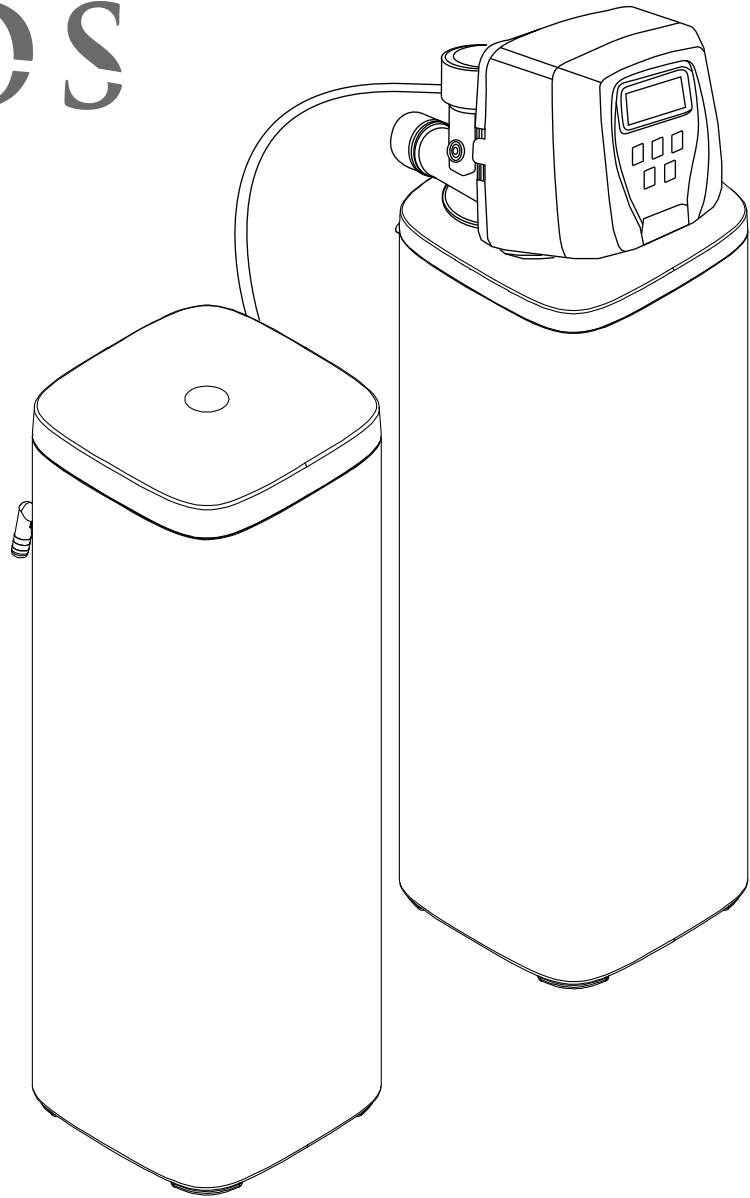


AQMOS

Owners Manual



FLEX-10 DIAMOND FLEX-15 DIAMOND Water softener

1. Read all instructions carefully before operation.

2. This system is not intended for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

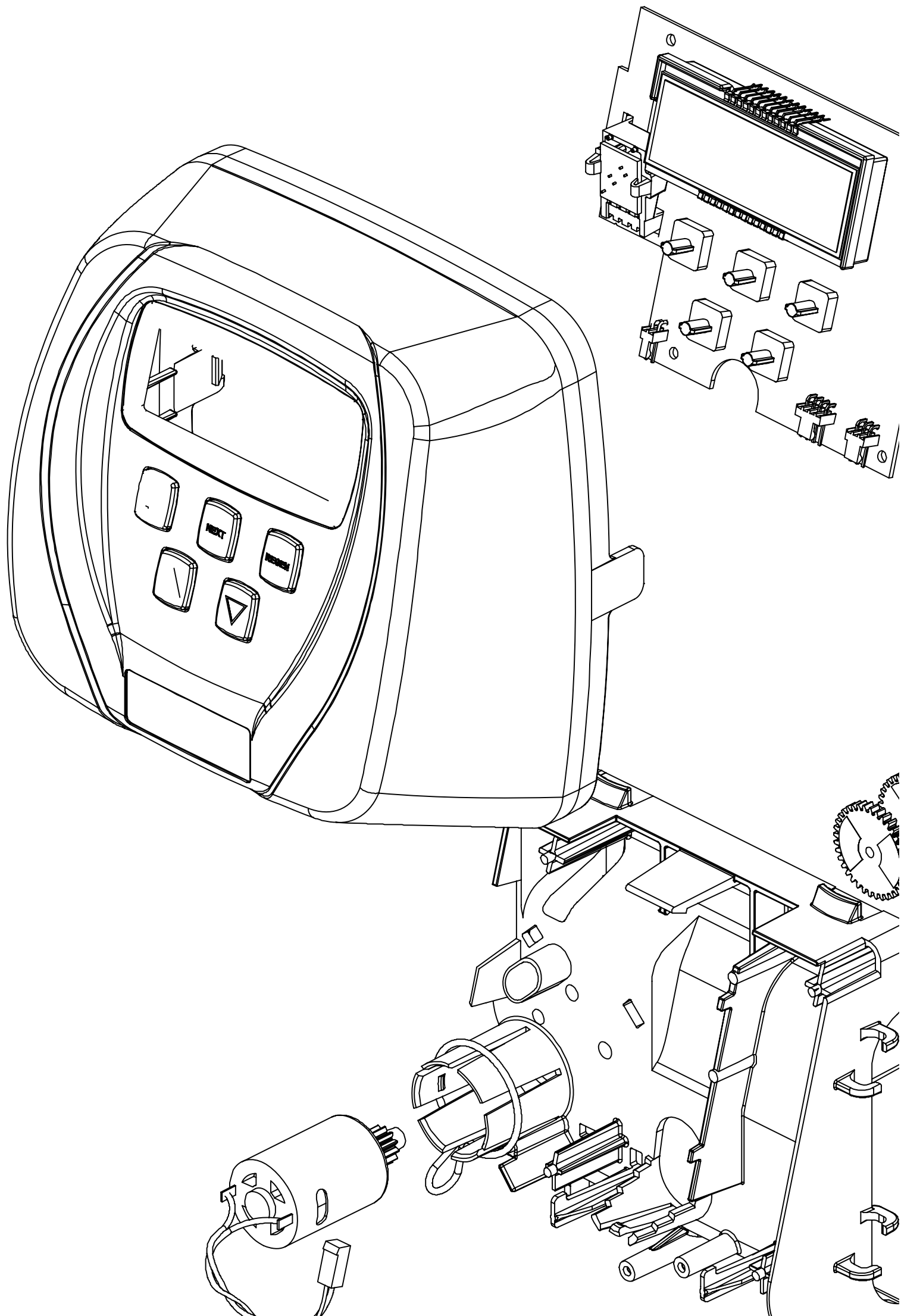


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READ THIS PAGE FIRST

BEFORE STARTING INSTALLATION

- ▶ Carefully read this manual before installing or operating your water softener. Failure to follow the instructions in this manual may result in personal injury or property damage.
- ▶ This system and its installation must comply with all applicable state and local regulations. Check with your local public works department for plumbing and sanitation codes. If any local codes conflict with the information in this manual, the local codes must be followed.
- ▶ The water softener must be operated at pressures between 2 bar (30 psi) and 8.6 bar (125 psi). If the water pressure exceeds 8.6 bar (125 psi), a pressure-reducing valve must be installed in the supply line.
- ▶ This unit must be operated at temperatures between 5°C and 40°C (41°F and 104°F).
- ▶ Do not use this water softener with hot water supplies
- ▶ Do not install the unit in areas exposed to direct sunlight, wet conditions, or temperatures outside the specified range.
- ▶ The appliance must only be used with the power supply unit provided.
- ▶ The appliance must only be connected to a safety extra-low voltage supply as indicated on the appliance.
- ▶ Apply only NSF-certified lubricant to all O-rings during installation. Do not pinch or damage O-rings.
- ▶ Softeners exposed to high levels of iron, manganese, sulphur, or sediment may experience damage to pistons, seals, or spacers within the control valve. Such damage is not covered under warranty.
- ▶ It is recommended to inspect and service the control valve annually. Cleaning and replacement of pistons, seals, and spacers may be required depending on local water conditions.
- ▶ Do not use water that is microbiologically unsafe without adequate disinfection before or after this system.
- ▶ This publication is based on information available at the time of printing. Continued design improvements may result in changes not included in this manual.
- ▶ This appliance is not intended for use by children. The appliance is not a toy and must not be used or played with.
- ▶ This appliance must not be used by persons with reduced physical, sensory, or mental capabilities, or by persons lacking experience and knowledge, unless they are supervised or have been instructed in the safe use of the appliance and understand the hazards involved.

INSTALL NOTES & SAFETY MESSAGES

Watch for the following messages in this manual:

EXAMPLE:

NOTE

Check and comply with your state and local codes. You must follow these guidelines.

EXAMPLE:



CAUTION

Disassembly while under pressure can result in flooding.

EXAMPLE:



WARNING

Electrical Shock Hazard! Unplug the unit before removing the cover or accessing any internal control parts.

WATER SOFTENER BASICS

WHAT IS HARD WATER AND HOW IT IS SOFTENED

Hard water contains minerals such as calcium and magnesium. These minerals are picked up as rainwater moves through soil and rock. While not harmful to health, hard water causes scale in pipes and appliances, makes soap less effective, and can leave stains on surfaces.

A water softener solves this problem by using a special resin bed. As water passes through the resin, calcium and magnesium are removed and replaced with small amounts of sodium or potassium. Over time the resin becomes full and needs to be cleaned. The softener does this automatically in a process called regeneration, where it uses salt water (brine) to refresh the resin so it can work again.

WHAT A SOFTENER DOES AND DOES NOT REMOVE

A softener is designed to remove hardness (calcium and magnesium). It can also handle small amounts of dissolved iron (often called "clear-water iron").

A softener cannot remove:

- Iron that has already turned brown or red (rusty water)
- Iron combined with organic matter (tannins)
- Iron bacteria (slimy deposits in pipes)
- Sediment, sand, dirt, or silt
- Bad smells (like sulphur or "rotten egg" odour)
- Micro-organisms or unsafe bacteria

For these problems, other filters or treatment systems are needed in addition to a softener.

Some local supplies have low pH and are corrosive to plumbing and fixtures. A softener does not correct low pH or corrosivity. If your analysis indicates low pH or corrosive conditions, install an appropriate conditioning system, such as a neutralizing filter, upstream of the softener.

IRON AND MANGANESE

If your water has a small amount of clear-water iron, the softener can usually handle it. But if iron or manganese levels are higher, it can reduce the softener's performance and damage the resin. In that case, an extra filter should be installed before the softener.

To keep your softener working well, it may need to regenerate more often when iron is present. Using a special resin cleaner every few months (or sooner if you notice stains) will also help keep the system in good condition.

CARE AND MAINTENANCE

To keep your softener running smoothly:

- Always keep salt in the brine tank and use high-quality salt.
- Check occasionally for salt bridges (hard crusts) and break them up if needed.
- Inspect the system regularly for leaks or blockages.
- Use a resin cleaner on a regular basis as recommended for your system and water hardness.

By following these steps, your water softener will give you reliable, soft water and help protect your home from scale and hard water damage.



CAUTION

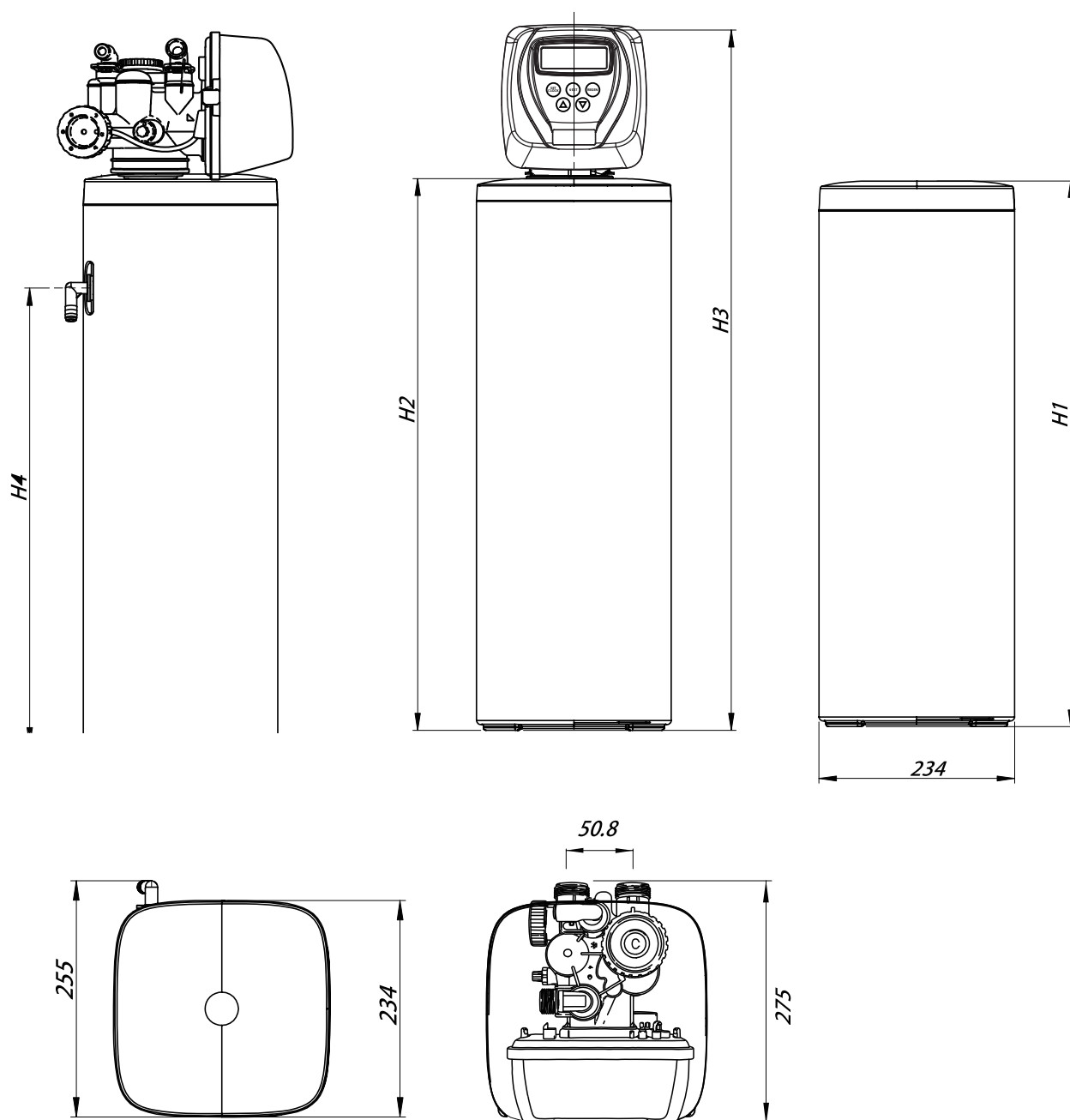
DO NOT USE WATER FILTERED THROUGH THIS SOFTENER WHERE THE WATER IS MICROBIOLOGICALLY UNSAFE OR THE WATER IS OF UNKNOWN QUALITY. THE WATER MUST BE DISINFECTED BEFORE OR AFTER THE UNIT.

SOFTENER SYSTEM SPECIFICATIONS

System Configuration		
Model	FLEX-10 DIAMOND	FLEX-15 DIAMOND
Control System	Clack W1SCI control valve	
Regeneration Mode	Time and Volume Controlled	
Tank Size(Inch)	8"x18"	8"x26"
Media Loaded	Yes	Yes
Resin Type	Extremely High Capacity Ion Exchange Resin(001×8FG, Fine Mesh)	
Resin Quantity(L)	10	15
Distributor Pilot	OD 1.05	
Brine Tank	BTS-0818	BTS-0826
Salt Storage Capacity(Kg)	14	20
Valve Configuration		
Regeneration Type	Down Flow	Down Flow
Injector	Black	Black
BLFC(gpm)	0.5	0.5
DLFC(gpm)	1.3	1.7
Recommended Settings		
Backwash Duration Setting(Min)	5	5
Brine Duration Setting(Min)	60	60
Rinse Duration Setting(Min)	5	5
Refill Setting(Kg)	2	4
Reg. Days	10	10
Installation Requirements		
Water Supply	Municipal	
Operating Pressure(bar)	2 ~ 8.6	
Water Temperature(°C)	5°C - 40°C (41°F - 104°F).	
Plumbing Connections	3/4" or 1" Fittings Available	
Electrical Requirements	Input 100V-240~50/60Hz~0.35A	
	Output 15V 0.5A 7.5W	

- Capacities of softeners may deviate from the chart above depending on flow rates and raw water conditions.
- Changing salt settings from factory setting may require changing injector sizes to achieve stated capacities.
- Iron content must not exceed 1 ppm. Beyond 1 ppm an iron softener must be used.
- Do not subject the unit to freezing temperatures.
- Do not use water that is microbiologically unsafe without adequate disinfection before or after the system.
- The manufacturer reserves the right to make product improvements which may deviate from the specifications and descriptions stated herein, without obligation to change previously manufactured products or to note the change.

SOFTENER SYSTEM DIMENSIONS



Model	H1(mm)	H2(mm)	H3(mm)	H4(mm)
FLEX DIAMOND-10	483	473	650	346
FLEX DIAMOND-15	686	676	870	549

UNPACK & INSPECT YOUR WATER SOFTENER

Inspect the water softener for any shipping damage. If damage is found, notify the transportation company and request a damage inspection. Damage to cartons should also be noted.

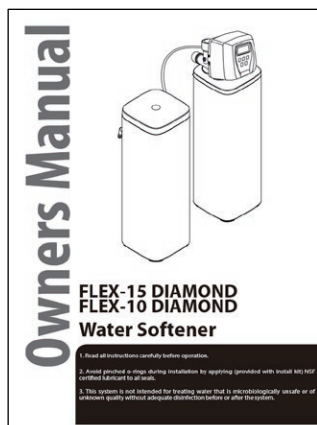
Handle the softener unit with care. Do not drop the unit or set on sharp, uneven surfaces. Do not turn the softener unit upside down.

NOTE

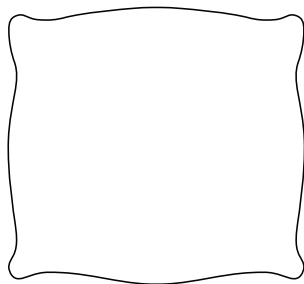
IF THERE IS A SEVERE LOSS IN WATER PRESSURE WHEN THE SOFTENER UNIT IS INITIALLY PLACED IN SERVICE, THE SOFTENER TANK MAY HAVE BEEN LAID ON ITS SIDE DURING TRANSIT. IF THIS OCCURS, BACK-WASH THE SOFTENER TO "RECLASSIFY" THE MEDIA.

The manufacturer is not responsible for damages in transit. Small parts, needed to install the softener, are in a parts box. To avoid loss of the small parts, keep them in the parts bag until you are ready to install.

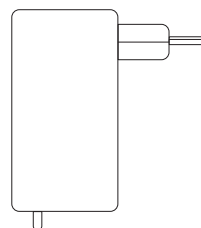
ACCESSORIES CONTENTS :



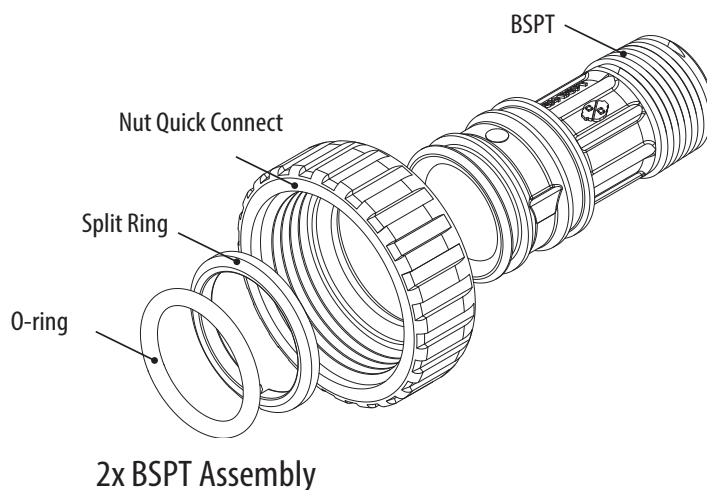
1x Manual



1x Inflatable transport cushion
(discard after transport)

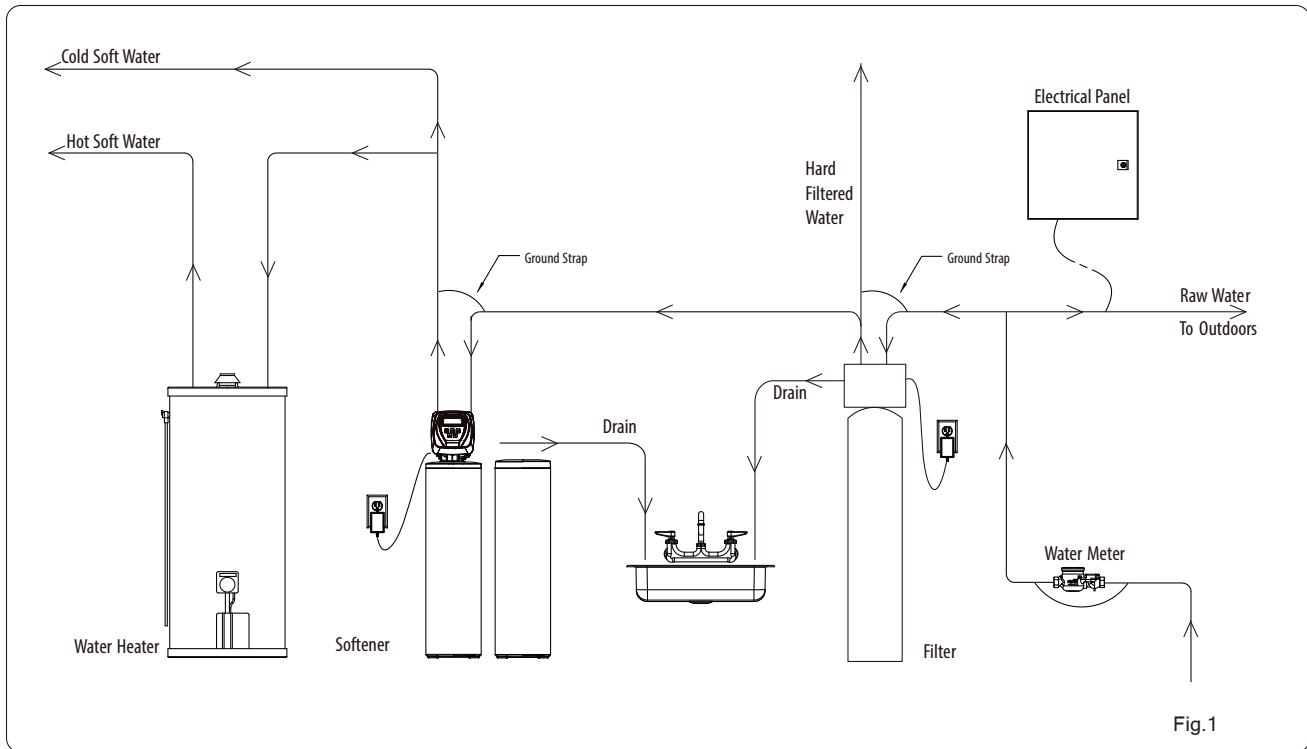


1x Plug



PRE-INSTALLATION INSTRUCTIONS

Contact your distributor for a complete water analysis and check water hardness with your supplier. Correct water data is essential for proper operation of the softener.



NOTE

YOU MUST FOLLOW ALL GOVERNMENT CODES AND REGULATIONS GOVERNING THE INSTALLATION OF THESE DEVICES.

DETERMINE THE CORRECT LOCATION FOR THE WATER SOFTENER

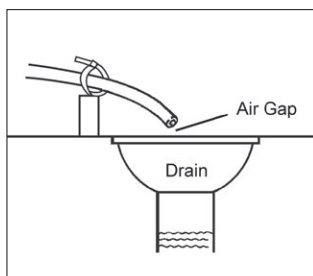
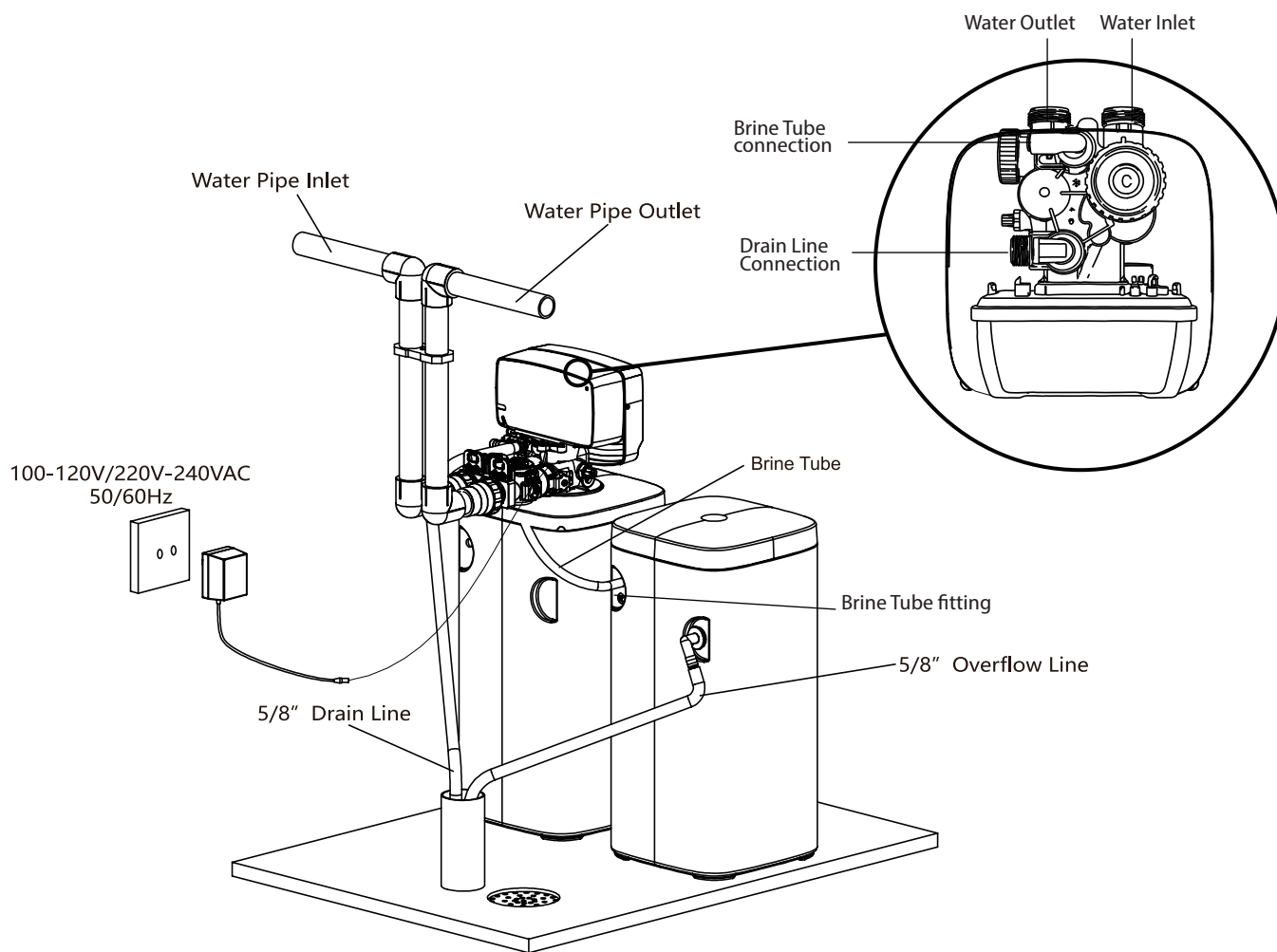
Select the installation location carefully. The following conditions must be reviewed to ensure proper operation and service life:

- Install the softener as close as possible to the main water supply line.
- Position the unit near a suitable drain.
- Ensure the softener is correctly placed in relation to other water treatment equipment (see Fig. 1).
- Always install the softener on the cold water line, before the water heater. Exposure to water temperatures above 104°F (40°C) can damage the softener.
- Do not install the softener in areas where temperatures may drop below freezing. Freezing can cause permanent damage and will void the factory warranty.
- Provide adequate clearance around the unit for inspection, maintenance, and service.
- If your water source is municipal or community-supplied, or if you need to bypass water for applications such as geothermal heat pumps, lawn irrigation, outbuildings, or other high-demand uses, review your plumbing and make modifications as necessary (see Fig. 1).
- Avoid locations exposed to direct sunlight and heat. Excessive heat can cause plastic components to soften or warp.

INSTALLATION INSTRUCTIONS

TOOLS REQUIRED FOR INSTALLATION:

- ▶ Two adjustable wrenches are required for installation.
- ▶ Additional tools may be necessary if modifications to existing plumbing are needed.
- ▶ Use copper, brass, or PEX pipe and fittings. Some local codes may also permit PVC pipe.
- ▶ Always follow local plumbing regulations.
- ▶ A 5/8" OD drain line is required for proper drainage.



⚠ CAUTION

THE WASTE CONNECTION OR DRAIN OUTLET MUST INCLUDE AN AIR GAP TO THE SANITARY WASTE SYSTEM. THE AIR GAP SHALL BE AT LEAST TWO PIPE DIAMETERS OR 1 INCH (25 MM), WHICHEVER IS GREATER.

⚠ CAUTION

NEVER INSERT THE DRAIN LINE DIRECTLY INTO A DRAIN, SEWER LINE, OR TRAP. ALWAYS ALLOW AN AIR GAP BETWEEN THE DRAIN LINE AND THE WASTE WATER. THIS WILL PREVENT THE POSSIBILITY OF SEWAGE BEING BACK-SIPHONED INTO THE SOFTENER.

NOTE

PERFORM ALL PLUMBING ACCORDING TO LOCAL PLUMBING CODES.

STEP 1: PLACE IN CORRECT LOCATION

A suitable location must meet the following requirements:

Drain: Within 6 metres of the water softener, with a maximum vertical elevation of 1.20 metres measured from the control valve.

Power socket: A power socket must be available nearby.

Branch point: Install the water softener after the water meter but before the first branch in the pipework.

Level surface: The softener should be placed on a level surface.

STEP 2: TEST WATER HARDNESS

Before you begin, test the hardness of your water using a titrant (AQMOS water hardness test set). This value is required to configure the water softener correctly.

STEP 3: INSTALL BYPASS (OPTIONAL)

If you have a bypass follow the instructions of the bypass installation on page 16.

No bypass: continue to step 4

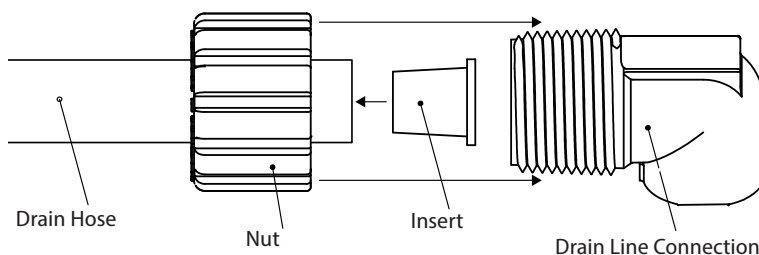
STEP 4: CONNECT INLET AND OUTLET

Close the main water shut-off valve. Open a cold-water tap to release the pressure from the pipework. Connect the water inlet and outlet on the control valve (or bypass) directly to the water supply using the BSPT pieces and flexible hoses. Use gaskets to prevent leakage.

Important: The inlet must be connected to the incoming water supply, and the outlet to the downstream line. These are marked with directional arrows.

STEP 5: INSTALL DRAIN LINE AND OVERFLOW LINE

Install a clamp saddle or Y-piece on the drain pipe. Add a siphon to prevent unpleasant odours. Attach a drain hose to the control valve. Attach an overflow hose to the back of the salt reservoir. Ensure that the overflow can always drain downwards.



Important: Assemble the nut and insert in the correct order. First, slide the nut onto the drain hose. Then press the insert firmly into the hose and screw the nut onto the drain line connection on the control valve.

STEP 6: INSTALL BRINE TUBE

Connect the control valve to the brine tank using the brine tube. Push one end of the tube firmly into the brine tube connection on the control valve. Connect the other end to the brine tube fitting on the float of the brine tank.

Important: Assemble the nut and insert in the correct order. First, slide the nut onto the drain hose. Then press the insert firmly into the hose and screw the nut onto the float on the brine tank.

STEP 7A: COMMISSIONING (WITHOUT BYPASS)

1. Plug the power cord into a suitable electrical outlet. The display will turn on.
2. Press and hold REGEN for 3 seconds to start a manual regeneration.
3. Slowly open the main water shut-off valve.
4. Allow the softener to complete the remaining stages:

Backwash → Brine → Rinse → Refill

5. Check all connections for leaks during every stage.
6. Slowly open a tap and let the water run for 30 seconds.

STEP 7B: COMMISSIONING (WITH BYPASS)

1. Plug the power cord into a suitable electrical outlet. The display will turn on.
2. Set the bypass valve to Bypass mode by closing both the inlet and outlet.
3. Open the main water shut-off valve.
4. Press and hold REGEN for 3 seconds to start a manual regeneration.
5. When Backwash starts, slowly open the inlet on the bypass while keeping the outlet closed (diagnostic mode) to release trapped air.
6. After Backwash has finished, approximately 5 minutes, open the outlet of the bypass (service mode).
7. Allow the softener to complete the remaining stages:

Backwash → Brine → Rinse → Refill

8. Check all connections for leaks during every stage.

TIP

During initial commissioning, the Brine stage may be skipped because the brine tank does not yet contain brine. Press the REGEN button once to advance to the next stage. Only skip the Brine stage during initial commissioning. During all future regenerations, the complete regeneration cycle must be allowed to run.

STEP 8: FILL THE BRINE TANK WITH SALT

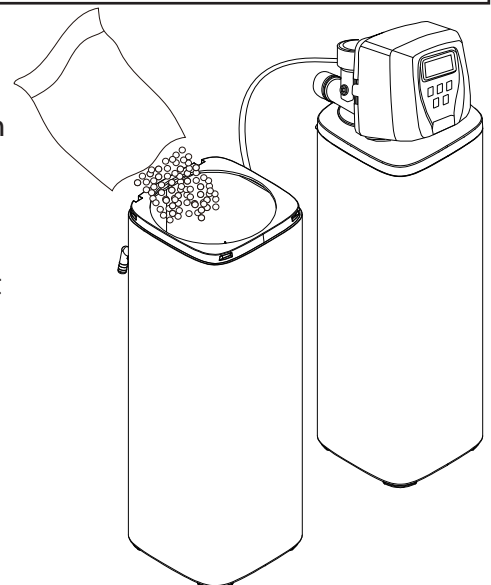
Once the full regeneration cycle has finished, fill the brine tank with salt tablets.

STEP 9: TEST WATER HARDNESS

Let the tap run for a few seconds before taking a water sample. Test the hardness of the treated water. The result should be 0 °dH.

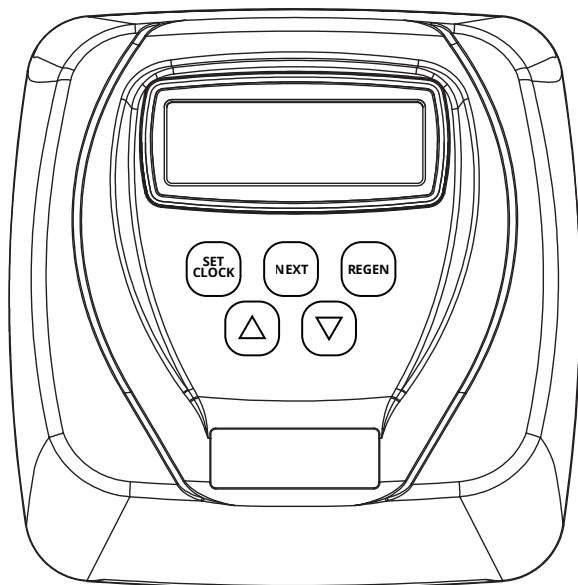
AUTOMATIC WATER BYPASS DURING REGENERATION

The regeneration cycle lasts approximately 70 minutes, after which softened water service will be restored. During regeneration, untreated hard water is automatically bypassed into the household supply. Hot water use should be minimized during this period to prevent hard water from entering and filling the water heater. For this reason, automatic regeneration is typically scheduled during the night, and manual regenerations should be started at times when little or no water will be used in the home.



PROGRAMMING GUIDE

FAMILIARIZE WITH KEY PAD CONFIGURATION



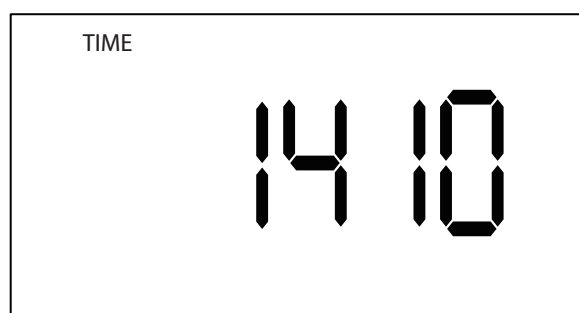
- SET CLOCK** Press to set current time or to go back to main screen.
- NEXT** Press to navigate through display menu or confirm a setting.
- REGEN** Press once to schedule regeneration at the pre-set time. Press and hold for 3 seconds to start a manual regeneration immediately.
- ▲** Press to change value (higher)
- ▼** Press to change value (lower)

QUICK SETUP GUIDE

MAIN SCREEN

Press "NEXT" to cycle through the information shown on the display:

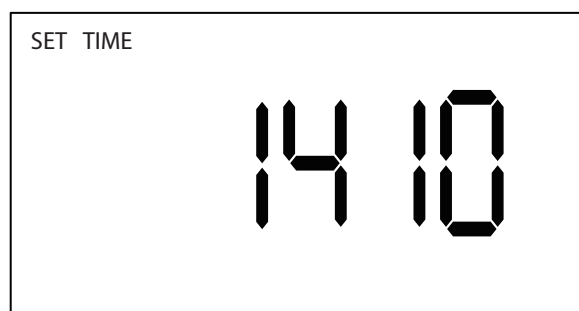
Days until the next planned regeneration → Current time → Current flow rate (L/min) → Remaining capacity until regeneration



STEP 1 SET CURRENT TIME

Press the "SET CLOCK" button once.

Use the ▲ and ▼ buttons to set the current time then confirm with "NEXT" to go back to the main screen.

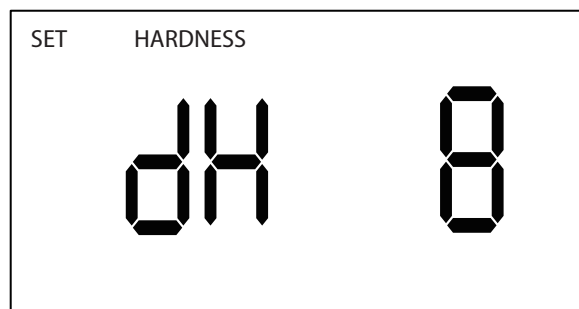


STEP 2 SET WATER HARDNESS

Press the "NEXT" and ▲ button simultaneously. To open the settings menu.

Use the ▲ and ▼ buttons to set the incoming water hardness, then confirm with "NEXT" to continue.

Press the "SET CLOCK" button to return to the main screen. Leave all other settings unchanged.



ADVANCED SETTINGS



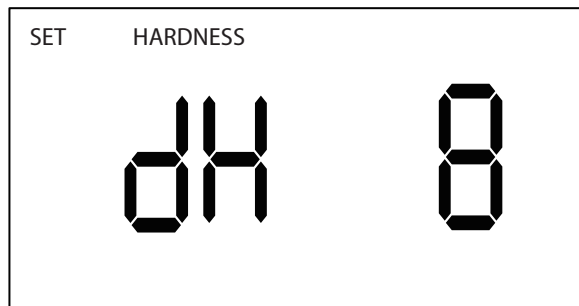
CAUTION

Changing these settings to values other than the recommended ones may cause the water softener to malfunction. Always consult your installer before making adjustments.

STEP 1: SET WATER HARDNESS

Press the "NEXT" and **▲** button simultaneously. To open the settings menu.

Use the **▲** and **▼** buttons to set the incoming water hardness, then confirm with "NEXT" to continue.



STEP 2: SET SERVICE WATER HARDNESS

Only required when using the mixing valve (see [bottom section of this page](#))

Use the **▲** and **▼** buttons to set the service water hardness, then confirm with "NEXT" to continue.

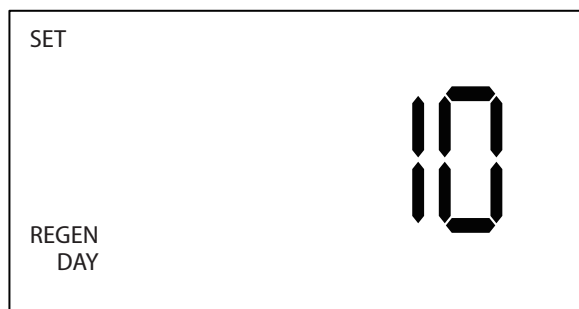
Standard value is 0.



STEP 3: SET MAXIMUM DAYS UNTIL REGENERATION

Use the **▲** and **▼** button to set the maximum number of days until the system does a forced regeneration. Then confirm with "NEXT" to continue.

Standard value is **10 days**.



STEP 4: SET TIME OF REGENERATION

Use the **▲** and **▼** buttons to set the regeneration start time. During regeneration the softener supplies hard water. Recommended time: **02:00**.

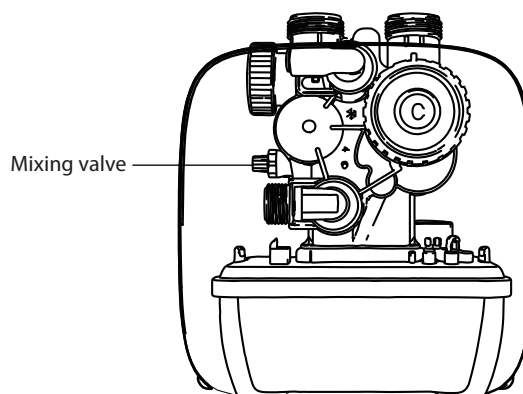
1. Set the hour and confirm with "NEXT" to continue.
2. Set the minutes and confirm again with "NEXT" to return to the main screen.



MIXING VALVE

The mixing valve on the side of the control valve can be used to set a desired residual hardness. Turning the valve mixes a small amount of untreated hard water with the softened water.

Test the water hardness and adjust the mixing valve until the desired hardness is reached. Then open the settings menu and set the service water hardness to the measured value.



MAINTENANCE INSTRUCTIONS

CHECK THE SALT LEVEL

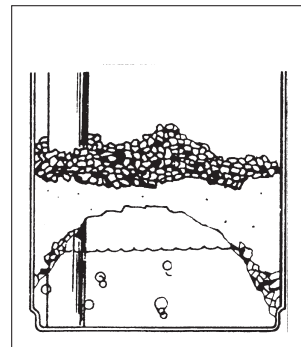
Check the salt level monthly. Remove the lid from the cabinet or brine tank, make sure salt level is always above the water level.

ADDING SALT

Use only clean salt labelled for water softeners. We advice to only use salt tablets, not crystals, to avoid salt crystallization in the brine tank. Add the salt directly to the tank, filling no higher than the top of the brine well.

BRIDGING

Humidity or the use of the wrong type of salt can create a cavity between the water and the salt. This is known as "bridging" and prevents proper brine formation, causing the water softener to function incorrectly. As a result, your water may become hard again.



If you suspect salt bridging, carefully pound on the outside of the plastic cabinet or pour some warm water over the salt to break up the bridge. Clean the brine tank and fill the tank with fresh salt. Wait for four hours and manually regenerate the softener.

RESIN CLEANER

Add 200ml resin cleaner every 3-6 months to the brine tank to ensure the softener remains in optimal condition.



TAKE CARE OF YOUR WATER SOFTENER

Clean occasionally with a mild soap solution. Do not use abrasive cleaners, ammonia or solvents. Never subject your softener to freezing.

OPERATION DURING A POWER FAILURE

In the event of a power failure, the valve retains the correct time and day. All programmed settings are stored in non-volatile memory and will not be lost.

If power fails while the unit is in regeneration, the valve will automatically resume and complete the regeneration cycle from the point where it stopped once power is restored. If a scheduled regeneration is missed due to a power failure, the valve will automatically queue the regeneration and carry it out at the next scheduled time after power is restored.

WATER BYPASS (OPTIONAL)

A bypass allows you to divert water around the softener. This is especially useful for applications with high water demand, such as garden irrigation or other bulk water use where you don't necessarily need softened water. By using the bypass in these situations, you reduce the load on the system and save on salt consumption, while keeping the installation flexible and easy to manage.

BYPASS INSTALLATION

STEP 1 (OPTIONAL): CONNECT THE VERTICAL ADAPTERS

Connect the vertical adapter to the control valve inlet and outlet ports.

If you do not have a vertical adapter, continue to step 2.

STEP 2: CONNECT BYPASS

Connect the bypass to the vertical adapters.

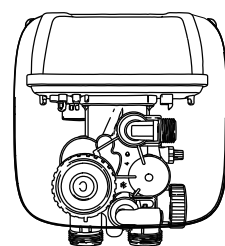
If no vertical adapter is installed, connect the bypass directly to the control valve inlet and outlet ports.

STEP 3: INSTALL BSPT PIECES

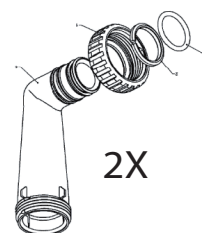
Install the BSPT pieces onto bypass of the control valve and tighten the union nuts.

Note: Do not use the fittings to support or carry any pipework.

Continue to Step 4 on page 11.

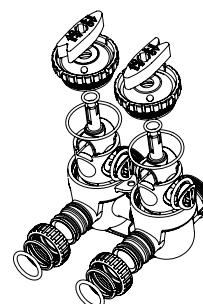


Control valve inlet and outlet ports



2X

Vertical adapter (Optional)



Bypass

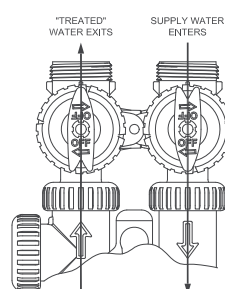
BYPASS INSTRUCTION

The water softener can be disconnected from the household water supply using the bypass valve located at the back of the control unit.

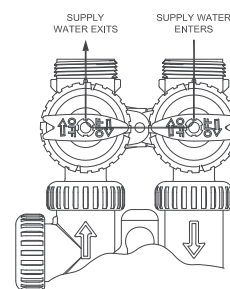
STEP 1: Locate the two bypass knobs on the bypass.

STEP 2: Turn the knobs to the "bypass" position to take the water softener out of service. Note: The knobs may be stiff.

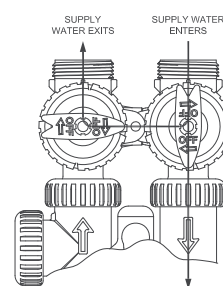
STEP 3: Turn the knobs back to the "service" position to put the water softener back into operation.



Service mode



Bypass mode



Diagnostic mode

NOTE

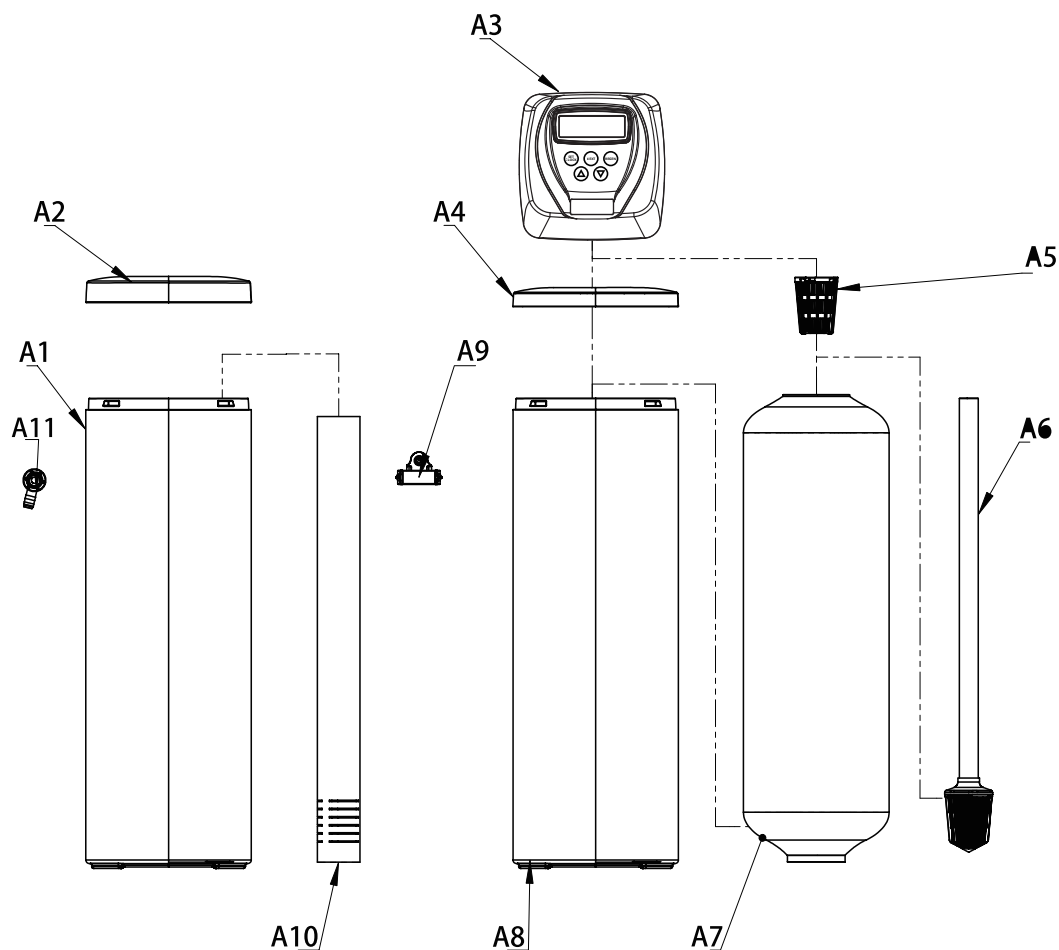
Always make sure the bypass knobs are fully open during use. If they are not completely open, untreated hard water may bypass the softener.

TROUBLE SHOOTING GUIDE

Problem	Possible Solutions
1. SOFTENER DELIVERS HARD WATER A. Bypass valve is open B. No salt in brine tank C. Injector or screen clogged D. Insufficient water entering brine tank E. Leak at distributor tube F. Internal valve leak G. Flow meter jammed H. Flow meter cable disconnected or not plugged into meter cap I. Improper programming	A. Close bypass valve B. Add salt to brine tank and maintain salt level above water level C. Replace injectors and screen D. Check brine refill time and clean brine line flow control if clogged E. Inspect distributor tube for cracks; check O-ring and tube pilot F. Replace seals and spacers and/or piston G. Remove obstruction from flow meter H. Check meter cable connection to timer and meter cap I. Reprogram the control to the proper regeneration type, inlet water hardness, capacity or flow meter size.
2. SOFTENER FAILS TO REGENERATE A. Electrical service to unit has been interrupted B. Timer is not operating properly C. Defective valve drive motor D. Improper programming	A. Ensure permanent electrical service (check fuse, plug, chain or switch) B. Replace timer C. Replace drive motor D. Check programming and reset as needed
3. UNIT USES TOO MUCH SALT A. Improper salt setting B. Excessive water in brine tank C. Improper programming	A. Check salt usage and salt setting B. See #7 C. Check and reset programming
4. LOSS OF WATER PRESSURE A. Iron build-up in line to water softener B. Iron build-up in water softener C. Inlet of control plugged due to foreign material broken loose from pipes by recent work done on plumbing system.	A. Clean supply line to water softener B. Clean control valve and add resin cleaner to resin bed. Increase frequency of regeneration C. Remove piston and clean control
5. LOSS OF RESIN THROUGH DRAIN LINE A. Air in water system B. Drain line flow control is too large	A. Assure that well system has proper air eliminator control. Check brine line connections. B. Ensure drain line flow control is correctly sized
6. IRON IN SOFTENED WATER A. Fouled resin bed B. Iron content exceeds recommended parameters	A. Check backwash, brine draw and brine tank fill. Increase frequency of regeneration. Increase backwash time. B. Add iron removal filter system
7. EXCESSIVE WATER IN BRINE TANK A. Plugged drain line flow control B. Brine valve failure C. Improper programming	A. Clean flow control B. Replace brine valve C. Check programming and reset as needed
8. SALT WATER IN SERVICE LINE A. Plugged injector system B. Timer not operating properly C. Foreign material in brine valve D. Foreign material in brine line flow control E. Low water pressure F. Improper programming	A. Clean injector and replace screen B. Replace timer C. Clean or replace brine valve D. Clean brine line flow control E. Raise water pressure F. Check programming and reset as needed
9. SOFTENER FAILS TO DRAW BRINE A. Drain line flow control is plugged B. Injector is plugged C. Injector screen is plugged D. Line pressure is too low E. Internal control leak F. Improper programming G. Timer not operating properly	A. Clean drain line flow control B. Clean or replace injectors C. Replace screen D. Increase line pressure (line pressure must be at least 20 psi at all times) E. Change seals and spacers and/or piston assembly F. Check programming and reset as needed G. Replace timer
10. CONTROL CYCLES CONTINUOUSLY A. Timer not operating properly B. Faulty micro-switches and/or harness C. Faulty cycle cam operation	A. Replace timer B. Replace faulty micro-switch or harness C. Replace cycle cam or reinstall
11. DRAIN FLOWS CONTINUOUSLY A. Foreign material in control B. Internal control leak C. Control valve jammed in backwash, brine or rinse position D. Timer motor stopped or jammed teeth E. Timer not operating properly	A. Remove piston assembly and inspect bore. Remove foreign material and check control in various regeneration positions B. Replace seals and/or piston assembly C. Replace piston and seals and spacers D. Replace timer motor and check all gears for missing teeth E. Replace timer

PARTS BREAKDOWN

SOFTENER PARTS

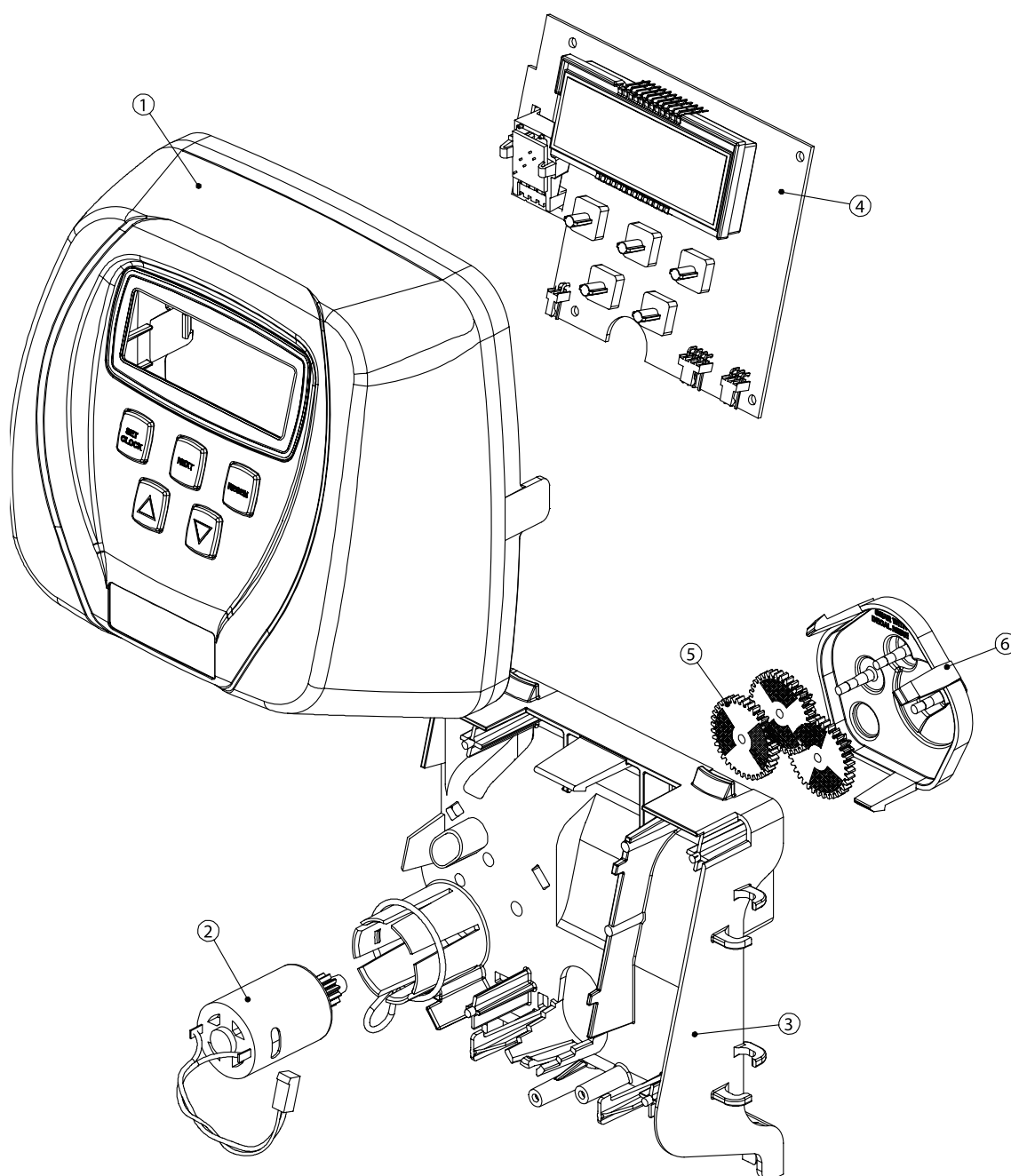


Drawing No.	Part #	Description	Qty
A1	2020010357	Brine Tank-DS03-0818	1
	2020010353	Brine Tank-DS03-0826	1
A2	2020010358	Brine Tank Lid	1
A3	2010004910	Control Valve Assy	1
A4	2020010323	Cabinet Cover	1
A5	2020001520	Top Distributor	1
A6	2010001114	Distribution Assy(18")	1
	2010001111	Distribution Assy(26")	1
A7	2010000273	0818 Pressure Tank(Black)	1
	2010000282	0826 Pressure Tank(Black)	1
A8	2020010356	Cabinet-DS03-0818	1
	2020010354	Cabinet-DS03-0826	1
A9	2020003450	Brine Well Clamp Assy	1
A10	2020010490	Brine Valve&Brine Well Assy 0217	1
	2020010491	Brine Valve&Brine Well Assy 0226	1
A11	2020007651	Overflow Assy	1

FRONT COVER AND DRIVE ASSEMBLY

Drawing No.	Order No.	Description	Quantity
1	V3175CI-01	WS1CI Front Cover ASY	1
2	V3107-01	WS1 Motor	1
3	V3106-01	WS1 Drive Bracket & Spring Clip	1
4	V3108CI	WS1/1.5CI PC Board	1
5	V3110	WS1 Drive Gear 12x36	3
6	V3109	WS1 Drive Gear Cover	1
	V3002CI	WS1CI Drive ASY	*
Not Shown	V3186	WS1 AC ADAPTER 110V-12V	1
	V3186EU	WS1 AC ADAPTER 220-240V-12V EU	
	V3186UK	WS1 AC ADAPTER 220-240V-12V UK	
	V3186-01	WS1 AC ADAPTER CORD ONLY	

* Drawing number parts 2 through 6 may be purchased as a complete assembly, part V3002CI.

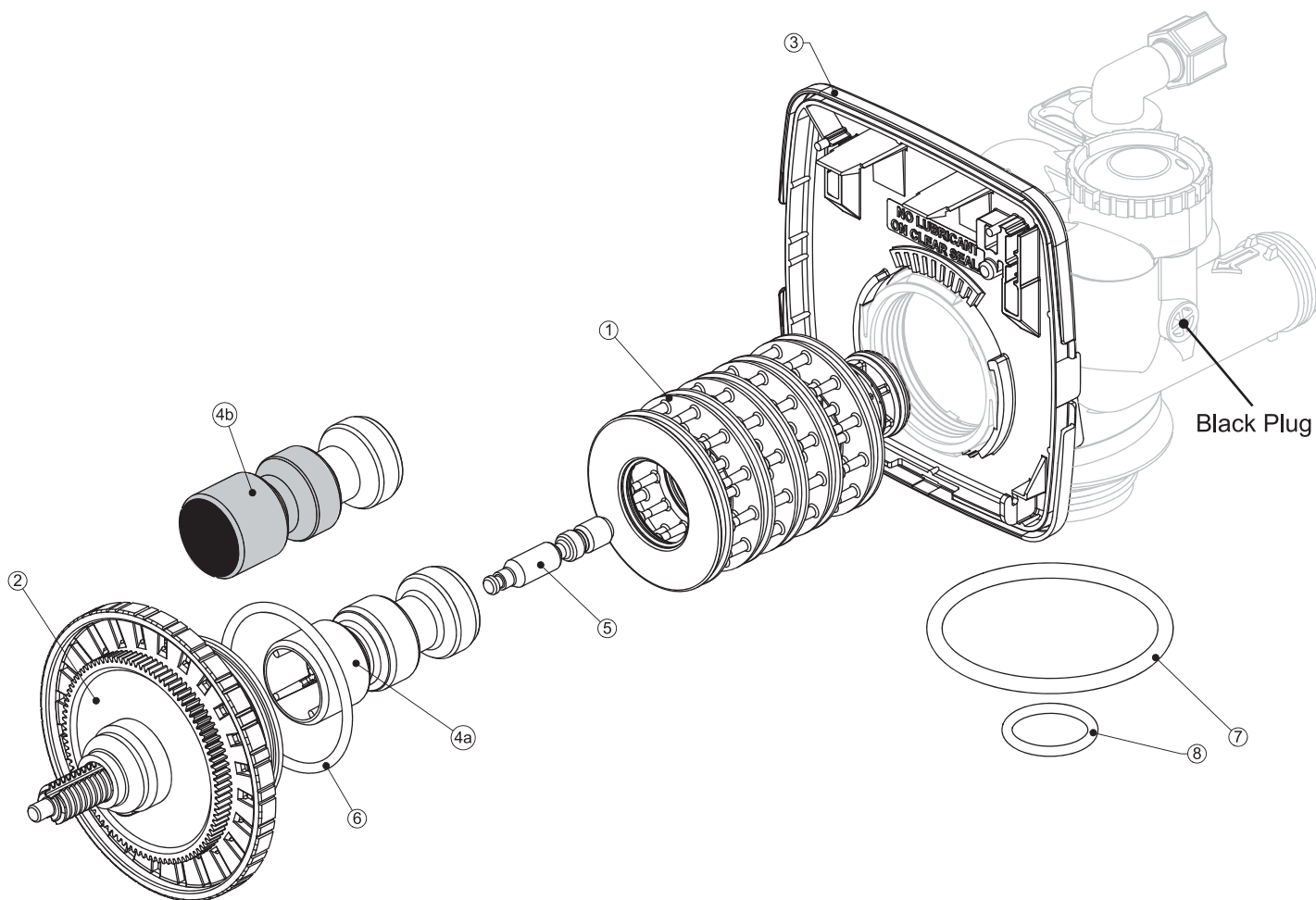


DRIVE CAP AND PISTON ASSEMBLY

Drawing No.	Order No.	Description	Quantity
1	V3005	WS1 Spacer Stack Assembly	1
2	V3004	Drive Cap ASY	1
3	V3178	WS1 Drive Back Plate	1
4a	V3011*	WS1 Piston Downflow ASY	1
4b	V3011-01*	WS1 Piston Upflow ASY	
5	V3174	WS1 Regenerant Piston	1
6	V3135	O-ring 228	1
7	V3180	O-ring 337	1
8	V3105	O-ring 215 (Distributor Tube)	1
Not Shown	V3001	WS1 Body ASY Downflow	1
	V3001-02	WS1 Mixing Valve Body ASY	
	V3001UP	WS1 Body ASY Upflow	
	V3001-02UP	WS1 Mixing Valve Body Upflow ASY	

*V3011 is labeled with DN and V3011-01 is labeled with UP.

Note: The regenerant piston is not used in backwash only applications.

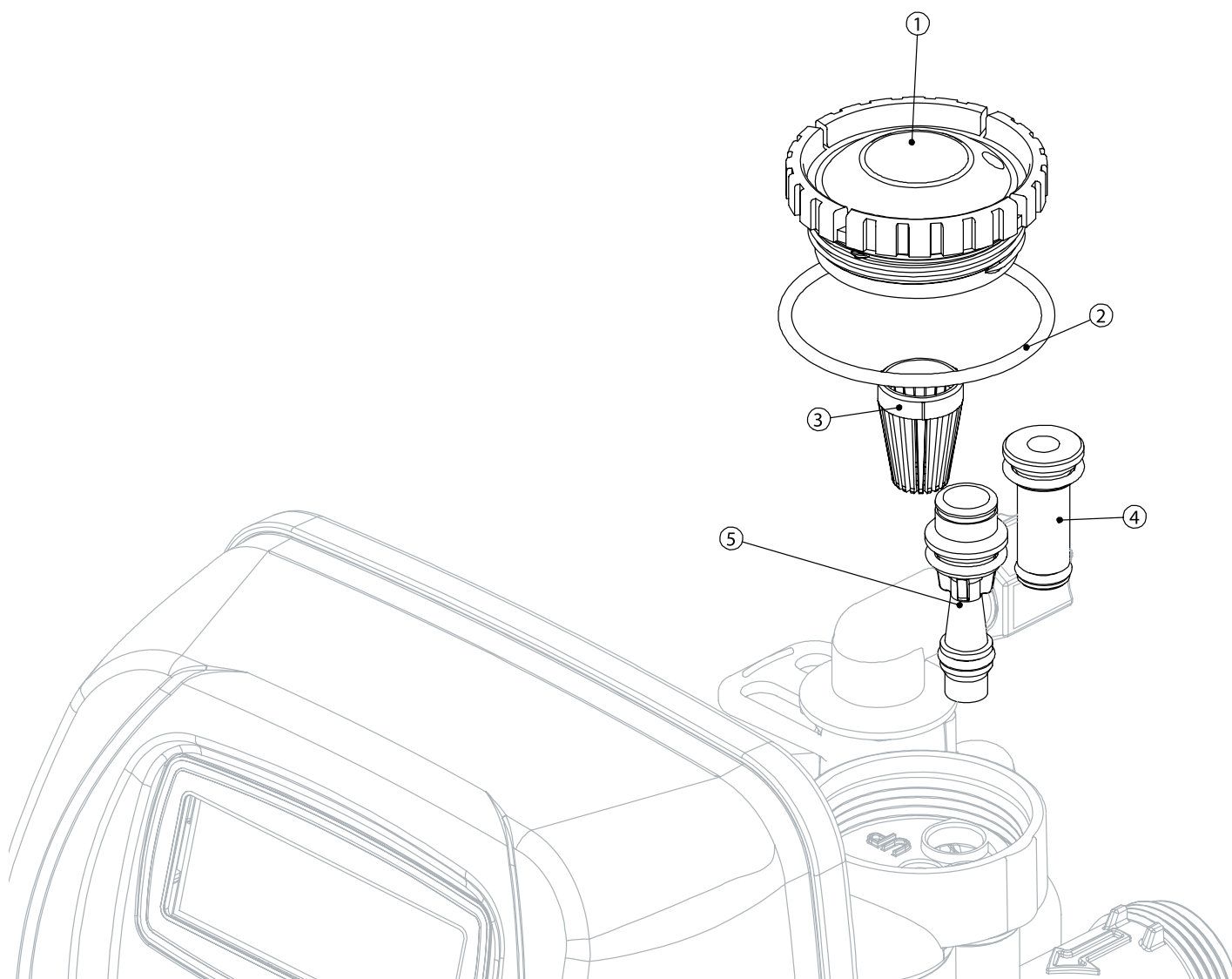


INJECTOR ASSEMBLY

Drawing No.	Order No.	Description	Quantity
1	V3176	Injector Cap	1
2	V3152	O-ring 135	1
3	V3177	Injector Screen	1
4	V3010-1Z	WS1 Injector ASY Z Plug	1
5	V3010-1A	WS1 INJECTOR ASY A BLACK	1
	V3010-1B	WS1 INJECTOR ASY B BROWN	
	V3010-1C	WS1 INJECTOR ASY C VIOLET	
	V3010-1D	WS1 INJECTOR ASY D RED	
	V3010-1E	WS1 INJECTOR ASY E WHITE	
	V3010-1F	WS1 INJECTOR ASY F BLUE	
	V3010-1G	WS1 INJECTOR ASY G YELLOW	
	V3010-1H	WS1 INJECTOR ASY H GREEN	
	V3010-1I	WS1 INJECTOR ASY I ORANGE	
	V3010-1J	WS1 INJECTOR ASY J LIGHT BLUE	
	V3010-1K	WS1 INJECTOR ASY K LIGHT GREEN	
Not Shown	V3170	O-ring 011	*
Not Shown	V3171	O-ring 013	*

*The injector plug and the injector each contain one 011 (lower) and 013 (upper) o-ring.

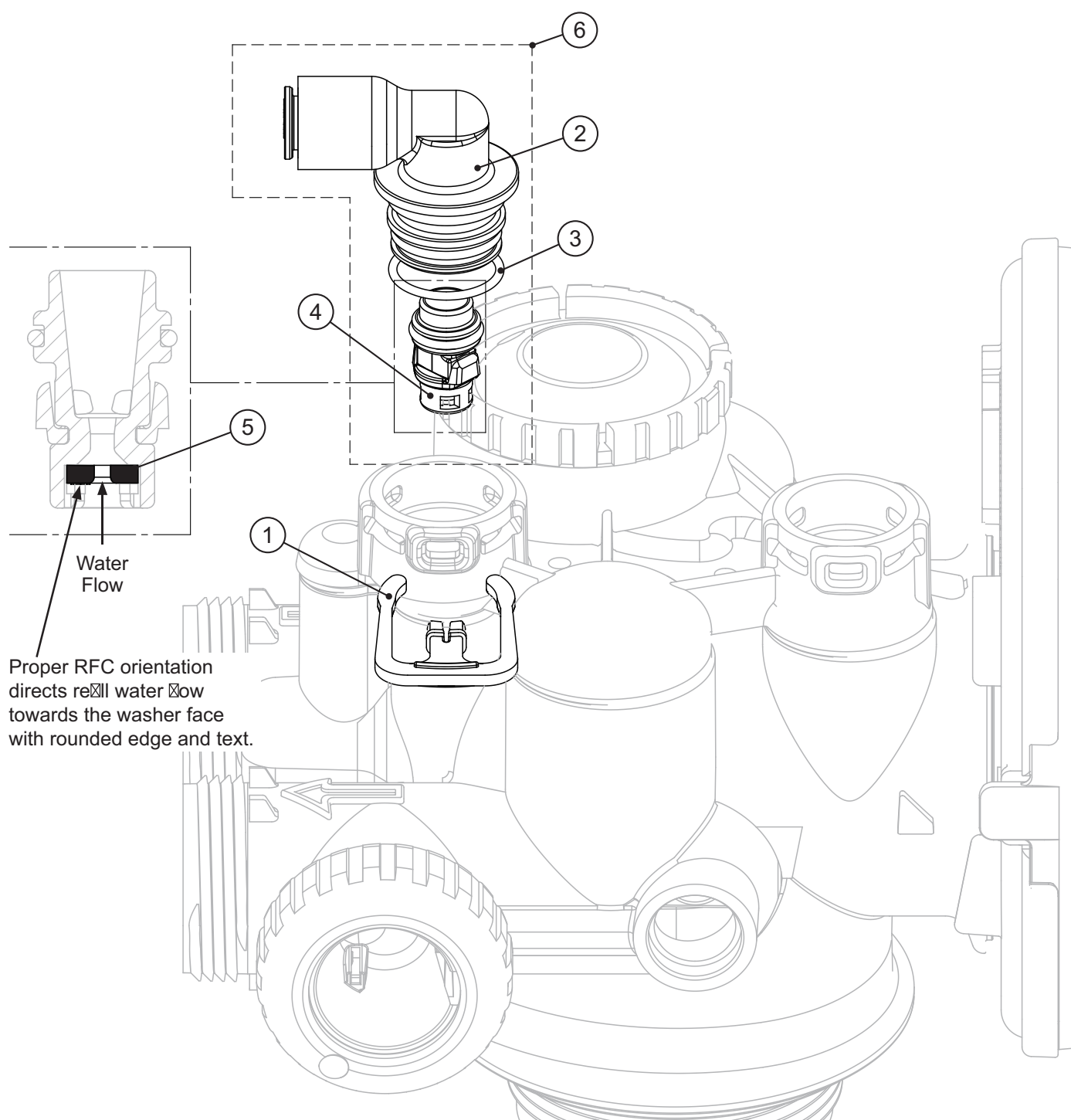
Note: For upflow position, injector is located in the up hole and injector plug is in the other hole. WS1CI upflow bodies are identified by having the DN marking removed. For a backwash only filter, injector plugs are located in both holes.



REFILL FLOW CONTROL ASSEMBLY

Drawing No.	Order No.	Description	Quantity
1	H4615	Elbow Locking Clip	1
2	H4628	Elbow 3/8 Brine QC	1
3	V3163	O-ring 019	1
4	V3165-01*	WS1 RFC Retainer Asy (0.5 gpm)	1
5	V3182	WS1 RFC	1
6	V4144-01	Elbow 3/8 Brine QC w/RFC	1
Not Shown	V3552	WS1 Brine Elbow Asy w/RFC	Option
Not Shown	H4650	Elbow 1/2" with nut and insert	Option

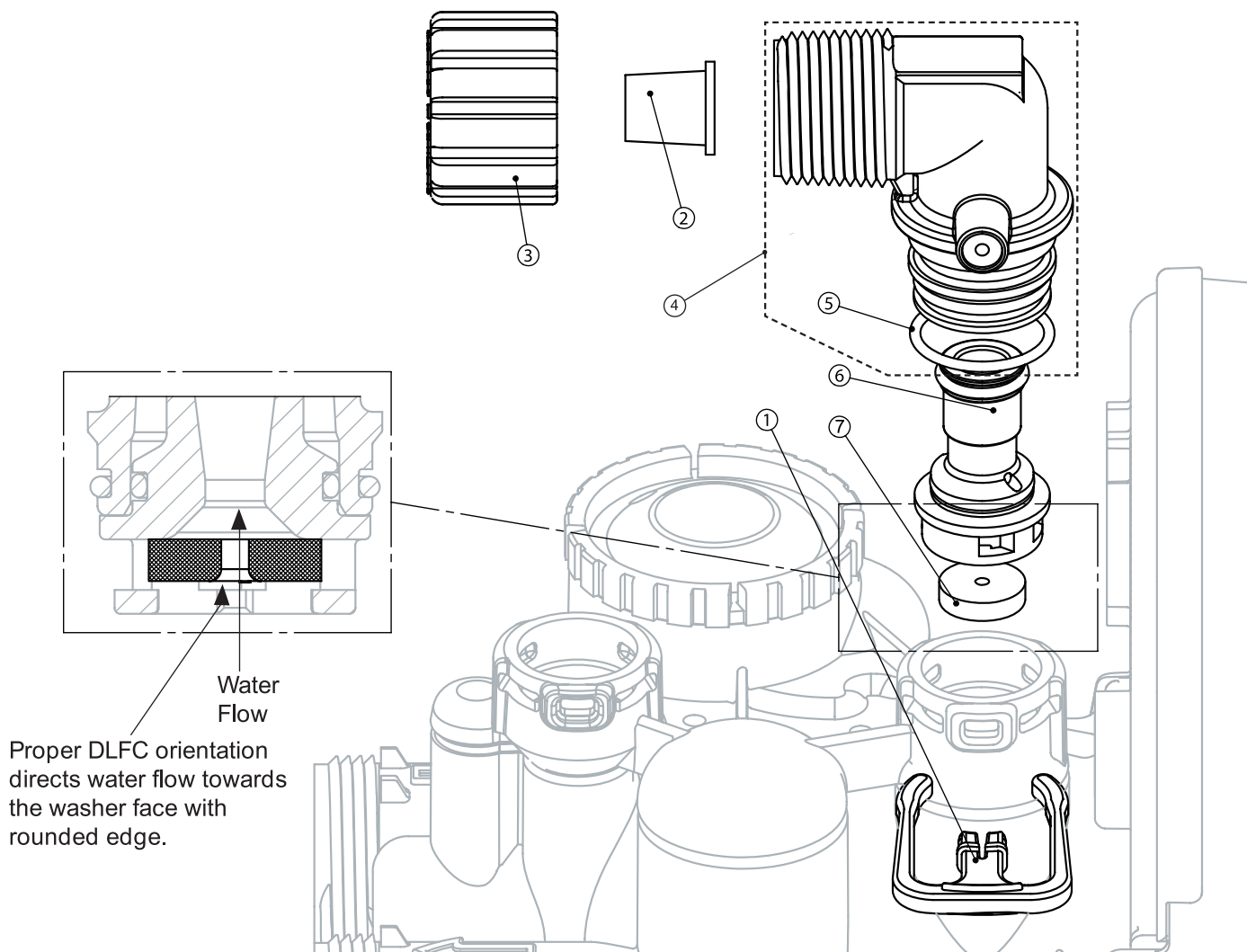
*Assembly includes V3182 WS1 (0.5 gpm) RFC.



DRAIN LINE ASSEMBLY

Drawing No.	Order No.	Description	Quantity
1	H4615	Elbow Locking Clip	1
2	PKP10TS8-BULK	Polytube insert 5/8	Option
3	V3192	WS1 Nut ¾ Drain Elbow	Option
4*	V3158-01	WS1 Drain Elbow ¾ Male	1
5	V3163	O-ring 019	1
6*	V3159-01	WS1 DLFC Retainer ASY	1
7	V3162-007	WS1 DLFC 0.7 gpm for ¾	One DLFC must be used if ¾ fitting is used
	V3162-010	WS1 DLFC 1.0 gpm for ¾	
	V3162-013	WS1 DLFC 1.3 gpm for ¾	
	V3162-017	WS1 DLFC 1.7 gpm for ¾	
	V3162-022	WS1 DLFC 2.2 gpm for ¾	
	V3162-027	WS1 DLFC 2.7 gpm for ¾	
	V3162-032	WS1 DLFC 3.2 gpm for ¾	
	V3162-042	WS1 DLFC 4.2 gpm for ¾	
	V3162-053	WS1 DLFC 5.3 gpm for ¾	
	V3162-065	WS1 DLFC 6.5 gpm for ¾	
	V3162-075	WS1 DLFC 7.5 gpm for ¾	
	V3162-090	WS1 DLFC 9.0 gpm for ¾	
	V3162-100	WS1 DLFC 10.0 gpm for ¾	

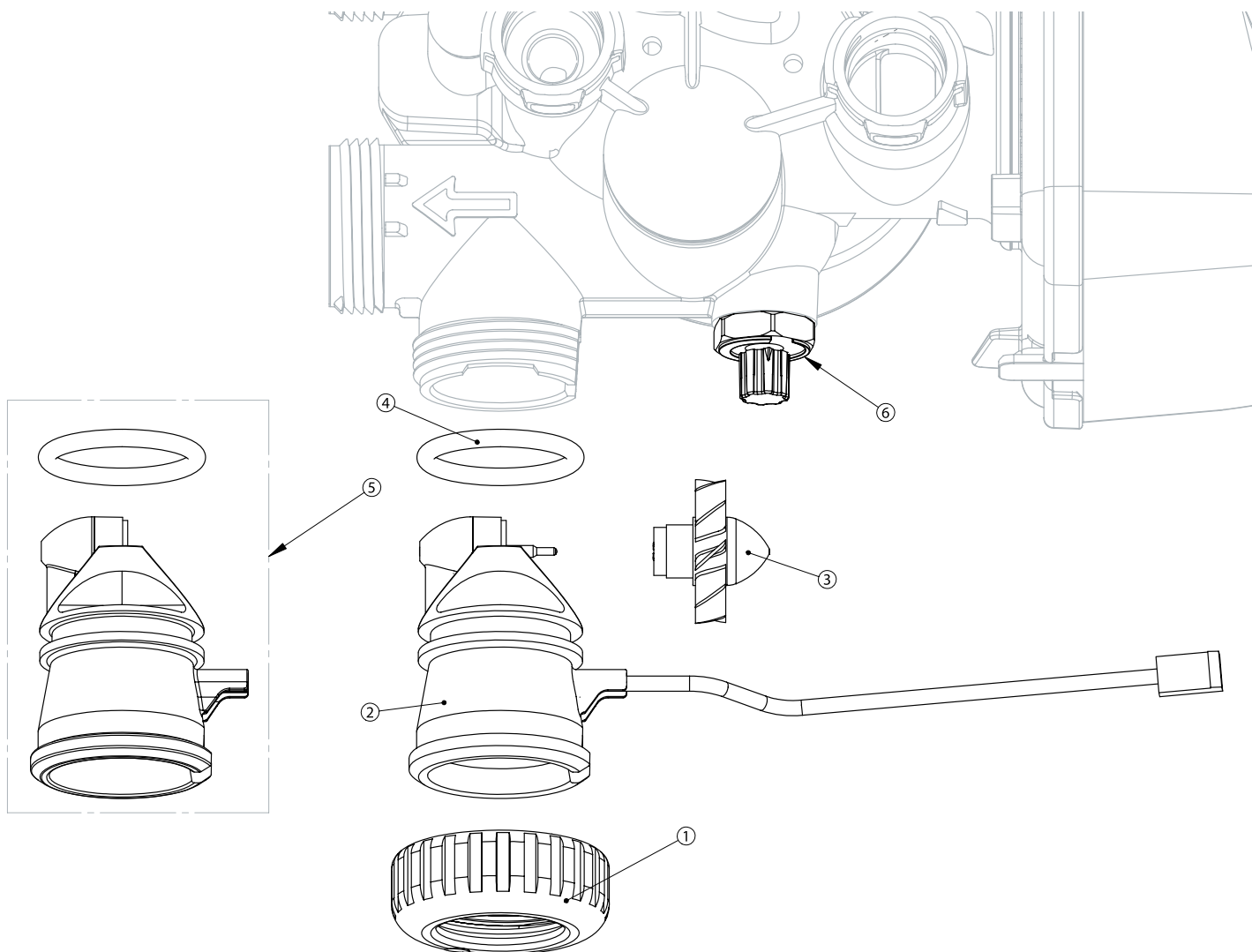
*4 and 6 can be ordered as a complete assembly - V3331 WS1 Drain Elbow and Retainer Asy



WATER METER, METER PLUG AND MIXING VALVE

Drawing No.	Order No.	Description	Quantity
1	V3151	WS1 Nut 1" QC	1
2	V3003*	WS1 Meter ASY	1
3	V3118-01	WS1 Turbine ASY	1
4	V3105	O-ring 215	1
5	V3003-01	WS1 Meter Plug ASY	1
6	V3013	Mixing Valve	optional

*Order number V3003 includes V3118-01 WS1 Turbine ASY and V3105 O-ring 215.



THIS WATER METER SHOULD NOT BE USED AS THE PRIMARY MONITORING DEVICE FOR CRITICAL HEALTH EFFECT APPLICATIONS.

ORDER MAINTENANCE PRODUCTS



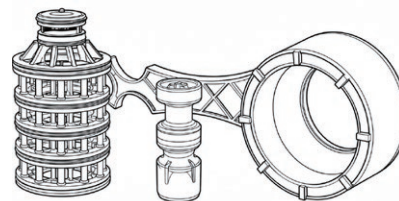
SALT

Ensure the working of your softener.



RESIN CLEANER

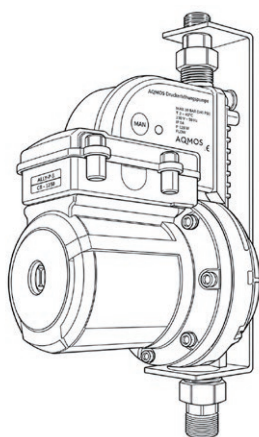
Keep your resin in optimal condition.



CLACK MAINTENANCE KIT

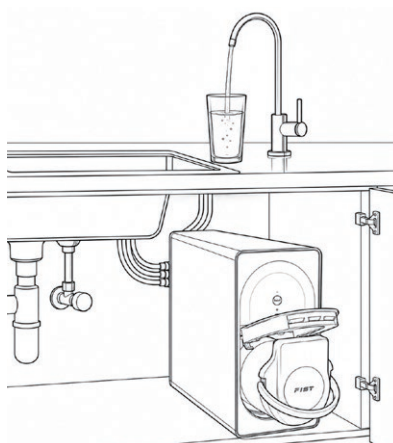
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Eekboerstraat 28M
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The Netherlands

info@aqmos.nl
www.aqmos.nl
+31 541 23 45 60

THANK YOU FOR CHOOSING US. ENJOY YOUR SOFTENED WATER

