

Under Counter Alkalizer Installation Instructions

There are five areas that need to be addressed in order to install our Alkalizer unit under a kitchen sink: the electric power, the water supply, the drain, the faucet, and the outlet to the faucet.

1. **Electric power** – People think that this is the easiest to do because most homes have garbage disposals that already supply electric power under the sink. However, that power is usually supplied by a switched circuit and is a dedicated supply through an armored cable. If there is an outlet, you are in good shape as long as it is a GFI receptacle. If not you need to tap into a power line coming from the backsplash and install a utility box and GFI outlet with a waterproof cover.
2. **Water supply** – The only line you need to be concerned with is the cold water supply line. You need to use a WATTS brass “Adapt-a-Valve” T-fitting #666 & connect the 3/8” T to a ¼ turn supply stop to a braided supply line up to the ½” handle connection.
3. **Drain** – The drain line must be kept as low to the floor of the sink cabinet as possible. If there is a cleanout trap, you can drill the front and put in a plastic threaded 3/8” hose barb which you then must caulk around. Or you can use a John Guest fitting and drill a small hole using a threading bit to screw it into. If the P-trap is low enough you can replace the tailpiece with a branch tailpiece and use a rubber boot – OR you can buy a saddle drain tap and drill the arm and hook the drain hose to the fitting connected to the saddle. Either way you need to make sure that the water does not drain higher than half the unit height itself or else it will cause back pressure and leak out the bottom of the unit. If that happens you can usually elevate the unit on top of a cheap rectangular Tupperware bin
4. **Faucet** – If there is no secondary faucet present you must drill the sink twice to accommodate an independent handle and faucet. I use the Delta single hole end unit assembly and matching handle and half of the quick connect hose. The faucet is a regular drinking fountain spigot that usually is used with RO drinking water systems, which I secure in the open position with a cable tie or remove the knob which turns it on and off.
5. **Alkaline water outlet** – The Alkalizer unit must now be partially modified. The top metal gooseneck hose must be removed from the swivel adapter and a couple of WATTS brass fittings must be used in its place. You need to have a 3/8” union with compression threads on each end coupled to a 3/8” x 3/8” compression nut to carry the 3/8” water line. Or you can use a John Guest 3/8” fitting and Teflon tape. The supply and drain hoses can be connected with appropriate barbs and hose clamps.

What you are trying to accomplish is that when you turn the handle for water it allows the water to flow from the cold water supply line through the handle assembly into the Alkalizer, activating the unit, then the alkaline water flows up into the faucet and the acidic wastewater flows out into the drain tap. If someone wishes to access the acidic stream for cleaning purposes, they just need to manually switch the streams by depressing the appropriate button on the unit.

The two things to remember are: 1. That the system cannot have water pressure fed to it constantly like an RO system. That is why you need a separate handle assembly to control the water flow – the system remains in standby mode until the water starts flowing thru it; and 2. That if the machine is leaking on you then there is too much back pressure on it which means that the water flowing into it is greater than the water flowing out of it. The easiest way to remedy this is by not opening the secondary cold water supply you installed more than you need to get the machine to activate. There does not have to be a lot of water pressure flowing into the machine to get it to do its job.