

User's Guide

ExAC Trainer Model: ETSM1

General

ExAC Trainer is a mannikin that allows training on manoeuvres that may stop or reduce bleeding after delivery or trauma.

It represents a torso and can easily be modified to a torso of a woman who have recently given birth.

ExAC Trainer can by an instructor be used to teach skills such as uterine massage and external aortic compression.

The torso allows the students to recognize the femoral artery and abdominal aorta. The pulsation in the femoral artery will be reduced and ultimately cease when the abdominal aorta is compressed against the spinal column.

When modified to a postpartum torso it allows the students to recognize the changes in the abdominal wall after delivery and how this affects the access to aorta and uterus.

It also allows the students to recognize an atonic uterus and upon instruction learn uterine palpation, massage and compression. As the instructor may initiate uterus contractions, the student will be able to recognize a well contracted uterus.

The ETSM1 model consists of several replaceable parts and does not include advanced electrical or digital functions. It contains a 6.5 mA/91 WH lithium battery that allows it to work without an external power source for about 3 hours.

The pulsation is created by air pressure and requires no liquid or refilling of liquids. This makes it possible to use the ExAC Trainer in most regions of the world independent of level of infrastructure. There might be differences between individual models when it comes to air pressure. A slight “trumpeting” sound following the pulsation might be heard when turned on.

See www.exac.no/resources for instruction video.

Main components

ExAC Trainer comes with:

1. A torso with integrated femoral and abdominal aorta.
2. An exchangeable abdominal padding or uterus unit with an abdominal sack for the postpartum abdomen.
3. A charger with adaptor.
4. A bag, ExAC Bag, for protection and carry.

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Cautions and warnings

Take the following precautions to avoid personal injury or damage to the product:

- Turn off and disconnect the ExAC Trainer when not in use.
- Never use the ExAC Trainer in wet conditions.
- Do not attempt to connect the ExAC Trainer to a power source that is not original. Use the supplied power cords.
- Turn off and disconnect the ExAC Trainer from external power source if suspecting electrical malfunctions or mechanical damage. Do not use the ExAC Trainer if suspecting malfunctions of the internal tubing.
- Sharp objects, including nails and jewellery could cause damage to parts vital to the functioning of the ExAC Trainer.
- The warranty expires if the ExAC Trainer is disassembled by others than the manufacturer or approved service provider.

General care

- Check all functions of the ExAC Trainer before use, and at least once a year.
- Charge the battery after use and at least every six months to preserve capacity.
- Optimal temperatures for preserving battery capacity is 21-25°C.
- Moist or water may damage the electricity in the ExAC Trainer.
- The cover may be washed by hand.
- Wash hands before use and/or use gloves during simulation scenarios to preserve the textile cover.
- The ExAC Bag and ExAC Dust Cover will provide extra protection
- For optimal lifespan of the ExAC Trainer, store indoor in a dry place without exposure to sunlight. Avoid exposure to low and high temperatures (< 0°C and >40°C).

Transportation

The ExAC Trainer is easy to carry using the ExAC Bag. Shoulder strapping can also be attached directly to the ExAC Trainer to facilitate carrying on the back.

Always ensure that the ExAC Trainer is firmly secured during transportation and storage to prevent personal injury or damage to the product.

When transporting the ExAC Trainer without supervision, always use the ExAC Hard Case.

The ExAC Trainer contains a lithium battery of 92,16WH and can normally be transported by air. Verify restrictions with the airline before transport.

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Instructions for use

Make sure the batteries are charged or connected to a power source through the charging connector (A). Turn on the device using the on/off button (B).

The femoral artery and the aorta are now pulsating. This is verified visually by the indicator (C) moving for each pulsation.

To train external aortic compression

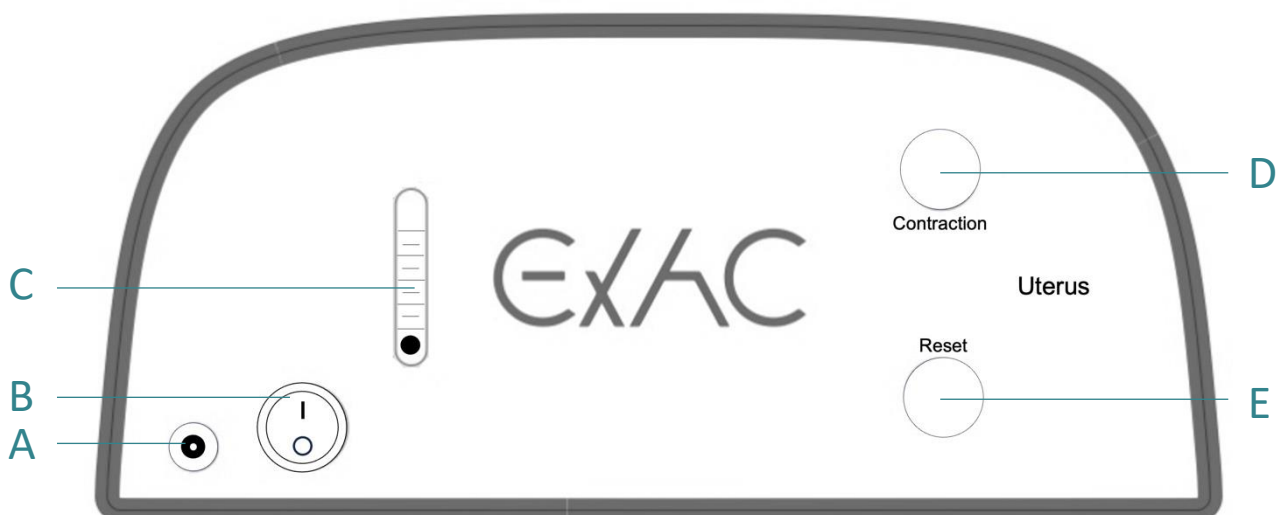
With a hand placed on the abdomen, press the aorta towards the spinal column at the level of umbilicus.

- The pulsation in the femoral artery will cease when the aorta is compressed.
- The indicator (C) on the front panel will stop pulsating still when the procedure is performed correctly.

To train uterine massage

The objective is to recognize the fundus of an atonic uterus. The student can now be instructed in how to palpate, massage and compress the uterus.

By pressing the contraction button (D) uterus contracts and becomes firm. Press the reset button (E) to make the uterus return to an atonic state.



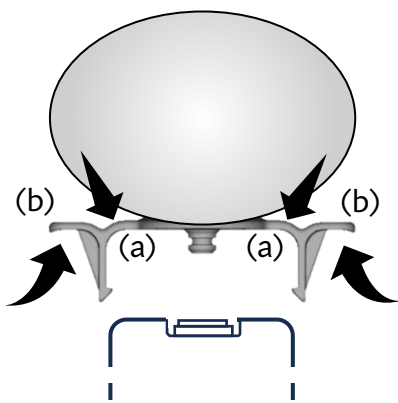
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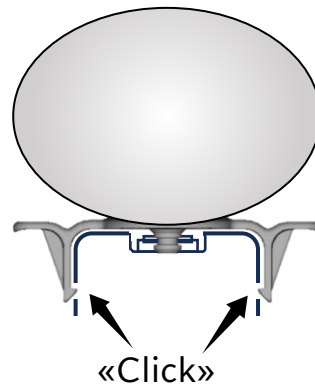
Connecting and releasing uterus component

The uterus component shall be connected when training with padding for for PPH situations, and released when training with padding for trauma situations.

To connect:

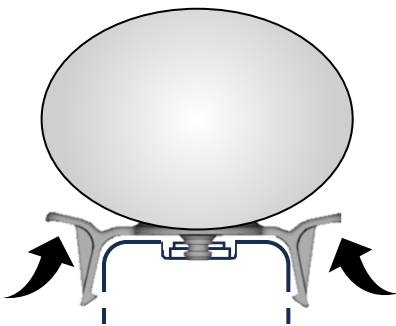


Slide the uterus component onto the connector by pushing the bracket with the thumbs (a) while gently pushing the handles on both sides upwards with the index fingers (b). Do not use excessive force.

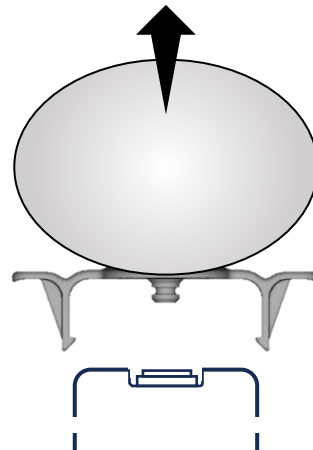


Release the upward pressure on the handles and push downwards until the component is fastened on both sides.

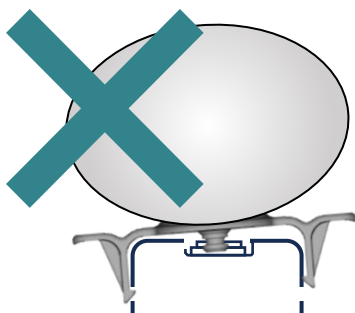
To release:



Gently push the handles on both sides upwards to release the component.



When released, slide the uterus component upwards.



Verify that the component is fastened on both sides.

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Extras and spare parts

The following parts are available separately:

- Abdominal padding.
- Uterus unit
- Uterus cushion
- Uterus membrane
- Abdominal sack for the postpartum abdomen.
- Charger with adaptor
- Femoral pulsation tube
- Aorta pulsation tube
- ExAC Trainer Hard Case for transportation and storage.
- ExAC Dust Cover
- ExAC backpack straps

Problem solving

To ensure optimal functionality of the ExAC Trainer, we recommend to follow advice and directions as described above. However, in the unlikely event of unexpected problems, the list below might be helpful. Spare parts can be purchased through www.exac.no.

Problem	Possible reason	Measure
The Exac Trainer does not start	No electrical connection	Charge the batteries or connect the ExAC Trainer to a power supply.
		Charger is not original. Verify feasibility described on the product label on the ExAC Trainer.
The uterus does not contract	Air leakage	Check that the uterus is firmly connected to the device.
		Check for ruptures or deterioration of the membrane. Replace if damaged.
		Check the elastic band tightening the membrane to the uterus core. Adjust or replace elastic band.
		Check the o-ring on the uterus connector and replace if damaged.
No pulsation or weak pulsation	Air leakage	Check connections of the tube(s) and push in to secure connection.
		Check for ruptures or deterioration of the tube(s). Replace if damaged.

Warranty Certificate

This warranty certificate is issued to the customer as proof that ExAC AS ("Manufacturer") undertakes to provide a 1-year warranty for ExAC Trainer ETSM1 ("the Product"). The warranty also applies to removable parts that were delivered with the product. The warranty period starts from the date of purchase and covers any manufacturing defects or material defects that may arise during normal use of the product.

Coverage:

Manufacturing Defects: The Manufacturer guarantees that the product is free from manufacturing defects. In the event of a manufacturing defect occurring within the warranty period, the Manufacturer undertakes to repair or replace the product at no extra cost to the customer.

Material Defects: The warranty also covers any defects in the material that affect the functionality or durability of the product. The Manufacturer reserves the right to repair or replace the defective product at its discretion.

Limitations and Exceptions:

1. The warranty does not cover damage caused by misuse, unauthorized repairs, or alterations to the product.
2. The warranty does not cover normal wear and tear on the product.
3. The guarantee can be canceled if the product has been attempted to be completely or partially disassembled or the seal has been broken.
4. The guarantee can be cancelled if the product has been used for commercial purposes such as rental or leasing.
5. Any modification or adaptation of the product not approved by the Manufacturer may void the warranty.

Claims Procedure:

To submit a warranty claim, the customer must contact the Manufacturer and provide the purchase receipt or other valid proof of purchase. The Manufacturer reserves the right to request additional information or inspection of the product to verify the warranty claim.

Limited Liability:

The Manufacturer's liability under this warranty is limited to repairing or replacing the defective product in accordance with the terms of this warranty. The Manufacturer is not liable for any indirect or consequential damages, including loss of profit or loss of use.

Applicable Law:

This warranty is subject to the laws of Norway and is governed accordingly.

This warranty gives you specific legal rights, and you may also have other rights that vary from jurisdiction to jurisdiction.

For further information or to submit a warranty claim, please contact:
ExAC AS Tomteveien 33c, 1614 Fredrikstad, Norway or e-mail: post@exac.no