Owner's Manual







Superior Water WATERBOY™ Whole House System

Waterboy 948, 2000, 3000, 4000, 5000 Valvehead Series 5000/7000



13230 Evening Creek Drive #216 San Diego, CA 92128 858-679-2200 1-800-WATERBOY

CONGRATULATIONS ON YOUR NEW WATERBOY!

- 1. After the **WATERBOY** system is installed, the water will taste and smell fresh and clean throughout all the taps in your home. Since the **WATERBOY** conditions the water without salt or potassium, you will notice a squeaky clean rinse after a shower as opposed to a slimy, slippery, salt based feel. You will have increased lather from soaps and shampoos and a decreased need in quantity of soap and detergent for laundry and dishes. You will also have the reversing of scale and corrosion in your pipes, appliances and fixtures, as well as decreasing it from happening in the future.
- 2. The system has been preset at the factory to automatically backwash and purge itself once a week at 12:00AM. This process takes about 15 minutes and will sound like rushing water. There is a backwash cycle and later a forward rinse cycle within that time. (total flush cycle=2 rinses) It will disperse about a bathtub full of water over that period of time.
- 3. There is a lifetime warranty (original owner) on the tank for cracks and leaks and we will come out for service if any of that occurs. It needs no regular service unless you see a change in your water or notice the system not flushing.

No Maintenance Required

No maintenance is required because the system automatically back flushes, rinses and cleans itself between two and four times per month depending on usage. In most cases a filter change is not required for approximately 10-15 years. You don't have to do anything except enjoy the benefits of fresh, filtered, conditioned water always tasting terrific.

HOW IT WORKS The WATERBOYTM

Electronic control valve and timer

Stage I

Stage IV Multi-Reversing Fields Module

When your household water is treated with the **WATERBOY™** Whole House System, it goes through: 3 stages of filtration & 1 stage of conditioning.

Stage I

A pharmaceutical blend of activated carbon media is specifically formulated for taste and odor improvement, while eliminating the harmful effects of chlorine and disinfectants.

Stage III —

Stage II

An internal sediment filter of fine silica quartz filtration media which removes dirt and sediment in the water.

Stage III

Patented K.D.F. 55[™] redox media consisting of high-purity copper-zinc granules, which improves performance of the carbon to last longer.

Stage IV

The Multi-field water conditioning unit is a critical component in every WATERBOY System. Click here for more information. The multi-reversing polarity module stands head and shoulders over any presently used conditioning system in the world today. Numerous fortune 500 companies have been using this process in over half a million installations worldwide. The Multi-field unit conditions the water non-chemically by restructuring and realigning the polarity of the mineral molecules, without removing the minerals from the water.

General Residential Customer Information

LOCATION: The *WATERBOY*TM usually gets installed at the main line after the pressure regulator. Sometimes there is an existing loop in the garage where a Water Softener has been, that is also where we would install the system.

If the main shut off is on the front yard or side yard we have a few options to install the system there. We can run the copper around to the side of the yard and then back to the main or we can bury the unit $\frac{1}{2}$ way down in the ground. The plumber will assess the most convenient location and together you can decide which is best.

PRESSURE REGULATOR: The *WATERBOY™* needs to run within 65-8 0 PSI to stay within the warranty requirements. When the plumber installs the unit, he will check the current pressure of the house and then adjust accordingly. If there is an old PRV he will recommend installing a new one. **CAUTION:** Water pressure is not to exceed 100PSI and water temperature is not to exceed 100F. The unit can not be subjected to freezing conditions, otherwise needs to be blanketed and insulated from weather.

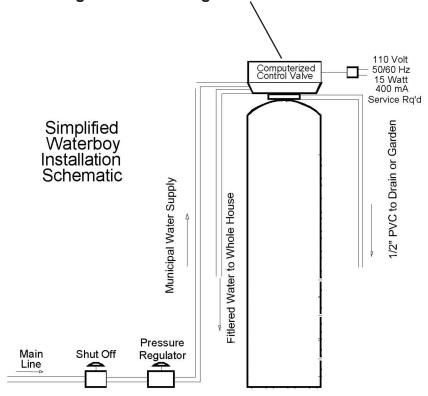
WATER PRESSURE: A minimum of 25 pounds of pressure is required for backwash valve to operate effectively .

ELECTRICAL FACILITIES: An uninterrupted alternating current (A/C), 110 outlet supply is required. **Note:** Other voltages are available. Please make sure your voltage supply is compatible with your unit before installation.

BACKFLUSH LINE: A $\frac{1}{2}$ " PVC backflush line will be installed at the top of the system to allow flushing of the media beds once a week. This happens at a preset time and will take approximately 15 minutes for the entire process to be completed.

BYPASS VALVES: Always provide for the installation of a by-pass valve if unit is not equipped with one.

* A thin blade or screwdriver can be used through the holes to get a little leverage to turn the valves.



^{*} Always leave red clips in when turning bypass valve.

7000 VALVE



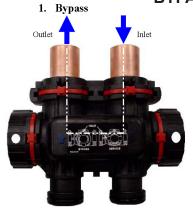


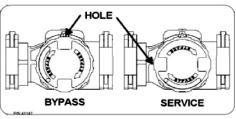
IMPORTANT

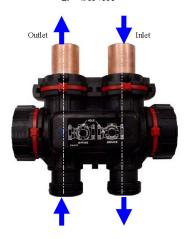
- Always leave red clips in while turning bypass on 7000 VALVE.
- To bypass the valve, turn bypass knob on both sides of the valve to bypass position.
- When returning to service, put the inlet into service before the outlet.

BYPASS VALVE

2. Service





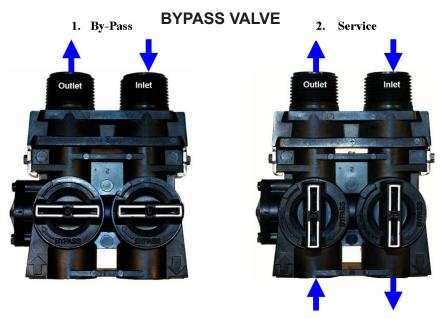


*To put unit in bypass, turn each wheel 1/4 turn to bypass position.

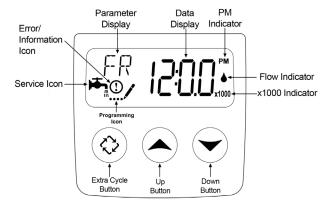
5000 VALVE

*There is a stamp with an arrow that shows the direction to turn for bypass; turn the opposite way to return to service.





These valves have 90° radius and will only turn in one direction from either service or bypass position. *Sometimes pliers are needed to get a little leverage on valves to turn.



Setting the Time of Day

- Press and hold either the Up or Down buttons until the programming icon replaces the service icon and the parameter display reads TD.
- 2. Adjust the displayed time with the Up and Down buttons.
- 3. When the desired time is set, press the Extra Cycle button to resume normal operation. The unit will also return to normal operation after 5 seconds if no buttons are pressed.



*Unit should always show present time of day.

Manual Backwash

Press and hold the Extra Cycle button for 5 seconds.

Programming is retained during power outage; Control valve will keep track of time up to 48 hours.

Change Routine

- 1. Press the Up and Down buttons for five seconds while in service, and the time of day is NOT set to 12:01 PM.
- 2. Use this display to adjust the Day Override. This option setting is identified by "DO" in the upper left hand corner of the screen.



Days Between Backwash

3. Press the Extra Cycle button. Use this display to adjust the Backwash Time. This option setting is identified by "RT" in the upper left hand corner of the screen.



This is your programmed back wash time.

Digital settings for 5000 SXT & 7000 SXT (Both SXT valve displays have blue background lighting)

* These settings are retained during power outages.

To Enter Master Programming Mode:

- * Set the Time of Day display to 12:01 PM (see below). (After setting to 12:01 PM; wait a few seconds for faucet icon to come back) Then press Up and Down buttons together until the Display Format screen appears (DF-GAL); this is the first line of programming for both valves.
- * Use the up and down buttons to set or change settings and Extra Cycle button to accept the displayed settings and cycle to the next parameter.

5000 SXT Settings

DF - GAL

VT - Fltr

CT - tc

NT - 1

DO - 7 (unit will flush once a week)

RT - 12:00 AM (programmed backwash time)

BW - 10 (backwash length)

RR - 2 (forward wash length)

7000 SXT Settings

DF - GAL

VT - Fltr

CT - tc

DO - 7

RT - 12:00 AM (programmed backwash time)

BW - 10 (backwash length)

RR - 5 (forward wash length)

Set clock to current time of day using up/down buttons. Buttons must be held in a couple seconds, then computer will allow time setting to change. Once time is set, let unit sit a couple seconds until faucet icon returns.

VACATION SHUT DOWN INSTRUCTIONS 5000 SE VALVE

Before you leave:

- 1. Press and hold extra cycle button (button left of up/down buttons with arrows pointing around in a circle) for about 5 seconds until flashing "BW" appears on screen and let go. Unit will go through backwash cycle automatically and screen will show time of day when complete.
- 2. After flush cycle complete, turn both black bypass knobs $\frac{1}{4}$ turn so that both knobs are perpendicular to water flow and system is in bypass.
- 3. Un-plug unit.

When you return:

- 4. Plug in unit
- 5. Set time to current time of day using up/down arrows. PM is indicated by small light in lower right corner of digital display. AM is indicated by light being off.
- 6. Turn both black bypass knobs ¼ turn so that knobs are in line with water flow and system is in service.
- 7. Press and hold extra cycle button for about 5 seconds until flashing "BW" (or a series of dashes) appears and let go. Unit will go through backwash cycle automatically and screen will show time of day when complete.
- 8. Done.

If your Waterboy has the 7000 valve bypass, all steps are the same except the bypass operation is different.



*7000 valve bypass. Rotate each of the round valve handles ¼ turn clockwise so that holes are perpendicular to water flow. To place in service rotate valve handles ¼ turn counterclockwise so holes are in line with water flow. DO NOT REMOVE RED CLIPS TO TURN BYPASS VALVES ON 7000 VALVE

*There is a picture on top of 7000 bypass valve that shows correct service and bypass positions.

WATERBOY INSTALLATION & PLUMBING INSTRUCTIONS

5000SE or 7000SE HEAD

Parts needed to install the unit:

- > 1 Waterboy Whole House System
- > Copper Pipe & Fittings for plumbing to unit

5000 Valve

- > 1 PVC 1/2" thread to slip adapter for valve drain connection
- > Brass Yoke and plastic double bypass

7000 Valve

- > 1 PVC $^3\!\!4"$ Female adapter and $^3\!\!4"$ x $^1\!\!4"$ Reducing Bushing for valve drain connection
- > Plastic bypass and brass adapters

Installing Waterboy Filtration and Conditioning System w/ 5000 Valve

- 1. Turn water off at main.
- 2. Open one faucet in house, and open 1 or 2 hose bibs attached to house plumbing.
- 3. Take out left clip from valve and attach $\frac{1}{2}$ " thread to slip adapter to drain line flow control fitting.
- 4. Reconnect drain line flow control assembly to valve head.
- 5. Attach bypass to valve head with metal side clips.
- 6. Detach yoke from bypass.
- 7. Sweat two 3" to 6" pieces of appropriate size copper pipe to yoke.
 - a. Attach the yolk to bypass brush flux onto pipe connections.
- 8. Cut above pressure regulator. Cut pipe to allow for 2 90's.
- 9. Bring up risers to back of filtration unit.
- 10. Check incoming and outgoing lines on valve.
- 11. Check incoming supply line is correct.
- 12. Sweat all connections.
- 13. Hook up PVC backwash/drain line. Can be sent to lawn, garden or drain. Be sure drain line retaining clip is in place before backflushing.
- 14. Open inlet bypass knob with outflow knob closed (open when in line with copper pipe to valve). Turn on water at slow rate to allow system to fill. Take 30 minutes to allow media to soak and settle with water.

Installing Waterboy Filtration and Conditioning System w/ 7000 Valve

- 1. Turn water off at main.
- 2. Open one faucet in house, and open 1 or 2 hose bibs attached to house plumbing.
- 3. Glue 3/4" x 1/2" Reducing Bushing to 3/4" female adapter
- 4. Take out top clip from valve drain line flow control fitting.
- 5. Connect PVC female adapter to threaded valve head drain fitting and clip back into valve.
- 6. Attach bypass to valve head with red clips
- 7. Unclip brass adapters from bypass by removing red clips
- 8. Remove o-rings from brass adapters and sweat on two 3" to 6" pieces of proper size copper to each adapter. Replace o-rings.
 - a. Attach 90 degree adapters to bypass or brass adapters
- 9. Cut above pressure regulator. Cut pipe to allow for 2 90's.
- 10. Bring up risers to back of filtration unit.
- 11. Check incoming and outgoing lines on valve.
- 12. Check incoming supply line is correct.
- 13. Sweat all connections.
- 14. Hook up $\frac{1}{2}$ " PVC drain line direct to lawn, garden or drain. Be sure to drain retaining clip in place before starting back rinse.
- 15. Open inlet bypass knob with outflow knob closed. Turn on water at slow rate to allow system to fill. Take 30 minutes to allow media to soak and settle with water.

Check all connections / System ready for first flush

- 1. Press and hold recirculation/cycle button for about 5 seconds until display shows flashing "BW". Let go of button. System will automatically cycle through backwash until complete (it is complete when time of day comes back to display). Continue with step if backwash is not complete and set when time of day comes back to display. Backwash cycle takes approx. **15 MINUTES**.
- 2. Attach Waterboy label to unit (removing plastic protective coating optional)
- 3. Check all connection for leaks.
- 4. Open outlet bypass knob.
- 5. With main water on open all faucets until water runs clear. (You might see lots of tiny air bubbles. These are normal and will go away).
- 6. Turn off faucets draw a glass of water it should taste
 - "SUPERIOR"!!

Dishwasher Tips & Instructions

- Superior Water recommends using using Cascade Complete bubble pack or Cascade Powder and also Lemishine for the rinse cycle.
 This combination will leave dishes and glasses sparkling.
- 2. **CUT DOWN ON SOAP!** Use only Powdered dishwasher soap! **USE 1 TABLESPOON TOTAL** Divide ½ into each cup. Too much soap can cause spotting, etching, film, and/or glazing.
- 3. Hot water must be at least 140 degrees higher is better! Set the hot water on the medium setting (older hot water heaters may have to be turned up to the high setting to achieve this temperature until the scale build-up inside clears).
- 4. Run the Hot Water at the kitchen tap until it is hot. This ensures the water is hot enough when you turn on your dishwasher. It is best to run your dishwasher when you know your hot water still has an adequate amount of hot water to do a complete cycle of dishes.
- 5. Turning off the dishwasher's heating element and letting your dishes cool dry can make a significant difference. Opening the door a crack to let steam escape as soon as the wash cycle is completed is helpful.
- 6. Store detergent in a dry place (not under sink) as moisture adversely affects dish detergent contributing to spotting. Seal the open boxes as best as possible. Purchase small boxes of detergent, thereby making it easier to keep the contents fresh and moisture free. Also, check the expiration date for freshness.

The above guidelines are based upon years of experience. Superior water has less surface tension, so less of anything is needed when added to the water. Water varies from area to area – so work with your water.

Hot water heaters having scale build-up should be drained about twice a year to avoid the scale going out into your dishwasher.

To remove film from dishes, pour two cups of vinegar in the dishwasher with no soap and run the dishwasher. Some glasses can become permanently etched if too much soap is used.

** Dishwashers are designed to wash dishes. Detergents are designed to bind with food particles to break down and need hot water to dissolve. Save Water – Save Time by not pre-washing all your dishes.

TIPS on Soap, Cleaning Materials, etc.

- 1. LIQUID OR BAR SOAPS work well in the shower, but any is best. Our water doesn't require detergent conditioning agents. A more natural soap works well!
- 2. Chlorine Disc in Toilet BOWL: We recommend chlorine tablets (that fasten underneath bowl rather than inside the tank) in the toilets to keep the bowl fresh smelling and clean.

3. GLASS SHOWER DOORS:

- a) We recommend using a squeegee on clear glass doors to prevent spotting from soap scum. Wiping the doors down is very effective.
- b) Use a cleaner for glass/tile to remove soap scum routinely. Products such as Shower Clean, X-14's products for soap scum, and Dow bathroom cleaner works well if done routinely (usually once a month). Vinegar and hot water also work effectively and are environmentally friendly.
- c) Mildew in Showers: Mildew build-up rarely occurs in areas with proper ventilation. If mildew develops, use a product such as X-14 Mildew Remover to remove the mildew. Advise leaving shower doors open for drying purposes to prevent further build-up.
- d) Rain X, Turtle Wax or a good liquid car wax on clear glass doors, chrome, brass, and/or dark tiles help promote sheeting and discourage soap scum build-up.

For additional moisturizing and silky skin, try Rainbath or Soft soap in your shower.

The above guidelines are based on years of experience. Superior Conditioned Water has less surface tension – so less of anything is needed when added to the water. Water varies from area to area, so work with your water. Cascade, for instance, might work better with the water in your area.



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