

# techsavvy

HANDS-ON | HOT LINE | COACH & POWERTRAIN

HANDS-ON | *by* BOB LIVINGSTON

## PORTABLE POTABLE SOFT WATER

Say goodbye to water spotting and minerals that damage plumbing fixtures

**Water is a motorhome's lifeblood. We use water to** flush the toilet, shower, wash dishes and clothes, make ice, and to keep the interior and exterior clean — not to mention for drinking. Without water, our coaches are just places to sleep. But water can be our nemesis.

Hard water deposits play havoc on our plumbing fixtures, especially the faucets and shower heads. Over time the flow can become restricted as filters and screens become plugged. Washing our rigs can be an exercise in futility as we chase water spots during the drying process. The Stain-Less Water Filter Softener will make you love water again.

While there are a number of filters on the market that are designed to remove minerals before they enter the rig, the Stain-Less filter also makes the water soft. Residents in areas with hard water are well aware of the benefits of a water softening system, which include more comfortable showers and easier clean up, without horrible spotting. The water in our neighborhood is so hard it's virtually impossible to wash a motorhome or car without a complete cardio workout during the drying process. If the sun is out, all bets are off.

We've used a number of portable water softeners that have a large enough capacity for washing coaches over the years and most are bulky and heavy to maneuver. The lighter versions run out of soft water quickly. The recharging process for some of these products is tantamount to desktop paper printers, which have an insatiable appetite for expensive cartridges.

By contrast, the Stain-Less filter is fairly compact, measuring 6 inches by 34 inches (main unit) and not very heavy. What looks like a big PVC pipe with hose fittings in the ends, the filter is completely made of non-corrosive materials, has no mechanical or metallic parts and requires no power to operate. Inside the tube are millions of resin beads, which are said to produce an ion exchange that extracts the hard-water elements. The filter is designed to remove calcium,

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magnesium, iron, chlorine and ammonia from the water.

The system is pretty basic, consisting of the main tube, a pre-filter (which is also the recharger) and a 4-foot hookup hose. It comes charged from the factory, so it's ready to use right out of the shipping carton. The pre-filter can be attached to either side of the tube since the water can flow in either direction. The two pieces are mated using the supplied brass quick-connector, and the hookup hose screws on to the other side (inlet) of the pre-filter. Once assembled, the loose end of the hookup hose is connected to the water faucet and your longer hose is screwed on to the free end of the big filter.

Filter kits are available in three sizes, but the most practical for motorhome use is the standard, which is can produce up to 5,000 gallons of soft water before recharging. Water hardness will ultimately affect how long the charge actually lasts. The standard kit sells for \$350, which is half the price of the mega size counterpart (8,500 gallons of soft water before recharging). A mini filter, capable of providing 1,000 gallons of soft water, sells for \$250.

Being a little bit of a skeptic and maniacal when it comes to water spotting, I tested the Stain-Less filter under the worst conditions. I started with the dinghy vehicle since I didn't want to subject myself to major work should the system not perform as advertised. The vehicle was washed in direct sun on a warm day with the filter hooked up to water that is exceptionally hard. After the usual washing, I allowed the vehicle to air dry. The result was very impressive, leaving only about 20 percent of the water spotting normally experienced in these conditions. Subsequent washing in the shade made the process even more efficient and minimized drying time, which made me a happy camper.

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Not only was the drying time shortened with little effort, the washing experience was dramatically improved. The soft water allows the soapy water to work more efficiently, making bug carcass and bird dropping removal a much easier proposition. Although it didn't dawn on me at the time of washing, the improved efficiency parallels the effectiveness of using a water softener in the house. I tested the water with and without the filter and the

results were dramatic: the water quality was equivalent to the sophisticated home water softening system. Water flow is not impacted with the filter inline.

Recharging the filter is uncomplicated and inexpensive. A pre-measured packet of salt is loaded into the pre-filter after the carbon cartridge is removed. Then it's just a matter of turning it upright and pushing water through the pre-filter and into the main filter until the salt is dissolved completely. Salt pellets can be purchased from Stain-Less for \$5.95 or you can use pellets sold at home centers. The carbon cartridge should be replaced

periodically and it sells for around \$10.

The Stain-Less filter doesn't take up that much room and it has feet to keep it from rolling around, so storing it in a compartment is practical. It can be rigged up to remain in a storage compartment while connected to campground hookups, and it certainly should be used to fill the onboard water tank. Just be sure to use a drinking-water hose for both of these applications. Not only will spotting and plumbing damage be a thing of the past, the water even tastes better.

**Stain-Less Water Filters LLC, 609-296-2564, [www.stainlesswaterfilters.com](http://www.stainlesswaterfilters.com) ♦**