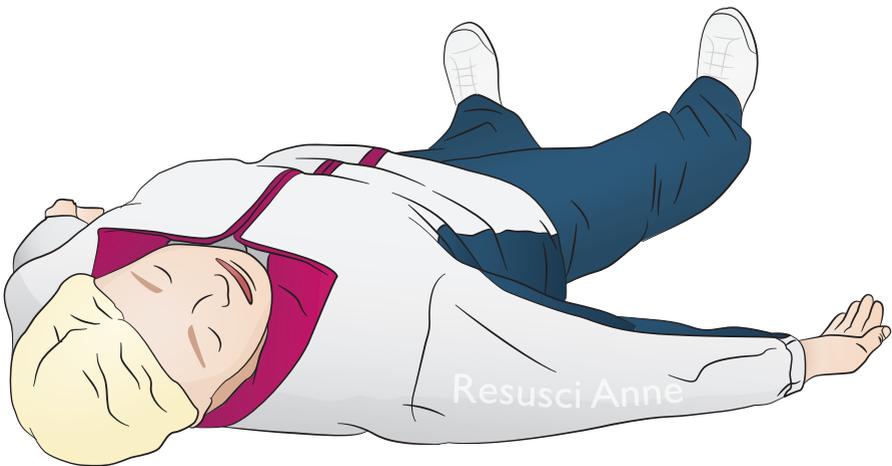


# Resusci Anne Advanced Skill Trainer

User Guide





<b>Intended Use</b>	4
<b>System Overview &amp; Setup</b>	5
<b>Items Included</b>	6
<b>Overview</b>	8
<b>Features</b>	9
<b>Charging</b>	10
<b>Power Panel</b>	10
<b>Preparing for Simulation</b>	
Connect Microphone	11
IV Arm	12
Lubrication	13
Change Eyes	14
<b>Use</b>	
Defibrillation	
• Resusci Anne Advanced Skill Trainer Link version	16
• Resusci Anne Advanced Skill Trainer Paddle version	17
Connect ECG Monitoring	18
Connections	19
Ventilation	20
Chest Compressions	21
IV Arm	22
<b>Maintenance</b>	
General Cleaning	23
Stomach Replacement	24
Lung Replacement	26
Leg Replacement	28
Battery Replacement	30

# Intended Use

---

The Resusci Anne Advanced SkillTrainer (RA AST) is designed to meet the core learning objectives of intermediate to advanced healthcare. The manikin supports training for CPR, defibrillation, IV therapy and basic to intermediate (supraglottic) airway management procedures. Adding the optional first aid and rescue limbs also enables first aid and extrication practice.

SimPad and SkillReporting software enables documentation of key events and comprehensive instructor-to-student debriefing.

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](http://www.laerdal.com).



## Note

*Illustrations may vary from product.*

## RA AST AED



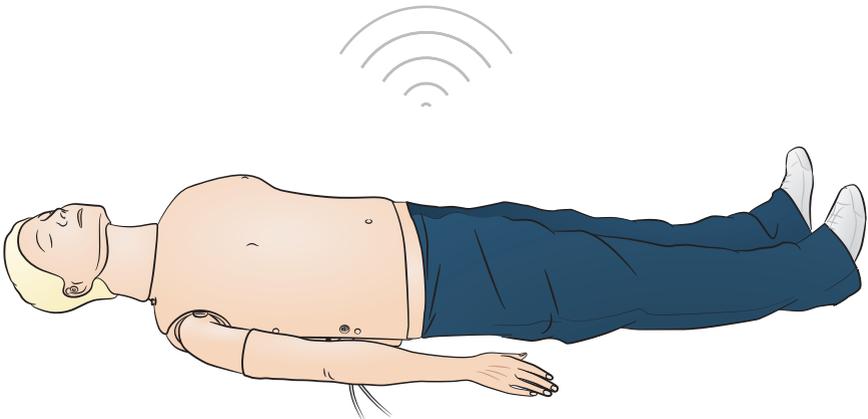
### Cautions

- *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 RA AST AED 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
- LLEAP

## Compatible systems

- Laerdal Simulation Home
- Voice Conference Application
- Patient Monitor

To enable scenarios, real time feedback and debriefing, connect to SimPad PLUS or other PC or Tablet applications.

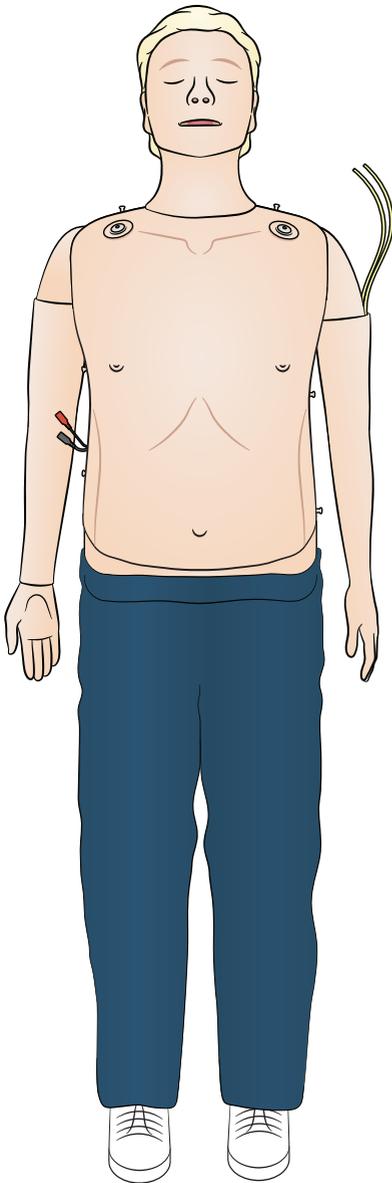


Note

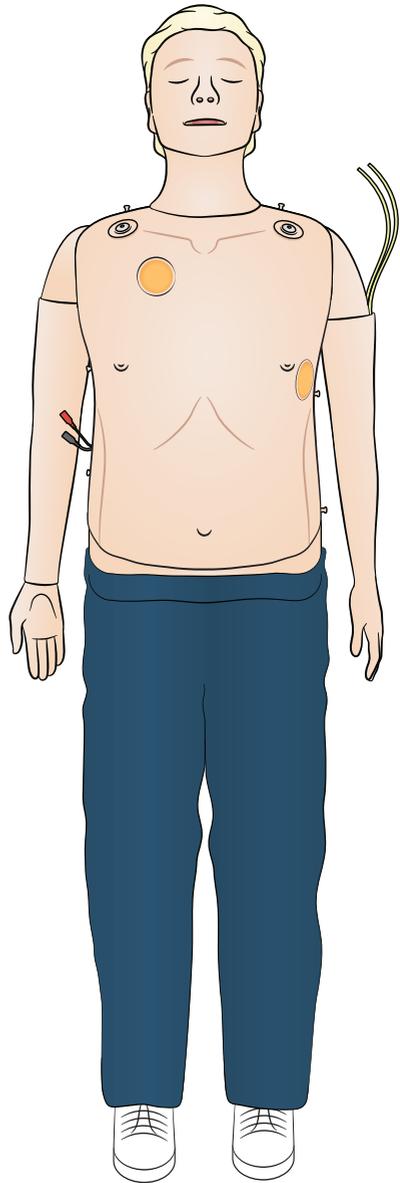
Visit [www.laerdal.com](http://www.laerdal.com) to download *SimPad PLUS User Guide*.

# Items Included

---



Resusci Anne Advanced  
Skill Trainer  
AED Link version



Resusci Anne Advanced  
Skill Trainer  
Paddle version



ShockLink  
included with the  
AED Link version



Simulated  
blood



Lubricant



Trolley bag



Clothes



Documents



LAN  
cable



AC adapter and  
extension cable



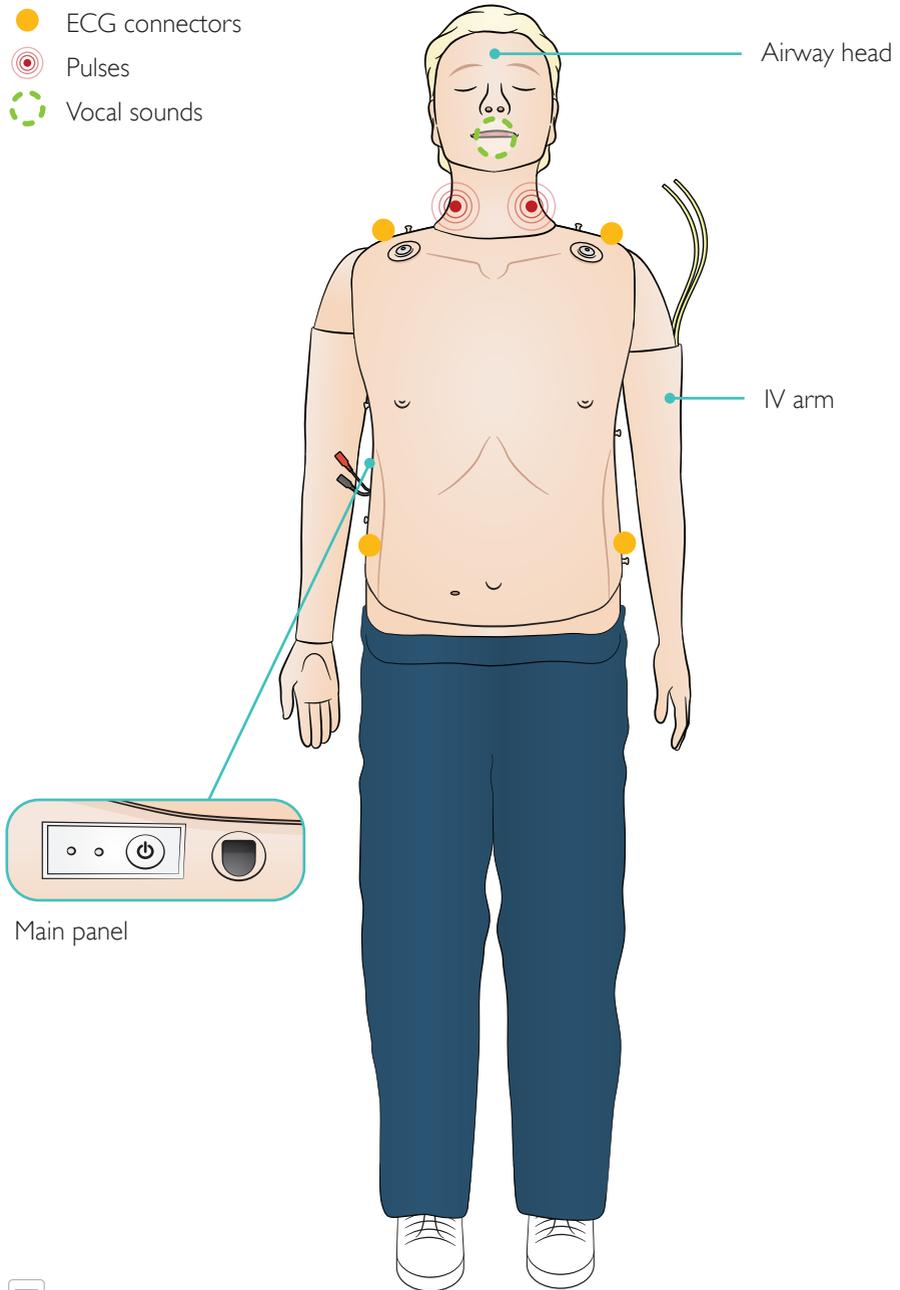
Microphone  
extension cable



USB  
cable

# Overview

- ECG connectors
- ◎ Pulses
- ⊞ Vocal sounds



Note

*IV arm can be reversed in alternative configuration; 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 chords)
- Supraglottic intubation (iGel, Laryngeal Tube LTS, LMA and others)
- Sellick maneuver
- Tongue fall back
- Stomach distension

## 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
- Pulses (carotid, bilateral)
- Compression measurement and feedback

## Vascular Features

- Multivenous IV arm

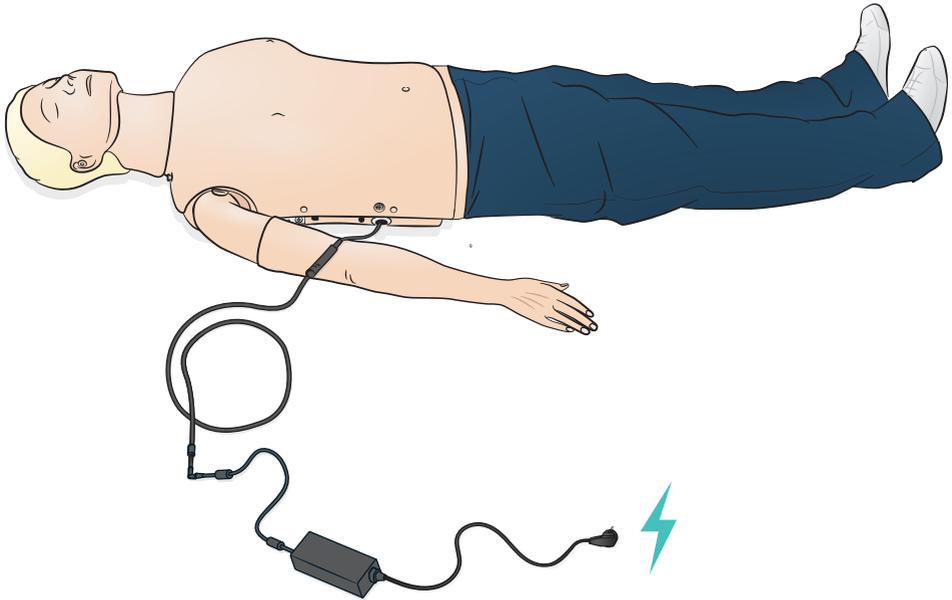
## Other Features

- Interchangeable pupils
- Log files for debriefing

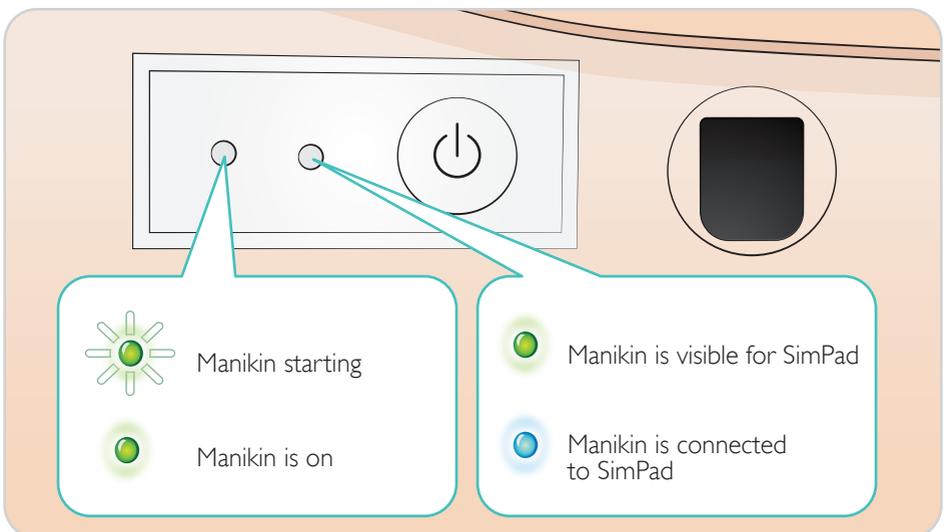
# Charging

Charge battery using AC adapter complete with extension cable.

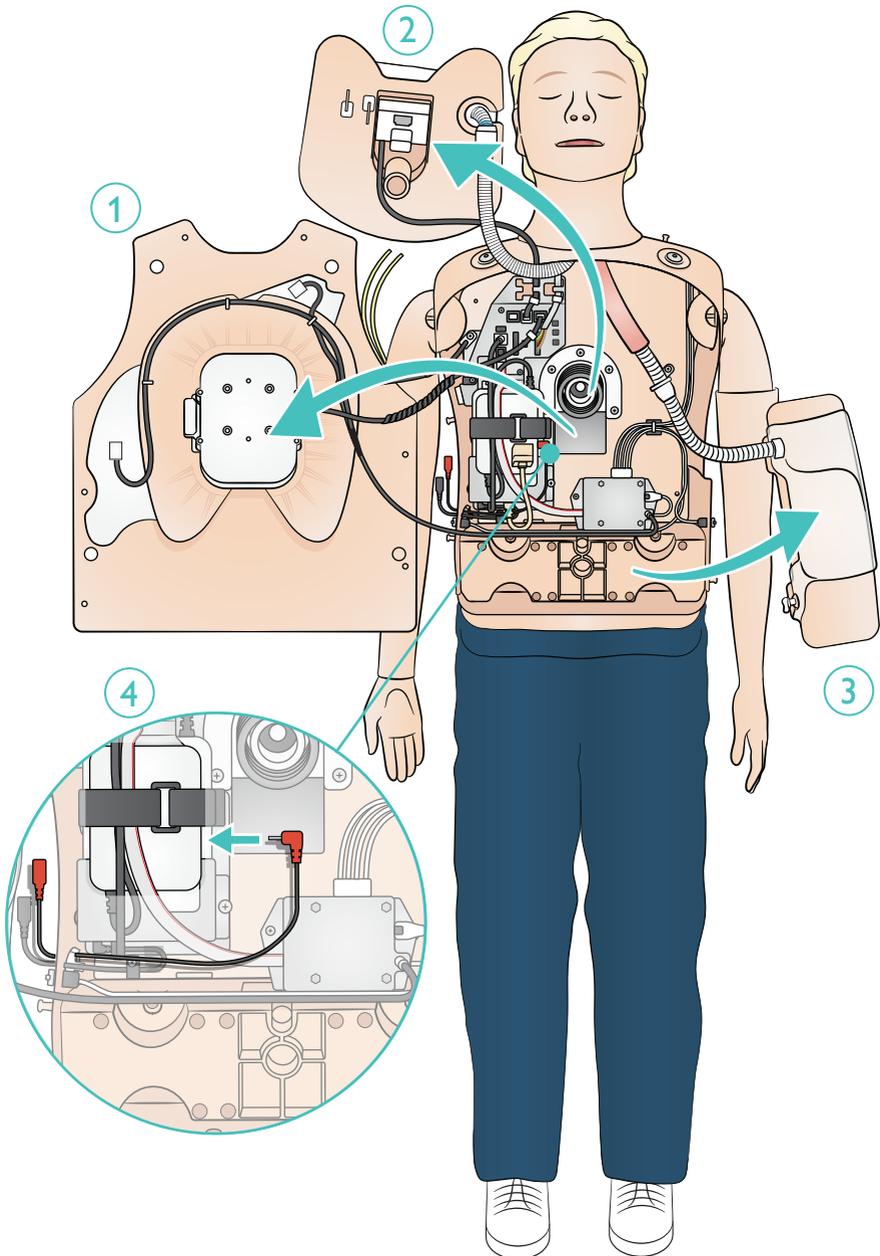
Fully charge battery before first use. Use AC adaptor with extension cable to charge.



## Power Panel

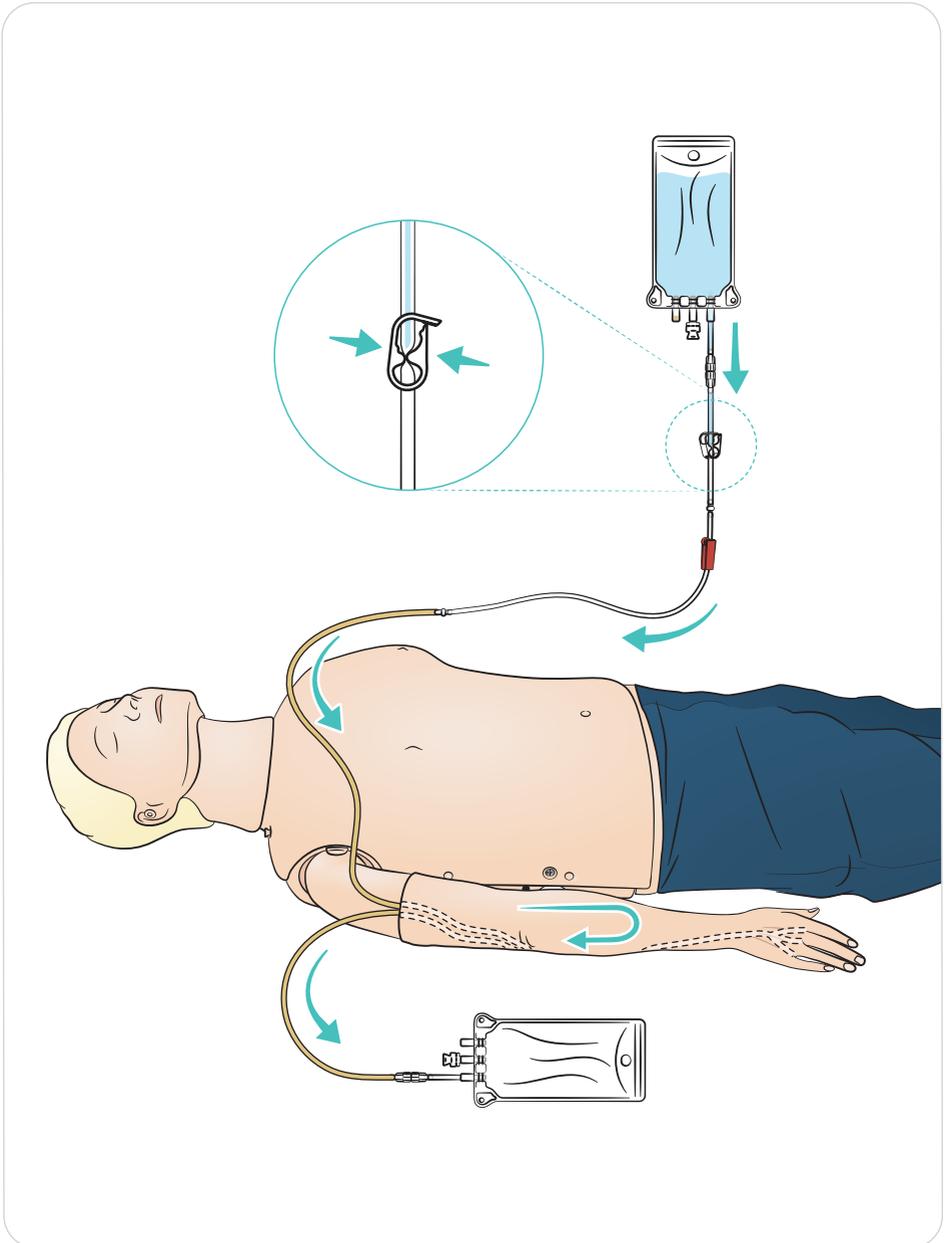


## Preparing for Simulation - Connect Microphone



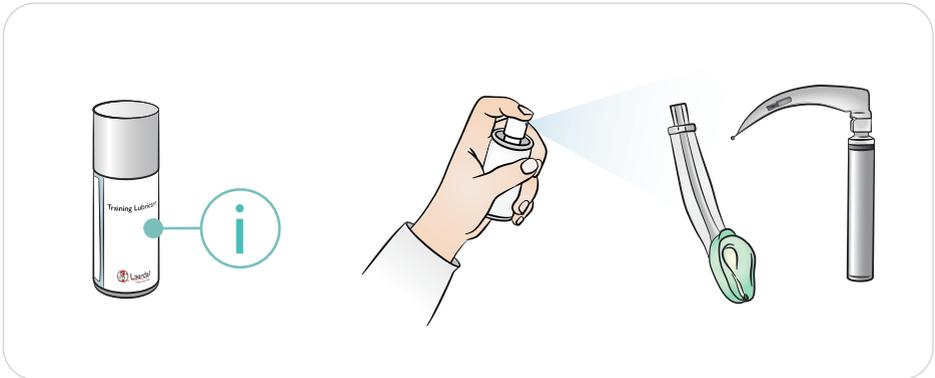
## Preparing for Simulation - IV Arm

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.

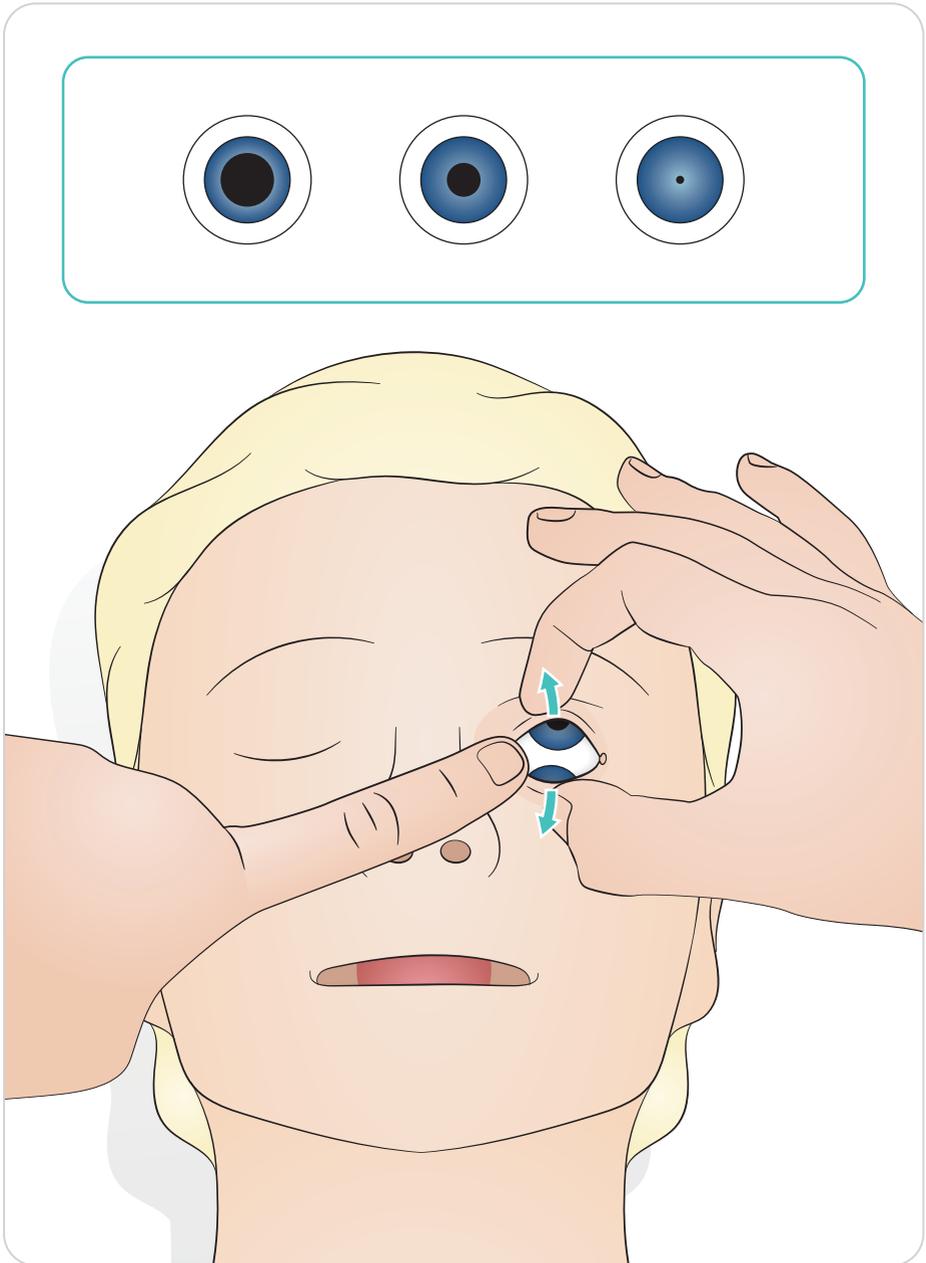


#### Cautions

- 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

# Preparing for Simulation - Change Eyes

Use different pupils to simulate various patient conditions.





# Use - Defibrillation

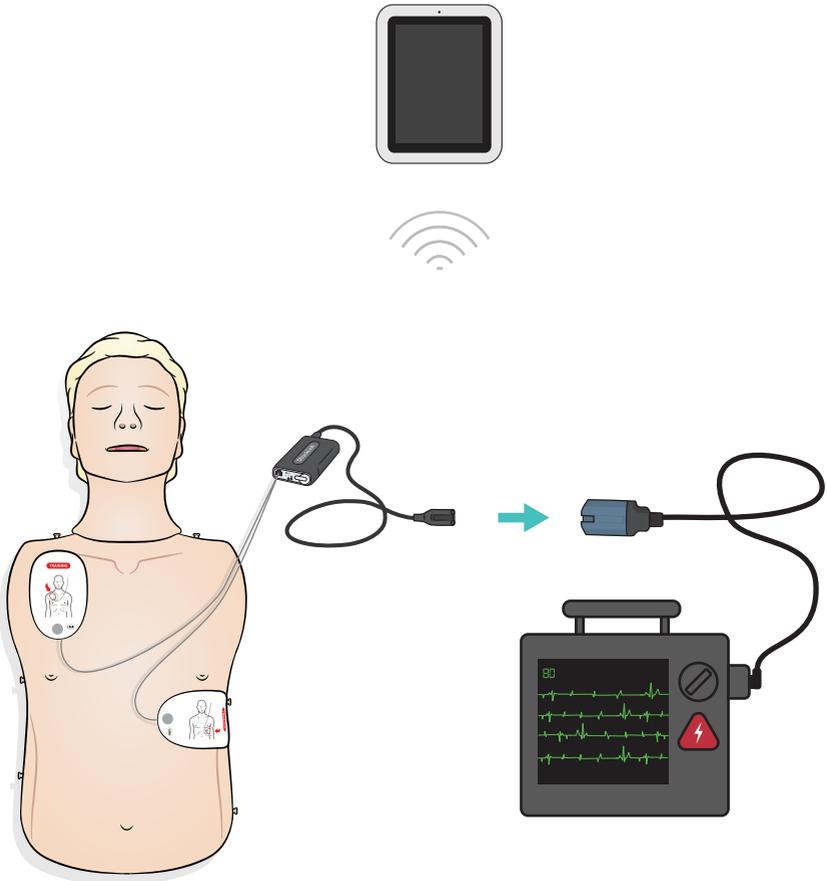
---

## Resusci Anne Advanced Skill Trainer 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.*

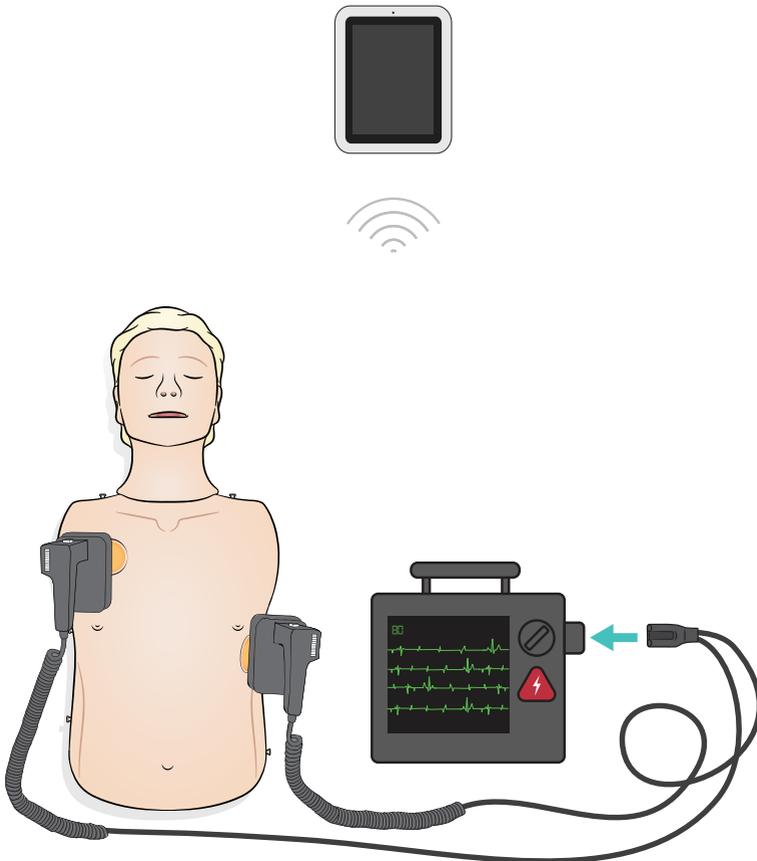


### Resusci Anne Advanced Skill Trainer Paddle version

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*



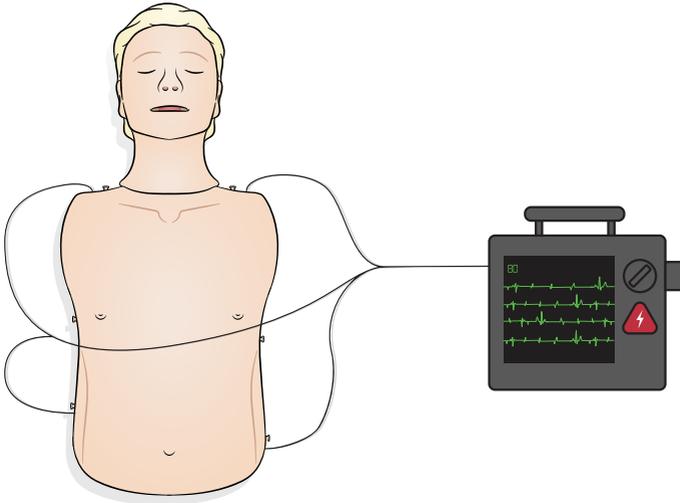
# Use - Connect ECG Monitoring

---

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

 **Caution**

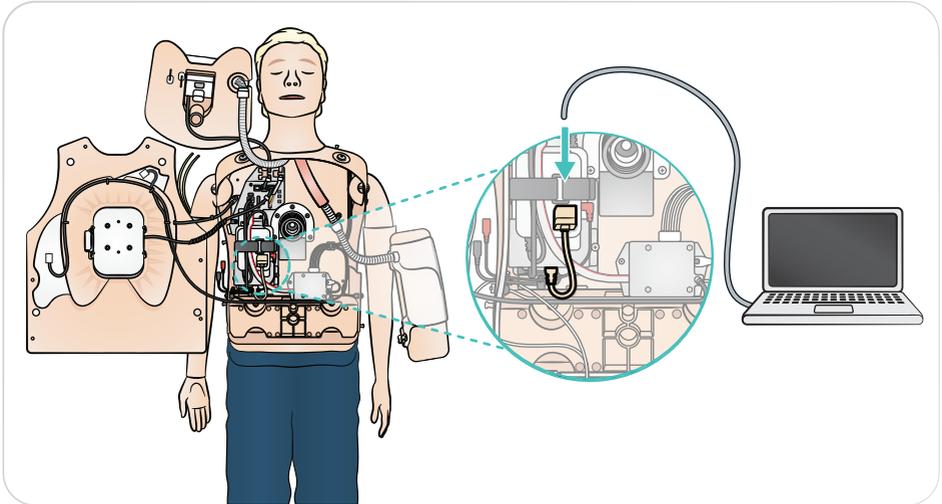
*The ECG monitoring connectors are not designed for defibrillation or pacing energy.*



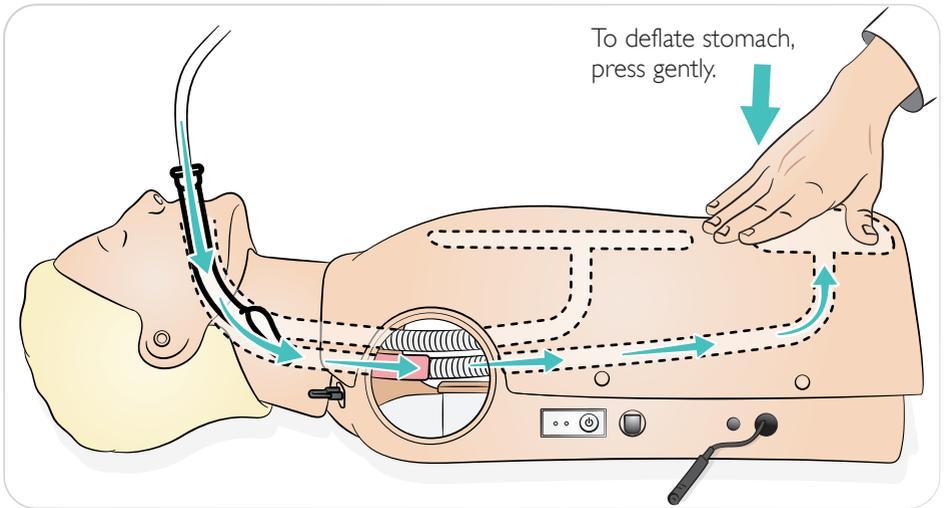
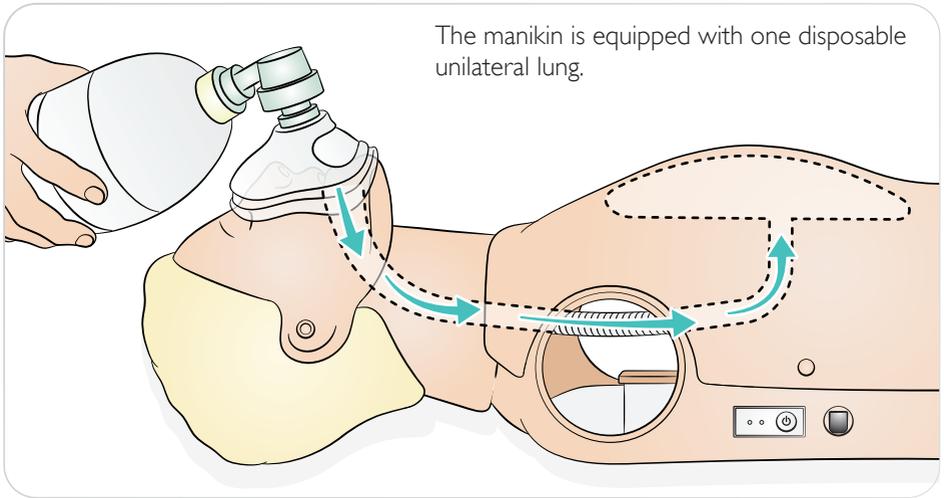
### Connect SimPad to simulator

Refer to SimPad User Guide for instructions. Visit [www.laerdal.com](http://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)



# Use - Ventilation



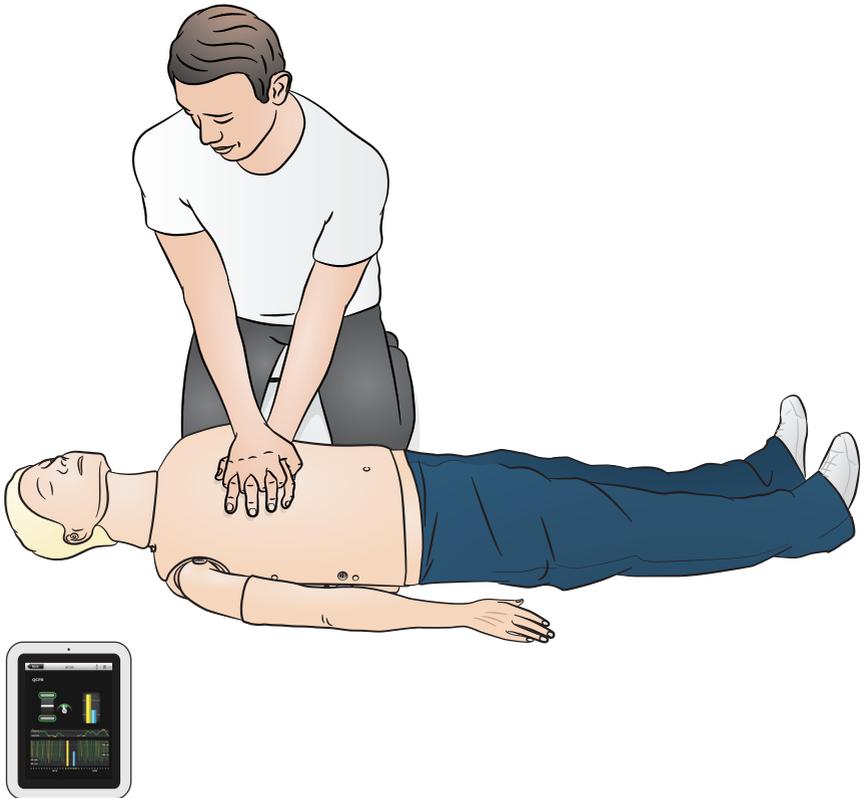
Note

Do not use simulated vomit for suctioning.

## Use - Chest Compressions

---

Manikin will detect correct hand position.



# Use - IV Arm

---

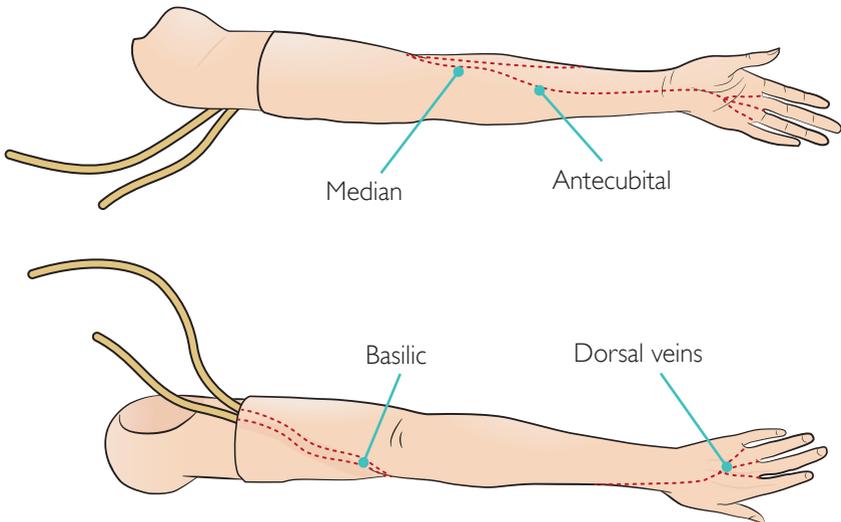
The IV arm supports simulation of IV drug administration, IV insertion, infusion, and bolus into peripheral veins of forearm, antecubital fossae, and dorsum of the hand.

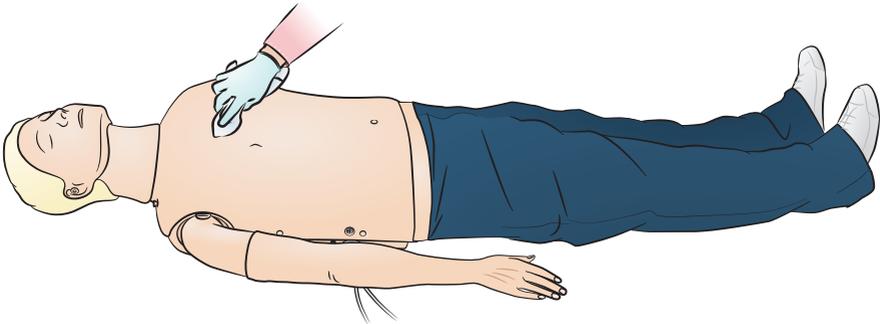


### Notes

- 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





### 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.

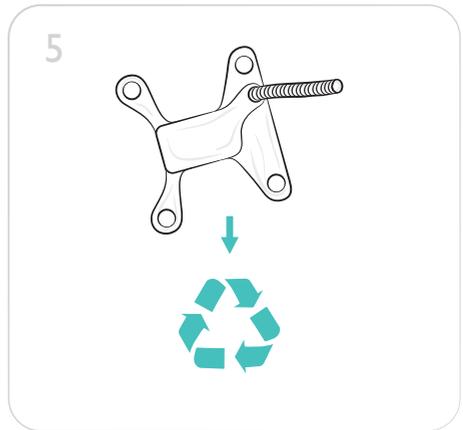
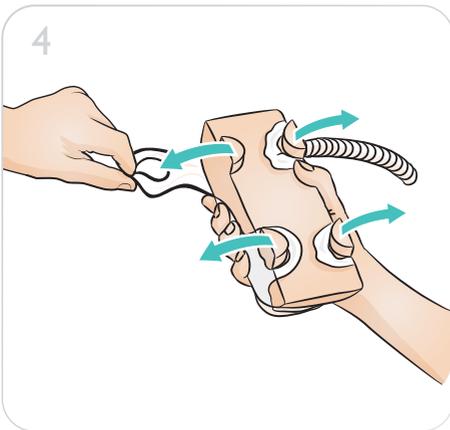
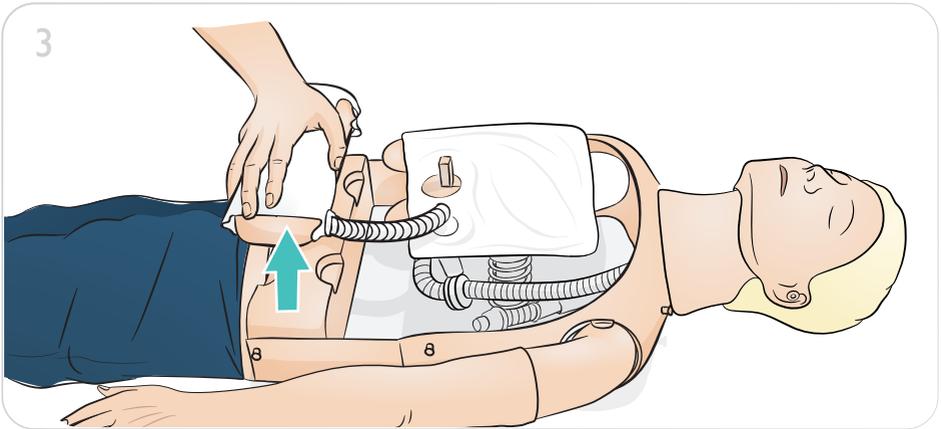
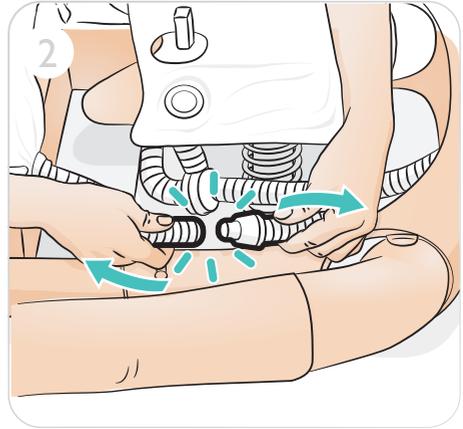
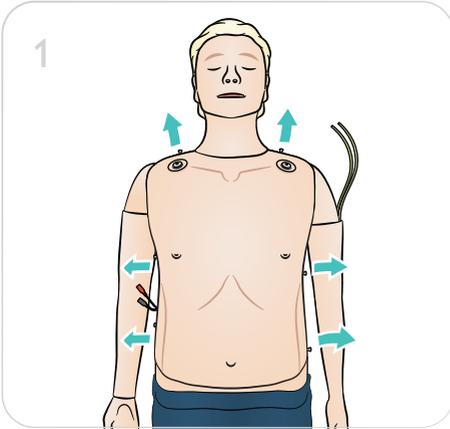
Most stains can be removed with warm water and soap or Laerdal manikin wipes. Before use, test cleaning agents on a non-critical area (e.g. under the chest cover).



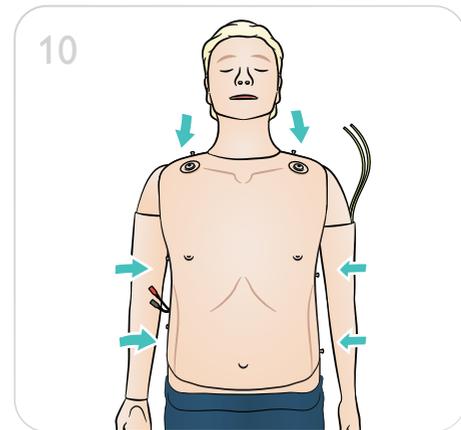
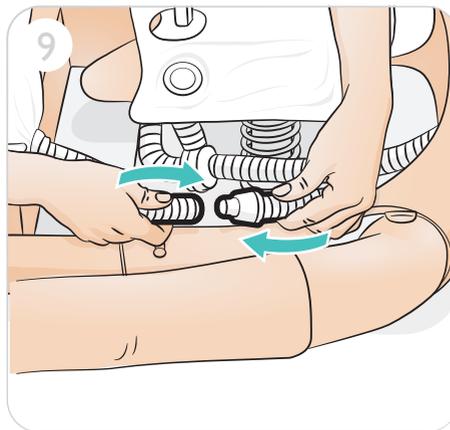
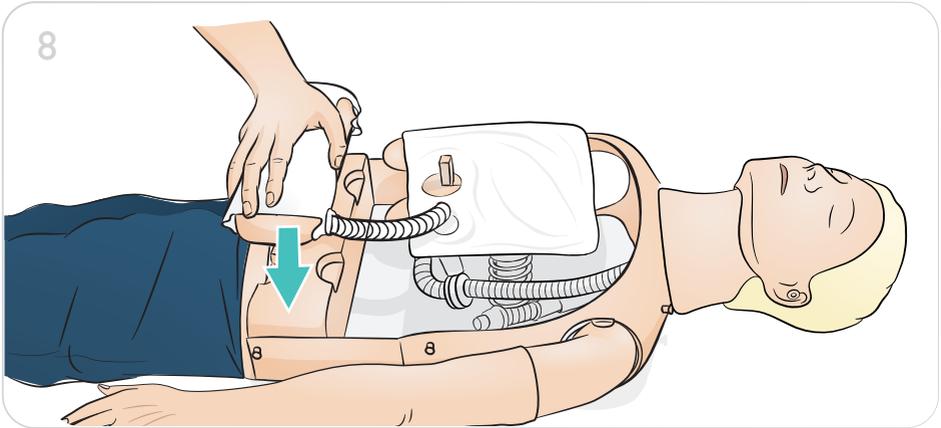
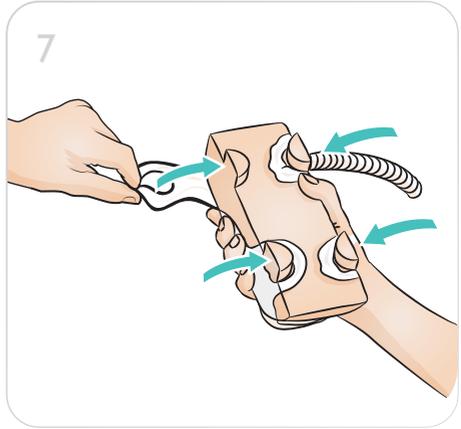
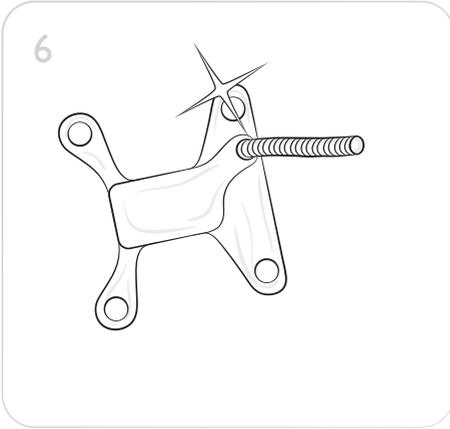
#### Note

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

# Maintenance - Stomach Replacement

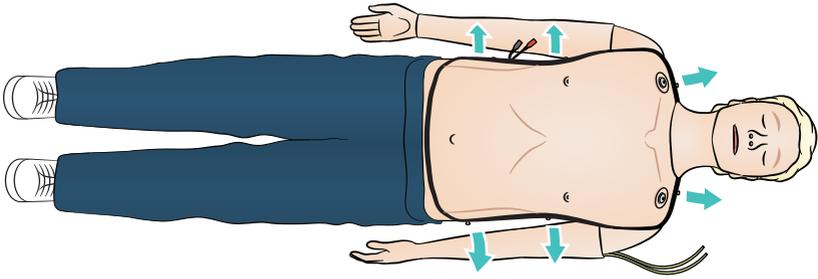


# Maintenance - Stomach Replacement

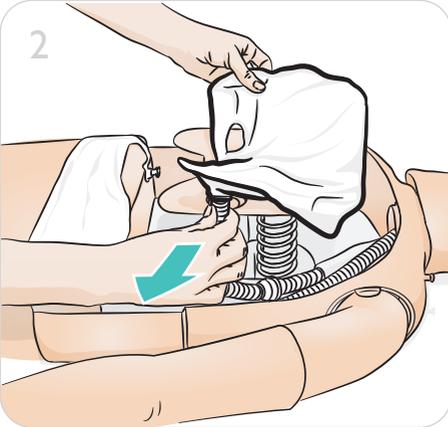


# Maintenance - Lung Replacement

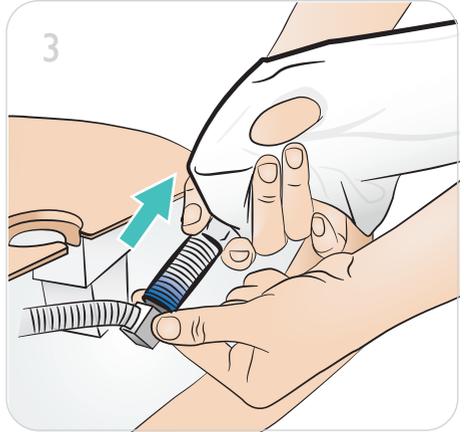
1



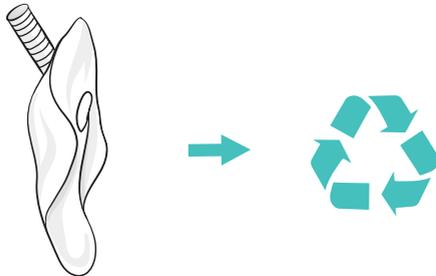
2



3



4

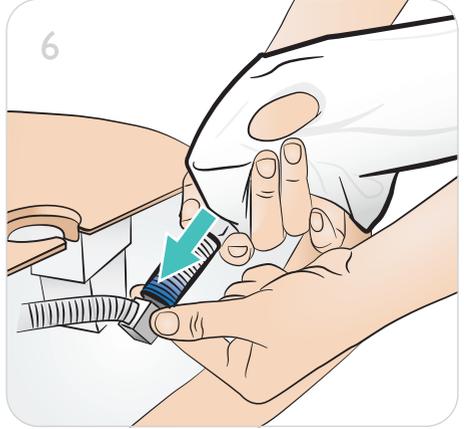


# Maintenance - Lung Replacement

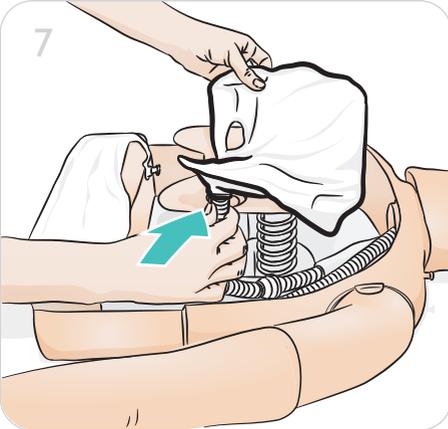
5



6



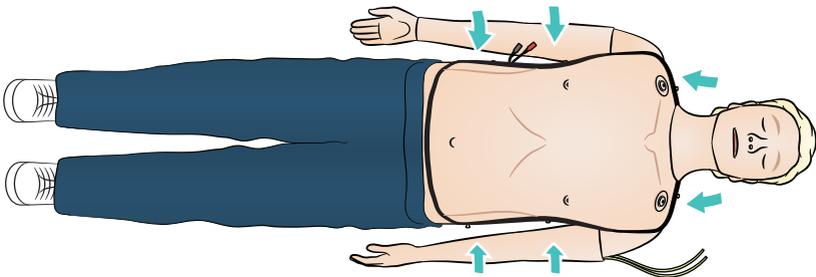
7



8

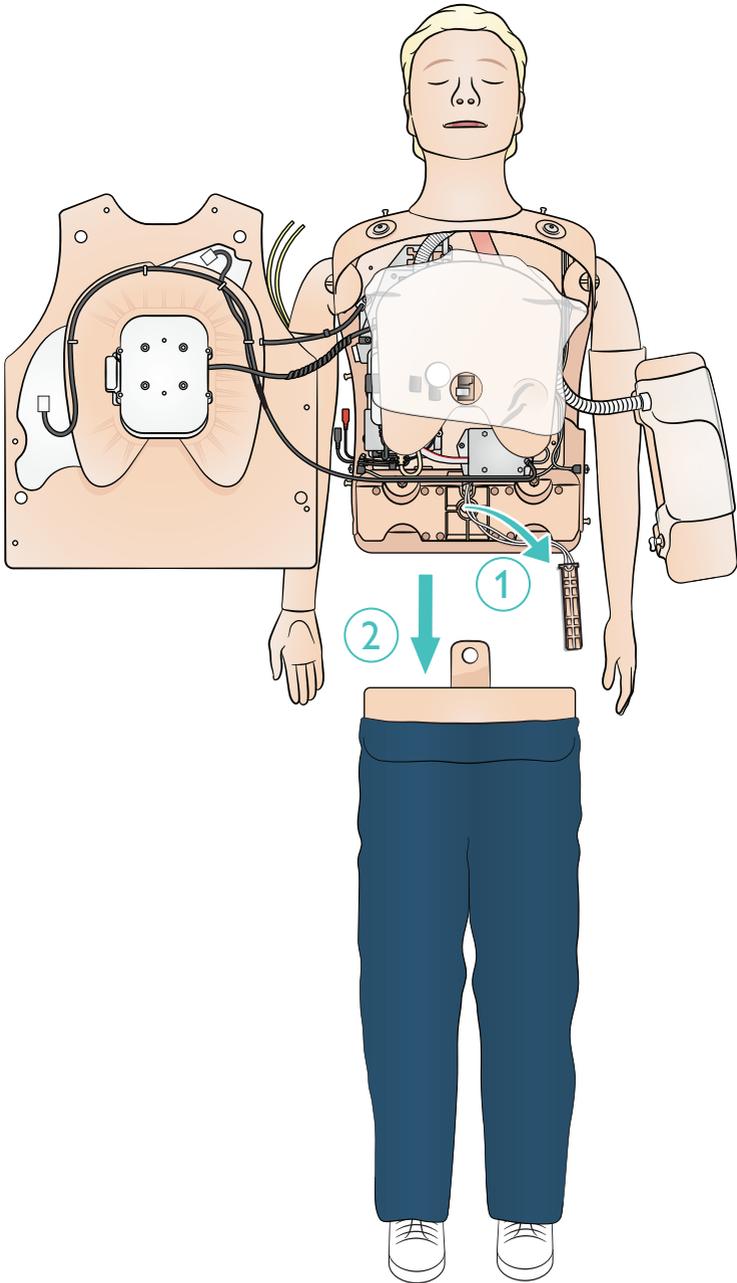


9



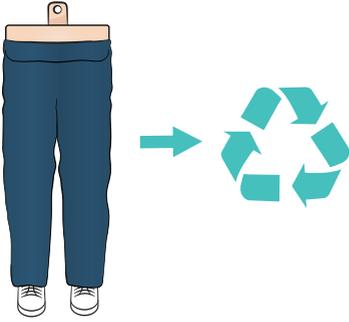
# Maintenance - Leg Replacement

1

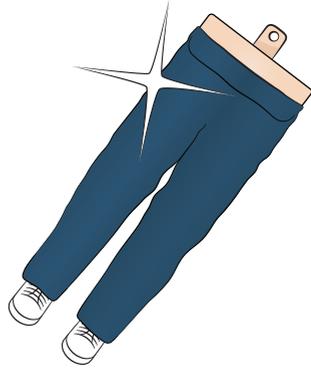


## Maintenance - Leg Replacement

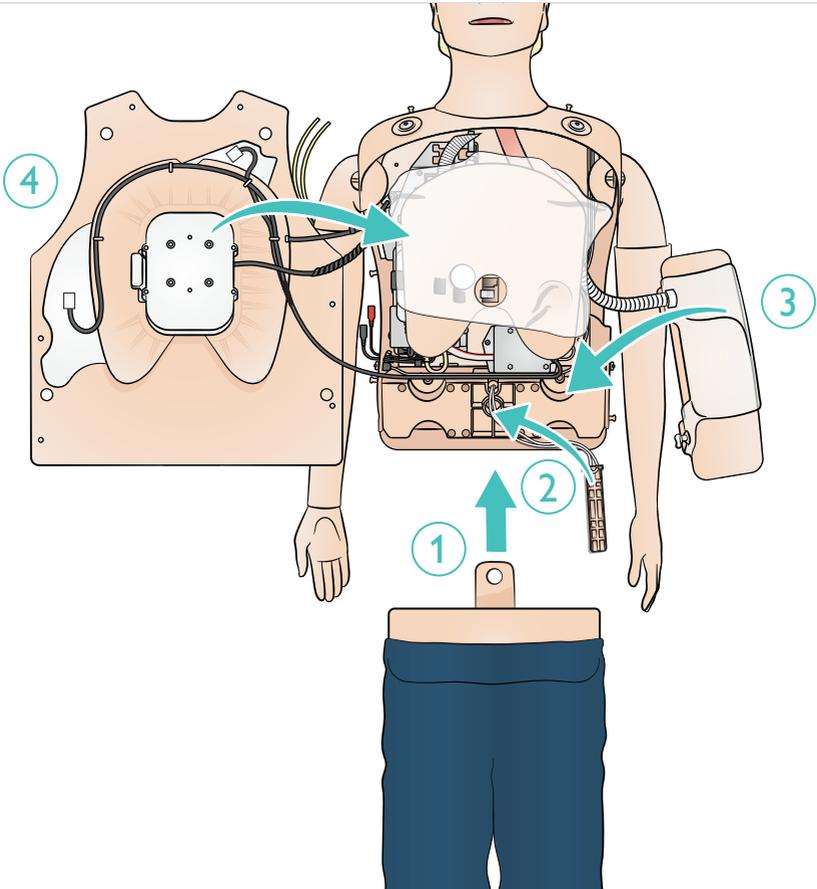
2



3

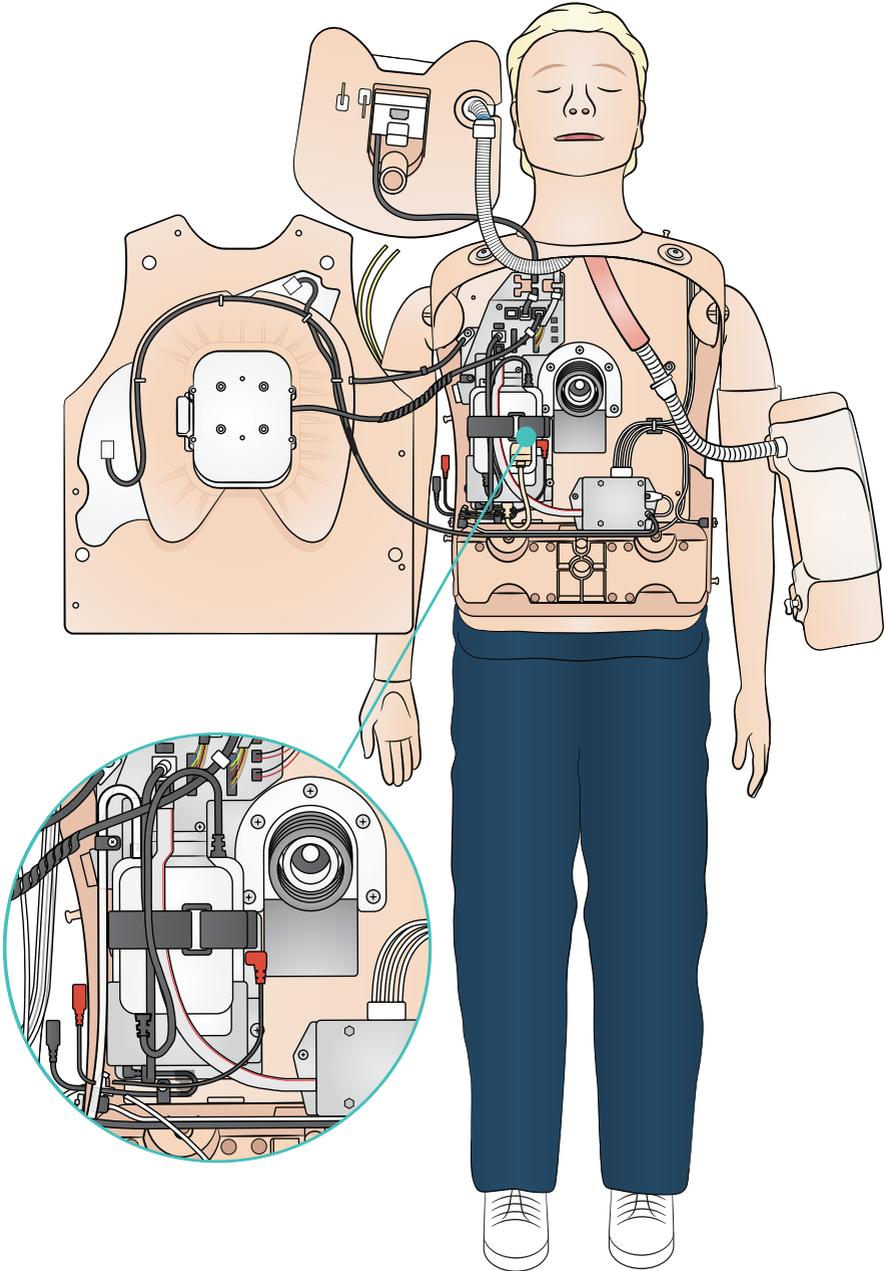


4

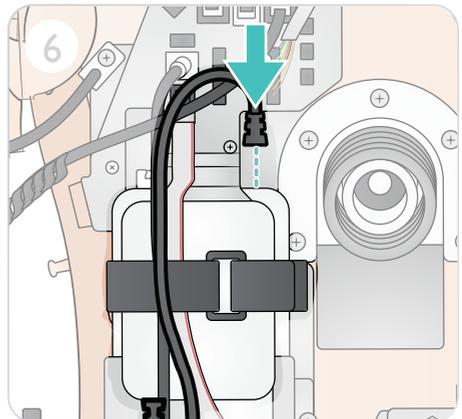
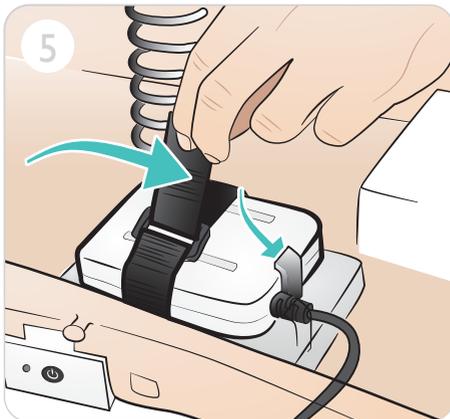
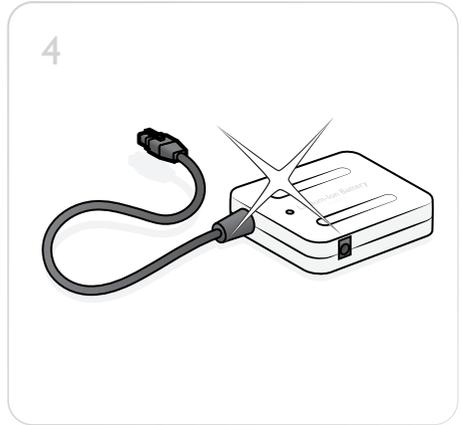
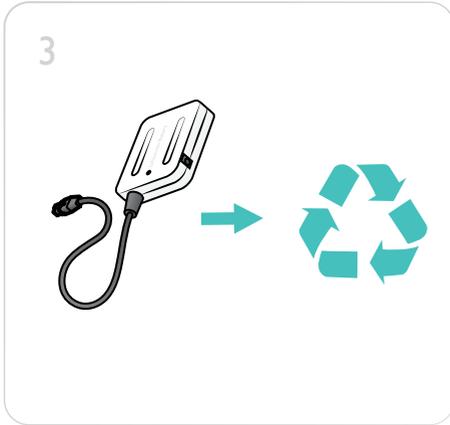
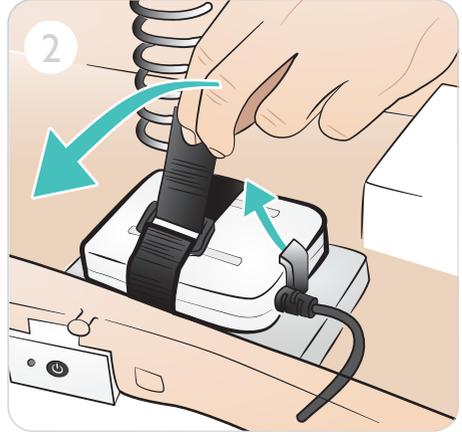
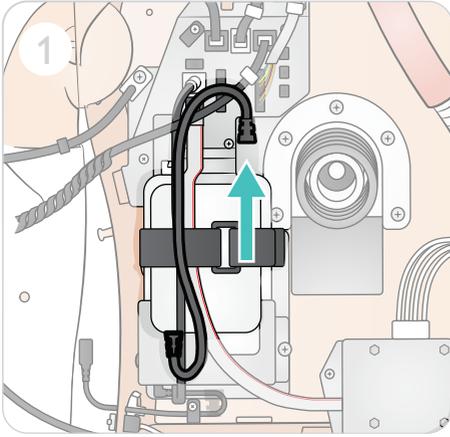


# Maintenance - Battery Replacement

---



## Maintenance - Battery Replacement



© 2021 Laerdal Medical AS. All rights reserved.

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

Printed in Norway

20-12271 Rev E

---

[www.laerdal.com](http://www.laerdal.com)



**Laerdal**  
helping save lives