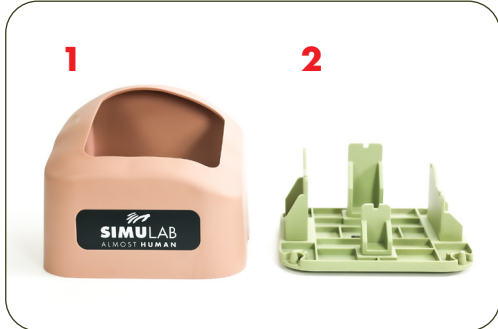


Ultrasound Pericardiocentesis Trainer



Ultrasound Pericardiocentesis Trainer Components

- 1. Torso Cover (UGP-10)
- 2. Base (UGP-11)
- 3. Tissue Holder (UGP-12)
- 4. Ultrasound Guided Pericardiocentesis Replaceable Tissue (UGPT-10)
- 5. Effusion Insert - Small (UGP-13)
- 6. Effusion Insert - Large (UGP-14)
- 7. Secondary Insert (UGP-15)
- 8. Fluid Filling System (FFS-10)
- 9. Simulated Pericardial Fluid (TMP-1061)
- 10. Funnel (645023)
- 11. Fluid Tank Drain Tube (200515)
- 12. Tissue Holder Drain Tube (200516)



Contact your account representative at
info@simulab.com

for further assistance or to order replacement tissues.



Effusion and Tissue Installation

The trainer arrives with the effusion insert and secondary insert pre-installed in the tissue holder.

Effusion Inserts

The trainer comes with two interchangeable effusion inserts, and a secondary insert (UGP-15).

- The small insert comes pre-installed in the tissue holder (UGP-12)
- The **small insert** allows for a **larger effusion** space in the pericardium (UGP-13)
- The **large insert** allows for a **smaller effusion** space in the pericardium (UGP-14)

It is easy to replace or change the effusion inserts. Follow the instructions:

- Remove the secondary insert first, by pulling it gently to remove it from the plugs in the base.
- Remove the effusion insert in the same way.
- When reinstalling, always install the effusion insert first, so the secondary insert is nestled properly when installed.
- Push down on newly installed inserts to ensure that they are seated in the plugs in the base.

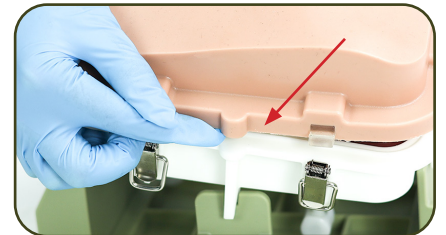
Tissue Installation

To install the tissue, align the tissue onto the tissue base. The base is built to enable the tissue to easily nestle and sit properly.

NOTE:

There is an alignment tab on both the tissue holder and the tissue to assist you in tissue placement. Simply line up the tab on the tissue with the tab on the white base and you will be all set.

Once the tissue is properly aligned, secure the 8 latches on the base to the tissue. This will ensure a waterproof seal.



Tissue Alignment Tab



Fluid Filling System Setup

The fluid system is easy to set up, and provides consistent fluid pressure during the procedure. The system needs to be assembled, primed, connected to the trainer and you are ready to go!

Fluid Filling System Setup

The Fluid Filling System includes a tripod, a tank, tubing and a funnel. Please take note of the valve on the tubing. This valve will be important both for filling and draining. Also take note of the hand pump. This will be required to properly prime the system. The tank will hold one FULL bottle of simulated pericardial fluid (TMP-1061).

- Install the assembled Fluid Filling System Tank onto the tripod stand by turning the hand screw into the bottom of the green tank
- Connect the two fittings on the fluid filling system together to make a complete loop in the fluid filling system tubing

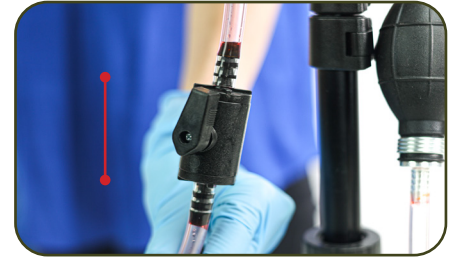
Prime the Fluid System Tubing

- With the tripod assembled, and the tubing connected in a loop, fill the fluid filling system with the red pericardiocentesis fluid using the funnel provided
- Raise up the tripod stand to a height that allows for the fittings to hang in the air
- Make sure the valve is in the OPEN position
- Squeeze the priming bulb until no air is present in the tubing
- Lower the tripod back down to its lowest position

Tubing Valve and Hand Pump

Anytime you are working with the fluid system, you will be using the valve and the hand pump. The **hand pump** allow you to easily move fluid through the system, and assists you in moving any air bubbles that may be present.

The **valve** allows for you to turn the flow of fluid on or off during filling and draining of the system.



Valve **ON POSITION**: *Inline with tubing*



Valve **OFF POSITION**: *Perpendicular to tubing*



Priming the Tissue Holder with Fluid

With the tissue attached and secured to the tissue holder and fluid filling system assembled and tank filled, the next step is to connect the fluid filling system to the tissue holder and prime. This step will fill the procedural area around the inserts, and also remove any air bubbles. It is important to remove any air bubble to maintain integrity of the ultrasound image.

Connect Fluid System to Tissue Holder

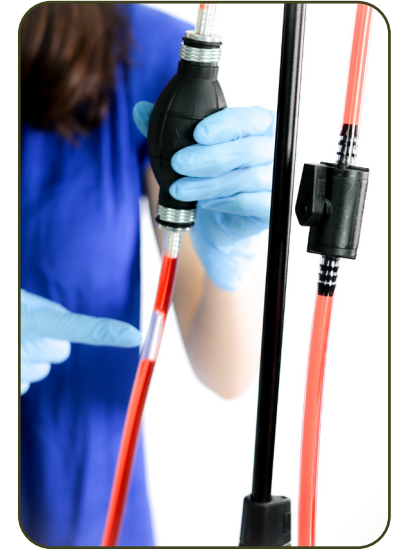
- Remove the connected tissue and tissue holder from the base
- Set the tissue and holder down on a table with the fittings facing upwards

Connect Fittings and Prime Tissue Holder

- Connect the fittings from the fluid filling system to the tissue holder - the fittings will be easy to determine how to connect because they are male/female fittings.
- Raise the tripod stand up to a height that straightens the tubes from the fluid-filling system.
- Lightly squeeze the priming bulb until no air is present inside the tubing. This will pull air from the tissue holder and return it to the tank.
- Lower the tripod back down to its lowest position.
- Place the tissue holder back on the base.
- Place the torso cover on the system with the Simulab decal facing you. The tubes will set into the base and come out of the openings in the back of the torso cover.

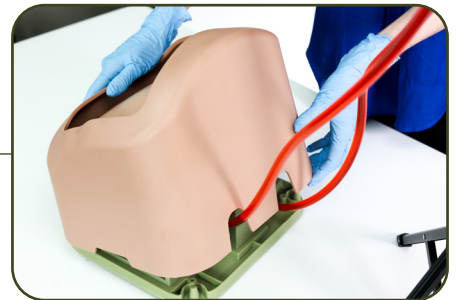
Your System is Now Ready for Use!

It is important to drain the tissue holder before replacing a tissue, or storing. See back page for instructions on how to drain the tissue, and how to return the fluid to the bottle for storage.



TIP:

Tapping and wiggling the tubing and tissue holder will help release any residual air bubbles from inside the procedural area and upwards to the tank and out of the ultrasound imaging.



Replace Tissues

Drain Fluid from Tissue Holder

The fluid in the tissue holder **must be drained before replacing the tissue** with a new one. If you remove the tissue before draining the fluid, the fluid will spill.

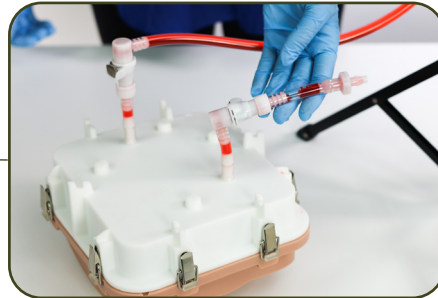
- Lower the fluid filling system tripod to its lowest setting.
- Remove the torso cover from the base, and place the tissue holder on the table with the **tubes facing upward**.
- Locate the fitting on the **VALVE** side of the tubing, (not the pump side) and unclip the fitting.
- Connect the **Tissue Holder Drain Tube (200516)** to the fitting on the tissue holder.
- Hold the tissue high above the tank to allow for the fluid to flow into the tank.
- Squeeze the priming bulb on the tubing. Air will enter the system and the fluid will be returned to the tank on its own.
- When all the fluid has been pumped back into the tank, simply unlatch the tissue and replace the tissue- ensuring all latches are secure.
- If you plan to store the system, it is recommended to drain the tissue and wipe down any moisture in the tissue holder.



Tissue Holder Drain Tube



Fluid Tank Drain Tube



Drain Fluid Tank

Drain Fluid from Tank into Bottle

- **Turn the valve on the tubing to the OFF** position. If the valve is not closed, the fluid will drain unexpectedly.
- Connect the **Fluid Tank Drain Tube (200515)** to the fitting on the **VALVE** side of the fluid filling tank.
- Raise the tripod to a height that allows for the drain tube to be inserted into the fluid bottle with no kinks in the tubing.
- Place the connected drain tube into the empty bottle and when you feel secure, turn the valve to the on position for fluid to drain
- Allow fluid to drain from the tank into the fluid bottle.
- It is possible for the bottle to fill, requiring an additional bottle for fluid collection. You can easily stop the flow of fluid by turning the valve to the off position at anytime.

