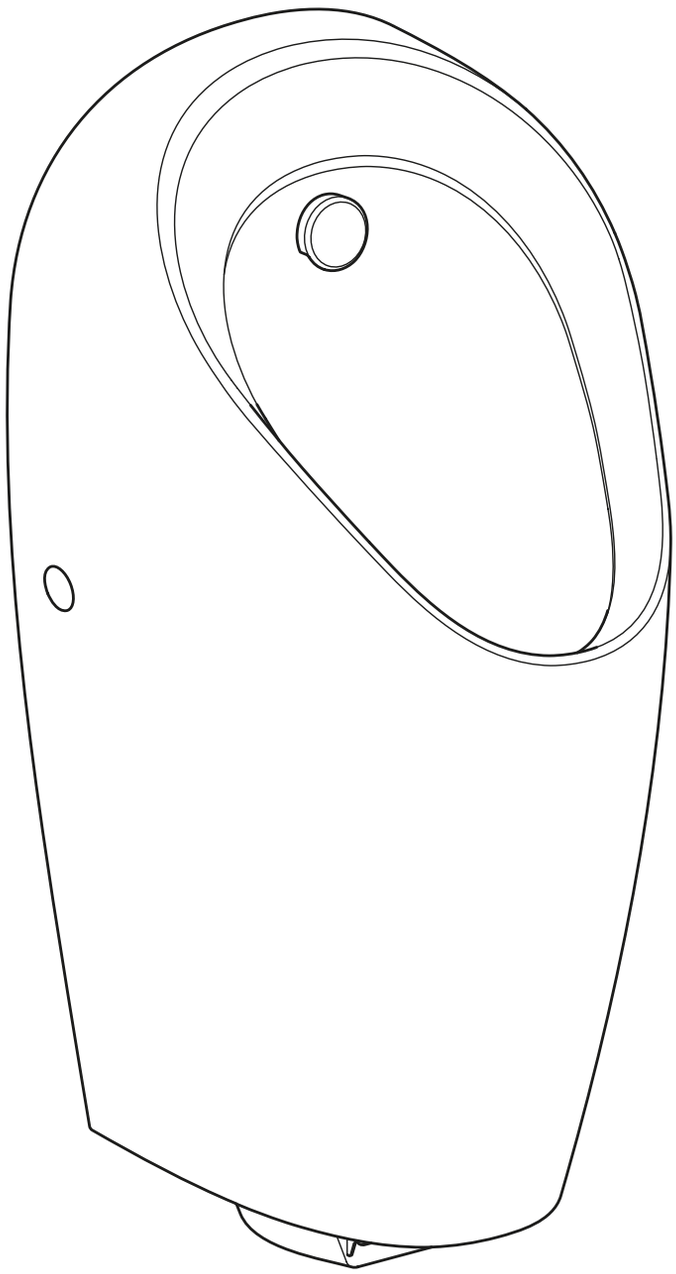
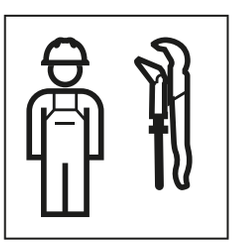
GEBERIT



MAINTENANCE MANUAL

KNOW
HOW
INSTALLED



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Safety

About this document

This document applies to the professional maintenance of the following products:

- Geberit urinals Preda, Selva and Tamina with integrated flush control, mains operation
- Geberit urinals Preda, Selva and Tamina with integrated flush control, battery operation
- Geberit urinals Preda, Selva and Tamina with integrated flush control, self-sustaining

Intended use

Urinals allow for urinating while standing up. These urinals are designed to be operated using a flush. Use for any other purpose is deemed improper.

Safety notes

- Repairs, conversions and additional installations may only be made by trained, skilled persons within the sanitation sector.
- Live parts may only be replaced by trained, skilled persons within the electronics sector.
- Only original Geberit spare parts may be used.

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Product description

Structure

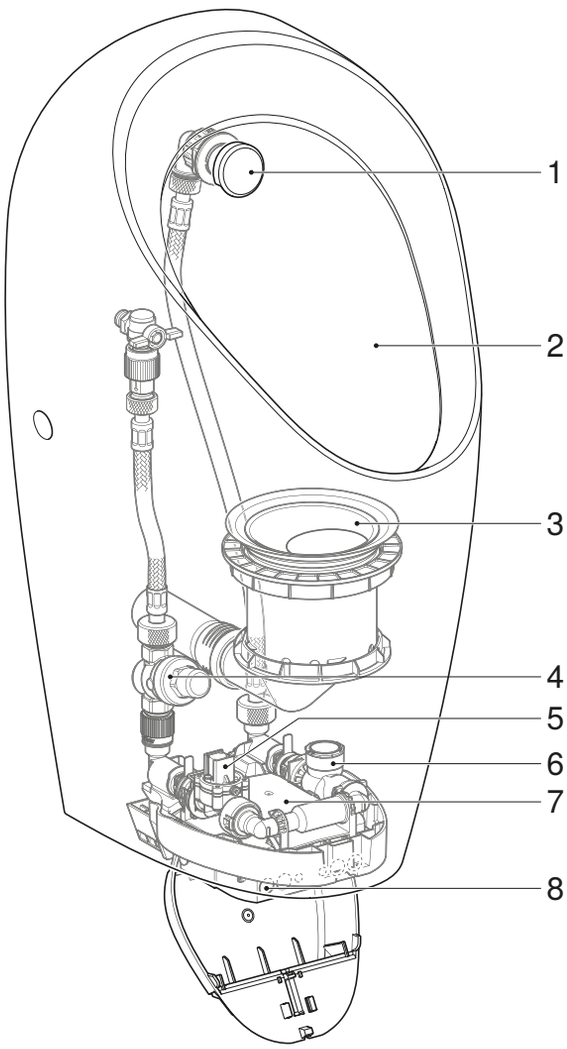

Figure 1: Geberit urinals Preda, Selva and Tamina with integrated flush control

1	Spray head
2	Urinal ceramic
3	Urinal trap
4	Water pressure reducing valve
5	Solenoid valve with basket filter
6	Generator (only for self-sustaining power supply)
7	Urinal flush control with control electronics, power supply unit, a battery or self-sustaining power supply
8	IR sensor

Technical data

	Mains operation	Battery operation[1)]	Generator operation
Nominal voltage	110–240 V AC	–	–
Mains frequency	50–60 Hz	–	–
Mains connection	Direct connection via system plug	–	–
Operating voltage	4.5 V DC	3 V DC	6.6 V DC
Battery type	–	Alkaline battery (1.5 V AA)	–
Power consumption	< 0.5 W	< 0.5 W	< 0.5 W
Power consumption standby	< 0.1 W	< 0.1 W	< 0.1 W
Flow pressure range	100-800 kPa	100-800 kPa	100-800 kPa
	1-8 bar	1-8 bar	1-8 bar
Ambient temperature	5–40 °C	5–40 °C	5–40 °C
Storage temperature	-20 – +70 °C	-20 – +70 °C	-20 – +70 °C
Flow rate at 1 bar with flow regulator	0.18 l/s	0.18 l/s	0.18 l/s
Flush time factory setting	7 s	7 s	7 s
Flush time, adjustment range	1-15 s	1-15 s	1-15 s

1) Battery service life: approx. 2 years

Characteristic curve of flow rate

The solenoid valve is fitted with a flow regulator ex works, which controls the flow rate at 14 l/min. Replacing the flow regulator (article number 243.579.00.1) can reduce the flow rate to 9 l/min.

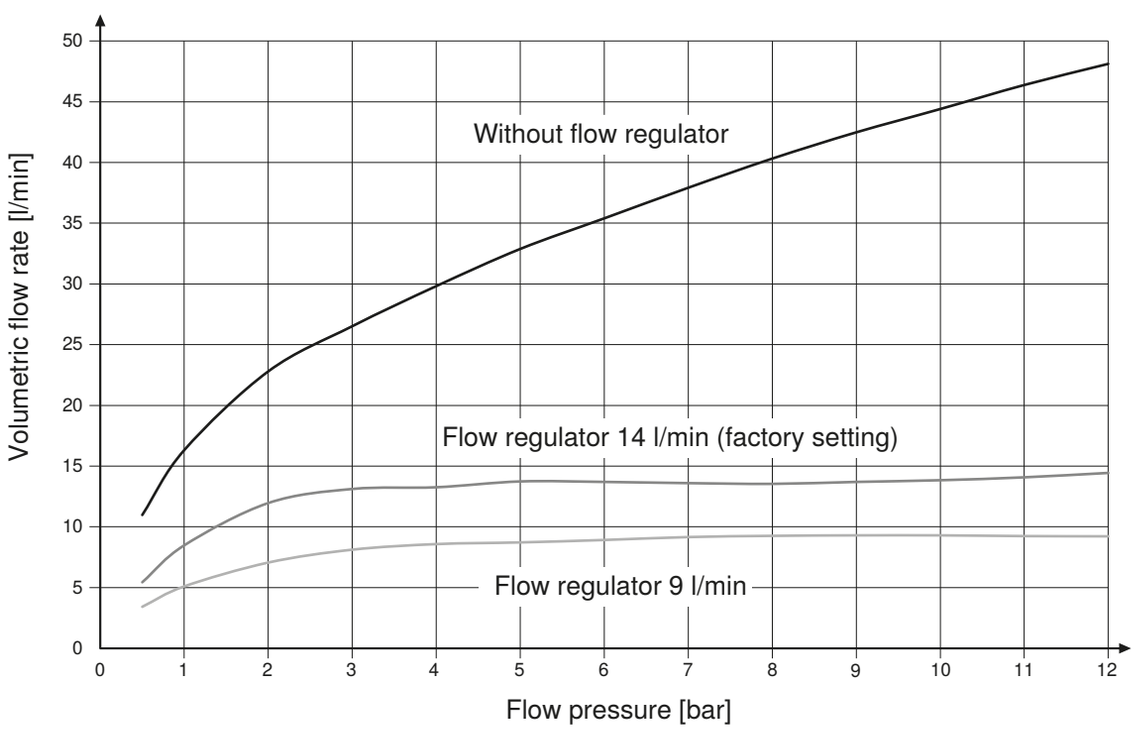

Figure 2: Characteristic curve of flow rate

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Troubleshooting

The operator can perform the following measures to rectify malfunctions. → See operation manual 966.933.00.0 (mains operation) and 966.934.00.0 (battery operation and self-sustaining).

- Restart the urinal flush control
- Set the flush time
- Optimise the detection distance
- Clean the basket filter
- Replace the batteries
- Charge the rechargeable battery of the self-sustaining power supply

Malfunction	Cause	Action
Incorrect flushes (too soon, too late, unwanted)	Detection distance not set correctly	► Optimise the detection distance. → See operation manual.
	IR window is dirty or wet	► Clean or dry the IR window.
	IR window scratched	► Replace the control electronics.
Water is running continuously into the urinal ceramic.	Software fault	► Restart the urinal flush control. → See operation manual.
	Technical fault	► Replace the control electronics or the solenoid valve.
Flushing out of the urinal ceramic is inadequate.	Flush time set incorrectly	► Set flush time. → See operation manual.
Flush volume is inadequate.	Basket filter in solenoid valve blocked	► Clean the basket filter. → See operation manual.
	Water pressure reducing valve blocked	► Replace the water pressure reducing valve.
No flush actuation	Network failure	► Check the power supply.
Battery warning level 1 (4 short signal tones upon entering the detection range)	Batteries dead Rechargeable battery empty	► Replace the batteries. ► Charge the rechargeable battery of the self-sustaining power supply.
Battery warning level 2 (no flush actuation, 2 short signal tones every 30 seconds)		
Battery warning level 3 (no flush actuation, no signal tone)		

Maintenance

Maintenance performed by the operator

The operator may perform the following maintenance work. → See operation manual 966.933.00.0 (mains operation) and 966.934.00.0 (battery operation and self-sustaining).

- Activate cleaning mode
- Clean the urinal ceramic
- Clean and replace the spray head
- Replace the urinal trap
- Set the flush time
- Optimise the detection distance
- Clean the basket filter
- Replace the batteries
- Charge the rechargeable battery of the self-sustaining power supply

Maintenance performed by skilled persons

The maintenance work described in the following chapters may only be performed by skilled persons.

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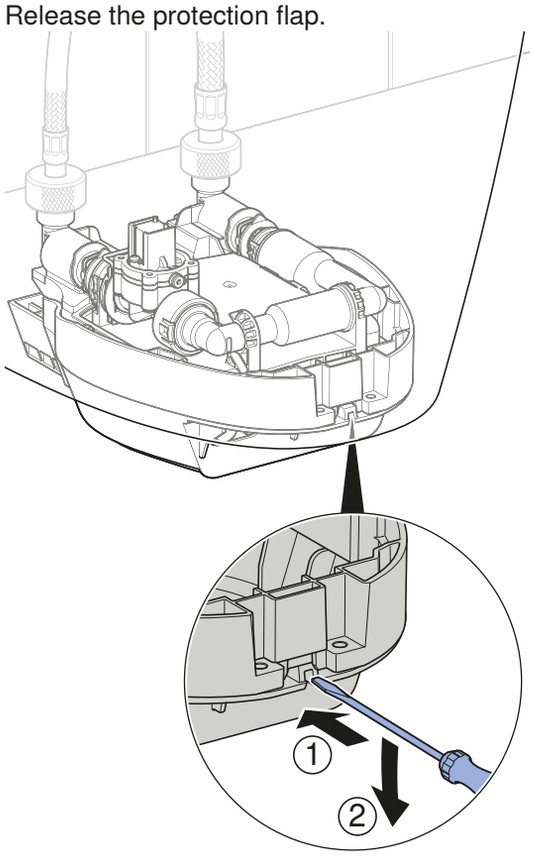
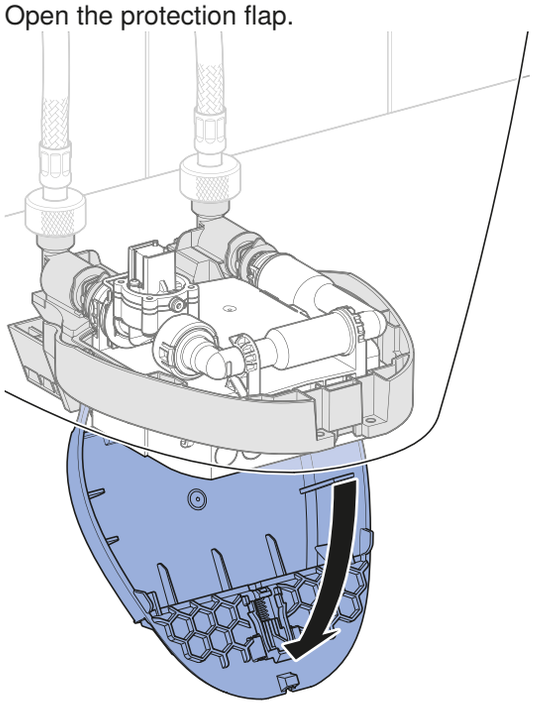
Replacing the control electronics

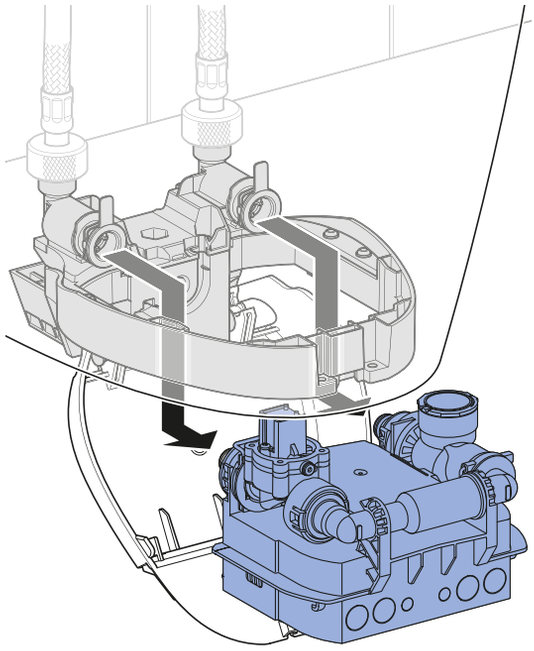
1 Release the protection flap.



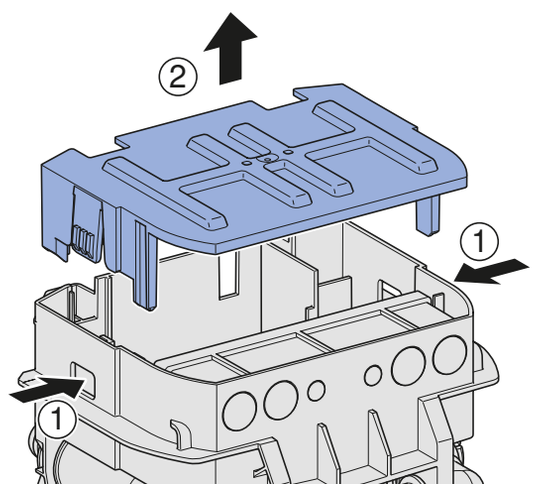
2 Open the protection flap.



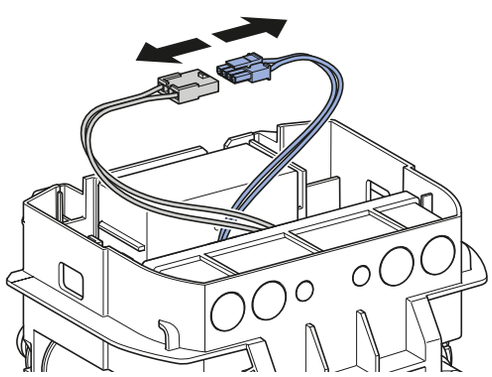
3 Remove the urinal flush control.



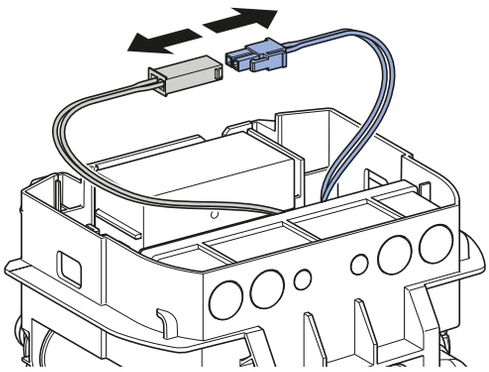
4 Open the urinal flush control cover.



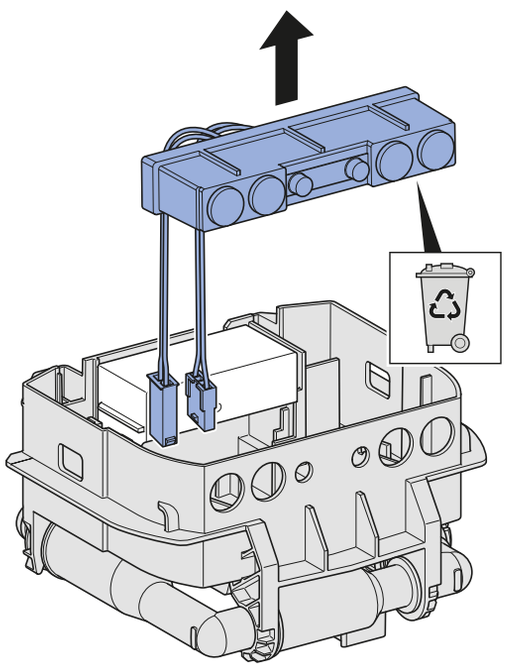
5 Disconnect the power supply cable.



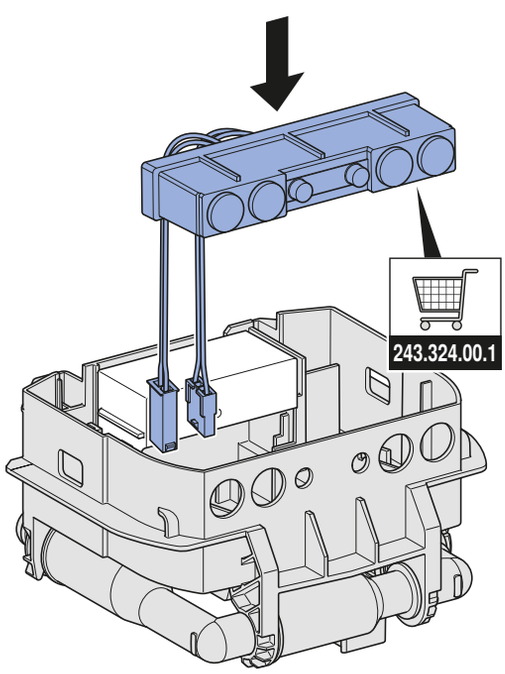
6 Disconnect the solenoid valve cable.



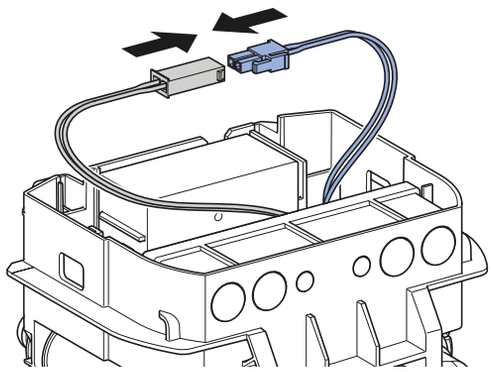
7 Remove the defective control electronics.



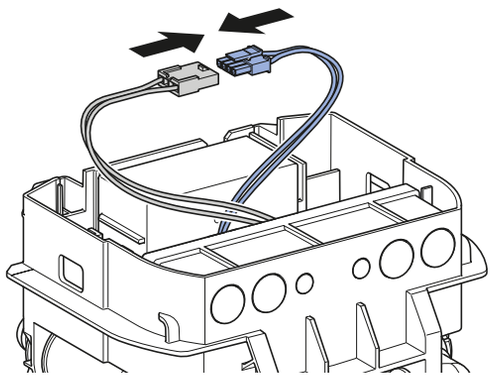
8 Insert the new control electronics.



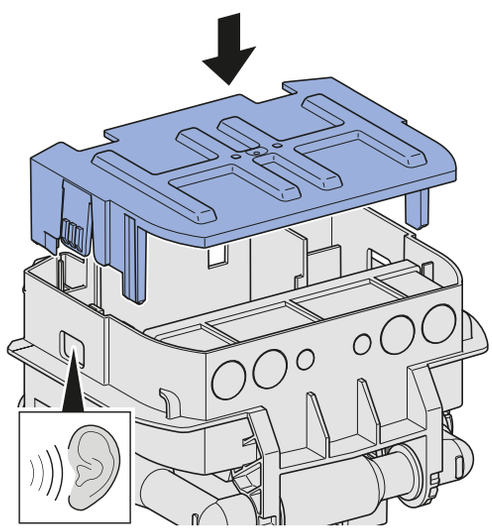
9 Connect the cable for the solenoid valve.



10 Connect the power supply cable.



11 Close the urinal flush control cover.



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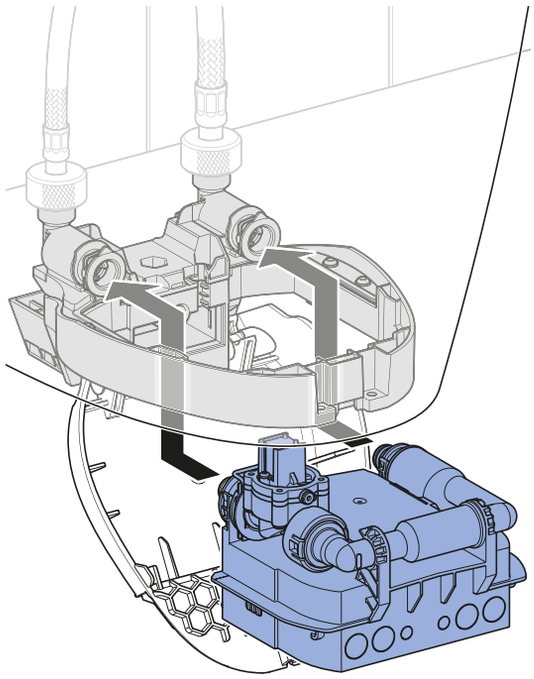
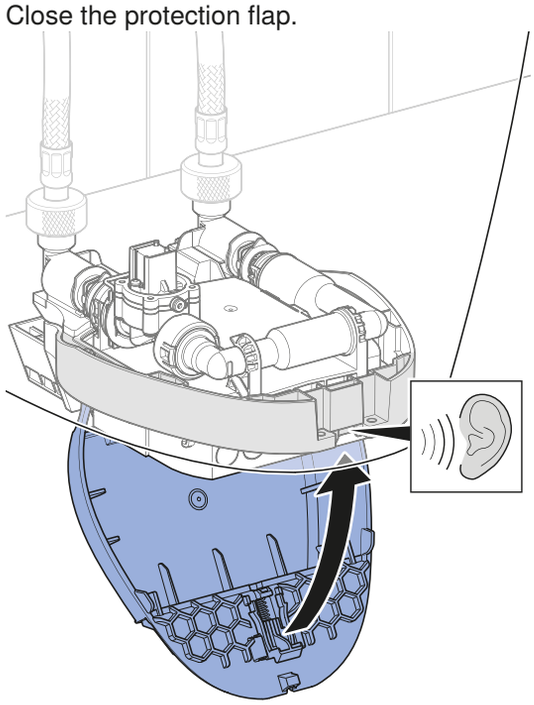
12 Install the urinal flush control.



13 Close the protection flap.

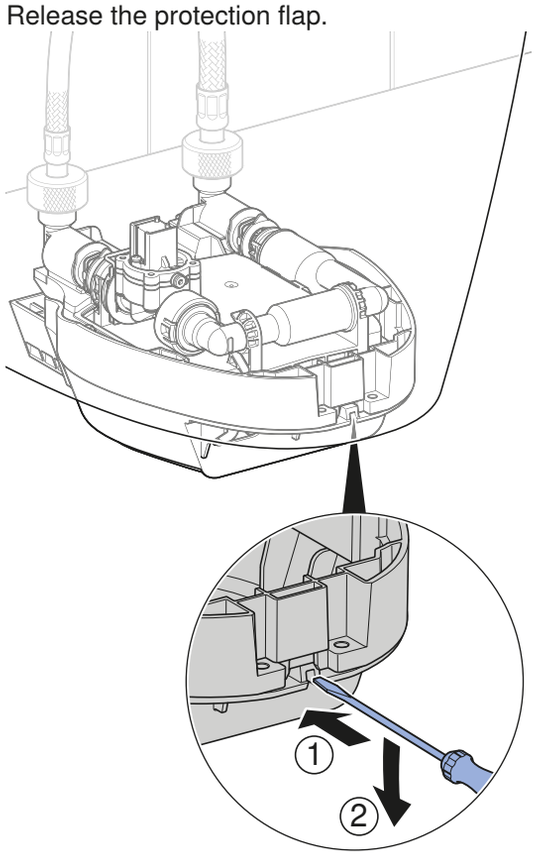


Result

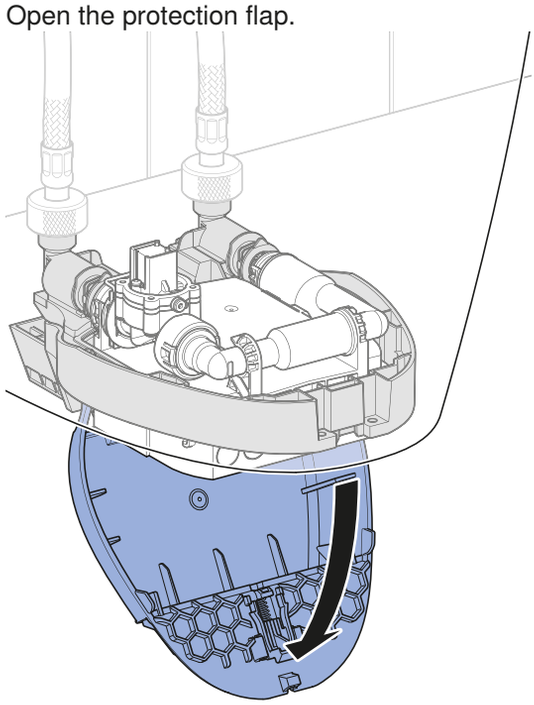
✓ The urinal is ready for operation.

Replacing the solenoid valve

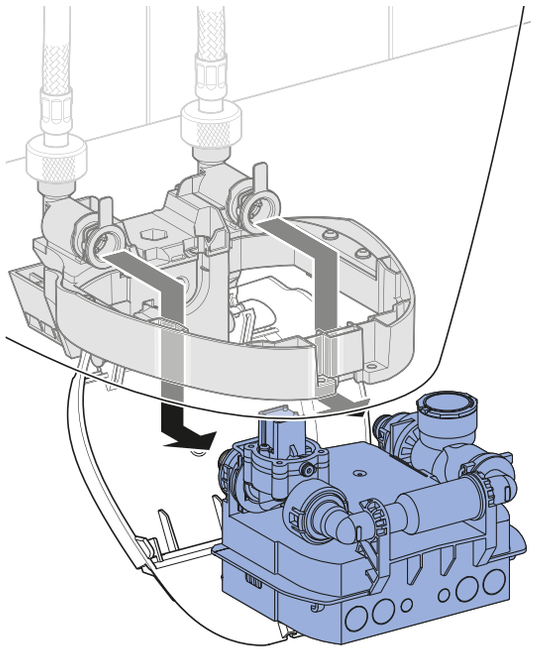
1 Release the protection flap.



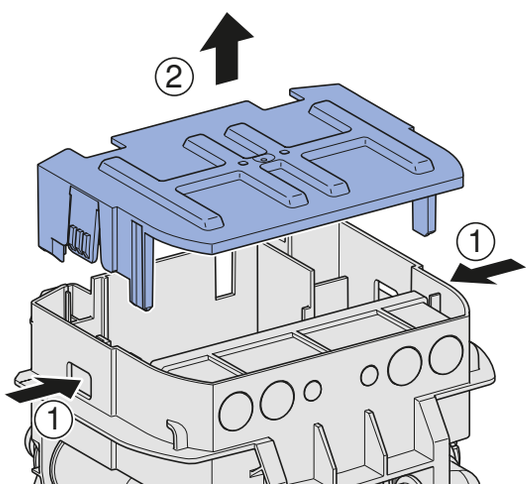
2 Open the protection flap.



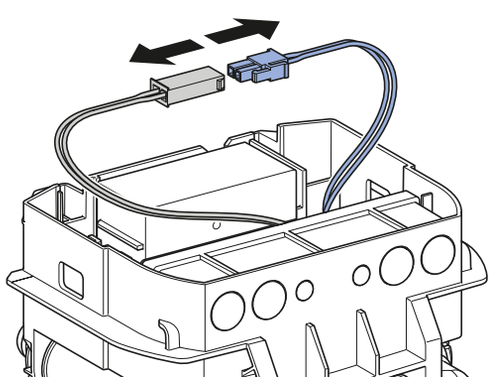
3 Remove the urinal flush control.



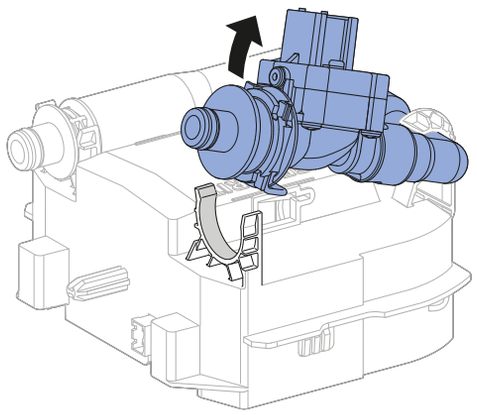
4 Open the urinal flush control cover.



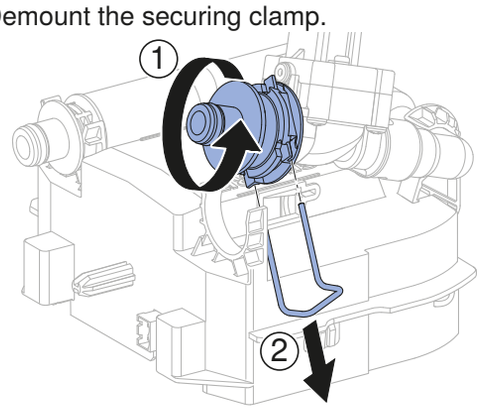
5 Disconnect the solenoid valve cable.



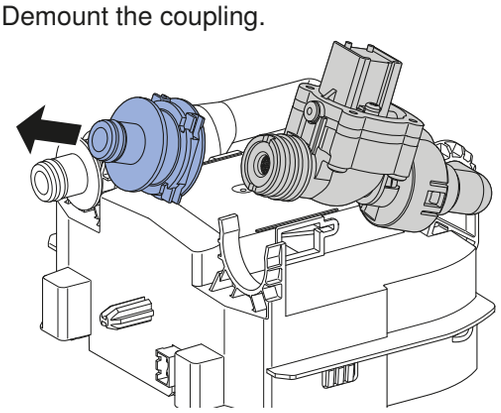
6 Remove the solenoid valve unit.



7 Demount the securing clamp.



8 Demount the coupling.



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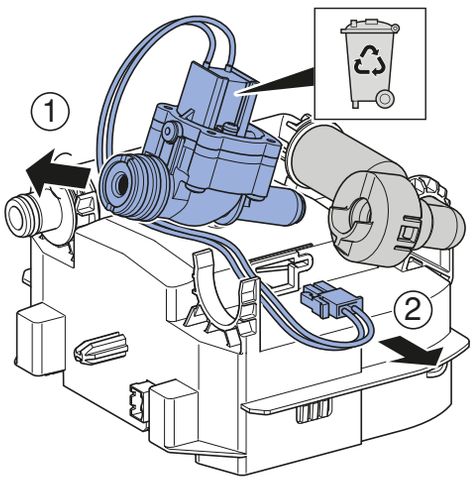
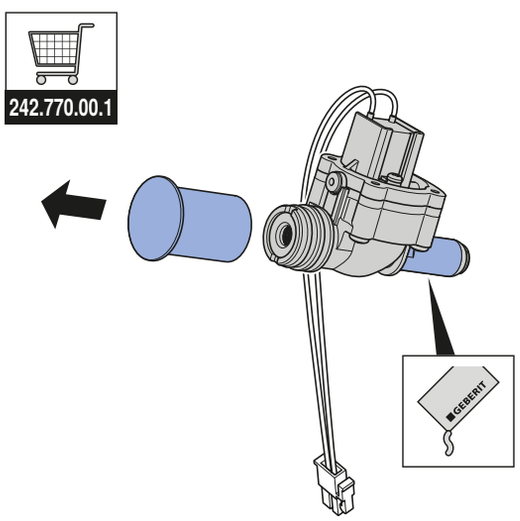
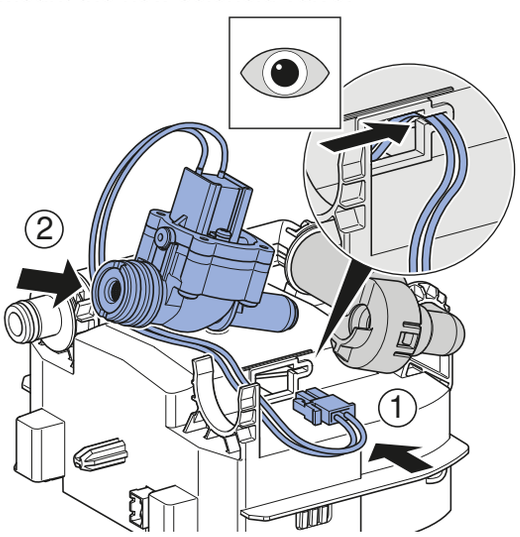
9 Demount the solenoid valve.



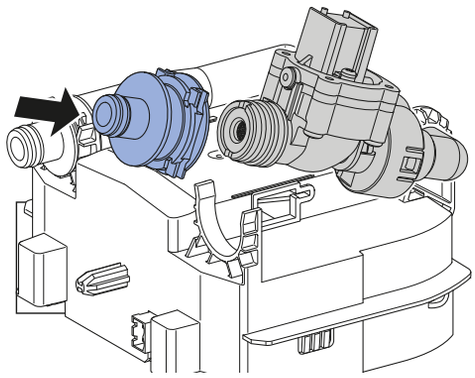
10 Prepare the new solenoid valve.



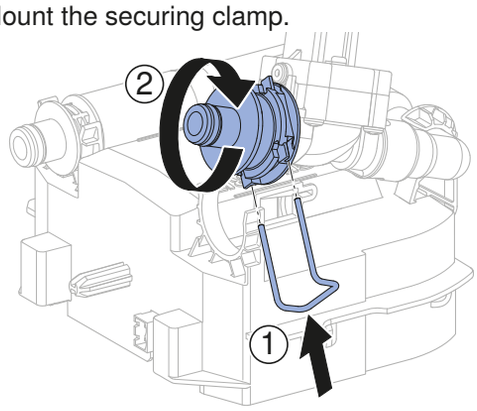
11 Mount the new solenoid valve.



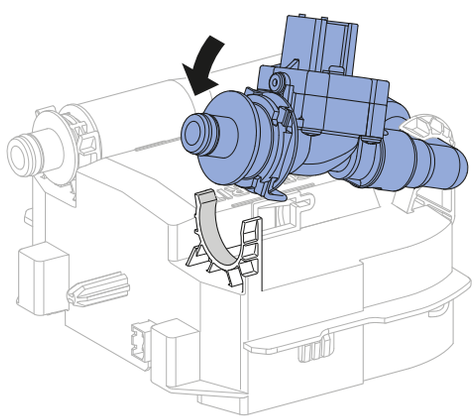
12 Mount the coupling.



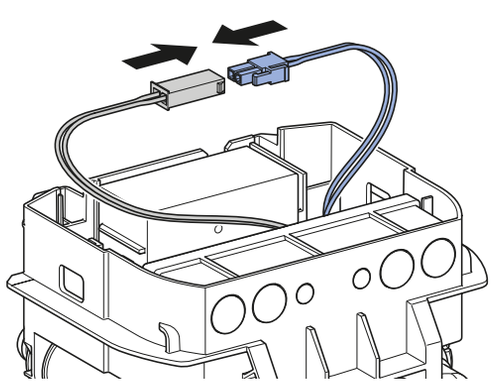
13 Mount the securing clamp.



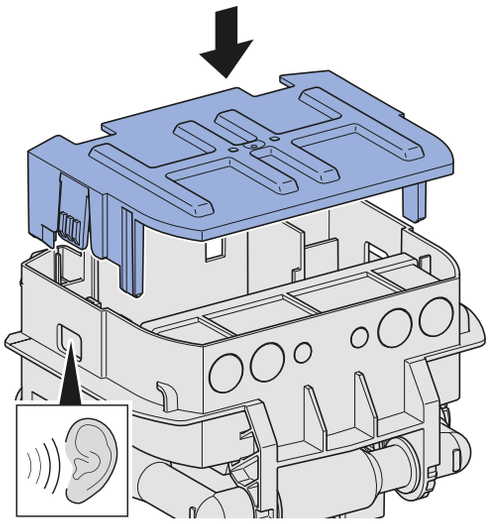
14 Snap the solenoid valve unit into place.



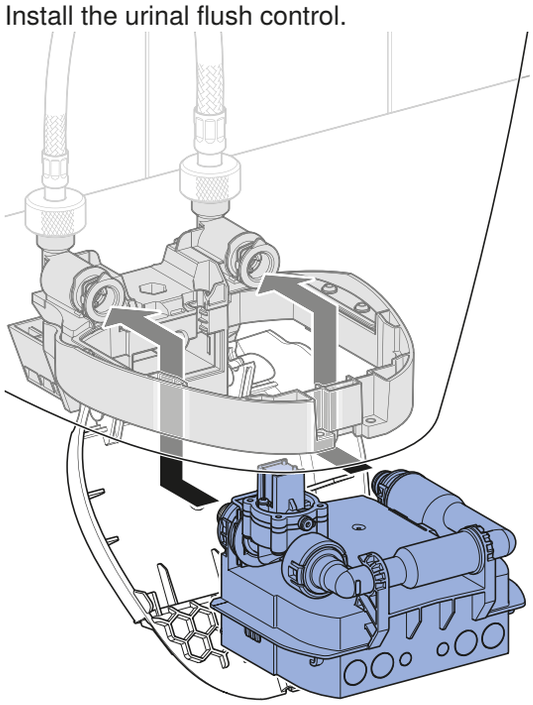
15 Connect the cable for the solenoid valve.



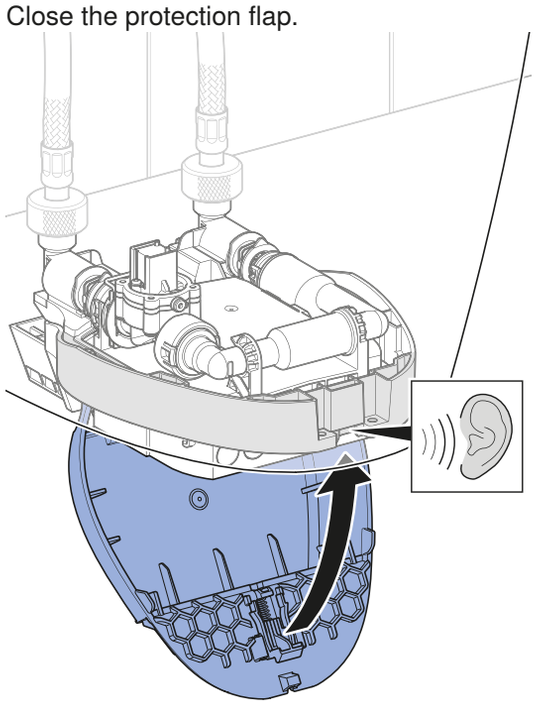
16 Close the urinal flush control cover.



17 Install the urinal flush control.



18 Close the protection flap.



Result

✓ The urinal is ready for operation.

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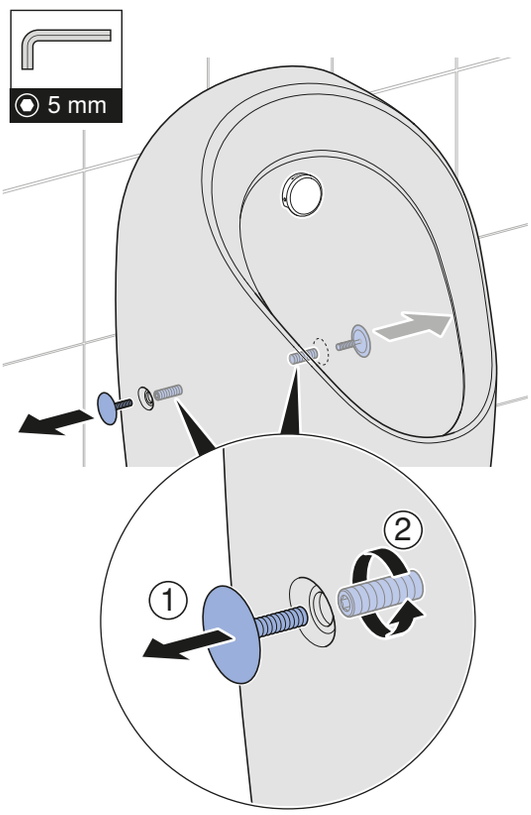
Replacing the water pressure reducing valve

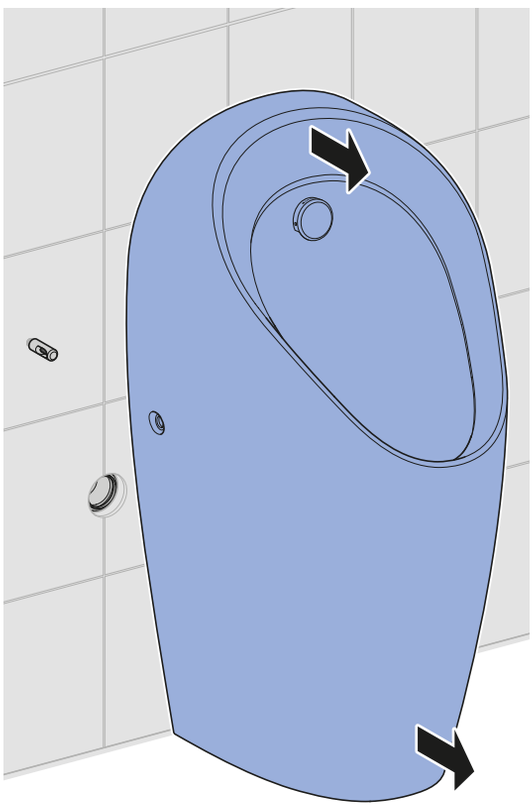
Do not open the water pressure reducing valve. This can cause the pressure setting to be adjusted.

Replace the water pressure reducing valve in the event of clogging.

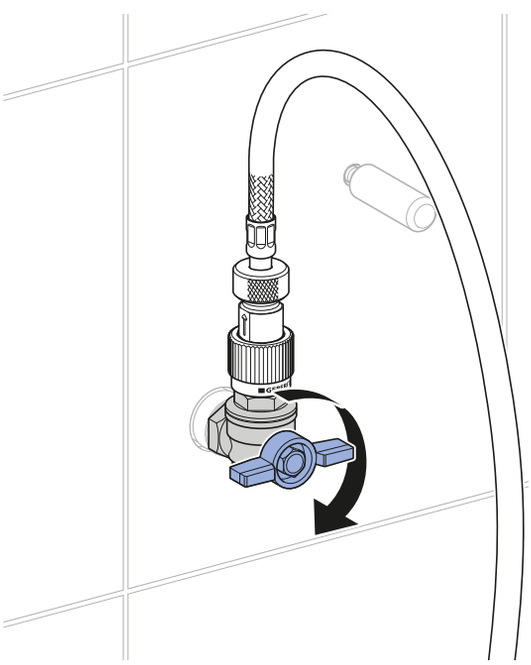
1 Remove the fastening for the urinal ceramic.



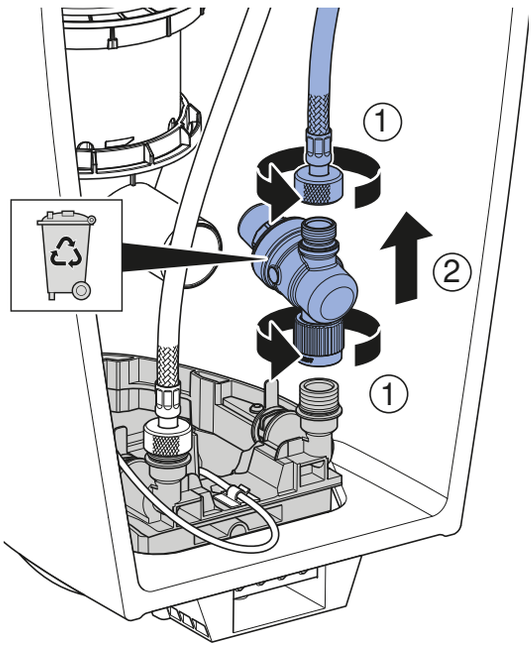
2 Remove the urinal ceramic.



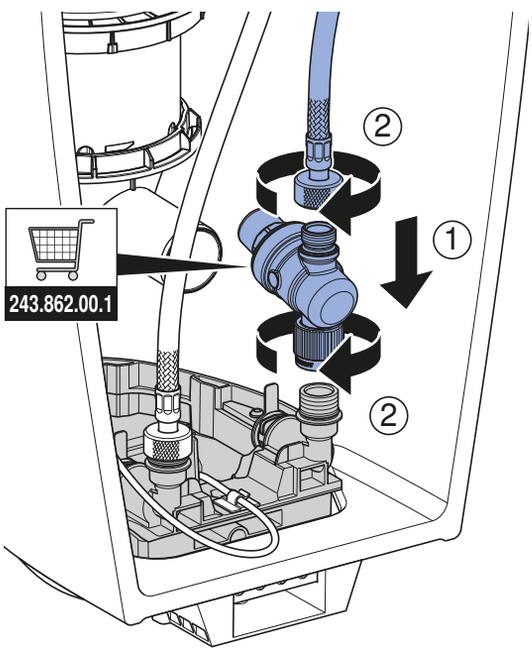
3 Close the angle stop valve.



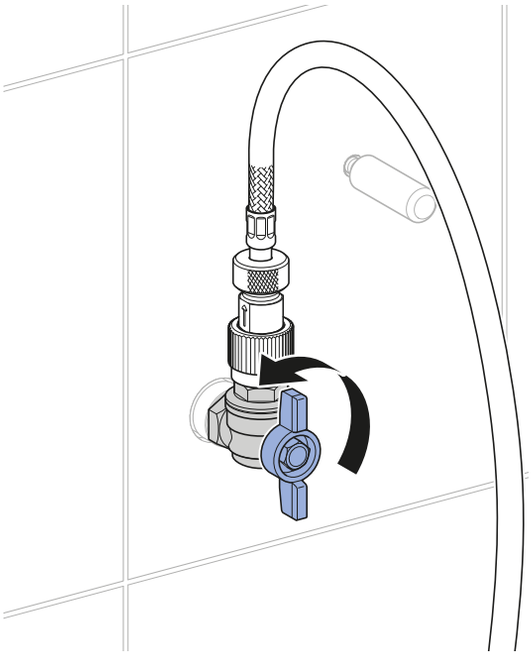
4 Demount and dispose of the water pressure reducing valve.



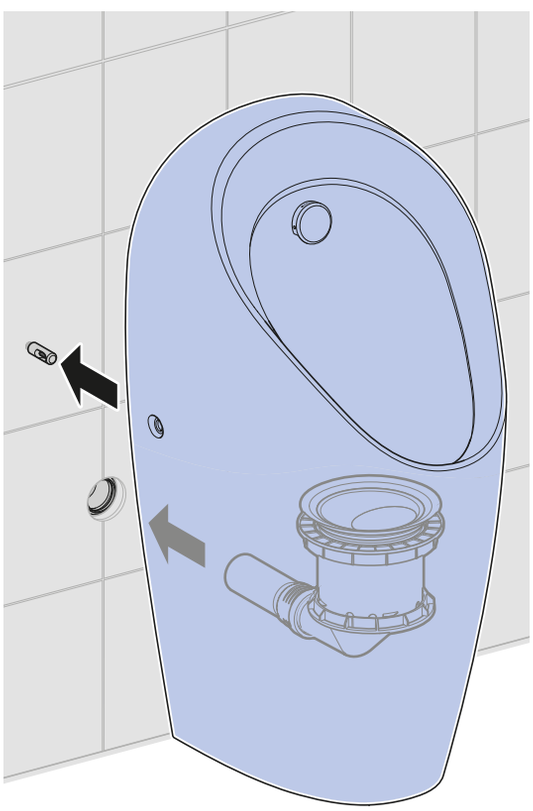
5 Mount the new water pressure reducing valve.



6 Open the angle stop valve.



7 Mount the ceramic.



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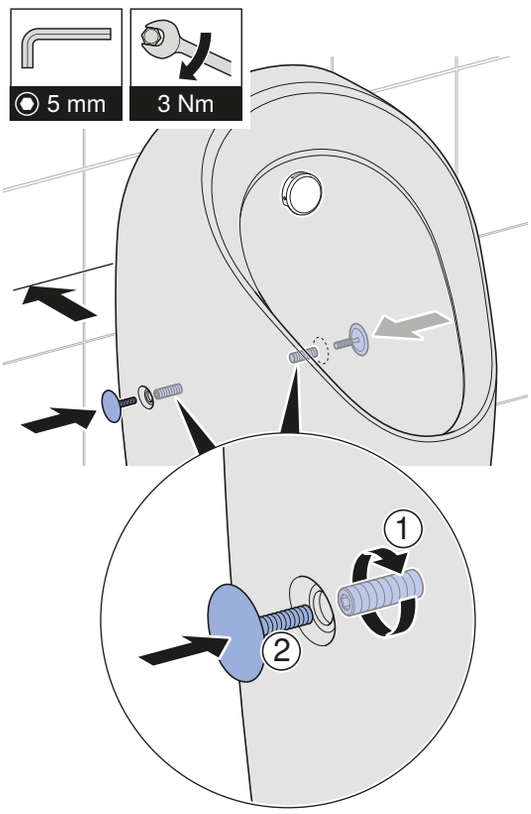
8 Fasten the ceramic in place.



Making settings using Geberit Service Handy

The operator can make the manual settings “Activate cleaning mode” and “Set flush time”. → See operation manual 966.933.00.0 (mains operation) and 966.934.00.0 (battery operation and self-sustaining).

With the Geberit Service Handy, additional maintenance functions can be performed and individual settings can be made. The numbers and terms in the column “Menu item” correspond to what can be seen on the display of the Geberit Service Handy. For further information → See user manual for the Geberit Service Handy.

Commands				
Menu item [EN] [DE]	Description	Application	Value	Factory setting
20 [UmgebMess] [SurrMeas]	Recalibrate IR sensors.	Rectify detection malfunctions.	Start = <OK>	–
21 [Flush] [Spülung]	Actuate flush.	• Testing the solenoid valve. • Flushing out the urinal ceramic (e.g. when setting the flush time).	Start = <OK>	–
22 [RangeTest] [TestErfas]	Check detection range. As soon as an object is located in the detection range, 1 short signal tone sounds every second. No flush is actuated. The function switches off automatically after 10 minutes.	Checking the user recognition.	On = <OK> Off = <OK>	–
23 [BlocFlush] [Blockiere]	Block flush. No flush is actuated. 2 short signal tones sound every minute. The function switches off automatically after 10 hours.	Performing maintenance work.	On = <OK> Off = <OK>	–
24 [EmptyPipe] [RohrLeer]	Empty pipe. The solenoid valve is opened so that the pipe can be drained. 2 short signal tones sound every minute. The function switches off automatically after 30 minutes.	• Performing maintenance work. • Performing winter emptying.	On = <OK> Off = <OK>	–
25 [FactrySet] [Werkseinst]	Reset to the factory setting. All functions are reset to factory settings. 3 short signal tones sound. The urinal flush control is restarted.	Rectifying functional malfunctions.	Start = <OK>	–
26 [CleanMode] [Reinigung]	Activate cleaning mode. A short signal tone sounds every 4 s. The flush actuation is suppressed for the duration [CleanTime] [ReiniZeit] (menu item 45). The urinal flushes at the end of this duration.	Cleaning the urinal ceramic.	Start = <OK>	–

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Programmes				
Menu item [EN] [DE]	Description	Application	Value	Factory setting
30 [IntFlush] [IntervSp]	Activate interval flush.[1)]	• Topping up the urinal trap in the event of infrequent use. • Flushing out stagnant water (to prevent stagnation).	On = [ON] Off = [OFF]	On = [ON]
31 [PowOnFlsh] [NetzEinSp]	Activate power-on flush. Flushes after switching on the mains voltage.	• Actuating the central flush. • Confirming the switch-on function.	On = [ON] Off = [OFF]	On = [ON]
32 [DynFlush] [DynamSpül]	Activate dynamic flush. Flush time is reduced when under frequent use.	Reducing water consumption when under frequent use (e.g. in a sports stadium).	On = [ON] Off = [OFF]	On = [ON]
33 [PreFlush] [Vorspülng]	Activate preflush. Flushes for 3 s on entry into the detection range if the urinal has not been used in the last 10 minutes.	Wetting the urinal ceramic before use to prevent deposits.	On = [ON] Off = [OFF]	Off = [OFF]
34 [FollwFlsh] [FolgeSpül]	Activate follow-up flush. Flushes once after the last use once the delay [DelFollwF] [FolgVerzö] has elapsed (menu item 42).	• Flushing out the urinal ceramic. • Filling the urinal trap.	On = [ON] Off = [OFF]	Off = [OFF]
35 [PostFlush] [NachSpül]	Activate postflush. Flushes for 2 s, 3 s after a main flush.	Filling the urinal trap.	On = [ON] Off = [OFF]	Off = [OFF]
36 [AttndFlsh] [BeglSpül]	Activate attendance flush. Flushes as long as a user is detected (60 s max.).	• Flushing out the urinal ceramic thoroughly. • Activating with background noise (for high water consumption).	On = [ON] Off = [OFF]	Off = [OFF]
37 [HybridMod] [HybridMod]	Activate hybrid mode.[1)]	Activating waterless operation with periodic flush (for minimal water consumption).	Off = [0] Use = [1] Time = [2]	Off = [0]
38 [PurgFlsh] [PurgFlsh]	Activate purging flush.[1)]	Flushing out deposits in the drainage system (can occur if flush times are short or in hybrid mode).	On = [ON] Off = [OFF]	Off = [OFF]
39 [CleanEn] [FreiReini]	Enable cleaning. Enables cleaning mode [CleanMode] [Reinigung] (menu item 26).	Function = Off: Prevents unintentional activation of cleaning mode.	On = [ON] Off = [OFF]	On = [ON]

[1)] → See "Selecting the flush mode", page 22 for a detailed description of the flush modes.

Parameters				
Menu item [EN] [DE]	Description	Application	Adjustment range	Factory setting
40 [FlshTime] [Spülzeit]	Set flush time. Determines the duration of the flush after one use.	Improving the flushing out of the urinal ceramic, observing water consumption.	1–15 s [...]	7 s [7]
41 [DetectT] [VerweilZ]	Set detection time. Determines the minimum detection time within the detection range to be recognised as a user.	Preventing flushes due to unintentional entry into the detection range.	3–15 s [...]	7 s [7]
42 [DelFollwF] [FolgVerzö]	Set delay of follow-up flush. Is active when menu item 34 “Activate follow-up flush” is [ON] [EIN].	–	1–24 h [...]	2 h [2]
43 [IntFlushT] [IntervSpZ]	Set the flush time for the interval flush. Is active when menu item 30 “Activate interval flush” is [ON] [EIN].	–	3–180 s [...]	5 s [5]
44 [IntervalT] [IntervalZ]	Set the flush interval for the interval flush. Is active when menu item 30 “Activate interval flush” is [ON] [EIN].	–	1–168 h [...]	24 h [24]
45 [CleanTime] [ReiniZeit]	Set cleaning time. Defines the duration for which the flush is suppressed when menu item 26 [CleanMode] [Reinigung] is started.	–	1–16 min [...]	10 min [10]
46 [DetectRng] [Erfassdis]	Set detection range.	Optimising user recog-nition.	0–4 [...]	[4]
47 [HybFlshT] [HybFlshT]	Set flush time for the hybrid mode. Is active when menu item 37 “Activate hybrid mode” is [1]or [2].	–	1–15 s [...]	7 s [7]
48 [HybTimOut] [HybTimOut]	Set time-out for the hybrid mode. Is active when menu item 37 “Activate hybrid mode” is [1].	–	5–720 min [...]	60 min [60]
49 [HybIntT] [HybIntT]	Set interval for the hybrid mode. Is active when menu item 37 “Activate hybrid mode” is [2].	–	10–1440 min [...]	1440 min [1440]
50 [PurgFlshT] [PurgFlshT]	Set flush time for the purging flush. Is active when menu item 38 “Activate purging flush” is [ON] [EIN].	–	3–30 s [...]	12 s [12]

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Parameters				
Menu item [EN] [DE]	Description	Application	Adjustment range	Factory setting
51 [PurgIntT] [PurgIntT]	Set interval for the purging flush. Is active when menu item 38 “Activate purging flush” is [ON] [EIN].	–	1–168 h [...]	6 h [6]

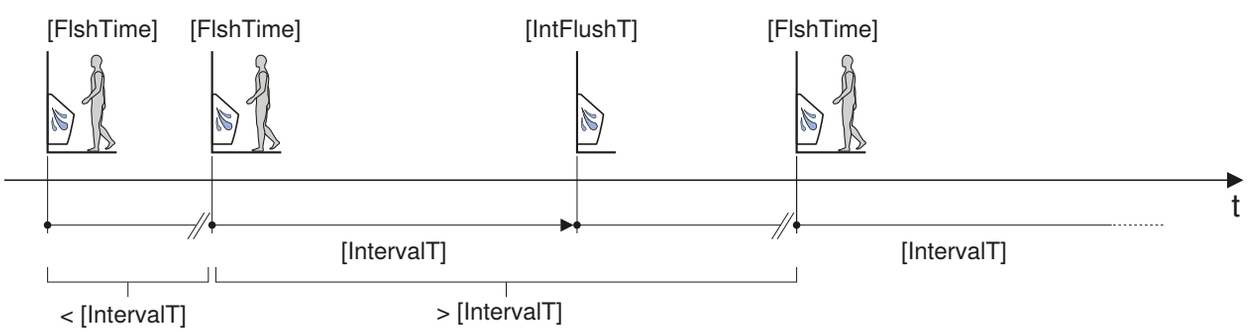
Counters		
Menu item [EN] [DE]	Description	Version
60 [Days?] [SumBetrT?]	Total number of days of operation. Displays the number of days of operation since commissioning.	[...] days of operation
61 [Uses?] [SumBenut?]	Total number of uses. Displays the number of uses since commissioning.	[...] uses
62 [Flushes?] [SumSpül?]	Total number of flushes. Displays the number of flushes since commissioning.	[...] flushes
63 [↯ Days] [↯ SumBetrT]	Number of days of operation power-on. Indicates the number of days of operation since the last switch-on.	[...] days of operation
64 [↯ Uses] [↯ SumBenut]	Number of uses power-on. Indicates the number of uses since the last switch-on.	[...] uses
65 [↯ Flushes] [↯ SumSpül]	Number of flushes power-on. Indicates the number of flushes since the last switch-on.	[...] flushes

Device info		
Menu item [EN] [DE]	Description	Version
70 [TypeNo] [Modell-Nr]	Article number. Indicates the article number of the control electronics (does not apply if the control electronics have been replaced).	[...]
71 [SWVersion] [SWVersion]	Software version. Indicates the software version of the control electronics (e.g. [0312] = version 3.12).	[...] XXZZ
72 [SerialNo] [Serien-Nr]	Serial number. Displays the serial number of the current control electronics.	[...]
73 [ManufDate] [ProdDatum]	Manufacturing date. Displays the manufacturing date of the control electronics. Does not apply if the control electronics have been replaced (e.g. [1015] = calendar week 10, 2015).	[...] WWYY
74 [TypePower] [Netz/Batt]	Type of power supply. Indicates whether it is a mains-operated (AC) or a battery-operated (DC) or generator-operated (DC) urinal flush control.	DC = [0] AC = [1]
75 [Battery%] [Batterie%]	Battery capacity. Displays the current battery capacity in %. At 10%, replace batteries or charge rechargeable battery.	[...] %

Selecting the flush mode

Activating the interval flush

The interval flush [IntFlush] [IntervSp] is activated with menu item 30. It flushes after the last use once a certain interval has elapsed [IntervalT] [IntervalZ] (menu item 44). The interval is restarted with every use. The flush time is determined by [IntFlushT] [IntervSpZ] (menu item 43).



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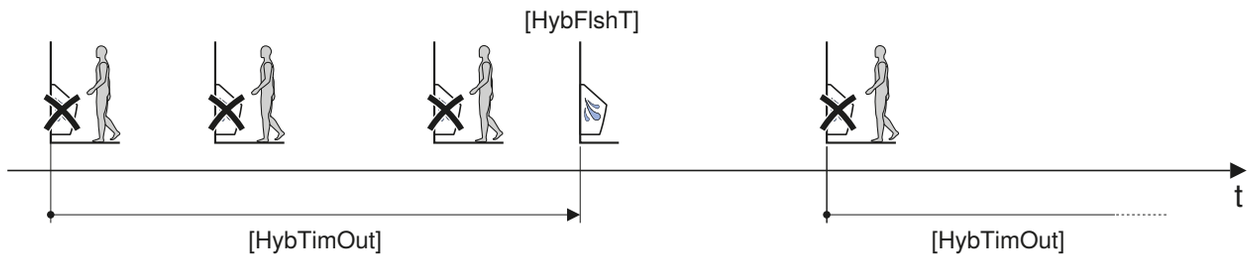
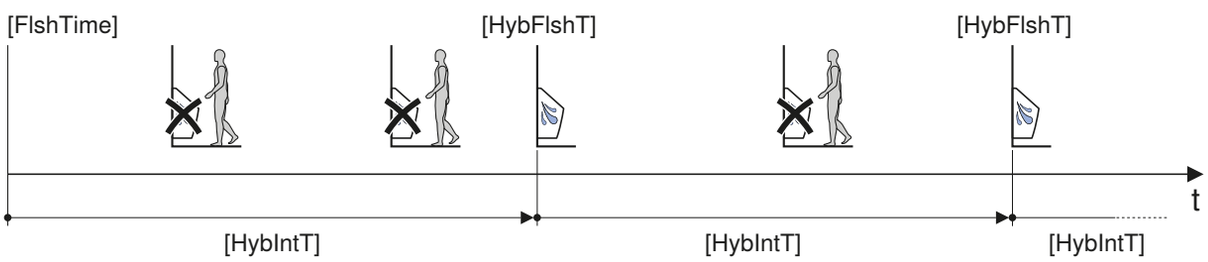
Activating hybrid mode

The hybrid mode [HybridMod] is activated with menu item 37. The flush is not released during use (waterless operation). A periodic flush is released once the time-out period or interval has elapsed. The flush time is determined by [HybFlshT] (menu item 47).

- Use mode [1]: flushes once the time-out [HybTimOut] has elapsed (menu item 48). No flush is released if the time-out is still active. Start of the time-out:
  – from the first use
  – from the next use once the previous time-out has elapsed



- Time mode [2]: flushes once the interval [HybIntT] has elapsed (menu item 49). No flush is released if the interval is still active. The interval starts:
  – once activated
  – once the previous interval has elapsed, regardless of the number of uses

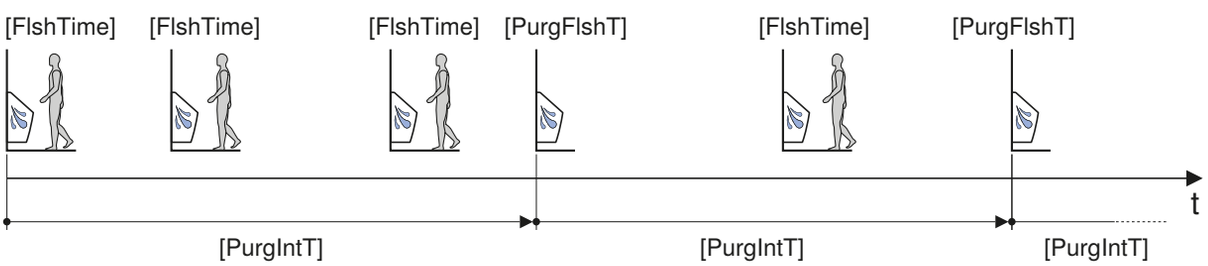


Activating the purging flush

The purging flush [PurgFlsh] is activated with menu item 38. It flushes once a certain interval [PurgIntT] has elapsed (menu item 51). The flush time is determined by [PurgFlshT] (menu item 50).

The interval starts:

- from the first use
- once the previous interval has elapsed, regardless of the number of uses



The purging flush can be used together with the interval flush or the hybrid mode.

Disposal

Constituents

This product meets the requirements of Directive 2011/65/EU (RoHS) (restriction of the use of certain hazardous substances in electrical and electronic equipment).

Disposal of old electrical and electronic equipment

In accordance with Directive 2012/19/EU (WEEE - Waste Electrical and Electronic Equipment) manufacturers of electrical equipment are obliged to take back old equipment and to dispose of it appropriately. 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. Addresses to which equipment can be returned can be requested from the relevant Geberit sales company.

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