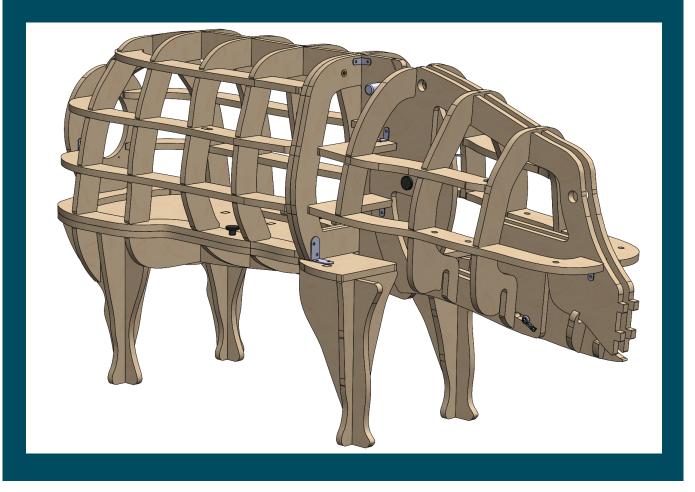
USER MANUAL





Interlocking Porcine

Revision A: Interlocking Porcine User Manual

Product SKU: P200-000 Last Updated: 10 November 2023



Part List

Equipment Required:

- Power Drill
- Pozi Drill Bit
- Screwdriver
- Holsim Wooden Mallet

All operational equipment required for teaching various procedures is to be provided by the user.

Spare Parts:

• Spare Parts Available to Order

For all other parts or repairs, please contact Holsim through our website www.holsim.co.nz

OVERALL HARDWARE:

Small Angled Bracket	24
Medium Angled Bracket	10
6G x 10mm Pan Pozi Self Tapping Screw	50
M3 x 10mm Buttonhead Bolt	2
Eyelet Guide	3
M6 Knurl Screw	6
M3 Flat Washer	4
Rotational Dowel - Large	2
Rotational Dowel - Small	1
Rotational Dowel Plate - Small	2
Nylon Neck Line	1
Neck Stop	1
Jaw Spring	2



Parts List

Top Cage Assembly:

Top Cage - Part A	1
Top Cage - Part B	1
Top Cage - Part C	1
Top Cage - Part D	1
Top Cage - Part E	1
Top Cage - Part F	1
Top Cage - Part G	1
Top Cage - Part H	1
Top Cage - Part I	1
Top Cage - Part J	2
Top Cage - Part K	2
Top Cage - Part L	2
Top Cage - Part M	1

Hardware Required:

Head Assembly:

Head - Part A	2
Head - Part B	1
Head - Part C	1
Head - Part D	2
Head - Part E	2
Head - Part F	2

Hardware Required:

Small Hafele Angle Bracket	8
M6 Knurl Screw	1
Rotational Dowel - Large	1
6G x 10mm Pan Pozi Screw	12
Nylon Neck Line	1
Neck Stop	1

Bottom Cage Assembly:

Bottom Cage - Part A	1
Bottom Cage - Part B	1
Bottom Cage - Part C	1
Bottom Cage - Part D	1
Bottom Cage - Part E	1
Bottom Cage - Part F	1
Bottom Cage - Part G	1
Hardware Required:	
Medium Angle Bracket	2

Medium Angle Bracket	Z
Small Hafele Angle Brackets	4
6G x 10mm Pan Pozi Screw	16

Legs Assembly:

Leg - Part A	2
Leg - Part B	2
Leg - Part C	2
Leg - Part D	2
Hardware Required:	

Medium Angle Bracket	4
6G x 10mm Pan Pozi Screw	16

Jaw Assembly:

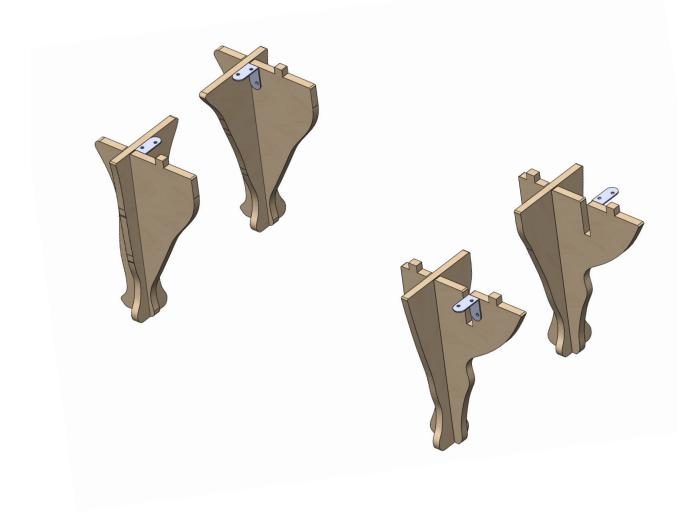
Jaw - Part A	1
Jaw - Part B	1
Jaw - Part C	1

Hardware Required:

Rotational Dowel - Large	1
Rotational Dowel - Small	1
Rotational Dowel Plate - Small	2
Eyelet Guide	1
M6 Knurl Screw	1
M3 Flat Washer	4
M3 x 10mm Buttonhead Bolt	2
6G x 10mm Pan Pozi Screw	2
Jaw Spring	2
Nylon Neck Line	



Leg Assembly



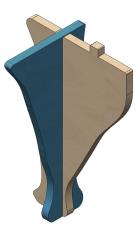


Leg Assembly



1 STEP ONE

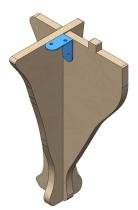
Locate leg part B.



2 STEP TWO

Slot in Leg Part A

- Locate Leg Part A into Leg Part B as shown
- Take note of the orientation of the parts



3 STEP THREE

Attach medium angle bracket

- Attach Medium Angle Bracket to the internal face of Part B as shown
- Ensure bracket is hard against the corner
- Ensure bottom external face of bracket is flush with the top faces of Parts A and B as shown
- Secure in place using 2x 10mm Screws

Leg Assembly



4 STEP FOUR

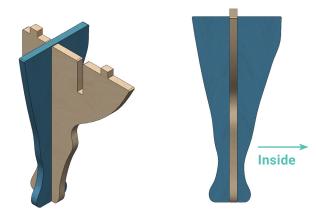
Repeat Steps 1-3

- Repeat steps 1 to 3, mirroring the first Leg
- Take note of the orientation of the parts





Locate leg part c

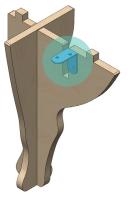


6 STEP SIX

Slot in leg part D

- Slot Leg Part D into Part C as shown
- Take note of orientation of Part D

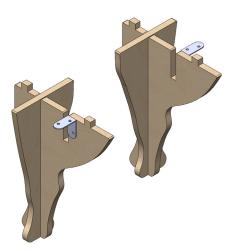




STEP SEVEN

Attach Medium Angle Bracket

- Attach Medium Angle Bracket to external face of Part C
- Ensure bracket is aligned as indicated in diagram
- Secure in place using 2x 10mm Screws



8 STEP EIGHT

Repeat Steps 5 - 7

- Repeat steps 5 7 mirroring the previous leg
- Take note of the orientation of the parts



Bottom Cage Assembly





Bottom Cage Assembly



1 STEP ONE

Lay out part A of bottom cage

- Lay out the pieces for the Bottom Cage Assembly on the floor, starting with Part A
- Ensure the brass insert flanges are facing up



2 STEP TWO

Locate part C

• Locate Part C onto Part A as shown



3 STEP THREE

Locate part D

• Locate Part D onto Part A as shown



Bottom Cage Assembly



4 STEP FOUR

Locate part E

• Locate Part E onto Part A as shown



5 STEP FIVE

Locate part F

• Locate Part F onto Part A as shown



6 STEP SIX

Locate part G

- Attch small and medium bracket to part C and part E
- Locate Part G onto the central slots of Parts C through to F as shown

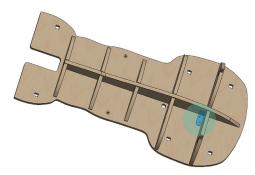




7 STEP SEVEN

Locate part B

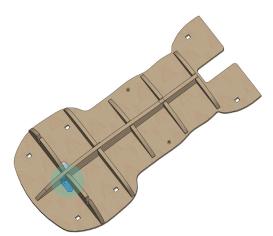
Interlock Part B at the front of Part G



8 STEP EIGHT

Attach medium angle bracket

- Attach Medium Angle Bracket as shown to be hard into the corner against Parts F and G
- Secure in place using 4x 10mm Screws



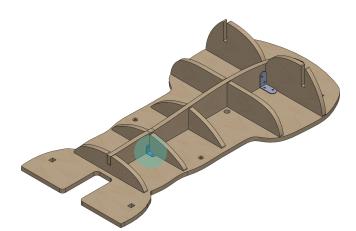
9 STEP NINE

Attach medium angle bracket

- Attach Medium Angle Bracket as shown to be hard into the corner against Parts F and G
- Secure in place using 4x 10mm Screws



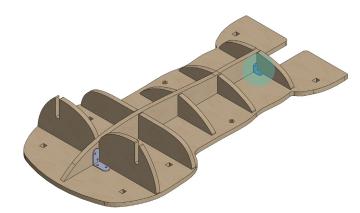
Bottom Cage Assembly



10 STEP TEN

Attach small angle bracket

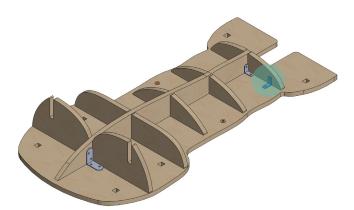
- Attach Small Angle Bracket into the corner of Part C and G as shown.
- Secure in place using 2x 10mm Screws



11 STEP ELEVEN

Attach small angle bracket

- Attach Small Angle Bracket into the corner of Part B and G as shown
- Secure in place using 2x 10mm Screws



12 STEP TWELVE

Add small angle bracket

- Add Small Angle Bracket as shown to secure Part B to Part A.
- Secure in place using 2x 10mm Screws





13 STEP THIRTEEN

Repeat on opposite side

- Add a second Small Angle Bracket to the opposite side of Part B
- Secure in place using 2x 10mm Screws

14 STEP FOURTEEN

Slot the Front Right Leg into the Base

- Fasten the leg to the base by securing it with 2x 10mm Screws through the Medium Angle Bracket, previously attached to the internal face of the leg as shown.
- Check Diagram for correct orientation

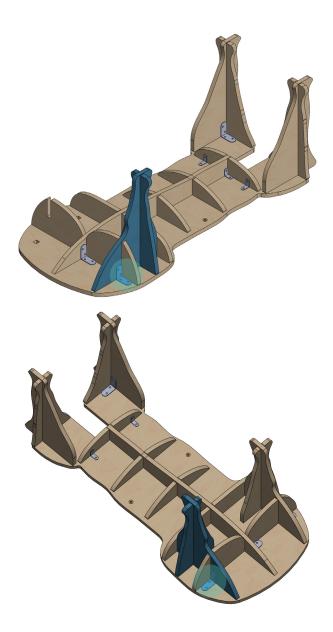
15 STEP FIFTEEN

Repeat on opposite side

• Repeat previous step on opposite side with the front left leg



Bottom Cage Assembly



16 STEP SIXTEEN

Locate back Left leg

- Locate back left leg assembly as shown, interlocking it with the base assembly
- Secure the bracket in place using 2x 10mm Screws

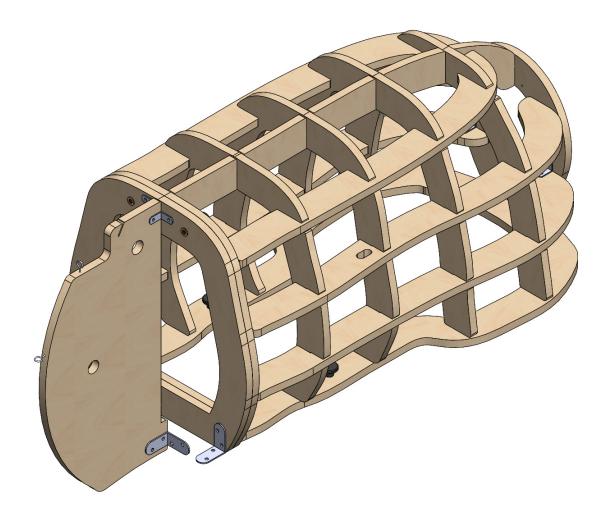
17 STEP EIGHTEEN

Repeat previous step on opposite side

- Locate back right leg assembly as shown, interlocking it with the base assembly
- Secure the bracket in place using 2x 10mm Screws

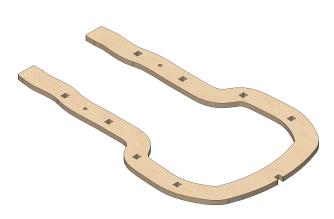


Top Assembly





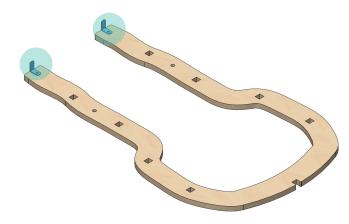
Top Cage Assembly



1 STEP ONE

Lay down Top cage Part A

• Lay out the pieces for the Top Cage Assembly on the floor, starting with Part A.



2 STEP TWO

Attach small angle brackets

- Using 2x 10mm Screws, attach a small angle bracket to each side of Part A, on the open end
- Ensure the upright outer face of the angle bracket is flush with the end face of Part A



3 STEP THREE

Locate Part E onto Part A

• Lock in Part E as shown





• Lock in Part F as shown

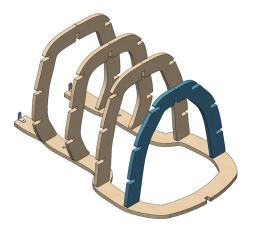
Locate Part F onto Part A

4 STEP FOUR



Locate Part G onto Part A

• Lock in Part G as shown



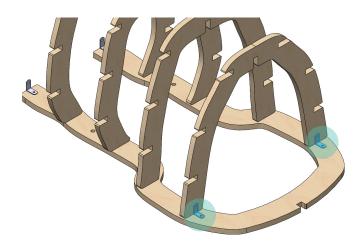
6 STEP SIX

Locate Part H onto Part A

• Lock in Part H as shown



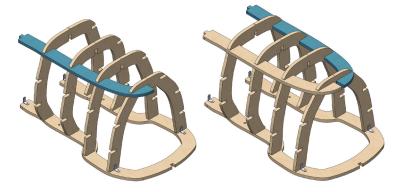
Top Cage Assembly



7 STEP SEVEN

Attach small angle brackets

• Using 4x 10mm screws attach 2x small angle brackets as shown in diagram

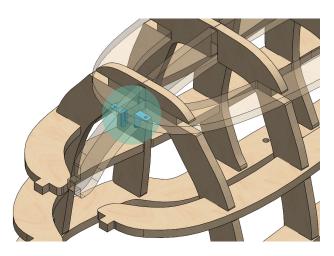


8 STEP EIGHT

•

Locate part J

Repeat on opposite side Add the second. Part J to the opposite side of the Top Cage

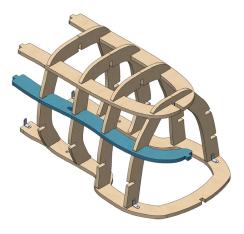


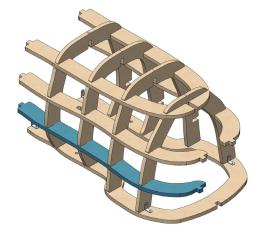
9 STEP NINE

Attach small angle brackets

- Using 4x 10mm Screws attach 2x Small Angle Brackets on the underside of Parts K to M
- Refer to diagram and make sure to offset brackets so the screws do not interfere with each other







10 STEP TEN

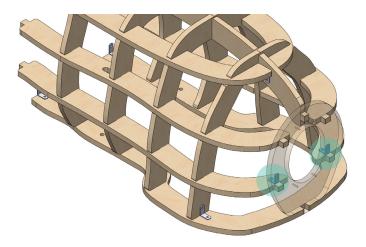
Locate part K.

• Repeat on opposite side with second part K

11 STEP ELEVEN

Locate part L

- Locate Part L as shown on one side of the arches
- Add the second Part L to the opposite side of the Top Cage



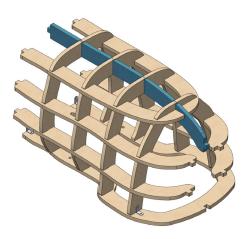
12 STEP TWELVE

Attach small angle brackets

- Using 4x 10mm Screws attach 2x Small Angle
 Brackets to part I and L
- Refer to diagram for correct orientation



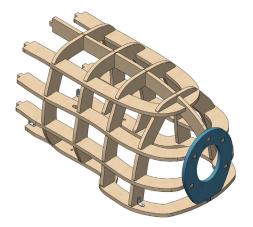
Top Cage Assembly



13 STEP THIRTEEN

Locate part M

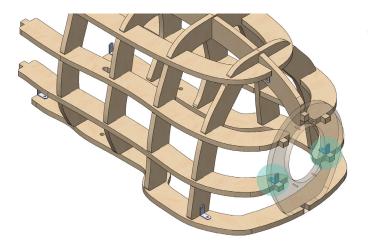
• Locate Part M into the central slots of the underside of the arches as shown.



14 STEP FOURTEEN

Locate part I

• Locate Part I onto the back end of the Top Cage as shown.

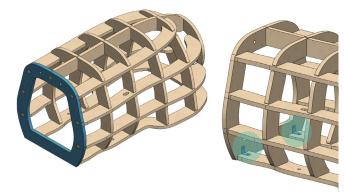


15 STEP FIFTEEN

Fix in the small angle brackets

- Using 4x 10mm Screws attach 2x Small Angle
 Brackets to part I and L
- Refer to diagram for correct orientation





16 STEP SIXTEEN

Locate part D

- Locate Part D onto the front end of the Top Cage as shown
- Using 2x 10mm Screws attach the brackets on the inner side of part D and A as per diagram

17 STEP SEVENTEEN

Attach small angle brackets

- Using 4x 10mm Screws attach 2 Small angle brackets to both parts J and D
- Refer to diagram for correct orientation



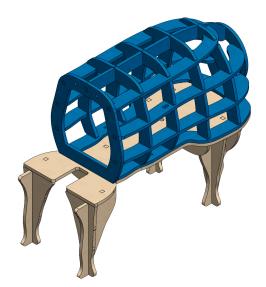
18 STEP EIGHTEEN

Locate Bottom assembly

• Locate Bottom Assembly and stand it up on its feet as shown.



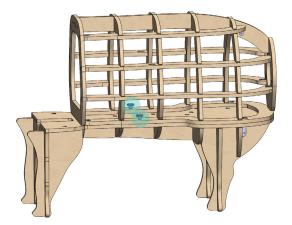
Top Cage Assembly



19 STEP NINETEEN

Locate top assembly

• Locate Top Cage Assembly as shown, matching the curves of the base

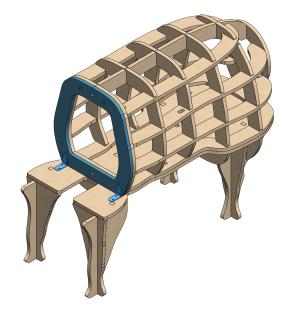


20 STEP TWENTY

Secure top assembly

• Secure together using 2x Knurl Screws as indicated in diagram

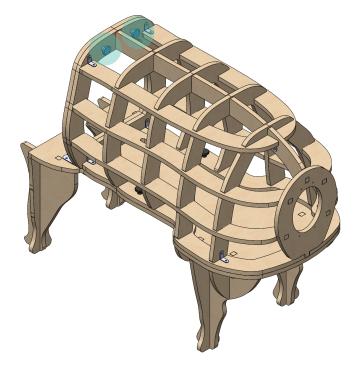




21 STEP TWENTY-ONE

Locate Top Cage Part C

- Locate Top Cage Part C in front of the Top Cage, and secure in place with 2 x Medium Angle Brackets as shown, using 8x 10mm Screws to fasten in place
- Check Part C orientation making sure the brass insert flange is facing outwards
- Refer to diagram



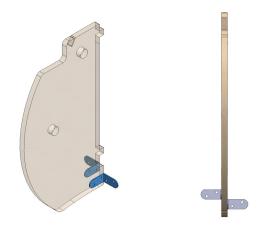
21 STEP TWENTY-ONE

Screw in 2x Knurl screws

• Screw in 2x knurl screws as indicated in diagram



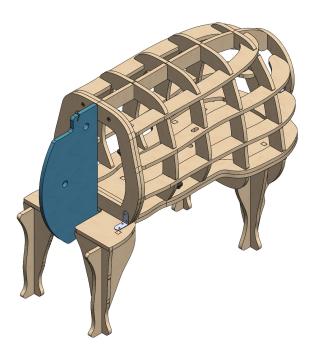
Top Cage Assembly



23 STEP TWENTY-THREE

Locate Part B and Attach medium angle bracket

- Attach 2x Medium Angle Bracket to the bottom of Part B using 4x 10mm Screws with one bracket on each side
- Check bracket position is offset to avoid interference between the screws
- Refer to diagram

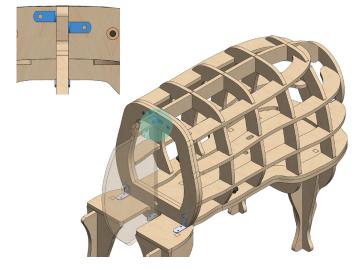


24 STEP TWENTY-FOUR

Place Part B in between the front legs, against the face of Part C

Refer to diagram for correct orientation

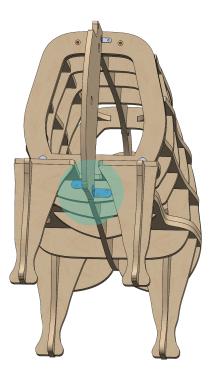




25 STEP TWENTY-FIVE

Attach small angle brackets

- Locate 2x Small Angle Brackets as shown, securing the top of Part B to Part C
- Use 4x 10mm Screws to secure in place
- Make sure to offset brackets to avoid interference between the screws
- Refer to diagram for correct locations



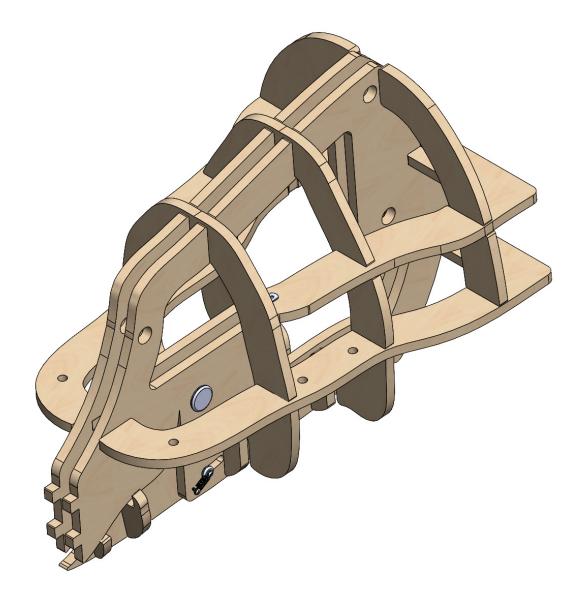
26 STEP TWENTY-SIX

Secure part B bases

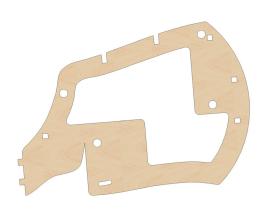
• Secure the brackets at the base of Top Cage Part B to the Bottom Cage Part B using 4x 10mm Screws



Head Assembly



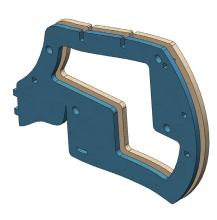
Head Assembly



STEP ONE

Locate head part A

• Locate Head Part A



STEP TWO

2

Locate second Part A

• Locate second Part A and line up the slots and holes.



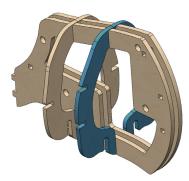
3 STEP THREE

Insert head Part B

• Slot in Head Part B as shown.



Head Assembly



4 STEP FOUR

Insert head part C

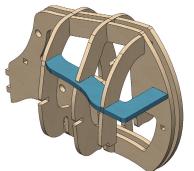
• Slot in Head Part C as shown.



5 STEP FIVE

Insert head part D

• Insert Head Part D onto one side of the head as shown.

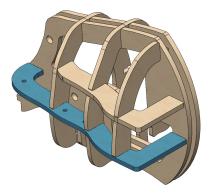




Locate Part E

• Locate Part E into the highest slots of Parts C to D.

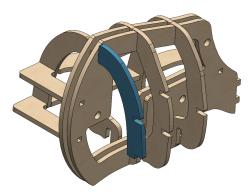




7 STEP SEVEN

Locate Part F

• Locate head Part F into the lower slots of Parts B to D.



STEP EIGHT

8

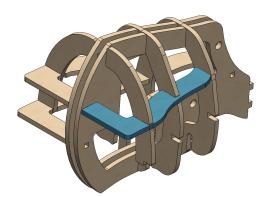
Locate second Part D

• Locate the second Part D piece onto the opposite side of the head.

9 STEP NINE

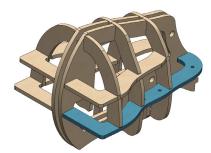
Locate second part E

• Locate the second Part E piece into the top slots as shown.





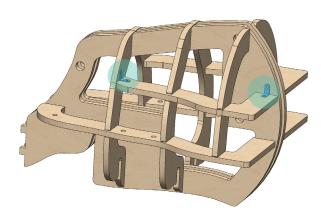
Head Assembly

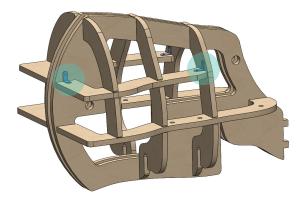


10 STEP TEN

Locate second Part F

• Locate second Part F into the lower slots of Parts B to D as shown.





Locate 2x Small angle brackets

STEP ELEVEN

11

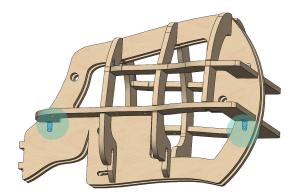
- Locate the 1st small angle bracket onto the top of Part E, securing it to the back face of Part B using 2x 10mm Screws
- Locate the 2nd small angle bracket onto the top of Part E, securing to the outer face of Part A using 2x 10mm Screws
- Refer to diagram

STEP TWELVE

Repeat on opposite side

- Locate the 1st small angle bracket onto the top of Part E, securing it to the back face of Part B using 2x 10mm Screws
- Locate the 2nd small angle bracket onto the top of Part E, securing to the outer face of Part A using 2x 10mm Screws
- Refer to diagram

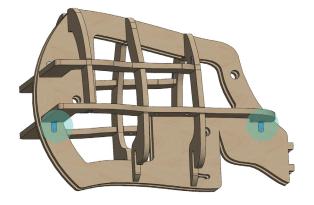




13 STEP THIRTEEN

Attach small angle brackets

 Attach 2x Small Angle Brackets using 4x 10mm Screws to the front and back points of where Part F meets Part A as shown



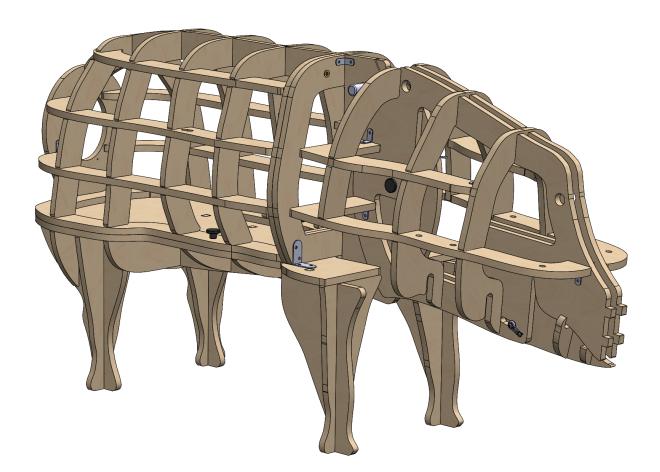
14 STEP FOURTEEN

Repeat on opposite side

 Add two more Small Angle Brackets using 4x 10mm Screws to the opposite side of the head, connecting both front and back ends of Part F to A.



Jaw & General Assembly





Jaw Assembly



STEP ONE

Locate jaw part A

• Locate Jaw Part A and orientate as shown.



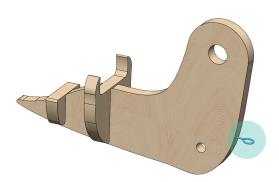
2 STEP TWO

Insert jaw Part B & C

• Slot Jaw Part B and C into A as shown.



Jaw Assembly



3 STEP THREE

Insert eyelet guide

• Insert an Eyelet Guide into the back of the Jaw Part A as shown.



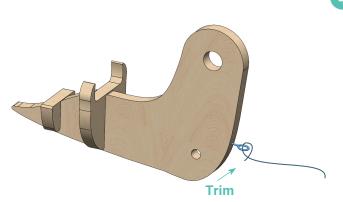
Tie nylon line onto jaw

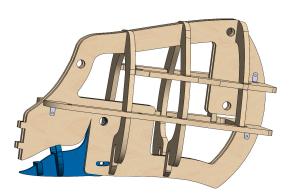
- Tie one end of the Nylon Line onto the Eyelet using a secure, tight knot.
- Leaving the longest length for later, trim the short excess nylon, leaving about 5 -10mm remaining.

STEP FIVE

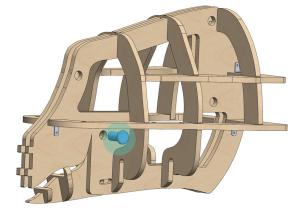
Insert jaw into head

• Slide the Jaw Assembly in between the two main face plates of the head of the pig as shown and line up the holes.







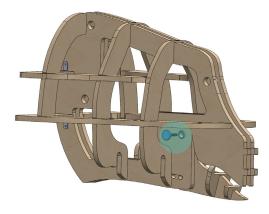


STEP SIX

6

Insert jaw rotation dowel

• Insert large rotational dowel into through the large hole in the top of Jaw Part A.



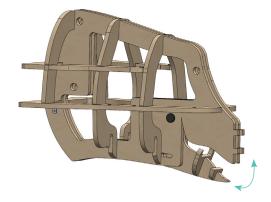
STEP SEVEN

Screw in knurl screw

 Screw in a M6 Knurl Screw into the other side of the dowel, into the threaded insert.

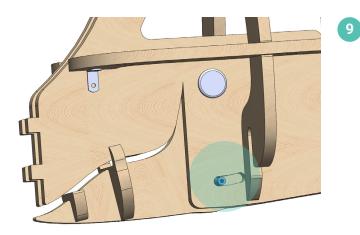


• Check the jaw moves up and down freely.





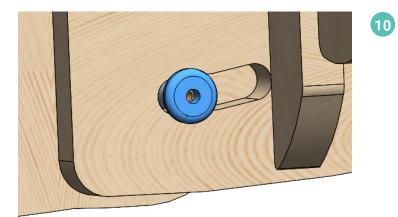
Jaw Assembly



STEP NINE

Insert small jaw dowel

• Insert small jaw dowel into the lower hole in Jaw Part A, and where the slot is in the main face plate of the pig head.

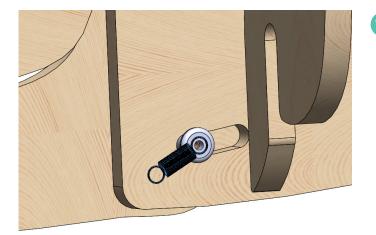


STEP TEN

Locate the dowel plate

• Locate the dowel plate at one end of the jaw dowel.

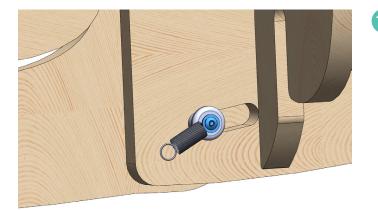




STEP ELEVEN

Locate the spring

• Locate one loop of the jaw spring over the hole in the dowel plate.



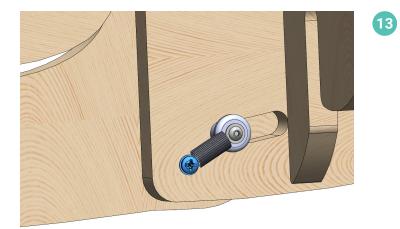
12 STEP TWELVE

Secure with bolt & washer

• Secure the spring in place with an M3 flat washer and M3 button head bolt, screwing it into the threaded insert in the jaw dowel.



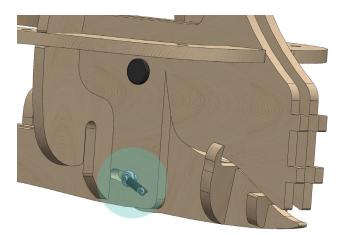
General Assembly



STEP THIRTEEN

Screw in the other spring end

• Close the jaw then fasten the other end of the spring to the main face plate of the pig head using a 10mm screw and M3 flat washer.



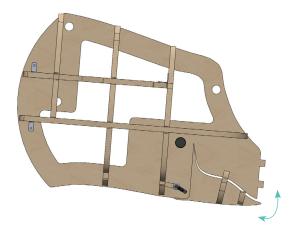
STEP FOURTEEN

14

Repeat on opposite side

• Repeat steps 22 through to 25 on the other side of the jaw/head.

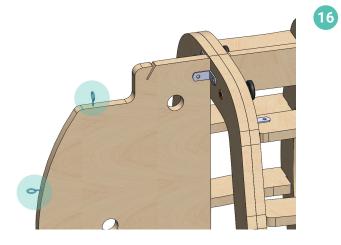




15 STEP FIFTEEN

Check jaw movement

• Check the movement of the jaw. It should close back by itself when opened.



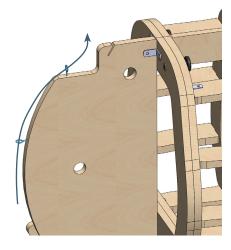
STEP SIXTEEN

Insert eyelet guides

• Insert 2 x Eyelet Guides into the edge face of Part B of the Top Cage as shown.



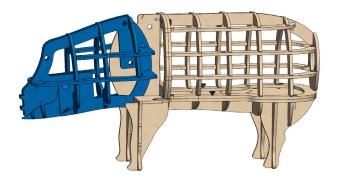
General Assembly



17 STEP SEVENTEEN

Thread the nylon

- Take the long end of the Nylon that is attached to the jaw.
- Thread the Nylon through the eyelets from the bottom to the top.
- NOTE: You will need to hold the head assembly close to the body for this part.

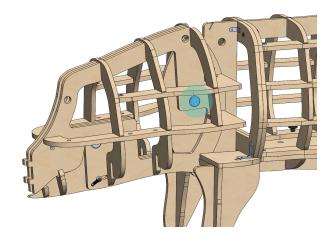


18 STEP EIGHTEEN

Locate head assembly

- Locate the Head Assembly over Top Cage Part B as shown.
- Line up the central hole in the neck.

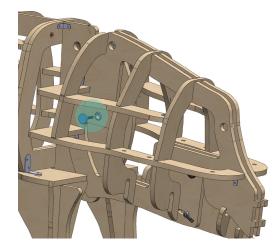




19 STEP NINETEEN

Insert rotational dowel

• Insert a large rotational dowel in through the central neck hole.



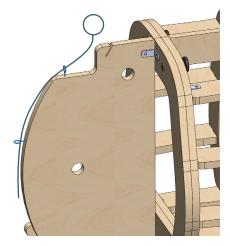


Secure neck in place

• Use an M6 Knurl Screw to fasten the Head Assembly in place by screwing it into the rotational dowel threaded insert.



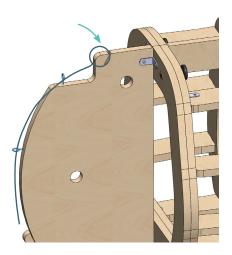
General Assembly



21 STEP TWENTY ONE

Tie a loop at the end of Nylon, while head is down and mouth is open

- Tie a loop roughly 30mm diameter at the end of the nylon.
- Make sure the nylon is pulled tight.

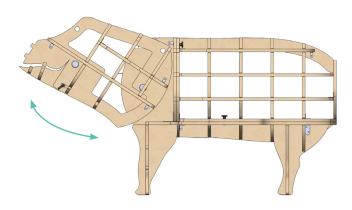


22 STEP TWENTY TWO

Loop the nylon over slot

• Secure the Nylon in place by sitting the loop of the nylon over the slot at the top of Top Cage Part B

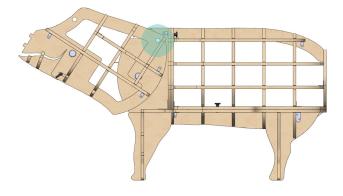




23 STEP TWENTY THREE

Check head movement

- The head should now be able to rotate freely up and down.
- You should notice that the jaw will open and shut as the head is lowered & lifted



24 STEP TWENTY FOUR

Use the Neck stop

• Use the Neck Stop to hold the pig's head in a raised position by plugging it through the hole in the top of the head when it aligns with the hole in Part B of the Top Cage.



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