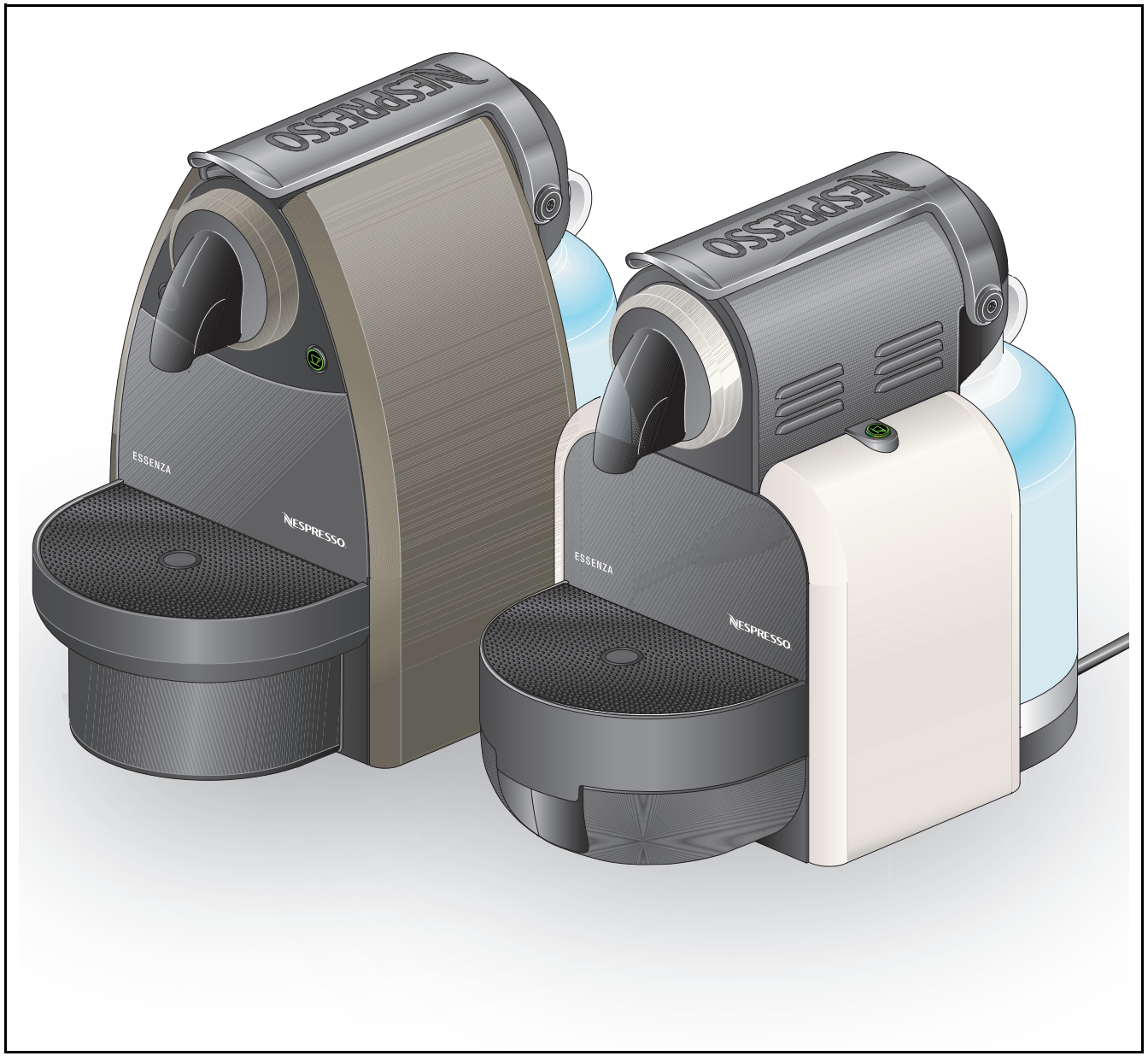
en Service Manual Coffee Machine



Essenza
EF 347 / C99

Essenza
EF 348 / D99

Version 1.0 en

Contents

General

The purpose of this service manual is to provide the service personnel with all necessary information with regards to correct handling, maintenance and repair of the coffee machines EF 347 and EF 348.

This manual should be used by the technicians as a valuable aid to guarantee the permanent readiness for use of the machine. In order to take full advantage of all the functions, it is absolutely necessary to follow the instructions in this manual.

Nespresso technical website

Visit the *Nespresso* technical website periodically to check for upgrades, technical modifications, counter measures etc. for this coffee machine: https://business.nespresso.com

Access is restricted and can be obtained by asking your *Nespresso* technical contact person.

Please keep this manual together with the corresponding service documentation. This way you are assured to have the necessary information.

Content updates

The version number of this service manual is printed on the lower right corner of the page.

Version 1.0

First released service manual version.

Risk of fatal electrical shock and fire! Mains voltage inside the coffee machine.

- **Unplug appliance before cleaning.**
- **Never clean wet or immerse plug, cord or appliance in any fluid.**
- **Disconnect the mains plug before disassembly - the appliance must be free of voltage.**

As an additional safety measure, the use of a residual current device (RCD), also called a ground fault circuit interrupter (GFCI), in the repair centre is highly recommended.

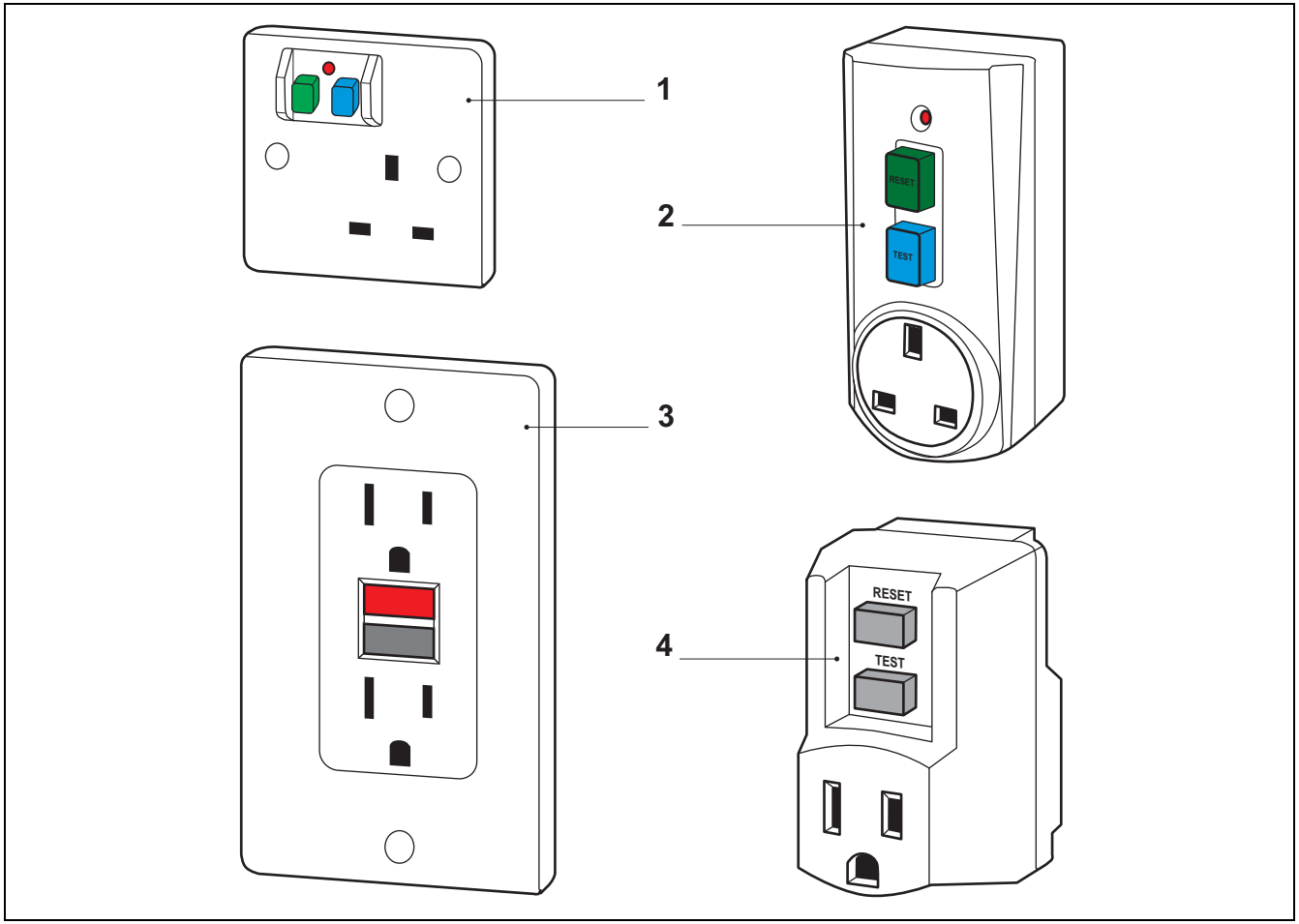
This device does not protect against electrical shock due to contact with both circuit conductors.

Use a GFCI with a trip level of 4 - 6 mA (USA) resp. a RCD with a trip level of 15 - 30 mA (Europe). A trip level above 30 mA provides only very limited protection against harm from an electric shock.

Danger of burns! Hot parts and water under pressure inside the coffee machine (particularly in the thermoblock).

- **Let coffee machine cool down before cleaning or disassembly.**

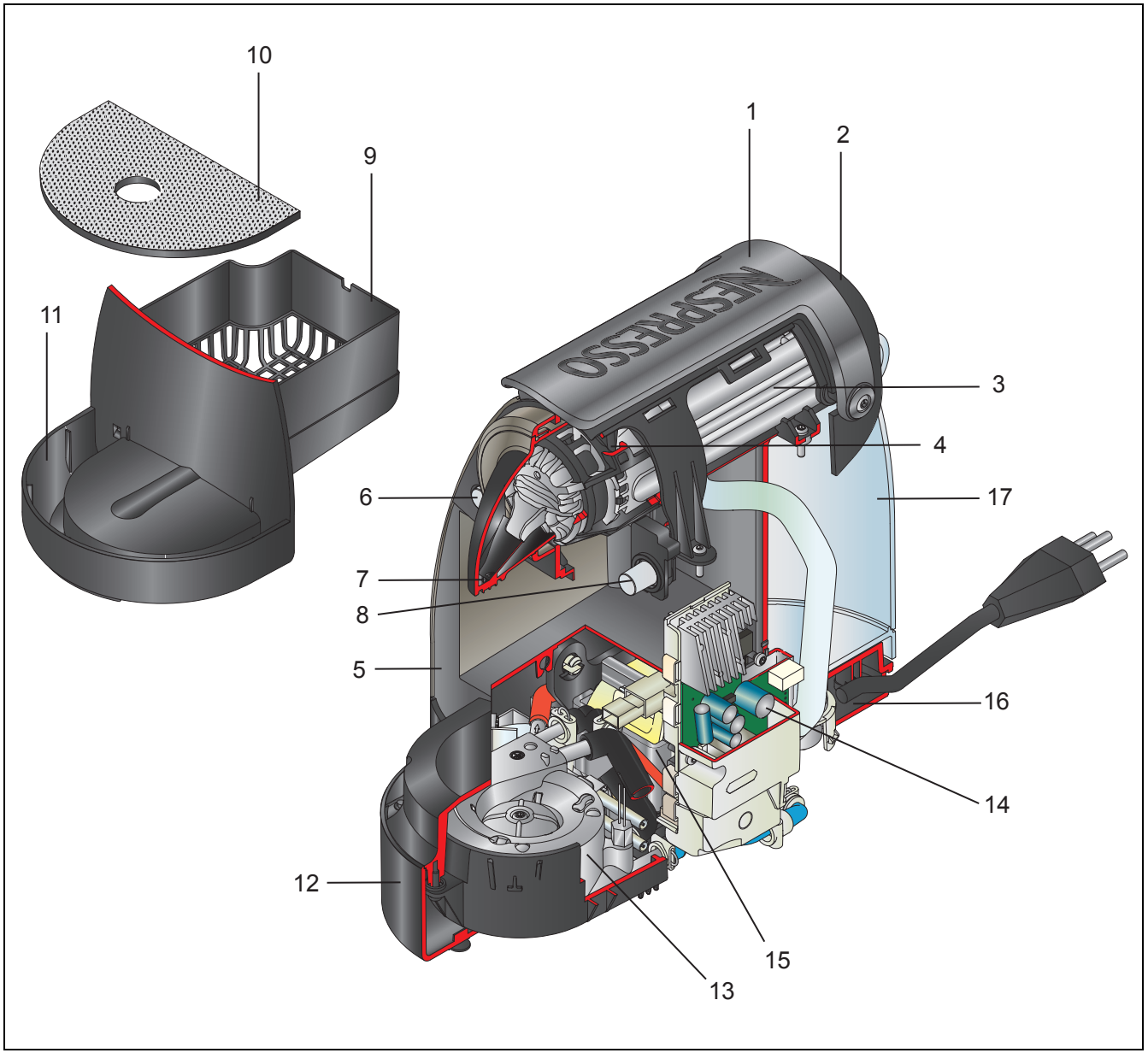
Example illustrations of typical devices:



1) RCD protected socket-outlet
2) Plug-in RCD unit
3) GFCI socket
4) Plug-in GFCI

Overview

1) Closing handle
2) Cover
3) Compact brewing unit (TCBU)
4) Capsule inlet
5) Side panel
6) Espresso button, back lighted
7) Coffee outlet
8) Lungo button, back lighted
9) Container for used capsules
10) Drip grid
11) Drip tray
12) Lower chassis
13) Thermoblock
14) Electronic control board
15) Pump
16) Upper chassis
17) Water tank



Overview of rating plates

The rating plate can be found at the underside of the coffee machine. It is of varying design depending on the brand and carries the following information:

1. Brand name
2. Voltage and power rating
3. Manufacturing country
4. Conformity with RoHS guidelines
5. Bar code
6. Serial number
7. Machine type
8. Special disposal icon
9. Sign of conformity (CE)
10. Article number of the rating plate

Serial number codification

Example: 121 243 47Q 1234 782 1Ke

12124	production date: 124th day of year 2012
347	machine type (EF no.)
Q	production site
1234	incremental number per production day
7	machine partner codification
8	voltage
2	mains plug version
1K	colour version
e	checksum number

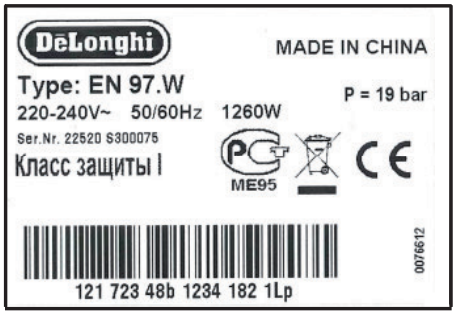
Rating Plates - Essenza machine partners

C99 **Krups XN214010:**

C99 **Turmix TX150:**

D99 **Magimix M100**:

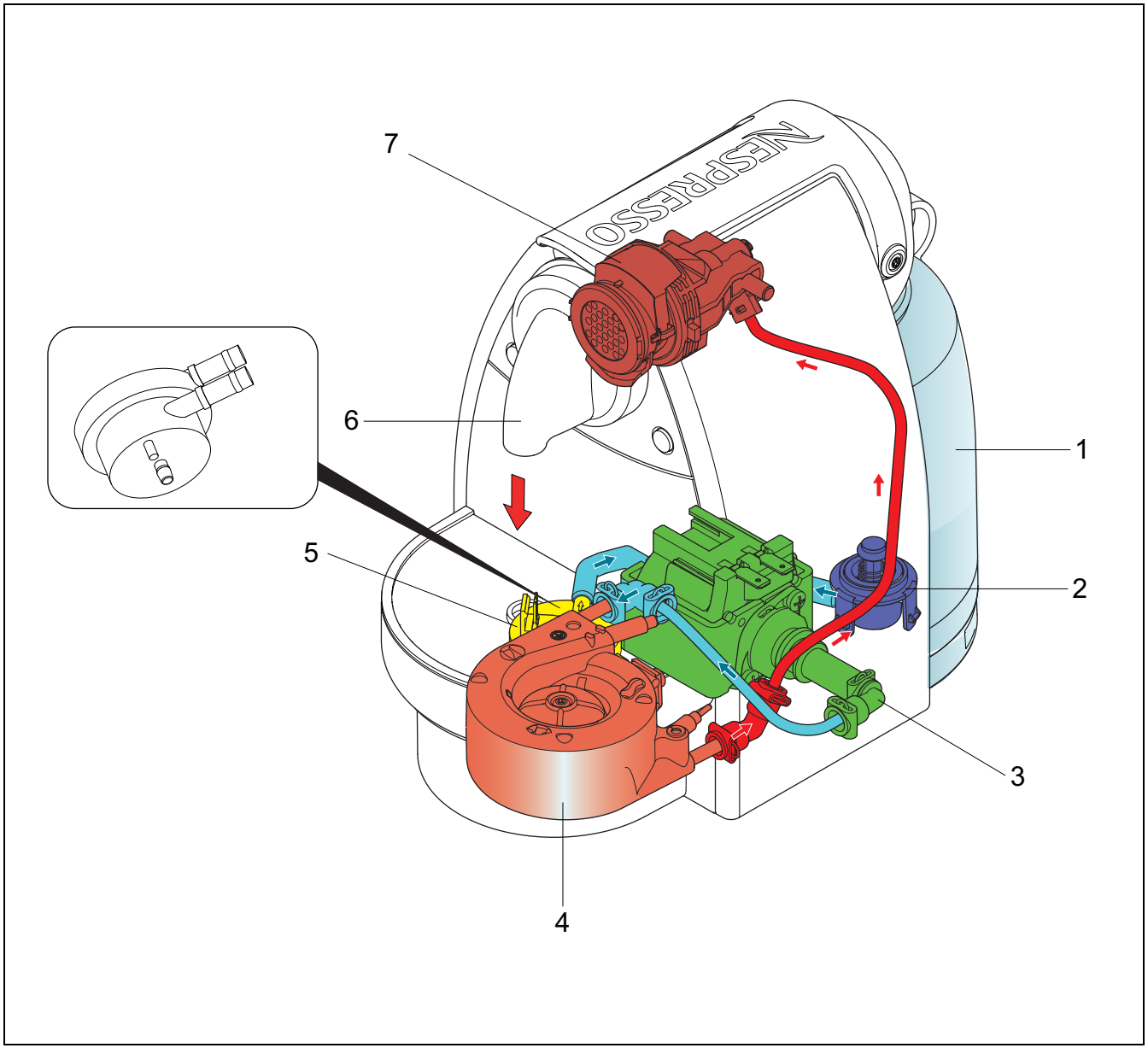
D99 **DeLonghi EN97**:



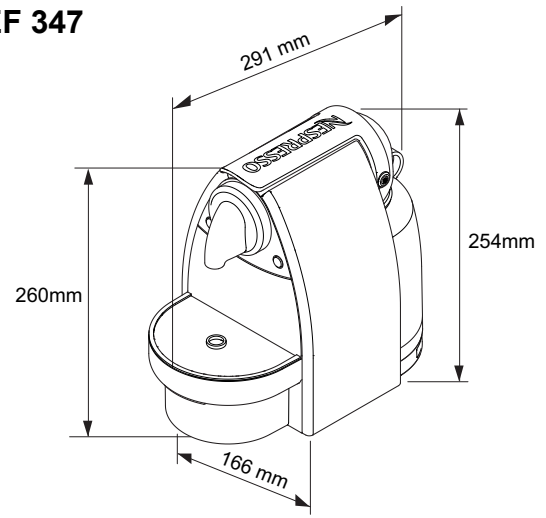
D99 **Koenig Capri nm**:

Water circuit

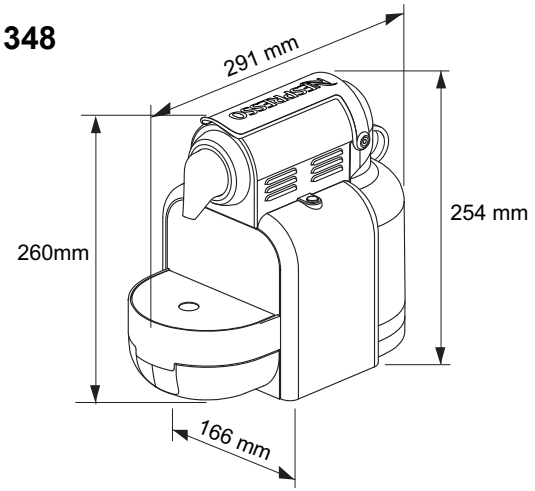
1) Water tank
2) Water tank valve and connector
3) Pump
4) Thermoblock
5) Flowmeter
6) Coffee outlet
7) Compact brewing unit (TCBU)



EF 347



EF 348



Mains

EUR	230V / 50 Hz
USA / CAN	120V / 60 Hz
Approvals	SEV, CENELEC, CE-conform UL, CUL, MITI
Cable length	approx. 1.5 m

Pump data

Pump pressure	
- max. permissible	17,5 bar ± 1,5 bar
- during coffee preparation (depending on brand of coffee)	9 - 13 bar
Flow performance	120 - 240 ml/min. at 12 bar

Capacities

Water tank	0.9 l
Drip tray	approx. 100 ml
Capsule container	10 - 14 pcs.

Power consumption

220 V / 240 V	1’260 W

Energy consumption (CECED / FEA 2009 method)

Energy efficiency class level	A - 40%
Daily energy consumption	63.8 Wh
Annual energy consumption	23.3 kWh

Various data

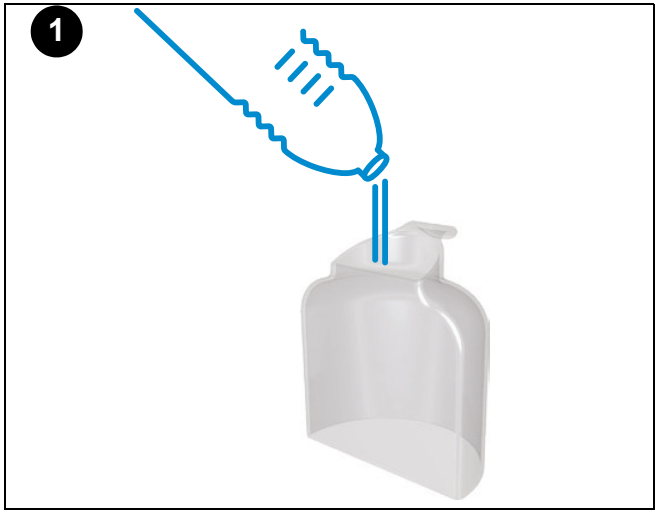
Pre-heating time approx.	~25 sec.
Storage temperature	-25° C up to 60° C
Safety temperature (thermal cut-off)	167° C
Coffee temperature at outlet	86° C ± 3° C
Weight of machine (without water)	approx. 3 kg

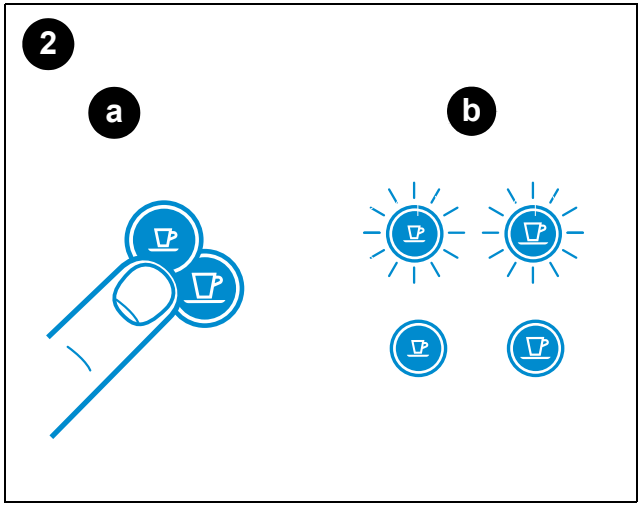
Making coffee

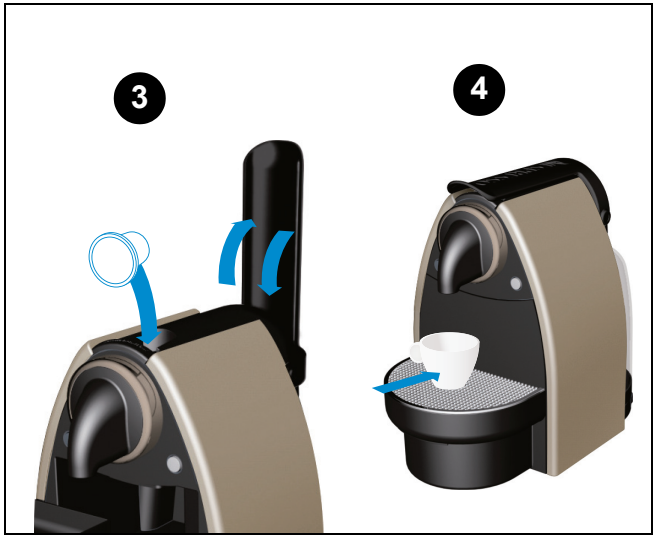
1. Rinse then fill the water tank with potable water.
2. a) Press the Espresso or Lungo button to activate the machine.
   b) Blinking Lights: heating up (25 sec).
   Steady Lights: ready.

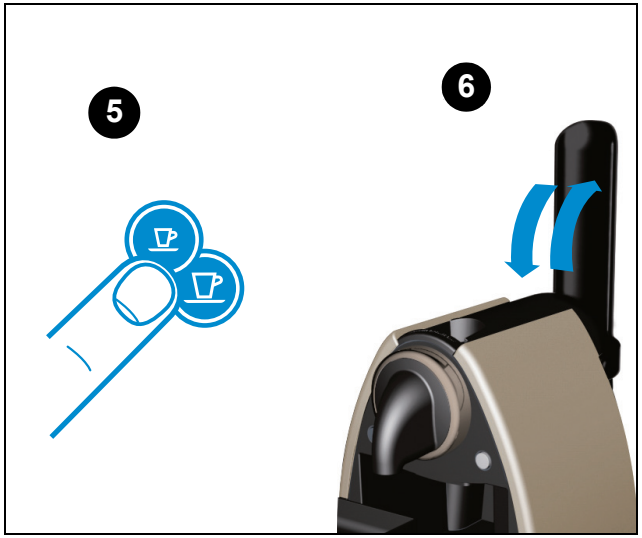
Never lift lever during operation and refer to the safety precautions to avoid possible harm when operating the appliance.
During heat up, you can press either coffee button while blinking. The coffee will then flow automatically when the machine is ready.

3. Lift the lever completely and insert a *Nespresso* capsule.
4. Close the lever and place a cup under the coffee outlet.
5. Press the Espresso (40 ml) or the Lungo (110 ml) button to start. Preparation will stop automatically. To stop the coffee flow or top up your coffee, press again.
6. Remove the cup. Lift and close the lever to eject the capsule into the used capsule container.



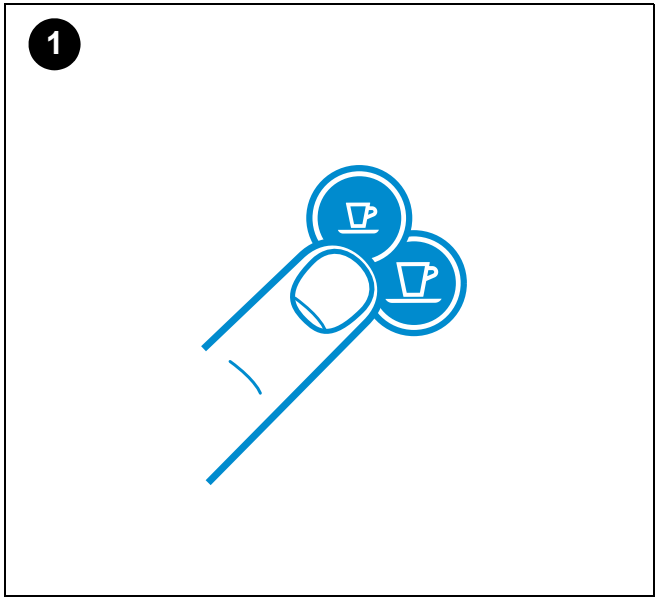


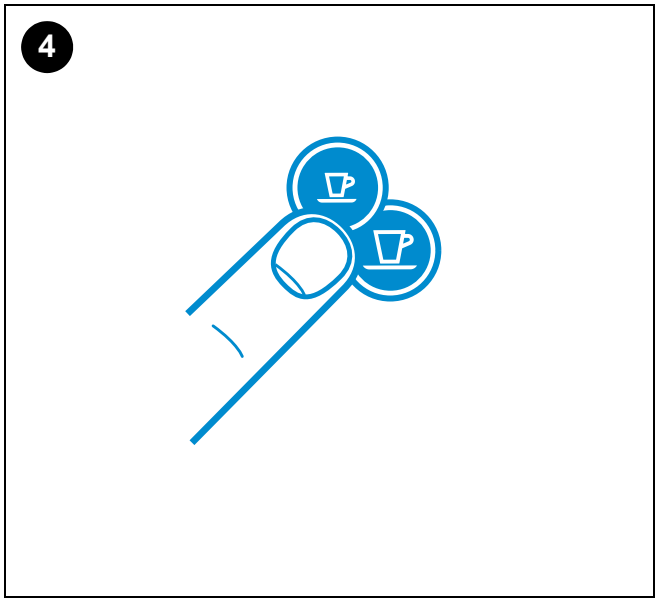




Programming the water system

1. Turn the machine on and wait for it to be in ready mode (steady lights).
2. Fill the water tank with potable water and insert a *Nespresso* capsule.
3. Place a cup under the coffee outlet.
4. Press and hold the Espresso or Lungo button.
5. Release button once the desired volume is served.
6. Water volume level is now stored.

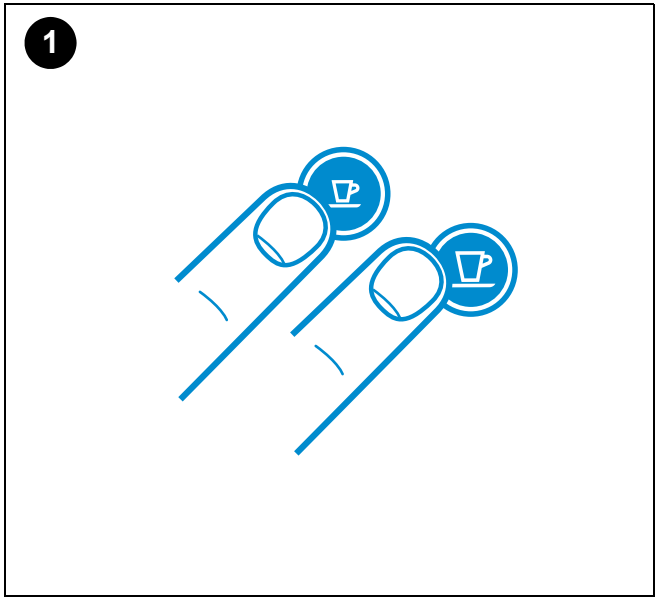


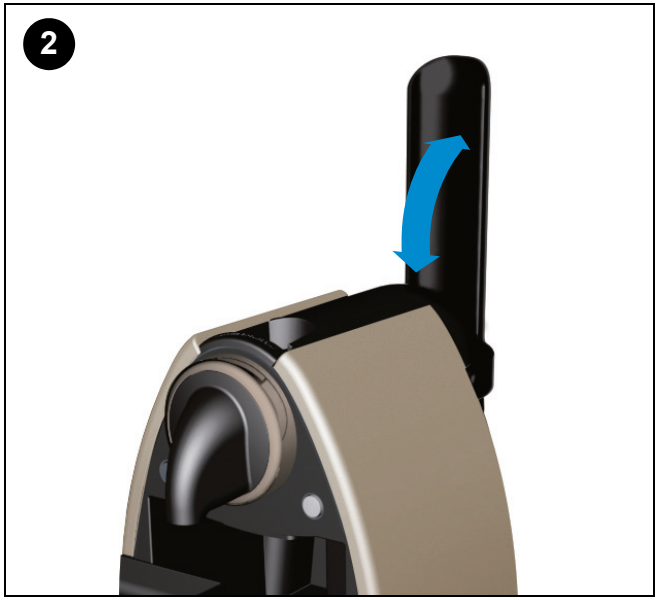


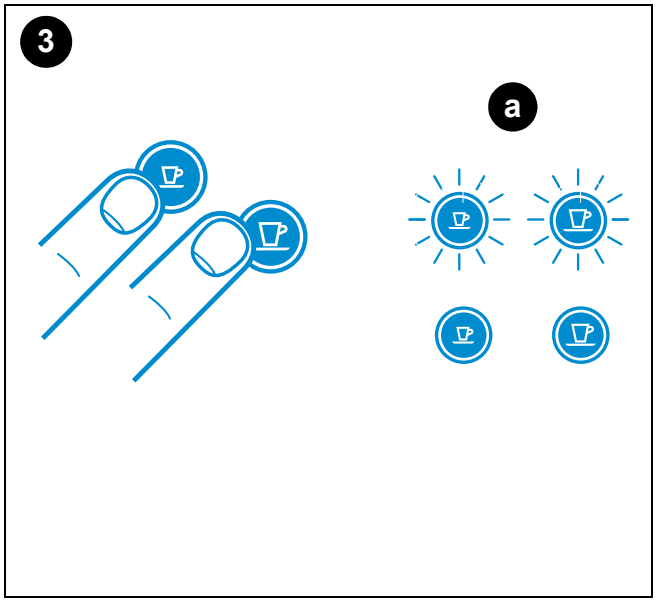
Emptying the water system

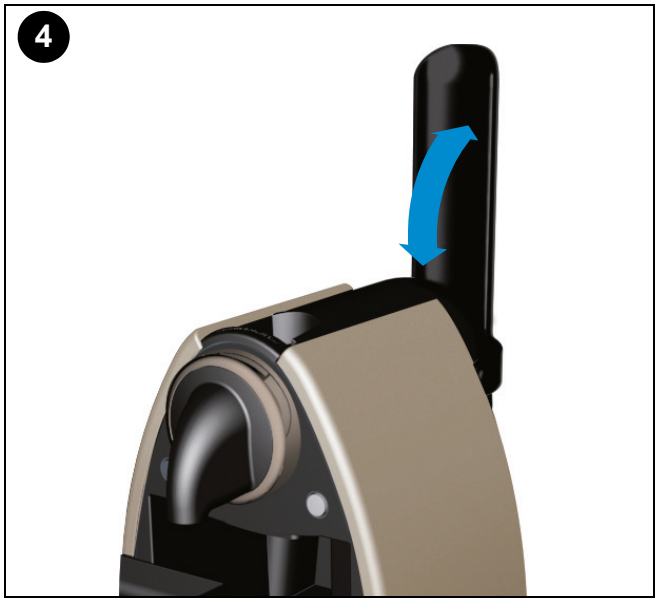
The machine will be blocked for 10 minutes after emptying mode.

1. To enter the emptying mode, press both the Espresso and Lungo button to turn the machine off.
2. Remove the water tank and open the lever.
3. Press both the Espresso and Lungo button for 3 seconds.
   a) Both LEDs blink alternatively.
4. Close the lever.
5. Machine switches off automatically.
6. Empty and clean the used capsule container and drip tray.









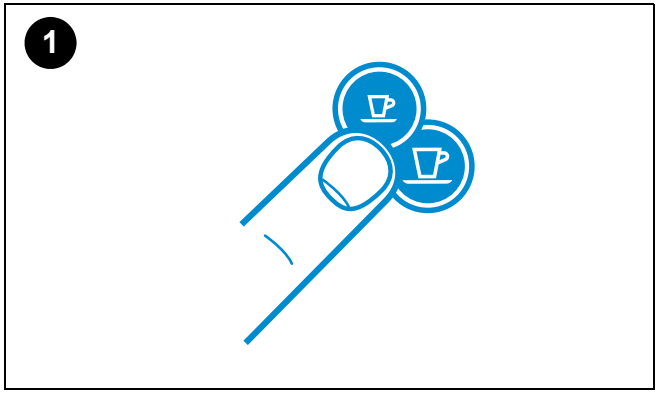
Energy saving mode

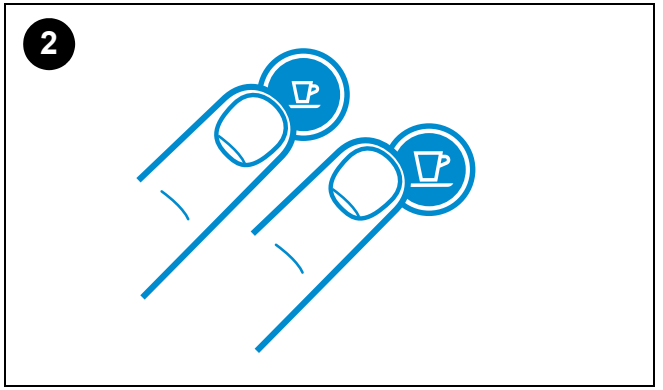
This machine is equipped with an energy saving feature. The machine will automatically enter power off mode after 9 minutes.

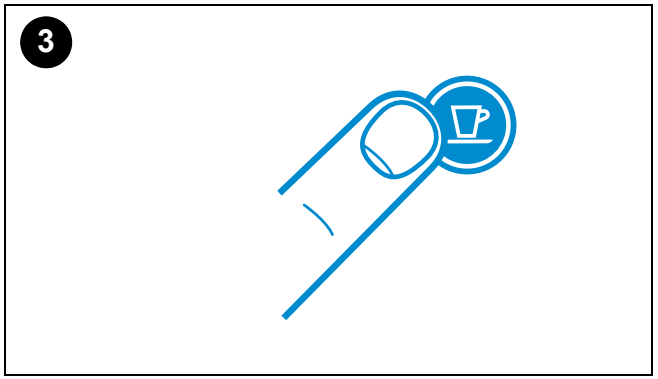
1. To turn the machine on either press the Espresso or Lungo button.
2. To turn the machine off before automatic Power Off mode, press both the Espresso and Lungo button simultaneously.

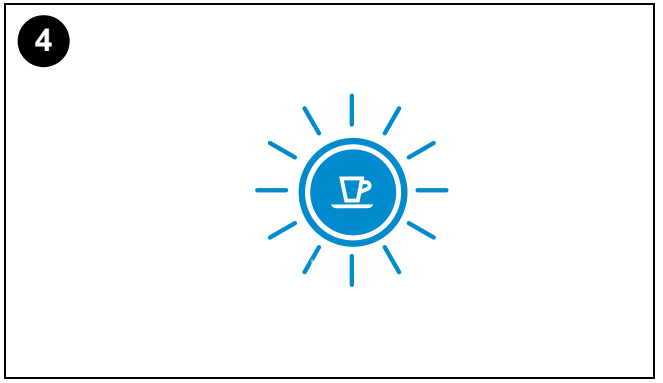
To change this setting

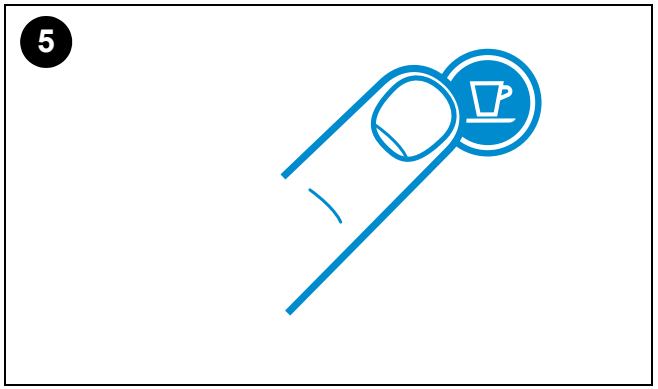
3. With machine being turned off, press and hold the Espresso button for 3 seconds.
4. The Espresso button will blink to indicate the current setting.
5. To change this setting press the Espresso button:
   One time for power off mode after 9 minutes
   One more time for power off mode after 30 minutes
   One more time to deactivate
6. To exit the energy saving mode press the Lungo button for 3 seconds.

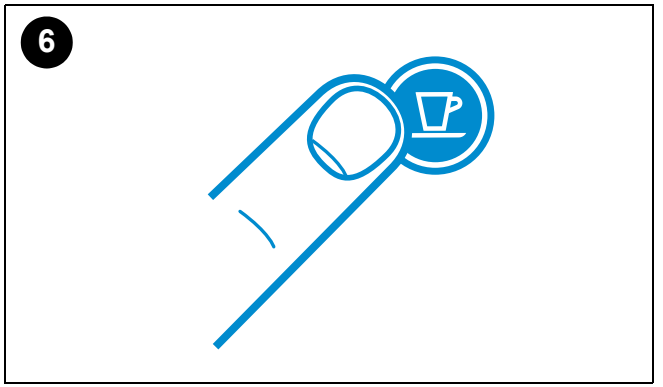








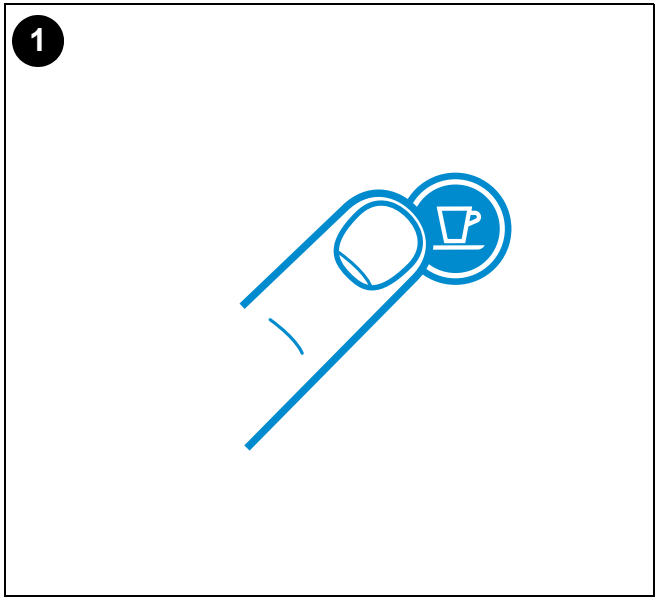


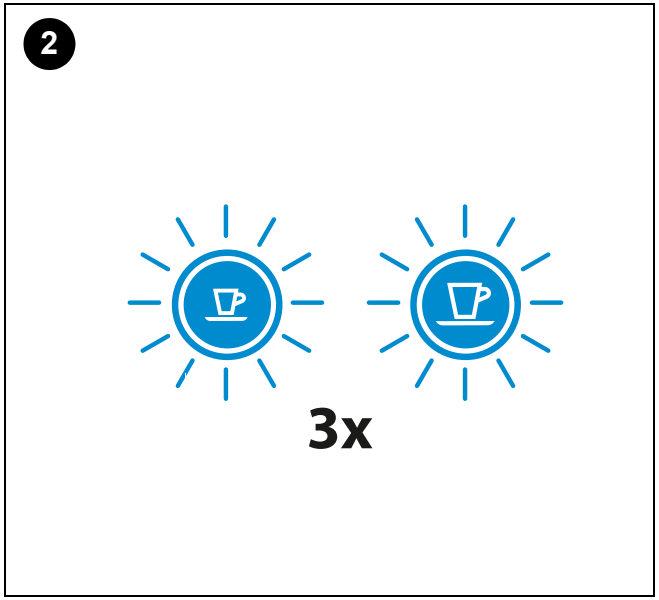


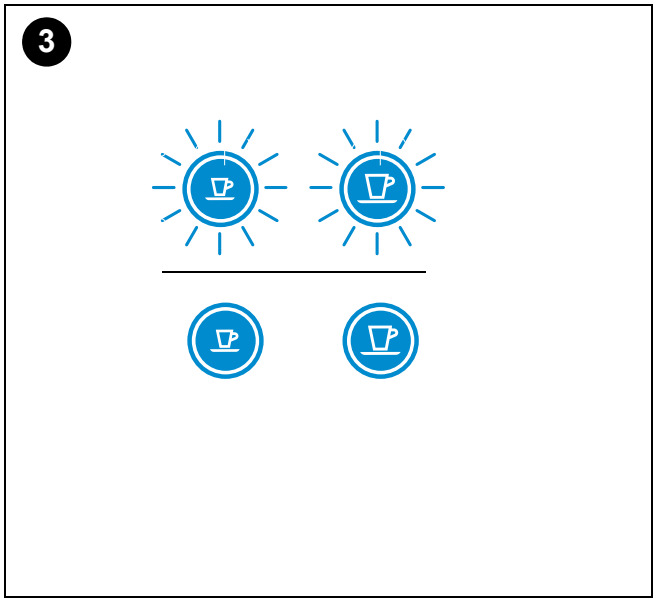
Reset to factory settings

1. With machine being turned off, press and hold down the Lungo button for 5 seconds.
2. LEDS will blink fast 3 times to confirm machine has been reset to factory settings.
3. LEDs will then continue to blink normally, as heating up, until ready. Steady lights: machine ready

Factory settings:
Espresso Cup: 40 ml
Lungo cup: 110 ml
Power off mode: 9 min.







Coffee machine status (1)

After pressing the On/Off button, an automatic self test is performed to check if

- the NTC is connected,
- the NTC is short circuited,
- the thermoblock reaches the standby temperature within 2 minutes.

Operating modes and detected failures are indicated by backlighted coffee buttons as listed in the following table.

Operating mode	Small cup	Led signal	Big cup	LED signal
Off	off		off	
Ready	on		on	
Error	blinking fast 3 times every 2 sec.		blinking fast 3 times every 2 sec	
Heat up	Blinking slow		Blinking slow	
Brewing small cup	Blinking slow		on	
Brewing big cup	on		Blinking slow	
Rinse small cup	Blinking slow		on	
Rinse big cup	on		Blinking slow	

Coffee machine status (2)

Operating mode	Small cup	Led signal	Big cup	LED signal
Power off Program	Blinking small cup - 1x for 9 min. (factory setting) - 2 x for 30 min. - 3 x for deactivated		off	
Emptying	Blinking fast		off	
	off		Blinking fast	
Descaling ready D. pump on descal) D. pump off (descal)	Blinking fast		Blinking fast	
Overheat	Blinking slow		Blinking slow	
Order small cup (during heat)	Blinking slow		off	
Order big cup (during heat)	off		Blinking slow	
No more stand by No more power save	-		-	
Resetting to factory	Blinking 3 Hz		Blinking 3 Hz	

Check Machine on receipt

The receipt check enables you to rapidly locate faults on the machine and to initiate appropriate repair action.

Follow the check procedure.

Repair any faults found and check if the machine is operating perfectly.

Check procedure	Symptoms	Action / repair work	Further action / repair work
1 Check appliance for visible damage	1.1 Parts of housing broken or damaged	YES - Replace parts if necessary NO - Go to point 1.2	
	1.2 Mains cable damaged	YES - Replace mains cable NO - Plug machine to the mains and go to point 2.1	
2 Check mechanical elements	2.1 Closing handle works correctly	YES - Go to point 2.2	
		NO - It is hard or impossible to close the closing handle	YES - Screw on closing handle screws at defined torque or replace CBU (see page 26) NO - Replace the CBU
	2.2 Is the capsule correctly ejected?	YES - Go to point 3 NO - Replace TCBU	
3 Fill water tank	3.1 Water tank is leaking	YES - Replace water tank NO - Go to point 4	

Check procedure	Symptoms	Action / repair work	Further action / repair work
4 Press any button to start coffee machine to perform automatic self test	4.1 Machine is not working (no function)	YES - a) Check if mains cable is functional	YES - Go to point b) NO - Replace it
		YES - c) Check if pump is working (press coffee button)	YES - Go to point f) NO - Go to point d)
		YES - d) Check if coffee button is functional	YES - Go to point e) NO - Replace it
		YES - e) Check if pump's thermal fuse (128°C) is defective	YES - Replace pump (see page 24) NO - Go to point f)
		YES - f) Check if thermoblock's thermal fuse (167°C) is defective	YES - Replace thermal fuse and if necessary thermoblock too (see page 23) NO - Go to point g)
		YES - g) Check if electrical wires are functional	YES - Replace elect. mainboard and the NTC (see page 25) NO - Replace defective(s) wire(s)
		NO - Go to point 4.2	
	4.2 Backlighted coffee button blinks at irregular intervals	YES - Check if thermoblock heating element is functional	YES - Replace NTC (see page 22) NO - Replace thermoblock (see page 23)
		NO - Self test ok. Go to point 5	
5 Check coffee temperature while preparing a coffee (see page 34)	5.1 No coffee at outlet	YES - a) Water system is empty	YES - Fill water system (see page 11) NO - Go to point b)
		YES - b) Pyramid plate is clogged	YES - Replace TCBU (see page 26) NO - Go to point c)
		YES - c) Machine is blocked by scale	YES - Descale machine (see page 40)
		NO - Go to point 5.2	
	5.2 Temperature is too low (less than 83°C)	YES - Descale the machine (see page 40) NO - Go to point 5.3	
	5.3 Temperature is too high (more than 89°C)	YES - Change NTC (see page 22) NO - Go to point 6	

Check procedure	Symptoms	Action / repair work	Further action / repair work
6 Check for leaks and check flow rate (see pages 28 and following)	6.1 Leakage at extraction system	YES - Replace TCBU (see page 26) NO - Go to point 6.2	
	6.2 Leakage at tubes connection	YES - Replace defective tube and seal NO - Go to point 6.3	
	6.3 Flow rate out of range	YES - Machine is scaled	YES - Descale machine (see page 40) NO - Replace pump
7 Descaling process (if needed)	7.1 Machine scaled	YES - Descale machine (see page 40) NO - Go to point 8	
8 Final cleaning			
End of check procedure			

Safety instructions

Risk of fatal electrical shock!
Mains voltage inside the coffee machine.
Disconnect the mains plug before disassembly - the coffee machine must be free of voltage.

Danger of burns!
Hot parts and water under pressure inside the coffee machine (thermoblock in particular).
Let coffee machine cool down before disassembly.

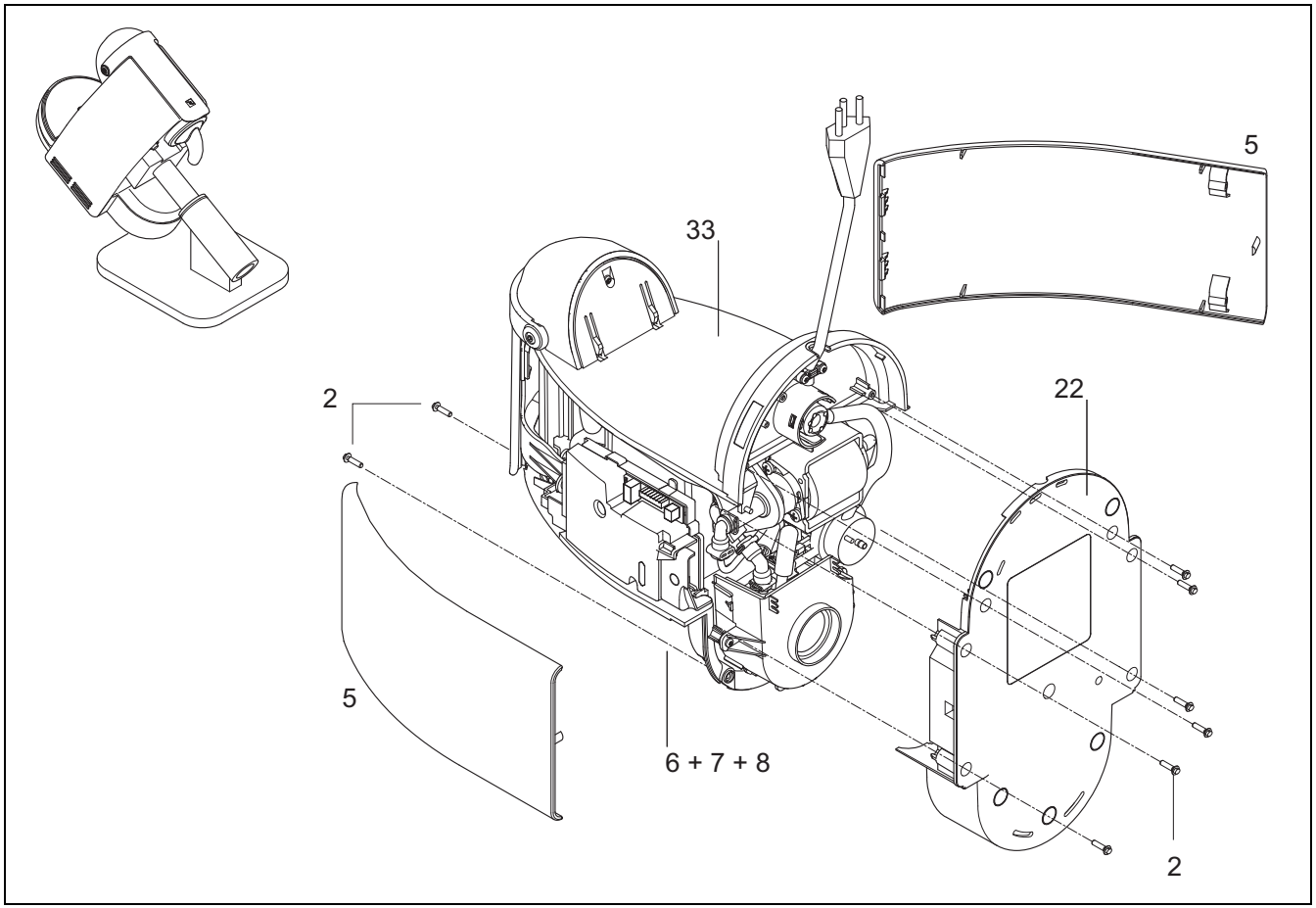
General disassembly

Tool:

- Oval screwdriver

Procedure:

1. Remove water tank (33) and drip tray (8) together with drip grid (7) and capsule container (6).
2. Remove 2 screws (2) on the front side of the machine.
3. Place machine on the repairing/service holder device (see page 42).
4. Remove 6 screws (2) on the bottom of the machine.
5. Swing out and remove both side panels (5).
6. Remove lower chassis (22).



Replacing NTC

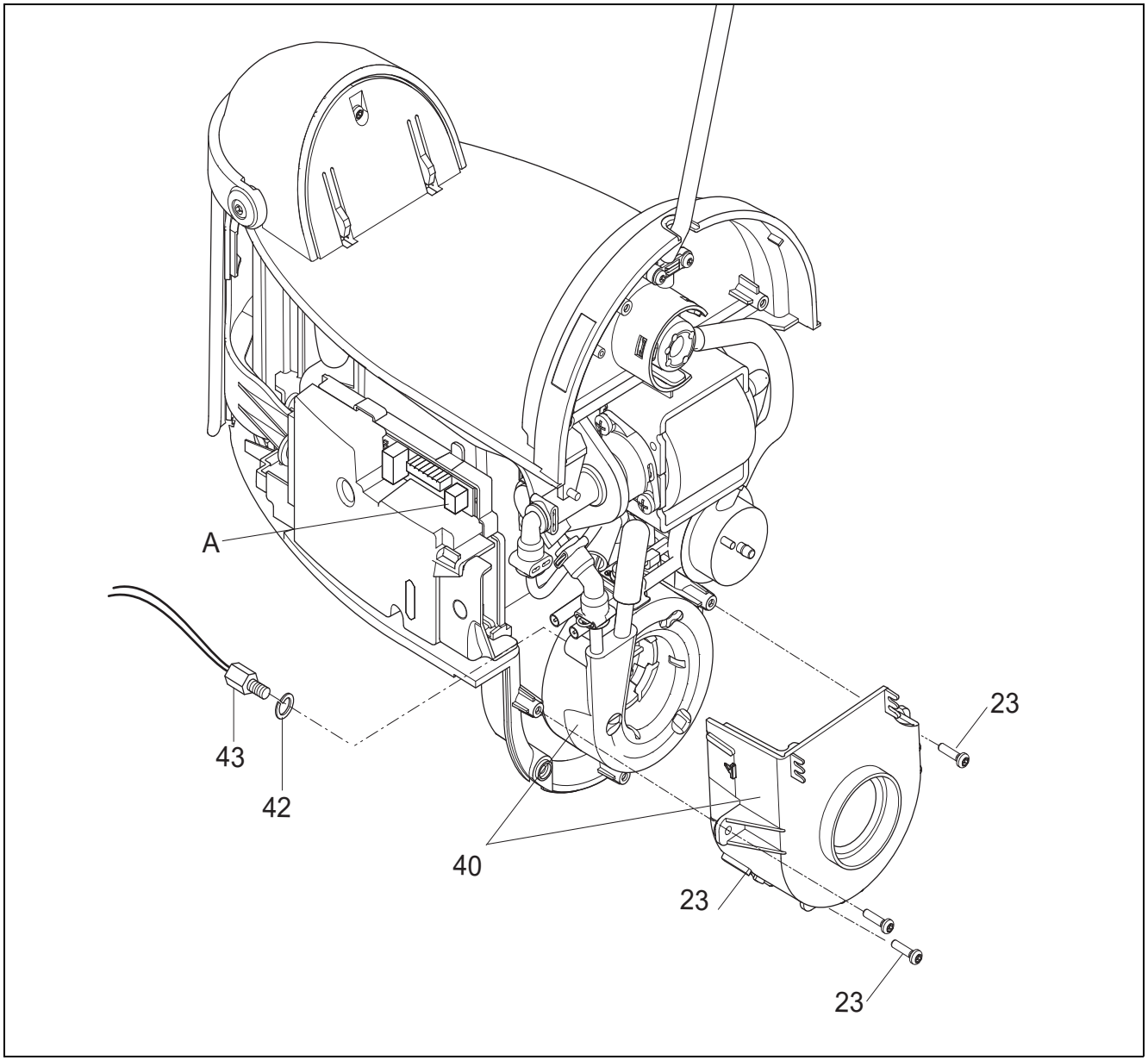
Tools:

- Torx screwdriver Pin-TX10
- Open-ended spanner 9 mm AF
- Torque wrench

Procedure:

1. Follow general disassembly (see page 21).
2. Unplug NTC connector from electronic control board (A).
3. Unscrew 3 screws (23) from thermobloc cover.
4. Unscrew the screw fixing the cover to the thermobloc and remove the cover.
5. Remove defective NTC temperature sensor (43) from thermoblock (40) and replace it with a new one.
6. Assemble in reverse sequence.

Re-use spring lock washer (42) and tighten new NTC temperature sensor (43) with torque wrench (80 - 100 Ncm).



Replacing thermoblock

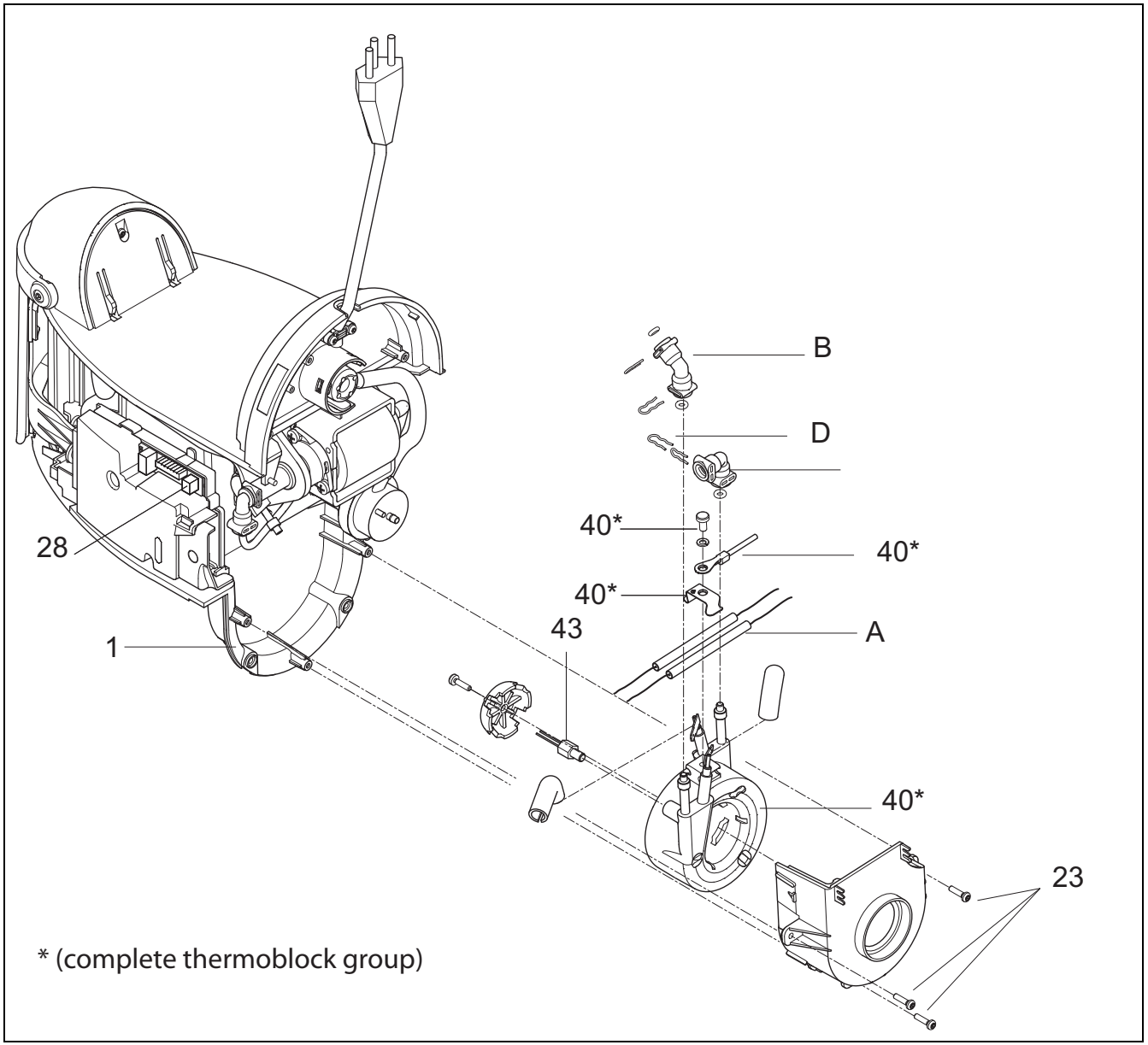
Tools:

- Torx screwdrivers Pin-TX10, TX20
- Open-ended spanner 9 mm AF
- Torque wrench

Procedure:

1. Follow general disassembly (see page 21).
2. Remove 3 screws (23) and separate thermoblock assembly from upper chassis (1).
3. Unplug NTC connector from electronic control board (28).
4. Remove clips (D) and 2 hose connectors (B + C) from thermoblock.
5. Remove ground wire and electrical connections from thermoblock.
6. Replace thermoblock (40)
7. Mount a new NTC temperature sensor (43) on the thermoblock (40).
8. Assemble in reverse sequence.

Use a torque wrench (80 - 100 Ncm) to tighten NTC temperature sensor (43) with spring lock washer (42).



Replacing pump

Tools:

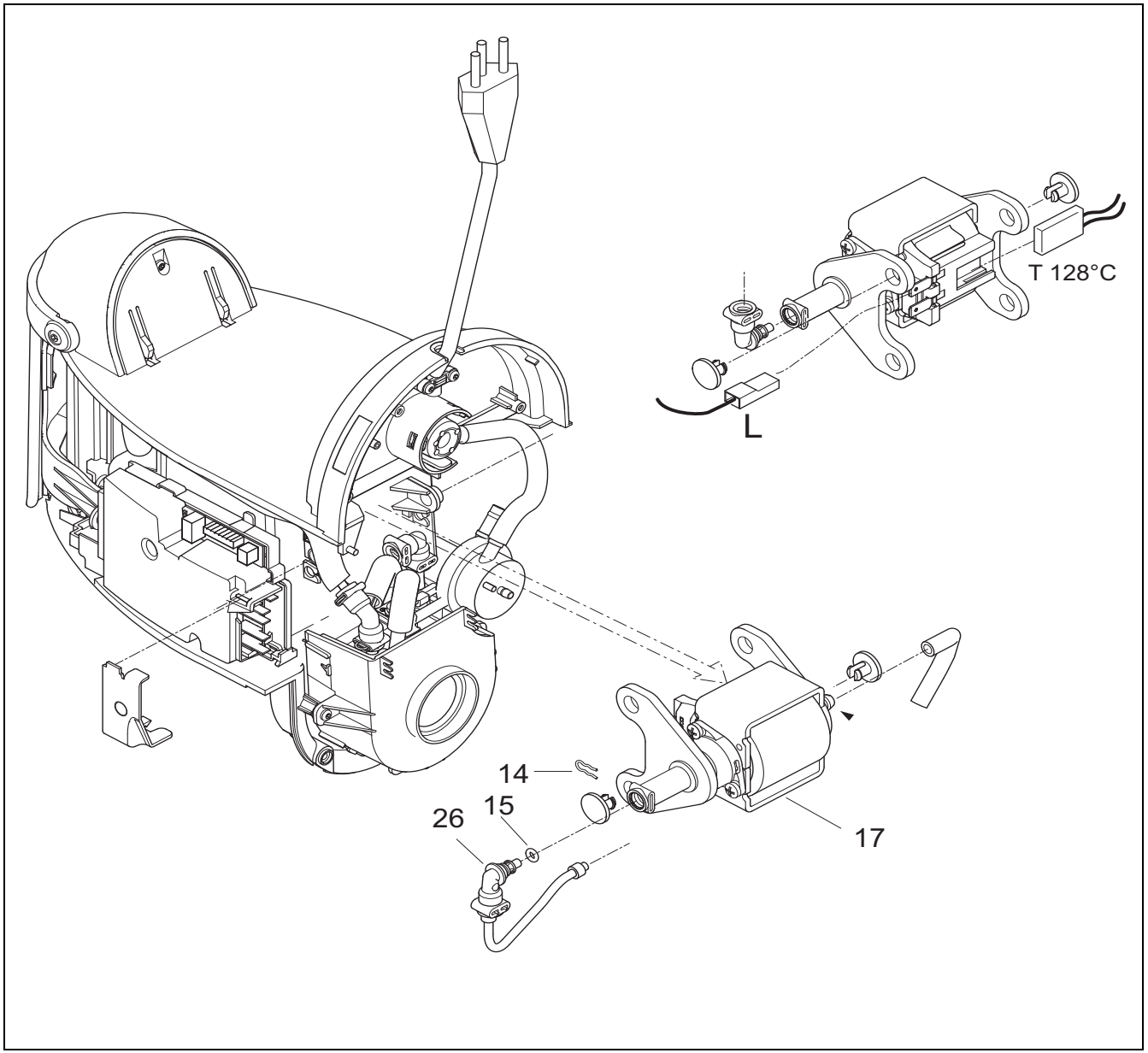
- Torx screwdriver Pin-TX10
- Long-nose pliers
- Blade screwdriver, no. 7

Procedure:

1. Follow general disassembly (see page 21).
2. Remove clip (14) and O-ring (15).
3. Remove pump (17).
4. Remove electrical connections from pump.
5. Replace defective pump (17).
6. Plug in electrical connections on pump.

Check for correct wiring of pump.

7. Insert new O-ring (15).
8. Mount angled hose (26) with clip (14).



Replacing electronic control board with button prints

Tools:

- Torx screwdriver Pin-TX10

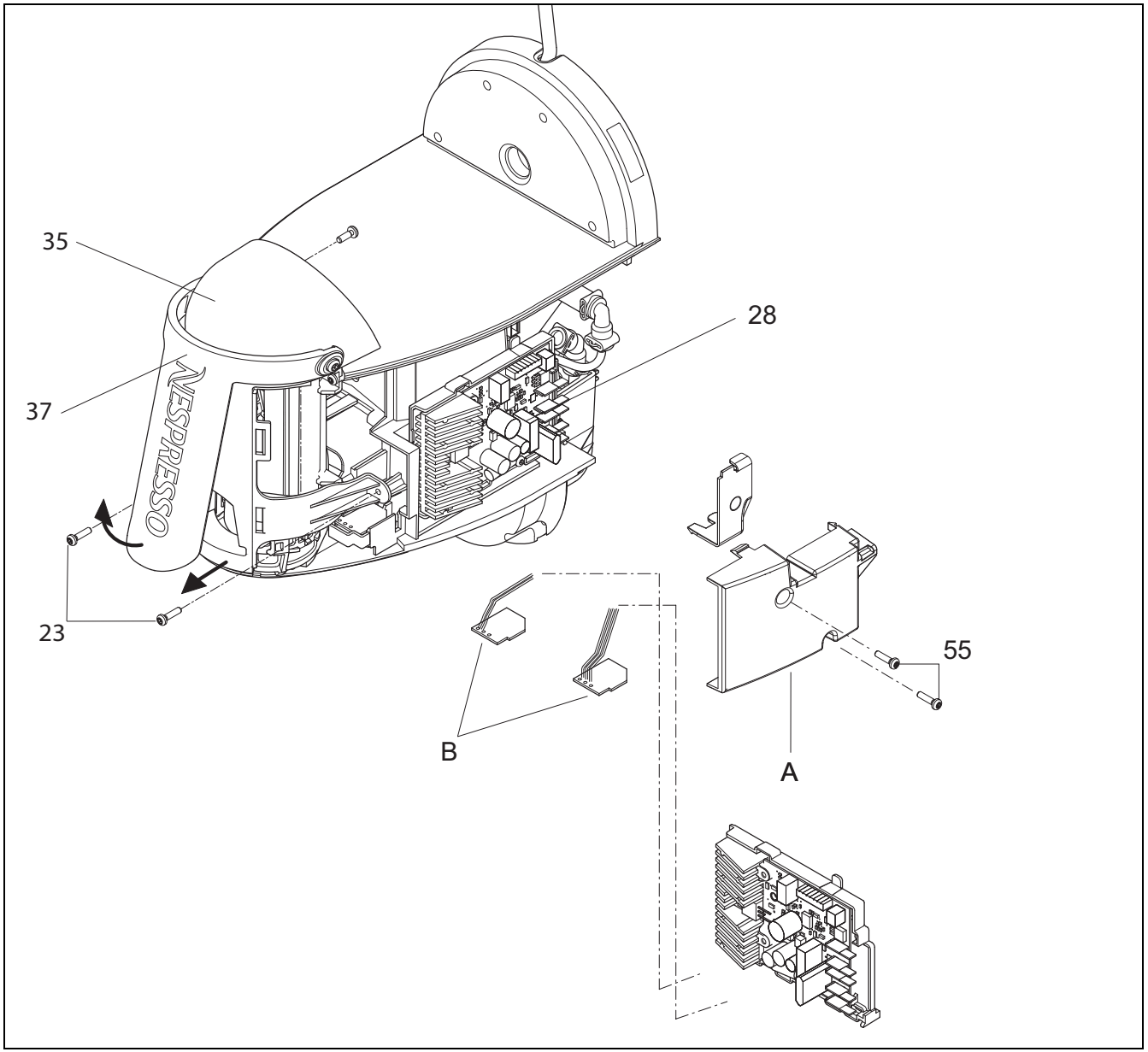
The service engineer must be earthed using an earthing strap!

Only touch button prints with dedicated gloves to avoid oxydation.

Procedure:

1. Follow general disassembly (see page 21).
2. Remove 2 screws (55) and remove housing (A) from electronic control board.
3. Unplug NTC and flowmeter and all wires from electronic control board (28).
4. Remove the 2 screws (23) from cover (35), open the lever (37) and lift up lightly the front part of the cover so the buttons prints wires can pass.
5. Replace defect electronic control (B) board with button prints (B).
6. Assemble in reverse sequence.

Check for correct wiring of electronic control board (see page 27).



Replacing compact brewing unit

Tools:

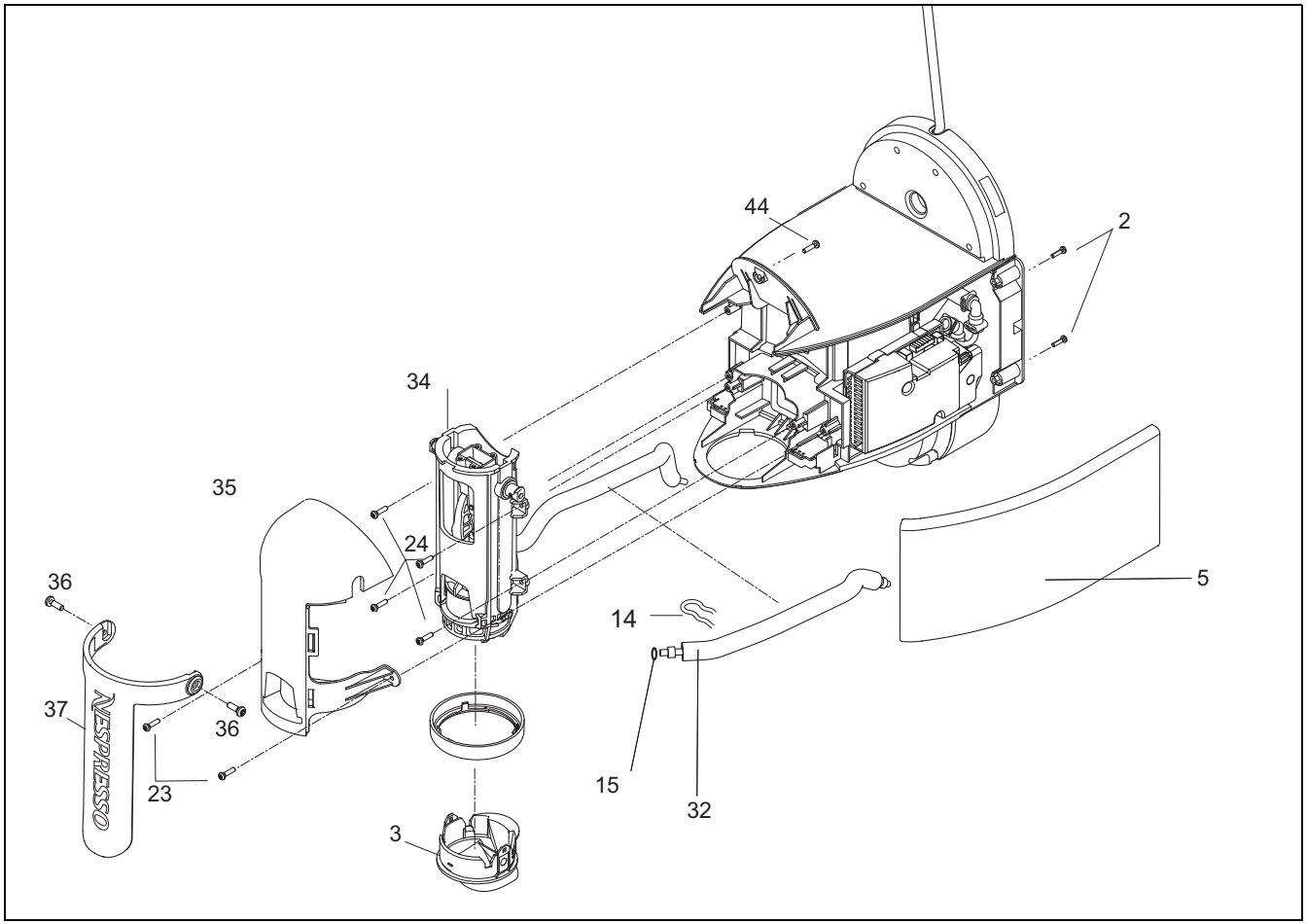
- Torx screwdriver Pin-TX10
- Blade screwdriver no. 4
- Long-nose pliers
- Torque wrench

Procedure:

1. Remove water tank (33) and drip tray (8) together with drip grid (7) and capsule container (6).
2. Place machine on the repairing/service holder device (see page 42).
3. Remove 4 screws (2) on the bottom of the machine. Swing out and remove both side panels (5).
4. Remove 2 screws (36) and pull off closing handle (37).
5. Remove 2 screws (23) at the front and 1 screw (44) at the back to detach cover (35).

C99 machine: All screws have the same lenght.
D99 machine: The screw at the back is longer than those at the front.

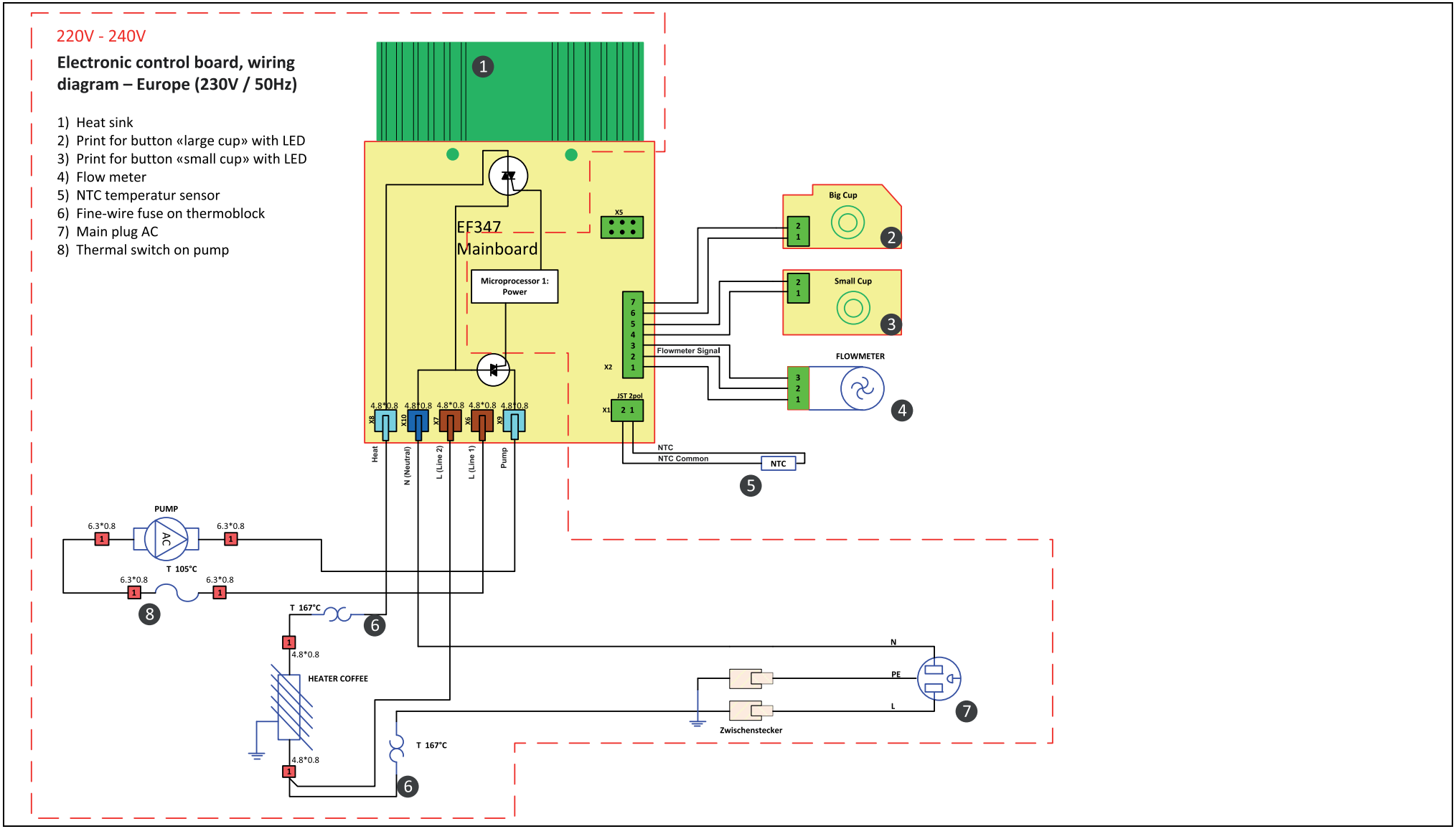
6. Remove clip (14) and hose (32) with O-ring (15) from compact brewing unit.



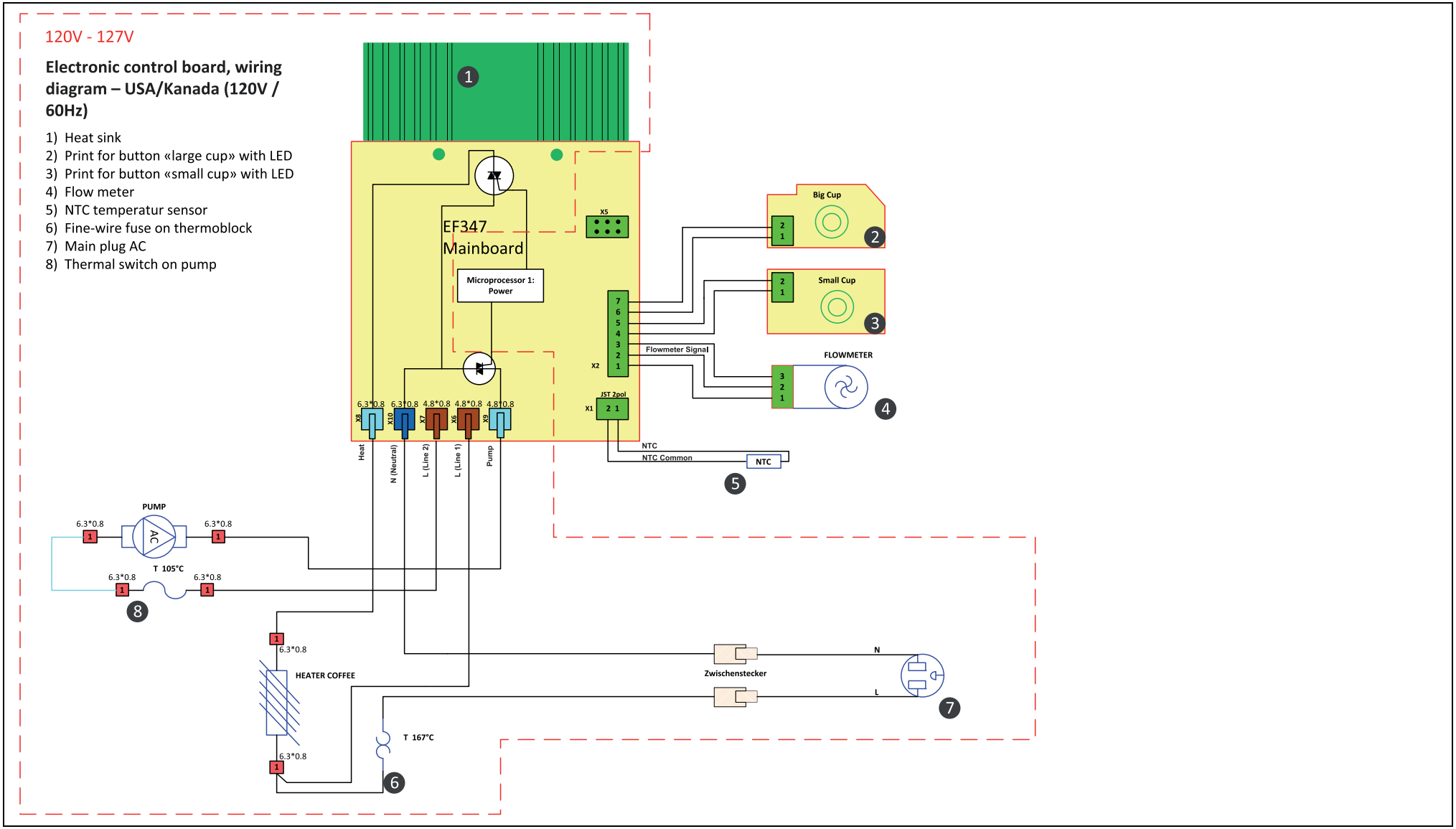
7. Unlatch coffee outlet (3) from compact brewing unit (34) with a blade screwdriver. Take care not to damaged the ring, otherwise replace it
8. Remove 4 screws (24) and detach compact brewing unit (34).

Tighten closing handle screws (21) with a torque of 230 - 270 Ncm.

Wiring diagram 220V - 240V IEC



Wiring diagram 120V - 127V IEC



Safety instructions

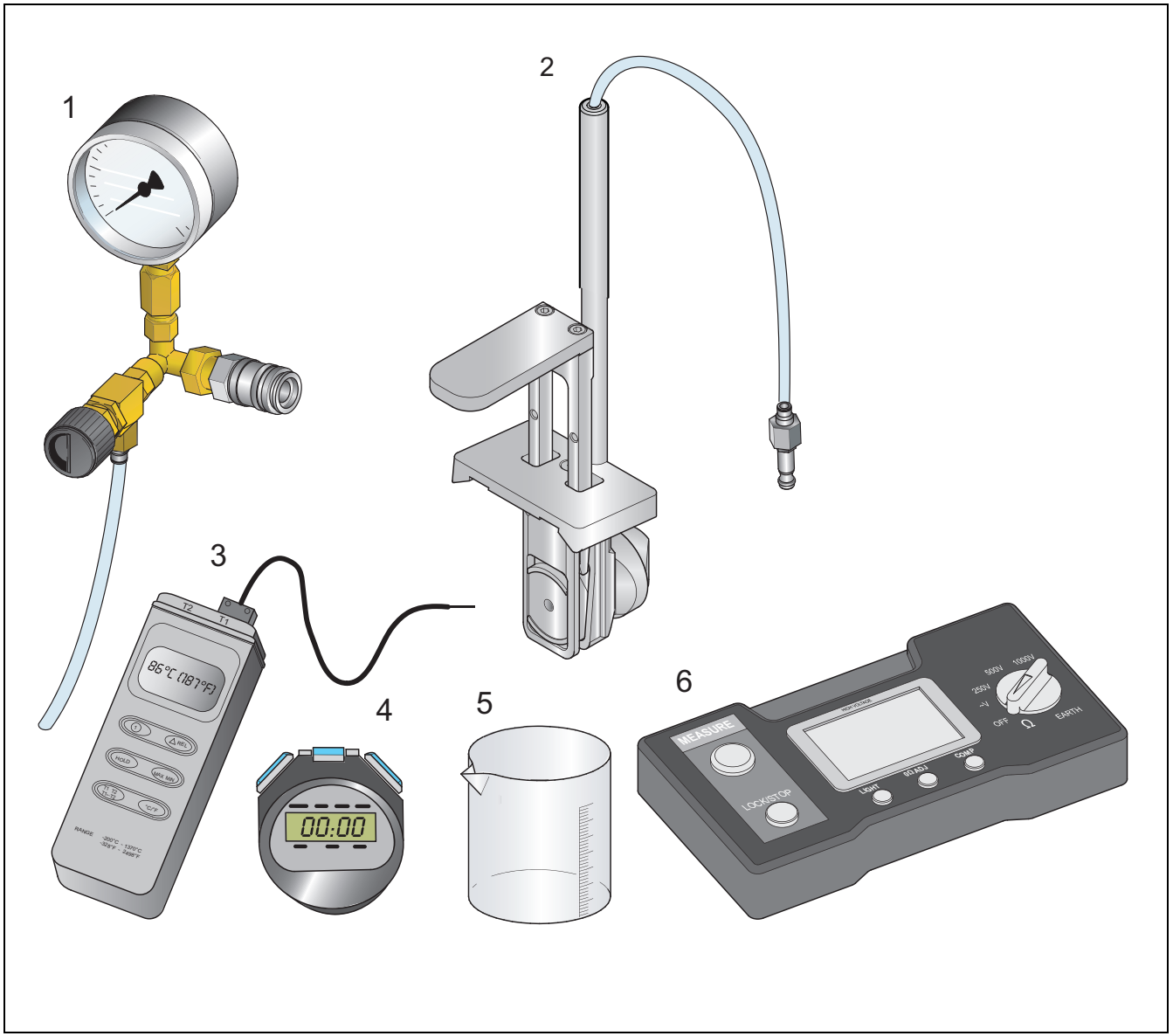
Some function tests are performed with an energized, partly opened coffee machine.

Danger of electrocution!
Mains voltage inside the coffee machine. Do not touch any live part while performing tests.

Danger of burns!
Hot parts and water under pressure inside the coffee machine. Do not touch any hot parts while checking for leakages! Always wear protective goggles.

Required equipment

Pos.	Component
1	Pressure gauge (EFR no. 16195)
2	Essenza pressure gauge adapter (for part number refer to EF webshop)
3	Electronic thermometer (or digital multimeter suitable for temperature measurement)
4	Timer
5	Measuring beaker
6	Test equipment for protective earth continuity test and protective insulation test

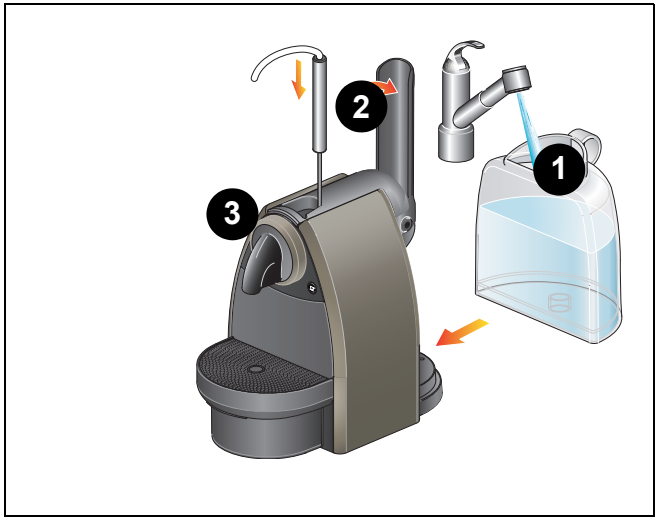


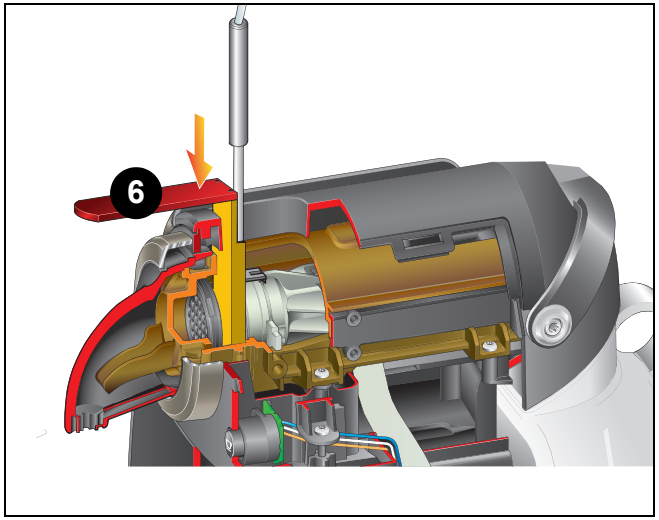
Measuring flow rate (1)

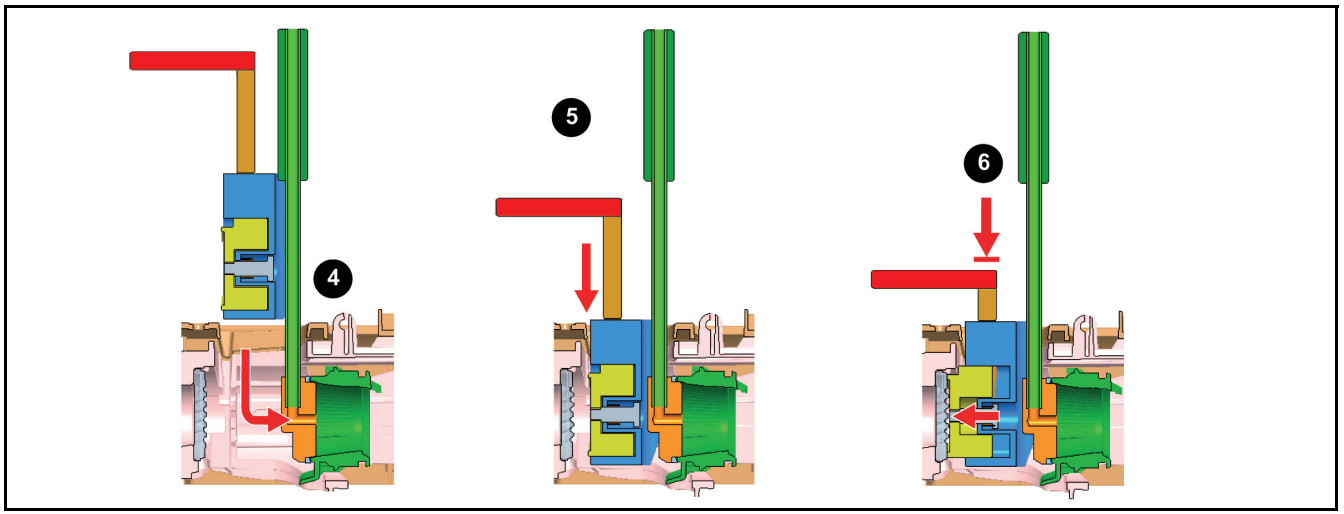
Procedure:

1. Fill and insert water tank.
2. Open closing handle.
3. Insert connecting unit of pressure adapter into capsule bay.
4. Push back sealing cone into capsule cage.
5. Insert fixation unit of pressure adapter into capsule bay.
6. Press down operating lever.

Continued on next page.







Measuring flow rate (2)

Procedure (continued):

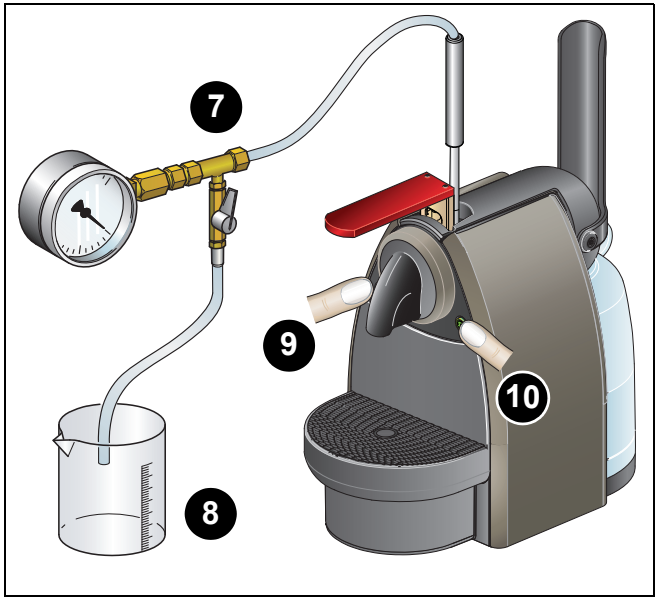
7. Connect pressure hose to pressure tester.
8. Position measuring beaker underneath exit tube of pressure tester.
9. Switch on machine.
10. Press coffee button after heating-up.
11. Open valve fully till water begins to flow.
12. Close valve slowly until 12 bar are indicated.

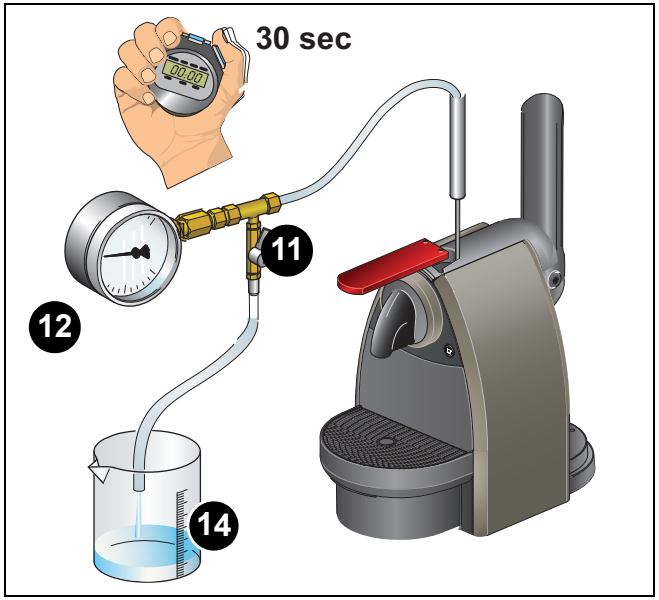
The manometer must be observed continuously and the pressure regulated using the valve if necessary. With increasing temperature the pressure also increases, if necessary readjust the pressure to 12 bar.

13. Perform measurement for approx. 30 sec.
14. There must be at least 60 - 120 ml water in the measuring beaker.

Notice:

- With a flow of < 60 ml the pump is defective or there is a leak in the system.
- Large fluctuations in the pressure gauge readings (± 4 bar) during measurement are indicative of a defective pump.





Checking for leaks and pump pressure (1)

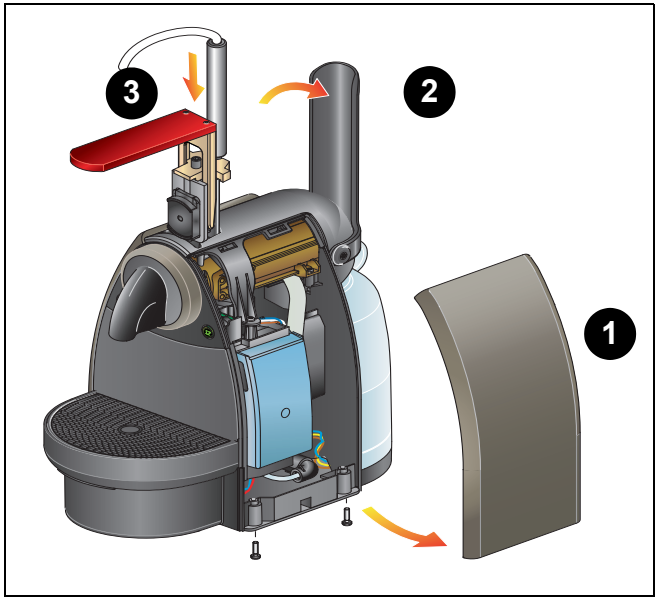
The following components are checked for leaks:

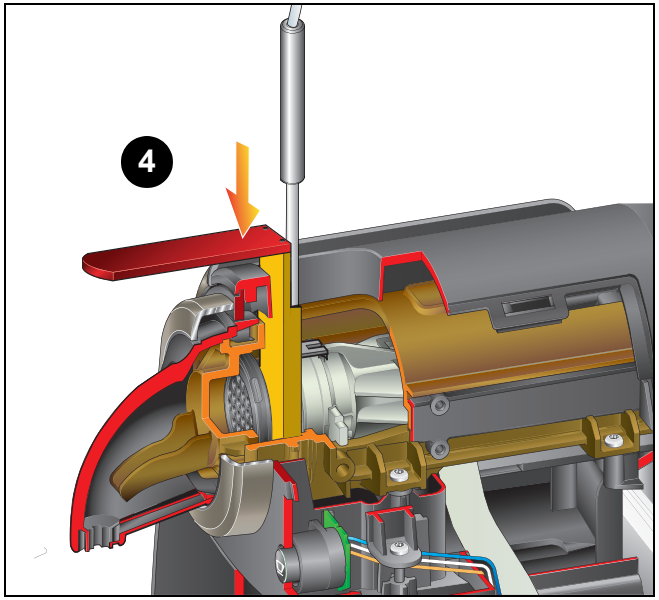
- Compact brewing unit (TCBU)
- Hose connections
- Thermoblock
- Pump

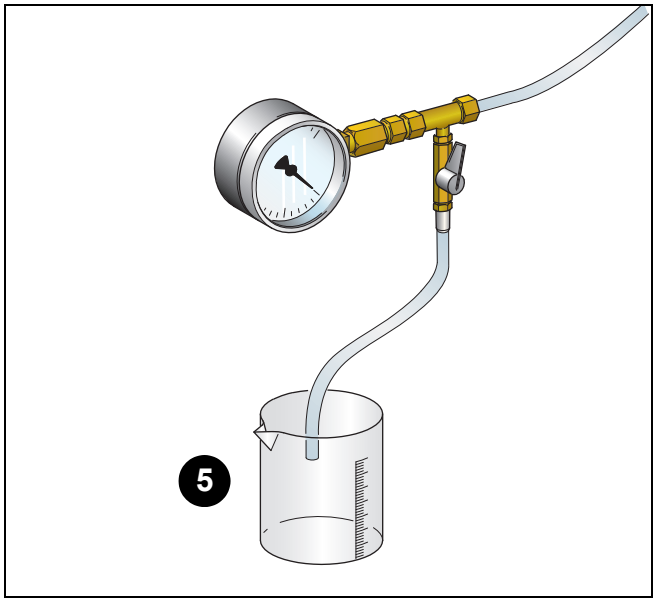
Preparation (unplug machine from mains):

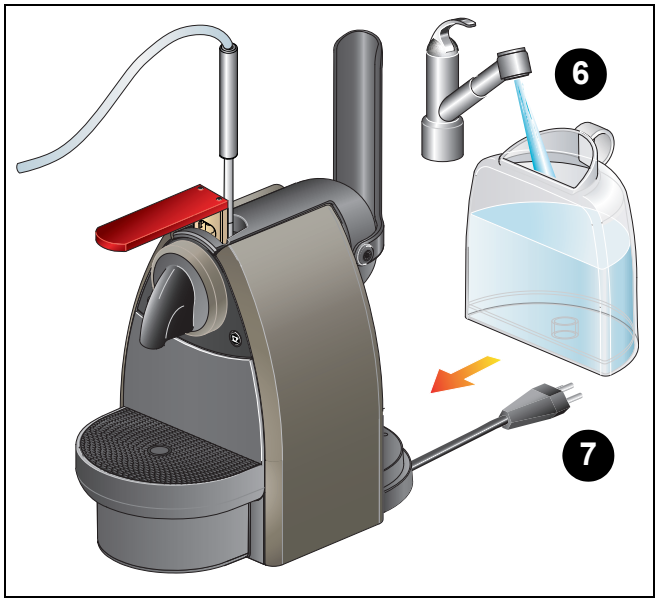
1. Remove right side panel.
2. Open closing handle.
3. Insert connecting and fixation unit of pressure adapter into capsule bay (refer to page 30).
4. Press down operating lever.
5. Position pot underneath exit tube of pressure plug.
6. Fill and insert water tank.
7. Connect mains cable.

Dangerous voltage inside coffee machine! - Do not touch any live part while performing checks.
Hot, pressurized parts inside coffee machine! - Do not touch any hot part while performing checks. Wear safety glasses during inspection.









Continued on next page.

Checking for leaks and pump pressure (2)

Procedure (continued):

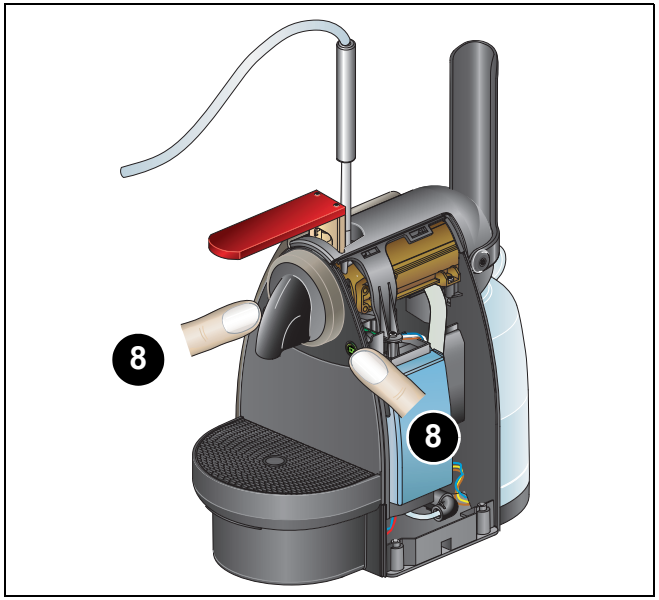
8. Press any button to start the coffee machine. Press coffee button after heating-up.
9. Open valve and leave water to run out for approx. 10 sec.
10. Fully close valve. The pressure will rise rapidly initially and stabilise between 16 - 19 bar (check of pump pressure).

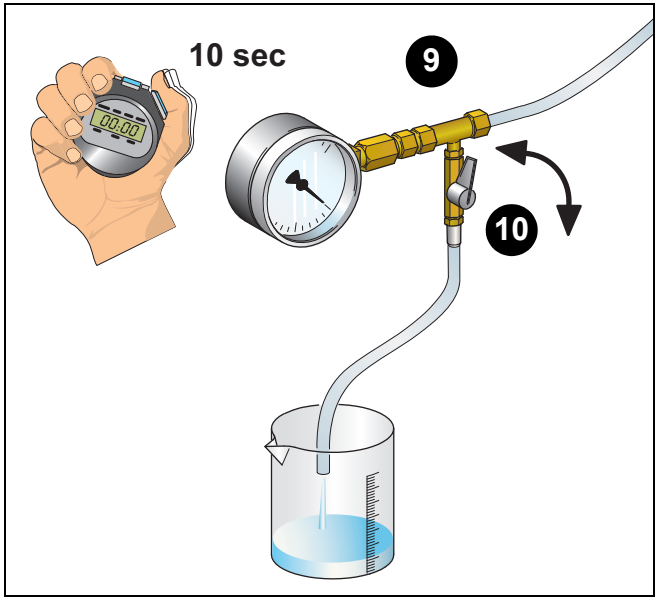
The pressure will rise slowly due to the temperature increase.
If the pressure exceeds 23 bar, the machine has to be switched off and pressure released through the pressure valve.

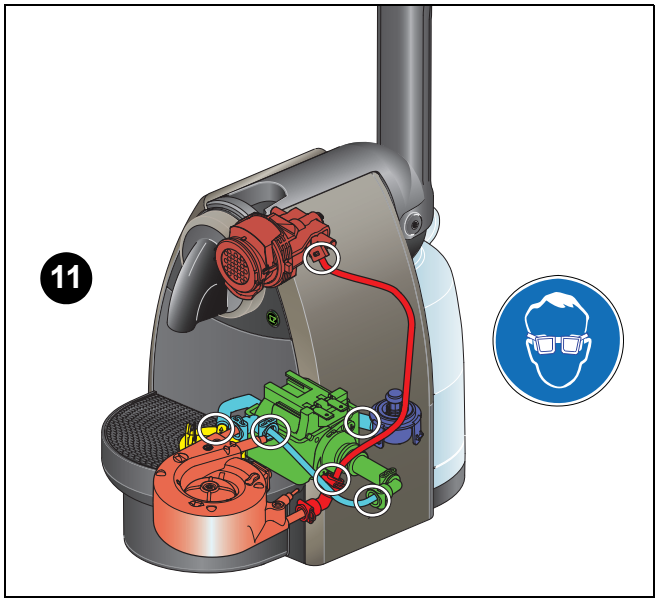
11. Perform visual and acoustic checks on all pressurized connections.

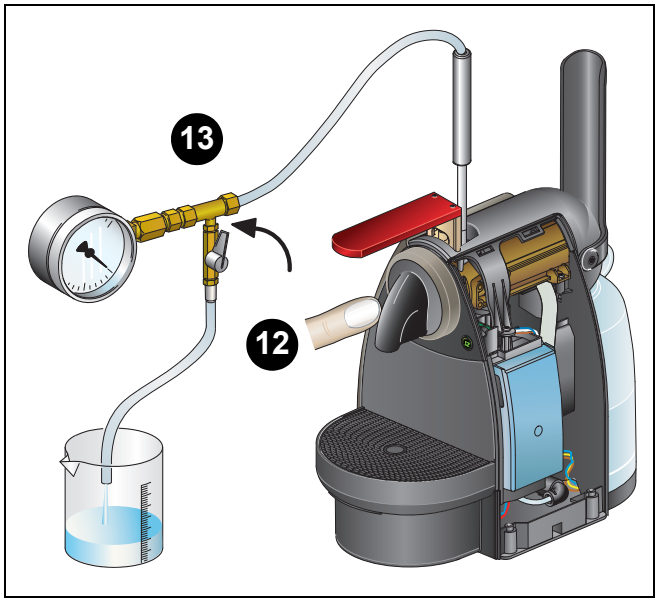
The pump must not be in operation for longer than 50 sec. without water flow.

12. Open valve to empty pressure gauge.







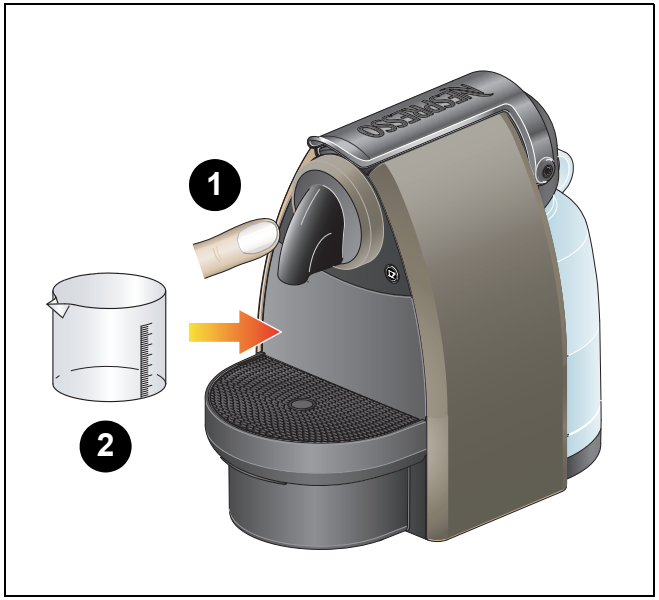


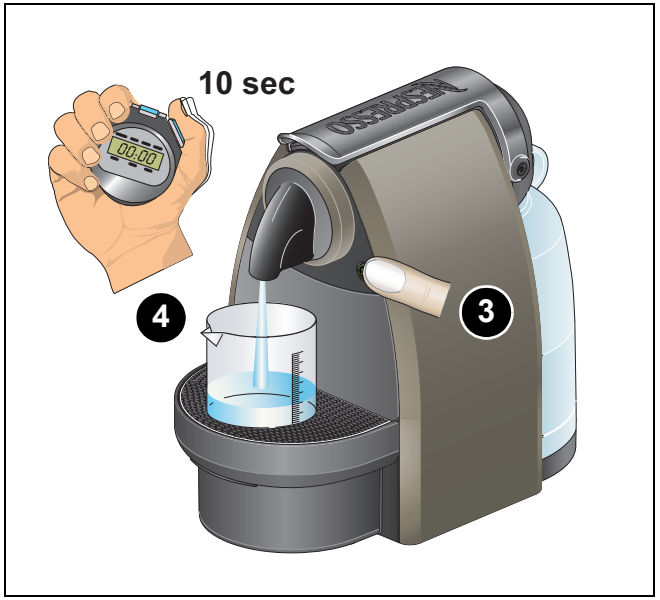
Measuring coffee temperature

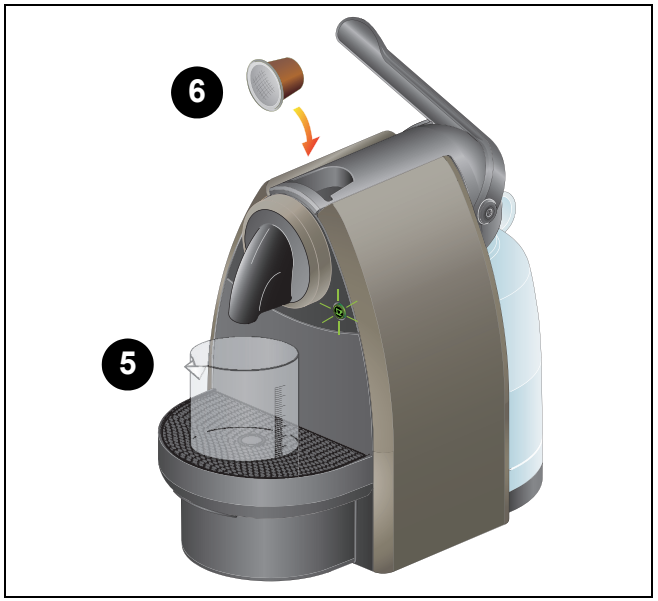
Procedure:

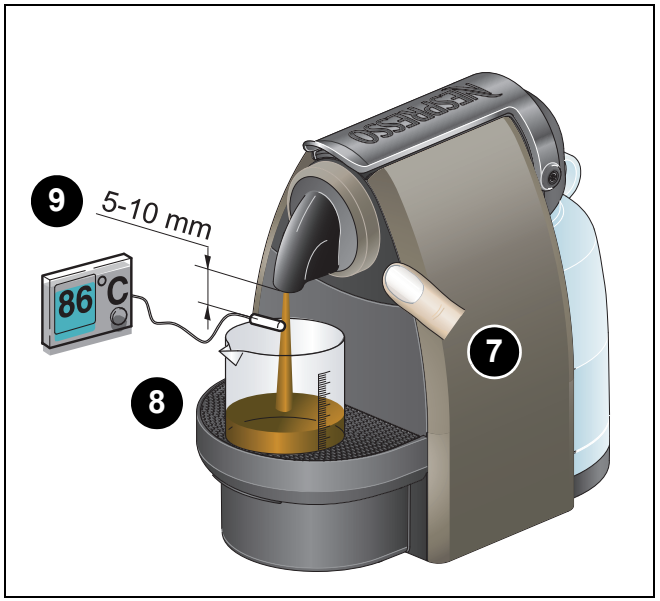
1. Press any button for start the coffee machine.
2. Position measuring beaker underneath coffee outlet.
3. After warming up, press coffee button.
4. Preheat coffee outlet for 10 sec. with hot water.
5. Empty measuring beaker.
6. Insert a capsule (Cosi is the most suitable).
7. Press coffee button.
8. Wait until 20 ml coffee has flown in the measuring beaker.
9. Measure the coffee temperature approx. 5 - 10 mm below the outlet opening.

Coffee temperature should be approx. 86 °C ± 3 °C (187 °F ± 5.4 °F).









Protective earth continuity test (1)

What coffee machine model has to be tested and when?

This test is necessary

- for class 1 equipment (three-wire power cord with protective earth)
- after a repair whenever the housing was opened and for example a general disassembly was performed.

Therefore all coffee machine models have to be tested after opening the housing, except country-specific models without a protective earth connection.

General

Legal regulation

In case of a repair/modification of the coffee machine, the repair centre is bound by law to protect the user/consumer by

- restoring the regular condition of the appliance and
- performing the respective tests according to EN/IEC 60335-1 “Safety of household and similar electrical appliances” and national regulations (e.g. DIN VDE 0701).

Description

Protective earth continuity measurements are made between the protective earth terminal of the power plug and

- the thermoblock,
- all conductive, touchable parts of the coffee machine where dangerous voltage could occur if the basic insulation was to fail.

This test assures that

- the ground (earth) connection does not have an interruption between the power plug and the thermoblock
- the permissible ground resistance is less than 0.3 Ohms (with a test current of 200 mA DC).

Test equipment

Special test equipment is needed that complies with the regulations to perform protective earth continuity measurements. Detailed requirements and tolerances must be verified by your local authorities or measurement supplier in any case.

Test report

For legal reasons a repair or test report should be prepared and filed with following information

- customer (name, address)
- type and serial number of coffee machine
- date of repair/test(s)
- performed test(s)/measuring value(s)
- used test equipment
- signature

Test sequence

Danger of electrocution!
Do not plug in the coffee machine during the protective earth continuity test.
Read and observe safety instructions in user manual of test equipment.

This test sequence is not applicable for coffee machines with two-wire power cords (without ground pin).

Continued on next page.

Protective earth continuity test (2)

Test sequence (continued):

1. Connect black measuring cable to ground pin of power plug with an alligator clip (example shown: Swiss power plug).
2. Switch on test equipment and select protective earth continuity test.

☞ **Symbolic illustration of test equipment.**

3. Touch thermoblock tube with tip of red test probe.
4. Press "measure" button and read off displayed resistance.

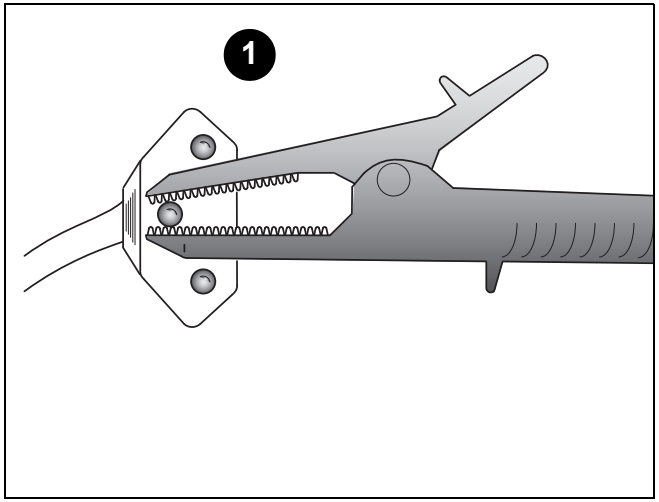
☞ **The resistance must be lower than 0.3 Ohm.**

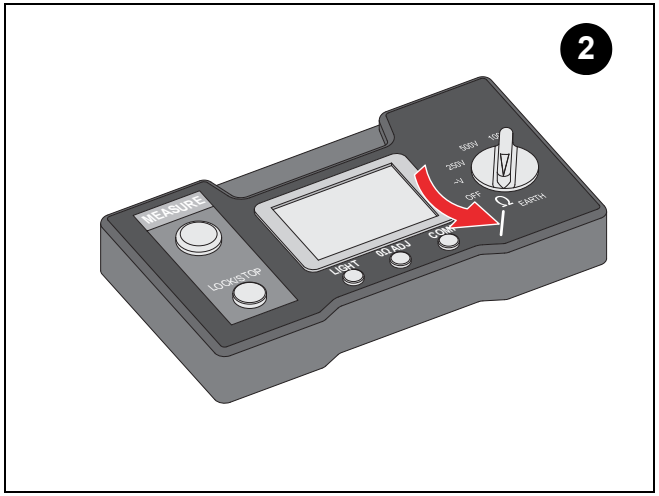
5. Fill in measured value in a test report.

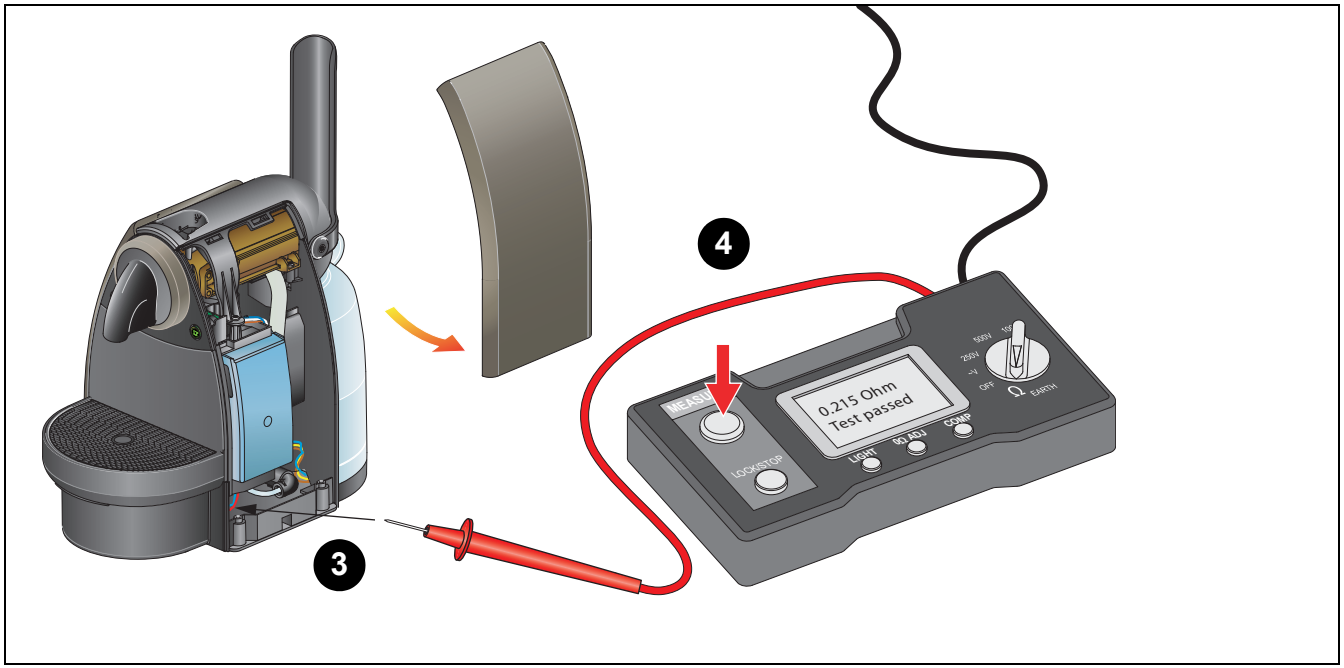
☞ **Proceed with protective insulation test before reassembling the housing of the coffee machine.**

What to do if the protective earth continuity test fails

Check ground wire connection on thermoblock (refer to wiring diagrams on page 27).







Protective insulation test (1)

Perform the protective earth continuity test at first, if it is mandatory.

What is the protective insulation test about?

This test is necessary

- for class 1 and 2 equipment (with/without protective earth),
- after a repair whenever the housing was opened and for example a general disassembly was performed.

General

Legal regulation

In case of a repair/modification of the coffee machine, the repair centre is bound by law to protect the user/consumer by

- restoring the regular condition of the appliance and
- performing the respective tests according to EN/IEC 60335-1 “Safety of household and similar electrical appliances” and national regulations (e.g. DIN VDE 0701).

Description

The insulation test

- assures that wiring and insulation of the coffee machine fullfill the normative requirements after a repair,
- rates the insulation capability of the coffee machine,
- is a very dangerous test because of a high test voltage (500 V DC).

For the insulation test, phase and neutral wire are shunted at the power plug. Then a test voltage is applied between phase/neutral and selected parts of the coffee machine.

Test equipment

Special test equipment is needed that complies with the regulations to perform insulation and withstanding voltage tests. Detailed requirements and tolerances must be verified with your local authorities or measurement supplier in any case.

Ideally the test equipment has a national power socket for testing, so that the coffee machine can plugged in directly. Otherwise a special shunt is necessary to connect the phase and neutral pin of the coffee machine’s power plug.

Test report

For legal reasons a repair or test report should be prepared and filed with following information

- customer (name, address)
- type and serial number of coffee machine
- date of repair/test(s)
- performed test(s)/measuring value(s), test points
- used test equipment
- signature

Test sequence

Danger of electrical shock/short circuit!

- **Do not plug in the coffee machine during insulation test.**

Danger of electrical shock!

- **Do not touch tip of test probes.**
- **Do not touch metallic parts of coffee machine during test.**
- **Read and observe safety instructions in user manual of test equipment.**

Continued on next page.

Protective insulation test (2)

Test sequence (continued):

1. Connect the phase and neutral pin of the power plug together with a test adapter (procured by the repair centre).

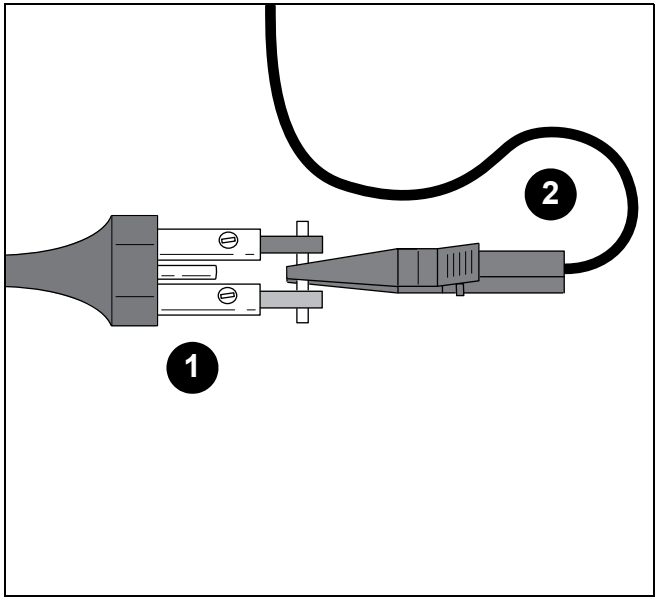
☞ **A Swiss power plug is shown here as an example.**

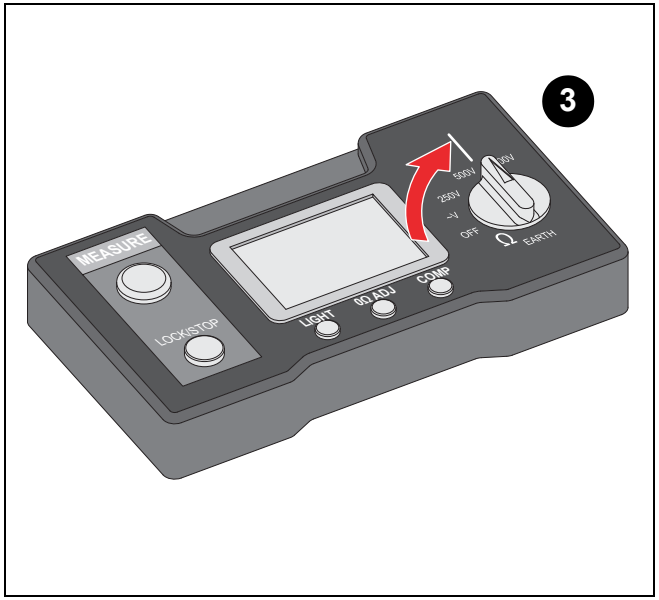
2. Connect the black measuring cable to the test adapter (see image).

☞ **Use a short circuit plug or special alligator clips etc. as substitute for this test adapter.**

3. Switch on test equipment and select an insulation test voltage of 500 V DC.

☞ **Symbolic illustration of test equipment.**





Continued on next page.

Protective insulation test (3)

Test sequence (continued):

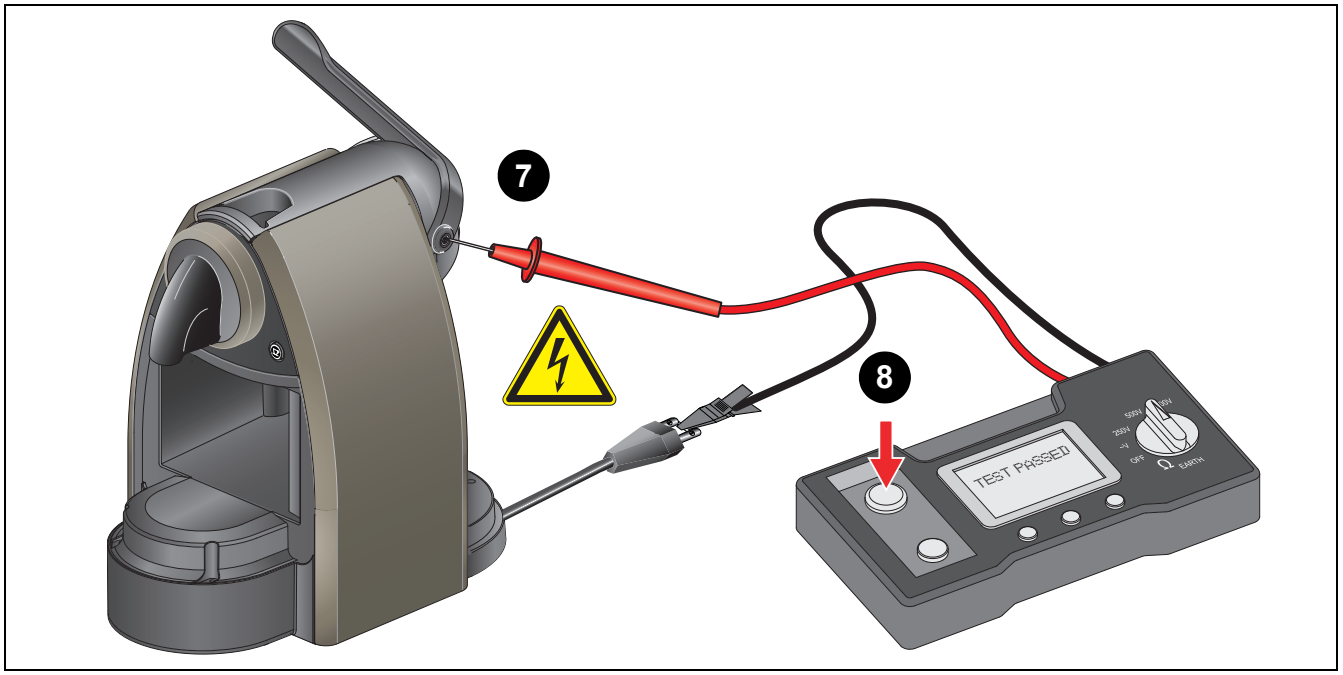
4. Touch closing handle screw with red test probe.

Do not scratch surface of closing handle with probe tip.

5. Press "measure" button.
6. Read off displayed insulation resistance or test result.

The insulation resistance must be higher than 300 kOhm (300,000 Ohm).

7. Fill in measured value in a test report.
8. Switch off test equipment.
9. Short red with black test probe to make sure that test voltage is discharged.



What to do if the insulation test fails

Risk of damage!
A sparkover can damage the electronic control board and sensors etc.

Assume that the coffee machine is defect after a failed insulation test.

Check wiring and locate fault.

After fault clearance proceed with trouble-shooting check list (see page 16).

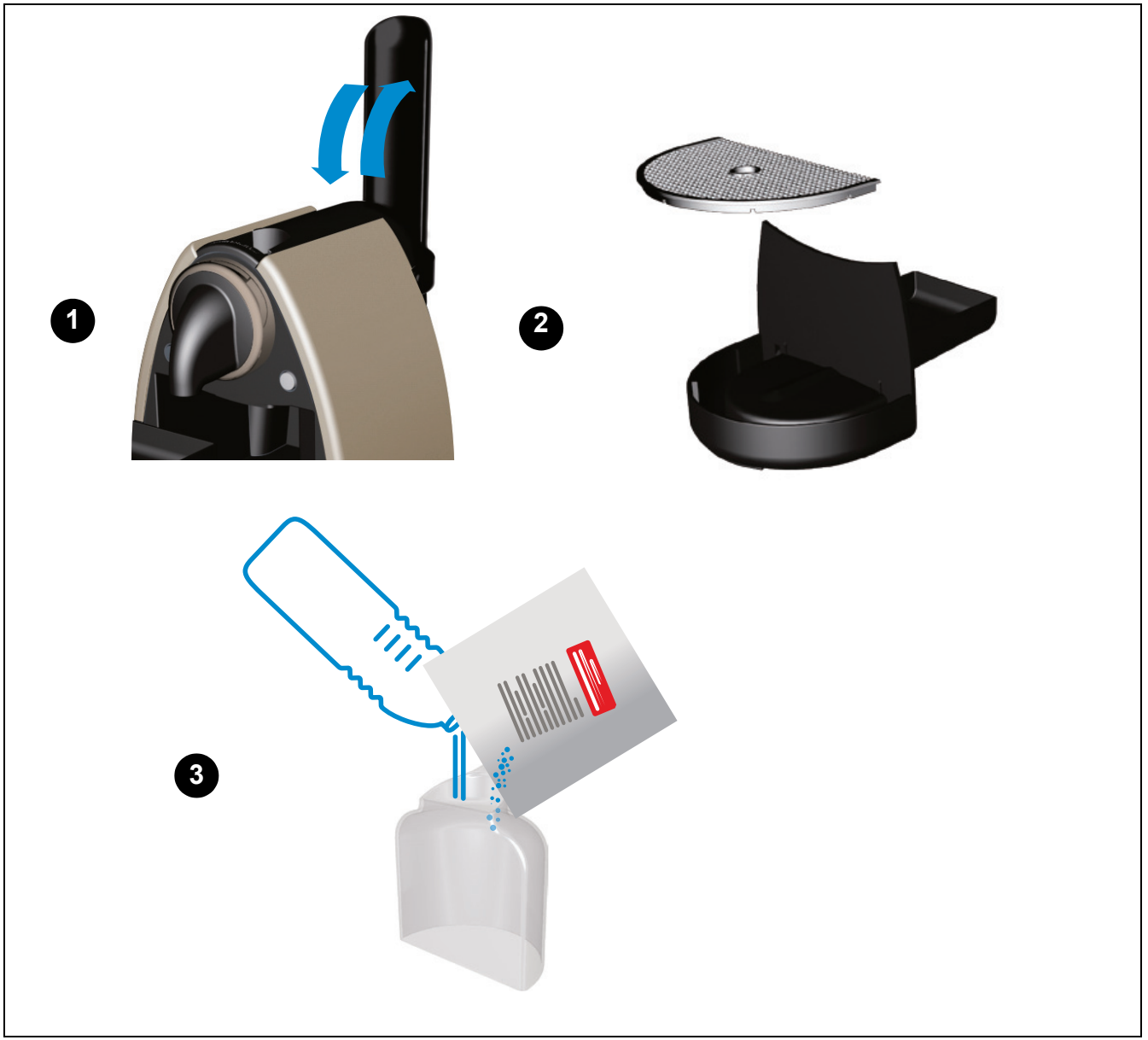
Descaling (1)

Only use Nespresso decalcifier! Decalcifier is aggressive to surfaces. Immediately clean drops of descaling solution.

This machine is equipped with a descaling alarm (both LEDs blink during ready mode).
Descaling duration:
approx. 15 minutes.

Carefully read safety instructions on decalcifier package.

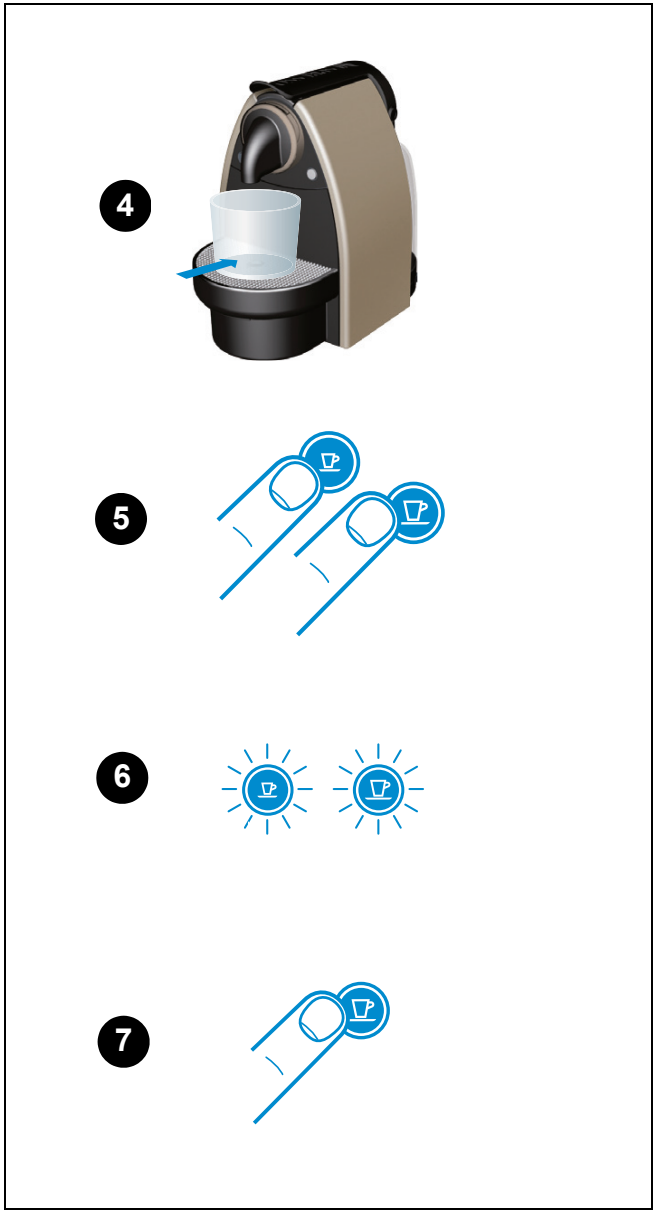
1. Remove the capsule and close the lever.
2. Empty the drip tray and used capsule container.
3. Fill the water tank with 0.5 L of potable water and add 1 *Nespresso* descaling liquid.

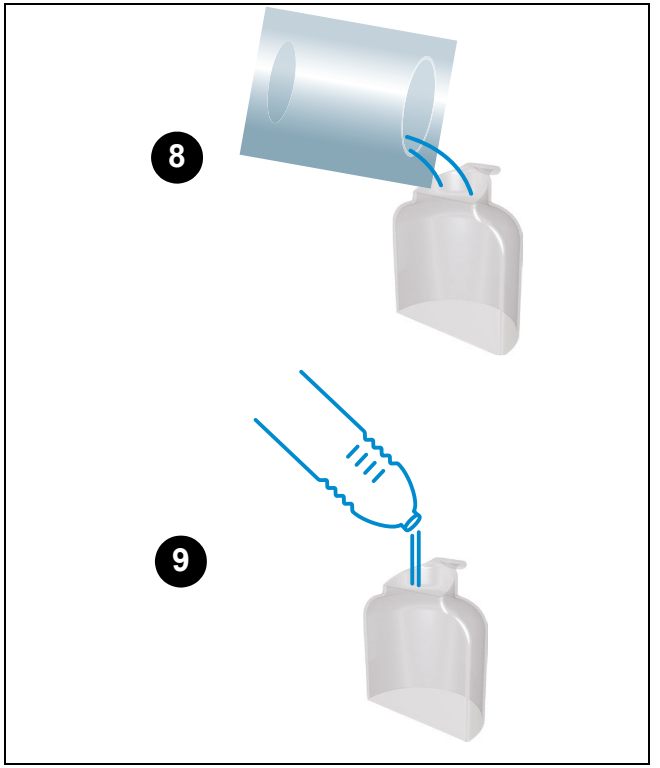


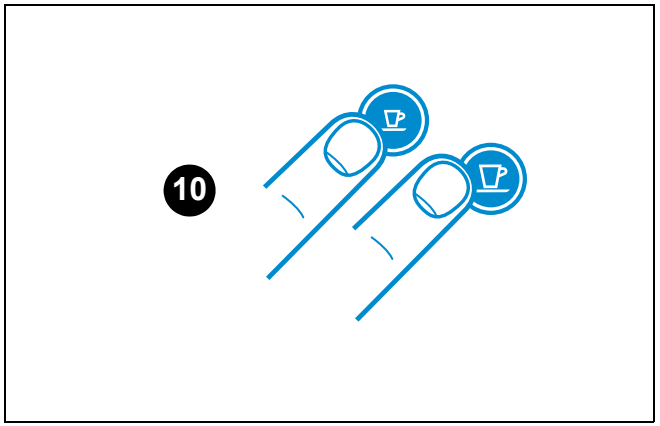
Descaling (2)

Procedure (continued):

4. Place a container (min. volume 1 l) under the coffee outlet.
5. To enter the descaling mode, while the machine is turned on, press both the Espresso and Lungo button for 3 seconds.
6. Both LEDs blink.
7. Press the Lungo button and wait until the water tank is empty.
8. Refill the water tank with the used descaling solution collected in the container and repeat step 4 and 6.
9. Empty and rinse the water tank. Fill with potable water.
   When ready, repeat step 4 and 6 to now rinse the machine.
10. To exit the descaling mode, press both the Epresso and Lungo button for 3 seconds.
11. The machine is now ready for use.





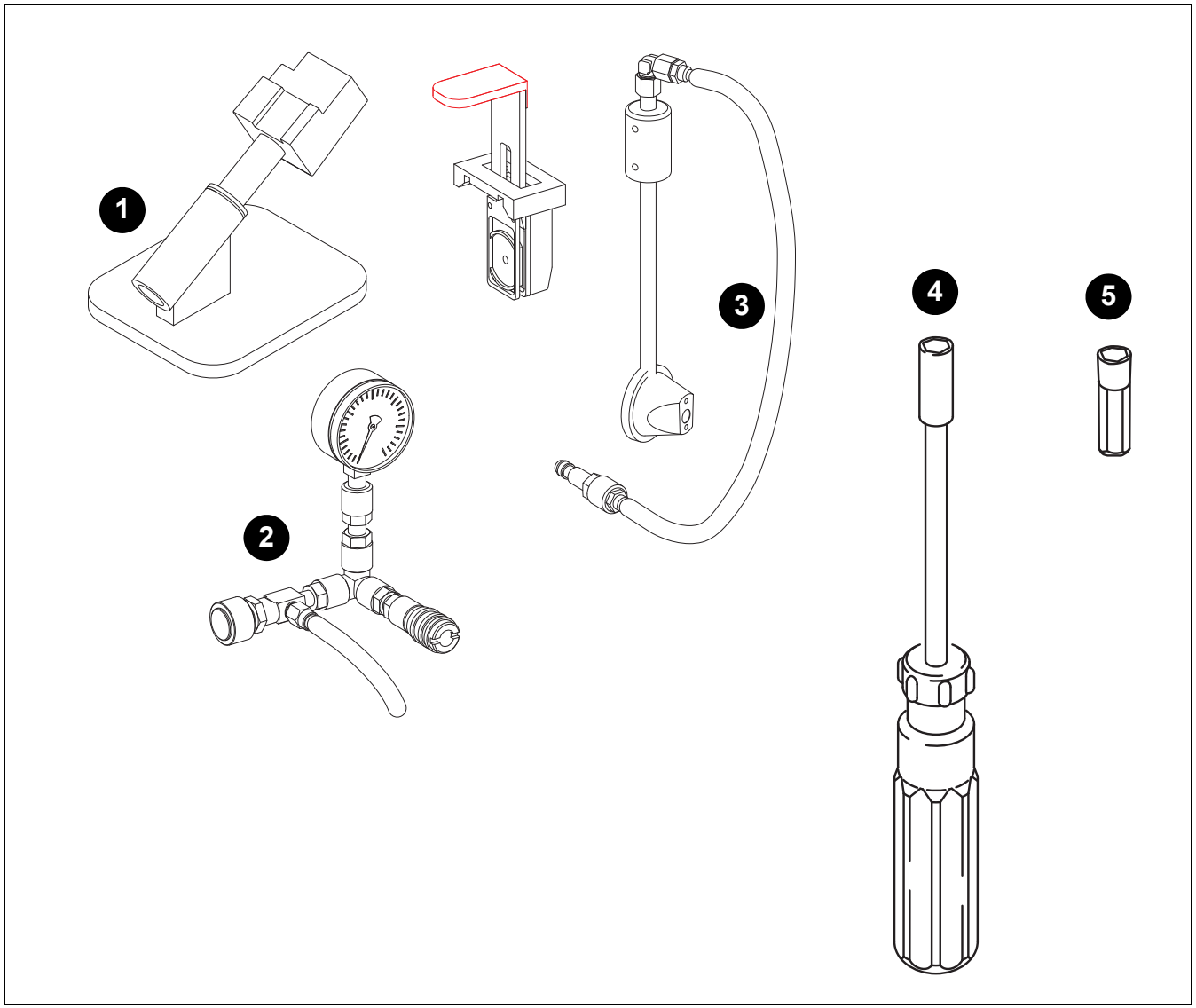


Repair accessories

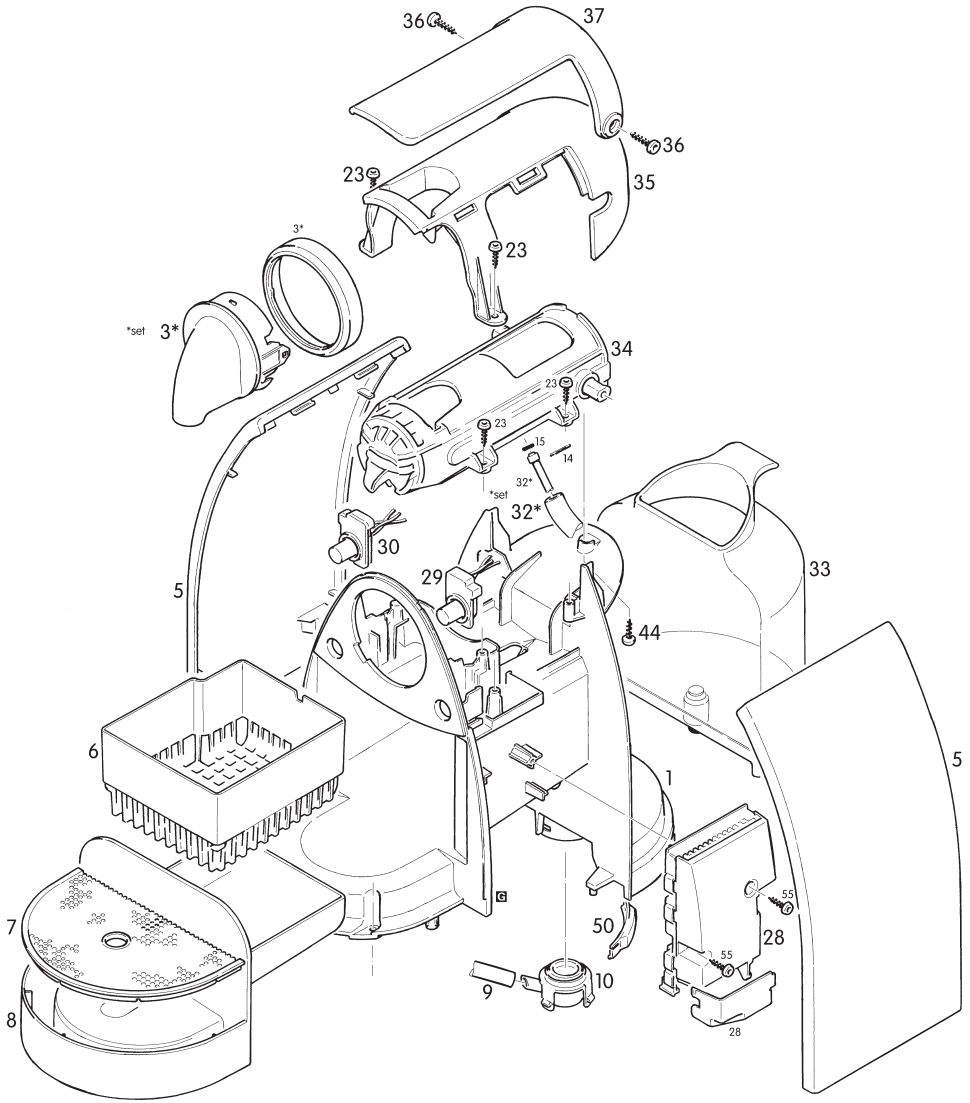
Pos.	EFR No.	Component
1	*	Repairing/service holder device (for C99 or D99)
2	42213	Manometer
3	60460	Pressure adapter G4
4	0004872	Screwdriver
5	0004878	Oval bit
-	64373	Spare part seal G4

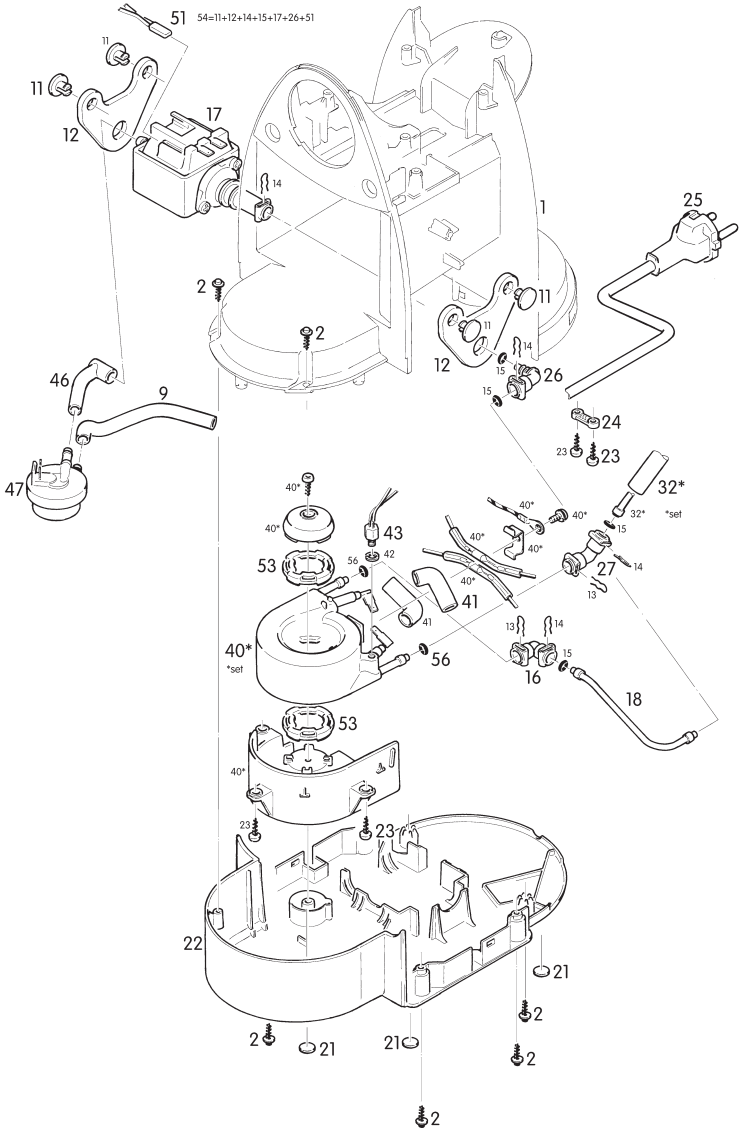
* Repair accessories only available at *Nespresso*. Please ask your *Nespresso* technical contact person.

Manometer and pressure adapter are available at Eugster Frismag AG.



Spare parts EF 347 / C99

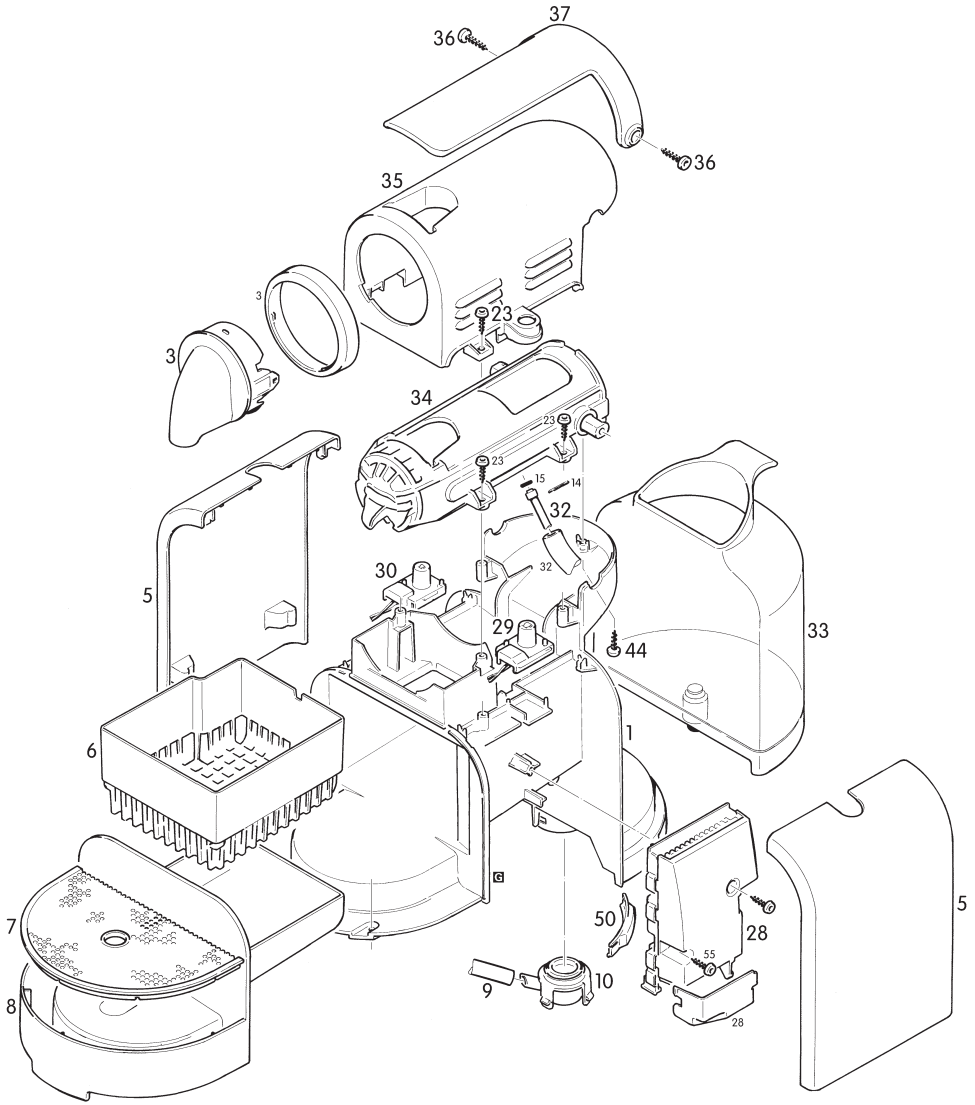


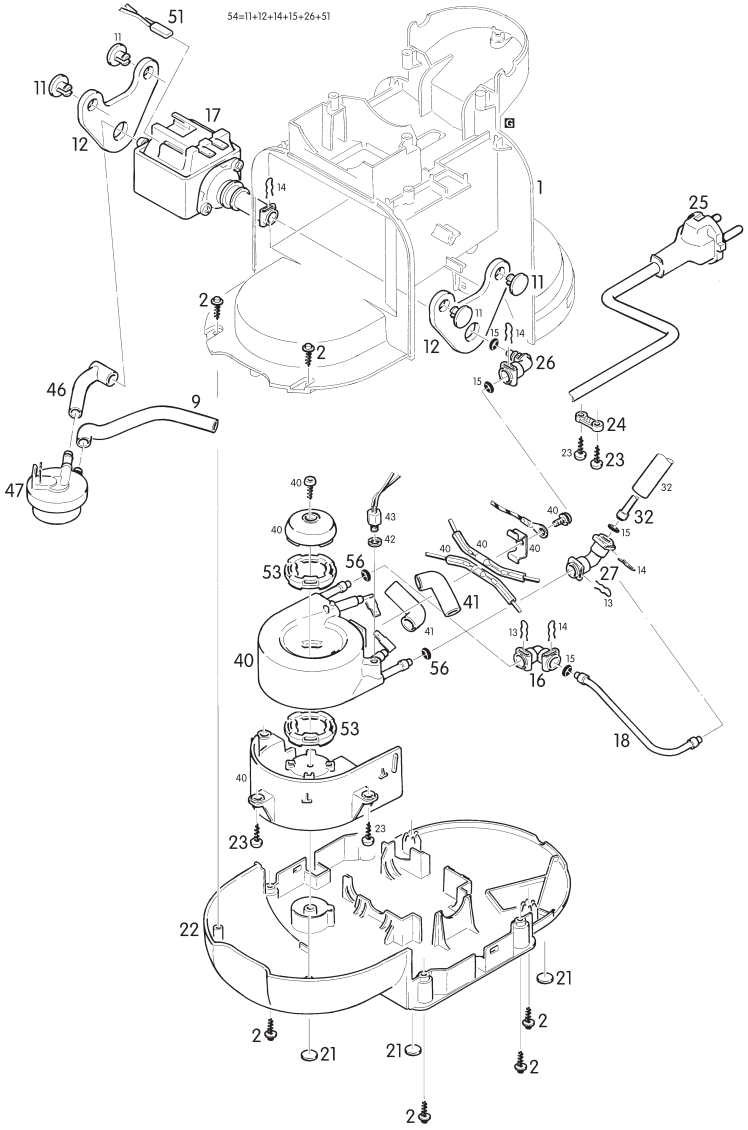


Draw. No.	Art. Nr.	Part Description	
001	0077828	Holder 473 black V3	
002	0024863	Screw safety KST/PT 3.0x12	bl galvan oval head (SFS-Remform)
003	0079793	Outlet	
005	0075782	Side wall 347 taupe earth	high gl.
006	0059106	Capsule container	
007	0077819	Drip grid 347 black V2	
008	0075915	Drip tray	
009	0005238	Hose silic 05.0x2.00mm	meter ware, 70 Shore, transp (di/W)
010	0042592	Valve lifter 704 cpl mount.	
011	0077824	Pump holder 470 black V3	
012	0039196	Pump holder 470 black 60 sh	D=00,0mm, 2 fix holes 0,0mm
013	0037384	Clip D=5mm browned	inox
014	0005470	Clip D=4mm L=14mm Inox	
015	0061701	O-Ring 03.40x1.90 EPDM V3	70 Shore black
016	0060761	Fluid connect elbow 90°	black, 16.0x16.0mm crosspiece
017	0069200	Pump SAP.HP4.V04	230-240V/50Hz
018	0077573	Hose FEP D=4.0/2.50x115mm	2 clamp rings/2 tubul. rivets
021	0013299	Rubber feet 9.0x 0.8mm	white SJ-5832
022	0077833	Base 470 black	
023	0071635	Screw KST/PT 3.0x12 bl galvan	rd head Torx-10
024	0045182	Strain relief clamp 966	transp,screwable
025	0075931	Line cord EU SF-71	H05VV-F3G0.75/L80/N180/PE40, assembled
026	0063089	Fluid connect elbow 90° V2	black, 1xF, 1xmale, crosspiece
027	0063049	Fluid connect V shape 55° V3	black, 2xF
028	0079586	Spare electronic 347 230V	
029	0048034	Push-button 471 coffee V2	silic translucent

Draw. No.	Art. Nr.	Part Description	
030	0048033	Push-button 474 Espresso V2	silic translucent
032	0079584	Spare hose FEP D4/2.5x230	clamp ring/tubul. rivet/Serto mount.
033	0060988	Water tank	
034	0065019	Spare extract unit 473 cpl.	TCBU, packed
035	0077829	Hood 473 black V2	gravure: Nespresso capsules only
036	0076213	Screw KST/PT 4.0x16 blk galvan	rd head Torx-20
037	0075784	Lock rod 347	
040	0079581	Thermobl 2010/L 230V/1200W	EF347 cpl V2
041	0043202	Insul. leeve Elbow connect	black, FH6,3 US
042	0044585	Spring ring M 5 bl galvan	
043	0064816	Temperature gauge 710 cpl	NTC 104M5-S160A2
044	0071635	Screw KST/PT 3.0x12 bl galvan	rd head Torx-10
046	0043073	Molded tube 473 silic	neutral, flow meter pump
047	0067795	Flow meter FHKSC 12 0°	932-9521/A, double insulated
050	0077832	Cover 470 main switch V3	black
051	0075917	Thermost TB02-B-B8D-105	strd wires 95/150mm, 1xFHL6,3x0,8/1xFHL4,8x0,8
053	0079126	Damping element 347 thermobl	black, 60 Shore
054	0079698	Pump holder 348 cpl	
055	0071635	Screw KST/PT 3.0x12 bl galvan	rd head Torx-10
056	0024374	O-Ring 003,40x1.90 silic/2-K	70 Shore red 2-comp silic
982	0078156	Polystyr. 347 2-part.	
983	0050083	Covering box 475 slotted V2	449x339x321mm
992	0047595	Supplement ventilation	12-lang.

Spare parts EF 348 / D99





Draw. No.	Art. Nr.	Part Description	
001	0077856	Holder 474 black V3	
002	0024863	Screw safety KST/PT 3.0x12	bl galvan oval head (SFS-Remform)
003	0079587	Outlet 347 TCBU cpl	black
005	0075783	Side wall 348 white sand	high gl.
006	0059105	Caps contain 471 V2 black	
007	0077854	Drip grid 348 black V2	
008	0077855	Drip tray 471 black V3	
009	0005238	Hose silic 05.0x2.00mm	meter ware, 70 Shore, transp (di/W)
010	0042592	Valve lifter 704 cpl mount.	
011	0077824	Pump holder 470 black V3	
012	0039196	Pump holder 470 black 60 sh	D=00.0mm, 2 fix holes 0.0mm
013	0037384	Clip D=5mm browned	inox
014	0005470	Clip D=4mm L=14mm Inox	
015	0061701	O-Ring 03.40x1.90 EPDM V3	70 Shore black
016	0060761	Fluid connect elbow 90°	black, 16.0x16.0mm crosspiece
017	0069200	Pump SAP.HP4.V04	230-240V/50Hz
018	0077573	Hose FEP D=4.0/2,50x115mm	2 clamp rings/2 tubul. rivets
021	0013299	Rubber feet 9.0x0.8mm	white SJ-5832
022	0077831	Base 471 black V4	
023	0071635	Screw KST/PT 3.0x12 bl galvan	rd head Torx-10
024	0045182	Strain relief clamp 966	transp, screwable
025	0075931	Line cord EU SF-71	H05VV-F3G0,75/L80/N180/PE40, assembled
026	0063089	Fluid connect elbow 90° V2	black, 1xF, 1xmale, crosspiece
027	0063049	Fluid connect V shape 55° V3	black, 2xF
028	0079586	Spare electronic 347 230V	
029	0048034	Push-button 471 coffee V2	silic translucent

Draw. No.	Art. Nr.	Part Description	
030	0048033	Push-button 474 Espresso V2	silic translucent
032	0079584	Spare hose FEP D=4/2.5x230	clamp ring/tubul. rivet/ Serto mount.
033	0060991	Water tank 471 cpl transp V2	
034	0079580	Spare extract unit 473 cpl	TCBU
035	0077851	Hood 474 black V2	gravure: Nespresso capsules only
036	0076213	Screw KST/PT 4.0x16 blk galvan	rd head Torx-20
037	0075784	Lock rod 347	
040	0079581	Thermobl 2010/L 230V/1200W	EF347 cpl V2
041	0043202	Insul. leeve Elbow connect	black, FH6,3 US
042	0044585	Spring ring M 5 bl galvan	
043	0064816	Temperature gauge 710 cpl	NTC104M5-S160A2
044	0018904	Screw KST/PT 3.0x16 bl galvan	rd head Torx-10 CA point
046	0043073	Molded tube 473 silic	neutral, flow meter pump
047	0067795	Flow meter FHKSC 12 0°	932-9521/A, double insulated
050	0077832	Cover 470 main switch V3	black
051	0075917	Thermost TB02-B-B8D-105	strd wires 95/150mm, 1xFHL6,3x0,8/1xFHL4,8x0,8
053	0079126	Damping element 347 thermobl	black, 60 Shore
054	0079698	Pump holder 348 cpl	
055	0071635	Screw KST/PT 3.0x12 bl galvan	rd head Torx-10
056	0024374	O-Ring 03.40x1.90 silic/2-K	70 Shore red 2-comp silic
981	0077354	Picture carton 348 Nespresso	D 99.331x215x314mm
982	0078157	Polystyr. 348 2-part.	
983	0050083	Covering box 475 slotted V2	449x339x321mm
990	0077040	Instr. man. 348 Nespresso	Essenza, 9-lang.NO/SW/DA/FI/GR/arabic/TR/FR/GB, Zone 2
992	0047595	Supplement ventilation	12-lang.