



Reverse Osmosis (RO) Drinking Water System

Product Manual



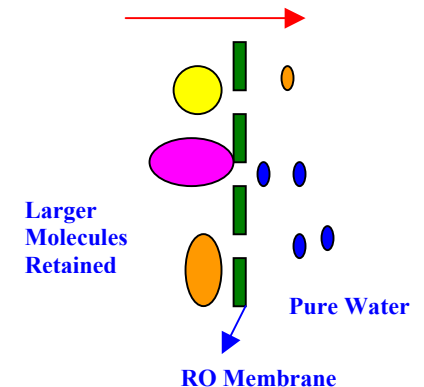
Your Neotec RO Drinking Water System

Congratulations on choosing the Neotec Reverse Osmosis Drinking Water System. Your family's health is of paramount importance to you and that shows in your decision to choose simply the best drinking water system. As you will see, this system will deliver crystal clear pure drinking water free of harmful minerals and chemicals.

The Neotec Drinking Water System is based on the technology of *Reverse Osmosis* or simply RO. RO is the latest technology being used to convert seawater to drinking water, purify wastewater and provide high quality drinking water around the world.

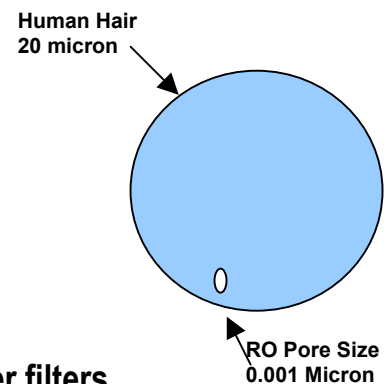
What is Reverse Osmosis?

Reverse Osmosis is, simply put, a very fine filtration process, which occurs at a molecular level. The process involves forcing water through a semi-permeable *Membrane*, which allows only a given size of molecule to pass, and *Rejects* the rest. In effect, the pores or holes in the membrane are so small that most of the harmful minerals and chemicals cannot pass, while water molecules pass through. The rejected water carrying the minerals in high concentration is drained off while the pure water is diverted for drinking. The Neotec drinking water system removes up to 95% of the harmful minerals & chemicals and gives you good, clean & healthy drinking water.



What else does my Neotec RO System Do?

The Neotec Drinking Water System also removes suspended impurities in the water like dirt, sand, dust, etc. chlorine & smell and improves the taste of water. The system also incorporates a special Hydro-pneumatic tank that ensures that the pure clean water is delivered to you at a good pressure.



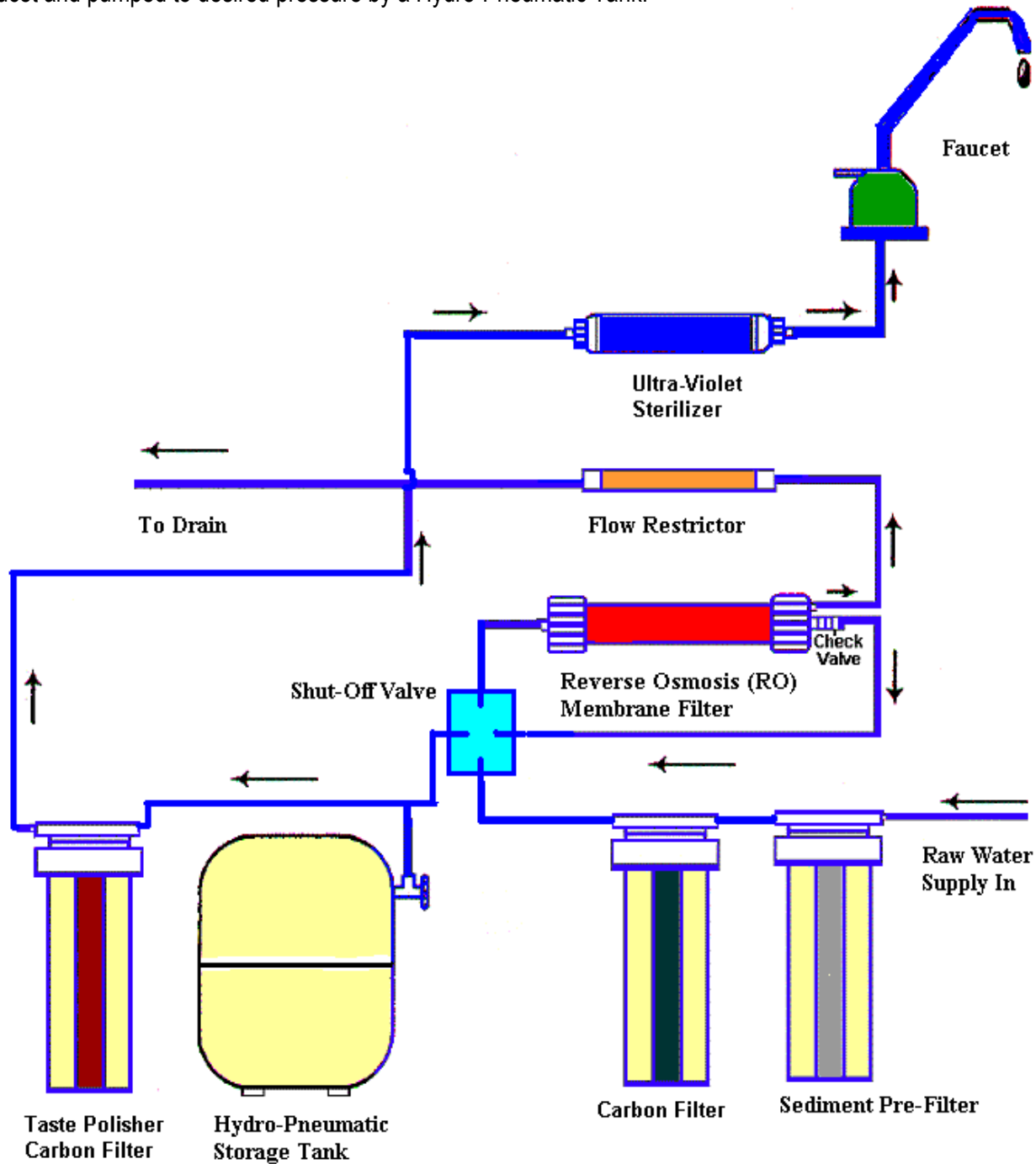
How different is Neotec Drinking Water System from ordinary water filters

Ordinary water filters do not remove dissolved impurities. The Neotec DWS removes a high percentage of chemical impurities like Tri Halo Methane, Barium, Potassium, Calcium, Chromium, Copper, detergents, Strontium, Insecticides, Nickel, Herbicides, Sodium, Sulphates, Cadmium and many other dissolved impurities, making your drinking water virtually free from chemical contamination. Besides it also removes sediment or visible impurities like dust, sand, particles etc. and chlorine, smell & odor. Use the New Neotec Drinking Water System and enjoy Clean & Pure drinking Water for years!!

Functional Description

Neotec DW Systems incorporate 5* stages of treatment. Water first passes through a 5-micron sediment filter. This filter traps visible/suspended impurities which are 5 micron or above in size, making the water sparkling clear.

After this stage, water passes through a carbon block filter that adsorbs chlorine and other organic compounds. The third purification stage is a semi-permeable Reverse Osmosis Membrane where up to 95% of the dissolved impurities are removed from the water and rejected into a drain. The fourth stage of purification is a Granular Activated Carbon Filter for polishing the water of any smell, taste or odor. The final stage is a Ultraviolet Sterilizer that inactivates bacteria and virus, making the water clean and pure. The water is delivered through a dedicated faucet and pumped to desired pressure by a Hydro-Pneumatic Tank.



Schematic Flow diagram of N-RO-75-3-UV system with 5 purification stages.

* - Purification Stages Vary with models

The system is generally installed under-the-sink and a faucet is conveniently placed on the kitchen sink to deliver pure water. The qualified Neotec Service Representative can install the system at any location in your office or home wherever you desire*. You could use the water supply from the system to your refrigerator for cold drinking water and ice-cubes. Use the water for cooking, washing vegetables, coffee, tea, juices etc, and taste the difference!!

**Extra Service Charges may apply. The system may be mounted anywhere within 20 feet of the faucet except areas of high humidity, direct sunlight or a direct source of heat. Please allow sufficient space for periodic filter changes and maintenance.*



Parts of The System

The following picture is intended to help you identify the various parts and components that accompany your new system.



Fig : Main Components of the Reverse Osmosis Drinking Water System Model NRO-75-3-UV*

* : Fittings Extra

Your new system includes the following:

- ✓ The Main filter assembly
- ✓ 1 Reverse Osmosis Membrane Sealed in a Plastic Bag
- ✓ 1 Sediment Filter Cartridge Sealed
- ✓ 1 Carbon Block Cartridge Sealed
- ✓ 1 Granular Activated Carbon Filter Cartridge, Sealed.
- ✓ One Chrome-Faucet
- ✓ Two #10 x 3/4" wall mounting screws.
- ✓ One 4 gallon Hydro-Pneumatic Tank.
- ✓ One Filter Housing Wrench
- ✓ One plastic Tank-Shutoff valve
- ✓ Poly Tubing for water & drain connections.
- ✓ One Owner's Manual Package including – This Product Manual, Warranty Certificate and Extended Warranty Plan.

Installation & Start-Up

If you have purchased this product from an authorized Neotec distributor/agent, a trained service representative of Neotec can complete the installation for you. The installer will follow the following procedure.

1. Clear the working area. Unpack all the components from the cartons and inspect for visual damage if any. Should you find any damage, please inform the dealer immediately. *(Please note that all Neotec Systems are inspected and checked prior to delivery.)*
2. Inspect the cold water supply line and the air pressure in the RO pressure tank with a regular tire gauge. The tank is pre-charged to 7 psi. Adjust if necessary.
3. Turn off the water supply. Attach the self-piercing saddle valve to a convenient location in the cold water line.
4. Connect the inlet pipe of the system with the water supply.
5. Unpack the filter cartridges and carefully install them in the filter housings. Do not contaminate the filter cartridges by touching with bare hands.
6. Unpack the RO membrane and install it in the RO housing.
7. Connect the housings, RO pressure tank and the inlet/outlet connections as per flow diagram.
8. Install the faucet on the sink by drilling a hole and connect the bottom end to the outlet of the GAC filter.
9. Turn on the feed (raw) water supply and check all connections for leaks. Do not proceed until all leaks are fixed. Close the faucet and open the drain valve. Let the water flush the system for about 10 minutes. Do not consume the water until flushing of the system is complete.
10. Fill the pressure tank and then drain the water completely from it. Fill it again and now the system is ready for use. Draining the system is essential to flush out any manufacturing debris. Further, the RO

membrane contains a preservative solution to prevent microbiological growth and freezing which, if ingested, may cause irritation of the gastro-intestinal tract, colic, diarrhea, or other similar symptoms. Once the system is drained as per instructions, the water is good for drinking.

11. It is not uncommon to experience air bubbles or effervescence in the product water initially. This will disappear once the unit will be in service for some time.

If you experience any trouble in the installation of the product, please call your Neotec dealer. They will be glad to offer assistance.

Maintenance Schedule

Your drinking water system requires periodic maintenance to ensure good water quality at all times. Maintenance is easy and generally anyone at home can do it. The following maintenance schedule serves as a general guideline only. The actual maintenance of your system will largely depend on you feed water quality. Poor water quality would require higher maintenance while relatively cleaner water will require lesser maintenance.

The Sediment Filter

The sediment filter (shown in Figure 1 inside the housing) should be replaced every 12 months. However, if the incoming water has high-suspended impurities, the filter may choke (plug) early and need to be replaced sooner.



1



2

The Carbon Block Filter

The carbon block filter (Fig 2) should be replaced every 6 months. The carbon filter may not plug, but its chlorine adsorption capacity wanes and the escaping chlorine will damage the RO membrane.

The Reverse Osmosis Membrane

This is the heart of the system. The membrane life will again, depend on the Total dissolved solids in the feed water. Generally the membrane will require replacement in 2 – 3 years. However, if the product water flow is reduced or the quality of water decreases in terms of solid removal efficiency, it is advisable to change the membrane.



The Granular Activated Carbon Filter

This filter will require change out every 12 months. When you are changing the filter, please ensure that the inlet water supply is closed. Close the tank valve & then open your faucet to release the system pressure and then proceed with the replacement/maintenance schedule.



Use the Filter Wrench to open and close the housings. Do not over-tighten the housings. Please ensure that the filters do not come into contact with dirt or bacteria. Avoid touching with bare hands.

Your Drinking Water System is designed for years of use. Take care of your system and it will continue to give trouble-free performance for many years to come.

SANITIZING THE SYSTEM

Occasionally, it is advisable to sanitize the system. To do this, remove all the filters and the membrane from the system. Open the sediment filter housing (sump) and fill it with a chlorine solution (Mix one teaspoon of bleach in a gallon of water). Turn the water supply on and allow this solution to pass through all the filter housings. Fill the air pressure tank and then drain the water. Fill the tank again and drain it fully. Shut off the water supply and replace the filters and membrane. Turn the water supply on and flush the system for a few minutes. The system is now ready for use again.

Please ensure that the chlorine solution is completely drained from the system prior to installing the Reverse Osmosis Membrane as it can damage the membrane.

Troubleshooting

While the Neotec Drinking Water System has been manufactured to the highest levels of quality, it is possible that sometimes you may experience problems. In most cases, you can rectify the problem yourself by referring to the table below. However, if you are unable to get your system going by yourself, please call your dealer for assistance.

	Problem	Possible Reason
1	Water does not come out from the faucet?	Your sediment filter may have choked (blocked) and may need replacement. OR Your RO membrane may need replacement. OR The feed water supply itself may be blocked
2	Water comes out in a trickle	One of the above or the air pressure tank may have low pressure. Increase the air pressure
3	Water has a little smell/taste to it	Your GAC filter may have exhausted it's life. Change the filter.
4	Ice Cubes are hazy	Some Ice-makers freeze ice from the outside causing air to be trapped. If not, you may need to change the Reverse Osmosis Membrane.
5	I fill up air in the pressure tank, but it reduces again.	The air-pressure (hydro-pneumatic) tank may have problems. Contact your dealer for help.

It is advisable to check with your dealer at all times before making any changes in the system.

Caution:

This System is not designed to act as a primary barrier to waterborne microbiological or toxic chemical contamination. Where these conditions exist, please consult a qualified water professional to ensure sufficient raw-water pre-treatment and disinfection.

Warranty

NEOTEC Water Treatment (referred to as The Company) hereby warrants its equipment as follows:

- 1)The company warrants its Reverse Osmosis Drinking Water System controls to be free of defects due to workmanship or materials, under normal use and service for FOUR YEARS from date of purchase. If defective due to workmanship or materials, and if reported within one (1) month from equipment failure, the Company will, at its option, repair or replace the product.
- 2)This warranty is valid only when the unit is installed and adjusted according to factory specifications by Neotec authorized personnel only. It does not include standard maintenance items.
- 3)If the system performance is affected due to any of the following reasons, the warranty will be void and necessary charges, as may be determined from time to time by The Company, will be applicable:
 - Change in raw water quality
 - Damage from abuse, neglect, accident, fire, flood or any other act of God.
 - Damage resulting from unauthorized alterations, attachments, or repairs.
 - Failure or malfunction occurring due to the system being operated in a corrosive and contaminated atmosphere.
 - Failure due to repair or service performed by any person or company other than those approved by Neotec.
- 4)The obligation to repair defective parts does not require replacement of the complete unit. Service which includes replacement of defective parts, repair work or adjustments within the warranty period should be handled by, or through the authorized dealer from whom the system was purchased.
- 5) This warranty becomes void if the serial number is removed or defaced.
- 6)In no event shall Neotec be liable for incidental, special, direct, indirect, consequential or multiple damages such as, but not limited to, water damage, lost business or profits arising out of the sale or use of the Neotec AC System even if advised of the possibility of such damages.
- 7)Warranty does not include Filter cartridges and the RO membrane.
- 8)**NO OTHER WARRANTY EXPRESSED OR IMPLIED IS APPLICABLE TO THIS UNIT.**

MODEL NUMBER.....

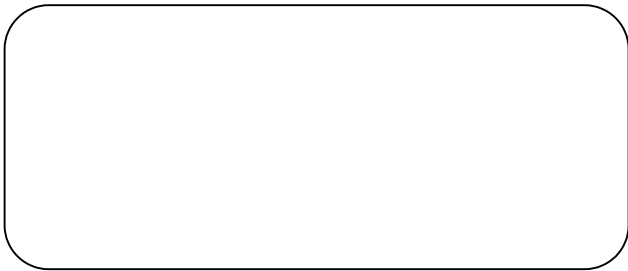
SERIAL NUMBER.....

DATE INSTALLED.....

INSTALLED BY.....

DEALER NAME.....

Authorized Dealer:



Made in Canada



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