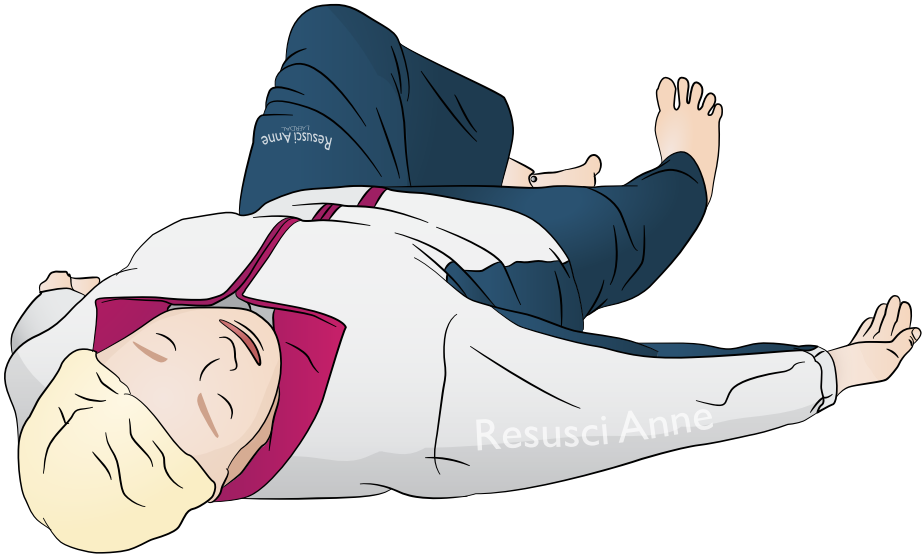
EN

Resusci Anne Simulator

User Guide



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Contents

The Resusci Anne Simulator (RA Sim) manikin is designed for the unique training needs of emergency care in both pre-hospital and in-hospital environments. The manikin is optimized for quality simulation training in a wide range of ALS scenarios, helping transform training into a mobile, dynamic and realistic learning experience for both the instructor and the trainee. This User Guide covers two configurations of the RA Sim: RA Sim AED Link version and RA Sim Paddle version. Unless otherwise specified, the information in this User Guide applies to both configurations.

Read the Important Product Information booklet before use.
Refer to the Laerdal Global Warranty for terms and conditions. For more information visit www.laerdal.com.

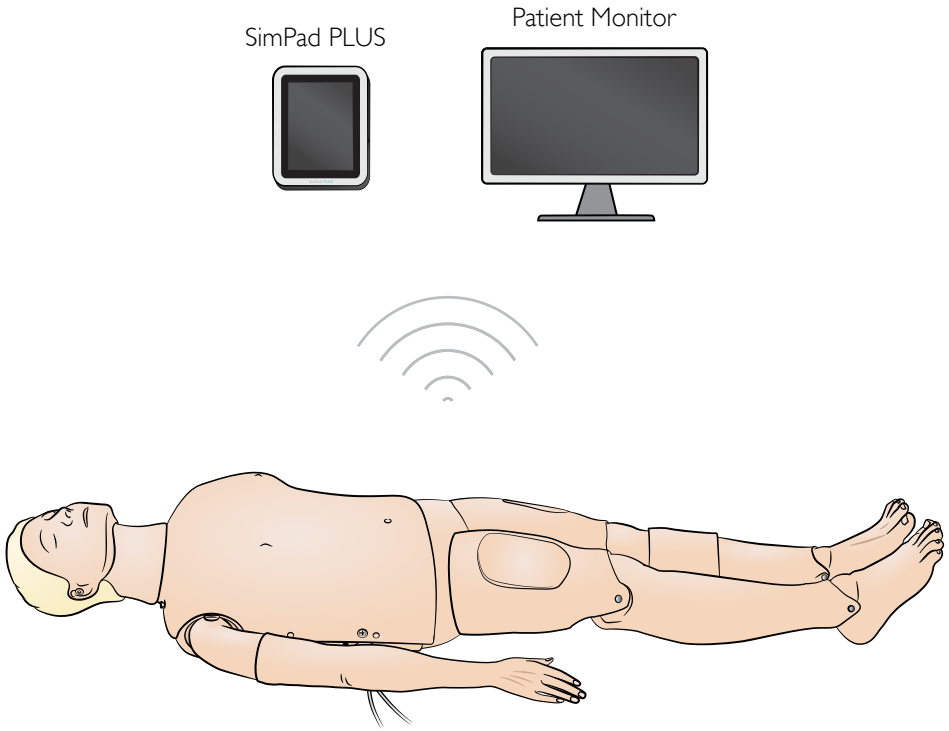
The RA Sim AED Link version is designed for use with ShockLink. RA Sim Paddle version is designed for use with a defibrillator, delivering high voltage in to the manikin paddle plates.

Note
Illustrations may vary from product.

RA Sim AED

⚠ Cautions
- *Defibrillation must be performed using ShockLink only. Refer to ShockLink Important Product Information. Paddle adapters are not possible to use.*
- *When removing or replacing the chest skin, do not pull or damage the wires connecting the chest skin to the battery box.*
- *To prevent skin pitting on the Resusci Anne Simulator Laerdal Link version, do not apply conductive gel or conductive defibrillation pads intended for patient use.*
- *Do not provide artificial respiration to the patient simulator using oxygen enriched air or flammable gases.*

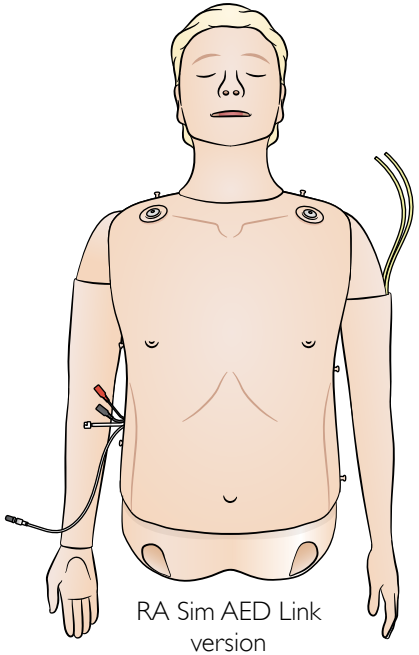
⚠ Warnings
- *Observe all standard safety precautions for the use of defibrillators.*
- *Do not defibrillate in a flammable or oxygen-enriched atmosphere.*
- *Only defibrillate using ShockLink as described in ShockLink instructions.*



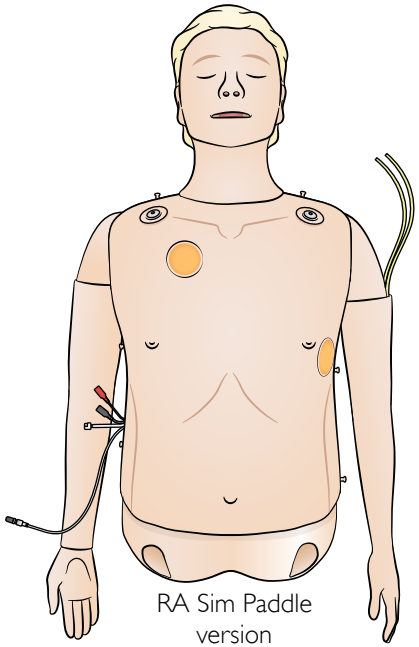
Operating Systems

- SimPad PLUS
- Patient Monitor

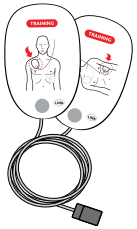
Note
Visit www.laerdal.com to download SimPad PLUS User Guide.



RA Sim AED Link version

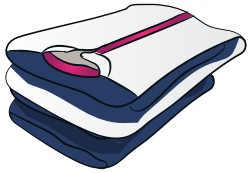


RA Sim Paddle version

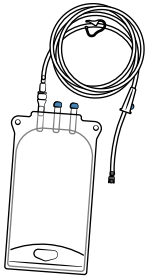


Training pads included with the AED Link version

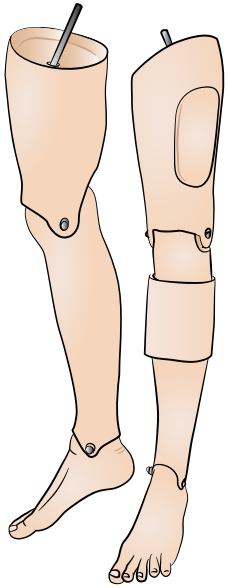
ShockLink included with the AED Link version



Clothes



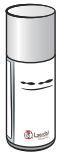
Reservoir bag (2)



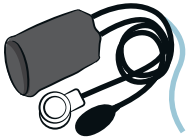
Extrication rescue legs

Documents

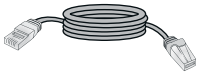
Simulated blood



Lubricant



Blood pressure (BP) cuff

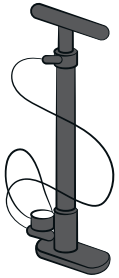


LAN cable

USB cable

Microphone extension cable

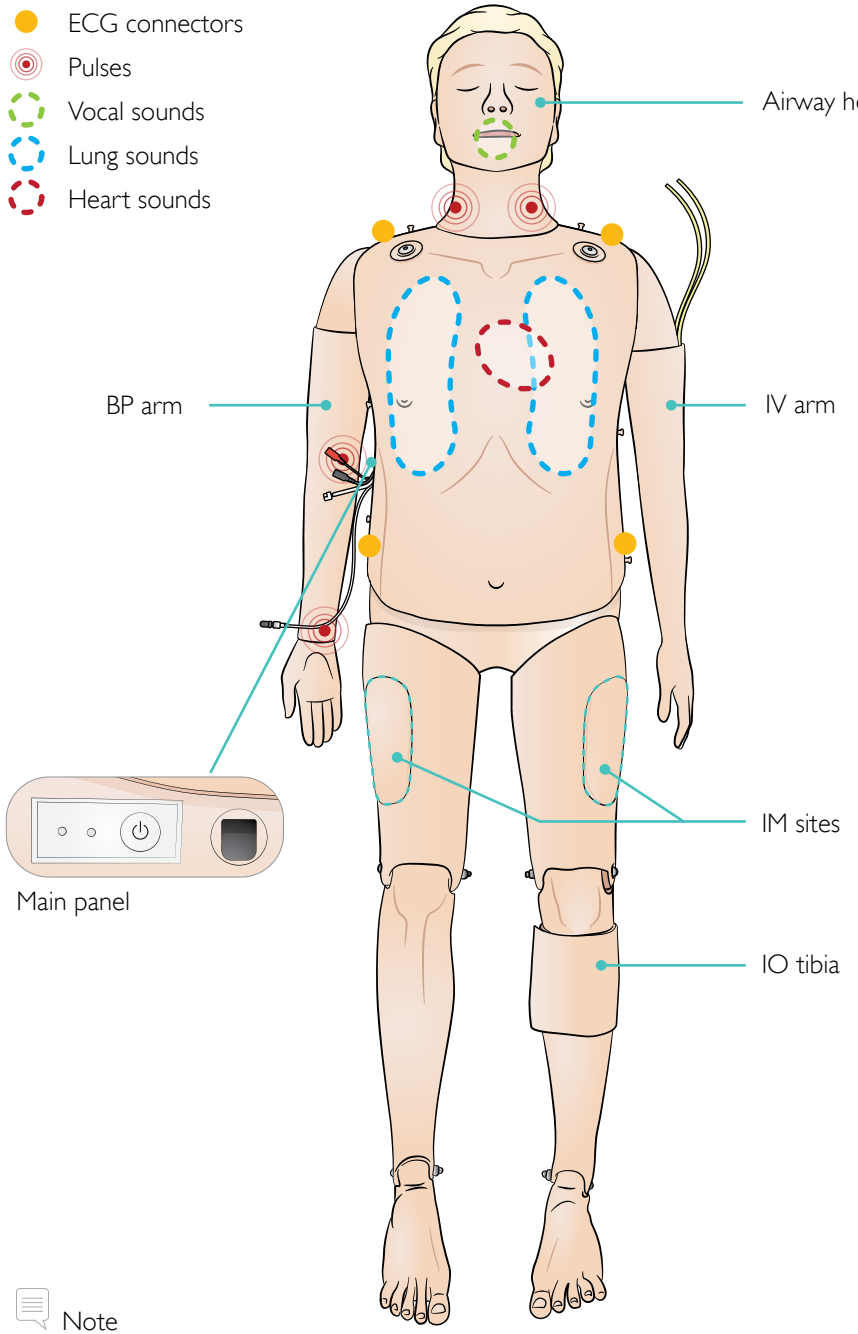
Microphone headset and 2nd microphone



Air pump

AC adapter and extention cable

Full body soft pack



Note

IV arm and BP arm can be reversed in alternative configuration; BP left / IV right and opposite.

Airway Features

Anatomically accurate, realistic airway including cricoid cartilage
Head tilt / chin lift
Jaw thrust
Bag Valve Mask (BVM) ventilation
Endotracheal intubation (Anatomically correct down to vocal cords)
Supraglottic intubation (iGel, Laryngeal Tube LTS, LMA and others)
Sellick maneuver
Airway closing mechanism (located in torso)
Tongue fall back
Stomach distension
Spontaneous breathing (visible chest rise)

Cardiovascular Features

Live defibrillation (AED Link version with use of ShockLink)
Defibrillation with paddles (paddle plate configuration)
Automatic rhythm change after defibrillation
ECG monitoring and extensive ECG library
QCPR live feedback
Blood pressure (NIBP)
- Systolic and diastolic pressure
- Auscultatory gap

Pulse strength variable with NIBP
Korotkoff sounds synchronized with ECG
Pulses (carotid, bilateral, brachial)
Compression measurement and feedback

Vascular Features

Multivenous IV arm
Left tibial IO insertion
Bilateral intramuscular (IM) injections

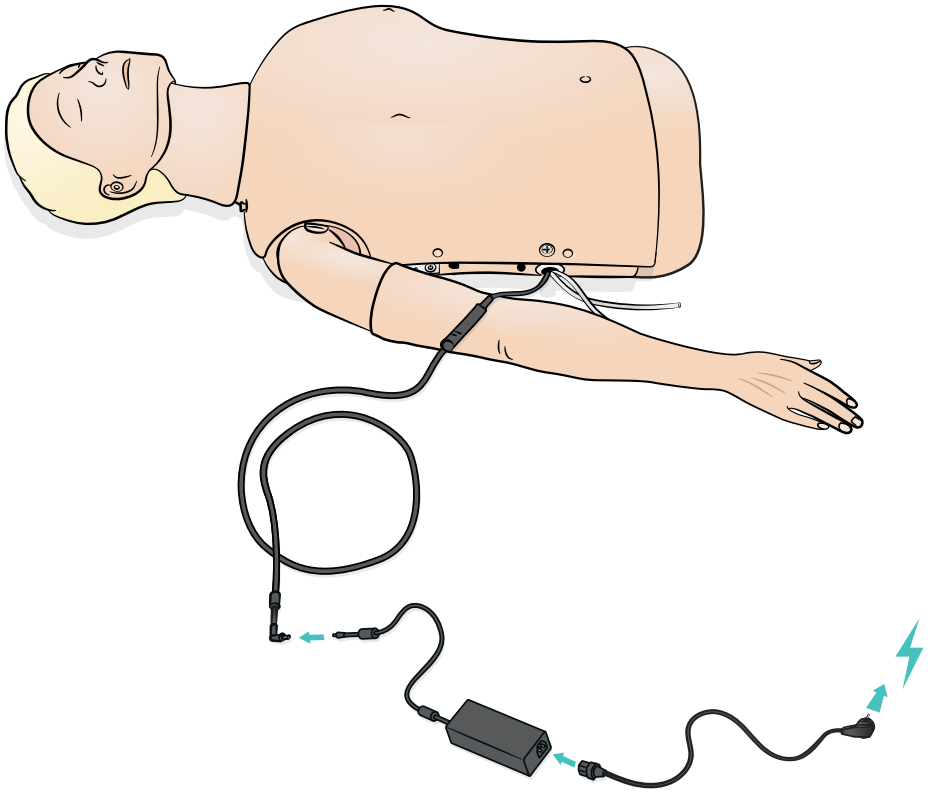
Other Features

Interchangeable pupils
Extensive sound libraries
Log files for debriefing

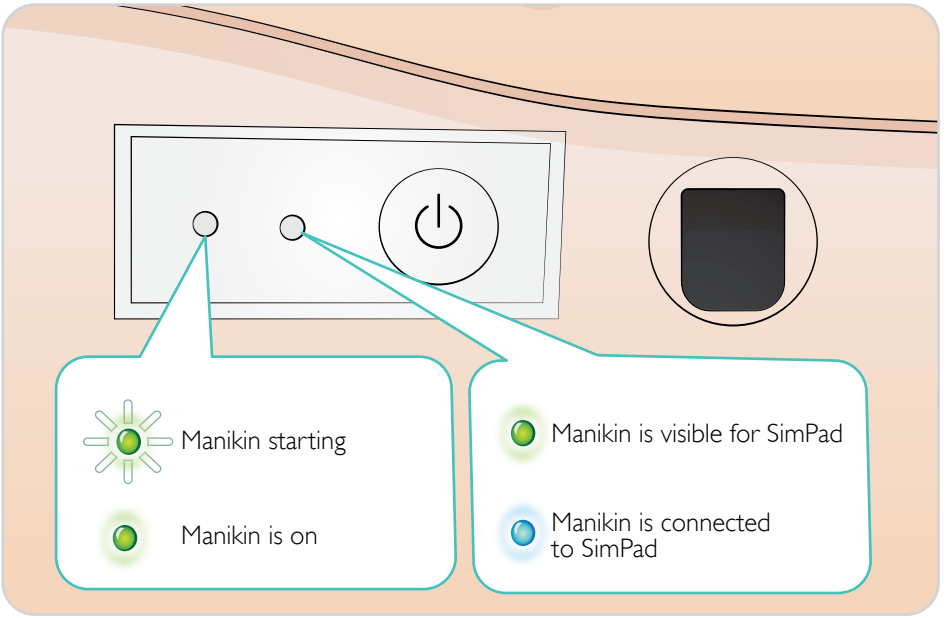
Charging

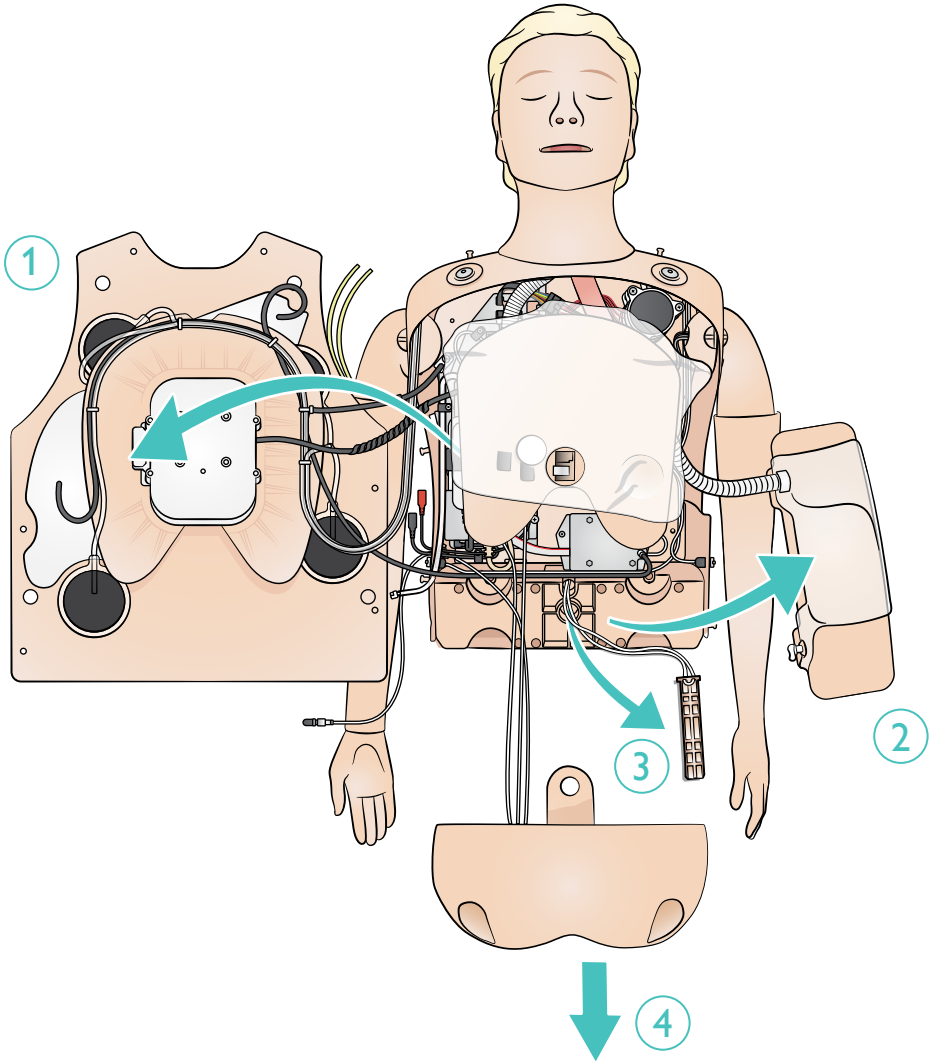
Charge battery using AC adapter complete with extention cable.

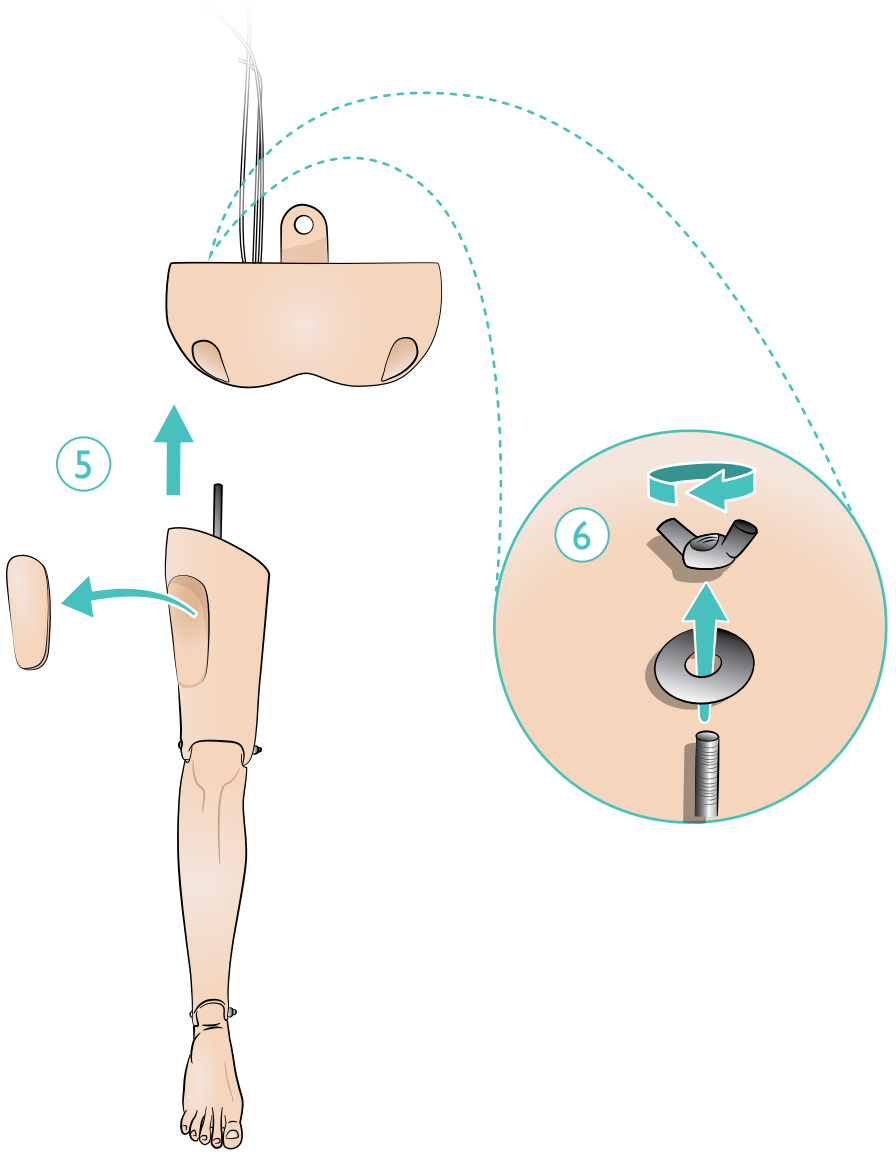
Fully charge battery before first use. Use AC adaptor with extension cable to charge.



Power Panel

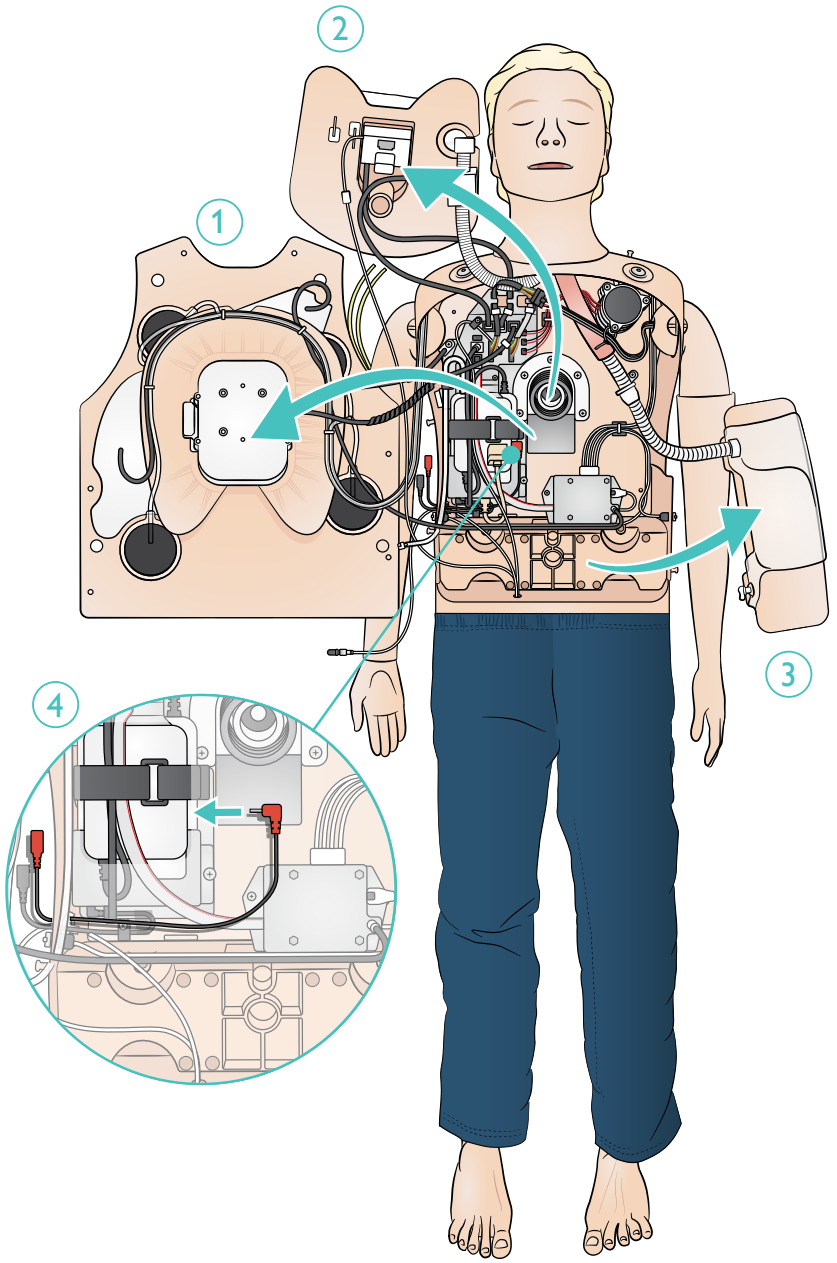




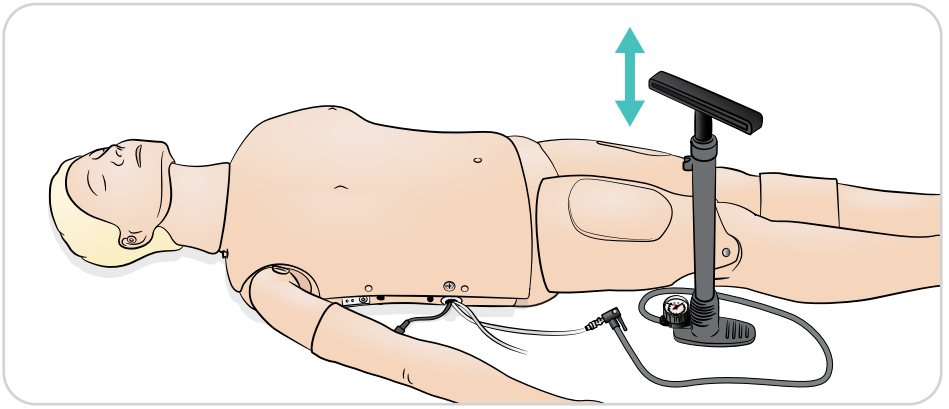


Note

To remove legs, reverse procedure.



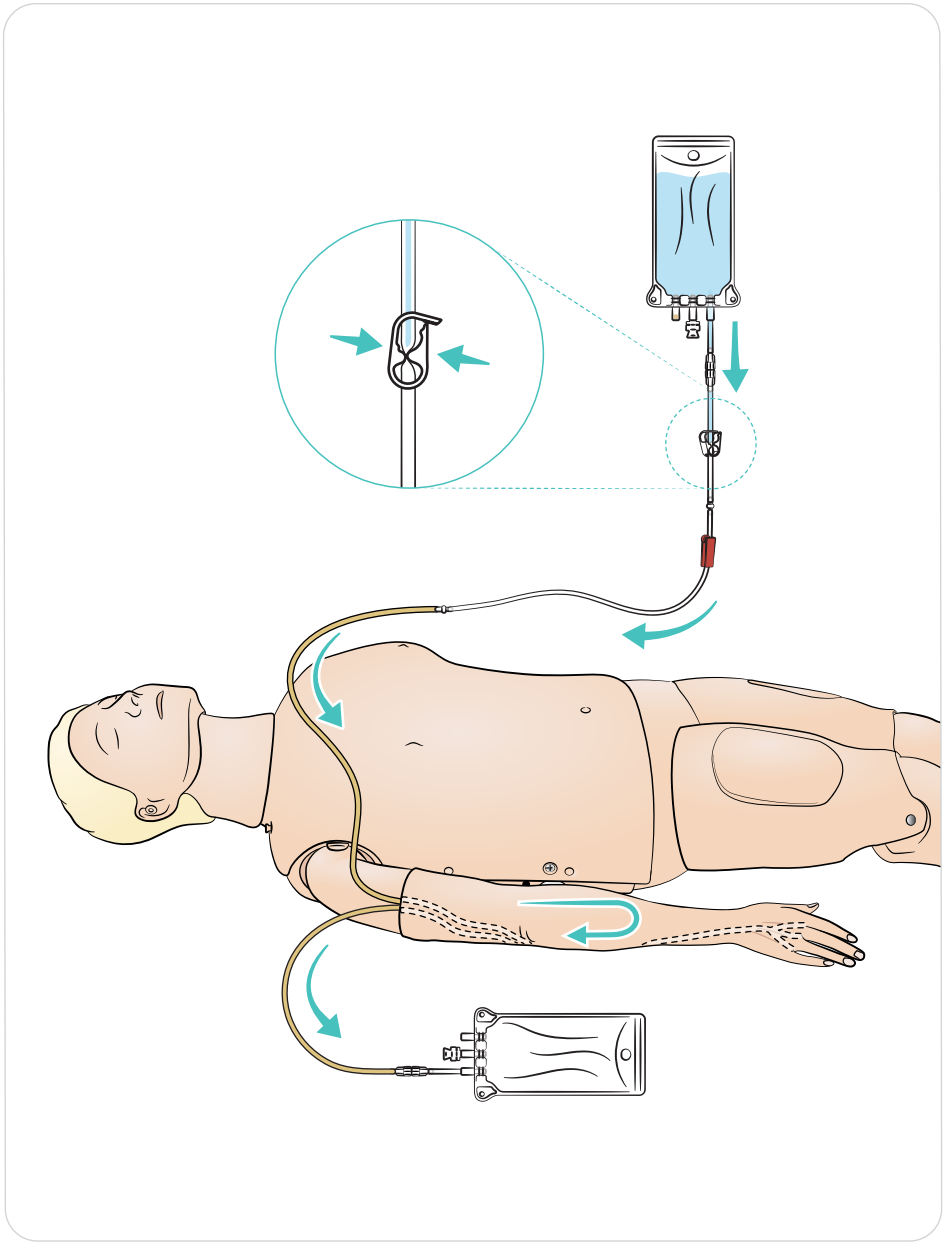
Air container is located inside pelvis. Use manual pump provided (or external compressor). Do not to exceed 10 bar (145 psi).



Note

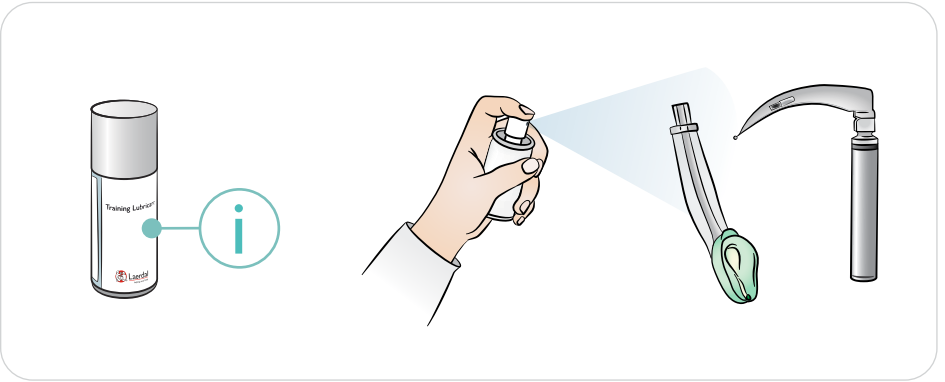
If spontaneous breathing is activated and no chest rise is observed, ensure there is enough air in the air container. Refill as necessary.

Attach IV tubing to IV bag. Allow fluid to flow through arm and out of other vein. Use clamp to stop flow.



Lubrication

- Lubricate airway with two or three sprays prior to starting your training session.
- Lubricate airway management tools liberally prior to starting intubations. Consider whether additional lubrication is needed later in the session.
- Use only Laerdal Airway Lubricant. Do not use silicon or other lubricant, as this may damage manikin.
- Lubricate the supraglottic or ET tubes before insertion.



Note

Head contains electrical components. Due to inability to sanitize airway, mouth-to-mouth/ mouth-to-mask ventilation should not be performed.

⚠ Cautions

- *Use only Laerdal Airway Lubricant. Other lubricant not approved by Laerdal can damage the airway.*
- *Lubricate instruments and tubes before insertion into the airway. Non-lubricated instruments and tubes are difficult to insert and can also damage the airway.*
- *The airways in the Airway Head cannot be completely sanitized, therefore, do not do: Mouth-to-mouth ventilation, mouth-to-mask ventilation, insertion of simulated vomit for suctioning.*

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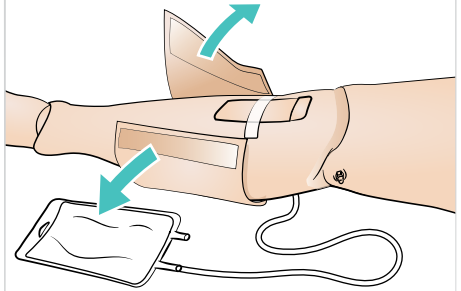

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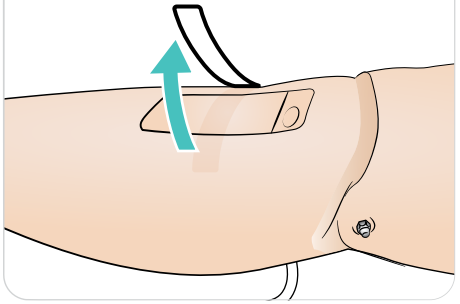

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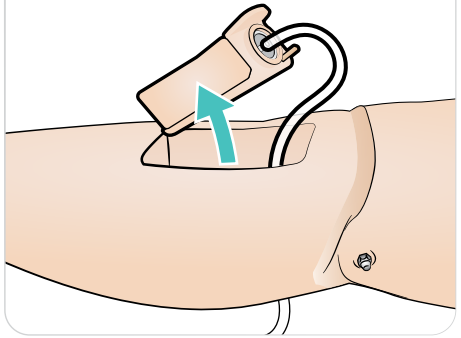

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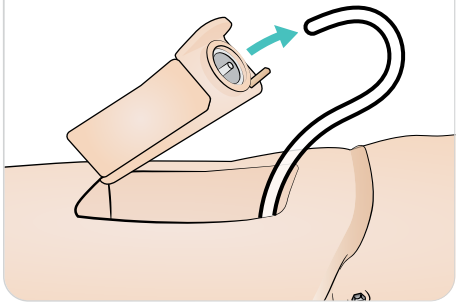

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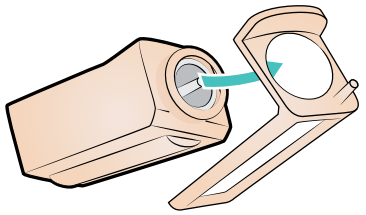

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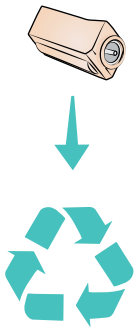

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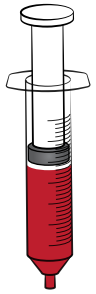

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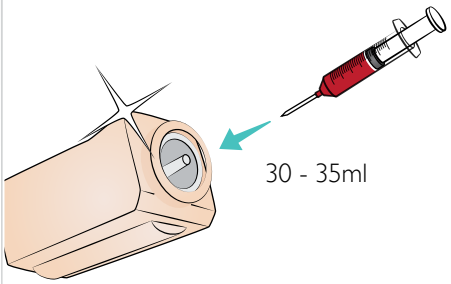

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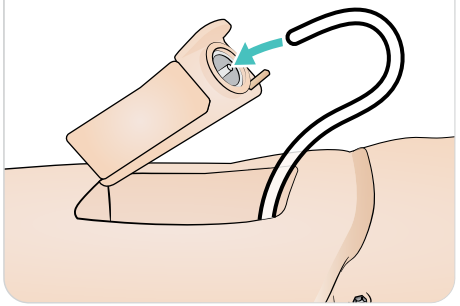

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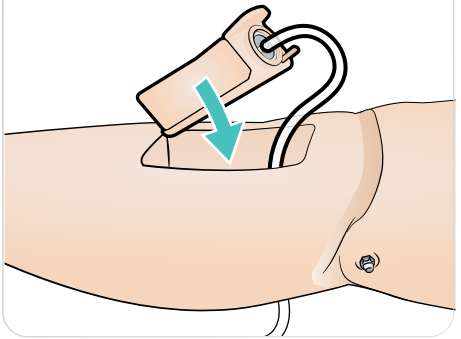

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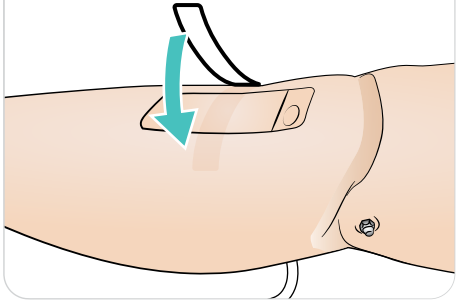

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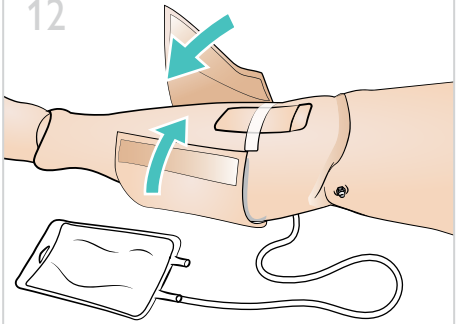
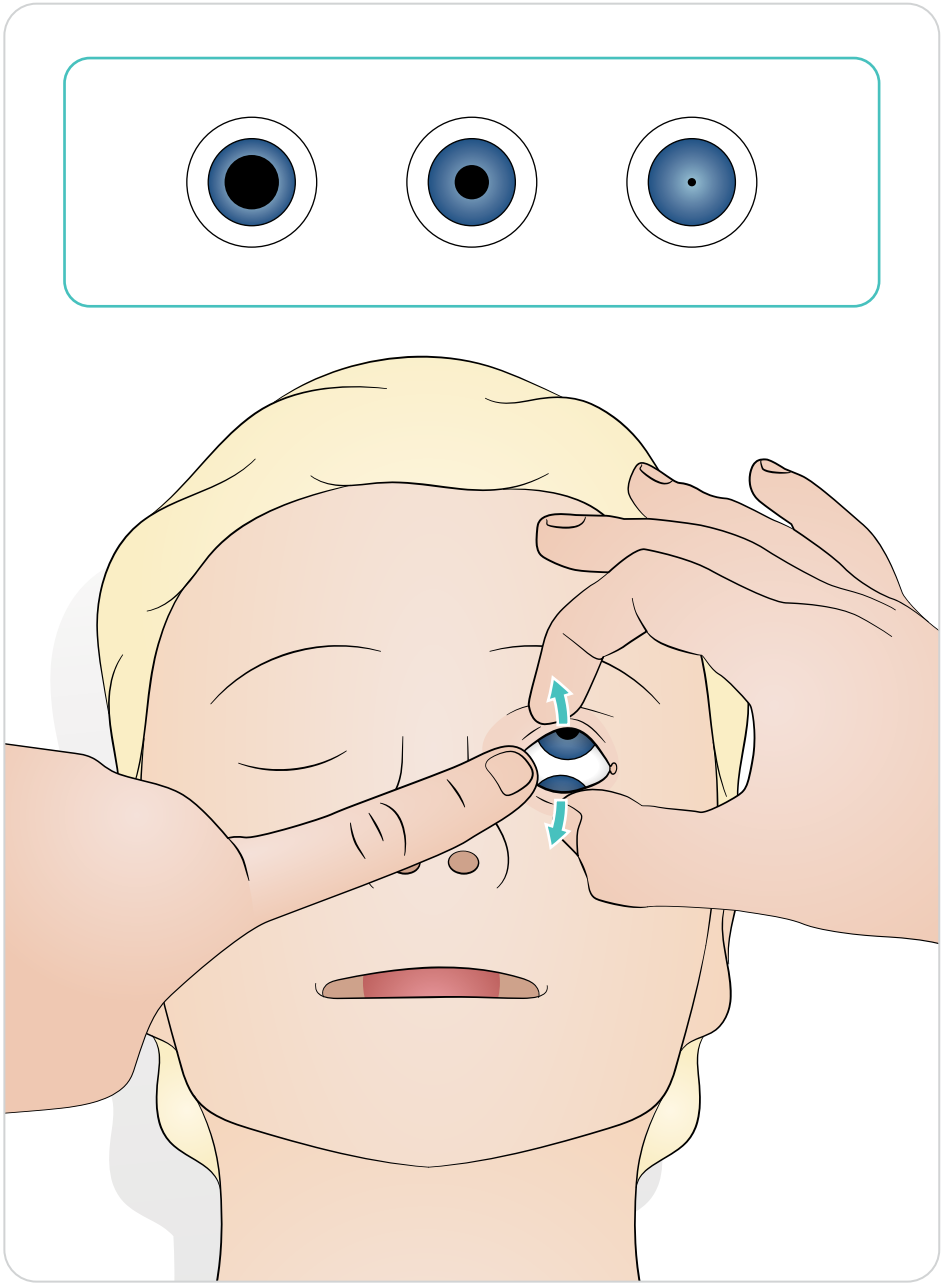


Preparing for Simulation - Change Eyes

Use different pupils to simulate various patient conditions.

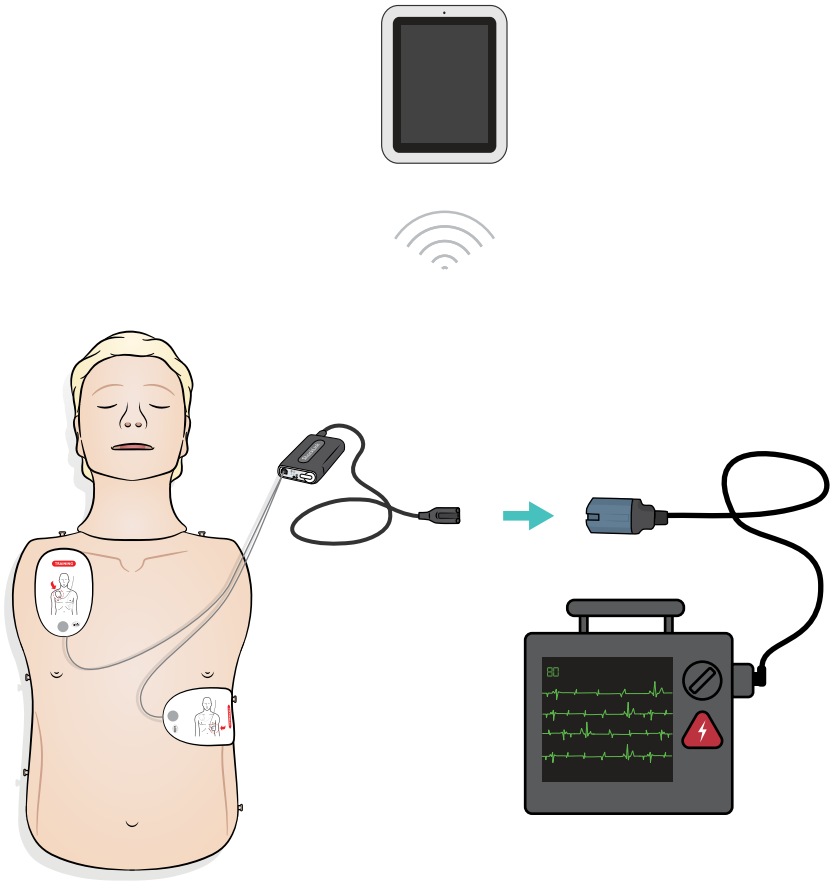


Resusci Anne Simulator AED Link version

Defibrillation using ShockLink and Training Pads. The SimPad PLUS (LLEAP) extensive ECG library will override the internal ShockLink ECG library.

⚠ Caution

Defibrillation training must be performed using ShockLink only. Refer to ShockLink Important Product Information. Paddle adapters are not possible to use.

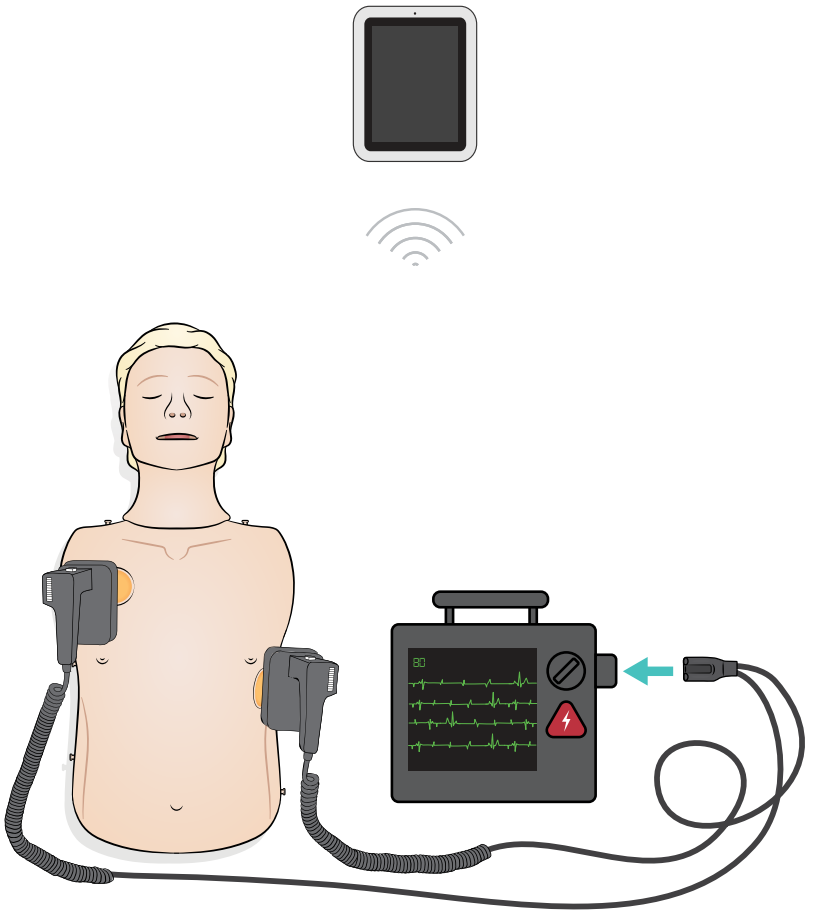


Resusci Anne Simulator Paddle version

The paddle plates are designed for use with manual defibrillators with paddles. The paddle plates can be replaced with the peg set included.

⚠ Cautions

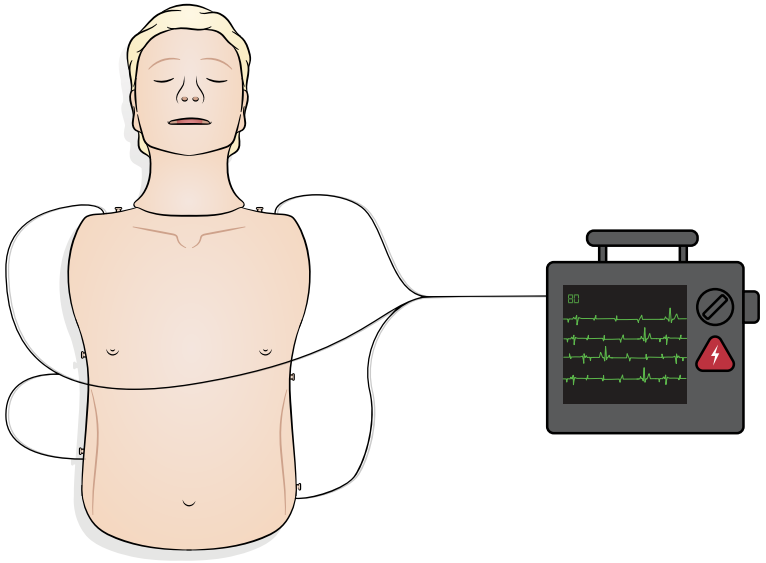
- *Defibrillation must be performed over the two paddle plates only. Alternatively use with peg set mounted and connect the defibrillator by HeartStart Defibrillator Training Cable*
- *To prevent overheating, provide maximum 2 x 360J discharges per minute*
- *Keep manikin chest dry. Ensure manikin remains dry when using IV arm*
- *To prevent chest pitting, do not apply conductive gel or conductive defibrillation pads intended for patient use*



Monitoring ECG is provided via the four ECG connectors as illustrated. Monitoring ECG can be selected in the SimPad PLUS (LLEAP) ECG library. ECG lead(s) can be selected using the lead selector on the monitor defibrillator.

⚠ Caution

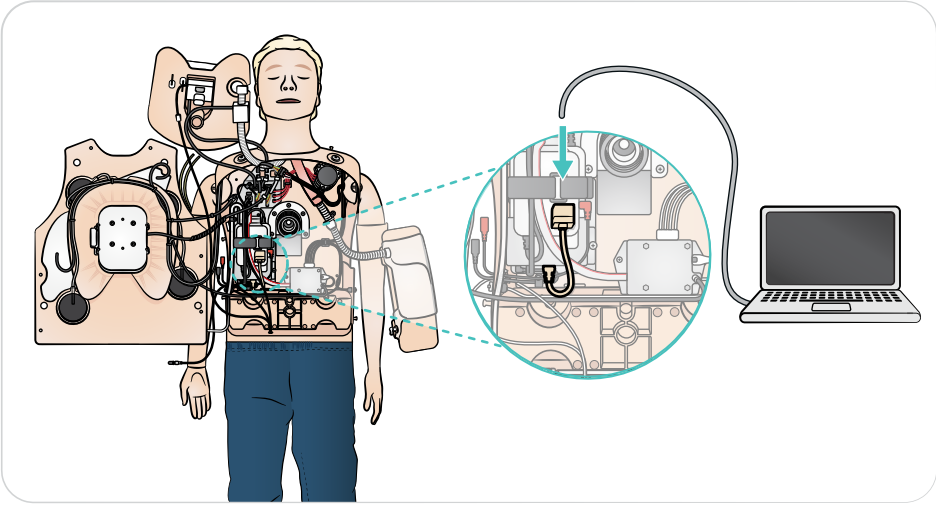
The ECG monitoring connectors are not designed for defibrillation or pacing energy.

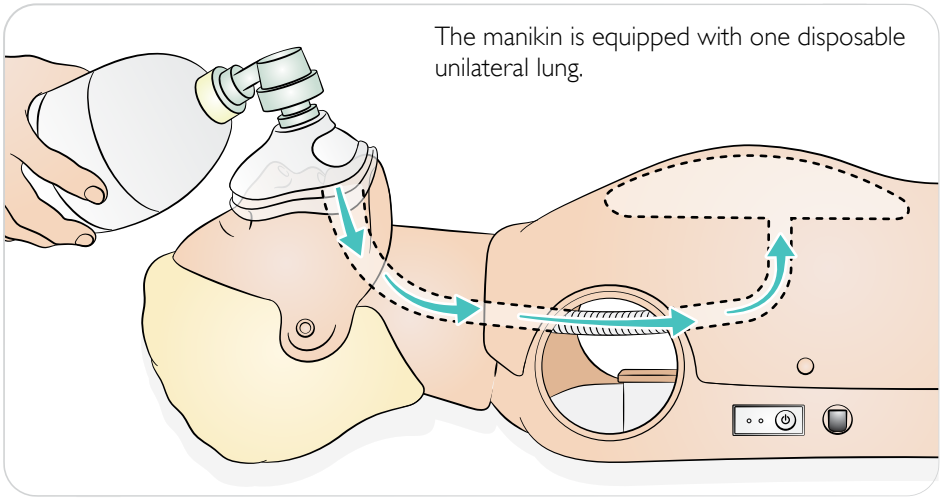


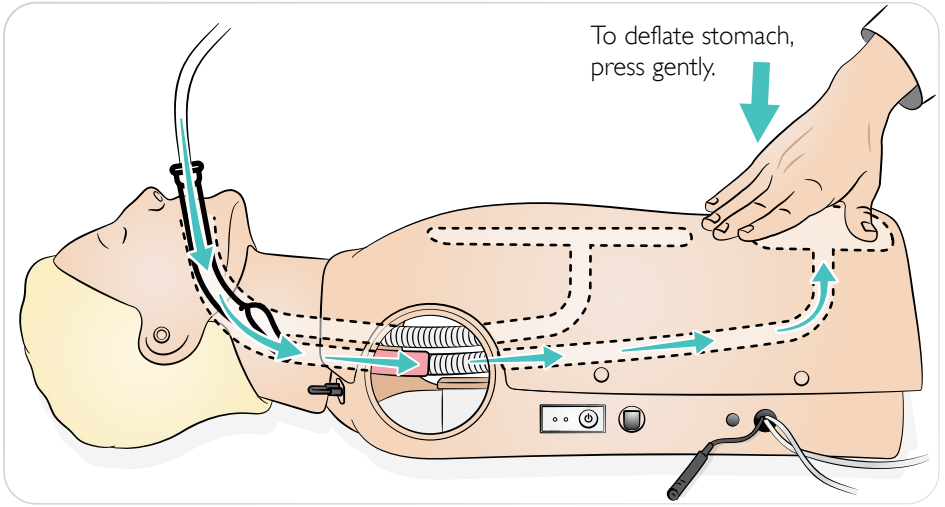
Connect SimPad to simulator

Refer to SimPad User Guide for instructions. Visit www.laerdal.com to download SimPad User Guide. Connect to SimPad PLUS wirelessly or with a USB-C cable.

Connect PC to simulator (optional for SimPad Patient Monitor)







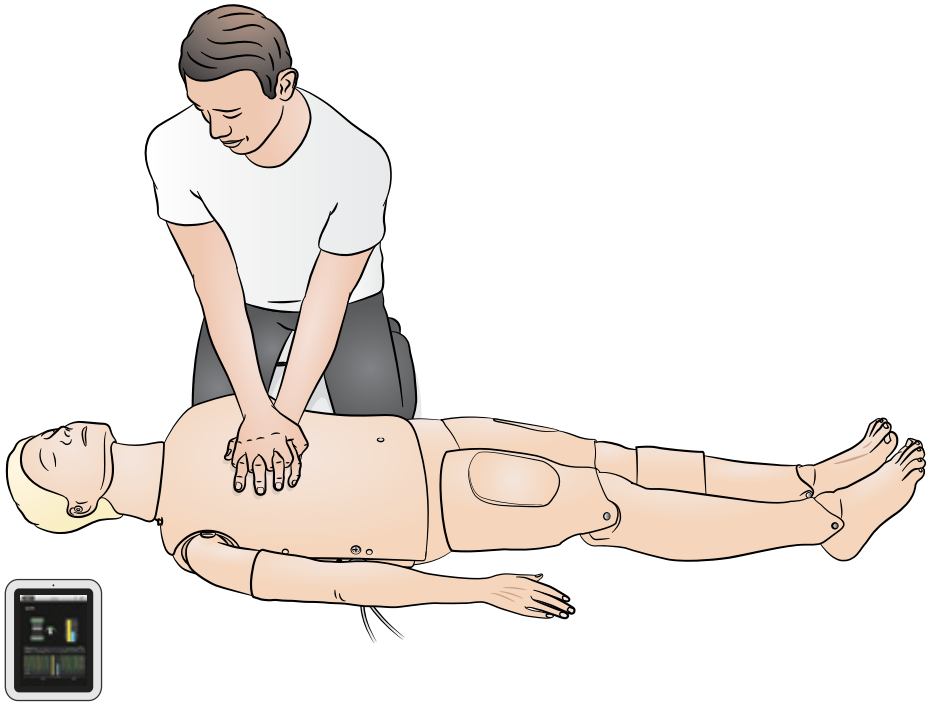
Airway Obstruction

Airway obstruction can be activated by the SimPad.

Notes

- *If the simulator is turned off while closure valve is closed, valve remains closed. Closure valve will open automatically when simulator is turned on.*
- *Do not use simulated vomit for suctioning.*

Manikin will detect correct hand position.



Use - Blood Pressure (BP) Arm

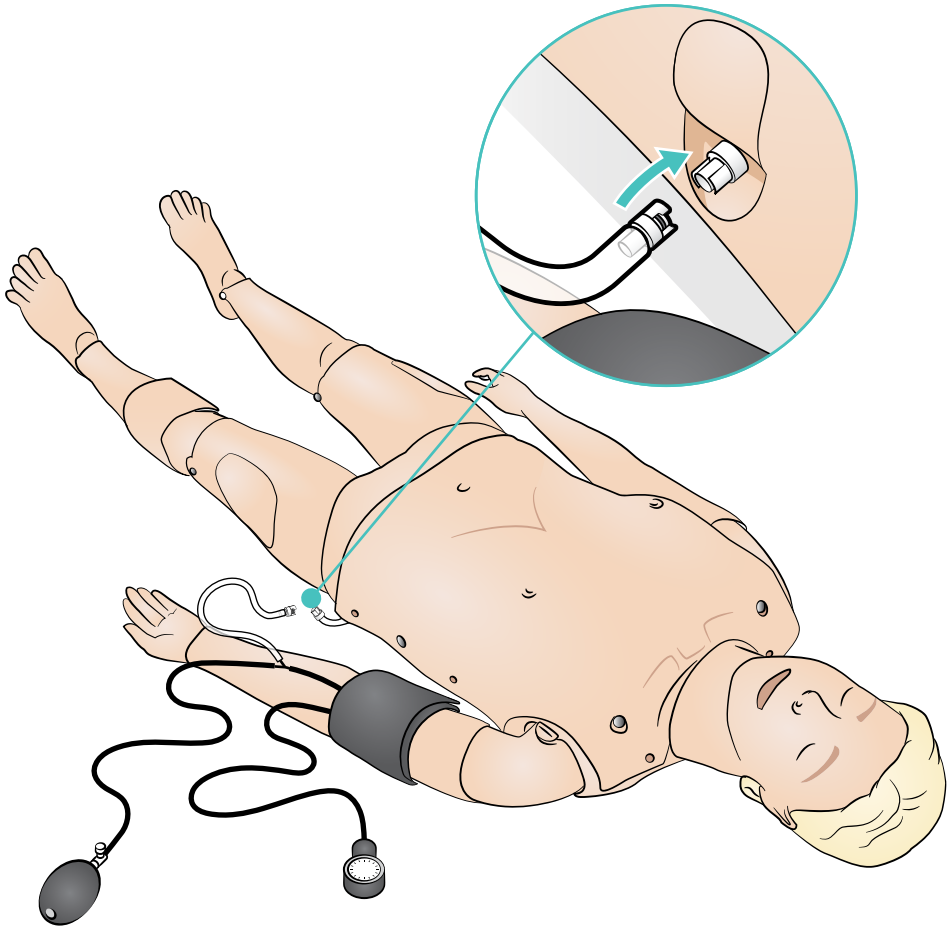
The simulator is packaged with the BP arm attached and is designed to rotate approximately 220°. The specially adjusted blood pressure cuff measures BP manually by auscultation of Korotkoff sounds.

Notes

- *Only use the Blood Pressure Cuff supplied with RA Sim.*
- *BP arm can be on left or right side depending on configuration*
- *See Installation Guide for BP arm for further instructions.*

⚠ Caution

To prevent damage, do not over rotate the BP arm.



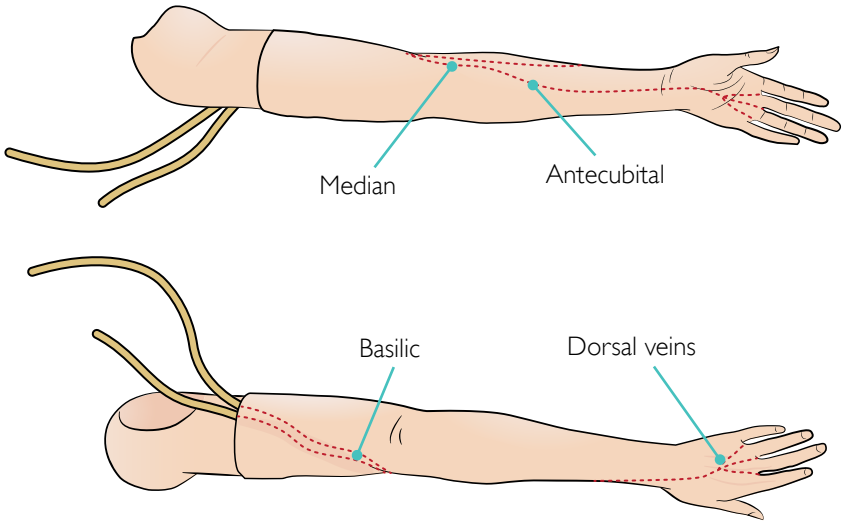
Use - IV Arm

The IV arm supports simulation of IV drug administration, IV insertion, infusion, and bolus into peripheral veins of forearm, antecubital fossae, and dorsum of the hand.

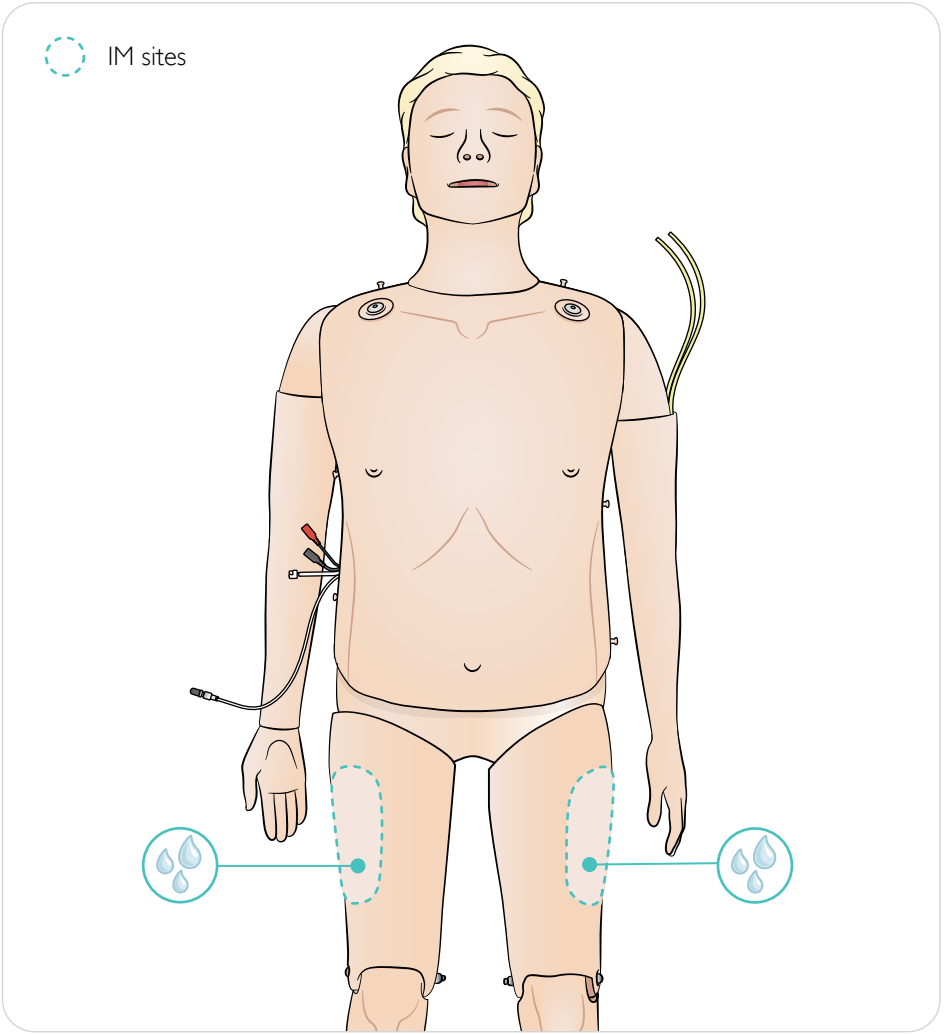
Notes

- *Do not store the simulator with fluid in the IV arm system. Use a syringe to flush remains of any injected water from the tubing and components prior to storage*
- *IV arm can be on left or right side depending on configuration*
- *See Installation Guide for IV arm skin and veins kit for further instructions*

Recommended needle size: 22 - 24 G



Simulated medications can be administered via intramuscular injections in several sites. Clean IM foam pads after each use. See 'Cleaning' section.



Notes

- *Do not inject fluids into thighs*
- *Recommended: use 21G or smaller sharp needles*
- *Only inject distilled water*
- *Does not support subcutaneous injections*

General

Preventive maintenance is the best method to ensure optimal operation. General inspection should be conducted at regular intervals.

Periodically wash all skin parts that are not regularly sanitized using warm water and soap or manikin wipes.

Most stains can be removed with warm water and soap or Laerdal manikin wipes. Before use, test cleaning agents on a non-critical area (e.g. under the chest cover).

Note

Pigments from lipstick and pens may be impossible to remove. Avoid using coloured plastic gloves when handling the manikin, as they may cause discolouration.

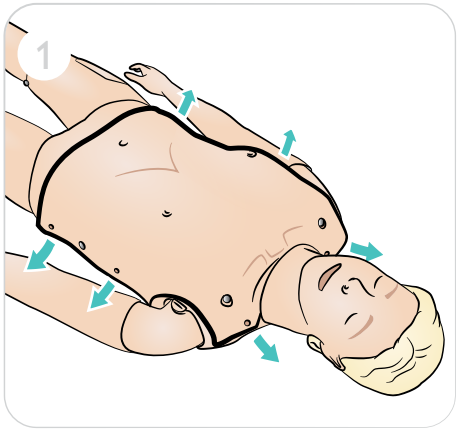
IM Injection Pads

Immediately after use, remove IM injection pads from the simulator. Squeeze to remove excess fluids. Air dry.

IM injection pads have a foam interior that must be removed for drying. Remove foam through the slit in the back of the pad. Squeeze to remove excess fluids. Immerse foam in weak solution of tap water and bleach, then squeeze to remove the bleach solution. Air dry and reinsert. Talcum powder may be used to ease reinsertion.

Note

Leaving wet injection pads in manikin for extended periods of time will promote mold growth.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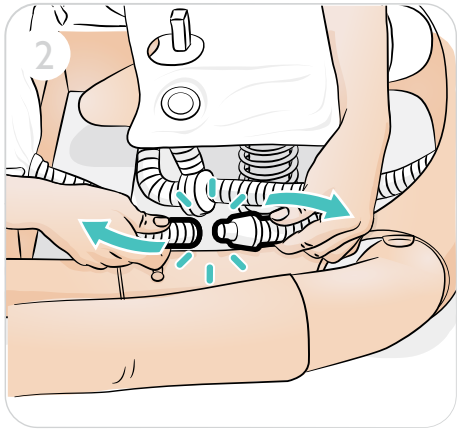
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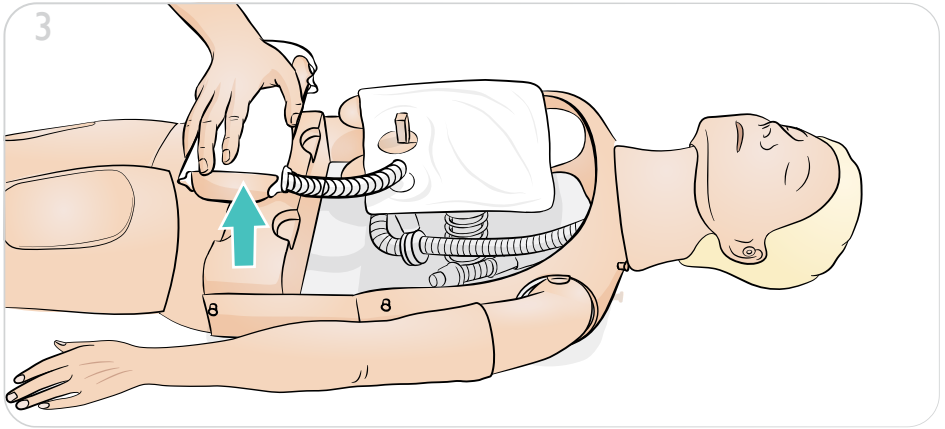
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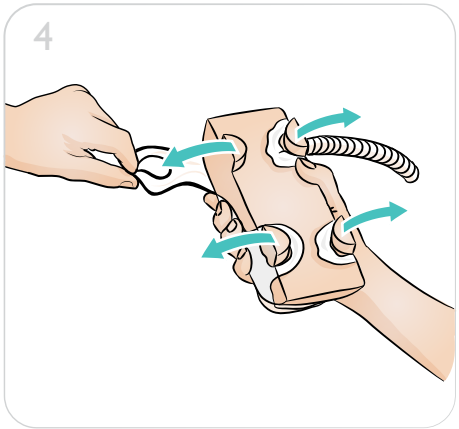
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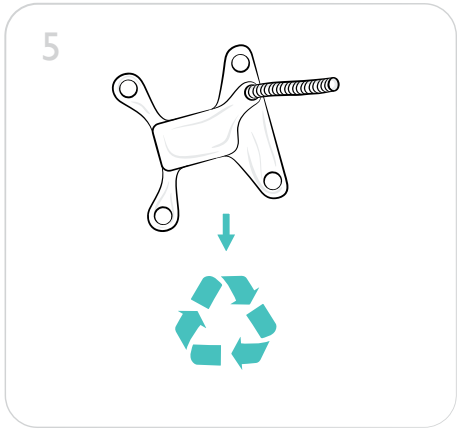
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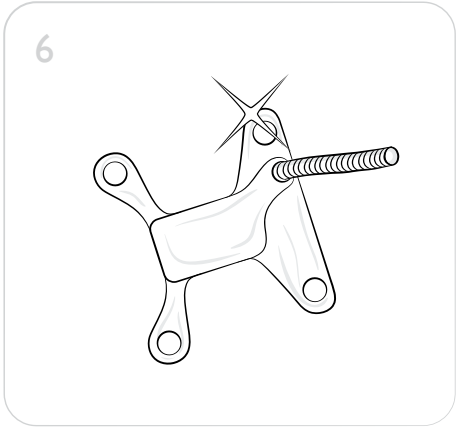
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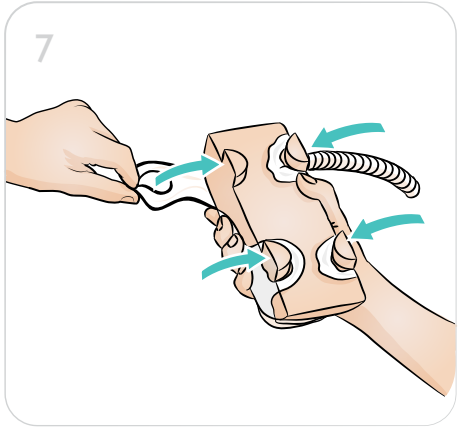
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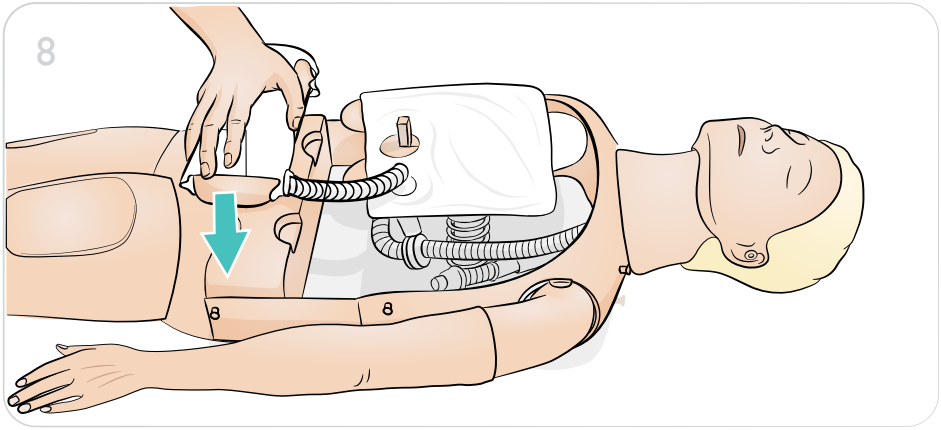
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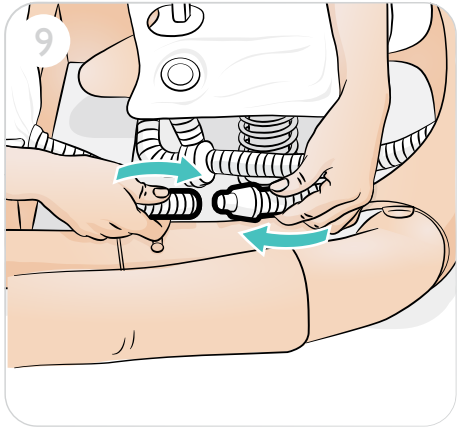
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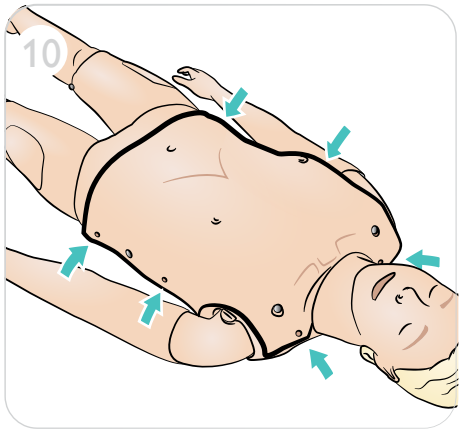
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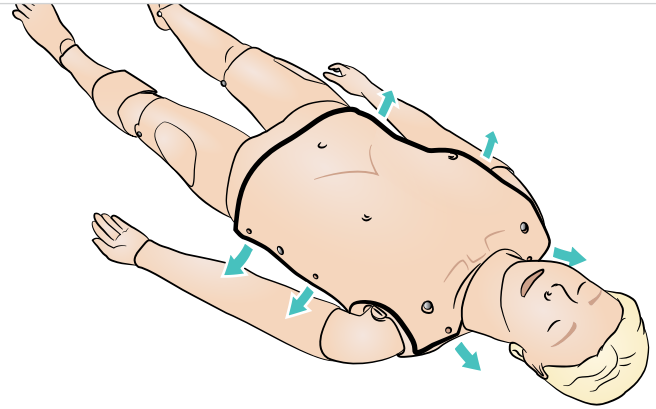

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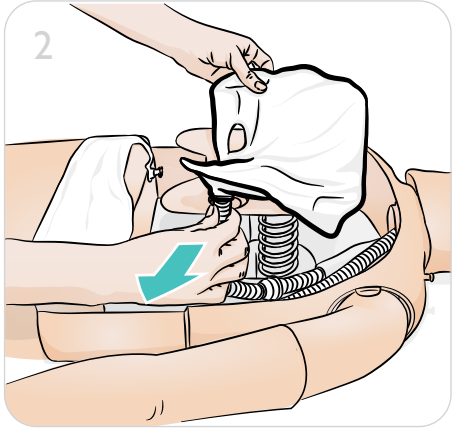

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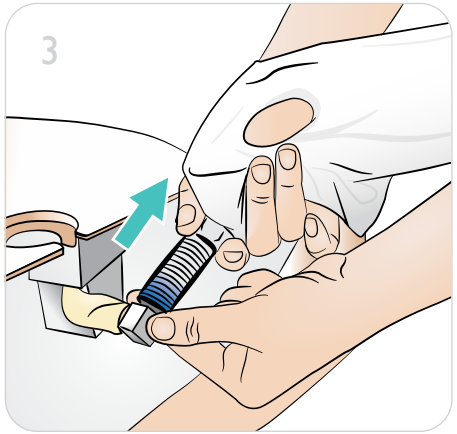

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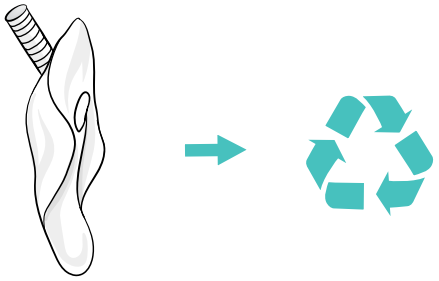

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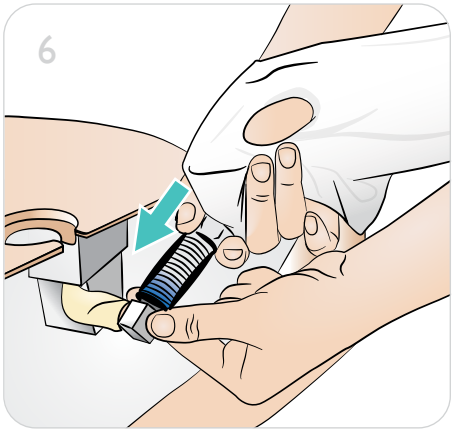

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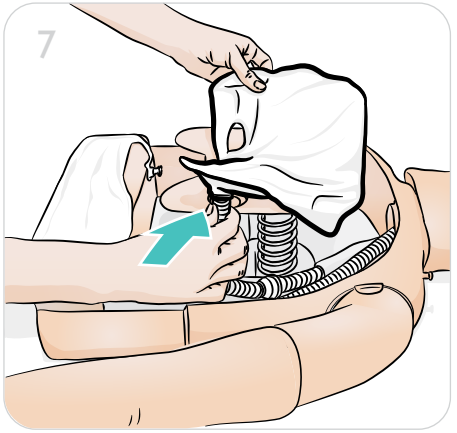

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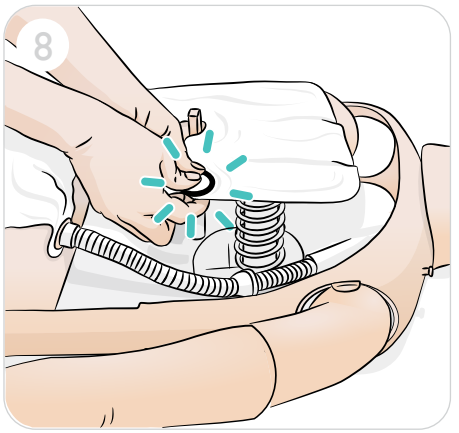

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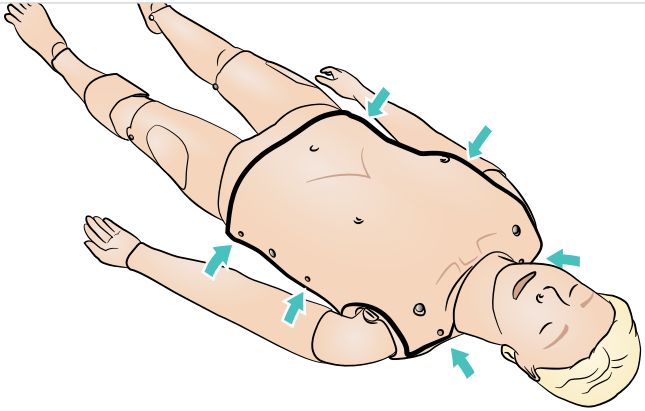

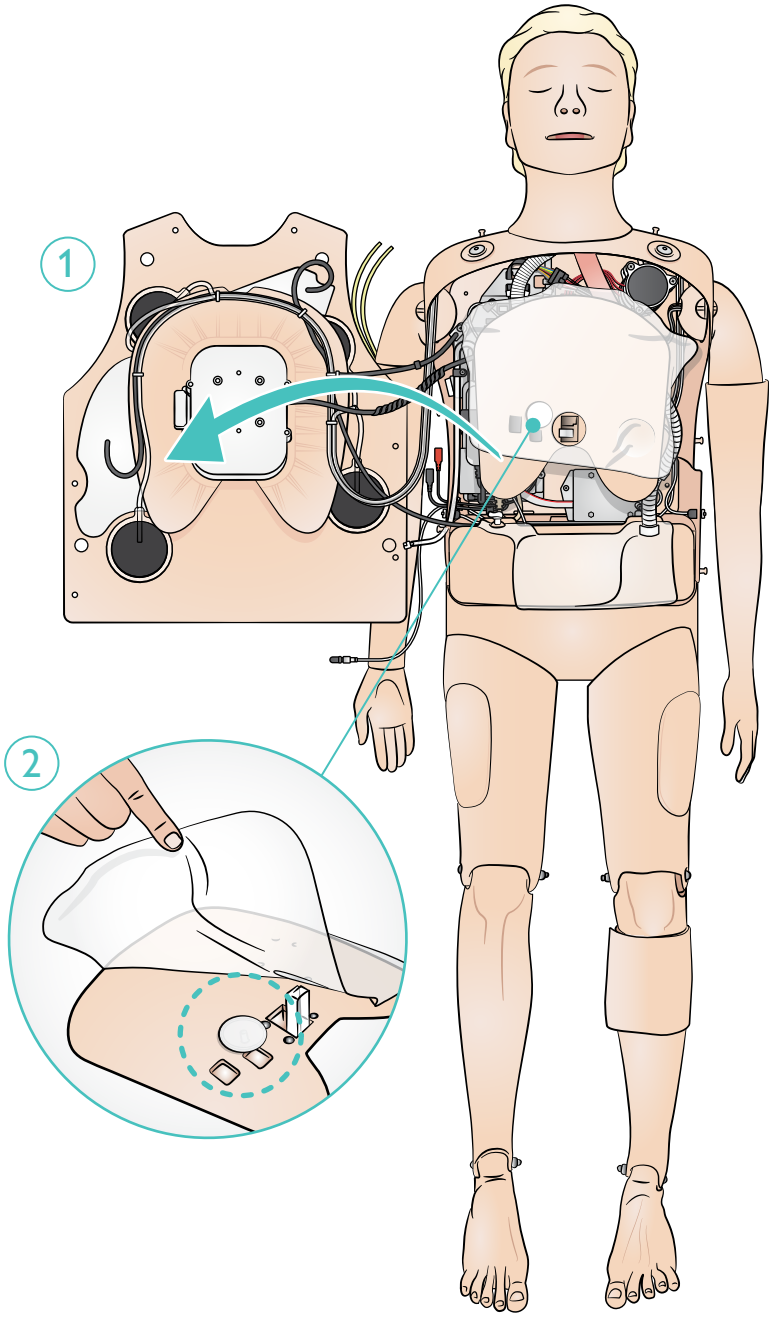
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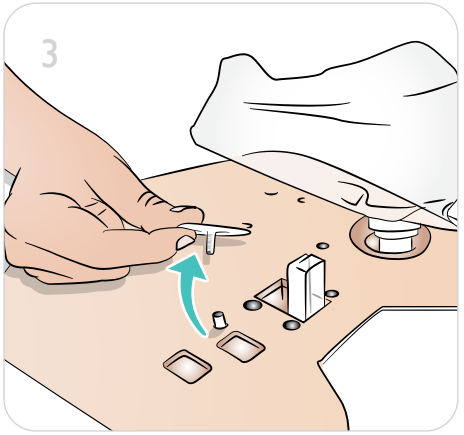
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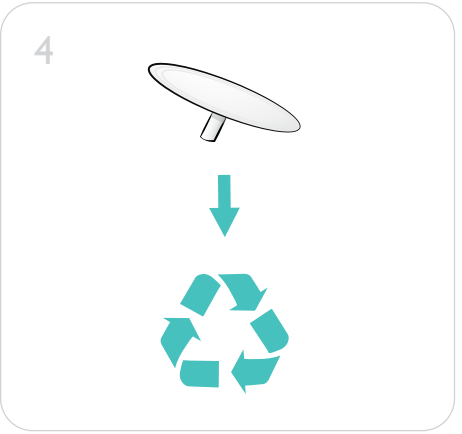
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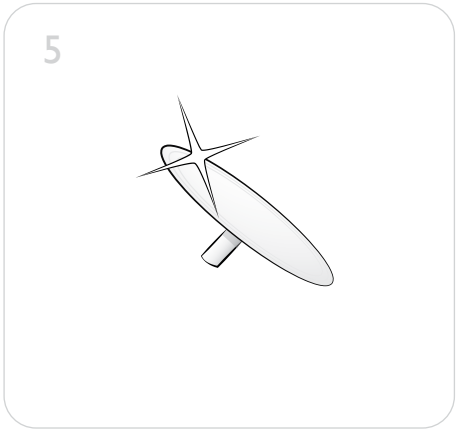
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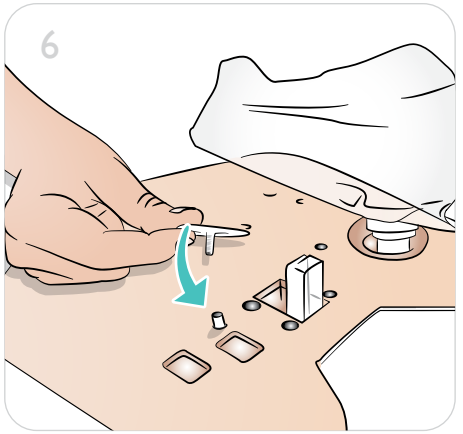
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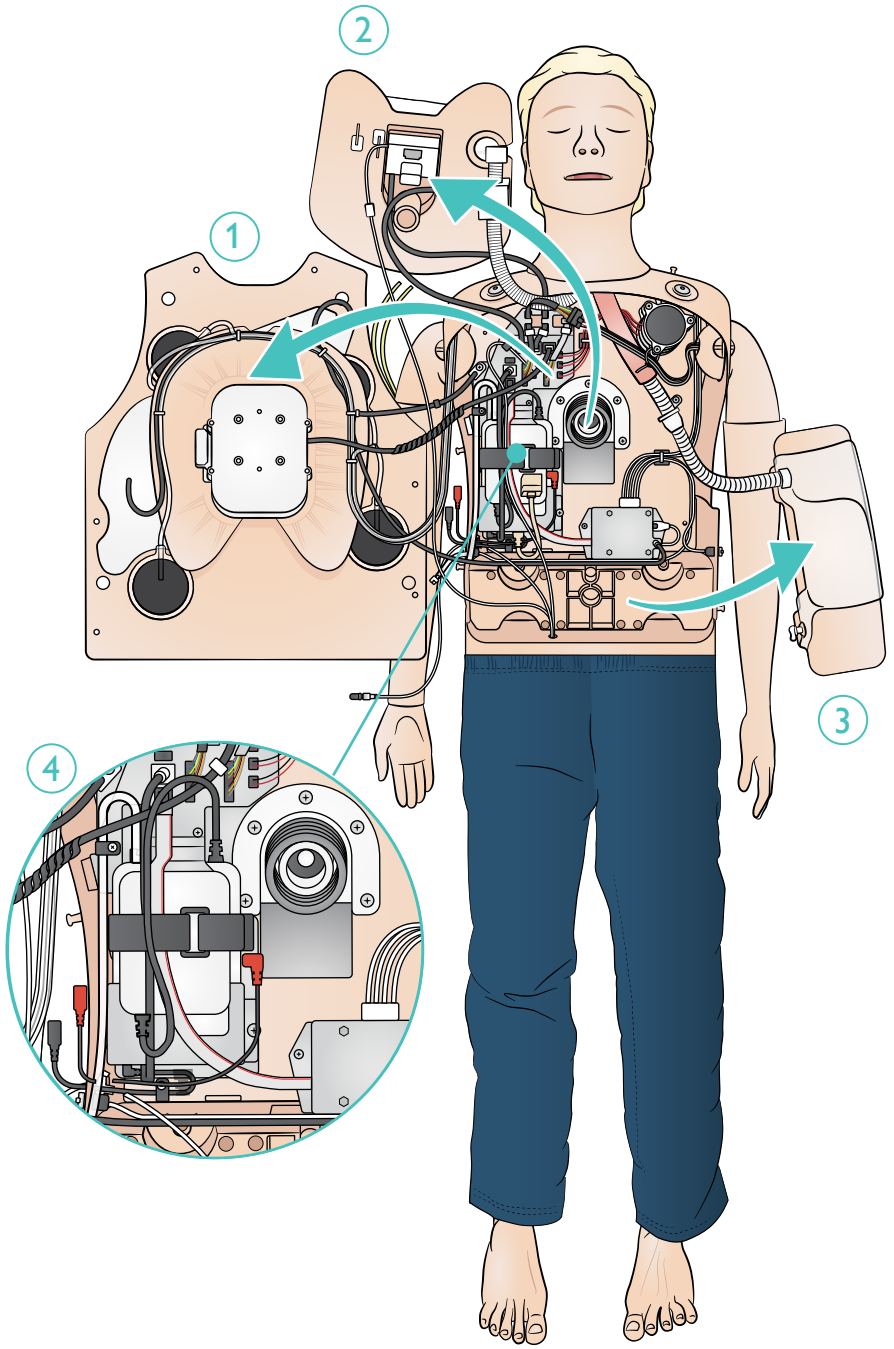
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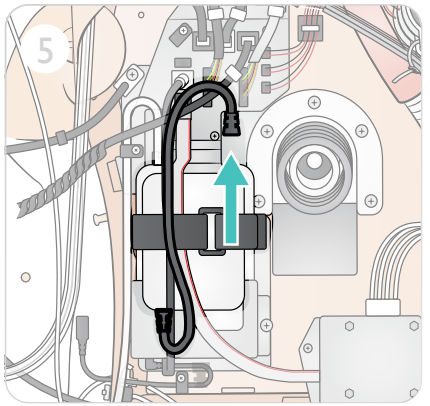
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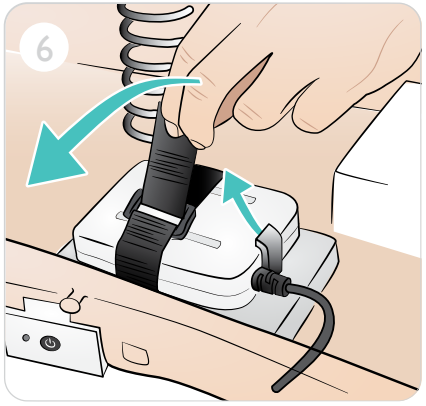
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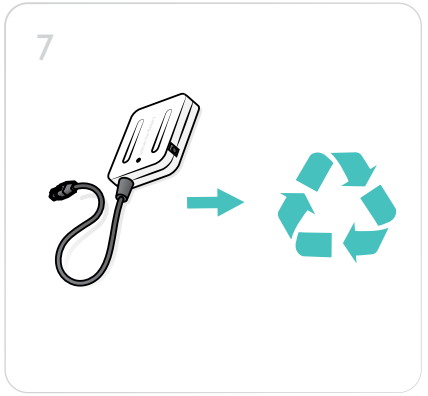
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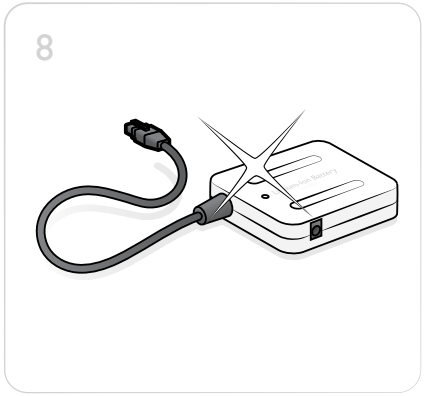
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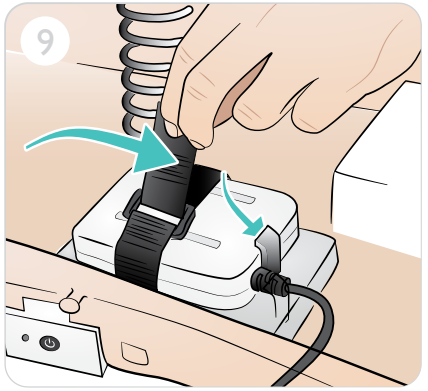
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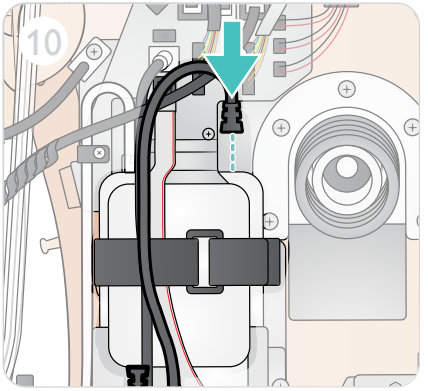
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Laerdal Medical AS
P.O. Box 377
Tanke Svilandsgate 30, 4002 Stavanger, Norway
T: (+47) 51 51 17 00

20-12270 Rev G

www.laerdal.com

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