

Owner's Manual

Chlorine Injection System with Retention Tank

© Copyright 2012 Enviro Water Solutions Inc. All rights reserved.

All information contained herein is the property of Pelican Water Systems. Pelican Water Systems makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Pelican Water Systems shall not be liable for technical or editorial errors or omissions contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material. The information is provided "as is" without warranty of any kind and is subject to change without notice. This document contains proprietary information which is protected by copyright. No part of this document may be photocopied, reproduced, or translated into another language without the prior written consent of Pelican Water Systems. Pelican Water Systems is an Enviro Water Solutions, Inc. company.

Table of Contents

Table of Contents
Product Operation and Specifications4
Important Information4
Complete Parts List5
Installation Overview
Installation
Chemical Injector Pump Installation 7 Solution Tank Installation 7 Retention Tank Installation 8
Complete the Installation 9 Testing Chlorine Levels in Water 9
Maintenance10Solution Tank Refill10Chemical Injector Pump:10
Troubleshooting
Warranty12Warranty Registration Form13

Product Operation and Specifications

Specification Description	Retention Tank
Max Flow Rate	14 GPM
Minimum Working Pressure	25 PSI
Maximum Working Pressure	100 PSI
Maximum Vacuum	5 inch/127 mm Hg
Operating Temperatures	36°F - 120°F
pH Range	6.5 - 11

Important Information

- Read these instructions carefully and determine the location of all system components before beginning installation.
- Check all applicable plumbing, building, and electrical codes for installation compliance.
- Install the system on the main water supply.
- Systems that contain electronic components cannot be installed outside in uncovered areas.

MARNING:

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. Older homes may have been built in accordance with building codes from decades ago, some of 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 systems use.

A 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.

Complete Parts List

Note: Pelican supplies the parts below to accommodate a variety of water supply lines.

Table 1: Parts List

Part	Description	Qty.
	Chlorine Test Strips	1
	Solution Tank	1
	Chemical Injector Pump Tubing	1
Periods	Chemical Injector Pump	1

Part	Description	Qty.
	Shut-Off Valve: 201-305 Legend PVC Compact Ball Valve	1
	Extension Tube	1
	Retention Tank	1

Note: Drawings are not to scale.

Additional fittings will be needed to adapt to your plumbing.

Installation Overview

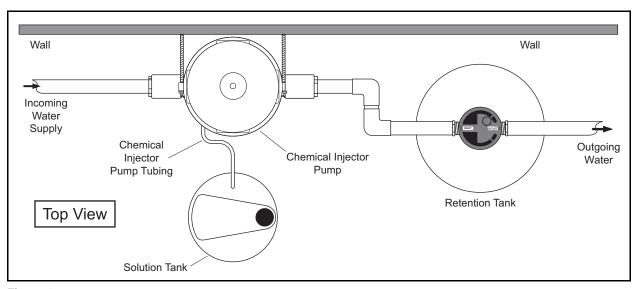


Figure 1

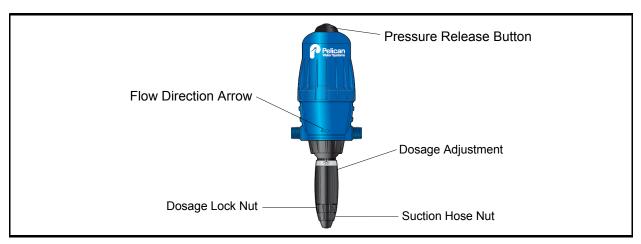


Figure 2

Pressure Release Button - Allows you to relieve the air pressure after install and maintenance.

Flow Direction Arrow - Indicates the proper flow pattern depending on how the unit is install.

Dosage Adjustment - Allows you to increase or decrease the amount of solution injected per gallon of flow.

Dosage Lock Nut - Locks and unlocks the Dosage Adjustment for increasing and decreasing solution.

Suction Hose Nut - Compression nut the secures the injector tubing to the injector.

Installation

Chemical Injector Pump and Solution Tank Installation

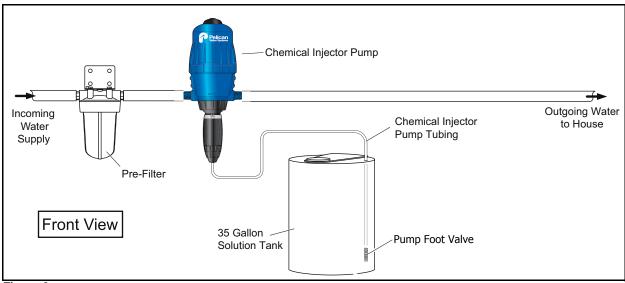


Figure 3

Chemical Injector Pump Installation

!IMPORTANT!

Install the Chemical Injector Pump into the water supply after the Pre-Filter and before any other filtration or softening system.

- 1. Determine the size and material of your incoming water supply line from the Pre-Filter System.
- 2. Mount the Chemical Injector Pump to the wall using the provided bracket. Line up the inflow and outflow connections with the current water line.
- 3. Plumb the Chemical Injector Pump into your water line. The arrow on the body of the Chemical Injector Pump shows the correct water flow direction. The water should enter and exit the pump following the direction of the arrow.

Solution Tank Installation

- 1. Remove the black cap from the opening on the Solution Tank.
- 2. Drill one 1/2" hole into the top of the Solution Tank.
- 3. Insert the end of the Chemical Injector Pump Tubing with the pump foot valve connected, into the hole which was covered by the black cap on the top of the Solution Tank.
- 4. Feed and pull the other end of the tubing through the drilled opening on the top of the Solution Tank.
- 5. Determine the length of Chemical Injector Pump Tubing required for the foot valve to reach 1" from the bottom of the Solution Tank and cut tubing.
- 6. Connect the Chemical Injector Pump Tubing to the suction valve on the Chemical Injector Pump by removing the suction hose nut, place nut over tubing, push tubing onto suction valve and tighten nut.
- 7. Fill the Solution Tank with 17 gallons of bottled water and proper cups of bleach. (see chart below)

Concentration of Bleach (% Sodium Hypochlorite)	Number of Cups	Gallons of Water
3.00%	12	17
5.25%	7	17
6.00%	6	17
8.25%	4.5	17

Retention Tank Installation

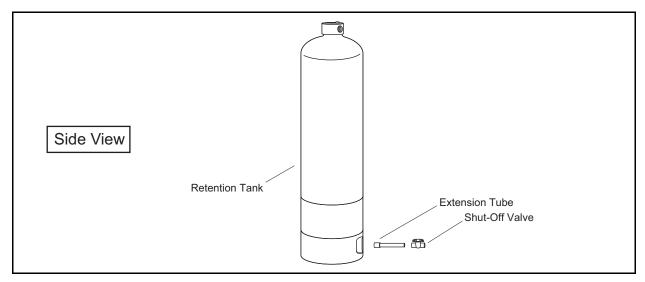


Figure 4

- 1. Install the Extension Tube to the 90 degree fitting on the bottom of the Retention tank.
- 2. Connect the Extension Tube to the Shut-Off Valve.

Optional: Connect the Shut-Off Valve to an outgoing drain line.

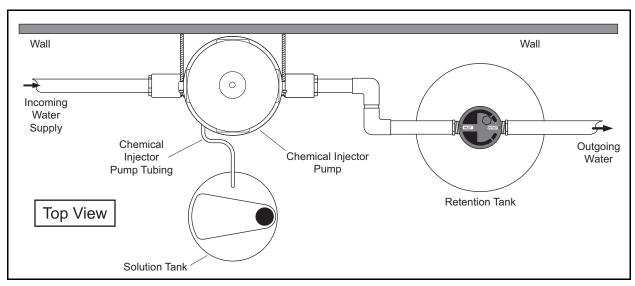


Figure 5

1. Determine the size and material of your incoming water supply line and choose the appropriate fittings required to connect it to the head of the retention tank.

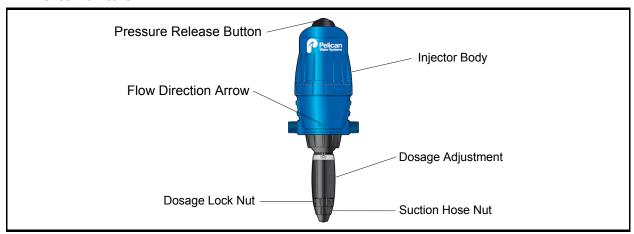
A CAUTION:

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

- 2. Install the fitting onto the INLET and OUTLET sides of the filter head.
- 3. Connect the incoming water supply to the INLET side of the retention tank.
- 4. Connect the outgoing water supply to the OUTLET side of the retention tank.

Complete the Installation

- 1. Turn on the main water supply.
- 2. Check for leaks.



Testing Chlorine Levels in Water

- 1. Put the Carbon tank in bypass. (If present)
- 2. Turn on the nearest cold water faucet to the system.
- 3. Listen and watch the pump to make sure it is pumping. The pump should pulse and not run continuously. If the water is off, the pump will stop.
- 4. Let the water run for 30 minutes.
- 5. After 30 minutes, use a chlorine test strip to test a sample of water from the cold water faucet.
 - a. The optimum chlorine level reading is 2.6ppm on the test strip.
 - b. If you do not have a reading of chlorine you will need to add 3 more cups of bleach to the solution tank and mix. Note the new total or bleach to 17 gallons water. Repeat steps 4 & 5 to achieve a new sample for testing. Double check to make sure the Carbon Tank is in bypass.
 - c. If your reading is close to 2.6ppm then you will unlock the dosage adjustment on the injector pump and rotate up two full turns. Re-lock the dosage adjustment and repeat steps 4 & 5 to achieve a new sample for testing.
 - d. Once you have tested another sample, if you still do not have a reading of chlorine add another 3 cups of bleach and mix. Note the new total of bleach to 17 gallons of water. Repeat steps 4 & 5 to achieve a new sample for testing.
 - e. If your reading is close to 2.6ppm then you will unlock the dosage adjustment on the injector pump and rotate up two full turns. Re-lock the dosage adjustment and repeat steps 4 & 5 to achieve a new sample for testing.

*If after testing again there is still no reading of chlorine we recommend calling in to speak with a Technical Support representative.

Concentration of Bleach (% Sodium Hypochlorite)	Number of Cups	Gallons of Bottled Water
3.00%	12	17
5.25%	7	17
6.00%	6	17
8.25%	4.5	17

Maintenance

Chemical Injector Pump:

1. Change once a year (Injector Pump Seal Kit - 3 O-Rings & Check Valve)

NOTE: Spare kits for replacement purposes can be obtained by calling your customer service representative at Pelican Water.

Solution Tank Refill — Bleach & Water

- 1. Check the level of the Solution Tank twice per month. Do not let the liquid in the tank fall below ¼ full.
- 2. Fill the Solution Tank with bleach and treated water as needed. (Water that has gone through your filtration system).

Troubleshooting

Problem	Solution	
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).	
The tank leans to one side or is not level.	If the tank is not level, lift the tank straight up 6 inches and tap it on the ground until the tank stands vertical. The bottom of the tank is round and the boot allows the tank to stand upright.	
Unlevel Tank Boot	========	
Unlevel Tank Boot	Level Tank Unlevel Boot	

Warranty

Pelican 5 Year Limited Warranty

Pelican Water ("Pelican") warrants to the end user ("customer") that its retention tanks and solid-state electronic heads ("Covered Items") will be free from defects in material and workmanship under normal use and service for a period of 5 years.

Pelican Dosatron Professional Chemical Injector Pump Warranty

Pelican Water ("Pelican") warrants to the end user ("customer") that its Dosatron Professional Chemical Injector Pump Motor (upper half of unit) will be free from defects in material and workmanship under normal use and service for a period of 1 year. The Dosatron Professional Chemical Injector Pump Adjustment Ratio Side (lower half of unit) will be free from defects in material and workmanship under normal use and service for a period of 90 days. The Chemical Injector Pump tubing is not covered as part of this warranty.

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.

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 Wa	rranty Registration Fo	rm	
Date Item((s) were Received:	Order ID#:	Model:
Dealer Pur	chased From:		
Model/Seri	ial Number:		
Name:			
Address: City:		State:	Zip:
DeLand, FL 3	nance Circle, Suite 2		
We like to red			ou were happy with your installer please x you for your time.
		I to install system: of the Plumbing ins	staller