



Senseo® Select

PHILIPS

CSA230/60

CSA230/69

CSA230/61

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Important repair instructions

- Only skilled personnel should carry out the repair.
- After repair the appliance should function properly.
- After repair the appliance has to meet the regulatory- and safety requirements that were applicable at the time of release of the model.
- After repair the appliance always has to be tested for electrical safety according VDE 0701-0702 and for medical products IEC 62353.
- Only use genuine Philips spare parts to replace critical components.
- The warranty of your Philips product is void if you do not use genuine Philips spare parts to repair critical components of your appliance.
- The critical components are indicated with a warning triangle ⚠ in the service exploded view and/or service manual.

General information



Technical information

- Voltage : 220 - 240 V
- Frequency : 50 - 60 Hz
- Power consumption : 1450 W
- Standby power consumption : < 0.5 W
- Contents water reservoir : 850 cc
- Cord length : 0.8 m
- Pump pressure : 1.0 bar
- Colour setting : Deep black
- Dimensions (W x D x H)
 - Packaging : 190 x 385 x 350 mm
 - Product : 155 x 310 x 310 mm
- Weight
 - Incl. packaging : 2.600 kg
 - Product : 2.115 kg

Features

- Crema plus technology
- Direct start
- Brew stop
- MEMO function (only for CSA240 & CSA250)

NTC value range

T = 20 °C -> 10 K Ω $\pm$ 0.4 K Ω

T = 100 °C -> 0.8 K Ω $\pm$ 0.02 K Ω

Materials

- Podholder : Stainless steel
- Podholder handle : PP
- Collector, spout : POM
- Drip tray cover : ABS
- Drip tray cover : Stainless steel (only for CSA240 & CSA250)
- Drip tray, Water container, Back cover, Front housing : PP
- Brewchamber bottom : PA
- Lever, Hinge : PC

Consumer Replaceable Parts

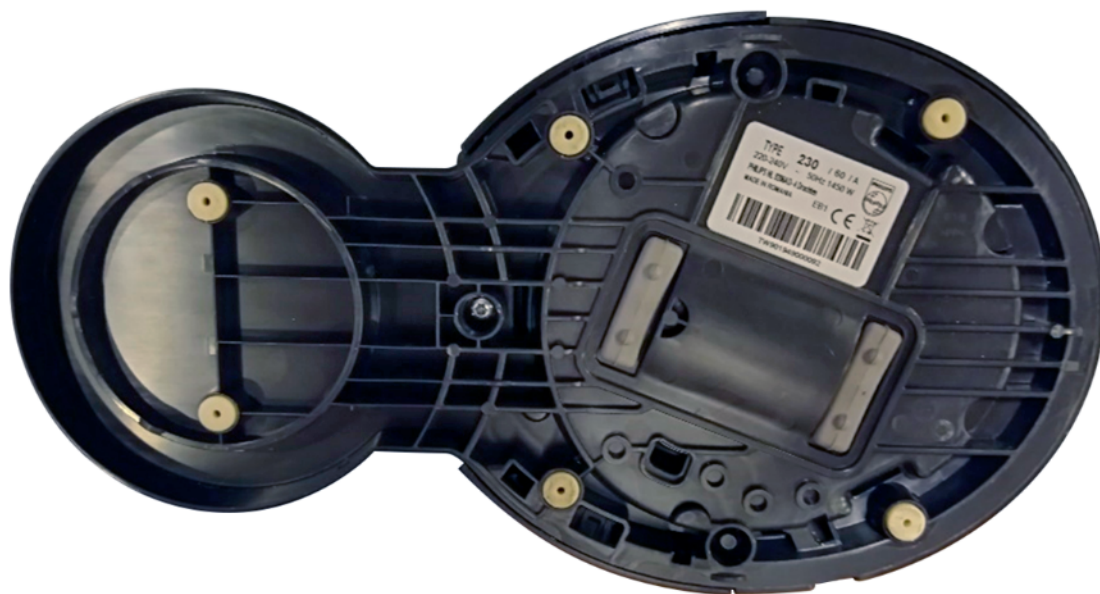
- CP1242/01 Podholder assy 1-cup SENSEO Select, Deep black
- CP1243/01 Podholder assy 2-cup SENSEO Select, Deep black
- CP1244/01 Collector
- CP1245/01 Spout assy, Black (Brown printed)
- CP1246/01 Spout assy, Black (Silver printed)
- CP1247/01 Drip tray cover, Metal
- CP1248/01 Drip tray cover, Deep black
- CP1249/01 Printed drip tray, Cashmere grey (Silver printed)
- CP1250/01 Printed drip tray, Deep black (Brown printed)
- CP1251/01 Printed drip tray, Deep black (Silver printed)
- CP1252/01 Printed drip tray, Star white (Silver printed)
- CP1253/01 Water container assy, Sephia

Technical information

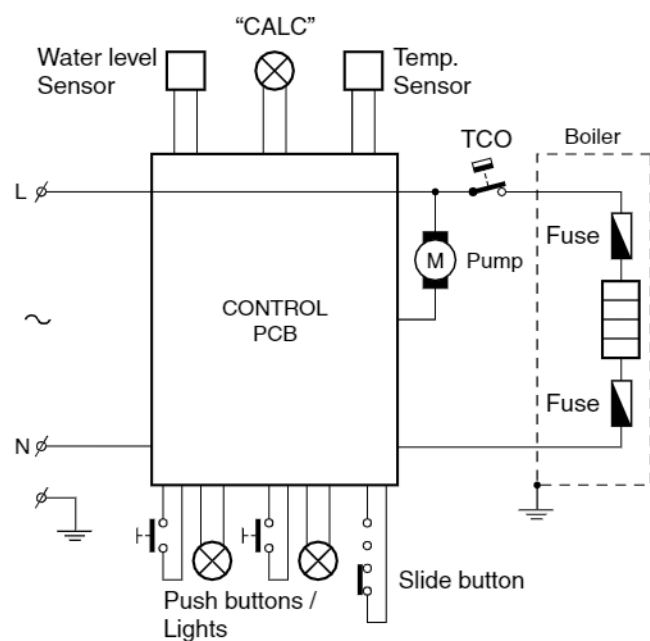
Optional (accessories)

- CA6520/00 SENSEO® coffee machines Descaler

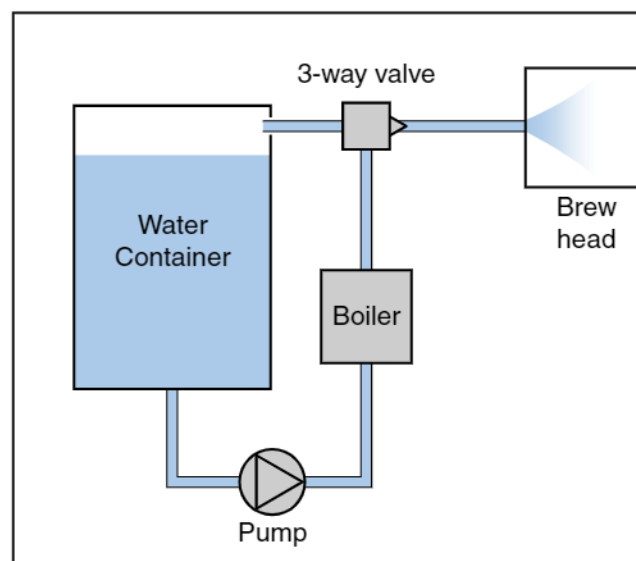
Production date (or serial number)



Electrical diagram



Functional diagram



Technical information

General coffee specifications

In cup volume 1-cup (mL) Coffee	Intensity Slide upper position	Intensity Slide middle position	Intensity Slide lower position
General version	122	100	45
French, Spanish version	100	80	45
Difference between left/right volume	<10	<10	<10

Temperature indication (°C) 1-cup Intensity Slide upper position	1 st cup temperature	2 nd and further cup temperature
General version	≥75	≥76
French, Spanish version	≥75	≥76

In cup volume 1-cup (mL) Water	Intensity Slide upper position	Intensity Slide middle position	Intensity Slide lower position
General version	133 ± 10	111 ± 10	56 ± 10
French, Spanish version	111 ± 10	91 ± 10	56 ± 10

In cup volume 2-cups (mL) Water	Intensity Slide upper position	Intensity Slide middle position	Intensity Slide lower position
General version	266 ± 12	222 ± 12	112 ± 12
French, Spanish version	222 ± 12	182 ± 12	112 ± 12

Measure equipment needed:

Thermometer with K-sensor 0- 100 °C ± 2 °C

Plastic cup

Scale balance 0 – 300 g ± 2 g

Descaling

Scale builds up inside the machine during use. It is essential to descale the SENSEO® coffee machine when the CALC light is lit. If the descaling procedure is not performed correctly, scale residue remains behind in the machine. This causes scale to build up more quickly and may cause permanent and irreparable damage to the machine. Use the correct descaling agent (CA6520 only). It has been developed to ensure better machine performance and operation. Never use a descaling agent based on mineral acids such as Sulphuric acid Acetic acid (vinegar) or Hydrochloric acid. These descaling agents may damage your SENSEO® coffee machine.

For detailed instructions, please refer to the Directions For Use, chapter CALC.

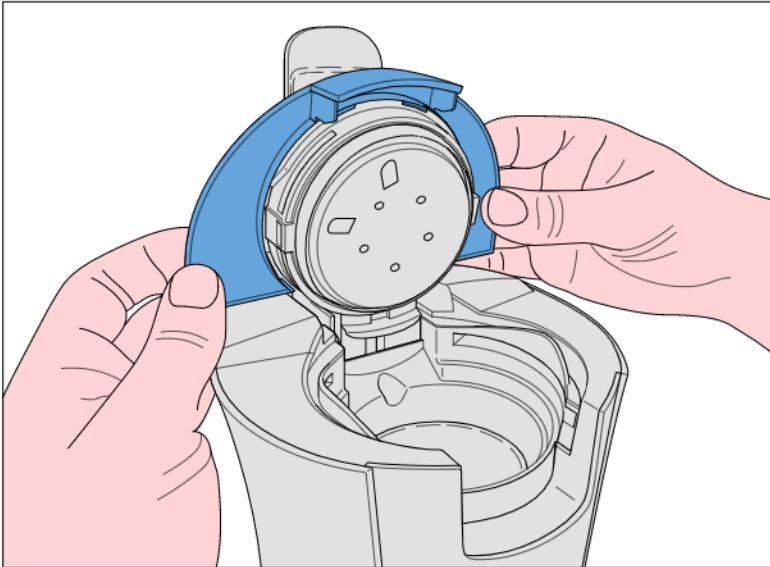
Disassembly- and Reassembly advice

Remove all Consumer replaceable parts from the coffee machine.

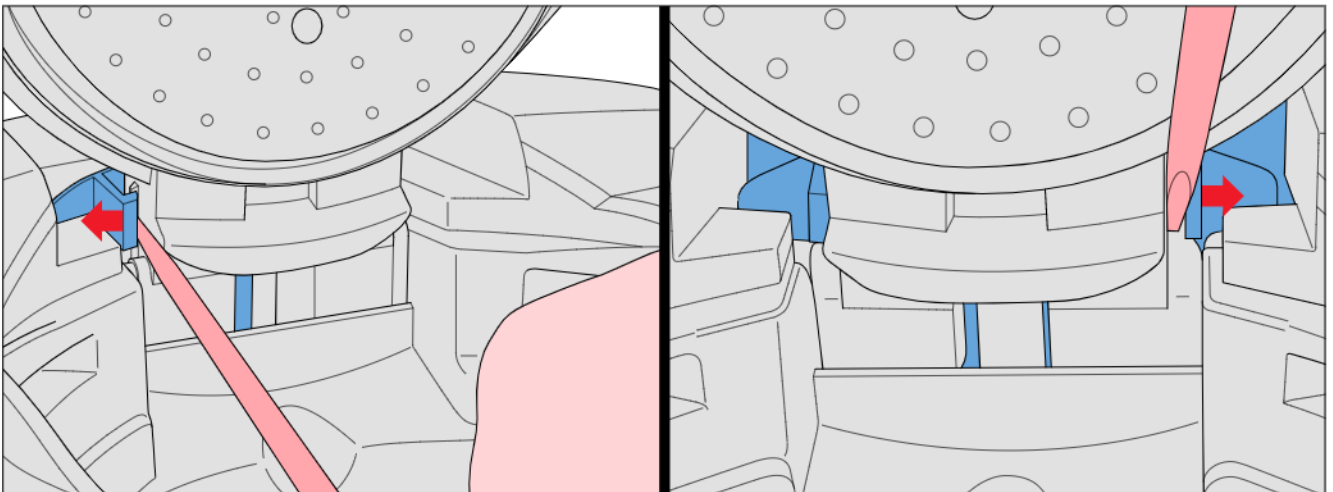
Podholder - Collector - Spout - Tank - Drip tray and cover.

To open the appliance follow the below steps:

1. **Remove the Lid cover.** Brewhead in open position.
Move the both outside flaps of the part gently backwards. The part will come loose.
Slide it upwards for removal.



2. **Remove the Hinge cover.**
Unclick the both click hooks (left & right) by placing the tip of the screwdriver and bend the flap outwards, the part comes loose, rotate it backwards until it blocks. Careful the part does not fall inside the lid. Lower the lid and remove the Hinge cover from the top side.



Disassembly- and Reassembly advice

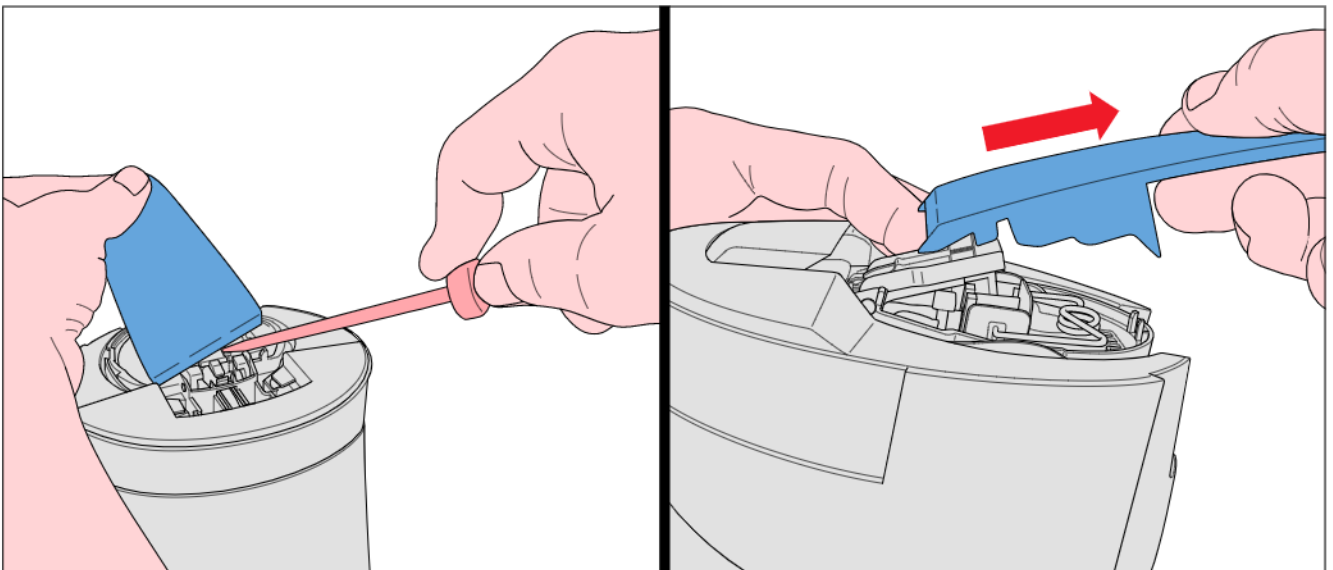
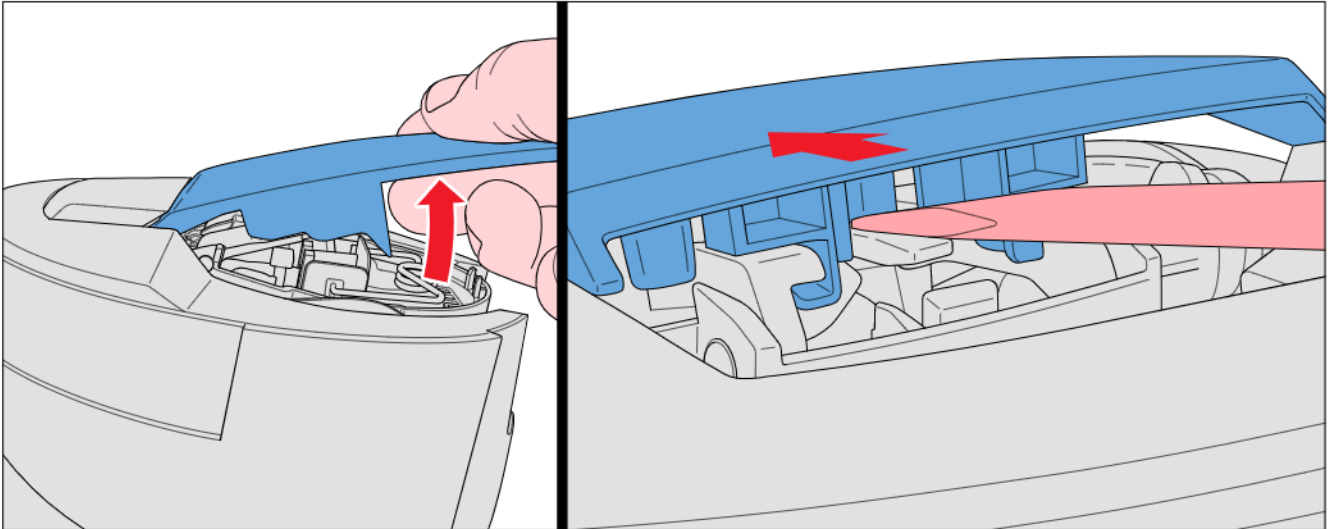
3. Remove the lever.

Rotate the appliance 180° so it is pointing backwards to you.

Place the screwdriver according the illustration in the middle and push with the flat screwdriver.

Make sure the lever is in open position and the lid is pushed down.

During pushing the screwdriver also move the lever out backwards.

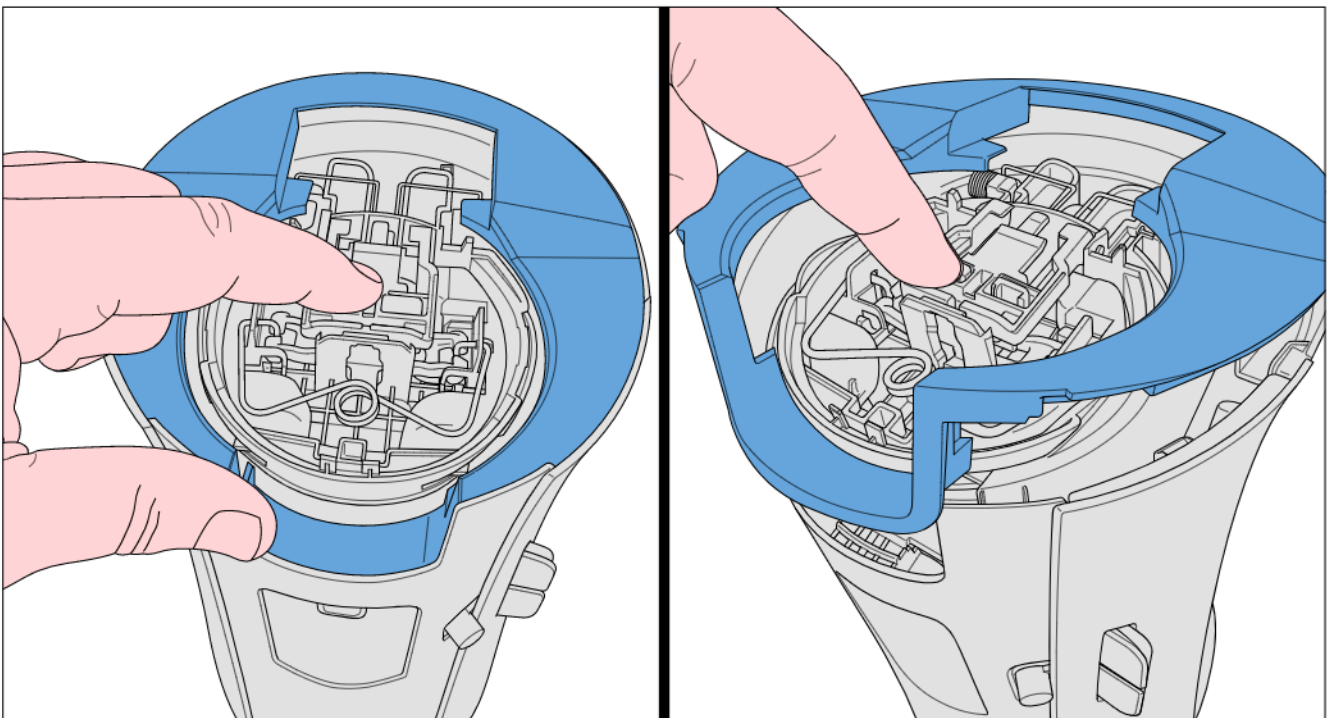
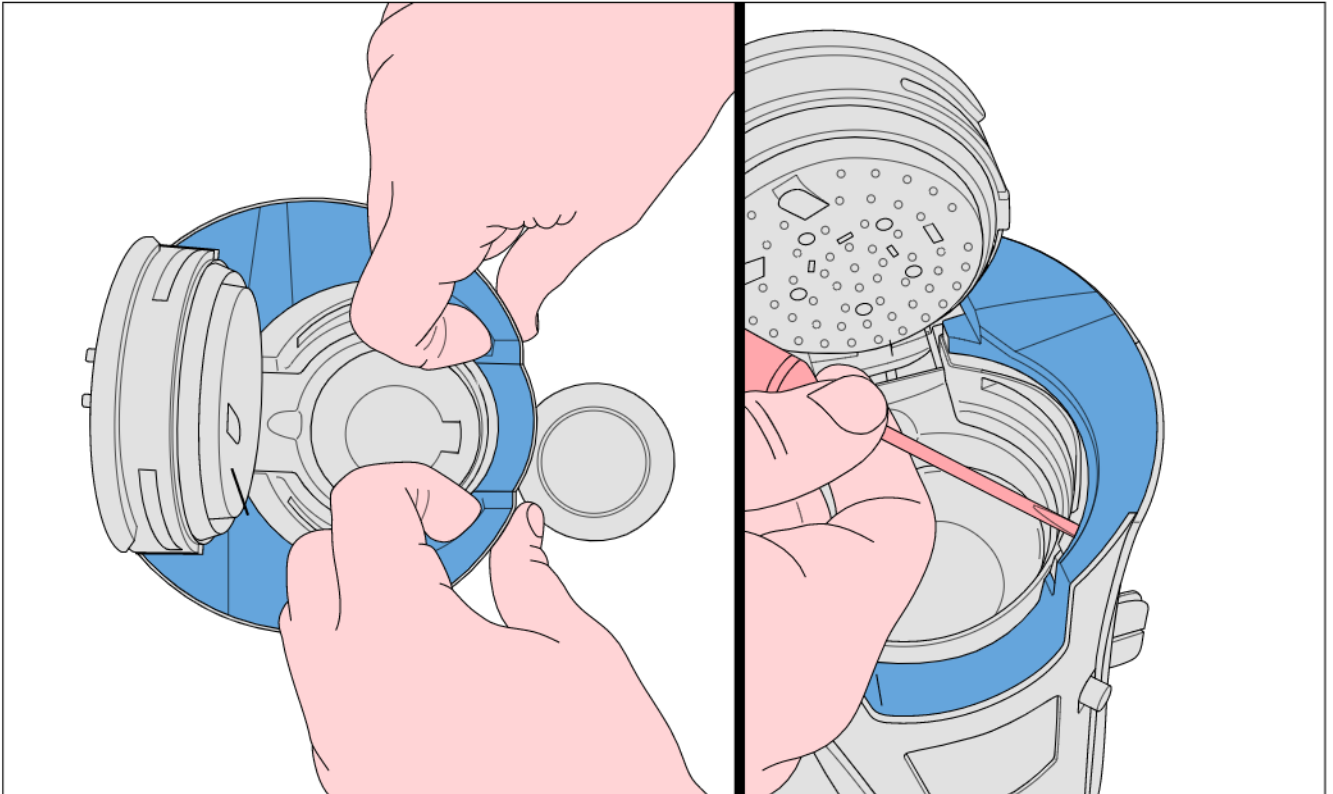


Disassembly- and Reassembly advice

4. Remove top cover.

Place your fingers or a flat screwdriver as indicated in the illustration. (Or use a flat screwdriver, watch out when using a screwdriver to not damage the part).

Open the Brewhead. Push forward and pull up the top cover, first the click hooks on the spout side will unlock, thereafter the other clicks become loose. One at the backside and two in the middle left and right.



Disassembly- and Reassembly advice

5. Remove the Valve outlet.

Turn the valve outlet a bit and pull it off from the valve assy.

6. Remove the back cover.

To remove the back cover, unscrew the 4 Torx screws (B).

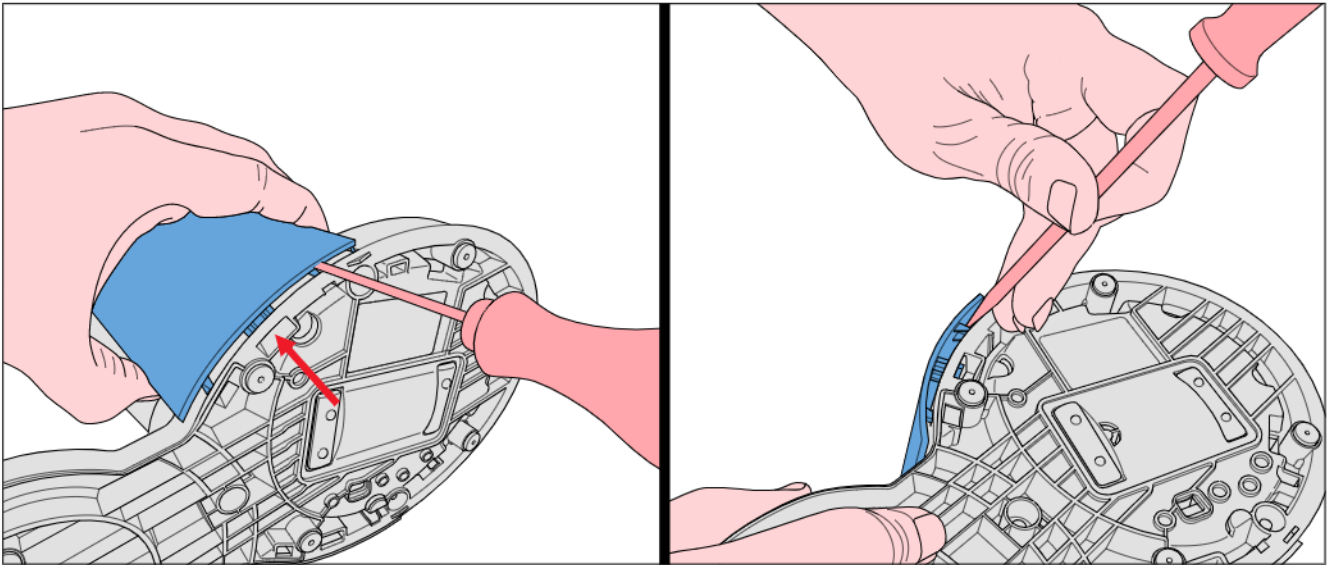
Before you can take out the back cover, unhook the Hall sensor + sensor housing and detach the corrugated tube from the WC socket in the bottom.

You are now able to see the boiler, pump and PCBA assy.

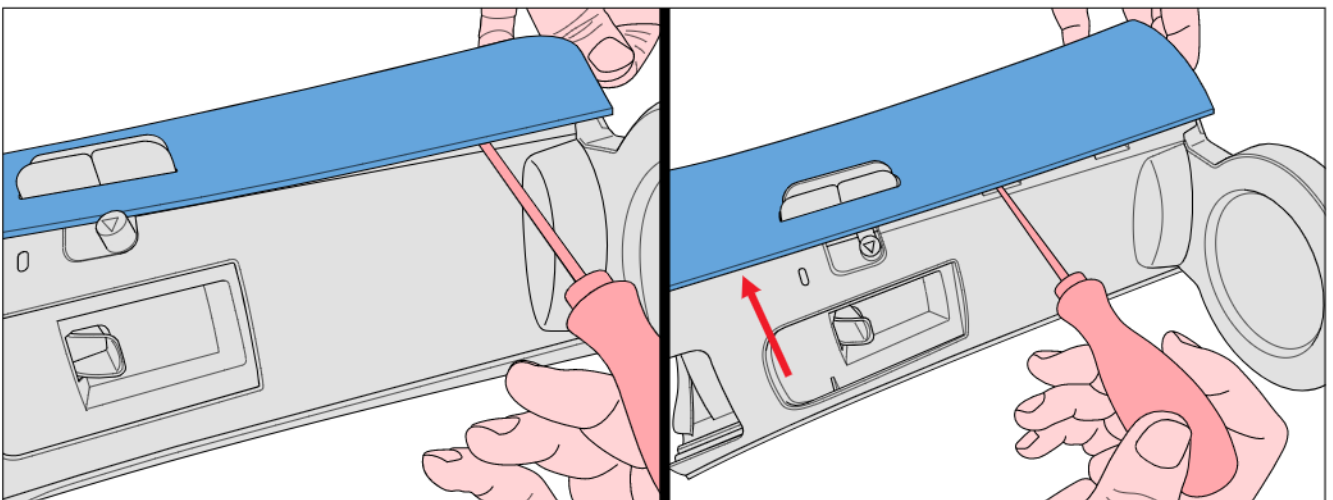
7. Remove the side panels.

Place the appliance with the side facing up.

Place the screwdriver according illustration, move the tip of the flat screwdriver to the left to unhook the click. (Screwdriver to be placed lower in the indent of the base, see illustration).



Search for the next click hook on the left, place the tip of the screwdriver and now move the tip of the screwdriver to the right. Lift the panel up on the bottom where you just have released the clicks and ensure by placing a small part between panel/baseplate that it will not lock again.



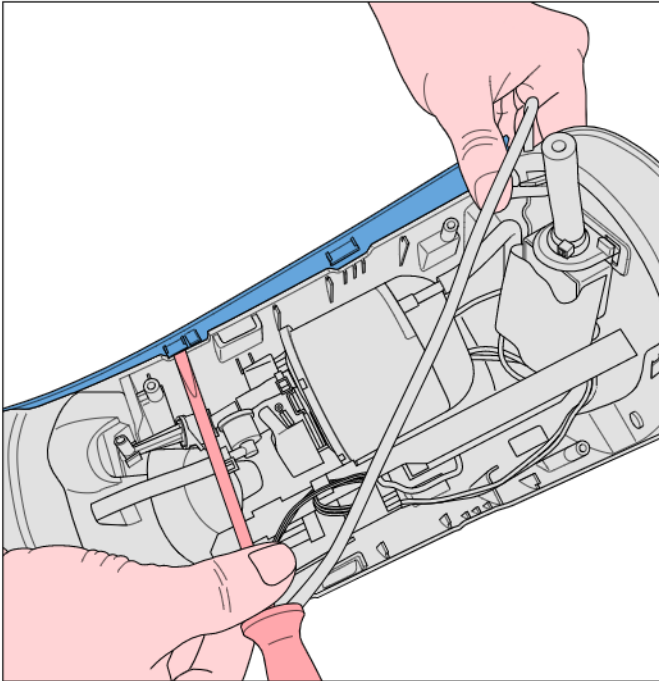
Note: Careful not to scratch the visual areas when removing the side panels.

Disassembly- and Reassembly advice

Next step is to unsnap the two hooks, visible at the backside (see illustration) and turn/move the panel slightly backwards to unhook the other two hooks.

If the bottom and side click hooks are released you should be able to move up the panel side/upwards to release the two top hooks.

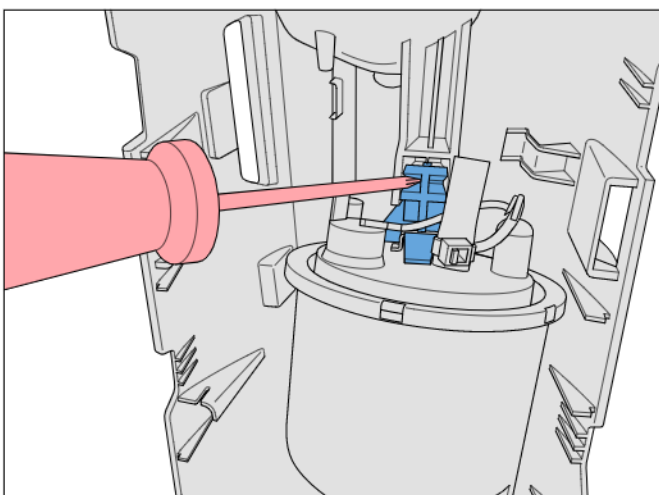
Repeat the same process for the other side panel.



8. Remove the boiler.

Unsnap the suspension bracket from the Brew Chamber bottom interface with a flat screwdriver (see illustration) and move side wards, the boiler will come loose.

Remove the black caps and disconnect the electrical wires from the boiler. Unclick the NTC wire connection from the PCBA. Remove the 3-way valve from the hose connected to the boiler.



Disassembly- and Reassembly advice

9. **Remove the PCBA.**

Slide the PCBA including the plastic PCBA holder assy out of the machine, by lifting it a bit up so it will unlock from the bottom. Unlock all wires, including pump connection under the yellow tape. Then you are able to move it out from the machine, take attention for the wires that are connected to the PCBA. The complete PCBA assy including the buttons, plastic holder is available as service part.

Note: While assembly of PCBA, make sure Slide knob should be always in bottom condition.

10. **The Pump is now in reach.**

Remove by sliding it out of the dampers, after disconnecting the fastons and hoses.

Functions/feature explanation

Crema improvement

With Crema plus you will brew, cup after cup, SENSEO® coffee with the finest and most velvety crema layer.

Direct start

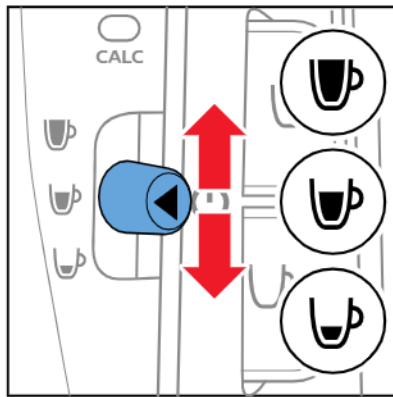
The direct start function allows you to switch on your coffee machine and brew coffee with one touch of a button. When you press the 1-cup button or the 2-cup button, this button starts flashing, the machine starts heating up and then starts to brew coffee. When the machine has finished brewing, it switches off automatically to save energy.

Brew stop

The brew stop function will stop the brewing if the 1-cup or 2-cup button is pressed during brewing coffee.

Intensity Plus slide

Use the Intensity Plus slide to select the recipe of your choice:



- Select the top position to brew a classic smooth SENSEO®

- Select the middle position to brew an intense SENSEO®.

- Select the bottom position to brew an espresso.

MEMO function (only for CSA240 & CSA250)

For each setting of the Intensity Plus slide, you can adjust the coffee volume to your personal taste and save this setting.

Repair instruction

Volume adjustment procedure:

In case of customer complaints on volumes, make sure before measuring the volume output that if the machine has the MEMO function (CSA240 & CSA250) you have RESET (press the 2-cup button >5 seconds until the 1-cup & 2-cup light flashes quickly) the volumes stored to default values.

If you have replaced the PCBA for whatever reason, you always need to check/adjust the volume setting from this new PCBA, see chapter "Volume measurement procedure" how to measure the volume output.

In chapter "Changing the coffee volume" it is described how you can change the volume. This section is part of the appliance "service menu".

Select the right PCBA modus.

Important when the PCBA **assy** needs replacement!

PCBA boards provided from the Philips warehouse have the following standard settings:

- WEU volume settings
- MEMO function disabled

Entering the service menu:

Enter service mode

1. Keep the 1-cup and 2-cup button pressed while connecting the mains voltage to the appliance.
2. Release, press and release again the 1-cup button before releasing the 2-cup button to enter service mode.

Note: the 2-cup light will always be ON.

The 1-cup light will represent if the MEMO function is enabled/disabled.

- 1-cup LED ON: MEMO setting enabled (models CSA240 & CSA250)
- 1-cup LED OFF: MEMO setting disabled (models CSA230)

Press and release the 1-cup button to toggle enable/disable the MEMO setting.

To save the setting press and release the 1-cup and 2-cup button at the same time.
The 1-cup and 2-cup LED will blink fast for 1 second and then stay on.

Proceed at step "Changing the coffee volume" to change the volume setting or unplug the machine in case the volume setting do not need further adjustment.

Changing the coffee volume

You need to be in the service mode and have finished the step "Service-step MEMO function enabled/disabled". Both the 1-cup & 2-cup button light will be "On" and in this stage; you are able to adjust the 1-cup volume settings.

Repair instruction

Volume adjustment 1-cup recipe(s)

Put the Intensity Plus slide in the recipe position that needs adjustment.

Decrease pump time 1-cup recipe(s) in steps of 500 ms ($\pm$ 3.5 ml lower volume)

1. Press and release the 1-cup button to decrease the pump time.
2. The 1-cup LED turns off for 500 ms.

Increase pump time 1-cup recipe(s) in steps of 500 ms ($\pm$ 3.5 ml higher volume)

1. Press and release the 2-cup button to increase the pump time.
2. The 2-cup LED turns off for 500 ms.

For each slider position, that needs a different volume, repeat above steps.

Once done store the new 1-cup settings.

Press and release the 1-cup and 2-cup button together to store the new values.

The 1-cup and 2-cup LED will blink fast for 1 second and then stay on.

The machine will now enter automatically into the 2-cup volume adjustment routine.

Volume adjustment 2-cup recipe(s)

Follow the same steps as described in the “Volume adjustment 1-cup recipe(s)” section.

The only difference is that not the 1-cup but the 2-cup setting will be adjusted.

By pressing/releasing both 1-cup & 2-cup button the new settings will be stored in the machine.

The 1-cup and 2-cup LED will blink fast for 1 second and the appliance will go to standby and is ready to be used.

End of volume adjustment procedure.

Restoring the Boiler_empty flag to production default:

Sometimes it is needed, that the boiler of the SENSEO have to be emptied.

This for instance in wintertime were the possibility exists that the boiler becomes frozen during transport e.g.

For those occasions, it is handy to restore the **Boiler_empty_flag** again to production default.

Bringing the SENSEO back into production status, has the benefit the flush routine will be activated automatically when installed by the consumer.

How to SET the **Boiler_empty_flag**:

1. Keep the 1-cup button pressed while connecting the mains voltage to the PCBA.
2. Press and release the 2-cup button before releasing the 1-cup button to reset the boiler empty flag.
3. The 1-cup and the 2-cup LED give a 1 second burst signal and the pump will be on for 1 second.

Repair instruction

Volume measurement procedure:

Below steps, describe how to measure the volume.

You can apply this procedure for checking the volume per Intensity Plus slider position (classic, intense & espresso)

1. Make sure the boiler is filled with water.
2. If the machine has the MEMO function option enabled, ensure you have reset to factory default. (machine plugged in, press and hold the 2-cup button for 5 seconds until the 1-cup button and 2-cup button start flashing, release the 2-cup button)
3. Place a 1-cup pod holder **without** a Coffee POD. (only adjusting with **plain** water)
4. Place a cup on the drip tray cover and push the one-cup button.
5. When the appliance has finished, you are able to perform the volume adjustment.
6. Empty the cup, podholder and push again for one cup setting.
7. Measure the volume output with a graduated beaker and compare the values against the table you can find in the “general coffee specifications”.
8. Repeat the above for every Intensity Plus slider setting.

Repeat steps 6 - 8 also for the 2-cups setting.

Every setting has its own volume storage, in total 6 recipes that would need to be checked.

Temperature measurement procedure:

Use a certified temperature meter & probe.

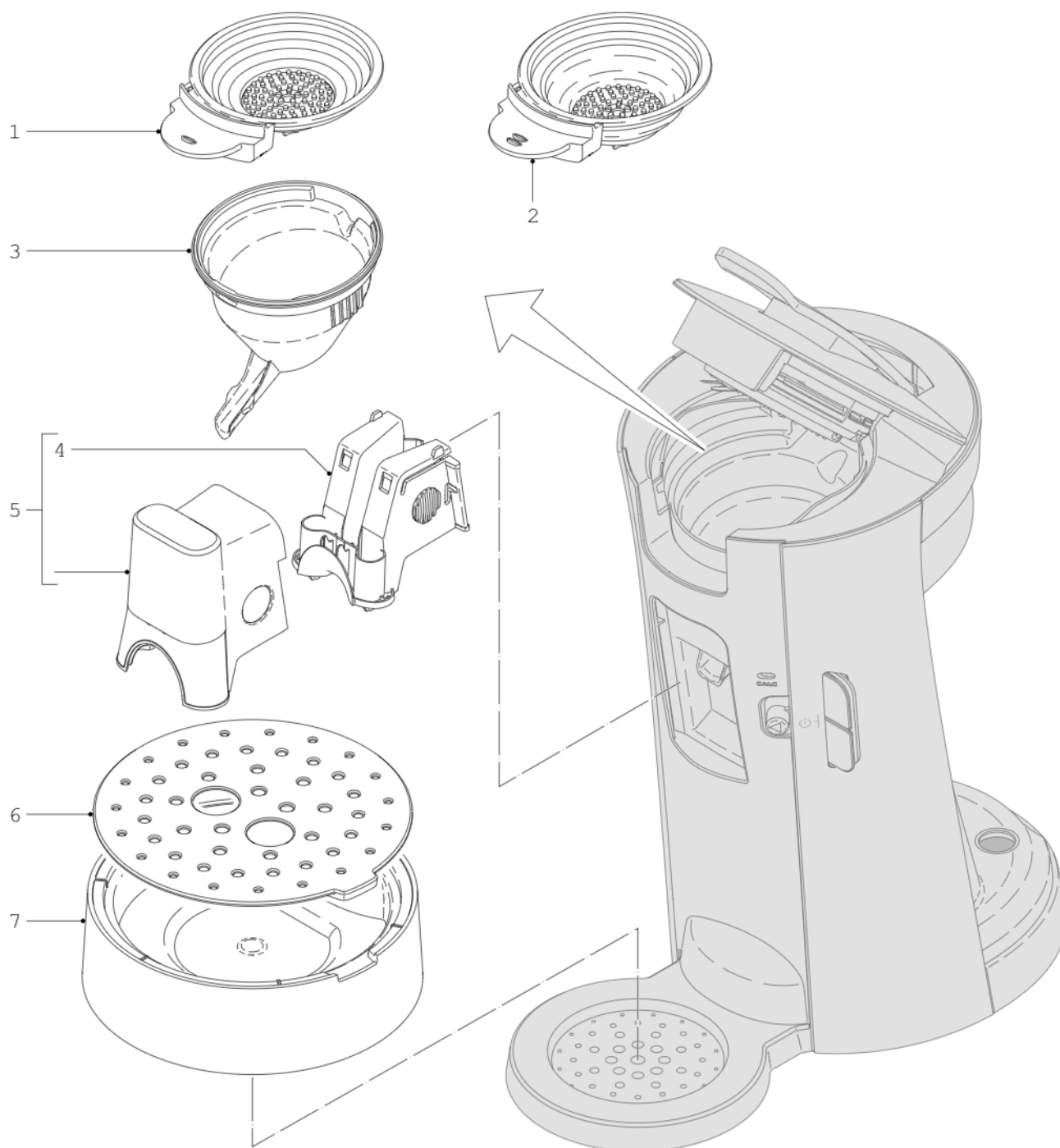
1. Make sure the boiler is filled with water.
2. If the machine has the MEMO function option enabled, ensure you have reset to factory default. (machine plugged in, press and hold the 2-cup button for 5 seconds until the 1-cup button and 2-cup button start flashing, release the 2-cup button)
3. Put the “Intensity Plus” slider in the top position.
4. Place a 1-cup pod holder without a Coffee pod. (measuring with plain water)
5. Place a plastic cup under the coffee spout and push the 1-cup button.
6. Stir water in cup during the brew with the measuring probe.
7. Shortly after brew, measure the temperature and check against table on page 5.

End of procedure.

Fault finding

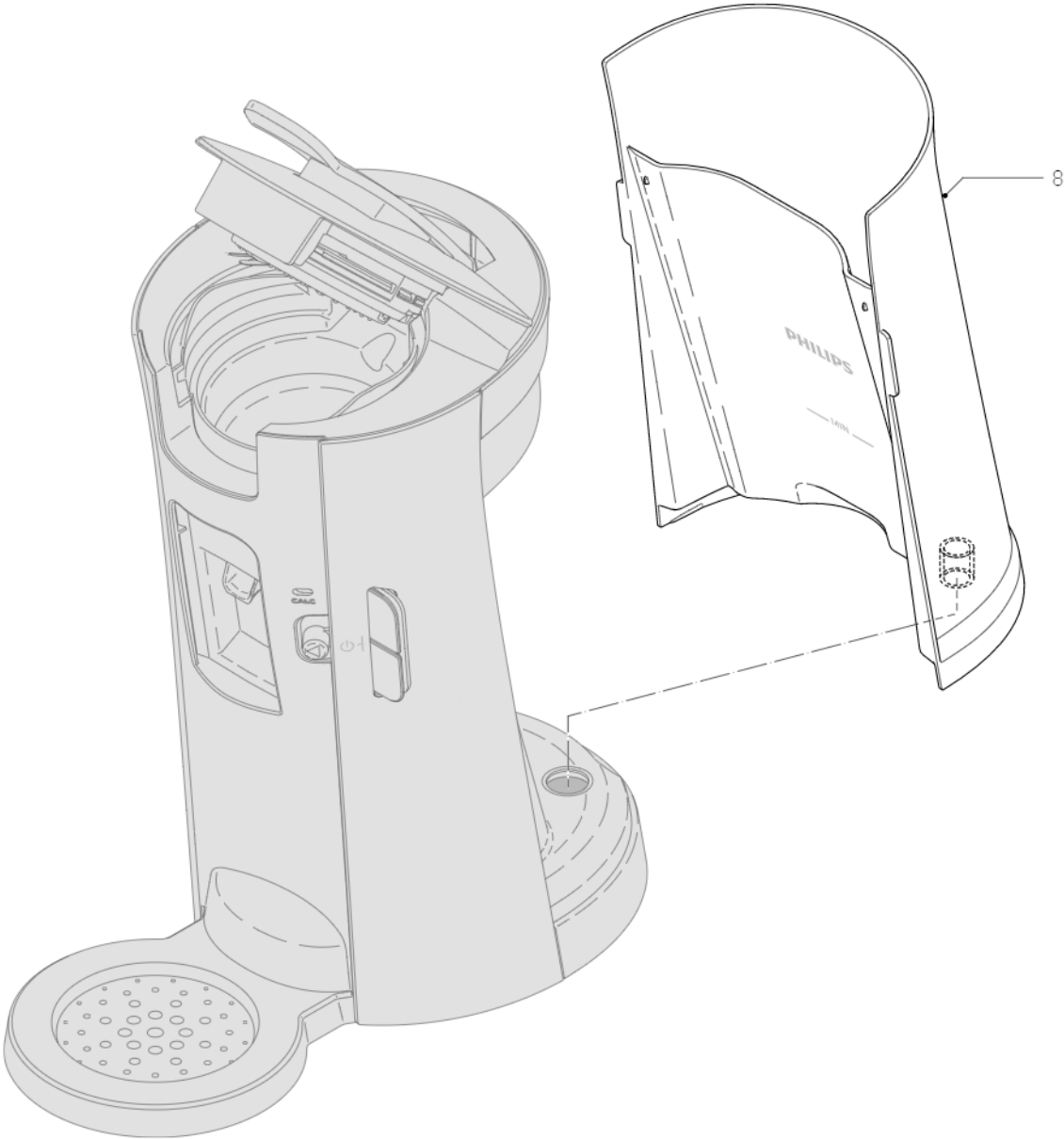
Problem	Possible root cause	Solution
Blinking slow ≥ 90 sec, no heating	Boiler, PCBA	Exchange boiler, PCBA
Blinking fast	Float/magnet missing NTC defect/disconnected, PCBA	Exchange water tank, NTC or PCBA
CALC light "On"	Appliance need descale	Descale the appliance
Cannot open lid	Blocked podholder	Clean/descale or exchange podholder
Cold coffee	Boiler full of scale	Descale appliance according instruction for use
	Boiler, NTC defect	Exchange boiler, NTC
Too less coffee	MEMO function used by customer	Reset MEMO function to default values
	Podholder blocked	Descale podholder or exchange
	Boiler full of scale	Descale appliance according instructions for use
	3 way valve defect	Exchange 3 way valve
	None of the above	Adjust the SW in the PCBA
Too less coffee 1st cup	Pump backflow	Exchange pump
Too much coffee	MEMO function used by customer	Reset MEMO function to default values
	Bypass podholder	Exchange podholder

Service parts



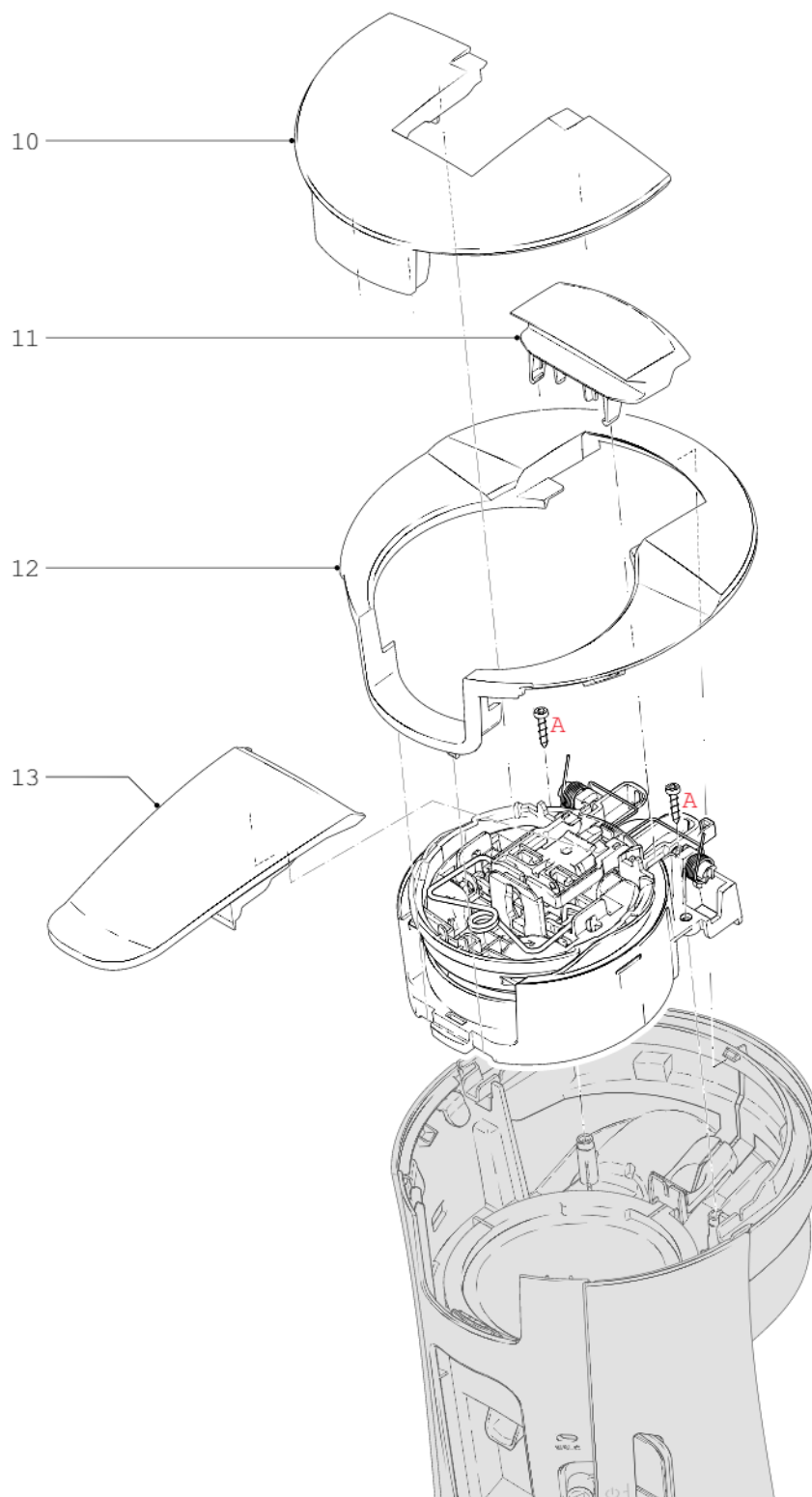
Pos	Service code	Description	Remark	Online CRP
1	3000 044 93701	Podholder assy 1-cup SENSEO Select	Deep black	CP1242/01
2	3000 044 93711	Podholder assy 2-cup SENSEO Select	Deep black	CP1243/01
3	3000 049 04131	Collector		CP1244/01
4				
5	3000 051 91002	Spout assy	Black (Silver printed)	CP1246/01
6	3000 076 06751	Drip tray cover	Deep black	CP1248/01
7	3000 045 40352	Printed drip tray	Deep black (Silver printed)	CP1251/01

Service parts



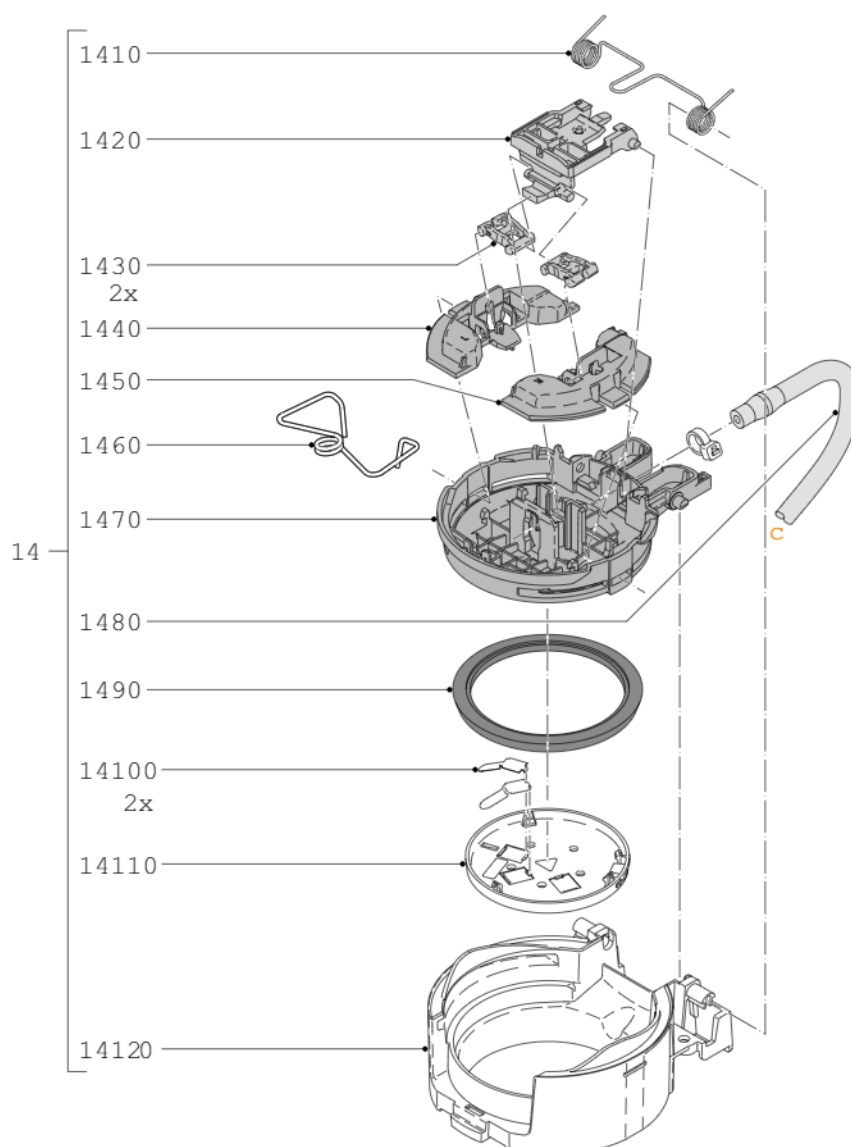
Pos	Service code	Description	Remark	Online CRP
8	3000 044 69351	Water container assy	Sephia	CP1253/01

Service parts



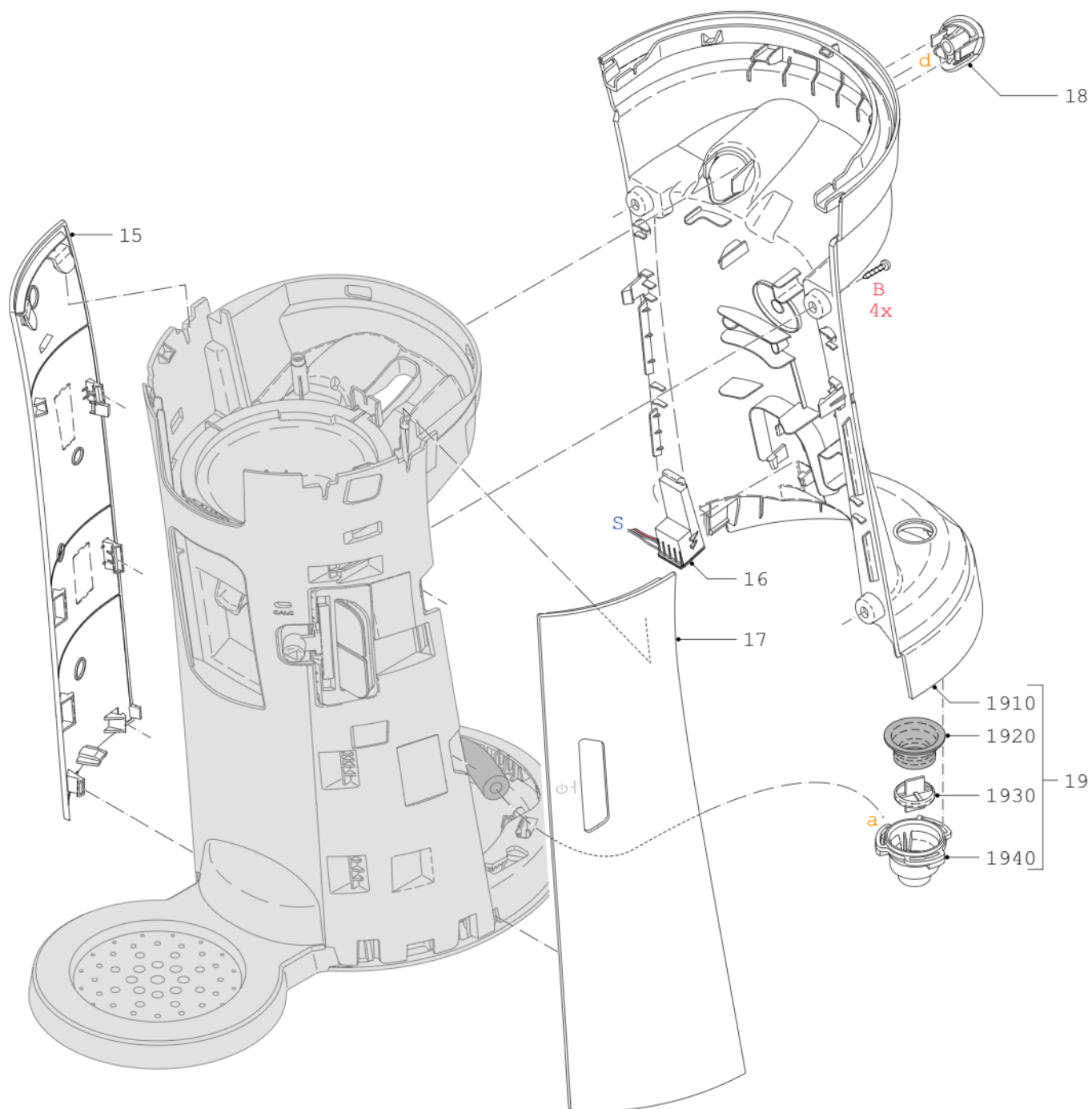
Pos	Service code	Description	Remark
10	3000 044 69252	Lid cover	Deep black
11	3000 044 69301	Hinge cover	Deep black
12	3000 044 69281	Top cover	Deep black
13	3000 044 69291	Lever	Deep black

Service parts



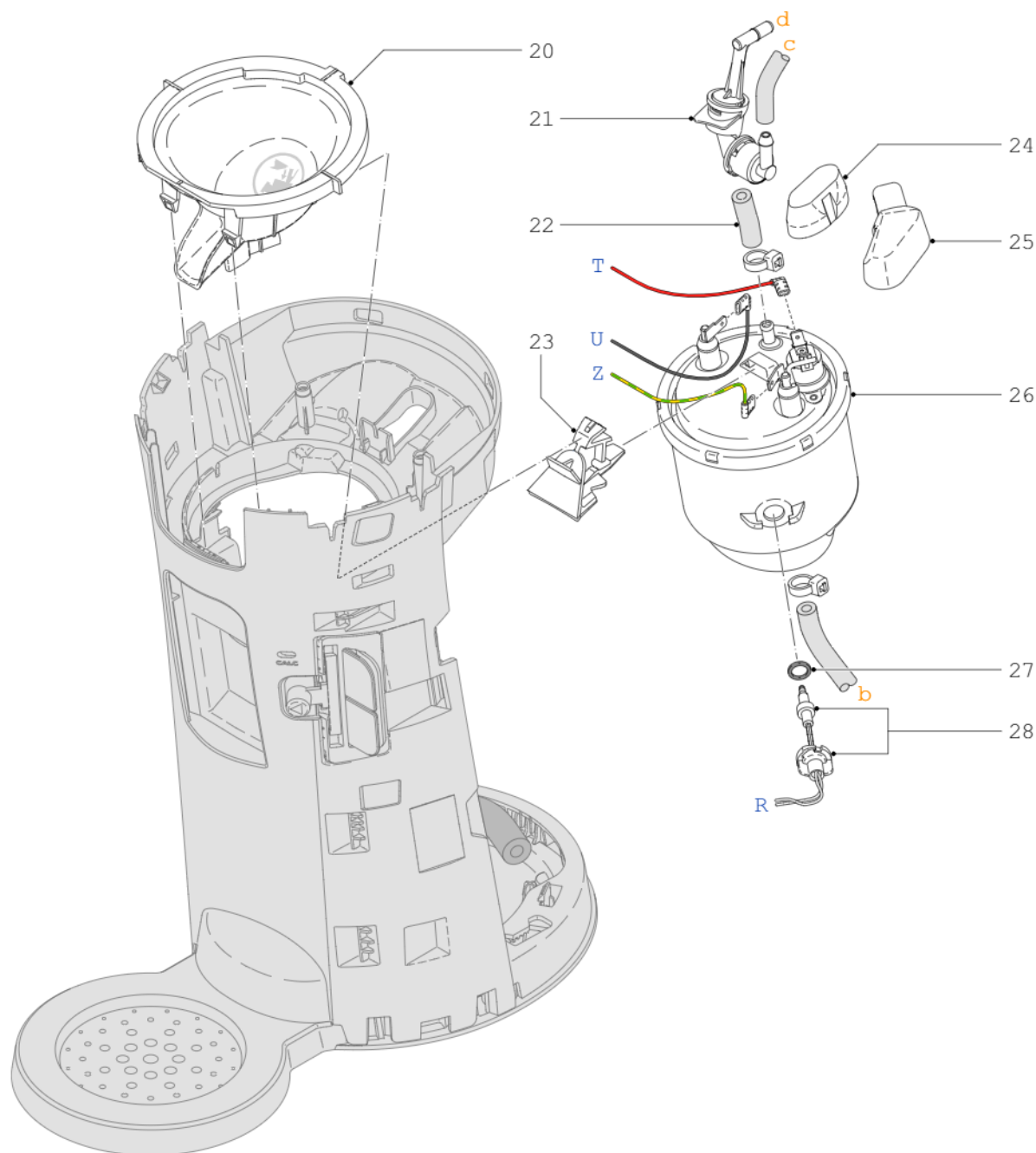
Pos	Service code	Description	Remark
14	3000 044 88262	Brew chamber assy (general)	
1410		Lid spring	
1420		Lever frame	
1430		Rod (2x)	
1440		Slider left	
1450		Slider right	
1460		Slider spring	
1470		Lid Frame	
1480		Hose	
1490	4222 247 08122	Brew chamber seal	
14100	4222 240 05991	Ejector pin	
14110	4222 247 72614	Distribution disk	
14120		Brew chamber bottom	

Service parts



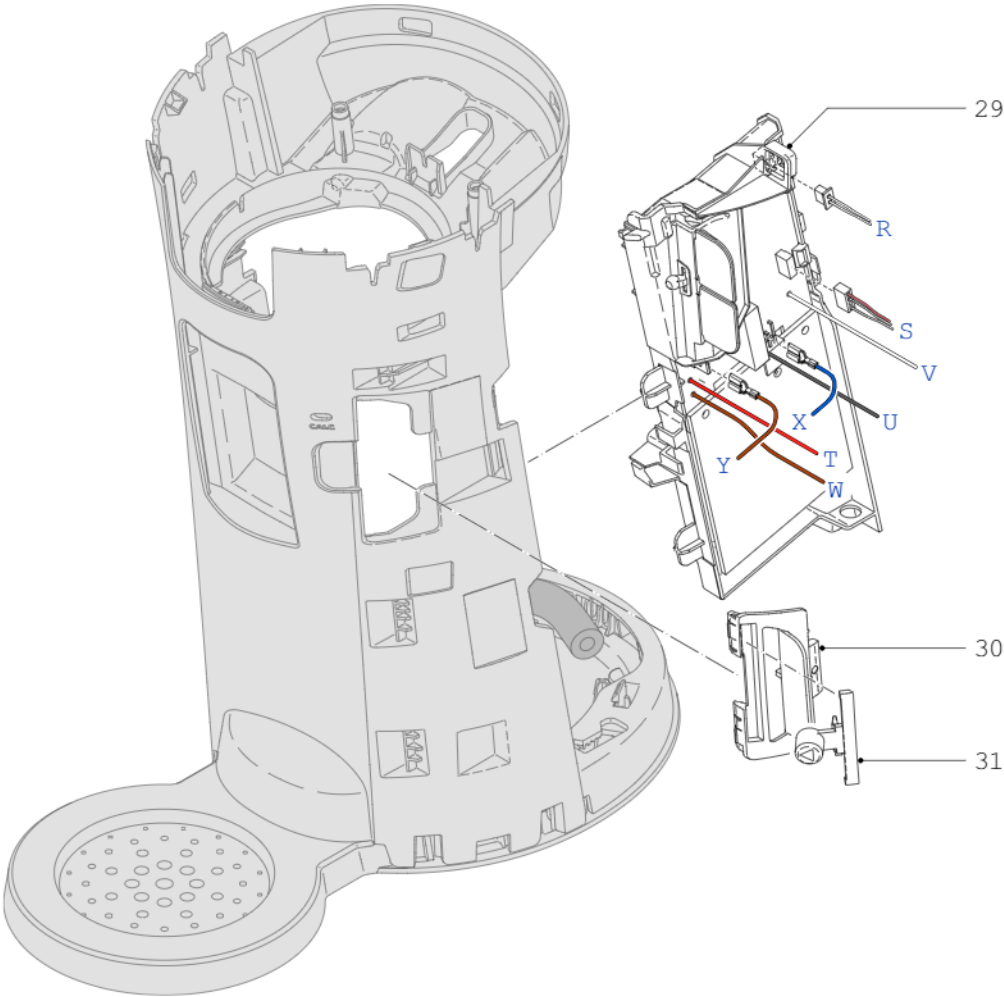
Pos	Service code	Description	Remark
15	3000 044 69181	Deco panel left (HE)	Deep black
16	4222 247 59473	Sensor housing	Level 1+2
17	3000 044 69201	Deco panel right (HE)	Deep black
18	4222 247 71143	Valve outlet	Black
19	3000 044 83911	Back cover assy	Deep black
1910		Back cover	
1920		Water container sealing	
1930		Filter	
1940		Water container socket	

Service parts



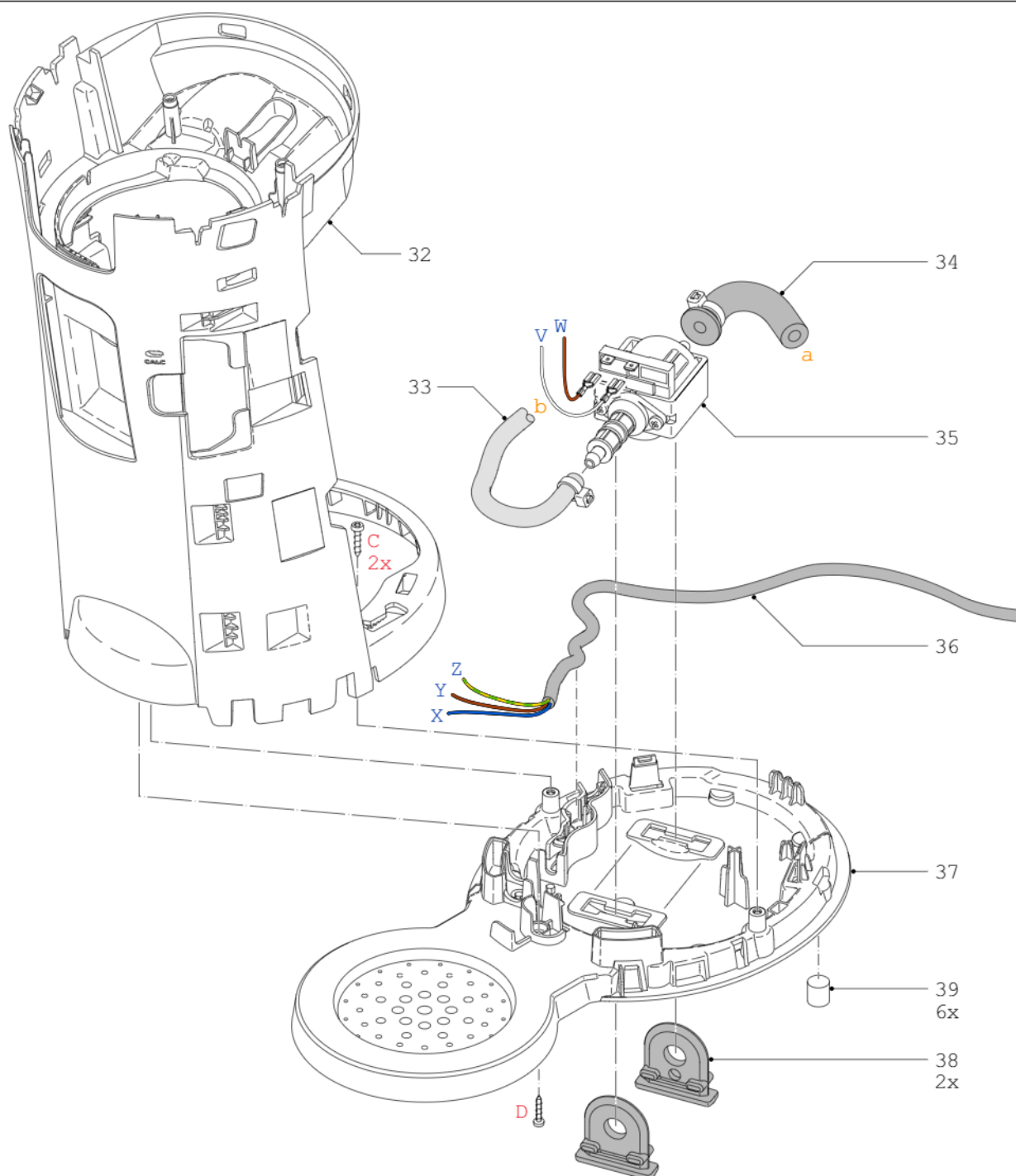
Pos	Service code	Description	Remark
20		Brew chamber bottom	
21	4222 259 59541	3 way valve	
22		Hose	
23	4222 247 72552	Suspension bracket	
24	4222 247 43694	Boiler pin cap	
25	4222 247 75271	TCO cap for OPR boiler	
26	4222 259 65482	Boiler assy OPR	230 V
27	4222 247 05136	NTC O-ring	
28	3000 045 30401	NTC assy	

Service parts



Pos	Service code	Description	Remark
29	3000 052 23571	PCBA SENSEO Select	230V ⚠
30		User interface cover	
31	3000 059 14181	Slide button	

Service parts



Pos	Service code	Description	Remark
32	3000 044 93602	Front housing printed	Deep black
33	3000 050 92001	Pressure hose assy	
34	4222 247 07582	Corrigated tube, SENSEO Select	
35	4222 259 37249	Pump ULKA HF	230 V / 50 Hz ⚠
36		Power cord	
37		Base plate	
38	3000 070 20041	Damper	
39	4213 247 05256	Foot (6x)	

Version history

20/12 Version 1.1 : CSA230/60 / CSA230/61

21/12 Version 1.2 : Updated the cover page with CSA230/69 model number.

In Parts list, the following Alternate Part Numbers are added:

Pos	Old Service Code	New Service Code
6	3000 044 69231	3000 076 06751
10	3000 044 69251	3000 044 69252
14	3000 044 88261	3000 044 88262
18	4222 247 71141	4222 247 71143
23	3000 060 80201	4222 247 72552
35	4222 259 37248	4222 259 37249
38	4222 247 06301	3000 070 20041
14110	4222 257 72613	4222 257 72614



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