

# Umbilical Cord Kit

# Instruction Manual

Thank you for purchasing the Umbilical Cord Kit.

Please read this instruction manual carefully to ensure correct use of the product, and store it in a safe place for easy access.

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## **Handling and Safety Precautions**

These precautions should be strictly observed in order to ensure safe, long-term use of the product.

## The following precautions should be observed particularly strictly:

- The model is made with a special material to simulate the texture of human skin. We recommend
  that it be handled carefully, in the same manner as an actual person. The model may become
  damaged by pulling at it with excessive force or if it suffers a strong impact, for example if
  dropped.
- 2. The material of the umbilical cord contained in this Umbilical Cord Kit has a distinct odor. This odor is not harmful to the human body and does not indicate poor quality. The distinct odor fades with time. There may also be a smell of baby powder remaining on the product, as baby powder is applied to the model during the manufacturing process.
- 3. Wear disposable gloves when practicing with the model.
- 4. Apply a moderate amount of lubricant (glycerin) to the fetal model and placenta model before use.
- 5. Please do not use oily lubricant (baby oil, olive oil etc.), alcohol lubricant, and lubricant containing organic solvent. These may cause breakage of the model.
- 6. In caring for the model, do not use rubbing alcohol, thinners, or benzin or other organic solvents on the model, as doing so may cause damage.
- 7. Do not use oil-based inks, pencil, chalk, or paints on the model, as they may cause permanent staining.
- 8. Placing objects directly on top of the model or placing it on uneven surfaces may change the shape of the model.
- 9. If the surface becomes sticky or after washing the model following use, apply baby powder all over the model to reduce friction.
- 10. The umbilical cord contained in this Umbilical Cord Kit may lose its shape after a long time. Check the shape of the model about 3 years after purchase. If it is deformed to the extent that correct functioning is affected, consider replacing it.
- 11. Air bubbles or impressions in the umbilical cord contained in this Umbilical Cord Kit that may remain from the manufacturing process do not affect the strength of the material, as the material used is strongly tear-resistant.



## **Handling and Safety Precautions**

These precautions should be strictly observed in order to ensure safe, long-term use of the product.

## Caring for the model after use

- 1. This model is washable. After washing, wipe off all the remaining water with a soft, dry gauze or cloth. After wiping off the water, pat baby powder all over the model. Wipe off all the remaining water to prevent the metal parts in the umbilical cord connector from rusting. If the metal parts become rusted to the extent that their functioning is affected, consider replacing the model. (Do not clean the model with rubbing alcohol, thinners, benzene or other organic solvents.)
- 2. Storing the umbilical cord contained in this Umbilical Cord Kit for an extended time in a highor low-temperature environment may cause its shape to change. Exposure to direct sunlight or ultraviolet rays may also alter its shape or color. Store the model at a temperature of 0-50°C, in a place where it will not be exposed to direct sunlight or ultraviolet rays.
- 3. Oil may leak from the umbilical cord contained in this Umbilical Cord Kit. When storing it, wrap the umbilical cord in paper towel, gauze or another cloth, and place it in the re-sealable plastic bag that comes with the kit.
  - 1. The contents of this instruction manual are subject to change without notice.
  - 2. This instruction manual may not be reproduced in part or in its entirety without permission.
  - 3. Please contact the manufacturer in the event that any errors or omissions are found in the contents of this instruction manual.
  - 4. This product should be used only as described in this instruction manual. In particular, the product should not be used in any way that contravenes the precautions noted in the instruction manual.

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## 1. Outline and Features

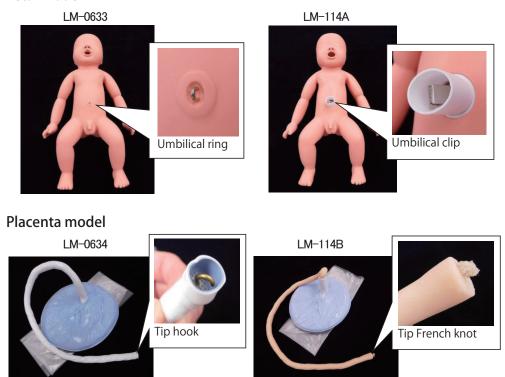
#### **Outline**

This umbilical cord model can be used to practice actual tying and cutting. It can be attached to Koken's fetal model and placenta model to practice performing delivery without stopping the sequence of steps from delivery of the fetus to delivery of the placenta. It therefore enables practice that retains the tension that would be felt during actual delivery.

#### **Features**

1. This model can be attached to the fetal model (LM-0633, LM-114A) and placenta model (LM-0634, LM-114B) to practice the entire sequence of steps from delivering the fetus to tying and cutting the umbilical cord and delivering the placenta.

#### Fetal model



- 2. The umbilical cord contained in this Umbilical Cord Kit has a tear-resistant texture that slides away from scissors when being cut. (There are no arteries or veins in the umbilical cord.)
- 3. The new material used is soft and tear-resistant, and enables trainees to practice tying an umbilical cord with an umbilical cord clamp.
- 4. A single umbilical cord contained in this Umbilical Cord Kit can be used multiple times to practice tying and cutting.

# 2. Components and Configuration



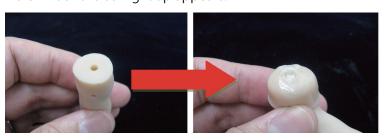


Umbilical cord Umbilical cord connector

# 3. Attaching the fetal and placenta models

## 3-1 Attaching the fetal model (LM-0633) and placenta model (LM-0634)

1) Take the umbilical cord contained in this Umbilical Cord Kit and roll down the end that has a hole in it until a string loop appears.



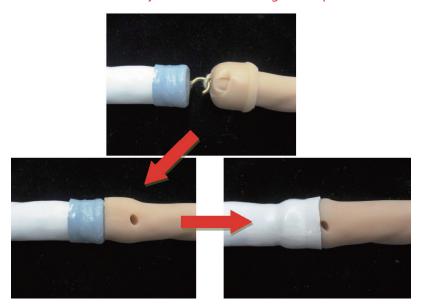


2) Roll down the end of the umbilical cord attached to the placenta model until a hook appears on the end.

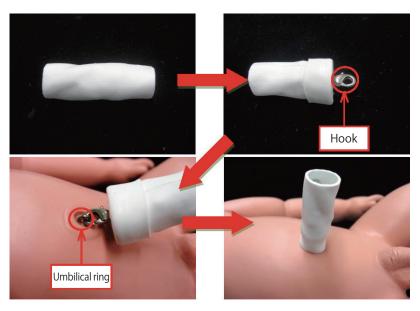




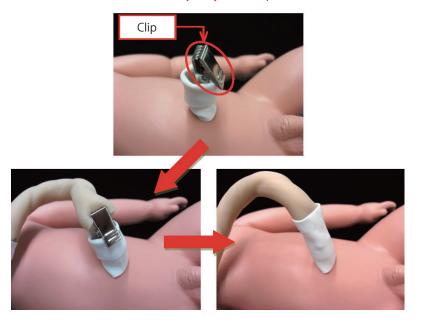
- 3) Place the hook of the placenta model on the string loop of the umbilical cord contained in this Umbilical Cord Kit. Unfold the edges of the ends that were rolled down so that the end of the umbilical cord of the placenta model covers the end of the umbilical cord contained in this Umbilical Cord Kit.
  - \* If the end of the umbilical cord contained in this Umbilical Cord Kit is not covered by the end of the umbilical cord of the placenta model, they will come apart during delivery.
  - \* Make sure the parts are not lubricated when attaching them together. It will be difficult to slide the umbilical cord of the placenta model over the umbilical cord contained in this Umbilical Cord Kit if they are lubricated during this step.



4) Roll down the end of the umbilical cord connector with a hook attached until the hook is visible, then attach the hook to the umbilical ring on the fetal model. After attaching the hook, unfold the end.



- 5) Roll down the end of the umbilical cord connector with a clip until the clip is visible, then clamp it onto the umbilical cord contained in this Umbilical Cord Kit. After clamping them together, unfold the end of the umbilical cord connector and onto the umbilical cord contained in this Umbilical Cord Kit.
  - \* If the end of the umbilical cord contained in this Umbilical Cord Kit is not covered by the umbilical cord connector, they may come apart.



- 6) Assembly is now complete. To re-attach the umbilical cord contained in this Umbilical Cord Kit after it is cut off, start the procedure again from step 5.
  - \* Apply adequate glycerin to the fetal model and placenta model as well as to the inside of the vulva when practicing delivery.

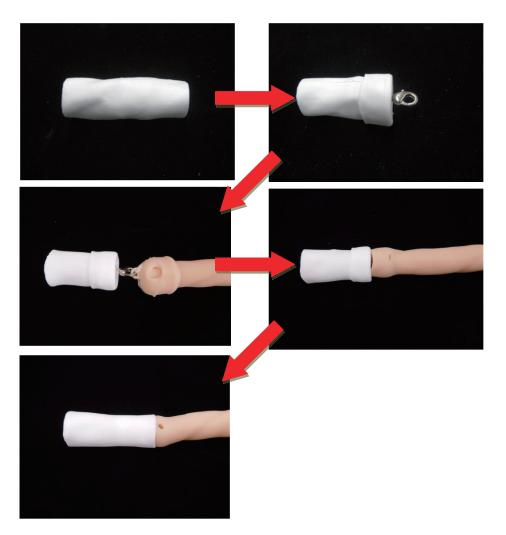


## 3-2 Attaching the fetal model (LM-114A) and placenta model (LM-114B)

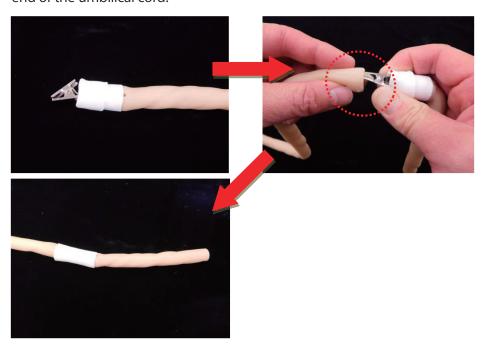
1) Take the umbilical cord contained in this Umbilical Cord Kit and roll back the end that has a hole in it until a string loop appears.



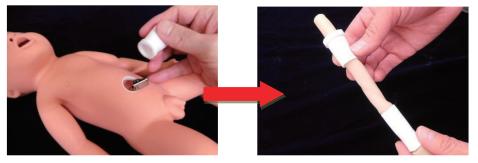
2) Roll back the end of the umbilical cord connector with a hook attached until the hook is visible, and then attach the hook to the umbilical ring of the umbilical cord contained in this Umbilical Cord Kit. After attaching the hook, unroll the edge of the end that was rolled back so it covers the end of the umbilical cord contained in this kit.



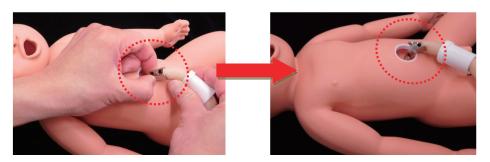
3) Roll back the end of the umbilical cord connector with a clip until the clip is visible, then clamp it onto the French knot on the placenta model's umbilical cord. After clamping them together, unroll the end of the umbilical cord connector that was rolled back so it covers the end of the umbilical cord.



4) Remove the umbilical cover from the fetal model, and then thread the outer part of the umbilical cord contained in this Umbilical Cord Kit through it.

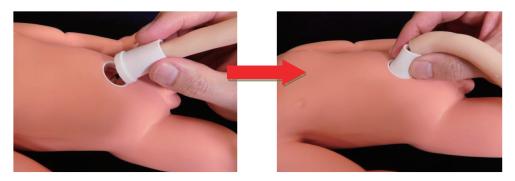


5) Clamp the umbilical cord contained in this Umbilical Cord Kit in place using the clip attached to the fetal model.



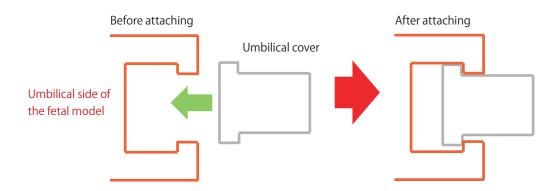
\* Make sure the parts are not lubricated when attaching them together. If the parts are lubricated with glycerin, etc. during this step, the umbilical cord contained in this Umbilical Cord Kit will become slippery and come off.

6) Attach the umbilical cover to the fetal model.



- \* Make sure the parts are not lubricated when attaching them together. If the parts are lubricated with glycerin, etc. during this step, the umbilical cover will become slippery and come off.
- \* Internal structure of the fetal model and the umbilical cover's connector

  There is a grove in the fetal model's umbilicus as shown in the figure below. Make sure to fit
  the umbilical cover's flange into the groove.



- 7) Assembly is now complete. To re-attach the umbilical cord contained in this Umbilical Cord Kit after it has been cut, restart the procedure from step 4.
  - \* Apply adequate glycerin to the fetal model and placenta model as well as to the inside of the vulva when practicing delivery.

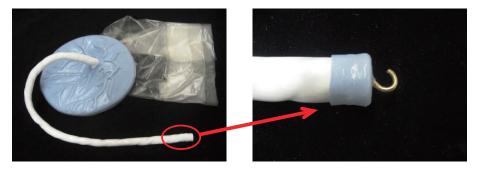


#### 3-3 Attaching the fetal model (LM-114A) and placenta model (LM-0634)

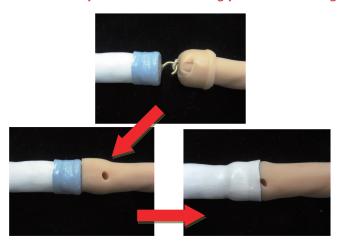
1) Take the umbilical cord contained in this Umbilical Cord Kit and roll back the end that has a hole in it until a string loop appears.



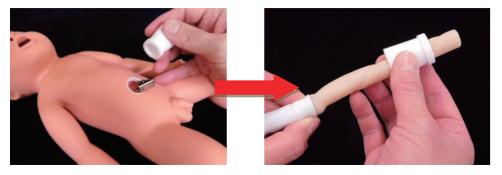
2) Roll back the end of the umbilical cord attached to the placenta model until a hook appears on the end.



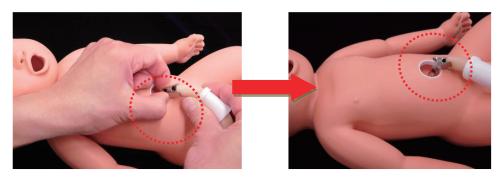
- 3) Hook the placenta model's hook onto the string loop of the umbilical cord contained in this Umbilical Cord Kit. Unroll the edge of the end that was rolled back so it covers the end of the umbilical cord contained in this kit.
  - \* If the end of the umbilical cord contained in this Umbilical Cord Kit is not covered by the end of the placenta model's umbilical cord, they may come apart during delivery.
  - \* Make sure the parts are not lubricated when attaching them together. It will be difficult to slide the placenta model's umbilical cord over the umbilical cord contained in this Umbilical Cord kit if they are lubricated with glycerin, etc. during this step.



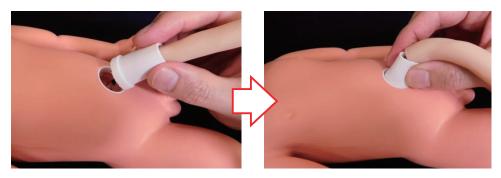
4) Remove the umbilical cover from the fetal model, and then thread the outer part of the umbilical cord contained in this Umbilical Cord Kit through it.



5) Clamp the umbilical cord contained in this Umbilical Cord Kit in place using the clip attached to the fetal model.

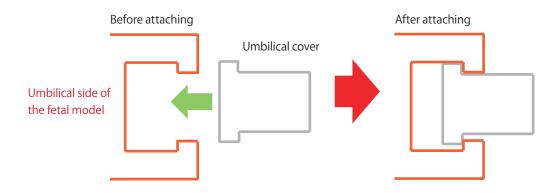


- \* Make sure the parts are not lubricated when attaching them together. If the parts are lubricated with glycerin, etc. during this step, the umbilical cord contained in this Umbilical Cord Kit will become slippery and come off.
- 6) Attach the umbilical cover to the fetal model.



\* Make sure the parts are not lubricated when attaching them together. If the parts are lubricated with glycerin, etc. during this step, the umbilical cover will become slippery and come off.

- \* Internal structure of the fetal model and the umbilical cover's connector.
- \* There is a grove in the fetal model's umbilicus as shown in the figure below. Make sure to fit the umbilical cover's flange into the groove.

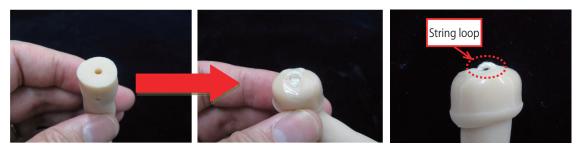


- 7) Assembly is now complete. To re-attach the umbilical cord contained in this Umbilical Cord Kit after it has been cut, restart the procedure from step 4.
  - \* Apply adequate glycerin to the fetal model and placenta model as well as to the inside of the vulva when practicing delivery.

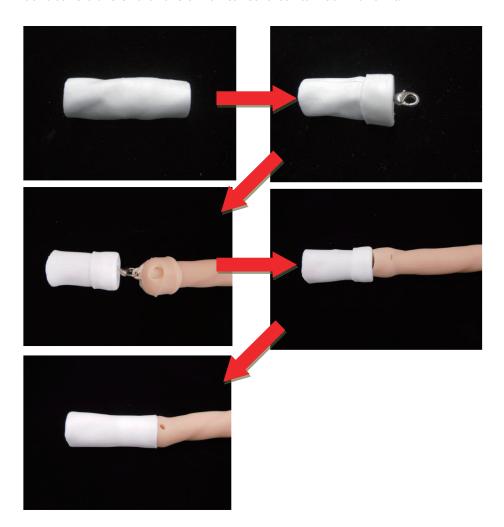


#### 3-4 Attaching the fetal model (LM-0633) and placenta model (LM-114B)

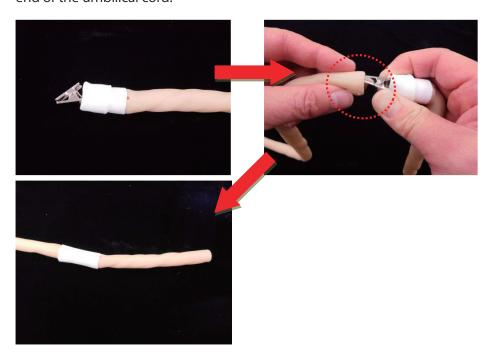
- \* Two umbilical cord connectors are needed.
- 1) Take the umbilical cord contained in this Umbilical Cord Kit and roll back the end that has a hole in it until a string loop appears.



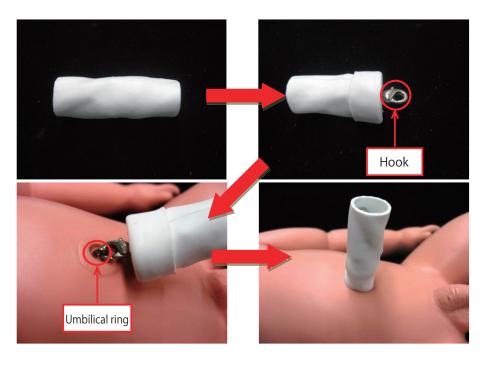
2) Roll back the end of the umbilical cord connector with a hook attached until the hook is visible, and then attach the hook to the umbilical ring of the umbilical cord contained in this Umbilical Cord Kit. After attaching the hook, unroll the edge of the end that was rolled back so it covers the end of the umbilical cord contained in this kit.



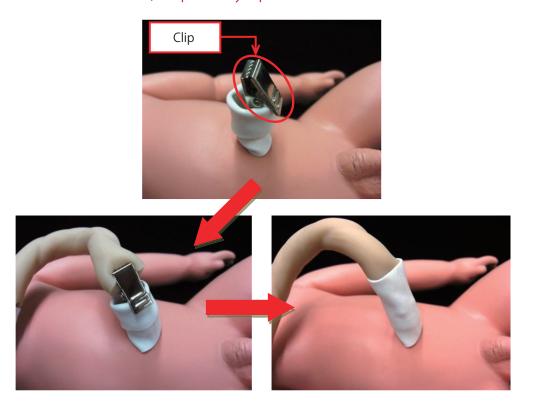
3) Roll back the end of the umbilical cord connector with a clip until the clip is visible, then clamp it onto the French knot on the placenta model's umbilical cord. After clamping them together, unroll the end of the umbilical cord connector that was rolled back so it covers the end of the umbilical cord.



4) Roll back the end of another umbilical cord connector with a hook until the hook is visible, then attach the hook to the umbilical ring on the fetal model. After attaching the hook, unroll the end.



- 5) Roll back the end of the umbilical cord connector with a clip until the clip is visible, then clamp it onto the umbilical cord contained in this Umbilical Cord Kit. After clamping them together, unroll the end of the connector that was rolled back so it covers the end of the umbilical cord contained in this kit.
  - \* If the umbilical cord connector does not cover the end of the umbilical cord contained in this Umbilical Cord Kit, the parts may separate.



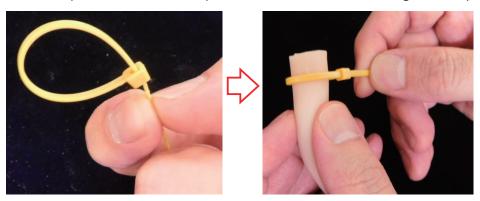
- 6) Assembly is now complete. To re-attach the umbilical cord contained in this Umbilical Cord Kit after it has been cut, restart the procedure from step 5.
  - \* Apply adequate glycerin to the fetal model and placenta model as well as to the inside of the vulva when practicing delivery.



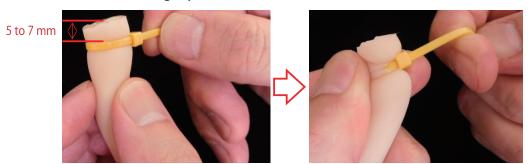
#### 3-5 When the umbilical cord kit comes off the umbilical cord connector (clip)

\*If the umbilical cord kit easily comes off the clip, follow the procedure below for attachment.

1) Make a loop with a cable tie and pass the umbilical cord kit through the loop.



#### 2) Tie the cable tie tightly.



\*The cable tie may come off the umbilical cord if the position where it is tied is too close to the edge. Tie with a cable tie with a margin of 5 to 7 mm from the edge.

\*If the part is lubricated with glycerin, etc. during the attachment process, the cable tie will become slippery and cannot be attached to the umbilical cord.

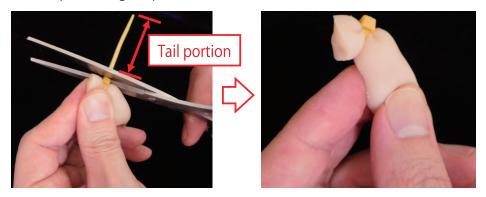
Wipe off any lubricant, etc. before attachment.

#### \*Size of cable ties

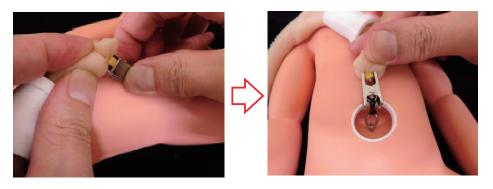
Use cable ties with a width of 2 to 3 mm for connecting the umbilical cord.

If it is not the right size, it may be difficult to tie the umbilical cord or the clip of the fetal model may not be able to clip the head.

3) Cut the protruding tail portion of the cable tie.



4) Clip the head of the cable tie with the clip of the fetal model.
When attaching the part to the fetal model (LM-0633), use the clip of the umbilical cord connector.



# **4. Model Configuration Chart**

# Umbilical Cord Kit (LM-101D)

Product name	Quantity	
Umbilical cord	1	
Umbilical cord connector	1	
Instruction Manual (this document)	1	

# Optional item Umbilical cord for replacement (10 pcs) (LM-101E)

Product name	Quantity	
Umbilical cord	10	
Handling Precautions	1	

# 5. Specifications

Product name	Total length	Diameter	Weight
Umbilical cord	Approx. 12 cm	Approx. 1.4 cm	Approx. 16 g
Umbilical cord connector	Approx. 4 cm	Approx. 1.6 cm	Approx. 7 g