



# **Owner's Manual**

**Chlorine Injection System with  
Retention Tank**

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## Product Operation and Specifications

Specification Description	80 Gallon Retention Tank	120 Gallon Retention Tank
Max Flow Rate	8 GPM	12 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	7 - 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.

#### **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. 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.

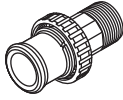
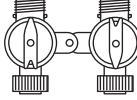
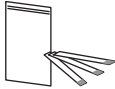




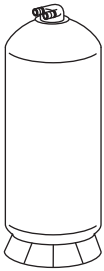
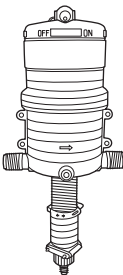
#### **CAUTION:**

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.	Part	Description	Qty.
	<b>1" Plastic Male NPT Assembly:</b> V3007-04 WS1 Fitting 1" Plastic Male NPT Assembly (2): O-Rings (2), Split Rings (2), and Connectors (2)	1		<b>Bypass Valve:</b> In/Out Bypass Valve with Red Arrow Handles	1
	<b>Chlorine Test Strips</b>	1		<b>Shut-Off Valve:</b> 201-305 Legend PVC Compact Ball Valve	1
	<b>Solution Tank</b>	1		<b>Extension Tube</b>	1
	<b>Chemical Injector Pump Tubing</b>	1		<b>Retention Tank</b>	1
	<b>Chemical Injector Pump</b>	1			

**Note:** Drawings are not to scale.

Additional fittings will be needed to adapt to your plumbing.

## Installation Overview

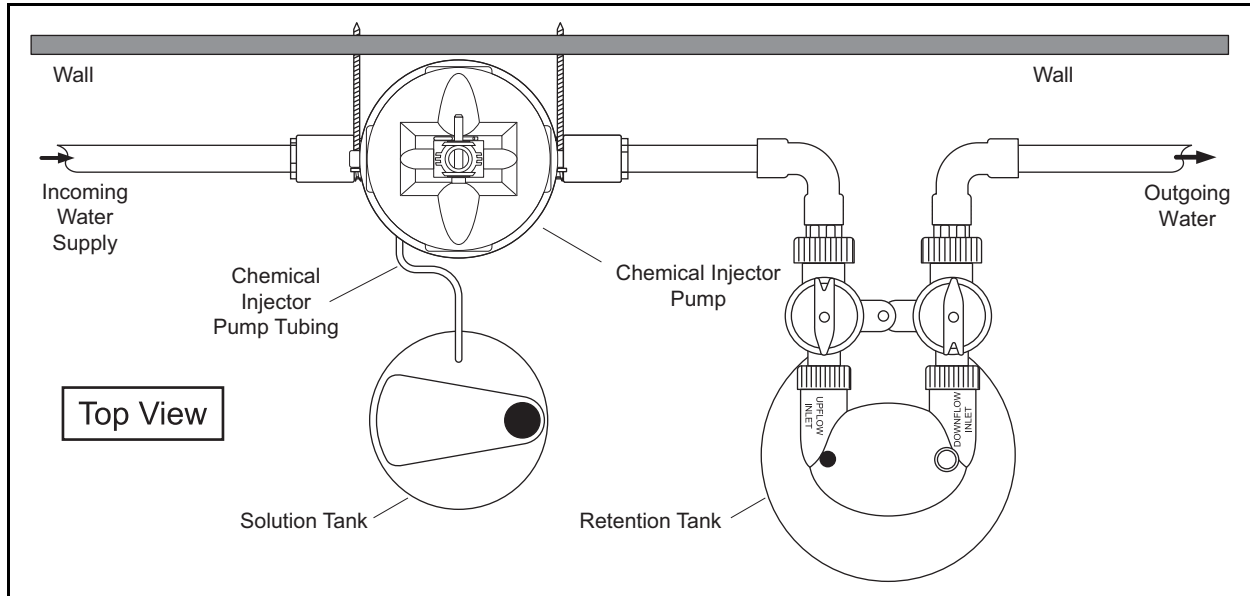


Figure 1

## Pre-Installation

### Bypass Valve Installation

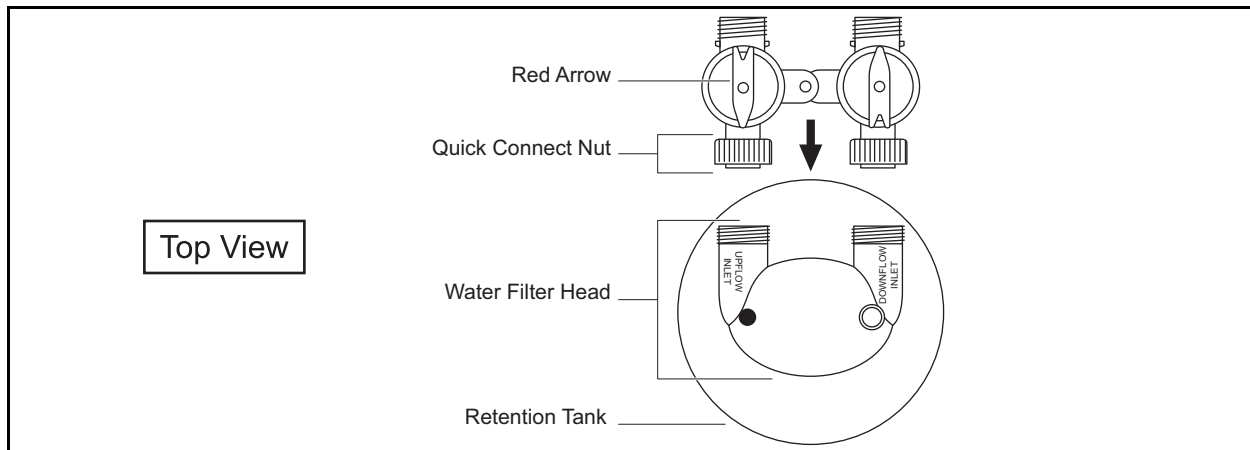


Figure 2

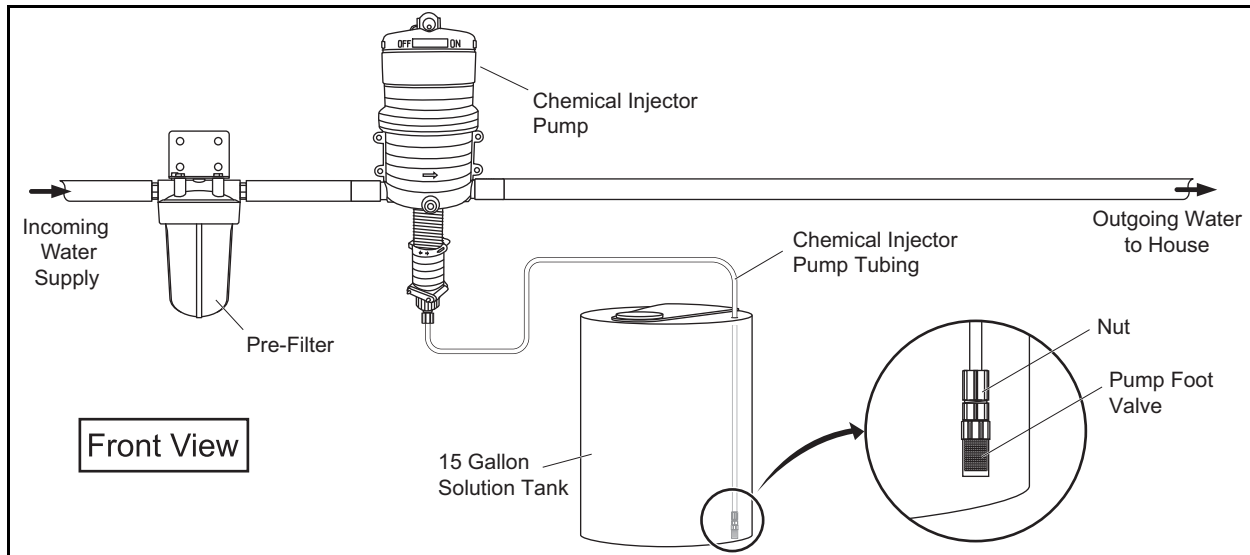
The Bypass Valve comes pre-assembled and ready to install with the O-Rings, Split Rings, and Quick Connect Nuts. Push the Bypass Valve into the head of the retention tank with the unthreaded ends oriented toward the tanks and hand-tighten the Quick Connect Nuts.

### Notice:

The bypass valve(s) included with this system are designed for multiple Pelican water systems. This may result in the arrows on the bypass valve(s) pointing differently than shown. If the arrows on your bypass valve(s) do not match the diagram, remove the red arrows by pulling them straight up, turn them 180° to match the drawing, and push them back down onto the stem.

## 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 brackets. 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.

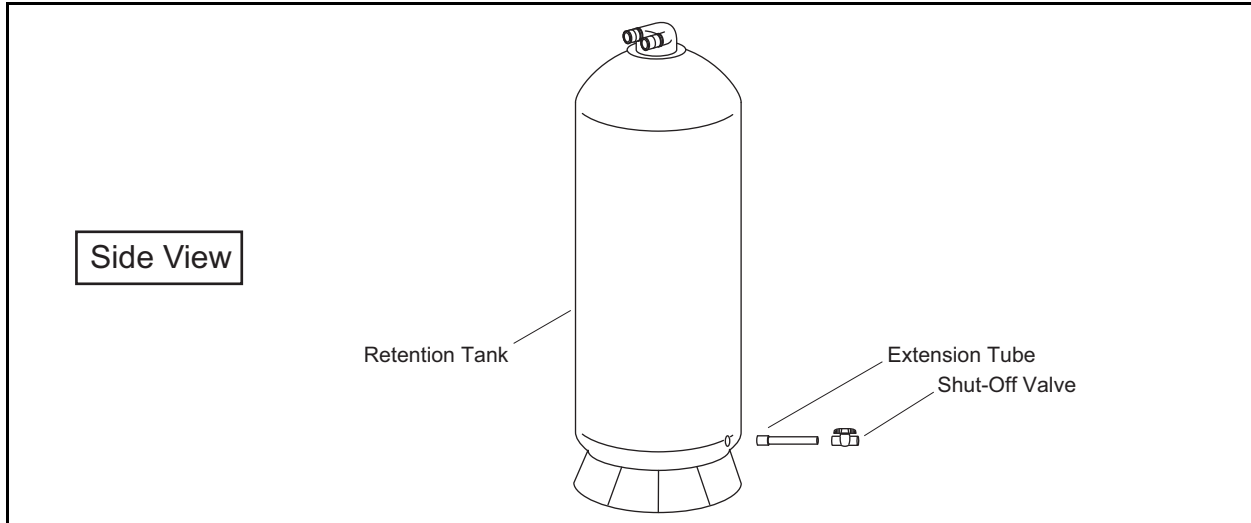
#### Solution Tank Installation

1. Remove the black cap from the opening on the Solution Tank.
2. Drill one 3/8" 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. Fill the Solution Tank with ¼ cup household bleach and 15 gallons of water. Replace the cap.
6. Determine the length of Chemical Injector Pump Tubing required to reach the bottom connection point of the Chemical Injector Pump and then cut the Chemical Injector Pump Tubing to the appropriate length.
7. Connect the Chemical Injector Pump Tubing to the suction valve on the Chemical Injector Pump.

##### **!!IMPORTANT!**

Ensure the Chemical Injector Pump Tubing is free of kinks.

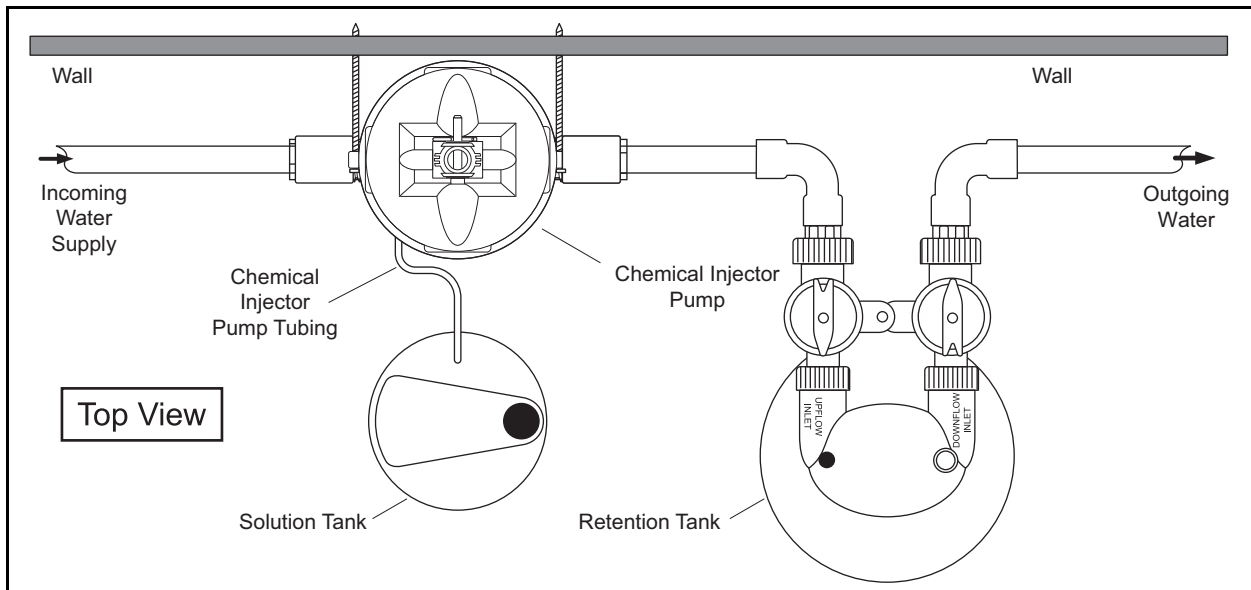
## Retention Tank Installation



**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**



**Notice:**

Follow the raised black arrows on the head of the Retention tank.

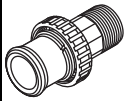
1. Level the Retention tank, using shims (not provided) if necessary.
2. Determine the size and material of your incoming water supply line from the In-Line Injection Port and choose the appropriate fittings required to connect it to the Bypass Valve.

**⚠ CAUTION:**

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

**Table 2: Bypass Valve Fittings**

**Note:** The fitting below is designed with a ¼" give to allow for proper pipe alignment. It will not leak and is intended to have some flexibility.

Part	Description	Qty.
	<b>1" Plastic Male NPT Assembly:</b> V3007-04 WS1 Fitting 1" Plastic Male NPT Assembly (2): O-Rings (2), Split Rings (2), and Connectors (2)	1 bag

3. Install the fitting onto the upflow and downflow inlet sides of the Bypass Valve. Follow the diagram supplied with the fitting.
4. Connect the incoming water supply from the In-Line Injection Port to the fitting on the upflow inlet side of the Bypass Valve.
5. Connect the outgoing water supply to the downflow inlet side of the Bypass Valve.

## 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.
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 10 minutes.
5. After 10 minutes, use the chlorine test strip at the running cold water faucet to check the chlorine level.
6. The optimum chlorine level reading is 3ppm on the test strip.
  - a. If the level is lower than 3ppm chlorine, remove the black clip from the ratio adjustment slide. Turn the ratio adjustment slide 2 full revolutions in the positive direction. Replace the black clip.
  - b. If it is higher than 3ppm, remove the black clip from the ratio adjustment slide. Turn the ratio adjustment slide 2 full revolutions in the negative direction. Replace the black clip.

#### **⚠ CAUTION:**

Do not remove the silver clip from the ratio adjustment slide when the system is under pressure.

7. Continue with these steps until the system achieves a 3ppm reading on the chlorine test strip.

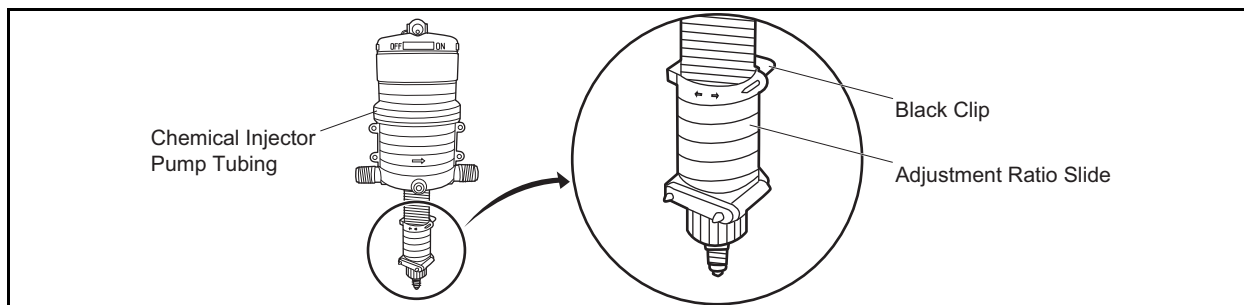


Figure 6

## Care and Cleaning

### Solution Tank Refill — Chlorine

1. Check the level of the Solution Tank once per month. Do not let the liquid in the tank fall below  $\frac{1}{4}$  full.
2. Fill the tank with  $\frac{1}{4}$  cup household bleach and 15 gallons water.

### Chemical Injector Pump:

1. Change yearly (Kit A - part number 011850V) - 2 o-rings and dosage piston. One extra Kit A is included with your original purchase.
2. Change every 2-3 years (Kit B - part number 011645V) - 2 o-rings, dosage piston, and shaft.

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

# 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.
<p>The diagrams illustrate the process of leveling a tank. The top row shows an 'Unlevel Tank' on the left, followed by an upward arrow indicating lifting, and a 'Level Tank' on the right with a downward arrow indicating tapping. The bottom row shows an 'Unlevel Tank' on the left, followed by an upward arrow, and a 'Level Tank' on the right with a downward arrow. Labels 'Boot' and 'Unlevel Boot' are also present.</p>	
Iron appears in the water.	Adjust settings on Chemical Injector Pump by removing black clip on the adjustment ratio slide and turning the adjustment ratio slide 2 full revolutions in the positive direction. See graphic on page 10 to locate adjustment ratio slide. If problem persists, increase backwash frequency by one day.

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## 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 Superdos Professional Chemical Injector Pump Warranty

Pelican Water ("Pelican") warrants to the end user ("customer") that its Superdos 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 Superdos 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 Pelican's 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](http://www.PelicanWater.com) to complete warranty registration form online.

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### Pelican Warranty Registration Form

<b>Date Item(s) were Received:</b>	<b>Order ID#:</b>	<b>Model:</b>
_____	_____	_____
<b>Dealer Purchased From:</b>		
_____		
<b>Model/Serial Number:</b>		
_____		
<b>Name:</b>	_____	
<b>Address:</b>	_____	
<b>City:</b>	<b>State:</b>	<b>Zip:</b>
_____	_____	_____

#### Send To:

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

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#### Plumber's Information (optional)

We like to recommend good plumbers throughout the USA and if you were happy with your installer please give us their information so we can pass it on as a courtesy. Thank you for your time.

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**Name of Plumbing Company used to install system:** \_\_\_\_\_

**Phone #:** (\_\_\_\_\_) - \_\_\_\_\_ of the Plumbing installer

**!!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

	<p><b>Clack V3007-xx Bypass Fittings</b> – WWQA Gold Seal Certified to NSF/ANSI Standard 44 for material safety and structural integrity only</p>
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