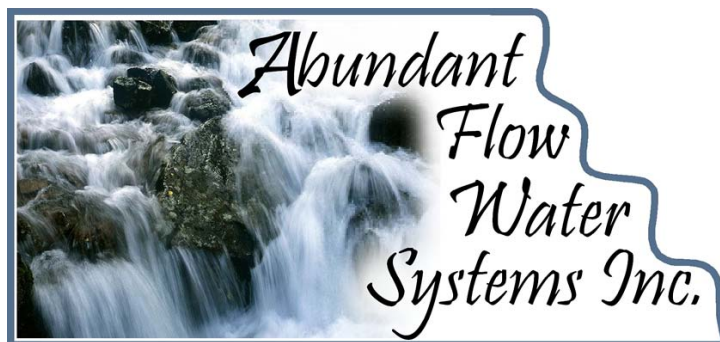


# RO/DI Systems

Standard & Reefmaster



## Installation & Service Manual



2261 Schoenchen Road  
Pfeifer, KS 67660  
(785)735-9769  
[www.abundantflowwater.com](http://www.abundantflowwater.com)

# Important Information

**System Purchased:**

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**Installation Date:**

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**Replacement Filter Set:**

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Replacement filters available online at:

<http://www.abundantflowwater.com/products/ReplacementFilters.php>

## Filter Change Log:

Filters should be changed **at least** every 12 months, for average use every 6 months is recommended

Date	Filters Replaced

Date	Filters Replaced

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## A Brief Technical Aspect of the Water Treatment System

The water filter system utilizes a process called reverse osmosis (RO) to purify the water. As the heart of the purification system, the RO process uses a semi-permeable, spiral-wound membrane to separate and remove dissolved solids, organic, pyrogens, sub-micron colloidal particles and bacteria from the water. Feed water is delivered under pressure at about 60 PSI through the permeator where water permeates the minute pores of the membrane and is delivered as purified water. Impurities in the water are concentrated in the reject stream and flushed to drain. The RO Membrane is capable of removing 90% to 97% of contaminants. The DI filter is composed of a mixed bed of resin beads, some positively charged, some negatively charged. These charged resins effectively strip the remaining impurities from the water, giving you a final rejection rate of 99% or more! The system includes pre-filters to remove sediment and chemicals from the water, protecting and extending the life of the membrane. . The second DI filter provides added purity and improves efficiency, allowing the each DI filter to be fully exhausted before being replaced. The water purification system consists of these stages:

1. 1-micron Sediment Pre-filter
2. 1-micron Carbon Block Pre-filter
3. RO TFC Membrane
4. Full Size DI Filter
5. Second Full Size DI Filter

The replacement filter set for the standard Deluxe RO/DI system is UDIFK-2. This includes the standard filters used in this system. If the system was ordered with specialty and/or additional filters, or if you are unsure, call us with the name it was ordered under and we can assist you. Replacement filters may be ordered securely online at [www.abundantflowwater.com](http://www.abundantflowwater.com) or by calling 1-785-735-9769. More information on filters can be found in the maintenance section of this manual.

## Pre-installation Checklist:

- 1. Read through and familiarize yourself with these instructions and the installation process.** This will ensure you have the proper tools, parts, and abilities to install the system before beginning, rather than having to stop halfway through because you are missing something or are unable to do something.
- 2. Check local plumbing codes and follow any that apply to your installation.** Going against plumbing codes is illegal, and can cause problems. AFW is not responsible for any problems resulting from improper installation or installation that is a violation of local plumbing codes.
- 3. Determine installation locations, including feed water supply, drain, and filter system.** Ensure you have room for everything, and plan room for future filter changes.
- 4. Familiarize yourself with the quick connect fittings.** Your system uses quick connect fittings. There is a collet ring at the end of the fitting that grips the tubing and holds it in place. To remove, simply hold the collet ring against the fitting and pull the tubing out. To replace tubing, just push it into the fitting, it will slide in easily about 1/4" then stop, apply a little more pressure and it will slip in another 1/8" or so and seal in place.
- 5. Familiarize yourself with any purchased upgrade kits.** If you ordered any kits to upgrade

your system, read through the instructions on how to install it, as it is usually easier to install any upgrades before installing the system.

**6. Check to ensure there are no missing parts.** Use the connection option section to verify the connection choice you received and ensure all components are accounted for. If anything is missing, contact us and we will get replacements out as soon as possible.

**7. Assemble the tools you will need.** Depending on the connection method chosen the tools needed may vary. You may need a Phillips head screwdriver, drill, pliers, & a sharp knife or scissors to cut the tubing (when cutting tubing, ensure the end is smooth and straight, this will ensure a good seal and prevent leaks). Read through the instructions for your connection choice to get a better idea of the tools required.

**8. Ensure the following conditions are met:**

Feed water condition	Min.	Max.
Inlet Pressure	40 PSI	80 PSI
Temperature	40° F	100° F
PH Level	3	11
TDS Level	0 ppm	2000 ppm

A booster pump is required for pressures less than 40psi, and recommended for pressures less than 50psi. **NOTE:** Failure to meet the above conditions will void the warranty on the system.

**9. Auto Shut Off Valve Operation.** Your system is equipped with an auto shut off valve built on to it. The auto shut off is usually utilized with a pressurized storage tank, or a storage tank with a float valve. When the tank is full (or the float valve closes), pressure builds in the line until the auto shut off is activated, shutting off the water supply to the membrane and stopping waste water.

## Connection Options/Instructions

The RO/DI system comes with one (1) of the following connection options, additional connection options may be purchased separately (pictures and descriptions represent the most common style, actual style may vary):



**Garden Hose Connector** – This is the standard connection option that is included, unless otherwise requested. Connects to the red line on the system and attaches to any water source with a standard garden hose style fitting. To use, simply turn on the source water, blue line is product (good) water, yellow line is waste (bad) water.



**OPTIONAL SNAP Faucet Adapter:** Remove screen and aerator from faucet. Connect quick connect adapter to faucet (use adapters included if needed) Remove nut from Snap adapter and place on red tubing. Push tubing onto barb fitting of Snap adapter until snug and secure with nut.

Connect Snap adapter to quick connect and turn faucet on to make water. Yellow line is waste water, blue line is product water. To remove SNAP adapter, pull white collar down and pull free.

## OPTIONAL Under sink Installation Kit:



**Angle Ball Valve** - Blue handled metal valve with male threads and compression fitting. Attaches to slip joint adapter and feed water line, valve is open when handle is inline with tubing.



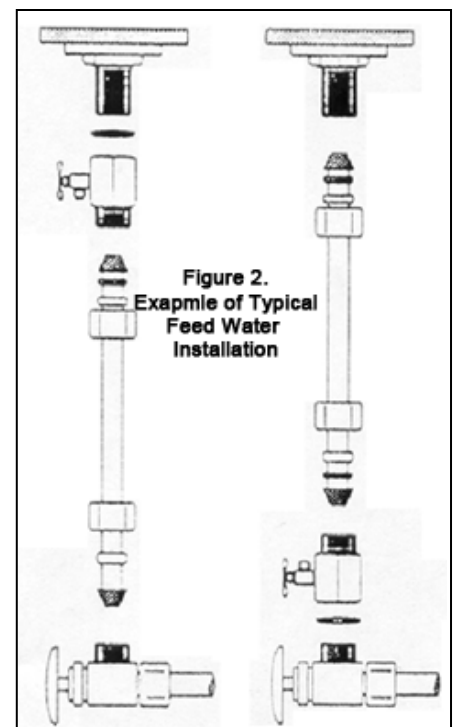
**Slip Joint Adapter** - Metal fitting with male & female ends, smaller female threads on one side for attaching the angle ball valve. Fits most standard faucet shanks for easy feed water installation.



**Drain Saddle** - White plastic clamp with quick connect fitting, 2 bolts with nuts, and rubber seal. Clamps around the drain pipe and connects to the waste water line.

## Feed Water Installation:

1. The feed water assembly consists of a 1/2" slip joint adapter with 2 washers and an angle ball valve. Locate these parts in the installation kit. If space permits, the angle valve should be installed into the slip joint adapter before connecting the assembly to the feed water line (Note: Teflon tape must be used on angle valve to prevent leaks).
2. Locate cold-water angle shut off valve underneath the sink, usually on the right side, and turn it off. Open cold water faucet to release the pressure. On single handle faucets, the hot water may need to be turned off to prevent any hot water from crossing over. If water continues to come out of the faucet with angle valve turned off the main water supply will have to be turned off.
3. The slip joint adaptor is usually installed on the cold water faucet shank, but may be installed on the cold water shut off valve. (Figure 2) If installing on the cold water shut off valve, an adapter will most likely be required. Use the following instructions for your particular plumbing type.



### Flex line Instructions

Loosen nut and separate cold water line from faucet shank. Insert the flat washer into the slip joint adapter, and gently bend flex line so that the slip joint adapter fits onto faucet shank and tighten slip joint adaptor to faucet shank. If washer in flex line is worn or damaged, replace before continuing to prevent any leaks. Re-install cold water line onto slip joint adapter and tighten. (The cone washer is not used in flex line installations)

### Copper Instructions

Loosen nut and separate cold water line from faucet shank. You will need to cut a piece of the copper tube about 3/4" to 1" (measure to determine the exact cut needed) so the slip joint adapter can fit between faucet and the copper line. Insert the flat washer into the slip joint adapter and tighten onto cold water faucet shank. Insert the cone washer into the slip joint adaptor and push the copper pipe into the washer and adaptor and tighten down the compression nut. Make sure you use plenty of Teflon tape on all connections.

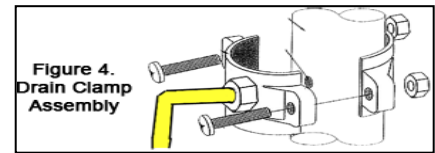
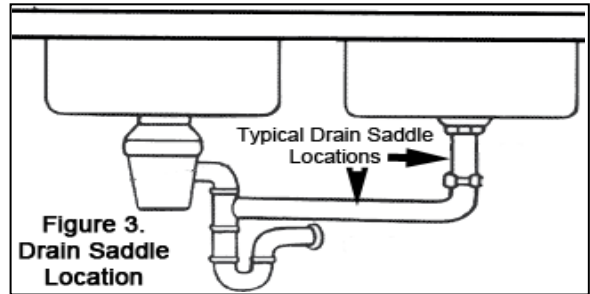
4. Once the system is ready to be hooked up, the feed water line will connect to the angle ball valve. To connect, place the nut and ferrule (white plastic ring) over the feed water line, insert the line into the angle valve, and tighten the nut.

## Drain Saddle Installation:

The drain saddle consists of two (2) halves, (one half has a fitting on it), two (2) bolts with nuts, & a rubber seal. It is used to direct the waste water from your system down the drain. Depending on where the saddle is located, you may hear water running down the drain when the system is making water, this is normal. If the sound is annoying, the drain line may be pushed farther in to help alleviate it. Please note, pushing the drain line in farther than normal requires a good amount of force, as you are forcing the tubing past the typical stopping point. If doing so, please use caution to prevent any injuries.

### To install:

1. The drain saddle should be installed above the “P” trap and on the vertical or horizontal tailpiece (see figure 3). A horizontal location is ideal, as it is more likely the waste water will be heard if installed on a vertical pipe.
2. The hole position on the pipe should be marked and drilled with a 1/4" bit. If using a horizontal pipe, ensure the hole is made on the top of the pipe, so that standing water in the pipe will not leak into the drain saddle. **NOTE:** Drill through one side of the pipe only!
3. Take the backing off of the rubber seal, center over the hole just drilled, and stick in place.
4. Position the half of the drain saddle with the fitting (the fitting half) over the hole in the drain pipe, then position the other half (the back half) of the drain saddle on the opposite side of the drain. Place one of the bolts through the fitting half through the back half and loosely thread the nut onto it. Repeat on the other side. Position the fitting on the fitting half of the saddle over the drilled hole and seal, and evenly tighten both nuts, being careful not to over tighten. Once your system is set up, the drain line will connect to the drain saddle (Figure 4).



## Color Coded System Connections:

**Red Line** – Feed water line, connects from the “IN” fitting on the first filter housing to the angle valve.

**Blue Line** – Product (good) water line, connects from the final DI filter to your water storage container.

**Yellow Line** – Waste (bad) water line, connects from the flow restrictor (white cylinder with black valve handle) to the drain saddle.

## System Start Up:

After all the connections have been made it is time to prepare the system for use.

### Preparing the system for use:

**Note:** Valves are open when the handle is inline (parallel) with the tubing

1. Double check all the connections, ensure they are all connected and secure.
2. Ensure all filter housings are tightened down, using the filter housing wrench included with your system.
3. Close the valve on the flow restrictor. This restricts the flow of water down the drain and allows pressure to build up on the membrane so it can produce purified water.
4. Open the blue handled ball valve on the membrane line. This is simply an inline valve that allows you to shut the water off to the membrane when the system is not in use.
5. Open the angle valve to allow water to reach the system. Water will fill the first two filter housings.
6. Check all connections, ensuring there are no leaks.
7. It will take some time for the water to fill the housings and reach the membrane. As the membrane begins producing purified water, the DI filter housings will start to fill with water.  
**NOTE:** Water may be produced from the product line without completely filling the DI filter housings. This is normal and does not need corrected or fixed.
8. Production rates vary depending on a number of factors including pressure, membrane size, cleanliness of filters, and plumbing set up. Typical production rates are 75 or 100 gpd (gallons per day) for single membrane systems, and 150 or 200 gpd for dual membrane systems. This will provide an output of 3 – 8 gallons per hour. **PLEASE NOTE:** Production rates indicated are based on perfect conditions, and lower actual production rates are to be expected.
9. Once the system has started producing water, discard the first 1-2 gallons. This will flush any preservatives and media fines off the filters and membrane.
10. The system is now ready to provide pure, distilled quality water!

# System Maintenance

## Filters:

Filters need changed regularly to ensure protection of the membrane and high purity water production. The replacement filter set for the standard Deluxe RO/DI system is UDIFK-2. This includes the standard filters used in this system. If the system was ordered with specialty and/or additional filters, or if you are unsure, call us with the name it was ordered under and we can assist you. Replacement filters may be ordered securely online at [www.abundantflowwater.com](http://www.abundantflowwater.com) or by calling 1-785-735-9769. With average usage and normal water conditions filters should be changed every 6 months. The more water you use or the dirtier your water the more often you will want to change filters. If the first filter (sediment filter) gets dirty quickly it may need changed more often than the rest, part number for the individual sediment filter is **SED101**. All filters (excluding the membrane) should be changed at least every 12 months. The Deluxe RO/DI system uses 2 DI filters for ultra purity and high efficiency. To get the most efficiency, a TDS (total dissolved solids) meter should be used to monitor the system. After both filters the TDS should be less than 2ppm. When that reading gets over 4ppm, remove the first DI filter and replace with the second DI filter, putting a new DI filter in place of the second one. This allows each DI filter to be fully exhausted and ensures the highest purity possible. **Note:** When testing, allow the water to run for 30-60 seconds before testing the sample, this will prevent inaccurate readings.

## How to change filters:

**Note 1:** Depending on connection options and system configuration, some steps may not be applicable.

**Note 2:** If using a pressurized storage tank, it will need to be emptied when changing filters. If you would like to save the water in the tank for use, follow the instructions below, opening the product line and collecting the water from the tank **after** turning the feed water off.

1. Ensure the feed water is shut off. If using the under sink connection kit, this is done by closing the angle ball valve. The valve is closed when the handle is at a 90° angle to the tubing (when handle is NOT parallel to tubing). If saving water from the tank, do so after closing the valve.
2. If using a pressurized storage tank, shut the ball valve on the tank. The valve is closed when the handle is at a 90° angle to the tubing (when the handle is NOT parallel to the tubing).
3. Open the product line to release any remaining pressure.
4. Place the system where it can be easily worked with. A sink or tub is an ideal location to catch any water that may spill out. If the system was installed with an under sink kit it may need to be disconnected to locate it for easy access.
5. Remove the first filter housing. To remove, use the filter housing wrench supplied with your system. When looking down at the top of the system, the filter housing will turn clockwise to loosen, counterclockwise to tighten. Once the filter housing has been removed, pull the filter out and replace with the new one. At the top of each housing is an O-ring, when changing filters it is recommended to remove the O-ring and check for any damage such as nicks, gouges, or kinks. If damage is found, replace before continuing, otherwise, use a silicon based lubricant (vegetable oil can be used if no silicone lubricant is available) and lubricate the O-ring, place it in the filter housing and screw the housing back in place. This will help prevent leaks. **DO NOT USE VASELINE! This will damage the o-rings and void any warranty on the system. We are not responsible for any damaged caused by using Vaseline or other petroleum**

## **lubricants.**

6. Repeat step 5 with each housing, replacing the old filter with the similar new filter and checking the O-rings. If any of the filters have only one gasket (the DI filter on most systems will have only one gasket) the filter will need to be installed with the gasket at the top of the housing, unless dictated otherwise by the filter itself.
7. **Reefmaster Only:** Once the filters in the housings have been changed, it is time to change the inline filter. To replace it, remove the tubing and/or fittings from each end of the filter (refer to section on quick connect fittings near the beginning of the manual if you are unsure how to do this) and replace in the new filter, paying careful attention to the direction of flow as indicated on the filter, and ensuring the new filter is installed in the same direction as the old filter.
8. Hook the system back up and turn the water supply on.
9. If applicable, open the tank valve and product line, and ensure the valve on the membrane line is open.
10. Allow the system some time to start producing water, depending on the system and water pressure this may take up to 30 minutes. Once you are getting a steady flow of water (anything from a steady drip to a small stream, depending on membrane size and water pressure), discard the first 1-2 gallons to flush the filters.
11. Your filters are now changed and the system is ready to use again.

## **Membrane:**

The RO membrane will last an average of 2 –4 years, depending on water quality, water usage, frequency of filter changes, and quality of filters used. Reduced water quality, reduced production rate, or no production can be an indication of a fouled membrane, but there may not always be these signs to tell you the membrane is bad. The best way is to monitor the rejection rate of the membrane using a TDS meter. A functioning membrane should be removing a minimum of 90% of contaminants under normal conditions. To test this, simply compare the TDS of your tap water to the TDS of the water from the membrane (before it goes to any other filters). For example, if your tap water has a TDS of 400ppm, after the membrane your TDS should be 40ppm or less. If you do not wish to use a TDS meter, it is recommended that you change your membrane at least every 4 years.

### **To change the membrane:**

**Note 1:** Depending on connection options and system configuration, some steps may not be applicable.

**Note 2:** If using a pressurized storage tank, it will need to be emptied when changing filters. If you would like to save the water in the tank for use, follow the instructions below, opening the product line and collecting the water from the tank **after** turning the feed water off.

1. Turn off the supply water to the system.
2. If using a pressurized tank, shut the ball valve on the tank and open the product line to release any pressure.
3. Place the system where it can be easily worked with. A sink or tub is an ideal location to catch any water that may spill out. If the system was installed with an under sink kit it may need to be disconnected to locate it for easy access.
4. Disconnect the tube feeding the membrane (the tube going to the single fitting on the membrane housing cap). If unsure how to disconnect the quick connect fittings, refer to the section on quick connect near the beginning of the manual.

5. Remove the membrane housing cap (when looking at the fitting on the cap it will turn counterclockwise to loosen).
6. Remove the membrane from the housing. A pair of needle nosed pliers may be needed to grip the end of the membrane. To remove, gently pull with a twisting motion and the membrane should slide out.
7. Lubricate the O-rings on the membrane with a silicon based lubricant (vegetable oil may be used if silicon lubricant is not available), and push back into the housing. **DO NOT USE VASELINE! This will damage the o-rings and void any warranty on the system. We are not responsible for any damaged caused by using Vaseline or other petroleum lubricants.**
8. Lubricate the O-ring on the membrane housing (some housings have 2) and screw the membrane housing cap back onto the housing.
9. Push the tubing back into the fitting on the membrane cap.
10. If the filters need changed, now is a good time to do so, since the system is turned off.
12. Hook the system back up and turn the water supply on.
13. If applicable, open the tank valve and product line.
11. Allow the system some time to start producing water, depending on the system and water pressure this may take up to 30 minutes. Once you are getting a steady flow of water (anything from a steady drip to a small stream, depending on membrane size and water pressure), discard the first 1-2 gallons to flush the membrane.
12. Your membrane is now changed and the system is ready to use again.

## O-rings:

The filter housings on the system utilize O-rings (black rubber washers, located in a groove right below the threads on the housing) to seal themselves. To prevent leaks it is recommended to check the O-rings every time the housings are opened. Ensure there are no nicks, kinks, or gouges in the O-ring. If damage is found, replace before continuing, otherwise, use a silicon based lubricant (vegetable oil can be used if no silicone lubricant is available) and lubricate the O-ring before replacing the housing. **DO NOT USE VASELINE! This will damage the o-rings and void any warranty on the system. We are not responsible for any damaged caused by using Vaseline or other petroleum lubricants.** To ensure a good seal and minimize any possibility of leaks, it is recommended you replace your O-rings periodically, usually every 1-2 years.

## System Sanitization:

**Important Note:** Reverse Osmosis water purification systems remove most contaminants in drinking water, however there is no guarantee on the quality of the final product. In addition to that, it is important that you are aware that bacteria can grow within your RO system, and thus we recommend using this sanitization procedure at least one a year to prevent and eliminate any bacteria growth. We recommend sanitizing during a filter change, that way the old filters can be removed and thrown away, the system can be sanitized, and then new filters put in.

### Sanitization Procedure:

1. Turn off the feed water supply
2. If using a pressurize storage tank, open the product water line to allow the tank to empty. This water may be saved if so desired. Once no more water comes out, close the product water line.
3. Place the system where it can be easily worked with. A sink or tub is an ideal location to catch any water that may spill out. If the system was installed with an under sink kit it may need to be disconnected to locate it for easy access.
4. Remove all filters and the membrane from their housings.
5. Add one capful (2 tsp or 10ml) of 5 ¼% bleach (any household bleach, such as Clorox®, will work) to each filter housing and the membrane housing.
6. If the system was unhooked, hook it back up now.
7. Open the feed water supply and allow water to fill the housings.
8. If using a pressurized storage tank, ensure the tank valve is open and allow 5 - 10 minutes for water to fill the tank. Open the product water line.
9. Once water starts coming out the product water line, shut the feed water off.
10. Let solution stand in system for 15 minutes.
11. Open the feed water line and allow water to run through the system for 15 - 20 minutes to flush the lines.
12. If using a pressurized storage tank, close the product water line for 5-10 minutes to allow the tank to fill. Open the product line and empty the tank. Repeat at least once to ensure the tank is rinsed out.
13. Install new filters.
14. Insert membrane (either the original or a new one) into membrane housing.
15. Ensure housings are tight and all connections are secure.
16. Flush the system as detailed in the filter change instructions to clean out the new filters.
17. Your system is now sanitized and ready to use.

# Troubleshooting

**Note:** To remove tubing from quick connect fittings, hold in on the small collet ring at the end of the fitting, push this ring in towards the fitting while gently pulling out on the tubing. This releases the tubing from the fitting and it will slide out easily

## No water production

1. Check to make sure the feed water line is fully open
2. Ensure the valve on the flow restrictor (white cylinder with black valve handle) is in the closed position (the valve is closed when the handle is at a 90-degree angle to the tubing (not parallel). This valve needs to be closed to allow pressure on the membrane to build so it can produce water.
3. Check for kinks in lines.
4. If you just changed filters, ensure the DI filter is placed correctly with rubber gasket up.
5. Trace flow of water in the system. **NOTE:** Shut the feed water supply off before removing any lines. Once the line is removed, turn the water supply back on and check the flow. If using a pressurized storage tank, ensure the tank valve is shut off as well.
  - I. Check water pressure on the feed water line where it enters the first filter. If there is none, ensure the lines are not kinked or clogged and that the main water supply is on.
  - II. Check water pressure on the line coming out of the first and second housing on the bottom. Pressure and flow from each one should be about the same as going into the unit, if pressure is significantly less or none at all, check individual filters and housings for blockages and debris. If filters are dirty, change filters. As your pre-filters start to clog, pressure on the membrane decreases, decreasing water production and membrane efficiency. If your filters are extremely dirty they will prevent the membrane from producing any water at all. If water production is fine, continue to III.
  - III. Check water flow on the red line connecting the auto shut off valve (the white block with 4 connections usually located behind the membrane) to the single fitting end of the membrane. Flow should be the same as in the previous step. If not, the auto shut off is defective and needs replaced. If flow is fine, move to IV.
  - IV. Check the wastewater line, there should be a flow of water coming out of the waste water line if water is running into the membrane. If hooked up to the drain valve you may be able to hear the water, but it is best to remove the line to visualize the flow. The waste water keeps the membrane clean, and the flow restrictor (the white cylinder about 3 inches long with black valve handle) regulates the amount of wastewater from the membrane, allowing pressure to build against the membrane and push clean water through. Check the flow of water with the flow restrictor in place, then remove it and compare the flow of water without the flow restrictor. If there is no flow with the flow restrictor but plenty of flow without it, or if the flow is the same before and after the flow restrictor (when closed) it is damaged and needs to be replaced. If there is no water coming out of the waste line even with the flow restrictor removed and water is feeding the membrane, then the membrane is fouled and needs replaced. If water is coming out the waste line properly go to IV.
  - V. Check the clear line connecting the check valve on the membrane to the auto shut off valve. You should get a steady drip or a slow stream, depending on water pressure. If there is no water it means purified water is not getting past the membrane. This can be cause by a number of reasons. On new installations the most common cause is low water pressure, add

a booster pump. If pressure is fine, or on an existing system, and If water flow tested fine in all the previous steps, the cause is usually a defective check valve or a fouled membrane. Try replacing the check valve first to see if that solves the problem. If not, or if your membrane is more than 3 or 4 years old, the membrane is most likely fouled and needs replaced. If the membrane is producing go to V.

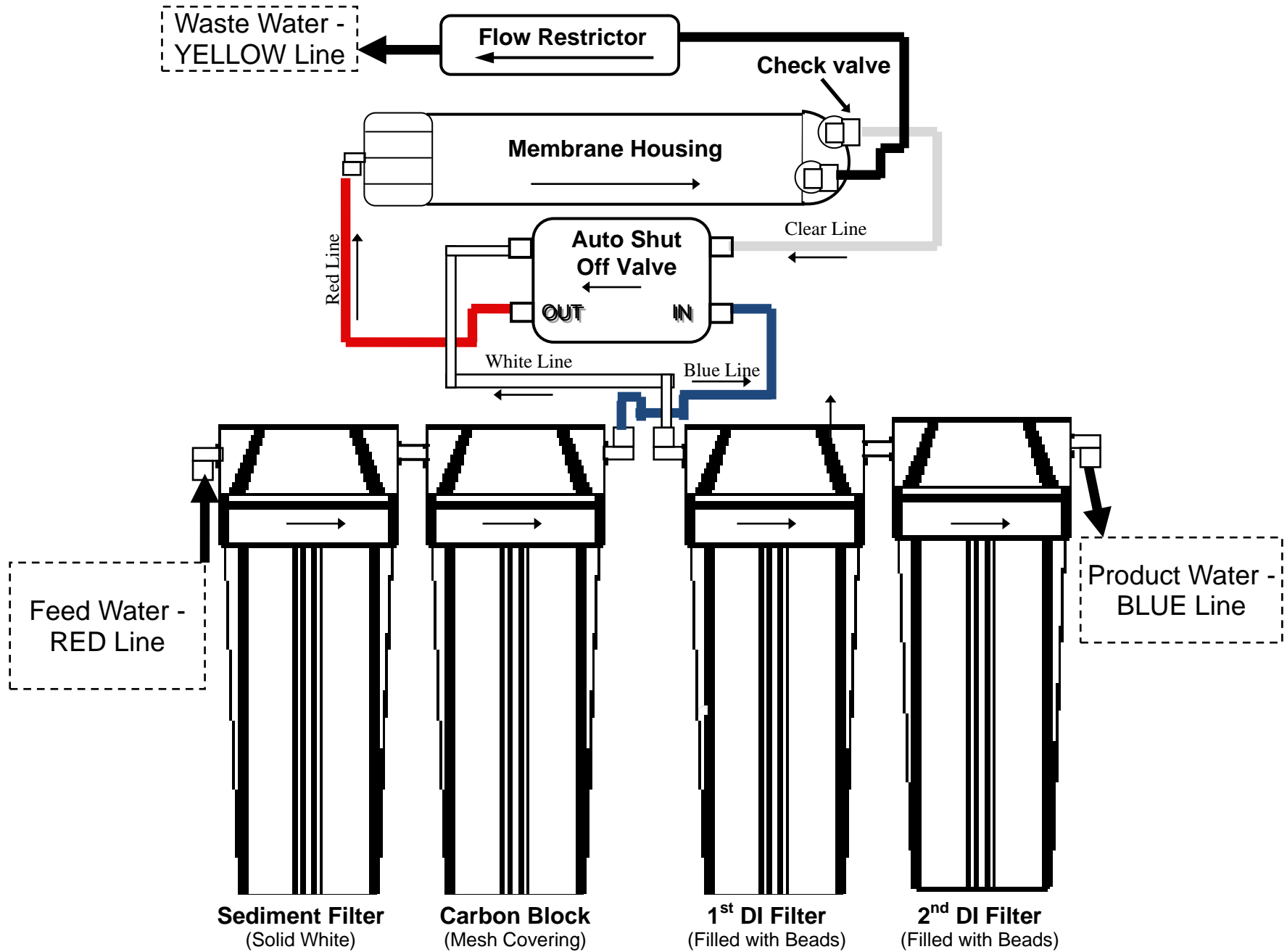
- VI.** Check the blue line connecting the auto shut off valve to the DI filter. Flow here should be the same as in the last step. If it not, the auto shut off valve is defective and needs to be replaced. If flow is fine, go to VII.
- VII.** Check the flow after the DI filter housings, flow should be the same as in the last step. If not, one of the DI filters is clogged and needs replaced.

### **Waste Water Not Shutting Off**

- 1.** Make sure pre-filters are clean, dirty filters reduce pressure to the membrane, which decreases output pressure. If you system is not providing enough pressure through the membrane, the auto shut off valve will not activate and waste water will continue to flow. Check the water flow before and after the pre-filters. If water flow after the pre-filters is reduced the filters are dirty and need replaced.
- 2.** Ensure water supply is fully opened, and that there are no kinks in the lines. Check all valves to make sure they are open fully. Check for leaks and ensure there are no obstructions in the line. Check water flow before and after the auto shut off valve (the white square block behind the membrane), flow should be the same, if it is not, your auto shut off valve is defective, replace it.
- 3.** Verify that the valve on the flow restrictor is in the CLOSED position. If open, pressure will not build up and the system will not shut off.
- 4.** Ensure you have enough pressure. The RO process requires a minimum of 40psi, if your pressure is less you will need a booster pump.
- 5.** If using the system with a pressurized storage tank, shut the valve on the tank off. If using a float, manually activate the float to ensure the line is shutting off. If the problem persists with the tank off or float activated, your check valve or auto shut off valve is defective. We recommend replacing the check valve first, as it tends to be the problem more often than the auto shut off valve. If replacing the check valve doesn't solve the problem, replace the auto shut off valve.

# Connection Diagram

Arrows Indicate water flow direction (Not to scale)



# Abundant Flow Water Systems Inc.

## Reverse Osmosis System Limited Warranty

### **What Does This Warranty Cover?**

This warranty covers manufacturer defects on your Reverse Osmosis system (**System**). This includes filter housings, membrane housings, brackets, membranes, fittings, transformers, clips, check valves, flow restrictors, ball valves, storage tanks, faucets, adapters, drain valves, filter housing wrenches, tubing, and accessories included in your original order.

### **What Does This Warranty NOT Cover?**

This warranty does not cover replaceable filters or other consumables (excluding membranes). This warranty does not cover defects resulting from improper installation or installation contrary to printed instructions. This warranty does not cover defects that are the result of abuse, misuse, misapplication, improper maintenance, neglect, alteration, accidents, casualties, fire, flood, freezing, environmental factors, natural occurrences, unnatural occurrences, or acts of God. For warranty service, please call for return authorization number before returning items. No credit or exchange will be given without a valid RMA number. To obtain your authorization number, you will need to provide us with the reason for return, the date of purchase. All returns must be received within 15 days of the RMA number.

### **What is the Length of This Warranty?**

This warranty is good for one (1) year on all parts of the system, excluding consumables as set forth above. Warranty coverage begins on the date of purchase, and expires on the same date 1 year later. The purchase date is the date your order was placed, as dictated by our records.

### **What are the Limitations of This Warranty?**

This warranty is applicable to the original purchaser and original installation only. Resale or relocation of the System nullifies any warranty, written or implied. Systems purchased for commercial use are also excluded from warranty coverage.

### **Failure to meet the following conditions will void this warranty:**

The Reverse Osmosis System must be hooked up to a potable cold water supply.

The ph of the water must not be lower than 3 or higher than 11.

The water pressure must be between 40 and 80 pounds per square inch.

Incoming water temperature cannot exceed 105' F (40.5' C).

Incoming TDS/Total Dissolved Solids not to exceed 2000 PPM.

Use of Vaseline or petroleum based lubricants will also void the warranty.

### **How Do I Receive Warranty Service?**

If your system is found to be defective, first call for a returned merchandise authorization number (RMA#). Please provide a reason for the return and a date of purchase or invoice number if available. Returns must be received within 15 days of the RMA# issue date. The buyer will be responsible for shipping costs to our warehouse, if a defect is found Abundant Flow Water will pay for return shipping, if no defect is found buyer will be responsible for return shipping as well. Upon inspection, Abundant Flow Water will replace or repair, at our option, any parts found to be defective according to the terms of this warranty. If we choose to replace the equipment, we may replace it with reconditioned equipment. Parts used in repairing or replacing the equipment will be warranted for 90 days from the date the equipment returned to you or for the remainder of the original warranty period, whichever is longer. **Returns received without a RMA number shall become the property of Abundant Flow Water. Customers who return items without a RMA # and contact us with details about the return will be responsible for return shipping, regardless of warranty covered defects.**

### **LIMITATIONS AND EXCLUSIONS:**

Abundant Flow Water will not be responsible for any implied warranties, including those of merchantability or fitness for a particular purpose or application. The purchaser and installer are responsible for checking fittings, lines, parts, and equipment for defects before installation. Abundant Flow Water will not be responsible for any incidental or consequential costs or damages incurred by installation of the system or loss of function of the system, including, but not limited to, water damage, leaks, inconvenience, travel expenses, telephone charges, loss of revenue, loss of time, loss of equipment usability, loss of life, property damage, or loss of finances. The purchaser and installer are responsible for checking the system for leaks or defects after installation. **All responsibilities of Abundant Flow Water regarding this equipment are set forth in this warranty.**