

## Instructions for Use

### **Performer<sup>®</sup>**

Dental Chair, Delivery System, Assistant's Instrumentation,  
Support Center with Cuspidor, and Dental Light

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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](http://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](http://www.a-dec.com).

## Product Models and Versions Covered in This Document

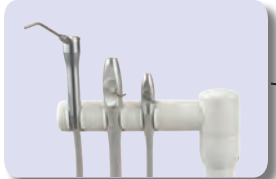
Model	Versions	Description
Performer	B	Assistant's Instrumentation
Performer	B	Chair
Performer	B	Delivery System
Performer	B	Dental Light
Performer	B	Support Center

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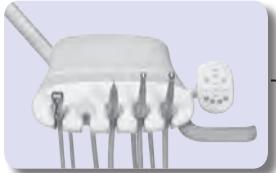
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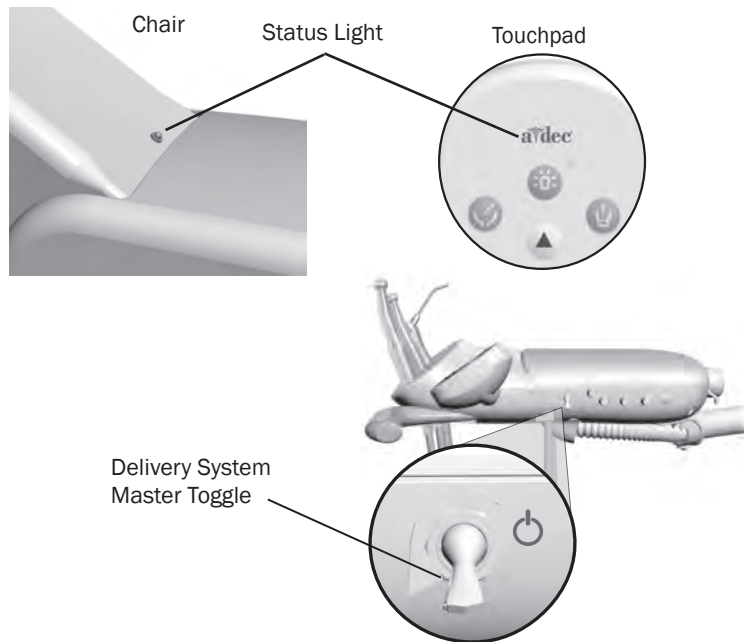
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# Chair

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## Power and System Status



### Power On/Off

To power on the Performer dental chair:

1. Verify that the chair is plugged into the mains supply.
2. Flip the master toggle up to turn on the chair. The master toggle is located on the delivery system.

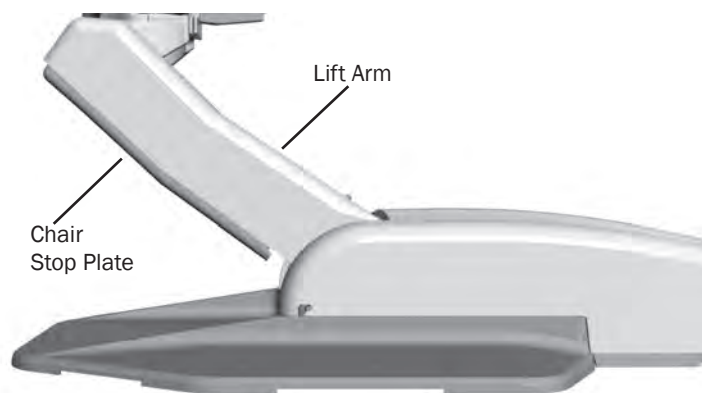
The Performer dental chair does not have an power button.

When the A-dec logo on the touchpad or the status light on the chair lift arm illuminates, the system is on and ready for use. If the status light blinks, the stop switch has been activated. See “Chair Safety Features” below for more information.

### When to Turn Off the Power

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

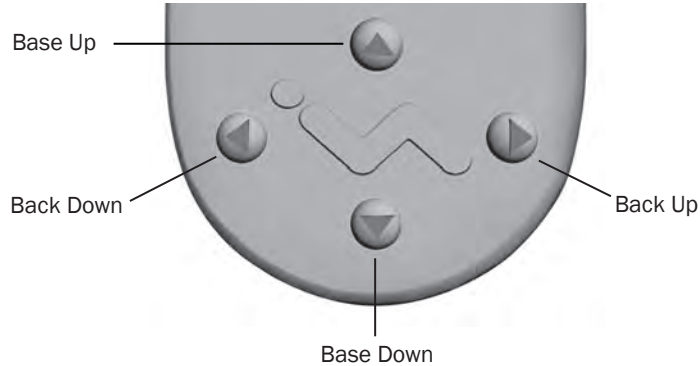
- remove any potential obstructions under the chair and attached modules
- avoid pressing the foot control disc or lever
- keep handpieces properly seated in their holders

### If the Chair Stops Unexpectedly

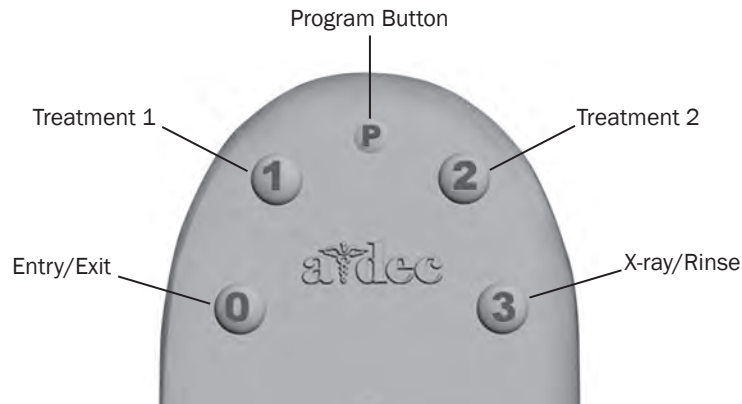
Check the actions listed above to correct the condition. If the downward movement of the chair stopped because of an obstruction, use the touchpad or footswitch to raise the chair and remove the obstruction.

## Footswitch Chair Controls

### Manual Controls



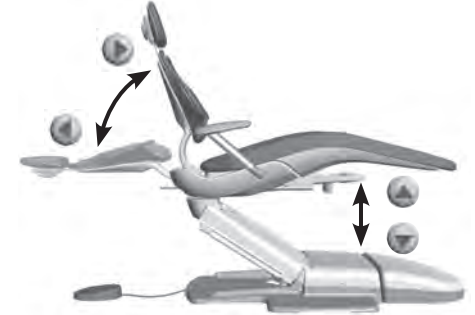
### Programmable Controls



The A-dec touchpad and footswitch control chair movement in the same way. See “Touchpad Controls,” on page 12, for detailed information about your touchpad controls.

### Manual Controls

Press and hold an arrow button until the chair is in the desired position. The horizontal arrows raise and lower the chair back. The vertical arrows raise and lower the chair base.

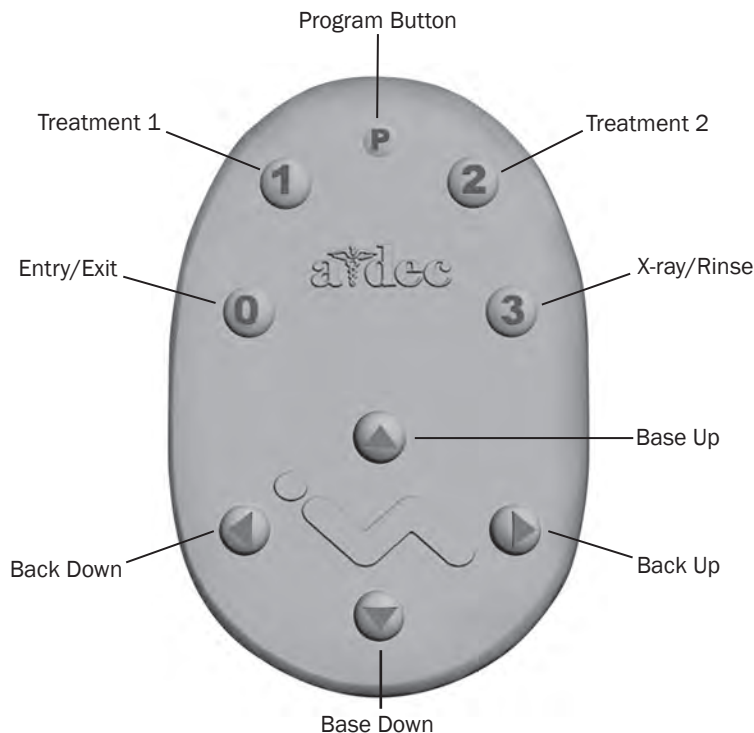


### Programmable Controls

Press and release a programmable button to move the chair to a preset position. These buttons are programmed at the factory as follows:

Icon	Position	Factory Setting
0	Entry/Exit	Positions the chair for patient entry/exit.
1	Treatment 1	Positions the chair base and back down.
2	Treatment 2	Positions the chair base down and back up.
3	X-ray/Rinse	Moves the chair to either x-ray or rinse position. Press again to move the chair to the previous position.

## Footswitch Chair Controls *(continued)*



**WARNING** Ensure that the patient is positioned safely before using the manual or programmable chair controls. Never leave the patient unattended while the chair is in motion. Always take extra care with small children and patients with limited mobility.

To stop the chair at any point during programmed movement, push any chair positioning button on the footswitch or touchpad.

### Reprogram Buttons 0, 1, and 2

To change the factory preset chair positions assigned to the entry/exit and treatment buttons (0, 1, 2):

1. Use the manual controls to position the chair as desired.
2. Press and release P. One beep indicates that the programming mode is on.
3. Within five seconds, press the chair position button you wish to reprogram (for example, press 1). Three beeps confirm that the new setting is programmed into memory.

### Reprogram X-Ray/Rinse Button

The x-ray/rinse button (3) is preset to move the chair and patient into an upright position for x-rays or cuspidor access. A second press of 3 returns the chair to the previous position.

You can reprogram 3 to function in a similar way to the other programmable chair preset buttons. To change its function:

1. Press and hold P and 3 at the same time for three seconds.
  - o One beep indicates 3 is set as another programmable chair preset button.
  - o Three beeps confirm that 3 is configured as the x-ray/rinse factory preset (which toggles between the x-ray/rinse and the previous chair position).
2. If you reprogram 3 as another programmable button and want to assign a different chair position, follow the steps outlined in "Reprogram Buttons 0, 1, and 2" above.

### Chair Back and Chair Base Down Speed Adjustment

The speed at which the chair back and base move can be adjusted. Contact your authorized A-dec dealer to reduce/increase the speed at which the chair back and base move.

## Headrest Positioning



The dual-articulating headrest includes several adjustment features that improve your access to the oral cavity and increase patient comfort.

Use the glide bar to accommodate a variety of patient heights. Simply pull up or push down on the headrest until it is in the desired position. The gliding headrest cushion provides additional height adjustment.



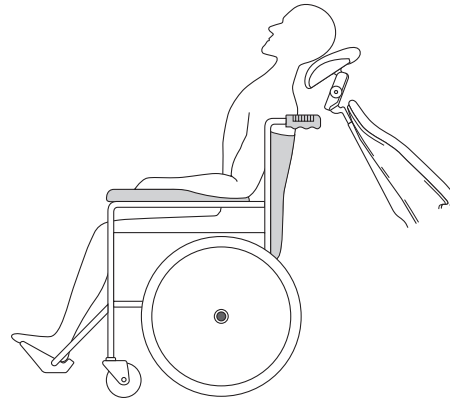
**CAUTION** If the glide bar has exceeded its maximum recommended working height, a warning line will be visible on the patient's side of the glide bar. Do not use the headrest in a position where this warning line is visible.

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The locking knob allows you to easily adjust the headrest for a full range of positions. Release the headrest by turning the locking knob counterclockwise, then adjust the headrest for a proper fit. Lock the headrest in the desired position by turning the knob clockwise.



## Headrest Position for Wheelchairs



To position the headrest for wheelchairs:

1. Remove the headrest from the dental chair.
2. Rotate the headrest 180° and slide the glide bar into the backrest until it stops.
3. Position the backrest to its full upright position.
4. Position the wheelchair and the dental chair back to back.
5. Move the dental chair up or down, as needed, to adjust the headrest height.
6. Lock the wheelchair wheels.

## Patient Positioning



To properly seat patients in the chair, ask the patient to sit as far back in the seat pocket as possible. This ensures the best alignment with the lumbar support and headrest.

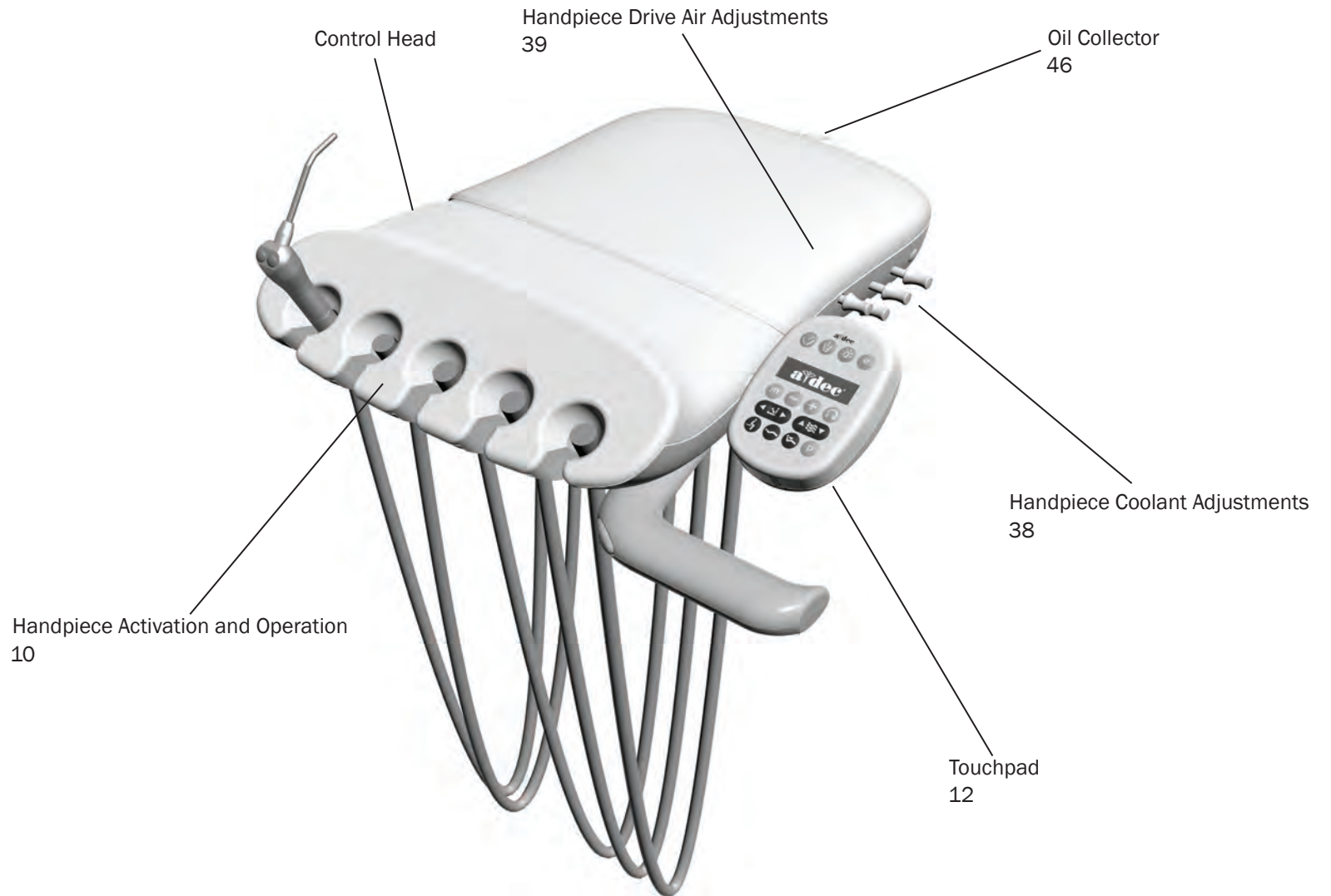
For optimal comfort, patients should place their forearms on the armrests or keep their arms comfortably folded on their lap.



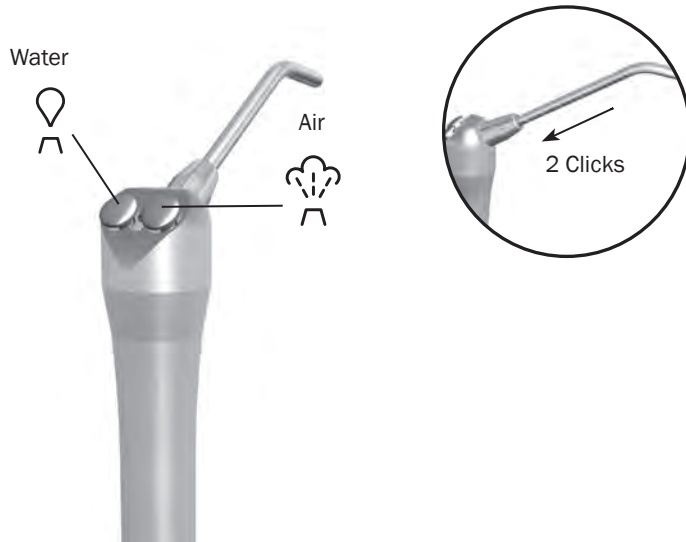
**WARNING** Do not allow patients to drop their arms behind the armrests or under the backrest during chair movement.

# Delivery System

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## Autoclavable Syringe

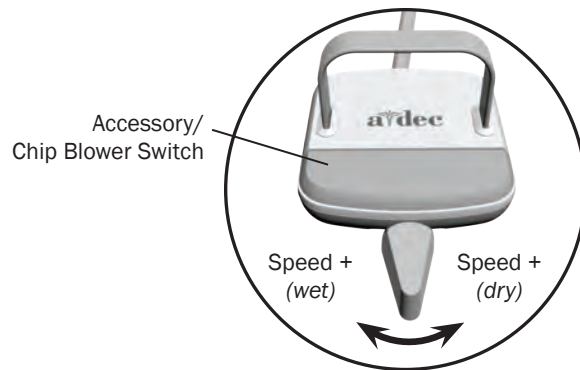
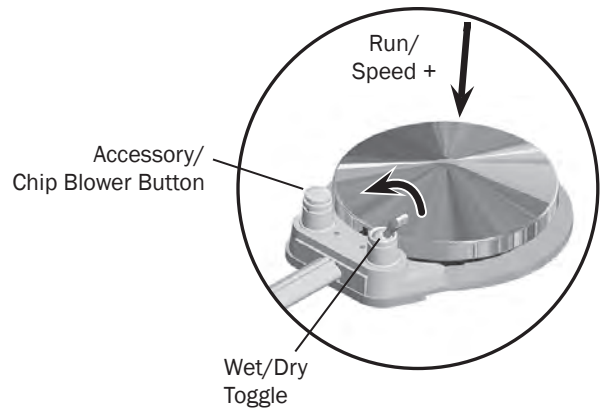


To install the A-dec syringe tip, push the tip in until you feel two clicks. Press both buttons simultaneously for the air/ water spray.



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

## Handpiece Activation and Operation



To activate a handpiece, lift it from the holder. Use the foot control to perform the desired handpiece operation.

Control	Operation	Procedure
<b>Disc Foot Control</b>	Run a handpiece.	Press on the disc. Push down to increase speed.
	Run a handpiece with or without water coolant.	Move the wet/dry toggle toward the blue dot for wet operation or away from the blue dot for dry operation. Then press on the disc.
	Run the optional accessory or chip blower.	Press the accessory/chip blower button.*
	Operate the intraoral camera.	Press on the disc to capture an image.*
<b>Lever Foot Control</b>	Run a handpiece with water coolant.	Move the lever to the left. Move farther to increase speed.
	Run a handpiece without water coolant.	Move the lever to the right. Move farther to increase speed.
	Run the optional accessory or chip blower.	Press the accessory/chip blower switch.*
	Operate the intraoral camera.	Move the lever to the left or right to capture an image.*

\* Contact your authorized A-dec dealer for questions about the operation or configuration of your integrated A-dec accessories.

For handpiece coolant adjustments, see page 38.



**NOTE** The lever foot control function can be reversed by a technician (change left direction to dry, right direction to wet). For more details, contact your authorized A-dec dealer.

## Control Head Positioning



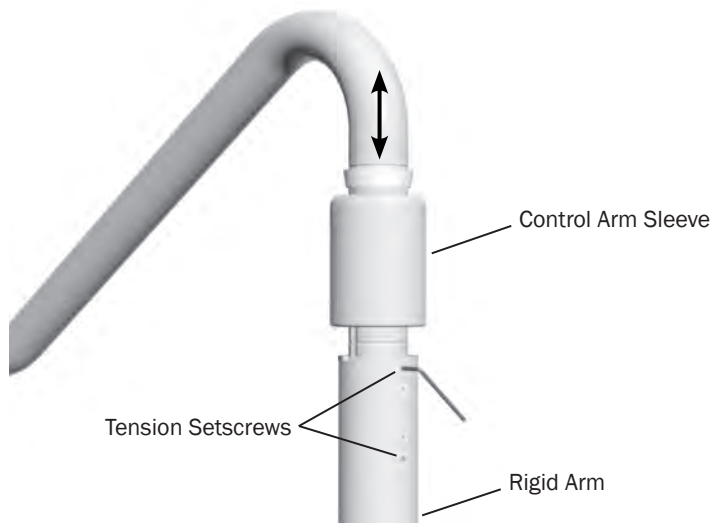
To adjust the control head height:

1. Lift the control arm.



**NOTE** The height adjustment range for the control arm is 5" (127 mm).

2. Slide the stop ring to the desired height groove.
3. Lower the control arm until it stops.



If the control arm is difficult to rotate, or rotates too freely, you should adjust the tension setscrews on the rigid arm.

To adjust the control arm tension:

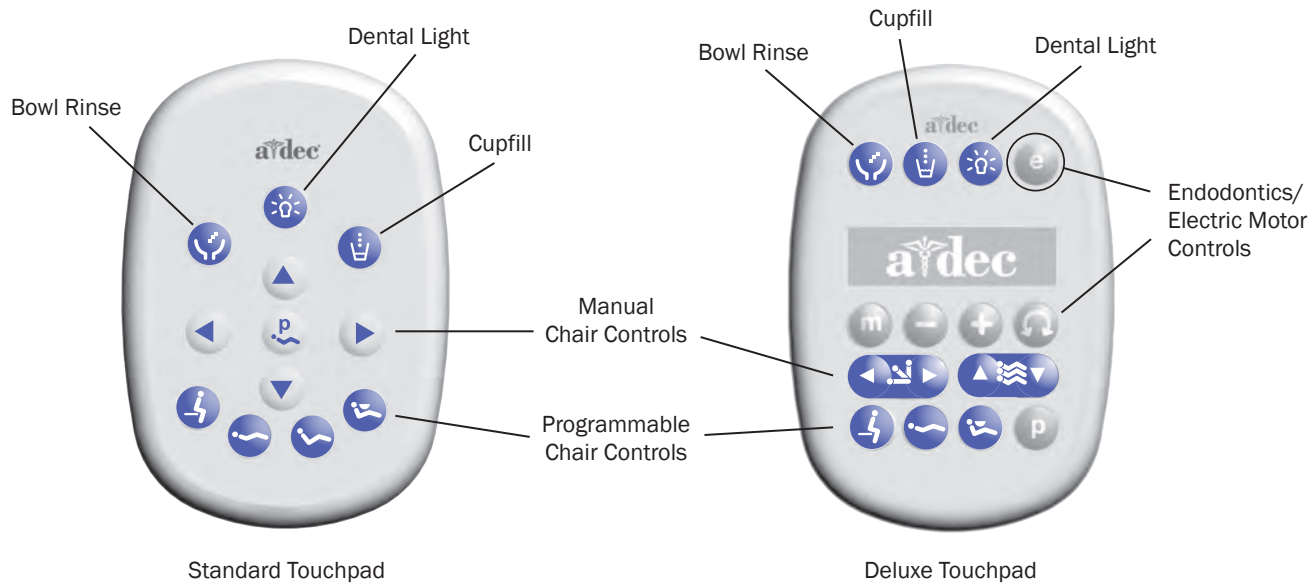
1. Lift the control arm.
2. Note the position of the stop ring and then lift it to the top height groove.
3. Lift the control arm sleeve to reveal the tension setscrews on the rigid arm.
4. Use a 3/32" hex key to loosen or tighten the two tension setscrews the same amount.
5. Lower the control arm sleeve and set the stop ring to its original position.
6. Lower the control arm.

## Touchpad Controls

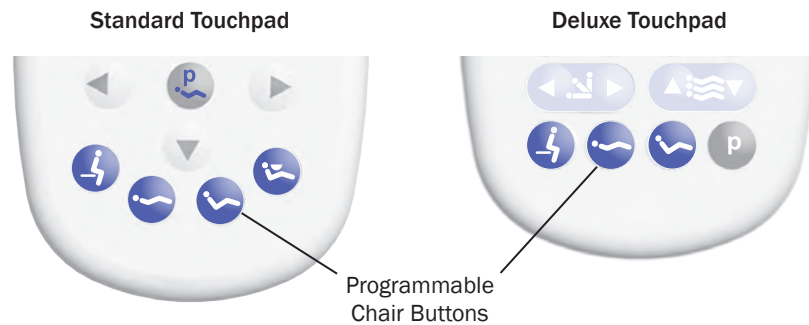
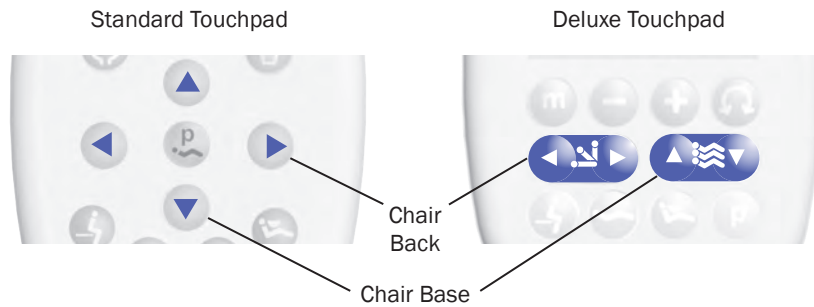
The A-dec touchpad and footswitch control chair movement in the same way. See *Footswitch Chair Controls*, on page 4, for detailed information about your footswitch controls.

### Basic Touchpad Functions

Your system may include a standard or deluxe touchpad. The standard touchpad operates the chair, cuspidor, and dental light functions. The deluxe touchpad adds functions for electric motors and other integrated clinical devices. Both touchpads provide manual and programmable controls.



## Touchpad Controls *(continued)*

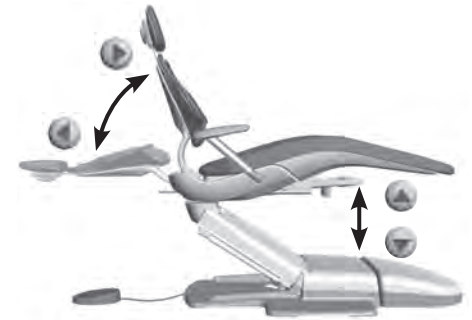


**WARNING** Ensure that the patient is positioned safely before using the manual or programmable chair controls. Never leave the patient unattended while the chair is in motion. Always take extra care with small children and patients with limited mobility.

To stop the chair at any point during programmed movement, push any chair positioning button on the footswitch or touchpad.

## Manual Chair Controls

Press and hold an arrow button until the chair is in the desired position. The horizontal arrows raise and lower the chair back. The vertical arrows raise and lower the chair base.



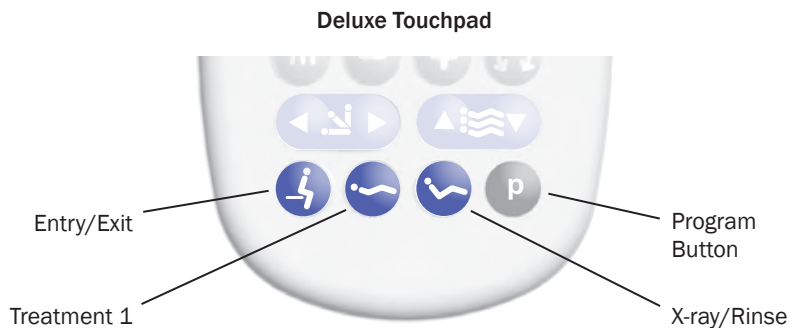
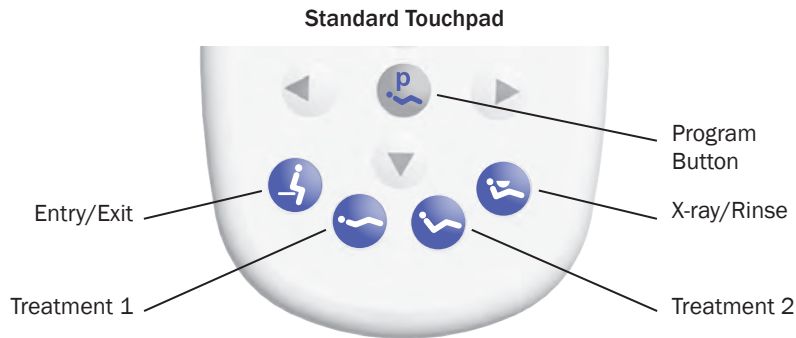
## Programmable Chair Controls

Press and release a programmable button to move the chair to a preset position. These buttons are programmed at the factory as follows:

Icon	Position	Factory Setting
	Entry/Exit	Positions the chair for patient entry/exit.
	Treatment 1	Positions the chair base and back down.
	Treatment 2	Positions the chair base down and back partially up ( <i>standard touchpad only</i> ).
	X-Ray/Rinse	Moves the chair to either x-ray or rinse position. Press again to move the chair to the previous position.

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

## Touchpad Controls *(continued)*



### Reprogram Entry/Exit, Treatment 1 and 2\* Buttons

To change the factory preset chair positions assigned to the entry/exit and treatment buttons (🦽, 🌊, 🌊\*):

1. Use the manual controls to position the chair as desired.
2. Press and release 🌊 or 🌊\*. One beep indicates that the programming mode is on.
3. Within five seconds, press the chair position button you wish to reprogram (for example, press 🦽). Three beeps confirm that the new setting is programmed into memory.

\* Note: The deluxe touchpad does not include a Treatment 2 button.

### Reprogram X-Ray/Rinse Button

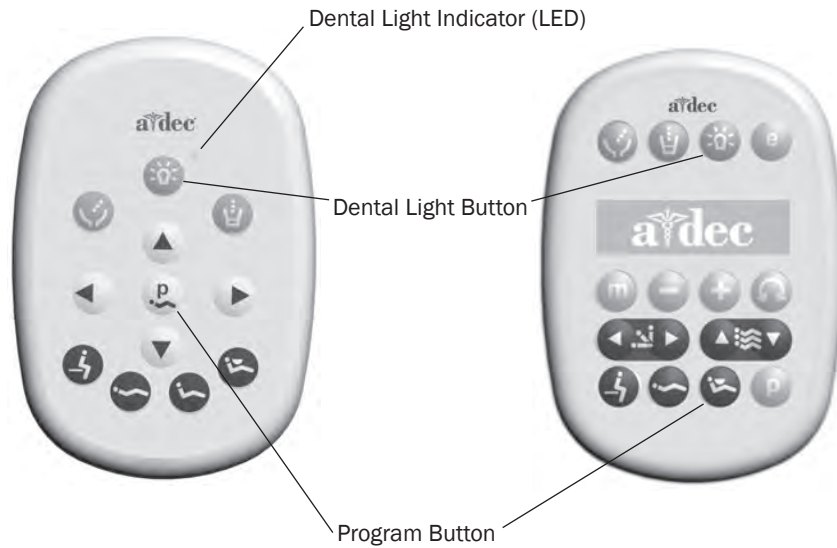
The x-ray/rinse button (🌊) is preset to move the chair and patient into an upright position for x-rays or cuspidor access. A second press of 🌊 returns the chair to the previous position.

You can reprogram 🌊 to function in a similar way to the other programmable chair preset buttons. To change its function:

1. Press and hold 🌊 or 🌊\* and 🌊 at the same time for three seconds.
  - One beep indicates 🌊 is set as another programmable chair preset button.
  - Three beeps confirm that 🌊 is configured as the x-ray/rinse factory preset (which toggles between the x-ray/rinse and the previous chair position).
2. If you reprogram 🌊 as another programmable button and want to assign a different chair position, follow the steps outlined in “Reprogram Entry/Exit, Treatment 1 and 2\* Buttons” above.



## Touchpad Controls *(continued)*

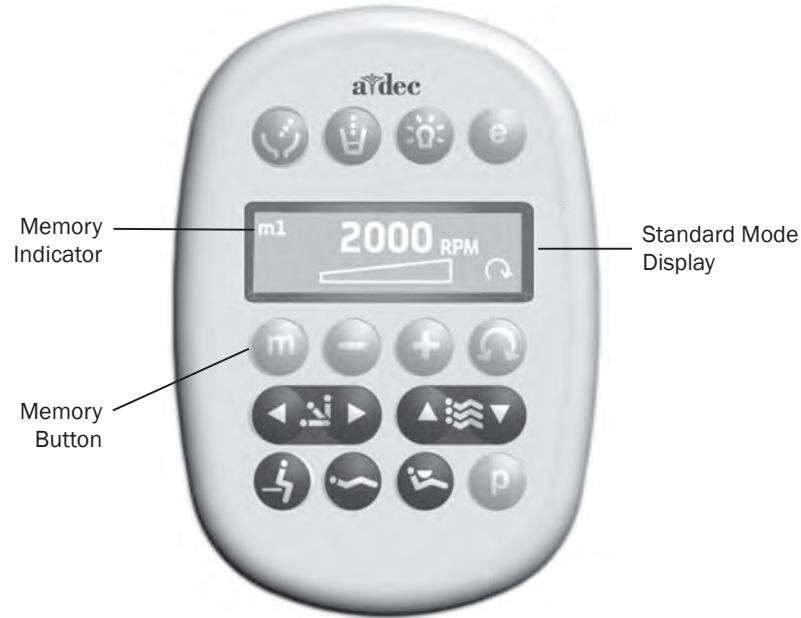


## Dental Light Touchpad Controls

For detailed information on the touchpad controls for the dental light, see page 32.

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

## Electric Handpiece Settings *(deluxe touchpad only)*



### Standard Mode

To activate the electric motor, lift the handpiece from the holder. The touchpad screen displays the previous settings used for that handpiece position. Standard mode provides four factory preset speeds for electric motors:

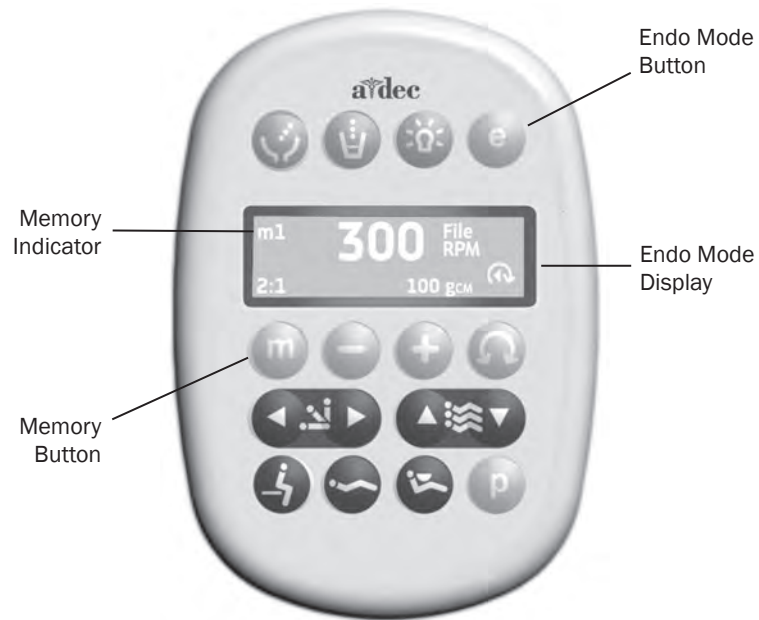
Memory Setting	Factory Preset Speed
m1	2,000 rpm
m2	10,000 rpm
m3	20,000 rpm
m4	36,000 rpm

You can reprogram these memory settings with your own specific preset speeds. A total of eight customized settings per handpiece is possible (four in standard mode and four in endodontics mode).

To program the handpiece setting:

1. Press **+** or **-** until the rpm setting you want displays on the touchpad screen.
2. Press **P** to save it to memory. One beep sounds.
3. Press **m** to display the m1 through m4 memory settings. When the desired memory setting displays, press **P**. Three beeps confirm the setting.

## Electric Handpiece Settings *(deluxe touchpad only) (continued)*



### Endodontics (Endo) Mode

In addition to handpiece speed adjustments, the endo mode allows you to change a number of settings based on the specific file and desired handpiece behavior. Icons on the touchpad screen reflect the settings.



**NOTE** For more information regarding speed and torque limits for a specific file, consult the file manufacturer.

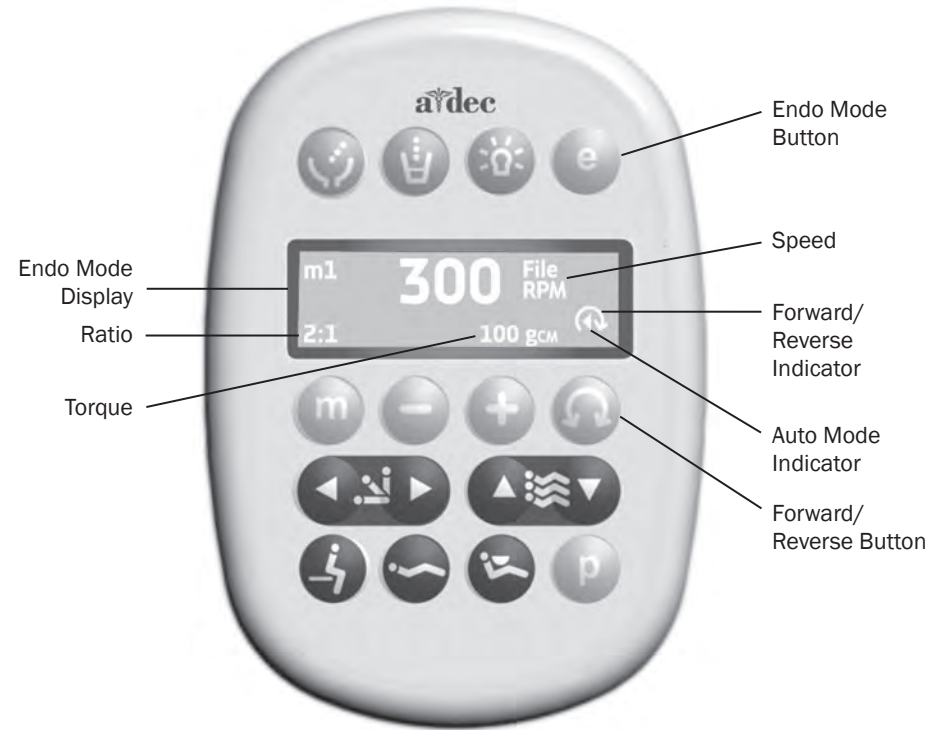
To program the handpiece setting:

1. Lift the handpiece from the holder.
2. If the touchpad screen does not display the endo mode, press **e**.
3. To change settings in endo mode, press **+** or **-**. A white reverse video box displays on the touchpad screen.
4. Use the chair positioning buttons to move from setting to setting on the touchpad screen.
5. Use **+** or **-** to change the setting as desired.
6. To set the speed limit, torque limit, or ratio into memory, press **p**. One beep sounds.
7. Press **m** to display the m1 through m4 memory settings. When the desired memory setting displays, press **p**. Three beeps confirm the setting.

## Electric Handpiece Settings *(deluxe touchpad only) (continued)*

### Endo Mode Touchpad Screen Icons

Icon	Setting	Description
	Speed	Setpoint for file speed limit. For more information, consult your file manufacturer.
	Torque	Setpoint for file torque limit. For more information, consult your file manufacturer.
	Torque Units	Toggles between newton centimeters (N·cm) and gram centimeters (g·cm). Adjusting this setting for one handpiece changes it for all handpiece settings. <i>Note: 1 N·cm = 102 g·cm.</i>
	Ratio	Sets the handpiece ratio. For more information, consult your handpiece manufacturer.
	Auto Modes	Adjusting this setting for one handpiece changes it for all handpiece settings. The auto mode indicator displays inside of the forward/reverse indicator.
	Auto Stop	<ul style="list-style-type: none"> <li>When the file reaches the torque limit, the motor shuts off.</li> </ul>
	Auto Reverse	<ul style="list-style-type: none"> <li>When the file reaches the torque limit, the motor stops and reverses direction.</li> </ul>
	Auto Forward	<ul style="list-style-type: none"> <li>When the file reaches the torque limit, the motor stops, reverses 3 turns, then changes back to forward again.</li> </ul> <p><i>Note: If the file is stuck, the auto forward cycle repeats three times before the motor stops.</i></p>



### Forward/Reverse Button

The forward/reverse button changes the electric motor’s direction. The system defaults to the forward position when you return the motor to the holder or turn off the system. In reverse mode, the screen icon flashes continuously.

## Touchpad Help Messages



The deluxe touchpad screen displays help messages for disabled operations. When a help message appears, record the screen message and the function you were performing in case service is required. For complete details on help messages, 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](http://www.a-dec.com).

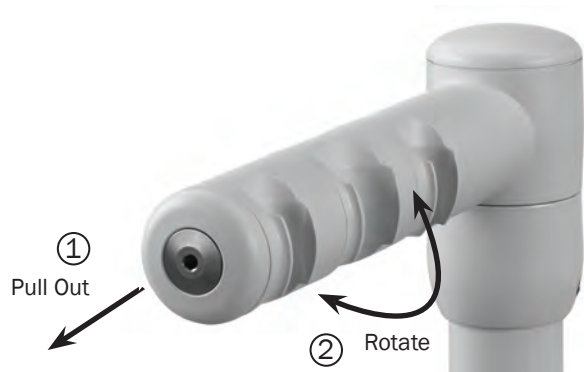
## Other Handpiece and Accessory Settings

See your authorized A-dec dealer to change any of these handpiece and accessory settings, if applicable:

- **Auto-Off Delay** - determines how long the handpiece light remains on if the foot control is released. The default setting is 5 seconds.
- **On When Selected** - specifies whether the handpiece light turns on or remains off when the handpiece is removed from the holder. The default setting is on.
- **On in Endo** - specifies whether the handpiece light turns on or off when the endo mode is selected. The default setting is off, which is recommended to reduce heat and extend bulb life.
- **Ultrasonic Colors** - for Acteon ultrasonic instruments, specifies whether color-coded tip categories are on or off. The default is on.
- **Voltage Adjustment** - allows for customized light output voltage for each handpiece position. The default setting is 3.2 VDC.

# Assistant's Instrumentation

## Instrument Holders

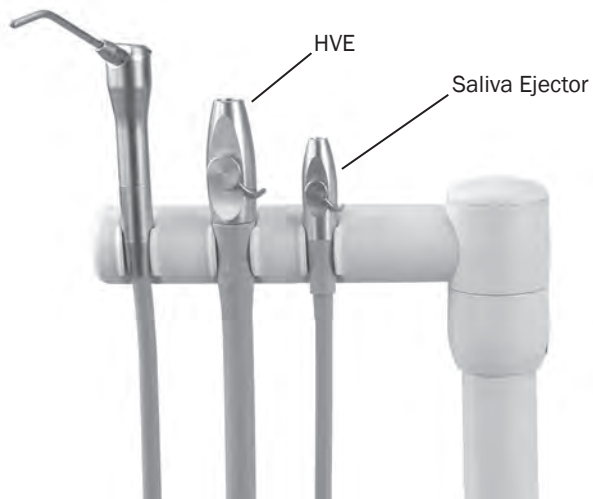


The instrument holders rotate independently to allow customized positioning for each instrument (with the auto-air holder option, the holders rotate only as a set). Pull the holder slightly away from the adjacent one, rotate to the desired position, and then release. To adjust as a complete set, pull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



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

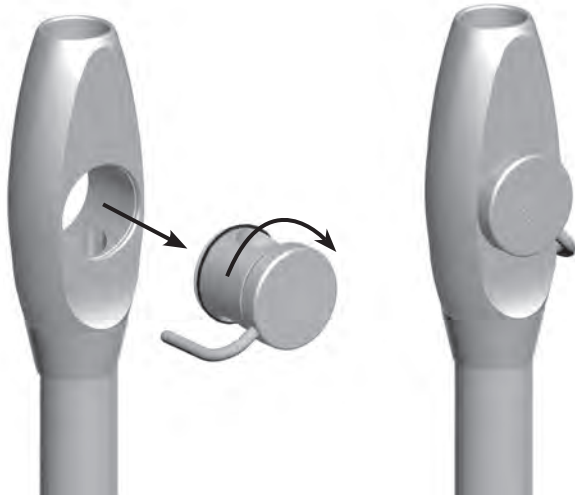
## Air Vacuum System (AVS)



The optional Air Vacuum System (AVS) generates a vacuum using an air supply at 70 psi (483 kPa) minimum when a central vacuum system is not available. It also separates moisture and air that flows through the system and discharges them through a drain and air outlet.

On AVS-equipped systems, the assistant's instrumentation includes a feature called auto-air switching. Auto-air switching activates the air vacuum generator when the instruments are removed from the holder. Lift the instrument and open the valve for normal operation. Return the instrument to its holder to turn off the vacuum.

## HVE and Saliva Ejector Right/Left Conversion



You can easily convert the A-dec 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.

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## A-dec 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 A-dec 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 A-dec 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.



## A-dec 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 A-dec 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.

## A-dec HVE/Saliva Ejector Valve Body Assembly Asepsis *(continued)*



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 black 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.

## A-dec 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 52 for specifications.

### Disposable Tips

Replace disposable HVE and saliva ejector tips after each use.



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

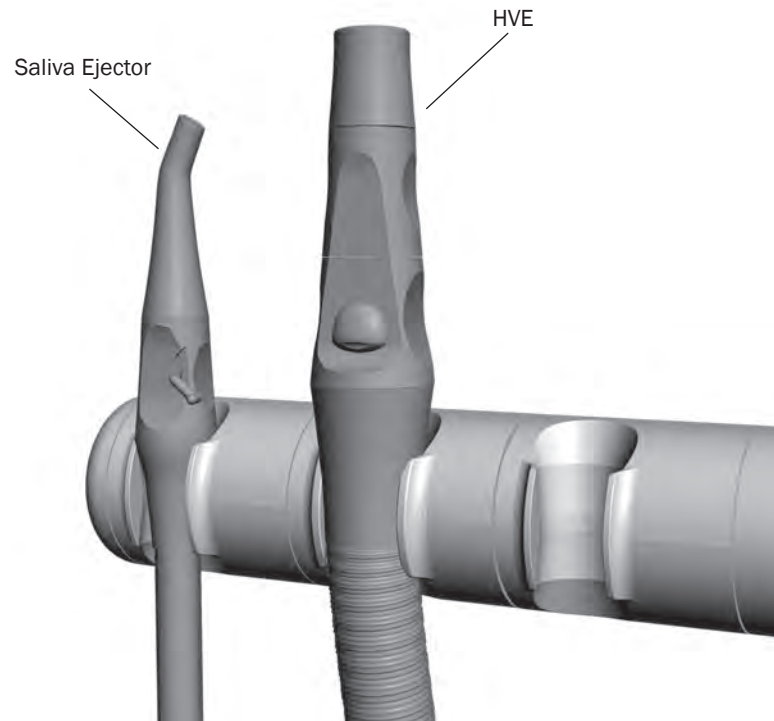


### Sterilizable Tips

Heat sterilize stainless steel HVE tips after each use. 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 the tip at 132-134 °C (270-273 °F) for 4 minutes in a pre-vacuum sterilizer or 6 minutes in a gravity displacement sterilizer.

## Dürr HVE and Saliva Ejector Asepsis



If you use barrier film to protect the main body of the Dürr HVE and saliva ejector, clean and sterilize these instruments weekly, or more frequently as needed. If you do not use barrier film, or if you perform oral surgery, clean and sterilize these instruments after each patient.



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



To clean and sterilize the Dürr HVE and saliva ejector:

1. Turn off the vacuum.
2. Remove the tip from the HVE or saliva ejector.
3. Remove the HVE or saliva ejector valve body by pulling it away from the tubing at the tailpiece.
4. Clean and rinse the valve body using a mild detergent, water, and a brush.
5. Allow the instruments to dry completely.
6. Heat sterilize the instruments using a steam autoclave for at least 6 minutes at a dwell temperature of 134 °C (273 °F).
7. Apply a light coat of petroleum-based lubricant on the red O-ring seal.



**CAUTION** Use only petroleum-based lubricant on red O-rings in Dürr instrumentation. Silicone lubricants can damage the material.

8. Reinstall the valve body on the tubing tailpiece.
9. Verify that the HVE and the saliva ejector operate and rotate smoothly.

## 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 5500.

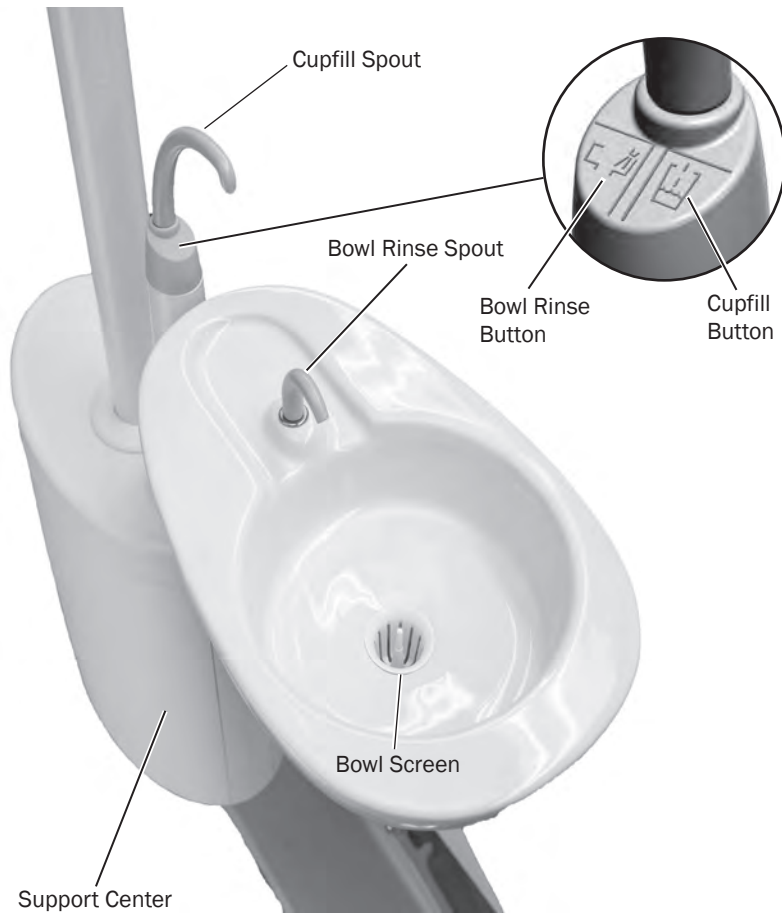


**BIOHAZARD** Biohazard from dental equipment can result in life threatening disease to patients and staff. Use appropriate precautions including PPE (Personal Protective Equipment), barriers, disinfectant, and sterilization to minimize exposure hazard.

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.

# Cuspidor



The cuspidor cupfill and bowl rinse functions can be controlled from the cuspidor or the touchpad.



## Cuspidor Controls

Press and hold the cupfill button on the cuspidor for the desired amount of water. Release the button to stop the flow.

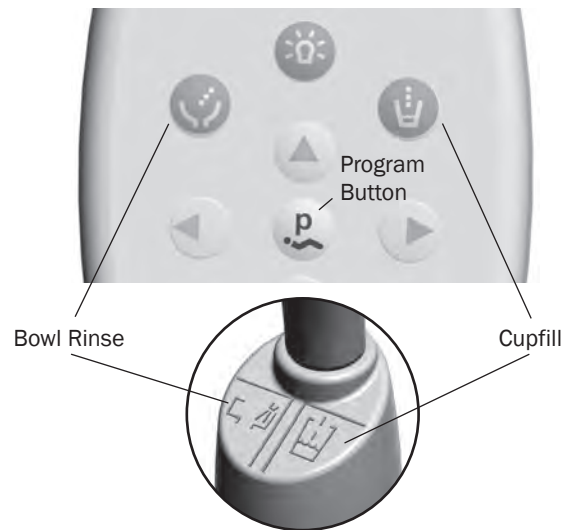
Press the bowl rinse button on the cuspidor once for a 15-second rinse. For continuous rinse, hold the button down. When you release the button, the water will continue to flow for 15 additional seconds.


## Touchpad Controls

You can also use the buttons on the touchpad to operate and program bowl rinse and cupfill functions:


Button	Description and Action
	<p><b>Cupfill Button:</b></p> <ul style="list-style-type: none"> <li>Press and release the cupfill button for a timed operation. The factory preset is a 2.5 second fill.</li> <li>Press and hold the cupfill button for manual operation.</li> </ul>
	<p><b>Bowl Rinse Button:</b></p> <ul style="list-style-type: none"> <li>Press the bowl rinse button for a timed operation. The factory preset is a 30 second rinse.</li> <li>Press and hold the bowl rinse button for manual operation.</li> </ul>

## Programming Cuspidor Buttons

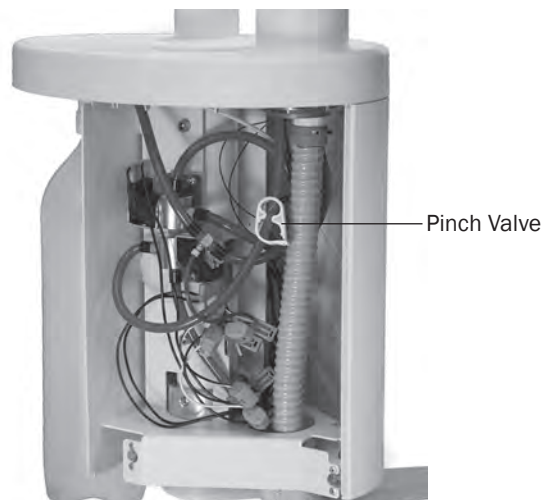


**TIP** Press  twice in less than two seconds to activate the continuous operation mode. Press the button once to end the continuous bowl rinse mode.

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 on the cuspidor. 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. Three beeps confirm that the program has changed.

## Bowl Rinse Flow Adjustment

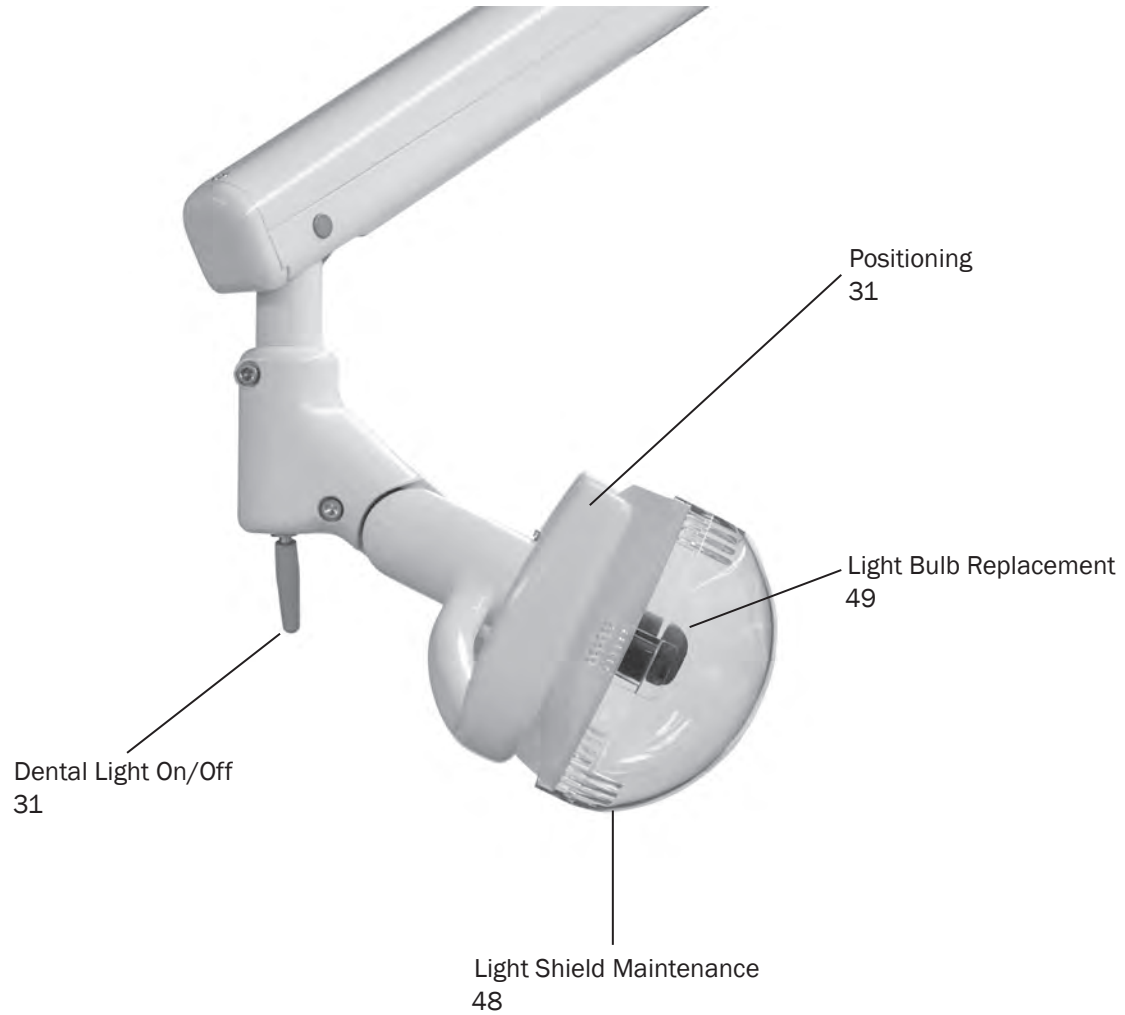


Adjustments to the cuspidor bowl rinse flow are made inside the support center. To make an adjustment:

1. Carefully pull the bottom edge of the cover out and remove the cover.
2. With the cuspidor bowl rinse on, tighten or loosen the pinch valve to adjust the flow.
3. For the best rinsing action, adjust the flow pattern by rotating the bowl rinse spout.

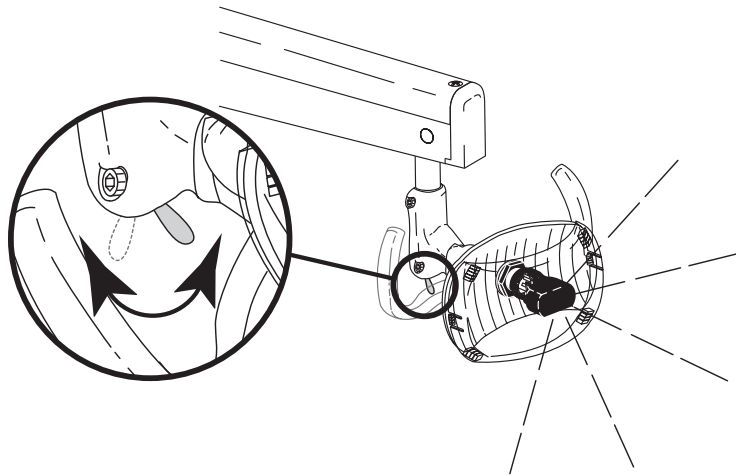
# Performer Dental Light

Touchpad Controls  
32



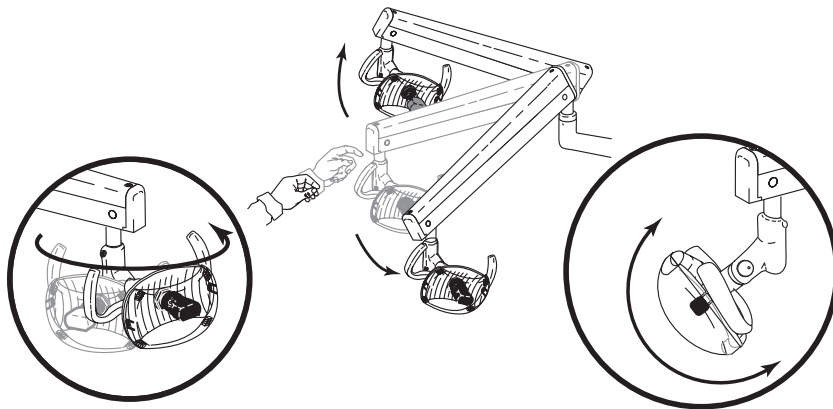


## Dental Light On/Off Toggle



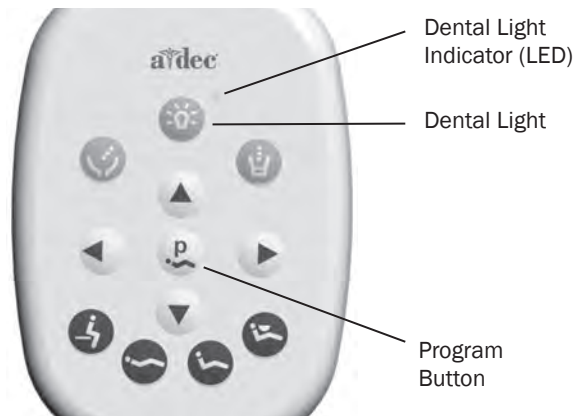
To turn on the dental light, flip the toggle switch on the bottom of the light. The light turns on in high intensity mode. Use the touchpad to change the intensity.

## Light Head Positioning

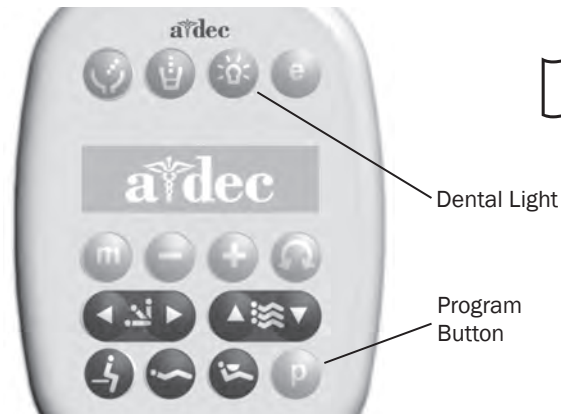


## Touchpad Controls

Standard Touchpad



Deluxe Touchpad



### Dental Light Button

- To turn the light on, press and release the light button.
- To turn the light off, press and briefly hold the light button.

To change the intensity mode, press and release the light button to toggle between intensity settings.

### Dental Light Auto On/Off Feature

The auto on/off feature turns the A-dec light on once the chair reaches a preset treatment position.

When you press or , the dental light turns off and the chair moves to that preset position.

To disable the auto on/off feature, press and hold the program button ( or ) and at the same time for three seconds until you hear one beep.

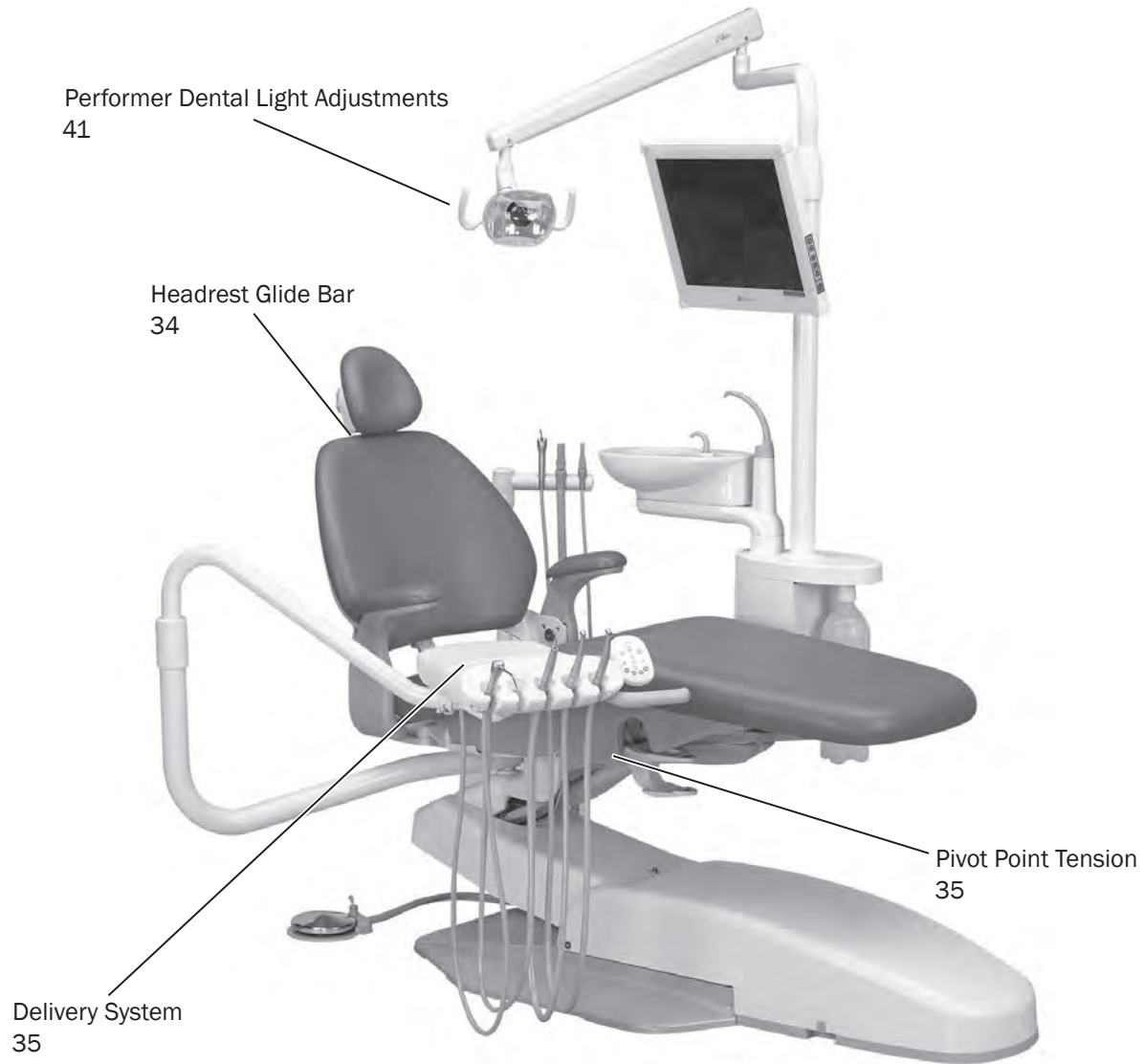
To enable the auto on/off feature, press and hold or and at the same time for three seconds until you hear three beeps.

For more information about dental light functions, see your dental light *Instructions for Use*.

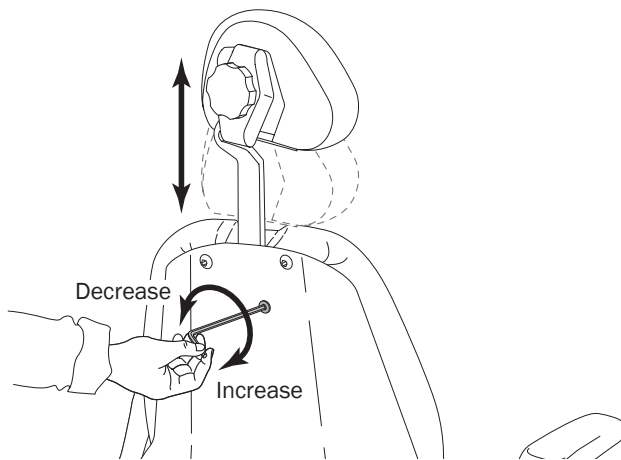
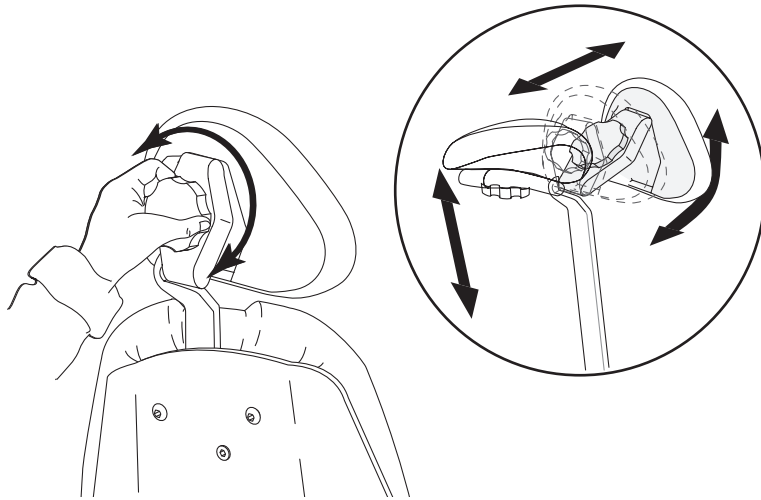
Note: Touchpad symbols are proprietary to A-dec Inc.

# Mechanical Adjustments

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## Chair Adjustments



### Headrest Positioning

The headrest includes several adjustment features that improve your access to the oral cavity and increase patient comfort.

Use the glide bar to accommodate a variety of patient heights. Simply pull up or push down on the headrest until it is in the desired position. The gliding headrest cushion provides additional height adjustment.



**CAUTION** If the glide bar has exceeded its maximum recommended working height, a warning line will be visible on the patient's side of the glide bar. Do not use the headrest in a position where this warning line is visible.

The locking knob allows you to easily adjust the headrest for a full range of positions. Release the headrest by turning the locking knob counterclockwise, then adjust the headrest for a proper fit. Lock the headrest in the desired position by turning the knob clockwise.

### Headrest Glide Bar Tension Adjustment

If the headrest drifts downward, or if it is difficult to move up or down, the glide bar tension needs adjustment.

To adjust the tension, use a 1/8" hex key. Turn the tension adjustment screw clockwise to increase friction or counterclockwise to decrease friction.

## Delivery System Adjustments

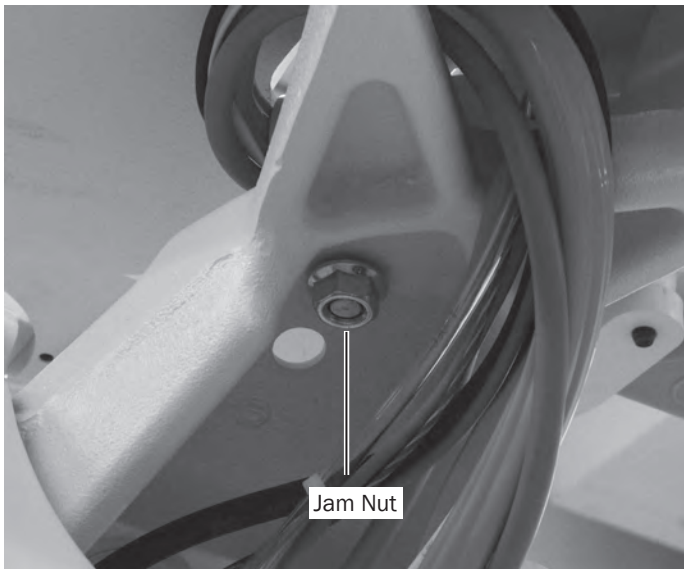


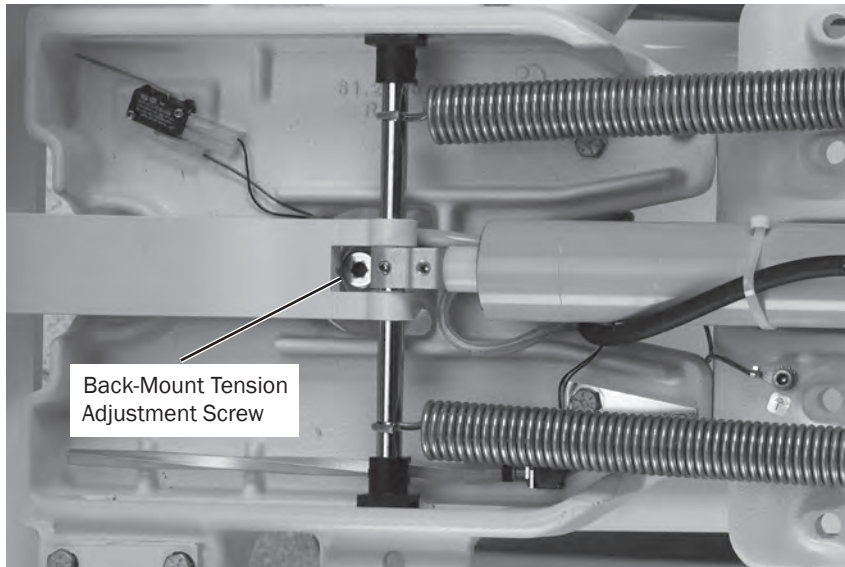
### Pivot Point Tension Adjustments

If the delivery system drifts, you can adjust the tension on the delivery system rigid arm.

#### Adjust the Back-Mount Delivery System or Dental Light Tension

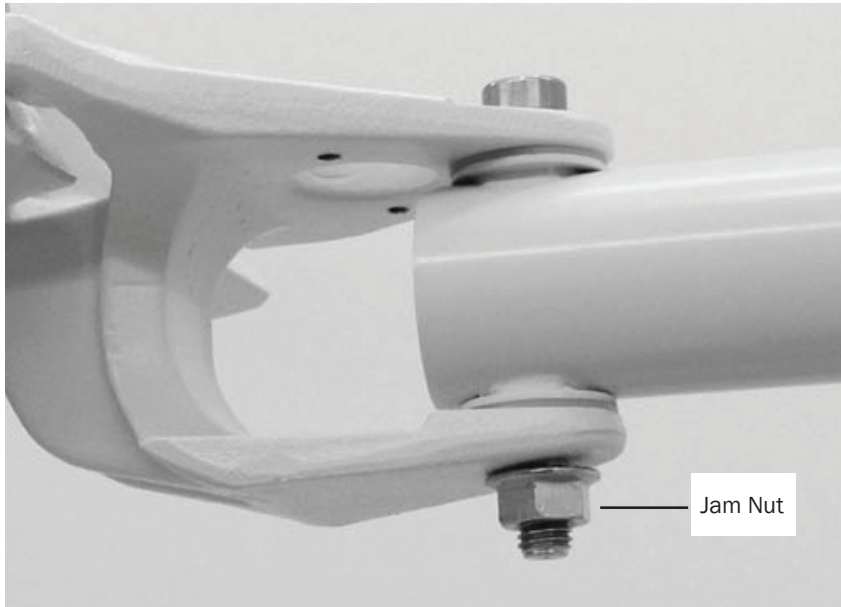
1. Use a 5/32" hex key to remove the four screws that secure the seat upholstery to the chair casting and remove the upholstery.
2. Lower the seat back all the way down. This provides access to the back-mount tension adjustment screw.
3. On the underside of the chair casting, use a 3/4" wrench to loosen the jam nut on the end of the tension adjustment screw.





**Adjust the Back-Mount Delivery System or Dental Light Tension**  
(continued)

4. Use a 1/4" hex key to adjust the tension of the screw. Adjust the screw until the arm rotates easily but does not drift.
5. On the underside of the chair casting, tighten the jam nut on the end of the tension adjustment screw.
6. Reinstall the seat upholstery and secure it with the four screws removed earlier.



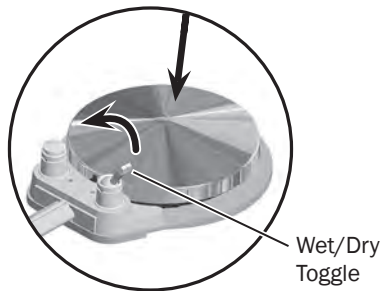
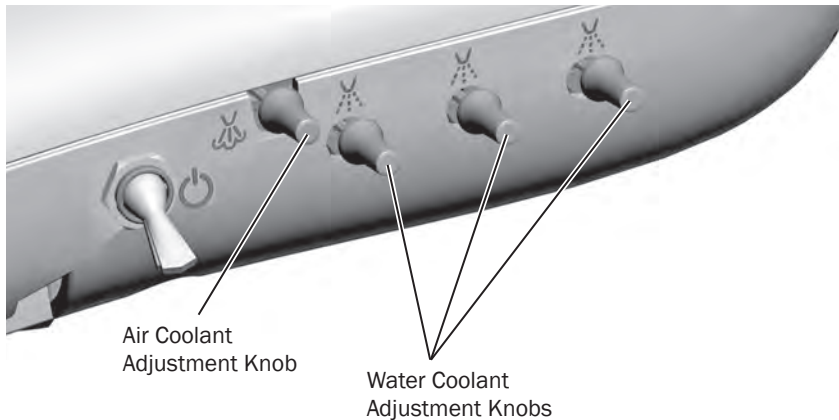
### **Adjust the Front-Mounted Delivery System or Dental Light Tension**

The front-mount tension adjustment is accessed below the seat upholstery at the front of the chair.

1. Loosen the jam nut on the bottom of the tension adjustment screw.
2. Use a 1/4" hex key to adjust the tension of the screw. Adjust the screw until the arm rotates easily but does not drift.
3. Use a 3/4" wrench to tighten the jam nut on the bottom of the tension adjustment screw.



**CAUTION** When performing this procedure, do not attempt to completely shut off the water or air flow. The adjustment knobs are not designed to completely shut off flow and can damage the control block if you apply too much force.



Disc Foot Control



Lever Foot Control

## Handpiece Coolant Adjustments

The air coolant knob on your delivery system simultaneously adjusts air flow to all handpiece positions. Each water coolant knob adjusts water flow to a single position. Use the following process to adjust for the desired handpiece coolant atomization:

1. Insert bur into each handpiece you are adjusting.
2. Turn the air coolant adjustment knob clockwise until coolant flow stops.
3. Lift the handpiece from the holder, or pull the whip forward, and do one of the following:
  - On a disc foot control: flip the wet/dry toggle to water (toward the blue dot) and press the disc all the way down.
  - On a lever foot control: move the lever all the way to the left.
4. Locate the water coolant adjustment knob for the handpiece position you are adjusting and turn it clockwise until coolant flow stops.
5. Slowly turn the water coolant adjustment knob counterclockwise until water droplets are expelled from every water port on the handpiece head. Return the handpiece to the holder.
6. Repeat steps 3 through 5 for each handpiece.
7. To set the air coolant for the system, lift a handpiece from the holder or pull the whip forward.
8. Turn the air coolant adjustment knob counterclockwise until you achieve the desired atomization at the cutting surface of the bur.



**CAUTION** Do not continue turning the air coolant adjustment knob counterclockwise after the air coolant stops increasing. The stem may come out of the control block.

9. If you require more water coolant, increase the water output in step 5 as needed.

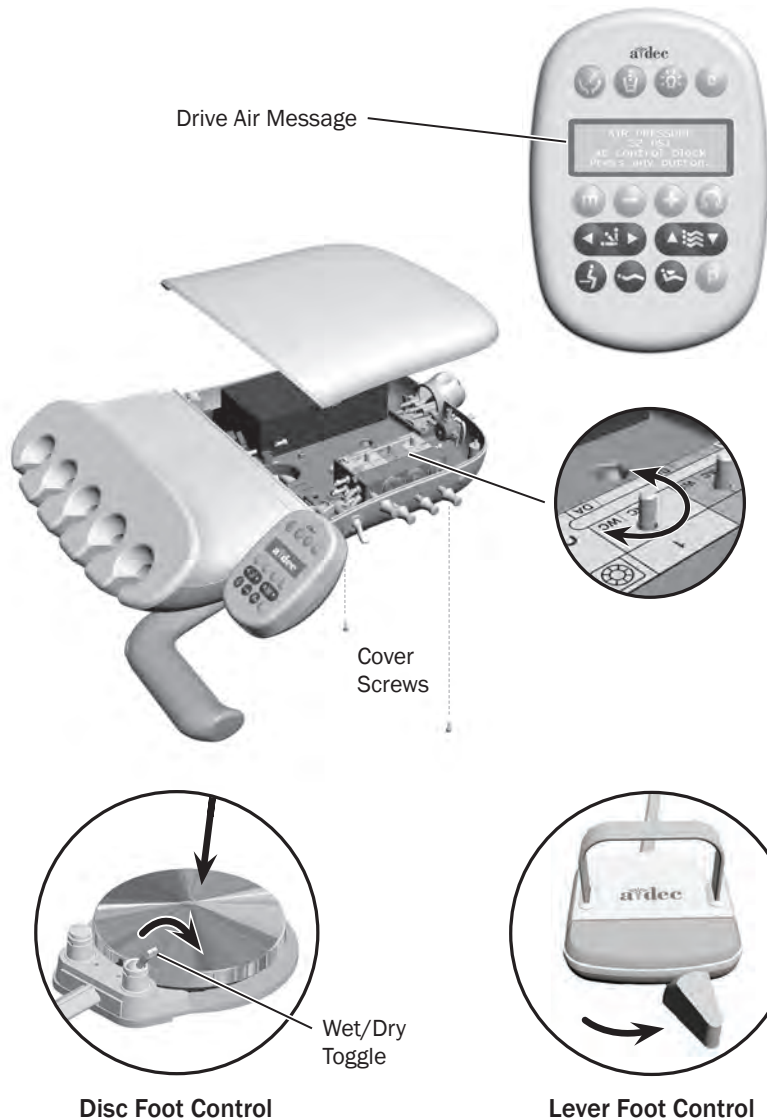


## Handpiece Drive Air Adjustments

You can check drive air pressure on the deluxe touchpad screen by pressing **+** and **-** at the same time. For systems with a standard touchpad, and for the most accurate drive air measurement, use a handpiece pressure gauge (A-dec p/n 50.0271.00) attached to the handpiece tubing.

To adjust the drive air pressure for each handpiece:

1. Remove the control head cover screws. Remove the cover and locate the drive air pressure controls inside.
2. Lift the handpiece from the holder or pull the whip forward.
3. Do one of the following:
  - On a disc foot control: flip the wet/dry toggle to dry, and press the disc all the way down.
  - On a lever foot control: move the lever all the way to the right.
4. With the handpiece running, check the deluxe touchpad readout or handpiece pressure gauge.
5. Adjust the handpiece drive air pressure to meet the manufacturer's specifications. Turn the control stem clockwise to decrease flow and counterclockwise to increase flow.

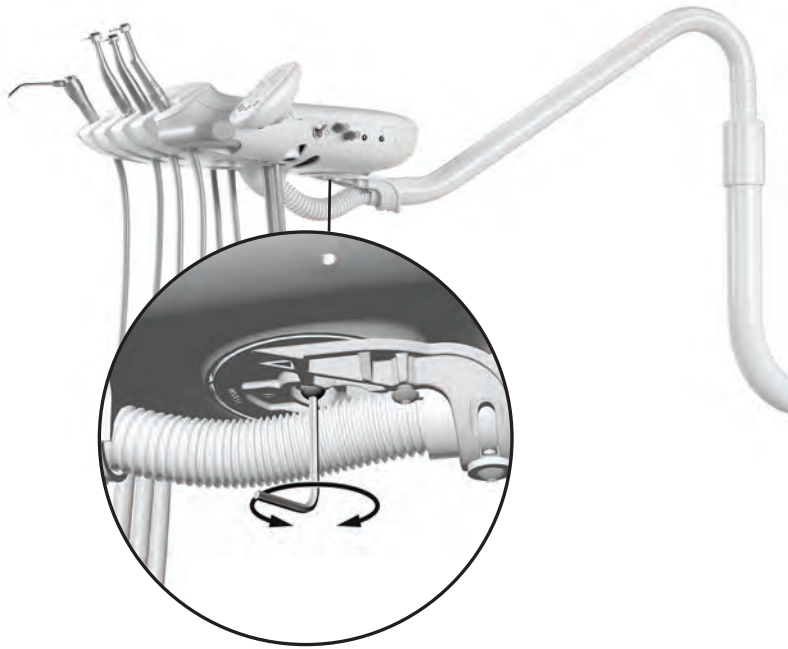


**CAUTION** See your handpiece documentation for the drive air pressure specification. Exceeding manufacturer's recommendations increases the risk of damage and may significantly decrease the life of your handpiece components.

## Rotational Adjustments

### Control Head

If the control head is too loose or difficult to rotate, use a 5/32" hex key to adjust the tension screw under the control head.



### Tray Holder

If the tray holder rotation is too tight or too loose, use a 9/64" hex key to adjust the tension:

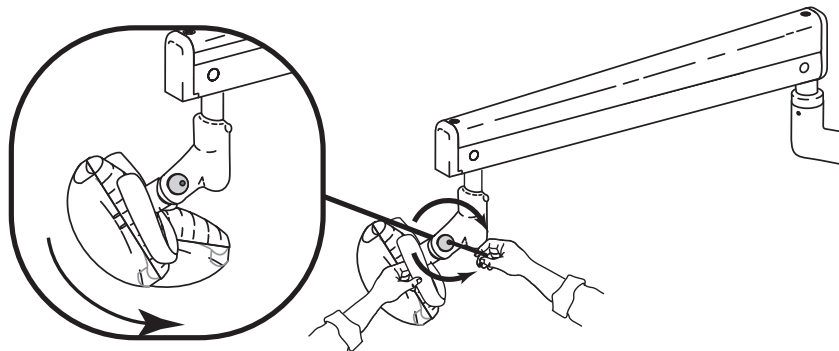
1. Insert the hex key through the mounting bracket. If necessary, rotate the holder or arm until the key slides completely into the mounting bracket.
2. While holding the bracket stationary, turn the tray holder clockwise to increase the tension or counterclockwise to reduce the tension.



# Performer Dental Light Adjustments

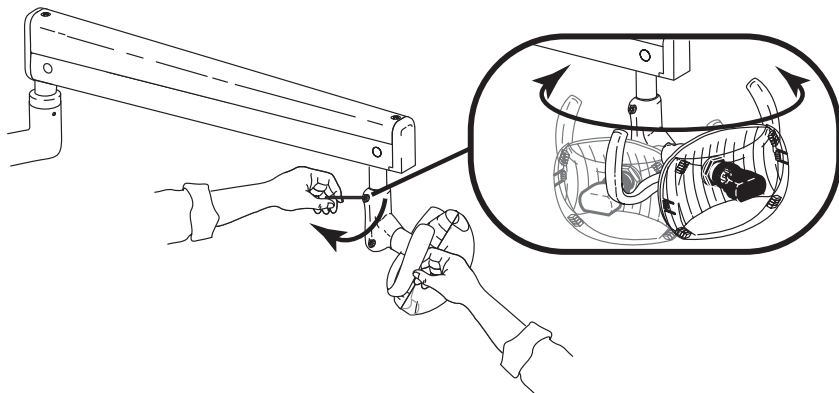


**NOTE** If your system has a different dental light, refer to the *Instructions for Use* that shipped with the light for adjustment instructions.



## Adjust the Vertical Tension

Adjust the screw closest to the light head to change the vertical tension. Turning the screw clockwise increases the tension.



## Adjust the Horizontal Tension

Adjust the screw closest to the flexarm to change the horizontal tension.

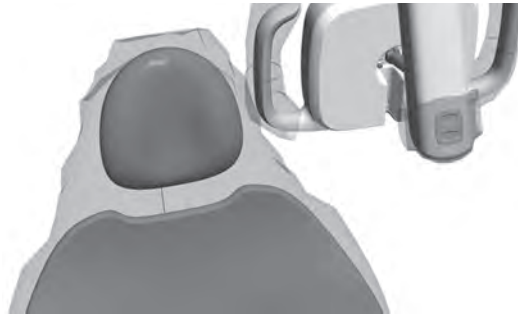
## Adjust the Pivot Point Tension

If the dental light drifts, adjust the pivot point tension on the rigid arm. See “Adjust the Back-Mount Delivery System or Dental Light Tension” on page 35 or “Adjust the Front-Mounted Delivery System or Dental Light Tension” on page 37.

# Cleaning and Maintenance

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## Barrier Protection



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

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**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).

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## Upholstery

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**CAUTION** Do not use household bleach (sodium hypochlorite) or other products containing chlorine, isopropyl alcohol (greater than 25 percent by volume), or hydrogen peroxide to clean or disinfect the upholstery. It can cause rapid deterioration and damage the product.

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To preserve the quality of your A-dec upholstery, use barrier covers instead of relying on chemicals. Barriers significantly extend the life of the upholstery and will help to preserve its luxurious look and soft feel. To clean the upholstery, use a solution of mild detergent and water. Use surface disinfectants only when the barriers have been compromised or there is visible spatter on the upholstery. See the *A-dec Equipment Asepsis Guide* (p/n 85.0696.00) for more information.

## Self Contained Water System



**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.

The 2-liter self-contained water bottle supplies water to handpieces, syringes, and the cuspidor cupfill. For proper installation:

1. To remove the bottle, turn off the Master toggle, and rotate the bottle to the left.
2. Empty any remaining water from the bottle.



**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).

3. Following the ICX instructions for use, place an ICX tablet in the bottle and fill it with water.
4. Insert the bottle so the A-dec logo is in front, facing away from the chair.\*



**CAUTION** Do not overtighten the water bottle or you may damage the components.

5. Rotate the bottle to the right 1-1/2 turns. Do not overtighten.
6. Turn on the master toggle. A pressurization sound may be heard up to 2 minutes after the system is turned on.

\* For left-handed configurations, the A-dec logo should face toward the chair.

## Self Contained Water System *(continued)*

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**CAUTION** Use caution when using the self-contained water system with accessories that require an uninterrupted water supply (e.g., scalers), as these could get damaged without a continuous water source. 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 your dental unit to fail.

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### **How to Choose Treatment Water**

The correct water to use in your system depends on the quality of water available from your municipal source. It's important to choose a source that consistently provides good water quality.

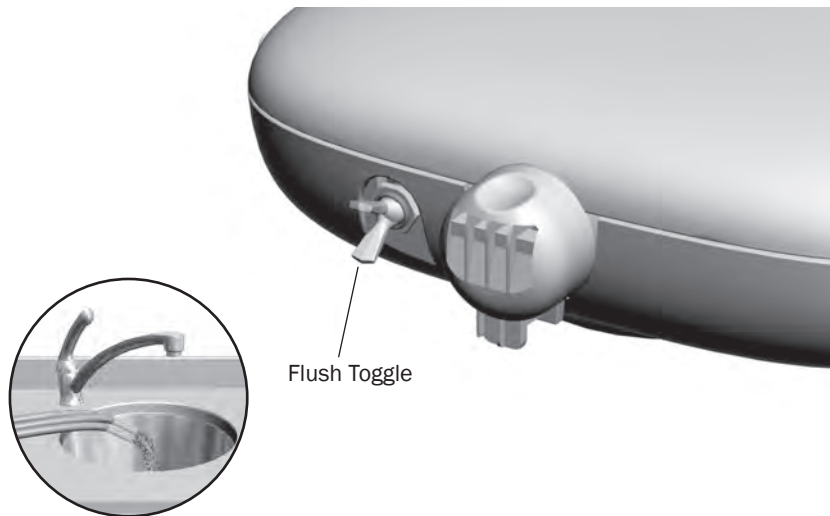
#### **Tap Water**

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

#### **Distilled Water**

If you have concerns about the quality of water delivered from your municipal supply, we recommend the use of distilled water – either from a commercial source or from a countertop distiller. When using a countertop distiller, carefully follow the cleaning and maintenance instructions for that device. Contamination may result if you do not follow the proper maintenance protocol.

## Cleaning the Handpiece Tubing



Use the flush toggle to move a high volume of water through the handpiece tubing. To flush the tubing after each patient:

1. Disconnect the handpieces.
2. Hold all of the handpiece tubing that uses water coolant over a sink, cuspidor bowl, or basin.
3. Hold the flush toggle down for 20–30 seconds.

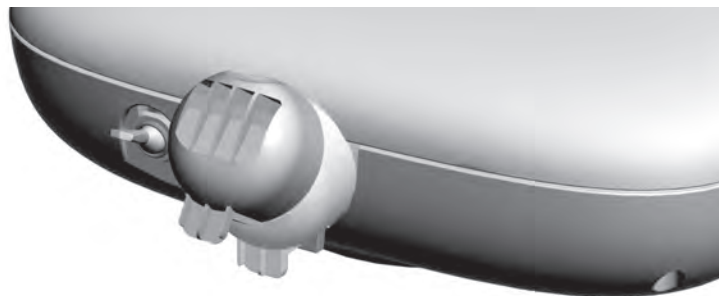


**NOTE** Discharge all tubing air and water lines for 20–30 seconds after each patient.



**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).

## Servicing the Oil Collector



Service the oil collector on the delivery system once a week for normal usage and more often for heavier use. To service:

1. Unsnap the oil collector cover from the control head and discard the old gauze. Do not remove the foam muffler.
2. Fold a new gauze pad (2" x 2" [51 mm x 51 mm]) into quarters and place it inside the cover.
3. Snap the oil collector cover closed.



## Cleaning the Cuspidor 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.



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**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.

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**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.

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## Gravity Drain Cleaning

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



Bowl Screen

For replacement cuspidor bowl screens, order p/n 75.0035.03.

## Dental Light Shield Maintenance



**CAUTION** Use only soap and water to clean the shield. Do not allow alcohol-based solutions or other chemical disinfectants to come into contact with the dental light shield. These solutions and chemicals will shorten its life.

For optimal performance and maximum life of your dental light shield, use only soap and water to clean the shield. Do not use alcohol-based solutions. Follow these steps to remove and clean the shield:

1. Turn off the light and allow it to cool completely.

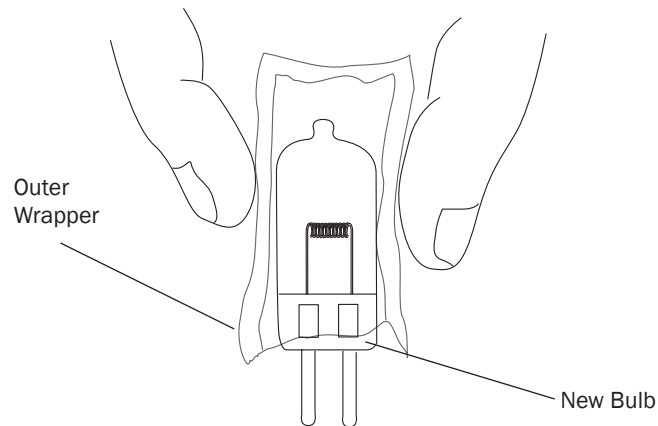
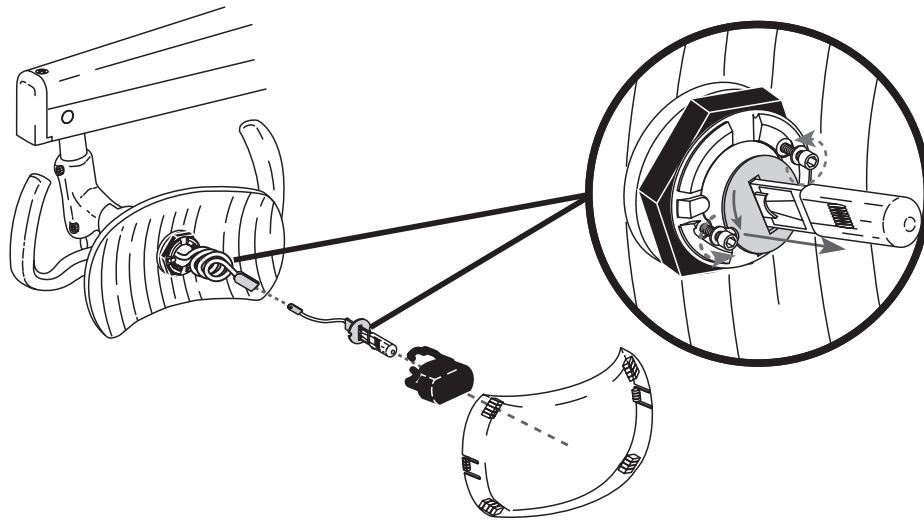


**WARNING** To avoid burning your fingers, allow the dental light to cool before removing the light shield. Never operate the light with the shield removed. The clear shield contains UV blocking additives and is also your protection in the unlikely event that the bulb shatters.

2. Hold the light shield and gently squeeze one side while pulling the shield away from the dental light.
3. Use a small amount of mild, non-abrasive liquid soap and warm water to clean the shield.
4. Rinse and dry with a non-abrasive, lint-free cloth.
5. Ensure that the shield is completely dry before reinstalling it and turning on the dental light.

If the shield becomes scratched or damaged, replacements are available from your authorized A-dec dealer.

## Dental Light Bulb Replacement



Follow these steps when replacing the dental light bulb:

1. Turn the light off and allow it to cool.



**WARNING** To avoid burning your fingers, allow the bulb to cool before removing. Never operate the dental light with the light shield removed. The clear shield contains UV blocking additives and is also your protection in the unlikely event that the bulb shatters.

2. Hold the light shield and gently pull on one shield tab while pulling the shield away from the reflector. Set the light shield aside.
3. Carefully grasp the legs of the black lamp shield and pull it away from the dental light.
3. Using a gauze pad or cloth to protect your fingers, carefully pull the old bulb from its socket. Discard the bulb.
4. Holding the new bulb in its outer wrapper, carefully insert the bulb pins into the socket. A small section of each pin is still visible when the bulb is fully seated.



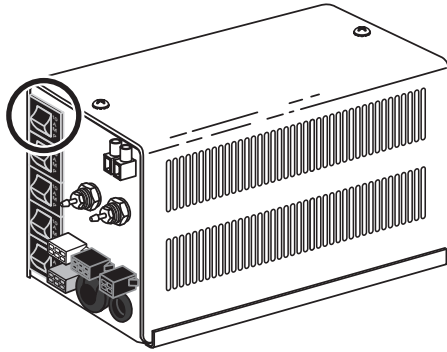
**CAUTION** Take care when handling the bulb. The bulb base is fragile and can break under excessive pressure. Do not remove the outer wrapper when handling the new bulb. Finger oils can affect light performance and severely limit bulb life. If you should inadvertently touch the bulb, gently clean it with cotton dampened with isopropyl or ethyl alcohol.



**CAUTION** Do not attempt to install the light shield if it has a broken tab. Contact your authorized A-dec dealer for a replacement shield and install it before operating the light.

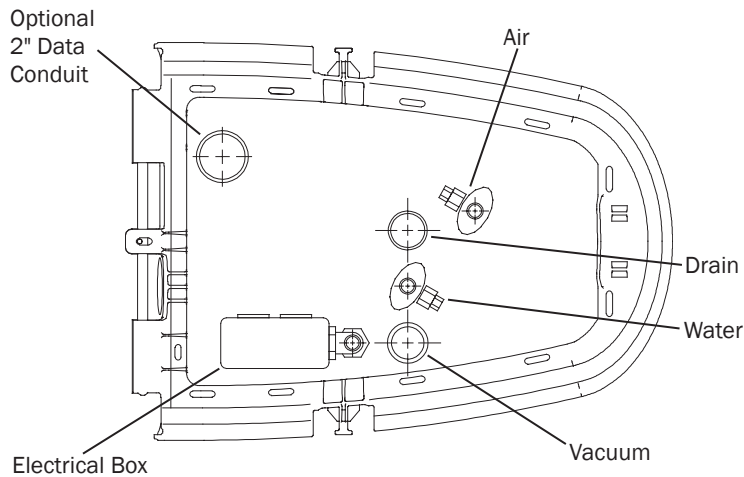
5. Remove and discard the outer wrapper.
6. Reinstall the black lamp shield. Reinstall the light shield.
7. Verify the operation of the light by turning it on and operating it at each intensity setting.

## Dental Light Circuit Breaker Location

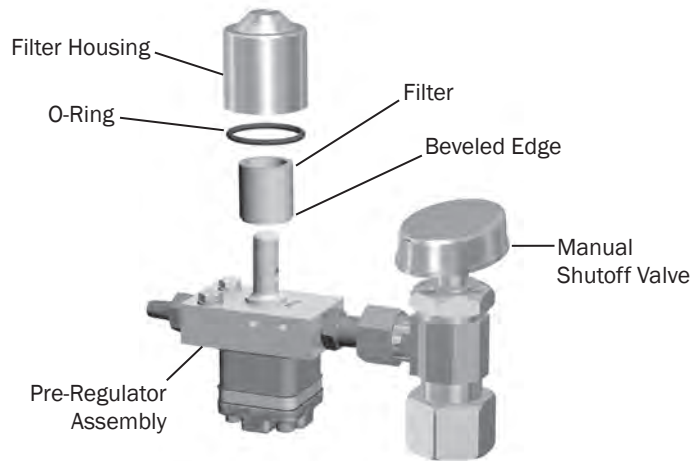


Under abnormal conditions, the dental light circuit breaker interrupts the flow of electricity. If the circuit breaker should trip, reset it by pushing the circuit breaker. The circuit breaker for your dental light is located on the power supply.

## Utilities and Shutoff Valves



**CAUTION** When removing or replacing covers, take care not to damage any wiring or tubing. Verify that the covers are secure after replacing them.



The utilities for A-dec chair-mounted delivery systems are located in the contoured floor box under your chair. To access, lift the cover up and off the floor box frame.

The manual shutoff valves control the air and water to the system. To prevent leaks, leave these valves fully open (turned counterclockwise), except when your system is being serviced.

Air and water pass through separate filters before entering the regulators. Replace these filters when they become clogged and restrict flow.

### To check for a clogged water filter:

1. Turn on the master toggle.
2. While watching the cuspidor, press the bowl rinse button. If the bowl rinse water pressure fades or if the water flow stops, replace the water filter.

### To replace the filter:

1. Turn off the master toggle and close the shutoff valves (turn clockwise).
2. Bleed the system of air and water pressure by operating the syringe buttons until air and water no longer flow.
3. Using a standard screwdriver, remove the filter housing from the water pre-regulator assembly and remove the filter.
4. Replace the filter if it is clogged or discolored. Install the filter with the beveled edge facing the manifold.



**CAUTION** To ensure proper operation, install the filter with the beveled edge facing the manifold.

5. Open the shutoff valves, turn on the master toggle, and operate the bowl rinse to remove air from the waterline.

# Specifications

## Performer Dental Chair

### Chair Capacity

Patient Load:	400 lb (182 kg) maximum
Accessory Load:	130 lb (59 kg) maximum

## Performer Delivery System

### 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:	11.05 ± 0.15 mm (0.435" ± 0.006")
15 mm HVE:	14.8 mm (0.59")
Saliva Ejector:	6 mm (0.24")

### Maximum Weight Specifications

Control head:	55 lb (30 kg)
Cuspidor and dental light:	27 lb (12.3 kg)
Tray holder (optional):	12 lb (5.4 kg)
Scaler (optional):	2 lb (0.9 kg)

## Performer Dental Light

### Operating Specifications

Rotational Axes:	Horizontal, vertical
Lamp rating:	12 V/ 55 W
Focal range:	Adjustable; 18 - 31 inches (457 - 787 mm)
Bulb:	Quartz Xenon Halogen, single-end prongs
Color temperature:	4500K (nominal, at high intensity)
Light pattern:	9" x 4.3" at 27.6" (229 mm x 109 mm at 701 mm)
Heat output:	188 BTU/hour at high intensity
Power consumption:	55 W

### Nominal Light Intensity

Low:	8,000 lux (743 fc)
High:	11,500 lux (1068 fc)



**IMPORTANT** For chair accessory load capacity, 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](http://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.

# Warranty

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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](http://www.a-dec.com).



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