

Installing the Add-on Pressure Gauge Kit

Buckeye Hydro Pressure Gauge Kits are intended to be installed in existing RO or RO/DI systems that lack a pressure gauge. Start by carefully removing all parts from the shipping box. Identify your pressure gauge, quick connect female adapter, quick connect tee, and ¼-inch tubing. Please read through these instructions in their entirety before installing your kit. The installation will take only several minutes under normal circumstances.

Examine your RO or RO/DI system. A schematic of a three stage RO system is provided here for reference. You'll note tap water passes first through one or more sediment filters, followed by one or more carbon filters. These two stages precede the RO membrane, and are often referred to as "prefilters." Your system may or may not have an additional prefilter stage or two prior to the RO membrane.



Along with water temperature, pressure is a critically important parameter in determining how well your system operates. The purpose of the pressure gauge you've purchased is to display the pressure present in the system that will affect the performance of the RO membrane. Factory specifications for Filmtec membranes call for 50 psi; specifications for residential membranes produced by other manufacturers are commonly higher (e.g., 60 or 65 psi).

Begin the installation by selecting a location for the gauge. The gauge can be mounted by drilling a hole through your RO system bracket, or the gauge can be positioned to rest atop the RO membrane housing. Do not allow the gauge to hang loosely from the system supported only by the tubing and fittings in the kit.



Wrap the male threads on the back of the gauge with Teflon tape. Screw the female adapter to these threads, being careful not to cross thread or over-tighten the plastic fitting.

Turn off the water supply to your system, and relieve pressure within the system.

With a razor blade, or very sharp scissors, cut the plastic tubing cleanly and at right angles between the last prefilter and the RO housing "in" port. If your system is equipped with an automatic shut off valve, cut the tubing between the ASO valve and the RO membrane "in" port. Insert the two cut ends into the tee supplied with the kit, and extend the tubing provided in the kit from the tee to the female adapter. Your installation is complete! Turn the water supply on and check for leaks.

Note the pressure shown on the gauge when new prefilters are installed. If the pressure is too low (e.g., below approximately 40 psi if you have a Filmtec membrane), you will be unhappy with the performance of your system. Assuming your pressure approximates manufacturer's specifications, recheck the gauge periodically. Loss of pressure reaching the membrane indicates one or more of the prefilters is clogged and needs to be replaced. To determine which prefilter is not allowing the free passage of water, remove the sediment filter (only) and note any

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changes in system pressure. If the pressure returns to that experienced when the prefilters were new, the sediment filter is clogged. If the pressure does not improve, the carbon block (and perhaps the sediment filter as well) is clogged. During this troubleshooting, do not operate your system without the carbon block in place for longer than a minute. Operating the system without a prefilter carbon stage will expose the membrane to chlorine and may damage the membrane.

If available pressure with new prefilters is lower than desired, the pressure can be increased by installing a booster pump. Please contact Buckeye for additional guidance.