



*User Guide*

# PARACENTESIS TRAINER



60100

*For more skills training products visit*  
**limbsandthings.com**

# INDEX

• PARACENTESIS TRAINER	3
• SAFETY & CLEANING INSTRUCTIONS	4
• SET UP   You will need	5
• ADDING/REMOVING INTERNAL ANATOMY	7
• Bowel	7
• Liver	8
• Spleen	9
• FITTING THE PARACENTESIS PADS	9
• ADDING THE ASCITES FLUID (WATER)	11
• USING THE LARGE VOLUME REFILL SYSTEM	13
• USE OF THE PADS	15
• DIAGNOSTIC PROCEDURE	16
• THERAPEUTIC PROCEDURE	17
• ULTRASOUND PROCEDURE	18
• CLEANING & STORAGE AFTER USE	19



A GOOD STARTING POINT...

Take a look at our  
Paracentesis Trainer video  
Visit the website or YouTube channel

[limbsandthings.com](http://limbsandthings.com)

[youtube.com/limbsandthings](https://youtube.com/limbsandthings)

This trainer fulfills the fundamental component of core medical training in diagnostic and therapeutic techniques of Paracentesis, for both landmark or ultrasound guided techniques.

Trainees are able to identify the echogenic anatomy enabling them to learn how to safely insert a needle or catheter into the peritoneal cavity.

## SKILLS

- Familiarity with abdominal regions and underlying anatomy
- Palpation of bony landmarks
- Identification of excess fluid
- Through ultrasound, safe needle/catheter insertion sites
- Insertion of needle into peritoneal cavity for therapeutic or diagnostic purposes
- Professional-to-patient communication

## FEATURES

- Landmark or ultrasound techniques can be practiced (side by side)
- Internal echogenic anatomy to allow recognition of landmarks under ultrasound
- Two 3.5 l chambers can be filled with water
- Self-sealing pads, withstanding up to 200 needle or up to 100 catheter insertions
- Realistic tissue and needle response
- Ability to insert and remove a drain
- Cost effective consumable pads
- Latex free

## PACKAGE SUPPLIED

- **60101** Paracentesis Skin
- **60102** Paracentesis Pads (x2)
- **60103** Paracentesis Liver
- **60104** Paracentesis Spleen
- **60105** Paracentesis Bowel Insert (x2)
- **60106** Paracentesis Floating Bowel (x2)
- **60107** Paracentesis Clamping Frame (x2)
- **60108** Paracentesis Large Volume Refill System
- Base Unit      • Funnel      • Carry Case



# SAFETY & CLEANING INSTRUCTIONS



Caution please retain  
for future reference

## READ THE SAFETY INSTRUCTIONS CAREFULLY BEFORE USING YOUR PARACENTESIS TRAINER

1. Follow all instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Do not install near any heat sources, do not expose the product to flames or use near naked flame sources.
5. Only use attachments/accessories specified by the manufacturer.
6. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged.
7. Never use the product outdoors as this may damage the product.
8. Do not disassemble the product or attempt to repair a faulty unit, please return the product to Limbs & Things for assessment and repair.
9. Clean the product with a damp soft cloth or sponge, using only warm water with mild detergent.
10. Do not use flammable solvents near or on this product.
11. Do not allow young children to use this product.

## DO NOT USE THE PARACENTESIS TRAINER IF:

- The Torso is not assembled correctly
- The skin or organs are torn or not properly fitted
- There is fluid leakage in or on to the product
- There are unusual sounds indicating air leakage

## STORAGE AND 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.

This product is heavy once full of water in both chambers (additional 7 litres in weight).

## SET UP

*You will need:*

(not supplied)



*For Ultrasound guided Paracentesis:*

As above plus:



Remove skin and un-screw the two frames



Add or remove internal anatomy



# ADDING/REMOVING INTERNAL ANATOMY

## Bowel



**Bowel (x2)**

1 for each cavity

**Floating bowels (x2)**

Can be located in either cavity as needed



*Bowels should be located in the trainer before liver or spleen*

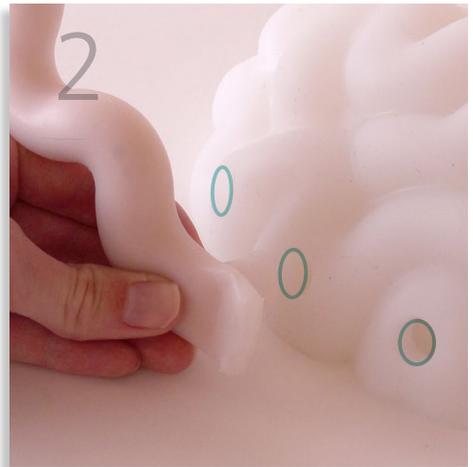
## FITTING THE BOWEL

Line up the two holes on the bottom of the bowl with the two plugs located on the bottom of each reservoir



## FITTING FLOATING BOWEL TO THE BOWEL

Plug the Floating Bowel into one of the three holes in the bowl



Push down to secure in place

# Liver

## FITTING THE LIVER

Locate on right hand side of the torso

Line up the hole on the Liver with the plug on the upper left of the torso. Push until located



# Spleen

## FITTING THE SPLEEN

Locate on left hand side of the torso and follow the same steps as fitting the Liver



## FITTING THE PARACENTESIS PADS

Locate the flange within the detached frame and make sure notches line up and push pad through the frame



Attach the frame to the torso. The text on frame should be at the apex of the belly



Add retaining knobs and tighten

The pad is now in place



 *The retaining knobs need to be securely fastened to avoid leakage*

Attach the skin

6



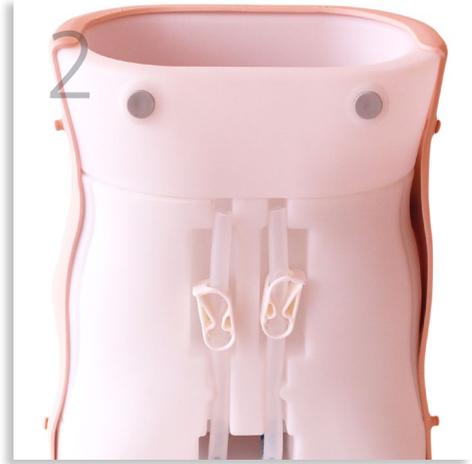
 *We recommend rotating the pad by 180 degrees after every 100 needle insertions, to get maximum use from the pad*

## ADDING THE ASCITES FLUID (WATER)

Place the torso in the standing position



At the back of the model ensure that both clamps are closed



Unscrew the reservoir cap to the reservoir you wish to fill



Add funnel and pour in water



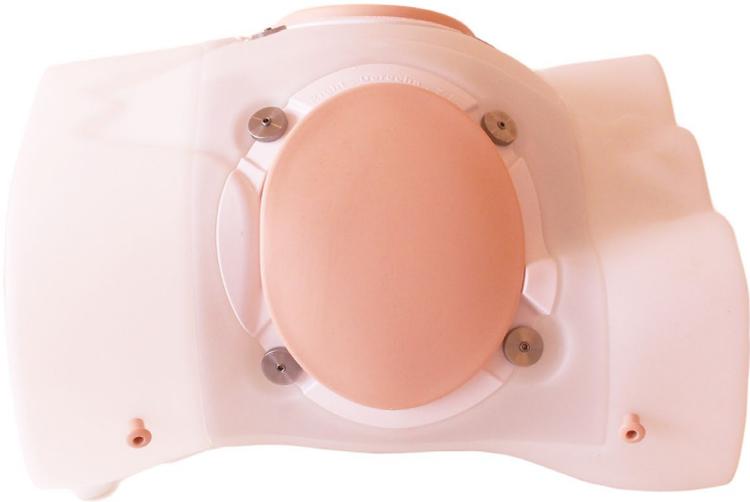
Each reservoir can take up to 3.5 litres of fluid at any one time.  
We recommend even for diagnostic training the reservoir is kept full



*We recommend filling the trainer where it will be used as it will be heavy to move*

Lie trainer on the back and add skin

5



Secure the skin with the 2 pegs on each side

6



## USING THE LARGE VOLUME REFILL SYSTEM



Unscrew the lid (holding the lid and rotating the bottle to avoid tangling of the tubes)

1



Fill with water to the rim of the container. The container should be over half full at all times

Screw lid on tightly and ensure the clamp on the refill system is closed

2



3



Connect to the reservoir connector on the top of the trainer



Release clamps on fluid refill system



Squeeze the hand pump 4 times to create fluid behind the pad



The pad will bulge slightly and feel firm to the touch. A further 2 - 4 pumps may be needed if the pad is still not firm



Once filled, close the clamp on the fluid refill system. The trainer is ready to use



 Do not over pump. If over-pumped, leakage from the pad may occur. To prevent this, open the clamp on the fluid refill system and release the valve on the hand pump to release pressure

## USE OF THE PADS

Each pad can withstand up to 200 needle insertions.

This can be achieved by rotating the pad 180 degree's clockwise once 100 needle impressions have been made



## SHELF LIFE OF THE PADS



*The shelf life can be seen on the bottom of each pad.  
Performance of the pad could be reduced after this date*

## DIAGNOSTIC PROCEDURES

Ensure you have a kidney dish below the pad

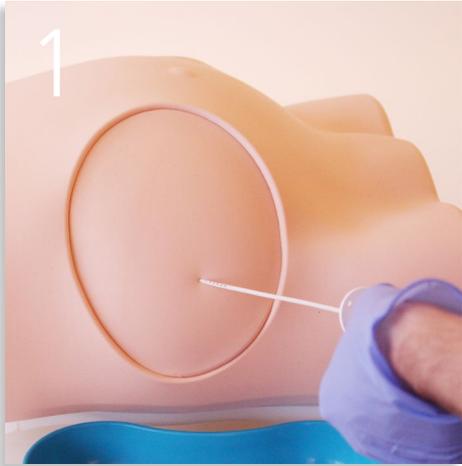


Insert the needle, you should feel it pass through the peritoneum, then remove fluid

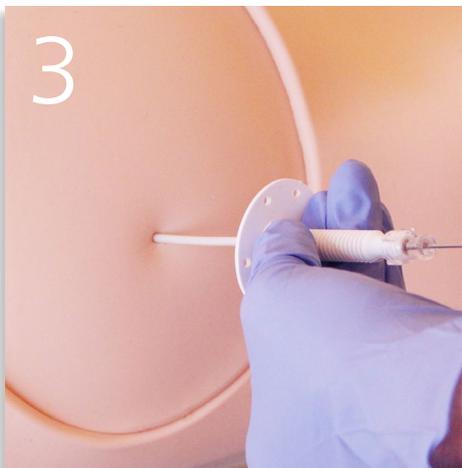


## THERAPEUTIC PROCEDURES

Ensure you have a kidney dish below the pad  
Insert the catheter into the Paracentesis Pad



Once the catheter is inserted, remove the needle while still advancing the catheter into the model



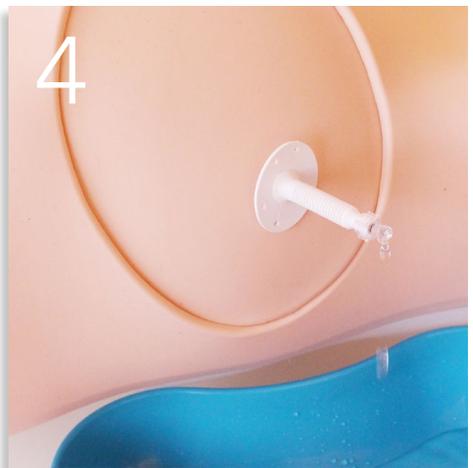
Push forward the fringe whilst holding still the oval ring of the catheter.

Ensure all of the holes on the tip of the catheter are inserted into the model



Once the catheter is fully inserted, remove the needle completely.

The fluid (water) will then begin to drain from the model



# ULTRASOUND PROCEDURE

Ensure a curved probe is being used  
Apply ultrasound gel to the probe and  
Paracentesis Pad



Navigate around the Paracentesis Pad with  
the curved probe



The underlying anatomy of the model will  
display on the ultrasound machine



## CLEANING AND STORAGE AFTER USE

Release the connection between the trainer and the fluid-refill system



Take trainer to a sink area or drain into a jug or jerry can. Remove skin and unclip the clamp to allow fluid to drain out



Remove bottle top to prevent pads from sucking in

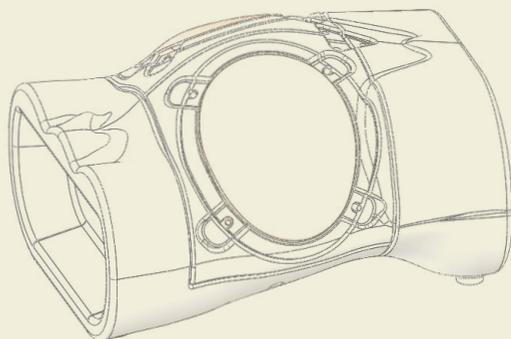


When complete remove the pads by un-screwing the retaining knobs



Wipe out with a dry cloth the internal cavity and organs, as well as the pad itself. Allow the trainer to air-dry over night before returning to storage

# PARACENTESIS TRAINER



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*Built on the knowledge and experience gained in the design of the Chest Drain Trainer, there was a clear opportunity for a Paracentesis model which was reasonably priced, tailored exactly to the teaching requirements and easy to set up.*

*I feel confident we've achieved this and hope our customers agree!*

*Matt Pilon*  
R&D Project Manager

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