

# BOANN

Specialized Stainless Steel Kitchen and Bath Hardware

## Reverse Osmosis 5-Stage Water Filtration System Manual Five-Stage Water Purification System



### For easy installation of your Boann product, please conduct the following:

- Thoroughly **read all** instructions before installing the product to ensure proper operation
- **Read and understand** all warnings, care and maintenance information

### Product Features:

- Five-Stage Water Purification System
- Quick Twist Filter Replacement
- Auto Leak Detector & Pressure Regulator
- 3-Year Filtration System Warranty



# Pre-Installation Instructions

## Installation Instructions Prelude

The Boann Reverse Osmosis 5-Stage Water Filtration System has been designed as a Do-It-Yourself filtration system. However, it is recommended to acquire the services of a licensed professional to facilitate and expedite the installation process. To ensure a successful installation, as well a fully-operating filtration system, carefully read this manual and follow all operational guidelines.

The installation instructions set forth in this manual are very detailed and thorough. Should you experience a leak during installation or usage, please see the Leak Prevention section on page 18.

**ATTENTION:** It is very important to change the filter of your system in order to ensure pure water is being produced and to avoid any premature system degradation. After installation is complete and deemed successful, please read the Recommended Filter Replacement Schedule section on page 19 and keep record on your calender when your system filters require replacement.

**PLEASE NOTE:** Water contaminants and/or foreign substances mentioned within this manual are not necessarily present in all water. The Reverse Osmosis 5-Stage Water Filtration System performs a succession of filtration steps to purify and optimize water for consumption.

## Reverse Osmosis 5-Stage Water Filtration System Specifications

### Dimensions:

R.O. System: 10.13" W x 14.63" H x 8" D

Tank: 11" W x 15" H x 11" D

Unit Weight: 11.5 lbs (R.O. System); 8 lbs (Tank)

Tank: 5 Gallons (Tank Capacity 3.2 Gallons)

### Water Source Conditions:

Maximum Total Dissolved Solids (TDS): <2000 ppm

Water Pressure Range: 40-100 psi (2.8 bar)

Minimum Inlet Water Pressure: 40 psi (2.8 bar)

Water Temperature Range: 40 - 85°F (4.5° - 30°C)

Water pH Range: 4 - 11

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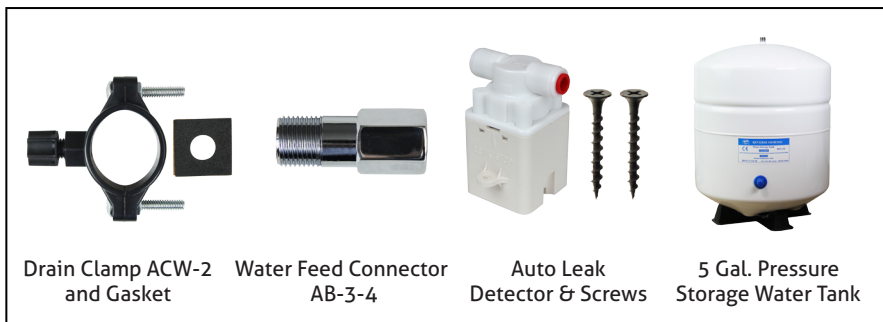
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# Package Contents

## Take Everything Outside of the Box

Examine the contents inside the box and make sure you have all required parts and accessories to complete the installation process.

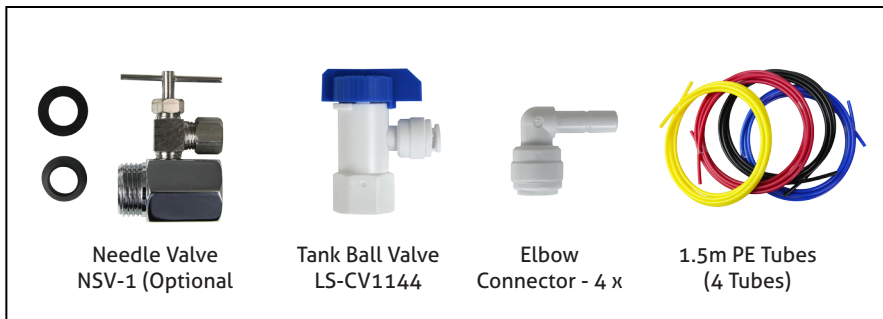
### Parts Diagram 1



### Parts Diagram 2



### Parts Diagram 3



# Product Overview

## Boann Reverse Osmosis 5-Stage Water Filtration System

FOR VISUAL REFERENCE PURPOSE ONLY: Provided below are images showing the front and rear of the filtration system, with filters intact. We recommend to thoroughly read the installation instructions step by step in order to expeditiously and correctly complete the installation process.

System Front View:

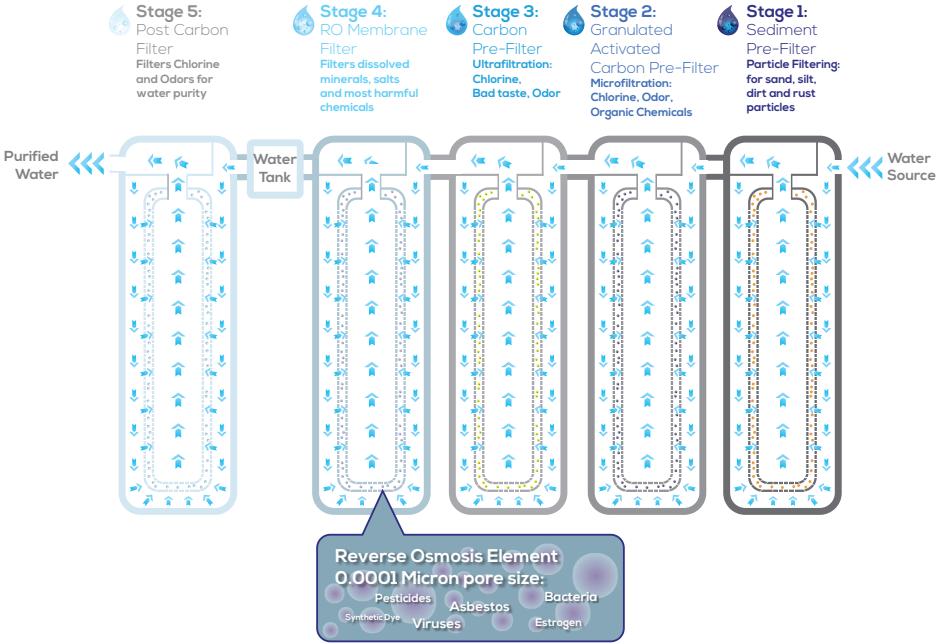


System Back View:



# System Operation Filtration Chart

## How Does RO System work?



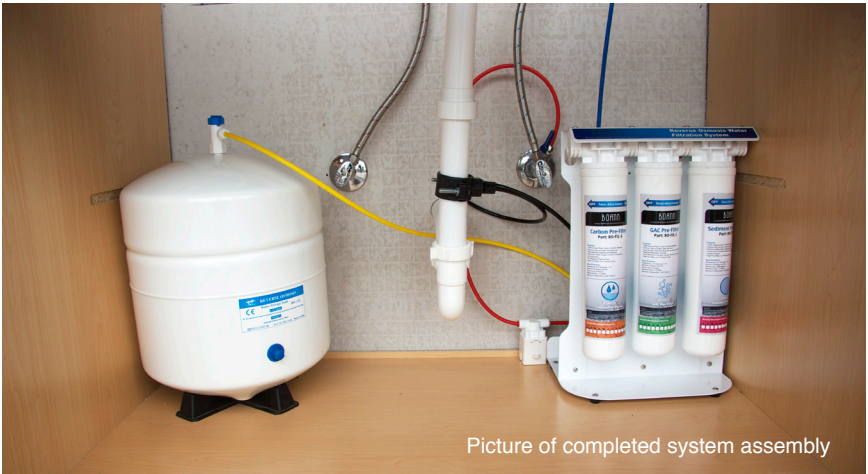
## Tools to Complete Installation



# Installation Preparation

## Prepare Space for the Filtration System

Before installation is initiated, it is advisable to clean out space underneath the sink in which the filtration system will be installed. Evaluate the area underneath the sink and determine the proper location for the unit and tank. Please consider easy accessibility, as it is required to periodically service the filtration system and its parts.



Picture of completed system assembly

**TIP!**

Understanding installation will likely cause water to splash or drip from the filtration system during installation and/or servicing, it is advisable to stand the unit inside a drip pan. Disposable aluminum baking sheets suffice for this application.



# Installation Preparation

## Using the EZ Angle Stop Adapter

The Boann R.O. 5-Stage Water Filtration System comes with the EZ Angle Stop Adapter (NSF Certified). The adapter is a convenient and user-friendly part that facilitates installation. PLEASE NOTE YOU DO NOT NEED TO TURN OFF THE MAIN WATER SUPPLY LINE when using the EZ Angle Stop Adapter. **DO NOT use Teflon tape on this product.**

1. To start, turn both Hot and Cold water valves clockwise, turning Off water to both water lines. Turn the sink faucet On to make sure no cold water is flowing. Next, use a wrench to unscrew the cold water hose from the Cold Water Valve.



2. If the white gasket is not attached to the EZ Angle Stop Adapter, place and push the gasket into the female threads. After, screw the EZ Angle Stop Adapter onto the 3/8" male threads on the Cold Water Valve. When resistance is felt, tighten the EZ Angle Stop Adapter one full rotation, securing the adapter.



### Note!

The Mur-lock® Union-Tee Fitting (V0420426) can be purchased and used as a supplement fitting to connect a 1/4" refrigeration water line to the water filtration system.

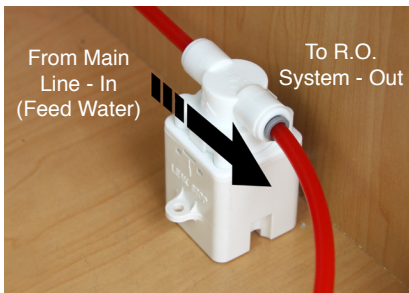
# Installation Preparation

## Using the EZ Angle Stop Adapter

- Using a wrench, thoroughly tighten the cold water hose onto the male threading of the EZ Angle Stop Adapter. **Note: Adapter should always remain upright, withstanding no stress from the hose.** Cut the red PE tubing in half and push one end of the red PE tubing firmly into the Collet on the EZ Angle Stop Adapter.



- Attach the other end of the red PE Tubing to the R.O. System Out port on the Auto Leak Detector. Next, use the other cut red PE tubing and attach it to the Main Line-In port on the Auto Leak Detector.



### Note!

Although the Leak Detector is an invaluable safeguard against leakage, it is considered an optional part and therefore is not required for full system operation. Therefore, connecting the red PE tubing from the Manual Shut Off Valve to the Inlet input port on the system will complete water main line system connection.

# Installation Preparation

## The Auto Leak Detector Advantage

The Boann Reverse Osmosis 5-Stage Water Filtration System comes exclusively with an Auto Leak Detector module, which is an invaluable part of the system and serves to detect the presence of water (leakage) around the system. Should the Auto Leak Detector sense the presence of a leakage, a water-absorbent cell will absorb neighboring water and initiate a system shut-down, thus stopping excess water from damaging the unit and the surrounding environment.

### Leak Detector Parts:



## Re-Activating the Auto Leak Detector

1. Every Auto Leak Detector module comes with 2 internal water-absorbent cells. Should the system initiate a shut-down due to a leak, the replacement of the used cell will be required.
2. To open the housing module, simply pry the upper - spring trigger with your hand or use a flat screwdriver to detach (pry) the upper from the housing.
3. Next, detach the blue cell holder and discard the used cell. Place a new cell inside the cell holder and reinsert the upper - spring trigger onto the lower housing, making sure the spring inserts into the cavity of the cell holder.
4. Apply firm pressure to connect the upper to the lower housing. You will hear a click when the module is correctly assembled.
5. Reinstall or house the Auto Leak Detector back in its original location.

NOTE: Replacement water-absorbent cells can be purchased separately.

# R.O. Filtration System Installation

## Preparing the Discharge Water Drain Clamp

Find the location on the drain pipe under your sink where you wish to secure the Discharge Water Drain Clamp. CAUTION: Make sure the location chosen is above the Trap, and is at least 3-4" above the return line. (The Trap is the "U" shape part of the drain pipe) You may secure the saddle clamp on the horizontal pipe, as long as the clamp is above the Trap. It is also advisable to secure the drain clamp in a location that it is not blocking anything.

1. Drill out the chosen spot with a 1/4" drill bit. The 1/4" hole that is created into the chosen location on the drain pipe is where the black discharge line will be inserted and secured into place with the Discharge Water Drain Clamp.



2. If not already attached to the Discharge Water Drain Clamp, take the rubber gasket that's provided and remove its paper backing.



**TIP!**

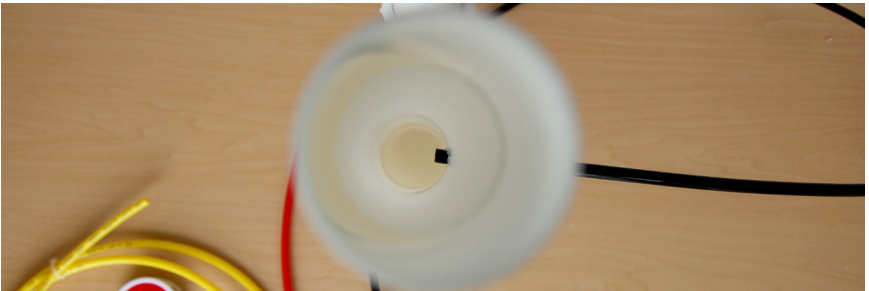
A redesigned Discharge Water Drain Clamp has been added to the RO Water Filtration System. System assembly of the new drain clamp is the same process, as noted in this section; however attachment of the PE tubing is facilitated by way of a quick-connect collet opening on the redesigned drain clamp.

# R.O. Filtration System Installation

3. Adhere the gasket to the interior of the Discharge Water Drain Clamp. Now stick the black PE tubing into the drain clamp, making sure the tubing is protruding through at least 1/2 inch.

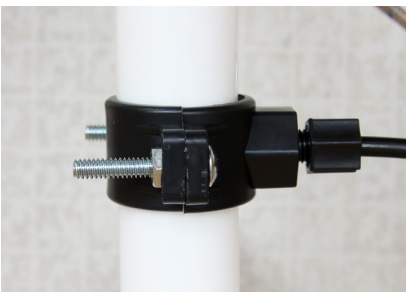


4. Now firmly secure the Discharge Water Drain Clamp in its chosen location, making sure the tubing is inserted into the drain pipe by 1/4 inch (as shown).



5. Assemble the two pieces of the Discharge Water Drain Clamp with use of the two screws and bolts. Now attach the black PE tubing discharge line into the Drain input port on the rear of the R.O. filtration system.

Assembled Discharge Drain Clamp



Drain Input Port



# R.O. Filtration System Installation

## Prepare the R.O. Pressure Storage Water Tank

The R.O. Pressure Storage Water Tank has both an air and water bladder built inside it. The air bladder comes pre-set from the factory at 7 PSI. NOTE: Changes to the PSI of the air bladder inside the water tank may cause harmful back pressure which can result in damage to the R.O. filtration system.

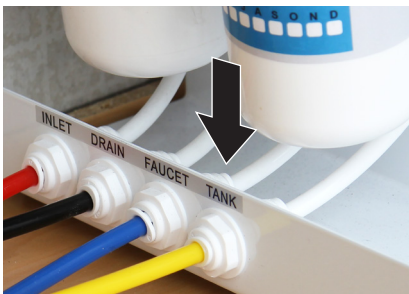
## Connecting the R.O. Pressure Storage Water Tank

1. Screw the Tank Ball Valve onto the threads located on top of the water tank. For security, apply 5-8 wraps of Teflon tape to the thread of the tank.



2. The yellow PE tubing will now be used to connect the system to the R.O. Pressure Storage Water Tank. Connect the yellow PE tubing into the Tank Ball Valve atop of the water tank and connect the other end to the Tank input port on the R.O. Filtration System.

Tank Input Port



Ports with Elbow Connectors



**TIP!**

For geographic locations or within homes where inadequate water pressure may be experienced, we recommend using a Diaphragm Pump (water pressure pump), which can be added to the Boann RO Water Filtration System. For product use information, please visit: [www.boannstyle.com](http://www.boannstyle.com).

# R.O. Filtration System Installation

## Installation of Push-In Standard Faucet

At this point the blue PE tubing will be used to connect the R.O. filtration system to the faucet. The length of tubing used to hook up the kitchen faucet should be long enough to connect to the Faucet input port. Take a moment to assess and measure the amount of tubing required for the application. Once an accurate measurement is taken, cut the blue PE tubing with scissors or a sharp knife. Make certain the cut is straight and not at an angle.

Now insert one end of the customized blue PE tubing into the Faucet input port on the rear of the filtration system. The other end will connect to the faucet adapter.

### Installation Steps

1. Drill a 1/2" hole in the sink or counter top, or utilize an existing hole (should it be the appropriate size).

2. Slide chrome cover plate and rubber gasket onto stem of faucet and place the faucet onto the sink, with the stem going through the hole.

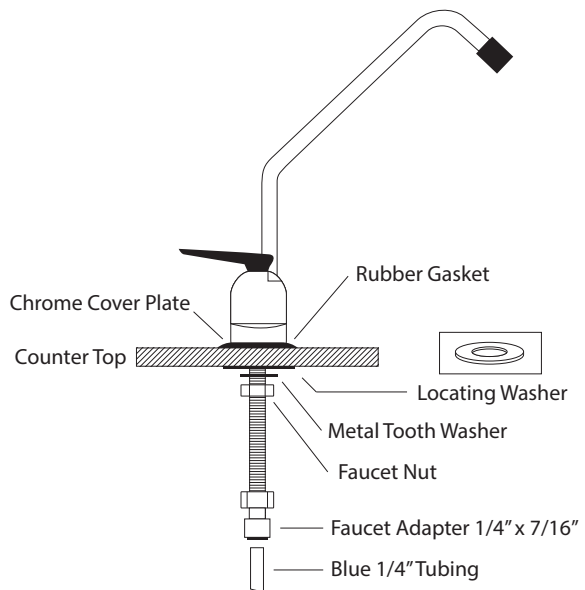
3. Attach plastic locating washer (used where a 1/2" hole is available, reverse when mounting on stainless steel or when using a drilled hole). Attach metal tooth washer.

4. Tighten the faucet nut from under the counter surface to lock the faucet into place.

5. Thread the faucet adapter onto the faucet's threaded stem. Do not use Teflon tape.

6. Firmly push the blue 1/4" tubing into the faucet adapter.

Check over all of the steps. Make sure all of your tubing is inserted firmly into the respective inputs!



# R.O. Filtration System Installation

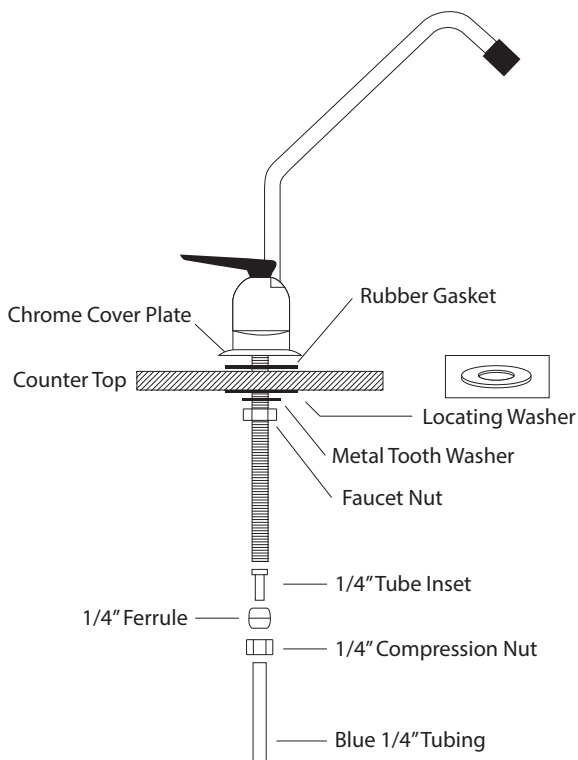
## Installation of Standard Faucet

At this point the blue PE tubing will be used to connect the R.O. System to the faucet. The length of tubing used to hook up the kitchen faucet should be long enough to connect to the Faucet input port. Take a moment to assess and measure the amount of tubing required for the application. Once an accurate measurement is taken, cut the blue PE tubing with scissors or a sharp knife. Make certain the cut is straight and not at an angle.

Now insert one end of the customized blue PE tubing into the Faucet input port on the rear of the filtration system. The other end will connect to the faucet assembly.

## Installation Steps

1. Drill a 1/2" hole in the sink or counter top, or utilize an existing hole (should it be the appropriate size).
2. Slide chrome cover plate and rubber gasket onto stem of faucet and place the faucet onto the sink, with the stem going through the hole.
3. Attach plastic locating washer (used where a 1/2" hole is available, reverse when mounting on stainless steel or when using a drilled hole). Attach metal tooth washer.
4. Tighten the faucet nut from under the counter surface to lock the faucet into place.
5. Slide the compression nut and ferrule onto the blue tubing.
6. Insert the tube inset into the opening end of the blue tubing.
7. Thread the compression nut onto the faucet's threaded stem, securing the blue tubing.



Check over all of the steps. Make sure all of your tubing is inserted firmly into the respective inputs!



# R.O. Filtration System Installation

## Initiating the Water Filtration System

### Opening All Water & System Valves

At this point, turn On all water and system valves to initiate the water filtration system. Proceed to turn On the Hot and Cold water valves and the filtration system's Tank Ball Valve, located atop of the R.O. Pressure Storage Water Tank.

#### Hot Water Valve

Turn Water Valve  
Counter-Clockwise  
to Turn On

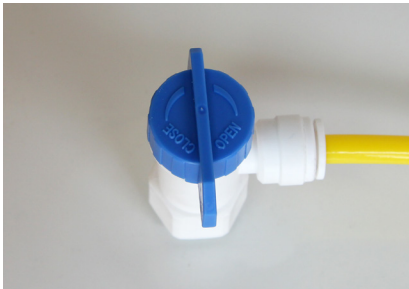


#### Cold Water Valve

Turn Water Valve  
Counter-Clockwise  
to Turn On



#### Tank Ball Valve - Close



#### Tank Ball Valve - Open



## Flushing the Reverse Osmosis 5-Stage Water Filtration System

**PLEASE NOTE:** By turning the cold water shut off valve ON, water is effectively flowing through the system, thereby flushing the system of any and all loose particulates and carbon dust.

**IMPORTANT:** It is advisable to turn on the cold water tap on the kitchen faucet to make sure there are no leaks anywhere within the plumbing system.

It is important to allow the water to run through the system for one (1) hour to initiate the Reverse Osmosis process and ensure proper system flushing. In that the R.O. Membrane is filled with food preservative for quality assurance, it is advisable to flush it out with water, along with the Post Carbon Filter and the Water Storage Tank's bladder before water consumption.

# R.O. Filtration System Evaluation/Leak Prevention

## Testing the Water Filtration System

After letting the system operate for one (1) hour, turn On the filtration system faucet and let water run from the faucet until the storage water tank is empty. Invariably at first you will evaluate dark, murky water coming from the faucet. This is normal and reflects loose particulates and carbon dust being flushed out from the system. Upon conclusion of emptying out the tank, water will commence to trickle from the faucet, indicating the tank is empty. After this process, turn Off the faucet and let the system fill with water. The system is now operational and thus will produce clean, drinkable water.

This concludes the installation process and you may now start drinking purified water from the Boann Reverse Osmosis 5-Stage Water Filtration System. Enjoy!

If you require further information and/or clarification regarding the installation process, please feel free to contact Boann at: [info@boannstyle.com](mailto:info@boannstyle.com).

### Note!

Alternatively, the Reverse Osmosis 5-Stage Water Filtration System can be flushed by simultaneously allowing water to run through the system and letting the faucet run for 1 hour. Upon conclusion, clean, drinkable water can be enjoyed.

## Threaded Fittings

To prevent a leak on any threaded fitting that screws into the Reverse Osmosis 5-Stage Water Filtration System, please employ Teflon tape by way of wrapping the threads of the various threaded fittings 5-7 times.

This preventative measure will assist in preventing potential leaks from the threaded fittings throughout the R.O. filtration system.



If there are signs of leakage from a 1/4" tube inserted into a threaded fitting, simply push and insert the threaded fitting further. To facilitate this process, use pliers and grab the tubing 1/2" from where the tube inserts into the threaded fitting. This will help avoid damaging the tubing which will be inserted into the threaded fitting and invariably prevent leakage from this location.

### Tip!

Maintaining the pre-filters of your system is key to ensure the filtration system sustains integrity in both water quality production and longevity of its parts and components. The pre-filters are the filtration systems first line of defense and thus paramount in promoting the maximum lifespan of the R.O. Membrane.

# Water Filtration Filter Schedule

## Recommended Filter Replacement Schedule

Pre and Post Filters: Defined as the filter stages Pre (before the R.O. Membrane) and Post (after the R.O. Membrane).

### Stage 1, 2 & 3 Pre-Filters - When to Conduct a Filter Change.

Stages 1, 2 & 3 are the filtration system's pre-filters which need to be changed approximately every 1,000 gallons or every 6-months. On average households consume about 5 gallons of drinking and cooking water daily and, as such, a filter change is required every 6 months or sooner. For your convenience, a monthly maintenance schedule checklist is provided on the label of each filter to keep record of routine filter maintenance. As an added measure, mark your calendar for a routine filter change every 6 months.

**WARNING!** If the pre-filters are not changed before 1,000 gallons of purified water is produced, chlorine will bypass the pre-filters, thus entering and damaging the R.O. Membrane, rendering it useless and in need of premature replacement.

### Stage 4 - Reverse Osmosis Membrane Replacement

The R.O. Membrane is the most important component of the Boann Reverse Osmosis 5-Stage Water Filtration System. The R.O. Membrane is rated for 4,000-5,000 Gallons of purified water production. A new R.O. Membrane will last approximately 3-4 years. However, it is suggested replacing the R.O. Membrane every 2 years for system and performance optimization.

- A standard household will consume between 3-5 gallons of purified water each day for drinking and cooking. A 3-gallon per day consumption rate over a year's time is equal to roughly 1095 gallons, which therefore requires the Reverse Osmosis Membrane to be changed about every 3.5 years.
- A 5-gallons per day consumption rate over a year is equal to approximately 1825 gallons which in turn requires the Reverse Osmosis Membrane to be changed about every 2-2.8 years.

### When in Doubt, Replace the R.O. Membrane

Boann recommends to replace the R.O. Membrane if it has never been replaced and if the R.O. filtration system is more than 3 years old. If the age of the R.O. Membrane is unknown, it is recommended to replace the filter as soon as possible.

### Stage 5 - Post Carbon Filter Replacement

The Post Carbon Filter is the last filtration stage in the Boann Reverse Osmosis 5-Stage Water Filtration System. The Post Carbon Filter is rated for 1800-2000 gallons of purified water production and should be changed once a year or every second time you change the three pre-filters.

# Filter Replacement Guide

## Quick Twist Visual Guide - Filter Replacement

### Step 1

Lift up filter approximately 30-degrees from R.O. filtration system.



### Step 2

Twist filter counter-clockwise and gently remove the filter from the filter housing.



### Step 3

Twist on replacement filter and position back into place.



# Filter Replacement Instructions

## Pre-Filters - How to Perform a Filter Replacement

### Depressurizing Your System

Before filter replacement is to be executed, you must depressurize the filtration system. To do so, please implement the following steps.

1. Shut off the flow of water to the feed water supply line of the system with use of the Manual Shut Off Valve, located near the cold water valve.
2. Turn the Tank Ball Valve clockwise, located on top of the R.O. Pressure Storage Water Tank, to its "OFF" position.
3. Depress the handle on the filtration faucet downward to open the faucet valve. Once water stops the depressurizing process is complete.

### Step 1. Install the New Pre-Filters

1. Grab the filter that is to be replaced by its base.
2. Pull the filter outward from the R.O. filtration system approximately 45°.
3. Grip the filter with one hand and proceed to unscrew the filter counter-clockwise in a 1/3 rotation.
4. At this point, the filter should detach from the filter housing.
5. Remove the new filter from its protective plastic coating.
6. With the new filter centered in the pre-filter housing, push the filter into the filter housing and twist it clockwise in a 1/3 rotation. Employ reasonable force to make sure the filter is properly attached.
7. Proceed to push the filter back into place within the R.O. filtration system housing.

### Step 2. Flushing the Pre-Filters

All water filters throughout the R.O. filtration system should be flushed out before initial use to rid the system of any loose particulates from the manufacturing process. To execute the flushing process, refer to section Flushing the Reverse Osmosis 5-Stage Filtration System section on page 17.

# Boann Manufacturer Warranty

## BOANN REVERSE OSMOSIS 5-STAGE WATER FILTRATION SYSTEM PARTS AND SYSTEM WARRANTY INFORMATION

### LIMITED WARRANTY

Boann Reverse Osmosis 5-Stage Water Filtration System is hereby warranted to the original purchaser to be free from defects in material and workmanship for three (3) YEARS from the time of the original purchase, excluding the filtration media (examples – RO Filters, RO Membranes and other such media) as it is typical to change such media approximately every six (6) MONTHS (contingent upon usage). Any filter housings or adaptor fittings found to be defective will be replaced free of charge with all cost of shipping incurred by Boann. Any costs, labor and associated liability with removal or installation of the product for warranty consideration shall be incurred by the purchaser. The Boann Reverse Osmosis 5-Stage Water Filtration system is designed for self-maintenance and thereby Boann will take no responsibility of any cost incurred for maintenance, removal and/or installation of the Reverse Osmosis 5-Stage Water Filtration System and the system's parts.

Filter Cartridges – Media – are hereby warranted to the original purchaser to be free from material defects for one (1) YEAR from the time of the original purchase.

Warranty Service can be obtained by contacting Boann at 1-855-239-2666 or by email at [info@boannstyle.com](mailto:info@boannstyle.com) to receive a Return Authorization Number (RA). In receipt of an assigned RA number, any returned package must be labeled with an RA Number somewhere on the outside of the package. Returns that are received without a RA number will be refused and sent back. When shipping a package to our factory/service center, freight and insurance is incurred by the original purchaser. Please include a copy of the original purchase invoice/sales receipt with date of purchase. A note or letter should accompany the return, explaining the problem in detail. Boann in turn will repair, replace and ship back the unit prepaid. Please mail returned products to:

**Boann**  
375 South 6th Avenue  
City of Industry, CA 91746

Boann has the right, at its discretion, to replace or repair returned equipment. Replaced equipment may be reconditioned. Parts used in repairing or replacing equipment will be warranted for ninety (90) days from the date the equipment is returned to you, unless the time-period is less than the original warranty period, whichever is longer.

**All Warranties are Non-Assignable and Non-Transferable.**

### Warranty Conditions

This is void and does not cover defects resulting from improper installation, misuse, abuse, misapplication, improper maintenance (including standard cleaning), neglect, alteration, accidents, casualties, fire, flood, freezing, environmental conditions, water pressure spikes or other such acts of God.

Warranty is also void if the following conditions are not met:

Reverse Osmosis System must be hooked up to a portable municipal or well cold water supply.

Water hardness should not exceed 7 grains per gallon or 120 ppm.

Maximum incoming iron should not exceed .2 ppm.

The pH of the water must not be lower than 4 or higher than 11.

Incoming water pressure must be between 40 and 100 pounds per square inch.

Incoming water to the system should be between 40 - 85°F (4.5° - 30°C).

Incoming TDS (Total Dissolved Solids) must not exceed 2000 ppm.

Water must be biologically safe – Do not use the filtration system with water of unknown quality and without proper disinfection before and after entering the system.

This warranty is only valid on equipment installed and used in the United States and Canada. Warranty is only valid for home use of the R.O. Filtration System. Any installation for commercial, business and/or industrial use will void the Warranty.

Boann will not be responsible for any implied warranties, including those of merchantability and fitness for a particular purpose. Boann will not be responsible for any incidental or consequential damages, including travel, phone, loss of revenues, loss of time, inconvenience, loss of use of equipment, and damage caused by this equipment and its failure to function properly. This warranty hereby sets forth all of Boann's responsibilities and limitations of liability regarding this equipment and occurrences arising from its operation.



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