



# Reverse Osmosis System

## Maintenance Guide



Customer Support **1-800-992-8876**





# System Startup

**Time Estimate:** 8-12 hours (We recommend running 4 full tanks of water through your new system. Each tank should take 2-3 hours, depending on your home's water pressure levels).

**NOTE! Do not drink water from your new system until you have completed System Startup. The flushing process is needed for your filters to begin working.**

**NOTE! Do not send water through your fridge until flushing is complete, carbon fines flushed during startup will clog your refrigerator.**

1. Turn the Tank Valve to the Closed position.
2. Open the water supply to the RO System (use Cold Water Supply and Feed Water Adapter Valve) (Make sure the main water supply is also on)
3. Open handle on the RO Faucet and wait up to 10 minutes for water to start dripping from faucet. Let the water drip for 5 minutes.
4. Close the handle on the RO Faucet and wait 10 minutes for pressure to build. Then carefully check your RO System for any leaks (Feel or visually inspect every connection point for leaks. If a leak occurs, turn the Feed Water Adapter Valve OFF).
5. Turn the Tank Valve to the Open position.
6. Allow the Water Storage Tank to fill completely (this takes about 2-3 hours depending on your incoming water pressure).
7. Flush the system by opening the RO Faucet handle until the stored water is completely emptied and the flow is reduced to a trickle (about 1-5 minutes).
8. Close the RO Faucet handle and allow the Tank to fill again.
9. Repeat steps 6-8 three more times (about 6-9 hours). (Occasionally check for leaks during this time)
10. After the 5th tank is filled you may drink the water.
11. **Check for leaks daily during the 1st week of use and periodically thereafter.**

**NOTE! You may notice that the water has a milky color during the 1st week. This is an indication of air bubbles in the water. This is normal during this period and the water is safe to drink.**

# System Maintenance

These recommendations are intended for maximum efficiency of your RO System.

## Filter and RO Membrane Storage

- Store unopened filters in an airtight container to prevent them from absorbing air. This prolongs the shelf life of the filters and avoids any possible odors or contamination from the air.
- Using this method it is okay to store filters for several years. Store in a cool, dry, dark place (avoid heat and moisture contamination).

## Extended System Non-Use

- If you will not be using the RO System for two weeks or more you will need to follow the "Vacation Mode" guide.



# Filter Change Instructions

This RO System contains Filters that must be replaced at regular intervals to maintain proper performance. Use only authentic **Express Water** filters.

## How to Change the Sediment, GAC, and Carbon Block Filters (Prefilters)

(Recommended about every 6 months)

1. You will need a clean cloth, dish soap, filter housing wrench and appropriate Sediment, GAC, and Carbon Block Filters. (We also recommend a bucket or bin large enough for the system to sit in. The system will release water when it is disassembled.)
2. Turn off the Cold Water Supply connected to the RO System, the Feed Water Adapter Valve, and the Tank Valve. Then open the RO Faucet handle to release pressure, close handle when the flow of water stops.
3. Place the RO System in the bucket and unscrew the 3 Prefilter Housings using the Filter Housing Wrench. Remove old filters and dispose of them.
4. Wash the Prefilter Housings with dish soap then proceed to rinse until all soap is removed.
5. Ensure that your hands are washed clean before unwrapping the new filters. After unwrapping, place the new filters inside their correct housings. Make sure the O-Rings are in their proper locations.
6. Tighten the Prefilter Housings using the Filter Housing Wrench. Do not overtighten. If these are the only filters you are replacing continue to the Restarting the System section.



## How to Change the RO Membrane

(Recommended about once a year)

**NOTE!** Make sure you have shut down the RO System (Step 2 in the above section).

1. Open the RO Membrane Housing by unscrewing the cap. Pull out the RO Membrane with a pair of pliers. Be sure to note which side is the front and which side is the back.
2. Wash out the RO Membrane Housing. Install the new RO Membrane in the Housing in the correct direction you noted earlier. Make sure to push the Membrane in firmly, then close the Housing by tightening the cap with your hand. If this is the only/last filter you are replacing continue to the Restarting the System section.

**Make sure the O-Ring is in place before you tighten the Membrane Housing Cap**



## How to Change the Inline Post Carbon Filter

(Recommended about once a year)

**NOTE!** Make sure you have shut down the RO System (Step 2 in the Prefilters section).

1. First disconnect the Stem Elbow and Stem Tee from the sides of the Inline Post Carbon Filter.
2. Note the orientation of the old filter, install the new filter in the same orientation. Remove the old filter from the holding clips and discard. Next, insert the new filter into the holding clips and connect the Stem Elbow and Stem Tee to the new Inline Post Carbon Filter. If this is the only/last filter you are replacing continue to the Restarting the System section.





## Restarting The System

1. Fully open the Feed Water Adapter Valve, Cold Water Supply, and the Tank Valve.
2. Open the RO Faucet handle and fully empty the tank before turning the Faucet handle off.
3. Let the system refill with water (this takes 2-3 hours). You can open the RO Faucet briefly to release any air trapped inside the system while it's filling. (Be sure to check for new leaks during the first 24 hours after restarting.)
4. After the Water Storage Tank has filled drain the entire system by opening the RO Faucet until the water flow is reduced to a slow trickle. Then close the Faucet.
5. Repeat steps 3 and 4 three times to fully flush the system (6-9 hours)

**NOTE! If the RO System is connected to a refrigerator do not drain the system through the refrigerator water dispenser. The excess carbon fines from the new carbon filter will clog the internal fridge filter.**

# How to Sanitize your RO System

(Recommended Once a Year)

1. Before you begin you will need a new Sediment Filter, GAC Filter, Carbon Block Filter, RO Membrane, Inline Post Carbon Filter, and the Filter Housing Wrench. We also suggest using a bucket or bin large enough for the system to sit in (the system will release a lot of water when it is disassembled).
  2. Close any incoming water (Feed Water Adapter Valve).
  3. Open the RO Faucet handle and drain the system completely (wait until water flow stops completely), then close the Faucet handle.
  4. Use the Filter Housing Wrench to open the Filter Housings, then remove and dispose of ONLY the following filter cartridges: **Sediment Filter, GAC Filter, Carbon Block Filter, and RO Membrane**
- NOTE! Leave the Inline Post Carbon Filter in place! You will replace it after sanitizing the system.**
5. Mix 1 gallon of water with 2 tbsp of household bleach. Do not add bleach directly to the filter housing.
  6. Fill up the Pre Filter Housings (Sediment, GAC, and Carbon Block Housings) with your mixed solution and close the housings using your Filter Housing Wrench.
  7. Open the incoming water to the system (Feed Water Adapter Valve) and let it run for 10 minutes.
  8. Open the RO Faucet handle and let it drain for 10 minutes.
  9. Close the RO Faucet handle and wait for 10 minutes then open the Faucet handle again and wait for it to drain completely. **(If you smell bleach from your RO Faucet repeat steps 7-9)**
  10. You are now ready to replace all filters and restart your system. Please refer to System Startup section for detailed instructions, ignore any additional sanitation steps therein.



# Troubleshooting

**Note!** Turn off the system before servicing or inspecting

Problem	Cause	Solution
Milky colored water Air bubbles in the water	- Air in system	* Air in the system is a normal occurrence with initial startup of the RO System. This milky look will disappear during normal use within 1 to 2 weeks.
Noise from the system	- Air gap in Faucet - Location of Drain Saddle - Restrictions in drain line	* Will disappear after system shutdown. * Relocate the Drain Saddle to above P-Trap. * Blockage sometimes caused by debris from garbage disposal or dishwasher.
Slow production or no water from RO Faucet	- System just starting up - Air pressure in Water Storage Tank is low - Tank Valve is closed - Low water pressure - Crimps in tubing - Clogged Prefilters - Fouled RO Membrane	* Normally it takes 2-3 hours to fill the tank. Low water pressure and/or temperature can reduce production rate. * Add pressure to the storage tank. The pressure should be 8-10 PSI when the tank is empty. * Add a booster pump. * Make sure tubing is straight. * Replace Prefilters. * Replace RO Membrane.
Water taste or an offensive smell	- Drain line clogged - Inline Post Carbon Filter is depleted - Fouled RO Membrane - Sanitizer not flushed out	* Replace Inline Post Carbon Filter. * Replace RO Membrane. * Drain Water Storage Tank and refill it.
No drain water	- Clogged Flow Restrictor	* Replace the Flow Restrictor.
Leaks	- Fittings are not tightened - Twisted O-Ring - Misalignment of hole in Drain Saddle - Threaded Connections	* Tighten fittings as necessary. * Replace the O-Ring. * Realign Drain Saddle * Replace Teflon Tape with 7-10 rounds
No Water	- Check Leak Stop Valve - Check Feed Water Adapter Valve	

## Vacation Mode

When you plan to not use your RO System for 2 weeks or more it should be Turned Off. Locate the red Feed Water Adapter Valve connected to your Cold Water Supply.

**Turn Off System:** Turn the red Feed Water Adapter Valve to point away from the Red Tubing connection (in the Closed position) to close the water supply to the system.

**Turn On System:** Turn the red Feed Water Adapter Valve to point towards the Red Tubing connection (in the Open position) to open the water supply to the system.



# FAQ's

## **Does this system filter Fluoride, Lead, Pharmaceuticals, and Arsenic?**

Yes, as well as Cyanide, Phosphate, Pesticides, Sodium, Cadmium, Sulfates, and many other contaminants up to certain levels. You may need other changes to media for high levels of these substances.

## **What PSI do I need? What is the operating pressure?**

The minimum PSI for the system is 40 and the maximum PSI is 80. If your PSI is too low you can purchase a Booster Pumps to aid your system. If your PSI is too high you can purchase a Pressure Regulator to reduce your pressure to acceptable levels. Let us walk you through these options; call us at 1-800-992-8876 or visit [expresswater.com](http://expresswater.com)

## **Does this system soften water?**

Your RO System will soften water. However, hard water does reduce the lifespan of your Filters.

## **Does it stop filling automatically when filled? Why is the drain line constantly flowing?**

The RO System does stop filling automatically when tank is filled (2-3 hours). If your drain line is constantly flowing this is a sign that your incoming water pressure is too low.

## **Can I install this system in the basement? If so, will it affect the efficiency of the RO System?**

Yes, the RO System can be installed in a basement. However, if you do not have adequate water pressure you may need to purchase a Delivery Pump. Contact Express Water and we'll help you find your solution.

## **What is the discharge rate?**

The typical discharge range is one to three gallons for every one gallon produced. Your water pressure, incoming water quality, and water temperature will affect your RO System's discharge rate.

## **Why does it take so long to fill up the tank?**

The purification process takes some time on its own. However, some water takes longer to process. Your water pressure, incoming water quality, and water temperature will all affect how quickly your RO System fills the Water Storage Tank.

## **How often do I change Filters? Is there an indicator?**

The Sediment, GAC, and Carbon Block Filters should be changed every 6 months. The RO Membrane and Inline Carbon Filter should be changed every one year at the same time as the second change of the 6 month filters. There is no direct indicator for filter changes. However, if you notice a drop in water quality before the 6 months or 1 year mark this may mean that due to your water quality your filter has degraded. If you reach 6 months or 1 year without noticing a change in taste you should still change your filter at this point as they are no longer viable.

## **Can I add additional filters to my current system?**

Yes, each system is fully upgradeable. Check the Upgrades and Accessories section at [expresswater.com](http://expresswater.com) for more information.

## **Can I connect this system to a refrigerator or icemaker?**

Yes, you may need an Express Water Refrigerator Kit to do so. In some cases, your situation may require a separate tank or Delivery Pump depending on how far away your refrigerator is from the system. Contact Express Water and we'll help you find your solution.

**Can I reuse discharge water?**

Never consume discharge water. With proper installation it is possible to utilize your discharge water. Contact Express Water to speak with a qualified representative who can give you more information based on your situation.

**How long does the system last? How long does the tank last?**

With proper maintenance and average water quality an RO System should last 5-10 years. The water storage tank usually lasts 3-5 years before we recommend replacing it.

**Can I change my 50 GPD (Gallons Per Day) system to 100 GDP? If so, how?**

Yes, to do so, you will need different parts (such as the RO Membrane and Flow Restrictor). Contact Express Water and we will help you arrange your upgrade.

**Why are there bubbles in the water?**

Bubbles in your water is a common issue, but they only affect the appearance of your water and pose no risk. There can frequently be air trapped inside any plumbing system, so the air may be coming from your home's plumbing and not the RO System. Trapped air happens frequently when you change a filter, when there is a leak in your system or plumbing, or even when there is construction in your area. Check your system carefully for any leaks or unexplained moisture. You may need to carefully tilt the system various directions then set it back in place to help release trapped air.

**Does this produce aquarium safe water?**

While the water is perfectly safe for human consumption, we suggest installing our Deionization Filter Upgrade to create water for aquatic life.

**Why do I need to flush the system?**

New filters (or filters that have experienced extended disuse) can develop carbon residue. We recommend emptying the Water Storage Tank four times (which can take 8-12 hours) to release any extra carbon before the water is safe to drink.

**How much water can the Water Storage Tank hold?**

The maximum capacity of the tank is 3.2 gallons. However, the typical tank reaches 2-2.5 gallons. Your Water Storage Tank's capacity depends on your incoming water pressure. Lower water pressure means the tank will hold less water.