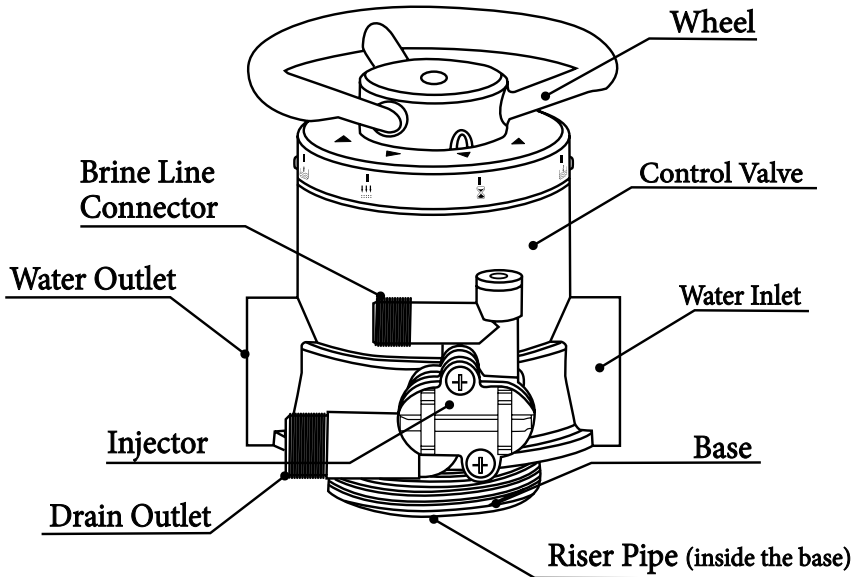


AQT-MSV-1

OPERATIONAL MANUAL









DIAGRAM

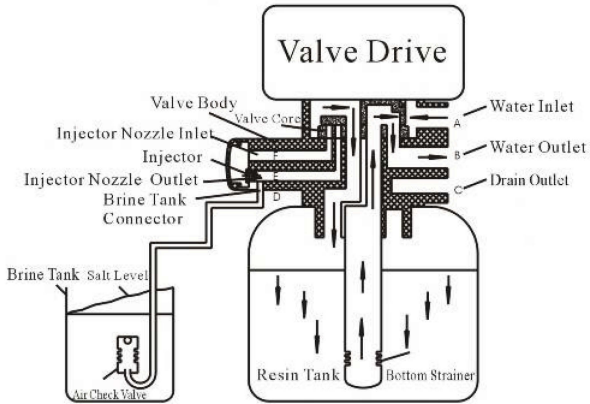


OPERATION

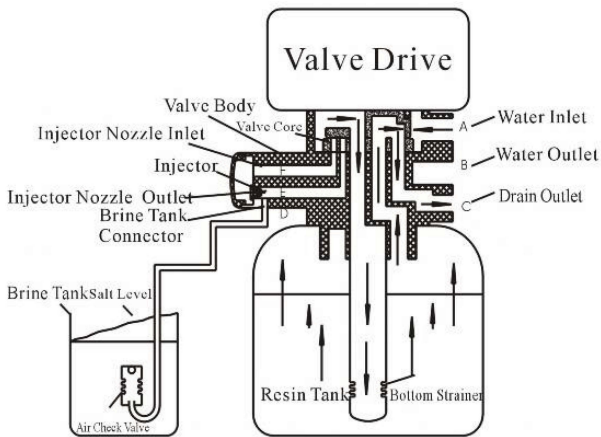
Simple turn the wheel into the desire position. The following table explains each position of the regeneration process.

#	PROCESS	DESCRIPTION	RECOMMENDED TIME
1	SERVICE 	Raw water enters the valve and flows through the resin (down-flow). This softened water flows from the bottom through the riser pipe (upflow) to the valve body and finally exit through outlet valve.	Until hardness grows above 0 or after calculated time of services finishes.
2	BACKWASH 	Raw water enters the valve and flows through the riser pipe, expanding the resin bed and backwashing all impurities. Backwashing water flows out from drain.	10 minutes.
3.1	BRINE DRAW 	Raw water enters into the valve through the injector, producing a Venturi effect, which sucks the brine from the brine tank. Brine flows through the resin (down-flow), through bottom strainer, upward along the riser pipe and finally out the valve from drain.	40 minutes.
3.2	SLOW RINSE 	After brine is finished, raw water enters the valve and flows in the same direction as in the Backwash process. Raw water rinses all the residual salt from the valve, injector and resin (keeps same position of BRINE position).	10-15 minutes.
4	BRINE TANK REFILL 	Raw water enters into the valve and flows through the injector outlet to the brine tank. Brine tank is refilled. Another part of the water flows out from drain.	Until water reaches calculated level. Do not forget to add salt into the brine tank before Brine Refill.
5	FAST RINSE 	Raw water enters the valve and flows through the resin (down-flow), then upward the riser pipe to the valve body and finally exit through drain valve.	5 minutes.

1. SERVICE

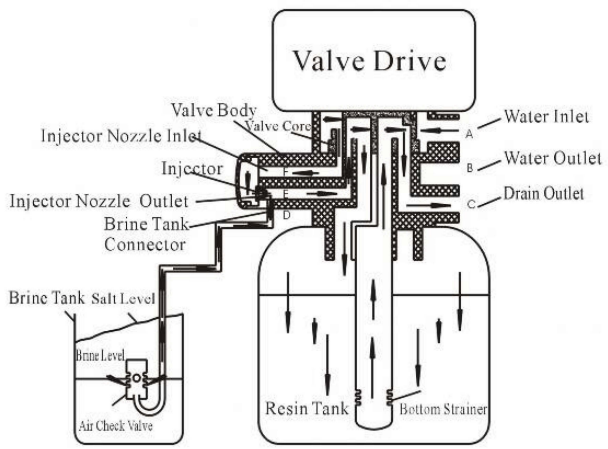


2. BACKWASH

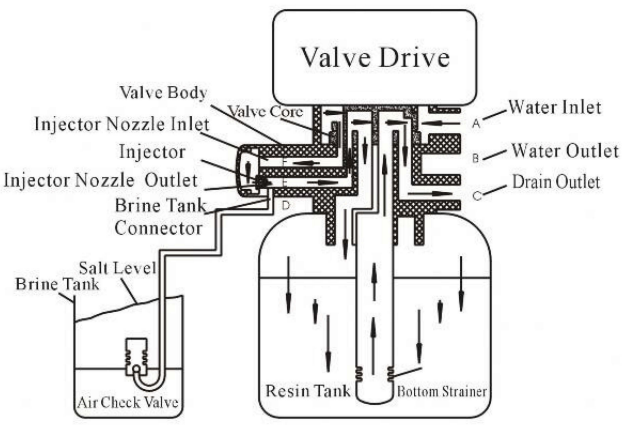


OPERATION

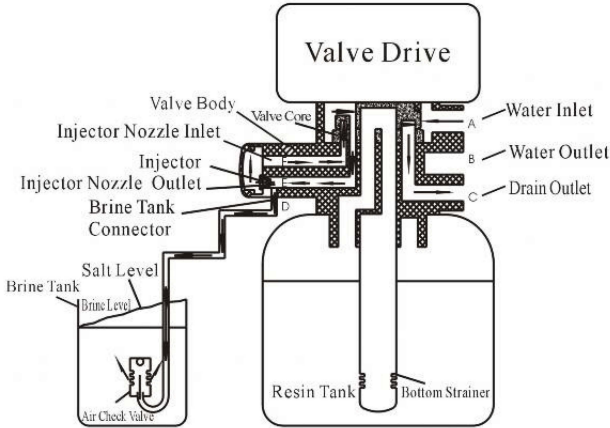
3.1 BRINE DRAW



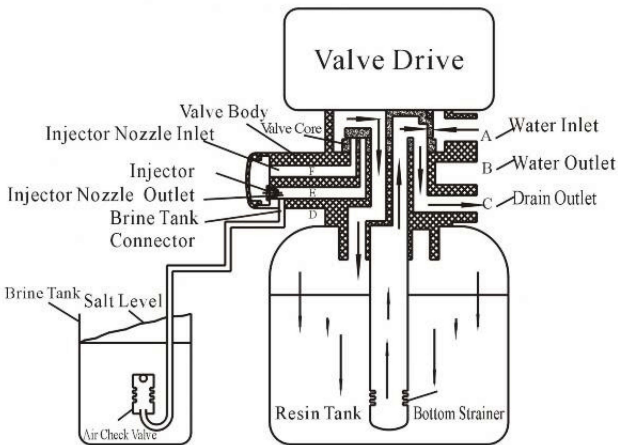
3.2 SLOW RINSE (same position as brine draw after brine is finished)



4. BRINE TANK REFILL



5. FAST RINSE



TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
SOFTENER WATER OUTPUTS	<ol style="list-style-type: none"> 1. By pass opened 2. No salt in brine tank 3. Injector blocked 4. No enough water refilled to brine tank 5. Leak in riser pipe 6. Leak inside the body valve 	<ol style="list-style-type: none"> 1. Close bypass 2. Make sure is enough salt in brine tank 3. Change or clean injector 4. Increase refill time 5. Check riser pipe and change it if necessary 6. Repair body valve or change valve
CAN NOT SUCK SALT	<ol style="list-style-type: none"> 1. Inlet pressure too low (at least 30 psi) 2. Brine hose blocked 3. Leak in brine hose 4. Injector damaged 5. Leak inside the body valve 	<ol style="list-style-type: none"> 1. Increase inlet pressure (min 30 psi) 2. Check and clean brine hose 3. Check and change brine hose 4. Change injector 5. Repair body valve or change valve
EXCESS WATER IN BRINE TANK	<ol style="list-style-type: none"> 1. Brine refill time too long 2. Excess water in brine tank after brine draw 	<ol style="list-style-type: none"> 1. Adjust refill time 2. Check if injector is plugged
WATER FLOWS OUT FORM DRAIN CONTINUALLY	<ol style="list-style-type: none"> 1. Leak inside the body 	<ol style="list-style-type: none"> 1. Change valve
TANK OR VALVE LEAKS	<ol style="list-style-type: none"> 1. Excess pressure in pipeline 2. Pipeline blocked or plugged 	<ol style="list-style-type: none"> 1. Readjust pressure to the recommended operating pressure 2. Check pipelines and change if necessary

INJECTORS FOR AQT-MSV-1

Use the following table to choose the correct injector depending on the tank size.

TANK SIZE	VALVE	INJECTOR
7" -12"	AQT-MSV-1	BLACK
13" -14"	AQT-MSV-1	RED
16"	AQT-MSV-1	GREEN



AQT-MSV-1 Specifications:

Temp Range: 41° F (5° C) – 113°F (45° C)

Maximum Temperature: 122°F

Pressure Range: 21.8 psi - 87 psi

Control Type: Manual

Electricity: None Required

Base: 2.5"

Inlet: 1"

Outlet: 1"

Drain: 1"

Riser Pipe: 1.05" OD

Water Capacity Service: 17.02 gpm @ 21.8 psi

Water Capacity Back Wash: 6.7 gpm @ 21.8 psi

Tank Diameters: 6" – 12"

Material of Construction:

Body: Noryl

Handle: Metal

Internal Disc: Ceramic

Distributed by:



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