



# PWS-AFRS-100

## Filter Replacement for the PWS™ BEV-100 Series

After 12 months of use, it is time to replace the 2-stage pre-filter and the 4-stage DI module to insure your system is producing water within BEV parameters. Replacement modules can be ordered directly from Pure Water Systems via our web site <http://www.purewatersystems.com>.

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

### Preparing the System

- a) Disconnect the coupler from your faucet.
- b) Drain all the water from the reservoir.
- c) Choose a work area with a large flat surface such as a kitchen table.
- d) Place a soft clean towel on the working surface—it will absorb the small amount of water that will spill from the modules as they are changed out, and it will protect the surface of both the table and your BEV system housing.
- e) Remove the lid
- f) Turn the unit over on the towel, exposing the filter modules.

### Removing the Modules

- 1) The first module you can see is the 2-stage pre-filter. It is supported by two “Double C” clamps which are attached to the reverse osmosis pressure vessel (ROPV). At one end of the module feed water enters from the hose assembly. At the other end a piece of tubing connects to the the RO pressure vessel.

*Your system was originally shipped with shaped foam packing blocks (not shown) securing the RO pressure vessel and DI module from shifting during shipping. You can remove these as you disassemble the filters if you choose.*

The tubing is attached to the module using a unique push-in fitting system manufactured by John Guest® (study Figure 3 on the next page). The “collet” assembly will securely hold the tubing under normal conditions. An O-ring behind the collet assures a leak free seal.

To insure your system will be water-tight even after being shipped across country, we have inserted small [red] plastic retaining clips on each fitting. These are easily removed with your fingers or, if grabbing the clip is difficult, you may wish to use a pair of needle-nose pliers.

- 2) Remove the retaining clips from each end of the pre-filter, then remove the tubing itself (refer to Figure 3 on the next page). You will feel some resistance as the tubing slides away from the O-ring inside the fitting.
- 3) With the module free of its connections, it can be removed from the two “Double C” clamps holding it to the RO pressure vessel. Remove the two “Double C” clamps and set them aside. (See Figure 2, next page.)

*Note the direction of the “FLOW” arrow. You will need to install the new filter in the same orientation.*

- 4) With the pre-filter removed, you now have access to the DI Module and the RO pressure vessel. These modules are attached with a custom clamp secured by two wing nuts. (See Figure 2, next page) Before removing the wing nuts, you need to disconnect several more tubes from their fittings...
- 5) Disconnect the tubing from each end of the de-ionization (DI) module.

*Note the direction of the “FLOW” arrow. You will need to install the new DI Module in the same orientation.*

- 6) One end of the reverse osmosis pressure vessel has two connections—the blue tube connects to the DI module, and the black tube connects to the flush valve assembly. Remove the black tube from the RO pressure vessel.
- 7) You can now remove the two wing nuts which secure the RO pressure vessel and DI module to your BEV-100 Series housing.

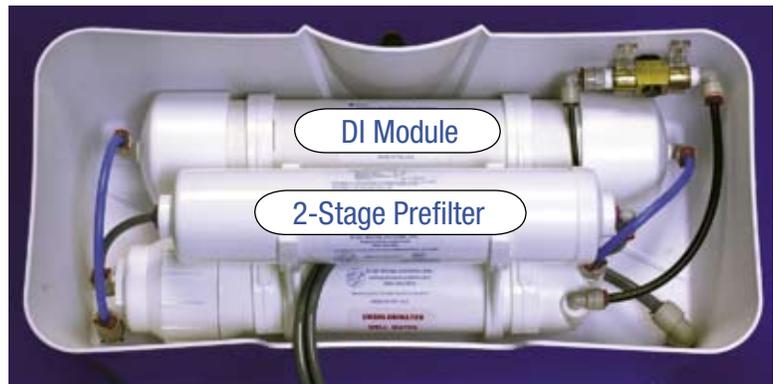


Figure 1, Underside of PWS-BEV-100 Series system

- 8) You are now ready to remove the RO pressure vessel and DI module from the housing.

*If this is the first time you are replacing the DI module, you will find both the DI module and RO pressure vessel are secured to the clamps with double sided adhesive tape (installed to prevent damage during transit). The adhesive will release if you carefully, and slowly, rotate the DI module away from the clamp. It is not necessary to replace the adhesive when re-assembling the system.*

- 9) Place the new DI module into the housing. Re-insert the tubing which connects the reservoir to the DI module, taking care to attach the tubing to the outlet end of the module.

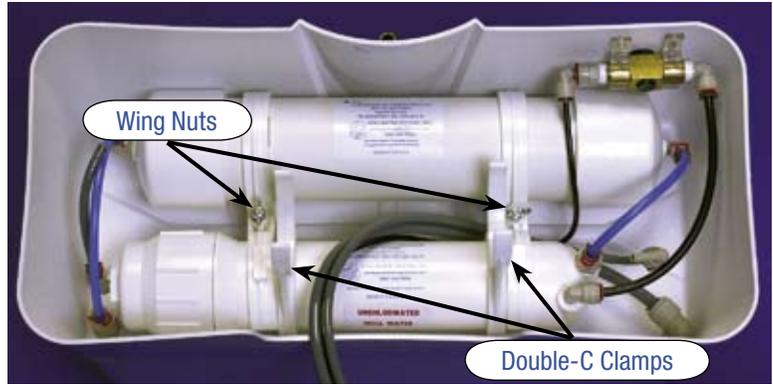


Figure 2, Location of Wing Nuts securing DI Module & RO Pressure Vessel

- 10) Replace the RO pressure vessel and clamps. Re-insert the blue tubing coming from the RO pressure vessel into the inlet end of the DI module.
- 11) Re-insert the black tubing into the brine water discharge port on the RO pressure vessel. Replace the retaining clips.
- 12) Replace the two wing-nuts which secure the RO/DI clamp.
- 13) Snap the two "Double C" clamps back onto the RO pressure vessel. Place the new Sediment and Carbon Pre-filter into the clamps, being sure the "FLOW" arrow points the same direction as noted in step 3 above.
- 14) Re-insert the feed water tube from the hose assembly into the inlet end of the pre-filter. Re-insert the tubing from the RO pressure vessel inlet into the outlet end of the pre-filter. Replace the retaining clips.
- 15) When all filters have been replaced and all tubes have been reconnected, hook the unit up to the faucet, open the flush valve, and turn on the water. Let the unit flush for 10–15 minutes then drain any water in the reservoir, invert the unit, and inspect for leaks.

*If any water appears at any of the tubing connections, remove the retaining clip, then remove and re-insert the tubing. Make sure the tubing is bottomed out inside the fitting. Replace the retaining clip. (A leaking connection is extremely rare.)*

- 16) Return the unit to service. Discard the first tank of water. You are now ready to enjoy great tasting, pure BEV water for another 12 months!

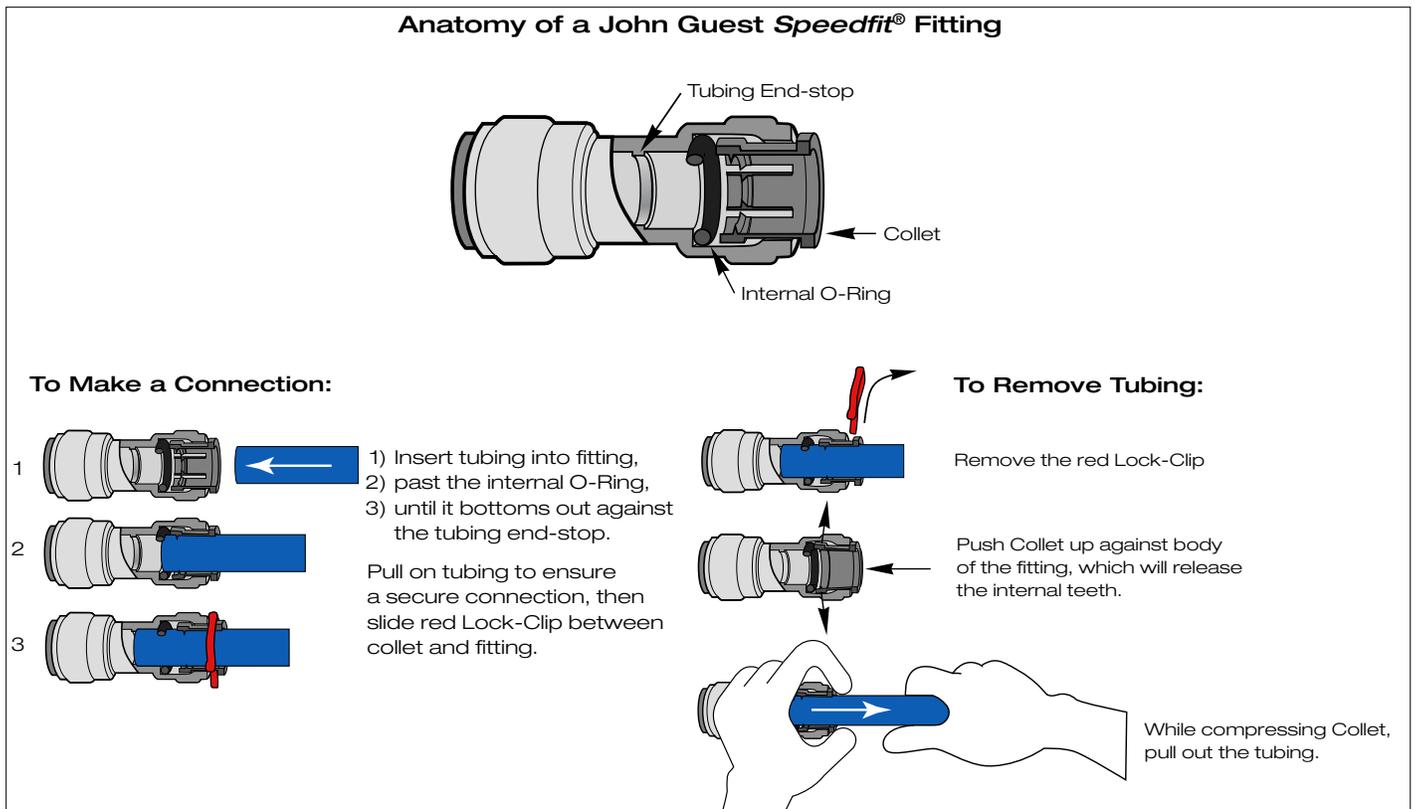


Figure 3, John Guest® Fittings