Instructions for Use

A-dec 300 Support Systems

351, 352, and 353 Assistant's Instrumentation
362 and 363 Support Center and Cuspidor

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For required regulatory information and the A-dec warranty, see the *Regulatory Information, Specifications, and Warranty* document (p/n 86.0221.00) available in the Resource Center at www.a-dec.com.

Product Service

Product service is available through your local authorized A-dec dealer. For service information, or to locate an authorized dealer, contact A-dec at 1.800.547.1883 in the USA and Canada or 1.503.538.7478 worldwide, or visit www.a-dec.com.

Product Models and Versions Covered in This Document

Model	Version	Description
351	A, B	Assistant's Instrumentation
352/353	A	Assistant's Instrumentation
362/363	A	Support Center and Cuspidor

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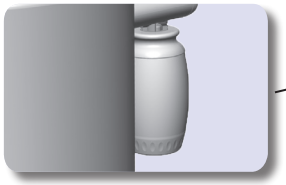

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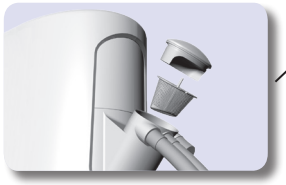

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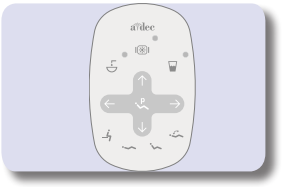

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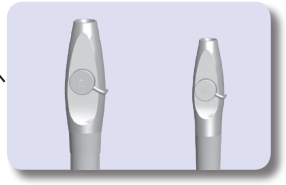

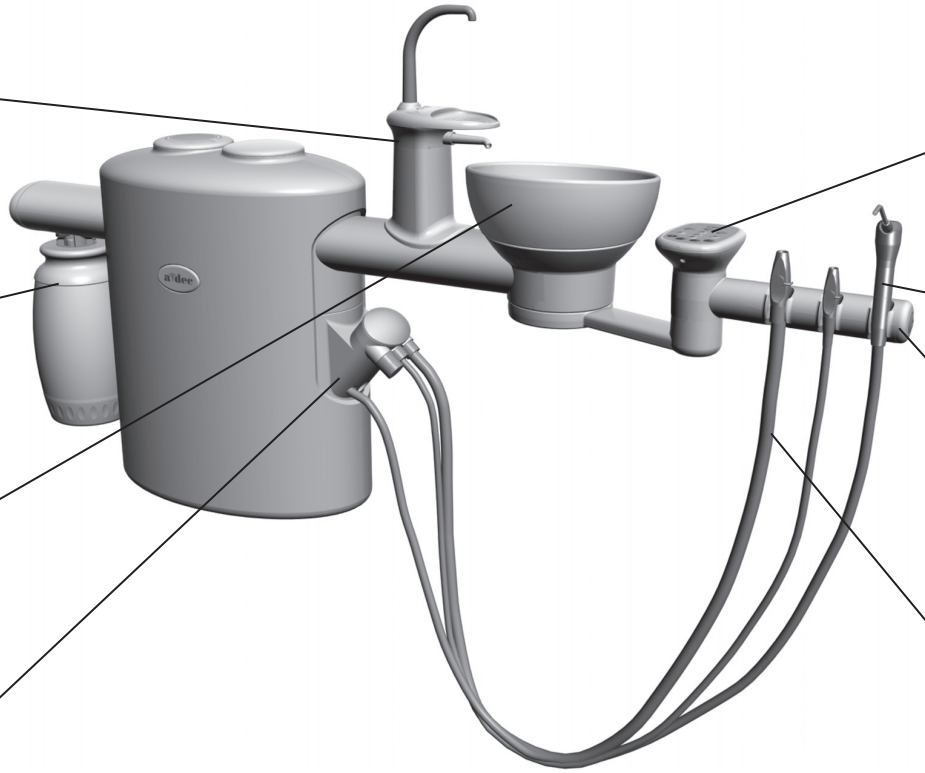

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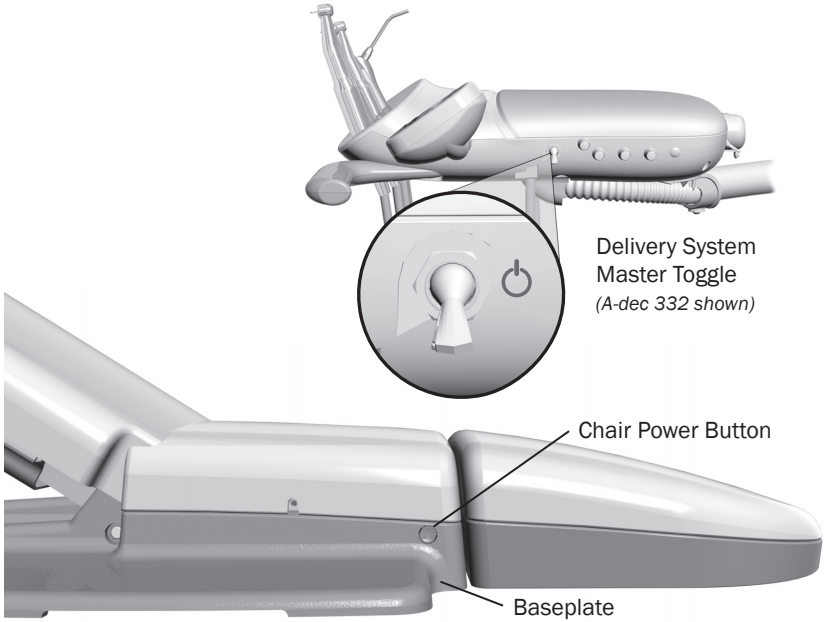
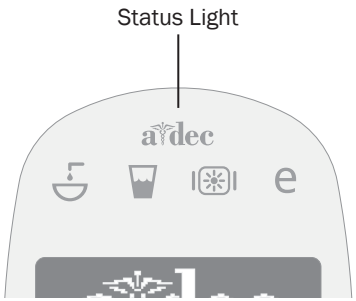
Power On/Off





NOTE A-dec recommends that you perform a shock treatment on the dental unit waterlines before you use the system for the first time. For more information, see "Waterline Maintenance" on page 9.

Master Toggle

Use the master toggle to turn on the power, water, and air. The master toggle is normally located on the delivery system, but may instead be located on the support center or floor box on chairs without a delivery system.

If there is no power to the system, verify that the chair power button is pushed in. The chair power must be on in order for the master toggle to control system power.

When to Turn Off the Power

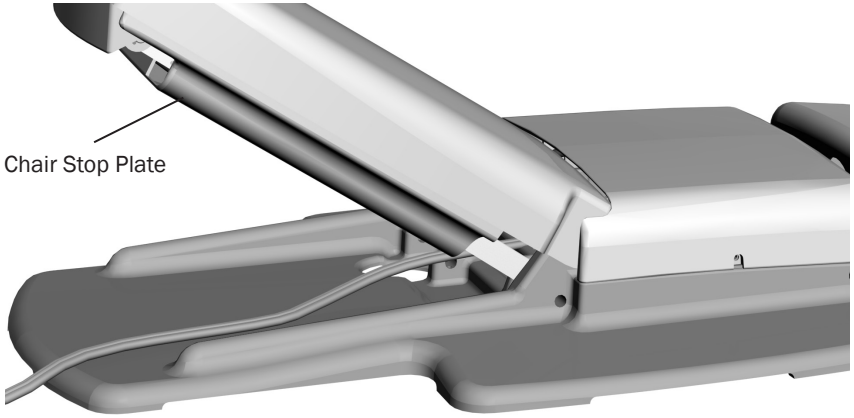
To save energy, turn off the power at the end of the work day and during longer periods of non-use.

Touchpads and the Status Light

The A-dec logo on the touchpad illuminates when the system is on and ready for use. If the status light blinks, it may indicate that a safety feature has interrupted chair motion. See "Chair Safety Features" on page 3 for more information.

For complete details on touchpad functionality, please see your delivery system Instructions For Use.

Chair Safety Features



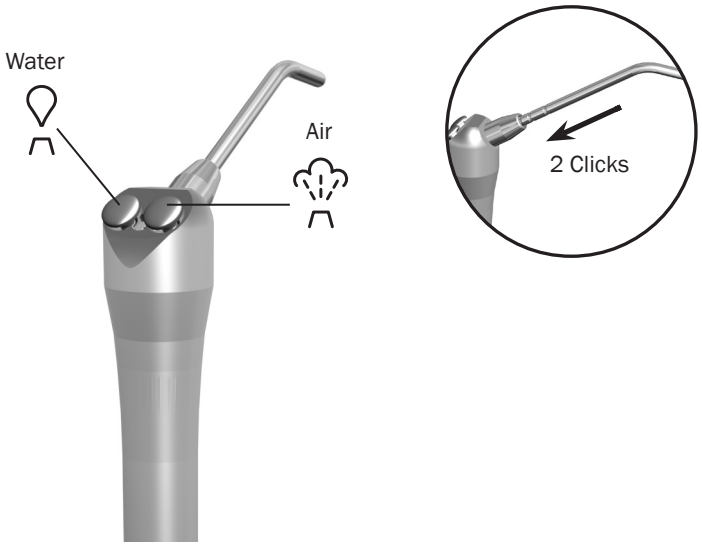
A-dec dental chairs and systems include several features designed to improve safety. Activated stop switches may halt the chair or prevent it from moving. To help ensure uninterrupted chair motion:

- remove any potential obstructions under the chair and attached modules
- avoid pressing the foot control disk or lever
- keep handpieces properly seated in their holders

If the Chair Stops Unexpectedly

Check the actions listed above to correct the condition. If the downward movement of the chair stopped because of an obstruction, use the touchpad or footswitch to raise the chair and remove the obstruction.

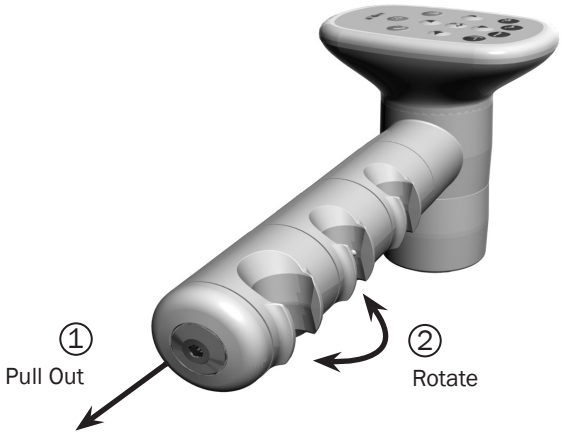
Autoclavable Syringe



To install the A-dec syringe tip, push the tip in until you feel two clicks. Press both buttons simultaneously for the air/water spray.

IMPORTANT For detailed instructions on syringe usage, flow adjustment, and maintenance, see the *A-dec Syringes Instructions For Use* (p/n 85.0680.00).

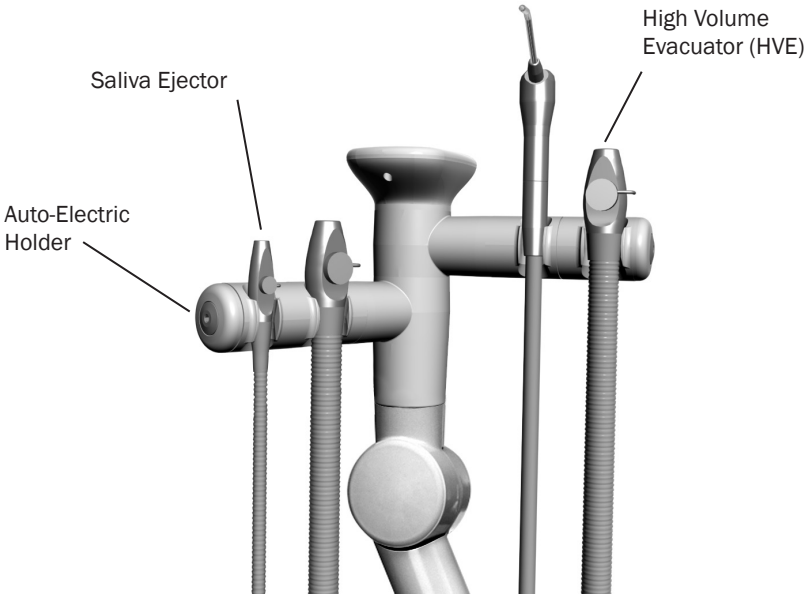
Instrument Holders



The instrument holders independently rotate for customized positioning of each instrument. To reposition, pull the holder slightly away from the adjacent one, rotate it to the desired position, and release.

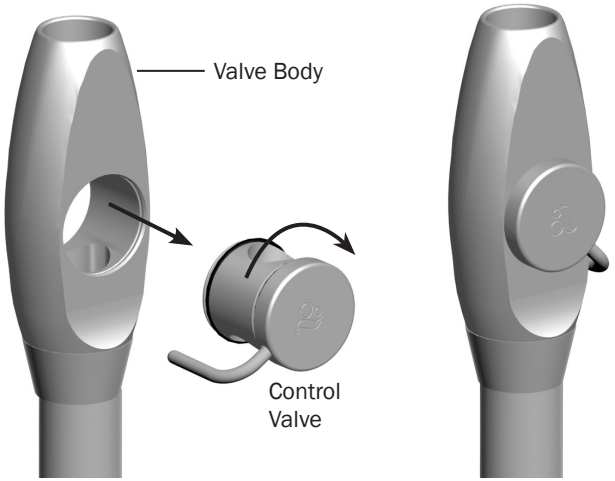
CAUTION Twisting the holder without pulling it away from the adjacent one will damage the mechanism.

Auto-Electric Holders



If you have a chair-side vacuum system and auto-electric holders, lift the HVE or saliva ejector from its holder and open the valve to turn on the vacuum. Return the instrument to its holder to turn off the vacuum.

HVE/Saliva Ejector Left/Right Conversion

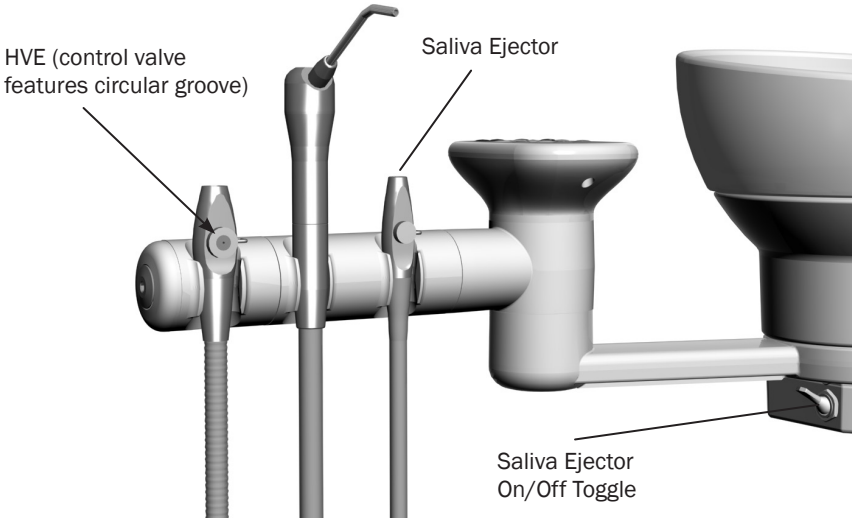


To convert the standard HVE and saliva ejector for left-handed operation, push the control valve out of the valve body, rotate the control valve 180°, and push it back into place.

NOTE Be sure to reinstall the valve on the same side of the valve body. Otherwise, the HVE or saliva ejector will not operate properly.

CAUTION Do not attempt to remove the HVE valve if you have an Air Vacuum System (AVS). The HVE is permanently attached to the tubing in this configuration and cannot be removed *(see below)*.

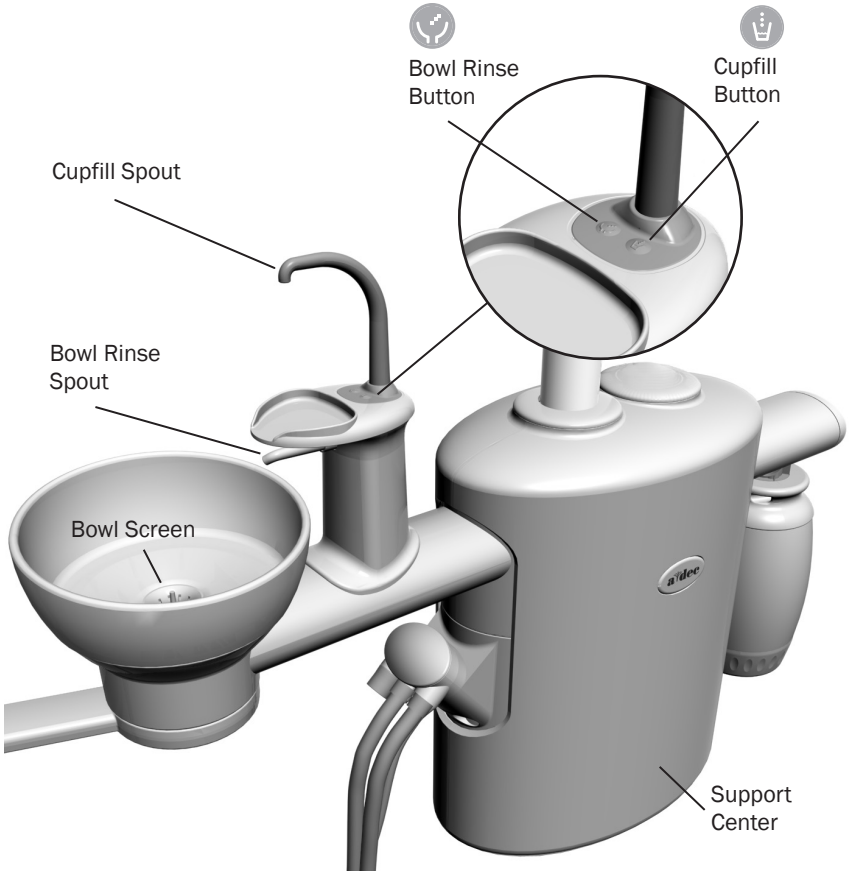
Air Vacuum System (AVS)



The AVS option includes a self-contained air vacuum generator. Also, with this option, the HVE valve body is permanently attached and cannot be removed from the tubing.

To activate the saliva ejector vacuum, use the on/off toggle.

Cuspidor Functions



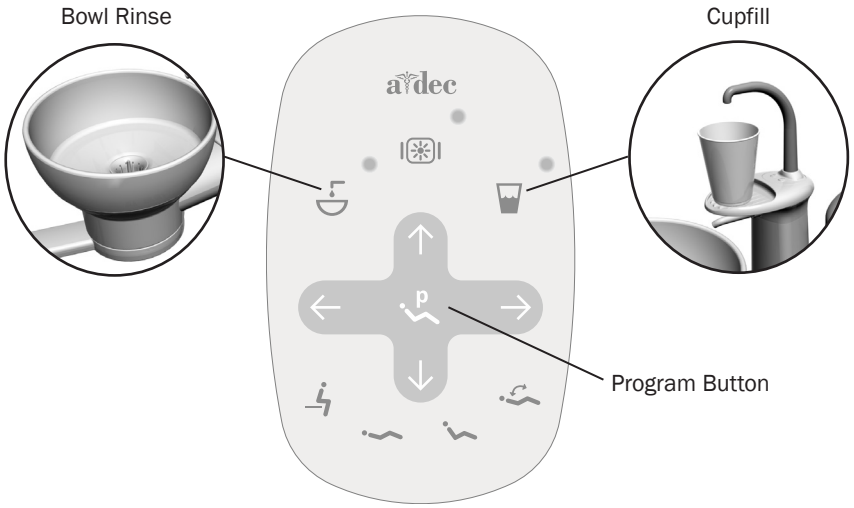
Bowl Rinse and Cupfill

Use the buttons under the cupfill spout or on the touchpad to control the bowl rinse and cupfill functions. The buttons support both programmed and manual operation.

Button	Description and Factory Presets
	Bowl Rinse Operation: • Press and release the bowl rinse button for a timed operation. The factory preset is a 30 second rinse. • Press and release the bowl rinse button twice in less than two seconds to activate the continuous operation mode. Press and release the button again to end the continuous mode. • Press and hold the bowl rinse button for manual operation.
	Cupfill Operation: • Press and release the cupfill button for a timed operation. The factory preset is a 2.5 second fill. • Press and hold the cupfill button for manual operation.

Note: Touchpad symbols are proprietary to A-dec Inc.

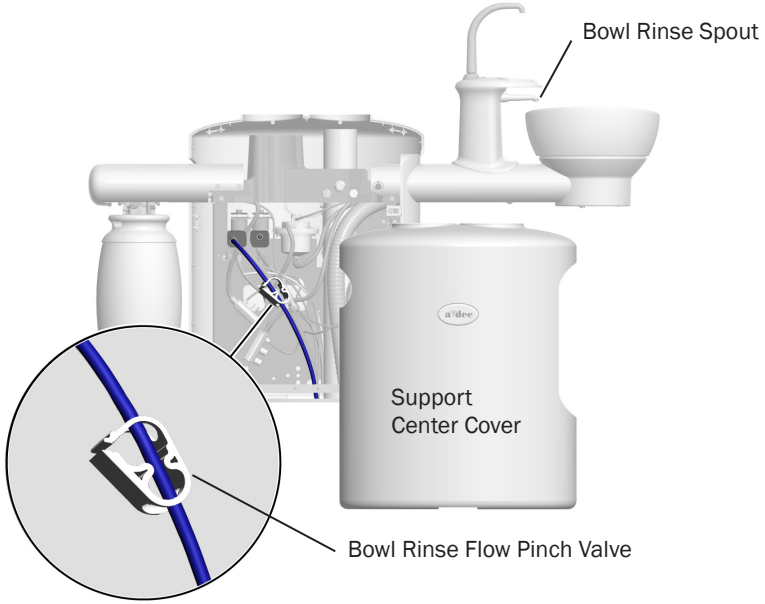
Cuspidor Functions *(continued)*



Customize Bowl Rinse or Cupfill Timing

To reprogram the timed bowl rinse or cupfill functions:

1. Press P on the touchpad, or press and hold the cupfill and bowl rinse buttons under the cupfill spout. Release the button(s) when you hear one beep.
2. Within five seconds, press and hold the cupfill or bowl rinse button for the desired time.
3. Release the button. Three beeps confirm that the program has changed.

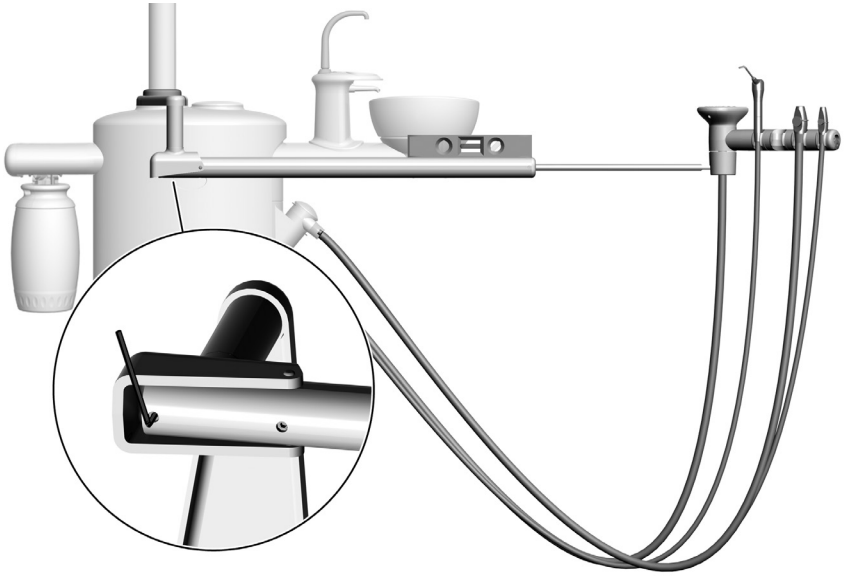


Bowl Rinse Flow Adjustment

The bowl rinse function should provide enough water to completely rinse the cuspidor bowl. If the flow is not sufficient, an adjustment can be made inside the support center:

1. Remove the side cover from the support center by pulling the lower edges of the cover out.
2. With the bowl rinse on, squeeze the pinch valve to reduce the flow. Release the valve to increase the flow.
3. For the best rinsing action, adjust the flow pattern by rotating the bowl rinse spout.

Telescoping Arm Adjustment

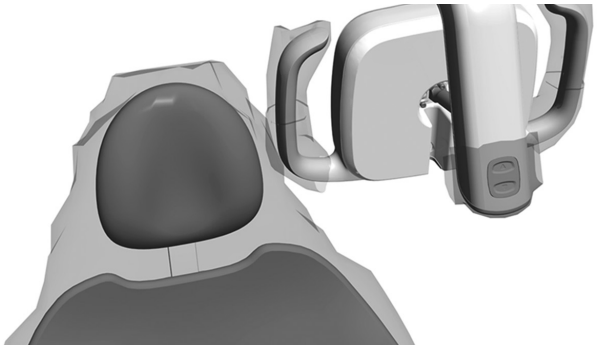


To level the telescoping arm:

1. Extend the arm.
2. Locate the adjustment setscrew underneath the arm.
3. Use a 1/8" hex key and turn the setscrew clockwise to tilt the arm up, counterclockwise to tilt the arm down.

Clean / Maintain

Barrier Protection



A-dec recommends barrier protection for all applicable touch and transfer surfaces. Touch surfaces are areas that come into contact with hands and become potential cross-contamination points during dental procedures. Transfer surfaces are areas that come into contact with instruments and other inanimate objects.

In the USA, barriers must be produced under the Current Good Manufacturing Practice (CGMP) as specified by the U.S. Food and Drug Administration (USFDA). For regions outside the USA, refer to the medical device regulations specific to your location.

NOTE For proper use and disposal of barriers, see the instructions provided by the barrier manufacturer.

IMPORTANT For recommendations on cleaning and chemical disinfection of touch and transfer surfaces (where barrier protection is not applicable or when barriers are compromised), please see the *A-dec Equipment Asepsis Guide* (p/n 85.0696.00).

Waterline Maintenance

Self-Contained Water Bottle

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

For on-going waterline maintenance, A-dec recommends a three-part protocol: continuous use of A-dec ICX® waterline treatment tablets, regular dental unit water quality monitoring, and shock treatment.

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
A-dec Self-Contained Water System ..... p/n 86.0609.00
Waterline Maintenance Guide ..... p/n 85.0983.00

Cuspidor and Drain

Spouts and Bowl

The contoured spouts and smooth bowl of the cuspidor provide for quick and easy cleaning. Remember to empty and clean the bowl screen every time you clean the cuspidor.

CAUTION Do not remove the spouts when cleaning the cuspidor. This will help prevent cleaning solutions from damaging the equipment and contaminating the cupfill water.

CAUTION Do not empty the solids collector screen or bowl screen into the cuspidor. Doing so could plug the cuspidor drain. Dispose of the contents in an appropriate biohazard container according to the regulations specific to your location. After cleaning, always install the bowl screen in the cuspidor bowl to prevent debris from plugging the drain.

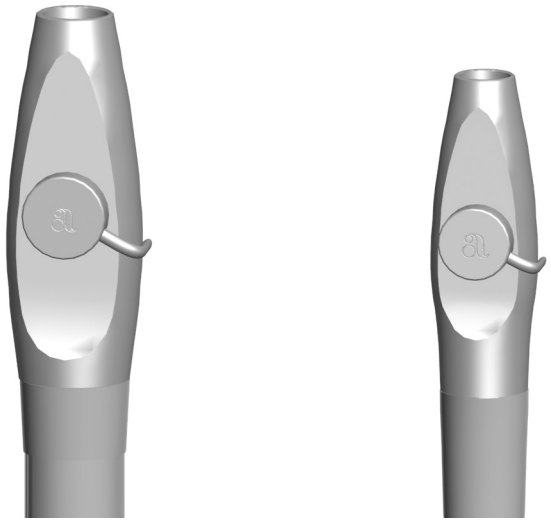
Gravity Drain Tubing

At the end of each day, flush the cuspidor to remove debris from the flexible drain tubing. If the cuspidor is not flushed regularly, debris may build up and impair draining. To flush the cuspidor, run the bowl rinse for about 60 seconds.

Maintenance Parts

For replacement cuspidor bowl screens, contact your authorized A-dec dealer and order p/n 75.0035.03 (package of 5).

HVE/Saliva Ejector Valve Body Assembly Asepsis



NOTE Vacuum lines should be flushed at the end of each day or more frequently according to your clinic's protocols.

If you use barriers to protect the main body of the HVE and saliva ejector, replace the barriers after each patient. Clean and disinfect these instruments at the end of each day or after each patient if the barriers have been compromised. If you do not use barriers, or if you perform oral surgery, always clean and disinfect these instruments after each patient.

Cleaning and Disinfection

To clean and disinfect the HVE and saliva ejector valve body assembly without disconnecting from the vacuum system:

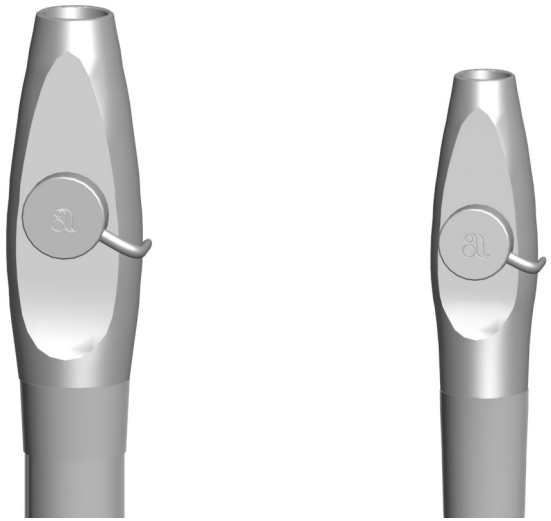
CAUTION Clean the valve body assembly as soon as possible after treating each patient. Do not allow blood and debris to dry on instruments. If you cannot clean it immediately, keep the valve body assembly moist.

NOTE Use an intermediate-level EPA-registered hospital-grade disinfectant containing a tuberculocidal claim with one of the following compositions: high-dilution water-based phenolic formulation or quaternary ammonium compound with less than 25% isopropanol.

NOTE If using a spray solution, spray on a soft, low-lint wipe to apply solution to the valve body assembly.

1. Remove the vacuum tip from the HVE or saliva ejector valve body assembly. Discard disposable vacuum tips.

HVE/Saliva Ejector Valve Body Assembly Asepsis *(continued)*



2. Clean the valve body assembly to remove visible soil using a disinfectant wipe or spray solution. Keep the valve body assembly wet according to the manufacturer's recommended contact time. Repeat, if necessary, until the valve body assembly is visibly clean.
3. Disinfect the valve body assembly using a new disinfectant wipe or spray solution. Keep the valve body assembly wet according to the manufacturer's recommended contact time.
4. Allow the valve body assembly to air dry.
5. Operate the HVE and the saliva ejector valves several times to verify that they rotate smoothly.

NOTE A-dec valve body assemblies are heat tolerant for sterilization. Users may sterilize at their discretion.

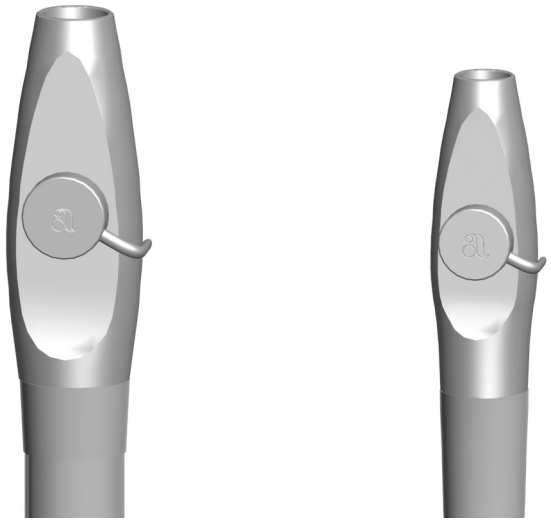
Routine Maintenance and Sterilization

To routinely maintain and sterilize the HVE and saliva ejector when disconnected from the vacuum system (frequency determined by the user):

CAUTION Clean the valve body assembly as soon as possible after treating each patient. Do not allow blood and debris to dry on instruments. If you cannot clean it immediately, keep the valve body assembly moist.

1. Remove the valve body assembly from the vacuum line by pulling it away from the tubing at the tailpiece.
2. Disassemble the valve body by pushing the control valve out of the valve body.
3. Clean soiled valve body components using a soft, low-lint wipe.

HVE/Saliva Ejector Valve Body Assembly Asepsis *(continued)*



4. Prepare a warm (32-43°C [90-110°F]) detergent solution (neutral pH enzymatic detergent or alkaline non-enzymatic detergent), according to the manufacturer's recommended instructions.
5. Soak soiled valve body components in the prepared detergent solution for at least one minute.
6. Remove and inspect O-rings. Discard and replace, if damaged.
7. Use a soft, nylon-bristle brush, or equivalent, to scrub the:
   - Exposed surfaces of the valve body components and O-rings, while submerged, for a minimum of 30 seconds or until all visible soil has been removed.
   - Interior lumen of the valve body at least three times (in and out), clearing any visible soil from brush bristles.
8. Rinse the cleaned valve body components under flowing, warm (32–43°C [90-110°F]) potable water for a minimum of 30 seconds.
9. Allow valve body components to air dry.
10. Sterilize the valve body components according to the following:
    - Dynamic air-removal sterilizers: 4 minutes at 132-135°C (270-275°F)
    - Gravity-displacement sterilizers: 30 minutes at 121-123°C (250-254°F)
11. Allow the load to dry for 30 minutes before removing it from the sterilizer. Ensure the valve body components are completely dry before proceeding.

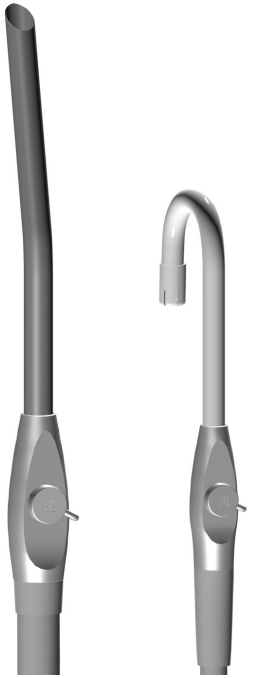
CAUTION Use only silicone lubricant when lubricating the black O-rings in A-dec instruments. Petroleum-based products will cause permanent damage to the O-rings.

12. Prior to use, lubricate O-rings with A-dec silicone lubricant, and reassemble the valve body assembly.

HVE/Saliva Ejector Valve Body Assembly Asepsis *(continued)*

13. Reinstall the valve body assembly on the tubing tailpiece.
14. Operate the HVE and the saliva ejector control valves several times to verify that they rotate smoothly.

HVE/Saliva Ejector Tips



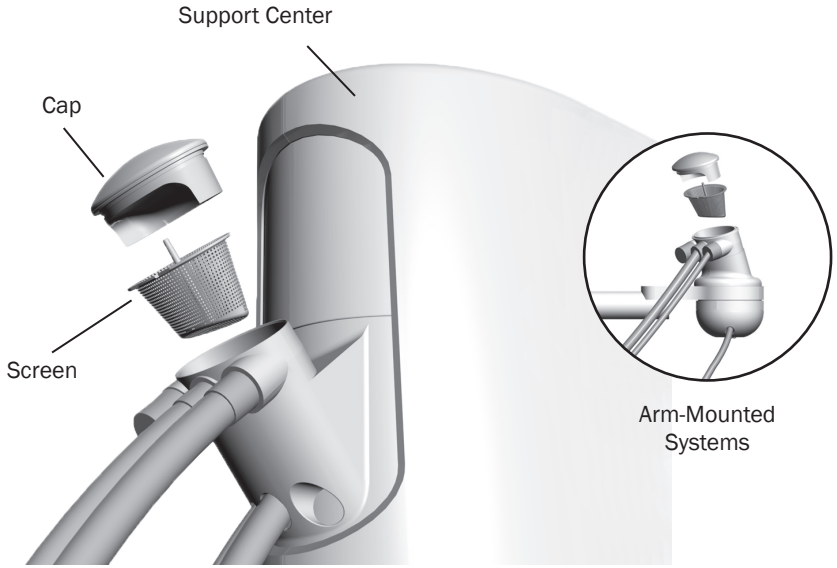
NOTE Select tips that are compatible with your HVE and saliva ejector openings. See "A-dec HVE/Saliva Ejector Tip Connections" on page 12 for specifications.

Disposable Tips

CAUTION Disposable HVE and saliva ejector tips are not sterilizable and should not be reused.

Replace disposable HVE and saliva ejector tips after each use.

Solids Collector



WARNING Infectious waste may be present. Follow asepsis protocol to prevent cross contamination.

The solids collector aids in preventing solids from entering the central vacuum system. To ensure proper suction from the central vacuum and maintain proper treatment room asepsis, discard and replace the solids collector screen at least twice a week.

TIP For solids collector replacement screens, contact your local authorized A-dec dealer and reference Pinnacle p/n 5512 or A-dec p/n 11.1284.01.

To replace the solids collector screen:

1. Turn off the vacuum or open the HVE control valve.
2. Remove the solids collector cap and screen.
3. Discard the screen according to your local regulations.
4. Inspect the collector cap O-ring, replace the O-ring as needed, and lubricate with A-dec silicone lubricant as needed.
5. Insert a new screen in the collector and replace the cap.

Specifications

Minimum Air, Water, and Vacuum Service Requirements

Air: 2.5 scfm (71 sL/min) at 80 - 125 psi (550 - 860 kPa) minimum

Water: 1.5 gpm (5.7 L/min) at 60±20 psi (410±140 kPa) minimum

Vacuum:

(wet): 9 scfm (255 sL/min) at 10±2 inches of Hg (34±7 kPa) minimun

(dry): 12 scfm (340 sL/min) at 4.5±1 inches of Hg (16±3.5 kPa) minimum

HVE/Saliva Ejector Tip Connections

Standard 11 mm HVE:	11 mm (0.433") diameter opening *(for standard HVE tips)*
Large bore 15 mm HVE:	15 mm (0.591") diameter opening *(for large bore HVE tips)*
Standard 6 mm SE:	6 mm (0.236") diameter opening *(for standard SE tips)*

IMPORTANT For 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 Document Library 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.

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