Repair manual - Dishwasher

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Concerning this document

1.1 Important information

Read and observe chapter 2 "Safety" before performing any work!

1.1.1 Purpose

These repair instructions form the basis for a systematic and safety conscious procedure for the repair of domestic appliances.

These repair instructions include information about troubleshooting and repair.

1.1.2 Target group

These repair instructions are intended for persons who are familiar with equipment technology and were instructed by BSH or an authorised body:

- Service technicians for the repair of domestic appliances
- Pre-assemblers in the spare part stockroom when determining required spare parts
- Call centre employees during order acceptance

1.1.3 Other applicable documents

The following documents include additional relevant repair information:

- General repair instructions
- Error codes and service programs
- Circuit diagrams
- Exploded drawings
- Parts lists
- Repair videos

1.2 Explanation of symbols

1.2.1 Danger levels

The warning levels consist of a symbol and a signal word. The signal word indicates the severity of the danger.

Warning level	Meaning
Danger	Non-observance of the warning message will result in death or serious injuries.
Warning	Non-observance of the warning message could result in death or serious injuries.
Caution	Non-observance of the warning message could result in minor injuries.
Notice	Non-observance of the warning message could result in damage to property.

Table 1: Danger levels

1.2.2 Hazard symbols

Hazard symbols are symbolic representations which give an indication of the kind of danger.

The following hazard symbols are used in this document:

Hazard symbol	Meaning
	General warning message
	Danger from electrical voltage
	Risk of explosion
	Danger of cuts
	Danger of crushing

Hazard symbol	Meaning
	Danger from hot surfaces
	Danger from strong magnetic field
	Danger from non-ionizing radiation

Table 2: Hazard symbols

1.2.3 Structure of the warnings

Warnings in this document have a standardised appearance and a standardised structure.

⚠ Danger

Type and source of danger!
Possible consequences of ignoring the danger / warning.
- ▸ Measures and prohibitions for preventing the danger.

The following example shows a warning that warns against electric shock due to live parts. The measure for avoiding the danger is mentioned.

⚠ Danger

Risk of electric shock due to live parts!
Death by electrocution
- ▸ Disconnect appliances from electrical supply at least 60 seconds before starting repairs.

1.2.4 General symbols

The following general symbols are used in this document:

Gen. symbol	Meaning
	Identification of a special tip (text and/or graphic)
	Identification of a simple tip (only text)
	Identification of a link to a video tutorial

Gen. symbol	Meaning
	Identification of required tools
	Identification of required preconditions
	Identification of a condition (if ..., then ...)
	Identification of a result
Start	Identification of a key or button
[00123456]	Identification of a material number
Status	Identification of displayed text / window (in the appliance's display)

Table 3: General symbols

2.1 Qualification

In Germany, only qualified electricians trained by BSH or an authorised body may perform any repair work.

In other countries, only similarly trained qualified personnel is permitted to perform the repair work.

Appliances must only be repaired by persons that are qualified, **approved** and trained by BSH or an authorised body as instructed.

2.2 General safety instructions

2.2.1 All domestic appliances

Risk of electric shock due to live parts!

- Disconnect the appliance from the mains for at least 60 seconds before starting work.
- Do not touch the housing, components and cables.
- For tests on an energised system, use a residual current circuit breaker.
- Discharge high-voltage capacitors.

Risk of injury from sharp edges!

- Wear protective gloves.

Risk of crushing during repair, maintenance, troubleshooting and service due to heavy and moving components

- Wear protective shoes.
- Secure heavy components from falling down.
- Do not stick body parts into moving components.

Risk of injury when dealing with harmful substances!

- Observe the associated safety data sheet!

Risk to the appliance's safety / function!

- Only use original spare parts.

Risk of damage to electrostatically sensitive components (ESDs)!

- Before touching ESDs, use an electrostatic protection system (wristband with earth safe plug).
- Do not touch connections and conductor paths of the modules.
- Only transport ESDs in conductive materials or original packaging.
- Keep ESDs clear of electrostatically chargeable materials (i.e. plastic).

2.3 Measures after each repair

If the appliance is functional:

- Check according to VDE 0701 or country-specific regulations.
- Check external appearance, function and tightness.
- Document repair work, measured values and functional reliability.

If the appliance is **not** functional:

- Identify the appliance as “not functionally reliable”.
- Warn customers of commissioning and notify them in writing .

Design and function

3.1 Older descriptions

New component descriptions which are valid for the appliance are contained in this section.

Older component descriptions are contained in the general ARA "Design and Function".

3.2 Spray system

3.2.1 Construction

The spray system consists of three spray levels: the lower and upper spray arms and an optional shower. Water is supplied to the upper spray arm and the shower via the feed pipe attached to the inside of the container back wall. This pipe is connected to the pump sump by a direct plug-in connection.

The feed pipe has optionally two separate water channels. This allows the upper spray arm and the optional shower to be controlled separately.

The inlet pipe of the upper spray arm is attached directly to the upper basket. The feed pipe is connected by a coupling. Optionally is there a height adjustment of max. three levels (RackMatic).

The bearing support of the lower spray arm is connected directly to the pump sump. It has a nozzle on the underside to clean the strainer and to flush dirt into the filter system.

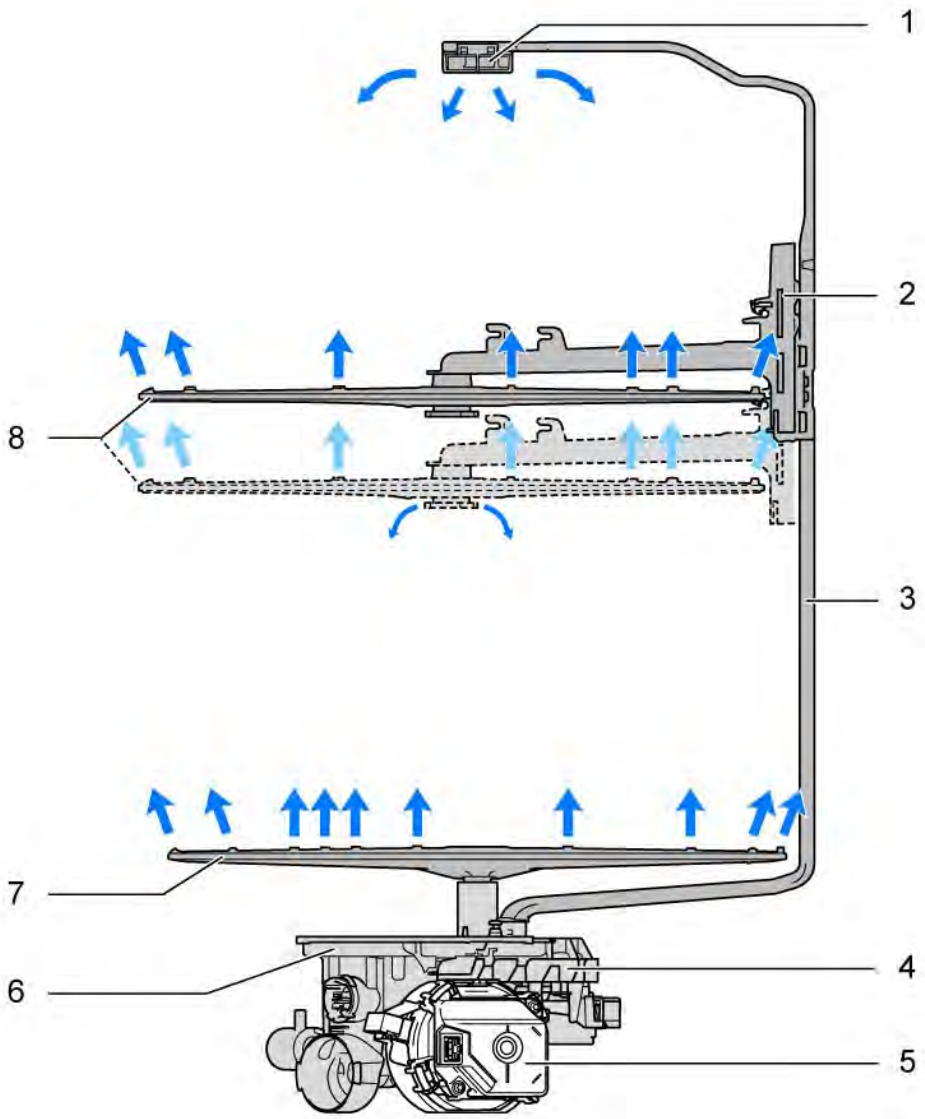


Fig. 1: Spray system

1 Roof shower/roof spinner (optional)
2 Coupling for upper spray arm
3 Supply pipe

4 Water switch (optional)
5 Heating pump
6 Pump sump
7 Lower spray arm
8 Upper spray arm

3.2.2 Function

Water is pumped under pressure into the spray system and comes out of the nozzles on the spray arms and sprinkler disc. The nozzles on the spray arms are attached to the ends in an offset/oblique position so that the recoil of the escaping water actuates the spray arms.

	Thanks to the separate water channels in the feed pipe, the sprinkler disc and upper spray arm can be controlled separately. Appliances without a water switch do not have a sprinkler disc. The spray arms can only be operated at the same time.

3.2.3 Upper spray arm (with HZ)

The upper spray arm has been changed for devices with a hydraulic zone (HZ). An additional valve is integrated in the spray arm to prevent escaping water from the upper spray arm in the upper basket mode.

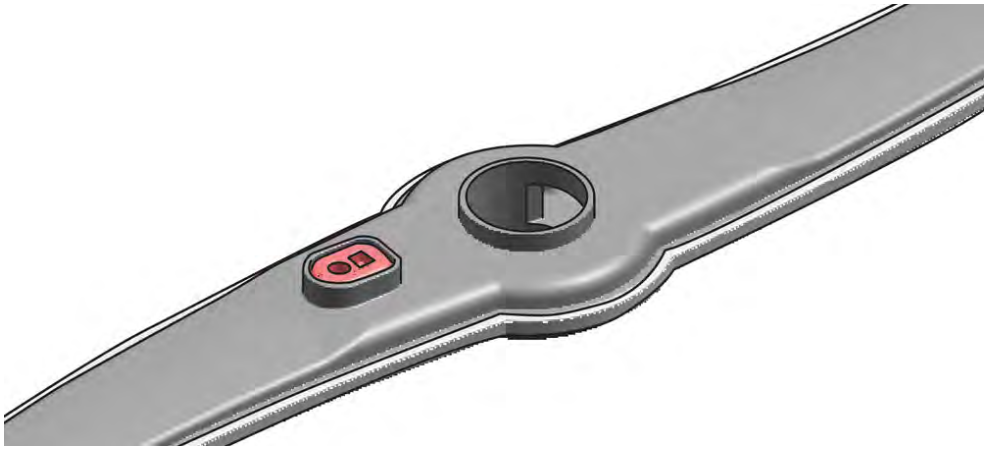
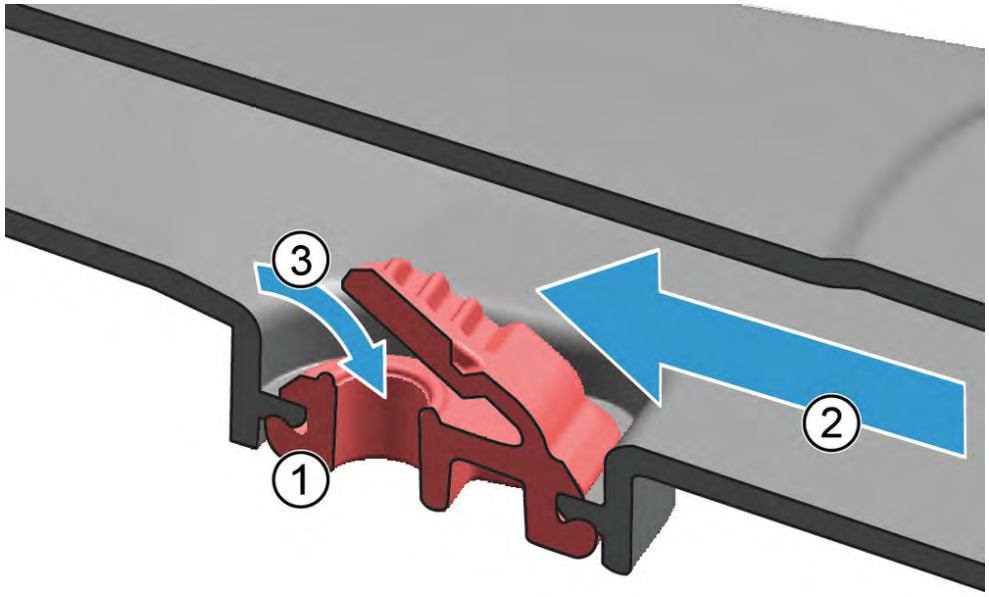


Fig. 2: Dynamic idle nozzle



1 Valve cap
2 Water flow direction with activated upper basket
3 Water flow direction with deactivated upper basket

When the upper spray arm is activated, the valve closes the idle nozzle. Closing the flap during operations improves the performance of the spray arm on the upper basket.

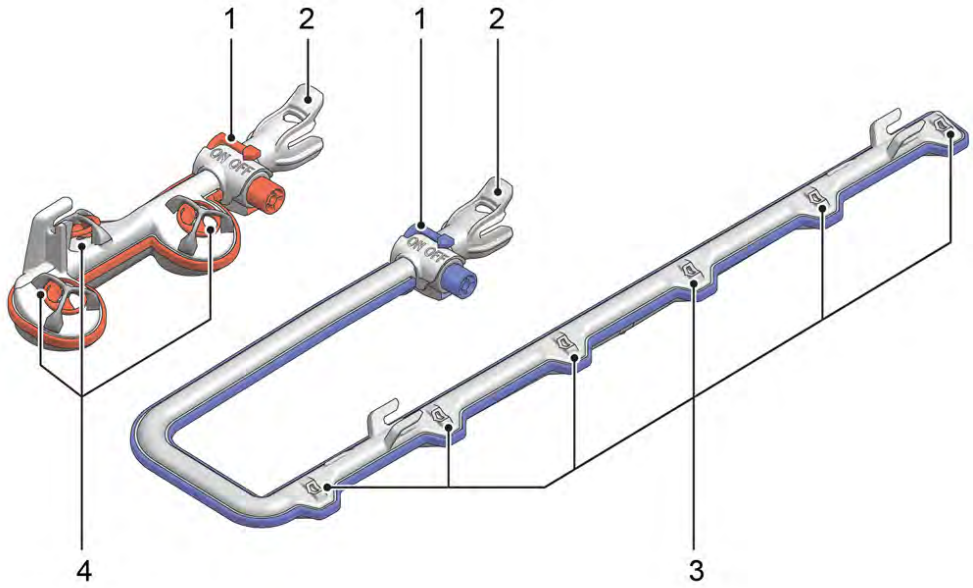
As soon as the water pressure is stopped, the valve opens and residual water can flow out of the HZ and the spray arm.

3.3 Hydraulic zone in upper basket

Additional spray nozzles in upper basket are referred to as the hydraulic zone (HZ).

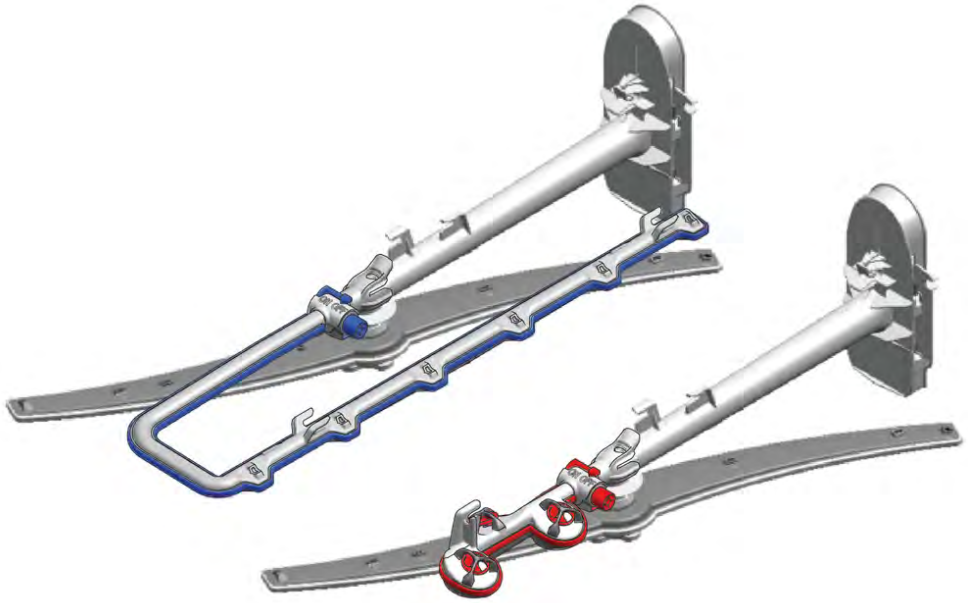
Two variants are used, depending on the brand:

- • "Extra Clean Zone" consists of 3 gyros that clean dishes in this area intensively with rotating water jets.
- • “Brilliant Shine Glass Zone” contains 6 fan nozzles. These generate a v-scattering spray jet for constant and gentle, mechanical glass cleaning.

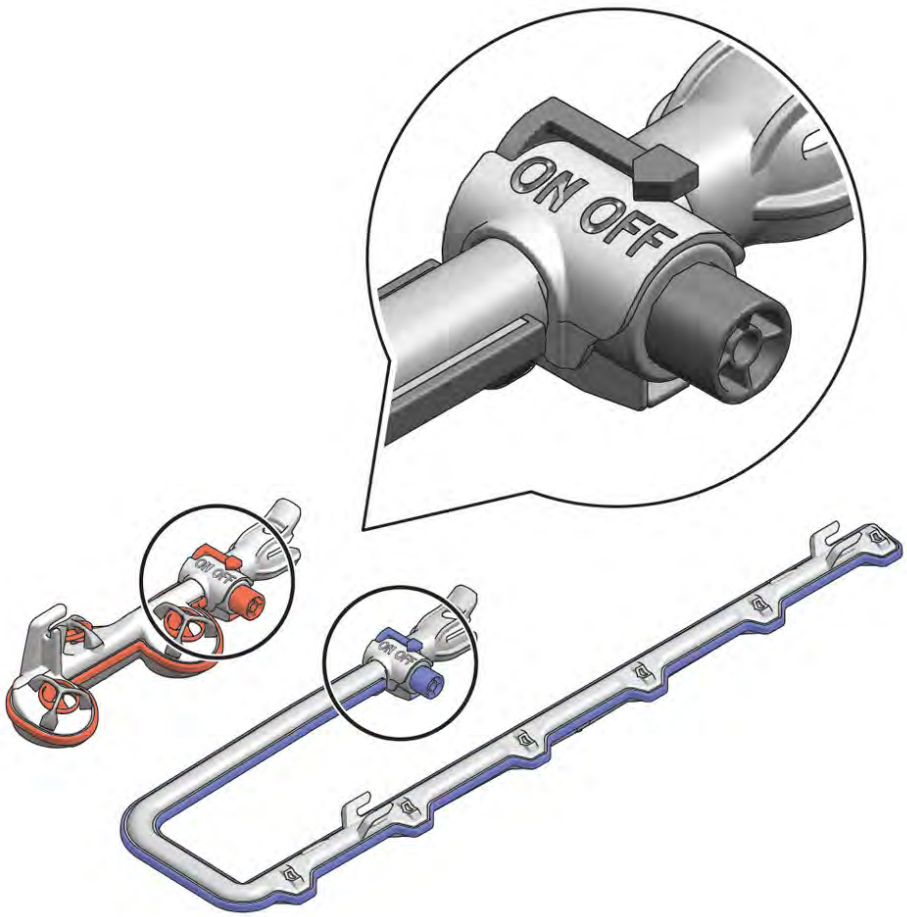


1 Valve
2 Connection to inlet pipe
4 Intense gyro nozzles

The additional nozzles of the hydraulic zone are attached to the inlet pipe of the upper spray arm and can be easily removed for cleaning (see chapter “installation”).



It is switched on and off by pressing the button in the corresponding position.



In the delivery state, the hydraulic zone is switched off.

The electronics recognize whether the hydraulic zone is switched on or off. The water volume and pressure in the upper basket can be controlled accordingly.

To ensure correct detection, the electronics must be calibrated to the hydraulic zone.

This takes place when the device is started up for the first time. To do this, the valve of the HZ must be in the "off" position. In order to prevent incorrect calibration by accidentally switching on the HZ, a small water-soluble barrier is installed in front of the HZ activation valve.

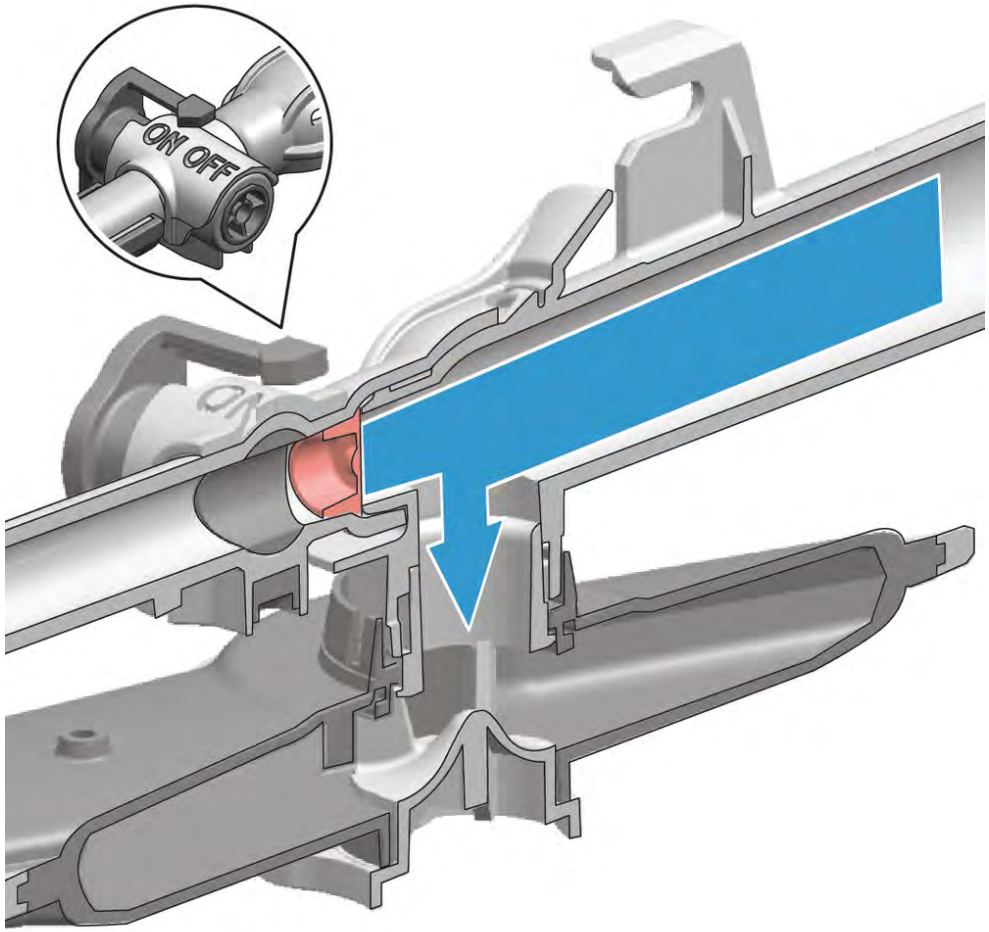


Fig. 3: HZ with barrier

This dissolves automatically after two rinse cycles at the latest. The calibration values are stored in the SMM and the power module.

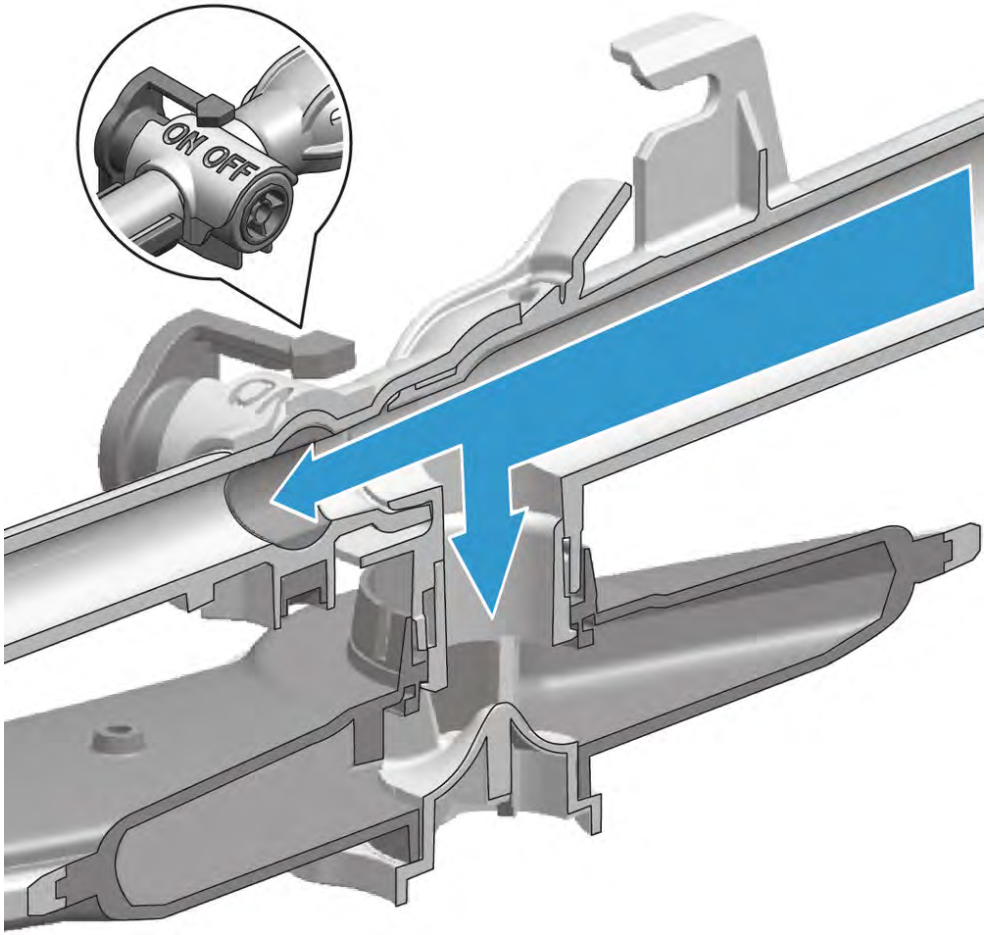


Fig. 4: HZ without barrier

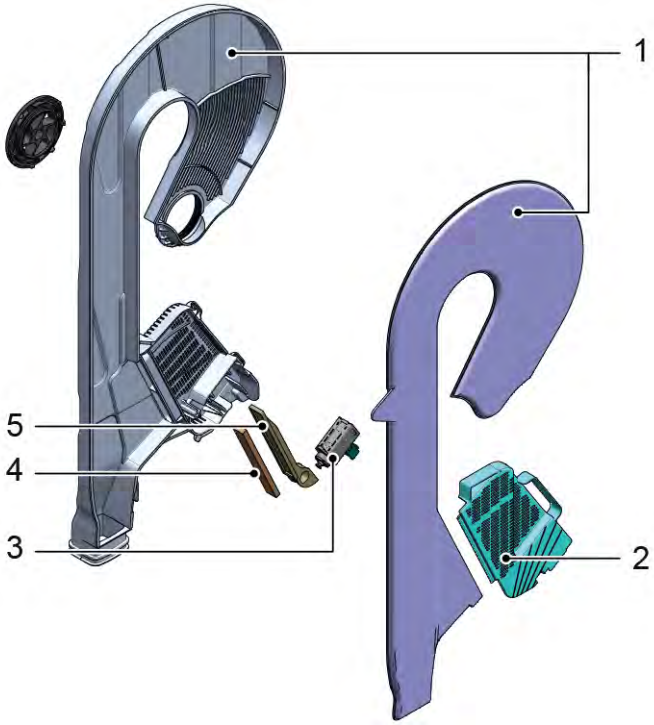
Exchange of LM	No action needed
Exchange of SMM	No action needed
Simultaneous exchange of (SMM) and power module	The existing HZ must be switched off for 1 rinse cycle in order to ensure correct calibration (see also error picture "poor washing result in the upper basket").
Factory setting	The calibration values are still available after a "factory reset"
Spray arm exchanged	No action needed
Heat pump replaced	No action needed
Exchange of Intensive Zone	No action needed Intensive Zone spare part has a water soluble barrier

Table 4: Actions to note for, when HZ, SMM or Power Module has been changed:

3.4 Active odor reduction (AOR)

The active odor reduction (AOR) should prevent that odor occur in appliances with zeolite drying and without water storage tank. Odors can occur if appliances are not operated for a long time when they are loaded or the outdoor temperature is high.

3.4.1 Design



1 Suction channel
2 AOR cover
3 Actuator
4 AOR valve
5 AOR foam seal

3.4.2 Function

The odor reduction can be achieved because the air is convected over the zeolite fan.

There are two conditions:

- The convection of the air (AOR valve is inactive).
- The supply with outdoor air (AOR valve is active).

The AOR function can be activated or deactivated during a running program. The door **does not** open at the end of the EcoDry program when the AOR function is activated. If the AOR function is activated the air is cyclical convected for 15 min during the first three hours after the program ends.

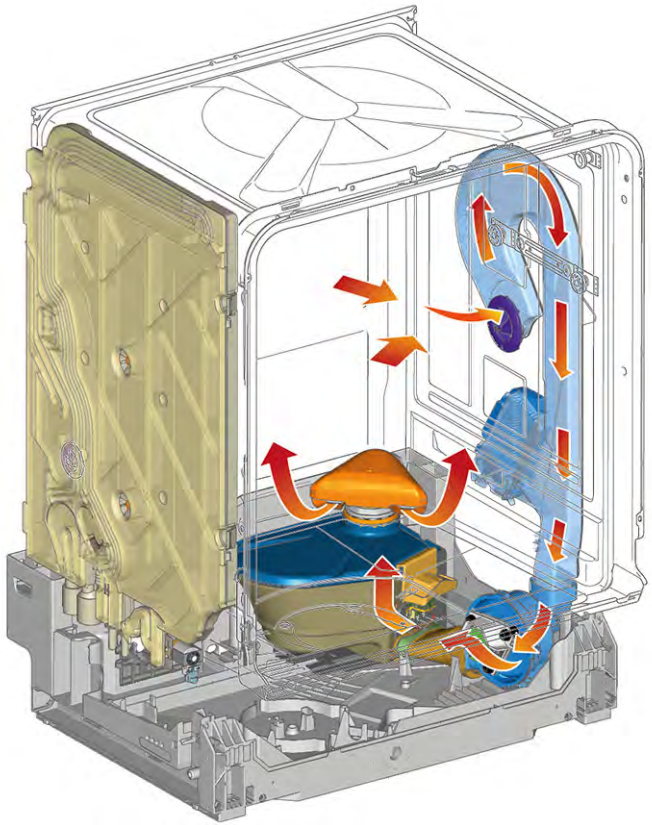


Fig. 5: Cleaning cycle without outdoor air (AOR valve closed)

After three hours the AOR valve is activated by the actuator. The AOR valve closes the air flow to the inlet in the rinsing tank in the suction channel. Therefore the zeolite fan draws in air from outside of the rinsing tank and leads it through the zeolite container. Over the expansion opening and the lower door seal the air comes out of the appliance.

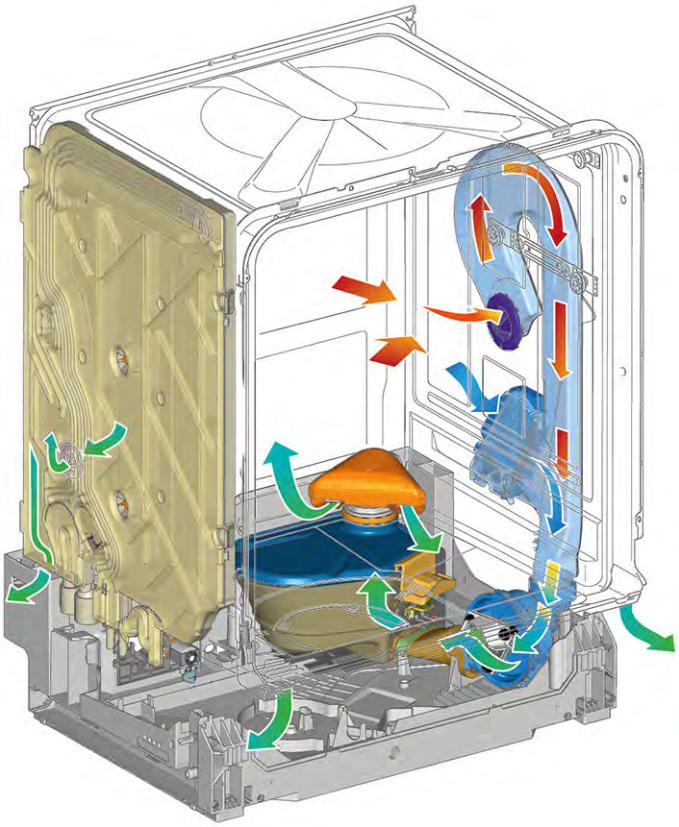
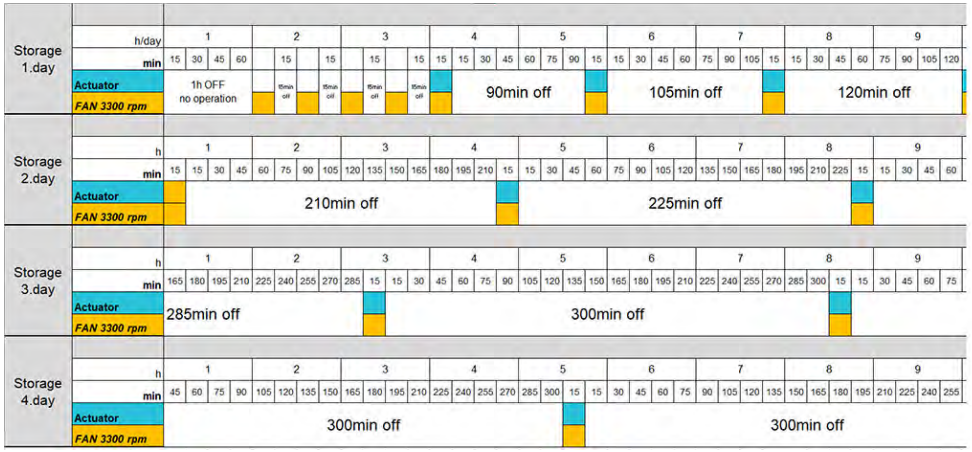


Fig. 6: Cleaning cycle with outdoor air (AOR valve open)

This process is cyclical continued for additional 93 hours in a cycle of 15 min.



For example: The appliances is ready at 15:00 o´clock.

- 15:00 - 16:00: Break
- 16:00 - 16:15: Air convection
- 16:15 - 16:30: Break
- 16:30 - 16:45: Air convection
- 16:45 - 17:00: Break
- 17:00 - 17:15: Air convection
- 17:15 - 17:30: Break
- 17:30 - 17:45: Air convection
- 17:45 - 18:00: Break
- 18:00 - 18:15: Draw in outdoor air
- 18:15 - 19:45: Break
- ...

The AOR display expires after the process is finished when the appliances is meanwhile not operated. If the door is opened during the AOR process the AOR function is interrupted till the door is closed. The AOR function starts again at the point where it stopped.

3.5 Basket system

The basket system consists of 2 - 3 levels. The baskets differ in features and color depending on appliance class.

	Vario	VarioFlex	VarioFlexPlus
Top basket			
Ball ends	–	–	■
Split additional cup racks, hinged	■	■	■
Folding spikes	optional	■	■
Optimised glass holder	–	–	■
Height-adjustable basket (3x Rackmatic)	optional	■	■
Basket handle	–	■	■
Dosing assistant	■	■	■
Bottom basket			
Ball ends	–	–	■
Split additional cup racks, hinged	optional	■	■
Holder for long-stemmed glasses	–	–	■
High basket back	–	–	■
Basket handle	–	■	■

Fig. 7: Basket features. The table indicates the differences in features (date 07.2008).

3.5.1 Cutlery drawer - option

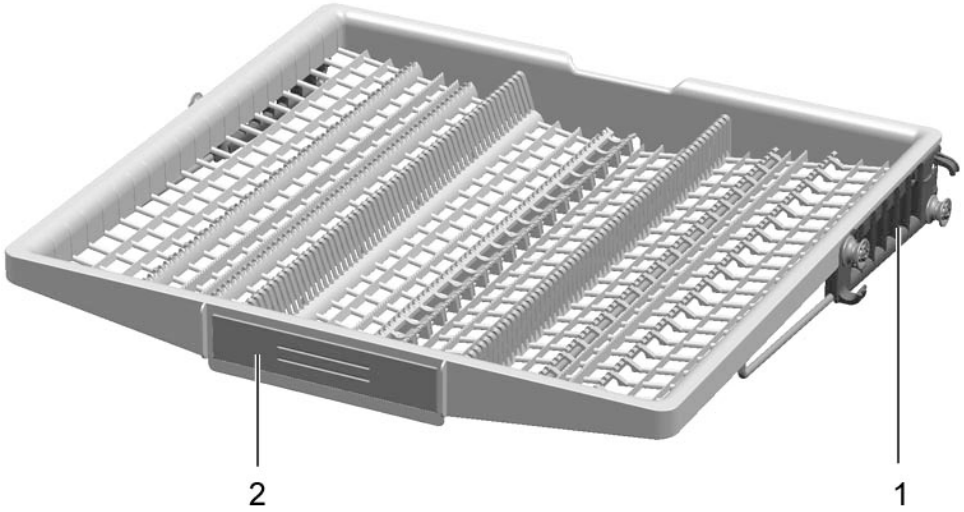


Fig. 8: Overview

1 Pull-out plate
2 Basket handle

The cutlery drawer is attached at the very top of the rinsing tank. It is used as a holder for cutlery, other cooking accessories and also espresso cups. The utensils are washed primarily by the roof sprinkler. See Spray system.

Fig. 9: Cutlery drawer loading example

3.5.2 VarioDrawer Plus - optionally from 10/2011

Fig. 10: Overview

1 Lowerable elements
2 Lowering mechanism
3 Folding spikes
4 Opening

Starting from 10/2011 a VarioDrawer comes to the employment. This contains 2 rows flip tiens and lowerable files in the external areas, separately for right and left.

Representation of mobile elements and loading example:

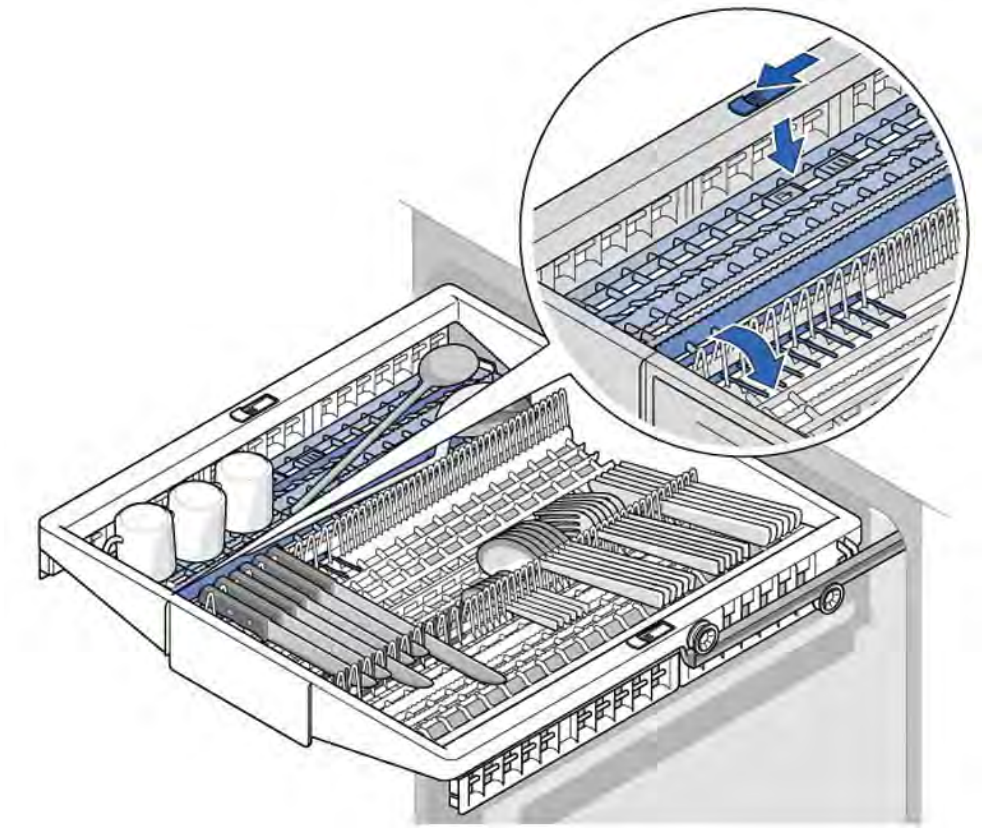


Fig. 11: Loading example

3.5.3 Top basket

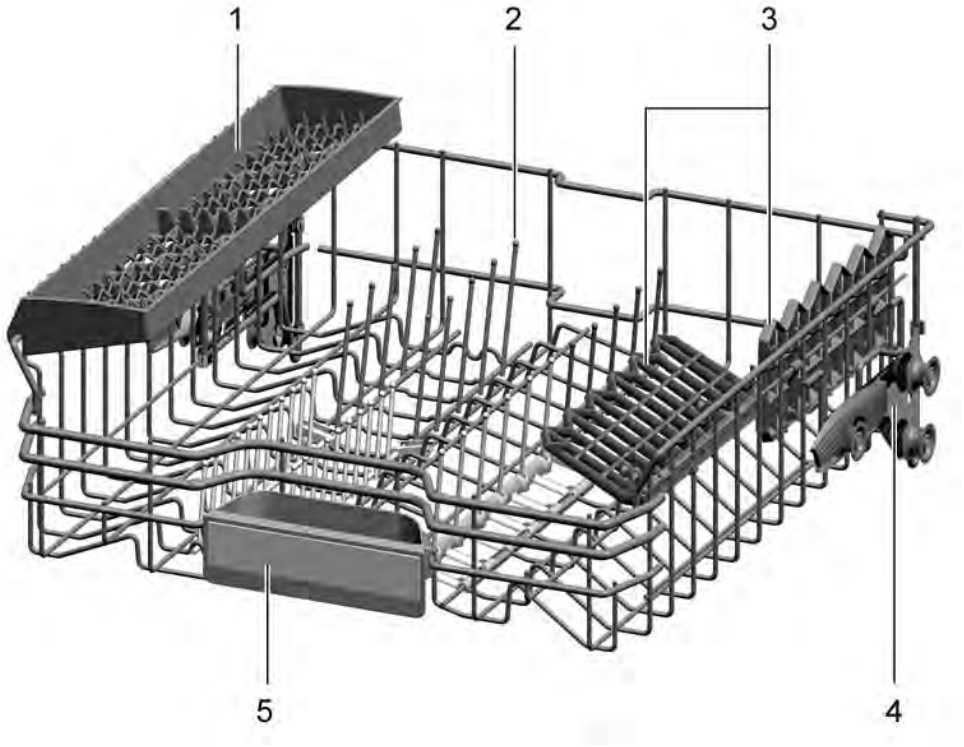


Fig. 12: Overview

1 Knife shelf
2 Folding spikes
3 Split, hinged additional cup racks
4 Rackmatik plate
5 Basket handle

The extendable top basket is loaded with smaller plates, glasses and cups. The utensils are cleaned by a spray arm under the top basket. When the top basket is pushed in, it docks with the supply pipe at the rear to make the water connection (see Spray system).

Representation of mobile elements:

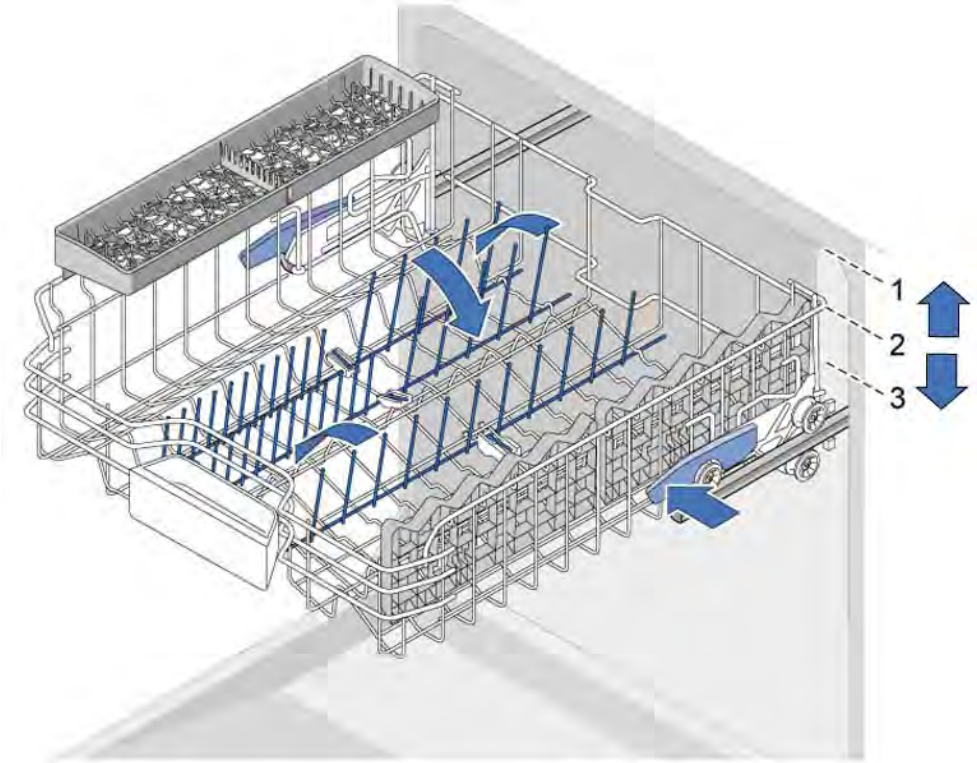


Fig. 13: Upper basket mobile elements

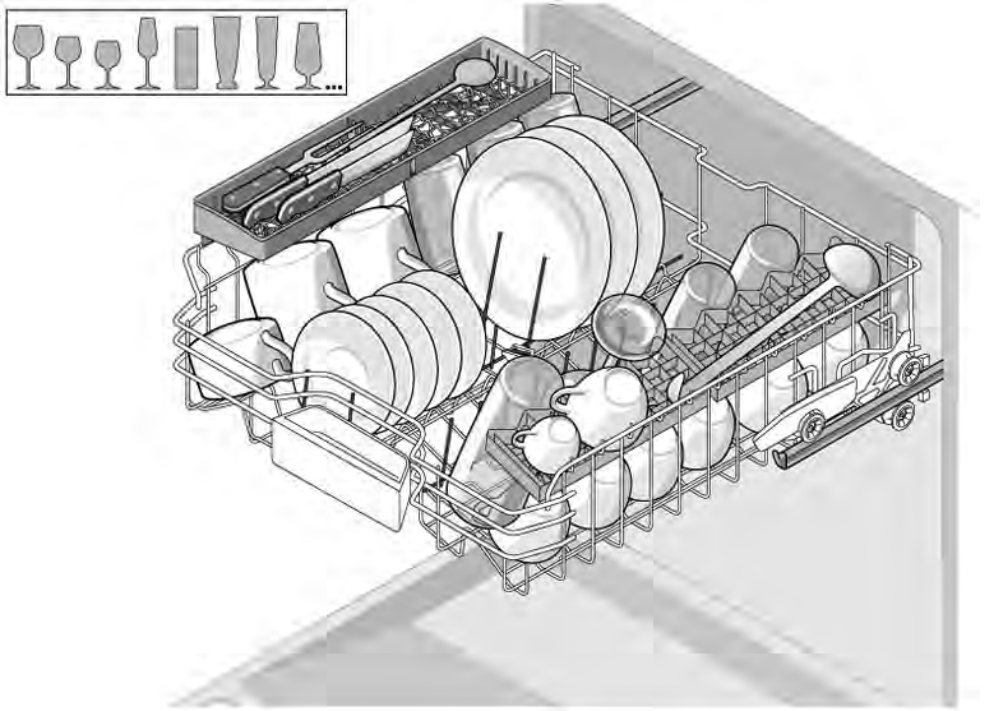


Fig. 14: Loading example

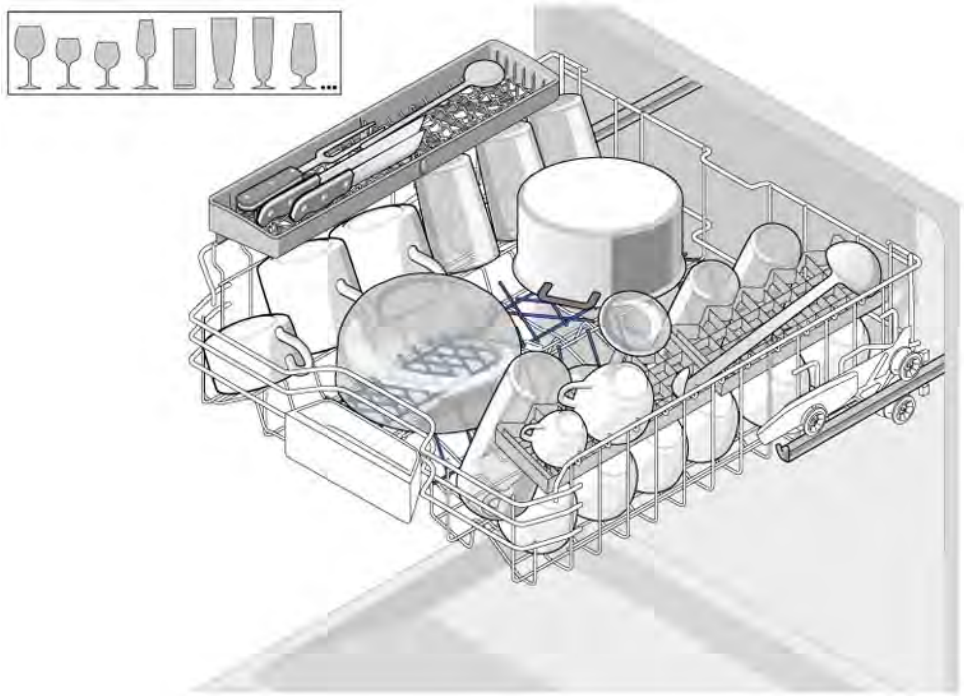


Fig. 15: Loading example 2

3.5.4 Bottom basket

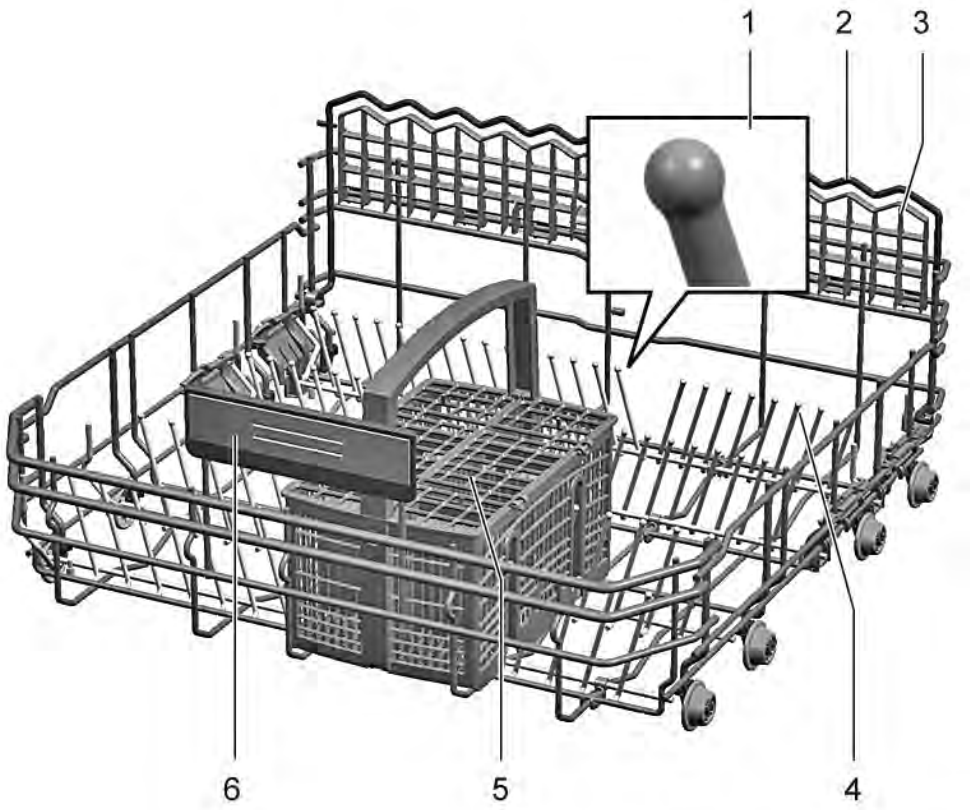


Fig. 16: Overview

1 Ball ends
2 Holder for long-stemmed glasses
3 Split, hinged additional cup racks
4 Folding spikes
5 Cutlery basket (optionally)
6 Basket handle

The bottom basket is moved out of the appliance on rollers. The fixed lower spray arm cleans the utensils in the bottom basket (see Spray system).

Representation of mobile elements:

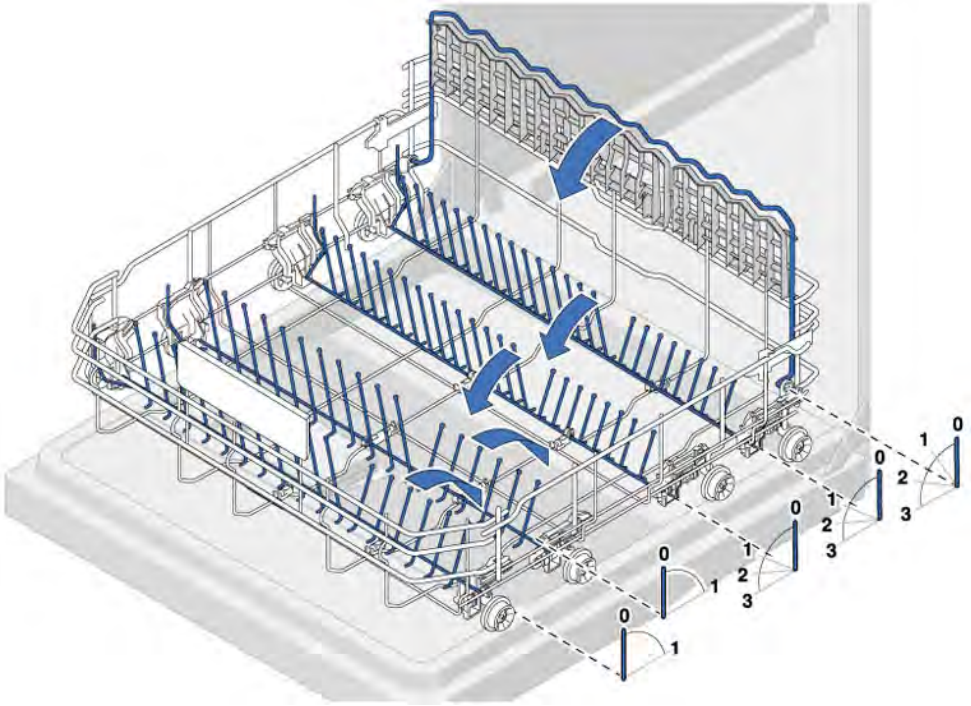


Fig. 17: Lower basket mobile elements

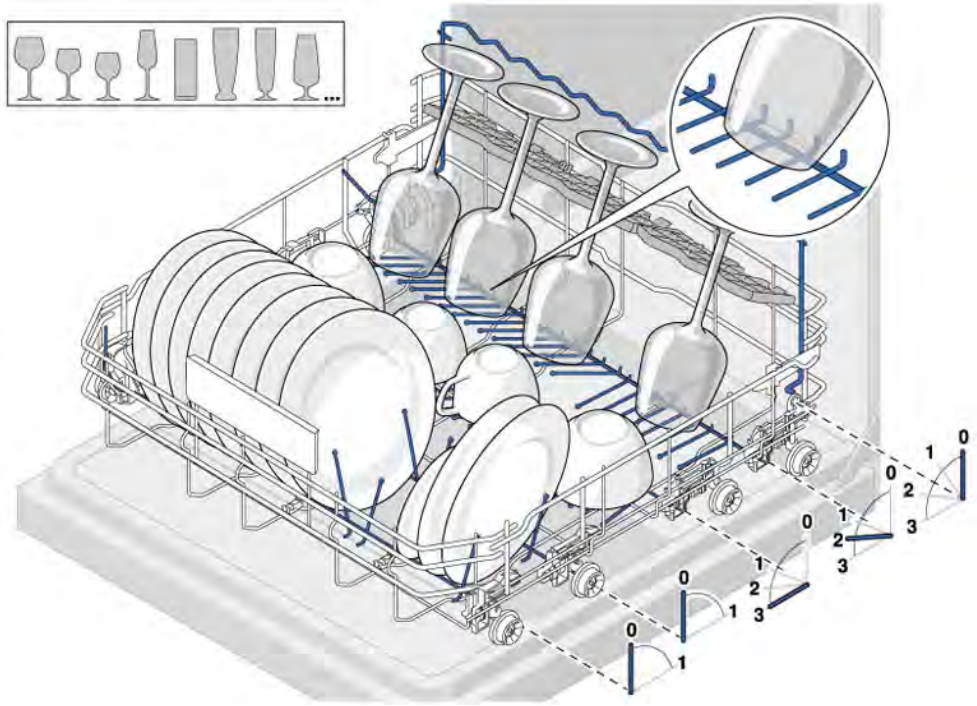


Fig. 18: Loading example

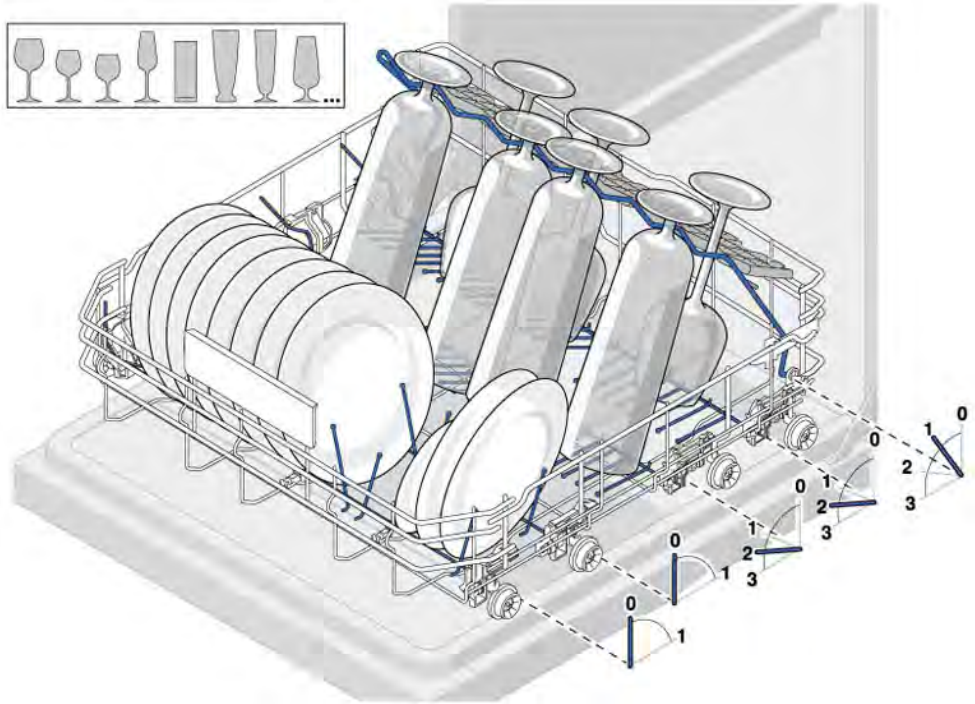


Fig. 19: Loading example 2

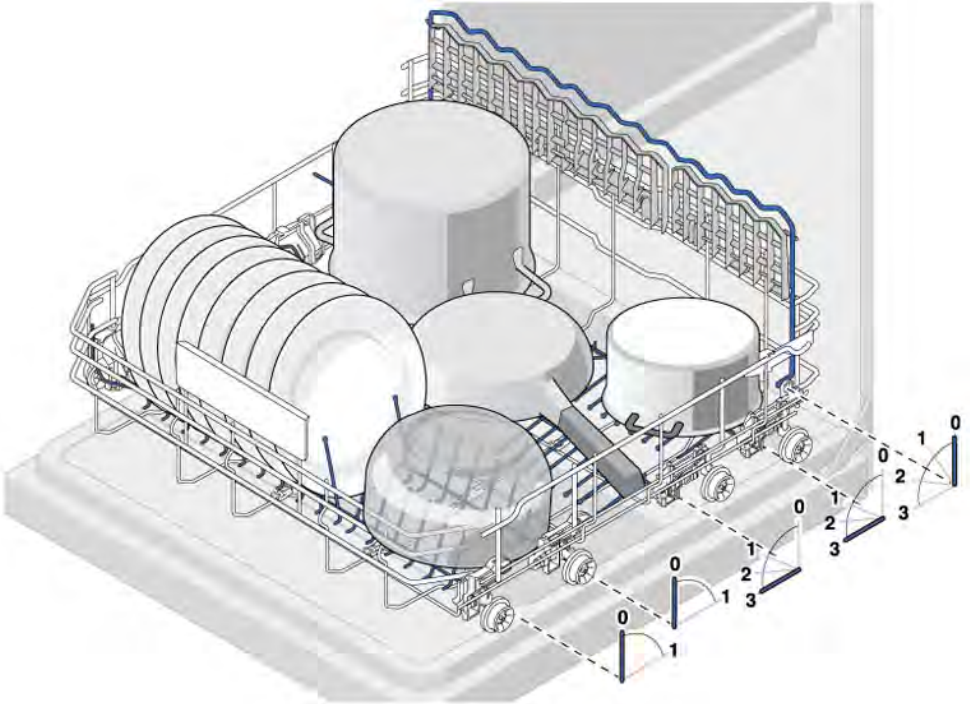


Fig. 20: Loading example 3

3.5.5 Ball ends

Ball ends are small balls on the tips of the folding spikes. If glasses or plates are placed on standard spikes, streaks may form in the area where the utensil touches the spike. The ball ends generate a minimum gap. As a result, utensils can be washed and dried without streaks.

3.5.6 Etagere

An etagere is an additional hinged shelf in the baskets. As it is attached in the top of the basket, this produces another level (etage).

There is space on this level for mocha cups or small objects.

3.5.7 Folding spikes

These spikes can be folded down so that utensils can be arranged more flexibly. The spikes can be folded down on several levels or only on one level.

3.5.8 Rackmatik

The height adjustment for the top basket is called Rackmatik. The adjustment can be on several levels (3 levels). The supply pipe has connections for one 3-level Rackmatik.

The top basket can also be tilted to the right or left.

The metal holders of the Rackmatik are pressed mechanically into the top basket. If the holders are bent open, the surface of the top basket may be damaged.

3.5.9 Holder for long-stemmed glasses

A folding bracket on the back of the bottom basket can be folded forwards so that long-stemmed glasses can also be arranged on a 2nd row.

3.5.10 Lower rack stopper

Lower rack stopper at the front wheels prevent the derailing of the basket on the inner door both to the front and the sides. The lower basket can still be pulled out completely guaranteeing easy loading of the appliance. Removing the lower rack (for salt refilling or filter cleaning) is not hindered.

3.6 Power module (appliance with SMM)

The power module is connected to the power supply. In the appliance the electrical components are connected to the power module with coded plugs. Via D-Bus-System the power module exchanges data with the SMM and is programmed.

Functions of the power module:

- Provision of power supply for all electronic components.
- Protection of the different voltages towards the power grid.
- Operation of electronic components.
- Optional: galvanic isolation to operation elements.
- Storage of failure codes.

3.7 SystemMaster

The SystemMaster (SMM) is the key part of the appliance and is located in the front of the bottom group. It is connected to the cable harness of the appliance with a 4-wire cable (data, ground, DC voltage, on/off function). Via this bus connection the SMM gets supply voltage and is able to communicated with other components which are connected to the bus system (Electronic control unit=ECU).

The SMM combines the "intelligence" of the whole appliance in one component. It can be considered as a whole independent Linux computer and has a generic area and an domain area for appliance software. In the generic area the operating system, functions about communication (Bluetooth, WIFI) and safety software are located.

A specific appliance firmware is placed in the domain area of the appliance software, because the SMM hardware can be used in all product areas. The whole firmware which is needed for the bus communication is located in the SMM.

The configuration of the buttons on the operating module is stored in the SMM. The components are still controlled by the power module, but the SMM gives commands.

SMM tasks:

- Communication with "intelligent" components (ECUs) via D-Bus-connection.
- Storage of appliance software.
- Storage of software for test programs.
- Storage of firmware for external components (ECUs) for the Plug&Play replacement (in future SPAU -> Spare Part Automatic Update).
- Logging of all failure codes, appliance procedures and occurrences in logging files.
- Online communication with BSH-Backend via WIFI and HomeConnect App.
- Pairing to the local WIFI and Internet via Bluetooth.

Affects to the appliance because of SMM:

- Flashing of software takes place wireless via WIFI not via cable connection.
- The SMM has its own independent appliance software. Therefore safety updates are required.
- The reset function not only stops the running rinsing program. The appliance software is rebooted and the known reset procedure with running pump starts. During the reboot all LEDs of buttons and symbols in the display light up. Appliances with acoustic signals confirm the successful reboot with an acoustic signal.

	**Reset / Cancellation via HomeConnect App** If a reset or cancellation is started via HomeConnect App there is no reset of the operating system. The program stops with draining.

3.7.1 Electronic control unit (ECU)

Active components are called ECUs. The ECUs are programmed with the latest software via the SMM. Till now all bus participants where fix programmed. With the SMM all active components can be new programmed via flashing. Because of this opportunity specific customer configurations can be realized , e. g. assignment of buttons or symbols of TimeLight.

Examples for ECUs:

- Control module
- Power module
- Door opening module
- TimeLight

3.7.2 Wireless connections

All SMM have wireless connections as Bluetooth and WIFI. For appliances with WIFI button the paring happens via Bluetooth (see Pairing).

3.7.3 Pairing - Connecting with the internet

The connection establishment between the appliance, the local customer WIFI network and the internet does not work with the WPS button of the router. The BSH HomeConnect App is required on a mobile phone to establish the connection. This mobile phone needs to be connected to the network which should be also connected to the appliance afterwards.

During the installation of the internet connection there is a reference to a QR code. The QR code is provided in the appliance documents or can be found in the quickfinder. After reading the QR code the bluetooth of the appliance is activated. Appliance and connection data of the network are transferred to the appliance. For safety reasons the password of the router WIFI needs to be entered in the App. After the connection is established the bluetooth on the mobile phone can be deactivated (depending on the operating system, Android / IOS).

3.8 Power cords - country versions

The power cord has a appliance coupler system connection (IEC60320) and is enclosed with the appliance. When the appliance is switched on for the first time, the cable must be connected to the back of the appliance

3.8.1 Country versions

Different power cords are offered as optional accessories via Sales.

⚠ Warning

Incorrect connected loads!

Destruction of the appliance

- If a power cord is replaced with a power cord with a different plug, check the connected loads of the appliance with the supply voltages and frequencies of the particular country.

3.8.2 Power cord

5 m power cord is available from customer service. This is currently released by PDC.

Material number EU version: [12022522]

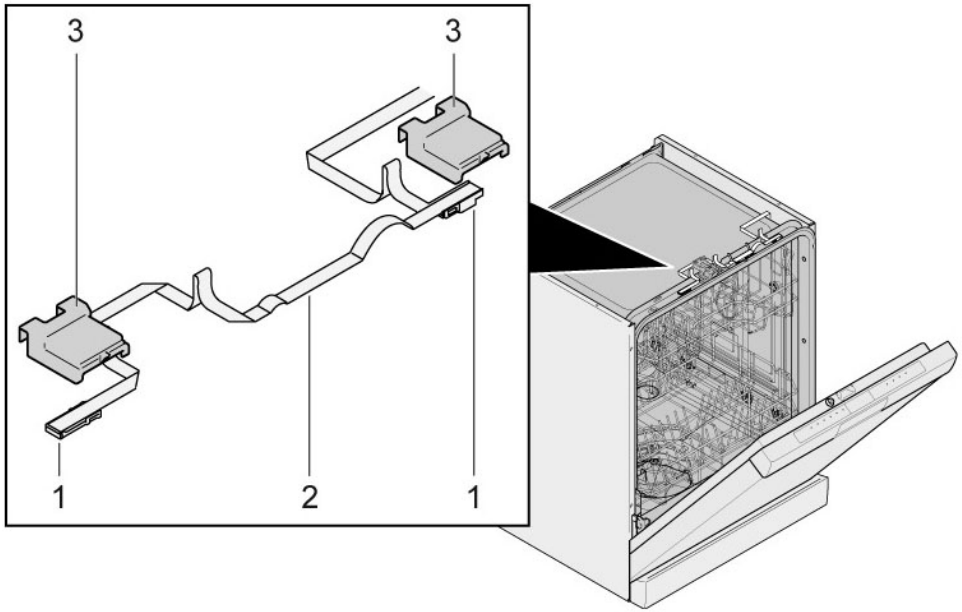
3.8.3 Extension cords

3 m extension cords are available from customer service.

Material number GB version: [644534]

3.9 EmotionLight (optional)

The EmotionLight is an interior light inside of the appliance (light curtain).



1 LEDs
2 Ribbon cable
3 Cap

If the function „EmotionLight“ is activated in the appliance menu, two LEDs light up

- when the door is opened or
- when the appliance is switched on

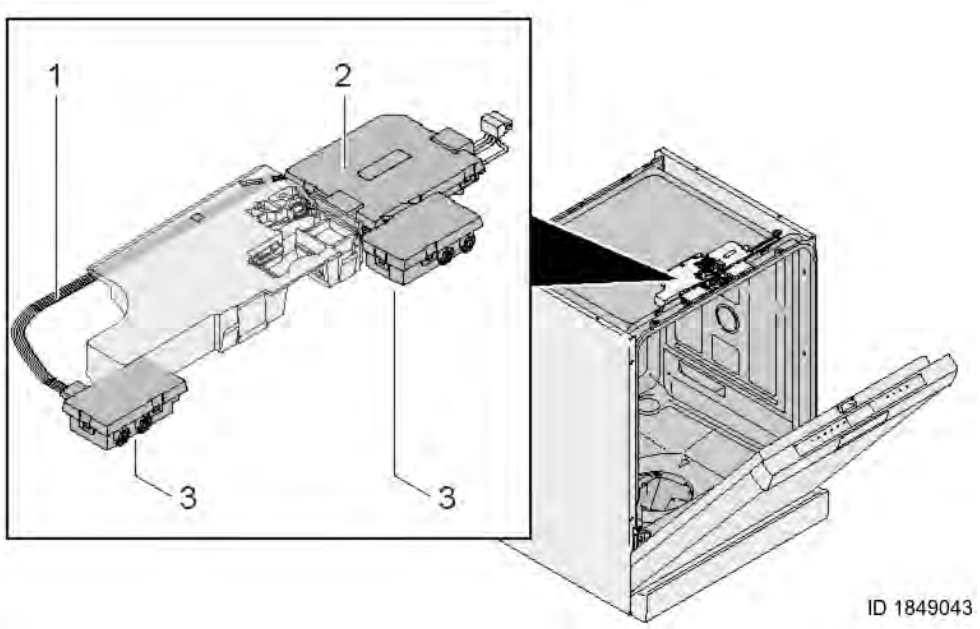
3.9.1 Function (appliances with SMM)

The EmotionLight comes on when the door is opened depending on the settings. The EmotionLight is switched off automatically when the door is open for longer than 10 min. When the door is closed there is no lightning. Depending on the brand there are different colors available.

	Different variants of appliances can have a different switch-on behavior. Note customer settings.

3.10 EmotionLight pro

The EmotionLight pro is a light in the inside of the appliance (light curtain). The EmotionLight pro consists of two RGBW-LED and a controller. It is fixed at the tub frame like in current series.



1 Ribbon cable
2 Control unit
3 LEDs with housing

If the function „EmotionLight“ is activated in the appliance menu, two LEDs light up

- when the door is opened or
- when the appliance is switched on

Depending on the brand there are eight different colors and four different intensity levels available depenting on the setting in the appliance menu. There are more and different colors available within the Home Connect App the complete color spectrum is available. Without Home Connect, the brand specific color spectrum is available. Optical warning signals are possible.

Important hints:

- Different variants of appliances can have a different switch-on behavior. Note customer settings.
- If you have created a color via the Home Connect App the setting EmotionLight 1 is not available.
- In the case of an failure the LEDs light is flashing red when opening the door. This function is only available if the EmotionLight is activated. This function can be switched on/off.
- If the interior light is deactivated the settings for EmotionLight 1, 2 and 3 are not selectable.

3.10.1 Function (appliances with SMM)

The EmotionLight comes on when the door is opened depending on the settings. The EmotionLight is switched off automatically when the door is open for longer than 10 min. When the door is closed there is no lightning.

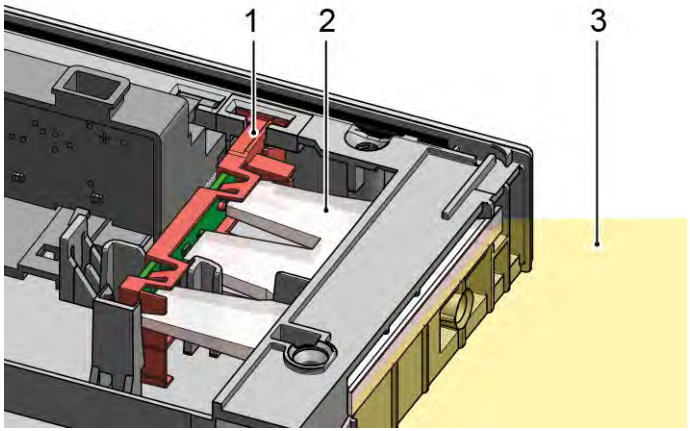
3.11 Gap illumination

Fully integrated appliance have an Info-Light, now called gap illumination (Brand name: Bosch = Active Light, Siemens = Side Light) which is visible from the outside. It gives additional information about the status of the appliance to the customer.

The gap illumination is built into the control panel on the left. A circuit board with LEDs is connected to the operating module via a connection cable. The light is projected into the gap between the dishwasher and the neighboring piece of furniture via a light guide. Different colors (blue / white) are possible depending on the brand.

Gap illumination... :

- is only active when dishwasher is running
- gives no cycle status indication (similar to Info Light)
- is blinking when door is opened during cycle
- can be acitvated via HomeConnect or via machine settings
- is not available with Time Light



1 PCB holder with PCB
2 Light fibre
3 Light projection

3.12 Using rear labels when door labels are missing

When inner doors have been replaced without copying model and serial #'s, the only way to identify dishwashers is to pull them out and look at rear labels, attached to the center rear of bases, above the drain hose.

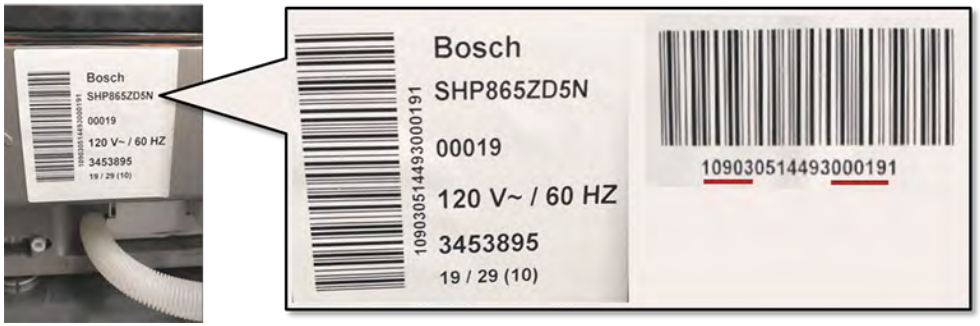


Fig. 21: Rear serial label location and detail

When inner door serial labels are missing, use the rear serial label to identify dishwashers as follows (e.g. SHP865ZD5N/01):

- Copy the model # from the top of the label (under the brand): SHP865ZD5N.
- Use the 18-digit serial # to determine the FD # for service documentation since it's not listed directly on the rear label (e.g. FD 9903 00019):
  - Locate the 18-digit serial # "under" (to the right of) the bar code: 10 9 03 0514493 00019 1.
  - The 3rd digit represents the last digit of the year: 9 = 2019. To get the 1st 2 digits of the FD #, subtract 20 from the production year and use only the last 2 digits (2019 - 20 = 99, not 1999).
  - For the next 2 (3rd & 4th) digits of the FD #, copy the next 2 digits (4th & 5th) of the 18-digit serial #, representing the month: 03 = March.
  - Copy the next 5 digits after the 7-digit model # (0514493), representing the unit made that month: 00019 = 19th dishwasher made that month. This # is also printed under the model # and can be copied directly from the label (00019).
  - Ignore the last digit (check digit 1).
- To get the KI #, look it up in our parts look up system based on the 1st 4-digits of the FD # (i.e. FD 9903 occurred during KI # /01).

When you determine the model, KI and FD #'s, record them for future repairs:

- Instruct customers to write their model and serial #'s in their Use & Care manuals.
- Order blank service replacement serial label [00618453], legibly write the model / serial #'s and ratings on it using permanent ink and affix it to the inner door (on the right side where production labels are affixed).

Fig. 22: Replacement serial label [00618453]

Fault Diagnosis

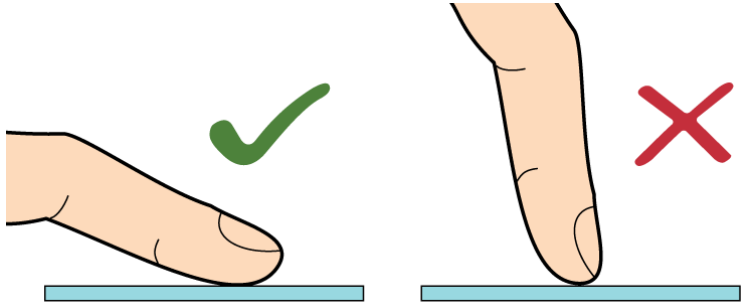
Condensation / Humidity / Leakage

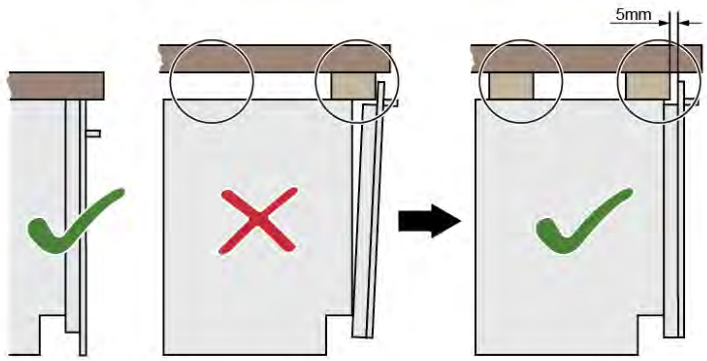
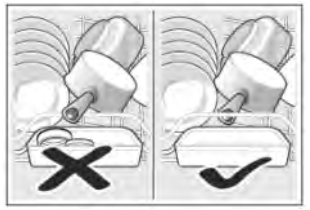
Fault	Possible cause	Troubleshooting
Leakage under the pump sump	Dissolved the pump sump	1. Do not use a cordless screwdriver. Tighten screws. 2. Replace the pump sump with the cover (position 0605). See Replace the pump sump→ *Page 104*.
	Leaking connection between pump sump and container	▸ Install pump sump seal repair kit as per item 0199.
Leaking heat exchanger / water inlet	Expansion opening not correctly screwed together	▸ Check the screw connection. Perform the installation in the order given. See the chapters: Replacing the heat exchanger and Replacing the water inlet.
	Outlet valve is leaking	1. Check outlet valve. 2. Clean sealings. 3. Replace outlet valve.
	Heat exchanger is damaged	▸ Replace the heat exchanger. Perform the installation in the order given. See the chapters: Replacing the heat exchanger and Replacing the water inlet.

Malfunction

Fault	Possible cause	Troubleshooting
No function after replacement of the CapaTouch operating module	CapaTouch module not programmed or installed with incorrect software	▸ Flash operating module in accordance with "Install software" or install programmed module.
Programme freezes, cannot be started, programme breaks off	Door lock is not properly closed because the door lock lever snapped. Closing force too high.	1. Recover self-correction function of the door lock. 2. Reduce closing force by replacing the profile stripe.

Fault Diagnosis

Fault	Possible cause	Troubleshooting
Poor button response *Capatouch doesn´t react or reacts in a strange way*	Press buttons correctly	▸ 
	Contamination / moisture on the user interface	▸ Clean with a soft cloth. Do not use aggressive household cleaner or scouring sponges.
	Influence because of metal ⓘ Only valid for fully integrated appliances. Metal surface at the built-in door changes the capacity values of the operating module for all sensors.	▸ Be aware of right installation order after replacement of capatouch control module or flashing for appliances with metal furniture panels.
Door cannot be closed	The catch of the door lock is in the wrong position (clicked over)	1. Firmly press the door closed until the catch corrects itself (needs higher pressure!). 2. Check the door lock.

Fault	Possible cause	Troubleshooting
	Faulty appliance installation	1. Make sure that the rear wall of the appliance is not distorted by pressure from power sockets, hose clips, ... 2. The furniture door must not touch any other furniture parts. Remove obstructions.  3. Check the door lock.
	Door hinges are overstretched Door hinges are overstretched. The inner door is distorted near the hinges.	▸ Replace the inner door. → "Replacing hinges", Page 129
	The screws on the inner door are not fully inserted	▸ Insert the screws straight and tighten them fully by hand.
	Baskets badly loaded	1. Check basket loading. 1. Dishes may not protrude from the basket. 2. Leave the area around the handle of the basket clear.  2. *Advise customer:* *Explain to the customer how to load the dishwasher correctly (see instruction manual).*

Fault	Possible cause	Troubleshooting
	Door lock does not close with enough force	1. Replace the upper trim. 2. Replace the door lock.
	Door seal is not correctly mounted or has slipped	▸ Check the position of the door seal and correct it. The seal lip faces inwards. Press the seal fully into place.
	supply hose or riser was installed incorrectly	1. Check that the components are correctly seated. 2. Replace defective components.
	Automatic door opening system not in home position	▸ After opening the door, wait 1 s until it can be closed again.
Door does not open automatically at the end of the Eco 50° programme	Eco drying deactivated	▸ Activate Eco drying.
	Childproof lock activated	▸ Deactivate childproof lock.
	Eco 50° programme not selected	▸ Select Eco 50° programme.
	Additional functions selected	▸ Deselect additional functions.
	ExtraDry is switched on	▸ Switch off ExtraDry.
	Door adjustment is incorrect	▸ Set the door correctly using the repair manual.
	Door and door seal dirty	▸ Clean the door and door seal with a damp cloth and a small amount of detergent.
	AOR activated	No fault. ▸ *Advise customer:* *Deactivate AOR in customer settings.*
EmotionLight does not light up	EmotionLight deactivated	▸ Activate the function in the customer settings.
	Door open for more than 60 mins	▸ Close and re-open the door.
Error message "P0 Switchmirror 1" or colour bar in the display in the case of appliances with CapaTouch	The wrong buttons were pressed to launch the test programme	▸ Switch the appliance off and on again.
	Steam guard plate installed Operating module is too close to the steam guard plate. CapaTouch reacts	▸ Ensure a distance of at least 3 mm between the operating module and the steam guard plate.

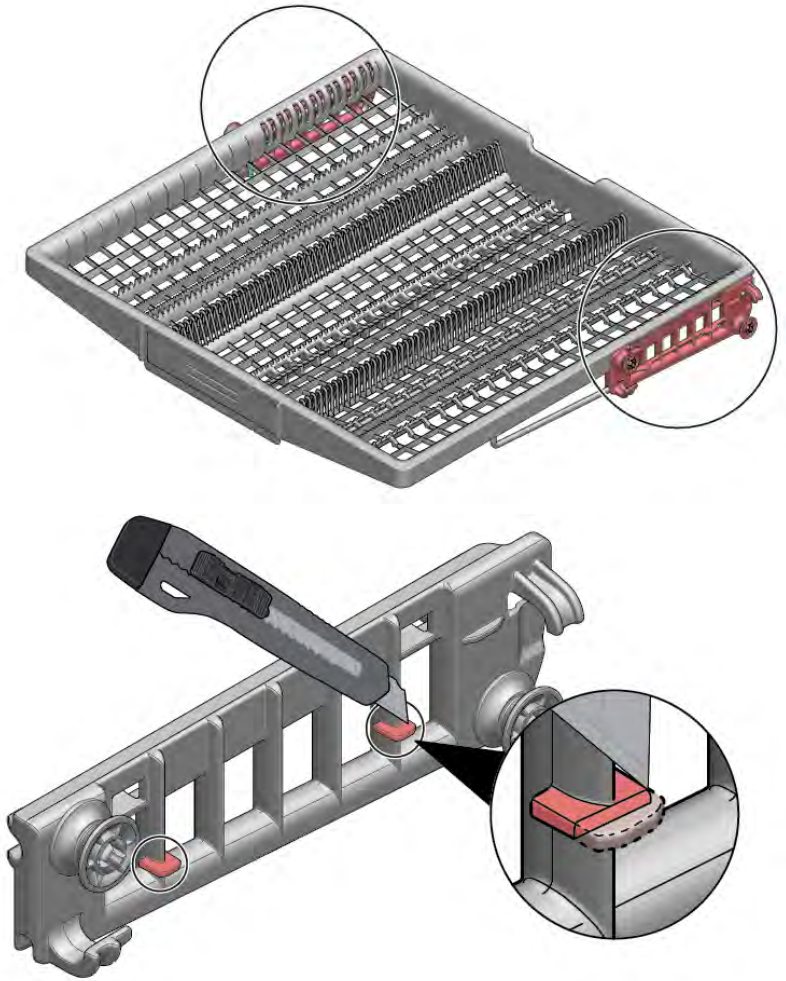
Fault Diagnosis

Fault	Possible cause	Troubleshooting
Time jumps with remaining running time display in 45° programme	Software occasionally indicates a longer running time	▸ Software is being adapted, ATI will be published when available.
Low salt sensor is permanently lit	No salt in the container for regeneration salt	1. Check the level in the salt container. 2. Refill with special salt. 3. Check customer settings.
	Salt tabs were used	1. *Advise customer:* *Do not use salt tabs.* 2. Detection of low salt. 3. Replace the water-softening system.
	Faulty plug connection	▸ Check the plug connection.
	The low salt sensor, power module and / or control module, connector or cable harness is defective	▸ Replace the faulty component.

Mechanical damage

Fault	Possible cause	Troubleshooting

Noise

Fault	Possible cause	Troubleshooting
Squeaking sound when pulling out the cutlery drawer	Remove abrasive plastic webs	

Fault Diagnosis

Odour

Fault	Possible cause	Troubleshooting
Smell of burning *The reason for this must always be established*	Incorrect connection, or damage to cables or multiway power sockets (external) Appliances that are connected to multiway power sockets must be immediately taken out of service!	1. The reason must always be established! Only approved extension cables may be fitted (see installation instructions) 2. Replace the power cord. 3. Observe the safety instructions in the instruction manual.
	Faulty plug connections inside the appliance	1. Check the cable of the power supply unit and the plug connection to the power module. 2. Check the power module for any faulty components. 3. Replace the faulty component.
	Defective housings or damaged cables on components inside the appliance	1. Measure the component's values and check them against the circuit diagram. 2. Check the plug connection. 3. Replace the faulty component.
Chemical odour	Constituents of the detergent / rinse aid	1. To eliminate an unpleasant odour you can use a detergent or rinse aid from a different manufacturer or choose additive-free products 2. *Advise customer:* *Recommend changing to a product with citrus aroma or using a fragrance dispenser.*
Foul smell / like drains	Appliance is not connected or not connected to the siphon correctly	A siphon acts as an odour trap. If an appliance is connected to the drainage pipe without a siphon, this can give rise to unpleasant smells. 1. Connect the appliance correctly to the drainage pipe via a siphon. 2. Create an artificial siphon as described in the installation instructions (using the hose support).

Fault	Possible cause	Troubleshooting
	Washing temperature is always too low	1. Cleaning and care products available as accessories in BSH shop. Descale the appliance. 2. *Advise customer:* If the appliance is constantly operated at low temperatures, residues may be deposited in the appliance and soiling may damage it. 1. Use programmes with a high water temperature frequently. 2. Use a machine cleaner that contains bleach (eliminates deposits). 3. Use water-softening additives (powder or tabs). 4. Descale the appliance regularly.
	Frequently too little detergent is used	1. Descale the appliance. 2. *Advise customer:* If too little detergent is used, this produces deposits that smell. 1. Increase the quantity of detergent according to the dosage instructions. 2. Use salt. 3. Descale the appliance regularly. 4. Change machine cleaner. 5. Use a fragrance dispenser for dishwashers.
	Filter system is soiled	1. Clean the filter system. 2. *Advise customer:* *Remove large food remnants before loading the dishwasher. The filter system should be cleaned regularly.*
	Detergents containing bleach are never used	▸ *Advise customer:* Some detergents do not contain bleach. Without bleach, residues can be deposited in the appliance. 1. Use programmes with a high water temperature. 2. Do not use liquid detergents. 3. Occasionally use detergent with bleach.
	Dishes with damaged glaze When exposed to the high temperatures required in the appliance over a long time, detergent solution may be deposited underneath the glaze, where it breaks down.	1. *Advise customer:* *Advise customer: Only use dishes which are dishwasher-safe.* 2. Wash such dishes by hand

Fault	Possible cause	Troubleshooting
New smell	This comes from the bonding material, bitumen, fleece, insulating mats, electronic components (soldering materials), plastics	1. *Advise customer:* *The smell may be stronger when the appliance is new. It will disappear after a few dishwashing cycles.* 2. *Advise customer:* *Recommend a fragrance dispenser.* 3. There is no health risk!

Other

Fault	Possible cause	Troubleshooting
Appliances shows "Communication fault" (at TFT) or al LEDs flash (without TFT)	Internal communication fault	1. Reset (press power button for 4 s). 2. Power Reset (disconnect appliance from mains power for 10 s). 3. Update SMM. 4. Disconnect TimeLight, Door open assist and EmotionLight (pro). 5. ⓘf If fault has been rectified, - replace defective component. 6. ⓘf If error still exists, - replace defective component (1. power module, 2. operating module, 3. SMM).
Other error patterns with defective electronics (e. g. E01-00, E69-00)	Control module defect (e. g. display error)	▸ Check electrical line. ET according to bill of material.
	TimeLight defect (e. g. LCD)	▸ Check electrical line. ET according to bill of material.
	Power module defect (e. g. E01-00)	▸ Check electrical line. ET according to bill of material.
No function of single ECUs. No error code	ECUs without connection or voltage	▸ Check voltage. ▸ Check electrical line. ET according to bill of material.
All displays / LEDs light up or flash after switching on from standby	Probably hardware problem	1. Reset (press power button for 4 s). 2. Power Reset (disconnect appliance from mains power for 10 s). 3. Replace SMM.

Fault Diagnosis

Fault	Possible cause	Troubleshooting
Reset time too long (> 1 min)	Probably hardware problem	1. Reset (press power button for 4 s). 2. Power Reset (disconnect appliance from mains power for 10 s). 3. Replace SMM.
Pairing not possible or HomeConnect does not work. (device is no longer recognized as connected in the app)	WLAN too weak, Backend temporarily not available, Hardware problem	1. Check WiFi signal strength with another device (specify app? Min. 1 line?) 2. Perform pairing. 3. Perform a reboot (4 s power button). 4. Perform pairing again. 5. Replace SMM.
Appliance appears to boot (all LEDs and symbols in display light up for approx. 70 s), then all LEDs flash simultaneously. No operating function possible	SMM is disconnected or defect	1. Check cables. 2. Check voltage. 3. Replace SMM according to bill of material.

Result problem

Fault	Possible cause	Troubleshooting
Residue on the utensils / in the appliance *Sandy, food remnants*	Baskets badly loaded Utensils placed too closely together.	1. Check the basket load (see instruction manual, chapter Utensils). 2. Observe chapter Loading the appliance correctly→ *Page 52*
	Spray arm blocked by tableware or cutlery drawer	1. Arrange utensils so that the spray arm can rotate without obstruction. 2. Load the appliance correctly→ *Page 52*
	Filter not engaged in the pump sump or incorrectly inserted.	▸ Correctly insert the filter and lock into position (see user manual "Maintenance and care").
	The coarse, micro and fine filters are soiled	▸ Clean the filters (see user manual "Maintenance and care").
	Spray arm nozzles or shower are blocked (e.g. lemon pips, etc.)	▸ *Advise customer:* *Clean the nozzles and shower and correctly insert and lock the filter. (See IM, Maintenance and care)*
	The spray arm bearing is stiff (soiling around the bearing)	1. Clean the parts 2. *Advise customer:* *instruct the customer to use the correct filters*

Fault	Possible cause	Troubleshooting
	Spray arm or feed pipe is deformed -> spray arm is hitting the basket, the docking site or the Zeolite blow-out cap.	1. Checking the components with the glass door. 2. Replace defective components.
	Drain pump is blocked	1. Checl failure code memory. 2. Checking the drain pump (see user manual "Eliminating faults yourself").
	Dirty water runs back into the appliance --> tableware becomes dirty again	▸ Check that the drain pump is functioning, check that the drain check valve is not leaking.
	Tall narrow receptacles in corners are not adequately rinsed	▸ *Advise customer:* *Don't position tall narrow receptacles too obliquely, and don't put them in the corners. See chapter Loading the appliance correctly→ Page 52.*
	Dishes precleaned too intensely The sensors therefore choose a gentler programme. Some stubborn soiling cannot be completely removed.	▸ *Advise customer:* *Do not prewash dishes, only remove large food remnants. Recommended programme Eco50°.*
Detergent residue	Detergent detergent cover blocked by dishes (cover does not open fully)	1. Check that the detergent dispenser is functioning, the detergent cover must not be obstructed by utensils. Do not place utensils or fragrance dispensers in the DosageAssist 2. Loading the appliance correctly→ *Page 52*
	Detergent detergent cover is blocked by a tab	▸ *Advise customer:* *Explain to the customer how to correctly insert tabs (crosswise, not upright)*
	Tabs were used in the Quick Wash or Short programme -> the detergent does not have time to dissolve in the selected short programme	▸ *Advise customer:* *Tabs take too long to dissolve; use a powder detergent or select a more intensive programme*
	Detergent residue in the rinse cycle; detergent transfer	▸ Check that the drain pump is functioning, check that the drain check valve is not leaking
	Detergent is extremely lumpy, its cleaning effect and ability to dissolve are reduced after prolonged storage	▸ *Advise customer:* *Use fresh new detergent and replace the old detergent*

Fault	Possible cause	Troubleshooting
Water stains	It is physically impossible to prevent droplets forming on plastic surfaces Plastics do not retain heat. After drying, substances which were dissolved in the water become visible.	1. *Advise customer:* *Use a more intensive programme (change water more often) (see IM, Programme overview).* 2. *Advise customer:* *Arrange dishes in a sloping position.* 3. *Advise customer:* *Use rinse aid and increase if required.* 4. *Advise customer:* *If required, increase softening setting.* 5. *Advise customer:* *Remind the customer about the Extra Dry programme (not available in all appliances).*
On pull-out rails	Deposits of detergent and food remnants Detergent and food remnants may be deposited, depending on the appliance design and how it is used.	▸ Clean it by hand. Use a modified set of telescopic rails for the upper basket. Use a repair set for the cutlery drawer.
Coloured, easy to remove	Soapy film formed from substances in food remnants and limescale In view of the tolerances of multi-component detergents (3 in 1 or higher), it may be necessary to use the water-softening system from a water hardness of 14 °dH.	▸ *Advise customer:* *Contrary to the detergent manufacturer's instructions, also activate the water-softening unit and use salt.*
Deposits - wipeable, water-soluble *in the container / on the door*	Detergent substances are deposited Such deposits cannot usually be removed with chemicals (e.g. with appliance cleaner).	1. *Advise customer:* *Change detergent. We recommend using separate products (branded detergent, salt, rinse aid).* 2. Clean the appliance by hand with a cloth.
	Water-softening system has been set to a marginal value: there is regularly a "white deposit on the container floor"	▸ Determine the water hardness and adjust the setting of the water-softening system.
	Regeneration salt on the dishes ■ Salt dispenser cover not fitting tightly. ■ Regeneration valve leaking.	1. *Advise customer:* *Eliminate leakage.* 2. Adjust the water-softening system. 3. Check the regeneration valve and make sure it is properly seated (customer service program). 4. Start a short program to prevent rust.

Fault	Possible cause	Troubleshooting
	Detergent residues in the rinse cycle, detergent transfer	1. Check the detergent dispenser function. The dispenser cover must not be obstructed by dishes. 2. Check the drain check valve.
	Wrong program selected (Quick Wash programme selected)	▸ Select a suitable programme (see IM, Programme overview).
	Glasses starting to become cloudy Can only seemingly be wiped off.	▸ ⓘ See Damage to load - Clouding of glass→ *Page 47*.
Deposits - white, difficult to remove (limescale) *Limescale on the dishes, container or door*	Detergent substances are deposited These deposits cannot usually be removed with chemicals (appliance cleaner, ...).	1. *Advise customer:* *Change brand of detergent. We recommend using separate products (branded detergent, salt, rinse aid).* 2. Clean the appliance by hand with a cloth.
	Hardness range set incorrectly or total water hardness greater than 50°dH	1. Check the residual hardness in the washing and rinsing cycle. 2. Adjust the water-softening system. 3. Refill salt.
	Water-softening system is not being regenerated	▸ Use the customer service programme to test operation of the regeneration valve.
	3-in-1 detergent or bio/eco detergent is not effective enough	1. *Advise customer:* *Change brand of detergent. We recommend using separate products (branded detergent, salt, rinse aid).* 2. Clean the appliance by hand with a cloth.
	Detergent in the salt container	1. Confirm using the mini-lab. Mini-lab Mat. no. [340070]. 2. Replace the water-softening system.
Deposits - starch residues on dishes	Underdosing of detergent	1. Confirm using the mini-lab. Mini-lab Mat. no. [340070]. 2. *Advise customer:* *Use more detergent or change the detergent.*
	Wrong programme selected (programme was too gentle)	▸ *Advise customer:* *Select the right programme (see IM, Programme overview).*
Deposits - Tea or lipstick left on dishes	washing temperature too low	▸ *Advise customer:* *Select a program with a higher washing temperature.*

Fault Diagnosis

Fault	Possible cause	Troubleshooting
	Not enough detergent	▸ *Advise customer:* *Use suitable detergent at the correct dosage.*
	Dishes precleaned too intensely The sensors therefore choose a gentler programme. Some stubborn soiling cannot be completely removed.	▸ *Advise customer:* *Do not prewash dishes, only remove large food remnants. Recommended programme Eco50°.*
	Unsuitable detergent	▸ *Advise customer:* *Change detergent.*
Deposits - difficult or impossible to remove *Blue, yellow or brown deposits in the container or on the door*	Film produced by substances in vegetables or tap water Vegetables: e.g. from cabbage, celery, potatoes, and noodles, ... Tap water: e.g. manganese	1. Can sometimes be removed with machine cleaner or by mechanical cleaning. Such deposits are harmless. Machine cleaner Mat. no. [311313]. 2. Roughly preclean dishes.
	Film formed by metallic constituents This is known for silver or aluminium items.	1. *Advise customer:* *Use a silver care cartridge.* 2. Can sometimes be removed with machine cleaner or by mechanical cleaning. Machine cleaner mat. No. [311313].
Discolouration - iridescent, difficult or impossible to remove *blue, yellow or brown discolouration in the container or on the doors*	Film formed by metallic constituents. This is known for silver or aluminium utensils	▸ *Advise customer:* *Can sometimes be removed with machine cleaner or by mechanical cleaning.*
	Film formed from substances in vegetables (e.g. cabbage, celery, potatoes, noodles, etc.) or from tap water (e.g. manganese)	▸ *Advise customer:* *Can sometimes be removed with machine cleaner or by mechanical cleaning. Can usually be removed mechanically with “Wiener Kalk”. Deposits are harmless*
On plastic parts	washing temperature too low	▸ *Advise customer:* *Select a program with a higher washing temperature.*
	Rinse programme too weak	▸ Select another rinse programme.
	Dishes precleaned too intensely The sensors therefore choose a gentler programme. Some stubborn soiling cannot be completely removed.	▸ *Advise customer:* *Do not prewash dishes, only remove large food remnants. Recommended programme Eco50°.*
Streaks on glasses and cutlery *Removable streaks on glasses and cutlery or glasses with a metallic appearance*	Too much rinse aid	▸ *Advise customer:* *Adjust the quantity of rinse aid to a lower setting (see IM, Rinse aid).*

Fault	Possible cause	Troubleshooting
	No rinse aid in the appliance or setting too low	▸ *Advise customer:* *Add rinse aid and check dosage (recommended setting 4-5).*
	Detergent residue in the final rinse Detergent dispenser cover blocked by dishes (cover does not open fully).	▸ ⓘ The dispenser cover must not be obstructed by dishes. Do not place dishes or fragrance dispensers in the DosageAssist unit. Check the detergent dispenser function.
	Non-return valve is not tight	▸ Check tightness of non-return valve.
	Dishes precleaned too intensely The sensors therefore choose a gentler programme. Some stubborn soiling cannot be completely removed.	▸ *Advise customer:* *Do not prewash dishes, only remove large food remnants. Recommended programme* Eco50°.
Damage to load / water-insoluble residues *Irreversible* ***clouding of glass***	Glasses not sufficiently dishwasher-proof (most glasses are only suitable for dishwashers)	▸ *Advise customer:* *Reduce the main reasons for glass corrosion.* 1. Use dishwasher-proof glasses. 2. Avoid a long steam phase (standing time after wash cycle ends). 3. Use a low-temperature programme. 4. Set the water-softening system according to the water hardness (if necessary, one level lower, see IM, water-softening system). 5. Use detergent with glass protection component.
Rust spots on cutlery	Cutlery not sufficiently rust-resistant Knife blades are often more severely affected.	▸ *Advise customer:* *Use rust-resistant cutlery.*
	Cutlery contaminated with rust from other rusting objects (metal lids, damaged baskets, etc.)	▸ *Advise customer:* *Do not wash rusting objects.*
	Salt content in rinsing water too high Salt dispenser is not properly closed or salt was spilled while it was being refilled.	▸ Close the salt dispenser tightly or remove any spilled salt (via prewash).

5.1 Diagnose of "Poor washing result"

Due to an increase in queries to rinsing result are below reasons for the complaint "bad "rinsing result "and information on remedy options.

	Faults due to clear operating errors or inadequate maintenance may not be dealt with under the guarantee. Appropriate instructions for use and maintenance may be found in the instruction manual and brief description.

In addition to the error image must be saved at a questions and establish not only the symptoms observed but also the circumstances in the order. The functional test must be carried out in the customer service test programme using the glass door.

- ▸ Bring the answers on the following questions customer.
  1. Is the problem present all the time, does it occur sporadically or at specific intervals?
  2. Were different programs or detergents being used?
  3. Does the problem date back to a specific event (new tableware, change of detergent, ...)?
  4. Does the problem affect only tableware in certain areas (only the top or bottom basket, only in the corners, ...)?

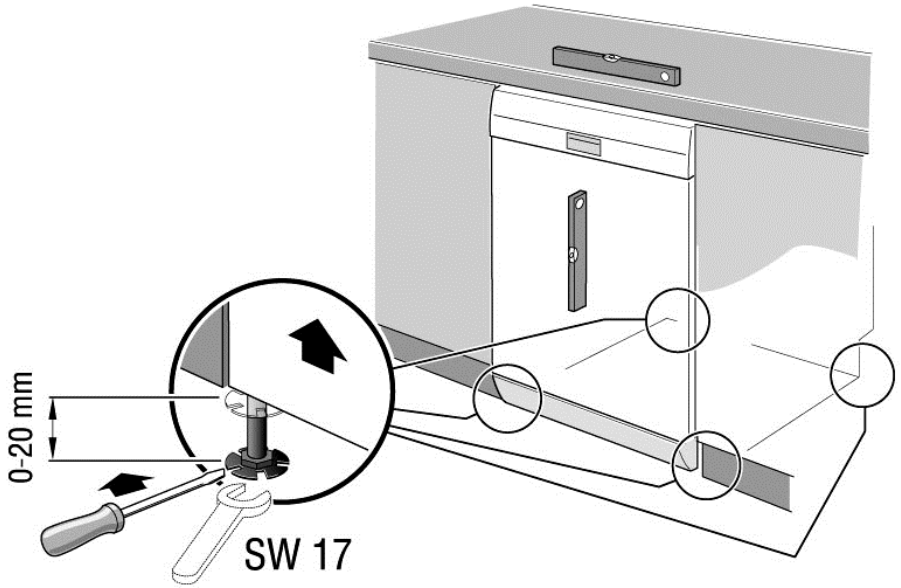
5.2 Aligning the appliance

5.2.1 Aligning free-standing appliance

▸

	Adjustment range for appliance feet: 0 mm - 20 mm.

Adjust feet at the front of the appliance with a WAF 17 or WAF 13 spanner or flat-head screwdriver.



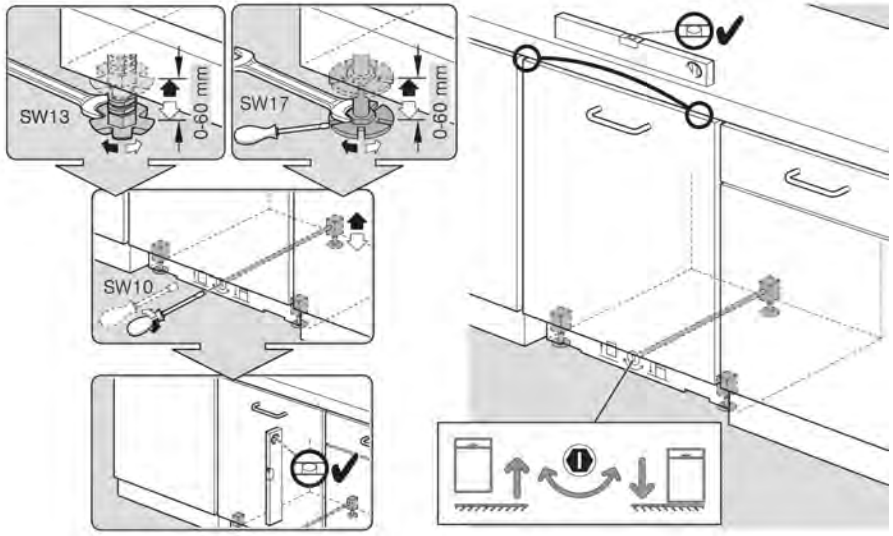
5.2.2 Aligning build-under, integrated or fully integrated appliances

1.

	Adjustment range for appliance feet: 0 mm - 60 mm.

Adjust feet at the front of the appliance with a WAF 17 or WAF 13 spanner or flat-head screwdriver.

2. Adjust feet at the rear of the appliance with a WAF 10 spanner or a flat-head screwdriver.



5.3 Installing / removing transparent door

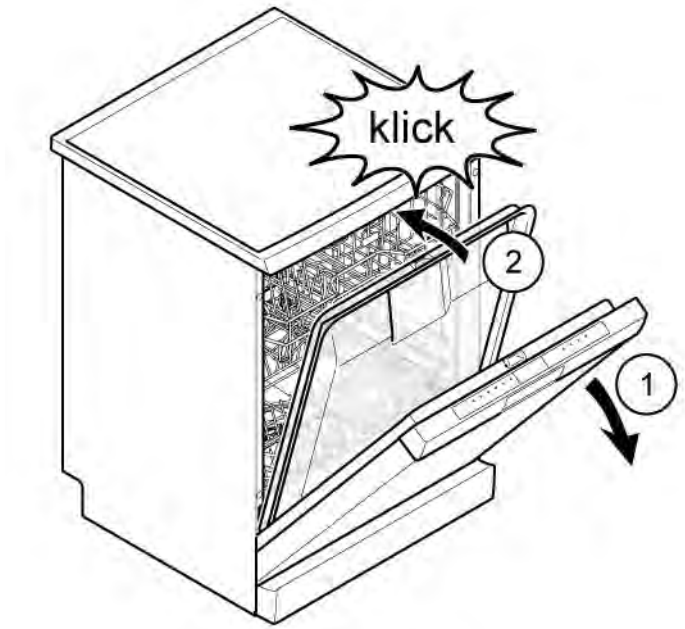
Required tools:

Transparent door	45 cm x 81 cm, with permanent magnet, for dishwashers	[00341987]
Transparent door	60 cm x 81 cm, with permanent magnet, for dishwashers	[00341333]
Transparent door	60 cm x 86 cm, with permanent magnet, for dishwashers	[00341334]
Permanent magnet	Permanent magnet with suction cup for customer service transparent door	[00341332]

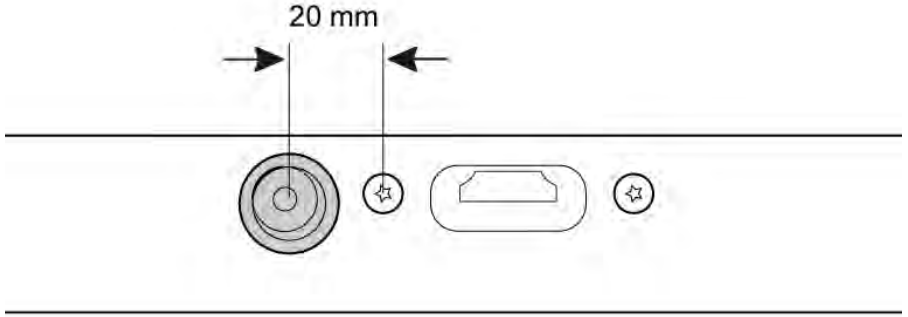
5.3.1 Installing transparent door

	If a transparent door is used, a permanent magnet must be positioned on the inner door. This allows the appliance to start the test programmes despite the open door. The door contact switch responds to the direction of the magnetic field.

1. Open the appliance door.
2. Place the transparent door into the appliance and engage in the door lock at the top.



3. Secure the suction knob with magnets on the top edge of the inner door.



4. Turn the permanent magnet so that the appliance recognises the magnetic field correctly.

5.3.2 Removing transparent door

1. Remove the permanent magnet on the inner door.
2. Wait till program is stopped.
3. 

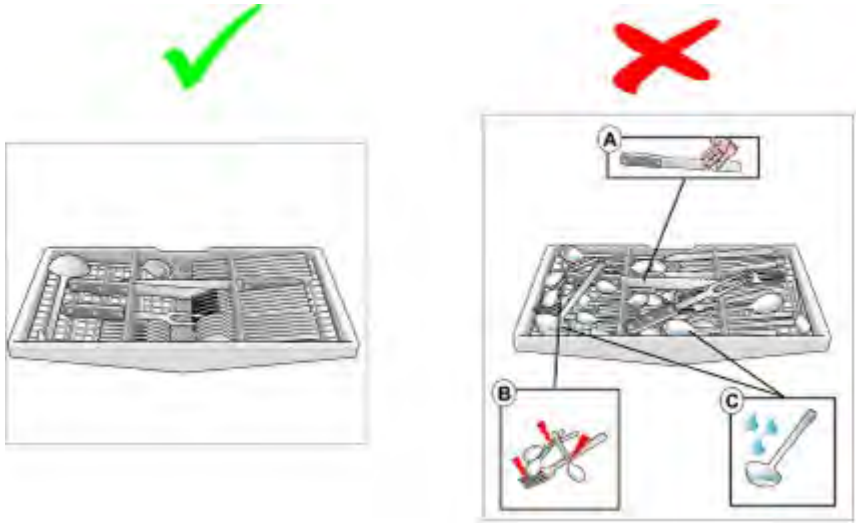
   To unlock the door lock again after manual locking, a high level of mechanical resistance must be overcome.

   Close the transparent door firmly to unlock the door lock.
4. Remove the transparent door.

5.4 Loading and unloading appliance correctly

5.4.1 Loading cutlery drawer

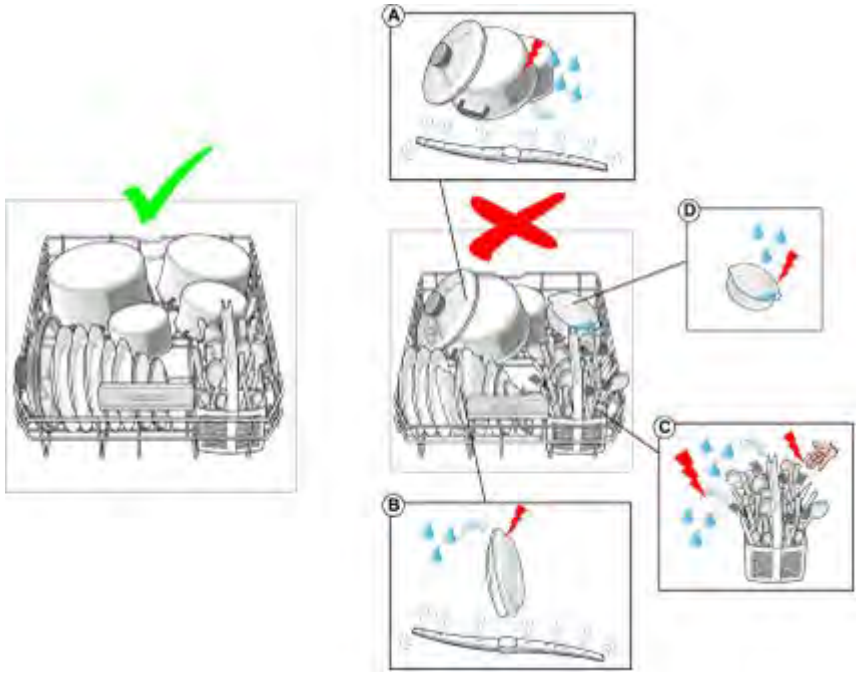
1. Arrange knives and other sharp-edged or pointed cutlery with the blades face down to prevent any injury (A).



2. Do not place items of cutlery on top of each other (B).
   ➥ Correct arrangement avoids stains on cutlery.
3. Arrange spoons and ladles at an angle (C).
   ➥ This will prevent accumulation of water and stains.

5.4.2 Loading lower basket

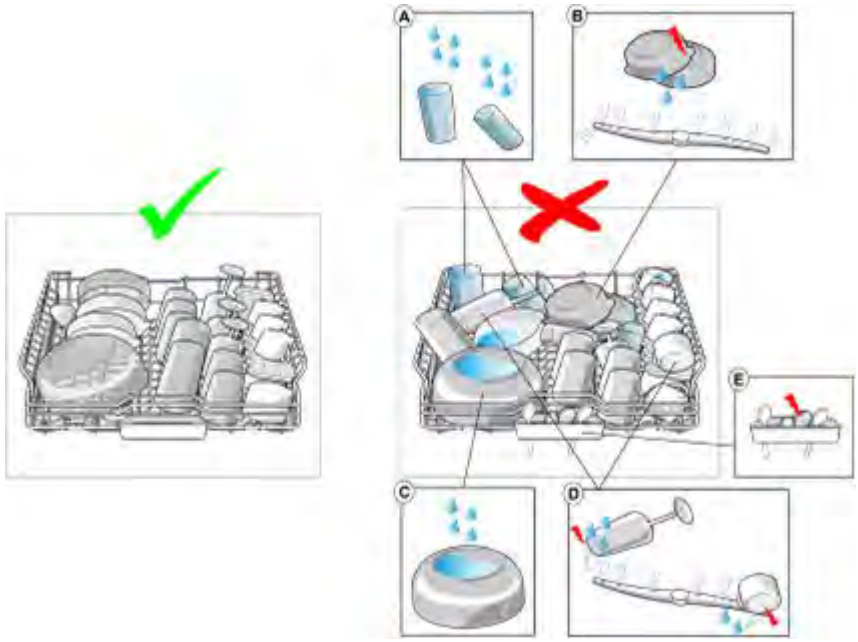
1. Place all dishes next to each other so that they are all sprayed with water from below (A).



2. Avoid large contact points between the dishes (B).
   ➥ This prevents food remnants and stains on dishes.
3. Do not overload the cutlery basket (C). Avoid large contact points between items of cutlery where possible.
   ➥ Correct arrangement avoids stains on cutlery.
4. Arrange hollow receptacles so water cannot collect inside (D).
5. Do not allow any dishes to project through the top basket.
   ➥ This ensures that the spray arm is not blocked.

5.4.3 Loading upper basket

1. Arrange hollow receptacles so water cannot collect inside (A).



2. Place all dishes next to each other so that they are all sprayed with water from below (B).
3. Load cups and bowls at a slight angle (C).
   ➔ This will prevent accumulation of water in the bottom.
4. Do not arrange hollow receptacles at too great an angle or in the corners (D).
   ➔ This ensures correct rinsing.
5. Do not load the tab collecting tray with dishes or aroma dispensers to avoid obstructing detergent dispensing.
6. Do not allow any dishes to project through the top basket (E).
   ➔ This ensures that the spray arm is not blocked.

5.4.4 Unloading appliance

	When dishes have lost their heat, the drying effect is reversed. The humidity in the appliance condenses back on the cold dishes and water drops appear. Water drops on the lower edges of the dishes and on the cutlers basket can not be completely avoided.

Unload appliance in the following order within 30 min after end of program.

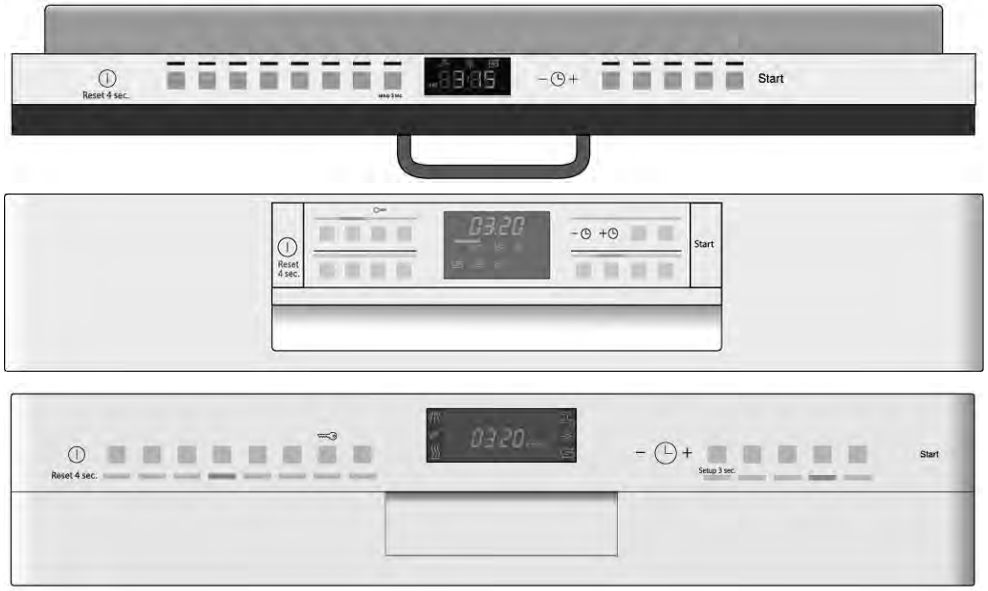
1. Unload lower basket.
2. Unload upper basket.
3. Unload cutlery drawer (optional).

5.5 Customer settings CapaTouch

Prerequisite:

Appliance is switched on

5.5.1 Button layout, examples (SMM)



5.5.2 Button layout, examples

Fig. 23: Fascia 1

Fig. 24: Fascia 2

Fig. 25: Fascia 3

5.5.3 Selection of customer settings

- Press Info button / Setup 3 sec. for 3 seconds.

5.5.4 Selection ranges

The display shows the first setting option.

1. Use the < or > button, the setting range is selected.
2. Using the buttons + and -, the setting is set.

5.5.5 Saving the setting

- Press Info button / Setup 3 sec. for 3 seconds.

5.5.6 Possible settings for models with 7 digit display

The setting will be displayed in plain text

Area	Possible settings	Factory settings
Water hardness	H:00 – H:07	H:04
Rinse aid dispenser	r:00 – r:06	r:05
Aquasensor setting	SE:00 – SE:02	SE:00
Extra dry	d:00 – d:01	d:00
Water connection	A:00 – A:01	A:00
Auto Power Off	P:00 – P:02	P:01
EmotionLight	E:00 – E:01	E:01
Timelight	S:00 – S:01	S:01
Infolight	I:00 – I:01	I:01
Start program	SP:00 – SP:01	SP:01
Tone volume	SL:00 - SL:03	SL:02
Button Volume	bL:00 – bL02	bL:02

Area	Possible settings	Factory settings
Childproof lock	C:00 – C:01	C:00
Eco drying	o:00 – o:01	O:01
Depending on the features of your dishwasher		

Table 5: Possible settings

5.5.7 Possible settings for models with TFT display

The setting will be displayed in plain text.

Area		Factory settings
Time setting		12:00
Time format		24:00
Time		Time
Language		German
Water hardness		Medium , 13°-16° dH
Rinse aid dispenser		Setting 5
Aquasensor setting		Standard
Extra dry		Off
Water connection		Cold water
Eco forecast		Off
Auto Power Off		After 1 minute
EmotionLight		On
Front display		On
Timelight		On
Infolight		On
Start program		Eco 50°
Tone volume		Setting 2
Button Volume		Setting 2
Childproof lock		Off
Eco drying		On
Greeting		On
HomeConnect		On
Factory setting		Confirm/Back, Resetting to the factory setting.

Area		Factory settings
Depending on the features of your dishwasher		

Table 6: Possible settings

Additional information about each setting are displayed by pressing the info button.

5.6 Checking water supply

Prerequisite:

✔ Left side panel has been removed.→ *Page 125*

1. Check for correct installation (correct connection, hoses not kinked).
2. Visually inspect the connection for water droplets.
3. Start customer service test programme to measure flow rate.
4. Visual inspection in programme step "Water level in appliance" and check of correct water inlet in waterinlet/heat exchanger.
5. ⓘf If there is a damage or leakage at the waterinlet/heat exchanger
   - change waterinlet/heat exchanger.→ *Page 83*
6. ⓘf If flow rate of 2.5 l/min is not reached
   1. Check the flow limiter and filter in the AquaStop valve for soiling or blockage.
   2. Check the water tap for limescale.
7. ⓘf If flow rate of 2.5 l/min is exceeded
   - Flow limiter is defective --> replace the valve.
8. ⓘf If you cannot find any reason for the fault
   - Check the component electrically.

5.7 Checking water hardness in appliance

Video tutorial

Required tools:

Water hardness test	Chemical test: water hardness test; aqua test A + B with measuring cylinder	[00340069]

5.7.1 Measuring water hardness with active water-softening system

Prerequisite:

- The water-softening system has been activated.
- There is salt in the appliance.
- At least one program has been run since it was refilled (e.g. pre-rinse).

1. Start the test program.
2. Run through the test program as far as the visual check: 'Water level in appliance' (sump is full of water).
3. Take a sample of the washing water and test the hardness.
4. if If the hardness of the washing water is between 1 °dH and 6 °dH,
   - Do not adjust.
5. if If the hardness of the washing water is above 6 °dH,
   1. Check activation of the water-softening system.
   2. Check that the correct hardness is set.
   3. Use fresh detergent or tab.

5.7.2 Measuring water hardness with inactive water-softening system

	Salt substitutes in detergents can bind calcium and magnesium ions in the water up to 21 °dH according to manufacturer´s data). The water softening system should be activate if the water hardness is above 14 °dH to reach a good washing and drying result.

1. Take a sample of tap water and test the hardness.
2. if If the hardness of the tap water is below 14 °dH,
   - Use a suitable detergent with salt function (combi product, All-in-one-tabs).
3. if If the hardness of the tap water is above 14 °dH,
   1. Activate the water-softening system.
   2. Check that the correct hardness is set.
   3. Check the level in the regeneration container.
   4. Use fresh detergent or tab.
   5. Activate the water softening system if the water hardness is above 14 °dH to reach a good washing and drying result.

5.8 Checking door sensor

Required tools:

Screwdriver Torx T10 with bore 200 mm, for screws with safety pin hole [00341404]

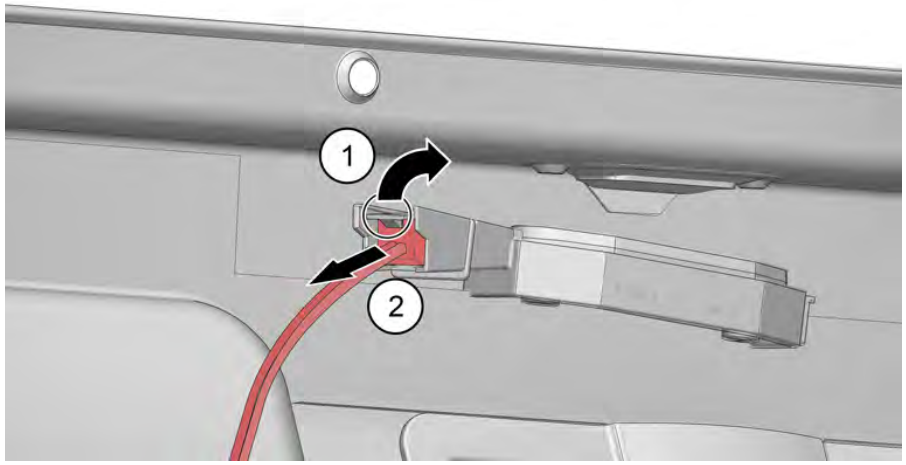
	For measurements, see the circuit diagrams.

	Danger **Risk of electric shock while performing tests on energised circuits!** ▸ For tests on energised circuits, use a Residual Current Device (RCD). ▸ Do not touch housings, frames, components and cables.
	Plug contacts may be damaged! Check the plug contact.

Prerequisite:

- Appliance is disconnected from the power supply.
- Furniture panel has been removed (optional).
- Outer door has been removed.
- Outer door has been removed (fully integrated/integrated).
- Control panel has been removed.→ *Page 165*
- Right side panel has been removed.→ *Page 125*

1. Release the electrical plug to the door sensor (1) and unplug it (2).



2. Connect the appliance to the main power.
3. Measure the voltage on the door sensor.
4. ⓘf If the voltage agrees with the value given in the circuit diagram
   - Replace the defective door sensor.→ *Page 78*
5. ⓘf If the voltage does not agree with the value given in the circuit diagram
   - Check the line voltage at the plug.
6. ⓘf If the cable or plug is interrupted (R > 0 to ∞)
   - Replace the defective cable harness.
7. ⓘf If the cable is intact (R = 0)
   - Replace the defective power module.→ *Page 161*

5.9 Checking dispenser

The customer service test program can be used to check the dispenser. The first dispenser impulse opens the detergent cover, subsequent impulses control the dispensing of rinse aid (1 ml rinse aid each time).

If the door is not opened completely, rinse aid may not get into the appliance because the scoop compartment was not filled.

If the appliance door is opened the trigger mechanism will be reset. This has the effect that the next time the coil is activated, the detergent cover will be opened first.

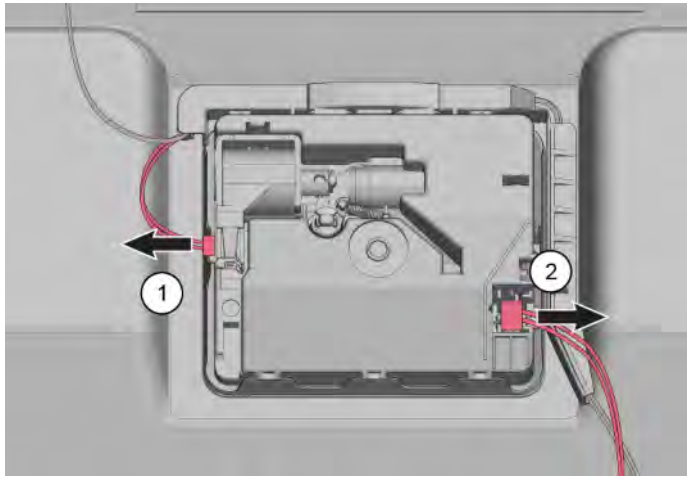
5.9.1 Checking dispenser electrically

	For measurements, see the circuit diagrams. The dispenser can be replaced only as a unit.
	Plug contacts may be damaged! Check the plug contact.

Prerequisite:

- Appliance is disconnected from the power supply.
- Furniture panel has been removed (optional).
- Outer door has been removed.
- Outer door has been removed (fully integrated/integrated).

1. Release the electrical connection on the coil and unplug it (1).



2. Release the electrical connection on the low rinse-aid sensor and unplug it (2).
3. Measure the resistance of the dispenser.
4. ⓘf If the resistance does **not** agree with the value given in the circuit diagram
   - Replace the dispenser.→ *Page 122*
5. ⓘf If the resistance agrees with the value given in the circuit diagram
   - Check the cable resistance at the plug.
6. ⓘf If the line is defective (R > 0)
   - replace the defective cable harness.
7. ⓘf If the line is intact (R = 0)
   - Replace the power module.→ *Page 161*

5.10 Checking drainage valve

5.10.1 Checking function and tightness of drainage valve

1. In the test program, select the item “Test: drainage valve” and observe whether the heat exchanger / water inlet system is emptied.
2. Examine the component visually for leaks.
3. ⓘf If you cannot find any reason for the fault.
   - Check the component electrically.

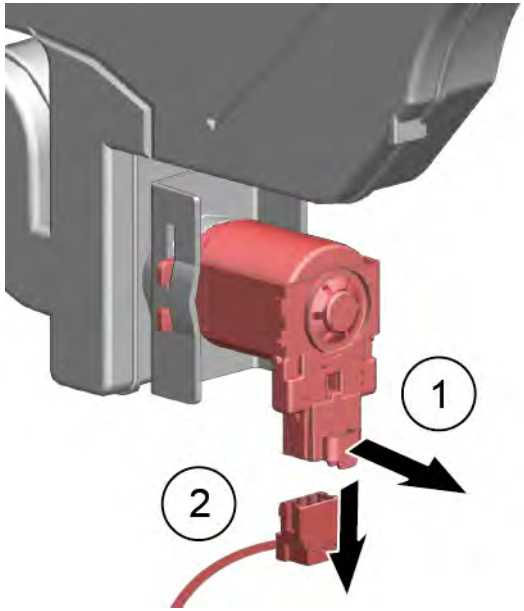
5.10.2 Checking drainage valve electrically

ℹ	For measurements, see the circuit diagrams.
ℹ	Plug contacts may be damaged! Check the plug contact.

Prerequisite:

- ✔ Appliance is disconnected from the power supply.
- ✔ Appliance is freely accessible.
- ✔ Both side panels have been removed.→ *Page 125*

1. Release the electrical plug to the drainage valve (1) and unplug it (2).



2. Measure the resistance of the drainage valve coil.
3. ⓘf If the measured resistance does not agree with the value given in the circuit diagram
   - Replace drainage valve→ *Page 89*
4. ⓘf If the measured resistance agrees with the value given in the circuit diagram
   - Check the line resistance R at the plug.
5. ⓘf If the line is defective (R > 0)
   - Replace the defective cable harness.
6. ⓘf If the line is intact (R = 0)
   - Replace the defective power module→ *Page 161*.

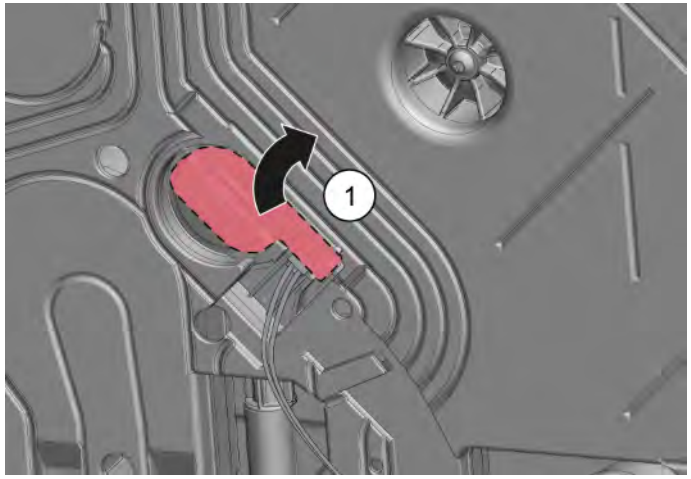
5.11 Electrical test of reed switch, flow meter

Prerequisite:

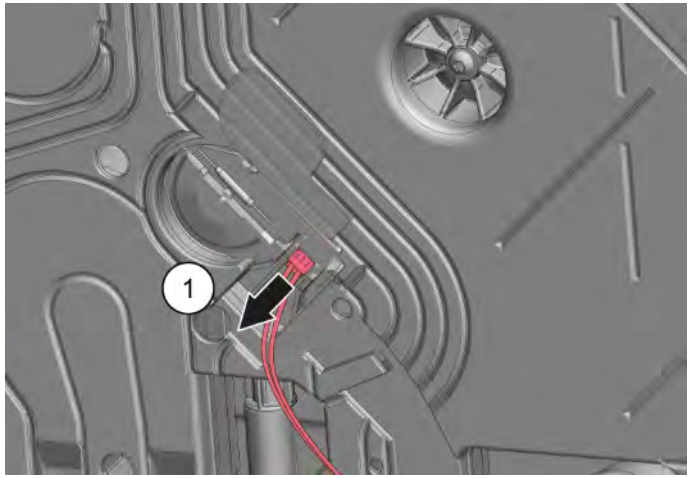
- Machine is disconnected from power source.
- Machine is uninstalled / removed from installation.
- Left wall has been removed.
- Reed switch has no visible damage (glass broken, PCB broken).

5.11.1 Checking reed contact switch

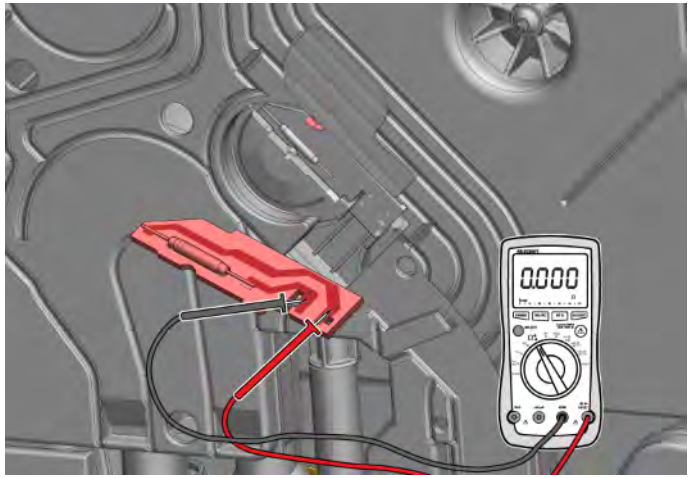
1. Carefully bend the plastic cover of the heat exchanger / water inlet open.



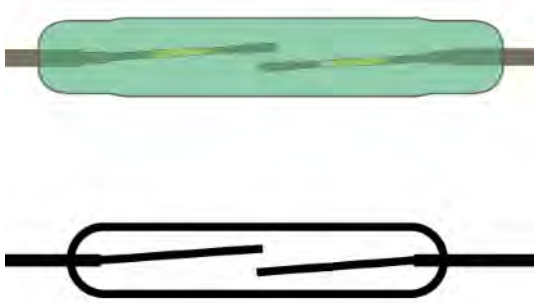
2. Remove the connector.



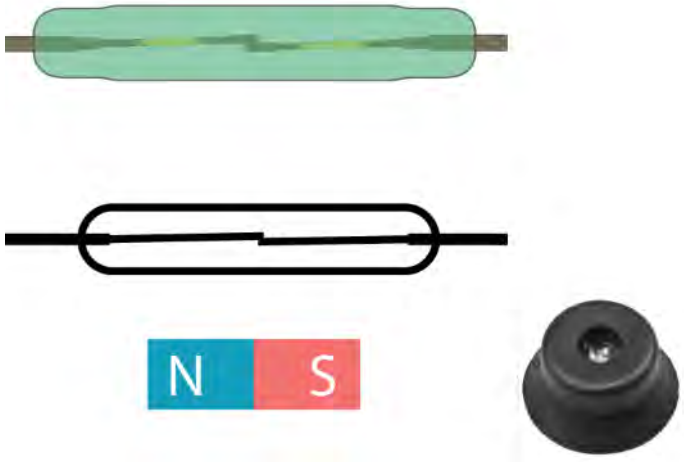
3. Connect a Multi-meter to the PCB and set it to Resistance max. 200 Ohm.



4. In its resting state the contact of the Reed Switch should be visible open.



5. Present a magnet close to the Reed Switch. The contact should close and the Multi-meter should read close to zero.



5.11.2 Installing reed contact switch

1. Remove the Multi-meter from the PCD.
2. Reconnect the electrical connector.

5.12 Check zeolite 3.0 system

The zeolite material used is designed for the life span of the appliance.

Specific measurement of the zeolite system's function is not possible via customer service. Prevailing circumstances such as water quality, ambient temperature, rinse-aid brand, load and type of dishwashing items are complex, but play an important role in the drying phase. Only the function of the heating element and the fan motor can be checked.

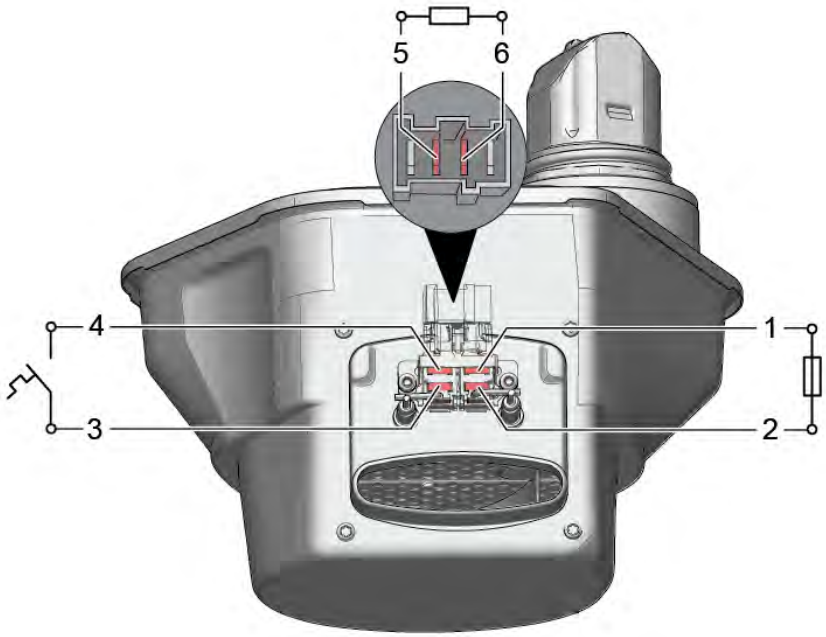
5.12.1 Testing heater

	See the circuit diagrams for the measurements. The heating element is located in the interior of the zeolite container. Next to the connection point of the heating element (marked in red), there is a short circuit (marked in green) and a thermal fuse (marked in blue) on the zeolite container.
	Connection 1-2: Zeolite container thermal fuse (continuity when functional). Connection 3-4: Zeolite container clixon (continuity when functional). Connection 5-6: Zeolite container heater.

Prerequisite:

- ✔ Appliance is disconnected from the power supply.
- ✔ Connection to the heating element is accessible.

1. Attach the measuring tips to the upper connection on the two inner contacts.



2. Measure and compare the resistance.
3. ⓘf If the resistance does not agree with the value given in the circuit diagram
   - Replace the faulty zeolite container.

5.12.2 Checking the fan

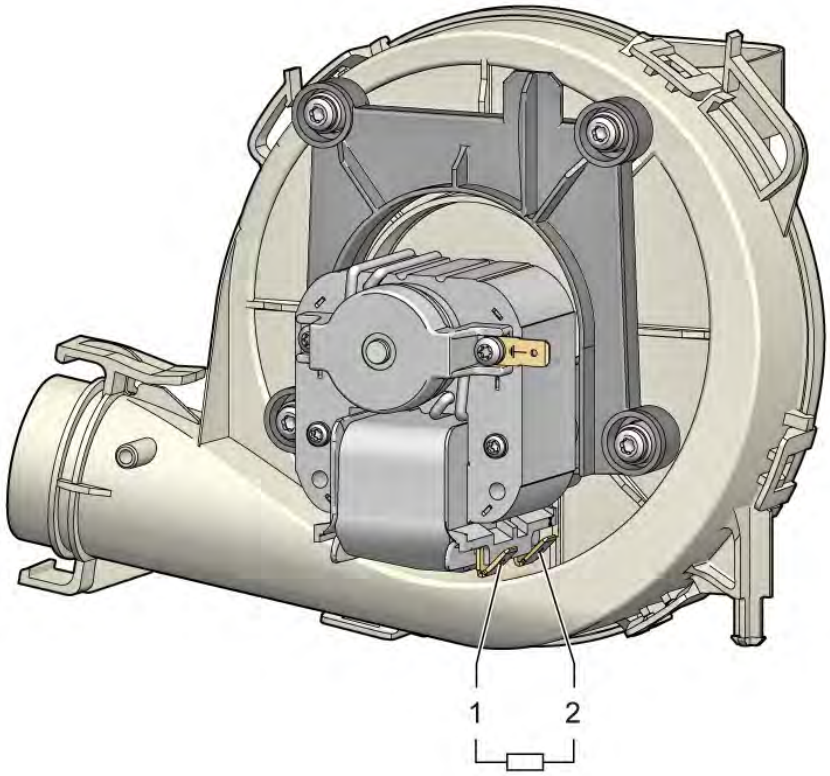
	For measurements, see the circuit diagrams.

Prerequisite:

- ✔ Appliance is disconnected from the power supply.
- ✔ Fan connection is accessible.

1. Attach the measuring tips to both connections of the fan motor and check the resistance.
2. ⓘf If the resistance does not agree with the value given in the circuit diagram

- Replace the faulty fan.



5.13 Checking drain pump

5.13.1 Checking function and tightness of drain pump

1. Check the drain pump using the customer service test program.
2. ⓘf If fault codes are displayed
   - perform the subsequent steps specified in the fault code table.
3. ⓘf If the drain pump makes any unusual (loud) noises
   1. check it for foreign bodies. Remove any foreign bodies from the pump.
   2. check that the service hatch is correctly seated.
   3. replace the drain pump.

5.13.2 Checking drain pump electrically

ⓘ	For measurements, see the circuit diagrams.
ⓘ	Plug contacts may be damaged! Check the plug contact.

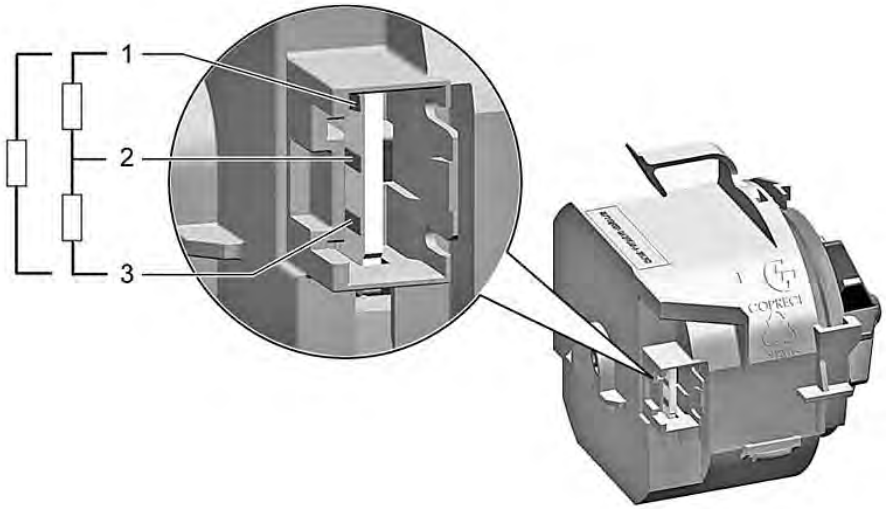
Prerequisite:

- ✔ Appliance is disconnected from the power supply.
- ✔ Base socket plate has been removed.→ *Page 142*
- ✔ Toe panel has been removed (optional).→ *Page 141*
- ✔ Connection to the drain pump is accessible.

1.

ⓘ	Resistance measurement The resistance values are approximate values. All measurements must be symmetrical (identical resistance values).

Measure the winding resistance.



2. ⓘf If the resistance **does not** agree with the value given in the circuit diagram
   - replace the drain pump→ *Page 113*.
3. ⓘf If the measured resistance does agree with the value given in the circuit diagram
   - check the line resistance R at the plug-in connections.
4. ⓘf If the line or plug-in connection is interrupted (R > 0)
   - replace the defective cable harness.
5. ⓘf If the line is intact (R = 0)
   - replace the power module.→ *Page 161*

5.14 Checking heat pump (removed)

The customer service test programme is used to check the heat pump for all possible faults. Incorrect measurements are displayed as error codes.

	For measurements, see the circuit diagrams.
	Plug contacts may be damaged! Check the plug contact.

Prerequisite:

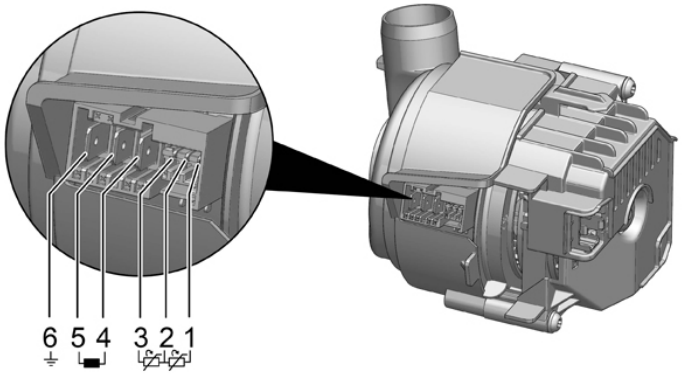
Heat pump has been removed.→ *Page 109*

5.14.1 General procedure

1. If resistance **does not** agree with value given in circuit diagram
   - replace heat pump.→ *Page 109*
2. If resistance does agree with value given in circuit diagram
   - check line resistance R at plug-in connections.
3. If line or plug-in connection is interrupted (R > 0)
   - replace defective cable harness.
4. If line is intact (R = 0)
   - replace defective power module.

5.14.2 Checking heat pump heater electrically

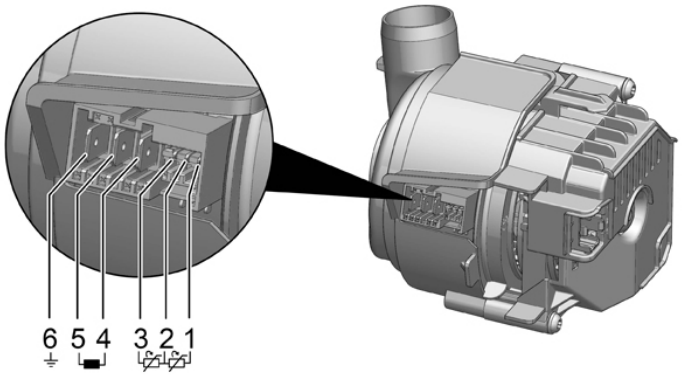
1. Measure resistance of heater at contact 4 - 5.



2. If resistance does not agree with value given in circuit diagram
   - replace defective heat pump→ *Page 109*

5.14.3 Checking heat pump's NTC sensors electrically

1. Measure resistance of NTC sensors at contacts 2 - 1 and 2 - 3 (measurements must be equal).



2. ⓘf If resistance does not agree with value given in circuit diagram
   - replace defective heat pump.→ *Page 109*

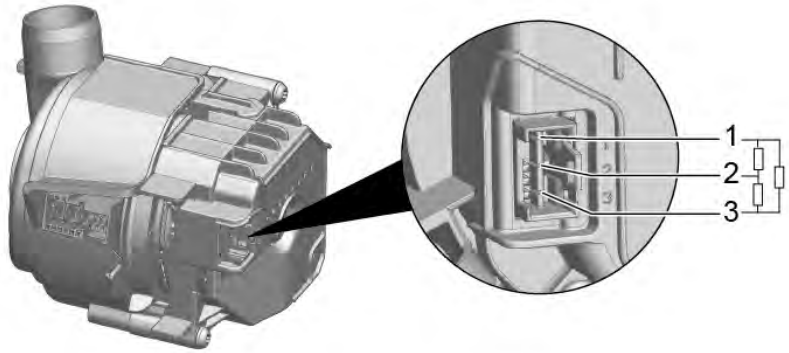
5.14.4 Heat output too low

The water is to be heated at 1.5 °C/min. If heating takes place more slowly, check the water hardness and the setting of the water softening unit. Deposits may have formed on the heater.

- ▸ Clean appliance with dishwasher detergent and descale if necessary.
  Use descaler obtained from customer service.

5.14.5 Checking heat pump's BLDC motor electrically

1. Measure resistance of BLDC motor at contacts 2 - 1, 2 - 3 and 1 - 3 (measurements must be equal).



2. ⓘf If resistance does not agree with value given in circuit diagram
   - replace defective heat pump→ *Page 109*

5.15 Checking Aquastop valve

5.15.1 Checking function and tightness of Aquastop valve

1. Check for correct installation (correct connection, hoses not kinked).
2. Visually inspect the connection for water droplets.
3. Measure the flow rate.
4. ⓘf If a flow rate of 2.5 l/min is not reached
   1. check the flow limiter and filter in the Aquastop valve for dirt or blockage.
   2. check whether the tap contains limescale.
5. ⓘf If a flow rate of 2.5 l/min is exceeded
   - the flow limiter is defective --> replace the valve.
6. ⓘf If you cannot find any reason for the fault
   - check the component electrically.

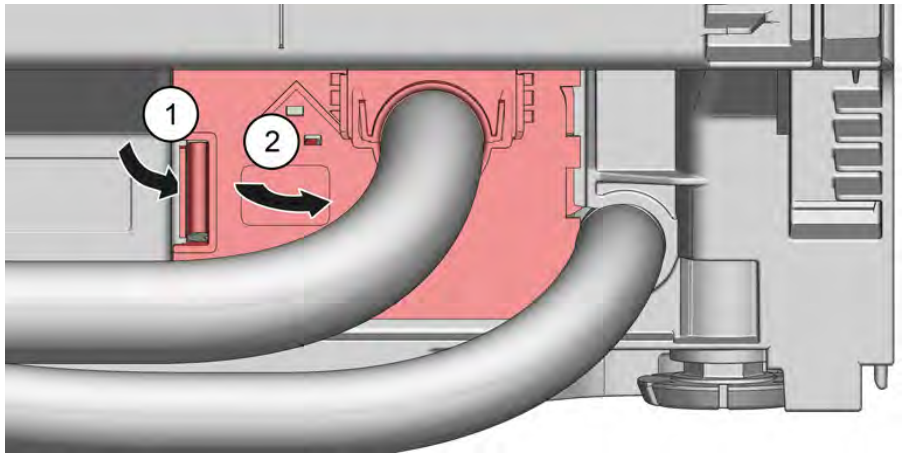
5.15.2 Checking Aquastop valve electrically

ⓘ	For measurements, see the circuit diagrams.
ⓘ	Plug contacts may be damaged! Check the plug contact.

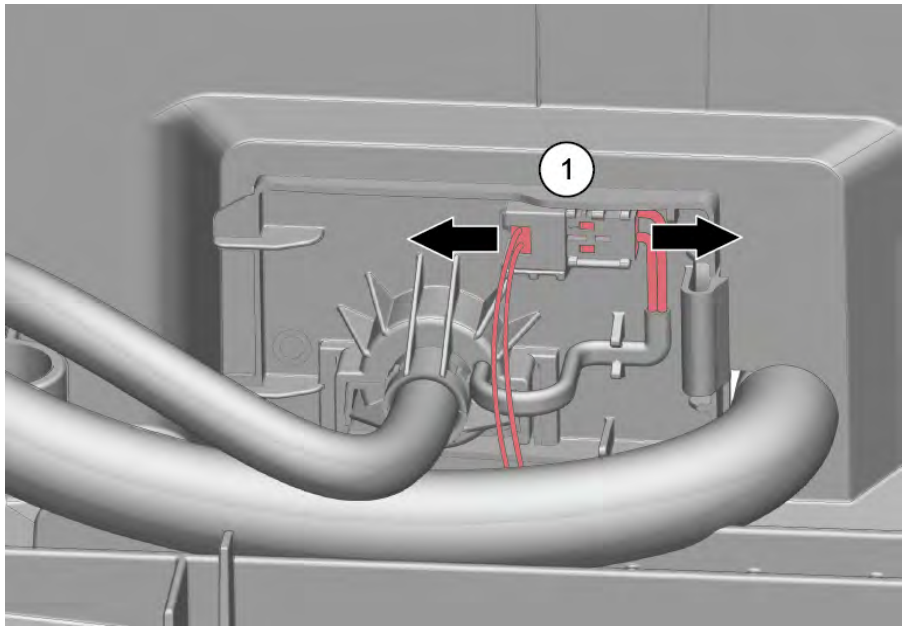
Prerequisite:

- ✔ Appliance is disconnected from the power supply.
- ✔ Water tap is closed.
- ✔ Appliance is freely accessible.
- ✔ Appliance back side is accessible.

1. 1. Release the stop tab (1).
   2. Fold out the cover with the inlet hose (2).



2. Release the electrical connector to the Aquastop valve and unplug it.



3. Measure the resistance of the Aquastop valve coil.

4. ⓘf If the measured resistance does not agree with the value given in the circuit diagram
   - replace the defective Aquastop valve.
5. ⓘf If the measured resistance does agree with the value given in the circuit diagram
   - check the line resistance R at the plug-in connections.
6. ⓘf If the line or plug-in connection is interrupted (R > 0)
   - replace the defective cable harness.
7. ⓘf If the line is intact (R = 0)
   - replace the defective power module.→ *Page 161*

5.16 Checking water switch

	For measurements, see the circuit diagrams.

5.16.1 Checking operation of water switch visually

Prerequisite:

- Appliance is connected.
- Transparent door has been installed.→ *Page 50*

1. Start the customer service test program. (Do not use an ordinary program because the length of time until the water change varies with each program!)
2. Wait until the water switch is actuated.
3. ⓘf If the upper and lower spray arms do not rotate alternately
   - replace the defective water switch.→ *Page 97*

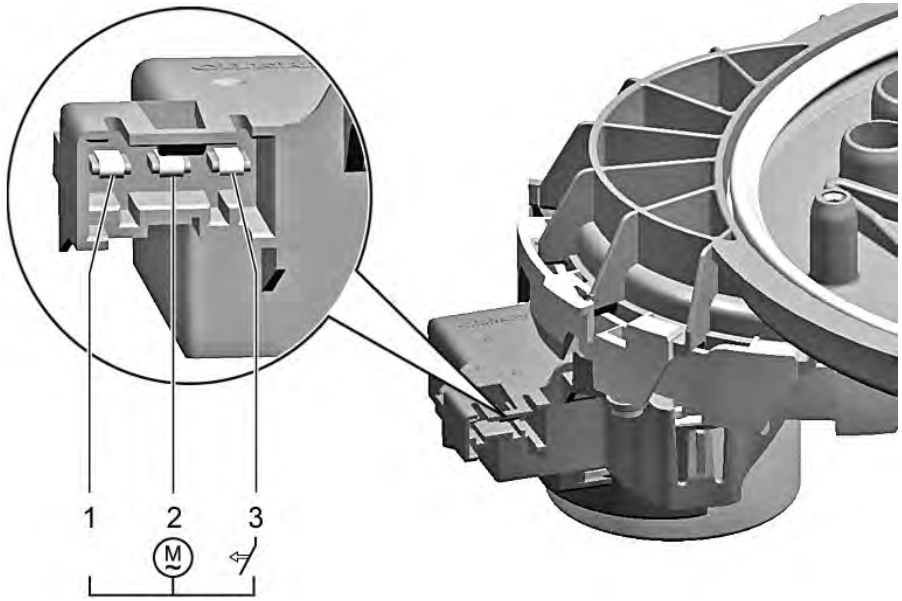
5.16.2 Checking water switch electrically

	Plug contacts may be damaged! Check the plug contact.

Prerequisite:

- Appliance is disconnected from the power supply.
- Rinsing tank has been folded down.

1. Release the electrical connector to the water switch and unplug it.
2. Measure the resistance of the motor winding in the water switch.



3. ⓘf If the resistance does not agree with the value given in the circuit diagram
   - replace the defective water switch→ *Page 97*.

5.17 Checking EmotionLight

	For measurements, see the circuit diagrams. The EmotionLight is fastened at the front on the upper frame of the washing tank.

	**Danger** **Exposed, live parts!** Death by electrocution ▸ Disconnect appliances from electrical supply at least 60 seconds before starting repairs. ▸ Do not touch housings, frames and components. ▸ For tests on energised circuits, use a Residual Current Device (RCD). ▸ Ensure that the resistance of the earthing conductor does not exceed the standardized value (appliance is well earthed).
	Plug contacts may be damaged! Check the plug contact.

Prerequisite:

- Appliance is disconnected from the power supply.
- Appliance is freely accessible.
- Right-hand side panel has been removed.→ *Page 125*
- Upper part of housing for the power module has been removed.

1. Unplug the EmotionLight from the power module.
2. Connect the appliance to the power supply.
3. Activate the EmotionLight in the customer settings and open the door.
4. Measure the voltage on the power module.
5. ⓘf If the voltage does **not** agree with the value given in the circuit diagram
   - → *Page 161*
6. ⓘf If the voltage agrees with the value given in the circuit diagram
   - Replace the EmotionLight.

5.18 Checking TimeLight

For measurements, see the circuit diagrams.
The TimeLight is mounted on the base socket plate.

5.18.1 Checking installation

- Ensure that no other part of the cabinet (such as the trim) or the appliance (such as the toe panel) obscures the light beam.

5.18.2 Checking TimeLight electrically

Danger

Risk of electric shock while performing tests on energised circuits!
- For tests on energised circuits, use a Residual Current Device (RCD).
- Do not touch housings, frames, components and cables.

Notice

Damage to the plug contact possible!
-

Prerequisite:
- Toe panel removed (optional).
- Base socket plate removed.

1. Unplug the TimeLight from the power module.
2. Connect the appliance to the power supply.
3. Activate the TimeLight by closing the door and starting the programme.
4. Measure the voltage on the power module.
5. ⓘf If the voltage does **not** agree with the value given in the circuit diagram
   - → *Page 161*.
6. Plug the TimeLight back in.
7. Check voltage on the TimeLight plug.
8. ⓘf If voltage present,
   - replace defective TimeLight.
9. ⓘf If voltage not present,
   - Replace the defective cable harness.

→ *"Replacing TimeLight", Page 149*

5.19 Checking the power module

The power module can be examined only visually.

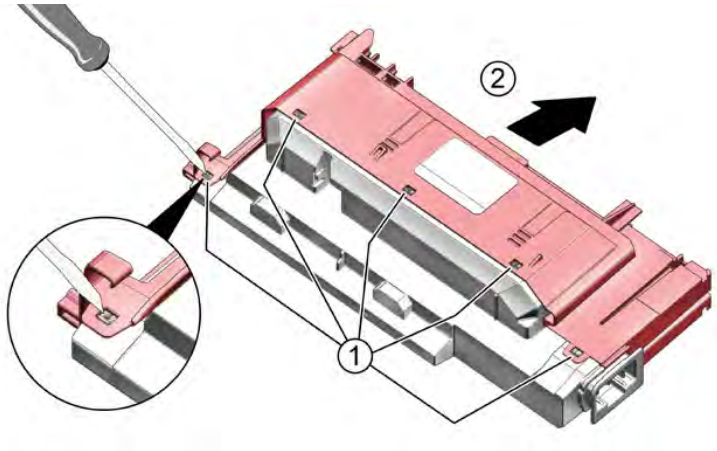
	Damage to components on the power module indicates defective components in the appliance. If there is such damage, then replace these components as well.

5.19.1 Disassembling the power module

Prerequisite:

- Power module has been removed.→ *Page 161*

1. Release the catches on the housing (1).



2. Pull the parts of the housing apart (2).
3. Lift the power module out of the upper housing section.

5.19.2 Check the power module visually

A visual inspection of the power module detects any damage to it with complete failure of the appliance and when an error code is displayed. This can prevent consequential faults in other components.

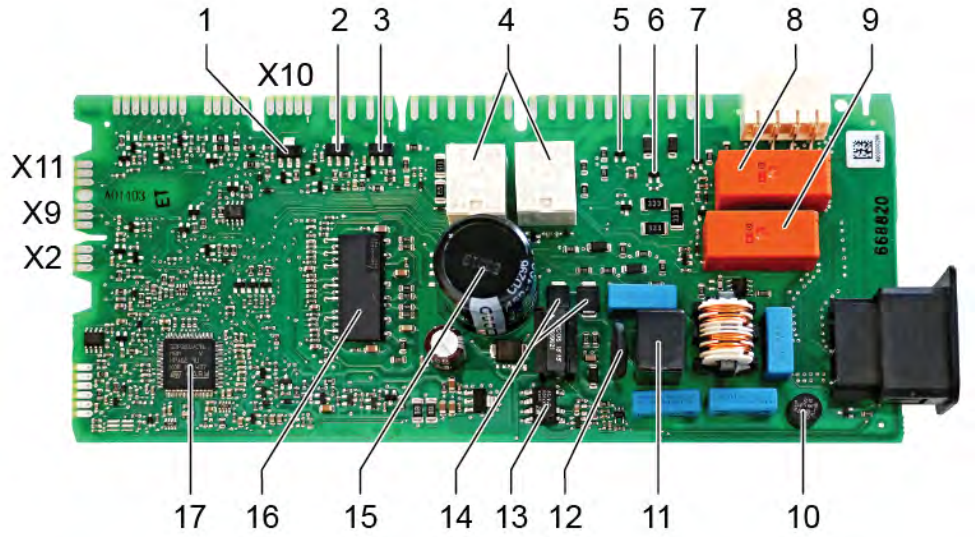


Fig. 26: Position of the components on the power module

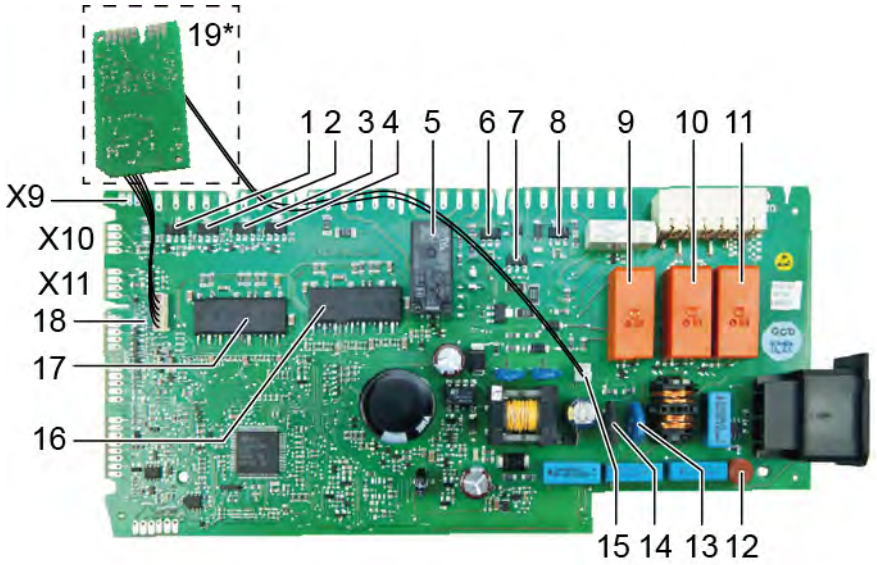
1	TH405 = Regeneration valve
2	TH403 = Filling valve / AquaStop
3	TH401 = Water switch
4	U702/U701 = Relay heating pump /drain pump
5	T326 = Dispenser
6	T325 = Drainage valve of heat exchanger, dispenser
7	T324 = Drainage valve of heat exchanger
8	K303 = Heating (operating relay)
9	K301 = Heating (safety relay)
10	F100 = Safety fuse
11	R119 = Varistor with thermal fuse
12	R101 = NTC (intermediate circuit)
13	5 V Voltage regulator
14	D103/D113 = Rectifier diodes
15	Capacitor, intermediate circuit
16	V700 = BLDC motor control (HP/LP)
17	Processor

1. Perform a **visual** check for any damage to the components on the power module.

2. ⓘf If any of the components on the power module are damaged
   - Check the corresponding parts of the appliance and replace any that are defective.
3. ⓘf If **none** of the components on the power module is damaged
   1. reassemble the power module.
   2. Continue diagnosing the fault.

5.19.3 Check the power module visually

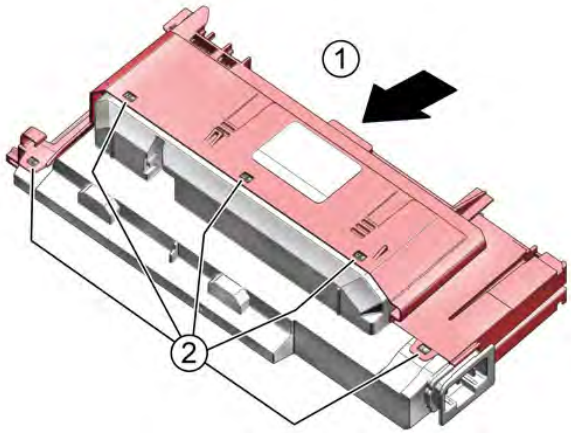
A visual inspection of the power module detects any damage to it with complete failure of the appliance and when an error code is displayed. This can prevent consequential faults in other components.



1 TH401 = water points
2 TH402 = optional: Actuator water storage tank
3 TH403 = filling valve / AquaStop
4 TH405 = regeneration valve
5 Relais DP / Zeolith-fan
6 T324 = Valve-heat exchanger
7 T325 = Drain valve heat exchangers, Dispenser
8 T326 = Dispenser
9 K302 = Zeolith heater (working relais)
10 K301 = Zeolith heater (safety relays)
11 K303 = Heater 9working relais)
12 F100 = Fuse
13 R119 = Varistor, overvoltage protection with thermal fuse
14 R101 = NTC
15 Terminal bar for optional module
16 V700 = BLDC-motor control (HP/Fan or HP/DP)
17 V200 = BLDC-motor control (HP)
18 Terminal bar for optional module
19 Optional modules with galvanic isolation

5.19.4 Reassembling the power module

1. Slide the power module into the upper housing section (1).
2. Push the housing sections together and latch them evenly (2).



5.20 Check CapaTouch operating module

	For measurements, see the circuit diagram. After replacement with an unprogrammed module, this must first be imported.

	**Danger** **Exposed, live parts!** Death by electrocution ▸ Disconnect appliances from electrical supply at least 60 seconds before starting repairs. ▸ Do not touch housings, frames and components. ▸ For tests on energised circuits, use a Residual Current Device (RCD). ▸ Ensure that the resistance of the earthing conductor does not exceed the standardized value (appliance is well earthed).

Prerequisite:

- Appliance is disconnected from the power supply.
- Control panel has been removed.→ *Page 165*
- Connections are accessible.

1. | | |
   |---|---|
   | | The CapaTouch module is supplied with power and data via a 3-pin bus connection.
A 4th line is required for the On and Off switching function. |

   Check the voltages.
2. Import the control panel correction value using the iService software (operating module will not function before).

5.21 Checking regeneration valve

5.21.1 Checking tightness and function of regeneration valve

1. | | |
   |---|---|
   | | If salt is transferred, check the cover of the water-softening system for leaks. |

   Use the customer service test programme to check the function of the regeneration valve.

2. Visually check the component for leaks.

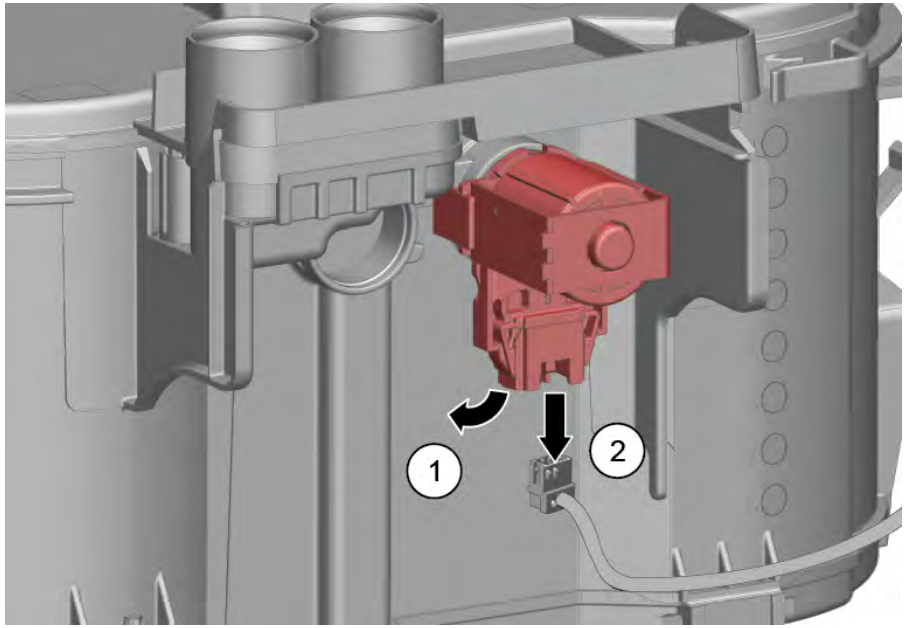
5.21.2 Checking regeneration valve electrically

	For measurements, see the circuit diagrams.
	Plug contacts may be damaged! Check the plug contact.

Prerequisite:

- Appliance is disconnected from the power supply.
- Appliance is freely accessible.
- Left-hand side panel has been removed.→ *Page 125*

1. Release the electrical connection on the regeneration valve (1).



2. Pull out the plug (2).
3. Measure the resistance of the regeneration valve.
4. ⓘf If the resistance does not agree with the value given in the circuit diagram
   - Replace defective regeneration valve.→ *Page 94*
5. ⓘf If the resistance does agree with the value given in the circuit diagram
   - Check the cable resistance at the plug.
6. ⓘf If the line is defective (R > 0)
   - Replace the defective cable harness.
7. ⓘf If the cable is intact (R = 0)
   - Replace the defective power module.→ *Page 161*

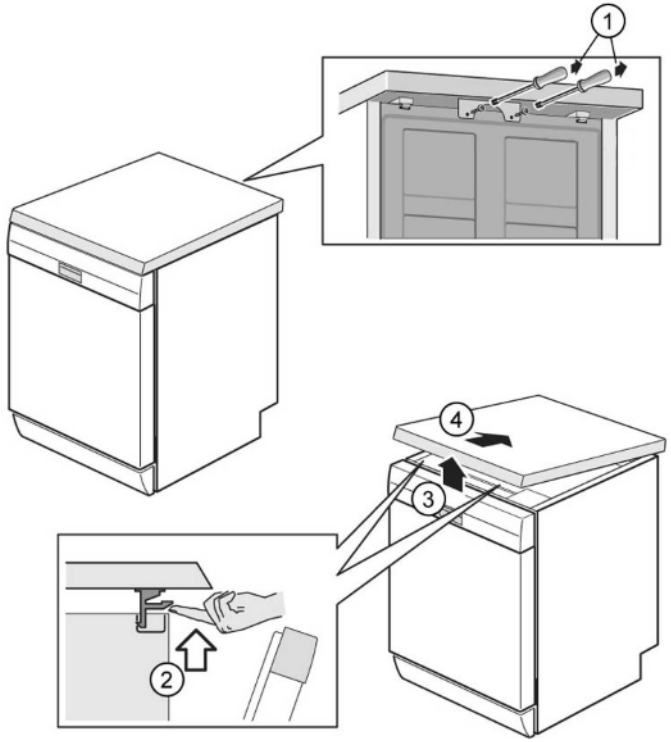
6.1 Replacing worktop

Prerequisite:

- Appliance is disconnected from the power supply.
- Appliance is freely accessible.

6.1.1 Removing worktop

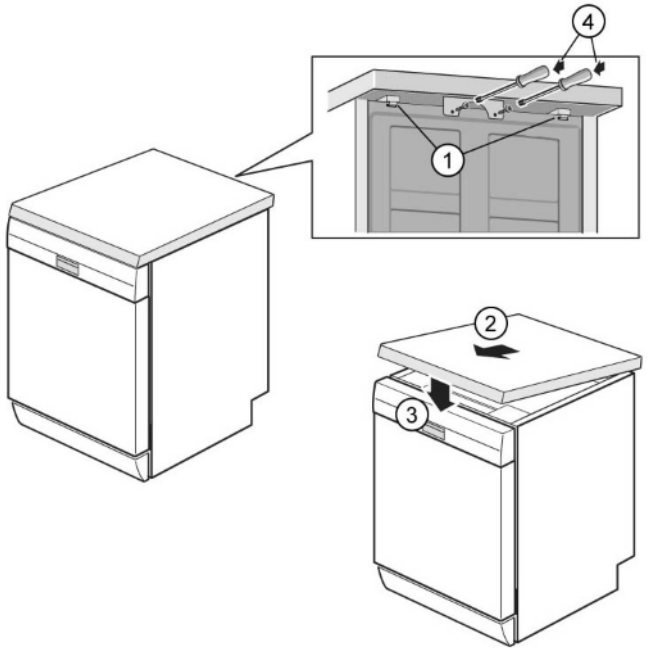
1. Remove the two screws at the back (1) (optional).
2. Press both catch levers under the worktop upwards (2).



3. Lift the worktop slightly at the front (3).
4. Push worktop away towards the rear (4).
5. Remove worktop.

6.1.2 Installing worktop

1. Lock the rear of the worktop into the guides using the retaining collars (1).



2. Push worktop forwards (2).
3. Press the front of the worktop downwards until both catch levers click audibly into place (3).
4. Screw in the two screws again (4) (optional).

6.2 Replacing door sensor

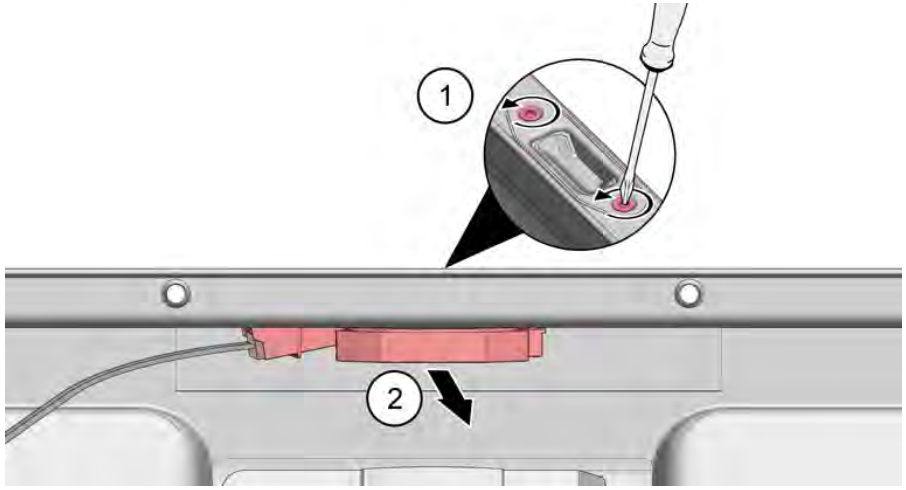
	The door sensor is situated in the upper area of the inner door.

Prerequisite:

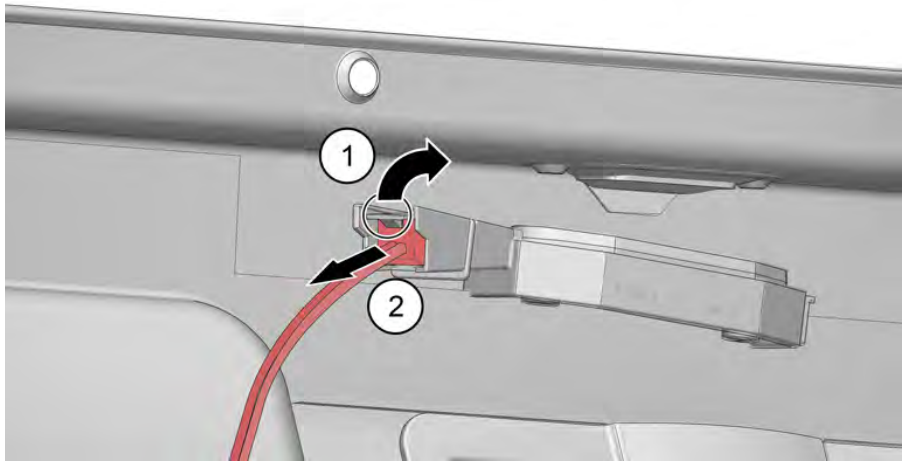
- Appliance is disconnected from the power supply.
- Furniture panel has been removed (optional).
- Outer door has been removed.
- Outer door has been removed (fully integrated/integrated).
- Control panel has been removed.→ *Page 165*

6.2.1 Removing door sensor with closure recess

1. Remove two screws (1) (Torx 10).



2. Remove the door sensor and closure recess (2).
3. Unlock the electrical connection (1).



4. Pull out the plug (2).

6.2.2 Installing door sensor with closure recess

- Install the door sensor in reverse sequence.

6.3 Replacing child safety lock

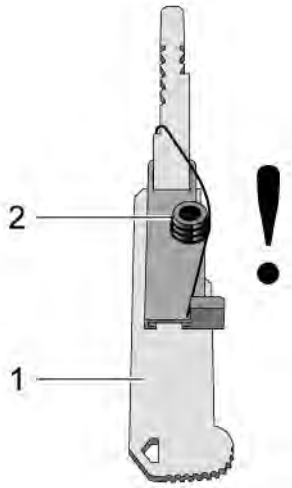


Fig. 27: Components of the child safety lock

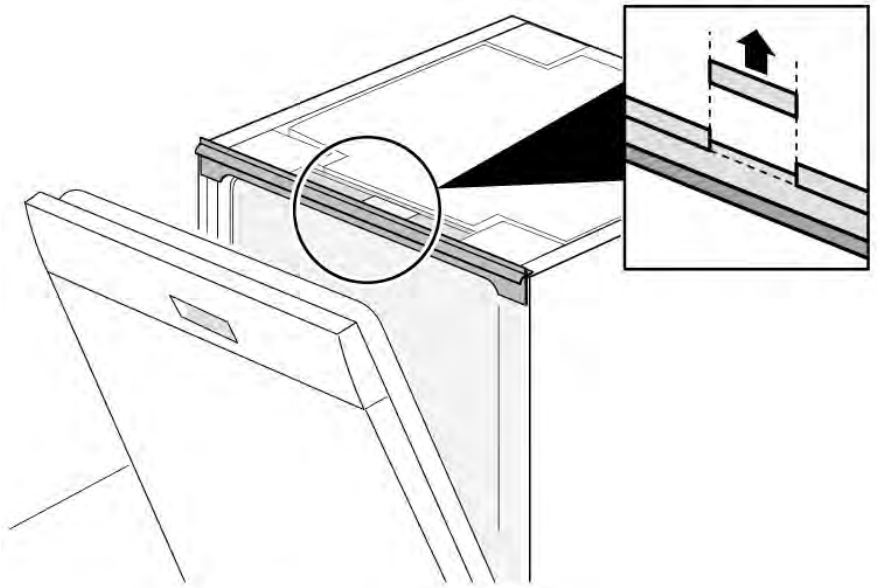
1 Lever
2 Spring

Prerequisite:

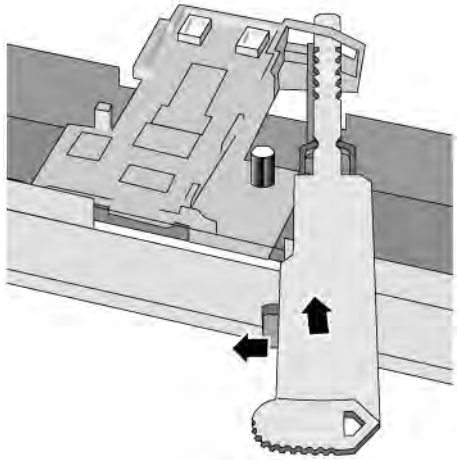
- Appliance is disconnected from the power supply.
- Free-standing appliances: Worktop has been removed.→ *Page 77*
- Built-in appliances: Pull out the appliance as far as the container frame.

6.3.1 Installing child safety lock

1. Fix the spring to the lever.
2. Open the appliance door and cut a piece approx. 2 cm wide out of the trim on the upper edge of the appliance next to the door lock.



3. Insert the child safety lock at a slight angle into the door lock and push it on to the door lock.



4. Pull the child safety lock forwards until the spring clicks audibly into place.

5. Press the child safety lock downwards until the spring clicks audibly into place.

	The 2 cm wide recess does not impair the function of the trim. Trim does not have to be replaced.

6.3.2 Removing child safety lock

- Remove the child safety lock in reverse order.

6.4 Replacing door lock

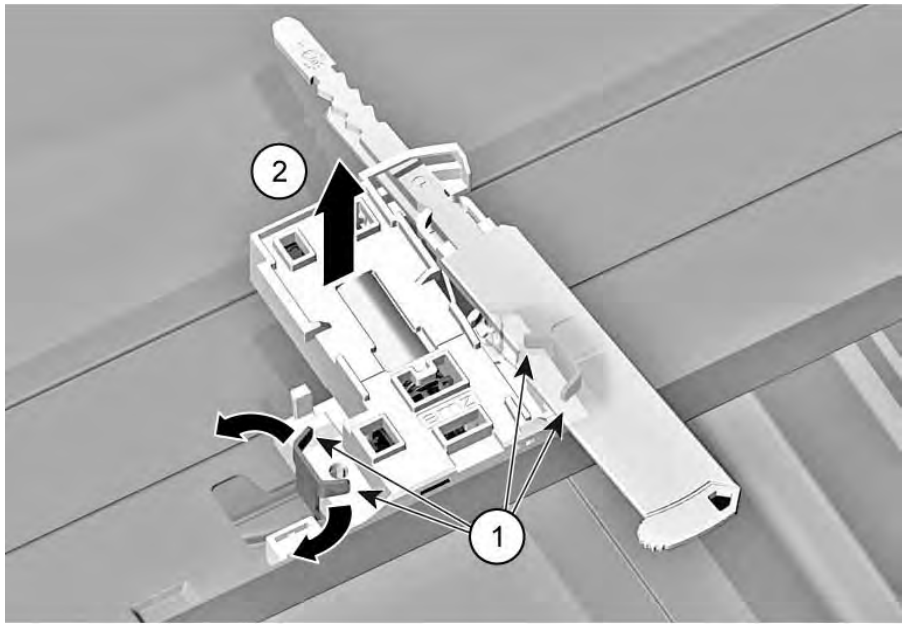
	The door lock is situated in the frame of the rinsing tank at the front of the appliance.

Prerequisite:

- Appliance is disconnected from the power supply.
- Free-standing appliances: Worktop has been removed.→ *Page 77*
- Door opening module has been removed (optional).
- Built-in appliances: Pull out the appliance as far as the container frame.

6.4.1 Removing door lock

1. Bend both the retaining brackets at the door lock (1) straight.



2. Disengage both catch elements (on the tank frame at the front and back) with a small screwdriver.
3. Take the door lock out of the tank frame.
4. Detach door lock from the catch on the left (1).

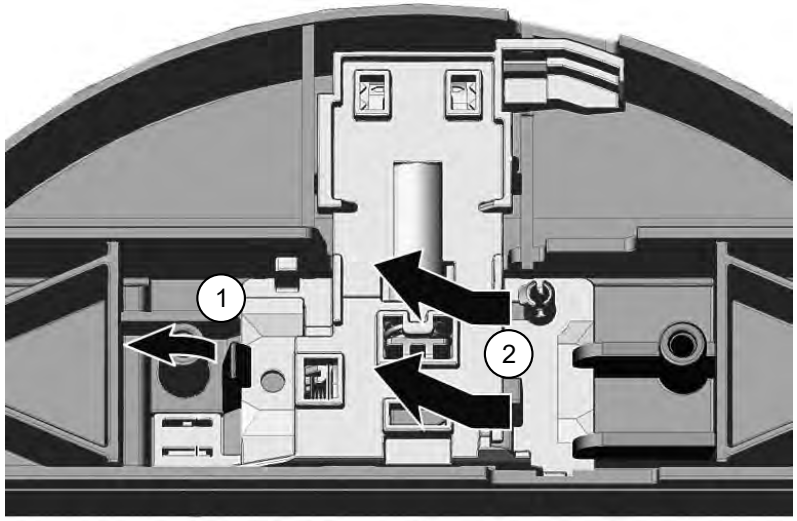
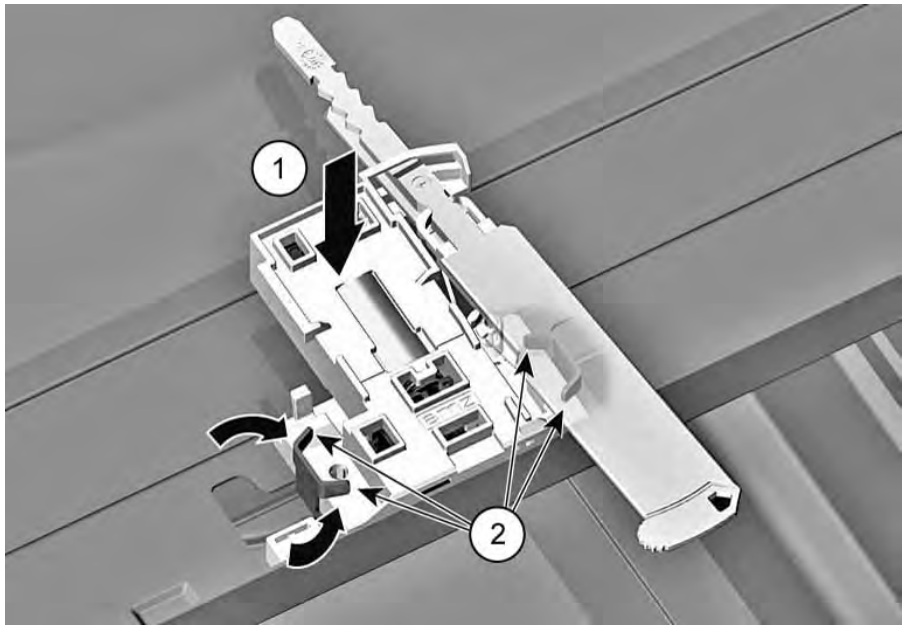


Fig. 28: door lock

5. Lift off the door lock from the left to the right (2).

6.4.2 Installing door lock

1. Insert the door lock into the tank frame and click into place (1).



2. Click the catch elements into place.
3. Bend both retaining brackets inwards to fix the door lock (2).
4. Place the right side of the door lock under two lugs (1).

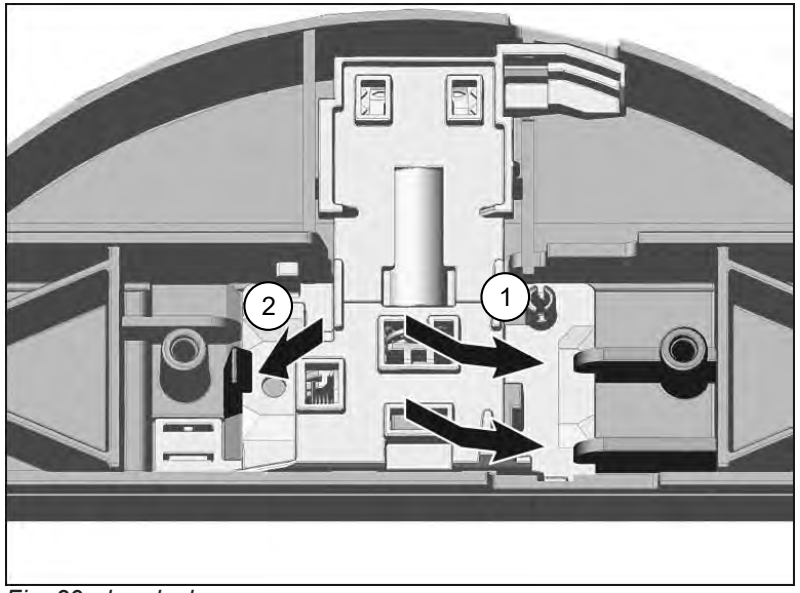


Fig. 29: door lock

5. Press left side of the door lock until it snaps under the catch on the left (2).

6.4.3 Unlocking the system

	If the spring lock is locked manually (e.g. when using the transparent diagnosis door), the system must be unlocked again.

► Close the appliance door.

	Strong mechanical resistance needs to be overcome! Increased force is therefore necessary to close the door.

6.5 Replacing water inlet system

Required tools:

Auxiliary tool	Threaded ring salt container, cover cap vent slot, water inflow pin and screw	[00341805]

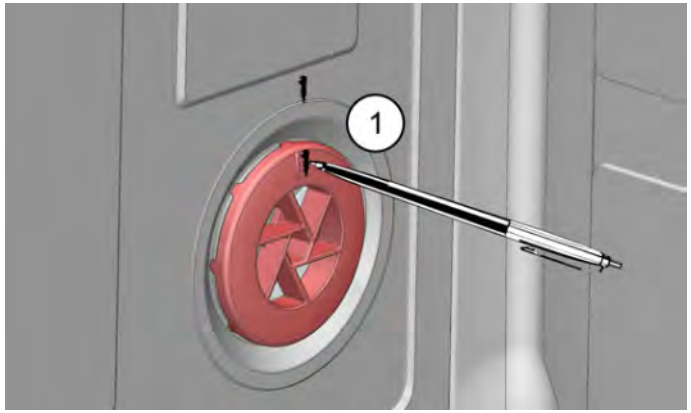
The water inlet system is on the left-hand side of the washing tank.

Prerequisite:

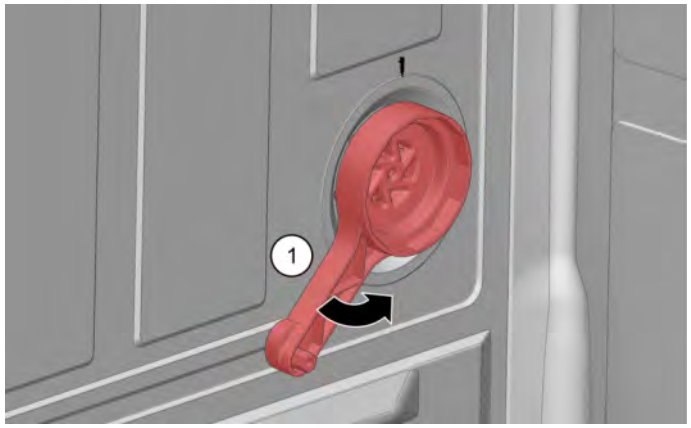
- Appliance is disconnected from the power supply.
- Appliance is freely accessible.
- Appliance has been emptied.
- Cable from the flow meter has been unplugged.
- Water storage tank has been removed (optional).
- Left side panel has been removed.→ *Page 125*

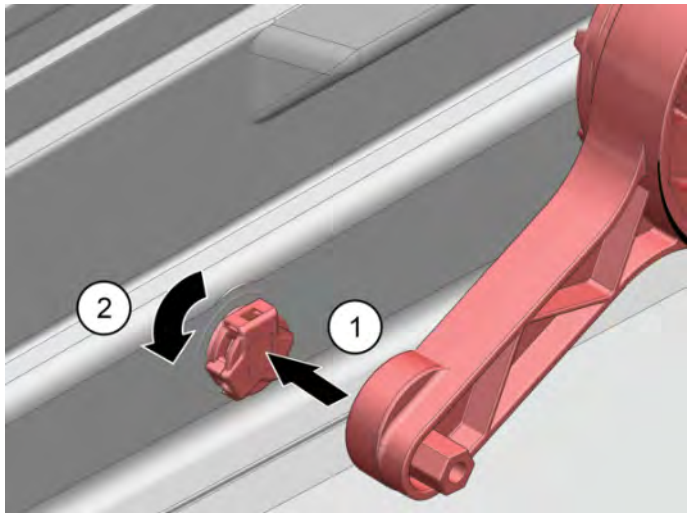
6.5.1 Removing water inlet system

1. Mark the installation position of the cover cap steam vent with a water-soluble pen.



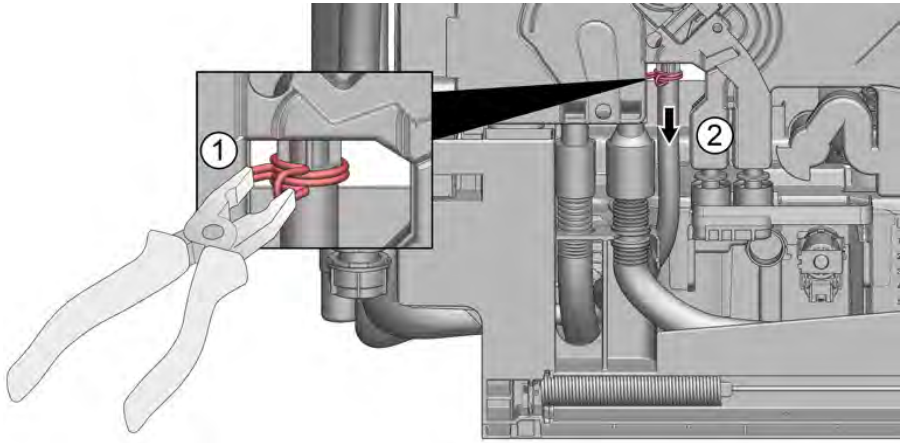
2. Remove the cover cap steam vent and the water inlet socket with the auxiliary tool.





3. Bend the cover of the flow meter (2) outwards. Replacing the flow-through sensor→ *Page 90*
4. Remove the electrical connection.

5. Release the hose clamp (1) on the supply hose.

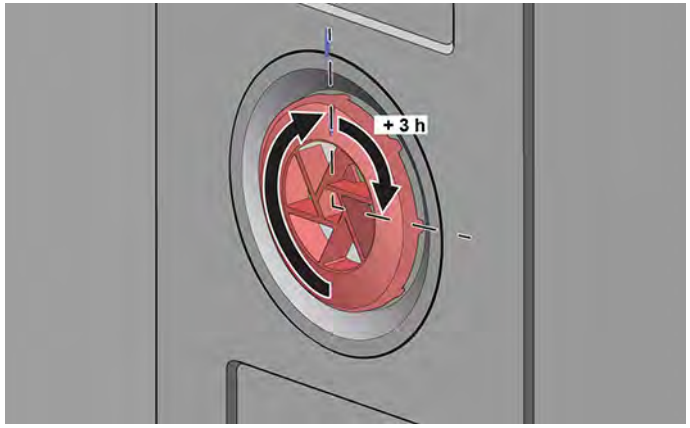


6. Remove the supply hose (2).
7. Detach the retaining element.
8. Remove the water inlet system to the front (1) and pull it up out of the water-softening system (2).

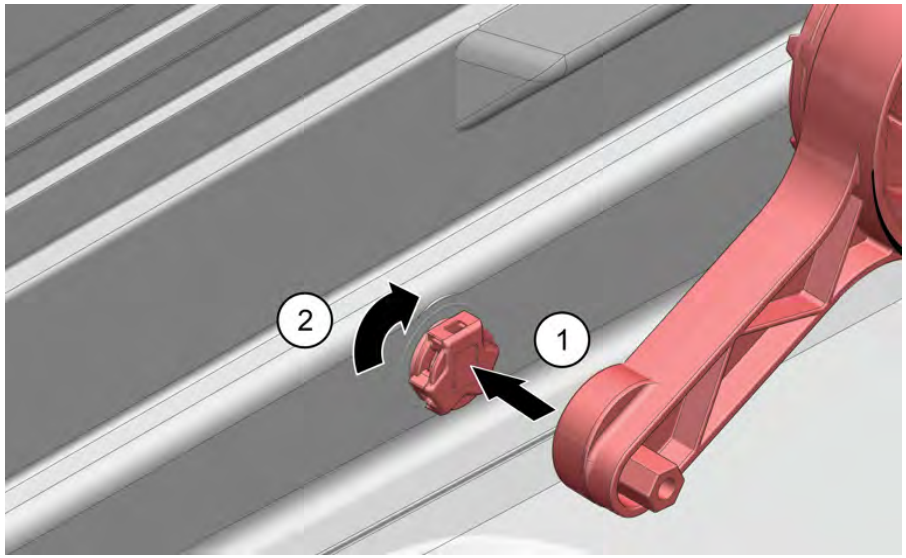
6.5.2 Installing water inlet system

	To prevent leaks: ■ Avoid squeezing the connections to the water-softening system, the water drain hose and the seals. ■ Ensure that the seal of the cover cap steam vent is correctly positioned.

1. Insert the water inlet into the openings of the water-softening system and the water drain hose.
2. Insert the water inlet into the retaining element on the rear of the appliance.
3. Fit the water inlet hose and secure with hose clamps.
4. Tighten the cover cap steam vent to the marking indicated.



5. To prevent leaks, continue to tighten the cover cap steam vent by a ¼ revolution (+3 h).
6. Tighten the water inlet socket with the auxiliary tool.



7. Fit the supply hose and secure with a hose clamp.
8. Attach the electrical connection of the flow meter.
9. Bend the cover back.

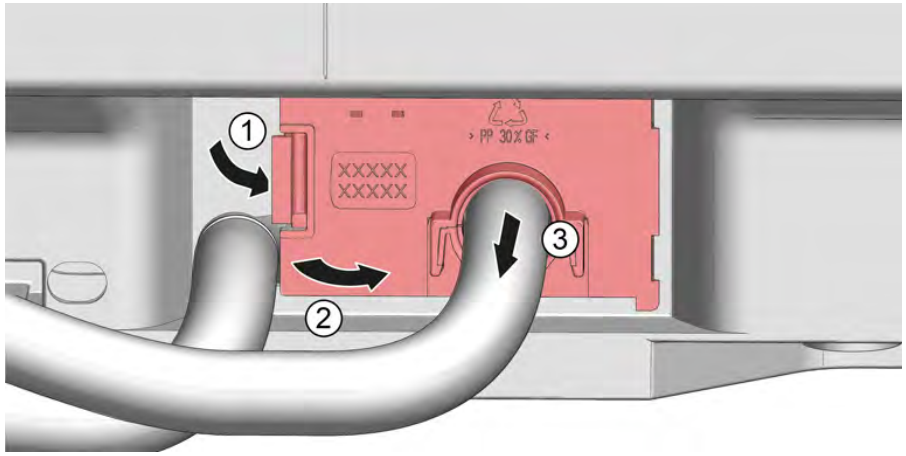
6.6 Replacing supply hose

Prerequisite:

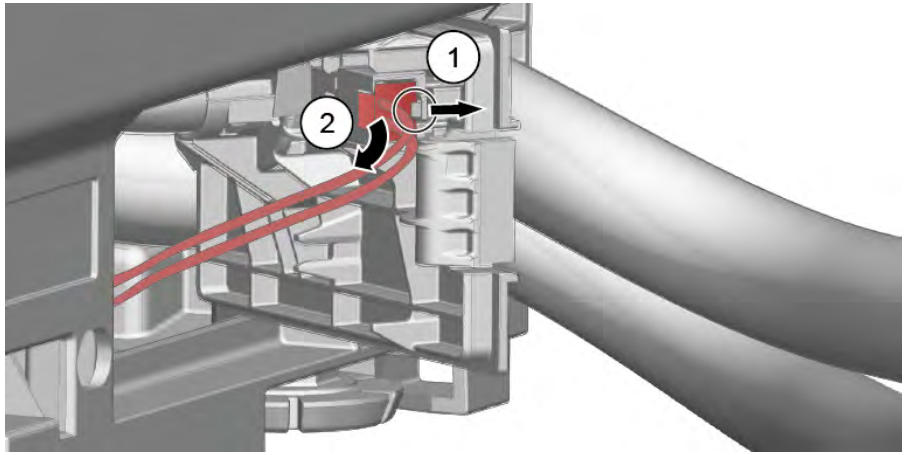
- Appliance is disconnected form the power supply.
- Appliance is drained.
- Left side panel has been removed→ *Page 125*

6.6.1 Removing supply hose

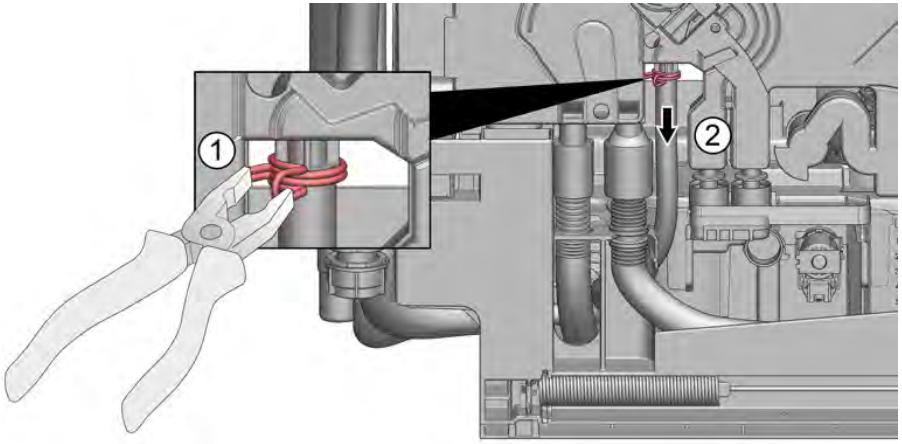
1. Loosen the panel catch mechanism.



2. Flap to the right hand side.
3. Fold out the panel.
4. Unlock the lock (1).



5. Disconnect electrical connection (2).
6. Open clamp (1).



7. Remove supply hose (2) from the heat exchanger / water inlet.

6.6.2 Installing supply hose

- Installation in reverse sequence.

	After assembling is finished, start customer service test program and check for leakage.

6.7 Replacing drain hose

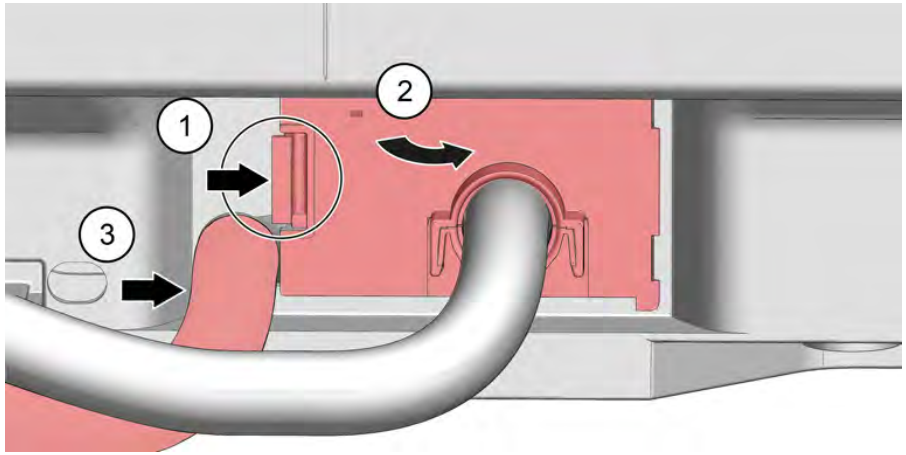
	The drain hose is installed in the lower area at the rear of the appliance.

Prerequisite:

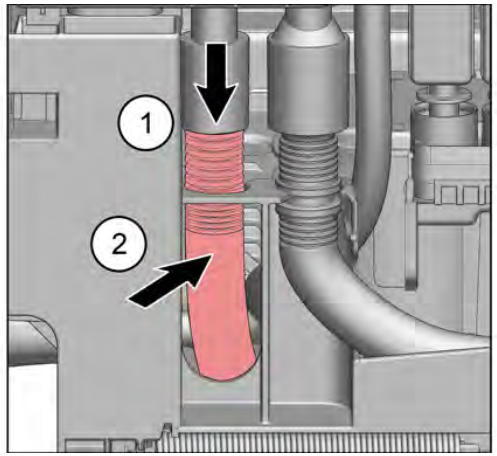
- Appliance is disconnected from the power supply.
- Appliance is freely accessible.
- Appliance is drained.
- Left side panel has been removed→ *Page 125*

6.7.1 Removing outlet hose (appliance with AquaStop)

1. Release the panel catch mechanism (1).



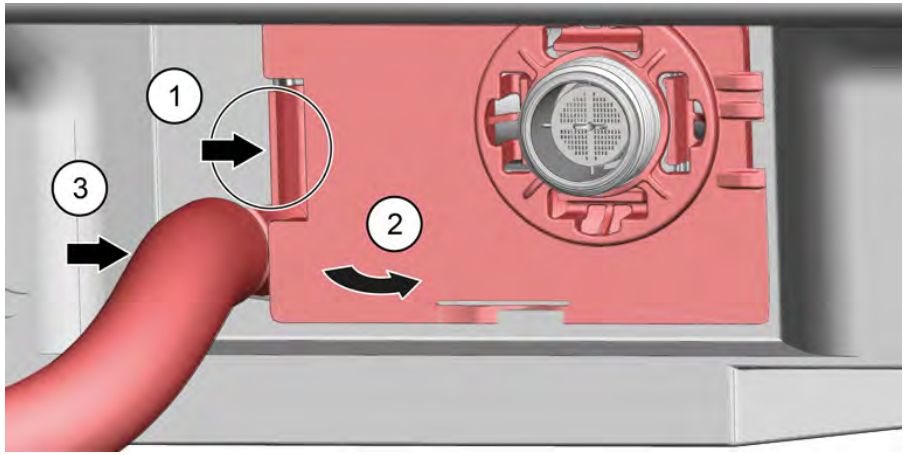
2. Fold the panel to the right side (2).
3. Pull the outlet hose out of the holder (3).
4. Pull the drain hose out of the connection to the water inlet system / heat exchanger (1).



5. Then press the drain hose into the interior of the appliance (2).
6. Pull the drain hose out of the appliance at the rear.

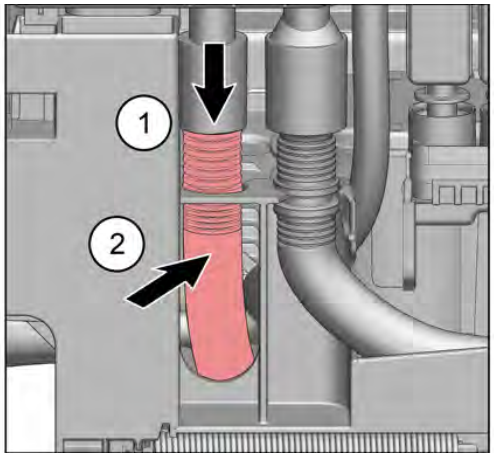
6.7.2 Removing outlet hose (appliance with inlet valve)

1. Release the panel catch mechanism(1).



2. Open the retaining flap (2).
3. Pull the outlet hose out of the holder (3).

4. Pull the drain hose out of the connection to the water inlet system / heat exchanger (1).



5. Then press the drain hose into the interior of the appliance (2).
6. Pull the drain hose out of the appliance at the rear.

6.7.3 Installing drain hose

1.

	**Notice** **Incorrect installation!** Leakage ▸ Ensure that the drain hose does not twist during installation.

Install the outlet hose in reverse sequence.

2.

	Check for leaks.

6.8 Replacing drainage valve

	The drainage valve is located in the lower area of the heat exchanger.

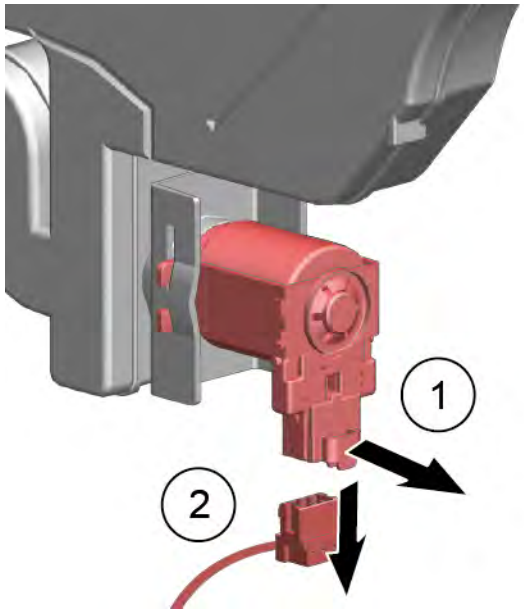
Prerequisite:

- Appliance is disconnected from the power supply.
- Appliance is drained.
- Appliance has been emptied.
- Left side panel has been removed.→ *Page 125*

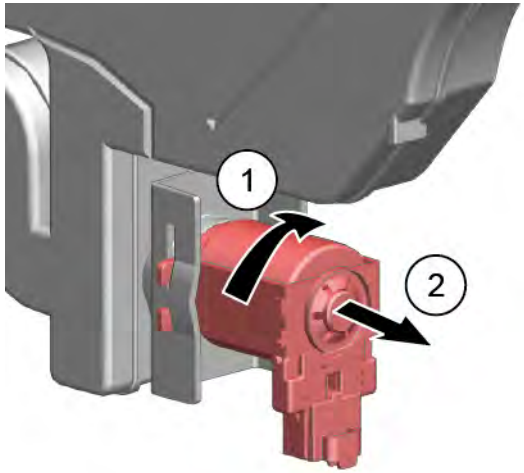
6.8.1 Removing drainage valve

	Drain the water or catch in a container if the valve needs to be replaced. There is no need to remove the drainage valve to take out the heat exchanger.

1. Unlock the electrical connection (1).



2. Pull out the plug (2).
3. Turn the drainage valve to the right (1).



4. Pull the drainage valve out of the heat exchanger (2).

6.8.2 Installing drainage valve

1. Install the drainage valve in reverse order.
2. Check that the heat exchanger is not leaking following installation of the drainage valve.

6.9 Replacing flow sensor

	The flow sensor consists of an impeller and a Reed contact switch. It is located on the heat exchanger / water inlet system. A defective impeller can only be replaced (e.g. blockage that cannot be removed) as a complete unit with a water inlet system / heat exchanger. The Reed contact switch can be replaced individually.

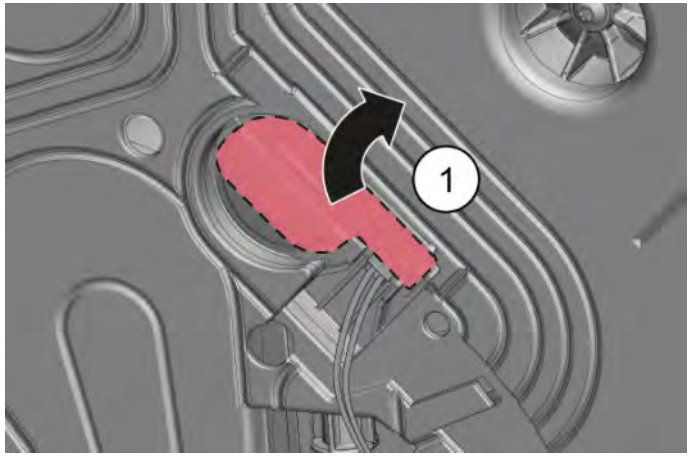
6.9.1 Removing reed contact switch

	Notice **Too much force applied!** Destruction of the red contact switch (glass flask). ▸ Do not bend or kink the PCB of the reed contact switch.

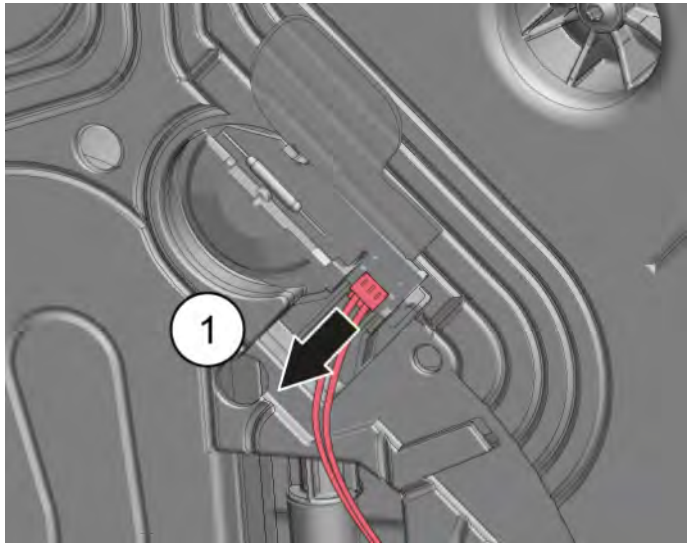
Prerequisite:

- Appliance is disconnected from the power supply.
- Left side panel has been removed→ *Page 125*

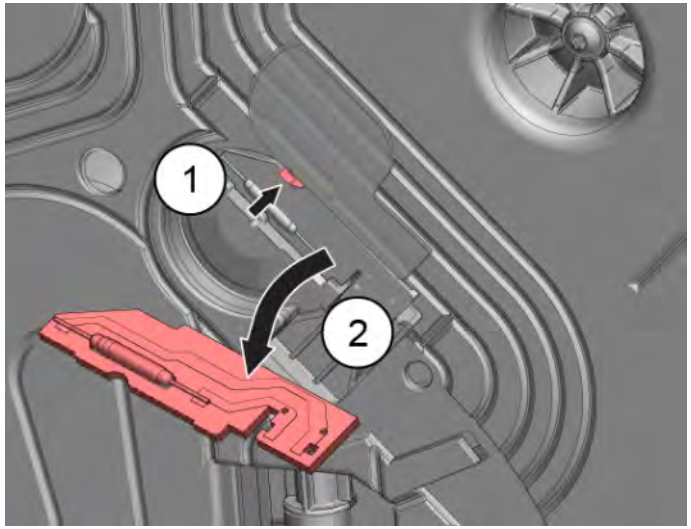
1. Bend the protective cover of the reed contact switch outwards (1).



2. Disconnect the reed contact switch plug (1).



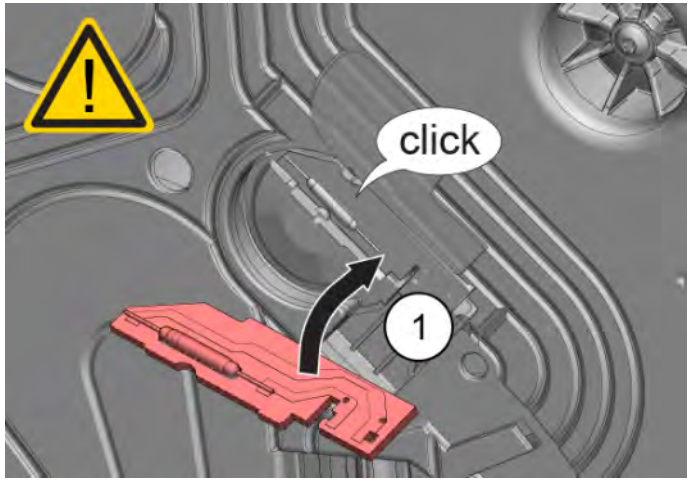
3. Disengage the PCB with the reed contact switch (1) and remove (2).



6.9.2 Installing reed contact switch

The reed contact switch of the impeller counter must audibly click into place.

- Install the reed contact switch in reverse order (1).



6.10 Replacing non-return valve

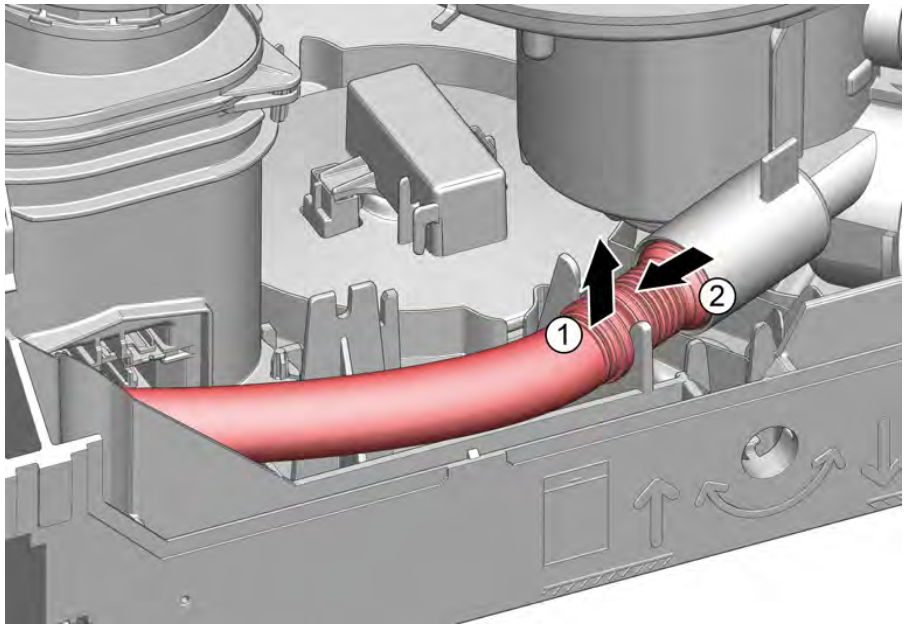
	Drain check valve is located in the lower area of the pump sump.

Prerequisite:

- Appliance is disconnected from the power supply.
- Sump has been emptied.
- Furniture panel has been removed (optional).
- Base socket plate has been removed.→ *Page 142*
- Toe panel has been removed (optional).→ *Page 141*

6.10.1 Removing non-return valve

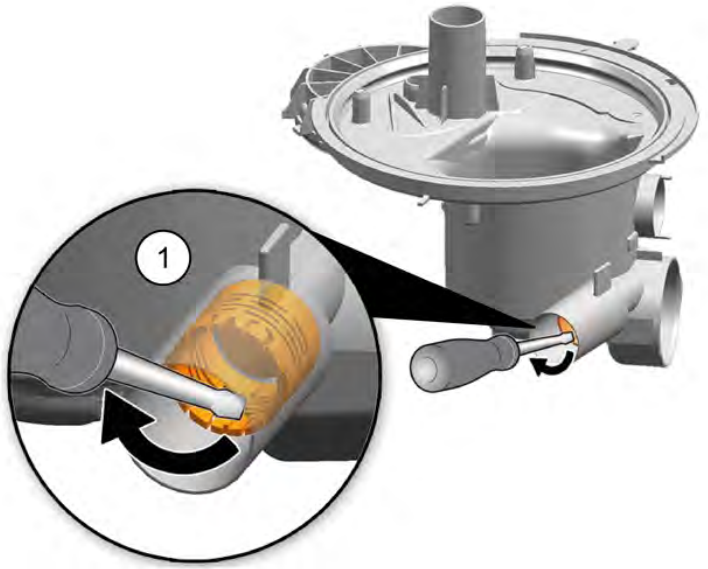
1. Push the connecting hose out of the holder (1) and pull off the connecting stub of the pump sump (2).



2.

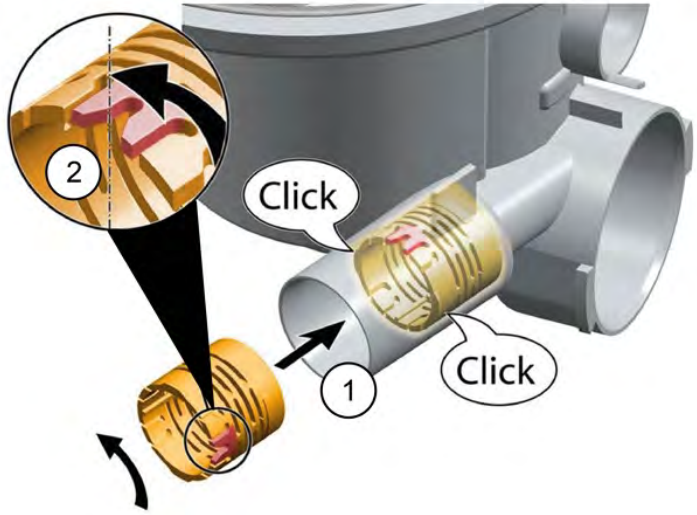
	Leakage at the connecting piece due to improper removal! Do not use sharp-edged tools. Do not scratch the inside of the connecting piece.

Turn the non-return valve to the right or the left (< 45°) and remove the non-return valve from the connecting piece.



6.10.2 Installing non-return valve

1. Push the non-return valve with the marking pointing upwards (2) into the connecting piece (1) and turn anticlockwise until it audibly clicks into place twice.



2. Push the connecting hose into the connecting piece of the pump sump.
3. Press the connecting hose into the holder.

6.11 Replacing regeneration valve

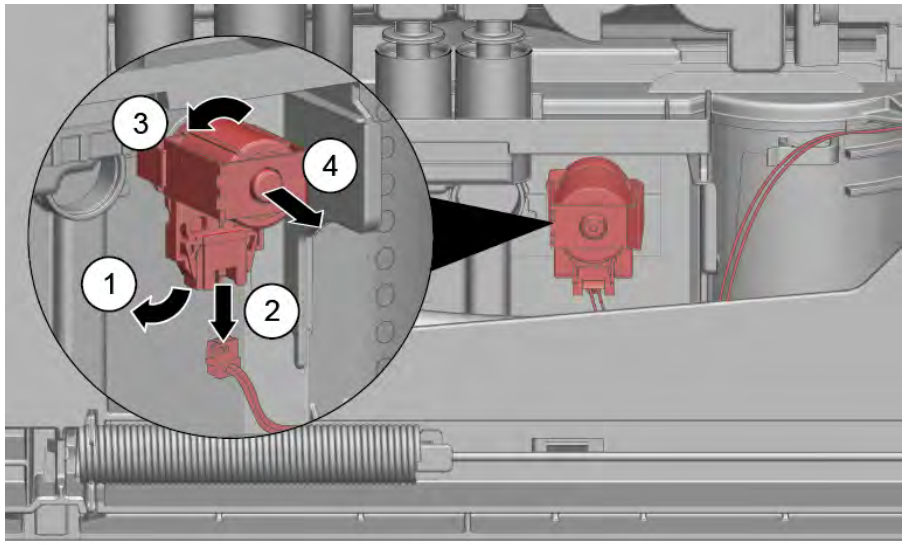
	The regeneration valve is connected to the water-softening system (on the left lower side of the appliance).

Prerequisite:

- Appliance is disconnected from the power supply.
- Appliance is drained.
- Left side panel has been removed→ *Page 125*
- Water has been emptied from the salt container.

6.11.1 Removing regeneration valve

1. Unlock the electrical connection (1).

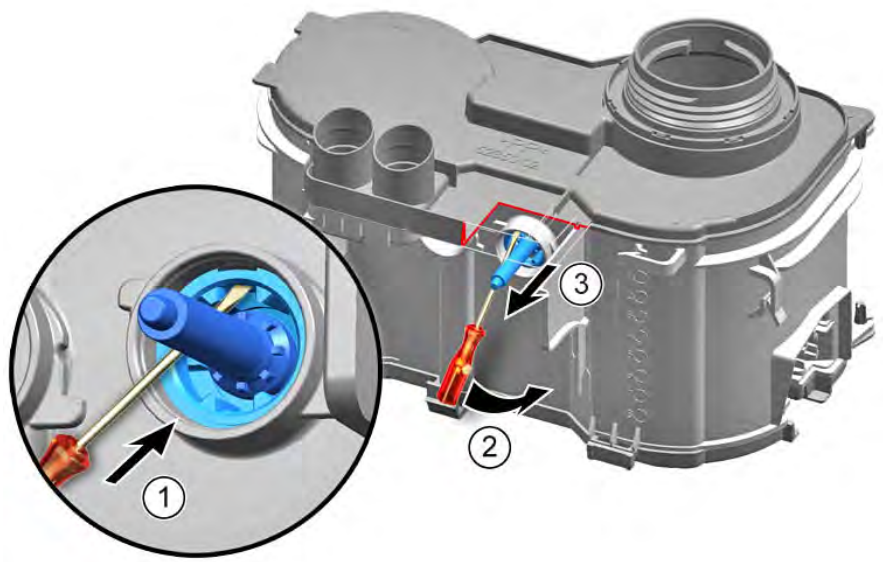


2. Pull out the plug (2).
3. Turn the coil to the left (3) and pull it forwards out of the water-softening system (4).

6.11.2 Releasing valve insert

▸ If the valve insert gets stuck in the water-softening system during removal

1. Lever the valve insert loose (1) with a small screwdriver and turn (2).
2. Remove the valve insert from the water-softening system (3).



6.11.3 Installing regeneration valve

1. Install in reverse order.

2. Click the valve insert with the spring into place in the coil (1). Align the catch elements of the valve insert and coil (2).

3. Insert the regeneration valve with the valve insert first into the water-softening system.
4. Click the regeneration valve into place carefully.
5. Check that the water-softening system is not leaking.

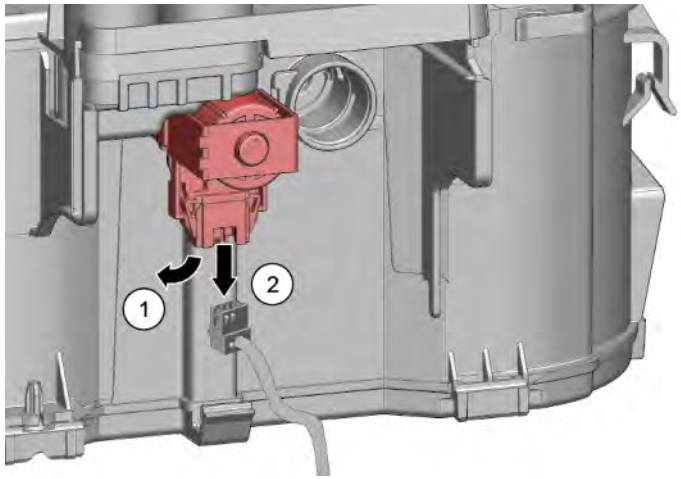
6.12 Replacing bypass valve

Prerequisite:

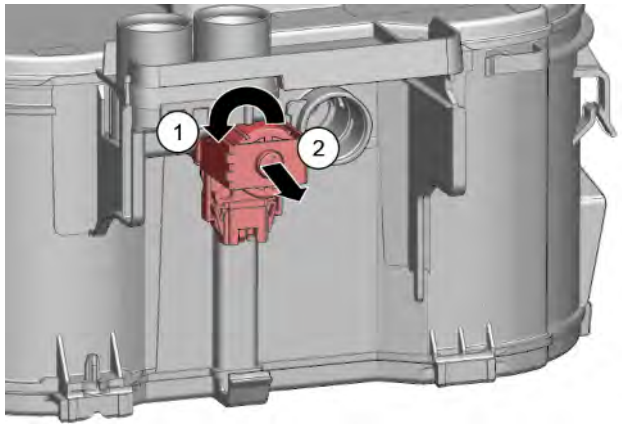
- Left side panel is disassembled.
- Heat exchanger emptied (optional).
- Water from the salt container is emptied.
- Regeneration valve is disassembled.

6.12.1 Removing bypass valve

1. 1. Release the catch element (1).
   2. Disconnect the electrical connection (2).



2. 1. Turn the coin to the left (1).
   2. Pull the coin out (2).



6.12.2 Installing bypass valve

- Assemble in reverse order.

6.13 Replacing water switch

	**⚠ Caution** **Sharp edges on the sump!** Cut injuries ▸ Wear protective gloves.

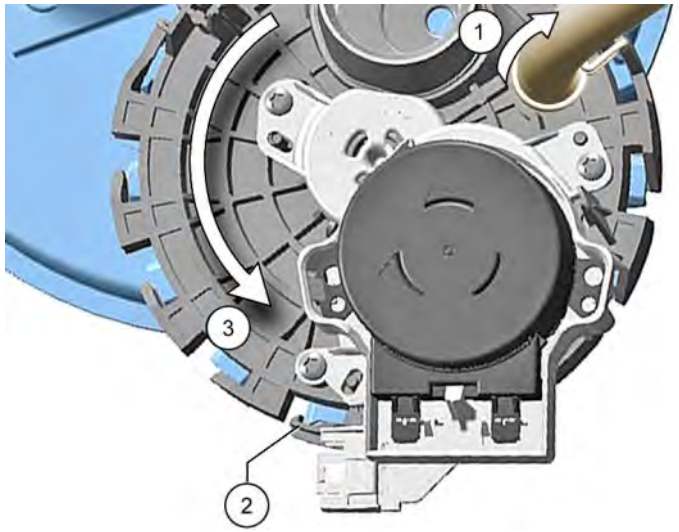
Prerequisite:

- Appliance is disconnected from the power supply.
- Appliance is freely accessible.
- Appliance is drained.
- Rinsing tank has been folded down.
- Heat pump has been removed.→ *Page 109*

6.13.1 Removing water switch

1. | | |
|---|---|
|  | Risk of injury: the water switch can only be turned by using force.
Use gloves! |

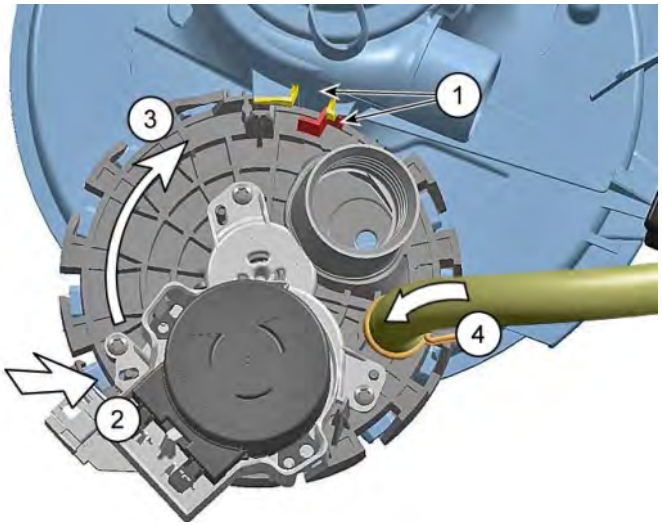
2. Remove the hose to the fleet reservoir (optional) (1).



3. Detach catch element (2).
4. Turn the water switch anticlockwise and remove from the sump (3).

6.13.2 Installing water switch

1. Brush the seal of the water switch with a little rinse aid.
2. Position the Z-shaped projection of the water switch between the two projections of the sump (1).



3. Position the water switch on the sump (2), turn it clockwise (3) and lock.
4. Fix the hose to the fleet reservoir (optional) (4).

6.14 Replacing water-softening system

Required tools:

Auxiliary tool	Threaded ring salt container, cover cap vent slot, water inflow pin and screw	[00341805]

The water-softening system is located in the base support.

AU models:

- For production reasons Australian models sometimes have a "dummy" water-softening system without granules. The valve is replaced by a blind plug. The lid must always be screwed onto the water-softening system.

Caution

Sharp edges!

Cut injuries

- Wear protective gloves.

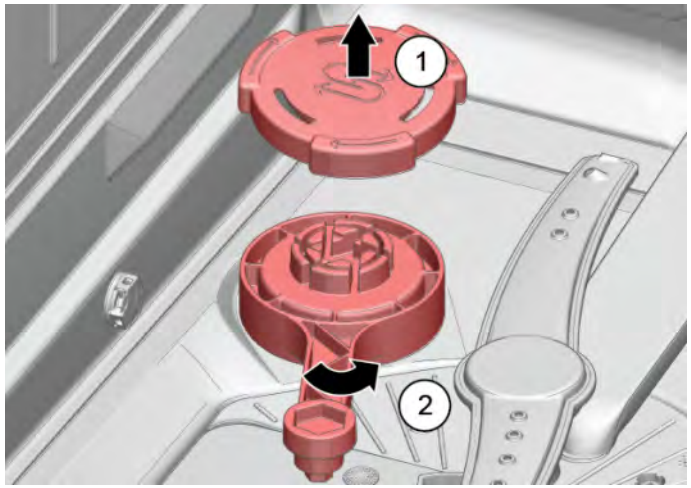
If salt or brine gets into the appliance from the water softening system, immediately start the rinse programme after finishing repair.

Prerequisite:

- Appliance is disconnected from the power supply.
- Appliance is freely accessible.
- Rinsing tank has been folded down.
- Appliance is drained.
- Regeneration valve has been removed.→ *Page 94*
- Bypass valve has been removed (optional).
- Low salt sensor has been removed.

6.14.1 Removing water-softening system

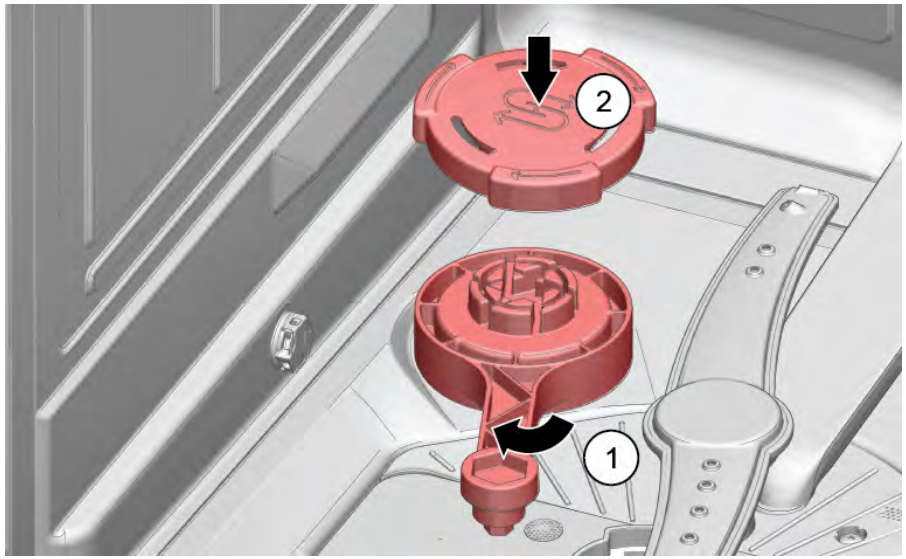
1. Remove the salt container cover (1).



2. Remove the nut (2) on the salt container with a special tool.
3. Remove the water-softening system under the rinsing tank.

6.14.2 Installing water-softening system

1. Install the water-softening system in reverse order.



2.

	Check for leaks.

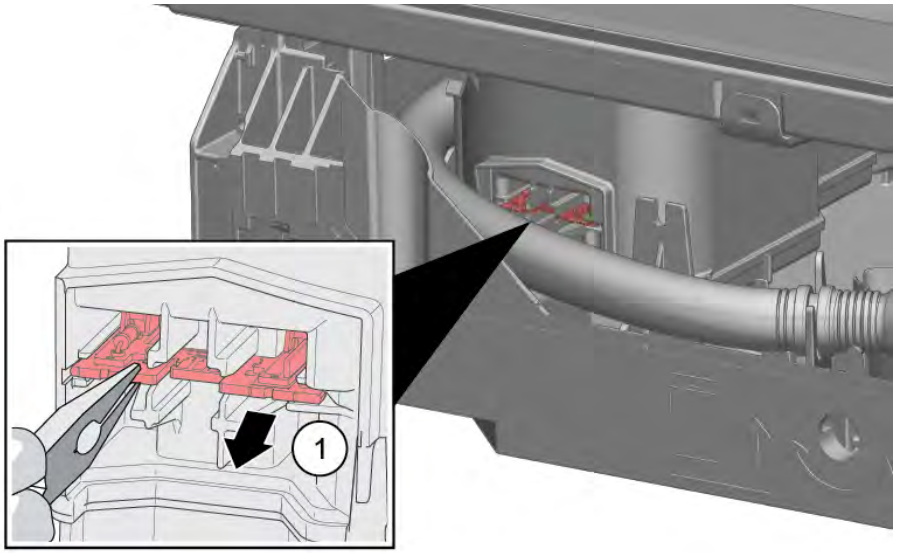
6.15 Replacing low salt sensor

Prerequisite:

- Base socket plate has been removed.

6.15.1 Removing low salt sensor

1. Disconnect the plug connection of the sensor.
2. Remove the PCB of the low salt sensor from the holder in the water-softening system with nipper pliers (1).



6.15.2 Installing low salt sensor

- Install the low salt sensor in reverse order.

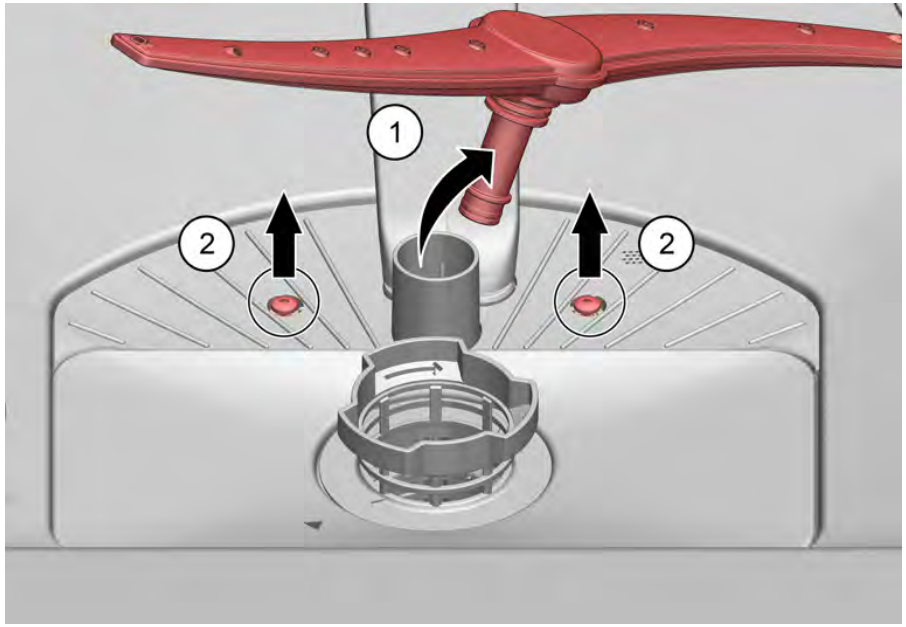
6.16 Replacing feed pipe

Prerequisite:

- Appliance is disconnected from the power supply.
- Baskets have been removed.
- Cutlery drawer has been removed (optional).
- Spoiler has been removed (optional).

6.16.1 Removing feed pipe

1. Pull the spray arm up with a slight jerk (1).



2.

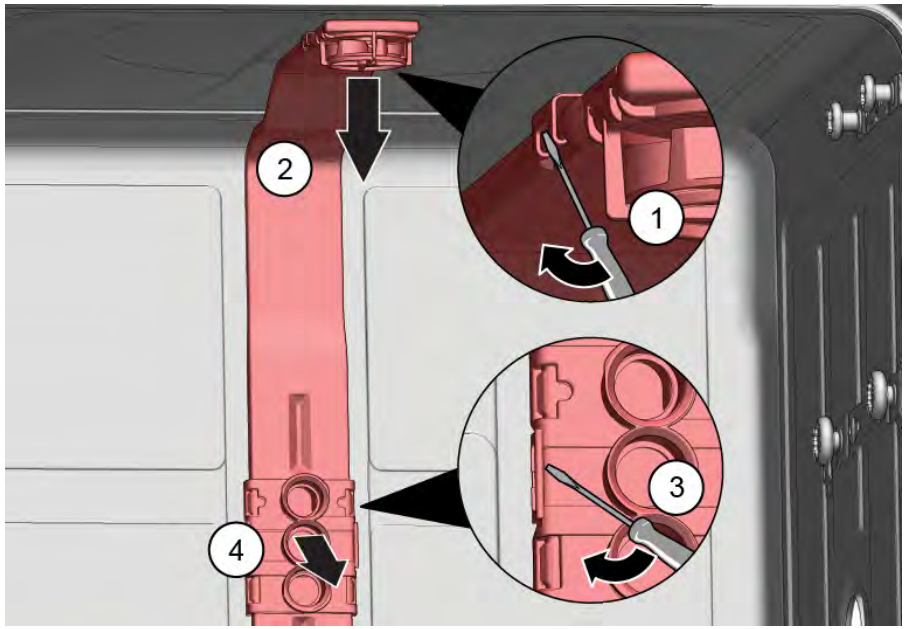
	Pay attention that the screws of the pump sump have to be removed.

Remove the screws (2).

3.

	Depending on the appliance model, there are appliances with and without a sprinkle disc.

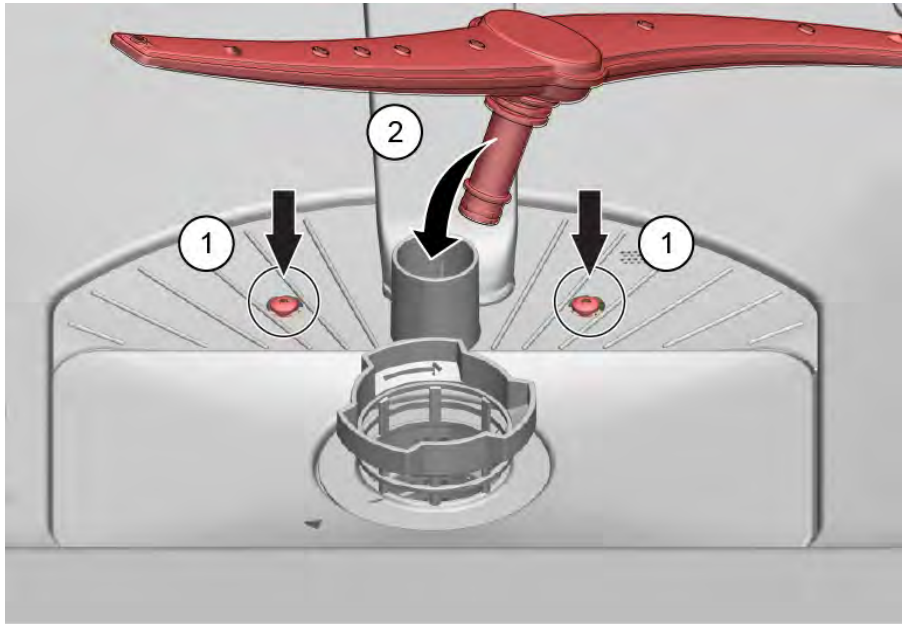
Disengage the catch element on the back wall (3) and sprinkle disc (1) using a screwdriver.



4. Remove the feed pipe (2, 4).

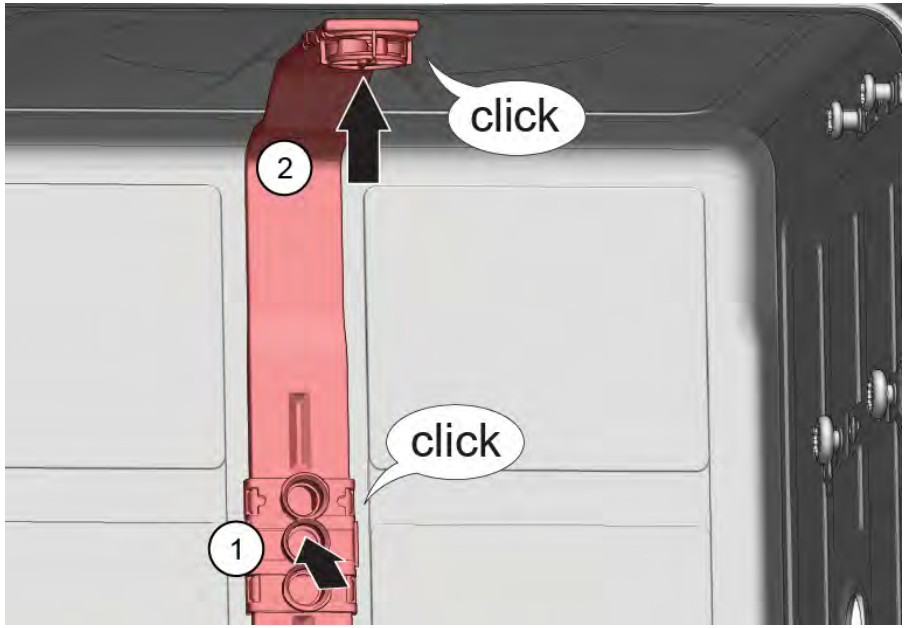
6.16.2 Installing feed pipe

1. Insert both screws (Torx) on the pump sump (1).



2. Gently press the lower spray arm into the supply hose (2).

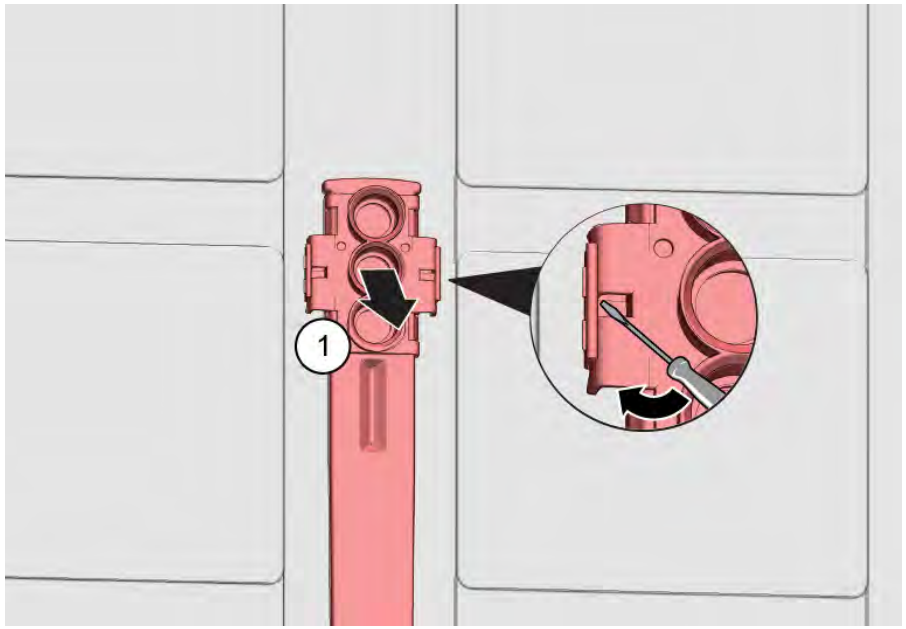
3. Lock the feed pipe into place at the connection point (1).



4. Lock the feed pipe into place in the upper holder (2).

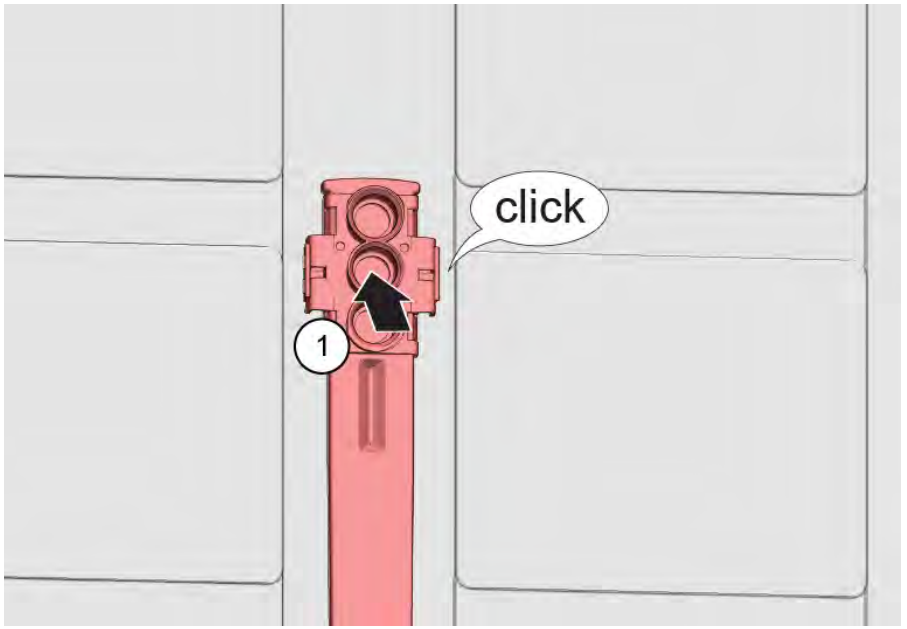
6.16.3 Removing feed pipe

- Release the catches around the connection point.



6.16.4 Installing feed pipe

- Lock the feed pipe into place at the connection point (1).



6.17 Replacing sump

	The sump is screwed to the bottom of the tub in the centre. It extends into the base support.

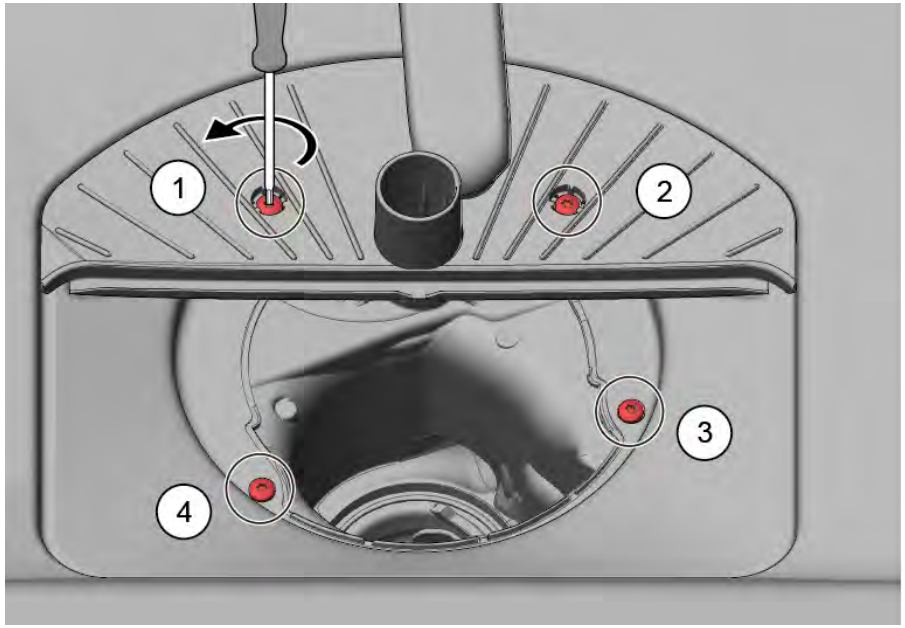
Prerequisite:

- Appliance is disconnected from the power supply.
- Appliance is freely accessible.
- Appliance is drained.
- Baskets have been removed.
- Rinsing tank has been folded down.
- Heating pump has been removed.→ *Page 109*
- Drain pump has been removed.→ *Page 113*
- Water switch has been removed.→ *Page 97*
- AquaSensor has been removed (optional).→ *Page 114*

6.17.1 Removing sump

	⚠ Caution **Sharp edges on the sump!** Cut injuries ▸ Wear protective gloves.

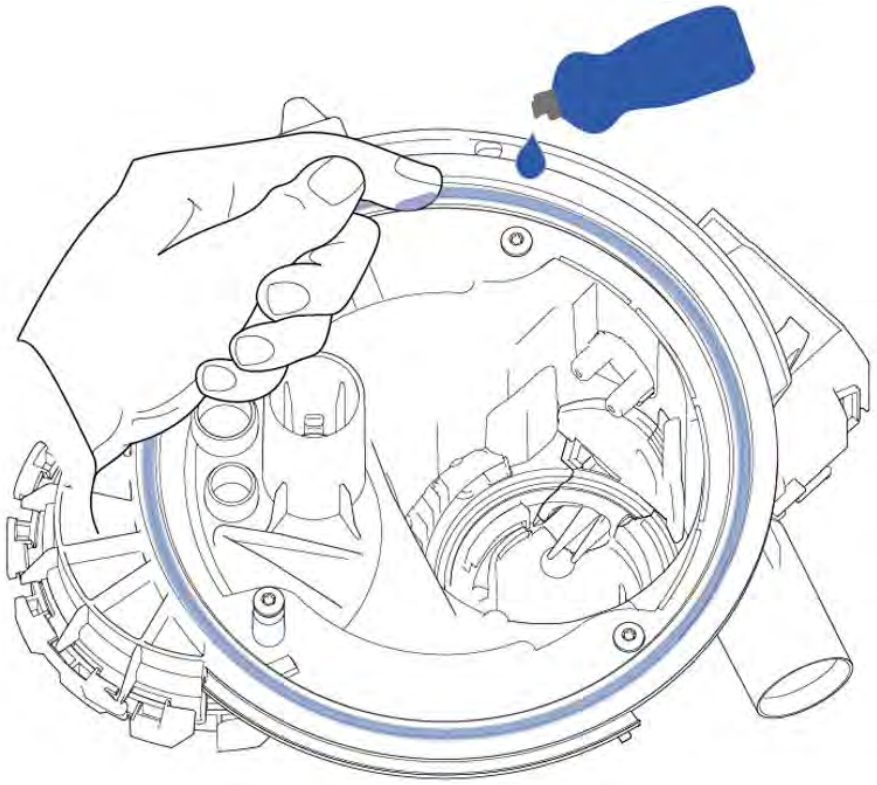
1. Remove the four screws on the sump in the container.



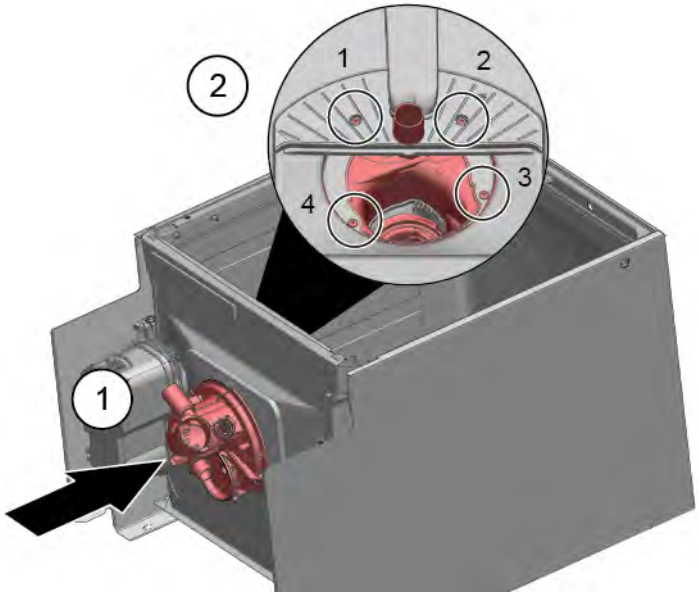
2. Secure the sump from falling.

6.17.2 Installing sump

1. Brush seal with rinse aid.



2. Position sump on underside of tub (1).

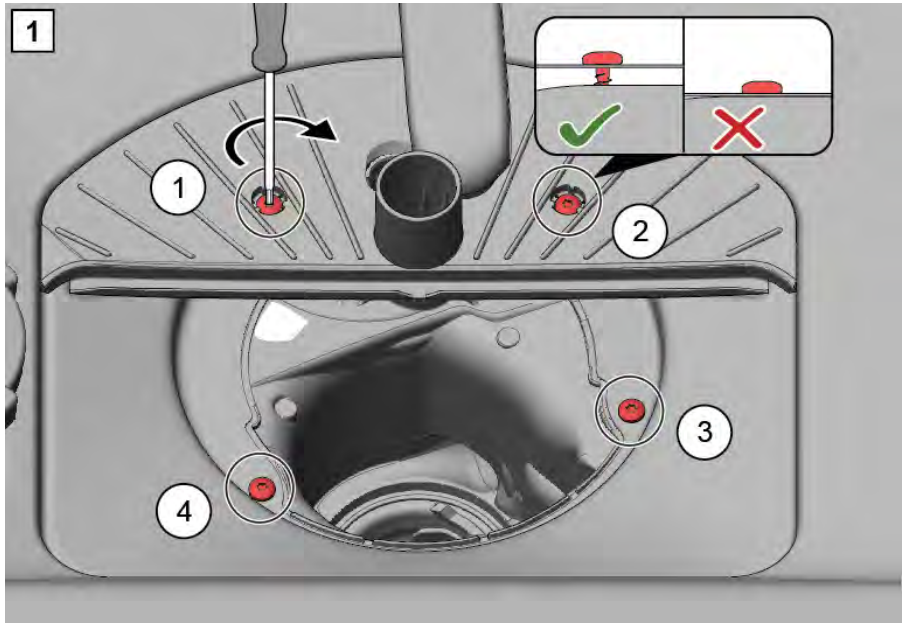


3. Do not use a screwdriver.

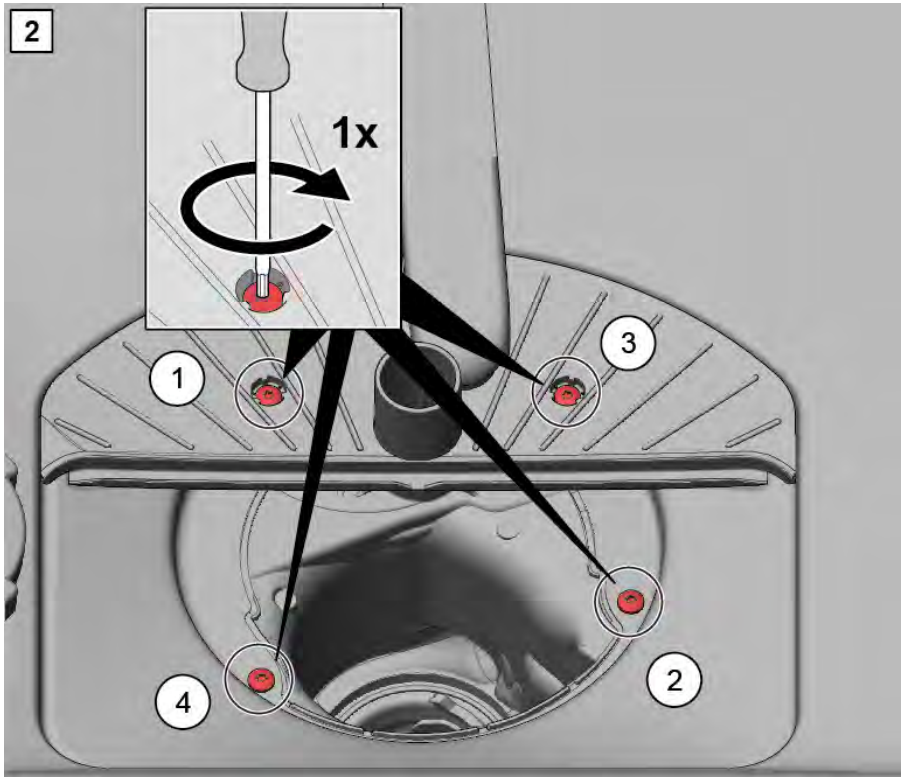
Tighten screws 1-4 slightly until sump is held against container (2).

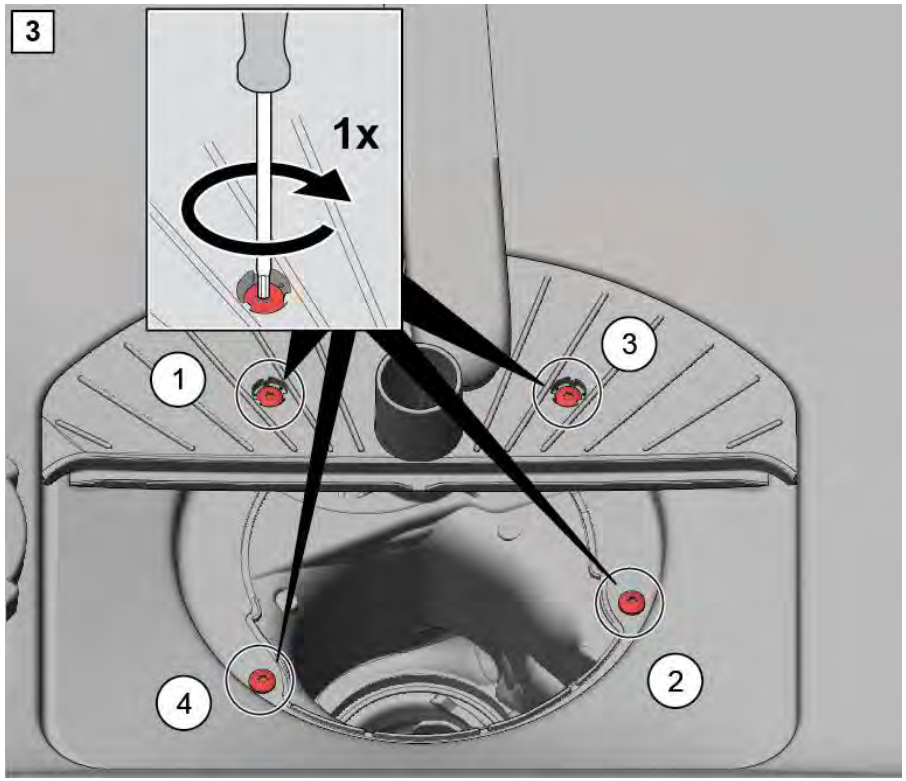
4. Leakage due to incorrect installation!
Comply with sequence for screws.

Tighten screws by hand in sequence 1-3-2-4.

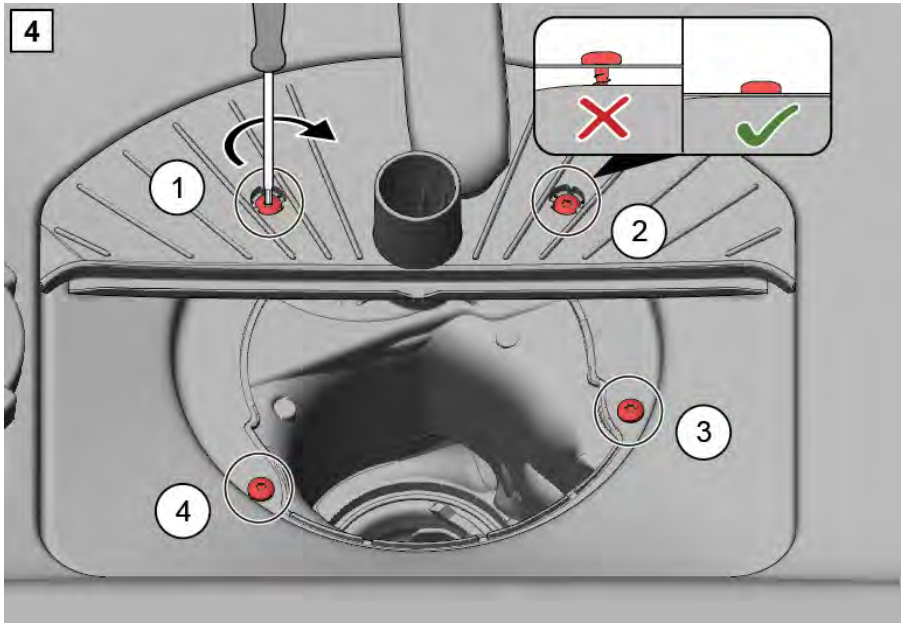


5. Tighten screws by one turn each time.





6. Tighten screws until all screws are secured.



7. Install components (heat pump, drain pump, water switch, AquaSensor and feed pipe) in reverse order.
8. Attach rinsing tank.

6.18 Replacing float switch

	The float switch is centred in the bottom of the base support.

Prerequisite:

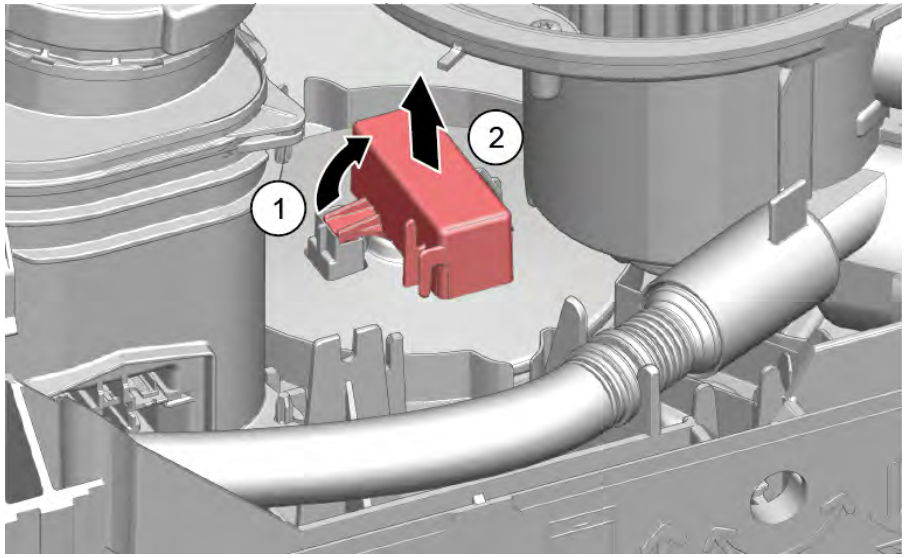
- Appliance is disconnected from the power supply.
- Base socket plate has been removed.→ *Page 142*
- Toe panel has been removed (optional).→ *Page 141*

6.18.1 Removing float switch

Required tools:

- Long screwdriver
- Needle nose pliers Length: 200 mm, straight [00340871]

1. Release the catch mechanism (1).

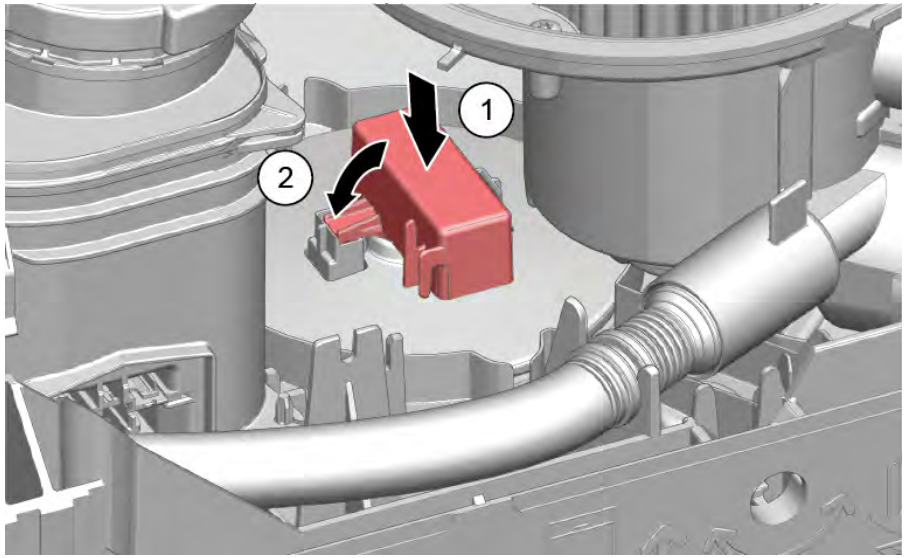


2. Remove the float switch (2).
3.

	Use nipper pliers and a long screwdriver as a lever to remove the float switch without first releasing the catch mechanism.

6.18.2 Installing float switch

▸ Push the float switch from the top into the float and lock in place.



6.19 Replacing heat pump

Required tools:

Hose clamp	inner diameter 28 mm - 39 mm	[00172272]

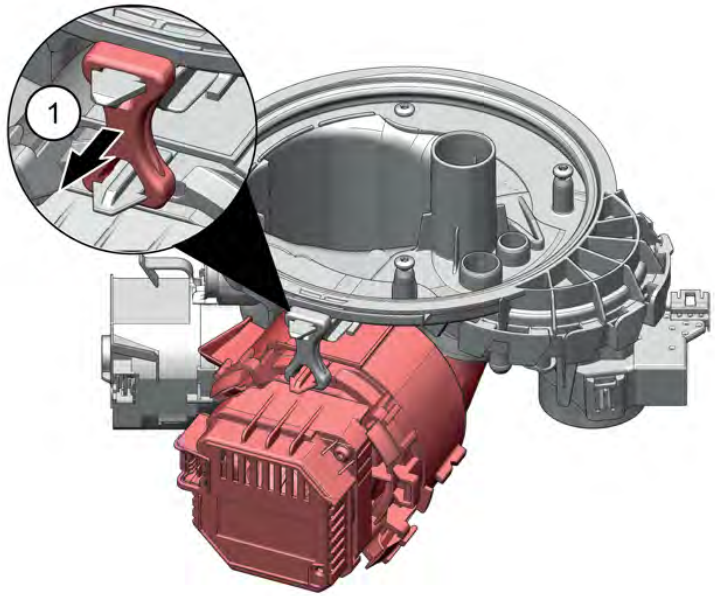
- The heat pump is located on the sump.
- The heat pump must **not** be opened for cleaning or testing.

Prerequisite:

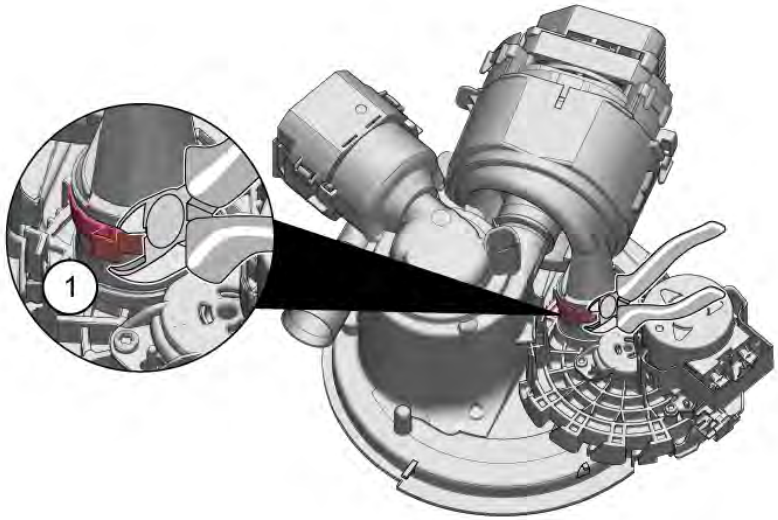
- Appliance is disconnected from the power supply.
- Baskets have been removed.
- Rinsing tank has been folded down.
- Heat pump has been removed.→ *Page 109*
- Drain pump has been removed.→ *Page 113*
- Water switch has been removed.→ *Page 97*
- AquaSensor has been removed (optional).→ *Page 114*

6.19.1 Removing heat pump

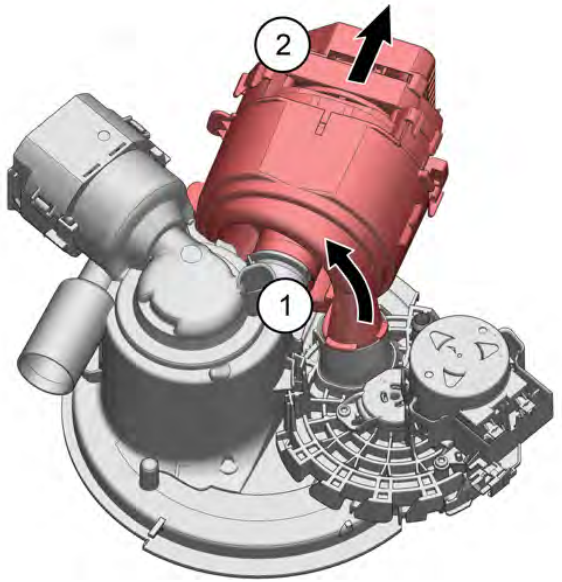
1. Disconnect plug on heat pump.
2. Detach rubber holder between heat pump and sump.



3. Remove hose clamp between heat pump and water switch with diagonal pliers (1).

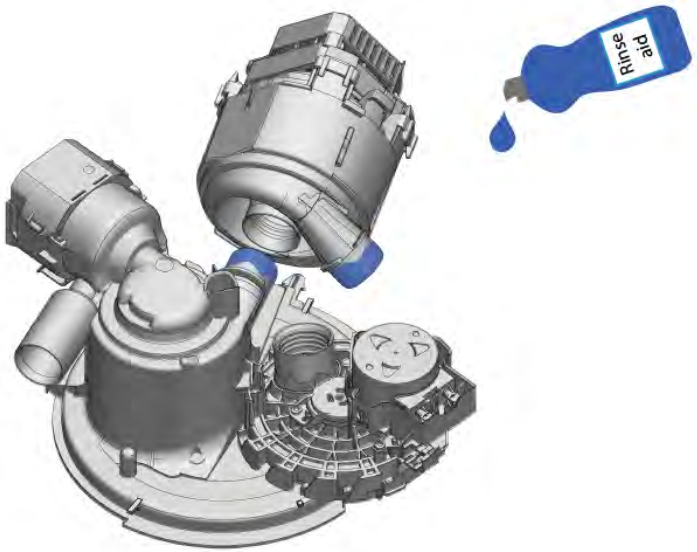


4. Turn heat pump out of connection to water switch (1) and remove heat pump from sump (2).



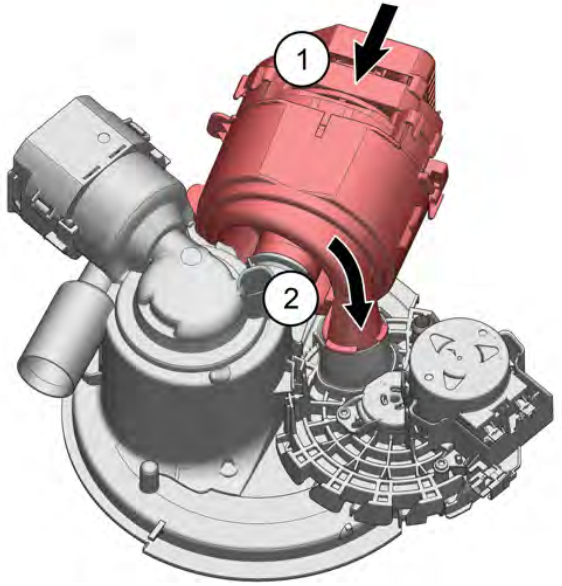
6.19.2 Installing heat pump

1. Brush heat pump with rinse aid.



2.

	Avoid leaks due to improper installation! Push heat pump up to stop position on supports of sump (1).

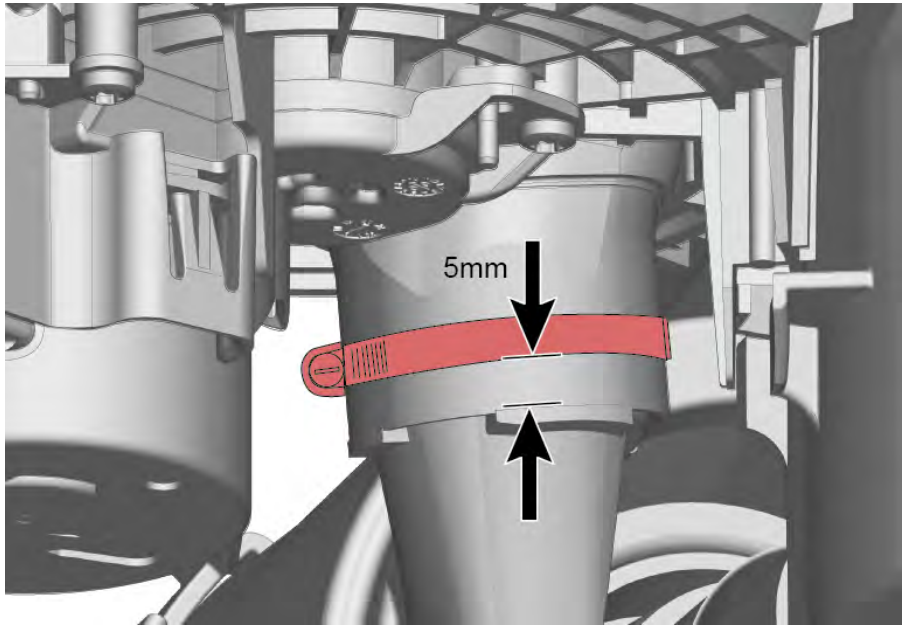


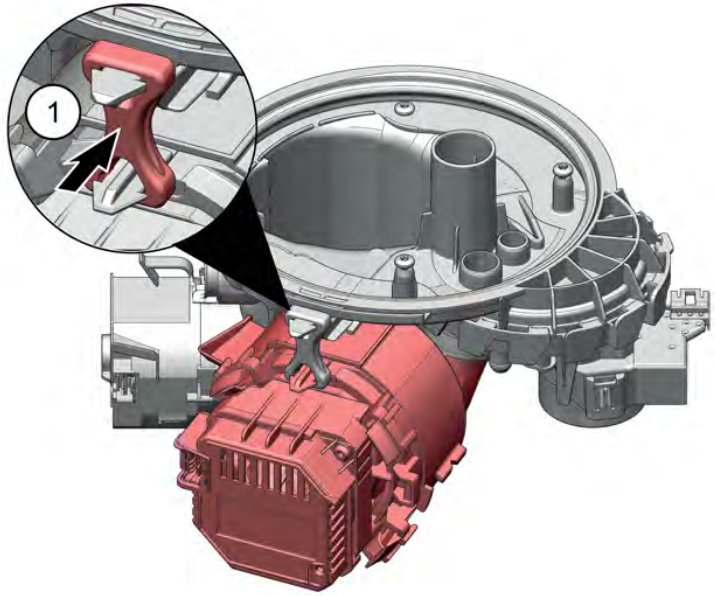
3. Turn heat pump to stop position in connection of water switch (2).

4.

	During installation always use new hose clamp included in delivery.

Secure new hose clamp ([172272]) on connection to water switch.





5. Attach rubber fixture between heat pump unit and sump.
6. Check for leaks.

6.20 Replacing drain pump

	The drain pump is installed on the pump sump.

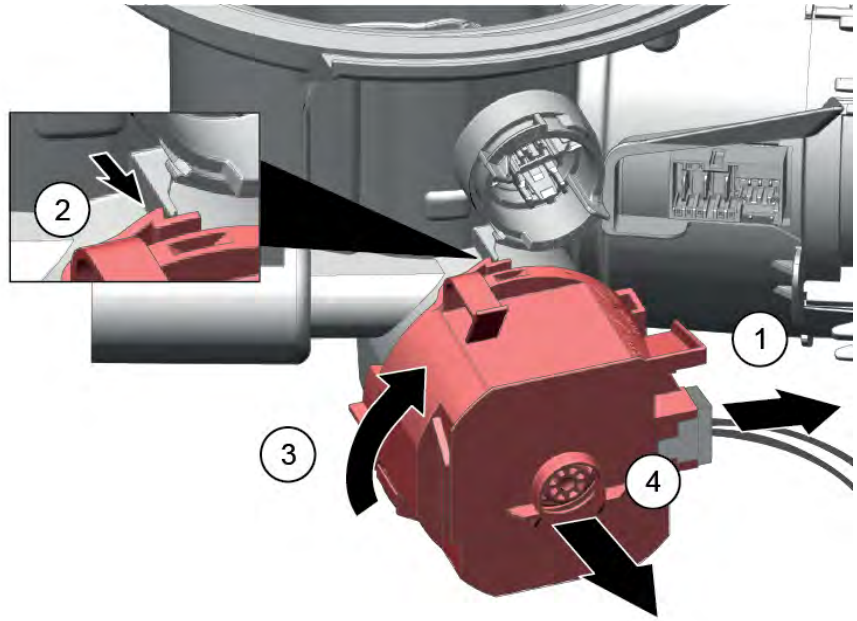
Prerequisite:

- Appliance is disconnected from the power supply.
- Appliance is freely accessible.
- Appliance is drained.
- Base socket plate has been removed.→ *Page 142*

6.20.1 Removing drain pump

	Depending on the design of the base support, greater force is required to remove the drain pump.

1. Unlock and remove electrical connection (1).



2. Pull the catch element forwards (2).
3. Turn the drain pump clockwise (3) and remove from the pump sump (4).

6.20.2 Installing drain pump

1. Install the drain pump in reverse order.
2.

	Check for leaks.

6.21 Replacing AquaSensor (optional)

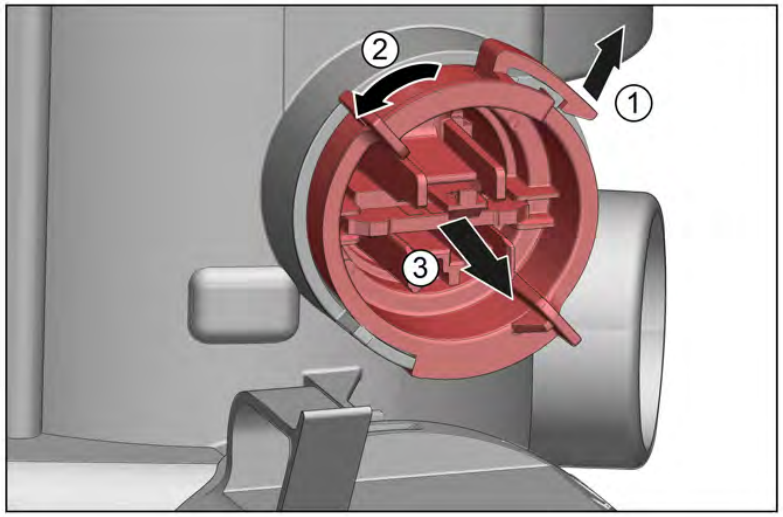
	The AquaSensor is located on the sump.

Prerequisite:

- Appliance is disconnected from the power supply.
- Appliance is drained.
- Front furniture panel has been removed (optional).
- Base socket plate has been removed.→ *Page 142*
- Toe panel has been removed (optional).→ *Page 141*
- Plug on the AquaSensor has been removed.

6.21.1 Removing AquaSensor

1. Unlock the AquaSensor (1) and turn 90° to the left (2).

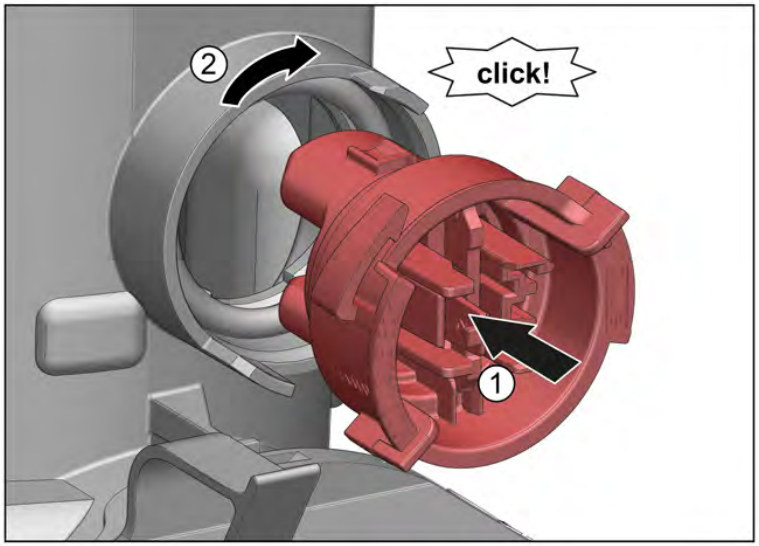


2. Remove the AquaSensor from the sump (3).

6.21.2 Installing AquaSensor

1. | | |
|---|---|
| | Brush the seal of the AquaSensor with rinse aid to facilitate installation. |

Insert the AquaSensor with the vertically positioned PCB into the sump (1).



2. Turn the AquaSensor 90° to the right until the catch element locks (2).

6.22 Installing basket system

Prerequisite:

The relevant basket has been removed from the appliance.

6.22.1 Installing a tab slide for the 86 cm model

Required tools:

Tabguide	[00614935]
Cup support clip	[00618565]

1. Insert the tab slide diagonally at the front of the basket.
2. Centre and click the tab chute into place.

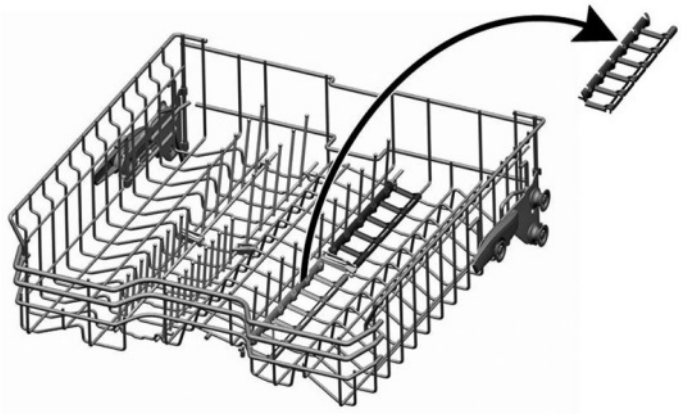
6.22.2 Installing cup support clip

Required tools:

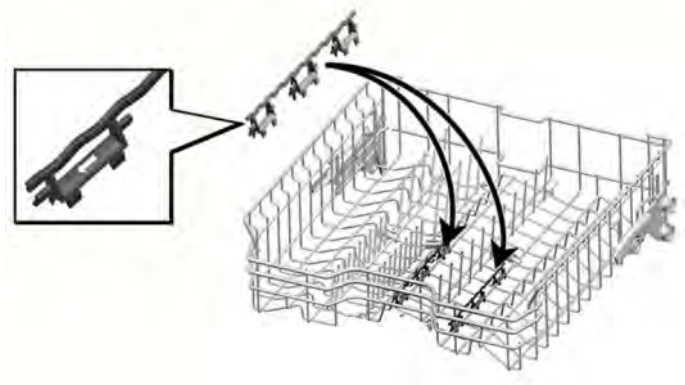
Tabguide	[00614935]
Cup support clip	[00618565]

	When washing cups, the cup support clip can be folded up. The additional angle reduces the collection of water on the bottom of cups. In the case of tall glasses we recommended leaving the cup support clip folded down. If upper baskets have an optional plastic insert, they must first be removed.

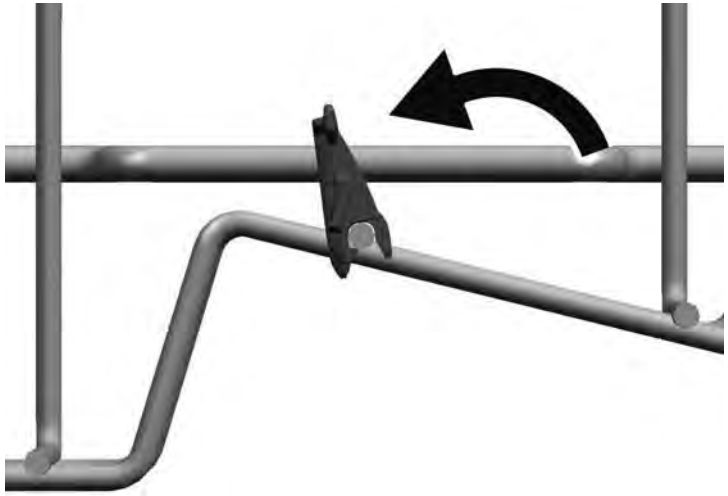
1. Remove the plastic insert.



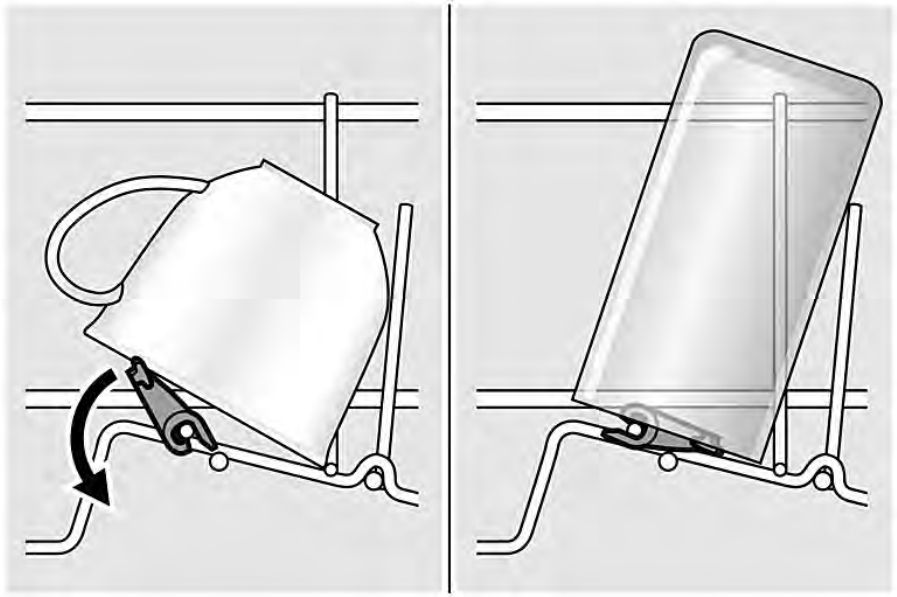
2. Click the cup support clip into place.



3. Fold up the clip.



4. Position the items to be washed.

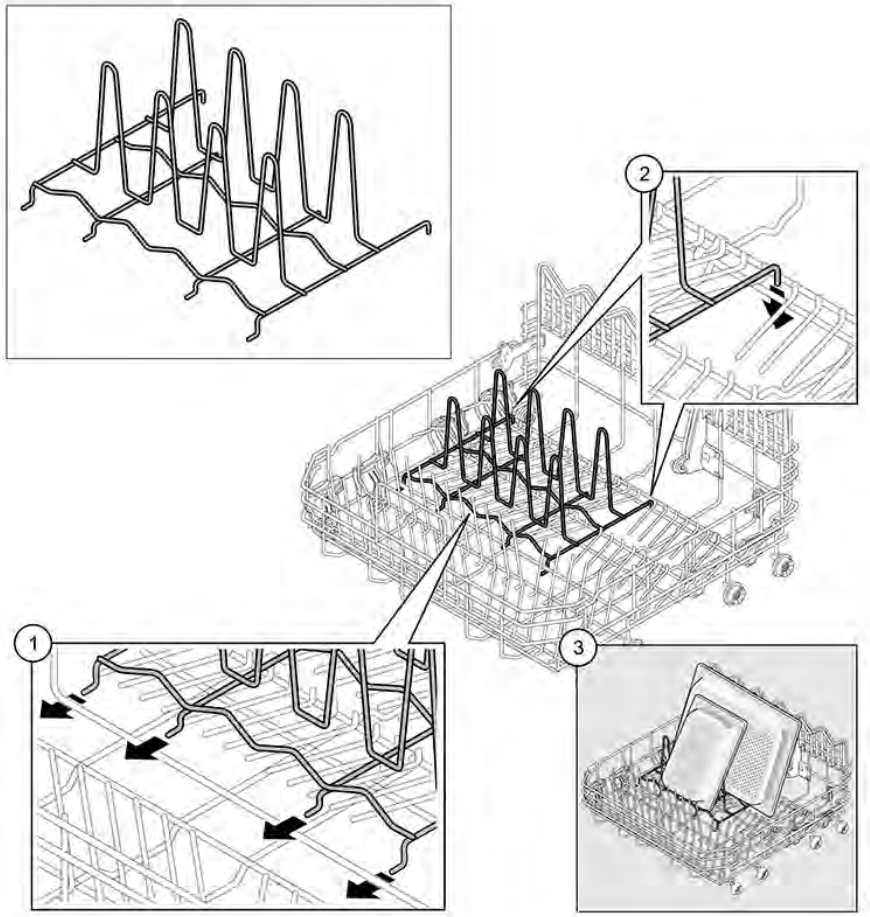


6.22.3 Installing steamer insert

Required tools:

- Tabguide [00614935]
- Cup support clip [00618565]

▸ Wedge the steamer insert with the end pieces under the basket system.



6.23 Replacing pull-out rail

Prerequisite:

The basket has been removed.

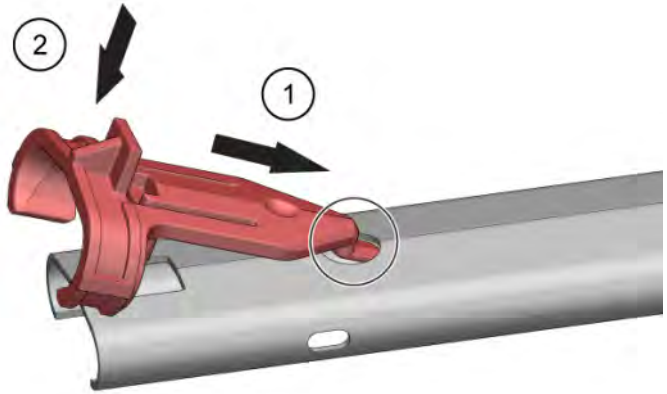
6.23.1 Removing pull-out rail

1. Bend both wings of the plastic holder outwards (1).

2. Press the plastic holder outwards in a downwards direction (2).
3. Remove the plastic holder from the rail (3).
4. Remove the pull-out rail to the front (1).

6.23.2 Installing pull-out rail

1. Insert the tip of the plastic holder into the opening of the pull-out rail (1) and press the holder into the pull-out rail (2).



2. Push the pull-out rail into the rollers of the container (1).

6.23.3 Removing smooth running pull-out rails

Notice

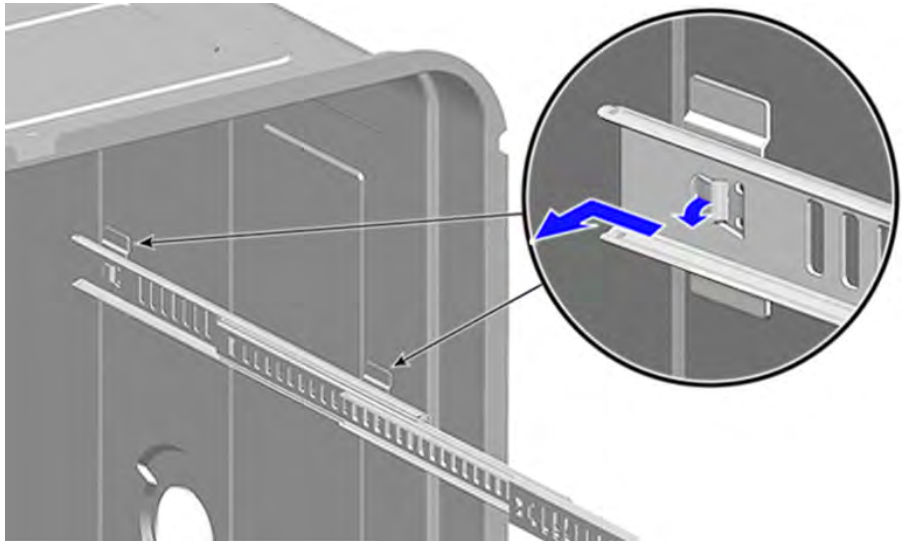
Too much force applied!

Retaining tabs may break off. Appliance is then no longer repairable.

- ▸ Bend the retaining tabs carefully.

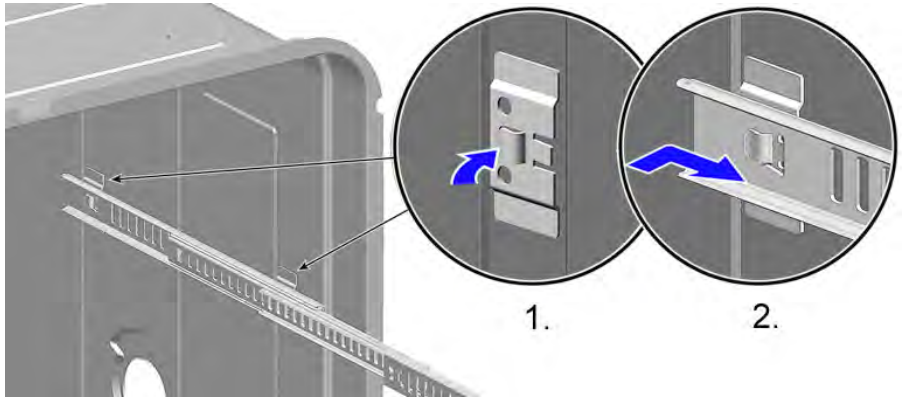
1. Bend both retaining tabs open a little with a screwdriver.

2. Push the pull-out rail towards the back and remove inwards.



6.23.4 Installing smooth running pull-out rails

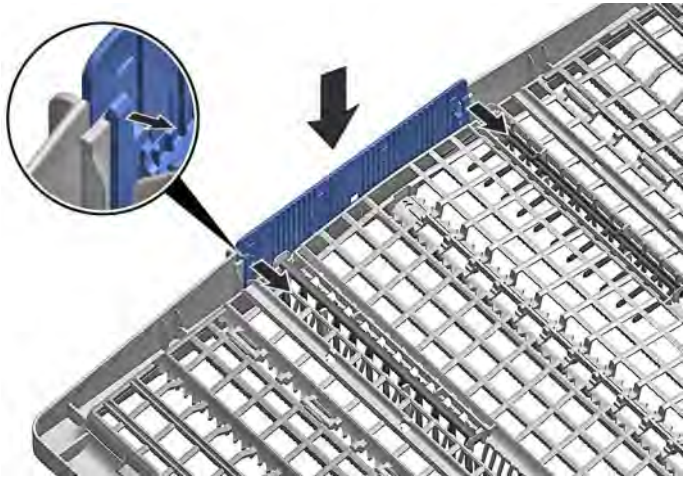
1. Bend back the retaining tabs.
2. Insert the pull-out rail and press it forwards until it clicks into place.



6.24 Replacing varioDrawer

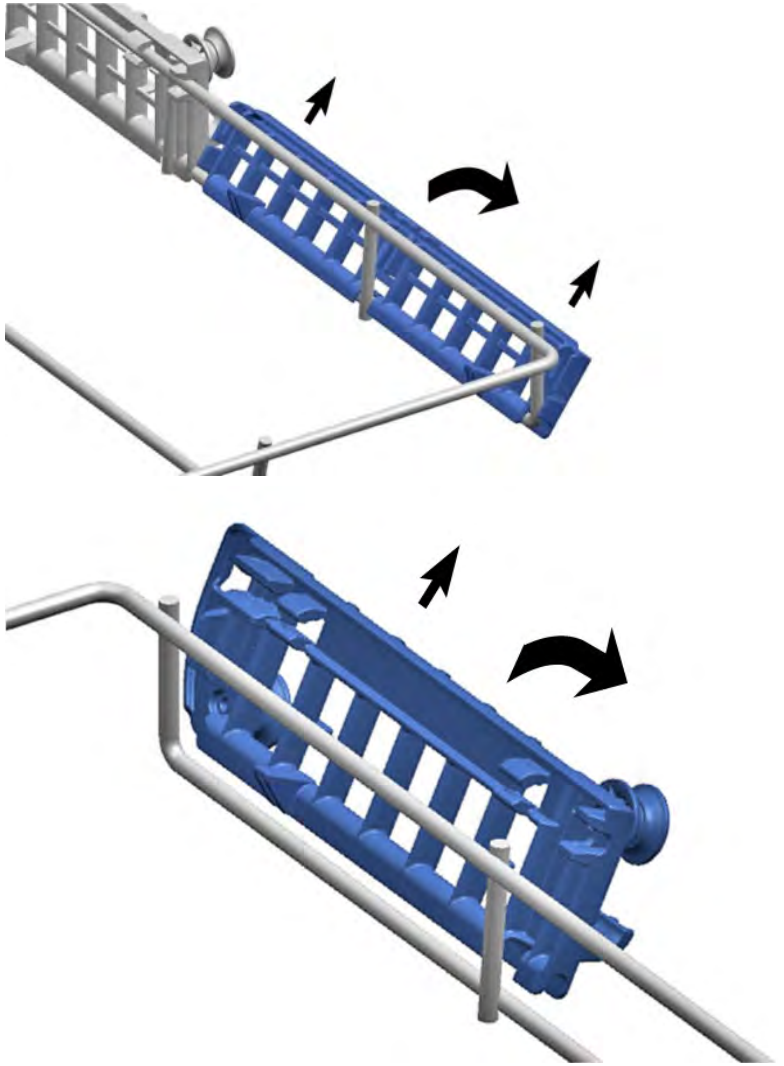
6.24.1 Removing varioDrawer

1. Bend the handle flaps inwards.

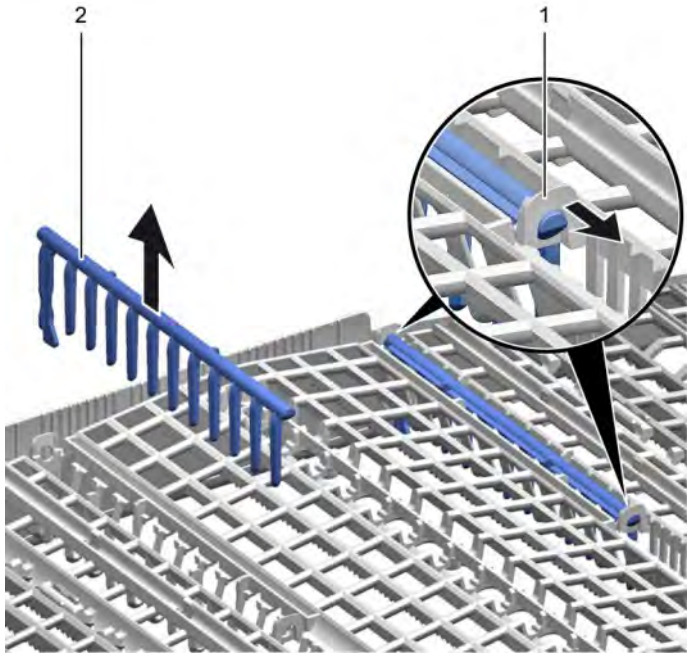


2. Remove the handle upwards.

3. Press plastic side inserts outwards and press them upwards out of the frame.

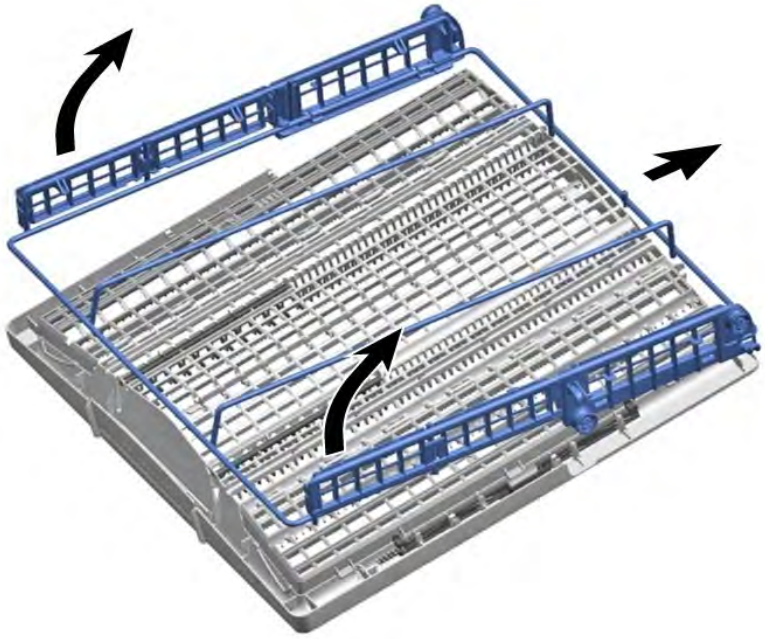


4. Carefully bend the guide tabs outwards.



5. Pull the folding spines out of the tabs.

6. Press metal frame at the front out of the holders.



7. Push metal frame back out of the guide.

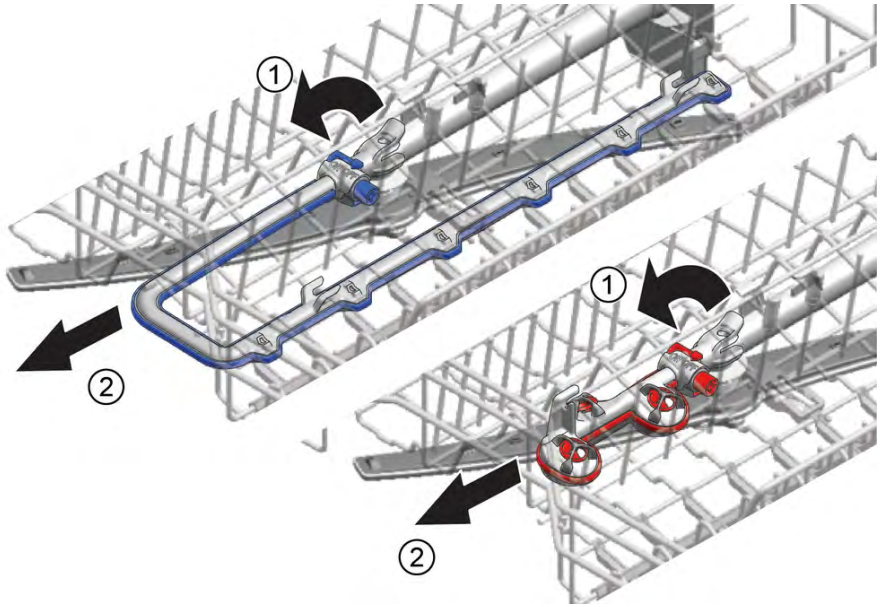
6.24.2 Installing varioDrawer

▸ Install in reverse order.

6.25 Replacing hydraulic zone

6.25.1 Removing hydraulic zone

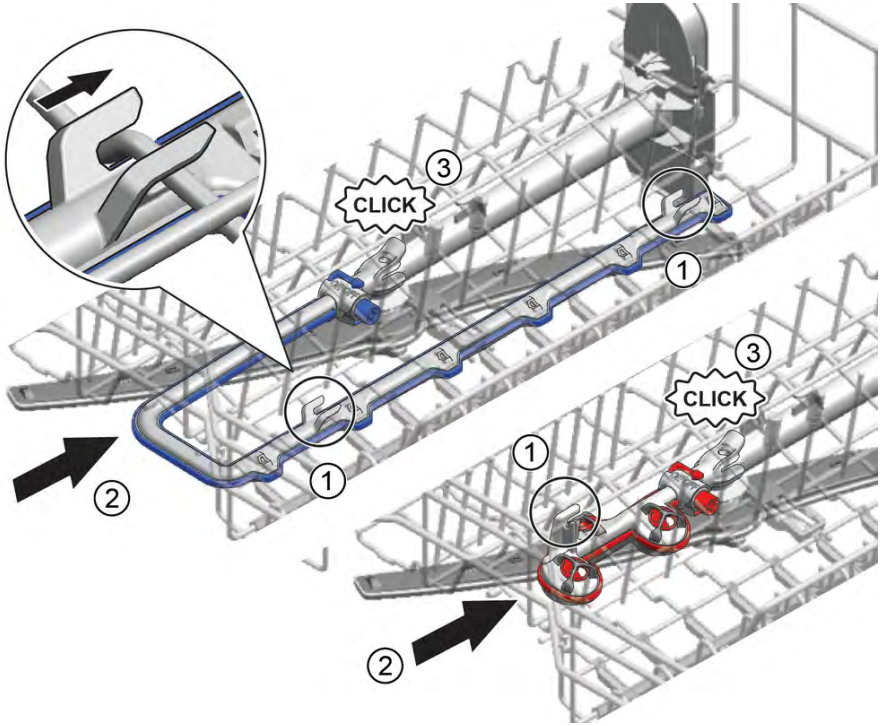
▸ 1. Release unlocking lever (1).
2. Push HZ forward and remove it (2).



6.25.2 Installing hydraulic zone

1. - Position hook in upper basket. (1)

2. Slide HZ backwards until locking audibly engages (2, 3).



6.26 Replacing dispenser

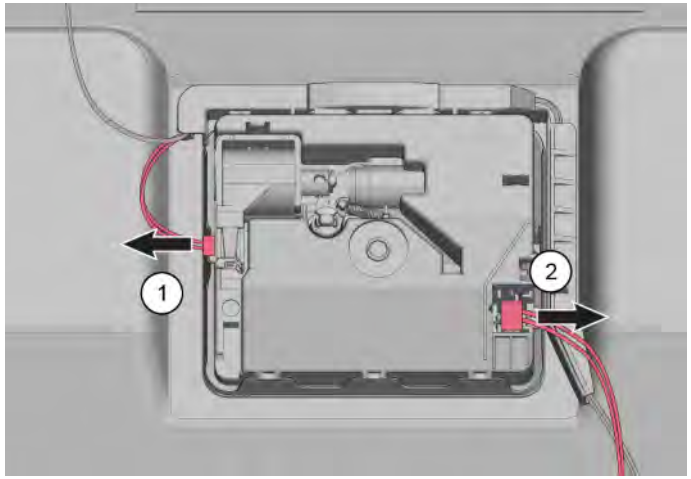
Caution

Sharp edges!
Cut injuries
- Wear protective gloves.

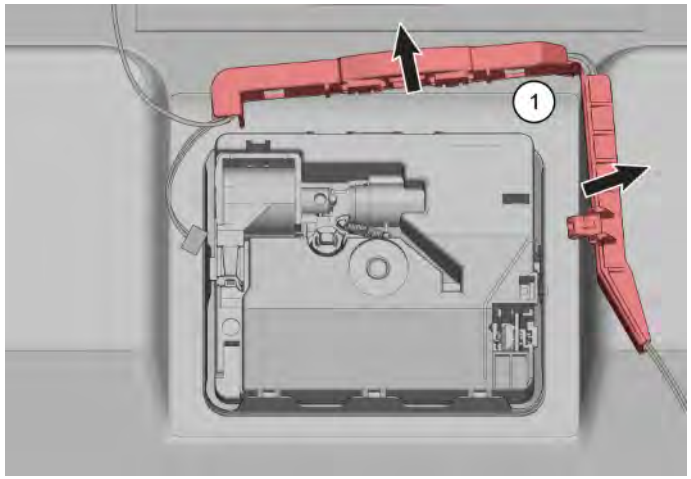
Prerequisite:
- Appliance is disconnected from the power supply.
- Furniture panel has been removed (optional).
- Outer door has been removed.
- Outer door has been removed (fully integrated/integrated).

6.26.1 Removing dispenser

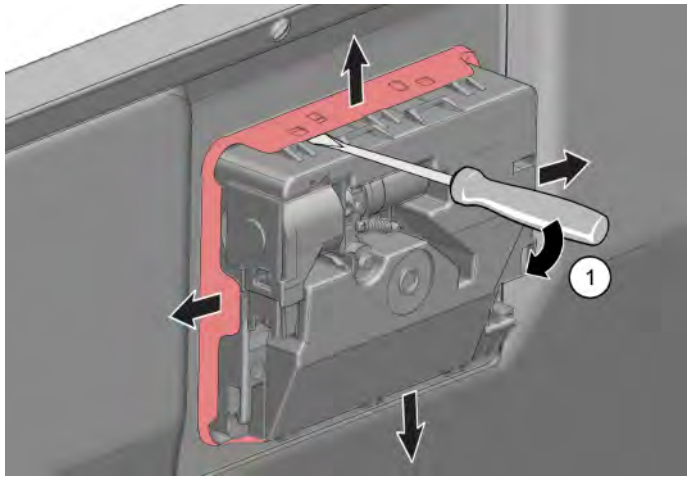
1. Unlock the electrical connection and unplug it (1).



2. Pull out the plug of the low rinse aid sensor (2).
3. Disengage the cable duct on the right and at the top of the dispenser and fold it down (1).

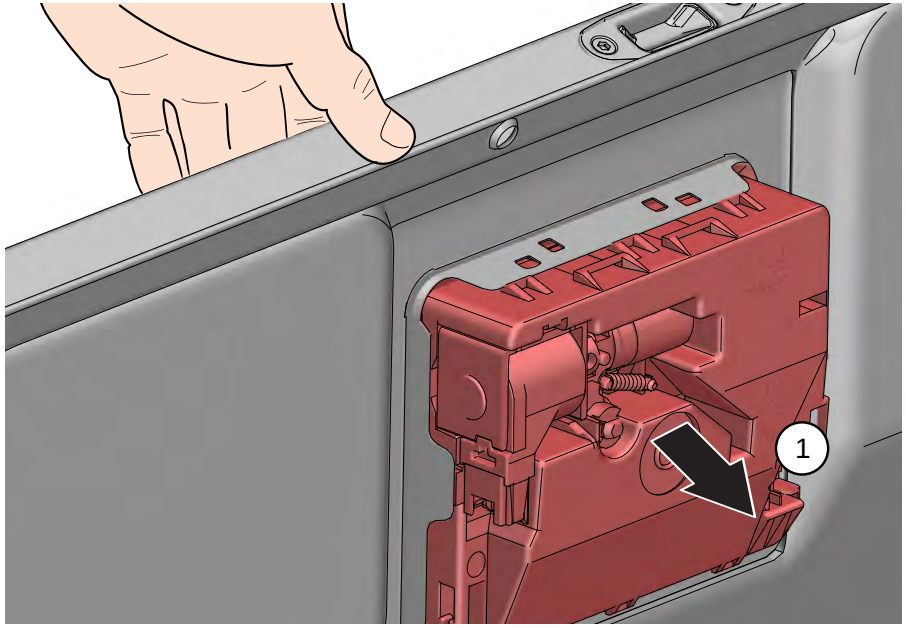


4. Bend the metal plates of the inner door carefully outwards (1).



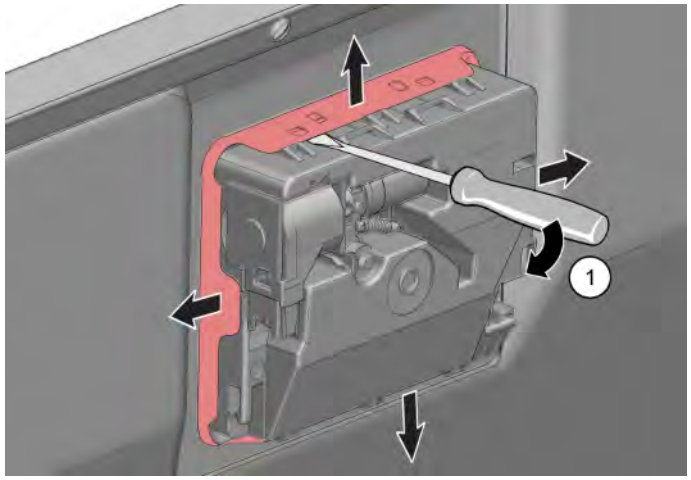
5. Disengage the dispenser.
6. Secure the dispenser on the inside against falling and press it out of the recess.

7. Remove the dispenser.



6.26.2 Installing dispenser

1. Bend back the retaining bracket of the inside door into its initial position.
2. Press the dispenser evenly into the recess until all eight retaining brackets have clicked into place.



3. Fold up the cable duct and click it into place on the dispenser.
4. Connect the electrical connections.

6.27 Replacing detergent cover

	A small screwdriver can be used as a levering tool.

Prerequisite:

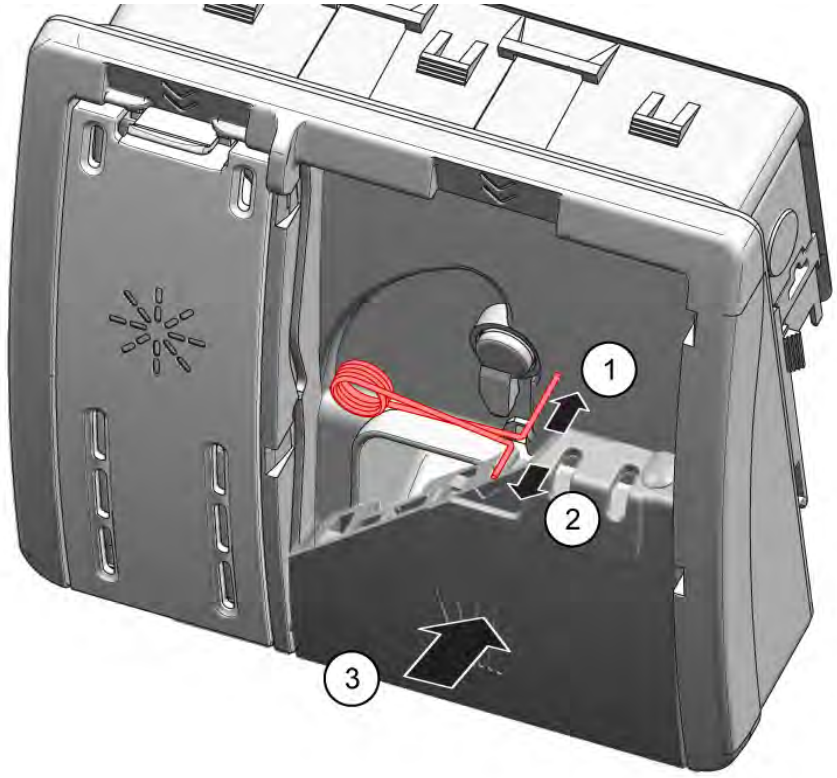
- Appliance is disconnected from power supply.
- Appliance is disconnected from water supply.
- Door has been opened.
- Detergent cover has been opened.

6.27.1 Removing detergent cover

1. Slide the detergent cover in 5 mm.
2. Lever the detergent cover on the lower side out of the guide rails and take the detergent cover on the upper side out of the guide rails.
3. Remove the spring.

6.27.2 Inserting spring

1. Insert the long end of the spring into the mounting hole of the dispenser device (1).



2. Insert the short end of the spring into the mounting hole of the detergent cover (2).
3. Press cover into the dispenser device (3).

6.27.3 Installing detergent cover

1. Insert the detergent cover 5 mm before the completely open position into the guide rails on one side. Applying gentle force, press the opposite side into the guide rails.
2. Check the function of the detergent cover.

6.28 Replacing side panel

Prerequisite:

- Appliance is disconnected from power supply.
- Appliance is disconnected from water supply.
- Appliances is freely accessible.
- Free-standing appliances: Worktop has been removed.→ *Page 77*

6.28.1 Removing side panel

1. Remove screws from the side panel (1).

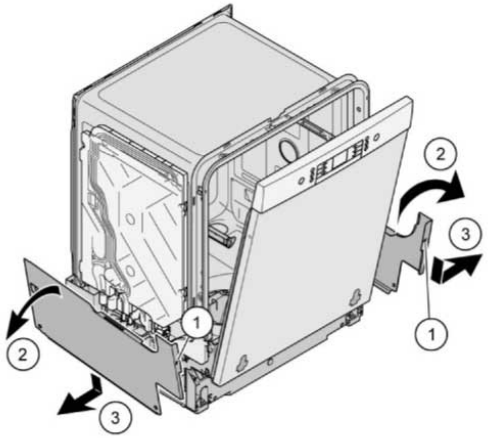
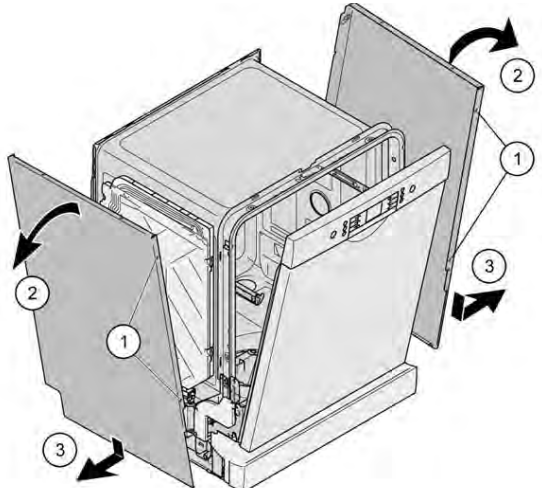


Fig. 30: Fully integrated



2. Tilt the side panel slightly outwards at the top (2).
3. Lower the side panel and pull it out of the base trough (3).

6.28.2 Installing side panel

1. Insert the side panel into the base trough (1).

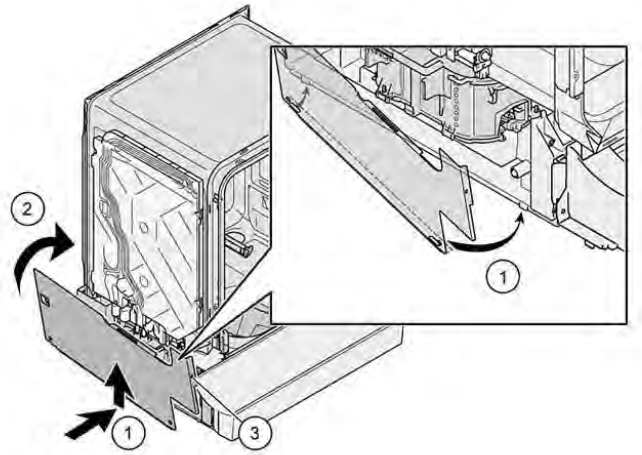
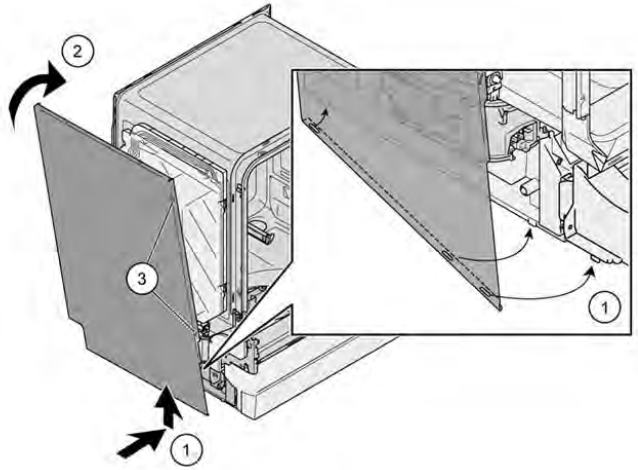


Fig. 31: Fully integrated



2. Press the side panel onto the appliance (2).
3. Secure the side panel with screws (3).

6.29 Replacing outer door

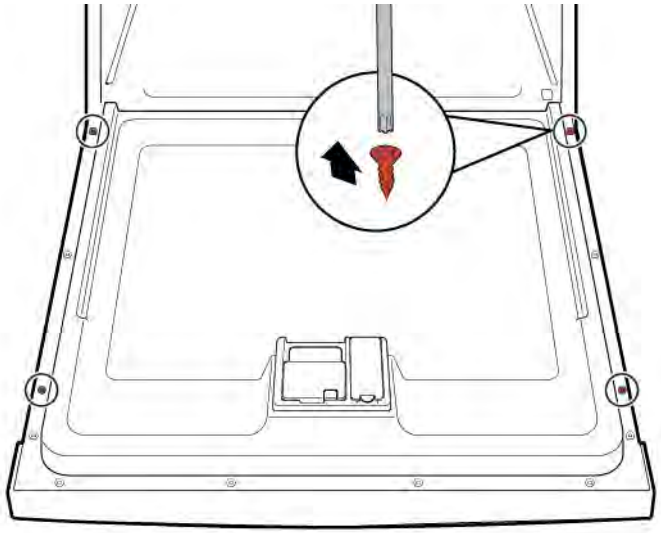
Prerequisite:

- Appliance is disconnected from power supply.
- Appliance is disconnected from water supply.

6.29.1 Removing outer door

	Just remove the screws which are described in the following steps.

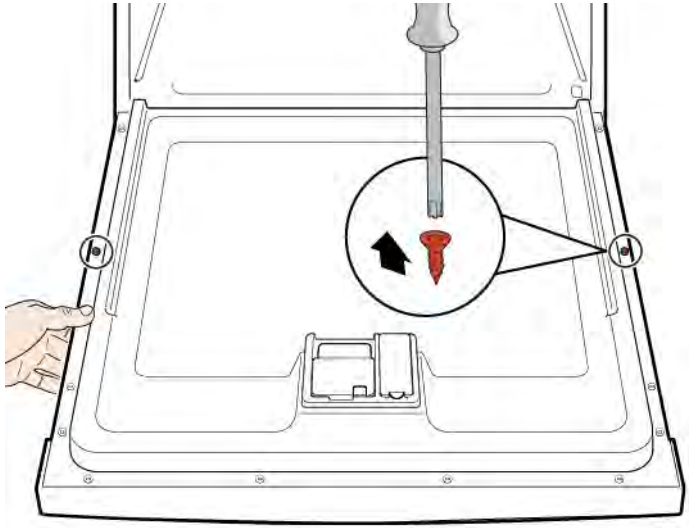
1. Open door.
2. Remove four screws.



3.

	Secure the door by holding it on one side.

Remove two screws.



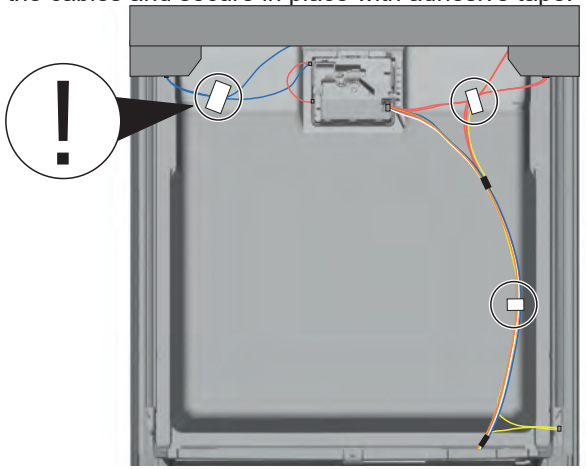
6.29.2 Installing outer door

Notice

Cables which are incorrectly positioned or not secured!

Damage to cabling

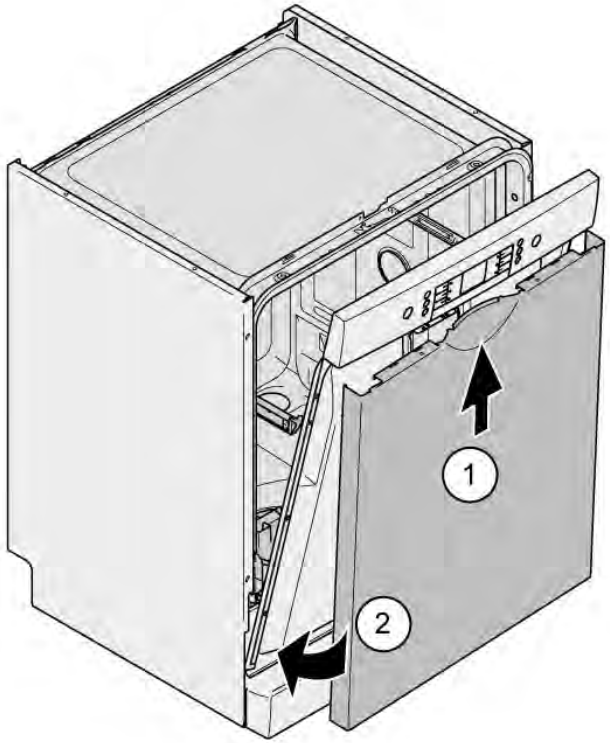
- Position the cables and secure in place with adhesive tape.



Prerequisite:

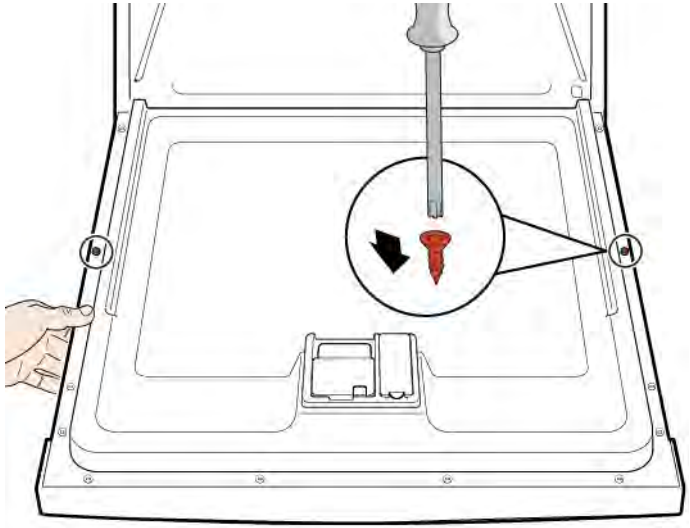
- Insulating fleece has been correctly positioned and fixed on the inside of the outer door.
- Hinges are inserted into the outer door.

1. Close the inner door without snapping it shut.
2. Push the outer door upwards underneath the control panel (1).

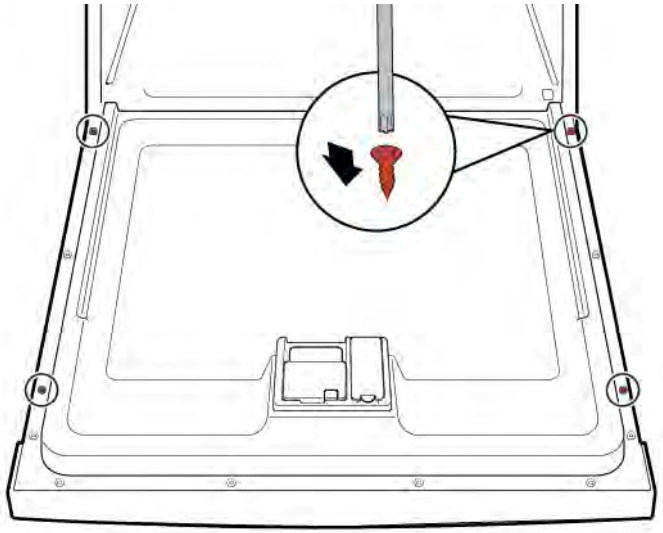


3. Press the outer door against the inner door and hold (2).
4. Secure the door by holding it on one side.

Open the door and secure it with two screws (4 x 11 mm metal screws).



5. Secure the outer door with four screws (4 x 11 mm metal screws).



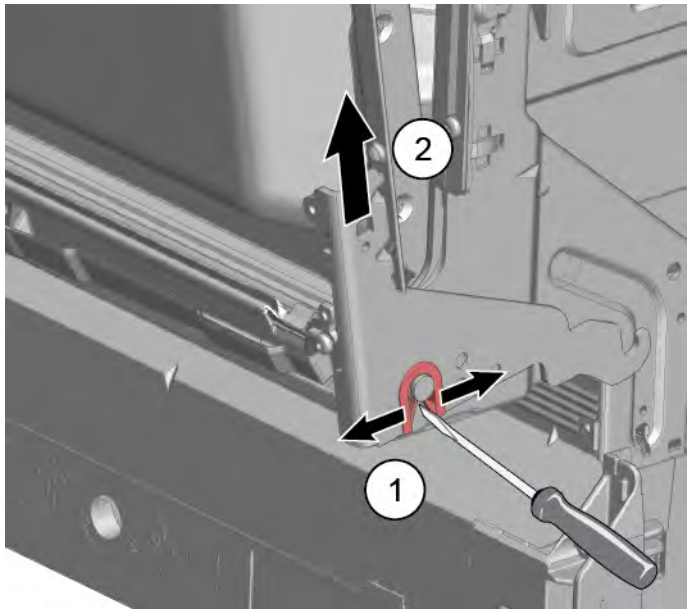
6.30 Replacing hinges

Prerequisite:

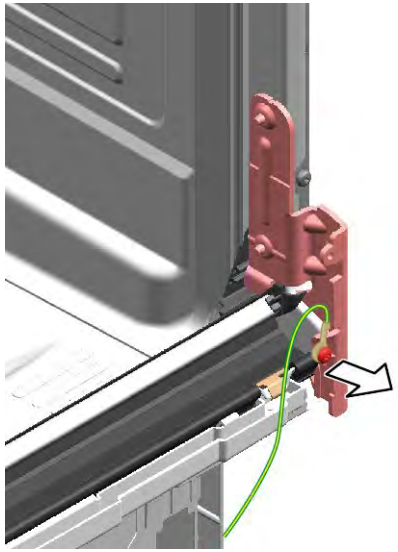
- Appliance is disconnected from the power supply.
- Outer door has been removed.
- Base socket plate has been removed.
- Toe panel has been removed (optional).
- Door springs have been removed.
- Control panel has been removed.
- Cable harness holder on the bottom right has been removed.
- Overflow conduit has been released.

6.30.1 Removing hinges

1. Release the catch tappets with a screwdriver (1) and pull out the door upwards together with the hinges (2).



2. Release ground connection on door hinge.



3.

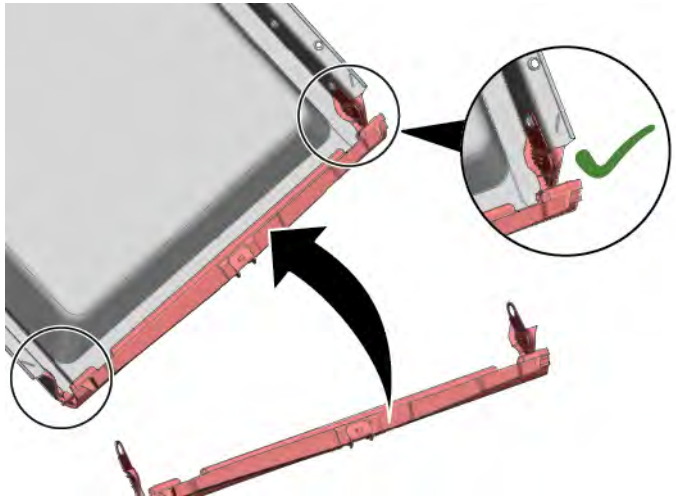
	The lower door seal is removed at the same time.

4. On the dismantled door, remove two screws from each hinge to take it off.

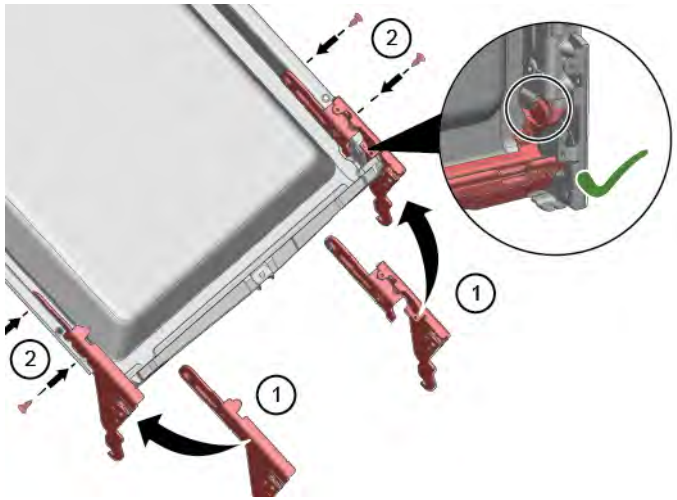
6.30.2 Installing hinges

	Danger **Risk of electric shock due to live parts!** Danger to life through electric shock in case of improper repair ▸ Electric parts should be repaired by a qualified electricians. ▸ After the repair have a safety test according VDE 0701 or country-specific regulations performed.

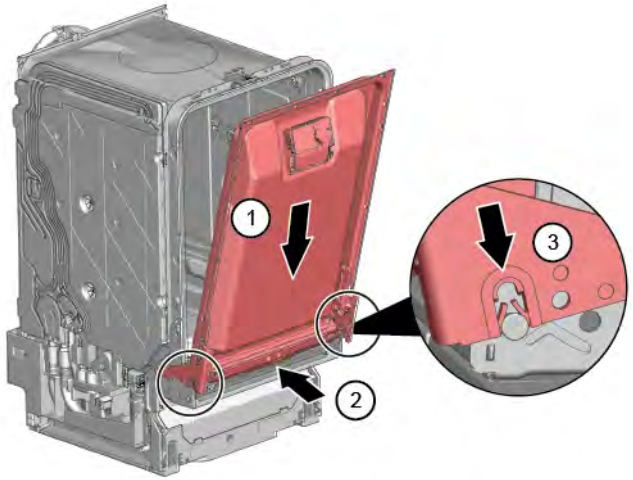
1. Push the door seal onto the bottom edge of the inner door.



2. Attach hinges to each side (1). Secure the hinge and the plastic holder of the door seal to the inner door (2) using two screws for each.



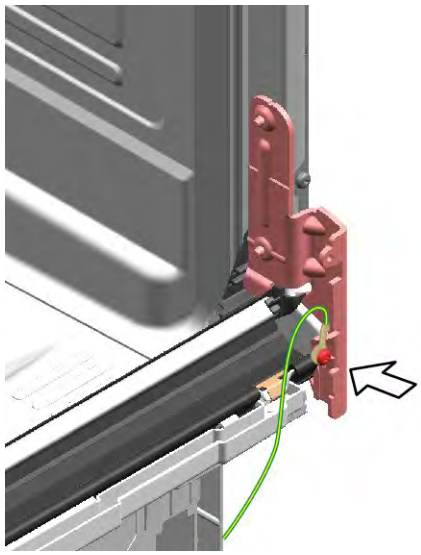
3. Hook in the hinges together with the inner door (1).



4. Place the lower door seal carefully over the overflow gutters of the container (2) and check that they are correctly positioned.
5. Hook in the hinges (3).
6.

	A missing ground connection can lead to mains potential on door.

Establish ground connection.



7. Install two retaining clips on the lower door seal.

6.31 Replacing door spring - with door opening module (60 cm)

	There are the spring system the spring system I and II. Both variants are described below.

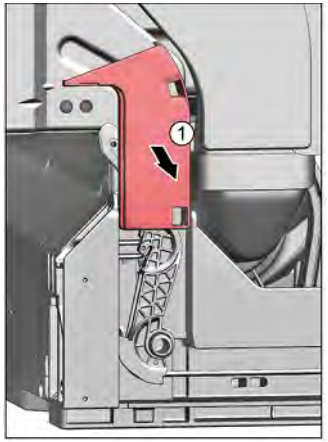
6.31.1 Removing door springs

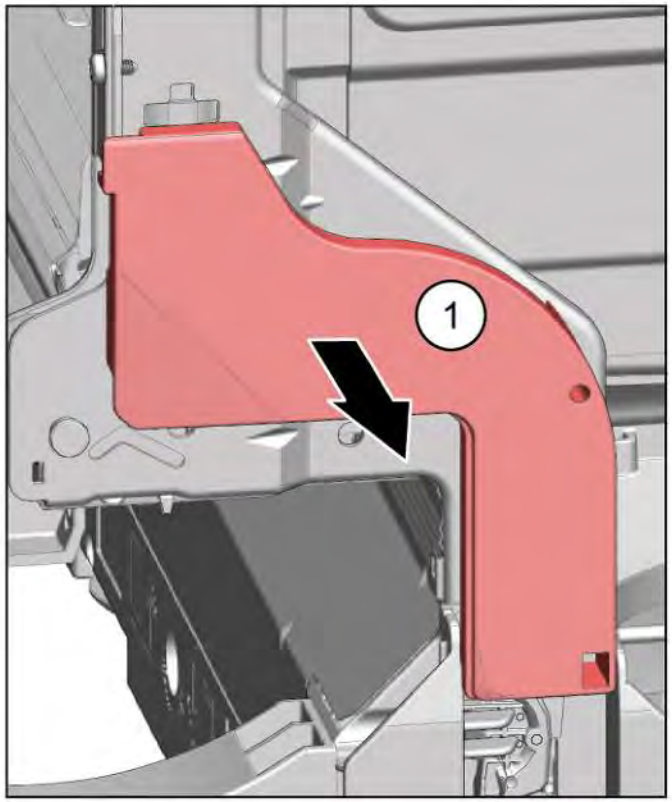
Spring system I from FD 8804 to 9207 from FD 9311.
Spring system II from FD 9208 up to and including 9310.

Prerequisite:

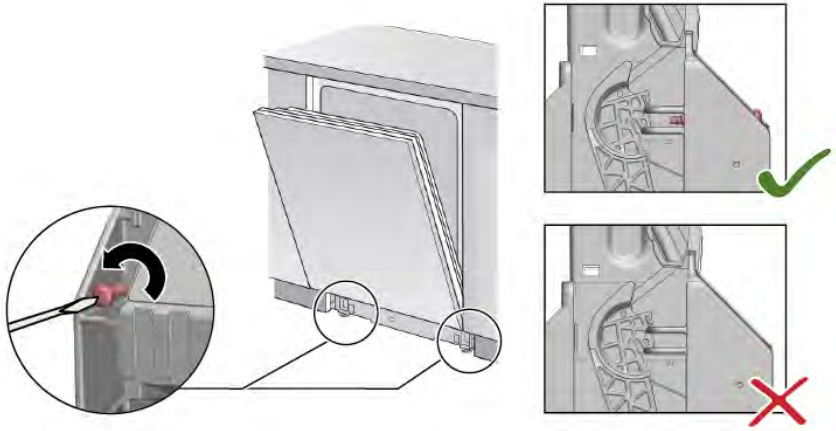
- Side panels have been removed→ *Page 125*

1. Remove the cord guide cover out.



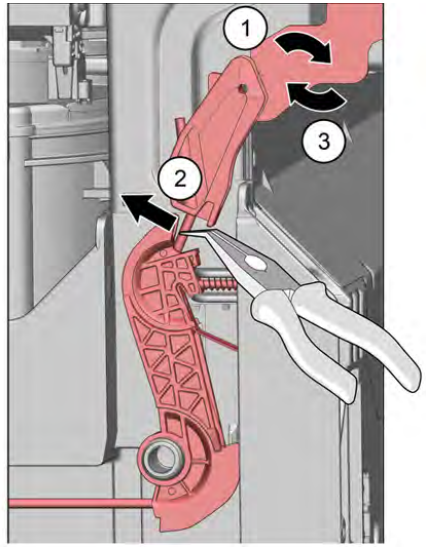


2. Loosen the adjustment screws.



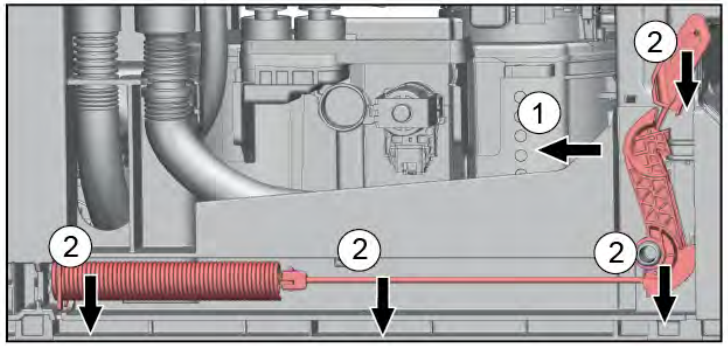
Only relevant for appliances with door opening module.

3. Open the door slightly (1).



4. Hold the tension cord with flat-nosed pliers (2).
5. Slowly close the door (3).
   ➔ Take out the holder of the support

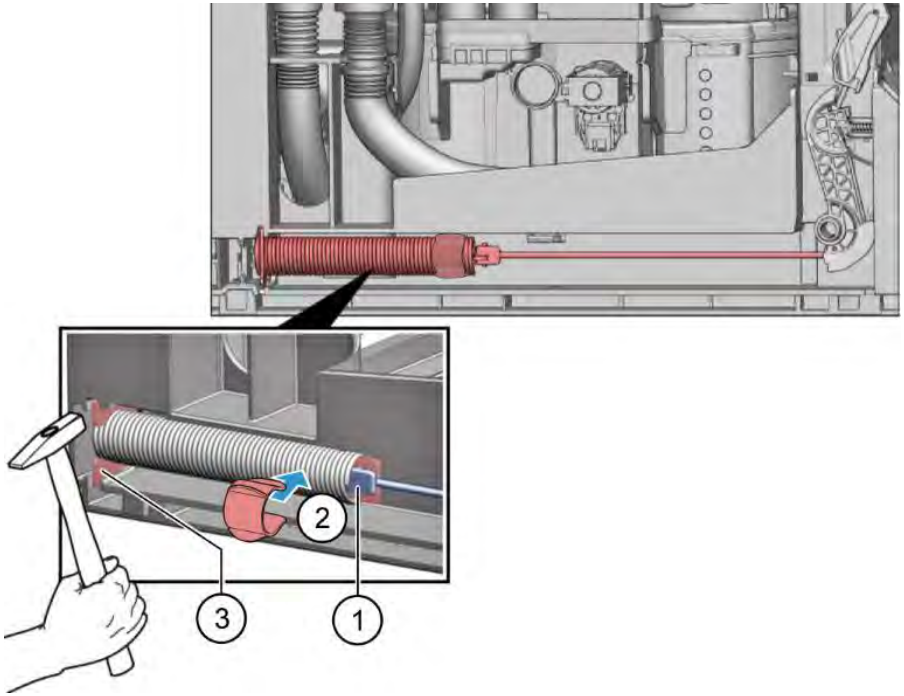
6. Loose the flat-nosed pliers.
   Spring is released
7. Press the lever to the left (1).



8. Remove the complete cord system forwards (2).

6.31.2 Installing door springs - System I

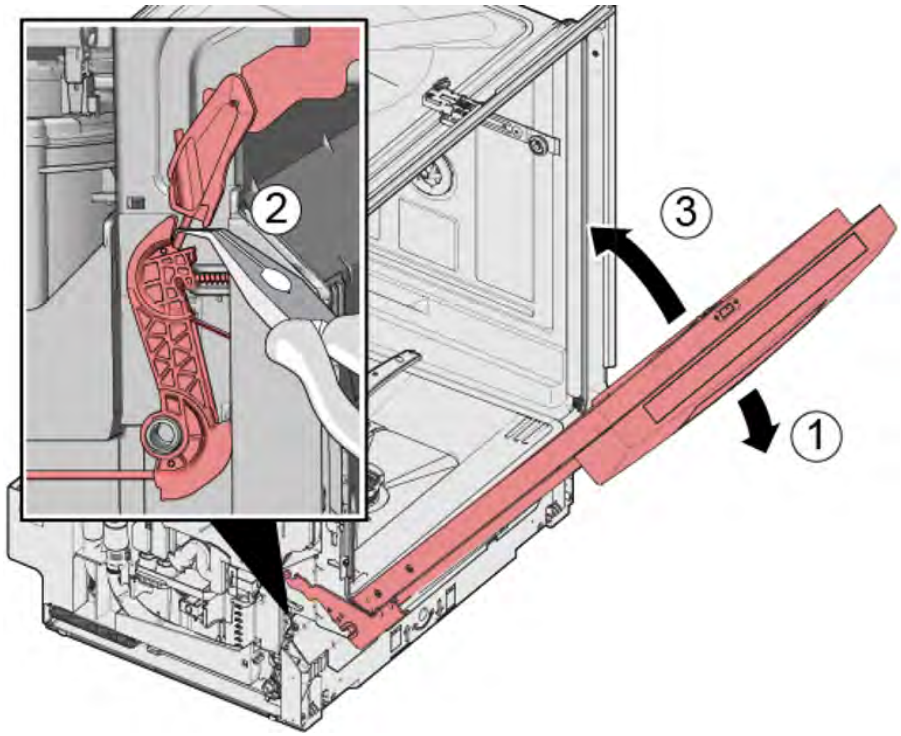
1. Hook the tension cord into the spring (1).



2. | | |
   |---|---|
   | | The tension cord holder must be inserted exactly as shown to prevent friction to the floor pan. |

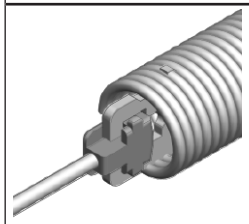
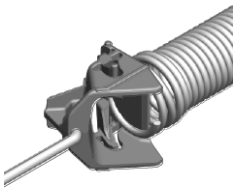
   Attach rope protection (2).
3. Hammer the spring into the groove of the base group (3).
4. Insert the deflexion lever.

5. Open the door slowly (1).



6. Fix in the groove of the base trough (2).
7. Slowly close the door (3).
   ➥ The cord system attaches itself automatically to the door hinge.

6.31.3 Table of springs

System I ■ Mat. no.	Spring colour	System II ■ Mat. no.	Weight of the furniture door*
	.		.
[12009811]**	Light blue**	00754874	3,0 kg - 10 kg
[12006153]	Pink	00754873	3,0 kg - 10 kg
[12009523]	Green	00754870	2,5 kg - 8,5 kg
[12006151]	Black	00754869	2,5 kg - 8,5 kg
[12022728]	Blue	00754867	2,5 kg - 8,5 kg
[00637632]	Red	00754866	-
[12007253]	Yellow	00754865	-

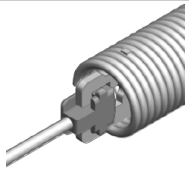
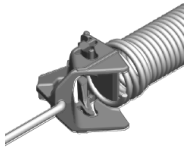
Procedure for using a furniture panel weighting 7,5 - 11,5 kg:
- Determine the series spring according to the Quickfinder.
- Select and install springs that are two levels stronger.
- If there is only one stronger level, select this one and install.
- If the strongest spring has already been used according to the table, it is not possible to increase the spring force.

**The using the light blue spring in conjunction with the ECO Dry is only permissible with integrated safety-spring system!
- According Quickfinder determine whether springs - safety system is installed.

Weights of the furniture door
- In their original condition, all 86,5 cm fully integrated dishwashers can support door fronts weighing 3,0 - 10,0 kg.
- For appliances ≥ 40 dB is a max. weight of 11,5 kg possible by replacing the springs.
- For appliances ≤ 39 dB there are no further springs, stronger light blue, available.
- In their original condition, the rest of dishwashers can support door panels weighing 2,5 - 8,5 kg.

6.31.4 Table of springs (Appliances with EcoDry)

Do not use the springs for 45 cm width models!

System I ■ Mat. no.	Spring colour	System II ■ Mat. no.	Spring colour	Weight of the furniture door
	-		-	-
[00630633]	Brown	[12013412]	Light blue	3,0 kg - 10 kg
[00630851]	Purple	[12013411]	Pink	2,5 kg - 8,5 kg

Weights of the furniture door

- In their original condition, all 86,5 cm fully integrated dishwashers can support door fronts weighing 3,0 - 10,0 kg.
- For appliances ≥ 40 dB is a max. weight of 11,5 kg possible by replacing the springs.
- For appliances ≤ 39 dB are **no** further springs, stronger light blue, available.
- In their original condition, the rest of dishwashers can support door panels weighing 2,5 - 8,5 kg.

Procedure for using a furniture panel weighing 7,5 - 11,5 kg:

- Determine the series spring according to the Quickfinder.
- Select and install springs that are two levels stronger.
- If there is only one stronger level, select this one and install.
- If the strongest spring has already been used according to the table, it is not possible to increase the spring force.

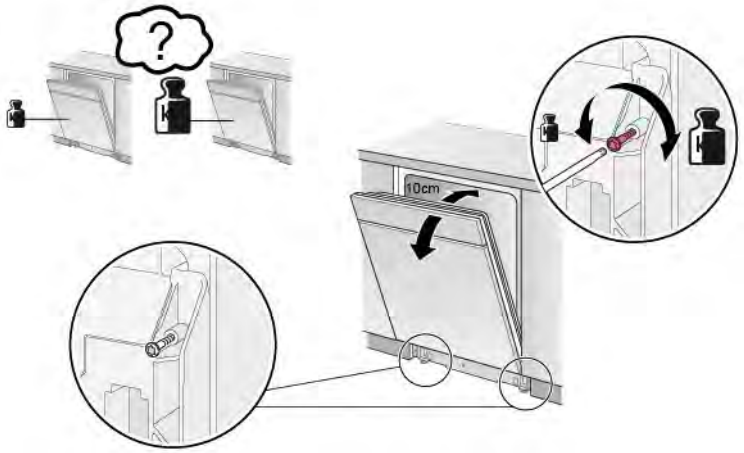
6.31.5 Adjusting door opening module

Prerequisite:

✔ Toe panel has been removed.→ *Page 141*

▸ Set door opening with the adjusting screws so that the door automatically opens to 10 cm.

Tighten and loosen the screws to vary the tension of the tension cord until the required tension is reached.



6.32 Replacing door spring - without door opening module (60 cm)

	There are two spring systems: the spring system I and II. Both variants are described below.

6.32.1 Removing door springs

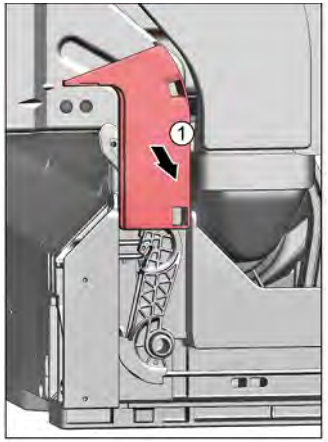
Spring system I from FD 8804 to 9207 from FD 9311.

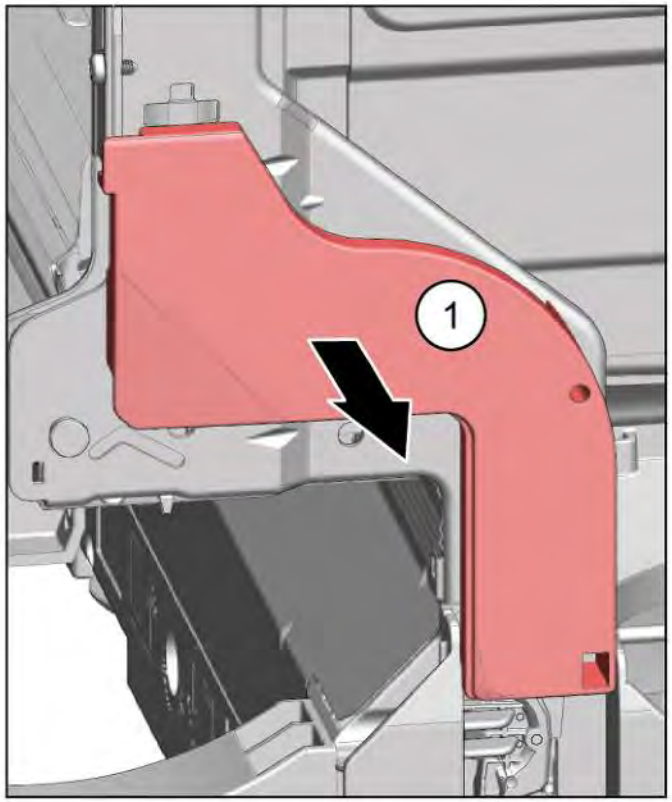
Spring system II from FD 9208 up to and including 9310.

Prerequisite:

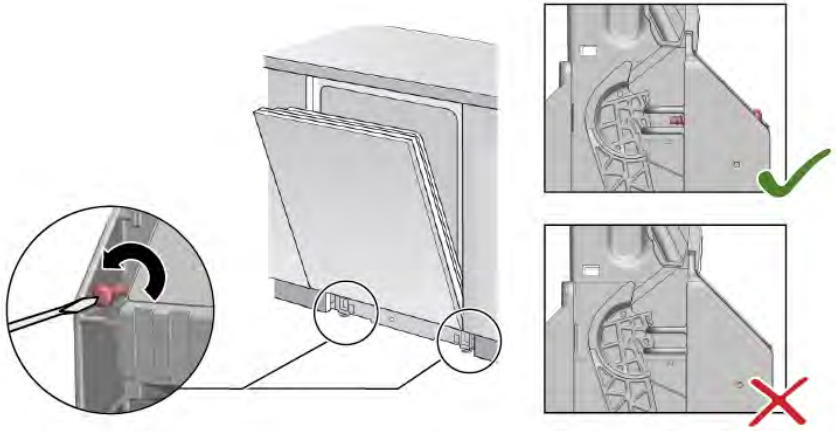
- Side panels have been removed→ *Page 125*

1. Remove the cord guide cover out.



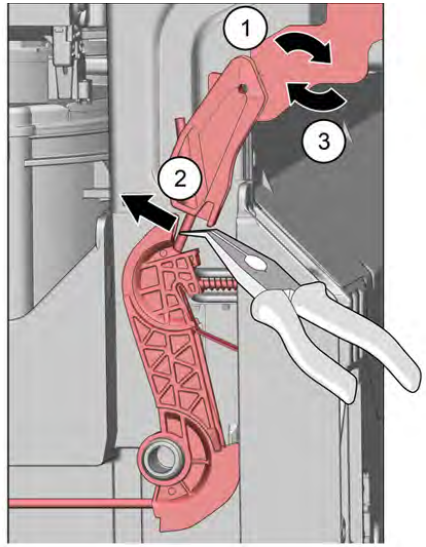


2. Loosen the adjustment screws.



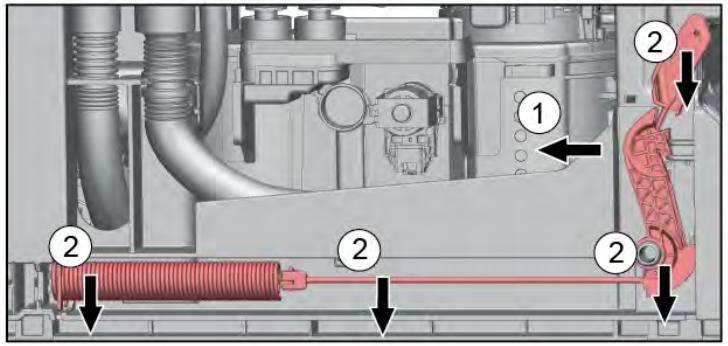
Only relevant for appliances with door opening module.

3. Open the door slightly (1).



4. Hold the tension cord with flat-nosed pliers (2).
5. Slowly close the door (3).
   ➔ Take out the holder of the support

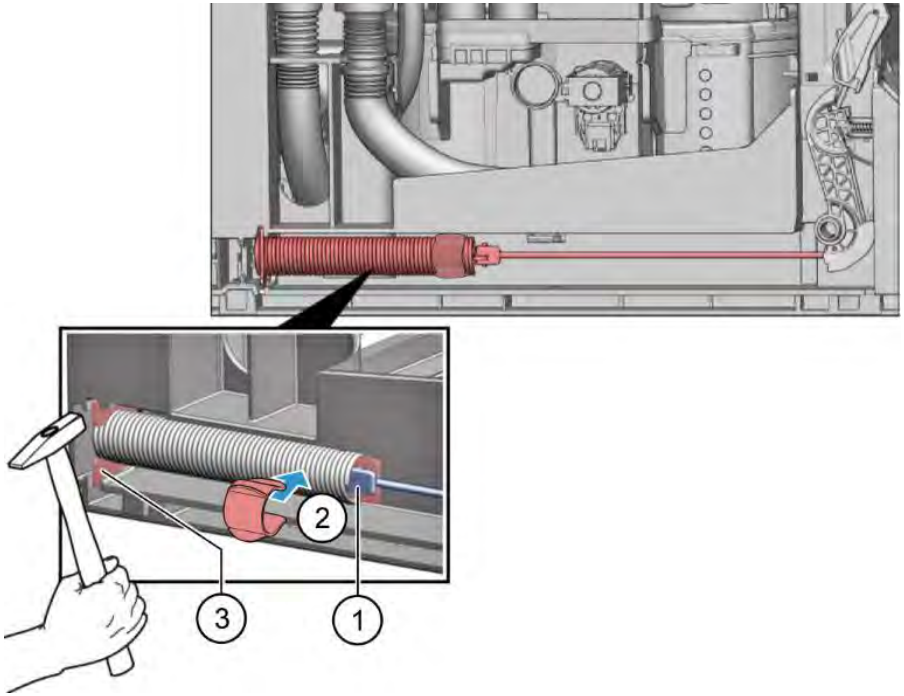
6. Loose the flat-nosed pliers.
   Spring is released
7. Press the lever to the left (1).



8. Remove the complete cord system forwards (2).

6.32.2 Installing door springs - System I

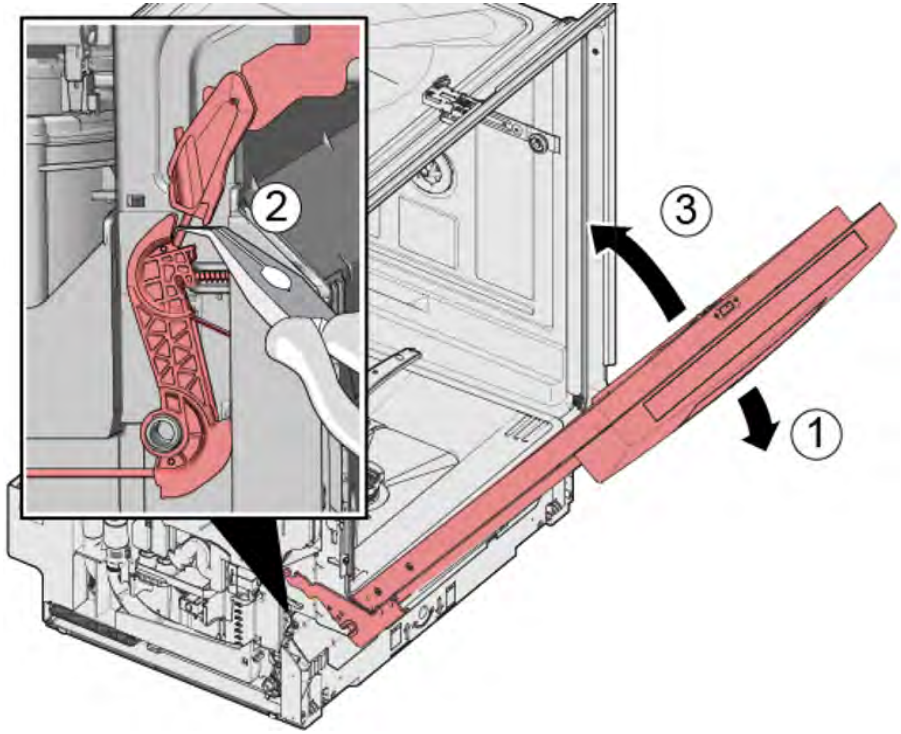
1. Hook the tension cord into the spring (1).



2. | | |
   |---|---|
   | | The tension cord holder must be inserted exactly as shown to prevent friction to the floor pan. |

   Attach rope protection (2).
3. Hammer the spring into the groove of the base group (3).
4. Insert the deflexion lever.

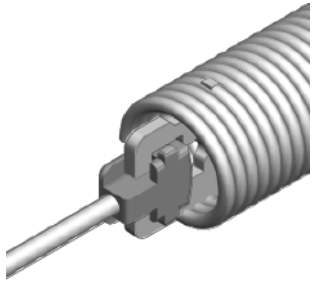
5. Open the door slowly (1).



6. Fix in the groove of the base trough (2).
7. Slowly close the door (3).
   ➥ The cord system attaches itself automatically to the door hinge.

6.32.3 Table of springs

Do not use the springs for 45 cm models!

System I ■ Mat. no.	**Spring colour**	**Weight of the furniture door***
	-	-
[00623843]	Light blue	3,0 kg - 11,5 kg
[00611340]	Pink	3,0 kg - 11,5 kg
[00611339]	Green	2,5 kg - 8,5 kg
[00611338]	(Purple) Black	2,5 kg - 8,5 kg
[00611337]	Blue	2,5 kg - 8,5 kg
[00611336]	Red	-
[00611335]	Yellow	-

Weights of the furniture door

- In their original condition, all 86,5 cm fully integrated dishwashers can support door fronts weighing 3,0 - 10,0 kg.
- For appliances ≥ 40 dB is a max. weight of 11,5 kg possible by replacing the springs.
- For appliances ≤ 39 dB are **no** further springs, stronger light blue, available.
- In their original condition, the rest of dishwashers can support door panels weighing 2,5 - 8,5 kg.

Procedure for using a furniture panel weighing 7,5 - 11,5 kg:

- Determine the series spring according to the Quickfinder.
- Select and install springs that are two levels stronger.
- If there is only one stronger level, select this one and install.
- If the strongest spring has already been used according to the table, it is not possible to increase the spring force.

6.33 Replacing toe panel

	The feet are identical and can be swapped over.

Prerequisite:

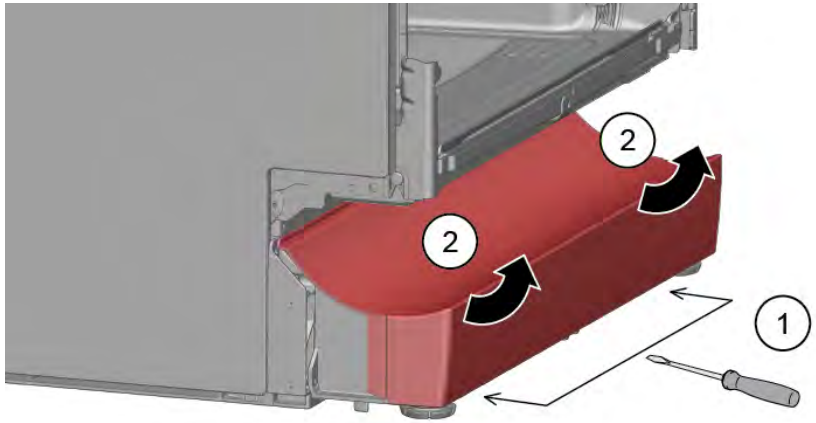
- Appliance is disconnected from power supply.
- Appliance is disconnected from water supply.
- Outer door has been removed.
- Outer door has been removed (fully integrated/integrated).

6.33.1 Removing toe panel

1.

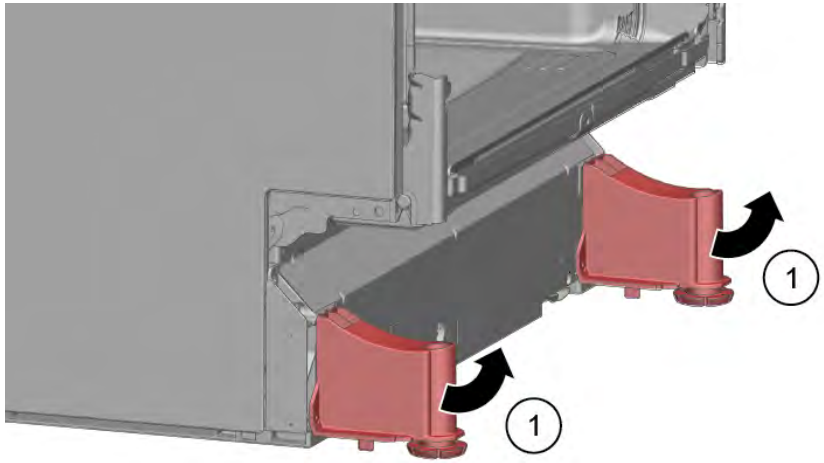
	Incorrect removal. If the toe panel is loosened at the side and removed, the two brackets may break away. If only one bracket is damaged, the side can be changed as the brackets are identical. It is advisable to place something under the appliance at the front on the side to relieve the load on the toe panel with the feet.

2. Reach into the guides (1) with a screwdriver and release the catch by pushing downwards.



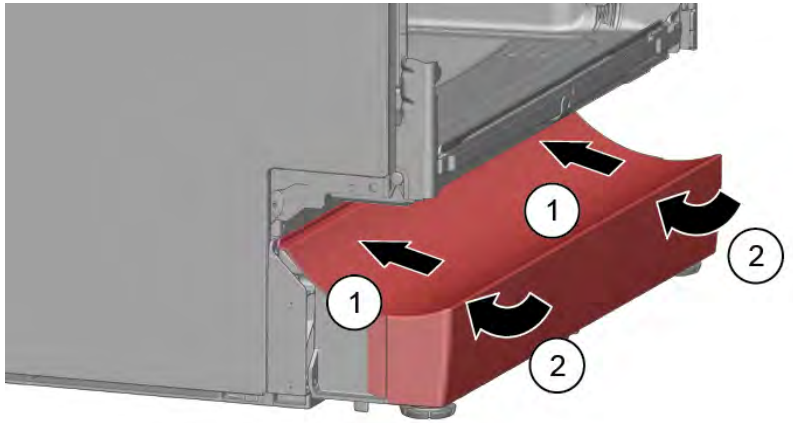
3. Lift the panel off.

4. Remove the feet forwards (1).



6.33.2 Installing toe panel

1. Insert the feet.
2. Attach the toe panel at the top (1) and press it down until it audibly clicks into place (2).



6.34 Replacing base socket plate

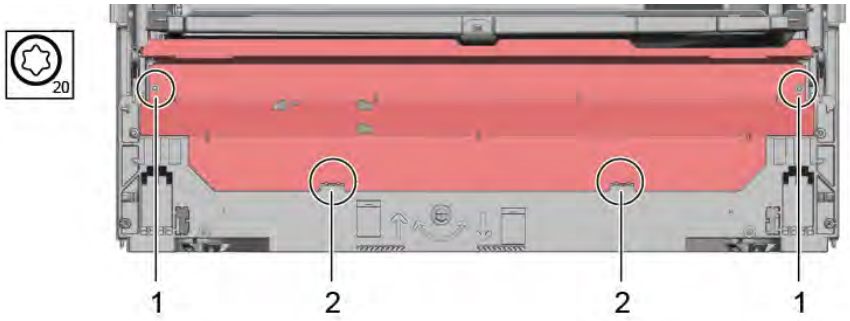
	The base socket plate is located in the lower area at the front.

Prerequisite:

- Appliance is disconnected from power supply.
- Appliance is disconnected from water supply.
- Furniture panel (optional) has been removed.
- Outer door has been removed.
- Outer door has been removed (fully integrated/integrated).
- Toe panel has been removed (optional).→ *Page 141*

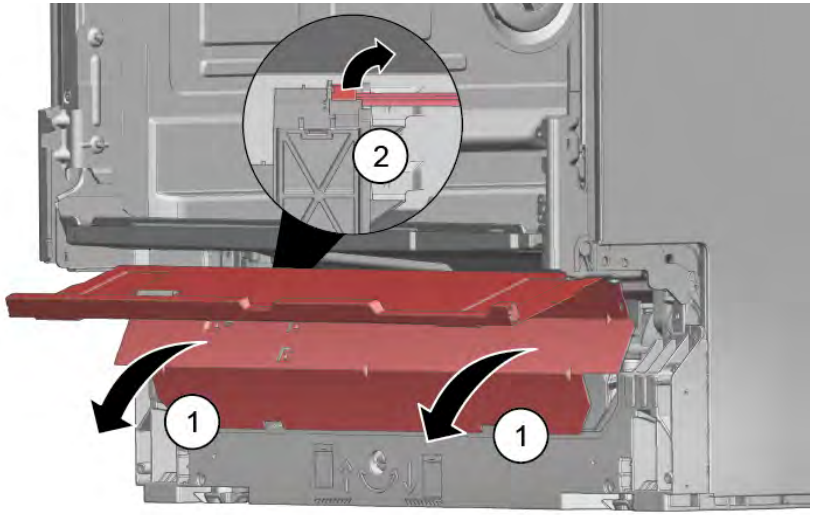
6.34.1 Removing base socket plate

1. Remove two screws (1).



2. Disengage catch elements (2).

3. Tilt the base socket plate carefully forwards (1).



4.

	Depending on the model series, the plug to the EmotionLight is still secured to the base.

Unlock the plug on the catch tappet and pull to the rear (optional) (2).

6.34.2 Installing base socket plate

▸ Install the base socket plate in reverse order.

6.35 Replacing EmotionLight

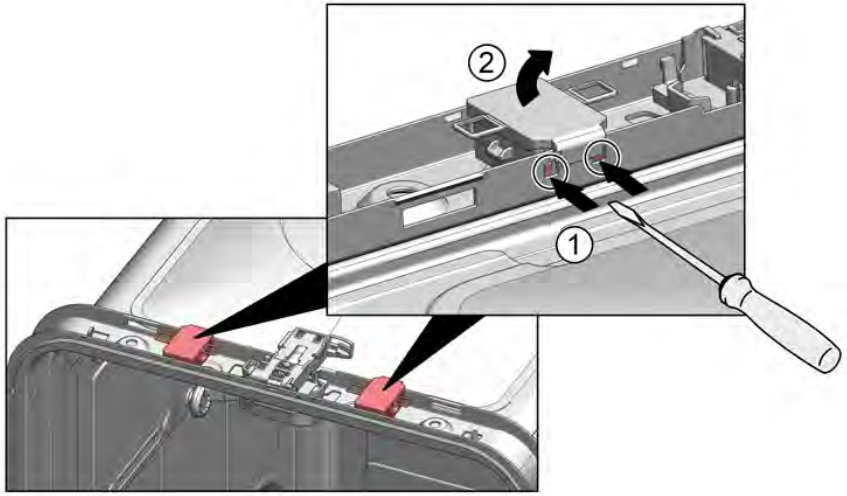
	The EmotionLight is situated in the upper front exterior area of the rinsing tank.

Prerequisite:

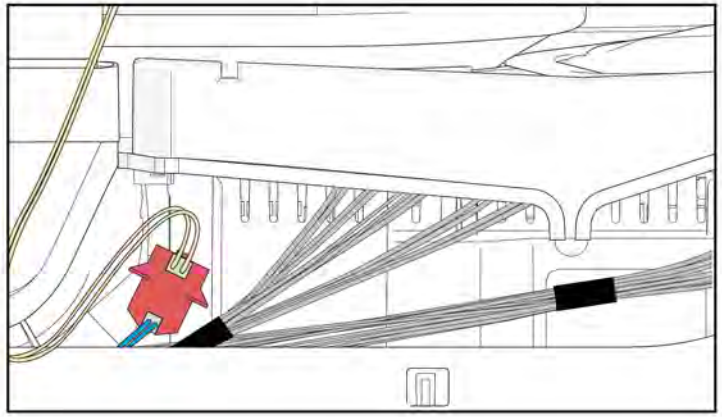
- Appliance is disconnected from power supply.
- Appliance is disconnected from water supply.
- Appliances is freely accessible.
- Worktop has been removed (optional).
- The right-hand side panel has been removed (optional).→ *Page 125*

6.35.1 Removing EmotionLight

1. Detach catch hook at the rear (1).



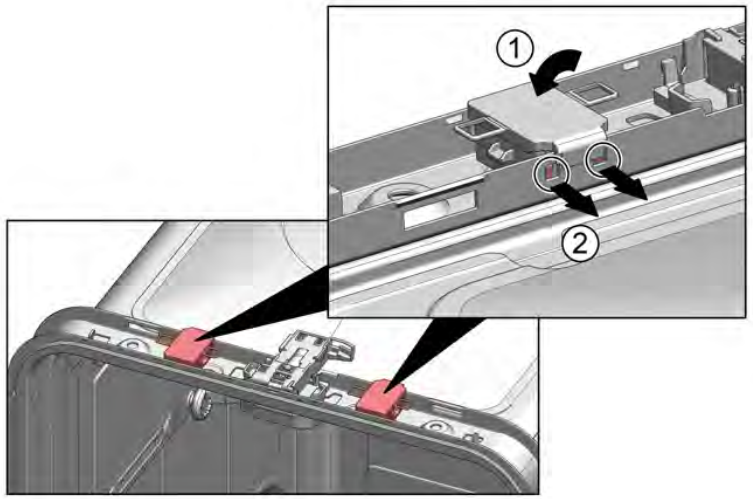
2. Remove the holder upwards (2).
3. Pull plug out of connector (bottom right at front of appliance).
4. Remove electrical connection from the power module.



5. Remove EmotionLight from the appliance.

6.35.2 Installing EmotionLight

1. Insert the holder into the rinsing tank frame (1).



2. Engage the catch hook (2).
3. 

Notice

Improper installation!
Damage to the cable in the area of the door hinge.
- Install the cable in the area of the door hinge (between the plate hinge and the rinsing tank) so that it cannot be damaged by moving parts.

Install the cable on the right lower side.

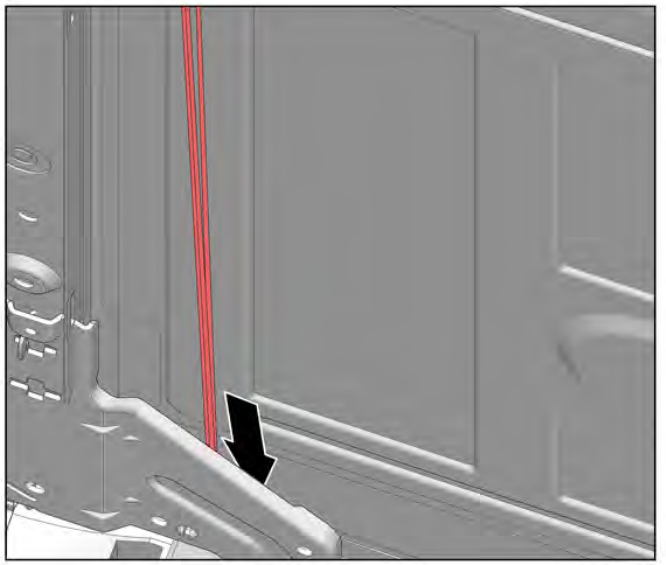


Fig. 32: Flat cable

4. Insert the plug.

6.36 Replacing InfoLight (optional)

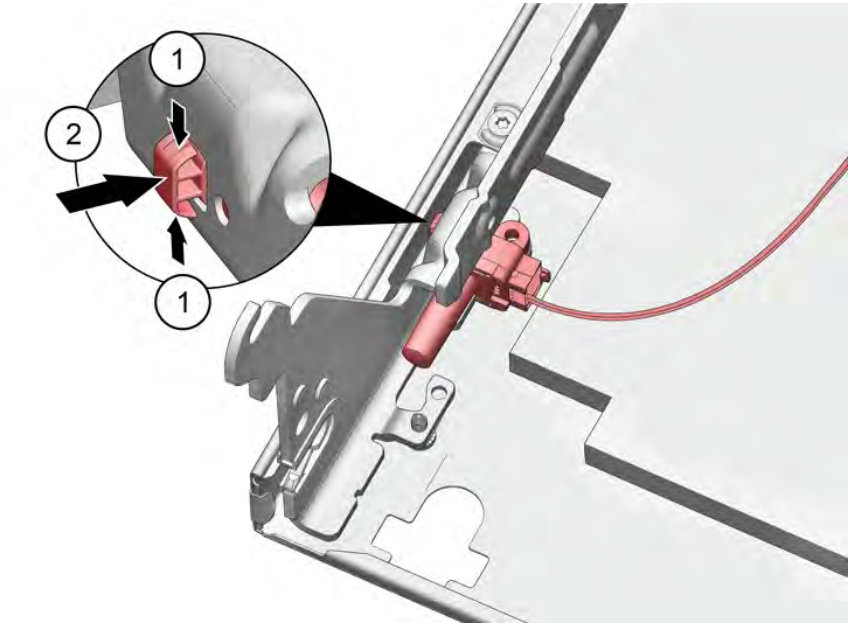
	■ InfoLight is fixed to door hinge. ■ InfoLight can only be replaced as a unit.

Prerequisite:

- Appliance is disconnected from power supply.
- Appliance is disconnected from water supply.
- Furniture panel (optional) has been removed.
- Outer door has been removed.
- Outer door has been removed (fully integrated/integrated).

6.36.1 Removing InfoLight

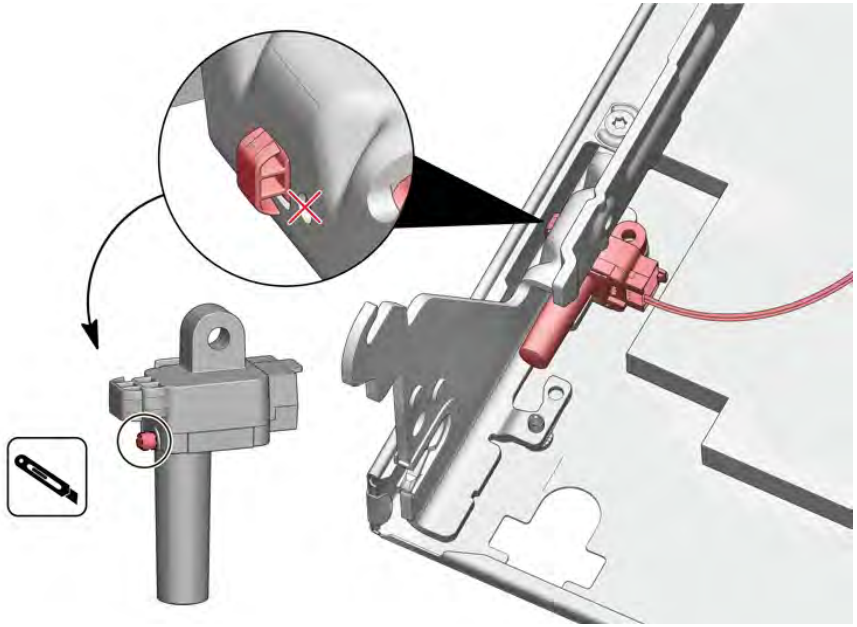
1. Carefully press the catch elements together (1).



2. Remove the InfoLight to the middle of the door (2).

6.36.2 Installing InfoLight

1. Check the recess for insulating fleece and cable guide.



2. If appliance is up to FD 8810 and fully integrated without piezo operating module,
   - enlarge cut-out by 15 mm.

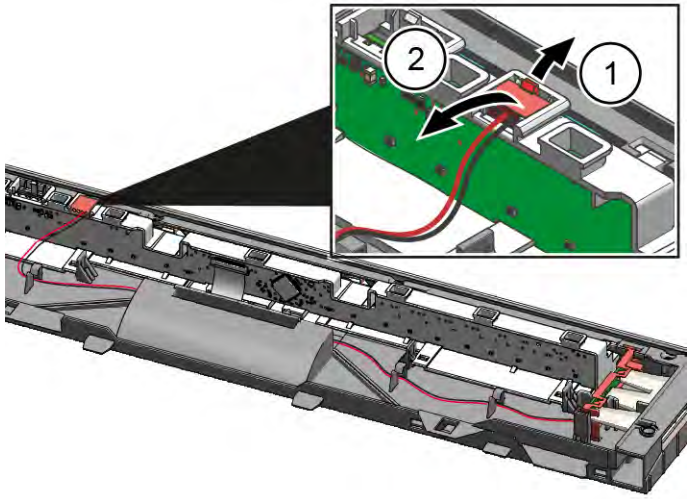
6.37 Replacing Gap illumination

Prerequisite:

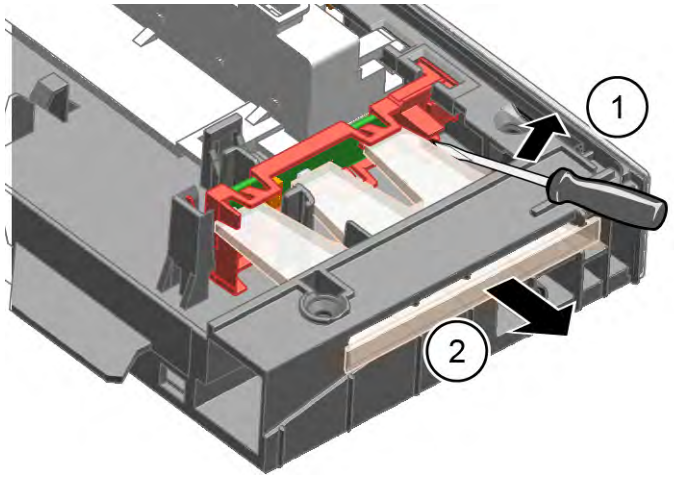
- Appliance is disconnected from power supply.
- Appliance is disconnected from water supply.
- Outer door is disassembled.
- Operation panel has been removed.

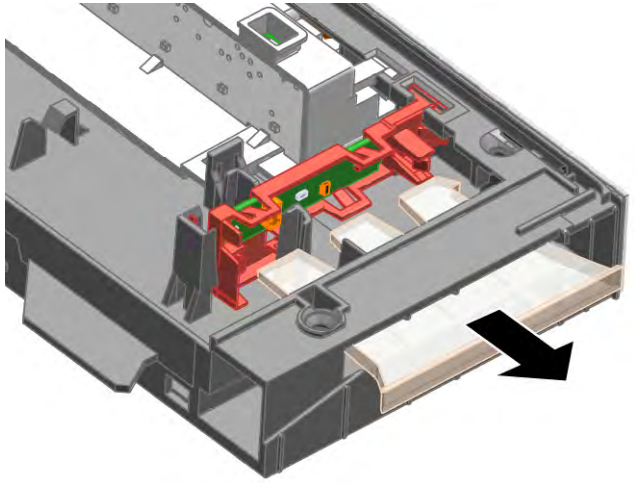
6.37.1 Removing Gap illumination

1. 1. Detach catch (1).
   2. Remove electrical connection from the operation module (2).

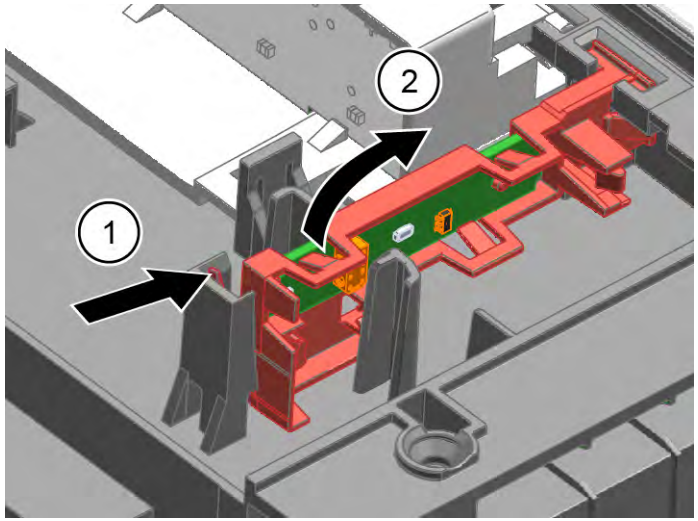


2. 1. Detach catch hook at rear (1).
   2. Remove light fibre (2).



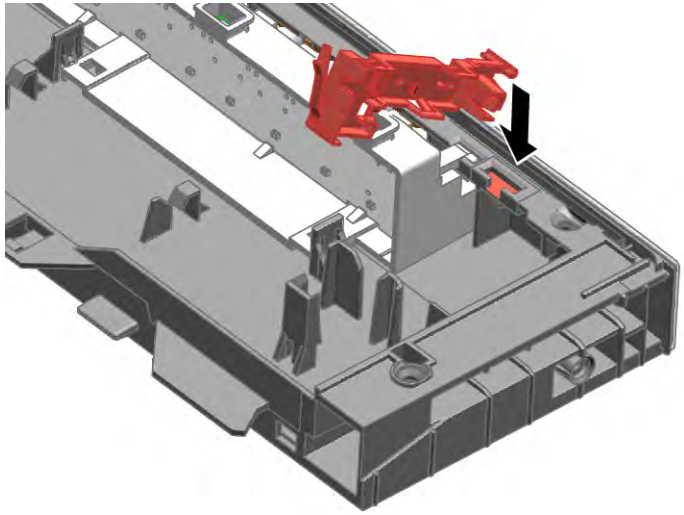


3. 1. Detach catch hook (1).
   2. Lift up PCB with holder and remove it from operation module frame (2).

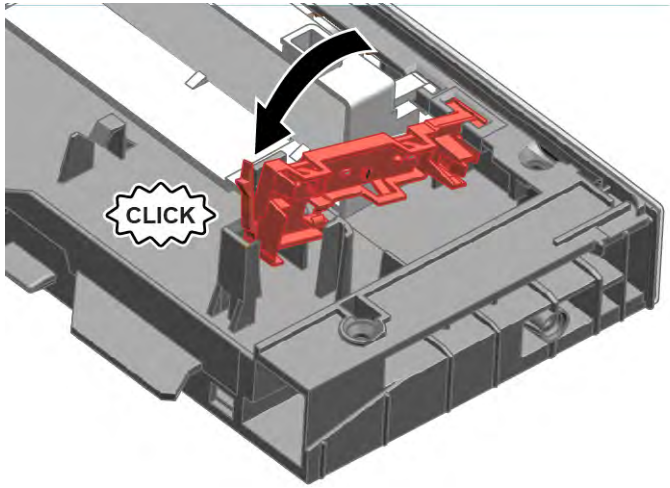


6.37.2 Installing Gap illumination

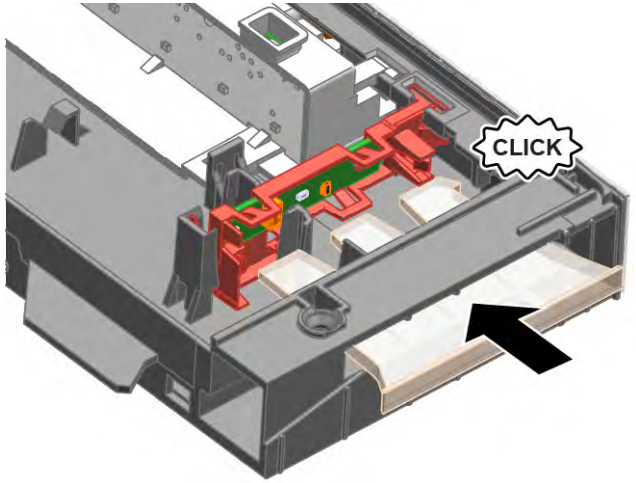
1. Insert PCB holder to operation module frame.



2. Tighten it with a "click" sound.



3. Install light fibre and tighten it with a "click" sound.



4. Connect wire to operation module.

6.38 Replacing TimeLight

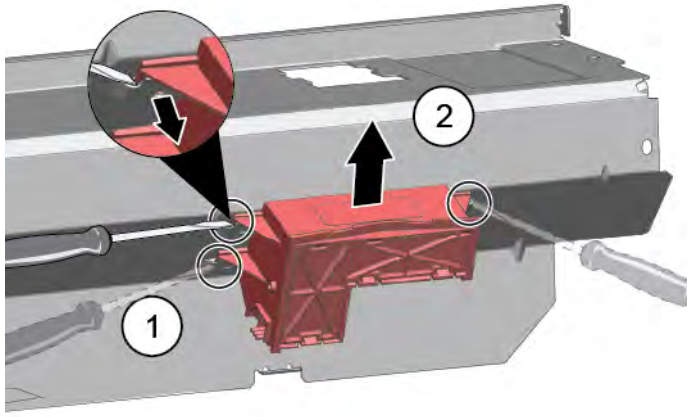
	Replace the TimeLight only as a complete part. The TimeLight module is fixed to the rear of the base socket plate.

Prerequisite:

- Appliance is disconnected from power supply.
- Appliance is disconnected from water supply.
- Toe panel has been removed.→ *Page 141*
- Base socket plate has been removed and turned.→ *Page 142*

6.38.1 Removing TimeLight

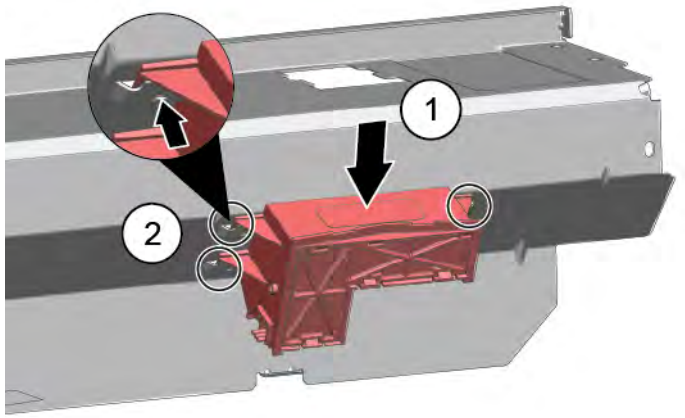
1. Bend the catch elements (1) slightly outwards.



2. Pull the TimeLight module upwards out of the guide (2).

6.38.2 Installing TimeLight

1. Bend the catch elements (1) back again.



2. Push the TimeLight module into the guide (2).
3. Connect the electrical connection.

6.39 Folding down rinsing tank (auxiliary heater)

Prerequisite:

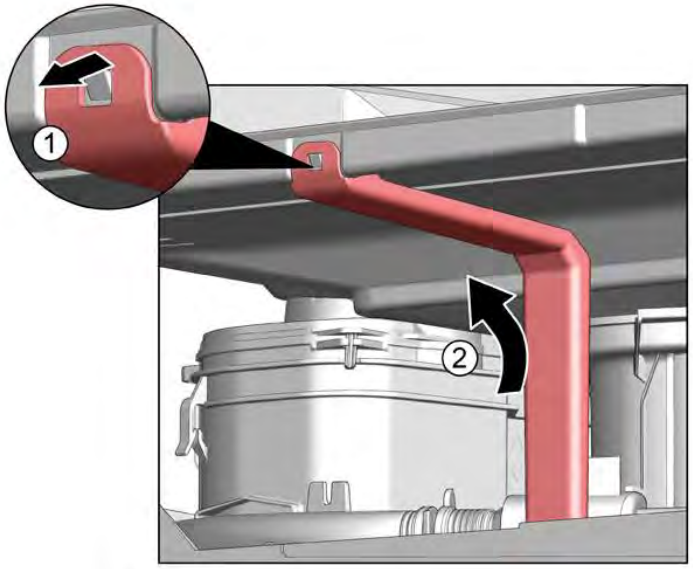
- Worktop removed (optional)→ *Page 77*
- Side panels removed→ *Page 125*
- Outer door removed
- Power module removed→ *Page 161*
- Emotion Light plug-and-socket connection loosened (optional)

6.39.1 Folding down rinsing tank

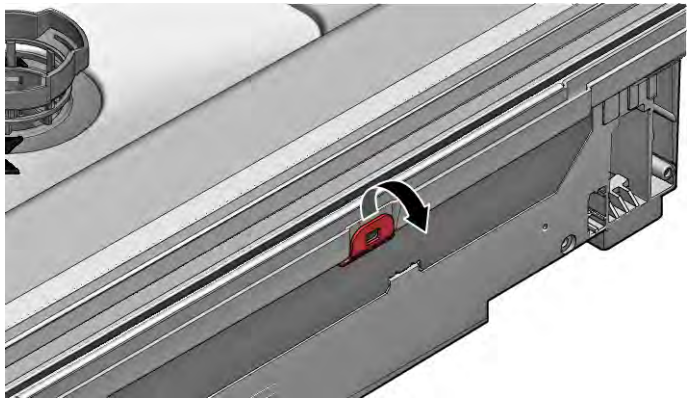
6.39.1.1 Removing overflow channel

	Residual water ■ When the drainage hose is removed, residual water may run out. ■ Catch water or remove from the base pan with suction syringe.

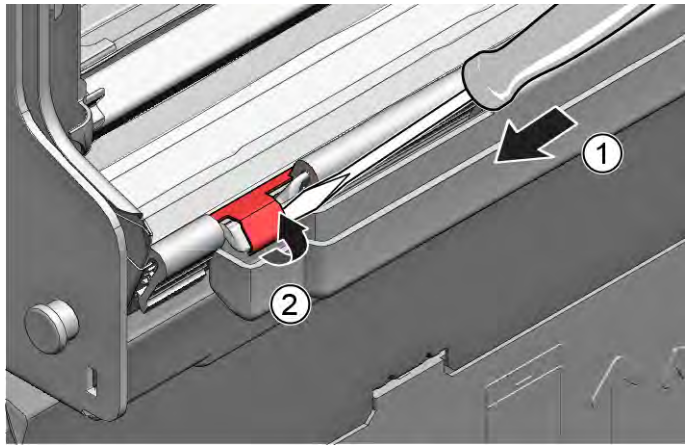
1. Lever out of the catch mechanism at the top (1, 2).



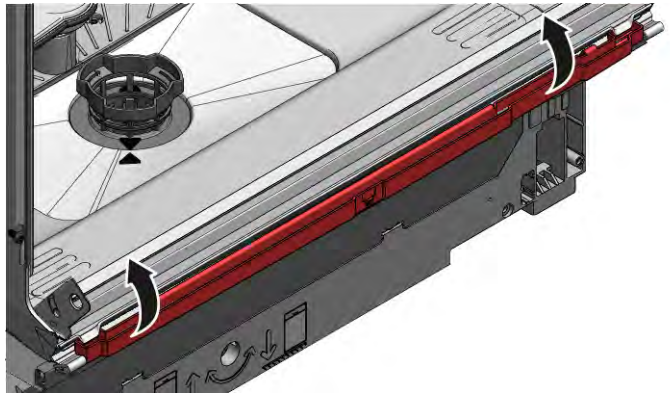
2. Release catch element at top.



3. 1. Insert screwdriver below metal brake (1).
   2. Gently release metal clip (2).

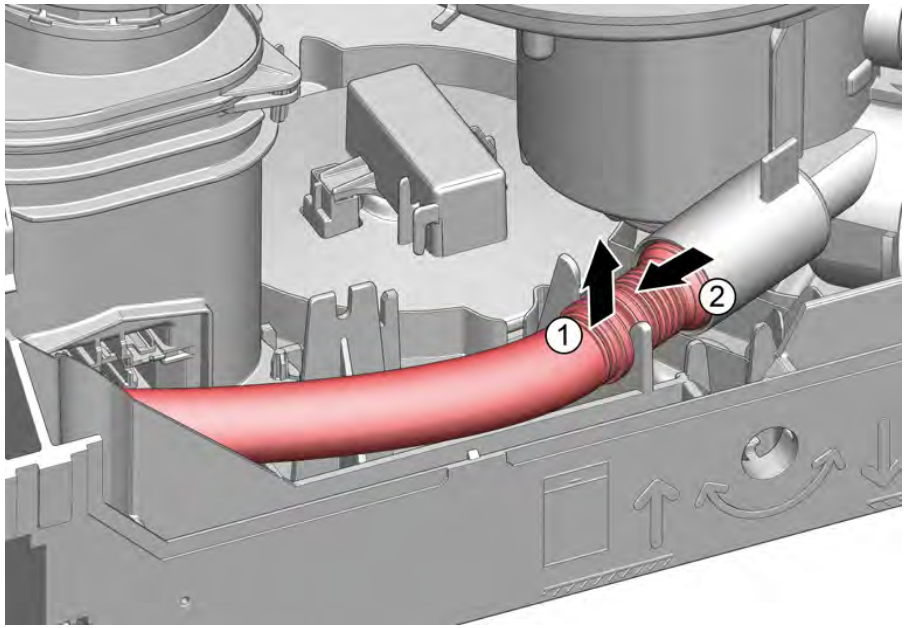


4. Lift overflow conduit off.



6.39.1.2 Removing drainage hose

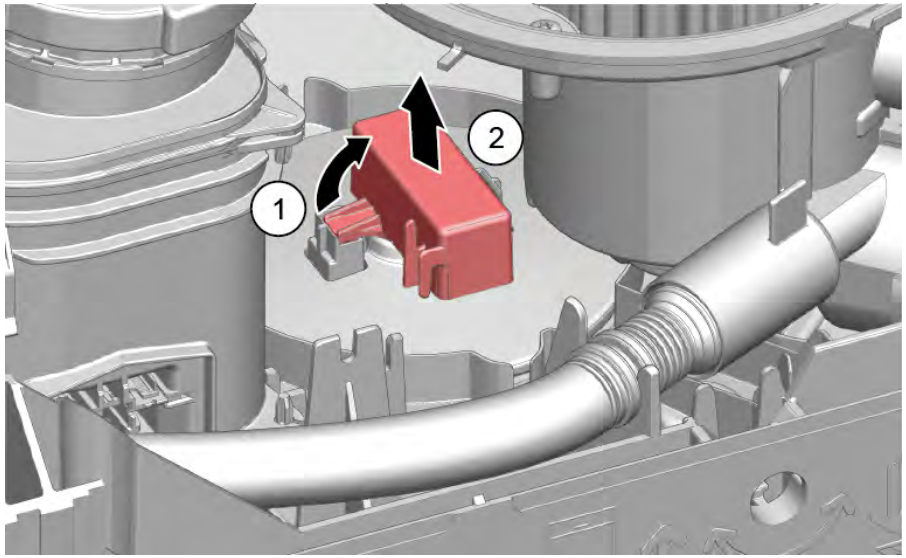
1. Press flexible drainage hose upwards out of the fixing.



2. Remove from pump sump.

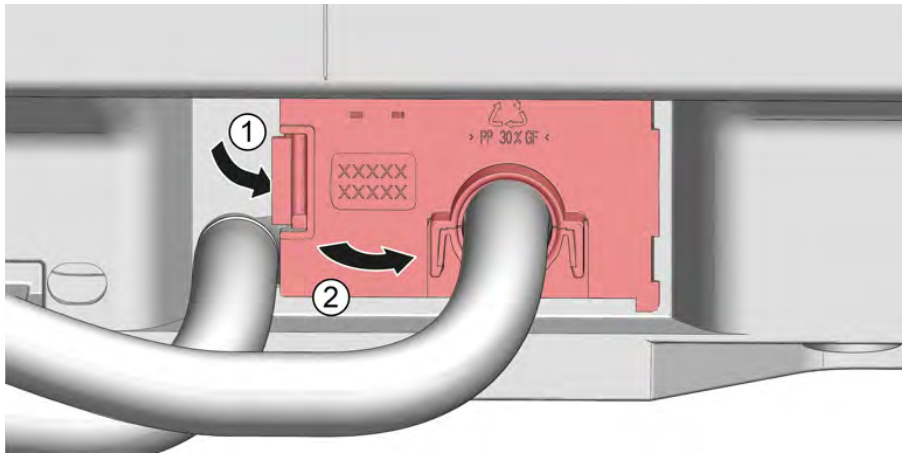
6.39.1.3 Removing float switch safety system

► Loosen catches and remove switch.



6.39.1.4 Opening supply hose (Aquastop models)

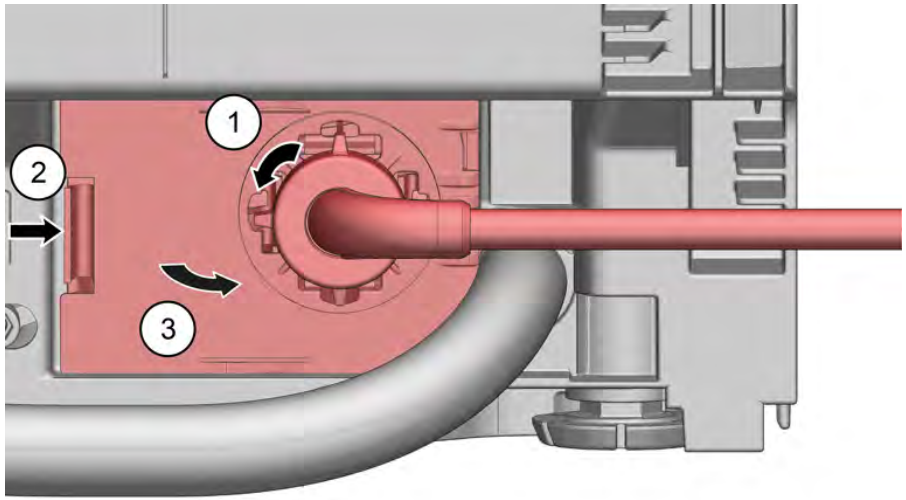
1. Loosen the panel catch mechanism.



2. Fold out the panel.

6.39.1.5 Opening supply hose grommet (water inlet valve models)

1. Remove supply hose.



2. Loosen locking lever.
3. Fold the cover with the inlet hose outward.

6.39.1.6 Loosening the tank catch mechanism

The rinsing tank is held and locked at the front and rear in guides on the base. The rinsing tank is fixed at the rear on the left and right with sheet-metal brackets. These are bent by a plastic lug on the base pan.

1. Using a screwdriver, straighten sheet-metal brackets.

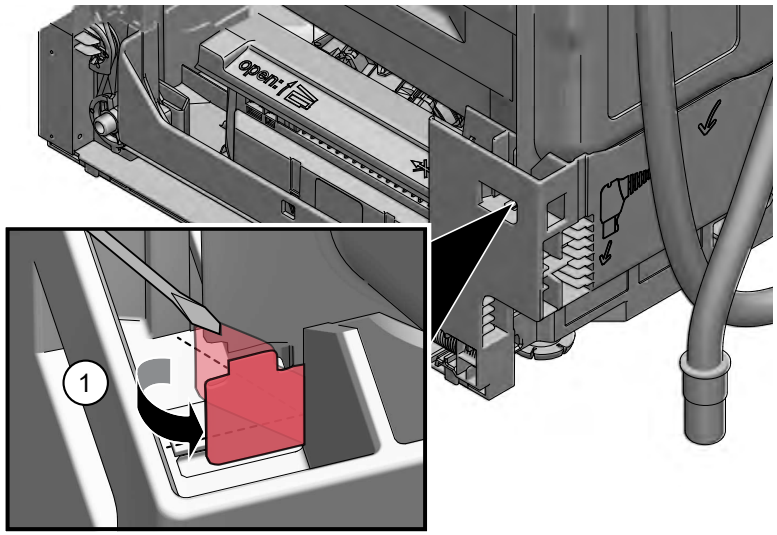


Fig. 33: Loosening the tank catch mechanism

2. Using a screwdriver, detach hinge plates at the front side from the top of the catch mechanism. To do this, bend in the hinge plate catch mechanism.

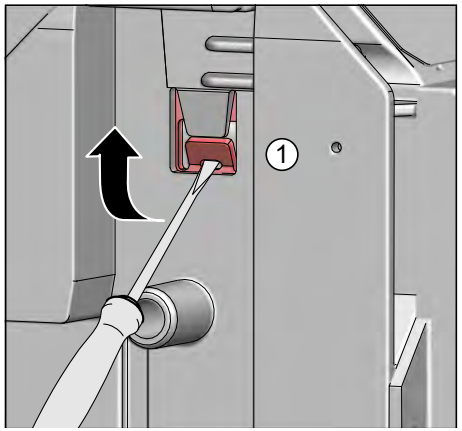


Fig. 34: Loosening the tank catch mechanism

6.39.1.7 Folding down the rinsing tank

- Close salt dispenser.
- Always check that the salt dispenser cover is screwed shut to prevent salt solution from running out subsequently when the tank is folded down!
- Check that the blow-out opening of the zeolite heater is secure!
- Protect support surface for the rinsing tank from being scratched.
- Tank is seated firmly in the guides and requires only a little force to lift it out. To facilitate handling, the appliance can be placed on its back and the base pan carefully removed.

In the case of free-standing appliances, ensure that the weight does not fall out of the base pan.

1. For devices with fleet storage is to remove the retaining clip (1) of the tube gently (optionally).

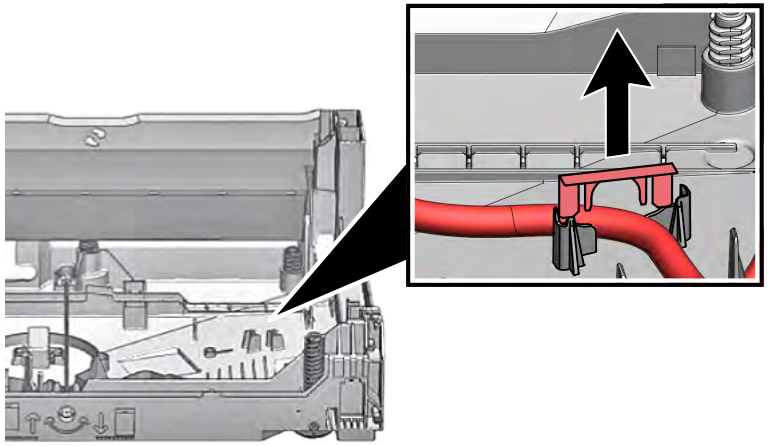
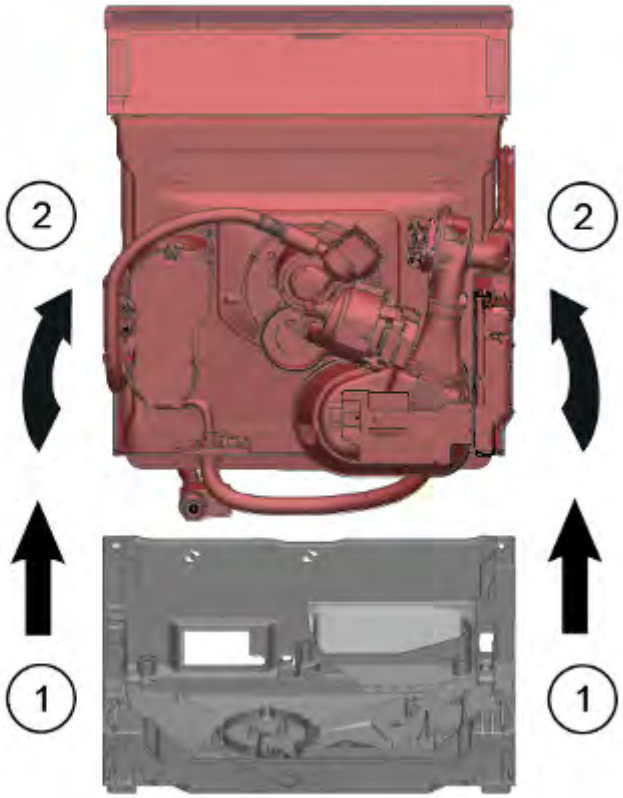


Fig. 35: Remove the retaining clip

2. If the appliance is on its back and the base pan is removed, ensure that the weight does not fall out of free-standing appliances.

1. Carefully lift rinsing tank upwards (1).
2. Place rinsing tank towards the rear (2).

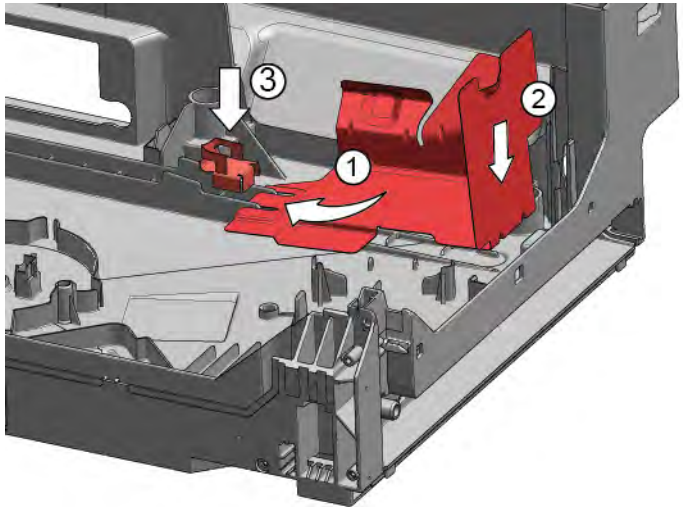


6.39.2 Attaching rinsing tank

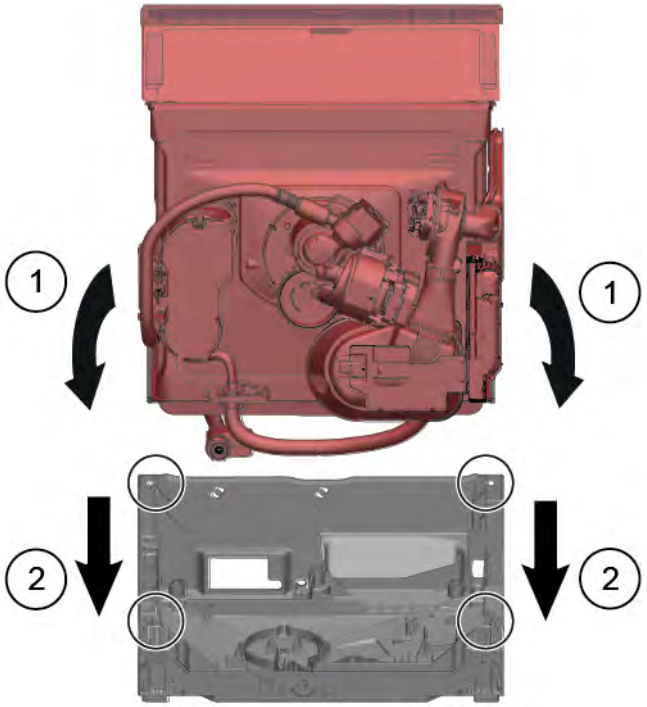
Ensure it is seated correctly.

- Ensure that the weight is installed correctly in free-standing appliances.
- If the heat exchanger is mounted on the rinsing tank, ensure that the hose connections are clean.
- Do not trap supply and drainage hoses.
- Push water softening system into the guides.
- Protect power module from jamming.
- Protect cable harness from crushing.

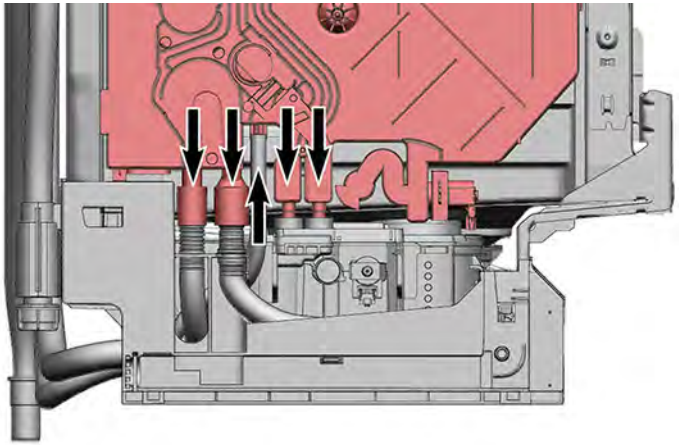
1. 1. Insert the heat safety cover to the guides (1).
   2. Push the heat safety cover down to the bottom group (2).
   3. Install the guide for the zeolite container (3).



2. 1. Carefully fold the rinsing tank forwards (1).
   2. Insert to the guides (2).



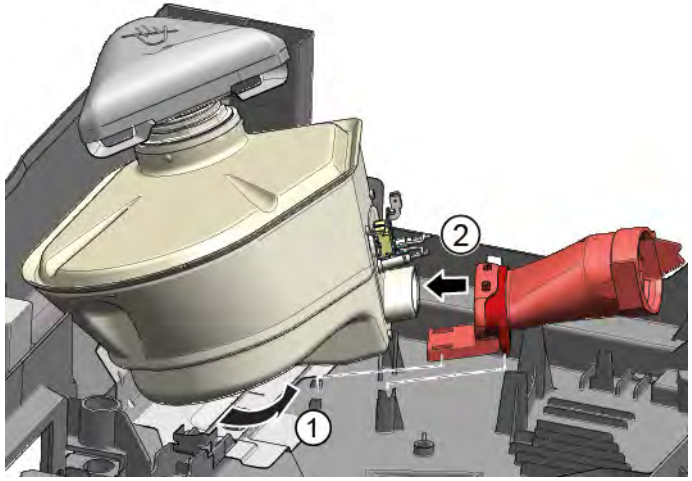
3. Take care that the connection is correctly fitted.



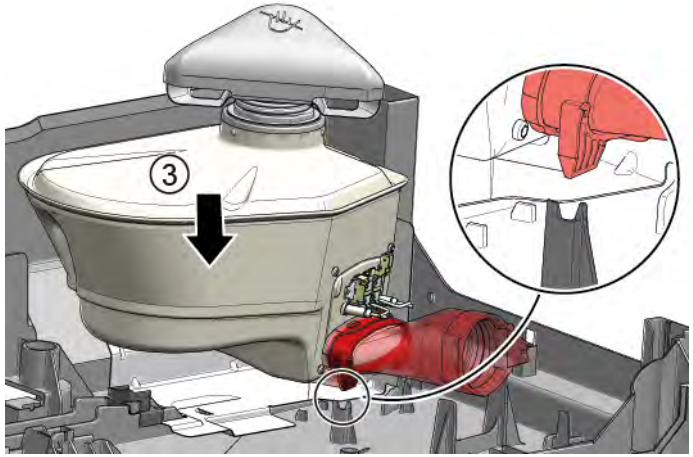
4. Install the second heat safety cover.
5. Insert the zeolite container to the bottom group.
6.

	Pay attention to the proper installation of the zeolite system.

   1. Lift the zeolite container at side with connection for the air channel up (1).
   2. Move the guide of the air channel below the zeolite container and connect it to the zeolite container (2).



7. Lower the zeolite container and push the air channel into the guides (3).



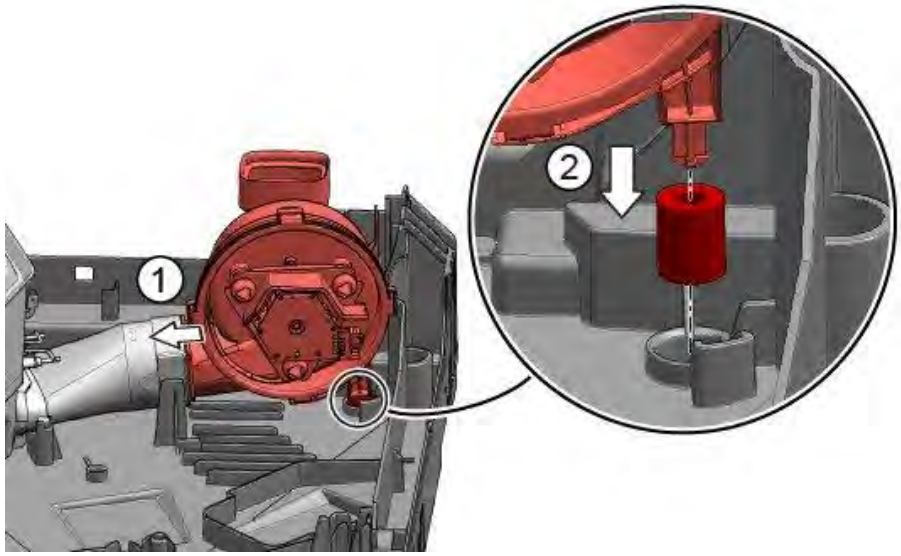
8. Establish a hose connection.

6.39.2.1 Securing the fan motor

►

	**Notice** **Damage!** The pin of the fan may break off ► On the underside of the fan housing is a pro-truding pin. A rubber ring is attached to this pin to prevent fan noises from being transferred to the base pan.

1. Lower housing pin with rubber ring into the base pan.
2. Secure in the recess.



6.39.2.2 Securing tank catch mechanisms

1. Using a screwdriver, bend hinge plate catch mechanism outwards.

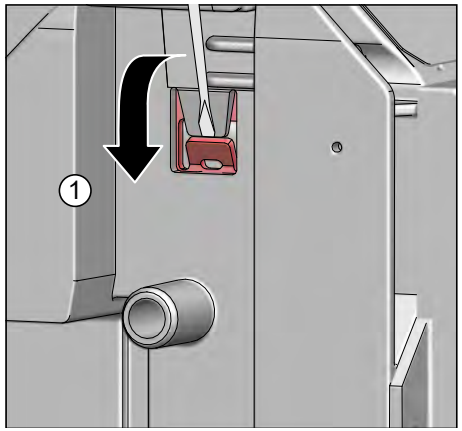


Fig. 36: Securing tank catch mechanisms

2. Using a screwdriver, bend over sheet-metal brackets.

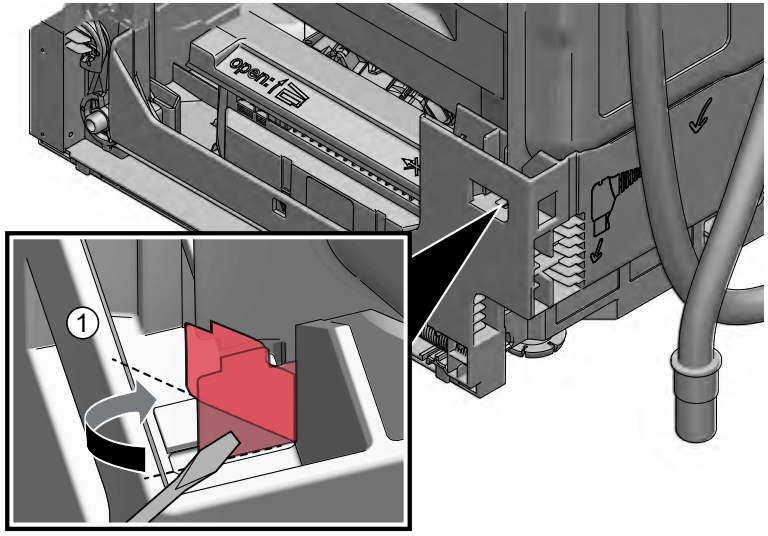
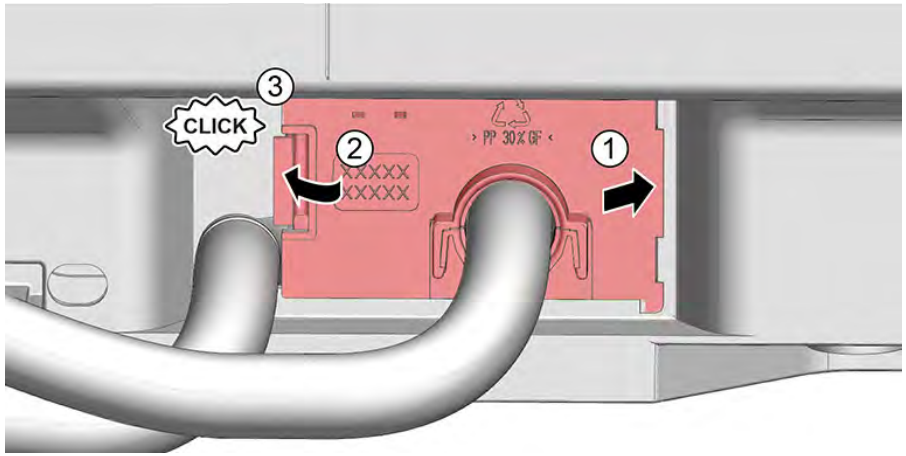


Fig. 37: Securing tank catch mechanisms

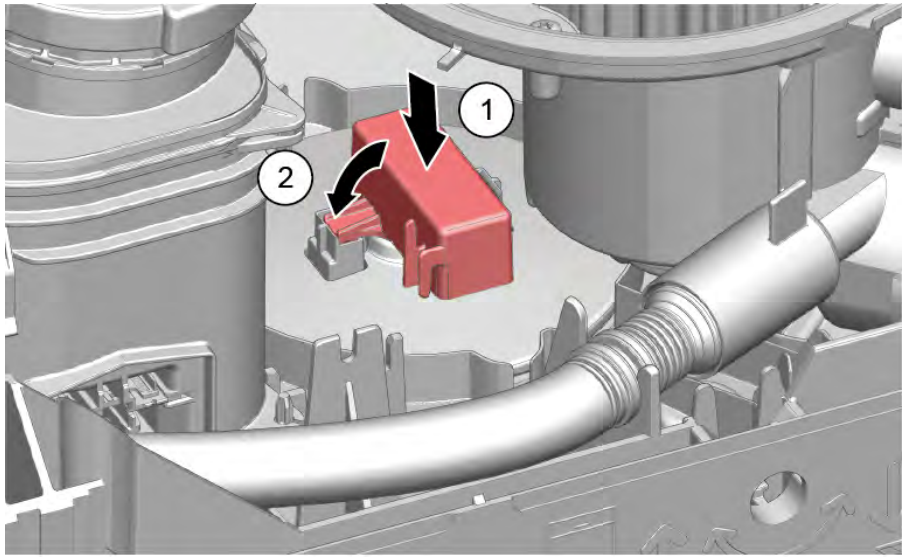
6.39.2.3 Installing supply hose

▸ 1. Insert panel with hose (1) at the right.
2. Fold panel to the left (2) and lock with a click sound (3).



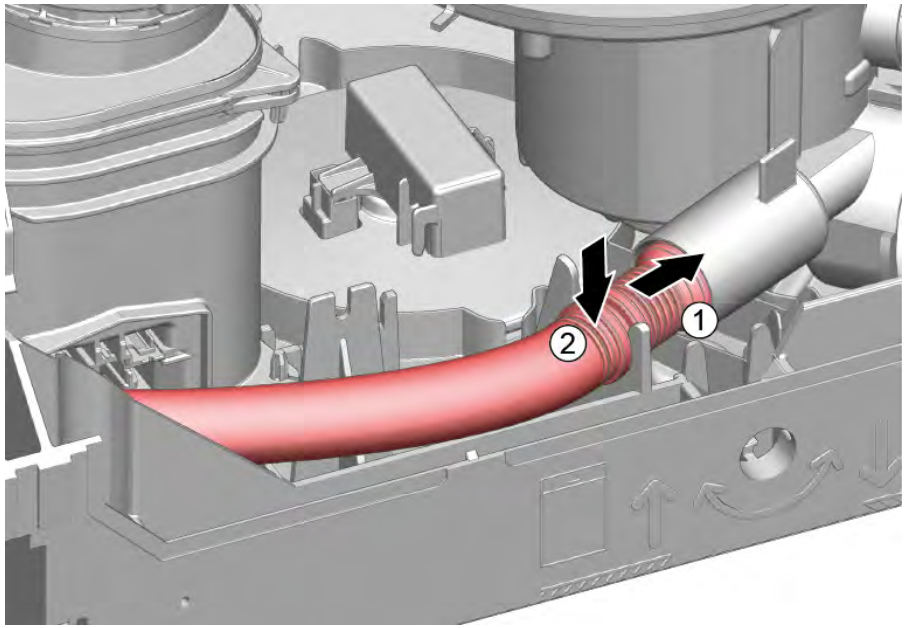
6.39.2.4 Installing float switch safety system

- Press float switch into the catch mechanism of the base plate.



6.39.2.5 Connecting drainage hose

1. Push drainage hose into the pump sump.



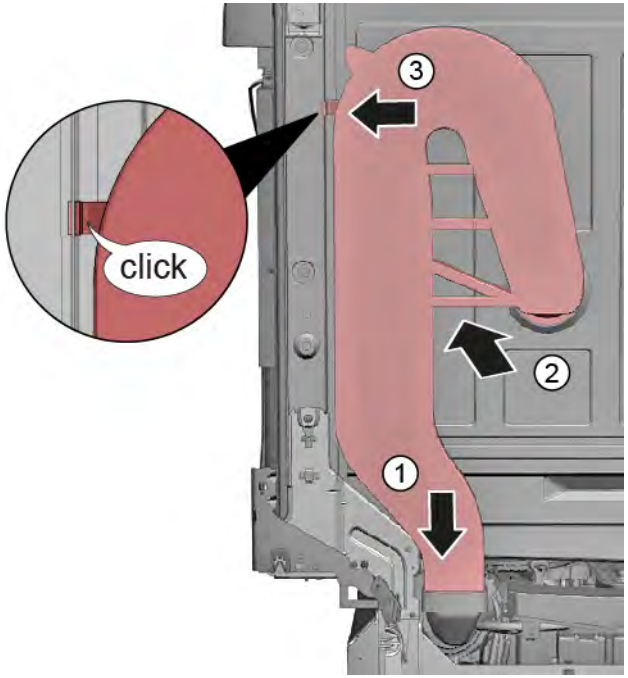
2. Press flexible drainage hose into the fixing.
3.

Notice

Leakage!
Water damages becaus of leaking water
- Check connections after installing for leakages.

6.39.2.6 Installing the suction channel

1. 1. Push the intake duct with the suction channel into the fan (1).
   2. Press onto the container and engage with the container (2).
   3. Catch the catch element till there is a click sound (3).

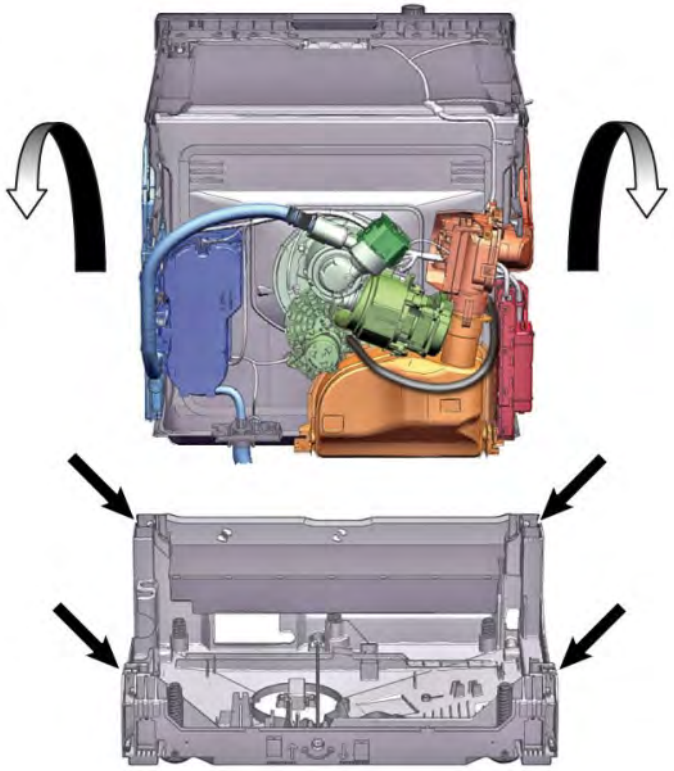


2. Screw in suction channel nut until mark is flush with the mark on the container and tighten further by the value + 3 h (1/4 turn).

6.39.3 Attaching rinsing tank

	Ensure it is seated correctly. ■ Ensure that the weight is installed correctly in free-standing appliances. ■ If the heat exchanger is mounted on the rinsing tank, ensure that the hose connections are clean. ■ If the heat exchanger is mounted on the rinsing tank, ensure that the hose connections are clean. ■ Push water softening system into the guides. ■ Protect power module from jamming. ■ Push water softening system into the guides.

1. Lift rinsing tank upwards and move into the guides.



2. Check if all positions are seated correctly.
3. Push the rinsing tank into the guides.
4. Close the metal clips at the backside.
5. Install all components which are left.

6.39.3.1 Securing tank catch mechanisms

1. Using a screwdriver, bend hinge plate catch mechanism outwards.

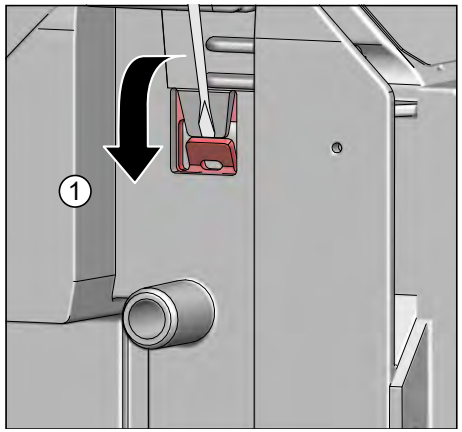


Fig. 38: Securing tank catch mechanisms

2. Using a screwdriver, bend over sheet-metal brackets.

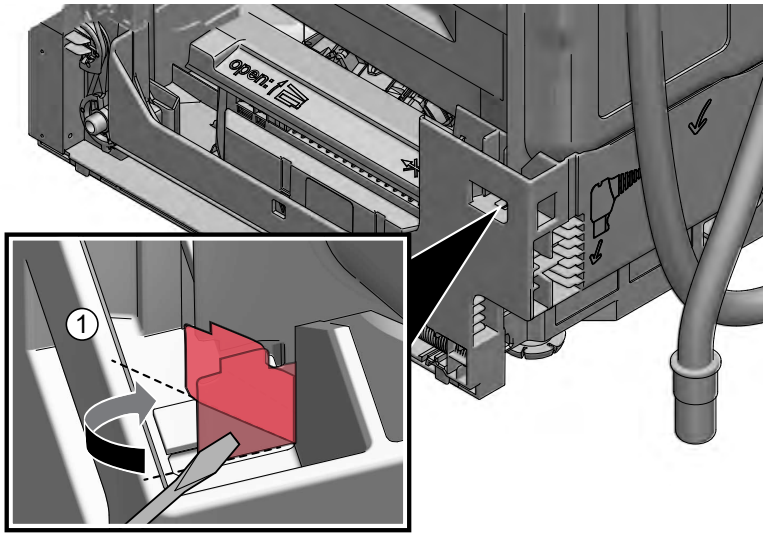
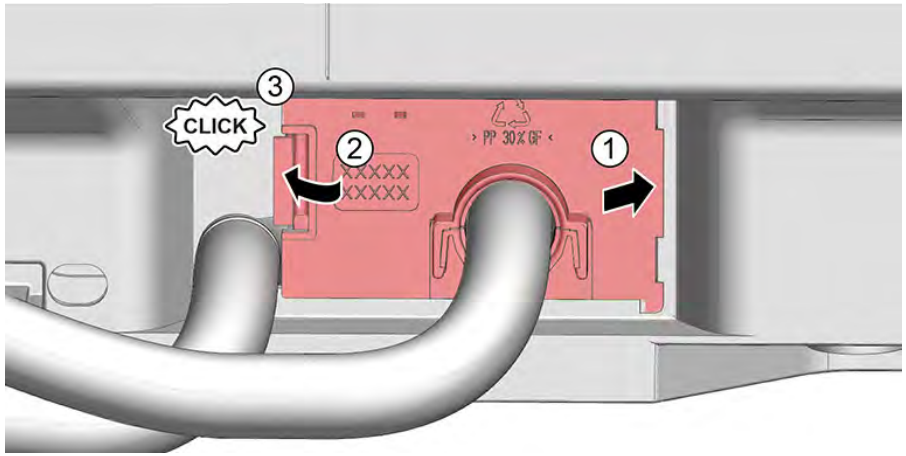


Fig. 39: Securing tank catch mechanisms

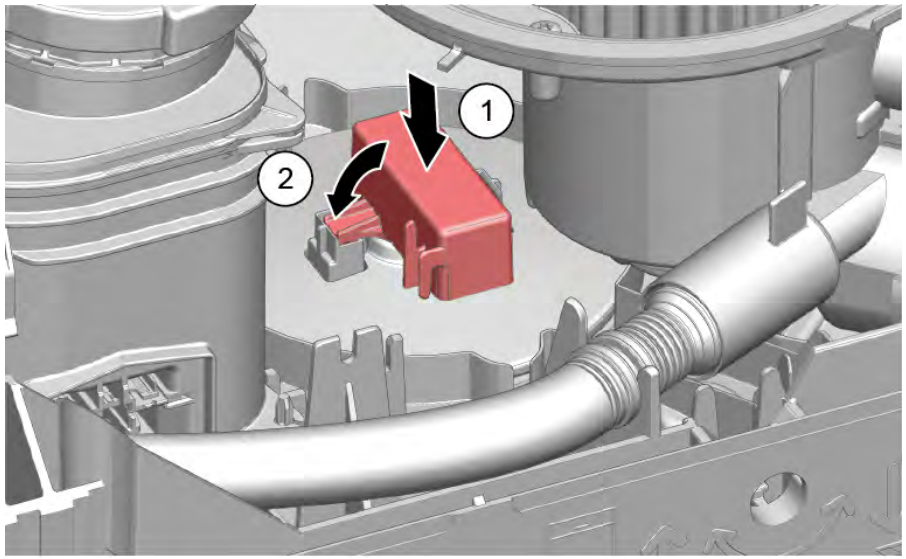
6.39.3.2 Installing supply hose

► 1. Insert panel with hose (1) at the right.
2. Fold panel to the left (2) and lock with a click sound (3).



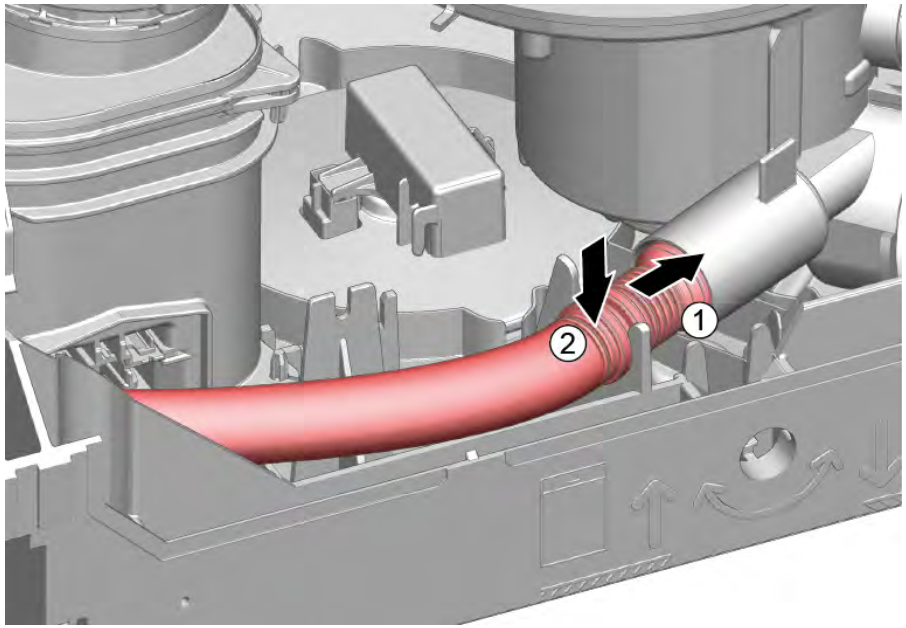
6.39.3.3 Installing float switch safety system

► Press float switch into the catch mechanism of the base plate.



6.39.3.4 Connecting drainage hose

1. Push drainage hose into the pump sump.



2. Press flexible drainage hose into the fixing.
3.

Notice

Leakage!
Water damages becaus of leaking water
- ▸ Check connections after installing for leakages.

6.40 Replacing power module

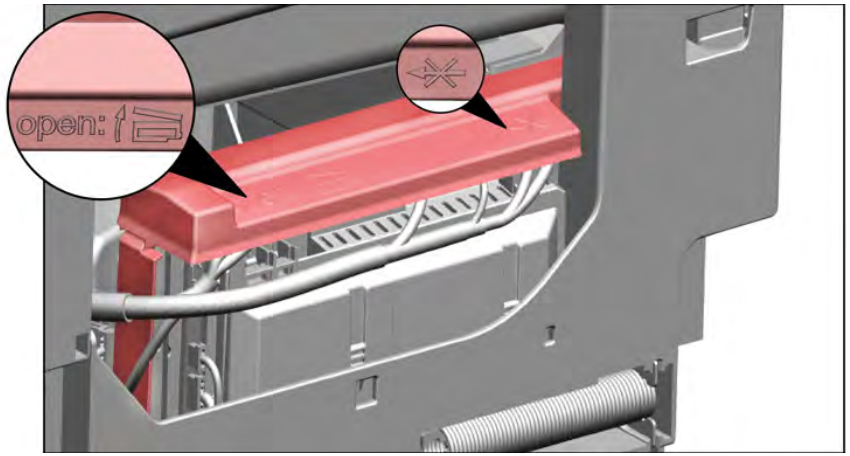
	The power module is situated on the lower right-hand side of the rinsing tank in the base support.

Prerequisite:

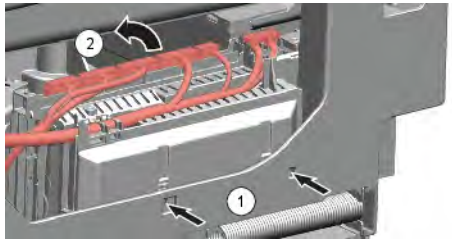
- Appliance is disconnected from the power supply.
- Mains cable has been removed.→ *Page 168*
- Right side panel has been removed.→ *Page 125*
- Insulating mat has been removed
- Water storage tank has been removed (optional).
- Appliance has been emptied (only for appliances with a heat exchanger).

6.40.1 Removing power module

1. Press the splash water guard upwards on the left-hand side and remove.

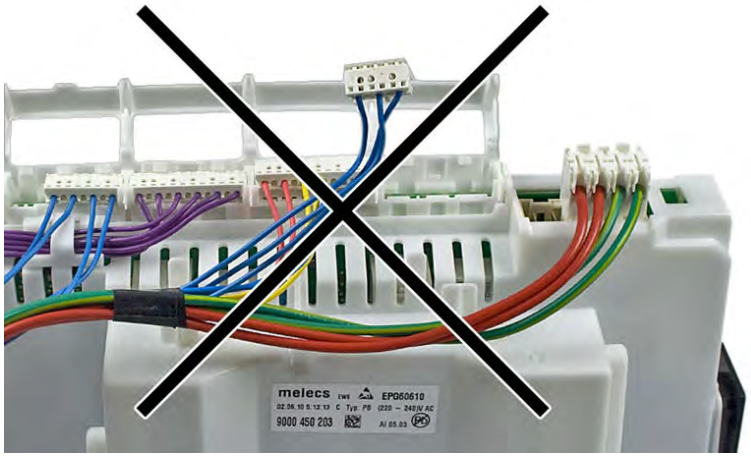


2. Loosen the catch hook on the top of the lateral splash water guard (optional) and fold splash water guard to the left.



3.

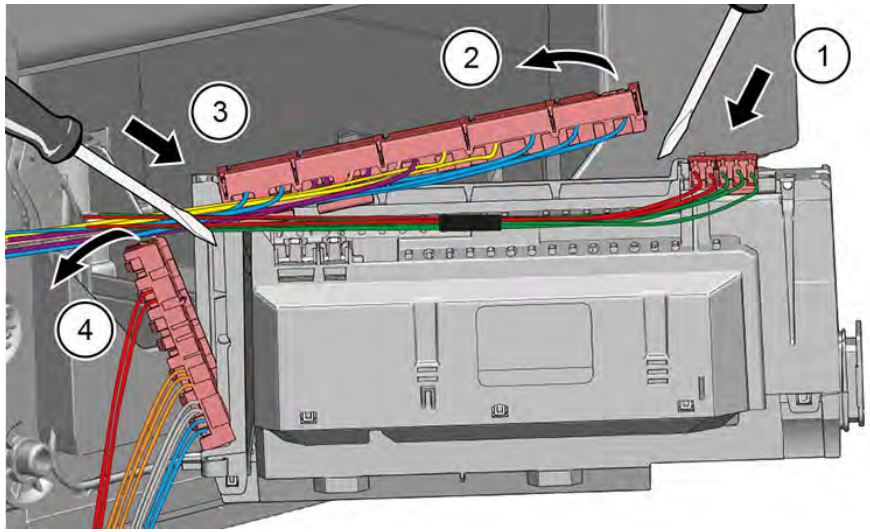
	Do not open coding frames. The coding frames are a part of the cable harness and are removed with the plugs.



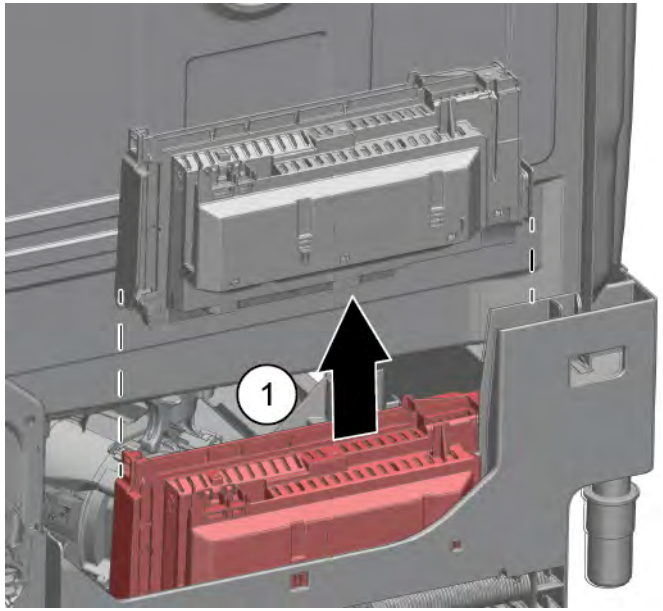
	Observe measures to protect electrostatically sensitive components. Before carrying out any work on electrostatically sensitive components, apply electrostatic protective system.

Using a screwdriver, remove both coding frames together with the plugs from the contact strip.

1. Release catch element on the right side (1) of the upper coding frame.
2. Move coding frame upwards (2) to remove it.
3. Release catch element on the upper side (3) of the coding frame on the left side.
4. Move coding frame to the left (4) to remove it.

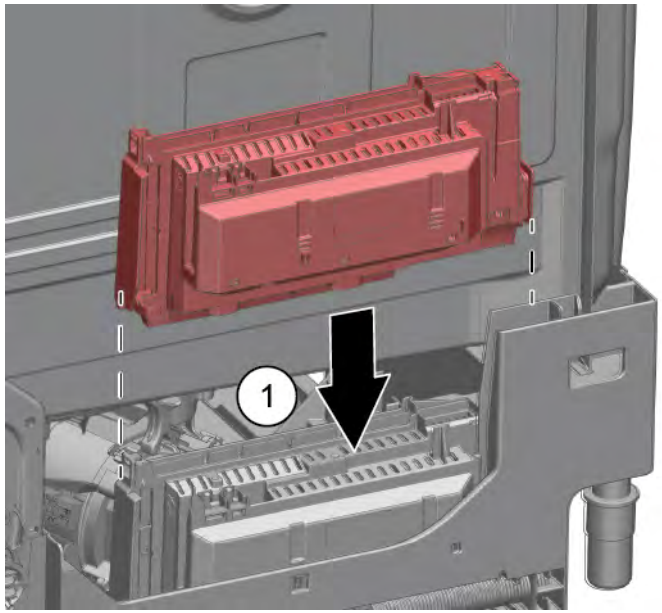


4. Remove power module upwards (1) to remove it.

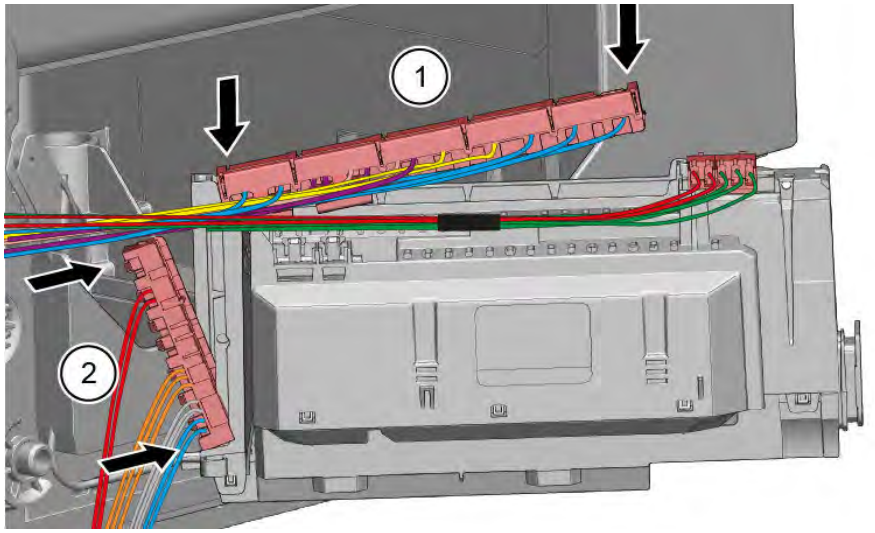


6.40.2 Installing power module

1. Insert the power module into the base tray along the back wall and lock into position.



2. 1. Insert upper coding frame into guide and press down until you hear a click sound (1).
   2. Insert left coding frame into guide and press right until you hear a click sound (2).
   3. Ensure that plug contacts are firmly positioned in coding frames.



3.

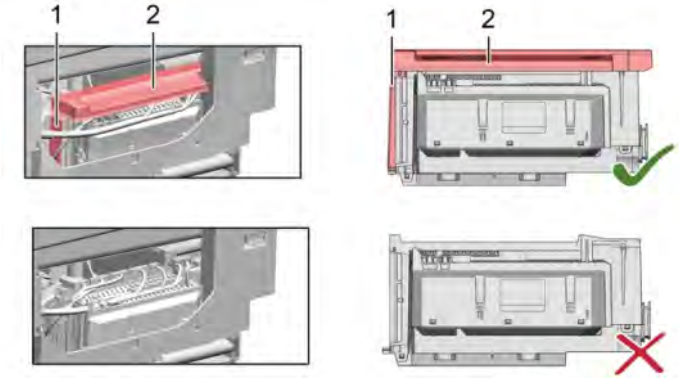
Cable guide

- The optical cover and the upper part of housing must be fitted.
- Cables must be installed under the upper part of housing with water outlet duct.

Lay the cables.

4.

Avoid any damage to the power module due to incomplete installation!
Attach the splash water guard. There are two splash water guard covers on Zeolite appliances. All other appliances have the upper cover only.



6.41 Replacing control panel

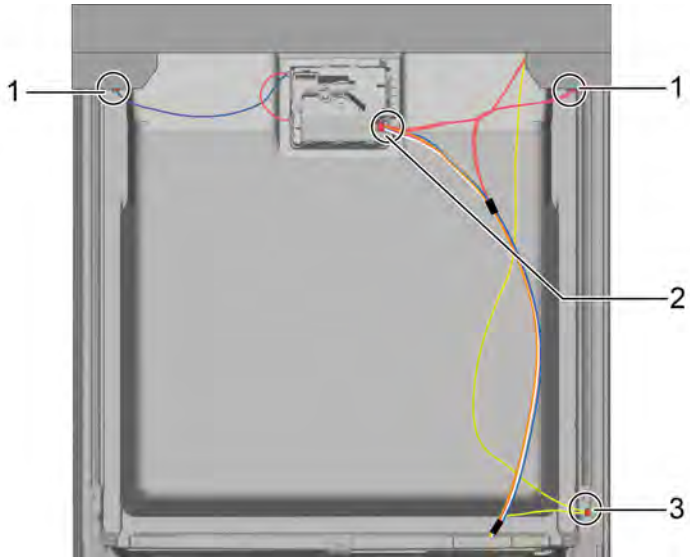
	If an operating module is defective, the entire control panel must be replaced.

Prerequisite:

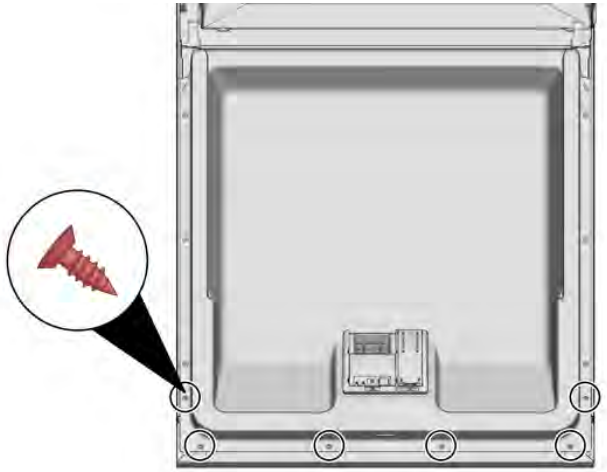
- Appliance is disconnected from power supply.
- Appliance is disconnected from water supply.
- Outer door has been removed.
- Outer door has been removed (fully integrated/integrated).

6.41.1 Removing control panel

1. Disconnect electrical connections from the control panel and the low rinse-aid sensor (1, 2).



2. Disconnect the earth cable (3) (optional).
3. Open the appliance door.
4. Secure the control panel to prevent it from falling down (hold on to it).
5. Remove six screws.



6. Remove the control panel.

6.41.2 Installing control panel

	Use screws 4 x 16 mm.

▸ Install in reverse order.

6.42 Replacing SMM

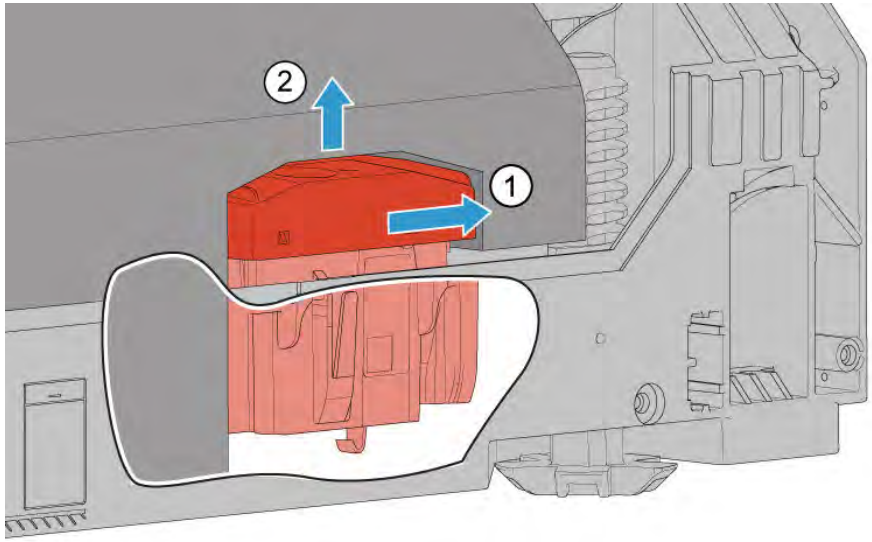
Danger

Exposed, live parts!
Death by electrocution
- Disconnect appliances from electrical supply at least 60 seconds before starting repairs.
- Do not touch housings, frames and components.
- For tests on energised circuits, use a Residual Current Device (RCD).
- Ensure that the resistance of the earthing conductor does not exceed the standardized value (appliance is well earthed).

Prerequisite:
- Base socket plate is removed.→ *Page 142*
- Toe panel removed.→ *Page 141*
- Bitumen removed (optional).

6.42.1 Removing SMM

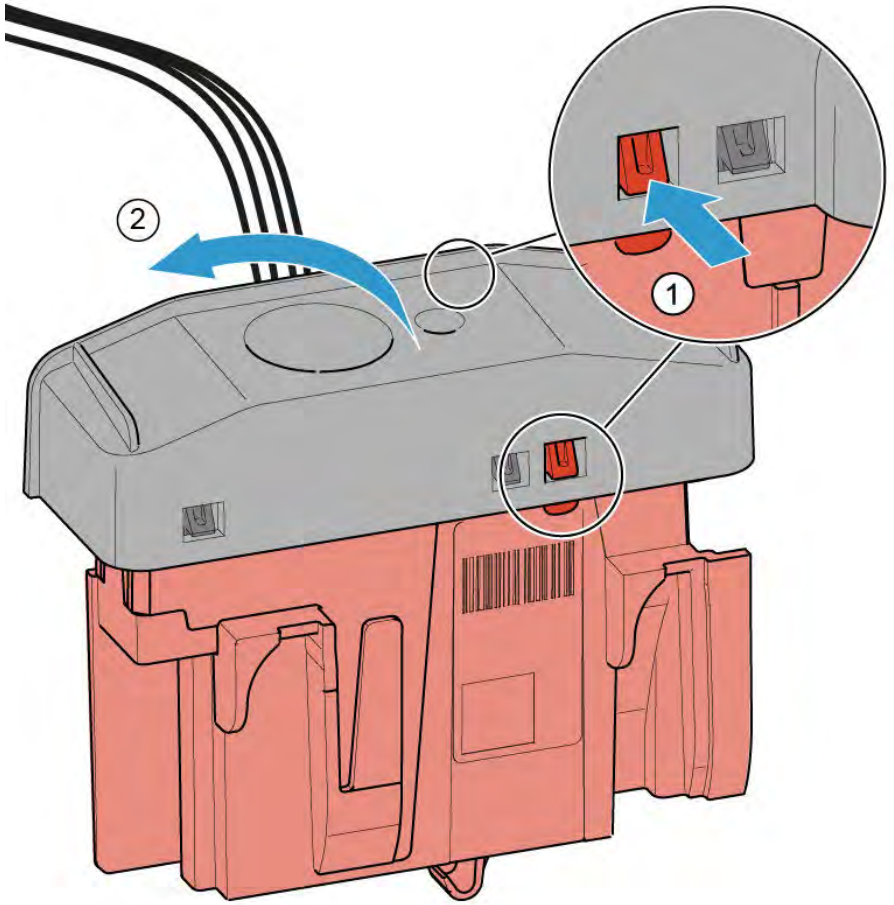
1. 1. Push SMM slightly to the right (1).
   2. Remove SMM upwards (2).



2.

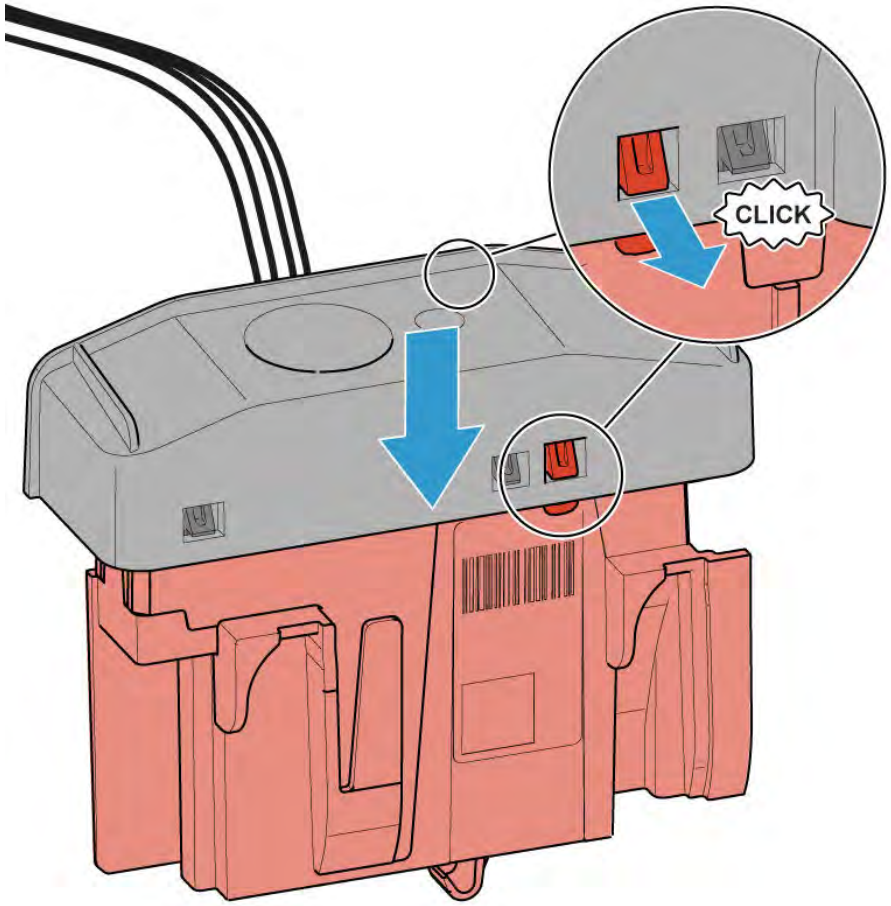
Do not release the cable connection. The cover is only available with complete cable harness.

1. Push catching elements on the front and on the back inwards to release (1).
2. Move cover with cable connection to the left and remove (2).

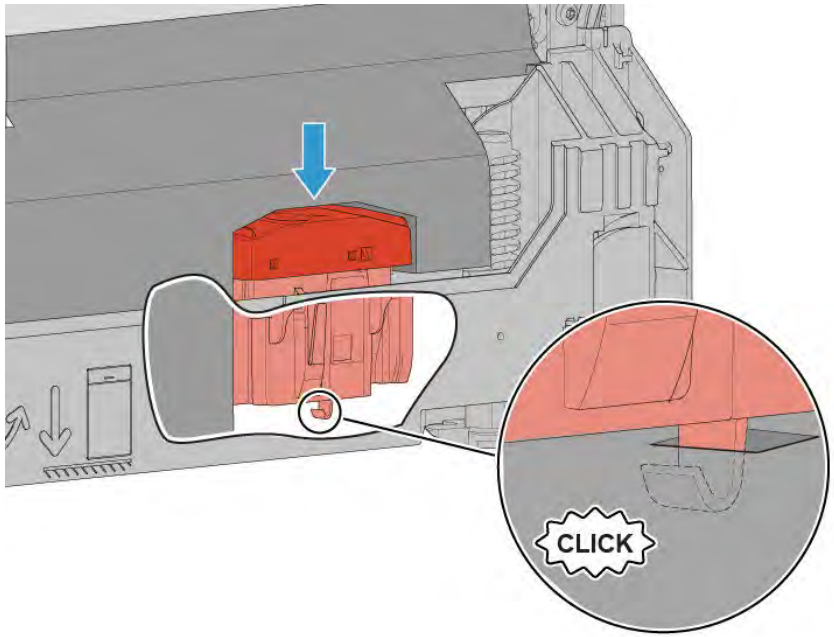


6.42.2 Installing SMM

1. 1. Push cover with cable connection on the left into housing.
   2. Push cover to the right until it is locked.



2. Insert SMM in bottom group and move down till a "click" sound appears and it is locked.



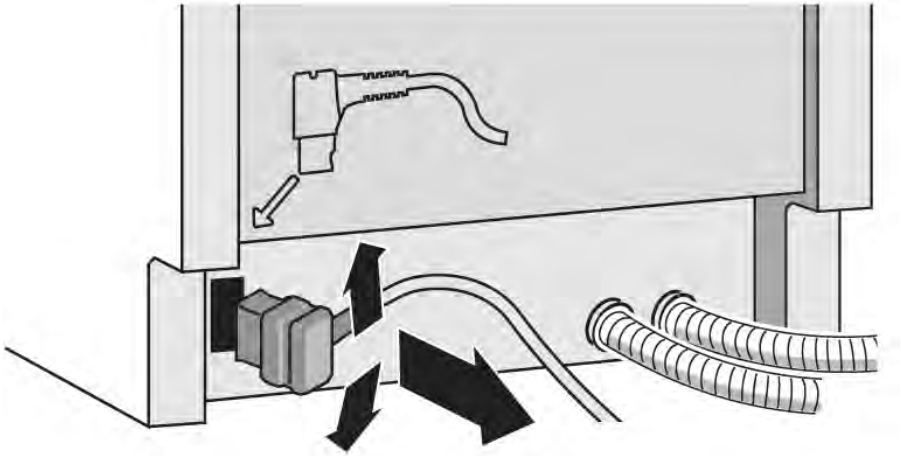
6.43 Replacing power cord

Prerequisite:

- Appliance is disconnected from power supply.
- Appliance is disconnected from water supply.
- Appliances is freely accessible.

6.43.1 Unplugging power cord

- Move the plug of the power cord carefully up and down and pull it out of the mains socket.



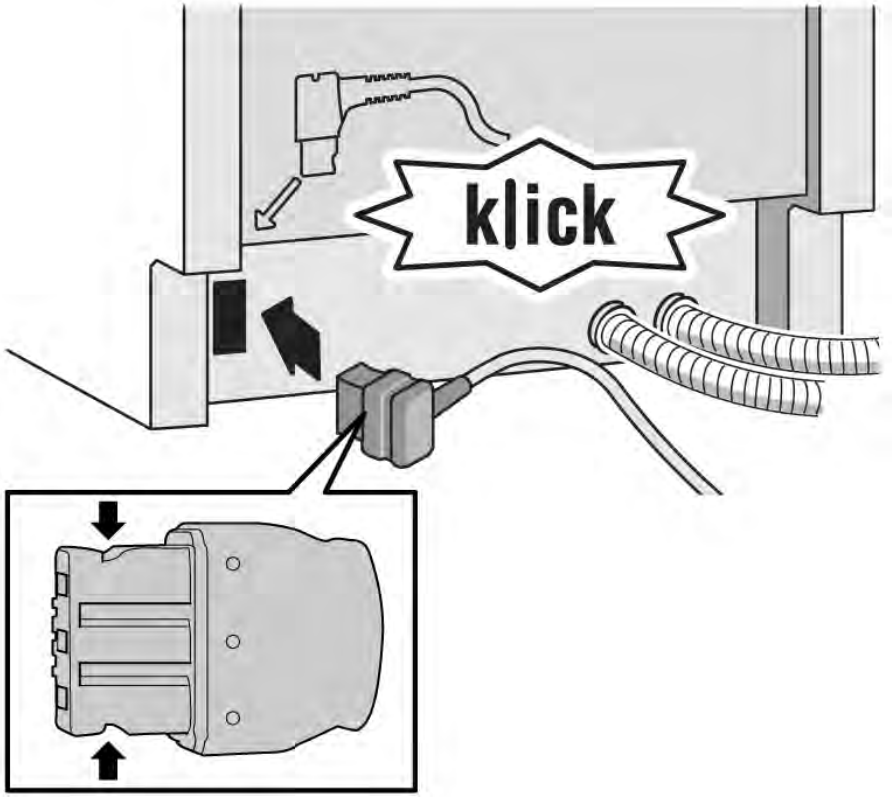
6.43.2 Plugging in power cord

Notice

Overheating of main connection!
Risk of fire

- Firmly insert the power cord until it clicks.

- Insert the plug of the power cord into the mains socket until the plug clicks audibly into place.



6.44 Replacing counterweight

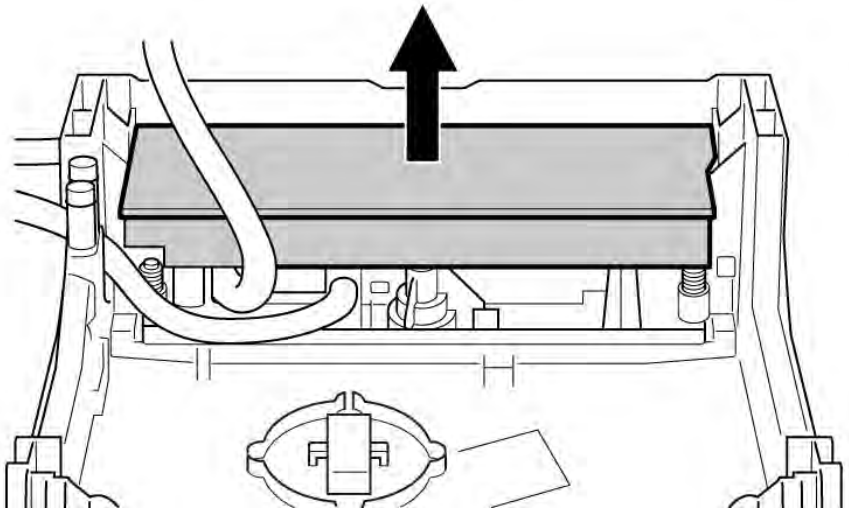
	The weight and size may vary depending on the device variant. The replacement is the same for all counterweights. The weights are located in the base carrier near the back of the appliance. There are three different concrete weights: ■ Appliances with cutlery drawer: 6,5 kg. ■ Appliances without cutlery drawer: 5,5 kg. ■ Appliances with Zeolite drying: 2,5 kg.

Prerequisite:

✔ Rinsing tank has been folded down.

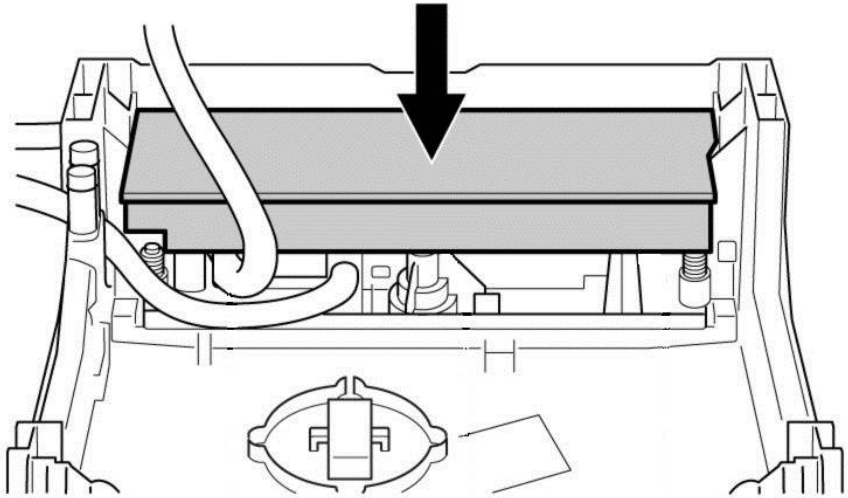
6.44.1 Removing counter weight

▸ Take the counterweight up from the bottom tray.



6.44.2 Installing counterweight

▸ Put the counter weight in gaps of the bottom tray.



6.45 Replacing suction channel

Required tools:

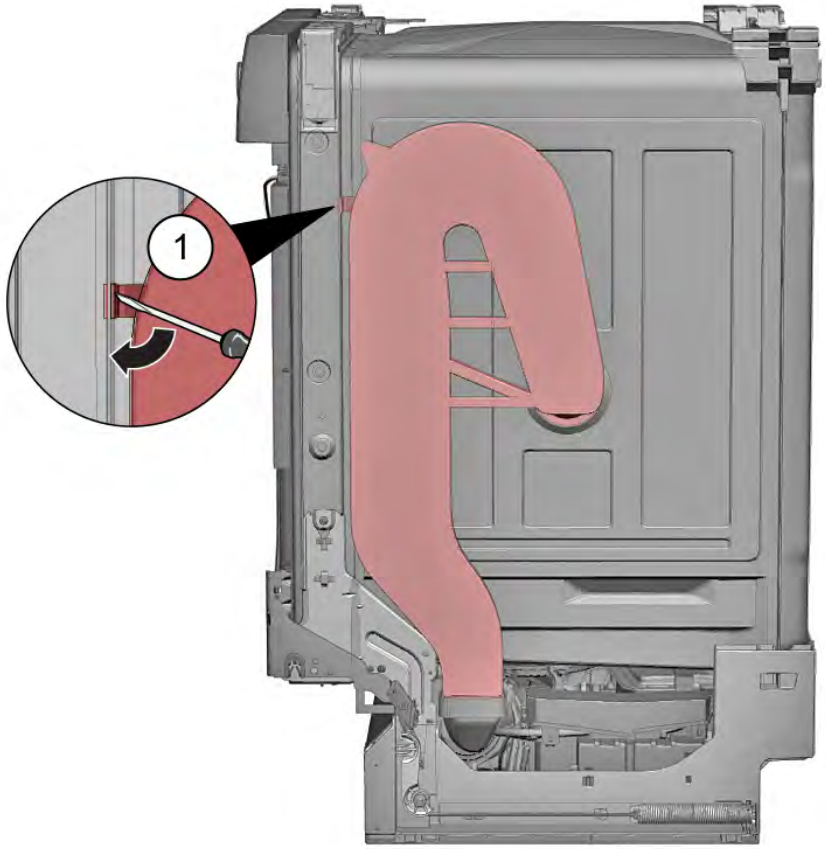
Auxiliary tool	Threaded ring salt container, cover cap vent slot, water inflow pin and screw	[00341805]

Prerequisite:

- Appliance has been emptied.
- Right-hand side panel has been removed→ *Page 125*.

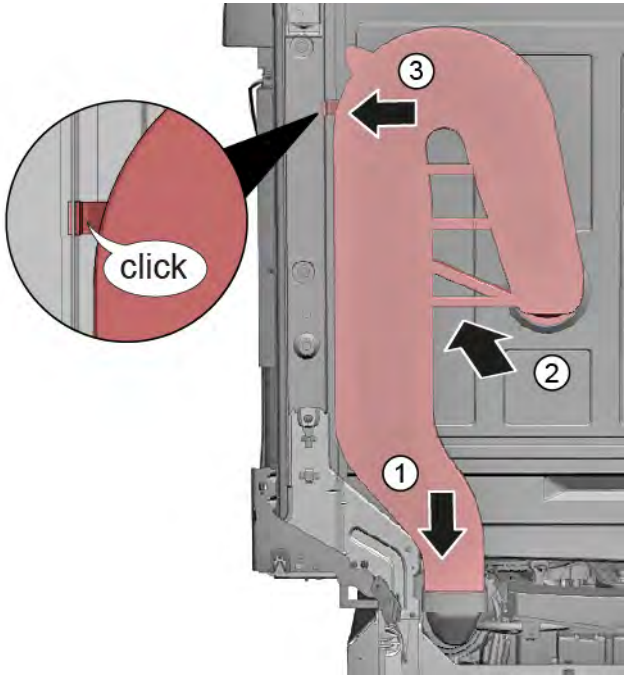
6.45.1 Removing suction channel

- Release the suction channel at the top of the washing tank (1).



6.45.2 Installing the suction channel

1. 1. Push the intake duct with the suction channel into the fan (1).
   2. Press onto the container and engage with the container (2).
   3. Catch the catch element till there is a click sound (3).



2. Screw in suction channel nut until mark is flush with the mark on the container and tighten further by the value + 3 h (1/4 turn).

6.46 Replacing fan motor for Zeolith auxiliary heater (with lifted up rinsing tank)

Required tools:

Needle nose pliers Length: 200 mm, straight [00340871]

Prerequisite:

Rinsing tank lifted up

6.46.1 Removing fan motor for Zeolith auxiliary heater

1. Disconnect electrical connection on the fan motor.

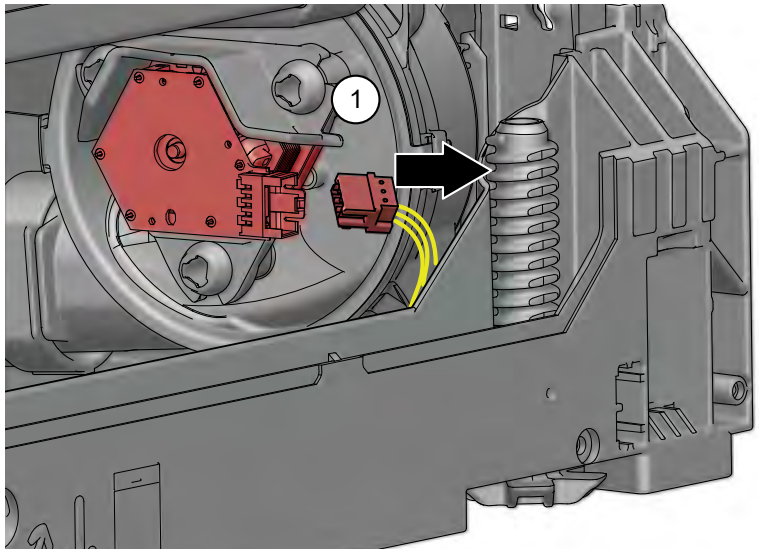


Fig. 40: Removing fan motor for Zeolith auxiliary heater

2. Lift up fan motor with fan housing from the base for easier access.

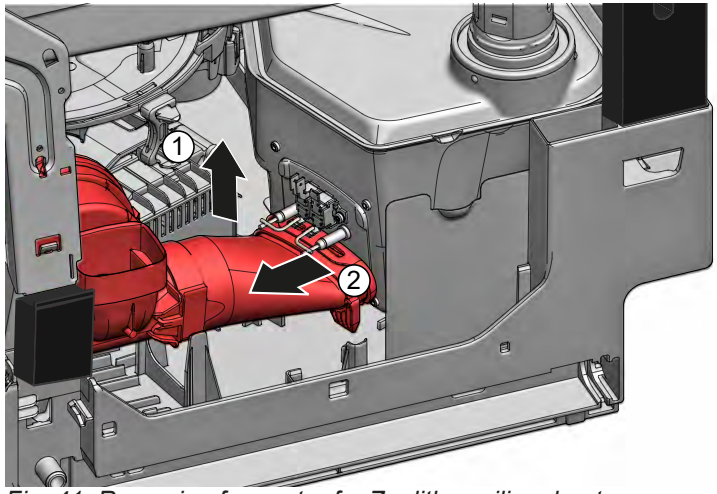


Fig. 41: Removing fan motor for Zeolith auxiliary heater

3. Remove fan motor with fan housing from the base.

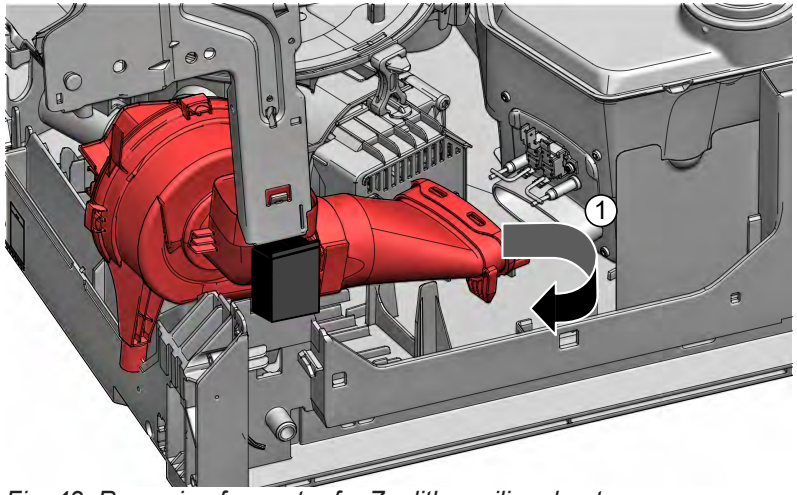


Fig. 42: Removing fan motor for Zeolith auxiliary heater

6.46.2 Installing fan motor for Zeolith auxiliary heater

1. Insert fan motor with fan housing under the lifted tank.

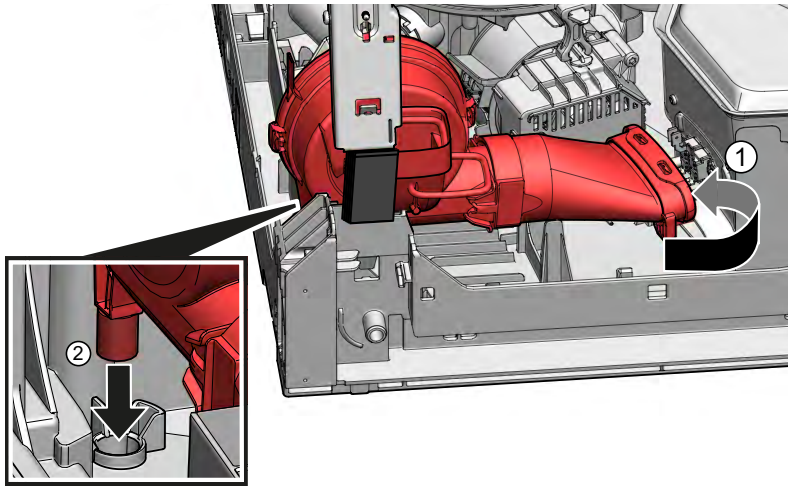


Fig. 43: Installing fan motor for Zeolith auxiliary heater

2. Attach air duct to the Zeolith container (1), insert it firmly in the base (2) and pay attention to the mounting of air duct (3).

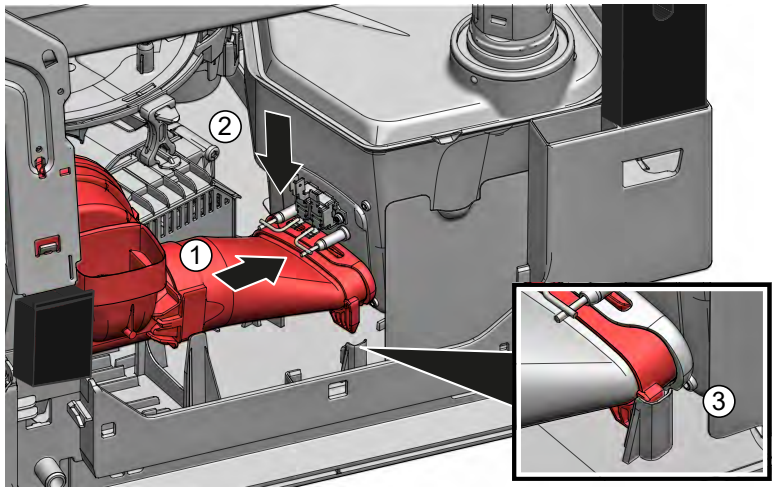


Fig. 44: Installing fan motor for Zeolith auxiliary heater

3. Restore electrical connection on the fan motor.

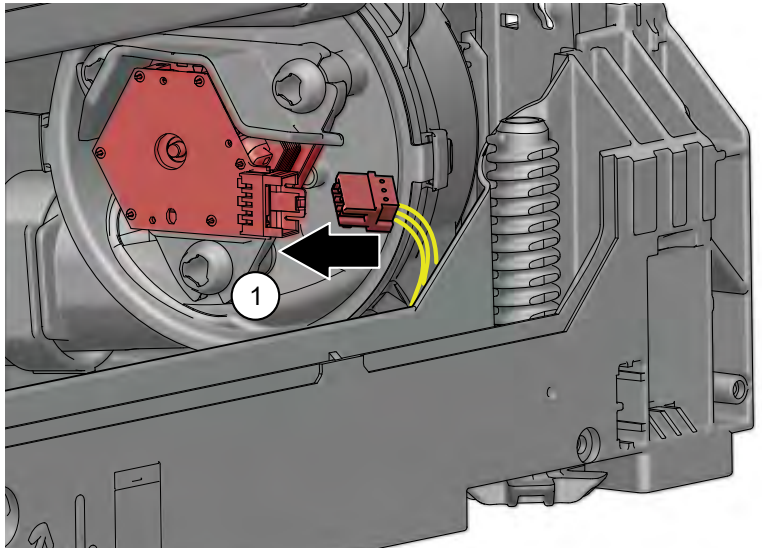


Fig. 45: Installing fan motor for Zeolith auxiliary heater

6.47 Replacing Zeolith container (with lifted up rinsing tank)

Required tools:

Needle nose pliers	Length: 200 mm, straight	[00340871]
Special tool	Tool set for the repair of zeolite devices	[15000508]
Auxiliary tool	Nut for zeolite container	[15000364]

Prerequisite:

- Rinsing tank lifted up.
- Fan motor with fan housing removed.→ *Page 172*

6.47.1 Removing Zeolith container

⚠ Caution

Sharp-edged parts!
Cut injuries
- ▸ Wear protective gloves.

Secure Zeolith container.
- ■ When the blow-out cap has been detached, the entire Zeolith container is loose. Secure / hold the Zeolith container to prevent it from dropping.

1. Disconnect electrical connections on the Zeolith container.

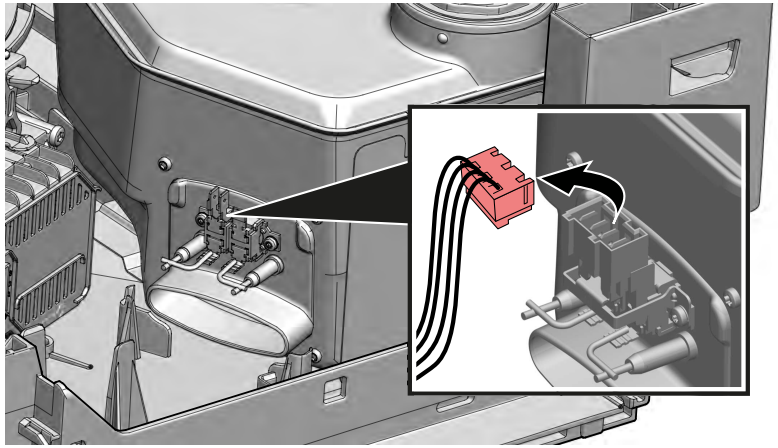


Fig. 46: Removing the Zeolith container

2. Remove Zeolith container and protection shield from the base.

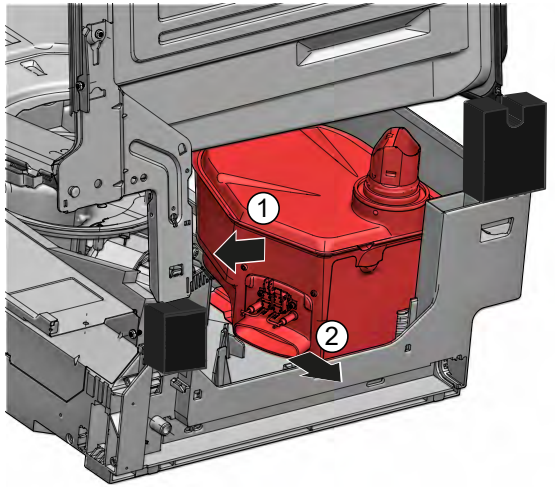


Fig. 47: Removing the Zeolith container

6.47.2 Installing Zeolith container

1. Fix the sealing.

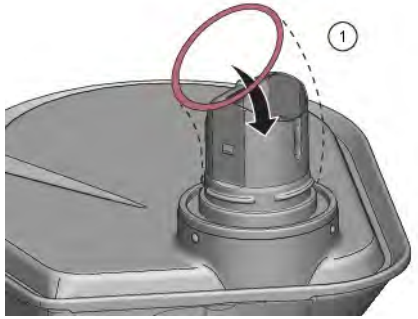


Fig. 48: Installing the Zeolith container

2.

Pay attention to the place of protection shield in order to install it at the correct position.

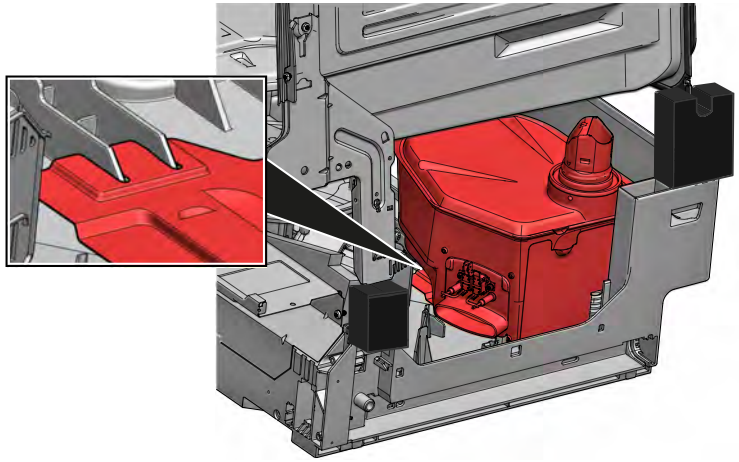


Fig. 49: Protection shield.

Insert Zeolith container and protection shield gently into the base tube.

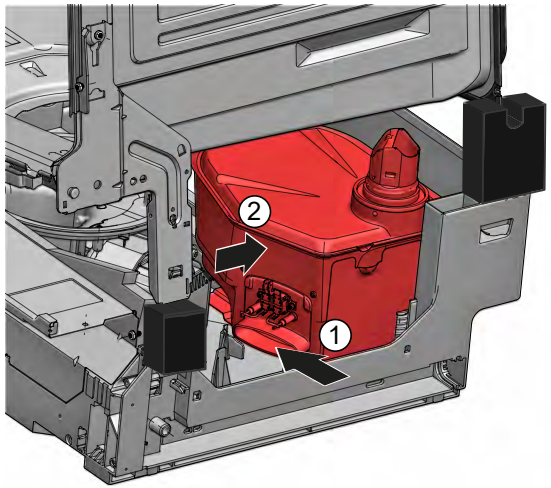


Fig. 50: Installing the Zeolith container

3. Restore electrical connections.

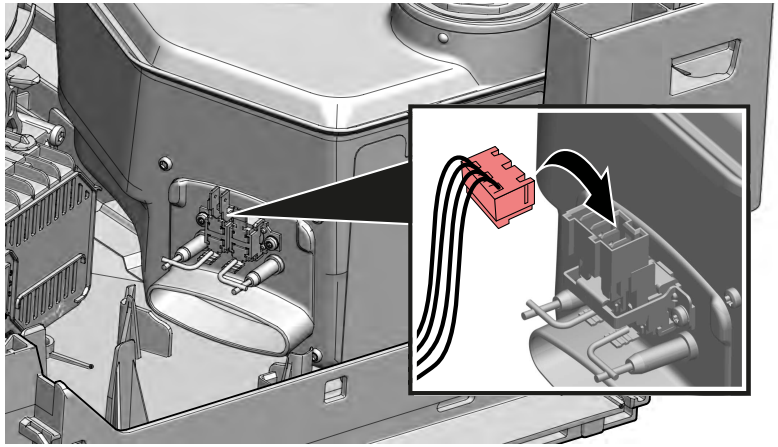


Fig. 51: Installing the Zeolith container

4. Lower the rising tank into the base.
5. Place the mother of zeolite container in position.

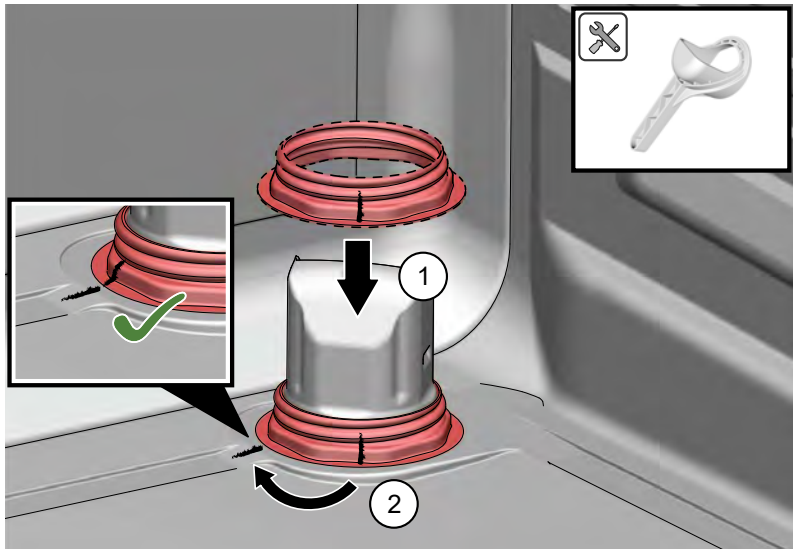


Fig. 52: Installing the Zeolith container

6. Tighten with special tool until the marking.

7. Put the cap carefully and evenly to the exhaust opening of the Zeolith container.

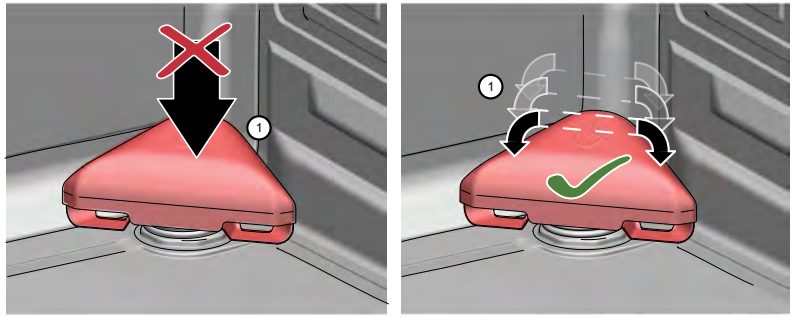


Fig. 53: Installing the Zeolith container

Do not knock or press on with tools!

	Lower spray arm ■ After the final assembly check that the lower spray arm moves freely and is not blocked by the cap.

6.48 Replacing zeolite container

Required tools:

Auxiliary tool	Nut for zeolite container	[15000364]

Caution

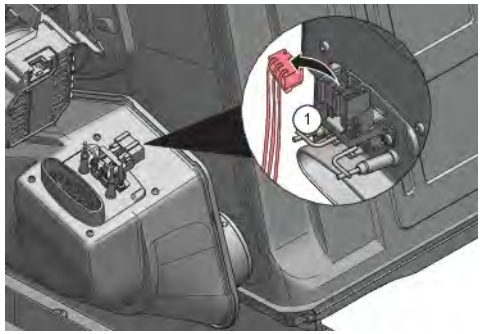
Sharp edges!
Cut injuries
- Wear protective gloves.

Prerequisite:
- Container folded down.
- Fan motor with fan housing removed.

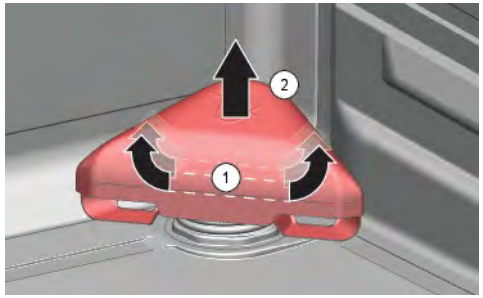
6.48.1 Removing

1. Secure Zeolith container.
   - When the blow-out cap has been detached, the entire Zeolith container is loose. Secure / hold the Zeolith container to prevent it from dropping.

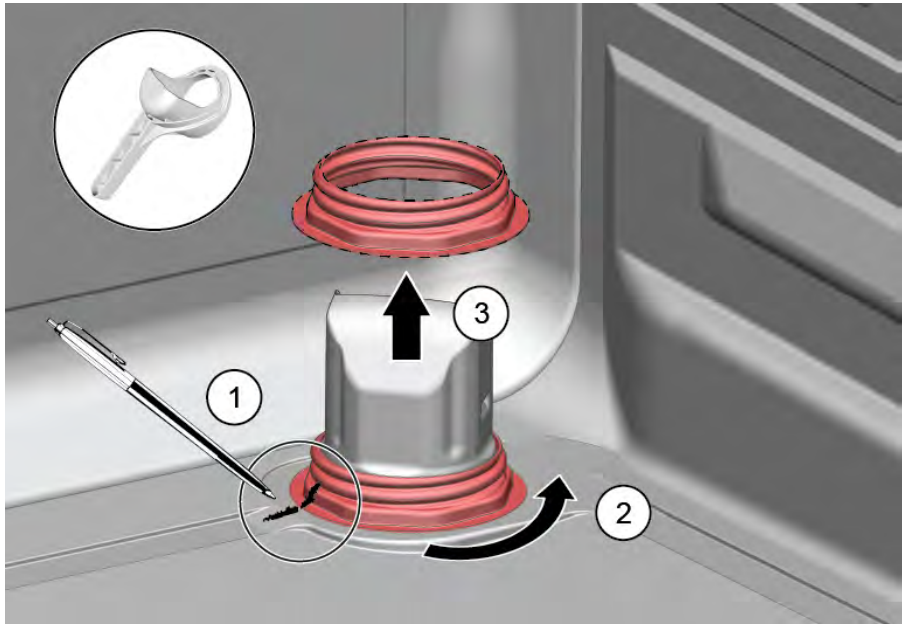
   Disconnect electrical connections on the zeolite container.



2. Loosen cap by lateral shaking (1) and pull upwards (2).

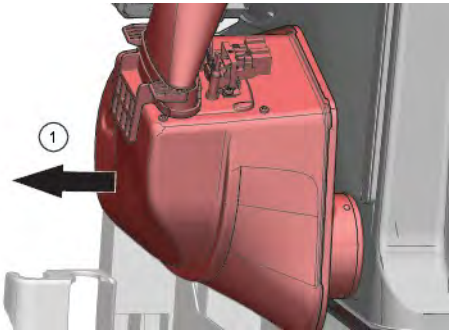


3. Mark the position of the mother-zeolite container (1).



4. Solve it with special tool (2).
5. Remove it upwards (3).

6. Remove zeolite container from tub.



6.48.2 Installing

1. Fix the sealing.

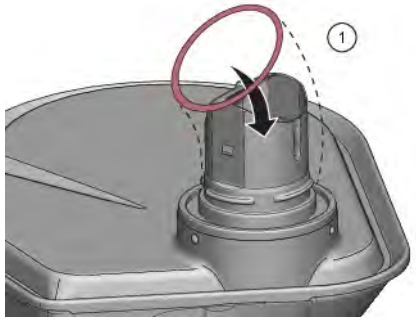
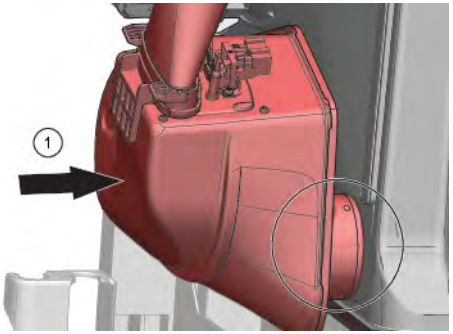
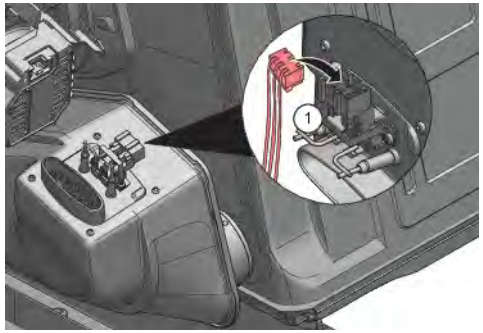


Fig. 54: Installing the Zeolith container

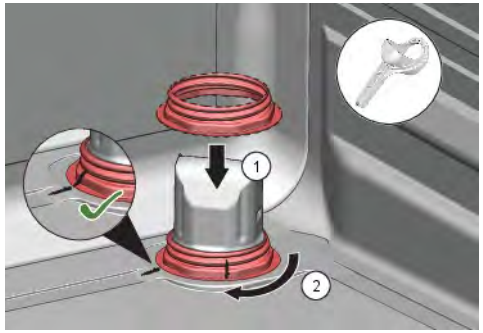
2. Insert zeolite container gently into the opening of the tub.



3. Restore electrical connections.



4. Place the mother of zeolite container in position.



5. Tighten with special tool until the marking.

6. Put the cap carefully and evenly to the exhaust opening of the Zeolith container.

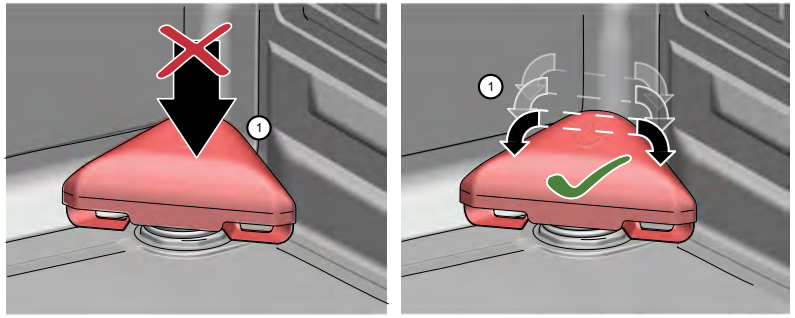


Fig. 55: Installing the Zeolith container

Do not knock or press on with tools!

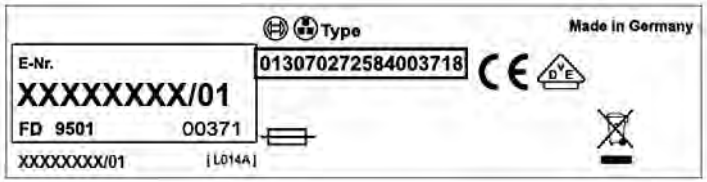
	Lower spray arm ■ After the final assembly check that the lower spray arm moves freely and is not blocked by the cap.

6.49 Coding

Coding is always necessary after flashing or exchanging the power module, operation module or communication module.

The coding can also be done by a Remote technician.

1. On the label you can find the necessary information for coding, e. g. FD and serial number (18 digit).



   Fill in the necessary fields.

2. Execute the coding by following the steps described in iService.

3. After coding is correctly finished a power reset is mandatory to store the appliance information in the communication module.
   In some appliances this step is automatically performed during the coding process.

   Disconnect the appliance shortly from the power supply to perform a power reset.

4. Pair the appliance (successful pairing will show if the appliances information is stored in the communication module).

6.50 Loading appliance software

Required tools:

- Computer
- Interface converter set — UDA2-CS – universal diagnosis adapter with USB-C cable, D-Bus-2 cable, splitter cable 3/4-pin **not included**: HSI cable [15000484]

⚠ Danger

Exposed live parts!
Risk of electric shock

- Disconnect the appliance from the power supply.
- Do not touch housing, frame or components.
- Use residual-current-operated circuit-breaker if tests have to be conducted with the power on.
- Ensure that the resistance of the protective conductor does not exceed the standardized values.
- UDA connected only on the upper side of the module with fixed coding frame -> risk of short circuit.

⚠ Caution

Voltage peaks when disconnecting/connecting the plug-in contacts!
The operating module or the power module will be destroyed by the mains potential on the earth cable of the bus system.

- Disconnect the appliance from the power supply before disconnecting/connecting plug-in connections.
- Do not connect Y-cable to the power module.

Prerequisite:

- Power module installed in dishwasher or set in programming station-logistic.
- Outer door has been removed.
- Outer door has been removed (fully integrated/integrated).
- Right side panel has been removed.→ *Page 125*

6.50.1 Steps for copying Software

1. Disconnect appliance from power supply.
2. Connect UDA to appliance (at inner door or at power module→ *Page 183*).
3. Connect UDA to computer.
4. Connect appliance to power supply.
5. Switch on appliance.
6. Make sure, that appliance is not running in a (test) program.
7. Start→ *Page 183*iService program on computer and load software until message that installation has been successfully completed shows up.
8. Disconnect appliance from power supply for a minimum of 10 s (Hardware Reset; all LEDs on control module must turn off).
9. Disconnect UDA from appliance.
10. For fully integrated appliances with capatouch: Install furniture panels with metal parts before the appliance is connected to the power supply!

    Connect appliance to power supply.
    - ➔ Display shows S:00 and/or all LEDs will be on and factory test program (not CS-test program) starts.
11. Execute a Software Reset (hold start button for 3 s).
12. Turn appliance off with power button.

6.50.2 Connecting UDA to operating module at inner door

1. Connect Y-cable to control module. Depending on appliance, 3-wire or 4-wire connection of adaptor [341248] should be used. There will always be two connectors that are not used.

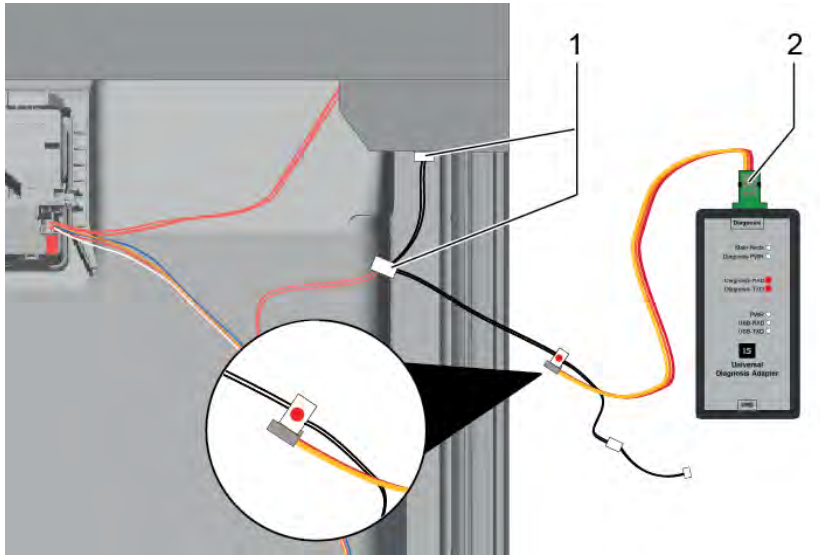


Fig. 56: 4-wire connection (capa touch operation models)

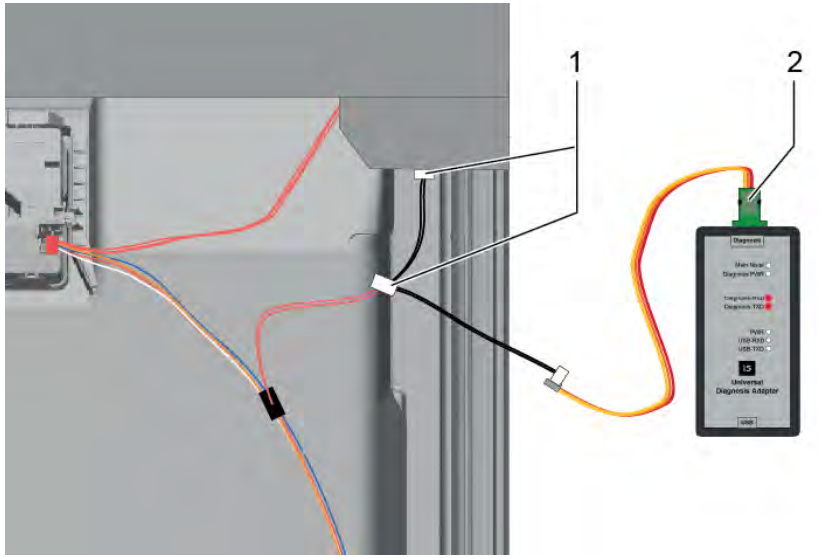


Fig. 57: 3-wire connection

2. Connect cable to UDA. UDA-cable is to be connected to Y-cable at connection shown with red dot (optional).

6.50.3 Connecting UDA to power module

UDA-cable can also be connected directly to power module. Do not use Y-cable for this connection.

Notice

No flashing possible!

The flashing at the power module only works correctly if

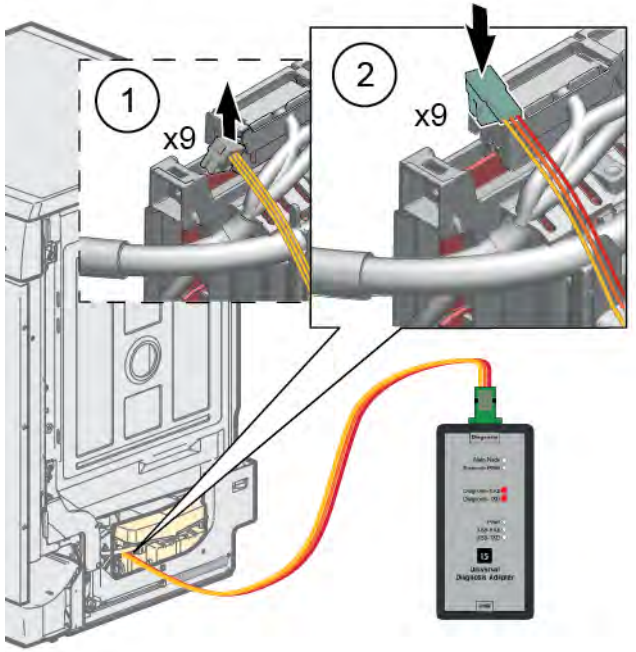
- the module is already loaded with software and no other component is connected through the iService connection
- the module has been installed unprogrammed.

Notice

Damage to the Control Module!

- If the UDA is connected somewhere other than what is instructed here, damage can occur.
- Connect the UDA only with the coding frame in place on the top side of the module.

1. iService connection X9 on power module can be found in ASP document. If connection is already being used, connection must be removed.



2. Connect UDA-cable to labeled iService / D-2bus connection X9. Connect cable to UDA.

6.50.4 Flashing software

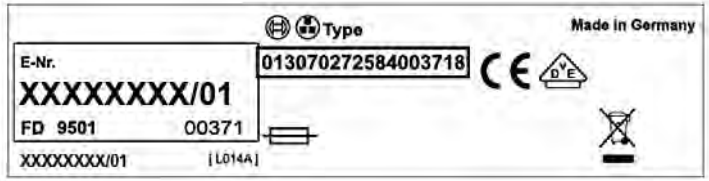
1. Start iService Software on computer.
2. Insert E-number.
3. Select Continue.
4. Continue with Flash.
5. Select component that needs to be flashed in field "flash process".
6. Select Continue.
   - When Flash button is selected, software will be loaded.
   - When flashing is completed, a message will indicate a successful process.

6.50.5 Coding

Coding is always necessary after flashing or exchanging the power module, operation module or communication module.

The coding can also be done by a Remote technician.

1. On the label you can find the necessary information for coding, e. g. FD and serial number (18 digit).



   Fill in the necessary fields.

2. Execute the coding by following the steps described in iService.

3. After coding is correctly finished a power reset is mandatory to store the appliance information in the communication module.
   In some appliances this step is automatically performed during the coding process.

   Disconnect the appliance shortly from the power supply to perform a power reset.

4. Pair the appliance (successful pairing will show if the appliances information is stored in the communication module).

6.51 Load software

	Only programmed power and control modules are delivered from logistics. The System Master can´t be programmed.

6.52 Programming and diagnose of SMM via iService

Prerequisite:

- Mobile phone with WI-FI.
- Installed current version of the customer service software iService 4 (iS4) or iService 5 (iS5).

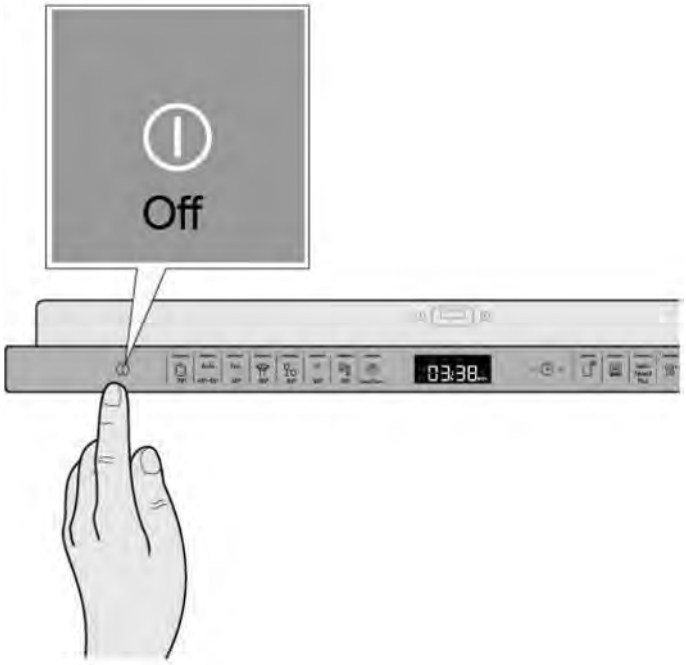
1. Open iService.
2. Enter VIB/KI.

6.52.1 Activating WIFI function (SMM)

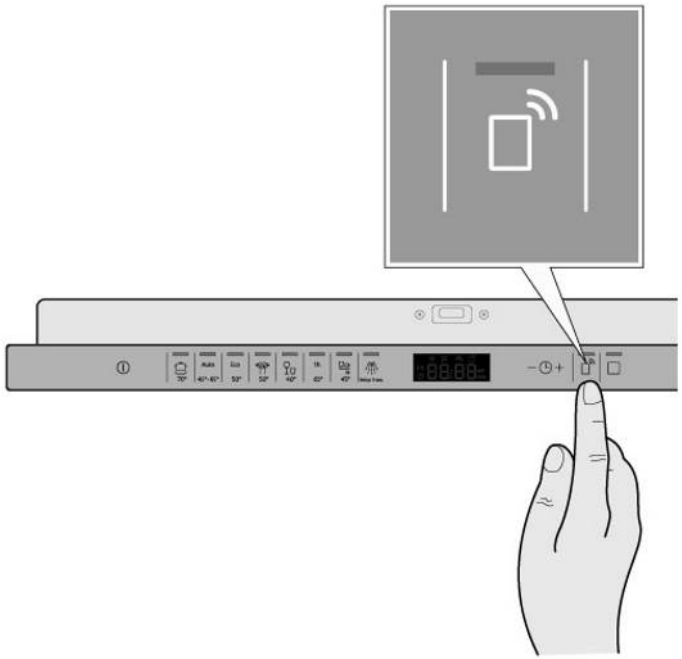
The WIFi access point needs to be activated on the appliance to load appliance software to the SMM. The connection from the appliance to the router will be interrupted and the appliance works as a WIFI source.

After a reset of the appliance the WIFI access point will be automatically closed.

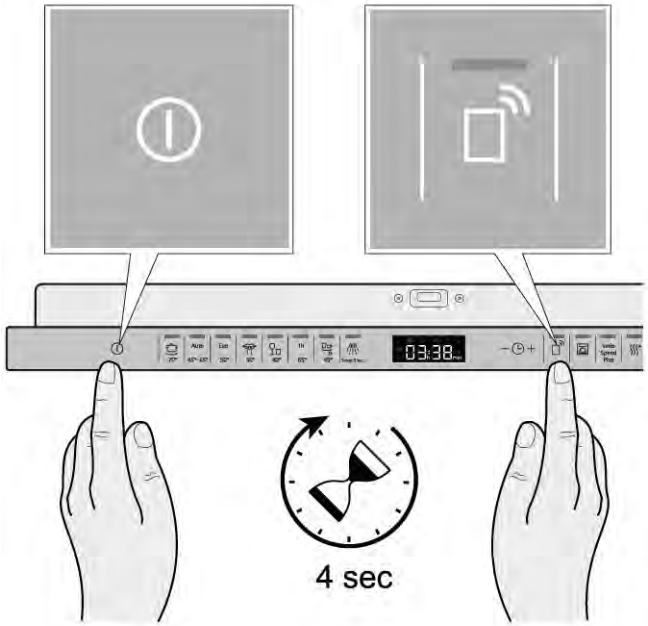
1. Press off-button.

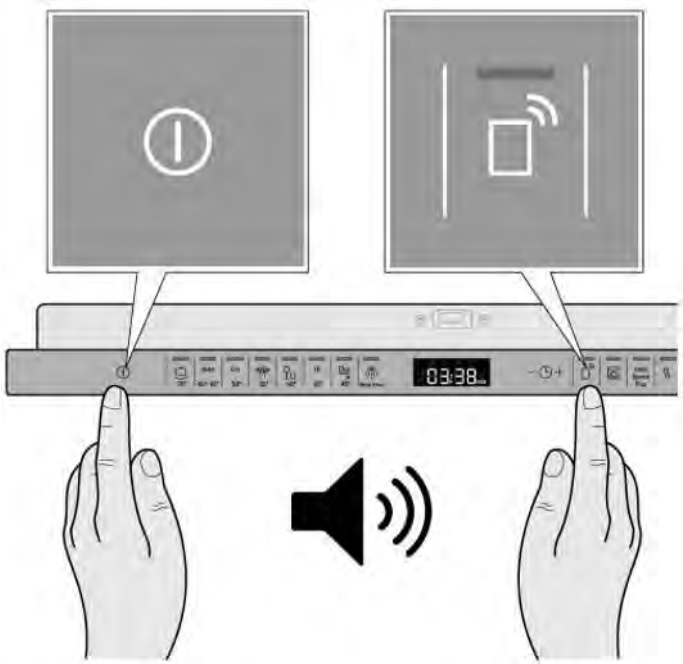


2. Press wifi-button (remote control) and hold it.



3. Hold wifi-button (remote control) and off-button together for 4 s till WIFI button LED starts to flash and sound appears (for appliances with acoustic signal).





6.52.2 iService 4

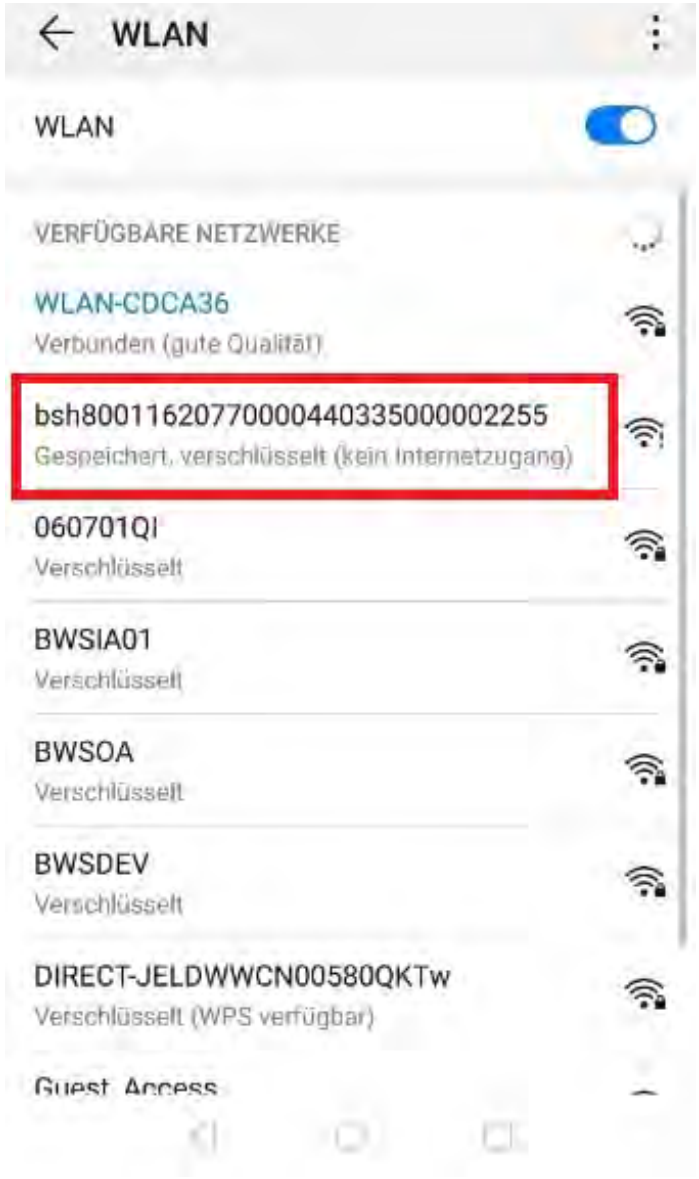
With iService 4 the connection between the appliance and the mobile phone will be established automatically. The manual establishment of the connection via WLAN settings and entering the password is not required.

► Follow instructions in iService.

6.52.3 iService 5

1. Check available networks on mobile phone.

➥ Network "**bsh_+18 digit serial number**" appears. If the SMM was flashed before tracing ID (bsh_8xxxxxxx) is shown.



2. ⓘf If there is no network of the appliance
   - try activation again.
3. Open iService.
4. Enter password 0123456789 on mobile phone for WI-FI connection to appliance.
5. Switch to iService.
   iService offers functions when WIFI connection is established.
6. Follow instructions in iService.

6.52.4 Load software

ⓘ	Only programmed power and control panels are delivered from logistics.

Prerequisite:

✔ Active WIFI connection between iService and appliance.

1. Select Flashing / Programming.
2. | | |
   |---|---|
   | ⓘ | After programming appliance performs a reboot. Don´t disconnect appliance from power supply before it is ready to operate again. |

   Load software.

6.52.5 Read out error codes

Prerequisite:

✔ Active WIFI connection between iService and appliance.

► Select Log.
   See error code table for error code descriptions.

6.52.6 Interrupt appliance access

► Perform a appliance reset.