



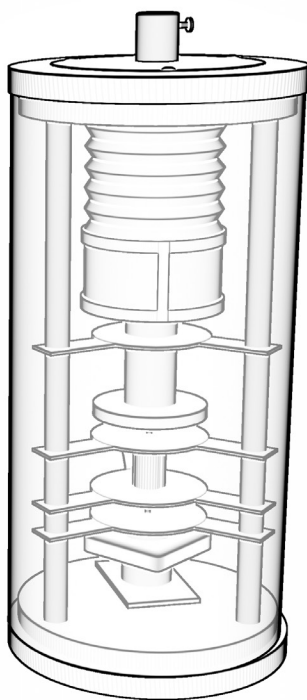
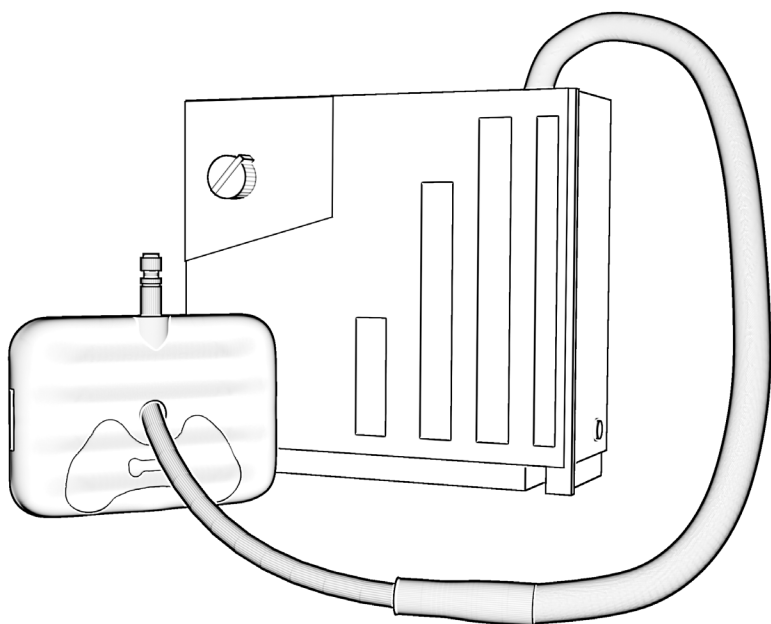
USER MANUAL

Customer Assistance

302-562-2110

Technical Support

302-562-2040



Welcome to your Avthor!



Tidaling & Fluctuation- Learners can observe different rates of tidaling and fluctuation in chest drainage system and in tubing.

Blood Collection- Observe blood draining into chest drainage system.

Chest Drainage System- Responds accurately to kink in tube and air leak, modified so collection chamber can be emptied.

Crepitus- Allow students to identify and mark crepitus locations.

Line Management- Allow learners to manage lines and tubes with realistic patient movements.

What's Included

- ✓ Avthor: wearable chest tube management device for use with standardized patients
- ✓ Floor unit
- ✓ Chest tube drainage system
- ✓ Simulated Ribs
- ✓ Crepitus Add-on
- ✓ Control bag with 1000 ml of blood
- ✓ Transport Sim Add-on
- ✓ Repair/Maintenance Kit
- ✓ Cleaning Syringe
- ✓ Micro USB charger

Getting Started

Watch the instructional video on the customer portal and USB.

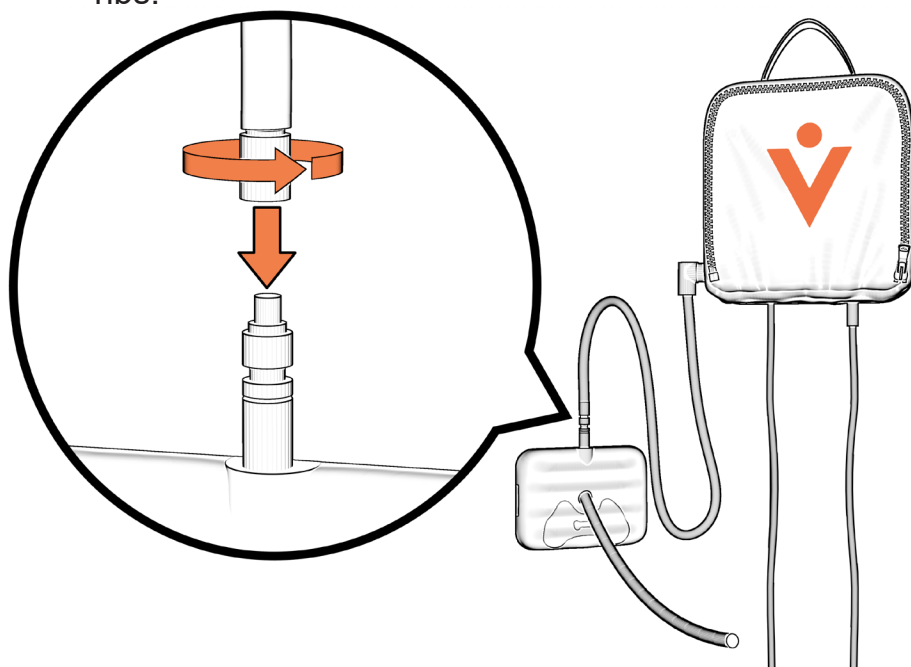
- 1** Download the “Avkin” App on your Apple or Android device.



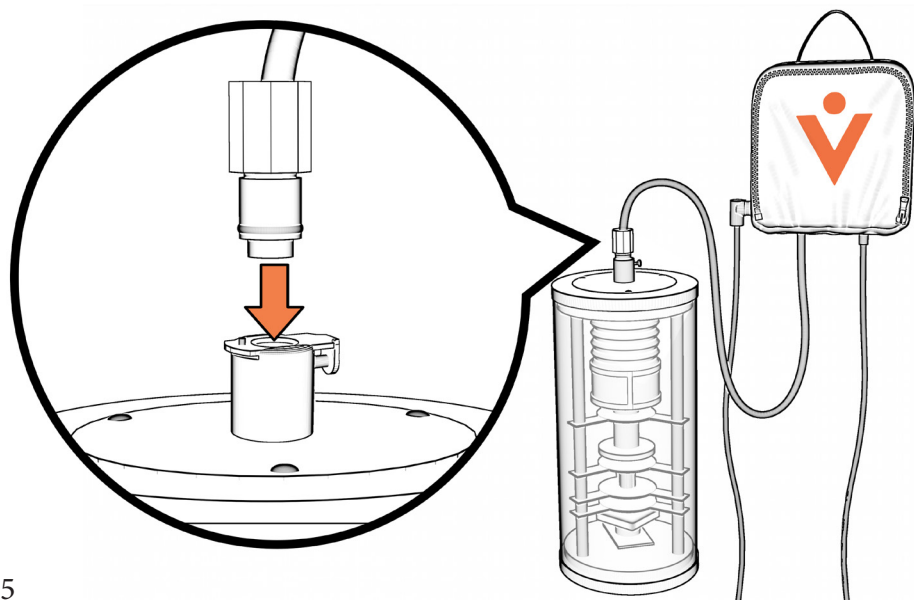
- 2** Hang control bag on IV Pole.



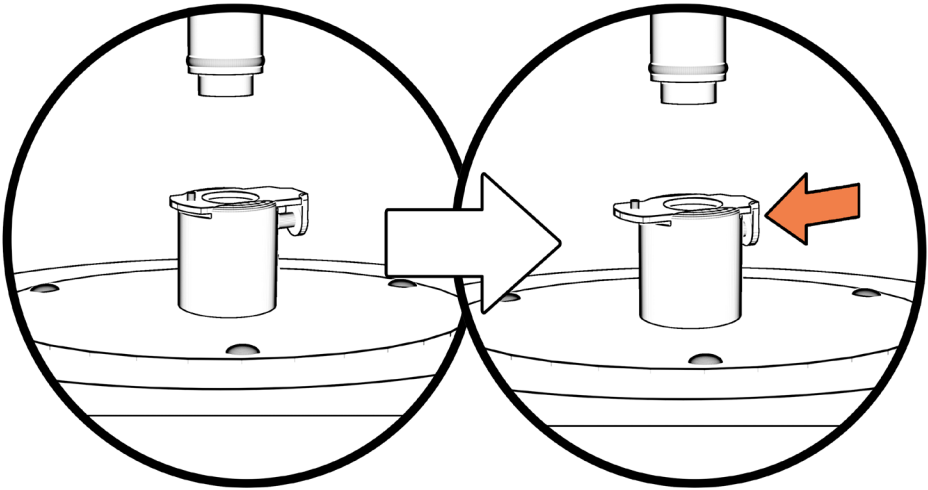
- 3** Connect tubing coming out from side of control bag to ribs.



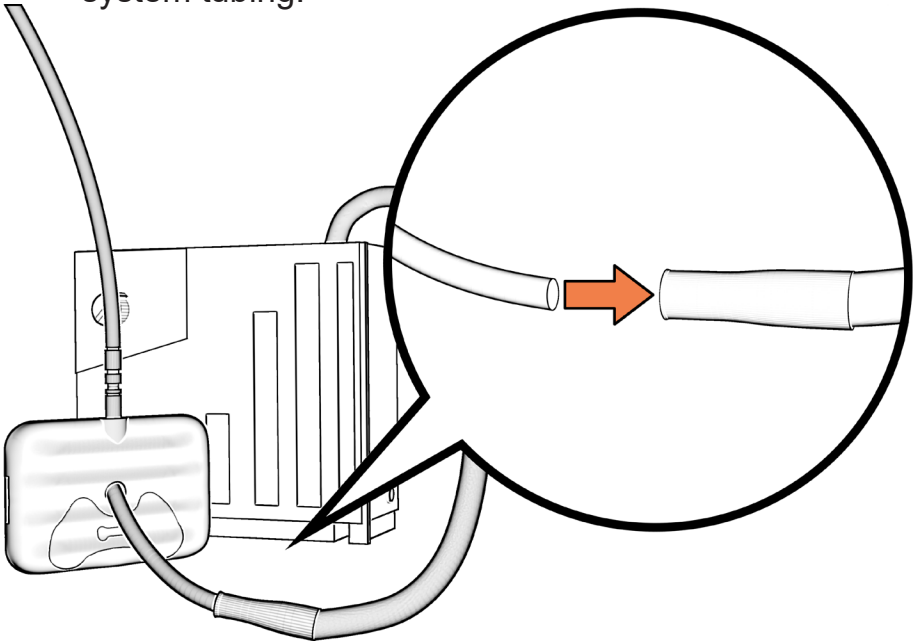
- 4** Plug tubing coming out bottom of control bag into floor unit.



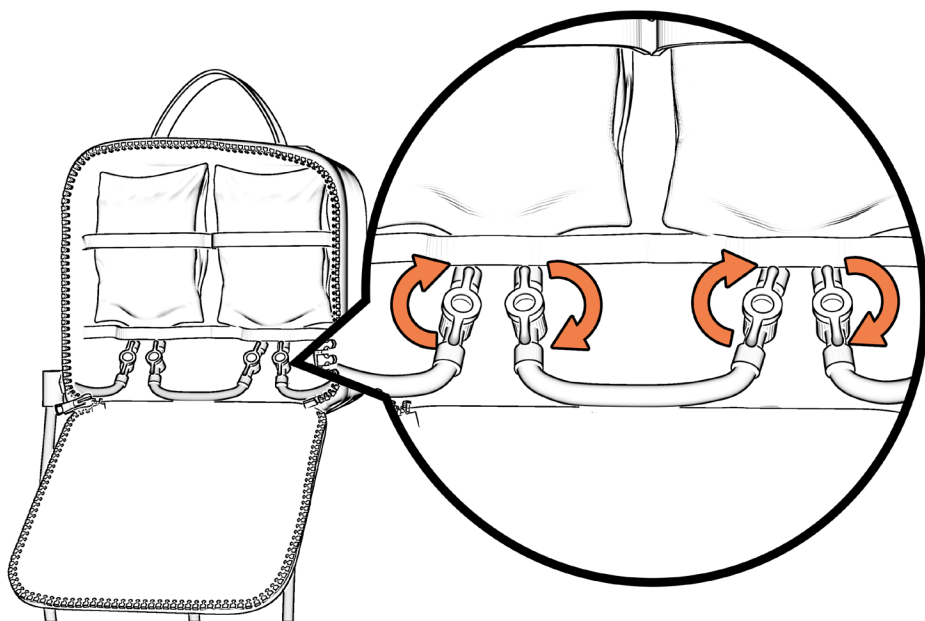
(you might need to compress the floor unit connector to allow the connectors to go together)



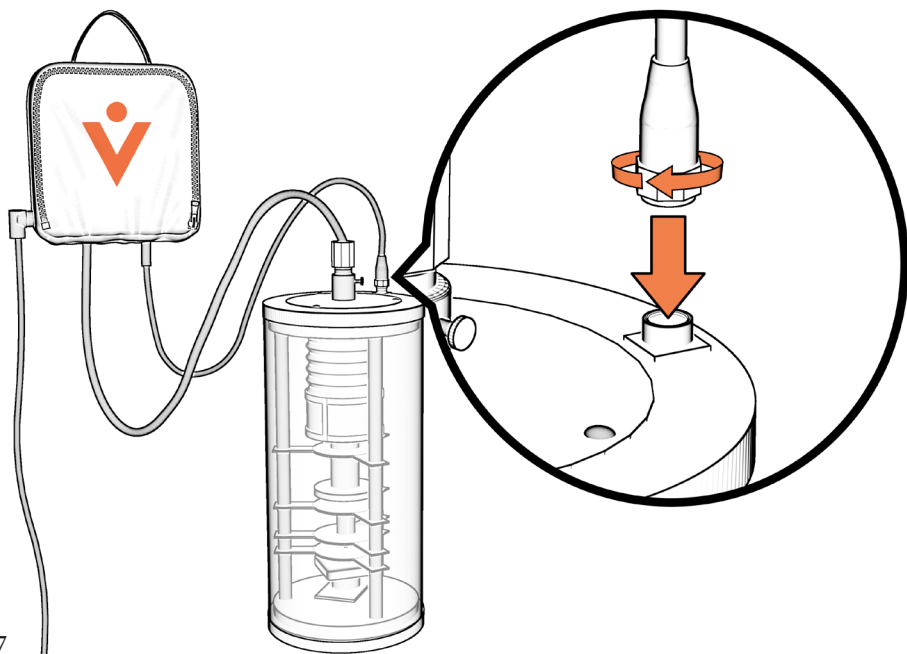
5 Connect chest tube coming out of ribs to drainage system tubing.



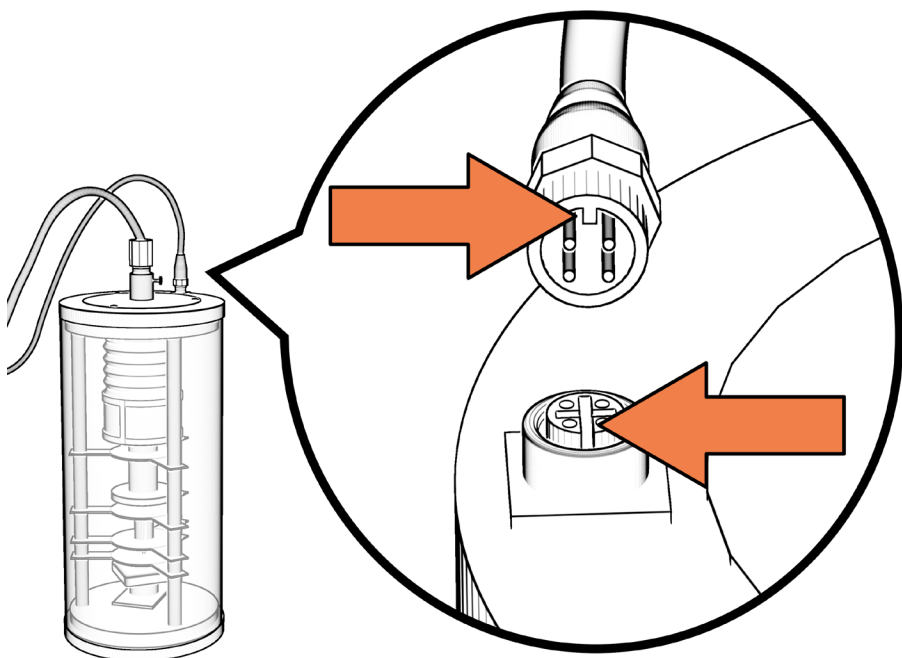
6 Open all blood bag stopcocks.



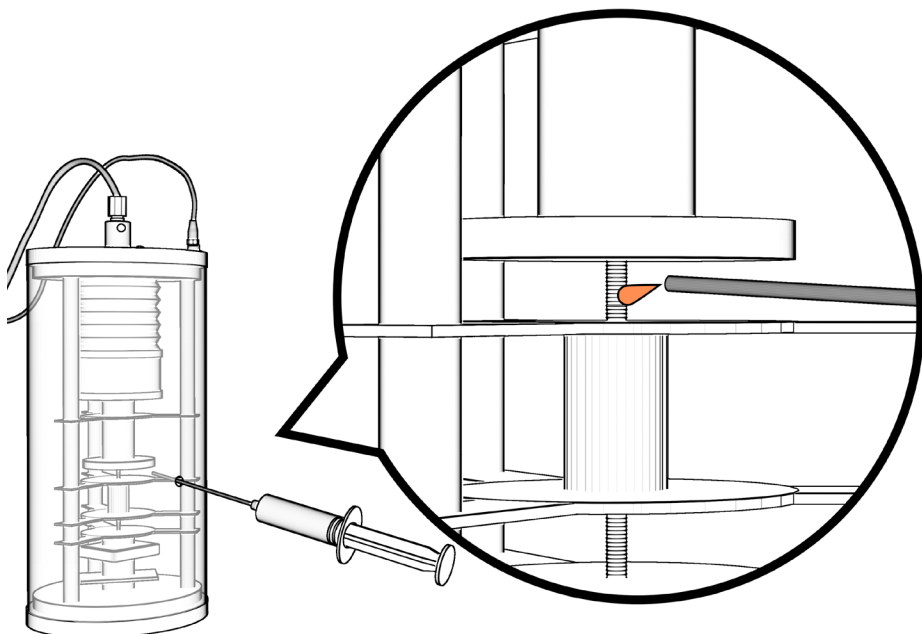
7 Connect electrical connection from control bag to floor unit.



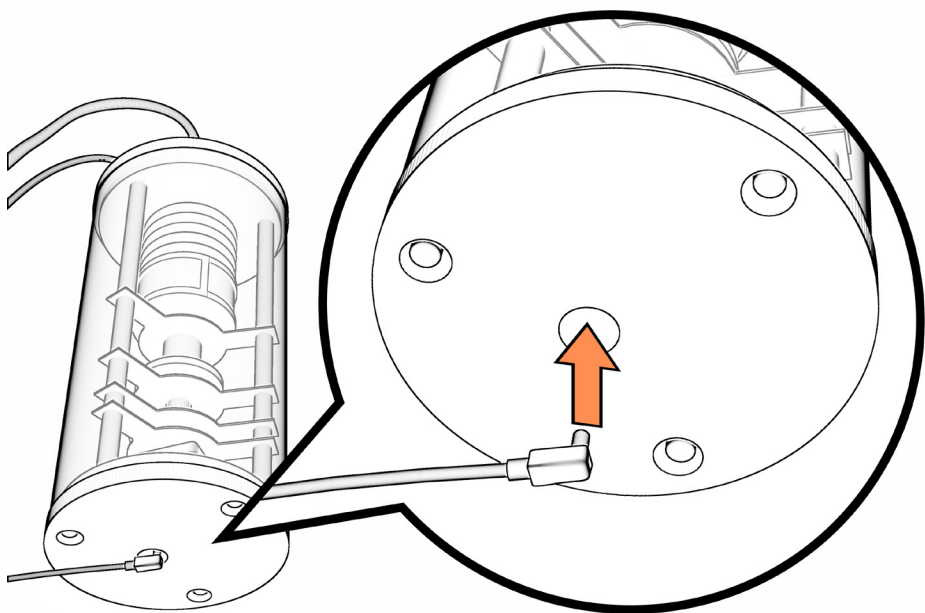
(Line up the notches for the two electrical connections)



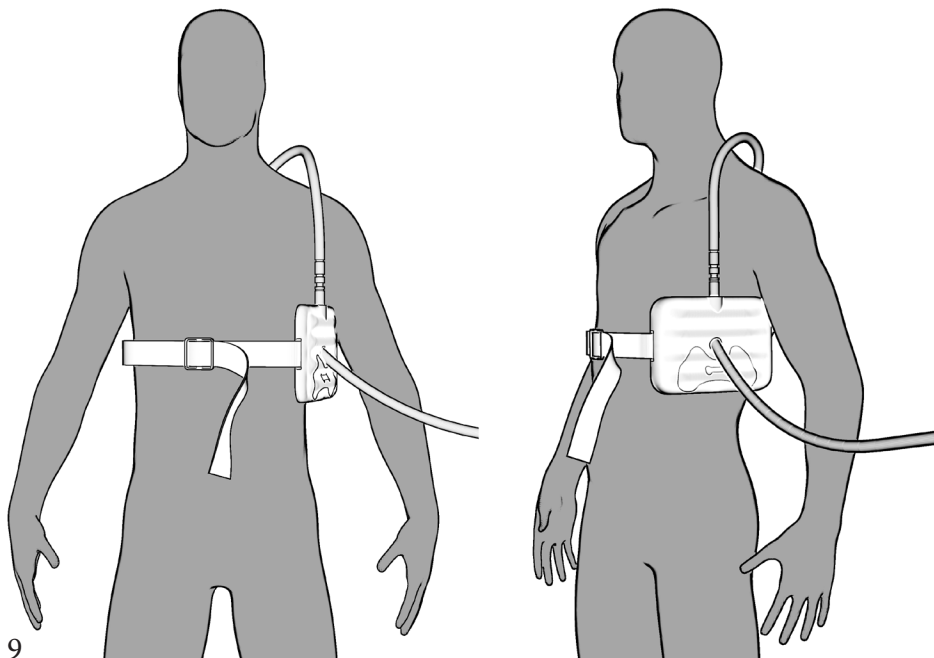
8 Lubricate lead screw (1x per month).



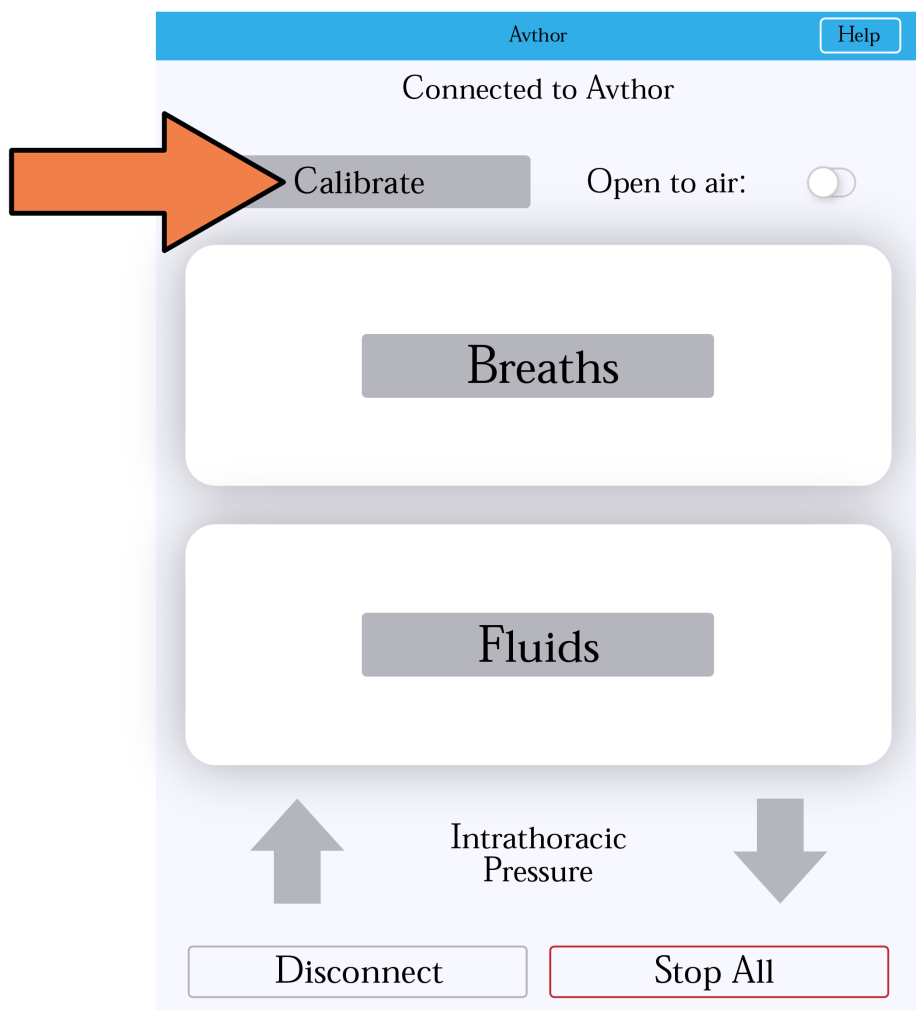
9 Plug power cord into bottom of device.



10 Put ribs on SP.



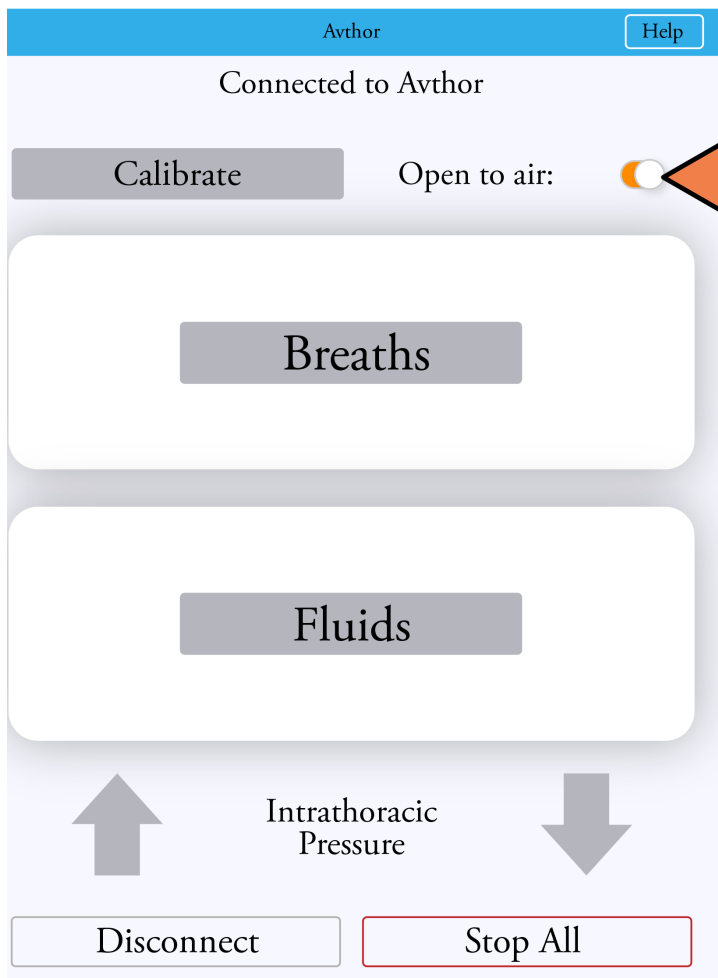
- 11 Connect drainage system to suction if desired.
- 12 Connect to Avthor through App.
- 13 Hit calibrate button before choosing settings.



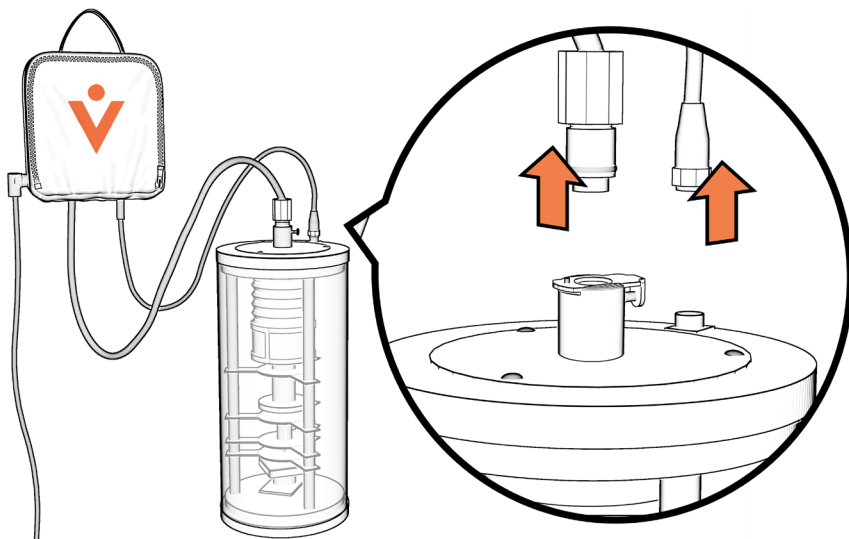
- 14 On the app you can set the breath rate, blood flow rate, intrathoracic pressure, and create an air leak with the open to air button.

Shutting Down

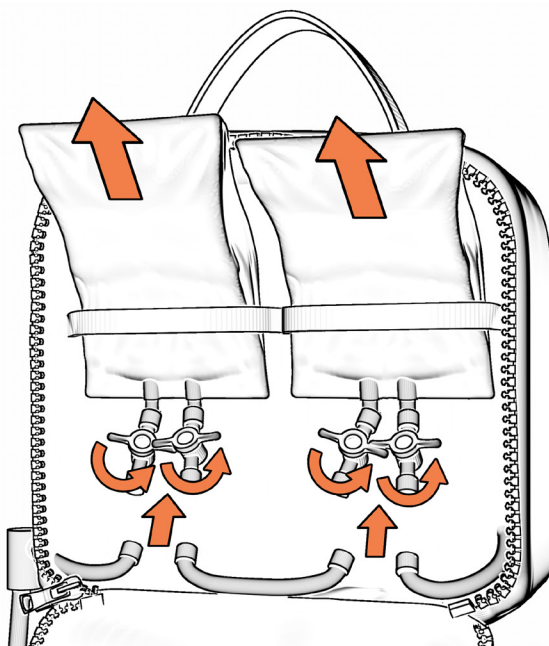
- 1 Calibrate the system in the App.
- 2 Open the vent to air while letting the blood empty into the drainage system. Blood will move faster if drainage system is connected to vacuum.



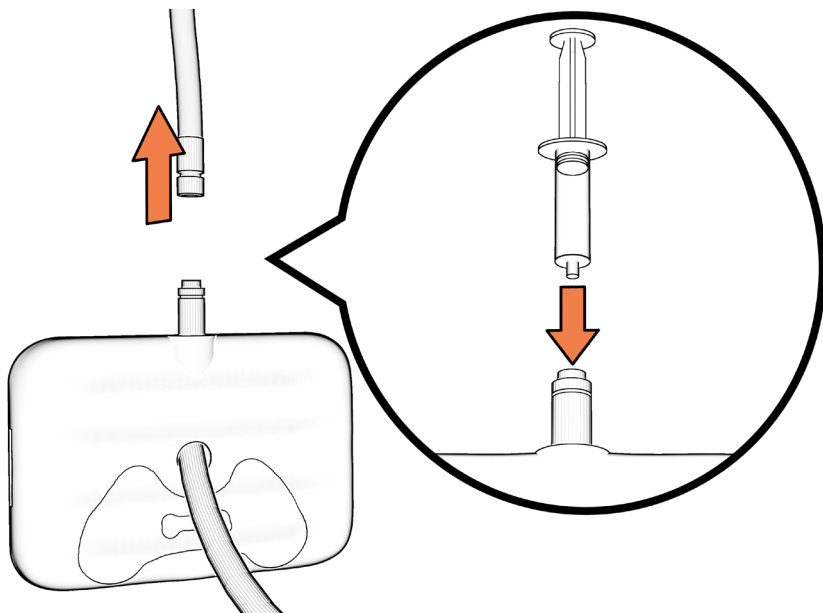
- 3** Disconnect electronics wire and tubing from control bag to floor unit.



- 4** Refill blood bags as needed by closing the stopcocks and disconnecting the tubing from the bags, then remove them from the control bag and refill with simulated blood. (use only blood with no sugar added)

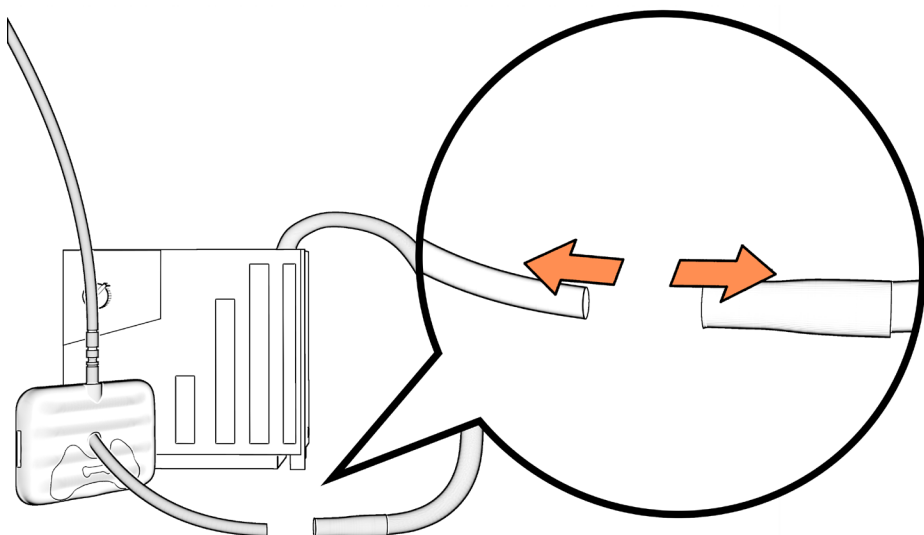


- 5** Disconnect tubing from ribs and flush ribs with distilled water.

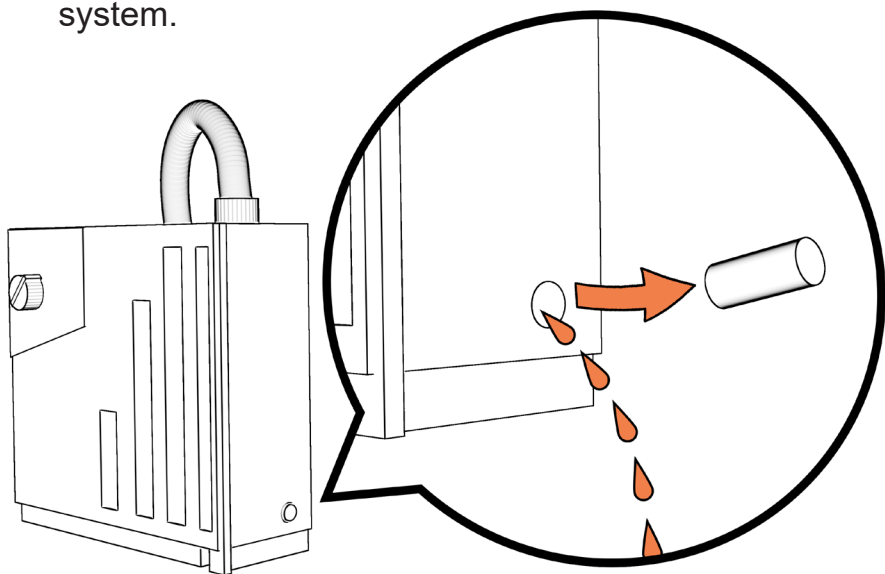


- 6** Allow distilled water to drain into drainage system by removing dependent loops.

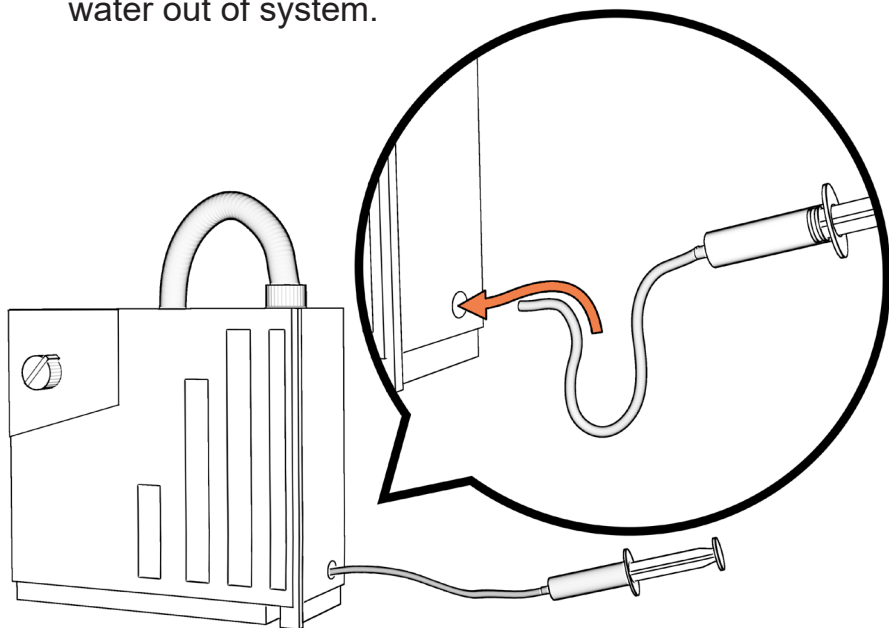
- 7** Disconnect ribs from drainage system.



- 8** Remove plug to allow blood to drain out of drainage system.



- 9** Flush drainage system through hole with distilled water and use small tube and syringe to suck excess water out of system.



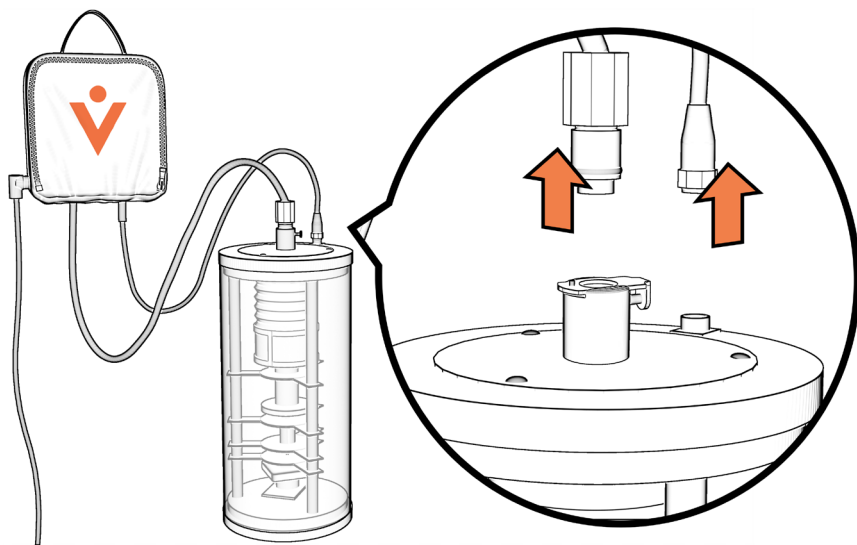
- 10** Clean ribs with hand sanitizer or 70% alcohol solution. Follow up with corn starch or baby powder.

Tips and Tricks

- 1 If there is a lot of blood in the dependent loops of the tubing, an air leak will not show even when the open to air button is selected.
- 2 To stick the statlock to the ribs, rub down the silicone with skin prep wipe first.

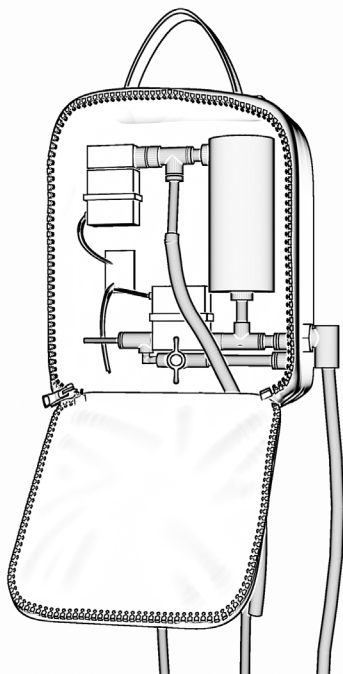
Transport Sim

- 1 If your device is all set up, disconnect the wire from the control bag to the floor unit and the tubing from the bottom of the control bag to the floor unit.

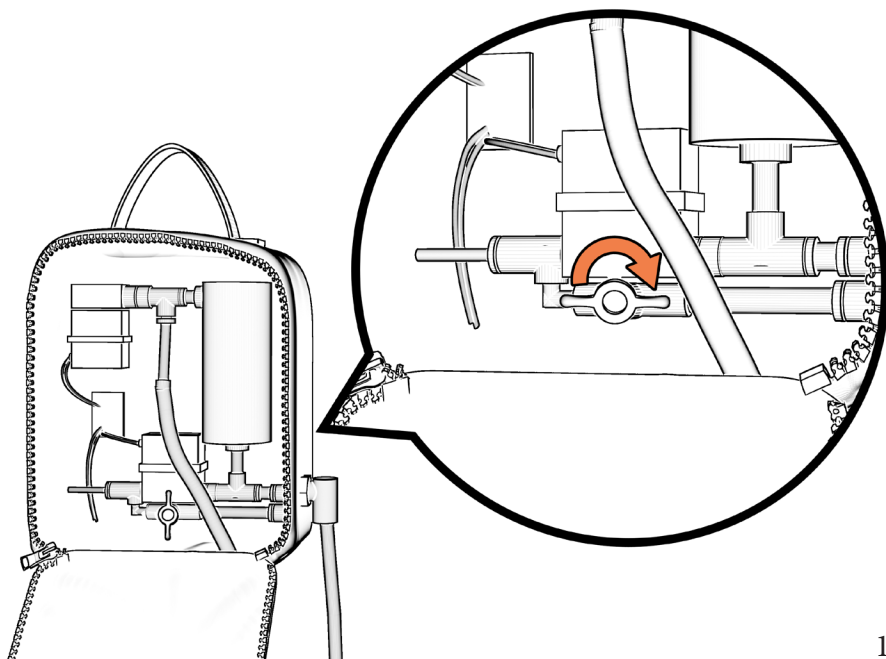


- 2 You can put the floor unit away at this point.

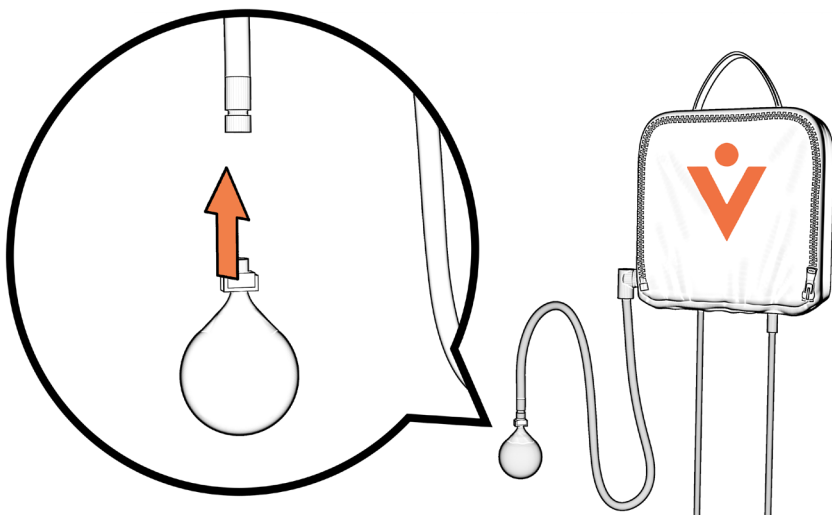
- 3** Open the back pocket of the control bag.



- 4** Open the valve at the bottom of the back pocket.



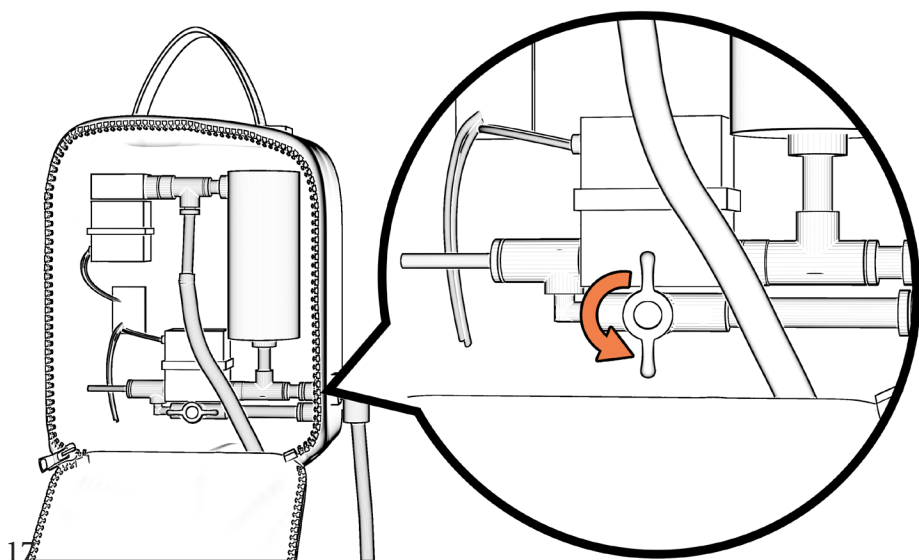
- 5** Connect bulb to tubing come out the side of the control bag



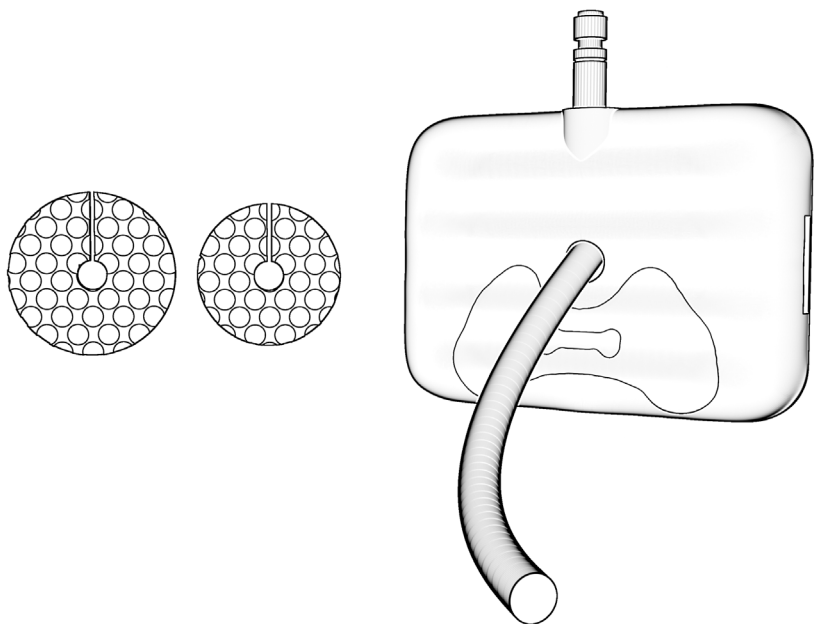
- 6** Squeeze bulb to see tidaling and fluctuations.

Packing Sim Up For Transport

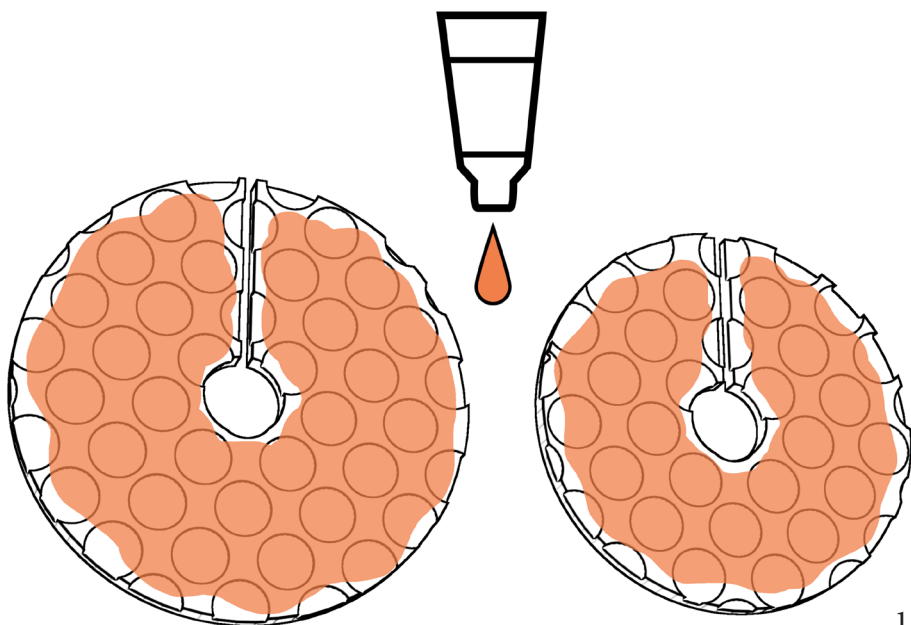
Make sure valve in back of control bag is closed whenever you are not using the transport sim add-on or for storage.



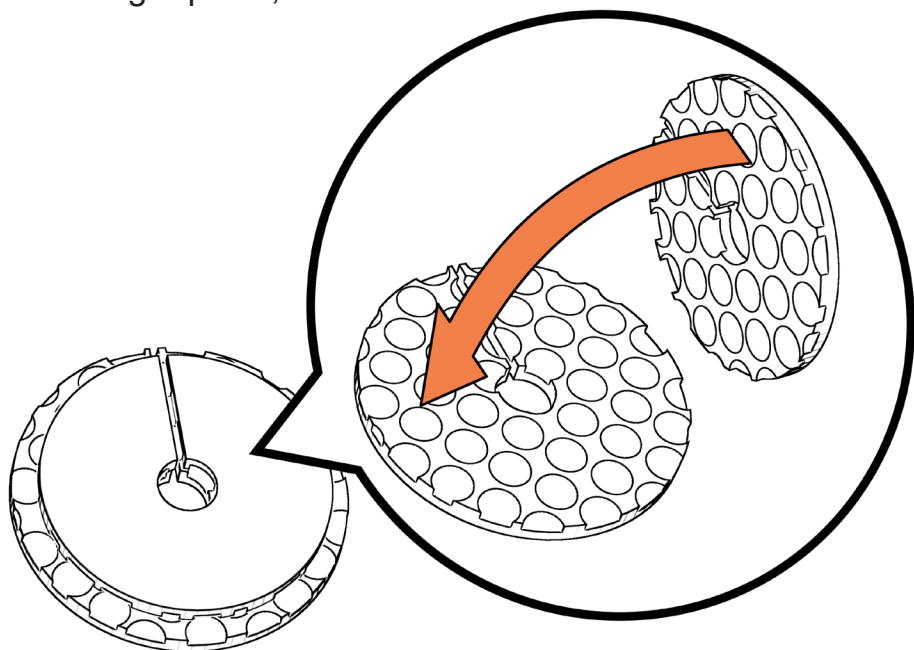
Crepitus Add-On



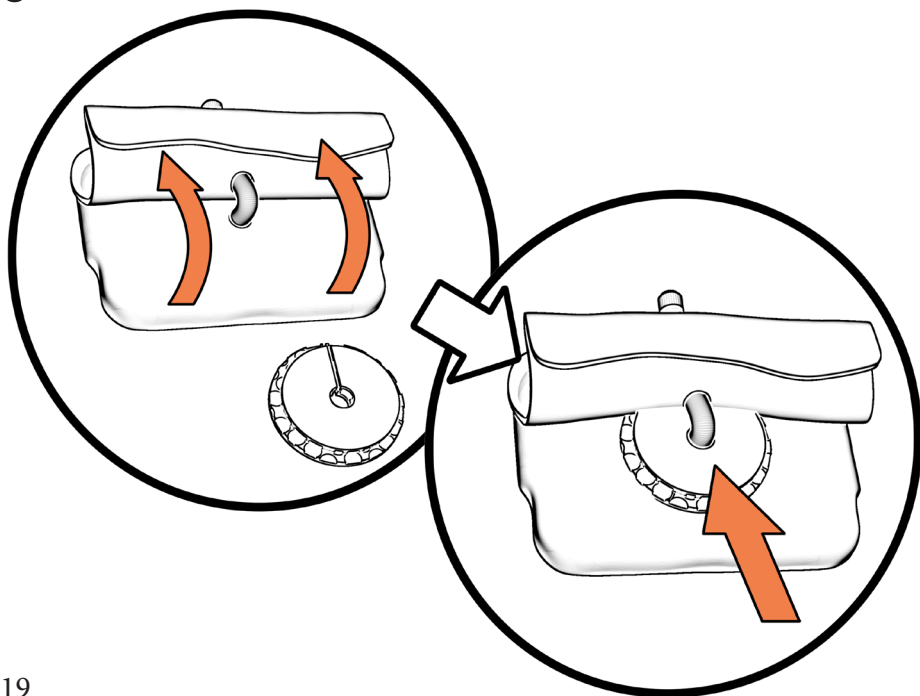
- 1** Rub aquagel or an equivalent thick lubrication on the two crepitus insert pieces.



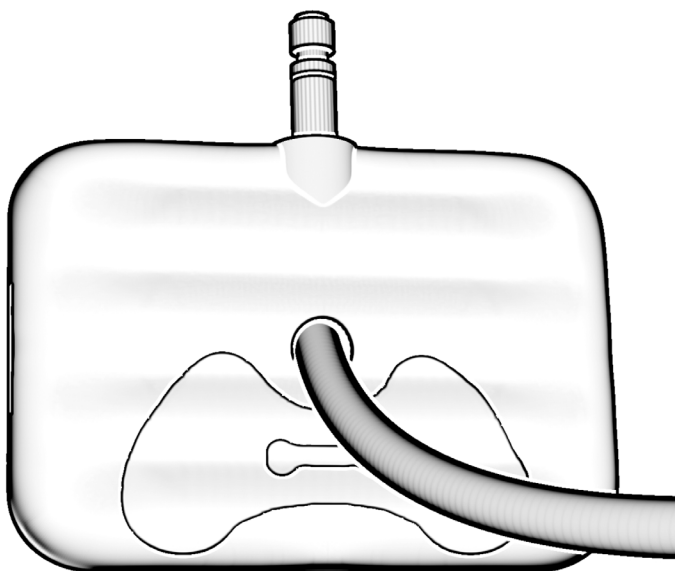
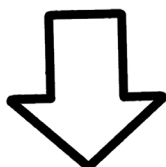
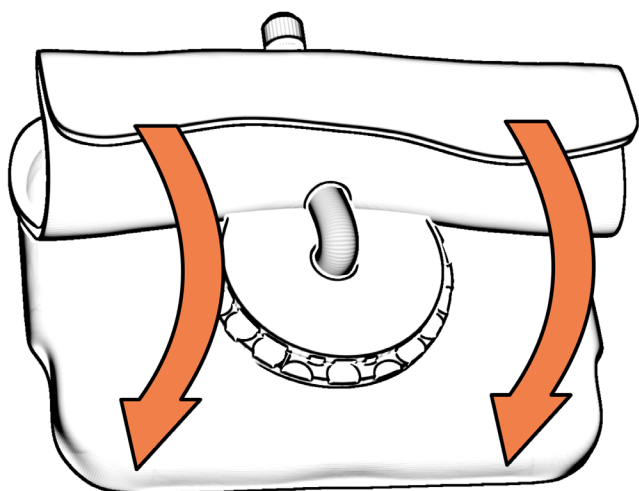
- 2** Place the smaller crepitus insert piece on top of the larger piece, face down.



- 3** Place crepitus insert under skin layer of ribs.



4 Put skin layer back down.



Avthor™ 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?](#)

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