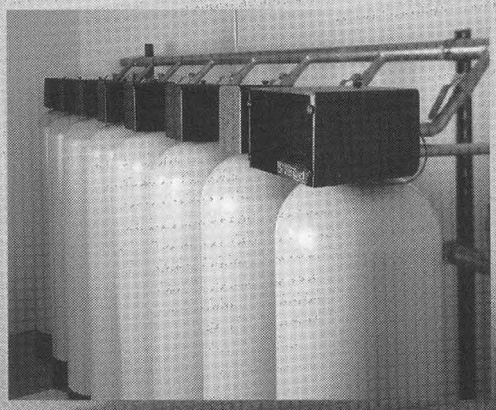
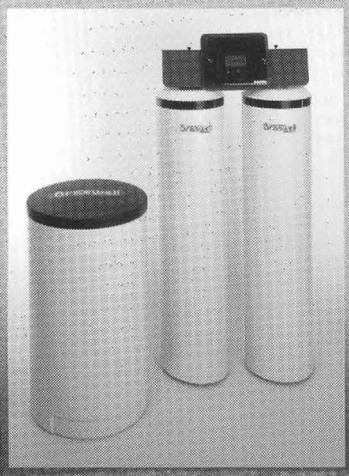
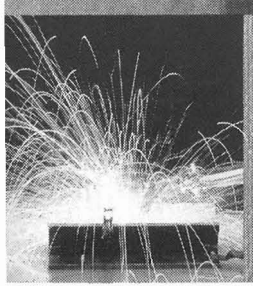
User's Manual

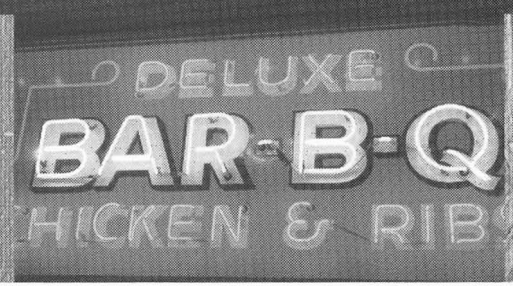




Commercial Water Quality System

Braswell





Congratulations!

Your Water Quality System was designed and manufactured for optimal performance with minimal maintenance. We know you will enjoy its many benefits for years to come. Thank you for choosing our system.

Owner/user responsibility

Please read this User's Manual carefully and familiarize yourself with your new Water Quality System. With a little preventative maintenance, you can reduce the need for service calls.

Before calling for service, please check:

- Is the power cable connected to the transformer? Is the transformer plugged into a 120V, continuously hot electrical outlet?
- Does the unit have a sufficient supply of approved salt that has not become hard or bridged?
- Is the unit protected from freezing, including drain lines and lines to and from the brine-tank?
- Is the unit protected from excessive heat or dampness from sweating pipes or leaks?
- Is the water pressure supply to the unit within the limits set by the manufacturer or has the water source been changed?

Be sure your dealer fills in the information below when your Water Quality System is installed.

Model _____

Controller Number _____

Valve Serial Number _____

Date of Installation _____

Dealer _____

Address _____

_____

Service Phone _____

Water Analysis

Hardness _____ GPG

Iron _____ PPM

pH _____

Other _____

Installation Checklist

- ❑ Water pressure should be at least 20 pounds per square inch. If pressure is over 80 PSI, install a pressure reducer.
- ❑ Flow rate should be at least 4.5 gallons per minute at 20 PSI.
- ❑ Drain availability—floor drain, washer drain, etc. Run overhead no more than 5 feet above the water softener. Increase the size of the drain for long runs. All plumbing codes require a 3-inch air gap at the end of the drain line.
- ❑ Electricity—continuously hot receptacle of 120 volts, 60 cycles.
- ❑ Water quality—if the water supply contains sulphur, iron, bacteria, tannins, algae, oils, acids, salt or other unusual substances, your system may require pretreatment.

Do...

Install the system after the pressure tank. Ask for advice on any special plumbing arrangement.

- Comply with all local plumbing and electrical codes.
- Examine inlet piping. If it is clogged, replace or clean it. Minimum size should be 3/4 inch nominal.

Install gravity drain on the brine tank.

Don't...

- Don't install if inlet water temperature exceeds 120°F.
- Don't allow heat from torches to be transferred to plastic or valve parts.

Installation Procedures

(Multi-Tank Commercial System)

1. Select location for water softener.

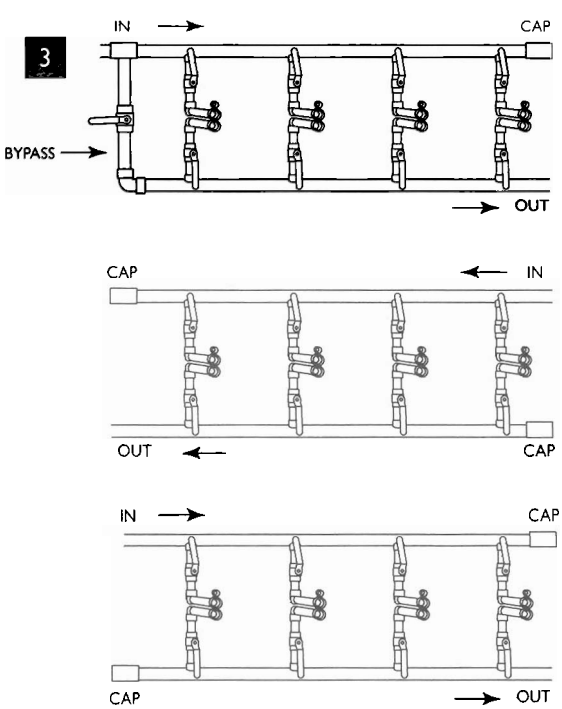
   The location of a commercial softener is usually dictated by the space available. There are several additional things that must be considered.

   - Floor surface must be firm and level.
   - Near the main water line.
   - A floor drain or sump must be nearby.
   - A 120V electrical outlet should be within 10 ft.

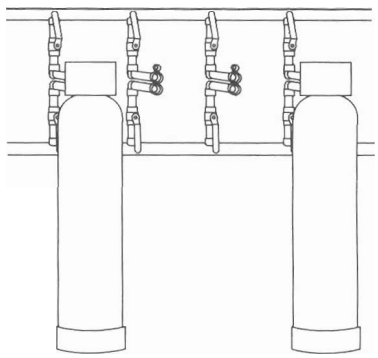
2. Open boxes to verify that there is no damage from shipping and all parts are included.

   For each valve in the system:
   2 - connector bars
   2 - 1/4-20 x 1 3/4 pan head screws
   2 - 1/4-20 hex nuts
   1 - clevis
   2 - 1" in & out nipples
   1 - 1/2" drain nipple
   brine harness with fittings
   1 - stud
   1 - black nut
   Hood and controller with turbine sensors, power cable, wiring harness attached
   1 - small black hood for all other valves

3. Determine the direction the water will flow and provide a bypass (optional). Connect the two header pipes using a tee on the top pipe and an elbow on the bottom pipe. Locate a bypass valve in the center of the connecting pipe. Cut-off valves are located before and after each tank in the system. Cap the end of the top header pipe, if optional bypass is used. (3)



4. Install the header.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- Measure one of the resin tanks from the floor to the center of the top 1" inlet port.
- Use this measurement to suspend the header from the ceiling of wall temporarily. Adjust it up or down to fit the in and out nipples to the control valve.
- Grease the female ports of the valve and adapter.
- Grease the O-rings on both the 1" in and out nipples and the 1/2" drain nipples with silicone grease.
- Insert nipples into the tank adapter on the header.
  Move a resin tank into position at either end of the header and connect it to the header.
  Adjust the height of the header again if necessary and move another tank into position at the opposite end of the header. (4)
- Secure both tanks with the connector bars and pan head bolts. When everything is in place, tighten 1/4" bolts and nuts securely.
- Move the remaining resin tanks into place and secure them in the same manner as the first two. Check each tank and the position of the header to be sure that none of them is in a bind. Secure the header permanently.

5. Connect the softener.

   Plumb the hard water line into the top header pipe. Water can enter from either end of the header but must exit from the opposite end of the bottom header pipe. Plumb the soft water line back into the existing main water line.
   - Install a pressure gauge in the fittings provided on each end of the header.

   NOTE: Prefabricated headers come from the factory with the turbines installed. If water is to be measured through a single tank, turbines will be installed on the first two tanks, beginning of the left end of the header. If water is to measured by one turbine on the full line, it will come as a separate piece to be installed on the job. Plumb it into the soft side near the header.

6. Install drain line.

   - Attach a 1/2" PVC pipe to the 1/2" drain opening on each tank.
   - Connect each pipe to a 3/4" PVC header at the back of the system.
   - Run the drain line to drain. Provide a 3" air gap at the end of the line.

7. Install brine tanks.

   Remove the safety float from the brine wells.
   Check the valve fittings.
   Remove the rubberband from the bottom of the float and return float to brine wells.

   A. TO REGENERATE ONE TANK AT A TIME.
   - Connect the 3/8" brine lines from the control valves of odd numbered resin tanks to the safety valves in brine tank #1.
     Connect the 3/8" brine lines from the control valves of even numbered resin tanks to the safety valves in brine tank #2.

Example:

For a 6-tank system with two brine tanks.

- Connect Resin tanks 1 - 3 - 5 to brine tank #1.
  Connect Resin tanks 2 - 4 - 6 to brine tank #2.

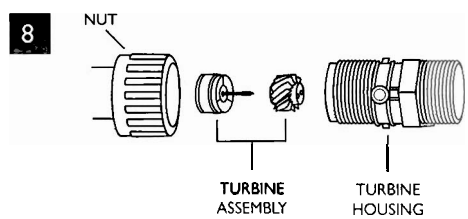
B. TO REGENERATE TWO TANKS AT THE SAME TIME.

Connect the 3/8" brine lines from the control valves of tanks 1, 2 and 3 to brine tank #1.

- Connect brine lines from resin tanks 4, 5 and 6 to brine tank #2.

8. Flush cuttings and other debris from the lines and pressurize the system.

- Remove impeller assembly from the turbine housing (replace later) (8).
- Loosen the plastic nut on the end of the turbine and union nut. Remove that section of pipe to allow room to remove both pieces of the impeller assembly.
  Replace the short piece of pipe and tighten the nut on the turbine housing hand tight. Be sure the rubber washer is in place inside the nut. Tighten the nut on the union very tight.
  Bypass the system.
- Close the inlet and outlet ball valves on each tank.
- Close the bypass valve between the two header pipes.
- Open the main shut-off valve.
- Open the bypass valve slowly to pressurize the system.
- Check for leaks.
  Open the inlet ball valve to each resin tank.
  When tanks are pressurized, open the outlet ball valve to tank number 1.
- Open a cold water faucet.
  When air has been removed from the tank, open the outlet valve to the next tank until all valves have been opened to all tanks.
  Close cold water faucet.
- Close bypass valve.
- Replace impeller assembly using the same procedure as above.



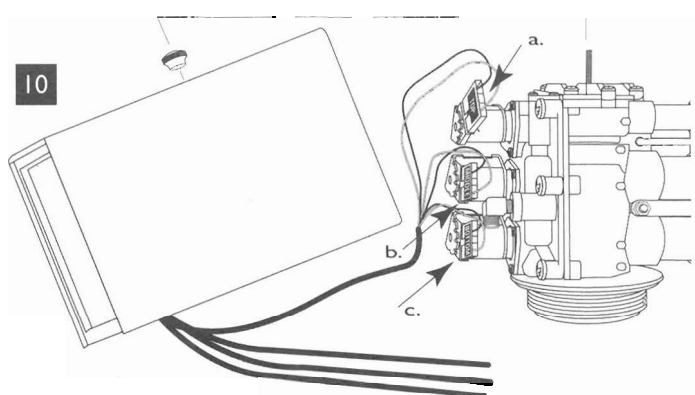
9. Install controller hood.

- Remove stud from plastic bag and screw it into the tapped hole in the center of the top lid of the #1 tank. This is the tank on the far left of the header.

10. Attach the solenoid harness to the control valves.

Remove acrylic door from front of hood.

- Select the #1 harness and attach it to the #1 control valve.
- Connect the red and white cable to the top solenoid coil (brine draw). (a)
- Connect the green and white cable to the middle solenoid coil (backwash). (b)
  Connect the black and white cable to the bottom solenoid coil (refill and purge).(c)
- Push connectors on snugly to assure solid contact. (10)



11. Complete installation of controller hood.

    Place the hood over the top of the control valve and allow the stud to come through the small hole in the top of the hood. Secure the hood with the black knob.

12. Attach remaining cables.

    - Attach the remaining solenoid cables to the appropriate control valves in the same manner as above.
    - Arrange the cables in a neat bundle, secure with a plastic tie at each tank.
    - Run the bundle across the top of the drain line.

13. Attach sensor cables to turbines.

    BRASWELL TURBINE.
    - Place the turbine O-ring around the opening of the sensor cavity. The proper position for the sensor is identified by a square projection on the clip and corresponding female depression in the turbine housing.
    - Slip the sensor into the cavity.
    - Press gently until both sides of the clip have snapped into place.

14. Attach power cable to the outside two connections on the transformer (it does not matter which wire is attached to left or right terminal) (14).

    Plug transformer into a continuously hot 120V electrical outlet.

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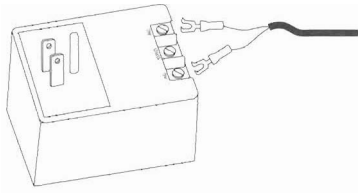
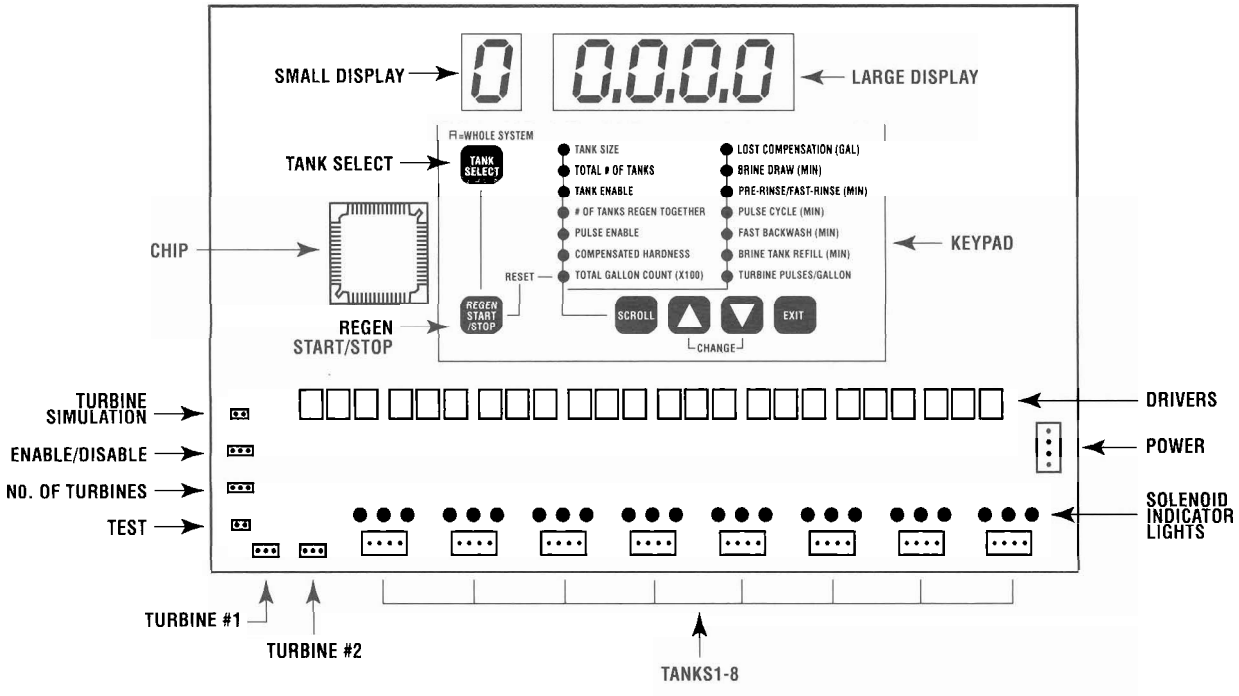


Commercial Controller



Softener Start Up

Remove the acrylic door from the front of the controller hood.

1. Program the commercial controller.

STEP 1. SET TANK SIZE

Press the scroll button. A red light will appear next to "Tank Size".
Press the up or down button to select tank size.

STEP 2. SET TOTAL NUMBER OF TANKS

Press the scroll button. The red light will move to "Total Number Of Tanks".
Press the up or down button to select the proper number of tanks.

STEP 3. SET TANK ENABLE

Press the scroll button. The red light will move to "Tank Enable". The large display will indicate the status of the tank that appears on the small 1 digit display.
Press the up button to change the status of the tank - yes for enable - no for disable. All tanks should read "yes".
Press the tank select button to move to other tanks.

STEP 4. SET THE NUMBER OF TANKS TO REGENERATE TOGETHER

Press the scroll button. The red light will move to "Number Of Tanks Regen Together".
Press the up or down button to set 1 for one tank at a time or 2 for two tanks at a time.

STEP 5. SET PULSE OR NON-PULSE

Press the scroll button. The red light will move to "Pulse Enable".
Press up or down button to select yes for pulse or no for non pulse.

STEP 6. SET COMPENSATED HARDNESS

See chart on page 12 to calculate compensated harness before proceeding.
Press scroll. The red light will move to "Compensated Hardness".
Press up or down button to set the proper compensated hardness.

STEP 7. SET TOTAL GALLON COUNT

Press the scroll button. The red light will move to "Total Gallon Count". The number displayed is the number of gallons that have passed through the system since the total gallon count was last reset.
Press the regen start/stop button to reset the total gallon count. (Multiply the number displayed by 100 to get the total gallons.)

STEP 8. SET LOST COMPENSATION (GAL)

Press the scroll button. The red light will move to "Lost Compensation (GAL)".
Press up or down button to enter the correct number of gallons to compensate for water that passes through the system but is not measured. Lost water can run as much as 10% of total gallon count.

NOTE: This feature will seldom be used and should always be set on zero gallons for the initial setting.

STEP 9. SET BRINE DRAW (MIN)

Press the scroll button. The red light will move to "Brine Draw (MIN)".
Press up or down button to set the desired number of minutes. The number displayed is the default setting for the tank and should be changed only to depart from the default setting. (The default setting is the standard program for the tank.)

STEP 10. SET PRE-RINSE (MIN)

Press the scroll button. The red light will move to "Pre-Rinse/Fast Rinse MIN".
Press up or down button to set the desired number of minutes in pre-rinse. The number displayed is the default setting, change only to depart from the default setting.

STEP 11. SET PULSE CYCLE (MIN)

Press the scroll button. The red light will move to "Pulse Cycle (MIN)".
Press up or down button to set the number of minutes in pulse cycle. The number displayed is the default setting. Change only to depart from the default setting. (If the board is set for non-pulse, it will skip this setting.)

STEP 12. SET FAST BACKWASH (MIN)

Press the scroll button. The red light will move to "Fast Backwash".
Press up or down button to set the desired number of minutes in fast backwash. The number displayed is the default setting. Change only to depart from the default setting.

STEP 13. SET BRINE TANK REFILL (MIN)

Press the scroll button. The red light will move to "Brine Tank Refill".
Press up or down button to set the desired number of minutes in brine tank refill. Change only to depart from the default setting.

STEP 14. SET TURBINE PULSE/GALLON

Press the scroll button. The red light will move to "Turbine Pulses/Gallon".
Press up or down button to set the proper number of pulses for the turbine to be used on this system. Turbine pulses are set at the factory. Call the factory for more information, if needed.

Turbine pulse settings:

Braswell	-	216
1" Erie	-	108
1" Autotrol	-	80
2" Autotrol	-	15

2. Test the system:

Use the test feature to check the performance of each tank.

- Press tank select button to bring up the number one tank. The number 1 will appear on the small display.
  Connect the J4 prongs. Test will appear on the large display.

TEST FOR BRINE DRAW

- Press the scroll button to energize the number one solenoid coil on the number one tank. The first solenoid indicator light will come one. Remove the brine line from the brine tank. Place your finger over the end to determine if a vacuum is being formed. Replace brine line.
  Press scroll again to de-energize the solenoid. The indicator light will disappear.

NOTE: If a vacuum does not occur, it may be because all of the air has not been forced from the tank. Go to "Test For Backwash" to remove any remaining air.

TEST FOR BACKWASH

Both the number one and number two solenoid valves must be open for the system to backwash.

Press the scroll button to energize the number one solenoid.

- Press the up button to energize the number two solenoid. The second indicator light will come on. Water will move up flow through the resin tank and can be heard running to the drain.
- Press scroll to de-energize the number one solenoid. Wait at least 10 seconds.
- Press the up button again to de-energize the number two solenoid. Both the number one and number two indicator lights will disappear.

TEST FOR BRINE REFILL AND PURGE

- Press the down button to energize the number three solenoid coil. The number three indicator light will appear. Water can be seen in the brine line running to the brine tank.
- Press the down button again to de-energize the number three coil. The indicator light will disappear.

IMPORTANT: When using the test feature to test for backwash, the number one solenoid coil must be turned off first. Wait at least 10 seconds to turn the number two solenoid off. If this procedure is not followed, the valve will stay in brine draw and will not perform the remainder of its functions.

TEST THE REMAINING TANKS IN THE SYSTEM

Press tank select to bring up the next tank.

- Repeat the test procedures above to test the entire system.

3. Fill the brine tank with salt.

Use a good brand of solar or pellet salt.
Be sure the brine well cover is in place.

- Place salt in the brine tank.
- Replace brine tank cover.

Additional Features For Service Technicians

1. J2 Prong -- TURBINE COUNTER

   - Important: Disconnect the turbine cable before using this feature.
   - Connect the prongs and maintain the connection.
   - The system will count down to 0 to determine if the controller will count gallons and initiate a regeneration automatically. To speed up this process, set the turbine pulses to 5.

2. J3 Prong -- KEY PAD ENABLE-DISABLE

   - To change the status of the key pad, pull the jumper up and change the position.
   - To enable key pad, place jumper on 1 and 2 prongs - (Set Up).
   - To disable key pad, place jumper on 2 and 3 prongs - (Normal).

3. J5 Prong -- NUMBER OF TURBINES

   - To select the number of turbines for the system pull the jumper up and change position.
   - To use one turbine, place jumper on 2 and 3 prongs.
   - To use two turbines, place jumper on 1 and 2 prongs.

4. J4 Prong -- TEST FEATURE

   - Connect the prongs to activate the test feature. Test will appear on the display. Each solenoid coil can be energized individually or in combination of two.
   - Press tank select button to choose the tank to be tested.
   - Press scroll button to energize the number 1 solenoid. (Brine Draw)
   - The number 1 solenoid light for the tank selected will appear at the bottom of the controller to verify that is has been energized.
   - Press the up button to energize the number 2 solenoid. (Backwash)
   - Press the down button to energize the number 3 solenoid. (Downflow Purge and Refill)
   - To de-energize the solenoid, press the appropriate button a second time.
   - To get out of the test mode, press exit button.

5. MANUAL REGENERATION

   - Press tank select button to select the proper tank to be regenerated.
   - To regenerate all tanks, select A for all tanks.
   - Press Regen Start/Stop button to start a manual regeneration.
   - To stop a regeneration, continue to press the Regen Start/Stop button until it moves through all cycles to the end of regeneration.

Programming the Controller

Calculating compensated hardness

1. Enter grains per gallon of hardness here. _____
2. Enter PPM of iron here. + _____
3. Add lines 1 and 2 and enter result here. = _____
4. Enter the appropriate compensation factor from chart at right here. x _____
5. Multiply the sum from line 3 by the compensation factor on line 4. Enter result here. = _____

Compensated hardness factors

Result from step 3	Compensation factor
1-20	1.1
21-40	1.2
41-70	1.3
71-100	1.4
100+	1.5

EXAMPLE

10	Grains
+ 3	PPM Iron
= 13	Total Hardness
x 1.1	Compensation Factor for 13 gr H^2O
= 14.3	Compensated Hardness

Quick Service Guide

Unit fails to regenerate

Cause	Solution
Electrical service to unit has been interrupted	Assure constant power source
Commercial controller is defective	Replace commercial controller
Solenoid coils burned out	Replace solenoid coils
Drain is frozen or plugged	Thaw out, replace or clean drain

Unit delivers hard water

Cause	Solution
Bypass open	Close bypass
Bypass O-ring damaged	Replace O-ring(s)
No salt or salt is hard or bridged	Add salt or break up bridging
Aspirator plugged	Clean aspirator
Insufficient water refilling brine tank	Check #3 solenoid coil, refill flow control and tank size setting
Cracked riser tube	Replace riser tube
Back pressure on drain	Correct drain
Broken vacuum breaker spring	Replace spring
#2 solenoid inoperative	Clean solenoid valve Replace solenoid coil

Unit uses too much salt

Cause	Solution
Improper tank size setting	Reset tank size
Excessive water in the brine tank	Defective #1 solenoid. Trash in the brine suction line or under the brine elbow. Trash under the #3 solenoid diaphragm.

Loss of water pressure

Cause	Solution
Iron buildup in the lines to the unit	Clean or replace lines
Iron buildup in the unit	Clean unit with acid or salt additive
Trash in the system	Clean complete control valve and bypass. Add pre-filter.
Clogged upper distributor	Remove and clean upper distributor.

Loss of resin through house lines

Cause	Solution
Defective lower distributor	Replace lower distributor

Iron in conditioned water

Cause	Solution
Salt dosage too low	Reset controller or increase size of flow control
No salt usage	Correct bridging
Oxidized or colloidal iron	Install post-filter (1 or 2 micron)

Excessive water in brine tank

Cause	Solution
#3 solenoid valve leaking	Clean #3 solenoid valve and check for bent solenoid guide
Purge check leaking	Check for trash
Aspirator plugged	Clean aspirator
#1 solenoid coil inoperative	Replace #1 solenoid coil
Blue dot elbow leaking back to brine tank when unit is not regenerating.	Replace elbow or rubber ball - if worn.

Quick Service Guide, *continued*

Unit fails to draw brine

Cause	Solution
Drain line plugged/frozen	Clean drain line
Aspirator plugged	Clean aspirator
#1 solenoid coil inoperative	Replace #1 solenoid coil
Low water pressure	Correct pressure
Trash in the purge check	Clean purge check
Brine tube disconnected	Replace or tighten brine tube
#2 solenoid coil inoperative	Clean or replace solenoid coil

Water runs to drain continuously

Cause	Solution
Trash under #1 or #3 solenoid diaphragm	Clean or replace solenoid diaphragms
Bent solenoid guide	Replace solenoid guide
Broken solenoid spring	Replace solenoid spring
Cage O-ring broken or missing	Replace cage O-ring
Cracked top lid	Replace top lid
Piston return spring caught	Replace or realign piston return spring

Brine tank does not refill

Cause	Solution
#3 solenoid coil inoperative	Replace solenoid coil
Refill flow control plugged	Clean or replace flow control
Driver on commercial controller inoperative	Replace commercial controller
#1 solenoid valve not seating out	Remove trash from under diaphragm. Check for swelling - replace

Vacuum breaker leaks

Cause	Solution
Foreign matter in lip of vacuum breaker split ball check.	Clean or replace

Odor

Cause	Solution
Sulfur or methane	Consult dealer
Other organics water conditions changed	Other equipment may be needed

Salty water after regeneration

Cause	Solution
Low water pressure	Increase water pressure
#2 solenoid coil inoperative	Check power or replace
Too much water in brine tank	Check brine refill for continuous flow
Test water for chlorides or nitrates	Add R.O. for drinking or find a new source of supply
Air leak in brine tubing harness	Replace or tighten fittings that leak

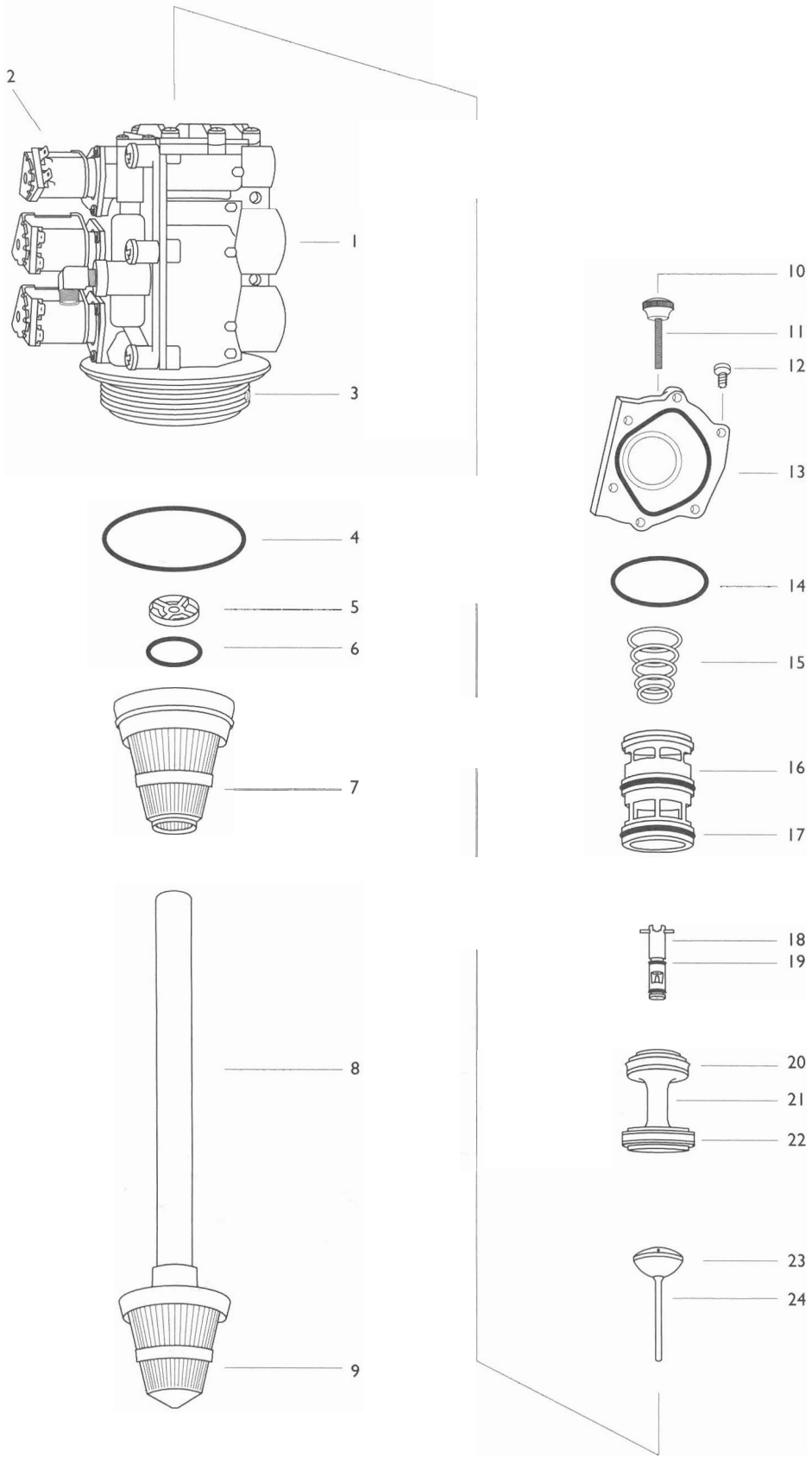
Control Valve Assembly

Ref. No.	Part Number	Description	Units per Assy.
1	1CV41820000**	Control valve body (brass or noryl)	1
2	A1CMBY110850*	Control module assy, complete	1
3	1SCR612SS000	Upper distributor mounting screw #6 X 1/2 PL FH SM 18-8 SS	2
4	10RING235000	Valve base O-ring #235	1
5	1CKSTEMGUIDE	Check stem guide	1
6	10RING121000	Riser tube O-ring #121	1
7	1UD20SEG0130	Braswell upper distributor	1
8	5RT1050ABSO*	Riser tube	1
9	5LD10SEG0000	Braswell lower distributor	1
10	3NUTK1032NPO	Black knob	1
11	1STUD10321SS	Stud 10/32 X 1 18-8 SS	1
12	1SCR103212AA	Top lid mounting screw 10/32 X 1/2 PL RH MS 18-8 SS	6
13	1TOPLID00000	Top lid	1
14	1ORING142000	Top lid O-ring #142	1
15	1PISTONSPG00	Piston return spring	1
16	1PISTONCAGE0	Piston cage	1
17	1ORING127000	Cage O-ring #127	3
18	S1ASPA100000	Aspirator	1
19	1ORING010000	Aspirator O-ring #010	2
20	1PISTONCUPSL	Piston cup seal	1
21	S1PISTONW000	Piston	1
22	1PISTONGAST0	Piston gasket	2
23	1STEMCKSEAL0	Stem check seal	1
24	1STEMCHECK00	Stem check	1

* Specify tank size

** Specify brass or noryl

Control Valve Assembly

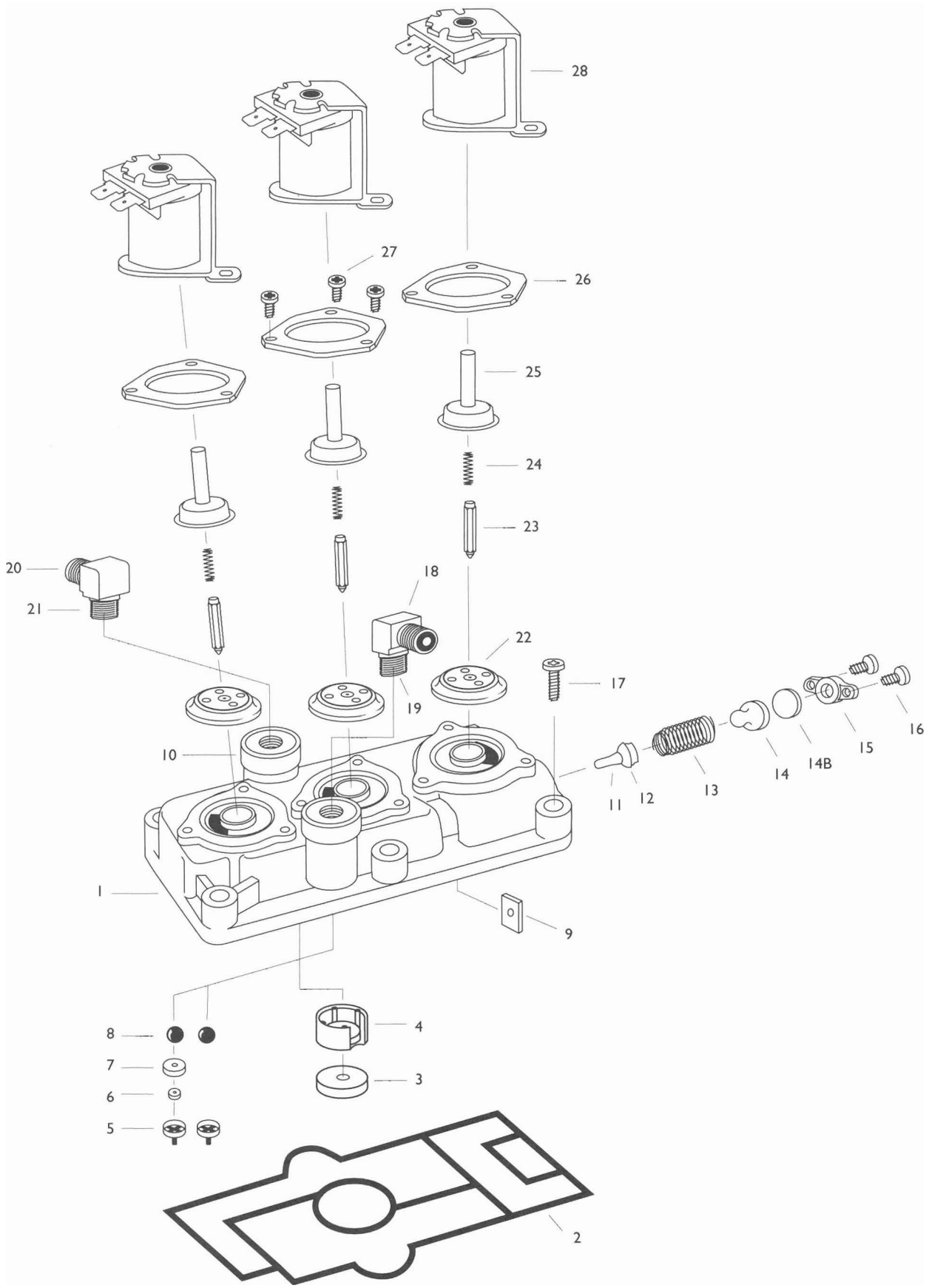


Control Module Assembly

Ref. No.	Part Number	Description	Units per Assy.
1	1CMBDY000000	Control module body	1
2	1CMSEAL00000	Control module seal	1
3	1BWFC1000000	Backwash flow control	1
4	1BWFCSUP0000	Backwash flow control support	1
5	1BDRKEEPER00	Brine draw and refill keeper	2
6	1RFC00000000*	Refill flow control	1
7	1RFCRETAIN00	Refill flow control retainer	1
8	1516CKBALL00	5/16 diameter check balls	2
9	1PURGEGATE00	Purge gate	1
10	1BRRING 14580	Brass ring	2
11	1PURGECK0000	Purge check	1
12	1PURGECKSEAL	Purge check seal	1
13	1VBSPRING000	Vacuum breaker spring	1
14	1VBBALLCK000	Vacuum breaker split ball check	1
14B		Felt pad	
15	1VBCOVER0000	Vacuum breaker cover	1
16	1SCR8716STOO	Vacuum breaker mounting screw #8 X 7/16	2
17	1SCR142034SS	Control module mounting screw 1/4-20 X 3/4 PL PAN HD MS 18-8 SS	6
18	138BRELB18MP	Brass elbow 3/8 OD X 1/8 MPT	1
19	1INSSTOP0000	Ball check stop insert (outlet)	1
20	138BRELB18MP	Brass elbow 3/8 OD X 1/8 MPT	1
21	1INSSEAT0000	Ball seat insert (inlet)	1
22	1SOLDIAPHRAG	Solenoid diaphragm high lift	3
23	1SOLARMATURE	Solenoid armature	3
24	1SOLSPRING00	Solenoid spring	3
25	1SOLGUIDE000	Solenoid guide	3
26	1SOLRETAINTER	Solenoid retainer	3
27	1SCR8716ST00	Solenoid mounting screw #8 x 7/16 SS	9
28	1SOL110B0000	Solenoid	

* Specify tank size

Control Module Assembly



Limited Commercial Warranty

This warranty is extended to the original owner only and is not transferable to subsequent owners of this equipment.

To place the equipment under warranty, THE WARRANTY REGISTRATION CARD MUST BE COMPLETED IN ITS ENTIRETY AND RETURNED TO: 415 E. WASHINGTON ST., Jackson, Missouri 63755, within thirty (30) days of installation by a factory-authorized dealer.

Terms

The manufacturer warrants its COMMERCIAL equipment to be free of defects of workmanship and materials for the following terms.

Defective parts will be repaired or replaced FOB Factory from the original owner along with the unit serial number.

2 Years: From date of manufacture of brass or noryl valve bodies. All electronic controls, control valve, solenoids, gaskets, springs and seals. Mineral tank and brine tank if not exposed to direct sunlight.

Limitations

Your COMMERCIAL equipment must be sold to you by an authorized dealer in order to receive benefits of this warranty.

This warranty does not cover damage due to:

- abuse, misuse or neglect
- excessive water pressure (over 125 PSI)
- excessive water temperature (over 120°F)
- freezing
- alterations
- application or installation not in accordance with published factory specifications or the instructions provided in the operation manual or not conforming to local codes
- over-chlorinated water (over 1.5 ppm residual)
- or any other act of God not reasonably within the Dealer's power to prevent or control.

This warranty does not cover any labor or service call costs incurred with respect to the removal or replacement of any defective part or parts.

In the event that the water supply being processed through this system contains bacterial iron, algae, sand, or other unusual substances, unless the system is represented as being capable of handling these substances in factory published literature, these substances must be removed before entering this product.

There are no other warranties, expressed or implied, other than stated in this document to the extent permitted by local state laws.

The manufacturer shall not be liable for indirect, special or consequential damages in connection with the use of this equipment to the extent allowed by local state laws.

Authorized Distributor

Braswell

Braswell Water Quality Systems, Inc.
415 E. Washington
Jackson, Missouri 63755
573 243-3660 ■ 573 243-5334 fax

WATER QUALITY
ASSOCIATION
MEMBER