3) Bend the replacement battery's connector wires to align with the socket in the Aurora S3's battery compartment (FIGURE 7).

4) Although the battery replacement can be accomplished with one person, plugging in the new battery may be easier for some people if one person holds the Aurora S3, while another positions and snaps the connector into its socket.

5) Using the battery as a handle, position the connector in front of the socket and slide it forward until it begins to enter the socket. Note: The battery's red wire should be positioned toward the outside edge of the battery compartment (FIGURE 8).

6) Use your finger to push the connector the rest of the way into the socket. Do not use a metal tool.

7) Insert the replacement battery into the compartment (FIGURE 9), protect the wires from binding, and slide the compartment cover back on and replace the screw.

8) Allow the battery to fully charge for 3 hours before first use to maximize the battery performance.

9) Dispose of the old battery properly.

**THE AURORA S3 KIT INCLUDES:**

1 – Aurora S3 Curing Light

1 – Wall Power Transformer / Charger

2 – Clear Curing Lenses

1 – Black Tacking Lens

2 – Plastic Barrier Sleeve Sample

1 – Rechargeable Battery

**ALSO AVAILABLE:**

Replacement Battery Charger (230 VAC); Replacement Battery

**WARRANTY:**

TWO (2) YEAR LIMITED WARRANTY

Your Parkell Aurora S3 charger and battery are warranted for 2 years from the date of purchase against manufacturing defects. The warranty covers Parkell factory labor for any authorized repair to the aforementioned device and parts.

For warranty service, return the unit to PARKELL, freight prepaid, carefully packed with an explanation of the problem. The unit will be repaired and returned to you. After the warranty period, please call PARKELL for instructions before returning your unit for service.

The Aurora S3 is NOT covered for damage due to misuse, abuse, tampering, modifications, installation of a non-Parkell battery, or opening of the Aurora S3 case by anyone other than authorized Parkell personnel, other than for replacement of the battery. The Reflector Lenses are meant to be periodically replaced at the user's expense, and are not covered by the warranty.

Warranty registration card: 1 – Rechargeable Battery

**DEVICE DESCRIPTION**

The Aurora™ S3 is a high-intensity curing light for use with light-cured dental materials. It is designed with a ultra-thin, low profile head and a unique curved shape, allowing excellent access to all areas of the mouth, especially the hard-to-reach palatal and lingual surfaces.

The light uses three high-performance Light Emitting Diodes (LEDs) that emit a bright blue beam with a wavelength range of 420-480 nm and a user-selectable intensity of 1000 or 1300 mW/cm². This high intensity, when combined with the wide beam spot diameter of 11 mm, permits the Aurora S3 to deliver speedy, complete curing of entire restorations in one cycle.

The Aurora S3 will fully cure materials that include camphorquinone as the photo-initiator.

The device is CE marked—certified to European Medical Device Directive (93/42/EEC). Parkell's quality system is certified to ISO9001/13485.

The light is controlled via a single button and has three modes of operation, a 3-second "gel" curing cycle at 1000mW/cm², a 20-second "standard" curing cycle at 1000 mW/cm², and a 10-second "turbo" curing cycle at 1300 mW/cm². Audible tones allow the operator to monitor the progress of each cycle, and stop the curing at any desired duration by simply pressing the button.

The curing light operates on an internal, rechargeable lithium-ion battery which can be replaced if necessary by the user. The unit is capable of battery operation for at least 120 20-second curing cycles between charges. The Aurora S3 may also be operated as a corded light while it is recharging.

The Aurora S3 Dental Curing Light is solely intended for the polymerization of visible light-cured dental materials, used in accordance with the instructions provided. It should be used in an environment suitable for the practice of dentistry using clinically acceptable techniques.

The light is intended for use by qualified dental professionals including, but not limited to, dentists, dental hygienists and dental auxiliaries trained in the use of visible light cured materials and equipment.

**THE AURORA S3 KIT INCLUDES:**

1 – Aurora S3 Curing Light

1 – Wall Power Transformer / Charger

2 – Clear Curing Lenses

1 – Black Tacking Lens

2 – Plastic Barrier Sleeve Sample

1 – Instructions for use and Warranty registration card

1 – Rechargeable Battery

**CONFORMANCE TO STANDARDS**

The Parkell Aurora S3 conforms to IEC 60601-1, IEC 60601-1-2 and CAN/CSA C22.2 No. 601.1. The device is CE marked—certified to European Medical Device Directive (93/42/EEC). Parkell's quality system is certified to ISO9001/13485.

Warranty registration card

**ALSO AVAILABLE:**

Replacement Battery Charger (230 VAC); Replacement Battery

**CURING LIGHT SPECIFICATIONS**

- **Power Supply:** Lithium-ion battery, 3.7 V, 2000 mAh
- **Wavelength Range:** 420-480 nm
- **Light Intensity (approx.):** 1000-1300 mW/cm²
- **Operation:** Duty cycle of 1.5 minutes ON, 5 minutes OFF
- **Dimensions:** (approx.): Length 9.4" (240 mm); Diameter 1.1" (28 mm)
- **Weight:** (approx.): 4 oz (111 g)

**WALL POWER TRANSFORMER/CHARGER SPECIFICATIONS**

- **Operating Voltage:** 100-240 VAC, 50/60 Hz input
- **Output Voltage:** 5 VDC
- **Output Current:** 2.0 A
- **Dimensions:** 3.4" (86 mm) x 1.8" (46 mm) x 1.3" (33 mm)
- **Weight:** 4.2 oz (120 g)
- **Classification:** Class II Equipment
- **Operating temperature:** 10°-32°C
- **Relative humidity:** 30%-75%
- **The time to charge a discharged battery is approximately 3 hours.**

(Continued)
TRANSPORT AND STORAGE CONDITIONS
- Ambient temperature range: -20°C to +40°C
- Relative humidity range: 10%-80%, non-condensing

GLOSSARY OF SYMBOLS

PRECAUTIONS FOR USE
- The Aurora S3 must be used in strict accordance with these operating instructions. Parkell accepts no liability for any damage resulting from the misuse of this unit or uses for any other purpose.
- All light operating modes are controlled using a single button. The Aurora S3 must be used in strict accordance with these operating instructions. Parkell accepts no liability for any damage resulting from the misuse of this unit or uses for any other purpose. Medical equipment with respect to electrical shock, fire and mechanical hazards only in accordance with UL 60601-1 1st Edition standard and CAN/CSA-C22.2 No. 601.1-M90
- Attention, consult accompanying documents
- Orange (with 2 bars) 03 sec @ 1000 mW/cm² (“Gel” mode)

OPERATING THE AURORA S3 CURING LIGHT
- All light operating modes are controlled using a single button. The Aurora S3 has three curing modes. During operation, indicator lights on the top and underside of the case (FIGURE 2) will show the current curing mode as follows:

<table>
<thead>
<tr>
<th>Indicator Light</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange (with 2 bars)</td>
<td>03 sec @ 1000 mW/cm² (“Gel” mode)</td>
</tr>
<tr>
<td>Green (with 3 bars)</td>
<td>10 sec @ 1300 mW/cm² (“Turbo” mode)</td>
</tr>
<tr>
<td>Blue (with 2 bars)</td>
<td>20 sec @ 1500 mW/cm² (“Standard” mode)</td>
</tr>
</tbody>
</table>

- To change the mode, press and hold the button down. After about 1 second the unit will start to cycle through the three modes as shown by the indicator lights. Release the button when the required mode is reached.
- If the light is not used for 10 minutes it will enter “sleep mode” to conserve the battery. All the indicator lights will go out. One press and release of the button will wake the unit up in the last used setting prior to entering “sleep mode”.
- To start the curing cycle, press and release the button. This will activate the light in the curing mode selected. The light will shut off automatically at the end of the curing cycle.
- To turn the Aurora S3 curing light off at any time during a curing cycle, simply press and release the button for a second time.
- Due to the variation in light-cured materials, curing times will differ between products and between batches of the same product. Review the manufacturer’s product instructions for their recommended curing times. Use these numbers as a starting point, but ALWAYS bench test new materials before use in vivo to verify the suggested curing time.

- If the patient is new to light-cured resin dentistry, explain to them what to expect before use.

A GUIDE TO THE AURORA S3 CURING LIGHT
During the 3-second curing cycle, a beep will sound every 5 seconds. For convenience during intraoral use, an auxiliary mode indicator LED on the bottom of the unit mimics the mode LED colors, allowing you to always know what mode has been selected. At the end of a curing cycle, the curing light will beep and automatically shut off with an ending sound.

REFLECTOR LENS CARE
Parkell recommends that the light should be connected to its charger each evening to assure a full charge the next time you need it.

CLEANING AND DISINFECTION
- Use of Parkell’s Aurora Barrier Sleeves (Stock No. S100) is highly recommended to eliminate the need to disinfect the light after every patient, and prevent composite from bonding to the lens.
- To disinfect the light, spray disinfectant onto a cloth and wipe down the unit. Use an EPA-approved, high-level surface disinfectant based upon glutaraldehyde or quaternary ammonium.
- To protect your warranty:
  - Do not steam autoclave the light, or use dry heat or Chemclave.
  - Do not spray disinfectant directly onto the light.
  - Do not immerse the unit in any liquid.
  - Do not use phenolic-based disinfectants or alcohol to disinfect the light.
- Always clean the light with a curing lens in place. Parkell will not be responsible for units that have been improperly disinfected.

MAINTENANCE AND CARE
- Other than the rechargeable battery, there are no user-serviceable components in the Aurora S3 light. Only Parkell technicians are authorized to open the housing to repair the unit. Use Parkell-supplied batteries only. The use of other batteries is a potential hazard and may damage the unit.

REPLACEMENT OF THE BATTERY
1) Remove the Phillips screw below the charger socket (FIGURE 5) and remove the battery compartment cover.
2) Remove the battery from the compartment and disconnect the two-prong connector by pulling the battery’s connector wires (Figure 6).

(Continued)
TWO IMPORTANT THINGS TO KNOW BEFORE YOU START USING YOUR AURORA™ S3 CURING LIGHT

INITIAL BATTERY CHARGING INFORMATION
• Before using your new Aurora™ S3 Curing Light for the first time, let it charge overnight, or for a minimum of 3 hours. While the battery is charging, all the indicator lights will come on. When the battery is fully charged, the blue light will flash.
• If left unused, the Aurora S3 will hold its charge for at least a week. Since there’s no damage to the unit by leaving it plugged into the wall outlet (you can’t overcharge the battery), we recommend you simply plug the unit in whenever it’s not in use.

TACKING LENS INFORMATION
• For the task of tacking down a porcelain veneer for inspection before final curing, we’ve created the Aurora S3 Tacking Lens (Fig. 1). One is included in your kit, and replacements are available from Parkell. The Tacking Lens concentrates the light into a small, extremely bright beam approximately 2.5mm in diameter, making it perfect for tacking veneers.
• To remove the Aurora S3 standard curing lens, simply grasp the rim and rotate the lens counterclockwise about 1/8 of a turn (Fig. 2). This will unlock it, allowing you to easily withdraw the lens from the light.
• To attach the Aurora S3 Tacking Lens, line up the slots on the rear of the tacking lens with the slots in the head (Fig. 3) and rotate it clockwise about 1/8 of a turn (Fig. 4). This will lock it into position (Fig. 5).
• The Aurora S3 Tacking Lens fits this light exclusively, and won’t fit onto the previous model Aurora.
• To protect the LED and the reflector (Fig. 6), never leave the Aurora S3 without a lens in place.
• Like all Aurora lenses, the Tacking Lens should be spray disinfected and NEVER autoclaved.

For assistance, call Parkell at 1-800-243-7446, or email info@parkell.com