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RainSoft®
Water Treatment Systems

**MODEL 9596 AND 9596N
REVERSE OSMOSIS
DRINKING WATER SYSTEM**

**Owners
Manual**

MODEL 9596 AND 9596N

YOUR NEW REVERSE OSMOSIS DRINKING WATER SYSTEM

You now have the finest Reverse Osmosis Drinking Water Systems made. It will give you years of cleaner, clearer, better tasting drinking water with only occasional attention.

To make using, operating and maintaining your system as enjoyable as possible, please read this owner's manual. It contains all the information you need, presented in a clear concise manner.

This Reverse Osmosis System has been pre-set for optimum performance by your RainSoft[®] Dealer. Do not attempt to reset, remove or repair any items except as indicated under "Routine System Maintenance." Tampering with settings may result in poor performance, leaks and/or personal injury.

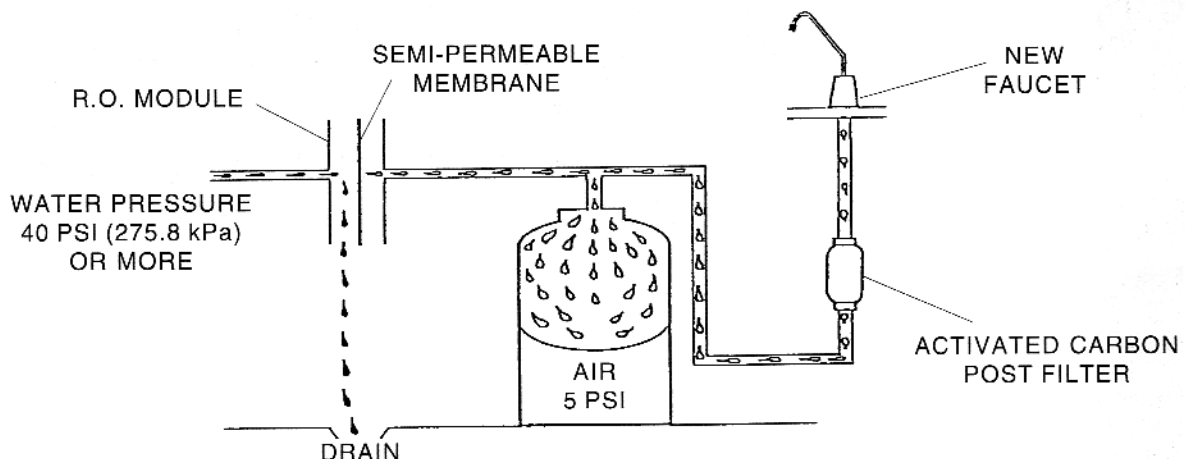
WHAT IS REVERSE OSMOSIS?

To fully understand the technology of Reverse Osmosis (R.O.), one must first understand normal osmosis. Osmosis is a natural process that occurs in living things. In plants, osmosis permits the absorption of water and nutrients through the root system. In people, nutrients are absorbed into the bloodstream by osmosis.

Reverse Osmosis utilizes pressure to reverse this normal osmosis; thus in reverse osmosis, water flows from a more concentrated solution through a semi-permeable membrane to a less concentrated solution.

In the RainSoft[®] System the water supply flows over the surface of a semi-permeable membrane which is rolled into the R.O. Cartridge. The pressure forces the water through the membrane, while the remaining water, now heavy in contaminants, is flushed down the drain.

The purified water is stored in a storage tank that has a bladder in it, pressurized with about 5 PSI of air pressure. This pressure forces the water through an activated carbon post filter and up to a new R.O. faucet installed on the kitchen sink and wherever else R.O. water is desired.



RAINSOFT MODEL 9596 AND 9596N R.O. SYSTEM SYSTEM COMPONENTS

1. **ACTIVATED CARBON FILTER:** An activated carbon filter that removes chlorine from the supply stream. The filter cartridge requires periodic replacement, every 6 months after installation or sooner, depending upon the quality of the water supply and the amount used. An order form for replacement filters is located at the end of this manual.
2. **SEDIMENT FILTER:** A water filter that removes particles and sediment as small as 5 microns in size from the supply stream. The filter cartridge requires periodic replacement, every 6 months after installation or sooner, depending upon the quality of the water and the amount used. An order form for replacement filters is located at the end of this manual.
3. **R.O. MEMBRANE CARTRIDGE:** A spiral wound, thin film composite, semi-permeable membrane R.O. cartridge. The R.O. cartridge requires periodic replacement every 18 months after installation or sooner depending upon the quality of the water supply and the amount used. An order form for a replacement R.O. cartridge is located at the end of this manual.
4. **ACTIVATED CARBON POST FILTER:** An activated carbon filter to remove unwanted tastes, odors and other impurities. The activated carbon post filter requires periodic replacement, every 6 months after installation or sooner depending upon the quality of the water and the amount used. An order form for replacement filters is located at the end of this manual.

MODEL 9596 AND 9596N R.O. SYSTEM

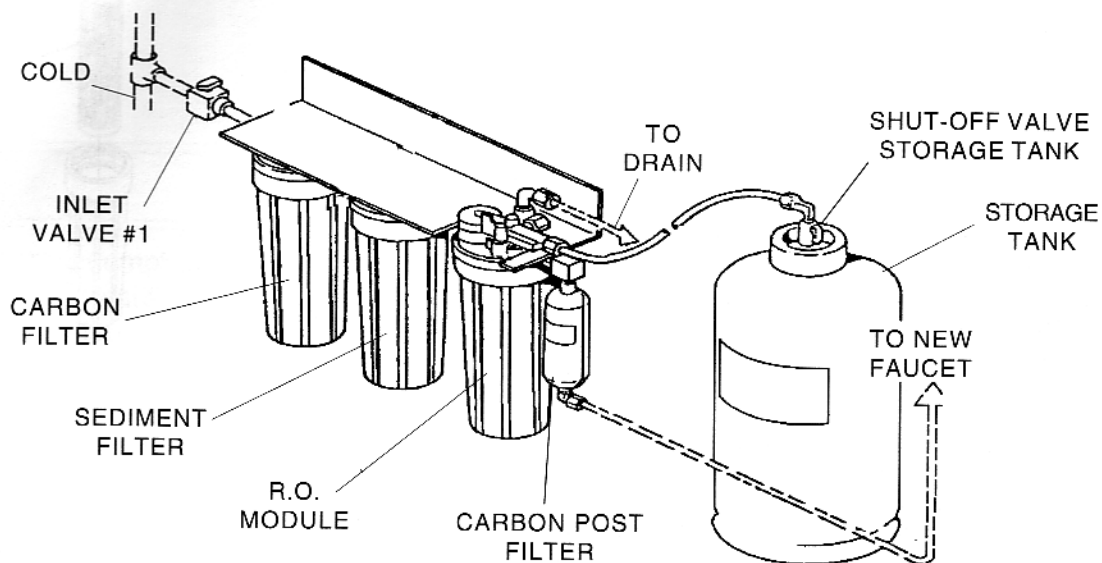


DIAGRAM #1

CARBON FILTER ASSEMBLY = HOUSING ASSEMBLY & CARTRIDGE

SEDIMENT FILTER ASSEMBLY = HOUSING ASSEMBLY & CARTRIDGE

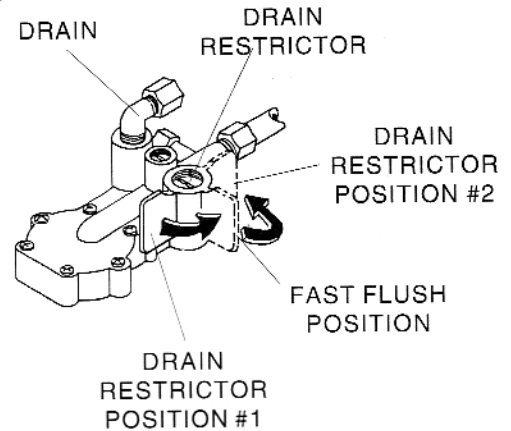
R.O. MODULE = HOUSING ASSEMBLY & MEMBRANE CARTRIDGE

ROUTINE SYSTEM MAINTENANCE

1-2 TIMES A WEEK: The storage tank should be drained and the system should be fast flushed. This will maintain a fresh water supply in the storage tank and promote better operation of the R.O. cartridge.

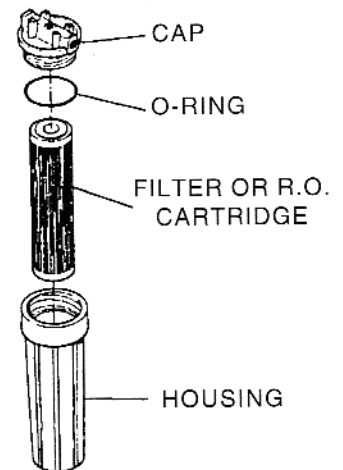
To drain the storage tank, open the R.O. faucet. Let the water run until there is only a dripping coming from the faucet. Then close the R.O. faucet and rotate the drain restrictor 90° to the fast flush position (shown at right). The sound of rushing water should be heard. Allow the system to fast flush for 5 to 7 minutes. Then rotate the drain restrictor to position #2. The next time you drain the tank, reverse the rotation of the drain restrictor.

NITRATE REDUCTION UNITS: Nitrate reduction units contain a Nitrate test kit. Follow the instructions included with the test kit to check for Nitrate at least once a month.



TO CHANGE THE CARTRIDGE FILTERS OR R.O. CARTRIDGE (Use only RainSoft replacement parts)

1. Shut off the water at inlet valve #1 (see diagram #1) and open the faucet to drain the storage tank completely.
2. Remove unit from hanger and place over a drip pan for water spillage. Extra tubing has been provided to facilitate this process.
3. Notice: When changing filters or the R.O. membrane, be sure that the O-ring and rubber brine seal are securely in place. Always lubricate all the O-rings with a non-petroleum base lubricant to ensure longevity of the O-ring. Never over tighten the housing to the cap.
4. **Hand tighten only.**
To replace carbon and sediment filters only: Unscrew both housings from their caps. Install the carbon filter first, replace the cartridge and reassemble while leaving the sediment filter unassembled. With the R.O. unit over the drip pan, turn the inlet valve #1 and catch the water as it flushes any carbon fines out of the system. It is now safe to install the carbon filter.



To change R.O. membranes only: Leave carbon and sediment filters in place, unscrew the R.O. housing from the unit body, replace membrane and reassemble. No flushing is necessary during this service.

To replace both filters and membrane: Unscrew all housings from their caps. Follow the above steps in consecutive order. Note: It is very important to flush the carbon filter before replacing the sediment filter and the R.O. membrane.

WHEN LEAVING YOUR HOME VACANT: Close the cold water inlet valve. When you return, open the cold water inlet valve, drain the storage tank, and fast flush the system as indicated above.

**YOUR RAINSOFT® DEALER WILL TEST A SAMPLE OF YOUR R.O. WATER
AT ANY TIME AT NO CHARGE**

1. Open the R.O. water faucet and let it run until it is merely dripping.
2. Catch the R.O. water drips in a clean glass. Rinse the glass in the R.O. water. Discard the rinse water.
3. Catch another sample of the R.O. water, as above, and take it to your dealer's office during normal working hours. Phone him/her first.

Note: This reverse osmosis system contains replaceable treatment components critical for effective removal of contaminants. The water should be tested frequently to verify the system is working satisfactorily. (NSF specifies at least once every six months.)

TROUBLE SHOOTING GUIDE

SYMPTOM	PROBABLE CAUSE	SOLUTION
No water	Bladder over pressurized Water supply turned off Faulty valve Water supply blocked Fouled R.O. cartridge Product line crimped Bladder leaking Air Valve leaks	Relieve pressure 5 PSI Turn on Replace or Repair Clear blockage Replace Remove crimp Replace Replace and recharge to 5 PSI
High TDS Water	Drain Restrictor Blocked Low Water Pressure Fouled R.O. cartridge Fouled prefilters	Rotate Drain Restrictor 180° Unit requires 40 PSI supply (minimum) Replace Replace
Bad Taste	Various	Call your RainSoft® Dealer

Warning: Do not attempt to reset or remove the Pressure Release Screw or the Drain Restrictor Screw. These items are pre-set by your RainSoft® Dealer. Tampering with these settings could result in poor system performance, leaks and/or personal injury.

