



Manuale per il Tecnico
Manual for Technical

CAFE RACER

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1. INTRODUCTION

- This manual was written only to be used by authorised technicians of the manufacturer.

1.1 General safety warnings

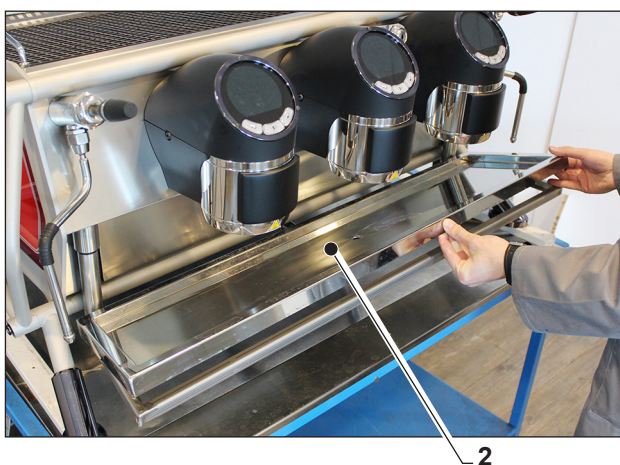
- When operating on the machine, make sure that the main switch and the machine switch are in **OFF** position and that the water supply tap is closed.
- When some operations/adjustments need to be carried out with the power on, **operate with extreme care.**
- When operating on the machine, check that the water contained in the machine is cold.
- When some operations/adjustments need to be carried out with the machine at operating temperature, **operate with extreme care** and use suitable personal protective equipment.
- Suitable personal protective equipment must be worn in any case as required by current safety regulations in the country of use.
- Current specific regulations in the country of use must be followed at all times.
- See the attached wiring diagram for all operations on the electrical system.
- See the attached water diagram for all operations on the water system.

2. REMOVING THE TRAY

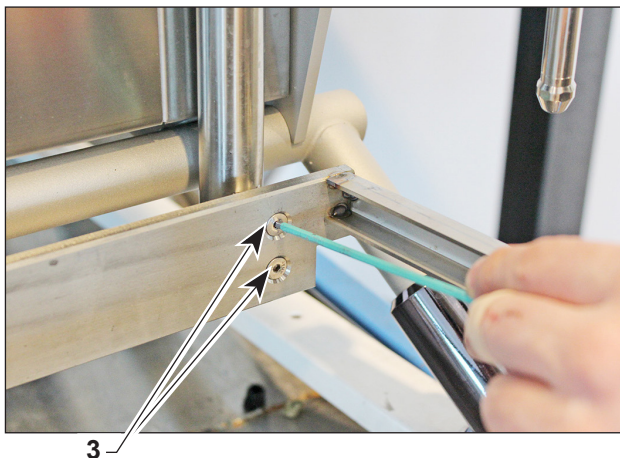
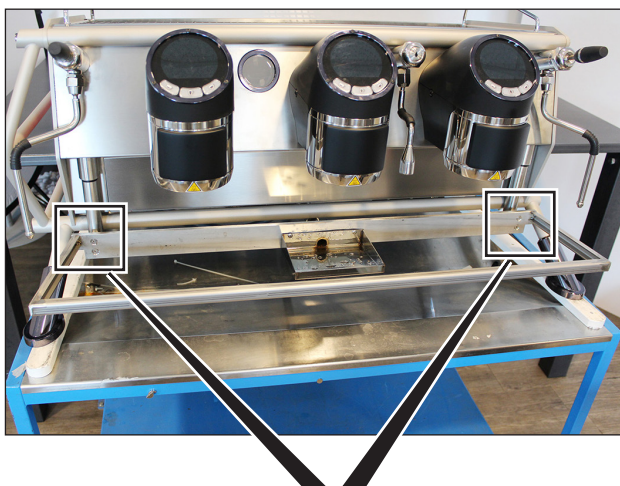
- Remove the grille (1).



- Lift and remove the tray (2).

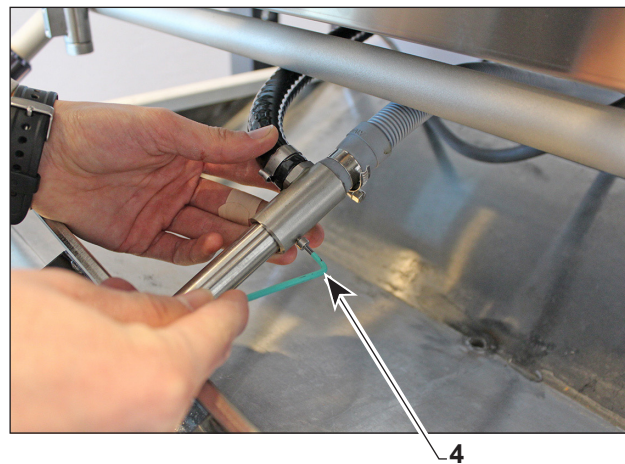



- Undo the four Allen screws (3).

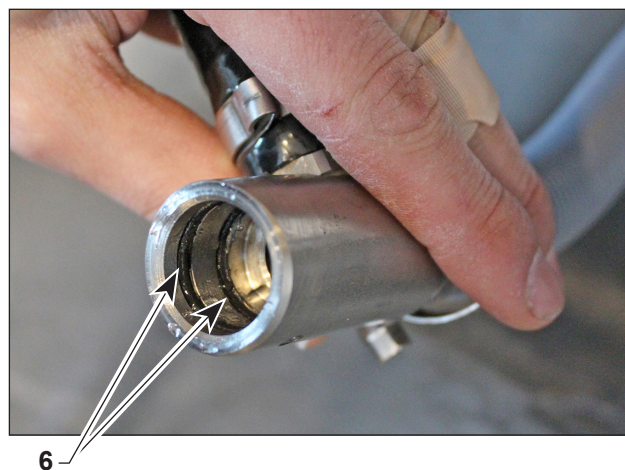


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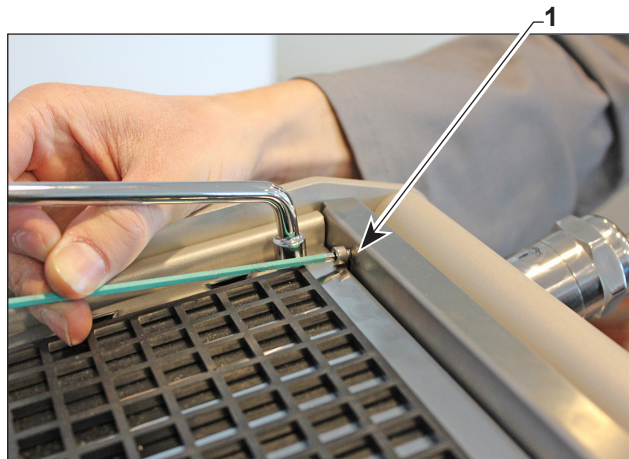
- Loosen the screw (4) and remove the tray support (5).



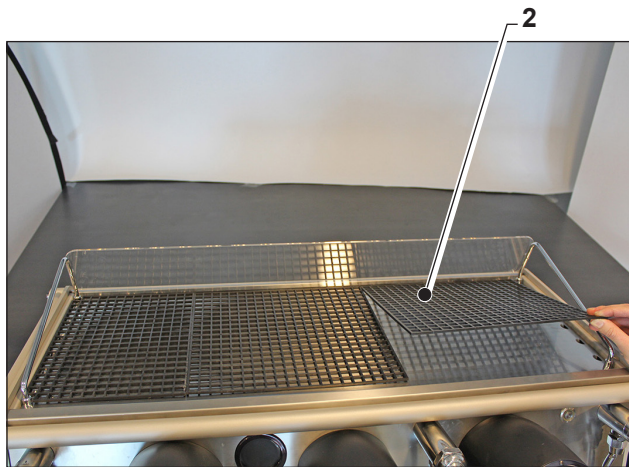
-  When reassembling the tray (5) check the conditions of the OR gaskets (6) and grease them.



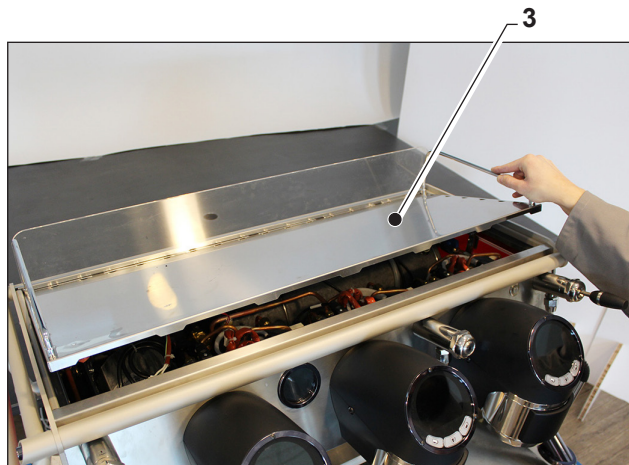
3. REMOVING THE CUP HEATING PLATE



- Unscrew screw (1) on both sides.

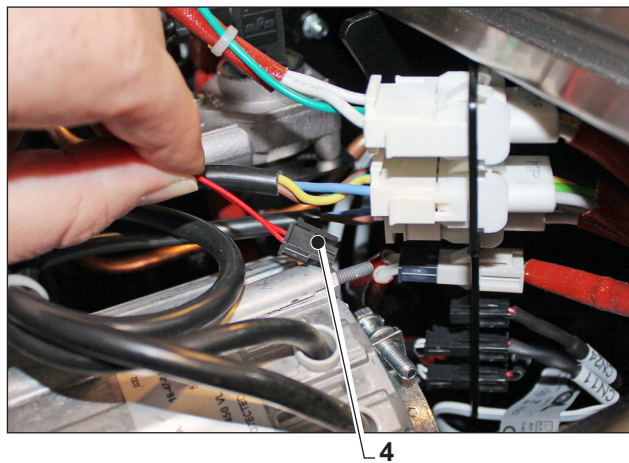
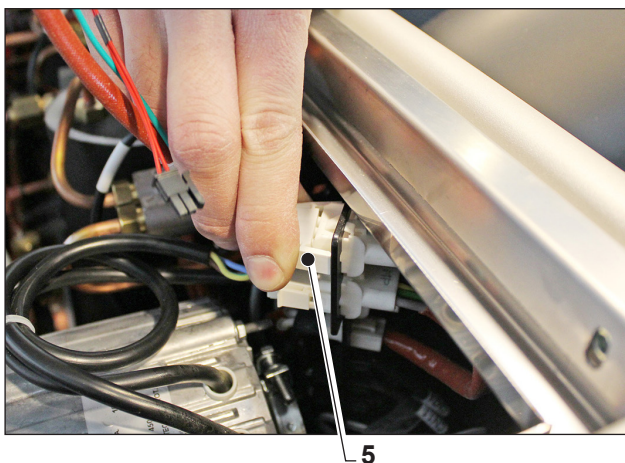


- Remove the grilles (2).




- Lift the cup heating plate (3).
- Disconnect the connector (4) of the probe.
- Disconnect the heating element connector (5).
- Remove the cup heating plate (3).

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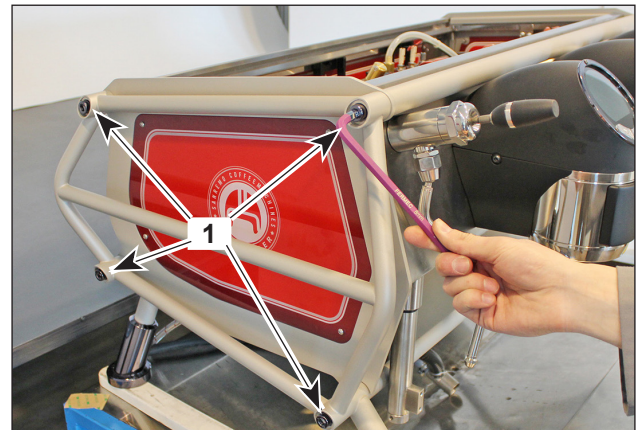


4. REMOVING THE PANELS

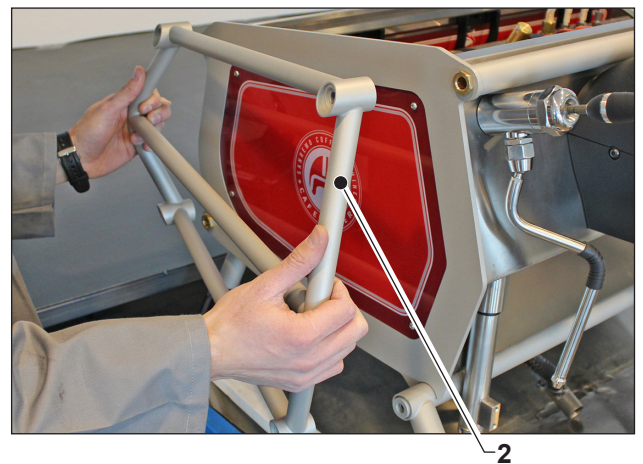
 Remove the side panels and the cup heating plate to access all the internal machine components.

4.1 Removing the profile side

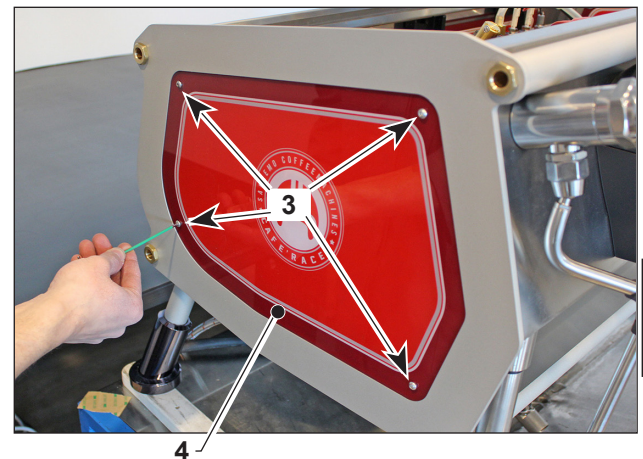
- Unscrew the screws (1).



- Remove the profile side (2).



- Unscrew the screws (3) fastening the panel (4).



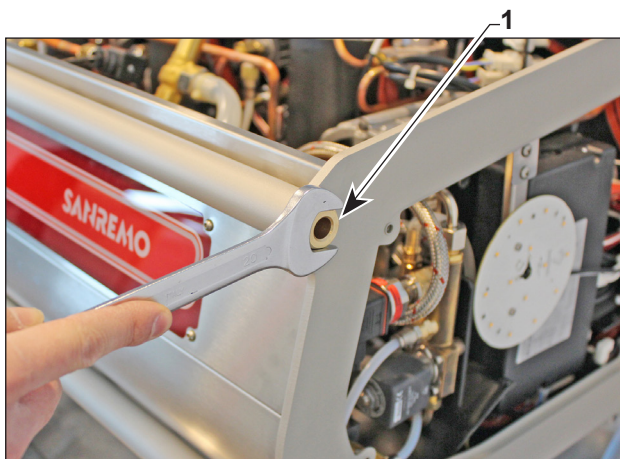
- Remove panel (4).



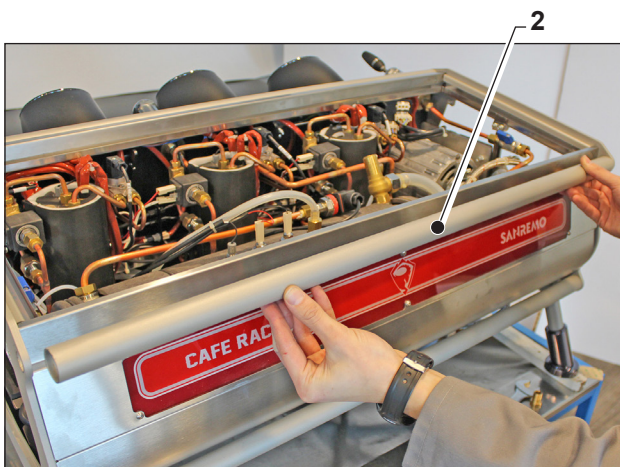
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4.2 Removing the rear panel

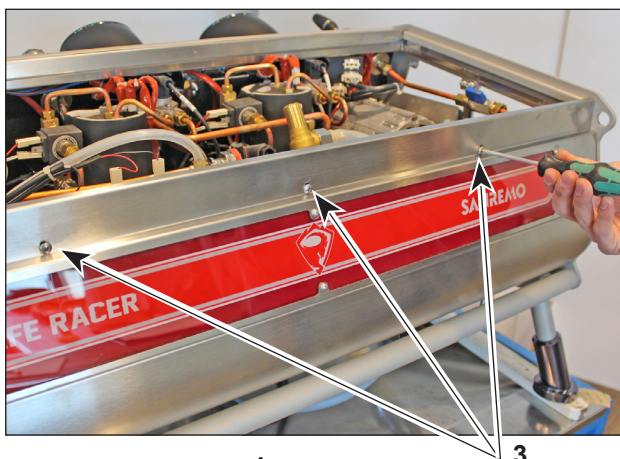
- Unscrew the two side screws (1).



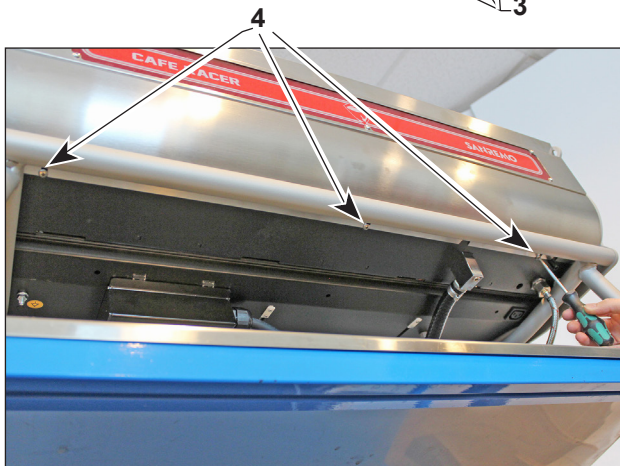
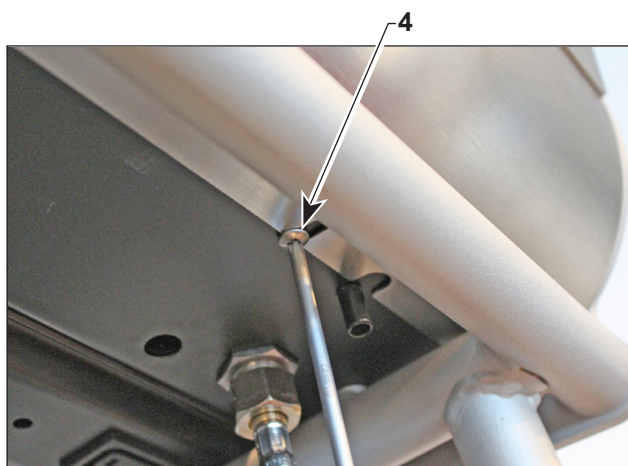
- Remove the pipe (2) connecting the two shoulders.



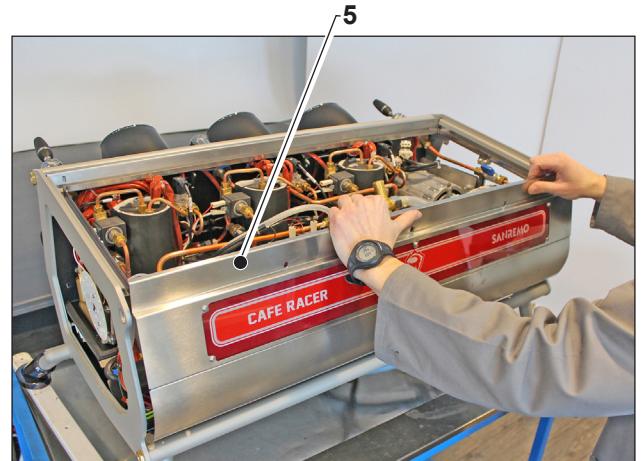
- Unscrew the three screws (3).
- Loosen the three screws (4).



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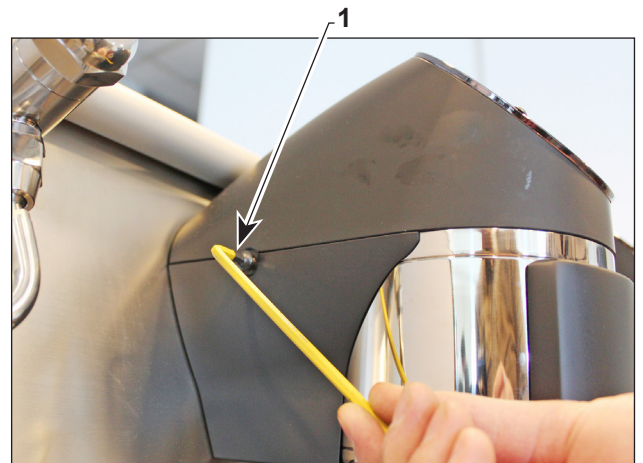


- Remove the rear panel (5).



4.3 Removing the coffee unit guard

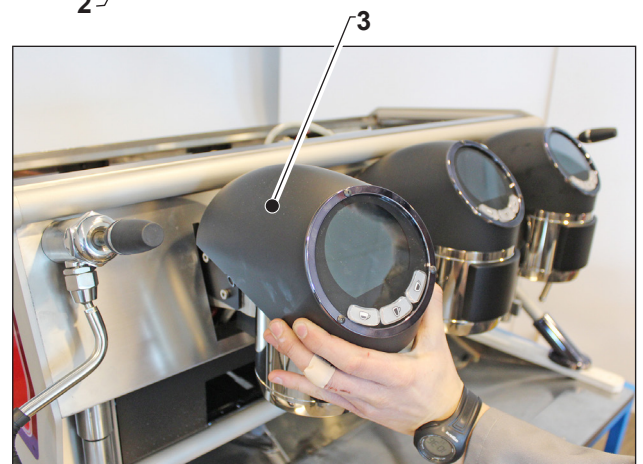
- Unscrew the screws (1) on both sides.



- Widen the two guards (2) and remove them.

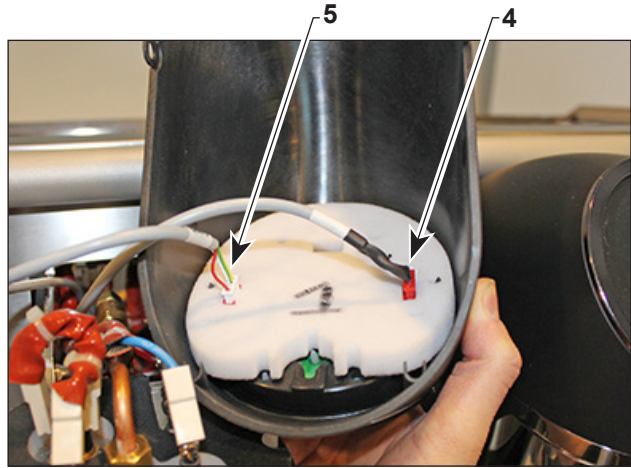


- Pull out the guard (3) with the display toward the front.



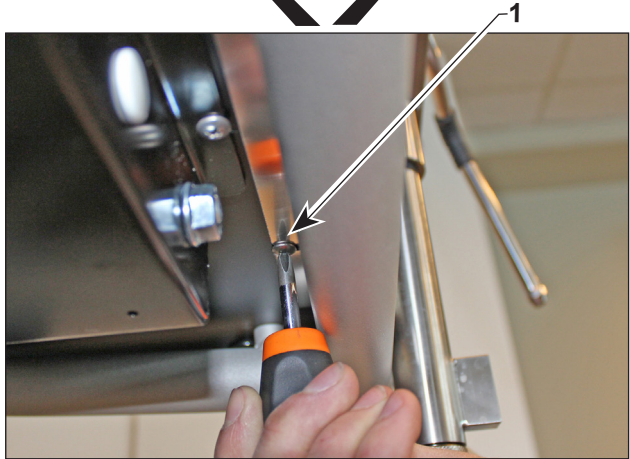
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- Disconnect the connectors (4) and (5).



4.4 Removing the lower front panel

- Loosen the two Phillips screws (1).



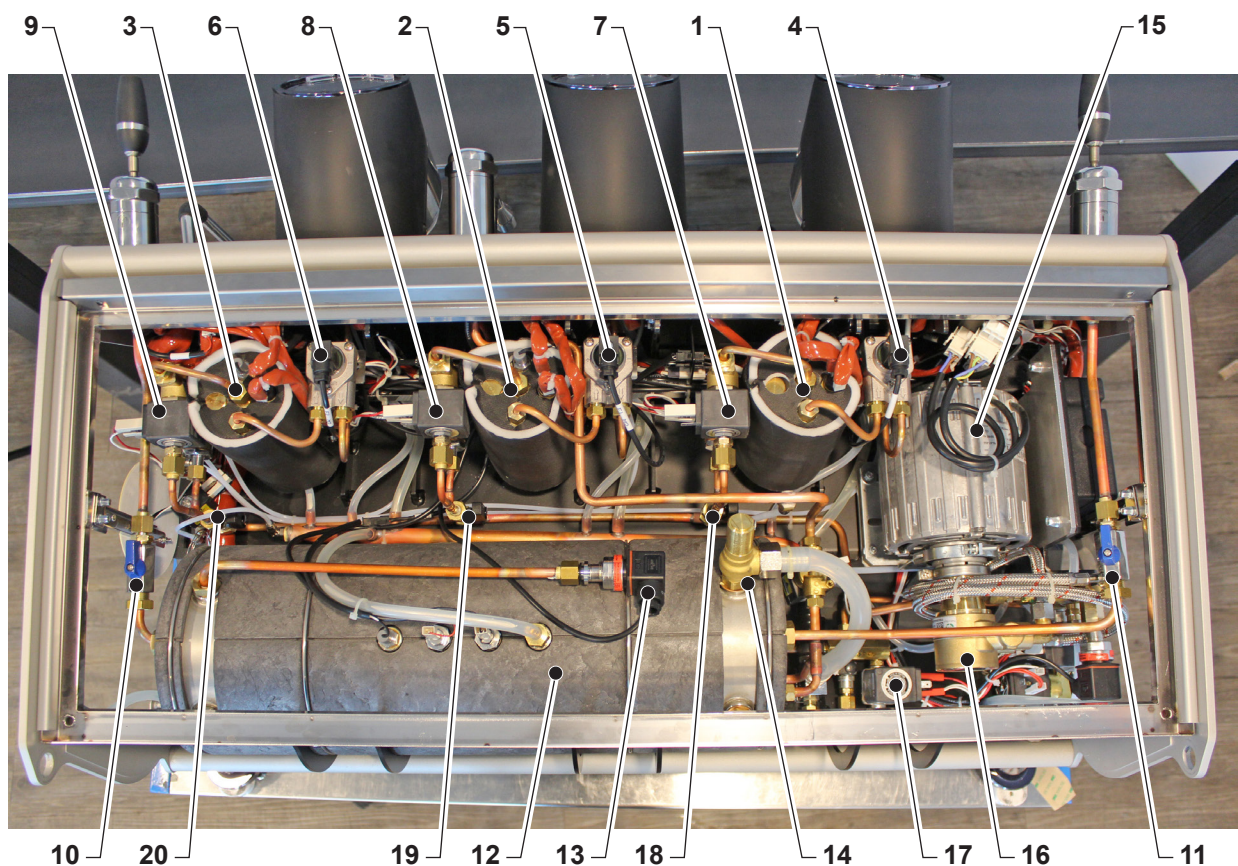
- Pull out panel (2).



5. LAYOUT OF MAIN COMPONENTS

5.1 Top view

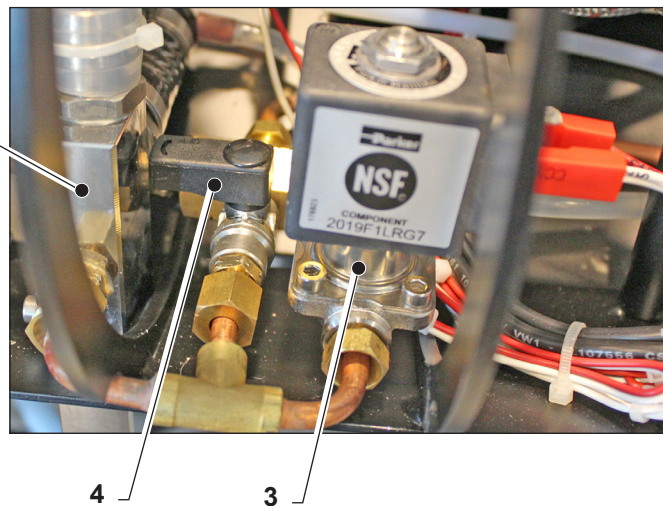
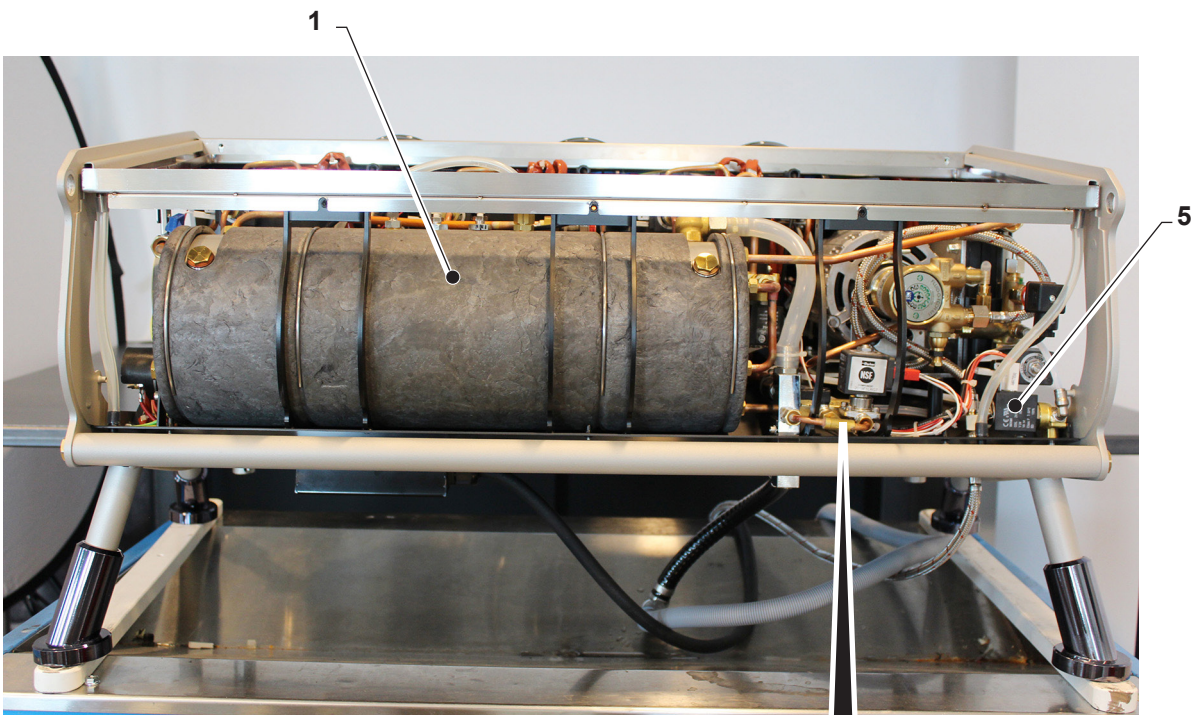
- 1) Unit "1" boiler
- 2) Unit "2" boiler
- 3) Unit "3" boiler
- 4) Unit "1" displacement counter
- 5) Unit "2" displacement counter
- 6) Unit "3" displacement counter
- 7) Unit "1" pre-infusion solenoid valve
- 8) Unit "2" pre-infusion solenoid valve
- 9) Unit "3" pre-infusion solenoid valve
- 10) RH steam tap shut-off tap
- 11) LH steam tap shut-off tap
- 12) Service boiler
- 13) Steam pressure transducer
- 14) Safety valve
- 15) Pump motor
- 16) Water pump
- 17) Drain solenoid valve
- 18) Unit 1 shut-off tap
- 19) Unit 2 shut-off tap
- 20) Unit 3 shut-off tap



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5.2 Rear view

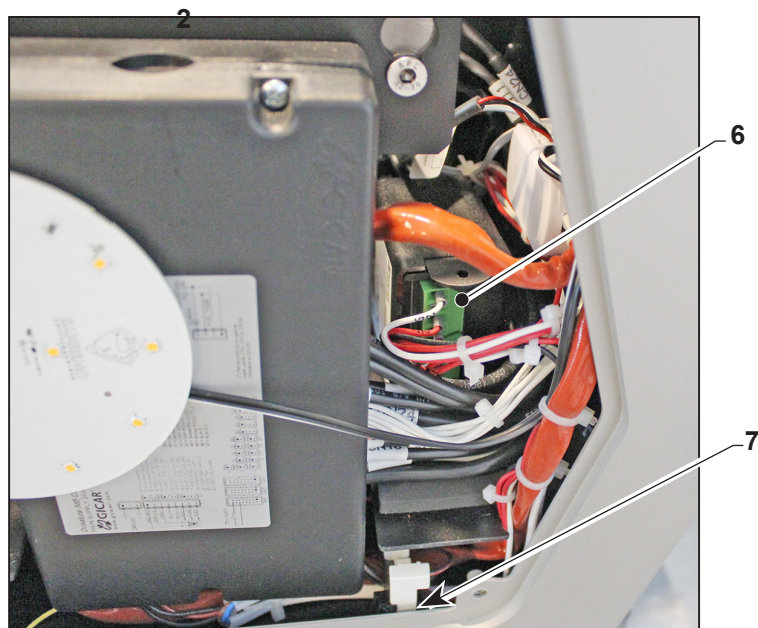
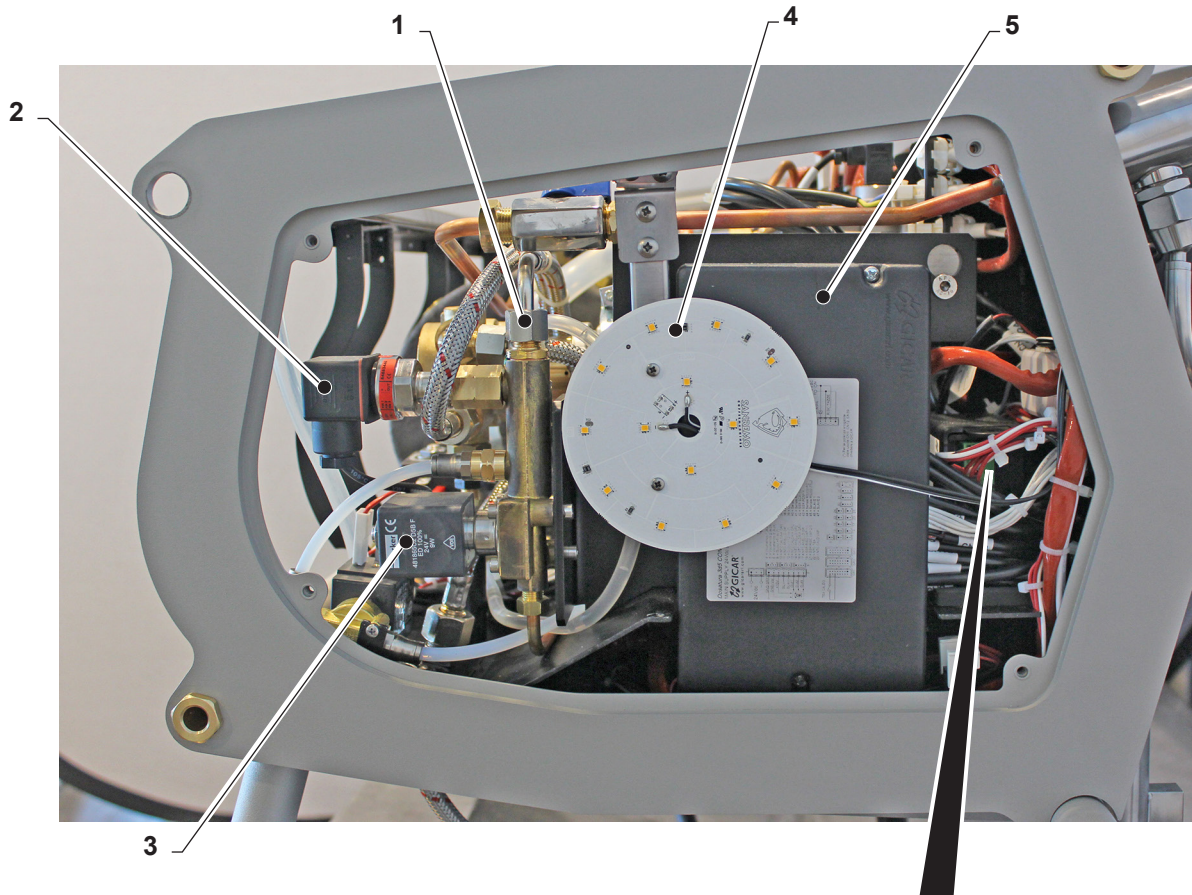
- 1) Service boiler
- 2) Drain manifold
- 3) Cooling cycle solenoid valve (boiler water regeneration)
- 4) Steam boiler drain tap
- 5) Mixed water solenoid valve



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5.3 LH side view

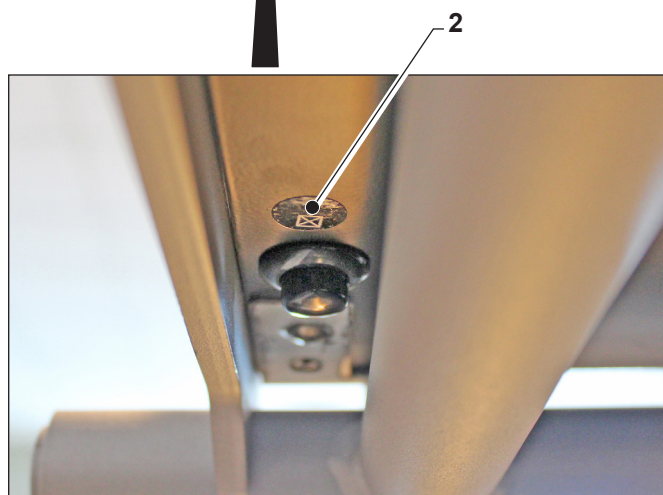
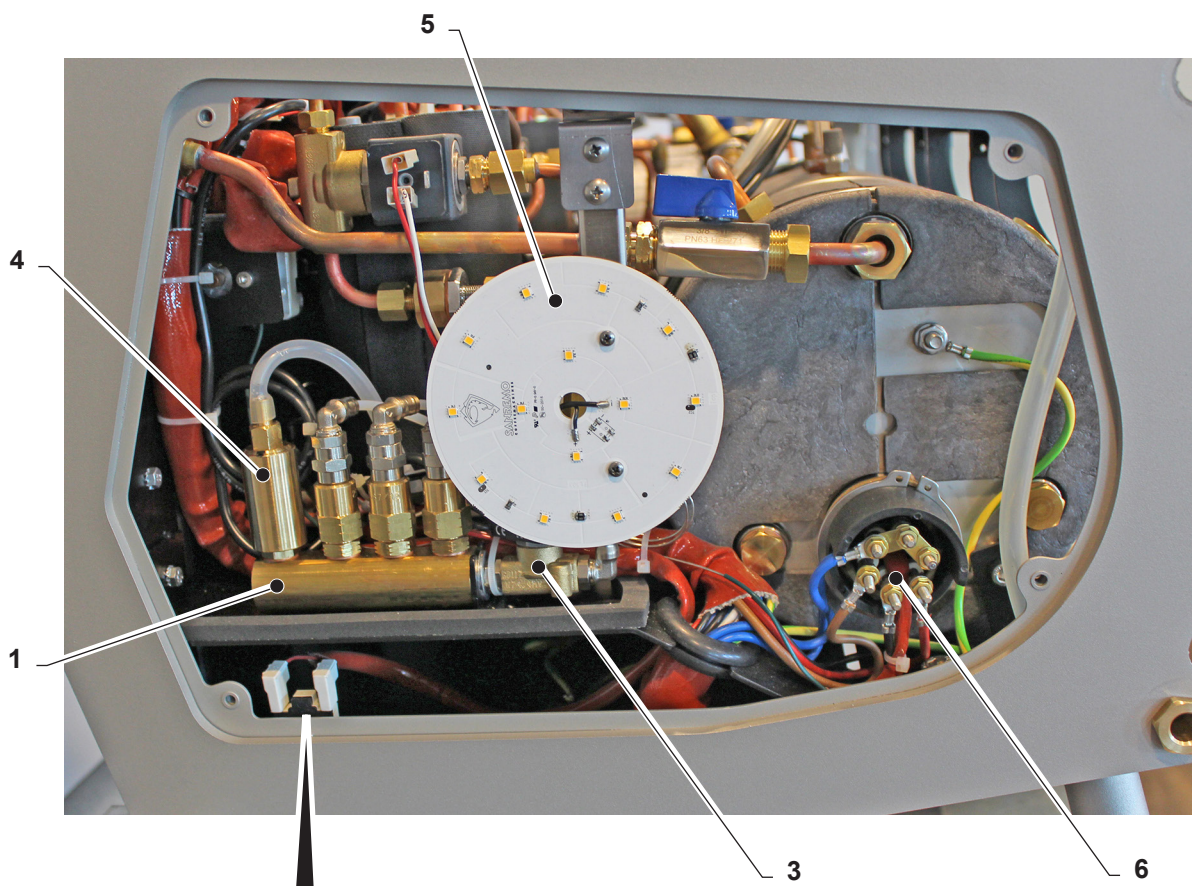
- 1) Loading flange
- 2) Pump pressure transducer
- 3) Water loading solenoid valve
- 4) LED plate
- 5) Main electronic control unit
- 6) Pre-infusion expansion board
- 7) Front and side LED on/off switch



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5.4 RH side view

- 1) "Purge" drain connections
- 2) "Purge" button
- 3) "Purge" solenoid valve
- 4) Expansion valve
- 5) LED plate
- 6) Boiler heating elements

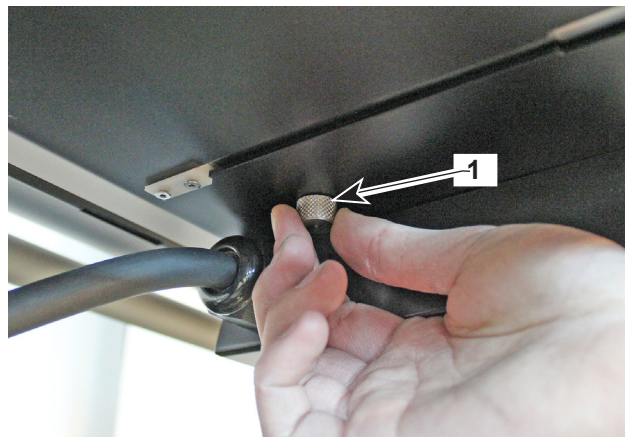


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5.5 Removing the electrical panel

Remove the lower front panel as described in the relevant paragraph

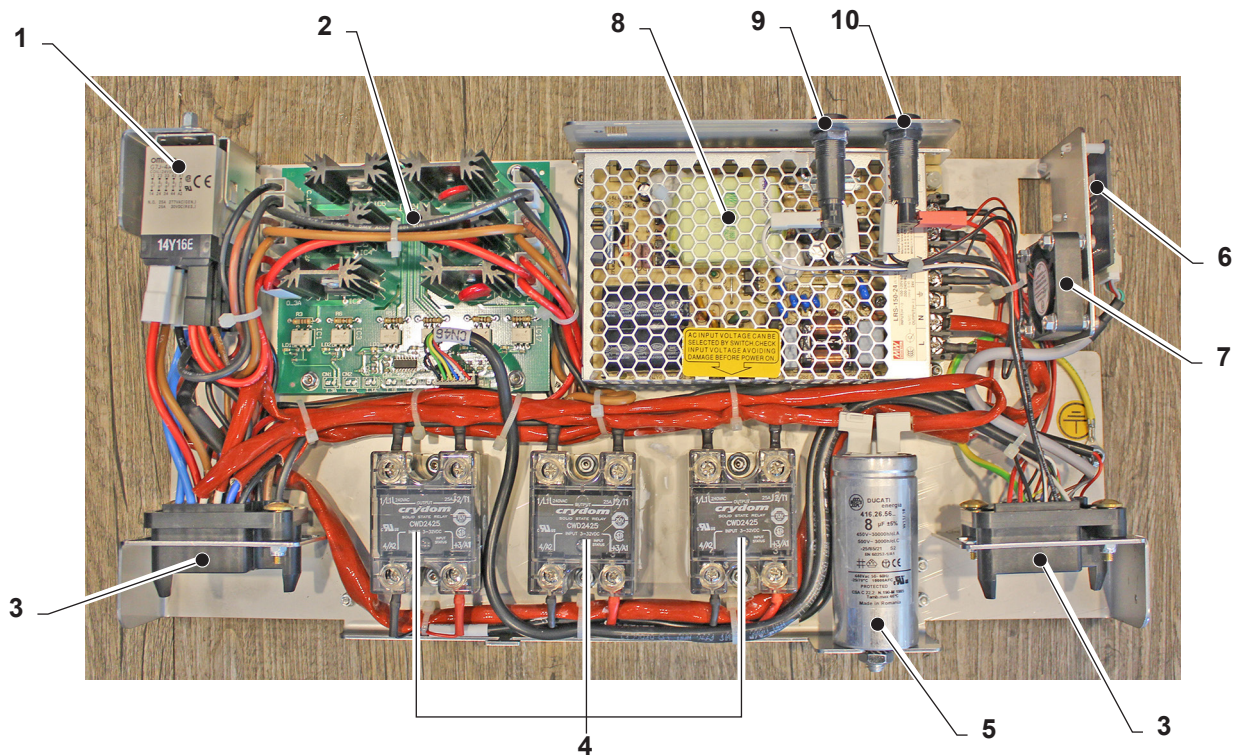
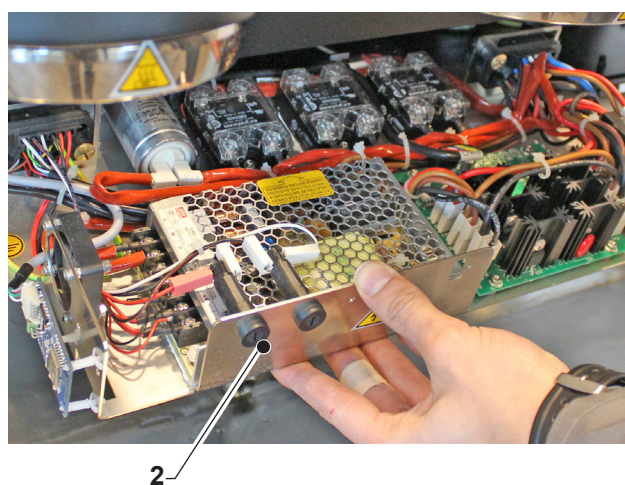
- Unscrew the two knobs (1) located under the front of the machine.



- Pull out the electrical panel (2).

5.6 Layout of the electrical panel

- 1) Power relay
- 2) Triac board (unit heating and small boiler pre-heating)
- 3) High voltage self-centring connector
- 4) Single phase static relays to control steam boiler heating
- 5) Condenser
- 6) WIFI interface board (optional)
- 7) Power unit cooling fan
- 8) Switching power unit (stabilised transformer)
- 9) Fuse "F2" 3.15 A - LED fuse
- 10) Fuse "F1" 1 A - Control unit fuse



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6. ADJUSTMENTS AND RESETS

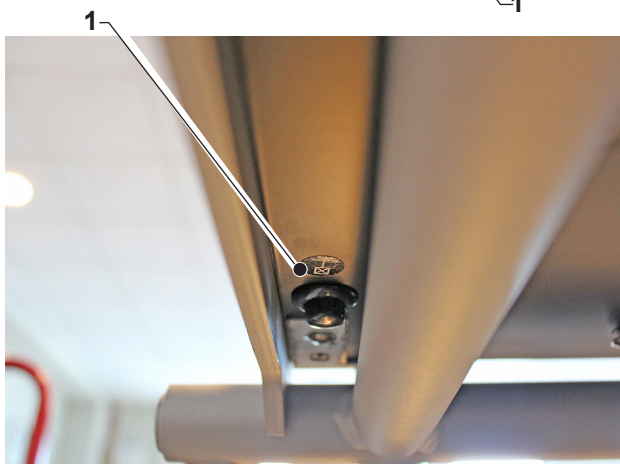
6.1 Adjusting mixed water

- Act on the screw (1) of the mixed water solenoid valve located in the left rear lower part, to adjust the amount of cold water that is mixed with hot water during water dispensing.



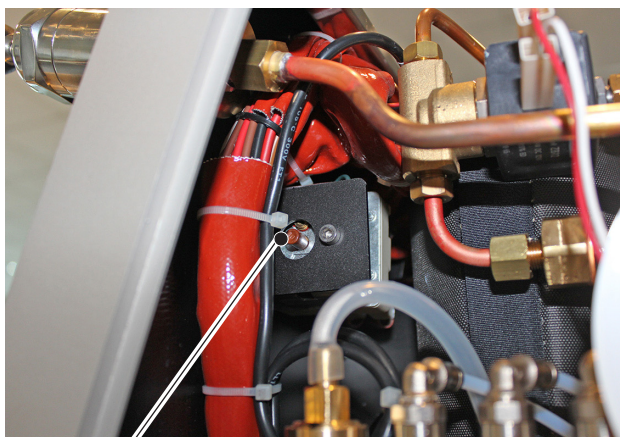
6.2 Bleeding the air from the circuit

- Press button (1), located in the right front lower part, to energise the coils and bleed any air from the circuit.
- Keep the button pressed until only water comes out of the drain, not water mixed with air.



6.3 Resetting the service boiler safety thermostat

- Remove the RH side panel as described in the relative paragraph.
- Press the safety thermostat (1) to reset it.




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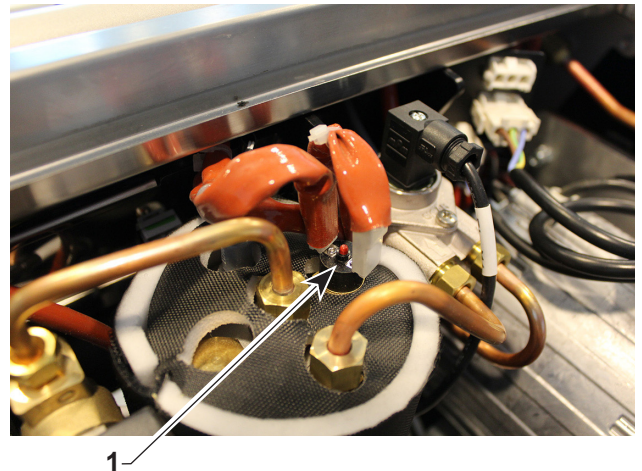


If the thermostat trips again when the machine is restarted after resetting the safety thermostat, check the boiler heating elements and the other thermostats in the machine.

6.4 Resetting the small boiler safety thermostat


- Remove the cup heating plate as described in the relevant paragraph.
- Press the safety thermostat (1) to reset it.

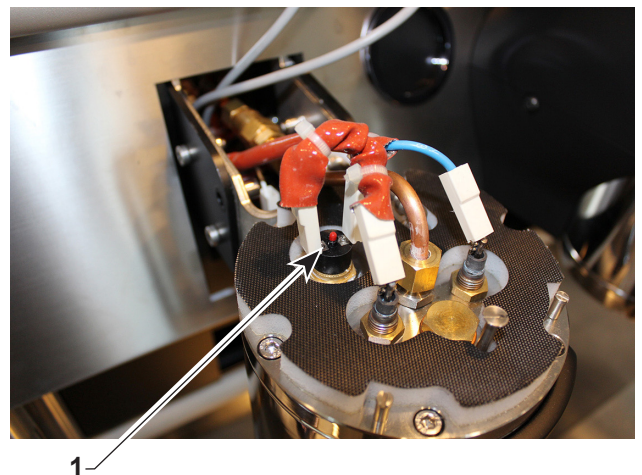
 **If the thermostat trips again when the machine is restarted after re-setting the safety thermostat, check the adjustment of the small boiler temperature thermostat or its proper functioning.**



6.5 Resetting the unit safety thermostat

- Remove the unit guards as described in the relevant paragraph.
- Press the safety thermostat (1) to reset it.

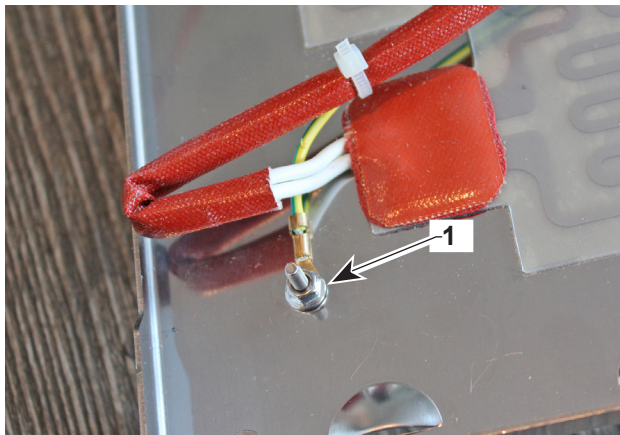
 **If the thermostat trips again when the machine is restarted after re-setting the safety thermostat, check the adjustment of the small boiler temperature thermostat or its proper functioning.**



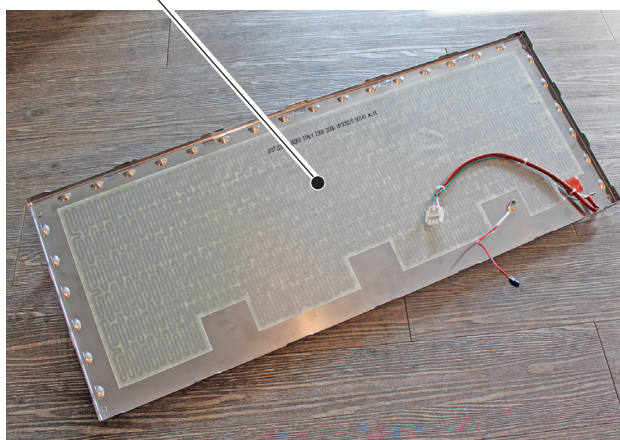
7. REMOVAL AND REPLACEMENT

7.1 Replacing the cup heating plate heating element

- Remove the cup heating plate as described in the relevant paragraph.
- Unscrew the nut (1) connecting the ground wire.

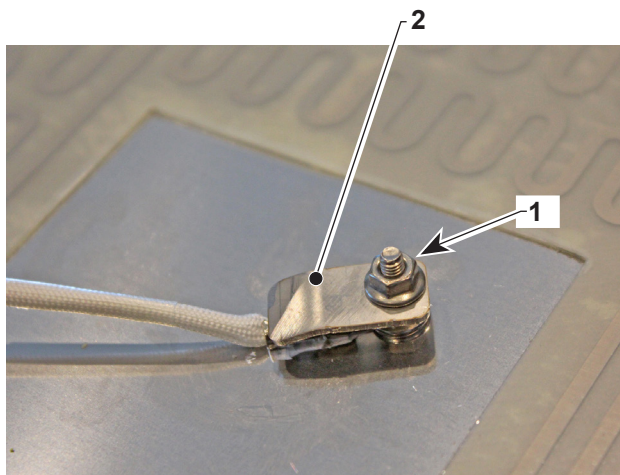


- Use a spatula to remove the adhesive heating element (2).
- Clean the surface of glue residues.
- Screw the ground nut back in and gradually place the heating element (2) on the surface so that there are no air bubbles between the surface and the heating element.




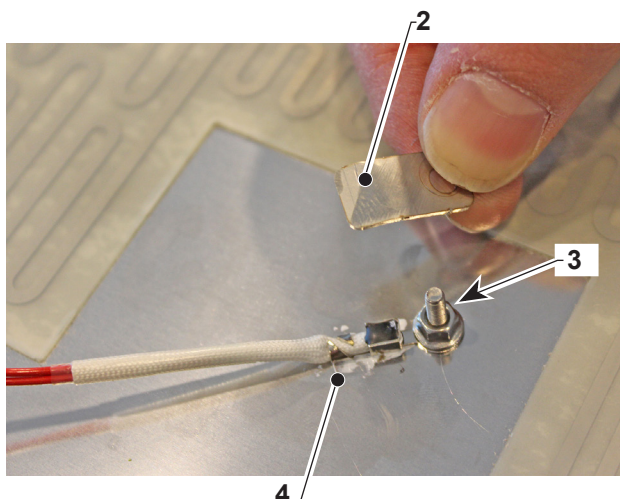
7.2 Replacing the cup heating plate probe

- Remove the cup heating plate as described in the relevant paragraph.
- Unscrew the nut (1) and remove the stopping plate (2).



- Unscrew the nut (3) and remove the probe (4).

 **When reassembling, spread conductive paste between the probe and the cup heating plate.**



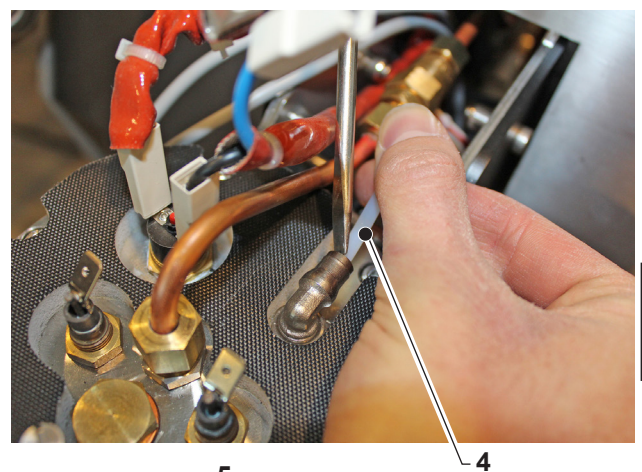
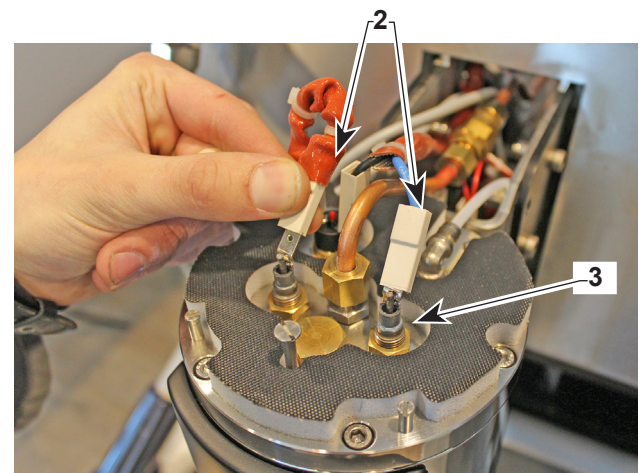
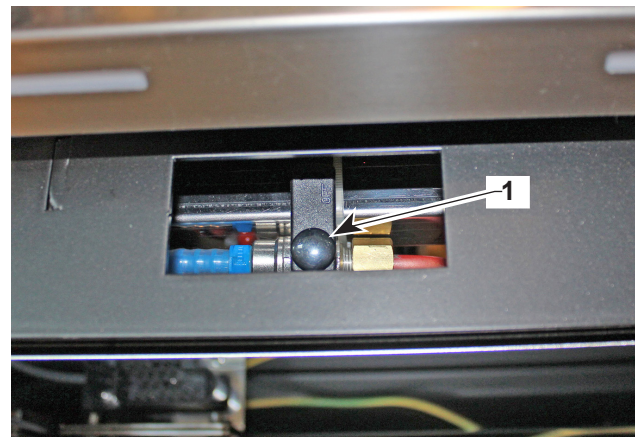
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7.3 Replacing the boiler heating element

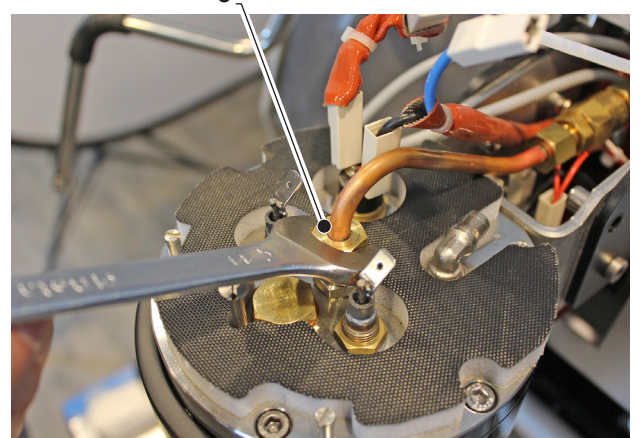


Cut the power to the machine by setting the upstream main switch to OFF.

- Remove the unit guard as described in the relevant paragraph.
 - Remove the lower front panel as described in the relevant paragraph.
 - Ensure the machine is off and the water supply tap is closed.
 - Drain the coffee circuit by opening the tap (1) of the boiler unit.
-
- Disconnect the two Faston connectors (2) from heating element (3).
-
- Disconnect the water drain tube (4); press the ring nut and pull the tube.

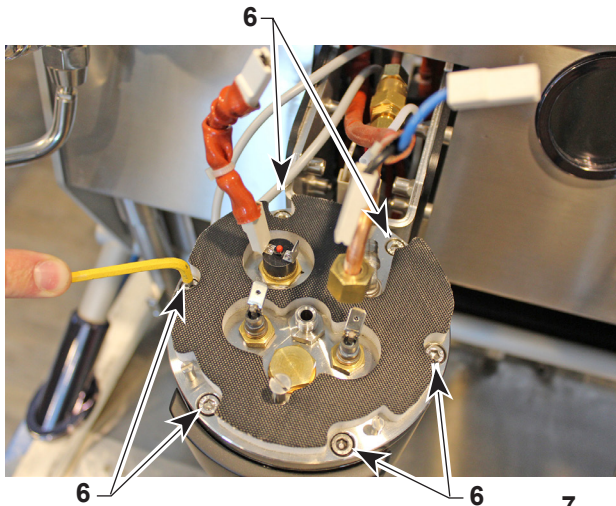


- Unscrew the nut (5) of the water supply tube.

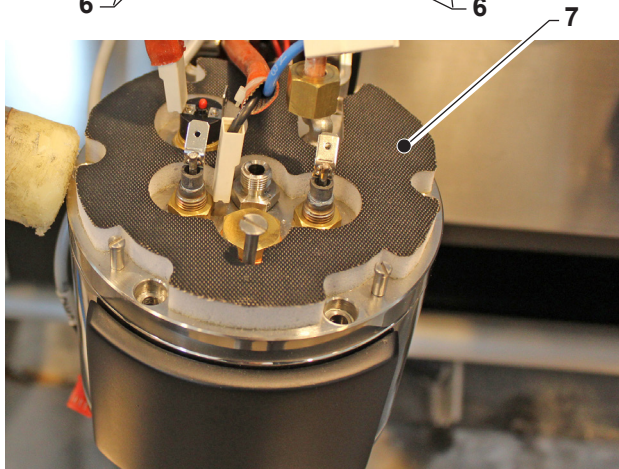


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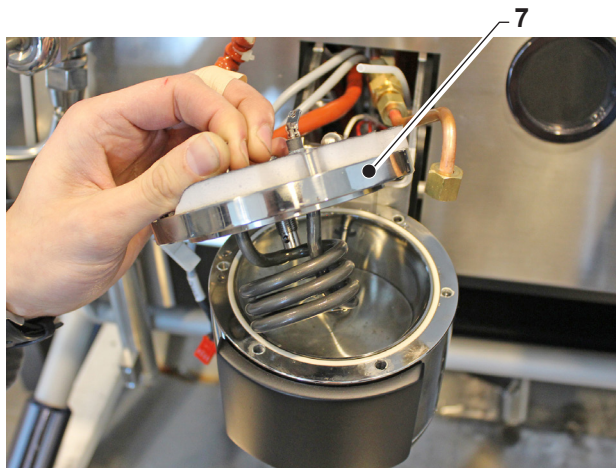
- Unscrew the screws (6) fastening the boiler cover.



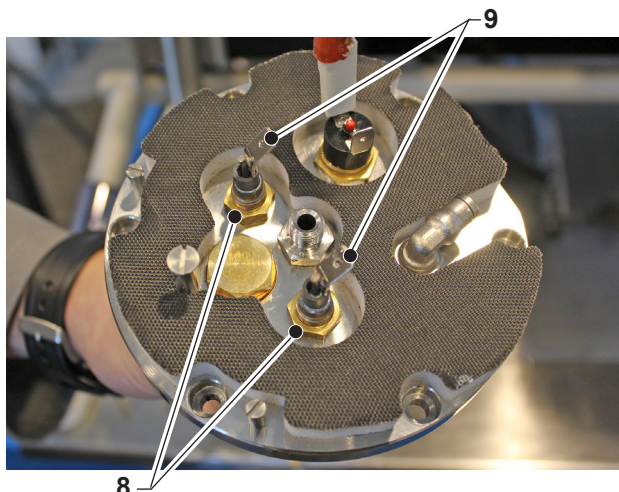
- Use a plastic hammer to tap the cover (7) to facilitate its removal.



- Remove the cover (7).



- Unscrew the nuts (8) and replace the heating element (9).



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Refit everything operating in reverse order from removal checking the condition of the gasket (10) and replacing it if it is worn. Check proper electrical connection of the heating element and of the safety thermostat.

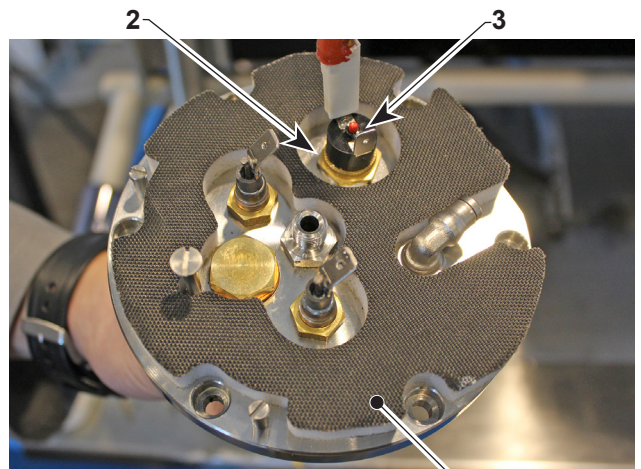


7.4 Replacing the boiler thermostat

- Remove the boiler cover (1) as described in paragraph "Replacing the boiler heating element".
- Unscrew the nut (2) and remove the thermostat (3).

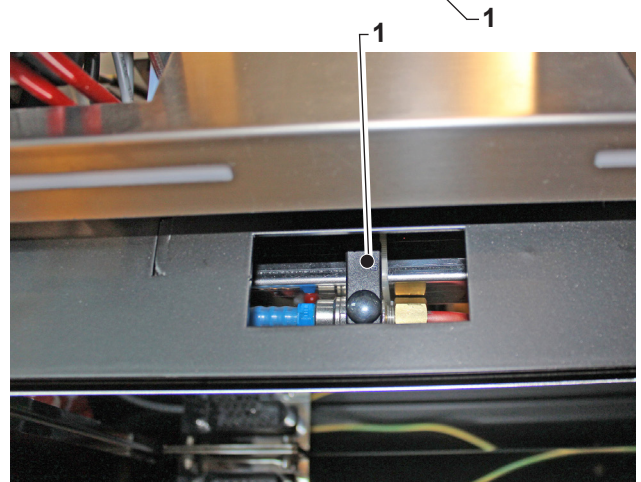


When reassembling, spread conductive paste on the contact surfaces between the thermostat (3) and the cover (1).



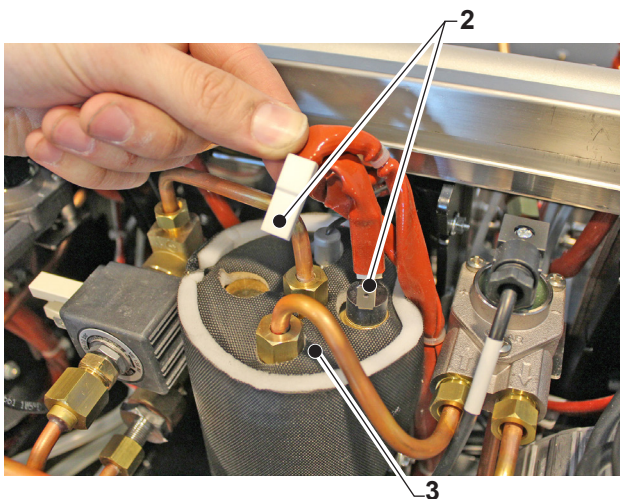
7.5 Unit boiler replacement.

- Remove the cup heating plate and the front panel as described in the relevant paragraphs.
- Drain the coffee circuit of the boiler to be removed by opening the relevant tap (1).

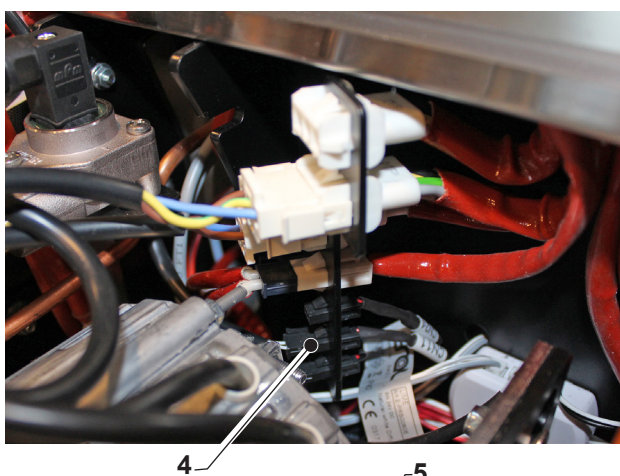


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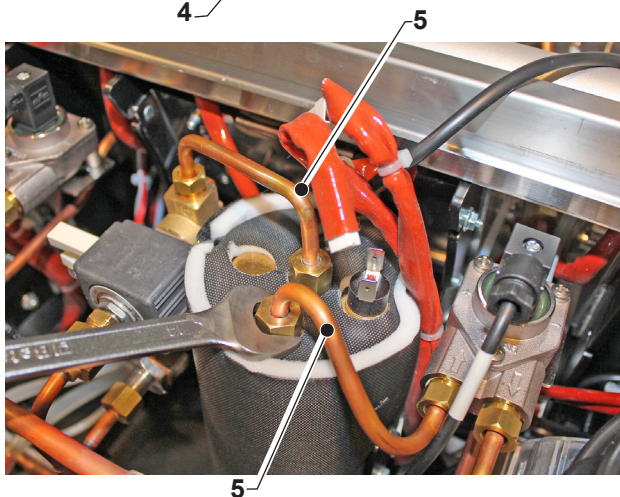
- Disconnect the boiler electrical connections (2). (3).



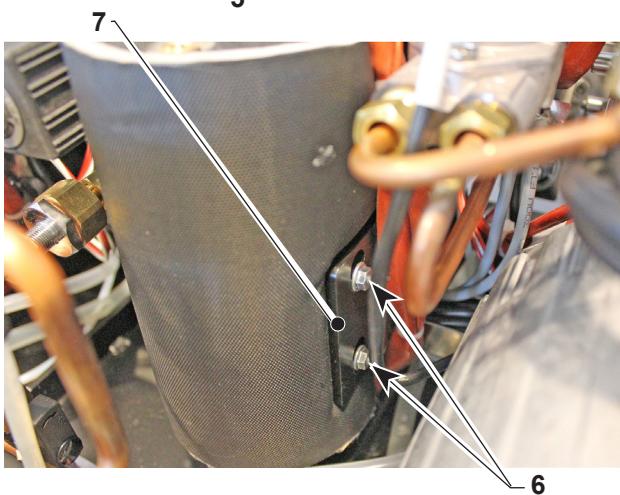
- Disconnect the probe connector (4).



- Unscrew the two water connection tubes (5).

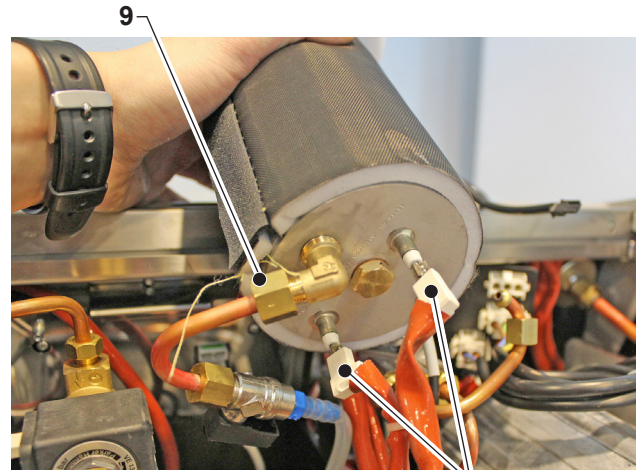


- Loosen the nuts (6), lift it and detach it from the support bracket (7).



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- Disconnect the connectors (8) of the heating element and unscrew the nut (9) connecting the drain tap.
- Replace the boiler by operating in inverse order of removal, reconnecting the electrical cables according to the attached wiring diagram.

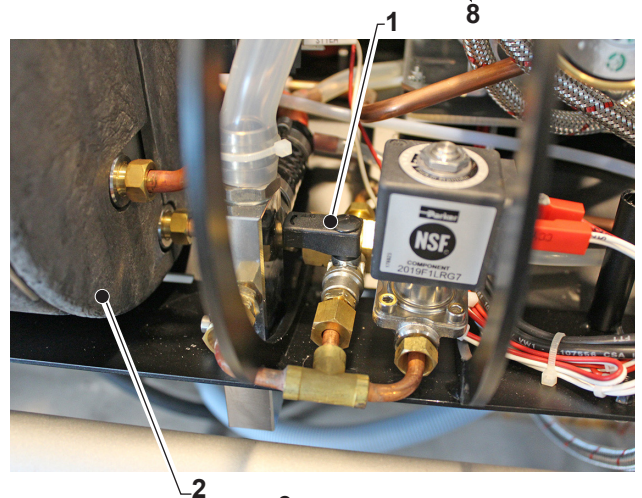


7.6 Replacing the coffee boiler heating element

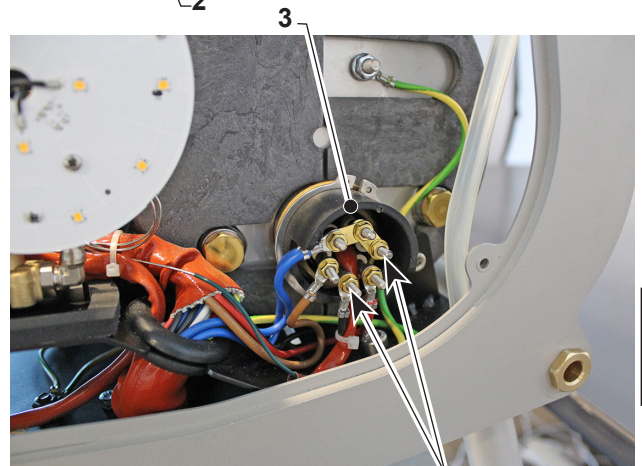


Cut the power to the machine by setting the upstream main switch to OFF.

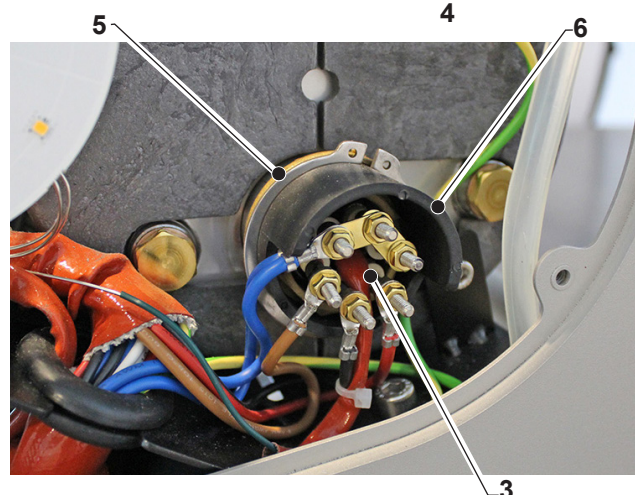
- Remove the RH side panel and the cup heating plate as described in the relevant paragraphs.
- Open the tap (1) to drain the water from the boiler (2).
- Disconnect all wires connecting the heating element (3) to the machine wiring, unscrewing the relevant nuts (4).



ment (3) to the machine wiring, unscrewing the relevant nuts (4).



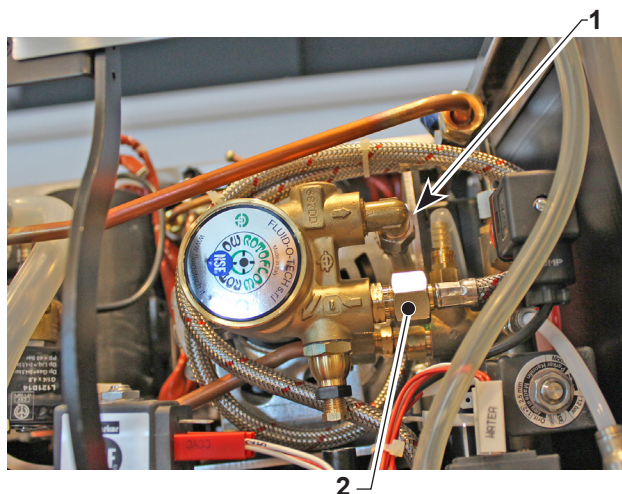
- Remove the Seeger ring (5) and guard (6).
- Remove the heating element (3).
- Refit everything operating in reverse order from removal checking the condition of the heating element and replacing it if it is worn.
- Connect the wiring following the instructions on the wiring diagram attached to this manual.



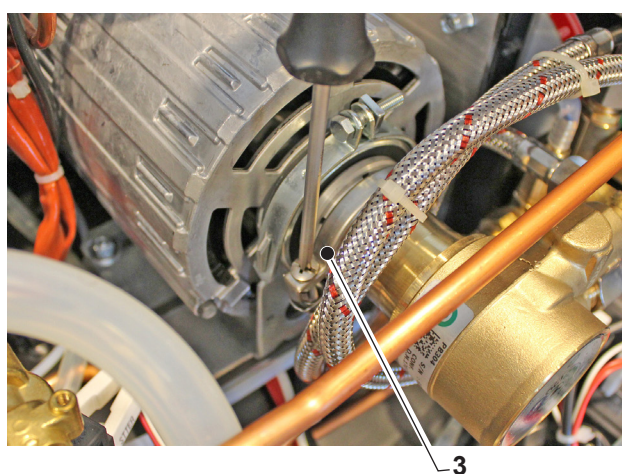
EN

7.7 Replacing the pump


- Remove the cup heating plate as described in the relevant paragraph.
- Disconnect the pump from tubes by unscrewing nuts (1) and (2).

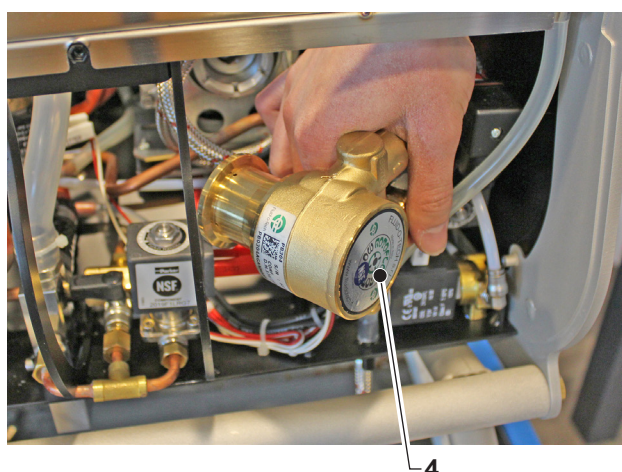


- Loosen the strap (3).



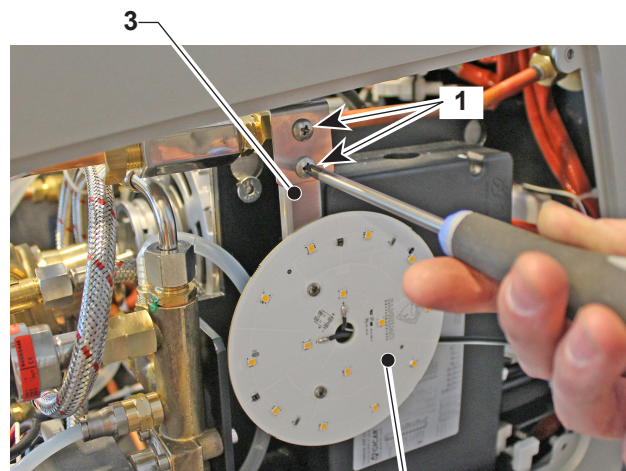
- Remove the complete pump (4): When reassembling, pay attention to properly fit the pump pin onto the crankshaft.

 **When reassembling, pay attention to properly fit the pump pin onto the crankshaft.**

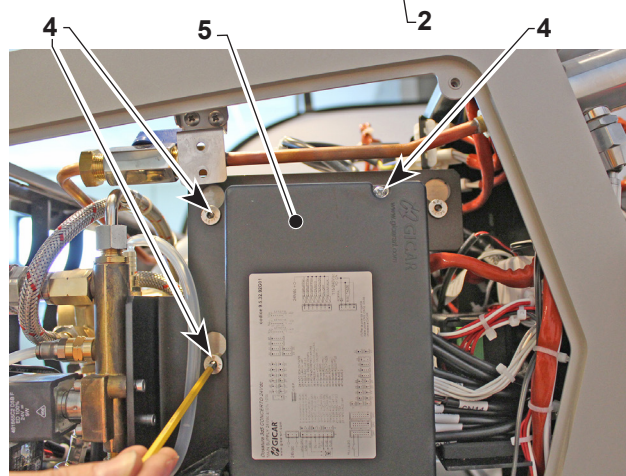


7.8 Replacing the pump motor

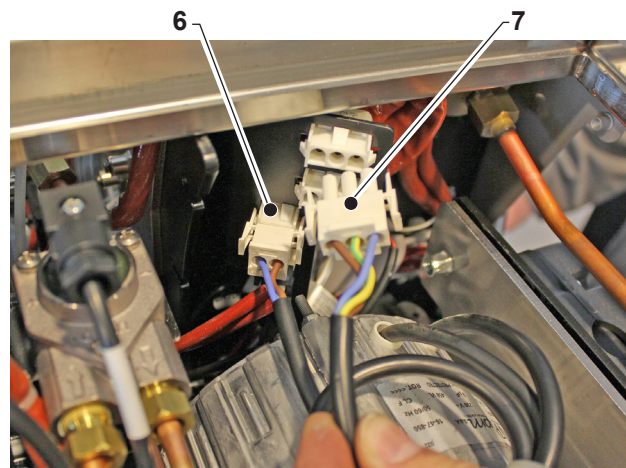
- Remove the cup heating plate and the LH side panel as described in the relevant paragraphs.
- Remove the pump as described in the relevant paragraph without disconnecting the intake and delivery pipes.
- Unscrew the two screws (1) and move the LED plate (2) with the relevant bracket (3).



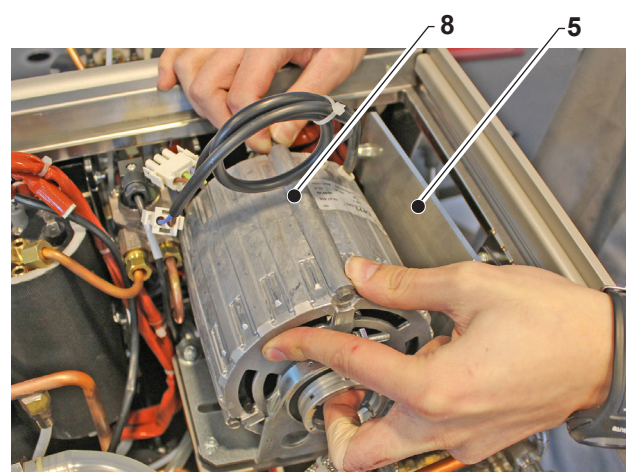
- Loosen the screws (4) fastening the pump to the plate (5).



- Disconnect the two pump connectors (6) and (7).

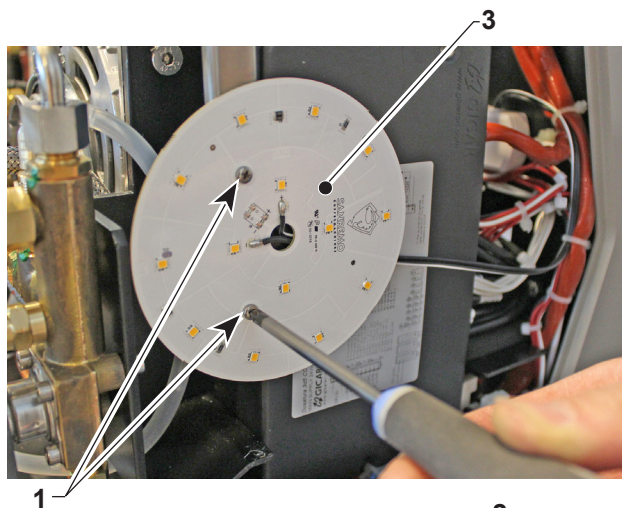


- Lift the pump motor (8) detaching it from the plate (5) and remove it.
- Reassemble everything in reverse order of removal, paying attention to connect connector (7) to the 3-way connector below it; see the wiring diagram.

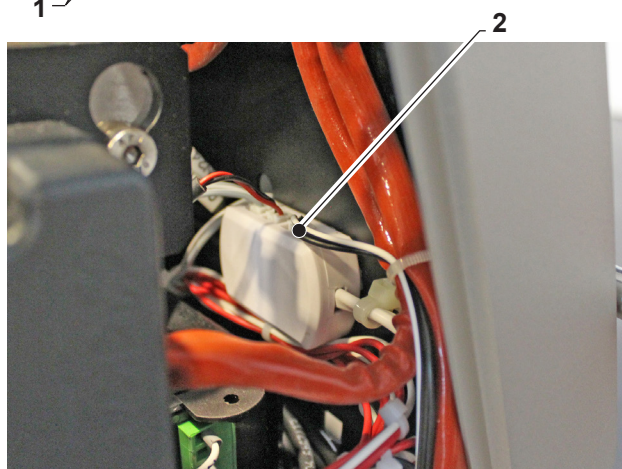


7.9 Replacing the LED plate

- Remove the side panel as described in the relative paragraph.
- Unscrew the two screws (1).



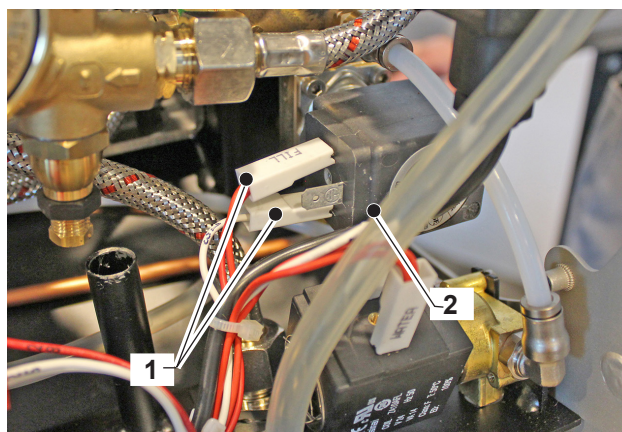
- Disconnect the connector (2) from the junction box and replace the complete plate (3).



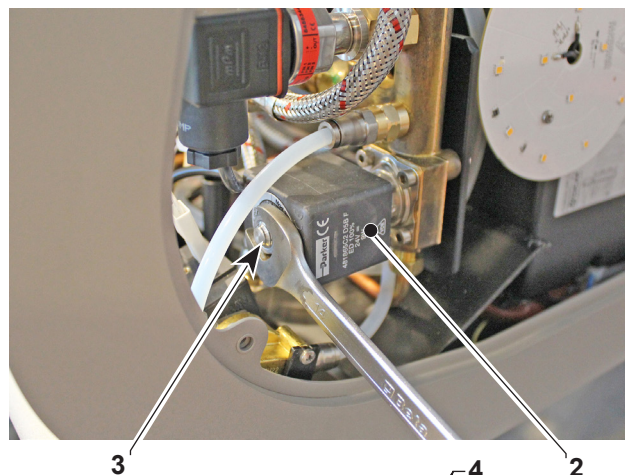
EN

7.10 Replacing the boiler filling solenoid valve


- Remove the LH side panel as described in the relevant paragraph.
- Disconnect the two Faston connectors (1) from the coil (2).

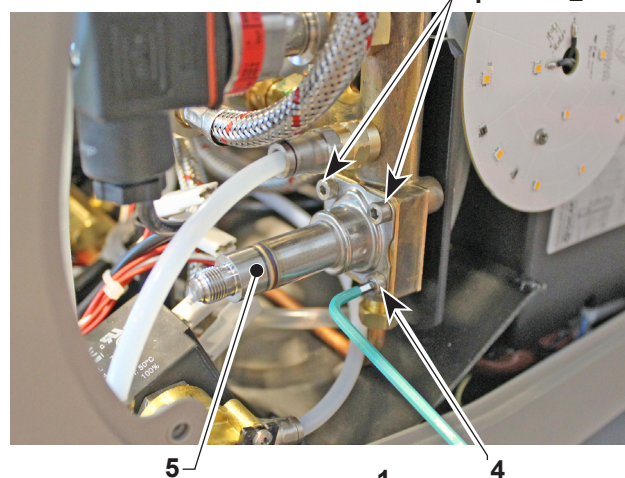


- Unscrew the nut (3) of coil (2).



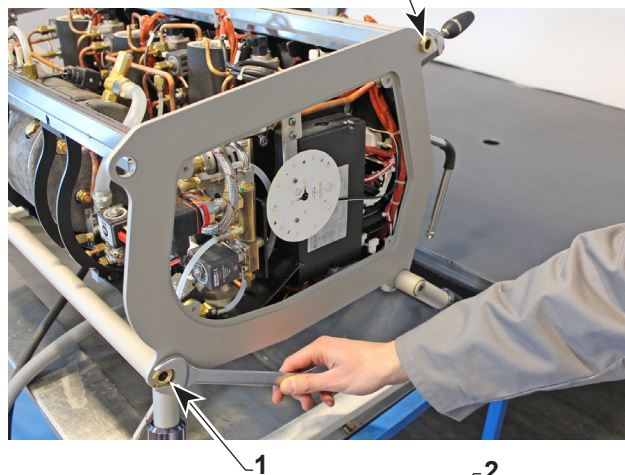
- Undo the four screws (4) and remove the core (5) of the solenoid valve.
- When reassembling, pay attention to properly connect the Faston connectors to the coil.

 **When reassembling the core, pay attention to properly reassemble the gasket, core and spring.**



7.11 Replacing the mixed water solenoid valve

- Remove the LH side panel, the LH side profile and the rear panel as described in the relevant paragraphs.
- Unscrew the two bushings (1).

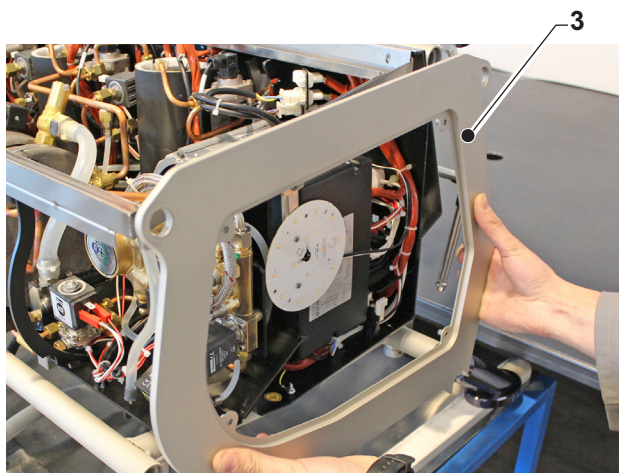


- Unscrew screw (2).

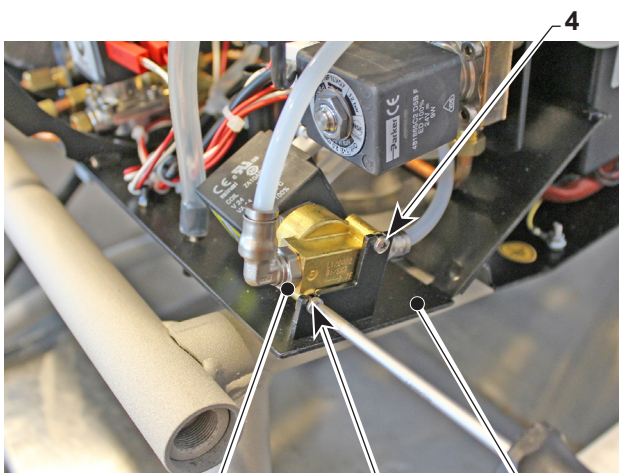


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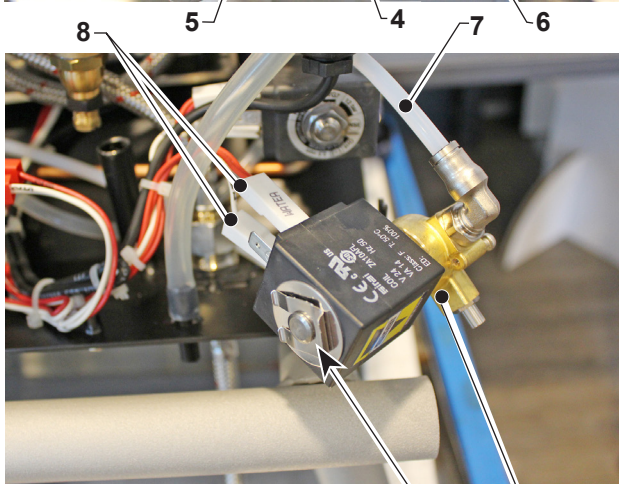
- Remove the left shoulder (3).



- Unscrew the screws (4) fastening the solenoid valve (5) to the bracket (6).



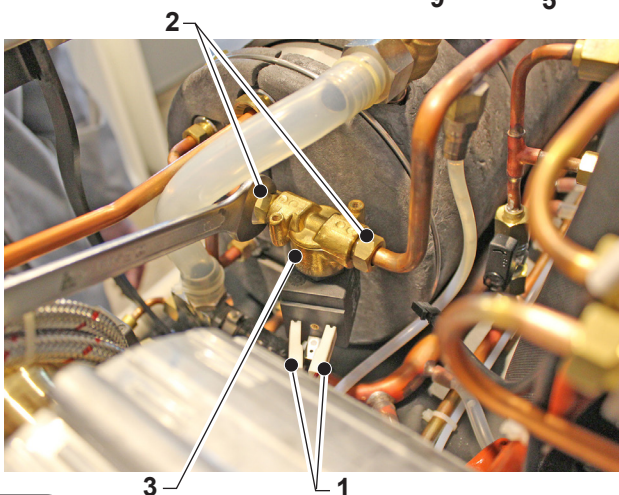
- Disconnect the two Teflon tubes (7).
- Disconnect the two Faston connectors (8).
- Remove the clip (9) to replace the coil or replace the entire solenoid valve (5).
- When reassembling, pay attention to properly connect the Faston connectors to the coil.



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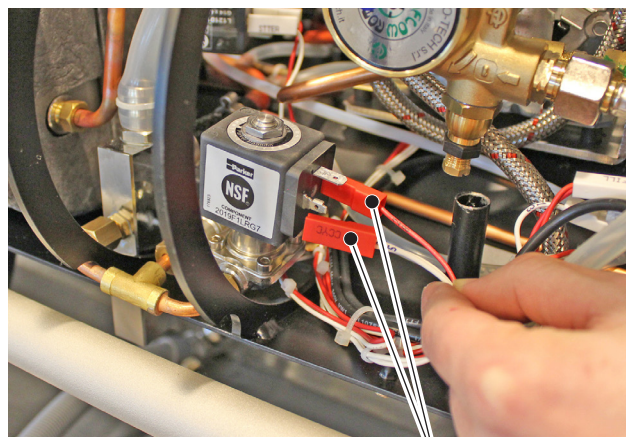
7.12 Replacing the hot water solenoid valve

- Remove the cup heating plate as described in the relevant paragraph.
- Disconnect the Faston connectors (1).
- Unscrew the two nuts (2) and remove the solenoid valve (3).
- Replace the coil or solenoid valve and reassemble in inverse order of removal.

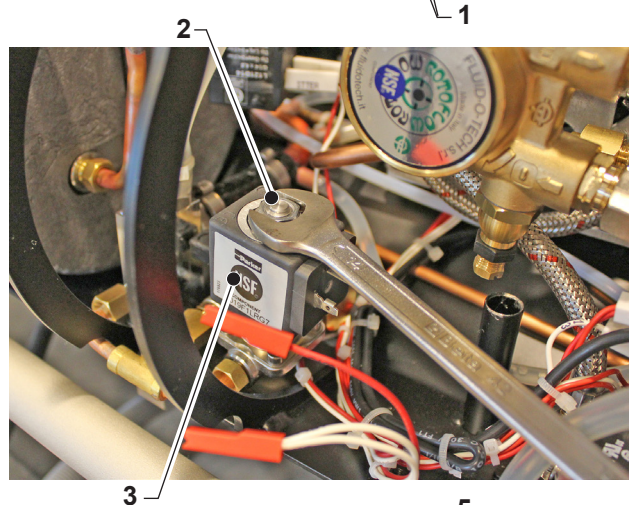


7.13 Replacing the cooling cycle solenoid valve


- Remove the cup heating plate as described in the relevant paragraph.
- Disconnect the Faston connectors (1).

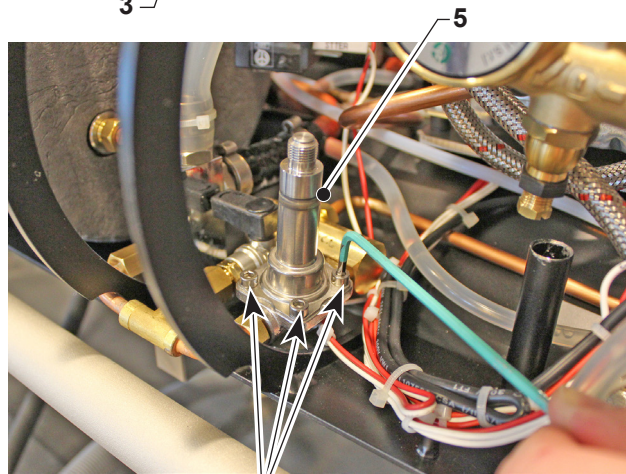


- Unscrew the nut (2) and remove the coil (3).



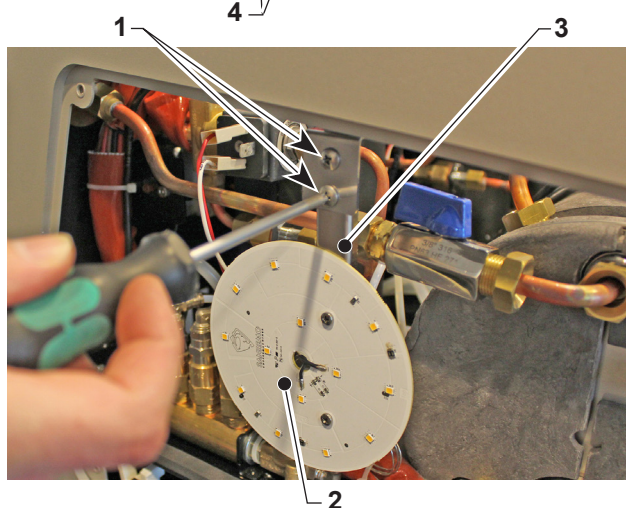
- Undo the four screws (4) and remove the core (5).
- When reassembling, pay attention to properly connect the Faston connectors to the coil.

 **When reassembling the core, pay attention to properly reassemble the gasket, core and spring.**

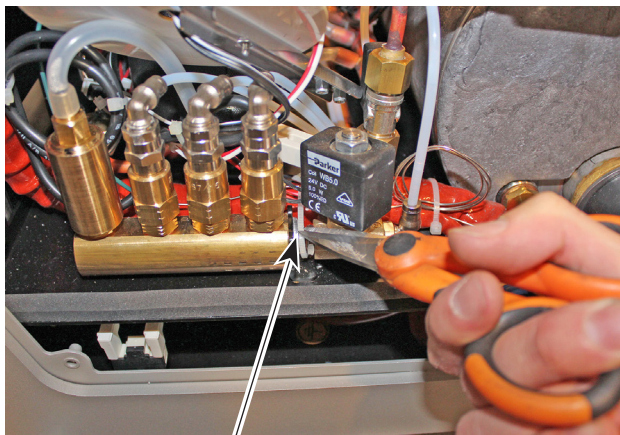


7.14 Replacing the purge solenoid valve.

- Remove the RH side panel as described in the relative paragraph.
- Unscrew the two screws (1) and move the LED plate (2) with the relevant bracket (3).

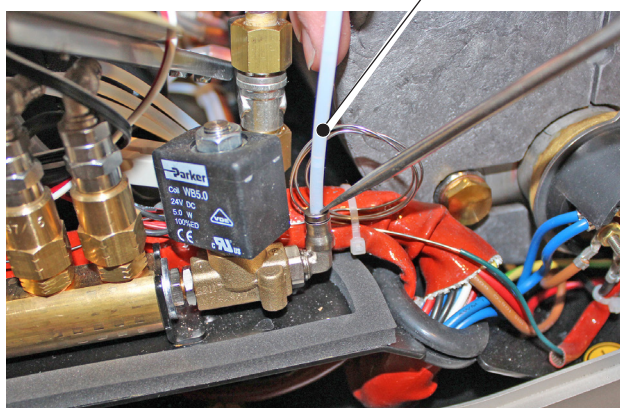


- Cut the strap (4).

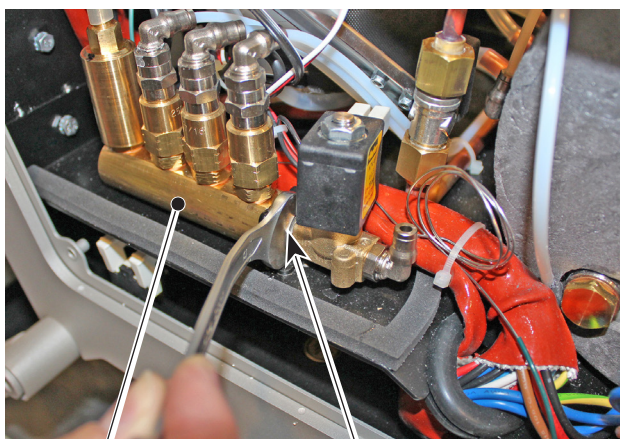


4 5

- Disconnect the tube (5).

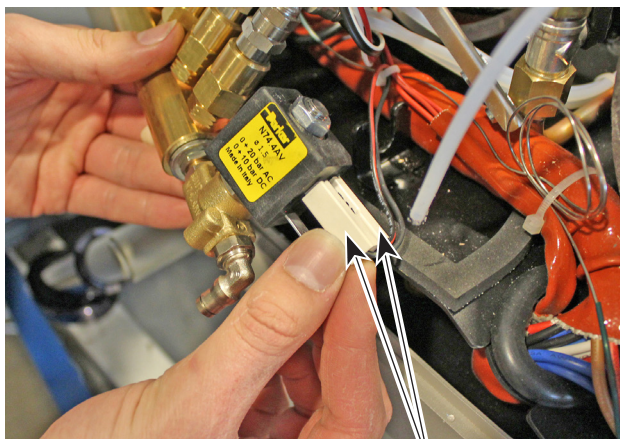


- Loosen the nut (6) fastening the flange (7) to the bracket.



7 6


- Disconnect the Faston connectors (8).

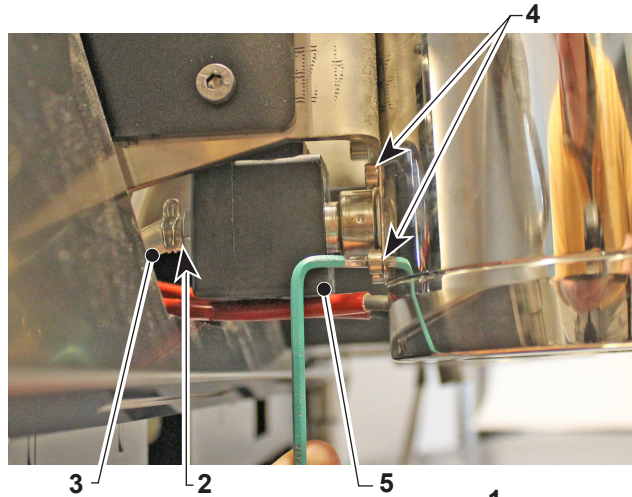


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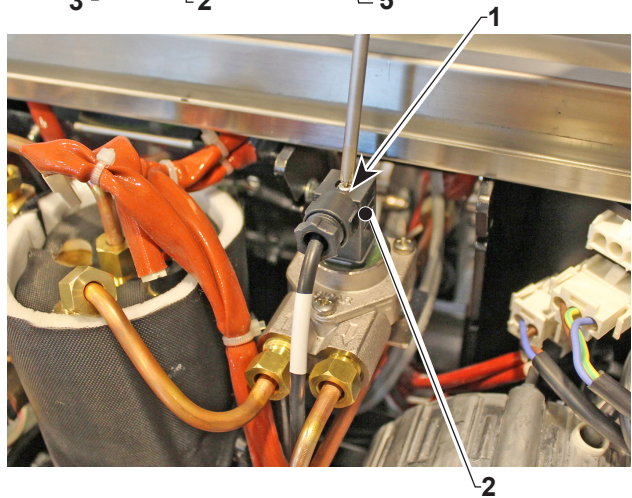
- Open the wire strap (2) and disconnect the tube (3).
- Undo the four screws (4) and remove the core with coil (5).
- When reassembling, pay attention to properly connect the Faston connectors to the coil.

 **When reassembling the core, pay attention to properly reassemble the gasket, core and spring.**

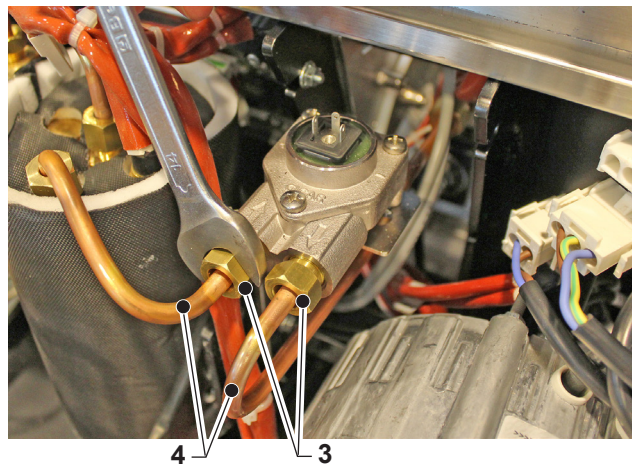


7.17 Replacing the displacement counter.

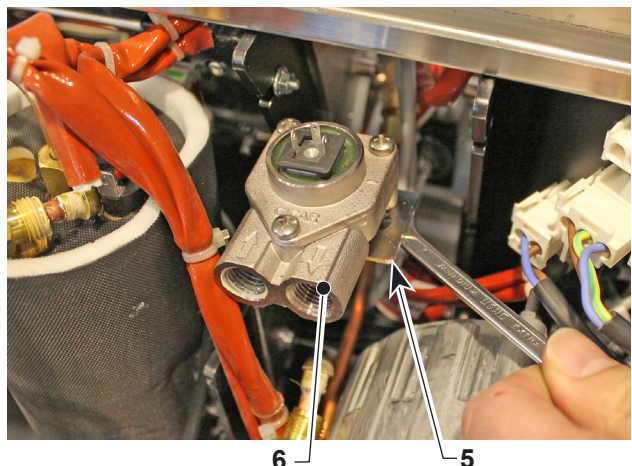
- Remove the cup heating plate as described in the relevant paragraph.
- Undo the screw (1) and remove the head (2).



- Unscrew the nuts (3) and disconnect the tubes (4).



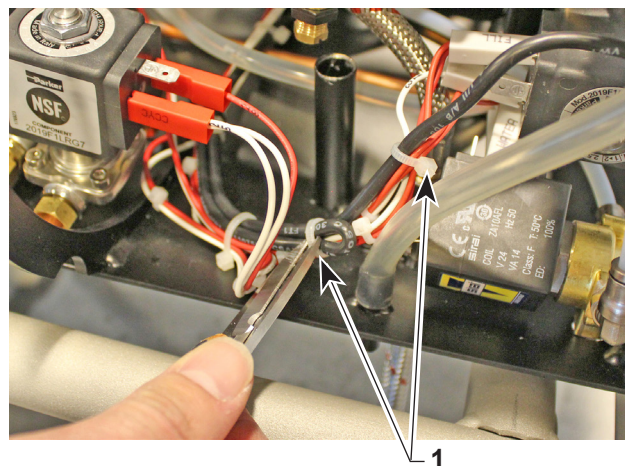
- Loosen the two nuts (5) located under the support square, then pull out the displacement counter (6).



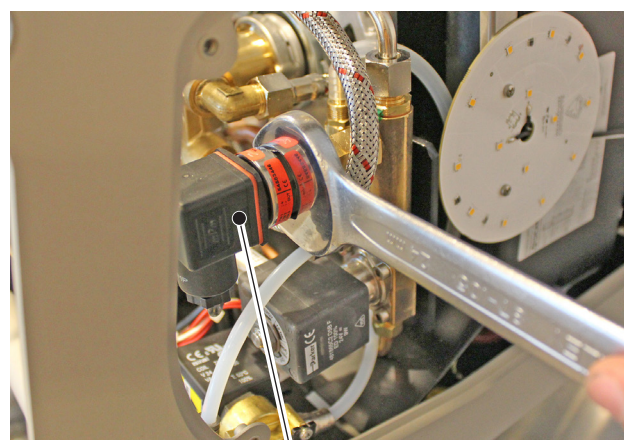
EN

7.18 Replacing the pump pressure transducer

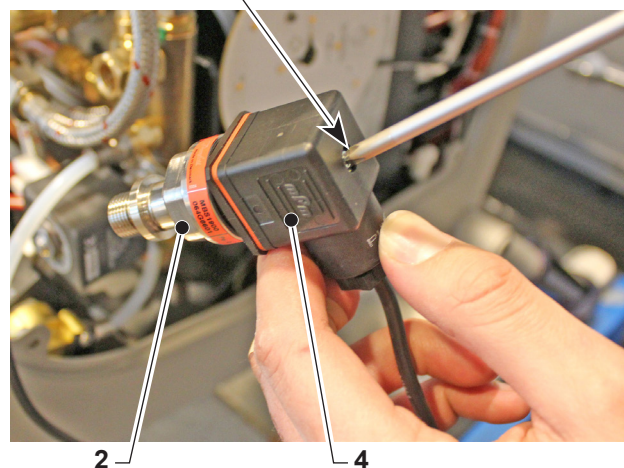
- Remove the left panel as described in the relevant paragraph.
- Cut the straps (1) fastening the transducer cable to the machine wiring.



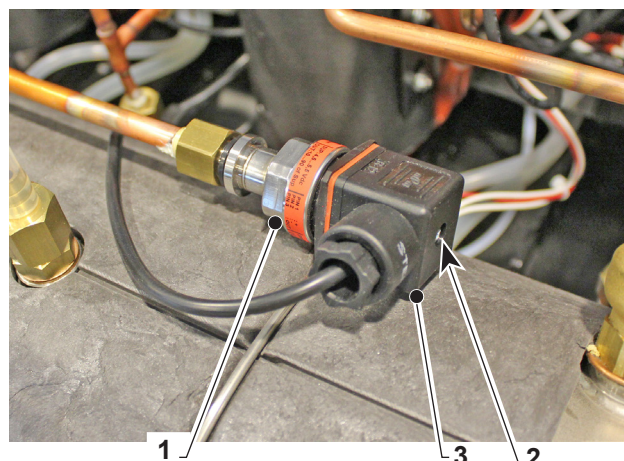
- Unscrew the transducer (2).



- Unscrew screw (3) and disconnect contacts (4) from transducer (2).

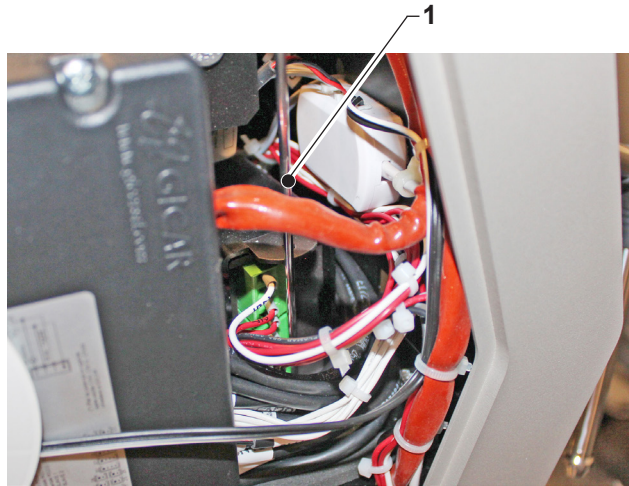
**7.19 Replacing the service boiler pressure transducer**

- Remove the cup heating plate as described in the relevant paragraph.
- Unscrew the transducer (1).
- Unscrew screw (2) and disconnect contacts (3) from transducer (1).

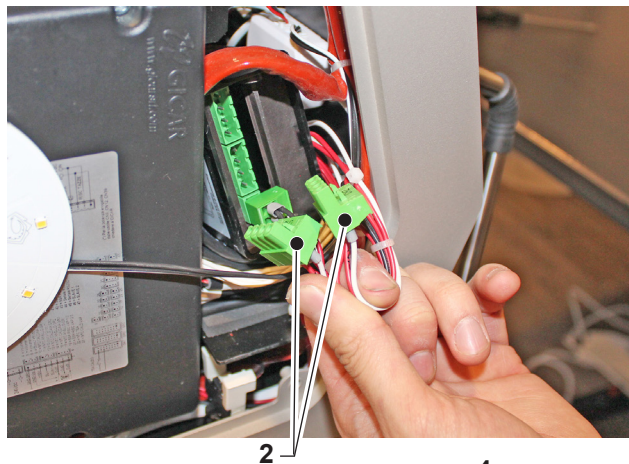


7.20 Replacing the pre-infusion expansion board


- Remove the cup heating plate and the LH side panel as described in the relevant paragraphs.
- Use a long Phillips screwdriver (1) to unscrew the fastening screw of the expansion board

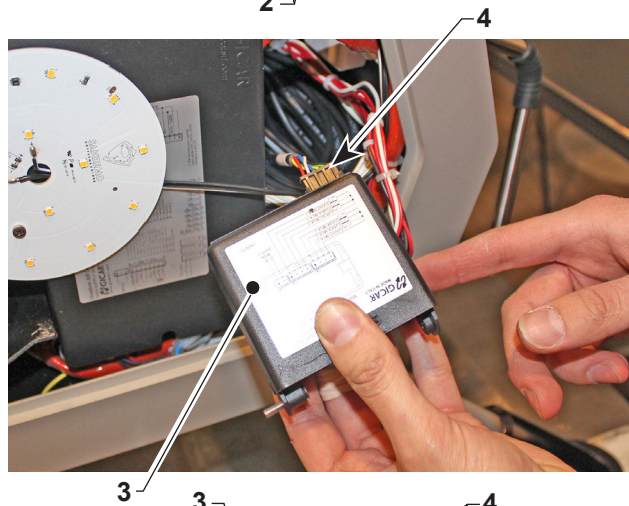


- Disconnect the connectors (2).



- Pull out the board (3) and disconnect the rear connector (4).

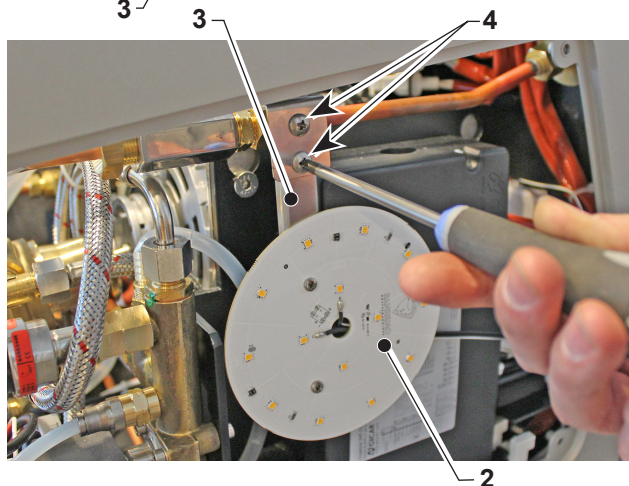
 **Mark the position of connectors so that they are inserted in the relevant seat when the board is reassembled.**



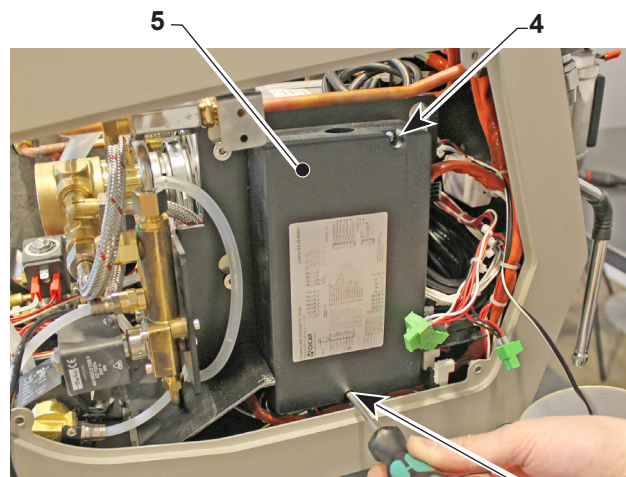
EN

7.21 Replacing the electronic board

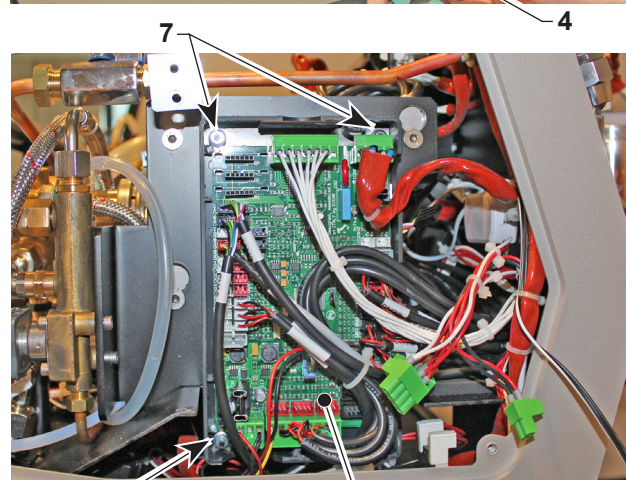
- Remove the LH side panel as described in the relevant paragraph.
- Unscrew the two screws (1) and move the LED plate (2) with the relevant bracket (3).



- Undo the two screws (4) and remove the cover (5) of the electronic board.



- Disconnect all connectors of board (6), unscrew the three flanged nuts (7) and remove the board.

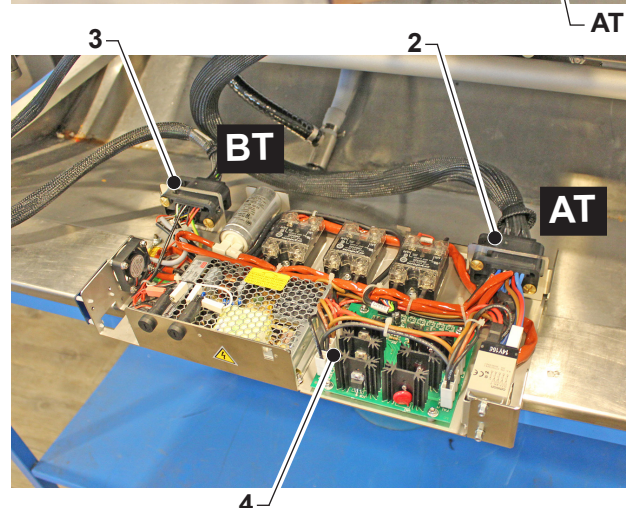
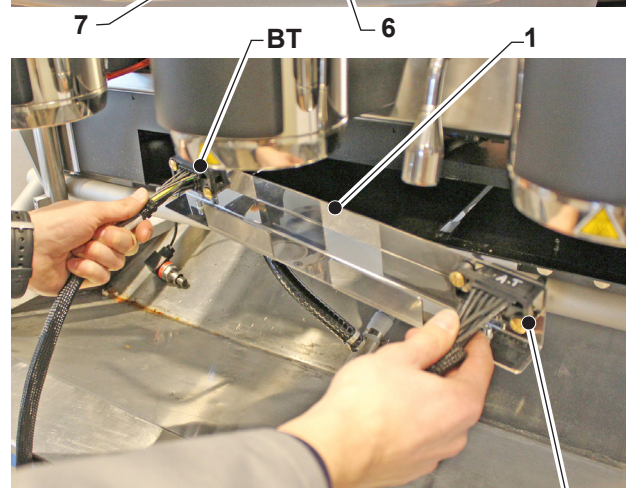


7.22 Replacing the electrical panel components



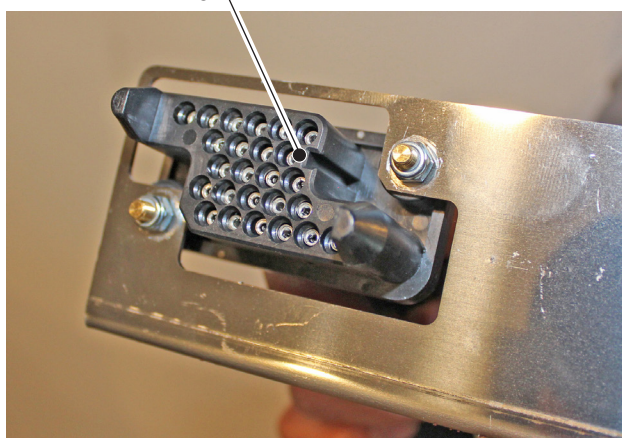
To perform this check, the electrical connection must be inserted, therefore the electrical panel components (4) are powered up. Operate with utmost care.

- In order to check proper operation of the electrical panel components, pull the panel out and connect the relevant extension, supplied upon request.
- Remove the lower front panel as described in the relevant paragraph.
- Pull out the electrical panel as described in the relative paragraph.
- Insert the extension (1) in place of the panel into the machine.
- Connect the connector marked "AT" to connector (2), and the connector marked "BT" to connector (3).



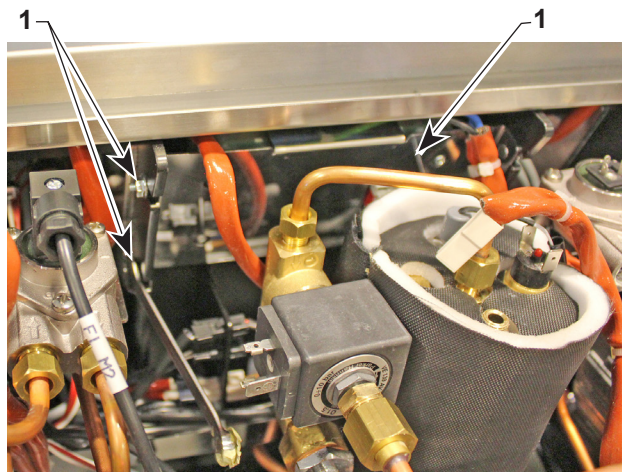
EN

- If the plate (5) is removed, assemble the connectors as shown in the figure, paying attention to position the guide (6), for both connectors, as positioned in the figure.

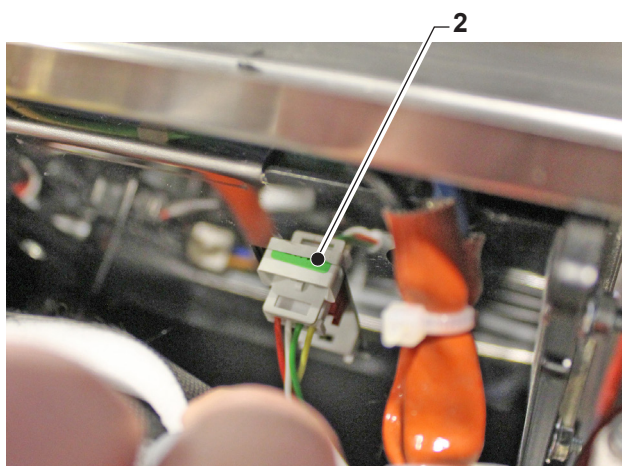


7.23 Replacing the display board

- Remove the cup heating plate as described in the relevant paragraph.
- Loosen the four nuts (1), two on each side.

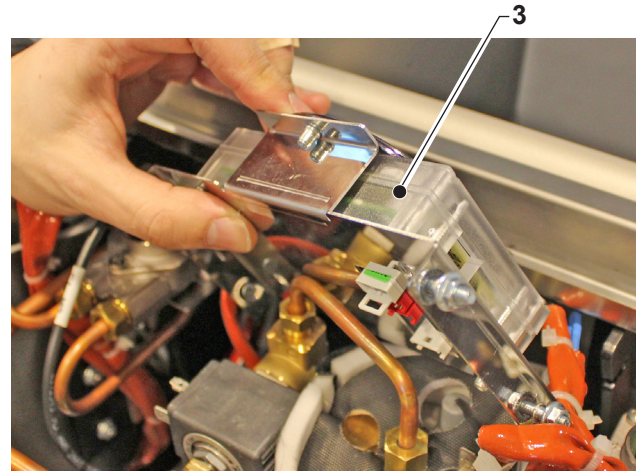


- Disconnect the connector (2).

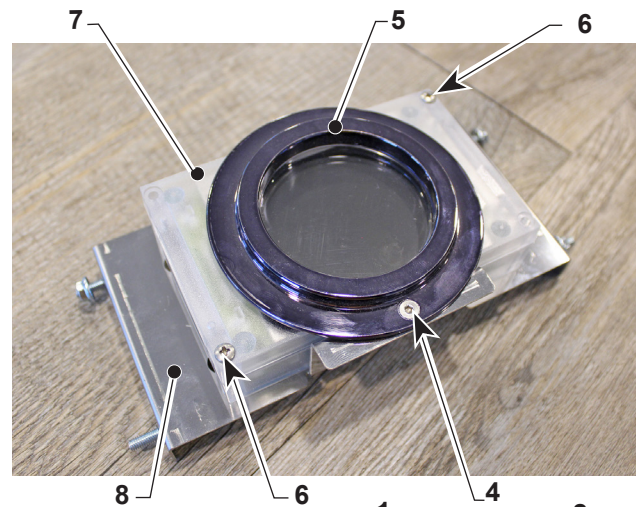


EN

- Pull out the display board (3).

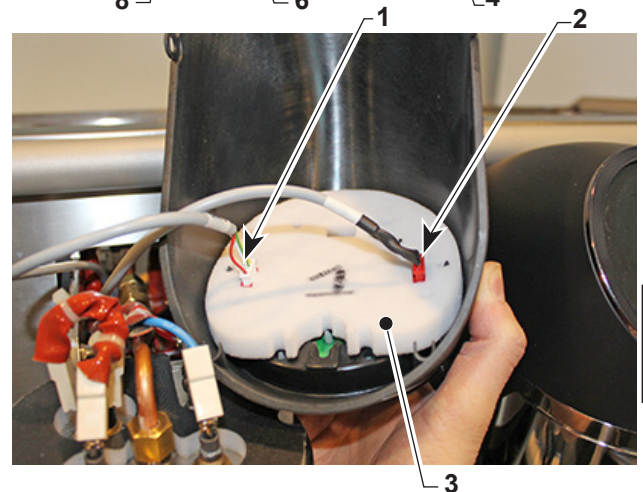


- Undo the screw (4) and remove the frame (5).
- Unscrew the two screws (6) and remove the display board (7) from bracket (8).

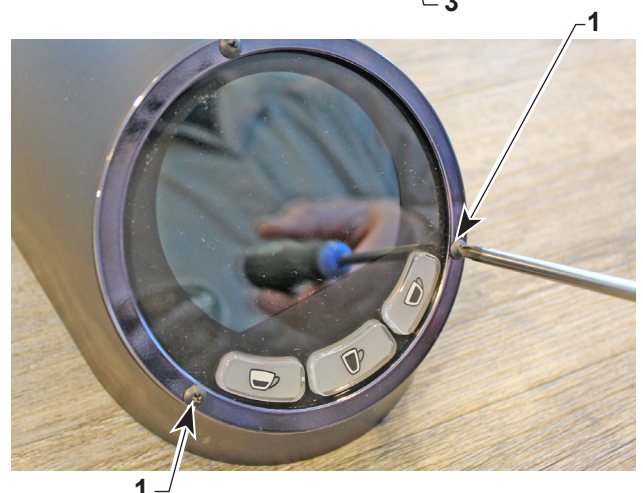


7.24 Replacing the unit display

- Remove the coffee unit guards as described in the relevant paragraph.
- Disconnect the two connectors (1) and (2) and remove the sponge (3).



- Unscrew the three front screws (1).

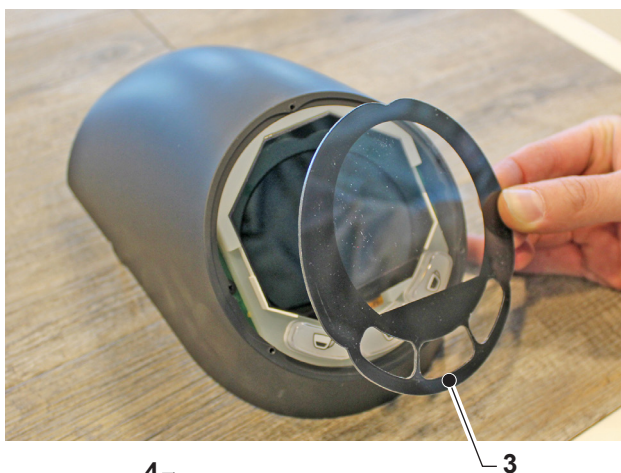


EN

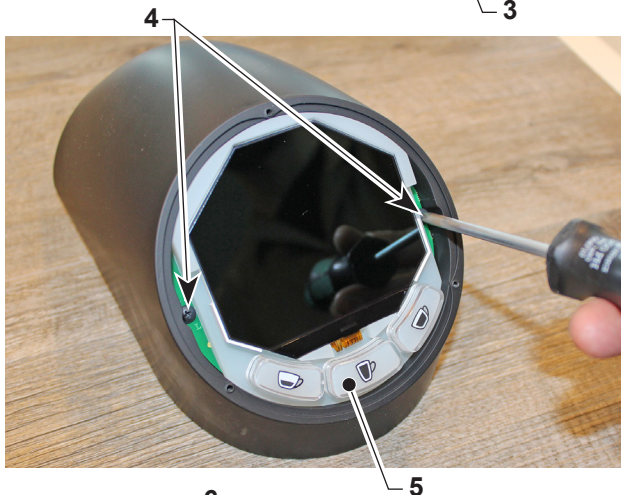
- Remove the external frame (2).



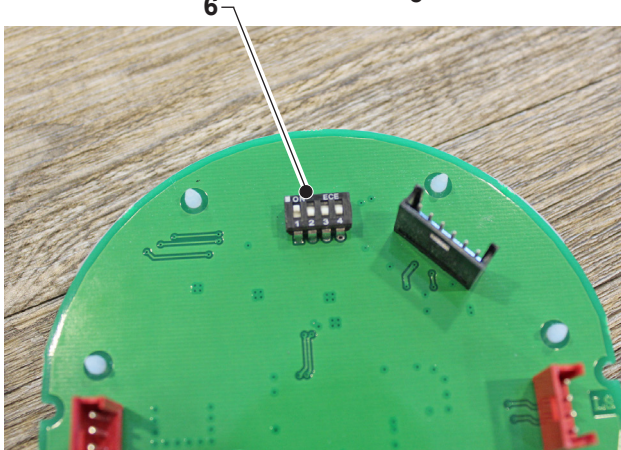
- Remove the internal frame (3).



- Unscrew the two screws (4) and remove the display (5).



- After replacing the display, set the dip-switch (6) according to the fact that unit "1", "2" or "3" is installed; see the figure to adjust the dip-switch.



1st unit



2nd unit



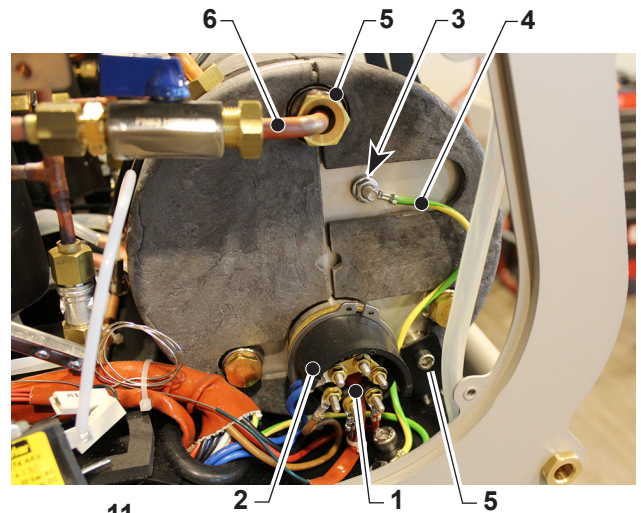
3rd unit



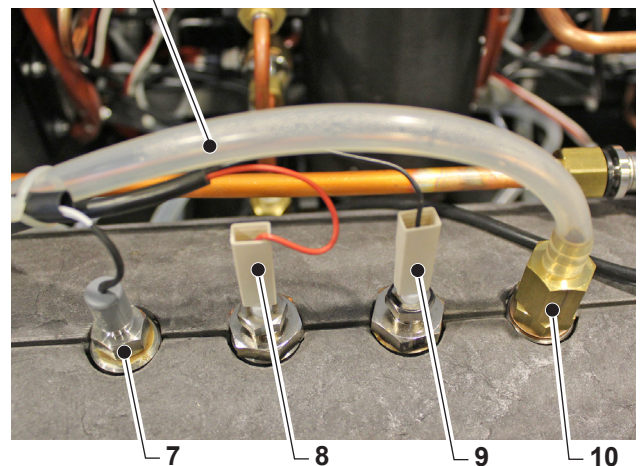
EN

7.25 Removing the service boiler

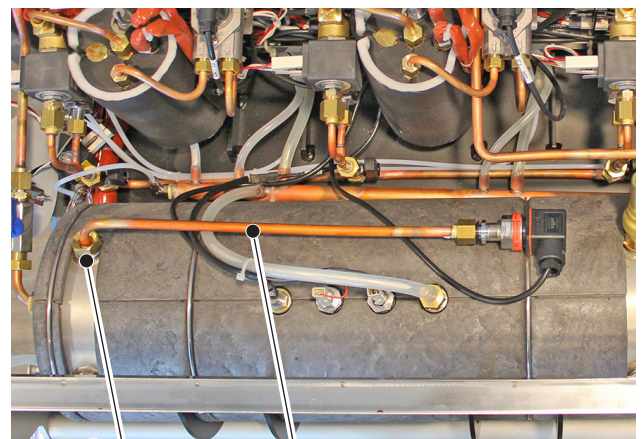
- Remove the cup heating plate and the RH side panel as described in the relative paragraphs.
- Disconnect the heating element (2) electrical connection cables (1).
- Unscrew the nut (3) and remove the ground wire (4).
- Unscrew the nut (5) and disconnect the right steam tap connection tube (6).



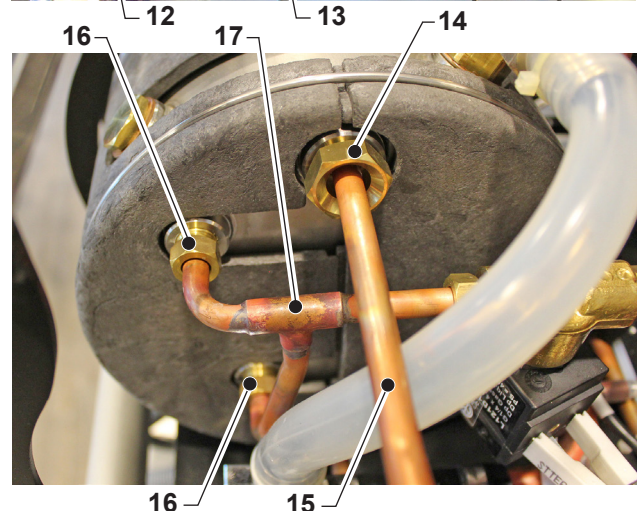
- Unscrew and remove the temperature probe (7).
- Disconnect the maximum level probe connector (8).
- Disconnect the minimum level probe connector (9).
- Unscrew the nut (10) and disconnect the air bleed tube (11).



- Unscrew the nut (12) and remove the transducer tube (13).

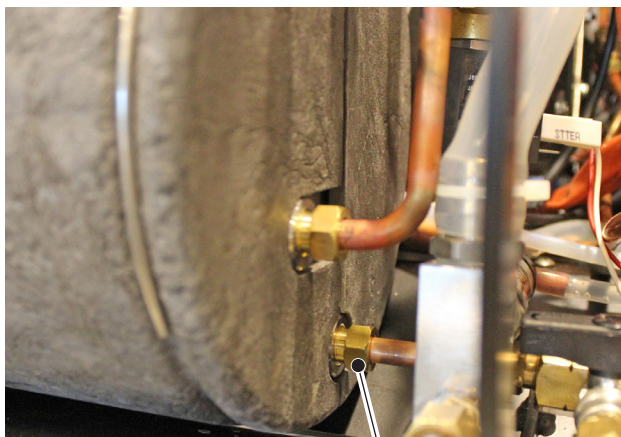


- Unscrew the nut (14) and disconnect the left steam tap connection tube (15).
- Unscrew the nuts (16) and disconnect the mixed water solenoid valve connection tube (17).

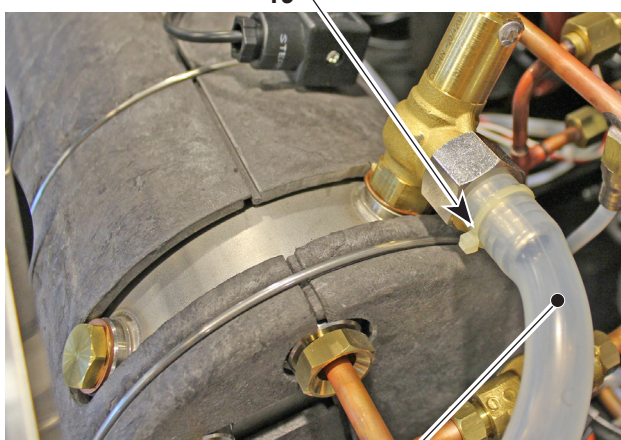


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- Unscrew the nut (18) of the boiler drain tube.

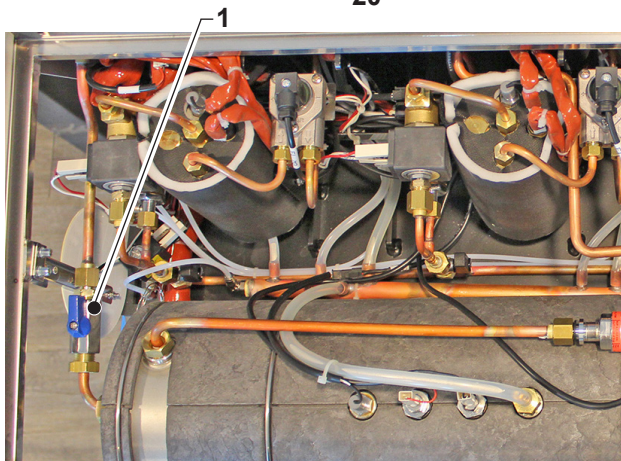


- Cut the strap (19) and remove the safety valve drain tube (20).
- Pull out the boiler upwards.



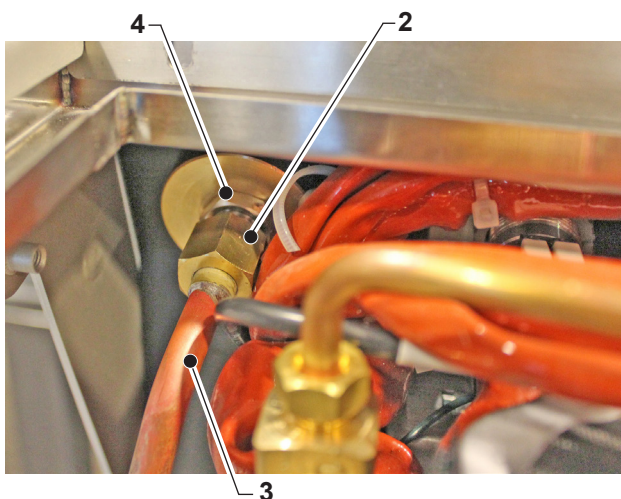
7.26 Replacing the steam tap

- Remove the cup heating plate as described in the relevant paragraph.
- Close the tap (1) pertaining to the steam tap to be replaced.

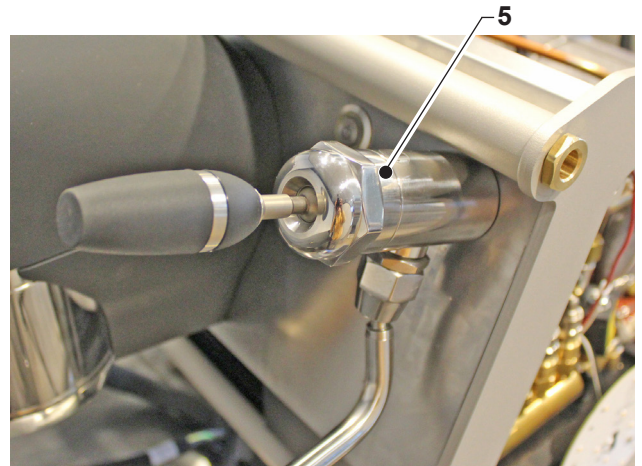


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- Unscrew the nut (2) and disconnect the tube (3).
- Unscrew the nut (4) fastening the tap to the machine body.

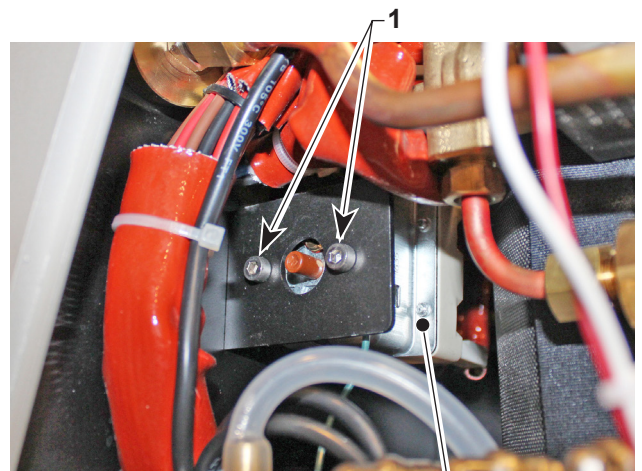


- Remove the tap (5) from the front.

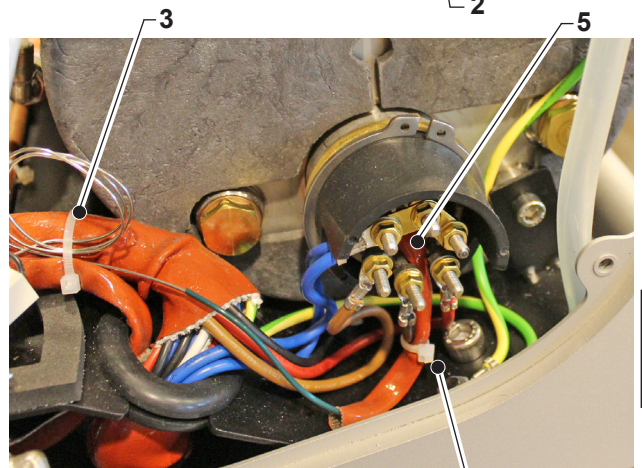


7.27 Replacing the safety thermostat.

- Remove the RH side panel as described in the relative paragraph.
- Unscrew the two screws (1), disconnect the thermostat (2) from the support square and disconnect the Faston connectors.

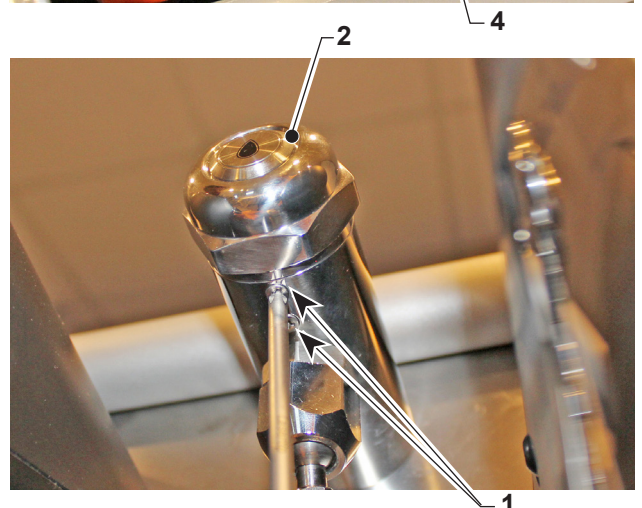


- Cut the strap (3) and (4) and pull out the bulb (5).
- When reassembling, pay attention to properly connect the Faston connectors and properly position the straps.



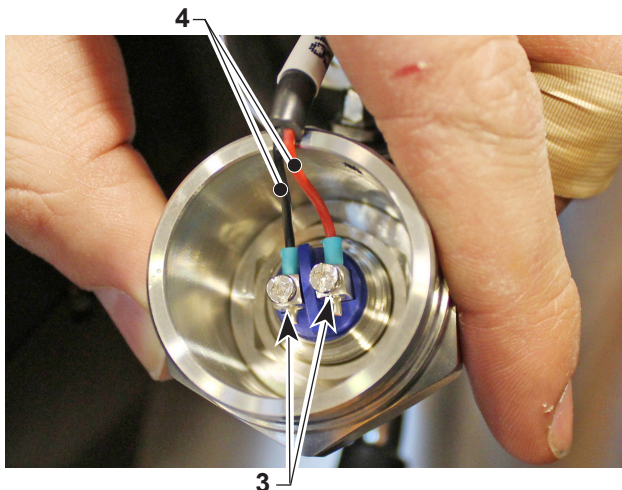
7.28 Replacing the water dispensing tap button

- Undo the two screws (1) and remove the ring nut (2).



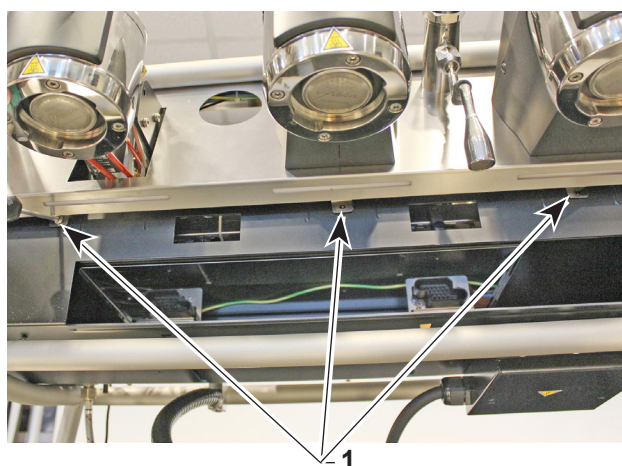
EN

- Loosen the screws (3) and disconnect the wires (4).
- When reassembling, properly reconnect the wires (4).

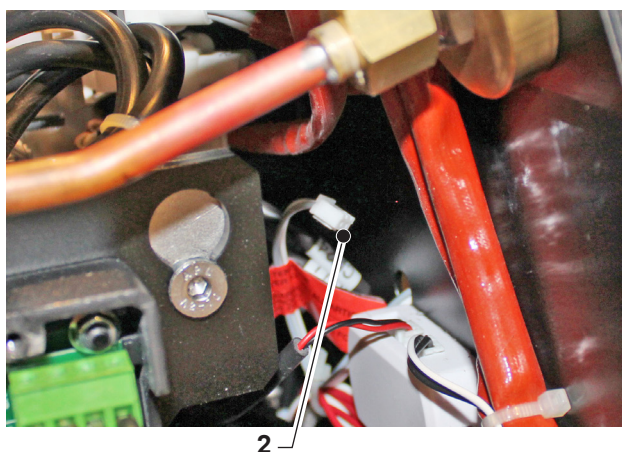


7.29 Replacing the LED bar

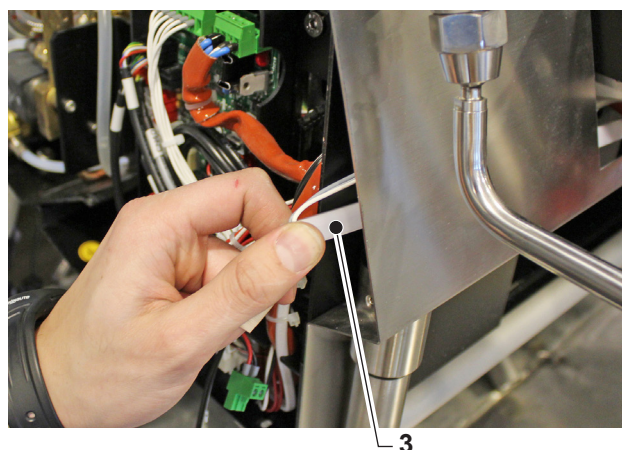
- Remove the left panel with shoulder and the lower front panel as described in the relevant paragraphs.
- Unscrew the three screws (1).



- Disconnect the connector (2).



- Pull out the LED bar (3) from the side.



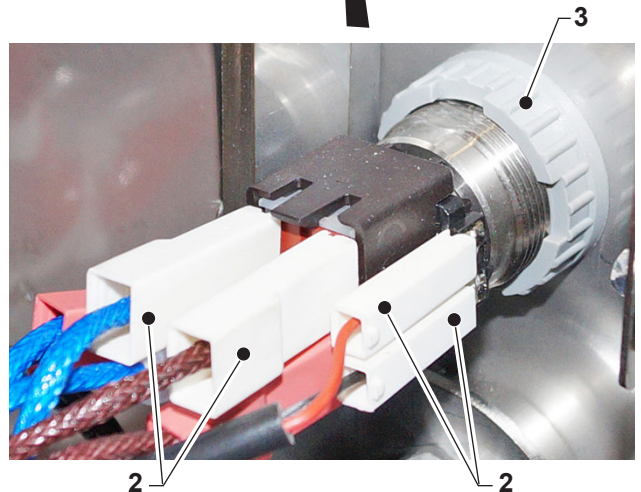
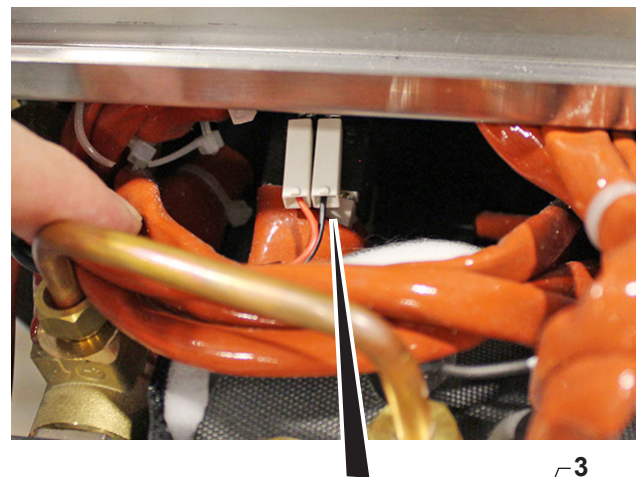
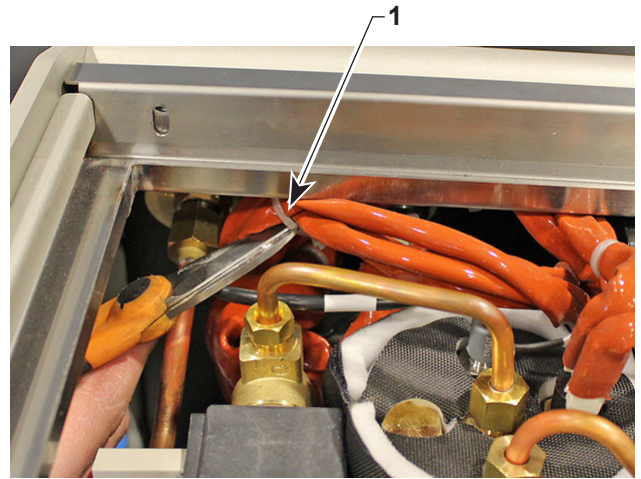
EN

7.30 Replacing the main switch.

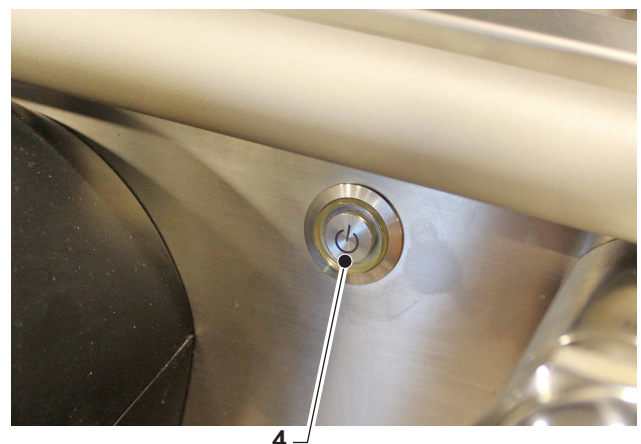


Make sure that the main switch upstream of the machine is in OFF position, then post a sign on the main switch saying "Maintenance in progress" so that no one turns on the power during this operation.

- Remove the cup heating plate as described in the relevant paragraph.
- Cut the strap (1)
- Disconnect all the connectors (2).
- Unscrew the ring nut (3).



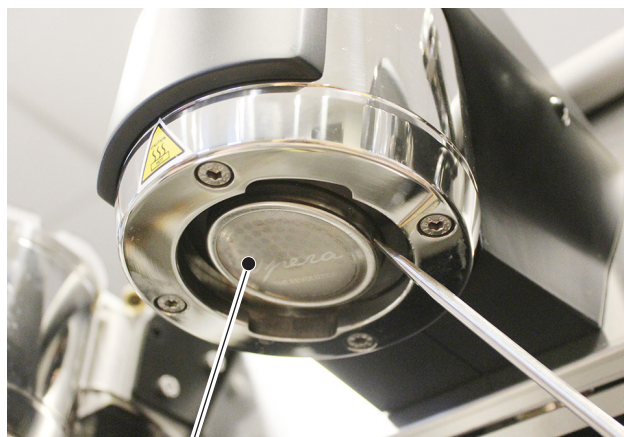
- Remove the switch (4).
- Reassemble everything in reverse order, referring to the attached wiring diagram for electrical connections.



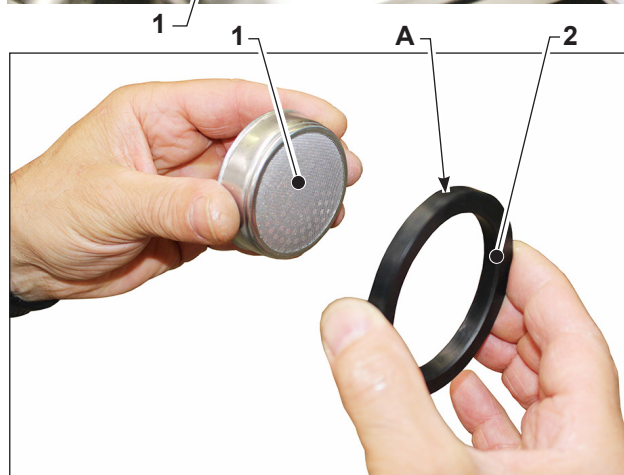
EN

7.31 Removing the head and gaskets

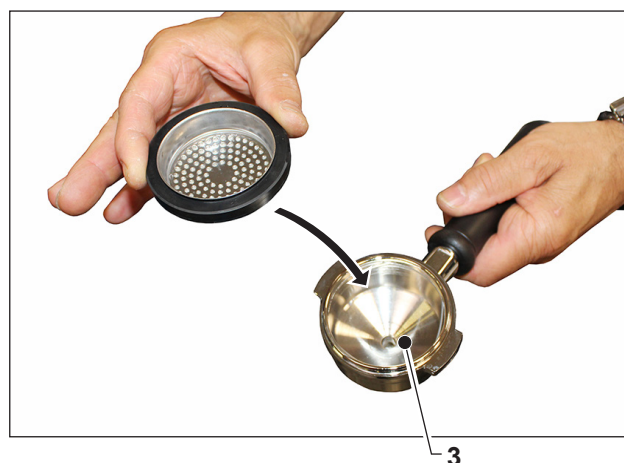
- Leverage with a screwdriver to remove the head (1) and relevant gasket (2).



- Insert the new gasket (2) on the head (1).
- The bevel corners "A" of the gasket must be facing upward.



- Remove the filter from the filter holder (3) and assemble the head with gasket on the filter holder (3).



- Wet the head with water and assemble the filter holder (3) on the machine pressing thoroughly.
- Lock the filter holder (3).



EN

8. PROGRAMMING BY THE TECHNICIAN

- To access the programming mode, bring the machine to the electronic OFF and keep the central button (1) pressed, then press button (2), the display shows "oFF" and button (2) flashes.



- Press and keep pressed button (1) until "PASSWORD" appears on the display (3); press button (1) five times to enter the programming mode; the default password is "11111".

Programming by the technician follows drill-down screens with the various programming sequences, therefore scroll through the sequences and confirm the set data until reaching the desired sequence to be modified.

The programming sequences are:

- Language
- Name
- Service tel.
- Number of units
- Chrono function
- Intake + coffee
- Watt
- Steam pressure transducer
- Pump pressure offset
- Programming doses
- Four doses
- Displacement counter offset 1
- Displacement counter offset 2
- Displacement counter offset 3
- Sensitivity
- Maintenance cycles
- Temperature
- Boiler temperature
- Unit 1 temperature offset
- Unit 2 temperature offset
- Unit 3 temperature offset
- Inactivity time
- Rest temperature offset
- Filling timeout
- Water filter
- Number of credits
- Cooling cycle
- Password change



8.1 Language

In this section, you can set the language for the messages shown on the display.

- press the button “☺” or “☹” to change language; press button “☺” to confirm and move to the next section.

The available languages are:

Italian, English, French, German, Spanish.



8.2 Name

The machine name is shown in this section

- Press the button “☺” to go to the next section.



8.3 Service tel.

In this section, you can set the phone number of the service centre (the modifiable number blinks).

- to set the number, press button “☺” to confirm the number and move to the next number by pressing button “☹”;
- Press the button “☺” to confirm the phone number set and go to the next section.



8.4 Number of units

This section is used to set the number of units, which must always be "3".

- Press the button “☺” to confirm the selection and go to the next section.



8.5 Chrono function

The Chrono function allows displaying the number of seconds the coffee is dispensed for on the unit display.

- Press button “☕” to enable or disable the function.
- Press the button “☕” to confirm the selection and go to the next section.



8.6 Intake + coffee

In this section, you can enable or disable loading water while coffee is being dispensed;

- to keep the pressure constant, set this to “DISABLED” otherwise set it to “ENABLED”;
- Press button “☕” to enable or disable the function.
- Press the button “☕” to confirm the selection and go to the next section.



8.7 Watt

This function is used to set the machine power between a minimum of 3500 watt and a “Full” maximum of 8750 watt; the default setting is 6500 watt.

- Press button “☕” or “☕” to change watt.
- Press the button “☕” to confirm the selection and go to the next section.



8.8 Steam pressure transducer

This function is used to enable or disable the pressure transducer positioned above the service boiler.

- In this case the pressure transducer must be ENABLED.
- Press the button “☕” to go to the next section.



8.9 Pump pressure offset

This function displays the difference between the set pressure and the actual pump pressure.

This is set to "0.8" and must not be changed.

- Press the button "☕" to go to the next section.



8.10 Program doses

With this function, you can enable or disable programming doses by means of the buttons.

Leave it ENABLED in this case.

- Press the button "☕" to go to the next section.



8.11 Four doses

This functions is used to enable the button multifunction; leave it selected to "YES".

- Press button "☕" once to dispense a short coffee.
- Press button "☕" twice to dispense two short coffees.
- Press button "☕" once to dispense a long coffee.
- Press button "☕" twice to dispense two long coffees.
- Press the button "☕" to go to the next section.



8.12 Displacement counter offset 1-2-3

- If there are discrepancies between the set ml and the dispensed ml, the setting can be adjusted by pressing the button "☕" or button "☕"
- Press the button "☕" to confirm the selection and go to the next section.



8.13 Sensitivity

This section is used to select the type of sensitivity of the boiler water level probe:

- Use button “☺” or button “☹” to set the sensitivity to “Low” - “Average” - “High” according to the water acidity; with high water acidity, a low sensitivity must be set for the probe, while a high sensitivity must be set with low water acidity.
- Typically, the “MEDIUM” sensitivity covers 90% of cases.
- Press the button “☺” to confirm the selection and go to the next section.



8.14 Maintenance cycles

In this section, you can set after how many dispensing cycles the machine requires maintenance.

- Press the button “☺” or “☹” to set the cycles.
- When the set number of cycles has been reached, the service phone number appears on the display.
- Press the button “☺” to confirm the selection and go to the next section.



8.15 Temperature

Check that "ENABLED" is set in this section.

- Press the button “☺” to go to the next section.



8.16 Temperature (C° / F°)

In this section, you can set the temperature scale to °C or °F:

- Press the button “☺” or “☹” to set the scale.
- Press the button “☺” to confirm the selection and go to the next section.



8.17 Boiler temperature

Check that the service boiler temperature is set to 124°C / 255°F in this section.

- Press the button “☺” to go to the next section.



8.18 Unit 1-2-3 temperature offset

If there are discrepancies between the set temperature and the actual temperature, they can be corrected by increasing or decreasing the temperature of the unit.

- Press the button “☺” or “☹” to set the value.
- Press the button “☺” to go to the next section.



8.19 Inactivity time

If the machine is installed in an outdoor kiosk, the temperature is low and the machine is inactive for a few minutes, the unit temperature may drop 0.5 °C or 1°C.

- You can set an inactivity time beyond which the machine automatically increases the unit temperature to a value set in the next screen "REST TEMP. OFS".

- Press the button “☺” or “☹” to set the values.
- Press the button “☺” to go to the next section.



In this section, you can set the degrees of unit temperature increase in order to compensate for inactivity or a cold climate.

- Normally this function is not used, so set the value to "0" in both screens to disable the function.
- Press the button “☺” to go to the next section.



8.20 Filling timeout

The water filling solenoid valve opening time can be set in this section; when this time has elapsed the machine stops if filling has not yet occurred.

- Press the button “☕” or “☕” to set the value (normally 120 seconds is set).
- Press the button “☕” to confirm the selection and go to the next section.



8.21 Water filter

In this section, you can set after how many litres of water used to dispense coffee, the water filter needs to be replaced.

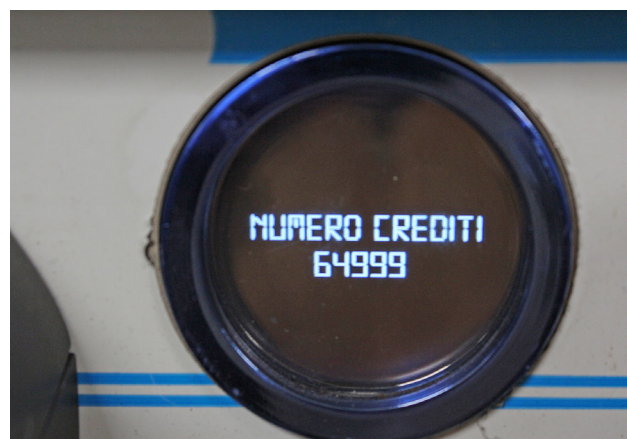
- Press the button “☕” or “☕” to set the litres.
- Press the button “☕” to confirm the value and go to the next section.



8.22 Number of credits

This section can be used to set after how many coffees the machine stops; this function can be enabled or disabled;

- Press the button “☕” or “☕” to enable or disable this functions or set the max. no. of coffees to be dispensed;
 - when “DISABLED” is selected, press button “☕” to go to the next section;
 - if the quantity of coffees after which the machine is stopped is set, the value is set with button “☕” or “☕”.
- Press the button “☕” to confirm the value and go to the next section.



8.23 Cooling cycle

The function allowing to empty the service boiler to regenerate the water within can be enabled in this section.

- Press the button “☕” or “☕” to select "YES" or "NO".
- When “YES” is selected, the emptying cycle starts automatically by disabling the heating elements, then the machine automatically quits the technical menu at the end of the cycle.
- This operation can be stopped by pressing any buttons on the first pushbutton panel on the left.
- Select “NO” and press button “☕” to go to the next section.

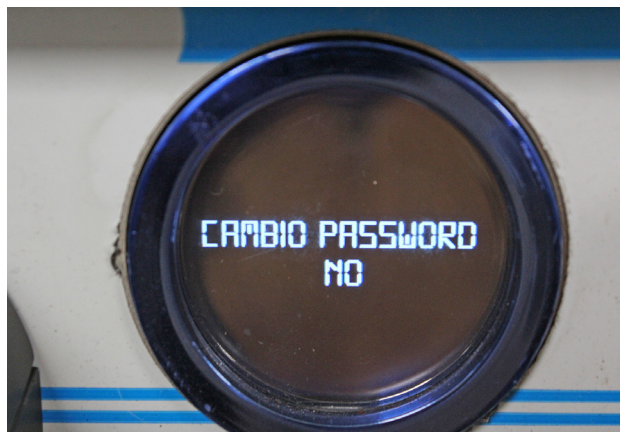


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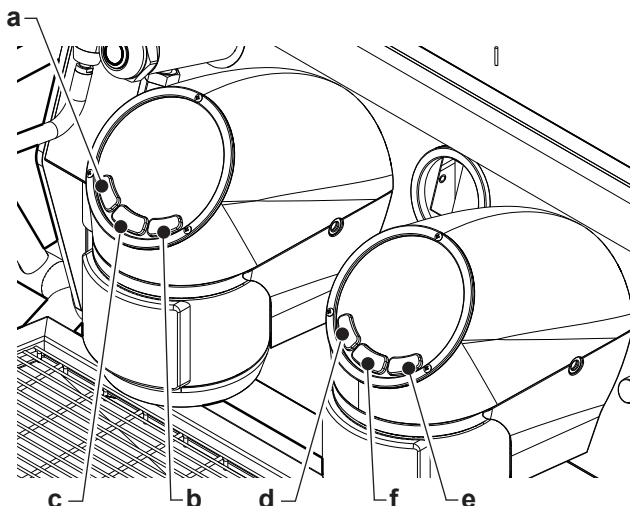
8.24 Password

In this section, you can change the password to access the technician section.

- Use the button “☹” to set “NO” to leave the current password or “☺” to change it:
- If you have selected “NO”, press the button “☺” to exit the technician menu;
- If you have selected “YES”, press the button “☹” to confirm the selection and go to the next section where the blinking number is the modifiable one.

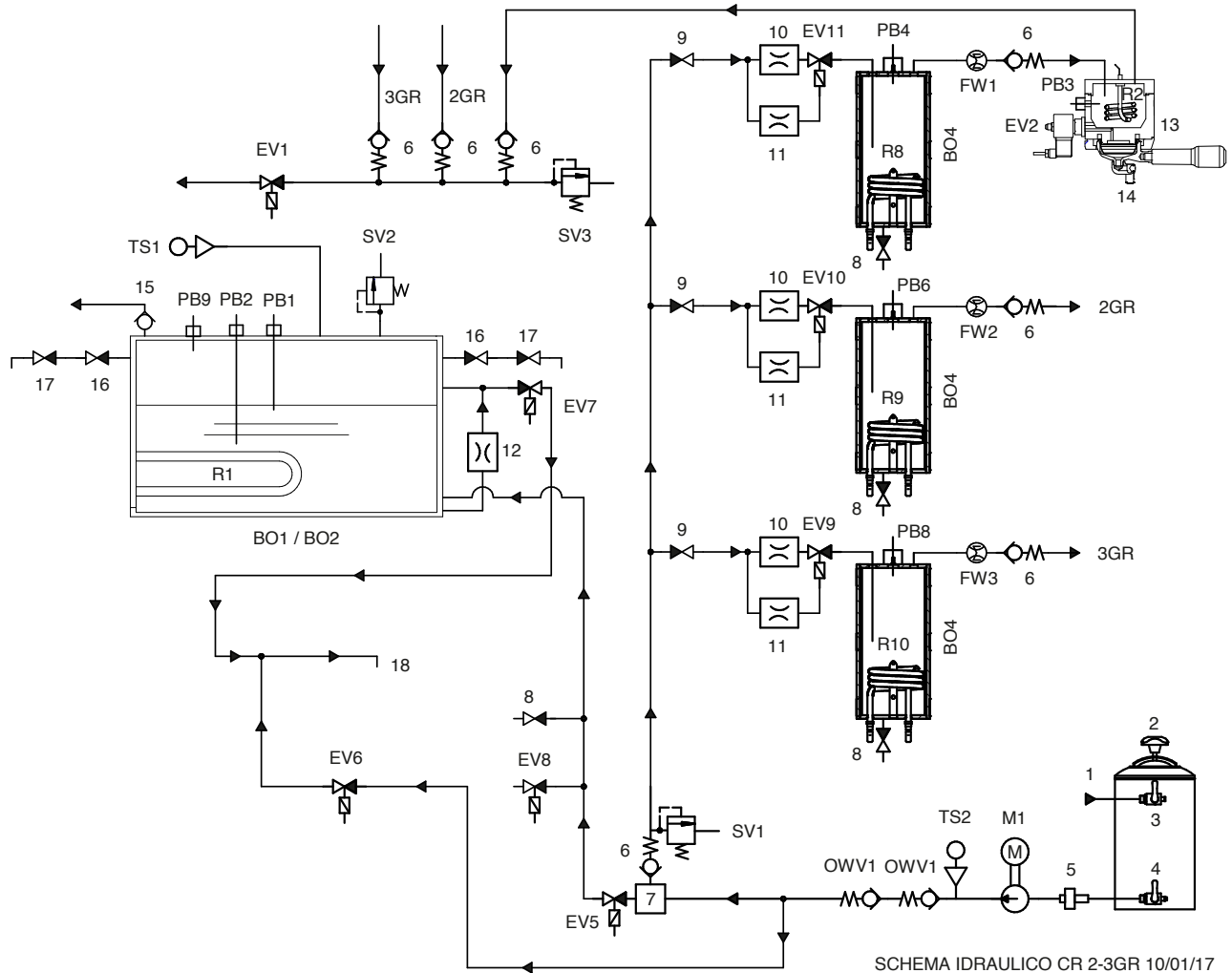


- Use the buttons of the first two units on the left to set the password.
 Button (a) to enter number “1”
 Button (b) to enter number “2”
 Button (c) to enter number “3”
 Button (d) to enter number “4”
 Button (e) to enter number “5”
 Button (f) to enter number “6”
- Once the new password is set, the machine automatically quits the technical menu.



EN

9. HYDRAULIC DIAGRAM



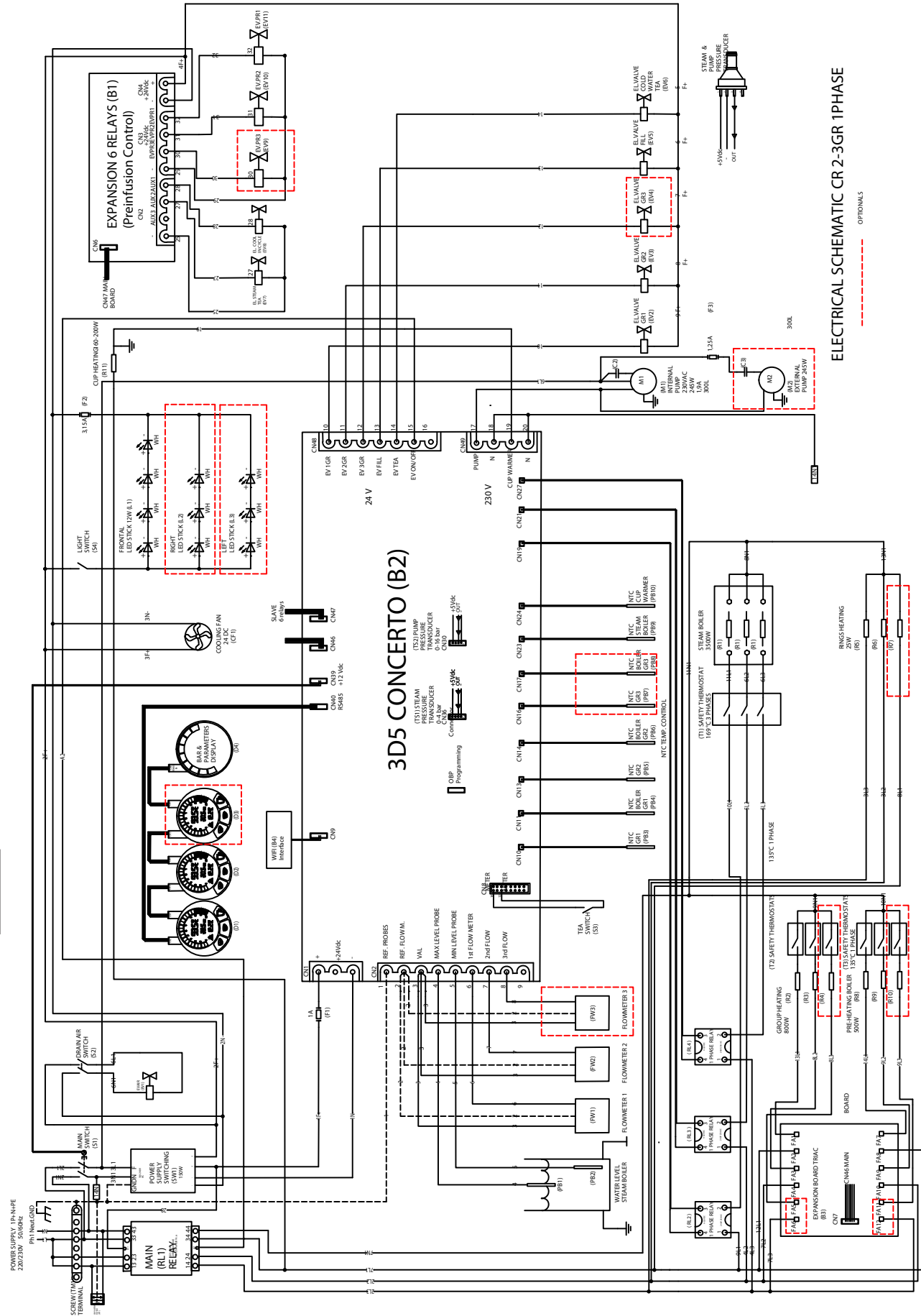
SCHEMA IDRAULICO CR 2-3GR 10/01/17

LEGEND

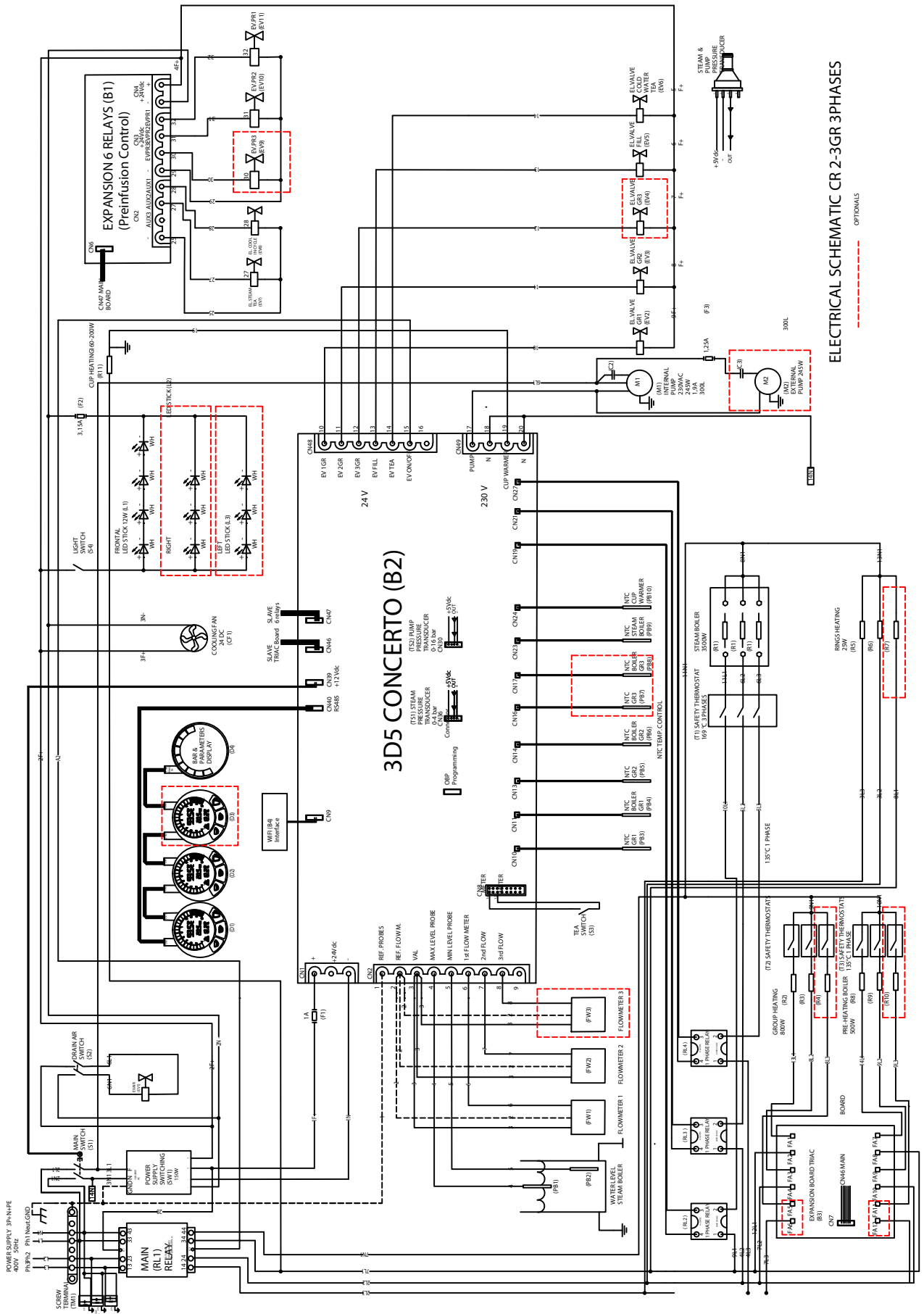
- 1) Water grid supply
- 2) Softener
- 3) Water inlet tap
- 4) Water outlet tap
- 5) Filter
- 6) Check valve
- 7) Loading flange with filter
- 8) Boiler drain tap
- 9) Coffee circuit tap
- 10) Giglieur 0.3mm
- 11) Giglieur 1mm
- 12) Giglieur 2mm
- 13) Dispensing unit
- 14) Filter holder
- 15) Antivacuum valve
- 16) Steam shut-off tap
- 17) Steam tap
- 18) Hot water outlet
- BO2) Steam boiler (2 units)
- BO1) Steam boiler (3 units)
- BO4) Coffee boiler

- EV1) Bleed solenoid valve
- EV2) Dispensing unit solenoid valve
- EV5) Solenoid valve for automatic filling
- EV6) Mixed cold water solenoid valve
- EV7) Steam intake solenoid valve
- EV8) Cooling cycle solenoid valve
- EV9-10-11) Pre-infusion solenoid valve
- FW1-2-3) Displacement counter
- M1) Motor with 300 litre pump
- OWV1) Loading flange check valve
- PB1) Max level probe
- PB2) Minimum level probe
- PB3) Coffee unit temperature probe
- PB4-6-8) Coffee boiler temperature probe
- PB9) Steam boiler temperature probe
- R1) Steam boiler heating element
- R2) Unit heating element
- R8-9-10) Coffee boiler heating element
- SV1) 12Bar expansion valve
- SV2) Safety valve
- SV3) 12Bar adjustable expansion valve
- TS1) Boiler pressure transducer
- TS2) Pump pressure transducer

10. WIRING DIAGRAM



EN



ELECTRICAL SCHEMATIC CR 2-3R 3PHASES

OPTIONALS

EN

Think
about
it!

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