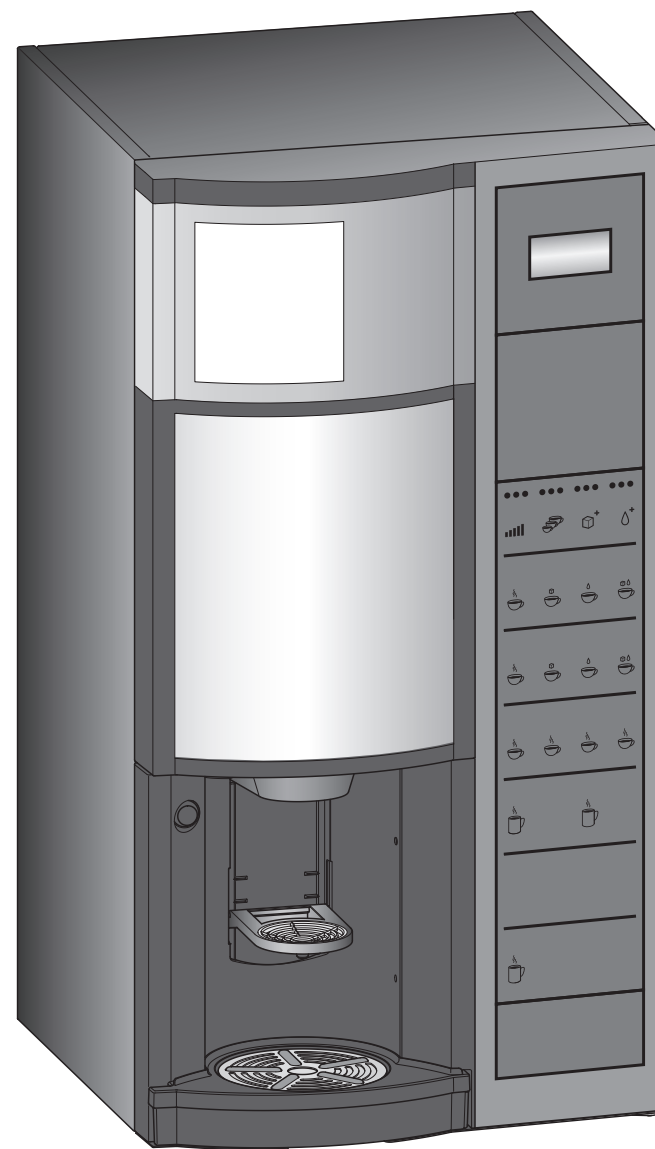


WITTENBORG

OPERATOR MANUAL

ES 7100 PLUS



H0412EN00

10.2011

The symbol indicates that the machine may not be disposed of as ordinary waste; it must be disposed of in accordance with the provisions of the European directive 2002/96/CE (Waste Electrical and Electronics Equipments - WEEE) and of any resulting national laws, for preventing any possible adverse effects on the environment and on human health.

For correct disposal of the machine, contact the dealer from whom you have purchased the machine or our after sales service.

All packing materials shall be disposed of in a manner which is safe for the environment.



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INTRODUCTION

According to the requirements of the customer, the service technician can program different functions into the vending machine.

The machine dispenses

- hot espresso drinks
- hot instant drinks
- hot water.

or

- hot espresso drinks
- hot/cold instant drinks
- hot water.

Use only fresh coffee beans or instant products made for vending machines.

The machine is delivered with direct selection buttons. All communication with the machine, such as drink selection, rinsing functions, data retrieval and settings, is carried out by using the direct selection buttons.

All parts to be cleaned are designed in a light blue colour (for regular cleaning) and in a dark blue colour (for deep cleaning). All parts of action are supplied in a green colour.

If the vending machine is not used according to its purpose, the manufacturer cannot take on any liability.

This operator manual is valid for several variants of the vending machine. Therefore, it is possible that in this operator manual you may find instructions for operating elements that are not installed in your vending machine.

This technical documentation is part and parcel of the vending machine and must always follow the machine in case it is moved or by transfer of ownership.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

SAFETY

- Before starting installation and using the machine, it is first necessary to carefully read and understand the instructions contained in this manual, as they offer important information on installation safety, operating instructions and maintenance.
- This manual describes the loading and routine maintenance operations which are carried out in areas of the machine accessible with simple use of the door key, without using any other tools.
- The vending machine may not be subject to frost during operation, storage and transport.
 - If there is the risk of frost in the area of the installation site of the machine, voltage to the machine may not be disconnected.
 - If there is the danger of damage due to frost, the service technician must check and replace boiler, hoses and valves if required prior to reconnecting the vending machine and he should additionally carry out a functional test.
- The vending machine may not be installed outside.
- The vending machine should only be installed and repaired by qualified personnel, who are trained in the correct use of the machine according to the standards in force and who have the specific knowledge of the machine functioning from a point of view of electrical safety and health regulations.
- Safety devices must not be bridged or put out of function.
- The vending machine must be connected to the drinking water line and to the electric line in compliance with local regulations.
- The vending machine has to be placed in a horizontal position.
- The vending machine must be connected to a secured electric circuit.

We recommend to install a fault current safety switch. The connections must be made using an earthed safety plug socket complying with valid regulations.
- After the machine has been installed, the power supply plug must be accessible.



Never touch the power supply plug with wet hands or plug it in if the plug itself is wet.



The liquids dispensed by the vending machine are very hot! To prevent scalding, hands (and/or other parts of the body) must be kept away from the outlets while drinks are being prepared and dispensed.

- If the power supply cable of the vending machine is damaged it may only be replaced by a service technician.

- Do not attempt to fill several cups by pressing the pot button. There is danger of injuries.
- Only authorised and qualified personnel may clean, fill up and set the vending machine.
- The vending machine may not be cleaned under a water jet and is not suitable for installation on surfaces next to which water jets are being used (e.g. for cleaning).
- Use only original spare parts.
- Observe the local regulations!
- Regular cleaning of the vending machine is necessary for functional and hygienic reasons.



When cleaning, take care of sharp edges. There is danger of injuries!

- To clean the cabinet only use cleaning agents approved by the food industry.
- Clean the inside and outside of the vending machine by using a damp cloth and do not splash it.
- After cleaning, make sure that all components are correctly reinstalled.
- Every machine is identified by its own serial number indicated on the rating plate attached at the rear of the vending machine. This plate is the only one acknowledged by the manufacturer as identification of the machine. The technical data of the vending machine are given on the rating plate.



When the yellow special key is inserted in the slot of the door switch, the voltage is re-established to the machine.

The door can be closed only after removing the key from the door switch.

If power is turned on, be careful not to touch moving parts and electrical components.



Door switch:
When the door is opened, a special switch ensures that there is no access to energized or moving parts.

Any operation requiring the machine to be energized with the door opened must be carried out **exclusively** by qualified personnel informed about the specific risks of such situation.

The machine may be energized by qualified personnel by inserting a special yellow key into the door switch.

Before starting any maintenance operation requiring parts of the espresso brewer unit to be removed, the machine must always be switched off.

By means of class 1 LEDs. LEDss are generally shielded by a glass front or an aesthetic panel. The light of LEDs may be noxious if you directly look at it without these panels.

Technical data

TECHNICAL DATA

The technical data of the vending machine are given on the rating plate.

The vending machine is suitable for indoor use only.

Dimensions vending machine	Height:	min. 850 mm (without levelling feet), max. 875 mm (with levelling feet)
	Width:	450 mm
	Depth:	378 mm (cabinet), 475 mm (cabinet+door)

Weight	Approx. 68 kg (without ingredients)
---------------	-------------------------------------

Electric connection	Power supply:	230V, HZ Lines: Single line+neutral+earth (IEC-standard) Brown = line Blue = neutral Yellow/green = earth
----------------------------	---------------	---



The vending machine must be earthed! In addition, it is recommended to install a fault current safety switch.

	Power consumption:	1800W Heating element: 1450W
	Connecting cable:	Approx. 1.8-3.5 m (varies, depending on local requirements).
	Fuse:	Transformer, primary: 2A Transformer, secondary (on VMC): 8A

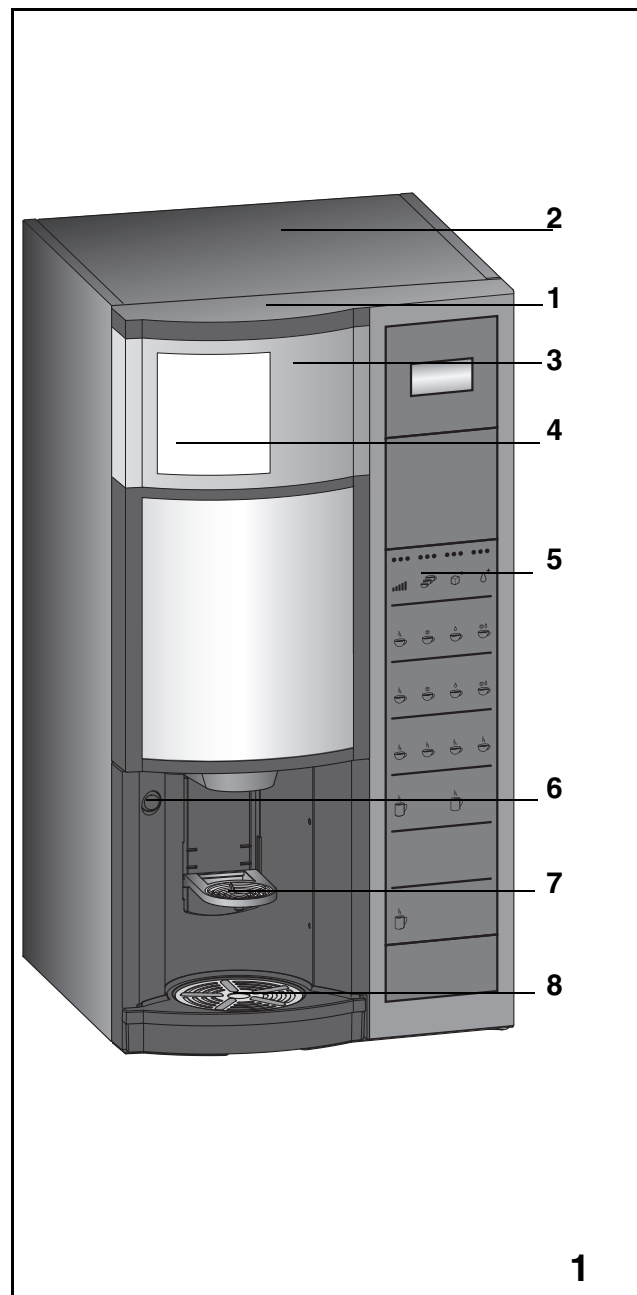
Water connection	Water system connection:	The vending machine must be connected with the potable water system according to the provisions in force in the place of installation of the equipment.
-------------------------	--------------------------	---

	Min. back pressure	without chiller: 0.8 bar (0.08 MPa) with chiller: 1.5 bar (0.15 MPa)
	Max. pressure:	without chiller: 10 bar (1.0 MPa) with chiller: 8 bar (0.8 MPa).

	Hose connection:	Connect the water network with the 3/4" gas union of the water inlet solenoid valve by means of a tube that can support the network pressure and of a type suitable for foodstuffs (min. inner diameter 6 mm.).
--	------------------	---

		<p>It is recommended to apply a water tap on the water network outside the machine in an accessible position.</p> <p>Let water come out of the water network until it is clear and free of any trace of dirt.</p>
Capacities	Boiler capacity	0,6 l
	Solid waste container:	Approximately 7 l
	Liquid waste container:	Approximately 2.5 l
	Drip tray:	Approximately 0.4 l
	Standard espresso coffee bean canister:	Approximately 6 l (2.2 kg)
	Standard Instant ingredient canister:	Approximately 2.6 l
Further system requirements	Ambient temperature.	Min. 4°C - max. 36°C (-2/+0) at 80% RH
	Acoustic emission:	The A-weighted sound pressure level is below 70 dB.
	Subject to changes.	

Product presentation



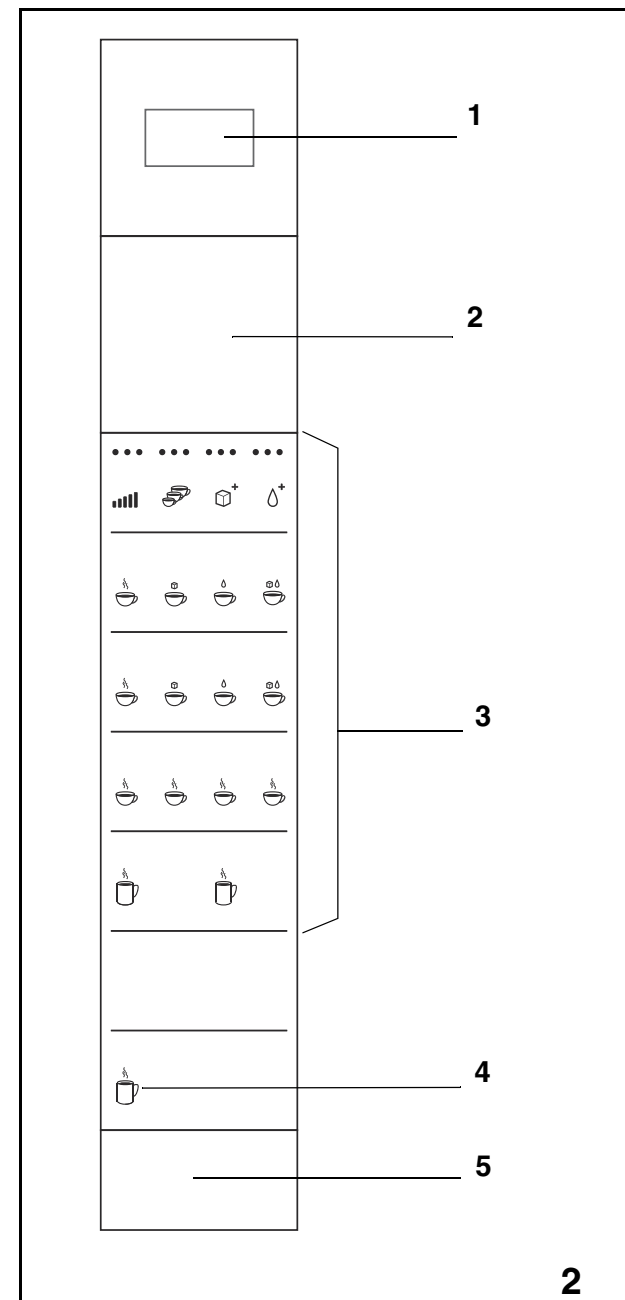
Vending machine components

Machine front (fig. 1):

- 1 Door
- 2 Cabinet
- 3 Advertising poster
- 4 Coffee bean canister
- 5 Operating panel
- 6 Door lock
- 7 Cup carrier
- 8 Pot platform

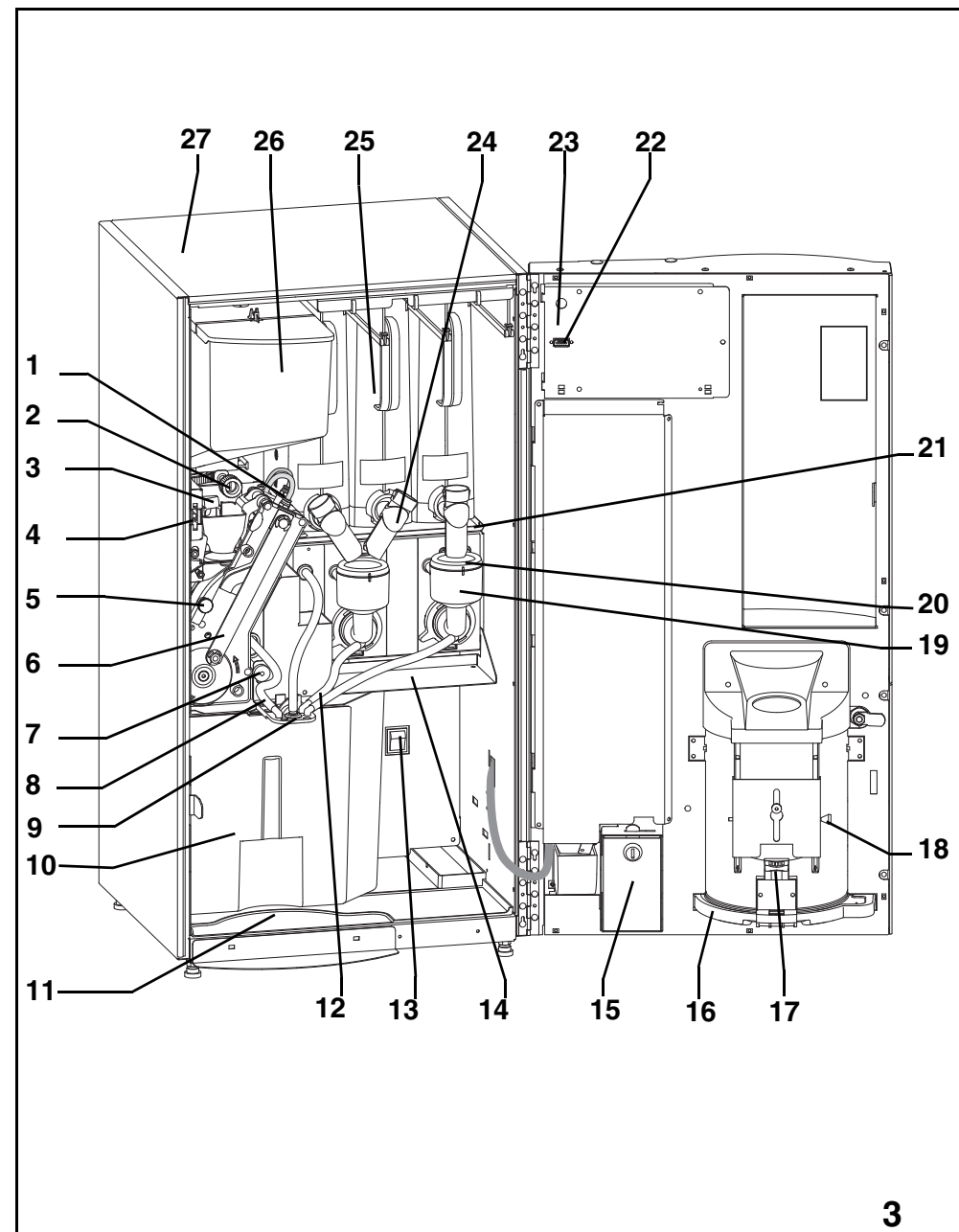
Operating panel (fig. 2):

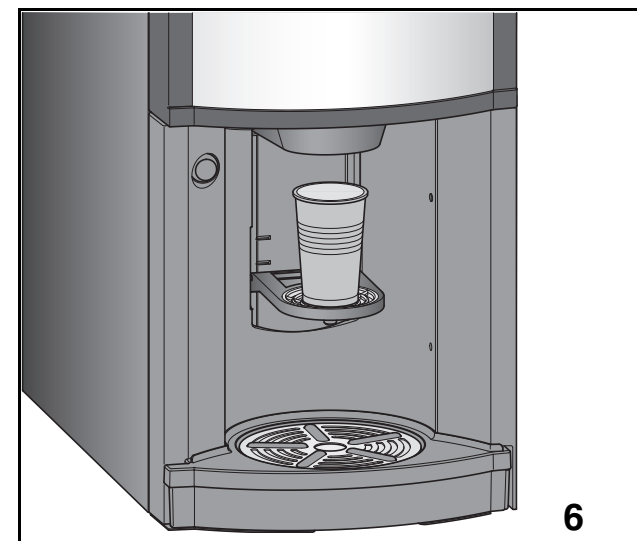
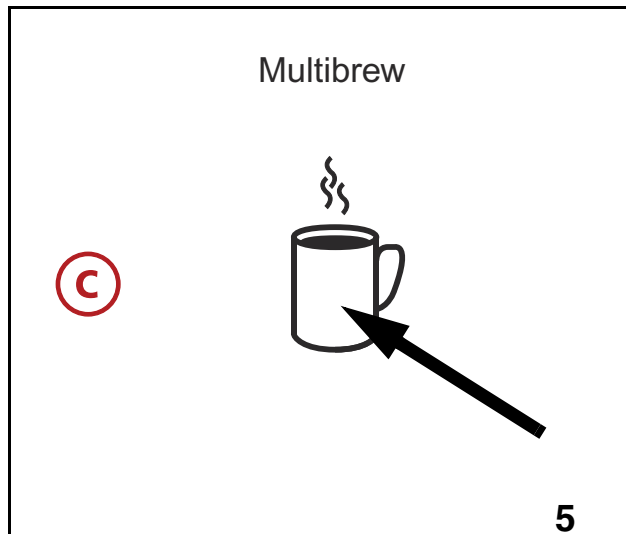
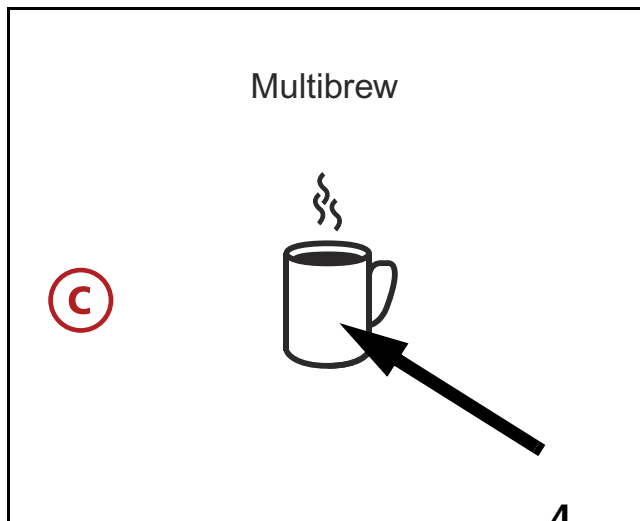
- 1 Display
- 2 Payment panel
- 3 Selection panel
- 4 Pot panel/Discount key
- 5 Optical interface
- 6 Coin return cup



Machine cabinet (fig. 3):

- | | |
|---|---|
| 1 Brewer inlet hose / brewer piston hose | 17 Lock for drip tray |
| 2 Adjusting knob for grinder | 18 Retaining pin for cup carrier |
| 3 Coffee grinder | 19 Mixing funnel with whipper housing / powder trap (behind) |
| 4 Door switch | 20 Mixing funnel hood |
| 5 Securing bolt for brewer | 21 Ingredient waste tray |
| 6 Brewer | 22 RS232 connector |
| 7 Securing bolt for bracket for dispense head | 23 Up-key connector plug connection (on CPU board behind cover plate) |
| 8 Brewer outlet hose | 24 Outlet spout |
| 9 Dispense head | 25 Instant ingredient canister |
| 10 Coffee waste containers | 26 Coffee bean canister |
| 11 Base tray | 27 Cabinet |
| 12 Outlet hoses | |
| 13 Main switch | |
| 14 Ingredient waste shelf | |
| 15 Cash box (option) | |
| 16 Drip tray | |





Pot panel (Multibrew)

How to brew a pot: (fig. 4)

- Enter password
- Press multibrew button as many times as the number of cups you want in the jug.

A predefined number, eg. '4' is shown in the display.

- Place a pot on the pot platform.
- Press the pot button once or more times for the desired number of portions.

Pressing again will increase the displayed counter by one, up to the maximum value

(15 or lower, set by the technician).

When the counter reaches the maximum value and the pot button is pressed once more, the counter restarts at the predefined number.

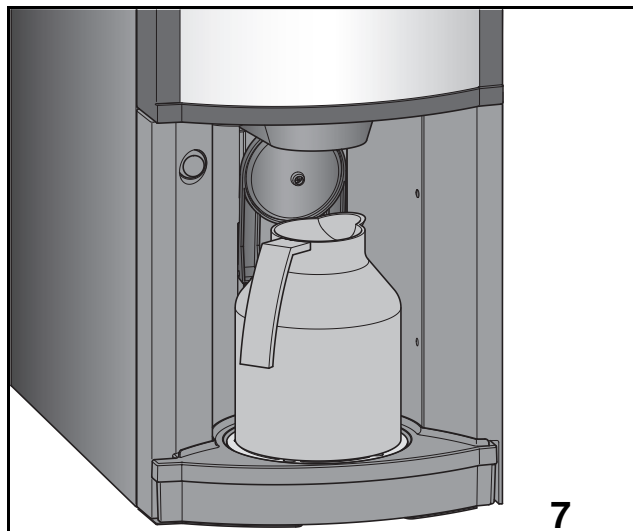
- If the machine is not set to free vend, insert a card with sufficient credit, or insert an amount of coins corresponding

to the value of the number of drinks selected or a value above.

- Press the selection button for the wanted drink.

The display steps back one number each time a portion is dispensed, or if 'optimised multibrew' is active a progressive bar is shown.

- Remove the pot when the drinks have been dispensed.



A pot brew in progress can be stopped immediately, simply by pressing the cancel button ©.

The pot sensor may not register a pot of transparent material, eg. glass.

Discount lock

How to use discount lock: (fig. 5)

When using the discount lock, drinks can be dispensed at a preset discount. The discount lock can be used for single drinks and for pots.

If you want one or more drinks at a discount:

- Press the multibrew button and insert the password needed to avoid free drink dispensing.

Drink to be dispensed in cup: (fig. 6)

- place a cup on the cup platform
- Press the selection button of the desired drink.
- After dispensing, remove the cup.
-

Operation

Overview of Operator and Technicians functions

This diagram shows a total view of the functions of the Operator and technicians menu (version 7.4).

All functions are reached using the four pre-selection buttons to navigate through the menus.

The operator **and/or** the technicians menus are password protected to prevent unintentional and unauthorized use.

As requested by the customer, access through password is requested either

- when entering the operator menus,
- or
- when entering the technicians menus.

(See explanation on previous pages).

Operator menu - version 7.4

Test	
Complete selections	
Operator	Filling/Clean
	Rinse
	Rinse Total Machine
	Rinse Water
	Rinse ES Tablet
	Counters
	Sales Audit
	Total number, nres
	Total turnover,nres
	Total number, res
	Total turnover,res
	No. per drink, nres
	No. per drink, res
	Turn. p. drink,nres
	Turn. p. drink,res
	MB per drink, nres
	MB per drink, res
	No. per group, nres
	No. per group, res
	Turn. p. group,nres
	Turn. p. group,res
	Card audit
	No. per drink, nres
	No. per drink, res
	Turn. p. drink,nres
	Turn. p. drink,res

Continued on next page

Diagram continued

Cash Audit	
	Money to tubes
	Money to cash box
	Number of tokens
	Collected money
	Manually filled
	Manually delivered
	Value overpay
	Dispensed change
Cashless Audit	
	Revalued amount
Free vend audit	
	Total no. ,nres
	Total no. ,res
	No. per drink, nres
	No. per drink, res
	No. per group, nres
	No. per group, res
MB. discount audit	
	MB. number, nres
	MB. turnover, nres
	MB. number, res
	MB. turnover, res
Discount key audit	
	D.Key number ,nres
	D.Key turnov. ,nres
	D.Key number ,res
	D.Key turnov. ,res
Time Discount audit	
	T.Disc number ,nres
	T.Disc turnov.,nres
	T.Disc number ,res
	T.Disc turnov.,res

Continued on next page

Diagram continued

Step prices audit	SP. turnover,nres
	SP. turnover,res
Test Audit	Test no. ,nres
	Test no. ,res
	No. per group, nres
	No. per group, res
Reset Counters	Reset sales audit
	Reset cash audit
	Reset Test audit
Printing	Not Resetable
	Resetable
Cash action	Cash collected
	Dispense coins
	Manual filling
	Reset tube contents
Basic operations	Change prices
	Global price
	Price per drink
	Step prices
	Change quantities
	Drink On/Off
	Change group
Service information	Event log book
	Reset log book
	Program versions
	Show menufile ver.

Continued on next page

Diagram continued

Machine settings	
	Set Freevend,global
	Set Beep mode
	Clock on display
	Temp. on display
	Set date and time
	Key discount
	Time discount
	Set Time discount
	Set Day(s)
	Set Time
Machine Info	
	Machine Code
	Operator Code
	Show Install. Date
	Set Install. Date
Energy saving	
	Save Energy On/Off
	Set Day(s)
	Set Time
	Set Temperature
	Set Doorlight
	Set counters on/off
	Selfcheck setting
	Gr. counters on/off
	100% discount mode
	Use EVA-DTS events
ES System Test	
	Complete ES cycle

Continued on next page

Diagram continued

Technician menu - version 7.4

Technician			
	Adjust system		
		Calibration	
			Ingredient
			Espresso
			Instant
			Cold water
		Temperatures	
		Lower cup sensor	
		Cup sensor status	
		Pot Sensor On/Off	
		Cold water valve	
		Undosed water	
		Empty grinder check	
		ES Restore Pressure	
		Softener counter	
		Multiple ES cycles	
		ES preinfusion time	
		ES preinfus. pulses	
		ES Precomp. Managm.	
		ES Valve Type	
		ES Pellet Squeezing	
		Set Rinse Timeout	
		Global dr. scaling	
	Reset relationship		
	Change Comm. route		
		Closed door	
			Serial XModem
			Serial EDDCMP
			IR XModem
			IR EDDCMP
			Back to terminal

Continued on next page

Diagram continued

	Opened door	
		Terminal Mode
		Configurator Mode
Payment settings	Set baud rate	
	Single/Multi vend	
	Set payment type	
	Set max credit	
	Set max change	
	Obligation to buy	
	Coin inhibit	
	Low change inhibit	
	Audit unit Ext/Int	
	Exact change eq.	
	Exact change offset	
	Keyboard inhibit	
	Price mode	
	Price to index	
	Zero vend mode	
	Zero vend index	
	Revalue	
	Immediate change	
	Currency code(auto)	
	Currency code(man)	
	Coin validator	
	Decimal point pos.	
	Freevend count.mode	
	Delayed Paymentmode	
	Set Cash Sale	
	Sess. Complete Mode	
	Autom Cashaudit Res	
	Pricelist Start Nr.	

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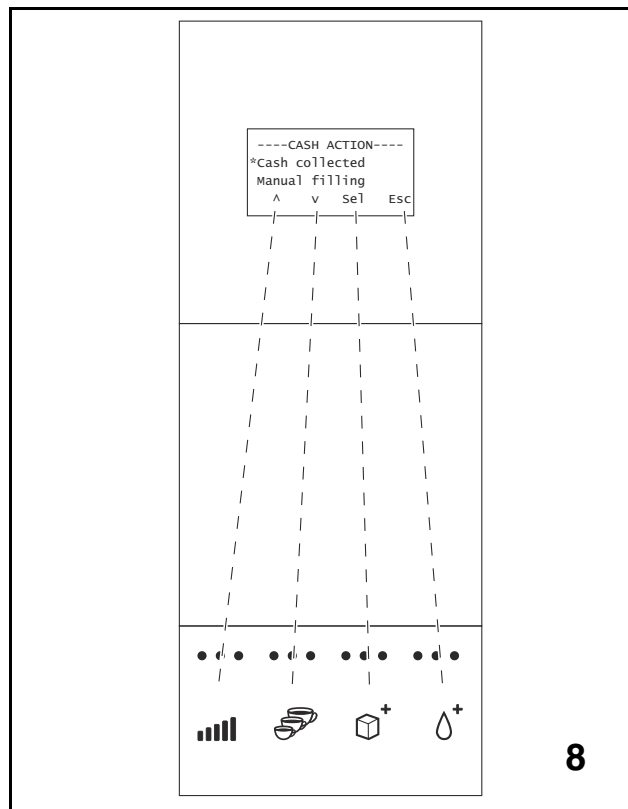
Diagram continued

Multibrew settings	
	Preset value
	Min value
	Max value
	Means of action
	MB Discount
Change config files	
	Set language file
	Set recipe file
	Set menu file
ES Test Functions	
	Complete ES cycle
	Grind and Dose
	ES brewer cycle
	ES airbreak empty
	ES boiler empty
	Manual boiler fill
Diagnostics/Test	
	Overall functions
	Wittlink test
	Full dispense test
	Test vend
	Cup handling
	Sensor test
	User interface
	Button/Key test
	Display test
	Pre. sel. led test
	Door light toggle
	Test Init.text
	Coin return motor

Continued on next page

Diagram continued

Water/power/heat	
	Water sensors
	Fan on/off
	Test whipper no. X
	Test all whippers
	Test IN motor no.X
	Test all IN motors
Change password	
GSM settings	
	GSM On/Off
	PIN Code
	Pre-Alarms
	Set GSM Thresholds
	Reset Pre-Al. cnt
	Bank ID's
	Reset GSM relations
DaylightSaving	
UP KEY Utility	
	Setup files
	Statistics files



SNavigation buttons

The four pre-selection buttons are used as navigation buttons for retrieval of sales data, settings, e.g. of prices, and activation of service functions (fig. 8).

(See also diagram “Overview of Operator and Technicians functions” on page 10.)

How to use the navigation buttons

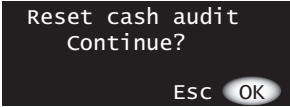
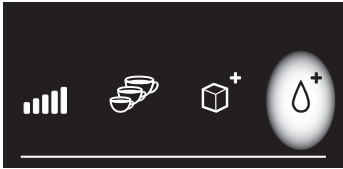
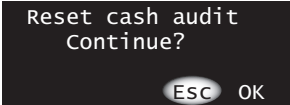
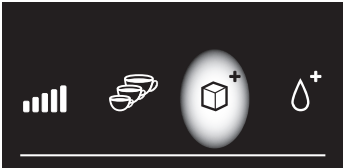
This table describes how the four pre-selection buttons are used as navigation buttons.

Display	Button	Function
<pre> -----CASH ACTION----- *Cash collected Manual filling ^ v Sel Esc </pre>		
<pre> -----SALES AUDIT----- *Total number Total turnover ^ v Sel Esc </pre>		‘Up’ button Press this button to move up one step at a time
<pre> -----SALES AUDIT----- *Total number Total turnover ^ v Sel Esc </pre>		‘Down’ button Press this button to move down one step at a time
<pre> -----SALES AUDIT----- *Total number Total turnover ^ v Sel Esc </pre>		‘Sel’ button’ Press this button to <ul style="list-style-type: none"> • move one step to the right or <ul style="list-style-type: none"> • activate a function, eg. rinsing.
<pre> -----SALES AUDIT----- *Total number Total turnover ^ v Sel Esc </pre>		‘Esc’ button Press this button to <ul style="list-style-type: none"> • move one step to the left or <ul style="list-style-type: none"> • jump to the top of a row, e.g. from “Turnover per drink” to “Total turnover”.



The functions of the buttons vary. The 'Sel' button, for example, may change to an 'OK' button to confirm an action. The immediate functions can always be read from the bottom line of the display.

Alternative functions of the navigation keys:

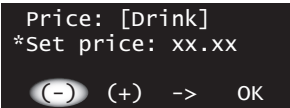
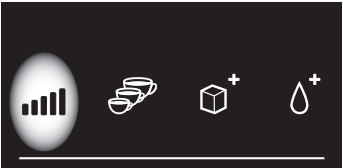
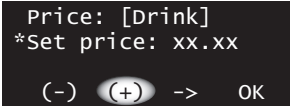
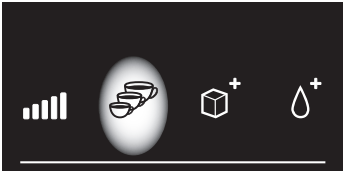
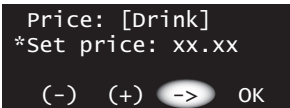
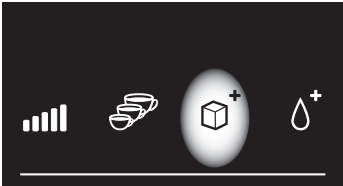
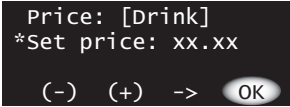
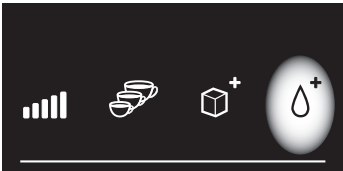
Display	Button	Function
		'OK' button Press this button to confirm an action, e.g. resetting of counters.
		'Esc' button Press this button to exit a function without activating it, e.g. avoid resetting a counter.

Operation

Settings buttons

In functions that require settings, for example price settings, the functions of the four pre-selection buttons change accordingly.

This table describes how the four pre-selection buttons are used to enter or change numbers.

Display	Button	Function
		'Minus' button Press this button to decrease a numeric value in increments of one.
		'Plus' button Press this button to increase a numeric value in increments of one.
		'Next' button Press this button to continue to the next digit, e.g. in price setting functions.
		'OK' button Press this button to save changes to settings in the system.

Operation

Additional Features



The machine can be set to either multi-vend or single-vend.

Multi-vend

- The machine can be set to enable selection of several drinks, one after the other, from only one payment action by coins or card.

Single-vend

- The machine can be set to return coins / release payment card after each drink selection.

Short cuts

Some functions can be reached through short cuts.

A short cut is a one-step way to select often used functions, which would otherwise require several steps through the Operator menu.




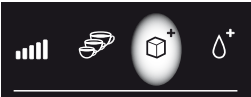
The following functions can be reached via short cuts:


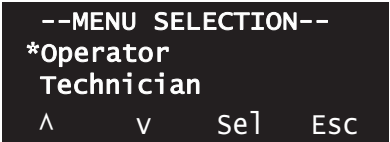
- Rinse function, see *“Rinsing machine”* on page 36.
- Test function, see *“Last check”* on page 37¹⁾.
- Counters function, see *“Calling and resetting counters”* on page 53.
- Menu, see *“Overview of Operator and Technicians functions”* on page 10.

How to use the short cuts:

Step	Action	Display										
1	<ul style="list-style-type: none">• Open and close door.• Wait and turn to the display.											
2	<ul style="list-style-type: none">• If the display shows the following short cuts selection window, then go to step 3.	<div>-----SHORTCUTS----- *(1)=Rinse 3=Counter (2)=Return 4=Menu (1) (2) (3) (4)</div>										
	<ul style="list-style-type: none">• If the display shows the following short cuts selection window, then go to step 4	<div>-----SHORTCUTS----- *(1)=Rinse 3=Counter (2)=Test 4=Menu (1) (2) (3) (4)</div>										
3	<table><tr><th>If you want to ..</th><th>then go to ..</th></tr><tr><td>Perform a rinse function</td><td>Step 5</td></tr><tr><td>Read the counters</td><td>Step 8</td></tr><tr><td>Proceed to the menu functions</td><td>Step 9</td></tr><tr><td>Return to vend mode</td><td>Step 6</td></tr></table>		If you want to ..	then go to ..	Perform a rinse function	Step 5	Read the counters	Step 8	Proceed to the menu functions	Step 9	Return to vend mode	Step 6
If you want to ..	then go to ..											
Perform a rinse function	Step 5											
Read the counters	Step 8											
Proceed to the menu functions	Step 9											
Return to vend mode	Step 6											
4	<table><tr><th>If you want to ..</th><th>then go to ..</th></tr><tr><td>Perform a rinse function</td><td>Step 5</td></tr><tr><td>Perform a test vend</td><td>Step 7</td></tr><tr><td>Read the counters</td><td>Step 8</td></tr><tr><td>Proceed to the menu functions</td><td>Step 9</td></tr></table>		If you want to ..	then go to ..	Perform a rinse function	Step 5	Perform a test vend	Step 7	Read the counters	Step 8	Proceed to the menu functions	Step 9
If you want to ..	then go to ..											
Perform a rinse function	Step 5											
Perform a test vend	Step 7											
Read the counters	Step 8											
Proceed to the menu functions	Step 9											

1. This short cut is not present in all machines.

Step	Action	Display
5	Press "1"  <p>and, if open, close the door to go directly to the rinse functions menu.</p> <p>From here you can select one of the available rinse functions.</p>	<pre> -----RINSE----- *Rinse total machine Rinse with Stop FB1 ^ v Sel Esc </pre>
6	Press "2"  <p>With closed door, the machine returns to vend mode.</p>	<pre> -----SHORTCUTS----- *(1)=Rinse 3=Counter (2)=Return 4=Menu (1) (2) (3) (4) </pre>
7	Press "2"  <p>and, if open, close the door to go directly to the test vend functions.</p> <p>From here you can select one of the available test vend functions.</p>	<pre> -----TEST----- *Complete selections ^ v Sel Esc </pre>
8	Press "3"  <p>and, if open, close the door to go directly to reading the counters.</p> <p>From here you can select one of the available counters.</p>	<pre> -----SALES AUDIT--- *Total number, nres Total turnover,nres ^ v Sel Esc </pre>

Step	Action	Display
9	<p>Press "4"</p>  <p>and, if open, close the door to go directly to the menu selections.</p> <p>From here you can select one of the menus</p>	

General instructions

- All items of the schedules in this chapter should be carried out at the following intervals:
Regular cleaning: Every time replenishing of ingredients is required
Deep cleaning: Once a week.
Occasional routines: Once a month.
- If the schedules hereafter are not carried out as indicated, it will influence the reliability of the machine, which will not be covered by guarantee, and there might arise HACCP risks, for which the suppliers of machine and ingredients cannot be held responsible.
- Read the corresponding sections in the operator manual to enable you to exactly perform the individual tasks.
- Do not use aggressive or abrasive cleaning agents.



Make sure that all components are installed correctly after the cleaning procedure.



Clean the inside and outside of the vending machine by using a clean damp cloth, and do not splash it.

- Use only cleaning agents approved by the food industry, or the supplier of the vending machine.

Cleaning and maintenance

Maintenance routines

Schedule for regular maintenance routines

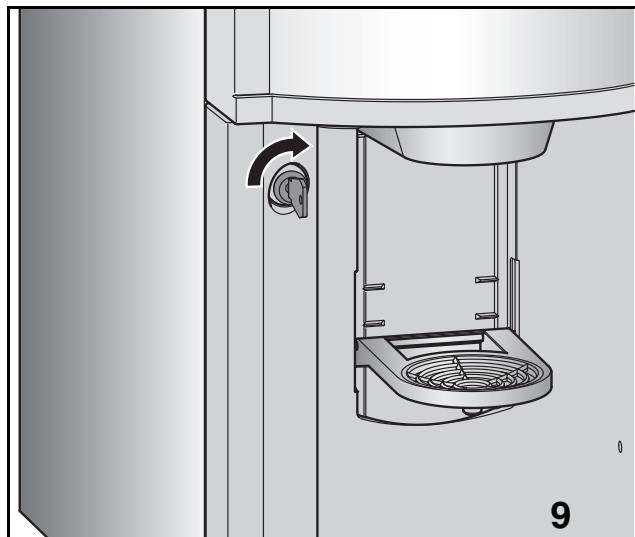
Interval	Type of work / Check	Tools / Materials for the job
Regular: Every time replenishing of ingredients is required	Opening and disconnecting the machine Removing the waste containers Filling the instant ingredient canisters Filling the coffee bean canister Cleaning the cup carrier Cleaning the drip tray Cleaning the machine interior and exterior Mounting the cleaned parts Rinsing machine Last check	1 bucket of hot water (60-80°C) with cleaning agent. 1 bucket of clean warm (min. 40°C) water Soft clean cloths or paper towels Ingredients

Schedule for deep and occasional maintenance routines

Interval	Type of work / Check	Exchange kit (hygiene kit)
Deep: Once a week.	<p>Opening the machine</p> <p>Removing the coffee waste containers</p> <p>Filling the instant ingredient canisters</p> <p>Removing the coffee bean canister</p> <p>Disconnecting machine</p> <p>Removing the dispense head and the bracket for dispense head</p> <p>Removing and cleaning the brewer</p> <p>Cleaning the ingredient waste tray</p> <p>Cleaning the instant ingredient dispensing system components and the powder traps</p> <p>Cleaning the instant waste tray below the instant ingredient mixing funnels.</p> <p>Cleaning the cup carrier and the drip tray.</p> <p>Cleaning inside and outside.</p> <p>Mounting cleaned parts.</p> <p>Rinsing machine.</p> <p>Last check.</p>	<p>Mixing hoods</p> <p>Instant ingredient mixer units with whipper wheels and sealing rings</p> <p>Powder traps</p> <p>Cup carrier</p> <p>Dispense head with outlets and hoses (incl. coffee outlet spout)</p> <p>-----</p> <p>All the above mentioned parts together with the coffee waste containers, the drip trays as well as the instant ingredient canisters are dishwasher-proof. (max. 30 minutes at 60°C, max. 30 seconds at 80°C).</p>

Cleaning and maintenance

Interval	Type of work / Check	Exchange kit (hygiene kit)
Occasional	Cleaning the instant ingredient canisters	
Once a month	Cleaning the coffee bean canister.	



Opening and disconnecting machine

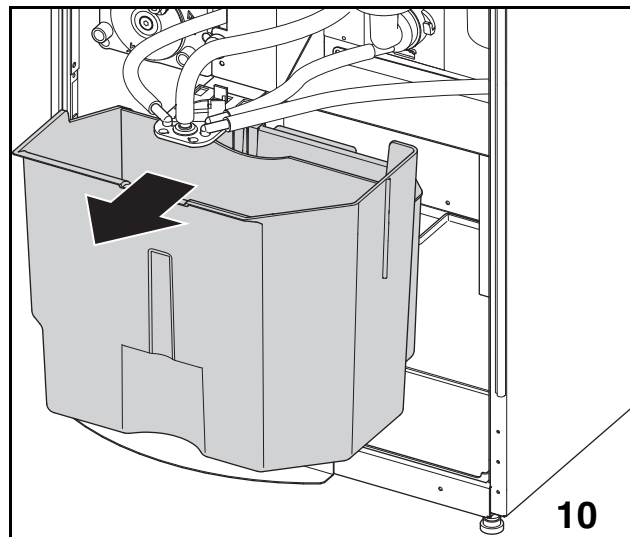
- Turn the door key clockwise in keyhole (*fig. 9*) and open the door.



The 230 V current is automatically turned off, but the machine still carries 24V current.

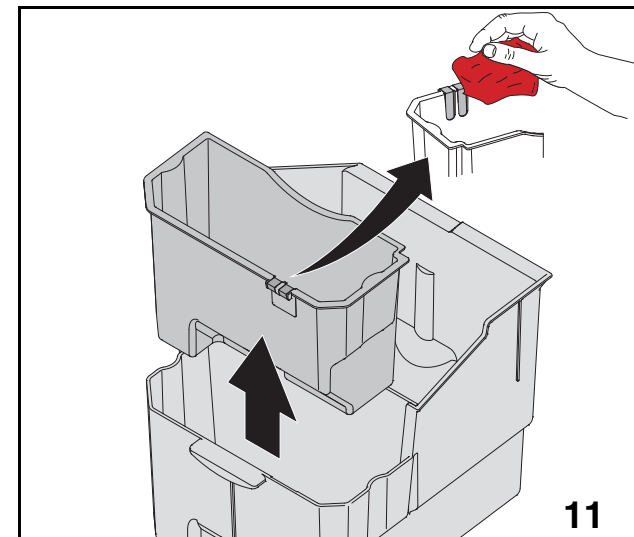


If power is turned on, be careful not to touch moving parts and electrical components!



Removing the coffee waste containers

- Take out the coffee waste containers (*fig. 10*).
- If used, remove plastic bag from the solid waste container.
- Remove the liquid waste container, empty it and wipe it clean (*fig. 11*).
- Carefully wipe dry the sensors of the liquid waste container (*fig. 11*).



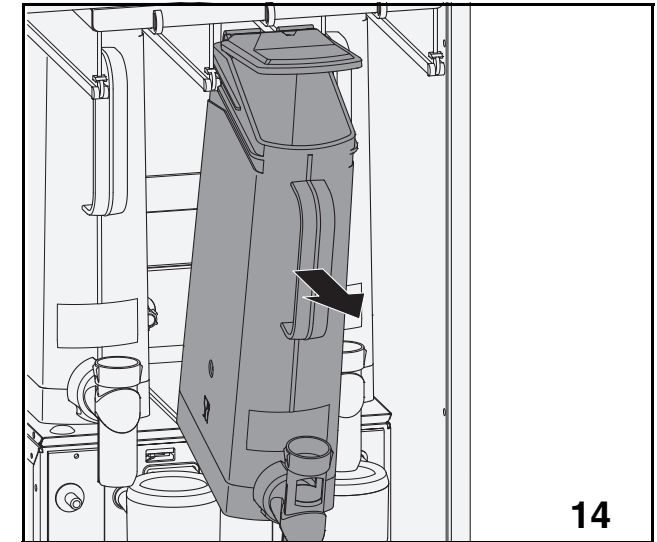
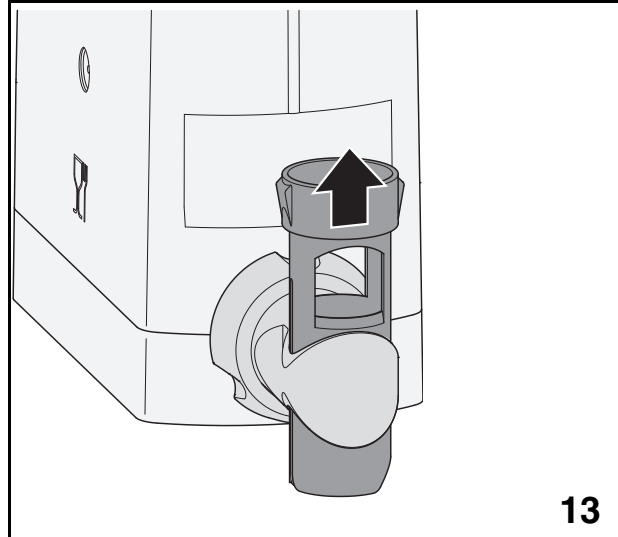
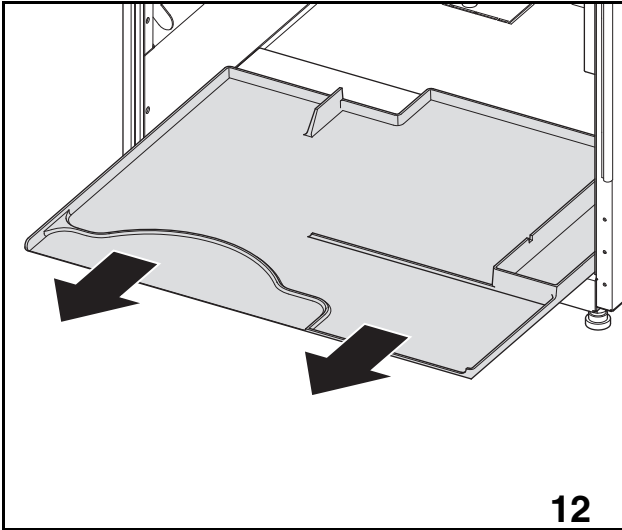
- Wipe clean the solid waste container, relocate the liquid waste container inside the solid waste container and, if used, insert a new plastic liner in **solid** waste container.



Ensure that the sensors in the liquid container are not covered by the plastic liner in solid waste container.

- Leave the coffee waste containers outside of the machine.

Regular cleaning



Filling the instant ingredient canisters



Check ingredient level of instant ingredient canisters daily. Replenish when necessary.



The instant ingredient canisters should be labelled to avoid ingredients being poured into wrong canisters.

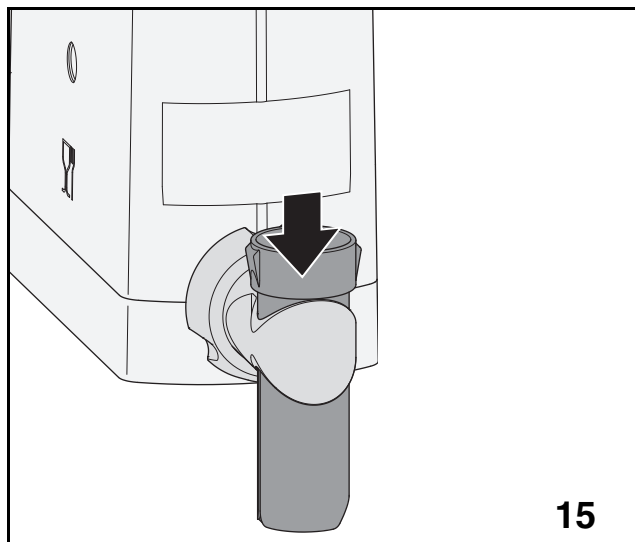
- Pull base tray forward (*fig. 12*).

- Push the outlet tube upwards to close the outlet spout of the wanted canister (*fig. 13*).

- Take the canister by the handle and pull it forwards (*fig. 14*) until it is hanging freely at its end stop in guiding rail. The lid is automatically triggered open.

If required, lift the canister upwards and pull forwards over the end stops in guiding rail. Place canister on a plain, clean surface.

- Fill the canister with instant ingredient, press lid slightly down and push back canister in place.



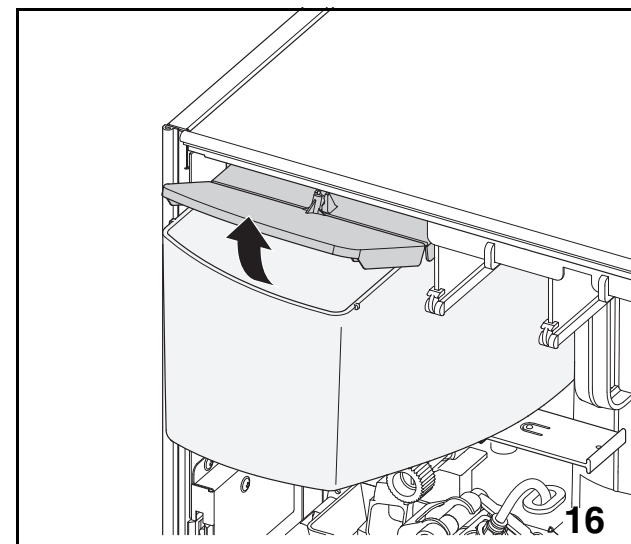
15

- Push the outlet tube downwards to open the outlet spout (*fig. 15*).
- Repeat procedure until the required number of canisters have been filled.
- Wipe clean the base tray and the area behind the waste containers.
- Push base tray back in place.
- Relocate the waste containers.



Filling the coffee bean canister

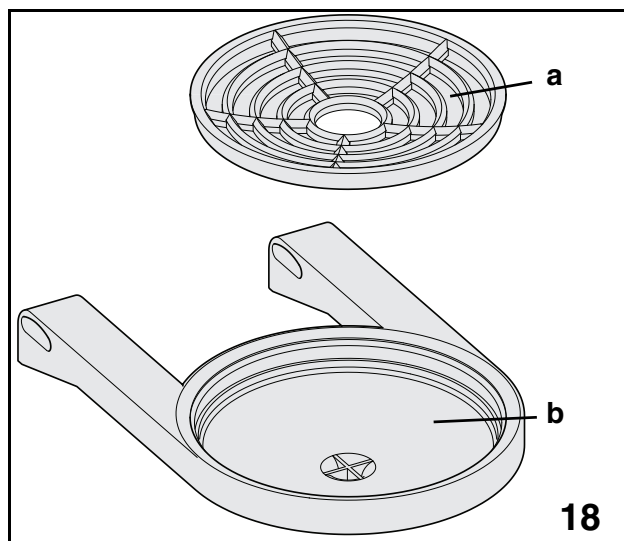
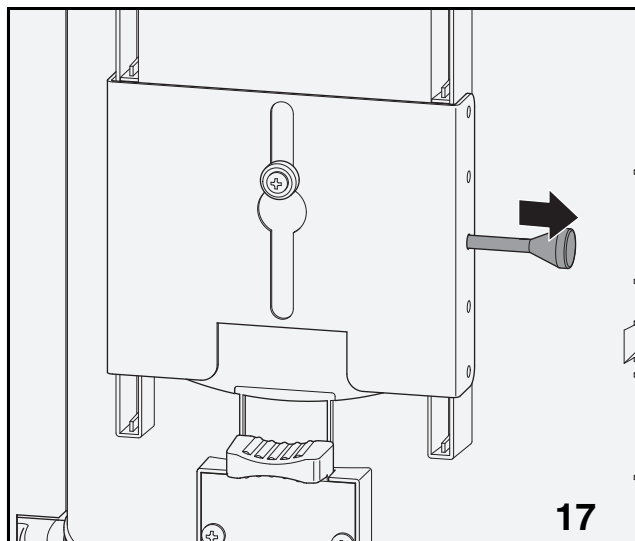
Fill according to use of ingredient and only through open lid with canister still inside machine. When filled in this way, the capacity of the waste containers and the coffee bean canister are balanced.



16

- Open the lid (*fig. 16*).
- Fill the canister with coffee beans.
- Put lid back on.

Regular cleaning

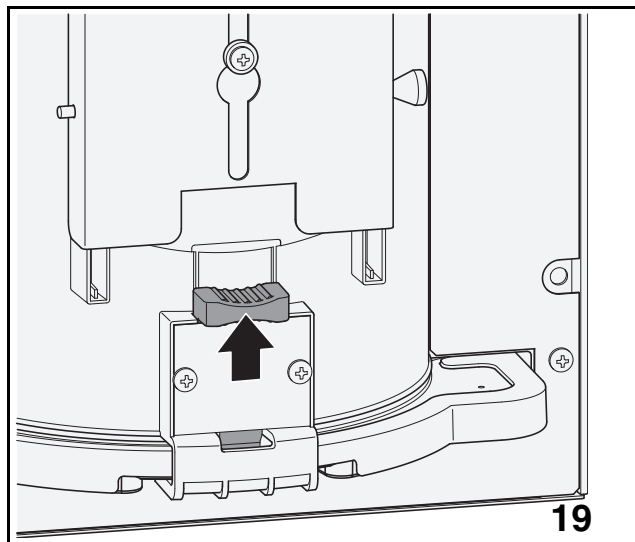


Cleaning the cup carrier

- Remove the cup carrier: Take hold of the cup carrier with your right hand and with your left hand remove the corresponding retaining pin, situated on the rear side of the cup station. (*fig. 17*).
- Disassemble cup carrier (*fig. 18*). Clean the drip grid (**a**) and tray (**b**) in hot water with cleaning agent and dry parts.

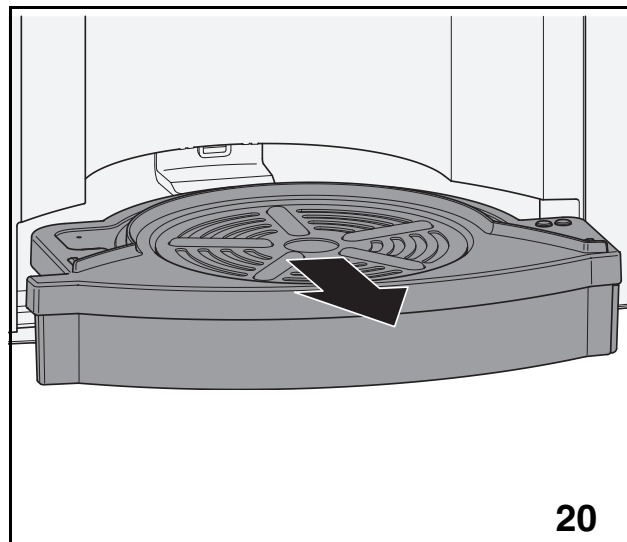


The complete cup carrier is dishwasher-proof.



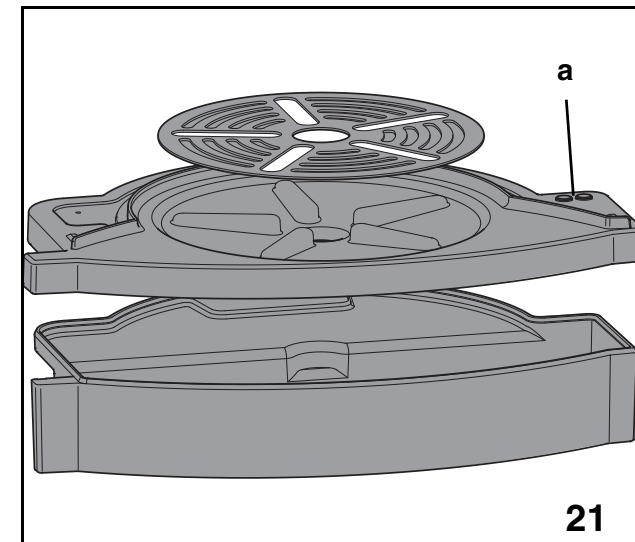
Unlocking the drip tray

- If locked, pull upwards lock for drip tray (*fig. 19*), situated on the rear side of the cup station.



Cleaning the drip tray

- Take hold of the drip tray with one hand and pull it forwards in a gentle movement. (*fig. 20*).

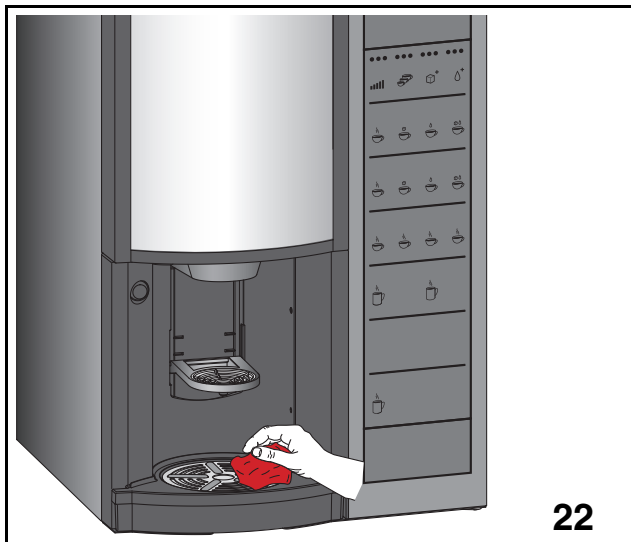


- Remove drip grid from lid.
- Remove the lid and empty the tray.
- Clean drip grid, lid and tray in hot water with cleaning agent and wipe parts dry (*fig. 21*).



Wipe sensor (*fig. 21,a*) in lid dry.

Regular cleaning

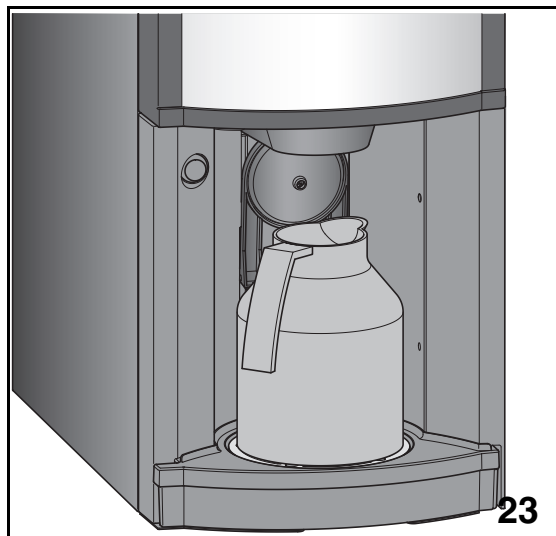


Cleaning inside and outside

- Clean the door and the housing inside and outside, and finally the bottom with a clean, damp cloth (*fig. 22*).

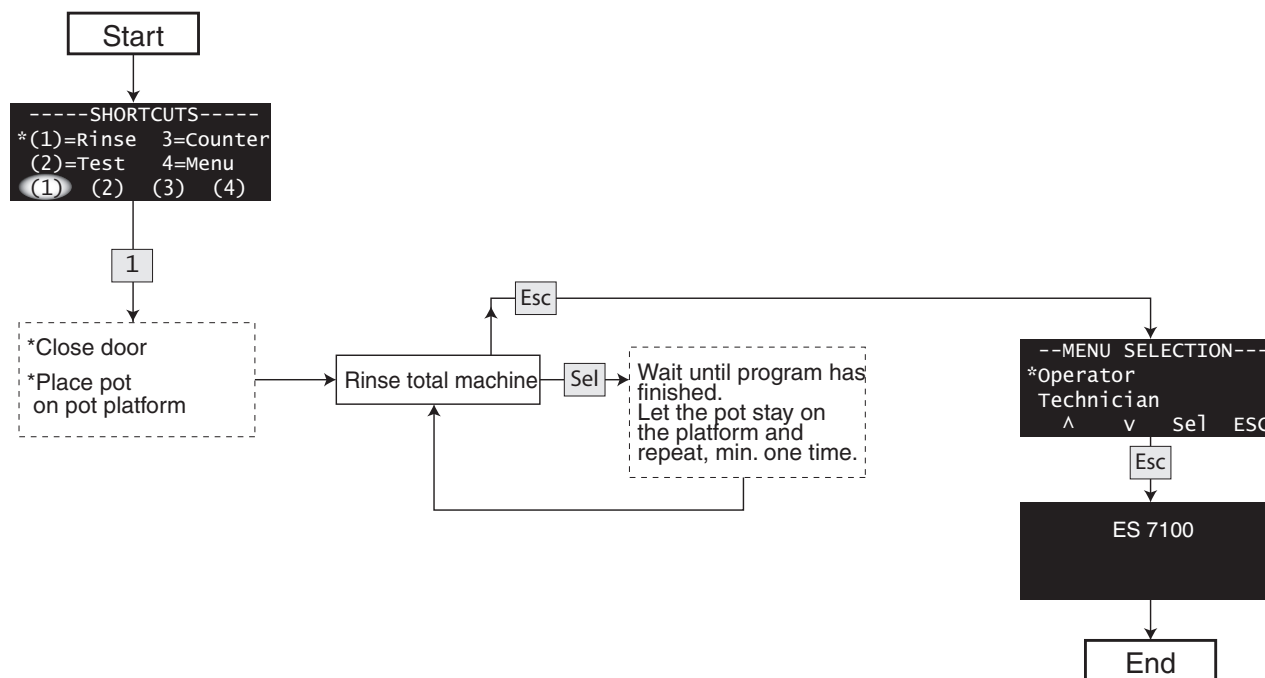
Mounting of cleaned parts

- Re-insert and assemble all parts in reverse order.



Rinsing machine

- Have an empty pot (min. 1,5 l) ready to place on the pot platform (*fig. 23*)
- Turn to the display and follow the diagram to perform a machine rinse.



Regular cleaning

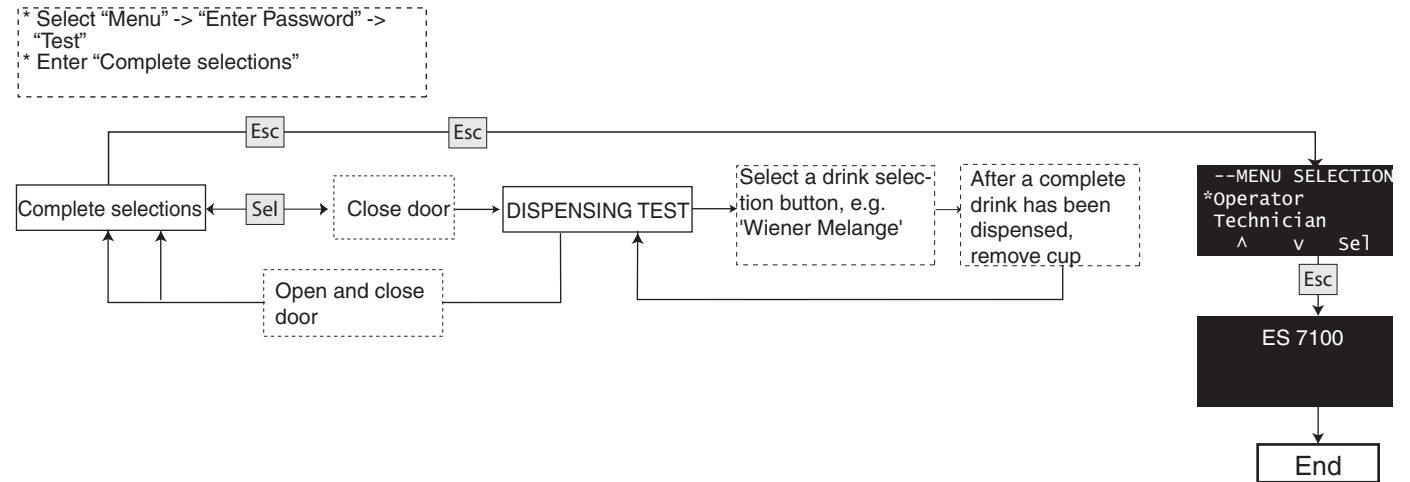


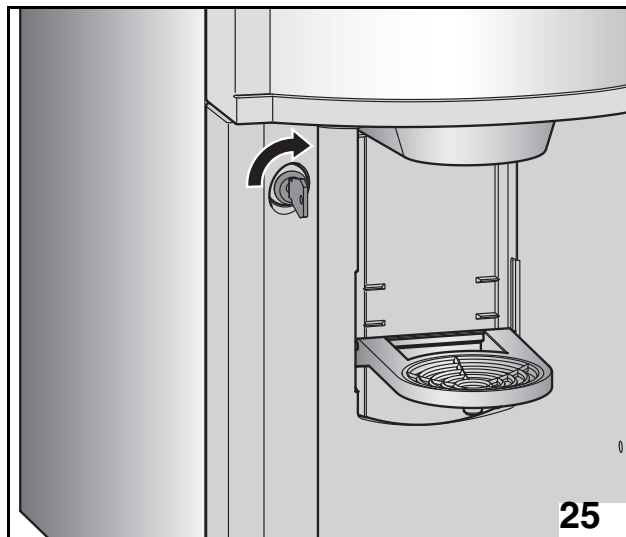
Last check

- Clean the machine with a damp cloth on the outside (*fig. 24*).
- Perform a test dispensing by pressing
 - the selection button for coffee with sugar or tea with sugar, or
 - using the 'Test' option in the operator menu (*see diagram above*). In this case the drink will not be included in the Sales Audit counter (*see "Calling and resetting counters" on page 53*).



There is a risk of scalding from hot water.





Hygiene kit

- In order to save time when cleaning and filling it is recommended to have a hygiene kit consisting of:
 - mixing hoods.
 - instant ingredient mixer unit with whipper wheels
 - powder traps
 - dispense head with hoses and coffee outlet
 - cup carrier

Opening the machine

- Turn the door key clockwise in keyhole (*fig. 25*) and open the door.



The 230 V current is automatically turned off, but the machine still carries 24V current.

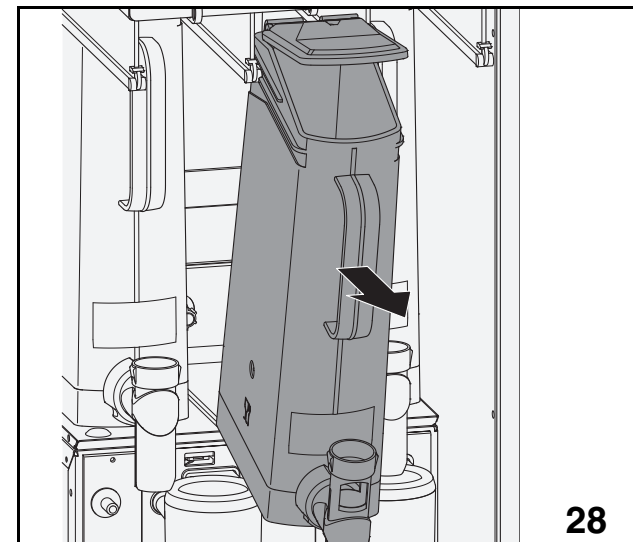
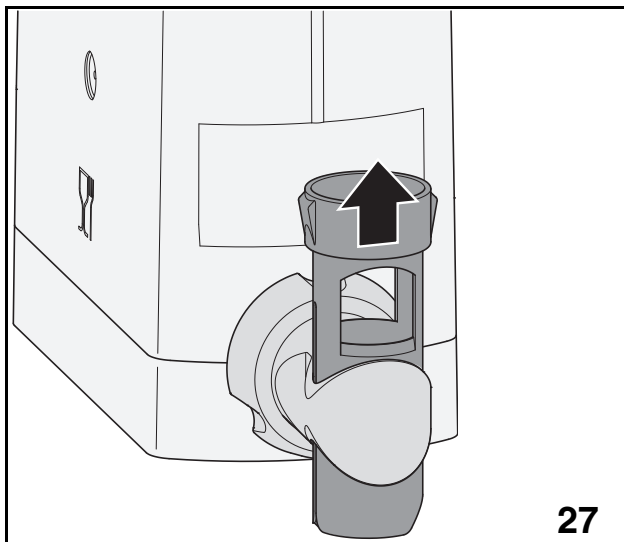
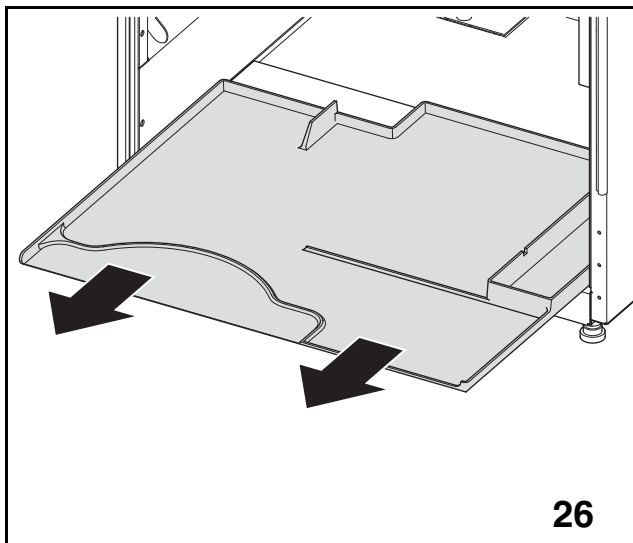


If power is turned on, be careful not to touch moving parts and electrical components!

Removing the coffee waste containers

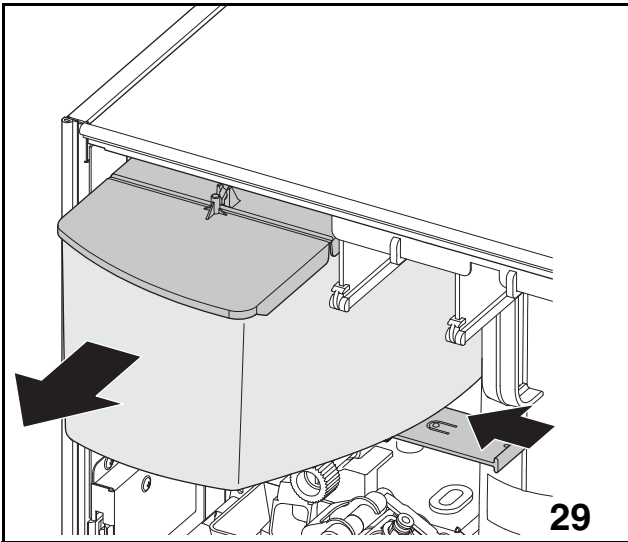
- Remove and empty the coffee waste containers (see *regular cleaning*)

Deep cleaning



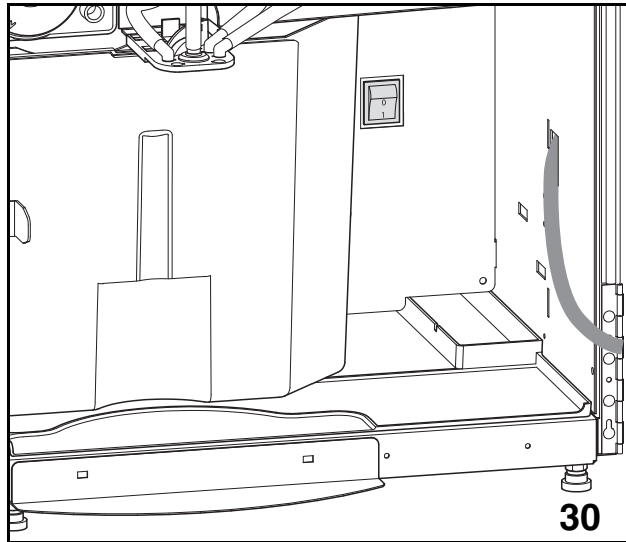
Filling the instant ingredient canisters

- Pull forwards the base tray (*fig. 26*).
- Push the outlet tube upwards to close the outlet spout of the wanted canister (*fig. 27*).
- Fill the instant ingredient canisters one by one as described in *regular cleaning* (*fig. 28*).
- Leave the outlet spouts closed.
- Remove the base tray from machine.



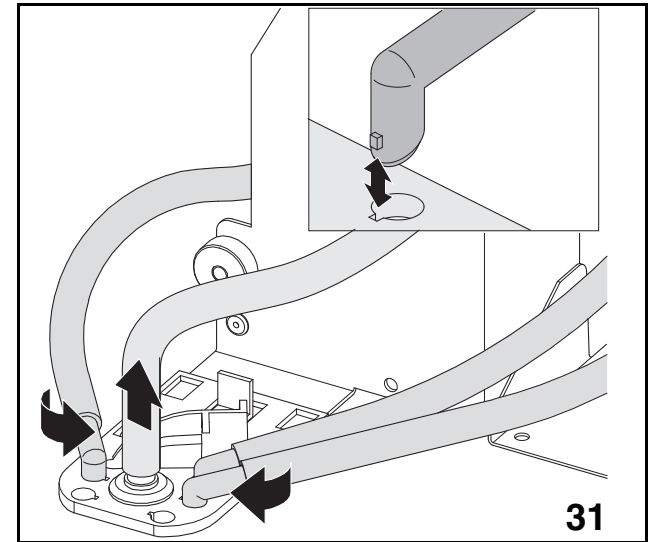
Removing the coffee bean canister

- Close the shutter (bean stop) of the coffee bean canister. (*fig. 29*).
- Lift the canister out of the machine and place the canister outside of the machine on a plain clean surface.



Disconnecting machine

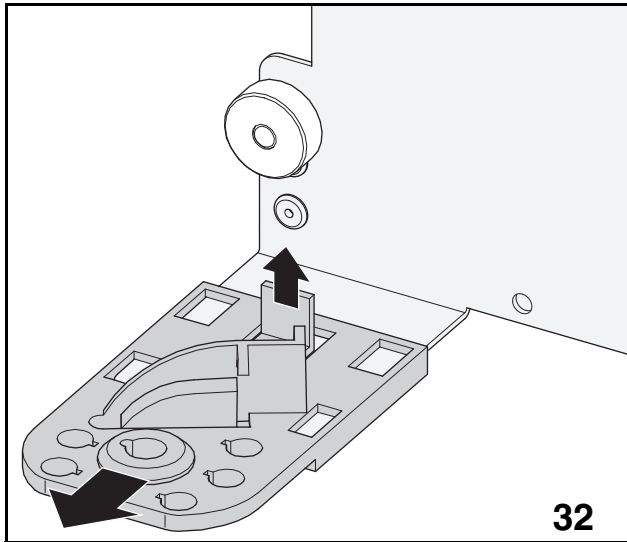
- Turn machine **off** with main switch (*fig. 30*) before disassembling parts in connection with the brewer parts.



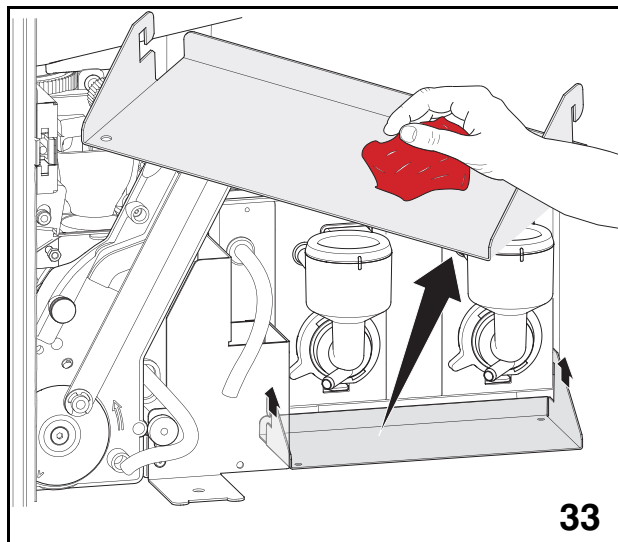
Removing the dispense head

- Remove hoses with spouts from dispense head: turn each spout until its locking tab can be released through the notch of the hole in dispense head and lift off the spout (*fig. 31*).

Deep cleaning

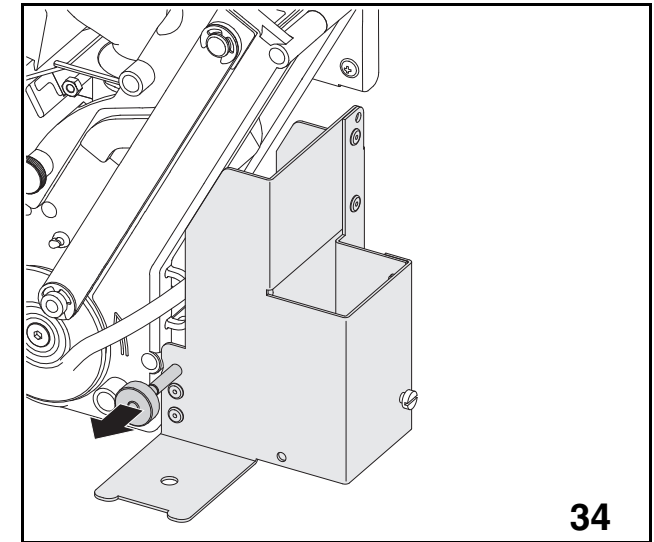


- Remove the dispense head by pulling it forwards. (*fig. 32*).



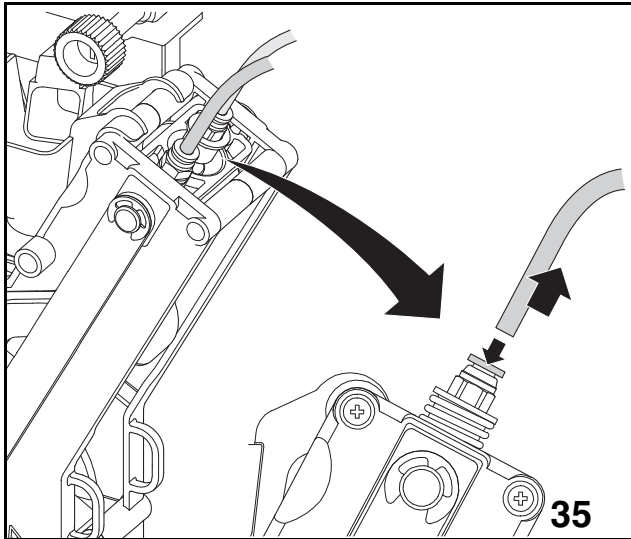
Cleaning the ingredient waste shelf below instant ingredient mixers

- Lift off and wipe clean the ingredient waste shelf with a moist cloth (*fig. 33*).



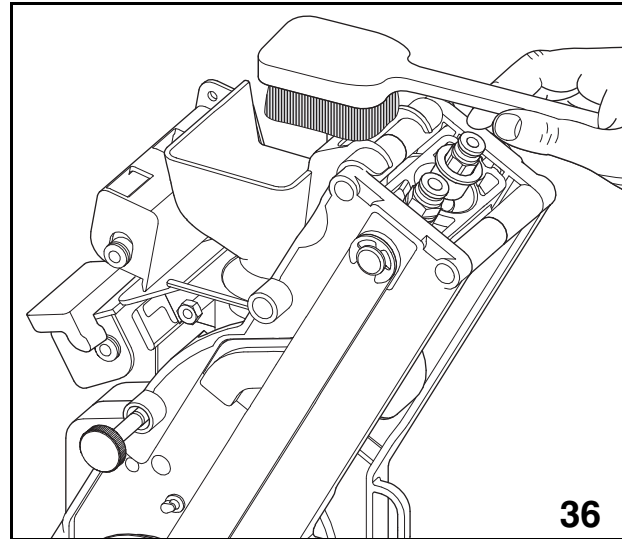
Removing the bracket for dispense head

- Remove the bracket for dispense head by loosening the securing bolt (*fig. 34*).
- Clean the bracket and wipe it dry.



Removing the brewer

- Remove the inlet hose and the piston hose: Press the green locking ring of each quick coupling at top of the brewer (*fig. 35*).
- Loosen the securing bolt retaining the brewer to its bracket.
- Remove the brewer.

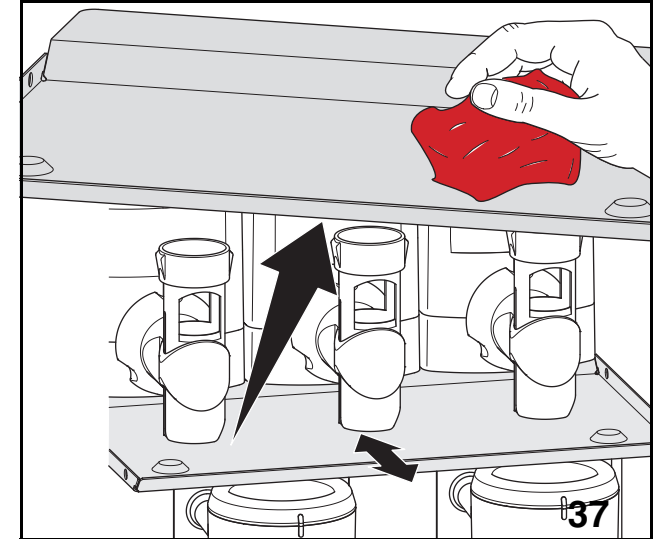


Cleaning the brewer

- With a dry, clean brush remove any powder residue from external parts of the brewer, particularly from the coffee funnel (*fig. 36*).



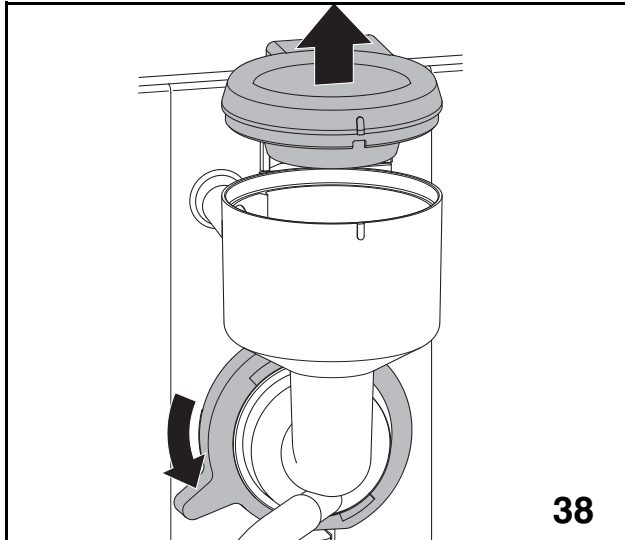
Clean espresso brewer every time coffee is refilled or at least once a week.



Cleaning the ingredient waste tray

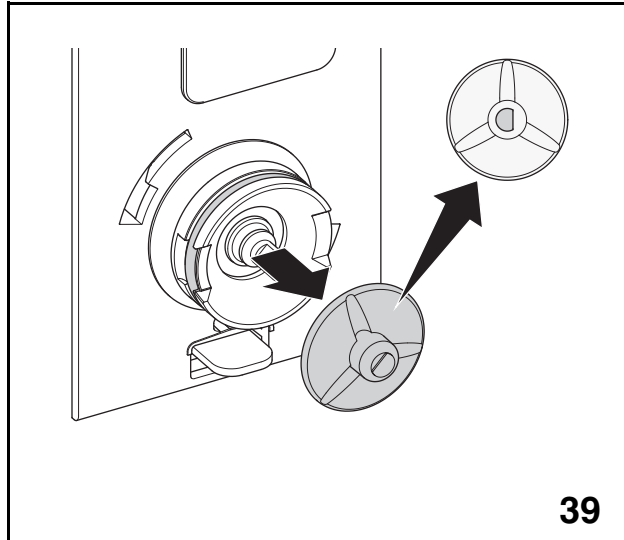
- Remove and wipe clean the ingredient waste tray with a moist cloth (*fig. 37*).
- Relocate the ingredient waste tray.

Deep cleaning

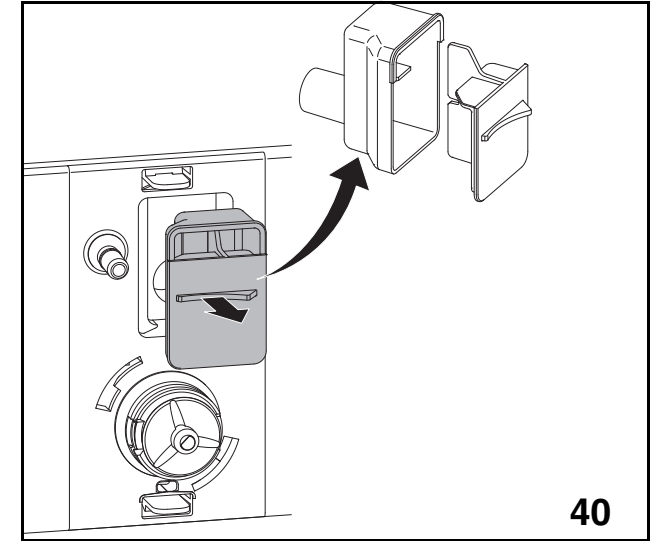


Cleaning the instant ingredient dispensing system components

- Remove the mixing hood by lifting off (*fig. 38*).
- Loosen locking ring of mixing funnel by pressing release lever anti-clockwise and pull out mixing funnel leaving hose back on (*fig. 38*).

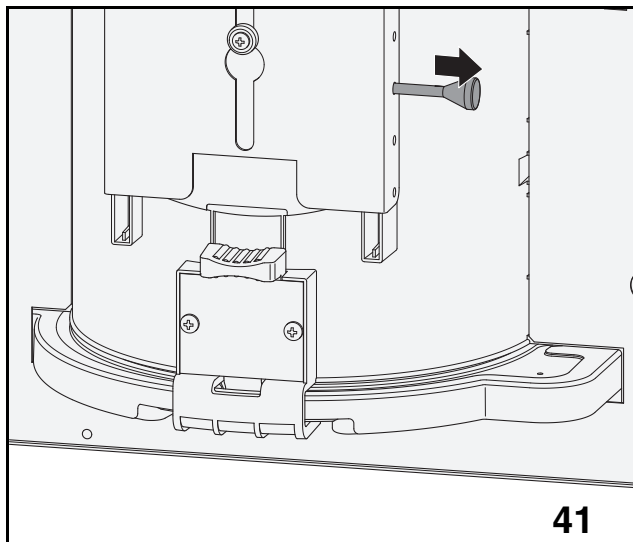


- Remove sealing ring (*fig. 39*).
- Pull off the whipper wheel (*fig. 39*).
- Repeat procedure until all mixing funnels have been removed.



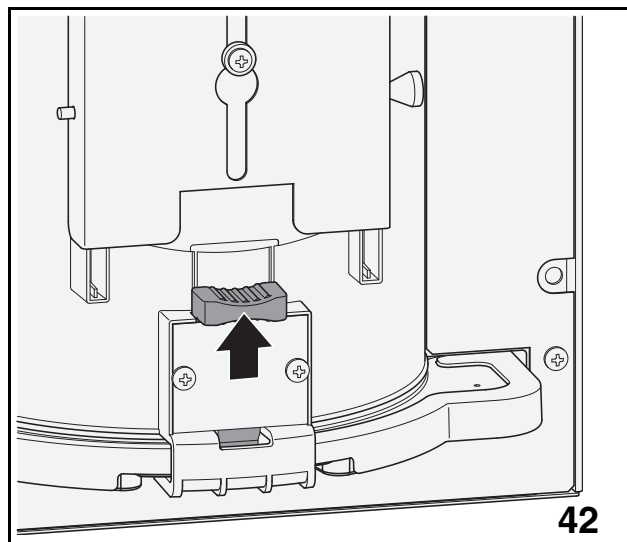
Cleaning the powder trap

- Take hold of the small handle on the powder trap and pull out (*fig. 40*).
- Separate front and rear parts.
- Soak both powder trap components in hot water with cleaning agent.
- Rinse parts in clean hot water, dry and relocate items in reverse order.



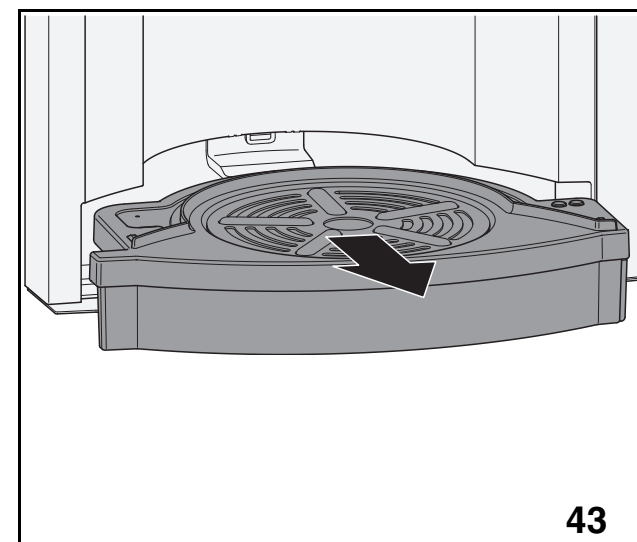
Cleaning the cup carrier

- Remove the cup carrier (*fig. 41*) (see *regular cleaning*).
- Clean the drip grid and tray (see *regular cleaning*).



Cleaning the drip tray

- If locked, pull upwards lock for drip tray (*fig. 42*). (see *regular cleaning*).

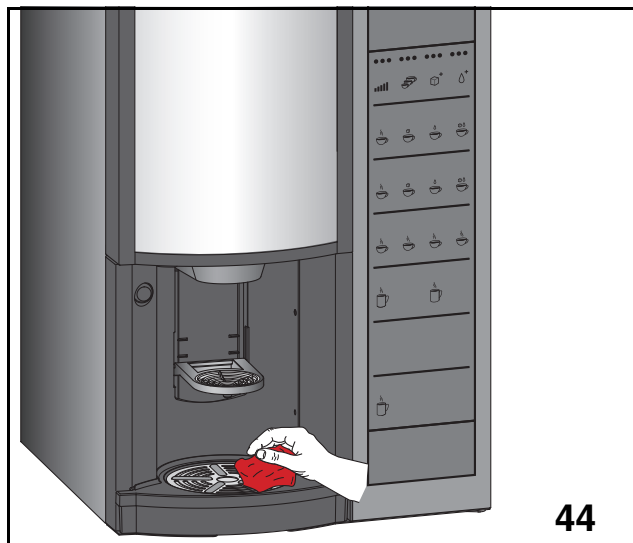


- Take out and clean the drip tray and its parts (*fig. 43*). (see *regular cleaning*).



Always wipe sensor in lid dry.

Deep cleaning

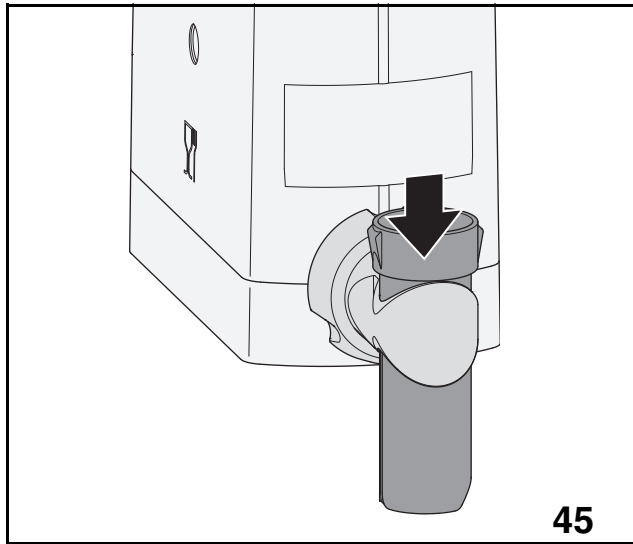


Cleaning inside and outside

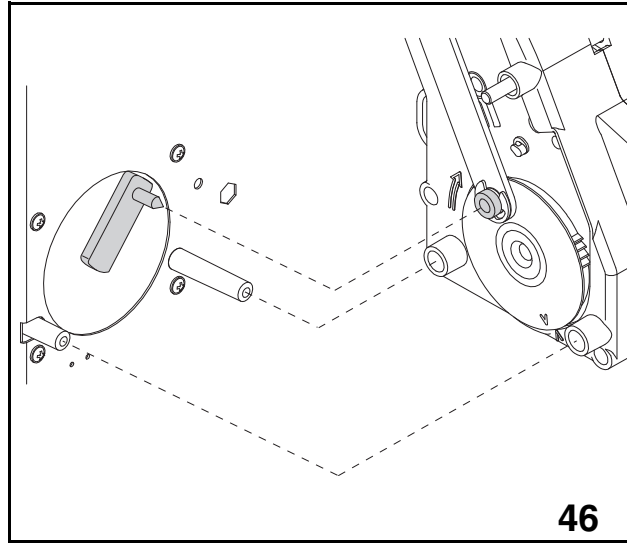
- Clean the door and housing inside and outside, and finally the bottom with a clean, damp cloth (*fig. 44*).
- Flush all parts which have been soaking thoroughly with clean and warm water.
- Dry all parts with a dry cloth.



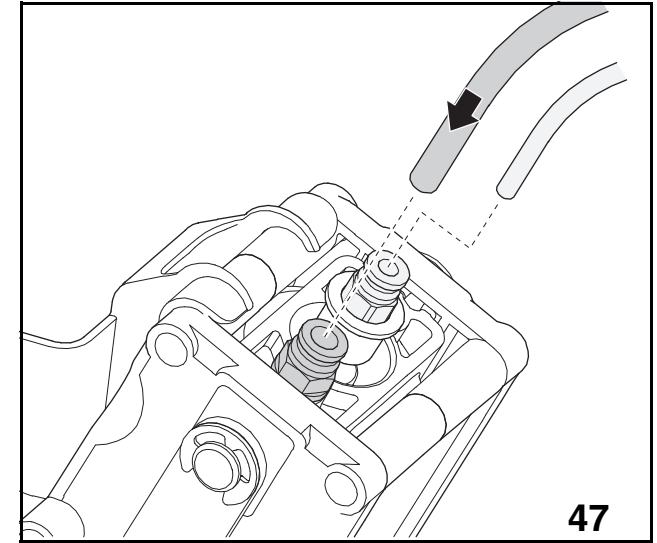
Check that no dirt or cleaning agent remains on the parts.



45



46



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Mounting cleaned parts

- Push the outlet tubes downwards to open the outlet spouts of the canisters (*fig. 45*).
- Fill coffee bean canister and re-insert in machine.
- Pull out shutter (bean stop) to open position, after canister is repositioned.
- Reinstall espresso brewer taking care that the crank arm of the coffee motor engages correctly into the drive shaft of the brewer (*fig. 46*).



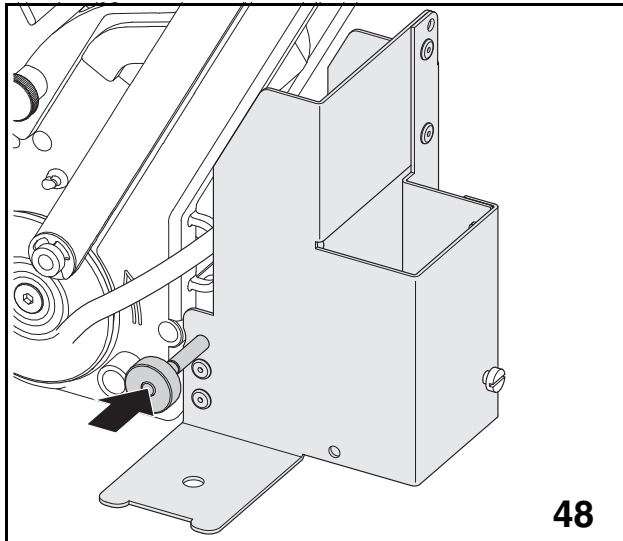
When reinstalling brewer, check that the crank arm of the coffee motor is correctly engaged in its seat.



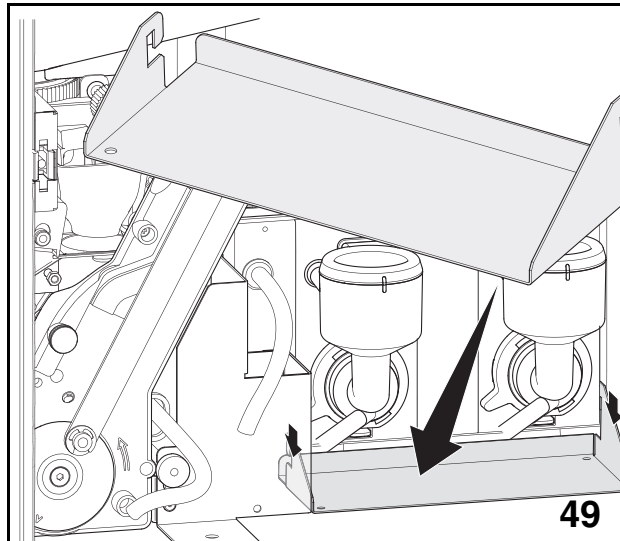
- Re-insert hoses at top of the brewer (*fig. 47*).

Check that the hoses at top of the brewer are properly seated by pulling upwards. If properly seated, the hoses will be retained by the locking rings.

Deep cleaning



- Reinsert the bracket for dispense head (*fig. 48*).

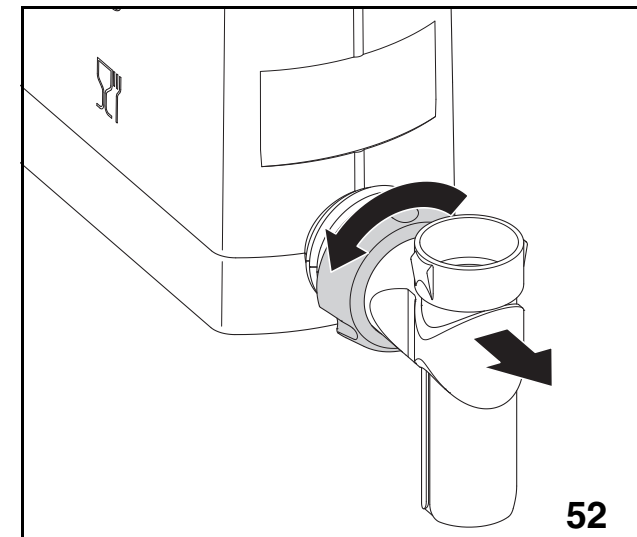
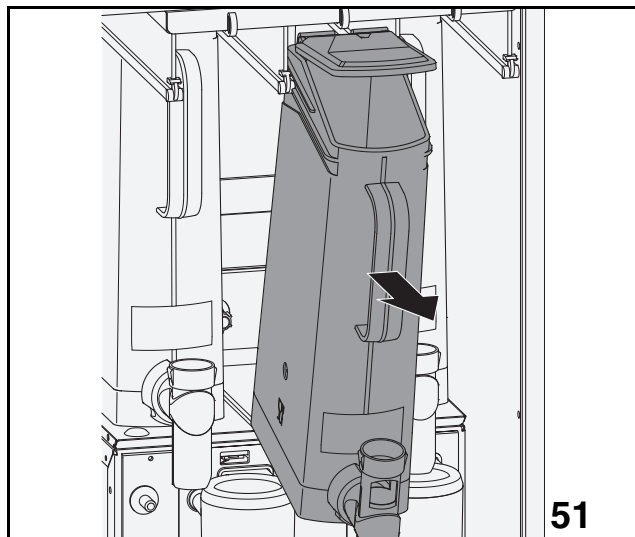


- Reinsert the ingredient waste shelf below the ingredient mixers (*fig. 49*).
- Remount all remaining parts in reverse order.



Rinsing and last check

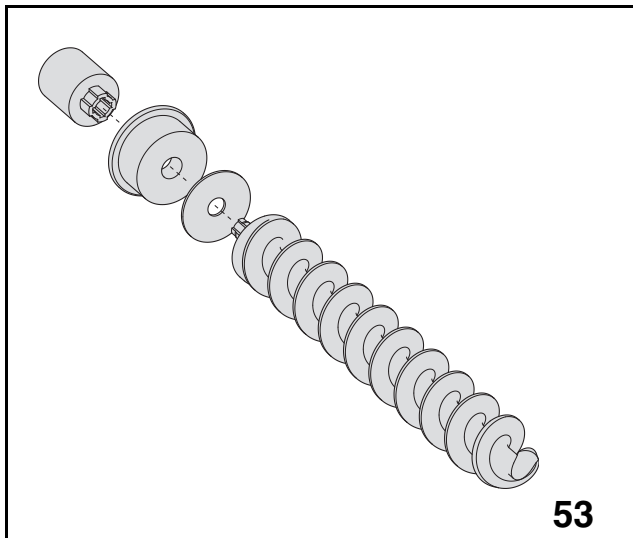
- Turn on machine with the main switch.
- Rinse machine twice (see *regular cleaning*).
- Clean outside of machine with a clean damp cloth (*fig. 50*).
- Perform a test dispensing by pressing a selection button, e.g. coffee with milk and sugar or using the 'Test' option (see *regular cleaning*, "Last check" on page 36).



Cleaning the instant ingredient canisters

- Push the outlet tube upwards to close the outlet spout of the canister.
- Take the canister by the handle and pull it forwards (*fig. 51*) until end stops in guiding rail. Lift the canister upwards and pull forwards over the end stops. The lid is automatically triggered open.
- Remove the entire lid.
- Empty the ingredient of the canister into a plastic bag or a clean container.
- Unscrew locking nut on front side of canister and remove the outlet spout (*fig. 52*).
- Unscrew locking nut on back side of canister and remove the dosing system.

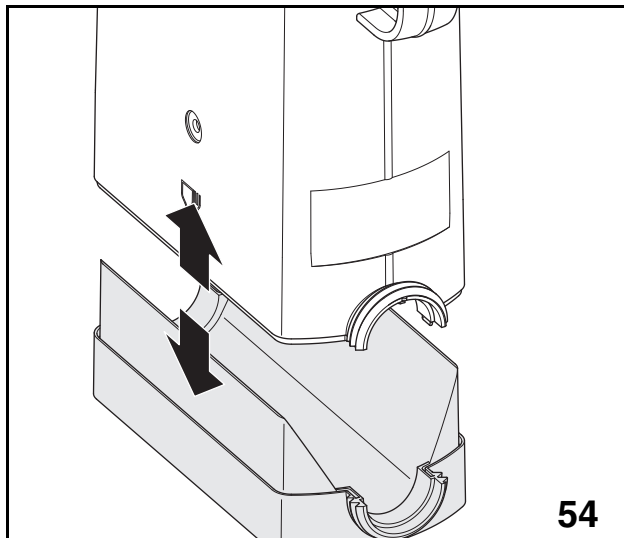
Occasional routines



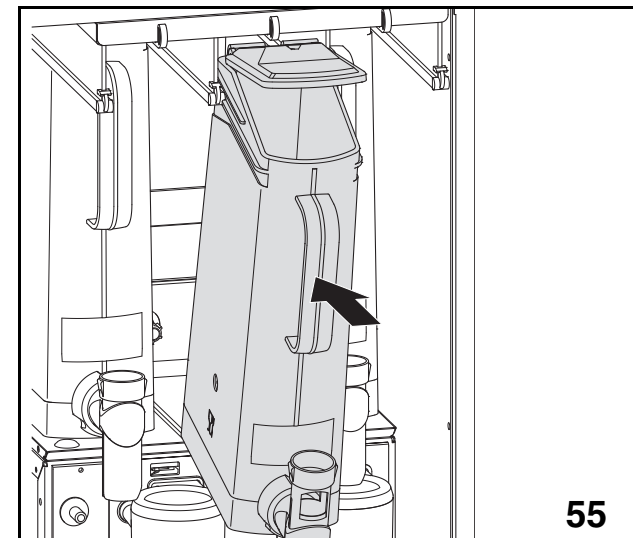
- Separate dosing system (*fig. 53*):
 - coupling
 - sealing bushing
 - auger
 - felt disc



All parts of the instant ingredient canisters are dishwasher-proof, except the felt disc.



- Separate bottom part from canister part (*fig. 54*).
- Soak all components in hot water with cleaning agent, except felt disc.
- Rinse all items thoroughly in hot clean water
- Let components dry completely
- Reassemble instant ingredient canister in reverse order.

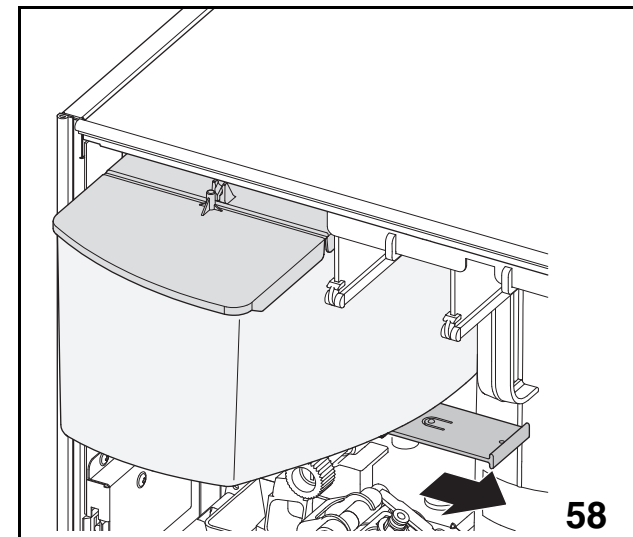
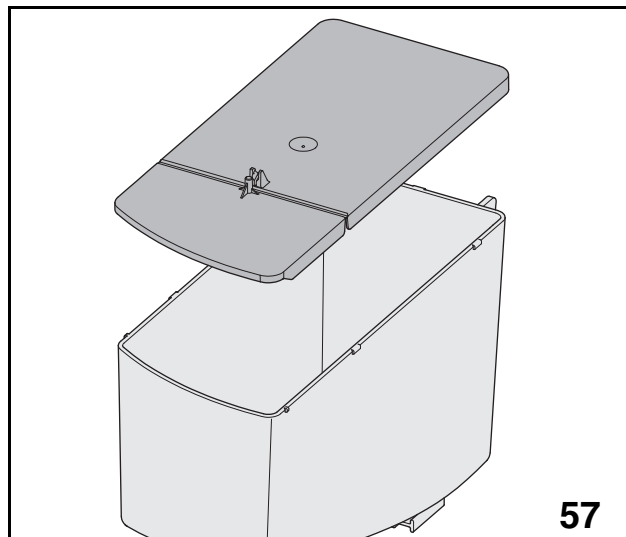
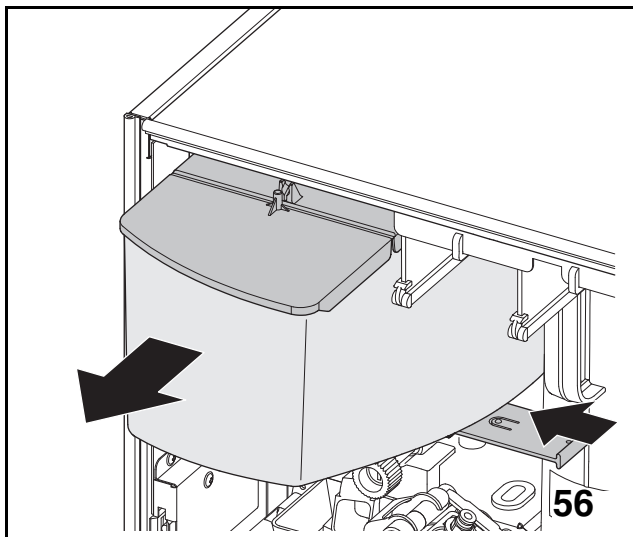


- Return canister to its former position (*fig. 55*).
- Fill canister with instant ingredient.
- Repeat procedure for all canisters.



Ensure that the outlet tube points the open end downwards.

The canisters must always be returned to their original position.

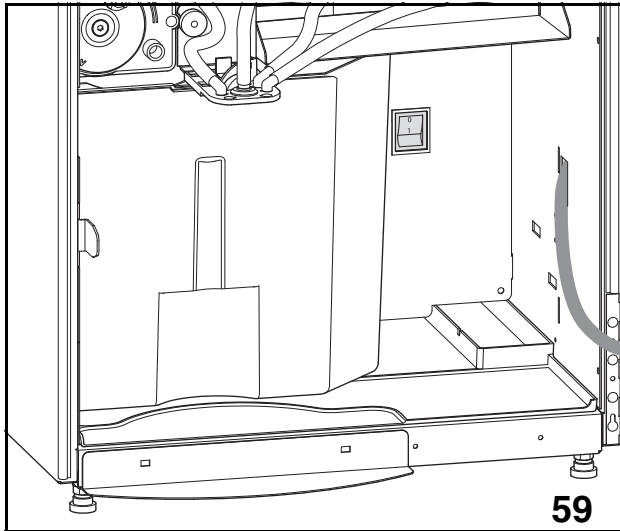


Cleaning the coffee bean canister

- Close the shutter (bean stop) of the coffee bean canister. (*fig. 56*).
- Lift off canister from the grinder.
- Remove lid and empty the canister.
- Soak canister in hot water with cleaning agent.
- Rinse canister thoroughly in hot clean water.
- Let canister dry completely.
- Fill canister with coffee beans and re-insert canister in machine.



Ensure that the shutter (bean stop) is fully open.



Cleaning the brewer with cleaning tablet

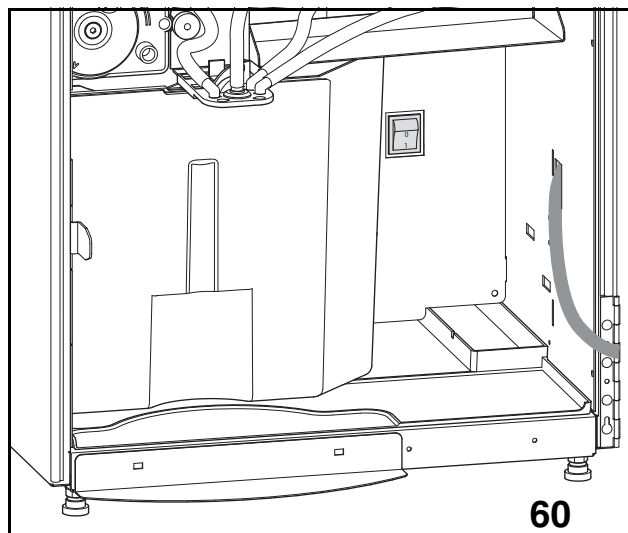


For cleaning, use products specifically intended for coffee machines, only. Strictly observe the producer's instructions for storage, handling and dosage.

- Turn the door key clockwise in keyhole and open the door.
- Turn the machine **off** with main switch (*fig. 59*) before disassembling parts in connection with the brewer parts.

Preparing the brewer cleaning with cleaning tablet

- Remove hoses with spouts from dispense head: turn each spout until its locking tab can be released through the notch of the hole in dispense head and lift off the spout
- Remove the dispense head by pulling it forwards.
- Lift off the ingredient waste shelf.
- Remove the bracket for dispense head by loosening the securing bolt.
- Remove the inlet hose and the piston hose: Press the green locking ring of each quick coupling at top of the brewer.
- Loosen the securing bolt retaining the brewer to its bracket.
- Remove the brewer
- Flush the brewer under a water tap to remove all coffee remnants from upper and lower filter.
- Wipe dry the brewer with a clean, dry cloth.
- Reinsert the brewer and the other parts in reverse order.

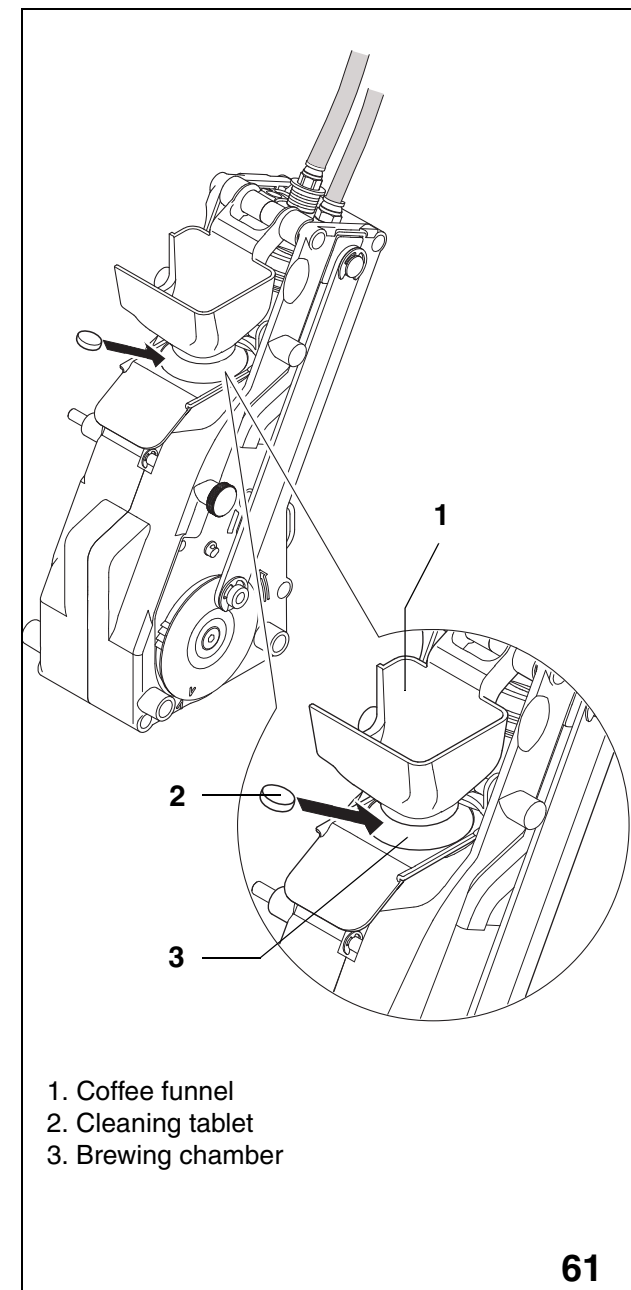


- Turn the machine **on** with main switch (*fig. 60*) .
- Close the door and let the machine initialize. (The brewer runs a cycle to reach its proper position).
- Have an empty container (min. 2 l) ready to place on the pot platform.
- Open the door.
- Have a cleaning tablet ready to fill into the brewing chamber.



Do not insert the cleaning tablet through the coffee funnel to avoid any residue from the cleaning tablet (*fig. 61*).

- Turn to the display and follow the table overleaf.

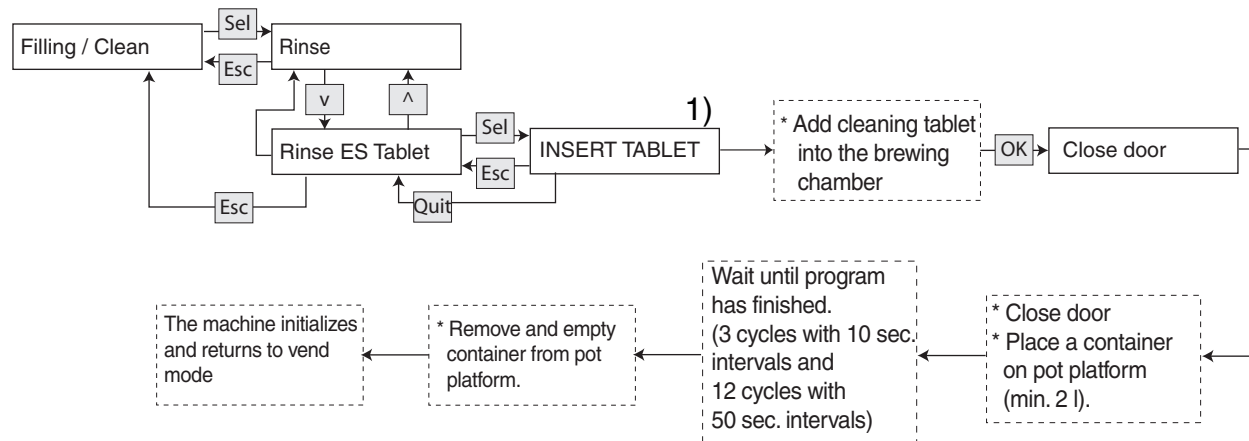


- 1. Coffee funnel
- 2. Cleaning tablet
- 3. Brewing chamber

Occasional routines

Table of cleaning procedure for brewer with cleaning tablet

- Select “Menu” (press button 4).
- Enter your password and press “OK” to proceed (if applied).
- Select “Operator” .
- From “Operator” enter “Filling/Clean” (press “SEL” button).
- Follow diagram next to this text:



1) Do not insert the tablet through the coffee funnel to avoid any residue of the cleaning tablet.

A cleaning cycle takes about 15 minutes.

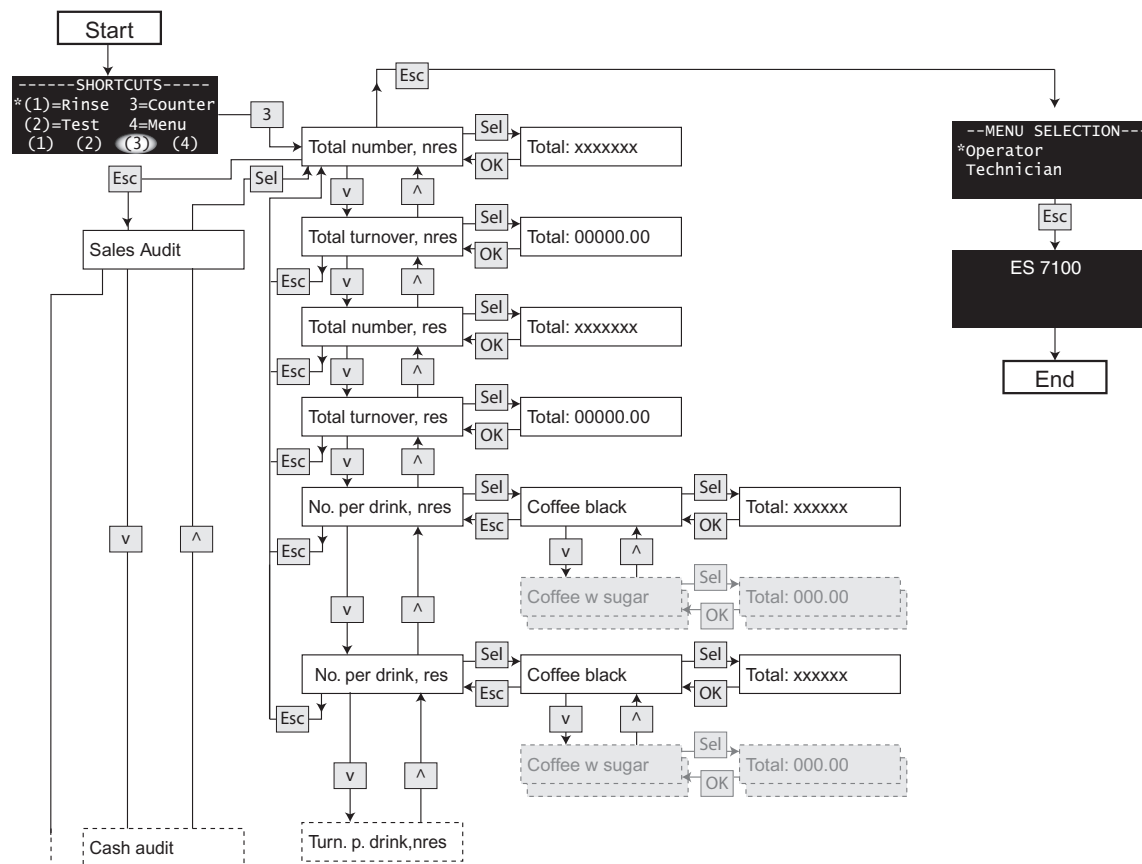
Do not interrupt a cleaning cycle!

If a cleaning cycle is interrupted, manually, due to power failure, or on powering up the machine again, a rinsing cycle is required to remove any residue of the cleaning tablet.

No espresso based selections can be made until this rinse cycle has been performed.

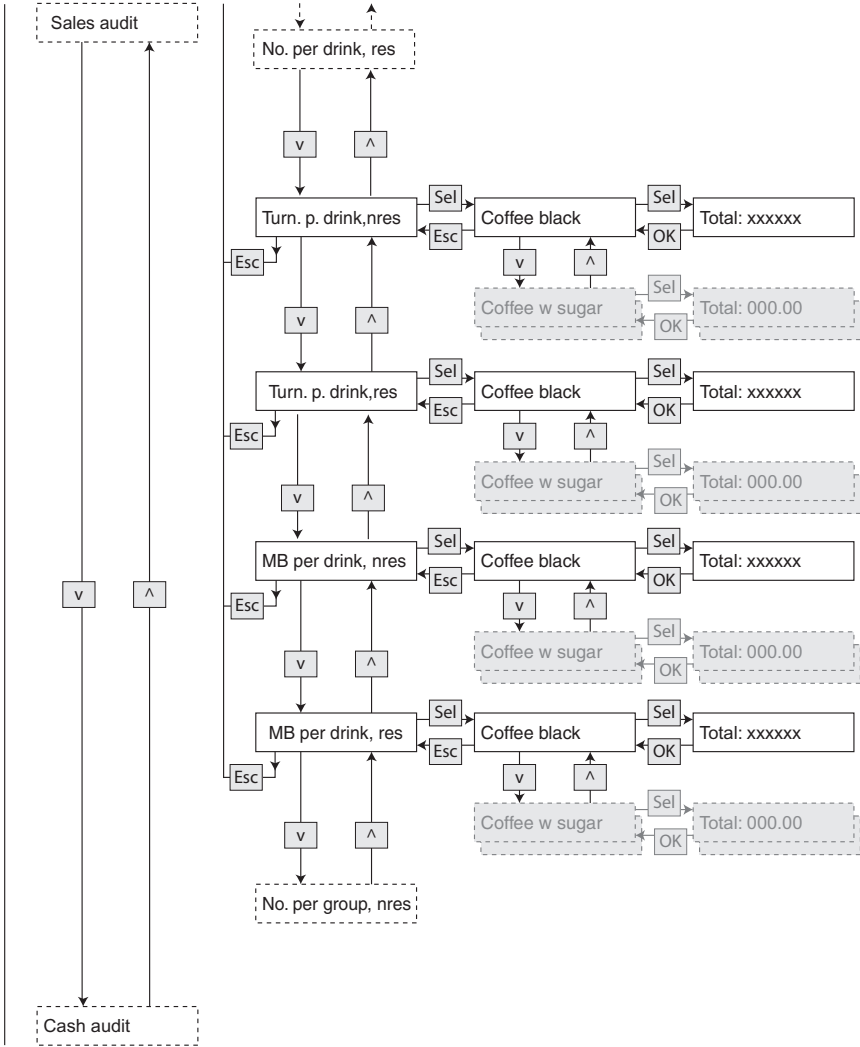
Follow this diagram to check and reset counters.

Sales turnover and numbers of items sold are available as totals as well as by individual types of drink selections.



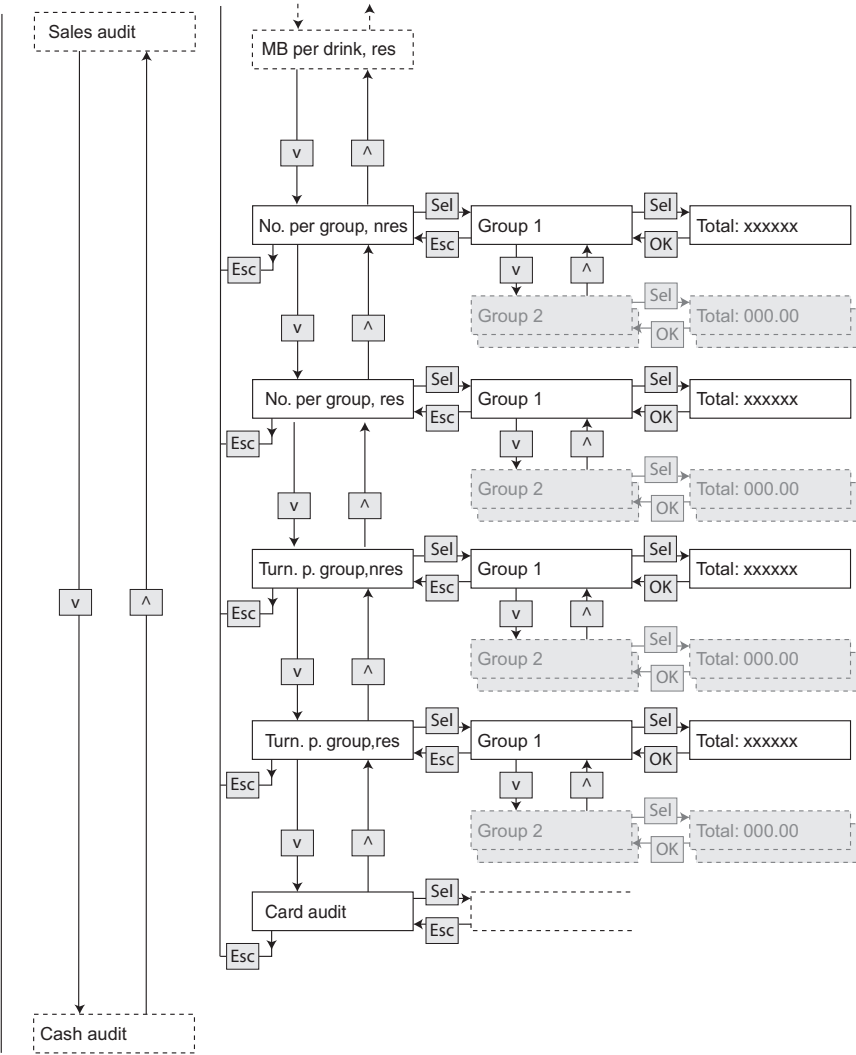
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Diagram continued



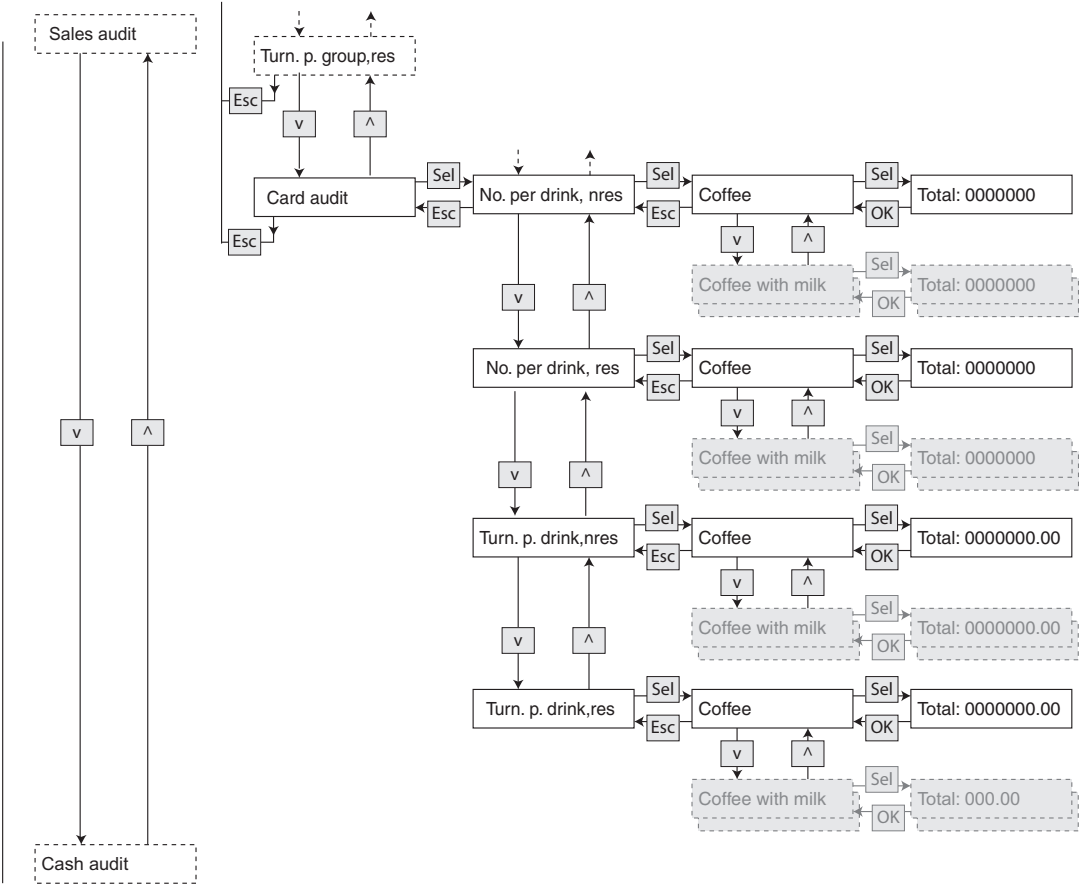
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Diagram continued



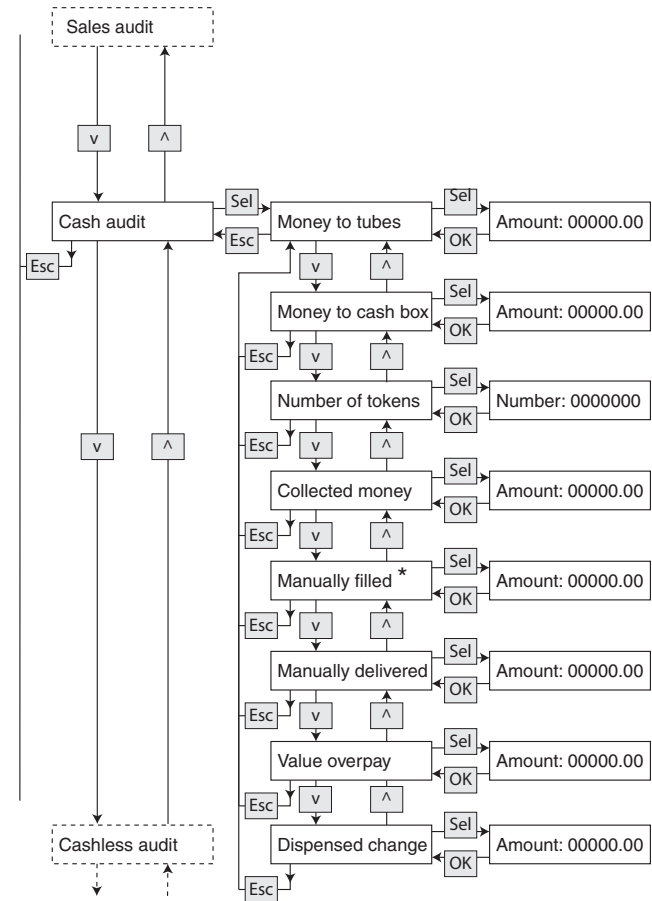
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Diagram continued



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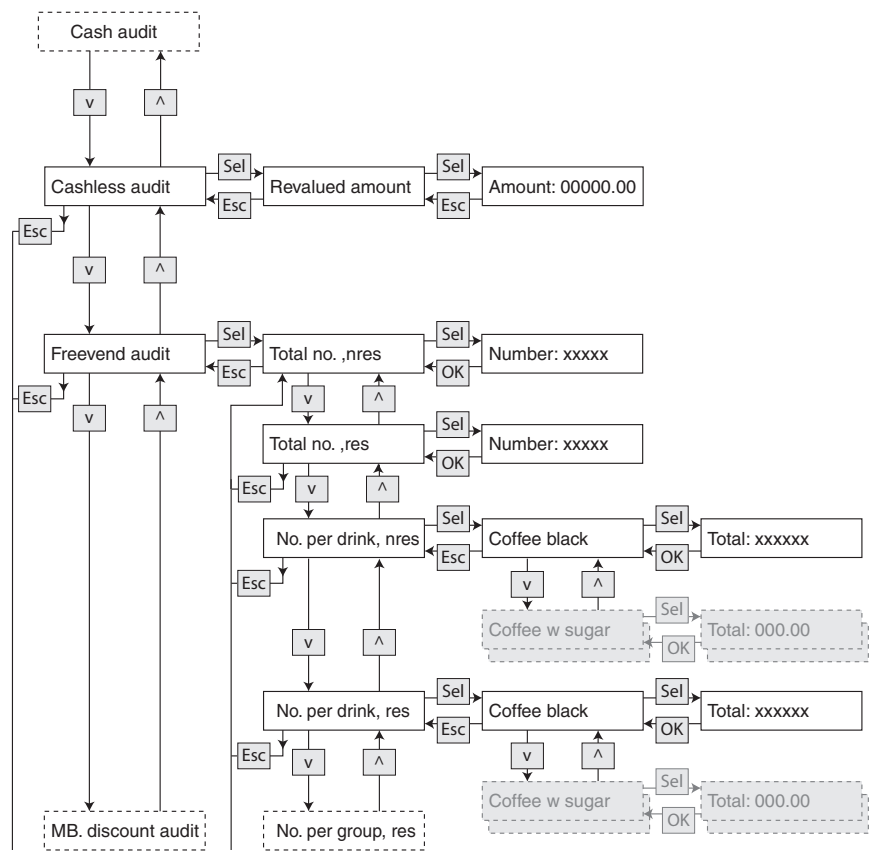
Diagram continued



* Applicable only to BDV and MDB/
ICP coin mechanisms.

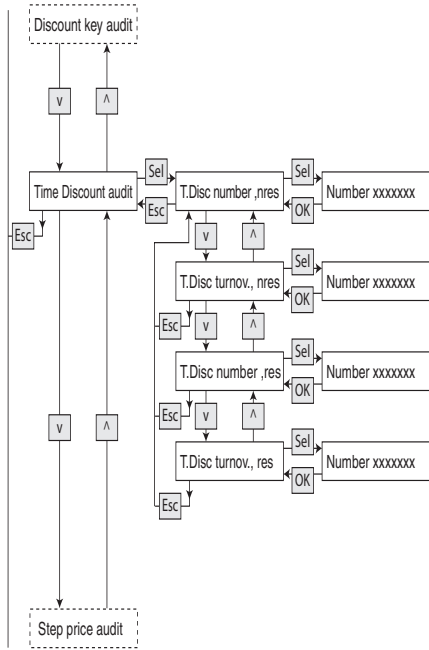
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Diagram continued



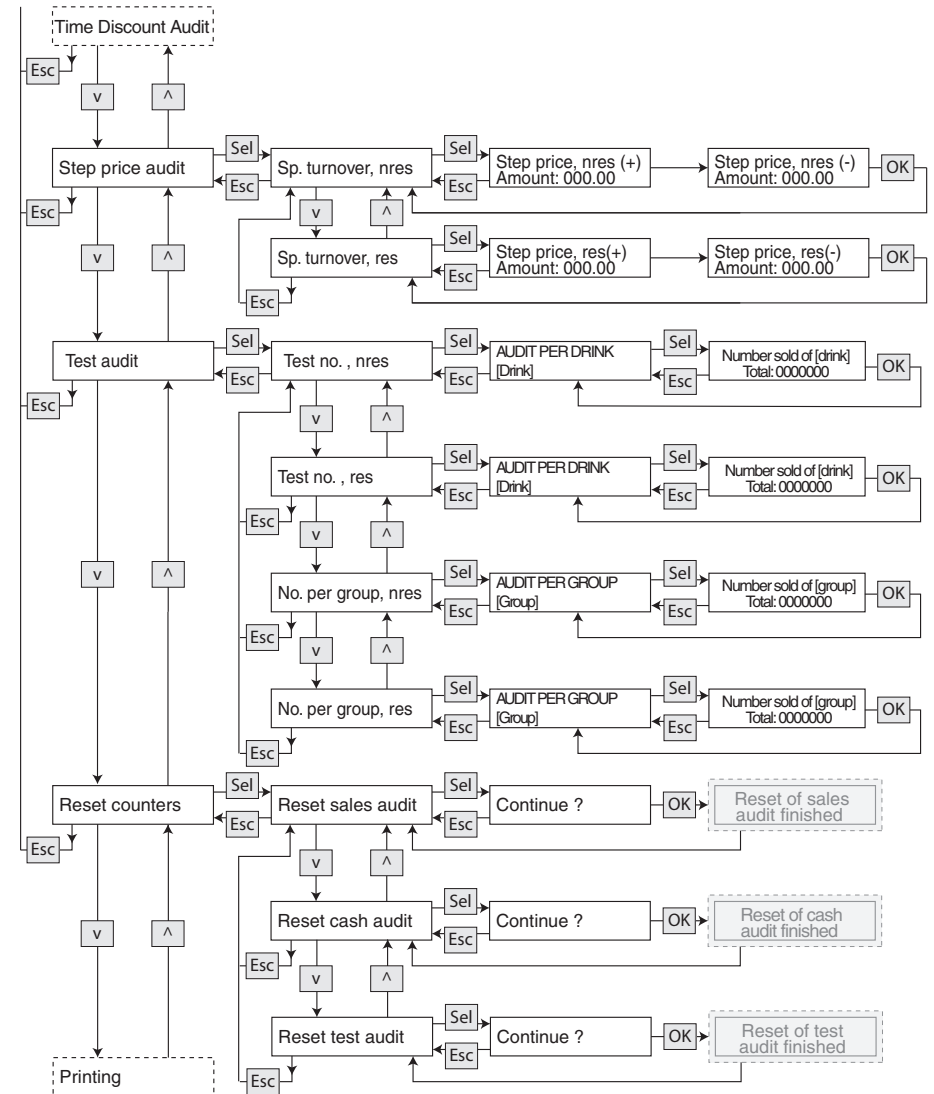
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Diagram continued



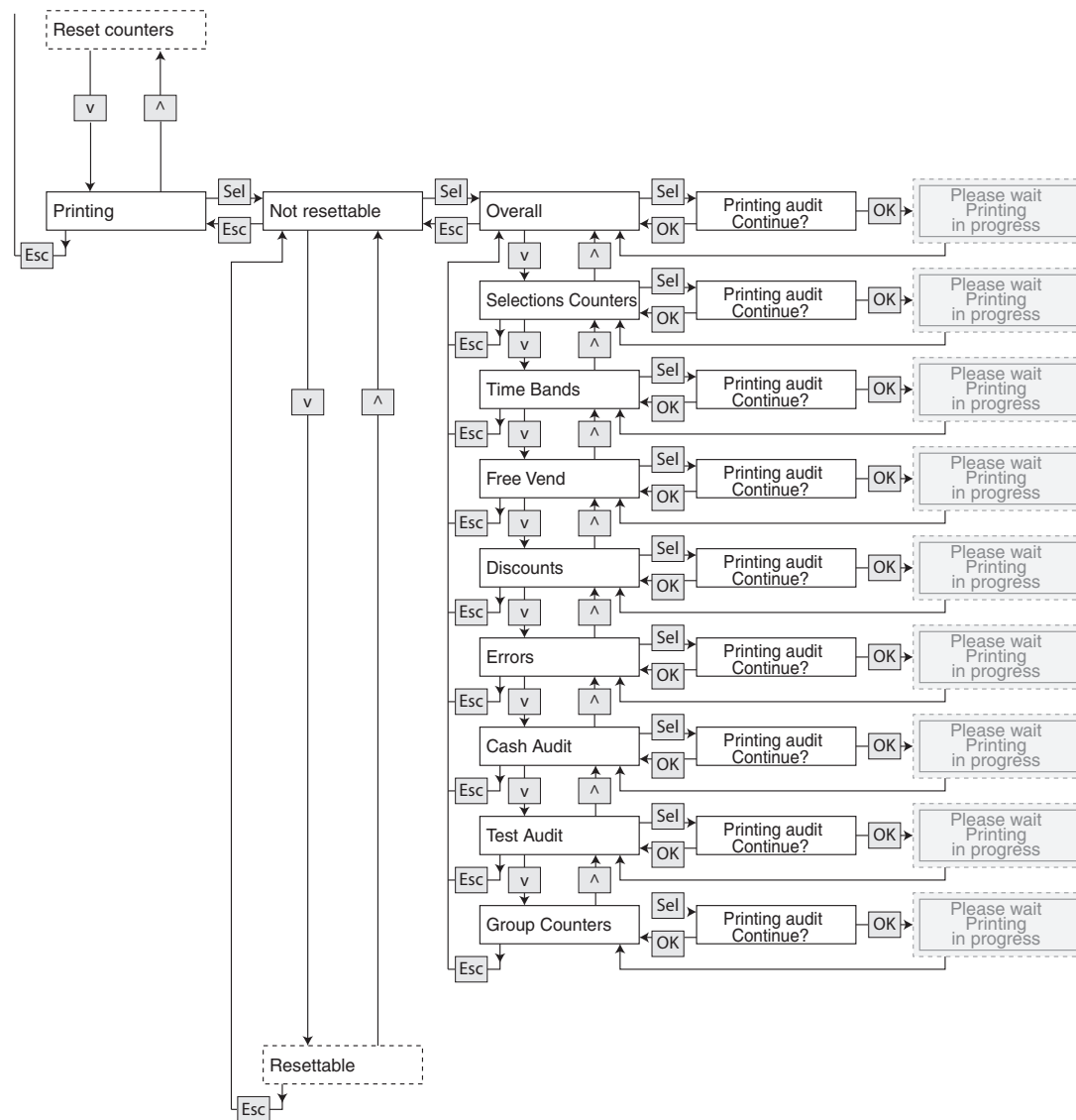
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Diagram continued



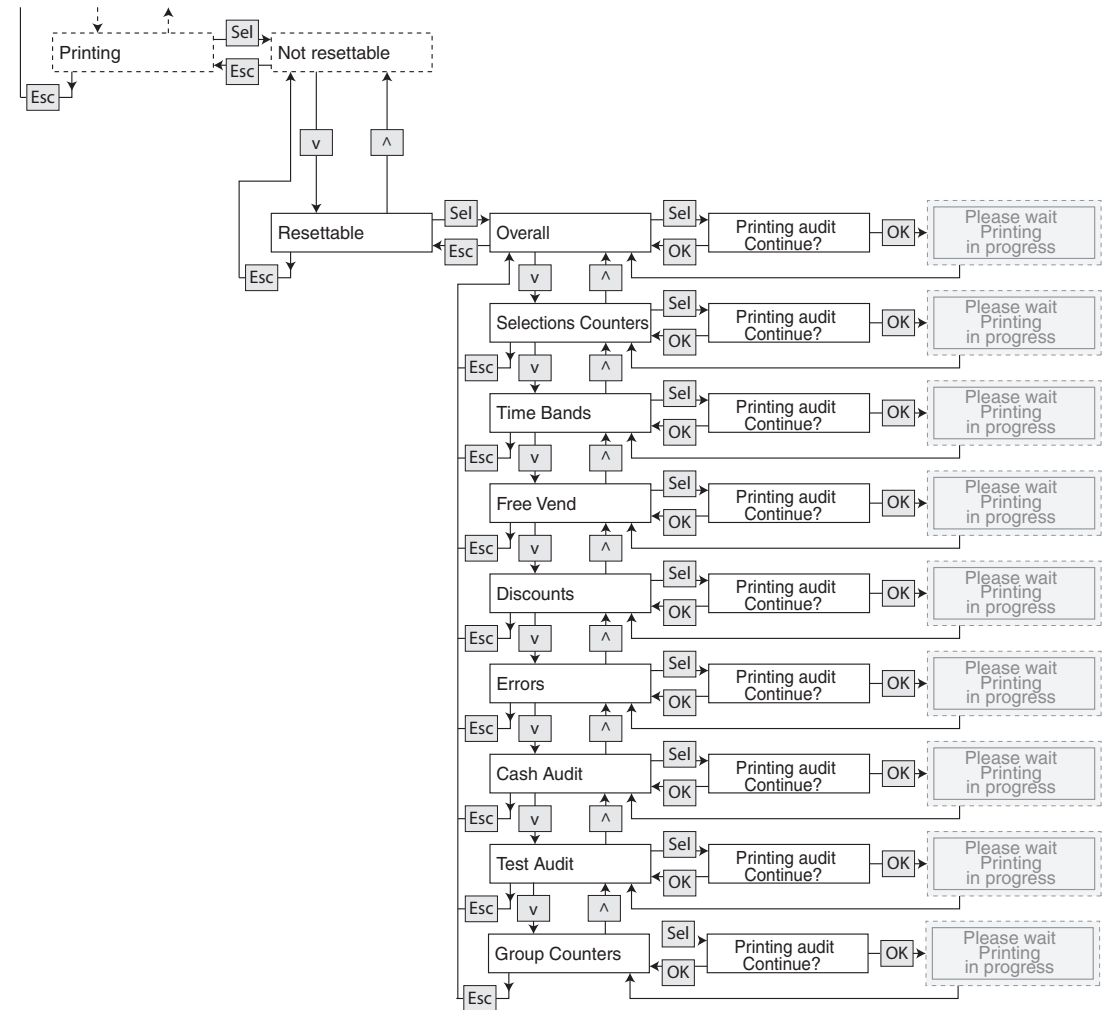
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Diagram continued

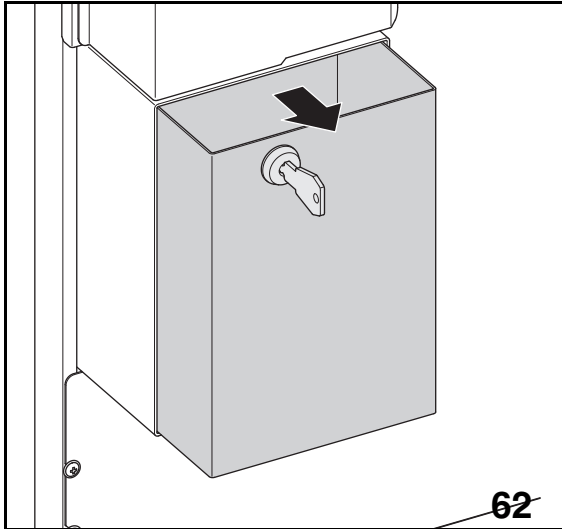


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Diagram continued



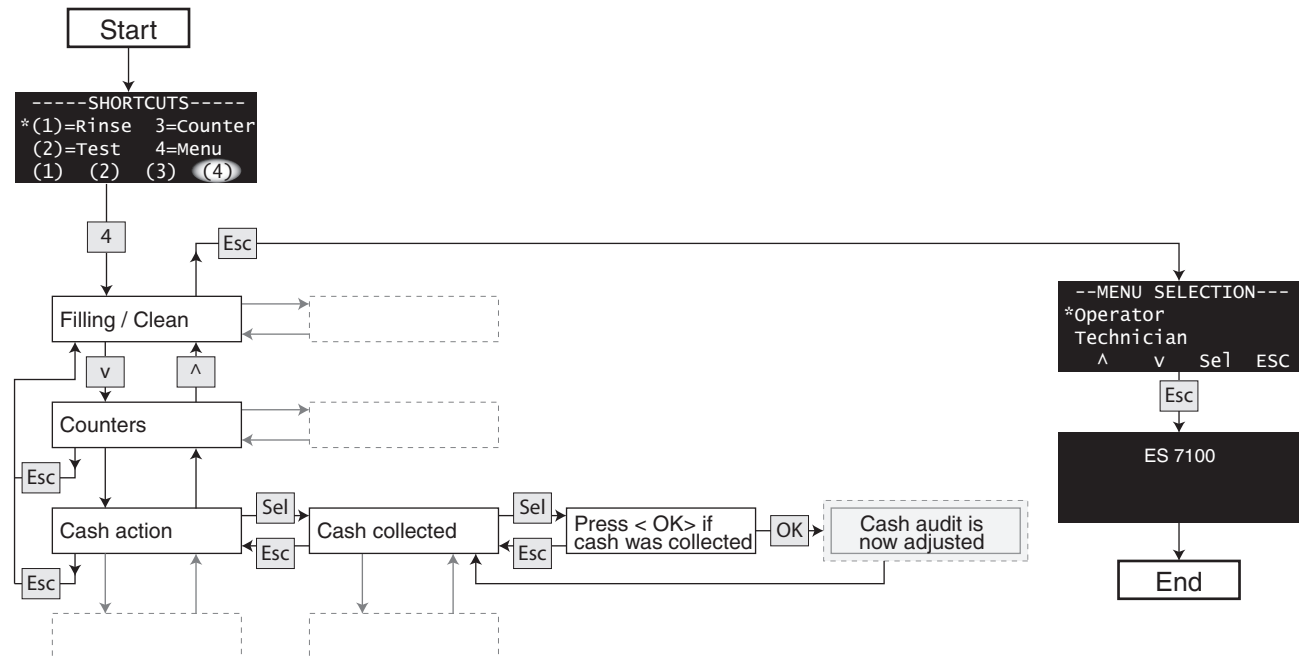
Additional routines



Emptying the cash box

- Open the door of the vending machine.
- Insert cash box key into keyhole and turn it clockwise.
- Pull out the cash box and empty it (fig. 62).
- Turn to the display and follow the diagram to register the removed amount electronically.

The amount is registered under “Collected money” (See “Calling and resetting counters” on page 53).



Adding change manually

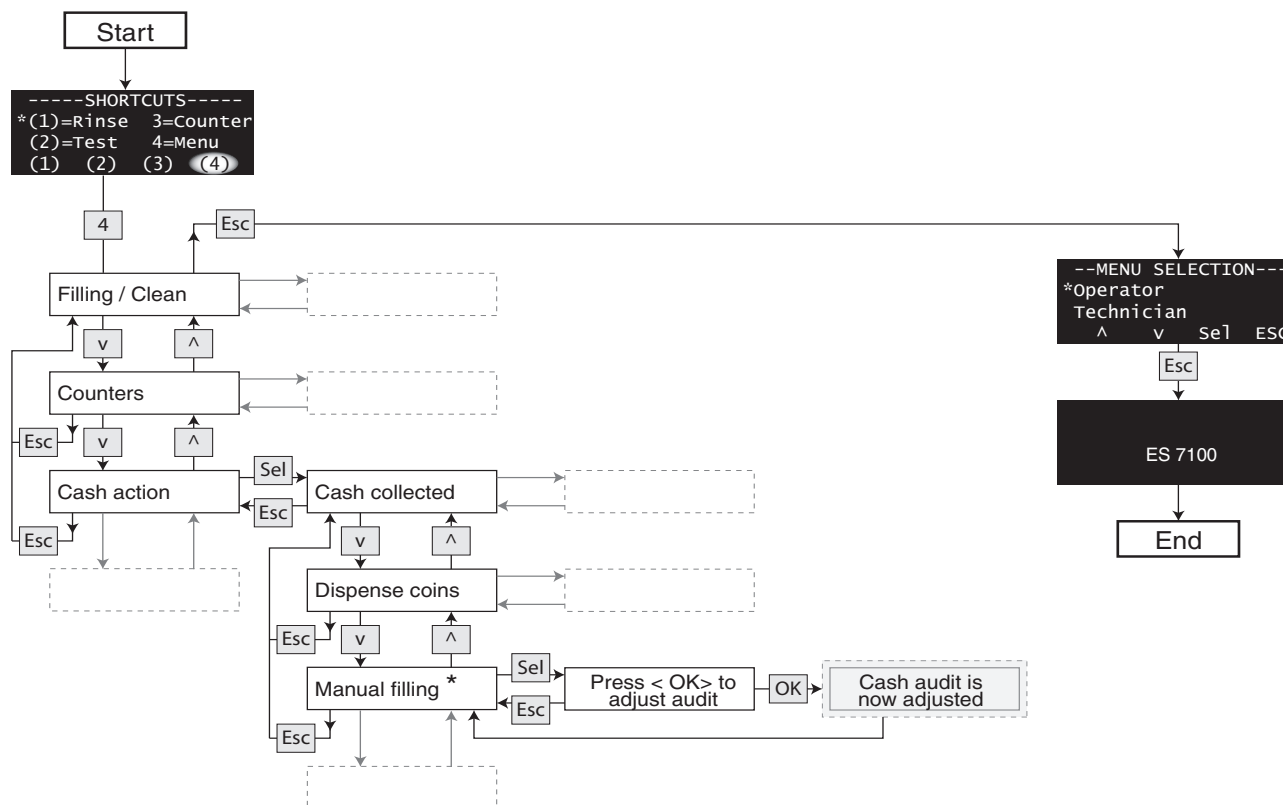


This procedure is applicable only to BDV and MDB/ICP coin mechanisms.

Insert the change amount into the machine through the coin slot.

Follow the diagram to electronically register the inserted amount as change.

The inserted amount is registered under “Manually filled”. (See “Calling and resetting counters” on page 53).

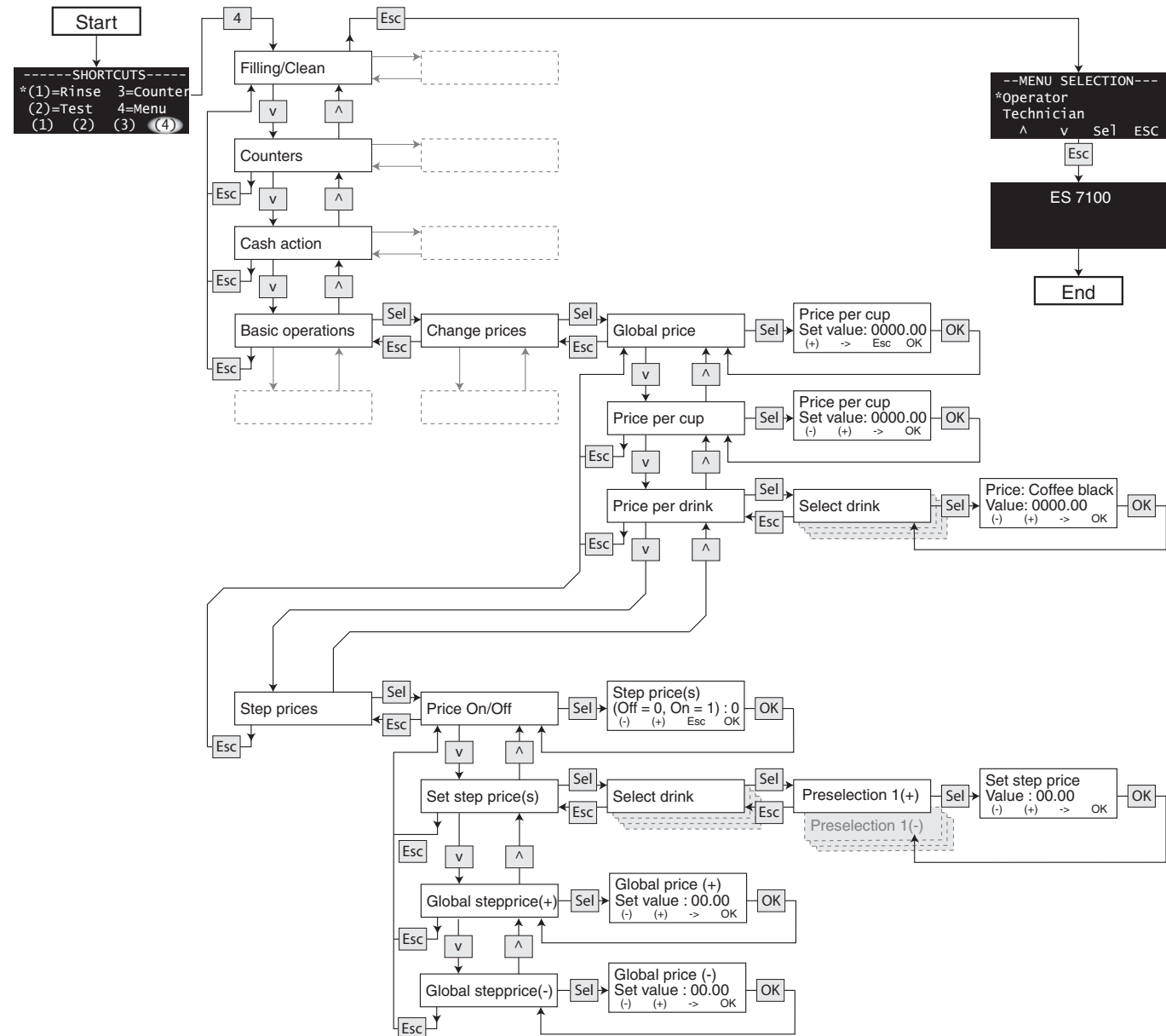


* Applicable only to BDV and MDB/ICP coin mechanisms.

Changing prices

Follow this diagram to change the price of a drink.

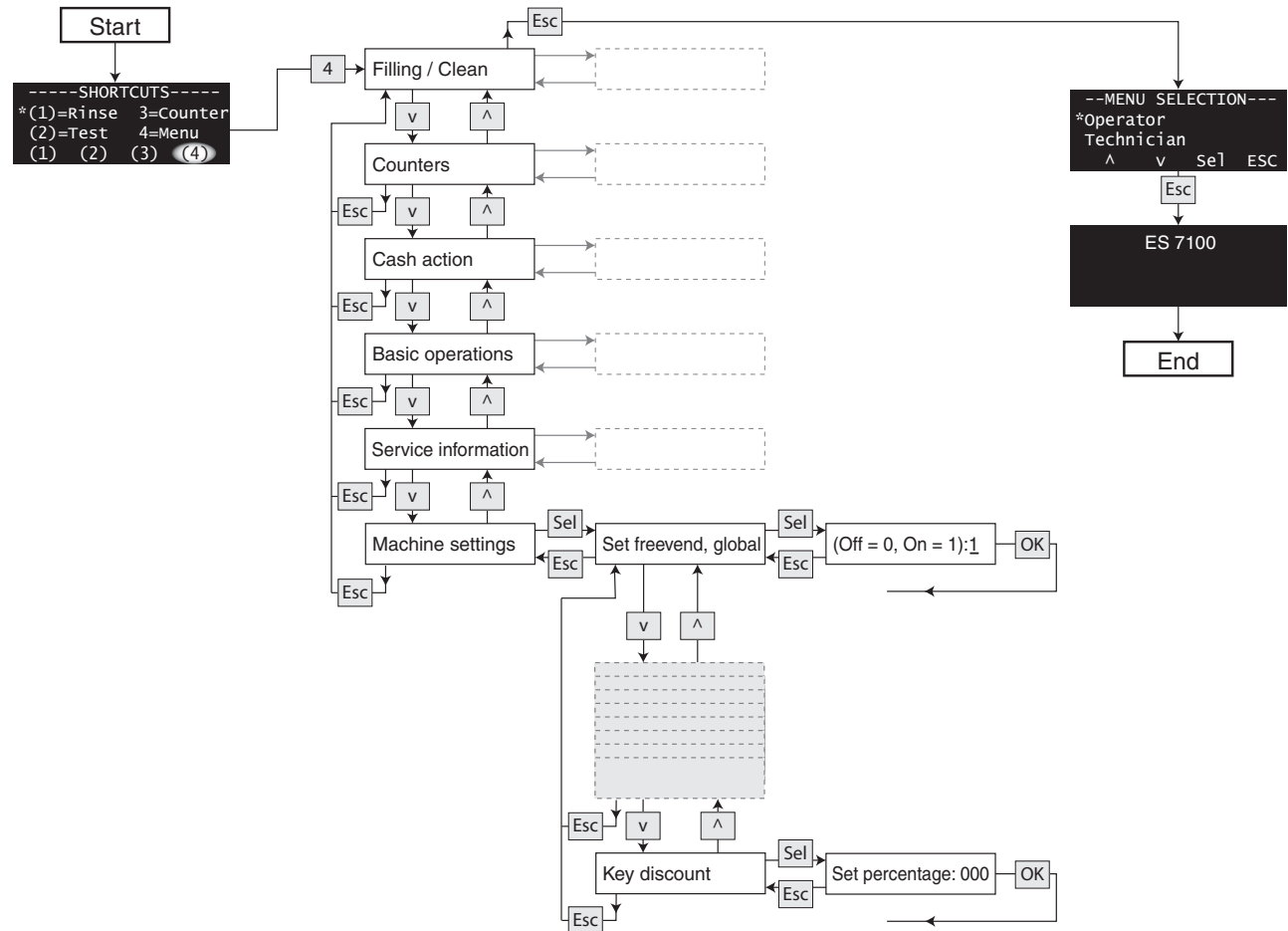
See the section Settings buttons on page 20 for an explanation of how to use the Plus (+), Minus (-), Next (->) and Save (OK) buttons.



Setting of free vend and key discount

Follow this diagram to

- turn free vend on or off
- or
- set or change key discount rates.



Additonal routines

Time Discount

The Time discount option is used to set time periods during which drinks are to be sold at a discount.

A percentage rate is given as a discount on all drinks during the set periods.

Seven different discount periods can be programmed on a weekly basis.

For each period a start day and time, and an end day and time must be defined.

The start and end days are identified by progressive numbers: (Monday=0, Tuesday=1, etc.) and all weekdays (ALL=7).

This means:

- A time discount period that crosses midnight requires two period settings, see Example 1, periods 1 and 2.
- If a time discount is to apply within the same period of time every day of the week, e.g. from 10 a.m. to 2 p.m. (10:00 to 14:00), one period setting stating ALL as start and end day is sufficient. If a time discount should apply only some of the days of a week, e.g. Saturdays and Sundays, separate periods must be defined for each of these days, see Example 2 next page.
- A period cannot have a 'start time' later than the 'end time', see Non Example next page.
- The same time period cannot include days from different weeks, i.e. a period cannot be set from Monday to Monday.

Example 1:

- A time discount is to apply Monday to Friday from 10:00 p.m. to 06:00 a.m. Furthermore, time discount is to apply all day during week-ends. Three period settings are required to define this combination of time discounts:

Period 1			
Set start day	ALL=7	Set start time	22:00
Set end day	ALL=7	Set end time	23:59
Result: Time discount is given between 10:00 p.m. and midnight of the same day.			
Period 2			
Set start day	ALL=7	Set start time	00:00
Set end day	ALL=7	Set end time	06:00
Result: Time discount is given between midnight and 06:00 a.m. of the same day.			
Period 3			
Set start day	Sa=5	Set start time	06:00
Set end day	Su=6	Set end time	23:59
Result: Time discount is given continuously all through the week-end.			

Example 2:

- A time discount is to apply Saturdays and Sundays between 10:00 a.m. and 2:00 p.m. Separate periods must be defined for each of the two days:

Period 1			
Set start day	Sa=5	Set start time	10:00
Set end day	Sa=5	Set end time	14:00
Period 2			
Set start day	Su=6	Set start time	10:00
Set end day	Su=6	Set end time	14:00
Result: Time discount is given on Saturdays and Sundays between 10:00 a.m. and 2:00 p.m.			

Non example:

Period 1			
Set start day	ALL=7	Set start time	22:00
Set end day	ALL=7	Set end time	06:00
Result: No time discount will be given as the <i>end time</i> cannot be earlier than the <i>start time</i> for the same 'day' or 'ALL'. In this case a time discount up till midnight and another one from midnight and onwards should have been defined. (See Example 1, Periods 1 and 2)			

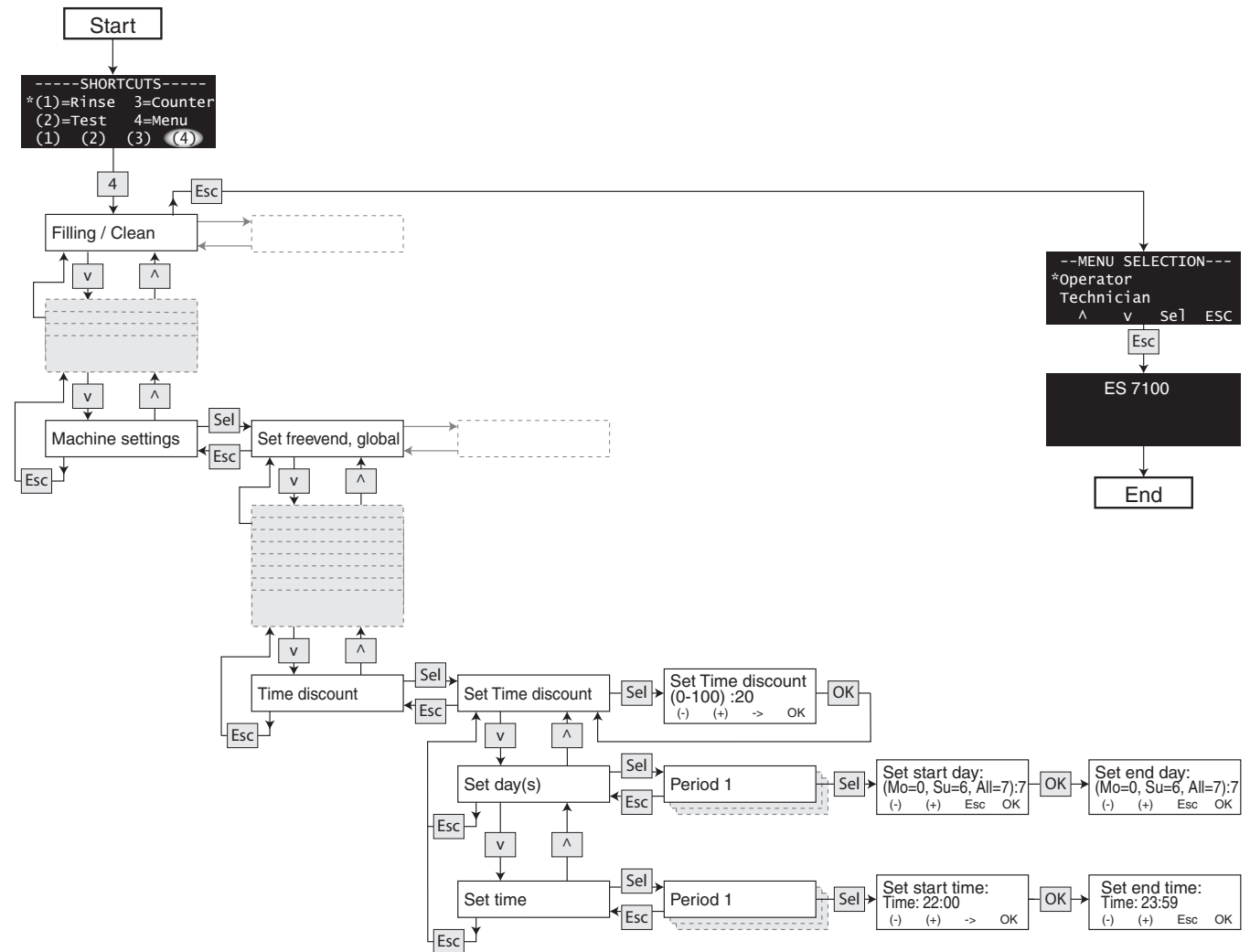
Additional routines

Setting time discount

- Follow this diagram to set the discount percentage rate and to define one or more time periods (up to seven periods) in which it is to apply.



If the discount key is used during an active Time discount period, the higher of the two discount rates will apply.



Energy saving periods

In order to save electric power when the machine is not in use, this function is used to lower the water temperature in the boiler and to switch off the door light.

The energy saving function is enabled / disabled in 'Save energy On/ Off'.

7 energy saving periods can be programmed on a weekly basis.

For each period a start day and time, and an end day and time must be defined. The start and end days are identified by progressive numbers: (Monday=0, Tuesday=1, etc.) and all weekdays (ALL=7).

This means:

- An energy saving period that crosses midnight requires two period settings, see Example, periods 1 and 2.
- If the periods are set overlapping, the machine will be shut down as long as it is covered by one of these periods, see Example: Period 3.
- The same time period cannot include days from different weeks, i.e. a period cannot be set from Monday to Monday.
- A period cannot have a 'start time' later than the 'end time', see Non Example 2.
- Non Examples 1 and 2 illustrate settings which will give unintended results.

Example

The vending machine is to run Monday to Friday from 07:00 till 22:00. The remaining time of the week and during the weekend the machine is set to energy saving. Three periods have to be set as follows:

Period 1			
Set start day	ALL=7	Set start time	22:00
Set end day	ALL=7	set end time	23:59
Result: The machine is 'shut down' every day from 22:00 till midnight the same day.			
Period 2			
Set start day	ALL=7	Set start time	00:00
Set end day	ALL=7	set end time	07:00
Result: The machine is 'shut down' from midnight 00:00 till 07:00 in the morning the same day.			
Period 3			
Set start day	Fr=4	Set start time	22:00
Set end day	Su=6	set end time	23:59
Result: The machine is shut down from Friday evening at 22:00 till Sunday evening at 23:59.			

Non Example 1:

Period 1			
Set start day	Mo=0	Set start time	22:00
Set end day	Fr=4	set end time	07:00
Result: The machine is 'shut down' Monday at 22:00 till Friday at 07:00 which was not the intention.			

Non Example 2:

Period 1			
Set start day	All=7	Set start time	22:00
Set end day	All=7	set end time	07:00
Result: The machine is not 'shut down' as the <i>end time</i> must not be earlier than the <i>start time</i> for the same day or the setting 'ALL'.			

Additional routines

The temperature during the energy saving period is set in 'set temperature'

Switching off the door light during the energy saving mode is enabled / disabled in 'Set doorlight'.



If a selection button is activated during an energy saving period, the machine leaves the energy saving mode and returns to the vend mode. As soon as the temperature in the water tank has reached the 'nominal temperature', the machine is ready for dispensing, and the wanted drink can be selected.

When the selection buttons have been left untouched for more than 10 minutes after the last drinks dispensing, and an energy saving period is still in force, the machine returns to the energy saving mode.

MAINTENANCE

General instructions

Before starting any adjusting operations requiring parts of the unit to be removed, the machine must always be switched off.

- The operations described in the proceeding pages should be carried out only by qualified personnel, who are trained in the correct use of the machine according to the standards in force and who have the specific knowledge of the machine functioning from a point of view of electrical safety and health regulations.

The grinder is fitted with a sensor that counts the number of rotations of the grinding wheels, allowing the control software of the machine to determine the number of rotations and thus the grams of coffee for each single selection.

With the programming procedure, it is possible to set the grams (6 to 12 gr) of ground coffee (rotations of the grinder) for each selection.



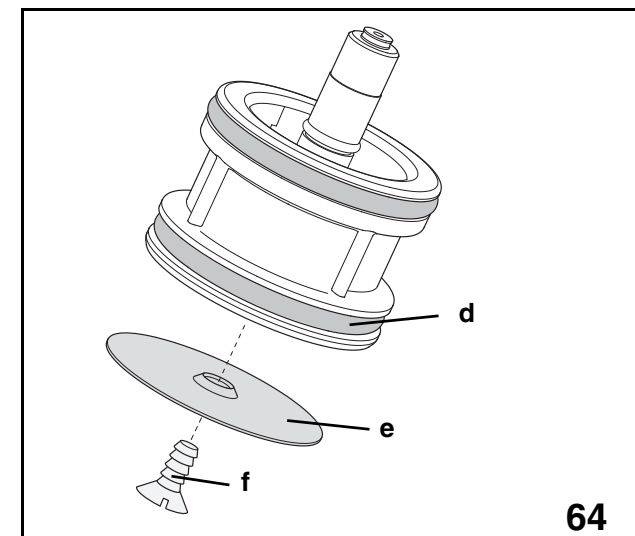
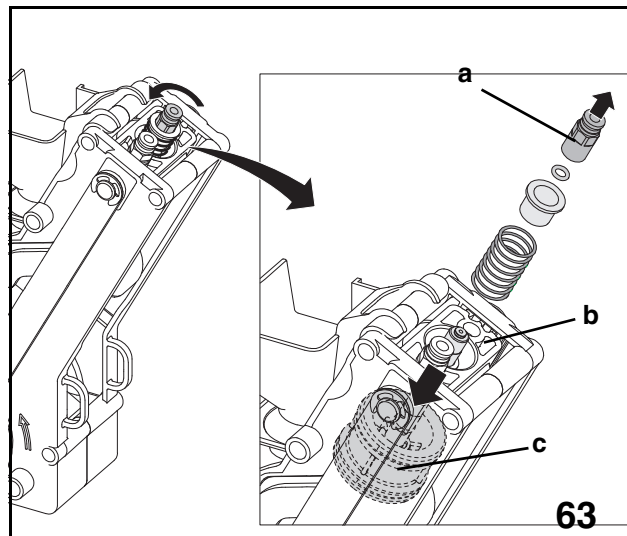
Important:

Never touch the adjusting knob of the grinder.

Always call a technician for adjustment / calibration of grinder!



The grinder requires a period of 50 selections to allow the grinder to “run in”. After this period the coffee empty detection becomes stable. A complete coffee bean canister contains 250 - 300 selections so the grinder should be correctly “run in” by the time the coffee bean canister is empty for the first occasion.



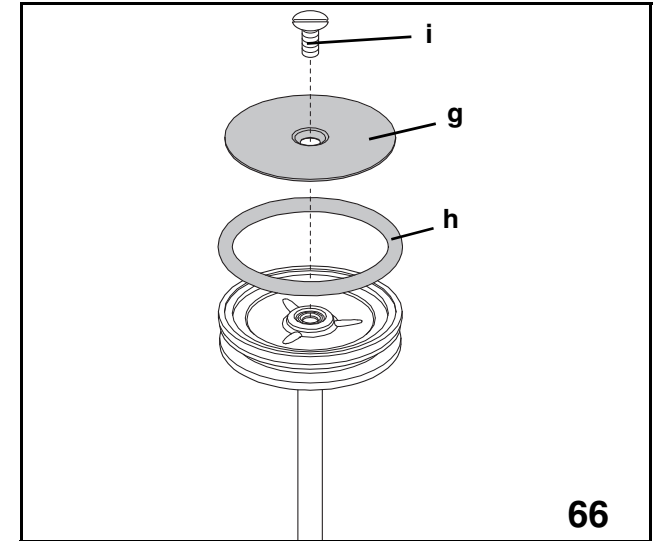
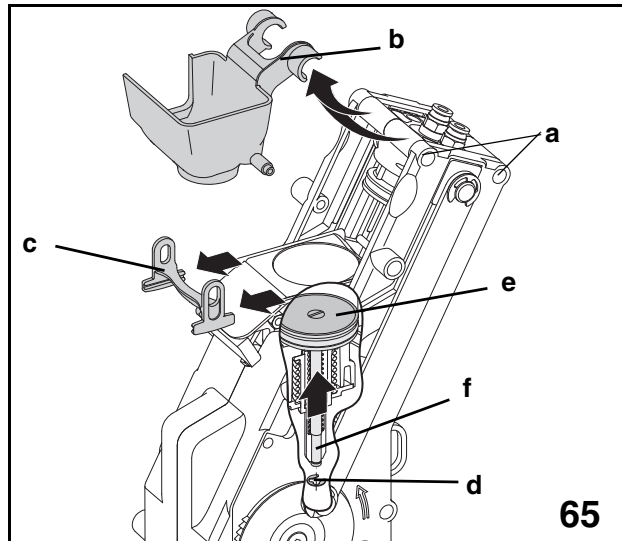
Espresso brewer unit maintenance

Every 10,000 selections or every 6 months some maintenance of the coffee unit must be carried out.

- Turn off the main switch.
- Remove the dispense head, the bracket for dispense head and finally the brewer (see *deep cleaning*, page 39 and page 41).

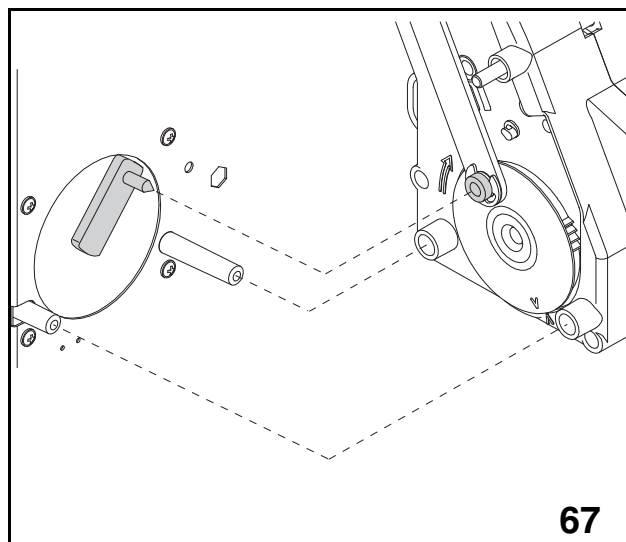
Removing the upper filter

- Loosen and remove nut (a, fig. 63), using e.g. a spanner.
- Press the shaft of the upper piston out of the cross-piece (b, fig. 63) from above, and remove piston (c, fig. 63).
- Disassemble the filter (d) and the piston seal (e, fig. 64) by removing screw (f, fig. 64).



Removing the lower filter

- Loosen the screws (a, *fig. 65*), enough to release the coffee funnel.
- Remove the coffee funnel (b, *fig. 65*) by snapping it off the frontmost spacer bar of the brewer side parts and releasing the side tabs from the brewer side parts.
- Remove the scraper (c, *fig. 65*) by sliding it off the tracks at top of the brewing chamber.
- Remove the lower piston snap ring (d, *fig. 65*) (retaining ring).
- Take the lower piston (e, *fig. 65*) out of brewing chamber by pressing the lower piston guide (f, *fig. 65*) from below of brewing chamber.
- Disassemble the filter (g, *fig. 66*) and the piston seal (h, *fig. 66*) by removing the screw (i, *fig. 66*).



Cleaning brewer parts

- Soak all components removed from the brewer unit in a solution of boiling hot water and coffee machine detergent for approx. 20 minutes.
- Thoroughly rinse and dry all parts.
- Reinstall parts in reverse order of disassembly.



Check that the crank arm of the coffee motor is correctly engaged in its seat (*fig. 67*).

Display messages and trouble shooting

Display messages

If the vending machine shows one of the display messages mentioned below, please follow the suggestions for remedy under Corrective action. If the error remains, please call for service.

If a display message appears that is not mentioned here, please call for service.

Display message	Corrective action
Cleaning required	<ul style="list-style-type: none">The 'rinse time period' is exceeded. Clean the machine and use one of the rinse functions, see "Rinsing machine" on page 35.
Energy saving mode	<ul style="list-style-type: none">Energy saving is active. At the press of a selection button, the machine will return to vend mode. When the water is sufficiently heated, the machine is ready to dispense drinks. <p>If the selection panel is left untouched for 10 minutes, the machine will return to energy saving.</p>
Out of service	<ul style="list-style-type: none">Turn the machine off and on.
Rinse in progress...	<ul style="list-style-type: none">Wait until machine has finished automatic rinse function.
Temperature low	<ul style="list-style-type: none">Wait until the water is heated sufficiently (maximum 13 minutes).
Water level low	<ul style="list-style-type: none">Descalc water inlet valve.Remove impurities from water filter. Replace if necessary.Remove impurities from water supply connection.
Base tray full	<ul style="list-style-type: none">Empty and clean base tray. Wipe it dry.
Drip tray full	<ul style="list-style-type: none">Empty and clean drip tray. Wipe sensor dry.
Please remove cup	<ul style="list-style-type: none">Remove cup from cup carrier.

Display message
Please remove pot
ES brewer faulty
ES temperature low
ES water fault
ES water level low
No coffee beans

Corrective action
<ul style="list-style-type: none"> • Remove pot from pot platform.
<ul style="list-style-type: none"> • Switch machine off and on. • Check whether the brewer is installed correctly or something is blocking the brewer. If necessary, reinstall or remove blocking part.
<ul style="list-style-type: none"> • Wait until the water is heated sufficiently.
<ul style="list-style-type: none"> • Turn the machine off and on.
<ul style="list-style-type: none"> • Check if water is turned on. If necessary, open water tap. • Check if water supply connection is blocked. If necessary remove impurities. • Check if water pressure from the water mains is very low. If necessary, call a plumber.
<ul style="list-style-type: none"> • Refill coffee bean canister • Ensure that the shutter is open.

Display messages and trouble shooting

Trouble shooting

If the vending machine does not function correctly and does not show a display message, check the following points before calling for service.

Fault	Corrective action
Machine dispenses drinks for free.	<ul style="list-style-type: none">• Check prices. Reset as necessary.• Switch off free vend.
Flavour of drink is not satisfactory.	<ul style="list-style-type: none">• Wrong ingredients. Use correct ingredients, i.e. correct whitener for coffee and tea. Use only ingredients recommended for vending machines.• Check if components are clean. Replace and rinse thoroughly as necessary.• Ensure that canisters are located in their correct place.• Ensure that hoses from ingredient canisters are located correctly in the dispense head.
Too little water or no water is dispensed.	<ul style="list-style-type: none">• Ensure that water pipes are not blocked.
Only water is dispensed, no ingredient.	<ul style="list-style-type: none">• Ensure that canister spout(s) is (are) open.• Check if the ingredient canisters are empty. Refill as necessary.• Ensure that canisters are properly located.• Ensure that canister coupling is fitted in canister.• Check if the mixing funnels are blocked. Clean and relocate.
Ingredients are moist and become lumpy in canisters.	<ul style="list-style-type: none">• Remove dust from grid at rear of machine with a vacuum cleaner from outside or take out fan and clean box from the inside of the machine.• Check for blockage around mixing funnels. Remove and install components as necessary.

Fault	Corrective action
Mixing system overflows.	<ul style="list-style-type: none"> • Mixing funnel(s) blocked. Replace or clean blocked part(s). Check if they are positioned correctly. • Leak in mixing system. Check if the sealing ring is missing at the mixing funnel.
Quantity of drink is inadequate or dispensing hose has a kink.	<ul style="list-style-type: none"> • Replace or clean clogged components. Install hose of correct length.
Coins have difficulties being accepted.	<ul style="list-style-type: none"> • Press the coin return button. • Please confer with suppliers manual.
Machine is out of function.	<ul style="list-style-type: none"> • Check the power supply cord and connect it correctly if required. • Check fuses outside of the machine, replace as necessary. • Check if the drip tray or base tray is empty. Empty, wipe and dry sensors. • Ensure that the door is properly closed.
The liquid waste container or the solid waste container is full with liquid or solid waste.	<ul style="list-style-type: none"> • Empty liquid waste container.
Machine does not shut down when liquid or solid waste container is full.	<ul style="list-style-type: none"> • Check if sensors for containers are soiled. Clean as necessary.
Liquid escaping from machine.	<ul style="list-style-type: none"> • Ensure that waste containers, trays canisters, mixing funnels and dispensing hoses are positioned correctly. • Ensure that sensor for liquid waste container is not covered by coffee waste bag. • Check if sensors for drip tray or liquid waste container are soiled. Clean as necessary.
No drinks are delivered.	<ul style="list-style-type: none"> • Check if mixing funnels are blocked, and clean as necessary.

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Reg. Produttori A.E.E.: IT0802000001054

Valbrembo, 01/01/2012

**DICHIARAZIONE DI CONFORMITA'
DECLARATION OF CONFORMITY
DECLARATION DE CONFORMITÉ
KONFORMITÄT SERKLÄRUNG
FORSÅKRAN OM ÖVERENSSTÄMMELSE
ÖVERENSSTÄMMELSEERKLÆRING
VERKLARING VAN OVEREENSTEMMING**



Italiano Si dichiara che la macchina, descritta nella targhetta di identificazione, è conforme alle disposizioni legislative delle Direttive Europee elencate a lato e successive modifiche ed integrazioni.

English The machine described in the identification plate conforms to the legislative directions of the European directives listed at side and further amendments and integrations

Français La machine décrite sur la plaque d'identification est conforme aux dispositions légales des directives européennes énoncées ci-contre et modifications et intégrations successives

Deutsch Das auf dem Typenschild beschriebene Gerät entspricht den rechts aufgeführten gesetzlichen Europäischen Richtlinien, sowie anschließenden Änderungen und Ergänzungen

Svenska Maskinen som beskrivs på märkskylten överensstämmer med de lagliga föreskrifterna i Europa-direktiven som anges i listan bredvid och följande ändringar och integreringar

Dansk Maskinen beskrevet på identifikationspladen stemmer overens med lovgivningerne, der er indeholdt i de Europæiske direktiver listet til højre, og med de efterfølgende ændringer og tilæg

Nederlands De machine beschreven op het identificatieplaatje is conform de wetbepalingen van de Europese Richtlijnen die hiernaast vermeld worden en latere amendementen en aanvullingen

Italiano Le norme armonizzate o le specifiche tecniche (designazioni) che sono state applicate in accordo con le regole della buona arte in materia di sicurezza in vigore nella UE sono:

English The harmonised standards or technical specifications (designations) which comply with good engineering practice in safety matters in force within the EU have been applied are:

Français Les normes harmonisées ou les spécifications techniques (désignations) qui ont été appliquées conformément aux règles de la bonne pratique en matière de sécurité en vigueur dans l'UE sont :

Deutsch Die harmonisierten Standards oder technischen Spezifikationen (Bestimmungen), die den Regeln der Kunst hinsichtlich den in der EU geltenden Sicherheitsnormen entsprechen, sind:

Svenska De harmoniserade standarderna eller de tekniska specifikationerna (beteckningar) som tillämpas i överensstämmelse med sunda tekniska principer ifråga om säkerhet som gäller inom EU är

Dansk De harmoniserede standarder eller de tekniske specifikationer (betegnelser) der er i overensstemmelse med alle kunstens regler relateret til sikkerhedsforskrifterne, der er i kraft i EF er:

Nederlands De geharmoniseerde normen of technische specificaties (aanzwijzingen) die toegepast werden volgens de in de EU van kracht zijnde eisen van goed vakmanschap inzake veiligheid zijn de volgende:

Il fascicolo tecnico è costituito presso:

The technical file is compiled at:

N&W GLOBAL VENDING S.p.A.

Norme armonizzate / Specifiche tecniche	Harmonised standards / Technical specifications
2006/42/EC	EN 60335-1:2002 + A1:2004 + A11:2004 + A12:2006 + A2:2006+ A13:2008
73/23/EC + 93/68/CE	EN 60335-2-75:2004 + A1:2005 + A11:2006 + A2:2008 + A12:2010
89/336/EC + 92/31/CE + 93/68/CE	EN 62233:2008
90/128/EC	EN 55014-1: 2006 + A1: 2009
80/590/EEC and 89/109/EEC	EN 55014-2: 1997 + A1: 2001 + A2: 2008
EC 10/2011	EN 61000-3-2: 2006 + A1: 2009 + A2: 2009
2002/96/EC	EN 61000-3-3: 2008
	EN 61000-4-2: 2009
	EN 61000-4-3: 2006 + A1: 2008
	EN 61000-4-4: 2004
	EN 61000-4-5: 2006
	EN 61000-4-6: 2009
	EN 61000-4-11: 2004

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