

## CLEANING, SANITIZING, AND CARTRIDGE REPLACEMENT PROCEDURE

1. Mix mild cleaning solution of dish soap and clean, potable water in plastic bowl.
2. Empty storage tank and relieve system pressure. Verify tank valve is open. Close feed water supply valve and open product water faucet.

**Icemaker:** Transfer ice cubes from bin/tray to clean freeze container for storage until procedure is done.

3. **CAUTION:** Use air hand pump to avoid damaging tank. Verify product water valve is open before proceeding.

Check product water storage tank air pre-charge using low-pressure gauge (P/N 34002024). Air valve is located on tank base. Pre-charge should be 55 kPa (8 psig) with tank empty and tank valve open.

4. **CAUTION:** Do not attempt to remove filter housings until water flow stops. This reduces pressure inside the system so housings may safely be removed.

**CAUTION:** Additional point-of-use devices (i.e., icemakers) may use filters along their supply line. Remove any filter or treatment device installed between module and device before proceeding.

Remove each filter/membrane housing by turning it counter-clockwise. Remove each filter cartridge as its housing is removed. Discard filters.

**IF MEMBRANE IS PERFORMING SATISFACTORILY:**  
Proceed to Step 5.

**IF MEMBRANE IS DEPLETED OR FOULED:** Discard it and go to Step 7.

5. **CAUTION:** Use sanitary rubber gloves for this procedure to avoid contaminating the sanitizing solution, filters, or membrane. Wear gloves whenever cleaning/sanitizing system components or handling new filter/membrane cartridges.

Clean membrane outer wrap with washcloth and cleaning solution. Do not immerse membrane in solution. Do not scrub membrane wrap with abrasive cleaners. Rinse membrane well with clean potable water.

6. Place membrane into clean plastic bag, close bag.
7. Remove filter/membrane housing "O" rings and wash them with cleaning solution. Rinse them well with clean potable water. Inspect them for damage (i.e., nicks or scratches). Replace damaged "O" rings.
8. **CAUTION:** Do not get Smartap® Water Quality Monitor electronics, wiring, or connectors wet.

Clean filter housings and manifold ports, inside and

outside, with washcloth and cleaning solution. Do not use abrasive materials.

9. Rinse manifold/housings with clean potable water.
10. Inspect manifold and filter housing "O" ring groove area for damage (i.e., nicks or scratches). Replace damaged components.
11. Place small amount of "O" ring lubricant over surface of filter/membrane housing "O" ring. Install "O" ring into filter housing groove.

**TO SANITIZE THE SYSTEM:** Complete Steps 12-34.

**TO INSTALL FILTERS:** Complete Steps 19-34.

**WARNING: WEAR SAFETY GLASSES WHILE PERFORMING THIS PROCEDURE.**

**READ "WARNINGS" INFORMATION ON BLEACH CONTAINER BEFORE USING CONTENTS.**

**HANDE SANITIZING SOLUTION CAREFULLY. AVOID CONTACT WITH UNPROTECTED AREAS.**

12. **CAUTION:** Excessive concentrations of bleach will damage plastic and rubber components. Rinse all parts that contact bleach thoroughly with clean potable water.

Mix sanitizing solution of 1.5 mL (1/3 teaspoon) of household bleach and 3.8 L (1 gallon) of clean, potable water in the bucket. Mix solution well.

13. **CAUTION:** Tighten filter housings by hand only. Do not use tools as they will over-tighten and damage housings. Take care not to cut or pinch o-rings.

Add 236 mL (1 cup or 8 oz.) of sanitizing solution to each filter housing and install them onto the manifold (do not install filters or membrane at this time). Tighten each filter housing by hand only.

14. Slowly open source water supply valve.
15. Open product water faucet. Close faucet as soon as water begins to flow from spout.
16. Wait 5 minutes, then close source water supply valve.
17. Wait 25 minutes, then open product water faucet and let water flow to drain.
18. **CAUTION:** Do not attempt to remove filter housings until water flow stops. This reduces pressure inside the system so housings may be removed safely.

Remove filter housings and dispose of water. Rinse filter housings and manifold ports thoroughly with clean potable water.

## CLEANING, SANITIZING, AND CARTRIDGE REPLACEMENT PROCEDURE

19. **CAUTION:** Do not remove protective plastic bag from replacement filter/membrane cartridges until so instructed.

Install "O" rings into filter housings. Open top of filter bag enough to expose filter cap and "O" ring grooves. Place a small amount of "O" ring lubricant on surface of each "O" ring.

20. **CAUTION:** Tighten filter housings by hand only. Do not use tools as they will over-tighten and damage housings. Take care not to cut or pinch "O" rings.

Install filter and membrane cartridges. Hold cartridge by its protective plastic bag and insert cartridge into manifold turning it 1/4 turn as it enter the port. Slide bag from cartridge and discard. Replace each filter housing as each cartridge is installed.

21. Turn feed water valve slowly to open position.  
22. Confirm system is producing water. Unit will be sending rinse water to drain.

### OPTIONAL SMARTAP WATER QUALITY MONITOR

**TO REPLACE BATTERY:** Perform Steps 23-29.

**NOTE:** Replace battery with a new alkaline 9-volt battery (P/N 31300001).

23. **CAUTION:** Wiring within module cover connects monitor components. If wires, circuit board, or connections are damaged and/or wetted, monitor will not function.

Remove module cover.

24. Disconnect battery. The battery connection is a snap type connector (Figure 1).  
25. Remove battery by sliding it out of its holder.  
26. Carefully slide new battery into its holder.  
27. **CAUTION:** Verify battery connector alignment before making connection (Figure 1).

**CAUTION:** Reconnect new battery after system has been in production mode for at least 5 minutes. This ensures sensing switch is in proper position to record data.

Connect battery by pressing clip onto battery terminals.

28. Test battery connection by activating monitor. Press push button. If an indicator light illuminates, connection is good.

**NOTE:** Release button immediately after light illuminates. Test to confirm battery connection, not water quality.

29. Replace manifold cover and tighten screws.  
30. Open product water faucet. Let water flow until all air has been expelled from the system.  
31. Close product water faucet. Wait 30 minutes, check connections for leaks, and correct if necessary.

Icemaker/Extra point-of-use: Check lines for leaks.

32. Allow storage tank to fill overnight.  
33. **WARNING: DO NOT USE THE FIRST FULL STORAGE TANK OF WATER**

Discard (to drain) first full tank of water by opening product water faucet until water flow stops, then close faucet. This flushes sanitizing solution from system.

Icemaker: Let tray/bin fill with ice cubes. Discard all ice cubes to drain. This flushes sanitizing solution from lines to icemaker. Replace delivery device filter (if applicable).

34. System is ready to use. Should there be any aftertaste or odor, drain storage tank and repeat steps 32 and 33.

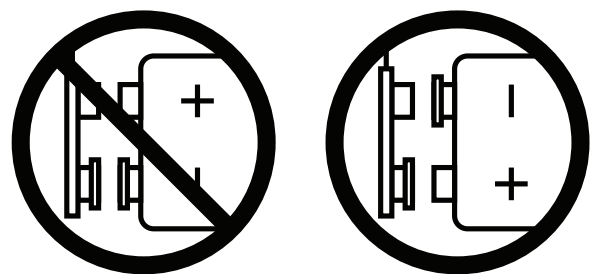


Figure 1: Smartap Battery Connections

### DO NOT USE THE FIRST FULL STORAGE TANK OF WATER

Allow reservoir to fill overnight.

Dispense this water to drain.

This process removes sanitizing solution from system, sanitizes fittings and tubing, and sends solution to drain.