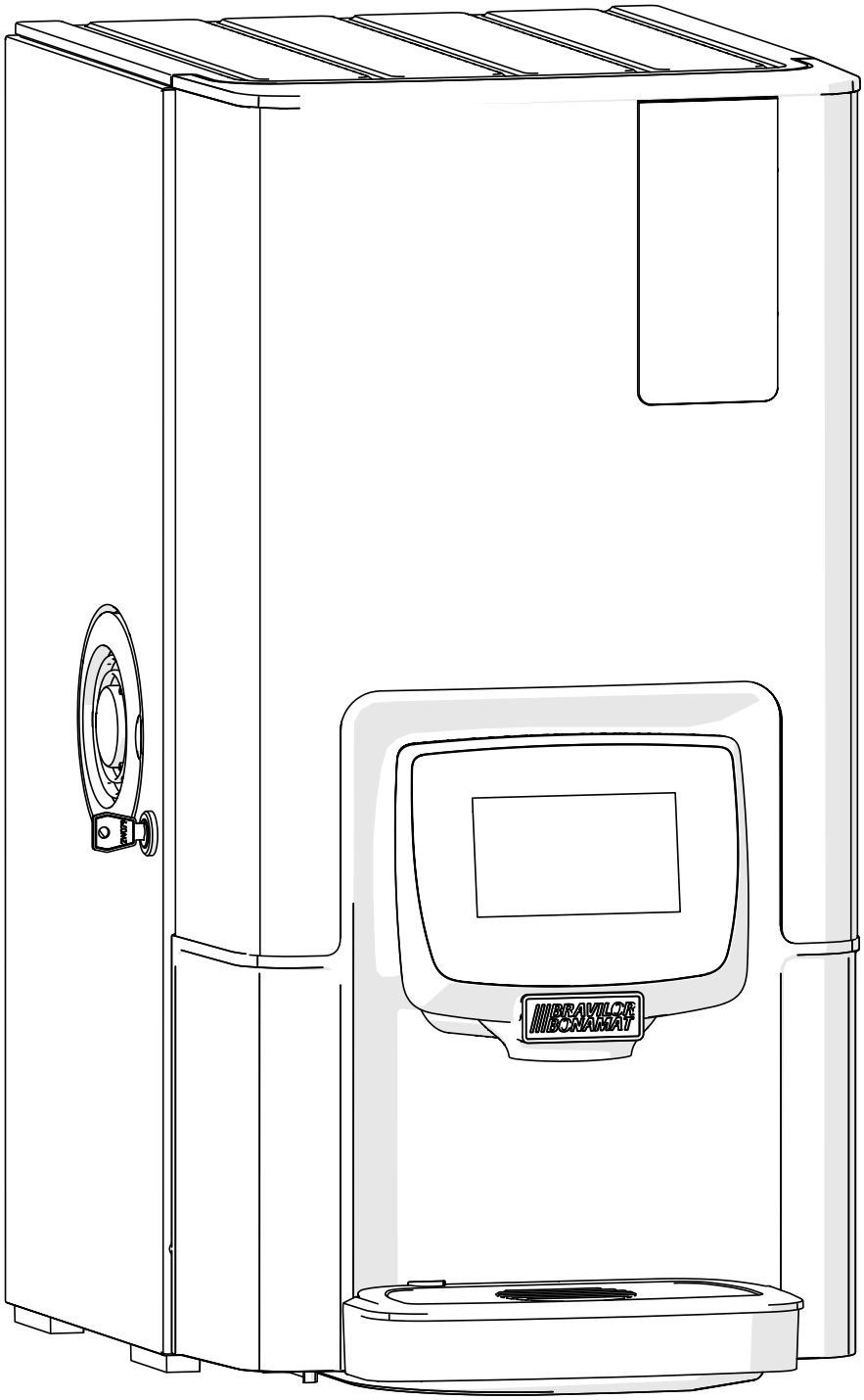
BRAVILOR BONAMAT

# Sego

## TECHNICAL MANUAL



Technical manual - English

Original document by manufacturer
version 1.0

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# 1. Installation requirements

**To enable a smooth and simple installation of the Sego please ensure the customer has the following prepared:**

- Ensure the electrical supply is situated within 1 meter of the machines proposed location.
- Ensure the power supply is correct for the ordered machine:
- Sego
  - » Standard : 1x 230V, 2190W, 13amp (or higher)
  - » North America : 1x 120V, 1440W, 12amp (or higher)
- Ensure that the machine fits the proposed location.
- The water supply must be cold potable (drinking) water terminating in a shut off valve with a male 3/4" connection. This must be within 1 meter of the machines proposed location.
- The water pressure must be between 1 - 10 bar.
  ***NOTE:*** Water pressure must be measured as standing pressure AFTER any fitted water filtration.
- The machine must be immediately available to the engineer within a reasonable distance of the proposed install site.

**What the engineer can do:**

- Upon arrival the fully trained engineer will complete the following;
- Unpack the machine and inspect for transit damage.
- Install the machine in the proposed location.
- Connect the power and water supply to the machine.
- Connect a water filtration system if ordered.
- Commission the machine and complete a function test ensuring full operation.
- Set the machine up to a standard recipe if no pre set recipe has been specified in advance.
- Make adjustments to beverages taste and size (based on the person on site presented as the management representative).
- Setup the recommended dosage of the soluble ingredient of each drink.
- Check if the water volume dosage is correct, if not, a calibration must be performed.
- Train staff on machine maintenance, cleaning and operation.
- Leave the area tidy .

► *Always follow the local and national safety regulations and standards for electrical devices during installation.*

► *Read the safety book carefully. The safety book is provded with the machine or can be downloaded from the Bravilor Bonamat site*

**Ingredients you may need:**

- Ingredients should be selected based on taste profiles and site requirements.
  We do however provide the following direction:
  - » Roasted whole coffee beans.
  - » Cacao and/or topping (or other soluble ingredient)*
    - * Only use instant ingredients that are suitable for vending machines (contains a flowing agent).
    - * Use the recommended dosage as indicated on the packaging.

► *Always follow the local and national safety regulations and standards for electrical devices during installation.*

► *The contents of the safety booklet supplied with the machine must be known to both the installer and the customer.*

► *The operator instructions can be downloaded from the Bravilor Bonamat site.*

# 2. Spare parts replacement

### ► *Precautionary measures*

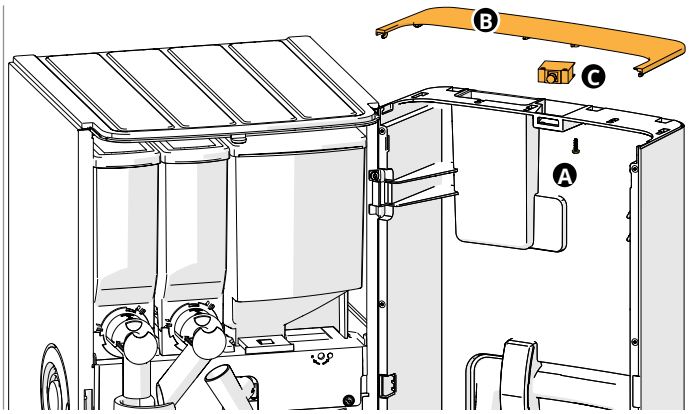
» Always unplug the machine to turn off the power before opening it.
» Turn off the water tap and disconnect the water supply hose.
» The service area can have sharp edges, wear gloves and long sleeves.
» When the Sego is drained, hot water comes out of the drain hose, therefore take protective measures.

**Necessities:**
- Philips screwdriver
- screwdrivers torx 10 and 15
- small adjustable wrench
- open-en wrench / socket wrench: M3 and M4
- curved nose pliers
- combination-pliers

**Reassembly remarks:**
- see the exploded views for the service part numbers
- see the electric diagram for the wiring connections

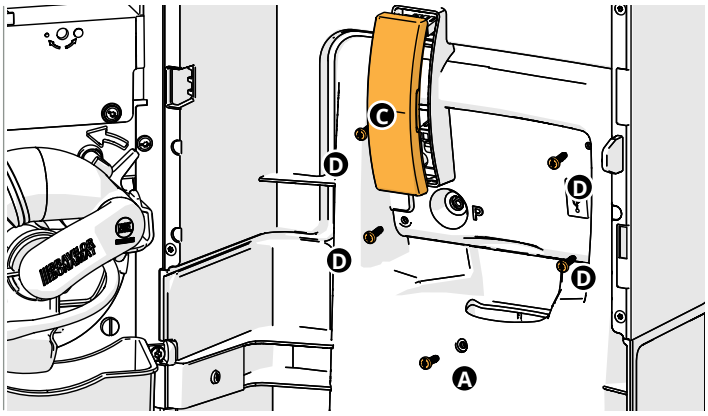
► *The (cleaning) animations can be found on the Sego website.*
*These animations can also be found on our You-tube channel:*
*https://www.youtube.com/user/BravilorBonamatBV/playlists*

## 2.1 Remove the door safety switch

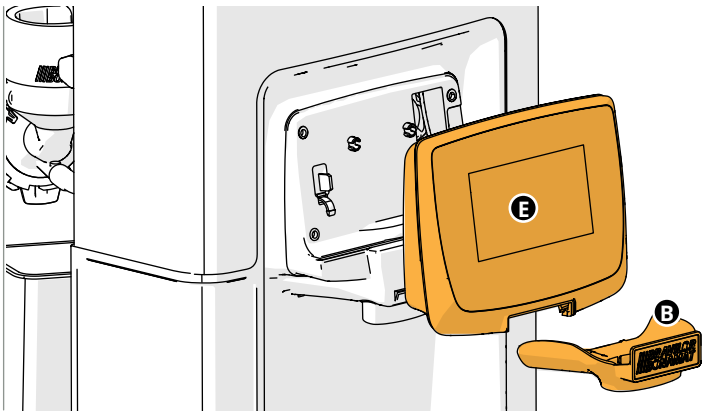



Step 1
- open the door
- remove the screw of the door lid Ⓐ
- remove the lid of the door Ⓑ
- remove the safety switch Ⓒ
- disconnect the connector of the wiring

## 2.2 Remove the service panel




Step 1
- open the door
- remove 1 screw from the chrome (coloured) outlet cover A
- remove the chrome outlet cover B
- remove the wiring cover C
- disconnect the wiring

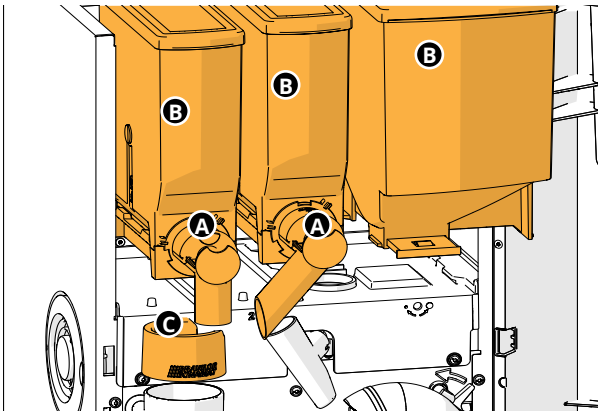



Step 2
- hold the touch screen and remove the 4 screws D on the inside of the door
- pull the service panel towards you E

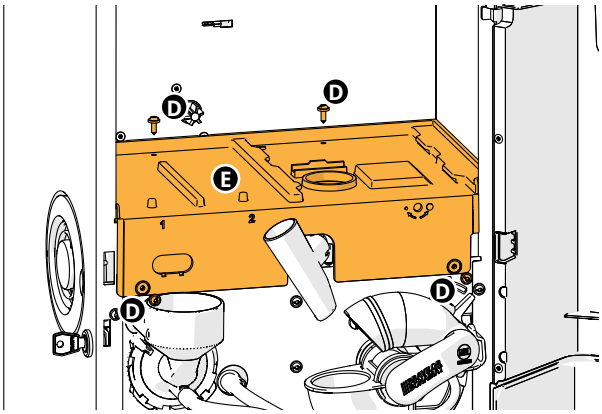
► *The service panel is delivered without software, you need to download the software yourself on an USB-stick from our website.*

- go to www.bravilor.com and log in with your login name and password
- select Sego machine
- download the software on the USB-stick
- mount the new service panel
- insert the USB-stick with the software in the machine (USB-slot in the door)
- set the time and date
- enter the serial number (see ID−plate − 02000******)
- the software is now loaded from the USB-stick (this may take several minutes)
- the machine will start up with the installation program
- remove the USB-stick
- run the complete installation program
- the machine is now ready for use again

## 2.3 Remove the fan motor

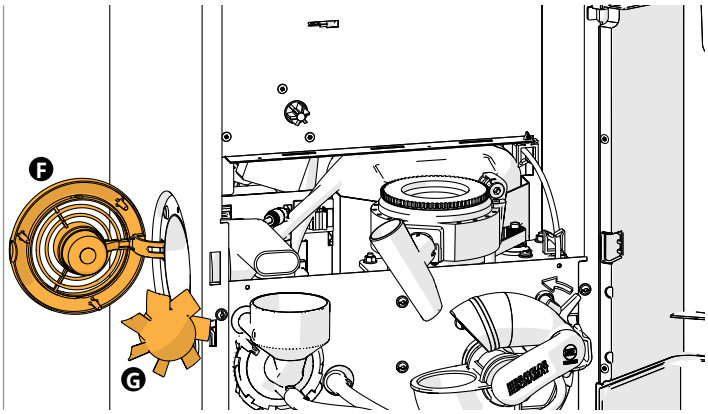



Step 1
- open the door and lid
- close the “yellow” slider of the canister outlets Ⓐ
- take all the canisters out of the machine Ⓑ
- remove the condense reservoir of the mixing unit Ⓒ

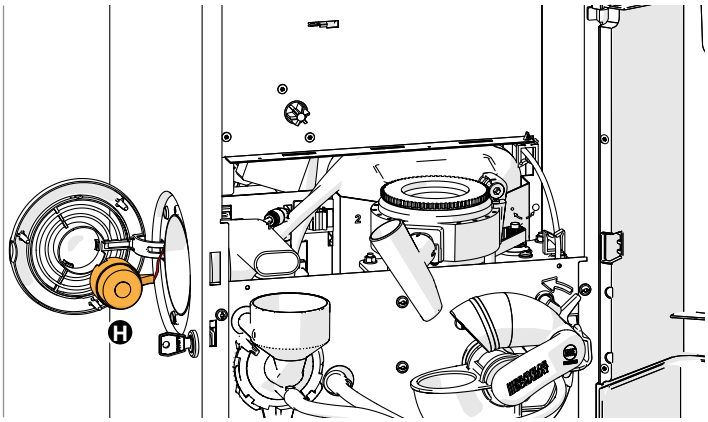



Step 2
- remove 4 screws from the protective plate Ⓓ
- remove the protected plate (service hatch) Ⓔ

► *The service area can have sharp edges, wear gloves and long sleeves.*

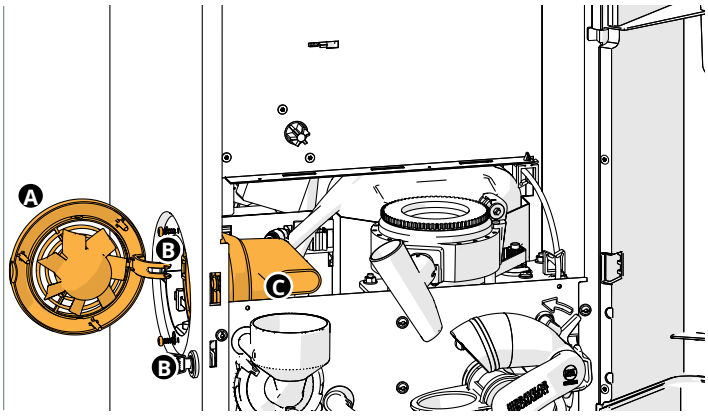



Step 3
- open the fan grid Ⓕ
- remove the fan rotor Ⓖ




Step 4
- disconnect the connector through the service hatch
- lead the wiring with the connector through the opening to the outside
- remove the fan motor Ⓗ

## 2.4 Remove the fan housing




Step 1
- take out the canisters as in Step 1 of section 2.3

Step 2
- remove the protective plate/service hatch as in Step 2 of section 2.3

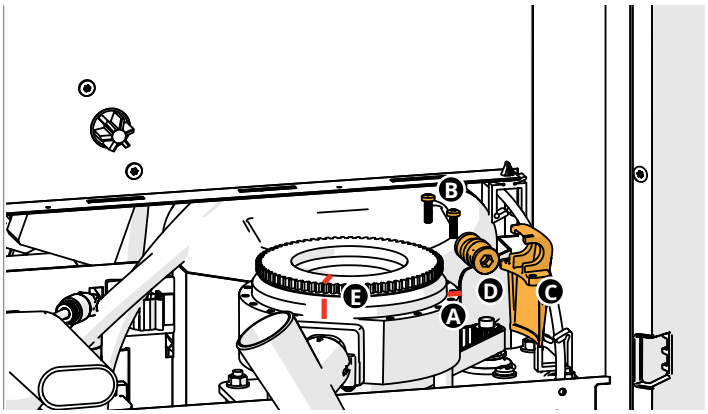
Step 3
- open the fan grid Ⓐ
- disconnect the connector through the service hatch
- remove the fan grid
- remove 2 screws from the fan housing Ⓑ
- remove the fan housing Ⓒ

## 2.5 Remove the grinding discs

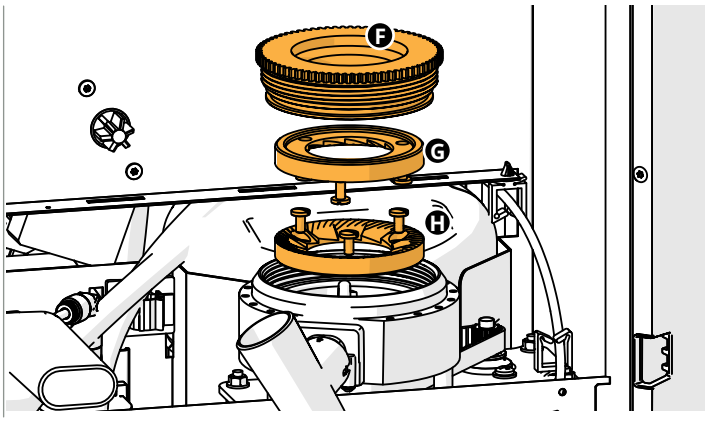
- ► *Use a vacuum cleaner to remove all existing coffee beans.*
- ► *Wear gloves to protect your hands.*
- ► *Always replace both disks at the same time.*
- ► *When reassembling the machine, ensure that the grinding discs do not touch before switching on the machine.*

Step 1
- take out the canisters as in Step 1 of section 2.3

Step 2
- remove the protective plate/service hatch as in Step 2 of section 2.3

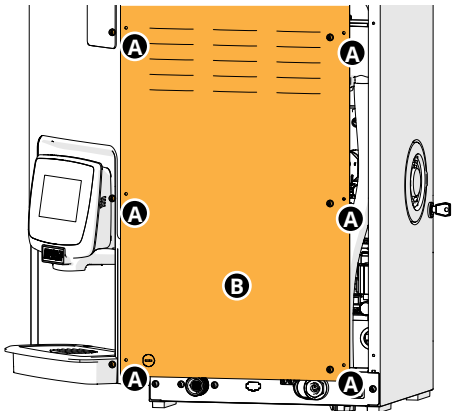



Step 3
- mark the position Ⓐ of the bracket for the setting wheel
- remove 2 screws Ⓑ of the bracket
- remove the bracket Ⓒ and the setting wheel Ⓓ
- mark the adjusting wheel on top, for example in the middle of the grinder outlet Ⓔ , so that the position is known




Step 4
- remove the adjusting wheel Ⓕ
  - ► *Count the amount of rotations to open the grinder, this for reassembling.*
- remove the 3 screws Ⓖ of the upper grinding disc and remove it
- remove the 3 screws Ⓗ of the lower grinding disc and remove it
  - ► *Press and hold the drive belt slightly to hold the grinding wheel in place, then loosen the screws.*

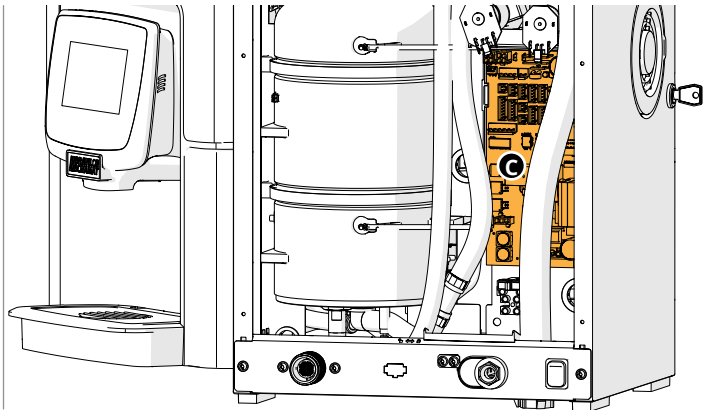
## 2.6 Remove the grinder



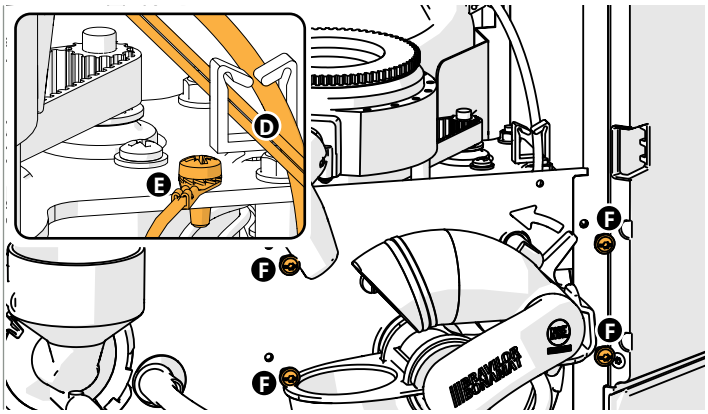

Step 1
- take out the canisters as in Step 1 of section 2.3

Step 2
- remove the protective plate/service hatch as in Step 2 of section 2.3

Step 3
- remove the 6 screws Ⓐ of the back panel
- remove the back panel Ⓑ
- disconnect the connector from the mainboard

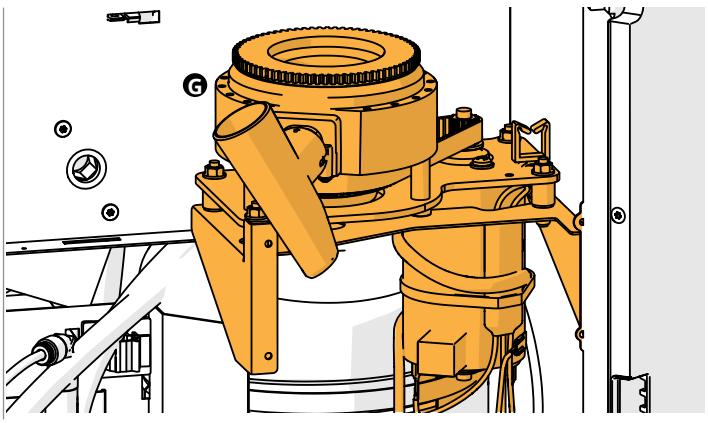



Step 4
- disconnect the grinder wiring and 'Hall sensors' from the mainboard Ⓒ




Step 5
- remove the wiring and the water hose Ⓓ from the cable clip on the right side of the grinder
- remove the screw from the earth wire Ⓔ
- remove the 4 screws Ⓕ of the grinder bracket

► *To makes it easier to reach all 4 screws you may remove the CIRCO brewer, see section 2.7 Step 1*

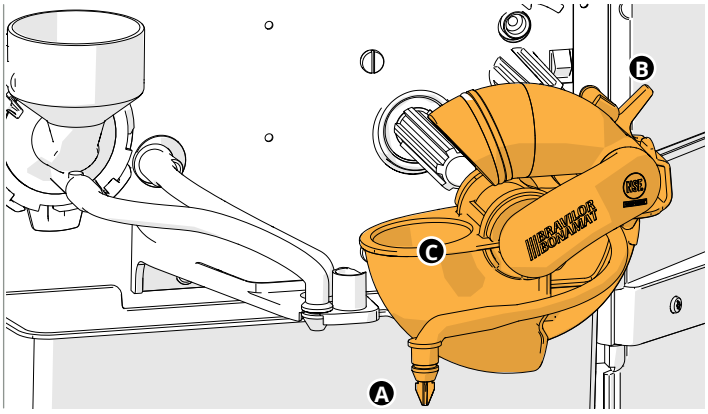



Step 6
- remove the bracket with grinder Ⓖ through the service hatch

► *Do not forget to connect the earth wire during installation.*

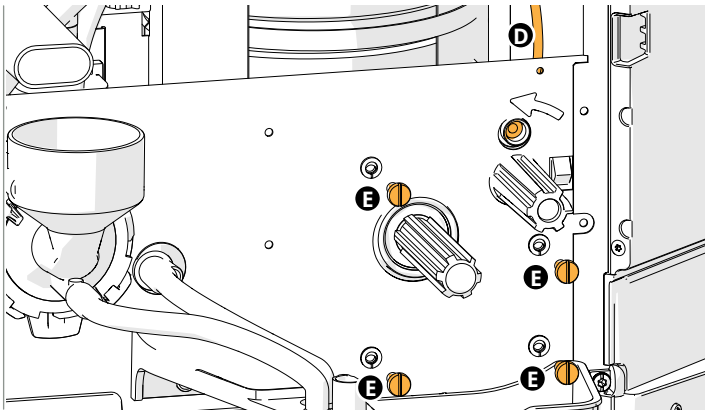
## 2.7 Remove the brewer motor

► *A maintenance kit is available for the periodic replacement of the CIRCO brewer components, the instructions of which are shown in an animation.*
*This '**Service kit instructions**' animation is on the Sego website and on our You-tube channel in the Sego play list https://www.youtube.com/user/BravilorBonamatBV/playlists.*

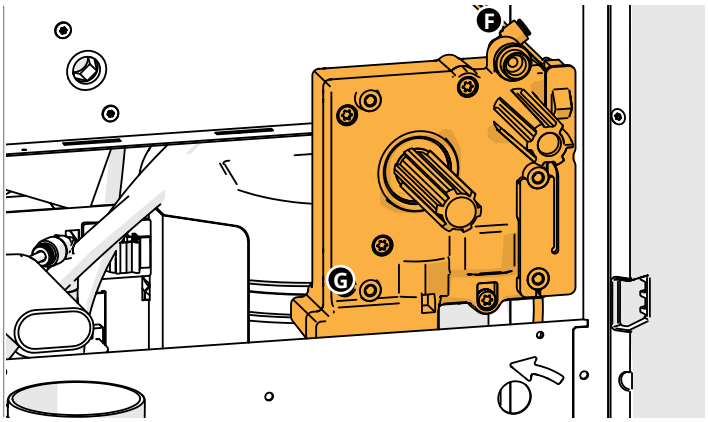



► *First remove the grinder as in section 2.6 to make room for removing the brewing motor*

Step 1
- remove the hose outlet Ⓐ from the bracket
- turn the lock Ⓑ counter clockwise
- remove the CIRCO brewer Ⓒ

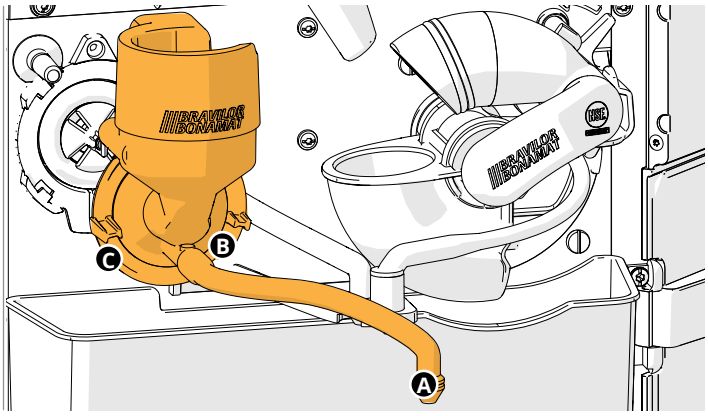



Step 2
- disconnect the wiring of the brewer switch
- disconnect the hose Ⓓ from the coupling Ⓕ
- remove 4 screws Ⓔ from the brewer motor



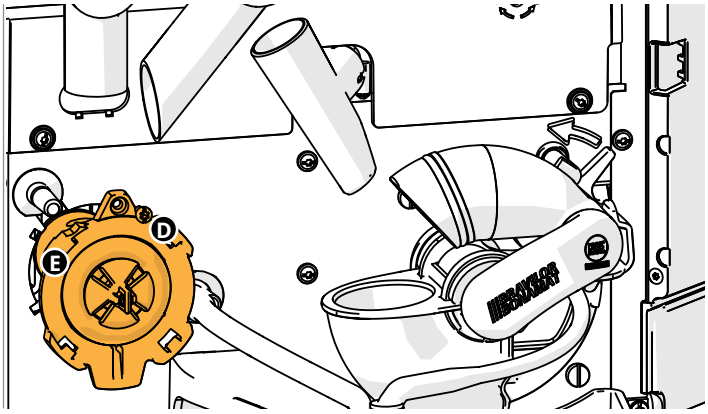

Step 3
- take the brewer motor Ⓖ out the machine
- disconnect the motor wiring

## 2.8 Remove the mixer motor

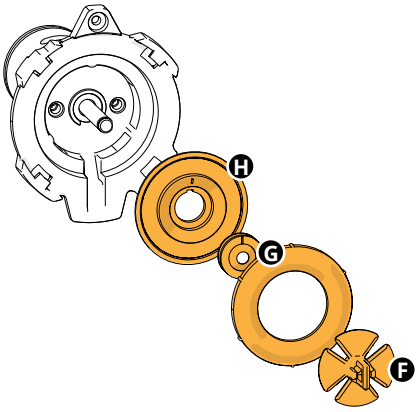



Step 1
- take out the canisters as in Step 1 of section 2.3

Step 2
- remove the hose outlet Ⓐ from the bracket
- turn the fixation ring Ⓑ counter-clockwise
- remove the mixing unit Ⓒ

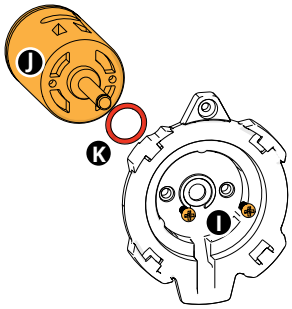



Step 3
- remove the screw Ⓓ of the mixer motor plate
- detach the mixer motor plate Ⓔ and carefully and pull it towards you




Step 4
- disconnect the wiring
- remove the mixer Ⓕ
- remove both seals Ⓖ and seal holder Ⓗ

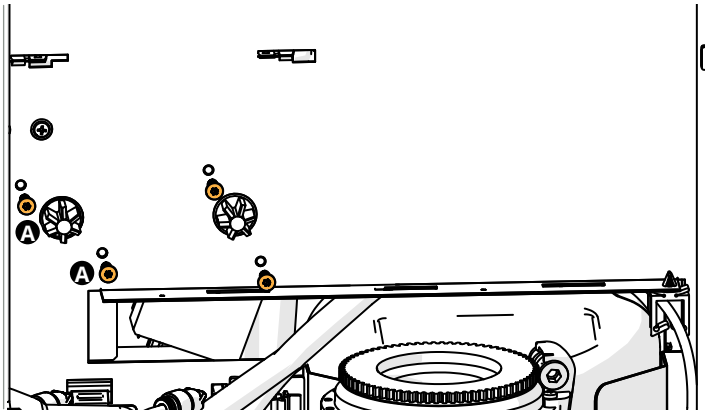
► *Consider to exchange the seals.*




Step 5
- remove the 2 screws Ⓘ
- remove the mixer motor Ⓙ

► *Consider to exchange the O-ring Ⓚ*

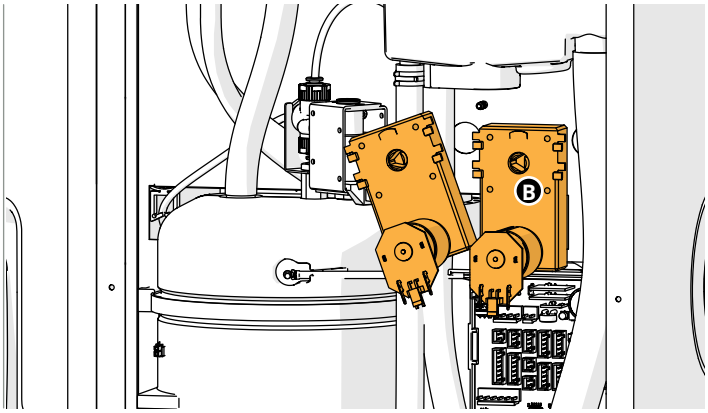
## 2.9 Remove the canister motor




Step 1
- take out the canisters as in Step 1 of section 2.3

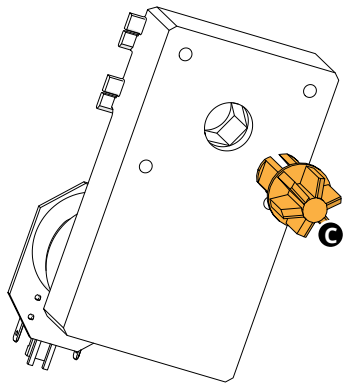
Step 2
- remove the protective plate/service hatch as in Step 2 of section 2.3

Step 3
- remove the 2 screws Ⓐ of one of the canister motors



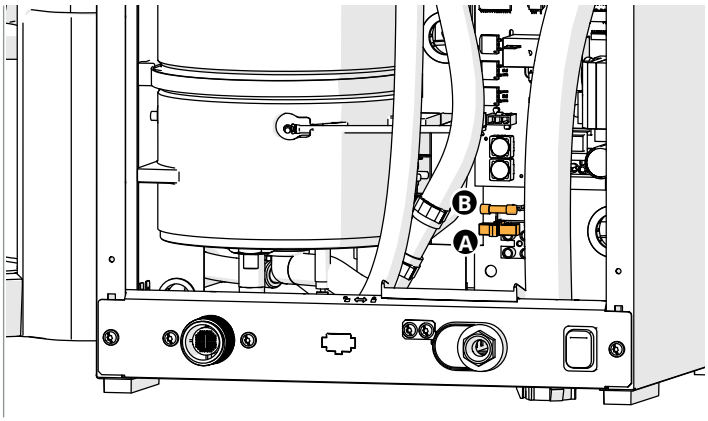

Step 4
- remove the back panel as in Step 3 of section 2.6

Step 5
- remove the canister motor Ⓑ
- disconnect the wiring




Step 6
- remove the drive shaft Ⓒ

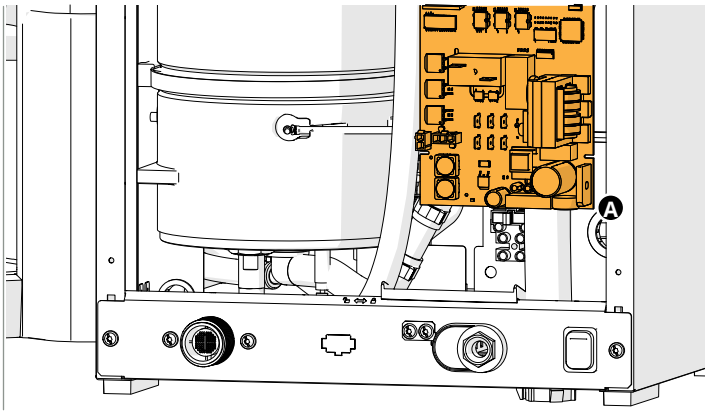
## 2.10 Remove the fuse




Step 1
- remove the back panel as in Step 3 of section 2.6

Step 2
- remove the (black) cover Ⓐ
- remove the fuse Ⓑ

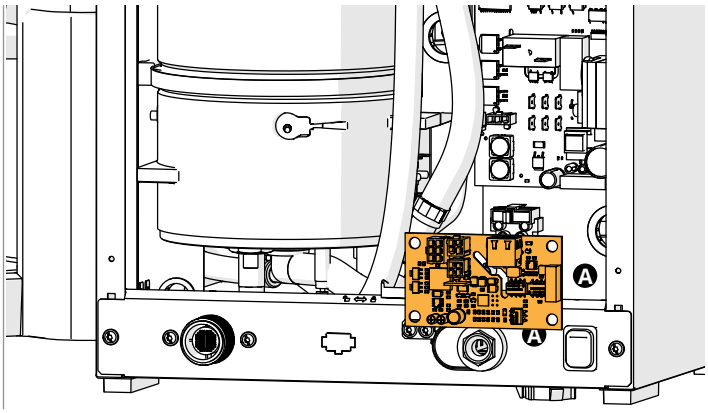
## 2.11 Remove the mainboard




Step 1
- remove the back panel as in Step 3 of section 2.6

Step 2
- disconnect the wiring
- remove the mainboard A

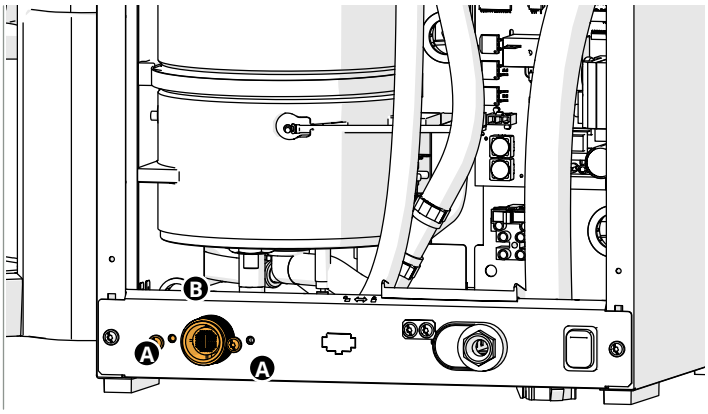
## 2.12 Remove the (optional) interface board




Step 1
- remove the back panel as in Step 3 of section 2.6

Step 2
- disconnect the wiring
- remove the interface board A

## 2.13 Remove the inlet valve




Step 1
- remove the back panel as in Step 3 of section 2.6

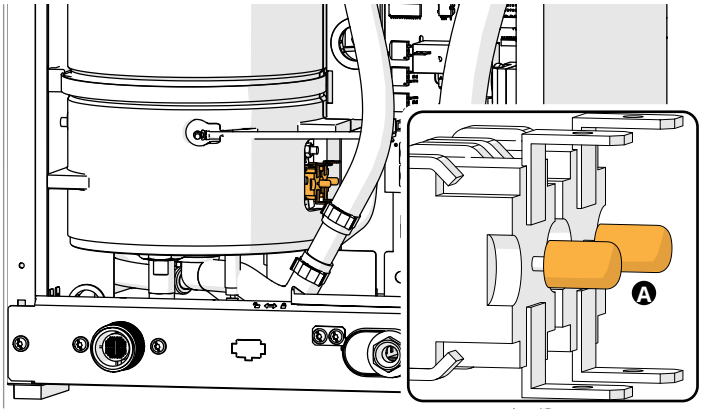
Step 2
- disconnect the wiring
- remove the 2 screws A of the valve bracket
- remove the inlet valve B
- disconnect the hose

► *Some water may come out of the hose.*

## 2.14 Remove the boiler (parts)

► *The boiler and their parts can be hot.*

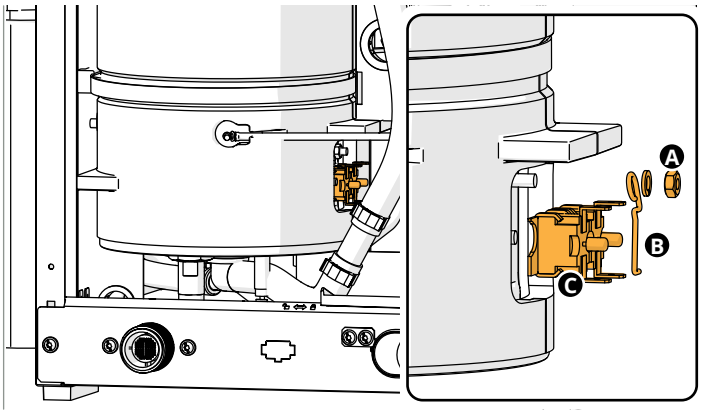
### 2.14.1 Reset the boiler thermostat




Step 1
- remove the back panel as in Step 3 of section 2.6

Step 2
- push both switches Ⓐ to reset

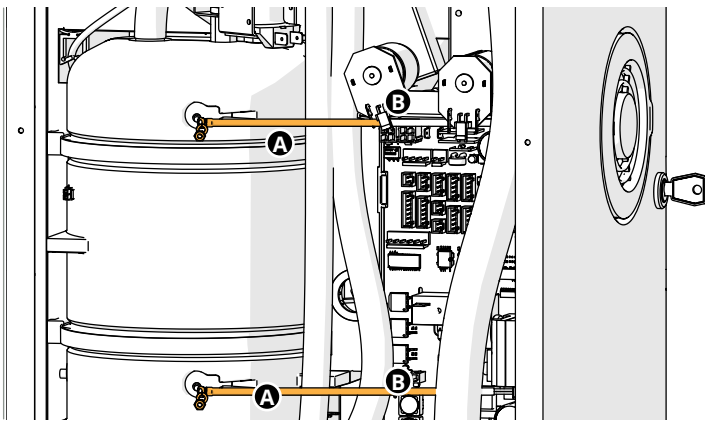
### 2.14.2 Remove the thermostat




Step 1
- remove the back panel as in Step 3 of section 2.6

Step 2
- disconnect the wiring
- remove the bolt of the thermostat Ⓐ
- remove the bracket Ⓑ
- remove the thermostat Ⓒ

### 2.14.3 Remove the temperature sensor

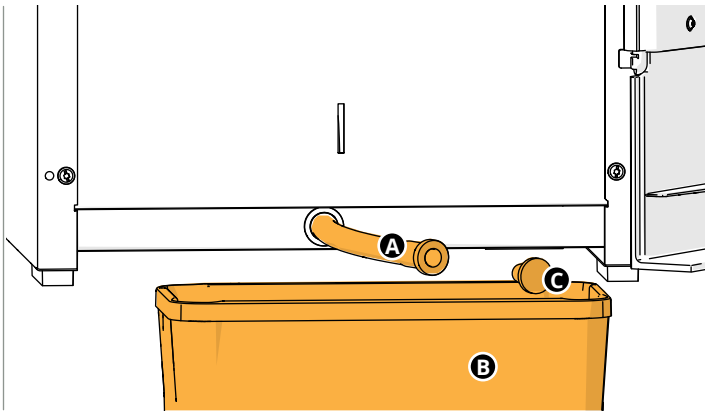



Step 1
- remove the back panel as in Step 3 of section 2.6

Step 2
- disconnect the wiring from the mainboard
- remove the bolt Ⓐ of the temperature sensor
- remove the temperature sensor Ⓑ

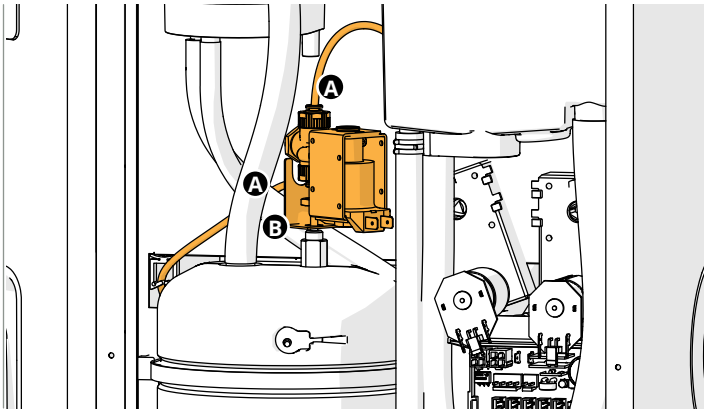
► *Keep in mind that the top sensor on the boiler needs to be attached on the top of the mainboard.*

## 2.14.4 Remove the hot water valve



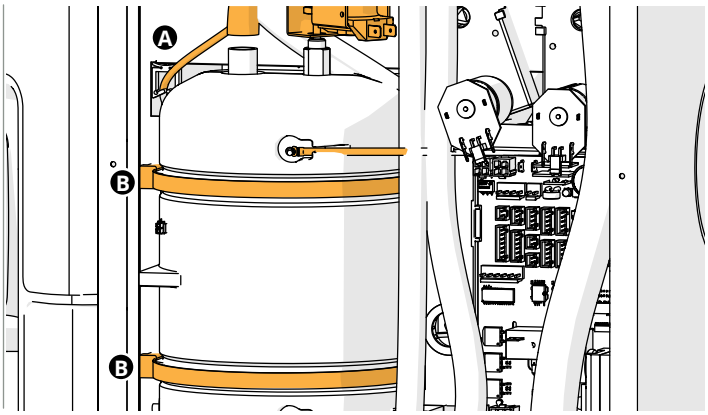

► *When the boilers is drained, hot water comes out of the drain hose, therefore take protective measures.*

Step 1
- open the door
- remove the drip tray and waste bin
- pull out the drain hose Ⓐ
- place a container under the drain hose Ⓑ
- remove the tightening plug Ⓒ
- wait until all the water has drained out of the boiler
- replace the tightening plug




Step 2
- disconnect the wiring
- disconnect the 2 thin hoses Ⓐ
- loosen the bolt Ⓑ
- remove the hot water valve

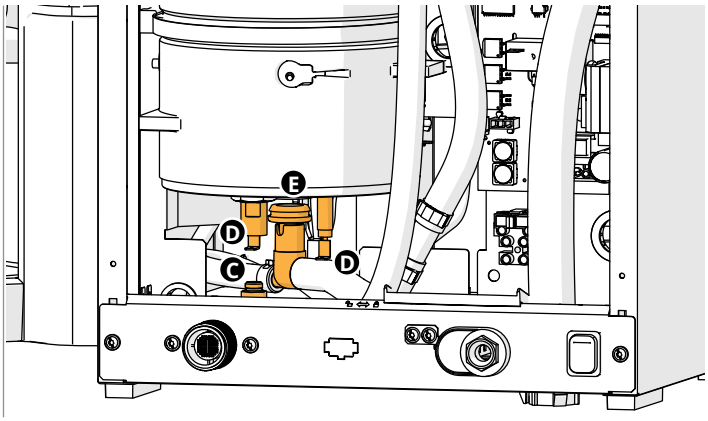
## 2.14.5 Remove the boiler




Step 1
- drain the boiler as in Step 1 of section 2.14.4

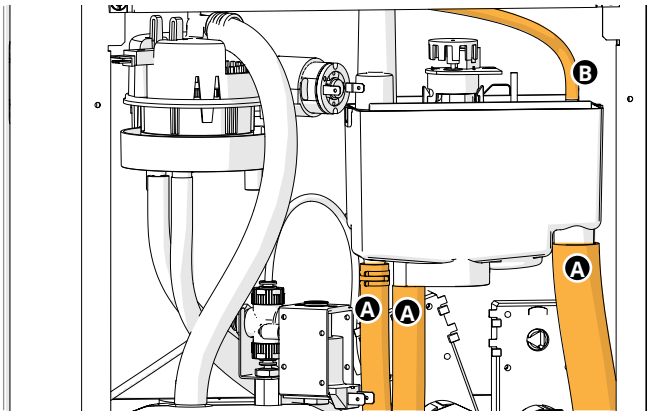
► *When the boiler is drained, hot water comes out of the drain hose, therefore take protective measures.*

Step 2
- remove the thermostat, see section 2.14.2
- remove the temperature sensors from the boiler, see section 2.14.3
- remove the hot water valve, see section 2.14.4
- remove the hose on top of the boiler Ⓐ
- loosen the 2 metal boiler clamps Ⓑ and move the boiler up



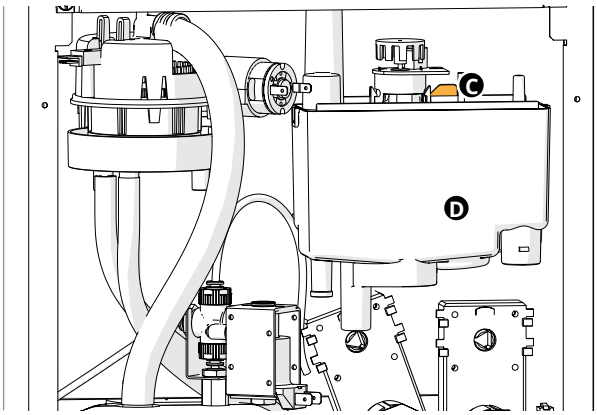

Step 3
- disconnect the pressure hose Ⓒ and wiring of the elements Ⓓ underneath the boiler
- pull the boiler supply Ⓔ out of the boiler
- open the 2 metal boiler clamps to remove the boiler
- remove the isolation parts

## 2.15 Remove the pump float tank




Step 1
- drain the boiler as in Step 1 of section 2.14.4

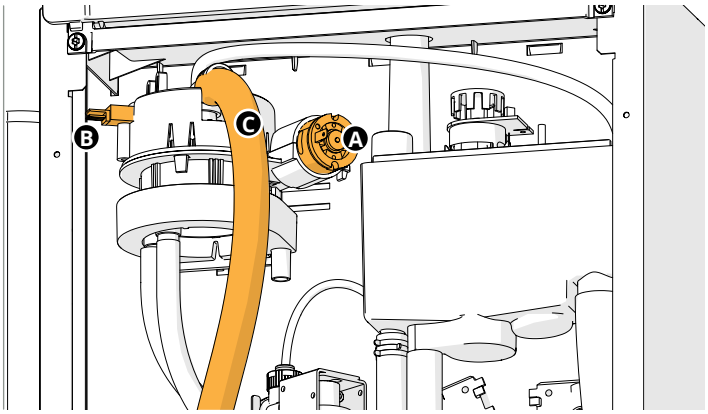
Step 2
- disconnect the connector of the float from the wiring
- remove the descaler inlet cap
- disconnect the 3 hoses underneath the float tank Ⓐ
- disconnect the aeration hose Ⓑ on top of the float tank
- disconnect the wiring from the pump




Step 3
- push the locking pawl Ⓒ forward
- move the pump float tank Ⓓ to the left to unlock it
- remove the pump float tank

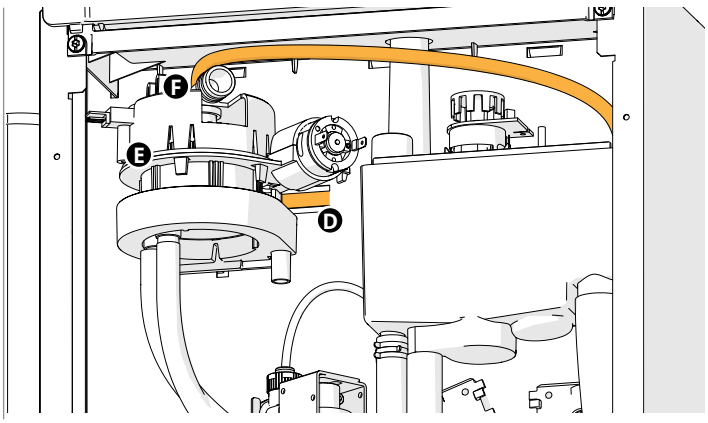
► *First remove the positioning disc to take out the pump motor.*

## 2.16 Remove the water selector




Step 1
- drain the boiler as in Step 1 of section 2.14.4

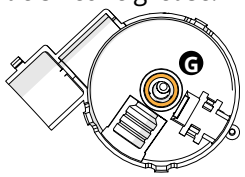
Step 2
- disconnect the wiring from the motor Ⓐ
- disconnect the wiring from the light sensor Ⓑ
- disconnect the hot water supply hose Ⓒ




Step 3
- push the locking pawl Ⓓ forward
- move the water selector Ⓔ to the right to unlock it
- disconnect the aeration hose Ⓕ

► *Maintenance can be carried out without disconnecting the hoses from the water selector outlet.*

► *Consider greasing the notch Ⓖ in the lid, where the rotating disc rotates, with food-grade silicone grease.*

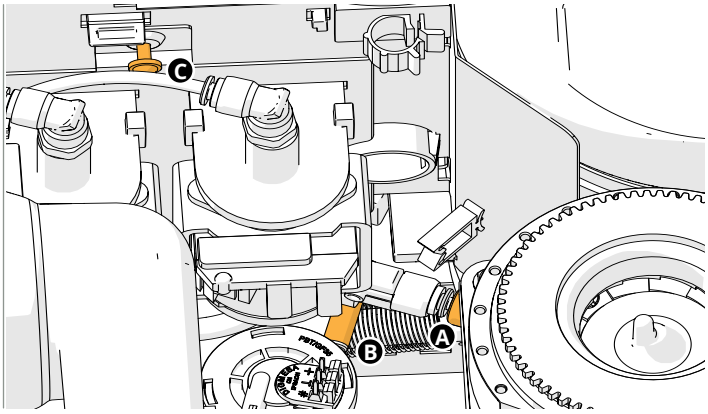


## 2.17 Remove the pump set

Step 1
- drain the boiler as in Step 1 of section 2.14.4

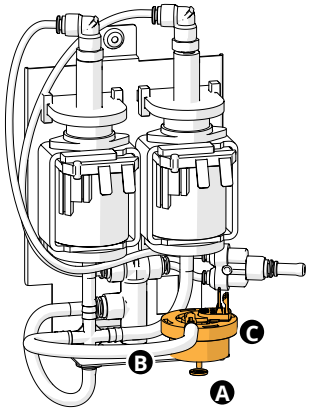
Step 2
- take out the canisters as in Step 1 of section 2.3

Step 3
- remove the protective plate/service hatch as in Step 2 of section 2.3




Step 4
- disconnect the supply pressure hose from the pump set Ⓐ
- disconnect the hose from the water counter Ⓑ
- disconnect the wiring of the water counter and pumps
- remove the screw of the bracket of the pumps Ⓒ
- tilt up the bracket and remove the hose from the water counter
- remove the red pressure hose under the pump
- remove the pump set

## 2.18 Remove the water counter




Step 1
- remove the pump set as in section 2.17

Step 2
- remove the starlock Ⓐ under the water counter
- disconnect the hose Ⓑ
- remove the water counter Ⓒ

# 3. Trouble shooting

## 3.1 Machine errors

| code | description | detection | suspected components |
|---|---|---|---|
| 00000 | communication error bus system | the bus systems circuit is interrupted | • cable between mainboard and touch screen |
| | | | • mainboard |
| | | | • touch screen |
| 00001 | canister motor runs insufficiently | no rotation of the canister motor detected by the software | • resistance in canister too high due to much powder in canister |
| | | | • canister motor |
| | | | • wiring |
| | | | • mainboard |
| 00101 | mixer motor runs insufficiently | no rotation of the mixer motor detected by the software | • mix system clogged |
| | | | • mixer motor |
| | | | • wiring |
| | | | • mainboard |
| 00201 | low-pressure pump runs insufficiently | light sensor receives not enough pulses for too long a time | • low pressure pump |
| | | | • blockage (scale) low pressure pump |
| | | | • encoder blocked |
| | | | • wiring |
| | | | • mainboard |
| 00401 | grinder runs insufficiently | the software has not received pulses from the hall sensor for too long a time | • grinder blocked, something between the grinder discs |
| | | | • grinder motor |
| | | | • hall sensor |
| | | | • wiring |
| | | | • mainboard |
| 00402 | grinder is incorrectly controlled | if a semiconductor on the mainboard gets defect the grinder runs unjustified | • mainboard |
| | | | • coffee (static) around the hall sensor |
| 02001 | filling process takes too long | the water inlet valve was open for 20 seconds in succession and the float did not rise | • water tap not opened |
| | | | • water supply hose kinked |
| | | | • water pressure too low |
| | | | • water flow too low |
| | | | • inlet valve |
| | | | • wiring |
| | | | • float |

| code | description | detection | suspected components |
|---|---|---|---|
| 02002 | fill up 3 times without selection | a NTC measures a resistance that is lower than normal | • temperature sensor<br>• wiring<br>• mainboard |
| | | | • wiring |
| | | | • mainboard |
| 02101 | break temperature sensor boiler | a NTC measures a resistance that is higher than normal | • temperature sensor |
| | | | • wiring |
| | | | • mainboard |
| 02102 | short-circuit temperature sensor boiler | a NTC measures a resistance that is lower than normal | • temperature sensor |
| | | | • wiring |
| | | | • mainboard |
| 02201 | no pulse detection water selector sensor | the light sensor receives not enough pulses for too long a time | • scale inside water selector |
| | | | • motor water selector |
| | | | • light sensor |
| | | | • wiring |
| | | | • mainboard |
| 02202 | water selector in wrong position | the hot water selector cannot find its zero position | • scale inside water selector |
| | | | • water rotation disc |
| 04301 | rotation brewer does not move | the espresso brewer mechanism is not reaching the desired position | • brewer not mounted correct |
| | | | • brewer motor defect |
| | | | • wiring |
| 04401 | water counter gives no pulses | pulses from the flow meter have not been measured for too long a time or when both high pressure pumps do not work | • air in hoses |
| | | | • high pressure pumps |
| | | | • wiring |
| | | | • water counter |
| 10001 | general I/O error | the I/O module is reporting an error | • mainboard |

## 3.2 Coin mechanism errors

| code | description |
|---|---|
| 07001 | coin mechanism missing |
| 07002 | coin mechanism defective |
| 07003 | coin mechanism blocked |
| 07004 | coin mechanism sabotaged |
| 07005 | communication error coin mechanism |
| 07006 | general error coin mechanism |
| 07101 | error in cashless device |

## 3.3 Machine messages

| Message | Reason of the message | Procedure to reset the message | Check the following |
|---|---|---|---|
| empty waste bin | the amount of cups passed the set amount of cups that fit the waste bin | empty the waste bin, door switch needs to be open for 5 seconds and closed again, a reset message appears in the screen if the waste bin is emptied | > *process settings* > *waste bin counter* |
| the machine show the clean brewer message | the machine has passed the set amount of cups or days for the clean brewer message | perform the clean brewer program: > *maintenance* > *cleaning brewer* | > *process settings* > *cleaning management* > *message cleaning brewer* |
| the machine shows the rinsing coffee machine message | the machine has passed the set amount of cups or days for the rinsing coffee machine message | perform the rinsing coffee machine program: > *maintenance* > *rinsing coffee machine* | > *process settings* > *cleaning management* > *message rinsing machine* |
| the machine shows the water filter replacement message | the amount of litres or month has past the set value for the water filter | manually reset the replace water filter message: > *maintenance* > *replace water filter* | > *process settings* > *water filter* |
| the machine shows the descale coffee system message | the amount of litres used by the machine has passed the amount of litres used for the coffee and instant system, this amount is determined by the setting of the hardness of the water in the machine | perform the descale procedure for the coffee system: > *maintenance* > *descale machine* > *descale coffee system* | > *process settings* > *descale management* |
| the machine shows the ‘enter the general PIN-code or ‘service’ menu PIN-code’ message | a general pin code is set on the machine, this pin code needs to be entered when accessing the programming menu (maintenance excluded) | enter the general pin code or service menu pin code | > *machine settings* > *PIN code settings* |
| the machine shows the ‘enter the ‘service’ menu PIN-code’ message | a PIN code for the service menu is set on the machine, this pin code needs to be entered when accessing the service menu | enter the pin code for the service menu | > *machine settings* > *PIN code settings* |
| energy-saving mode | the machine is not used for the amount of time that is set in the 'energy-saving mode' | touch the screen | > *process settings* > *energy-saving mode* |

## 3.4 Other problems

In addition to the messages and errors present in the machine, a number of other problems may occur; these problems are described below.

### 3.4.1 Coffee related

| Problem description | Possible cause | Check the following |
|---|---|---|
| coffee related drink to weak | almost out of coffee beans | • fill bean canister |
| | grinder calibration | • grinder calibration |
| | strength / contact time not correct | • adjust drink settings, strength and contact time coffee |
| | brewer issue | • brewer and brewer process |
| coffee related drink to strong | grinder calibration | • grinder calibration |
| | strength / contact time not correct | • adjust drink settings, strength and contact time coffee |
| only hot water is dispensed when a coffee drink is selected | out of coffee beans | • fill bean canister |
| less coffee in the cup than normal | brewer leaking | • brewer and brewer process |
| | high pressure pump not calibrated | • high pressure pump calibration |
| not enough crema on coffee | drink setting not correct | • adjust drink settings |
| | grinder setting | • adjust grinder |
| | grinder calibration | • calibrate grinder |
| | brewer not cleaned | • run cleaning brewer program with coffee cleaning pill |
| | coffee outdated, date expired | • use new coffee beans |

### 3.4.2 Instant ingredients related

| Problem description | Possible cause | Check the following |
|---|---|---|
| instant related drink to weak | almost out of powder in ingredient canister | • ingredient container |
| | strength not correct | • adjust drink settings, strength instant |
| instant related drink to strong | strength not correct | • adjust drink settings, strength instant |
| no water dosed (instant and hot water related) | water level to low | • float |
| | hose blocked (scale) | • all related hoses |
| mixing bowl clogs up | to much powder used | • check the advise dosing of the packaging of the powder, use a scale to weight the amount of powder used |
| | low pressure pump calibration not correct | • calibrate the low pressure pump |
| | water selector gives water in wrong outlet | • water selector |
| | hose blocked | • all related hoses |
| mixing bowl overflows water | low pressure pump calibration to high | • calibrate the low pressure pump |
| | mixing bowl clogged up | • mixing bowl |
| mixing bowl leaks | mixing bowl seal worn | • seal mixing bowl |

| Problem description | Possible cause | Check the following |
|---|---|---|
| no foam on instant drink | mixer speed not correct | • adjust drink setting, mixer speed |
| | type of instant ingredient | • try a different instant ingredient |
| to much foam on instant drink | mixer speed not correct | • adjust drink setting, mixer speed |
| water dispensed in wrong outlet | scale in water selector | • clean water selector |
| | hose blocked | • all related hoses |

### 3.4.3 Machine related

| Problem description | Possible cause | Check the following |
|---|---|---|
| machine doesn't turn on | no power | • check power supply |
| | | • check power cable connection |
| | main switch off | • main switch |
| | internal fuse blown | • replace fuse |
| | transformer issue | • transformer |
| | wiring issue | • internal wiring |
| | mainboard issue | • mainboard |
| | touch screen issue | • touch screen |
| ventilator doesn't turn | ventilator blocked | • ventilator |
| | ventilator motor defect | • ventilator motor |
| drinks blocked and temperature doesn't raise | boiler not heating | • temperature safety device |
| | | • heating element |
| | | • temperature sensor |
| | | • wiring |
| | | • mainboard |
| heating message in the display but the temperature doesn't rise | boiler not heating | • temperature safety device |
| | | • heating element |
| | | • mainboard |
| coffee drinks greyed out, instant only drinks and hot water can be selected | temperature not yet on the desired temperature for coffee | • nothing, boiler needs to heat further to reach the desired temperature for coffee |
| | temperature sensors switched around on the mainboard | • temperature sensor connection on the mainboard |
| | temperature safety device not functioning correct | • temperature safety device |
| the waste bin needs to be emptied multiple times a day | the machine is used for more drinks than specified | • consider to use the 'raiser set' which has a bigger waste bin and drip tray |

# 4. Special functions

## 4.1 Master PIN-code

► *The master PIN code can be used when the set PIN code is forgotten.*

- The master PIN code to overrule PIN 1 and PIN 2 is ***1948***.

## 4.2 Reset the counters

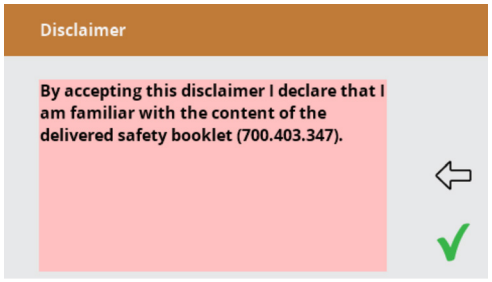
The counters tell you how many beverages have been prepared.
A total counter of all issued beverages is also shown.
If a drink is removed, the number of that beverage is still counted in the total machine counter.

► *The total machine counter can not be removed.*

## 4.3 Overriding the first install program

► *This is mainly to check the function of the machine if an unexpected error occurs during the first install program.*

- in the disclaimer screen there is an invisible button *(see the pink area in the screen below)*
- touch the screen for at least 10 seconds until the machine overrules the first install program
- after turning the machine off and on the machine will start up in the first install program again




## 4.4 Overriding the start-up procedure of the machine

► ***Required for installing new software updates.***

- when the machine starts up, the version of the software appears in the display *(see the example below)*
- when the version appears press the programming button on the inside of the door
- the machine shows the update screen.
- to update the machine download the latest software from our website www.bravilor.com

► ***Gives also access to the programming if the machine is not started up yet.***

# 5. Recipes (ex-factory)

## 5.1 Standard beverages/recipes

► *Only use instant ingredients that are suitable for vending machines (contains a flowing agent).*

| Recipe | Dosing sequence | Ingredient | Ratio grams | Partial ml | Total ml |
|---|---|---|---|---|---|
| ristretto | 1 | coffee beans | 8 | 25 | 25 |
| espresso | 1 | coffee beans | 9.3 | 40 | 40 |
| lungo / caffè crema | 1 | coffee beans | 8.5 | 120 | 120 |
| americano | 1 | coffee beans | 11.2 | 48 | 120 |
| | 2 | hot water | - | 72 | |
| cappuccino | 1 | topping | 10 | 80 | 120 |
| | 2 | coffee beans | 9.3 | 40 | |
| cappuccino dark | 1 | coffee beans | 9.3 | 40 | 120 |
| | 2 | topping | 10 | 80 | |
| latte macchiato | 1 | topping | 5 | 40 | 120 |
| | 2 | topping | 5 | 40 | |
| | 3 | coffee beans | 9.3 | 40 | |
| caffè latte / café au lait | 1 | coffee beans | 8.5 | 40 | 120 |
| | 2 | topping | 10 | 80 | |
| hot chocolate | 1 | cacao | 20 | 120 | 120 |
| hot chocolate deluxe | 1 | cacao | 20 | 80 | 120 |
| | 2 | topping | 2 | 40 | |
| espreschoc | 1 | cacao | 20 | 40 | 120 |
| | 2 | topping | 2 | 40 | |
| | 3 | coffee beans | 9.3 | 40 | |
| espressochoc | 1 | coffee beans | 9.3 | 40 | 120 |
| | 2 | cacao | 20 | 80 | |
| moccachino / wiener melange | 1 | topping | 13 | 40 | 120 |
| | 2 | cacao | 7 | 40 | |
| | 3 | coffee beans | 8.5 | 40 | |
| hot milk | 1 | topping | 12 | 120 | 120 |
| hot water | 1 | - | - | - | 120 |

## 5.2 Premix beverages

A premix is a customized blend of two or more ingredients.
With premix 1 and/or premix 2 in the canisters, you can choose the following recipes:

| Recipe | Dosing sequence | Ingredient | Ratio grams | Partial ml | Total ml |
|---|---|---|---|---|---|
| coffee + premix 1B | 1 | coffee beans | 8.5 | - | 120 |
| | 2 | premix 1 | 20% | - | |
| coffee + premix 2B | 1 | coffee beans | 8.5 | - | 120 |
| | 2 | premix 2 | 20% | - | |
| coffee + premix 1B+2B | 1 | coffee beans | 8.5 | - | 120 |
| | 2 | premix 1 | 20% | - | |
| | 2 | premix 2 | 20% | - | |
| premix 1A | 1 | premix 1 | 8% | - | 120 |
| premix 1B | 1 | premix 1 | 20% | - | 120 |
| premix 1C | 1 | premix 1 | 40% | - | 120 |
| premix 2A | 1 | premix 2 | 8% | - | 120 |
| premix 2B | 1 | premix 2 | 20% | - | 120 |
| premix 2C | 1 | premix 2 | 40% | - | 120 |
| premix 1B+2B | 1 | premix 1 | 20% | - | 120 |
| | 1 | premix 2 | 20% | - | |

The letters indicates a standard ratio
- A 8%
- B 20%
- C 40%

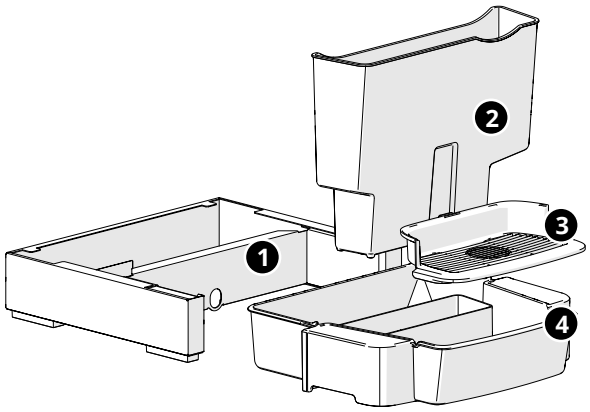
The ratio/grams can be changed in the programming

# 6. Accessories

## 6.1 Raiser set

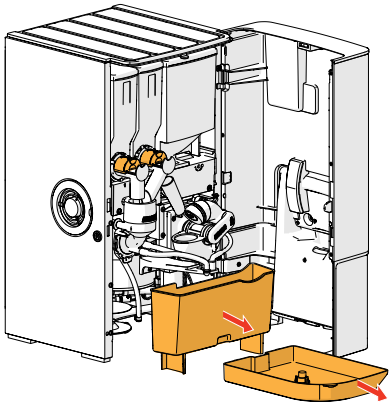
The Sego raiser set comprises a number of components: the Sego pedestal, a larger waste bin, a larger drip tray and a lower drip tray grid.
- The pedestal raises the standard Sego 12 by 60 mm. This brings the total machine height to 650 mm.
- The larger waste bin can hold about 40-55 waste coffee pucks (depending on the size, see Step 8 on p.25).
- The larger drip tray has room for more rinsing water, which means it needs emptying less frequently.
- The lower drip tray grid raises the tap height from 105 mm to 135 mm..

With a raiser set, it is also possible to connect the Sego to a water outlet, see 6.2 on p.26.

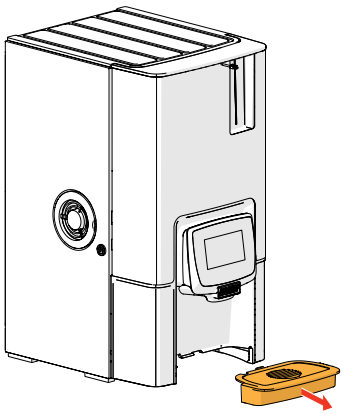



raiser set (7.270.623.101)
1. frame raiser Sego
2. waste bin XL Sego
3. drip tray grid XL Sego
4. drip tray XL Sego

► *If a drainage set is also to be installed, do so first as shown in section 6.2 on p.26.*

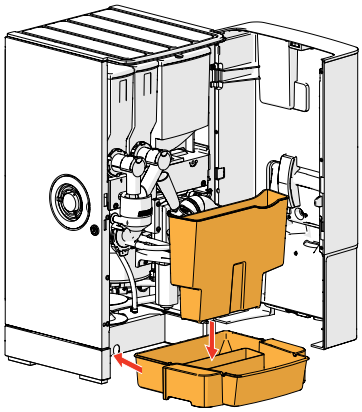


Step 1
- open the door
- close the canister outlets
- remove the drip tray, waste bin

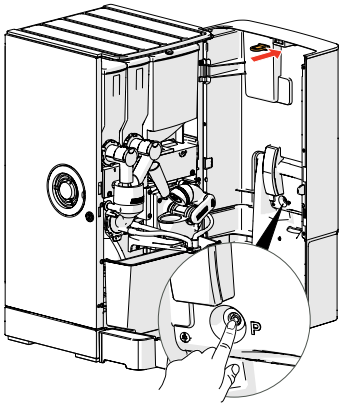


Step 2
- remove the drip tray grid

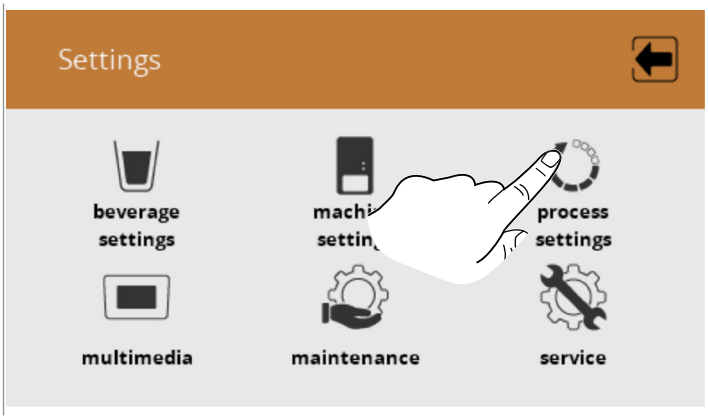
Step 3
- place the Sego carefully on its raiser set



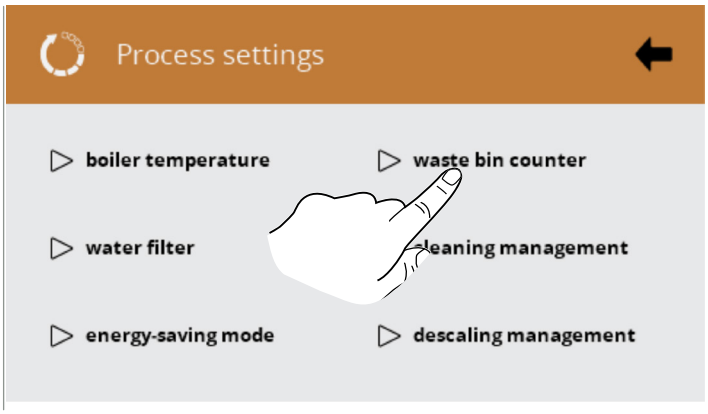
Step 4
- place the new drip tray and waste bin



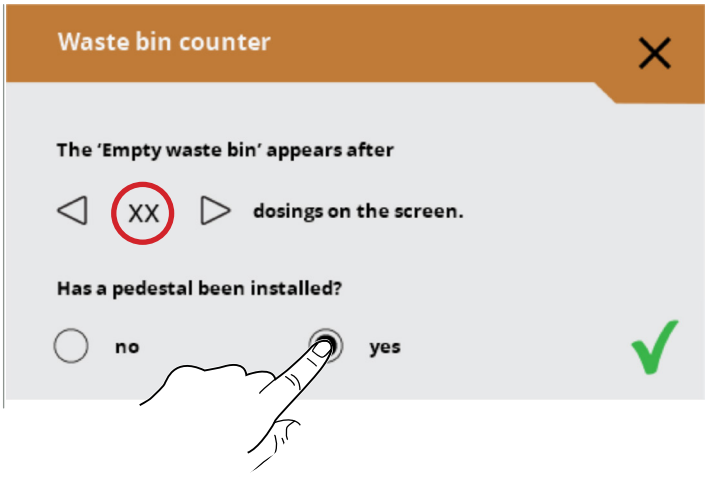
Step 5
- place the safety key
- press the P(rogramming) button




Step 6
- press ‘process settings’




Step 7
- press 'waste bin counter'

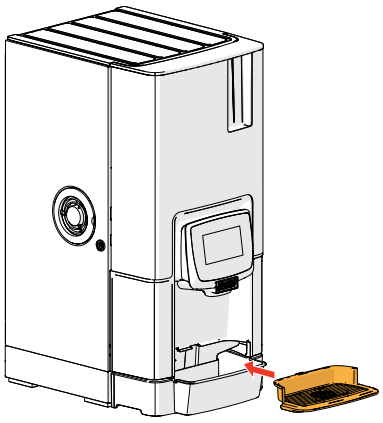



Step 8
- confirm installation of 'pedestal'
- set the number of dosages

► *The number depends on the size of the coffee pucks!*

| | coffee dosing | maximum coffee pucks for waste bin |
|---|---|---|
| STD | 7.5 gr | 55 |
| US / CA / MX | 12 gr (0.42 oz) | 40 |

- confirm your change

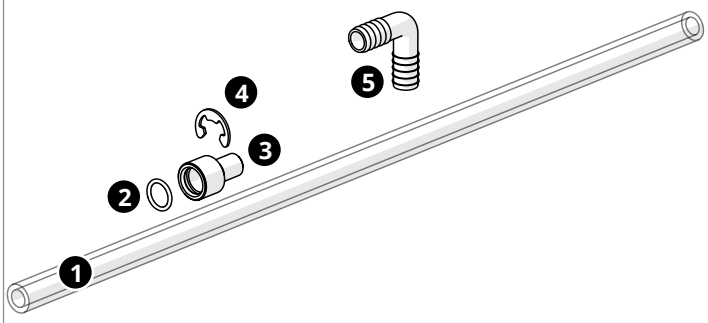


Step 9
- close the programming screen
- remove the safety key
- close the door
- place the new drip tray grid

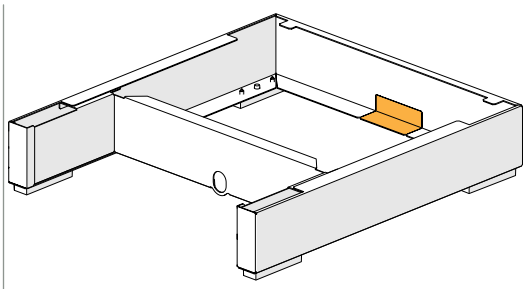
## 6.2 Drainage set

The Sego can be connected to a water outlet if desired.
In that case, you will require this drainage set.

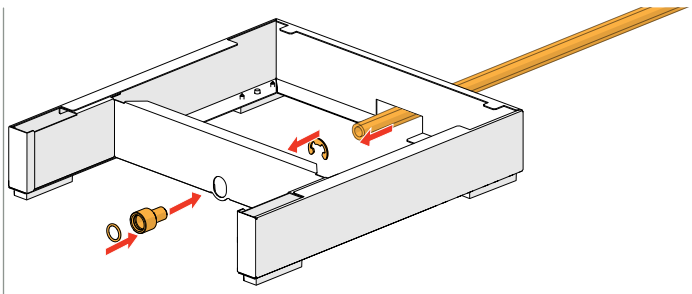
► *The Sego can only be connected to a drain when using the optional Sego raiser set, see section 6.1 on p.23.*



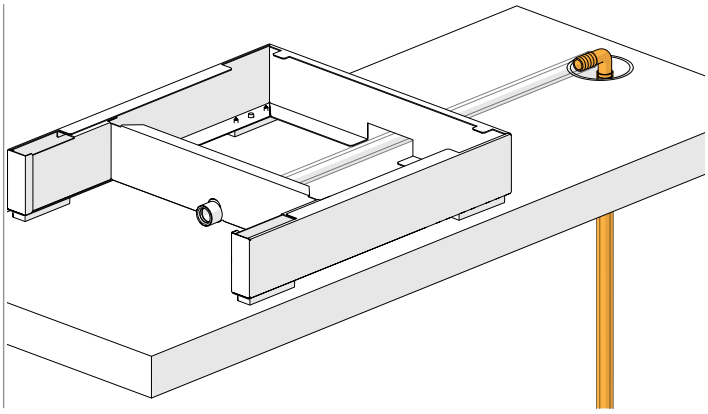

Drainage set
1. hose
2. O-ring
3. drain connection drip tray
4. shaft cir-clip
5. elbow coupling



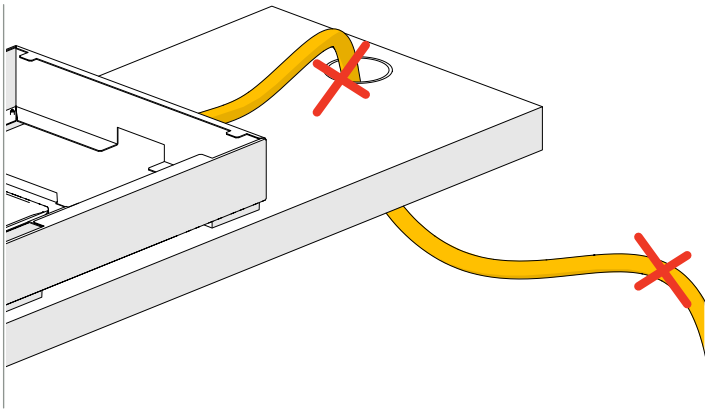
Step 1
- cut indicated part for hose pass-through
- smooth / sand the edges



Step 2
- place the O-ring in the drain connection drip tray
- place the drain connection in the frame
- insert the hose through the prepared through-hole and connect it to the drain fitting
- lock the hose with the shaft cir-clip

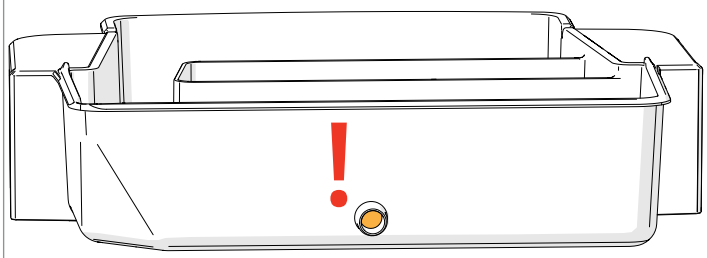


Step 4
- cut the hose to the required length
- use an elbow coupling to connect the 2 hoses



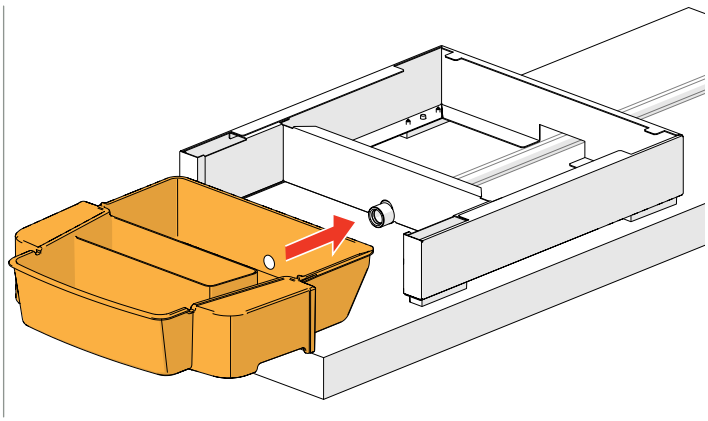
Step 5

► *Make sure that no syphoning can take place, otherwise the wastewater will not flow*




Ø 10 mm

Step 6
- drill out the drip tray drainage spout (from the back)



Step 7
- place the drip tray

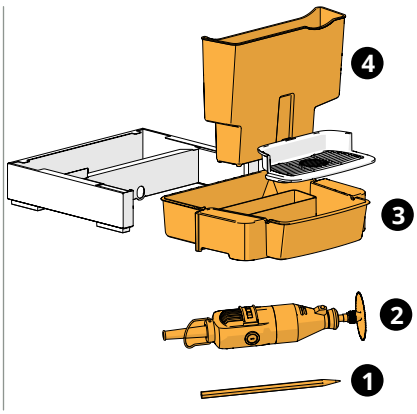
► *Ensure that the O-ring is not kinked, as this leads to leakage.*

- go to section 6.1 Step 3 on p.24

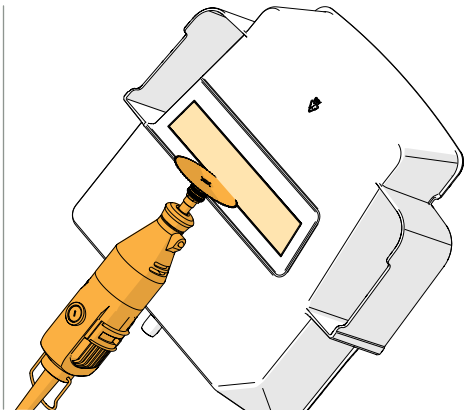
## 6.3 Counter cut-out for raiser set

The counter cut-out is meant for an external waste bin to create extra space for coffee residue below the machine. This is a solution, especially if you have installed your machine on a counter or cabinet.

► ***Making a hole in your counter is your own responsibility.***

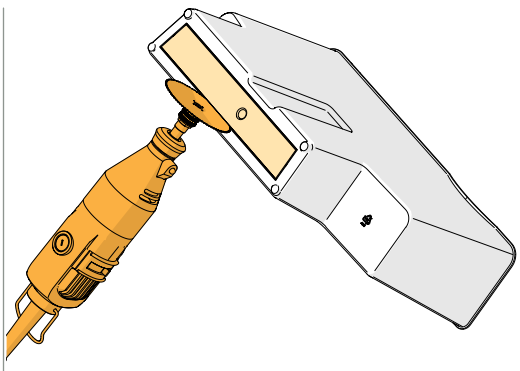



- tools needed
  1. pencil
  2. multi-tool with thin and fine hacksaw blade
- raiser set
  3. drip tray XL
  4. waste bin XL



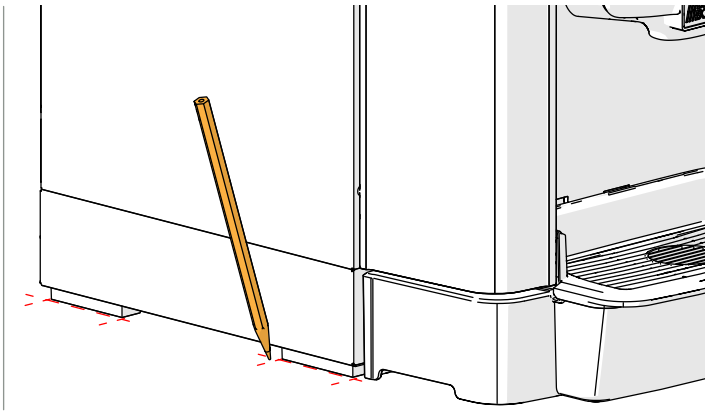
Step 1
- follow template to create cut-out (drip tray) carefully
- smooth / sand the edges

► *Do not exceed outline to prevent leaking.*

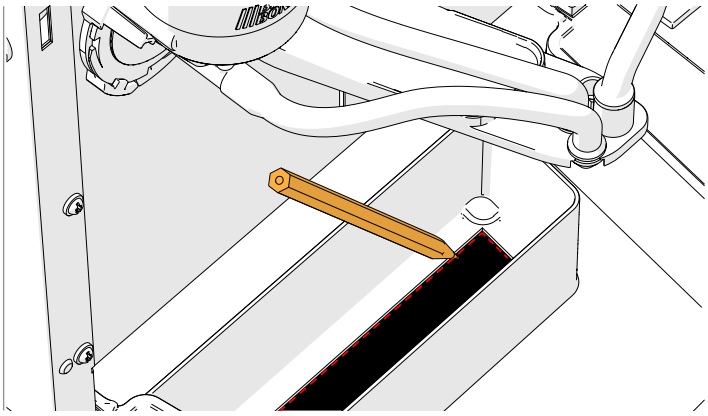


Step 2
- follow template to create cut-out (waste bin) carefully
- smooth / sand the edges

► *Do not exceed outline to prevent leaking.*



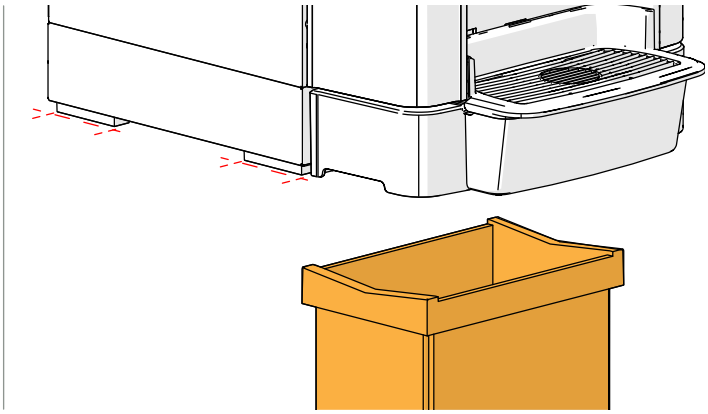
- put the Sego in its final position and mark it



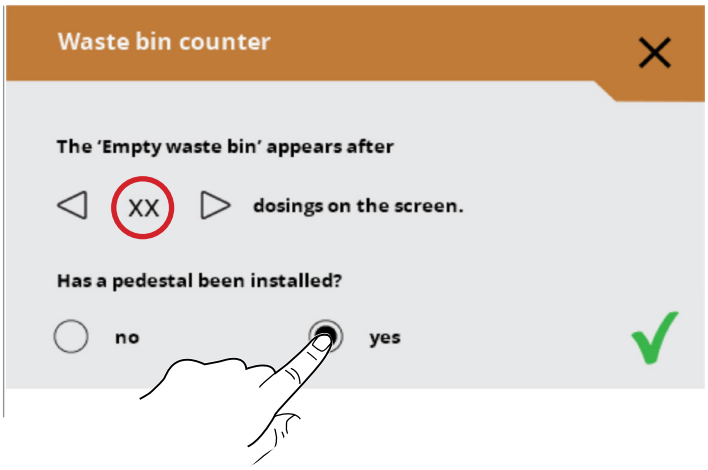
Step 4
- open the door
- place the drip tray with waste bin in the correct position
- mark the location of the hole in the counter
- remove the drip tray, waste bin and the Sego to create a free workplace
- cut out the hole in the counter

► ***Making a hole in your counter is your own responsibility.***

► *Protect the edges of the hole from moisture penetration.*



Step 5
- place the Sego on the previously marked place
- place a large waste bin under the hole




Step 6
- enter programming, select process settings, select waste bin counter
- select installation of 'pedestal'
- set the number of dosages to the ***maximum***
- confirm your change