



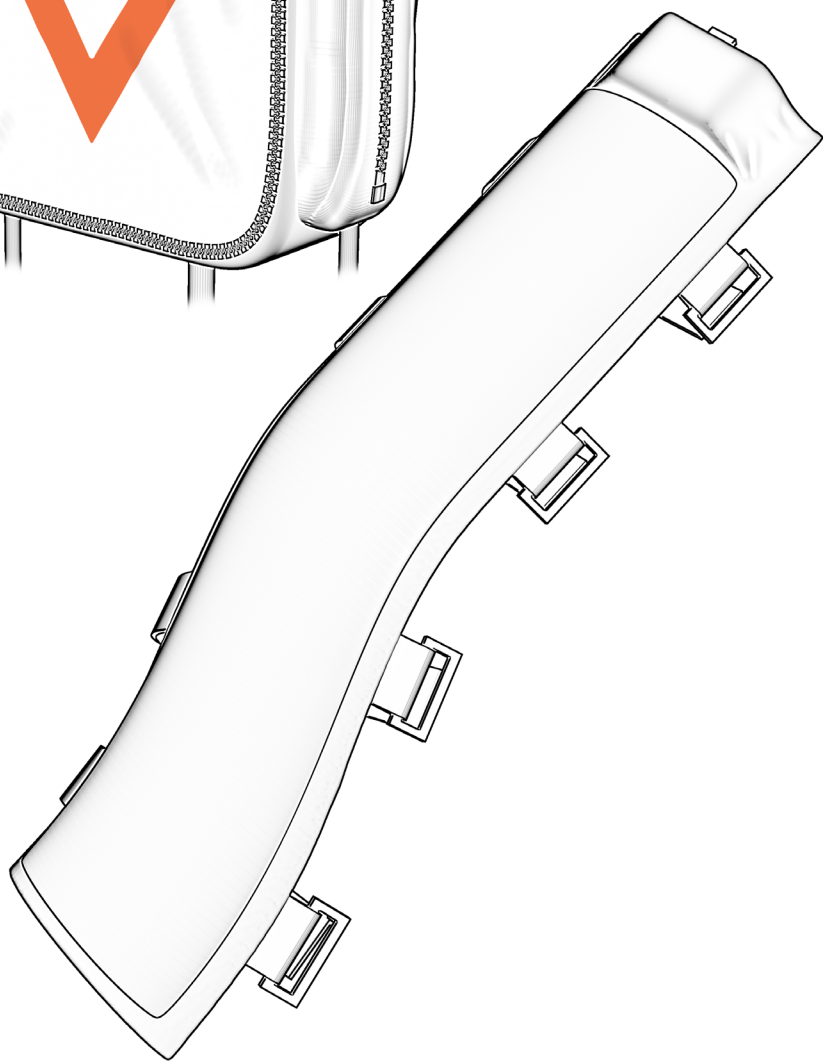
USER MANUAL

Customer Assistance

302-562-2110

Technical Support

302-562-2040



Welcome to your Avstick!



Blood Flow- Once the device is turned on, blood will flow through the veins. This allows for blood collection or IV fluid insertion.

Simulated Blood- The blood used in the Avstick is developed in house and has anti-microbial properties so if it is left in your device for a night (or a semester), it will not grow mold!

Sensory Feedback- Simulated participants are cued through a light vibration on their arm when the needle punctures the Smart Skin layer of the device. Learners receive real time feedback about their care through the simulated participant reactions.

Replaceable Tubing- The tubing used in the Avstick is easily replaceable and can be acquired from:

Large: <https://www.mcmaster.com/5234k971>

Small: <https://www.mcmaster.com/5234k241>

What's Included

- ✓ Avstick: wearable technology for use with standardized patients.
 - Wearable arm
 - 1 “control bag” equipped with simulated blood bag, pump to pump blood through veins, electronics
- ✓ 2 half-filled 500mL bag of simulated blood
- ✓ Battery charger
- ✓ Vein replacing kit with 5 replacement latex veins (3 large, 2 small)

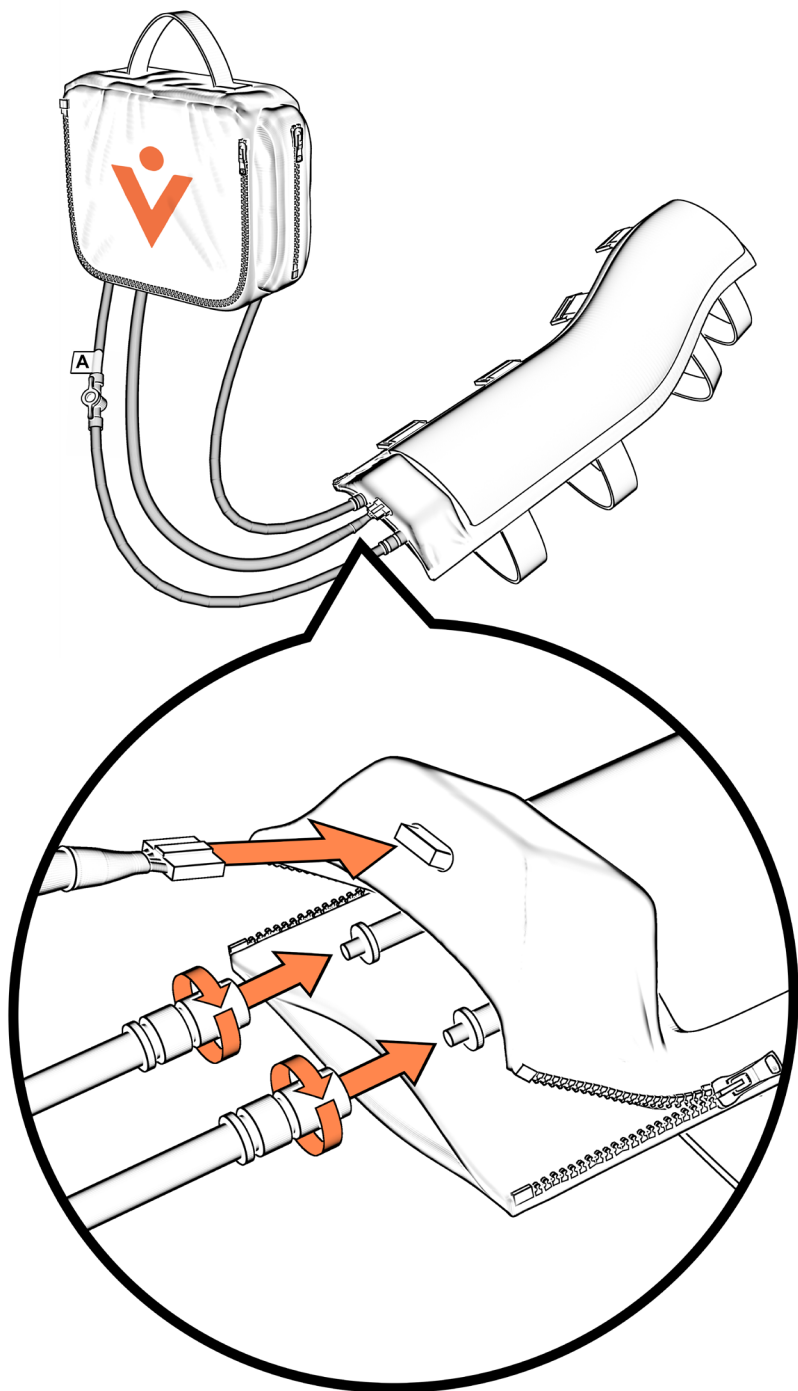
Getting Started

Watch the instructional video on the customer portal and USB.

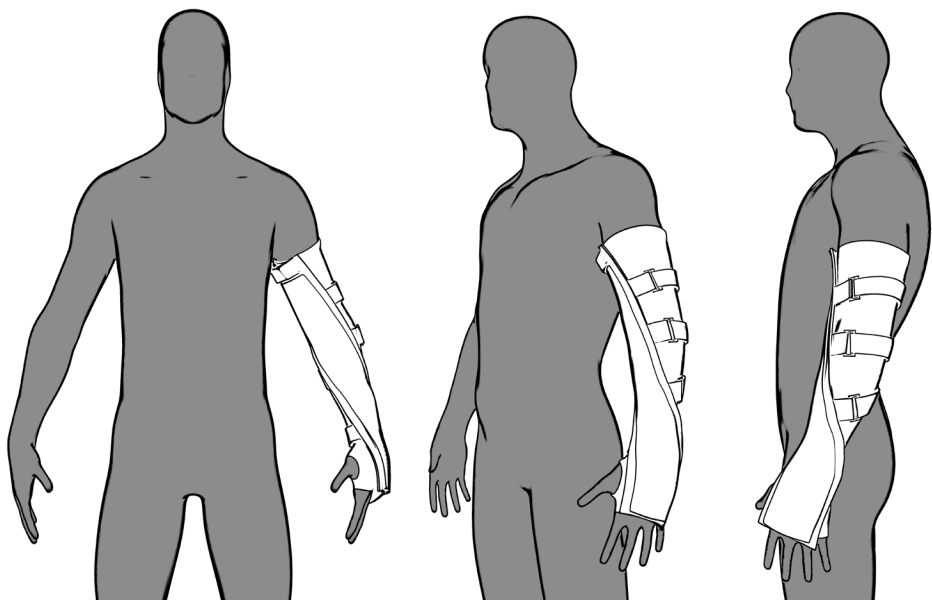
- 1** Hang the control bag off the hospital bed using the s-hook in the side pocket.



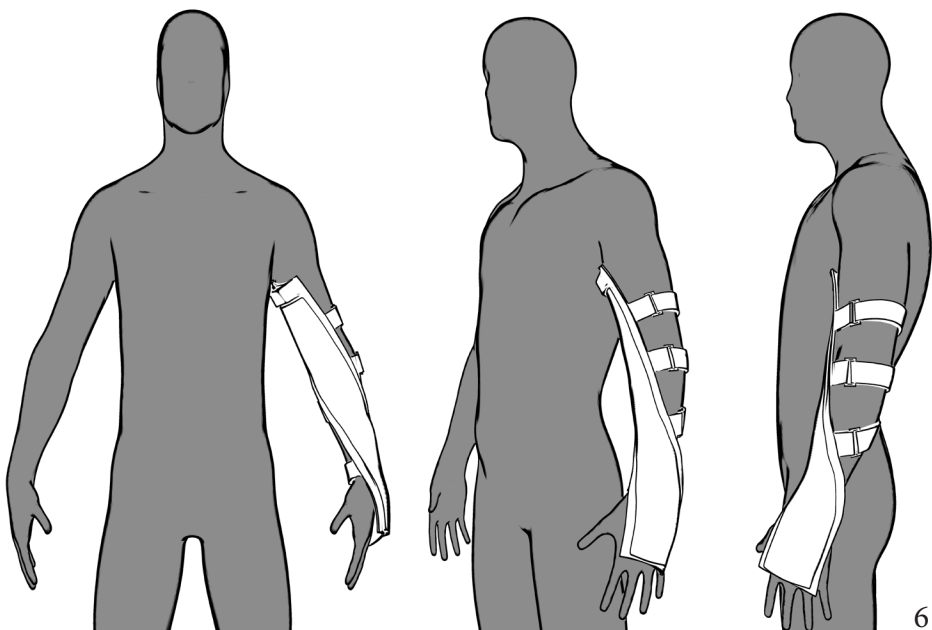
- 2** Connect the tubing and electrical connection coming from the control bag to the arm.



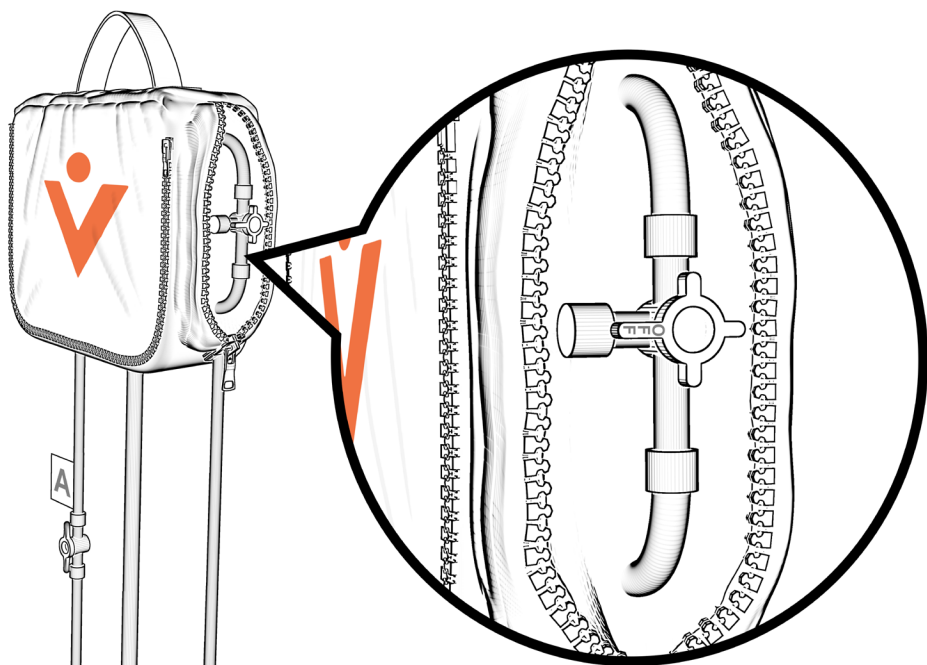
- 3** Put the arm on the left arm of the simulated participant (SP), wrapping from the top of the hand to antecubital region (inside the elbow).



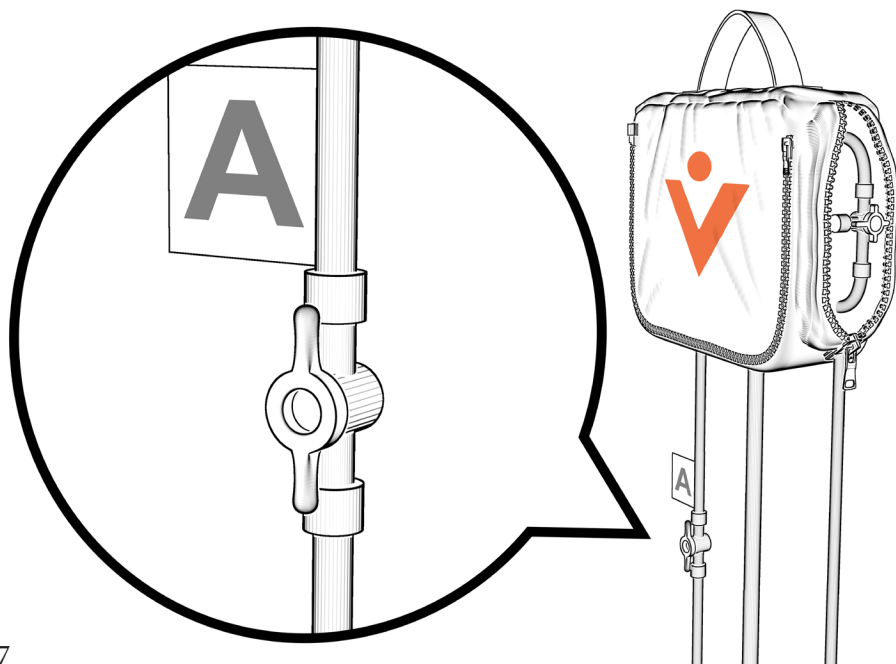
If the SP cannot comfortably fit into the sleeve of the arm, use only the straps to fit around the SP.



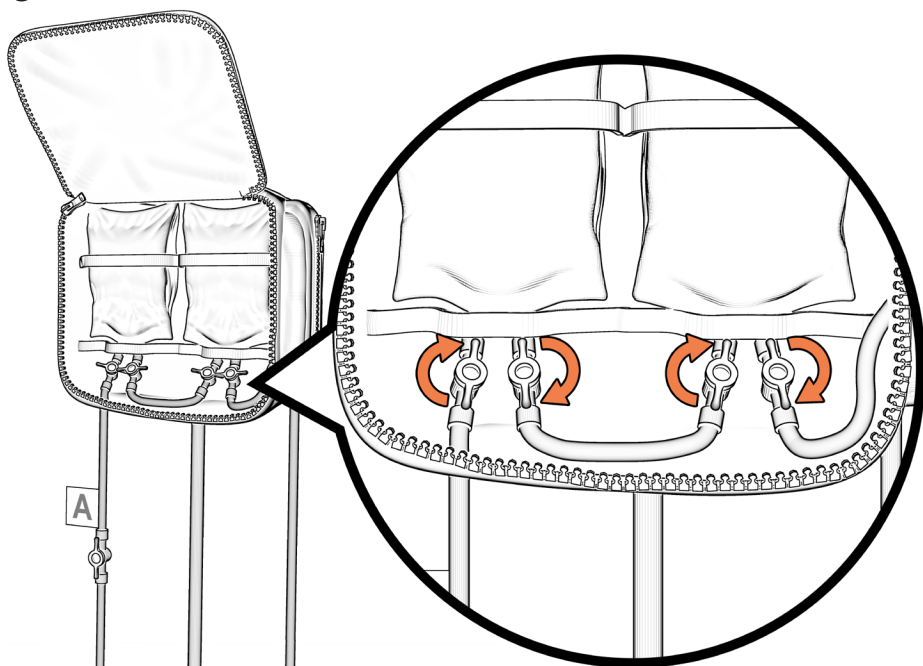
4 Position the “Drain” stopcock.



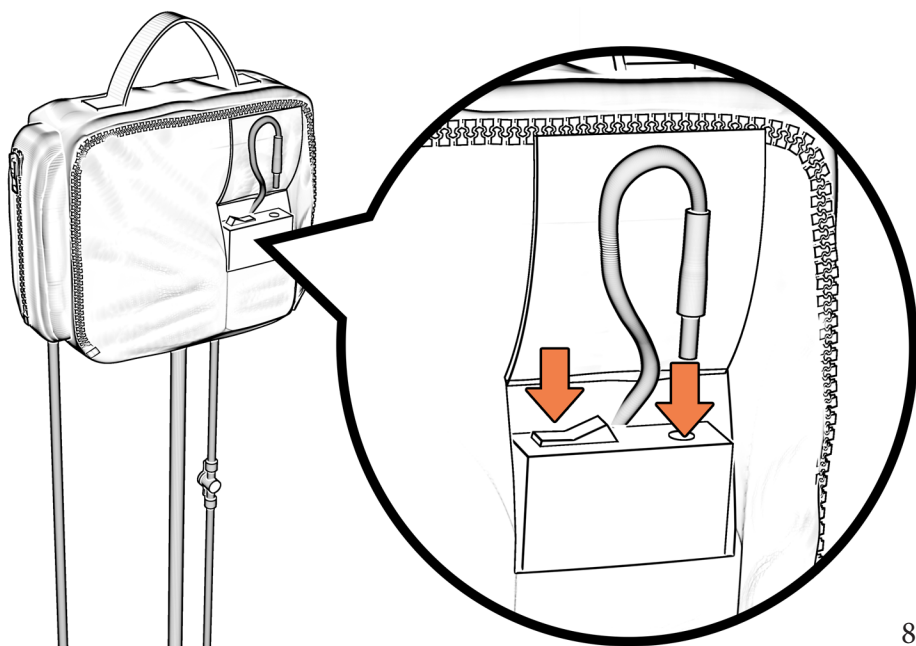
5 Position “Stopcock A”.



- 6** Ensure blood bag stopcocks are open.



- 7** Turn on battery, located in the back pocket of the control bag (when shipped, the battery will not be plugged in, so you need to plug it in as well).



IV Bag Tips

If inserting IV fluids: fill IV bag to 100ml

If drawing blood: fill IV bag to 400ml

If running performing IV practice: fill IV bag to 200ml

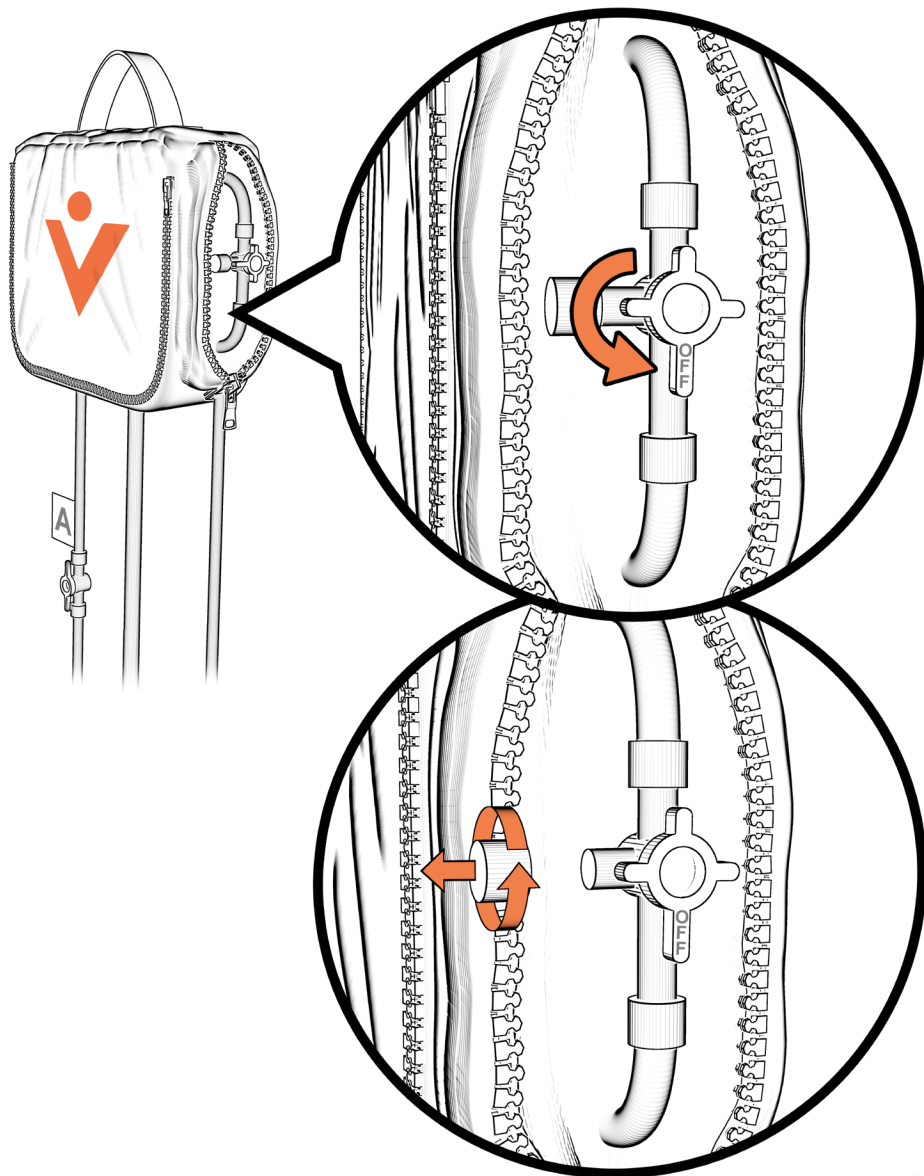
To remove the IV bag, disconnect at the stopcocks seen in the image below



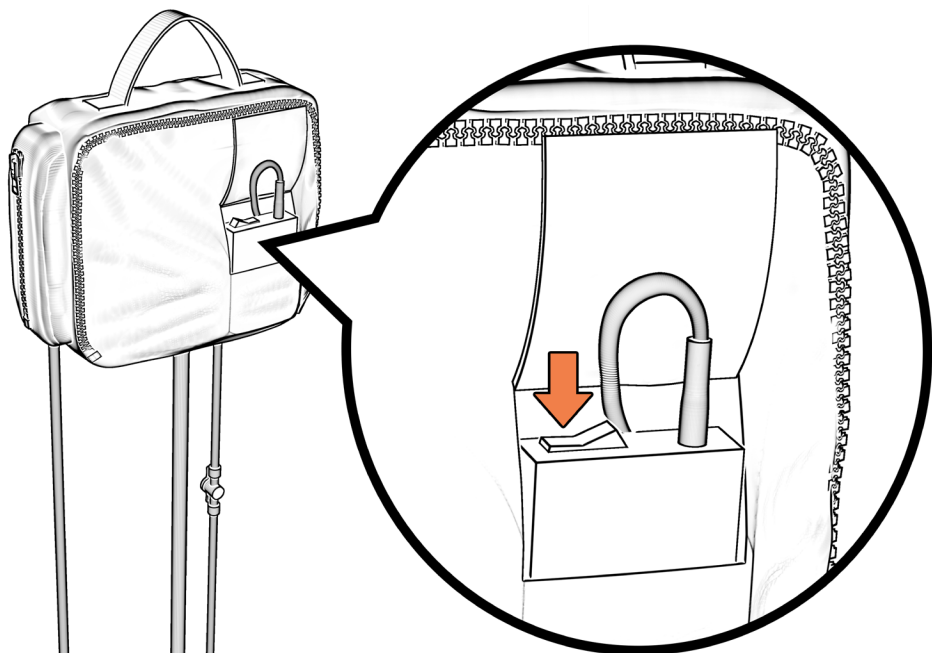
Flush the System

Before you disconnect the silicone tubing from the latex tubing in the Avstick sleeve make sure you flush the system.

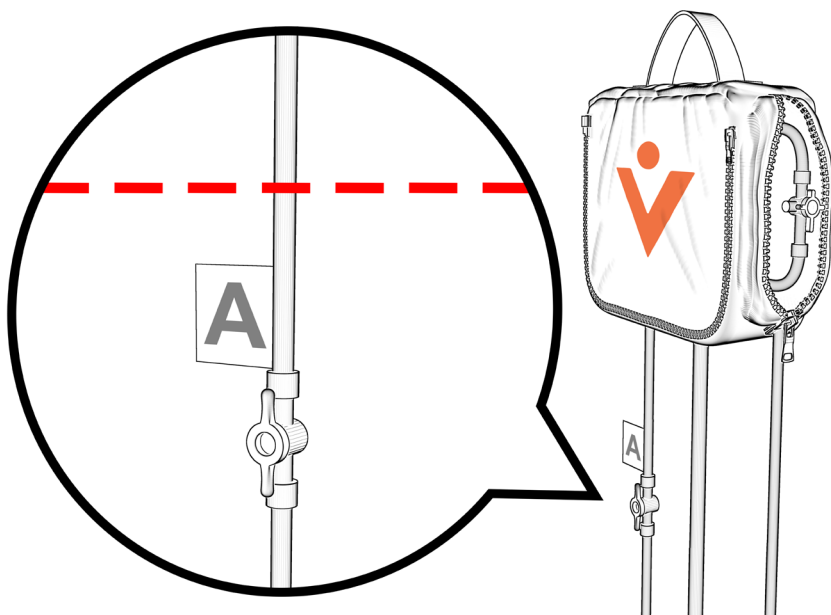
- 1 Position the Drain Stopcock and remove cap on the open air side of the stopcock.



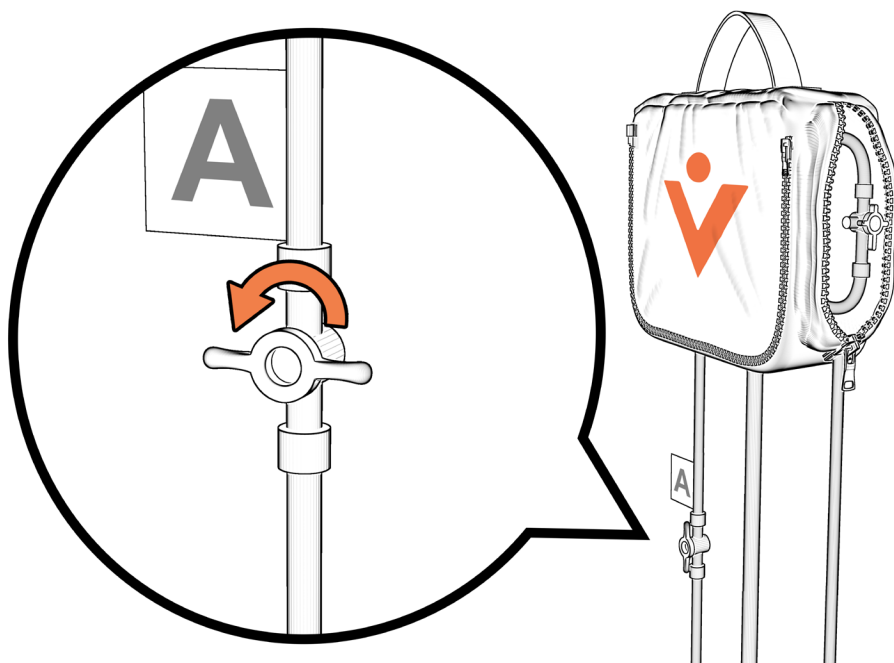
- 2** Turn on the battery to start pumping air into the system.



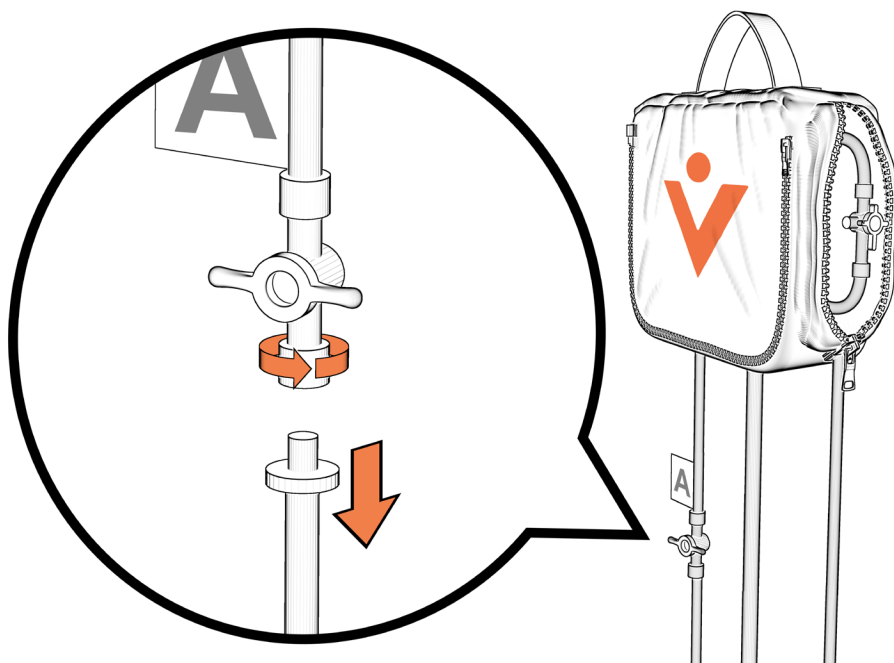
- 3** Pump until the air bubble reaches stopcock A, then turn off the pump. Air bubble should not go higher than the red dotted line in the image below.



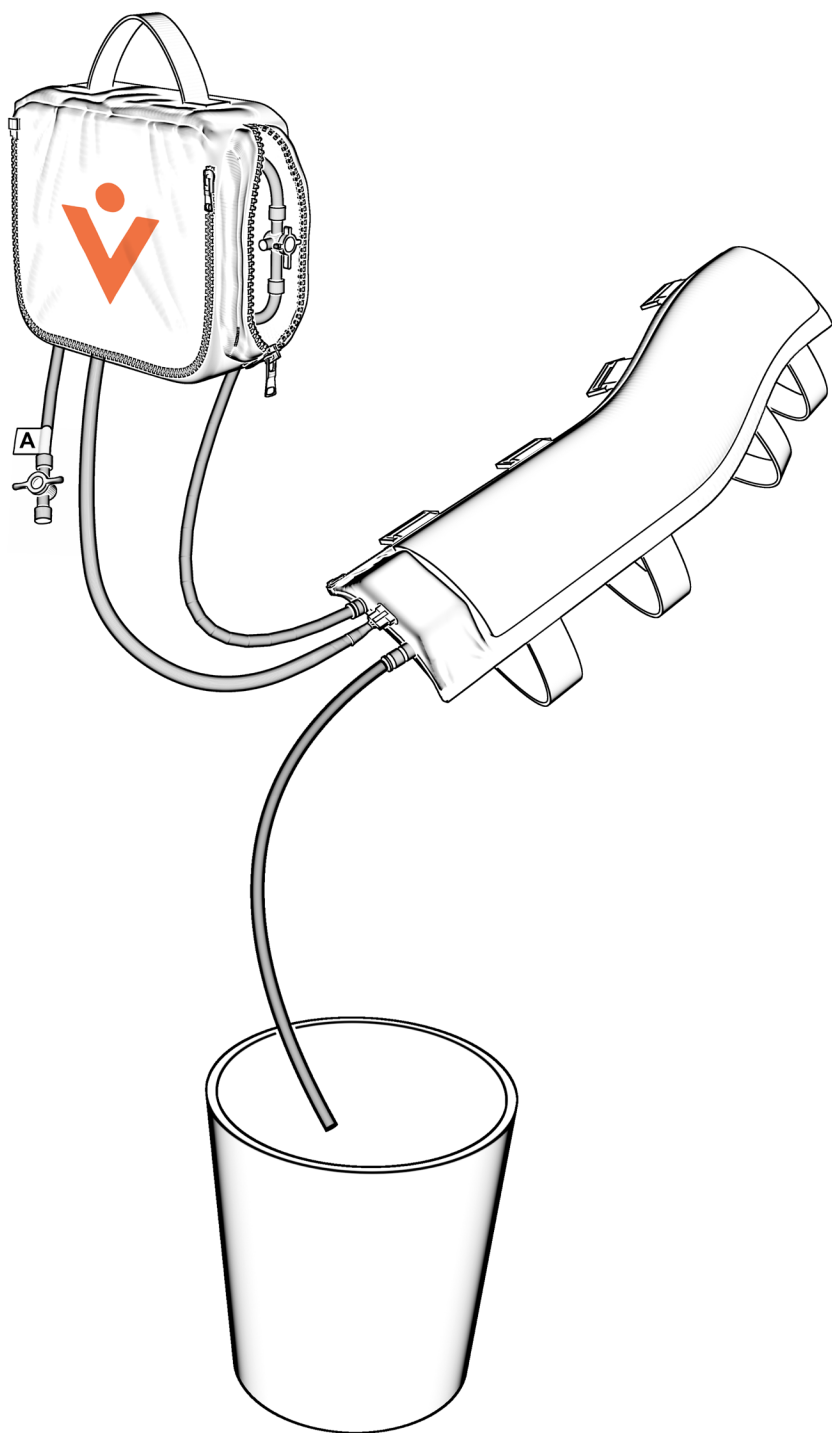
4 Close stopcock A.



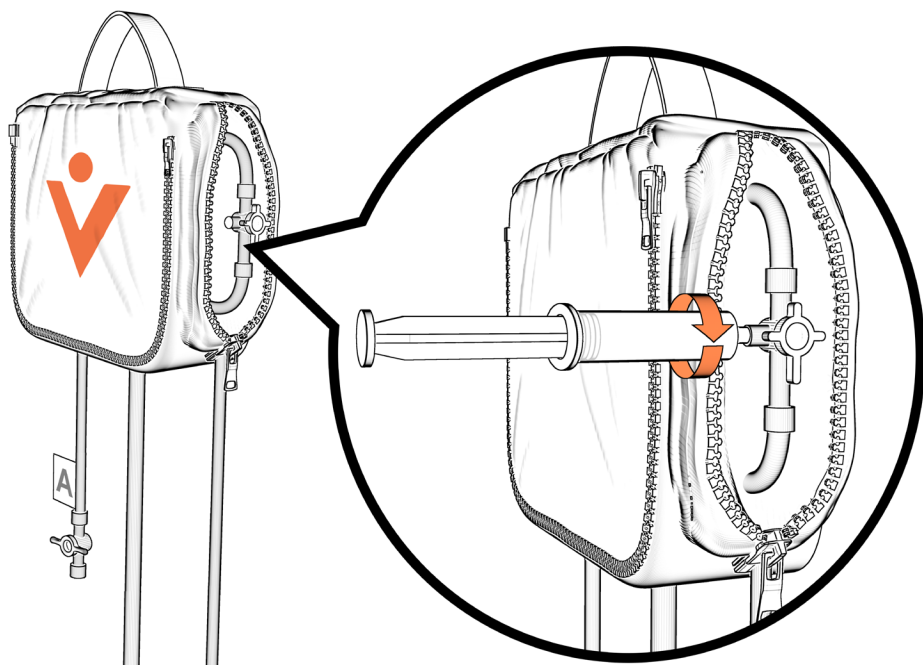
5 Disconnect tubing from arm at Stopcock A.



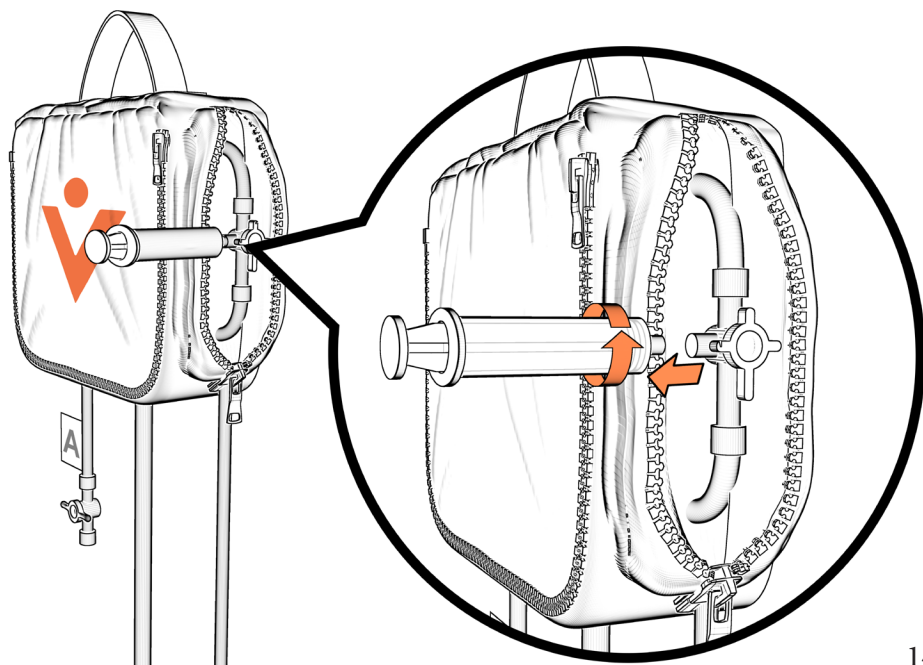
6 Put tubing end into sink or bowl.



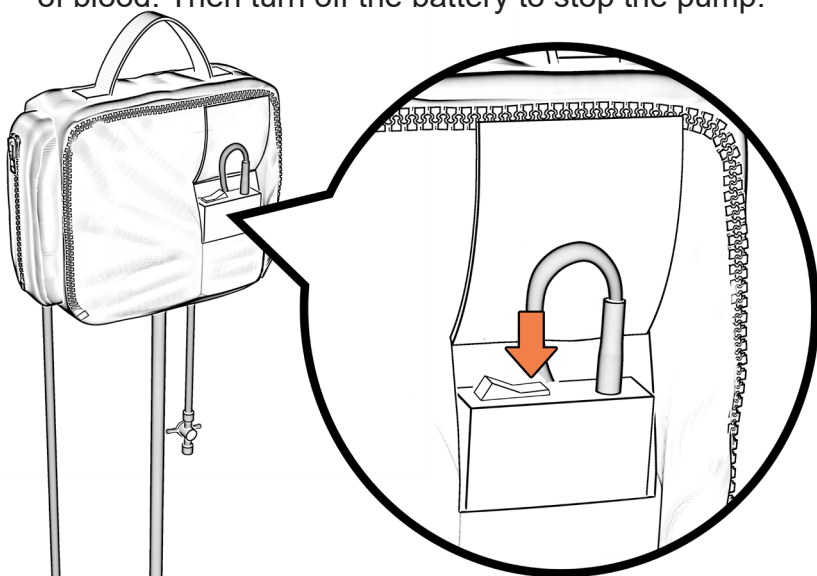
- 7** Connect 30ml syringe filled with distilled water to drain stopcock.



- 8** Turn battery on and allow pump to pull water from syringe until empty, then disconnect syringe immediately.

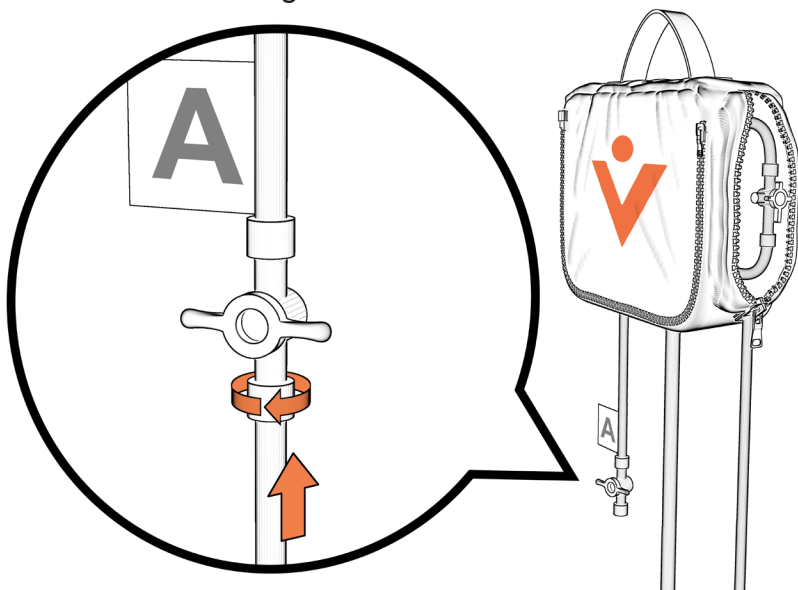


- 9** Continue to keep battery turned on, allowing pump to pump air through the system until the tubing is mostly clear of blood. Then turn off the battery to stop the pump.

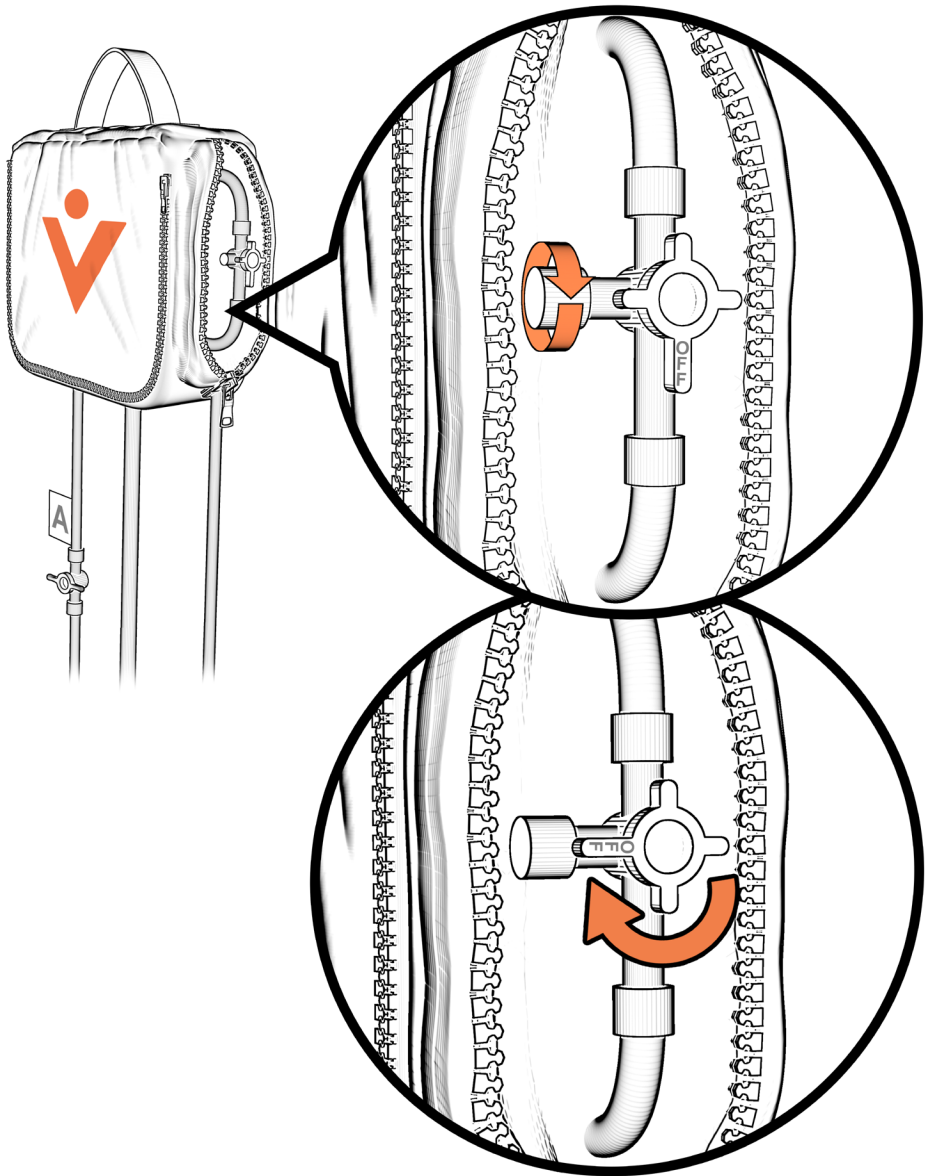


If there is a little blood left in the tubes, it is OK! The blood will slightly harden, but will dissolve the next time you pump blood through the device. The Avkin blood is antimicrobial, and will not grow mold in the device.

- 10** Connect the tubing back to stopcock A, keeping stopcock A closed for storage.



- 11** Screw cap back into place and position the “Drain” stopcock back to its original position.

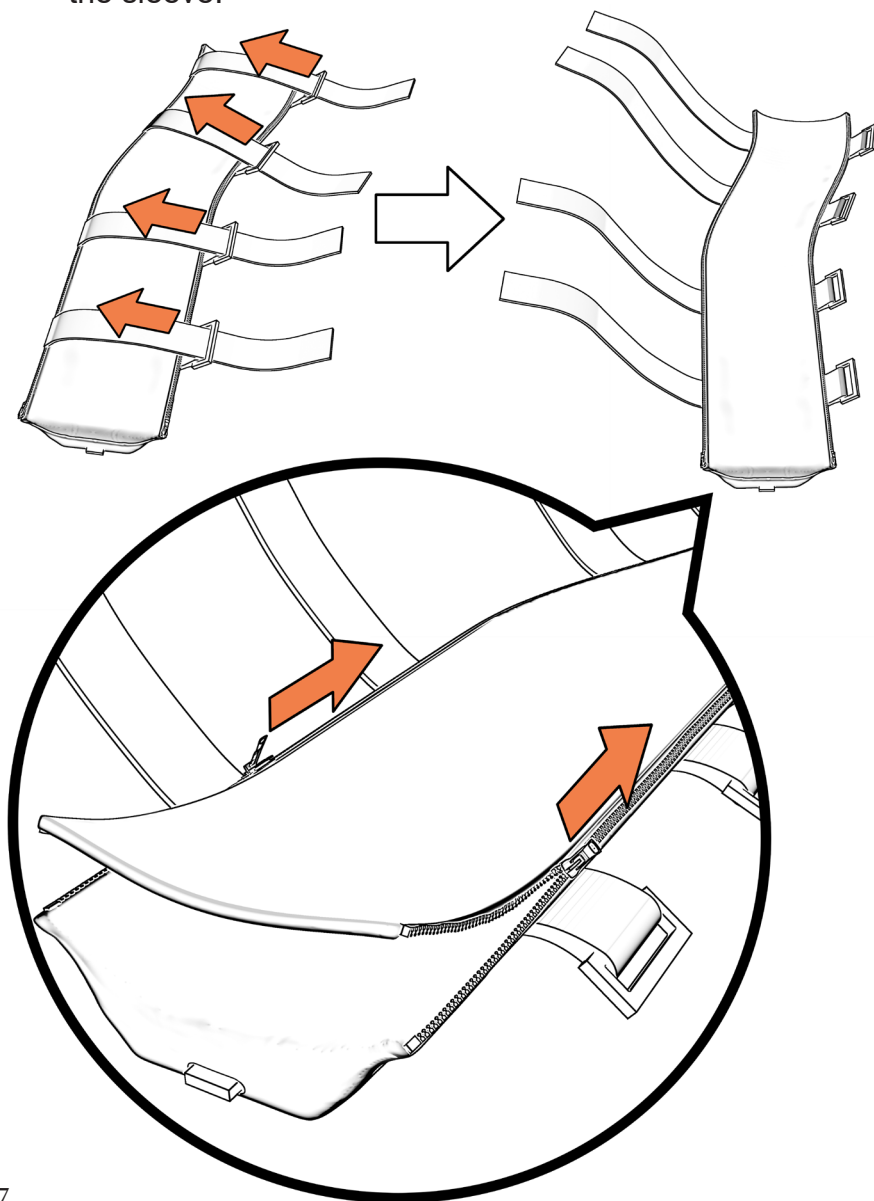


- 12** At this point you can disconnect the veins for replacement if necessary.

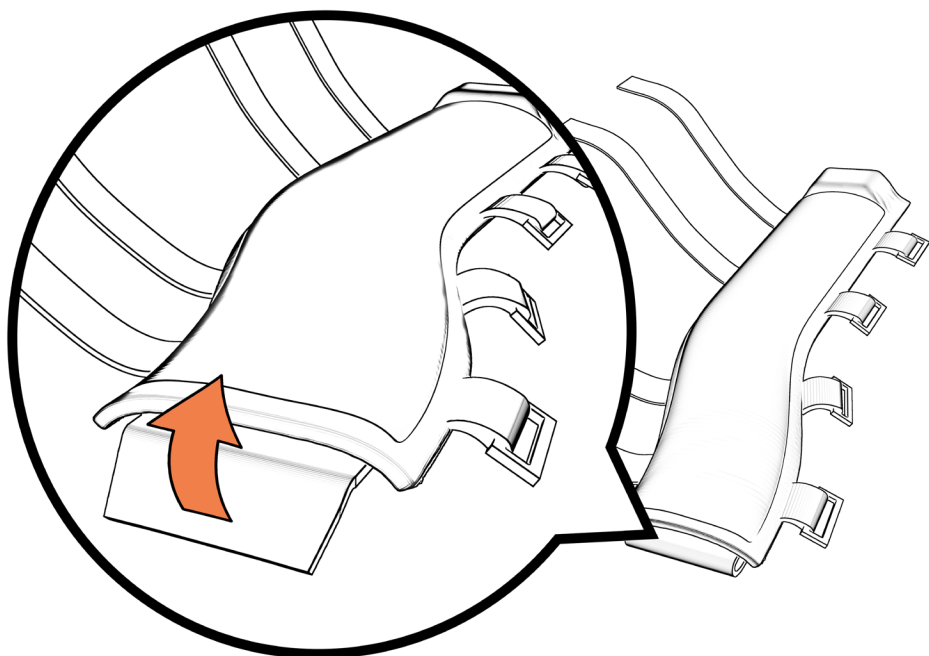
Replace Veins

Be sure to flush the system (page 7) before replacing the veins.

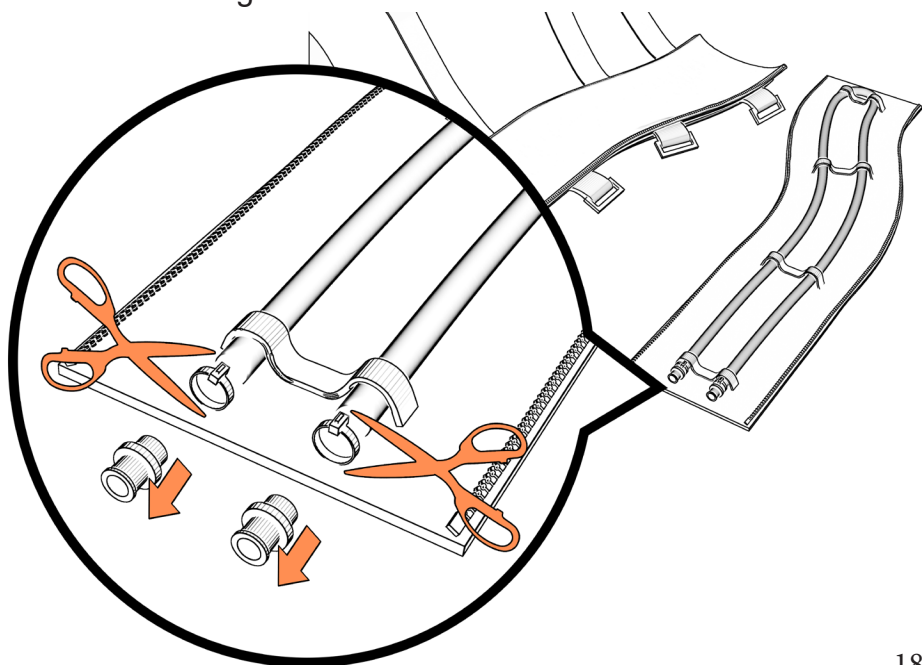
- 1 Unstrap the Velcro from the buckles and unzip the sides of the sleeve.



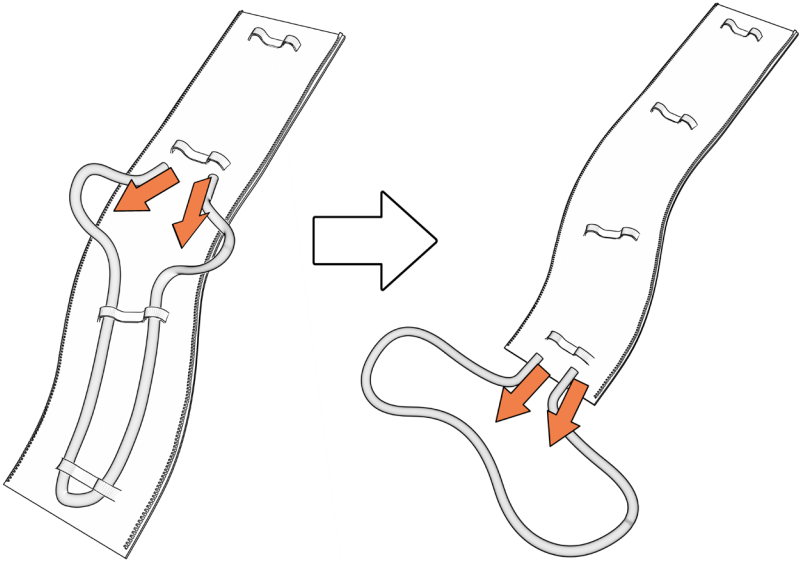
- 2** After both sides are unzipped and disconnected remove the flap at the knuckles that is in place with Velcro.



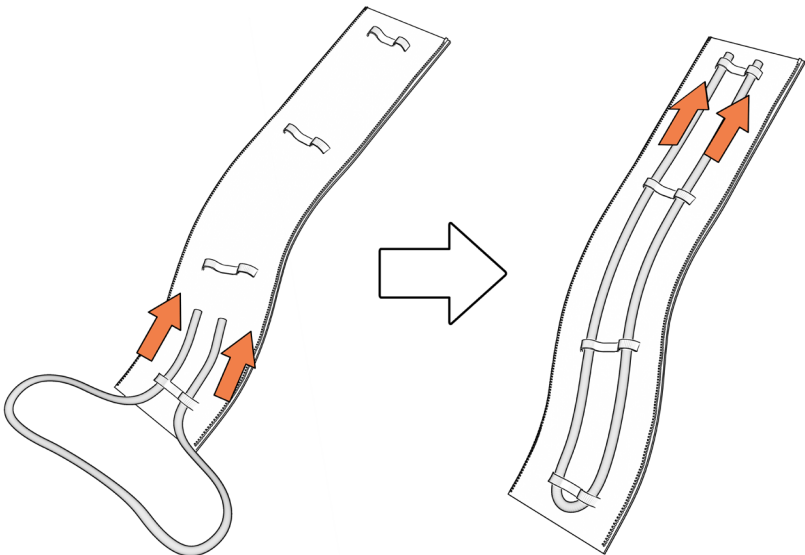
- 3** Cut off the zip ties and luer connectors from the end of the latex tubing.



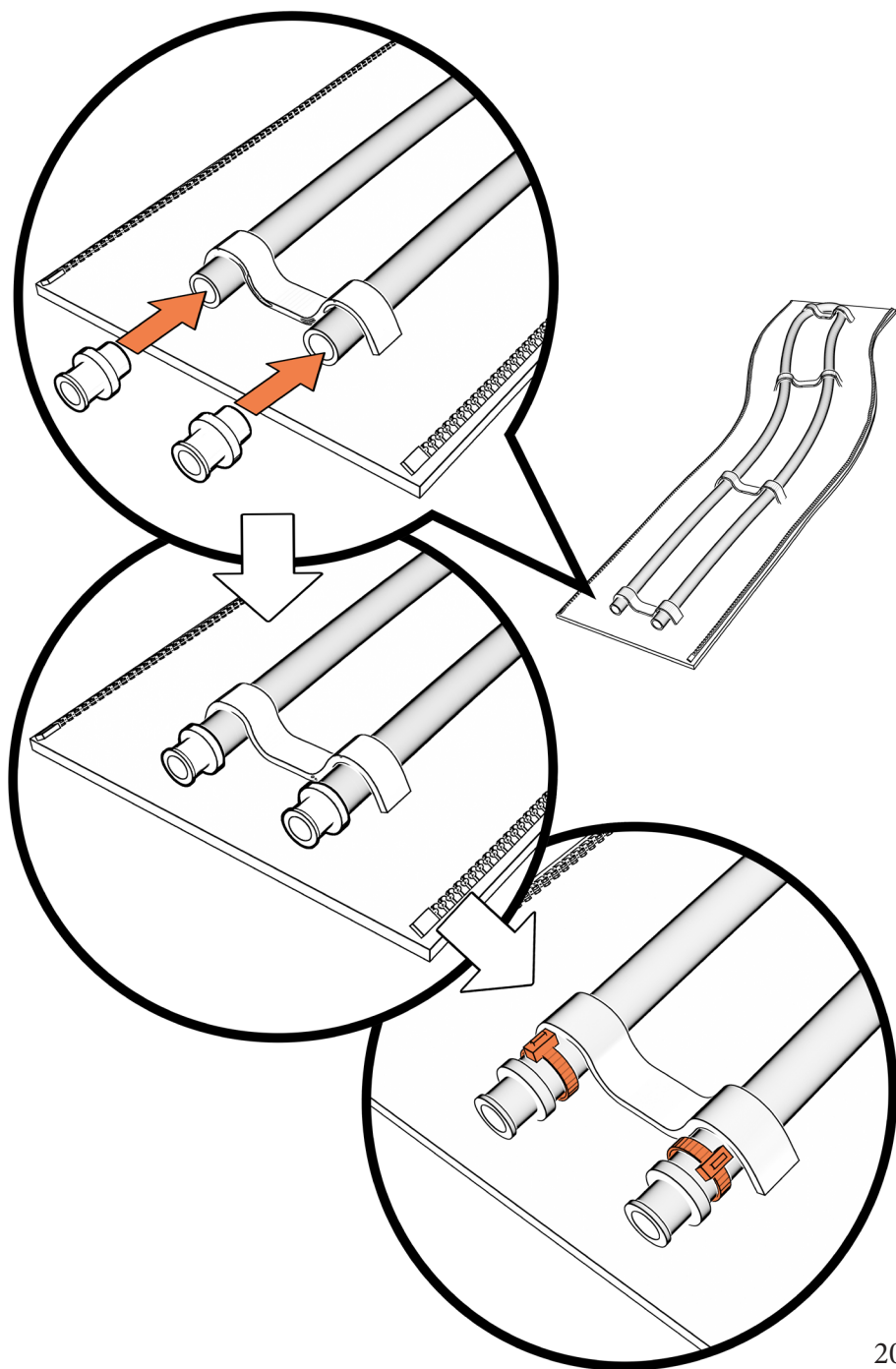
- 4** Remove latex tubing, pulling both sides towards the knuckles.



- 3** Put new latex tubing in (pick the smaller tubing to challenge your students!), starting at the knuckles insert the latex tubing down each pathway. If you struggle, getting the tube through an opening, use hemostats to pull the tubing through, otherwise, just guide it through with your hands!



- 3** Use mineral oil or hand sanitizer on the tip of the luer connector to easily insert it into the tubing, then zip tie it to secure in place.



Care and Maintenance

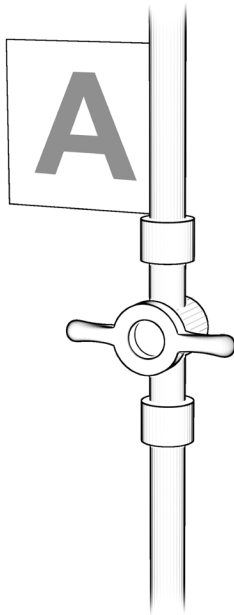
Daily Maintenance

Only use a damp lint-free cloth to clean off the silicone skin.

Once dry, dust with baby powder to remove tackiness.

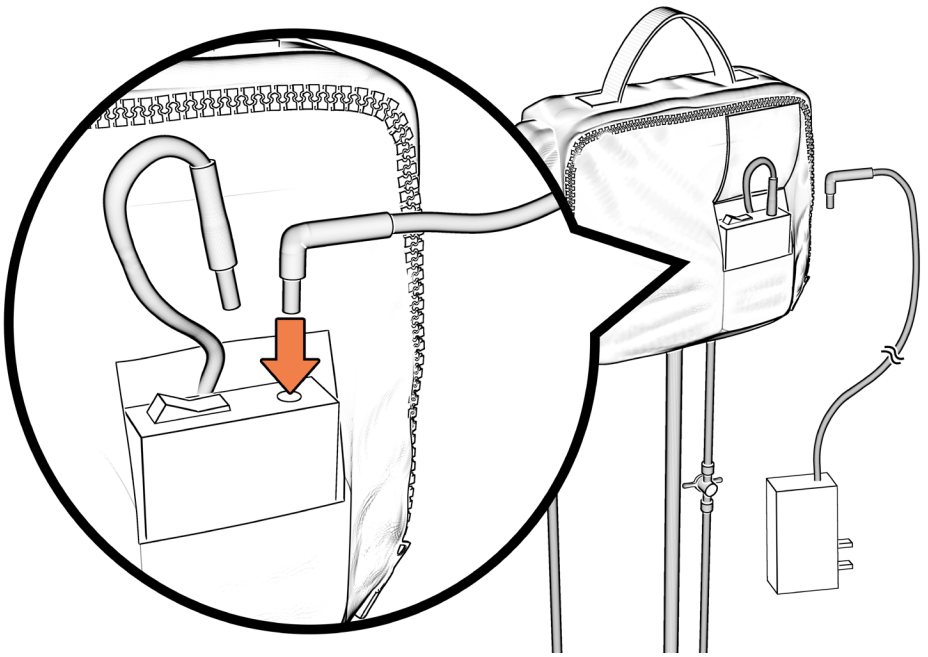
After each day of use, flush the system with air or distilled water. **Remove latex veins in the Avstick sleeve and replace with new latex tubing as necessary.**

Store with Stopcock A closed.



Charging

To charge the Avstick plug in charger to the battery pack located in the front pocket of the control bag.



Avstick™ is provided by:



www.avkin.com

Cleaning Your Devices

All Avkin products are designed to be easy to clean and maintain.

How Do I Clean My Devices?

- > 60% or more alcohol based hand sanitizer
- > Silicone can be wiped down with Sanicloth wipes or hand sanitizer

After Cleaning

- > For light and mid skin tone devices
 - > Dust baby powder or corn starch on the silicone
- > For dark skin tone devices
 - > Dust baby powder or corn starch mixed with no sugar coco powder on the silicone

What Not to Use

- > Do NOT get electronic components wet

Need More Assistance?

(302) 562 - 2040

support@avkin.com



Battery Life

To provide you with the most accurate data on use when charging of your products we have tested the battery life of each product. We recommend charging your products for at least 8 hours before use to ensure you are able to use products full battery life. Products should be charged every 3 months to maintain battery life.

Avtrach - 6 1/2 hours | Avline - 6 1/2 hours | Avstick - 7 1/2 hours
Avtone - 9 hours | Avcath - 9 hours

*the numbers posted are how long the battery will last if the product is in full use

[Need More Assistance?](#)

(302) 562 - 2040

support@avkin.com

