

SPRSO

ENGLISH MANUAL



Digital Manual Sprso (EN)

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The information in this document is based on data that was available at the time the design, the material characteristics and the operating methods were published, meaning that this document is subject to change.

For this reason, the instructions are merely a guideline for the installation, maintenance and repair of the machine displayed on the front cover.

This document applies to the standard version of this machine.

The manufacturer therefore declines all liability for any damage arising from specifications that deviate from the standard version of the machine delivered to you.

This document has been compiled with the utmost care. However, the manufacturer cannot be held liable for any errors it contains or the consequences thereof.

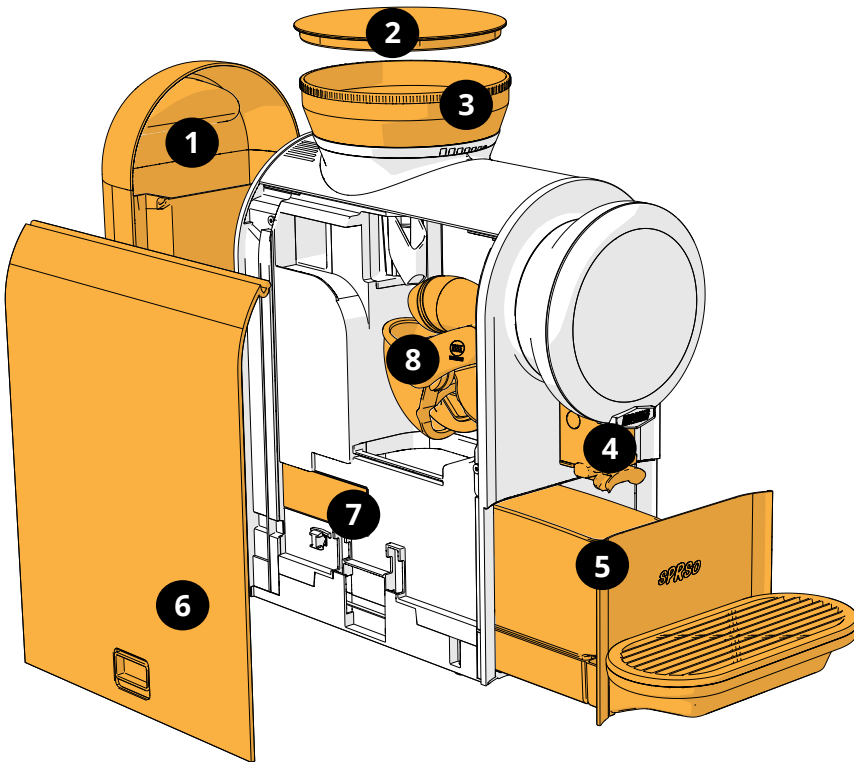
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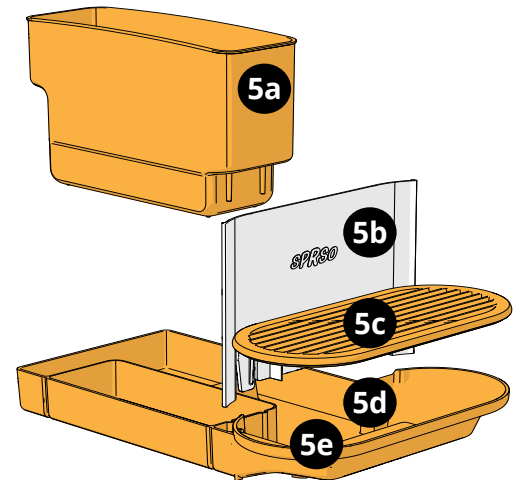
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1. Parts and functions

1.1 Parts



1. Water tank
2. Lid (bean canister)
3. Bean canister and Grinding wheel
4. Outlet
5. Drip tray (complete)
 - 5a. Waste bin
 - 5b. Front plate
 - 5c. Drip tray plate
 - 5d. Drip tray
 - 5e. Overflow drip tray
6. Side/service panel
7. Identification plate
8. CIRCO brewer



1.2 Optional parts

1.2.1 Milk unit

The Sprso is a bean-to-cup espresso machine. As standard the Sprso does not offer milk-based beverages such as cappuccino. However, you can connect a milk unit/cooler to the Sprso. If you connect a milk unit to the Sprso you can offer five additional beverages: caffe latte, espresso macchiato, cappuccino, latte macchiato and hot milk foam. How to install the milk unit to the Sprso is described in section "10.5 Connecting a milk unit" on page 84.

1.2.2 Water filter

The water tank of the Sprso can be fitted with a water filter. Water filters are purification filter systems that remove minerals which make water hard and cause scale. We recommend customers to use a water filter. A water filter improves the quality of your beverage and decreases lime scale therewith optimizing the performance of the Sprso. How to fit the water filter into the Sprso is described in section "10.3 Install a water filter" on page 82.

1.3 Controls

There are 4 main buttons for the navigation of the Sprso (see below) and 4 buttons to personalize your beverage (see section "5. Your beverage" on page 10.)



1.3a

Menu button:

- to enter the program menu (press and hold) (see section "7. Program menu" on page 19)
 - to cancel the preparation of a beverage
- *The menu button can be used to enter a menu or to 'go back'*



1.3b

Navigation buttons:

- to scroll through beverages, menu options, settings or change a value



1.3c

Start / confirm:

- to start dispensing
- to confirm a selection in the program menu

2. First start

This document is applicable to the model number(s):

- Sprso-0xx

Unpack the Sprso and inspect for damage

1. read the safety booklet
2. remove the foil from the screen
3. fill the water tank (backside)
4. fill the bean canister (on top)
5. insert the plug in the power socket (ensure it is earthed),
6. to switch on the Sprso
7. follow the installation procedure shown on-screen

Accessories in the packaging:

- safety booklet
- quick start guide
- brewer cleaning tablets
- sachet Renegite
- water hardness tester
- milk connector
- milk hose
- milk cleaning tablets



Start the installation procedure:

- after a few seconds the language selection screen will appear



2a

Select your language:

- press < or > to scroll through the available languages
- press **start** to confirm



2b

Read the safety book!

- press **start** to confirm or
- press < to go back to change the language



2c

Select volume units:

- press < or > to choose the units to use
- press **start** to confirm



2d



2e

Water filter (optional):

- press < or > to choose no/yes
- press **start** to confirm

▶ See section "10.3 Install a water filter" on page 82.



2f

Select your water hardness:

- press < or > to choose one of the 5 settings
- press **start** to confirm

▶ It is important to know the correct hardness of the water where the Sprso is used (for setting the descaling signal). If necessary, ask the local water company for the hardness of the water or measure the hardness of the water yourself with the water hardness tester. See also section "10.1 Water hardness and filter information" on page 81.

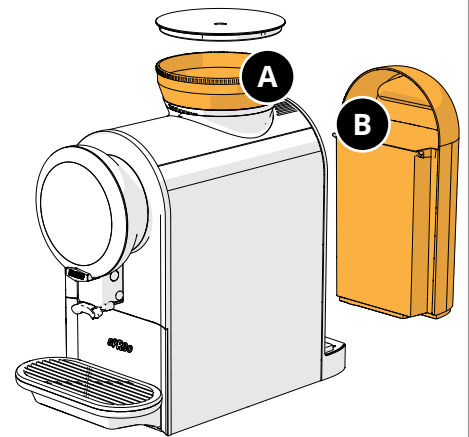


2g

Fill the bean canister (A) and the water tank (B)

- press **start** to confirm

▶ The water tank must be filled with fresh cold drinking water. Never use warm or hot water.



2h

Beverage profiles:

- press **start** to go to the selection screen

▶ A beverage profile is a preset of standard beverages.

2i



Select a profile:

- press < or > to choose between the three profiles
- press **start** to confirm

▶ See section "7.2.3 Beverage profiles" on page 52

2j



Milk unit:

- press < or > to choose no/yes
- press **start** to confirm

▶ See section "10.5 Connecting a milk unit" on page 84

2k

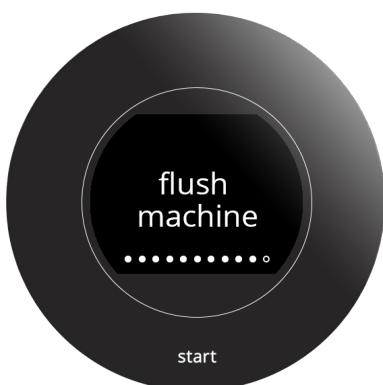


▶ This screen only shows if you confirmed the previous screen with Yes.

Fill the milk unit:

- press **start** to confirm

2l

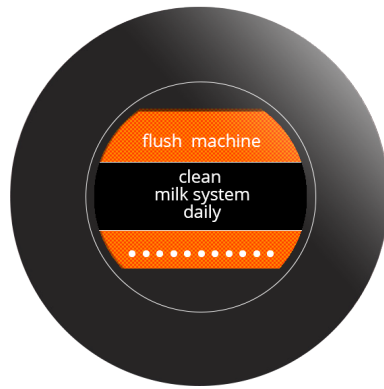
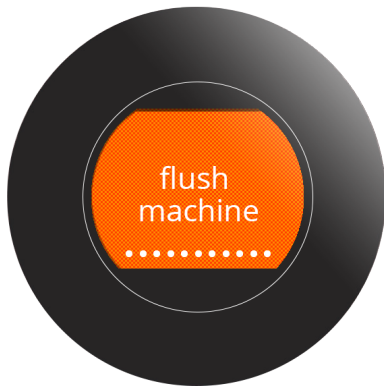


The Sprso must be flushed:

- put a big mug underneath the outlet or empty the drip tray after the installation procedure
- press **start** to confirm.

▶ Maximal 250 ml hot water from outlet.

2m



Flushing:

- ▶ *The screen blinks orange and black after a few seconds the Sprso starts to flush*
- ▶ *The reminder '**clean milk system daily**' is only visible if a milk unit is connected.*

2n



The first installation procedure has completed.

- empty the drip tray if you did not use a big mug to collect the flushing water

The Sprso is ready for use.

- ▶ *Only by selecting "7.3.11 Reset to factory settings" on page 66, the first installation procedure can be restarted.*

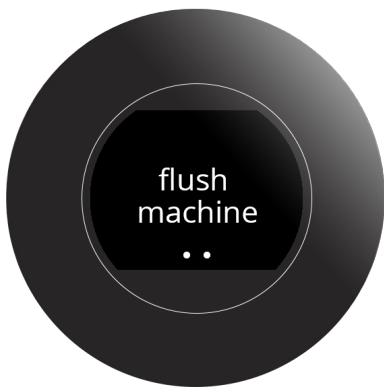
3. Start up

The Sprso flushes for a short period of time when the "first start" is completed and every time the Sprso is switched on.

- ▶ There is **no** automatic empty detection for the bean canister during inactive / standby functions.
- ▶ The water tank must be filled with fresh cold non-carbonated drinking water. Never use warm or hot water.



3a



3b

The screen blinks orange and black.

- after a few seconds the Sprso starts to flush
 - ▶ Hot water (± 15 ml) flushes from the outlet into the drip tray.
 - ▶ The reminder '**clean milk system daily**' is only visible if a milk unit is connected.

The Sprso is ready to use



3c

4. Standby

The Sprso does not have a power button, but you can manually put the machine into standby mode at any time.

In standby mode all functions are switched off only the start button keeps flashing slowly. To activate the machine press the start button.

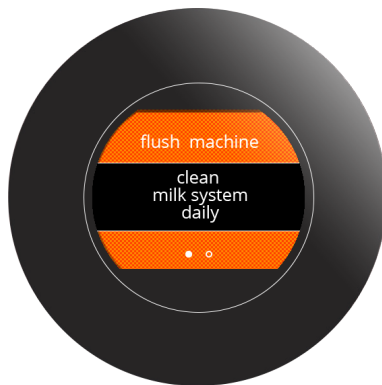
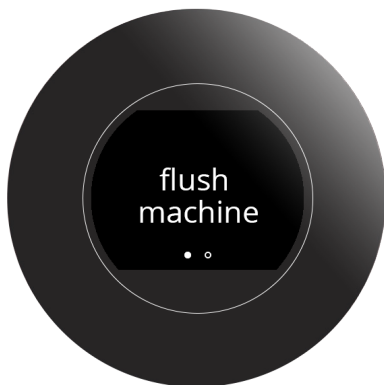
► See also section 7.3.4 on page 57 to allow the Sprso to automatically enter the standby mode.



4a

Start the 'standby mode':

- press and hold the 'start button'
- the necessary flushes will be done when enabled/required



4b

The screen blinks orange and black.

- after a few seconds the Sprso starts to flush
 - Hot water (± 15 ml) flushes from the outlet into the drip tray.
 - The reminder '**clean milk system daily**' is only visible if a milk unit is connected.



4c

The "goodbye" screen remains active for a few seconds, after which only a slowly blinking start button is visible.

- Touch the start button to activate the Sprso.

5. Your beverage

Press the navigation buttons (< or >) to scroll through the available beverages.

The Sprso has 3 beverage profiles to choose from during installation or select another profile in section “7.2.3 Beverage profiles” on page 52.

These profile offer the same beverages, though each profile has an unique combination of volume and strength of the beverages.

The available beverages are:








Standard	Additional beverages (connected milk unit)
espresso	espresso macchiato
ristretto	cappuccinno
lungo	cappuccinno dark
americano	latte macchiato
hot water	caffè latte
	hot milk foam

5.1 Preparing your beverage

Press **start** and the Sprso prepares immediately the selected beverage.

To cancel a selected beverage press 

The following indicators may appear on the screen during the brewing process:

Indicators	Meaning
	busy preparing your beverage
	brewer still busy, next action is brewing your coffee
	canceling your beverage
	empty waste bin (ME05), see section 9.1
	replace water filter (ME09), see section 7.1.6
	clean brewer (ME08), see section 7.1.3
	descaler machine (ME11), see section 7.1.5

► If you want to personalize the beverage select one of the icon buttons as shown in section 5.2.

5.2 Personalize your beverage

► These settings are used in preparing this one beverage and are not saved.

Beverage size



5.2a

- press < or > to adjust the volume
- See section 10.2 on page 81 for the default volume settings S, M and L per beverage

Strength / Intense






5.2b

- press < or > to adjust your strength
- The beans represents the three levels of coffee strength

Intense




- press  again to adjust your intense setting:
 - » disabled  or
 - » enabled 
- The intensive function will extend the brew time by 10% and the weight of the coffee grounds will be increased by 5%.

Single / double cup

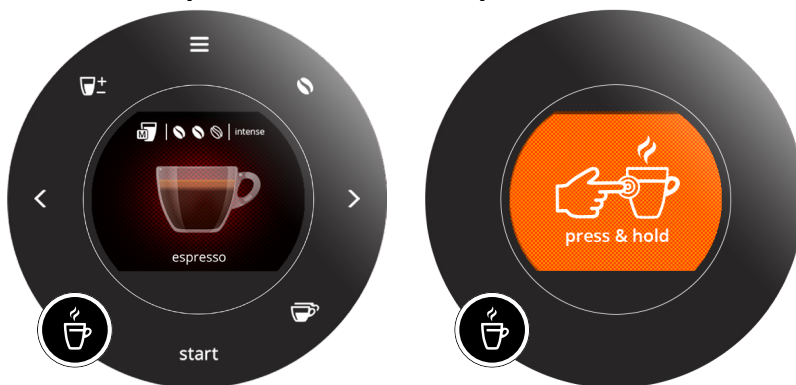


► *Two cups can only be selected for:*

- Espresso
- Ristretto
- Lungo
- press  if you want 2 cups to be prepared simultaneously

5.2c

Hot water (free flow function)

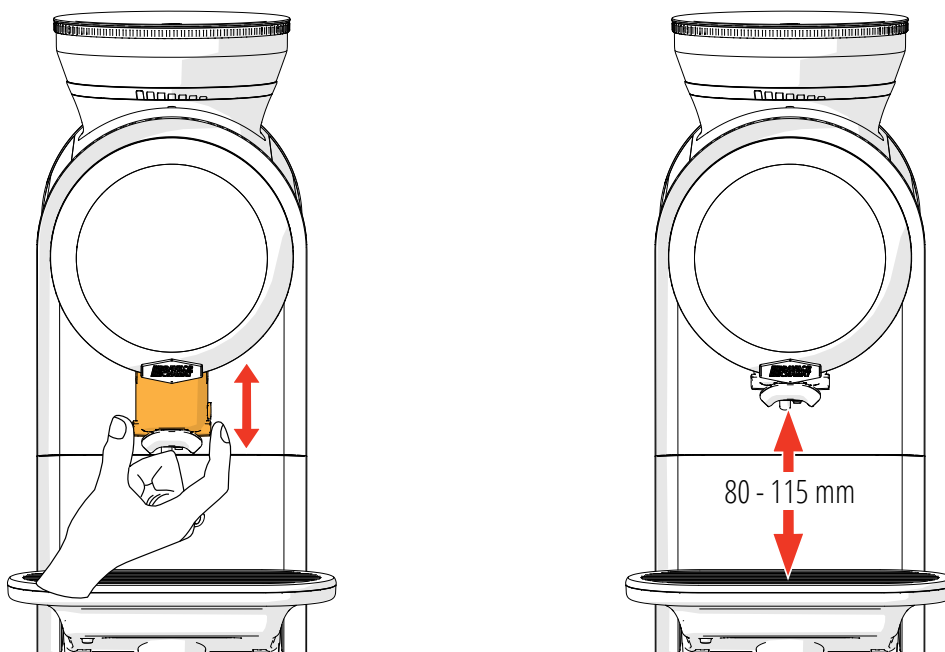


- press and hold  for your hot water

5.2d

5.3 Adjusting the tap height

► *Adjust the tapping height (80 - 115 mm) manually by sliding the beverage outlet in and out.*



6. Cleaning

It is important to keep the Sprso clean.

The Sprso has two flushing procedures that start automatically.

Screen messages are also generated indicating that a specific cleaning procedure should be started, see "7.1 Maintenance" on page 20.

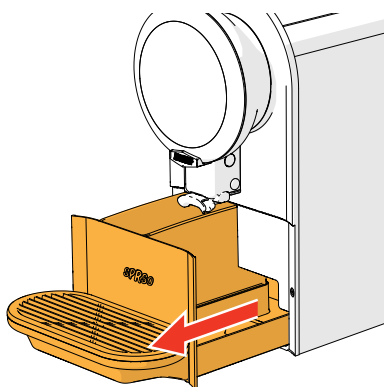
In addition, it is recommended to manually clean certain parts:

Daily	Weekly
drip tray and waste bin	beverage outlet
	water tank
	CIRCO brewer
	the outside

- ▶ *Never put parts of the Sprso in the dishwasher.*
- ▶ *Do not use any aggressive cleaning agents.*
- ▶ *Clean the milk unit according to the instruction supplied with the milk unit itself.*

6.1 Daily cleaning

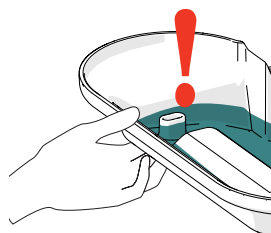
6.1.1 Drip tray and waste bin



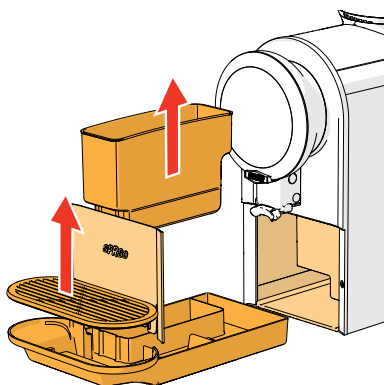
6.1.1a

When the message 'empty waste bin' appears on the display, clean the drip tray parts.

1. pull the complete drip tray forward
2. empty both the drip tray and waste bin



- ▶ *Put your finger underneath the overflow to avoid spillage.*



6.1.1b

3. detach the front plate from the drip tray
4. clean with *hot soapy water*:
 - » the drip tray
 - » drip tray plate
 - » waste bin
5. clean with *a damp cloth*:
 - » the front plate
 - » the area where the drip tray slides in
6. dry everything and put it back in place

6.2 Weekly cleaning

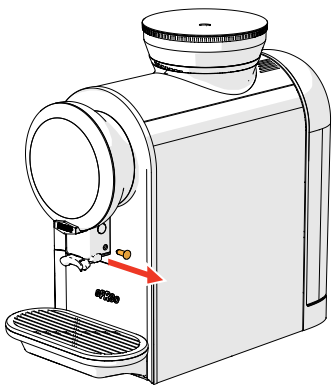
Weekly clean the following parts manually:

- beverage outlet
- water tank
- CIRCO brewer
- the outside

6.2.1 Beverage outlet

1. remove the plug, by pulling it to the right

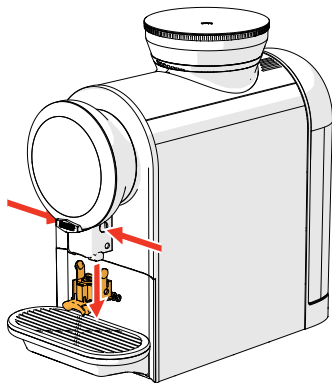
► *If milk unit is present, remove the milk hose including the connector.*



6.2.1a

2. press the buttons on both sides

3. remove the outlet by pulling it downwards



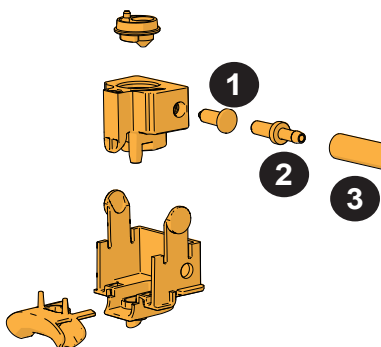
6.2.1b

4. clean the outlet parts using *hot soapy water*

► *Part no. 1 only present if **no** milk unit is connected.*

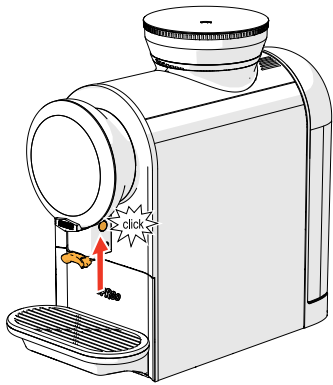
► *Part no. 2 and 3 only present if milk unit is connected.*

5. dry everything



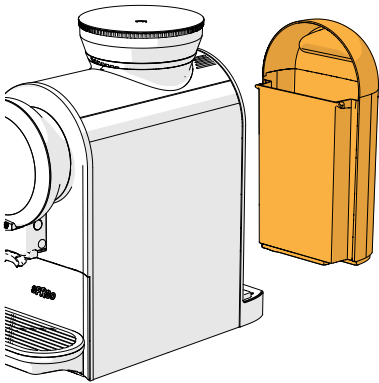
6.2.1c

6. return everything to its original position



6.2.1d

6.2.2 Water tank



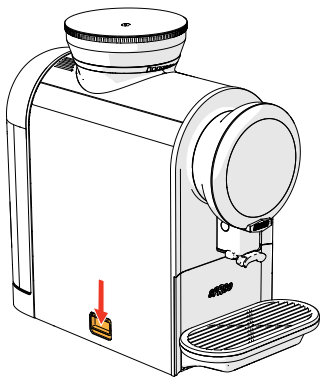
6.2.2a

1. empty the water tank
2. remove the water filter (if present)
3. clean the water tank with *hot water* and a non-abrasive brush
4. dry the outside of the water tank with a soft cloth
5. fill the water tank with fresh cold non-carbonated water and replace

6.2.3 CIRCO brewer

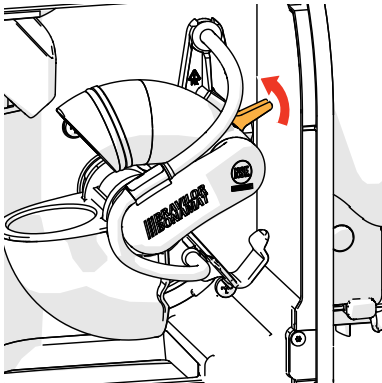
In addition to the fixed cleaning program (see section 7.1.3 on page 25), you can also manually clean the CIRCO brewer as shown below.

1. open the service panel



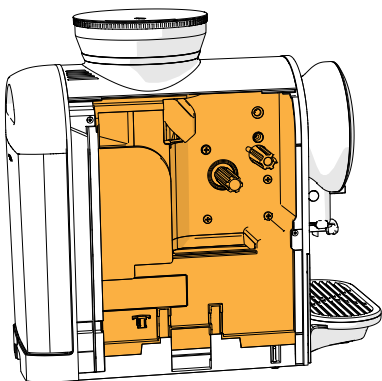
6.2.3a

2. turn the lock counter clockwise
3. remove the CIRCO brewer

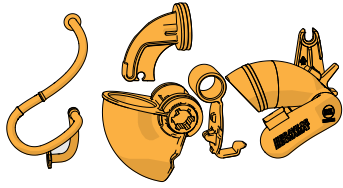


6.2.3b

4. clean the inside of the service compartment with a damp cloth



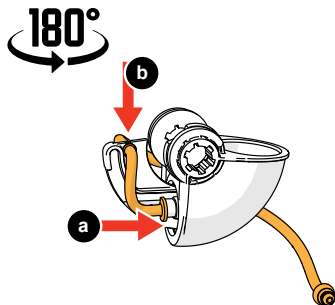
6.2.3c



5. disassemble the parts as shown
6. clean the CIRCO brewer parts with *hot soapy water* and a non-abrasive brush
 - ▶ *Not dishwasher proof*
7. rinse the parts thoroughly

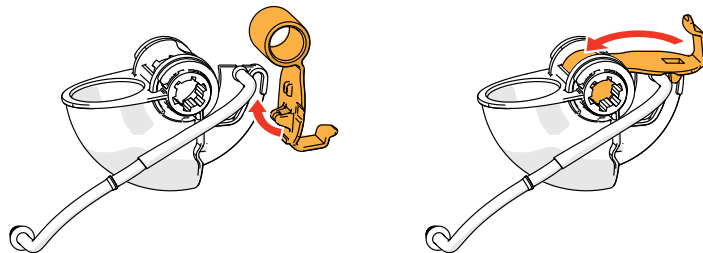
6.2.3d

8. reassemble the plunger and tube



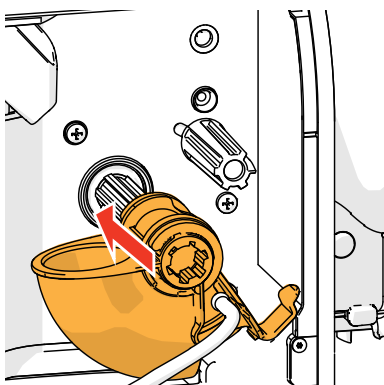
6.2.3e

9. reassemble the bracket

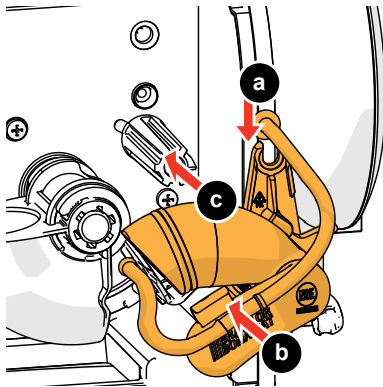


6.2.3f

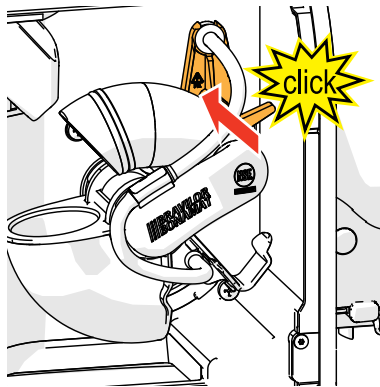
10. slide the fully assembled brewer housing over the axis



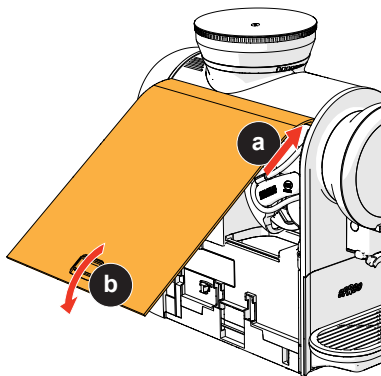
6.2.3g



6.2.3h



11. place the tube in the brackets
12. push the brewer head over the axis until it clicks

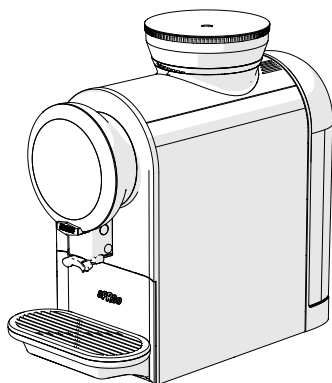


6.2.3i



13. close the service panel

6.2.4 The housing




6.2.4a

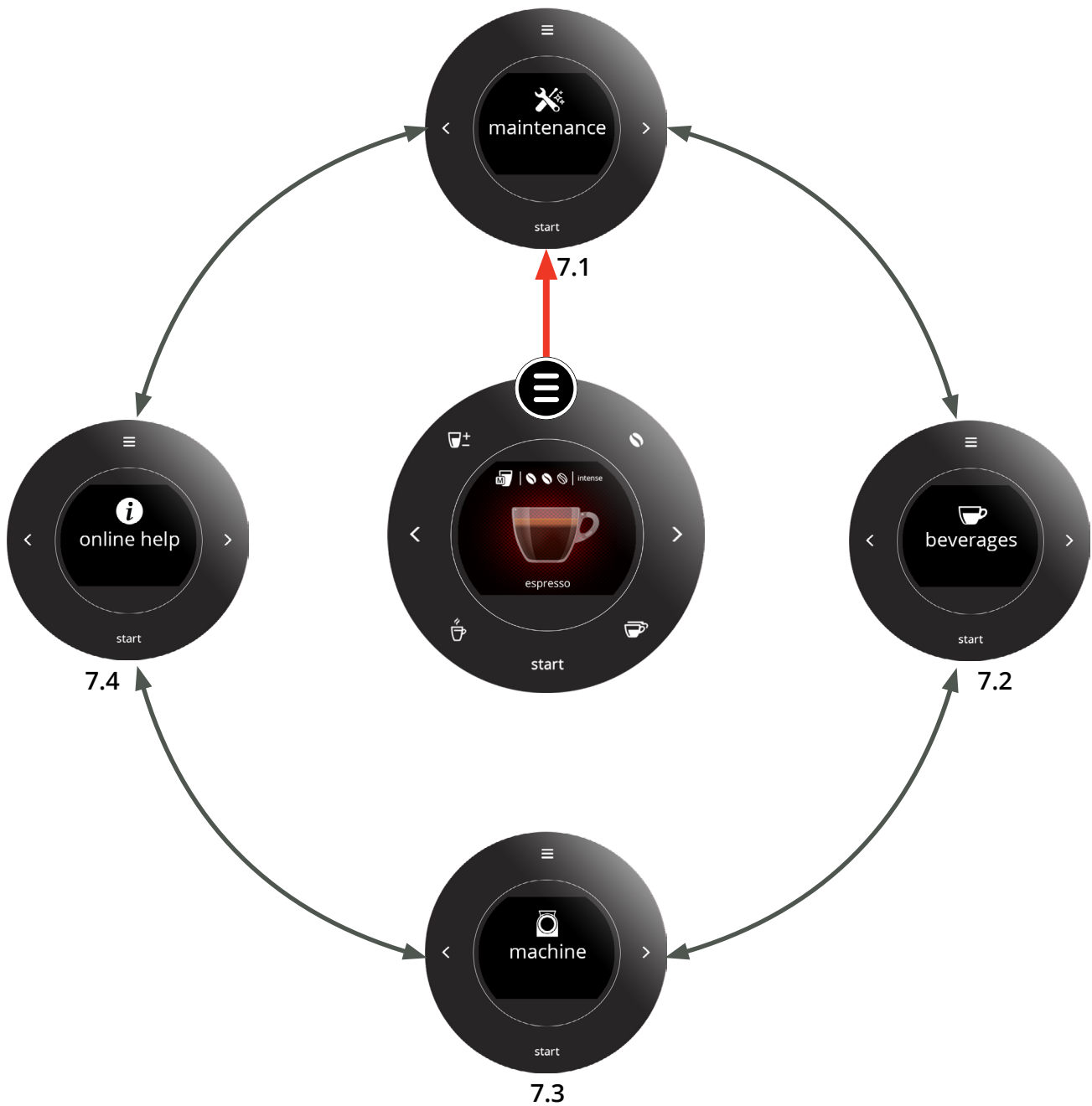
1. clean the outside of the Sprso with a damp cloth
2. dry everthing with a soft cloth

7. Program menu

Press and hold the menu button  to open a program menu.

- press < or > to scroll through the 'program menus' or
- press start to confirm or
- press  to cancel

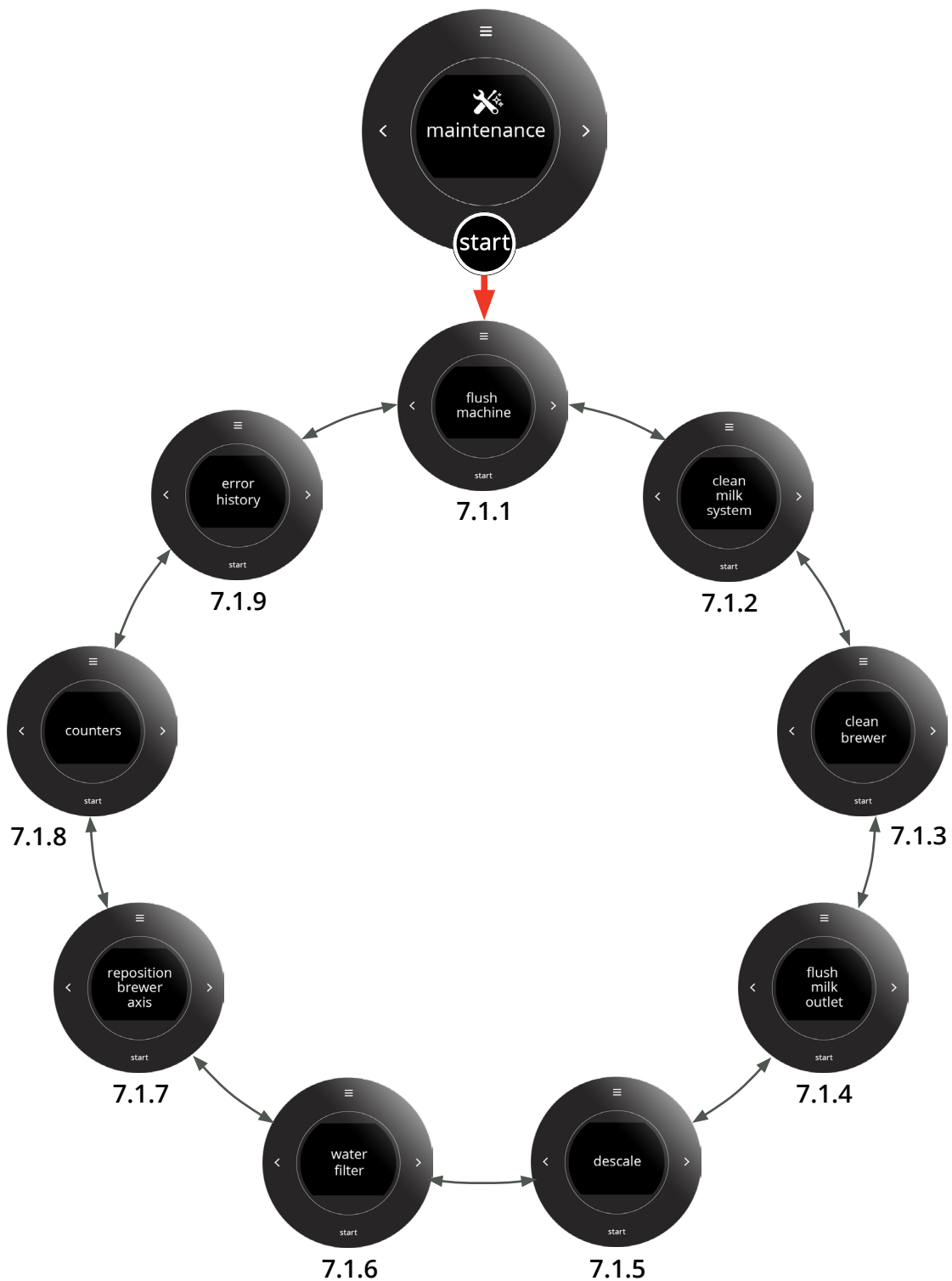
► *When the program menu is selected but no button is pressed within 30 seconds, the Sprso returns to the 'beverage selection screen'.*



7.1 Maintenance

The cleaning procedures and the descaling program can be started in the maintenance menu. If a water filter has been installed, replaced or removed, it must be specified in the machine software, see section “7.1.6 Water filter” on page 35.

The beverage counters and the error history can be read in this menu.



7.1.1 Flush coffee system

The flush coffee system is used to flush the brewer.

Hot water is pumped through the brewer and the coffee outlet to rinse it.

The brewer needs to be rinsed frequently.

• time: 40 seconds

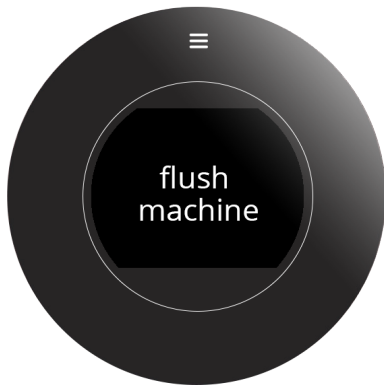
- ▶ *The coffee flushing function is also activated automatically 10 minutes after dosing a coffee beverage.*



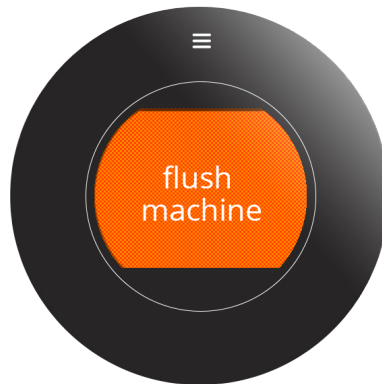
7.1.1

The coffee outlet must be flushed:

- press **start** to confirm
- press < or > to scroll through the maintenance menu

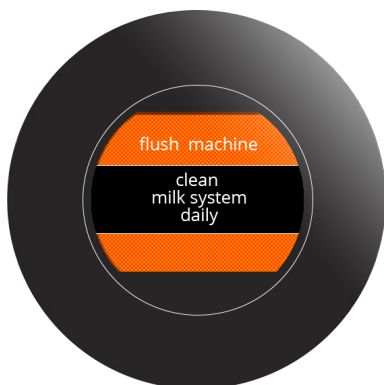


7.1.1a



The screen blinks orange and black.

- wait for the next screen



7.1.1b

Flushing:

- wait until the process is finished
 - ▶ *Hot water (± 30 ml) flushes from the outlet into the drip tray.*
 - ▶ *During flushing, the reminder '**clean milk system daily**' is only visible if a milk unit is connected.*
 - ▶ *The Sprso automatically returns to the 'beverage selection screen'.*

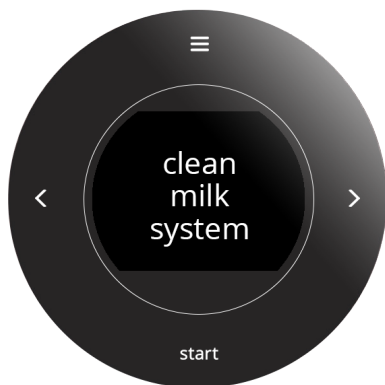
7.1.2 Clean milk system

This section is only visible when the milk unit is activated.

- ▶ *The milk unit is not automatically detected it must be selected in the software, see 7.3.1 on page 54.*
- ▶ *This event is determined by the number of milk-based beverages, but must be conducted at least once a day*

Necessities:

- milk system cleaner
(recommended: Rinza® M61 tablets)
- measuring jug (250 ml)
- big mug (>250 ml)
- time: ± 10 minutes



7.1.2

The milk system must be cleaned daily:

- press **start** to confirm
- press < or > to scroll through the maintenance menu
- ▶ *The function of cleaning the milk system will only be visible when the milk unit is activated.*



7.1.2a

Step 1 preparation:

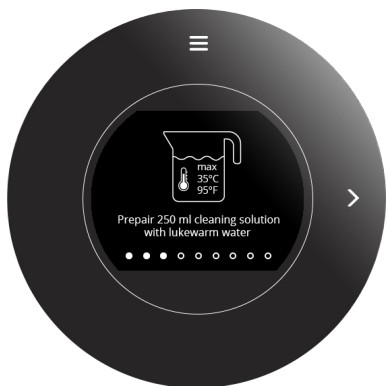
- make sure that you have all necessities
- press > to go to the next step



7.1.2b

Step 2 preparation:

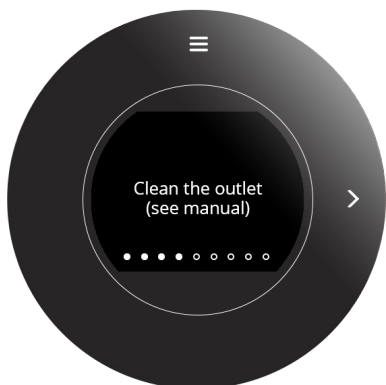
- follow the instructions on the screen
- ▶ *Water comes into the waste bin, therefore it is necessary to empty it.*
- ▶ *When emptying the drip tray, place your finger under the overflow to prevent spillage.*
- ▶ *When the drip tray and waste bin are back in position the next screen will appear*



7.1.2c

Step 3 preparation cleaning solution:

- dissolve one tablet completely in 250 ml lukewarm water (max 35 °C).
- ▶ *If the solution is too hot, steam will be generated during cleaning, making cleaning ineffective.*
- press > to go to the next step



7.1.2d

Step 4 Information screen:

- follow the instructions on the screen
- ▶ *It is also advisable to clean the beverage outlet manually on a weekly basis, see section 6.2.1 on page 14.*



7.1.2e

Step 5 actual start:

- follow the instructions on the screen
- insert the milk inlet hose in the measuring jug with cleaning solution
- press **start** to begin the cleaning process
- ▶ *The cleaning process cannot be interrupted after this step.*



7.1.2f

Step 6 cleaning the milk system is in progress:

- the screen blinks orange and black for a few seconds before the cleaning cycle begins
- wait for the next screen
- ▶ *Hot water and steam (±250 ml) will come from the outlet!*

7.1.2g



Step 7 preparation rinsing:

- empty the big mug
- follow the instructions on the screen
- ▶ *Use cold water, hot water produces too much steam which does not help rinsing.*
- press > to go to the next step

7.1.2h



Step 8 preparation rinsing:

- follow the instructions on the screen
- place an empty big mug
- insert the milk inlet hose in the measuring jug with clean water
- press **start** to begin the rinsing process

7.1.2j



Step 9 cleaning the milk system is in progress:

- the screen blinks orange and black for a few seconds before the rinsing cycle begins
- wait for the next screen
- ▶ *Hot water and steam (±250 ml) will come from the outlet!*

7.1.2i



The cleaning procedure has finished.

- press **start** to confirm
- ▶ *Water comes into the waste bin, therefore it is advisable to empty it.*

7.1.3 Clean coffee system

This procedure cleans the brewer and the outlet tubes.

This event is determined by the number of coffee based beverages.

Necessities:

- brewer cleaner (*recommended: 2 gram of Cafiza® E31 tablets*)
- container (500 ml)
- a full water tank
- time: ± 15 minutes



7.1.3

The brewer must be cleaned periodically:

- press **start** to confirm or
- press < or > to scroll through the maintenance menu



7.1.3a

Step 1 preparation:

- make sure that all necessities are present
- press > to go to the next step



7.1.3b

Step 2 preparation:

- follow the instructions on the screen
 - ▶ *Some water flows into the waste bin, therefore it is necessary to empty it.*
 - ▶ *When emptying the drip tray, place your finger under the overflow to prevent spillage.*
 - ▶ *When the drip tray and waste bin are back in place, the next screen will appear.*

7.1.3c



Step 3 preparation rinsing:

- follow the instructions on the screen
- press **start** to begin the cleaning process

► *The cleaning process cannot be interrupted after this step.*

7.1.3d



Step 4 pre-rinse of the brewer in progress:

- the screen blinks orange and black for a few seconds before the rinsing cycle begins
- wait for the next screen

► *Hot water (± 30 ml) will come from the outlet!*

7.1.3e



Step 5 preparation cleaning:

- follow the instructions on the screen
- press **>** to go to the next step

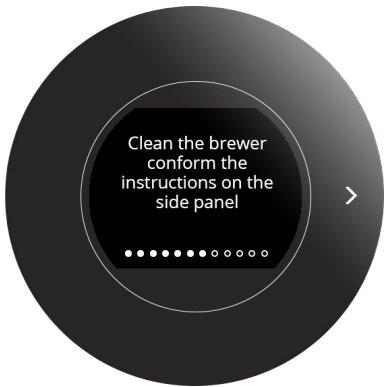
7.1.3f



Step 6 preparation cleaning:

- open the side panel as shown on the screen

► *When the side panel is removed, the next screen will appear.*



Step 7 information screen:

- follow the instructions on the screen

► *It is also advisable to clean the brewer manually on a weekly basis, see section 6.2.3 on page 16.*

7.1.3g



Step 8 preparation cleaning:

- put the cleaning tablet in the brewer
- press > to go to the next step

7.1.3h



Step 9 preparation cleaning:

- close the side panel as shown on the screen

► *When the side panel is back in place, the next screen will appear.*

7.1.3i



Step 10 preparation cleaning:

- put a measuring jug underneath the outlet
- press **start** to begin the cleaning process

7.1.3j



7.1.3k

Step 11 cleaning the brewer in progress:

- the screen blinks orange and black for a few seconds before the cleaning and rinsing cycles begins
- wait for the next screen, this may take about 10 minutes
- ▶ *Hot water and steam (±250 ml) will come from the outlet!*



7.1.3l

Step 12 cleaning the brewer:

- remove and empty the waste bin
- ▶ *Put your finger underneath the overflow to avoid spillage, see "6.1.1a" on page 13.*
- follow the instructions on the screen
- ▶ *When the drip tray and waste bin are back in place, the next screen will appear.*



7.1.3m

The cleaning procedure has finished.

- press **start** to confirm



7.1.3n

Information screen:

- ▶ *Only visible if a milk unit is activated in the software.*
- press > to go to the maintenance menu

7.1.4 Flush milk system

This section is only visible when the milk unit is activated.

- ▶ *The milk unit is not automatically detected, see 7.3.1 on page 54.*

Hot water (30 ml) is pumped through the milk outlet to rinse it.

This is a quick cleaning procedure that removes the milk from the outlet.

- time: 20 seconds

- ▶ *The milk flushing function is also activated automatically 10 minutes after dosing a beverage containing milk.*



7.1.4

The milk outlet can be flushed manually:

- press **start** to confirm or
- press < or > to scroll through the maintenance menu or
- ▶ *The function of flushing the milk system is only visible when the milk unit is activated.*

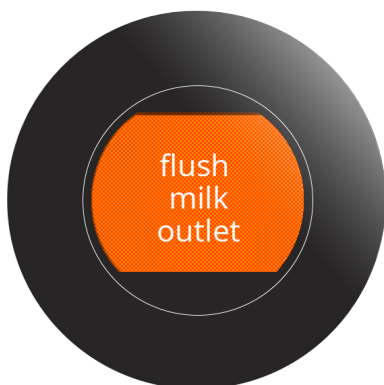


7.1.4a



The screen blinks orange and black.

- wait for the next screen



7.1.4b

Flushing:

- wait until the process is finished
- ▶ *Hot water (30 ml) flushes from the outlet into the drip tray.*
- ▶ *The Sprso automatically returns to the 'beverage selection screen'.*

7.1.5 Descale

Descaling the Sprso removes all lime scale within the water system. This extends the life-cycle of the Sprso.

Necessities:

- descale agent (recommended: "RENEGITE", our proven descaling agent)
- measuring jug (500 ml)
- total time : ± 20 minutes

- ▶ *The descaling process cannot be interrupted after the descaling agent is in the Sprso!*
- ▶ *Remove the water filter (if applicable) to ensure it won't be damaged by the descaling agent.*
- ▶ *Disconnect the milk unit (if connected) to prevent taste transfer.*



7.1.5

The Sprso must be descaled frequently:

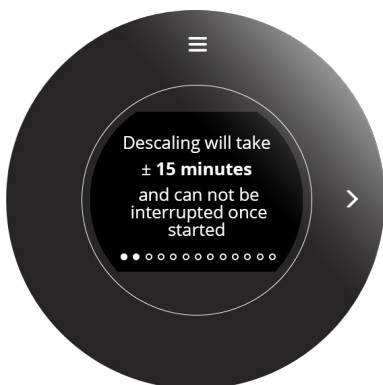
- press **start** to confirm or
- press < or > to scroll through the maintenance menu



7.1.5a

Step 1 information:

- press > to go to the next step
- ▶ *xxx Indicates how much water the machine has used and yyy is set after which descaling is required (see section 7.3.10 on page 65).*



7.1.5b

Step 2 information:

- length of time
- ▶ *If a fixed water connection is used additional steps are necessary:*
 - » close the water tap
 - » disconnect the hose from the water tank (see the sticker on the water tank).
- press > to go to the next step

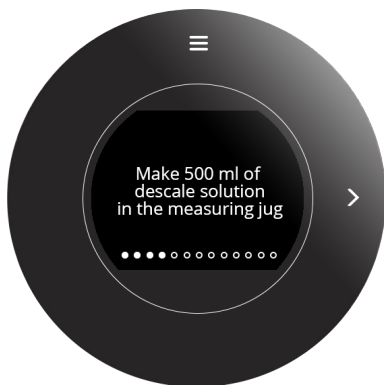
7.1.5c



Step 3 preparation:

- make sure that you have all necessities
- press > to go to the next step

7.1.5d



Step 4 preparation:

- follow the instructions on the screen
- press > to go to the next step
 - ▶ *Recommended: 50 gr Renegite / 500 ml water*
 - ▶ *If the volume is higher than the recommended (minimum) amount, more descaling solution will come out of the machine.*

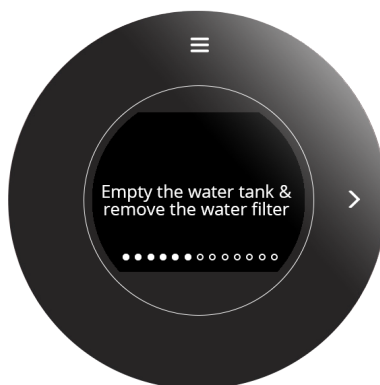
7.1.5e



Step 5 preparation:

- ▶ *Only visible if a milk unit is activated in the software.*
- follow the instructions on the screen
- press > to go to the next step

7.1.5f



Step 6 preparation:

- ▶ *If a water filter is connected in the water tank, remove it now.*
- follow the instructions on the screen
- press > to go to the next step

7.1.5g



Step 7 preparation:

- follow the instructions on the screen
- press > to go to the next step
- ▶ *Cancelling now implicates that the water tank must be emptied and rinsed thoroughly.*
- ▶ *The descaling process cannot be interrupted after this step.*

7.1.5h



Step 8 descaling process:

- follow the instructions on the screen
- press **start** to begin the actual descale process

7.1.5i



Step 9 descaling process:

- wait for the next screen (\pm 11 minutes)
- ▶ *Do not leave the Sprso unattended.*
- ▶ *Hot water with descaling solution comes from the outlet.*

7.1.5j



Step 10 descaling process:

- follow the instructions on the screen
- press > to go to the next step

7.1.5k



Step 11 refill water tank:

- follow the instructions on the screen
 - ▶ *Use cold water.*
 - ▶ *If the volume is greater than the recommended amount, more liquid will come out of the machine and rinsing will take longer.*
- press > to go to the next step

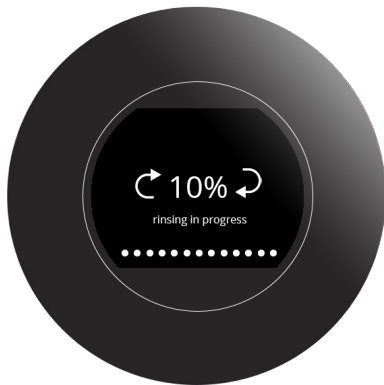
7.1.5l



Step 12 rinse after descaling:

- follow the instructions on the screen
- press **start** to begin the rinsing

7.1.5m



Step 13 rinsing process:

- wait for the next screen (± 2 minutes)
 - ▶ *Hot water comes from the outlet!*
 - ▶ *Rinsing will take longer as more water is added to the water tank.*

7.1.5n



Information screen:

- ▶ *Only visible if a milk unit is activated in the software.*
- follow the instructions on the screen
- press > to go to the next step



7.1.5o

The descaling procedure has finished and the counter is set to zero.

- press **start** to confirm

- ▶ *Reconnect the water filter when it was removed in "7.1.5f" during the descale procedure and fill the water tank.*
- ▶ *Reconnect the fixed water connection when installed and open the tap.*

7.1.6 Water filter

If a water filter is installed, replaced or removed this must be confirmed in the software so that the counter is updated. The Sprso can now indicate when it needs to be replaced.

Also see section “10.3 Install a water filter” on page 82.

A water filter lessens limescale deposits and reduces impurities in the water.

The Sprso then does not have to be descaled as often (see section “10.1 Water hardness and filter information” on page 81).

Additionally, it ensures a consistent quality of the hot beverage in both taste and aroma.



7.1.6

You can replace, remove or install the water filter:

- press **start** to confirm or
- press < or > to scroll through the maintenance menu
- ▶ *water filter **already** installed:
next screen is 7.1.6b*
- ▶ *water filter **not yet** installed:
next screen is 7.1.6i*



7.1.6a

Water filter information

- liters of water that passed the filter after the last installation/replacement
- press > to go to the next step
- ▶ *xxx Indicates how much water the machine has used and yyy is the amount when the water filter needs to be changed (see section 10.1 on page 81).*



7.1.6b

Replace the water filter:

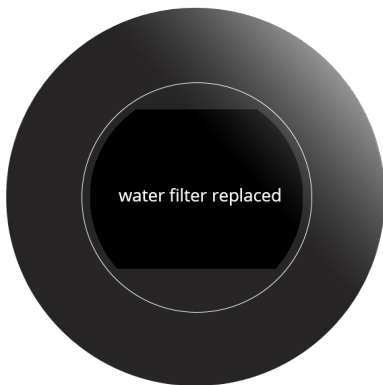
- press < or > to choose no/yes
- press **start** to confirm
- ▶ *selected YES:
next screen is 7.1.6c*
- ▶ *selected NO:
next screen is 7.1.6e*

7.1.6c



Replace the water filter (according to the instructions):
• press **start** to confirm

7.1.6d



The water filter is replaced, the procedure is finished and the counter is set to zero.

7.1.6e



Remove the water filter:
• press < or > to choose no/yes and
• press **start** to confirm
▶ *selected YES:*
next screen is 7.1.6f
▶ *selected NO:*
next screen is 7.1.6h

7.1.6f



Remove the water filter:
• press **start** to confirm

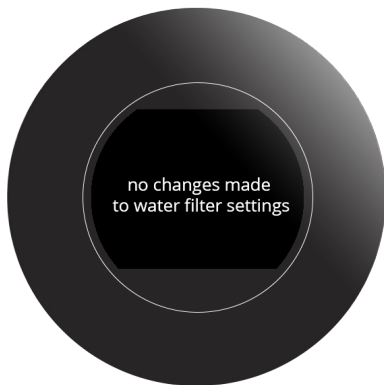
The water filter is removed, the procedure is finished and the counter is deactivated.

7.1.6g



No changes were made, the procedure is finished.

7.1.6h



Install the water filter:
• press < or > to choose no/yes
• press **start** to confirm

7.1.6i



- ▶ *selected YES:*
next screen is 7.1.6j
- ▶ *selected NO:*
next screen is 7.1.6h

Install the water filter (according to the instructions):
• press **start** to confirm

7.1.6j



The water filter is installed, the procedure is finished and the counter is activated.



7.1.6k

7.1.7 Reposition brewer axis

It is possible that the brewer housing cannot be brought into the correct position because the brewer axis has rotated.

► *The brewer axis cannot be turned manually nor with tools.*

You can reposition the brewer axis:

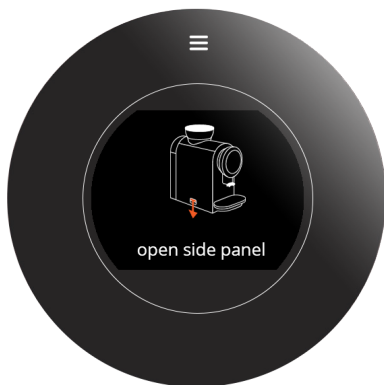
- press **start** to confirm or
- press < or > to scroll through the maintenance menu

7.1.7

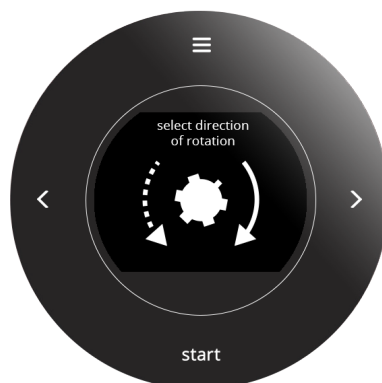
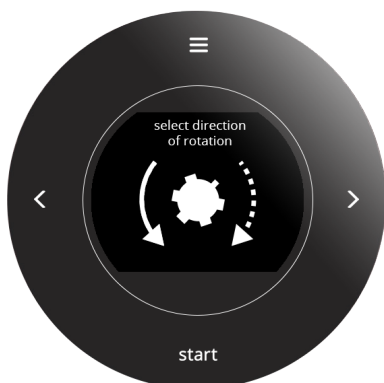


- open the side panel as shown on the screen
- *When the side panel is removed, the next screen will appear.*

7.1.7a



7.1.7b



- press < or > to determine the direction of rotation
- press **start** to confirm and go to the next screen

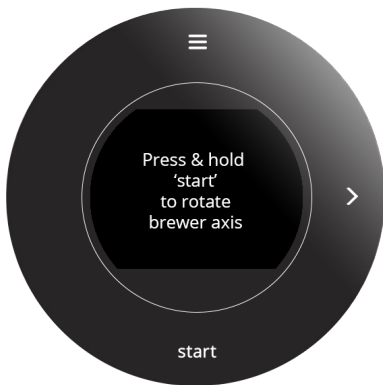


▶ *The side panel must be closed, otherwise there is a risk of injury from rotating parts.*

- close the side panel as shown on the screen

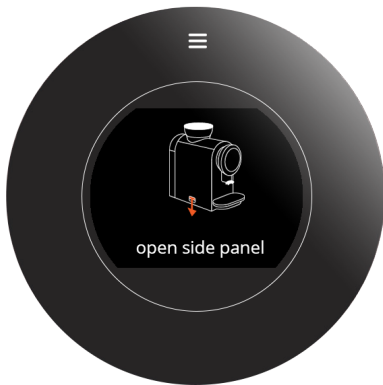
▶ *When the side panel is back in place, the next screen will appear.*

7.1.7c



- press **start** (and hold) to rotate the axis
- press > to go the next screen

7.1.7d



- open the side panel as shown on the screen

▶ *When the side panel is removed, the next screen will appear.*

7.1.7e



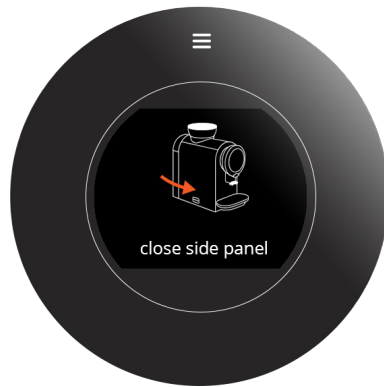
Can the brewer be placed:

- press < or > to choose no/yes and
- press **start** to confirm

▶ *selected YES:
next screen is 7.1.7g*

▶ *selected NO:
next screen is 7.1.7b*

7.1.7f



- close the side panel as shown on the screen
 - ▶ *When the side panel is removed, the procedure is finished and screen 7.1.7 is shown*

7.1.7g

7.1.8 Counters

The Counters tell you how many beverages have been prepared.

Custom beverages are also counted and added to the total machine counter, even when they are deleted.

- ▶ *The total machine counter will count every beverage dosed by the Sprso. It will not be possible to see the history of these beverages.*
- ▶ *Hot water dosages are counted when the amount exceeds 20 ml.*

7.1.8



Counter readings:

- press **start** to confirm or
- press < or > to scroll through the maintenance menu

7.1.8a



Total counters:

- press < or > to scroll through the counters menu
- ▶ *total day counter = total of all day counters after reset*
- ▶ *total beverage counter = total of all beverage counters from start (cancelled beverages are not included)*

7.1.8b



Day counter beverages:

- press < or > to scroll through the counters menu
- ▶ *day counter = individual beverage after reset*
- ▶ *beverage counter = individual beverage from start (cancelled beverages are not included)*



7.1.8c

Total machine counter:

- press < or > to scroll through the counters menu
 - ▶ *total machine counter = total of all beverages ever made (deleted customized beverages as in "7.2.1 Create your own" on page 46 are included)*



7.1.8d

Delete all day counters:

- press **start** to confirm or
- press < or > to scroll through the counters menu
 - ▶ *The day counters and the total day counter were set to 0.*

7.1.9 Error history

A total of 12 errors can be logged for technical support. When the log is full the first error will be overwritten.

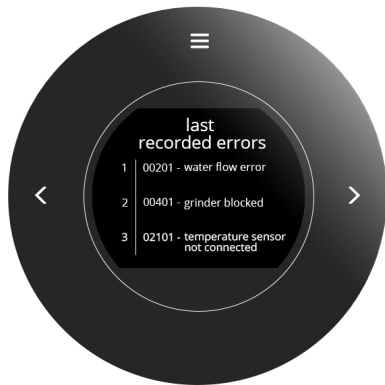
More information can be found in section "9. Warning and errors messages" on page 77.



7.1.9

Error history readings:

- press **start** to confirm or
- press < or > to scroll through the maintenance menu




7.1.9a

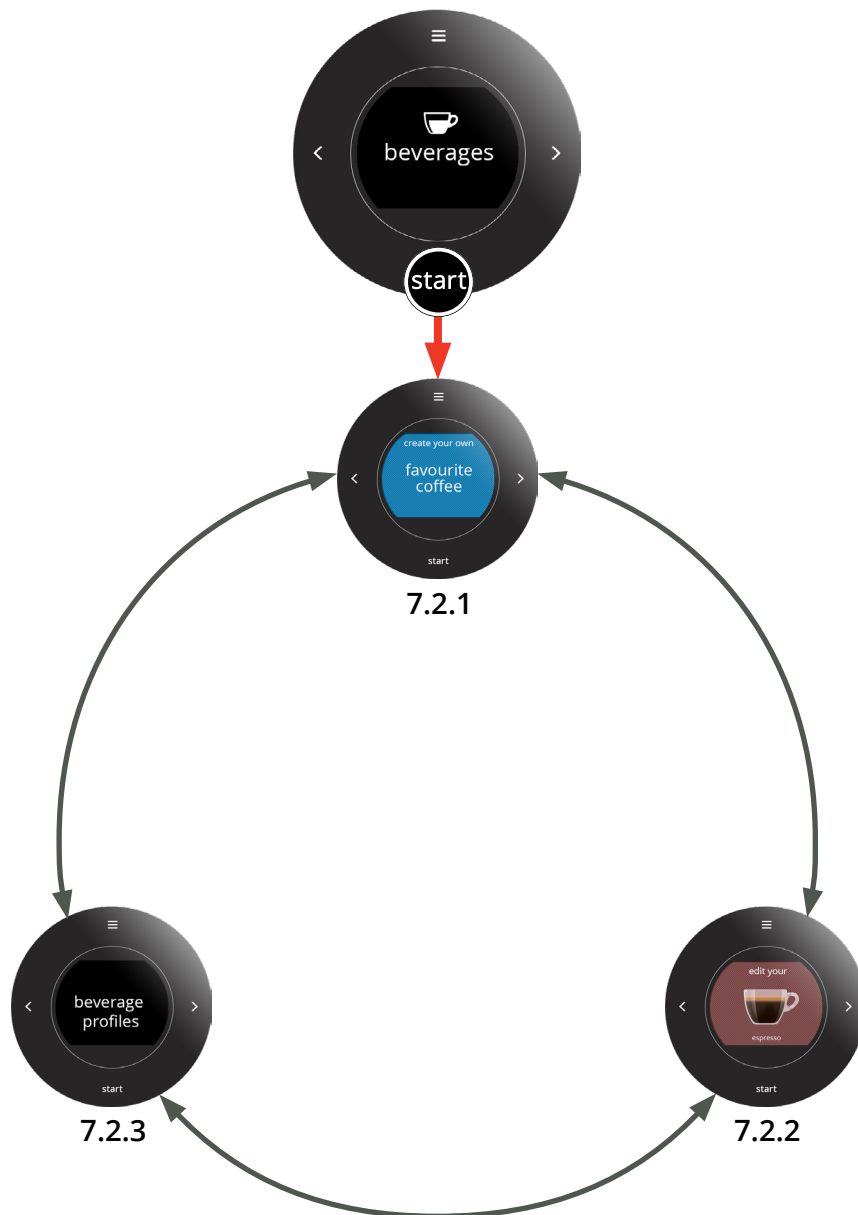
Error history readings:

- press < or > to scroll through the error history
- ▶ *A total of 12 errors can be logged.
When the log is full the first error will be overwritten.*

7.2 Beverages

Press the start button  in the program menu to open the beverage menu. In the "Beverage menu" select one of the available options:

- default beverages, adjust strength, intensity and volume
- custom beverages, three beverages can be added based on the default beverages



7.2.1 Create your own

You can add up to three beverages based on the default beverages.

When a customized beverage is created this will be saved with an identification ('Beverage' | 1, 'Beverage' | 2 and 'Beverage' | 3) and will be automatically added to the *'beverage selection screen'*.



7.2.1

Create a custom beverage:

- press **start** to confirm or
- press < or > to scroll through the 'beverages menu'

▶ *maximum custom beverages **not** reached:*
next screen is 7.2.1c



7.2.1a

The maximum of 3 custom beverages has been reached

- press < or > to choose no/yes
- press **start** to confirm

▶ *selected YES:*
next screen is 7.2.1b

▶ *selected NO:*
next screen is 7.2.1



7.2.1b

Replace a custom beverage:

- press < or > to choose one of the custom beverages to replace
- press **start** to confirm

7.2.1c




Create your custom beverage:

- press < or > to choose the beverage from the carousel on which the custom beverage will be based
- press **start** to confirm

7.2.1d



Set the strength and/or intense function:

- press < or > to choose the strength
- press  to set the intense function on/off
- press **start** to confirm

► *The intensive function will extend the brew time by 10% and the weight of the coffee ground will be increased by 5%.*

7.2.1e



Set the volume:

- press < or > to set the volume
- press **start** to confirm

► *See section 10.2 on page 81 for the default volume settings S, M and L per beverage.*

7.2.1f



Save your custom beverage.

► *The Sprsro automatically returns to screen 7.2.1.*

No changes were made, the procedure is finished.

► *The Sprso automatically returns to screen 7.2.1.*



7.2.1g

► *To delete a customer beverage see "7.2.2g" on page 51.*

7.2.2 Edit default beverage

You can change the settings of the default beverages.

The milk based beverages are always visible in this menu but cannot be edited, unless the milk unit is activated in "7.3.1 Milk unit" on page 54.

Once a *custom beverage* is created it appears here too (see 7.2.2f). The only difference with a default beverage is that a *customized beverage* cannot be switched off (disabled), it must be deleted.



7.2.2

Edit a default *beverage*:

- press < or > to scroll through the beverage menu and choose a beverage to change
- press **start** to confirm



7.2.2a


Disable a default *beverage*:

- press < or > to choose no/yes
- press **start** to confirm
 - ▶ *selected YES:*
back to screen 7.2.2
 - ▶ *selected NO:*
go to the next screen



7.2.2b

Set the strength and intense function:

- press < or > to choose the strength
- press  to switch the intense function on/off
- press **start** to confirm
 - ▶ *The intensive function will extend the brew time by 10% and the weight of the coffee ground will be increased by 5%.*



7.2.2c

Set the volume:

- press < or > to set the volume
- press **start** to confirm

▶ See section 10.2 on page 81 for the default volume settings S, M and L per beverage.



7.2.2d

Save your custom beverage.

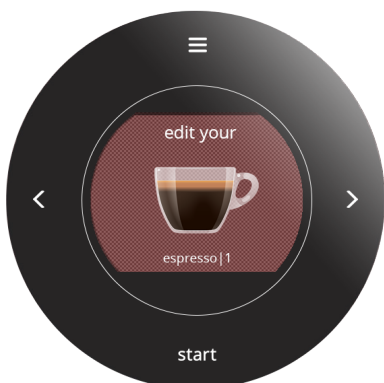
▶ *The Sprso automatically returns to screen 7.2.2*



7.2.2e

No changes were made, the procedure is finished.

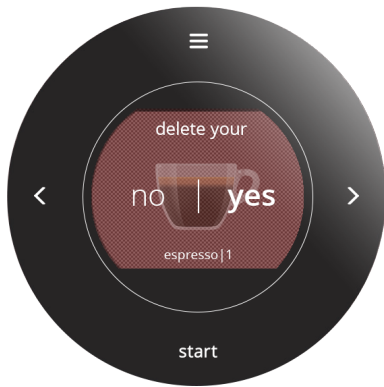
▶ *The Sprso automatically returns to screen 7.2.2.*



7.2.2f

Once a *custom beverage* is created it appears here too. It has the same status as the default beverages (the only difference is that a custom beverage must be deleted and cannot be disabled):

- press < or > to choose a beverage
- press **start** to confirm



7.2.2g

Edit or delete a *custom beverage*:

- press < or > to choose no/yes
- press **start** to confirm

- ▶ *selected YES:*
next screen is 7.2.1
- ▶ *selected NO:*
next screen is 7.2.2b

7.2.3 Beverage profiles

The Sprso has 3 beverage profiles to choose from during installation. These profile offer the same beverages, though each profile has an unique combination of volume and strength of the beverages. The available beverage profiles are:

Beverage profile	Characteristics
profile #1	small volumes / strong coffee
profile #2	medium volumes / regular strengths
profile #3	large volumes / less strong coffees

► See also section "10.2 Volume per beverage (S / M / L)" on page 81

7.2.3



Select a profile for your beverages:

- press **start** to confirm or
- press < or > to scroll through the 'beverages menu'

7.2.3a

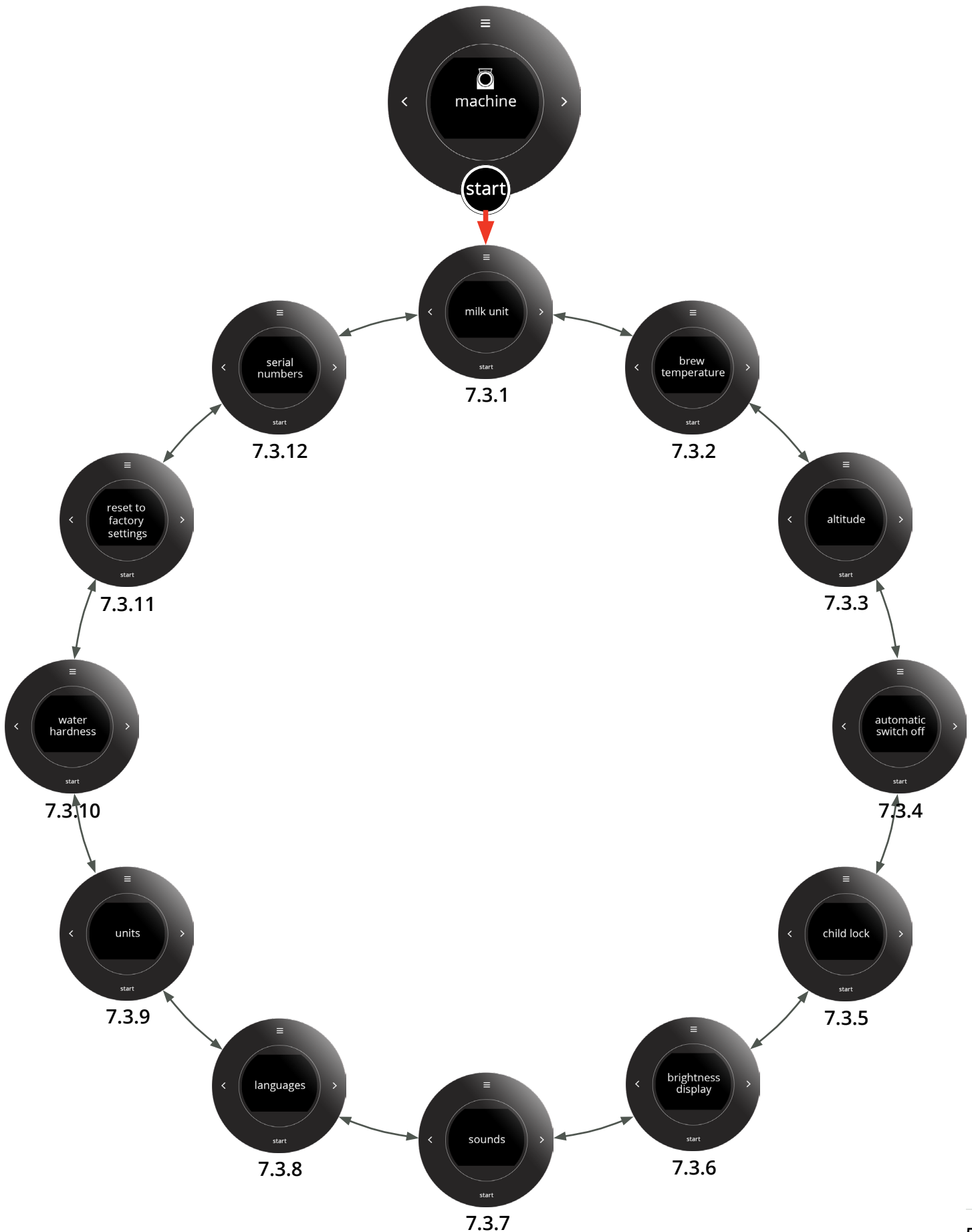


Profile selection

- press < or > to choose a profile
- press **start** to confirm

7.3 Machine

You can programme the following in the machine menu.



7.3.1 Milk unit

A milk unit/cooler can be added to the Sprso.

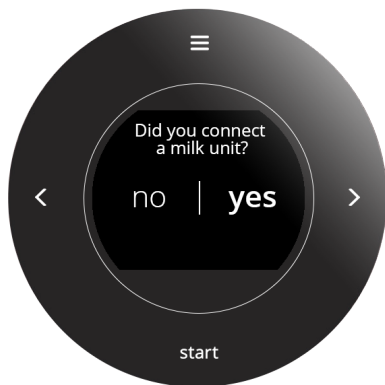
By activating the milk unit, the beverages with milk will be available and all related menus will become accessible. Messages concerning the cleaning and flushing become active.



7.3.1

Milk unit:

- press **start** to confirm or
- press < or > to scroll through the machine menu



7.3.1a

Did you connect a milk unit:

- press < or > to choose no/yes and
- press **start** to confirm



7.3.1b

Information screen:

- ▶ *Only visible if a milk unit is activated in the software.*
- press > to go to the machine menu

7.3.2 Brew temperature

It is possible to adjust the default brew temperature.

The temperature of all the beverages will be effected by this option.

When a different altitude is selected (see section "7.3.3 Altitude" on page 56) the default brew temperature is automatically changed.

Temperature setting	Temperature
low	-4°C (-7.2°F) relative to the default brew temperature
medium	default brew temperature
high	+2°C (+3.6°F) relative to the default brew temperature



7.3.2

Brew temperature:

- press **start** to confirm or
- press < or > to scroll through the machine menu



7.3.2a

Adjust the brew temperature:

- press < or > to choose one of the 3 settings and
- press **start** to confirm

7.3.3 Altitude

The setting of altitude where the Sprso is used (default: sea level) is necessary to determine the boiling point that depends on the local atmospheric pressure.

The boiling point at sea level is around 100°C (212°F), while the boiling point at 2000 meter is slightly lower at 97°C (206.6°F).

Altitude compensation	Temperature
0 - 1000	0 °C (32.0 °F)
1000 - 2000	-3 °C (-5.4 °F)
2000 - 3000	-6 °C (-10.8 °F)

7.3.3



Altitude:

- press **start** to confirm or
- press < or > to scroll through the machine menu

7.3.3a



Adjust the altitude setting:

- press < or > to choose one of the 3 settings
- press **start** to confirm

7.3.4 Automatic switch off

After a certain amount of time, the Sprso will automatically go into an energy-saving mode for lower power consumption, see also section "4. Standby" on page 9.

Automatic switch off settings:

- disabled
- 30 minutes
- 1 hour
- 2 hour
- 4 hours



7.3.4

Automatic switch off:

- press **start** to confirm or
- press < or > to scroll through the machine menu



7.3.4a

Adjust the automatic switch off function:

- press < or > to choose one of the 5 settings
- press **start** to confirm

7.3.5 Child lock

Select this option to prevent dangerous situations due to unintended actions, e.g. unattended children pressing controls.

By pressing both navigation buttons (< >) simultaneously for 5 seconds, the child lock is activated and the controls are automatically switched off.

If a button is pressed while the child lock is activated, the screen turns on and a message appears, see 7.3.5b.

To deactivate the child lock, press both navigation buttons (< >) simultaneously again for 5 seconds.

7.3.5



Child lock:

- press **start** to confirm or
- press < or > scroll through the machine menu

7.3.5a

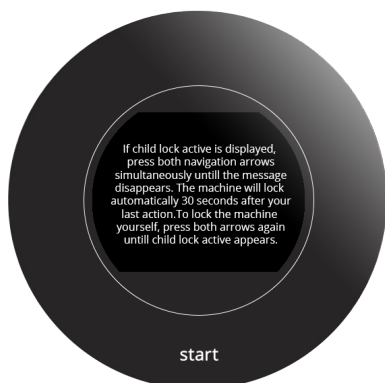


Do you want to use the child lock:

- press < or > to choose no/yes
- press **start** to confirm

- ▶ *selected YES:*
next screen is 7.3.5b
- ▶ *selected NO:*
next screen is 7.3.5

7.3.5b



Information screen

- press **start** to confirm

7.3.6 Brightness screen

The brightness of the screen can be adjusted in 5 steps and is immediately visible.



Brightness screen:

- press **start** to confirm or
- press < or > to scroll through the machine menu

7.3.6



Adjust the automatic switch off function:

- press < or > to choose one of the 5 settings
- press **start** to confirm

7.3.6a

7.3.7 Sounds

Audio signals are used to give feedback.

There are 3 different tones. The tone and volume of the sound cannot be adjusted.

Tone	When	Kind of adjustment
1	Start up, warning before flush End of process or when a next action is required	not adjustable
2	Sound of messages	on/off
3	Sound of buttons	on/off

7.3.7



Sounds:

- press **start** to confirm or
- press < or > to scroll through the machine menu

7.3.7a



Sounds of messages:

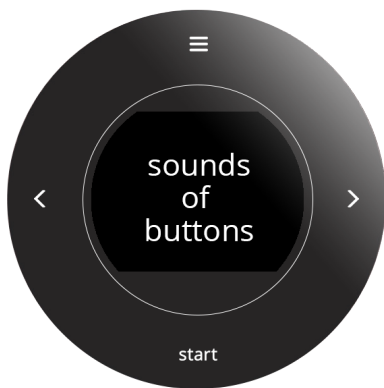
- press < or > to choose sounds of messages or sounds of buttons
- select sounds of messages
- press **start** to confirm

7.3.7b



Set sounds on/off during messages and warnings:

- press < or > to choose no/yes
- press **start** to confirm



7.3.7c

Sound while pressing a button:

- press < or > to choose sounds of buttons or sounds of messages
- select sounds of buttons
- press **start** to confirm



7.3.7d

Set sounds on/off while pressing a button:

- press < or > to choose no/yes
- press **start** to confirm

7.3.8 Languages

English is the default language.

The available languages are:

- English
- English (US)
- Czech
- Danish
- Dutch
- Finnish
- French
- French (CA)
- German
- Greek
- Hungarian
- Italian
- Norwegian
- Polish
- Portuguese
- Portuguese (BR)
- Romanian
- Russian
- Spanish
- Spanish (US)
- Swedish
- Turkish

7.3.8



Languages selection:

- press **start** to confirm or
- press < or > to scroll through the machine menu

7.3.8a



Select your language:

- press < or > to choose an available language
- press **start** to confirm

7.3.9 Units

The units for volume and height can be changed.

All variables of the Sprso are based on the International System of Units (SI), all others are calculated based on this.



Units:

- press **start** to confirm or
- press < or > to scroll through the machine menu

7.3.9



Volume units:

- press < or > to choose volume or height units
- select volume units
- press **start** to confirm

7.3.9a



Change volume units:

- press < or > to choose ml/l or fl.oz/gal
- press **start** to confirm

7.3.9b



7.3.9c

Height units:

- press < or > to choose height or volume units
- select height units
- press **start** to confirm



7.3.9d

Change height units:

- press < or > to choose metre or feet
- press **start** to confirm

7.3.10 Water hardness

It is important to know the correct hardness of the water at the location where the Sprso is used for setting the descaling signal.

Ask the local water company for the hardness of the water or measure the hardness of the water yourself with the water hardness tester (according to the corresponding instructions).



7.3.10

Water hardness:

- press **start** to confirm or
- press < or > to scroll through the machine menu



7.3.10a

Adjust the water hardness setting:

- press < or > to choose one of the 6 settings
- press **start** to confirm
- ▶ *The water hardness is set to "average" (7-14 °dH) as standard.*
- ▶ *See "10.1 Water hardness and filter information" on page 81.*

7.3.11 Reset to factory settings

The adjusted settings can be reset to the default settings in 3 ways.

Selected option	Result
Reset the beverage settings	All beverages will return to default except the beverages you created in section 7.2.1 on page 46.
Reset the machine settings	Any settings you have changed in section 7.3 are restored to the default settings. The beverage counters are also reset.
Reset to factory default	The profile and all beverages are reset to default including the beverages you created in section 7.2.1 on page 46. Any settings you have changed in section 7.3 are restored to the default settings. ▶ <i>The total counter and the descaling counter are not reset.</i>

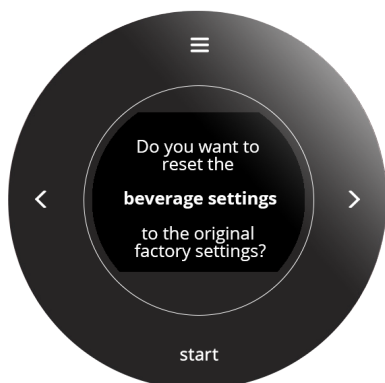
7.3.11



Reset to factory settings:

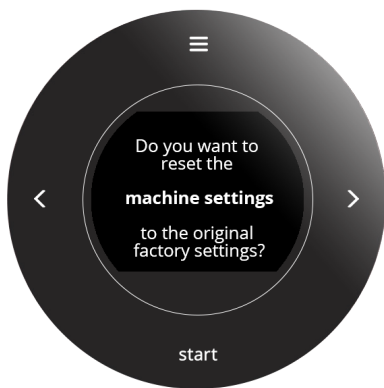
- press **start** to confirm or
- press < or > to scroll through the machine menu

7.3.11a



Reset the beverage settings:

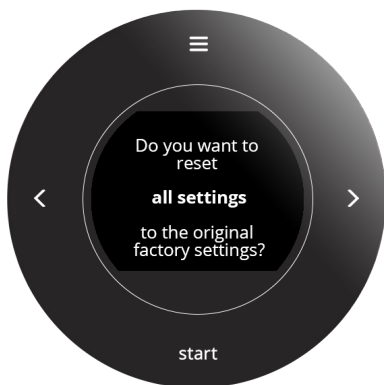
- press < or > to scroll through the reset to factory settings menu or
- select reset beverage settings
- press **start** to confirm



7.3.11b

Reset the machine settings:

- press < or > to scroll through the reset to factory settings menu or
- select reset machine settings
- press **start** to confirm



7.3.11c

Reset to factory default:

- press < or > to scroll through the reset to factory settings menu or
- select reset all settings
- press **start** to confirm

► *The Sprso starts with screen 2a on page 4*

7.3.12 Machine and software information

The serial number and software versions can be checked, this is essential information for a service request.



Serial numbers:

- press **start** to confirm or
- press < or > to scroll through the machine menu

7.3.12



Serial number machine:

- press < or > to choose serial number machine or serial number software
- ▶ *The unique serial number of the machine is displayed here.*

7.3.12a



Version number software:

- press < or > to choose serial number software or serial number machine
- ▶ *Human machine interface (HMI) software version.*
- ▶ *I/O board software version.*
- ▶ *Recipe and configuration.*

7.3.12b

7.4 Online help

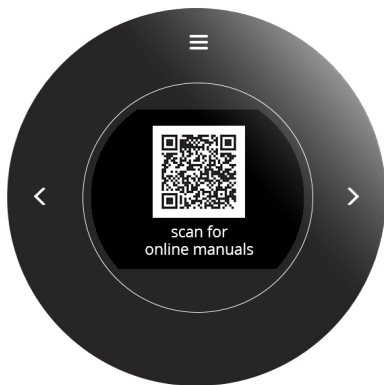
Online information can be approached via the QR code shown on the screen.



7.4.1

Online information:

- press **start** to confirm or
- press < or > to scroll through the machine menu



7.4.1a

Online manuals:

- press < or > to scroll through the available QR codes
- scan the QR code to get the latest online manual(s)



7.4.1b

Online animations:

- press < or > to scroll through the available QR codes
- scan the QR code to get the latest online animation(s)

8.Special conditions

8.1 Brewer (partially) missing (Error 10015)

After maintenance of the CIRCO brewer, it is possible that the brewer housing cannot be brought into the correct position because the brewer axis has rotated.

Close the side/service panel, this activates the message (8.1a), follow the on screen instructions to solve the problem.

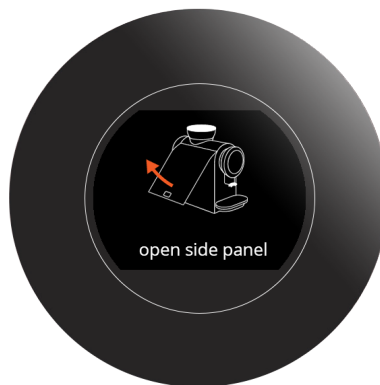
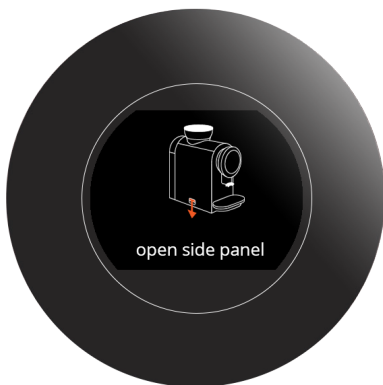
- ▶ *The brewer axis cannot be turned manually nor with tools.*

8.1a



Information message:
• press > to begin the reset

8.1b



- open the side panel as shown on the screen
- ▶ *When the side panel is removed, the next screen will appear.*

8.1c



Check if the complete brewer can be placed:

- press < or > to choose no/yes
- press **start** to confirm
- ▶ *selected YES:
next screen is 8.1j*
- ▶ *selected NO:
go to the next step*

The brewer axis needs to be repositioned:
 • press > to go to the next step

8.1d

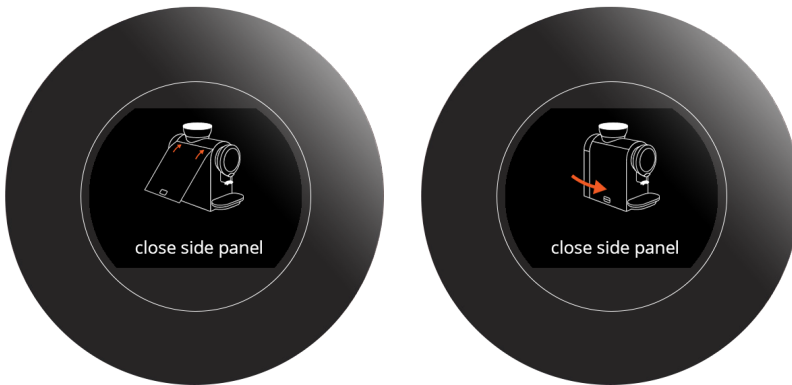


8.1e



- press < or > to choose the direction of rotation
- press **start** to confirm

8.1f



- ▶ *The side panel must be closed, otherwise there is a risk of injury from rotating parts.*
- close the side panel as shown on the screen
- ▶ *When the side panel is back in place, the next screen will appear.*

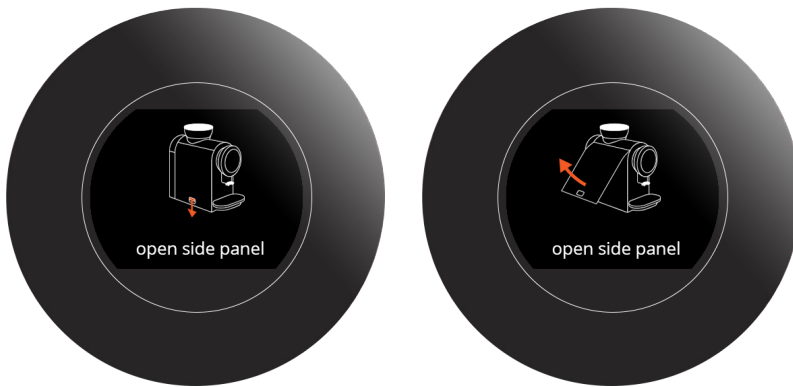
8.1g



- press **start** (and hold) to rotate the axis
- press > to go the next screen

- open the side panel as shown on the screen
- ▶ *When the side panel is removed, the next screen will appear.*

8.1h



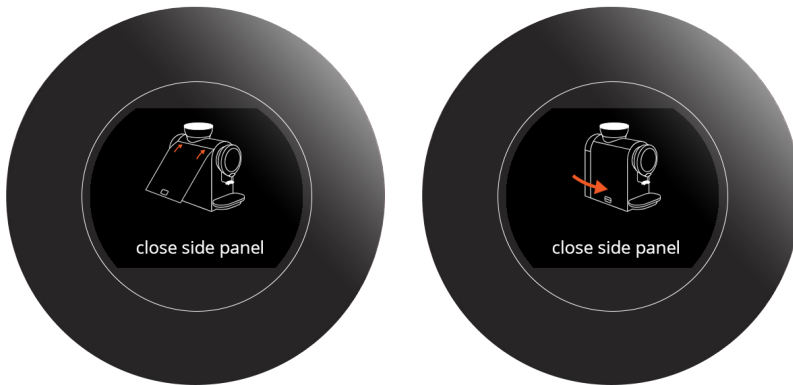
8.1i



- Can the brewer be placed:
- press < or > to choose no/yes and
 - press **start** to confirm
 - ▶ *selected NO: next screen is 8.1e*
 - ▶ *selected YES: go to the next screen*

- close the side panel as shown on the screen
- ▶ *When the side panel is back in place, the 'beverage selection screen' will appear.*

8.1j



8.1k



CIRCO brewer reset has finished

8.2 Brewer malfunction (Error 04104)

Brewer motor not moving.

When no movement is detected the error message is displayed, see 8.2a.

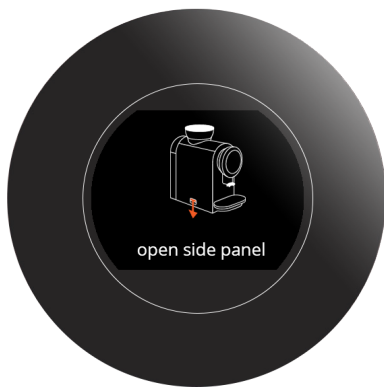
► *The brewer axis cannot be turned manually nor with tools.*

8.2a



Information message:
• press > to begin the reset

8.2b



• open the side panel as shown on the screen
► *When the side panel is removed, the next screen will appear.*

8.2c



Information screen:
• follow the screen instructions
• press > to go to the next screen

8.2d

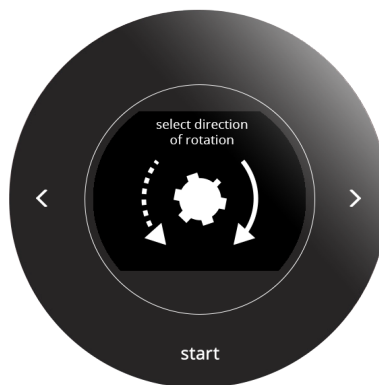
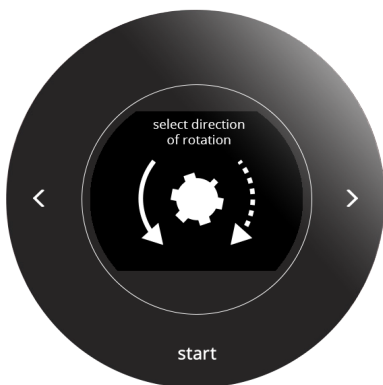


Check if the complete brewer can be placed:

- press < or > to choose no/yes
- press **start** to confirm

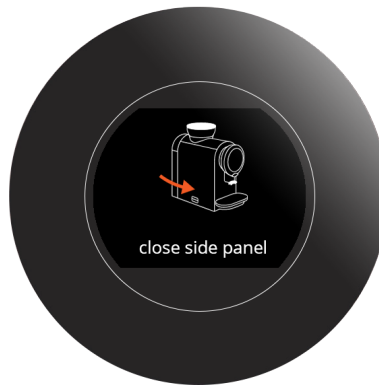
- ▶ *selected YES:
next screen is 8.1j*
- ▶ *selected NO:
go to the next step*

8.2e



- press < or > to choose the direction of rotation
- press **start** to confirm

8.2f

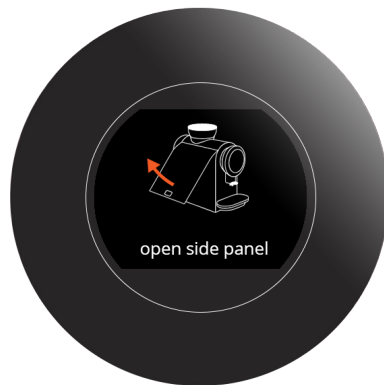
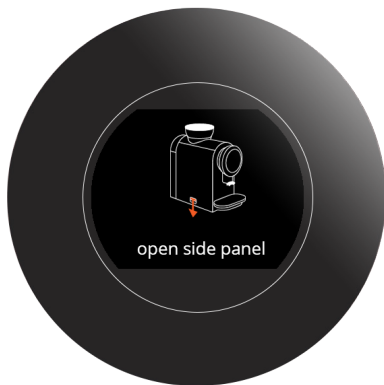


- ▶ *The side panel must be closed, otherwise there is a risk of injury from rotating parts.*
- close the side panel as shown on the screen
- ▶ *When the side panel is back in place, the next screen will appear.*

8.2g



- press **start** (and hold) to rotate the axis
- press > to go the next screen



- open the side panel as shown on the screen
- ▶ *When the side panel is removed, the next screen will appear.*

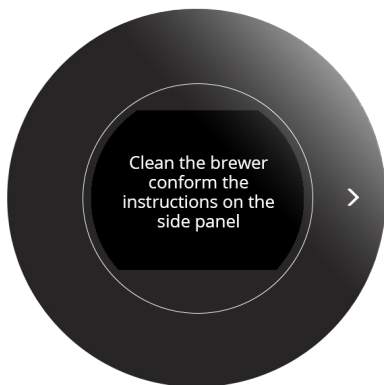
8.2h



Can the brewer be placed:

- press < or > to choose no/yes and
- press **start** to confirm
- ▶ *selected NO:*
next screen is 8.1e
- ▶ *selected YES:*
next screen is 8.2m

8.2i



Information screen:

- follow the screen instructions
- press > to go to the next screen

8.2j



Check if the complete brewer can be placed:

- press < or > to choose no/yes
- press **start** to confirm
- ▶ *selected NO:*
go to the next step
- ▶ *selected YES:*
next screen is 8.2m

8.2k

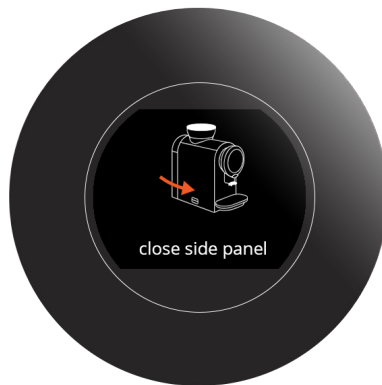
Information screen:
• press > to go to screen 8.2e

8.2l



- close the side panel as shown on the screen
- ▶ *When the side panel is back in place, the 'beverage selection screen' will appear.*

8.2m



CIRCO brewer reset has finished

8.2n



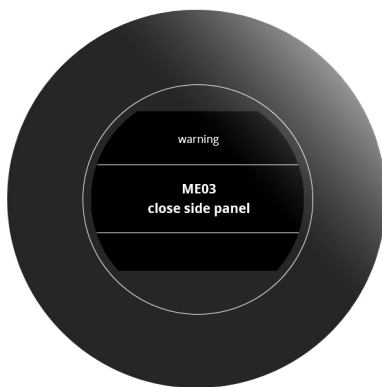
9. Warning and errors messages

9.1 Warning messages


Warning messages are used to inform the operator of a state which can prevent the Sprso from working correctly. In general warning messages are displayed after beverage.



- ▶ *The warning messages are displayed for 30 seconds.
A message can be displayed again when any button (except menu button) is used.
The menu will remain available.*

Example screen for warning messages



9.1a

Nr	Message	Description	Reset condition
ME01	fill or place water tank	no water detected in water tank or water tank not present	fill water tank or place water tank in correct position
ME02	not applicable		
ME03	close side panel	service panel not in correct position	close service panel (in correct position)
ME04	place drip tray + waste bin	drip tray or waste bin not in place	place drip tray (in correct position)
ME05	empty waste bin 	the waste bin is full and must be emptied	remove the drip tray. Empty the waste bin and drip tray. Put the parts back in the correct position
ME06	not applicable		
ME07	clean milk system daily	will be displayed when coffee flush or startup flush is active and a milk unit is activated in the software	only a reminder

Nr	Message	Description	Reset condition
ME08	clean brewer The icon below is visible on the <i>'beverage selection screen'</i> . 	start cleaning coffee system or continue (the first message is displayed after 125 brewing cycles - the message is repeated after every beverage)	after the 'clean coffee system' is finished (see section 7.1.3 on page 25)
ME09	replace water filter The icon below is visible on the <i>'beverage selection screen'</i> . 	please replace water filter for the optimal coffee or continue the message appears after "XX" litres have passed through the water counter and is repeated after every 11 beverages	replace the water filter and confirm this (see section 7.1.6 on page 35)
ME10	descale machine	please descale the Sprso for the optimal coffee - the message is repeated after every 9 beverages	descale the Sprso (see section 7.1.5 on page 30)
ME11	not applicable		
ME12	brewer jammed by grinding or obstruction	brewer is blocked. Too much coffee ground in the brewer	remove the obstruction. Adjust the coffee ground quantity

9.2 Error messages

Error messages appear when an error is detected by the machine's operating system. Depending on the error, it remains active or can be solved by itself and the error message disappears by itself.

The error message is stored to the Error Log (see section "7.1.9 Error history" on page 44). A total of 12 errors can be logged by the Sprso for technical support. When the log is full the first error will be overwritten.

- ▶ *The start button can be pressed to restart the Sprso.
If the error messages returns after the appropriate action, please contact your dealer.*

Example screen for error messages



9.2a

Nr	Error	Description	Most suspected components
00000	communication failed	communication between HMI-and I/O board defect	HMI-board I/O circuit board cable
00201	flow error	no water flow in system	water counter valve pump tubes I/O circuit board float (water tank) leakage water system
00401	grinder blocked	grinder is blocked or broken. Please clean grinder inlet with vacuum cleaner	grinder motor I/O circuit board
02101	temperature sensor not connected	temperature sensor is not connected or reading invalid	temperature sensor
02102	temperature sensor reading	temperature sensor reading invalid	temperature sensor I/O circuit board

Nr	Error	Description	Most suspected components
02203	heating element protection	heating is overheated or defect	heating element I/O circuit board
04104	brewer malfunction	brewer is blocked or defect	brewer jammed, see also section 8.2 on page 73 brewer motor
10001	I/O-fail	safety I/O control fails	I/O circuit board
10015	brewer partially mounted	brewer can not be calibrated	installation error brewer, see also section 8.1 on page 70
88888	external data fail	the data in the external flash is corrupt or incompatible	update - HMI board

10. Appendix

10.1 Water hardness and filter information

setting	very soft	soft	average	moderate	hard
°dH	< 3	3 - 7	7 - 14	14 - 21	> 21
°fH	< 5	5 - 13	13 - 25	25 - 38	> 38
°e / Clark	< 4	4 - 9	9 - 18	18 - 26	> 26
ppm (mg/l) parts per million	< 53	53 - 125	125 - 249	249 - 374	> 374
mmol/l	< 0,5	0,5 - 1,2	1,2 - 2,5	2,5 - 3,7	> 3,7
mg/l CaCO ₃	< 50	50 - 130	130 - 250	250 - 380	> 380
water hardness tester	□□□□	□□□■	□□■■	□■■■	■■■■
descale	90 l.	75 l.	50 l.	35 l.	25 l.
descale with water filter	270 l.	225 l.	150 l.	105 l.	75 l.
replace water filter after	180 l.	150 l.	100 l.	70 l.	50 l.

► See section 7.3.10 on page 65 to set the water hardness.

10.2 Volume per beverage (S / M / L)

beverages <i>(all volumes in millilitres)</i>	profile #1			profile #2			profile #3		
	S	M	L	S	M	L	S	M	L
ristretto	15	20	25	20	25	30	30	40	50
ristretto x2	30	40	50	40	50	60	60	80	100
espresso	20	30	40	30	40	50	50	60	70
espresso x2	40	60	80	60	80	100	100	120	140
crema coffee	40	60	80	100	120	140	140	160	180
crema coffee x2	80	100	120	180	200	220	280	320	360
americano	80	100	120	100	120	140	140	160	180
cappuccino	80	100	120	100	120	140	140	160	180
cappuccino dark	80	100	120	100	120	140	140	160	180
espresso macchiato	35	55	75	45	65	85	85	105	125
latte macchiato	100	120	140	120	140	160	160	180	200
caffè latte	100	120	140	120	140	160	160	180	200
hot water	80	100	120	100	120	140	140	160	180
hot milk foam	80	100	120	100	120	140	140	160	180
design your own (DYO)									
design your own (DYO)									
design your own (DYO)									

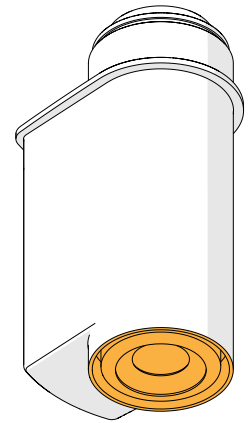
10.3 Install a water filter

The Sprso can be fitted with a **BRITA AquaAroma Crema** water filter

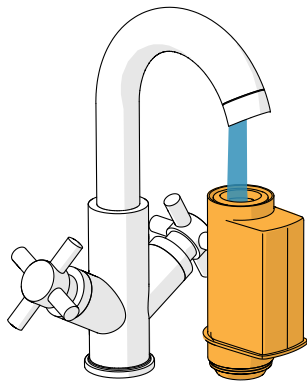
- ▶ Follow the original instructions of the purchased filter for more information regarding use and maintenance.

Please note

- ▶ If you use the Sprso normally the water filter lasts for a certain amount of time. This amount of time is mentioned in the manual of the water filter. If you do not use the Sprso whilst the water filter is installed this will decrease the lifespan of the water filter.

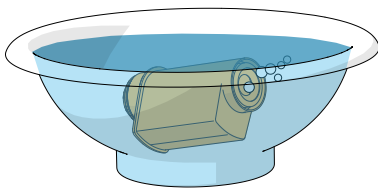


10.3a



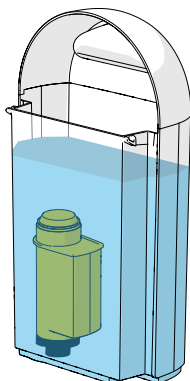
- unpack the filter
- read the installation instructions provided with the filter
- to activate the filter run tap water through the filter until water comes out of the opening for more than a minute

10.3b



- fill a clean bowl of fresh cold water
- insert the filter in the water tank and immerse it completely for about ten seconds, *sloping it and pressing it lightly* to enable the air bubbles to escape.

10.3c



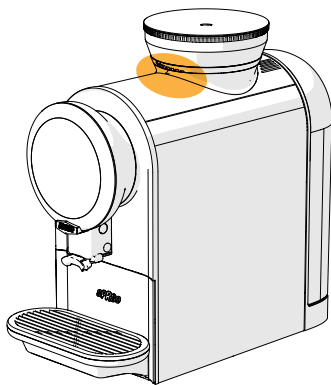
- remove the water tank from the Sprso
- put the filter in place and press as far as it will go
- fill the water tank with fresh cold non-carbonated water
- put the water tank back in the Sprso
- ▶ When you install you must notify the Sprso of its presence as described in section "7.1.6 Water filter" on page 35.

10.4 Adjusting the coffee grinder

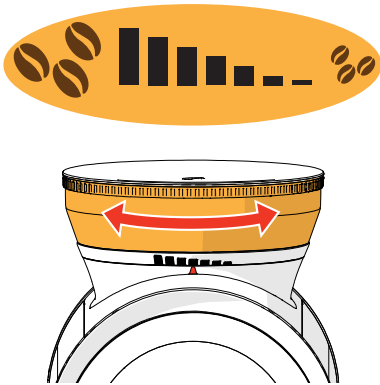
The coffee grinder adjustment is set by default. If the coffee is too weak or not creamy enough you can manually adjust the grinding degree. The grinding setting has 7 positions.

Location to adjust the grinding setting.

10.4a



10.4b



► Turn the top part of the bean canister to adjust the grinding degree.

If the coffee beverage flows too slowly or not at all, turn one click clockwise (coarser grind).

For creamier coffee (finer grind), turn one click anticlockwise

► The Sprso needs to prepare a few cups of coffee before you notice the difference.

10.5 Connecting a milk unit

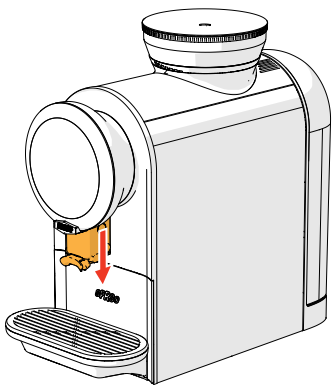
The Sprso is not equipped with a milk unit as standard.

If a milk carton or milk cooler is connected, the following milk based beverages can be selected:

- espresso macchiato
- latte macchiato
- cappuccino
- caffè latte
- cappuccino dark
- hot milk foam

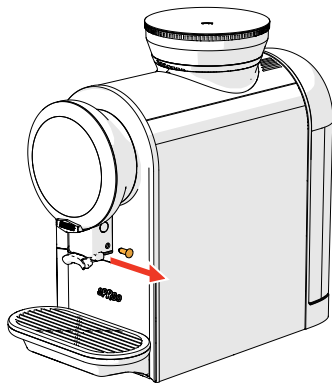
► *Bravilor Bonamat recommends a milk cooler over a non-cooled milk carton.
Cold milk (5°C) improves the taste of the milk-based beverages.*

10.5a



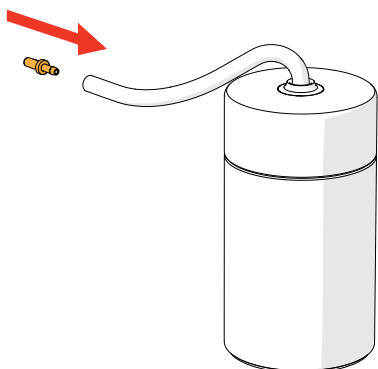
- pull down the outlet

10.5b



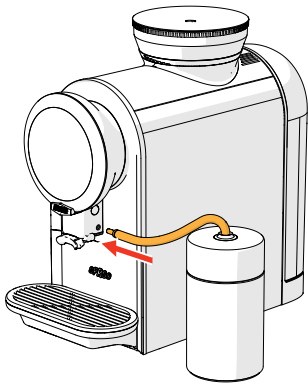
- remove the plug

10.5c



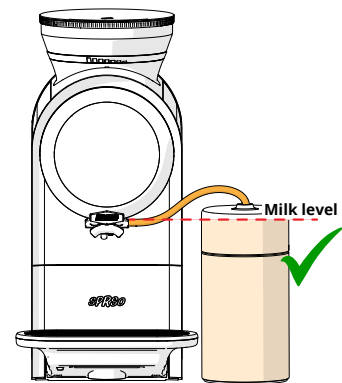
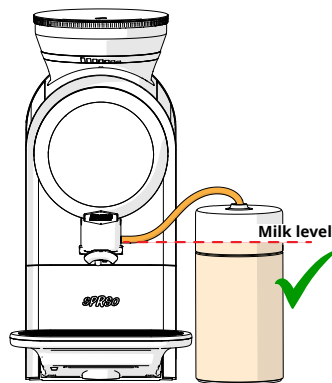
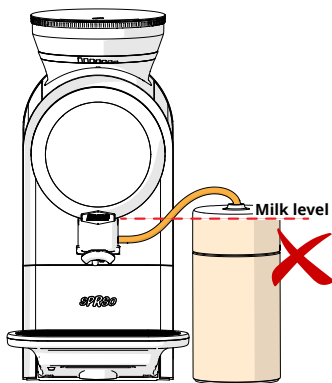
- insert the milk connector

10.5d



- attach the milk hose
 - ▶ Make sure that the milk connection is higher than the milk level in the milk unit to prevent a siphon effect, see 10.5e.
 - ▶ Make sure the milk hose reaches the bottom of the milk carton / cooler.
 - ▶ The total distance from the connector to the hose end affects the milk foam.

10.5e



10.5f



- go to “7.3.1 Milk unit” on page 54, to indicate that a milk unit is connected to the Sprso
 - ▶ Do not leave the milk carton / cooler out of the refrigerator for a long period of time. The warmer the milk (5°C is perfect), the poorer the quality of froth produced.

- ▶ Follow the original instructions of the purchased milk unit for more information regarding use and maintenance.

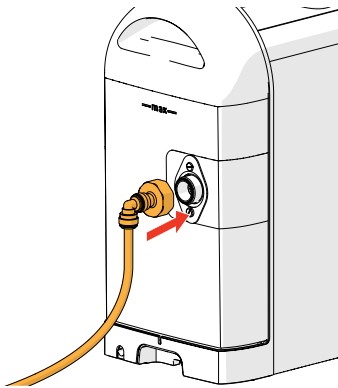
10.6 Install a fixed water connection

The Sprso is not equipped with a fixed water connection as standard.

If a fixed water connection is connected, there are two things to bear in mind:

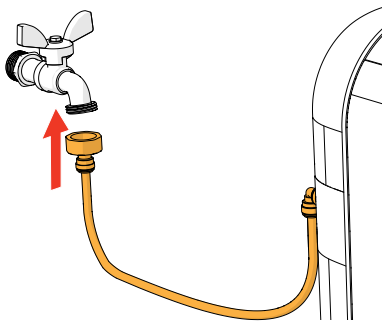
- ▶ *It is not possible to use a water filter in the water tank, install a water filter directly after the tap.*
- ▶ *The descaling procedure no longer runs completely as described in the Sprso software, the additional steps can be found on the sticker of the water tank with fixed water connection.*

10.6a



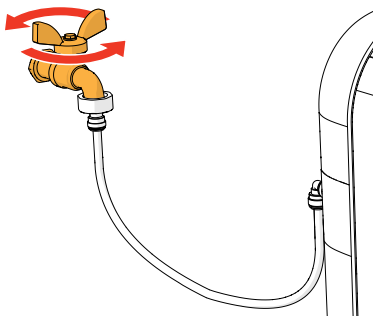
- replace the water tank
- attach the water connection hose to the water tank
- ▶ *Always use the new food approved hose set that is supplied with the water tank.*

10.6b



- ▶ *It is recommended to use an 'Aqua stop'*
- connect the hose to the water trap or directly to the water tap

10.6c



- open de water tap

10.7 Bin full message

When the waste bin counter has reached its limit, the Sprso generates a message to empty it. When replacing the drip tray (with waste tray), screen 10.6b must be answered to update the counter.

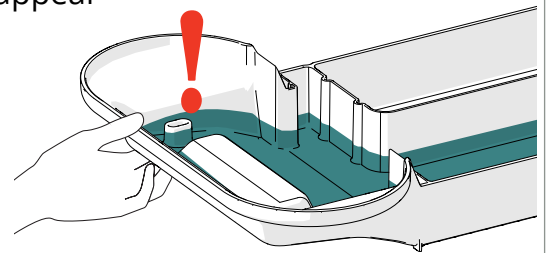
- ▶ *If the counter is reset while the waste bin is not emptied, the waste bin will overflow with all its consequences.*



10.7a

Waste bin full message:

- remove the drip tray and waste bin and empty them
 - ▶ *Put your finger underneath the overflow to avoid spillage.*
- clean and replace all parts
- the next screen will appear



10.7b

Verification screen:

- press < or > to choose no/yes
- press **start** to confirm
 - ▶ *selected YES:*
next screen is 10.7c
 - ▶ *selected NO:*
next screen is 10.7a



10.7c

10.8 Special functions

By using a 'secret key combination' special features can be activated.

10.8a



Standby mode:

- hold the 'Start button' for 5 seconds
- necessary flushes will be done
- the "goodbye" screen is turned off and only the start button is flashing slowly

- ▶ *The standby mode is a function which can be enabled for energy saving.*
- ▶ *Press the start button to end the standby mode*

10.8b



Demo mode on/off:

- hold the combination 'Menu- and Start button' for 10 seconds

- ▶ *The demo mode is a function which can be enabled for marketing purposes.*
- ▶ *Switch off the Sprsro to end the demo mode.*

10.8c



Child lock on/off:

- hold both 'Navigation buttons' for 5 seconds

- ▶ *This function is to lock (and unlock) all controls to prevent accidental dosing (see "7.3.5 Child lock" on page 58).*

10.9 Water system calibration

In this menu the water system can be calibrated.

With calibration the volume of the water is determined for a defined flow and time.

When finished the measured volume must be filled in.

- ▶ *The water system calibration is used to adjust the differences between the actual water delivery of the Sprso and the indicated amount.*

Necessities:

- measuring cup (with fine scale)



Water system calibration:

- go to the program menu
- hold the position where the 'bean- and volume button' are located for 5 seconds



Calibration water system:

- press **start** to confirm

10.9a



Step 1 preparation:

- make sure that you have all necessities
- press > to go to the next step

10.9b

Step 2 preparation:

- follow the instructions on the screen
- press **start** to begin the calibration



10.10a

Step 3 dosing hot water

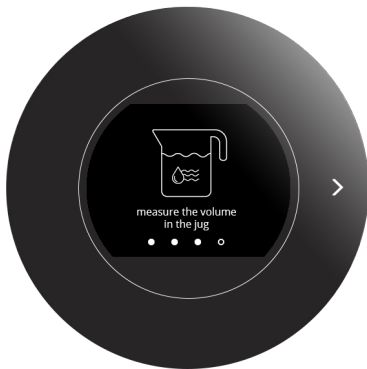
- wait for the next screen



10.10b

Step 4 measure:

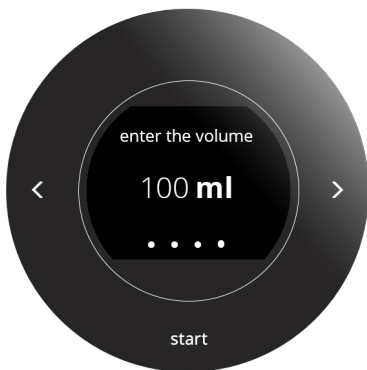
- read the dosed water
- press > to go to the next step



10.10c

Step 5 measure:

- press < or > to enter the measured volume
- press **start** to confirm



10.10d

New water volume is saved:

- after a few seconds the *'beverage selection screen'* will appear



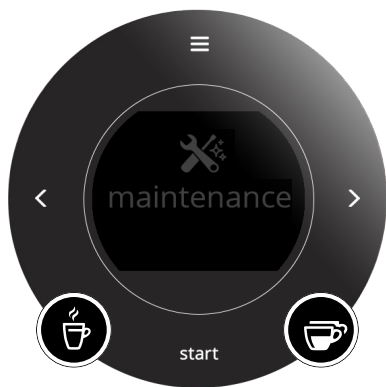
10.10e

10.10 Grinder calibration

The grinder calibration will effect every coffee related beverage.

Necessities:

- coffee beans
- digital kitchen scales



Grinder calibration:

- go to the program menu
- hold the position where the 'Double cup- and Hot water button' are located for 5 seconds



Calibration grinder:

- press **start** to confirm

10.11a



Step 1 preparation:

- make sure that you have all necessities
- press > to go to the next step

10.11b



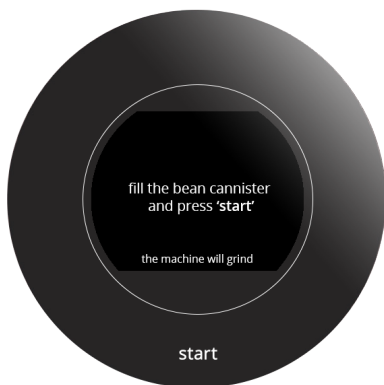
10.11c

Step 2 preparation:

- follow the instructions on the screen
- press > to go to the next step

▶ See also section "10.4 Adjusting the coffee grinder" on page 83.

▶ When another position is selected the result of the calibration is incorrect.



10.11d

Step 3 preparation:

- follow the instructions on the screen
- press **start** to confirm



10.11e

Step 4 preparation:

- wait for the next screen



10.11f

Step 5 preparation:

- follow the instructions on the screen

▶ The next screen is displayed automatically when the drip tray is removed.

10.11g



Step 6 preparation:

- follow the instructions on the screen
- press > to go to the next step

► *Tare weight is accounted for weighing scales which include a button that resets the display of the scales to zero when an empty container is placed on the weighing platform, in order subsequently to display only the weight of the contents of the container.*

10.11h



Step 7 calibration:

- follow the instructions on the screen
- press **start** to confirm

10.11i



Step 8 calibration:

- wait for the next screen

10.11j



Step 9 calibration:

- follow the instructions on the screen

► *The next screen is displayed automatically when the drip tray is removed.*

10.11k



Step 10 calibration:

- follow the instructions on the screen
- press > to go to the next step

10.11l



Step 11 calibration:

- follow the instructions on the screen
- press > to go to the next step
- press **start** to confirm

10.11m



Step 12 information screen:

- follow the instructions on the screen
- press > to go to the next step
- press **start** to confirm

10.11n



Step 13 information screen:

- empty and clean the waste bin and replace all in it original position
 - the calibration procedure is completed
- *The next screen is displayed automatically when the drip tray is removed.*

