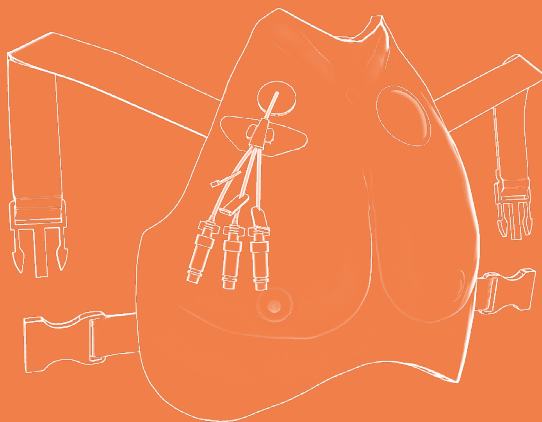


Avline

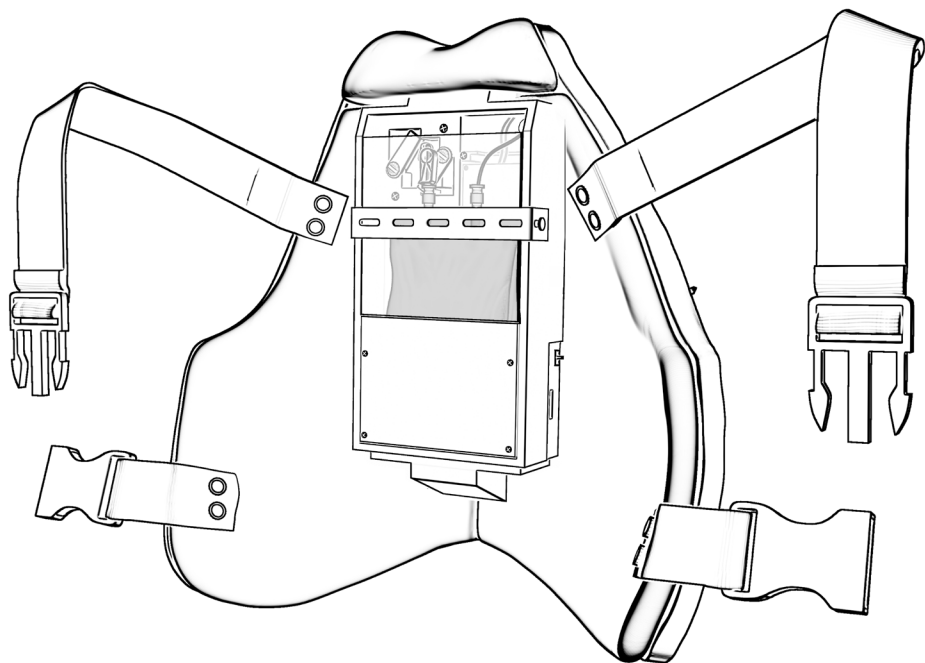
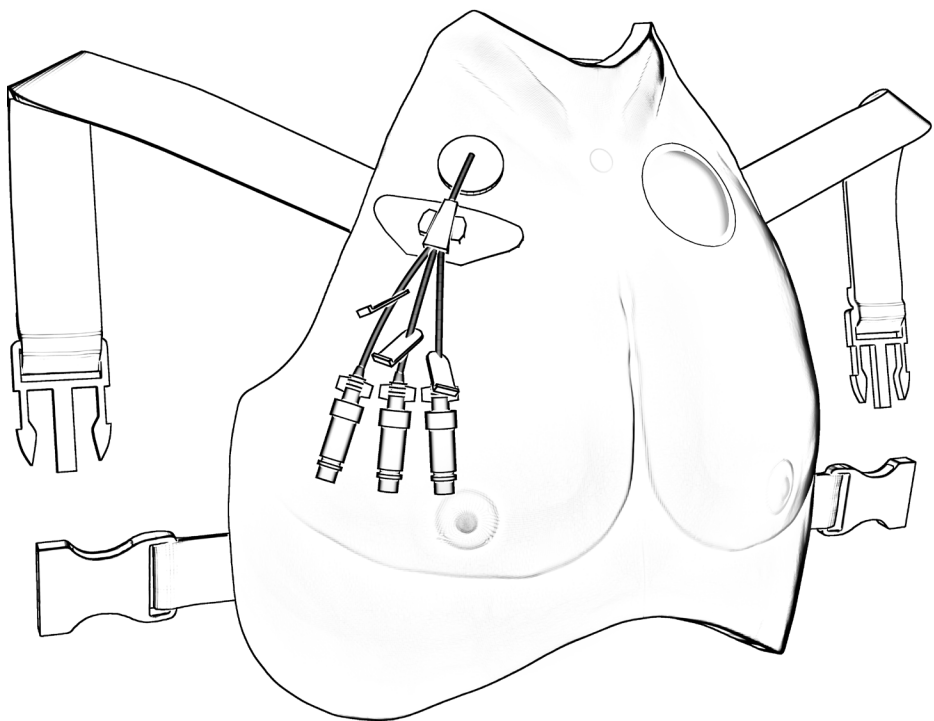
Wearable Central Line Simulator

USER MANUAL



Customer Assistance
302-562-2110

Technical Support
302-562-2040





WELCOME TO YOUR AVLINE!

HEART SOUNDS*


five heart sound locations can be controlled through the Avkin App

SIMULATED BLOOD

antimicrobial blood for blood draw and flushing

SENSORY FEEDBACK

Standardized patients are cued through a light vibration on the shoulder to provide a patient response when pressure is applied around the central line or to the port-a-cath. Learners receive real time feedback about their care

*Heart sounds provided by our partner, eMurmur 

WHAT'S INCLUDED

- ✓ Avline: wearable central line simulator for use with standardized patients.
- ✓ 7 fr Central Venous Catheter
- ✓ Simulated Biopatch
- ✓ Statlock
- ✓ Set of three port-a-caths : short, long, tilted
- ✓ Blood bags (2, one located in device)
- ✓ Replacement port-a-cath skin
- ✓ Funnel
- ✓ Micro USB charger

App Reminders:

- Enable location services on your smartphone or tablet before connecting your Avband to the Avkin App
- The tablet is preset so that it will not go to sleep while using the Avkin app. Do not press the tablet's lock button, as this will also suspend notifications.
- Set your font size on your smartphone or tablet to default or normal for proper viewing of the app. Larger font sizes can dysregulate functionality.

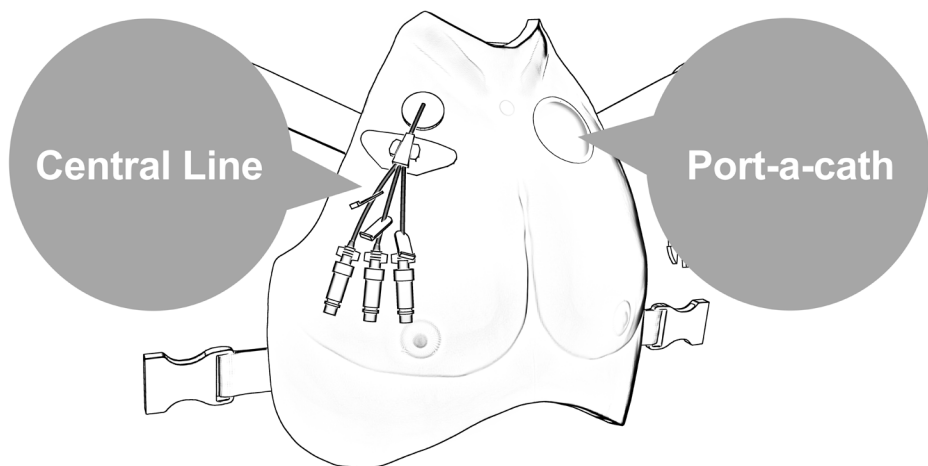
GETTING STARTED

Watch the instructional video on the Avkin Customer Product Resource page at www.avkin.com/product-resources/
Password: BringSim2Life

- 1 Download the “Avkin” App on your Apple or Android device.

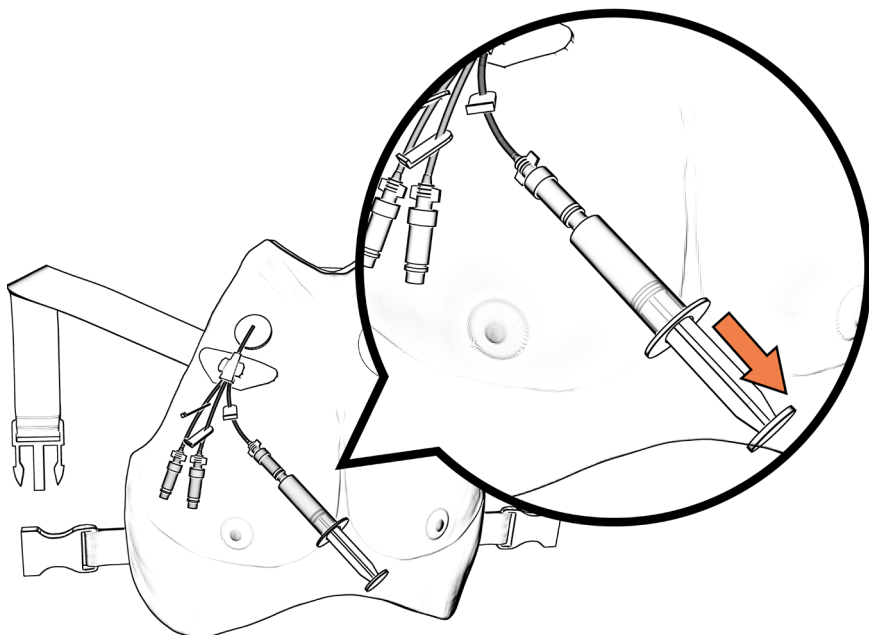
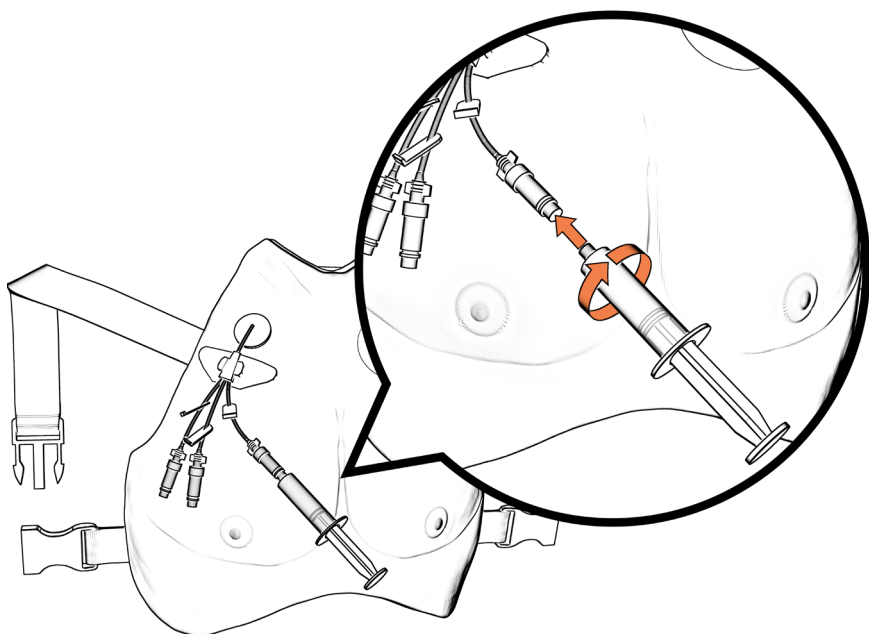


- 2 The central line and port-a-cath features can be used at the same time on the Avline. Follow the instructions below to set up one or both of the features.

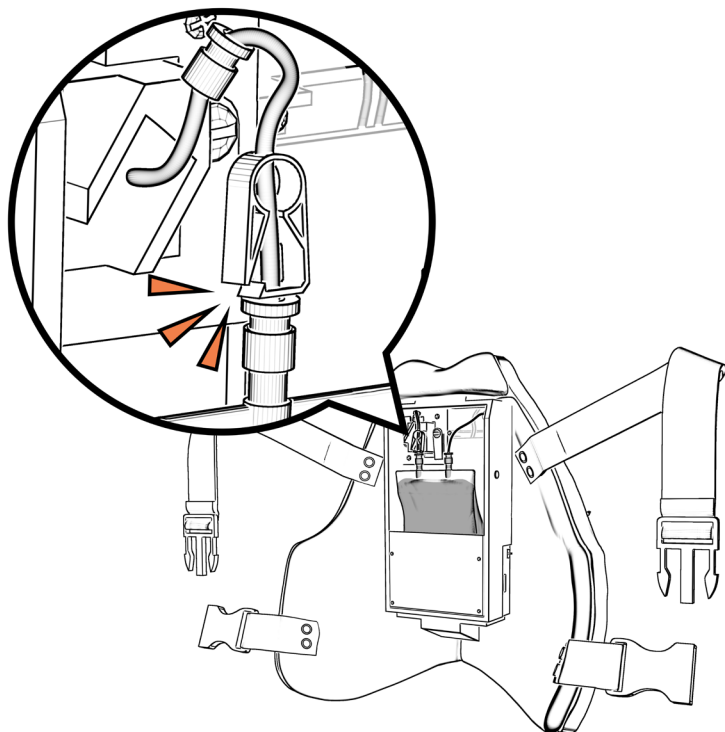


*** Do not turn on Avline until step #5**

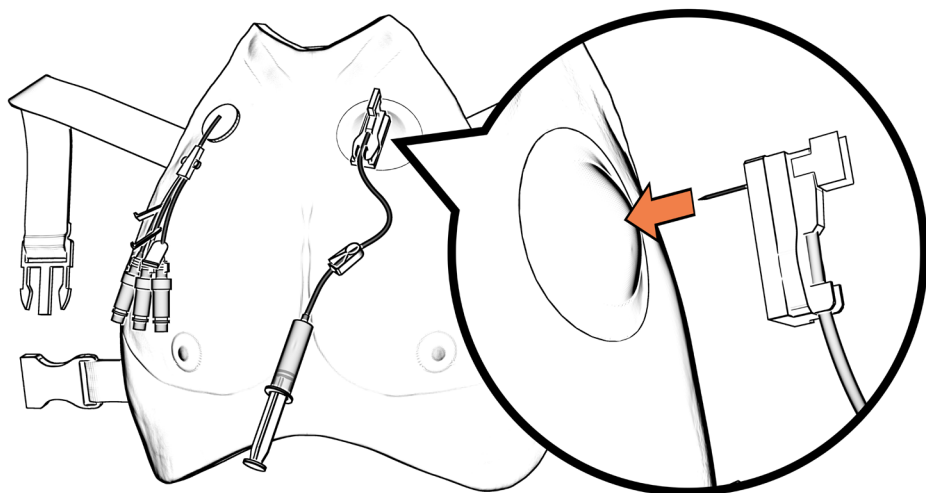
- 3** If using the central line, screw syringe filled with distilled water onto any of the 3 lines. Pull back plunger until blood shows to prime the system. Flush distilled water until line is cleared.



- 4** If using port-a-cath, unclip white clamp on port-a-cath tubing on back of device.

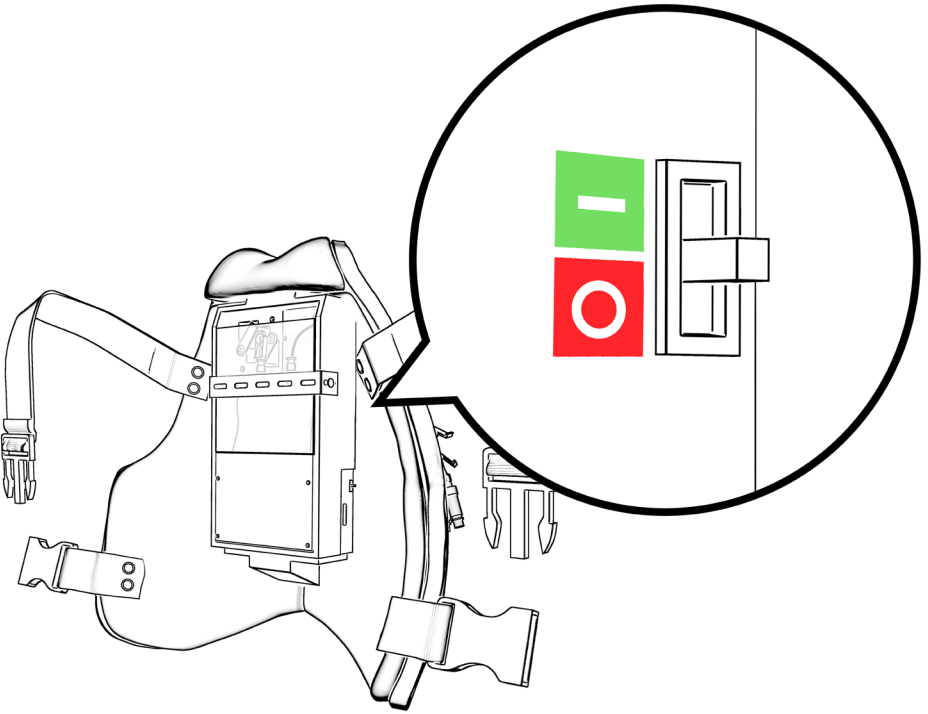


Using a syringe filled with distilled water attached to a huber needle, pull 10ml of blood out of the device, then push 5ml of blood back into the device to prime.



5

After the device is on your SP, turn on the device.



6

Turn on Bluetooth on your apple or android device.

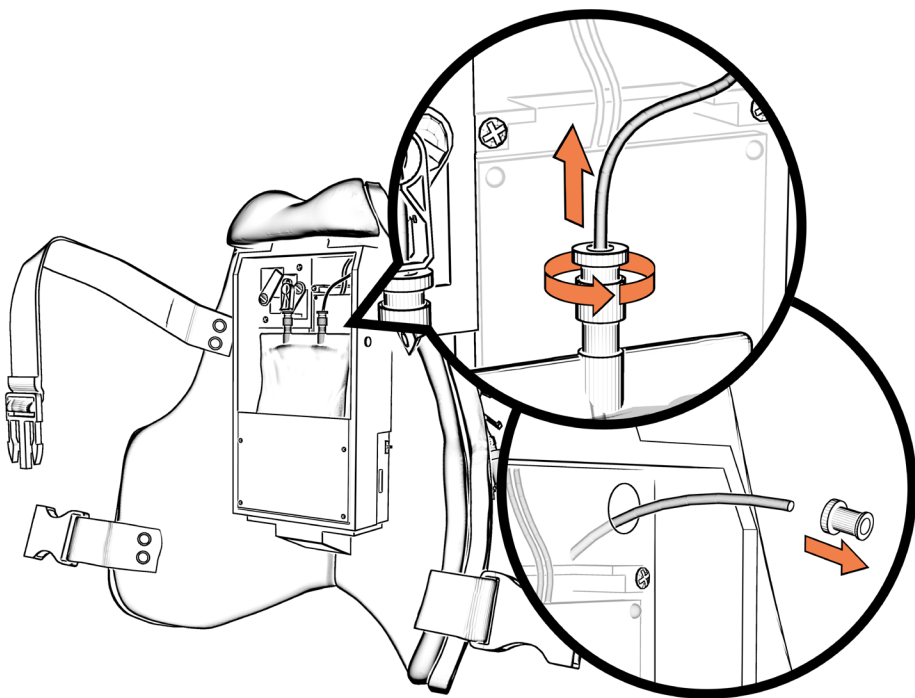
7

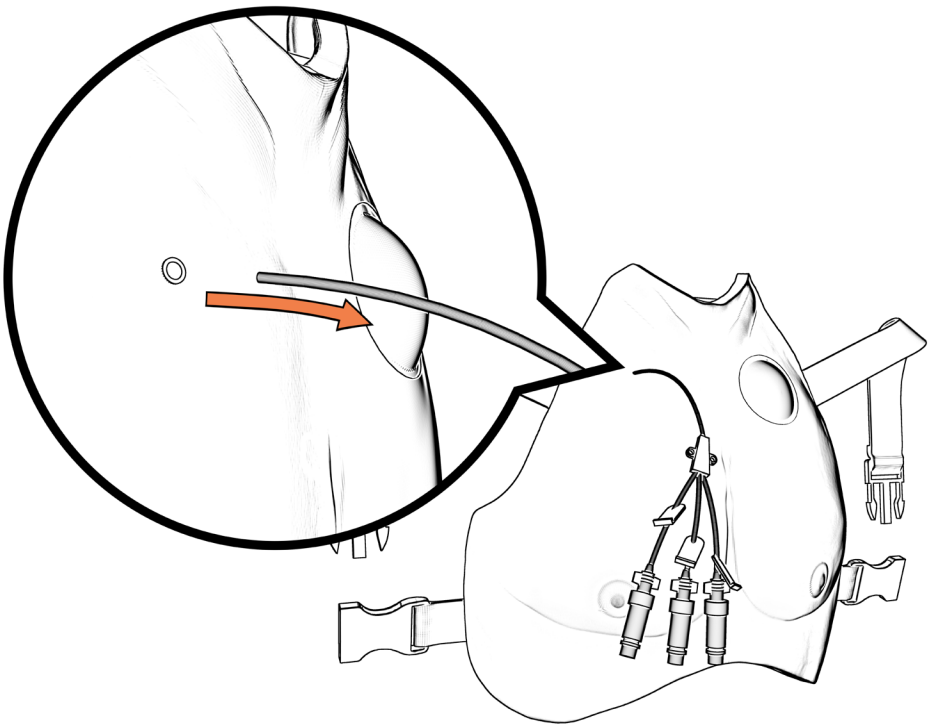
Open the Avkin App, select your Avline serial number (located on the chestplate) to connect to your device.

TO REMOVE AND REINSTALL CENTRAL LINE

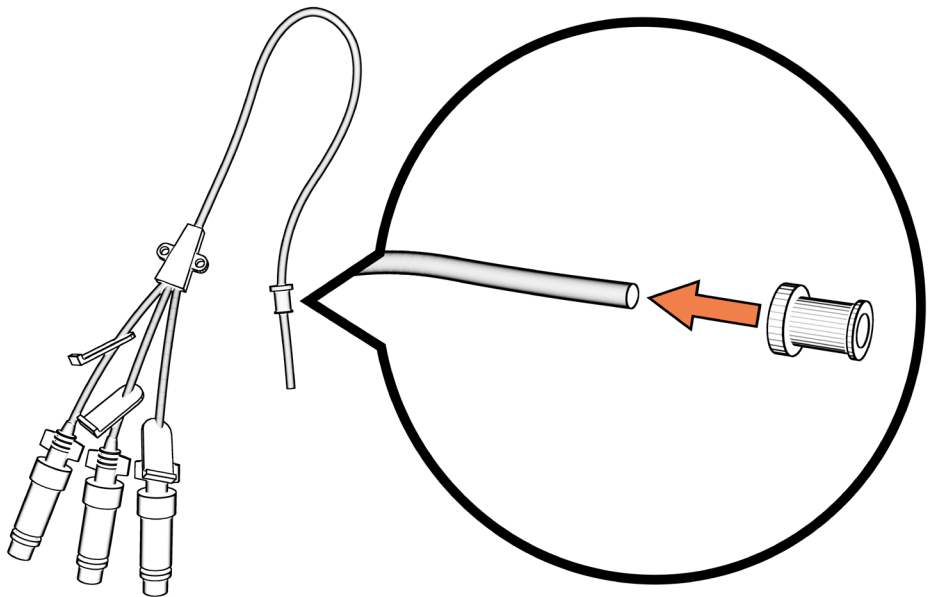
REMOVAL OF CENTRAL LINE

- 1 If you are not using the central line, you can remove the central line from the blood bag (cap the bag with red cap), remove the cap from the central line, and remove the central line from the device.



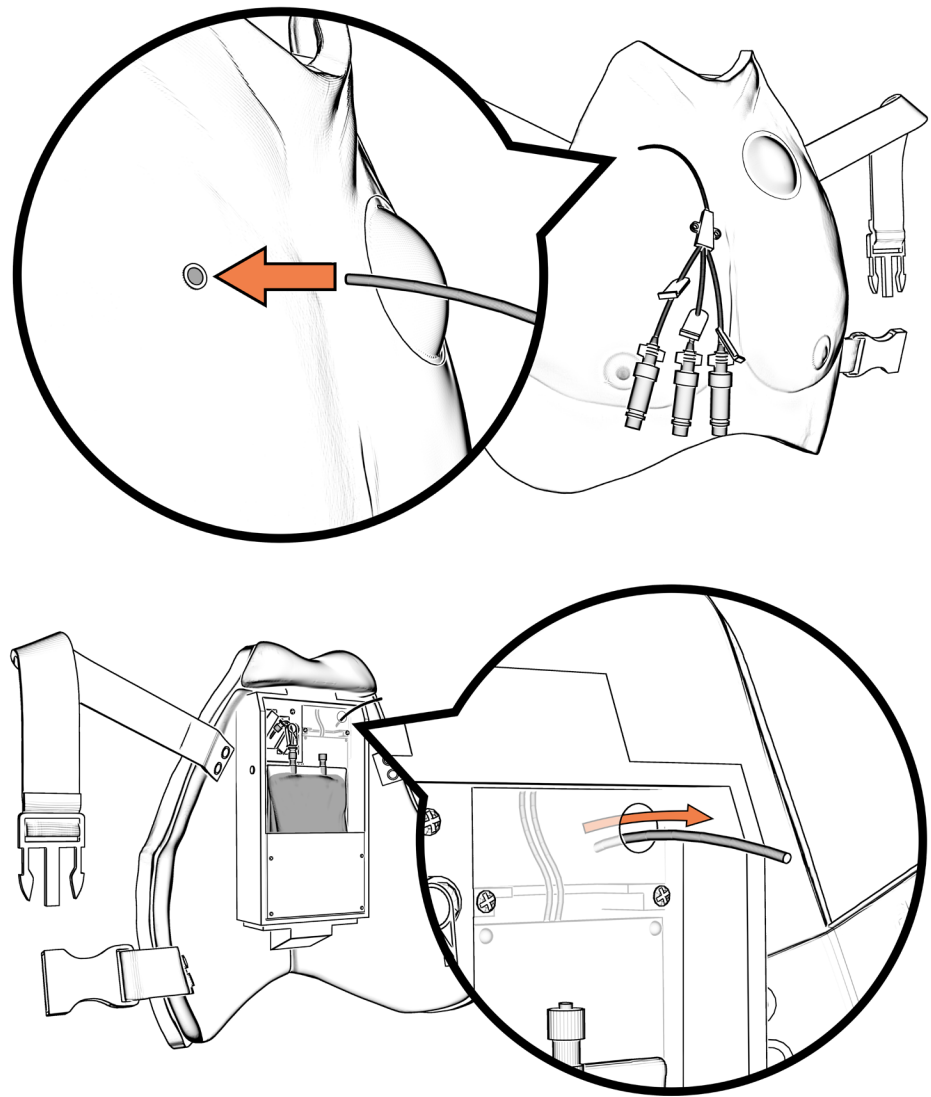


Immediately put the cap back on the central line to prevent losing it.

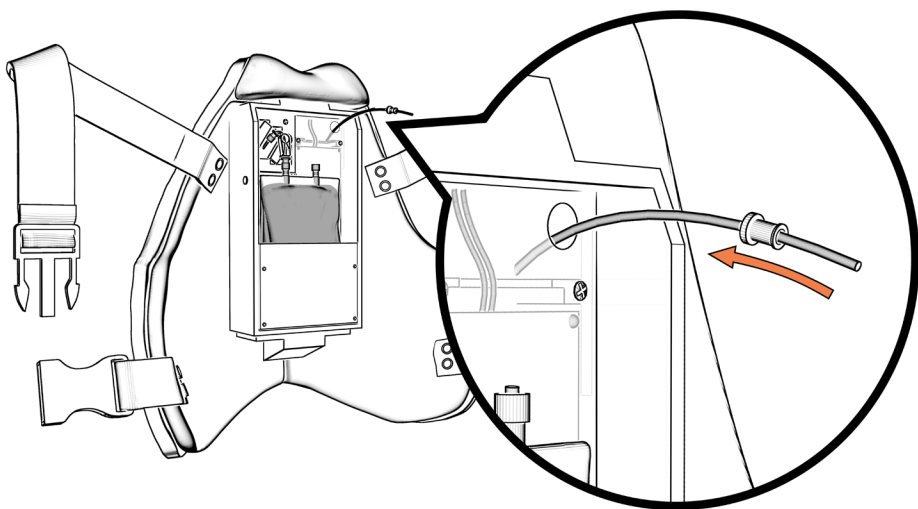


REINSTALLATION OF CENTRAL LINE

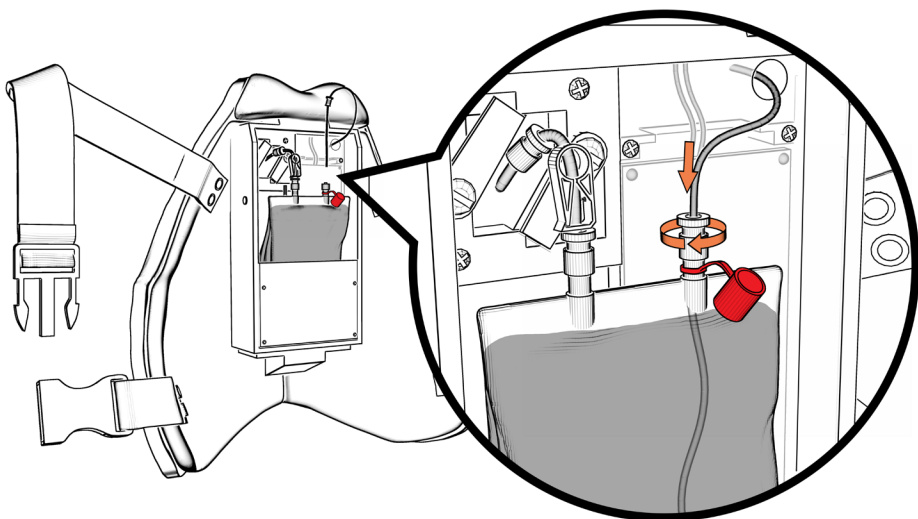
- 2** To reinstall the central line into chest, remove connector on central line, poke central line through hole in chest and align with hole in chestplate assembly to feed through to back of the device.



Install connector on central line inside chest plate.

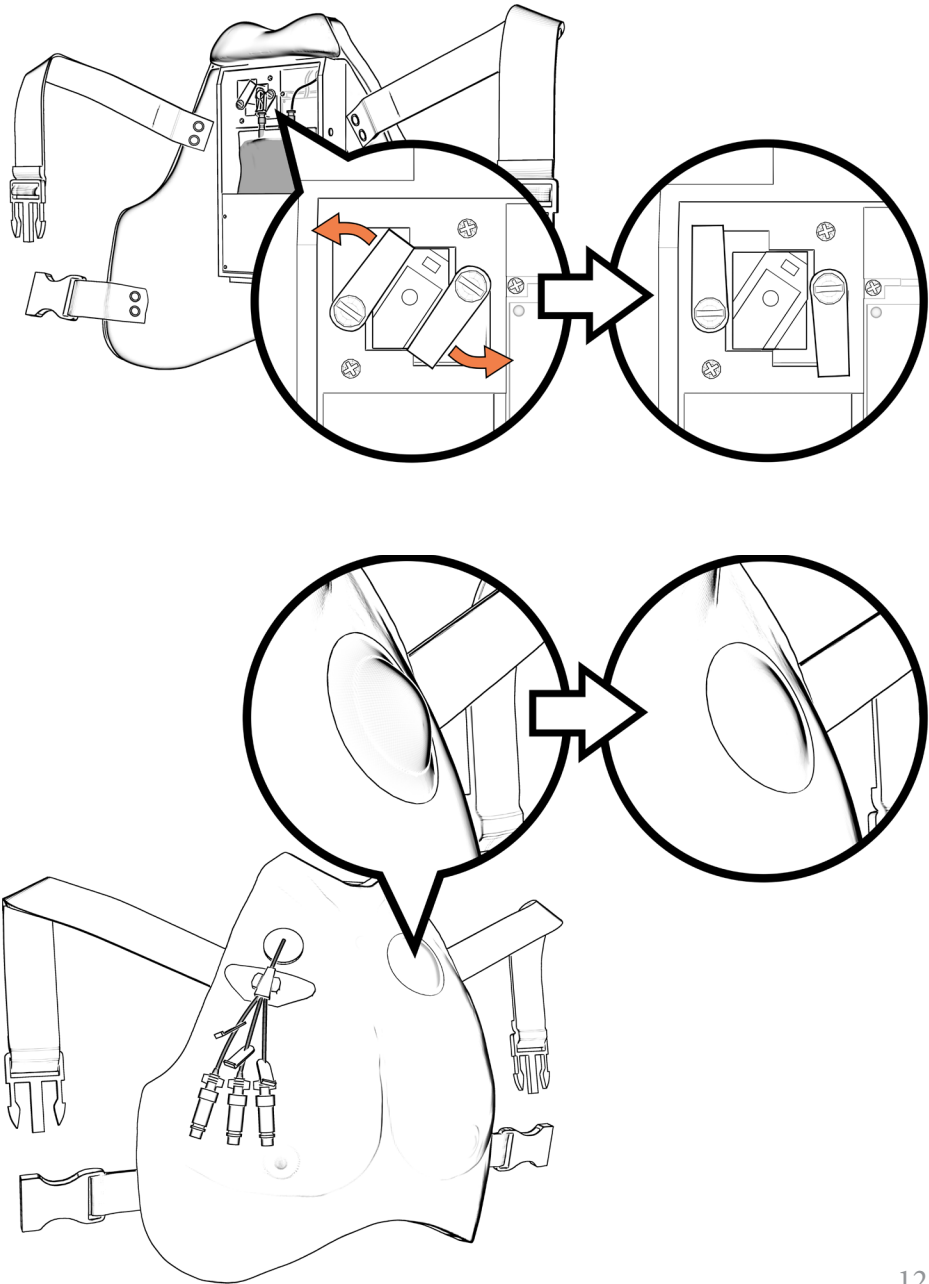


Remove red cap from central line side of blood bag.
Thread central line into blood bag until there is a little slack outside of the bag. Screw on cap that is on central line to blood bag.



REMOVAL OF PORT-A-CATH FOR SIMULATION

- 1** If not using port-a-cath, release the port-a-cath housing so it is not pushing port-a-cath into skin.

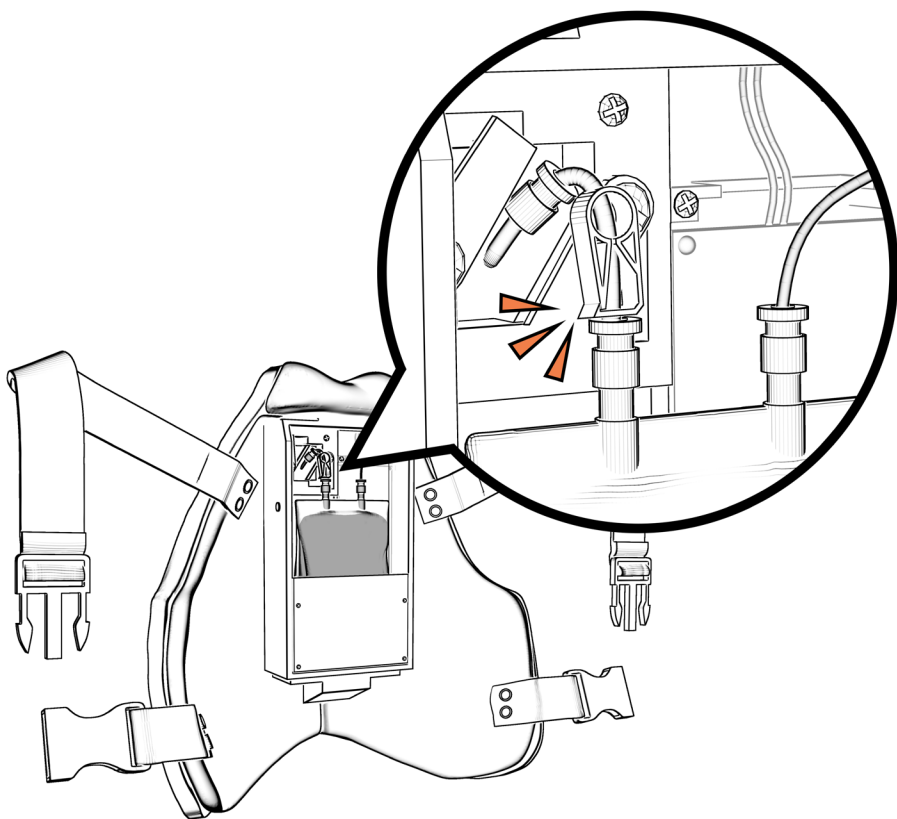


CARE AND MAINTENANCE

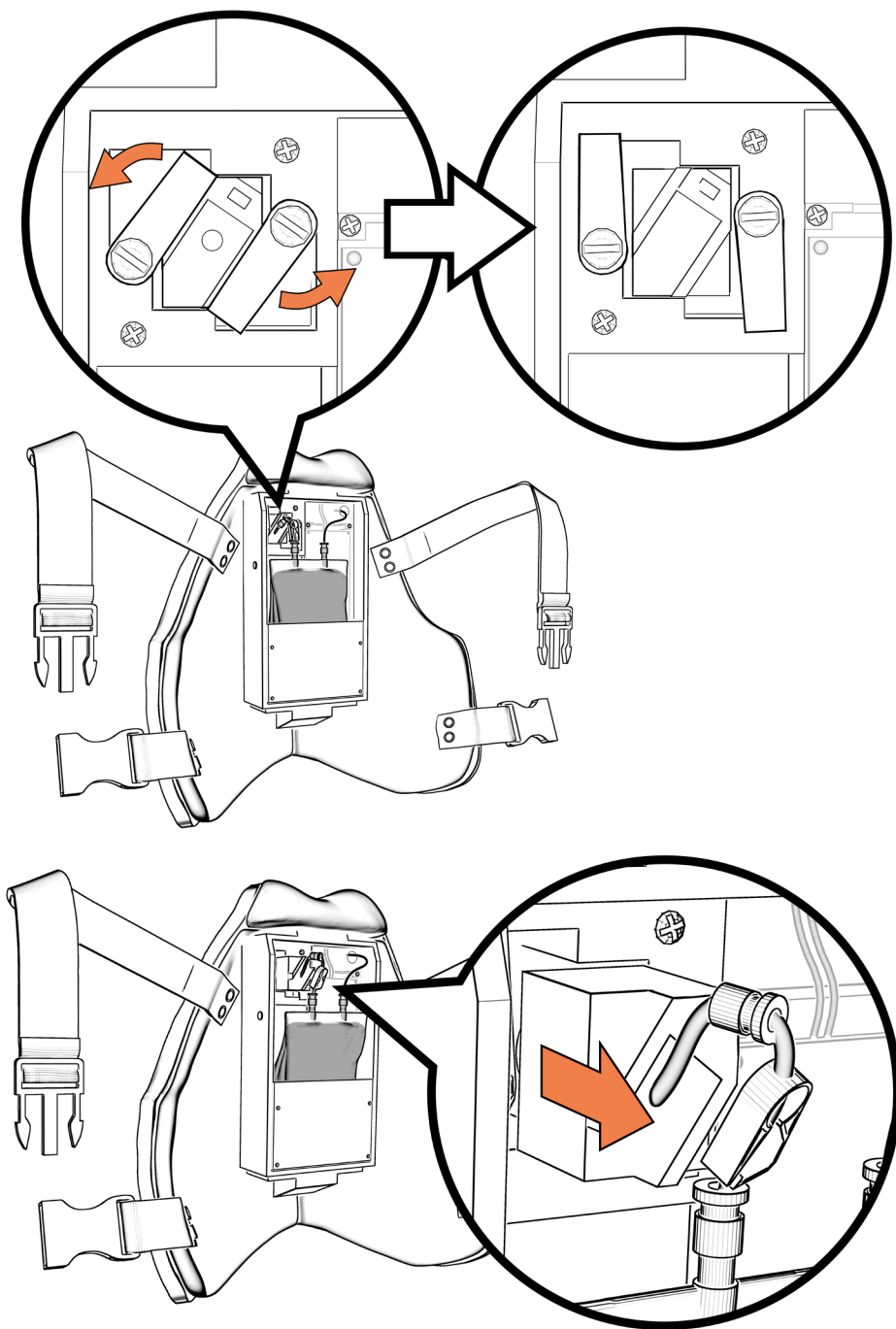
- 1** Remove any marks, moulage or blood on silicone chest.
- 2** Flush distilled water into each port to clean out central line and port-a-cath, follow up by flushing with air.

REMOVAL OF PORT-A-CATH FOR CLEANING

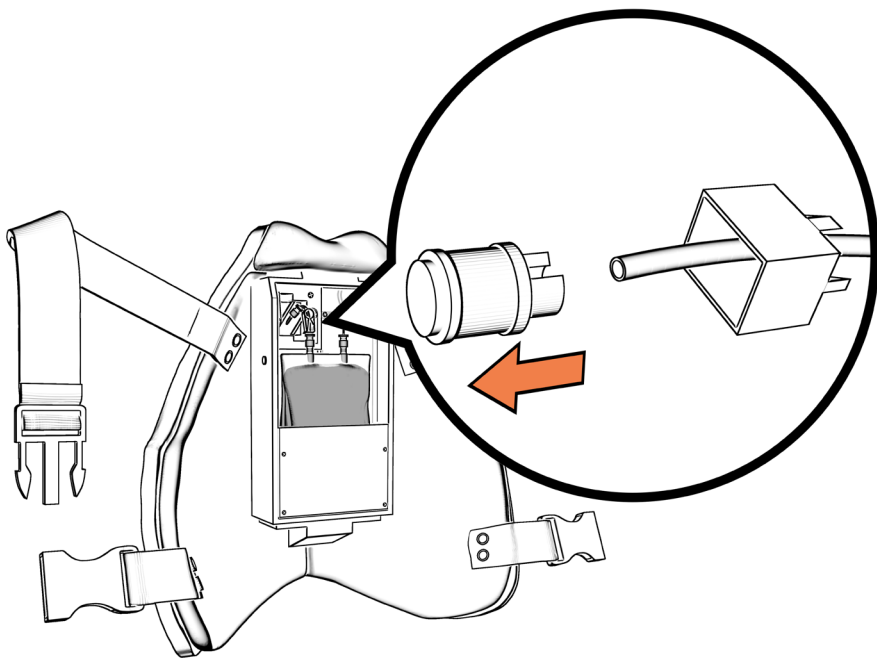
- 1** Clamp white clamp on tubing from blood bag to port-a-cath. Disconnect electric and tubing connections.



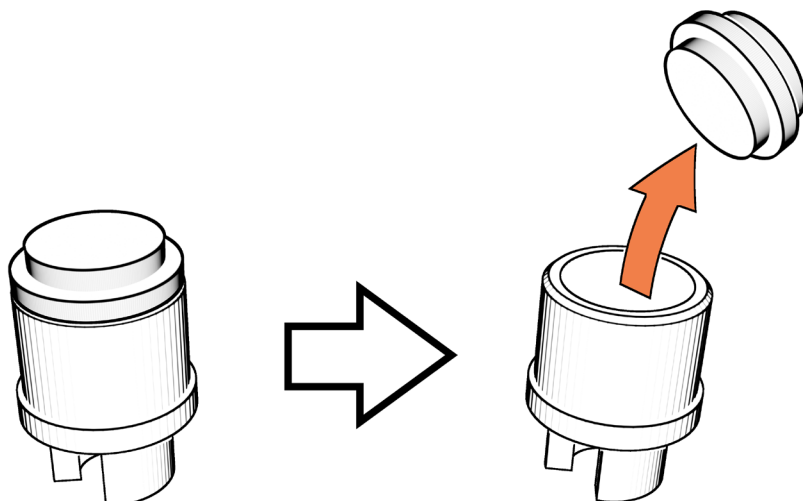
- 2** Remove port-a-cath- from device by sliding out port-a-cath housing.



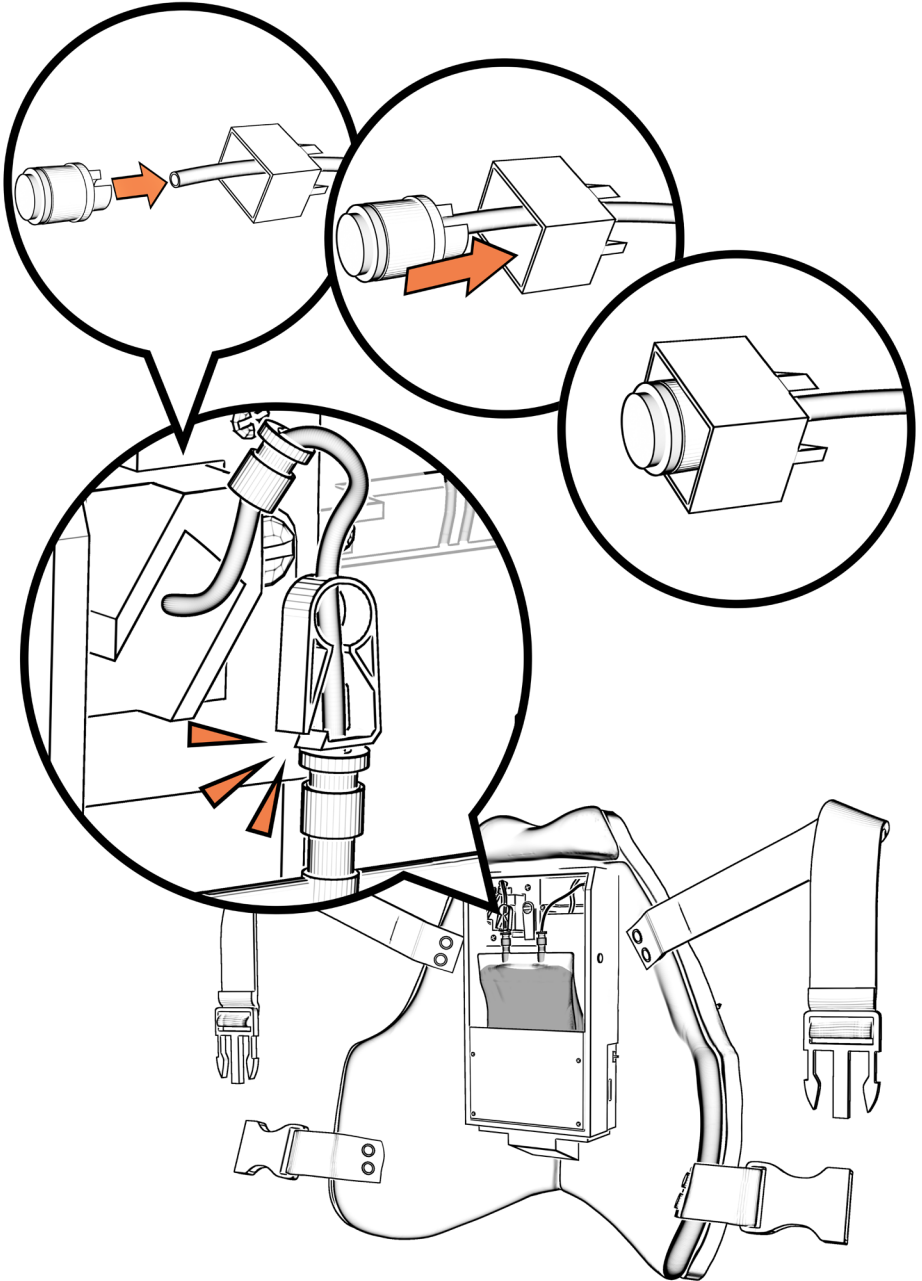
- 3** Remove port-a-cath from device by sliding out port-a-cath housing and disconnecting tubing connection.



- 4** Pull out silicone insert from port-a-cath and wipe down both the plastic and silicone components with paper towel. Snap the silicone back into place when complete.

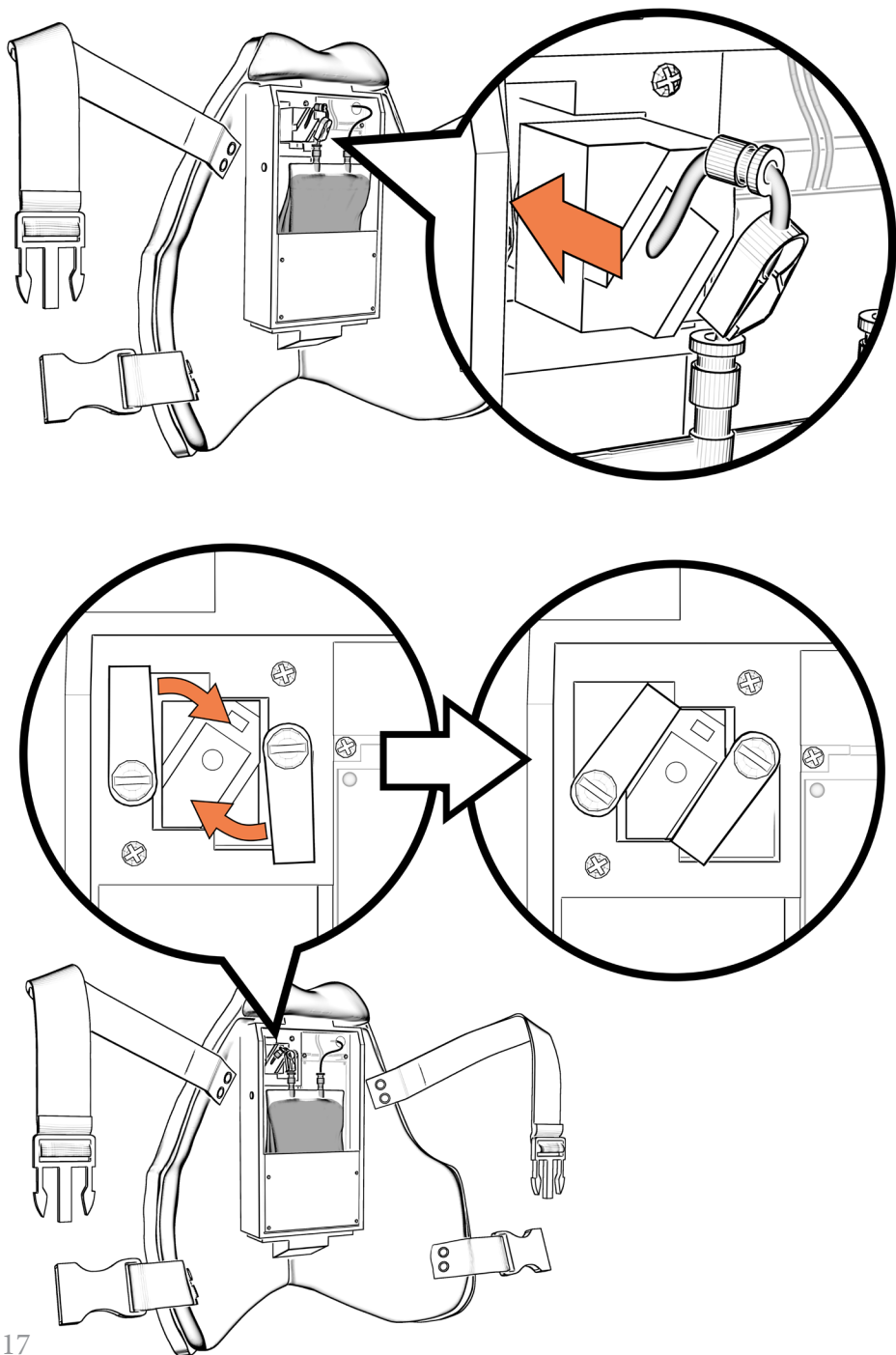


- 5** Connect barb on Port-a-cath to Port-a-cath tubing. Connect tubing from blood bag to Port-a-cath tubing. Release white clip.



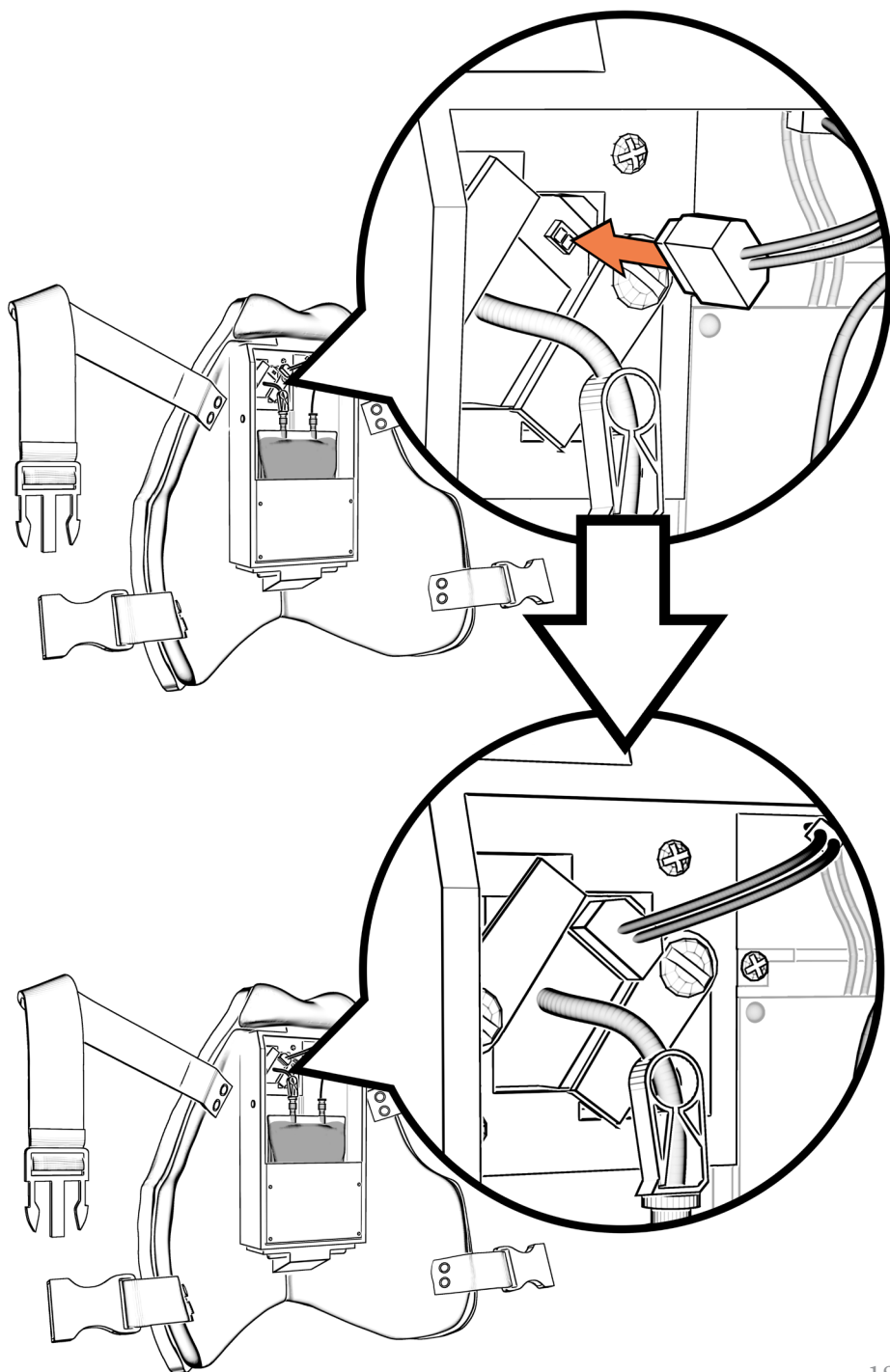
6

Make sure Port-a-cath housing is pushed into device and clamped down.



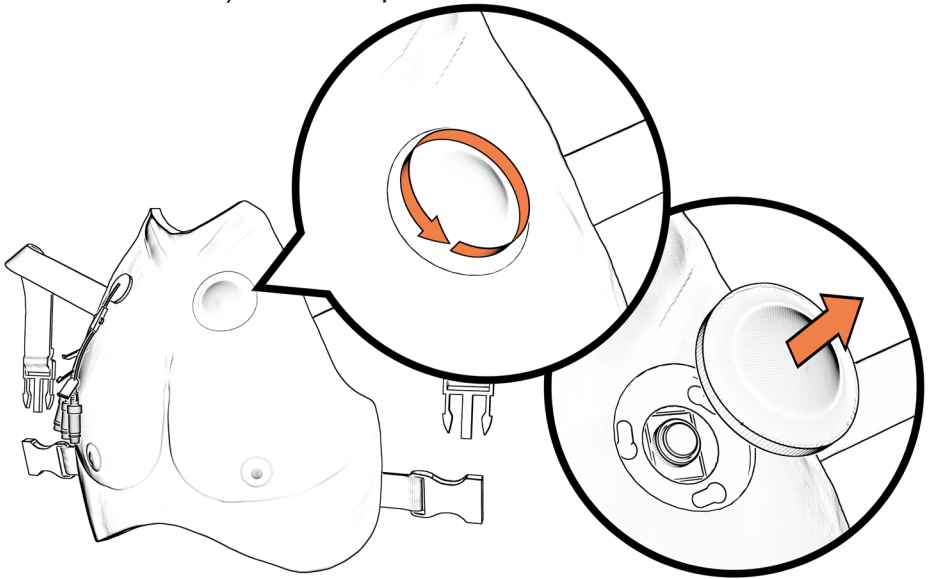
7

Attach electrical connection to Port-a-cath housing.

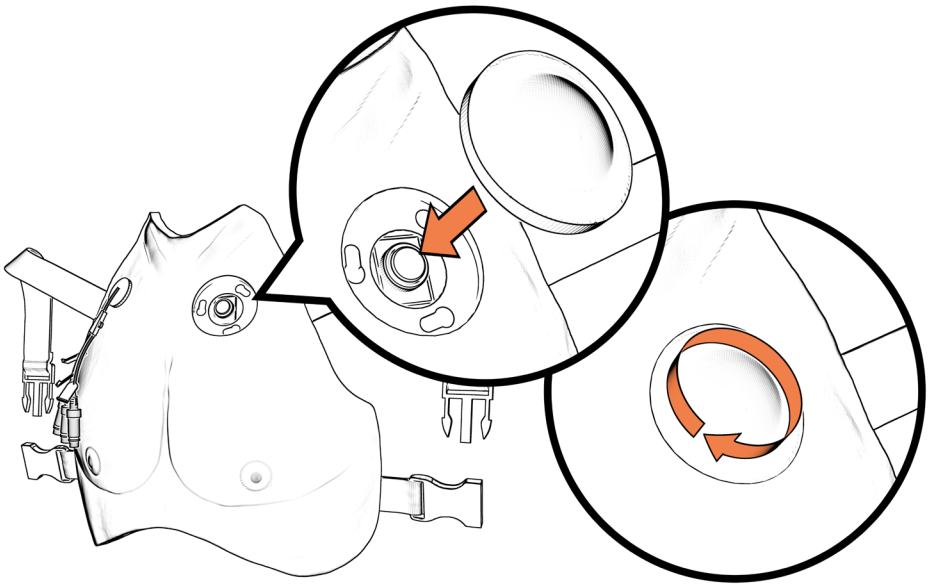


REPLACE PORT-A-CATH SKIN

- 1** If port-a-cath skin needs to be replaced, twist out (counter clockwise) current replacement skin.



- 2** To twist in new replacement skin (clockwise), coat the replacement skin and chest plate with mineral oil.



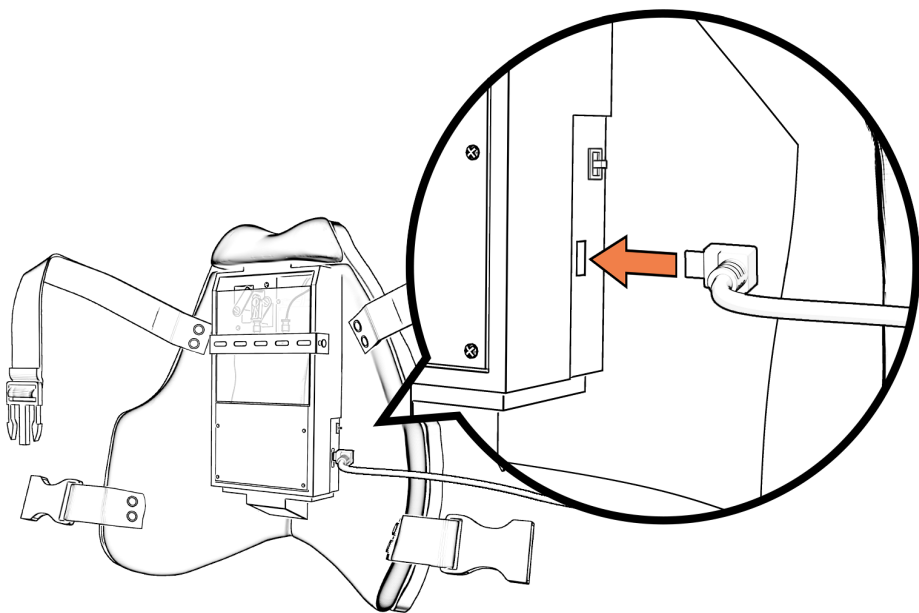
CHARGING

On the Avkin App, a battery percentage is displayed at the top of the App.

When the battery is at 10% power, the light on the back of Avline turns red indicating the device needs to be charged.

The Avline battery lasts up to 2 full simulation days (16 hours total). The battery requires up to 8 hours to fully charge.

Plug the charger provided in the back of the Avline.



The light will turn yellow when charging and green when charge is complete.



AVLINE BATTERY SAFETY GUIDELINES



The Avline contains a rechargeable 3.7/4.2V Lithium Ion Polymer Battery that could cause injury if mishandled. Follow the proper handling procedures for the Avline and the Avline charger:

- Charge the Avline only with a USB micro cable attached to a USB wall adapter - this is what Avkin provides with the Avline
- Do not charge or use unattended
- When charging, keep away any flammable or conductive materials (ex: textiles, paper, metal, etc.)
- Do not disassemble the Avline battery or charging circuitry (small blue board next to the battery and under the black plate)
- Do not puncture the Avline battery
- Do not immerse the Avline in water or other liquids
- Do not expose the Avline to:
 - Extremely cold temperatures (below freezing, 32 deg F)
 - Extremely hot temperatures (above 130 deg F)
 - Direct sunlight
 - Hot vehicles
- Do not expose the Avline to mechanical impact (ex: throwing, dropping, etc.)
- Do not use the Avline if the battery is damaged
 - Call Avkin for a replacement battery if needed
- Store the Avline in a cool, dry place
- Keep the Avline away from children - it is not a toy
- Refer to FAA guidelines for airplane transportation of devices with installed lithium batteries:
 - Turn the Avcath completely off (power switch on the side)
 - It is off when the blue light on the charging circuitry is off (under the black plate)
 - Protect it from accidental power-on
 - Pack it to cushion it from damage

Avline is provided by:



www.avkin.com