



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.

MW53

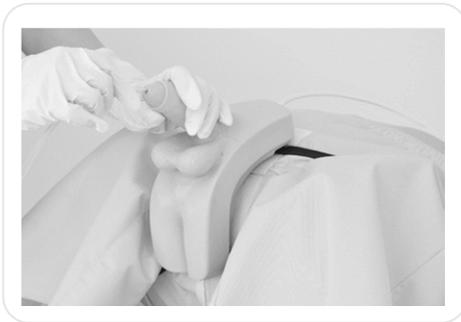
## Strap-on Male Catheterization / Enema Simulator

MW54

## Strap-on Female Catheterization / Enema Simulator

MW55

## Strap-on Male/Female Catheterization / Enema Simulator



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To keep good condition and for a long time, Lubricate the urethra and the valve with the included maintenance catheter before every training session. For more information about the preparation procedure, access our web site via following QR code to learn details.

(Sounds and subtitles is in Japanese.)



<https://www.kyotokagaku.com/jp/video/mw55.html>

### Manufacturer's Notes

MW53, MW54, MW55 Strap-on Catheterization / Enema simulators; Male, Female and Pair set respectively, are trainers for skills in urinary catheterization and enema.

They have been developed for the training of medical and allied health 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 the product carefully and refrain from subjecting it to any unnecessary stress or wear. Should you have any questions about this simulator, please feel free to contact our distributor in your area or KYOTO KAGAKU at any time. (The contact address is on the back cover of this manual)

#### FEATURES

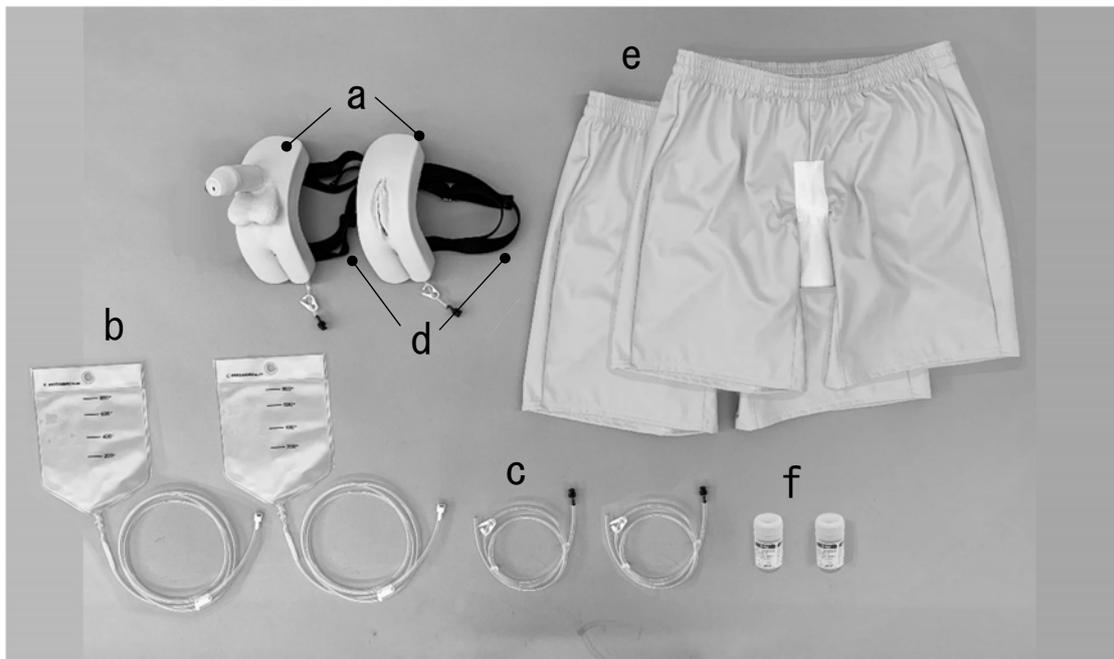
- Basic skills of urinary catheterization and enema, can be practiced through hybrid simulation with SP or hands-on training using a full body manikin.
- Strap-on feature allows trainees to experience the patient's role in a simulated manner.
- Strap-on Male Catheterization / Enema Simulator allows for retraction of foreskin for disinfection of the meatus.
- Soft female genitalia for realistic simulation training.
- Successful catheterization is confirmed by flowing out of simulated urine water)
- Training with a balloon catheter is possible.
- Real glycerin can be used for enema training.

#### Dos and Don'ts

<p><b>Handle with care.</b> Dropping or giving a strong impact may cause damage.</p>	<p><b>Do not write on the product with a ballpoint pen or felt-tip pen.</b> The ink will be absorbed and will become irremovable</p>
<p><b>Do not place printed objects on the surface of the product.</b> Do not allow printed objects to come into direct contact with the surface of the product. Ink will be absorbed by the material and become irremovable.</p>	<p><b>Wipe off any dirt with water or a neutral detergent.</b> For cleaning, wipe off any dirt with water or a neutral detergent, dry it well and apply talcum powder. Never use organic solvent such as paint thinner.</p>
<p><b>Keep away from high temperature and humidity.</b> Store avoiding high temperature, humidity or direct sunlight.</p>	<p><b>The surface may discolor.</b> The surface of the product may discolor over time, though it does not affect quality of training.</p>
<p><b>Drain the water after use.</b> After use, be sure to drain the water in the tubing. Remaining water may cause mold growth, discoloration or malfunction of the product.</p>	<p><b>Keep dry.</b> After use, dry the product body thoroughly in a well ventilated place before storing it. Storing in a damp condition can encourage the growth of mold.</p>

## Set Includes

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



The above picture shows components of MW55 set.

### **MW55 Strap-on Male/Female Catheterization /Enema Simulator**

- a. 2 simulator unit  
(male and female, 1 each )
- b. 2 water reservoir bag
- c. 2 drainage tube
- d. 2 strap  
(attached to the simulator unit)
- e. 2 holder pants
- f. 2 lubricant
- g. 2 maintenance catheter  
1 instruction manual

### **MW53 Strap-on Male Catheterization /Enema Simulator MW54 Strap-on Female Catheterization /Enema Simulator**

- a. 1 simulator unit  
(male or female)
- b. 1 water reservoir bag
- c. 1 drainage tube
- d. 1 strap  
(attached to the simulator unit)
- e. 1 holder pants
- f. 1 lubricant
- g. 1 maintenance catheter  
1 instruction manual

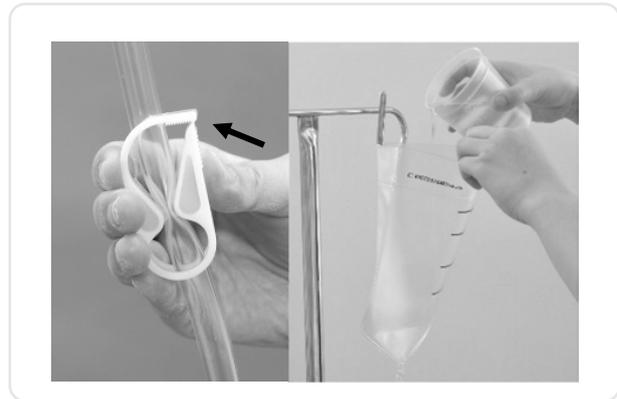
## 1) Set up the Water Reservoir

Common instruction for MW53, MW54 and MW55.

### 1.Fill the water reservoir bag with water

Hook the water reservoir bag on the IV pole, close the clamp on the tube, and fill the bag with about 400cc of water.

Keep the height difference between the water reservoir bag and the simulator unit 60cm.If the reservoir bag is set too high, water may leak from the urethral meatus.



### 2.Connect the water reservoir bag and the simulator unit

Insert the tube plug (white) at the tip of the tube from the water reservoir bag into the socket (white) on the upper side of the simulator unit, and turn it clockwise until they click. (Connect white and white)

To disengage the connection, turn the tube plug counterclockwise and pull it out.

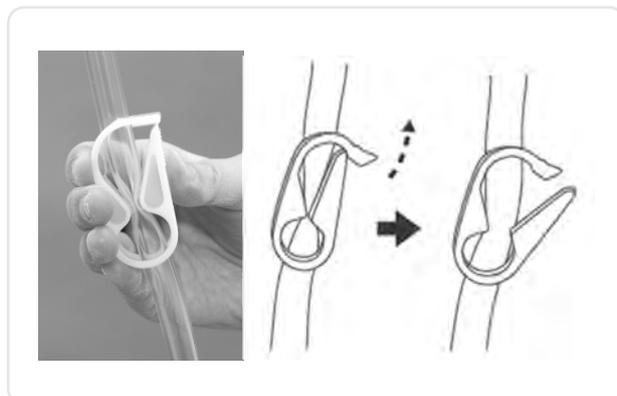


Attention!

Do not push the socket on the simulator unit into inside of the unit. Once the socket gets stuck inside the unit, connection with the tube will become difficult.

### 3.Water supply

Open the clamp on the tube to start supplying water to the simulator unit.



## 2) Lubrication

Common instruction for MW53, MW54 and MW55.

Attention!

Lubricate the urethra and the valve using the included maintenance catheter. Be sure to lubricate the parts following this instruction before every training session to keep using the simulator in its best condition.

### 1. Apply lubricant on the maintenance catheter

Pour some lubricant on the tray and coat the 5cm of the head of the maintenance catheter. Be sure to use only the included lubricant.

### 2. Insert the maintenance catheter

In order to lubricate the urethra and the valve thoroughly inside the unit, slightly turn the catheter right and left while inserting it. Insert the catheter penetrates the valve and until water flows out through the catheter.

Attention!

As male urethra is longer than female's, use larger amount of lubricant. When the amount of the lubricant is insufficient resistance to the catheter will become stronger. When it occurs, apply some more lubricant.

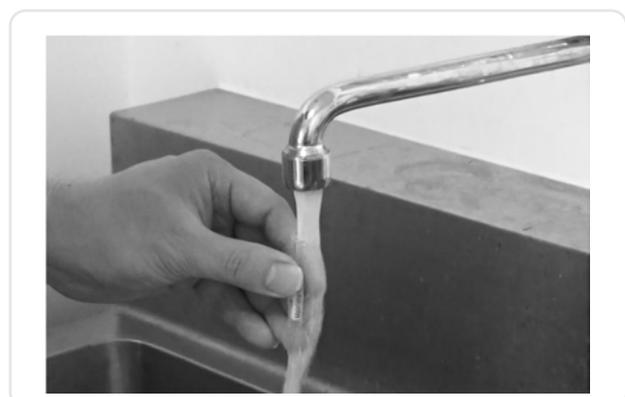
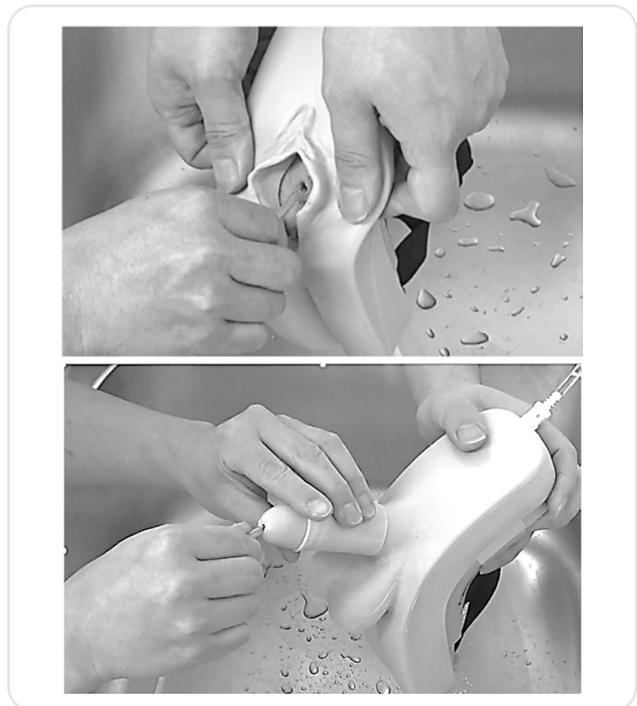


For more information about the preparation procedure check the below video. (In Japanese)

<https://www.kyotokagaku.com/jp/video/mw55.html>

### 3. Cleaning of the maintenance catheter

Wash all the lubricant remaining in both in and outside the catheter. If some lubricant remains, wash it using neutral detergent. After washing, remove the excess of water and let it dry before storage.

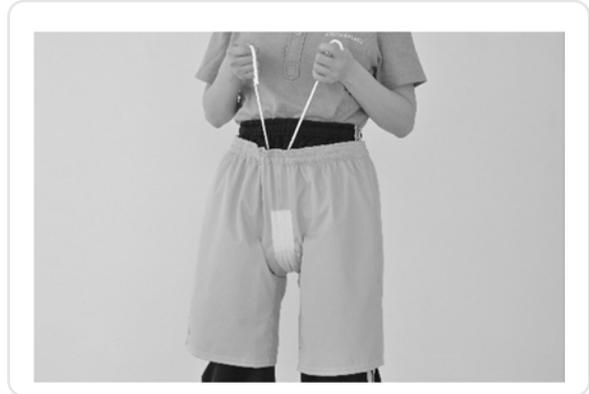


## Wearing the Simulator

Common instruction for MW53, MW54 and MW55.

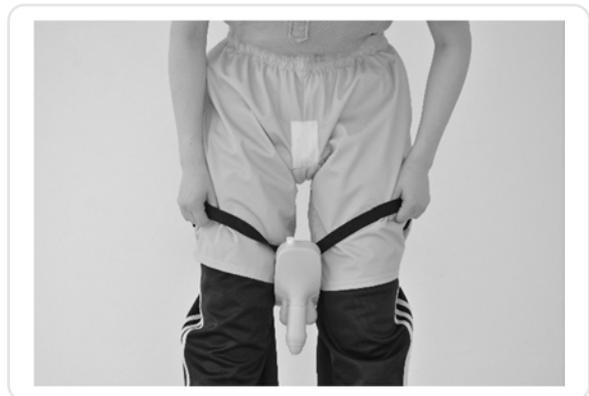
### 1. Wear the simulator holder pants

Adjust the waist size with the thread.



### 2. Wear the simulator

The simulator unit has two straps attached. Introduce both legs through the strap to wear the phantom.



### 3. Adjust the simulator's position

There are areas with Velcro tape on the back side of the unit and in the front of the pants. Make both Velcro areas match to adjust and fix the simulator position. In case the strap is too tight or too loose, adjust it with the buckle on the right side.



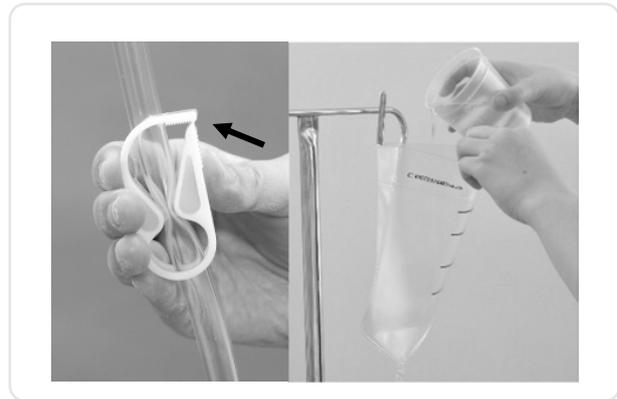
## 1) Set up the Water Reservoir

Common instruction for MW53, MW54 and MW55.

### 1.Fill the water reservoir bag with water

Hook the water reservoir bag on the IV pole, close the clamp on the tube, and fill the bag with about 400cc of water.

Keep the height difference between the water reservoir bag and the simulator unit 60cm. If the reservoir bag is set too high, water may leak from the urethral meatus.



### 2.Connect the water reservoir bag and the simulator unit

Insert the tube plug (white) at the tip of the tube from the water reservoir bag into the socket (white) on the upper side of the simulator unit, and turn it clockwise until they click. (Connect white and white)

To disengage the connection, turn the tube plug counterclockwise and pull it out.



Attention!

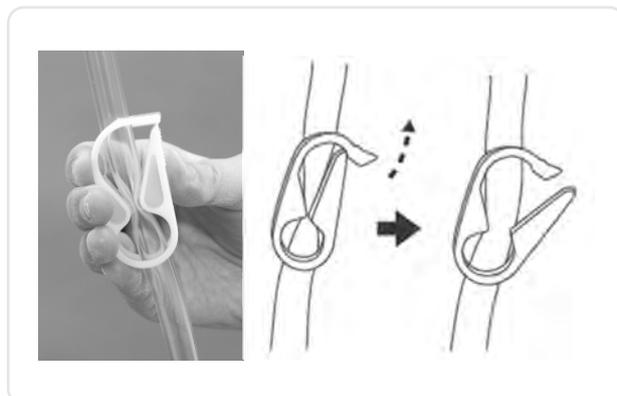
Do not push the socket on the simulator unit into inside of the unit. Once the socket gets stuck inside the unit, connection with the tube will become difficult.

### 3.Water supply

Open the tube cock to start supplying water to the simulator unit.

### 4. Prepare the urinal

Prepare a urine collector for the practice.

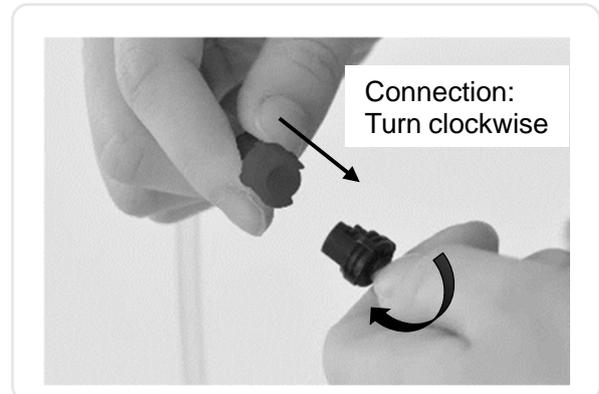


## 1) Set up the Water Reservoir

Common instruction for MW53, MW54 and MW55.

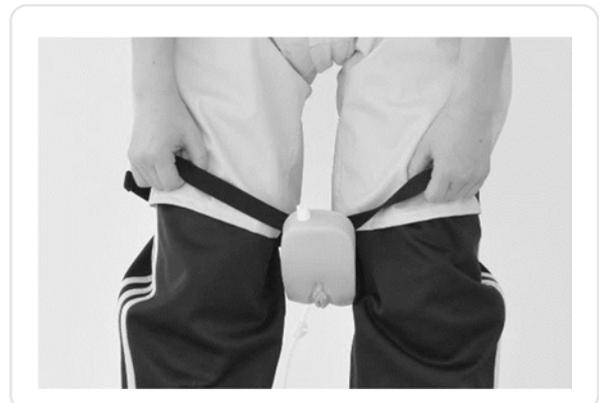
### 1. Connect the drainage tube bag and the simulator unit

Insert the tube plug (black) at the tip of the drainage tube into the socket (black) on the lower side of the simulator unit, and turn it clockwise until they click. (Connect black and black)  
To disengage the connection, turn the tube plug counterclockwise and pull it out.



### 2. Wear the simulator unit

Wear the simulator holder pants and set up the simulator unit. (See P.3)



### 3. Introduce the tip of the tube in a bucket.

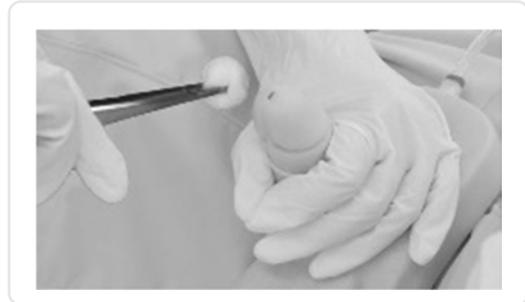
Injected enema fluid comes out through the tube into the bucket.



## Training Procedures for Male Urinary Catheterization

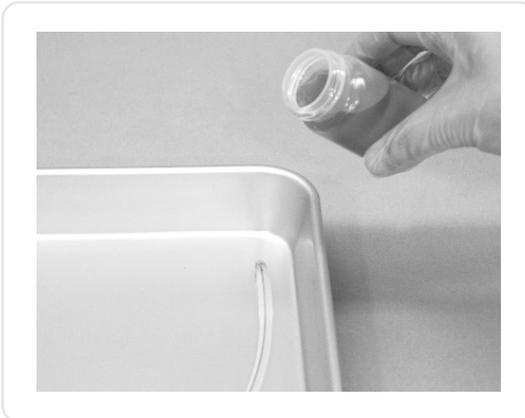
### 1. Sterilize the meatus urethra

Retract the foreskin to disinfect the urethral meatus. In case the foreskin doesn't slide smoothly, apply some of the included lubricant into the inner part of the foreskin. For meatus urethra disinfection training, use only water instead of real antiseptic.



### 2. Lubricate the catheter

On a tray, pour some of the included lubricant on the catheter to lubricate the first 5cm approx. from the end of the catheter. Be sure to use only the included lubricant .



**Use only the included lubricant.**

Since jelly type lubricants would be weakened by having contact with water, using this kind of lubricants may give stress to the internal parts (valves) with each catheter insertion and can lead to shorter life of the parts.

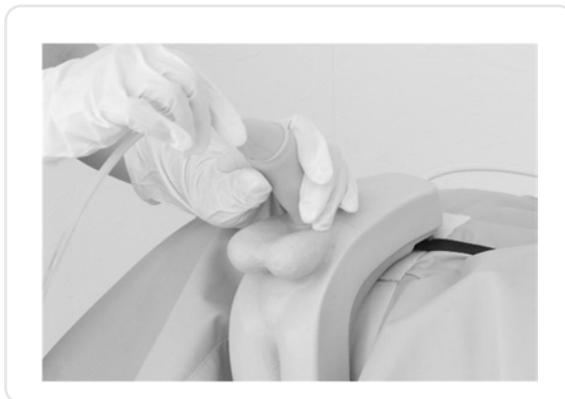
**Use 16Fr catheters.**

Using larger catheters causes breakages of the valves.

Attention!

### 3. Catheter insertion

- Insert the catheter through the meatus urethra holding the penis at about 90 degrees. During the insertion, the resistance that simulates the prostate and sphincter muscle will be felt. When this resistance is felt, lower the penis to at about 60 degrees, to insert the catheter smoothly.
- When the tip of the catheter reaches the proper place, the water (urine) will flow out to be received with a urinal. The catheter can be inserted approx.20cm.
- A balloon catheter placement also can be practiced. **Advance the catheter 3cm from the place the water starts flowing out before inflating the balloon.** If the balloon is inflated in a place too close to the valve, there will be risk of valve breakage



Please note

Make sure to lubricate thoroughly the urethra and valve by inserting the maintenance catheter coated with enough lubricant.

In case of using a balloon catheter, use one with a balloon capacity of 10ml maximum. If the balloon is inflated more than 10ml the inner parts of the simulator may get broken.

### 4. Remove the catheter

When the catheter is removed, the water flow will stop. Refill the water reservoir bag as much as needed.

## Training Procedures for Male Urinary Catheterization

### 1. Sterilize the meatus urethra

For meatus urethra disinfection training, use only water instead of real antiseptic.



### 2. Lubricate the catheter

On a tray, pour some of the included lubricant on the catheter to lubricate the first 5cm approx. from the end of the catheter. Be sure to use only the included lubricant .



#### Attention

**Use only the included lubricant.**

Since jelly type lubricants would lose lubrication ability by having contact with water, using this kind of lubricants may give stress to the internal parts (valves) with each catheter removal and can lead to shorter life of the parts.

**Use 16Fr catheters.**

Using larger catheters causes breakages of the valves.

### 3. Catheter insertion

- Insert the catheter. When the tip of the catheter reaches the proper place, the water (urine) will flow out to be received with a urinal. The catheter can be inserted approx. 10cm and no further.
- A balloon catheter placement also can be practiced. **Advance the catheter 3cm from the place the water starts flowing out before inflating the balloon.** If the balloon is inflated in a place too close to the valve, there will be risk of valve breakage



#### Please note

Make sure to lubricate thoroughly the urethra and valve by inserting the maintenance catheter coated with enough lubricant.

In case of using a balloon catheter, use one with a balloon capacity of 10ml maximum. If the balloon is inflated more than 10ml the inner parts of the simulator may get broken.

### 4. Remove the catheter

When the catheter is removed, the water flow will stop. Refill the water reservoir bag as much as needed.

## Training Procedures for Enema

Common instruction for MW53, MW54 and MW55.

### 1. Patient positioning

Perform the training on left lateral position.



### 2. Lubricate the enema device

On a tray, pour some of the included lubricant on the nozzle of the enema device to lubricate the first 5cm approx. from the tip. Be sure to use only the included lubricant .



Attention!

#### Use only the included lubricant.

Since jelly type lubricants would lose lubrication ability by having contact with water, using this kind of lubricants may give stress to the internal parts (valves) with each time of removal and can lead to shorter life of the parts.

### 3. Inject the enema solution

Insert the nozzle 5cm and inject the enema solution. The nozzle will hit the anterior rectal wall with approx. 7cm of insertion and cannot be advanced further.

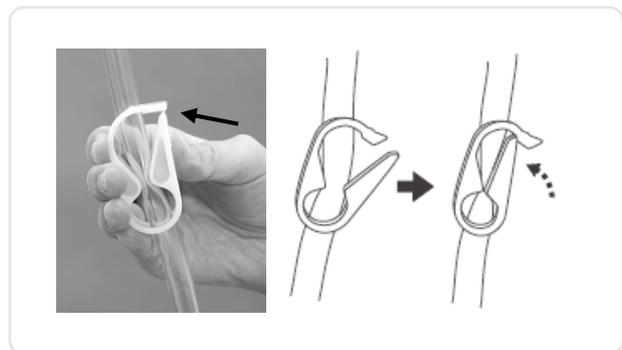


## Drain Water

Common instruction for MW53, MW54 and MW55.

### 1. Close the clamp on the tube

Close the clamp of the water reservoir bag's tube.



### 2. Unplug the tube from the simulator

Turn the white plug counterclockwise and pull it to detach it from the simulator.



### 3. Drain the residual water (simulated urine)

Place a piece of dry cloth over the meatus, then tilt the simulator unit towards the meatus to discharge the residual water (simulated urine).



## Drain Water

### 4. Pull off the simulator unit and the holder pants.

Pull of the simulator unit and then the holding pants.



### 5. Drain water from the simulator unit and dry it

Lubricate 5cm from the tip of the maintenance catheter. Then insert the it into the meatus to discharge the residue water thoroughly from the simulator. And then dry the simulator well.

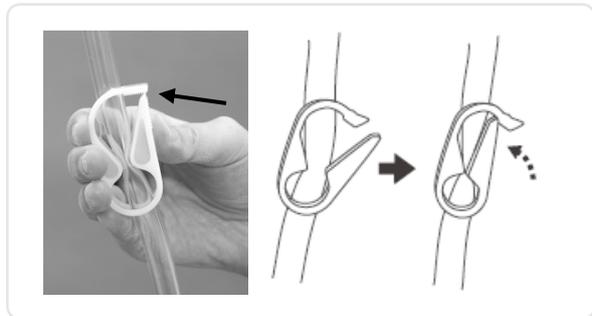


## Drain Enema Fluid

Common instruction for MW53, MW54 and MW55.

### 1. Close the clamp on the drainage tube

Close the clamp on the drainage tube .



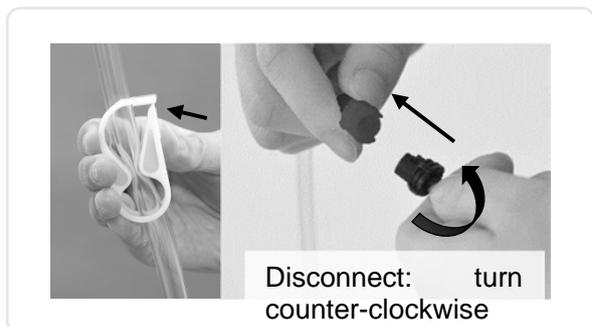
### 2. Pull off the simulator unit and the holder pants.

Pull of the simulator unit and then the holding pants.



### 3. Close the clamp on the connection tube and unplug the drainage tube.

Close the clamp on the short connection tube of the simulator unit. Then disconnect the plug(black) by turning it counterclockwise.



### 4. Open the clamps and drain fluid

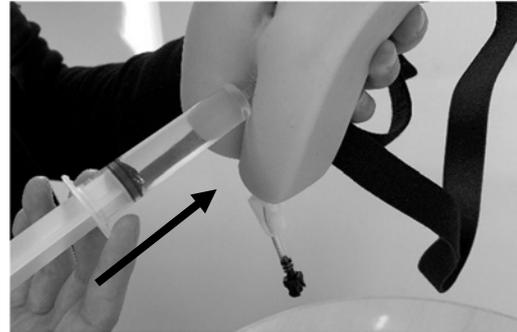
Open both clamps, on the connection tube and the drainage tube and drain the fluid.



## Drain enema Fluid

### 5. Wash the tubing with water

Using a syringe (not included), inject some water from the rectum. Repeat the process if necessary.



### 6. Drain water from the tubing

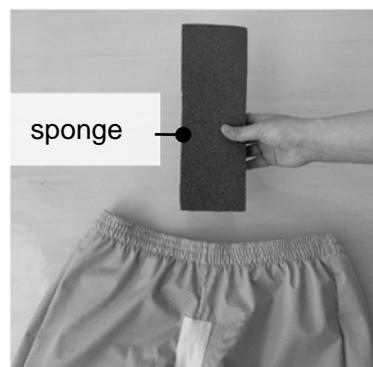
Using the syringe, inject some air from the rectum into the tubing to drain the water. Then dry the simulator unit well.



## Wash the Holding Pants

### 1. Remove the sponge from the holder pants

A block of sponge is placed in the mesh bag attached inside of the holder pants. Remove the sponge before washing the pants.



### 2. Washing

Wash the holding pants following the laundry symbols on the label. Use water no hotter than 40 degrees C, and use mild mode of a laundry machine (milder than standard mode of a home use laundry machine) Hang dry avoiding direct sunlight.



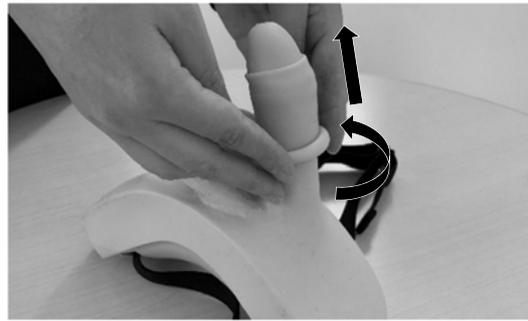
### Replacement of Foreskin

#### 1. Remove the foreskin

Remove the foreskin.  
In case that the lubrication under the foreskin is insufficient, roll up the foreskin for smooth removal.

#### Caution

Don't force when pulling the foreskin as it may get deformed or torn.



#### 2. Attach the new foreskin

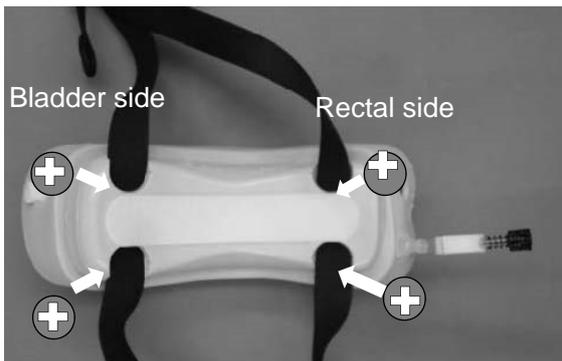
Apply small amount of included lubricant to the inner surface of the foreskin.  
Put the foreskin over the penis and slid it down.



Female simulator unit requires cleaning with disassembly after use to remove catheter lubricant. This process is not necessary for the male simulator unit.

## 1. Disassembly

Unscrew the four screws under the straps to remove the back panel.



Before disassembly

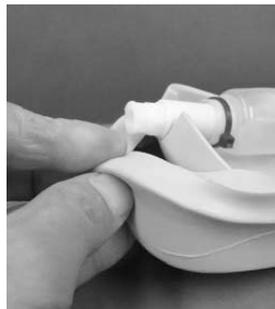


After removing the panel

Be sure to keep the removed screws.

## 2. Remove the skin

1) Disengage the skin from the tube by pulling the skin of the bladder side.



2) Raise the internal parts to separate them from the skin.



3) Remove the skin by pulling the rectal side of the skin.

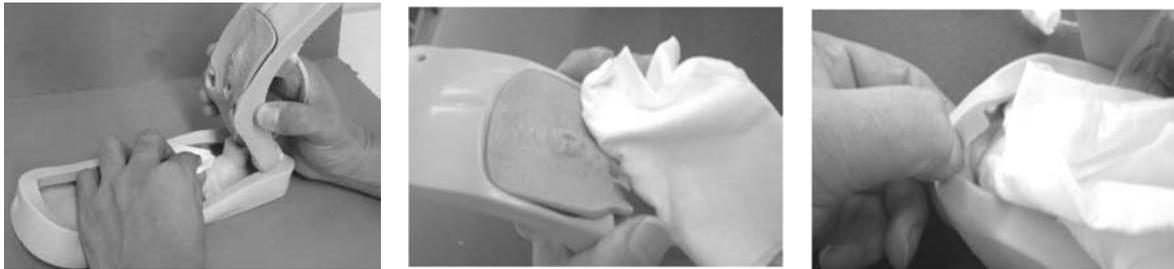


4) Lift the internal parts to separate them from the skin.



### 3. Cleaning

Wipe off the lubricant from the inside of the simulator unit using a piece of cloth or paper towel with diluted neutral detergent. Don't use organic solvent such as paint thinner.



### 4. Reassemble skin and the internal parts

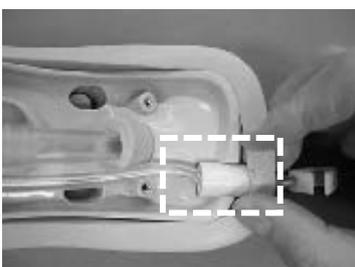
1) Verify that the projections at the backside of the meatus part are accommodated in the openings of the internal panel.



2) Put the two projections at the backside of the skin into the openings in the internal panel to anchor the skin in place.



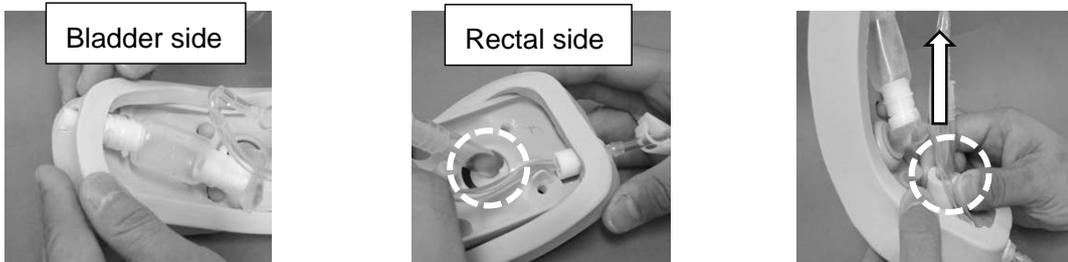
3) Attach the tube of the rectal side (connection tube) to the internal parts.



The cylindrical cover is attached to the connection tube at the rectal side to prevent the tube from slipping off. Fit this cylindrical part into the indent in the internal panel.

4) Attach the skin over the internal parts.

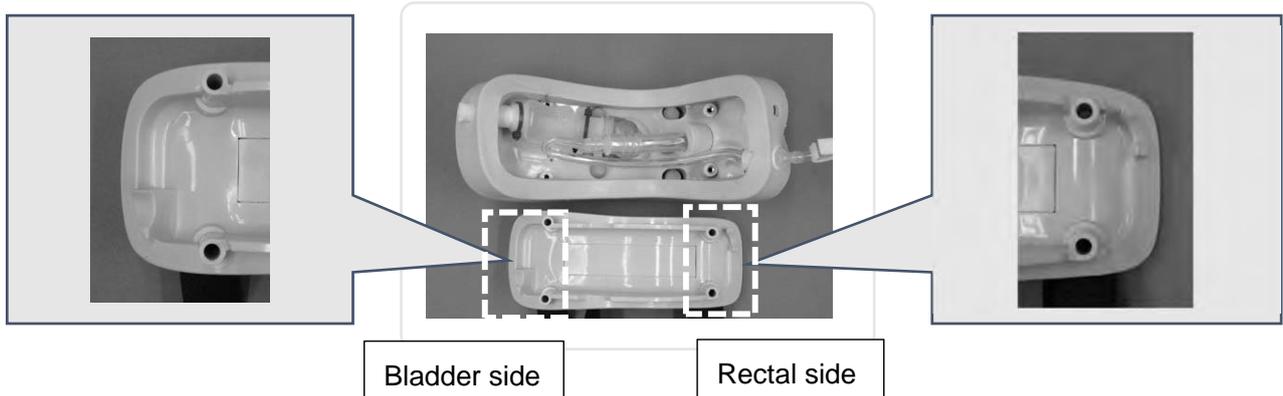
Be sure to insert the projective portion at the rectal side firmly through the opening of the internal panel.



## 5. Reassemble the simulator unit

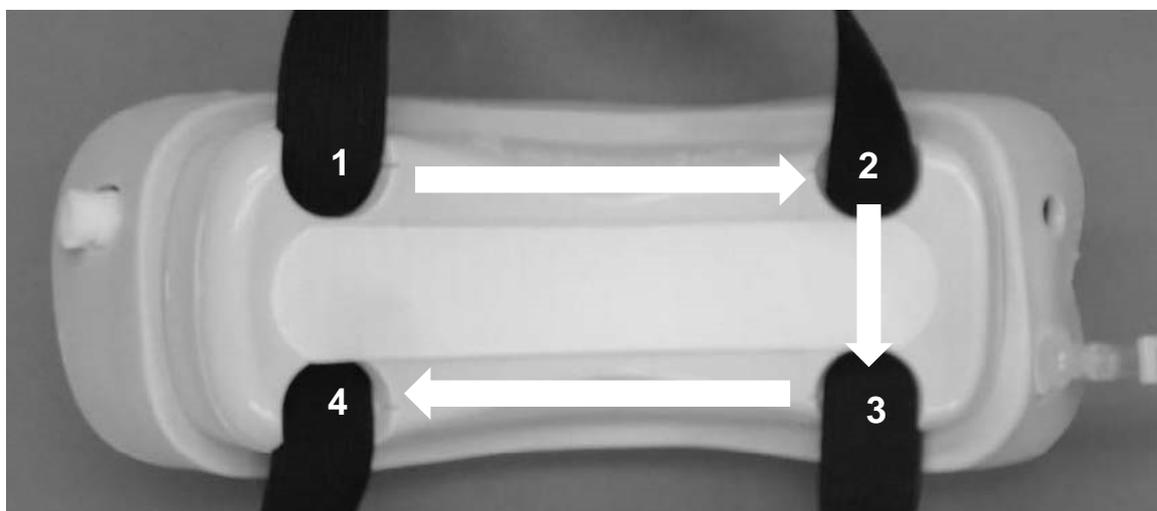
1) Noting the direction, attach the back panel to the simulator unit.

Applying the talcum powder on the surface of the skin helps smooth reassembling.



2) Fix the panel with four screws.

Fasten the screws following the order shown below.



Place the back panel on to the simulator unit and press them firmly before screwing. Fasten the screws following the order shown in the previous page.



The first screw is to be fastened only lightly at the beginning.



At times, the skin or the back panel may move out of their original position while working with screws. When it occurs, fit them by pulling or pushing the parts gently as shown below.



After fixing the fourth screw, tighten the first screw. Stop screwing when it stops turning.

**\*Stop screwing when it stops turning. Do Not Force.**



Push the back panel as shown in the picture left to see if the screws are fully anchored.

Find loose screw heads and screw them in.



Quick check-up before calling the customer service

Use the table when you have problems using the system.

Look in this section for a description of the problem to find a possible solution

## Urinal Catheterization

Problem	Possible Cause	What to Do
Water doesn't flow out when catheter reached in the bladder.	Clamp on the tube from the water reservoir bag is closed.	Open the clamp.
Water leaks from the meatus when the simulator unit is connected to the water reservoir bag and the clamp is open.	Internal part is worn out.	Request repair for your distributor or Kyoto Kagaku.

## Enema

Problem	Possible Cause	What to Do
Enema fluid doesn't flow out when injecting enema.	Clamp on the drainage tube and /or the connection tube is closed.	Open the clamp(s).
Enema fluid leaks from the simulator unit when injected.	Internal part is worn out.	Request repair for your distributor or Kyoto Kagaku.



**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.

**Consumables**

	Part Name
11381-800	Lubricant
11434-020	Foreskin (Replacement part for Male)



lubricant  
(for catheterization, enema)



Foreskin  
(Replacement part for Male)

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

The contents of the instruction manual are subject to change without prior notice.

No part of this instruction manual may be reproduced or transmitted in any form without permission from the manufacturer.

Please contact the manufacturer for extra copies of this manual which may contain important updates and revisions. Please contact the manufacturer for any discrepancies in this manual or product feedback. Your cooperation is greatly appreciated.

**WORLDWIDE INQUIRIES & ORDERING**



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