

Boiling Tank Overfill Troubleshooting

Possible causes:

1. **Solenoid Valve** - Unplug your water distiller, drain the boiling tank, dry the boiling tank walls with a few paper towels and keep an eye on it for a while. Without power water should not enter the boiling tank. If you see a trail of water running down the boiling tank wall or the boiling tank fills up over the day or night, you have a bad solenoid valve. Most likely there is sediment or debris stuck in the solenoid valve propping it open. If the diaphragm surface is good, it is possible to breakdown the valve body, remove debris, reassemble, and reinstall. If no water enters the boiling tank, your solenoid valve works as designed, and another issue is causing a overfill condition.

2. **Bushing Kit** – The bushing kit is what seals the boiling tank where the float rod travels through the boiling tank wall. It keeps water and steam inside the boiling chamber and out of the electrical compartment. The manufacturer recommends you replace the bushing kit every 8 years. Most clients will not experience issues until year 12, but it is better to be proactive. You may leave the boiling tank lid off and allow the distiller boiling tank to fill with water, then manually drain the boiling tank. Try this multiple times. As you do this, keep an eye on the float ball to learn if it freely floats or does it hesitate to rise with the water on occasion? If it does not freely float on the water, most likely the bushing kit is too old and holding up the float rod.

Notes:

- **Be very careful.** The distiller power will need to be on to activate the solenoid. If water overfills the boiling tank, you may be electrocuted. **Do not proceed with this step if you are not knowledgeable about electricity and the risks associated with working around it.**

- The distiller storage tank must be less than 2/3rd full or the distiller will be in standby mode, waiting for water to be used before turning on the water solenoid.

- If your water distiller boiling tank overfilled the excess dirty water will have run through the cooling coil and filled the distiller storage tank. Therefore, the water in the distiller storage tank is bad and will require draining empty, rinsing with new distilled water, and sanitizing (see owner's manual).

3. **Upper Micro Switch** - May not be working due to internal failure or is mounted too high on the Lexan bracket (*refer to form - PWS Boiling chamber water level settings*). Use a multi meter to check the resistance between the wired legs. With the micro switch pressed, your meter should show OL (open leg). If there is resistance, and the leads well connected with no oxidized services, there is an internal issue with the micro switch. When the micro switch is not pressed, there should be 100% continuity. If there is resistance, and the leads well connected with no oxidized services, there is an internal issue with the micro switch. If the upper micro switch is mounted too high, the brass actuator bar will fail to reach it before the boiling tank over fills.

4. **Float Ball** – Possibly lost buoyancy due to water filling it from a compromised weld. You can unscrew it from the float rod and shake it. If you hear or feel water inside, it is compromised and requires replacement.

Alternatively, you may arrange to ship your water distiller head to Water Specialties for expert repair service.