AZKOYEN GROUP

USER MANUAL

«VITRO S5»

ESPRESSO

REFERENCE MANUAL: 81044280; EDICIÓN 07-2020

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WARNINGS

General

- **BEFORE USING THIS DISPENSER, THIS MANUAL MUST BE READ CAREFULLY**
- This automatic dispenser has been designed and built in accordance with all safety legislation in force.

Installation

- **THE INSTALLATION AND OPERATIONS REQUIRED FOR INITIAL START-UP OF THESE MACHINES MUST BE PERFORMED BY QUALIFIED PERSONNEL. THE SERVICE AREA MUST ONLY BE ACCESSED BY QUALIFIED TECHNICAL STAFF WITH EXPERIENCE IN HANDLING THIS MACHINE, IN PARTICULAR, AS REGARDS HEALTH AND SAFETY.**
- **THE MACHINE MUST BE PLACED ON A PIECE OF FURNITURE OR SUPPORT, SO IT IS STABLE AND CANNOT BE TIPPED OVER BY ACCIDENT.**
- You might need to access the inside of the machine from the rear; please choose a place from which you can turn the machine around to open the rear door and to perform the maintenance and cleaning tasks while this door is open. Try not to remove the machine's anchoring elements; in case these need to be removed, remember to fit them back on after you complete all tasks.
- The plug of the machine has an earth connection. The outlet must be connected to a good earth connection and must be located in an accessible position once the machine is installed.
- These machines are designed **EXCLUSIVELY FOR INDOOR USE**. They must not be installed in places that may be exposed to sprayed water, and they likewise must not be cleaned using sprayed water.
- Ensure that the electrical installation, the outlet and the automatic circuit breaker have the appropriate sizes for machine consumption.
- **AZKOYEN** hereby declines all liability for damages caused to persons or things as a result of the following:
    - Incorrect installation.
    - Inadequate electrical and/or hydraulic installation.
    - Deficient cleaning or maintenance.
    - Incorrect use of the machine.
    - Using non-original replacement parts or making unauthorised modifications
- If it is necessary to move the machine avoid:
    - Tipping the machine
    - Dragging or lifting it with some kind of pulling system (rope, straps, etc.).
    - Shaking or striking the machine, no matter whether it is in protective wrapping or not.

Safety

- **ALL ELEMENTS THAT REQUIRE TOOLS TO BE DISASSEMBLED MUST ONLY BE HANDLED BY QUALIFIED TECHNICAL PERSONNEL.**

- The machine should be installed in locations that meet the recommendations of temperature, electrical and water installations, weights, etc., in this manual and performed by qualified personnel.
- **THE MACHINE HAS COMPONENTS THAT OPERATE AT DANGEROUS VOLTAGES. DO NOT DISCONNECT ANY COMPONENT. ONLY TECHNICAL SERVICE IS AUTHORISED. THE FEEDER CABLE CAN ONLY BE REPLACED BY AUTHORISED TECHNICAL PERSONNEL.**
- This appliance is not designed to be used by persons (including children) with reduced physical, sensory or mental capabilities, lack of experience or knowledge, unless they are supervised or have been instructed in its use by somebody responsible for their safety. Children should be supervised to ensure that they do not play with the appliance. Section 7.12 of EN60335.
- This appliance is not designed to be used by persons (including children aged 8 and above) with reduced physical, sensory or mental capabilities, lack of experience or knowledge, unless they are supervised or have been instructed in its use by somebody responsible for their safety.
- In any case, this appliance cannot be cleaned and serviced by unsupervised children.
- **AZKOYEN** guarantees that all elements in contact with water or foodstuffs meet the legal requirements established in regulation (EC) 1935/2004, or subsequent updates, in relation to materials and objects that come into contact with foodstuffs.

Maintenance

- **MAINTENANCE AND CLEANING TASKS MUST ONLY BE CARRIED OUT BY QUALIFIED STAFF WHO HAVE BEEN TRAINED ON USE AND MAINTENANCE OF THIS MACHINE. ALL OPERATIONS MUST BE CARRIED OUT WITH THE MACHINE DISCONNECTED FROM THE MAINS.**
- For refilling, only use food products prepared specifically for these kinds of vending machines. Do not touch the product with your hands, and prevent liquids from falling inside the product hoppers.
- Given the characteristics of some food products, these may lead to incorrect operation of the machine if used beyond the parameters of temperature and relative humidity recommended in this manual.
- Water must be prevented from freezing in the interior of the machine. If any maintenance task is going to performed and the machine is going to be disconnected for a long period of time, the boiler must be emptied.
- **IF THE MACHINE IS NOT GOING TO BE USED AND WITHOUT SUPERVISION DURING A PERIOD OF TIME, WE RECOMMEND CLOSING THE WATER TAP CONNECTED TO THE MACHINE. MALFUNCTION OF THE INPUT VALVE COULD FLOOD THE MACHINE**

Cleaning tips

- The user or person responsible for refilling and cleaning the device must follow the instructions set forth in this manual.
- **These machines operate with water at high temperatures and steam and hot water might be released during the cleaning procedures. Keep your hands far from the liquid outlets. Hot liquids could cause irritation, burns or scalding on**

your skin.

- Only use the products recommended by the machine's manufacturer. Use of generic products not only does not guarantee that the machine can be cleaned properly, but may alter the taste of some drinks or result in situations that are harmful to health.

User manual

- This manual is an integral part of the machine, and as such, it must always remain inside the same so that it may be consulted at any time.
- This document contains private property information protected by legislation on intellectual property. All rights are hereby reserved. No part of this document may be photocopied, reproduced or translated without the prior written consent of AZKOYEN.
- **AZKOYEN** hereby reserves the right to introduce, without prior notice, all improvements to this model derived from its constant research.
- **REMEMBER: To get the most out of your machine, follow the instructions in this manual.**
- **FOR ANY ADDITIONAL INFORMATION THAT IS NOT SPECIFIED HEREIN CONTACT YOUR DISTRIBUTOR OR ACCESS THE TECHNICAL MANUAL FROM AZKOYEN'S OFFICIAL WEBPAGE**

UE Declaration of Conformity

CE

We, the manufacturer, Azkoyen Vending Systems, declare under our sole responsibility that our product is in compliance with the essential requirements of the following European Union issued Directives:

- EMC Directive 2014/30/UE, and his modifications
- Machine directive 2006/42/EC
- Low Voltage Directive 2014/35/UE
- RoHS Directive 2011/65/UE, and its amends Directive 2015/863/UE
- Regulation 1935/2004, on materials and articles intended to come into contact with food.
- Regulation (EC) Plastic materials and items to be used in contact with foodstuffs 10/2011
- Regulation (EC) Best manufacturing practices for materials and items to be used in contact with foodstuffs 2023/2006

The product is according with the following norms / standards:

- IEC 60335-1:2010/AMD2:2016/COR1:2016
- IEC 60335-2-75:2012/AMD2:2018
- UNE-EN 55014-2:2015 (EN 55014-2:2015; CISPR 14-2:2015)
- UNE-EN 55014-1:2017 (EN 55014-1:2017, CISPR 14-1:2016/COR1:2016)
- UNE-EN IEC 61000-3-2:2019 (EN IEC 61000-3-2:2019; IEC 61000-3-2:2018)
- UNE-EN 61000-3-3:2013/A1:2020 (EN 61000-3-3:2013/A1:2019; IEC 61000-3-3:2013/A1:2017)

Azkoyen Vending Systems

Avda. San Silvestre, s/n

CHAPTER 1. GENERAL CHARACTERISTICS

1.1.- Description of the VITRO S5 line.

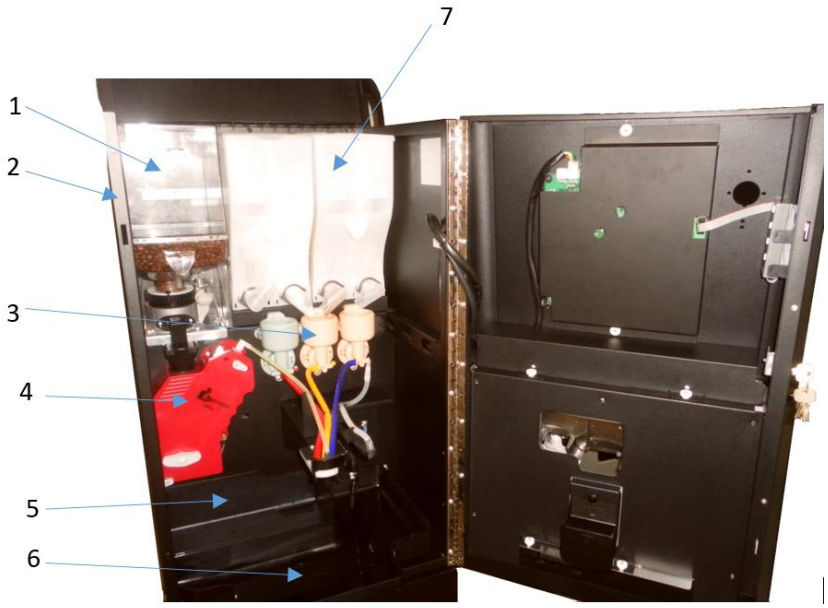
The machines of the **AZKOYEN VITRO** range are TABLETOP type dispensers of coffee and soluble drinks, and they are especially designed for use in places with average coffee consumption, such as waiting rooms, medium sized offices, etc.

Depending on the type of services offered, the machine is equipped with soluble product hoppers and can include groups with their respective hoppers, to offer coffee, tea, etc.

1.2.- Main characteristics

Dimensions (mm)	
Depth	590
Height / Height with stand	775 / 1630
Width	480
Weight (kg) Instant/Espresso	64 / 75
Electrical specifications	
Voltage	according to the characteristics plate (+6V/-10V)
Maximum consumption	1200W
Characteristics of the water supply system	
Types of water service connections	Water supply system, stand-alone on stand or with an incorporated tank.
Min. pressure of the water supply system	min 0,098 MPa.; Max. 0,98 MPa
Curb cock diameter	¾" M
Products and serving selection system	
Capacity per soluble product hopper	3 l
Number of selections	12-20
Number of pre-selections	4
Other characteristics	
Maximum working inclination	2º (on any axis)
Sound level	<80 dB(A)
Optimum exterior temper. Environment	1ºC < T > 40ºC; <65% Rel. hum.

1.3.- Description of the main components



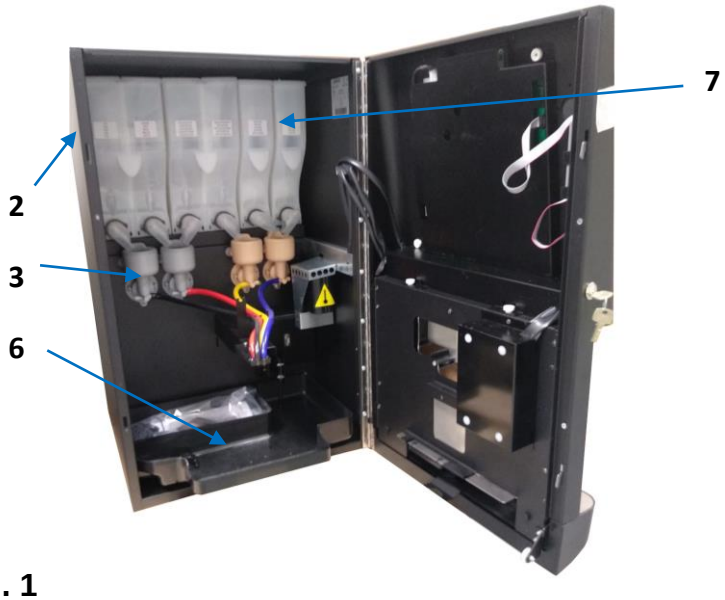


Fig. 1

1	Coffee bean Hopper
2	Cabinet
3	Mixers
4	Espresso coffee unit
5	Coffee bean tray
6	Liquid spill tray
7	Soluble product hoppers
8	Information screen
9	Sellection buttons
10	lift cup

Figure 2.

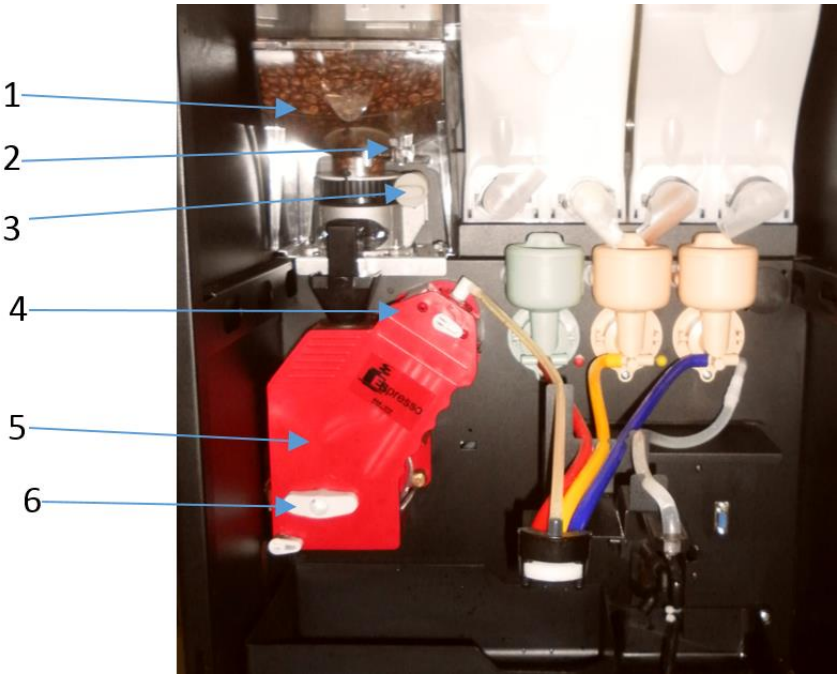


Figure 3.

Fig. 3

1 Hopper

2 Hopper flow gate

3 Grinder regulating handle

4 Uper piston

5 Lower unit

6 Unit securing lever

CHAPTER 2. INSTALLATION AND START-UP

THE INSTALLATION AND OPERATIONS REQUIRED FOR INITIAL START-UP OF THESE MACHINES MUST BE PERFORMED BY QUALIFIED PERSONNEL.

2.1.- Choosing a machine location

THE MACHINE MUST BE PLACED ON A PIECE OF FURNITURE OR SUPPORT, SO IT IS STABLE AND CANNOT BE TIPPED OVER BY ACCIDENT.

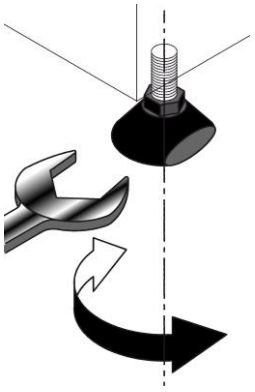
Before choosing the location for your "VITRO S5" machine, keep in mind that if any maintenance or repair work has to be performed, it is possible that the interior of the machine may have to be accessed from the rear. A place must be selected where it is possible to eventually turn the machine around in order to be able to open the rear.

If your machine is equipped with a cup detection system and it has been activated, it must not be exposed to direct or indirect sunlight.

The machine has the elements required to store waste internally (5 and 6, Fig. 1). These elements have been designed for a machine with a medium-low service level that is cleaned on a daily basis.

If these elements are insufficient due to the number of services of the machine, waste may be stored outside the machine. **AZKOYEN** may supply you with a piece of furniture or stand on which you can mount the machine, which feature larger capacity waste containers inside.

You can also place the machine on a countertop and adjust it to ensure that the waste passes through the machine and falls into a container under the countertop (see 2.5 and 2.6).



2.2.- Levelling

Remove the screws that fasten the machine to the transport pallet.

If your machine is not going be installed on a "VITRO S5" machine stand, mount the leg supports that are provided as attachments and level the machine adjusting the legs as needed.

2.3.- Electrical installation

The voltage of the electrical installation must correspond to the voltage indicated on the characteristics plaque located on the back of the machine, and it must not exceed the limits set in each country.

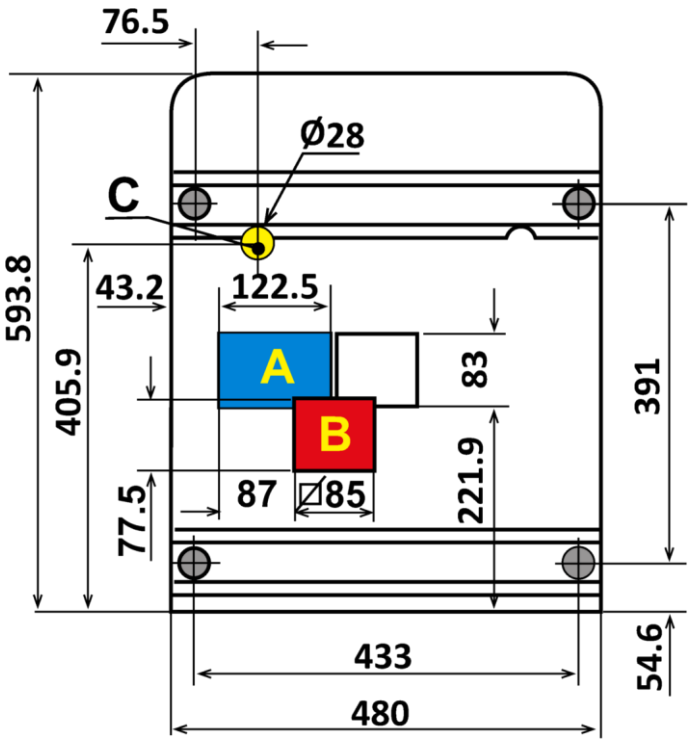
Maximum consumed power: according to the characteristics plaque.

2.4.- Water inlet

Prepare a water inlet in accordance with the indications of the general characteristics table, in the place in which the machine is to be situated. The distance between this water inlet and any electric socket must be at least 1 m. In any event, observe the European Directives.

2.5.- Dimensions required for mounting the machine on a countertop

Take into account the following dimensions before adapting the countertop to mount the machine:



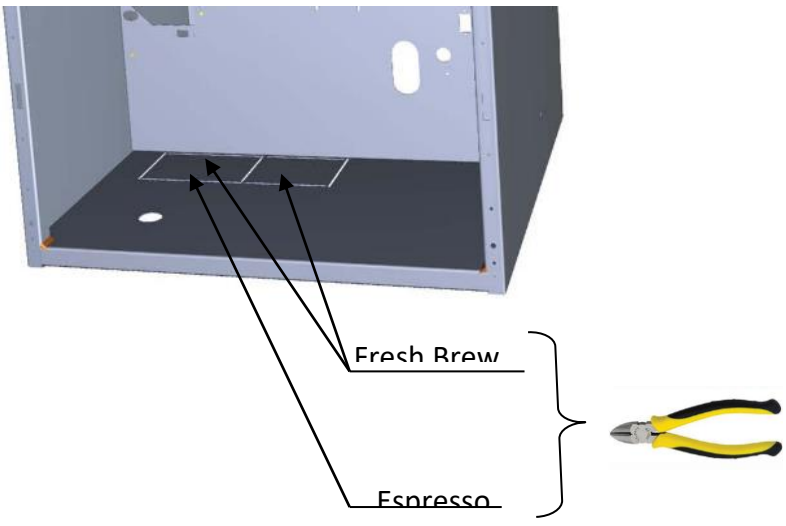
A Coffee bean waste outlet for machines with 1 grinder

B Coffee bean waste outlet for machines with 2 grinders

C Liquid drain tray

If your machine does not have a fresh coffee or coffee bean unit, you only need hole 3.

The unmarked pre-cut hole is for machines with the Fresh Brew Coffee unit. Two holes must be drilled into these machines.

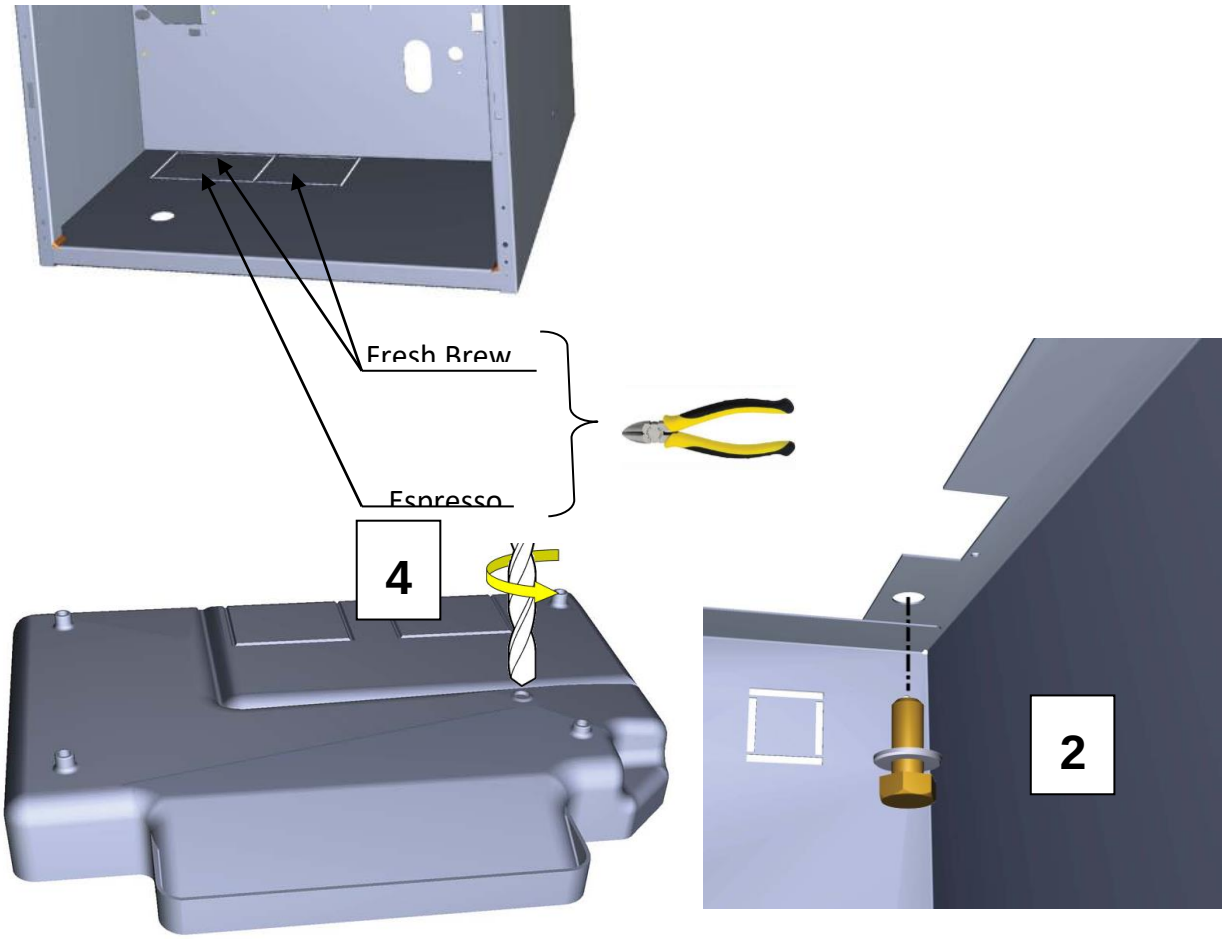


Once the countertop has been adapted and a hole opened for waste, complete the tasks indicated in point 2.6.

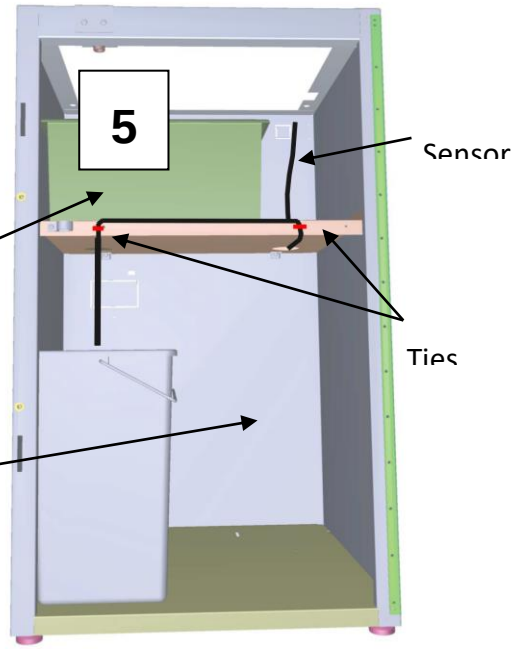
2.6.- Machine installation on a STAND

AZKOYEN can supply a stand especially designed for this range of machines. If you would like more information, consult your distributor.

1. Punch-out the residual waste opening (only for Espresso and Fresh Brew machines)
2. Position the machine on the stand and fasten it using hex screws and washers.
3. Remove the black cap from the base of the machine to clear the drain hole.
4. Drill a drain hole in the plastic tray using an Ø 8 drill bit (you will see the "blind" hole to be drilled at the bottom of the tray.).
5. Remove the sensor cable from the spill tray, fastened to the coin box bracket, and lead it to the waste bin of the stand as shown in the figure. Fasten it to the shelf using the ties that have been provided.
6. Attach the tube for liquid waste to the tray of the machine and guide it to the corresponding container.
7. Place the waste container as shown in the images. The tube used for the solid wastes must coincide with the funnel through which the espresso coffee packets drop in all machines equipped therewith.



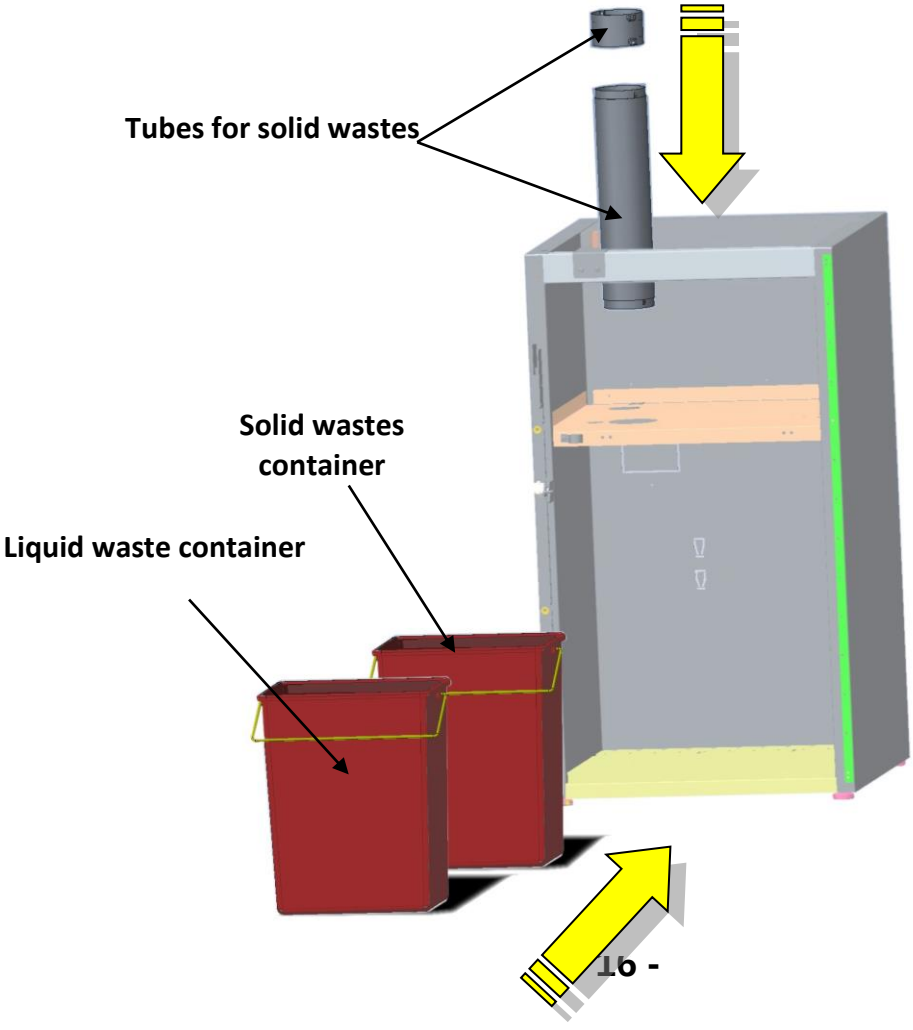
Waste container assembly according to the type of machine



Fresh Brew

Coffee grounds tray

Stand-alone cantainer



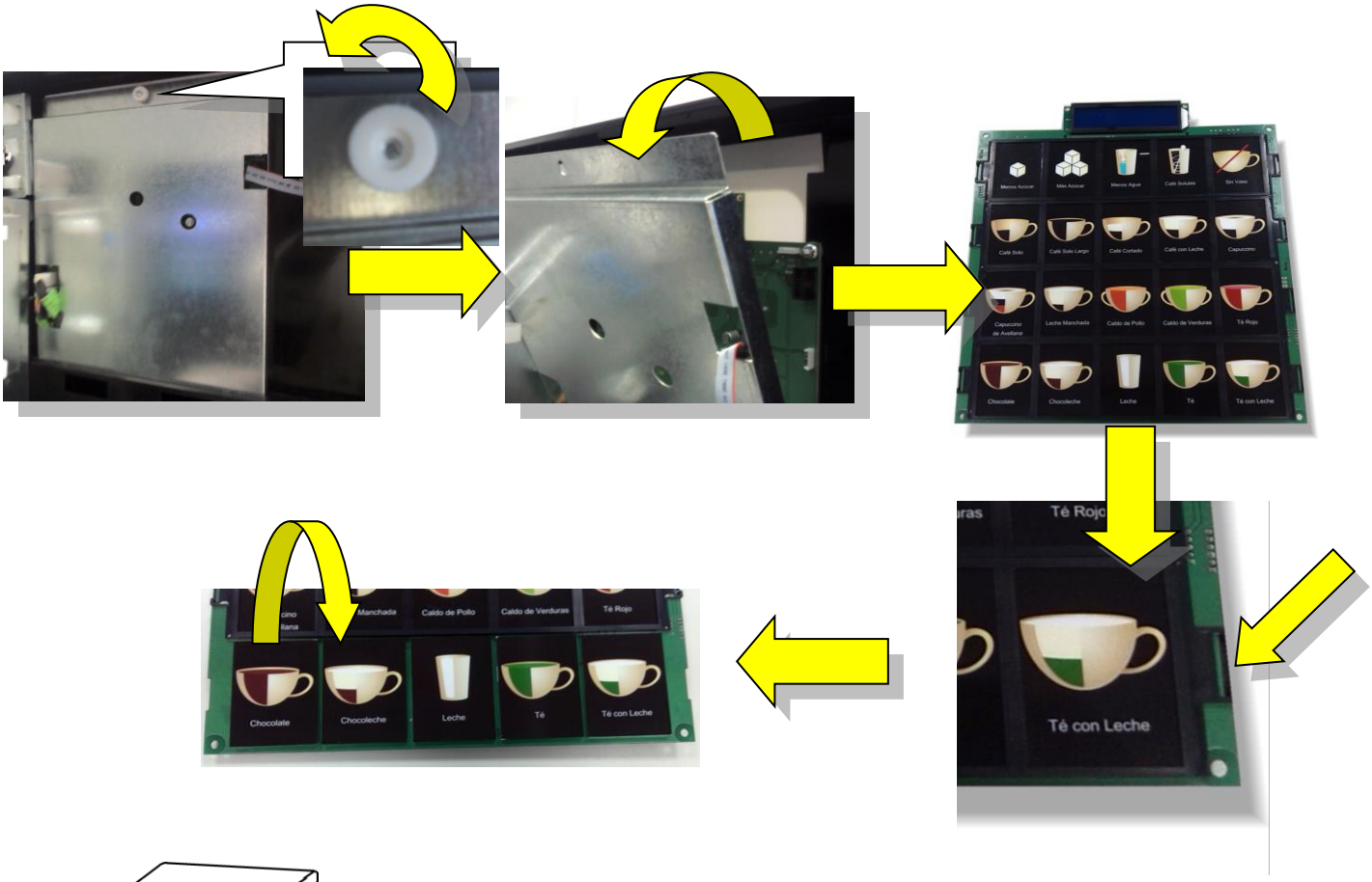
Espresso & Instant

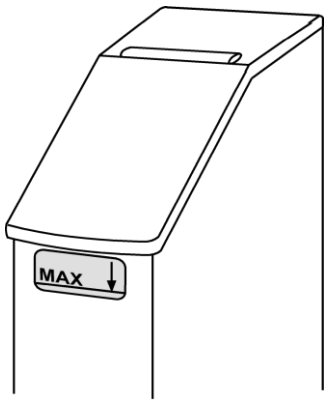
2.7.- Changing the product and price sign

Disconnect the machine and remove the plastic nut that fastens the top of the buttons.

Pull back the cover to remove the selections menu. Press on the side of the label holder to release the row of labels you want to change. Replace it with the desired label and press down on the label holder until the selections menu is fastened in place.

Once the necessary operations have been made, restore the cover and the cups container back to their correct position.





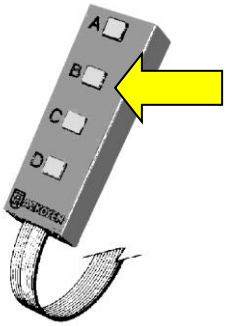
2.8.- Load level labels of the hoppers

Some of the soluble products may require shorter reloading cycles in order to prevent its expiry, or the loss of properties. The machine incorporates "top-level labels" as an additional provision. These will inform the person responsible for the loading the product what is the maximum level of each hopper.

The image shows the maximum height they are to be placed on all the hoppers

2.9.- First cleaning

The system must be cleaned the first time the machine is switched on:



Remove the mixers and clean with hot water

Remove the product hoppers and wash with hot water

Clean the hopper base

Mount everything back on again

Wash the mixers at least 5 times by pressing key B on the programming control.

If the machine has not been used for a period of time, we recommend washing it with this process again before you start it up.

2.10.- Start-up

Once the tank is full or the hose is connected to the water supply system and the current tap is connected, close the door and the machine will start automatically.

CHAPTER 3. FILLING THE MACHINE

3.1.- Soluble product hoppers

The machine may feature up to 6 soluble product hoppers, depending on the model.

These hoppers extract the product with a spindle towards the mixer, in which it is mixed with the water supplied from the boiler.

It is important to ensure that each hopper is filled with the same type of product, because the service configuration activates the hopper programmed in each case.

In other words, for example, do not fill the milk hopper with a different product, since the machine would include it in the services in which the milk service is programmed.

3.2.- Initial filling with soluble product

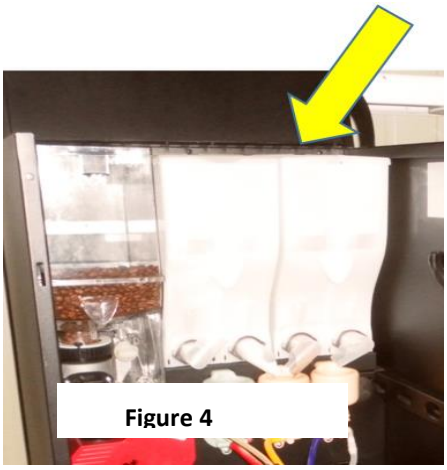


Figure 4

Open the machine door and lift the top cover of the machine in order to fill the hoppers.

Lift the cover of the hopper to be filled and fill with product. Be careful that the product filled corresponds to product for that hopper (each hopper has a label that indicates the product to be filled).

Recommendation: The ramp on which the product falls from the hopper should be turned upwards to prevent unwanted product spillage.

Once the product has been filled, close the hopper cover and proceed to fill the next hopper.

3.3.- Coffee bean group

Coffee beans are stored in the grinder's hopper. When the service is requested, the brewing group is moved to the loading position and the grinder grinds the amount of coffee programmed, sending it to the dosing unit, which will dose the coffee, according to the programmed service time; the coffee will will be dosed from the brewing piston.

Next, the group moves to the brewing position and the piston presses the coffee capsule down.

The pump injects the programmed amount of water into the group during the programmed time. Finally, the espresso coffee is poured into the cup.

There are three coffee bean groups, according to their adjustment capacity:

- **AZK V10** -> brews coffee, preparing doses from 5 to 8 g of coffee, with manual adjustment, if the grinder features a timed dosing system.
- **AZK V20** -> brews coffee, preparing doses from 10 to 14 g of coffee, with manual adjustment, according to the programmed services.
- **AZK V30** -> brews coffee, preparing doses from 7 to 14 g of coffee, with automatic adjustment, according to the programmed services.

AZK V10

AZK V20

AZK V30

3.4.- Filling with coffee beans

Remove the hopper cover and dump the content of the coffee package inside until the desired measure is reached.

If you prefer to take the hopper out of the machine in order to fill it more comfortably, remember that the hopper flow gate must be closed in order to prevent the content of the hopper from spilling (Fig. 4).

3.5.- Initial filling with water

All of the machines automatically fill the boiler when the machine is started.

BEFORE CONNECTING THE MACHINE, ENSURE THAT THE MACHINE HAS A WATER SUPPLY FOR FILLING THE BOILER (check the connection to the water supply system or verify that the water tank is filled).

3.6.- Cup detection

Some models feature a cup detection system that detects cups in the service area. There are two detection methods:

Cup presence. If this system has been activated, the machine cannot start the service until a cup is detected.

Cup presence and size. In addition to detecting presence, this includes the identification of the cup size. If your machine features this system, it can change the service volume, according to the type of cup.

The **458 – IDETECT** function (see programming settings) is used to activate or deactivate this system.

3.7.- Initial programming

The machine will be sent with the programming predefined by AZKOYEN. In order to modify any of the values of the functions, enter the *basic menu* (see chapter 4) and program the new functions.

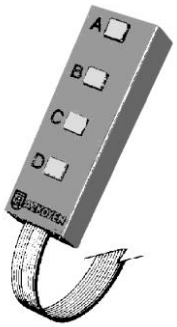
Recommendation: It is a good idea to identify each machine in order to record accounting, consumption, incidents, etc. Function 470 is available to programme said code.

ATTENTION: THE ACTIONS DESCRIBED IN POINTS 3.5 AND 3.7 MUST BE PERFORMED WITH THE MACHINE "ON" AND THE DOOR OPEN. THEY MAY ONLY BE PERFORMED BY TECHNICAL PERSONNEL AUTHORISED BY AZKOYEN

CHAPTER 4. CONFIGURATION AND PROGRAMMING

4.1.- What is programming?

The machine is cable of performing a series of functions that you can configure. The programming is the actions that you establish in order to determine how the machine will operate in certain functions.



The machine is cable of performing a series of functions that you can configure. The programming is the actions that you establish in order to determine how the machine will operate in certain functions.

4.2.- Programming control unit

The keys of the programming control unit can be activated in two ways: by simply pressing the key once and by holding the key down for more than 3 seconds.

Operation of the programming control unit in the normal sales mode.

	SINGLE PRESS OF THE KEY	KEY HELD
Key A	One free sale	Enters into the hierarchical programming menu.
Key B	Blender wash	Shows the temp. on the display
Key C	Enters into the basic programming menu	Runs a function directly.
Key D	Allows external programming	Programming of the basic menu functions

The operation of the programming control unit in accessing the functions

Press the C key of the programming keypad. If there have been incidents during service (breakdowns, empty hoppers, etc.), they will appear on-screen. Press the A key again to access the Functions menu (if there have been no incidents, pressing the C key once will suffice). The first function included in the function menus will appear.

	SIMPLE PRESS
Key A	Function goes forward
Key B	Function goes backward
Key C	Exits the programming
Key D	Accesses the function that is displayed at that moment

Operation of the programming control unit in the programming mode.

There are four “editing modes” for communicating with the machine in order to program values in the functions.

Alphanumerical (AB1)		**PRESSING THE KEY**	
	Key A	The digit being edited goes up one character in the table.	
	Key B	The digit being edited goes down one character in the table.	
	Key C	Erase the digit being edited, and it returns to editing the previous digit.	
	Key D	**SINGLE PRESS OF THE KEY**	**KEY HELD**
		The character is validated, and it goes to editing the next digit.	The character being edited is not validated, and it exits from the editing mode.
Numerical (001)	**PRESSING THE KEY**		
	Key A	Increases the digit being edited (if it is a sign, it changes)	
	Key B	Decreases the digit being edited (if it is a sign, it changes)	
	Key C	It returns to editing the previous digit (if it is the first number, it edits the sign, and if it is the sign, it exits and validates).	
	Key D	It advances to editing the next digit (if it is the first number, it edits the sign, and if it is the sign, it exits and validates).	
Options List (ABC)	**PRESSING THE KEY**		
	Key A	The next option on the list is accessed (if it is the last option, it goes to the first).	
	Key B	The previous option on the list is accessed (if it is the first option, it goes to the last).	
	Key C	It goes up one execution level.	

4.3.- Direct access to a function.

By keeping C pressed, the screen displays FUNCTION 000. Choose a function following the numerical editing method.

4.4.- List of functions

The following list details all of the programming functions of the machine in the order in which they are displayed on the machine, thereby indicating the message that will be displayed on the screen, a brief description of the function and a comment about how to operate with the function, if necessary.

The symbol of the editing mode that is used with the function is displayed next to each function. The symbols are the following:

EXE Direct execution function.

AB1 Alphanumeric editing mode.

001 Numerical editing mode.

ABC Option list editing mode.

PROP Editing mode proper to the function

030 TEST MACHINE	ABC	MACHINE TEST BY OPTION LISTS.
	Choose the elements to test.	
110 MONEY/SELECT	EXE	SALES BY SELECTION (CASH)
	Press the desired selection and the screen will display the amount of that selection. Press a new selection in order to continue reading the various amounts.	
120 TOTAL MONEY	EXE	TOTAL AMOUNT OF SALES
	The requested data are displayed on screen.	
201 PRICES PROGR	001	PRICES WITH COINS
	Press the selection and enter the new price. To program another selection, press the selection and repeat the steps. Press C to end.	
204 SINGLE PRICE	001	SINGLE PRICE FOR ALL SELECTIONS
	Program a price. This price is assigned to all selections.	
220 FREE SALE	ABC	FREE SALE
	Select to place the machine in free sale mode for more than one service.	
300 SELECTIONS	ABC	SELECTION-SERVICE ASSOCIATION
	Select the name of the service to associate. Press the desired key where the service is going to be located.	
315 SERV.PROGRAM	PROP	PROP SERVICE PROGRAMMING
	See point 4.5	
420 ADVERT.MESS.	AB1	ADVERTISING MESSAGE
	Program the advertising text to be displayed on the screen when the machine is at rest.	
458 IDETECT	ABC	ACTIVATING THE CUP DETECTION SYSTEM
	Programme the activation/deactivation of the cup presence (or volume) detection system (if your machine has this system installed).	
461 TEMPERATURE	001	BOILER TEMPERATURE
	Program the temperature of the boiler water.	
465 AUTONOMY	ABC	STAND ALONE UNIT YES/NO
	Program whether the stand's stand-alone equipment is used or not.	
490 HOPPER NAME	AB1	NAME OF THE HOPPERS
	Program the text assigned to each hopper.	
491 SERV. NAME	AB1	NAME OF THE SERVICES
	Program the text assigned to each service.	
510 DATE/TIME	001	ADJUST TIME AND DATE
	Program the date and then the time.	

4.5.- Service programming.

4.5.1.- What is a service?

A service is the act that the machine performs every time that a customer presses a selection.

When programming a service, each step that the machine needs to take to complete the selected operation must be programmed.

For example, to prepare instant coffee with milk, several actions must be performed:

1º - Pour hot water into the cup.

2º - Add coffee and stir.

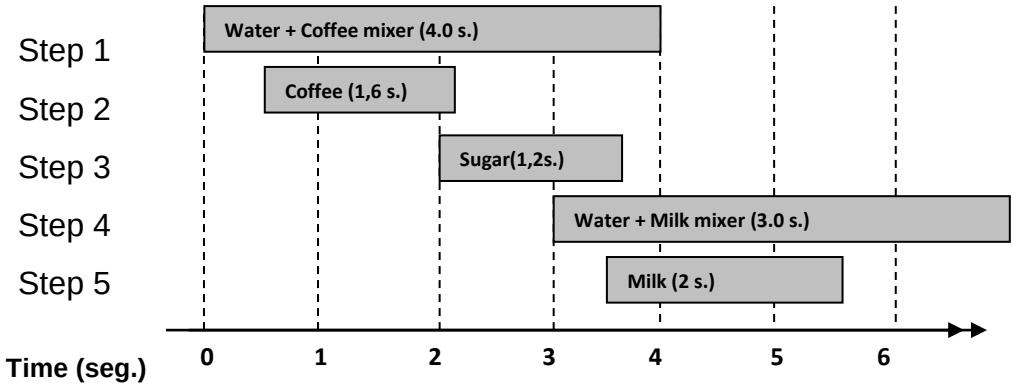
3º - Add sugar.

4º - Add milk

5º - Mix.

It is also a good idea for the actions to overlap each other in order to shorten the service time and to get the optimum mixture.

The service sequence of coffee with milk in the machine could thus be stated as follows:



4.5.2.- Function 315 PROG. SERVICE.

The complete configuration of each service can be programmed at function 315.

Select the service to be programmed by pressing the corresponding selection button or using the A and B keys to locate the service.

The following may subsequently be performed:

- **MODIFY** an already-programmed step.
- **ADD** a new step to a service, or
- **DELETE** a step from a service.

Change the values using the programming control keys. The functions of the keys are as follows:

- A or B - Go up or down the "steps"
- C or D - Increase or decrease the amounts (move the bar forward or backward in the figure) The water volumes are measured in seconds.
- To Delete a step or to Create a new one, simply select the desired option using the B key and press D.

¡ WARNING!

AFTER CHANGING THE COFFEE DOSAGE, OR AFTER ADJUSTING THE COFFEE GRIND, CHECK TO SEE IF THE SERVICES ARE CORRECT, INCLUDING THE "EXTRA COFFEE" PRESELECTION COMBINATIONS.

DO NOT EXCEED THE DOSAGE OF 8 GRAMS OF COFFEE IN THE SERVICES USING THIS

CHAPTER 5. ANOMALY CONTROL AND MAINTENANCE

5.1.- Reset

If the machine is out of service, enter and exit programming by pressing key C on theprogramming box twice.

5.2.- Possible incidents during a service.

- **If the machine is without of coffee beans** or if there is a problem with serving espresso coffee, the machine allows services of soluble product.
- **Dregs tray is full**. The water inlet is closed and the boiler is turned off until the machine is no longer in FDS (out of service)

5.3.- Service Meters

To facilitate maintenance, the machine is equipped with internal meters that will communicate the amount of services performed and any element that needs to be inspected.
The notification shall consist of an exclamation mark at the bottom left of the screen, similar to that shown when there is an incident. The machine can continue normal operation despite the notification.
The three meters are:

- LITRES X FILTER -> Indicates the amount of water that has passed through the filter since the last meter reset.
- ESPRESSO GROUP SERVICES -> Indicates the number of services performed by the espresso group since the last meter reset.
- FRESH BREW GROUP SERVICES-> Indicates the number of services performed by the fresh group since last meter reset.

The three meters are active, regardless of whether your machine can support different groups or not. If your machine does not include the Fresh Brew group the meter will logically remain at 0 and therefore the display will never prompt that element.
Enter programming and the display will show the affected element. Refer to the Technical manual to reset the meters.

IF THE MACHINE IS NOT GOING TO BE USED AND WITHOUT SUPERVISION DURING A PERIOD OF TIME, WE RECOMMEND CLOSING THE WATER TAP CONNECTED TO THE MACHINE. MALFUNCTION OF THE INPUT VALVE COULD FLOOD THE MACHINE

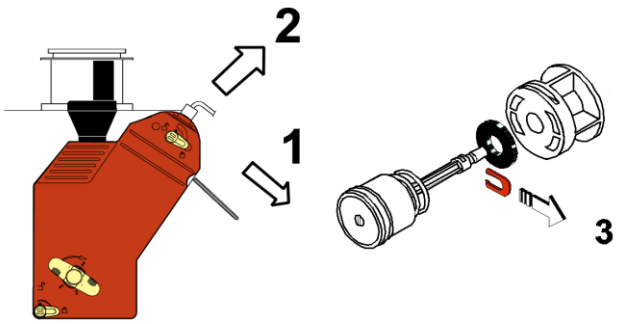
5.4.- Disassembly of the coffee bean unit

Use the 030 function to place the group in standby.

Groups AZK V10 & V20. In order to disassemble the complete lower unit, turn the anchor levers of the unit and remove the unit by pulling it outwards.

In order to remove the brewing piston,

1. Remove the fastening pin.
2. Pull up on the piston.
3. In order to completely disassemble the piston, remove the fastening clip.

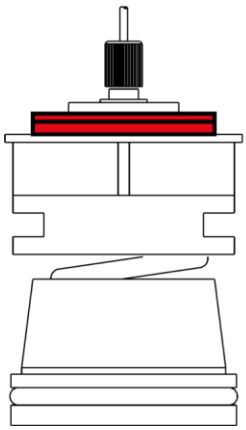


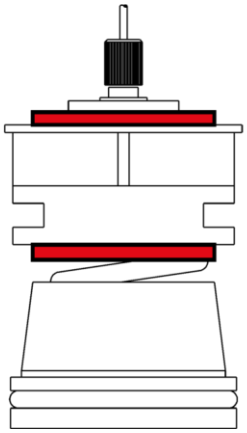
If you wish to **dismantle the entire lower group**, dismantle the group water input hose and then turn the group securing levers and extract the group by pulling it out.

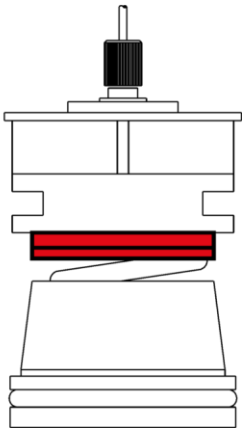
5.5.- Adjustments and regulation

Adjusting the coffee dose in espresso machines with AZK V10 and V20 groups. The group's brewing piston features a washer that can be used to increase or decrease the capacity of the brewing cylinder and adjust the quantity of ground coffee it can contain.

The diagram below indicates the position of the washer to adjust the desired quantity for the AZK V10 and AZK V20 groups.







Group	1	2	3
AZK V10	8 gr. - 7gr.	7 gr. - 6 gr	6 gr. - 5gr.
AZK V20	14 gr. - 13 gr.	13 gr. - 11 gr.	11 gr. - 10 gr.

The dose is adjusted at the factory, in group V10, with 6.5 g of ground coffee (100% natural coffee).

Machines with the **AZK V30** group feature an automatic adjustment system, according to the values programmed in each service.

Calibrating the COFFEE GRINDER. Use function F030 to calibrate the grinder and ensure that the correct dose is supplied.

Once it has been calibrated, each grinder service will adjust the coffee serving, according to the program using function 315.

For example, every 2.45 seconds of operation of the grinder are equivalent to 7 g. We also recommend adjusting the 22-25 g calibration to 10 seconds.

IMPORTANT NOTE: machines with the AZK V10 and V20 group require the cylinder capacity to be adjusted by changing the washer position, as shown in the diagram above; washers in the upper position for a higher capacity and in the lower position for a smaller capacity. Failure to adjust this properly may cause the group to malfunction and also cause breakdowns.

Calibrating the grinder.

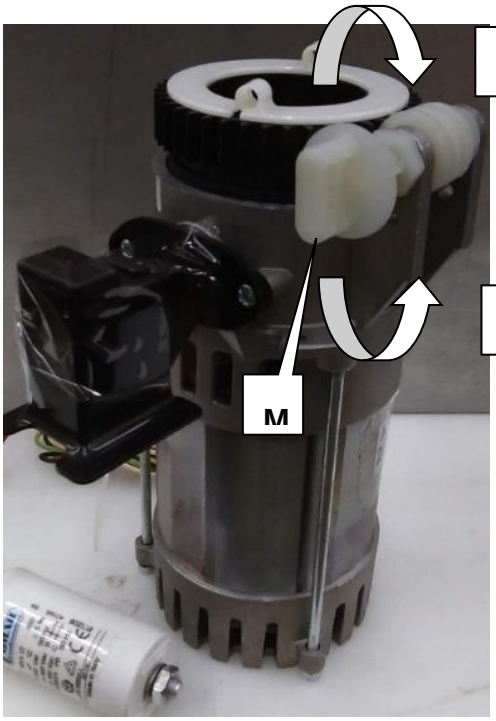
1. Remove the coffee grinder unit, as described in point 3.7.
2. Access the programming menu (see Chap. 4) and select function F030. Press the A and B buttons until the display shows “GRINDER”. Next, press the D button.
3. The machine will grind and extract coffee during 10 seconds. Place a container at the grinder outlet to collect the ground coffee.
4. Weigh the extracted product and enter the value using buttons A and B. Validate using button D.

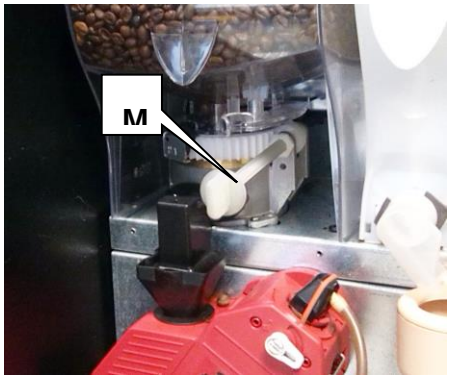
The machine will now indicate the weight of the product in grams.

Adjusting the grind point. The grinder leaves the factory regulated in the optimum grind position. If you want to change the degree of ground of the coffee, proceed as follows:

The grinder adjustment lever is located on top of the Group (**M**). Use it to adjust the degree of ground of the coffee you want. You can move one or two positions of the regulator with the grinder motor running, to avoid locking the wheels with the coffee.

A “good coffee” is one which has been brewed at 9 kg/cm^2, which is equivalent to a brewing time of between 15 and 20 sec.





Verify that the dosage is correct whenever an adjustment is made and perform a few coffee services to ensure proper operation

Adjusting the water temperature in the boiler. The machines are equipped with a single boiler; therefore the programmed temperature will be implemented in both the espresso services as well as in the services of other soluble products.

The manufacturer recommends a temperature between 88°C and 92°C. Use the 461 function to program the temperature values.

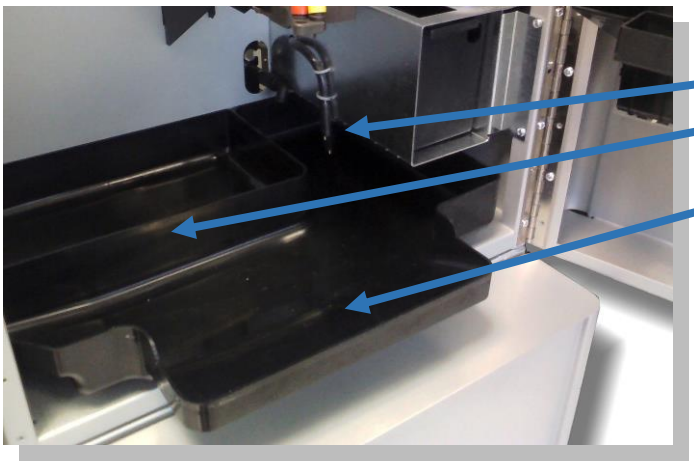
Is important to avoid that the water exceeds its point of boiling. In cities to the level of the sea the pressure is of 1 atmosphere and the temperature of boiling of the water is of 100°C, however, as increases the height decreases the pressure atmospheric and decreases the temperature of boiling. Therefore, is important verify this factor in cities to more than 1500mts on the level of the sea and avoid that the temperature of the water in the boiler exceeds the temperature of boiling. Examples:

Height (on the level of the sea)	**Water boiling Temperature**	**Maximum recommended boiler temp. (Función 461)**
1500m	95°C	92°C

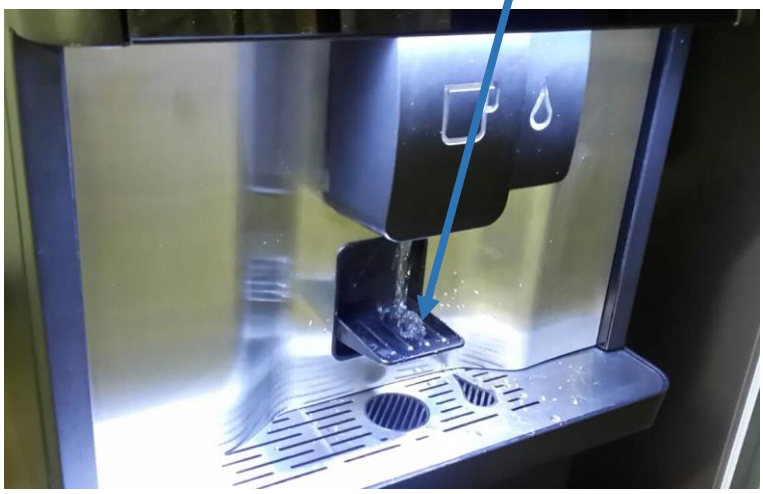
1800m	94°C	91°C
2100m	93°C	90°C
2400m	92°C	89°C
2700m	91°C	88°C

CHAPTER 6. CLEANING THE MACHINE.

6.1.- Components that require regular cleaning



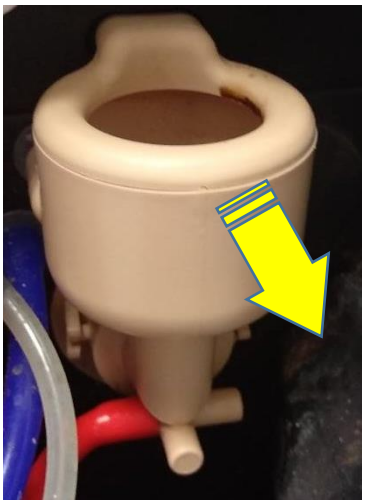
1. Sensor level of liquid wastes
2. Coffee grounds dregs tray (espresso machines only)
3. Liquid spill tray
4. To clean lift cup (by pressing B in the programming box and closing the door instantly of the machine with lift cup down)



Mixers. Pull the mixer out to clean it or replace with with a clean one.

Remember to fit the two outlet grips on the hoppers facing upwards to prevent the product from falling out, which could stain the machine when the mixer is removed.

When the clean mixer has been mounted, fit the rubber guards and the hopper grips.



Depending on the number of services that the machine provides, the machine components must be cleaned more or less regularly.

The following table details the recommended cleaning and frequency:

Once a week or every 700 services	• Clean the mixer (Press B in the programming unit). • To clean lift cup (by pressing B in the programming box and closing the door instantly of the machine with lift cup down). • Clean the surface of the mixer area • Clean the drip tray, it is located at the back of the door. • Clean the services compartment. • Empty the waste tray of coffee beans. • Clean the front of the machine after performing the aperations.
Once a month or every 5,000 services	• Remove the mixer blades and the nozzle support. Wash with hot water • Clean intake manifolds. • Remove the product hoppers and clean the base of the area.
Every 3 month or 10,000 services (espresso machines)	• Make a cleaning of the brewing chamber of the coffee group (See 6.2)
Once a year or every 25,000 services	• Perform all of the above. • Change the coffee filter of the group (see 5.4). • Wash the filter using the Cleaning Cycle (see 6.2), or retreat to thoroughly clean with detergent.
Once every 4 years or every 20,000 services	• Check the wheels of the grinder and replace if necessary. This task can only be accomplished qualified personnel.

For use in USA

Food contact parts must be washed with detergent, rinsed with clean water, and sanitized with an approved sanitizer and air dried in accordance with the FDA FOOD Code. We recommend STERA SHEEN, approved by NSF sanitizer.

6.2.- Cleaning cycle for the group brewing chamber

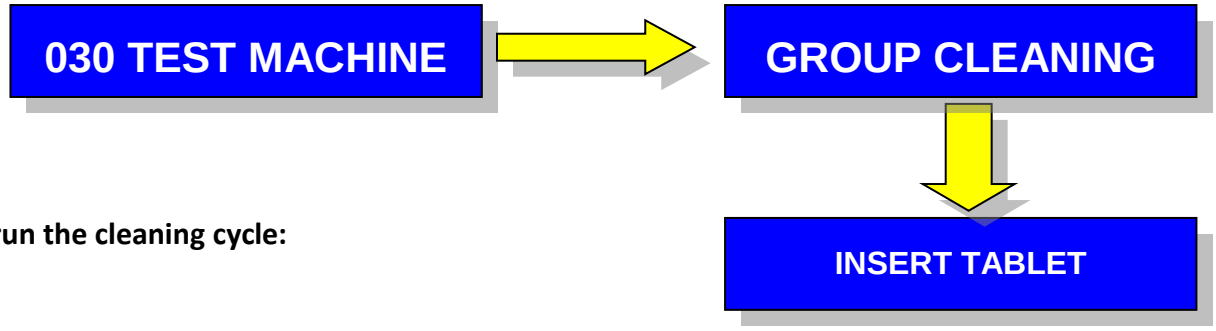
For hygiene reasons, this process should be performed at least once every three months in order to eliminate coffee particles from the brewing chamber, o 10.000 services.

Use special detergent tablets for super-automatic coffee machines. There are tablets weighing 2 to 3 g available on the market.

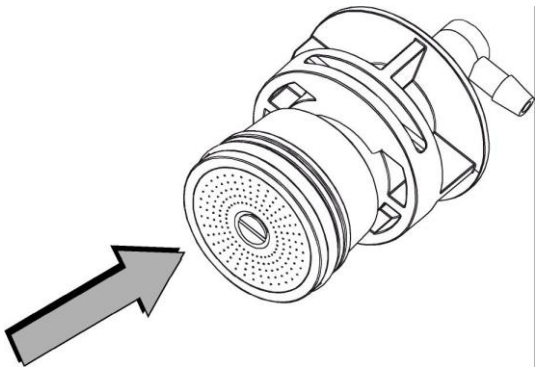
Before starting this operation

- That the dregs tray is fitted on the machine, as liquids will fall in it.
- You also need a cleaning tablet ready for use.
- Once the machine starts the cleaning cycle, it cannot be stopped. If you want to stop the cycle for any reason, you must switch the machine off and turn it back on again.
- When the cleaning cycle has finished, the machine will resume normal service.

To run the cleaning cycle:



For correct cleaning, you should remove the brewing piston and clean the upper filter with cleaning paper or a brush to eliminate any particles which may remain on the filter. To dismantle the piston, follow the instructions in 5.4.



AZKOYEN CAN SUPPLY YOU WITH AN APPROVED PAD KIT. REQUEST REFERENCE 09725700 FROM YOUR TECHNICAL SERVICE.

6.3.- Exterior cleaning

Always use lint-free **smooth or chamois cloths** for all operations.

Use lukewarm water (20°C to 40°C) and **neutral pH cleaning products** to clean the outer surfaces of the cabinet and service area (soap, neutral shampoo, etc.)

Alcohol-free window cleaner should be used to clean the selection panel.

In the event of persistent stains (grease, beverages, etc.), use a solution of water and sanitary alcohol (96º ethanol) at a 1% concentration.

Anexe 1. THE TREATMENT, COLLECTION, RECYCLING AND DISPOSAL OF THIS DEVICE

DIRECTIVE 2002/96/CE ON THE TREATMENT, COLLECTION, RECYCLING AND DISPOSAL OF ELECTRIC AND ELECTRONIC DEVICES AND THEIR COMPONENTS

INFORMATION

1. For countries in the european union (EU)

The disposal of electric and electronic devices as solid urban waste is strictly prohibited: it must be collected separately. The dumping of these devices at unequipped and unauthorized places may have hazardous effects on health and the environment. Offenders will be subjected to the penalties and measures laid down by the law.

To dispose of our devices correctly

a) Contact the Local Authorities, who will give you the practical information you need and the instructions for handling the
b) waste correctly, for example: location and times of the waste collection centres, etc.
c) When you purchase a new device of ours, give a used device similar to the one purchased to our dealer for disposal.

The crossed dustbin symbol on the device means that:

- When it to be disposed of, the device is to be taken to the equipped waste collection centres and is to be handled separately from urban waste;

- The producer guarantees the activation of the treatment, collection, recycling and disposal procedures in accordance with Directive 2002/96/CE (and subsequent amendments).

2. For other countries (not in the EU)

The treatment, collection, recycling and disposal of electric and electronic devices will be carried out in accordance with the

laws in force in the country in question