Owner's Manual

Pelican PRC34 Whole House Filter/Softener Combo

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Product Operation and Specifications

Specification Description	PRC34 Whole House Combo
Peak Flow	34 GPM
Minimum Working Pressure	25 PSI
Maximum Working Pressure	80 PSI
Maximum Vacuum	5 inch/127 mm Hg
Operating Temperatures	36°F - 120°F
pH Range	7 - 11

Water Conditions For Operation - NaturSoft® Systems

- The water should be free of hydrogen sulfide, a dissolved gas with a characteristic smell of rotten eggs. If present, it can coat the catalytic surface of the media and interfere with the process. The gas should be removed through adequate pre-treatment.
- The water should be free of hydrocarbons, oils, and lubricants. If present, they can coat the catalytic surface of the media and interfere with the process. Remove through adequate pre-treatment.
- The water should contain less than 1 mg/l of phosphates. Phosphates sequester dissolved hardness molecules preventing them from forming crystals and may coat the catalytic media surface and interfere with the process.
- The copper level in the water supply should be below the MCL of 1.3mg/L. If copper is present above this level, it can attach to the surface of the catalytic media and interfere with the process.

⚠ WARNING:

If this or any other system is installed in a metal (conductive) plumbing system, i.e. copper or galvanized metal, the plastic components of the system will interrupt the continuity of the plumbing system. As a result any errant electricity from improperly grounded appliances downstream or potential galvanic activity in the plumbing system can no longer ground through contiguous metal plumbing. Some homes may have been built in accordance with building codes, which actually encouraged the grounding of electrical appliances through the plumbing system. Consequently, the installation of a bypass consisting of the same material as the existing plumbing, or a grounded "jumper wire" bridging the equipment and re-establishing the contiguous conductive nature of the plumbing system must be installed prior to your system's use.

⚠ CAUTION:

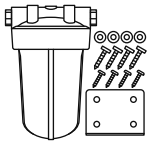
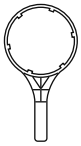
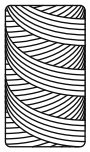
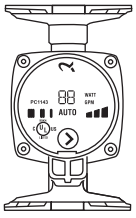
When adding a filtration/softening system to homes/buildings supplied by well water, the system should be installed following the pressure tank. **DO NOT USE this system for pneumatic or hydro pneumatic applications. If you are using a booster pump, then install this system following the booster pump.** If you have questions, please call customer service.

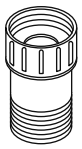
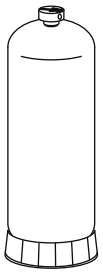
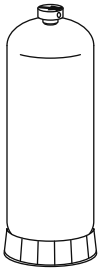
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Complete Parts List

Note: Enviro Water Products supplies the parts below to accommodate a variety of water supply lines.

Table 1: Parts List

Part	Description	Qty.
	**PVC Adapter:** 1-½" to 1" Threaded PVC Adapter Note: For Use with Tank Head	6
	**Sediment Filter System:** 20" Big Blue Filter Housing, Mounting Bracket, Philips Head Screws (4), Bolt Head Screws (4), and Washers (4)	2
	**Sediment Filter Wrench**	1
	**Sediment Filter:** 5 Micron Poly-Spun Sediment Filter	2
	**Flow Restrictor:** 17 gallons per minute	2
	**Circulation Pump**	1

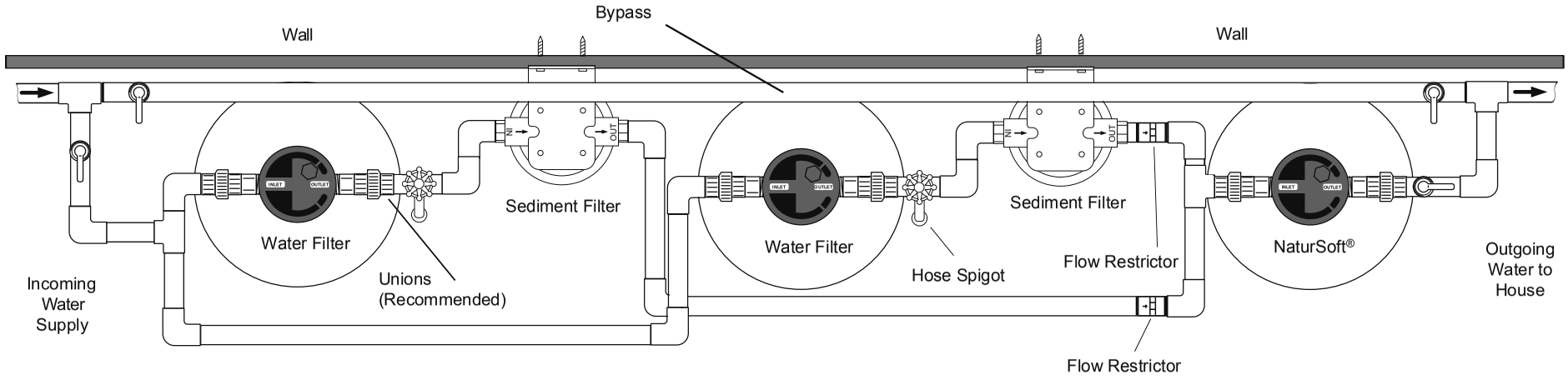
Part	Description	Qty.
	**PVC Adapter:** 1" to ¾" Threaded PVC Adapter Note: For Use with Tank Head	2
	**¾" PVC Hose Bib**	2
	**Water Filter Tank**	2
	**Salt-Free NaturSoft® Tank**	1

Note: Drawings are not to scale.

Additional fittings will be needed to adapt to your plumbing.

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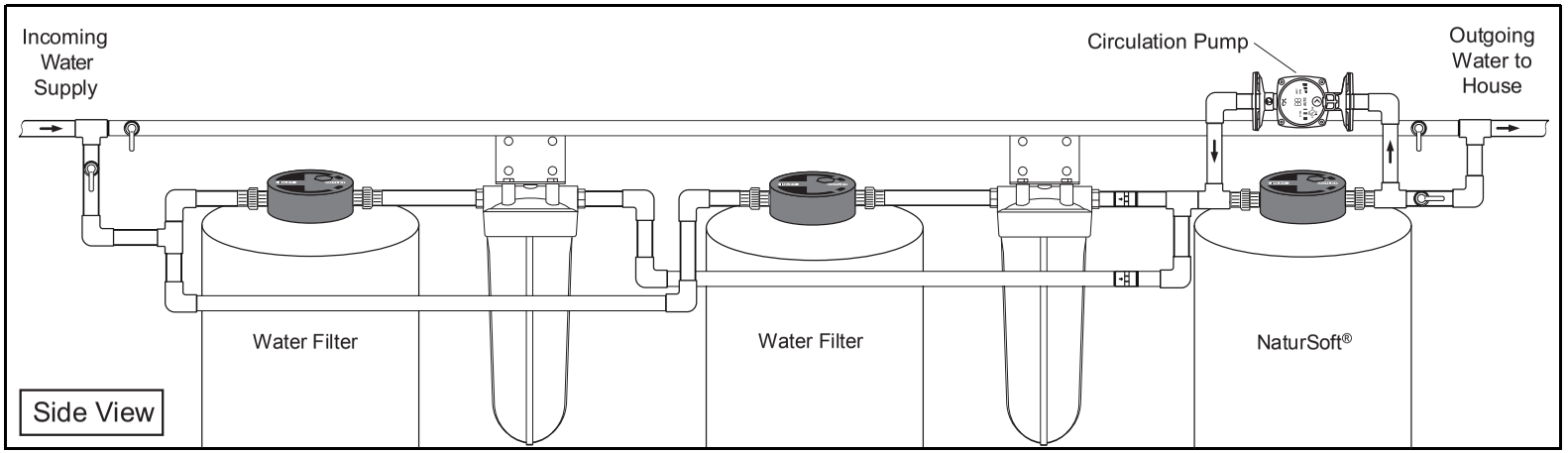
Installation Overview



Top View

⚠ **CAUTION: System requires a paralleled installation**

NaturSoft® Circulation Pump

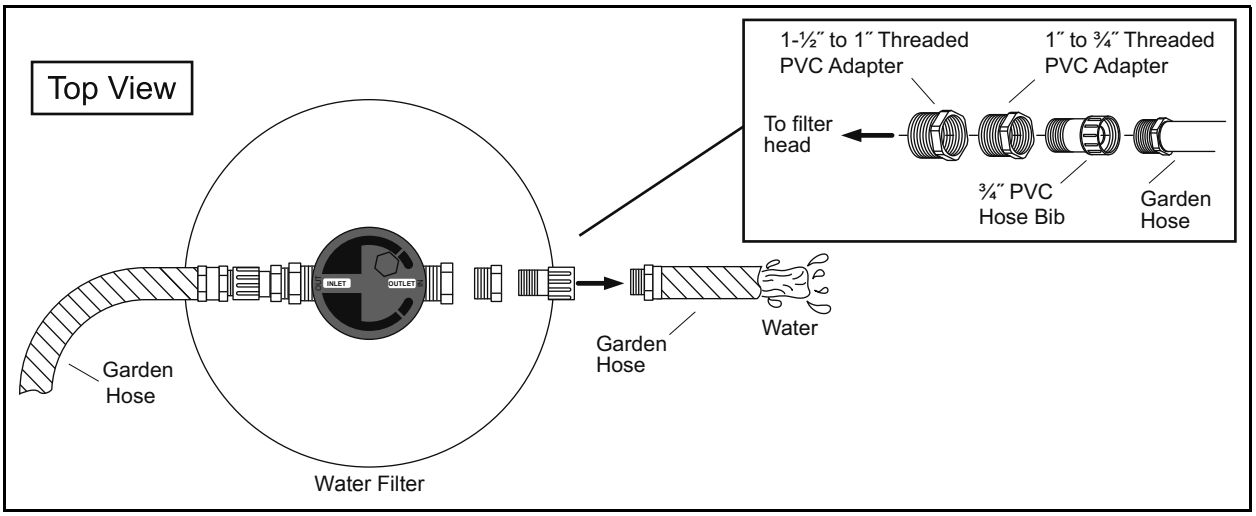


Side View

Water Filter Tank - Carbon Soak

!IMPORTANT!
Your system will not be ready for use for a minimum of 48 hours while the Carbon Soak process takes place. Please plan your installation accordingly.

Notice:
Water will flow out of the filter head during this process. Be sure you perform this series of steps in a location suitable for water flow.



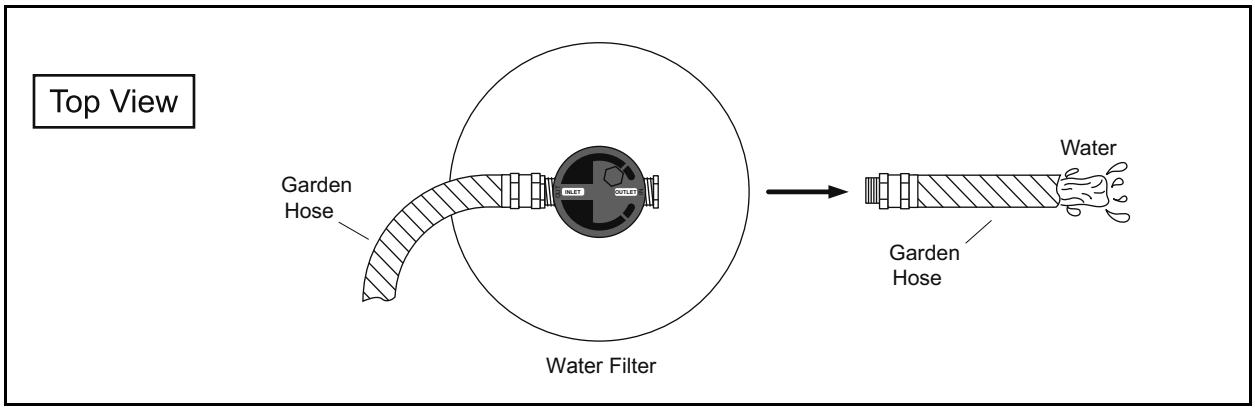
1. Connect the 1-½″ threaded PVC adapter to the inlet side of the tank head.
2. Connect the 1″ threaded PVC adapter into the 1-½″ adapter.
3. Connect the ¾″ PVC hose bib into the 1″ adapter.
4. Connect your garden hose to the Hose bib adapter.
5. Repeat steps 1-4 on the outlet side of the tank head.
6. Fill the Water Filter tank full until water flows out of the second hose.
7. Turn the water off.
8. Allow the Water Filter tank to soak for a minimum of 48 hours prior to installation.

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Water Filter Tank - Carbon Flush

!IMPORTANT!
Do not perform the Carbon Flush until the Carbon Soak process is complete.

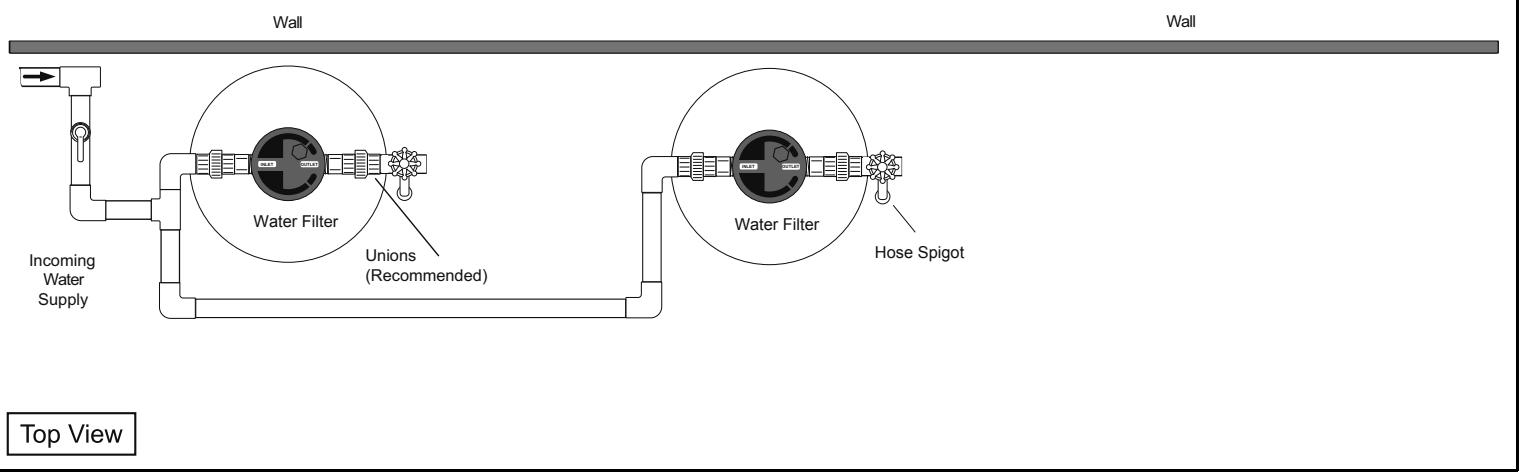
Notice:
Water will flow out of the filter head during this process. Be sure you perform this series of steps in a location suitable for water flow.



1. Slowly turn on the water to the full position for this entire process.
2. Run water through the INLET side of the filter head for 60 minutes.
3. Turn off the water.
4. Remove the hoses and the hose bib adaptors.

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Whole House Water Filters Installation



1. Shut off the main water supply
2. Level the Water Filters.
3. Determine the size and material of your incoming water supply line and choose the appropriate fittings required to connect it to the filter heads. We recommend using unions.
4. Install the fittings onto the INLET and OUTLET sides of the filter heads.

⚠ CAUTION:

Do not over-tighten any of the fittings during installation.

5. We recommend plumbing in a bypass around the system for future maintenance. When plumbing in the Water Filters integrate a tee fitting to allow for the bypass. (see figure above)
6. We recommend plumbing in a shut off valve prior to the system.
7. Connect the incoming water supply to the INLET side of the filter heads utilizing a tee fitting to split the line to the two Water Filters.
8. Connect the outgoing water supply to the OUTLET side of the filter heads.
9. We recommend installing 2 hose spigots after the Water Filters for flushing and future maintenance.

⚠ CAUTION:

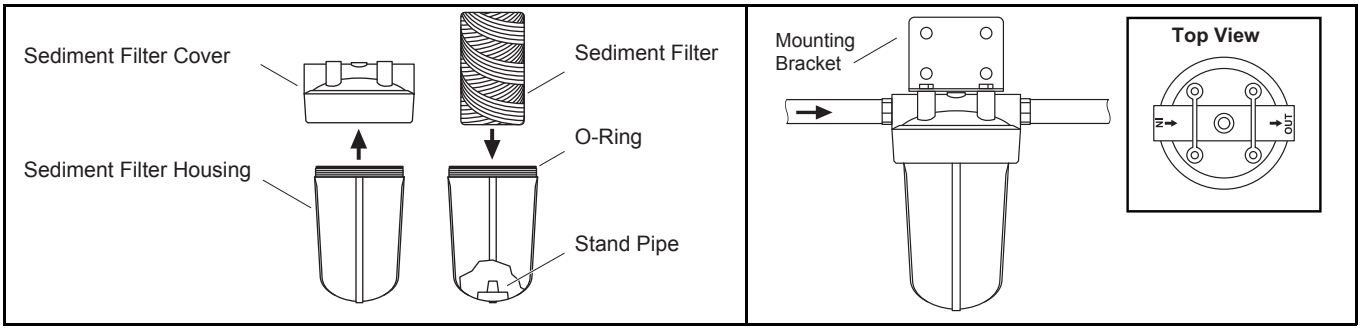
Carbon dust may be released into the water lines of the house/building during the first few days of water use after carbon tank installation. The carbon dust is harmless, but may give the water a gray appearance that should diminish within a week or 10 days depending on water use.

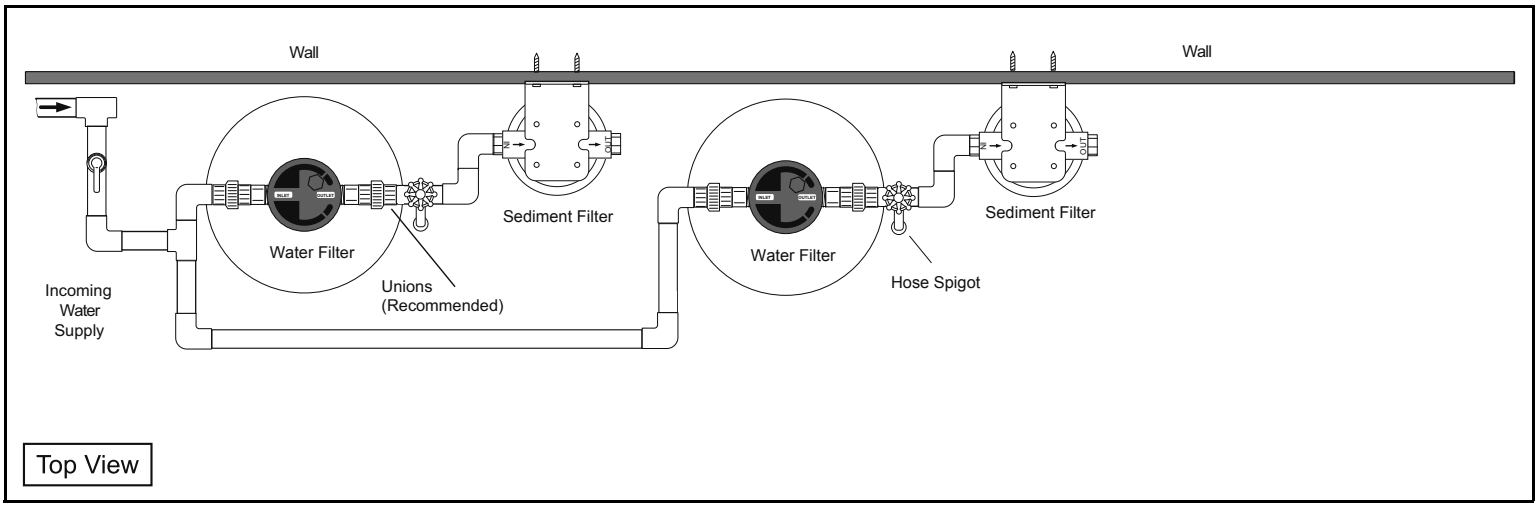
!IMPORTANT!

Do not use where water is microbiologically unsafe or with water of unknown quality without proper disinfection before or after the filter/softener system.

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Sediment Filter Installation



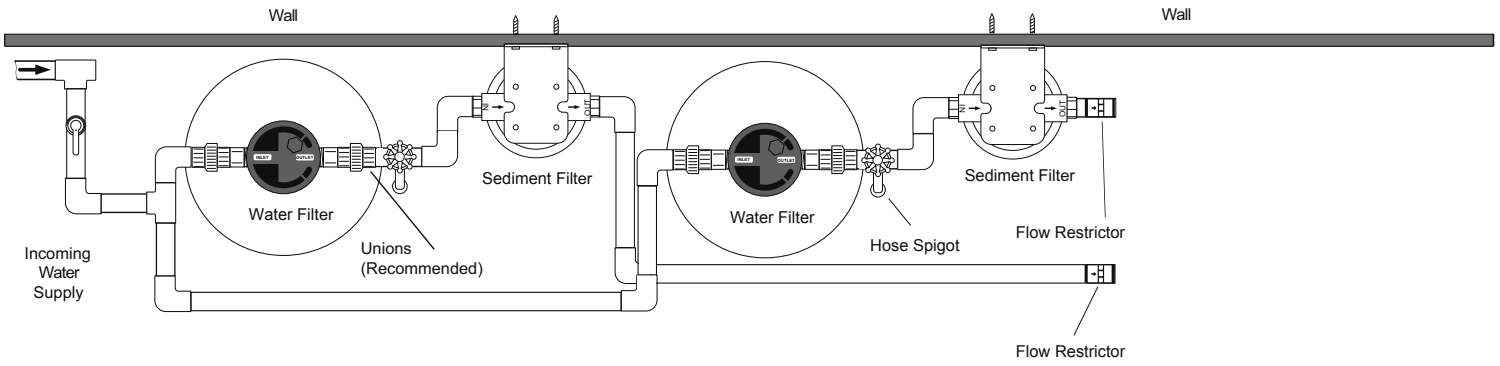


Notice:
The Sediment Filter Housing comes with a 1 1/2" threaded female inlet/outlet and will require additional fittings to adapt to your plumbing.

1. Unscrew the cover from the Blue Housing.
2. Attach the Mounting Bracket to the Cover using the supplied Bolt Head Screws and Washers. Make sure to orientate the INLET and OUTLET correctly to match the flow pattern.
3. Attach the Sediment Filter System to the wall using the supplied Phillips Head Screws.
4. Connect the outgoing water supply from the Water Filters to the INLETS of the Sediment Filters.
5. Remove the plastic covering from the Sediment Filters.
6. Place the Sediment Filters onto the Stand Pipes in the Blue Housings.
7. Tighten the Blue Housings using the supplied Sediment Filter Wrench (counter clockwise) Do Not Over Tighten.

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Flow Restrictors



Top View

1. Using the appropriate fittings thread both restrictors onto the outgoing water supply lines from the Sediment Filters.

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Prepare Circulation Pump

Note: Additional fittings will be needed to adapt to your plumbing.

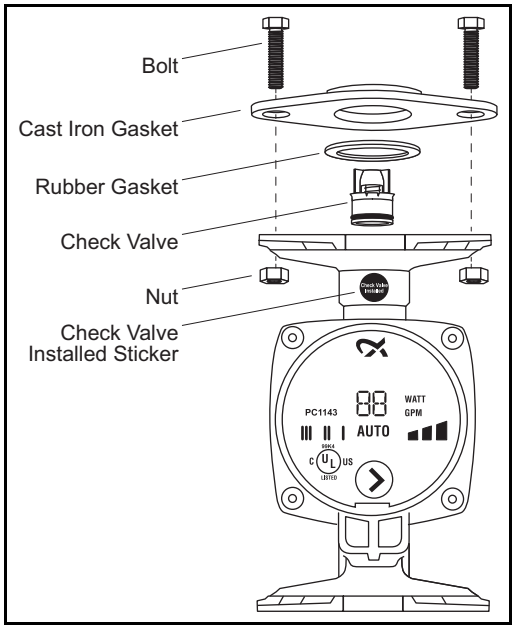
Required Tools

- 5/8" Socket Wrench
- (2) 1" Tee (Schedule 80 PVC or Copper)
- (2) 1" 90 Degree Elbows (Schedule 80 PVC or Copper)
- 1" Piping (length will vary)
- Pipe Straps (optional)

1. Attach (1) rubber gasket and set into gasket groove on one side of the pump flange (as shown in Figure 1).
2. Install check valve on outgoing end of pump.

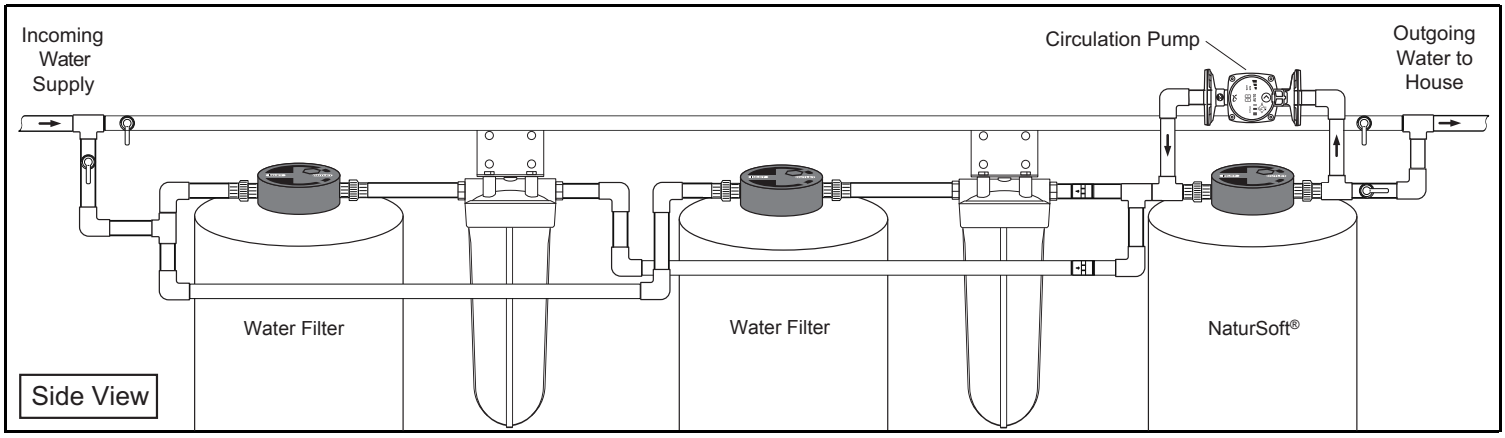
   !IMPORTANT!
   Place *Check Valve Installed* sticker on pump.
3. Place (1) cast iron flange on top of gasket and use (2) nuts and (2) bolts to tighten and secure flange. (5/8" socket needed to tighten fitting).
4. Install the gasket and flange on other side of pump.

Note: The circulation pump may come with an optional rubber gasket. Disregard this gasket; use the circular rubber gasket shown.



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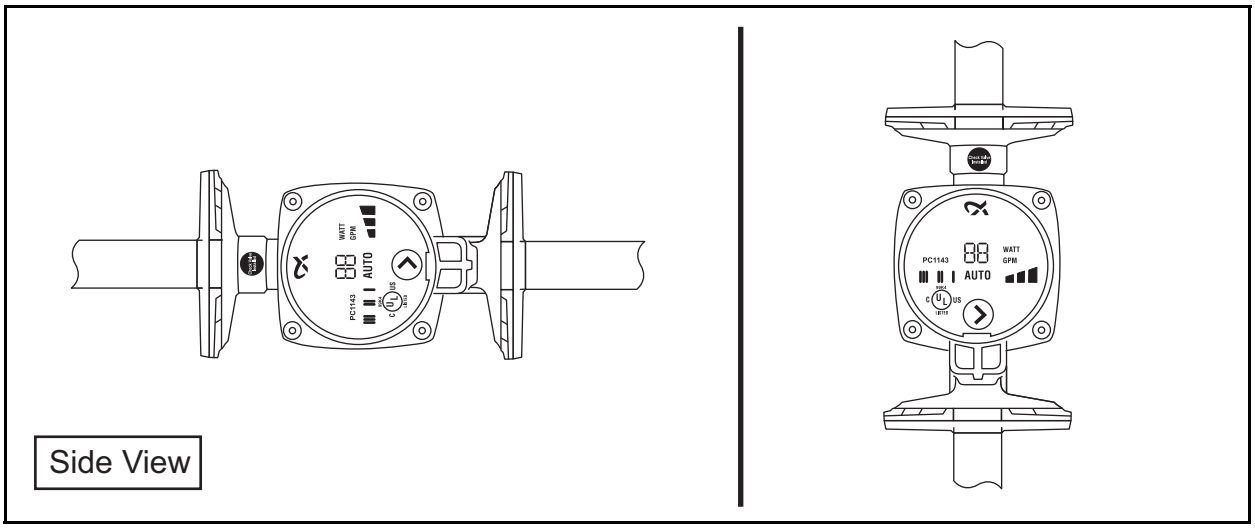
Circulation Pump Installation



1. Install (1) 1" Tee on the incoming water line before the NaturSoft System and (1) 1" Tee on the outgoing water line after the NaturSoft System. The "Tee" of the fitting should be pointing up when installed.
2. Install circulation pump using 1" piping (schedule 80 PVC or copper) and 90 degree elbows. Pump should be installed so the outgoing flow from the pump (side with check valve installed) is flowing towards the incoming side of the NaturSoft system. (See Notes below.)
3. Plug in pump and push the button on front of pump until LED displays the single "I" indicating the pump is set to the Low Fixed Speed setting.

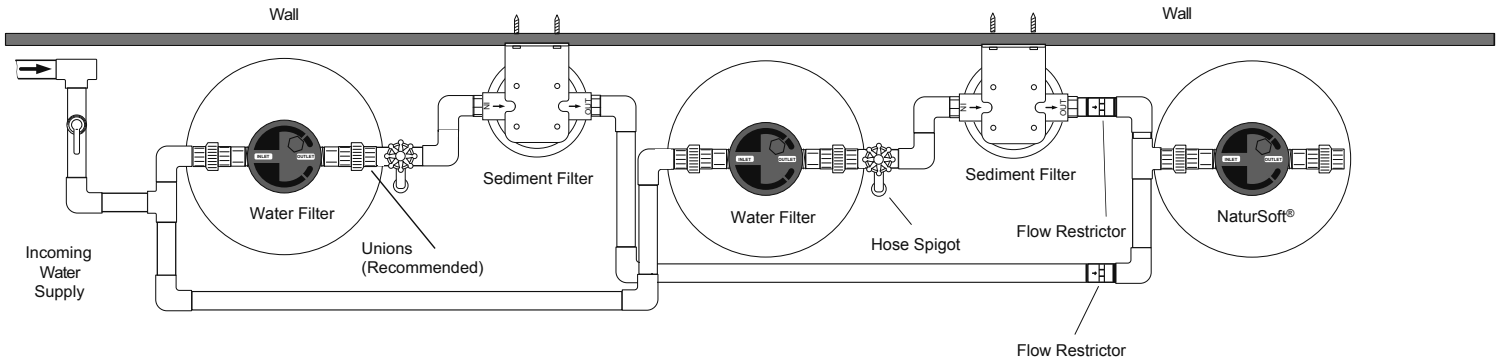
Note: If the piping is not secured to a wall or brace, use pipe straps to support some of the weight of the circulation pump after installation.

Note: The pump must be installed in 1 of 2 orientations shown in Figure 3.



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NaturSoft® Salt Free Water Softener/Conditioner Tank Installation



Top View

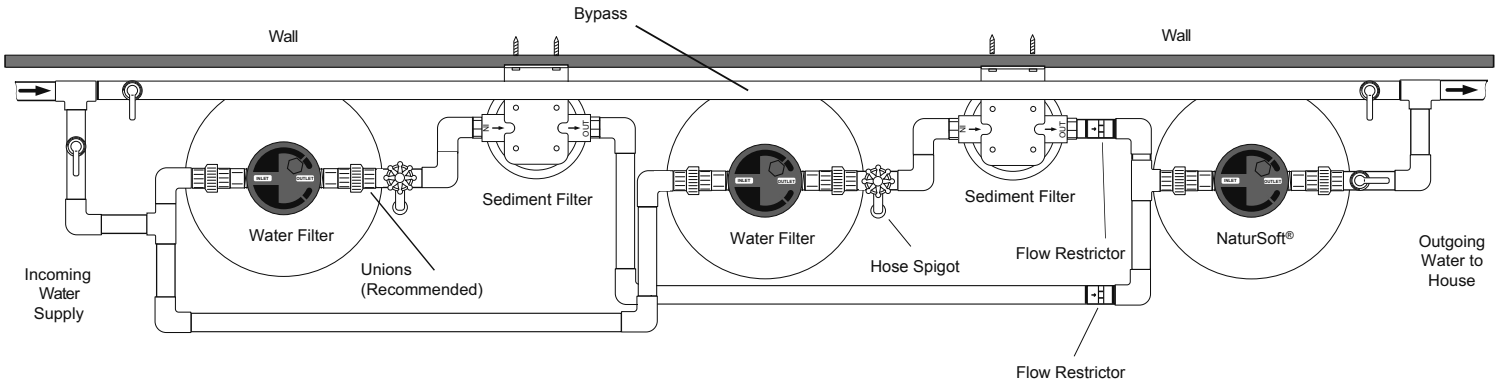
1. Level the NaturSoft® tank.
2. Determine the size and material of your incoming water supply line and choose the appropriate fittings required to connect it to the tank head. We recommend using unions.
3. Install the fittings onto the INLET and OUTLET sides of the head.

⚠ CAUTION:
Do not over-tighten any of the fittings during installation.

4. Connect the outgoing water supply from the Flow Restrictors to the INLET side of the NaturSoft® head utilizing another tee fitting to bring the paralleled plumbing back into a single line.
5. Connect the outgoing water supply to the OUTLET side of the NaturSoft® head.

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Bypass Installation



Top View

1. Install another shut off valve after the NaturSoft® Tank so the system can be isolated for maintenance.
2. Install another tee fitting to be able to connect the external bypass from the beginning of the system.
3. Install 2 additional shut off valves on the bypass to isolate the bypass when not in use.
4. Plumb the outgoing water supply back into the main water supply to the home.

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NaturSoft® Media Soak

1. Open a cold water faucet downstream of the Water Softener.
2. Turn the water back on at the main shut-off valve allowing the system to fill with water. The air being displaced will escape through the open fixture downstream.
3. Fill the NaturSoft® Tank full until water comes out of the downstream fixture. Bypass the tank using the bypass installed around the system. This will allow you to isolate the system and restore water supply to the home/building during the media soak.
4. Allow the tank to soak for at least 60 minutes.

NaturSoft Media Flush/Condition

1. After the tank has soaked for 60 minutes, turn the main water supply back on or turn the Bypass Valve back into the original position.
2. Flush the system by running water for 5 minutes at a high flow rate of 5 GPM (this can be achieved by using a bath tub or more than 3 faucets).
   Note: The flush water may have a milky look to it. This is normal as calcium carbonate fines are flushed from the system.
3. Rinse the system by reducing the flow rate to ½ GPM and run water for 60 minutes (this can be achieved by turning one faucet ¼ of the way on).

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What to Expect with your New Salt Free NaturSoft® System

If you have never had a water softener/conditioner:

Immediately after the installation you will experience naturally soft water. All detergents will work better with treated water and you will be able to reduce the amount you use. However, there are mineral deposits and scale coating the inside of your pipes and fixtures. Over the first few weeks, this scale will dissolve, detach itself from the pipes, and come out of your faucets. This de-scaling process is temporary and will steadily diminish. During these first weeks, you will notice:

- **Reduced softness of the water.** This will be particularly evident when using hot water. The water can pick up more than ten grains of mineral content per gallon between the Pro NaturSoft® system and the faucet as it travels through the water heater and the plumbing.
- **Mineral silt in the water.** Since the existing limestone scale is softened and dissolved as part of the Pro NaturSoft® effect, it will detach in small chunks ranging in size from very fine silt to pieces larger than a grain of sand. The larger pieces may be big enough to build up in the aerator screens of your fixture. Considerable silt-like accumulations may be visible on the shower heads, so clean them weekly for the first four weeks. Higher flow rates will shear off more of the existing scale than will lower flow rates. De-scaling activity will be most obvious in bathtubs, which have high flow and hot water. You may see milky water with sand-like grit, and possible sediment or iron in the bath tub.

The water line supplying fixtures which experience the most use will be cleaned the quickest and will be the first to return to providing you the full benefits you experienced immediately following installation; rarely used fixtures will take longer.

If you had a traditional water softener:

A traditional water softener turns dissolved mineral hardness (calcium bicarbonate) into dissolved sodium bicarbonate. The Pro NaturSoft® technology maintains the healthy mineral content of the water without adding the bicarbonate. You will notice:

- **The water does not feel as soft.** The absence of the calcium and the presence of sodium bicarbonate makes the water feel slick and slimy. If you miss the slick feeling, add some baking soda (sodium bicarbonate) to your bath.
- **The water spots are more visible.** A water softener replaces calcium with sodium. The water spotting that a traditional water softener leaves behind is a salt haze that wipes off very easily and is far less noticeable than spots caused by minerals. The Pro NaturSoft® treatment results in reduced spotting compared to untreated water, but more visible spots than produced by traditional, chemically treated softened water. The Pro NaturSoft® mineral spots are much easier to clean than spots from untreated water.
- **Soap curd forms with certain products.** Oil-based soaps like Ivory will react with calcium minerals to form a sticky film. Detergent-based cleaners like shampoos, shower gels, dish soaps, and laundry detergents will react very slightly or not at all. All detergent will work better with treated water, but you will notice very little improvement when using regular bar soap or oil-based products since the minerals are largely still able to react with the fats in the soap to form the curd.
- **There is some mineral silt in the bathtub.** Depending on the water chemistry of your water supply, you may still have some scale deposits in your plumbing system.

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If you have a dishwasher:

Generally, the Pro NaturSoft® system removes mineral hardness from solution and forms micro crystals; it does not physically remove the natural minerals from the water. Harsh chemicals, specifically acidic (low pH) detergents or rinse agents, can re-dissolve these crystals. This reduces the desired effect. Also, dishwashers are supplied by the hot water side of a building's plumbing system, so for the first few weeks, the water hardness inside the dishwasher will be higher than normal. For both of these reasons, you will have to adjust the combination and amounts of detergents and rinse agents. Gel packs offer a great alternative since they contain detergents and rinse agents in just the right amounts. This dishwasher detergent has received rave reviews from our customers:

Clean your Hot Water Heater

Cleaning and restoring the plumbing system is a major benefit of the Pro NaturSoft® system. In order to minimize the time required to complete the de-scaling process, we strongly recommend cleaning your hot water heater after a period of 3 weeks:

- Turn off the heat source, attach a hose to the drain valve at the bottom of the tank and flush the heater by opening the drain valve. After the water heater is completely filled with water, turn the heat source back on.

If you have glass shower doors:

Years of untreated hardness can etch the surface of your glass allowing for soap scum and minerals to get stuck in your glass. We recommend cleaning the glass surface thoroughly with a de-scaling cleaner such as CLR then applying a few coatings of Rain-X to seal the pores on the glass surface. This process will fill the pores in the glass and allow the water to bead. (Rain-X and CLR are available at all big box stores.)

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Maintenance

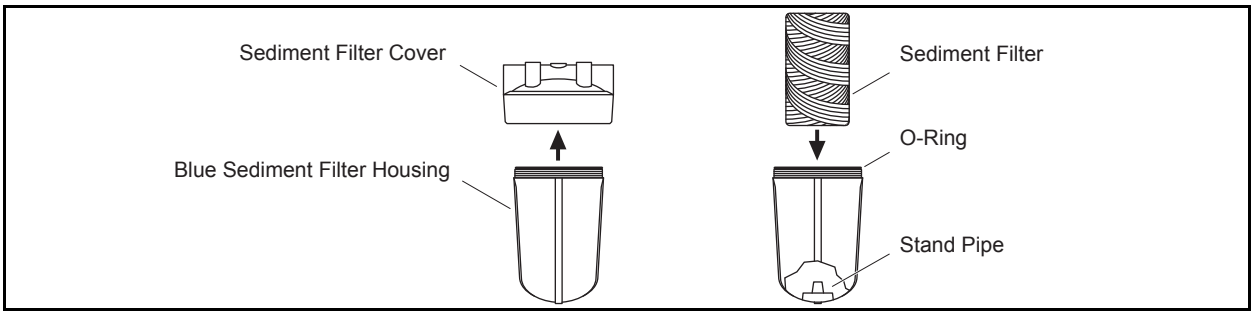
Premium Whole House Water Filters

Your Enviro Water Products Premium Whole House Water Filter requires maintenance after a period of 5 years. Replacement media and instructions can be ordered by contacting your local authorized Enviro Water Products dealer.

Sediment Filter

It is recommended that the Sediment Filter be replaced every 6-9 months depending on the amount of sediment present in the water supply. If the system has been working properly and the pressure is slowing, it may be time to change the Sediment Filter. Check the Sediment Filter and replace if necessary.

Replacing the Sediment Filter



1. Turn off the main water supply to the System
2. Run a faucet (cold water) inside the house to relieve the pressure. (Leave faucet open)
3. Unscrew the Sediment Filter Housing clockwise using the supplied Filter Wrench.
4. Remove the existing Sediment Filter and discard.
5. Remove & discard the O-Ring and wipe the groove clean. Lubricate a new O-Ring with a coating of clean food grade silicone grease. Replace O-Ring and press the O-Ring down into the groove.

   Note: This step is important to ensure the proper filter seal. Make sure the O-Ring is seated level in the groove. If the O-Ring appears damaged or crimped it should be replaced.
6. Place a new Sediment Filter onto the Stand Pipe in the Blue Filter Housing.
7. Screw the Blue Housing onto the Filter Cover hand tight. Lightly snug the housing with the wrench making sure not to over-tighten.
8. Turn on main water supply slowly to allow the System to fill with water and expel air from lines through the open faucet.
9. Check for leaks

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Troubleshooting

Problem	Solution
Pressure is dropping off during the carbon flush.	Turn the water off and let the tank sit about 30 minutes to allow the carbon to settle down off of the basket inside the tank. If the pressure drops off again, let the system stand for 72 hours. There is air trapped in the carbon bed that needs to be released from the tank. After 72 hours have passed, continue the carbon wash by slowly turning the water supply back on.
Water leaking at the top of the tank around the head.	You may need to turn the head to tighten it. The tank head is pre-installed hand-tight, do not overtighten the head (just turn it snug).
Water inside the tank is gray.	This is normal with all carbon filters and this will slowly fade away. The carbon inside the tank can still have air pockets inside that when released, turn the water a little gray with carbon dust. The carbon dust is harmless.
Water pressure is slowing.	It is recommended that the Sediment Filter be replaced every 6-9 months depending on the amount of sediment present in the water supply. If the system has been working properly and the pressure is slowing, it may be time to change the Sediment Filter. Check the Sediment Filter and replace if necessary.
Water appears grey or cloudy.	Water may appear grey or cloudy for the first seven to ten days after installation due to extra carbon dust.
Water pressure is slowing immediately after installation.	High flow rates such as bathtubs, utility sinks, hose bibs, multi-headed showers, body sprayers, or anything that is considered high flow for the first 72 hours should be avoided. If you suspect a carbon blockage of the top basket due to a high-flow situation within the first 72 hours of installation, turn off any running water for at least 10 minutes. This will clear the blockage and you can resume using water at low or normal flow rates.

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Warranty

Pelicans Limited 5 year Warranty

Pelican Water ("Pelican") warrants to the end user ("customer") that its tanks (13" & smaller), valves, in/out heads, bypass's, fittings, NaturSoft media and housings ("Covered Items") will be free from defects in material and workmanship under normal use and service for 5 years. No warranty is made with respect to defects or damaged due to neglect, misuse, alterations, accident, misapplication, physical damage, installation on water quality outside guidelines for system or damaged caused by fire, acts of God, or freezing.**

Limitations and Responsibilities

Pelican's obligation to the customer under these warranties shall be limited, at its option, to replacement or repair of Covered Items by these warranties, labor is not covered. Prior to return or repair of Covered Items, the customer must obtain a return goods authorization number from Pelican and at Pelicans option, return the Covered Items freight prepaid. Any Covered Item repaired or replaced under these warranties will be returned prepaid standard freight to the original point of shipment. Expedited freight options are available at customer expense.

No warranty is made with respect to defects or damaged due to neglect, misuse, alterations, accident, misapplication, physical damage, or damaged caused by fire, acts of God, or freezing. These warranties apply only to the original registered owner so long as the owner owns the home in which the unit was originally installed. Customer must register their system with Pelican within 90 days of purchase* in order to obtain a warranty. Warranty will discontinue after the unit is removed from the location where it was originally installed. Warranty begins on the date of delivery of product to the customer. Improper maintenance of system (i.e. not replacing filters or media) on time will be considered "neglect". Installation of any system on water conditions outside of or beyond the recommended specs of any system voids any warranty.

Pelican gives this warranty to the customer in lieu of all other warranties, express or implied, including without limitation any implied warranties of merchantability or fitness for a particular purpose or treatment of certain water and hereby expressly disclaims all other such warranties. Pelican's liability hereunder shall not exceed the cost of the product. Under no circumstances will Pelican be liable for any incidental or consequential damages or for any other loss, damage or expense of any kind, including loss of use, arising in connection with the installation or use or inability to use the Covered Items or any water treatment system the Covered Items are incorporated into. These warranties are governed by the laws of the state of Florida and may change at any time without notice.

*Failure by California and Quebec residents to complete the product registration form does not diminish their warranty rights.

**For all orders placed on or after June 3rd, 2011.

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Warranty Registration Form

Send in this Warranty Registration Form to validate your warranty or visit www.PelicanWater.com to complete warranty registration form online.

Pelican Warranty Registration Form

Date Item(s) were Received:	**Order ID#:**	**Model:**

Dealer Purchased From:

Model/Serial Number:

Name:

Address:

City: **State:** **Zip:**

Send To:

Pelican Water Systems
3060 Performance Circle, Suite 2
DeLand, FL 32724
Phone: 1-(877) 842-1635

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!IMPORTANT!
Do not use where water is microbiologically unsafe or with water of unknown quality without proper disinfection before or after the filter/softener system.

Product Certifications

	Clack V3007-xx Bypass Fittings – WWQA Gold Seal Certified to NSF/ANSI Standard 44 for material safety and structural integrity only
	U.S. Green Building Council
	The NaturSoft® is DVGW DW-9191 Certified for 99.6% scale prevention.

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