

# Maternity Model Type II

LM-043N

## Instruction Manual

Thank you for purchasing the Maternity Model Type II.  
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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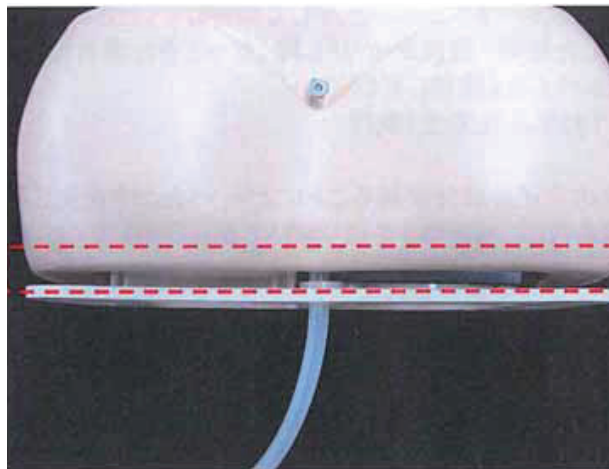
## Handling and Safety Precautions

**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:**

1. The skin is made of a special silicone with a texture that is similar to human skin, and the abdominal wall piece is made with a special material that is soft to the touch. Please handle these models with the same care that you would exercise when working with a human body. Applying excessive force may damage the model.
2. The material of the abdominal wall piece has a distinct odor. This odor is not harmful to the human body and does not indicate poor quality. The distinct odor fades over time. There may also be a smell of baby powder remaining on the model, as baby powder is applied during fabrication.
3. The abdominal wall piece may become sticky due to the oil component. Always place it correctly in the protective sheet (provided as an accessory) before storage. If it becomes too sticky after use or after washing, it may be difficult to set the skin in place. In these cases, apply baby powder (provided as an accessory) liberally to the abdominal wall piece.  
\*See "Caring for the Model" on page 10.
4. The skin may become sticky from the oil component in the abdominal wall piece. If this happens, wash the skin in water to remove the oil before use.  
To prevent the oil from getting onto the skin, always place the abdominal wall piece correctly in the protective sheet (provided as an accessory) before storage.  
\*See "Caring for the Model" on page 10.
5. The abdominal wall piece may change its shape over a prolonged period. Check the shape of the part about three years after purchase. If it is deformed to the extent that its function is affected, consider replacing it.
6. Air bubbles or impressions in the abdominal wall piece that may remain from the fabrication process do not affect the strength of the material, as the material used is tear-resistant.
7. Do not use oil-based inks, pencil, chalk, or paints on the model because they may cause permanent staining.
8. 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.

9. In caring for the model, do not use rubbing alcohol, thinners, or benzine or other organic solvents on the model, as doing so may cause damage.
10. Do not use the model outdoors or in damp places; doing so may damage the model.
11. Placing objects directly on top of the model or placing it on uneven surfaces may cause deformation.
12. For the power supply, always use the AC adapter provided as an accessory.
13. An excessive amount of air injected into the amnion may damage the amnion. When injecting air, palpate the abdomen of the model to check the tension in the amnion.
14. When setting the skin on the body, the skin may have wrinkles or sags due to the construction of the model. Please note that it may not always be possible to completely remove these wrinkles and sags.
15. Storing the model for an extended period in a high or low temperature environment or under exposure to direct sunlight may cause the oil component in the abdominal wall piece to ooze out, causing deformation or discoloration of the model. If possible, store the model at 10-50° C, away from direct sunlight.
16. Take care to avoid touching the internal parts through the gap between the panel and the body; doing so may cause the internal electronic device to malfunction.



17. This product is intended for use in standard operating environments. Do not use it in heavy industrial settings.
18. Urethane foam is used in some parts of this product, making them susceptible to damage from pests. Store the product in a location pests cannot gain access to.

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

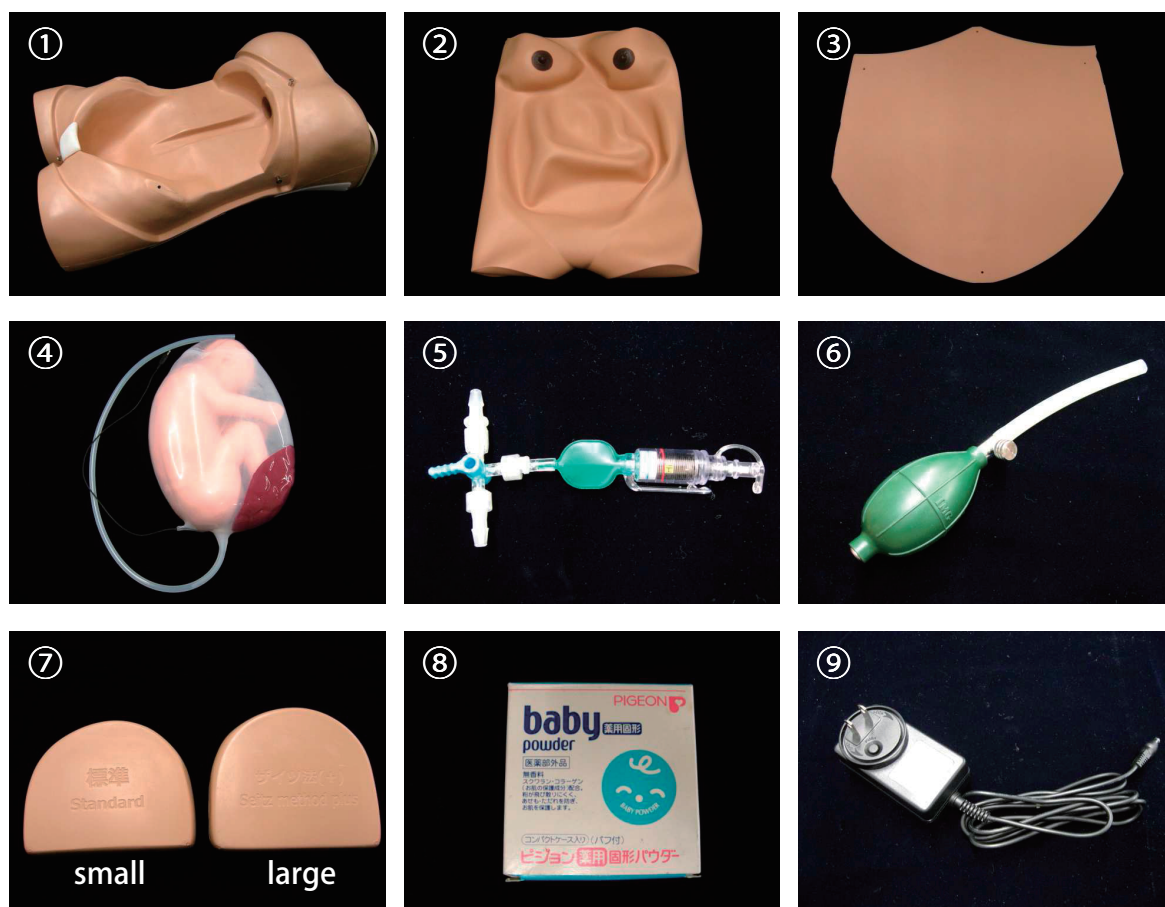
## Outline

The four types of Leopold's Maneuvers, fetal heartbeat monitoring, and abdominal measurement can be practiced. The abdominal wall piece is made of soft, stretchy material, and the abdomen can be inflated with air as a substitute for amniotic fluid; thus, reproducing a highly realistic sensation. An internal synthesizer reproduces a realistic fetal heartbeat sound. Volume and speed are adjustable.

## Features

1. The trunk skin and fetus material are made of a special silicone rubber with an appearance and texture that closely simulates human skin, for realistic practice.
2. The model contains a pelvis that enables realistic palpation to check the pubic symphysis and the ilium during uterine fundal height measurement and external pelvimetry, with a sensation that closely resembles an actual human body.
3. The amnion can be filled with air to make handling and control easier. The air pressure level of the air in the amnion can be checked with an indicator and adjusted to change the palpation sensation.
4. An internal synthesizer enables auscultation of a realistic fetal heartbeat sound. The volume and speed are freely adjustable.
5. Traube stethoscope monitoring of the fetal heartbeat can be practiced. The heartbeat sound can also be emitted from a speaker on the side of the panel.

## 2. Components and Configuration

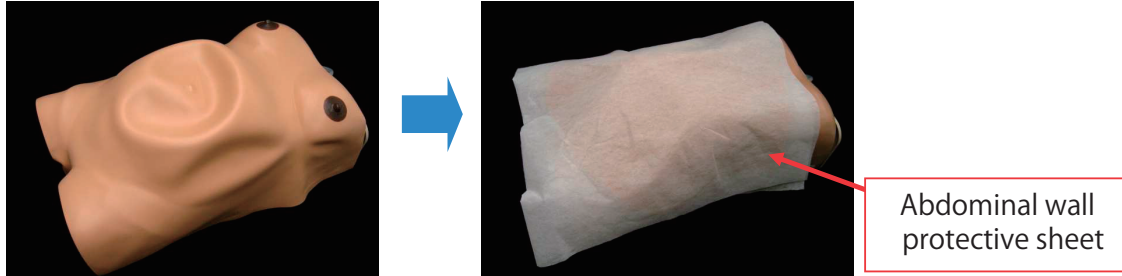


	Components	Quantity
①	Body	1
②	Skin	1
③	Abdominal wall piece	1
④	Fetus in amnion	1
⑤	Amnion indicator	1
⑥	Rubber bladder	1
⑦	Birth canal pads (1 small, 1 large)	2
⑧	Baby powder	1
⑨	AC adapter	1
	Abdominal wall protective sheet	1
	Storage bag	1
	Instruction Manual (this document)	1

### 3. Setting up the Model

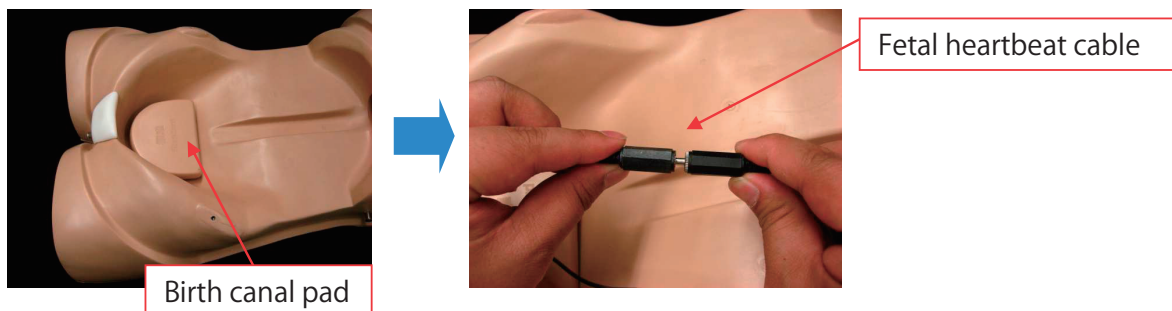
#### 3-1. Attach the fetus in amnion

1) Remove the main body from the storage bag and remove the skin.



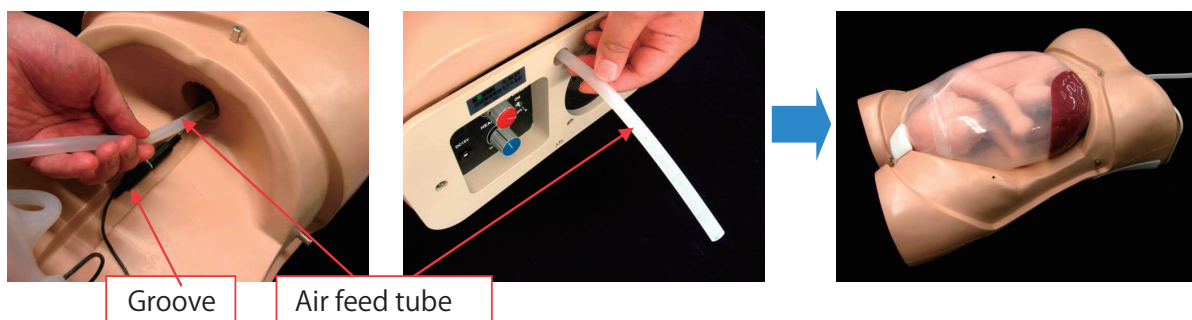
2) Remove the abdominal wall piece that is wrapped in the abdominal wall protective sheet and the fetus in amnion from the body; then, place a birth canal pad as shown below. Connect the fetal heartbeat cable.

- \* { No birth canal pad ... Seitz method (-)
- { Birth canal pad (small) ... normal
- { Birth canal pad (large) ... Seitz method (+)



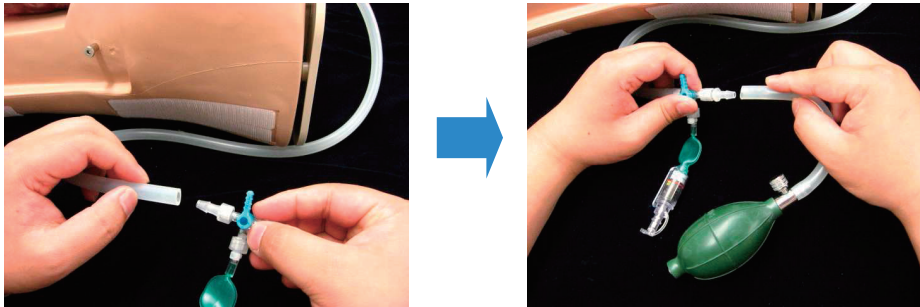
3) As shown in the illustration, thread the air feed tube through the panel from the inside of the body to outside the body, and set the fetus in amnion in the body.

\*The position and orientation of the fetus in amnion can be readily adjusted. When setting it in the breech presentation, place the air feed tube in the groove on the inside of the body so that it does not interfere.



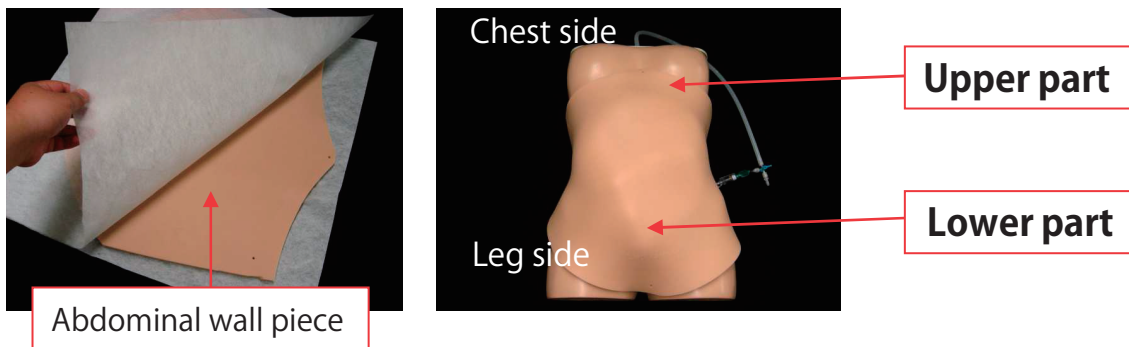


- 4) Attach the amnion indicator to the air feed tube. Then, attach the rubber bladder to the amnion indicator.

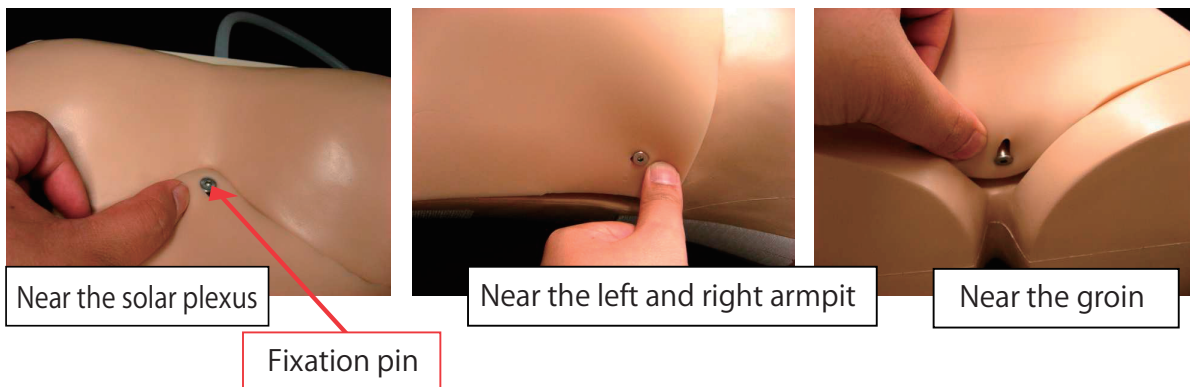


### 3-2. Attach the abdominal wall piece

- 1) Take the abdominal wall piece out of the abdominal wall protective sheet and place it on the body with the fetus in amnion in place. Place it in the body so that the "Upper part" and "Lower part" marks on the abdominal wall piece are positioned as shown below.



- 2) Anchor the abdominal wall piece onto the fixation pins on the body. Four fixation pins are supplied.



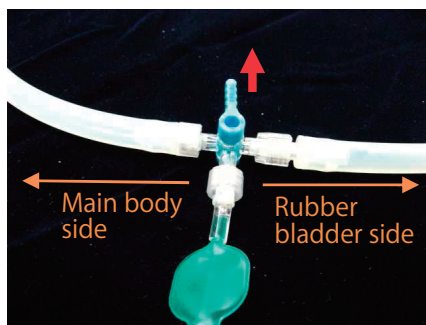
### 3-3. Attach the skin

- 1) After anchoring the abdominal wall piece to the fixation pins, place the skin over the main body.

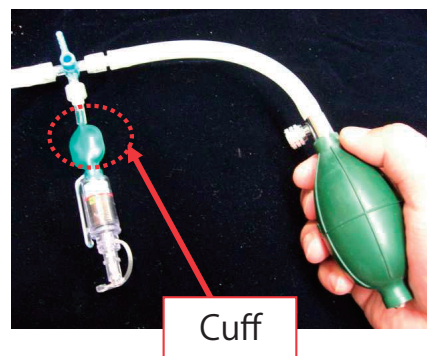
\*Do not secure the hook and loop fasteners on the sides at this time.



- 2) Set the amnion indicator stopcock in the opposite direction of the amnion indicator (the direction shown by the red arrow in the picture).

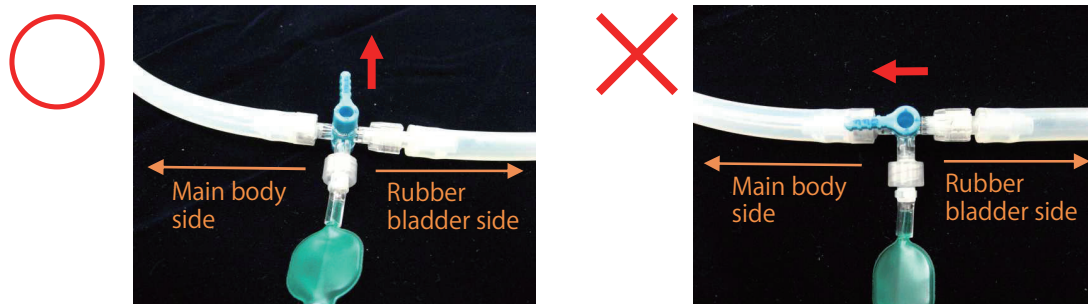


- 3) Twist the valve on the rubber bladder clockwise to close it, and fill the rubber bladder with air. When doing so, be careful not to twist the cuff of the amnion indicator. Placing the amnion indicator on a table facilitates filling the rubber bladder with air.



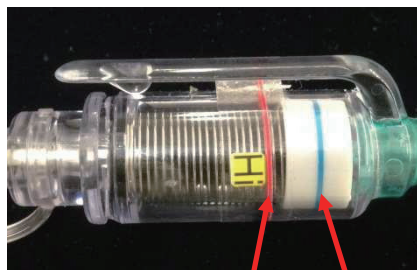
[NOTE]

Filling the rubber bladder with air while the amnion indicator stopcock is in the incorrect position may cause damage to the cuff. Always check the stopcock position before filling the rubber bladder with air.



- 4) Adjust the amount of air in the amnion while observing the amnion indicator. The red line on the amnion indicator is the maximum level for filling the amnion with air. The blue line indicates the current volume of air. To add air, pump air into the amnion using the rubber bladder. To remove air, twist the valve on the rubber bladder counter-clockwise to loosen it.

\*Filling the amnion with a volume of air that exceeds the red line (maximum) on the amnion indicator may cause the amnion to rupture. Be sure to maintain the air volume below the red line (maximum).



Red line (maximum)

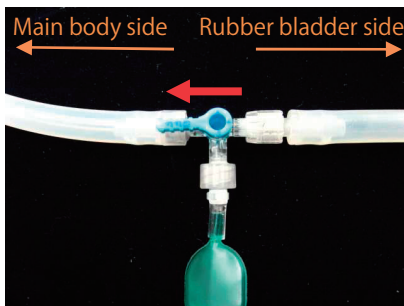
Blue line (current volume of air)

[REFERENCE]

As the volume of air in the amnion becomes larger, the situation where palpation is more difficult can be simulated. Using a smaller volume of air simulates the situation where palpation is easier. Adjust to suit the situation.

- After adjusting the volume of air in the amnion, set the amnion indicator stopcock in the direction of the tube on the main body side (the direction shown by the red arrow in the illustration) to prevent air from leaking out of the amnion.

\*If this step is skipped, air will slowly leak out of the amnion over time.



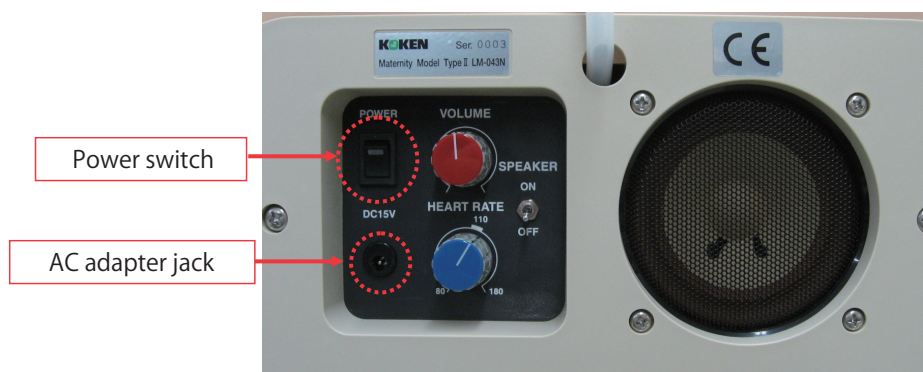
- Secure the hook and loop fasteners in four places on each side of the skin. Smooth down the skin vertically and horizontally to push wrinkles and sags on the abdomen outwards. Pull the skin taut and secure the hook and loop fasteners.

\*Depending on the volume of air injected, it may not always be possible to completely remove these wrinkles and sags.



### 3-4. Turn on the power

- Connect the AC adapter connector to the AC adapter jack on the panel. Plug in the cord, and press the power switch on the panel.

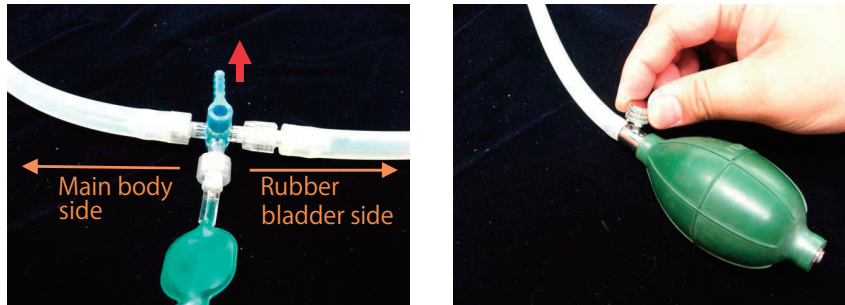


- Adjust the fetal heartbeat volume with the VOLUME dial on the panel, and the speed of the fetal heartbeat with the HEART RATE dial. The SPEAKER switch is used to switch emission of the fetal heartbeat sound to an external speaker.

## 4. Caring for the Model

(1) Remove the air from the amnion before storing.

To remove the air, turn the amnion indicator stopcock back in the opposite direction of the amnion indicator (the direction shown by the red arrow in the picture), and twist the valve on the rubber bladder counter-clockwise to loosen it.



(2) Wrap the abdominal wall piece in the abdominal wall protective sheet provided as an accessory, then place it back on the main body and place the skin over the top to store.

\*1. The abdominal wall protective sheet prevents the oil component from oozing out of the abdominal wall piece to the skin and other parts.

\*2. If the oil component contained in the abdominal wall piece oozes out to the skin and other parts, it will promote deterioration of the product. Be sure to wrap the abdominal wall piece in the abdominal wall protective sheet for storage.

\*3. If the abdominal wall piece becomes sticky, apply the baby powder provided as an accessory generously to the piece.



(3) If the model becomes dirty, wipe it with a moist gauze or similar soft material using a neutral solvent diluted with water.

\*Do not clean it with rubbing alcohol, thinners, benzene, or other organic solvents.

(4) Place the model in the proper orientation when storing to prevent deformation.

(5) Storing the model for an extended time in a high or low temperature environment, or under exposure to direct sunlight, may cause the oil component in the abdominal wall piece to ooze out, causing deformation or discoloration of the model. If possible, store the model at 10-30° C, away from direct sunlight.

(6) Place the model in the storage bag provided as an accessory when storing.

## 5. Specifications

Product name	Length	Width	Height	Weight
Maternity Model Type II Main Body	Approx. 35 cm	Approx. 52 cm	Approx. 23 cm	Approx. 11 Kg
Storage bag	Approx. 35 cm	Approx. 63 cm	Approx. 35 cm	Approx. 1 Kg