

Small Intestine for Colonoscopy (semi-difficult type)

LM-107A

Small Intestine for Colonoscopy (easy type)

LM-107B

Instruction Manual

Thank you for purchasing the Small Intestine for Colonoscopy.
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 to ensure safe, long-term use of the product.

The following precautions should be especially adhered to:

○ Regarding the LM-107A Small intestine for Colonoscopy (semi-difficult type)/LM-107B Small intestine for Colonoscopy (easy type)

1. This product is made with special silicone rubber to simulate the texture of human skin, and excessive force may damage the products. So we recommend that it be handled as carefully as actual biological material.
2. Before using this product, be sure to apply a generous amount of endoscope lubricant to the inside of it. For details, refer to "2-2: Applying lubricant jelly" on page 14. An insufficient amount of lubricant may cause the endoscope to get stuck inside of the model, which could possibly break it.
3. Do not place objects on the main unit, as doing so may alter its shape.
4. Do not use thinner, benzine or other organic solvents on this product. Doing so may cause its color to fade or deform its shape.
5. Do not use oil-based inks, pencils, chalks, or paints on this product as they may cause permanent staining.
6. When transporting this product in its storage case, make sure the metal latches are closed. Also, if the storage case is tilted or experiences heavy shock, the case or model may break as a result.

Caring for the model after use

1. After using this product, thoroughly flush out the lubricant with cold or hot water.
2. To clean the storage case, wipe with gauze or similar material moistened with water or a watered-down, mild detergent.
* Do NOT use thinner, benzine, or other solvents to clean the storage case.
3. Keeping this product in direct sunlight or exposed to UV light for a long period of time may cause it to deform or degrade. When not in use, keep it in the storage case in a flat area away from direct sunlight or UV light.

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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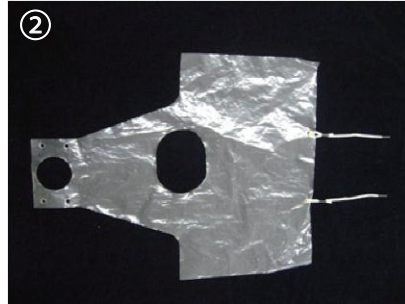
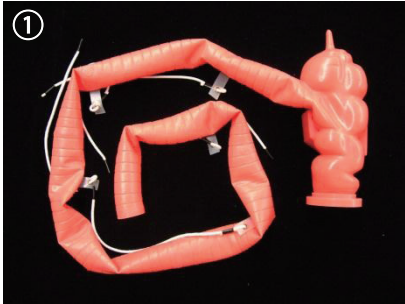
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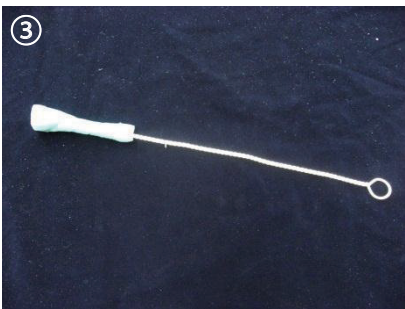
2-1 How to change Small Intestine for Colonoscopy

2-2 Applying lubricant jelly

1. Components and Configuration



* The Small Intestine for Colonoscopy with white elastic cords is easy type and that with yellow elastic cords is semi-difficult type.



	Name	Quantity
①	Small Intestine for Colonoscopy	1
②	Intestinal sheet	1
③	Sponge for lubricant application	1
④	Round stoppers	5
—	DVD version of Instruction Manual	1
—	Instruction Manual (this booklet)	1

[Caution]

A simulated polyp cannot be attached to the ascending colon when Small Intestine for Colonoscopy (this product) is attached to the Colonoscopy Simulator Type II.

2. Handling Methods

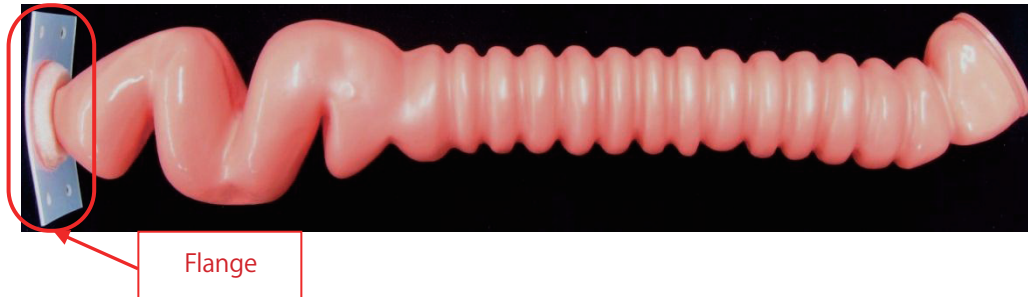
2-1 How to change Small Intestine for Colonoscopy

* The same method applies to both easy and semi-difficult types of the product.

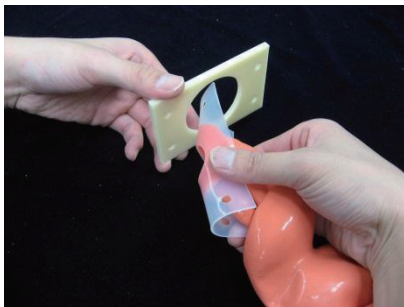
1) Place the rectum/sigmoid colon in the direction shown in the illustration, below.

* This is the overhead view of the rectum/sigmoid colon attached to the main unit.

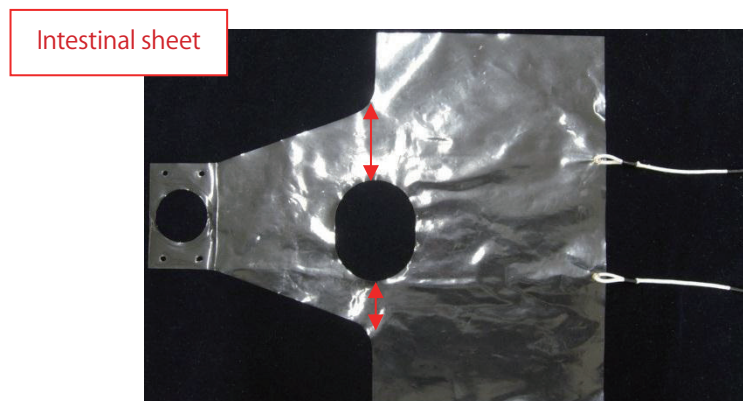
* Be sure to install the rectum/sigmoid colon into the main unit in this direction.



2) Insert the flange of the rectum/sigmoid colon into the flange plate.

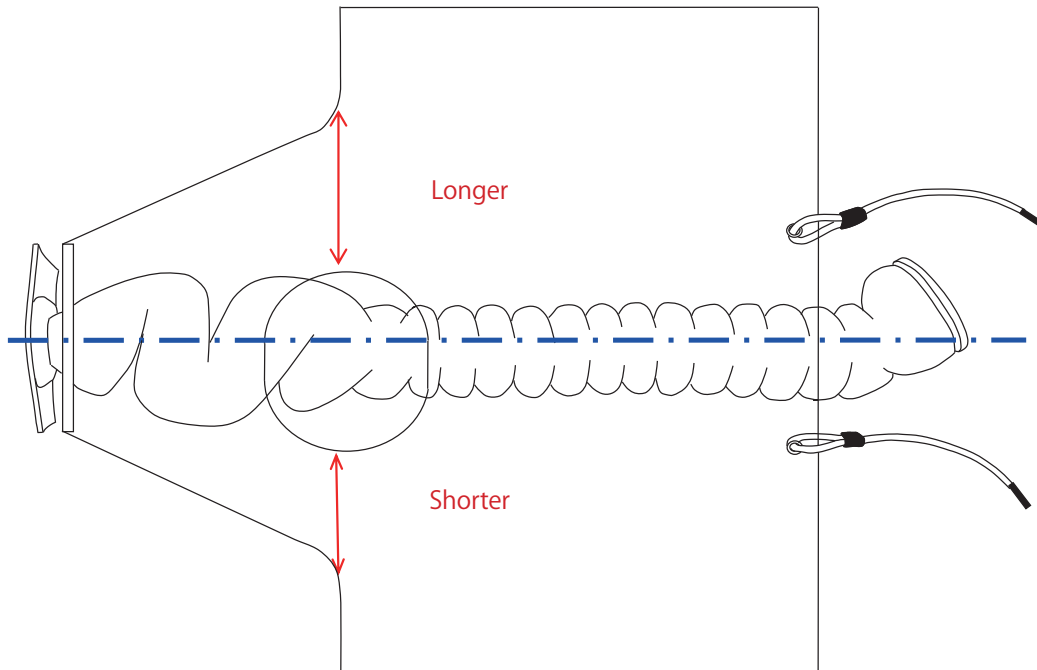


3) Place the intestinal sheet in the correct direction as shown in the illustration below.

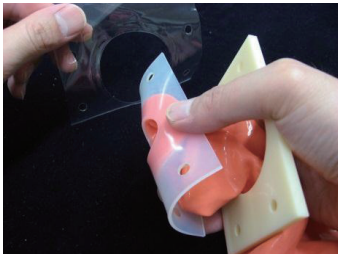


* Note that the intestinal sheet is not bilaterally symmetric.

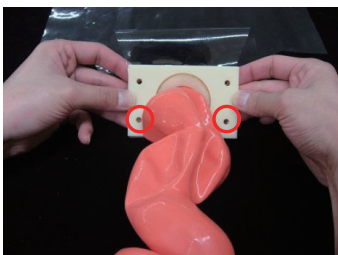
When the rectum/sigmoid colon is covered with the intestinal sheet, the positions of the sheet and the colon should be as shown in the illustration below.



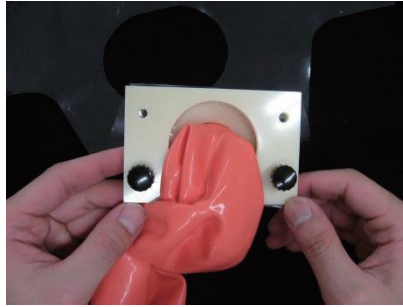
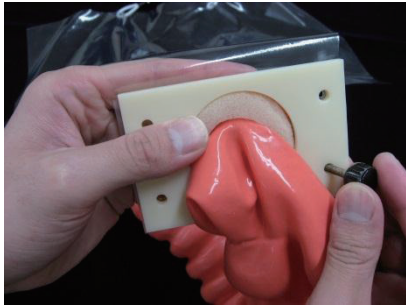
4) Insert the intestinal sheet between the rectum/sigmoid colon flange and the flange plate.



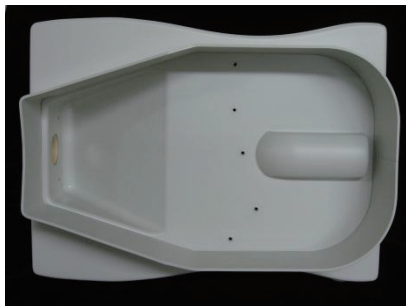
5) Align the openings of the rectum/sigmoid colon flange and the intestinal sheet with the openings (the two areas circled in the illustration below) of the flange plate.



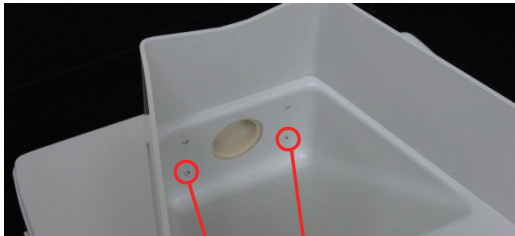
6) Insert the larger screws into the openings.



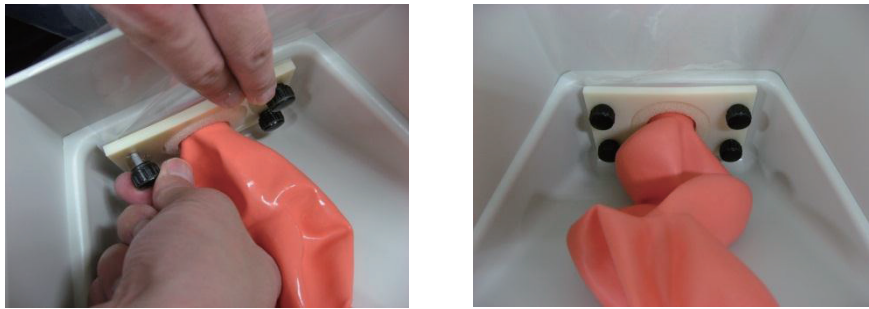
7) Place the main unit in the direction as shown in the illustration below.



8) Attach the rectum/sigmoid colon flange to the main unit (to the anal side of it) with the larger screws.



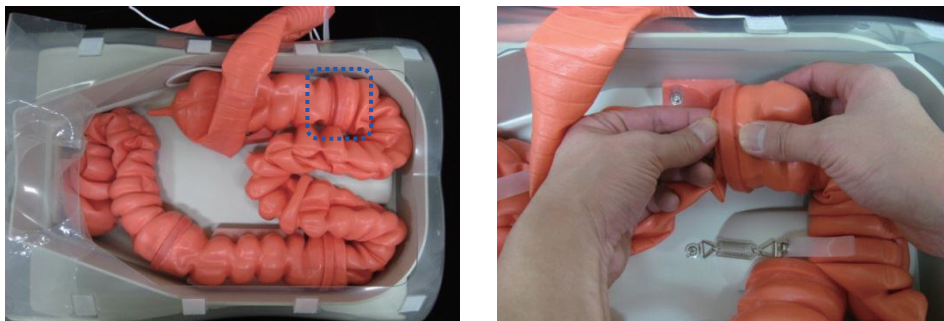
9) Similarly, attach the two upper areas of the rectum/sigmoid colon flange to the main unit with the larger screws.



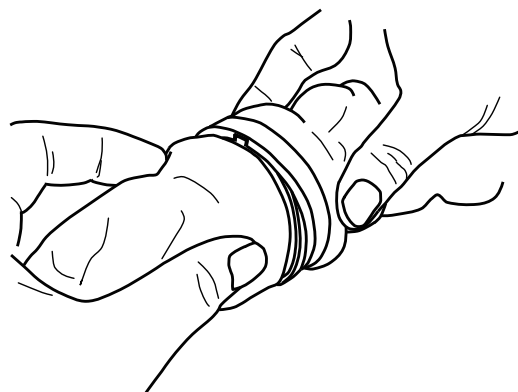
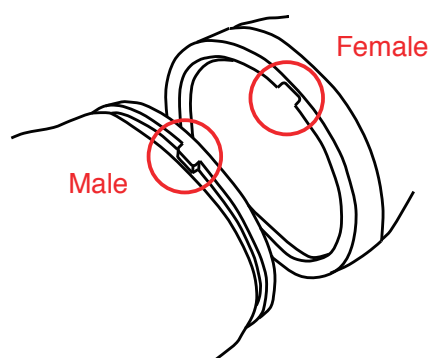
10) Connect the transverse colon to the descending colon and the descending colon to the rectum/sigmoid colon, and then attach the descending colon to the main unit.



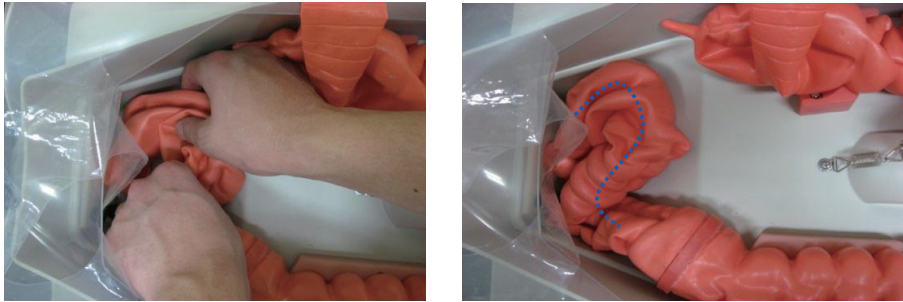
11) Connect the Small Intestine for Colonoscopy to the transverse colon, and install pins at the side of the main unit into the holes in the holding table.



* Make sure to align notch marks on each connector.



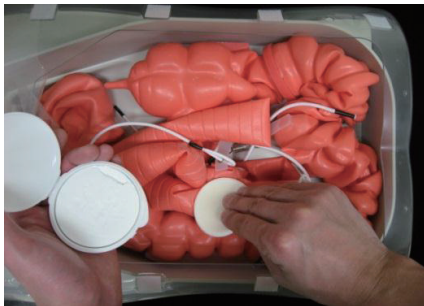
12) Bend the sigmoid colon into an "S" shape to place it in the main unit.



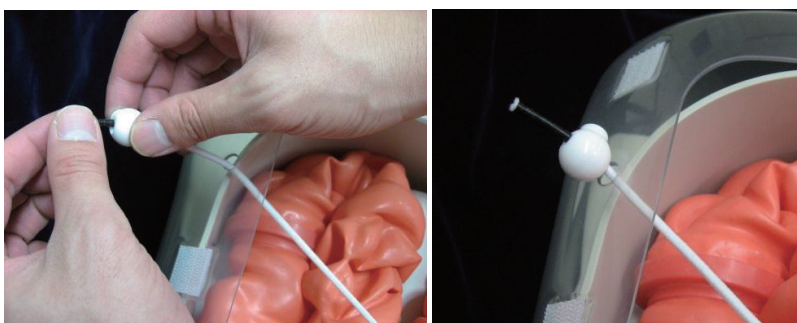
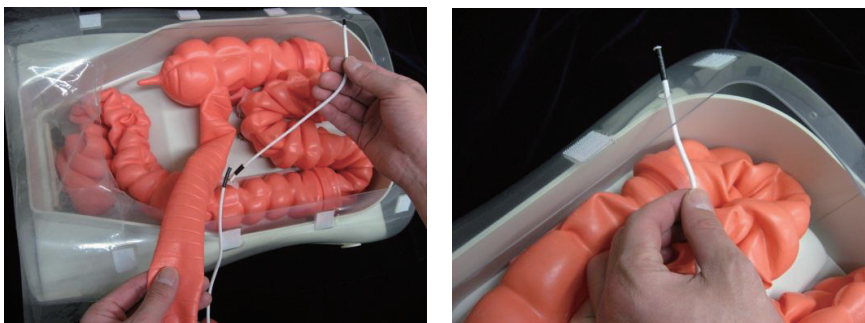
13) Apply a generous amount of powder to the outer surface of the intestine.

* Powder is not included with this product. Use commercially-available powder such as baby powder.

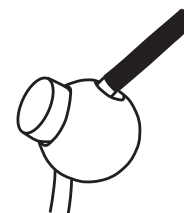
* Before using the model, be sure to apply a generous amount of powder to the outer surface of the intestine. Insufficient application of powder may increase the intensity of inter-intestinal resistance and make the insertion of the scope difficult.



14) Pass the first cord from the ascending colon through the opening in the transparent cover of the main unit and affix it with a round stopper.



Position of the affixed round stopper

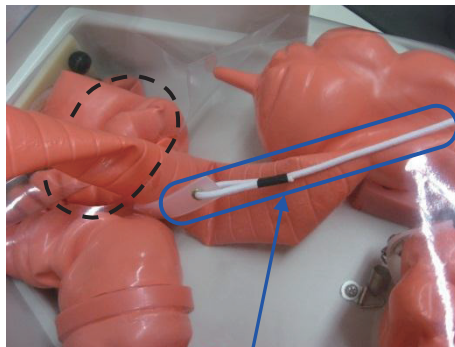
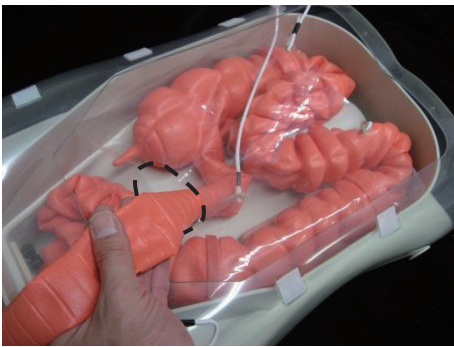


15) Cover the intestine with the intestinal sheet.



16) Insert the small intestine through the opening in the intestinal sheet.

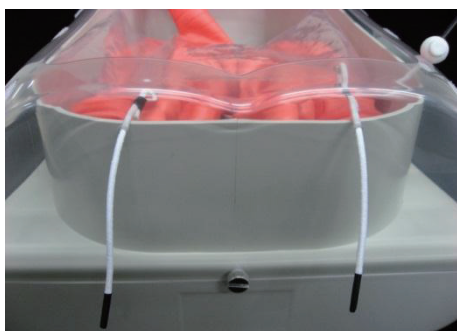
* Pass it to just before the first cord from the ascending colon side.



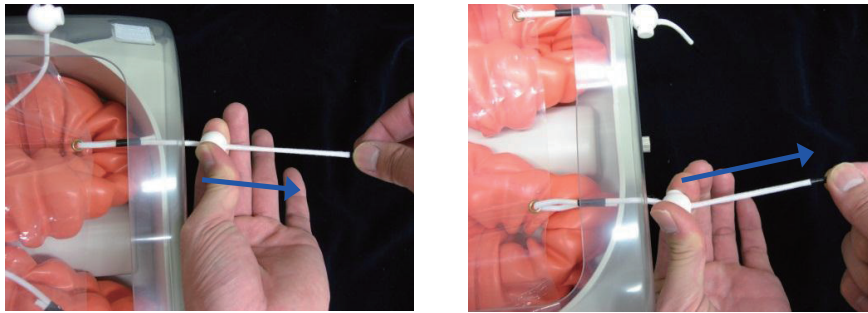
The first cord from the ascending colon side and its fastener should not be inserted through the opening of the intestinal sheet.



17) Insert the cord of the intestinal sheet through the opening in the transparent cover of the main unit.



18) Pull the cord such that the sheet becomes taut, and affix it with a round stopper.

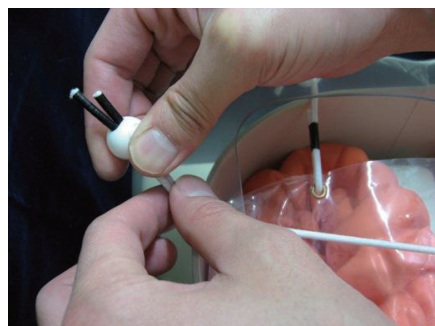


* The length from the round stopper to the end of the cord is approximately 8 cm.

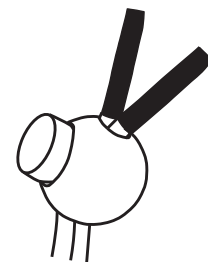
19) Insert the second and third cords from the ascending colon side into the openings in the transparent cover of the main unit and secure them to the cover with round stoppers.



* Insert the cords one by one, not both cords simultaneously, in the openings of the transparent cover of the main unit and the round stopper.



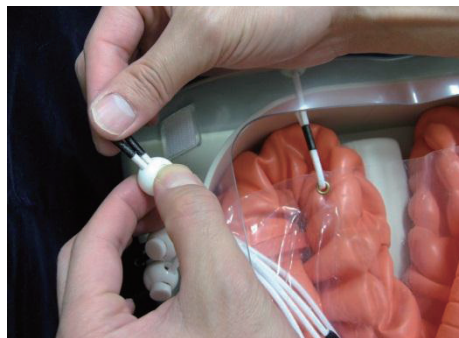
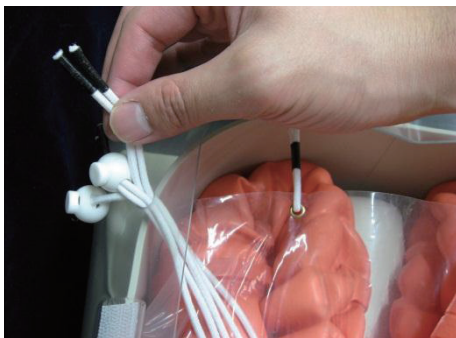
Position of the affixed round stopper



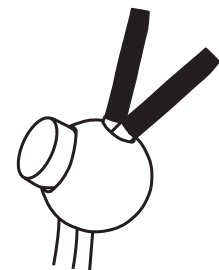
20) Insert the fourth and fifth cords from the ascending colon side into the openings in the transparent cover of the main unit and secure them to the cover with round stoppers.



* Insert the cords one by one, not both cords simultaneously, in the openings of the transparent cover of the main unit and the round stopper.

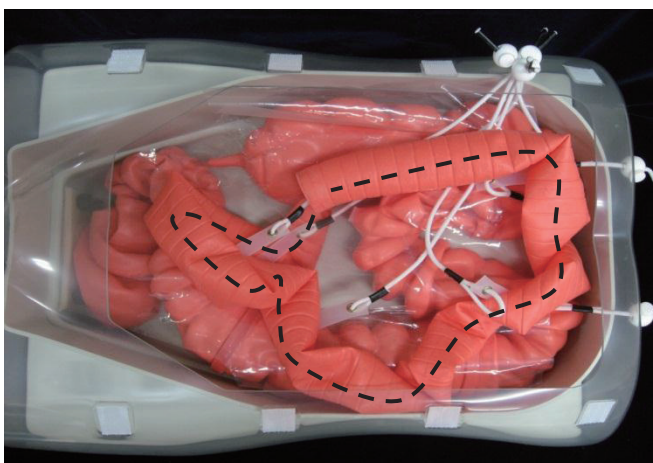


Position of the affixed round stopper



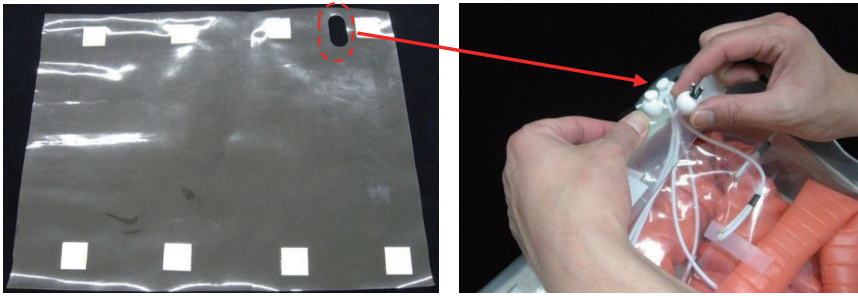
21) Place the model carefully on the sheet so that it does not twist.

* Any part of the model, from the openings in the intestinal sheet to the end of the small intestine, should not be placed atop any other part of the model.



22) Insert the round stoppers through the openings in the simulated peritoneal membrane sheet.

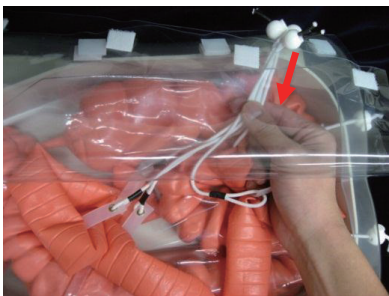
* Insert round stoppers one by one into the openings.



23) Fasten Velcro tapes on each side of the openings in the simulated peritoneal membrane sheet.



24) Pull the cords of the intestine to align round stoppers with each other.



* Pull the cords from inside of the simulated peritoneal membrane sheet in the direction of the arrow to align the round stoppers with the transparent cover of the main unit.

25) Fasten the other Velcro tapes.



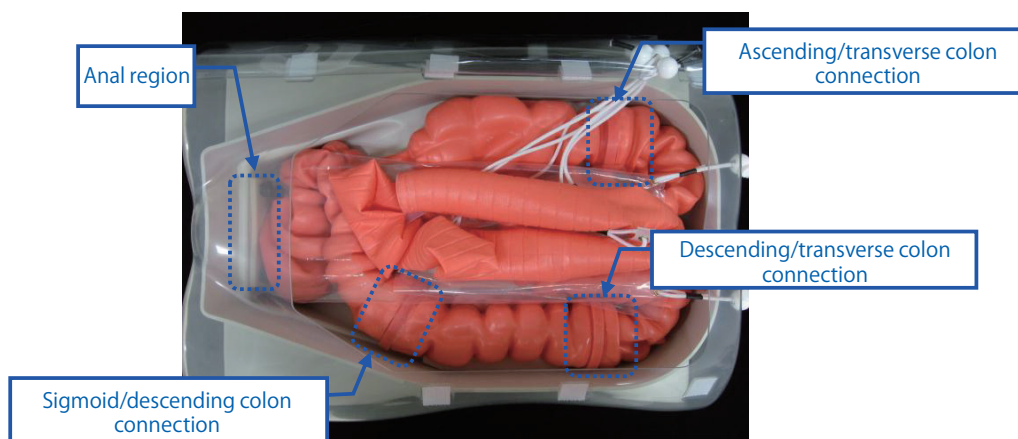
2-2 Applying lubricant jelly

* The same method applies to both easy and semi-difficult types of the product.

* Before using the model, be sure to apply a generous amount of lubricant jelly to the inside of the intestine. Insufficient application of lubricant may increase the resistance between the intestine and the scope/balloon and make the insertion of the scope/balloon difficult.

* Use lubricant jelly that is specifically designed for balloon endoscopes.

Lubricant should be applied to the following four openings:

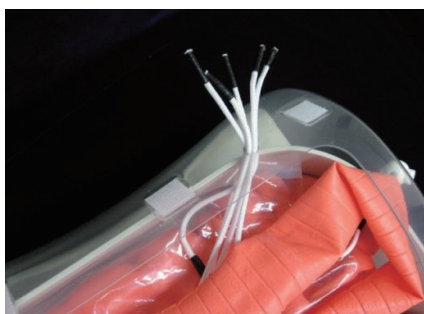


1) Pull out the round stoppers through the openings in the simulated peritoneal membrane sheet and then remove the sheet.

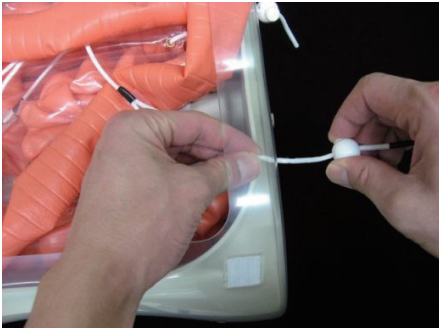


2) Remove the round stoppers for the small intestine.

* Pull the cords one by one in order not to damage their tips.



3) Remove the round stoppers (at the two areas shown in the illustration, below left) from the intestinal sheet.



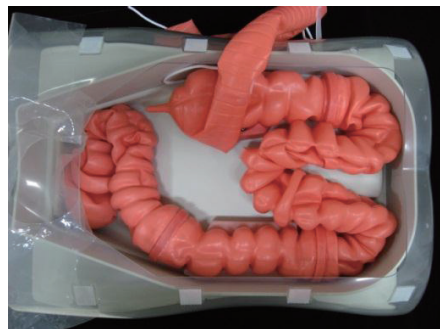
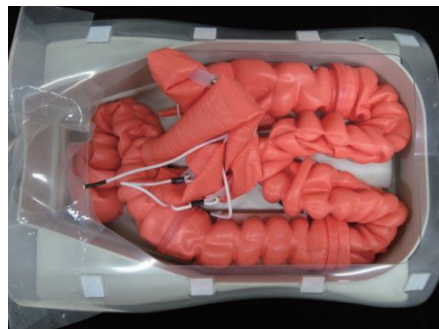
4) Remove all the cords from the openings in the transparent cover of the main unit.



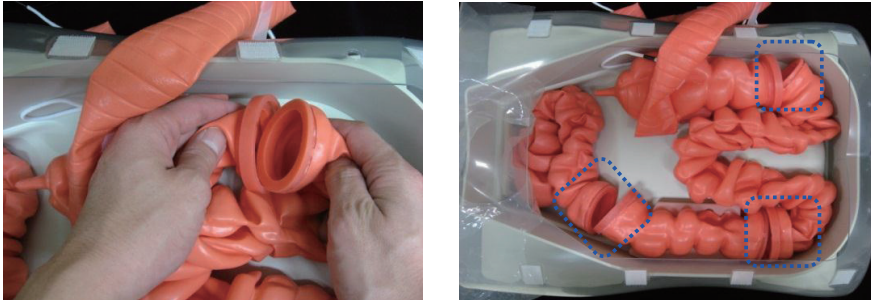
5) Insert the small intestine down through the opening in the intestinal sheet.



6) Turn over the intestinal sheet and remove the small intestine from the main unit.



7) Detach the colon connectors from three points.



8) Soak the sponge provided for lubricant application with lubricant jelly as shown in the illustration below

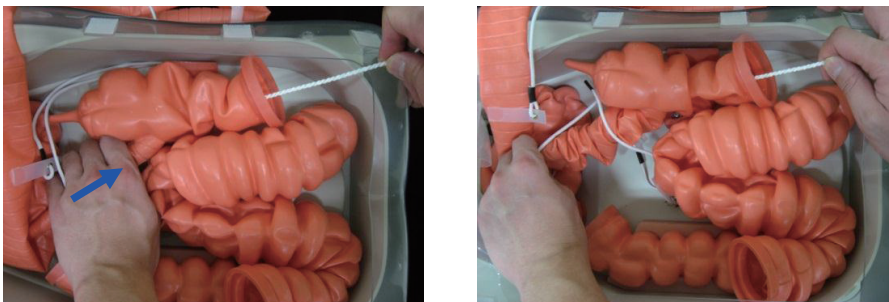
*** After applying lubricant to each part with the sponge, the sponge should be resaturated with lubricant jelly.**



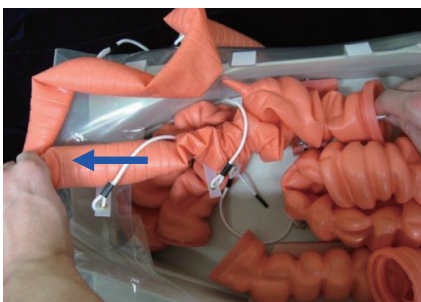
9) Apply lubricant to the small intestine.

*** Reapply lubricant jelly into the small intestine one or two more times to ensure even distribution.**

• Insert the sponge soaked with lubricant jelly from the ascending colon towards the distal end of the small intestine while compressing the intestine.

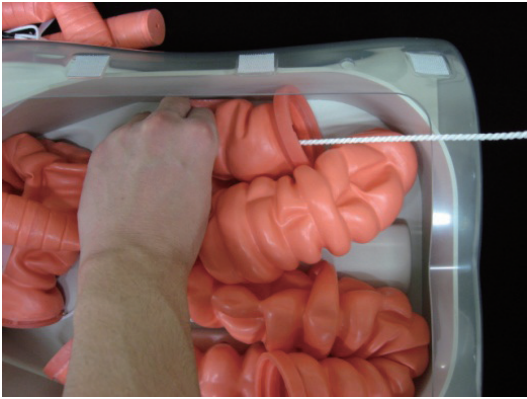


• Gradually pull out the small intestine while squeezing it throughout its length to ensure even distribution.



10) Apply lubricant to the ascending colon.

- Squeeze the ascending colon throughout its length to ensure even distribution.



11) Also apply lubricant to the rectum/sigmoid colon, transverse colon, and descending colon as in the existing models. After lubricant application, reconnect the disassembled colons and install the intestinal sheet and the simulated peritoneal membrane sheet.