



Vending Machine

model

ROYAL OFFICE

Type SUP 015V



OPERATION AND MAINTENANCE

WARNING: This instruction manual is intended exclusively for specialized personnel.

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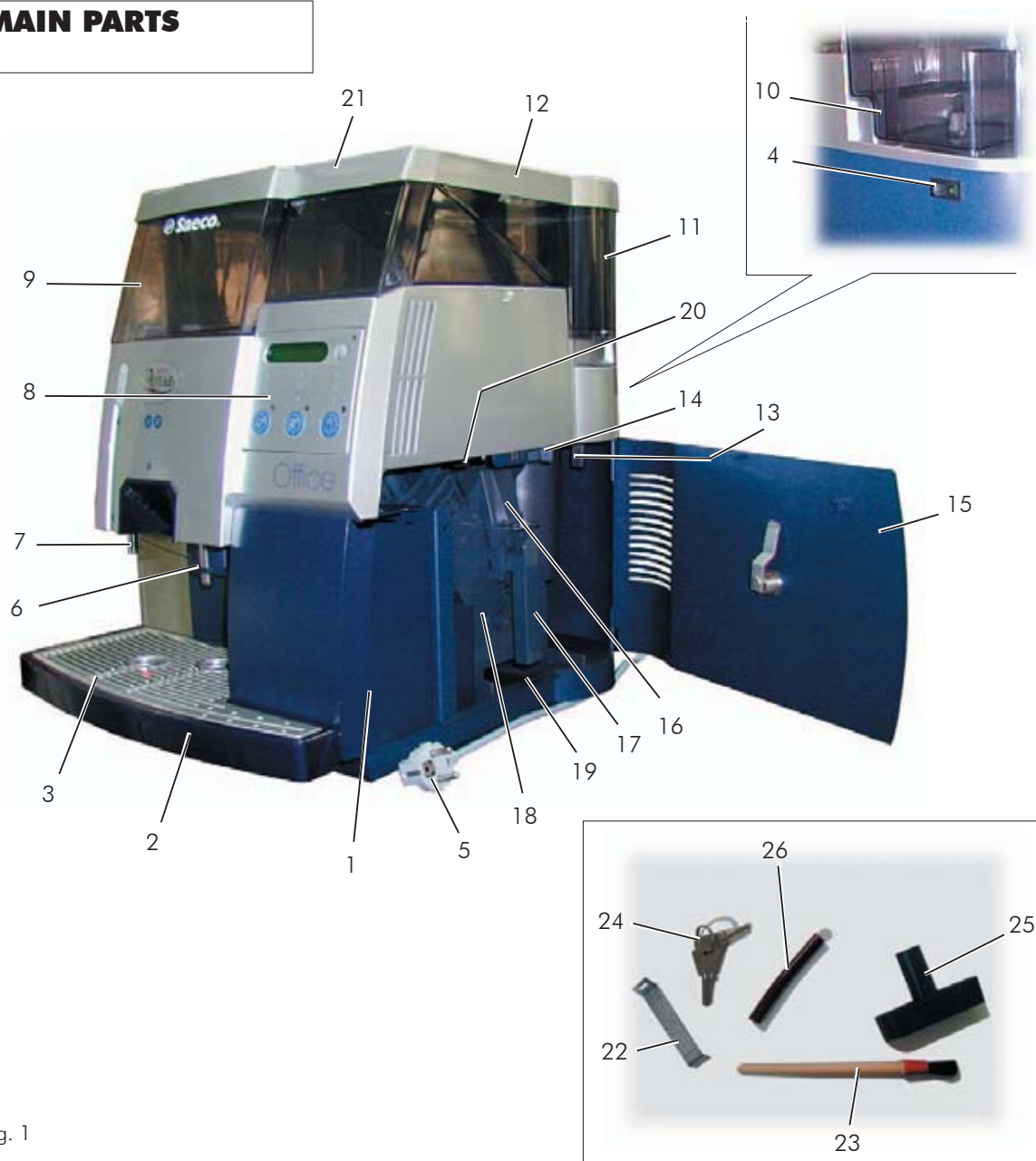
MAIN PARTS

Fig. 1

- | | | | | | |
|---|---|----|---|----|-----------------------|
| 1 | Dump box | 10 | Water level gauge
(inside water tank) | 18 | Brew group |
| 2 | Drip Tray | 11 | Coffee bean hopper | 19 | Coffee residue drawer |
| 3 | Grill drip tray | 12 | Coffee bean hopper cover
(under the cover with lock) | 20 | Safety microswitch |
| 4 | Main switch
(rear side of the machine) | 13 | Grind adjustment lever | 21 | Cover with lock |
| 5 | Power cord | 14 | Coffee dosing lever | 22 | Cover lock plate |
| 6 | Coffee dispenser | 15 | Service door with lock | 23 | Cleaning panel |
| 7 | Hot water spout | 16 | Water hopper | 24 | Locking keys (2x) |
| 8 | Control panel | 17 | Brew group handle | 25 | Brew group key |
| 9 | Water tank | | | 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.

2.4 Machine identification



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 supply.....	see data plate
Power rating	see data plate
Dimensions (l x w x h)	ca. 380 x 460 x 440 mm
Machine case	galvanized steel and thermoplastic material (ABS)
Weight.....	ca. 14.5 kg
Cable length	ca. 1.2 m
Operating system	Heat exchanger boiler
.....	Electromagnetic vibration pump
Temperature control	electronic
Coffeegrinder adjusting device	fine-grinding
Coffee grounds ejection	automatic
Coffee powder dosing	precision doser
Quantity setting	ca. 0 - 250 ml
Water tank.....	removable, transparent
Capacity	-Water tank..... ca. 6.5 l
	-Coffee bean hopper
	ca. 950 gr.
	-Drip tray
	ca. 1 l
Heating time	ca. 2 minutes
Preparation time	-espresso.....ca. 20 seconds per cup
	-coffee
	ca. 30 seconds per cup
	-hot water.....ca. 60 seconds per cup
Thermal cut-out	built-in
Insulation.....	class protection I
Approval	see data plate
Conformity with existing product class regulations	(see Declaration of Conformity page 41)
Warranty.....	see enclosed warranty certificate
A-weighted sound pressur level is	below 70 dB

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.

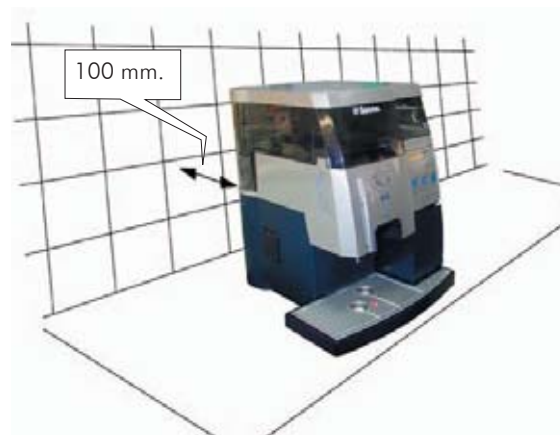


Fig. 3

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.

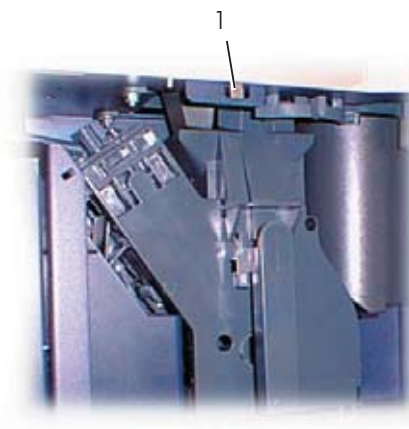


Fig. 4

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.

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 "O" 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

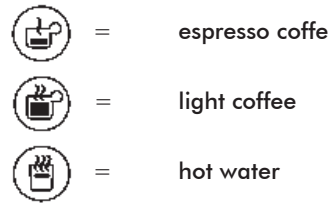
Dispensing mode

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



Keys

Dispensing programmed beverages



Setting mode

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 re-setting.

▼ DOWN key - "Hot water"

Scroll Menu and decrease the displayed value for re-setting.

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.



Important

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



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:

- room temperature: 10°C ÷ 40°C
- 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.



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°

6.3 Electric connection



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.

6.4 Applying the 'Instructions 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.



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 **V** (Hot water) and **C** (Esc) keys and then press the main switch.

The main settings options are the following:

- CREDIT MANAGEMENT
- AUDIT SINCE RESET
- AUDIT SINCE INIT
- SETTINGS
- CODE
- TIMER
- PAYMENT SYSTEM
- DECALCIFICATION
- CLEANING CYCLE

To exit the settings menu press **C** (Esc). The machine is in standard running mode.

Menu selection

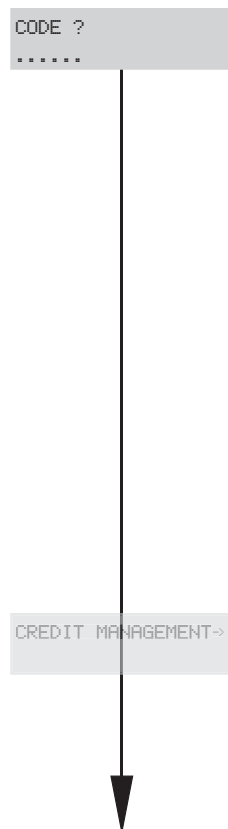
Select menus using the various **AV** keys and select options by pressing the **E** key. The parameters of each menu can be modified by pressing **AV** keys. To save the desired setting press the **E** key (e.g., "YES" for "SET DOSE").

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

Changing numerical values

When you want to change a value, press "E"; change the first digit using the **AV** keys and store by pressing "E". The cursor will move over to the next digit. Use this method for all of the digits; at the end, the entire value will be stored and you will exit the edit mode.

Structure of programming functions



On entering the programming mode, you will be prompted for the set code, which allows you to proceed with programming. To set it see "CODE" in the main menu. Note down the code when it is changed.

Warning:
After 5 attempts to introduce the wrong code, the vending machine will request the entry of the PUC (Personal User Code) to access programming.

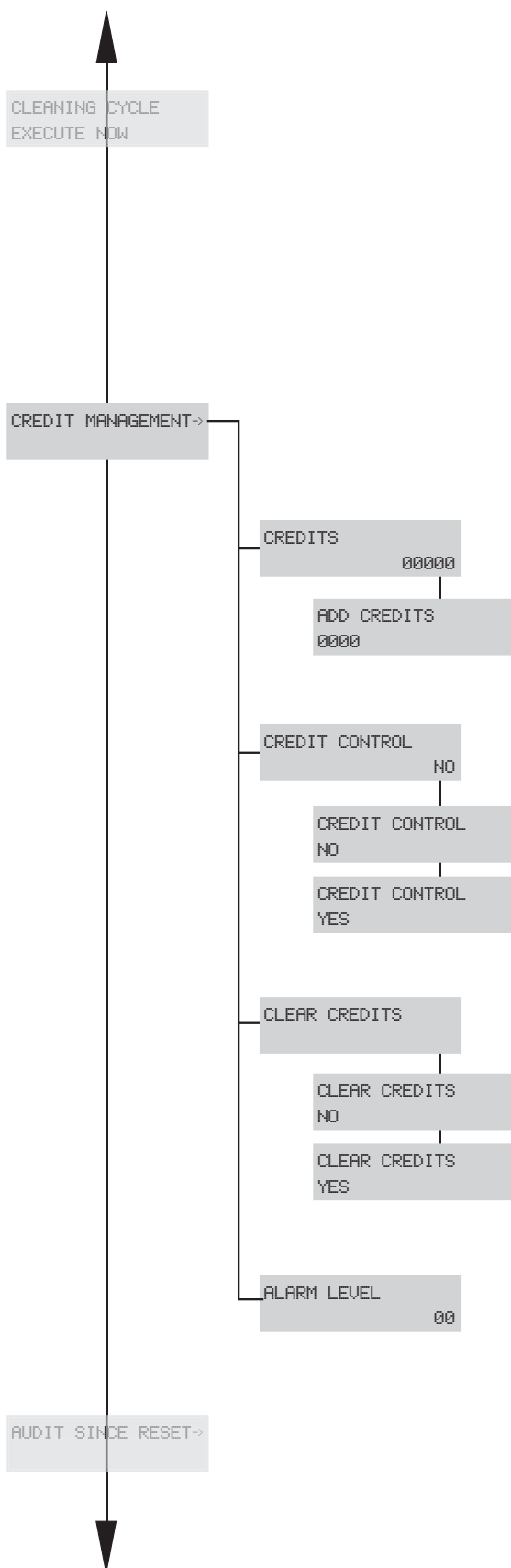
To receive the PUC code, contact a SERVICE CENTRE.

If the PUC is entered correctly, you will be prompted to set a new code. The keys take on the following values during entry of the code and PUC:

- Key 1 **E** (Ent) Small coffee..... 1
- Key 2 Coffee..... 2
- Key 3 Hot water 3
- Key 4 **C** (Esc) 4

For example, if you must set the code 312241, the sequence of keys to be pressed is as follows:

- 1: Key 3 Hot water 3
- 2: Key 1 **E** (Ent) Small coffee 1
- 3: Key 2 Coffee 2
- 4: Key 2 Coffee 2



5: Key 4 **C** (Esc) 4

6: Key 1 **E** (Ent) Small coffee 1



Warning

Note down the new code because if it is lost you will no longer be able to access the programming mode.

Vending functions

Royal Office features a coffee management menu. This function allows you to inhibit the dispensing of coffee, but not of hot water, after a set number of cycles. It may be useful, for example, in scheduling maintenance of the machine.

Menu displaying how many coffees can still be dispensed before the function is inhibited (max.65535).

Menu for adding credit: allowed values (0÷9999) up to a total of 65535.

Menu that enables/disables control of beverage dispensing via credit management.

Menu that clears current credit; to be used if the wrong credit is entered by mistake.

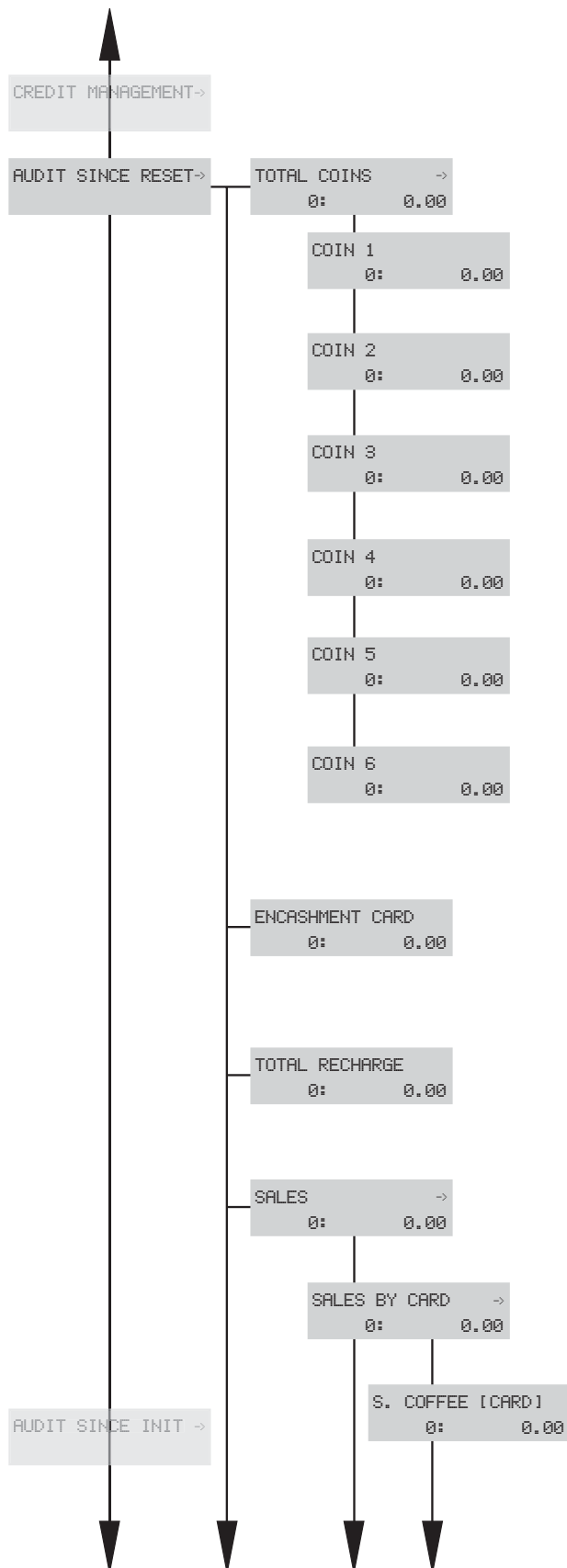
Menu that enables/disables the display of the "Credit Warning" and "No Credit" alarms.

The alarm is displayed when the machine reaches the number of coffees still dispensable (entered value).

If **0** is entered, the function is off.

Values : default = 20 ; range 0÷99.

When credits are over, the coffee distribution stops and the display will show the message : "NO CREDIT".



AUDIT RESET functions

Royal Office features a system for recording sales and the amounts collected since the last time the counter was reset by the establishment manager.

Main menu for displaying the total:
Number of coins inserted: Value of coins inserted.

Partial menu relating to type 1 coins. It displays:
Number of coins inserted: Value of coins inserted.

Partial menu relating to type 2 coins. It displays:
Number of coins inserted: Value of coins inserted.

Partial menu relating to type 3 coins. It displays:
Number of coins inserted: Value of coins inserted.

Partial menu relating to type 4 coins. It displays:
Number of coins inserted: Value of coins inserted.

Partial menu relating to type 5 coins. It displays:
Number of coins inserted: Value of coins inserted.

Partial menu relating to type 6 coins. It displays:
Number of coins inserted: Value of coins inserted.

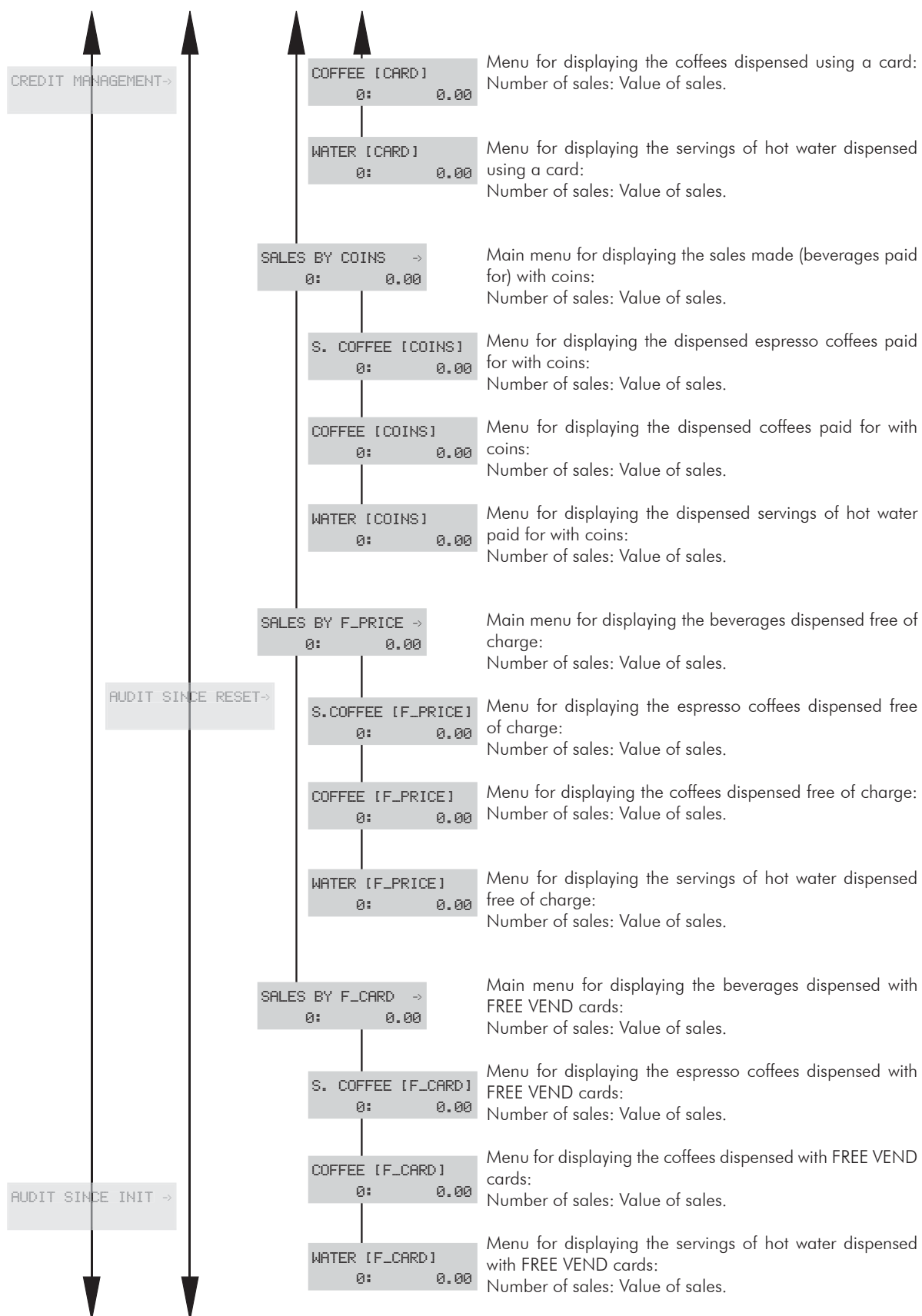
Main menu for displaying the beverages dispensed using a card.
Number of beverages dispensed: Value of beverages dispensed.

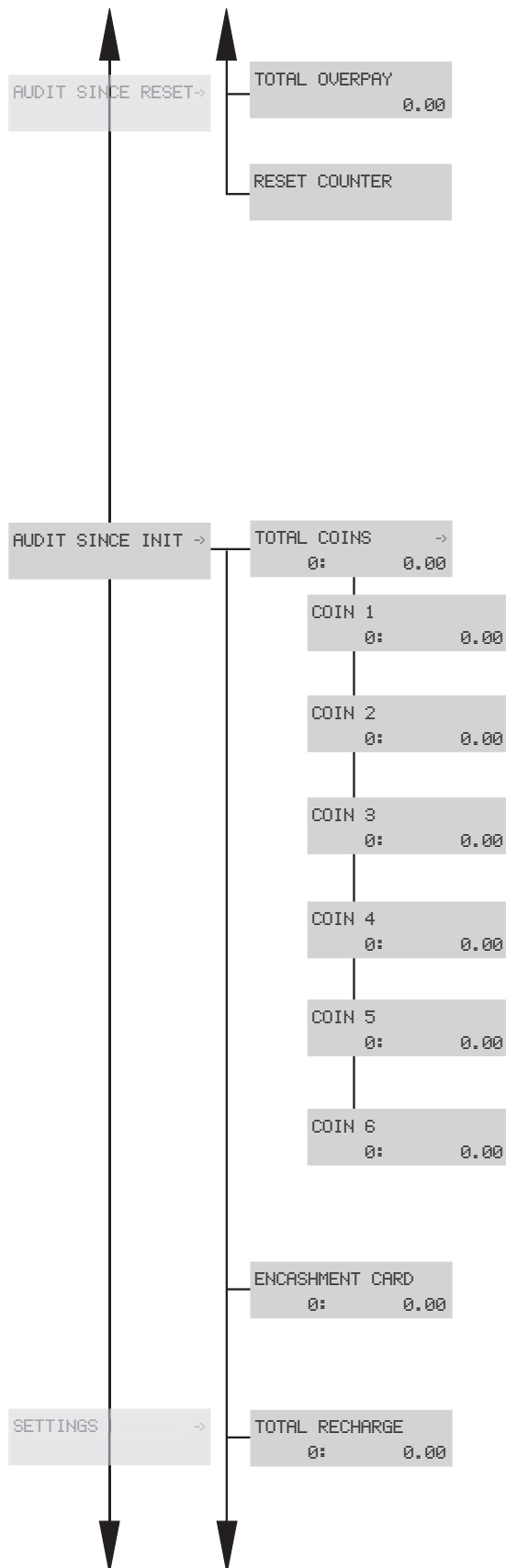
Main menu for displaying the number of recharges made using a card:
Number of recharges made: Value of recharges made.

Main menu for displaying sales (beverages dispensed):
Number of sales: Value of sales.

Main menu for displaying the sales made (beverages dispensed) using a card:
Number of sales: Value of sales.

Menu for displaying the espresso coffees dispensed using a card:
Number of sales: Value of sales.





The counter shows the “VALUE” or amount overpaid for the products dispensed.

Function allowing you to reset all partial counters.

AUDIT INIT functions

Royal Office features a system for recording sales and the amounts collected since the machine was first started up.

Warning:
these values cannot be cleared or changed by the establishment manager

Main menu for displaying the total:
Number of coins inserted: Value of coins inserted

Totals menu relating to type 1 coins. It displays:
Number of coins inserted: Value of coins inserted

Totals menu relating to type 2 coins. It displays:
Number of coins inserted: Value of coins inserted

Totals menu relating to type 3 coins. It displays:
Number of coins inserted: Value of coins inserted

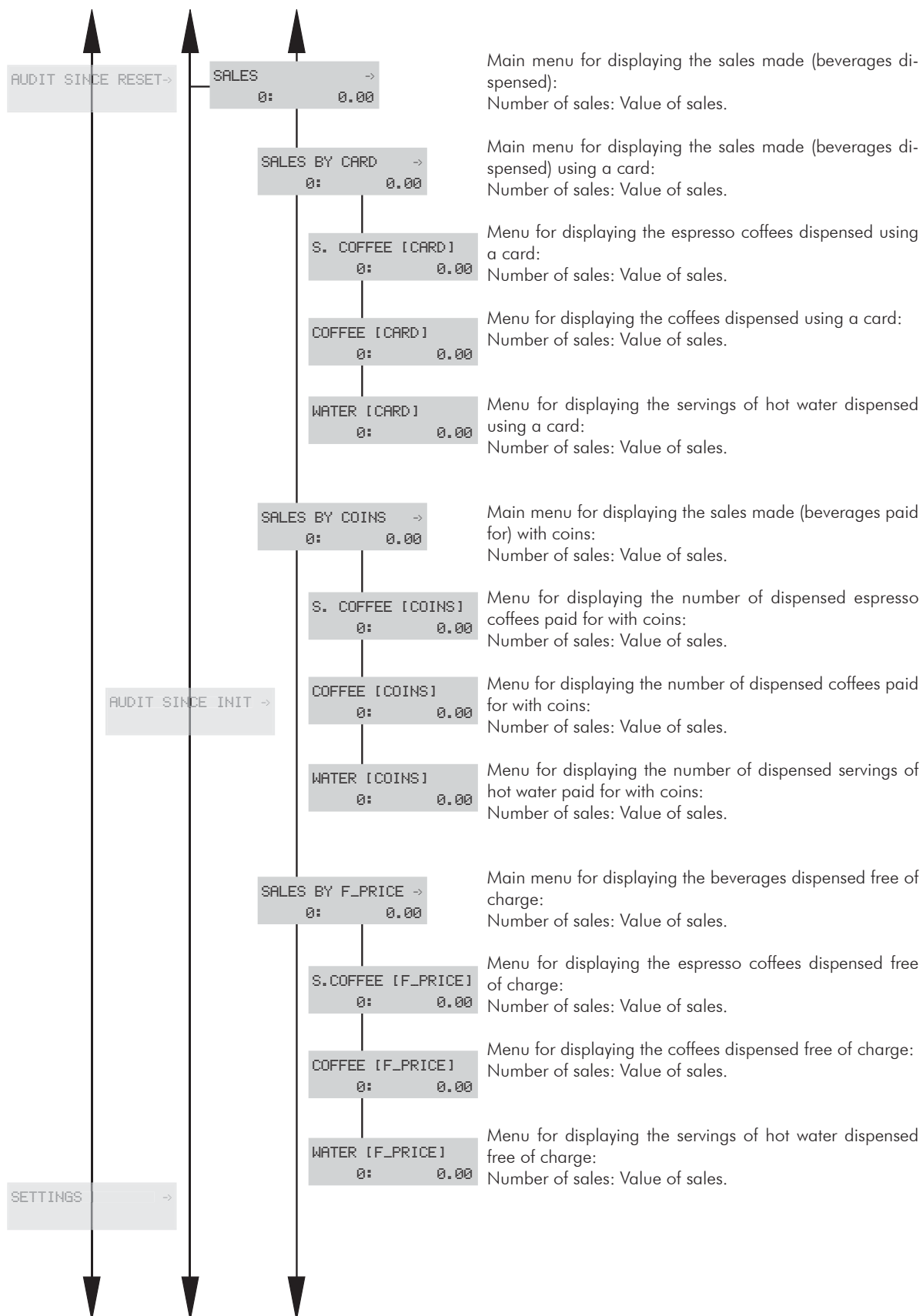
Totals menu relating to type 4 coins. It displays:
Number of coins inserted: Value of coins inserted

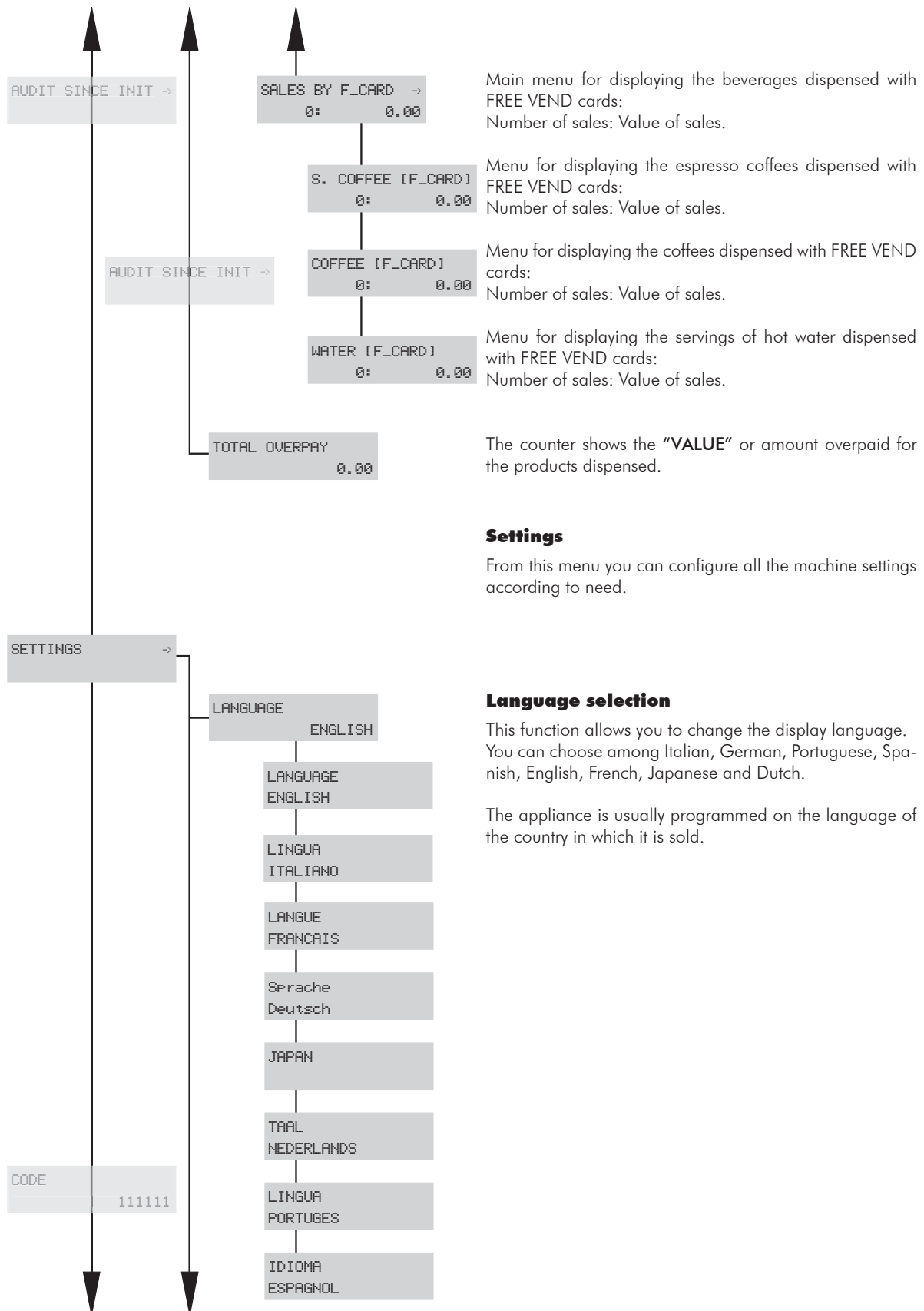
Totals menu relating to type 5 coins. It displays:
Number of coins inserted: Value of coins inserted

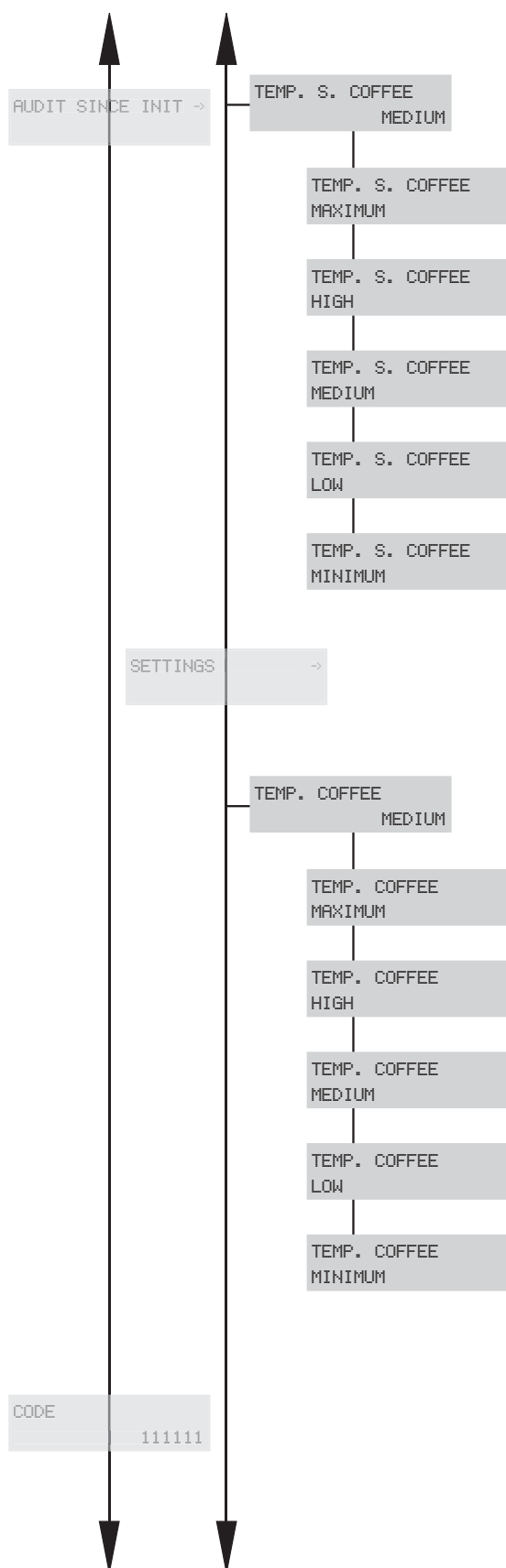
Totals menu relating to type 6 coins. It displays:
Number of coins inserted: Value of coins inserted

Main menu for displaying the beverages dispensed using a card:
Number of beverages dispensed: Value of beverages dispensed.

Main menu displaying the recharges made using a card:
Number of recharges made: Value of recharges made.







Setting the temperature of espresso coffee

Royal Office allows you to precisely set the temperature of ESPRESSO coffee.

You can set the brewing temperature of espresso coffee independently.

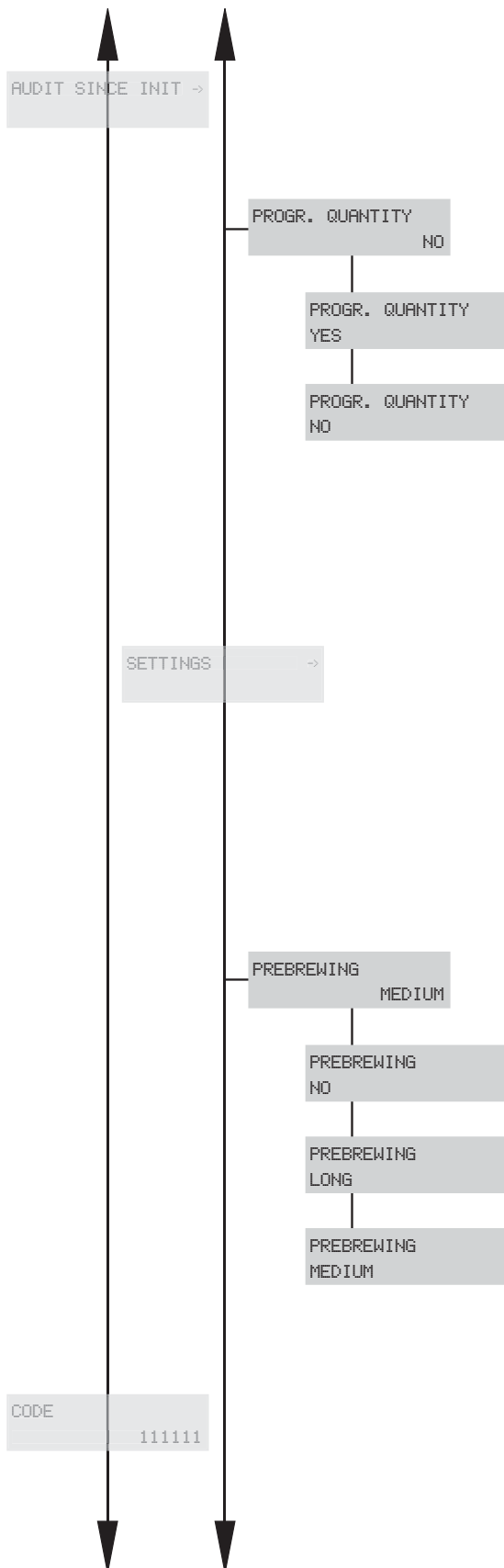
This function is designed to satisfy various user needs.

Setting the coffee temperature

Royal Office allows you to precisely set the temperature of regular coffee.

You can set the brewing temperature of regular coffee independently.

This function is designed to satisfy various user needs.



Programming the quantity

This function allows you to program the precise quantity of coffee to be dispensed using the three selector keys (Small coffee, Coffee and Hot water).

To program the cup filling level, press the corresponding selector key until you reach the desired amount of coffee (maximum approximately 250 ml). During this operation, the following message will appear on the display:

```
"SMALL COFFEE  "
"PROGR. QUANTITY  "
```

or:

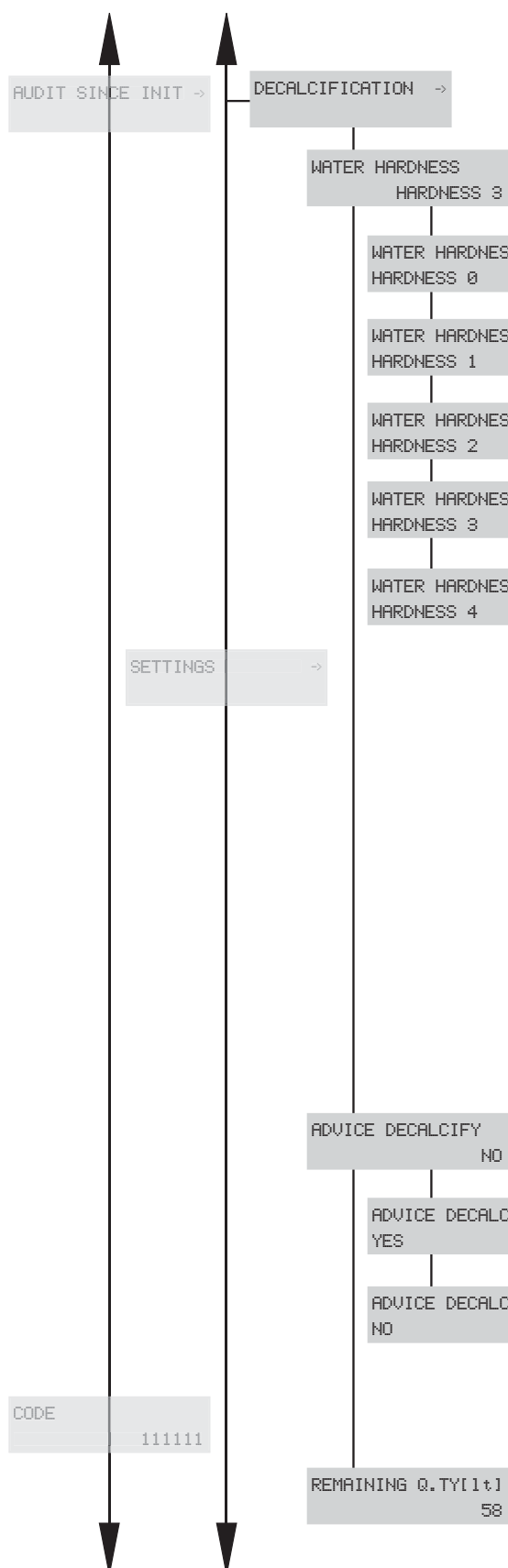
```
"COFFEE  "
"PROGR. QUANTITY  "
```

or:

```
"HOT WATER  "
"PROGR. QUANTITY  "
```

Prebrewing function

With the pre-brewing process the coffee is slightly moistened before actual brewing. This brings out the full aroma of the coffee and lends it an excellent flavour.



Descaling

From this menu you can set all the parameters for ensuring correct management of machine descaling cycles.

Setting the water hardness

The hardness of tap water may vary depending on the region.

For this reason, the appliance can be set according to the water hardness in the place where it is to be used, expressed on a scale of 0 to 4.

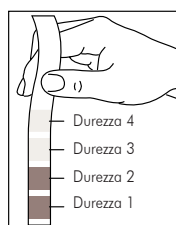
The machine is already set on an average value (hardness 3).

Setting the value to "0" will disable the descaling control function.

The setting should be adjusted according to the level of water hardness in the local area. To measure the hardness of your water, you can use the strip supplied with the machine.

Briefly dip (1 second) the strip in the water and shake it gently. After one minute the test results will be visible on the strip.

Depending on the test results, press the **AV** , keys; you can select among the following values:



HARDNESS 4 (hard)

HARDNESS 3 (medium)

HARDNESS 2 (soft)

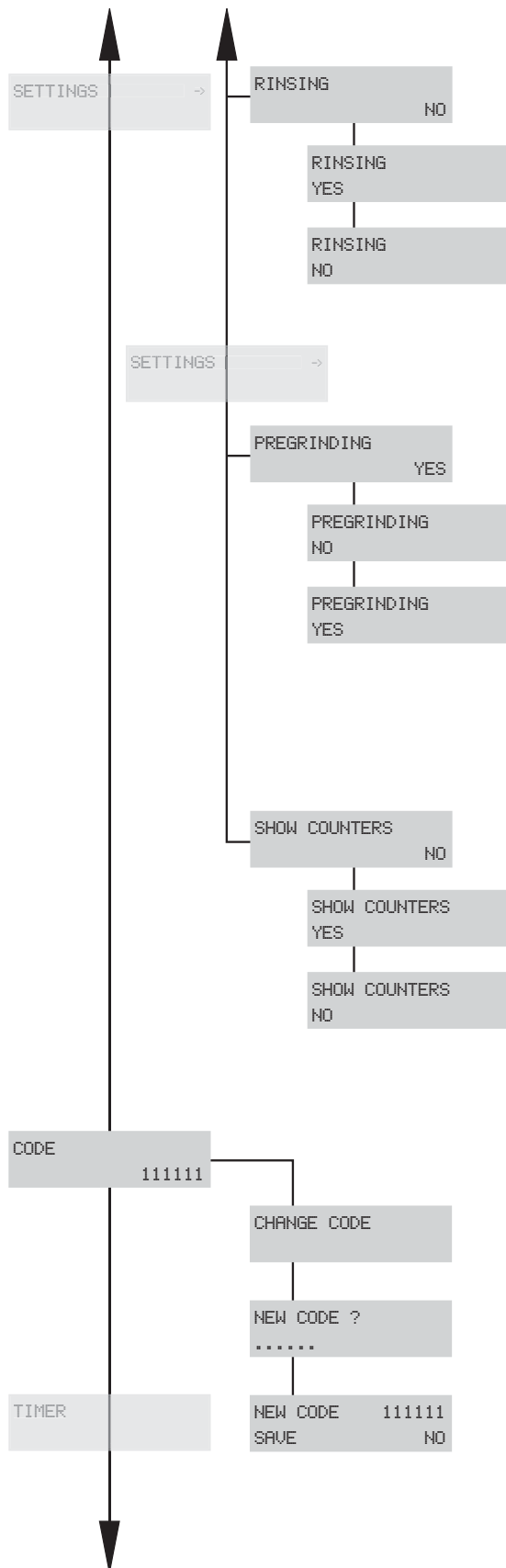
HARDNESS 1 (very soft)

HARDNESS 0 (disabled)

Select the value matching the hardness of your water (e.g. 2 squares = Hardness 2) and memorize it.

From this menu you can enable/disable the display of the "DESCALING" message.

The display shows the quantity of water the machine can handle before a descaling cycle has to be performed.



Rinsing function

If the rinsing function is enabled, as soon as the machine is switched on after a period of inactivity, a hot water rinsing cycle will automatically start to clean all coffee brewing and dispensing parts.

Pregrinding function

If this function is enabled, the machine will grind coffee every time the ground coffee dispenser is empty. There will thus always be an amount of preground coffee ready, which saves time in cases where the vending machine is used frequently. This function is not recommended in other circumstances given the benefits to be derived from using freshly ground coffee.

Counter display function

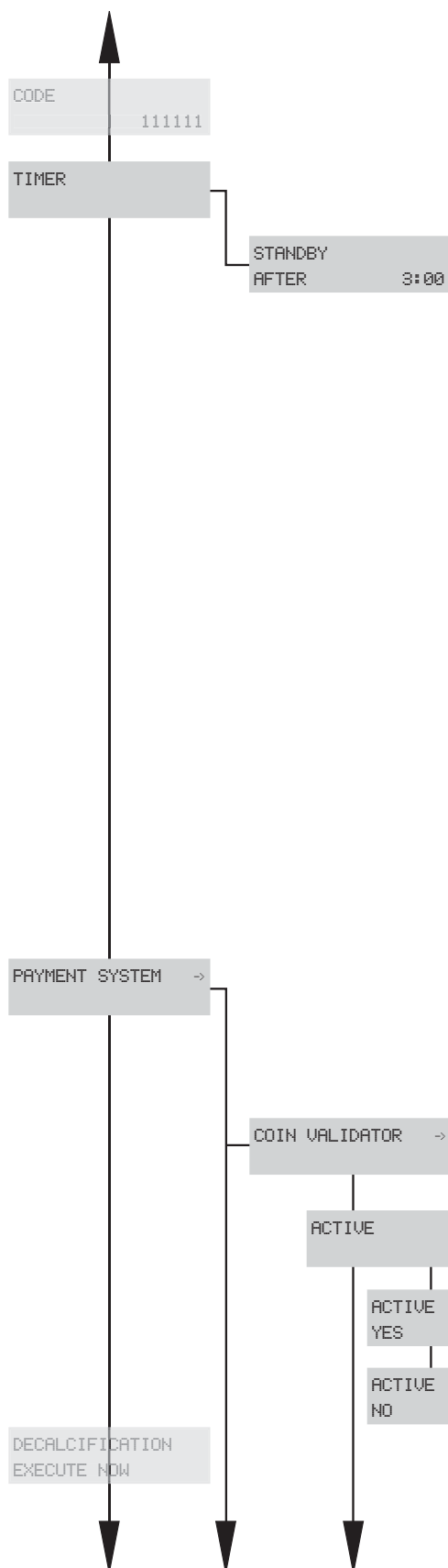
With this function you can enable/disable the total counter by pressing **C** (Esc) on the control panel.

This function allows you to display the total number of beverages dispensed without switching into the programming mode.

Access code modification

It allows you to set a code ("111111" is the default setting) to prevent unauthorized persons from accessing the programming mode. On confirming, you will access the menu item:

You will be prompted to enter the code every time you access the programming mode.



Timer

This is a factory-set function that automatically switches the machine into "Standby" mode when 3 hours have elapsed since last beverage dispensing. The switch-off time can be adjusted, in 15-minute intervals, up to a minimum of 0 minutes.

When set to 0:00 the function is disabled.

Using the **AV** keys move the asterisk to the menu item **TIMER**. To access this item, press the **E** key (Ent).

The display will show:

```
"STANDBY      "
"AFTER        3:00 "
```

The desired time can be set using the keys **AV**. Press **E** (Ent) to memorize the setting.

If the set time has already elapsed, the word:

```
"STANDBY      "
```

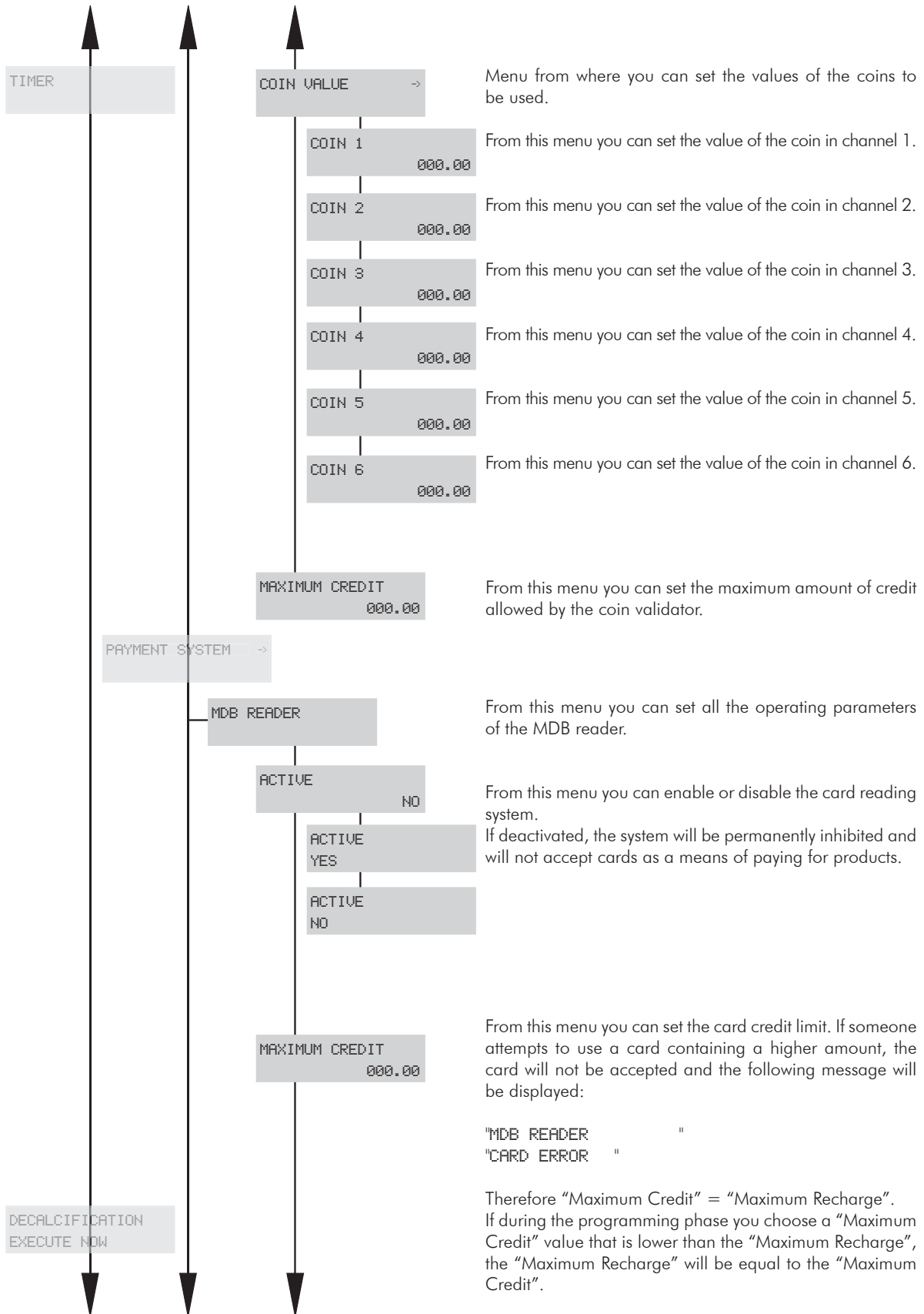
will appear on the display and the machine will shut down. If necessary, you can turn the machine back on by pressing **C** (Esc).

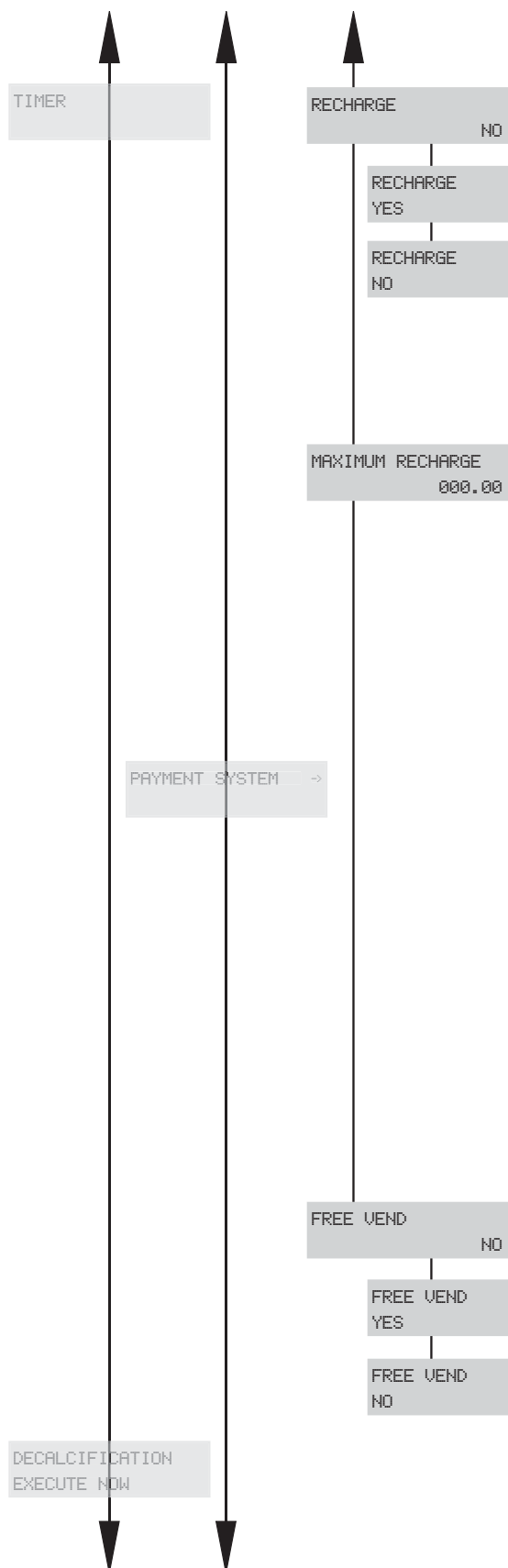
Payment systems

The vending machine features a software program for managing all standard commercial payment systems. This software is enabled only if a Coin Box has been correctly installed.

From this menu you can enable or disable the coin validator.

If deactivated, the validator will be permanently inhibited and will not accept the coins inserted.





From this menu you can enable or disable the recharge function.

If the function is off, it will not be possible to recharge a card.

This menu permits to set the maximum rechargeable value in the card.

Should the card credit be lower than the “Maximum Recharge”, it will be possible to recharge (reload); if not, the card recharging will be disabled.

Ex: Remaining credit = 40 EUR
 Maximum recharge = 50 EUR
 Total of the coins inserted in the machine = 20 EUR
 Amount of credit added to the card = 10 EUR

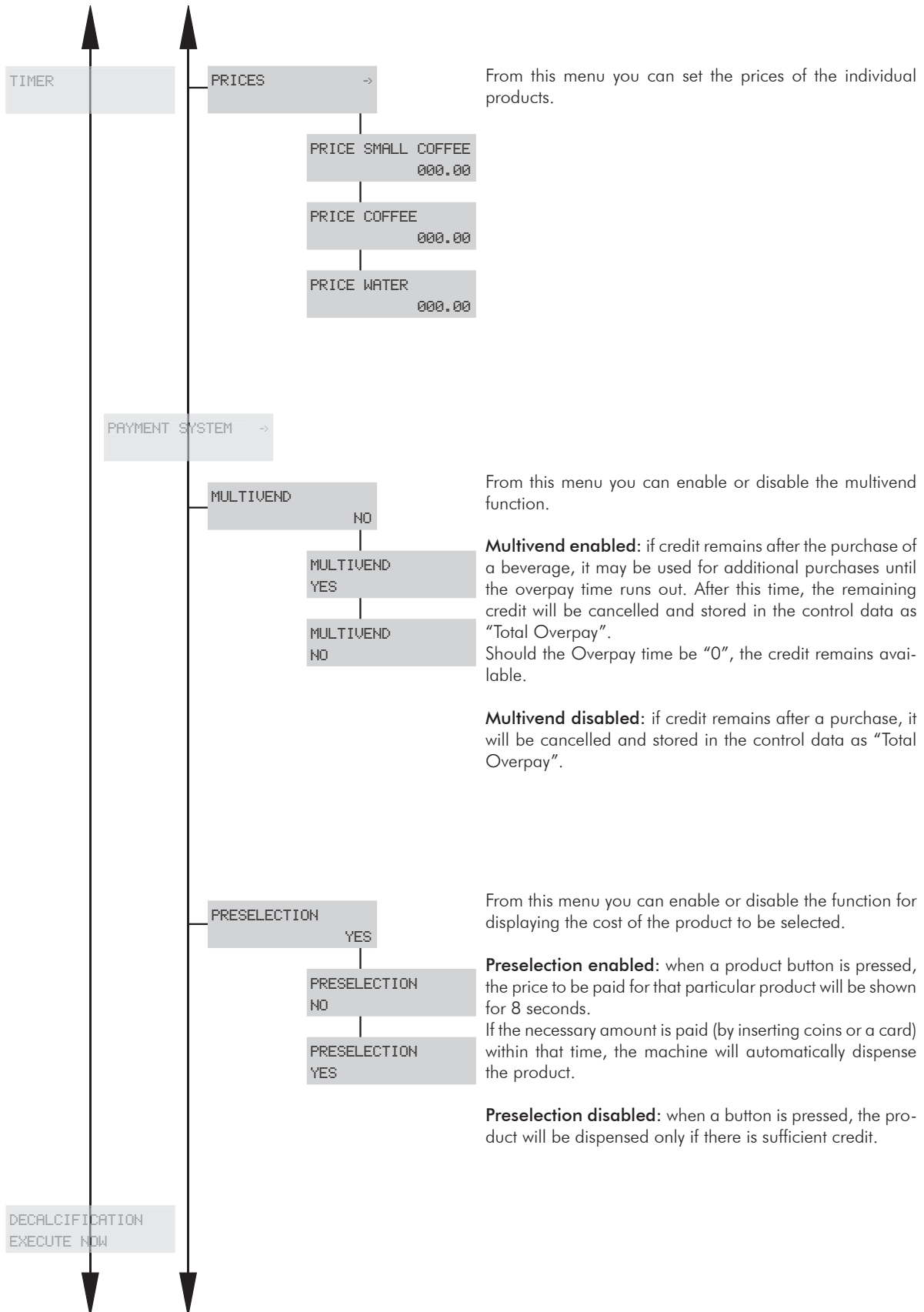
The remaining 10 EUR remain in the coin validator as credit. When the overpay time has elapsed, this credit will be lost.

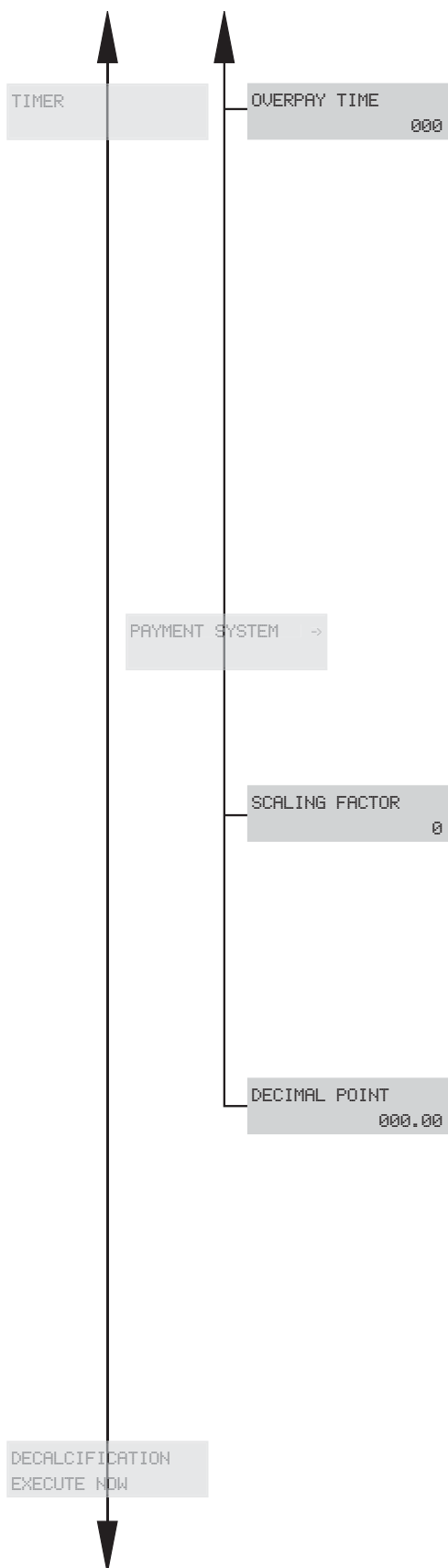
If during the programming phase you choose a “Maximum Recharge” value that is higher than the set “Maximum Credit” value, the setting will not be accepted.

The card reader also has a recharge limit. If the set “Maximum Recharge” value is higher than this limit, it will automatically decrease to the limit set in the card reader.

From this menu you can enable or disable the function of dispensing beverages with free vend cards.

If the function is enabled, your machine will allow products to be purchased using free vend cards (function used for servicing purposes).





From this menu you can set the overpay time: i.e. the time beyond which any credit remaining in the machine will be cancelled and stored in the control data as "Overpay Value".

Range of values: 0 - 255 seconds (0 = Deactivated)

This function can be used only when coins are inserted and works in the following manner:

Multivend disabled: any remaining credit that is not used within the time limit will be cancelled and stored in the control data as "Total Overpay".

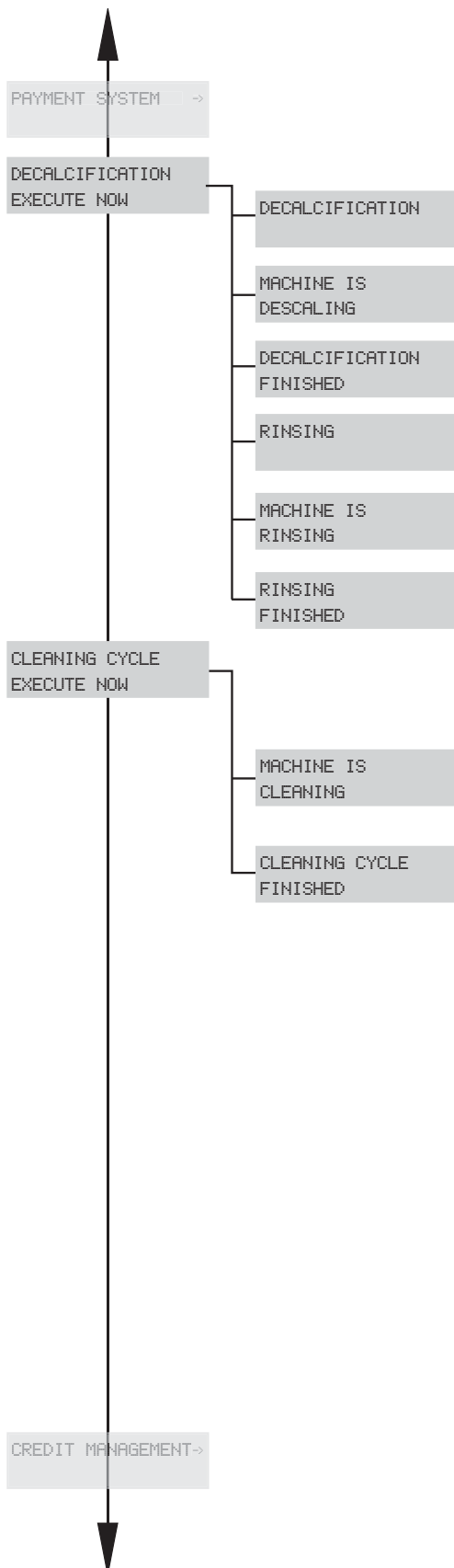
Multivend enabled: any remaining credit can be used for additional purchases until the "Overpay" time runs out; after that time the credit will be cancelled and stored in the control data as "Total Overpay".

Every time a coin is inserted in the machine or a beverage is dispensed, the calculation of the overpay time will again start from zero.

From this menu you can set the minimum unit that the machine will be able process apart from decimals (range: 1, 10, 100; standard 1). Ex.: In the case of Euros, select 1 as the scaling factor.

From this menu you can set the position of the decimal point: if the setting is different from the decimal point setting in the card reader, the coffee machine will be inhibited and the following error message will appear on the display:

```
"MDB READER      "
"DECIMAL ERROR   "
```



Descaling

Use the **▲▼** keys to display the menu item.

To access this item, press the **E** key (Ent).

The display will show:

"DESCALING "

See page 36 for an explanation about descaling.

Rinsing cycle

The machine features a rinse program that supplements normal daily and weekly cleaning. If used regularly, this program effectively eliminates oily coffee deposits from inaccessible parts and prevents alterations in the coffee flavour.

Depending on frequency of use, you are advised to carry out a machine rinse once a month or at most after 250 cups of coffee. The program lasts about 5 minutes and is divided into 4 cycles, including a final rinse. There are brief pauses of about 40 seconds between cycles.



Warning

The rinse program must never be interrupted.

Before starting the rinse program, always fill the water tank completely and place a large container (min. 1 litre capacity) below the brew unit (the brew unit is adjustable in height and can be removed for cleaning). The rinse program requires about 1 litre of water (including the water for the final rinse). Empty out the collection container as necessary.

Use the **▲▼** keys to display the menu item.

To access this item, press the **E** key (Ent).

The display will show:

"MACHINE IS "
"CLEANING "

Activating this function will start a cycle programmed to rinse all the coffee brewing and dispensing parts with water. When the rinsing cycle is over, the display will show:

"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 "0" 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 SAVING".
- 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:

"FILL COFFEE BEANS "
"READY FOR USE "

The dispensing LED inside the coffee selection key turns off.

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

Fill the bean hopper and delete the FILL COFFEE BEANS 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 FOR USE" 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

Close the hopper by placing the cover on the top (Fig. 8).



Fig. 8

Coffee beans should be fresh, non-oily and of medium grinding.

Filling the water tank



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.



Fig. 9

Fixing the cover lock plate



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).



Fig. 12

Water circuit filling



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 PRODUCT "
"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.

Grinding adjustment

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.

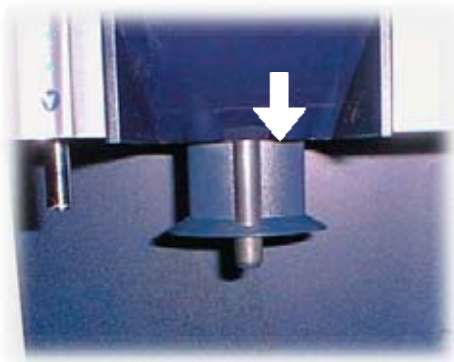


Fig. 14

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

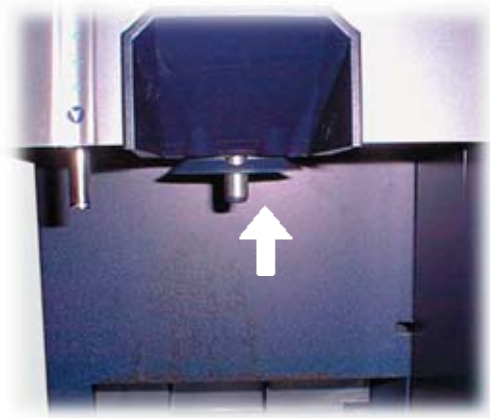


Fig. 15



Adjusting the cup filling level

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 SMALL COFFEE " 
"PROGR. QUANTITY " 

"1 COFFEE " 
"PROGR. QUANTITY " 



Important

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 18).

Hot water dispensing

Hot water is dispensed thanks to a circuit that guarantees that the water is tasteless 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 18).

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 SUPPLY OPERATOR.

Bean hopper electronic control

When the bean hopper is empty, the machine stops grinding after about 20 seconds. Fill the bean hopper following instructions outlined on page 28.

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 re-start the machine until the foreign body has been removed.

Follow the procedure outlined on page 35.

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 28.

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 in the general maintenance table.



Warning

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.



fig. 18

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).



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).



Fig. 23

Coffee grinder**Warning**

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).

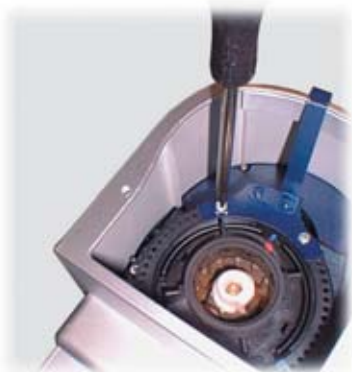


Fig. 29

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).



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.

Descaling



Warning

Descaling operations must be performed when the machine is cold.

The descaling procedure is used to eliminate limescale build-up 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 complexity of the coffee machine's water circuit, the automatic descaling cycles cannot reach all the components. In fact, easy-to-remove components such as the brew group (ref. 18 - Fig. 1) and the plastic pin/valve connecting it are excluded from the cycle.

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:

```
"DESCALING           "
"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 37.

Initially the machine is set on a 25°FH hardness value.

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 19.

The following adjustments are possible:

- **Hardness 4:** hard water, above 29°FH (14°dH).
- **Hardness 3:** medium-hard water, ca. 20-29°FH (7-14°dH).
- **Hardness 2:** soft water, ca. 12-20°FH (4-7°dH).
- **Hardness 1:** very soft water, below 10°FH (3°dH).
- **Hardness 0:** check disabled.

**Warning**

Never use vinegar to avoid damaging the machine!

Automatic descaling

Select this option from the settings menu (see page 26).

Using the **▲▼** keys select the relevant item and confirm the selection by pressing **"E"** (Ent).

The display reads:

```
"DECALCIFICATION  "
```

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 **"E"** (Ent) 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:

```
"DECALCIFICATION  "
"FINISHED         "
```

The pump will go off. Press **"E"** (Ent). A message will appear to warn you that the dispenser must be cleaned to remove all traces of descaling solution.

```
"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:

```
"MACHINE IS      "
"RINSING         "
```

On completion of a rinse cycle, the display will show:

```
"RINSING         "
"FINISHED        "
```

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

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

**Important**

If you interrupt the descaling process before it is completed, you must carry out a thorough rinsing of all machine circuits.

Eliminating the descaling message

The message that appears on the display:

```
"DESCALING       "
"READY FOR USE   "
```

will automatically be cleared once a complete descaling cycle has been carried out.

After descaling is over the display will show:

```
"SELECT PRODUCT  "
"READY FOR USE   "
```


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.

Important

The battery present on the electronic card should be removed from the device before its disposal.

The disposal of batteries should be performed in a safe manner.

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 ASSISTANCE CENTER.

Important

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

The possible causes are listed in par. 14.1 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.

PROBLEM	CAUSE	REMEDY
No display message.	No power supply.	Turn the main switch on, check the socket and fuse.
	The service door is open.	Close the service door.
Automatic coffee brewing does not start.	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 cycle.
	No drawer.	Insert the Dump box correctly.
	Coffee grinder jammed.	Clean the coffee grinder.
Coffee comes out too fast.	Grinding too coarse.	Adjust to a finer grinding (e.g., from 5 to 3).
Coffee comes out too slowly.	Grinding too fine.	Adjust to a coarser grinding (e.g., from 3 to 5).
Coffee has no sufficient crema.	Unsuitable coffee blend or coffee is not freshly toasted.	Change coffee blend
It takes long for the machine to warm up, or the load capacity is insufficient	There is limescale in the machine.	Descale the machine following instructions.
The brew group cannot be removed.	The brew group is not in the correct position.	Start the machine, close the service door, insert the Dump box. The brew group is automatically placed in the correct position.

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 commercial dispensing appliances and vending machines
EN 60335-2-75 - Edit.2003
- 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 fluctuations 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
- Electromagnetic compatibility (EMC)
Part 4 ^ : Testing and measurement technique.- Section 2 : Electrostatic 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 : Electrical 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 conducted disturbance, induced 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

