Instructions for Use

A-dec 551 Assistant’s Instrumentation
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Regulatory Information
Regulatory information mandated by agency requirements is provided in the Regulatory Information, Specifications, and Warranty document (p/n 86.0221.00), which is available in the Document Library 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.

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Operate / Adjust

Power On/Off

Master Toggle
Use the master toggle to turn the power on or off. 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 in the on position. 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 something is lodged under the chair. Remove the object to continue chair operation.

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

The instrument holders rotate independently to allow customized positioning for each instrument. Pull the holder slightly away from the adjacent one, rotate to the desired position, and then release. To adjust as a complete set, pull from the holder closest to the touchpad.

![Diagram of Instrument Holders](image)

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

**Auto-Electric Holders**

If both the high volume evacuator (HVE) and saliva ejector have ribbed tubing, it indicates that you have auto-electric holders. A switch in the holder activates the vacuum pump. Lift the instrument and open the valve for normal operation. When the instrument is placed back in the holder, the switch turns off the vacuum.

![Diagram of Auto-Electric Holders](image)
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).

HVE and Saliva Ejector Right/Left Conversion

You can easily convert the standard HVE and saliva ejector for right- or left-handed operation. Push the control valve out of the HVE or saliva ejector valve body by pressing on the small diameter side. While holding the HVE or saliva ejector in its original position, 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.
Solids Collector

The solids collector helps prevent 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** To obtain replacement solids collector screens, contact your authorized A-dec dealer and reference Pinnacle p/n 5512.

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

To replace the solids collector screen:
1. Turn off the vacuum or open the HVE control valve.
2. Remove the solids collector cap.
3. Remove the solids collector screen.
4. Discard the screen according to your local regulations.
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.

**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).

**DANGER** If you use barriers, always replace the barrier film after each patient.

Waterline Treatment

To properly maintain your system and water quality, A-dec recommends that you use an A-dec ICX® tablet with every water bottle refill.

**IMPORTANT** Follow the instructions that appear on the ICX packaging. For complete details on water usage in your A-dec system, see the A-dec Self-Contained Water System Instructions For Use (p/n 86.0609.00) and Waterline Maintenance Guide (p/n 85.0983.00).
HVE/Saliva Ejector Valve Body Assembly Asepsis

**NOTE** Vacuum-lines should be cleaned at the end of each day by evacuating a detergent or water-based detergent-disinfectant through the system.

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

**Disinfection**

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

1. Remove the vacuum tip from the HVE or saliva ejector.
2. Disinfect the valve body assembly by using an intermediate-level disinfectant according to instructions for the disinfectant; A dec recommends a phenolic (dual) water-based disinfectant.
3. Follow the manufacturer’s instructions for disinfectant contact time.
4. 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):

1. Turn off the vacuum or open the control valve before disconnecting the HVE or saliva ejector.
2. Remove the vacuum tip from the HVE or saliva ejector. Discard disposable vacuum tips.
3. Remove the HVE or saliva ejector valve body assembly from the vacuum line by pulling it away from the tubing at the tailpiece.
4. Disassemble the valve body assembly by pushing the control valve out of the HVE or saliva ejector valve body.
5. Inspect the O-rings. Remove and discard if damaged.
6. Clean undamaged O-rings with a soft brush and a health authority approved detergent. O-rings may be cleaned in place or removed and cleaned at the discretion of the user.
7. Clean all exterior and interior surfaces of the valve body and control valve using a health authority approved detergent and the brushes provided with the product (or equivalent). Lumens or channels of the valve body must be cleaned with a brush of the proper length and diameter. The brush must be long enough to extend through the lumen.
8. Rinse thoroughly with water.
9. Process the disassembled valve body assembly components through a washer-disinfector. If a washer-disinfector is unavailable, valve body assembly components must be manually disinfected using a health authority approved disinfectant.

10. Allow the components to dry completely.

11. Sterilize the valve body assembly components at 132-134°C (270-273°F) for 4 minutes in a pre-vacuum sterilizer or at 132-134°C (270-273°F) for 6 minutes in a gravity displacement sterilizer.

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

CAUTION Use only silicone lubricant when lubricating instrumentation O-rings. Petroleum-based products will cause permanent damage to the O-rings.

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 Tip Asepsis

NOTE  Select tips that are compatible with your HVE and saliva ejector openings. See “HVE and Saliva Ejector Openings for Tips” on page 12 for specifications.

Disposable Tips
Heat sterilize stainless steel HVE tips after each use. If you are using disposable HVE and saliva ejector tips, replace them with new tips after each use.

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

Sterilizable Tips
To clean and sterilize a stainless steel HVE tip:
1. Remove the tip from the HVE.
2. Clean and rinse the tip using a mild detergent and water, then allow the tip to dry completely.
3. Sterilize at 132-134°C (270-273°F) for 4 minutes in a pre-vacuum sterilizer or at 132-134°C (270-273°F) for 6 minutes in a gravity displacement sterilizer.
Utilities

Your system utilities are located in the chair or remote floor box. The utilities include air/water shutoff valves, filters, pressure pre-regulators, vacuum and gravity drains, as well as electrical outlets. For detailed information on adjusting and maintaining the utilities, please see your delivery system or cuspidor Instructions For Use.
Specifications

Minimum Air, Water, and Vacuum Service Requirements

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<tr>
<th>Service</th>
<th>Requirement</th>
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<tbody>
<tr>
<td>Air</td>
<td>70.80 L/min (2.50 scfm) at 551 kPa (80 psi)</td>
</tr>
<tr>
<td>Water</td>
<td>5.68 L/min (1.50 gpm) at 276 kPa (40 psi)</td>
</tr>
<tr>
<td>Vacuum</td>
<td>339.84 L/min (12 cfm) at 27 kPa (8&quot; of mercury)</td>
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HVE and Saliva Ejector Openings for Tips

<table>
<thead>
<tr>
<th>Tip Type</th>
<th>Opening Size</th>
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<tr>
<td>Standard HVE</td>
<td>0.435&quot; ± 0.006&quot; (11.05 ± 0.15 mm)</td>
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<tr>
<td>15 mm HVE</td>
<td>0.592&quot; (14.8 mm)</td>
</tr>
<tr>
<td>Saliva Ejector</td>
<td>6 mm (0.24&quot;)</td>
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Warranty

Warranty information is provided in the Regulatory Information, Specifications, and Warranty document (p/n 86.0221.00), which is available in the Document Library at www.a-dec.com.

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.