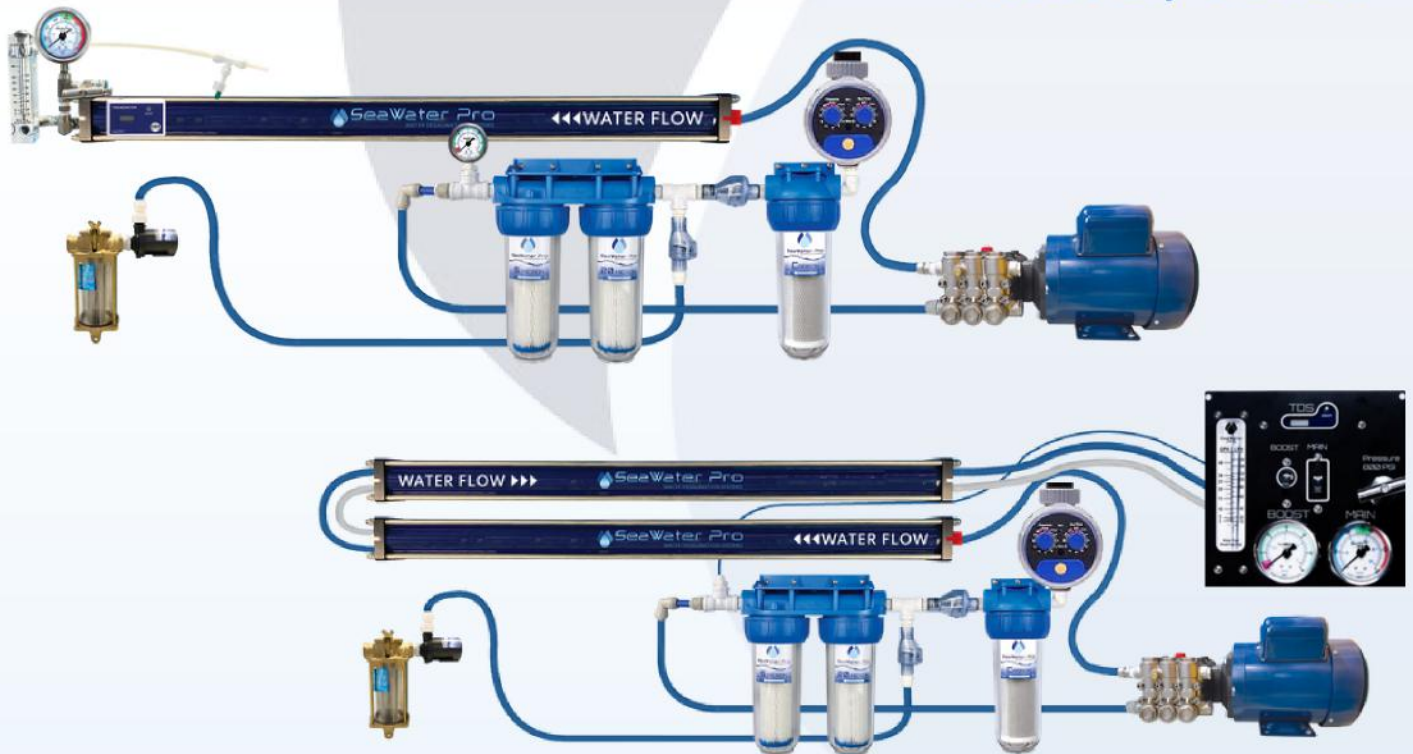


# SeaWater Pro

## WATERMAKERS

### Modular Desalination Unit Assembly Manual



3233 SW 2nd Ave. Ste #200 Fort Lauderdale FL. 33315  
954.800.8800 • seawaterprollc@gmail.com • www.seawaterpro.com





## **History of SeaWater Pro, LLC.**

SeaWater Pro was founded in 2017 as a small business that now produces some of the highest volume of watermakers in the US! With an aerospace background, SeaWater Pro fulfilled the niche for an affordable, easily maintainable watermaker that did not exist at the time. A SeaWater Pro Watermaker will set you free by giving you water independence.

When considering a watermaker, it is important to keep in mind that other factors come into play, such as energy expenditure, available space, and cost of maintenance. That's why SeaWater Pro offers a variety of watermaker configurations including AC and DC-powered systems, modular as well as portable and compact plug-and-play systems, and standard part sizes that are easily accessible wherever you are in the world.

We make it easy for our customers to stay hydrated wherever their ventures may take them by offering personalized customer support, top-notch service, and quality warranties. For these reasons, SeaWater Pro proudly offers the best watermaker on the market!

SeaWater Pro believes you shouldn't have to plan your trip around water!



## Why Choose SeaWater Pro Watermakers?

### **Easy to Use:**

Get your system running with just a flip of a switch after the initial setup is complete.

### **Non-corrosive Electronics:**

No worries about systems breaking down or being damaged by natural elements for longer-lasting reliability.

### **Patented Pressure Regulator:**

The unique pressure regulator makes for easy flow control and sustainability.

### **Made in America:**

Our warehouse is located in Fort Lauderdale, Florida, and produced by locals like us.

### **Lightweight and Durable:**

Our portable systems are under 50 lbs and can fit in an overhead compartment easily.

### **Low-cost and Affordable:**

Making everything in-house means we can sell our product directly to adventurers for a reasonable cost.

### **Available in Most Countries:**

We offer express shipping with a 21-day money-back guarantee to many parts of the world.

### **Lead Time:**

SeaWater Pro Watermakers systems ship within 48 hours from purchase.

### **Easy to Maintenance:**

Parts used in our systems can be bought online or in most hardware stores, which makes acquiring spares or replacements convenient for our customers.

### **Customer Service:**

SeaWater Pro prides itself on customer service and customer relations. Our customers speak directly to our sales team, managers, and even the owner!

### **Variety:**

SeaWater Pro offers systems in a variety of configurations. From as sizeable as our Dual Membrane System 43" tip-to-tip to our portable Mini Watermaker which can be rolled like luggage, to the compact Piranha system which can fit under your sink, and even smaller with the up-and-coming Mirco system.



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# SINGLE MEMBRANE WITH PANEL



**Seawater Strainer:**  
NOT  
Included



**Overboard Line:**  
Connects to  
panel

*\*Connect boost pump to strainer to prevent boost pump from clogging.*



# SINGLE MEMBRANE WITHOUT PANEL



**Seawater Strainer:**  
NOT Included



**Overboard Line:**  
Connects to panel

*\*Connect boost pump to strainer to prevent boost pump from clogging.*

# DUAL MEMBRANE WITH PANEL



**Seawater Strainer:**  
NOT  
Included



**Overboard Line:**  
Connects to  
panel

*\*Connect boost pump to strainer to prevent boost pump from clogging.*



# DUAL MEMBRANE WITHOUT PANEL



Seawater  
Strainer:  
NOT  
Included



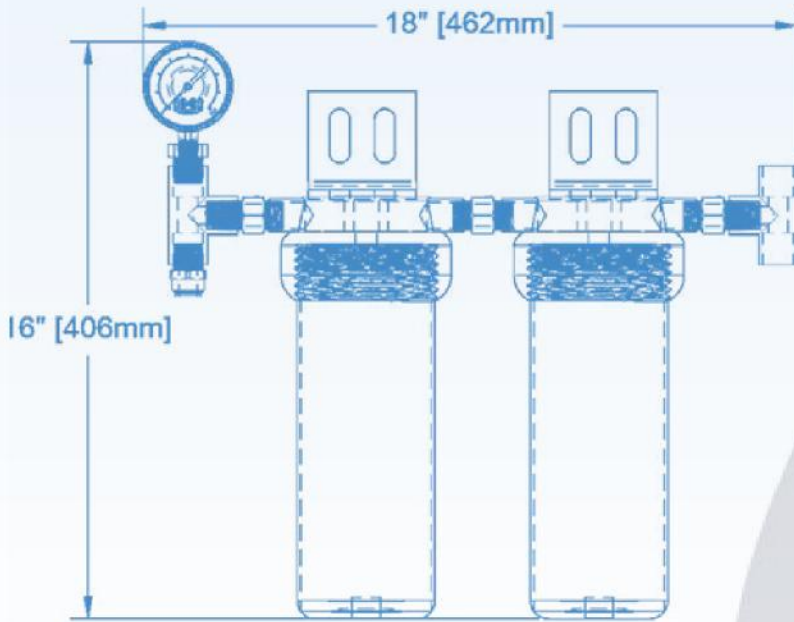
Overboard  
Line:  
Connects to  
panel

*\*Connect boost pump to strainer to prevent boost pump from clogging.*



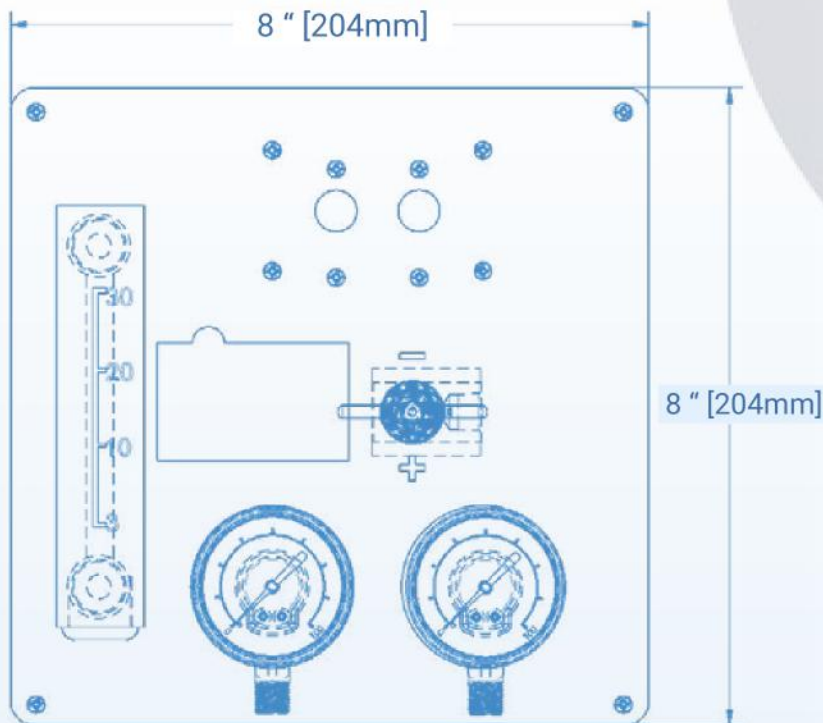


# Component Dimensions



Pre-Filtration Assembly

Filter Housing Unit



Remote Control Panel

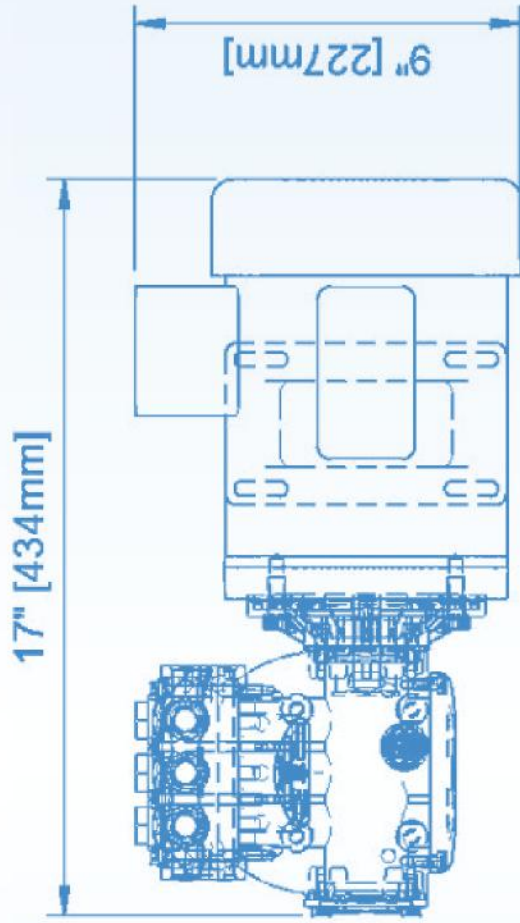
Control Panel

Various colors available.

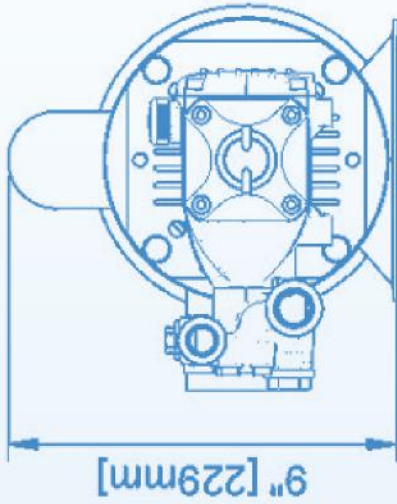
Dimensions 8x8



# Component Dimensions



Motor and Pump Assembly



Single Membrane Vessel

3.5" [89mm]





# Inventory List



Raw Water Boost Pump  
(12v 224vDC, Brush-less Pump)  
May operate at 120v-220v AC via  
optional transformer



Adjusting the  
Boost Pump



Installation Tips



Pre-Filters  
5 Micron, 20 Micron &  
Carbon Filter



Assembling the Pre-Filters



Automatic Rinse Timer  
(Requires 2 x AA batteries)  
(Style may vary)



Rinse Timer Procedure



2 Way Check Valve Assembly



Low Pressure Gauge T Connector  
(For Panel Only)



Low Pressure Gauge T Connector  
(For No Panel Only)



# Inventory List



High Pressure Pump  
(Style & Color May Vary)



Assembling Pump & Motor



High Pressure Motor  
(Style & Color May Vary)



NA Motor Wiring



High Pressure Pump Mounting Bolts  
& Vented Cap / Dipstick



High Pressure Membrane (x2 for Dual Membrane Units)



Replacing the Membrane



Flow Meter (No Panel)  
Pressure Regulator  
TDS Monitor



Pressure Regulator  
Maintenance



Rinse Timer Procedure



3" Hex Nipple (No Panel)



Stainless Steel Elbow (No Panel)



# Inventory List



6' (2m) High-Pressure Hose (Blue)  
(Remote option comes with x2 hoses)



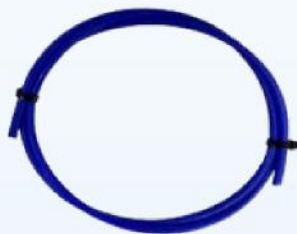
3/8" ID Overboard Hose (Clear)



3/8" OD Fresh Water Tubing (White)



1/2" OD Tubing (Blue)



1/4" Panel Low Pressure Tubing (Blue)  
(Panel Only)



12" High Pressure Loop Hose  
(Dual Membrane Only)



# Inventory List

## REMOTE PANEL OPTIONS

Dimensions 8x8



REMOTE PANEL BLACK



REMOTE PANEL WHITE



REMOTE PANEL GRAPHITE



REMOTE PANEL TEAK



Wiring Instructions Video



# Before Installing

SeaWater Pro would like to congratulate you on your purchase of a new watermaker!

**Some tips that we recommend before installing are the following:**

1. It is recommended that you **install and test the watermaker in your hometown before you set sail to a remote location**. This will help to ensure that you have all the necessary components you may need for your voyage, including spare fittings, appropriate hose lengths, additional filters, and any other parts that may be difficult to acquire overseas. Many customers leave port and cannot successfully install their systems as they are left with limited resources when sailing. This is especially crucial if you are sailing to the Bahamas as shipping here can be costly, time-consuming, and difficult. Do not make this mistake!
2. Do some research! SeaWater Pro offers many helpful Resources to facilitate your installation experience. Before installing we recommend that you review:
  - a. **Manual** - This manual is a great resource to review before installing as it covers all aspects of the installation, this manual should be close by when installing the system.
  - b. **YouTube** - SeaWater Pro has an incredible YouTube channel that features several videos on all aspects of the installation process. We get it, sometimes a video is easier to watch and understand than reading a manual. Check out our page for all sorts of helpful videos about your watermaker! Visit our YouTube channel @SeaWaterPoLLC
  - c. **Reach Out** - SeaWater Pro prides itself on customer service. You can always contact us by phone or email and we would be happy to help you with any questions you may have!  
Office Line: 954-900-8800 Email: info@seawaterpro.com
- a. **Consider an Installer** - Our systems are designed to be easy to install, but we understand everyone has different levels of installation experience. If you cannot assemble a kitchen table from IKEA then please consider hiring someone who can to install your watermaker. **DO NOT ATTEMPT TO INSTALL**. If you believe the installation is beyond your ability, it may be worth researching local installers.\*

\*Installation costs are not associated with SeaWater Pro. Installation prices are not determined by SeaWater Pro and should be handled directly with your installer. SeaWater Pro does not assume any liability or responsibility for any damages that may occur during the installation.



# General Cautions & Warnings

Safety is one of our highest priorities at SeaWater Pro Watermakers. Knowing what things to avoid is a crucial component of proper installation and operation. To ensure the highest level of safety to the installer or operator of the SeaWater Pro Watermaker, the following safety measures should be adhered to:

## General Cautions

1. Do NOT exceed the recommended operational pressure of 850-900 PSI.
2. The high-pressure pump is shipped with a red oil plug cap installed to prevent oil spillage. Before the initial operation of the system, replace the red plug cap with the breathable orange oil plug, included in the accessory bag before every use.
3. Reinstall the shipping cap while the unit is in storage.



## Water Cautions and Consumption

1. Do not allow chlorinated water to flow through the system. Oxidants, such as chlorine or bleach, can lead to impaired performance of the system.
2. The system is shipped containing a preservative/storage pickling solution. Allow a minimum of 30 minutes of initial operation to properly flush out the preservative solution before drinking the water. Repeat this process each time the system is freshly pickled.

## Heat Hazard

1. Handle with caution if the system has been run for more than an hour. The system can heat up to approximately 110 degrees Fahrenheit.



## Electrical Hazard

1. Do NOT operate the system when wet.
2. Disconnect the electrical power to the watermaker while making adjustments or during the installation process to avoid hazardous electrical shock.







# TDS Monitor

## Total Dissolved Solids Monitor

**HM Digital SM-1 In-Line Single TDS Monitor, 0-9990 ppm Range, +/- 2% Readout Accuracy**



- Displays TDS level of a single water line.
- Highly efficient and accurate due to its advanced microprocessor technology.
- Auto-Off function conserves battery power. The unit shuts off automatically after 10 minutes of non-use.
- Wide Range 0-9990 ppm

### Bottled Water [Food and Drug Administration (FDA)]

Mineral Water – Mineral water containing less than 500 ppm TDS must be labeled “low mineral content”. Conversely, if the water has more than 1,500 ppm TDS, it must be labeled “high mineral content”.

Purified Water – Water that has been produced by distillation, deionization, reverse osmosis, or other suitable processes and that meets the definition of “purified water” in the United States Pharmacopeia. May also be called demineralized water, purified drinking water, or alternatively, based on the process used, deionized (drinking) water, distilled (drinking) water, reverse osmosis (drinking) water, etc.

If the TDS of mineral water is between 500 and 1,500 ppm, no additional statement need appear.



FDA Acceptable TDS



Federal Regulations

# STEP 1

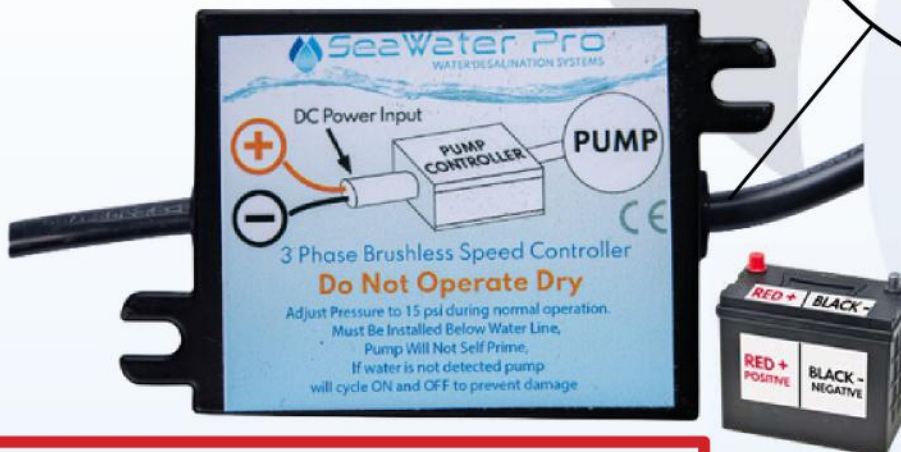
# Boost Pump Connection



Brushless pump will not work without this controller.  
Please do NOT remove.

Add 5 rounds of Teflon Tape to threads.

**Do NOT over-tighten plastic parts as they may crack.**



### IMPORTANT:

Observe battery polarity.  
Reversing battery polarity will cause the pump to not work  
Attach Red wire to Positive & Black wire to Negative.

**Boost Pump must be mounted as close to the strainer as possible to prevent restriction of flow.**



Protection Circuit

# STEP 1

## Boost Pump Connection

This is the ideal way to connect the Boost Pump to a Sea Strainer.  
(Sea Strainer NOT included.)

Salt water in

Do not over tighten plastic fittings.



Low-Pressure Boost Pump is  
NOT self-priming.

**Pump MUST be installed  
below the water line.**

**NOTE:**

Long lines on the suction side of the boost pump may result in poor boost pressure.

Seawater Strainer  
(NOT included)



Installation Tips

**WARNING:**

**Do NOT operate boost pump dry.**

Boost pump must be installed  
below waterline.



Adjusting the Boost Pump



# Boost Pump: Do's & Dont's

## DO:

Connect the boost pump as close to the strainer as possible.



## DON'T:

Connect the boost pump with a long line to the strainer.

Long lines on the suction side of the boost pump may result in poor boost pressure.



## WARNING:

**Do NOT operate boost pump dry.**

Boost pump must be below waterline. If you hear a screeching noise from the boost pump that means it is running dry. If the boost pump is cycling on and off that means the pump is not getting enough water supply. If the system is not detecting water, the pump will shut off to prevent damage.



Adjusting the Boost Pump



Protection Circuit



SeaWater Pro - watermaker brushless boost pump protection logic.

**STEP  
2**

# Pre-Filter Unit Assembly

**STEP 1**



**STEP 2**



**STEP 3**



Do not over tighten plastic fittings.

**Ensure that all bleeder ports are closed.\***

# STEP 2

# Pre-Filter Unit Assembly



## ASSEMBLED UNIT SHOWN BELOW

Low Pressure Gauge (Non-Panel Only)  
Panel assembly requires 1/4" Push-to-Connect (PTC) tube.



Ensure that all bleeder ports are closed.\*



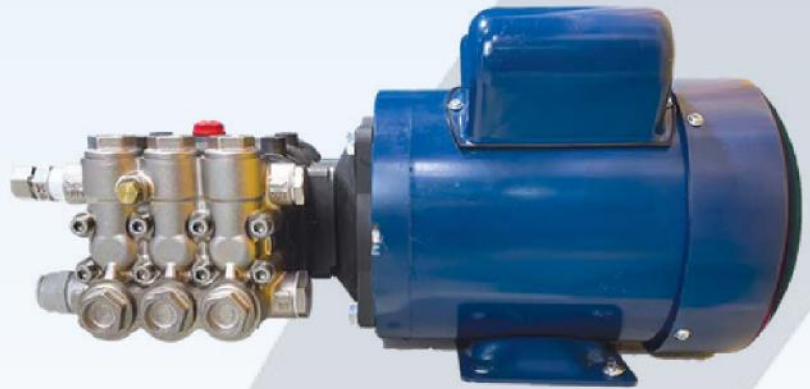
Assembling the Pre-Filters



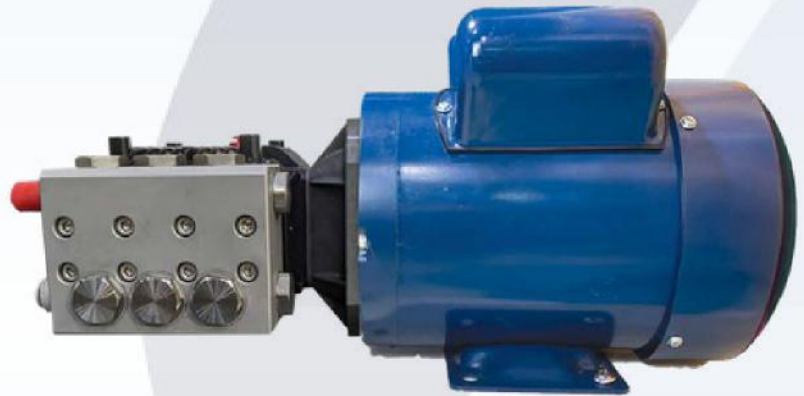
**STEP**  
**3**

# Pump & Motor Assembly

AC 110-220 Volt Motor  
with Plated Pump



AC 110-220 Volt Motor  
with Stainless Steel Pump  
UPGRADE



DC 12-24 Volt Motor  
with Plated Pump



DC 12-24 Volt Motor with  
Stainless Steel Pump  
UPGRADE



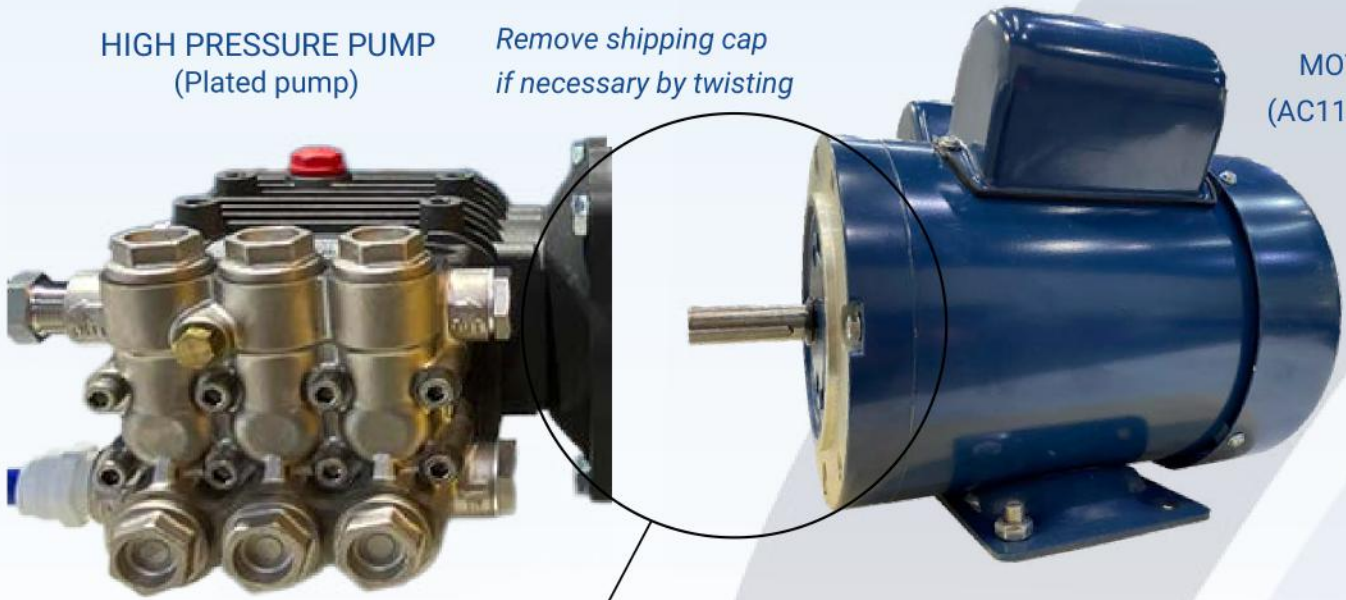
# STEP 3

# Pump & Motor Assembly

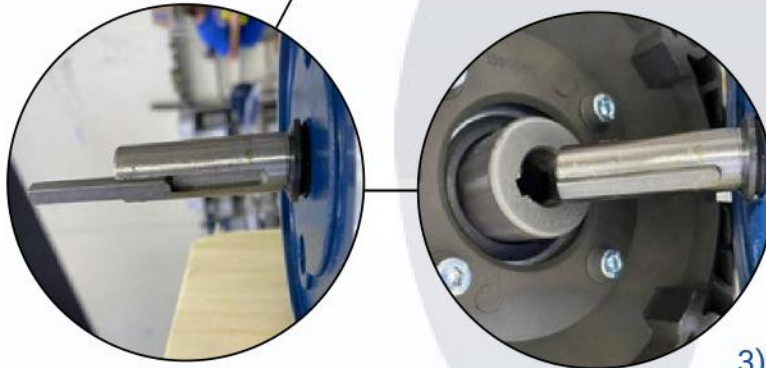
HIGH PRESSURE PUMP  
(Plated pump)

Remove shipping cap  
if necessary by twisting

MOTOR  
(AC110-220)



**WARNING:**  
Never attempt to thread 316 stainless parts together without Teflon tape. 316 stainless is a soft metal and will weld itself without Teflon tape. Once the threads stick, they will never come apart.



1). Align key way to join pump to motor.

2). Insert motor shaft into pump opening.

3). Secure firmly using 4 bolts. Tighten firm but do NOT over-tighten (3/8-16).

4). Replace Red Cap on Motor with Vented Dipstick.

5). Pump pre-filled at the factory with 11oz of engine oil.



Assembling Pump & Motor



Fittings with o-rings do not require Teflon tape; all other fittings should receive Teflon tape.\*





**STEP**  
**3**

# Electrical Set Up USA 120v 60Hz

This is how you would wire for 60Hz 120V:

Connect Phase or Neutral to either bundle.

Direction of rotation does not matter, the pump will work either way.



T1 , T3, T8

T2 , T4, T5



NA Motor Wiring

If contacts become oxidized the motor may overheat or stop functioning.

**STEP  
3**

# Electrical Set Up EU 220v 50Hz



AGI Motor Wiring



FARM DUTY	IND# K088C-SP				TEFC
HP 1.0	REF.NO. K104DF5FMSP	V 115	V 208-230		
HZ 60	RPM 1725	P.F. 90	FLA 9.4	FLA 4.7	
PH 1	MAN. THERMALLY PROTECTED	CED2797	EFF% 83	SFA 11.0	SFA 5.5
FRAME 56C	DUTY CONT.	DES. N			
TYPE K	MAX. AMB°C 40	S.F. 1.15			
DATE	INS.CLASS F	CODE K			
AG-I MotorTec Inc., East Garafraxa, ON, Canada L9W 7L8					
Suitable for use on 50HZ @ S.F.1.0					

FARM DUTY	IND# K088C-SP				TEFC
HP 1.0	REF.NO. K104DF5FMSP	V 115	V 208-230		
HZ 60	RPM 1725	P.F. 90	FLA 9.4	FLA 4.7	
PH 1	MAN. THERMALLY PROTECTED	CED2797	EFF% 83	SFA 11.0	SFA 5.5
FRAME 56C	DUTY CONT.	DES. N			
TYPE K	MAX. AMB°C 40	S.F. 1.15			
DATE	INS.CLASS F	CODE K			
AG-I MotorTec Inc., East Garafraxa, ON, Canada L9W 7L8					
Suitable for use on 50HZ @ S.F.1.0					

C.C.W. ROTATION FACING LEAD END.  
INTERCHANGE LEADS T5 & T8 FOR C.W.  
GW ELECTRIC(SHA)

Motor is suitable for use on 50 Hz.



**NOTE:**  
Direction of rotation does not matter.

# STEP 4

# Membrane Assembly

High Pressure Loop  
Hose Membrane 1-2

Dual Membrane with Remote Panel

High Pressure  
Hose to Panel



High Pressure Loop  
Hose Membrane 1-2

Dual Membrane with Regulator (No Panel)



High Pressure Hose to Panel

Single Membrane with Remote Panel



Fresh Water Out  
White Hose

Single Membrane with Regulator (No Panel)



Fittings with o-rings do not require Teflon tape; all other fittings should receive Teflon tape.\*

# STEP 4

# Membrane Assembly

Water flows into the system on the O-ring side of the membrane.



2nd Membrane: O-ring on left. (See water flow sticker.)

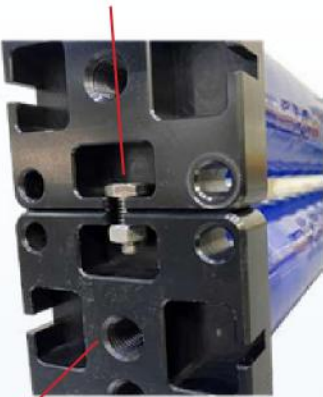
1st Membrane: O-ring on right. (See water flow sticker.)



### WARNING:

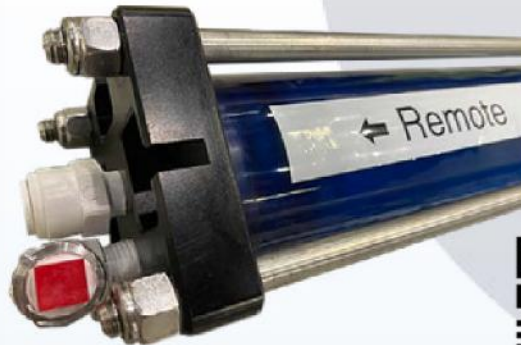
Never attempt to thread 316 stainless parts together without Teflon tape. 316 stainless is a soft metal and will weld itself without Teflon tape. Once the threads stick, they will never come apart.

You may unite the membranes together using 1/4" (6mm) bolt

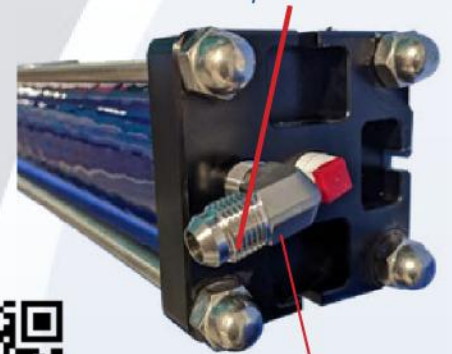


All ports are 1/4" NPT Threads

Unscrew red cap and replace with 3/8" push connect on the water output side.



Attach high pressure hose to this end on water in side. This does not require Teflon.

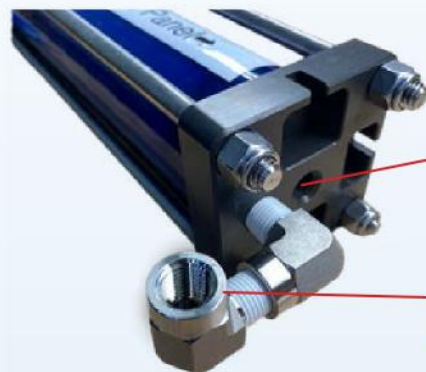


Default 90 degree connectors



Replacing the Membrane

Center port on either side of membrane can be used for fresh water output.



Connection for Pressure Regulator

High Pressure Loop Hose Membrane 1-2



Fresh Water Loop Hose Membrane 1-2

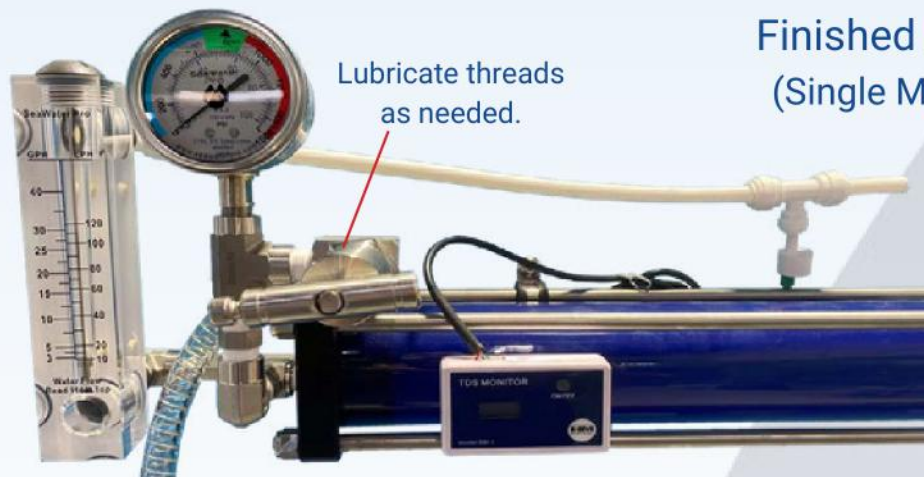
Optional straight connectors



Fittings with o-rings do not require Teflon tape; all other fittings should receive Teflon tape.\*

# STEP 5

# Pressure Regulator Set up



Finished Assembly  
(Single Membrane)

Finished Assembly  
(Double Membrane)



**NOTE:**

Pressure Regulator on Double Membrane unit goes on the lower right side.

## Assembling the Pressure Regulator (Double Membrane)



Minimum 5 rounds  
of Teflon tape.



Overboard  
Brine Hose  
Connection

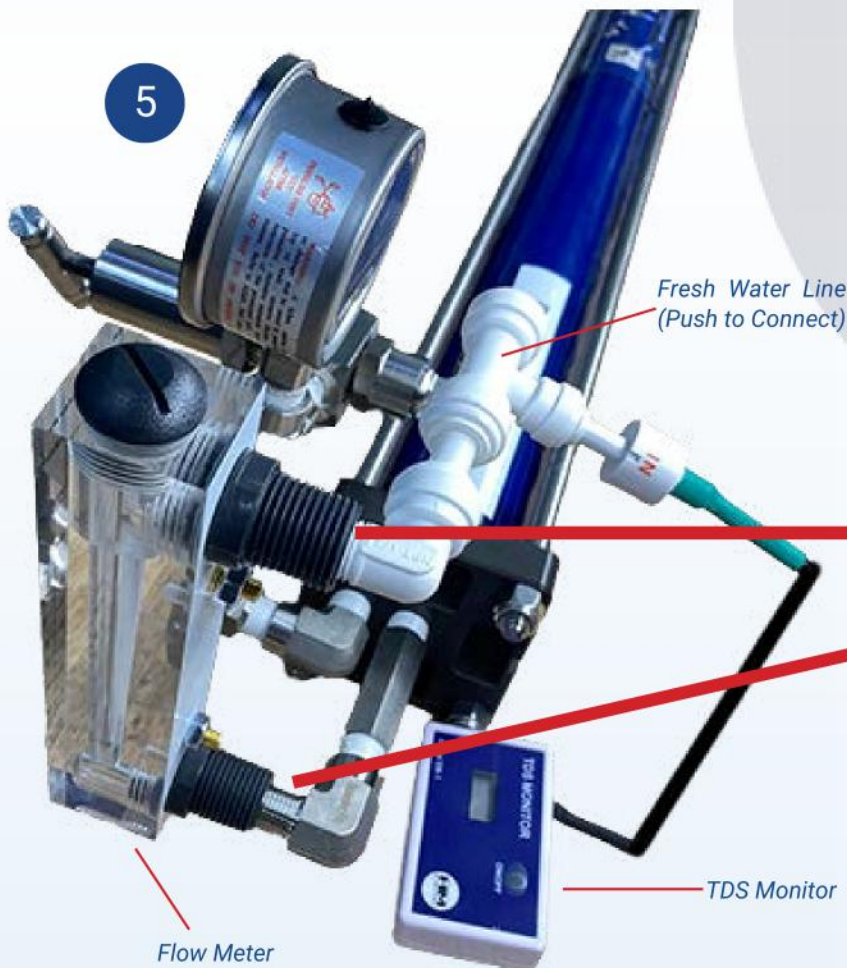
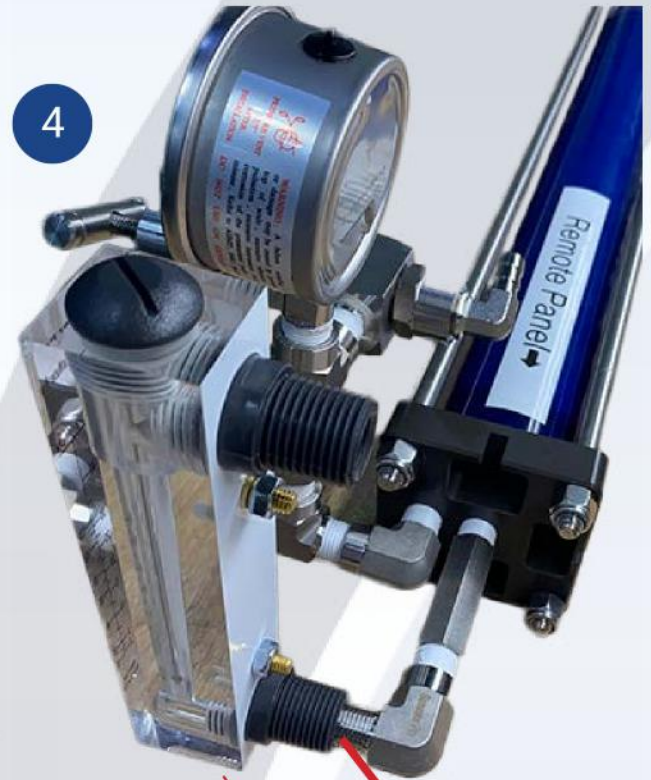
Fittings with o-rings do not require Teflon tape; all other fittings should receive Teflon tape.\*

**STEP**  
**5**

# Pressure Regulator Set up



**DO NOT attempt assembly of stainless on stainless threads without Teflon tape as this will damage threads.**



**Use Teflon Tape and assemble firmly. Do not over tighten plastic fittings.**



Pressure Regulator  
Maintenance



Fittings with o-rings do not require Teflon tape; all other fittings should receive Teflon tape.\*

**STEP**  
**6**

# Optional Control Panel

## REMOTE PANEL (FRONT)

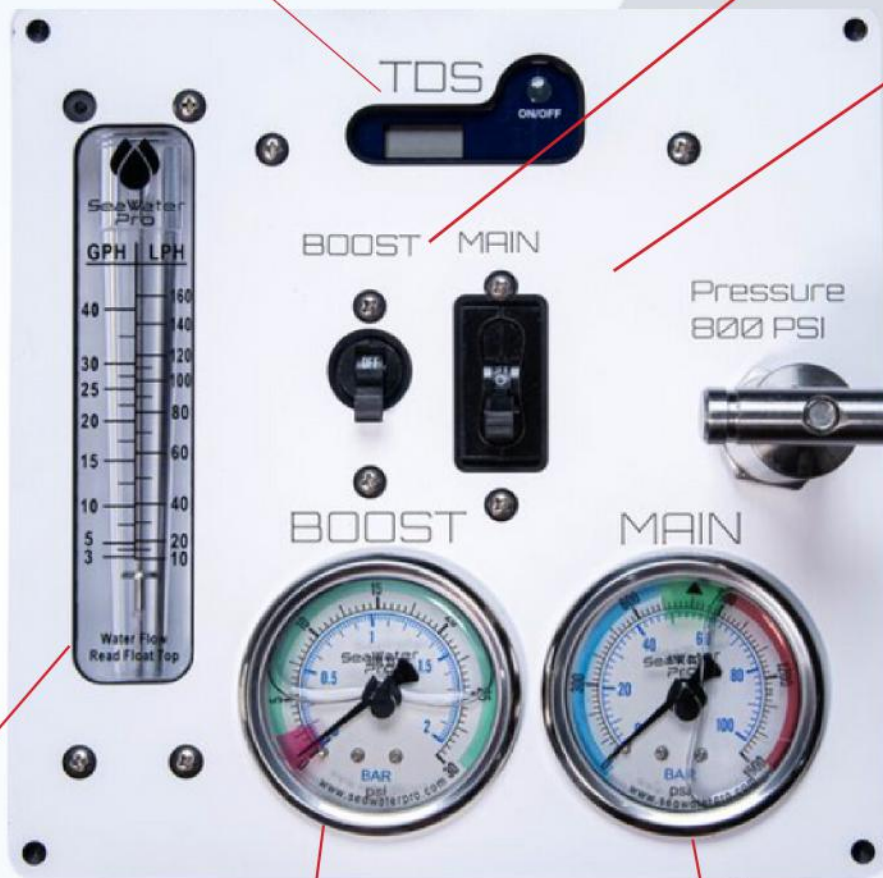
Dimensions 8x8

TDS Monitor  
Max Drinkable  
600 ppm

Boost Pump  
ON/OFF  
Switch

High Pressure  
Pump  
ON/OFF Switch

Pressure  
Regulator  
Control  
*\*Lubricate  
Threads*



Flow Meter

Low Pressure Gauge

High Pressure Gauge



Adjusting the  
Boost Pump

**STEP**  
**6**

# Optional Control Panel

## REMOTE PANEL (REAR)

Breakers

**Use shrink tubing on terminals.**

High Pressure  
Hose

Fresh Water  
Output 3/8"

Brine  
Hose 3/8"

Pressure  
Regulator

HI Pressure Input  
(From membrane)

Fresh Water  
Input 3/8"

LO Pressure  
Line 1/4"

TDS Monitor  
3/8"



Wiring Instructions Video







# Start-Up Procedure

1. Turn ON the boost pump switch and observe water flowing to the overboard line. Wait long enough to observe positive pressure on the low pressure gauge, before starting the high-pressure pump.
2. Do NOT run the high-pressure pump dry as this can damage the pump. Water is what lubricates the pump.
3. START the High-Pressure Pump by turning on the "Main Pump" switch. If necessary, adjust the pressure by turning the pressure regulator handle until the high-pressure gauge reads 800 PSI. The maximum allowable pressure is 1000 PSI.
4. If this is the first time you are operating the system or if the membrane has just been replaced, raise the pressure slowly over the course of 1 minute.
5. If your system has already been in operation, the pressure can be left at 800 PSI; eliminating the need for adjusting the pressure every time you turn on the system.



**WARNING! DO NOT drink fresh water from a NEW membrane during the first 30 minutes of operation.**





# Shutdown Procedure

1). Turn off the boost pump and count to 5.



2). Turn off the high pressure pump.

3). Ensure that the seacock is closed.  
This will mitigate the risk of flooding.



If you wish to run your boost pump using 110/220VAC consider a transformer.

These can be purchased directly on our website. Scan QR code:



AC/DC Power Supply





# Maintenance

## USING YOUR RINSE TIMER:

Each unit comes with a rinse timer. The purpose of rinsing is to flush out seawater that may contain microscopic sea life and may cause a foul odor if left in the membrane over time. Rinsing is recommended for the system when it is not in regular use. Rinsing the unit after every use will extend the life of all components. All Seawater Pro units include automatic check valves therefore the rinse process is fully automated once you set the timer. Rinse timer styles may vary but work similarly.

## TIMER INSTALLATION:

Unscrew and remove the waterproof cover. Carefully slide out the battery compartment in the front face of the timer. Insert two new 1.5V alkaline batteries (size AAA) and replace the battery compartment into the timer face. Test the unit by turning the RUN TIME knob from the "OFF" position. You should hear the sound of the motor within 30 seconds. If you do not hear the motor, check that the batteries are installed correctly. Whilst holding the unit steady, loosen the large locking collar ring located at the top of the timer until the tap connector collar is loose. Screw the tap connector onto the tap until it is hand-tight and then hand-tighten the large locking collar ring. DO NOT use spanners or pliers to tighten the collars. Connect your hose attachment to the male snap-on connector at the bottom of the timer.

## FEATURES:

- Battery operated (LR03 2XAAA 1.5V Alkaline battery)
- Strong Ball valve inside
- Durable high-impact construction
- Manual watering available
- Simple, reliable, water-proof
- Soft material for comfortable grip and easy use
- Can be attached to 3/4"(19mm) tap or faucet
- Once the program is set, it will repeat the cycles
- Frequency: (can be set at 1, 2, 3, 4, 6, 8, 12, 24, 48, 72 H, Week)
- Run Time: (can be set at 1, 3, 5, 10, 15, 20, 30, 60, 90, 120 mins)

## Specification:

Working Temperature: 5 - 60 C (40 - 140 F)

Water Pressure: 0 - 8 bar (0 - 116 PSI)



Rinse Timer Variant 1



# Rinse Timer

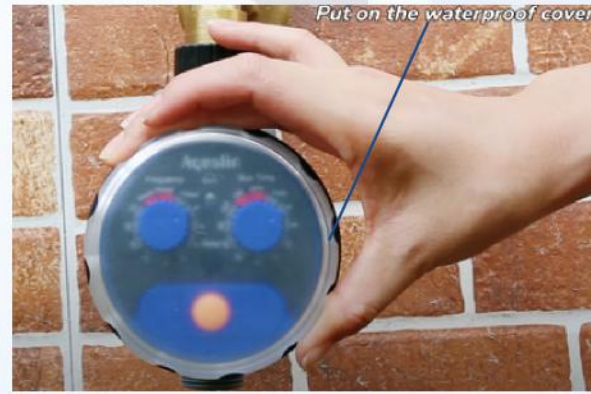
## USING YOUR RINSE TIMER:

Each unit comes with a rinse timer. The purpose of rinsing is to flush out seawater that may contain microscopic sea life and may cause a foul odor if left in the membrane over time. Rinsing is recommended for the system when it is not in regular use. Rinsing the unit after every use will extend the life of all components. All Seawater Pro units include automatic check valves therefore the rinse process is fully automated once you set the timer. Rinse timer styles may vary but work similarly.



## CHANGING THE BATTERY:

To change the battery, press the orange button to open the battery compartment.  
x2 AA 1.5v alkaline battery is required.

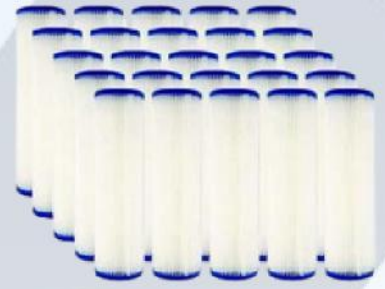




# Maintenance

## Pre-Filters

There are 2 pre-filters. The first stage requires a 20-micron filter, and the second stage requires a 5-micron filter. Both filters measure 2.5 inches in diameter by 10 inches in length. Filters need to be replaced as needed or every 6 months. If you notice a drop on the low pressure gauge then it is time to clean or replace the filters. Also, if you can see algae growing on the filter, then it is time to clean or replace the filters.



Low Pressure Gauge

## Carbon Filters

The system comes equipped with a carbon filter. The carbon filter is never exposed to seawater; this filter is only in use when rinsing. The carbon filter ensures that chemicals such as chlorine and fluoride do not enter the membranes from a dock source or a chlorinated tap. We recommend that you replace this filter once every nine months.

Note:

Chlorine or chemicals that are similar will damage the integrity of the membranes.



You may purchase filters directly from [www.seawaterpro.com](http://www.seawaterpro.com)

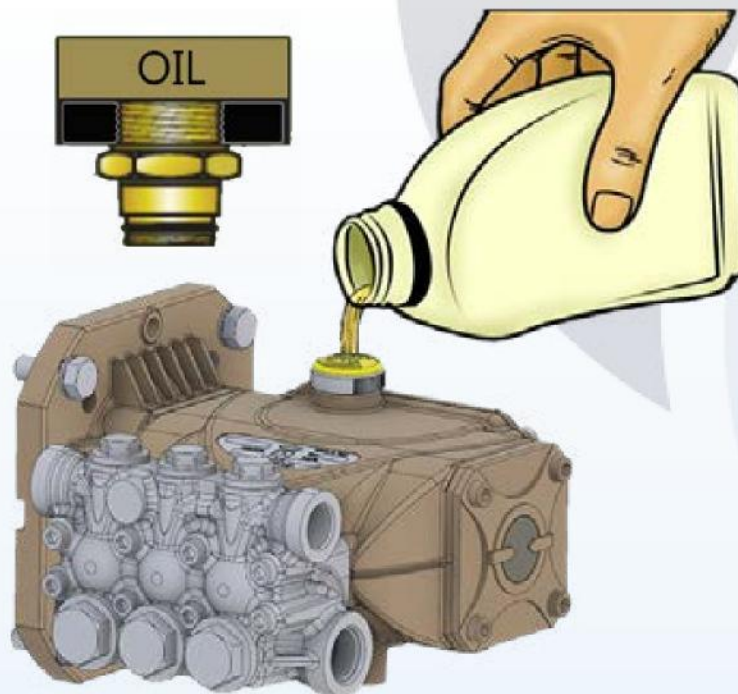




# Maintenance

## REPLACING PUMP OIL

1. To drain the oil, remove the drain plug at the bottom of the pump.
2. The first oil change is due after 50 hours of use. After that, it is recommended to replace the oil once a year or every 300 hours.
3. You may use any engine oil you happen to have available: 10W30, 5W40, synthetic, or non-synthetic.
4. Fill according to the dipstick or use a sight glass.





# Winterization

## WINTERIZATION PROCESS:

Seawater Pro, LLC. is a company that specializes in the production of high-quality watermakers. In order to ensure that our products maintain their optimal performance and longevity, the company recommends implementing freeze protection for the preservation of their watermakers during the winter months.

Freeze protection involves the use of special additives, such as 100% food-grade propylene glycol and water [*1 bottle propylene glycol:1 water gallon ratio*], to help prevent water from freezing inside the watermaker's components and causing damage. When water freezes, it expands, and this can cause internal components to crack or break, leading to costly repairs. By implementing freeze protection, Seawater Pro, LLC. ensures that their watermakers are protected from these potentially costly damages.

To effectively implement freeze protection, it is important to follow the proper winterization procedures. This involves draining all water from the system, adding the appropriate amount of propylene glycol and water to the components, and running the system on boost pump pressure **ONLY** to ensure that the freeze-protection solution is evenly distributed throughout the system. **DO NOT PRESSURIZE THE SYSTEM!** By doing this, the watermaker is protected from freezing temperatures and can be easily restarted in the spring.

In addition to freeze protection, Seawater Pro, LLC. recommends regular maintenance and servicing of their watermakers to ensure optimal performance. This includes regular filter changes, cleaning of the system, and inspection of the components for any signs of wear or damage.



Watermaker Pickling  
Guide



# Winterization

## 100% Food-Grade Propylene Glycol

Propylene glycol is an odorless chemical compound that is used as an anti-freeze solution in various industries. Unlike its cousin, ethylene glycol, propylene glycol is non-toxic and safe for human consumption. It has a low freezing point of  $-60^{\circ}\text{C}$ , which makes it an ideal coolant for extreme cold temperatures.

Seawater Pro, LLC, a Florida-based company, manufactures 100% propylene glycol-based products that are used in marine desalination systems. Seawater Pro's propylene glycol is specially manufactured with a light blue colored tint. Our anti-freeze solutions are designed to protect against freezing temperatures and corrosion, making them a popular choice for boat owners. Seawater Pro's anti-freeze solutions are made with pure propylene glycol, which provides maximum protection against freezing. Products are also biodegradable and environmentally friendly, making them a preferred choice for those who are looking for eco-friendly anti-freeze solutions that won't harm marine life or the environment.

100% food-grade propylene glycol is an excellent anti-freeze solution that is safe, effective, and environmentally friendly. Companies like Seawater Pro, LLC. are dedicated to producing high-quality products that meet the needs of their customers. As a boat owner or watermaker user, understanding that propylene glycol-based anti-freeze solutions can help protect your equipment from the damaging effects of freezing temperatures is imperative.



### **FREEZE PROTECTION: WARNING**

There is a high probability of damaging your watermaker by exposing it to severe cold or icy conditions. The following procedure will protect your watermaker against freeze damage.

**DO NOT USE ETHYLENE GLYCOL** (FOUND IN AUTOMOTIVE ANTIFREEZE PRODUCTS) FOR FREEZE-PROTECTING YOUR WATERMAKER. ETHYLENE GLYCOL IS A TOXIC SUBSTANCE AND MUST NOT BE INGESTED OR COME INTO CONTACT WITH YOUR SYSTEM.

**USE ONLY FOOD-GRADE NON-TOXIC PROPYLENE GLYCOL.** DO NOT USE PROPYLENE GLYCOL BLENDED WITH SUPPLEMENTARY ADDITIVES.







# Liquid Pickling Procedure

## Liquid Pickling Instructions:

One of the biggest risks to a watermaker during the winter months is freeze damage. Water left inside of the system can freeze, expand, and cause irreversible damage to delicate components. To ensure your watermaker stays in good condition throughout the winter, it's important to take steps to protect it from freezing temperatures.

Seawater Pro, LLC is a leading manufacturer of watermakers for boats and adventure lovers. Their team of experts has provided some tips and recommendations for winterizing your watermaker to protect it from freeze damage.

### **1. Drain the System**

Before winterizing your watermaker, it's crucial to ensure that all water is drained from the system. This means opening all valves and disconnecting any water hoses. Use compressed air to blow out any remaining water from the system. Be sure to open all faucets and drains to ensure that all water has been removed.

### **2. Use 100% Food-Grade Propylene Glycol Anti-Freeze**

Using 100% food-grade propylene glycol as an anti-freeze is an effective way to ensure that your watermaker is protected throughout the winter months. It is a non-toxic, marine-specific anti-freeze. Use a 1 bottle propylene glycol: 1 water gallon ratio in a bucket, mixed thoroughly, with boost pump pressure ONLY to circulate the solution throughout the system. Then cap off all inlets and outlets to prevent drying out the membranes.

### **3. Remove Pre-Filters**

It's important to remove all pre-filters from the watermaker before winterizing it. This will prevent the filters from becoming damaged due to freezing temperatures. Be sure to store the filters in a dry, warm location to prevent damage.

### **4. Keep the System Dry**

After all water has been drained from the system, it's important to keep the system dry to prevent any moisture buildup. Use a dry cloth to wipe down all components, and ensure that the system is completely dry before storing it for the winter.

By following these simple steps, you can help protect your watermaker from freeze damage and rest assured that your Seawater Pro watermaker will remain in excellent condition throughout the winter months. Seawater Pro, LLC is committed to helping its customers keep their watermakers in top condition all year round.



# Liquid Pickling Procedure

## Post-Pickling Instructions:

After successfully winterizing your watermaker using Seawater Pro, LLC products, there are a few important steps you should take to ensure that your system is ready to return to operation.

### **1. Check all Connections**

Inspect all hose and pipe connections to make sure they are tight and secure. Reconnect high-pressure hose from pump to membranes.

### **2. Ensure Pre-filters are Reinstalled**

Reinstall the pre-filters once the system is ready to be operated again.

### **3. Lubricate Moving Parts**

Apply a light coat of lubricant to any moving parts, such as the pump or motors. This will ensure the system runs smoothly when it is reactivated.

### **4. Pre-Assembly**

When ready to use the system again, use boost pump pressure to run the system's (depressurized) brine water overboard for 30 minutes before making product water. Once the brine has been run overboard for 30 minutes, connect the freshwater product hose from the system to the tank.

### **5. Boost Pump Assembly**

Follow the steps on Page 3 for Boost Pump assembly procedures. Enjoy fresh water!

For further questions regarding how to maintain your system, reach out to us at  
954-800-8800 or email [seawaterprollc@gmail.com](mailto:seawaterprollc@gmail.com)





# Warranty Agreement

## Warranty Conditions / Warranty Statement:

### GENERAL

SeaWater Pro water makers and desalination systems are exclusively manufactured in the U.S.A. under our highest quality standards. Our patented pressure regulators ensure that our customers have a top-tier and effective experience with the utilization of our systems. Each of these handcrafted products undergo a thorough quality control inspection as they are being manufactured and prior to delivery.

Upon purchase of a water maker system SeaWater Pro voluntarily provides a manufacturer warranty for manufacturing defects and materials under the following conditions.

The following conditions, which encompass the prerequisites and purview of our voluntary warranty, are outlined:

### WARRANTY PROVIDER

SeaWater Pro, LLC  
3233 NW 2nd Avenue  
Fort Lauderdale, FL 33315  
USA  
Phone 954-800-8800  
info@seawaterpro.com

### WARRANTY COVERAGE

I. This warranty extends exclusively to SeaWater Pro water makers that were purchased directly from the manufacturer's factory; this warranty does not cover third-party sales by dealers or pre-existing water maker systems owned by the consumer. This warranty excludes land-based installations; it is explicitly applicable to boat installations only.

#### Duration of Warranty

II. SeaWater Pro LLC. warrants the water maker and select parts to be free of all defects in material and workmanship for 2 years from the original purchase date. This warranty extends exclusively to the original buyer, the first lawful end customer; this warranty is non-transferable.

III. Within the period of this warranty, SeaWater Pro LLC. will repair or replace, free of charge; any part proving defective in material or workmanship. All warranty repairs and services must be performed by an authorized SeaWater Pro LLC. technician, or at an authorized SeaWater Pro LLC. service facility.

### PRODUCT COVERAGE:

- i. Seawater Pro Water Makers
- ii. Select SeaWater Pro and select parts
- iii. SeaWater Pro Membranes are not covered by this warranty.

IV. All expenses related to replacing or repairing a defective part under this warranty shall be assumed by SeaWater Pro LLC. except for travel and shipping expenses, which shall be assumed by the buyer.



# Warranty Agreement

## WARRANTY EXCLUSIONS

V. This warranty does not apply to any costs, repairs, or services for the following:

- i. Repairs necessitated by use other than normal wear and tear.
- ii. Damage resulting from misuse, abuse, accidents, alterations, or improper installation.
- iii. Corrective work necessitated by repairs made by anyone other than SeaWater Pro LLC. authorized service technician.
  1. SeaWater Pro Membranes are not covered by this warranty.
  2. This warranty excludes land-based installations; it is explicitly applicable to boat installations only.

VI. This warranty right shall be forfeited in the event of:

- i. Misuse of the product.
- ii. Improper installation.
- iii. Not abiding by the operating manual.
- iv. Not performing outlined regular maintenance.
- v. Any change in the product components.

VII. Further or other claims, particularly those related to any compensation for damage occurring outside the filter – provided such liability is not mandated by law – shall not be accepted. Warranty claims made in a country that is different from the country of purchase can entail reasonable fees or other limitations that the warranty provider may set at its reasonable discretion.

## LIMITATION OF DAMAGES

VIII. In no event shall SeaWater Pro LLC. be liable for consequential damages for breach of this warranty. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to the buyer.

## PROVISION OF WARRANTY SERVICES

IX. Upon discovery of any defect, malfunction, or nonconformity in the SeaWater Pro water maker system, the buyer should contact the manufacturer directly to obtain warranty service and repairs:

X. The buyer should carefully pack the water maker system, preferably in the original packing materials, and deliver it, together with a copy of the original purchase receipt and a description of the problem, to the listed repair and service facility:

Warranty repairs are to be made at an authorized service center:  
SeaWater Pro, LLC 3233 NW 2nd Avenue Fort Lauderdale, FL 33315 USA  
Phone 954-800-8800  
info@seawaterpro.com

If the buyer sends the product by U.S. mail, we recommend that the buyer insure it and send the return receipt requested. We accept no liability for products lost or misplaced in shipment.

## NOTICE TO BUYER

Consumer Protection Some states do not allow the exclusion or limitation of incidental or consequential damages or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. You have the right to bring any action at law or equity to resolve disputes concerning or to enforce the provisions of this warranty.

If the buyer disagrees over either's performance under the terms of this warranty, the buyer may submit the matter for resolution to SeaWater Pro, LLC. The buyer shall not be responsible for expenses incurred in submitting a dispute for resolution under the terms of this paragraph. The buyer is required to submit any dispute for resolution under this paragraph before pursuing any legal remedies to which he or she may be entitled.



# Troubleshooting

SYMPTOM	CAUSE	SOLUTION
Surging noise from the High Pressure Pump resulting in unstable High Pressure Gauge.	Water Starvation Not enough water reaching high pressure pump. Air Leaking into the water supply.	Replace Pre-Filters Clean Strainer Inspect Boost Pump Replace pre-filters.
Odor, rotten egg smell in the water.	Algae is growing in the filters and or membrane, due to lack of rinsing.	Remove and clean membrane if necessary. Increase rinse frequency. Damaged or mangled membrane O-ring.
High TDS reading, TDS meter reading over 500.	Improper installation of membrane. Worn out or damaged membrane. Air is present in the system. Sea cock is closed.	Replace membrane.
Unable to build up pressure.	Sea strainer is clogged. High Pressure Pump damaged. Barnacles or seaweed is restricting water flow.	Open pressure regulator counter clockwise and wait for air to purge, while operating both pumps. Verify sea cock is open. Clean sea strainer. Inspect for any growth or foreign objects or material.

*If you require additional instruction or have any other questions not covered in this manual, please*

*contact us at [seawaterprollc@gmail.com](mailto:seawaterprollc@gmail.com)*

*Primary 954-800-8800 Office 954-900-8800.*

**Scan this QR code or visit [www.seawaterpro.com/resources](http://www.seawaterpro.com/resources) to view & download a digital copy of this manual.**





# Resources & Videos

## Congratulations on purchasing your new SeaWater Pro WaterMaker!

SeaWater Pro is committed to not only providing our customers with the best product available at the highest quality, but also providing exceptional customer service.

Below are some helpful QR codes to our how-to videos.

Adjusting the Boost Pump



Installation Tips



Assembling the Pre-Filters



Rinse Timer Procedure



Assembling Pump & Motor



NA Motor Wiring



Replacing the Membrane



Pressure Regulator Maintenance



Wiring Instructions Video



FDA Acceptable TDS



Watermaker Pickling Guide



Protection Circuit



AGI Motor Wiring



AC/DC Power Supply



Rinse Timer Variant 1



Rinse Timer Variant 2





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SeaWaterPro.com



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@SeaWaterPro



YouTube

@SeaWaterProLLC



Email

Info@SeaWaterPro.com



Phone Number

954-800-8800



Address

3233 SW 2nd Ave. Suite #200  
Fort Lauderdale, FL 33315





# SeaWater Pro

WATERMAKERS



3233 SW 2nd Ave. Ste # 200 Fort Lauderdale FL.  
33315 954.800.8800 • seawaterprollc@gmail.com •  
[www.seawaterpro.com](http://www.seawaterpro.com)

