

Full Perinatal Patient Care Simulator

HANA

Instruction Manual

Table of Contents



Introduction	
■ Before you start • • • • • • • •	P.1
■ Safety precautions • • • • • • • • • • • • • • • • • • •	P.2
■ Handling · · · · · · · · · · · · · · · · · · ·	P.3
■ Set includes • • • • • • • • • • • • • • • • • • •	P.4-7
■ Functions of each	P.8
part · · · · · · · ·	P.9-10
Training items • • • • • • • • • • • • • • • • • • •	
■ Wigs attachment and detachment •	P.11
■ Detachment of mask • • • • •	P.12
Training	
■ Ultrasound Examination Module • •	P.13-
Obstetric Examination Module • • •	P.17-
Cervical Examination Module • • •	P.26-
■ Delivery Assistance Module • • • •	P.32-
■ Perineorraphy Module • • • • •	P.39-
Uterine Involution Assessment Module	P.42-
■ Epidural Anethesia • • • • • • •	P.45
■ Tube Feeding • • • • • • • • • • • • • • • • • • •	P.46
■ Bedbathing • • • • • • • • •	P.47
Patient transfer and	P.47
positioning • • • • • •	P.48
Oral care, oxygen management • • • •	P.49
Suction(nasal, oral, tracheostomy) • • •	P.49
Intravenous	P.50
injection • • • • • • • • • • • • • • • • • ■ Airway management/ intubation assistance/ Chest	P.52
compression	1.52
Airway management/intubation assistance	P.53
(Optional) Subcutaneous injection/	P.54
Intramuscular injection	1.54



Manufacturer's note

■Before use

The Full Perinatal Patient Care Simulator "Hana" is a training manikin which covers from gestational to post–natal periods. This "Hana" 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)

♠ DOs and DON'Ts

DOs

Operate the system under the designated circumstances

Power input: AC100V~230V plus or minus 10%, 50Hz/60Hz Temperature range: between 0 degrees C and 40 degrees C (no congelation)

Relative humidity; between 0% to 80% (no condensation) *Connecting to power source outside of the designated range may lead to fire.

Safe disposition

To avoid shot circuit, do not run the simulator set above a power receptacle.

Handle the power plug and cord observing following precautions

- 1. Clean the head of the plug periodically.
- 2. Plug in the plug to the outlet firmly to the end.
- 3. Always hold the plug when unplugging. Do not pull the cable.
- 4. Do not force to bend, twist the cable and avoid scratching or cutting on it.

Failing to follow the above precautions can result in damage in the plug and the cable, constituting risk of fire or shock.

When the electric parts get warm or produce smoke, immediately turn off the power and unplug from the power source

Risk of fire. Contact your distributor or the manufacturer for repair.

• Handle with care

The materials for the models are special compositions of soft resin

Please handle them with utmost care at all times.

Storage

Store the simulator at room temperature, away from heat, moisture and direct sunlight.

Storage under the temperature above 50 degrees C may reduce the performance quality of the simulator.

DON'Ts

Do not disassemble or open electric or precision components

Do not open up or disassemble the housing for electric parts or precision components.

Refrain from opening up any lids, caps or covers for such area, and never run the system while any of such covers are open

*Never disassembling the electric components, power plug and cable as it may create a risk of fire, shock or injury. Contact your distributor or the manufacturer for repair.

Never wipe the product and components with thinner or organic solvant

•Ink marks on the soft surface won't be removable

Don't mark on the product and components with pen or leave any printed materials in contact with their surface.

Do not give shocks

The electric components are precision instruments.

Strong shocks or continuous vibration may cause breakages of its internal structure.

Do not run the system continuously over 2 hours

Take at least 30 minutes shutdown, turning off the power, every 2 hours.

Do not wet the electric components

Do not pour or spill water or liquid detergent over the electric components, power cable and power plug. Running the system while the electric components are wet may create a shock hazard or a risk of fire.

● Do not handle the power plug with wet hands Risk of shock.

No fire

Do not put the product close to fire. It may lead to discoloration or deformation of the product as well as short circuit, creating a risk of fire.

A Caution

Caution indicates that a failure to observe the specified instructions may result in minor injuries or material loss and equipment damage. Be sure to observe all the caution statements.

Handle the manikin and the components ● Do not mark on the manikin or other with care. components with a pen or allow printed materials to come in contact with the Be sure not to drop the manikin and its components, since the product uses special resins. surface. Ink marks cannot be removed. Storing the manikin in a dark, cool and Never use organic solvents like paint dry space will help prevent the skin colors thinner or alcohol to clean the skin, from fading and product from becoming as this will damage the manikin. deformed. Even if the skin color of the manikin ■ The manikin may be cleaned with a wet cloth if necessary, using mildly soapy water changes as it ages, the quality of the performance is not affected. or diluted detergent.

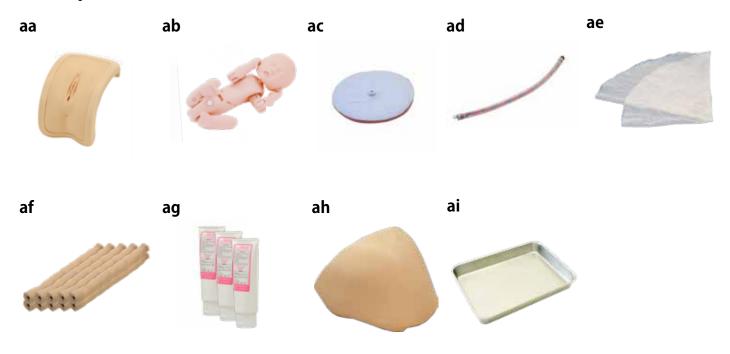
Set includes

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



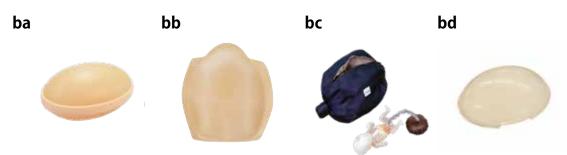
Set includes

Delivery assistance module



a a :genitalia	1
ab: fetus	1
a c : placenta	1
ad: umbilical cord	1
a e : 5 velament sheet	1
af: 10 umbilical cords for omphalotomy	1
a g:3 lubricants	1
a h: abdominal cover for delivery and	'
cervical examination	1
a i : tray	1

Ultrasound Examination Module



Obstetric Examination Module



Cervical Examination Module

da db dc dd de df

Ultrasound Examination Module

	: ultrasound pregnant uterus phantom	1
~ ~	: base for fetus ultrasound	1
~ ~	: fetus demonstration model	1
bd	: protection cover	1

Obstetric Examination Module

c a	: fetus model	1
cb	: base for fetus	1
СС	: Simulated doppler stethoscope	1
cd	: AC adapter	1

Cervical Examination Module

CEL	٧I	cai Examination Module	
d a	:	genitalia unit	1
db	:	set of cervical dilation inserts (5 variations)	1
d c	:	vagina unit	1
dd	:	holder for cervical dilation inserts	1
d e	:	3 lubricants	1
d f	:	abdominal cover (Obstetric and Cervical	1
		Examination)	

Before you start

Perineorrhaphy module

ea



Uterine Involution Assessment Module

fa fb







fc

Perineorrhaphy module

ea: genitalia with skin

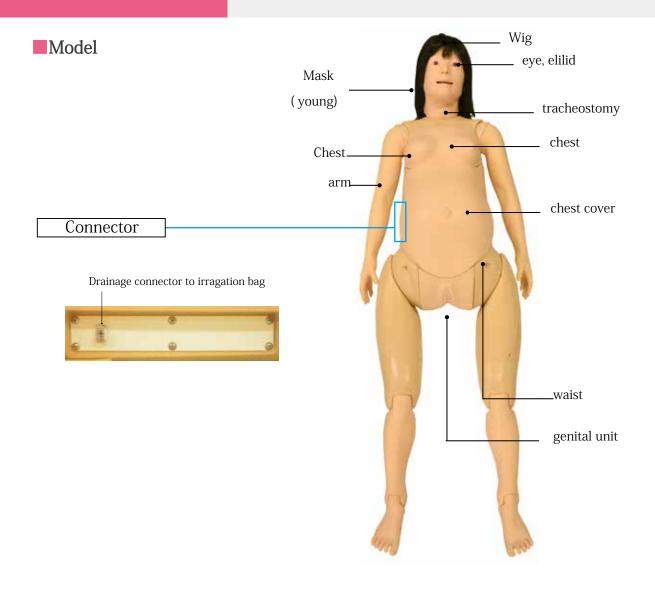
Uterine Involution Assessment Module

f a : set of uterine inserts (4 variations)
f b : supporting base
f c : abdominal cover for uterine
involution assessment module

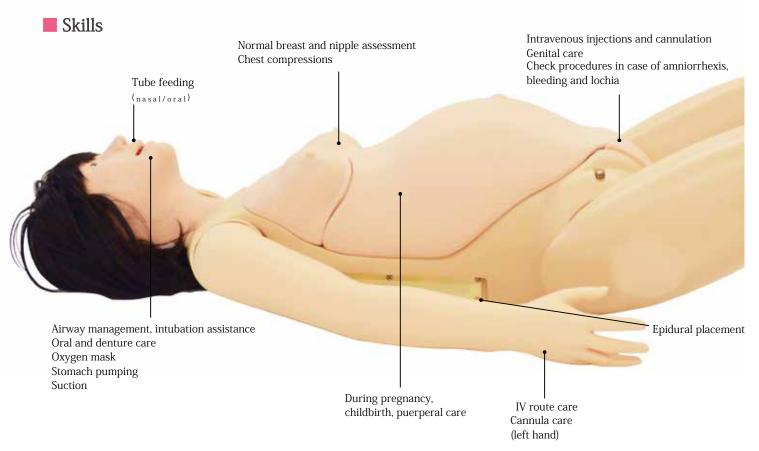
1

Before you start

Name of each part and functions



Training Skills



Others

- Abdominal and chest examination
- Inspection/palpation/auscultation/ percussion
- Body transfer
- · Bed bathing

Option IM Injections(upper arm) Subcutaneous injections (upper arm)



Tube feeding(nasal/oral) Catheterization, Tube place confirmation, tube placement



S~u~c~t~i~o~n~(~n~a~s~a~l~/~o~r~a~l~) Insertion of tracheostomy tube, suction



Urinary Catheterization (procedure only)



Intubation assistance preparation of equipment, auscultation, fixation of tracheal tube



Chest compression



During pregnancy, childbirth, puerperal care, perinatal examination, ultrasound examination, ultrasound examination, cervical examination, delivery assistance, perinatal tear, puerperal assessment

Training skills

Skills



Intravenous injections and cannulation(left median vein)



IV route care(dorsal vein of left hand)



Bedbathing



Partial bathing(hand/foot)



Oxygen mask



IM Injections(upper arm) Subcutaneous injections (upper arm)

Setting of the wig



Setting

Set the wig by the magnets at the forehead and in front of right and left ears.

- 1. Put the wig on to the head noting the orientetion then fix it with the magnet at the forehead.
- 2. Fix the wig with the magnets in front of right and left ears.
- 3. Pull down the back side of the wig and t it to the manikin's back of the head.







(2) Removal

- 1. Disengaging the magnet in front of the ears.
- 2. Disengaging the magnet of the forehead and slip the wig backward.





(3) Maintenance

Store the wig by following steps.

- 1. Brush the wig after use.
- 2. Insert the balled-up papers to avoid deformation.
- 3. Roll the tips of hairs inward by hands.
- 4. Store the wig in a bag.



- 1. Remove the cover for tracheostomy
- 2. Remove one end of the band from the mask hole







3. Hold up the mask from the neck side and remove





(2) Attachment

1. Cover the mask from the head side. Attach the hole of the mask in the three magnets in forehead and both ears.



4. Insert both ends of the band to the band to the mask in the back of head



2. Insert the salient part of the mask near the head



5. Insert the cover for tracheostomy





3. Insert the neck skin to body part

Ultrasound training

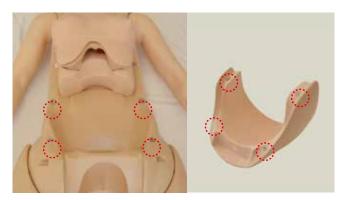


Preparation

Setup

1. Remove the abdominal cover from the model. The cover is fixed by four magnets. The cover can be removed by holding it upward.





2. Attach two nails of genitalia unit to two pits located under part of maternal body, and push on the top of the unit to fix





Be careful not to pinch your finger between maternal body and the genitalia unit

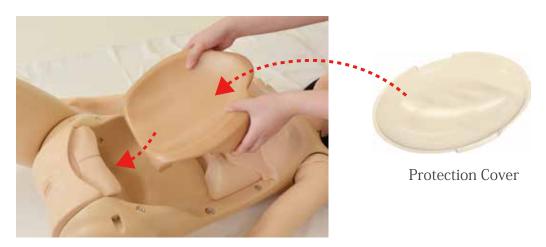




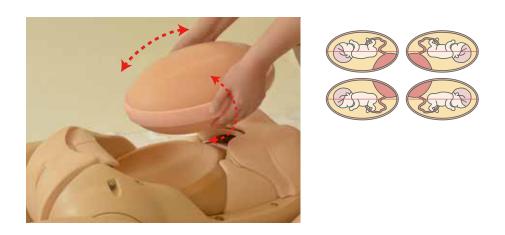
Ultrasound Training

Setting of the module

1. Attached the supporting base for fetus ultrasound. Put protection cover on the top.



2. Attach ultrasound pregnant uterus phantom on the base. The phantom can be set in four positions.



3. Apply plenty of ultrasound gel directly to the pregnant uterus phantom..



Ultrasound Training

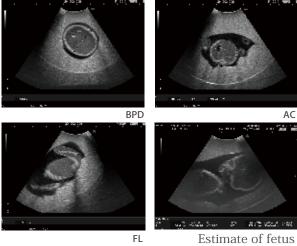
Ultrasound Training

Assessment of fetus and measurement

1. Place the probe on the phantom unit. The keys for ultrasound unit are listed on the back of this manual



Fetus assessment and measurement



weight

After training

1. Wipe off the gel completely with wet wipes not to leave the gel on the surface of the phantom and torso. You can wash the phantom unit and the protection bowl with water. Do not wash the body torso with water.



Ultrasound Training

Training Items

Assessment of development and condition of fetus, amniotic fluid amount, abnormality, placenta position, presentation, position, fetal habitus, sexuality and so on.

- * compatible with 2D and 3D probes.
 - Measurement of fetus (measuring at 3 points)

BPD: biparietal diameter - measures BPD using the transparent septum as landmarks.

AC: Abdominal circumference - measures AC using the stomach, abdominal aorta and umbilical vein as landmarks.

FL: Femur length - measures the total length of the bone.

Estimates the weight by measuring at 3 points to evaluate the development condition of the fetus.

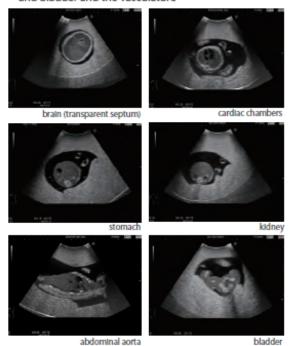
② Measurement of amniotic fluid volume

Measures the maximum vertical depth of the amniotic fluid (the maximum amniotic fluid depth).



3 Assessment of head, breast, abdomen, spine and so on

- Assessment of the figures of bones of skull and assessment of the brain
- Assessment of the spine and limbs
- Assessment of the cardiac chambers and blood vessels, inclination, and the lung
- Assessment of the viscera such as the stomach, kidney, and bladder and the vasculature



- Whole fetus assessment head, breast, abdomen, spine, limbs, and genitalia
- Fetus measurement BPD, AC, and FL
- Observation of the other appendages amniotic fluid amount, placenta, and umbilical cord









estimate the fetal weight

Assessment of umbilical cord and placenta

Scan the umbilical cord and blood vessels, placenta attachment condition, and placenta position.



blood vessels



umbilical cord

Determination of fetus presentation (cephalic or breech)

Rotate the phantom unit and determine the fetus presentation (cephalic or breech).



Determination of sex (This product represent

(This product represents a male fetus.)



male fetus

^{*} This product does not reproduce the heart beat and the bloodstream.

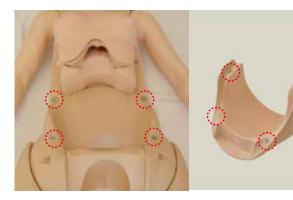
Obstetric Examination Module



Setup

1. Remove the abdominal cover from the model. The cover is fixed by four magnets. The cover can be removed by holding it upward.





2. Attach two nails of genitalia unit to two pits located under part of maternal body, and push on the top of the unit to fix





Be careful not to pinch your finger between maternal body and the genitalia unit



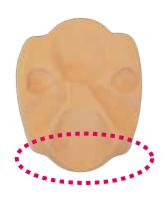


Obstetric Examination Module

Module setting

 $\bf 3.$ Set the fetal base to the model. Depending on the position of the base, the fetus can be set either in cephalic presentation and head presentation





Put the fetal head on this part

3. Set the fetus on the hole of the base. The fetus can be set in either left or right.





Right side

Left side

4. Set the abdominal cover then the setting is completed.



Obstetric Examination

(2) Training

Palpation

Anatomically correct landmarks of maternal pelvis and fetal parts, and innovative material of the uterine unit allow realistic palpation of the fetus. The uterine units can be freely oriented to represent different lies, presentations and positions, also enables CPD assessment (Leopord's fifth maneuver)

Leopold's maneuvers

Palpate parts of the fetus such as head, buttocks and the trunk through the steps from the first to the fourth maneuvers to assess fetal lie, presentation and position as well as degree of fetal descent

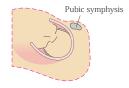
CPD assessment (Leopold's fifth maneuver)
The height fetal head against the pubic symphysis can
be changed by rotating the fetal unit to prepare
different scenarios for CPD assessment (Leopold's fifth
maneuver)







Fourth maneuver



Auscultation (Fetal Heart Sounds

Sounds recorded by the doppler and conventional stethoscope can be used for training. The doppler mode features fetal heart sounds, umbilical blood flow as well as mixed sounds of fetal heart and umbilical blood flow. Remote controller enables switch between sounds, speakers and also setting sound volumes.





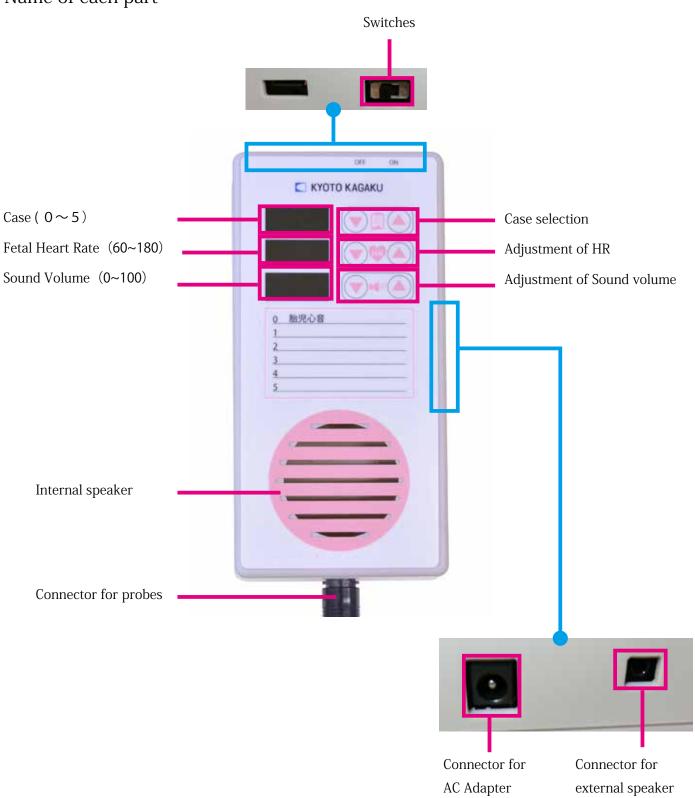


After Training

Clean the skin cover by wiping with a damp cloth, using water or mild detergent, LET THE TORSO DRY NATURALLY, then spread talcum powder on the surface before storing in a cool dry place.

Setting of simulated doppler stethoscope

Name of each part



\bigcirc Preparation

1 Insert the connector for probes to the C probe connector.



2. Insert the AC adapter



3. Turn on the controller



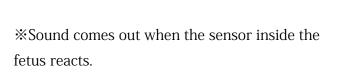
Obstetric Examination

2Training

1. Set the fetus training model to Hana



2. By putting the probe near fetal heart, the sound can be taken from internal speaker in simulated doppler stethoscope. (p19)

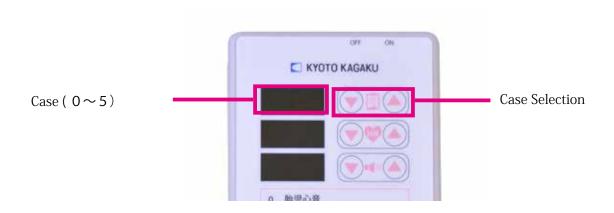




3 How to change the setting

How to change cases

- 1 Select sound case
- *At the time of delivery, no sounds are included in case 0 to 5
- *When the switch is on the case number is set to O(default)



Obstetric Examination

How to change fetal heart rate

1Change the heart rate by pushing up and down buttons

- **Setting can be changed between 60-180bpm
- *The value can be changed in 10bpm increments
- *130bpm is the default value.
- **applicable only in default case 0



How to set the sound volume

- 1. Set the sound volume by pushing up and down buttons.
- **Setting can be changed between 0 to 100
- *The value can be changed in 10 increments
- %50 is the default value



Installation of cervical dilation module to the holder

 Attach the cervical dilation module to the holder. Match the red point of holder with slit of cervical dilation module

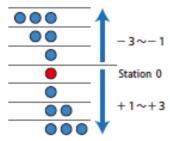


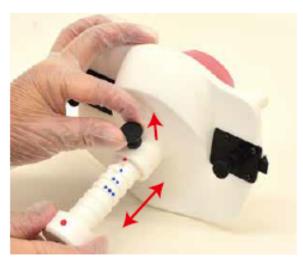


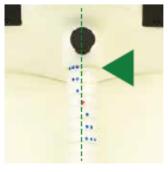
Note: The cervical dilation module is to be mounted on the tip (smaller tip) of the stick, which is opposite to the handle.

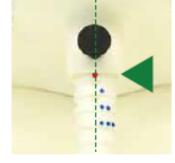
The lever on the holder becomes movable by pulling the black knob on the holder.Descent of the fetal head can be set by moving the lever back and forth.

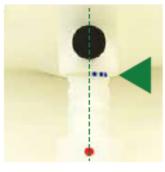
*Descent of fetal head is settable in seven phases.











Station -3

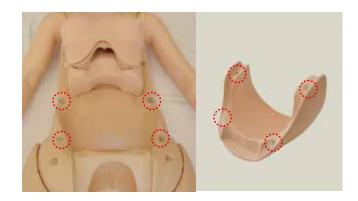
Station 0

Station +3

Setup

1. Remove the abdominal cover from the model. The cover is fixed by four magnets. The cover can be removed by holding it upward.





2. Attach two nails of genitalia unit to two pits located under part of maternal body, and push on the top of the unit to fix





Be careful not to pinch your finger between maternal body and the genitalia unit





Setup

3. Attach genital unit to the main body. Make sure not to put it upside down.



Lubricants

1. Apply lubricants inside the genital unit, genitalia and cervical dilatation modules.







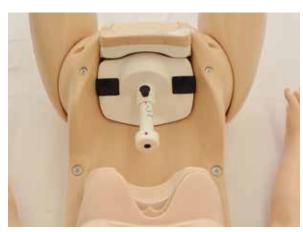
Attachment of cervical dilatation module

1. Attachment of cervical dilation module to the main body



Set the model fixation base to the cervical dilation module.

*Note: Engage the edges on the holder and the holes on the maternal body, and push the holder until clicking sound is heard.





Be careful not to pinch your finger between maternal body and the genitalia unit





Training / Features

For the training for pelvic examination, put on gloves and apply lubricant to fingers.

Cervical dilation module has 5 variations







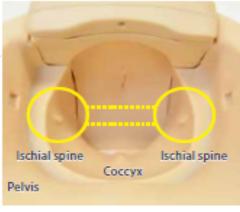
1-2cm



5-6cm Complete dilation



- · Station zero, the line that ischial spines can be recognized.
- To determine the fetal position is possible by posterior fontanelle.



Change of cervical dilation module

Unlock the holder with pulling the black knob on right and left of holder, then remove the holder from the maternal body. Change the cervical dilation modules and set the holder again.







(3) Afte

After the training



- O Disassembly of genital unit
 - 1. Remove the abdominal cover from the maternal body

Unlock the holder with pulling the black knob on right and left of holder, then remove the holder from the maternal body. Wipe off the lubricant which attached to cervical dilation module with wet wipes.

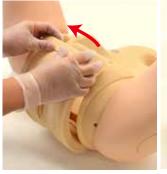


3. Pull out the cervix unit in front with holding white frame on the cervix unit. Wipe off the lubricant with wet wipes.



4. Cervix unit is removed from the maternal body with pulling the upper part of frame in front. Wipe off the lubricant with wet wipes.







**Also, these units are washable with water. Apply the talcum powder after having been dried enough.

The cervix unit and the genitalia unit are made from special soft resin.

For storage, cover them with included non-woven bag and keep them in the storage box.

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.

Vaginal Delivery Assistance

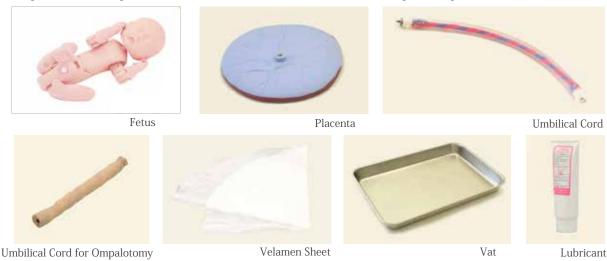
1

Preparation

Setup of the fetus

1. Setup

Prepare the fetus, placenta, umbilical cord, umbilical cords for ompalotomy, velamen sheet, vat and lubricant



2. Take out the placenta from the storage bag to attach umbilical cord. Connect the screw side of umbilical cord to the placenta and turn it clockwise to fix.



3. Insert the umbilical cord into the hole located at the center of the velamen sheet

4. Take out the umbilical cord for ompalotomy from the storage bag. Reverse the tip of it to show the hook, and engage it to the hook at the umbilical cord from the placenta







Vaginal Delivery Assistance

Setup

5. Loosen the white screw to remove the plate on the fetal abdomen, and take out the clip from there





6. Pinch the tip of umbilical cords for omphalotomy with the clip. Put it back to the fetal abdomen, and fix umbilical cords for omphalotomy to the abdomen by the plate with the white screw





**Place the clip in the direction shown in above picturei

7. Fetus is ready for training.



Lubrication

Before training, apply lubricant to the genitalia unit, placenta, and umbilical cord for omphalotomy.

1. Put the assembled fetus in the vat included in the set. Apply lubricant to it entirely including the velamen sheet and the placenta



2. Apply lubricant to the internal surface of the genitalia unit, too



*The genitalia unit can be lubricated after attaching to the maternal body

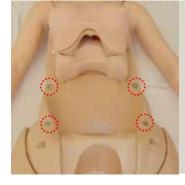




Assembly of the Maternal Body

1. Remove the abdominal cover from the body. The abdominal cover and body are attached with four magnets. The abdominal cover can be removed by lifting







Assembly of the maternal body

2. Attach two nails of genitalia unit to two pits located under part of maternal body, and push on the top of the unit to fix





* Be careful not to pinch your finger between maternal body and the genitalia unit





- 3. Put back the abdominal cover to the maternal body, and set the fetus to complete setup.
- * Always put the placenta on the vat during the training

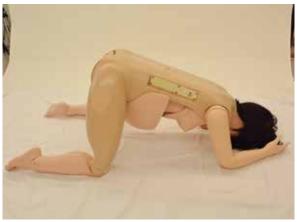


Positioning

Training can be done in three birth positions: dorsal position, lateral position, and all four position







Vaginal Delivery Assistance

2 Vaginal Delivery Assistance training

O Perineal protection



O Delivery assistance



 \bigcirc Delivery of fetus



 \bigcirc Clamping tying and cutting of umbilical cord



O Delivery of placenta



 \bigcirc Inspection of velamen and placenta



3 After Training

- O Removal of genitalia unit
- **1.** Lift the abdominal cover to remove from the maternal body



2. Pull back the top of the genitalia unit frame to remove from the body



- O Disassembly of fetus
 - 1. Disengage the umbilical cord and placenta in reverse order to setup
- O Clean and storage
 - 1. Wipe the lubricant left on the fetus, umbilical cord, placenta and genitalia unit away with wet paper tissue. If necessary, wash them by tap water, and dry them well naturally. After the components completely dried, apply talcum powder to each of them.









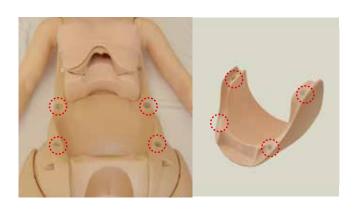
- **2.** Genitalia unit, placenta and umbilical cord for omphalotomy are made of special soft resin. It is required to store them either in the storage bag or on the vat after training.
 - * If these parts are stored while touching with other resin products or printed matter, the dent or ink might be left on the skin, and will become irremovable.

Perineorraphy

Setup

1. Remove the abdominal cover from the model. The cover is fixed by four magnets. The cover can be removed by holding it upward





2. Remove the genitalia unit for cervical assessment and delivery training. Hold the upper frame of the genitalia unit and pull it towards you.





Change to the perineorraphy training unit.



Genitalia for cervical examination and delivery

Genitalia unit for perineorraphy

Perineorraphy

Exchange of genitalia unit

3. Attach two nails of genitalia unit to two pits located under part of maternal body, and push on the top of the unit to fix





Be careful not to pinch your finger between maternal body and the genitalia unit





4. Attach the abdominal cover and the preparation is done



Perineorraphy

(2) Training

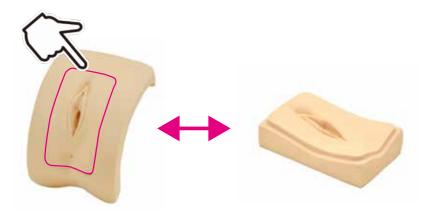
Suture training of the first-degree perineal tear.

- Single interrupted suture
- Vertical mattress suture



3 After Training

- 1. Training can be continued by removing the suture thread.
- 2. In order to exchange the genitalia skin, Put the finger into the gap between the genitalia skin and the holder to remove it, and attach the new skin. Put the genitalia skin into the pit of the supporting holder. Apply the talcum powder on the edge of skin to make it easy. Put the skin from directions to the holder. Ensure that he skin is sitting in the holder firmly.



Uterine Involution Assessment

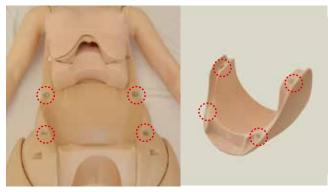
\bigcirc

Preparation

Setup

1. Remove the abdominal cover from the model. The cover is fixed by four magnets. The cover can be removed by holding it upward.





2. Attach two nails of genitalia unit to two pits located under part of maternal body, and push on the top of the unit to fix





Be careful not to pinch your finger between maternal body and the genitalia unit





Uterine Involution Assessment

3. Setting of the module 1. Attached the supporting base for fetus ultrasound. Put protection cover on the top.

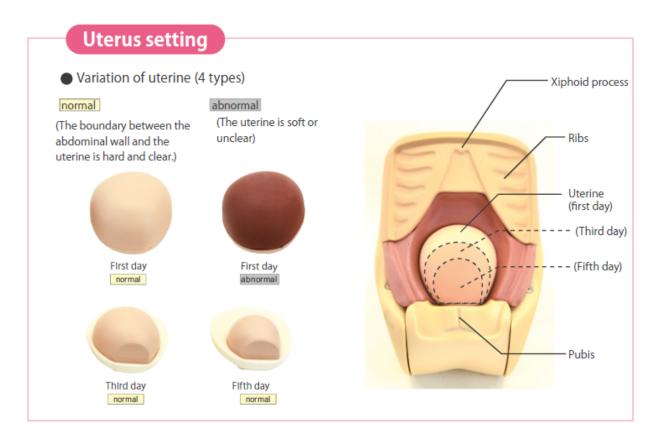


5. Attach the abdominal cover for uterine involution assessment to the model.



4. Attach the uterine unit to the hole











Measurement of funtal height

3 After training

1. The dirt in the abdominal cover can be wiped by water or neutral detergent. After the cover is wiped, apply talcum power on the surface.



Epidural and Anesthesia

1 Preparation

Insert epidural pad on the back.

(The pad is inserted at the time of delivery)



(2) Training

Training in lateral position
Only punctures and fixation of catheter are possible

%Water cannot be used



Tube Feeding

1 Training

Training of tube insertion for feeding (NG, OG) with the fowler's position. Insertion of catheter(NG, OG) is possible. Training of tube fixation and dressing is possible. Spray the lubricant included in the catheter to nasal and oral cavity. Shortage of lubricant will make insertion difficult.









- 12Fr Catheter is recommended for training.
- Please use the lubricant included in the set. Usage of other Jelly-type lubricants may cause damages.

(2) After the training

Remove the tapes and catheter after the training. Wipe the lubricant on the catheter and skin by wet tissue.





 \cdot Do not leave the tapes on the manikin. If the tape remains on the surface for long time, it ma cause persisted stickiness.

Bed bathing, partial bathing, position change, position holding, patient transfer, joint motion exercise

Bed bathing, partial bathing



Position change, position holding, patient transfer, joint motion exercise

- Limbs, fingers and toes with full articulation allow various patient postures for nursing care training.
- Can be place in a sitting position
- Fingers can be bended and stretchd



Oral care and oxygen inhalation

Oral Care

Oral care training in various patient settings

• Brushing (with denture)



Detachment of denture

Lift the molar side with both upper and lower dentures and take off. Raise the upper denture forward can remove it.







**Hole above area when holding the denture

Setting of denture

Put the denture one by one in the mouth cavity. Fit the grove at the back of the denture of onto the gum and push them together firmly.







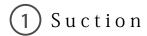




Oxygen inhalation



Suction(nasal/oral/tracheostomy)



nasal/ oral/ tracheostomy

Simulated sputum cannot be used



1. Apply lubricants to catheter, nasal, oral, and tracheostomy parts.





- Use 10-14Fr. suction catheter
- Use lubricant attached to the training model. Do not use the gel-type lubricant as it can remain inside and coagulate.
- 2. Take off the plug for tracheotomy and apply the included lubricant to the tracheotomy tube then insert it to the hole.

 Training in changing gauze and cleansing the tube can also be performed.



Recommended tracheal tube is PORTEX tracheostomy tube II MY-102 12746-020. Other tubes may not to the opening.



(2) After training

- 1. Remove the catheter or tracheotomy tube. After removing tracheotomy tube, set the plug to the tracheotomy tube.
- 2. Wipe off the remaining lubricant completely with wet cloth which stuck to catheter, tracheotomy tube, nose and oral cavity part.

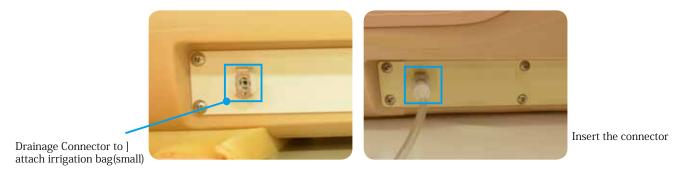


Intravenous injection

1 Preparation

2. Connection of drainage tube

Among the connectors in the right side of the model, attach the irrigation bag(small) to the white drainage connector. Then open the tube cock. In case lots of water for injection was used, use drainage tube instead of irrigation bag(small). The tip of the drainage tube should be put to a bucket.



(2) Training

- Openings on the left forearm and the back of the hand allow training on intravenous injection and fixing the dressing materials.
- Median vein on the left forearm which is fixing of the the puncture site allow training on confirmation of natural instillation





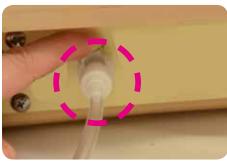
Intravenous injection

3 After Training

Drainage

Close the clamp of the irrigation bag which connnecting the body and detach the joint of the irrigation bag by pushing the button on at the end of the tube. Then Attach the drainage pump (small connector) to the tip of the tube which detach the irrigation bag.







Take out the injection pad (median vein).

Fill the opening in the arm with tissue paper (approx.2 sheets), then drain water from the tube by squeezing the drainage pump. After water drainage from the tube, remove the tissue paper from the opening and wipe inside of the opening as well as the pad. Dry the parts naturally and reassemble for storage.









Airway Opening Techniques Preparation and assistance of intraoral intubation Chest compression

1 Training

Training in assistance of tracheal intubation is possible, allowing training in perioperative or ICU scenarios

-preparation of devices –oral airway intubation (laryngoscope, video laryngoscope), confirmation by auscultation, fixation of the tracheal tube –observation of the rise of chest compression







Insertion of tracheal tubes

For oral route airway, spray enough lubricant in the mouth and the tracheal tube before inserting the tracheal tube.







Recommended tools: Macintosh laryngoscope Size: No.4

Tracheal tube: 7.0, 7.5 mm (inside diameter)

Use the lubricant included in the set. Others like gel type may remain in the model and become irremovable.

Confirmation of successful intubation

The placement of the tube can be confirmed by auscultation or movement of thoracoabdominal area.



Airway Opening Techniques Preparation and assistance of intraoral intubation Chest compression

Intubation by the video laryngoscope

Spray enough lubricant to the video laryngoscope and the oral cavity before training.





Use the lubricant included in the set

Securement of tracheal tube

Tape fixation and THOMAS fixation of tracheal tube



Do not leave the tapes on the model. If the tapes remain on the model for long time, its skin surface will become sticky with adhesive of tapes.



Wipe off the lubricant

Wipe off the remaining lubricant completely with wet cloth which stuck to tracheal tube and oral cavity part.



< Option > Intramuscular injection Hypodermic injection

1 Preparation

Attachment and detachment of Intramuscular pads

• Attachment The shape of each pad is the same. Open the attachment plate of an injection pad and fix it to the injection site as shown in the pictures.

Attachment



Position



Detachment

Open the attachment plate by hand and detach the pad from the manikin. Open the attachment plate wide enough. Do not pull the pads without opening the attachment plate. Otherwise, it may cause a tear in the manikin skin.



Ensure to remove the shoulder/thigh injection pads swiftly after use. Otherwise the manikin skin may become persistent.

Discharge all water from the pads after each session. Do not store the pads with water remaining inside.

(2) Training

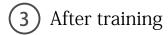
The training of Intramuscular injection can be conducted on upper arm and gluteal. The training of hypodermic injection can be conducted on upper arm, femoral and gluteal.



Intramuscular injection needle of 21-23G and hypodermic injection needle of 24-27G are recommended for training.



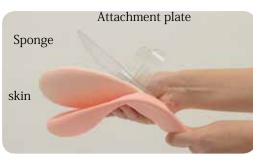
< Option > Intramuscular injection Hypodermic injection



Upper arm and femoral injectoin pads

Detachment of pads







- 1. Push the attachment plate inward, pull out the edge of the skin between the attachment and transparent back plate.
- 2. Take off the skin carefully and remove the sponge and transparent back plate.
- 3. Squeeze the sponge until parts get completely dry, reassemble them carefully.



Do note pull or twist the sponge. Excessive force may cause breakage.

Assemble the pads

- 1. Set the sponge on the convex side of the transparent back plate. Grip the skin at the narrow end.
- 2. Pushing the attachment plate inward, put the edges of the skin between the attachment plate and the transparent back plate.

<u>↑</u> Caution

Full Perinatal Patient Care Simulator

HANA



Code	Name
11406-040	wig
11229-050	lubricant for training models
11415-020	lubricant for MW35/36/40
11415-010	cervical dilation inserts
11415-030	genitalia unit
11416-010	fetus model
11416-020	placenta
11416-030	10 umbilical codes for omphalotomy
11416-040	velamen sheets
11417-020	genitalia unit (frame, skin)
11417-010	2 genitalia inserts(perineorrhaphy))
11418-020	1 set of uterine inserts (4 variations)





code	name
11251-030	2 shoulder injection pads





URL:http://www.kyotokagaku.com

e-mail:rw-kyoto@kyotokagaku.co.jp

2020/03

Worldwide Inquiries & Ordering Kyotokagaku Head Office and Factories: 15 Kitanekoya-cho, Fushimi-ku, Kyoto, 612-8388, JAPAN Tel: +81-75-605-2510 Fax: +81-75-605-2519

Kyotokagaku America Inc. : USA, Canada, and South America 3109 Lomita Boulevard, Torrance, CA 90505-5108, USA

Tel: 1-310-325-8860 Fax: 1-310-325-8867