Instructions for Use

A-dec Self-Contained Water System

The self-contained water system supplies water to handpieces, syringes, and the cuspidor cupfill. The system includes a 2- or 0.7-liter water bottle that mounts to the delivery system arm, support center, or cabinet. This system provides an easy way for you to control the quality of your treatment water.

**WARNING** Use only A-dec self-contained water bottles. Do not use other bottles, including glass or plastic beverage bottles. Do not use damaged bottles. These can pose a serious safety hazard while pressurized.

A-dec plastic water bottles cannot withstand heat sterilization. Attempting to do so will damage the bottle and your sterilizer.

**CAUTION** A-dec self-contained water systems are not designed to deliver sterile solution. A separate means for administering sterile coolant and irrigant is required if you use the A-dec dental unit for surgical procedures.

**CAUTION** Use caution when using the self-contained water system with accessories that require an uninterrupted water supply (e.g., scalers), as damage may occur without a continuous water source.

**CAUTION** Do not use saline solutions, mouth rinses, or any chemical solutions not specified in this guide in your A-dec self-contained water system. These may damage the system components and cause equipment failure.
Water Quality

How to Choose Treatment Water

The correct water to use in the A-dec self-contained water system depends on the quality of your municipal water. It’s important to choose a source that consistently provides good water quality. A-dec recommends using tap or bottled drinking water with the following guidelines:

- **Tap Water** — If you have confidence in the quality of your municipal water supply, consider using tap water in your self-contained water bottle.

- **Softened Water** — In areas where water hardness is greater than 200 mg/L as calcium carbonate (11.7 grains per gallon, 2.0 mmol/L), A-dec recommends the use of a water softener to prevent the buildup of mineral deposits that may impact delivery system functionality. Water pH should be compliant with local drinking water regulations.

- **Bottled Spring or Artesian Drinking Water** — If you have concerns about the quality of your municipal water supply, use bottled spring or artesian water from a commercial source. Various types of bottled water are commercially available. Bottled spring and artesian water tend to have a mineral content that is neither too high (causing mineral deposits associated with hard water) nor too low.

**WARNING**  A-dec does not recommend the regular use of distilled, deionized, reverse osmosis, or other ultra-pure water types. Long-term use of these water types may damage the delivery system and degrade the system performance.

For additional guidance, refer to the regulations specific to your location.
Water Quality (continued)

Waterline Maintenance

A-dec recommends that you perform a shock treatment on the dental unit waterlines before you use the system for the first time.


**IMPORTANT** For complete details on how to maintain good water quality in your system, see the Instructions for Use provided with ICX and your self-contained water bottle:

- A-dec ICX ................................................... p/n 86.0613.00
- Waterline Maintenance Guide ............... p/n 85.0983.00
Water Bottle Removal and Installation

Follow these procedures to properly remove, refill, and install an A-dec self-contained water bottle:

1. Wash your hands with soap and water before and after handling, filling, and installing the water bottle.
2. Use the master toggle to turn off the system.
3. Loosen the bottle until the air seal breaks.
4. Remove the bottle:
   - 2-liter bottle – push the bottle up while turning, and then pull down to remove.
   - 0.7-liter or 2-liter bottle (threaded top) – turn the bottle to remove.
5. Empty any remaining water from the bottle.
6. Following the ICX instructions for use, drop an ICX tablet into the bottle and fill with treatment water.
   - **WARNING** Avoid touching the A-dec ICX waterline treatment tablet with unprotected skin. For more details, please refer to the instructions for use provided with the ICX tablets (p/n 86.0613.00).
7. Install the bottle:
   - 2-liter bottle – align it with the water bottle receptacle, and then push up and turn.
   - 0.7-liter or 2-liter bottle (threaded top) – align it with the water bottle cap, making sure that the pick-up tube extends straight down into the bottle. Screw the bottle onto the cap until it is secure.
     - **CAUTION** Do not overtighten the water bottle or you may damage the components. It is normal to hear a pressurization sound after the system is turned on.
8. Turn on the system. Air can be heard filling the bottle.
9. Operate the syringe and handpieces to clear any air from the water system.
Water Bottle Maintenance

**CAUTION** The water bottle is under pressure during normal delivery system operation. Proper use, care, and maintenance are important to preserve the integrity, longevity, and continued safe use of the bottle.

Cleaning and Disinfecting Instructions

**CAUTION** Do not use a dishwasher, automated washer, thermal disinfector, or water exceeding 105°F (40°C) to clean the bottle. The high temperatures of the washer and the chemicals may adversely affect the water bottle and cause it to fail.

Clean the water bottle with mild dishwashing liquid and a bottle brush as needed or in accordance with your organization’s asepsis protocols. Be sure to thoroughly rinse the bottle to avoid any soapy residue.

To disinfect the water bottle, use a dental unit waterline shock treatment product registered with the U.S. Environmental Protection Agency (EPA). Always follow the manufacturer’s instructions.

Be sure to cover or cap the bottle and swirl to ensure all surfaces are coated. Follow the manufacturer’s recommended exposure time for the shock treatment and rinsing instructions.

When performing surface disinfection, use only:

- EPA-registered disinfecting wipes* with quaternary ammonium chlorides (“quats”) containing less than 25% isopropyl alcohol
- EPA-registered disinfecting sprays* with high-dilution, water-based phenols

**NOTE** In general, disinfecting wipes (when properly used) are less harmful than disinfecting sprays—primarily due to overspray and lack of consistent application. Always follow the disinfectant manufacturer’s directions for use.

Do not use products that have:

- Greater than 10% sodium hypochlorite (bleach)
- Hydrogen peroxide with a pH less than 4
- Greater than 50% isopropyl alcohol

Handling and Inspection

Handle the water bottle with care. Always inspect for damage and excessive discoloration before you fill the bottle and any time the bottle is dropped. If you find any cracks or other signs of damage, discontinue use immediately, and replace the bottle with a new one.

**IMPORTANT** For more details on cleaning and disinfecting, see the A-dec Equipment Asepsis Guide (p/n 85.0696.00), which is available in the Resource Center at [www.a-dec.com](http://www.a-dec.com).
Water Bottle Replacement

Replacement Frequency
Water bottles are a service item and should be replaced every 5 years.

CAUTION Use beyond the expiration date may result in damage to the water bottle. Proper use, care, and maintenance are important to preserve the integrity, longevity, and continued safe use of the bottle during the service life.

How to Determine When to Replace a 2-Liter Bottle
Inspect the bottom of the water bottle for one of the following:

- **Expiration date** – Replace the bottle after this date.
- **Manufacture date** – Add 5 years to this date to determine the replacement date.
- **No date** – Contact A-dec Customer Service or your local authorized dealer.

How to Determine When to Replace a 0.7 or 2-Liter Bottle (Threaded Top)
Inspect the bottom of the water bottle for the manufacture date:

- The arrow points to the replacement month.
- For the replacement year, add 5 years to the year shown.
Treatment During Periods of Inactivity

If you plan to leave the dental equipment unused for less than two weeks, leave the water (treated with ICX) in the system.

If you plan to leave the dental equipment unused for longer than two weeks, do the following:

1. Test the water quality and perform a shock treatment if necessary. For details, refer to the Waterline Maintenance Guide (p/n 85.0983.00).
2. Remove and empty the water bottle, then re-attach it.
3. Flush the handpieces and use the air-water syringe until all residual water is removed from the system.
4. Upon your return, perform a shock treatment on the system, then resume use of ICX.
5. Before first use, test the water quality to ensure it meets your water quality standards.

Specifications and Warranty

Minimum Available Capacity

<table>
<thead>
<tr>
<th>Bottle Size</th>
<th>Capacity</th>
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<tbody>
<tr>
<td>2-liter</td>
<td>1.80 liters</td>
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<tr>
<td>0.7-liter</td>
<td>0.72 liters</td>
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Recommended Operating Air Pressure

80–125 psi (550 to 860 kPa)

**IMPORTANT** For warranty, electrical specifications, identification of symbols, and other regulatory requirements, see the Regulatory Information, Specifications, and Warranty document (p/n 86.0221.00), which is available in the Resource Center at www.a-dec.com.

**NOTE** Specifications are subject to change without notice. Requirements may vary depending on your location. For more information, contact your authorized A-dec dealer.