INSTRUCTIONS FOR USE

A-dec® Dental Light
Model 571, 571-300, & 6300
A-DEC 571, 571-300, & 6300 DENTAL LIGHT

INSTRUCTIONS FOR USE
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Product Service

For service information, contact your local authorized A-dec dealer. To find your local dealer, go to www.a-dec.com.
INTRODUCTION

Thank you for choosing A-dec equipment. This guide contains basic operating instructions, adjustments, and maintenance for your A-dec 571 or 6300 dental light.

About Your Dental Light

A-dec dental lights include a number of features designed to make your job easier. The balanced light gives a clear view of tooth surfaces, the precision-balanced arm allows for smooth positioning, and a diagonal axis lets you angle the light head just where you need it.

Figure 1. Dental Light
Figure 2. Dental Light Features

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Light handle</td>
</tr>
<tr>
<td>B</td>
<td>On/Off Switch</td>
</tr>
<tr>
<td>C</td>
<td>Intensity Switch</td>
</tr>
<tr>
<td>D</td>
<td>Flexarm</td>
</tr>
<tr>
<td>E</td>
<td>Switch Housing</td>
</tr>
<tr>
<td>F</td>
<td>Light Yoke</td>
</tr>
<tr>
<td>G</td>
<td>Light shield</td>
</tr>
<tr>
<td>H</td>
<td>Nosepiece</td>
</tr>
</tbody>
</table>
Serial Number

Whenever inquiring about service for the dental light, please provide the serial number. The serial number is located under the flexarm (see Figure 3).

Figure 3. Serial Number Location

Figure 4. Serial Number Label Example

(A) The REF number is the model number. (B) The first letter of the serial number indicates the month the product was manufactured. The first digit of the serial number is the year of manufacture (for example, L8 = December 2008).

Table 1. Key to Month of Manufacture

<table>
<thead>
<tr>
<th>Letter</th>
<th>Month</th>
<th>Letter</th>
<th>Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>January</td>
<td>G</td>
<td>July</td>
</tr>
<tr>
<td>B</td>
<td>February</td>
<td>H</td>
<td>August</td>
</tr>
<tr>
<td>C</td>
<td>March</td>
<td>I</td>
<td>September</td>
</tr>
<tr>
<td>D</td>
<td>April</td>
<td>J</td>
<td>October</td>
</tr>
<tr>
<td>E</td>
<td>May</td>
<td>K</td>
<td>November</td>
</tr>
<tr>
<td>F</td>
<td>June</td>
<td>L</td>
<td>December</td>
</tr>
</tbody>
</table>
BASIC OPERATION

Power On/Off and Intensity Switches

The dental light head features a large On/Off switch so you can easily activate the light using the back of your hand or elbow. An intensity switch allows you to toggle between three intensities: high, medium, and composite (see Figure 5).

Figure 5. Power On/Off and Intensity Switches

(A) Intensity Switch; (B) On/Off Switch
Touchpad Controls (A-dec 300™/500 systems only)

A-dec dental lights can be operated from the assistant-side or doctor-side touchpad on your A-dec 300 or 500 system. To turn the light on, press the dental light button on the touchpad (see Figure 6). To turn the light off, press and hold the light button.

Figure 6. A-dec 300/500 Touchpad Controls

A-dec 300 Standard and Deluxe Touchpads

A-dec 500® Standard and Deluxe Touchpads

(A) Dental Light Indicator (LED)
(B) Dental Light Button
(C) Program Button
(D) X-Ray/Rinse Position Button
(E) Treatment Position Buttons
(F) Entry/Exit Button

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

On A-dec 300 and 500 systems, you can press the light button on the touchpad to toggle between intensity settings. The LED indicator on the touchpad illuminates when the dental light is in the high or medium intensity setting. When the dental light is in the composite setting, the LED indicator flashes.

Auto On/Off Feature *(A-dec 300/500 systems only)*

The dental light includes an auto on/ off feature that automatically turns the light on when the chair back reaches an operating position. When the chair back moves out of an operating position, it automatically turns off.

- To turn off the auto on/ off feature, press and hold the program and light buttons simultaneously (see Figure 6). A beep confirms the dental light on/ off function is off.
- To turn the auto on/ off feature back on, press and hold the program and light buttons simultaneously (see Figure 6). Three beeps confirm the auto on/ off feature is activated.
Circuit Breaker Locations

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, which varies by product (see Table 2).

Table 2. Circuit Breaker Locations

<table>
<thead>
<tr>
<th>Dental Light Mounting Location</th>
<th>Circuit Breaker Location</th>
<th>Model/Location</th>
<th>Circuit Breaker Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Chair mounted; A-dec 311 chair</td>
<td>*Chair mounted; A-dec 511 chair</td>
<td>*Chair mounted; Cascade, Decade, Performer, and non-A-dec chairs</td>
<td>Post Mount; Cascade, Decade, Performer, and non-A-dec chairs</td>
</tr>
<tr>
<td>Track Mount</td>
<td>Ceiling Mount</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cabinet Mount</td>
<td>Wall Mount</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE *The circuit breaker for chair-mounted lights is located on the power supply in the chair utility area or remote floor box.
ADJUSTMENTS AND MAINTENANCE

Focus Adjustment

The light is factory adjusted for proper illumination focus at 27 inches (700 mm) from the oral cavity. However, you can quickly and easily adjust the light focus (between 18 and 31 inches [460 mm and 790 mm]) to best suit your needs. To adjust:

1. Place a white towel over the chair headrest to represent the oral cavity.
2. Position the light head at the distance you would normally use it when working in the oral cavity (select a distance representative of most of your work).
3. Turn the light on.
4. Use a large screwdriver or coin to turn the focus adjusting screw (see Figure 7) until the light within the borders of the light pattern is most uniform.

Figure 7. Light Head Focus

(A) Focus Adjustment Screw
Light Head Adjustment

Adjust the light head tension if it is difficult to position, moves too easily, or tends to slip out of position (see Figure 8).

Figure 8. Light Head Rotation

(A) Left/Right Rotation; (B) Diagonal Rotation; (C) Up/Down Rotation

Horizontal Rotation

1. Use a hex key to make left/right rotation adjustments, beginning with the top screw on both sides of the switch housing (see Figure 9).

2. If the light head moves too easily, or tends to drift out of position, increase the tension by turning the screws right.

3. If the light is difficult to move, loosen the tension by turning the screws left.

Figure 9. Left/Right Rotation Adjustment

(A) Horizontal Rotation Tension Screws
Diagonal Axis Rotation

For diagonal axis rotation, adjust the screws at the bottom of the switch housing (see Figure 10).

1. If the light head moves too easily, or tends to drift out of position, increase the tension by turning the screw right.
2. If the light head is difficult to move, loosen the tension by turning the screw left.
3. To eliminate all movement in the diagonal axis, tighten the adjustment screw until it is tight.

Figure 10. Diagonal Axis Adjustment
Vertical Rotation

1. Loosen the setscrew (see Figure 11).
2. Remove the light yoke plug.
3. Use a large flat-blade screwdriver to turn the adjustment screw under the light yoke plug.
4. If the light head moves too easily, or tends to drift out of position, increase the tension by turning the screw right.
5. If the light head is difficult to move, loosen the tension by turning the screw left.
6. When the desired tension is achieved, retighten the setscrew and reinstall the light yoke plug.

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NOTE Make the adjustment to only one side of the light head.

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Bulb Replacement

A-dec dental lights include a convenient spare bulb under the light yoke (see Figure 12). To access the bulb, pull the plastic holder from the light head. Remove the bulb from the holder, but do not remove the outer wrapper.

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CAUTION Finger oils can affect light performance and severely limit bulb life. If you should inadvertently touch the bulb, gently clean it with cotton that is dampened with isopropyl or ethyl alcohol.
Follow these steps when replacing the bulb:

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

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

2. Release the toggles on the light shield and set the shield aside.
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 with the pins away from you, carefully insert the bulb pins into the socket (see Figure 13). The bulb base is fragile and can break under excess pressure.

5. Remove and discard the outer wrapper, then reinstall the light shield.
6. Verify the operation of the light by turning it on and operating it at each intensity setting.
Maintenance Parts

Table 3 lists the parts you may use during routine maintenance.

Table 3. Maintenance Parts List

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulb Only</td>
<td>041.709.00</td>
</tr>
<tr>
<td>Light Shield and Nosepiece</td>
<td>28.0503.02</td>
</tr>
<tr>
<td>Light Shield</td>
<td>28.0503.01</td>
</tr>
</tbody>
</table>

Care & Asepsis Instructions

Touch and Transfer Surfaces

**Touch** surfaces are those areas that require contact and become potential cross-contamination points during dental procedures. The minimum touch surface locations with dental lights include touchpads and the dental light handle.

**Transfer** surfaces are those surfaces that are contaminated by contact with instruments and other inanimate objects. There are no transfer surfaces on the dental light.

A-dec recommends barrier protection for all applicable touch and transfer surfaces. When used, barriers must be FDA market-cleared barrier plastic. Cover-All™ barrier film or any other FDA market-cleared barrier film is suitable for this application. Refer to your national regulatory authorities for barrier recommendations specific to your locale. Barrier plastics should be removed and discarded after each patient treatment.

For recommendations on cleaning and chemical disinfection of touch and transfer surfaces (where barrier protection is not applicable or when barriers are compromised) refer to the A-dec Equipment Asepsis Guide (P/N 85.0696.00).
APPENDIX A: WARRANTY AND SPECIFICATIONS

Warranty

A-dec warrants all products against defects in materials or workmanship for one year from time of delivery. A-dec’s sole obligation under the warranty is to provide parts for the repair, or at its option, to provide the replacement product (excluding labor). The buyer shall have no other remedy. All special, incidental, and coincidental damages are excluded.

Written notice of breach of warranty must be given to A-dec within the warranty period. The warranty does not cover damage resulting from improper installation or maintenance, accident or misuse. The warranty does not cover damage resulting from the use of cleaning, disinfecting or sterilization chemicals and processes. The warranty also does not cover light bulbs. Failure to follow instructions provided in the A-dec Instructions For Use (operation and maintenance instructions) may void the warranty.

A-dec warrants A-dec dental chair cylinders, both lift and tilt for ten years from the date of purchase of the chair or the cylinder. This warranty is retroactive to A-dec chair cylinders already in the field. The warranty covers chair cylinders A-dec finds to have manufacturing irregularities. Stool cylinders are covered under A-dec’s one-year warranty.

No other warranties as to merchantability or otherwise are made. For service information, contact your local authorized A-dec dealer. Check with local codes and ADA (Americans with Disabilities Act) requirements for installation of this product.

CAUTION Federal law restricts this device to sale by or on the order of a dentist, physician, or any other practitioner licensed by law of the state in which he or she practices to use or order the use of this device.
Specifications

Operating Specifications

- Operating voltage: 100, 120, or 240V
- Focal range: Adjustable; 18 - 31 inches (457 - 787 mm)
- Bulb: Quartz Xenon Halogen, single-end prongs
- Lamp rating: 17V/ 95W
- Color temperature: 5000 Kelvin
- Light pattern: 3.3" x 6.3" at 27.6" (84 mm x 160 mm at 701 mm)

Nominal Light Intensity

- Composite: 8,000 lux (743 fc)
- Medium: 20,000 lux (1858 fc)
- High: 24,000 lux (2230 fc)
- Heat output: 325 BTU/hour

**NOTE** Specifications are subject to change without notice.