

Instructions for Installing and Maintaining ICS Series Cartridge Filter Systems:

Thank you for purchasing your salt free water conditioning system. These instructions are meant for those who are experienced water treatment professionals or plumbers. There are no instructions for those without adequate plumbing experience. If you are a home owner, please consider hiring your local water treatment professional or an experienced plumber to install your ICS System. Once your ICS System is installed a simple filter change is all that is required to maintain peak operating condition.

Notes and Warnings:

- Follow local plumbing codes and good plumbing practices.
- Do not use the filter wrench to tighten housings to caps, simply snug the housing to cap by hand for the O-ring to seal.
- Do not use petroleum based products to lubricate the O-ring. Use only silicon lubricant PN: SIL-LUBE (included with ICS assembly).
- Do not use any type of thread sealant or tape on the threads of the sump to cap. If a leak develops replace O-ring and lubricate.

1) Location: Locate your ICS Filter Assembly on a wall near your main supply line. Total weight of loaded assembly with water can be over 50 lbs. May be located outdoors out of direct sun and protected from freezing conditions. Protect wall and floor from water that may be spilled during installation and when changing cartridges. Provide at least 6” of space below the ICS system.

2) Installation:

- a) Mark housings with installation date. Remove cartridges note which housing cartridge comes from.
- b) Mount on a solid and plumb surface making sure the ICS is level using anchoring devices designed to hold at least 100 lbs.
- c) Install valves on the inlet, outlet (marked on housing cap) and BDV (bottom drain valve) to enable control of water during installation and maintenance.
 - i) Other installation considerations;
 - Install a bypass assembly around the ICS System (see installation diagram).
 - Install a 0-100 psi pressure gauge on either side of the Housing Assembly. This will help you know when to change filters.
 - Connect 1/2” BDV and close, If needed plumb tubing from BDV to location for bucket to collect water during filter changes.
 - d) Connect plumbing to the ICS System and turn off all water valves.
 - e) Check for leaks;
 - i) Close outlet, bypass and BDV valves.
 - ii) Bleed air and fill with water.
 - While loosen air vent on top of each filter and slowly turn on water inlet valve to let air escape, close vent when air is gone.
 - iii) Check for leaks and repair any found.
 - If there is a leak where the housing meets the cap;
 - Turn off water valves and relieve pressure with vent and drain by opening BDV.
 - Loosen the leaking housing (may require a wrench), check O-ring for damage, groove for debris, lubricate and hand tighten only.
 - Close BDV.
 - f) Repeat e) above to relieve air and check for leaks again. If leak continues replace O-ring (lubricate with silicon grease only).
 - g) Install Cartridges;
 - i) Drain housing(s)
 - Turn off water valves and relieve pressure with vent valve.
 - Empty housing using BDV vent. Remove housing, use wrench if needed.
 - ii) Disinfect housings prior to installing cartridges;
 - Thoroughly wash and rinse your hands.
 - Wipe inside with clean cloth and diluted bleach.
 - Close BDV.
 - iii) Install filter cartridges into housings;
 - Remove protective wrap on cartridge(s) and note which housing(s) each cartridge goes into.
 - Install cartridges into housings.
 - Install housing with cartridge in the specified order (do not use wrench – Hand-Tighten Only).
 - Bleed air and fill with water (see 2)e) above). If unit is Valve-In-Head style, slowly rotate handle on top of housing to ON position.

- h) Start up your ICS system and ready for use.
- i) Open outlet valve, fully open a downstream tap and run water until water runs clear (at least 5 minutes and until filter fines and air are removed).
 - ii) Note and record the downstream tap opened and the pressure difference between inlet and outlet pressure gauges when water is flowing. This is your initial delta P (differential pressure). With use, the delta P on some filters may increase indicating filter needs changing. For the most accurate delta P fully open the same tap each time you record delta P.

3) Maintenance:

- a) Inspect and record delta P when cartridges are new and on a periodic basis (see 2)h) above). Periodically inspect for any leaks and repair as needed.
 - i) Change filter cartridges; Typical and maximum filter changing frequency is every 12 months; Water quality and volume treated may require more frequent changes or;
 - ii) Change when pressure difference is 5 to 7 psi above the difference when cartridge is new as measured in step 2)h) above or;
 - iii) Change when soap suds are not greater in treated water when compared to untreated water or;
 - iv) Change when water spots are no longer easy to clean or;
 - v) Change when taste, odor or staining re-appears
 - vi) Mark your calendar to remind you to change your cartridges again in 1 year. Inquire about our Filter Change Reminder Service or join our subscribe and save option.

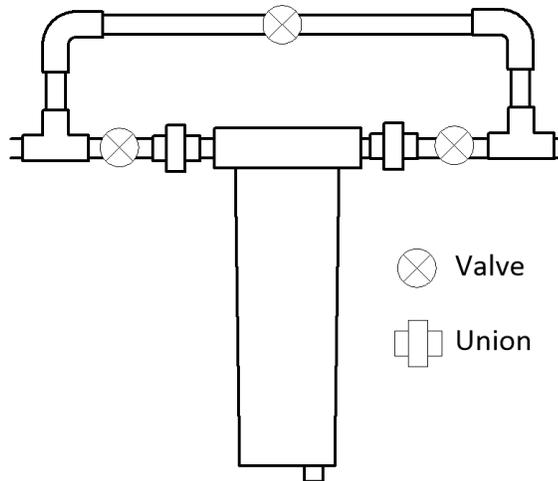
4) Order a new cartridge refill kit:

Always keep a spare cartridge or set of cartridges on hand so you will have them the next time your cartridges need changing.

5) Complete and return included Warranty Registration Card to protect your investment.

Life’s Short – Enjoy Your Water. Never be without high quality water again;
 Consider the Auto Reminder or Subscribe and Save Programs.

Basic Installation Diagram



ICS System	Replacement Filter Kit	Replacement O-Ring	Replacement Wrench	Bottom Drain Valve
ICS-A	ICS-AK	AF-ORING45	AF-WRENCH45	AF-DRAINKIT
ICS-B	ICS-BK	AF-ORING45	AF-WRENCH45	AF-DRAINKIT
ICS-H	ICS-HK	AF-ORING45	AF-WRENCH45	AF-DRAINKIT
ICS-IB	ICS-IBK	AF-ORING45	AF-WRENCH45	AF-DRAINKIT
ICS-P0527	ICS-P0521K	AF-ORING25	AF-25WRENCH	X
ICS-P	ICS-PK	AF-ORING45	AF-WRENCH45	AF-DRAINKIT
ICS-PH	ICS-PHK	AF-ORING45	AF-WRENCH45	AF-DRAINKIT
ICS-S5	ICS-S5K	AF-ORING45	AF-WRENCH45	AF-DRAINKIT
ICS-SI	ICS-SKP	AF-ORING45	AF-WRENCH45	AF-DRAINKIT
ICS-ST	ICS-STK	AF-ORING45	AF-WRENCH45	AF-DRAINKIT
ICS-TO	ICS-TOK	AF-ORING45	AF-WRENCH45	AF-DRAINKIT