

Philips Domestic Appliances and Personal Care

Service Manual

PRODUCT INFORMATION

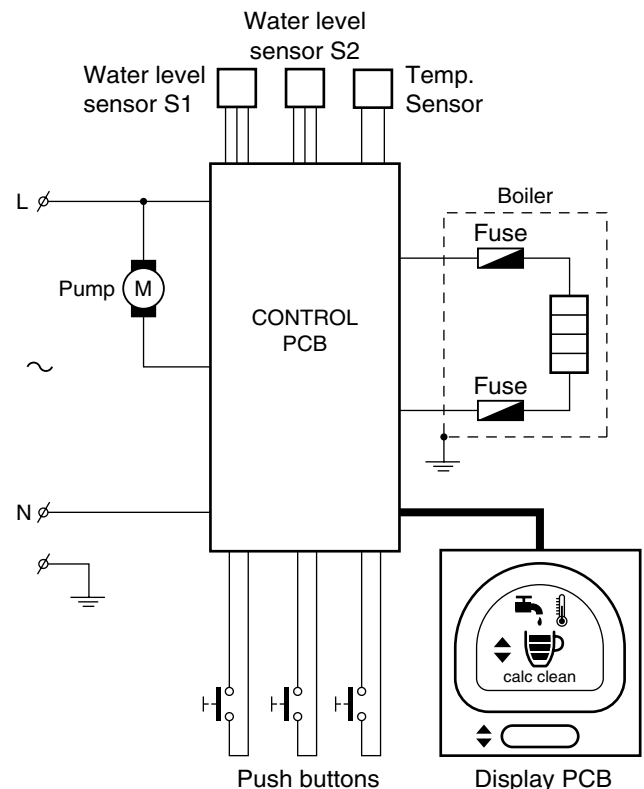
- This product meets the requirements regarding interference suppression on radio and TV.
- After the product has been repaired, it should function properly and has to meet the safety requirements as officially laid down at this moment.

TECHNICAL INFORMATION

- Voltage : 220 - 240 V
- Frequency : 50 - 60 Hz
- Power consumption : 1450 W
- Standby power consumption : 1.2 W
- Contents reservoir : 1200 cc
- Variable Coffee volume : (Min, Normal and Max)

	Coffee volume overview		
	Min cc/mL	Normal cc/mL	Max cc/mL
France version	80	100	140
General version	80	122	145

- Colour setting : Hot coral / Ultra red
- Sap coding : HD7830/80



DISASSEMBLY- AND RE-ASSEMBLY ADVISE

To remove the back cover, follow below steps:

- Remove Screw **A** (see exploded view).
- Remove valve outlet.
- Start at the upper side of the back cover and stick a screwdriver into the 2 snap locks positions and gently pull the back cover from the appliance so that a little chink between back cover and brew chamber becomes visible.
- Put the screwdriver into the 4 rectangular holes (snap locks) at the back and gently pull the screwdriver such away that the lips of the snap locks are bent outwards.
- If all clicks positions are loose, it is possible to remove the back cover.
- Reassemble follow steps backwards.

To reach the components placed on the base (for example exchange the NTC temperature sensor) follow below steps:

- First remove back cover, brew chamber, 3-way valve and boiler.
- Remove both Torx T15 screws **B** (see exploded view).
- Bend the 2 click snap locks with a screwdriver (see base), the housing can now be removed.
- To remove the rest of the housing unlock the last 4 snap locks at the base and gently pull of the front cover.
- To reassemble follow above steps backwards.

OPTIONAL (accessories)

- No specific issues.

REPAIR INSTRUCTION

Descaling


Regular descaling will prolong the life of your appliance and will guarantee optimal brewing results for a long time.



- Follow the steps in the section headed “Preparing the appliance for use” see DFU (Direction for Use manual)
- Instead of only water use a mix of water and Lemon sour.
- For the best result leave the mix of water and Lemon sour for about 30 Minutes in the appliance, before you start with flushing the appliance.
- To get the best results repeat above-mentioned step once or twice.
- When finished, flush the appliance twice by repeating the above-mentioned steps only use water instead.


Volume adjustment

The new PCB circuit board makes it possible to adjust the volume output by means of pushing the one-cup and two-cup user controls.

How to adjust the volume output:

1. Be sure the boiler is filled properly, other wise perform fill procedure see DFU for instructions.
2. Switch appliance on and wait until the unit is ready to brew.
3. With volume selection knob be sure to select normal cup volume (2 stripes on display, see picture) 
4. Be sure a **pod holder** is placed, but **without** a Coffee POD. (Only adjusting with **plain** water)
5. Place a cup on the drip tray cover and push the one-cup button.
6. When the appliance has finished it is stabilized to perform the volume adjustment.
7. Empty the cup, podholder and push again for one cup setting, measure the volume output with a graduated beaker. In the table you can find the requirements for the minimum / maximum volume output cc/mL values depending from the country version:

One-cup setting (2 stripes Display setting), Including Pod holder, water spec. (Without Coffee pod)		
	 Min. water cc/mL	 Max. water cc/mL
France version	104	120
General version	125	141

8. Unplug the appliance from the mains.
9. Press the 1- and 2 cup button simultaneously and plug the mains on.
10. When above step succeeded the LED will turn on continuously and the display will show the Tank empty symbol. (see picture) 
11. Depending if the volume has to de- or increase you have to push the 1- or 2 cup button.
Every time you push the 1- or 2 cup button the LED will turn off for 0.5 second (feedback to user) and the pump time will be shortened or lengthened for 0.5 seconds depending which button was pushed.
Pushing 1 cup button pump, time will be **shorten** with 0.5 sec is approximately - 3.5 cc/mL (less coffee)
Pushing 2 cup button pump, time will be **lengthen** with 0.5 sec is approximately + 3.5 cc/mL (more coffee)
When the volume has to increase with 10 cc for example, push the **2 cup** button 3 times.
The new value will be stored when you switch the appliance off by pushing the main switch. (LED will turn off)
12. Turn appliance on again and brew one cup, measure the volume. In case the volume is not within specification repeat steps 6 - 11.
13. End .

Automatic filling procedure:

The Senseo PCB contains an automatic filling procedure software routine.

This fill routine is only meant for **back-up**.

Normally the consumer has to follow the guidelines stated in the DFU.

The filling procedure functions as follows:

The consumer has to fill the water container and has to plug the appliance on the mains.

When the Senseo main switch has been pushed the main switch LED will light continuously. This is only the case when the Senseo has not finished the filling procedure completely! (**First use**)

When the consumer pushes the one or two-cup button, the Senseo will start automatically the pump to fill the boiler.

When the boiler is filled the pump stops pumping. (Pump time approximately 22 seconds)

When the filling procedure has been successful the software will clear a **Boiler_empty_flag** in the Eeprom.

By means of this **Boiler_empty_flag** the system knows the boiler is filled or not!

When the Senseo is switched off or disconnected from the mains, the value of the **Boiler_empty_flag** is stored in the Eeprom chip.

Restoring the Boiler_empty_flag to production default:

Some times it is needed that the boiler of the Senseo have to be emptied.

This for instance in wintertime where 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 in the Eeprom.

Bringing the Senseo back into production status, has the benefit the flush routine will be activated automatically when installed by the consumer, see topic **Automatic filling procedure**.

To **SET** the **Boiler_empty_flag** can be done by:

Keep the 1-cup button pressed while plugging in the power cord of the appliance.

The main switch LED will blink very rapidly for approximately 1 second.

To check if the **Boiler_empty_flag** is really set, you should reconnect the power cord a second time to the net and push the main switch.

The main switch LED should light continuously.

Pos	Service code	Description	
1	4222 259 37340	Padholder 1 cup	Pebble grey
2	4222 259 37350	Padholder 2 cup	Pebble grey
3	4222 247 42550	Collector	Black
4	4222 247 49320	Spout cover	Pebble grey
5	4222 259 37910	Spout assy	Black
6	4222 240 05960	Drip tray cover rim Top	
7	4222 247 41860	Drip tray	Black
8	4222 247 49260	Lever	Pebble grey Soft grip
9	4222 247 41950	Pushrod	
10	4222 247 06810	Sealing ring	
11	4222 240 05990	Ejector pin	
12	4222 247 41920	Distribution disk	Black
13	4222 259 37900	Display assy Blue	230 V
14	4222 259 34970	3-Way valve	
15	4222 259 35470	Boiler assy	V7.1 - 230 V
16	4222 247 06840	Hose	
17	4222 247 06860	O-ring (pump elbo)	
18	4222 247 35880	Pump Elbo	
19	4222 259 36900	PCB assy incl. level sensor (2x)	230 V
20	4222 247 05130	O-ring (NTC)	
21	4222 259 35500	NTC assy	
22	4222 259 36500	Water tank	Soft grey
23	4222 247 49310	Valve outlet	Pebble grey
24	4222 247 49300	Back cover	Pebble grey
25	4222 247 05180	WC sealing	
26	4222 247 35870	Filter	
27	4222 247 39890	WC socket hard	
28	4222 247 05110	Corrugated tube	
29	4222 259 34790	Pump	230 V
30	4213 247 05250	Foot	

EXPLODED VIEW

HD7830/80

