

OWNERS MANUAL

CONTENTS

ENJOYING YOUR NEW WATER TREATMENT SYSTEM	PAGE 2
OPERATION OF THE TIMER	PAGE 3
UNDERSTANDING YOUR EQUIPMENT	PAGES 4 & 5
WIRING DIAGRAM	PAGE 6
PARTS DRAWING	PAGE 7
PARTS LIST	PAGE 8

ENJOYING YOUR NEW WATER TREATMENT SYSTEM

You now have the finest water treatment system made. It will give you years of soft, crystal-clear water, with only occasional attention.

To make using, operating, and maintaining your unit as enjoyable as possible, please read this Owner's Manual. It contains all the information you need, presented in a clear, concise manner.

This unit was shipped from the factory ready for operation, and will start delivering filtered, softened water immediately.

USING CONDITIONED WATER

AT THE BATHROOM SINK: Use far less soap! Two or three rubs with the soap is enough. After rinsing, you may think that your skin still feels slick or "soapy". Actually, this feeling is not soap at all, but the natural feeling of clean skin! When your skin dries, it will feel soft and moist - like it had a cream lotion treatment!

IN THE BATH OR SHOWER: Use a bath mat to guard against slips and falls. With conditioned water, there is no sticky hard water scum to provide traction.

IN THE KITCHEN: Try using less coffee. You'll find less is required, and your coffee will be smooth and rich. If you do dishes by hand, try using a mild, pure soap and see the difference it makes on your hands. If you have an automatic dishwasher, try different cleaning products to find the one that does the best spotless job.

IN THE LAUNDRY: Here again, use less cleaning product. If you are now using a detergent, try using a genuine soap.

OPERATING YOUR UNIT

When your unit is properly adjusted to your water hardness and use of water, the only further attention regularly required is the addition of salt. For maximum satisfaction, add salt before the salt container is empty. Two kinds of salt can be used:

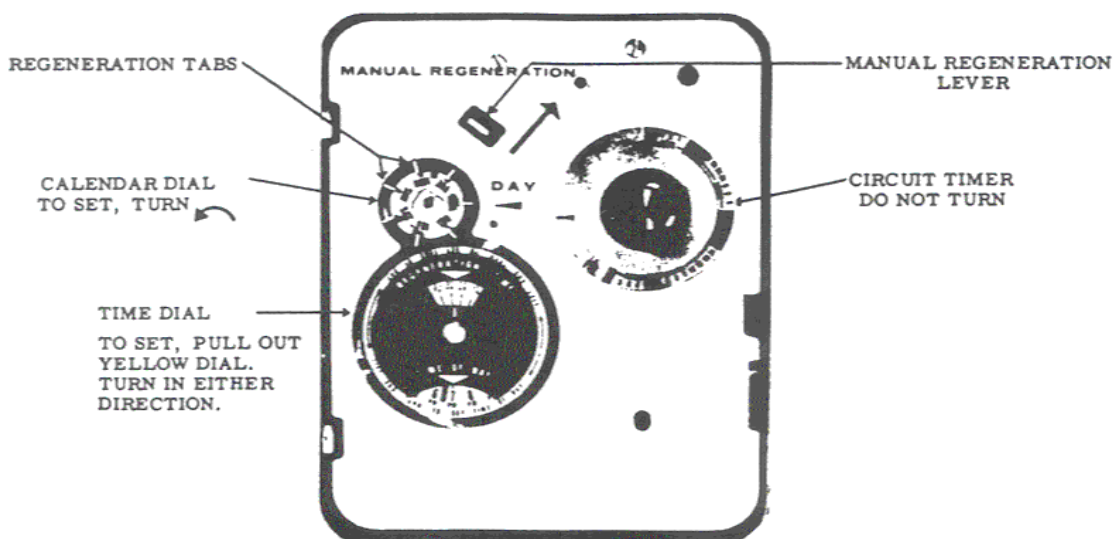
1. Water softener block salt is pure salt pressed into the shape of cattle blocks. It is recommended because it is low in cost, pure, and will not cake. Caution: the manufacturer cannot guarantee brine tank or components against the dropping of salt blocks. Use a belt to lower blocks into the unit.
2. Rock salt is mined and crushed. It is low in cost, but contains impurities which deposit in the brine tank, and must be cleaned out eventually. Use the largest size rock salt obtainable in your area, preferably #2 rock.

BEFORE USING ANY OTHER TYPE OF SALT IN THIS EQUIPMENT, CONSULT THE MANUFACTURER.

From time to time, you may also need to reset the Timer. If you change from Standard to Daylight Savings Time, you may want to reset the timer, just as you do the other clocks in your home. If your water hardness changes - or if your water usage changes - you may want to change the number of regenerations per week.

If there is iron in your water, it is wise to provide preventive maintenance by using block salt containing an iron remover. Or, you can add iron remover resin cleaner when you add salt (or oftener if necessary) to prevent the treatment media from becoming iron fouled. Use caution and follow instructions carefully if you use a cleaner containing nitric acid or other strong oxidizing agent.

OPERATION OF THE TIMER



HOW TO SET TIMER TO THE CORRECT TIME OF DAY

Pull the yellow time dial out, and turn it in either direction until the present time of day is opposite the **TIME OF DAY** arrow.

HOW TO SET TIMER TO THE CORRECT DAY OF THE WEEK

Turn the Calendar Dial counter-clockwise until the present day of the week is opposite the **DAY** arrow.

HOW TO CHANGE THE NUMBER OF REGENERATIONS PER WEEK

To increase the number of regenerations per week, pull out an additional Regeneration Tab. Tab should pull out 1/16 inch.

To decrease the number of regenerations per week, push in one of the Regeneration Tabs. Tab should push in 1/16 inch.

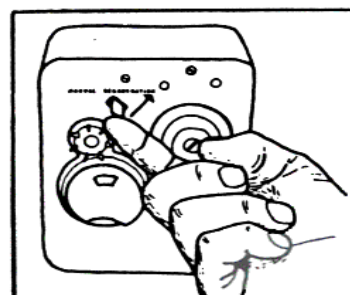
IF YOU REQUIRE THIS NUMBER OF REGENERATIONS PER WEEK . . .	1	2	3	4	5	6	7
THESE REGENERATION TABS SHOULD BE PULLED OUT . .	MON	MON THURS	MON THURS SAT	MON WED FRI SUN	ALL EXCEPT TUES & FRI	ALL EXCEPT WED	ALL

HOW TO CHANGE THE TIME OF REGENERATION

Loosen the screw in the center of the Time Dial. Turn the black plate in either direction until the desired time of regeneration shows in the window. Tighten the screw.

HOW TO REGENERATE MANUALLY

Press the Manual Regeneration Lever as shown at right. In 4 to 7 minutes, regeneration will begin. Unit will complete regeneration automatically and return to service. Normal regeneration cycle will resume automatically.



UNDERSTANDING YOUR EQUIPMENT

- 1.- CONDITION: HARD WATER (Water may be rusty without being hard.
See 2.)

Possible causes

Cure

- | | |
|---|--|
| a. UNIT NOT REGENERATING OFTEN ENOUGH. | INCREASE NUMBER OF REGENERATIONS (See "Operation of the Timer") |
| b. Unusual use of water due to guests, leaky toilet, etc. | Regenerate manually or increase number of regenerations (see "Operation of the Timer").
Check water use at meter. |
| c. No salt. | Refill salt container. |
| d. Caked salt. | Remove caked salt and refill with proper salt. |
| e. Not plugged in. | Plug in and set Timer correctly. |

2. CONDITION: RUSTY WATER

- a. If the water is rusty and hard, the cause is generally the same as that which is causing hard water (See 1).
- b. If the water is rusty but soft, these are likely reasons why:
1. Iron deposits in your pipes and hot water heater are being dissolved by the soft water. No cure (unless you wish to clean your entire plumbing system with acid). Soft water will eventually clean out the system.
 2. Your hot water heater may need to be drained. A heater acts as a collector of sludge. This sludge should be drained off, from the valve at the bottom of the heater, once a month - or oftener if necessary. Heater may also be rusty inside.
 3. You may have soft brass valves in your home. Some alloys of brass will color soft water - turn it yellow. No cure - just let the first gallon of colored water run down the drain.

4. Your city water supply may have unusually high iron. This can be caused by: (a) Hydrants being flushed, (b) Storage tank being flushed, (c) Repairs on water mains causing agitation of iron sludge in mains, or (d) City water treatment plant not functioning properly. The water from your outside sprinkling faucets may be yellow. It is best not to use water when this condition exists. To do so will cause the treatment mineral to become iron-clogged. Check with your city water department.
5. Iron content of your water may have increased. It is not unusual for well water to increase in iron content. Consult your dealer for recommendations.

3. CONDITION: WATER SMELLS OR TASTES BAD

- a. Magnesium anode rod in hot water heater. Causes "rotten-egg" odor in hot water, under some conditions. Cure: Remove rod from heater.
- b. Contaminated well. Cure: Have your well man sterilize your well.
- c. Contaminated treatment tank. Remove the Brine Line from the Brine Tank and insert it to the bottom of a quart of Clorox, Linco, or other household bleach. Regenerate the unit.

For removal of other strong tastes and odors, (except sulphur), install a Taste and Odor Filter ahead of the unit. For removal of sulphur odors, consult your dealer.

4. CONDITION: LOW WATER PRESSURE

- a. Low pressure in city mains. Check pressure at an outside sprinkler tap. Call city water department.
- b. Low pressure from pump. Check pressure at an outside sprinkler tap. Call your well man.
- c. Clogged faucet strainer. Cure: Unscrew and clean strainer.
- d. Valve in plumbing system partially closed or defective.

5. CONDITION: SALTY WATER

- a. Soft water normally has a "flat" taste, due to the limestone and iron being removed. Do not confuse this "flat" taste with saltiness.
- b. If water is salty at a time NOT immediately after regeneration, it is because water pressure has been turned off, line has been opened, and brine has siphoned into the treatment tank.

IF WATER IS SALTY, OPEN COLD WATER FAUCET, AND RUN UNTIL SALTINESS DISAPPEARS. DO NOT USE HOT WATER. IF HOT WATER IS SALTY, RUN COLD WATER FIRST; THEN DRAIN WATER FROM BOTTOM OF HEATER.

6. CONDITION: WATER RUNNING FROM DRAIN LINE

Unit is regenerating.

Allow unit to complete regeneration. Reset timer to correct time if necessary.

IN CASE OF DAMAGE DUE TO PRODUCT MALFUNCTION

DO NOT REPAIR UNIT.

If necessary, change bypass valve(s) so unit is bypassed.

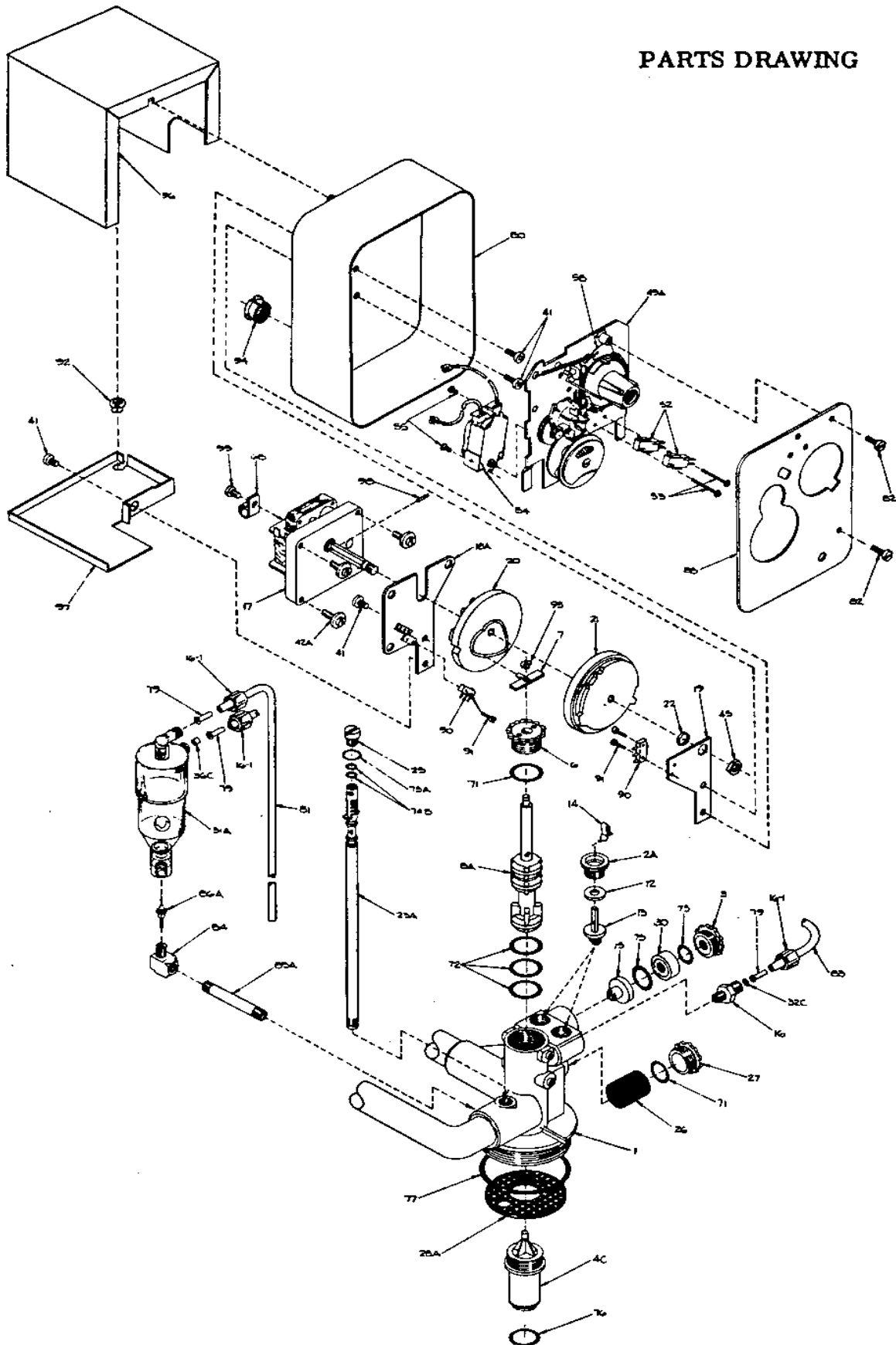
2. **DO NOT REPAIR DAMAGED PROPERTY OR MERCHANDISE**
Damaged property or merchandise should be preserved "as is" for inspection by a properly credentialed RainSoft Factory Representative. (Not a dealer or agent of dealer.)
3. **NOTIFY RAINSOFT CONSUMER SERVICE MANAGER,**
Elk Grove Village, immediately by phoning (847) 437-9400, followed by a confirming letter sent by registered mail to:

**RAINSOFT WATER CONDITIONING CO.
2080 E. Lunt Avenue
Elk Grove Village, IL 60007**

4. **A RAINSOFT FACTORY REPRESENTATIVE WILL EXAMINE UNIT and damage and determine liability of company.**

**POSITIVELY NO CLAIMS WILL BE HONORED BY FACTORY UNLESS THE ABOVE
PROCEDURE IS FOLLOWED.**

PARTS DRAWING



PARTS LIST

Part Number	Description	Material	Number Used
1	Valve Body	Teflon-lined Brass	1
2A	Shutoff Tab Retainer	Glass-filled Noryl	2
3	Drain Cap	Glass-filled Acetal	1
4C	Riser Pipe Adaptor	Glass-filled Acetal	1
6	Guide Cap & "O" Ring Assembly	Glass-filled Acetal	1
7	Cam Follower Pin	Nickel-Plated Zinc	1
8A	Piston Assembly	Brass, Acetal	1
12	Shutoff Tab Washer	Brass	2
13	Shutoff Tab	Brass, Rubber	2
14	Shutoff Tab Spring	Beryllium Copper	2
15	Drain Seat	Glass-filled Acetal	1
16	Brine Refill Seat	Celcon	1
16-1	Nut	Celcon	3
17	Drive Motor	All Metals Plated	1
18A	Rear Motor Bracket	Nickel-Plated Steel	1
19	Front Bearing Bracket	Nickel-Plated Steel	1
20	Drive Cam	Glass-filled Nylon	1
21	Back-up Cam	Glass-filled Nylon	1
22	Motor Shaft Bearing	Nylon	1
23A	Brine Injector Assembly	ABS Plastic	1
25	Brine Injector Cap	Brass	1
26	Inlet Screen	Monel	1
27	Inlet Screen Cap	Glass-filled Noryl	1
28A	Flow Diffuser	ABS Plastic	1
30	Backwash Flow Control	ABS Plastic, Rubber	1
31A	Tri-Guard Brine Control	ABS Plastic	1
32C	Brine Refill Screen	Plastic	1
36C	Brine Refill Flow Control, 1/4 gpm	Plastic	1
41	Bracket Screw	Brass	4
42A	Motor Mount Screw	Nickel-Plated Steel	3
45	Motor Shaft Nut	Nickel-Plated Steel	1
49A	Timer Mechanism for 1/4 gpm 36C	Plated	1
50	Cord	Rubber	1
52	Timer Switch	Plastic	2
53	Timer Switch Screws	Nickel-Plated Steel	2
54	Timer Motor	Plated	1
55	Timer Motor Screws	Nickel-Plated Steel	2
58	Anti-backlash Pawl	Aluminum	1
68	Cable Clamp	Plastic Coated Steel	1
71	1-1/8" O-Ring	Buna-N	2
72	1" O-Ring	Teflon-coated Buna-N	3
73	13/16" O-Ring	Buna-N	1
73A	5/8" O-Ring	Buna-N	1
74B	3/8" O-Ring	Teflon-coated Buna-N	2
75	7/8" O-Ring	Buna-N	1
76	1" O-Ring	Buna-N	1
77	2-7/8" O-Ring	Buna-N	1
79	Ferrule	Brass	3
80	Timer Box	Steel	1
81	1/8" Brine Tubing	Polyethylene	1
82	Timer Face Plate Screws	Nickel-Plated Steel	2
83	Brine Refill Tube	Polyethylene	1
84	1/8" Street Elbow	Brass	1
85A	1/8" x 3-1/2" Nipple	Brass	1
86A	Poppel and O-Ring	ABS and Buna-N	1
88	Timer Face Plate	Steel	1
90	Valve Switch	Plastic	2
91	Valve Switch Screws	Nickel-Plated Steel	4
92	1/2" Bushing	Plastic	1
93	"C" Clip	Brass	1
94	7/8" Bushing	Plastic	1
95	Cable Clamp Screws	Nickel-Plated Steel	1
96	Motor Cover	Steel	1
97	Motor Shelf	Steel	1
98	Shear Pin	Brass	1

Parts are available from your dealer, the manufacturer, or from Water Softener Parts Company, 2080 E. Lunt Avenue, Elk Grove Village, IL 60007