value.

Structure of the programming functions.







7.1 Menu description

CODE

A pre-set code must be entered to proceed with parameters setting in the setting menu. To set the code, see "**CODE**" in the Vending menu.

Note down the new code when modified.

Vending functions

The Royal Office is equipped with a counter that, by keeping track of dispensing operations, allows for the statistical analysis of the coffee machine. An additional counter is also fit to shut off dispensing after a number of operations. To access these functions a code must be entered.

Press the ΛV keys to position the asterisk on "VEND-ING" and select it by pressing **E** (Ent).

A submenu appears; select one of its options using the standard \mathbf{AV} keys.

The display shows:

RESET COUNTER

With this function all partial counters can be reset. Press **E** (Ent) and the display shows:

Press the keys to select one of the **YES/NO** options, confirm by pressing the **E** (Ent) key.

SMALL COFFEE TOTAL 0

The counter indicates the quantity of espresso coffee dispensed since the last reset.

From the VENDING menu, press the $\wedge \vee$ keys to position the asterisk on the SMALL COFFEE menu and confirm with the **E** (Ent) key.

Press the ΛV keys to modify the value displayed (e.g., to reset the counter) and save the new value by pressing **E** (Ent). Press the **C** (Esc) key to interrupt the setting of the new value and maintain the previous counter setting.

COFFEE TOTAL

0

The counter indicates the quantity of coffee dispensed since the last reset.

From the VENDING menu, press the $\wedge \vee$ keys to position the asterisk to the COFFEE menu and confirm with the **E** (Ent) key.

Press the ΛV keys to modify the value displayed (e.g., to reset the counter) and save the new value by pressing **E** (Ent). Press the **C** (Esc) key to interrupt the setting of the new value and maintain the previous counter setting.

HOT WATER TOTAL

The counter indicates the quantity of hot water dispensed since the last reset.

0

From the VENDING menu, press the $\wedge \vee$ keys to position the asterisk on the HOT WATER menu and confirm with the **E** (Ent) key.

Press the ΛV keys to modify the value displayed (e.g., to reset the counter) and save the new value by pressing **E** (Ent). Press the **C** (Esc) key to interrupt the setting of the new value and maintain the previous counter setting.

COUNTER CYCLES	0
and	
COUNTER	
LOCKING	0

With this function coffee dispensing can be shut off after a number of cycles while the machine can still dispense hot water. This setting can be used, for example, to plan maintenance interventions.

If the value '**O'** is entered, this function is off.

From the VENDING menu, press the $\wedge \vee$ keys to position the asterisk on the COUNTER menu and confirm with the **E** (Ent) key.

Press the ΛV keys to modify the value displayed (e.g., to re-plan the limit for shut-off) and save the new value by pressing **E** (Ent). Press the **C** (Esc) key to interrupt the setting of the new value and maintain the previous counter setting.

When the set limit is reached, coffee dispensing shuts off and the following messages flash alternatively on the display:

"COFFEE	"
"BLOCKED	"

TOTAL COFFEE TOTAL 0

The counter displays the total number of coffee cups dispensed and cannot be reset.

BEVERAGES TOTAL Ø

The counter displays the total number of beverages dispensed and cannot be reset.

BEVERAGE PRICE

With this function each beverage can be associated with a previously set price.

"PRICE			
"1 SMALL COFF	- 0 "		
"PRICE	"		
"1 COFFEE	0"		

"PRICE		"
"HOT WATER	0	"

13 Important

The pre-set prices of the machine correspond to **0**, meaning that beverages are free.

To set up prices 1 and 2 the machine must be equipped with the optional coiner (see Coiner Manual).

CODE

A code can be used to avoid unauthorized access to settings (default "111111"). By confirming, the following menu option appears:

"CHANGE CODE	"
"OLD CODE? "	"
"NEW CODE ? 0	"
"NEW CODE "SAVE YES	"

To access the settings function it is now necessary to enter the code.



Warning

After 5 unsuccessful attempts to enter the code, the machine requires that the PUC (Personal User Code) be entered to access the settings function.

To receive the PUC contact the ASSISTANCE CENTER.

If the PUC is entered correctly, a new code must then be entered.

When setting the code and the PUC the keys have the following functions:

Key 1	E (Ent)	Small Coffee 1
Key 2	٨	Coffee 2
Key 3	V	Hot water 3
Key 4	C (Esc)	

For example, if the new code is **312241**, the key sequence must be as follows:

1:	Key 3	V	Hot water	3
2:	Key 1	E (Ent)	Small Coffee	1
3:	Key 2	Λ	Coffee	2
4:	Key 2	Λ	Coffee	2
5:	Key 4	C (Esc)		4
6:	Key 1	E (Ent)	Small Coffee	1



Warning

Write down the new password because, if lost or forgotten, it will not be possible to access the settings function.

Displaying the number of products dispensed

When the machine is in the following mode

"SELECT FUNCTION" "READY"

the number of products dispensed since the last reset (see COUNTER RESET function) will be displayed after pressing simultaneously the following key combinations:

C + Small Coffee

"SMALL	COFFEE	"
"TOTAL		4"

indicating the number of "SMALL COFFEE" dispensed.

C + Coffee

"COFFEE	"
"TOTAL	2"

indicating the number of "COFFEE" dispensed.

C + Small Coffee + Coffee

"	"
"TOTAL	6"

indicating the total number of "SMALL COFFEE" + "COFFEE" dispensed.

C + Hot water

"HOT WATER	"
"TOTAL	7"

indicating the number of "HOT WATER" dispensed.

By pressing the **C** key only, the following message appears on the display:

"TOTAL COFFEE " 50" indicating the total number of "COFFEE" dispensed, this value is not reset when counters are.

Language selection

Press the **AV** keys to position the asterisk on the "**LAN**-**GUAGE**" option and select it by pressing **E** (Ent). The display reads:

"LANGUAGE	"
"ITALIANO	"

Press the keys to modify the language: "ITALIANO", "FRANÇAIS", "Deutsch","NEDERLANDS", "PORTUGUES", "ESPAGNOL", "ENGLISH"

Rinsing

If the rinse function is on, when the machine is started following a period of inactivity an automatic rinsing cycle of the coffee brewing components begins using hot water. Press the ΛV keys, position the asterisk on the "**RINS**-**ING**" option and select it by pressing **E** (Ent). The display reads:

"RINSING	"
"ON	"

Press the ΛV keys to modify the set values **ON**, **OFF**.

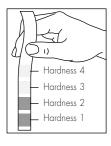
Water hardness adjustment

To assess water hardness a test can be performed using the supplied test strip. Soak the strip in water briefly (about 1 second), shake excessive water off and wait for the result (about one minute).

Press the $\wedge \vee$ keys to position the asterisk on the "WATER HARDN." option and select it by pressing **E** (Ent). The display reads:

" WATER HARDN. " HARDNESS 3

According to the test results, the following values can be selected by pressing the ΛV keys:



HARDNESS 4 (hard) HARDNESS 3 (medium) HARDNESS 2 (soft) HARDNESS 1 (very soft)

Set Temperature

The Royal Office allows the setting of a specific coffee temperature.

Press the $\land \lor$ keys to position the asterisk on the "TEMP. ESPRESSO" or "TEMP. COFFEE" options and select by pressing **E** (Ent).

According to the selection made, the display reads:

'TEMP.	S.	COFFEE	"
'MEDIUN	4		"

"TEMP. C	OFFEE	"
"MEDIUM		"

Use the standard keys to select the following values: "MINIMUM", "MAXIMUM", "HIGH", "MEDIUM" o "LOW".

Prebrewing function

When this function is on, the pump stops briefly when brewing coffee, using the coffee powder more effectively.

Press the ΛV keys to position the asterisk on the "**PREBREWING**" option and select it by pressing **E** (Ent). The display reads:

"PREBREWING	"
"ON	"

By pressing the standard ∧∨ keys the function can be modified: "ON", "OFF" or "LONG" (in the latter case the pump stops for a longer time).

Pregrinding function

With this function coffee is ground when the doser is empty, so that a dose of ground coffee is always ready, saving time when the machine is used frequently. This function is not recommended in cases when the coffee must be freshly brewed.

Press the keys to position the asterisk on the "PREGRINDING" option and select it by pressing **E** (Ent). The display reads:

"PREGRINDING	"
"ON	"

Press the standard $\wedge \vee$ keys to modify this function: "**ON**" and "**OFF**".

Set dose

With this function the quantity of coffee dispensed can be dosed with precision by pressing the standard selection keys (Espresso Coffee, Coffee and Hot water).

Press the keys to position the asterisk to the "SET DOSE" option and press **E** (Ent) to select it. The display reads:

> "PROG. QUANTITY " "ON "

Press the standard keys to modify this function: "ON", "OFF" and press E (Ent) to select.

To program the cup filling level, press the corresponding selection key until the desired quantity of coffee has been reached (maximum ca. 250 ml). During this operation the following message appears on the display:

"ESPRESSO "SET DOSE	"	"
or: "COFFEE "SET DOSE	"	"
or: "HOT WATER "SET DOSE	"	

Descaling

Press the ΛV keys to position the asterisk on the DESCALING menu option. To enter this option press E (Ent).

The display reads:

"DESCALING

About descaling see page 25.

Descaling warning

This function indicates whether the level of water used reguires descaling, according to the set value of water hardness.

Press the ΛV keys to position the asterisk on the DESCAL . WARNING menu option and press **E** (Ent) to select it. The display reads:

"QUANTITY WATER	"
"NOT REACHED	"

This message appears when the "DESCAL. WARN-**ING**" menu option is set before the **DESCALE** warning appears.

Return to the settings menu by pressing **C** (Esc).

Timer

With this function the machine can be programmed to automatically turn off after a period of time (varying from 15 minutes to ca. 13 hours). Time counting begins with the last product dispensed. If coffee is dispensed again after a few seconds, the timer starts anew. If the value is set at 0:00, this function is off.

Press the ΛV keys to position the asterisk on the **TIMER** menu option. Press E (Ent) to select it. The display reads:

"STANDBY		"
"AFTER	0:00	"

Press the ΛV keys to set the desired time. Press **E** (Ent) to save.

If the set time has already passed, the display reads:

and the machine turns off. If necessary, the machine can be turned back on by pressing **C** (Esc).

" SAVING

Rinsing cycle

The machine is equipped with a washing program to be used in addition to the standard, daily and weekly washing cycle. If used regularly, this program eliminates oily coffee residue in components that are not accessible and prevents alterations in the taste of coffee.

According to the use of the machine, washing cycles should be performed monthly or after a maximum 250 cups of coffee have been dispensed. The washing program lasts for about 5 minutes and is divided in 4 cycles, including rinsing. Short 40 seconds pauses occur between one cycle and the next.



Warning

The washing program must not be interrupted.

Before starting the washing program, fill the water tank fully and position a large container (min. 1 | capacity) under the coffee machine (the dispenser is height-adjustable and can be removed for cleaning). Washing requires about 1 litre of water (including rinsing). If necessary, empty the container periodically.

Press the ΛV keys to position the asterisk on the WASH-**ING** CYCLE option and select it by pressing **E** (Ent). The display reads:

> " "RINSING CYCLE

With this function a washing cycle begins using water to clean all the components of the brew group. The washing cycle is over when the display reads:

> "SELECT PRODUCT " ,, "READY FOR USE

8 - USE OF THE VENDING MACHINE

Important

Read this manual in full before using the machine so as to become sufficiently familiar with its functioning.

Before using the machine after a period of inactivity it is advisable to read again paragraph 8.3 "First switching on".

8.1 Machine status

Depending on the power supply, the status of the machine can be as follows:

Off and electrically insulated

- Main switch (Fig. 5) in "O" position.
- Only the settings memory is on.

On

- Main switch in "I" position.
- All functions are on and the display (ref. 8 Fig. 1) is lit.

Energy saving

It indicates the energy saving of the machine when the TIMER function is on (see SETTINGS) and automatically turns the machine on and off.

- Main switch in "I"position;
- The display shows the message: "ENERGY SAV-ING".
- Settings memory is on.
- The machine is not dispensing beverages.

8.2 Recommendations

Prolonged inactivity

Following a long period of inactivity, the circuit should be fully cleaned for hygienic reasons. Place a cup under the hot water spout (ref. **7** - Fig. 1) and fill it with water by pressing the hot water key.

Temperature control

Every time the machine is started, the display reads:

"WARMING UP....."

When the necessary temperature has been reached, the display reads:

"SELECT PRODUCT " "READY FOR USE "

Bean hopper empty

When the bean hopper is empty, the coffee grinder stops and the display reads:

"COF. BEANS EMPTY " "READY FOR USE "

The dispensing LED inside the coffee selection key turns off.

The message "**READY**" refers only to the availability of hot water.

Fill the bean hopper and delete the **BEAN HOPPER EMPTY** message by pressing one of the two coffee keys for about 5 seconds.

Water tank empty

When the water tank is empty, the program stops automatically and the display reads:

"FILL WATERTANK "

Fill the tank and restart the cycle.

Dump box full

When the Dump box contains 30 used coffee grounds, the display reads:

"DREGDRAWER FULL " "READY FOR USE "

The machine can dispense water only; remove and empty the drawer.

The message "**READY**" refers to hot water dispensing only.

8.3 First Switching on

Filling the bean hopper

Pour coffee beans in the hopper (Fig. 7).



Fig. 7



Remove the water tank and place it under a water faucet. Fill the tank (Fig. 9) with tap water. Put the water tank back in place.





Close the hopper by placing the cover on the top (Fig. 8). Coffee beans should be fresh, non-oily and of medium grinding.







Put the plate on the cover lock and position it carefully as shown in figure 10.



Fig. 10

After fixing the plate the cover must be placed on the water and bean hoppers before using the machine (Fig. 11).



Fig. 11

Secure the cover by turning the key in the lock (Fig. 12).







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Place a cup or other similar container under the hot water spout. Start the machine and follow the procedure below to fill the water circuit:

- Wait for the display to read:

"VENTILATE

Now press the HOT WATER key, the pump starts automatically and after a few seconds the display reads:

"SELECT	r PR(DUCT	"
"READY	FOR	USE	"

indicating that the circuit is ready and the machine can start dispensing beverages.

Important

Prime the circuit before starting the machine for the first time, following a long period of inactivity, if the water tank has been fully emptied or if the pump has malfunctioned.



The grind setting should be adjusted when the coffee is not dispensed properly: If the coffee drips out slowly then your grind is too fine. If the coffee is dispensed too quickly then your grind is too coarse. The suggested initial position is at point 5.

If grinding is too coarse and the coffee is dispensed too rapidly, adjust the grinder to a finer setting (e.g., from 5 to 3). If the coffee drops out, select a coarser setting (e.g., from 5 to 7) (Fig. 13).



Fig. 13

Important

Grinding adjustments must be performed only when the grinder is on. If possible avoid selecting position **1**. Use instead a different coffee blend, since not all blends produce the same results.

To adjust grinding, follow the procedure outlined below:

- when the machine is off, open the service door (ref. **15** - Fig. 1) using the supplied key, position the silicon pipe (ref. 26 - Fig. 1) (cutting out the safety microswitch), turn the main switch on and verify that the machine turns on;
- press the coffee key and verify the coffee outflow from the dispenser;
- adjust the grinding selection accordingly;
- turn the main switch off, remove the silicon pipe and close the service door using the supplied key.



Warning

The new grinding selection can be appreciated only after the third coffee grinding.

Coffee blends

Coffee must be fresh and an espresso coffee blend must be used.

To obtain a strong and tasty espresso, use a specific espresso machine blend. Keep the coffee in a fresh place in a airtight sealed container.

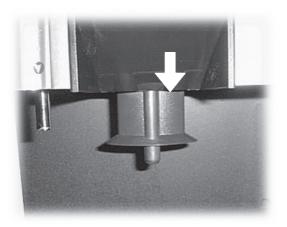
8.4 **Beverage dispensing**

Adjusting the coffee dispenser

The coffee dispenser is adjustable according to the cup size.

For short cups, position the dispenser as shown in figure 14.

For tall cups, position the dispenser as shown in figure 15.



Adjusting the cup filling level



Fig. 15

With this machine the quantity of coffee dispensed can be adjusted according to the cup used.

Select the desired quantity by pressing the two selection keys. The display will show the corresponding messages.

To set the cup filling level press the corresponding selection key until the desired quantity has been reached (max. ca. 250 ml).

When performing this operation, the display reads:

"1 SMAL	L COFFEE	"
"PROGR.	QUANTITY	"
"1 COFF		"
"PROGR.	QUANTITY	() "



This operation can be interrupted only after the minimum quantity has been dispensed. If the pre-brewing function is on, when adjusting the cup filling level keep the selected key pressed also during pump pauses until the desired quantity has been reached.



Coffee dispensing

Place the cup on the Grill drip tray (ref. **3** - Fig. 1) under the dispenser (ref. **6** - Fig. 1).

Press the corresponding selection key and the machine automatically dispenses the selected coffee.



Warning

Coffee can be programmed only if the corresponding setting is on (see page 14).

Hot water dispensing

Hot water is dispensed thanks to a circuit that guarantees that the water is tastefree and at the right temperature to prepare tea and soups.

Press the HOT WATER key (Fig. 16), the display reads:

"HOT WATER



Fig. 16

If the corresponding setting is on, only the set quantity of hot water is dispensed. Otherwise, it is necessary to stop water dispensing by pressing the key again when reaching the desired level of hot water.

To set the quantity of hot water, press the hot water selection key until the desired quantity has been reached.



Warning

The quantity of hot water dispensed can be programmed only if the corresponding setting is on (see page 14). When setting the desired quantity, the following message appears on the display:

"HOT WATER " "PROGR. QUANTITY "

Place the glass or cup under the hot water spout (ref. **7** - Fig. 1) and press the hot water selection key. Water is dispensed automatically.

8.5 Messages and special warnings

The machine shuts off automatically - partially or totally when the bean hopper is empty or the machine is malfunctioning. The cause of the shut-off appears on the display located on the control panel.

If the display shows a warning message, contact the SUP-PLY OPERATOR.

Bean hopper electronic control

When the bean hopper is empty, the machines stops grinding after about 20 seconds. Fill the bean hopper following instructions outlined on page 16.

Coffee beans protection against impurities

Even the best coffee beans may contain impurities (stones, metallic parts, etc.)

To avoid damaging, the coffee grinder is equipped with a protection device against impurities.

If a foreign body falls into the grinder, a special noise is produced: turn the machine off immediately!

Grinding stops automatically in about 20 seconds thanks to the electronic control.

Important

To avoid damaging the coffee grinder motor do not restart the machine until the foreign body has been removed.

Follow the procedure outlined on page 24.

Water level electronic control

The machine stops automatically when the water level in the tank is below the minimum value detected by the floating indicator (ref. **10** - Fig. 1). Fill the tank following instructions outlined on page 17.

9 - MAINTENANCE

9.1 Foreword



Warning

Before performing maintenance and /or cleaning procedures, unplug the machine and wait until it is cold.

Follow the instructions contained in this manual to obtain maximum beverage quality and guarantee the correct functioning of the machine.

The machine and its non-removable components must be cleaned with cold or warm water using non abrasive sponges and wet cloths unless otherwise stated (this operation must not be performed on exposed electrical components).

- Do not use detergents or solvents that could modify the shape or functionality of the machine and its components.
- Do not soak the machine in water or other fluids: the machine will be damaged.
- Do not wash component parts in the dishwasher.
- Always hand-dry the machine components, do not place them in the oven or microwave oven.
- Do not use direct jets of water.
- All the components that require cleaning are easily accessible and do not require the use of tools.
- Regular maintenance and cleaning keep the machine in good condition and guarantee its efficiency for a longer time while respecting standard hygienic regulations.
- The machine counters keep track of the number of beverages dispensed and allow standard maintenance interventions to be programmed by the maintenance technician.



[°] Important

When performing maintenance operations follow the timetable outlined in section. 14.1 in the **general maintenance table**.



In case of failure and/or malfunctioning contact an APPROVED ASSISTANCE CENTER.

9.2 Cleaning and maintenance

Maintenance operations must be performed at least once a year and include testing the condition of the machine and the conformity of the electric system.

Water tank/ Drip tray/ Dump box/ Brew group / Machine

To keep the dispensing outlet and brew group (ref. **18** - Fig. 1) clean, the Dump box should be emptied daily, according to needs (Fig. 17).



Fig. 17

The water tank (ref. **9** - Fig. 1), Dump box, drip tray (Fig. 18) and Grill drip tray (Fig. 18) should be washed regularly using non abrasive detergents and dried with care.





The coffee dispenser (ref. **6** - Fig. 1) can be removed for cleaning. Remove the protection cover (Fig. 19).



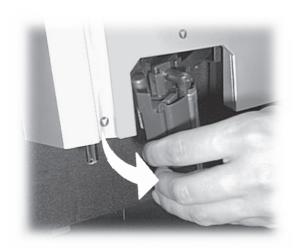
Fig. 19

Unfasten the knurled screw under the dispenser (Fig. 20).



Fig. 20

Remove the dispenser by lifting it out (Fig. 21).





Wash the dispensing channel (Fig. 22) and rinse carefully with hot water.



Fig. 22

Clean the machine periodically using a wet cloth, and then dry it.

Brew group

The brew group must be cleaned every time the coffee bean hopper is refilled and at least once a week. Turn the machine off by pressing the main switch (ref. **4** -Fig. 1) and open the service door (ref. **15** - Fig. 1).

Remove the Dump box first (Fig. 23).



Remove the brew group using the handle and pressing the "**PRESS**" sign (Fig. 24).

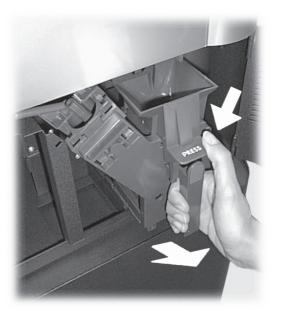


Fig. 24

The brew group must be cleaned with hot water and **no** detergents.

The stainless steel filter must be free of coffee residue.

Remove the upper filter for cleaning. Use the supplied key (ref. **25** - Fig. 1) to unfasten the screw counterclockwise (Fig. 25).

Wash and dry all components of the brew group, place

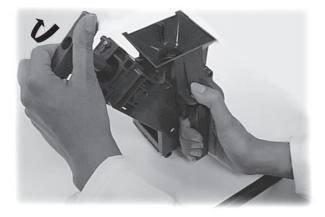


Fig. 25

the filter back in and fasten the screw using the key. Remove the coffee residue drawer for cleaning (Fig. 26).

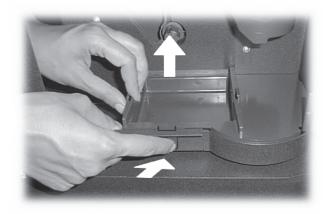


Fig. 26

Use non-abrasive detergents only.

Clean the dispensing outlet and place the coffee residue drawer back in.

Place the brew group back in using the handle until it locks in place, then close the service door (ref. **15** - Fig. 1).



Warning

When placing the brew group back in, **do not** press the "**PRESS**" sign (the machine would be damaged)!



Fig. 27

Important

If the brew group is not inserted correctly, the display reads: "BREW UNIT MISS "

Coffee cannot be brewed. The machine is not working. Place the Dump box back in (ref. 1 - Fig. 1).

Coffee grinder





Never put water inside the grinder, to avoid **irreparable damage** to the machine!

Clean the coffee bean hopper regularly. This operation must be performed only by a specialized technician only.

Unplug the machine from the socket (ref. 5 - Fig. 1).

Remove the cover with the lock (ref. **21** - Fig. 1) and the bean hopper cover (ref. **12** - Fig. 1).

Empty the bean hopper and unfasten the two fixing screws (fig. 28).

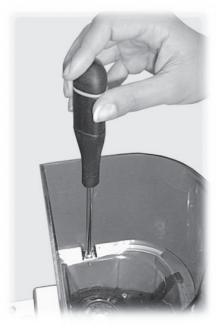


Fig. 28

Remove the screws from the adjustment lever (Fig. 29).





Pull up the lever carefully (Fig. 30) noting down the grinding selection. Now the hopper can be removed for cleaning.



Fig. 30

Turn the adjusting ring counterclockwise making the blue signs coincide (Fig. 31).



Fig. 31

Now the grinding ring can be removed, by pulling it up gently (fig. 32).



Clean the ring using the supplied brush (Fig. 33) and vacuum the grinding area and ring.

Proceed carefully so as not to modify the positioning of the reference signs.

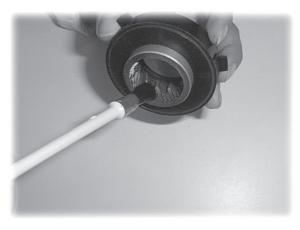


Fig. 33

Reassemble the coffee grinder following this procedure in reverse order.

If the adjusting ring has turned during cleaning, reposition it to make the blue reference sign coincide with one of the three grooves.

Place back the grinding ring making sure that the blue reference signs coincide.

Turn the adjusting ring clockwise until the red reference signs coincide.

Insert the adjustment lever on the ring so that it coincides with the grind selection previously noted.

Place the hopper back in and fasten the screws.





Warning

Descaling operations must be performed when the machine is cold.

The descaling procedure is used to eliminate limescale buildup from the surfaces and holes of the hydraulic circuit, guaranteeing the good functioning of the valves, of the heating controls and other important components.

Important

Given the complex structure of the machine hydraulic circuit, descaling cycles outlined below (automatic and standard) do not include all the channels. **Easily accessible components are excluded, namely the brew group (ref. 18** -**Fig. 1) and the plastic pin/valve connected to it.**

The descaling procedure must be performed regularly every 3-4 months. If the water used is particularly hard, it can be performed more frequently.

To avoid hazardous delays, the machine is equipped with a specific counter that, according to water hardness, signals the urgent need to perform this operation. In this case the display will show the following message:

"DESCAL	ING		"
"READY	FOR	USE	"

When this message appears the machine does not stop but it is advisable to perform the descaling procedure as soon as possible. To delete the message, follow instructions outlined on page 14.

Initially the machine is set on a 25°fH hardness value, so that the message appears after about 150 litres.

If the water is particularly hard, and to improve the quality of coffee, a water filter should be used to protect the machine and to reduce the frequency of descaling.

Important

Use decalcified water specific for coffee machines.

This warning can however be adjusted according to water hardness, following the instructions outlined on page 13.

The following adjustments are possible:

- Hardness 4: hard water, above 29°fH (14°dH), corresponding to ca. 80 | of water used;
- Hardness 3: medium-hard water, ca. 20-29°fH (7-14°dH), corresponding to ca. 150 l of water used;
- **Hardness 2**: soft water, ca. 12-20°fH (4-7°dH), corresponding to ca. 300 l of water used;
- Hardness 1: very soft water, below 10°fH (3°dH), corresponding to more than 500 l of water used.

Marning

Never use vinegar to avoid damaging the machine!

Two descaling procedures are available:

- AUTOMATIC DESCALING;
- STANDARD DESCALING.

Automatic descaling

Select this option from the settings menu (see page 14). Press the ΛV keys to position the asterisk on the Descaling option and select it by pressing **E** (Ent). The display reads:

Pour the descaling agent in the water tank (ref. 9 - Fig. 1) following instructions on the product packaging. Place a container of sufficient capacity under the hot water dispensing pipe (ref. 7 - Fig. 1) and press the HOT WATER V key. Automatic descaling begins, the pump injects small quantities of decalcifier into the system and stops to give it time to work.

During this phase, the display reads:

"MACHINE IS	"
"DESCALING	"

After about 45 minutes, when descaling is over, the display reads:

"DESCALING	"
"FINISHED	"

Press **E** (Ent). The pump stops. A message appears to signal that the machine must now be cleaned to eliminate decalcifier residue.

"RINSE	MACHINE	"
"FILL	WATERTANK	"

Remove the water tank (ref. 9 - Fig. 1), rinse it with care and fill with fresh water. Press **E** (Ent) to empty the tank completely. The display reads:

"RINSING	"	
"FINISHED	"	

Go back to the settings function by pressing **E** (Ent).

Note: Descaling can be exited by pressing C (Esc).

Eliminating the descaling message

Press the keys to position the asterisk on the Descal. Warning option from the settings menu and select it by pressing **E** (Ent).

The display reads:

"RESET DESCALING " NO "

To modify this value YES or NO press the standard keys. When this resetting is performed, all internal water counters are reset and the DESCALING message disappears. If now the following function is selected

```
"SIGNAL DESCAL. "
```

the DESCALING message does not appear on the display, replaced by the following message:

"QUANTITY	WATER	"
"NOT REAC	HED	"

10 - CARE

When the machine is not used, it must be turned off and unplugged from the socket.

Keep the machine in a dry place away from children.

If the machine is not used for a long period of time, it must be protected from dust and dirt.

11 - MACHINE SCRAPPING

Waste disposal following machine scrapping must be carried out according to environmental considerations, so as to prevent ground, water and air pollution.

Local environmental regulations must be complied with.

Cut the power cord so that the machine cannot be used.

Take the machine to the appropriate waste collection centre.

12 - TROUBLESHOOTING

In case of faults or damage possibly after a fall, immediately unplug the machine.

If the problem cannot be solved by following the instructions presented in the table below, contact the nearest AS-SISTANCE CENTER.

Important

Problems may arise when using the machine that can cause malfunctioning.

The possible causes are listed in par. 14.2 of this manual in the Troubleshooting table below along with the corresponding solutions.

If the problem cannot be solved, the machine must not be used until the nearest ASSISTANCE CENTER has been contacted.

13 - ACCESSORIES

The Royal Office machine can be equipped with the following optional components:

- Coiner box A coiner box can be attached to the machine.
- Cabinet To support the machine and to store cups, stirrers, sugar and stocks.

For further information see the corresponding manuals.

14 - GENERAL MAINTENANCE

To keep the machine in good working conditions cleaning and maintenance procedures should be performed according to the instructions in the table below.

Operations to be performed	At each supply	After 2 supplies	After 5-10 supplies
Emptying and cleaning the Dump box			
Emptying and cleaning the drip tray			
Emptying and cleaning the water tank			
Cleaning the coffee brew group			
Oiling the coffee brew group			
Cleaning the coffee bean hopper			

14.1 Troubleshooting

In case of failures or faults, immediately unplug the machine. Contact the maintenance technician or an Approved Assistance Centre for interventions and repairing. Incorrect repairing can present serious hazards for users. The manufacturer declines responsibility for incorrect repairing: the warranty also expires.

CAUSE	REMEDY
No power supply.	Turn the main switch on, check the socket and fuse.
The service door is open.	Close the service door.
The brew group is missing.	Insert the brew group.
The brew group is jammed.	Clean the brew group.
No water.	Fill the water tank.
No coffee.	Fill the coffee hopper. In both cases, restart the brewing cy- cle.
No drawer.	Insert the Dump box correctly.
Coffee grinder jammed.	Clean the coffee grinder.
Grinding too coarse.	Adjust to a finer grinding (e.g., from 5 to 3).
Grinding too fine.	Adjust to a coarser grinding (e.g., from 3 to 5).
Unsuitable coffee blend or coffee is not freshly toasted.	Change coffee blend
There is limescale in the machine.	Descale the machine following instruc- tions.
The brew group is not in the correct po- sition.	Start the machine, close the service door, insert the Dump box. The brew group is automatically placed in the correct position.
	No power supply. The service door is open. The brew group is missing. The brew group is jammed. No water. No coffee. No drawer. Coffee grinder jammed. Grinding too coarse. Grinding too fine. Unsuitable coffee blend or coffee is not freshly toasted. There is limescale in the machine. The brew group is not in the correct po-



EC DECLARATION OF CONFORMITY EC 73/23, EC 89/336, EC 92/31, EC 93/68, EC 98/37

We :

SAECO INTERNATIONAL GROUP S.p.A Via Panigali, 39

40041 GAGGIO MONTANO (BO)

declare under our responsibility that the product :

AUTOMATIC VENDING MACHINE

TYPE: SUP015V

to which this declaration relates is in conformity with the following standards or other normative documents :

- Safety of household and electrical appliances General requirements EN 60335-1 - 1994 + A11 / A12 / A13 / A14
- Safety of household and electrical appliances Part 2[^] Particular requirements for appliances for heating liquids EN 60335-2-15 - Edit. 1996 + A1
- Safety of household and electrical appliances Part 2[^] Particular requirements for coffee mills and coffee grinders EN 60335-2-14 - Edit. 1996 + A11 / A1 / A2
- Safety of household and electrical appliances Particular requirements for automatic vending machine Document IEC 60335-2-75 - Edit. 1995
- Limits and methods of measurements of radio disturbance characteristics of electrical motor-operated and thermal appliances for households and similar purposes, electric tools and similar electric apparatus EN 55014 - 1 - Edit. 1993 + A1 / A2
- Electromagnetic compatibility (EMC)
 Part. 3[^] Limits Section 2 : Limits for harmonic current emissions (equipment input current ≤ 16A per phase)
 EN 61000-3-2 Edit. 1995 + A12 / A1 / A2
- Electromagnetic compatibility (EMC) Part 3[^]: Limits - Section 3 : Limitation of voltage fluttuations and flicker in low-voltage supply systems for equipment with rated current ≤ 16 A. EN 61000-3-3 Edit. 1995
- Immunity requirements for household appliances, tools and similar apparatus. Product family standard EN 5014 - Edit. 1997
- Electromagnétic compatibility (EMC)
 Part 4[^] : Testing and measurement technique.- Section 2 : Elelctrostatic discharge immunity test.
 Basic EMC publication EN 61000-4-2 Edit. 1995 + A1 Edit. 1998
- Electromagnetic compatibility (EMC)
 Part 4[^] : Testing and measurement technique.- Section 4 : Elelctrical fast transient/burst immunity test
 Basic EMC publication EN 61000-4-4 Edit.1995
- Electromagnetic compatibility (EMC) Part 4^ : Testing and measurement technique.- Section 5 : Surge immunity test. EN 61000-4-5 Edit.1995
- Electromagnetic compatibility (EMC)
 Part 4[^]: Testing and measurement technique.- Section 6 : Immunity to conduced disturbance, inducted by radio-frequency fields. EN 61000-4-6 Edit.1996
- Electromagnetic compatibility (EMC) Part 4[^]: Testing and measurement technique.- Section 11: Voltage dips, short interruptions and voltage variations immunity tests. EN 61000-4-11 Edit.1994 following the provisions of the Directives : EC 73/23, EC 89/336, EC 92/31, EC 93/68.

Gaggio Montano

17/10/00

President Sergio Zappella

Cod. 0333.964 - Ed. 00 05/01