

(6

**Vending Machine** 

model

# **AMBRA** Type SUP 015VR



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

# TABLE OF CONTENTS

M	AIN P	ARTS	. 3
1	<b>- INT</b> 1.1 1.2	<b>RODUCTION TO THE MANUAL</b> Foreword Symbols used	. <b>4</b> . 4 . 4
2	- GEN 2.1 2.2 2.3 2.4 2.5	VERAL INFORMATION   Foreword   Intended use of the machine   Residual risks   Machine identification   Technical specifications	.4 .4 .4 .5 .5
3	- HAI	NDLING AND STORAGE Handling Storage	.6 .6
4	4.1 4.2 4.3 4.4	<b>TY</b> General safety norms Operators requirements Maintenance technician Supply operator User Safety devices Safety microswitch efficiency test	.6 .7 .7 .7 .7 .7
5	- <b>COI</b> 5.1	NTROLS DESCRIPTION   Main controls   Main switch (Fig. 5)   Control panel (Fig. 6)   Dispensing mode   Setting mode	. 8 . 8 . 8 . 8 . 8
6	- INS 6.1 6.2 6.3	TALLATION   List of supplied accessories   Positioning   Electric connection	.9 .9 .9 .9
7	- SETT	INGS Structure of programming functions Menu selection Changing numeric values	10 10 10

8	- USE	OF THE VENDING MACHINE	. 23
	8.1	Machine status	23
		Off and electrically insulated	23
		On	23
		Energy saving	23
	8.2	Recommendations	23
		Prolonged inactivity	23
		Temperature control	23
		Bean hopper empty	23
		Water tank empty	23
		Dump box full	23
	8.3	First Switching on	24
		Filling the bean hopper	24
		Fixing the cover lock plate	24
		Filling the water tank	24
		Water circuit filling	25
		Grinding adjustment	25
		Coffee blends	26
	8.4	Beverage dispensing	26
		Adjusting the coffee dispenser	26
		Adjusting the cup filling level	27
		Coffee dispensing	27
		Preheating	27
		Hot water dispensing	27
	8.5	Messages and special warnings	28
		Begn hopper electronic control	28
		Coffee begins protection against impurities	28
		Water level electronic control	28
9	- MAI		. 28
-	9.1	Foreword	28
	9.2	Cleaning and maintenance	29
	· · <b>_</b>	Brew group	30
		Coffee grinder	31
10	)- INA	<b>CTIVITY</b>	. 32
11	- <b>INS</b> '	TRUCTIONS FOR END-OF-LIFE	
	DIS	POSAL TREATMENT	. 32
12	2 - TRO	UBLESHOOTING	. 32
13	8- ACC	ESSORIES	. 32
14	I-GEN		. 33
	14.1	Iroubleshooting	33



- 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 knob
- 14 Coffee doser screw
- **15** Service door with lock
- **16** Coffee load hopper
- 17 Brew group lock lever

- **18** Brew group
- 19 Dregs drawer
- 20 Safety microswitch
- **21** Cover with lock
- 22 Cover lock plate
- 23 Locking keys (2x)
- **24** Brew group key
- 25 Cover lock fastening screw

# 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 AMBRA 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 AMBRA 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 (I x w x h).		ca. 380 x 460 x 440 mm
Machine case		galvanized steel and thermoplastic material (ABS)
Weight		ca. 17.5 kg
Cable length		ca. 1.2 m
Operating system		
		Electromagnetic vibration pump
Temperature control		electronic
Coffeegrinder adjusting	y device	fine-grinding
Coffee grounds ejection	, n	automatic
Coffee powder dosing .		adjustment screw
Quantity setting		
Water tank		removable, transparent
Capacity	-Water tank	ca. 6.51
, ,	-Coffee bean hopper	ca. 720 gr.
	-Drip tray	ca. 1 l
Heating time		
Preparation time	-espresso	ca. 20 seconds per cup
•	-coffee	ca. 35 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 existin	g product class regulations	(see Declaration of Conformity in the packaging)

### - HANDLING AND 3 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.

# SAFETY

In compliance with the Low Tension Directive 2006/95/EC (which replaces the directive 73/23/EEC and following amendments) and CE Marking Directive 93/68/EEC, SAECO Vending has drawn up a technical file of the AMBRA vending machine held at its plants. The following regulations were taken into account during the design phase:

-	EN 55014	-	EN 6100-3-2
-	EN 61000-3-3	-	EN 61000-4-2
-	EN 61000-4-3	-	EN 61000-4-4

- EN 61000-4-5 EN 61000-4-11
- EN 60335-2-75 EN 60335-1

#### 4.1 **General safety norms**

# Danger

It is extremely dangerous to put electrical parts in contact with water! Do not direct the 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.

Two microswitches (ref. 1 – Fig. 4) placed side by side, automatically cut the power supply if the side door is opened.



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.

When they turn off, it indicates that the vending machine is not in operation and that the microswitches are working.

#### 5 **CONTROLS DESCRIPTION**

#### R 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).





# Control panel (Fig. 6)

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





# **Dispensing mode**

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



Dispensing programmed beverages





light coffee





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

#### Е ENT key - "Espresso coffee"

Confirm modified parameters. Allows you to go to the lower programming level

#### С **ESC** key

Return to higher settings level without saving new parameters.

#### UP key - "Coffee" ٨

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.

# 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:  $10^{\circ}C \div 40^{\circ}C$
- 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. **24** Fig. 1).
- N. 1 Instruction and Maintenance Manual

# 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



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.

# Marning

The use of extensions and adapters is forbidden.

# 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 programming menu, turn off the machine, hold down the V (Hot Water) and **C** (Esc) keys, pressing the main power switch to turn the machine back on.

The main settings options are the following:

- CREDIT MANAGEMENT
- AUDIT SINCE RESET
- AUDIT SINCE INIT
- SETTINGS
- CODE
- TIMER

CODE ?

PAYMENT SYSTEM

# Structure of programming functions



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

# **Menu selection**

Select menus using the various  $\Lambda V$  keys and select options by pressing the **E** key. The parameters of each menu can be modified by pressing  $\Lambda V$  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)  $\Lambda V$  key without saving the new value.

# **Changing numeric values**

When you wish to modify a value, press the " $\mathbf{E}$ " key. Modify the 1<sup>st</sup> number with the keys  $\mathbf{AV}$  and save by pressing the " $\mathbf{E}$ " key again. The cursor will move to the next number. Use this method for all the numbers present, in the end the whole value will be saved and you will exit from the modification.

When entering the programming menu, the set code will be

requested. This programming. To Note the code whe	will allow you to continue with set it, see "CODE" in the Vending me on it is changed.	the mu.
After 5 attempts to machine requires to the programming m	<b>g</b> o enter an incorrect code, the vend he PUC (Personal User Code) to acc nenu.	ling
To receive the PUC CENTRE. If the PUC is correct new code. The keys have the and the PUC:	code, contact the CUSTOMER SERV tly entered, you will be requested to s following values while setting the c	ICE et a ode
Key 1 <b>E</b> (Ent) E Key 2 C Key 3 H Key 4 <b>C</b> (Esc) .	spresso Coffee Coffee lot Water	.1 .2 .3 .4
For example, if the for entering it is as	code 312241 must be set, the seque follows:	nce
1: Key 3	Hot Water	3
2: Key 1 <b>E</b> (Ent)	Espresso Coffee	1
3: Key 2	Coffee	2
4: Key 2	Coffee	2



CREDIT MANAGEMENT ->

AUDIT SINCE RESET->

TOTAL COINS

COIN 1

COIN 2

COIN 3

COIN 4

COIN 5

COIN 6

ENCASHMENT CARD

0.

0:

0:

SALES BY CARD

0:

RECHARGE

TOTAL

SALES

0:

0:

0:

0:

0:

0:

0.00

0.00

->

0.00

0.00

0.00

S. COFFEE [CARD]

0:

0:

0.00

0.00

0.00

0.00

0.00

0.00

0.00

# **AUDIT RESET Functions**

Ambra is equipped with a system that records sales and collections from the last reset that has been performed by the manager.

General menu for the total display of: Number of coins inserted: Value of coins inserted:

Partial menu relating to coin type 1 to display: Number of coins inserted: Value of coins inserted:

Partial menu relating to coin type 2 to display: Number of coins inserted: Value of coins inserted:

Partial menu relating to coin type 3 to display: Number of coins inserted: Value of coins inserted:

Partial menu relating to coin type 4 to display: Number of coins inserted: Value of coins inserted:

Partial menu relating to coin type 5 to display: Number of coins inserted: Value of coins inserted:

Partial menu relating to coin type 6 to display: Number of coins inserted: Value of coins inserted:

General menu to display the beverages that have been dispensed using the key: Number of beverages dispensed: Value of beverages dispensed:

General menu to display the recharges that have been made using the key: Number of recharges made: Value of recharges made:

General menu to display the sales made (beverage dispensing):

Number of sales made: Value of sales made:

General menu to display the sales made (beverage dispensing) using the key: Number of sales made: Value of sales made:

General menu to display the brewing of espresso coffee using the key:

Number of sales made: Value of sales made:

,	1		,
AUDIT	TOTAL	SALES	COFFEE
SINCE	OVERPAY	BY COINS	[CARD]
TNTT			





The counter indicates the excess collected "TOTAL **OVERPAY**" with regard to the value of the dispensed products.

Function that allows the zeroing of all partial counters.

# **AUDIT INIT Functions**

Ambra is equipped with a system that records sales and collections from the first machine start-up.

### Warning:

### these values may not be zeroed or modified by the manager.

General menu for the total display of: Number of coins inserted: Value of coins inserted:

Total menu relating to coin type 1 to display: Number of coins inserted: Value of coins inserted:

Total menu relating to coin type 2 to display: Number of coins inserted: Value of coins inserted:

Total menu relating to coin type 3 to display: Number of coins inserted: Value of coins inserted:

Total menu relating to coin type 4 to display: Number of coins inserted: Value of coins inserted:

Total menu relating to coin type 5 to display: Number of coins inserted: Value of coins inserted:

Total menu relating to coin type 6 to display: Number of coins inserted: Value of coins inserted:

General menu to display the beverages that have been dispensed using the key: Number of beverages dispensed: Value of beverages dispensed:

General menu to display the recharges that have been made using the key: Number of recharges made: Value of recharges made:

SETTINGS





General menu to display the sales made (beverage dispensing) using FREE VEND cards: Number of sales made: Value of sales made:

General menu to display the brewing of espresso coffee using FREE VEND cards: Number of sales made: Value of sales made:

General menu to display the brewing of coffee using FREE VEND cards: Number of sales made: Value of sales made:

General menu to display the dispensing of hot water using FREE VEND cards: Number of sales made: Value of sales made:

The counter indicates the excess collected "VALUE" of the dispensed products.

# Settings

This menu enables setting the machine according to the requirements requested.

### **Language Selection**

With this function the display language may be changed. You can choose from Italian, German, Portuguese, Spanish, English, French and Dutch.



### **Coffee temperature setting**

Ambra allows you to precisely regulate the temperature of the coffee.

This setting allows satisfying various user requirements. The standard definition is TEMP. COFFEE MEDIUM.

### **Dose setting**

This function allows you to dose with precision the quantity of dispensed product using the three selection keys (Espresso coffee, Coffee and Hot water).

To program the cup filling level, the corresponding selection key must be pressed in order to obtain the quantity of beverage desired (maximum 250 ml approximately). When the key is released, the dose will be saved. During this operation the following message will appear on the display:



### **Pregrinding Function**

By activating this function a grinding is performed every time the dosing unit is emptied. Therefore, a portion of ground coffee is always ready. This allows saving time in case of frequent use of the vending machine. This function is however not recommended in other cases for the advantages that derive from using coffee that has been grounded outright and that is therefore, fresh.



# **Counter display function**

This functions allows you to enable/disable the display of the total counter by pressing the **C** key (Esc) on the control panel.

This function allows you to display the total dispensing without having to enter into the programming menu.

### **Change Access Code**

Allows the setting of a code ("111111" by default) to avoid that unauthorized people access programming menu. By confirming it, the menu item is accessed:

The code will be requested every time the programming menu is accessed.

### Timer

This function, which is preset by the constructor, automatically puts the vending machine in "Standby" mode after 3 hours from the last dispensing.

The switch-off time may be regulated at intervals of 15 minutes, up to a minimum of 0 minutes.

# When the value is set to 0:00 the function is deactivated.

Using the keys  $\Lambda V$ , move the asterisk to the TIMER menu item.

To activate the item use the **E** (Ent) key.

The display shows:

"STANDE	3Y	"
<b>"</b> AFTER	3:00	"

The desired times can be set using the keys  $\Lambda V$ .

Use the **E** (Ent) key to save.

If the time set is already run out, the following message will appear on the display:

"STANDBY "

and the vending machine will turn off. If necessary, the vending machine can be turned on again using the C (Esc) key.

TIMER



# **Payment Systems**

The machine has software that manages the payment systems commonly available on the market. This software is active only if the Coiner Box is correctly installed.

This menu enables or disables the coin acceptance system.

If it is deactivated, it remains permanently locked and will not accept the inserted coins.

Menu for setting the values of the coins that may be used.

This menu sets the coin value of channel 1.

This menu sets the coin value of channel 2.

This menu sets the coin value of channel 3.

This menu sets the coin value of channel 4.

This menu sets the coin value of channel 5.

This menu sets the coin value of channel 6.

This menu sets the maximum allowed amount using the coiner box.

COIN VALIDATOR





This menu activates or deactivates the possibility of dispensing with free cards (FREE CARD).

If the function is active, it will be possible to acquire products with free cards (used for services reasons).

This menu sets the vending prices of the single products.

This menu activates of deactivates multivend.

**Multivend activated:** if after a sale there is still credit available, it will remain available for later sales until the overpay time runs out, after which the remaining credit will be cancelled and saved in the control data as "Overpay Value".

If the overpay time is "0", the credit remains available.

**Multivend deactivated:** if at the end of the cycle there is still credit, it is cancelled and saved in the data as "Overpay Value".

This menu activates or deactivates the possibility of displaying the cost of the product to be selected.

**Preselection activated:** when one of the product keys is pressed, the necessary credit to dispense the same product will be shown for 8 seconds.

If within that time the necessary credit (coins or card) is made available, the product will be automatically dispensed.

**Preselection deactivated:** when pressing the keys, the product will be dispensed only if sufficient credit is present.





CREDIT MANAGEMENT

# 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 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:

"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 coffee bean hopper and eliminate the NO COFFEE message by holding the Espresso key down for 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





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.



Fig. 9

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).





# Water circuit filling



When the vending machine is turned on for the first time, the boiler is automatically filled. This message will appear on the display:

> "SELF-DIAGNOSIS" "BOILER FILLING"

Place a cup or a suitable container under the hot water spout. Turn on the vending machine and wait for the procedure to end.

# 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



If the coffee is brewed too fast, as in the case of a too coarse grinding, or if it drips out, in the case of a too fine grinding, the grinding of the coffee grinder must be adjusted. Its recommended initial position is point 5 on the ring nut.

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. 14).



Fig. 13





#### Fig. 14 Warning

Grinding adjustments must be performed only when the grinder is on. Avoid extreme adjustments in the position below **7**: this may cause damage to grinders. Use instead a different coffee blend, since not all blends produce the same results.

To adjust grinding, follow the procedure outlined below:

- press the coffee key and verify the coffee outflow from the dispenser;
- Open the machine housing's main door, lift the lid of the coffee bean hopper and consequently adjust the grind (see fig. 13).



# 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 15.



Fig. 15 For tall cups, position the dispenser as shown in figure 16.



Fig. 16

# 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 ""

# B

# Important

This operation can be interrupted only after the minimum quantity has been dispensed.

# **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 17).

# Preheating

When brewing the first cup of coffee, the preheating function is activated. The following message will appear on the display:

### "PREHEATING"

Preheating consists of a cycle of water flowing through the brew group. It is automatically activated when the machine is turned on and if more than 300 seconds have passed between a coffee brewing cycle and the next one.

# 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. 17), the display reads:

"HOT WATER "

If the hot water key is pressed (Fig. 17) after brewing coffee, the circuit rinsing cycle is activated, which consists in repeatedly opening the solenoid valve with the following message appearing on the display:

"RINSE

At the end of the rinsing cycle, the hot water dispensing will automatically start and the following message will appear:



Fig. 17

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.

# Marning

The quantity of hot water dispensed can be programmed only if the corresponding setting is on (see page 17).

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 machines stops grinding after about 20 seconds. Fill the bean hopper following instructions outlined on page 24.

# **Coffee beans protection against impurities**

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

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

Grinding stops automatically in about 15 seconds thanks to the electronic control.

#### R. 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 31.

# 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 24.

#### 9 MAINTENANCE ][

#### 9.1 Foreword



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. 18).



Fig. 18

The water tank (ref. **9** - Fig. 1), the dregs drawer and the relevant conveyor (if necessary, remove the conveyor as in Fig. 19), drip tray (Fig. 20) and Grill drip tray (Fig. 20) should be washed regularly using non abrasive detergents and dried with care.



fig. 19



fig. 20

The coffee dispenser (ref. **6** - Fig. 1) can be removed for cleaning. Remove the protection cover (Fig. 21).



Fig. 21

Unfasten the knurled screw under the dispenser (Fig. 22).



Fig. 22 Remove the dispenser by lifting it out (Fig. 23).



Fig. 23

Wash the dispensing channel (Fig. 24) and rinse carefully with hot water.



Fig. 24

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. 25).



Fig. 25

Remove the brew group by turning the lock lever in a vertical position as indicated in fig (26) then remove the group by tilting it (Fig. 26). If necessary, use the left hand to make the removal easier.



Fig. 26

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 to clean it. With the provided wrench (ref. **24** – Fig. 1) unscrew the knob counter clockwise (Fig. 27).Wash and dry all the elements of the brew group, reinsert the filter and hand-tighten the knob.



Fig. 27 Remove the dregs drawer for cleaning (Fig. 28).



Fig. 28

Use non-abrasive detergents only.

Carefully clean the dispensing outlet and reinsert the dregs drawer.

Reintroduce the brew group by turning down the appropriate lever. Tilt the group to insert it, then position it inside the guides of the dregs drawer (Fig. 29). Once inserted, the release lever must automatically return to its initial position and the reference pin must coincide with the arrow point (Fig. 30). Close the service door (ref. 15 - Fig. 1).









If the brew group is not inserted correctly, the display reads: **"INSERT GROUP"** 

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



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. 31).



Fig. 31

The container can then be cleaned (Fig. 32).



Fig. 32



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- INSTRUCTIONS FOR END-OF-LIFE DISPOSAL TREATMENT

This product complies with EU Directive 2002/96/EC.



The symbol **matrix** on the product or on its packaging indicates that this product may not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment.

By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



# Warning

The diposal of the vending machine or of a part of it must be carried out with full respect of the environment and according to local laws in force.

# 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 ASSIST-ANCE CENTER.



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.



The Ambra machine can be equipped with the following optional components:

- Coiner box

Arrangement for housing a coiner or key system.

- 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 5 supplies	After10 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	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.
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
The brew group cannot be removed.	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 (Fig 30).

# NOTE

# NOTE

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