

MW18 11398-000

Ultrasound-Guided PICC Training Simulator  
末梢挿入中心静脈カテーテル PICC シミュレータ

**注意** モデル表面に印刷物などが直接触れないようにしてください。  
樹脂表面にインクが吸収されて消えなくなります。

**Caution** Do not mark on the model and its components with a pen or leave printed materials in contact with the model surface. Ink marks on the model are not removable.

Instruction Manual  
取扱説明書

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Movie Site



English Site

# English Instruction Manual

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## ● Before use

MW18 Ultrasound-Guided PICC Training Simulator is designed for medical education training. Please do not use the product for other purposes. Any other use not in accordance with the enclosed guidelines is strongly discouraged. The manufacturer holds no responsibility for any accidents or damages resulting from such use.

For questions regarding this simulator, please contact our distributor in your area or KYOTO KAGAKU. Our contact information can be found on the back cover of this manual.

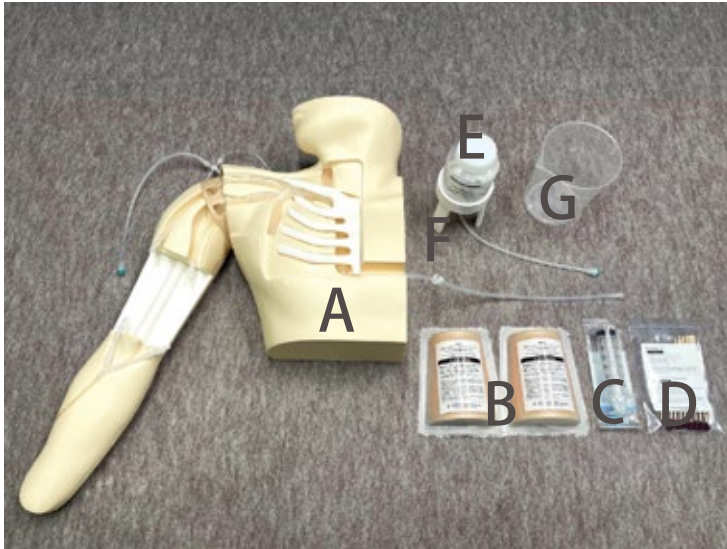
## ● Features

- "Back-flow" confirmation of successful venous access
- Movable sholder provides the training of the positioning
- Anatomically correct bifurcation of the vein
- Provides in procedures from needle insertion to catheter tip placement
- Ultrasound compatible pad

DOs	DON'Ts
<ul style="list-style-type: none"> <li>● Drain all liquids from the veins after training. Leaving fluids in tubes may cause mold, discoloration or other damages.</li> </ul>	<ul style="list-style-type: none"> <li>● Storage the manikin in the container when transferring. If you are moving the model itself, carefully lift by the body and arm to avoid adding pressure to the arm and vein tubes.</li> </ul>
<ul style="list-style-type: none"> <li>● Store the manikin in its storage case when not use. Store the training set at room temperature, away from heat, moisture and direct sunlight. Storage under the temperature above 50 degrees C may reduce the performance quality of the simulator.</li> </ul>	<ul style="list-style-type: none"> <li>● The movable shoulder which is used for positioning training; please do not forcibly extend the arm beyond its regular position.</li> </ul>
<ul style="list-style-type: none"> <li>● The manikin skin may be cleaned with a wet cloth and mildly soapy water or diluted detergent.</li> </ul>	<ul style="list-style-type: none"> <li>● Please do not mark the model with a pen or leave the printed materials in direct contact with the surface. Ink marks on the model are not removable.</li> </ul>
	<ul style="list-style-type: none"> <li>● Please do not puncture the body except the puncture pad. The pad is the only replaceable part of the model.</li> </ul>
	<ul style="list-style-type: none"> <li>● Prevent general damage to the tube, as it will affect liquid injection and / or catheterization procedures.</li> </ul>

## Included Parts

Before your first use, ensure all components listed below are included in the unit.



A. 1 Male upper torso with right arm

B. 2 PICC puncture pads

C. 1 50ml syringe

D. 10 Simulated blood sticks

E. 1 Container for liquids

F. 1 Stand for container

G. 1 Plastic jar

1 Model container

1 Instruction manual

## Manikin Size

approx. W40×D 15×H60cm  
approx. 15.7×5.9×23.7 (in)

## Manikin Weight

approx. 4.5 kg  
approx. 9.92 (lb)

## Recommended size of catheter

4 Fr. 50 ~ 60cm

## Replaceable parts

PICC puncture pads  
11398-010 (a set of 2)



10 Simulated blood sticks  
11388-400 (swab type)



## Optional parts

Introductory ultrasound training  
block "Real Vessel"  
11347-210 (a set of 2)



### ■ Opening the puncture pad



1) Turn the film of the pad.



2) Flip the puncture pad upside down and push down on the corners to empty onto a tray.



### ■WARNING■

Do not attempt to pull the pad directly out of the plastic container.

### ⚠ WARNING

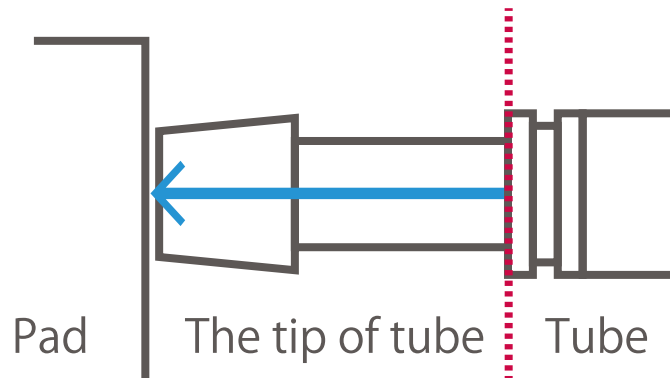
- Do not open the package until you are using the product.
- We recommended using these pads within one session. The aqueous material in the product will cause the pad to shrink after it is removed from its packaging.
- Keep the product away from high temperature, high humidity and direct sunlight.



- After it has been used, the puncture pad may be stored again by placing it back into its plastic case with the transparent seal and keeping it in a sealed bag. This method will preserve the product size and quality for a short period of time.



1) Connect the four tubes on the torso model to the puncture pad.



2) Tightly insert the tube up to the red line.



3) Secure the puncture pad into the arm by pressing down on the edges.

※ Do not press down the gel.

### 1 Preparation the simulated blood



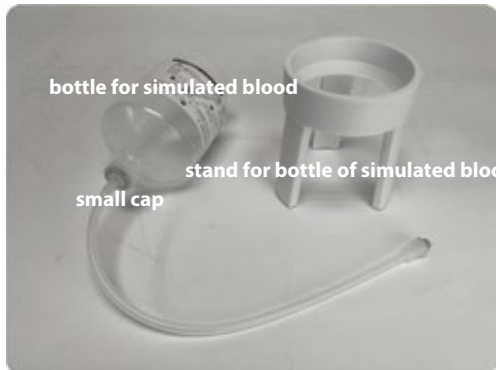
Pour 1000mL of water into the plastic beaker. Put the simulated blood (swab type) into the beaker and stir the water sufficiently to prepare the simulated blood.



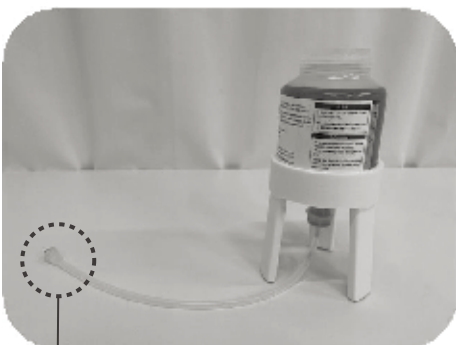
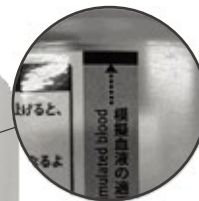
Caution Take care not to drop simulated blood on clothes as simulated blood stains can be very difficult to remove.

## 2 Assemble the bottle

1. Set the bottle for simulated blood on the bottle stand.



2. Take the lid off the bottle for simulated blood and pour approx. 450mL of the simulated blood into the bottle. The level of the simulated blood must be above the level indicated by the arrow (↑) on the bottle surface. Put aside the remaining simulated blood for replenishment during the training.



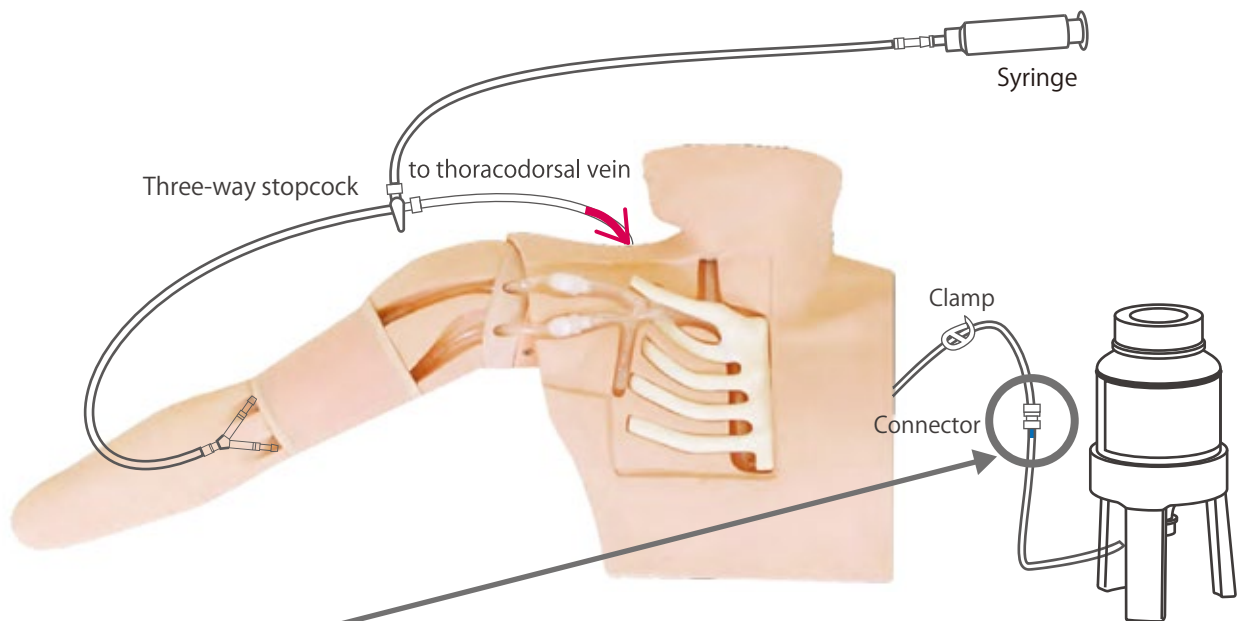
⚠ Caution

.....  
Pour the simulated blood to a level that is above the arrow (↑) mark on the bottle. If the level of the simulated blood is under the indicated range, you cannot check blood return (flashback) because the pressure on the simulated blood decreases. Always replenish simulated blood into the bottle when it decreases under the level during the training.

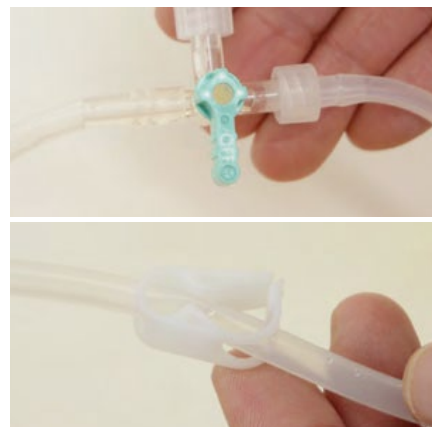
4. Close the lid of the bottle securely after pouring the simulated blood into it. Now the simulated blood has been prepared.

\* The connector on the tip of the simulated blood bottle tube (SurePlug) is locked when it is not connected with the other connector. This will prevent the simulated blood from leaking from the tube.





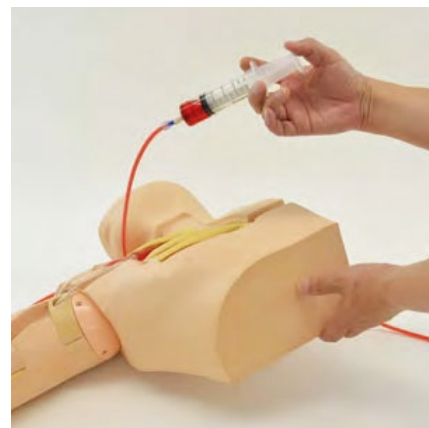
1) Connect the tubes of the body to the liquid container.



2) Ensure that the three-way stopcock and the clamp are opened.

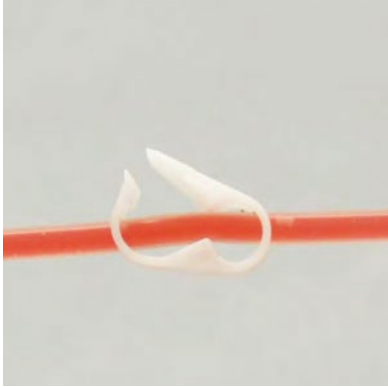


3) Connect the 50ml syringe to the tube of the body.



4) Slowly inject 100ml of water (inject with 50ml syringe twice) while raising the edge of the body to fill the tubes with liquid.

### ■ Allowing backflow



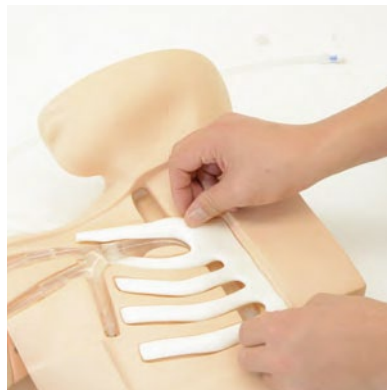
While training, open the clamp to allow backflow.

### ■ Attaching and removing the ribs

The veins and catheter insertion may be further observed by removing the ribs from the body.

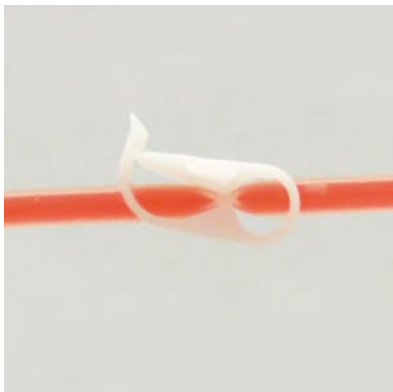


1) Insert the tip of first rib under the subclavian vein.

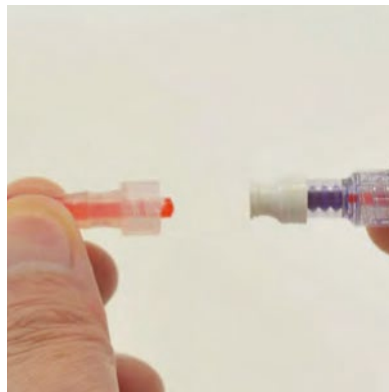


2) Adjust the rest of the ribs into the body.

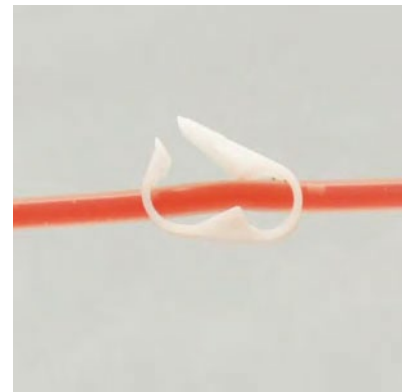
\*Ribs can be removed with reverse procedure.



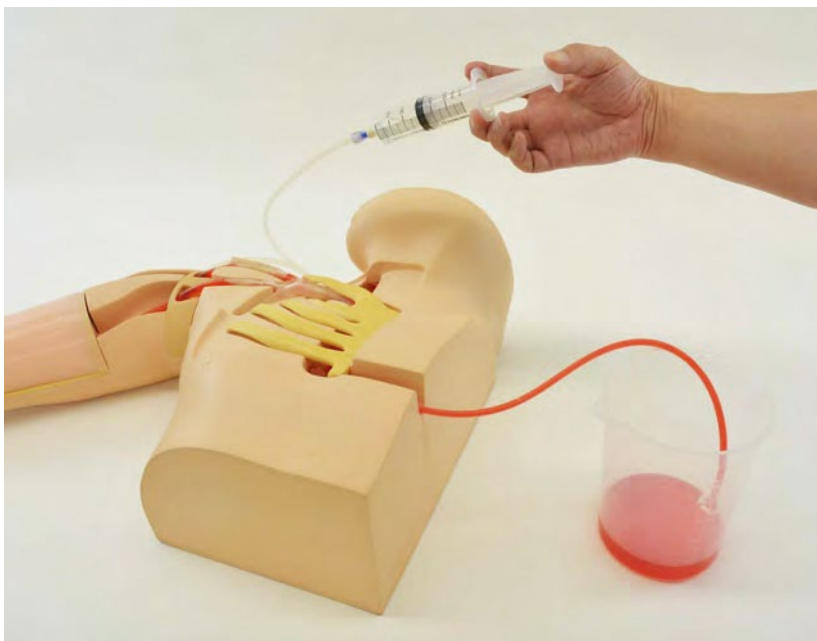
1) Close the clamp on the tube.



2) Disconnect the tubes between the liquid container and body.



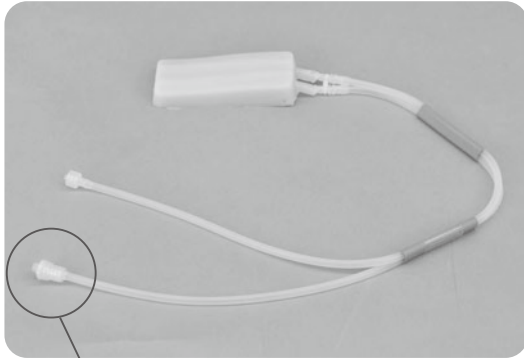
3) Open the clamp. Hold the body end of the tube upwards to prevent water from spilling.



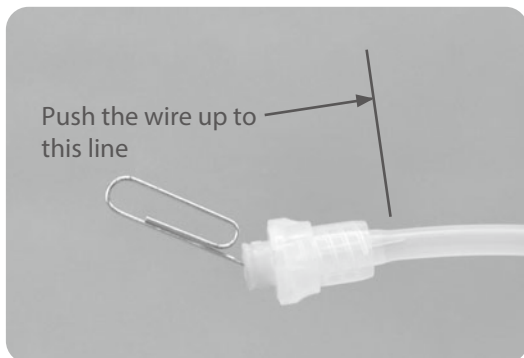
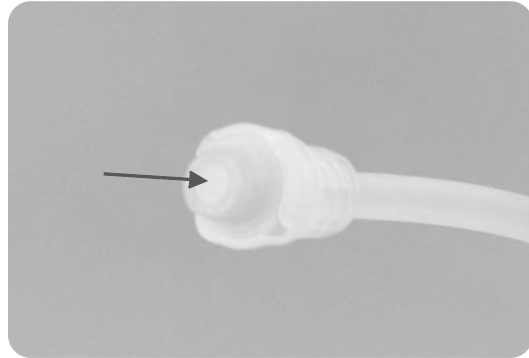
4) Slowly push air through the syringe and drain the water from the tubes.

## 1 Testing the connector

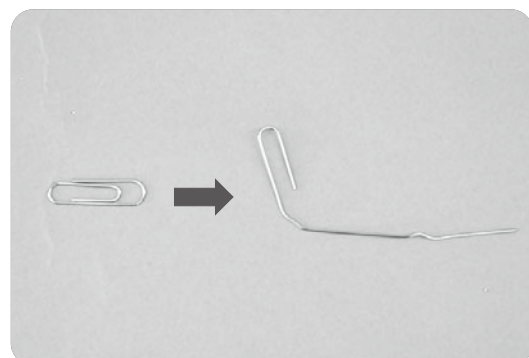
In case the simulated blood cannot flow in the tube by the syringe, the connector may be clogged. Test and reopen the connector as instructed below.



Connector



Insert a **wire**<sup>\*</sup> to the connector.  
Push the wire until the tip of it appears in the tube.



<sup>\*</sup>Wire or stick can be prepared using a paper clip.



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Please contact manufacturer for extra copies of this manual which may contain important updates and revisions.

Please contact manufacturer with any discrepancies, typos, or mistakes in this manual or product feedback. Your cooperation is greatly appreciated.

故障・ご不明点に関するお問い合わせは、販売店もしくは株式会社 京都科学までご連絡ください

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