

OPERATOR MANUAL

FB / FF 7600



75522700

Copyright © All rights reserved. This manual may not be translated or copied or reproduced in any form or by any means in whole or in part without the prior written consent of Wittenborg.

Wittenborg issues no explanations or guarantees with regard to the contents of this publication and expressly disclaims all responsibility for any implied guarantees. Wittenborg A/S reserves the right to revise and change the contents of this manual without notice.

Published by Wittenborg A/S, Seebadsgade 1-3, DK-5000 Odense C.

Part No: 75522700

Published in 2004, week 04.

TABLE OF CONTENTS

Introduction	1	Daily routines	
Safety	2	Opening and disconnecting machine.....	30
Technical data	4	Service light	30
Product presentation		Loading cups	31
Vending machine components	6	Filling the freshbrew ingredient canister	32
- Machine front (fig 1.):	6	Filling the instant ingredient canisters.....	33
- Operating panel (fig.2):.....	6	Cleaning the dispensing area	34
- Machine cabinet (fig. 3):.....	7	Emptying the coffee waste bucket	35
Operation		Emptying the waste bucket.....	36
Payment panel (fig. 2,1)	8	Cleaning inside and outside.....	37
- Display (fig. 4):	8	Mounting of cleaned parts	37
- Card and coin insert	8	Rinsing machine with one FB brewer, only.....	38
Drinks selection	9	Rinsing machine with double FB brewer	39
- How to buy a drink.....	10	Last check.....	40
Pot panel (Multibrew).....	11	Weekly routines	
Discount lock	12	Hygiene kit	41
Navigation buttons.....	13	Opening and disconnecting machine.....	41
How to use the navigation buttons	14	Filling the cup magazine	42
- Settings buttons.....	16	Removing and filling the freshbrew coffee canister	42
Overview of Operator functions	17	Filling the instant ingredient canisters.....	43
Short cuts	24	Cleaning the freshbrewer parts.....	44
Additional Features.....	25	Cleaning the coffee whipper	44
- Multi-vend	25	Disassembling the freshbrewer parts	45
- Single-vend	25	Cleaning the under trays.....	48
- Service lamp (optional).....	25	Cleaning the instant ingredient dispensing system components .	48
Cleaning and maintenance		Cleaning the powder trap.....	49
General instructions.....	26	Cleaning the distributor head.....	49
Maintenance routines	27	Cleaning the dispensing area	50
- Schedule for daily maintenance routines	27	Cleaning the cup platform.....	51
- Schedule for weekly and occasional maintenance routines.....	28	Cleaning coffee waste bucket.....	52
		Cleaning waste bucket.....	52
		Cleaning inside and outside.....	53
		Mounting cleaned parts	54
		Rinsing and last check.....	54

Table of contents

Occasional routines

Cleaning the instant ingredient canisters	55
Cleaning the freshbrew ingredient canister	57
Replacing filter roll.....	59
Rinsing the brewer (fig. 74)	60

Additional routines

Calling and resetting counters.....	61
Emptying the cash box.....	65
Adding change manually	66
Setting automatic rinse periods.....	67
Changing prices	68
Setting of freevend and key discount	69
Energy saving periods.....	70
Setting energy saving periods.....	72

Display messages and trouble shooting

Display messages	73
Trouble shooting	75

INTRODUCTION

The machine dispenses

- hot freshbrew drinks
- hot instant drinks
- hot water

or

- hot freshbrew drinks
- hot/cold instant drinks
- hot water

The machine can be equipped with one coffee / tea brewer, one coffee and tea brewer or two coffee / tea brewers.

Use only freshly ground coffee, ground tea or instant products made for vending machines.

The machine can be delivered with direct selection buttons or a keypad. All communication with the machine, such as drink selection, rinsing functions, data retrieval and settings, is carried out by using the direct selection buttons or the keys above the keyboard.



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

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

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.

Safety

SAFETY

- Before putting the vending machine into operation, the operator manual must be carefully read and fully understood.
 - 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 may only be installed, programmed and repaired by specially trained service technicians who are familiar with the safety and hygiene aspects of the vending machine
 - 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.
- The technical data of the vending machine are given on the rating plate.



If repair work has to be made to the service light always disconnect the machine at the mains plug. The service light is connected before the main switch.



When the yellow special key is inserted in the slot of the door key, 230 V is re-established to the machine. If power is turned on, be careful not to touch moving parts and electrical components.

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: 1834 mm - 1855 mm
Width: 700 mm
Depth: 620 mm (cabinet), 662 mm (cabinet+door)

Weight

Approx. 190 kg (without ingredients)

Electric connection

Power supply: 230V +10%/-15%, 50 HZ
(UK: 240V +10%/-15%)
Phases: Single phase+neutral+ground (IEC-standard)
Brown = phase
Blue = neutral
Yellow/green = ground



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

Power consumption: Machine without chiller unit: 2000 - 2200W
Machine with chiller unit:
Connecting cable: Approx. 1.8-3.5 m (varies, depending on local requirements).
Fuse: **Neutral: 10A**
Phase: 10 A

Water connection

Connect the vending machine to a cold water supply (potable water).

Min. back pressure: without chiller: 0.8 bar with chiller: 1.5 bar
Max. pressure: without chiller: 10 bar with chiller: 8 bar



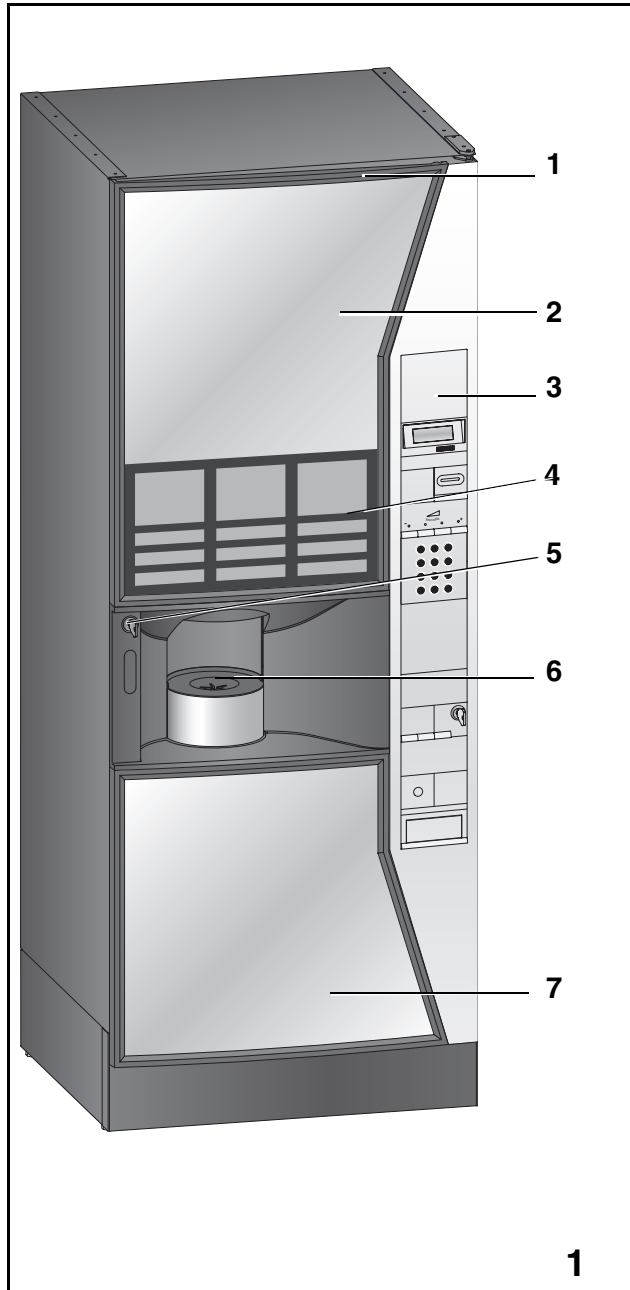
If the mains pressure is higher than 6 bar (even temporarily), install a pressure reducer in the water supply line.

Hose connection:

The hose connection of the supply hose to be ordered especially considering the connection facility of the installation site.

Boiler capacity		4.5 l
Capacities	Coffee Waste container:	Approximately 20 l
	Waste container:	Approximately 12 l
	Standard Freshbrew ingredient canister:	Approximately 13 l
	Standard Instant ingredient canister:	Approximately 4 l
	Large Instant ingredient canister:	Approximately 6 l
	Cup magazine:	Approximately 600 cups at 180 ml
Further 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



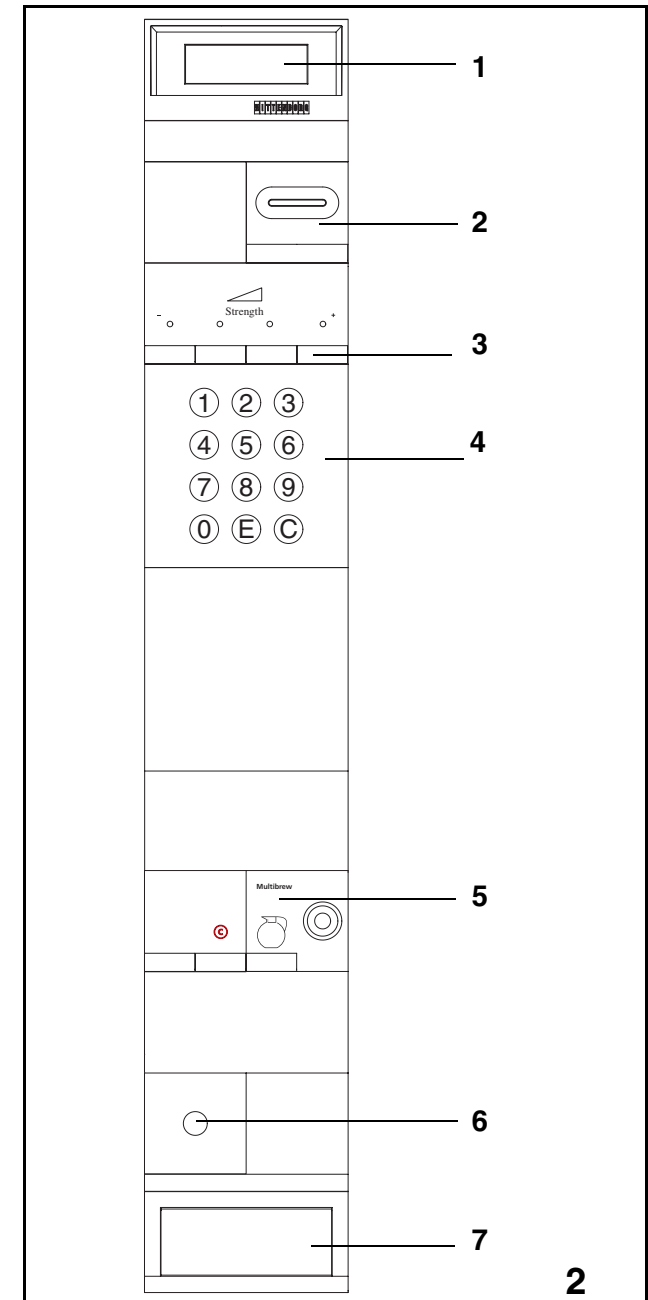
Vending machine components

Machine front (fig 1.):

- 1 Door
- 2 Upper advertising poster
- 3 Operating panel
- 4 Drinks selection menu
- 5 Door lock
- 6 Cup / Pot platform
- 7 Lower advertising poster

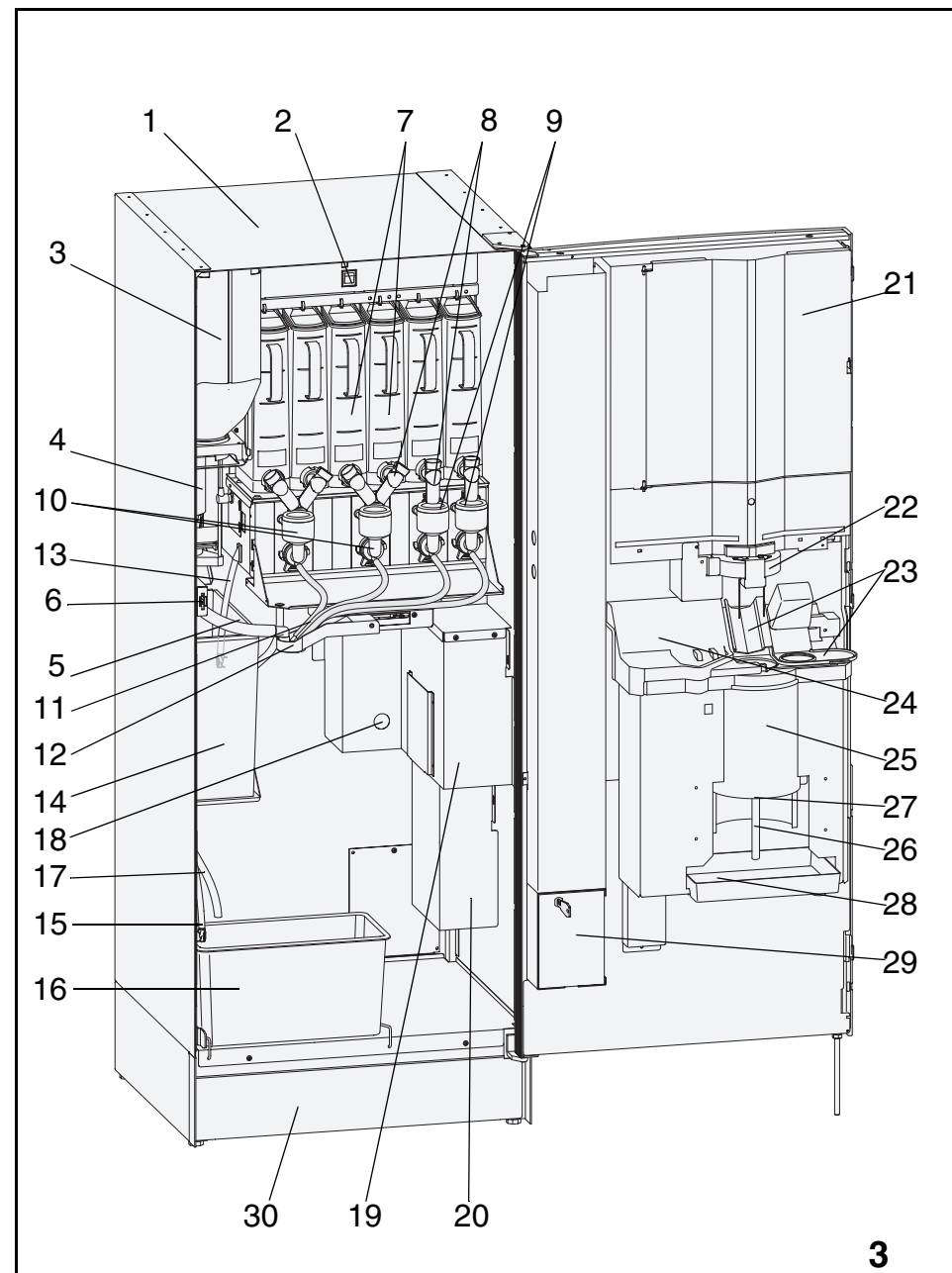
Operating panel (fig.2):

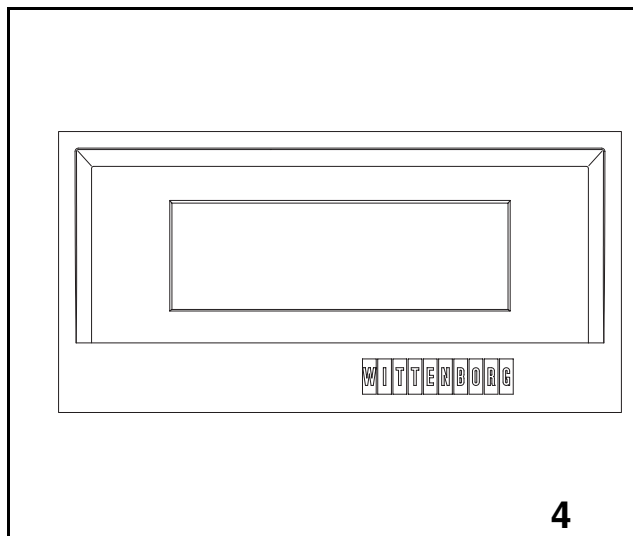
- 1 Display
- 2 Payment panel
- 3 Strength buttons
- 4 Keypad
- 5 Pot panel/Discount key
- 6 Optical interface
- 7 Coin return cup



Machine cabinet (fig. 3):

- | | |
|--|--|
| 1 Cabinet | 18 Cover for safety cut-out thermostat |
| 2 Main switch | 19 Cover for boiler |
| 3 Coffee canister | 20 Cover for pump |
| 4 Brewer | 21 Cup magazine |
| 5 Brewer outlet hose | 22 Cup drop ring |
| 6 Door switch | 23 Cup slide with shutter |
| 7 Instant Ingredient canisters | 24 Drip guide |
| 8 Outlet spouts | 25 Cup station cover |
| 9 Mixing funnel hood | 26 Drain hose from drip guide |
| 10 Mixing funnel with whipper housings | 27 Release lever for cup platform |
| 11 Outlet hoses | 28 Drip tray |
| 12 Distributor head | 29 Cash box |
| 13 Sensor for coffee waste bucket | 30 Kick plate |
| 14 Coffee waste bucket | |
| 15 Sensor for waste bucket | |
| 16 Waste bucket | |
| 17 Overflow drain hose | |





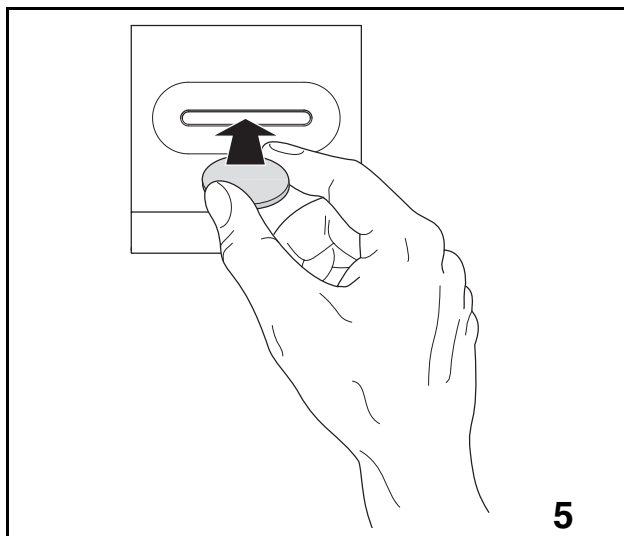
Payment panel (fig. 2,1)

Display (fig. 4):

The display can show the following:

- the price of the selected drink
- the value on the customer's inserted card
- the value of inserted coins
- the various predefined information texts

Other display texts are explained in section *Display messages*.



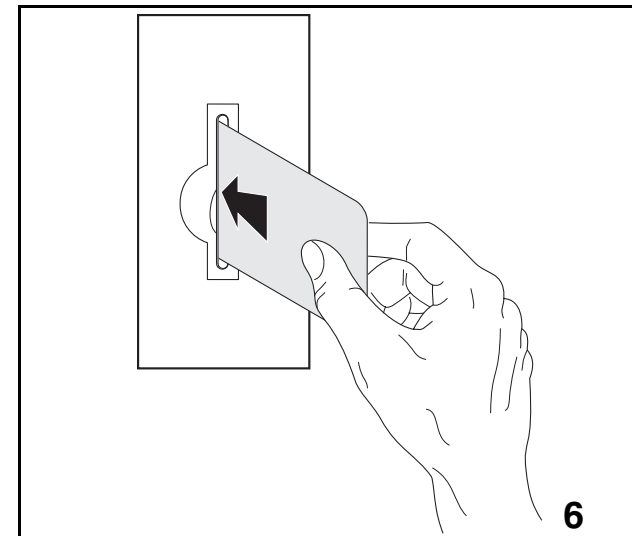
Card and coin insert

- **Coin slot** (fig. 5):

Insert coins to pay the selected drink in cash, or to insert the amount to be added to your card.

- **Card slot** (fig. 6):

Insert card to pay for the selected drink, or to add for selected value



Fresh brew Tea <input type="button" value="White"/> With sugar 51 <input type="button" value="Extra White"/> Extra sugar 52 <input type="button" value="Black"/> No sugar 53 <input type="button" value="Black"/> With sugar 54 <input type="button" value="Black"/> Extra sugar 55 <input type="button" value="Black"/> No sugar 56 <input type="button" value="Black"/> With sugar 57 <input type="button" value="Black"/> Extra sugar 58 <input type="button" value="Black"/> No sugar 59	Instant Coffee <input type="button" value="White"/> With sugar 21 <input type="button" value="Extra White"/> Extra sugar 22 <input type="button" value="Black"/> No sugar 23 <input type="button" value="Black"/> With sugar 24 <input type="button" value="Black"/> Extra sugar 25 <input type="button" value="Black"/> No sugar 26 <input type="button" value="Black"/> With sugar 17 <input type="button" value="Black"/> Extra sugar 18 <input type="button" value="Black"/> No sugar 19	Instant Decaff. Coffee <input type="button" value="White"/> With sugar 41 <input type="button" value="Extra White"/> Extra sugar 42 <input type="button" value="Black"/> No sugar 43 <input type="button" value="Black"/> With sugar 44 <input type="button" value="Black"/> Extra sugar 45 <input type="button" value="Black"/> No sugar 46 <input type="button" value="Black"/> With sugar 37 <input type="button" value="Black"/> Extra sugar 38 <input type="button" value="Black"/> No sugar 39
Chocolate Chocomilk <input type="button" value="Chocolate Chocomilk"/> 27 <input type="button" value="Chocolate Chocomilk"/> 67	Espressochochoc <input type="button" value="Espressochochoc"/> With sugar 65 <input type="button" value="Espressochochoc"/> No sugar 66	Decaff. Espressochochoc <input type="button" value="Decaff. Espressochochoc"/> With sugar 77 <input type="button" value="Decaff. Espressochochoc"/> No sugar 78
Soup <input type="button" value="Soup"/> 28	Cappuccino <input type="button" value="Cappuccino"/> With sugar 61 <input type="button" value="Cappuccino"/> No sugar 62	Decaff. Cappuccino <input type="button" value="Decaff. Cappuccino"/> With sugar 75 <input type="button" value="Decaff. Cappuccino"/> No sugar 76
Hot Water <input type="button" value="Hot Water"/> 29		

Strength

- +

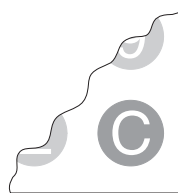
Drinks selection

Drinks selection menu (fig. 7)

All drinks available are shown in the Drinks selection menu on the front panel.

Each drink has its own number and a drink is selected by pressing the corresponding number on the keypad.

Cancel button



A wrong entry of the first digit can be deleted using the 'C' button on the keypad. Alternatively waiting for 10 seconds will reset the entered number.

Strength buttons (fig. 8)

The strength of a drink can be increased or decreased by means of the two strength buttons, '+' and '-'. The number of lit LEDs determines the strength.

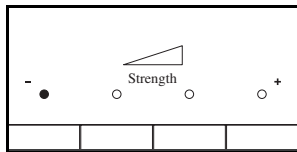


Always modify the strength before entering the number of the drink on the keypad.

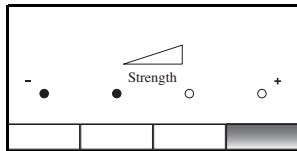
Operation

How to buy a drink

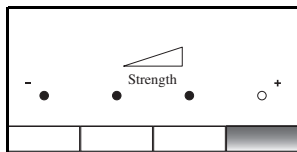
- If the machine is not set to freevend, insert a card with sufficient credit, or insert an amount of coins corresponding to the value of the drink.
- If required, press the '+' or '-' button one or more times to modify the strength of the drink.



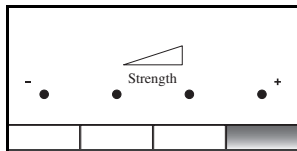
Normal strength



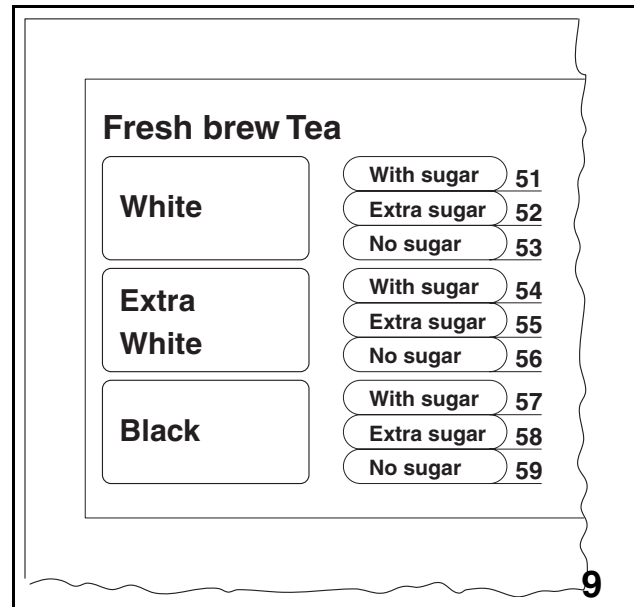
x1:
Strong



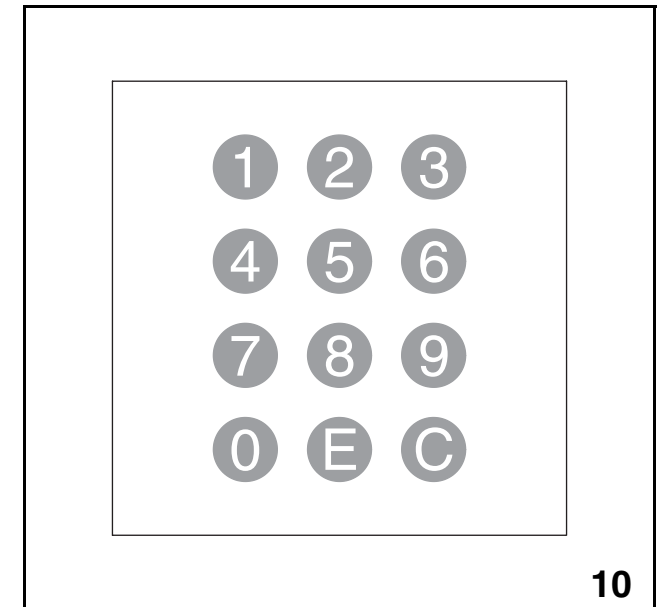
x2:
Stronger



x3:
Very strong



- Find number of drink on the drinks selection menu, e.g. “Fresh brew Tea, White, Extra sugar” no. 52, (fig. 9).



- Press the corresponding buttons, e.g. ‘5’ and ‘2’, on the keypad, (fig. 10).

The selected drink is shown on the display and will be dispensed after a few seconds.

Pot panel (Multibrew)

How to brew a pot: (fig. 11)

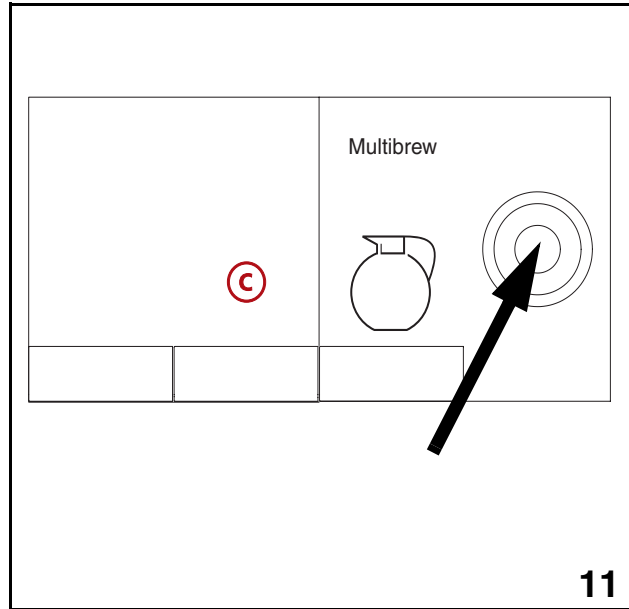
- Insert key in multi-brew lock and turn clockwise.

The cup platform moves down as far as it will go. A predefined number, e.g. '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.
- Enter the number of the wanted drink.

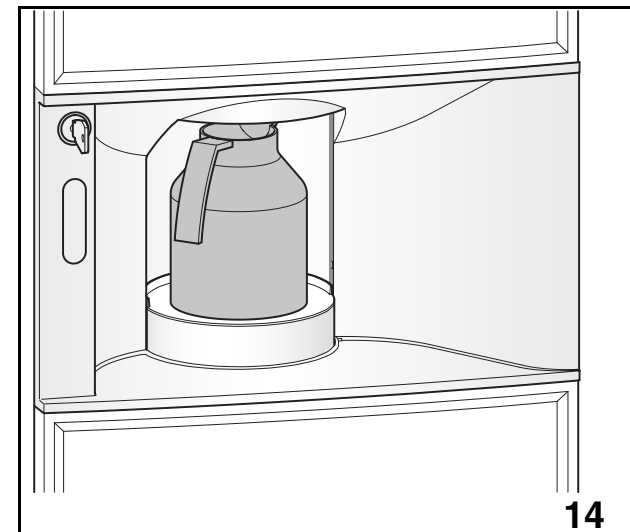
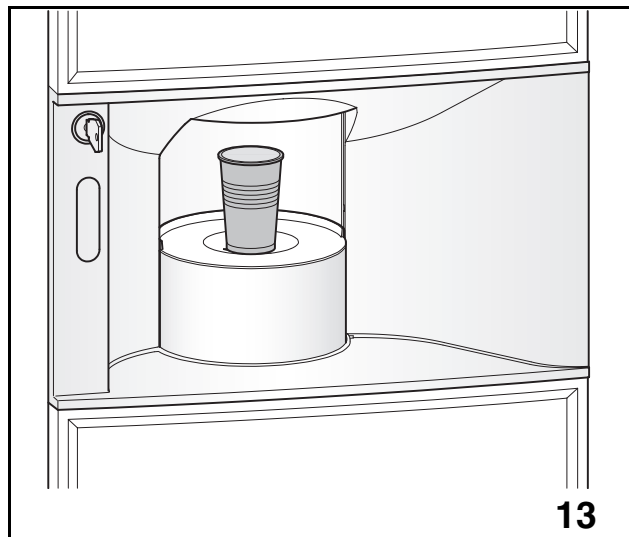
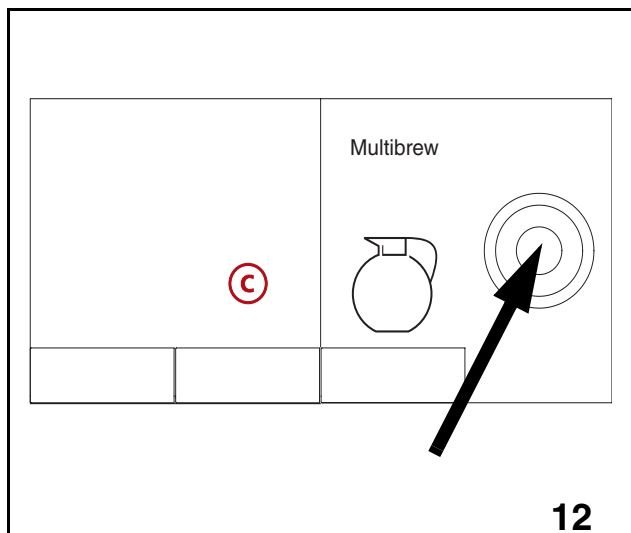
The display steps back one number each time a portion is dispensed.
- Remove the pot when the drinks have been dispensed.

- Turn key anti-clockwise and remove it to finish the multi-brew function.



A potbrew in progress can be stopped immediately, simply by pressing the cancel button .

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



Discount lock

How to use discount lock: (fig. 12)

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.



100% discount is free vend.

If you want one or more drinks at a discount:

- Insert key in discount lock and turn clockwise.

The cup platform moves down as far as it will go.

Drink to be dispensed in cup: (fig. 13)

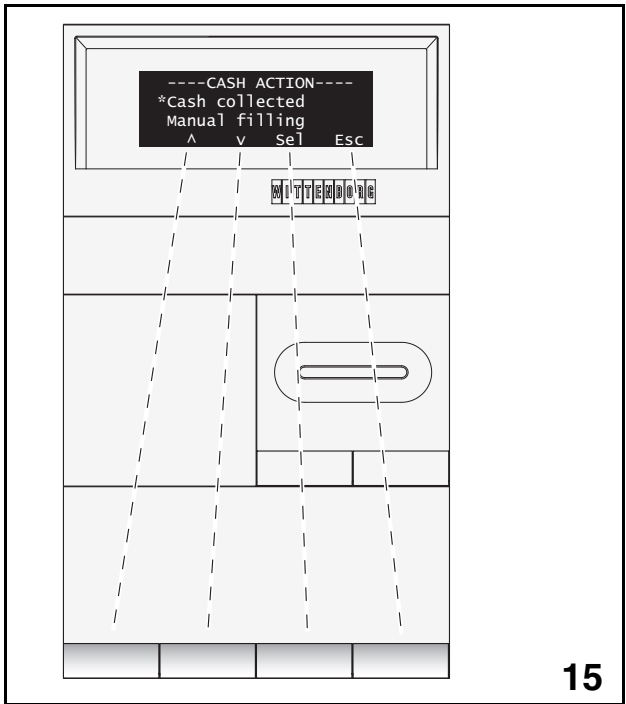
- place a cup on the cup platform

The cup platform moves up to dispensing position.

- Enter the number of the desired drink.
- After dispensing, remove the cup.
- Finish vend at a discount by turning and removing the key.

Drink to be dispensed in pot: (fig. 14)

- place a pot on the pot platform and press the pot button till the display shows the desired number of dispensings.
- Enter the number of the desired drink
- After dispensing, remove the pot.
- Finish vend at a discount by turning and removing the key.

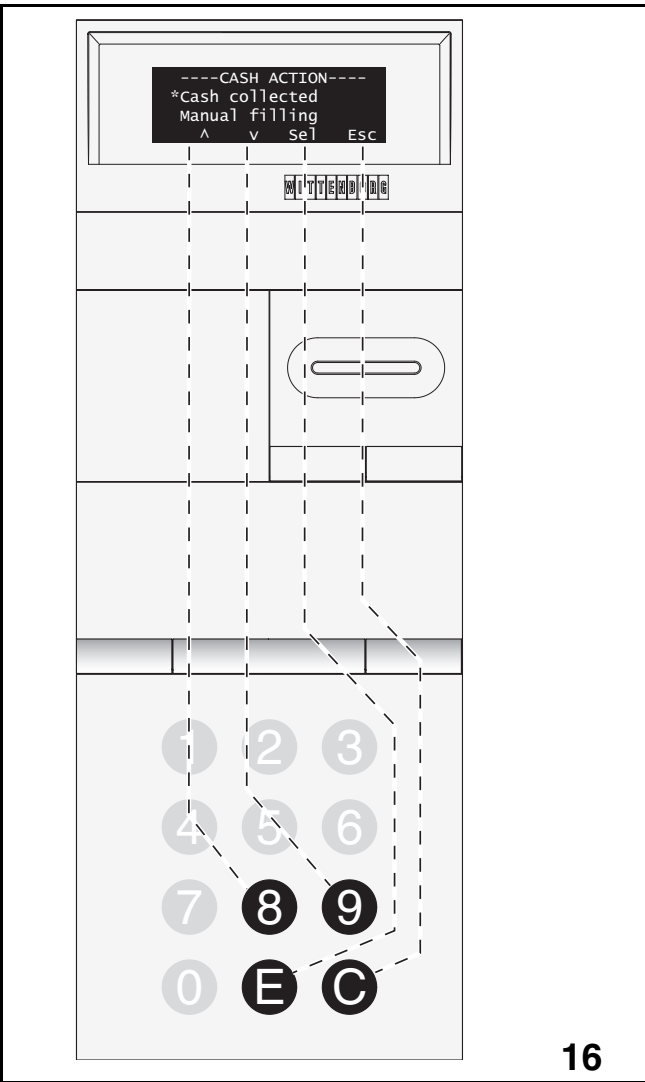


Navigation buttons

Two sets of navigation buttons are available for retrieval of sales data, settings, e.g. of prices, and activation of certain service functions:

1. The four pre-selection buttons (fig. 15).
2. The keypad buttons 8', '9', 'E' and 'C'. (fig 16)

The functions of the buttons appear from the icons shown on the bottom line of the display. The button functions, along with the icons, vary depending on the functions to be performed. The 'C' or rightmost pre-



selection button, for example, sometimes will function as an 'Escape' button and sometimes as an 'OK' button to confirm changes.




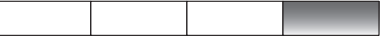
This table shows the correspondence between the four pre-selection buttons and the keypad buttons.

Keypad navigation buttons			

Operation

How to use the navigation buttons

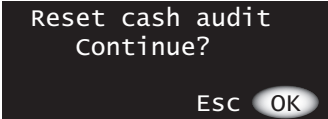

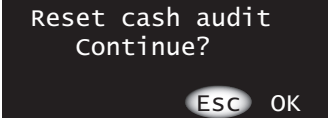

On the following pages the functions of the navigation buttons are described showing the connections between the display and the four pre-selection buttons.

Display	Button	Function
<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 buttons:

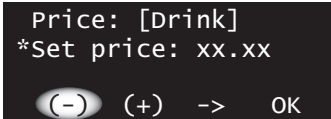

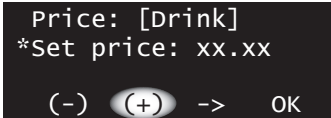

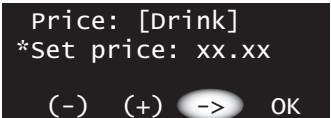

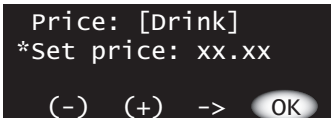

Display	Button	Function
		'OK' button Press this button to confirm an action, e.g. resetting of counters.
		'Esc' button Press this button to exit a function without activating it, e.g. avoid resetting a counter.

Operation

Settings buttons

In functions that require settings, e.g. price settings, the functions of the four navigation buttons change accordingly.

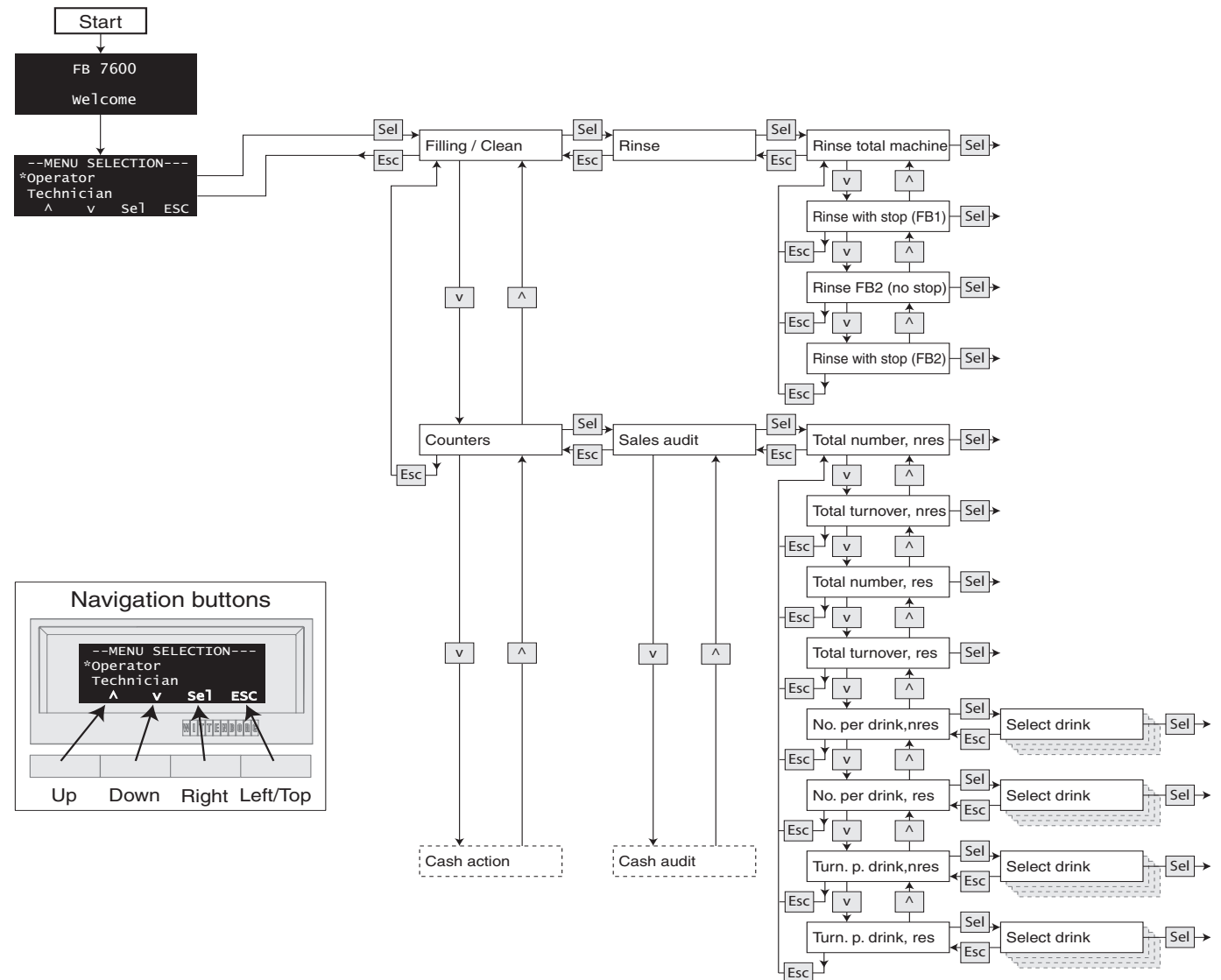
This table describes how the four navigation buttons are used to enter or change numbers.

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.

Overview of Operator functions

This diagram shows a total view of the functions of the Operator menu.

All functions are reached using the four pre-selection buttons to navigate through the menus.
(See explanation on previous pages).



Continued on next page

Diagram continued

Continued on next page

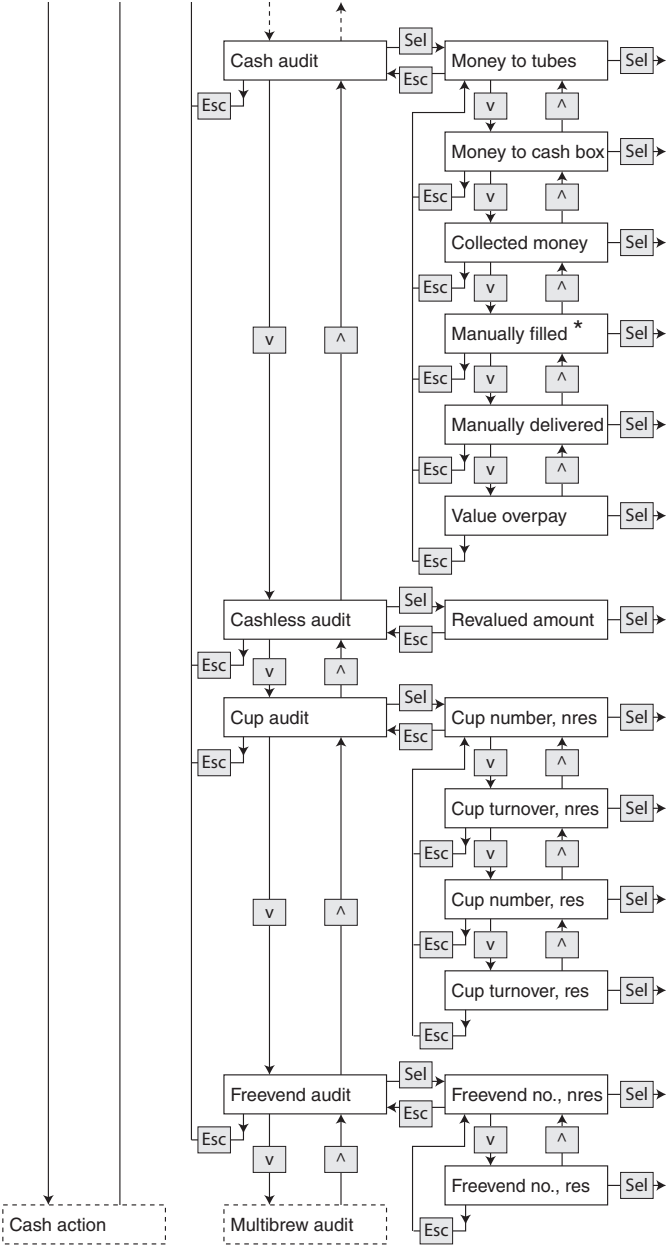
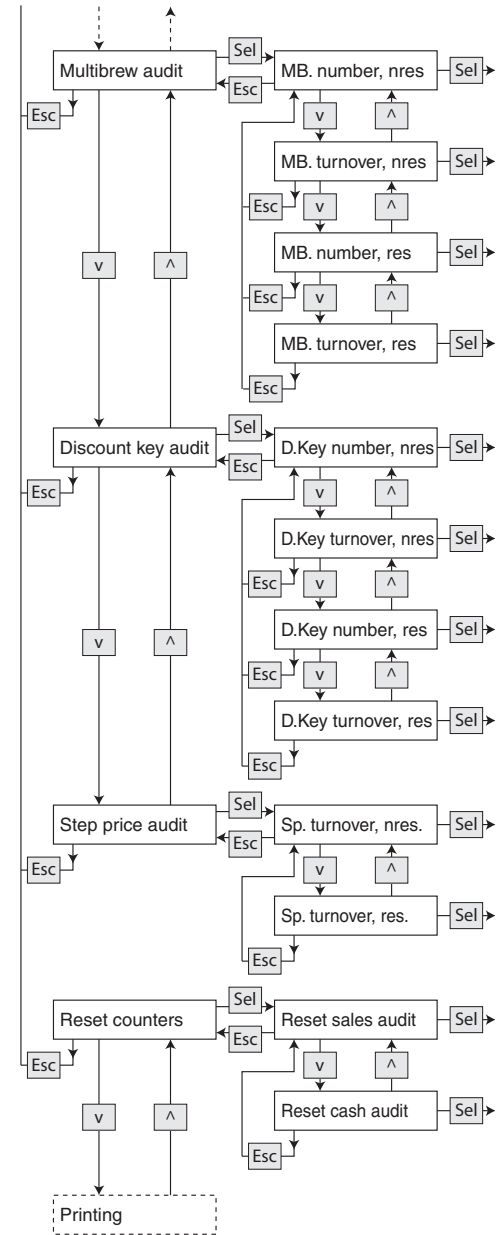


Diagram continued

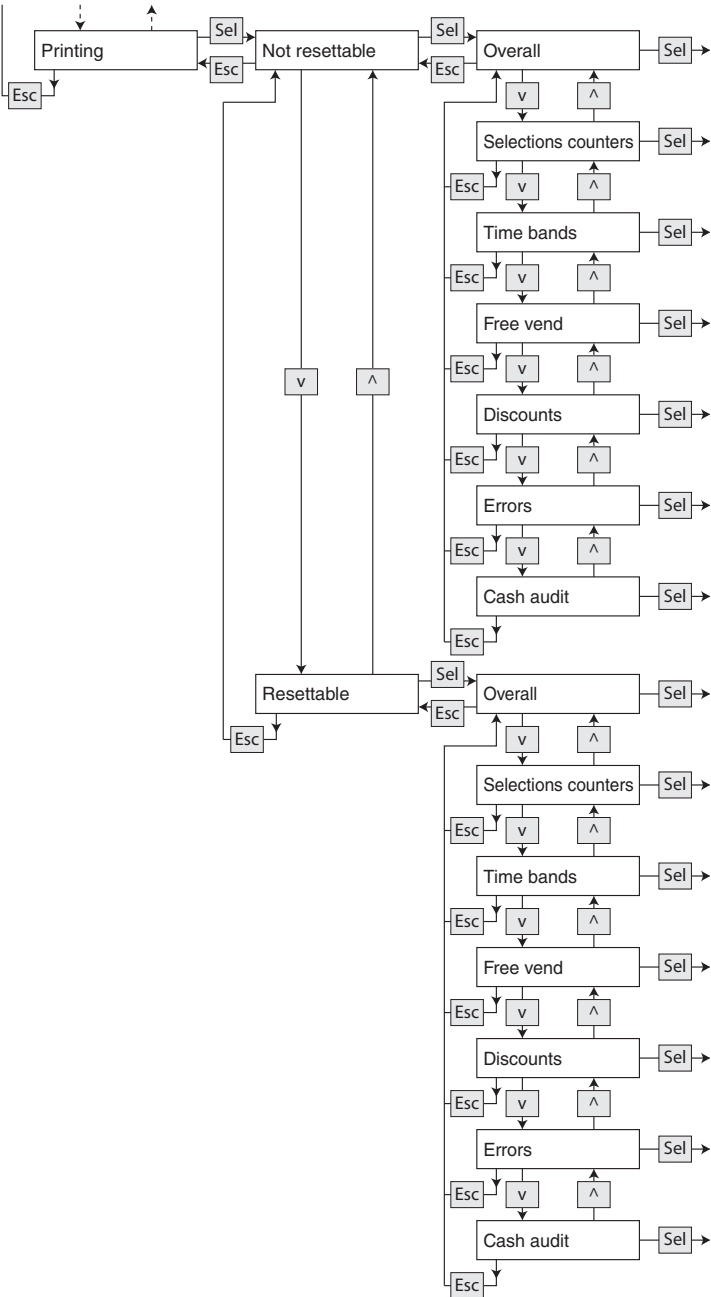


Continued on next page

Diagram continued

Continued on next page

Cash action



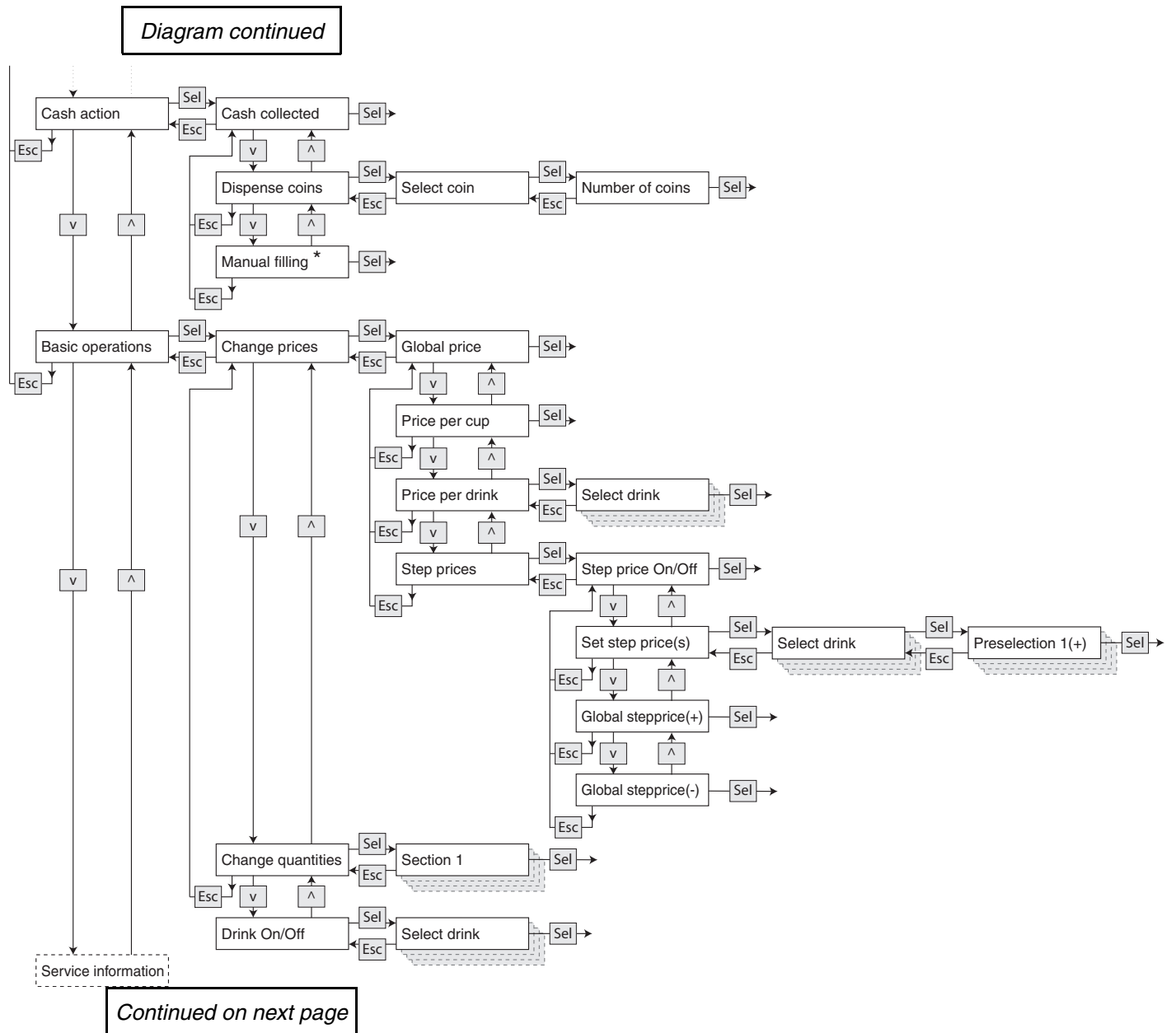
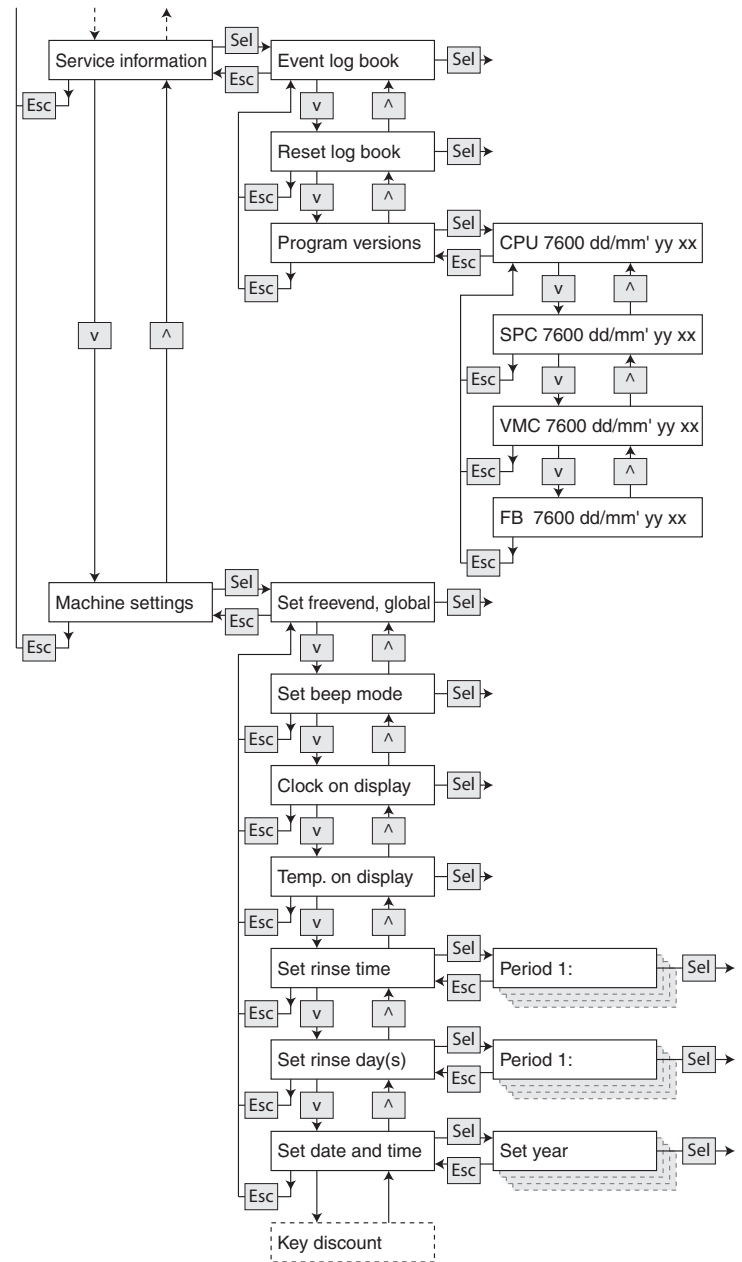
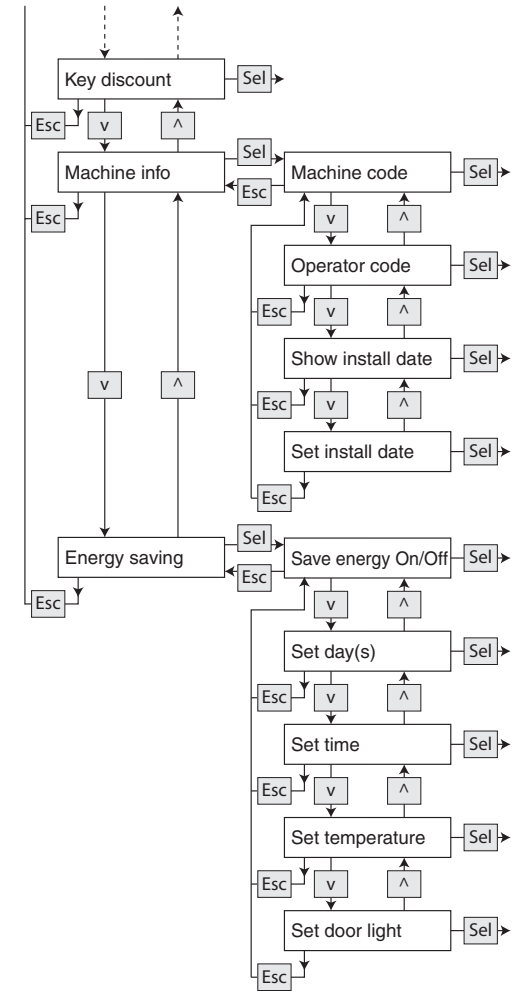


Diagram continued



Continued on next page

Diagram continued





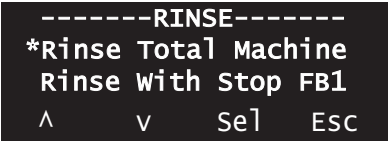
Operation

Short cuts

Some functions can be reached through short cuts.

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

How to reach the Rinse functions via a short cut

Step	Action	Display
1.	Unlock and open the door. The display will show the short cut selection window.	 <pre>-----SHORTCUTS----- *(1) = Rinse 1 Menu</pre>
2.	Press "1"  and close the door to go directly to the rinse functions menu. From here you can select one of the available rinse functions.	 <pre>-----RINSE----- *Rinse Total Machine Rinse With Stop FB1 ^ v Sel Esc</pre>

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.

Service lamp (optional)

- The machine can be equipped with service lamp, located at top of the machine. The light is activated by a switch on the lamp.

Cleaning and maintenance

General instructions

- All items of the schedules in this chapter must be carried out at the indicated intervals. 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.



Never spray off the machine, only wipe the inside and the outside by using a damp cloth.

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

Maintenance routines

Schedule for daily maintenance routines

Interval	Type of work / Check	Tools / Materials for the job
Every day	Opening the door and disconnecting machine Loading cups Filling the freshbrew ingredient canister Filling the instant ingredient canisters Cleaning the dispensing area Emptying the coffee waste bucket and the waste bucket 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 cloths Ingredients

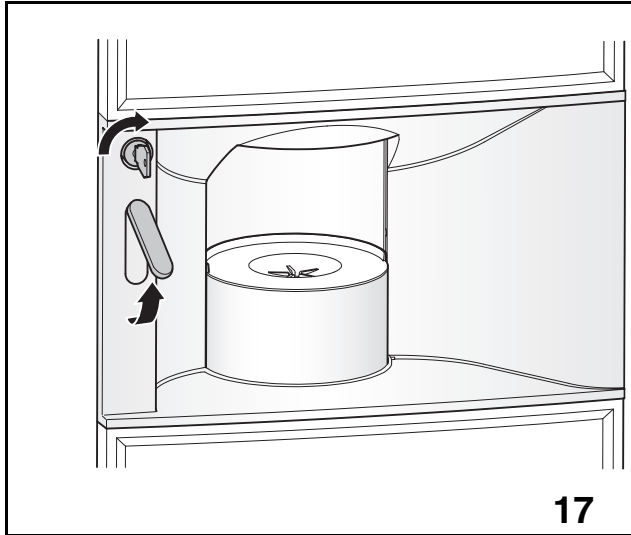
Cleaning and maintenance

Schedule for weekly and occasional maintenance routines

Interval	Type of work / Check	Exchange kit (hygiene kit)
Every week	<p>Opening the door and disconnecting machine</p> <p>Loading cups</p> <p>Removing and filling the freshbrew coffee canister</p> <p>Filling the instant ingredient canisters</p> <p>Cleaning the freshbrewer parts</p> <p>Cleaning the under trays and the instant ingredient dispensing system components</p> <p>Cleaning the powder traps</p> <p>Cleaning the dispensing area</p> <p>Cleaning the cup platform</p> <p>Cleaning the coffee waste bucket and the waste bucket</p> <p>Cleaning machine interior and exterior</p> <p>Mounting cleaned parts</p> <p>Rinsing and last check</p>	<p>Mixing hoods</p> <p>Instant ingredient mixer units with whipper wheels and sealing rings</p> <p>Powder traps</p> <p>Distributor head with outlet tubes and hoses (incl. brewer hose)</p> <p>Whipper wheel and whipper housing for coffee whipper</p> <p>Complete filter plate</p> <p>Brewing cylinder with plunger</p> <p>Scraper</p> <p>-----</p> <p>All the above mentioned parts together with the drip guide, the cup slide with shutter, the waste buckets, the drip trays as well as the instant ingredient canisters are dishwasher-proof.</p>

Interval	Type of work / Check	Exchange kit (hygiene kit)
Occasionally	Cleaning the instant ingredient canisters Cleaning the freshbrew ingredient canister Replacing the filter roll Rinsing / Descaling the brewer	

Daily routines



Opening and disconnecting machine



The door handle is automatically triggered open as the key is turned.

- Turn the door key clockwise in keyhole (fig. 17).
- Lift the released door handle.



The machine is automatically turned off.



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

Service light



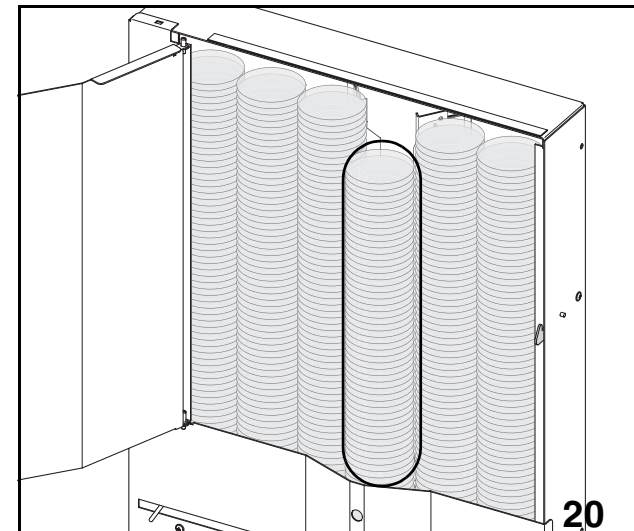
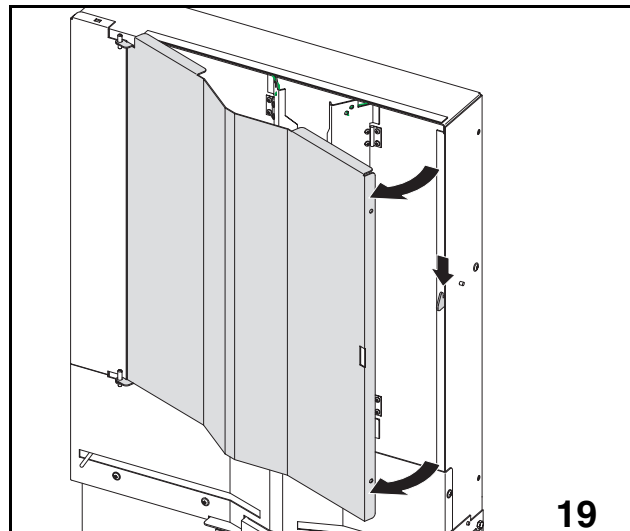
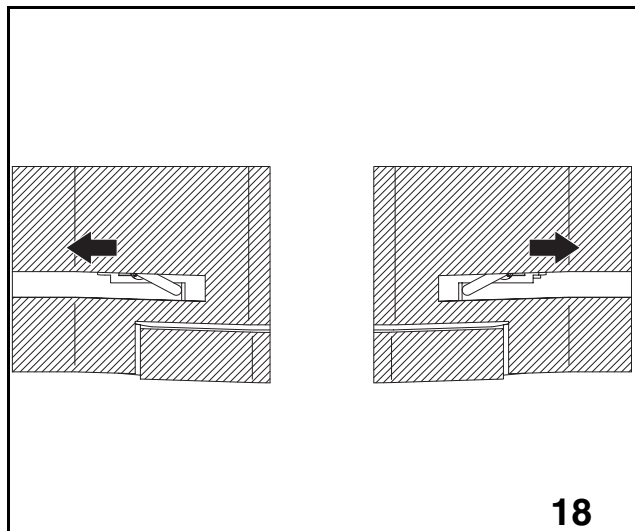
The service light (if fitted) is not turned on automatically when opening the door.

The service light is still lit even if the main switch is turned off to provide light in the machine for cleaning or servicing.

- Turn on the service light using the switch on the lamp.



Remember to switch off the light before closing the door after cleaning or servicing.



Loading cups



Never reach underneath the cup dispenser for pushing cups upwards.



To ensure a trouble free delivery of cups only anti-statically treated cups of good quality that are suitable for the use in vending machines may be used.

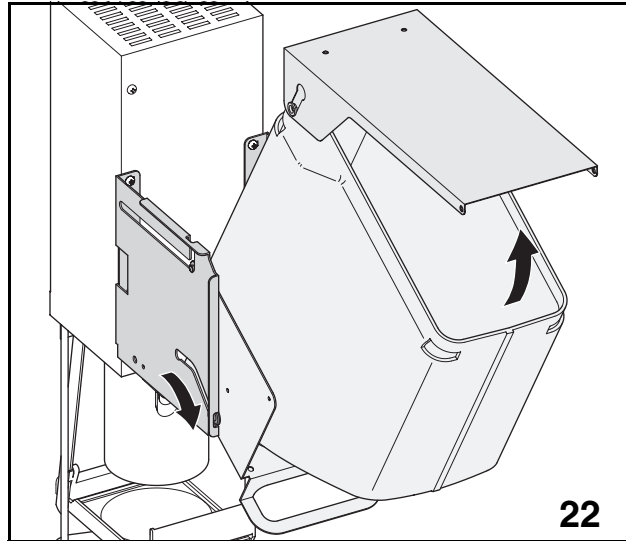
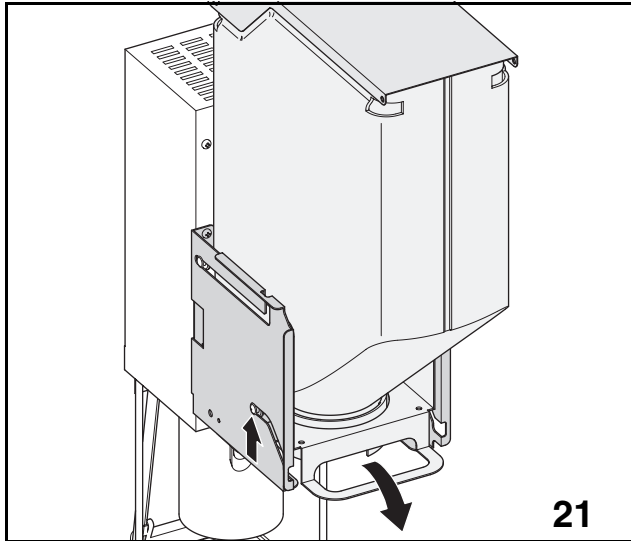
- Push aside the cup conveyors (*fig. 18*).
- Press down locking latch and open door of cup magazine (*fig. 19*).
- Open the plastic bag with cups at the bottom end (do not remove it).



Do not touch the cups for hygienic reasons.
Check the cups for damage and discard cups if necessary.

- Place cups in the cup magazine, starting with the centre column (*fig. 20*).
- Draw off plastic bag.
- Close the door of the cup magazine.

Daily routines

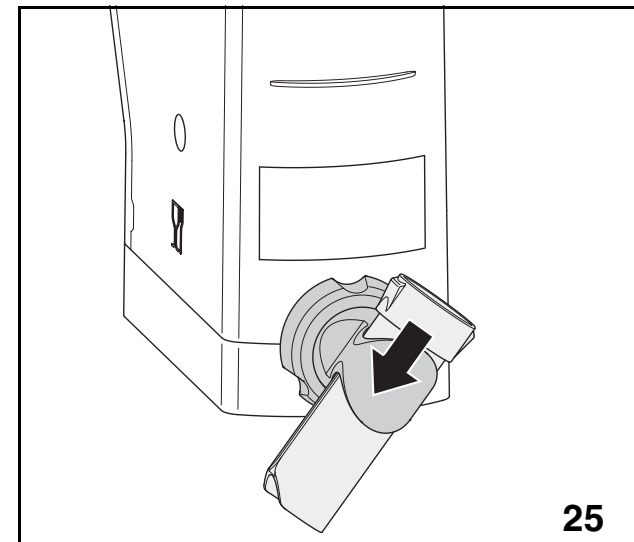
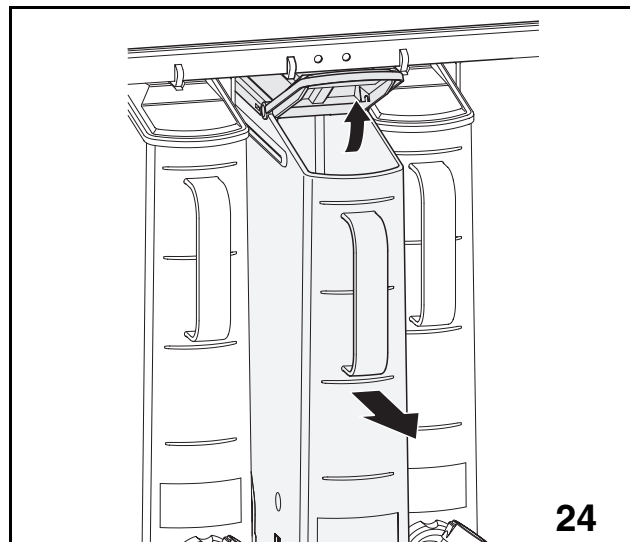
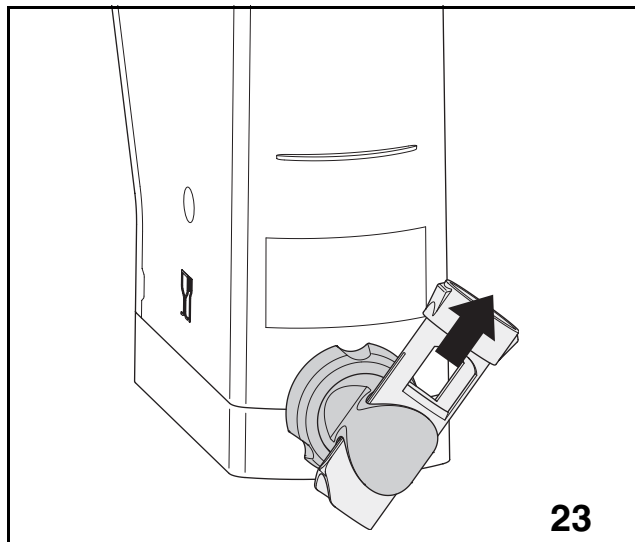


Filling the freshbrew ingredient canister



Fill according to use of ingredient.

- Hold handle of base of canister (*fig. 21*).
- Pull canister forward. It will slide forward and down.
- Lift lid and slide it back to keep open (*fig. 22*).
- Fill canister with freshbrew product.
- Close lid.
- Push canister back into horizontal position.



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.

- Close the outlet spout by pushing the outlet tube upwards (*fig. 23*).

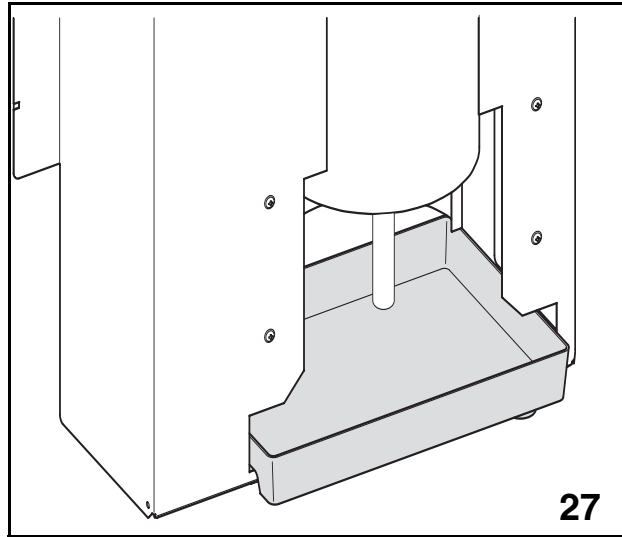
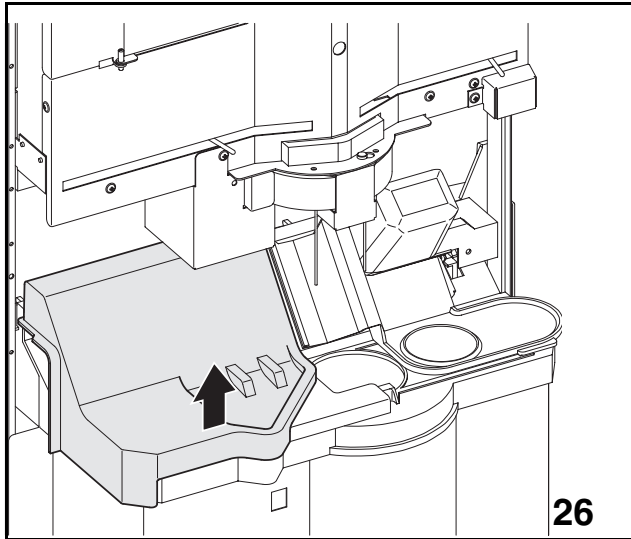
- Take the canister by the handle and pull it forwards (*fig. 24*) until a slight resistance is felt. The lid is automatically triggered open.

Possibly, take out the canister and place it on a plain, clean surface.

- Fill the canister with instant ingredient.
- Relocate and/or push back the canister in proper place (check label on canister and on ingredient motor module). The lid is automatically closed.

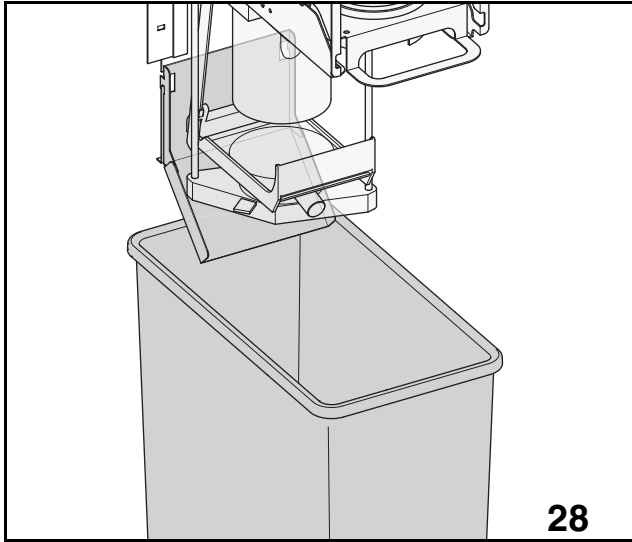
- Open the outlet spout by pushing the outlet tube downwards (*fig. 25*).
- Repeat procedure until the required number of canisters have been filled.

Daily routines



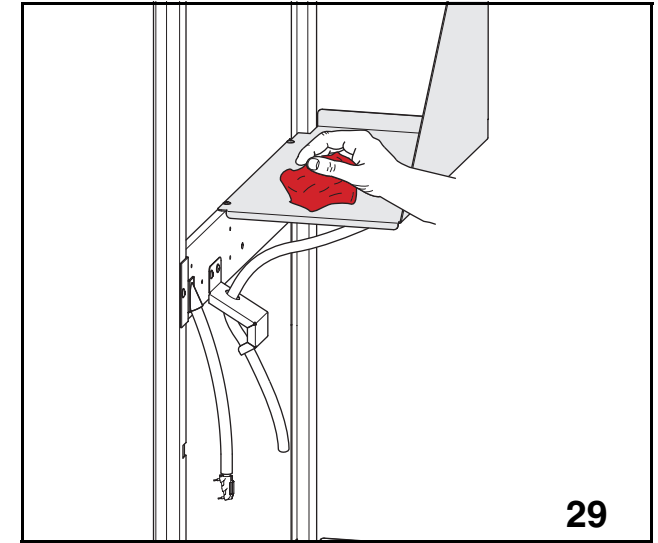
Cleaning the dispensing area

- Clean the cup platform, as well as the drip guide and the cup slide with shutter with a damp cloth (*fig. 26*).
- Remove and clean drip tray (*fig. 27*).



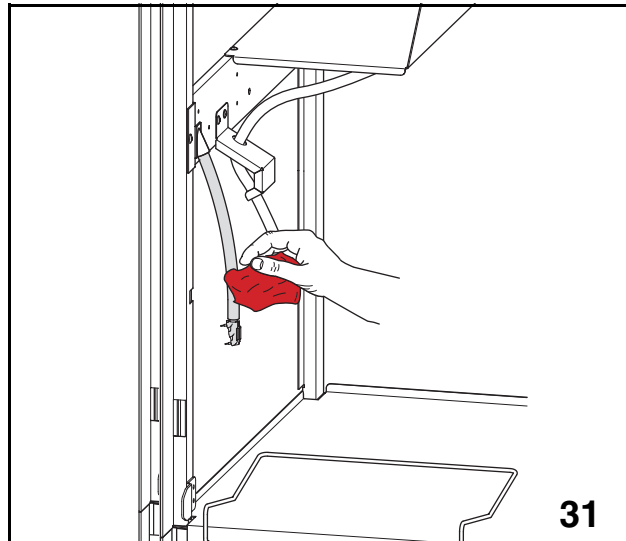
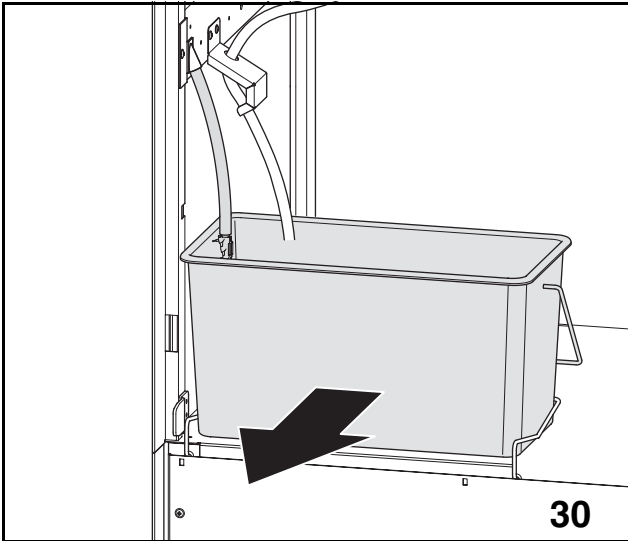
Emptying the coffee waste bucket

- Lift out the coffee waste bucket and the coffee waste chute (fig. 28).
- Remove the plastic bag with brewer waste.
- Wipe the bucket clean and clean the coffee waste chute.
- Place a new plastic bag in bucket.



- Wipe clean the bucket shelf and the area behind the bucket (fig. 29).

Daily routines



Emptying the waste bucket



If the waste bucket is full, the sensor arm will become wet, which will stop all machine operations although power is still on.

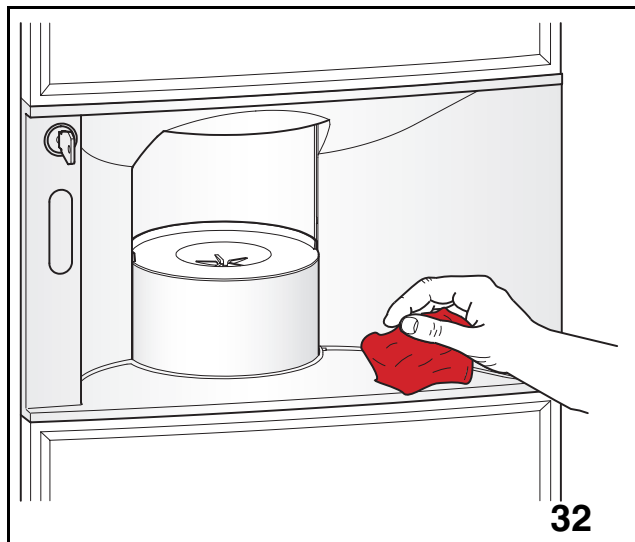
- Remove the waste bucket (*fig. 30*).
- Empty the waste bucket and wipe the bucket clean.

- Clean the machine floor and the bucket brace.
- Carefully wipe and dry the sensors (*fig. 31*).

- Reposition the waste bucket within the bucket holder brace.



Always remember to check that the sensor arm is repositioned properly in the bucket after emptying. If the sensor arm is not placed correctly in the waste bucket, the machine cannot operate.

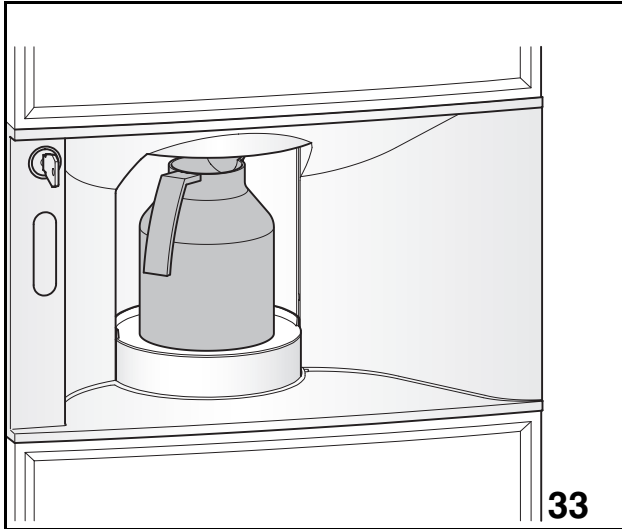


Cleaning inside and outside

- Clean the door and the housing inside and outside, and finally the bottom with a clean, damp cloth (*fig. 32*).

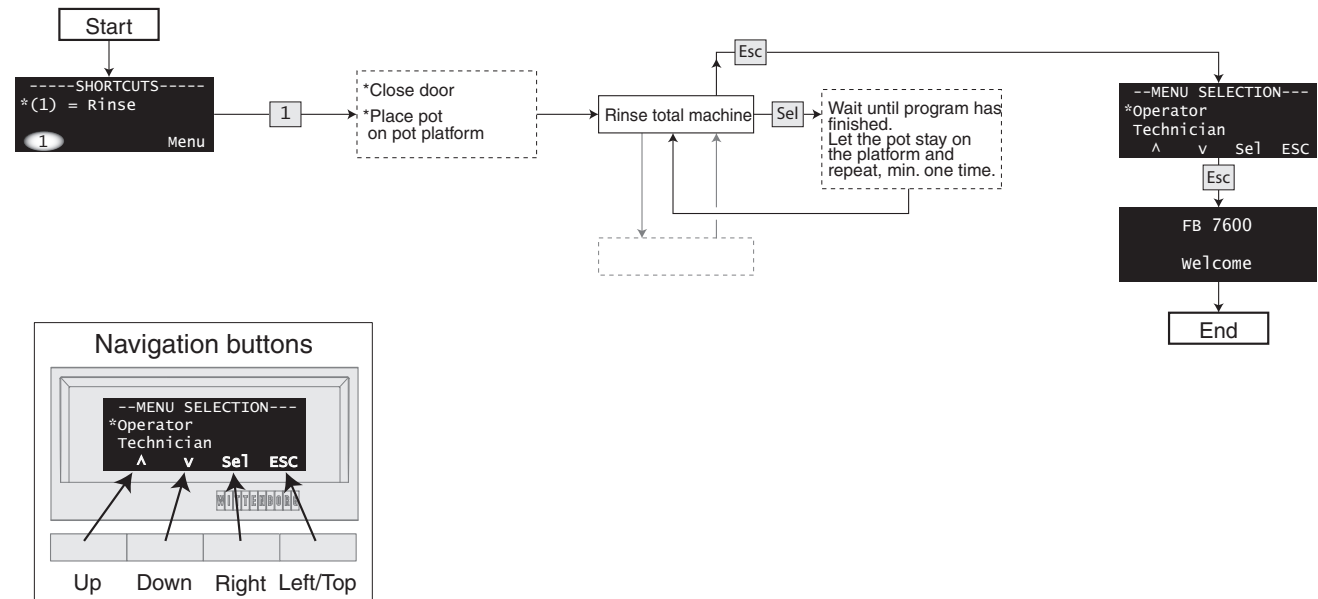
Mounting of cleaned parts

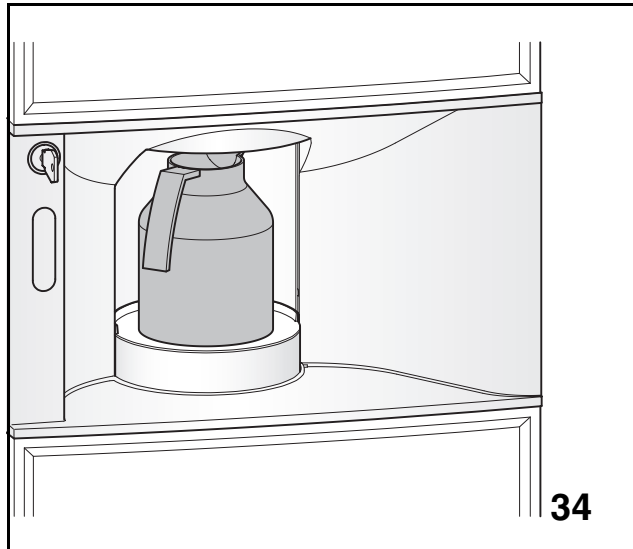
- Remount all parts.



Rinsing machine with one FB brewer, only

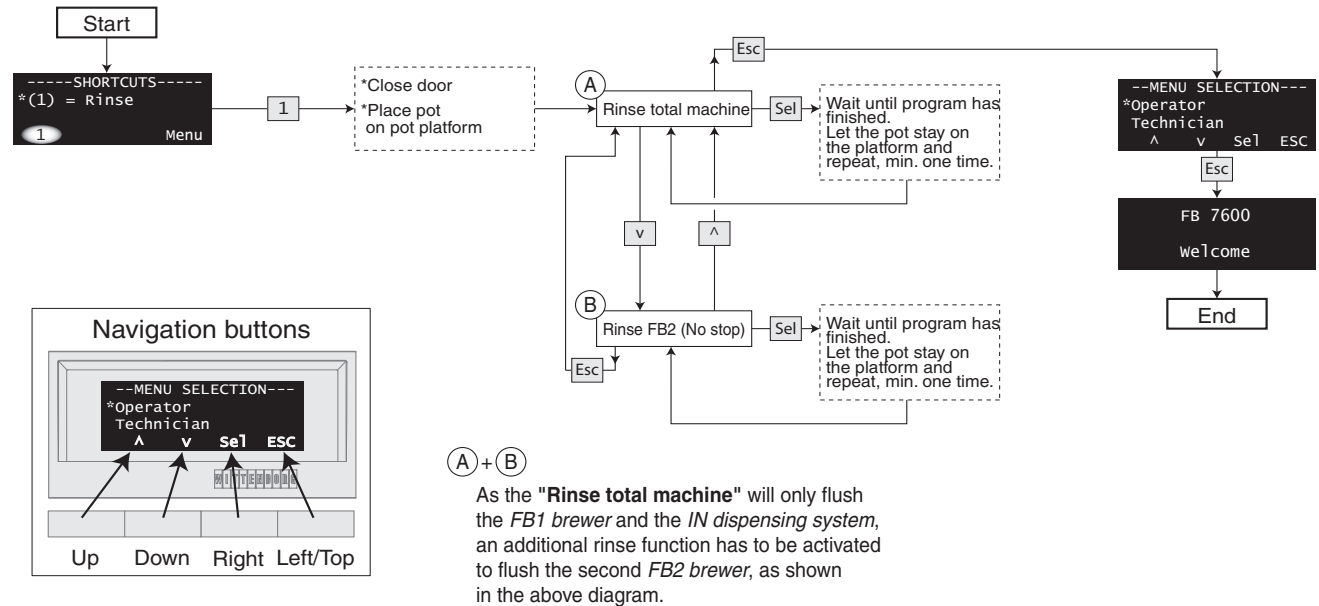
- Have an empty pot (min. 1.5 l) ready to place on the pot platform (*fig. 34*).
- Turn to the display and follow the diagram to perform a machine rinse.



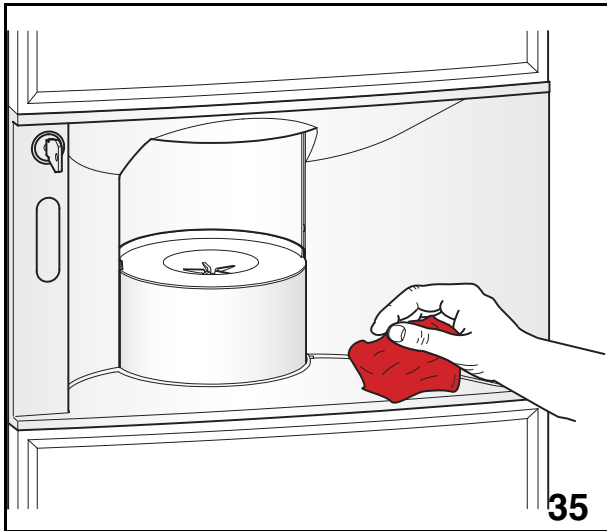


Rinsing machine with double FB brewer

- Have an empty pot (min. 1.5 l) ready to place on the pot platform (*fig. 34*).
- Turn to the display and follow the diagram to perform a machine rinse.



Daily routines

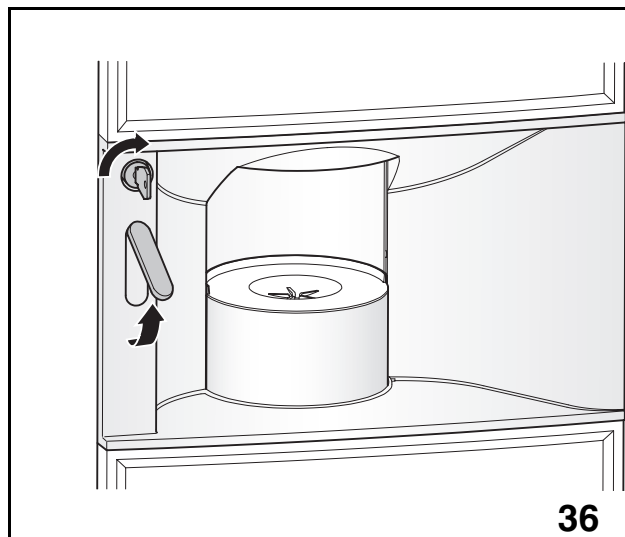


Last check

- Clean the machine with a damp cloth on the outside (fig. 35).
- Perform a test dispensing by pressing the selection button for coffee with sugar or tea with sugar.



There is a risk of scalding from hot water.



36

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
 - distributor head with hoses
 - complete filter plate
 - brewing cylinder with plunger
 - scraper
 - brewer hose
 - Whipper wheel and whipper housing for coffee whipper
 - cup slide with shutter

Opening and disconnecting machine



The door handle is automatically triggered open as the key is turned.

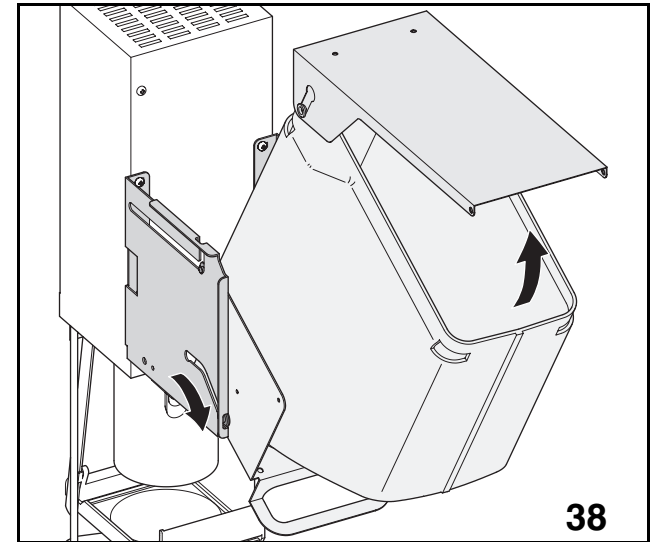
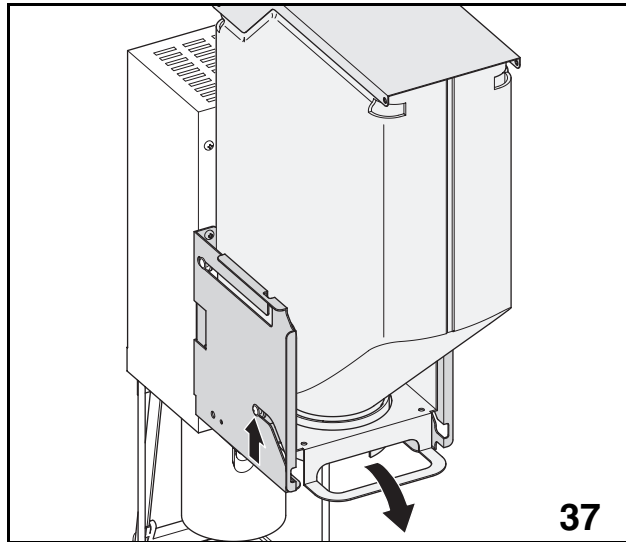
- Turn the door key clockwise in keyhole (*fig. 36*).
- Lift the released door handle (*fig. 36*).



The machine is automatically turned off.



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



Filling the cup magazine



Never reach underneath the cup dispenser for pushing cups upwards.



To ensure a perfect delivery of cups only anti-statically treated cups of good quality that are suitable for the use in vending machines may be used.

- Load cups in cup magazine as described in daily cleaning.

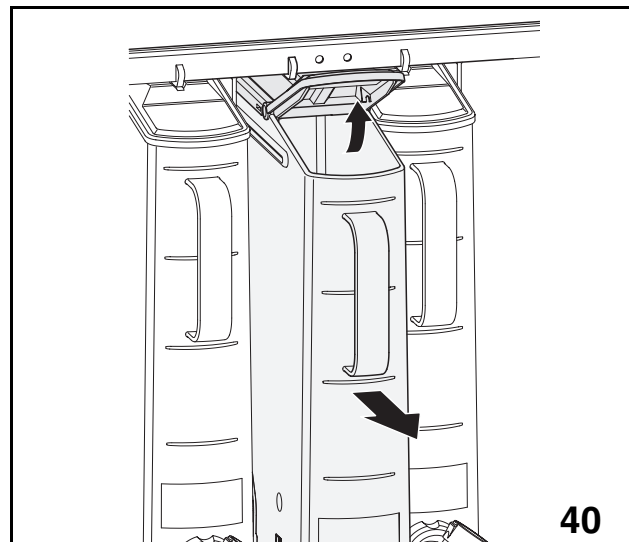
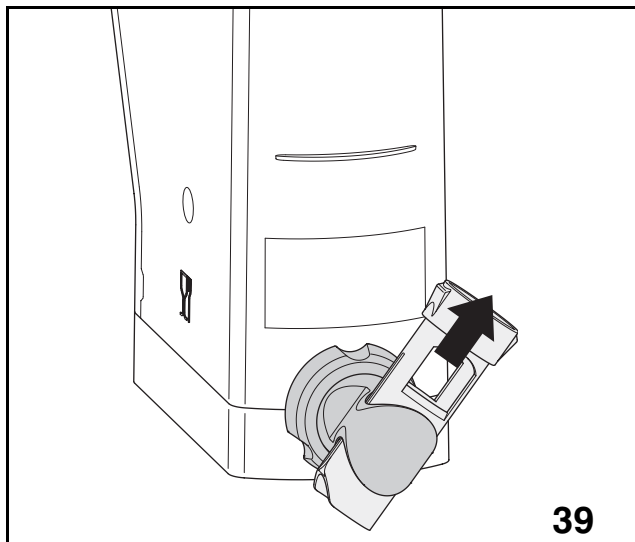
Removing and filling the freshbrew coffee canister

- Take the coffee canister by the handle, lift and tilt forward canister (*fig. 37*).
- Take coffee canister out of its lower track by pulling forward, and remove canister by lifting it up and out of its upper track.

- Lift lid and slide it back to keep open (*fig. 38*).
- Fill canister, close lid, and place canister outside of machine on a plain clean surface.



Do not use pressure to force more coffee / tea into the canister as this could damage the dosing system.



Filling the instant ingredient canisters



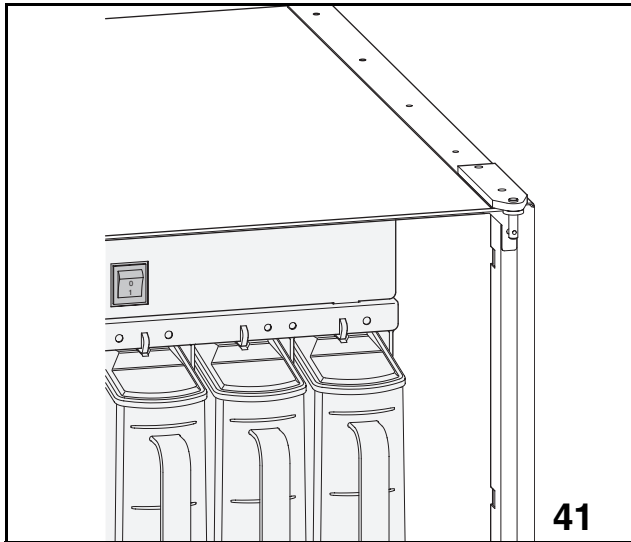
Check ingredient level of instant ingredient canisters daily.

Replenish when necessary.

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

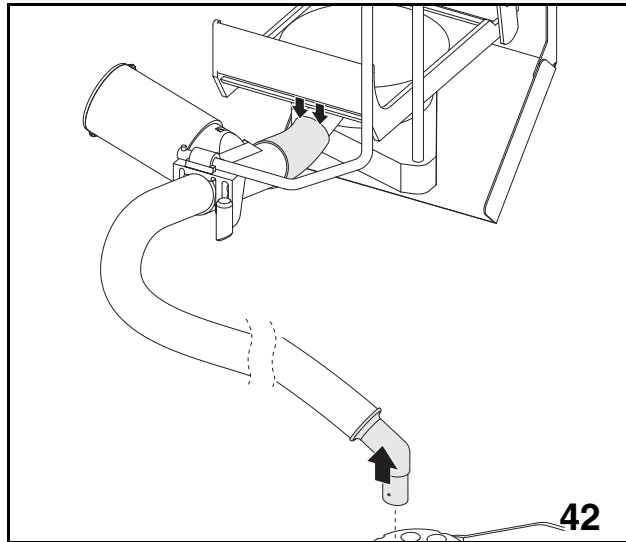
- Close the outlet spout by pushing the outlet tube upwards (*fig. 39*).
- Fill the instant ingredient canisters one by one as described in daily cleaning (*fig. 40*).
- Leave the outlet spouts closed.

Weekly routines



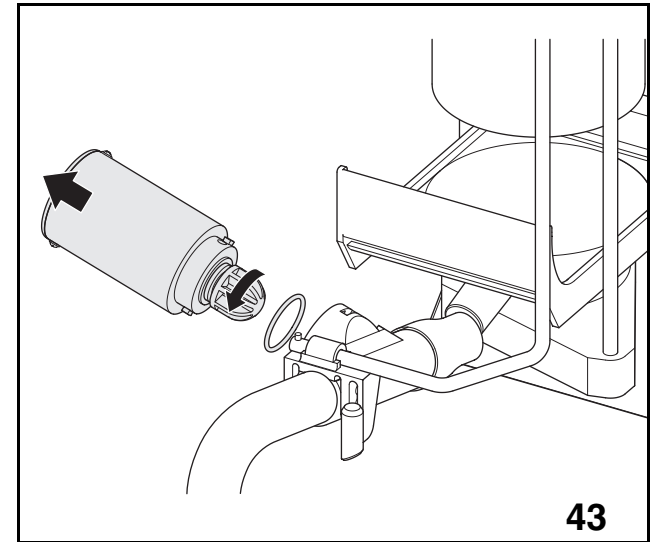
Cleaning the freshbrewer parts

- **Before** disassembling the brewer parts, turn **off** the main switch (*fig. 41*).

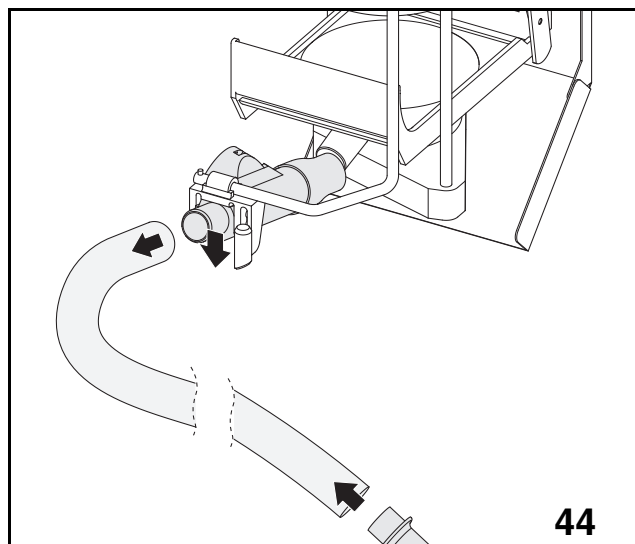


Cleaning the coffee whipper

- Remove the small outlet pipe with coffee whipper from the filter plate (*fig. 42*).
- Remove the outlet spout of the long coffee pipe from the distributor head.

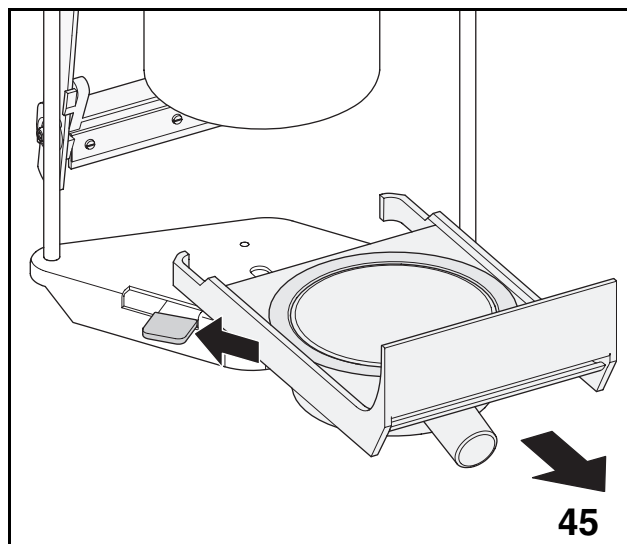


- Remove the whipper motor from the whipper housing (*fig. 43*).
- Remove the O-ring.
- Remove the whipper wheel by turning it counter-clockwise.



44

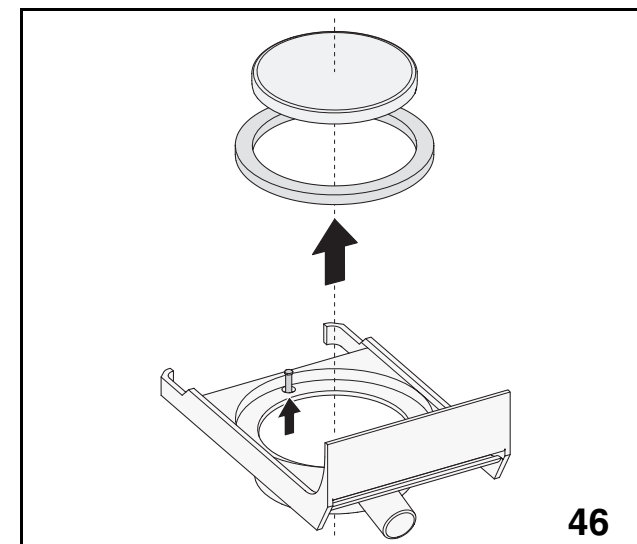
- Detach the whipper housing with outlet pipes from the holder arm.
- Disassemble the long outlet pipe from the whipper housing and the outlet spout (*fig. 44*).



45

Disassembling the freshbrewer parts

- Press lock at the support backwards and withdraw filter plate holder (*fig. 45*).
- Remove filter: Press out the sealing ring and the filter plate by means of the ejector pin (*fig. 43*).

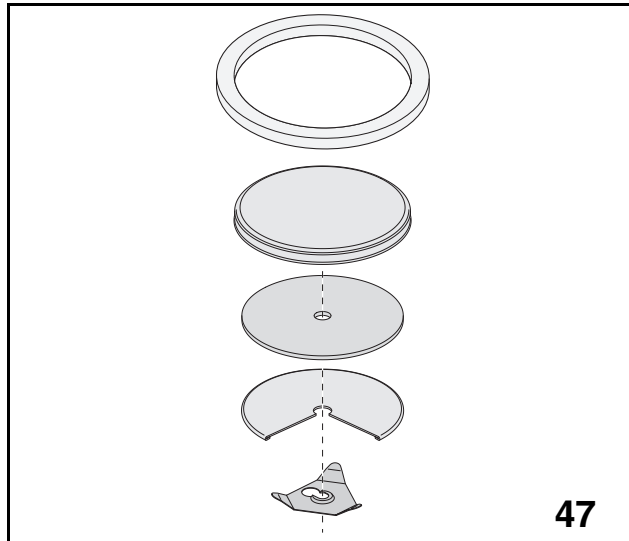


46

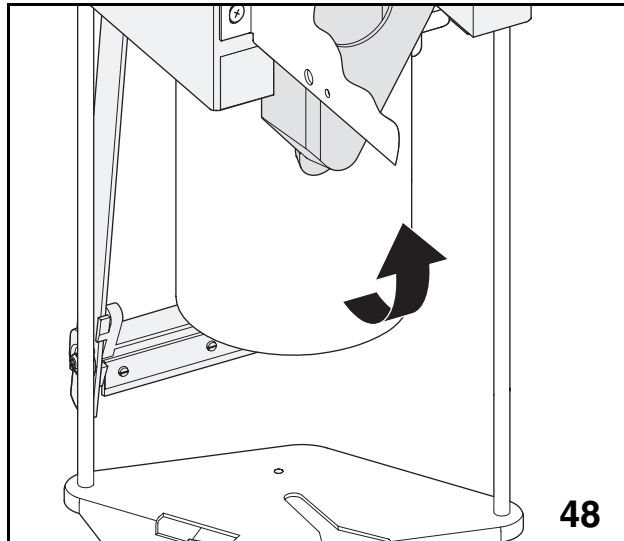
- Disassemble filter plate and clean it (*fig. 46*). If required decalcify the filter.¹

1. For cleaning and decalcifying: Refer to HACCP guidelines on Quick Reference Card.

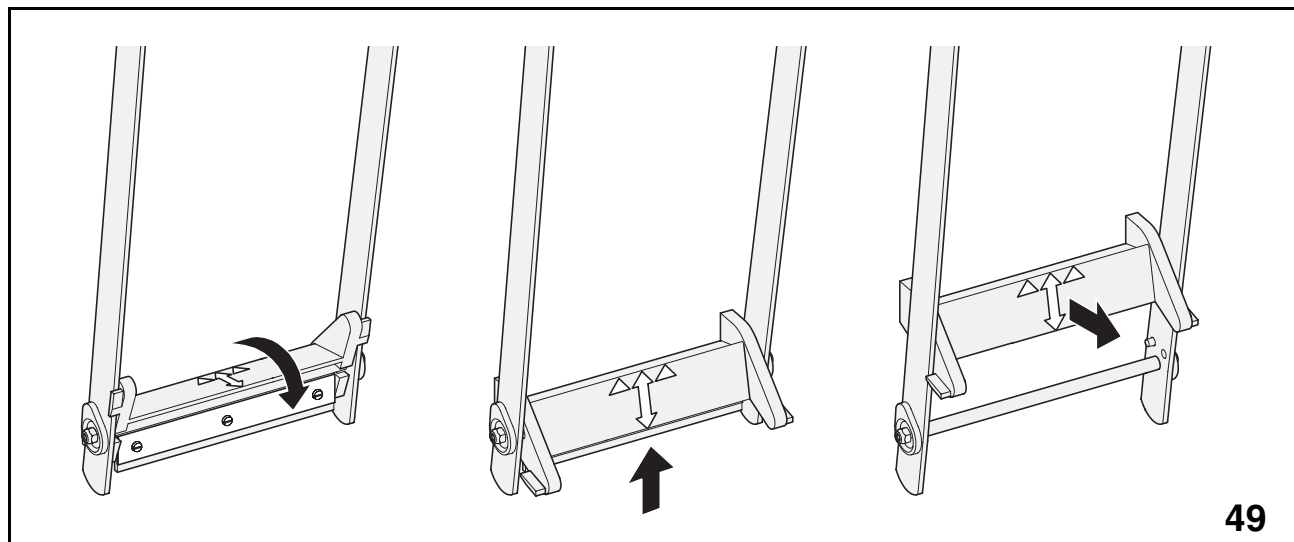
Weekly routines



- Take hold of the brewer cylinder by placing your thumb on the outside and the rest of your fingers inside the “brewing chamber”, tilt the cylinder smoothly and remove cylinder (*fig. 47*).



- Remove plunger from brewer cylinder from below of brewing chamber (*fig. 48*).

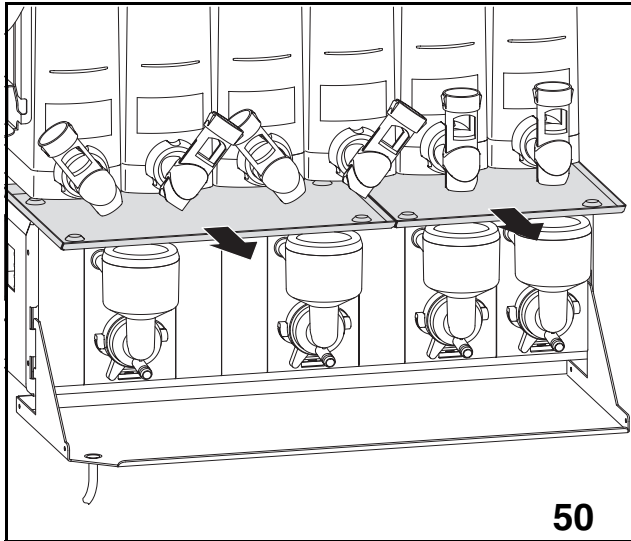


- Remove scraper by turning and lifting it straight up (*fig. 49*).



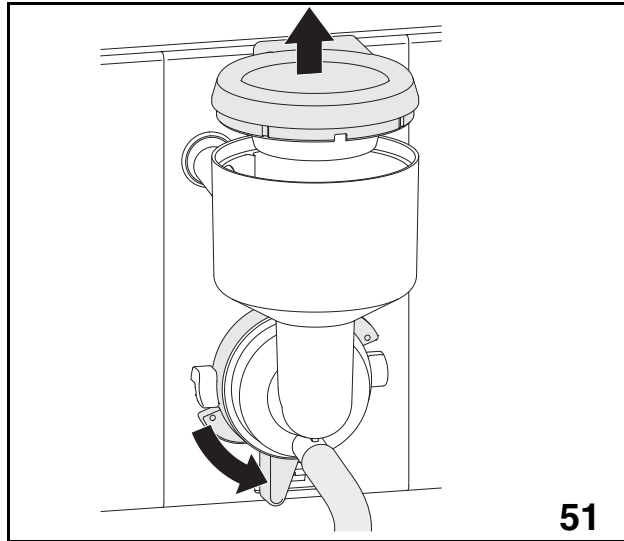
Soak all parts removed (coffee whipper, outlet pipe, filter plate, filter plate holder, sealing ring, scraper, plunger and brewer cylinder) at least for 15 minutes in hot water with cleaning agent.

Weekly routines



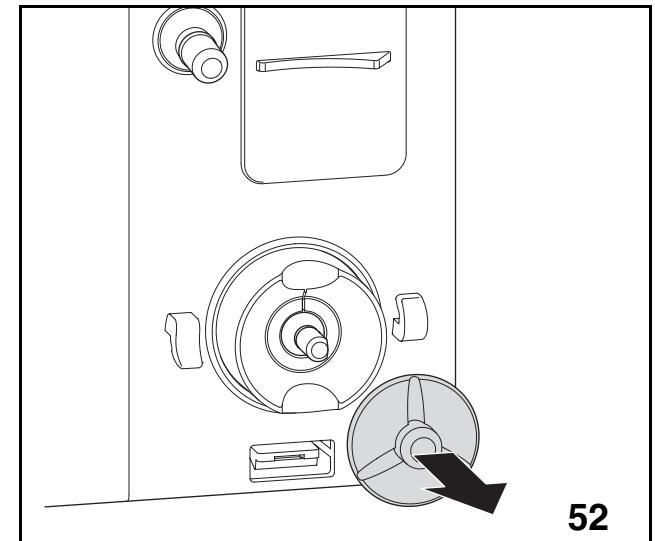
Cleaning the under trays

- Remove and wipe clean the under trays with a moist cloth (*fig. 50*).
- Relocate the under trays.

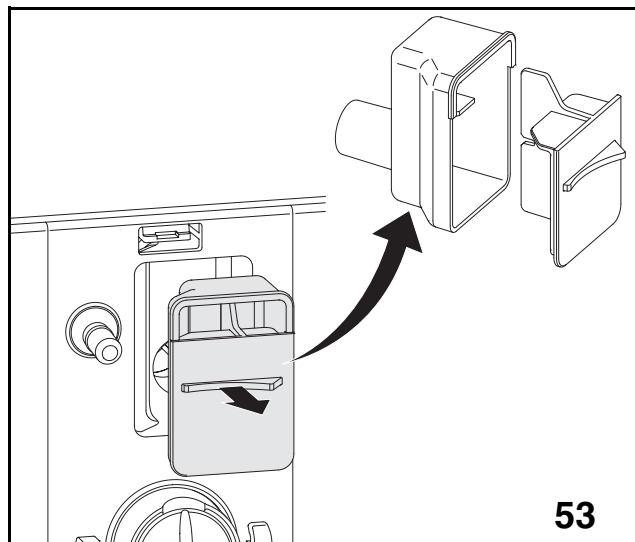


Cleaning the instant ingredient dispensing system components

- Remove the mixing hood by lifting off (*fig. 51*).
- Loosen locking ring by pressing release lever anti-clockwise and pull out mixing funnel leaving hose back on (*fig. 50*).
- Remove sealing ring.



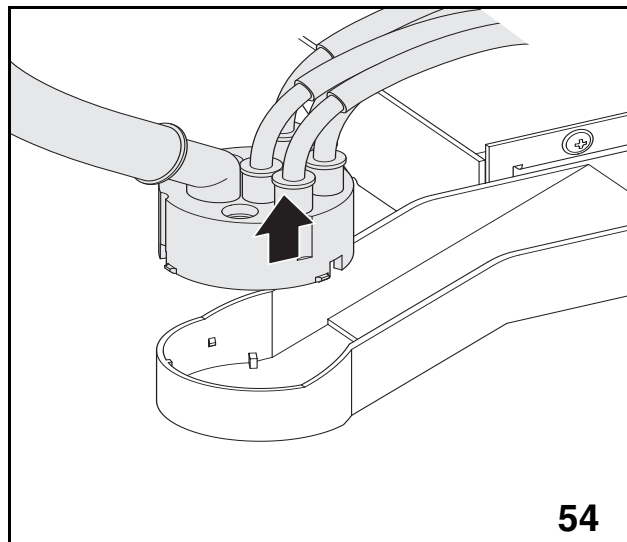
- Pull off the whipper wheel (*fig. 52*).
- Repeat procedure until all mixing funnels have been removed.



53

Cleaning the powder trap

- Take hold of the small handle on the powder trap and pull out (*fig. 53*).
- 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.



54

Cleaning the distributor head

- Unclip the distributor head by pressing upwards from below of head (*fig. 54*).
- Disassemble distributor head, hoses and mixing funnels and soak them in hot water with cleaning agent.

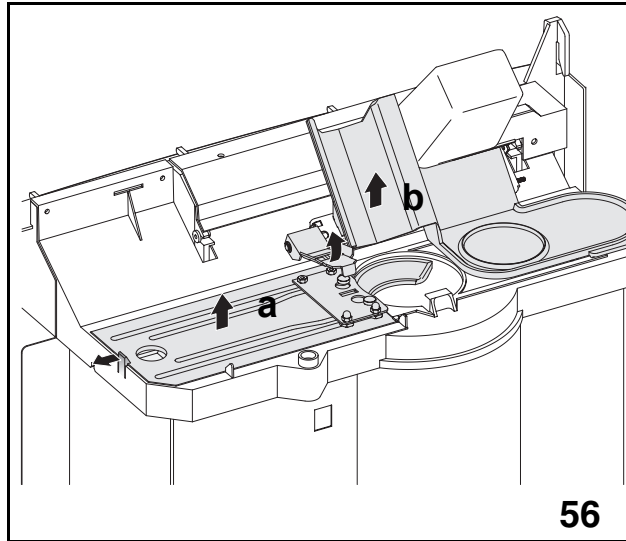
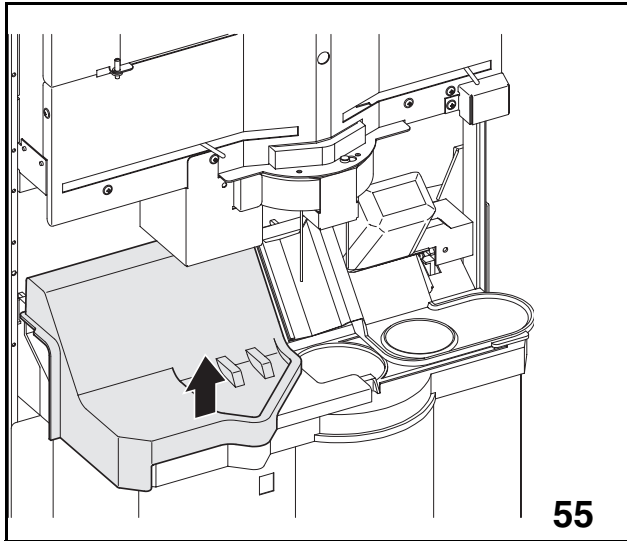
- If the holder arm for the distributor head is heavily soiled, pull it off its holder and clean it as well.



Always rinse pipes and hoses after disassembling the distribution system.

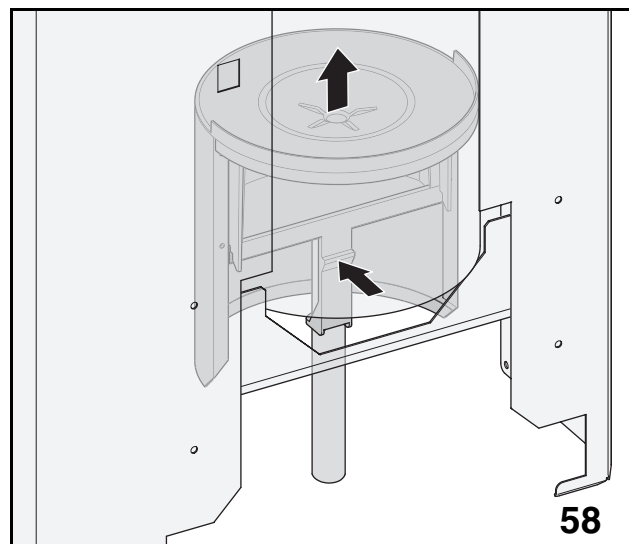
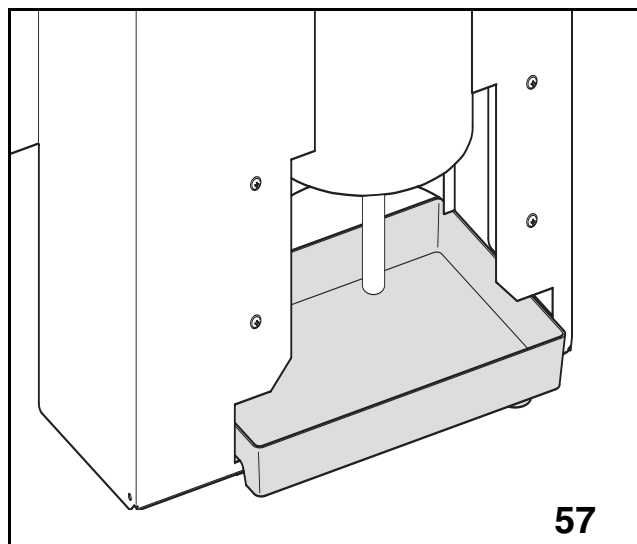
When reinstalling the distributor head with hoses after cleaning, check that it is seated securely in the holder arm and that the hoses are properly relocated.

Weekly routines



Cleaning the dispensing area

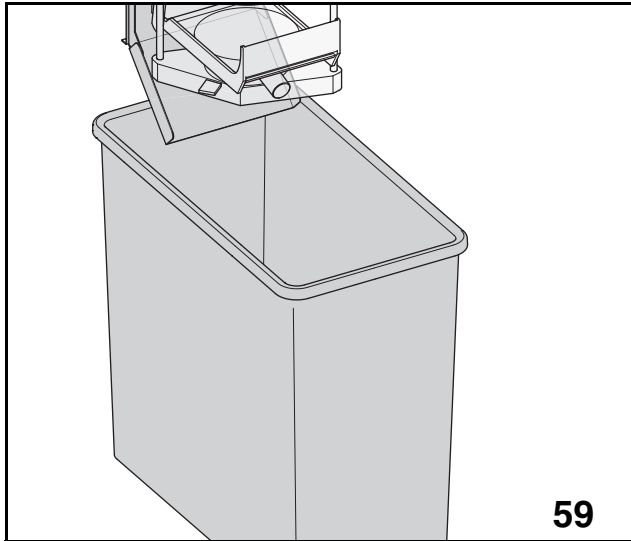
- Remove drip guide by pulling it up and out (*fig. 55*).
- Unclip cup catcher unit with one hand and remove it with the other using the hole in the guiding plate for cup catcher (*fig. 56,a*).
- Unclip and remove cup slide with shutter (*fig. 56,b*).
- Soak cup slide with shutter and drip guide in hot water with cleaning agent.



Cleaning the cup platform

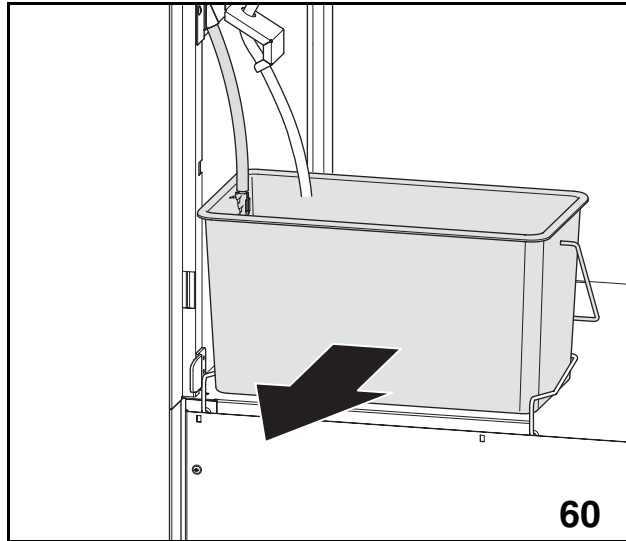
- Remove, empty and clean drip tray (*fig. 57*).
- With the left hand press the release lever (*fig. 58*).
- With the right hand pull up the cup platform.
- Clean drip tray and cup platform and reposition.
- Clean the area around the cup station on front side of machine door.

Weekly routines



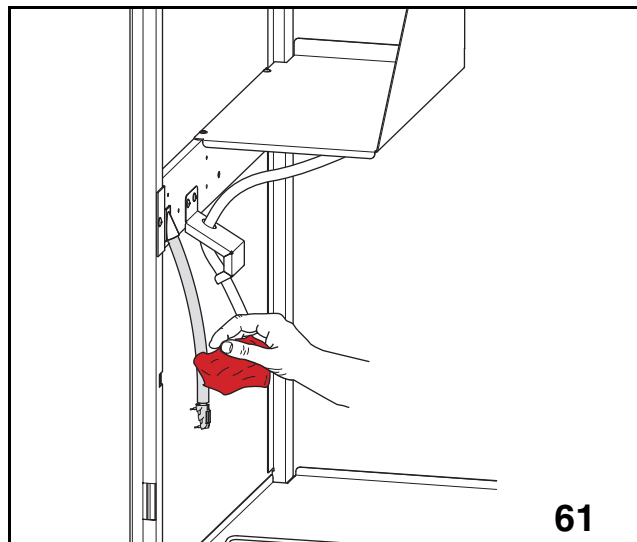
Cleaning coffee waste bucket

- Remove and replace plastic bag in waste bucket as described in daily cleaning (*fig. 59*).



Cleaning waste bucket

- Remove, empty and clean waste bucket (*fig. 60*).



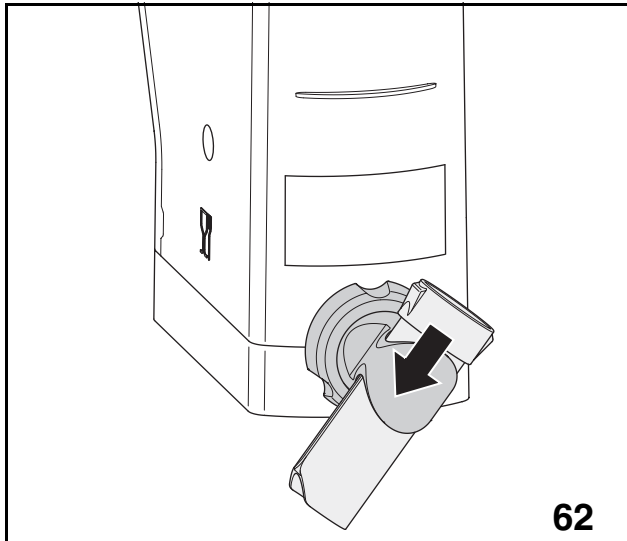
Cleaning inside and outside

- Clean the sensors of the waste buckets with a clean damp cloth and wipe dry (*fig. 61*).
- Clean the door and housing inside and outside, and finally the bottom with a clean, damp cloth.
- 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.

Weekly routines



Mounting cleaned parts

- Remount all parts.
- Open the outlet spouts of instant ingredient canisters by pushing the tubes downwards (*fig. 62*).

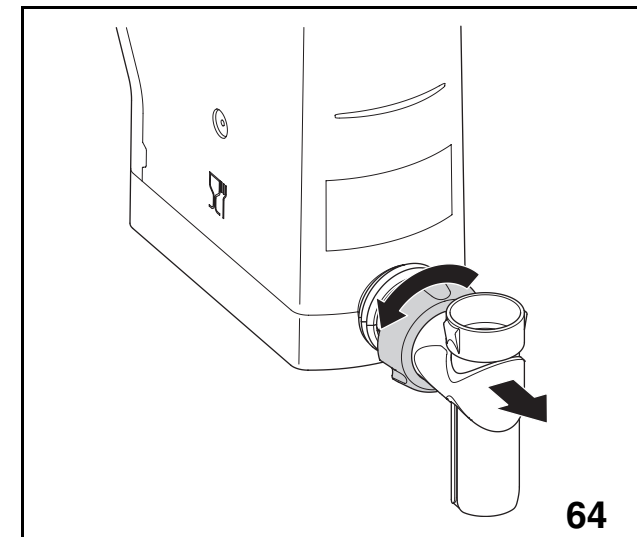
Rinsing and last check

- Turn on the main switch.
- Rinse machine twice (see *Daily Cleaning*).
- Clean outside of machine with a damp cloth.
- Perform a test dispensing by pressing a selection button eg. coffee with milk and sugar.

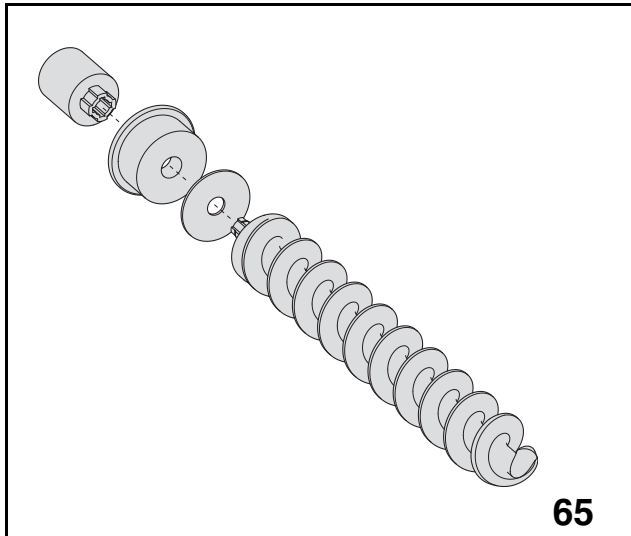


Cleaning the instant ingredient canisters

- Take the canister by the handle and pull it out of its holder (*fig. 63*). 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. 64*).
- Unscrew locking nut on back side of canister and remove the dosing system.



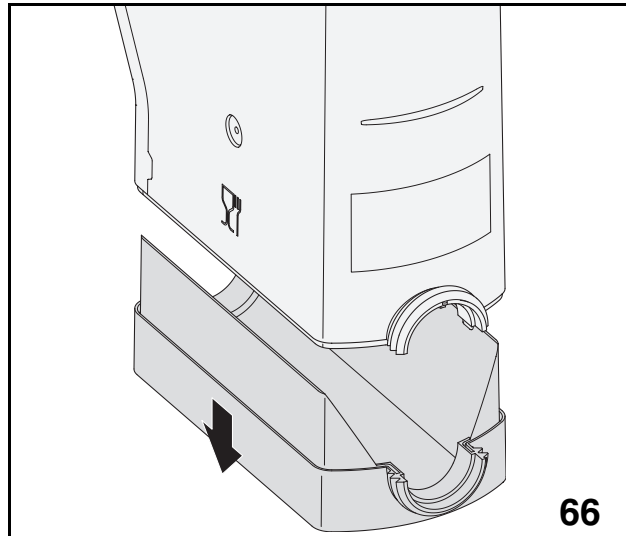
Occasional routines



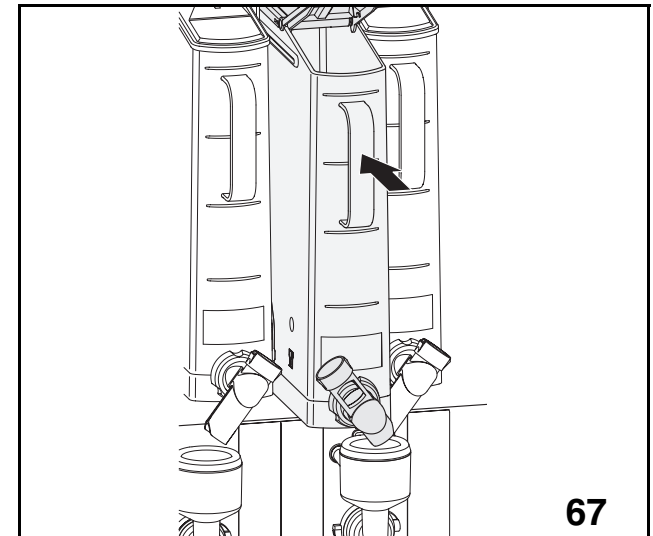
- Separate dosing system (*fig. 65*):
 - coupling
 - sealing bushing
 - auger
 - felt disc



All parts of the instant ingredient canisters are dishwasher-proof.



- Separate bottom part from canister part (*fig. 66*).
- 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.

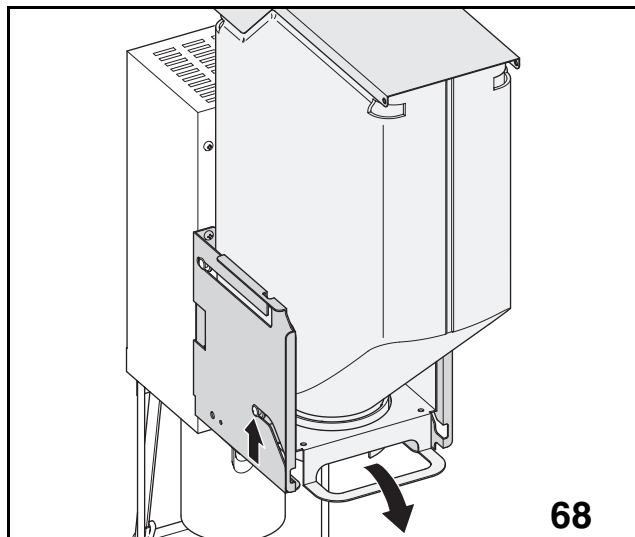


- Return canister to its former position (*fig. 67*).
- Fill canister with instant ingredient.
- Repeat procedure for all canisters.

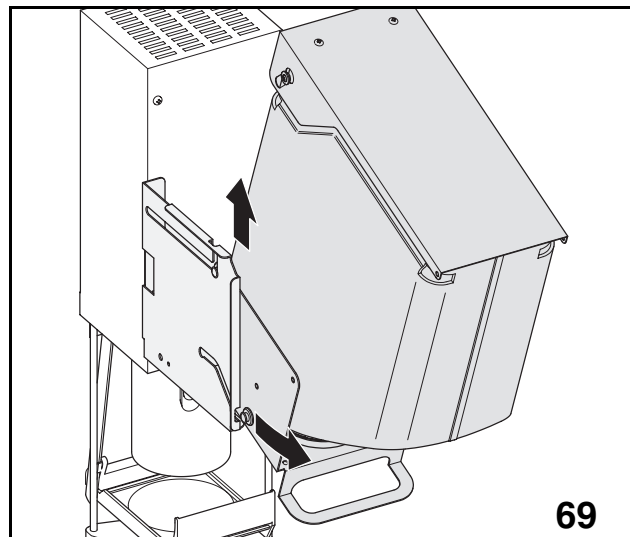


Ensure that the outlet tube points the open end downwards.

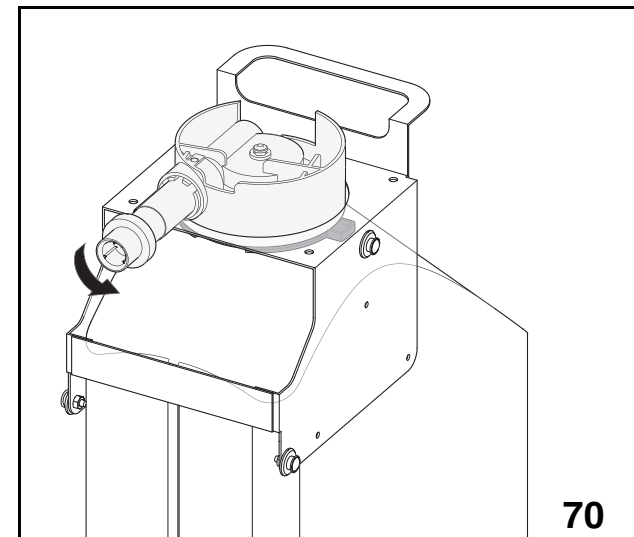
The canisters must always be returned to their original position.



68



69



70

Cleaning the freshbrew ingredient canister

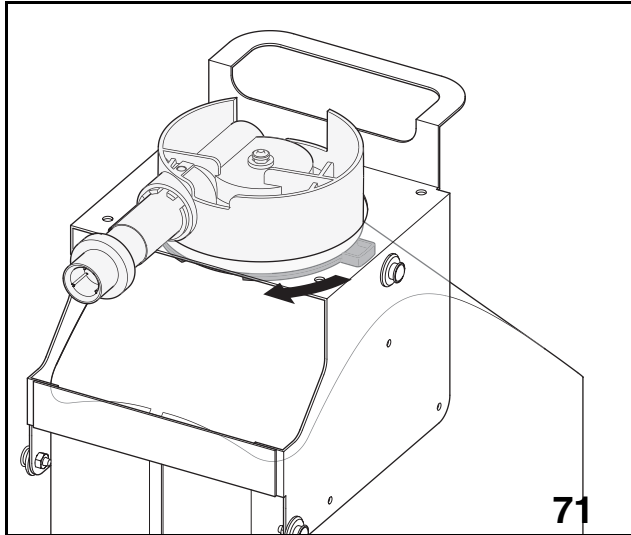
- Take the canister by the handle (*fig. 68*), lift and tilt forward canister.
- Take canister out of its lower track by pulling forward and remove canister by lifting it up and out of its upper track (*fig. 69*).
- Remove lid.
- Empty ingredient of the canister into a plastic bag or a clean container.
- Place the canister upside down on a table.
- Loosen the remaining coffee by turning the coupling (*fig. 70*) and by knocking on the bottom of the dosing system.
- Wipe the inside of the canister with a clean dry cloth.



Take care not to damage the mixing wire.

The canister and canister parts are **not** dishwasher-proof.

Occasional routines



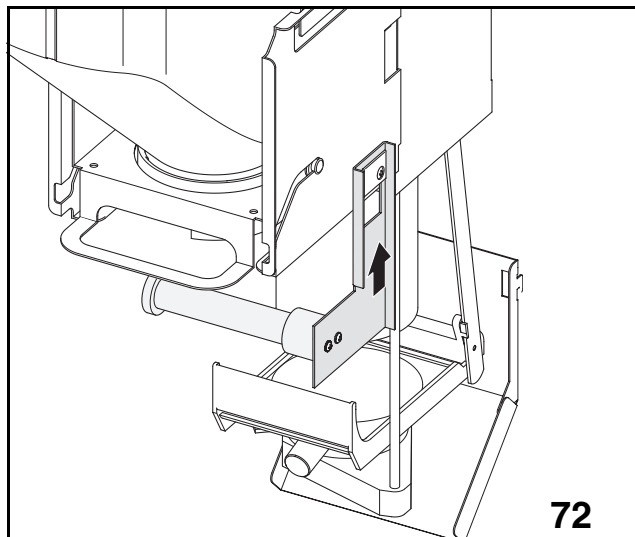
- For a heavily soiled canister loosen the adjusting ring at the handle (*fig. 71*) and carefully remove the dosing system.
- Dry the canister and reinsert.
- Fill canister with freshbrew ingredient.



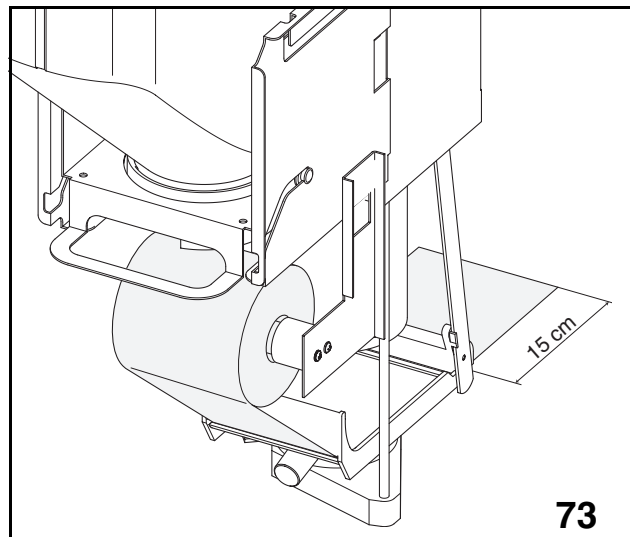
Take care not to damage the mixing wire.

Do not use a brush.

- Clean the canister in hot water.



72



73

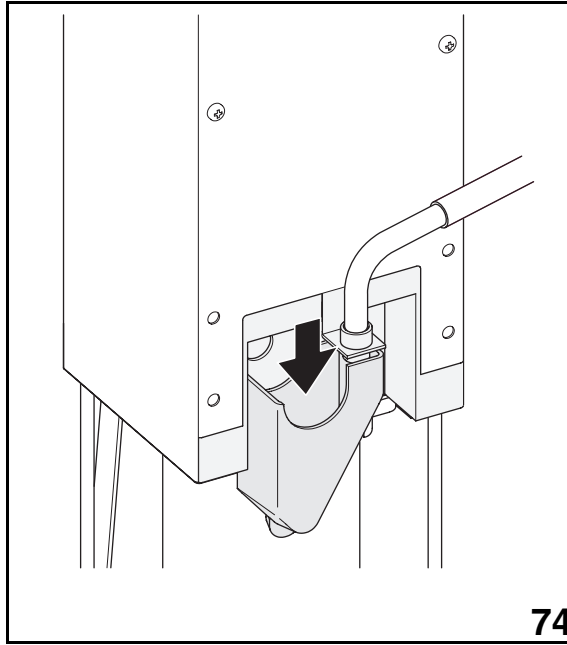
Replacing filter roll



Filter paper should be used for tea brewing.
Filter paper is optional for coffee brewing.

- Remove the filter roll holder (*fig. 72*) by lifting it and then taking it out sideways to the front.
- Remove the old roll core and position the new filter roll so that it feeds through as directed (*fig. 73*).
- Insert the paper in the filter plate holder, pull it through until approximately 15 centimetres of the filter paper sticks out from the back edge.
- Reposition the filter roll holder.

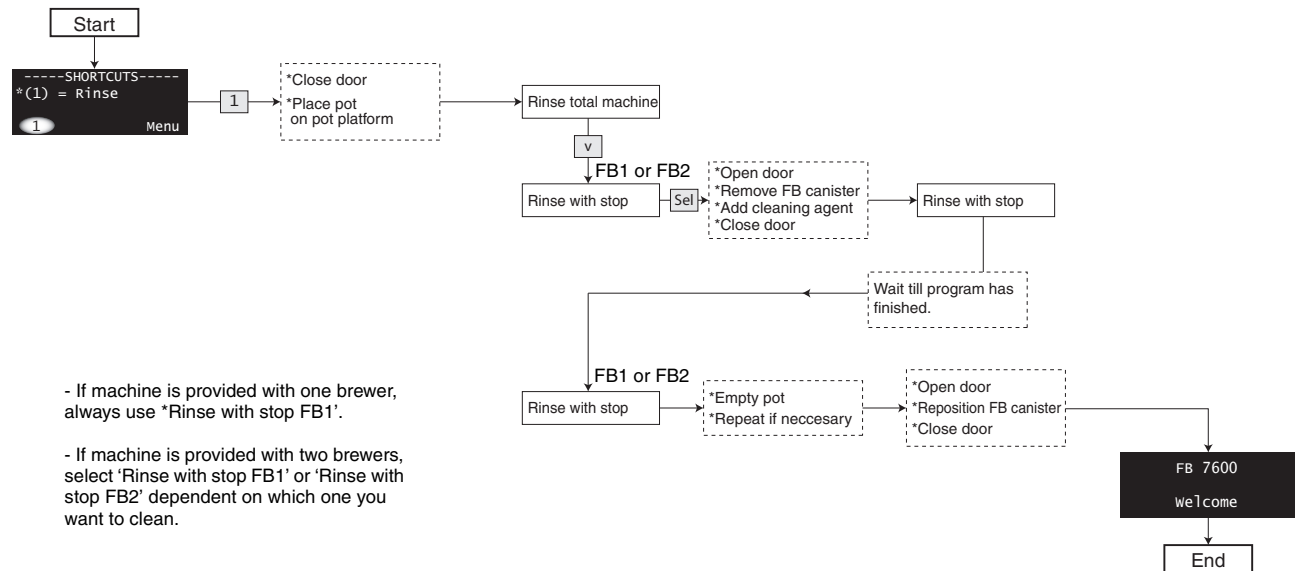
Occasional routines



Rinsing the brewer (fig. 74)

The brewer rinse procedure automatically carries out four rinse cycles, one time with cleaning agent and three times with clean water.

- Have an empty pot (min. 1.5 l) and cleaning or descaling agent ready.
- Open the door, turn to the display and follow the diagram to perform a rinse of the brewer.



Do not stop the rinsing before the full four cycles are completed as otherwise residues of the cleaning or descaling agent may remain in the brewer and outlet hose.



There is a risk of scalding from hot water.



Should the procedure be interrupted, e.g if the door is accidentally opened too early, the brewer must either be disassembled and rinsed manually or a new rinse procedure must be performed.



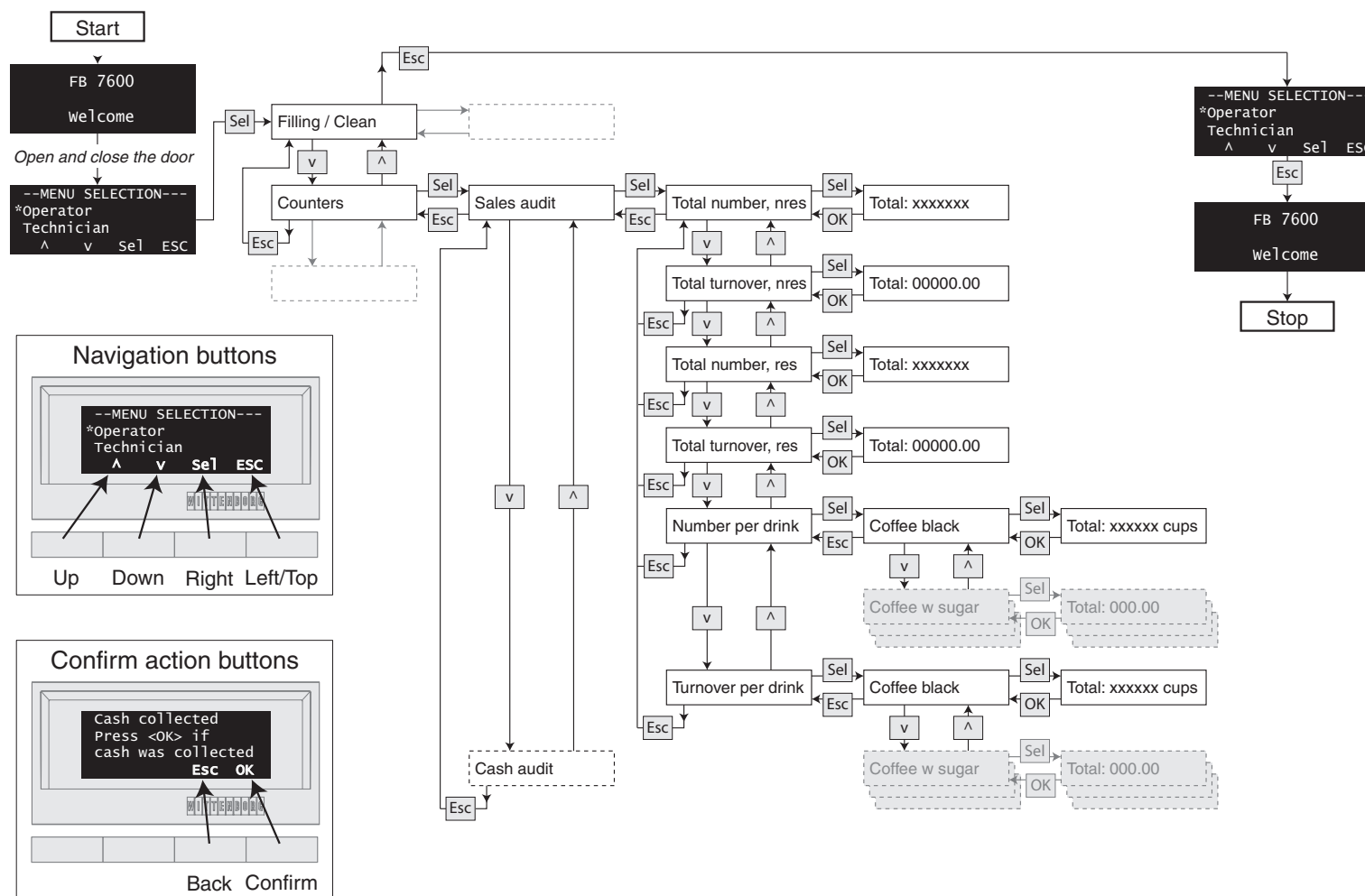
Most descaling agents are caustic. To protect your eyes and your skin follow the manufacturer's instructions

Calling and resetting counters

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.

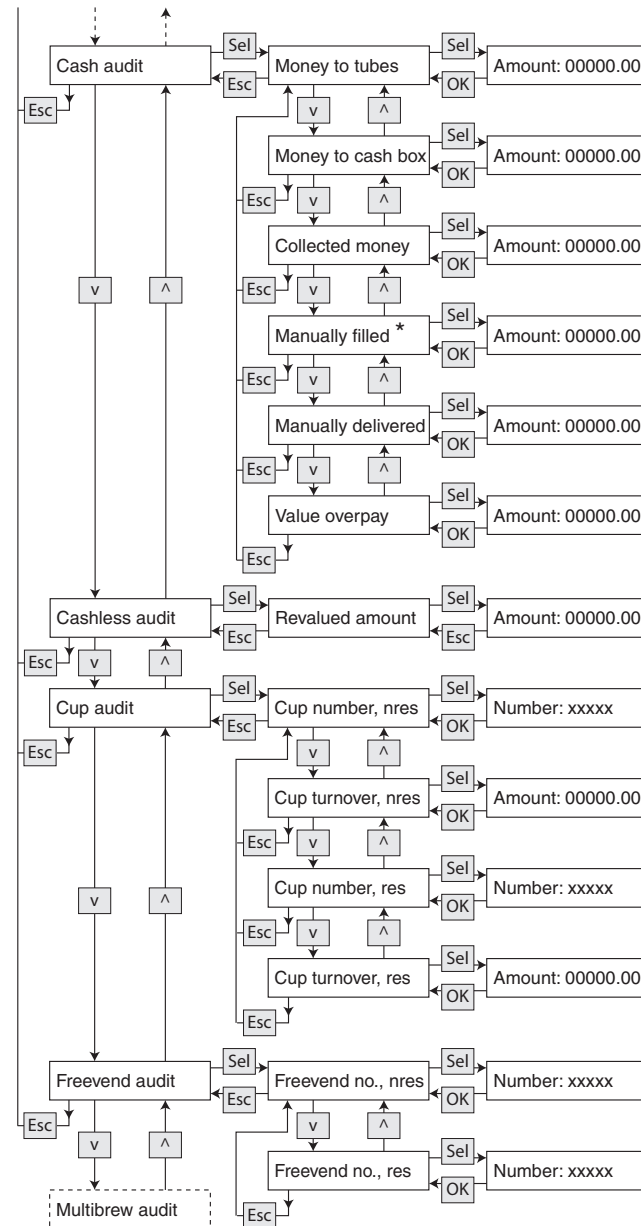
Note: Only the “Cash audit” counters are reset by the reset function.



Continued on next page

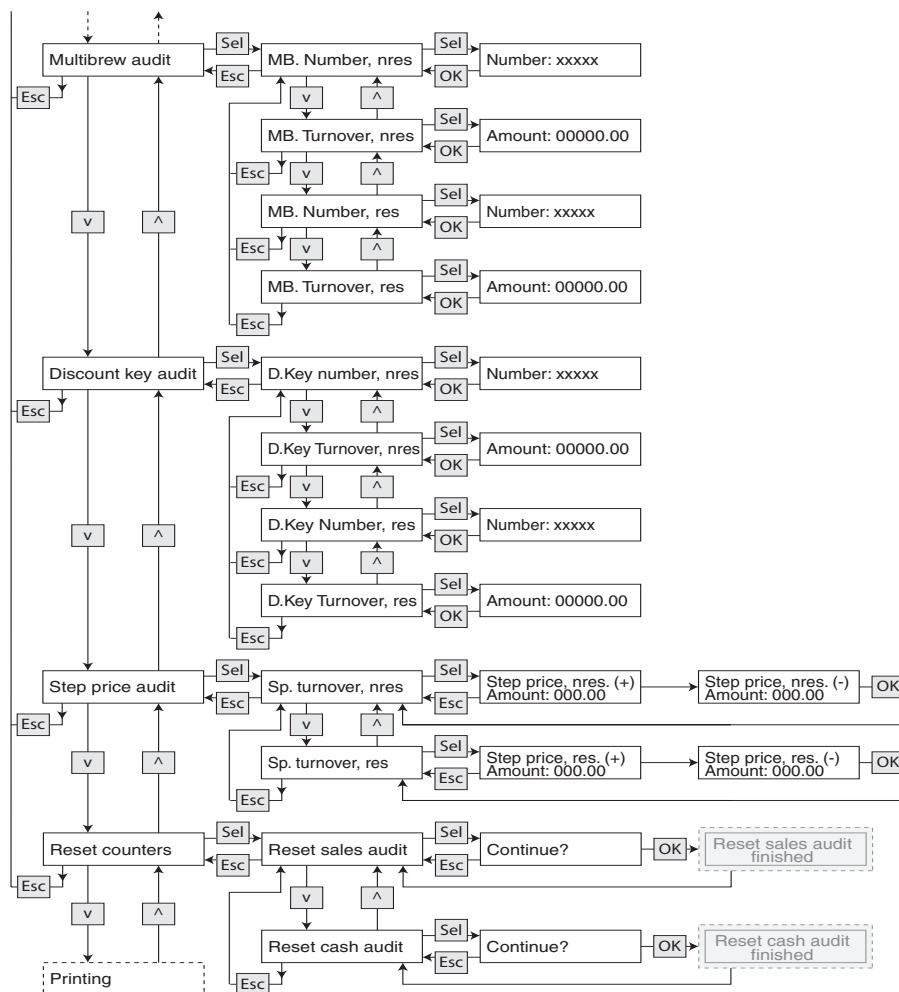
* Applicable only to BDV and MDB/ICP coin mechanisms.

Diagram continued



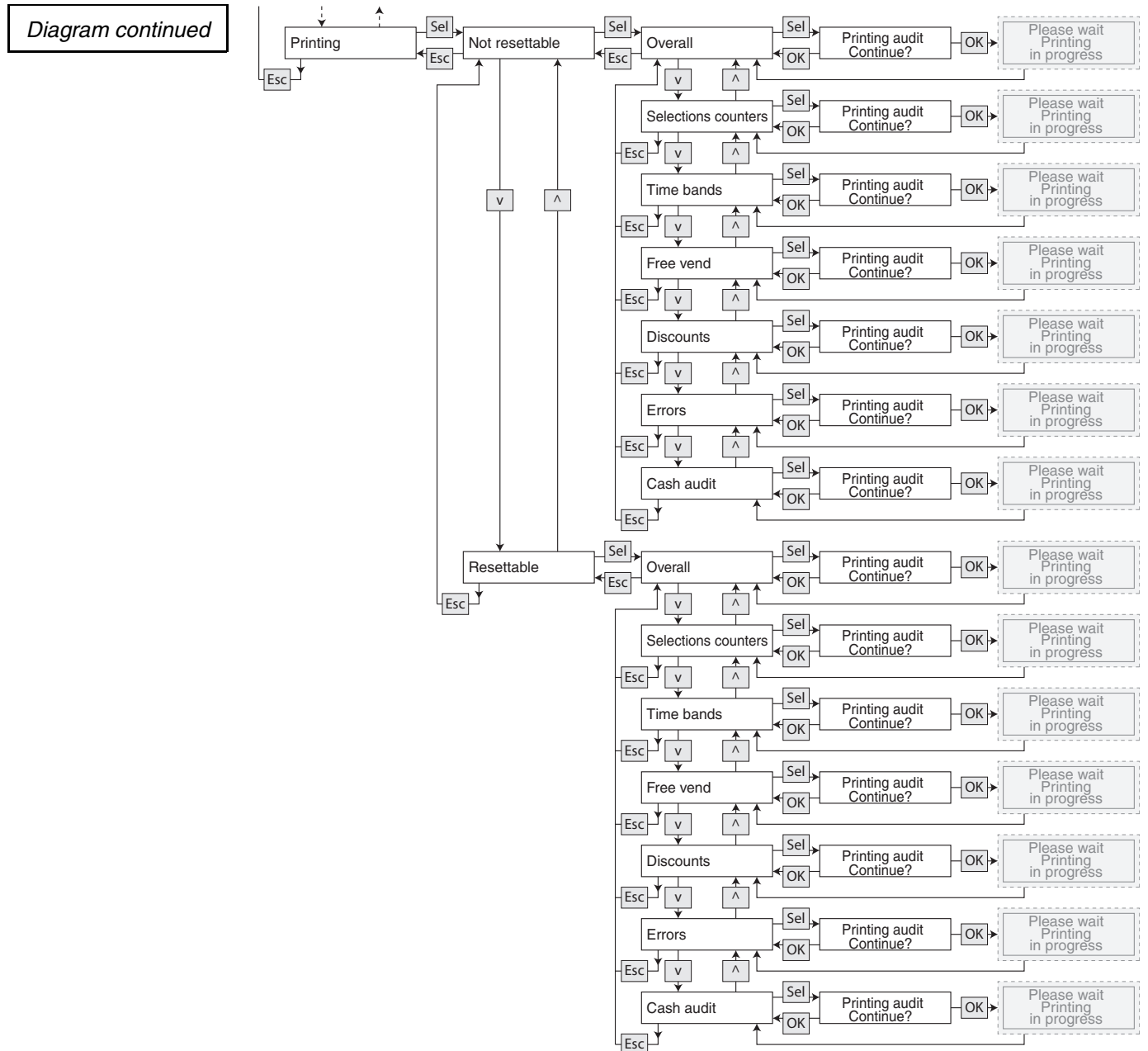
Continued on next page

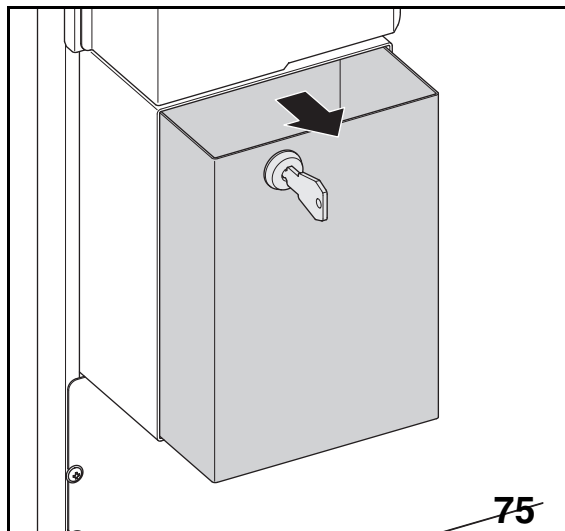
Diagram continued



Continued on next page

Additional routines

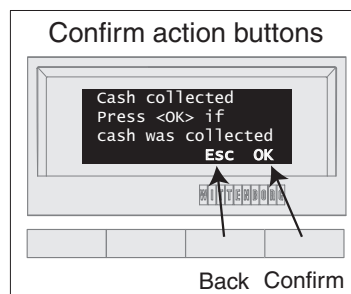
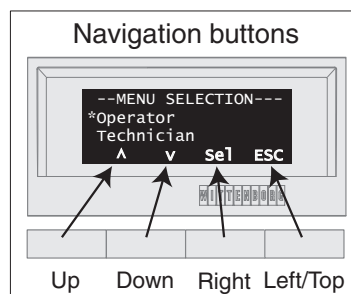
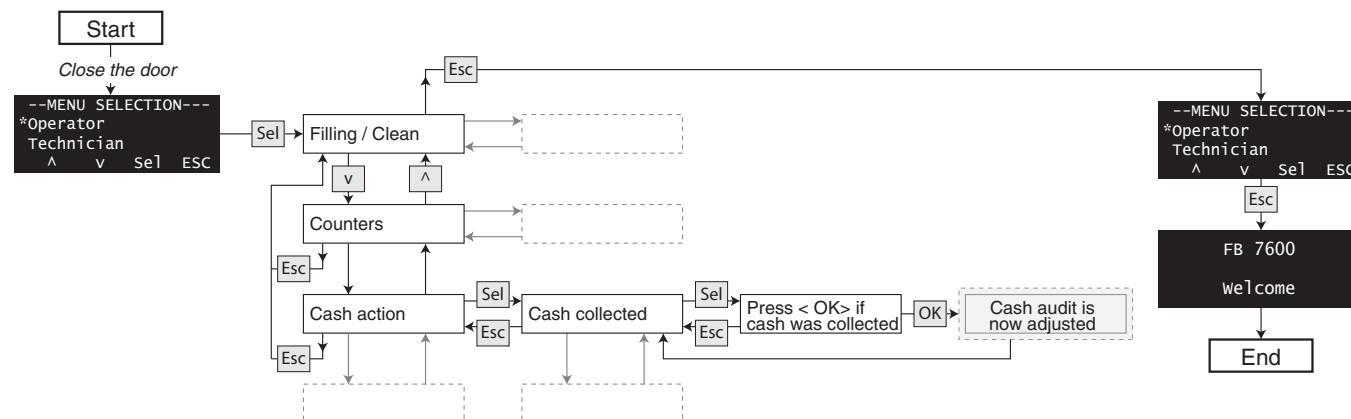




Emptying the cash box

- 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. 75)
- 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 61).



Additional routines

Adding change manually

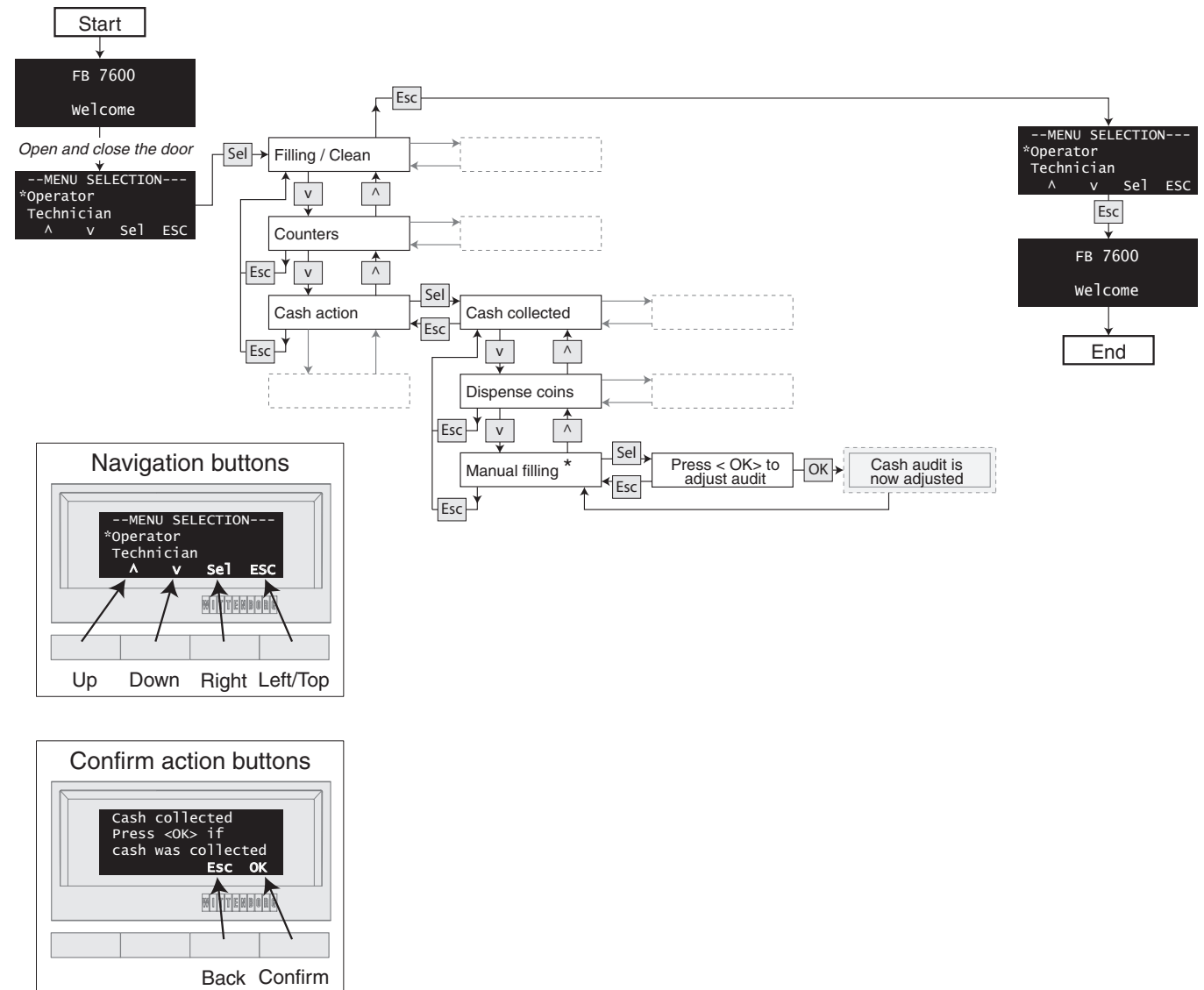


This procedure is applicable only to BDV and MDB/ICP coin mechanisms.

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 61)



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

Setting automatic rinse periods

Follow this diagram to define one or more automatic rinse periods (up to seven periods.)

Setting a period means scheduling the machine to run an automatic rinse procedure at a specific time on a given day of the week. The time and days are set in separate functions.

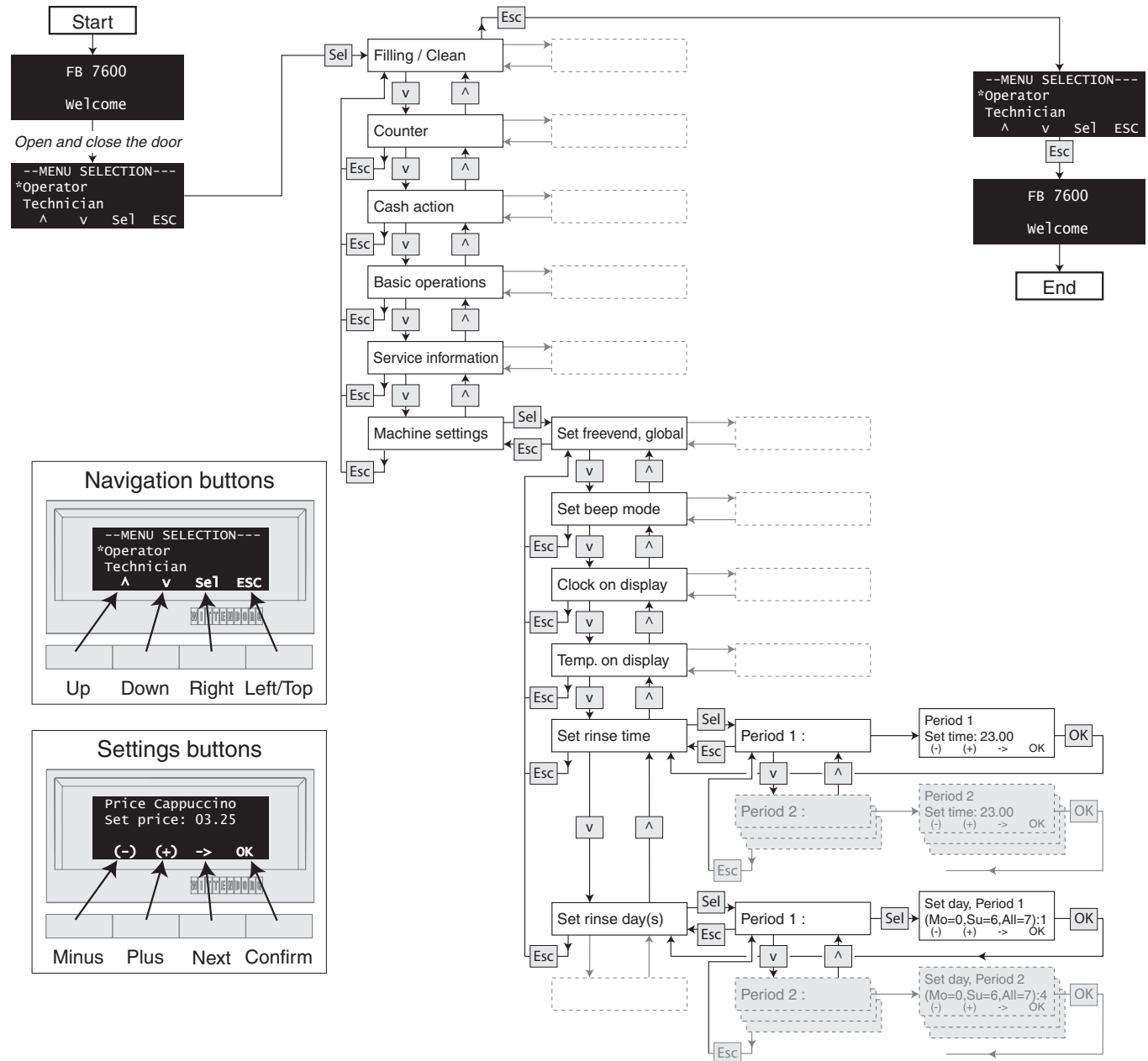
Example:

Period 1 is set to 23:00 hours in “Set rinse time” and to Tuesday (1) in “Set rinse day” (see diagram).

Period 2 is set to 23:00 hours in “Set rinse time” and to Friday (4) in “Set rinse day” (see diagram).

Result: Automatic rinse will be performed on Tuesdays and Fridays at 23:00 hours.

If rinsing is required every day of the week at the same time, it is enough to define one period and set days to “All” (7)

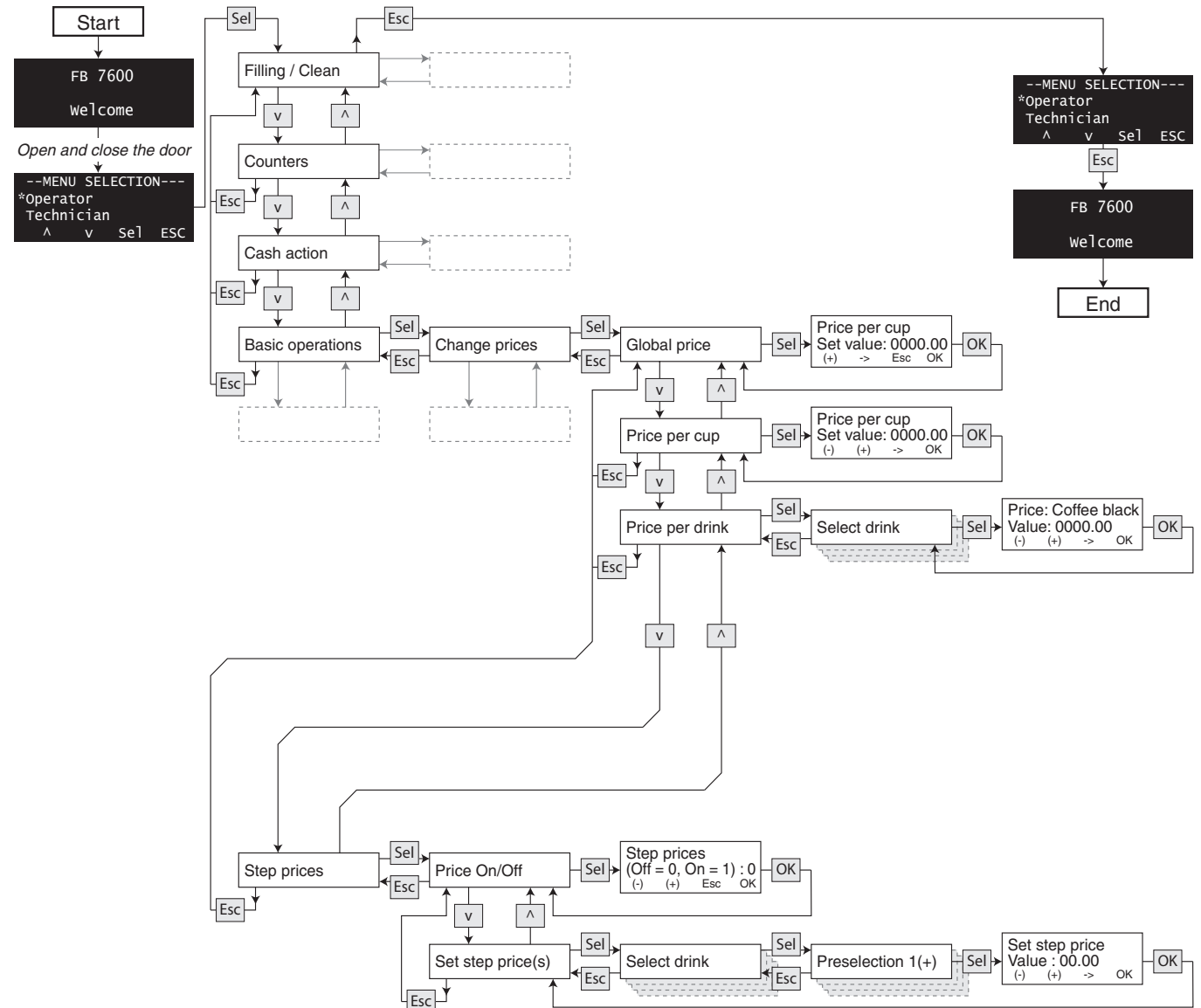


Additional routines

Changing prices

Follow this diagram to change the price of a drink.

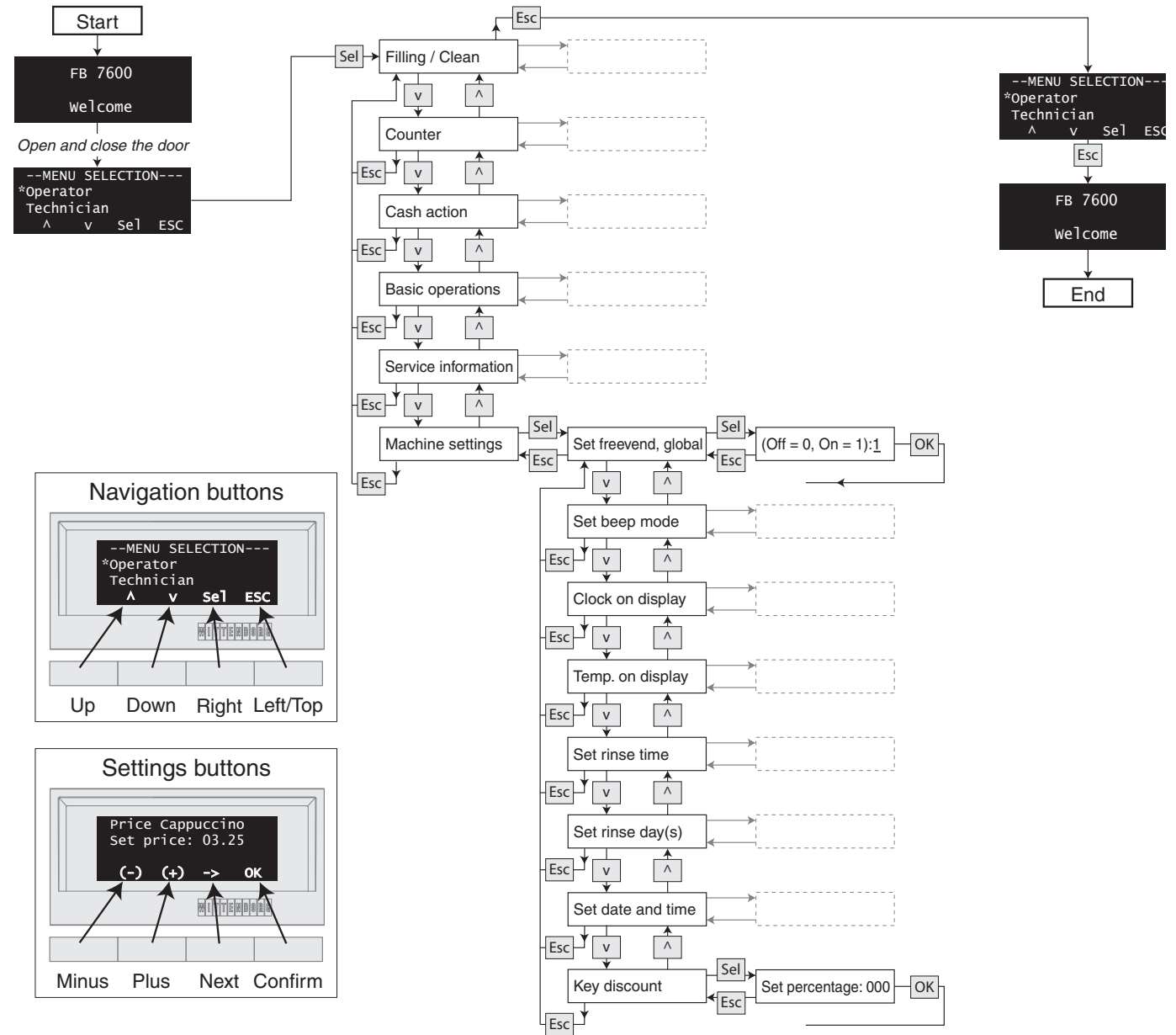
See the section *Settings buttons* on page 16 for an explanation of how to use the *Plus (+)*, *Minus (-)*, *Next (->)* and *Save (OK)* buttons.



Setting of freevend and key discount

Follow this diagram to

- turn freeend on or off
- or
- set or change key discount rates



Additional routines

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 function is enabled / disabled in 'Set state'.
- 7 energy saving periods can be programmed on a weekly basis: the week days are identified by progressive numbers: (0=Monday, 1=Tuesday, etc.) and all weekdays (ALL=7).
- The same time period cannot include days from different weeks (periods), i.e. a period cannot be set from Monday to Monday. A time for a period cannot have a 'start time' later than the 'end time', see Non Example 2.
- If the periods are set overlapping, the machine will be shut down as long as it is covered by one of these periods, cf. Example: Period 3.
- Two energy savings in a period require 2 period settings, cf. Example: Period 1 and 2
- 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'.
- Non Examples 1 and 2 describe settings which will give unintended results.

Example :

The vending machine is to run every day during the week 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	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 2

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 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 'ALL'.			



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 selected drink is dispensed.

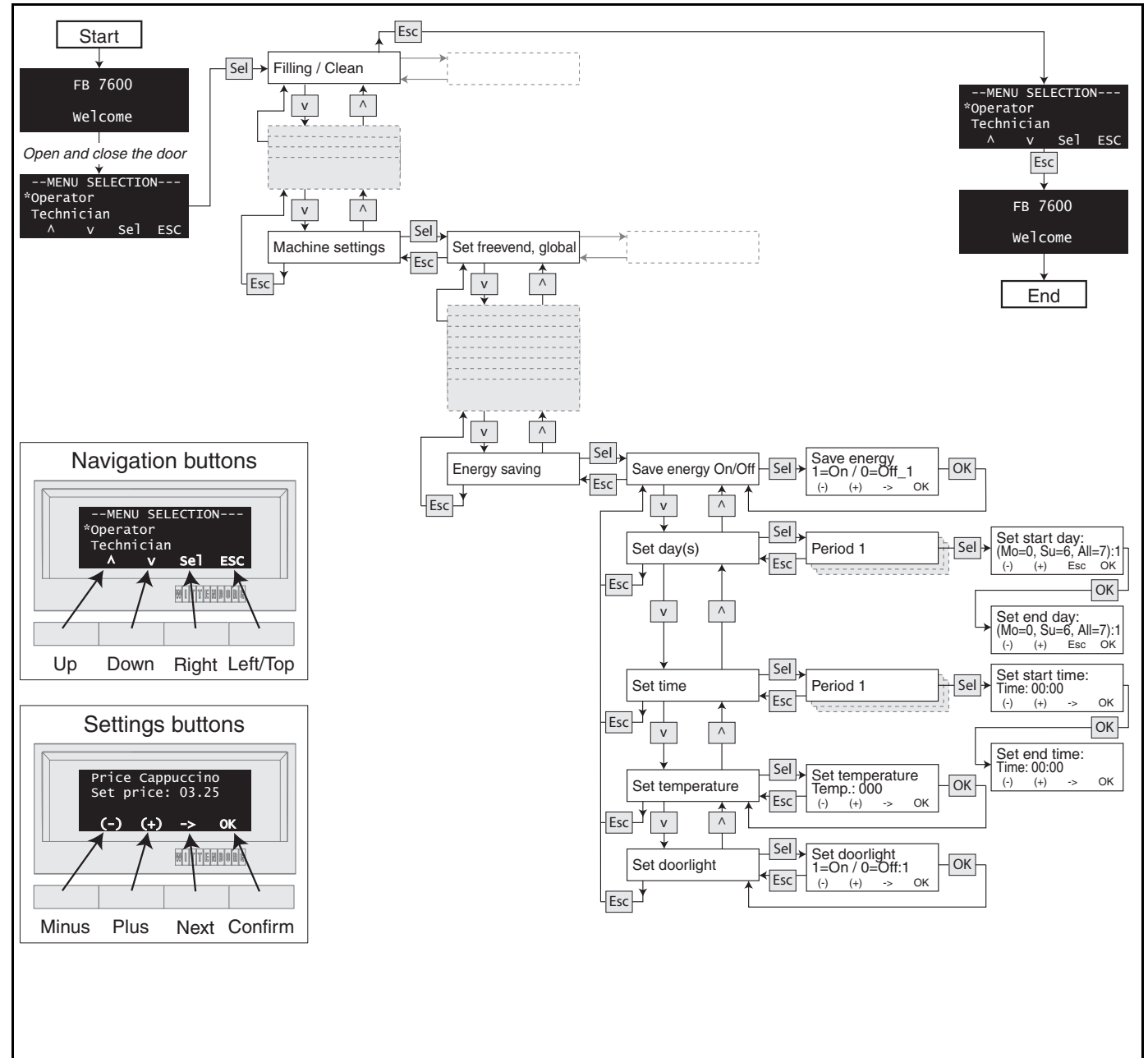
When the selection buttons have been left untouched for more than 10 minutes after the last drinks dispensing, and an energy saving period is still in force, the machine returns to the energy saving mode.

Temperature should never be set below 65 °C.

Additional routines

Setting energy saving periods

- Follow this diagram to define one or more energy saving periods (up to seven periods).
- Setting a period means scheduling the machine to reduce the temperature for the boiler heating to the the temperature set in 'Set temperature' and to switch off the door light, if 'Set doorlight' is enabled.



Display messages

If the vending machine shows one of the below display messages, check the following points before calling for service.

Display message	Corrective action
Branch pipe error	<ul style="list-style-type: none"> • Switch machine OFF and ON. • Remove blocking cup. • Clean cup catcher and cup slide areas.
Cup elevator error	<ul style="list-style-type: none"> • Remove cup from elevator. • Remove blocking foreign body.
Cup not delivered	<ul style="list-style-type: none"> • Load cups in cup magazine.
Fetch pos not found	<ul style="list-style-type: none"> • Remove blocking foreign body.
No cups, use own cup	<ul style="list-style-type: none"> • Use own cup or load cups in cup magazine.
Cup storage error	<ul style="list-style-type: none"> • Remove blocking cups.
Cup transport error	<ul style="list-style-type: none"> • Remove blocking cup.
Door open	<ul style="list-style-type: none"> • Close door properly.
FB waste bucket full	<ul style="list-style-type: none"> • Empty fresh brew empty waste bucket and wipe sensor dry.
Waste bucket full	<ul style="list-style-type: none"> • Empty waste bucket and wipe sensor dry.
Temperature low	<ul style="list-style-type: none"> • Wait until the water is heated sufficiently (maximum 13 minutes). • Press the reset button of the dry boiling thermostat.*
Water tank overboil	<ul style="list-style-type: none"> • Press the reset button of the overboil thermostat.*
Rinse in progress...	<ul style="list-style-type: none"> • Wait till machine has finished automatic rinse function.
Please remove cup	<ul style="list-style-type: none"> • Remove cup from cup platform.

Display messages and trouble shooting

Display message	Corrective action
Please remove pot	<ul style="list-style-type: none">• Remove pot from cup platform.

*) If the dry boiling or the overboil thermostat triggers repeatedly, call for service.

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 is out of function	<ul style="list-style-type: none"> • Check the power supply cord and connect it correctly if required. Check fuses, replace as necessary • Check if the waste bucket or the coffee waste bucket is full. Empty, wipe and dry sensors. • Check if door is properly closed. Close as necessary
Machine dispenses drinks for free	<ul style="list-style-type: none"> • Check prices. Reset as necessary. • Switch off free vend.
Too little water or no water is dispensed	<ul style="list-style-type: none"> • Check that water pipes are not blocked.
Only water is being dispensed No ingredient	<ul style="list-style-type: none"> • Check if the ingredient canisters are empty. Refill as necessary. • Check if canister is properly located. Relocate as necessary. • Check if the mixing funnels are blocked-up. 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 machine. • Check for blockage around mixing funnels. Remove and reinstall components as necessary.
No cups are being dispensed	<ul style="list-style-type: none"> • Check cup mechanism and cup magazine. Remove jammed cups and refill cups as necessary.

Display messages and trouble shooting

Fault	Corrective action
Mixing system overflows because of blockage in mixing funnel or leak in mixing system	<ul style="list-style-type: none">• Replace or clean block part/s. Check if they are positioned correctly.• Check if the sealing ring is missing at mixing funnel.
The waste bucket or the coffee waste bucket is full with water or waste	<ul style="list-style-type: none">• Empty
Liquid escaping from machine	<ul style="list-style-type: none">• Check if buckets, canisters, mixing funnels or dispensing hoses are correctly installed. Install correctly as necessary.
Machine does not shut down when buckets are full.	<ul style="list-style-type: none">• Check if sensors for buckets are soiled or if not seated in buckets. Clean or reposition as necessary.
Freshbrewer unit is malfunctioning.	<ul style="list-style-type: none">• Reassemble freshbrewer unit correctly.
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. It is usually due to impurities in the coin track of the validator of the coin mechanism.	<ul style="list-style-type: none">• Possibly open the validator coin track and clean with a damp cloth. Please confer with suppliers manual.
Drinks are cold	<ul style="list-style-type: none">• Check if power has been interrupted recently or check if thermostat is defective.
Flavour of drink is not satisfactory	<ul style="list-style-type: none">• Use correct ingredients.• Check if components are clean. Replace and rinse thoroughly as necessary.