



USER GUIDE



ABDOMINAL EXAMINATION TRAINER



This product is available
in light and dark skin tones

60000

60054

FOR MORE SKILLS TRAINING PRODUCTS VISIT

limbsandthings.com

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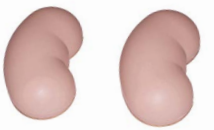

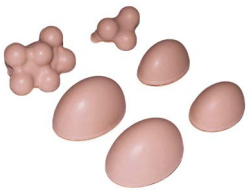






TAKE A LOOK AT OUR **VIDEO**

VISIT THE WEBSITE
limbsandthings.com

OR YOUTUBE CHANNEL
youtube.com/limbsandthings



PACKAGE SUPPLIED

<p>Base Unit</p> <p>60005</p> 	<p>Abdominal Examination Skin</p> <p>60006 60057</p> 	<p>Abdominal Rectus Bag</p> <p>60007</p> 	<p>Abdominal Examination Organ Locator</p> <p>60008</p> 
<p>Abdominal Wall</p> <p>60009</p> 	<p>Abdominal Examination Livers (Set of 3)</p> <p>60010</p> 	<p>Abdominal Examination Spleens (Set of 2)</p> <p>60011</p> 	<p>Abdominal Examination Kidneys (x2)</p> <p>60012</p> 
<p>Abdominal Examination Bladder</p> <p>60013</p> 	<p>Abdominal Examination Pathologies (Set of 6)</p> <p>60014</p> 	<p>Abdominal Examination Aortas (Set of 2)</p> <p>60015</p> 	<p>Abdominal Examination Distension Set</p> <p>60016</p> 
<p>International 5V DC Power Supply</p> <p>60053</p> 	<p>AA Batteries (x4)</p> 	<p>Carry Cases (x2)</p> 	<p>ART Mat</p> <p>60134</p> 



- **Rectus Bag + Abdominal Wall:** simulates underlying layers with in the abdomen (P. 15)
- **Ascites Bag + Distension Foam:** allows for identification of distended, fluid filled abdomen by using the following techniques, percussion, shifting dullness or fluid thrill technique (P. 16)
- **Distension Bag + Distension Foam:** allows for identification of distended, air filled abdomen when percussed/palpated. A potential scenario for this would be a bowel obstruction (P. 17)

SAFETY & CLEANING INSTRUCTIONS

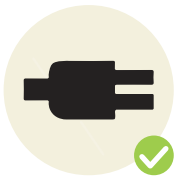
READ THE SAFETY INSTRUCTIONS CAREFULLY BEFORE USING YOUR ABDOMINAL EXAMINATION TRAINER

DO's



Follow all instructions.
Keep these instructions.
Heed all warnings.

Only use attachments/accessories specified by Limbs & Things.



Use only the XP Power ACM06 mains adaptor provided with the product, the use of a different adaptor can cause electrical or fire hazards.

Only used at altitudes not exceeding 5000m.



If a product is damaged or worn, it should be repaired by Limbs & Things. To arrange this, please contact your point of purchase who will be able to provide a repair quote.

Clean the product with a damp soft cloth or sponge, using only warm water with mild detergent. The product must be stored dry.



DON'Ts



Do not install near any heat sources, do not expose the product to flames or use near naked flame sources. Do not use flammable solvents near or on this product.

Never use the product outdoors as this may damage the product.



Caution - Risk of explosion if battery is replaced with incorrect type. This product is intended for use with standard type AA Alkaline or similar non-rechargeable batteries. Check local guidelines for the correct disposal of batteries.

Do not use this apparatus near water, this product contains electronics.



Do not disassemble the product or attempt to repair a faulty unit, please return the product to Limbs & Things for assessment and repair.

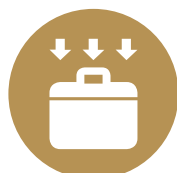
Do not allow young children to use this product.



SAFETY & CLEANING INSTRUCTIONS

READ THE SAFETY INSTRUCTIONS CAREFULLY BEFORE USING YOUR ABDOMINAL EXAMINATION TRAINER

STORAGE & TRANSPORTATION



The trainer and its accessories are heavy when packed in the carrying case.



Always ensure that the products are properly packed and secured during transportation and storage in order to prevent personal injury or damage to the product.

The black carry cases that the **ABDOMINAL TRAINER** is packed in should be stored flat.



STORE THIS WAY



They should not be stored on their side.

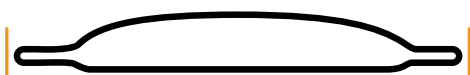


The cardboard box that the **ASCITES BAG** is supplied in should be kept and used to store the Ascites bag.

Always ensure both the Abdominal Rectus Bag and Abdominal Examination Ascites Bag are detached from the trainer when not in use and stored flat, without any risk of creasing/folded edges.



STORE FLAT



DISPOSAL INSTRUCTIONS

Do not disassemble, crush, short-circuit or incinerate the batteries as it may cause fire, injury, burns or other hazards.

Do not dispose of this product with unsorted waste. Improper disposal may be harmful to the environment and human health. Please refer to your local waste authority for information on return and collection systems in your area.



This symbol on the product(s) and / or accompanying documents means that used electrical and electronic equipment (WEEE) should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product(s) to designated collection points where it will be accepted free of charge.

Alternatively, in some countries, you may be able to return your products to your local retailer upon purchase of an equivalent new product. Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling.

Please contact your local authority for further details of your nearest designated collection point.

Penalties may be applicable for incorrect disposal of this waste, in accordance with your national legislation.

For professional users in the European Union

If you wish to discard electrical and electronic equipment (EEE), please contact your dealer or supplier for further information.

For disposal in countries outside of the European Union

This symbol is only valid in the European Union (EU). If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

TEST CERTIFICATIONS



EC DECLARATION OF CONFORMITY

In accordance with ISO IEC 17050-1 : 2010

We at

Limbs & Things Ltd

of

Sussex Street, St. Philips, Bristol, BS2 0RA

Declare under our sole responsibility that the product described below:

Brand and Model Name	Limbs and Things Abdominal Examination Trainer, Part numbers: 60000, 60054, 60001, 60055.
----------------------	--

Has been tested and is in conformity with the following standards:

SUBJECT	STANDARD
Electrical Safety	LVD Directive – 2014/35/EU EN 60065: 2014 Eighth edition and IEC 60065: 2014 Eighth edition – Audio, Video and similar electronic apparatus – safety requirements
Electromagnetic Compatibility	EMC Directive – 2014/30/EU EN61326-1:2013 Electrical equipment for measurement, control and laboratory use. Emissions: EN55016-2-3:2006 EN61000-3-2:2006 +A1+A2 EN61000-3-3:2013 EN55011:2009+A1: 2010 Immunity: EN61000-4-2: 2009 EN61000-4-3: :2006 +A1 +A2 EN61000-4-4: 2012 EN61000-4-5: 2014 EN61000-4-6: 2014 EN61000-4-8: 2010 EN61000-4-11:2004
Radio performance	EN 300 328 V1.8.1:2012-06
RoHS	RoHS - Directive 2011/65/EU, as amended (by Directive 2015/863)

Thereby meeting the essential requirements of directive (RED) (2014/53/EU)

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced Standards and meets all essential requirements of the RTTE Directive.

Signed Nick Hull
Position Managing Director
Location Limbs & Things, Bristol, England
Signature
Date 23 August 2021



Limbs & Things Ltd

DECLARATION OF CONFORMITY

In accordance with UK Government Guidance

We at

Limbs & Things Ltd

of

Sussex Street, St. Philips, Bristol, BS2 0RA

Declare under our sole responsibility that the product described below:

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----------------------	--

Has been tested and is in conformity with the following standards:

SUBJECT	STANDARD
Electrical Safety	Electrical Equipment (Safety) Regulations 2016 BS EN 60065: 2014 Eighth edition and IEC 60065: 2014 Eighth edition – Audio, Video, and similar electronic apparatus – safety requirements
Electromagnetic Compatibility	Electromagnetic Compatibility Regulations 2016 BS EN61326-1:2013 Electrical equipment for measurement, control, and laboratory use. Emissions: BS EN55016-2-3:2006 BS EN61000-3-2:2006 +A1+A2 BS EN61000-3-3:2013 BS EN55011:2009+A1: 2010 Immunity: BS EN61000-4-2: 2009 BS EN61000-4-3: :2006 +A1 +A2 BS EN61000-4-4: 2012 BS EN61000-4-5: 2014 BS EN61000-4-6: 2014 BS EN61000-4-8: 2010 BS EN61000-4-11:2004
Radio performance	Radio Equipment Regulations 2017 BS EN 300 328 V1.8.1:2012-06
RoHS	The Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced Standards.

Signed Nick Hull
Position Managing Director
Location Limbs & Things, Bristol, England
Signature
Date 05/11/21



DECLARATION OF CONFORMITY

We at

Limbs & Things Ltd

of

Sussex Street, St. Philips, Bristol, BS2 0RA


Declare under our sole responsibility that the product described below:

Brand and Model Name	Limbs and Things Abdominal Examination Trainer, Part numbers: 60000, 60054, 60001, 60055.
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Has been tested and is in conformity with the following standards:

Technical regulations	FCC CFR47 Part 15
Test laboratory	Intertek Intertek House Cleeve Road Leatherhead, Surrey KT22 75B
Test report number	102856564LHD-001B
Test report date	18 th April 2017

Signed Nick Hull
Position Managing Director
Location Limbs & Things, Bristol, England

Signature 

Date 23 August 2021

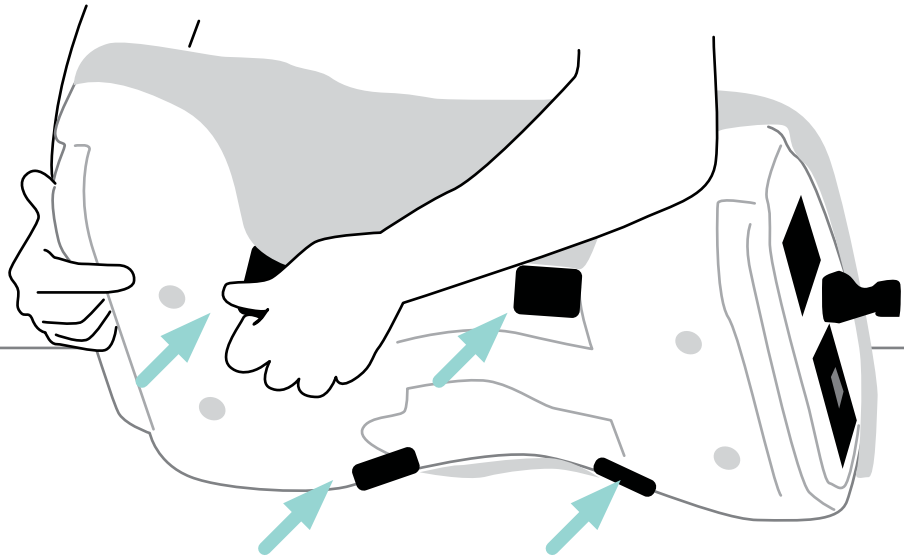
SET UP

ADDING/REMOVING ABDOMINAL SKIN



Tilt the model on to its side to reveal the velcro straps

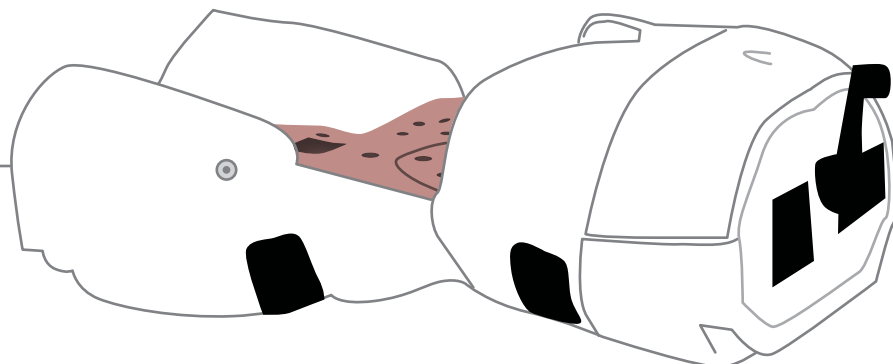
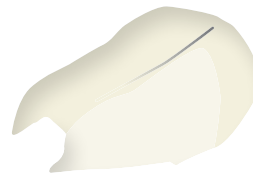
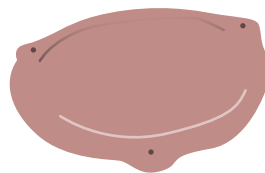
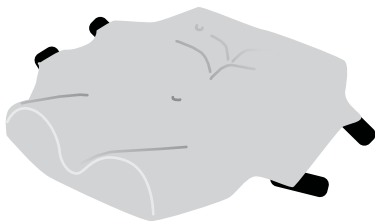
Please ensure to pull the velcro straps and NOT the skin



PLACING ORGANS & PATHOLOGIES



Remove Skin, Rectus Bag and Abdominal Wall to get to the Organ Locator

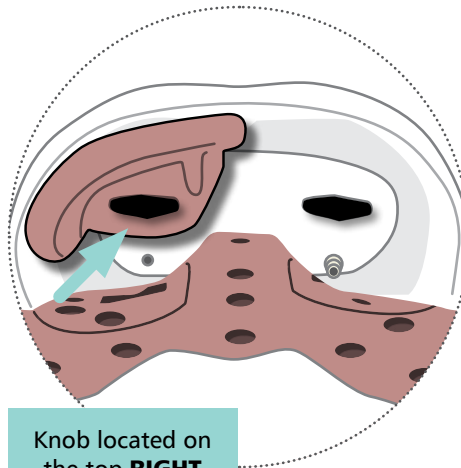
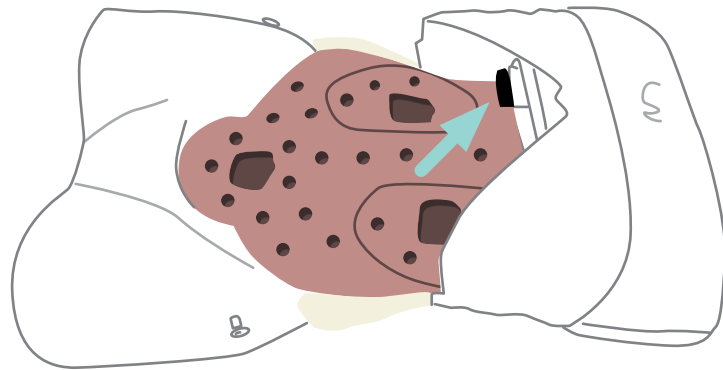
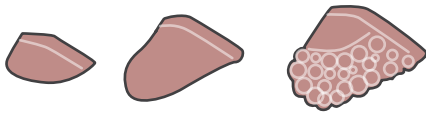


SET UP

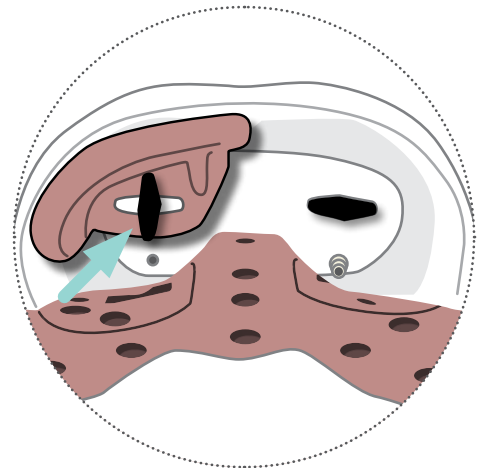
PLACING ORGANS & PATHOLOGIES

Liver & Spleen

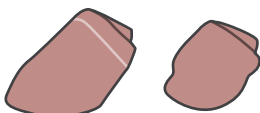
Select a **LIVER** from the Set of 3



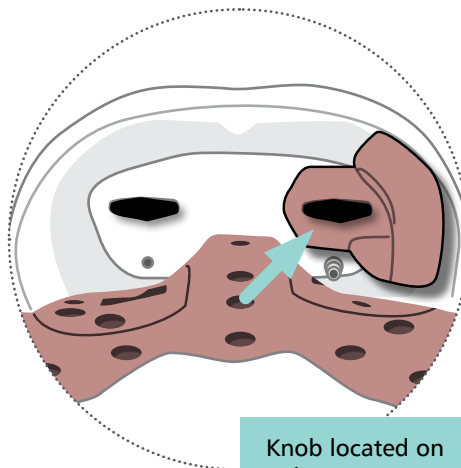
Knob located on the top **RIGHT** of the model



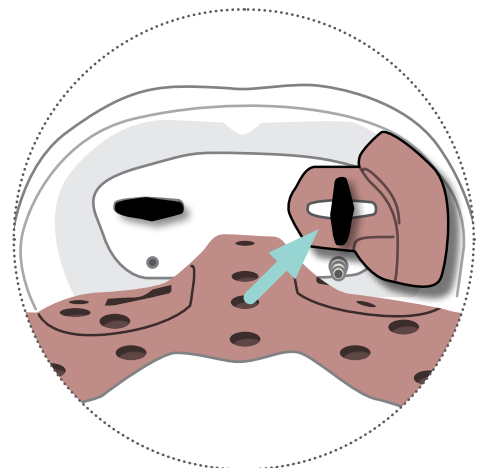
Select a **SPLEEN** from the Set of 2



Same fitting mechanism as Liver



Knob located on the top **LEFT** of the model

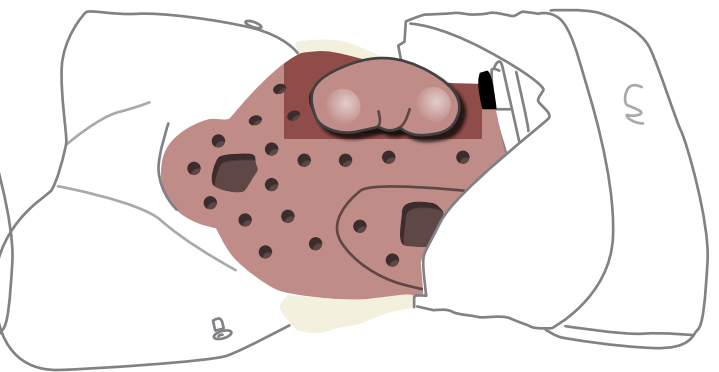
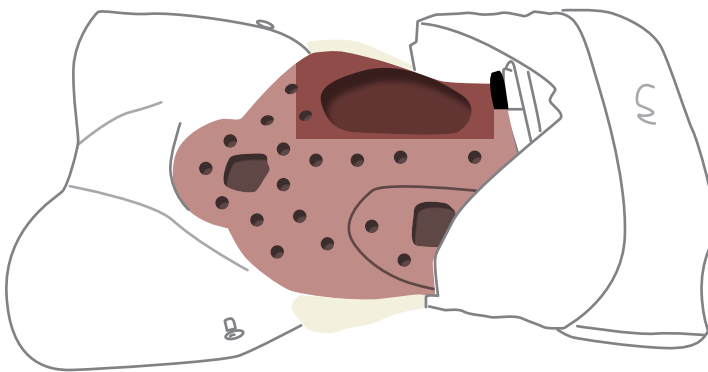
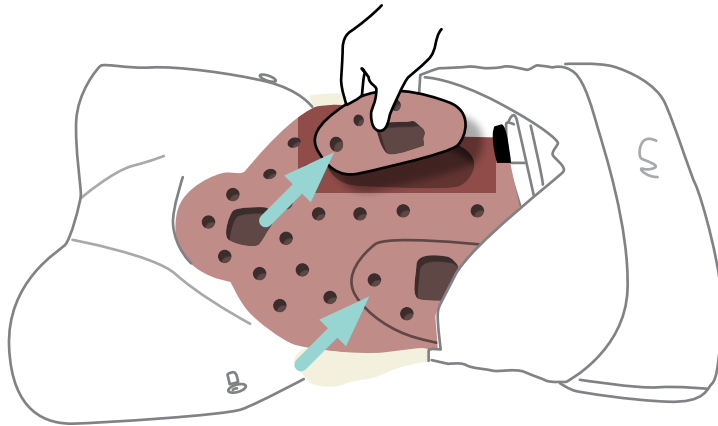
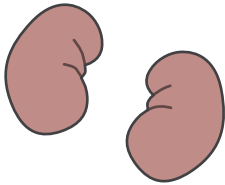


SET UP

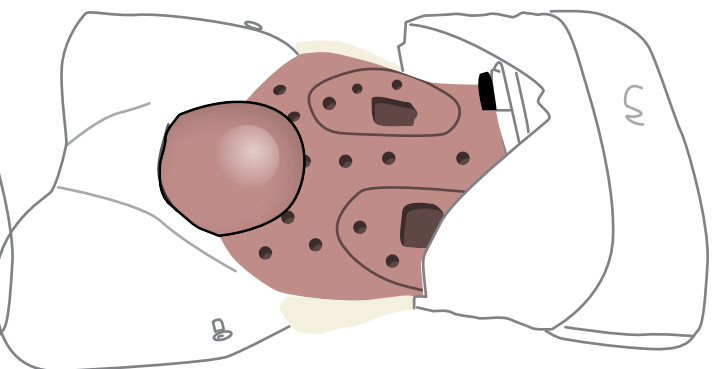
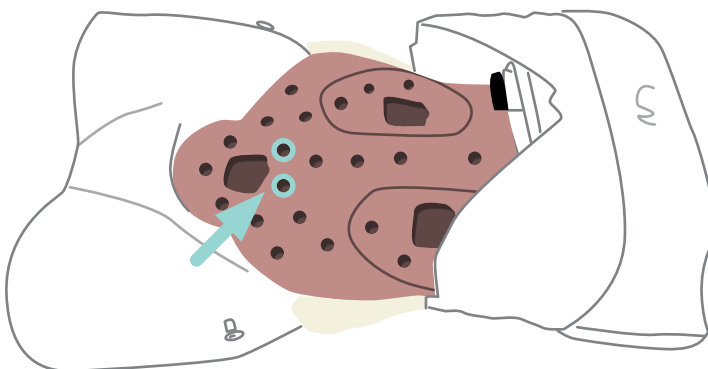
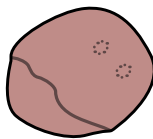
PLACING ORGANS & PATHOLOGIES

Kidney & Bladder

Remove the **KIDNEY LOCATOR**
(1 on each side of the model)



Select the **BLADDER** and fit
the 2 pegs on its back to the
holes indicated below

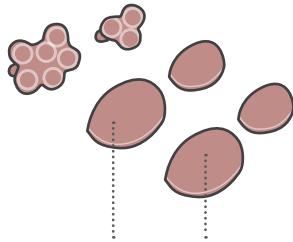


SET UP

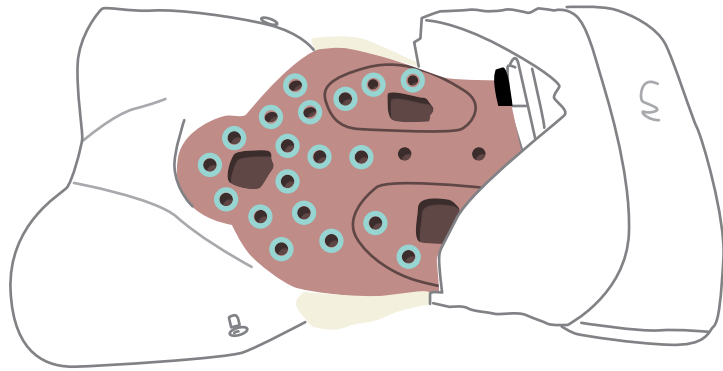
PLACING ORGANS & PATHOLOGIES

Pathologies & Aortas

Various **PATHOLOGIES/MASSES** can be placed in different areas of the Organ Locator

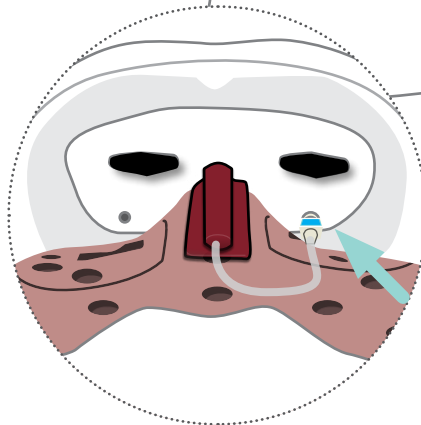
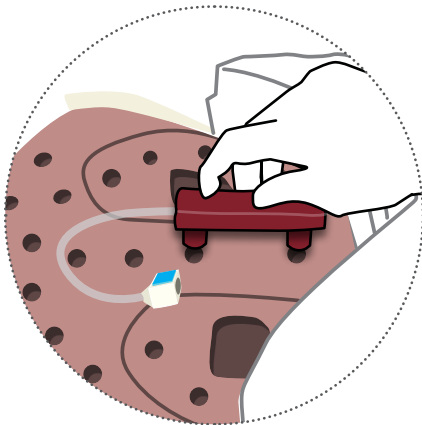


Hard & soft variations

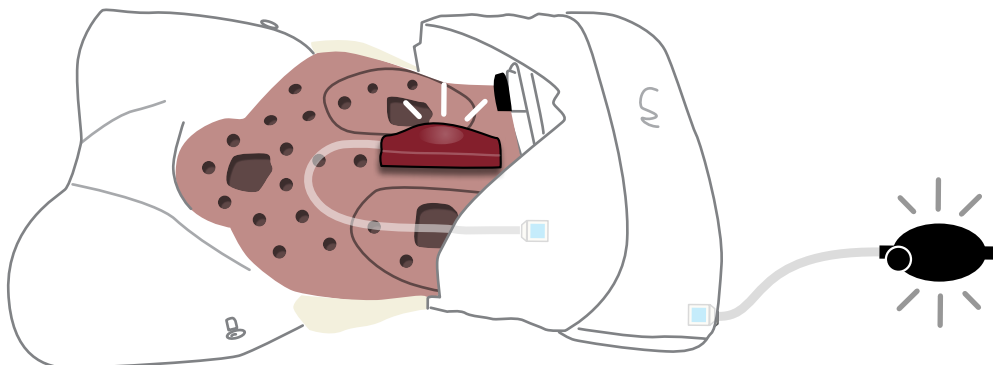


Each pathology/mass has 2 pegs on the bottom which can be lined up with the holes on the Organ Locator

Line up the 2 pegs on the back of the **AORTA** with the 2 holes at the highest point of the Organ Locator.

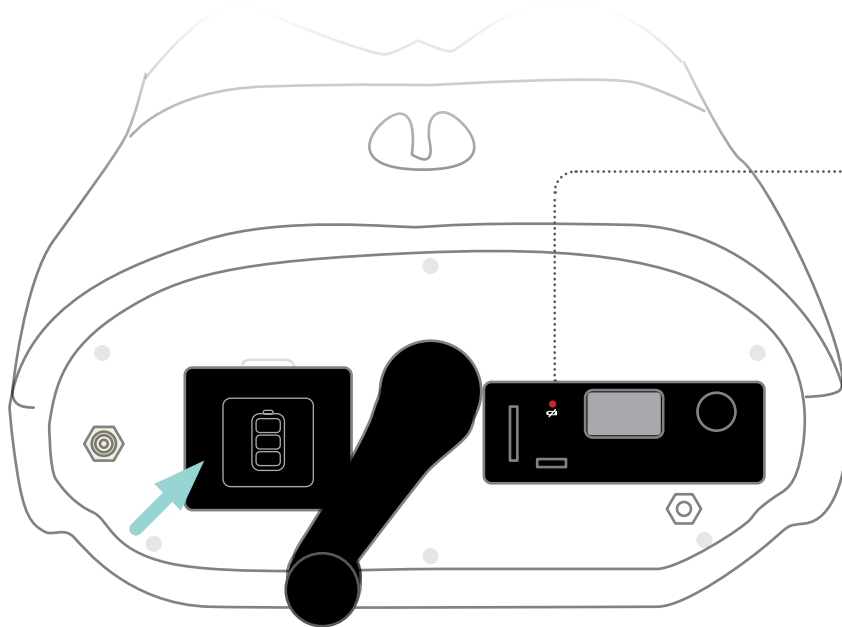


Same process for both Normal & Aneurysmal



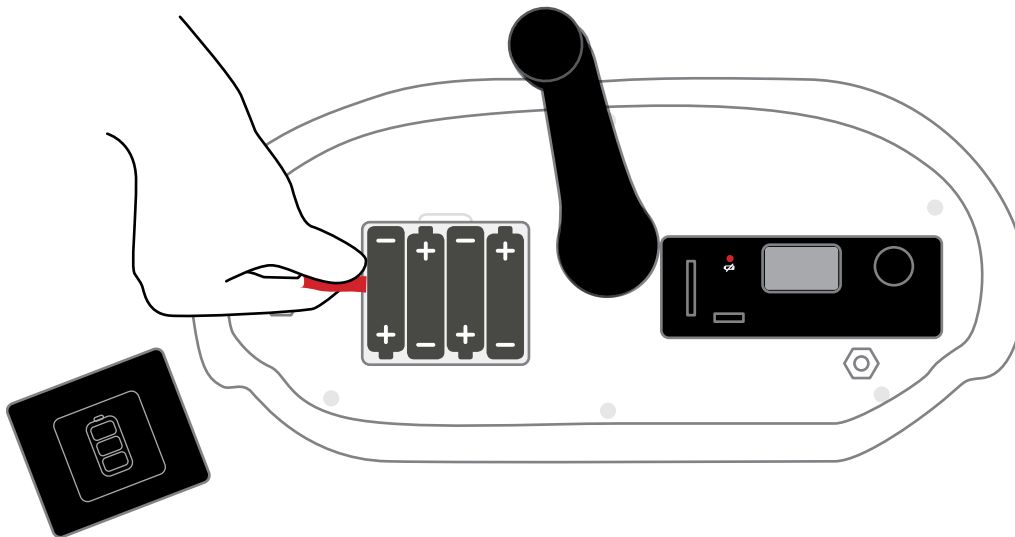
SET UP

INSTALLING/CHANGING BATTERIES



When the batteries are low, the red light will light up

[MEDIA ERROR] - If this message displays, it means 'change the batteries'



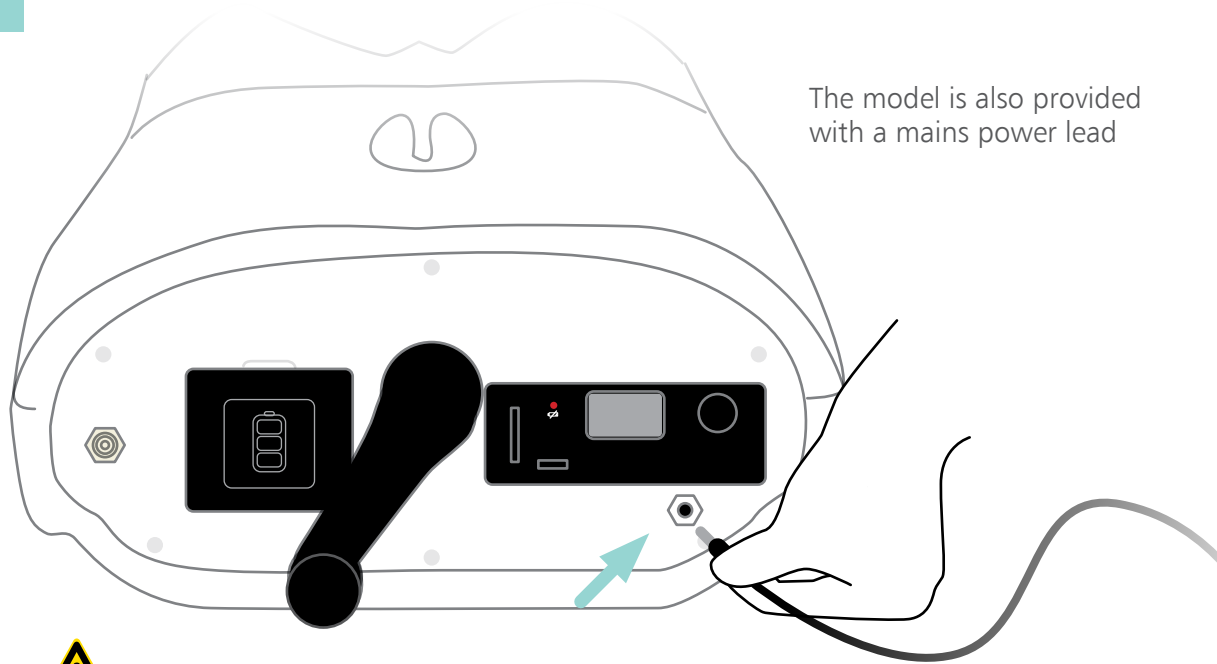
We strongly recommend high quality Batteries (e.G. Duracell/Energizer)



Remove batteries when the model is not in use

SET UP

USING MAINS POWER



The model is also provided with a mains power lead



Ensure batteries are removed before connecting unit to the mains



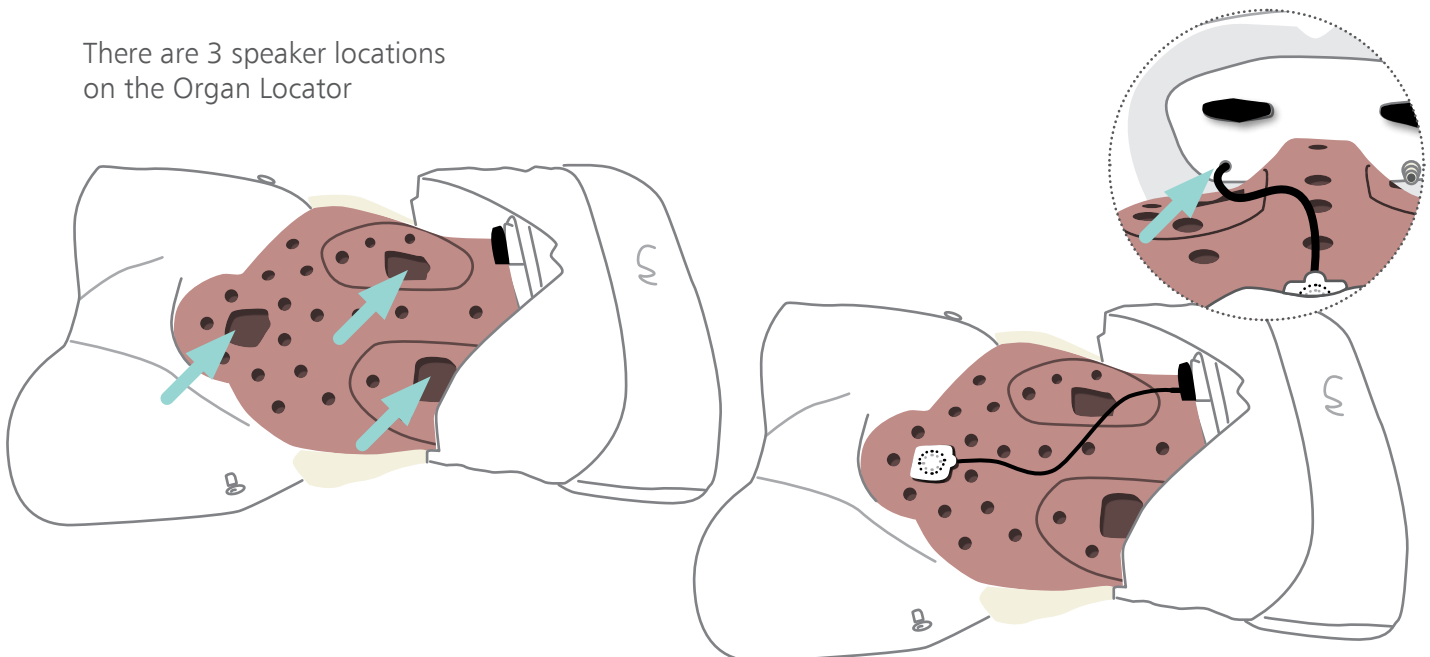
Use only the **XP Power ACM06** mains adaptor provided with the product, the use of a different adaptor can cause electrical or fire hazards



The unit can be used in tropical countries and **up to 5000m altitude** with the XP Power ACM06 mains adaptor

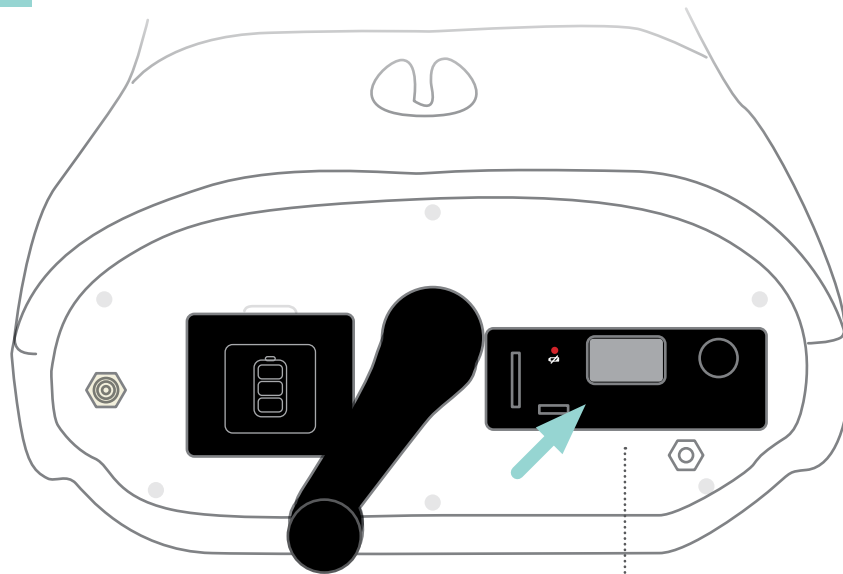
SPEAKER & MP3 PLAYER

There are 3 speaker locations on the Organ Locator



SET UP

SPEAKER & MP3 PLAYER



Rotate the **VOLUME** control to turn volume up and down

Press **POWER** button (hold for 2 seconds) and the display will light up

Press **MODE** button and ensure it is set to Normal

Press the **ARROWS** to scroll through the different available sounds

Select the chosen sound and press **PLAY** button

More sounds can be added by the user by loading them on to the provided USB, or by loading on to a soundcard (not provided)



If you add a sound file make sure it is in MP3 format and reads .mp3 at the end

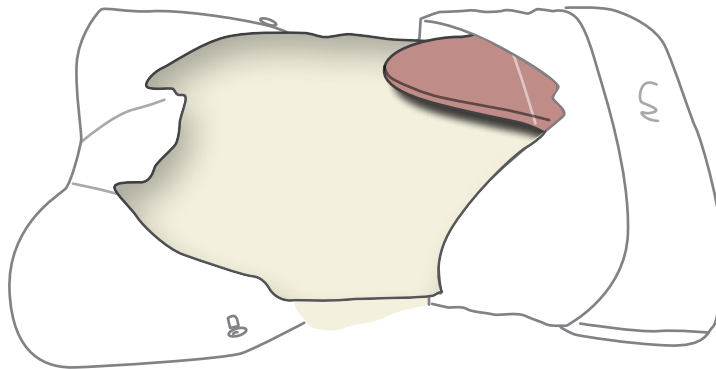
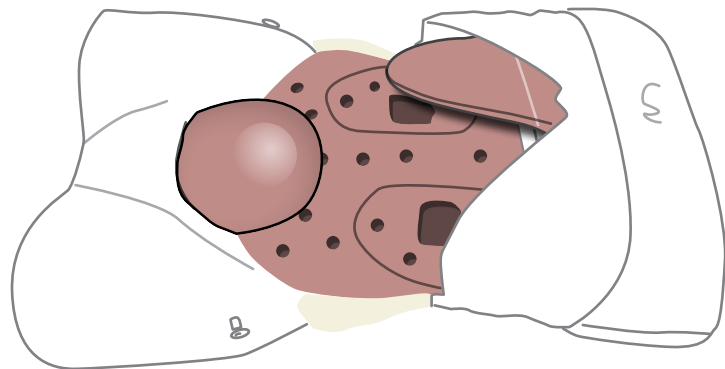


If the MP3 player stops working during use, this may be due to a slight power surge. To remedy this, remove one of the batteries or unplug the USB to turn the MP3 player off, then replace and restart. If there is still no sound, please contact a member of our Customer Services Team

SET UP

INSERTING THE ABDOMINAL WALL

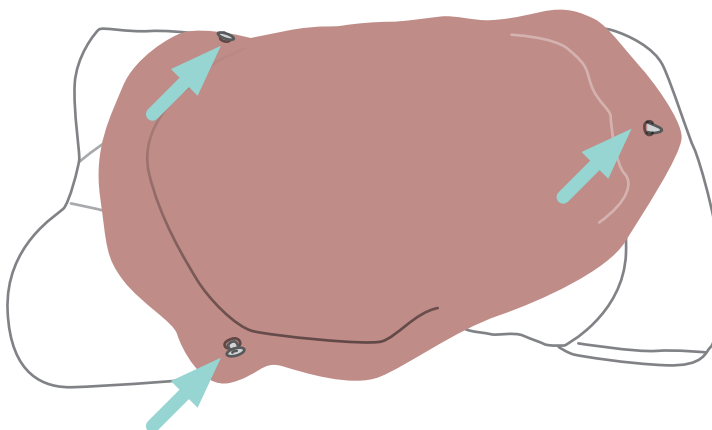
Once the model has been set up with the relevant organs, the **ABDOMINAL WALL** needs to be inserted



Ensure abdomen foam fits underneath liver/spleen

ATTACHING THE RECTUS BAG

Once the Abdominal Wall is in place, the **RECTUS BAG** can be fitted over the top



Secure the Rectus Bag by attaching the peg holes to the pegs on the model



STORE FLAT



Attach **SKIN** as per previous instructions (P. 8)

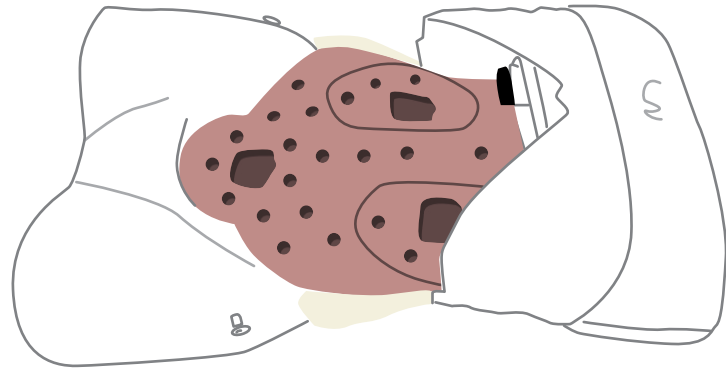
SET UP

ASCITES SET UP

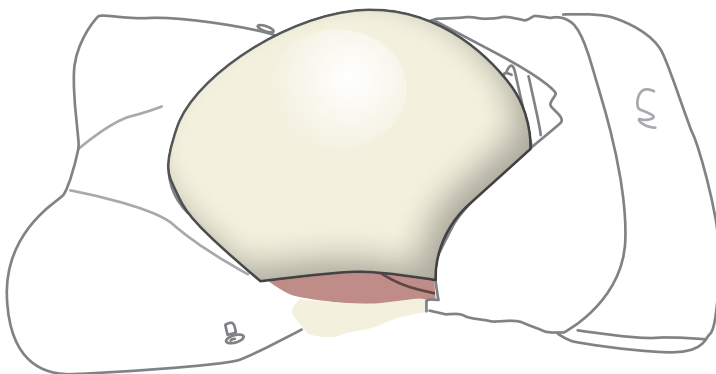
For **ASCITES SET UP** ensure that the Organ Locator is displayed as a starting point



Ensure all organs are removed prior to insertion of distention foam

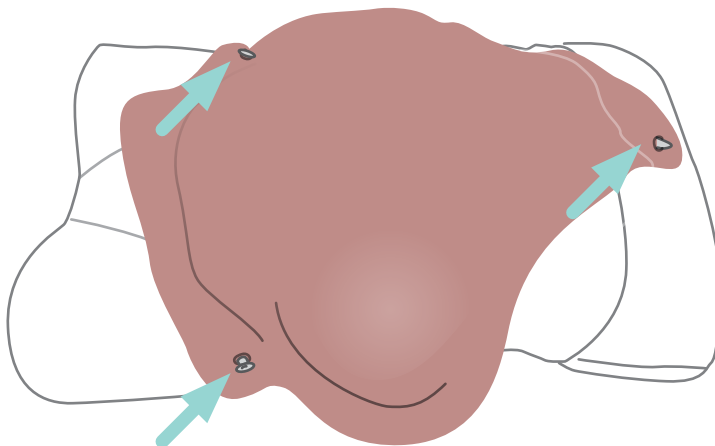


Place the **DISTENSION FOAM** on top of the Organ Locator



Use distention foam - not to be confused with the abdominal foam

Put the **ASCITES BAG** on top of the Distension Foam Insert



Secure the Ascites Bag by attaching the peg holes to the pegs on the model



STORE FLAT



Attach **SKIN** as per previous instructions (P. 8)

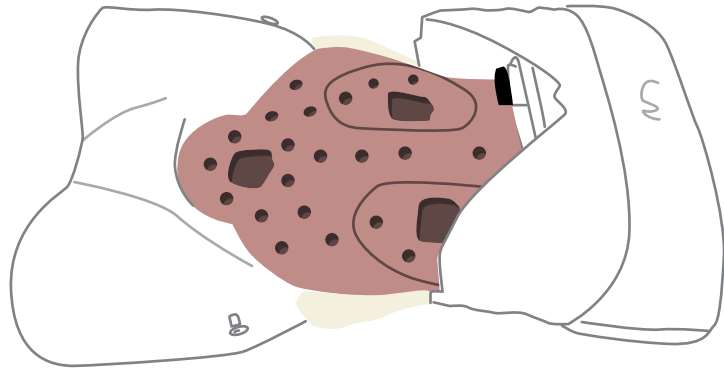
SET UP

GASEOUS DISTENSION

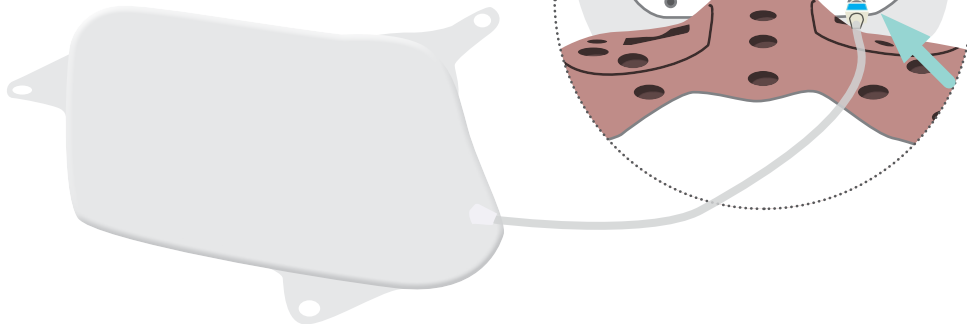
For **GASEOUS DISTENTION SET UP** ensure that the Organ Locator is displayed as a starting point



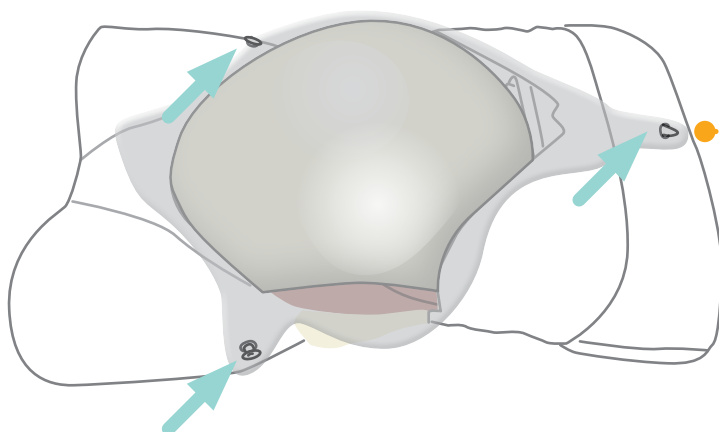
Ensure all organs are removed prior to insertion of distention foam



For **GASEOUS DISTENTION SET UP** ensure that the Organ Locator is displayed as a starting point



Place the **DISTENSION FOAM** on top of the Organ Locator.
Place the **GASEOUS DISTENSION BAG** over the Distention Foam Insert.
Secure the Gaseous Distension Bag by attaching the peg holes.



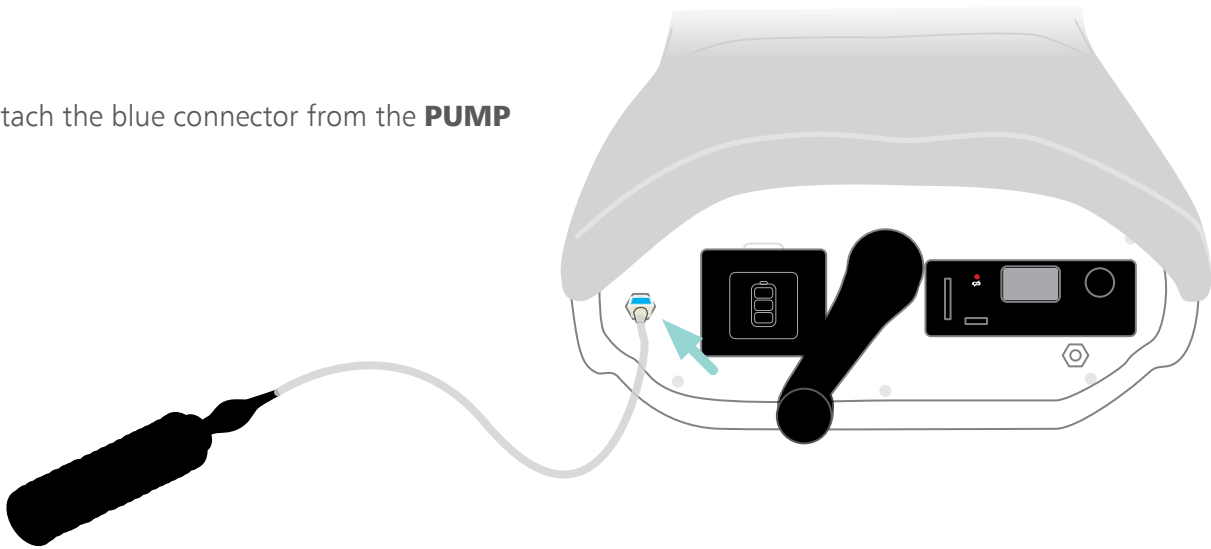
Ensure that the air inlet tube is on the underside of the Gaseous Distension Bag and under the Distention Foam. This will prevent kinks in the air inlet tube.

Attach **SKIN** as per previous instructions (P. 8)

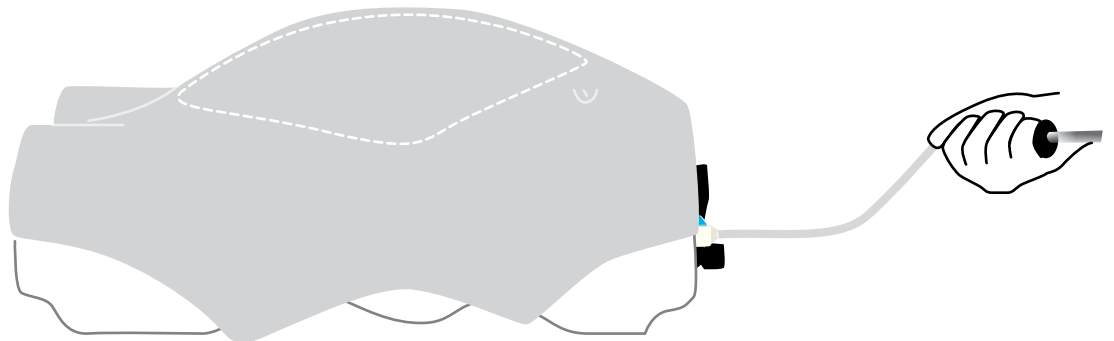
SET UP

GASEOUS DISTENSION

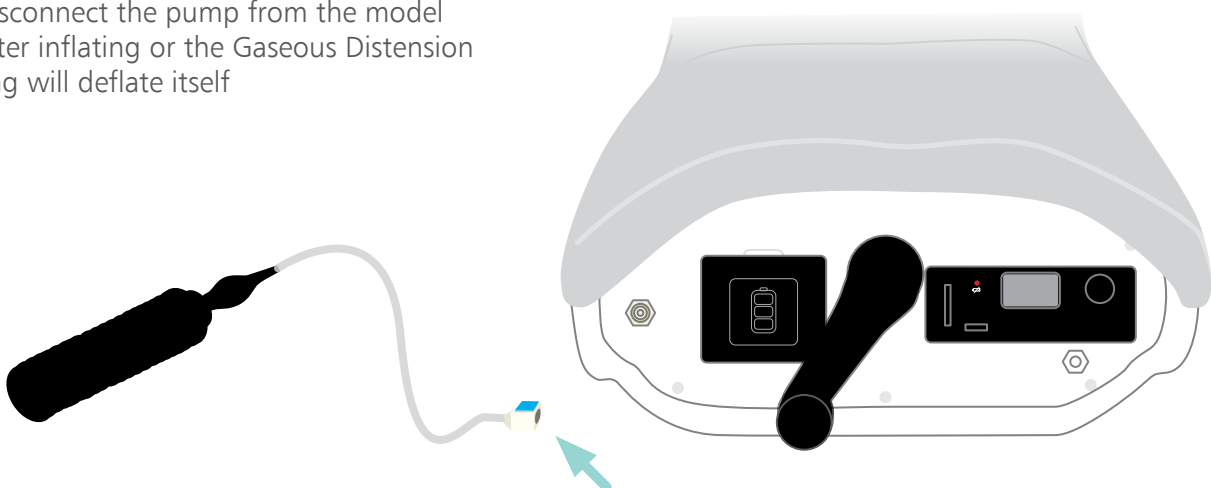
Attach the blue connector from the **PUMP**



Once connected inflate the Gaseous Distension Bag with the pump.
6-8 PUMPS (in and out as 1 pump)



Disconnect the pump from the model after inflating or the Gaseous Distension Bag will deflate itself



SET UP

GASEOUS DISTENSION

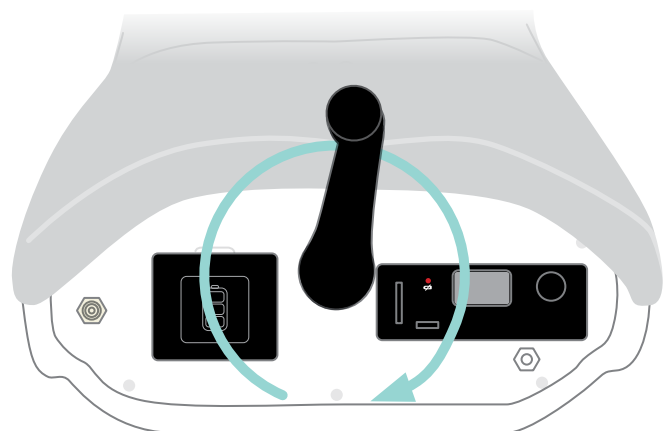
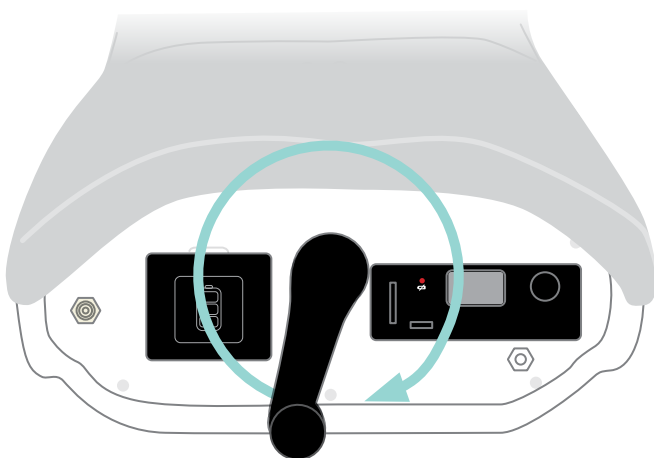
EMPTYING THE GASEOUS DISTENSION BAG



USING THE BREATHING MECHANISM

When the lever is rotated to a downward position, the model simulates the patient breathing in (inhaling)

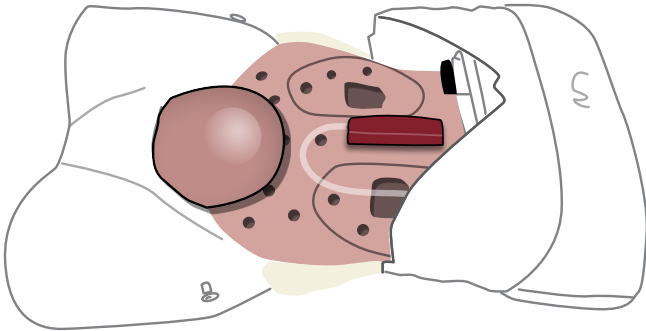
When the lever is pointed upwards, the model simulates the patient breathing out (exhaling)



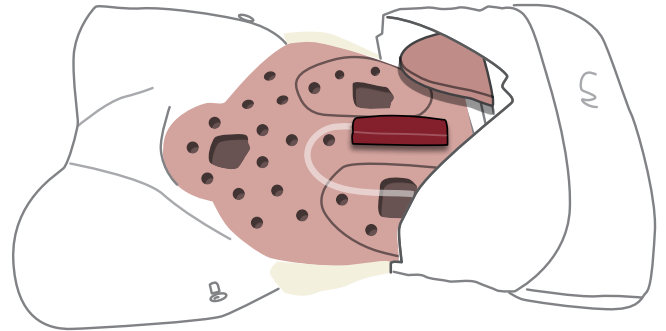
The lever can be rotated 360 degrees (in either direction) to simulate continuous breathing

EXAMPLES OF SET UP FOR SCENARIOS

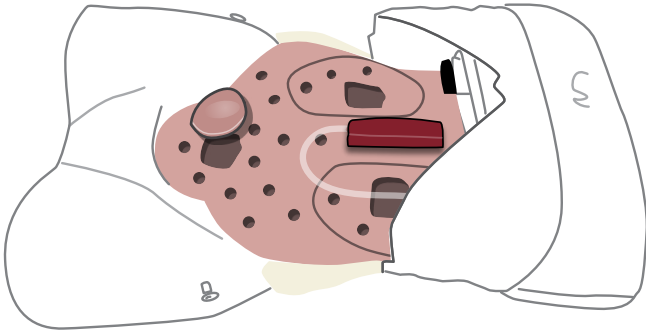
ACUTE URINARY RETENTION - BLADDER



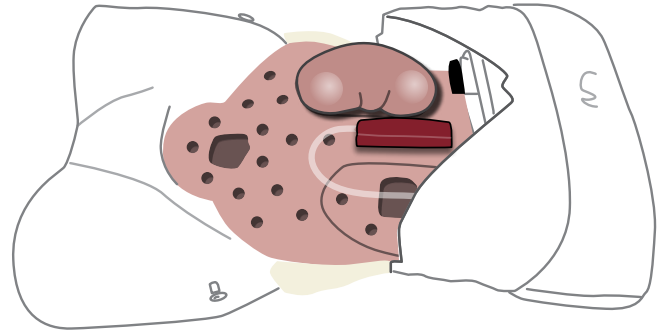
SLIGHTLY ENLARGED LIVER



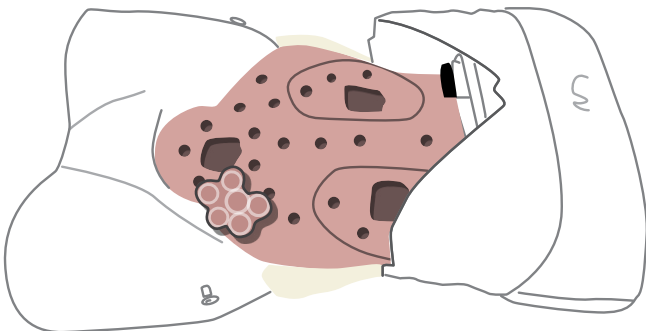
OVARIAN CYST - SMOOTH SOFT MASS



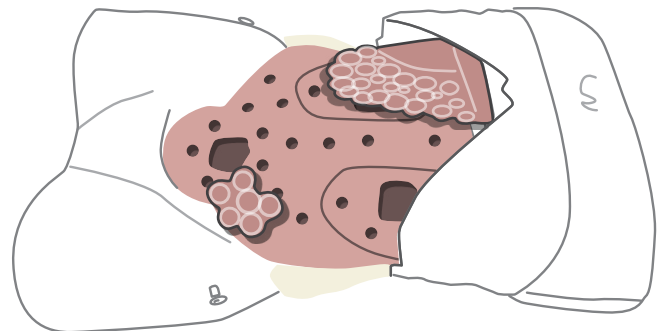
ENLARGED KIDNEY



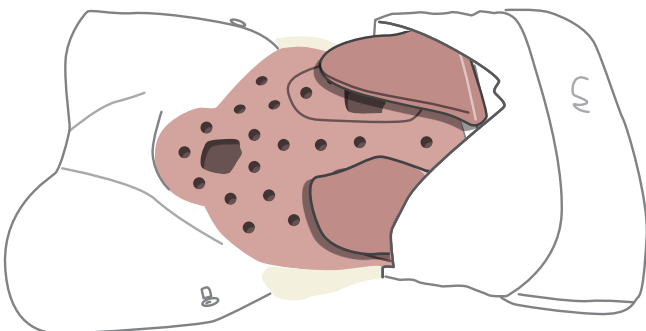
CARCINOMA ON MASS IN LEFT ILIAC FOSSA



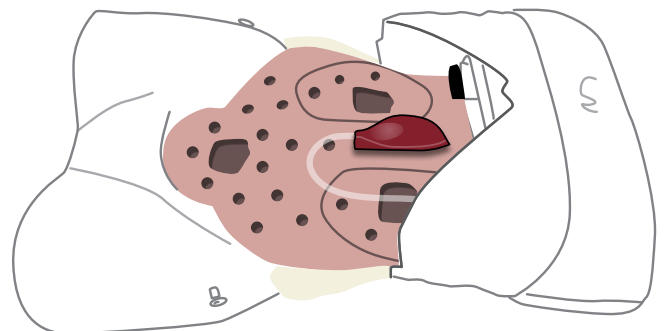
CARCINOMA WITH LIVER METASTASIS



LYMPHOMA



AORTIC ANEURYSM





AUGMENTED REALITY TRAINING (ART)

for your Abdominal Examination Trainer

SAFETY & CLEANING INSTRUCTIONS

Read the safety instructions
carefully before using your
ART Mat

DO's



Follow all instructions.
Keep these instructions.
Heed all warnings

Use mat on flat surface



Only use attachments/accessories
specified by Limbs & Things

Refer all servicing to qualified service
personnel. Servicing is required when
the apparatus has been damaged



DON'Ts



Do not install near any heat sources,
do not expose the product to flames
or use near naked flame sources.
Do not use flammable solvents near
or on this product

Do not set up the product near
electrical appliances or items
damaged by water



Do not cover the graphic of the mat
with other items

Do not move the mat with a
model on top of it



STORAGE



Store rolled up with print on the
outside



Don't fold



Don't place heavy objects on top

CLEANING



Can be cleaned with water, soap and
non-alcoholic cleaning agents



Avoid abrasive and
alcoholic cleaning agents

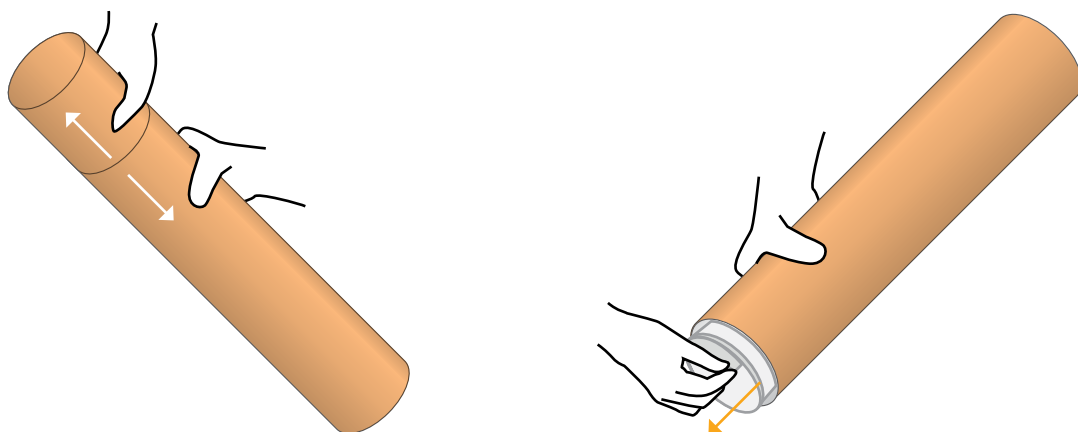


Make sure mat is dry before storing

ART SET UP

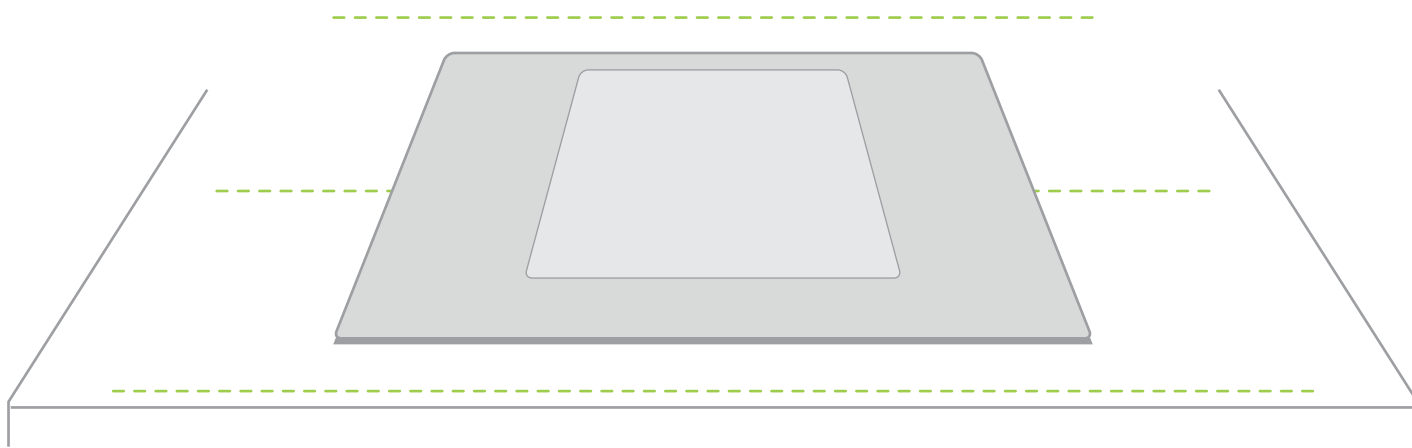
1

Take the mat out of tube



2

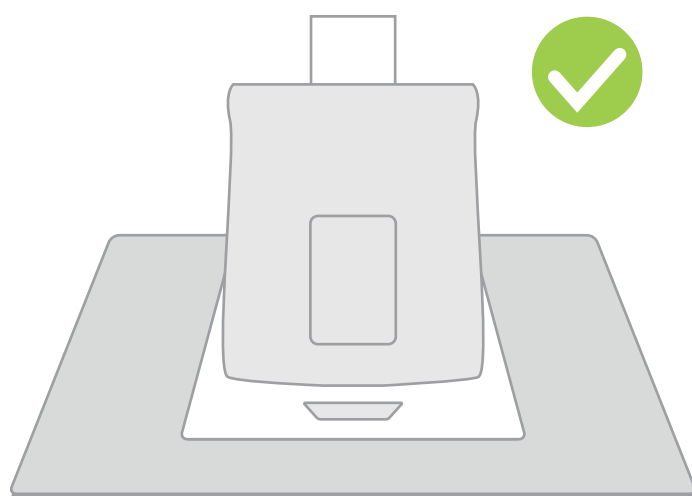
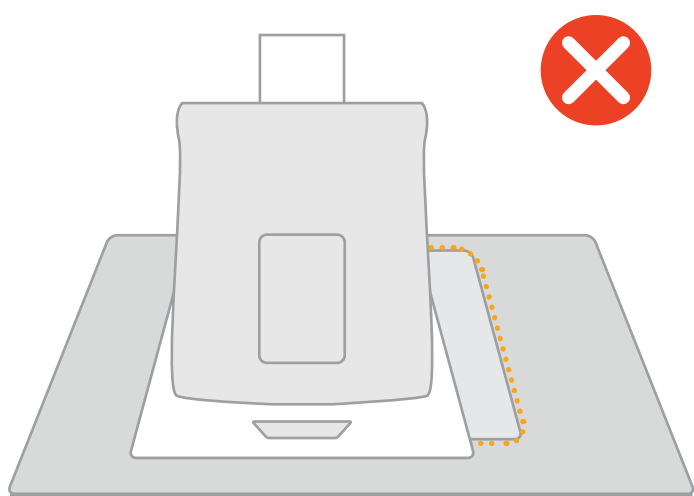
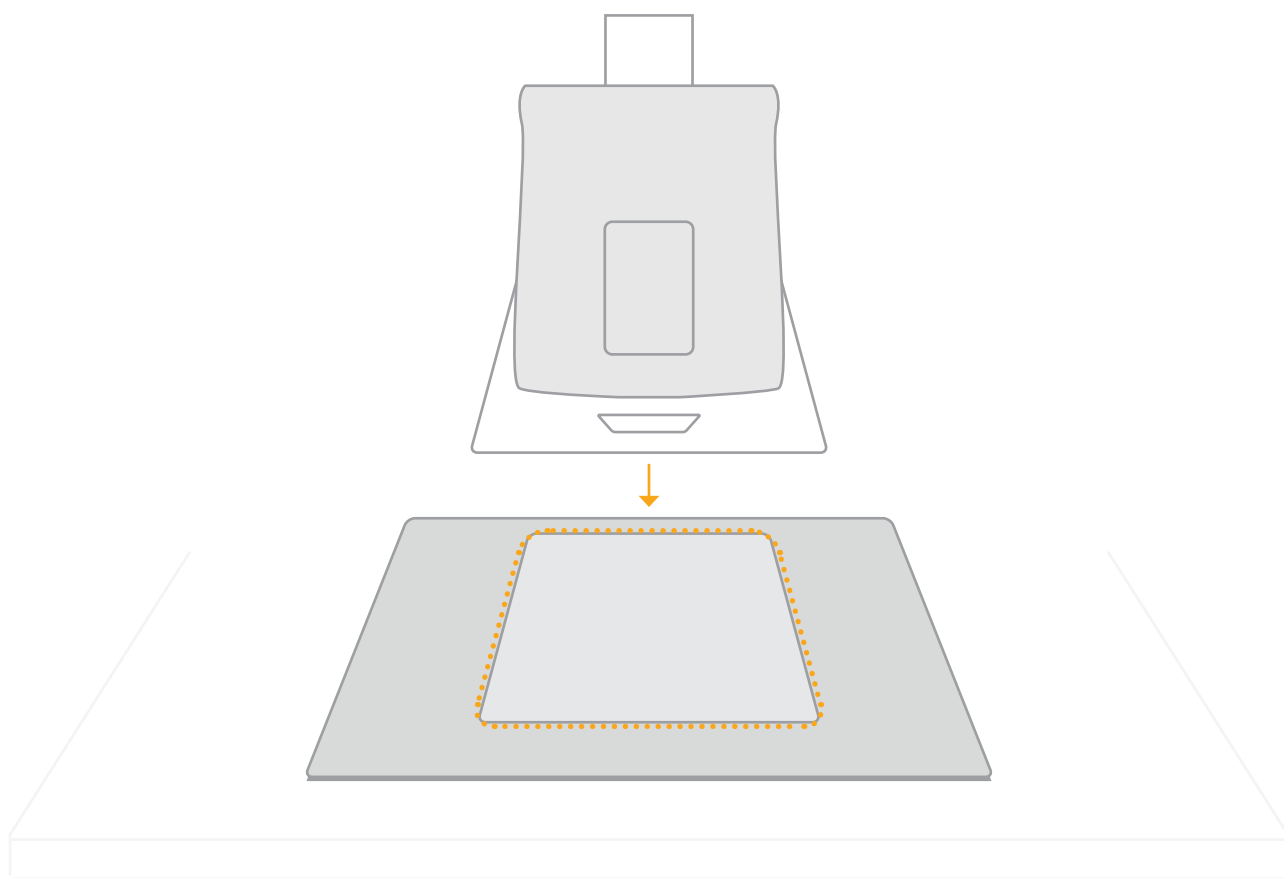
Place the mat on a table



Note: Diagrams are for illustrative purposes, your product may differ from the example shown

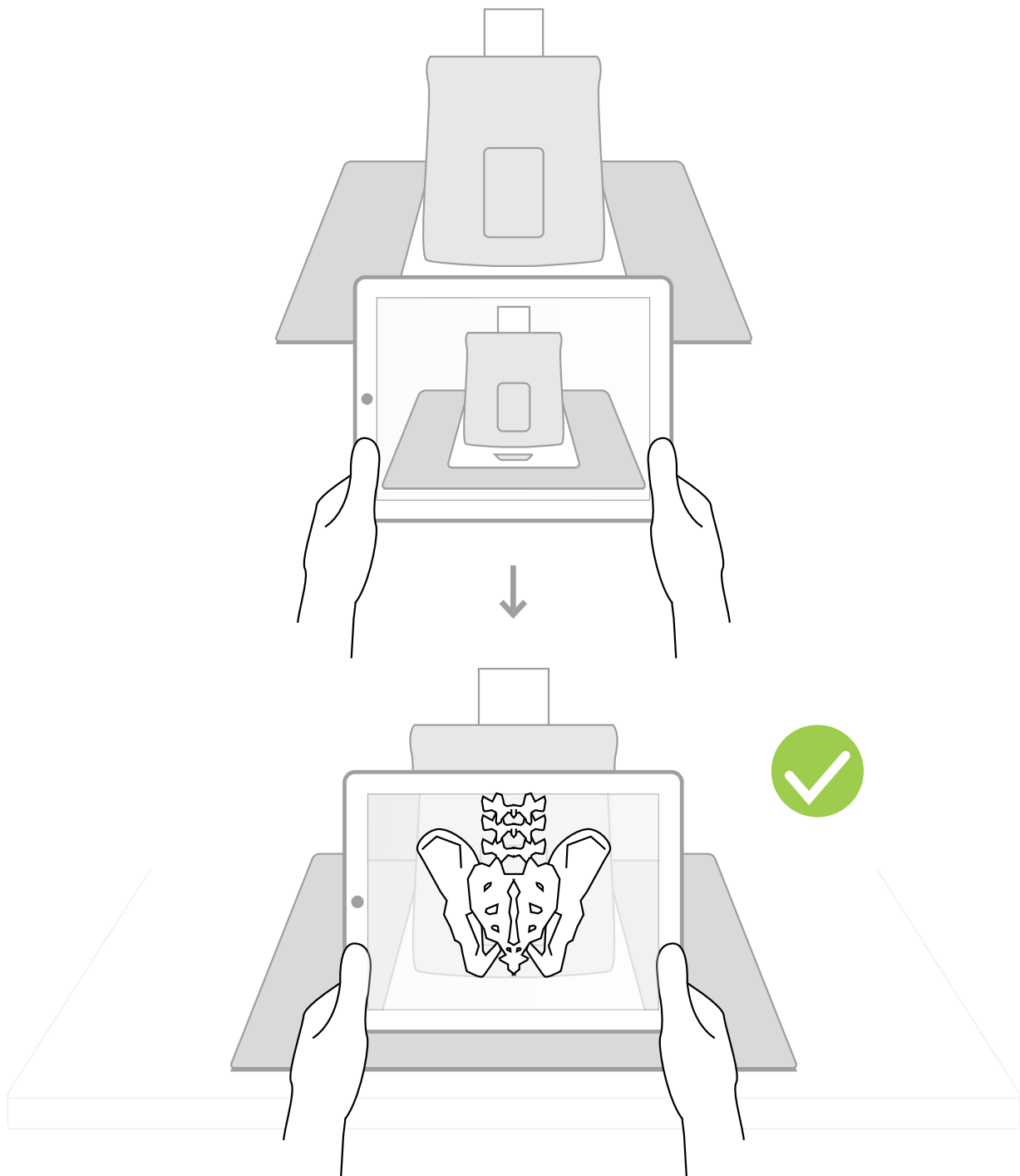
3

Place the the model on the designated area of the mat



Note: Diagrams are for illustrative purposes, your product may differ from the example shown

Use the A.R.T. app to scan the mat



For app troubleshooting please visit the website.

Note: Diagrams are for illustrative purposes, your product may differ from the example shown