

Maintenance Manual

Instandhaltungsanleitung
Manuel d'entretien
Istruzioni per la manutenzione



Table of Content

| | |
|--|----|
| Table of Content | 2 |
| Target groups | 2 |
| Explanation of symbols | 2 |
| Safety notes | 2 |
| Product classification | 2 |
| Structure | 3 |
| Troubleshooting | 4 |
| Settings using the Geberit Service Handy | 6 |
| Manual settings | 10 |
| Activating manual mode | 11 |
| A – Enabling cleaning | 12 |
| B – Setting the flush time to the factory setting | 12 |
| C – Setting the water saver | 12 |
| D – Setting the run-on time to 120 seconds | 12 |
| E – Setting the detection distance | 13 |
| Resetting all settings | 13 |
| Care and maintenance | 14 |
| Cleaning the surface (cleaning function) | 14 |
| Cleaning the tap aerator | 14 |
| Cleaning the basket filter | 14 |
| Adjusting the water temperature (with mixer, without handle) | 15 |
| Replace battery | 16 |
| Changing over the hot water limiter | 16 |
| Disposal | 18 |

Target groups

This document is intended for use by skilled persons as defined by EN IEC 62079:2001.

Explanation of symbols

| Symbol | Meaning |
|--|--|
|  CAUTION | Refers to a potentially dangerous situation that may cause slight or moderate injury or material damage. |
|  | Refers to important information. |

Safety notes

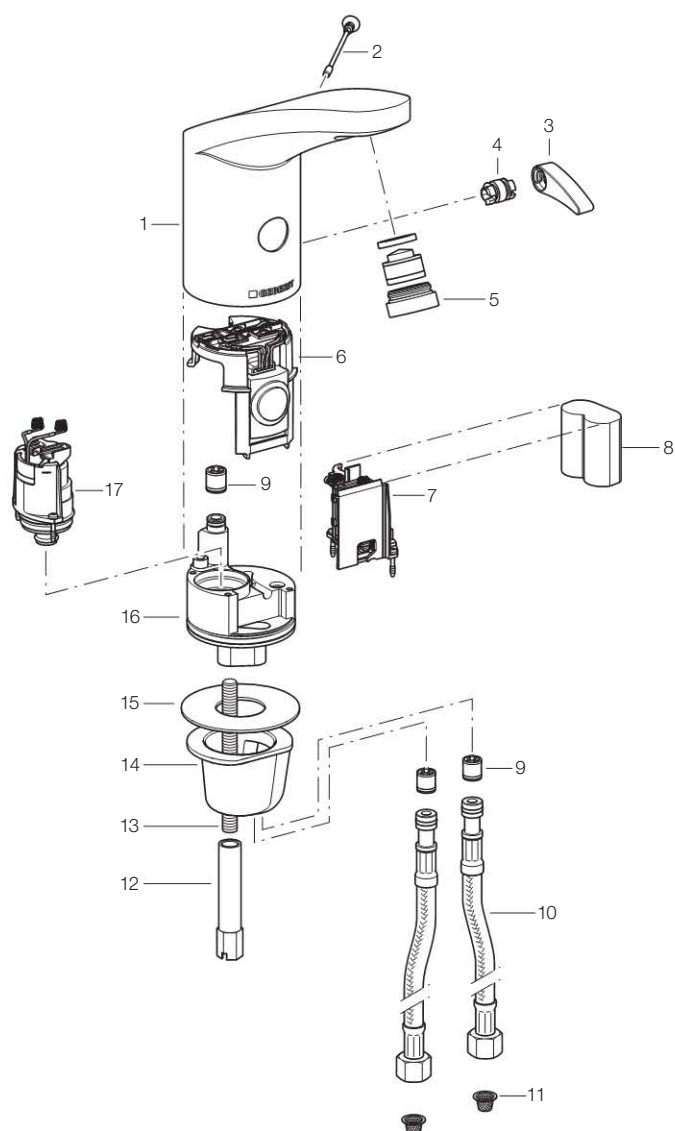
- Repairs may only be carried out by a skilled person using original spare parts and accessories
- Do not modify the lavatory tap or add any additional modules

Product classification

This document describes the maintenance of the following Geberit products:

- 116.235.21.1, Geberit lavatory tap type 185, battery, without mixer
- 116.236.21.1, Geberit lavatory tap type 186, battery, without mixer
- 116.245.21.1, Geberit lavatory tap type 185, battery, with mixer but without handle
- 116.246.21.1, Geberit lavatory tap type 186, battery, with mixer but without handle
- 116.255.21.1, Geberit lavatory tap type 185, battery, with mixer and handle
- 116.256.21.1, Geberit lavatory tap type 186, battery, with mixer and handle

Structure



- 1 Tap housing
- 2 Shut-off screw
- 3 Mixer handle
- 4 Hot water limiter
- 5 Tap aerator
- 6 IR sensor
- 7 Battery holder
- 8 Battery
- 9 Check valve
- 10 Reinforced braided hose
- 11 Basket filter
- 12 Long nut
- 13 Threaded rod
- 14 Fastening sleeve
- 15 Flat gasket
- 16 Valve block
- 17 Solenoid valve

Troubleshooting

| Problem | Possible cause | Fault clearance |
|---|--|---|
| No water | • Angle stop valves are closed | Open the angle stop valves |
| | • Tap aerator is blocked or dirty | Clean or replace the tap aerator • See "Care and maintenance" |
| | • Basket filter is blocked or dirty | Clean or replace the basket filter • See "Care and maintenance" |
| | • Reinforced braided hose is kinked | Rectify the kink |
| | • No pressure in water net | Examine the water pressure • Restore the water pressure |
| | • Battery is dead | Replace battery • See "Care and maintenance" |
| | • Battery terminals or contacts are corroded | Clean the contacts or replace the battery • See "Care and maintenance" |
| | • Battery is inserted incorrectly (incorrect polarity) | Insert the battery correctly |
| | • Shut-off screw is missing or defective | Insert or replace the shut-off screw |
| | • Tap is in cleaning mode | Wait for the end of the cleaning mode (approx. 2 min) |
| | • Detection distance is not adjusted correctly | Correctly set the detection range • See "Settings using the Geberit Service Handy" or "Manual settings" |
| | • IR window is scratched or dirty | Clean the IR window or replace the IR sensor |
| | • Interfering reflections from the washbasin | Correctly set the detection range • See "Settings using the Geberit Service Handy" or "Manual settings" |
| | • Solenoid valve contacts are corroded | Clean the contacts or replace the solenoid valve |
| | • Solenoid valve is defective | Replace the solenoid valve |
| | • IR sensor contacts are corroded | Clean the contacts or replace the IR sensor |
| • IR sensor is defective | Replace the IR sensor | |
| The LED in the IR sensor flashes 6 times after each use | • Battery level is low | Replace battery • See "Care and maintenance" |
| The LED in the IR sensor flashes continuously and the tap does not work | • Battery level is too low | Replace battery • See "Care and maintenance" |
| The LED in the IR sensor does not flash and the tap does not work | • Battery level is too low | Replace battery • See "Care and maintenance" |
| Water runs constantly and stops if an object appears in the detection range | • Spring contact probes between IR sensor and solenoid valve connected the wrong way round | Connect the plug connection correctly |
| Continuous flow (water does not stop) | • Interfering objects in the detection range | Remove objects from the detection range • Then, remove the shut-off screw and insert it again. Do not disturb the detection process (wait until the water flow stops and the LED in the IR window is no longer lit) |
| | • IR sensor is defective | Replace the IR sensor |
| | • Incorrect sensor mode | Change the sensor mode or reset the sensor • See "Settings using the Geberit Service Handy" or "Manual settings" |
| | • Pressure in water net is too high | Examine the pressure in the water net • Set the net water pressure to 0,5–8,0 bar |
| | • Solenoid valve is defective | Replace the solenoid valve |

| Problem | Possible cause | Fault clearance |
|---|---|--|
| Water runs although shut-off screw has been removed | <ul style="list-style-type: none"> • IR sensor is defective | <p>Replace the IR sensor</p> |
| Water starts to run by itself | <ul style="list-style-type: none"> • IR window is scratched or dirty • Tap is being adversely affected by influences in the room (mirrors, metal surfaces, glass washbasins, etc.) • Pressure fluctuations in the water net | <p>Clean the IR window or replace the IR sensor</p> <p>Reset the sensor</p> <ul style="list-style-type: none"> • See "Settings using the Geberit Service Handy" or "Manual settings" <p>Install a suitable pressure regulator</p> |
| Tap is leaky, water dripping from tap | <ul style="list-style-type: none"> • Leaks in water way, defective seals • Water drops out of water outlet, solenoid valve does not close properly | <p>Examine the connections in the water way</p> <ul style="list-style-type: none"> • Replace the seals, if defective <p>Clean or replace the solenoid valve</p> |
| Temperature cannot be adjusted properly | <ul style="list-style-type: none"> • No or not enough hot or cold water. Angle stop valves are not completely open • Basket filter in water supply valve is blocked or dirty • Differentiated pressure of the hot and cold water pipe is higher than 1,5 bar • Reinforced braided hose is kinked • Check valve in tap housing or on reinforced braided hose is blocked • Water temperature is too low or too high • Water temperature is too low • Reinforced braided hoses are not connected correctly (cold with hot and hot with cold) | <p>Open the angle stop valves completely</p> <p>Clean or replace the basket filter</p> <ul style="list-style-type: none"> • See "Care and maintenance" <p>Adapt the differentiated pressure of the two pipelines</p> <ul style="list-style-type: none"> • Slightly close the angle stop valve on the pipeline with the higher pressure • Install a flow regulator or a water pressure reducing valve <p>Rectify the kink</p> <p>Rectify the blocking or replace the check valve</p> <p>Examine the temperature of the water net or storage water heater</p> <p>Change over the hot water limiter</p> <ul style="list-style-type: none"> • See "Care and maintenance" <p>Connect the reinforced braided hoses correctly</p> |

Settings using the Geberit Service Handy

The numbers and terms in the column "Menu item" correspond to what can be seen on the display of the Geberit Service Handy. Further information can be found in the operating instructions of the Geberit Service Handy.



The Geberit Service Handy must be set to bidirectional mode.

Information given in [] corresponds to the text displayed on the Geberit Service Handy.
Information given in < > refers to buttons on the Geberit Service Handy.

Commands

| Menu item [EN] [DE] | Description | Application | Adjustment range | Factory setting |
|------------------------------------|--|--|-------------------------|-----------------|
| 20 [Valve] [Ventil] | Switch solenoid valve. Flushes until it is switched off again (stops automatically after 10 min) | a) Function test for the valve b) Flushing of standing water (stagnation) c) Disinfection of the pipe section and the tap (minimum 3 min at a minimum of 70 °C) d) Winter emptying | On = <OK> Off = <OK> | Off |
| 21 [RangeTest] [TestErfas] | Check detection range. Red LED in IR window lights up if an object comes into the detection range. No flush is initiated (switches off automatically after 90 s) | Problems with user detection | On = <OK> Off = <OK> | Off |
| 22 [ResetSens] [ResetSens] | Reset sensor. IR sensor recalibrates itself | a) In the event of detection malfunctions b) Environment has changed (e.g. new washbasin) | Start = <OK> | – |
| 23 [FactorySet] [Werkseinst] | Factory settings. All functions are reset to the factory setting | In the case of malfunctions | Start = <OK> | – |
| 24 [CleanMode] [Reinigung] | Switch cleaning function. The tap is inactive for 90 s | Cleaning the tap and the washbasin without the water running | Start = <OK> | – |

Programs

| Menu item [EN] [DE] | Description | Application | Adjustment range | Factory setting |
|----------------------------------|--|-------------------------------------|---|-----------------|
| 30 [MainProgr] [Hauptmenü] | Select main menu. Presence: Flushes as long as an object is in the detection range Water saver: see menu item 44 Run-on time: see menu item 43 | Selecting one of the three programs | Presence = [A] Water saver = [B] Run-on = [C] | [A] |
| 31 [Esaver] [E Sparen] | Select energy saver. Reduces the reaction speed of the IR sensor after the time from menu item 40 [ESaverT] has elapsed after the last use | Extension of the battery lifetime | On = [ON] Off = [OFF] | [OFF] |

Programs

| Menu item [EN] [DE] | Description | Application | Adjustment range | Factory setting |
|--------------------------------|---|--|--------------------------|-----------------|
| 32 [CleanEn] [FreiReini] | Enable cleaning. Enables one person to manually start the cleaning function (see "Care and maintenance") | Prerequisite for starting the manual cleaning function | On = [ON] Off = [OFF] | [OFF] |
| 33 [IntFlush] [IntervSp] | Select interval flush. Starts the interval flush program. The tap flushes automatically at the interval dictated by the entered value from menu item 42 [IntervalT] for the duration of the entered value from menu item 41 [IntFlushT] after the last use | a) Hygiene b) Flushing out of stagnant water | On = [ON] Off = [OFF] | [OFF] |

Parameters

| Menu item [EN] [DE] | Description | Application | Adjustment range | Factory setting |
|----------------------------------|--|---|---|-----------------|
| 40 [ESaverT] [EnerSparZ] | Set start time energy saver. Is active if [ON] is selected in menu item 31 [Esaver] | – | 6–48 h [...] | 24 h [24] |
| 41 [IntFlushT] [IntervSpZ] | Set interval flush – flush time. Is active if [ON] is selected in menu item 33 [IntFlush] | – | 3–180 s [...] | 3 s [3] |
| 42 [IntervalT] [IntervalZ] | Set interval flush – flush interval. Is active if [ON] is selected in menu item 33 [IntFlush] | – | 1–168 h [...] | 168 h [168] |
| 43 [RunOnTime] [NachlaufZ] | Set run-on time. Is active if [C] is selected in menu item 30 [MainProgr]. The tap continues to flush with the input value after the object has been removed from the detection range | a) Hygiene b) Cleaning of implements | 1–180 s [...] | 120 s [120] |
| 44 [WSaverT] [TWSporenZ] | Select running time water saver. Is active if [B] is selected in menu item 30 [MainProgr]. The tap flushes as long as an object is in the detection range but not longer than the input value | a) Water saver b) Extracting a certain amount of water | 3–180 s [...] | 10 s [10] |
| 45 [DetectRng] [Erfassdis] | Set detection range. Manual setting [0]: Place your hand in the detection range until the LED in the IR window flashes. Hold your hand in the desired detection distance until the LED lights up for one second and a water impulse follows | Individual adjustment of the detection distance | Manual 5–33 cm = [0] 11–14 cm = [1] 16–19 cm = [2] 21–24 cm = [3] 26–29 cm = [4] 31–33 cm = [5] | 16–19 cm [2] |

Settings using the Geberit Service Handy

Parameters

| Menu item [EN] [DE] | Description | Application | Adjustment range | Factory setting |
|----------------------------------|---|---|--|-----------------|
| 46 [SensorUp] [SensOben] | Set upper sensor operation. Off: IR sensor is switched off. (It is not possible for both IR sensors to be switched off at the same time) Auto: IR sensor switches automatically to "Dynamic" if required. Dynamic: IR sensor only reacts to moving objects | Improvement of the detection safety in case of external influences (e.g. strongly reflecting objects in the room) | Off = [0] Auto = [1] Dynamic = [2] | Auto [1] |
| 47 [SensorLow] [SensUnten] | Set lower sensor operation. Off: IR sensor is switched off. (It is not possible for both IR sensors to be switched off at the same time) Auto: IR sensor switches automatically to "Dynamic" if required. Dynamic: IR sensor only reacts to moving objects | Improvement of the detection safety in case of external influences (e.g. strongly reflecting washbasins) | Off = [0] Auto = [1] Dynamic = [2] | Auto [1] |

Counters

| Menu item [EN] [DE] | Description | Output |
|----------------------------------|---|-------------------------|
| 50 [Days?] [SumBetrT?] | Total number of days of operation. Displays the number of days of operation since commissioning | [...] days |
| 51 [Uses?] [SumBenut?] | Total number of uses. Displays the number of uses since commissioning | [...] uses |
| 52 [IntFlush?] [SumIntSp?] | Total number of interval flushes. Displays the number of interval flushes since commissioning | [...] flushes |
| 53 [↔Days] [↔SumBetrT] | Number of days of operation power-on. Displays the number of days of operation since the unit was last switched on | [...] days of operation |
| 54 [↔Uses] [↔SumBenut] | Number of uses power-on. Displays the number of uses since the unit was last switched on | [...] uses |
| 55 [↔IntFlush] [↔SumIntSp] | Number of interval flushes power-on. Displays the number of interval flushes since the unit was last switched on | [...] flushes |

Unit info

| Menu item [EN] [DE] | Description | Output |
|----------------------------------|---|----------------------|
| 60 [TypeNo] [Modell-Nr] | Type number. Indicates the article number of the tap (does not apply if the IR sensor has been replaced) | [...] |
| 61 [SWVersion] [SWVersion] | Software version. Indicates the software version of the IR sensor (e.g. [0312] = version 3.12) | [...] XXZZ |
| 62 [SerialNo] [Serien-Nr] | Serial number. Indicates the serial number of the current IR sensor | [...] |
| 63 [ManufDate] [ProdDatum] | Manufacturing date tap. Indicates the manufacturing date of the tap. Does not apply if the IR sensor has been replaced (e.g. [1007] = calendar week 10, 2007) | [...] WWYY |
| 64 [TypePower] [Netz/Batt] | Type of power supply. Indicates whether it is a mains-operated (AC) or a battery-operated (DC) tap | DC = [0] AC = [1] |
| 65 [Battery%] [Batterie%] | Battery capacity. Indicates the current battery capacity in %. The battery must be replaced at 00 % | [...] % |

Manual settings

The tap allows to set a limited number of functions manually without using the Geberit Service Handy. The setting is performed with the infrared sensor.

The manual mode must be activated before the functions A–E can be set (see "Activating manual mode").

Overview of functions

| Functions A–E | Description |
|-------------------------------------|---|
| A Enable cleaning | Enables one person to manually start the cleaning function (see "Care and maintenance"). The function remains continuously activated. See "A – Enabling cleaning" on the following pages |
| B Set flush time to factory setting | The flush time is set to the factory setting. The tap flushes as long as an object is in the detection range. See "B – Setting the flush time to the factory setting" on the following pages |
| C Set water saver | The tap flushes as long as an object is in the detection range but no longer than 10 s. See "C – Setting the water saver" on the following pages |
| D Set run-on time to 120 seconds | Once you have removed your hand, the tap will continue to flush for 120 s. See "D – Setting the run-on time to 120 seconds" on the following pages |
| E Set the detection distance | The detection distance from the IR sensor to the hand is set. See "E – Setting the detection distance" on the following pages |
| Further functions | |
| Reset all settings | All settings are reset to the factory settings and manual mode is deactivated. See "Resetting all settings" on the following pages |


Activating manual mode

The following instructions show a battery-operated tap. The same procedure applies to mains-operated and generator-operated taps.

The manual mode is active for 30 min. All functions can be set within this period.

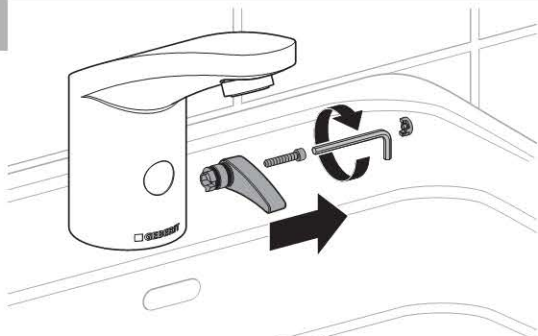
Prerequisites

- Tap is operable
- Water supply valve is open
- Battery is fully charged (LED in the IR window does not flash)
- Mains current is present

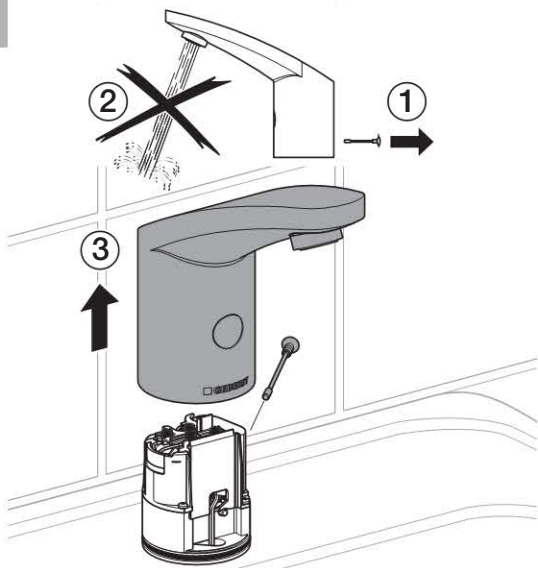
CAUTION
 Short-circuiting the spring contact probes and battery terminals can result in burns or damage to property.

- ▶ Ensure that the tap housing is only ever pushed onto the valve block in the correct position.
- ▶ Only connect the battery to the contacts in the battery holder.

1

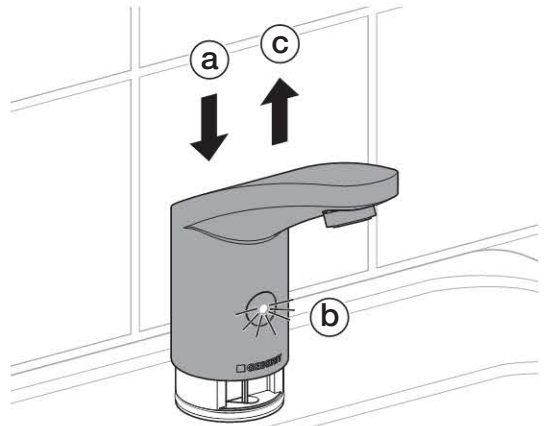


2

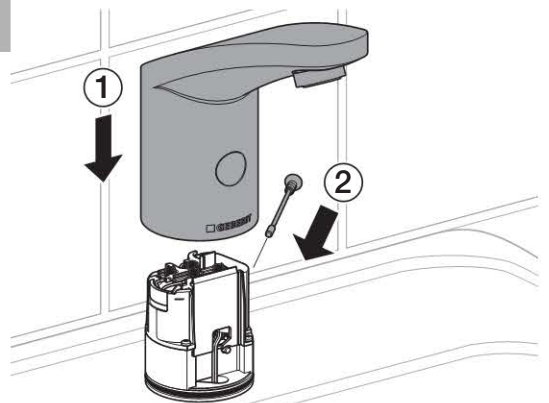


3

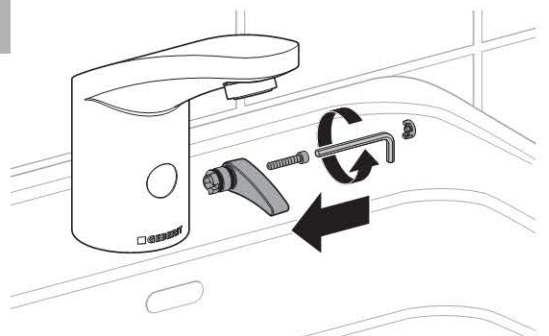
Steps a–c must be performed four times in a row.
 (a) Press the tap housing onto the contacts until
 (b) LED lights up for 1 s then (c) push the tap housing
 back up immediately by 3 cm.



4



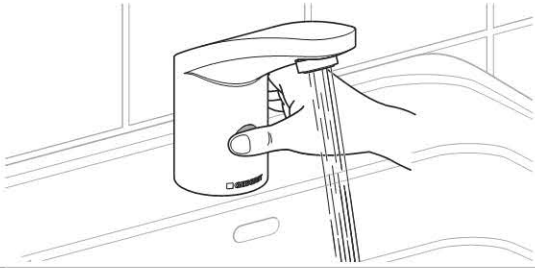
5



A – Enabling cleaning

Enables one person to manually start the cleaning function (see "Care and maintenance"). The function remains continuously activated.

- 1 Activate manual mode (see "Activating manual mode"). Manual mode will remain active for 30 min. Set the function within this period.
- 2 Cover the IR window completely with your hand. Water will stop after 5 s.

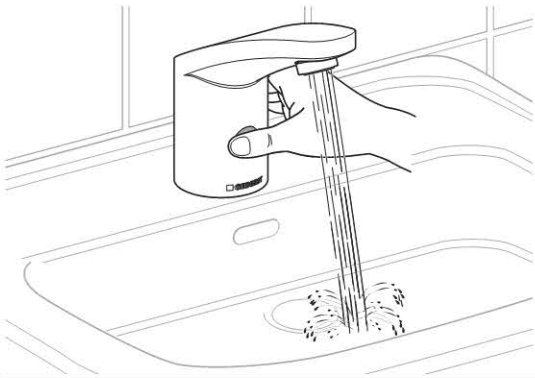


- 3 Remove your hand immediately.

B – Setting the flush time to the factory setting

The flush time is set to the factory setting. The tap flushes as long as an object is in the detection range.

- 1 Activate manual mode (see "Activating manual mode"). Manual mode will remain active for 30 min. Set the function within this period.
- 2 Cover the IR window completely with your hand. Water will stop after 5 s. Wait until a further water impulse has occurred.

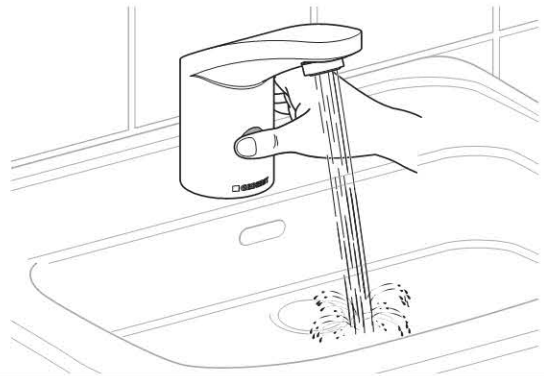


- 3 Remove your hand immediately.

C – Setting the water saver

The tap flushes as long as an object is in the detection range but no longer than 10 s.

- 1 Activate manual mode (see "Activating manual mode"). Manual mode will remain active for 30 min. Set the function within this period.
- 2 Cover the IR window completely with your hand. Water will stop after 5 s. Wait until 2 further water impulses have occurred.

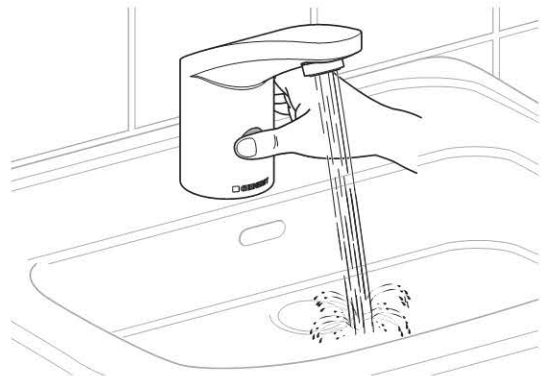


- 3 Remove your hand immediately.

D – Setting the run-on time to 120 seconds

Once you have removed your hand, the tap will continue to flush for 120 s.

- 1 Activate manual mode (see "Activating manual mode"). Manual mode will remain active for 30 min. Set the function within this period.
- 2 Cover the IR window completely with your hand. Water will stop after 5 s. Wait until 3 further water impulses have occurred.

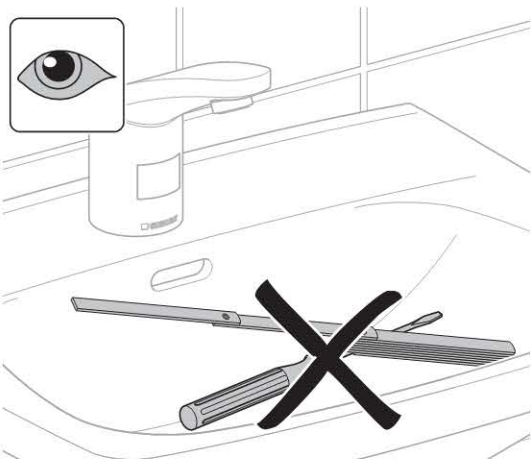


- 3 Remove your hand immediately.

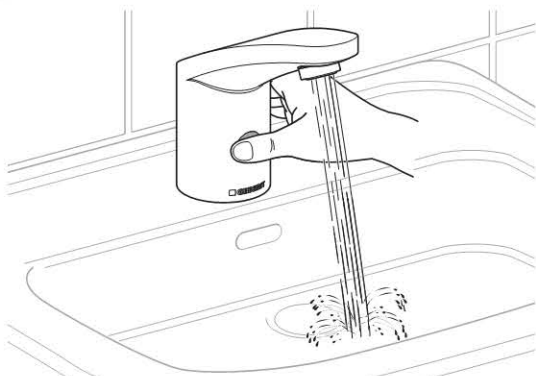
E – Setting the detection distance

The detection distance from the IR window to the hand is set.

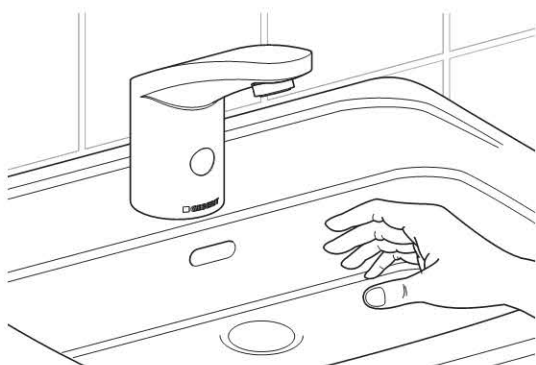
- 1** Activate manual mode (see "Activating manual mode"). Manual mode will remain active for 30 min. Set the function within this period.
- 2** Remove all objects from the detection range.



- 3** Cover the IR window completely with your hand. Water will stop after 5 s. Wait until 4 further water impulses have occurred.



- 4** Remove your hand immediately. The function is now activated.
- 5** Hold your hand at the current detection distance until the LED in the IR window flashes. Then place your hand at the desired detection distance until the LED is constantly lit for 1 s and a water impulse follows for 1 s.

**Resetting all settings**

All settings are reset to the factory settings and manual mode is deactivated.

- ▶ The process for resetting the control is the same as for "Activating manual mode", but step 3 must be repeated six times.

Care and maintenance

The following maintenance work must be carried out when required, but no later than at the specified time intervals:


- Cleaning the surface – weekly
- Cleaning the tap aerator – monthly
- Cleaning the basket filter – yearly
- Adjusting the water temperature (with mixer, without handle) – when required
- Changing over the hot water limiter – when required
- Replacing the battery – when required

Cleaning the surface (cleaning function)

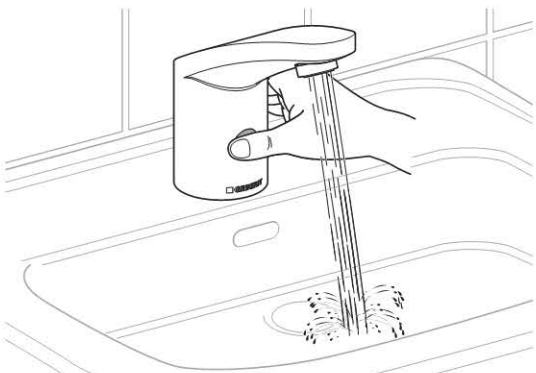
The tap can be deactivated for 90 s for cleaning purposes.

Prerequisites

The cleaning function is enabled (see "Settings using the Geberit Service Handy", "Enabling cleaning").

CAUTION
 Aggressive and scouring cleaning agents will damage the surface.
 ▶ Never use aggressive cleaning agents that are acidic, abrasive or corrosive or contain chlorine. Only use water and a mild cleaning agent.

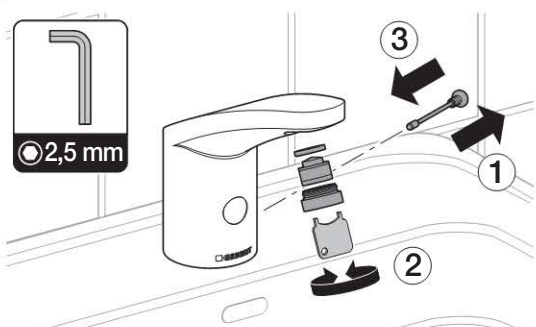
- 1 Cover the IR window completely with your hand. The flow of water stops after 5 s.



- 2 Remove your hand. The cleaning function is now active.
- 3 Clean the tap with a soft, damp cloth.
- 4 Dry the tap with a soft, dry cloth.

Cleaning the tap aerator

- ▶ Remove the shut-off screw and the tap aerator using the key provided. Clean the tap aerator and reinstall the shut-off screw.



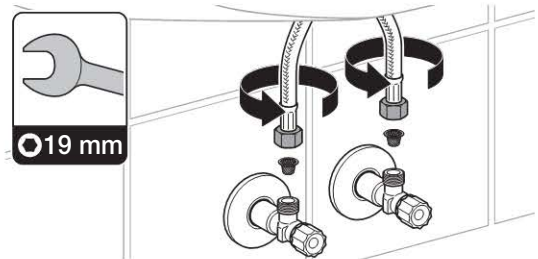
Cleaning the basket filter

1



2

Disconnect the reinforced braided hoses and clean or replace the basket filter. Then, reopen the angle stop valves.

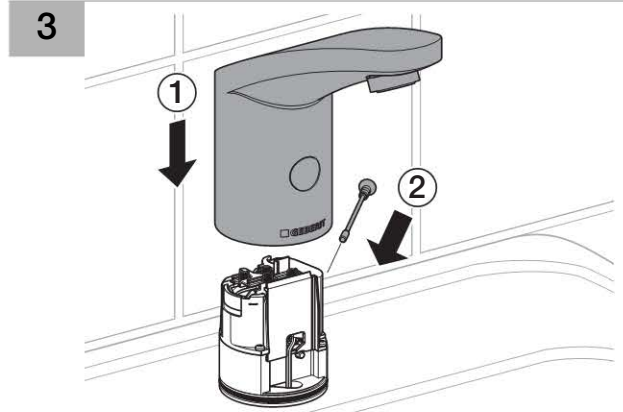
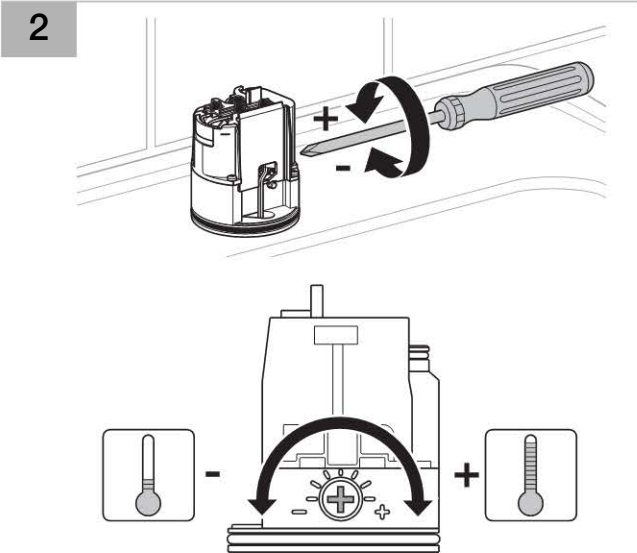
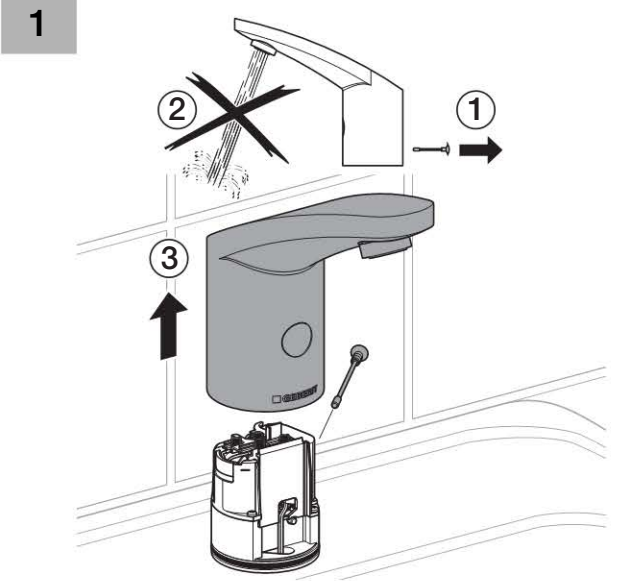


Adjusting the water temperature (with mixer, without handle)

CAUTION
 Short-circuiting the spring contact probes and battery terminals can result in burns or damage to property

- ▶ Ensure that the tap housing is only ever pushed onto the valve block in the correct position.
- ▶ Only connect the battery to the contacts in the battery holder.

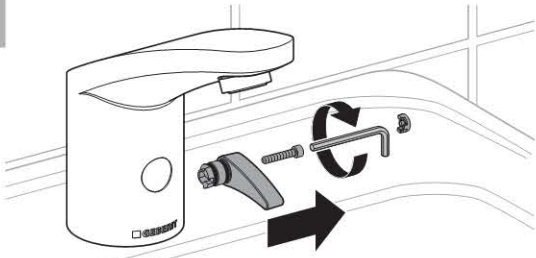
i The function of the tap is interrupted when the shut-off screw is removed. No water will flow.



Changing over the hot water limiter

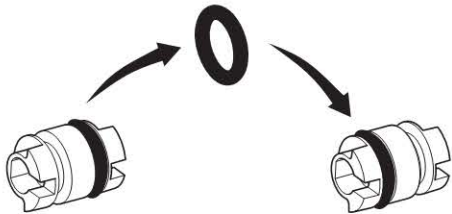
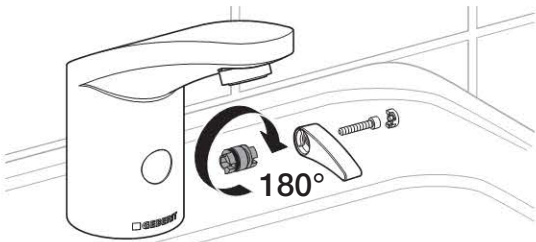
The proportion of hot water can be changed from 85 % up to 95 % and vice versa.

1

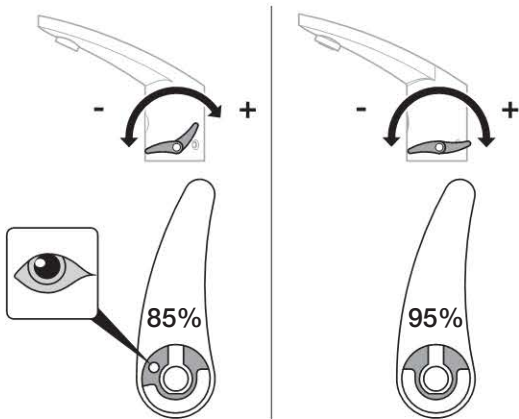


2

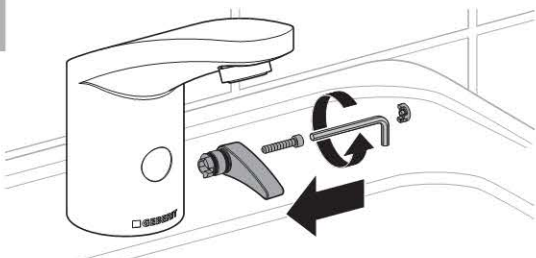
Remove hot water limiter from mixer handle using pliers, turn it by 180°, and insert it again. Push O-ring into second groove.



▶ Hot water limiter settings.



3



Replace battery

- Battery is low (LED is lit or flashes)
- New battery available (standard 6 V lithium battery CR-P2)



CAUTION

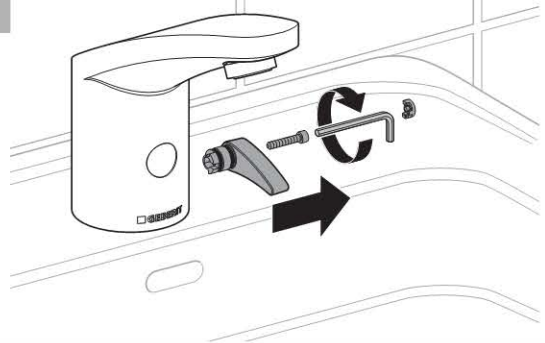
Short-circuiting the spring contact probes and battery terminals can result in burns or damage to property

- ▶ Ensure that the tap housing is only ever pushed onto the valve block in the correct position.
- ▶ Only connect the battery to the contacts in the battery holder.

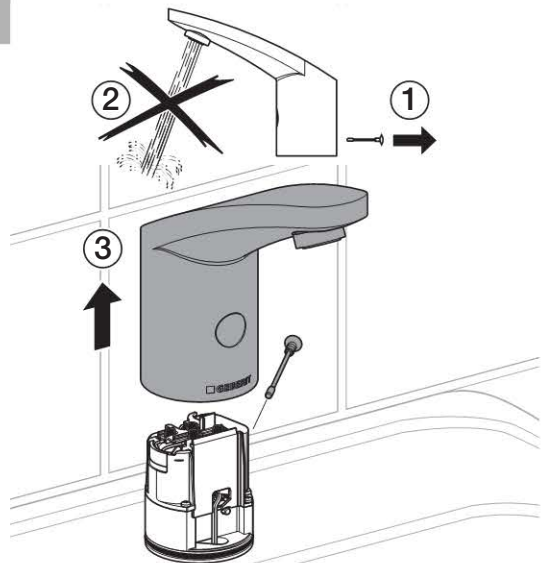


Never attempt to recharge a dead battery.

1

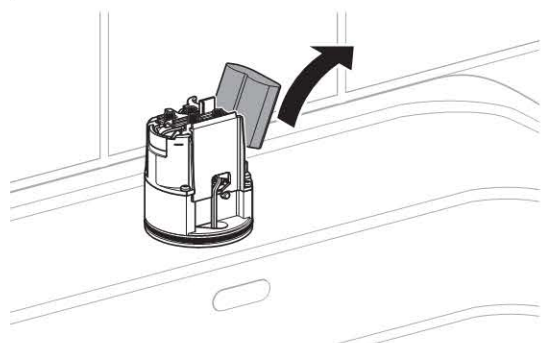


2

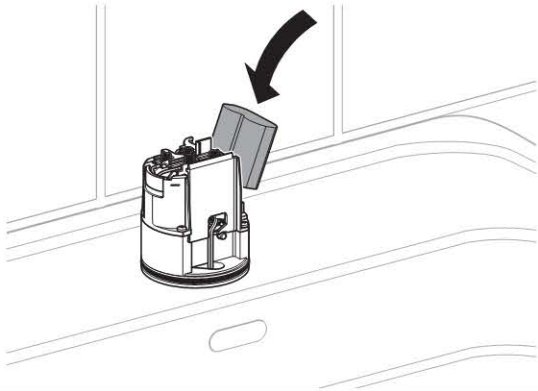


3

Remove dead battery and dispose of it appropriately.



- 4** Insert new battery. LED will light up for 1 s.



- 5** Reassemble the tap by following the steps in reverse order.

Disposal

Constituents

This product meets the requirements of the directive 2002/95/EC RoHS (Restriction of Hazardous Substances in electrical and electronic equipment).

Disposal



In accordance with directive 2002/96/EC WEEE on waste electrical and electronic equipment, manufacturers of electrical equipment are obliged to take back old equipment and to dispose of it correctly.

The symbol indicates that the product cannot be disposed of with non-recyclable waste. Old equipment should be returned directly to Geberit where it will be disposed of appropriately.

Please contact your responsible Geberit sales company or visit www.geberit.com for collection point addresses.

Geberit International AG
Schachenstrasse 77
CH-8645 Jona

dokumentation@geberit.com

→ www.geberit.com