INSTRUCTIONS FOR USE

A-dec 300 Support Systems

351/352/353 Assistant’s Instrumentation
361 Cuspidor
Copyright

© 2014 A-dec Inc. All rights reserved.

A-dec Inc. makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. A-dec Inc. shall not be held liable for any errors contained herein or any consequential or other damages concerning the furnishing, performance or use of this material. The information in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. A-dec Inc. does not warrant that this document is error-free.

No part of this document may be copied, reproduced, altered, or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without prior written permission from A-dec Inc.

Regulatory Information

Regulatory information mandated by agency requirements is provided with A-dec dental equipment in the Instructions for Use and the separate Regulatory Information, Specifications, and Warranty document (p/n 86.0221.00). These documents are also available at www.a-dec.com in the Document Library.

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.

Trademarks and Additional Intellectual Property Rights

A-dec, the A-dec logo, A-dec 500, A-dec 300, Cascade, Cascade Master Series, Century Plus, Continental, Decade, ICX, ICV, Performer, Preference, Preference Collection, Preference ICC, and Radius are trademarks of A-dec Inc. and are registered in the United States and other countries. A-dec 400, A-dec 200, Preference Slimline, and reliablecreativesolutions are also trademarks of A-dec Inc. None of the trademarks or trade names in this document may be reproduced, copied, or manipulated in any manner without the express, written approval of the trademark owner.

Certain touchpad symbols are proprietary to A-dec Inc. Any use of these symbols, in whole or in part, without the express written consent of A-dec Inc., is strictly prohibited.
CONTENT MAP
Power and the Master Toggle

Power to the support systems is normally activated by the Master toggle on the delivery system. There may also be a power button on the chair base.

To save energy, turn the power off at the end of the work day and during longer periods of non-use. The power should always be turned off before service.

System Status

When the A-dec logo on the touchpad or the status light on the A-dec chair illuminates, the system is on and ready for use. A blinking status light may indicate that something is lodged under the equipment, or that the chair is “locked out.” For more information, see the Instructions For Use that came with your delivery system or chair.
Self-Contained Water System

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

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) included with your equipment.

---

Autoclavable Syringe

Push in the A-dec syringe tip until you feel two clicks. Press both buttons simultaneously for the air/water spray. For detailed instructions on syringe usage and maintenance, see the A-dec Syringes Instructions For Use, p/n 85.0680.00.
Instrument Holder Adjustment

The instrument holders rotate independently to allow customized positioning for each handpiece. Pull the holder slightly away from the adjacent one, rotate to the desired position, and then release.

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

Auto-Electric Holders

Your assistant’s instrumentation may include optional auto-electric holders that provide vacuum on/off switching. When the high volume evacuator (HVE) or saliva ejector is lifted from an auto-electric holder, a switch in the holder activates the vacuum pump. When the instrument is placed back in the holder, the switch turns the vacuum off. If both the HVE and saliva ejector have ribbed tubing, then you have auto-electric holders.
HVE/Saliva Ejector Left/Right Conversion

You can easily convert the standard HVE and saliva ejector for right- or left-handed operation. Push the valve out of the HVE or saliva ejector body by pressing on the small diameter side. Rotate the valve 180° and push it back into place.

**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 Air Vacuum System (AVS) option includes a self-contained air vacuum generator. Although the HVE and saliva ejector operate the same way, the saliva ejector requires a separate switch to activate the vacuum. Also, the HVE valve body in this configuration cannot be removed from the tubing.
The A-dec 300 cuspidor comes factory preset with automatic timing for cupfill and bowl rinse operations. Both functions can be operated and programmed from the manual buttons under the cupfill spout or the touchpad.

For both the cupfill and bowl rinse buttons, a quick press activates timed operation. A long press activates manual operation.

<table>
<thead>
<tr>
<th>Button Description and Factory Presets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cupfill Button:</strong></td>
</tr>
<tr>
<td>• Press and release the cupfill button for a timed operation. The factory preset is a 2.5 second fill.</td>
</tr>
<tr>
<td>• Press and hold the cupfill button for manual operation.</td>
</tr>
<tr>
<td><strong>Bowl Rinse Button:</strong></td>
</tr>
<tr>
<td>• Press the bowl rinse button for a timed operation. The factory preset is a 30 second rinse.</td>
</tr>
<tr>
<td>• Press the bowl rinse button twice in less than two seconds and the continuous operation is activated. To stop the continuous bowl rinse, press the button again.</td>
</tr>
<tr>
<td>• Press and hold the bowl rinse button for manual operation.</td>
</tr>
</tbody>
</table>

Note: Touchpad symbols are proprietary to A-dec Inc.
Customize Cuspidor Functions
To reprogram the timed cupfill or bowl rinse functions:
1. Press 🔄 on the touchpad or press and hold both the cupfill and bowl rinse buttons under the cupfill spout. Release them when you hear one beep.
2. Press and hold the cupfill or bowl rinse button for the desired time.
3. Release the button. You’ll hear three beeps confirming the program has changed.

Cuspidor Bowl Rinse Flow Adjustment
Adjustments to the cuspidor bowl rinse flow are made inside the support center. Complete the following steps to adjust the bowl rinse:
1. Remove the side cover from the support center by pulling the lower edges of the cover out.
2. With the cuspidor bowl rinse on, tighten or loosen the pinch valve to adjust the flow.
3. Rotate the bowl rinse spout to adjust the flow pattern and achieve the best rinsing action.
Level the Telescoping Arm

Complete the following steps to level the telescoping assistant’s instrumentation arm:

1. Extend the telescoping arm.
2. Locate the adjustment setscrew underneath the telescoping arm.
3. Insert a 1/8” hex key and level the arm:
   ○ Turn the key clockwise to tilt the arm up.
   ○ Turn the key counterclockwise to tilt the arm down.
CARE AND MAINTENANCE

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 (US FDA). 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) included with your equipment.

CAUTION If you use barriers, always replace the barrier film after each patient.
Waterline Maintenance Protocol

A-dec’s recommendation for waterline maintenance is based on continuous use of the A-dec ICX waterline treatment tablet. ICX is intended for use with potable water and should be used in conjunction with regular dental unit water testing and following a flush (or shock) treatment with an antimicrobial product registered with the U.S. Environmental Protection Agency (EPA). For detailed procedures using ICX, see the instructions that came with that product. For more information on waterline maintenance, see the Self-Contained Water System Instructions For Use, p/n 86.0609.00.

Cleaning the Cuspidor

Remember to empty and clean the bowl screen every time the cuspidor is cleaned.

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

CAUTION Do not empty the solids collector or bowl screens into your cuspidor. Doing so could plug the cuspidor drain. After cleaning, always install the bowl screen in the cuspidor bowl drain to prevent debris from plugging the drain.

Gravity Drain Cleaning

At the end of each day, flush the drain to remove debris from the flexible drain tubing. If the drain is not flushed regularly, debris may build up and impair cuspidor draining. To flush the drain, run the bowl rinse several times until water flows down the drain for about 60 seconds. With Post Mount systems, raise the chair to increase flow.
Syringe Tip Cleaning and Sterilization

**CAUTION** Disposable syringe tips are not sterilizable and should not be reused.

All syringe tips are considered critical items and must be heat sterilized or disposed of after each use.

**Precleaning**
Always preclean the syringe tips before sterilization.
1. Remove the tip from the syringe.
2. Immerse the tip in a holding solution until ready for ultrasonic cleaning.
3. Clean the tip ultrasonically. Follow the manufacturer’s instructions that came with the ultrasonic cleaning device.
4. Purge all cleaning agents from the tip before sterilization.

**Sterilization**
Follow these steps to sterilize syringe tips:
1. Rinse the syringe tips in clear water.
2. Flush with isopropyl alcohol or equivalent sterilant-disinfectant solution.
3. Heat sterilize using a steam autoclave for at least 4 minutes at a dwell temperature of 134°C (273°F).
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.
HVE/Saliva Ejector Valve Body Assembly Asepsis (continued)

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.

CAUTION Do not attempt to remove the HVE body or valve if you have an Air Vacuum System. The HVE is permanently attached to the tubing in this configuration and cannot be removed for sterilization. Instead, use barrier film produced under FDA good manufacturing practices for protection on the HVE body, making sure to replace the barrier after each use.
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 17 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.
Solids Collector

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.
3. Remove the solids collector screen.
4. Discard the screen according to your local regulations.
5. Insert a new screen in the collector and replace the cap.

Utilities

A-dec 300 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 the Instructions For Use that came with your delivery system.
SPECIFICATIONS

Minimum Air, Water, and Vacuum Service Requirements
Air: 70.80 L/min (2.50 scfm) at 551 kPa (80 psi)
Water: 5.68 L/min (1.50 gpm) at 276 kPa (40 psi)
Vacuum: 339.84 L/min (12 cfm) at 27 kPa (8" of mercury)

HVE and Saliva Ejector Openings for Tips
Standard HVE: 0.435" ± 0.006" (11.05 ± 0.15 mm)
15 mm HVE: 0.592" (14.8 mm)
Saliva Ejector: 6 mm (0.24")

IMPORTANT  For electrical specifications, identification of symbols, and other regulatory requirements, see the Regulatory Information, Specifications, and Warranty document (p/n 86.0221.00) included with your equipment. This document is also available at www.a-dec.com in the Document Library.

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

WARRANTY

Warranty information is provided in the separate Regulatory Information, Specifications, and Warranty document (p/n 86.0221.00) included with your equipment. This document is also available at www.a-dec.com in the Document Library.