

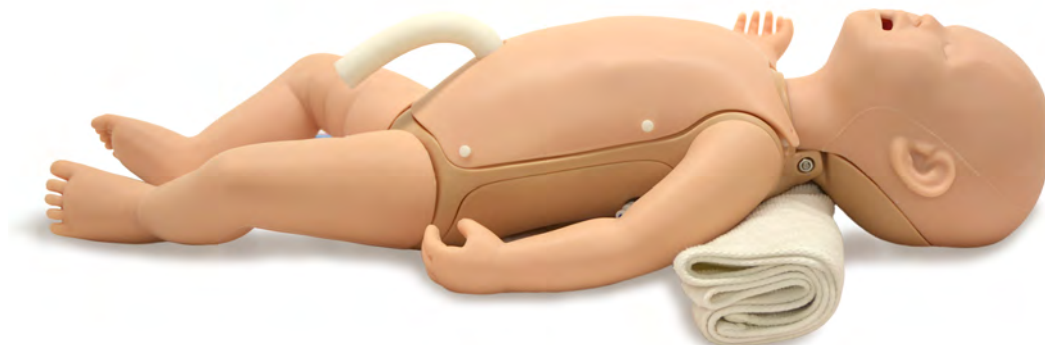
MW21

NCPR Simulator Plus

Instruction Manual

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Manufacturer's Note

• Features

Provides training in regards to the routine procedure for umbilical catheterization for both the operator and assistant.

Omphalotomy/ Catheter insertion/ Ligation with clip or string/ Placement

Model provides training for three types of punctures and catheterization procedures.

Landmark palpation access/ Transilluminator access

The simulator is designed for training in neonatal care. Do not use for improper purpose.

Please read the instruction carefully before use.

Do not use the system in a way other than here in after prescribed by manufacturer.

• Training Skills

- Training Positioning Keeping/ Assessment of Anterior Fontanel
- Intravenous Injection/Puncture
- Central Venousline Catheterization
 - Landmark Palpation/ Transillumination
- Umbilical Catheterization
- NG/OG Tube Feeding
- Airway Suction
- CPR
- Airway Management

DOs and DON'Ts

DOs

Handle the manikin and the components with utmost care at all times.

Storage in a dark, cool space will help prevent the skin colours from fading.

The manikin skin may be cleaned with a wet cloth, if neccessary, using mildly soapy water or diluted detergent.

DON'Ts

Do not mark on the model and other components with pen or leave any printed materials contacted on surface. Ink marks on the model cannot be removed.

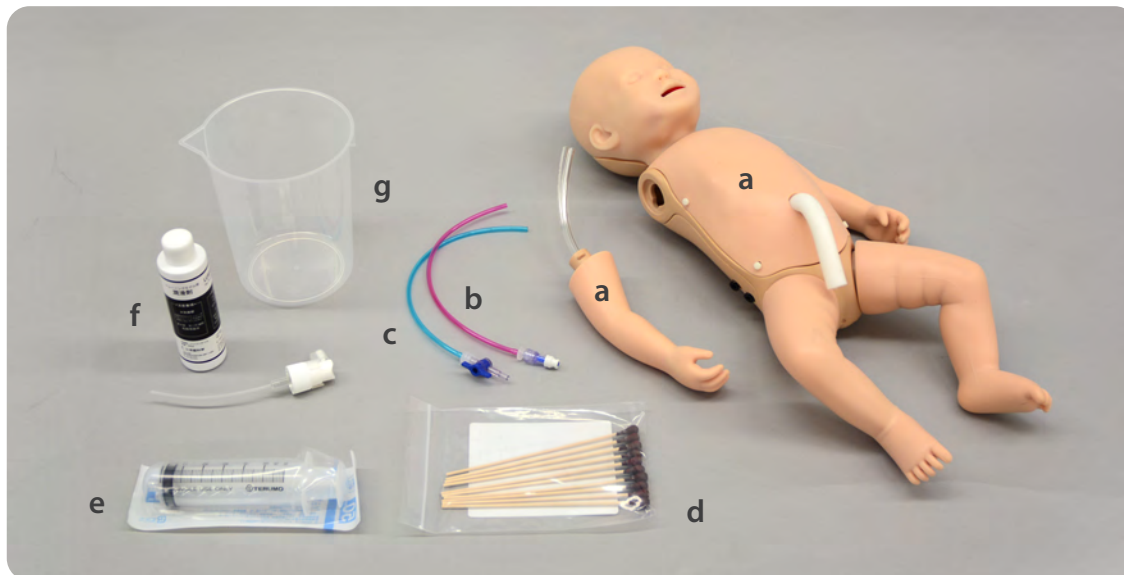
Never use organic solvent like paint thinner to clean the skin, as this will damage the simulator.

Do not leave the tapes or dressing materials onto the manikin as the adhesive left on the surface will become sticky.

* Even if color on its surface might be changed across the ages, this does not affect the quality of its performance.

Set Includes

Before your first use, ensure that you have all components listed below.



a Neonatal model *Right arm is not connected when shipped.

b Simulation blood tube (Red)

c Simulation blood tube (Blue)

d Simulation blood (swab type)

e Syringe

f Lubricant

g Plastic jar

Instruction manual

Configuration

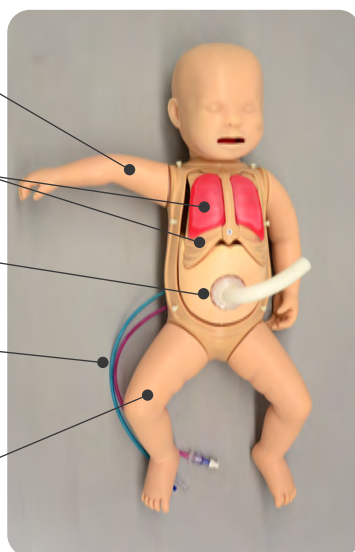
Arm for puncture and catheter insertion

Ribs/Lung

Umbilical Cord/
Blood storage bottle

Simulation blood
tubes

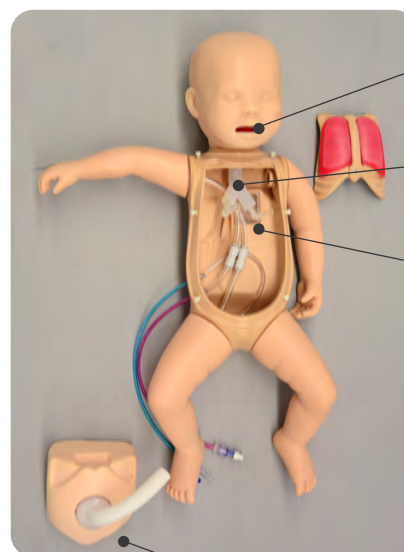
Leg for puncture and
catheter insertion



Oral Cavity

Bronchi

Stomach/
Esophagus



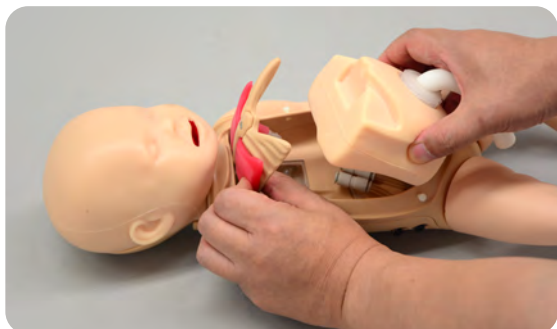
Umbilical Cord Unit

1 Right Arm Installation

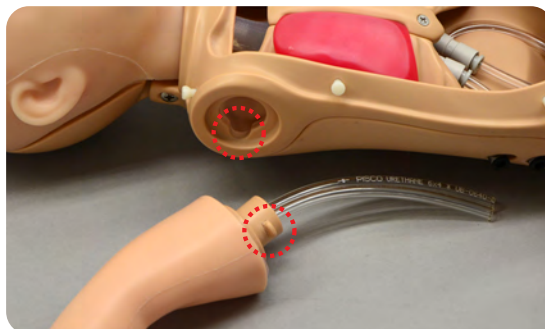
1. Remove the body skin. (The skin is fixed by six braces.)



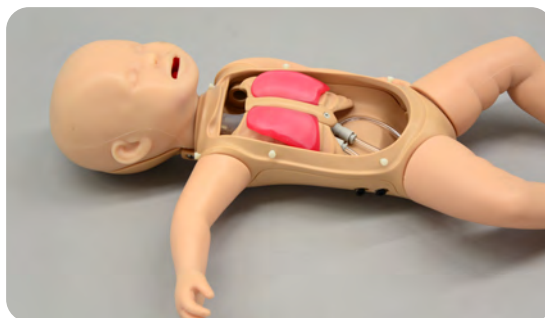
2. Lift the lung and rib and remove the umbilical part.



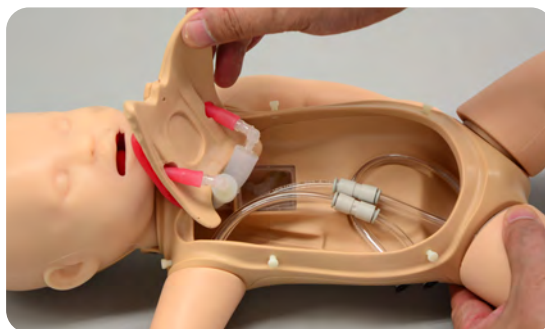
3. Attach the right arm to the shoulder at red circle.



4. Insert the two tubes from arm first, and attach the arm next. Turn the arm clockwise to fix.



5. Connect two tubes from the arm to each tube connector in the abdomen. (The tube doesn't designate the connector.)



2 Simulated Blood making

1. 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.



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



2. Draw the simulated blood to the syringe attached.

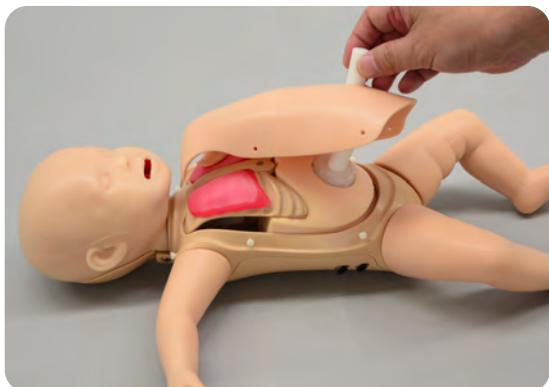
3 Umbilical blood preparation

1. Put out the umbilical blood bottle from umbilical part. Open it to fill with the umbilical blood. Install the umbilical bottle into the umbilical part.



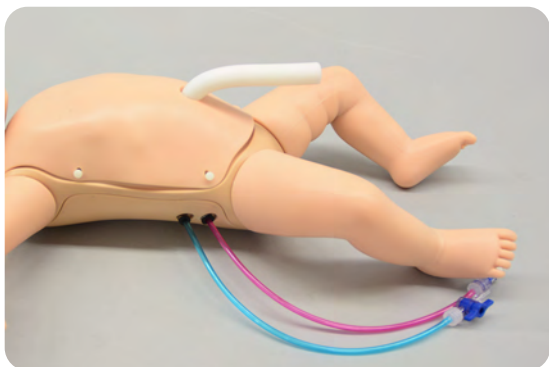
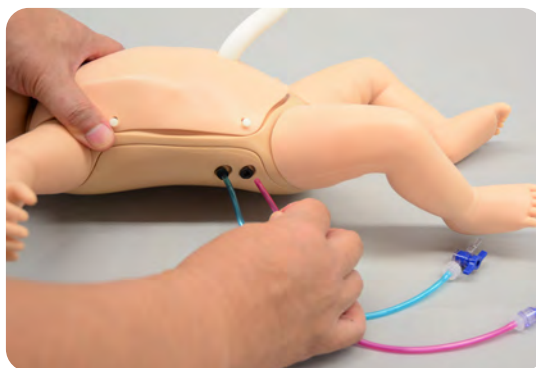
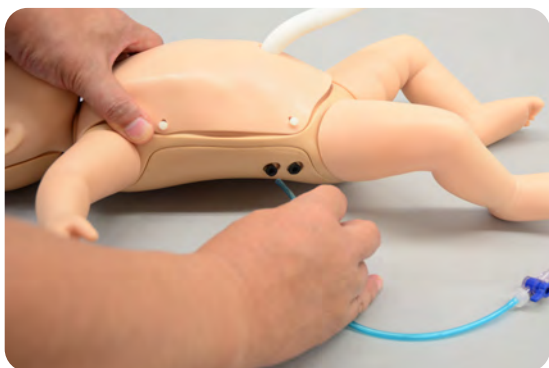
3 Umbilical blood preparation

2. Put the umbilical part in the body, and the lung and rib on it. Cover the model with the body skin. Put the umbilical cord through the body skin hole first, and put the body skin on the body to fix by six braces.



4 Installation of Simulated blood tube

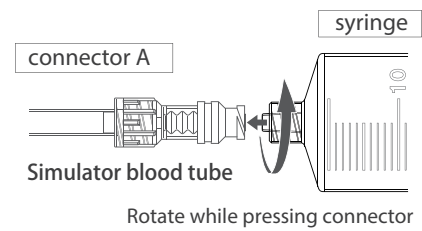
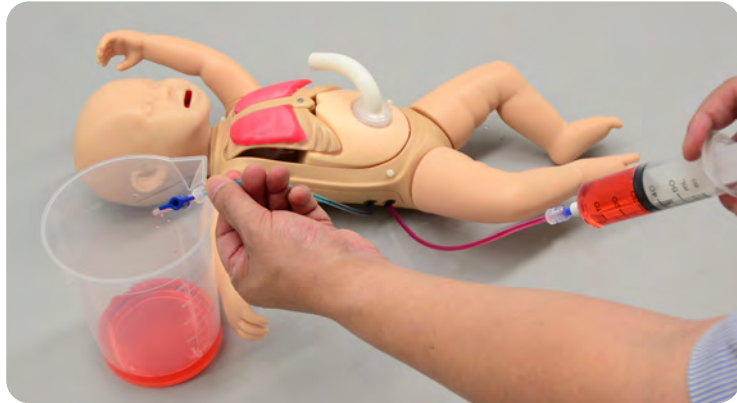
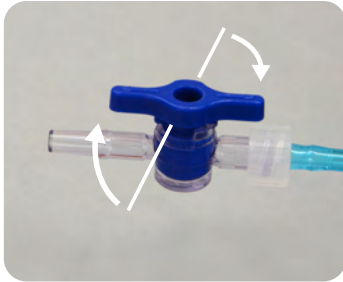
1. Install the simulated blood tube (blue) to the connector of arm side on the right side of the body. Install the red one to the other connector (on leg side).



2. Finished.

5 Injection of the Simulated Blood

1. Connect syringe to the red tube to inject the simulated blood, and open the blue cock on the tip of blue tube. Put the tip of blue tube in the plastic jar, and keep injecting the simulated blood until the blood ejects from the blue tube. Close the blue stop cock and remove the syringe when finished.



6 Injection of the Stomach Fluid (Water)

1. Connect the syringe to the connector under infra-axillary of the left side of body to inject the stomach fluid. The volume is approximately 5ml. Remove the syringe when finished.



1 Training Positioning keeping/ Assessment of Anterior Fontanel

Training for the position keeping and changing



Palpating to assess the anterior fontanel



2 Intravenous Puncture/ Central Venousline Catheterization

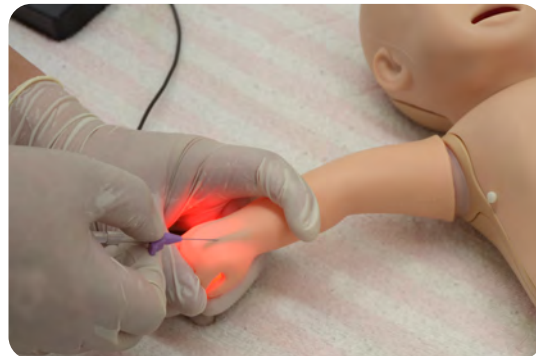
● Landmark Palpation

Training for the procedure from the puncture to catheter insertion.



● Transillumination

Training for puncture with the transillumination guide.



Recommended needle size; 23G.-27G.

3 Umbilical Catheterization



Provides training for routine procedure of umbilical catheterization for both operator and assistant.

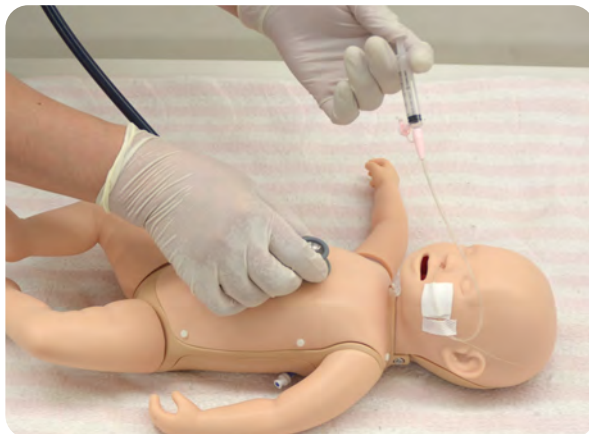
- Omphalotomy
- Ligation with clip or string
- Catheter insertion
- Placement

Recommended Catheter Size; 16G 30cm



Artery and Vein are elaborated

4 NG/OG Tube Feeding



Training for the catheter insertion through the nasogastric and orogastric tubes

- The catheter placement by dressing
- Air sounds can be heard with a stethoscope.

Recommended catheter size; 5Fr.



*Spray the attached lubricant to the catheter, nasal and oral cavity of model before practice.

5 Airway Suction



Training for the nasogastric and orogastric suction

Recommended catheter size; 5Fr.

*Use the lubricant to spray the catheter, nasal and oral cavity of model before practicing.

6 CPR



Training for chest compression

6 Airway Management

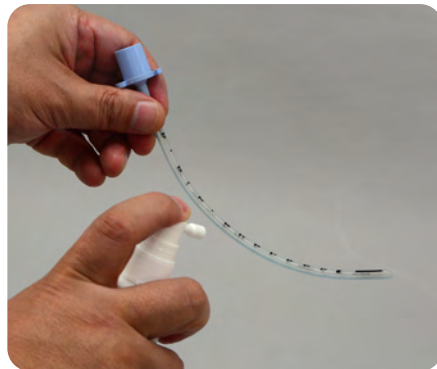


Training for the procedure of intubation with laryngoscope

- Bag-Valve-Mask ventilation
- Training for the assessment of intubation to the esophagus or one-lung or two-lung intubation

Preparing for Intubation

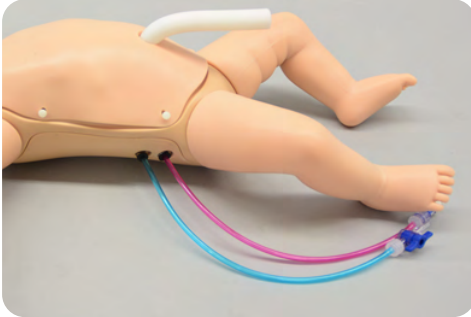
Spray the lubricant into the oral cavity and device before intubation practice.



Recommended device size
 Tube : 2.0~3.0 mm
 Blade : 0



1 Drainage of Simulated blood, Umbilical blood and Stomach fluid



1. Discharge the simulated blood from the blood tube after practice.
Connect the empty syringe to the red tube connector to draw the simulated blood after opening the blue cock.
*Repeat this drainage work until the tube is empty.

2. Remove the umbilical part and put out the umbilical bottle to drain the simulated blood. After that clean up the bottle and dry it up.



3. Connect the empty syringe to the connector under infra-axillary of the left side to draw the stomach fluid.



2 Replacing skin mask

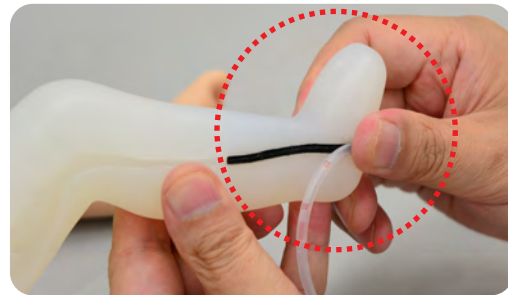


1. Remove the skin mask from posterior part by lifting it.
2. Put the edge of mask on the gap of posterior head to cover the head when installing the face mask.
3. Refer to Preparation page regarding body skin replacement.

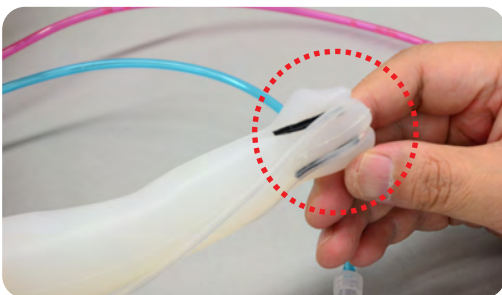
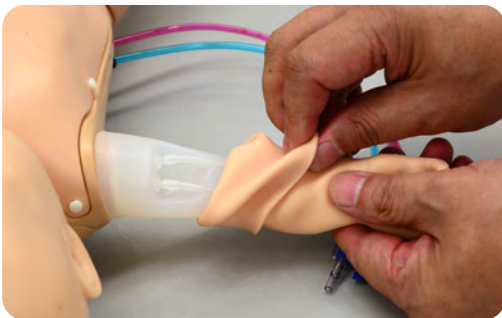
3 Veins Replacement

Replacing the vein tubes of the leg and arm

1. Remove the leg skin and disconnect the tube from the connectors in femoral part to remove the vein tube. When installing new tube, do the opposite order of processes.
Put the tube along the trench on the leg and foot. The vein tube goes to order of the inside of the leg, the bottom of the foot and outside of the leg.



2. Replace the vein tube of the arm as well as the leg. Remove the arm skin to disconnect the vein tube. This vein goes to hand and return to the shoulder side.





Caution

Do not mark on the model and other components with pen or leave any printed materials contacted on surface. Ink marks on the model cannot be removed.

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