SPACFAN-ST Foetal Ultrasound Examination Trainer

Part No: KKUS7

The SPACEFAN-ST provides high quality training for second trimester screening. The phantom contains a 23 week foetus with full anatomy placed in the uterus that can be scanned with 2D and 3D transducers.

Skills
- Foetal size assessment:
  - biparietal diameter (BPD)
  - abdominal diameter (AD)
  - abdominal circumference (AC)
  - femur length (FL)
- Confirmation of normal foetus situs
- Foetal anatomy assessment: head and brain, heart and lung, abdominal organs, spine and bones
- Placental localisation
- Evaluation of amniotic fluid volume

Features
- Oval shape phantom abdomen can be set in four different positions
- Life-size foetus model facilitates demonstration and three dimensional understanding
- Uterus anatomy: amniotic fluid, placenta, umbilical cord, 23 week foetus (26cm)
- Foetus anatomy: brain with septum lucidum, heart with four chambers, lungs, spleen, kidneys, aorta, umbilical vein (UV), umbilical artery (UA), and external genitalia

Package supplied
- 1 Mother torso
- 1 Ultrasound pregnant uterus phantom
- 1 Foetus demonstration model
- 1 Carry case

| Packed weight (kg) & dimensions (mm) | 16 | 650 | 480 | 480 |

Product details correct at time of going to press. Subject to change.
Cordocentesis Trainer

Part No: 60203

A simulation of a gravid abdomen for learning percutaneous umbilical blood sampling (cordocentesis).

Skills
• Familiarisation and use of ultrasound equipment
• Identification of ultrasound calling signals
• Recognition of placental/foetal cord
• Needle insertion and placement under ultrasound
• Withdrawal of foetal blood

Features
• Excellent image and realism used with any ultrasound equipment
• Contains a foetal cord, filled with mock blood, suspended in gel (does not include foetus)
• Includes 2 placentas, one on the anterior and the other on posterior aspect, enabling both direct and transplacental approaches to the cord
• The mock blood in the foetal cord can be replenished
• Can be used for needle insertion and placement for amniocentesis training, however no fluid can be withdrawn from the amniotic sac
• Self-sealing abdomen and cord can be pierced repeatedly providing a durable, long-lasting and cost effective model

Package supplied

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<th>Description</th>
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</thead>
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<tr>
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<td>Mock Blood - Venous (250ml)</td>
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Packed weight (kg) & dimensions (mm) 5.75 kg 550 x 430 x 250

MamaNatalie Birthing Simulator

Part No: LD340-00233 (Dark)
Part No: LD340-00333 (Light)

The MamaNatalie birthing simulator complete with NeoNatalie new-born baby provides realistic and affordable training in maternal and newborn care.

Skills
• Delivery of placenta (including partially and fully retained)
• Foetal heart rate monitoring using Pinard’s stethoscope
• Urinary catheterisation
• Breech delivery
• Vacuum delivery
• Oxytocin injection
• Controlled cord traction
• Postpartum haemorrhage management
• Develops communication skills

Features
• Instructor can manually control: foetal heart sounds; delivery of placenta; baby positions in birth tract; uterine firmness; intensity of bleeding and volume of blood loss
• Highly affordable, portable and easy to use
• Quickly ready for use in any setting
• Easily manipulate the condition of the uterus (from boggy to well contracted, and any condition in between)
• Visit the product page on our website for more features

Package supplied

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Packed weight (kg) & dimensions (mm) 5.4 kg 640 x 300 x 320
PROMPT Birthing Simulator

An integral part of the PROMPT (PRactical Obstetric Multi Professional Training) course, this unique product provides a platform for the teaching and acquisition of the complex skills required for successful childbirth management.

Skills
- Simulator allows for multiple positions and techniques:
  - Normal delivery
  - Breech delivery
  - Delivery on all fours
  - Shoulder dystocia management
  - Vacuum delivery
  - Delivery of placenta
  - Forceps delivery: traction and rotational deliveries

Mother
- Anatomically correct bony pelvis modelled from CT scan data
- Realistic pelvic floor musculature
- Stretchable perineum
- Removable abdominal skin for visualisation of foetal positions
- Articulated thighs for multiple manoeuvres and positions
- Realistic birthing process facilitated with lubrication
- Straps to secure Birthing Mother to delivery bed
- Hybrid simulation possible
- Latex free

Standard Baby
- Newborn size and weight
- Fully articulated limbs for multiple manoeuvres and positions
- Palpable fontanelles and suture lines
- Palpable clavicles and scapulae
- Detachable placenta with umbilical cord
- Latex free

Force Monitoring Baby (in addition to the Standard features)
- Fitted with an electronic strain gauge
- Supplied with computer software package for simultaneous force display, measurement and recording of data for shoulder dystocia management
- User definable text allows interventions, delivery scenarios, properties, to be edited into users native language

Developed with healthcare professionals
- Used for a UK Department of Health funded study, SaFE (Simulation and Fire-drill Evaluation). During the study, the midwives and obstetricians who received training using a prototype demonstrated a significant objective improvement in the management of simulated shoulder dystocia
- Developed in conjunction with midwives and obstetricians from Southmead Hospital, Bristol (UK) and Gloucestershire Royal Hospital (UK)
- Studies indicate that when forces of over 100N are applied to the baby by the accoucheur during delivery, obstetric brachial plexus injury (OBPI) can occur. The Force Monitoring system allows the force applied to be monitored

PROMPT Birthing Simulator
Force Monitoring

Episiotomy  Part No: 80005
Non-Episiotomy  Part No: 80006

Package supplied
- 1 Birthing Baby - Standard
- 1 Birthing Baby - Force Monitoring
- 1 Birthing Abdomen & Perineum - Episiotomy
- 1 Non-Episiotomy Birthing Abdomen & Perineum
- 1 Birthing Placenta
- 1 Birthing Mother
- 1 Removable Base & Straps
- 1 SimMom & PROMPT Birthing Lubricant (250ml)
- 1 Carry case

Packed weight (kg) & dimensions (mm)  19.55 kg  600 l  450 w  450 h

PROMPT Birthing Simulator - Value Set

Episiotomy  Part No: 80010
Non-Episiotomy  Part No: 80011

This cost effective set includes both the Standard and Force Monitoring Simulators. It is the ideal package for training centers running simultaneous ‘normal’ and ‘difficult’ birthing stations in a workshop or training environment.

Package supplied
- 1 Birthing Baby - Standard
- 1 Birthing Baby - Force Monitoring
- 1 Birthing Abdomen & Perineum - Episiotomy
- 1 Non-Episiotomy Birthing Abdomen & Perineum
- 1 Birthing Placenta
- 1 Birthing Mother
- 1 Removable Base & Straps
- 1 SimMom & PROMPT Birthing Lubricant (250ml)
- 1 Carry case

Packed weight (kg) & dimensions (mm)  38.8 kg  600 l  900 w  450 h

Delivery on all fours  Vacuum delivery  Forceps delivery  Shoulder dystocia
SimMom™

**UK** Part No: **10000-33**  
**Australia & New Zealand** Part No: **10000-15**

SimMom is an advanced full body birthing simulator with accurate anatomy and functionality to facilitate multi-professional obstetric training and birth management.

**Easy to use**  
Simple operation allows users to build basic to advanced level scenarios appropriate for required learning objectives.

**Realism**  
SimMom provides for the realistic practice of multiple delivery positions and manoeuvres, teamwork, leadership and communication skills in a risk-free environment. Uterus modules add further realism and extend the application of the simulator.

**Standardised and consistent learning**  
Pre-programmed scenarios provide standardised training for consistent quality patient care. Customisable scenarios and real time instructor controls allow for scenario adaptation to accommodate individual student or team needs.

**Multipurpose**  
SimMom can be used as a task trainer or as a full body simulator. In addition, it can be used for non-obstetric training as well as a female pregnant simulator.

With a range of Technical and Educational Services, as well as pre-programmed scenarios to ease educator preparation time, SimMom provides the optimal simulation experience.

Contact us to discuss your requirements.

Developed in partnership:

Limbs & Things

Laerdal

Helping save lives

Hybrid simulation

Normal birthing scenario with instructor controlling Patient Monitor display

SimMom Graphical User Interface

- Controlled via the Instructor PC:  
  - highly configurable  
  - easy to operate and control mother and foetal vital signs  
  - run on-the-fly, customised or pre programmed scenarios
Births, assisted deliveries & drills
- Normal births
- Vaginal breech births
- Assisted deliveries:
  - forceps
  - vacuum
- Shoulder dystocia
- Cord prolapse
- Eclampsia & pre-eclampsia
- Maternal collapse
- Post Partum Haemorrhage
- Sepsis
- Uterine inversion
- Ruptured uterus

Movement
- Seizure
- Able to position on all fours:
  - realistic rotation of the shoulder and hip joints
  - legs bend at the knees
  - arms bend at the elbow
- Other positions:
  - supine
  - semi-recumbent
  - left lateral
  - lithotomy
  - McRoberts position

Airway features
- Obstructed airway
- Tongue oedema
- Right lung, left lung and both lung blockage
- Head tilt/chin lift
- Jaw thrust
- Suctioning techniques (oral and nasopharyngeal)
- Bag-Valve-Mask ventilation
- Oropharyngeal and nasopharyngeal intubation
- Combitube, LMA and other airway device placement
- Endotracheal intubation (ET)
- Retrograde intubation
- Nasal and oral fibreoptic intubation
- Trans-tracheal jet ventilation
- Right mainstem intubation
- Surgical and needle cricothyrotomy
- Chest tube insertion

Pelvic components
- Atonic uterus modules (for post partum haemorrhage, uterine inversion and retained placenta)
- Fluids (blood, stained amniotic fluid and urine)
- Bladder catheterisation & filling

Breathing features
- Simulated spontaneous breathing
- Variable respiratory rates
- Bilateral and unilateral chest rise and fall
- Normal and abnormal breath sounds:
  - 4 anterior auscultation sites
  - bilateral midaxillary sites

Vascular access
- Pre-ported IV access (both arms)
- Subcutaneous and intramuscular injection sites

Circulation features
- Blood pressure measured manually by auscultation of Korotkof sounds
- Bilateral carotid and brachial pulse, radial (right side only) pulses synchronised with ECG
- Pulse strength variable with blood pressure
- Pulse palpation is detected and logged

Birthing Baby
- Realistically modelled head with all head landmarks present (fontanelles and sutures)
- Head can be used for forceps deliveries (including rotational) and suction delivery (kiwi and ventouse)
- Head can be easily manipulated by the trainer and flexes naturally as it is pushed through the birth canal
- Open mouth for suction (if required)
- The Birthing Baby’s body is designed to allow it to be easily pushed through the birth canal
- Bony prominences of the hips to support Lovset’s manoeuvres
- Realistically positioned torso landmarks (scapulae and clavicles)
- Arms and legs fully moveable to allow for manoeuvres required during deliveries (particularly breech and shoulder dystocia)
- Umbilicus and placenta (normal and retained)
- Electronic Fetal Monitoring and Cardiotocography can be controlled and displayed by the instructor

Cardiac features
- Extensive ECG library
- Heart sounds synchronised with ECG
- ECG rhythm monitoring
- 12 lead ECG display
- Defibrillation and cardioversion
- Pacing

Other features
- Bowel sounds and foetal heart rate (not at the same time)
- Interchangeable pupils (normal, blown and constricted)
- Patient Voice: - pre-recorded sounds - custom sounds - instructor can simulate patient’s voice wirelessly

www.limbsandthings.com
Keele & Staffs Episiotomy Repair Trainer

Part No: 60450

A three stage training system for teaching episiotomy, suturing techniques, and repair of episiotomy & second degree tears. The model was developed in conjunction with Professor Khaled Ismail - Senior Lecturer & Consultant Obstetrician & Gynaecologist, Keele University School of Medicine & University Hospital of North Staffordshire (UK) and Professor Christine Kettle - Professor of Women’s Health, University Hospital of North Staffordshire & Staffordshire University (UK).

Throughout 2014, Professor Ismail and his faculty will be training maternity health professionals across the UK on the Keele & Staffs Episiotomy Trainer, during ‘Birth 2’ - a maternity training initiative offering part-funded places set up by the charity Baby Lifeline. This is a direct response to the NHS Litigation Authority’s report ‘Ten Years of Maternity Claims’ and looks to promote patient safety through best clinical practice.

Package supplied  Part No
- 1 Episiotomy Incision Pad (Pack of 6) 60451
- 1 Episiotomy & Perineal Repair Pad (Pack of 2) 60452
- 1 Episiotomy & Perineal Repair Block 60453
- 1 Perineal Repair Perineum 60454
- 1 Perineal Repair Techniques Jig 60455
- 1 Perineal Repair Base & Clip Part No: 60456
- 1 Keele & Staffs Baby Head 60457
- 2 bench top clamps
- 1 carry case

Packed weight (kg) & dimensions (mm)  4.2 kg 460 l 310 w 180 h

Stage 1  Episiotomy

A simplified model for teaching safe methods of performing episiotomies.

Skills
- Identification of fontanelles
- Handling of a stretched perineum
- Reducing the risk of damaging the baby or mother
- Infiltration of perineum prior to episiotomy
- Use of instruments
- Performance of medio-lateral (or midline) episiotomy

Features
- Realistic representation of tissue to represent a stretched perineum
- Baby Head provides a realistic look and feel providing landmarks and appropriate tactile response when inserting fingers to guard the baby’s head

Stage 2  Perineal Repair Techniques

The Episiotomy & Perineal Repair Pad prompts trainees to learn to suture on two planes, one of which has the spatial challenges which exist when suturing within the vagina.

Skills
- Suturing in two planes (inside vagina and on the perineum)
- Practise suture techniques: continuous, subcuticular, knot tying

Features
- Representation of the anus printed on pad for orientation
- Representation of the hymenal remnant printed on pad to assist in assessment of suturing techniques
- Soft skin with a similar drag and strength to human skin
- Comprises epidermis, dermal and subdermal layer (not muscle)
- Epidermis and dermis have a realistic retention of suture

Stage 3  Perineal Repair Procedures

For the practice of episiotomy and second degree tear repair.

Skills
- Tissue layer recognition and handling
- Vaginal mucosal suturing
- Deep muscle suturing
- Subcuticular suturing
- Identification and management of perineal tears
- Enables digital rectal examination before and after repair

Features
- The Episiotomy & Perineal Repair Procedure Block represents the following realistic anatomy:
  - perineal skin
  - superficial muscle structure and relevant layer for suturing
- Cost effective: all layers can be sutured repeatedly
- Each Procedure Block presents 3 repair sites (left lateral is pre-incised, with both midline and right lateral uncut)
- Clamps provided to secure Trainer to edge of bench top
Episiotomy Trainer

Part No: 60225

For the practice and repair of episiotomy, and repair of perineal lacerations.

Skills
• Performing an episiotomy
• Tissue layer identification and handling
• Deep musculature suturing
• Subcuticular suturing
• Superficial suturing

Features
• Full procedure can be carried out
• Perineum, vagina and bowel are represented by a replaceable soft tissue pad
• Soft tissue pad contains superficial muscle structure and relevant layers for suturing
• Cost effective: all layers can be sutured repeatedly
• Episiotomy or laceration can be sited to the left, right or directly towards the anus
• Perineum can be distended to replicate delivery
• Skin surface is washable using soap and water
• Clamps stabilise the Trainer during use

Package supplied Part No
• 1 Episiotomy Pad 60226
• 1 base
• 2 clamps

Packed weight (kg) & dimensions (mm) 2.0 kg 280 l 290 w 150 h

FGM Deinfibulation Trainer

Part No: 60470

This new model has been designed to help recognise female genital mutilation (FGM) and perform the surgical reversal procedure of deinfibulation. This model represents Type III FGM.

The idea of adapting the Keele & Staffs Episiotomy Repair Trainer for deinfibulation training was conceived by Mr Abdalla E A Yagoub (Specialist Registrar in Obstetrics & Gynaecology, West Midlands Deanery) and developed by him in collaboration with Professor Khaled M K Ismail and Miss Fidelma O’Mahony from the University Hospital of North Staffordshire (UK).

Skills
• Recognise correct anatomy and classification type of FGM
• Identification of important anatomical landmarks
• Guarding vital anatomy whilst performing a surgical incision
• Suturing skills including knot tying

Features
• Skin layers have realistic retention of sutures
• Finger can be inserted to ‘guard’ the vagina and clitoris whilst incisions are made

• FGM Deinfibulation Upgrade Kit Part No: 60473
fits onto the frame supplied with both the Keele & Staffs Episiotomy Repair Trainer (page 58) and the Sultan Anal Sphincter Trainer (page 60)

Package supplied Part No
• 1 FGM Deinfibulation Perineum 60471
• 1 FGM Deinfibulation Insert Block 60474
• 1 FGM Deinfibulation Perineal Skin (Pack of 3) 60472
• 1 Frame
• 2 bench top clamps
• 1 carry case

Packed weight (kg) & dimensions (mm) 2.20 kg 560 l 360 w 130 h
Sultan Anal Sphincter Trainer
Part No: 60227

For practising the techniques associated with the repair of the internal and external sphincter (3rd degree tear). Developed in collaboration with Mr Abdul Sultan, Consultant Obstetrician & Gynaecologist, Croydon University Hospital (UK).

Skills
- Recognition of internal anatomy
- Tissue handling
- End-to-end repair of the external sphincter
- Overlap repair of the external sphincter
- Repair of the internal sphincter and mucosa

Features
- The Anal Sphincter Block presents the following realistic anatomy: perineal skin, external sphincter, internal sphincter, mucosa, and muscle tissue
- All essential layers of tissue can accept sutures
- Each replaceable Anal Sphincter Block presents 2 repair sites (1 site is preincised the other is uncut)
- Quick and easy to prepare and replace during training courses
- Durable, long-lasting perineum and frame
- Clamps provided to secure Trainer to edge of bench top
- Supplied in durable plastic carry case
- Compact and portable

Package supplied Part No
- 1 Anal Sphincter Perineum 60229
- 1 Anal Sphincter Block 60228
- 1 Anal Sphincter Block Clip
- 1 base
- 2 bench top clamps
- 1 carry case

Practise deinfibulation on your Sultan Anal Sphincter Trainer by purchasing the FGM Deinfibulation Upgrade Kit Part No: 60473. See page 59.
Umbilical Cord

Part No: 50143  (Pack of 5)

Simulated umbilical cord for identifying the vein and arteries and practising cannulation techniques relevant to an intermediate level of training for resuscitation of the newborn.

Skills
- Insertion of cannula into umbilical vein for venous access
- Withdrawal of blood for sampling
- Tying off the umbilical vessels

Features
- Non-biological material; no hygiene issues
- Realistic representation of the umbilical vessels – blood filled large vein, two smaller arteries, twisted within a soft tubal structure and simulated Wharton’s Jelly
- Suitable for introduction of catheters up to FG5
- Size to suit Baby Umbi
- Dimensions:
  - 12mm outside diameter
  - 220mm length

Package supplied
- 5 Umbilical Cords

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<th>235</th>
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Breastmilk Hand Expression Trainer

Part No: 40103

Developed for teaching the techniques required for the hand expression of breast milk. Designed in conjunction with the UNICEF UK Baby Friendly Initiative and it may be particularly useful for staff training in facilities working towards Baby Friendly accreditation.

Its purpose is as a teaching and learning tool for midwives, health visitors and other health care practitioners.

Skills
- The technique of hand expression mimics the natural stimulation of breast milk during feeding. There are two stages to this process:
  - the oxytocin reflex (milk ejection or let down reflex)
  - compression of the lactiferous sinuses

Features
- The soft foam breast is realistic in shape, texture and proportion, and is warm to the touch
- The model can be presented in two ways: freestanding or held against the body
- The model incorporates four ‘milk’ reservoirs. These mimic the 15 to 20 lactiferous sinuses of the normal breast
- Squeezing the nipple alone does not produce milk

Package supplied  Part No
- 1 Simulated Breast Milk (500ml)  40104
- 1 Breastmilk Hand Expression Trainer
- 1 cleaning pump

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