



PWS™ BEV300 Series

Annual Maintenance / Filter Replacement

After 12 months of use, it is time to replace the Sediment pre-filter, two Granular Activated Carbon pre-filters and the 4-stage DI module to insure your system is producing water within BEV parameters.

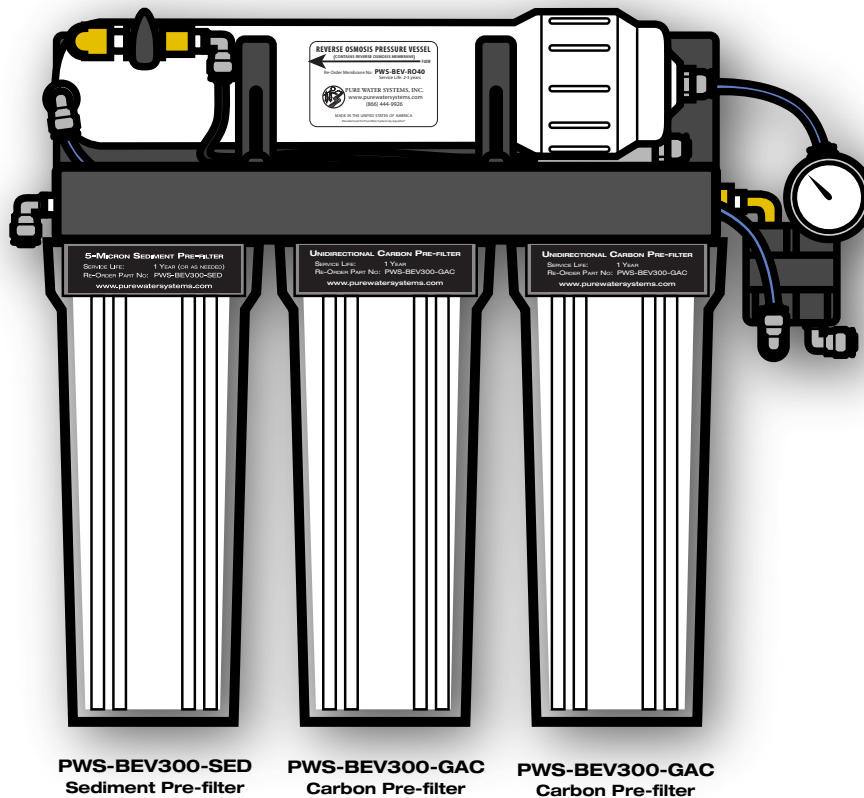
Please visit our website and view the animated owners manual for your BEV300 system. This file is easily viewable with a high speed internet connection. Dial-up connections will take a few minutes to load the animation. This clip will answer most questions regarding filter replacement. See <http://www.purewatersystems.com/300install.php>.

The process of filter replacement is detailed below. Please read through these instructions before proceeding.

FILTER REPLACEMENT

After 12 months of use, it is time to replace the sediment pre-filter, the twin GAC carbon filters, and the Deionization Module to insure your system continues to produce water within BEV parameters. Replacement modules can be ordered directly from Pure Water Systems via our web site at <http://www.purewatersystems.com>.

- 1) Remove the contents from beneath the kitchen sink where the filter assembly is located.
- 2) Turn off the cold water supply line.
- 3) Drain ALL the water from the storage tank by opening the sink mounted faucet.
- 4) Close the faucet and the ball valve on the top of the storage tank.
- 5) Open the Flush Valve (relieves pressure)



- 6) Place a towel beneath the pre-filter/RO assembly—it will absorb the small amount of water that will spill from the modules as they are changed out.

It is often helpful to have an empty 3-5 gallon bucket nearby.

Replacing the Sediment Pre-filter

The sediment pre-filter is in the canister on the left side of the assembly, beneath the manual flush valve. The sediment pre-filter will likely be distasteful looking—it is common for sludge to form on the filter surface. After one year, this sludge layer can be fairly thick.

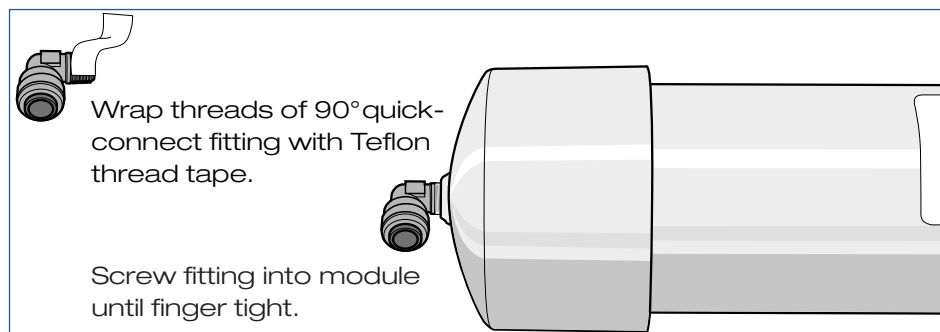
- a) Push the red button (on the top of the aluminum frame, above the pre-filter canister) to reduce any back pressure remaining in the canister.
- b) Firmly grasp the canister with both hands and unscrew it from the pre-filter assembly. (A canister wrench is available.) Carefully move the canister over the bucket, dump the water, and remove the old pre-filter.
- c) Using a long handled, soft bristle brush, scrub the inside of the canister with a mild dish washing detergent and rinse.
- d) Place the new pre-filter into the canister, and then carefully re-attach the canister to the assembly. Tighten until firm.

Replacing the GAC Pre-filters

The twin unidirectional, GAC pre-filters are in the middle canister and the canister on the right. Follow the same procedure as described for replacing the sediment pre-filter (above).

Replacing the DI Module

- 1) Disconnect the tubing from both ends of the DI module. Some water will pour from the tubing once released. (If the DI module was mounted vertically, you might find less water will be spilled if you remove the tubing from the outlet end *after* removing the module from the retaining clamp.)
- 2) Remove the top screw from the clamp and remove the old DI module. (The clamp is flexible and can be bent out to allow the module to be removed.) **Note the direction of flow. You will need to install the new DI module in the same orientation.**
- 3) Unscrew the *Speedfit®* fittings from both ends of the module. Scrape away the old Teflon® thread tape (without damaging the plastic threads) and re-wrap the threads.



- 4) Install the *Speedfit®* fittings into the new DI module.
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- 5) Place the new DI module into position, taking care to note the direction of flow. Secure the clamp and re-connect only the tubing from the main assembly. Gently tug on the tubing to insure a secure, leak free connection.



The next step will disinfect and sterilize the storage tank:

- 6) Carefully place a few drops of regular household bleach into the tubing that connects the outlet of the DI module with the storage tank before connecting the tubing to the DI module. (As the tank fills with water for the first time, it will be subjected to a strong but continually diluting solution of chlorine.)

Alternate disinfection procedure:

- a) Disconnect the tubing from the “T” connector on the tank ball valve and remove the storage tank from beneath the sink.
- b) Wrap a towel around the ball valve and slowly unscrew the valve from the storage tank. There is always some water remaining in the tank and this will escape when the valve is removed. After setting the valve aside, place the towel over the tank opening and shake and rotate the tank to remove any remaining water.
- c) Re-wrap the threads with Teflon® pipe tape.
- d) Now place a few drops of liquid chlorine bleach into the top of the tank and re-install the tank ball valve (with the valve in the closed position).
- e) Reconnect the tubing to the swivel “T” connector.

Returning the System to Service

To return your system to service:

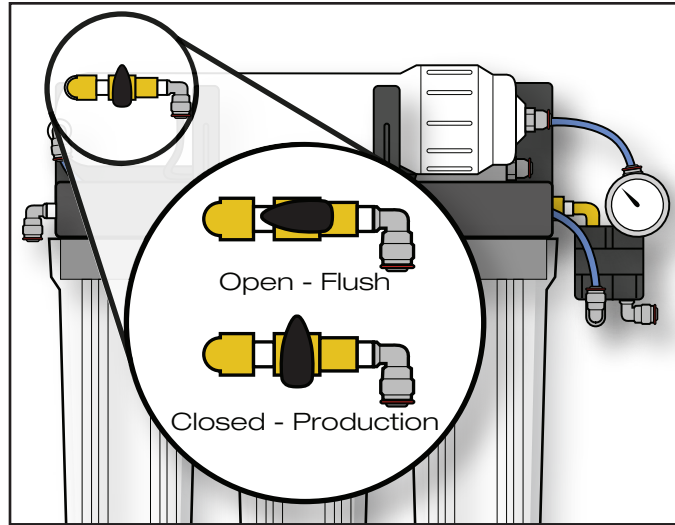
1. Verify the manual flush valve is in the “Open - Flush” position.
 2. Open the valve on top of the storage tank.
 3. Slowly re-open the cold water supply line. The pre-filter canisters should begin to fill.
 4. After ten (10) minutes, move the manual flush valve to the “Closed - Production” position.
 5. Check for leaks around the tops of the pre-filter canisters. If water is seeping from any of the canisters turn the cold water supply off, move the manual flush valve to the “Flush” position, and then relieve line pressure by pressing the red button on top of the canister. Unscrew the leaking canister from the assembly. Check to be sure the O-ring is properly seated and then carefully re-attach the canister to the assembly, taking care to align the filter module inside. Tighten until firm.
 6. Check for leaks at either end of the DI module and at the storage tank.
 7. Allow the system to produce a full tank of water.
 8. Drain off and discard the initial tank of water. Do not use for cooking or drinking.
 9. You are now ready to enjoy great tasting, pure BEV water for another 12 months!
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FLUSHING



Flushing is the single most important maintenance function needed to keep your system operating at peak efficiency. This simple operation only takes a few minutes and extends the service life of the reverse osmosis membrane.

- 1) Flushing is only possible when the system is filling. (The gauge will read zero when the system is idle.) Drain off some water at the pure water faucet until you hear water begin to flow and there is pressure on the gauge.
- 2) Move the handle on the flush valve to the "Open - Flush" position. This will allow water to flow rapidly across the RO membrane, washing away concentrated contaminants.
- 3) Set a kitchen timer so you do not forget to return the flush valve to the closed position.



Flushing once per week for 5 minutes is ideal. If you forget to flush the system for an extended period of time perform an exhaustive flush by leaving the flush valve open for 20 minutes.

If your unit has not been used for more than one week (e.g. while you are on vacation), drain the storage tank (use the water for watering plants, etc.) then flush the membrane for 5-10 minutes as described above.

