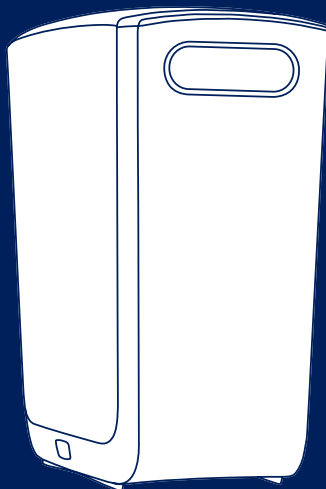


COMPLETE USER MANUAL



BLUEWATER CLEONE

WATER PURIFIER



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INTRODUCTION

About this manual

This manual contains complete user instructions for the Cleone. It gives you the necessary instructions to safely install, operate, do maintenance and do troubleshooting on the device.

Original language

The original language of this instruction is English.

Printing options

This manual is made to be printed as a double sided A4 or A5 booklet. The illustrations have a colour code, print the manual in colour to prevent mistakes.

Limited warranty

Refer to www.bluewatergroup.com for more information on Limited warranty.

Environment information



80% of the the water purifier components and its packaging have a label to help you recycle and discard it correctly. The water purifier is more efficient when it cleans water for longer periods. Example: do not fill a glass with water. Fill a jug instead.

Disposal

At the end of the water purifier's life, disconnect the plug from the electrical supply and cut the cable at the point where it enters the appliance. Make sure that children do not play with the left-over cable. Contact your local authority for information about where the water purifier can be left, or contact your dealer.



Appliances bearing this symbol must be deposited at the designated local reception point for the disposal of electrical and electronic equipment. This product may not be disposed of using the normal household refuse collection processes.

Safety instructions

Before you install or operate the device, you must read the safety information. Obey the instructions in this manual to prevent injuries or damage to the equipment. This manual contains CAUTIONS and NOTES that are applicable for the safe operation of the device.



A CAUTION identifies conditions that can cause damage to the equipment. Obey the instructions and do not continue until all conditions are accepted and engaged.



A Note identifies important information for a trouble free and optimal use of Cleone.

Safety information



Install the water purifier in accordance with local regulations. If you are not sure, contact a Bluewater dealer for aid. Bluewater has no responsibility for installation of the water purifier.



Discard 4 tanks of water when Cleone is installed or disinfected, or when the activated carbon postfilters is replaced. This water is not safe to use.



This appliance can be used by children who are more than 8 years old. It can also be used by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge, if they have been given supervision or instruction about the use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.



Do not disconnect the external water tubes, and do not do work on them. Speak to your Bluewater dealer for aid if you must disconnect water tubes. In an emergency, follow the instructions in the Complete User manual.



Do not repair or modify parts of the water purifier. This can make it operate incorrectly, and lead to injury and damage not covered by warranty.



Use only the original Bluewater power adapter as electrical power source for your Cleone. To use a different power adapter can make Cleone dangerous to use. It can also cause damage to internal parts of the Cleone. Do not use the cord if there are visible signs of damage on it. If the supply cord is damaged, a qualified electrician must replace it in order to prevent danger.



Only approved Bluewater staff can do servicing and repairs on the water purifier. Only use original replacement cartridges and parts from Bluewater.



Do not put Cleone in water. Clean the surface with a moist cloth and a weak soap solution. Do not use chemicals to clean the surface of Cleone. Alcohol, petrol, organic and inorganic acids, strong basic chemicals (such as concentrated dish washing detergent) will cause damage to the surface of Cleone.



Do not put or keep objects on top of Cleone.



Do not use Cleone on feed water that is microbiologically dangerous, or where the microbiological quality is not known.

PRODUCT OVERVIEW

Model	Cleone Classic	Cleone Balance	Cleone Ultra	Cleone PurityPlus
UV lamp			✓	✓
Integrated mineral filter		✓		✓

Cleone outside

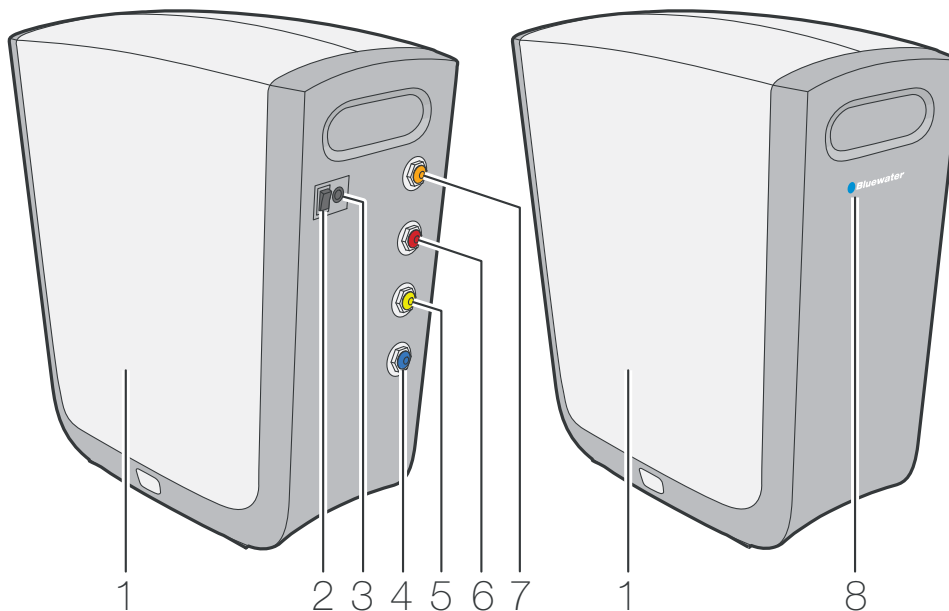


Figure 1. Cleone outside

Pos	Description	Pos	Description
1	Side cover	5	Clean water tank connector - YELLOW
2	Power switch	6	Drain water connector - RED
3	Electrical connection	7	Feed water connector - ORANGE
4	Clean water faucet connector - BLUE	8	System operation indicator

Power switch

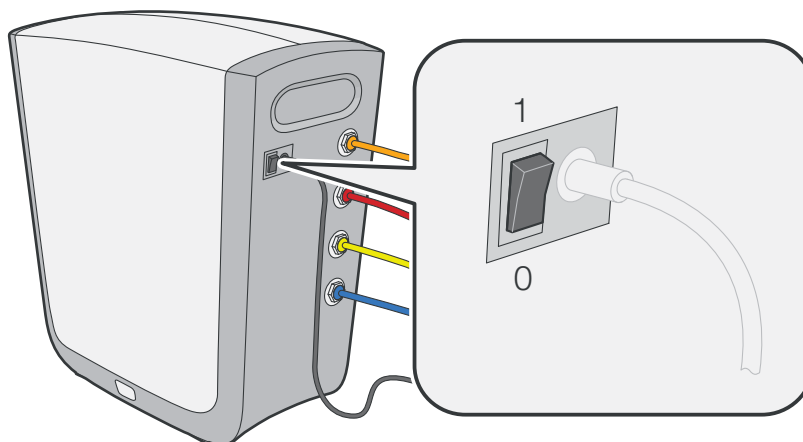


Figure 2. Power switch

Position	Description
1	Cleone is started. Water can be cleaned.
0	Cleone is stopped. No water is cleaned. Water from the clean water tank can be used until the tank is empty.

System operation indicator

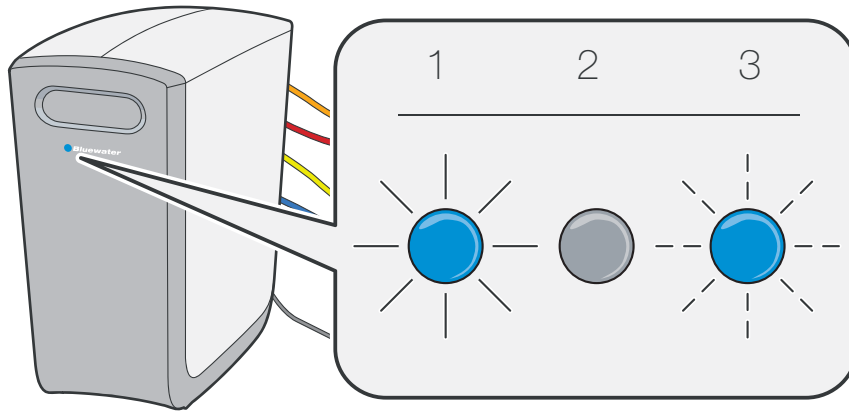


Figure 3. System operation indicator

Pos	Description
1	On – Cleone operates correctly.
2	Off – Cleone is shut off. If power switch is in position “1” see “Troubleshooting” on page 29.
3	Flashes – There is a problem with Cleone. See “Troubleshooting” on page 29 or contact your Bluewater dealer.

Cleone inside

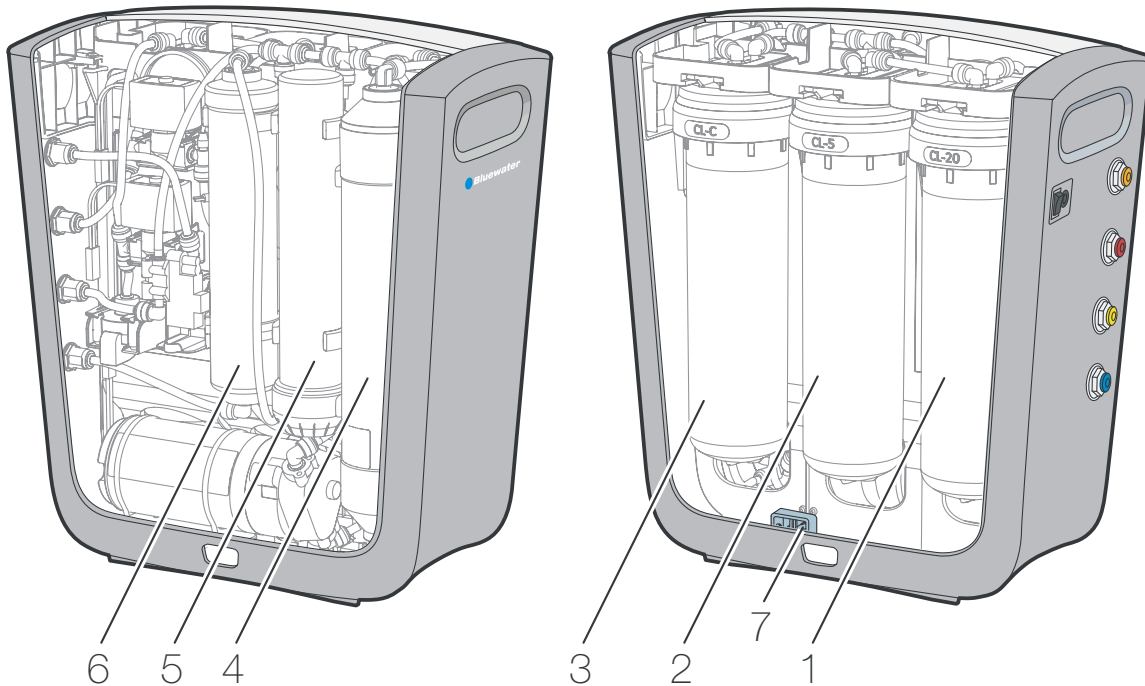


Figure 4. Cleone inside

Pos	Description	Pos	Description
1	Coarse sediment prefilter (CL-20)	5	Activated carbon postfilter (CL-Inline-C) UV lamp (Classic, Balance, Ultra) (PurityPlus)
2	Fine sediment prefilter (CL-5)	6	UV lamp Integrated mineral filter The position is left empty for Classic. (Ultra) (Balance, PurityPlus)
3	Activated carbon prefilter (CL-C)	7	Leak protection system switch
4	Reverse osmosis membrane		

SYSTEM OVERVIEW

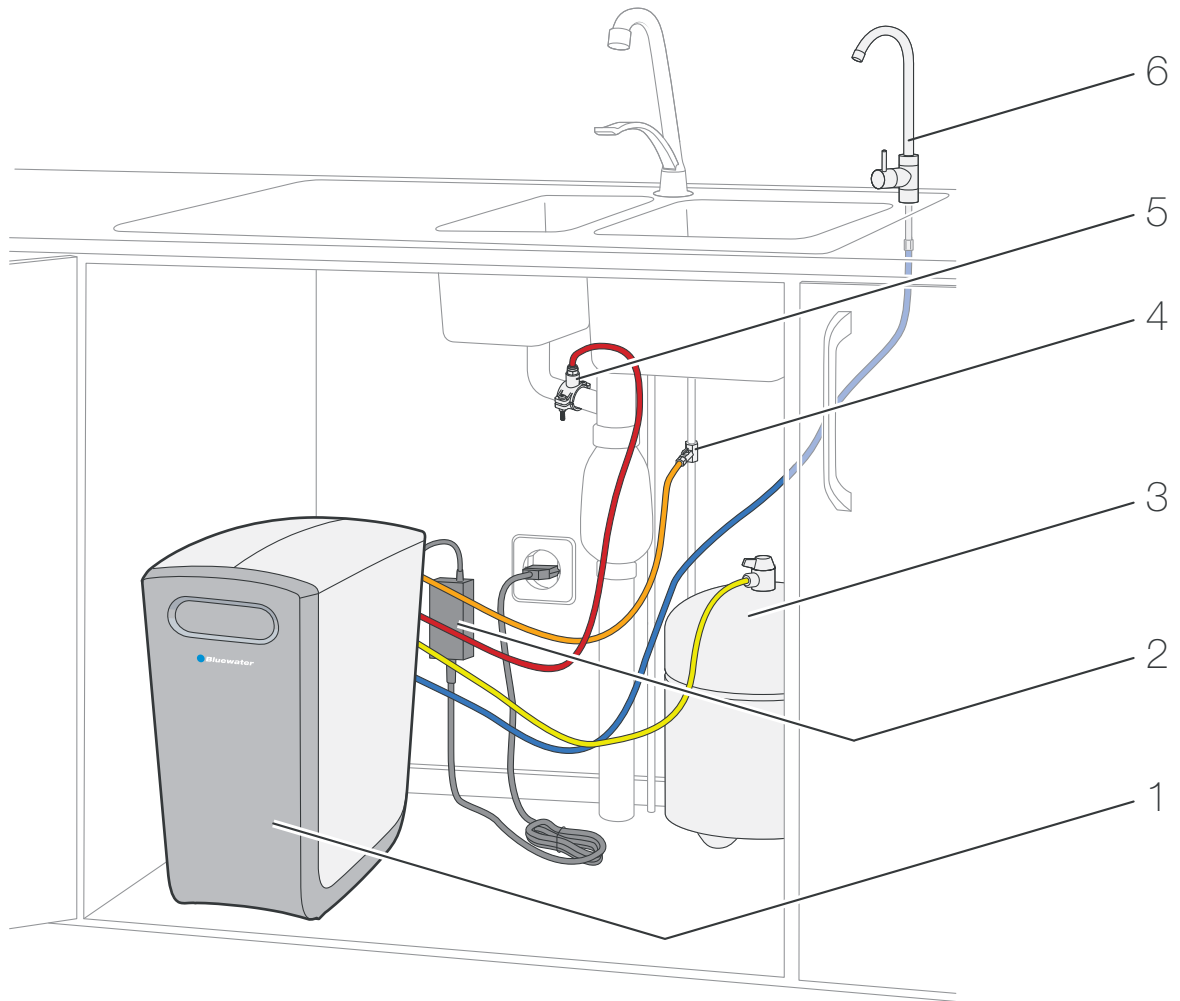


Figure 5. System overview

Pos	Description	Pos	Description
1	Cleone water purifier	4	Feed water connection
2	Power adapter	5	Drain water connection
3	Clean water tank	6	Clean water faucet

Clean water tank

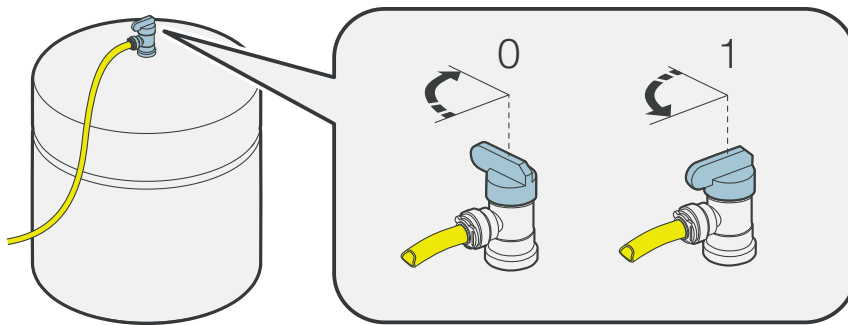


Figure 6. Clean water tank valve

Pos	Description
0	Valve closed – no water can flow
1	Valve open – water can flow to and from the tank

Clean water faucet

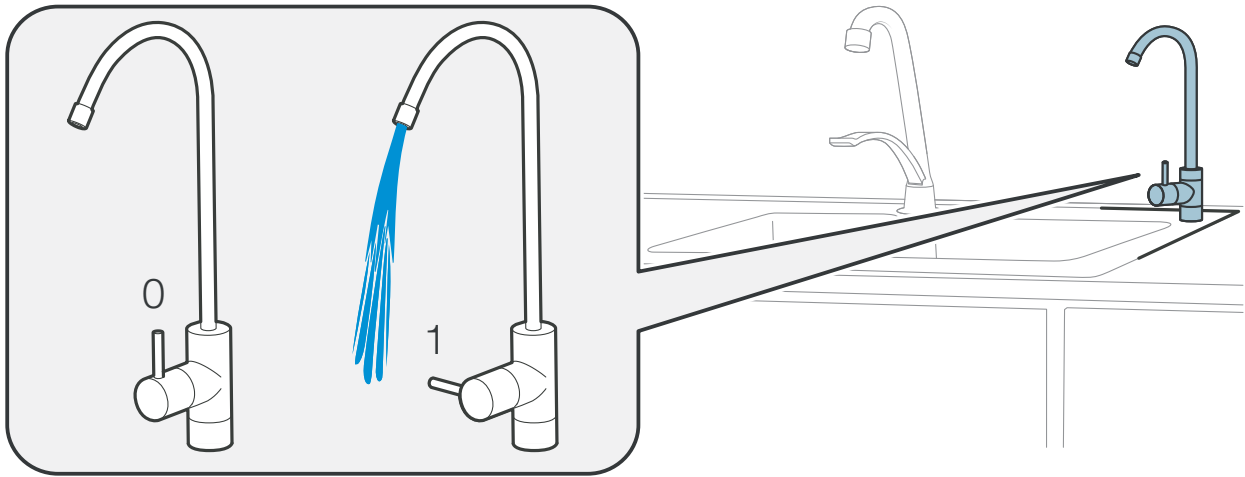


Figure 7. Clean water faucet

Pos	Description
0	Clean water faucet in closed position
1	Clean water faucet in open position

Water filtration system

Cleone cleans water in three steps: prefiltration, membrane filtration and postfiltration. Clean water from Cleone is collected in the clean water tank. When the tank is full, Cleone is put in standby mode. When the clean water tank level is low, Cleone opens the feed water supply and starts to clean water.

Water connections

There are four water connectors on the connection side of Cleone. The collet rings and tubing have a color code.

Color	Connection	Description
ORANGE	Feed water	The feed water connection supplies feed water to Cleone.
RED	Drain water	Drain water from Cleone to the drain pipe contains flushed and rejected contamination.
YELLOW	Clean water tank	Clean water is collected in the clean water tank before it is supplied to the clean water faucet.
BLUE	Clean water faucet	Clean water from Cleone to the clean water faucet.

Intelligent membrane flush

The reverse osmosis membrane is flushed regularly with water in standby mode. The membrane is also flushed before and after the cleaning cycle. This makes sure that the cleaning process always starts with fresh feed water.

Water quality system

The cleaning process is continuously monitored to make sure that the water quality is high. If the water quality decreases, the system operation indicator flashes. If the problem continues, Cleone stops.

Low pressure protection

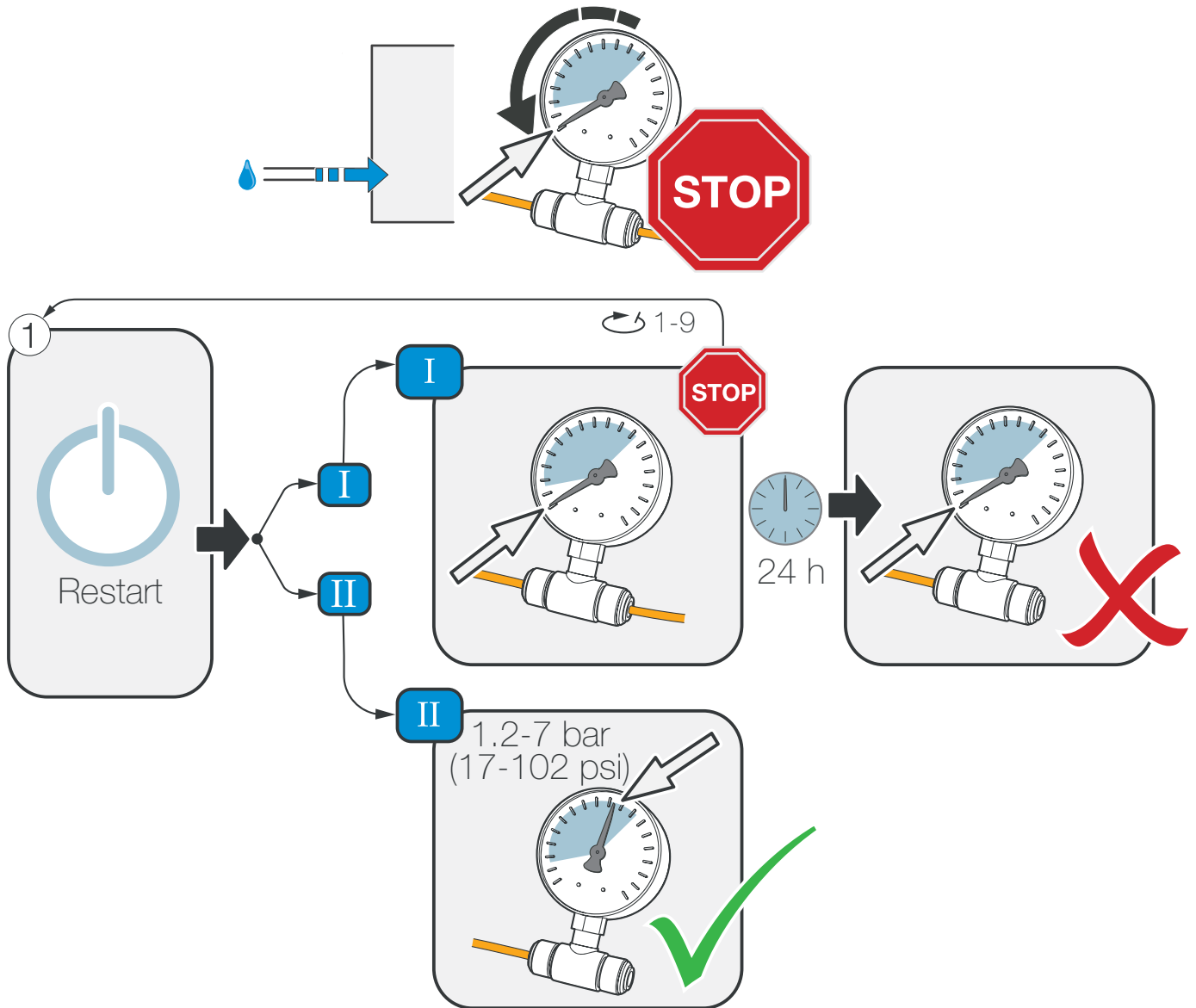


Figure 8. Low pressure restart function

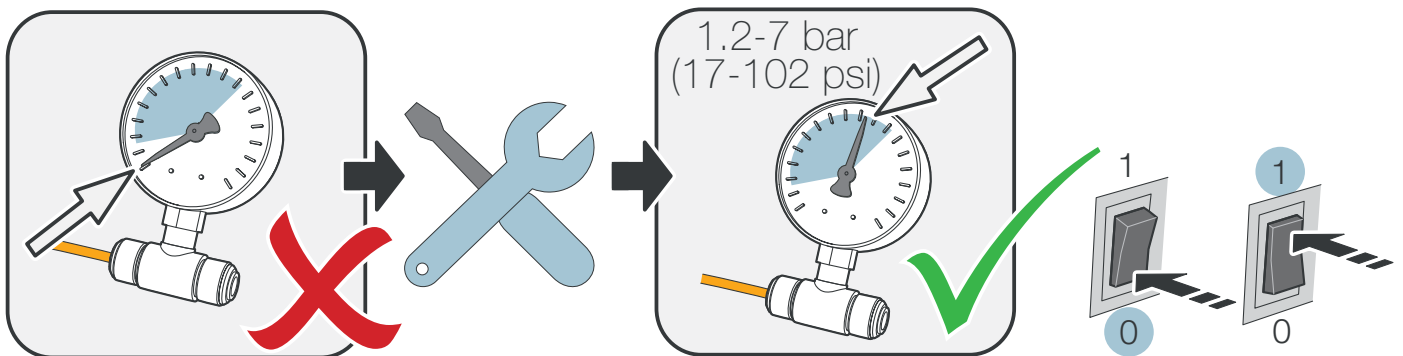


Figure 9. Manual restart after low pressure cause has been removed

Leak protection system

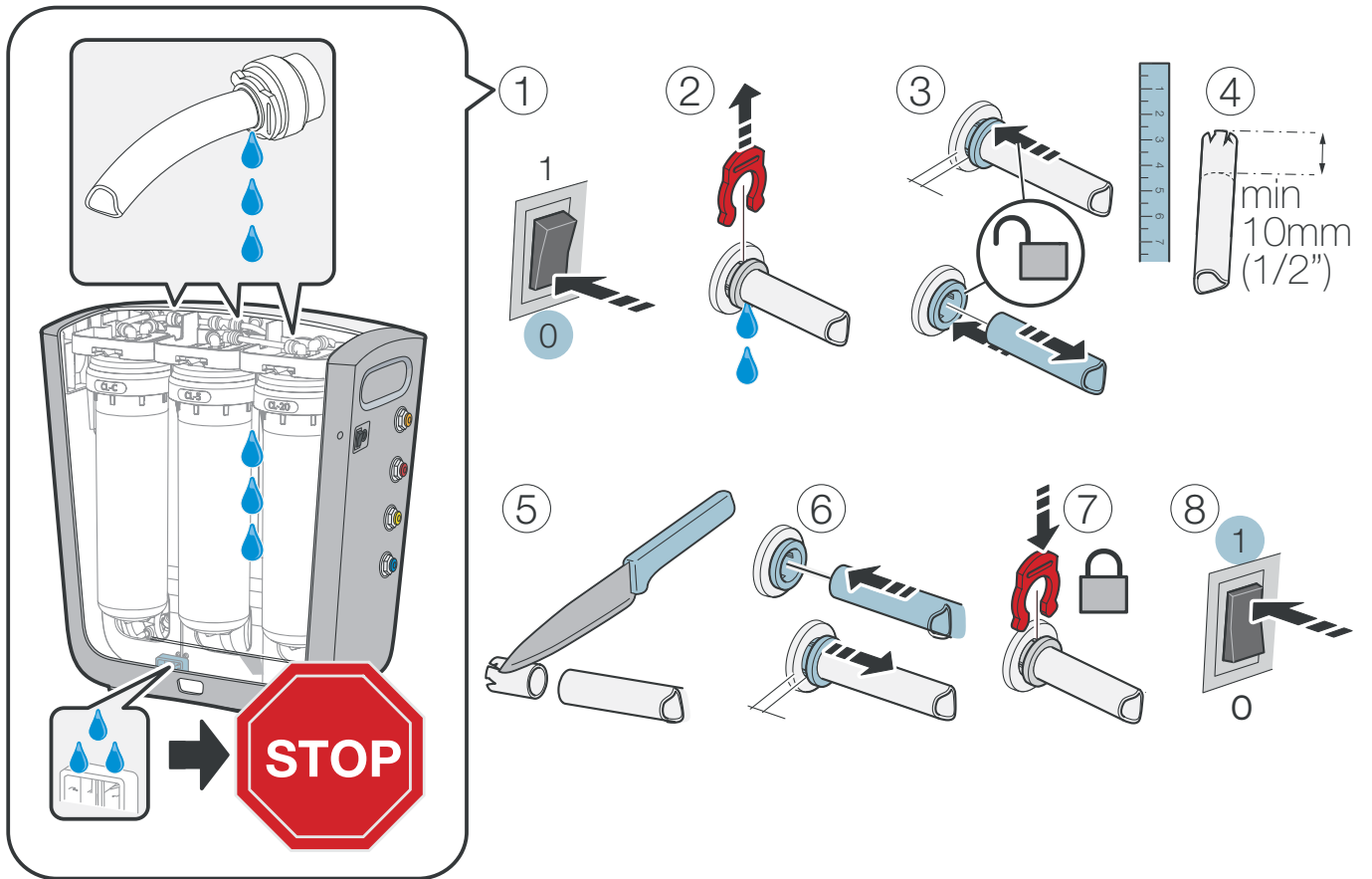


Figure 10. Leak protection system

INSTALLATION



Install Cleone in accordance with local regulations. If you are not sure, contact a Bluewater dealer for aid. Bluewater has no responsibility for installation of Cleone.



If the Cleone is connected to a public water supply, the system shall be protected against backflow.

Before installation



Remove the cable ties under Cleone before it is installed. They are used for load securing of the pump.

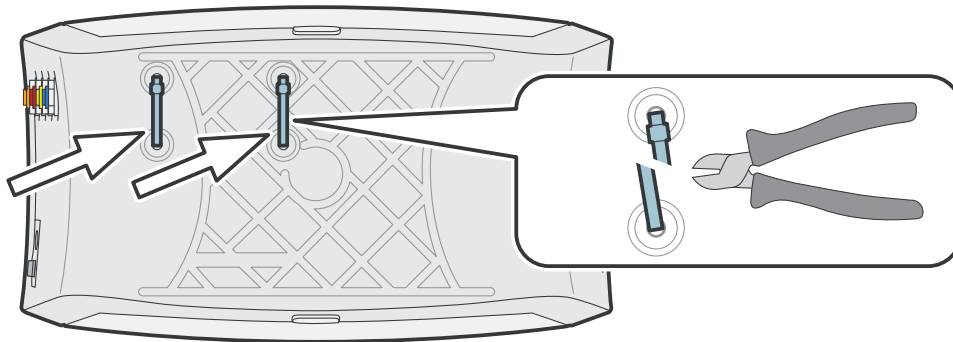


Figure 11. Remove cable ties

Install clean water faucet



Measure the clean water faucet for measure A.

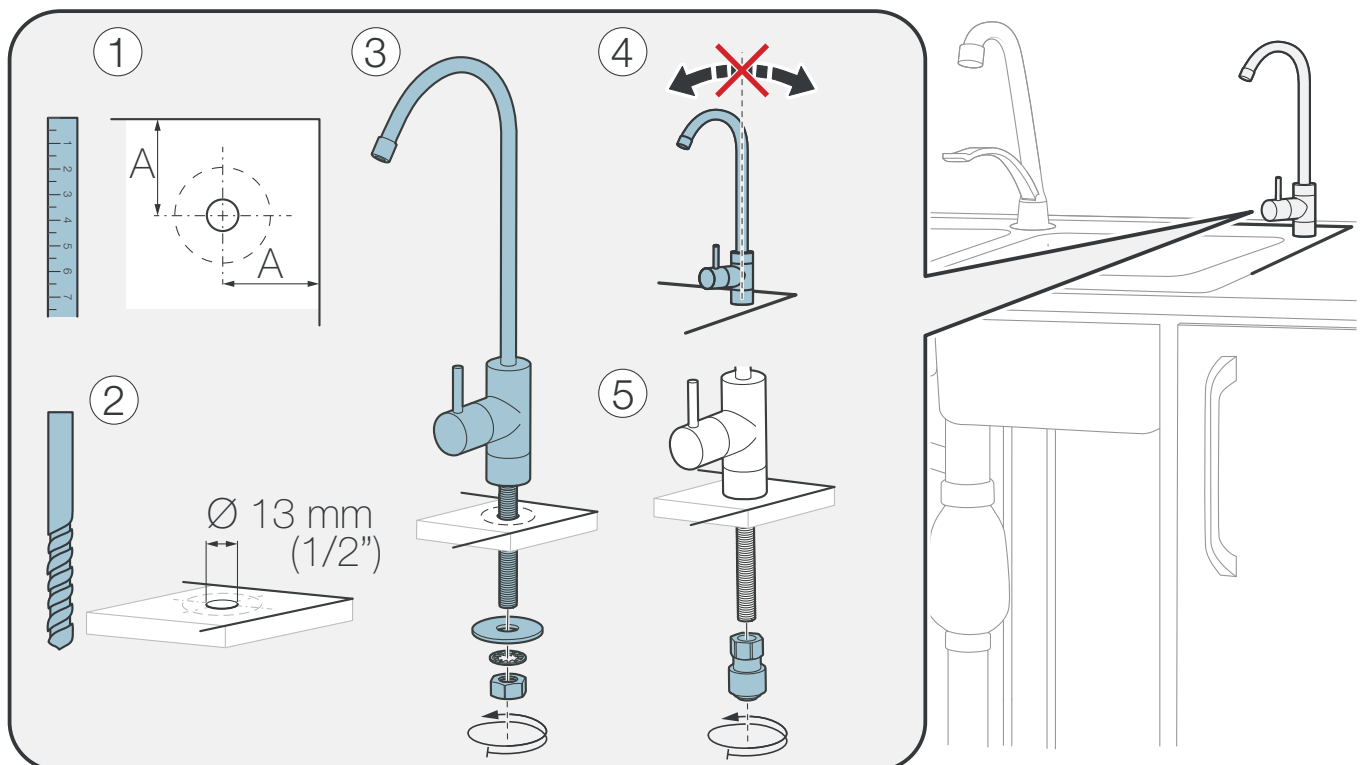


Figure 12. Install clean water faucet

Install feed water connection

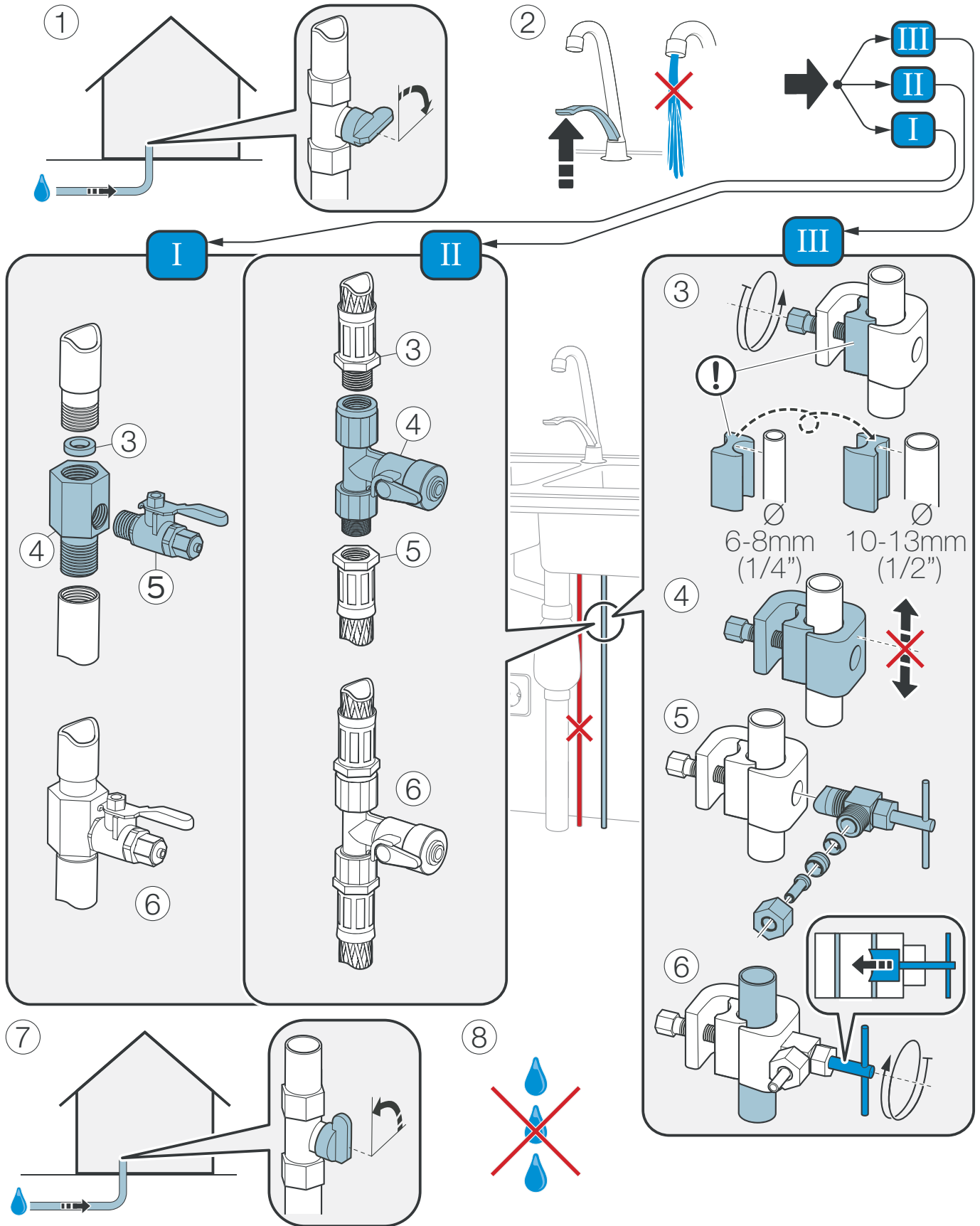


Figure 13. Install feed water connections

Install drain water connection

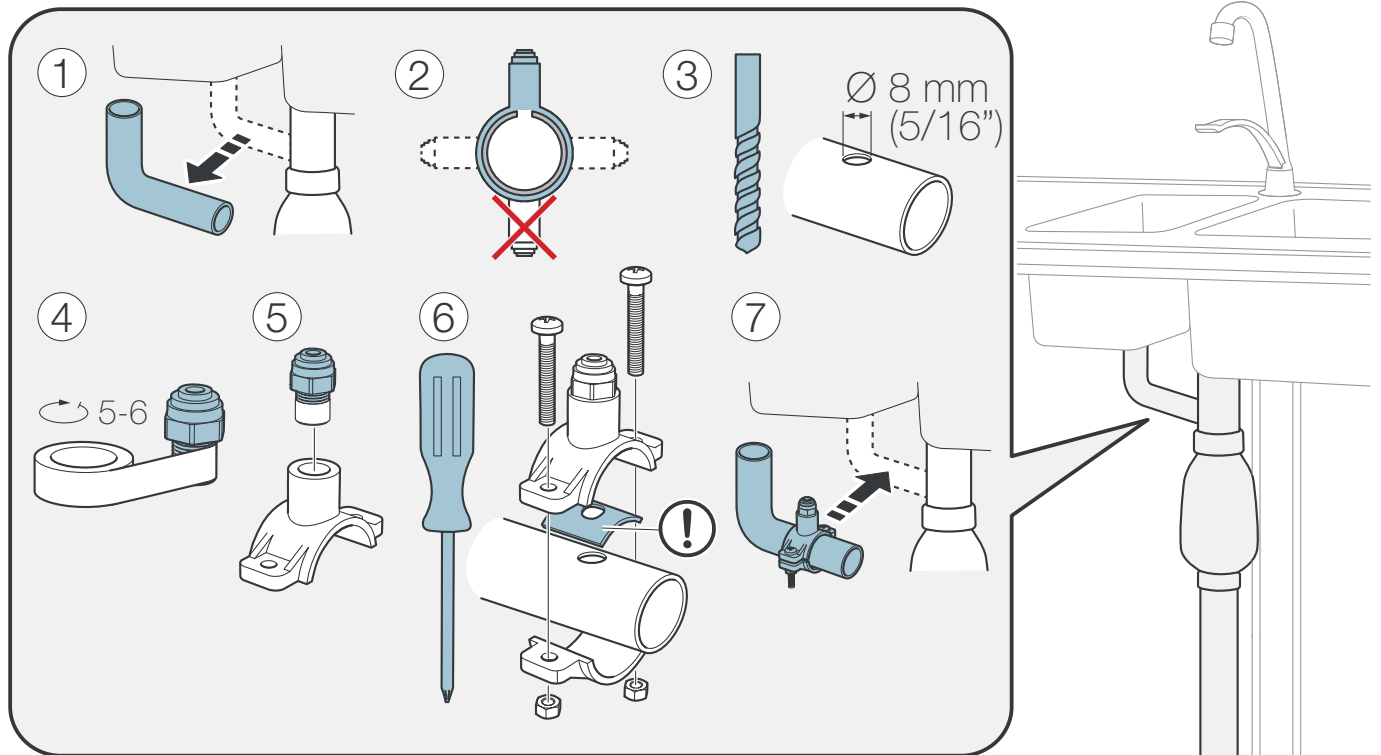


Figure 14. Install drain water connection

Install clean water tank

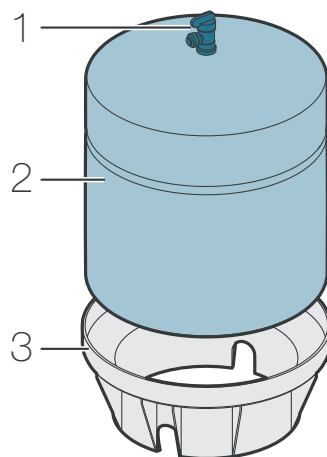


Figure 15. Install clean water tank

Step	Action
1	Install clean water tank valve (1).
2	Put the tank (2) under the kitchen sink. (Use the stand (3) if it is included.)

Connect tubing

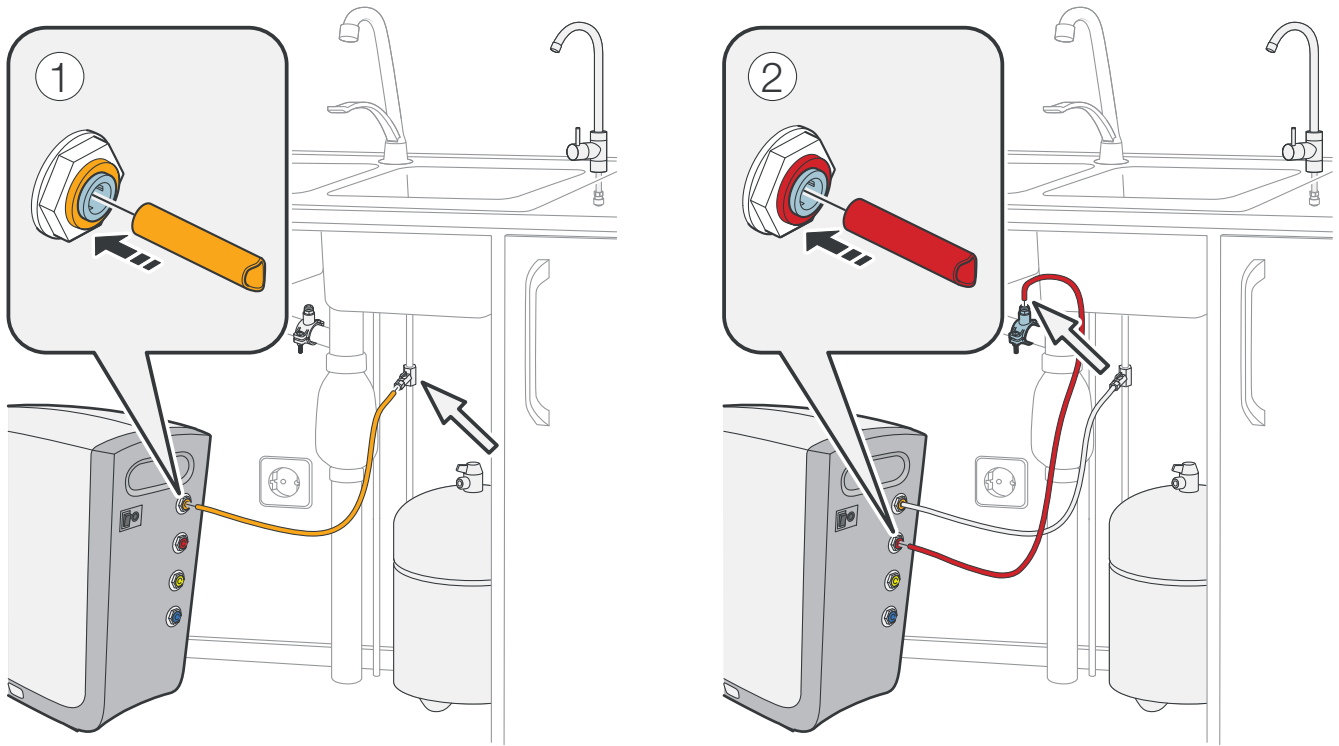


Figure 16. Connect tubing, ORANGE (1) and RED (2)

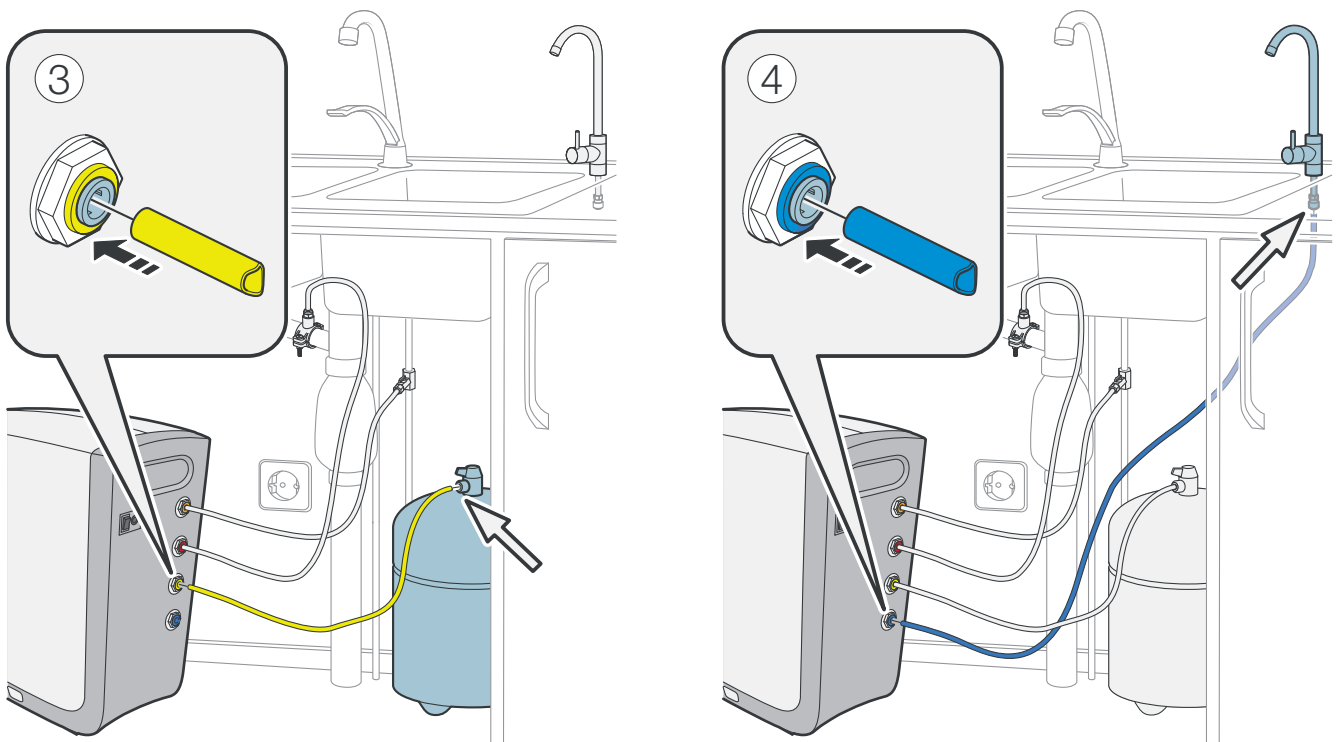


Figure 17. Connect tubing, YELLOW (3) and BLUE (4)

Secure water connectors with safety locking clips

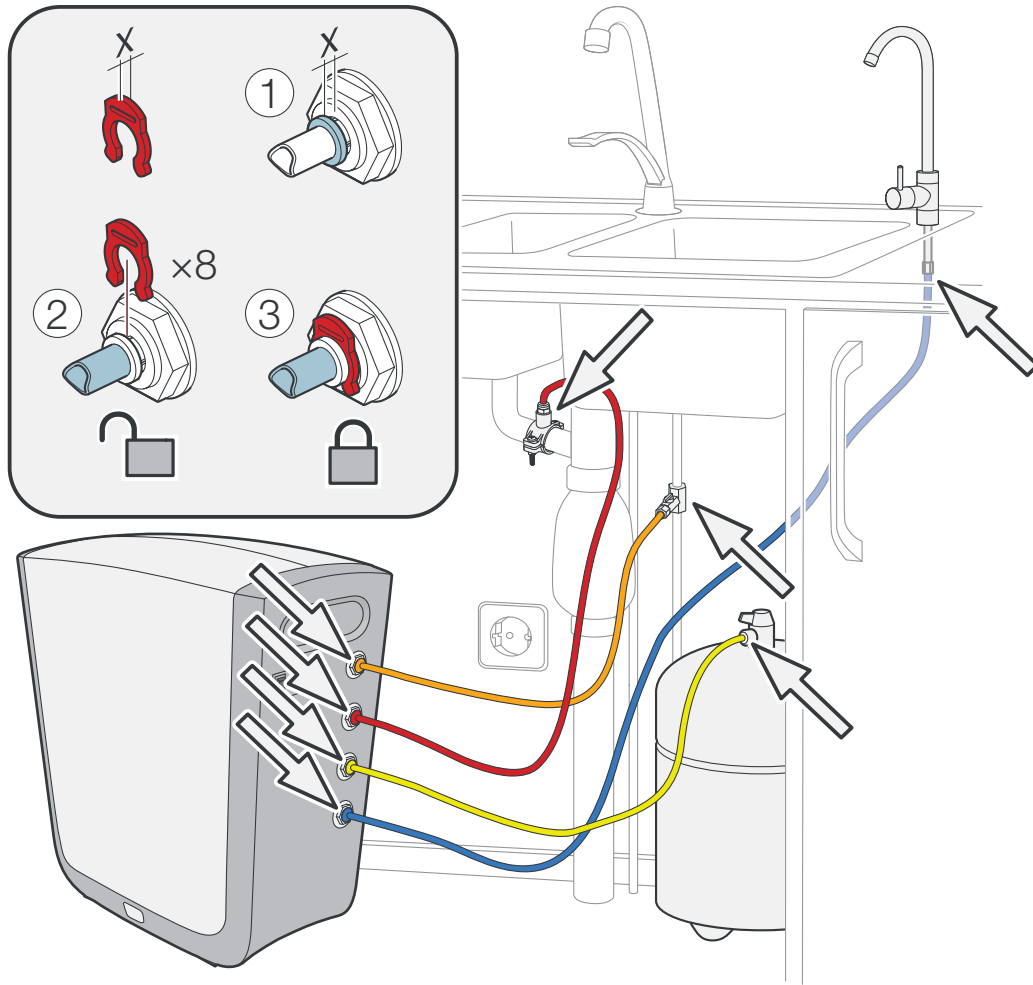


Figure 18. Safety locking clips

Open feed water valve

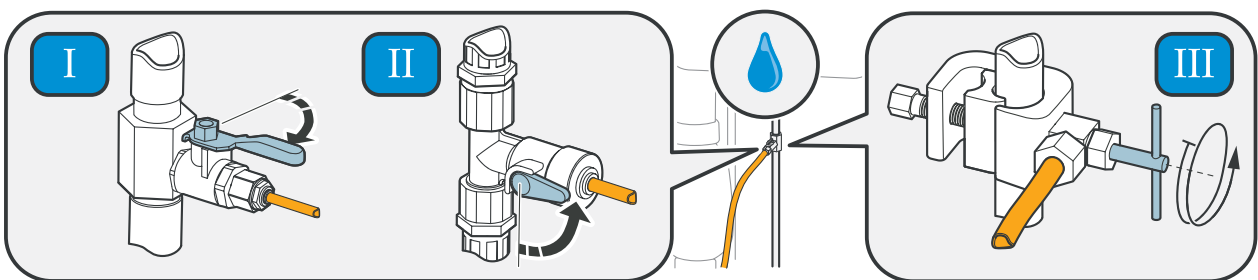


Figure 19. Open feed water valve

Step	Action
III	Turn the valve handle counter clockwise until it is fully open.

Install power adapter



See “Technical information” on page 28 for allowed electrical current and frequency.



Use only the original Bluewater power adapter as electrical power source for your Cleone. To use a different power adapter can make Cleone dangerous to use. It can also cause damage to internal parts of the Cleone.



Do not use the cord if there are visible signs of damage on it. If the supply cord is damaged, a qualified electrician must replace it in order to prevent danger.

US installation:



- Install the power adapter in a cabinet or on a wall, adjacent to the under counter space in which the water purifier will be installed.
- There must be an opening in the partition between the compartments that is large enough for the attachment plug to go through. The longest dimension of the opening must not be longer than 1 1/2 in (38 mm).
- The edges of the opening must be smooth and rounded if the partition is wood, or covered with an edge protector supplied for this function by Bluewater if the partition is metal.
- Be careful when the appliance is installed or removed, to decrease the risk of damage to the supply cord.

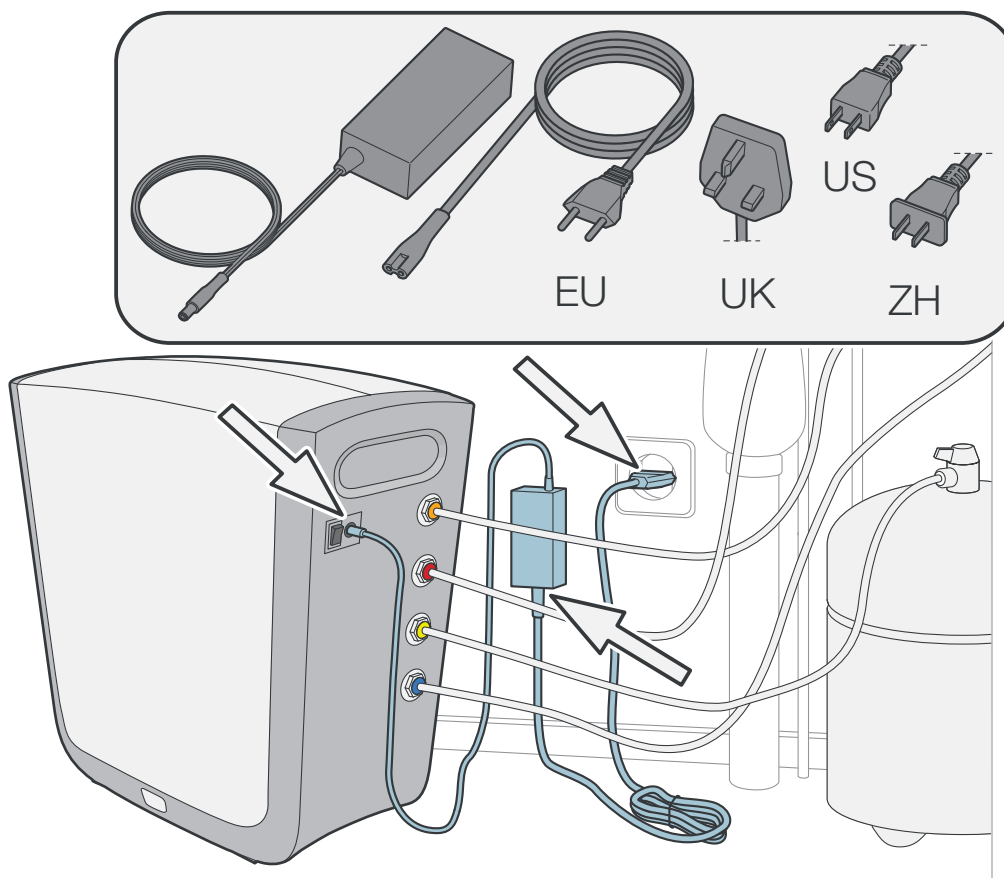


Figure 20. Install power adapter

After installation



When Cleone is installed, and after each maintenance, the following procedures must be performed before operation.

Flush Cleone

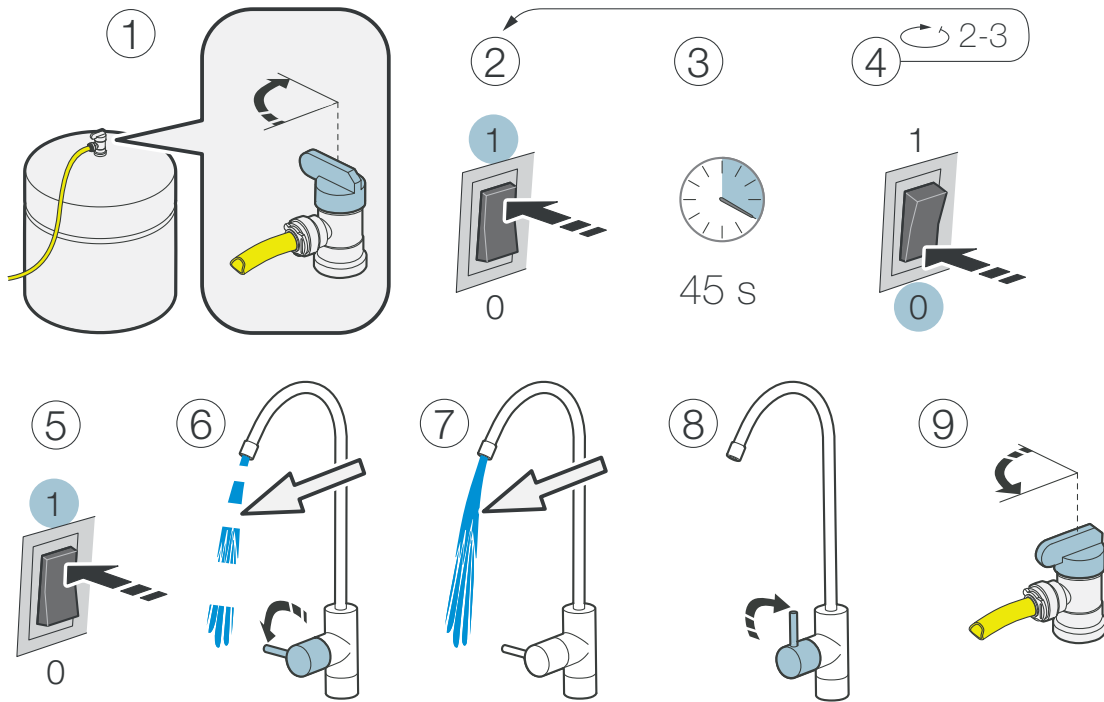


Figure 21. Flush Cleone

Condition Cleone



Do not use the water from the conditioning procedure! The reverse osmosis membrane is factory treated with a biocidic preservative solution.

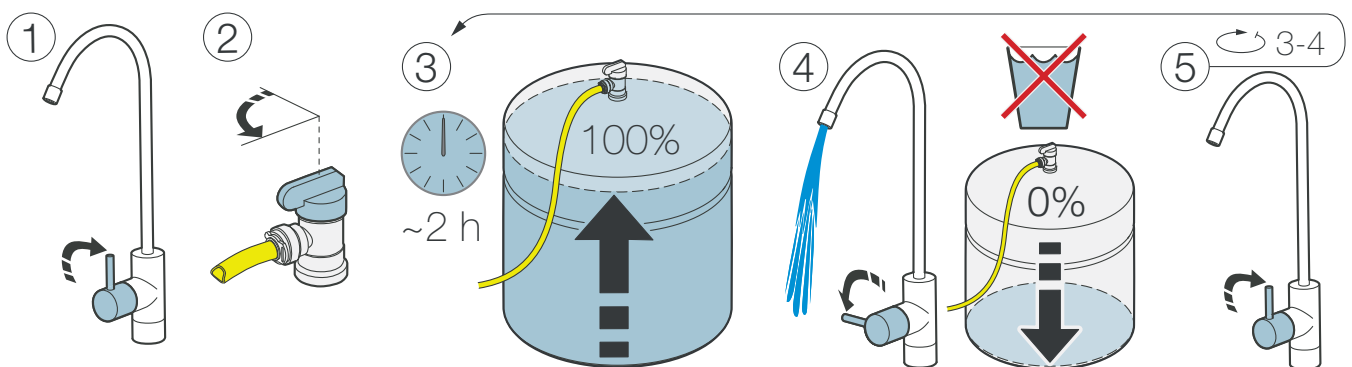


Figure 22. Condition Cleone

Do a check for leaks



The tubing connections must be tight!

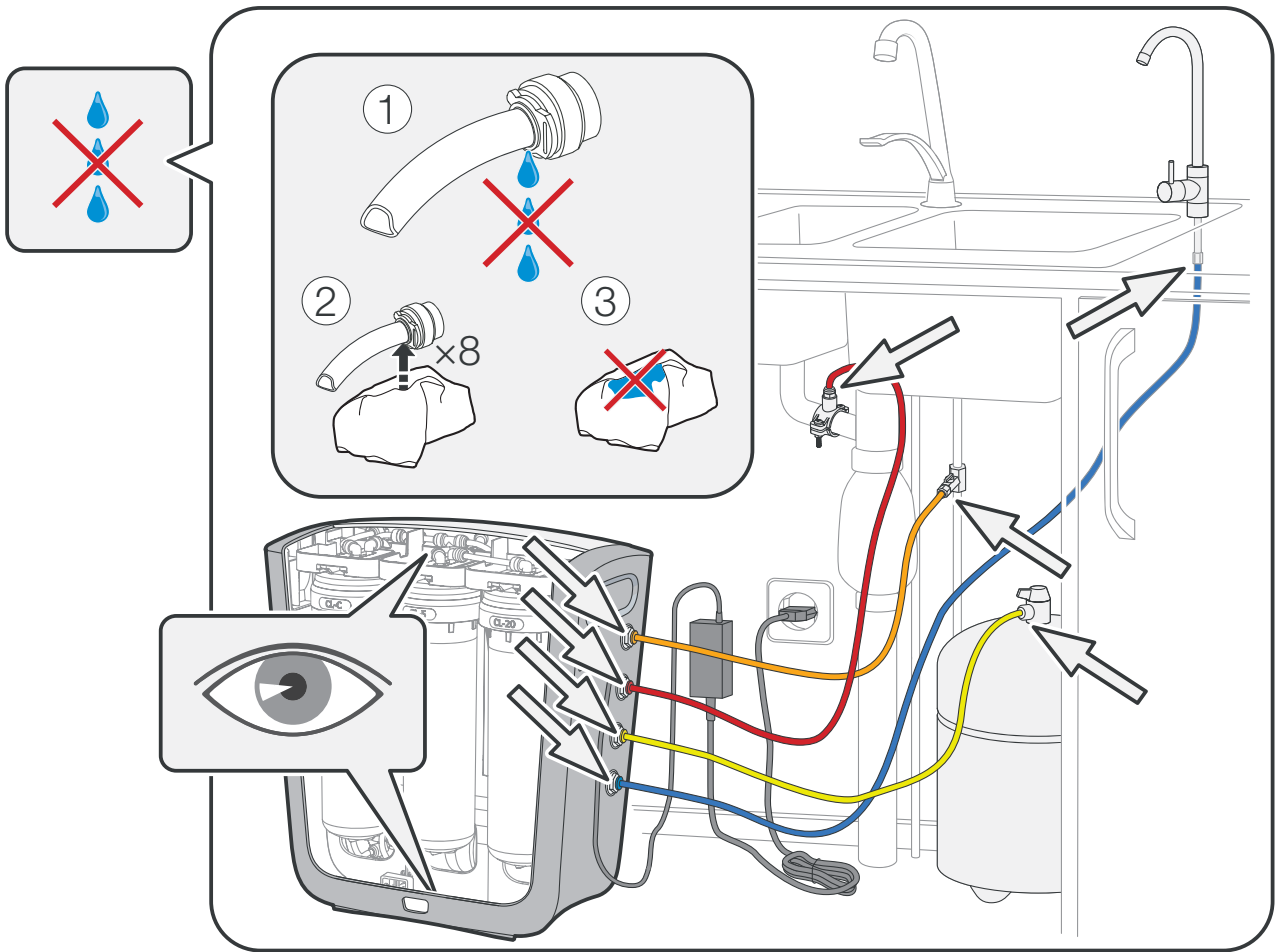


Figure 23. Check for leaks

Repair leaks

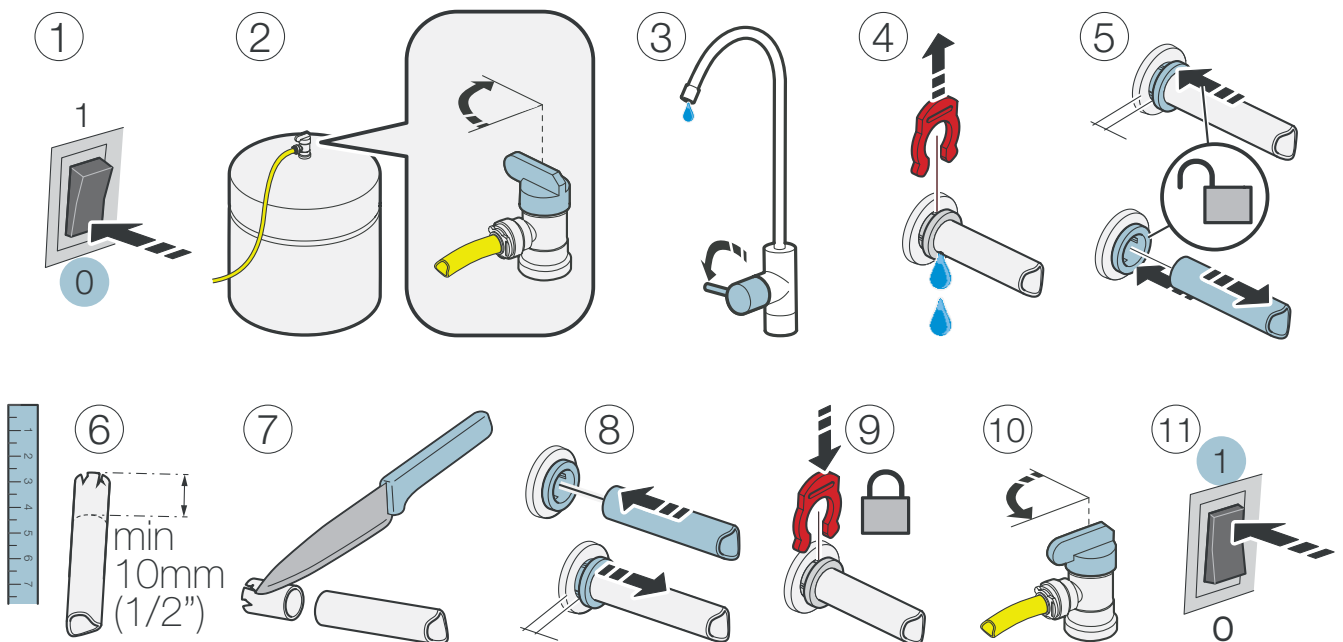


Figure 24. Repair leaks

MAINTENANCE



After each maintenance, all procedures in chapter “After installation” on page 17 must be performed before operation.



Regular maintenance is important for correct function and long term operation. Only educated and approved personnel can do the maintenance.



The water quality controls the maintenance frequency. If the feed water is of low quality, do maintenance more frequently.

Remove and install side covers

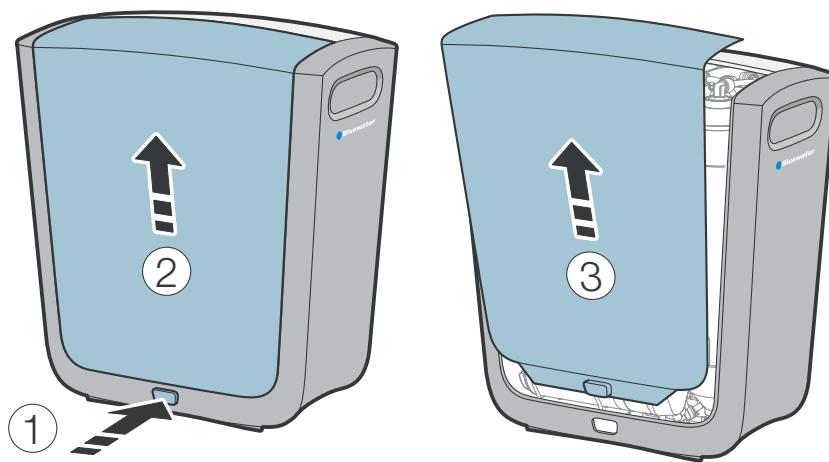


Figure 25. Remove side cover

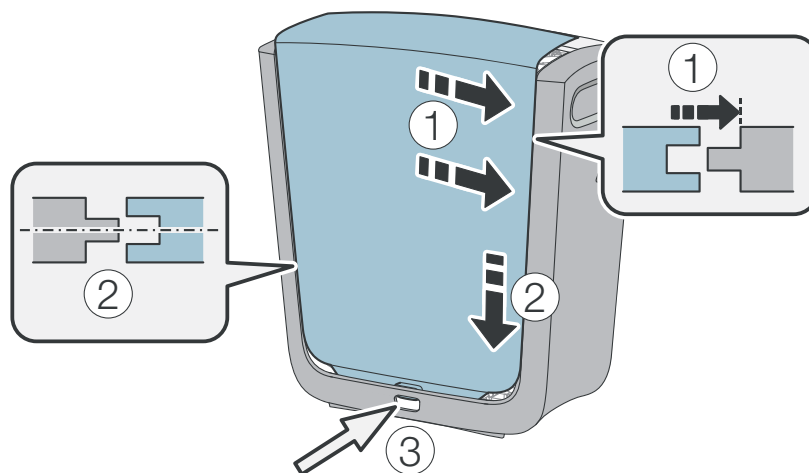


Figure 26. Install side cover

Each 6 months

Replace prefilters



Always flush the activated carbon prefilter after the filter is replaced. See "Flush Clean" on page 17.



The instruction applies to the coarse sediment prefilter, the fine sediment prefilter and the activated carbon prefilter.



See "Product overview" on page 05 for filter positions and models.

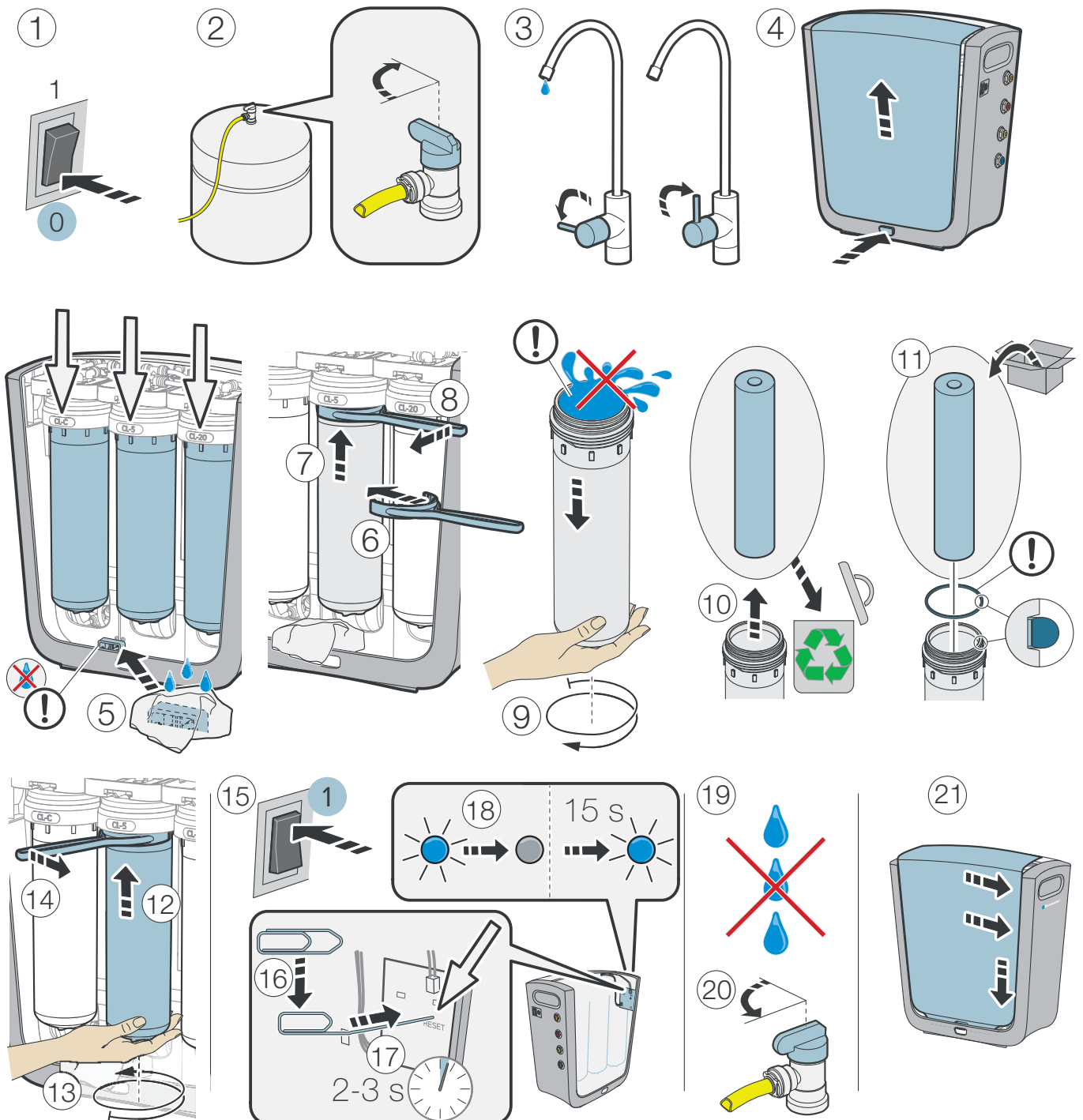


Figure 27. Replace prefilters

Replace integrated mineral filter



Always flush the integrated mineral filter after the filter is replaced. See "Flush Clean" on page 17.

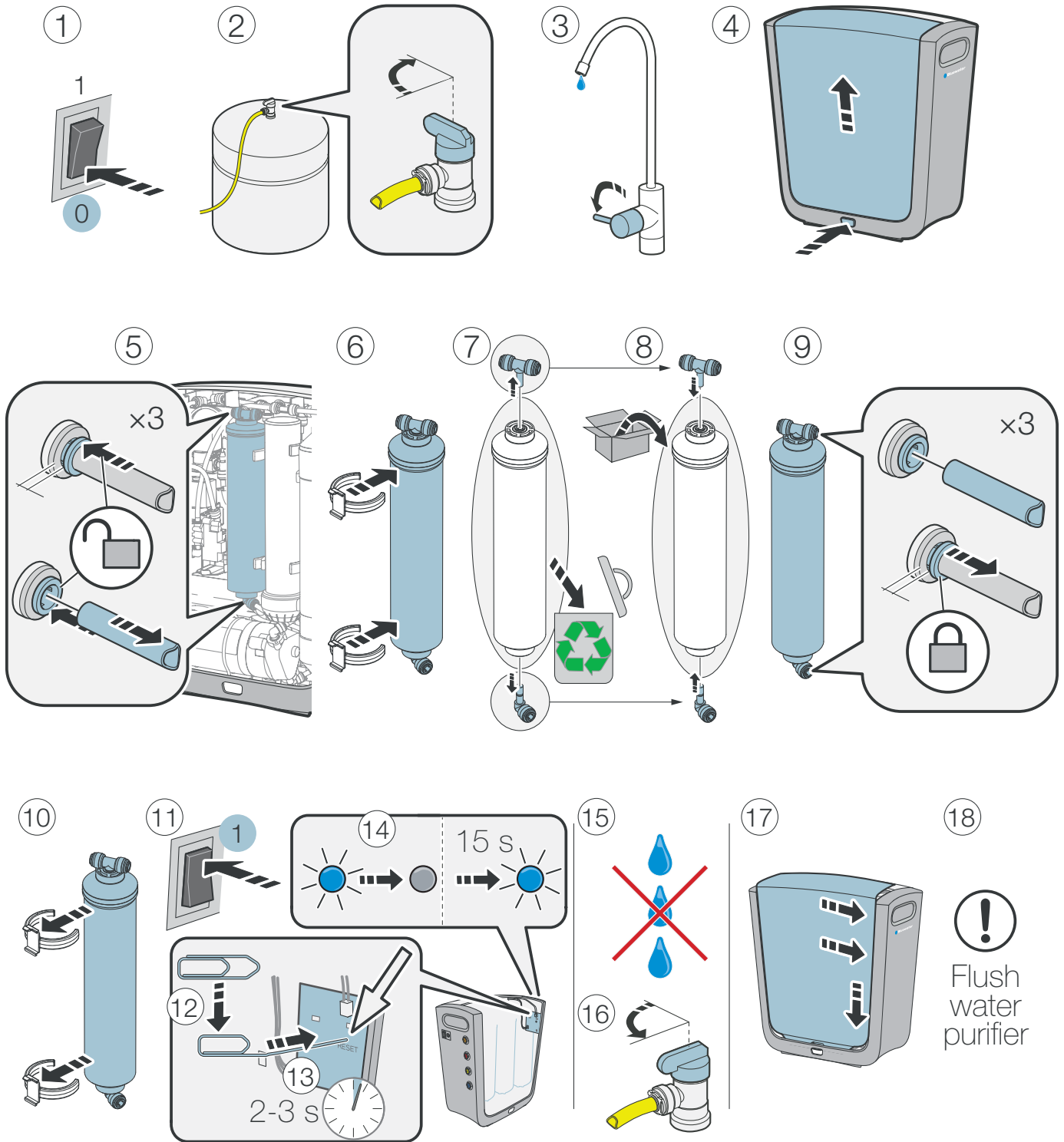
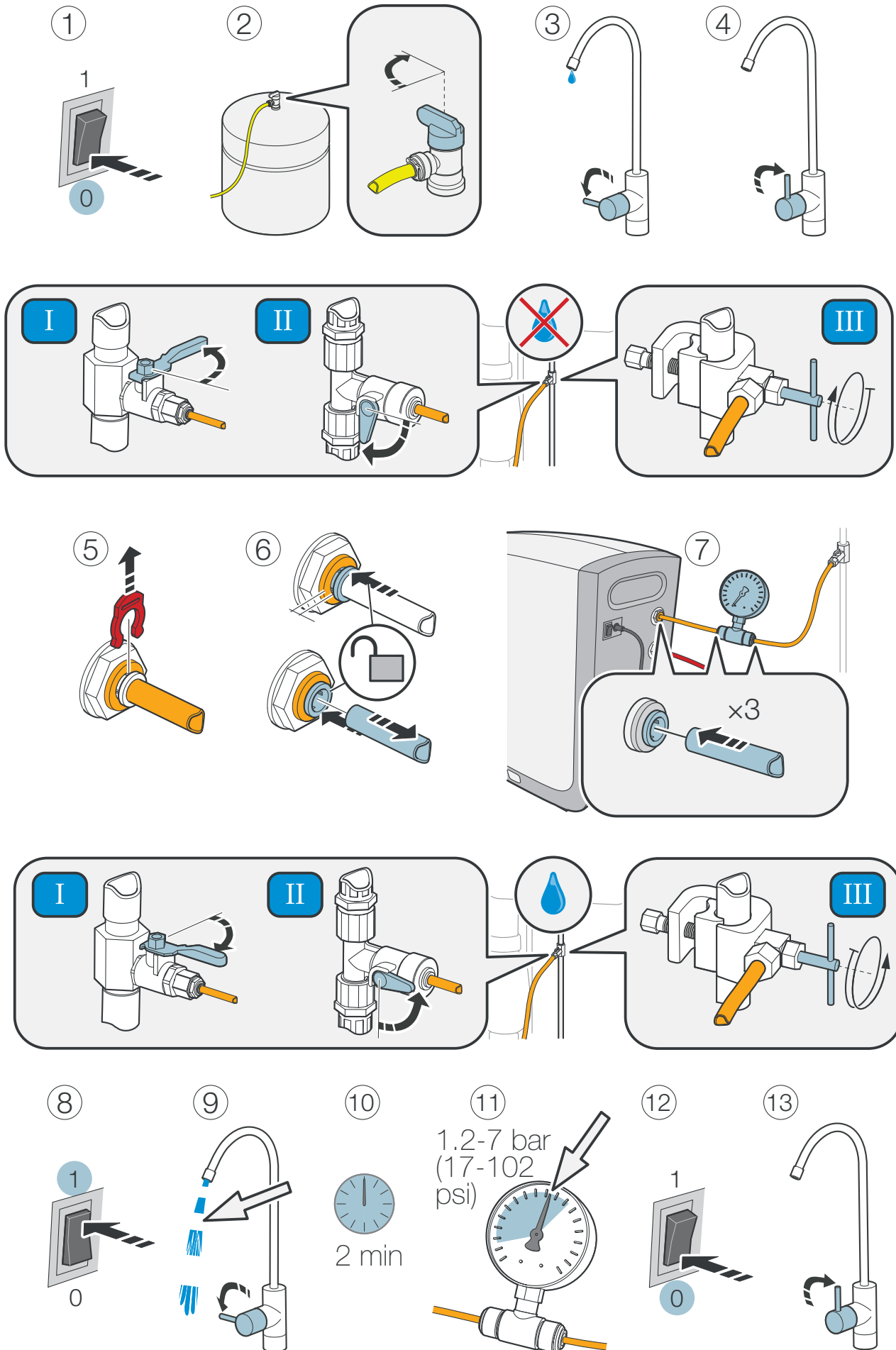


Figure 28. Replace integrated mineral filter

Do a feed water pressure check



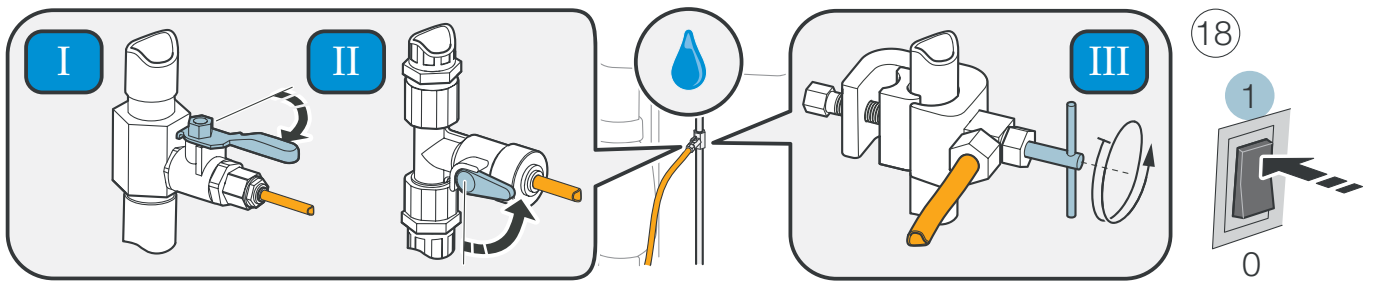
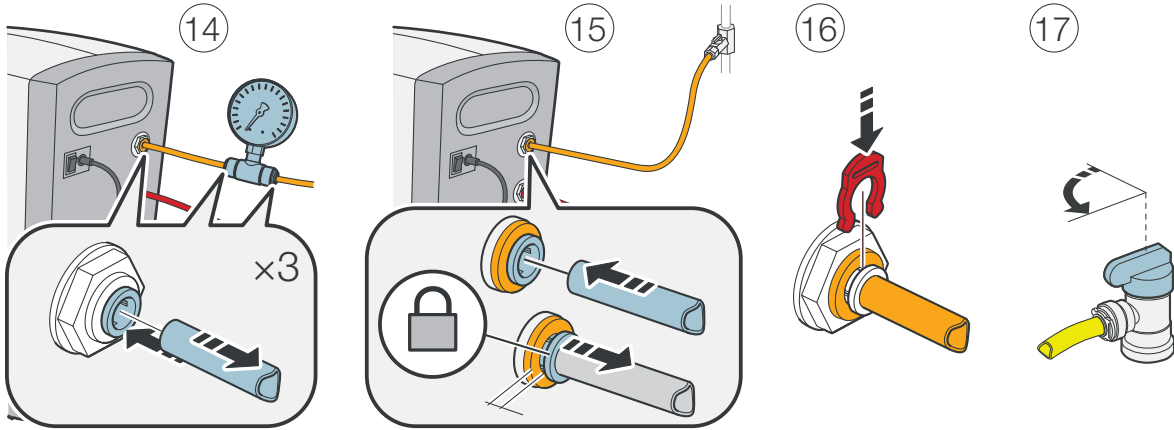
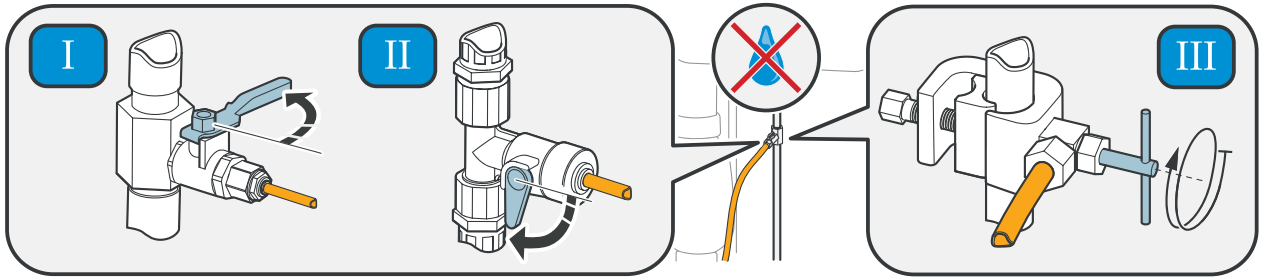


Figure 29. Feed water pressure check

Each year

Replace activated carbon postfilter



Always flush the activated carbon postfilter after the filter is replaced. See "Flush Cleone" on page 17 and "Condition Cleone" on page 17.



See "Product overview" on page 05 for filter position.

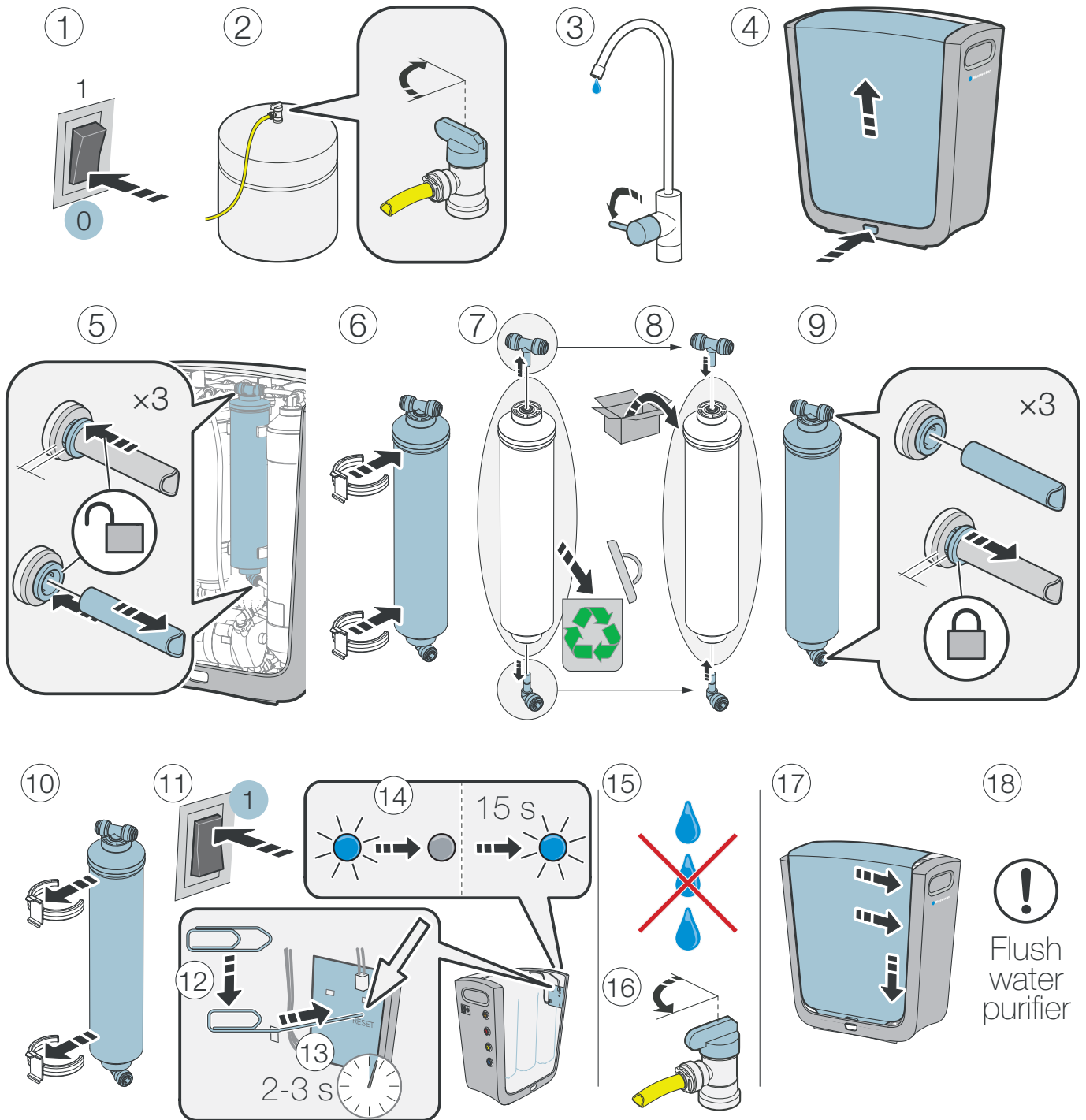


Figure 30. Replace activated carbon postfilter

Replace UV lamp



The UV lamp contains mercury and is poisonous. Contact your local authority for information on where the UV lamp can be left.

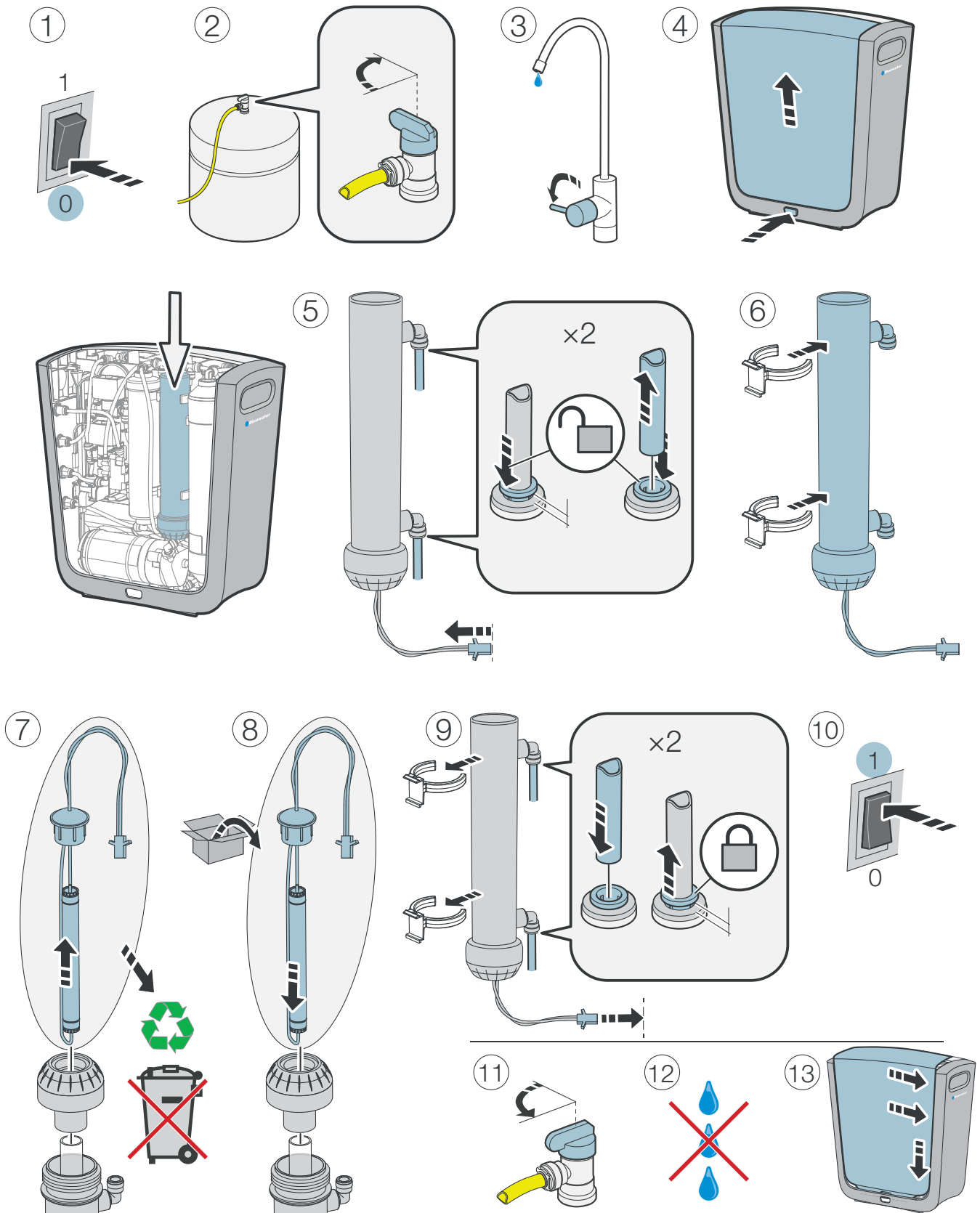


Figure 31. Replace UV lamp

Measure air cushion pressure in clean water tank



Make sure that the pressure in the air cushion in the clean water tank agrees with the recommended levels. It is important for the clean water flow.

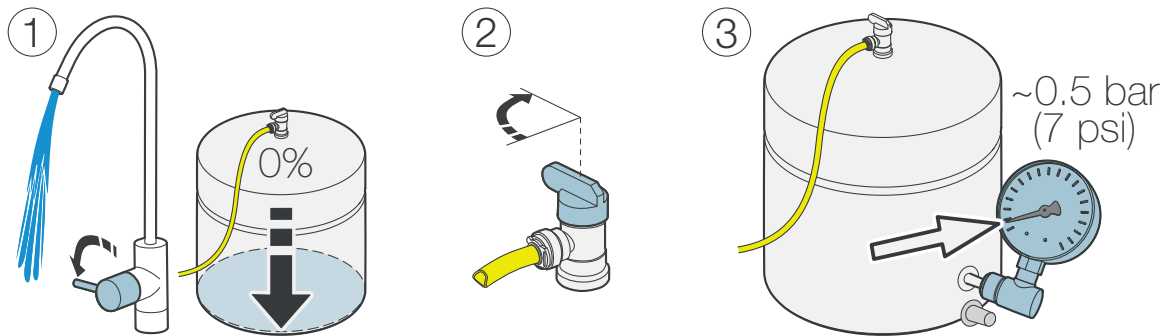


Figure 32. Measure air cushion pressure in clean water tank

Each 3-5 years

Replace reverse osmosis membrane



Always flush the reverse osmosis membrane after it is replaced. See "Flush Cleone" on page 17 and "Condition Cleone" on page 17.



If the rejection rate of Cleone is less than 80% (system operation indicator flashes) or if the flow rate is low, replace the reverse osmosis membrane.

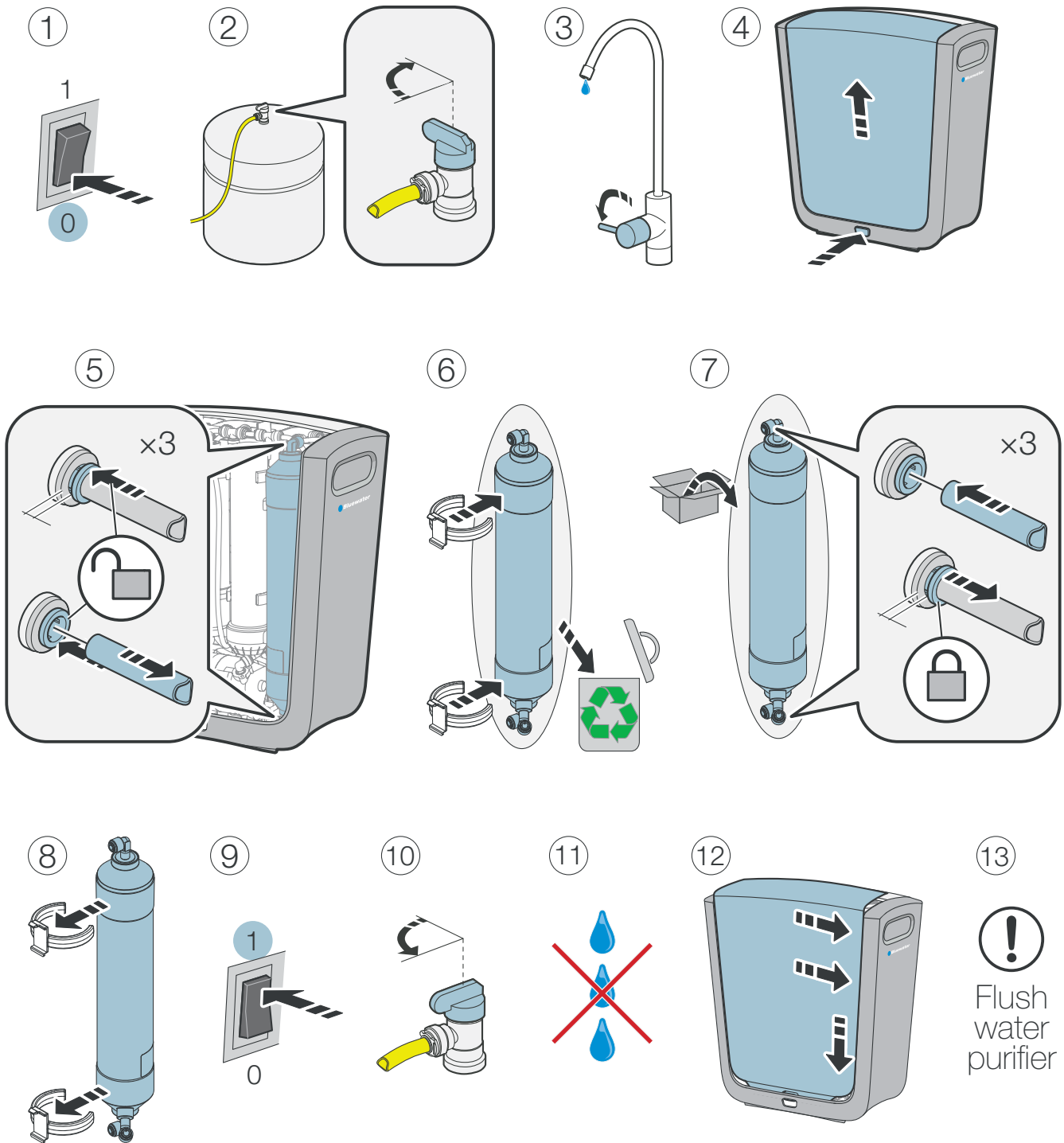


Figure 33. Replace reverse osmosis membrane

TECHNICAL INFORMATION

Technical data

Parameter/Model		Cleone Classic	Cleone Balance	Cleone Ultra	Cleone PurityPlus
Size WxDxH [mm] Size WxDxH ["]		215x380x416 8.5x15x16.4	215x380x416 8.5x15x16.4	215x380x416 8.5x15x16.4	215x380x416 8.5x15x16.4
Weight [kg] Weight [lbs]		10.4 22.9	11.0 24.2	11.4 25.1	12.0 26.5
Power supply		95-240V 50-60Hz	95-240V 50-60Hz	95-240V 50-60Hz	95-240V 50-60Hz
Power [W]		25	25	31	31
Purified water flow rate [l/day] Purified water flow rate [gal/day (GPD)]		189 50	189 50	189 50	189 50
Recovery [%]		25	25	25	25
Rejection [%]		93-99	93-99	93-99	93-99
Prefiltration	CL-20	Sediment 20 micron	Sediment 20 micron	Sediment 20 micron	Sediment 20 micron
	CL-5	Sediment 5 micron	Sediment 5 micron	Sediment 5 micron	Sediment 5 micron
	CL-C	Granulated Active Carbon (GAC)	Granulated Active Carbon (GAC)	Granulated Active Carbon (GAC)	Granulated Active Carbon (GAC)
Integrated mineral filter			✓		✓
Activated carbon postfilter Granulated Active Carbon (GAC)		✓	✓	✓	
UV lamp (6W)				✓	✓
Reverse osmosis membrane type		50 GPD	50 GPD	50 GPD	50 GPD
Water quality sensor		✓	✓	✓	✓
Leak protection system		✓	✓	✓	✓
Water tank		✓	✓	✓	✓

Requirements on feed water to water purifier



Do not install the water purifier if the water is microbiologically unsafe!

Description	Cleone Classic	Cleone Balance	Cleone Ultra	Cleone PurityPlus
Temperature min. - max. [°C]	2-38	2-38	2-38	2-38
Temperature min. - max. [°F]	35-101	35-101	35-101	35-101
Pressure min. - max. [bar]	1.2-7	1.2-7	1.2-7	1.2-7
Pressure min. - max. [psi]	17-102	17-102	17-102	17-102
TDS (Total dissolved solids) [mg/l (ppm)]	<2000 (<2000)	<2000 (<2000)	<2000 (<2000)	<2000 (<2000)

TROUBLESHOOTING

Symptom	Cause	Solution
No water comes from the clean water faucet. The system operation indicator is off.	Cleone is not connected to power.	Connect Cleone to an electrical outlet and to the power adapter. Make sure that the 24V DC cable from the power adapter is connected to the electrical power socket on Cleone.
	Cleone is not started.	Move the power switch to position 1.
	An internal leak has been sensed. Cleone has been automatically stopped.	Contact your Bluewater dealer to repair the leak and reset the system.
No water comes from the clean water faucet. The system operation indicator is on.	Cleone has been installed for the first time and the system is not filled with water.	Wait for the system to be filled with water. Flush Cleone as described in "Flush Cleone" on page 17.
	The water tubes are not connected or the connection is made incorrectly.	Make sure that the connections are made correctly.
	Regular maintenance has not been done. Prefilters are clogged.	Contact your Bluewater dealer to do maintenance on Cleone.
No water comes from the clean water faucet. The system operation indicator flashes with high intensity (0.1 sec ON, 0.1 sec OFF).	The feed water pressure is too low and the pump protection system has stopped the feed water supply.	Remove the cause of the low feed water pressure. Turn the power off and on to start Cleone again.
No water comes from the clean water faucet. The system operation indicator flashes quickly (0.5 sec ON, 0.5 sec OFF).	Cleone has stopped, because the water quality is low.	Contact your Bluewater dealer for service.
The system operation indicator flashes quickly (0.5 sec ON, 0.5 sec OFF). Water comes from the clean water faucet.	The water quality has decreased.	It is safe to use the cleaned water. Contact your Bluewater dealer for more information.
The system operation indicator flashes slowly (2 sec ON, 2 sec OFF).	The filters must be replaced.	Replace the filters and reset the filter indicator as described in "Maintenance" on page 19.
The flow rate from the clean water faucet is low.	The clean water tank is empty because of high water consumption.	Upgrade to a larger tank or to a high capacity membrane.
	The air pressure in the clean water tank is low.	Contact your Bluewater dealer to restore the correct air pressure in the clean water tank.
Too much continuous noise during water purification.	It is necessary to do maintenance on the booster pump.	Contact your Bluewater dealer.
Clean water contains particles	The water purifier has not been flushed and conditioned after postfilter change (Activated carbon postfilter, integrated mineral filter)	Flush and condition Cleone as described in "Flush Cleone" on page 17 and "Condition Cleone" on page 17.

Bluewater is a world leading water purification company. Headquartered in Stockholm, Sweden, the company helps people and businesses in Europe, the USA, China and elsewhere in Asia enjoy the health and wellbeing benefits of cleaner, healthier tap water. Bluewater innovates, makes and sells compact water purifiers that harness the company's patented reverse osmosis technology to remove virtually all pollutants from tap water, including lead, bacteria, pesticides, medical residues, chlorine and lime-scale.

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