

USER MANUAL



Set up and demonstration of the
Interlocking Ultrasound Horse.



Ultrasound Horse

Revision A:
Interlocking Ultrasound
Horse User Manual.

Product SKU:
E310-000

Last Updated:
7 September 2023



Part List

Equipment Required:

- x6 Surface screw square zinc yellow 8G 20mm
- x4 25mm Phillip button head screw
- 4x 20mm Phillip countersunk screw pan head
- x6 M6 Washers
- x4 Pan Square head 8G 20mm
- x2 M6 35mm Button Socket
- x2 Shroud attachment
- x2 Metal Pelvis Plate attachment
- x3 knurl bolts
- Pregnancy bean bag
- Ultrasound bag
- Rectum Bag and Clamp
- Silicon Horse Rump
- Horse Uterine horns
- x3 Bungee Carabiner Kit
- x2 Woodern Brackets

You will Need:

- Drill
- Allen Key
- 30 L Water
- Detergent
- Interlocking Horse
- Lube
- Portable Ultrasound

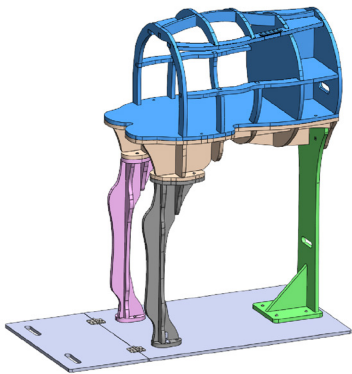


The Parts





The Assembly



1 STEP ONE

Assemble interlocking horse

- Follow the Interlocking Horse User Manual booklet before continuing the following steps.

2 STEP TWO

Attach left and right Shroud attachment brackets

- Shroud attachment bracket right and left.
- Using 2x Phillip countersunk screw, drill into the top 2 holes of the shroud attachment fitting onto the rear end of the interlocking horse top cage
- Using x2 25mm Phillip button head screw into the bottom cage.
- Repeat for left





3 STEP THREE

Screw in right wooden brackets into top cage

- Align so the pointed tip is pointing upward
- Screw in using x3 surface square screws



4 STEP FOUR

Repeat previous step on Left side

- Align so the pointed tip is pointing upward
- Screw in using x3 surface square screws



The Assembly



5 STEP FIVE

Attach right side of the front of the pelvis to right wooden Bracket

- In the remaining holes screw in x2 Pan Square and 2x washers



6 STEP SIX

Repeat on left side.

- In the remaining holes screw in x2 Pan Square and 2x washers



7 STEP SEVEN

Attach Right side of the back pelvis.

- Using a Allen key screw in a M6 35mm Button Socket and washer into pelvis with the Right Pelvis Metal attachment in between.



8 STEP EIGHT

Repeat on the left side

- Following the previous steps to attach the left side of the pelvis to top cage.



9 STEP NINE

Insert bean bag

- Place bean bag to be positioned under the pelvis and covering the base of the top cage.



10 STEP TEN

Insert cervix into ultrasound bag

- Hook both left and right side into the inserts inside the bag.
- Stretch the bands over the ovaries and cervix ends



The Assembly



11 STEP ELEVEN

Clamp ultrasound bag to horse rump

- Place clamp over clear rectum bag
- Fit rectum bag to the rectum
- Move clamp and tighten to secure the bag in place.
- Make sure the bundgee cord and rectum bag is up tp the horse frasme





12 STEP TWELVE

Insert the ultrasound bag into the interlocking horse.

- Carefully insert ultrasound bag to sit on top of the beanbag.



13 STEP THIRTEEN

Screw silicon horse rump in place

- Using 3 knurl screws, screw in bolts on both left, right and top to hold the horse rump in place.





The Assembly



14 STEP FOURTEEN

Hold in place using bungee and carabiner kit

- Loop through tags on ultrasound bag then clip together around right interlocking top cage.
- Repeat on both left and right side and rear end towards the pelvis.



15 STEP FIFTEEN

Funnel water with detergent mix into rear end of horse rump

- Mix some water and drops of detergent to help with more lubricated experience.
- Just water will also work if needed.



16 STEP SIXTEEN

Fill bag with 20Litres of warm water



17 STEP SEVENTEEN

Roll end and clip in place to secure in place.

- Burp it via valve on top.
- Around horse frame



Set up Complete





Finding Pregnancies

Note:

In this model there are 3 different types of pregnancies available to scan. There are some slight scan detail differences between a live horse and our Holsim Ultra sound Horse.



Appearance of 16 Day Pregnancy:

Longitudinal alignment



Real Life 16D Pregnancy:

16 day pregnancy scan is normally perfectly spherical black (anechoic) structure with small white hyperechoic reflections artifact spots on each pole.

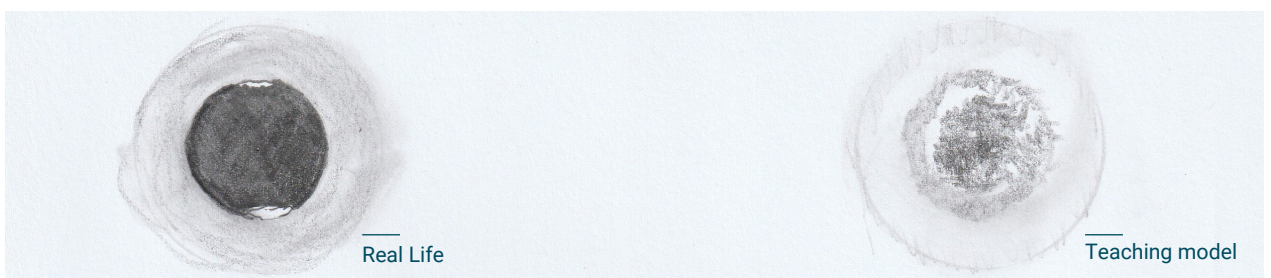
Longitudinal alignment



This teaching model:

The Holsim ultrasound simulator will have a black Centre with a thick white wall.

Cross-sectional alignment:



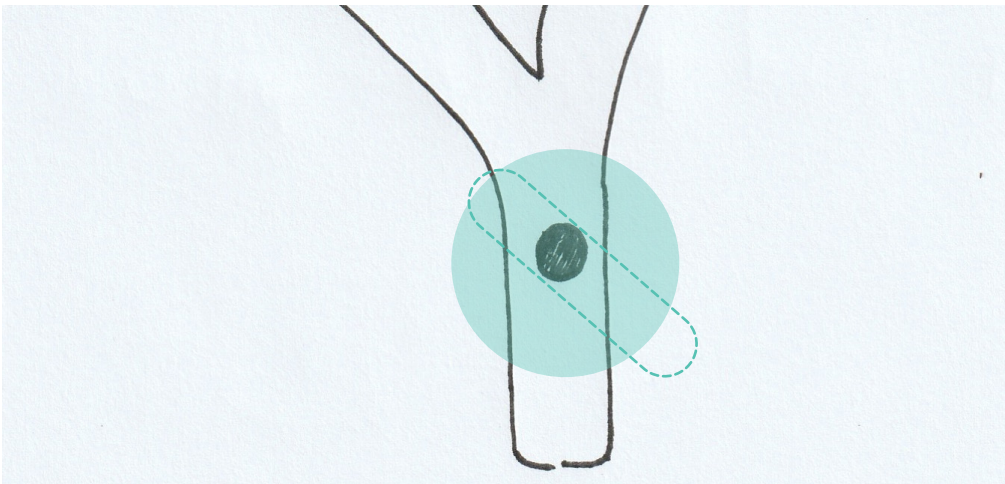


The Pregnancy

Technique for complete coverage of the uterus

In this model there are 3 different diagnostic scenarios to scan on the uterine horns, scan ovary to ovary to find.

The Pregnancy in uterine body

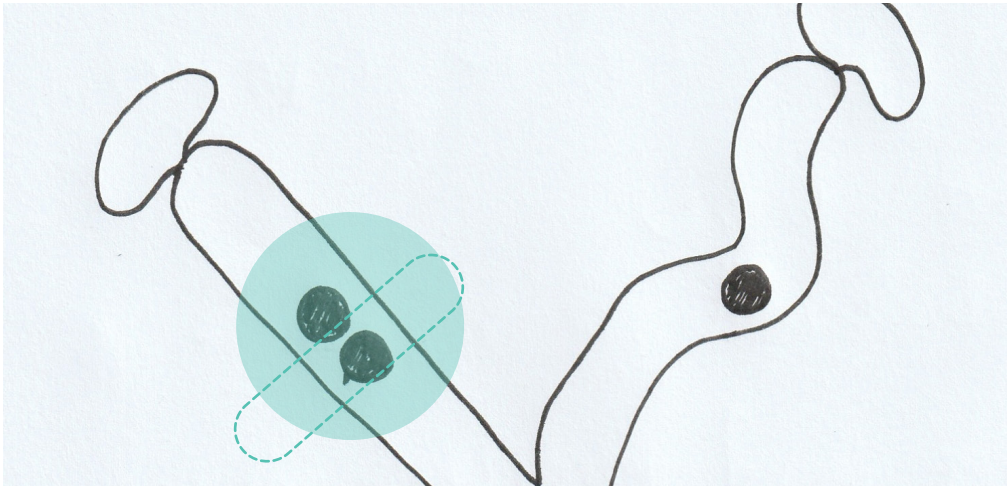


Uterine Horns: The Pregnancy in uterine body

Hold the probe at 45 degrees in the uterine body. This is an important structure often missed in the scanning procedure and one that needs different scanner head alignment to be covered effectively. The probe should be aligned at the longitudinal axis to adequately cover the uterine body



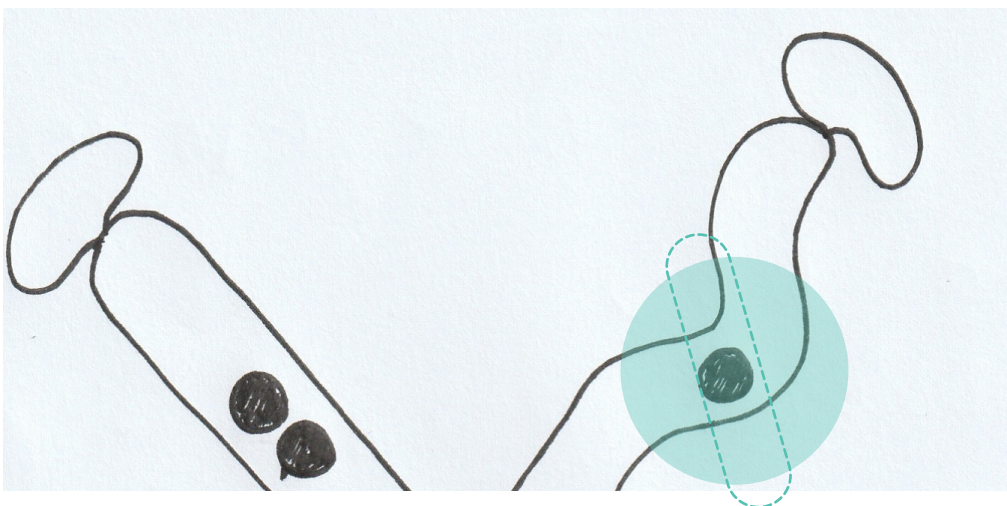
The Twins



Uterine Horns: The Twins

Two pregnancies side-by-side in the left horn (ipsilateral twins) Scan in a cross-section along the left of the ovary to detect a twin pregnancy.

The Kink



Uterine Horns: Pregnancy in "Kink"

Always hold probe at a right angles to uterus in order to detect a pregnancy in "Kink"



The Process





The Process



1 STEP ONE

Lube up hand to help insert ultra sound probe into horse rectum.



2 STEP TWO

Using the probe feel around the uterus to detect the different pregnancy diagnostic



The Clean up



1 STEP ONE

Undo Bungee, clamps then remove the rump



2 STEP TWO

Undo carabiners before removing uterus bag. Once moved empty out water.

3 STEP THREE

Clean any glove lube spills with warm soapy water





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