

**MW48**

Full Perinatal Patient Care Simulator

**HANA**

**Instruction Manual**

Table of Contents



**Introduction**

- Before you start . . . . . P.1
- Safety precautions . . . . . P.2
- Handling . . . . . P.3
- Set includes . . . . . P.4-7
- Functions of each part . . . . . P.8
- Training items . . . . . P.9-10

**Preparation**

- Wigs attachment and detachment . . . . . P.11
- Detachment of mask . . . . . P.12

**Training**

- Ultrasound Examination Module . . . . . P.13-
- Obstetric Examination Module . . . . . P.17-
- Cervical Examination Module . . . . . P.26-
- Delivery Assistance Module . . . . . P.32-
- Perineorrhaphy Module . . . . . P.39-
- Uterine Involution Assessment Module . . . . . P.42-
- Epidural Anesthesia . . . . . P.45
- Tube Feeding . . . . . P.46
- Bed bathing . . . . . P.47
- Patient transfer and positioning . . . . . P.47
- Oral care, oxygen management . . . . . P.47
- Suction (nasal, oral, tracheostomy) . . . . . P.48
- Intravenous injection . . . . . P.49
- Airway management/ intubation assistance/ chest compression . . . . . P.50
- Airway management/ intubation assistance . . . . . P.52
- (Optional) Subcutaneous injection/ intramuscular injection . . . . . P.53-54

Movie Site



English Site

### ■ Before use

The Full Perinatal Patient Care Simulator "Hana" is a training manikin which covers from gestational to post-natal periods. "Hana" has been developed for the training of medical and paramedical professionals only. Any other use, or any use not in accordance with the enclosed instructions, is strongly discouraged. The manufacturer cannot be held responsible for any accident or damage resulting from such use.

Please use this product carefully and refrain from subjecting to any unnecessary stress or wear. Should you have any questions on this simulator, please feel free to contact our distributor in your area or KYOTO KAGAKU at any time.

(Our contact address is on the back cover of this manual)

 **DOs and DON'Ts**
**DOs**

- **Operate the system under the designated circumstances**

Power input: AC100V~230V plus or minus 10%, 50Hz/60Hz

Temperature range: between 0 °C and 40 °C

(no congelation )

Relative humidity; between 0%to 80% (no condensation)

\*Connecting to power source outside of the designated range may lead to fire.

- **Safe disposition**

To avoid short circuit, do not run the simulator set above a power receptacle.

- **Handle the power plug and cord observing following precautions**

1. Clean the head of the plug periodically.
2. Plug in the plug to the outlet firmly to the end.
3. Always hold the plug when unplugging. Do not pull the cable.
4. Do not force to bend, twist the cable and avoid scratching or cutting on it.

Failing to follow the above precautions can result in damage of the plug and the cable, constituting risk of fire or shock.

- **When the electric parts get warm or produce smoke, immediately turn off the power and unplug from the power source**

Risk of fire. Contact your distributor or the manufacturer for repair.

- **Handle with care**

The materials for the models are special compositions of soft resin.

Please handle them with utmost care at all times.

- **Storage**

Store the simulator at room temperature, away from heat, moisture and direct sunlight.

Storage under the temperature above 50°C may reduce the performance quality of the simulator.

**DON'Ts**

- **Do not disassemble or open electric or precision components**

Do not open up or disassemble the housing for electric parts or precision components.

Refrain from opening up any lids, caps or covers for such areas, and never run the system while any of such covers are open.

\*Never disassemble the electric components, power plug and cable as it may create a risk of fire, shock or injury.

Contact your distributor or the manufacturer for repair.

- **Never wipe the product and components with thinner or organic solvent**

- **Ink marks on the soft surface won't be removable**

Don't mark on the product and components with pen or leave any printed materials in contact with their surface.

- **Do not thrust or jot**

The electric components are precision instruments. Strong shocks or continuous vibration may cause breakages of its internal structure.

- **Do not run the system continuously over 2 hours**

Take at least 30 minutes shutdown, turning off the power, every 2 hours.

- **Keep water from the electric components**

Do not pour or spill water or liquid detergent over the electric components, power cable and power plug.

Running the system while the electric components are wet may create a shock hazard or a risk of fire.

- **Do not handle the power plug with wet hands**

Risk of shock.

- **No fire**

Do not put the product close to fire. It may lead to discoloration or deformation of the product as well as short circuit, creating a risk of fire.

 **Caution**

Caution indicates that a failure to observe the specified instructions may result in minor injuries or material loss and equipment damage. Be sure to observe all the caution statements.

<ul style="list-style-type: none"><li>● <b>Handle the manikin and the components with care.</b> Be sure not to drop the manikin and its components, since the product uses special resins.</li></ul>	<ul style="list-style-type: none"><li>● <b>Do not mark on the manikin or other components with a pen or allow printed materials to come in contact with the surface. Ink marks cannot be removed.</b></li></ul>
<ul style="list-style-type: none"><li>● <b>Storing the manikin in a dark, cool and dry space will help prevent the skin colors from fading and the product from deformation.</b></li></ul>	<ul style="list-style-type: none"><li>● <b>Never use organic solvents like paint thinner or alcohol to clean the skin, as this will damage the manikin.</b></li></ul>
<ul style="list-style-type: none"><li>● <b>The manikin may be cleaned with a wet cloth if necessary, using mildly soapy water or diluted detergent.</b></li></ul>	<ul style="list-style-type: none"><li>● <b>Even if the skin color of the manikin changes as it ages, the quality of the performance is not affected.</b></li></ul>

■ Set includes

Before you start, ensure that you have all components listed below.

A



B



C



D



E



F



G



H



I



J



K



L



M



- |   |                                 |   |
|---|---------------------------------|---|
| A | : manikin                       | 1 |
| B | : wig (young)                   | 1 |
| C | : face mask (young)             | 1 |
| D | : denture                       | 1 |
| E | : injection pad (median vein)   | 1 |
| F | : female genitalia              | 1 |
| G | : epidural anesthesia pad       | 1 |
| H | : irrigation bag                | 1 |
| I | : drainage pump                 | 1 |
| J | : drainage hose                 | 1 |
| K | : lubricant for training models | 1 |
| L | : pajama                        | 1 |
| M | : talcum powder                 | 1 |
|   | instruction manual              |   |

Delivery assistance module

aa



ab



ac



ad



ae



af



ag



ah



ai



aa	: genitalia	1
ab	: fetus	1
ac	: placenta	1
ad	: umbilical cord	1
ae	: 5 velamen sheet	1
af	: 10 umbilical cords for omphalotomy	1
ag	: 1 1 lubricant (500ml) refill bag and bottle	1
ah	: abdominal cover for delivery and cervical examination	1
ai	: tray	1

**Ultrasound Examination Module**

**ba**



**bb**



**bc**



**bd**



**Obstetric Examination Module**

**ca**



**cb**



**Cervical Examination Module**

**da**



**db**



**dc**



**dd**



**de**



**df**



**Ultrasound Examination Module**

- ba : ultrasound pregnant uterus phantom 1
- bb : base for fetus ultrasound 1
- bc : fetus demonstration model 1
- bd : protection cover 1

**Obstetric Examination Module**

- ca : fetus model 1
- cb : base for fetus 1
- cc : Simulated doppler stethoscope 1
- cd : AC adapter 1
- ce : Controller 1

**Cervical Examination Module**

- da : genitalia unit 1
- db : set of cervical dilation inserts (5 variations) 1
- dc : vagina unit 1
- dd : holder for cervical dilation inserts 1
- de : 3 lubricants 1
- df : abdominal cover ( Obstetric and Cervical Examination ) 1

## Perineorrhaphy Module

ea



## Uterine Involution Assessment Module

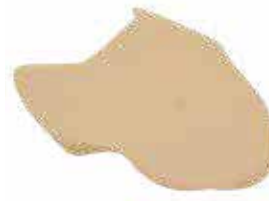
fa



fb



fc



### Perineorrhaphy module

ea : genitalia with skin

1

### Uterine Involution Assessment Module

fa : set of uterine inserts (4 variations)

1

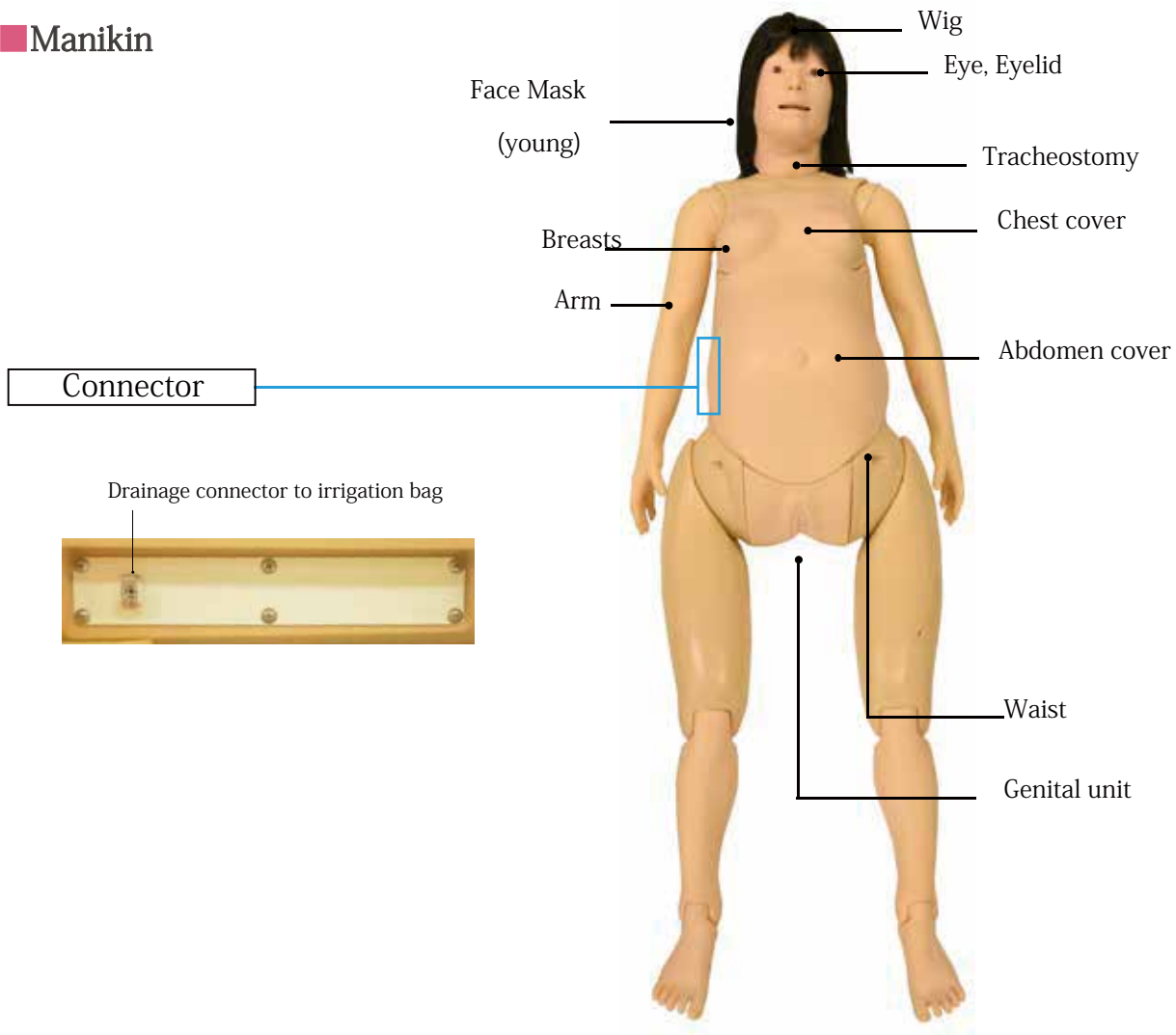
fb : supporting base

1

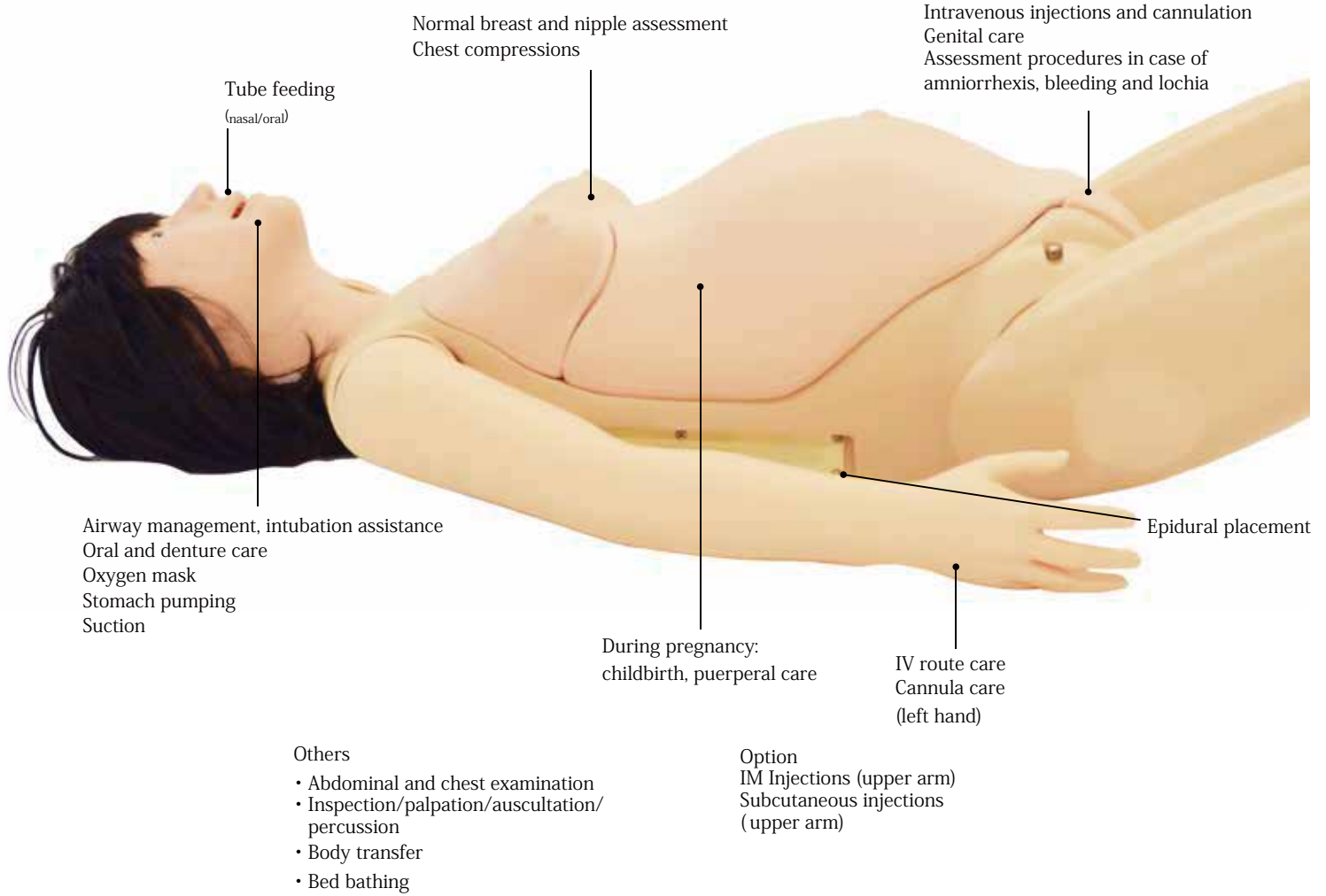
fc : abdominal cover for uterine  
involution assessment module

1

■ Manikin



Skills



Tube feeding (nasal/oral)  
Catheterization tube placement confirmation, tube placement



Suction (nasal/oral)  
Insertion of tracheostomy tube, procedures of airway suction



Urinary Catheterization (procedure only)



Intubation assistance  
Preparation of equipment, auscultation, fixation of tracheal tube



Chest compression



During pregnancy: childbirth, puerperal care, perinatal examination, ultrasound examination, cervical examination, delivery assistance, perinatal tear, puerperal assessment

■ Skills



Intravenous injections and cannulation (left median vein)



IV route care (dorsal vein of left hand)



Bed bathing



Partial bathing (hand/foot)



Oxygen mask

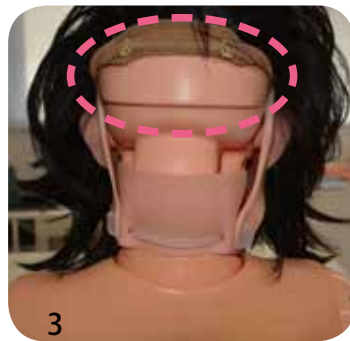
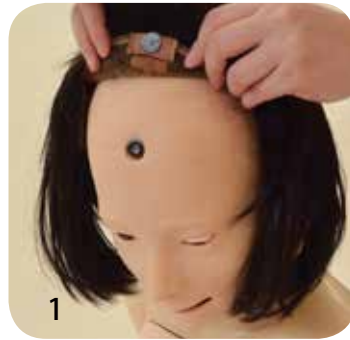


IM Injections (upper arm)  
Subcutaneous injections (upper arm)

## ① Setting

Set the wig by allocating the metal parts on the wig to the magnets at the forehead and in front of right and left ears.

1. Put the wig on to the head noting the orientation, then fix it with the magnet at the forehead.
2. Fix the wig with the magnets in front of right and left ears.
3. Pull down the back side of the wig and fix it to the manikin's back of the head.



## ② Removal

1. Disengaging the magnet in front of the ears.
2. Disengaging the magnet of the forehead and slip the wig backward.



## ③ Maintenance

Store the wig by following steps.

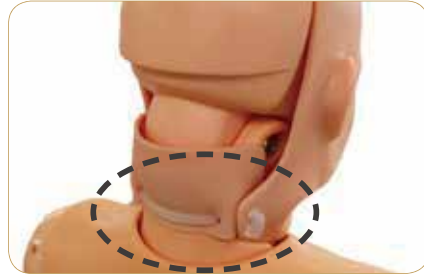
1. Brush the wig after use.
2. Insert balled-up paper to avoid deformation.
3. Roll the tips of hairs inward by hands.
4. Store the wig in a bag.

### ① Removal

1. Remove the cover for tracheostomy



2. Remove one end of the band from the mask hole on the back of the neck.



3. Hold up the mask from the neck side and remove it by pulling it over the head.

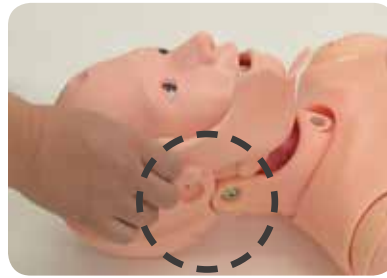


### ② Attachment

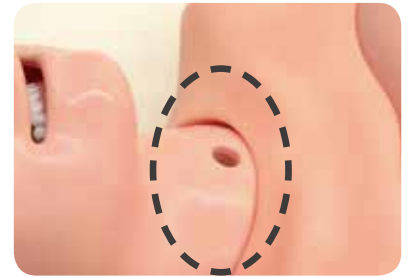
1. Cover the mask from the head side. Attach the holes of the mask to the three magnets: one on the forehead and one each in front of both ears.



2. Insert the salient part of the mask near the head



3. Insert the neck skin into the body part.



4. Inserts the ends of the band to the holes of the mask at the back of the neck



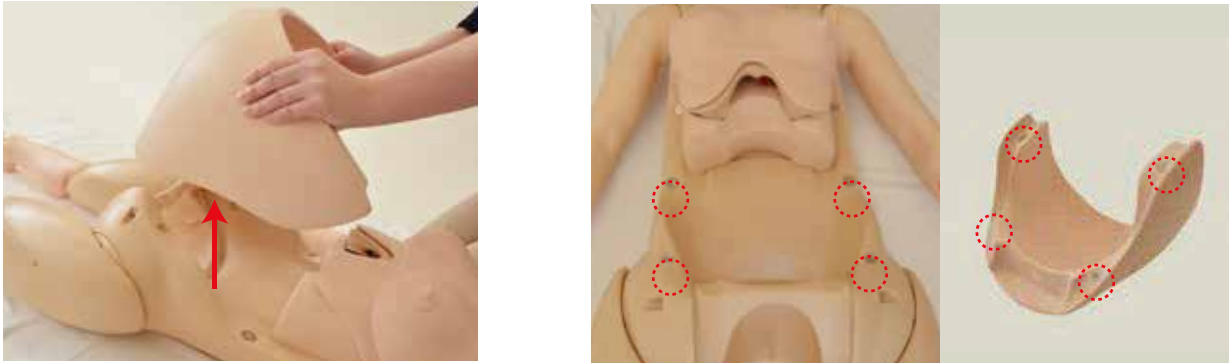
5. Insert the cover for tracheostomy



① Preparation

Setup

1. Remove the abdominal cover from the model. The cover is fixed by four magnets. The cover can be removed by lifting it upward.



2. Attach the two nails of the genitalia unit to the two pits located under the genitalia part of the maternal body, and push on the top of the unit to fix it.

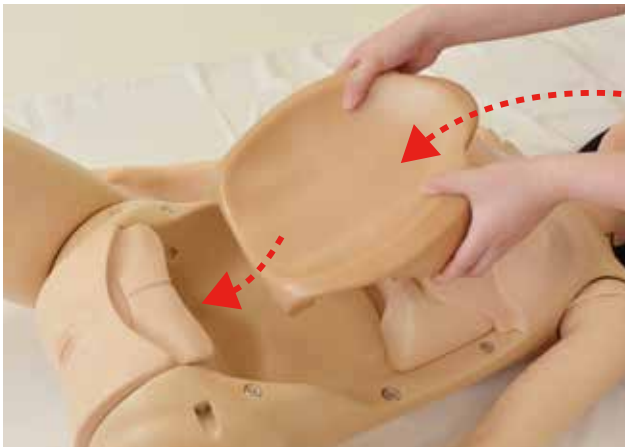


Be careful not to pinch your fingers between maternal body and the genitalia unit



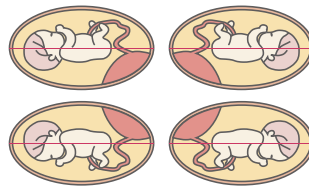
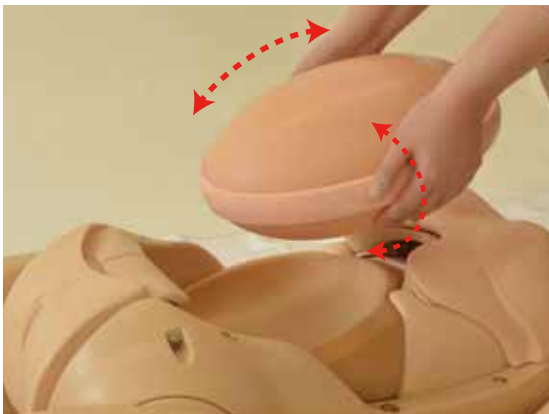
### Setting of the module

1. Insert the phantom holder for fetal ultrasound. Put protection cover on the top.



Protection Cover

2. Place the second trimester ultrasound phantom on the holder. The phantom can be placed in four positions.



3. Apply plenty of ultrasound gel directly to the second trimester (pregnant uterus) ultrasound phantom.



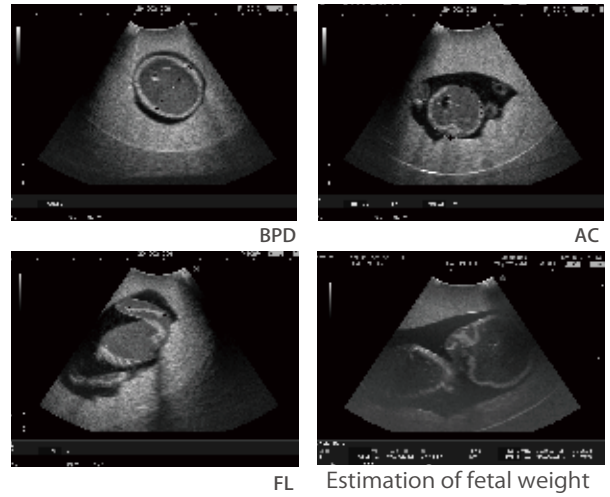
② Ultrasound Training

Assessment of fetus and measurement

1. Place the probe on the phantom unit. The key points of this ultrasound unit are listed on the back of this manual



● Fetus assessment and measurement



③ After training

1. Wipe off the gel completely with wet wipes not to leave any gel on the surface of the phantom and torso. Wash the phantom unit and the phantom holder with water., when necessary. Do not wash the body torso with water.



● Training Items

Assessment of development and condition of fetus, amniotic fluid amount, abnormality, placenta position, presentation, position, fetal habitus, sexuality and so on.

\* compatible with 2D and 3D probes.

① Measurement of fetus (measuring at 3 points)

BPD: biparietal diameter - measures BPD using the transparent septum as landmarks .

AC: Abdominal circumference - measures AC using the stomach, abdominal aorta and umbilical vein as landmarks.

FL: Femur length - measures the total length of the bone.

Estimates the weight by measuring at 3 points to evaluate the development condition of the fetus.

② Measurement of amniotic fluid volume

Measures the maximum vertical depth of the amniotic fluid (the maximum amniotic fluid depth).



③ Assessment of head, breast, abdomen, spine and so on

- Assessment of the figures of bones of skull and assessment of the brain
- Assessment of the spine and limbs
- Assessment of the cardiac chambers and blood vessels, inclination, and the lung
- Assessment of the viscera such as the stomach, kidney, and bladder and the vasculature



brain (transparent septum)



cardiac chambers



stomach



kidney

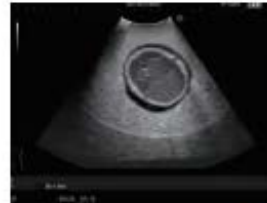


abdominal aorta



bladder

- Whole fetus assessment - head, breast, abdomen, spine, limbs, and genitalia
- Fetus measurement - BPD, AC, and FL
- Observation of the other appendages - amniotic fluid amount, placenta, and umbilical cord



BPD



AC



FL



estimate the fetal weight

④ Assessment of umbilical cord and placenta

Scan the umbilical cord and blood vessels, placenta attachment condition, and placenta position.



blood vessels



umbilical cord

⑤ Determination of fetus presentation (cephalic or breech)

Rotate the phantom unit and determine the fetus presentation (cephalic or breech).



breech

⑥ Determination of sex

(This product represents a male fetus.)



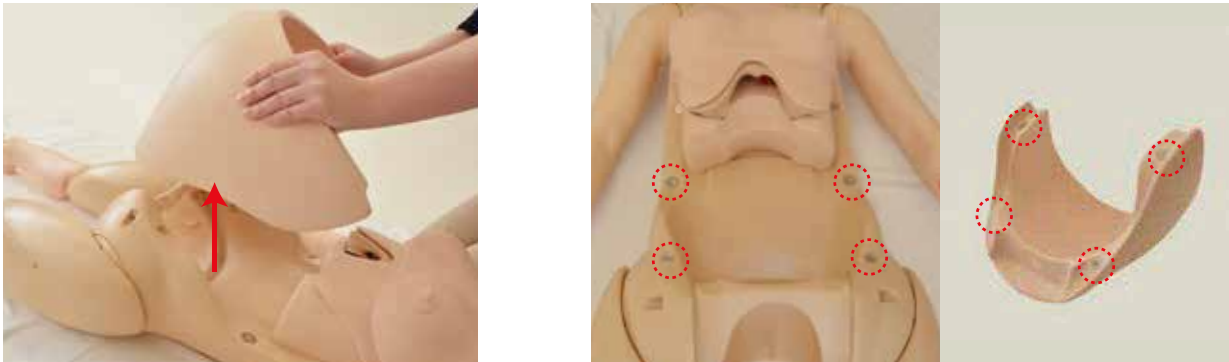
male fetus

\* This product does not reproduce the heart beat and the bloodstream.

① Preparation

Setup

1. Remove the abdominal cover from the model. The cover is fixed by four magnets. The cover can be removed by lifting it upwards.



2. Attach the two nails of the genitalia unit to the two pits located under the genitalia part of the maternal body, and push on the top of the unit to fix it.

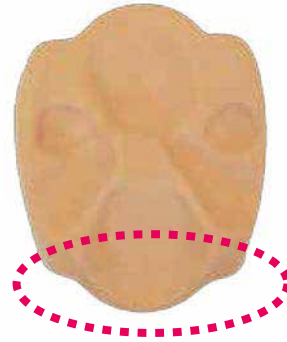


Be careful not to pinch your fingers between maternal body and the genitalia unit



Module setting

3. Insert the fetal base into the model. Depending on the position of the base, the fetus can be set either in cephalic presentation or breech presentation



Put the fetal head on this part

4. Align the fetus to the of the base. The fetus can be set in either left or right.



Right side



Left side

5. Place the abdominal cover. Then the setting is completed.



## ② Training

### Palpation

Anatomically correct landmarks of maternal pelvis and fetal parts, and innovative material of the uterine unit allows for realistic palpation of the fetus. The uterine units can be freely oriented to represent different lies, presentations and positions, also enables CPD assessment (Leopold's fifth maneuver)

#### ■ Leopold's maneuvers

Palpate parts of the fetus such as head, buttocks and the trunk through the steps from the first to the fourth maneuvers to assess fetal lie, presentation and position as well as degree of fetal descent

#### CPD assessment (Leopold's fifth maneuver)

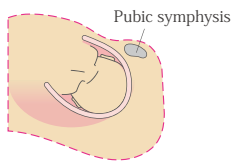
The height fetal head against the pubic symphysis is resigned to represent normal (-) finding in CPD assessment, with the fetal head lower than pubic symphysis.



First maneuver



Fourth maneuver



### Auscultation (Fetal Heart Sounds)

Sounds recorded with doppler and conventional stethoscope can be used for training. The doppler mode features fetal heart sounds, umbilical blood flow as well as mixed sounds of fetal heart and umbilical blood flow. The remote controller enables switching between sounds, speakers and also setting volume.

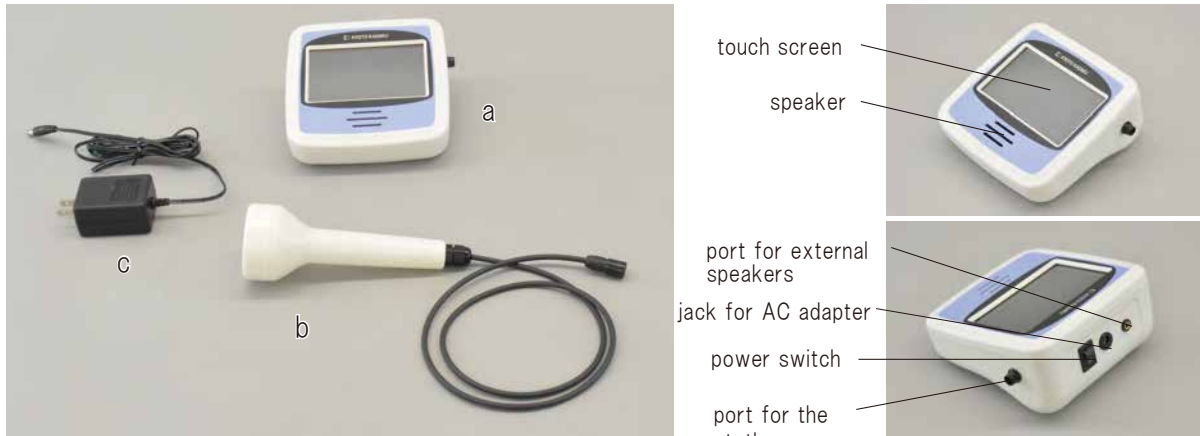


## ③ After Training

Clean the skin cover by wiping with a damp cloth, using water or mild detergent, LET THE TORSO DRY NATURALLY, then spread talcum powder on the surface before storing in a cool, dry place.

Parts names

Verify that all the components below are included.



a. controller b. simulated Doppler stethoscope c. AC adapter

Connection

1. Connect the cable from the stethoscope to the port at the side of the controller.

2. Connect the AC adapter to the jack at the back wall of the controller.



3. Connect the AC adapter to a power source and turn on the power.

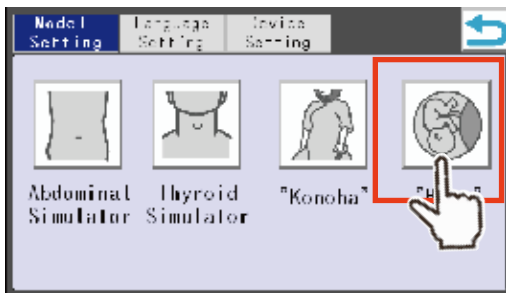
4. Connection completed.



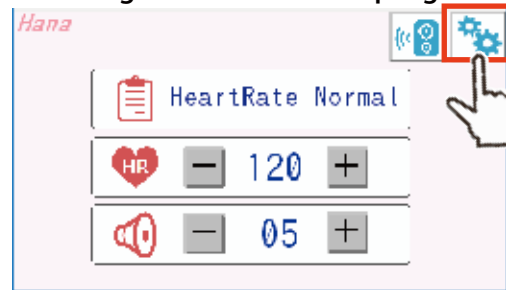
### Setting the controller

※The controller is common with several simulators. In case the unit is dedicated to one type of the simulator, "Model Setting" (selection of the simulator) can be skipped.

1. Press "Model Setting" and then select "Hana".



※To show the control screen, press the setting button at the top right corner.



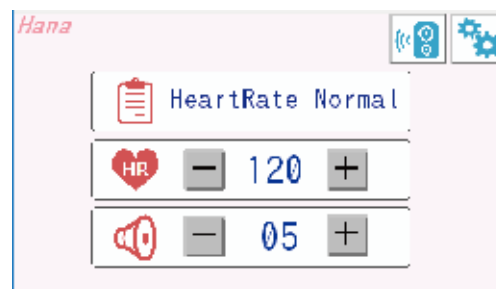
2. Press "OK" to continue.



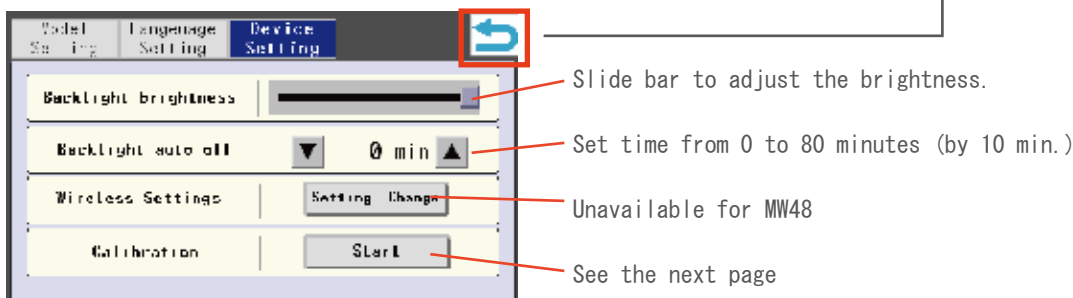
3. "Language Setting" allows to switch between Japanese and English.



Operation window



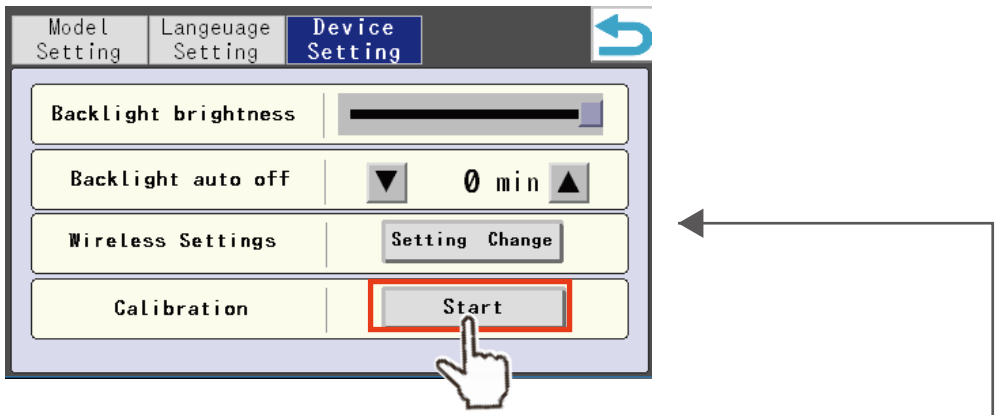
4. "Device Setting" allows to adjust brightness of the backlight, backlight auto-off and calibration of the touch screen. Press return mark to go back to the operation screen.



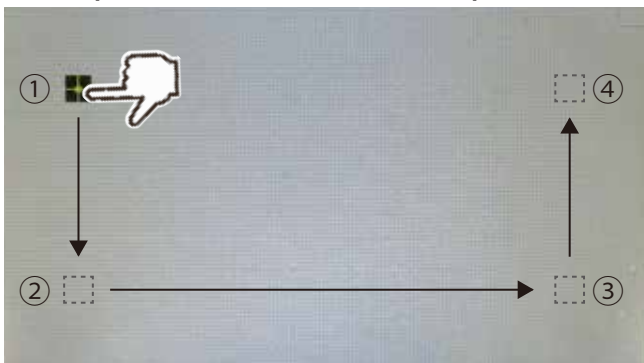
Setting of the controller (touch screen calibration)

※ Calibration is required only when the touch screen has troubles, such as lack of reaction or deviation of the target areas.

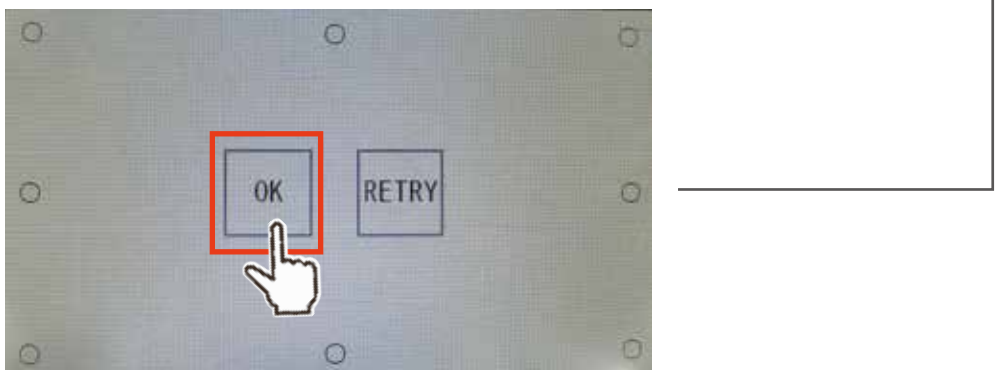
1. Press "Start".



2. Touch on the touch point mark, which appears at the four points on the screen in sequence.

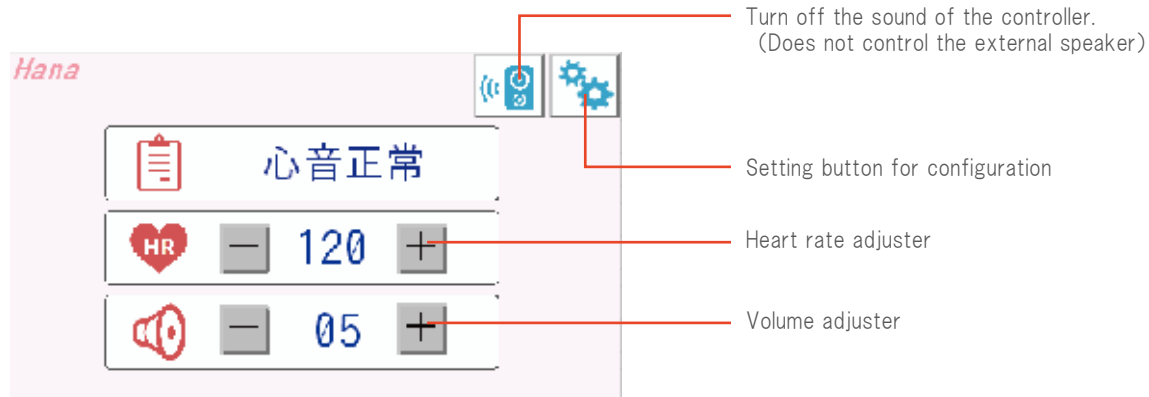


3. Once all four points are covered, confirmation button will appear. Press "OK" and return to the control screen.



## Auscultation

### ① Functions of control

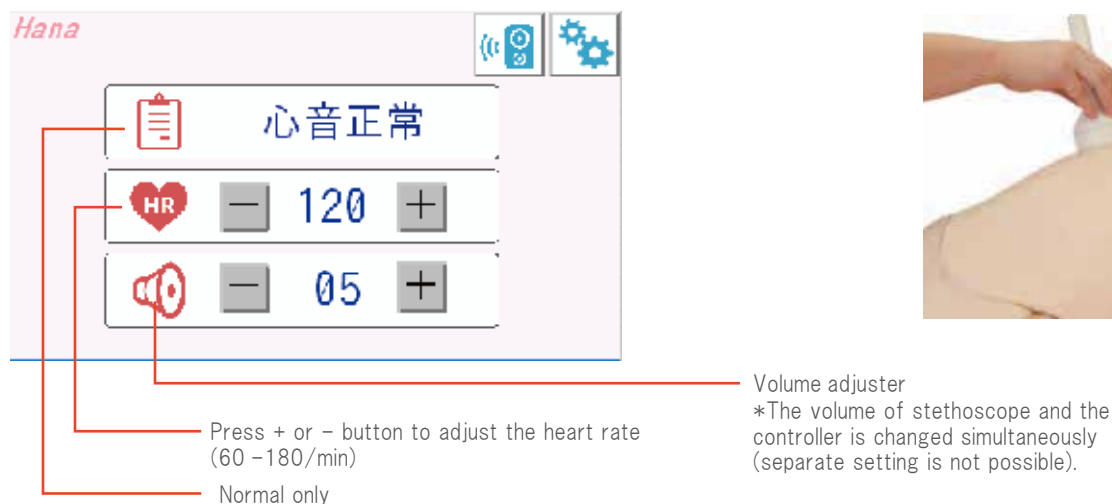


### ② Auscultation of heart sounds

1. Set the training module (fetal manikin) in the abdomen of Hana (see page 18).



2. Select the heart rate and volume and place the head of the simulated stethoscope on the abdominal wall of "Hana" to auscultate.



### ③ After use

After use, be sure to turn off the power by the power switch at the back wall of the controller. (No shutdown or log-off operation on the screen is required. Just turn off the switch). When turning on the power again, the screen shows the same view that displayed just before turning off the power.

### Installation of cervical dilation module to the holder

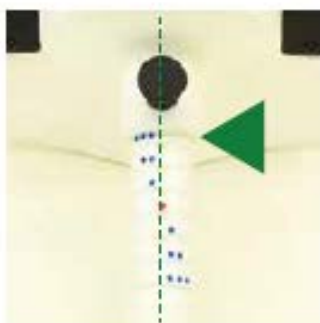
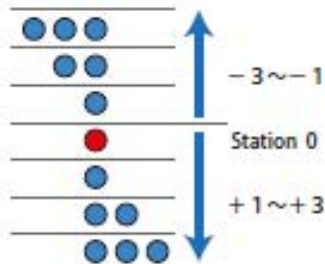
1. Attach the cervical dilation module to the holder. Match the red point of holder with slit of cervical dilation module



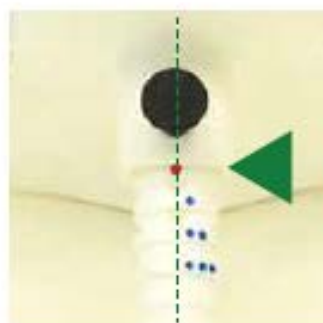
※Note: The cervical dilation module is to be mounted on the tip (smaller tip) of the stick, which is opposite to the handle.

2. The lever on the holder becomes movable by pulling the black knob on the holder. Descent of the fetal head can be set by moving the lever back and forth.

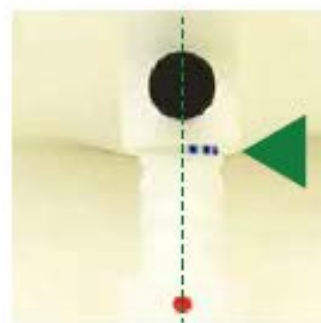
※Descent of fetal head is settable in seven phases.



Station -3



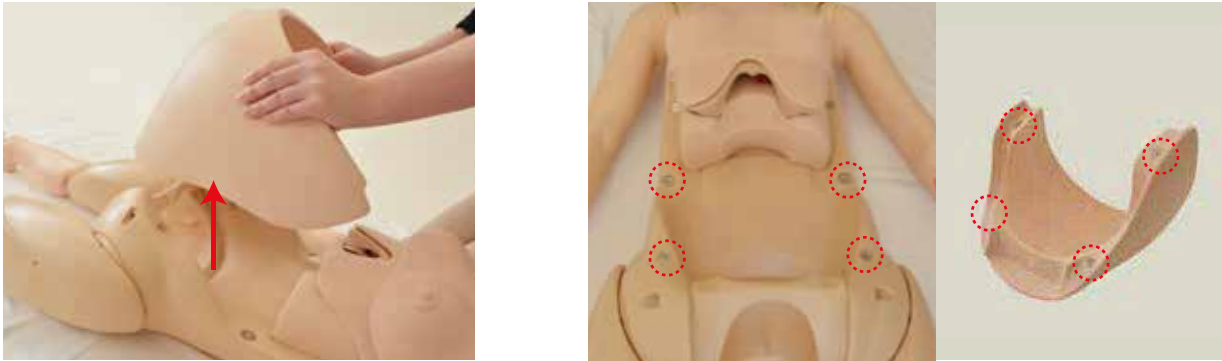
Station 0



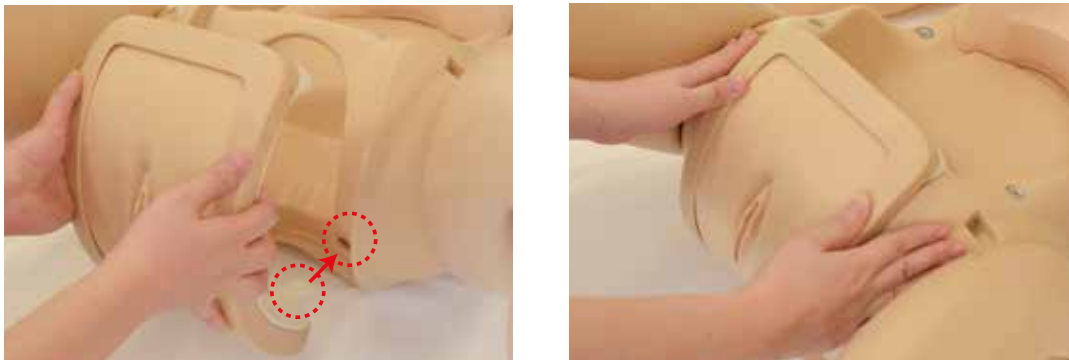
Station +3

Setup

1. Remove the abdominal cover from the model. The cover is fixed by four magnets. The cover can be removed by lifting it upwards.



2. Attach the two nails of the genitalia unit to the two pits located under the genitalia part of the maternal body, and push on the top of the unit to fix



Be careful not to pinch your fingers between maternal body and the genitalia unit



### Setup

3. Attach vagina unit to the main body. Make sure not to put it upside down.



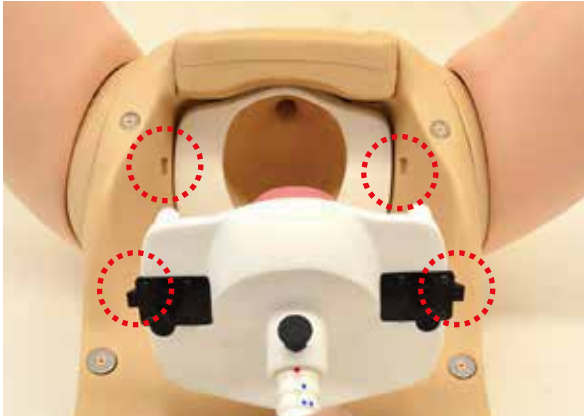
### Lubricants

1. Apply lubricants inside the vagina unit, genitalia and cervical dilatation modules.



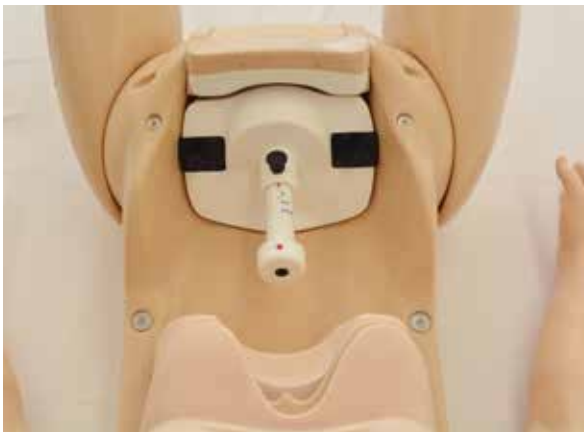
### Attachment of cervical dilation module

1. Attachment of cervical dilation module to the main body



Set the model fixation base to the cervical dilation module.

※Note: Engage the edges on the holder and the holes on the maternal body, and push the holder until clicking sound is heard.



2. Place the abdominal cover (obstetric & cervical type)



**Training / Features**

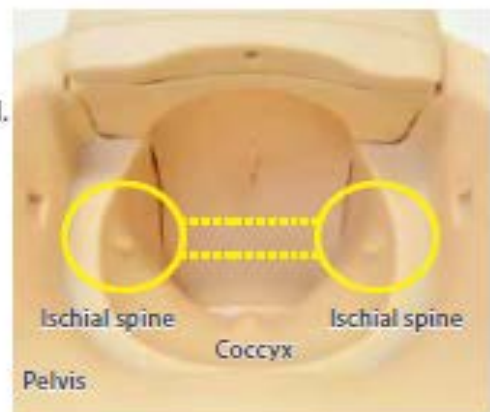
For the training for pelvic examination, put on gloves and apply lubricant to fingers.

Cervical dilation module has 5 variations



**Features**

- Station zero, the line that ischial spines can be recognized.
- To determine the fetal position is possible by posterior fontanelle.



○ Change of cervical dilation module

Unlock the holder with pulling the black knob on right and left of holder, then remove the holder from the maternal body. Change the cervical dilation modules and set the holder again.



3 After the training



○ Disassembly of genital unit

1. Remove the abdominal cover from the maternal body

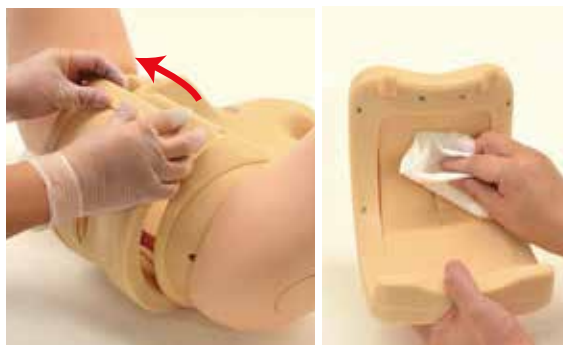
Unlock the holder by pulling the black knobs on the right and left of holder, then remove the holder from the maternal body. Wipe off the lubricant on the cervical dilation module with wet wipes.



3. Pull out the cervix unit in front while holding white frame on the cervix unit. Wipe off the lubricant with wet wipes.



4. Cervix unit is removed from the maternal body by pulling the upper part of frame to the front. Wipe off the lubricant with wet wipes.



※Also, these units are washable with water. Apply talcum powder after they dried naturally.

The cervix unit and the genitalia unit are made from special soft resin. For storage, cover them with included non-woven bag and keep them in the storage box.

**Caution: Do not mark on the model and other components with pen nor leave printed materials contacted on surface. Ink marks on the models cannot be removed.**

① Preparation

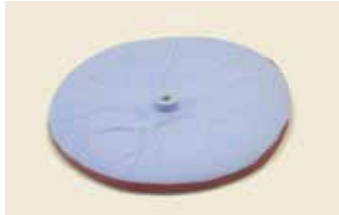
Setup of the fetus

1. Setup

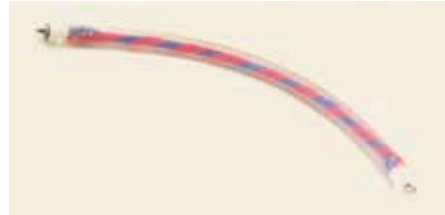
Prepare the fetus, placenta, umbilical cord, umbilical cords for ompalotomy, velamen sheet, vat and lubricant



Fetus



Placenta



Umbilical Cord



Umbilical Cord for Ompalotomy



Velamen Sheet



Vat



Lubricant

2. Take out the placenta from the storage bag to attach umbilical cord. Connect the screw side of umbilical cord to the placenta and turn it clockwise to fix.



3. Insert the umbilical cord into the hole located at the center of the velamen sheet



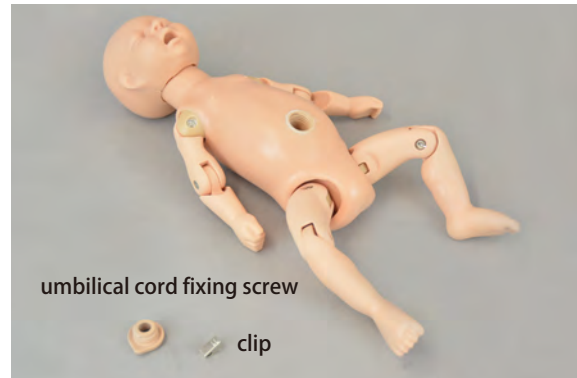
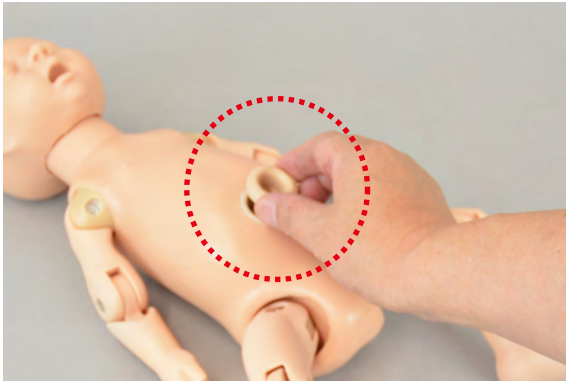
4. Take out the umbilical cord for ompalotomy from the storage bag. Reverse the tip of it to show the hook, and engage it to the hook at the umbilical cord from the placenta



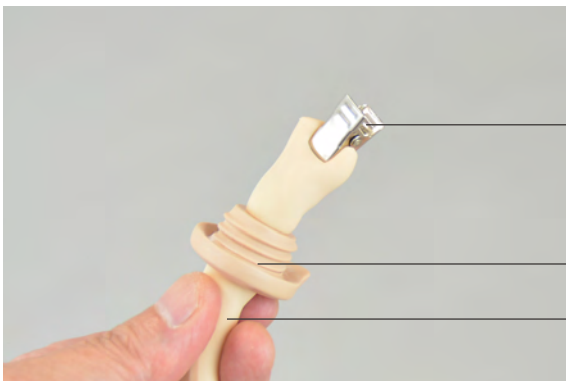
Attach the umbilical cord

5. Loosen the screw in the abdomen of the fetus and take out the clip inside.

※If the clip is difficult to take out, hold the fetus abdomen downwards and the clip will fall out.



6. Thread the umbilical cord through fixing screw, then clip the tip.



clip

umbilical cord fixing screw

umbilical cord for omphalotomy

7. Insert the clip back to the abdomen of the fetus and tighten the screw.



8. The fetus is ready.



※When tightening, if the clip hits the fixing screw, it cannot be tightened completely.

※Adjust the clip direction to avoid hitting fixing screw.

Lubrication

Apply sufficient lubricant to the fetus and the placenta, the velamen and the inner side of the uterine unit before training.

1. Place the fetus with placenta on a towel and apply lubricant.  
Apply lubricant to the whole fetus and the velamen over the placenta.



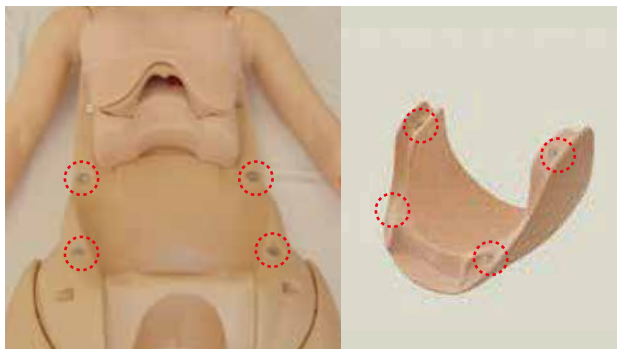
2. Apply lubricant to the internal surface of the genitalia unit, too

※The genitalia unit can be lubricated after attaching to the maternal body as well.



Assembly of the Maternal Body

1. Remove the abdominal cover from the body. The abdominal cover and body are attached to each other with four magnets. The abdominal cover can be removed by lifting it.



## Assembly of the maternal body

2. Attach the two nails of the genitalia unit to the two pits located under the genitalia part of the maternal body, and push on the top of the unit to fix



\* Be careful not to pinch your fingers between maternal body and the genitalia unit



3. Put back the abdominal cover to the maternal body, and set the fetus to complete setup.

\* Always put the placenta on the vat during the training



## Positioning

Training can be done in three birthing positions: dorsal position, lateral position, and all fours position.



② Vaginal Delivery Assistance training

○ Perineal protection



○ Delivery assistance



○ Delivery of fetus



○ Clamping, tying and cutting of umbilical cord



○ Delivery of placenta



○ Inspection of velamen and placenta



### ③ After Training

○ Removal of genitalia unit

1. Lift the abdominal cover to remove it from the maternal body.



2. Pull back the top of the genitalia unit frame to remove it from the body.



○ Disassembly of fetus

1. Disengage the umbilical cord and placenta in reverse order to setup

○ Cleaning and storage

1. Wipe the lubricant left on the fetus, umbilical cord, placenta and genitalia unit away with wet paper tissue. If necessary, wash them with tap water, and dry them well naturally. After the components completely dried, apply talcum powder to each of them.

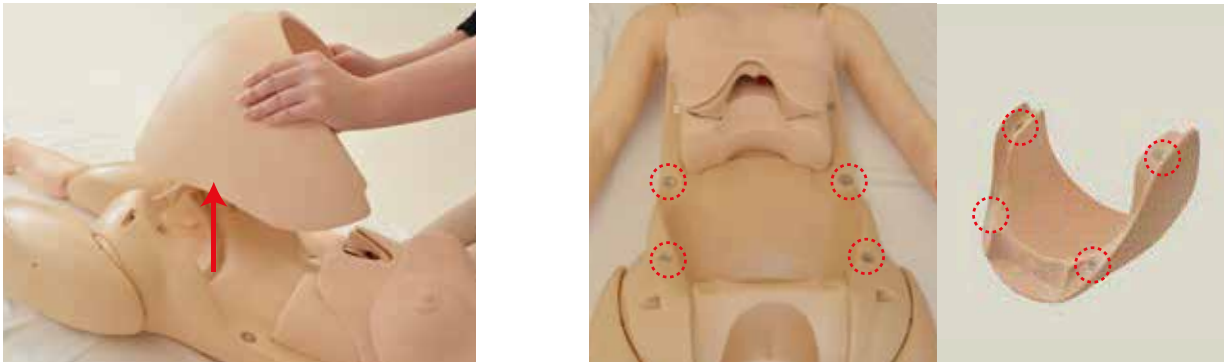


2. Genitalia unit, placenta and umbilical cord for omphalotomy are made of special soft resin. It is required to store them either in the storage bag or on the vat after training.

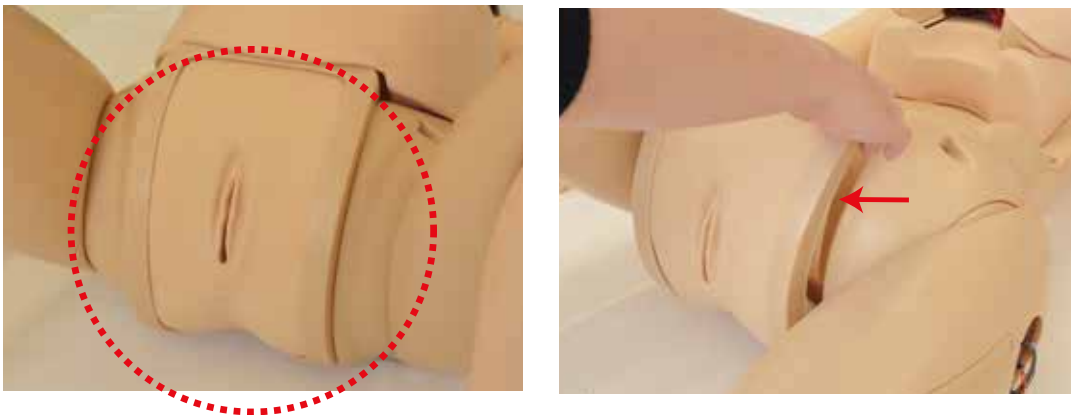
**\* If these parts are stored while touching with other resin products or printed matter, the dent or ink might be left on the skin, and will become irremovable.**

Setup

1. Remove the abdominal cover from the model. The cover is fixed by four magnets. The cover can be removed by lifting it upwards.



2. Remove the genitalia unit for cervical assessment and delivery training. Hold the upper frame of the genitalia unit and pull it towards you.



Change to the perineorrhaphy training unit.

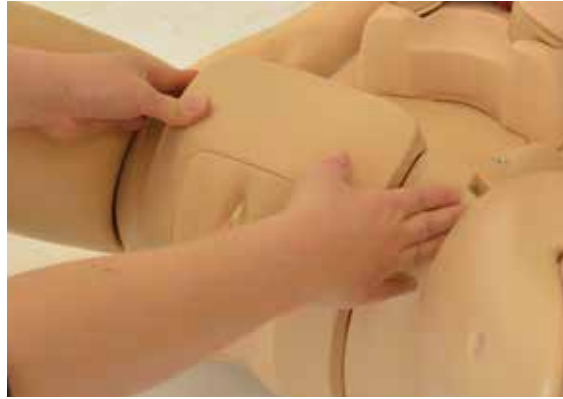


Genitalia with for cervical examination and delivery

Genitalia unit for perineorrhaphy

Exchange of genitalia units

3. Attach the two nails of genitalia unit to the two pits located under the genitalia part of the maternal body, and push on the top of the unit to fix it.



Be careful not to pinch your fingers between maternal body and the genitalia unit.



4. Attach the abdominal cover and the preparation is done.



## ② .....

Suture training of the first-degree perineal tear.

- Single interrupted suture
- Vertical mattress suture



## ③ After Training

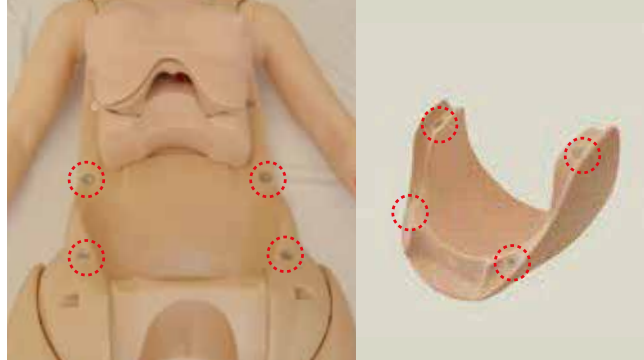
1. Training can be done repeatedly by removing the suture thread.
2. In order to exchange the genitalia skin, Put a finger into the gap between the genitalia skin and the holder to remove it, and attach the new skin. Put the genitalia skin into the pit of the supporting holder. Apply talcum powder on the edge of skin to make it easier. Put the skin from corners to the holder. Ensure that the skin is sitting in the holder firmly.



① Preparation

Setup

1. Remove the abdominal cover from the model. The cover is fixed with four magnets. The cover can be removed by lifting it upward.



2. Attach the two nails of the genitalia unit to the two pits located under the genitalia part of the maternal body, and push on the top of the unit to fix it.



Be careful not to pinch your fingers between maternal body and the genitalia unit



3. Setting of the module

1. Attached the supporting base for fetus ultrasound. Put protection cover on the top.



4. Attach the uterine unit to the cavity.



5. Attach the abdominal cover for uterine involution assessment to the model.



Uterus setting

● Variation of uterine (4 types)

**normal**

(The boundary between the abdominal wall and the uterine is hard and clear.)



First day  
**normal**

**abnormal**

(The uterine is soft or unclear)



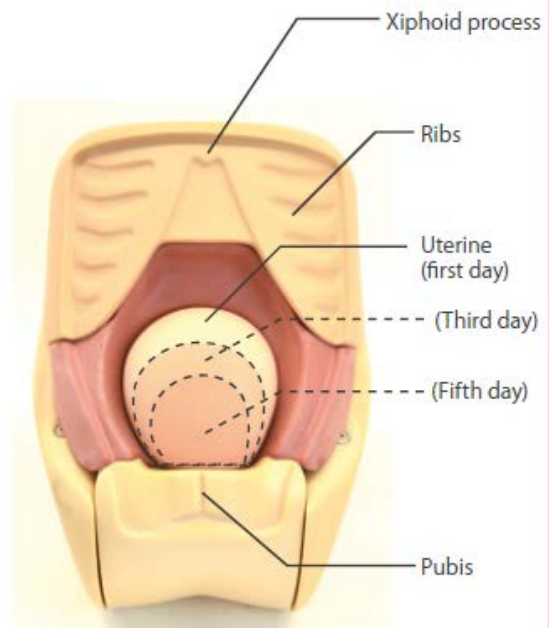
First day  
**abnormal**



Third day  
**normal**



Fifth day  
**normal**



② Training



Palpation of uterine fundus



Measurement of fundal height

③ After training

1. The dirt on the abdominal cover can be wiped with water or neutral detergent. After the cover is wiped, apply talcum powder on its surface.



## ① Preparation

Insert epidural pad on the back.

(The pad is already inserted at the time of delivery)



## ② Training

Training in lateral position

Only punctures and fixation of catheter are possible

※Water cannot be used



## ① Training

Training of tube insertion for feeding (NG, OG) in Fowler's position. Insertion of catheter (NG, OG) is possible. Training of tube fixation and dressing is possible. Spray the lubricant included on the catheter and into nasal and oral cavity. Shortage of lubricant will make insertion difficult.



- 12Fr. catheter is recommended for training.
- Please use the lubricant included in the set. Usage of other gel-type lubricants may cause damages.

## ② After the training

Remove tapes and catheter after the training. Wipe the lubricant on the catheter and skin with wet tissues.



- Do not leave the tapes on the manikin. If the tape remains on the surface for long time, it may cause persisted stickiness.

### Bed bathing, partial bathing



### Position change, position holding, patient transfer, joint motion exercise

- Limbs, fingers and toes with full articulation allow various patient postures for nursing care training.
- Can be placed in a sitting position
- Fingers can be bended and stretched



## Oral Care

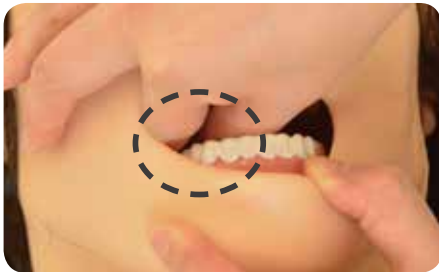
Oral care training in various training scenarios

- Brushing (with denture)



### ■ Detachment of denture

Lift the molar side with both upper and lower dentures and take it off. Raise the upper denture forward and remove it.



※Place the fingers as shown in the above photo when holding the denture.

### ■ Setting of dentures

Put the denture one by one in the mouth cavity. Fit the groove at the back of the denture of onto the gum and push them together firmly.



## Oxygen inhalation

Training of procedure of Oxygen inhalation



① Suction

nasal/ oral/ tracheostomy

※Simulated sputum cannot be used.

1. Apply lubricant to the catheter as well as the nasal, oral, and tracheostomy parts.



- Use 10–14Fr. suction catheter
- Use lubricant included in the set. Do not use the gel-type lubricants as they can remain inside and coagulate.

2. Take off the plug for tracheotomy and apply the included lubricant to the tracheotomy tube how then insert it to the hole. Training of gauze changing and cleansing the tube can also be performed.



Recommended tracheal tube is PORTEX tracheostomy tube II MY-102 12746-020. Other tubes may not fit into the opening.

② After training

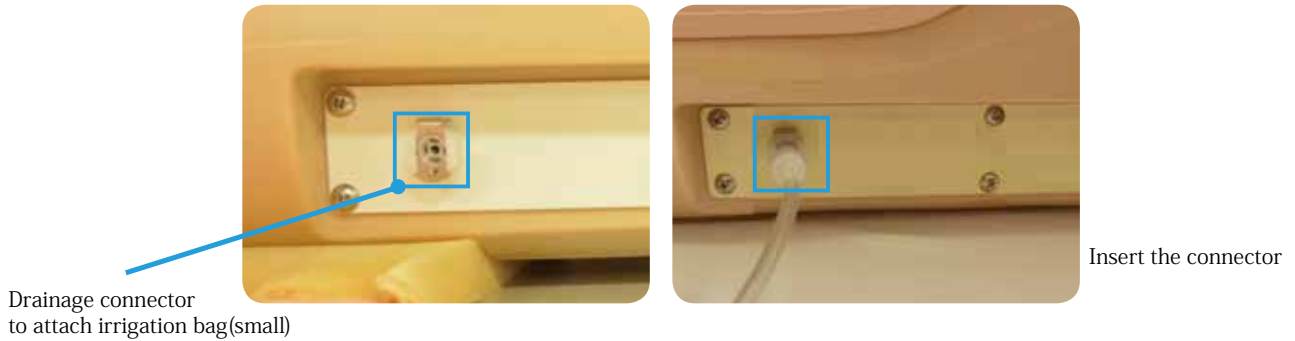
1. Remove the catheter or tracheotomy tube. After removing tracheotomy tube, set the plug to the tracheotomy hole.
2. Wipe off the remaining lubricant completely with wet cloth from the catheter, tracheotomy tube, nose and oral cavity part.



① Preparation

1. Connection of drainage tube

Among the connectors on the right side of the model, attach the irrigation bag (small) to the white drainage connector. Then open the tube cock. In case lots of water for injection was used, use drainage tube instead of irrigation bag (small). The tip of the drainage tube should be put to a bucket to collect the drainage water.

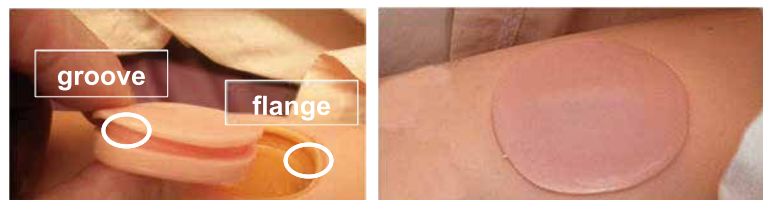


② Training

- Openings on the left forearm and the back of the hand allow training of intravenous injection and fixing the dressing materials.
- Median vein on the left forearm allows training of confirmation of natural instillation.



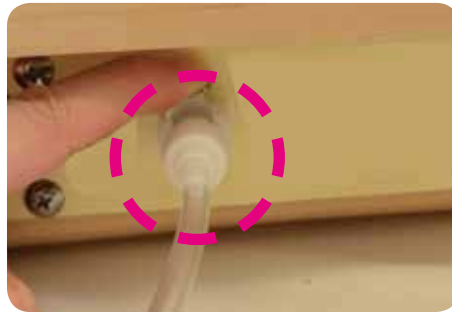
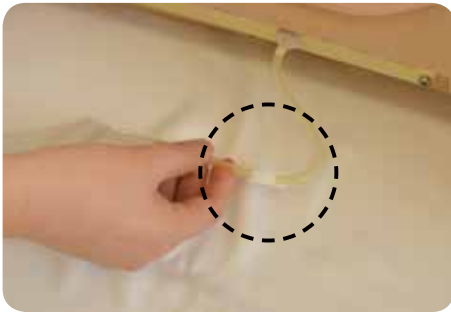
When water leakage occurred, the condition of the pad fitting into the hole of the arm might be not good. So that groove of the pad is inserted to flange on the arm hole, re-attach the pad to the hole of the arm.



③ After Training

**Drainage**

Close the clamp of the irrigation bag connected to the body and detach the joint of the irrigation bag by pushing the button at the end of the connector. Then Attach the drainage pump (small connector) to the same connector.



Take out the injection pad (median vein).

Fill the opening in the arm with tissue paper (approx.2 sheets), then drain water from the tube by squeezing the drainage pump. After all water is drained from the tube, remove the paper tissue from the opening and wipe the inside of the opening as well as the pad. Dry the parts naturally and reassemble for storage.



### 1 Training

Training in assistance of tracheal intubation is possible, allowing training in perioperative or ICU scenarios

- preparation of devices
- oral airway intubation (laryngoscope, video laryngoscope)
- tube placement confirmation by auscultation
- fixation of the tracheal tube
- observation of the rise of chest
- chest compression



### Insertion of tracheal tubes

For oral route airway, spray enough lubricant in the mouth and on the tracheal tube before inserting it.



Recommended tools: Macintosh laryngoscope Size: No.4

Tracheal tube: 7.0, 7.5 mm (inside diameter)

Use the lubricant included in the set. Other like gel type may remain in the model and become irremovable.

### Confirmation of successful intubation

The placement of the tube can be confirmed by auscultation or movement of thoracoabdominal area.



### Intubation with video laryngoscope

Spray enough lubricant to the video laryngoscope and the oral cavity before training.



 Use the lubricant included in the set

### Securement of tracheal tube

Tape fixation and THOMAS fixation of tracheal tube



Do not leave tapes on the model.  
If tapes remain on the model for long time, its skin surface will become sticky adhesive of the tape.

## ② After training

### Wipe off the lubricant

Wipe off the remaining lubricant completely with wet cloth from the tracheal tube and oral cavity part.



① Preparation

Attachment and detachment of Intramuscular pads

● Attachment

The shape of each pad is the same. Open the attachment bands of an injection pad and fix it to the injection site as shown in the pictures.

Attachment



Position



● Detachment

Open the attachment band by hand and detach the pad from the manikin.

Open the attachment band wide enough. Do not pull the pads without opening the attachment band. Otherwise, it may cause a tear in the manikin's skin.



Ensure to remove the shoulder/thigh injection pads swiftly after use. Otherwise the manikin skin may become persistent.

Discharge all water from the pads after each session. Do not store the pads with water remaining inside.

② Training

The training of Intramuscular injection can be conducted on upper arm and gluteal.

The training of hypodermic injection can be conducted on upper arm, femoral and gluteal.



Intramuscular injection needle of 21-23G and hypodermic injection needle of 24-27G are recommended for training.



③ After training

Upper arm and femoral injection pads

● Detachment of pads



1. Push the attachment plate inward, pull out the edge of the skin over the edge of the transparent back plate.
2. Take off the skin carefully and remove the sponge and transparent back plate.
3. Squeeze the sponge until parts are completely dry, reassemble them carefully.



Do not pull or twist the sponge. Excessive force may cause ripping.

Assemble the pads

1. Set the sponge on the convex side of the transparent back plate. Then, slide the skin over the plate and the sponge from the narrow end.
2. Pushing the attachment plate inward, place the edges of the skin between the back plate and the attachment plate.

# MW48

## Full Perinatal Patient Care Simulator

# HANA

### Replacement Parts

**Caution** Do not mark on the model and other components with pen nor leave printed materials contacted on surface. Ink marks on the models cannot be removed.

Code	Name
11406-040	wig
11229-050	lubricant for training models
11415-040	lubricant (500ml) refill bag
11415-050	lubricant (500ml) refill bag and bottle
11415-010	cervical dilation inserts
11415-030	genitalia unit for cervical assessment & delivery
11458-030	fetus model
11416-020	placenta
11416-030	10 umbilical corden for omphalotomy
11416-040	velamen sheets
11417-020	genitalia unit (frame, skin) for
11417-010	2 genitalia inserts(perineorrhaphy)
11418-020	1 set of uterine inserts (4 variations)



11406-040



11229-050



11415-040 : 11415-050



11415-010



11415-030



11458-030



11416-020



11416-030



11416-040



11417-020



11417-010



11418-020

### Optional parts

code	name
11251-030	2 shoulder injection pads



11251-030

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2025.05

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