



**Caution**

Do not mark on the product and its components with pen nor leave printed materials contacted on surface.  
Ink marks on the models cannot be removed.

MW65

## Advanced Obstetric and Birthing Simulator

### Instruction Manual

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MW65 Advanced Obstetric and Birthing Simulator is a comprehensive training set with the platform of maternal body for training in skills including cervical examination, delivery assistance and perineal repair.

## ■ Features

- Realistic reproduction of the cervix allows for pelvic examination in accordance with the progress of delivery.
- The ability to perform various techniques (McRoberts position, Woods screw method, etc.) in fetal malposition, and shoulder dystocia makes it ideal for a variety of workshops and training courses.
- Combination of modules offers a variety of skills training.
- Adjustable difficulty levels by changing the size of the bony birth canal in 3 steps.

## ■ Training Skills

- Delivery
  - Pelvic examination • Normal delivery • Delivery of placenta & umbilical cord
  - Handling of shoulder dystocia and fetal malposition
  - Vacuum extraction • Forceps delivery • Breech delivery
- Treatment of the fetus
  - Umbilical cord entanglement • Umbilical cord clamping and cutting
  - Palpation of the anterior/posterior fontanel • Suctioning procedures through mouth & nose
- Options (to be released)
  - Fetus ultrasound examination (uses US-7a SPACEFAN-ST)
  - Postpartum uterine palpation
  - Cervical cytology (pap smear)

### Read before use

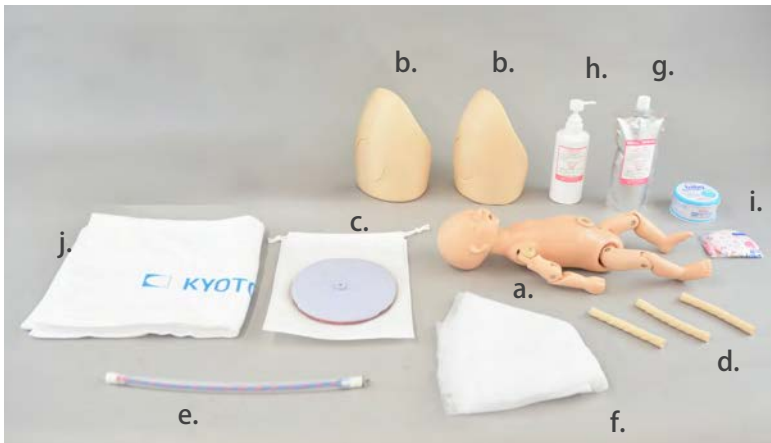
MW65 Obstetric Training Simulator has been developed for the training of medical and paramedical professionals only. Any other use, or any use not in accordance with the enclosed instructions, is strongly discouraged. The manufacturer cannot be held responsible for any accident or damage resulting from 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)

※ Be sure to refer and follow the handling and storage instructions on page 3.

## Set Includes

The components come in two boxes.

Before you start, ensure that all items listed below are ready.



- |                                      |   |                         |   |
|--------------------------------------|---|-------------------------|---|
| a. Fetus                             | 1 | f. Velamen sheet        |   |
| (with umbilical cord fixation clips) |   | g. Lubricant (500ml)    | 1 |
| b. Thigh                             | 2 | h. Bottle for lubricant | 1 |
| c. Placenta                          | 1 | i. Talcum powder        |   |
| d. Umbilical cord                    | 3 | j. 1 Towel              |   |
| for omphalotomy                      |   | 1 Instruction manual    |   |
| e. Umbilical cord                    | 1 |                         |   |



- |  |   |
|--|---|
| k. Maternal body   | 1 |
| ※The skin cover is not affixed to the torso. Take care when removing the model from storage box. |   |
| l. Skin cover holder   | 1 |
| m. Clamps  | 2 |
| ※The type of clamps is subject to change without notice.   |   |

## ⚠ DOs and DON'Ts

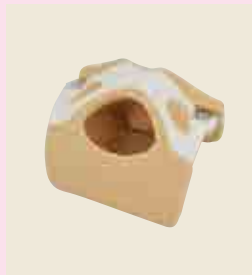
- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>● Handle the manikin and the components with care.<br/>Be sure not to drop or add shock to the product and its components, since the product uses special resins and heavy, such shock may cause damage to the product or environment.</li> </ul> | <ul style="list-style-type: none"> <li>● Do not let ink from pens, newspapers, this manual or other sources contact with the manikin, as they cannot be cleaned off the manikin skin.</li> </ul> |
| <ul style="list-style-type: none"> <li>● Storage in a dark, cool and dry space will help prevent the skin colors from fading and product from deforming.</li> </ul>  | <ul style="list-style-type: none"> <li>● Never use organic solvent like paint thinner to clean the skin, as this will damage the product</li> </ul>  |
| <ul style="list-style-type: none"> <li>● The manikin skin may be cleaned with a wet cloth if necessary, using mildly soapy water or diluted detergent.</li> </ul>  | <ul style="list-style-type: none"> <li>● Even if color on its surface might be changed across the ages, this does not affect the quality of its performance.</li> </ul>                          |

## Precautions:

- Handling and storage of skin cover, uterine unit, placenta and umbilical cords. They are made of special soft resin with excellent elasticity, resilience and durability. Read the following precautions to ensure good handling and storage.



Skin cover



Birth canal unit



Placenta



Umbilical cords for omphalotomy

- Do not hold the placenta by umbilical cord.

Placenta placed on a smooth surface tends to stick. Lift the edge of the placenta before moving it.



- Avoid contacting with other resin products and printed material.







These parts may deform if stored in contact with other resin products and may get irremovable ink mark by contacting printed material.

- Maintain proper temperature, humidity and avoid direct sunlight of the storage room of simulators.

Always pay attention to the temperature indication sticker on the storage box and store the simulator below 60 °C.

Change the storage place immediately when color circles on the sticker change as below.

※The color signs are irreversible.

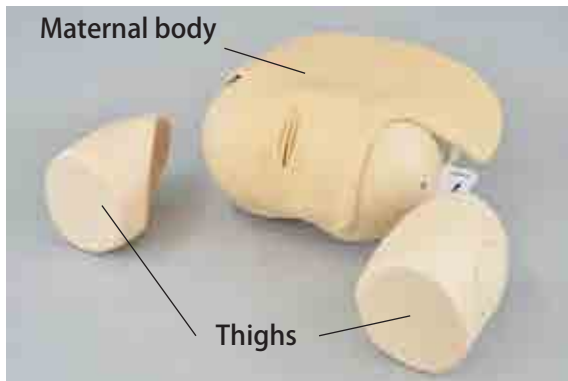
Before			After		
3F60	Year	Month	3F60	Year	Month
					
60	65	70	60	65	70



## Assemble the Thighs

Thighs are removed from the body and packaged separately.  
Follow the instructions below to assemble.

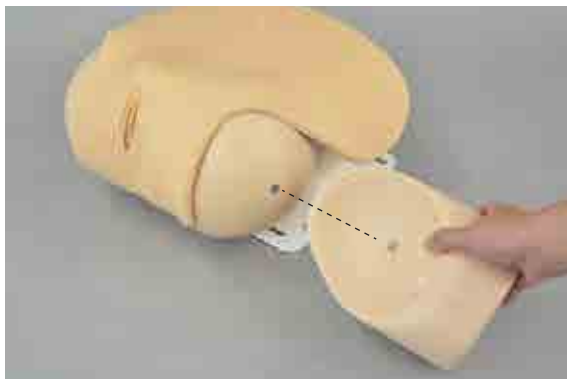
1. Thighs are common to both sides.  
The pat can be attached to either side.



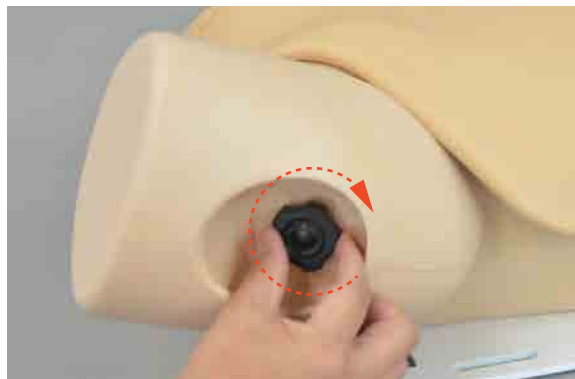
2. Remove the thigh cover.  
Insert one finger and pull the cover out.



3. Align the bolt on the thigh with the nut on the torso.



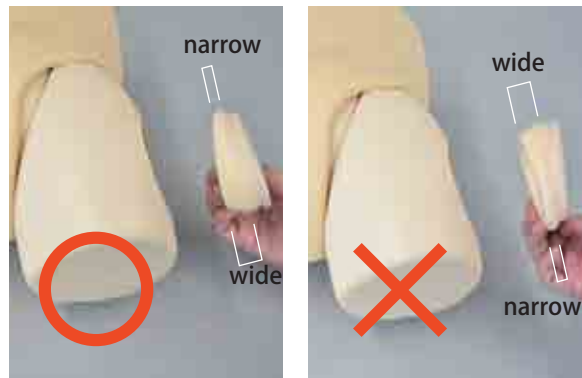
4. Turn the bolt to fix the thigh.  
※Pay attention not to overtighten.



5. Attach thigh cover.  
Repeat the same process with the other thigh.



- ※Please note that the covers are of a certain heading.



## Prepare the fetus & umbilical cord

### 1. Preparation of the fetus

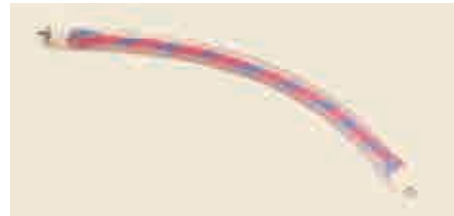
Prepare the fetus, placenta, umbilical cord (normal & for omphalotomy) and velamen sheet.



Fetus



Placenta



Umbilical Cord



Umbilical Cord for Omphalotomy



Velamen Sheet

2. Attach umbilical cord to the placenta. Connect the screw side of umbilical cord with the placenta and turn it clockwise to fix.



3. Insert the umbilical cord for omphalotomy into the hole in the center of the velamen sheet.



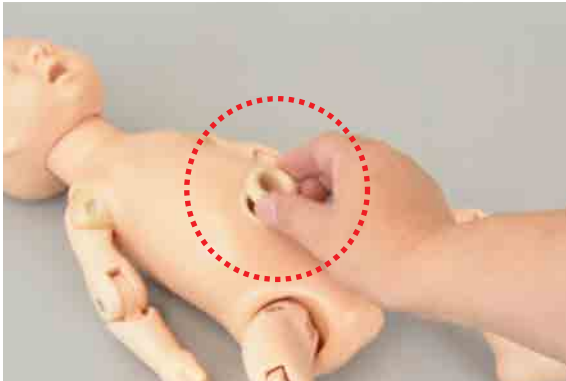
4. Reverse the tip of umbilical cord for omphalotomy to release the hook, and attach it to umbilical cord.



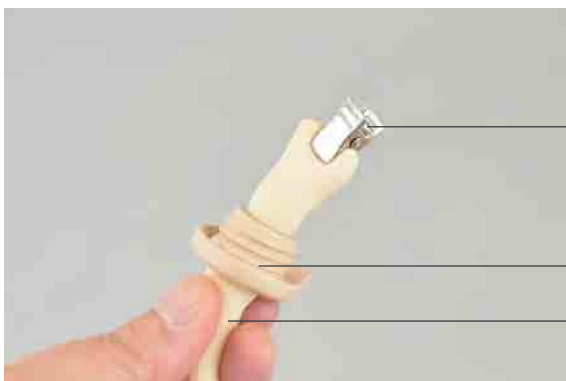
### Attach the umbilical cord

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.

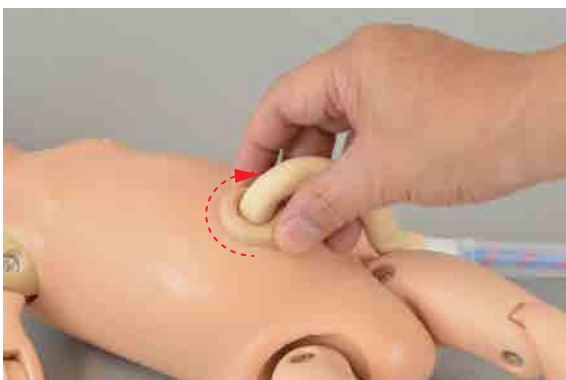


clip

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.

### Skin cover height setting

Set the height of skin cover to match delivery, antenatal palpation, etc.

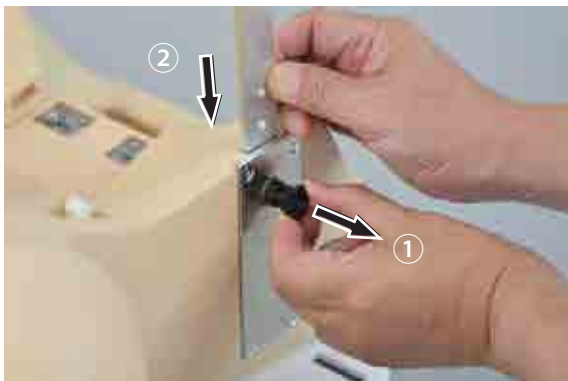
1. Lift the skin cover and remove the packing cushion.

※Do not dispose the cushion as it will be reused for storage.



2. Insert the skin cover holder into the recesses of torso and pull the two knobs on either side upwards or downwards to adjust the height (2 levels).

※The holder should be fixed at the point where it "clicks" into place.



Adjustable



Fixed in position.

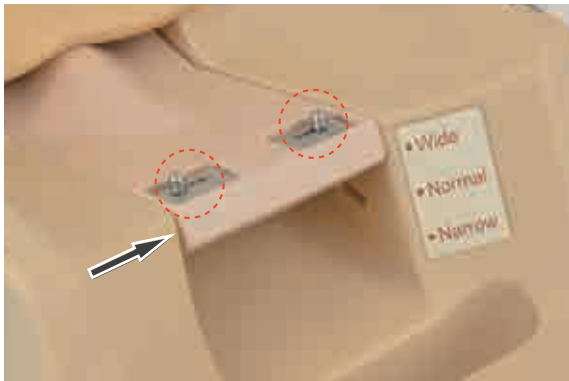


**Caution:**  
Do not lift the torso by the skin cover holder.  
Fixing parts will be damaged.

### Skin cover height setting

Attach the skin cover to the torso. (The skin was not attached to the torso when packed.)

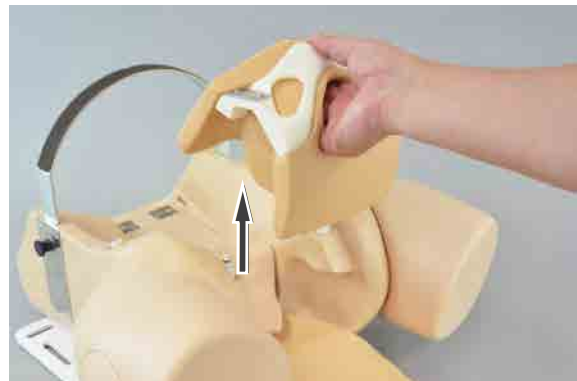
3. Switch the birth canal adjust lever to Wide.  
(Slide the lever inwards to unlock.)



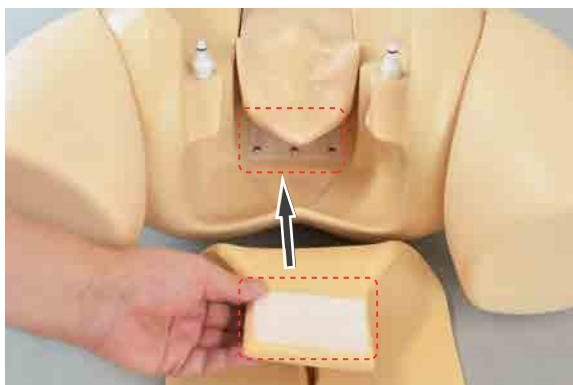
4. Push the ➡ pointed parts to unlock the birth canal unit.



5. Remove the fixings and lift the uterus unit upwards to remove.  
※Do not lose the 2 fixings.

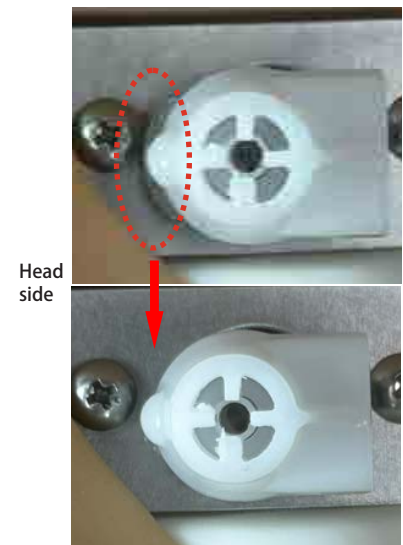
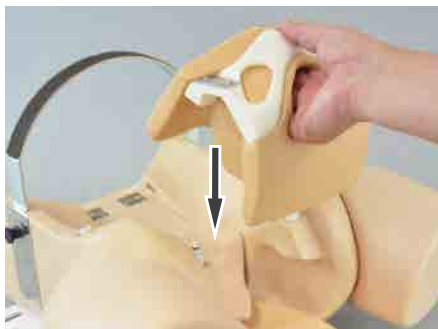


6. Match the Velcro of the skin and torso to fasten.

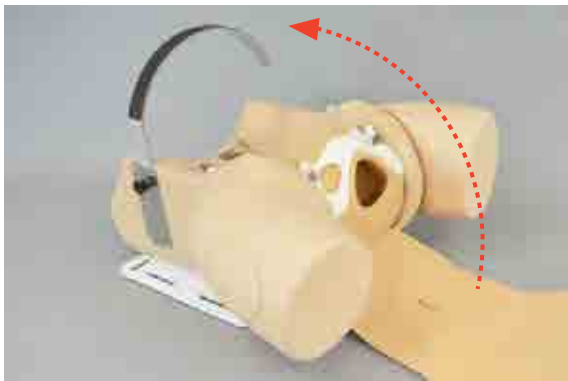


### Skin cover height setting

7. Attach the uterus unit to the torso, and put the 2 fixings in firmly.  
 \*Push it in until the silver part cannot be seen.



8. Recover the skin.  
 The holder and skin are indicated by ○, which should be covered to match.



9. Skin cover height setting is complete.



Delivery (High)



Postpartum uterine palpation (Low)  
 \*The palpation part is optional

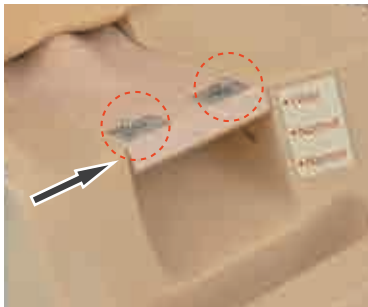
### Adjust the difficulty

1. Adjust the birth canal space.

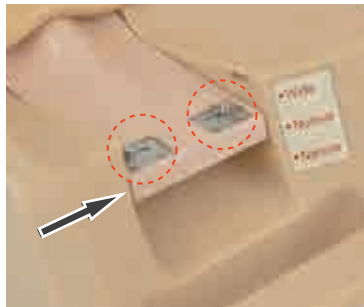
Slide the lever inwards to unlock the coccyx.

The space in the birth canal can be set in 3 (difficulty) levels by changing the angle of the coccyx.

After setting, slid the lever outwards to fix it in place.



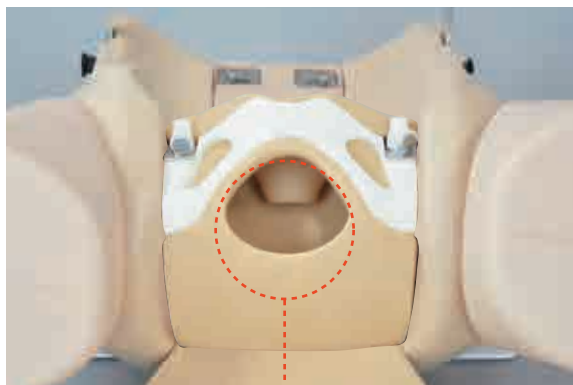
Wide



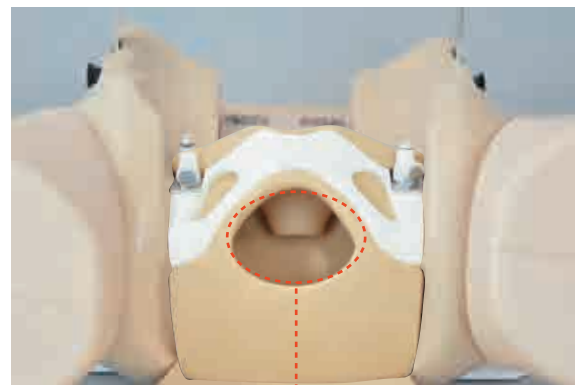
Normal



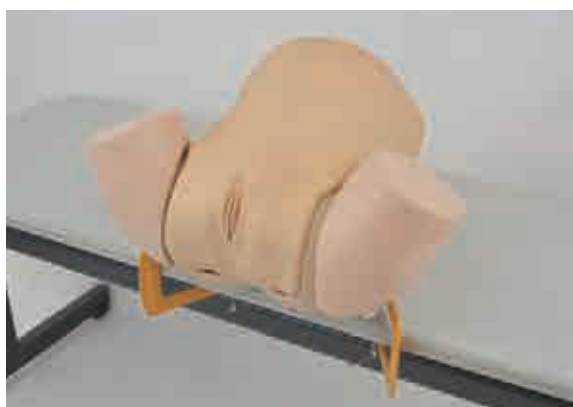
Narrow



Wide



Narrow



When training on a table etc., use the clamps to fasten the body.

**Caution:**

Don't perform vacuum extraction procedures in the difficulty of Narrow, which may cause damage on the pubes and the os uteri.

The setting of Narrow is assumed as shoulder dystocia, so this puts a load on the birth canal unit. So apply sufficient lubrication to the fetus and extract it using appropriate procedures. Avoid forcibly pushing or pulling of the fetus as this may cause damage.

### Apply lubricant

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 genitalia of skin cover and the uterus unit.  
※To apply to the uterus unit, turn the skin over. (No need to remove the skin cover completely.)



#### Caution :

If lubricant gets into the gap (→pointed area) between the birth canal unit and the body during the training sessions, the birth canal unit may slip during delivery, resulting in failure of the procedures.

When the birth canal unit slips, remove the unit and wipe off the lubricant in the gap.

### Delivery

#### ○ Delivery

- Internal pelvic examination • Normal delivery • Clamping, tying and cutting of umbilical cord
  - Delivery assistance • Delivery of placenta and umbilical cord • Inspection of velamen and placenta
  - Handling of shoulder dystocia, abnormal fetal position • Vacuum extraction
  - Forceps delivery • Breech delivery • Delivery of the placenta • Perineal and anal protection
- Reproduction of realistic fetal rotation in normal delivery. (The skin cover is removed just to illustrate.)



Internal rotation of the head



Restitution



Internal rotation of the shoulders



External rotation of the head



Inspection of velamen and placenta



Palpation of the anterior fontanel

#### Caution:

Don't perform vacuum extraction procedures in the difficulty of Narrow, which may cause damage on the pubes and the os uteri.

#### Set the difficulty for shoulder dystocia



Narrow



Suction delivery

The setting of Narrow is assumed as shoulder dystocia, so this puts a load on the birth canal unit. So apply sufficient lubrication to the fetus and extract it using appropriate procedures. Avoid forcibly pushing or pulling of the fetus as this may cause damage.

### Delivery position

It can be performed in the lithotomy or McRoberts position by changing the angle of the thighs.



Lithotomy position



McRoberts position

### Remove lubricant

- Remove the skin cover and the uterus unit.

1. Untie the Velcro of the skin and the holder.



2. Push → pointed parts to unlock the birth canal unit.



3. Remove the fixings and lift the uterus unit upwards for removal.

※Do not lose the fixings.



4. Remove the skin (Set the birth canal to Narrow to make space between skin cover and the coccyx for smooth removal.) Untie the Velcro of the skin and the torso.



- Disassemble the fetus.

Revert the process of assembling to remove the placenta, umbilical cord. (See P6~P7)

### Remove lubricant

○ Cleaning up and storage

1. Wipe off lubricant on the skin cover, fetus, umbilical cord, velamen and the birth canal unit with a wet wipe.  
The parts can be rinsed off with tap water but should be dried thoroughly. Apply talcum powder after drying.



Fetus



Placenta



Umbilical cord



Birth canal unit



Maternal body (Aroud the coccyx)



Skin cover (front)



Skin cover (back)

## Storage

The skin cover, birth canal unit, placenta and umbilical cords are made of special soft resin with excellent elasticity, resilience and durability.

**Caution: Avoid contacting with other resin products and printed material.**

**The soft material of the parts may deform or, absorb ink on printed material and can't be cleaned.**

1. Store the placenta and the umbilical cords in the non-woven fabric provided.



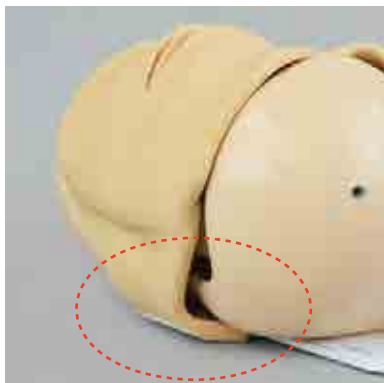
2. Store the birth canal unit assembled with the torso.

**It may deform if stored separately with the torso.**



3. Store the skin covered with the torso with the Velcro unfastened.

**Ensure that the Velcro part is not bent when storing in the case.**



# 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.

### Replacement Parts

Code	Name	Code	Name
11458-010	Replacement skin cover	11416-030	10 umbilical cords for omphalotomy
11458-030	Fetus	11416-040	5 velamen sheets
11416-020	Placenta	11415-040	Lubricant (500ml) without bottle



Replacement skin cover



Fetus



Placenta



10 umbilical cords for omphalotomy



5 velamen sheets



Lubricant (500ml) without bottle

### Optional Parts

Code	Name
11458-040	Postpartum Uterine Palpation Module
11458-050	Cervical Cytology Module (Pap smear)
11458-060	Fetus Ultrasound Examination Phantom



Normal



Abnormal



Cervical Cytology Module (Pap smear)



Fetus Ultrasound Examination Phantom

※ Coming soon.

For inquiries and service, please contact your distributor or KYOTO KAGAKU CO., LTD.

## ■ Worldwide Inquiries and Orders

**Kyoto Kagaku Head Office and Factories:**

**TEL : +81-75-605-2510 FAX : +81-75-605-2519**

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**Kyoto Kagaku America Inc.**

**TEL : 1-310-325-8860 FAX : 1-310-325-8867 3109**

**Lomita Boulevard, Torrance, CA 90505-5108, USA**

## ■ Europe, Russia & Africa

**Kyoto Kagaku Europe GmbH.**

**TEL : +49-69-5060-28160**

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**Level 23, One Island East, 18 Westlands Road, Island East, Hong Kong**

## ☐ **KYOTO KAGAKU co.,LTD**

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