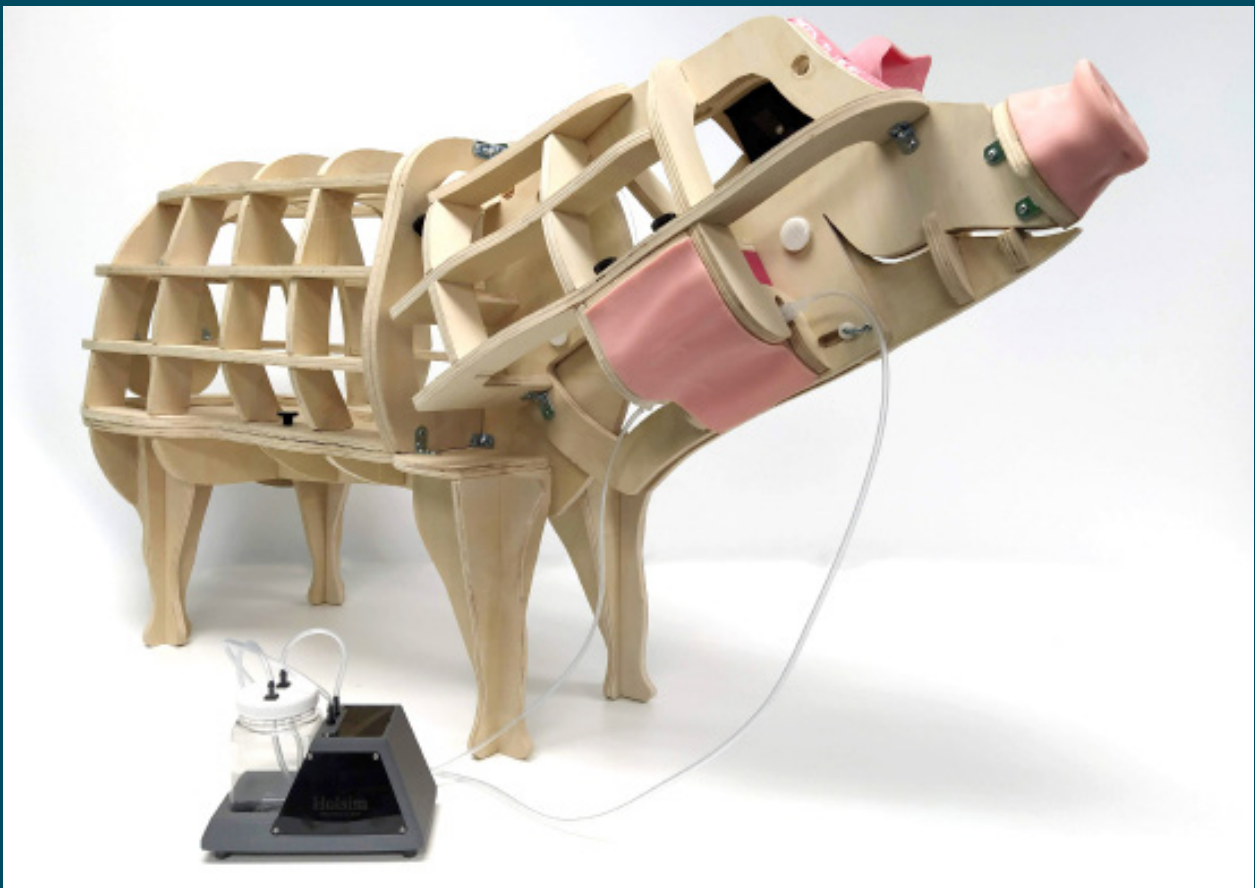


# USER MANUAL



Set up and operational instructions of the Holsim Jugular Blood Sampling model when mounted in the interlocking porcine.



## Porcine Jugular Blood Sampling

Revision A:  
Porcine Jugular Blood  
Sampling

Product SKU:  
P600-000

Last Updated:  
25 September 2023



# Parts List

## Equipment Required:

- Interlocking Porcine Model (preferably)
- Desk or Table
- Appropriate needle for blood sampling
- We recommend using a 19-21 gauge needle that is 3.5" long
- Holsim Blood Pump
- Holsim Artificial Blood

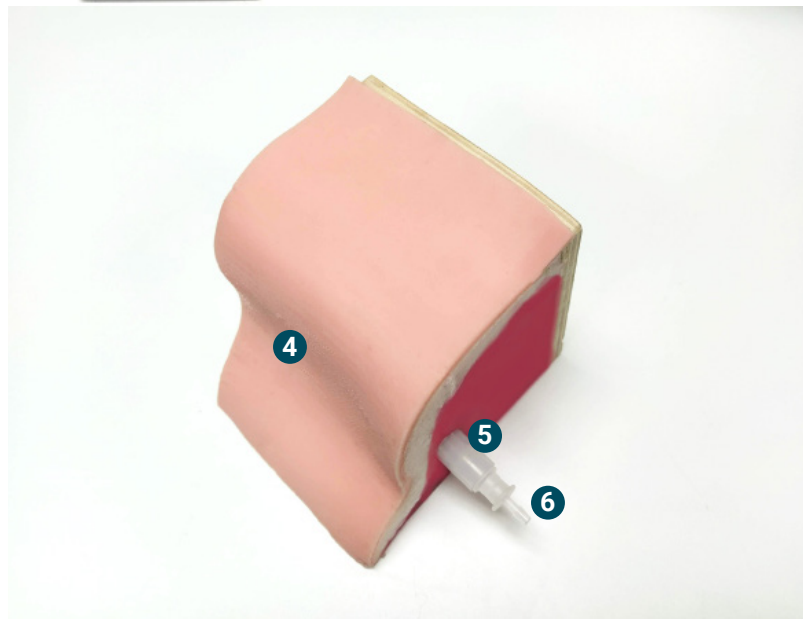
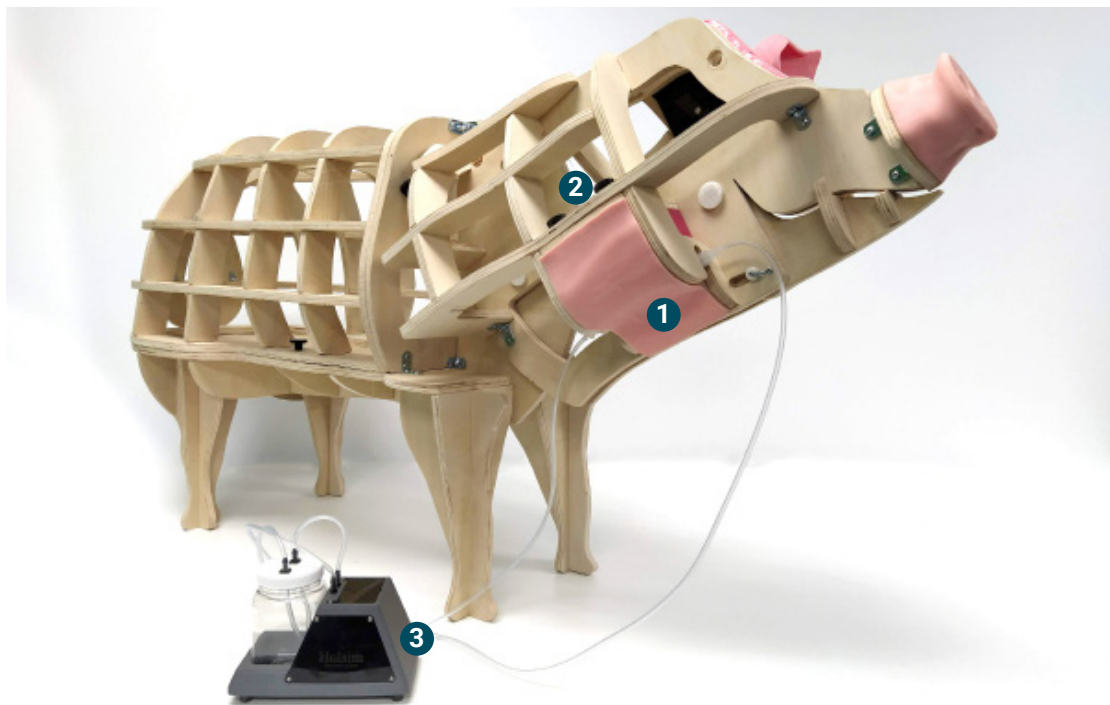
## Set Up

1. Jugular Block
2. Knurl Screw
3. Holsim Blood Pump
4. Jugular Groove
5. Jugular Vein
6. Jugular Vein Connectors

*For all other parts or repairs, please contact Holsim through our website. [www.holsim.co.nz](http://www.holsim.co.nz)*



# The Parts



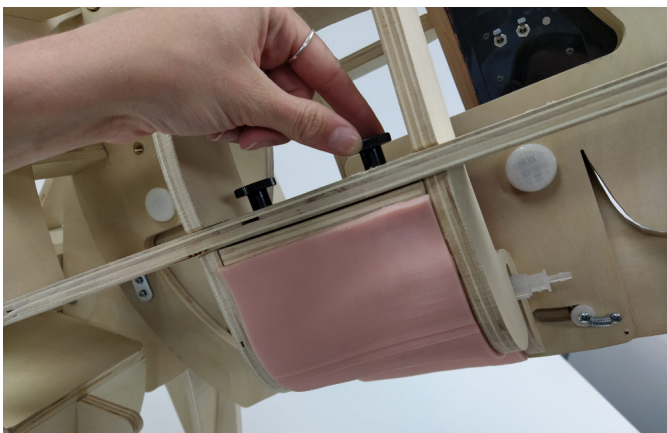


# The Set Up



## 1 Set up jugular block

- Push the jugular block into the cavity in the interlocking porcine model behind the jaw on the right hand side of the pig
- Ensure that the vein locates into the slots provided in the pig.
- The right jugular vein is preferred to avoid damaging the phrenic nerve.



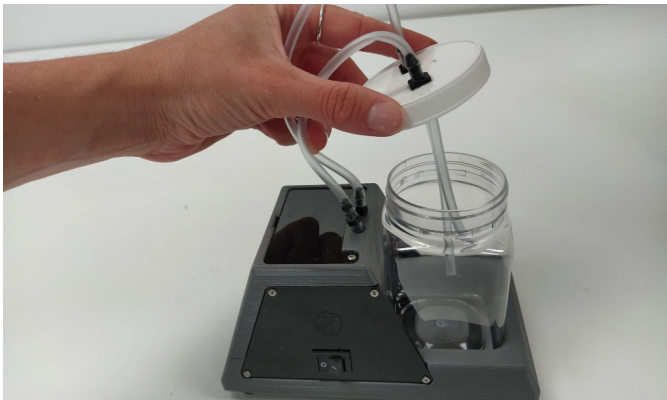
## 2 Secure block

- Align the knurl screws with the threaded inserts in the top plate of the jugular block.
- Tighten screws to secure jugular block.



## 3 Connect blood pump

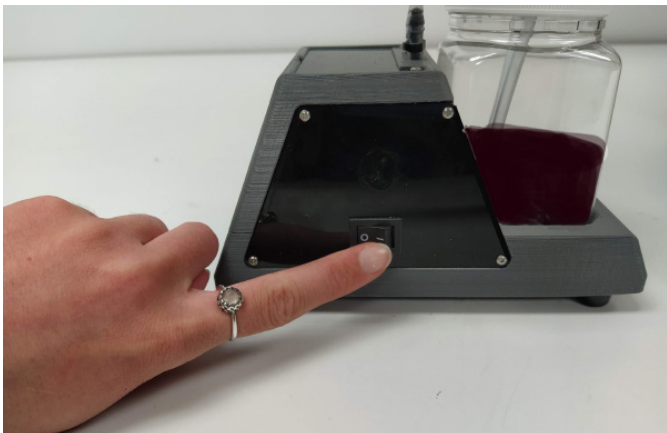
- Connect the blood pump tubing to each end of the jugular vein connectors.
- Ensure tubing is pushed on tightly



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#### Set up the blood pump

- Unscrew the lid and pour the Holsim Artificial Blood into the Holsim Blood Pump jar with tubing.
- Replace lid tighten



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#### Switch pump on

- Switch the blood pump on
- The blood should slowly pulse through the tubing into the jugular vein and back round into the jar.



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#### Lower pig head

- Ensure pig head starts in the lowered position.

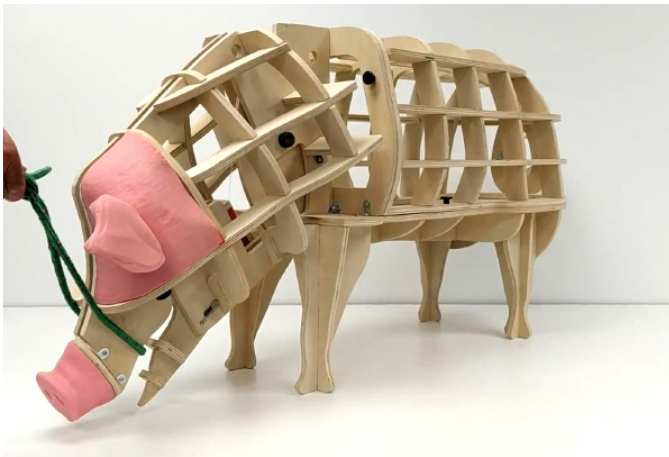


# The Set Up



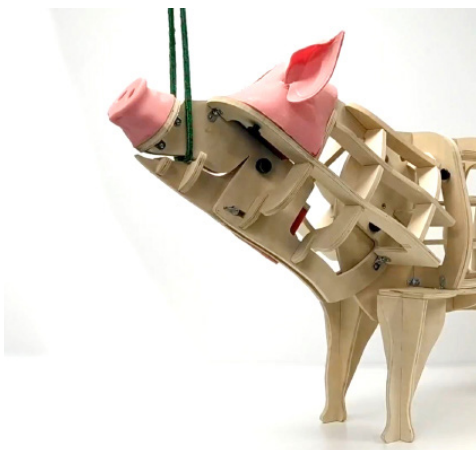
## 7 Check jaw

- Ensure the jaw is in the open position when the pig's head is lowered.



## 8 Secure snare

- Secure the same in the pig's mouth
- It should sit behind its teeth



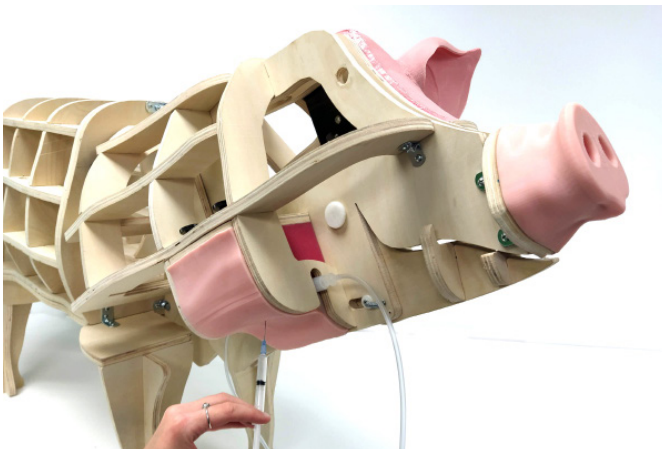
## 9 Raise head

- Raise the head of the pig to 30 degrees to the horizontal.
- This is the ideal position for exposing the jugular vein for sampling.
- you will notice that the pig's mouth will close.



### 10 Palpate the vein

- Palpate the jugular vein by finding the hollow groove in the neck. this is where the jugular vein runs.
- It should feel nice and soft.



### 11 Insert the needle

- The needle should be inserted perpendicular to the skin at the deepest point of the jugular groove.

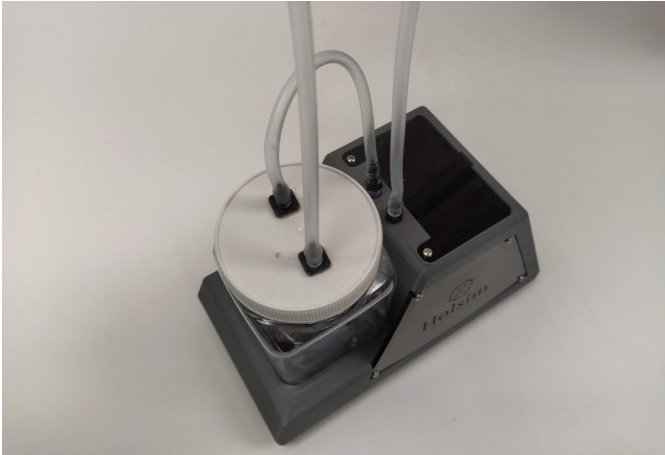


### 12 Lower pig head

- Once the blood sample has been collected lower the pig head and release the snare

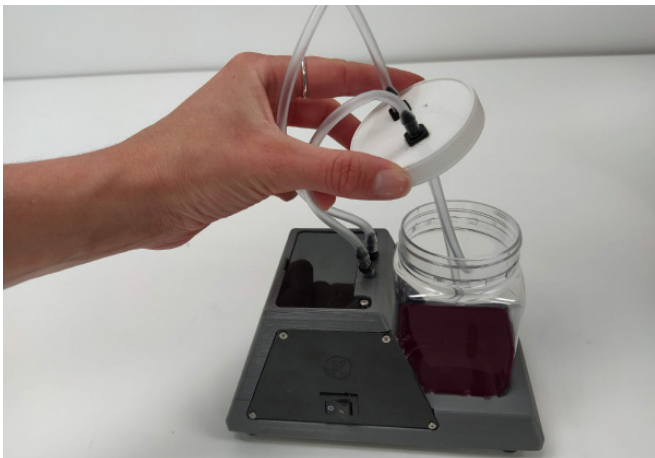


# The Clean up



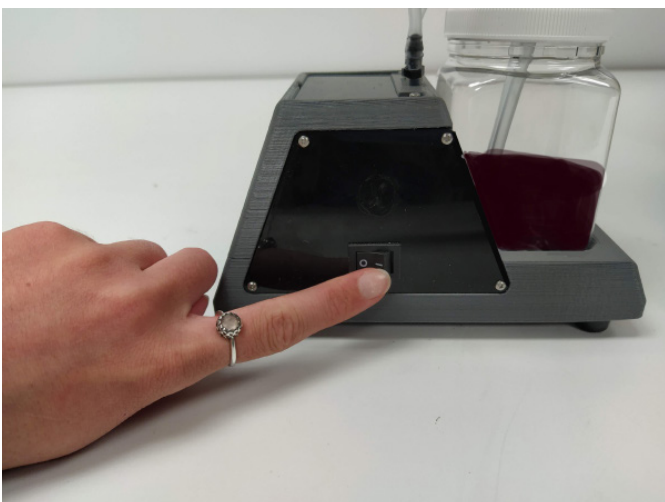
## 1 Undo jar lid

- Once the blood sample has been obtained undo the jar lid with the pump connectors on it and hold the tubes above the blood in the jar.



## 2 Drain tubing

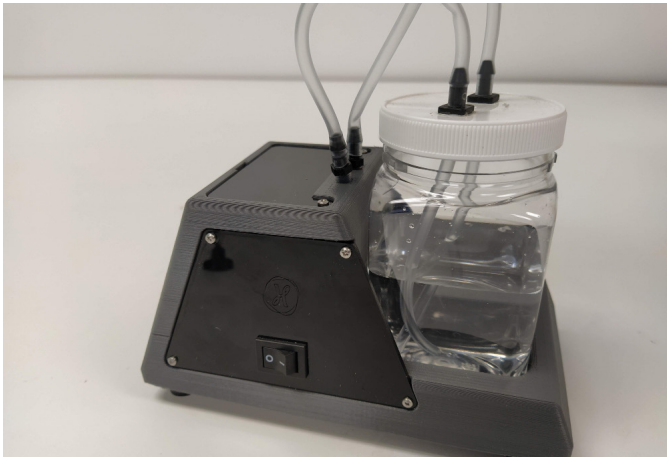
- With the jar tubing out of the blood, the pump will pulse the remaining blood in the tubes into the jar, without sucking any more blood up.



## 3 Turn pump off

- Once all the blood has drained from the tubing, switch the pump off.





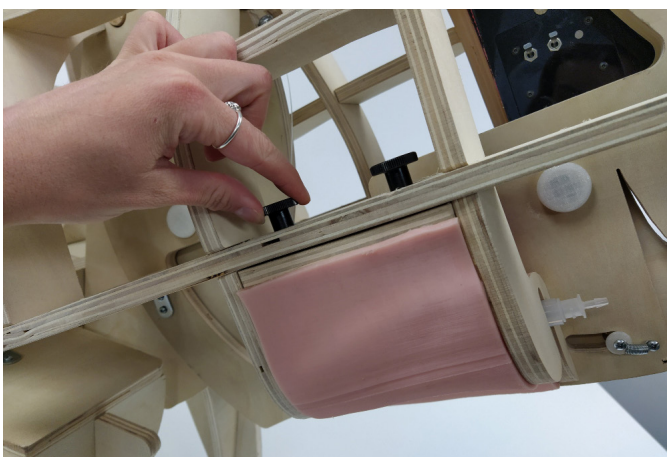
#### 4 Flush tubing with water

- it is best to flush the tubing out with water to have them clean before storing the pump.
- You can do this by replacing the jar of blood with one of water. Turn the pump on to flush the tubing and vein



#### 5 Disconnect pump

- Once clean, turn the pump off
- Disconnect the blood pump tubing from the jugular vein connectors



#### 6 Remove jugular and store

- Wipe any blood from the surface of the skin and allow tubing to dry
- Store jugular block and blood pump in a clean airtight container



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