

Owner's Manual

Compact Commercial Series



Models:

CC 206s
CC 206c
CC 208s
CC 208c
CC 208h

TABLE OF CONTENTS

1.0 GENERAL INFORMATION

About this Manual.....	3
The Compact Commercial Softener	5
System Sizing.....	5
Flow Rate Sizing.....	6
Specifications	7

2.0 OPERATING SPECIFICATIONS

System Operation.....	8
Disc Selection.....	9
Kinetico Valve Operation	10
Water Meter Disc	10
Regeneration Pawls	10
Jet Regeneration.....	10
Control Disc.....	10
Control Disc Indicator.....	11
Lower Valving Sections.....	11
Tank Components	12

3.0 INSTALLATION

Getting Started	13
Pre-installation Review	13
KineticoPRO Compact Commercial Softener Installation	14

4.0 TROUBLESHOOTING

Ten Steps to Determine the Problem	17
Hard Water	19
Frequent Regeneration.....	20
High Salt Consumption	20
Leaks.....	20
Salty Treated Water.....	21
Taste, Color & Odor.....	21
Iron Bleed-through.....	22
Water Running to Drain	22
Pressure loss.....	23
Equipment Noise	23
Units Stuck in Cycle.....	23

5.0 PARTS.....	24
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GENERAL INFORMATION

About this Manual

This manual will cover information needed for the proper installation and operation of your KineticoPRO Compact Commercial Softening System. We have also included information regarding the frequently asked questions about softening systems. This information may be more technical in nature, but provides further insight to the continued operation of this equipment at its highest levels.

This manual will use various icons to help highlight issues that are relevant to the safe operation of this equipment. The following icons will be used as described:



General information regarding the application of this product will be highlighted by this icon. This will include technical specifications and expected operational results.



Maintain Safe Pressure

This sign indicates the safe operating pressure range.



Consult Equipment Specifications Section

Refer to the equipment specifications section for specific instructions.



A caution icon will be used to present any information that may hold a potential hazard or concern during the installation, use or maintenance of this product. **Should this information not be followed, it may result in damage to this equipment and its surroundings.**



Pinch point or crushing hazard



Chemical hazard



The warning icon will be used to present any information that may result in a severe hazard or concern during the installation, use or maintenance of this product. **Should this information not be followed, it may result in severe physical harm.**



Do Not Touch



No Access

Only properly trained and authorized persons can enter area or open panel.



Any tools or materials required during the installation, use or maintenance of this equipment will be preceded by this icon. Using these specific tools will minimize time and effort. Not using the proper tool may result in damage to this equipment, its surroundings or even physical harm.

If there are any additional questions pertaining to this equipment, please contact your local KineticoPRO Dealer for further assistance.

The Compact Commercial Softener

The CC Series provides continuous soft water to smaller (<10 gpm) commercial applications. The unique design of Kinetico's control valve allows for all softener functions to operate automatically and non-electrically. The system has a number of options as described:

(s) – standard

The standard softener configuration includes duplex tanks and a control valve. The non-electric control valve operates fully automatically, with all service and regeneration functions performing via water pressure. The brining system is not included with the standard package. A variety of brine tanks can be added as an option.

(c) – cabinet

The cabinet configuration uses a special cabinet to house the softener, which is also used as the system's brine tank. The cabinet can be provided with casters for added mobility of the system. In addition to the cabinet, the unit is also designed to operate at 150°F average and 160°F peak.

(h) – high temperature

This is a standard system upgraded to be compatible with high temperature operation - 150°F average and 155°F peak. The brining system is not included with the standard package. A variety of brine tanks can be added as an option.

CC 206 - (2) 6" x 13" tanks

Part Number	Model	Description
11290A	CC 206s	Standard Compact Commercial Softener, no brine tank
11538B	CC 206c	Cabinet Compact Commercial Softener, 160°F, mobile

CC 208 - (2) 8" x 17" tanks

Part Number	Model	Description
11269A	CC 208s	Standard Compact Commercial Softener, no brine tank
11500B	CC 208c	Cabinet Compact Commercial Softener, 160°F, mobile
13529A	CC 208h	High Temperature Compact Commercial Softener, no brine tank

Brine Tank Options

Part Number	Description
7202	12" x 20" x 16" Compact Brine Tank
7938A	18" x 35" Standard Brine Tank

System Sizing

To properly size a softening system, the loading to the system must be determined. The "load" is determined by two factors: the incoming quality of the water and its flow rate. Both these characteristics must be considered when sizing a system.

Flow Rate Sizing

For sizing flow rates, there are three parameters that need to be determined to appropriately size a system:

- Average Flow
- Peak Flow
- Continuous Flow

Average Flow

This can be calculated based on the daily or monthly volume of water used, divided by the number of hours the facility is in operation.

EXAMPLE: The average flow would be:

Monthly Water Bill Usage:	47,953 gallons
Open 7 days / week	
Open from 6 am – 10 pm (16 hours/day)	
$47,953/30$	= 1,598/day
$1598/16$	= 99.9/hour
$50/60$	= 0.8 gpm average flow

Peak Flow:

The application's peak flow rate could be calculated in many different ways. The most reliable is to base the peak flow rate on the incoming water supply.

Inlet Pipe	Maximum Flow @ 50 psi inlet	Maximum Flow @ 100 psi inlet
0.75"	10 gpm	15 gpm
1"	15 gpm	25 gpm
1.25"	25 gpm	40 gpm
1.5"	40 gpm	60 gpm
2"	65 gpm	90 gpm
3"	150 gpm	225 gpm
4"	275 gpm	350 gpm

Water Meter Size	Maximum Flow
0.75"	30 gpm
1"	50 gpm
1.5"	100 gpm
2"	170 gpm
3"	400 gpm

Continuous Flow

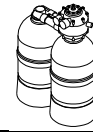
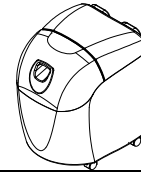
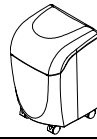
Continuous flow can take on many different definitions. For the application of our equipment, continuous flow is defined as the maximum flow average during a regeneration period.

Example: For the CC Series, the regeneration period is about 11 minutes. Therefore, understanding the maximum amount of water that is needed during any 11 minute period needs to be defined. Most appliances and devices use water in an intermittent period, and do not substantially affect this continuous flow requirement.

Devices that need to be considered include:

- Volume of a boiler blow down
- Large tank fills
- Continuous rinsing applications
- Irrigation needs

Specifications



	CC 206s	CC 206c	CC 208s	CC 208c	CC 208h*
Tank Size	6" x 13"	6" x 13"	8" x 17"	8" x 17"	8" x 17"
Resin Volume	0.2 ft ³	0.2 ft ³	0.4 ft ³	0.4 ft ³	0.4 ft ³
Service Flow	Upflow	Upflow	Upflow	Downflow	Downflow
Brine Tank Capacity	Optional	40 lb	Optional	80 lb	80 lb
Regeneration Volume	5 gal	5 gal	14 gal	9 gal	9 gal
Regeneration Time	11 min	11 min	11 min	11 min	11 min

Flow Meter Options

Hardness Removed (in compensated gpg)

Half Louver Nozzle		0.5 / 1.0 lb brining		1.0 / 1.4 lb brining		
	Disc 1	2/4	2/4	5/6	4/5	4/5
	Disc 2	5/8	5/8	10/12	9/11	9/11
	Disc 3	8/11	8/11	15/18	14/17	14/17
	Disc 4	10/15	10/15	20/23	19/22	19/22
	Disc 5	13/19	13/19	25/28	23/27	23/27
	Disc 6	15/23	15/23	29/33	27/32	27/32
	Disc 7	18/27	18/27	33/37	30/35	30/35
	Disc 8	20/30	20/30	37/42	35/40	35/40
	Meter Gearing (Disc 1)	583 gal	583 gal	732 gal	732 gal	732 gal
Flow Range	0.3 – 9.1 gpm	0.3 – 9.1 gpm	0.3 – 10.2 gpm	0.3 – 10.2 gpm	0.3 – 10.2 gpm	

Hardness Removed (in compensated gpg)

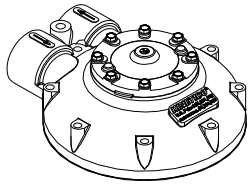
Micro Nozzle		0.5 lb brining		1.0 lb brining		
	Disc 1	20	20	30	30	30
	Disc 2	30	30	40	40	40
	Disc 3	40	40	50	50	50
	Meter Gearing (Disc 1)	61 gal	61 gal	61 gal	61 gal	61 gal
	Flow Range	0.05 – 0.15 gpm	0.05 – 0.15 gpm	0.05 – 0.15 gpm	0.05 – 0.15 gpm	0.05 – 0.15 gpm
	Disc 1	4	4	10	10	10
	Disc 2	10	10	20	20	20
	Disc 3	16	16	30	30	30
	Disc 4	20	20	40	40	40
Disc 5	26	26	50	50	50	
Disc 6	30	30	--	--	--	
Disc 7	36	36	--	--	--	
Disc 8	--	--	--	--	--	
Meter Gearing (Disc 1)	250 gal	250 gal	315 gal	315 gal	315 gal	
Flow Range	0.15 – 0.50 gpm	0.15 – 0.50 gpm	0.15 – 0.50 gpm	0.15 – 0.50 gpm	0.15 – 0.50 gpm	



Kinetico Compact Commercial Series cc206s, cc206c, cc208s and cc208c Water Softeners have been Tested and Certified by WQA against NSF/ANSI/CAN 61, Drinking Water System Components - Health Effects and NSF/ANSI 372, Drinking Water System - Lead Content and CSA Standard B483.1 - Drinking Water Treatment Systems.

* The 208h has been Tested and Certified by WQA to NSF/ANSI/CAN 61 and NSF/ANSI 372 only.

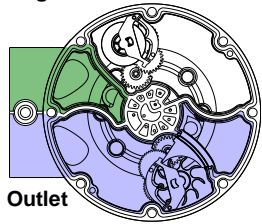
OPERATING SPECIFICATIONS



System Operation

KineticoPRO Water Softeners use a twin tank design to assure that treated water is always available. When one tank regenerates, the other supplies treated water. The Kinetico Valve controls when each tank is in service, when each tank must be regenerated and the regeneration of each tank.

Regeneration



Level 1 Operation

Level 1 assembly consists of three chambers: inlet, outlet and regeneration chambers.

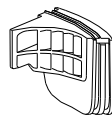
Hard water enters the inlet chamber and travels to the media tank where it is treated. Treated water moves from the media tank to the outlet chamber. Contained in the outlet chamber is a water meter turbine, which turns only when water is used. Gears connect the water meter turbine to the water meter disc. The system's meter gearing is defined as the volume of processed water needed to turn the water meter disc 360°.

Flow Nozzle

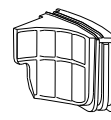
Accuracy and range of the flow meter will depend on the nozzle used with the system. Most units incorporate the half louver nozzle. This nozzle gives a highly accurate and wide range of flow metering capability. If an alternative nozzle is used, a different meter volume per 360° on the water meter will result. The Half Louver Nozzle is standard with all CC Systems.



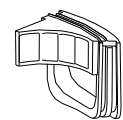
Micro



Half Louver



Full Louver



Open Louver

	Micro	Half Louver	Full Louver	Open Louver
Part Number	10880B	11018	11019	15653
Min. Flow Range	0.05 gpm	0.3 gpm	0.75 gpm	1.10 gpm
Max. Flow Range	5.00 gpm	25.00 gpm	40.00 gpm	50.00 gpm

Meter Gearing

Depending on the gear stack used, the volume of water per 360° on the water meter will change. Some of the gear stacks used are listed.

Gearing	Micro (0.05-0.15 gpm)	Micro (0.15-0.50 gpm)	Half Louver	Full Louver	Open Louver
2-2-2-3	36	146	342	760	1291
2-2-1-5	40	163	381	848	1440
2-2-7-6*	61	250	600*	1303	2213
2-2-3-4	69	282	657	1470	2497
2-1-5-4**	77	315	750**	1639	2785
2-7-6-4	119	484	1,119	2520	4280
2-3-4-4	134	546	1,253	2843	4829
1-5-4-4	149	609	1,408	3171	5386
7-23-23-6	180	735	1,715	3829	6504
7-6-4-4	230	936	2,168	4873	8279
3-4-4-4	289	1056	2,431	5498	9340

* Standard CC 206 Models

** Standard CC 208 Models

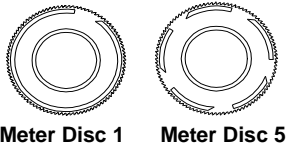
Disc Selection

CC 206c											
Alternating Operation with Central Brining				Meter Disc Selection (Compensated Hardness*)							
Setting	Capacity	Efficiency	Dosing	1	2	3	4	5	6	7	8
0.5 lb	1,914 grains	3,828 g/lb	2.7 lb/ft ³	2	5	8	10	13	15	18	20
1.0 lb	2,527 grains	2,527 g/lb	6.25 lb/ft ³	4	8	11	15	19	23	27	30
Gallons/Regeneration:				583	282	194	146	117	97	83	73
Flow during regeneration (@ 15 psig):				9.1	9.1	9.1	9.1	8.4	6.6	5.4	4.4
*Compensated hardness in gpg = Hardness + (3 x Fe in mg/L)											

CC 208s											
Alternating Operation with Central Brining				Meter Disc Selection (Compensated Hardness*)							
Setting	Capacity	Efficiency	Dosing	1	2	3	4	5	6	7	8
1.0 lb	4,568 grains	4,568 g/lb	2.5 lb/ft ³	5	10	15	20	25	29	33	37
1.4 lb	5,212 grains	3,723 g/lb	3.5 lb/ft ³	6	12	18	23	28	33	37	42
Gallons/Regeneration:				732	366	244	183	146	122	105	92
Flow during regeneration (@ 15 psig):				10.2	10.2	10.2	10.2	10.2	8.3	6.7	5.5
*Compensated hardness in gpg = Hardness + (3 x Fe in mg/L)											

CC 208c / h											
Alternating Operation with Central Brining				Meter Disc Selection (Compensated Hardness*)							
Setting	Capacity	Efficiency	Dosing	1	2	3	4	5	6	7	8
1.0 lb	4,094 grains	4,094 g/lb	2.5 lb/ft ³	4	9	14	19	23	27	30	35
1.4 lb	4,818 grains	3,442 g/lb	3.5 lb/ft ³	5	11	17	22	27	32	35	40
Gallons/Regeneration:				732	366	244	183	146	122	105	92
Flow during regeneration (@ 15 psig):				10.2	10.2	10.2	10.2	10.2	8.3	6.7	5.5
*Compensated hardness in gpg = Hardness + (3 x Fe in mg/L)											

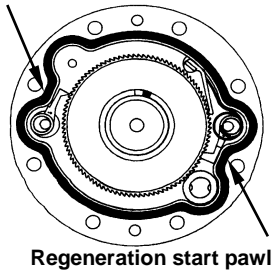
Kinetico Valve Operation



Water Meter Disc

The frequency of regeneration can be adjusted without re-gearing the system. The use of the water meter disc provides for multiple regenerations per 360° cycle on the water meter. Each regeneration notch on a water meter disc will initiate a regeneration when the regeneration start pawl drops into one of these segments and engages with the teeth of the control disc. The number of regenerations within the 360° cycle is indicated by the number of the water meter disc.

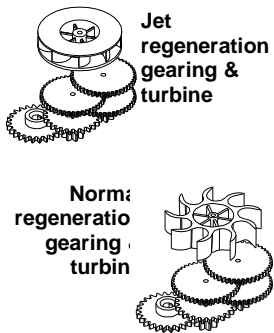
Regeneration drive pawl



Regeneration Pawls

It is important to realize that there are two regeneration pawls: the regeneration start pawl and the regeneration drive pawl. The regeneration start pawl advances the control disc enough to open the regeneration control valve. The water meter and control discs advance together until the control disc uncovers one of the holes in the ceramic disc located directly beneath the control disc. This opens the regeneration control valve, which starts regeneration. Once the valve has opened, the regeneration drive pawl continues to advance the control disc through the regeneration cycle.

When open, the regeneration control valve allows water to pass through a nozzle where it is directed to the regeneration turbine in the regeneration chamber. As the regeneration turbine spins, it drives the regeneration drive pawl, which advances the control disc.



Jet Regeneration

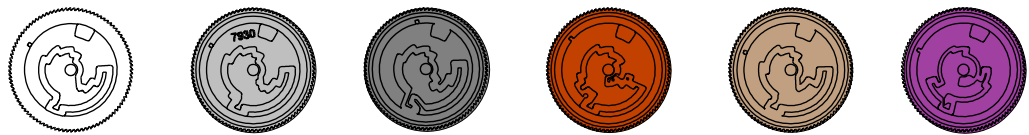
During the regeneration, water is used by the valve to control the sequence. For units equipped with *Jet Regeneration*, a 0.2 gpm regeneration flow control is used to limit the amount of water used. In addition to this small flow control, the regeneration nozzle in the level two, and the regeneration turbine in the level one are also modified to accept these lower flow rates.

In non-Jet systems, a 0.4 gpm flow control, standard regeneration nozzle and an open regeneration turbine are used.

The Jet feature is included with all CC Systems.

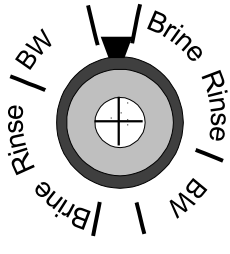
Control Disc

All internal valve positions are controlled by the Control Disc. As the control disc turns, it covers and uncovers holes in the ceramic disc (located directly below the control disc), sending pressure signals to open and close all internal valves. The sequence of regeneration and service configuration (alternating or Overdrive) is based on the type of control disc installed.



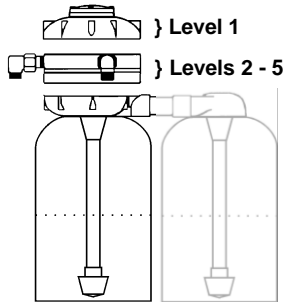
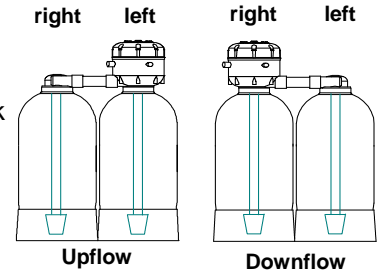
	White	Gray	Black	Orange	Tan	Purple
Part Number	4689*	7931	4700A	8637	5565	8635
Service Flow	Alternating	Alternating	Alternating	Overdrive	Overdrive	Overdrive
Regeneration Sequence:						
Backwash	--	--	--	12%	--	--
Brine • Slow Rinse	75%	89%	60%	57%	76%	--
Backwash	25%	11%	40%	12%	24%	65%
Purge	--	--	--	7%	--	25%

* Standard with all CC models



Control Disc Indicator

A visual indicator on top of the control disc (black dot) shows the state of the system at any time. The control disc rotates clockwise. When the indicator dot is at the 12 o'clock position, the Right Tank is in service. When it is between the 12 o'clock and 6 o'clock positions, the Left Tank is in regeneration. When the indicator dot is at the 6 o'clock position, the Left Tank is in service. When it is between the 6 o'clock and 12 o'clock positions, the Right Tank is in regeneration.

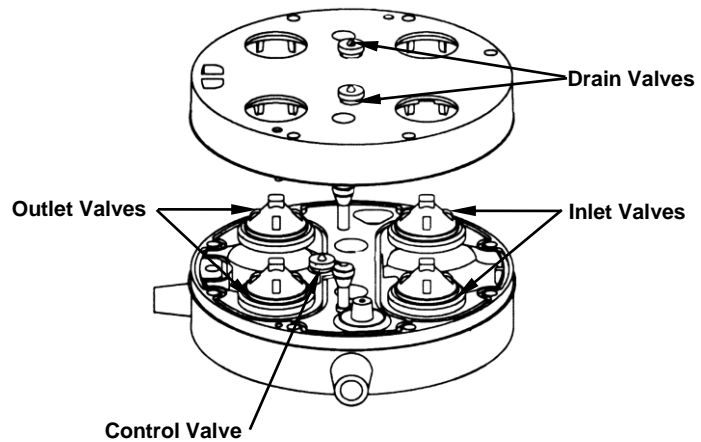
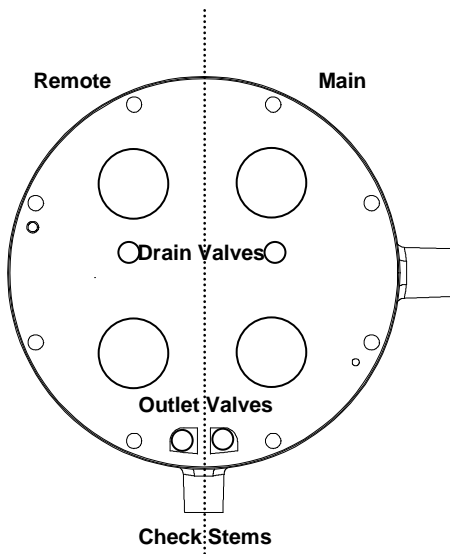


Lower Valving Section

The lower valving section consists of Level 2, Level 3, Level 4 and Level 5 assemblies.

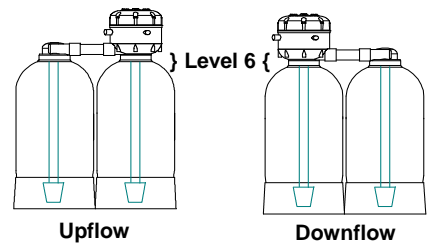
In the center, there is one regeneration control valve. This valve opens after four teeth on the control disc have engaged. This valve then opens, and powers the regeneration cycle.

All of the other valves are pairs: one set for the Remote Tank and one set for the Main Tank. For each media tank, there is an Inlet, Outlet, Drain and Check Stem valve (also a downflow rinse valve on DFFR enabled systems.) The Inlet, Outlet and Drain valves are all servo valves controlled by the control disc. The Check Stems are simple one-way valves (check valves). Together, these valves control the flow of water into and out of each media tank during service and regeneration.

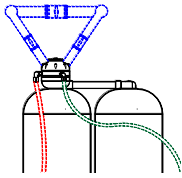


Level 6

The final level of the valve is used to direct the normal service path of the water. This can be either downflow or upflow. Since all regenerations are counter-current, choosing the service direction also specifies the regeneration direction. Downflow service is used with standard, non-packed tank systems. For high efficiency, packed tank systems, upflow service is specified.



Tank Components



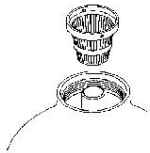
Main Remote

System By-pass

For each system, a by-pass is recommended. This can be installed using three ball valves. This allows the system to be isolated during any service operations. By-pass valving is not included as a part of the system package.

Resin Tanks

Each system uses two resin tanks. The main tank includes the control valve. The secondary tank is referred to as the remote tank.



Upper Distributor

A plastic molded distributor is attached to the top of the control valve. The distributor prevents channeling of the inlet stream into the top of the resin bed in downflow systems. The distributor also prevents resin from backwashing or flowing out of the tanks.

Riser Tube

A riser tube is used to connect the lower distributor to the control valve. The riser tube is 1.0" in diameter.

Distributors

The lower distributors for all CC units are an integrate distributor with the tank. The flat plate, stainless steel distributor provides for maximum flow distribution and strength.

Media

High capacity, non-solvent cation resin is used in the compact commercial softeners. The resin has a capacity of 30,000 grains/ft³ when regenerated at a brine setting of 15 lb/ft³.

Tank Interconnection

Each twin tank system uses a set of inter-connectors to provide a water path from the main control valve to the remote tank. This interconnecting plumbing is included with the system package. It uses a double O-ring seal to provide a leak-free connection. A connector link and pins hold the tanks together under pressure.

INSTALLATION

Getting Started

The following procedures have been developed to assist during the installation of your KineticoPRO Softener.



ALL STATE AND LOCAL PLUMBING CODES MUST BE MET, including, but not limited to:

- Distances that equipment should be placed from the main panel box and electrical outlets.
- Air gaps that must be provided for all drain lines.

Pre-installation Review

Before beginning the installation of the KineticoPRO system, confirm system configuration to be installed and components have been ordered. Please review the KineticoPRO specification sheet which includes required components.

Review of the customer's facility is also recommended, especially critical operating data that could affect the operation of the system:



Water pressure to the KineticoPRO system affects the performance during regeneration. The KineticoPRO system will not operate properly if the inlet pressure fluctuates below a dynamic pressure of 25 psi. This minimum pressure must be maintained to the system at all times. Should the pressure fluctuate below this level, a booster pump may be required.



Do not use on water pressure that exceeds 125 psi or water temperature that exceeds 120°F. (150°F average / 155°F peak for high temperature equipped models.)



Do not install the KineticoPRO Softener in an area where the temperature can cause the unit to freeze. Damage to the system will result.



It is recommended that a WQA certified installer perform the installation. Failure to install the system as instructed will void the warranty.



Proper ventilation **MUST** be provided when using PVC cleaner or glue.



A ladder should be used for all work overhead that would be beyond your natural reach. If working continuously at a height of six feet or more, the appropriate safety devices must be employed.



An appliance dolly should be used when transporting equipment on stairways.



When soldering, the following **MUST** be met and followed:

- LEAD FREE solder must be used.
- PVC containers and other flammable materials must be closed or removed to prevent fire or explosions.
- Loose clothing (ie: shirts tails, sleeves, etc.) should not be worn or should be addressed before using a torch for soldering.
- The customer must be notified if you will be disabling smoke alarm(s) during installation. Be sure to reconnect the smoke alarm(s).
- A scorch pad must be used to protect any surface that may be exposed to a torch flame or excessive heat. Wear protective eyewear while installing to prevent eye injury caused by splattering soldering materials or metal/plastic shavings.
- Do not solder brass adapters while inserted in the module main base. Damage to the plastic and rubber parts may occur due to the heat and may result in water damage.
- The materials used in the soldering process may attack certain types of plastics. Care should be taken during the installation process to assure that solder and flux do not come in contact with media tanks, the control module and related plastic components.



A prefilter **MUST** be used before a softener to prevent any foreign material from getting into the equipment.



VERY IMPORTANT! Where a brine drum overflow could cause damage, a 1/2" I.D. overflow line **MUST** be installed on drum and connected to a drain. Make sure the drain or overflow line is not higher than brine fitting.

NOTE: Clear area along wall where PVC drain line will be run to floor drain. KineticoPRO does not recommend running flexible tubing across floor or along walls, as it may be kicked out of discharge point at floor drain, or line may become pinched resulting in improper backwashing.



When installing a plastic component in line, it is recommended that grounding straps be put in place **BEFORE** the lines are actually cut to ensure that the ground is never broken.



When installation is complete, plumbing lines **MUST** be chlorinated for sanitation. Common household bleach may be used. The amount of bleach will vary on plumbing size, lengths, and fixtures.



NOTE: A clean grade of salt is strongly recommended. **DO NOT** use rock salt.



This unit will **NOT** make potable water from a non-potable source.



Read all steps, guides and rules carefully before installing and using the KineticoPRO Softener.

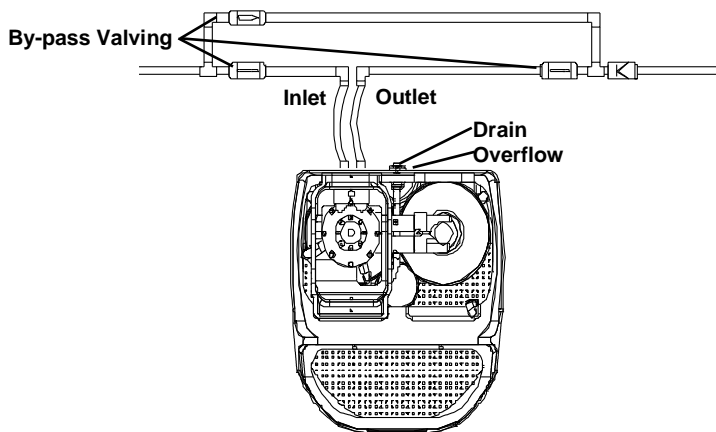
KineticoPRO CC Series Softener Installation

1. Determine location to install equipment. Make sure that the unit will be on a flat surface. Test water to confirm unit is properly sized for installation. If sand/silt or turbidity is present, a separate prefilter should be installed.



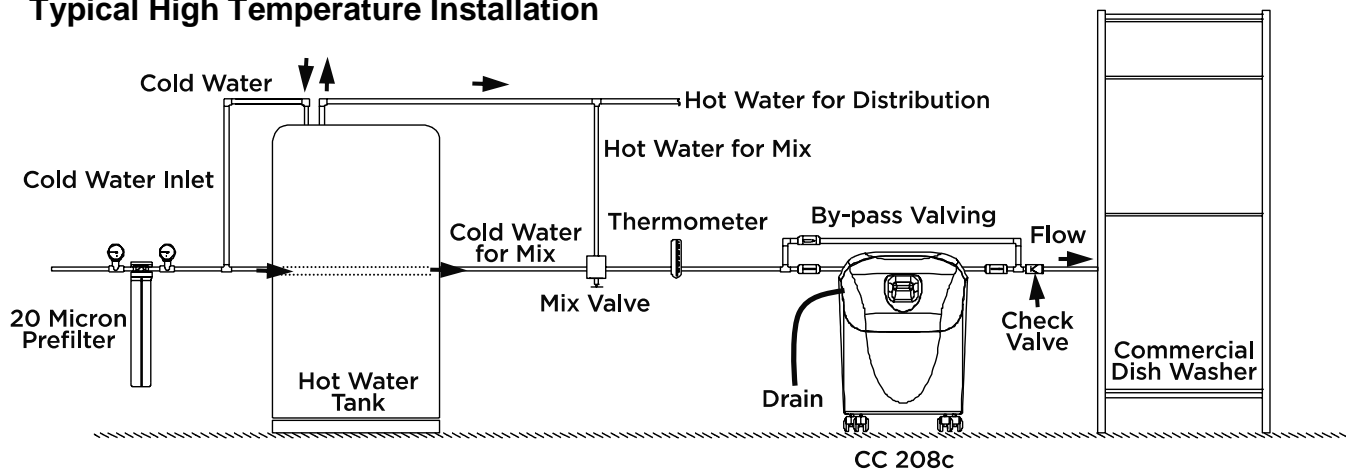
A ladder should be used for all work overhead that would be beyond your natural reach. If working continuously at a height of six feet or more, the appropriate safety devices must be employed.

2. Install with by-pass valving. Note the inlet and outlet arrows on valve head.



3. For Hot Water Applications, the addition of a mixing valve, thermometer and check valve are recommended. This will prevent overheating of the softener during off periods or during initial daily start-up.
 - Position mixing valve on hot/cold line, prior to softener.
 - Position thermometer after mixing valve.
 - Position check valve after softener, but before hot water appliance (such as a commercial dish machine).

Typical High Temperature Installation



4. Connect the inlet/outlet adapters leading to the conditioner using a minimum of $\frac{3}{4}$ " plumbing. Plumb as necessary to accommodate by-pass valving and to complete the installation.



A scorch pad must be used to protect any surface that may be exposed to a torch flame or excessive heat.



When installing a plastic component in line, it is recommended that grounding straps be put in place before the lines are actually cut to ensure that the ground is never broken.



Do not solder brass adapters while inserted in the module main base. Damage to the plastic and rubber parts may result due to the heat. Also, the materials used in the soldering process may attack certain types of plastics. Care should be taken during the installation process to assure that solder and flux do not come in contact with media tanks, the control module and related plastic components.




Proper ventilation must be provided when using pvc cleaner or glue.



Loose clothing (ie.- shirt tails, sleeves, etc.) should not be worn or should be addressed before using a torch for soldering.

5. After all plumbing is completed, but before connecting equipment, flush both the inlet and outlet lines by opening the by-pass valve and allowing water to rinse out any debris in the lines.

6.  An air gap must be provided for all drain lines. Check local and state plumbing codes for the proper setup of drain line air gaps.

7. Run a drain line to discharge point. **FOLLOW STATE AND LOCAL CODES.** Before connecting unit, check for any obstructions or kinks. Apply Teflon tape to pipe threads on side of softener valve, and install the two fittings supplied. Connect drain line to valve.



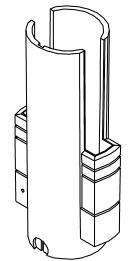
On drain lines that must travel more than 8 feet up and 30 feet over, it is best to take the $\frac{5}{8}$ " drain line that fits the valve and attach it in a larger diameter line or pipe. This will eliminate chances of restrictions. Running drain line higher than 10 feet will inhibit the ability of the venturi to draw brine.

8. In KineticoPRO Softeners, the brine drum mixes and stores a solution of salt for regeneration of the softener media. During the brine rinse cycle, this solution is drawn from the brine drum and through the media to regenerate it.

The brine drum contains an adjustment to draw the correct amount of salt solution for each cycle. This adjustment is made in two places: the adjuster tube and the float cup. The adjuster tube measures the amount of solution that is drawn from the brine drum into the softener during the brine rinse cycle. The float cup height determines how much softened water flows back into the brine drum to prepare for the next regeneration.

Adjuster Tube Setting

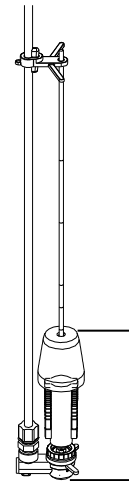
The Adjuster Tube is set by cutting and removing tabs on both sides of the tube. Using a pocket-knife, cut across each tab horizontally, following the channel in the plastic. Break off each tab individually until the proper setting is reached. The remaining number or letter imprinted on the tab determines the correct setting. ***Note: With Cabinet models, there is no adjuster tube setting.**



Adjuster Tube

Float Cup Setting

The float cup is set by adjusting its height above the bottom of the brine valve assembly. By removing the brine valve assembly and resting it on a flat surface, the height of the float cup can be measured with a ruler. The height is measured from the base of the brine valve assembly to the top of the float cup. (See drawing at right.) Note that standard settings are defined by markings on the rod of the brine valve assembly. The settings on the rod are listed in the tables at the end of this section. Where the predefined settings are not adequate, the actual float cup height, in inches, is listed, and the setting must be measured and set according to the measured float cup height.



Float Cup Height

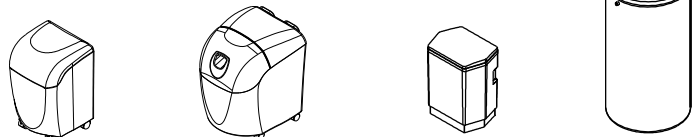
Installing the Brine Valve

After the adjustments have been made to the adjuster tube and the float cup, the brine valve assembly must be installed in the brine drum. Locate the brine valve in the brine well so that the 3/8 " bent tube is along the back of the brine well away from the brine drum wall. The 3/8 " bent tube snaps into a notch and extends from the brine drum about 1".



Do not drop the brine valve into the drum! Dropping may lower the float cup, resulting in an improper setting.

Brine Valve Settings



Unit	Brine Setting	206 Cabinet	208 Cabinet	12x20"	18 x 35"
CC 206	0.5 lb Setting	() 5 1/4"	X	(1) 7"	X
CC 206	1.0 lb Setting	() 6 1/4"	X	(1.5) 7 1/4"	(1) 7 3/4"
CC 208	1.0 lb Setting	X	() 5 1/4"	(1.5) 7 1/4"	(1) 7 3/4"
CC 208	1.4 lb Setting	X	() 5 3/4"	(A) 7 1/2"	(1.5) 7 3/4"

(adjuster tube) Float Cup Height (to top of float)"
note: cabinet models have no adjuster tube setting

- Add a clean grade of salt at this time. **DO NOT USE ROCK SALT.**



On iron-bearing water, a salt that contains resin cleaning additives is recommended.

- Open the inlet valve and allow tanks to fill slowly with water. Water will run at the drain until unit is full and pressurized.
- With the unit in service and under pressure, allow the brine drum to fill with water until the brine valve shuts off.
- After the unit is fully pressurized, purge air from the lines by opening soft water outlet.



When installation is complete, plumbing lines must be chlorinated for sanitation. Common household bleach may be used. The amount of bleach will vary on plumbing size, length and fixtures.

- VERY IMPORTANT!** Where a brine drum overflow could cause damage, a 1/2" I.D. overflow line must be installed on the overflow fitting on drum and connected to a drain. Make sure overflow line is not higher than the overflow fitting. **FOLLOW STATE AND LOCAL CODES.**
- Before leaving installation, check plumbing for leaks.

TROUBLESHOOTING

Ten steps to determine the problem...

1. Gather Information

Any information obtained can reduce troubleshooting time.

2. Test the Water

Test hot, cold and raw.

- Hot water, stored in the water heater, can tell you what the water was like yesterday.
- Cold water, directly from the softener, tells you what the water is like right now.
- Raw water, before treatment, tells you if the water to be treated has changed and if the correct meter disc was installed originally.

Test water at the brine fitting while water is running to determine if the softener is producing soft water.

Is there really a problem with the softener? Or does the problem lie elsewhere at the customer site?

3. Observe the installation

Look for customer related problems.

- Is the by-pass open or leaking?
- Is the softener out of salt?
- Is there bridged salt in the drum?
- Is the prefilter clogged?

Look for obvious installation mistakes.

- Is the meter disc and salt setting correct according to raw water?
- Is the by-pass disc correct?
- Are the inlet and outlet lines reversed?
- Drain installation – Are there any kinks, restrictions or T's from other appliances using water?

Is the unit running water to drain?

- Refer to the section for problems and solutions.
-

4. Run a soft water faucet wide open

Watch the meter disc.

- Is it turning?

Watch the no back pawl.

- As the meter disc turns clockwise, the no back pawl should drop into the next tooth, preventing the meter disc from turning backwards. Does it?
 - Measure the metering rate.
- Wait for the no back pawl to drop into a tooth. Place a bucket under the faucet to catch the water. Let the meter disc turn for another tooth or two, then measure the water captured in the bucket. The approximate metering rate for all models is shown below.

CC Softeners		
Model Number	CC 206	CC 208
Gallons/Tooth (1/2 louver nozzle)	6	7.6

<p>5. Place the unit in manual regeneration in the brine position</p>	<p>Check if unit is drawing brine by disconnecting the brine line from the elbow on the Level 3.</p> <ul style="list-style-type: none"> • Is the brine suction elbow screen clogged? • Is the suction sound smooth and continuous with no water blow back? • Moisten a finger and place it on the open end of the elbow. Can you feel a smooth continuous suction?
<p>6. Remove the brine valve</p>	<p>Check the brine valve setting.</p> <ul style="list-style-type: none"> • Is it set according to the brine valve installation sheet?
<p>7. Look for leaks in the house</p>	<p>Watch the meter disc.</p> <ul style="list-style-type: none"> • Is it turning? <p>Watch the no back pawl.</p> <ul style="list-style-type: none"> • As the meter disc turns clockwise, the no back pawl should drop into the next tooth, preventing the meter disc from turning backwards. Does it? <ul style="list-style-type: none"> • Measure the metering rate. • Wait for the no back pawl to drop into a tooth. Place a bucket under the faucet to catch the water. Let the meter disc turn for another tooth or two, then measure the water captured in the bucket. The approximate metering rate for all models is shown below.
<p>8. Measure water pressure</p>	<p>Low water pressure can cause hard water and/or salty water.</p> <ul style="list-style-type: none"> • Measure the water pressure: <ol style="list-style-type: none"> 1. Adapt a pressure gauge to the brine fitting port on Level 3. 2. Turn on cell. 3. Place either tank in the backwash portion of cycle. <ol style="list-style-type: none"> a. Did the pressure drop below 15 psi at the brine fitting? The Kinetico valve requires a minimum of 15 psi for the CC Series to function properly.
<p>9. Measure backwash flow rate</p>	<p>Too little backwash flow can cause salty water. Measure the amount of water coming out of the drain line during the backwash portion of cycle.</p> <ul style="list-style-type: none"> • Is it less than the backwash rate on the specification sheet?
<p>10. Check unit shutoff</p>	<p>The drain should be dry at the service positions (12 o'clock and 6 o'clock).</p> <p>An occasional drip may occur. Measure the drip rate. There should be less than 5 mL of water collected in 22 seconds.</p> <ul style="list-style-type: none"> • Is the drain running or dripping excessively in the service positions?

Solving the Problem

Having run through the above 10 steps, you are now ready to solve whatever problems have been uncovered. The next section tells specifically how to resolve common complaints and problems with water treatment systems.

Hard Water

Problem	Reason	Solution
1. Water meter disc is not turning.	<ul style="list-style-type: none"> <input type="checkbox"/> Non-conforming meter drive pawl. <input type="checkbox"/> Meter drive spring installed wrong. <input type="checkbox"/> No back pawl not installed. <input type="checkbox"/> Damaged tooth on the meter disc. <input type="checkbox"/> Damaged gear in the gearing stack. 	<ul style="list-style-type: none"> ▪ Replace meter drive pawl. ▪ Reinstall meter drive spring. ▪ Install no back pawl. ▪ Replace meter disc. ▪ Regear Level 1 Assembly and check allowable flow rates.
2. The unit will not go into automatic regeneration.	<ul style="list-style-type: none"> <input type="checkbox"/> Water meter disc is not turning. <input type="checkbox"/> Control disc will not automatically advance out of service position. <input type="checkbox"/> Damaged teeth on control disc. 	<ul style="list-style-type: none"> ▪ See number 1 above. ▪ Replace regeneration start pawl. ▪ Replace control disc.
3. No vacuum in brine position.	<ul style="list-style-type: none"> <input type="checkbox"/> Check stems missing or not working correctly. <input type="checkbox"/> Plugged venturi. <input type="checkbox"/> Plugged backwash flow control. <input type="checkbox"/> Plugged brine elbow screen. 	<ul style="list-style-type: none"> ▪ Replace or add check stems. ▪ Clean out Level 3 venturi throat and molded venturi nozzle (Do <i>not</i> use a paper clip!). ▪ Clean out backwash flow control. ▪ Clean out brine elbow screen.
4. Short salting.	<ul style="list-style-type: none"> <input type="checkbox"/> The grid system allows a water level no more than 1" above the grid. If the cabinet is not level, it may exceed this. 	<ul style="list-style-type: none"> ▪ Level the cabinet.
5. Bridged salt in the cabinet.	<ul style="list-style-type: none"> <input type="checkbox"/> Salt has solidified in the cabinet. 	<ul style="list-style-type: none"> ▪ Carefully move the salt around to break up the mass of solidified salt.
6. The by-pass is open.	<ul style="list-style-type: none"> <input type="checkbox"/> An open by-pass allows water to flow around the system without any treatment at all. 	<ul style="list-style-type: none"> ▪ Close the by-pass.
7. The by-pass is leaking.	<ul style="list-style-type: none"> <input type="checkbox"/> This can be determined by testing the water at a soft water tap. With the water still running, disconnect the brine line at the valve and test the water. Water that tests soft at the brine fitting and hard at the tap indicates a by-pass that is leaking. 	<ul style="list-style-type: none"> ▪ Repair or replace the by-pass.
8. Unit does not refill or overfills.	<ul style="list-style-type: none"> <input type="checkbox"/> The brine valve is set incorrectly. <input type="checkbox"/> The brine valve is non-conforming. <input type="checkbox"/> The venturi nozzle is plugged. <input type="checkbox"/> The brine elbow screen is plugged. 	<ul style="list-style-type: none"> ▪ Set the brine valve according to instructions on the brine valve installation sheet in the owner's pack or tech manual. ▪ Replace the brine valve. ▪ Clean out Level 3 venturi throat and molded venturi nozzle. (Do <i>not</i> use a paper clip!) ▪ Remove and clean brine elbow screen.

Frequent Regeneration

Problem	Reason	Solution
1. The customer does not understand KineticoPRO units.	<ul style="list-style-type: none"> ❑ If customers previously owned an electric unit with timer based regeneration, they may not realize that KineticoPRO units can regenerate at any time of the day or night. 	<ul style="list-style-type: none"> ▪ Explain to the customer how the KineticoPRO softener works. Emphasize that regeneration is controlled by the measurement of water use rather than on an arbitrary timed basis.
2. High water usage.	<ul style="list-style-type: none"> ❑ The customer may be using more water than he realizes. 	<ul style="list-style-type: none"> ▪ Install the correct meter disc.
3. The unit does not regenerate too frequently.	<ul style="list-style-type: none"> ❑ Incorrectly labeled meter disc. Verify that the number of slots on the disc match the number molded on the disc. ❑ Incorrect meter nozzle. 	<ul style="list-style-type: none"> ▪ Install the correct meter disc. ▪ Verify meter nozzle and replace if necessary.

High Salt Consumption

Problem	Reason	Solution
1. Regenerates too frequently.	<ul style="list-style-type: none"> ❑ See the section entitled Frequent Regeneration. 	<ul style="list-style-type: none"> ▪ See the section entitled Frequent Regeneration.
2. Water level in the brine drum is too high.	<ul style="list-style-type: none"> ❑ The brine valve is set wrong or non-conforming. ❑ The brine valve or the brine drum is dirty. ❑ The brine valve leaks. 	<ul style="list-style-type: none"> ▪ Verify the brine valve setting. Replace non-conforming brine valve. ▪ Clean brine valve and drum. ▪ Tighten the connectors on the brine valve.

Leaks

Problem	Reason	Solution
1. Water leaks from any of the assembly levels.	<ul style="list-style-type: none"> ❑ Main Valve screws are not tightened. ❑ One of the seals between assembly levels (Level 1 through Level 4) is pinched or missing. ❑ One of the screw holes is stripped or cracked. ❑ There is a crack on the seal area near a screw hole. 	<ul style="list-style-type: none"> ▪ Depressurize the unit and tighten the Main Valve screws. ▪ Replace the non-conforming seal. ▪ Replace the base. ▪ Replace the level.
2. Water feed pressure is too high (125 psi maximum).	<ul style="list-style-type: none"> ❑ No pressure regulator installed. ❑ The pressure regulator is broken. 	<ul style="list-style-type: none"> ▪ Install pressure regulator. ▪ Replace pressure regulator.
3. Water leaks at the main base or remote base.	<ul style="list-style-type: none"> ❑ The base is not tightened properly. ❑ The O-ring on the base is pinched or missing. 	<ul style="list-style-type: none"> ▪ Tighten base. ▪ Replace base O-ring.

Salty Treated Water

Problem	Reason	Solution
1. Restricted drain line.	<ul style="list-style-type: none"> ❑ The drain is kinked or clogged. 	<ul style="list-style-type: none"> ▪ Clear any obstructions. Make sure that the drain line flows smoothly and unrestricted.
2. Low water pressure.	<ul style="list-style-type: none"> ❑ The unit should not see water pressure drop below 15 psi on the outlet at any time. During the backwash portion of the regeneration cycle, it must hold at least 15 psi or the brine may not rinse out completely. ❑ The prefilter cartridge is plugged. 	<ul style="list-style-type: none"> ▪ Test the outlet pressure with the unit in backwash and one faucet at high flow. Measure the pressure by placing a gauge on the brine fitting. Raise pressure if below 15 psi. ▪ Replace prefilter cartridge.
3. The backwash flow control is plugged.	<ul style="list-style-type: none"> ❑ Without enough backwash flow to the drain, the unit cannot wash all the salt from the media tanks. 	<ul style="list-style-type: none"> ▪ Clean the backwash flow control.
4. The drain is extremely long or placed higher than 8 feet above the floor.	<ul style="list-style-type: none"> ❑ Such drain runs can put back-pressure on the unit and restrict the drain flow. This causes the same result as number 3 above. 	<ul style="list-style-type: none"> ▪ Locate a closer drain or use a larger diameter drain line.
5. The upper distributors are plugged. (This does not apply to upflow softeners)	<ul style="list-style-type: none"> ❑ Foreign material that finds its way into the media tanks may be collected around the upper distributors during backwash, clogging them. 	<ul style="list-style-type: none"> ▪ Clean upper distributors. ▪ Install a prefilter.
6. Water level in the cabinet is too high.	<ul style="list-style-type: none"> ❑ The brine valve is set wrong or non-conforming. 	<ul style="list-style-type: none"> ▪ Verify the brine valve setting. Replace non-conforming brine valve.

Taste, Color & Odor

Problem	Reason	Solution
1. Treated water has a metallic or iron taste.	<ul style="list-style-type: none"> ❑ See the section entitled "Iron Bleed-through." 	<ul style="list-style-type: none"> ▪ See the section entitled "Iron Bleed-through."
2. Treated water has chlorine odor and/or taste.	<ul style="list-style-type: none"> ❑ This is due to heavily chlorinated raw city water. 	<ul style="list-style-type: none"> ▪ Install a carbon filter.
3. Treated water has a salty taste.	<ul style="list-style-type: none"> ❑ In high TDS (1000+) applications, salt taste may be present due to the ion exchange process or sodium chloride in the raw water. ❑ See the section entitled "Salty Treated Water." 	<ul style="list-style-type: none"> ▪ Inform the customer of the KineticoPRO RO System or Commercial RO System. ▪ See the section entitled "Salty treated Water."
4. Treated water has a yellow tint.	<ul style="list-style-type: none"> ❑ The raw water may have traces of tannins present. ❑ See the section entitled "Iron-Bleed through." 	<ul style="list-style-type: none"> ▪ If tannins are present, use tannin softener. ▪ See the section entitled "Iron-Bleed through."
5. Treated water has an odor (hot water only).	<ul style="list-style-type: none"> ❑ The magnesium rod in hot water tanks can cause a reaction that gives off an odor of rotten eggs. 	<ul style="list-style-type: none"> ▪ Remove this rod from the hot water heater. An alternative rod may be installed.

Iron Bleed-through

Problem	Reason	Solution
1. Customer plumbing.	<ul style="list-style-type: none"> ❑ Previous iron buildup inside existing plumbing after the water softener. 	<ul style="list-style-type: none"> ▪ Verify the customer plumbing is the problem by testing the water quality at the brine fitting with water conditions.
2. The water meter disc is not set properly for current raw water conditions.	<ul style="list-style-type: none"> ❑ The composition of raw water can change with time. 	<ul style="list-style-type: none"> ▪ Check the hardness and iron content of raw water. Install the correct disc for current raw water conditions.
3. The salt setting is not set properly for current raw water conditions.	<ul style="list-style-type: none"> ❑ The composition of raw water can change with time. 	<ul style="list-style-type: none"> ▪ Check the hardness and iron content of raw water. Install the correct disc for current raw water conditions.
4. The iron may be ferric iron.	<ul style="list-style-type: none"> ❑ Ferric iron is not removable by ion exchange. ❑ The iron may be finer than the micron rating of the installed prefilter cartridge. 	<ul style="list-style-type: none"> ▪ Verify by using the demo softener to determine if iron is removable by the ion exchange. Add additional equipment if needed. ▪ Install a cartridge with finer micron rating.

Water Running to Drain

Note: With softeners and filter/softeners, start by testing the drain water. If the drain water is hard, the tank currently in service has a problem with its drain valve. If the drain water is soft, start with number 1 below.

Problem	Reason	Solution
1. The balance piston O-ring is not seated properly.	<ul style="list-style-type: none"> ❑ Water will leak past an improperly seated balance piston O-ring and out the drain. 	<ul style="list-style-type: none"> ▪ Depress the actuator several times to seat the O-ring. Replace worn or non-conforming O-ring.
2. Bad control disc.	<ul style="list-style-type: none"> ❑ A scored control disc will allow a fast drip to a pencil-sized stream to flow through the drain. 	<ul style="list-style-type: none"> ▪ Replace the control disc.
3. The drain or control valve seals are not seating properly.	<ul style="list-style-type: none"> ❑ Foreign matter under the seals will not allow them to seat properly. 	<ul style="list-style-type: none"> ▪ Disassemble and remove the foreign matter from seals.
4. Low water pressure.	<ul style="list-style-type: none"> ❑ If the water pressure is less than 15 psi at the brine fitting, the system may not operate properly. ❑ Test Backwashing Filters with the unit in backwash and 1 faucet (cold) running water. 	<ul style="list-style-type: none"> ▪ Increase water pressure.
5. The Main Valve piston quad rings or Level 4 internal quad rings are not sealing.	<ul style="list-style-type: none"> ❑ The quad rings may be rolled, pinched, torn or just dirty. ❑ The quad rings may be chloramine or chlorine damaged if on a chlorine treated water supply. 	<ul style="list-style-type: none"> ▪ Replace and re-silicone the quad rings. ▪ Replace quad rings with silicone seals. Order chloramine kit, part number 10534A.

Pressure Loss

Problem	Reason	Solution
1. Reduced pressure entering the unit.	<ul style="list-style-type: none"> ❑ The prefilter is clogged. 	<ul style="list-style-type: none"> ▪ Replace the clogged prefilter.
2. The upper and/or lower distributors are plugged.	<ul style="list-style-type: none"> ❑ Foreign matter from the input lines is accumulating in the distributors. 	<ul style="list-style-type: none"> ▪ Clean the distributors. Add a prefilter to eliminate the foreign matter before it enters the unit.

Equipment Noise

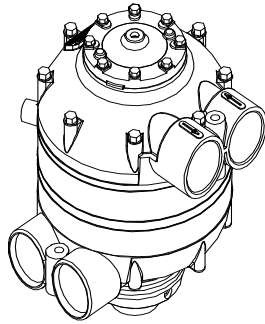
Problem	Reason	Solution
1. The unit makes a squealing noise.	<ul style="list-style-type: none"> ❑ The control disc is not flat on the ceramic, causing the drain valve to flutter. 	<ul style="list-style-type: none"> ▪ Replace the control disc, balance piston spring and the balance piston O-ring. You may also want to change the drain valves and seals.
2. The unit makes a gurgling, hissing or bubbling sound.	<ul style="list-style-type: none"> ❑ On new installations, there may be some air trapped in the unit initially. ❑ Air is being drawn into the plumbing. ❑ The brine line and/or the brine valve are not air checked. 	<ul style="list-style-type: none"> ▪ Run through an entire cycle to allow the air to escape. ▪ Identify air leaks in the plumbing and fix them. ▪ Identify and replace the faulty part(s).

Unit Sticks in Cycle

Problem	Reason	Solution
1. The unit sticks in regeneration or backwash cycle.	<ul style="list-style-type: none"> ❑ The regeneration flow path is plugged at the regeneration nozzle or flow control. ❑ The regeneration drive pawl and/or spring is weak or broken. ❑ There is a damaged tooth on the control disc. ❑ The eccentric pinion is worn. ❑ On backwashing filters, low pressure or poor backwashing may cause a plugged bed. 	<ul style="list-style-type: none"> ▪ Clean the regeneration flow path. ▪ Replace the regeneration drive pawl. ▪ Replace the control disc. ▪ Replace the eccentric pinion (snap fit). ▪ Increase inlet pressure or the frequency of backwash. Unit may need re-bedding.
2. The unit sticks in service cycle.	<ul style="list-style-type: none"> ❑ The regeneration start pawl is broken or missing. ❑ The control disc has a worn or missing tooth. 	<ul style="list-style-type: none"> ▪ Replace or install regeneration start pawl. ▪ Replace control disc.

PARTS

Complete Valve



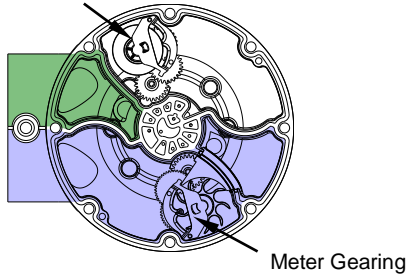
CC 206s.....	11293
CC 206c.....	11544
CC 208s.....	11272
CC 208c/h.....	11505

Level One

Cap Screw (8).....	1010
Cap.....	9044B
Actuator O-ring.....	1460
Actuator.....	9284A
Cap Seal.....	8628
Meter Disc 1.....	1504
Disc 2.....	1505
Disc 3.....	1506
Disc 4.....	1507
Disc 5.....	1508
Disc 6.....	1509
Disc 7.....	1510
Disc 8.....	1511
Balance Piston O-ring.....	1070
Balance Piston.....	14927
Balance Piston Spring.....	5448
Control Disc.....	4689
(central brining).....	4700A
No-Back Pawl.....	7097
Meter Drive Pawl.....	7014
Meter Drive Pawl Spring.....	7010A
Regen Start Pawl.....	1783
Eccentric Pin.....	1520
Level 1 Filter.....	10781
Support Pin.....	1023
Regen Drive Pawl.....	5511
Eccentric Pin.....	1520
Regen O-ring.....	2657
Level 1 Screw (8).....	1830
Level 1 Seal (Red LSR).....	8471
Level 1 Assembly (includes Level 2)	
CC 206s.....	11294A
CC 206c.....	13441A
CC 208s.....	11277A
CC 208c/h.....	11536A

Gearing

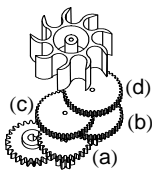
Regeneration Gearing



4 Stack Meter Gearing

Unit (Gallons)	(s) Stem Gear	(a) Gear	(b) Gear	(c) Gear	(d) Gear	(t) Turbine
CC 206c/s (600)	s	2	2	7	6	t
CC 208c/s/h (750)	s	2	1	5	4	t

turbine (t)



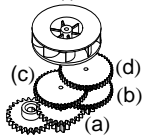
(s) stem gear

Part	Number
Gear Stem	1521
Gear 1	1522
Gear 2	1523
Gear 4	1525
Gear 5	1526
Gear 6	1527
Gear 7	1528
Turbine (PP9)	9258

Regeneration Gearing

Unit (Time)	(s) Stem Gear	(a) Gear	(b) Gear	(c) Gear	(d) Gear	(t) Turbine
CC 206c/s (11 min)	s	2	2	2	2	t
CC 208c/s/h (11 min)	s	2	2	2	2	t

turbine (t)



(s) gear stem

Part	Number
Gear Stem	1521
Gear 2	1523
Turbine (#10 jet)	8781F

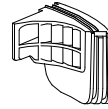
Gearing Part Numbers (all)

Gear 1	1522
Gear 2	1523
Gear 3	1524
Gear 4	1525
Gear 5	1526
Gear 6	1527
Gear 7	1528
Turbine (#8 jet)	11011A
Turbine (#PP9)	9258
Turbine (#10 jet)	8781F
Stem Gear	1521
Washers	1773
E-ring	1022
Meter Turbine Retainer	7859
Gear Alignment Clip	11902B

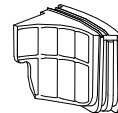
Nozzles



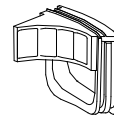
Micro Nozzle
0.05 gpm – 5 gpm.....10880B



1/2 Louver Nozzle
CC 206s
CC 206c/h
CC 208s
CC208c/h
0.3 – 25 gpm..... 11018

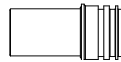


Full Louver Nozzle
0.7 – 40 gpm..... 11019

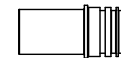


Open Louver Nozzle
1.1 – 50 gpm..... 15653

Inlet / Outlet Adapters



1 1/4" or 1" Brass - Solder7841
(complete kit) 7842A



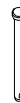
3/4" or 1" PVC - Glue5335D
(complete kit) 1483A



3/4" or 1" Brass – Solder.....1355
(complete kit) 1454A



3/4" Brass – FNPT3748
(complete kit) 3801A



Cotterless Clevis Pin.....10169



Module Set Screw11551
(CC 206c only)

Adapter Bracket 7840A

Tank Connector O-ring1328

Level 2

Vent Tube	1480
Level 2	8784D
Brine Flow Control	
CC 206 (0.3 gpm)	10546
CP 208 (0.4 gpm)	5156
Level 2 Seal (Red, LSR)	8630

Level 3

Drain Elbow	1850
(1/2" NPT x 1/2" Tube)	
Level 3	8915C
Brine Elbow	1840
(3/8" NPT x 3/8" Tube)	
Level 3 Seal (Red, LSR)	8631
Venturi Throat (Dark Blue)	2294
Venturi O-ring	1460
Regeneration Flow Control	
(0.2 gpm)	9183B

Level 4

	206/208(s)	206/208(c/h)
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Main Piston w/ Quad Ring	9751	5251
Main Piston Quad Ring	8186A	1550
Control Valve Quad Ring	8187A	1590
Control Valve (w / Quad)	13720A	13720A
Level 4	15128	5248A
Control Valve Seal	8193A	7869
Backwash Flow Control		
CC 206 (0.7 gpm)	1419	
CC 208 (1.4 gpm)	8474	
Main Valve Seat (w/ seal)	9741	5252
Main Valve Seal	8185A	7865
Level 4 Seal (Red, LSR)	8632	8632

Level 5

	206/208(s)	206/208(c/h)
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Drain Valve Quad Ring	8187A	1590
Drain Valve	15129A	7872A
Interlock	9261	9261
Level 5 (check stem)	13700A	7874B
Drain Valve Seal	8193A	7869

Level 6

Main Base Seal		
CC 206s, 208s	8633	
CC 206c	8620	
CC 208c/h	8620	
Check Stems	8627	
Main Base		
CC 206s, CC 208s	13701B	
CC 206c	5260E	
CC 208c/h	7656E	
Main Base O-ring	8925	
Upper Distributor	9251	

Remote Base

Remote Base		
CC 206s CC 208s	13705A	
CC 206c/h, CC 208c/h	8227A	
Main Base O-ring	8925	
Upper Distributor	9251	

Media Tanks, Distributors and Riser Tubes

Upper Distributor 9251

Media Tank
 CC 206s 7224B
 CC 206c 11540B
 CC 208s 11107B
 CC 208c/h 11714A

Riser Tube (Included w/Tank)

Brine Valve

$\frac{3}{8}$ " x $\frac{3}{8}$ " Tube Union 9210

Bent Tube
 CC 206c/h 11549A
 12x20 Brine Tank 7899
 18x35 Brine Tank 7802

Well Cover
 CC 206c 10087B
 CC 208c/h 10087B
 12x20, 18x35 7815A

Rod Lock 7796
 12x20, 18x35 7796

Float Cup 10699
 12x20, 18x35 7821

Float Cup Grommet 7789
 Float Cup Retainer 7820A

Rod Guide
 CC 206c/h 10698
 CC 208c/h 10698
 12x20, 18x35 7798

Adjuster Tube
 CC 206c, CC208c/h 10091
 12x20, 18x35 7787B

Brine Valve Assembly 7786

Brine Valve Quad Ring 9804

Brine Valve Body with connector 7783

Connector, $\frac{3}{8}$ " Tube x $\frac{1}{4}$ " MNPT 17506

Complete Brine Valve Assemblies

CC 206c/h	11548
CC 208c/h	11511
12 x 20 Brine Tank	7928
18 x 35 Brine Tank	7805

Tank Connectors

Connector Kit
 CC 208 13707

Connector Pin 4742

Connector O-ring 1328

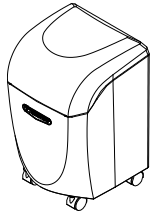
Connector Pipe
 CC 206 (6") 14654
 CC 208 (8") 13711B

Connector Link
 CC 206 (6") 10211
 CC 208 (8") 2845

Media

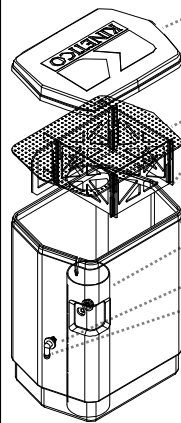
Softening Resin, Standard Mesh Non-solvent	13672
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CC 206c/h Brine Tank



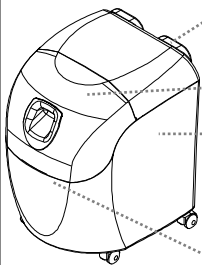
- Lid..... 11545
- Salt Shield 11550
- Salt Shield Screw 12507
- Cabinet 11546A
- KineticoPRO Logo..... 17526
- Grid Plate 11547
- Caster 11977A
- Washer 11527
- Rubber Feet 11698
- Screws (for Rubber Feet 11698)..... 11699

12 x 20 Brine Tank

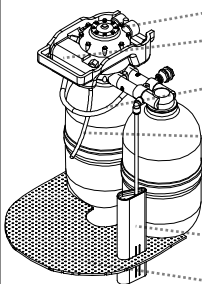


- Lid 5662A
- Grid Plate Complete 8705
- Grid Plate 8700
- Grid Support..... 8706
- Tank 11853
- Brine Well..... 7918A
- Overflow Nut 1139A
- Overflow Elbow 1138A

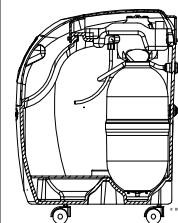
CC 208c/h Brine Tank



- Back Cover..... 11508
- Front lid 11507
- Cabinet 11509C
- Thumb Screws (for back cover) 12507
- Washers 11647
- KineticoPRO Logo..... 17526

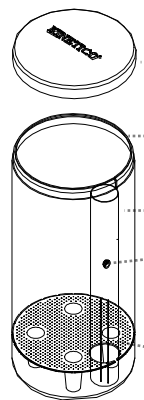


- Valve Lock..... Included w/Cabinet
- Screw 1010
- Drain Tube 11517
- Brine Tube..... 11516
- Brine Well..... 11709
- Grid Plate 11510A



- Bulkhead 11515
- Caster Washer 11527A
- Caster 11977A
- Caster Wheel Install Kit..... 11526A
- Rubber Feet 11698
- Screws (for Rubber Feet 11698)..... 11699

18 x 35 Brine Tank



- Lid..... 1456A
- Tank 1489
- Brine Well..... 1610A
- Overflow Nut 1139B
- Overflow Elbow 1138B
- Grid Plate 1539



Owner's Manual

Compact Commercial Series

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