



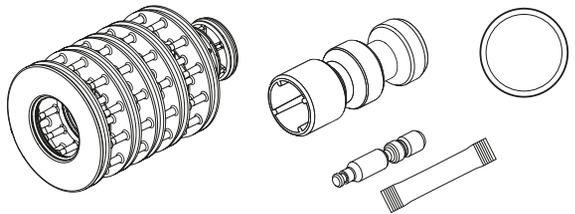
WARNING

THIS PRODUCT CONTAINS A BUTTON BATTERY

If swallowed, a lithium button battery can cause severe or fatal injuries within 2 hours.

Keep batteries out of reach of children.

If you suspect your child has swallowed or inserted a button battery, immediately call the 24-hour Poisons Information Centre 13 11 26 (in Australia).



User Guide

WTV4400

E1 & E3 Automatic Control Valve Service Kit

What's Inside

Puretec Customer Service	2
Introduction	3
Kit Inclusions	3
Servicing Instructions	3
Fig. 1 - E1 Front Cover and Drive Assembly	4
Fig. 2 - E3 Front Cover and Drive Assembly	5
Fig. 3 - Drive Cap Assembly, Pistons and Spacer Stack Assembly	6
Spacer Stack & Piston	7
Fig. 4 - 1" Drain Line	11
Fig. 5 - 3/4" Drain Line Elbow	12
Flow Control Servicing	13
Fig. 6 - 3/8" Brine Line Elbow and Refill Port Plug	14
Fig. 7 - Injector Cap, Injector Screen, Injector Plug & O-ring	15
Replace the Backup Battery	16
Brine System Servicing [Softener Only]	16
Fig. 8 - Water Meter, Meter Plug and Mixing Valve	18
Fig. 9 - WTV5060 - 1" Straight Adaptor, Male	19
Fig. 10 - WTV5070 - 1" Elbow Adaptor, Male	19

Puretec Customer Service

Thank you for purchasing a Puretec E1 & E3 Automatic Control Valve Service Kit.

This user guide contains instructions on how to perform preventative maintenance or repairs on a Puretec E1 or E3 Control Valves. Puretec E1 & E3 control valves can be found on:

- SOL Series Automatic Water Softeners
- IRS & IRX Series Iron Removal Systems
- CFS Series Carbon Filters
- SFS Series backwashing Sediment Filters

Be careful to ensure the information and illustration is applicable to your particular unit.

Call the Puretec Customer Care Team on **1300 140 140 (AU)** and **0800 130 140 (NZ)** for more details.

Introduction

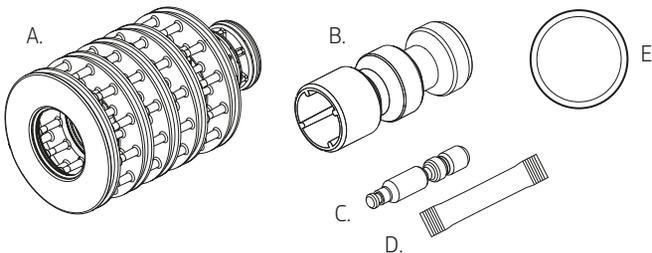
The included spacer stack and piston(s) are key components in redirecting water within the valve. Although faults are rare, the following faults are indications that the spacer stack may need replacing:

- Water is continuously leaking from the backwash drain line
- Unfiltered water is coming from the outlet
- Error codes 1002 or 1003
- Not using any salt
- The brine tank is overflowing
- Salt water being delivered during service

Kit Inclusions

Unpack the kit. Ensure all parts are present and have not been damaged in transport. You should have:

- (A) Spacer Stack Assembly
- (B) Main Piston
- (C) Brine Piston (only used for SOL series valves)
- (D) Food Grade Silicone Lubricant
- (E) BA-CR2032 Battery



Video Servicing Instructions

Scan the QR code for instant access to our training video with step by step instructions.

Fig. 1 - E1 Front Cover and Drive Assembly

No.	Part Code	Description
1	WTV5121	Front Cover, Suits E1 Valve
2	WTV5690	Motor
3	WTV5800	Drive Bracket
4	WTV5720	PCB, Suits E1 Valve

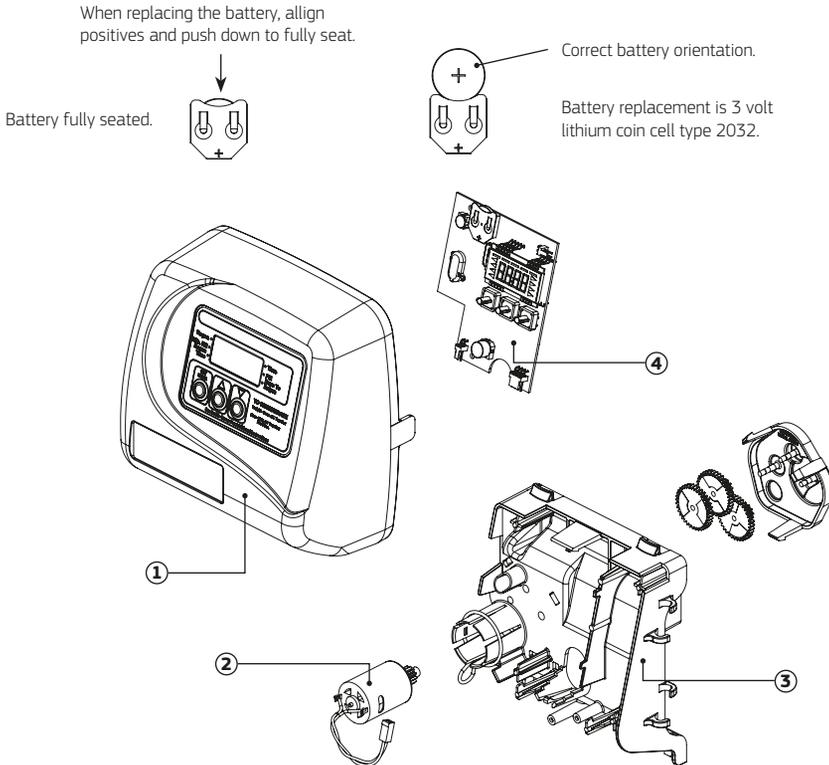


Fig. 2 - E3 Front Cover and Drive Assembly

No.	Part Code	Description
1	WTV5123	Front Cover, Suits E3 Valve
2	WTV5690	Motor
3	WTV5800	Drive Bracket
4	WTV5730	PCB, Suits E3 Valve

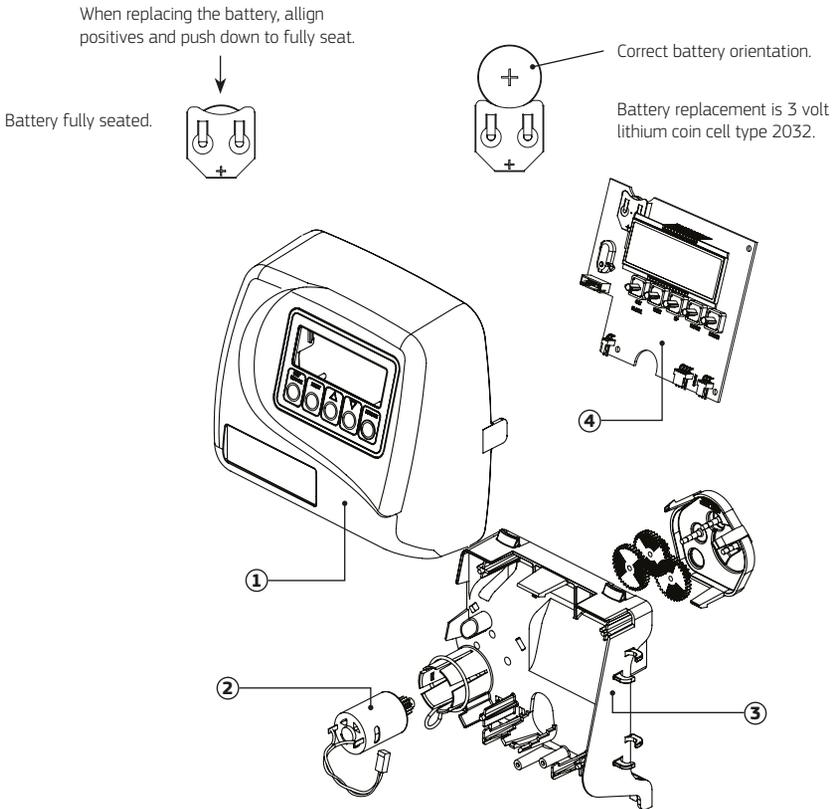
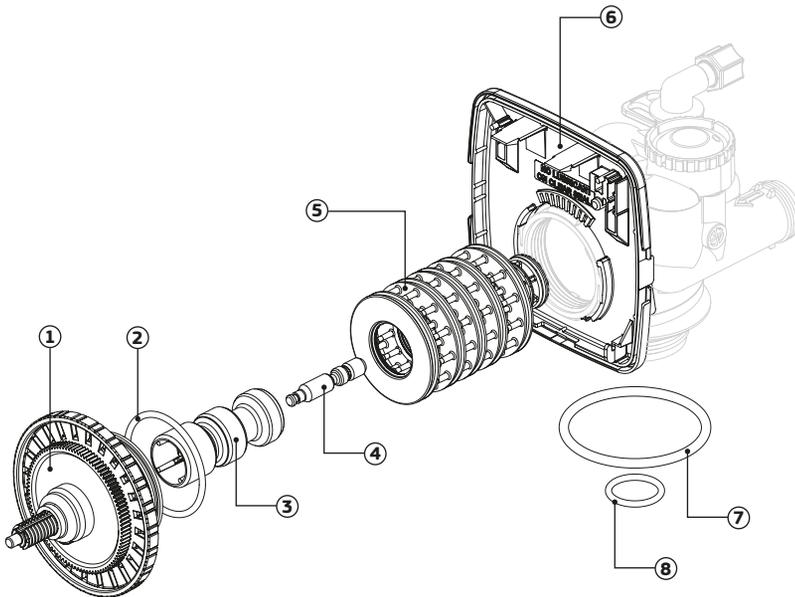


Fig. 3 - Drive Cap Assembly, Pistons and Spacer Stack Assembly

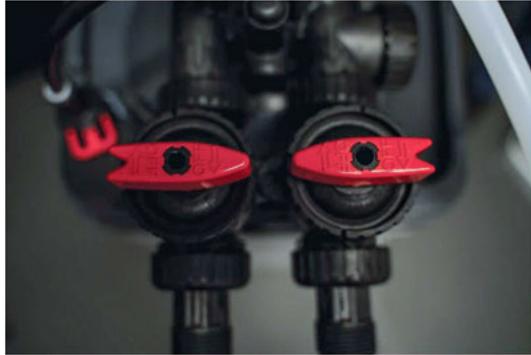
No.	Part Code	Description
1	WTV5510	Drive Cap Assembly
2		O-ring, 228
3	WTV5650	Downflow Piston Assembly
4	WTV6020	Regenerant Piston
5	WTV5520	Spacer Stack Assembly
6	WTV5540	Drive Back Plate
7	WTV6090	Main O-ring, 337
8	WTV6100	O-ring, 215



Spacer Stack & Piston

1. Isolate the water supply and release the pressure by opening an outlet after the system.

NOTE: If you have the optional bypass assembly, turn the handles so that they point toward each other.



2. Remove the weather cover. On a cabinet-style system, reach around the back of the unit and pull the 2 sides of the cover away from the pipe connection and lift.



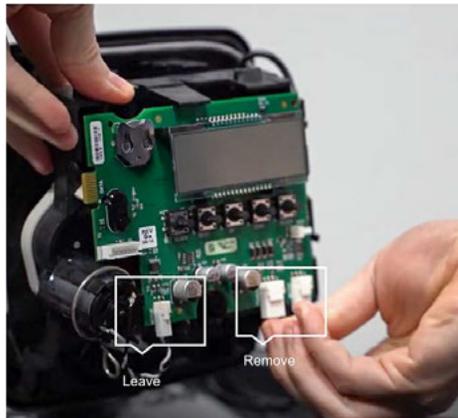
3. For the almond cover, squeeze both sides and lift to release.



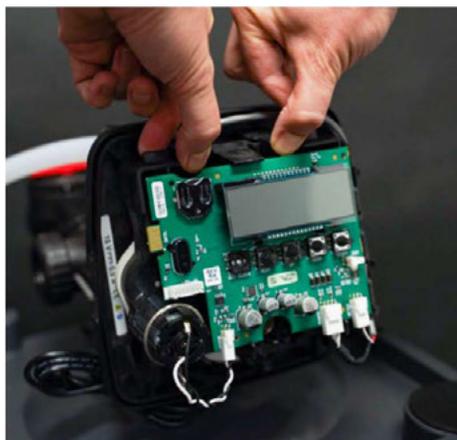
4. Remove the display front cover by pulling the tabs located on either side by pulling them away from the valve body.



5. Disconnect the power supply, and the flow meter or DP switch cables if present. The motor connection on the bottom left can remain connected.



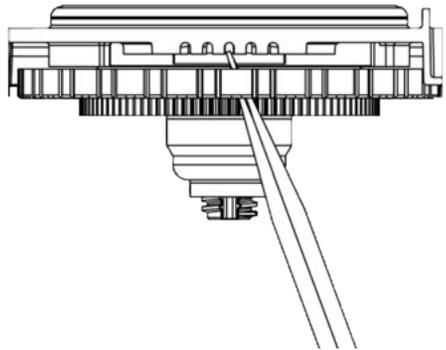
6. Remove the Drive bracket by lifting the 2 tabs at the top of the bracket.



7. Remove the drive cap assembly. To remove the drive cap assembly, if you have the Puretec WTV5180 spanner and multi-tool, use the tool to turn the slotted drive cap assembly anti-clockwise.



Alternatively, if you don't have the spanner, use a flat-headed screwdriver by inserting it through the slots around the top of the drive cap assembly and into the notches moulded into the drive back plate. The notches are visible through the holes. Lever the screwdriver so the drive cap assembly turns counterclockwise.



8. Remove Piston(s) Once the drive cap is removed, you can see the orange piston. The black brine piston is found on the softeners only.

To remove the black brine piston, slide sideways to unsnap it from its latch taking care that it is pressed in the direction of the latch opening.



To remove the main piston(s), turn the white gear anti-clockwise so that the orange piston is fully extended. This will allow the piston to be removed from the spindle and replaced. Unsnap the main piston from its latch by pressing on the side of the piston with the number.



9. Next, remove the grey spacer stack assembly and replace it. The spacer stack has external and internal O-rings for redirecting the water during regeneration or backwash. The internal O-rings are the most common point of damage. The internal O-rings have a custom profile so are not individually replaceable. To remove the spacer stack, simply pull it out with a thumb and forefinger.



10. To reassemble, insert the new spacer stack. If required, use the supplied silicone grease to lubricate the O-rings and piston.
11. Insert the drive cap and piston(s) into the spacer stack and valve body then tighten, taking care to screw it all the way in without over tightening. If you have a softener, make sure the black brine piston is secure before inserting it into the spacer stack.
12. Insert the drive bracket into the bottom locators, and click back into position. If it doesn't snap in easily, check that the wiring is out of the way.
13. Re-attach the cables and front display cover.



Fig. 4 - 1" Drain Line

No.	Part Code	Description
1	WTV5080	1" Drain Line Assembly Body
2		O-ring, 019
3		Split Ring
4		1" Quick Connect Nut
5		1" Drain FTG Adaptor
6		O-ring, 215
7	WTV5410	Elbow Locking Clip
8	WTV5340	Drain Line Flow Connector (DLFC) 42 Lpm

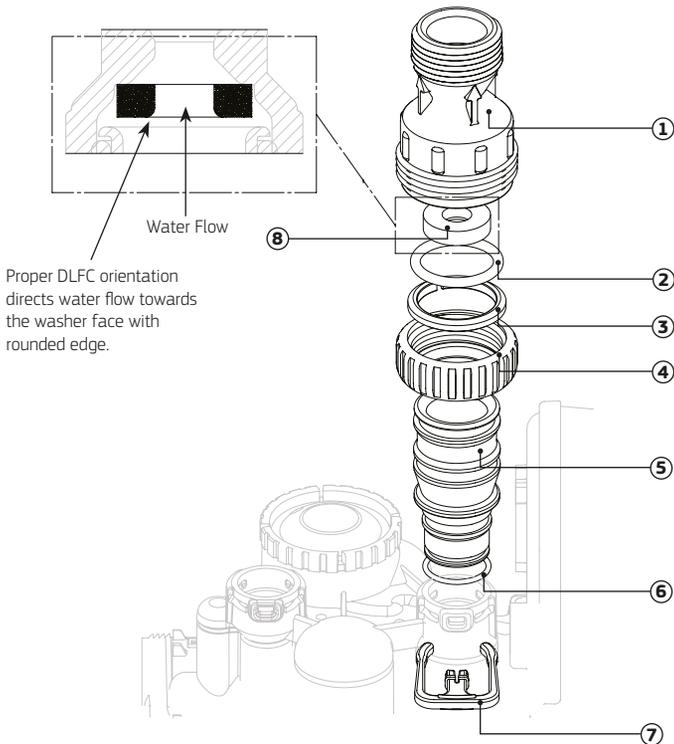
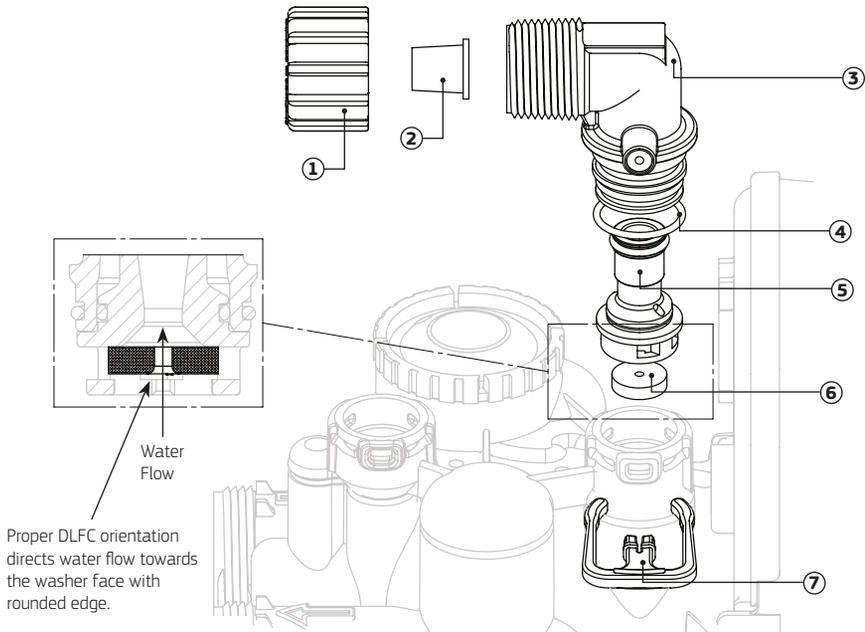


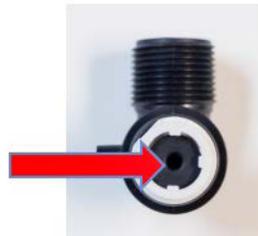
Fig. 5 - 3/4" Drain Line Elbow

No.	Part Code	Description
1	WTV5160	3/4" Nut
2	WTV5170	5/8" Tube Insert
3	WTV5940	3/4" Drain Line Elbow, Male
4	-	O-ring, 019
5	-	DLFC Retainer Assembly
6	WTV5190	Drain Line Flow Connector (DLFC) 2.6 Lpm, suits SOL30
	WTV5240	Drain Line Flow Connector (DVFC) 10.2 Lpm, suits SOL40
	WTV5290	Drain Line Flow Connector (DLFC) 28.4 Lpm, suits SOL45 / SOL60
7	WTV5410	Elbow Locking Clip
3, 4 & 5	WTV5930	3/4" Drain Line Elbow with DLFC Retainer

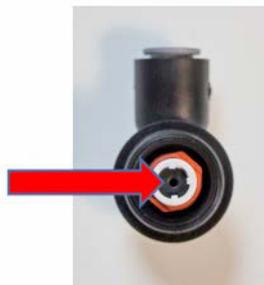


Flow Control Servicing

1. Isolate the water supply and release the pressure by opening an outlet after the system. If you have the optional bypass assembly, turn the handles so that they point toward each other.
2. On top of the control valve, remove the red clip closest to the front of the unit and remove the fitting. This is the drain line flow controller. Inspect the rubber ring and ensure it is free of any obstructions.



3. **[Softener only]** On top of the control valve, remove the red clip closest to the back of the unit and remove the fitting. This is the brine line flow controller. Inspect the rubber ring and ensure it is free of any obstructions.



4. Reassemble ensuring the fitting is fully inserted and locked in with the red clip(s)

Fig. 6 - 3/8" Brine Line Elbow and Refill Port Plug

No.	Part Code	Description
1	WTV5430	3/8" Tube Insert
2	WTV5440	3/8" Nut
3	WTV5400	3/8" Brine Elbow, Male
4	WTV6180	Refill Port Plug
5	-	O-ring, 019
6	-	RFC Retainer Assembly
7	WTV5410	Elbow Locking Clip
1,2,3,5 & 6	WTV3330	3/8" Brine Elbow with RFC Retainer Assembly

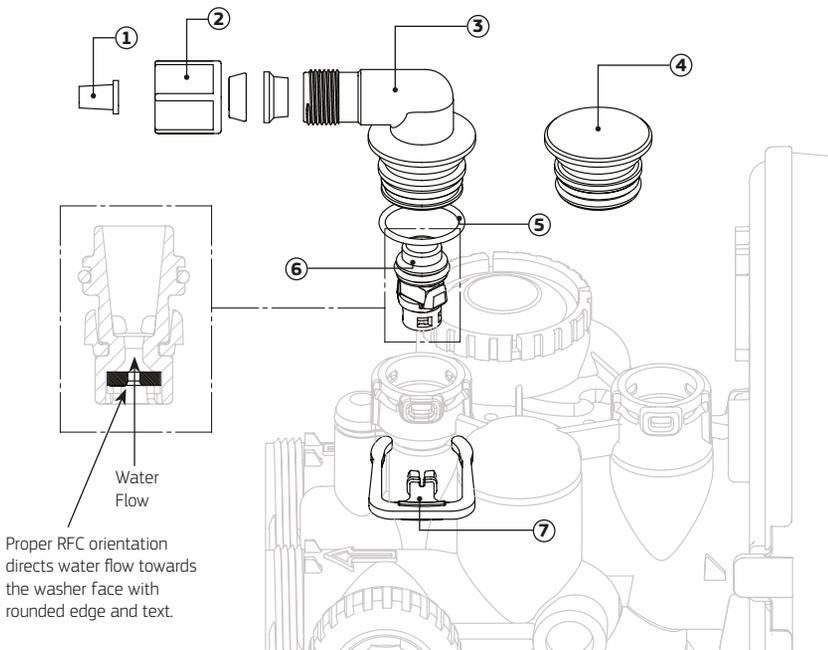
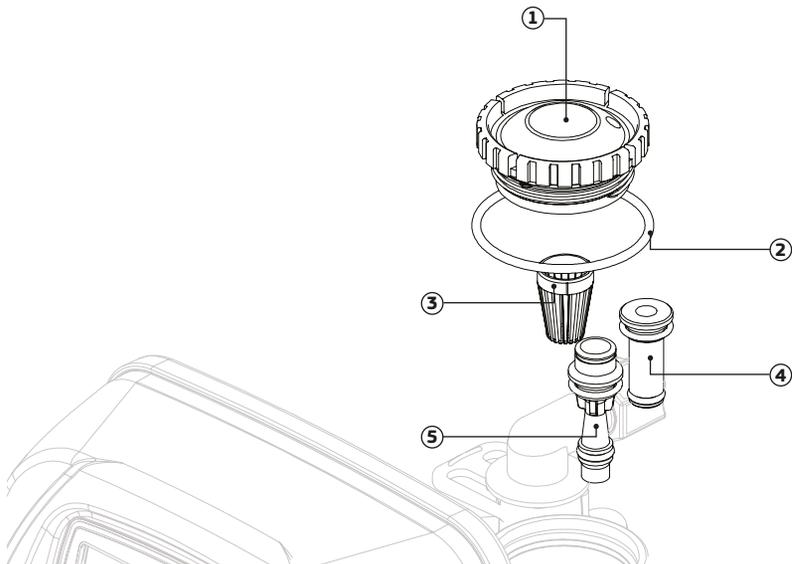


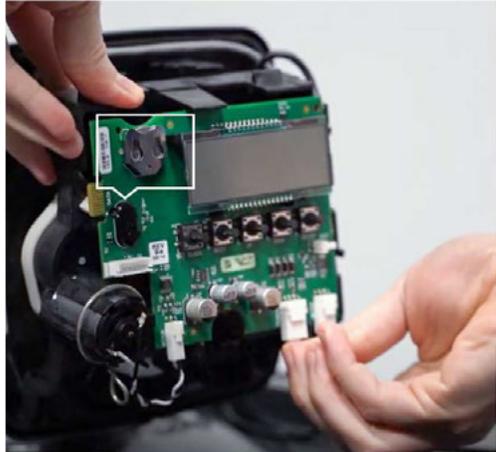
Fig. 7 - Injector Cap, Injector Screen, Injector, Plug and O-ring

No.	Part Code	Description
1	WTV3176	Injector Cap
2	-	O-ring, 135
3	-	Injector Screen
4	WTV5640	Injector Plug
5	WTV5580	Injector, Blue (F)



Replace the Backup Battery

1. The battery (CR2032 coin) keeps the time in case of a power outage. The battery should be replaced annually or after extended periods without power.
2. Reset the time if needed by following the instructions in the user guide for your model.
3. If your system is backwashing only (no salt), then replace the weather cover to complete the service

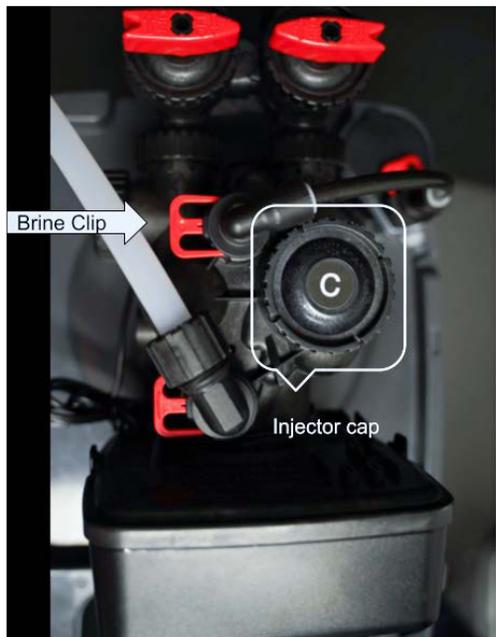


Brine System Servicing [Softener Only]

1. Isolate the water supply and release the pressure by opening an outlet after the system.

Note: If you have the optional bypass assembly, turn the handles so that they point toward each other.

2. Remove the injector cap. To remove the injector cap located on top of the valve, first remove the brine clip and the elbow fitting. Next use the Puretec WTV5180 spanner and multi-tool to remove the injector cap by turning anti-clockwise. If you don't have the tool, a large set of multi grips or a strap wrench can be used with care.



3. Flip the cap over and remove the injector screen located in the centre of the cap. Clean the screen and replace it back in the cap.
4. Flush the injector feed port. With the injector cap still off, slowly open the inlet water so water is coming out of the injector feed port as shown in the image. After a short flush, close the inlet water.
5. Remove the brine injector (labelled DN). To remove the brine injector, use the injector cap to lever the injector out as shown in the image.
6. Check the injector is clean and free of debris and blockages.
7. Re-insert the injector and push firmly to make sure it is all the way in.
8. Re-fit the injector cap and tighten firmly, taking care not to overtighten.
9. Replace the weather cover to complete the service.

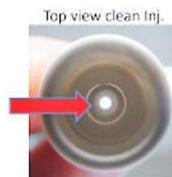
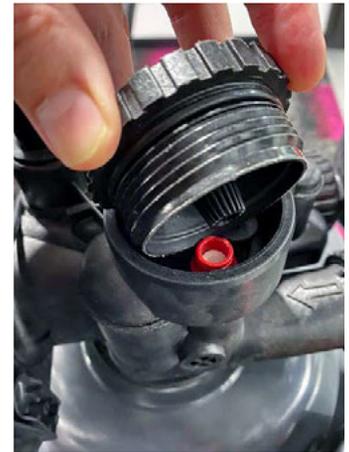
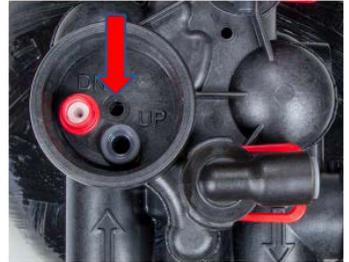


Fig. 8 - Water Meter, Meter Plug and Mixing Valve

No.	Part Code	Description
1	-	1" Nut
2	WTV5490	Meter Assembly
3		Trubine Assembly
4		O-ring, 215
5	-	Mixing Valve

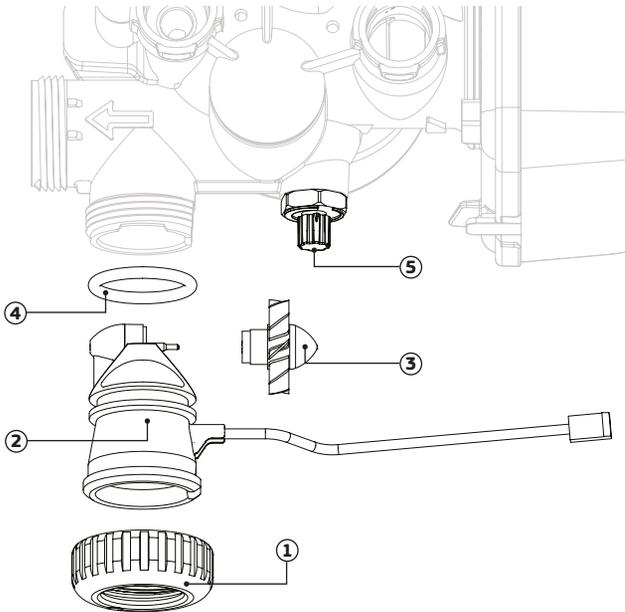


Fig. 9 - WTV5060 - 1" Straight Adaptor, Male

No.	Part Code	Description
1	WTV5060	1" Quick Connect Nut
2		Split Ring
3		O-ring, 215
4		1" Straight Adaptor Fitting Body, Plastic, Male BSPT

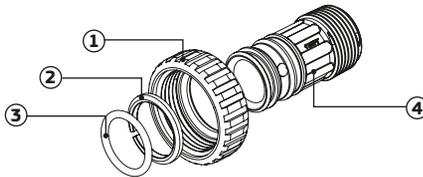
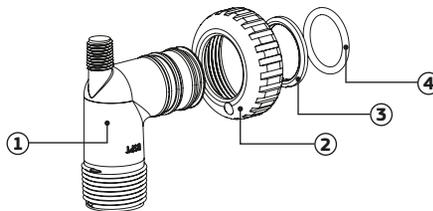


Fig. 10 - WTV5070 - 1" Elbow Adaptor, Male

No.	Part Code	Description
1	WTV5070	1" Elbow Adaptor Fitting Body, PVC, Male BSPT
2		1" Quick Connect Nut
3		Split Ring
4		O-ring, 215





AUSTRALIA

P 1300 140 140
E sales@puretec.com.au
W puretec.com.au

NEW ZEALAND

P 0800 130 140
E sales@puretec.co.nz
W puretec.co.nz