

PARAMETRIC
STUDIO

NEWTON AR

Kaleidoscope Kit: Assembly Instructions

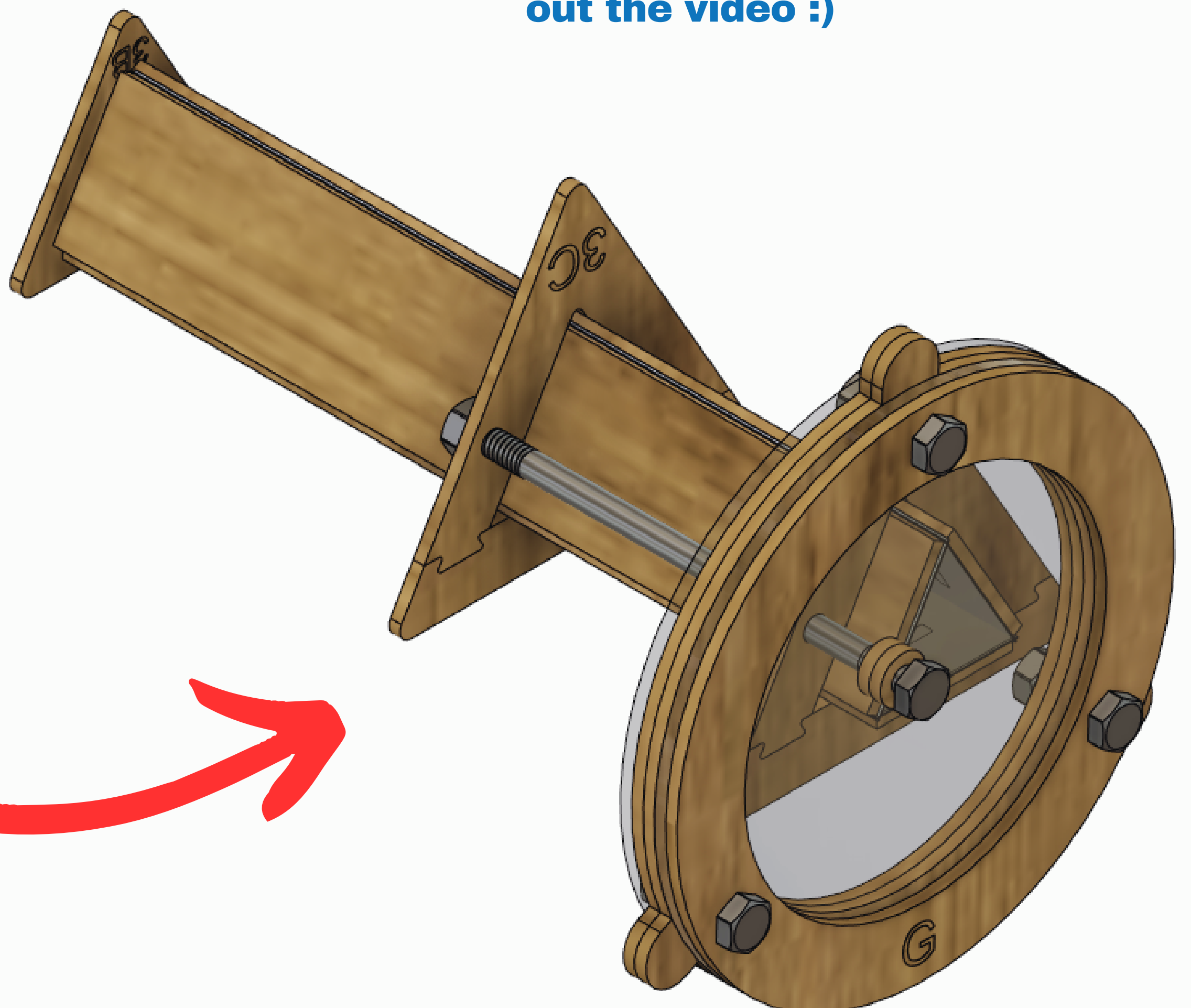
**Not much of a reader? Me neither ...
thankfully there is a video! To watch
the assembly video, go to:**

<https://www.newton-ar.com/projectdocs>



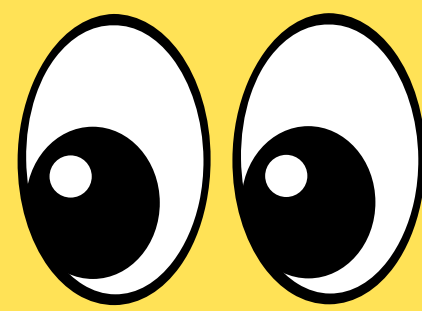
**Oh, you're still here? Excellent!
Videos are overrated anyway ... but
if you get stuck make sure to check
out the video :)**

**This is what you
will be building
today. Cool right?
Let's begin!**



<https://www.parametricstudioinc.com/>

WHAT'S IN THE BOX?



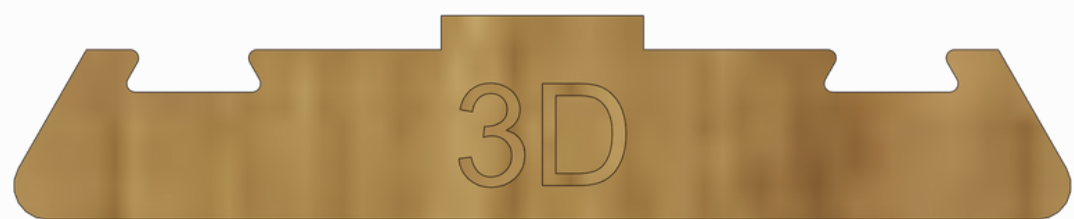
WARNING!
Small Parts
Present



Contents:

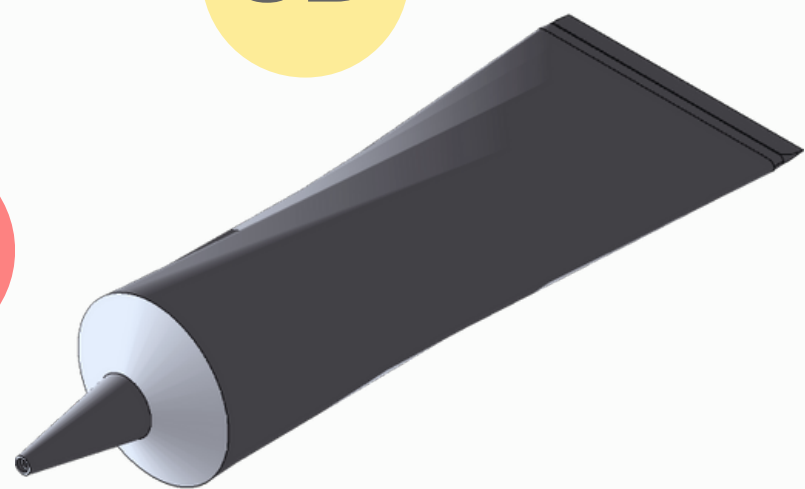
- [A] Tube Side (x3)
- [3B] 3S Eye Piece (x1)
- [3C] 3S Tube Ring Top (x2)
- [3D] 3S Tube Ring Bottom (x2)
- [E] Window Ring (x2)
- [F] Window (x2)
- [G] Frame (x1)

- 01. 1/4" - 20 Spacer (x2)
- 02. 3/4" Hex Bolt (x3)
- 03. 5" Hex Bolt (x1)
- 04. Glue
- 05. Hex Nut (x4)
- 06. Mirror Paper



3D

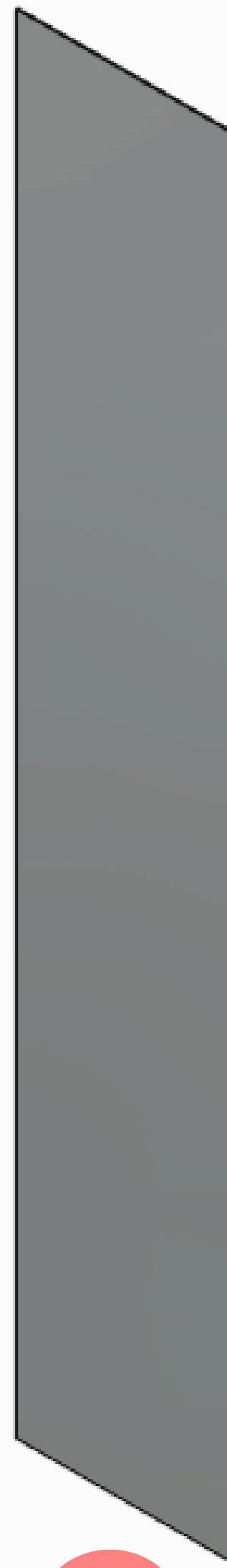
4



A



6



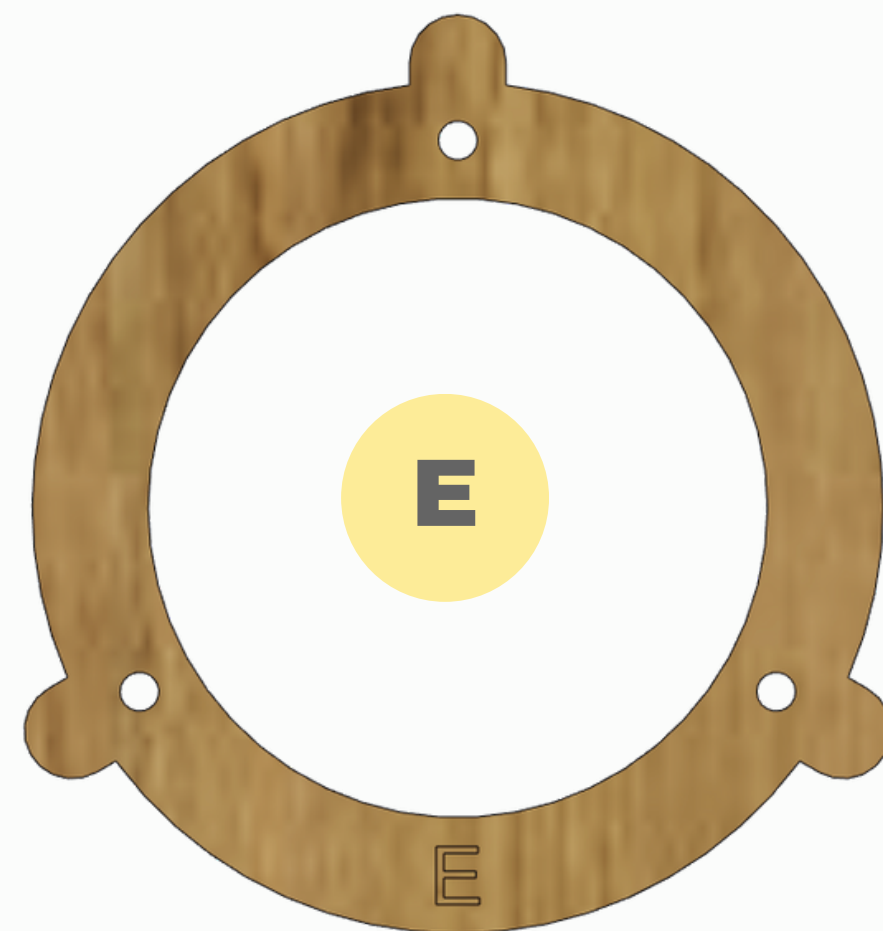
3B



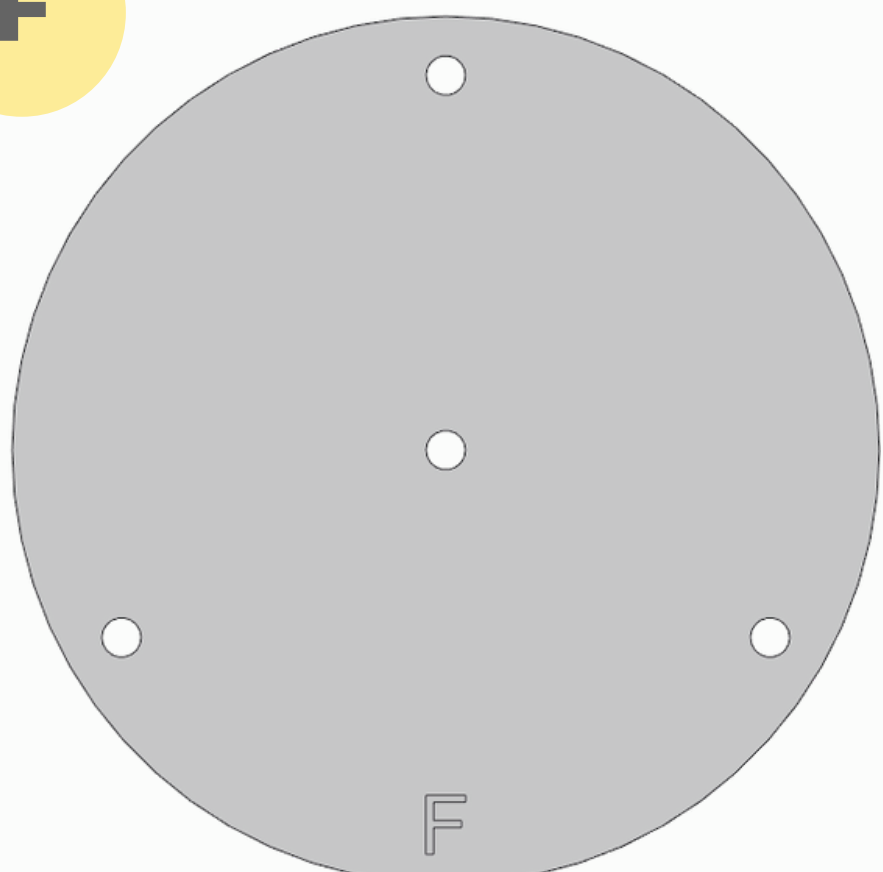
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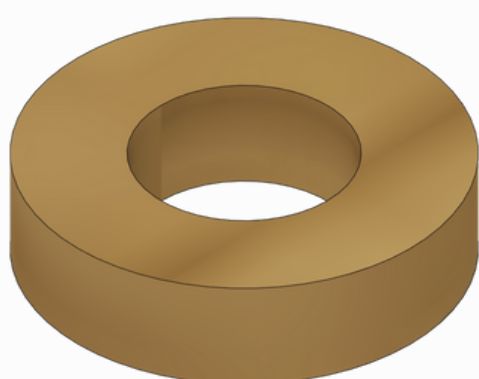
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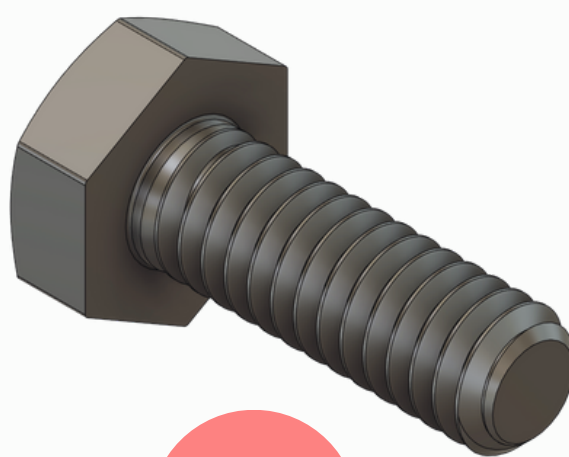
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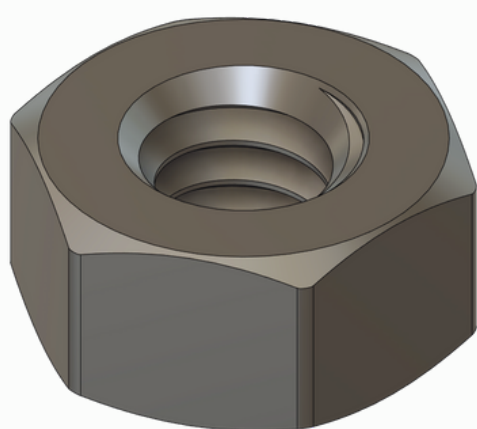
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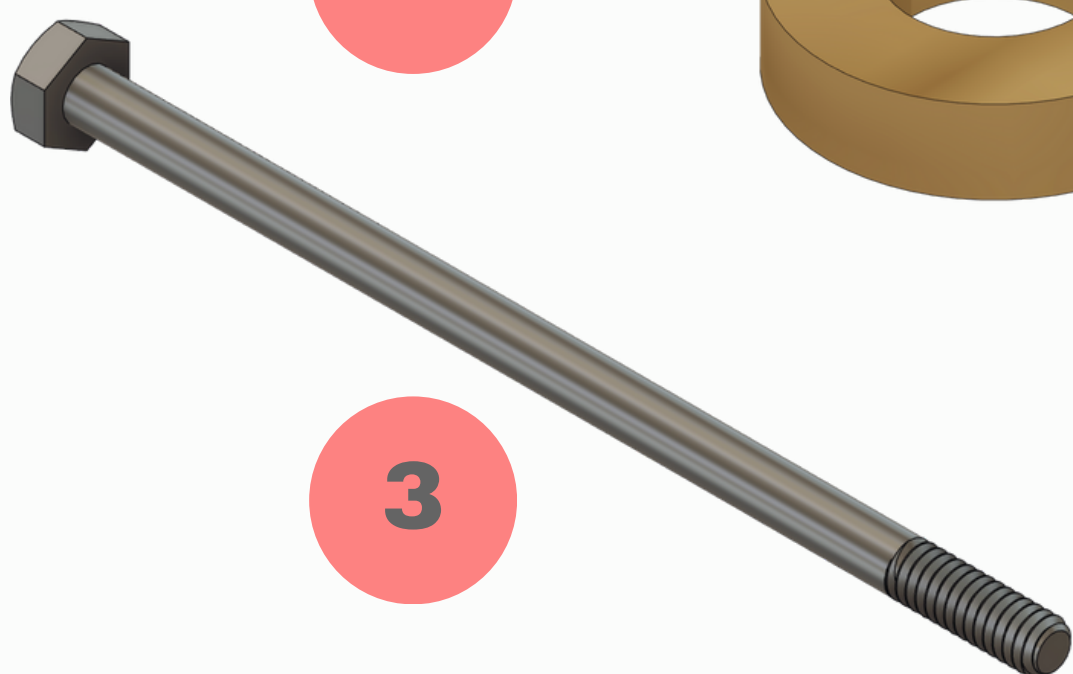
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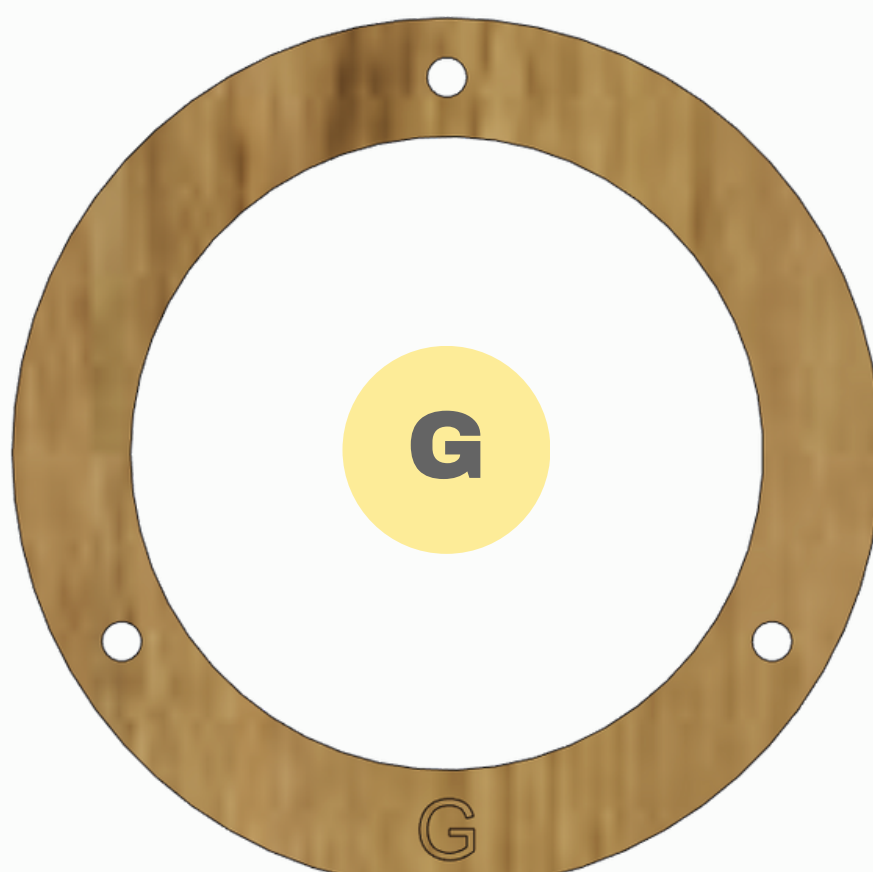
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3

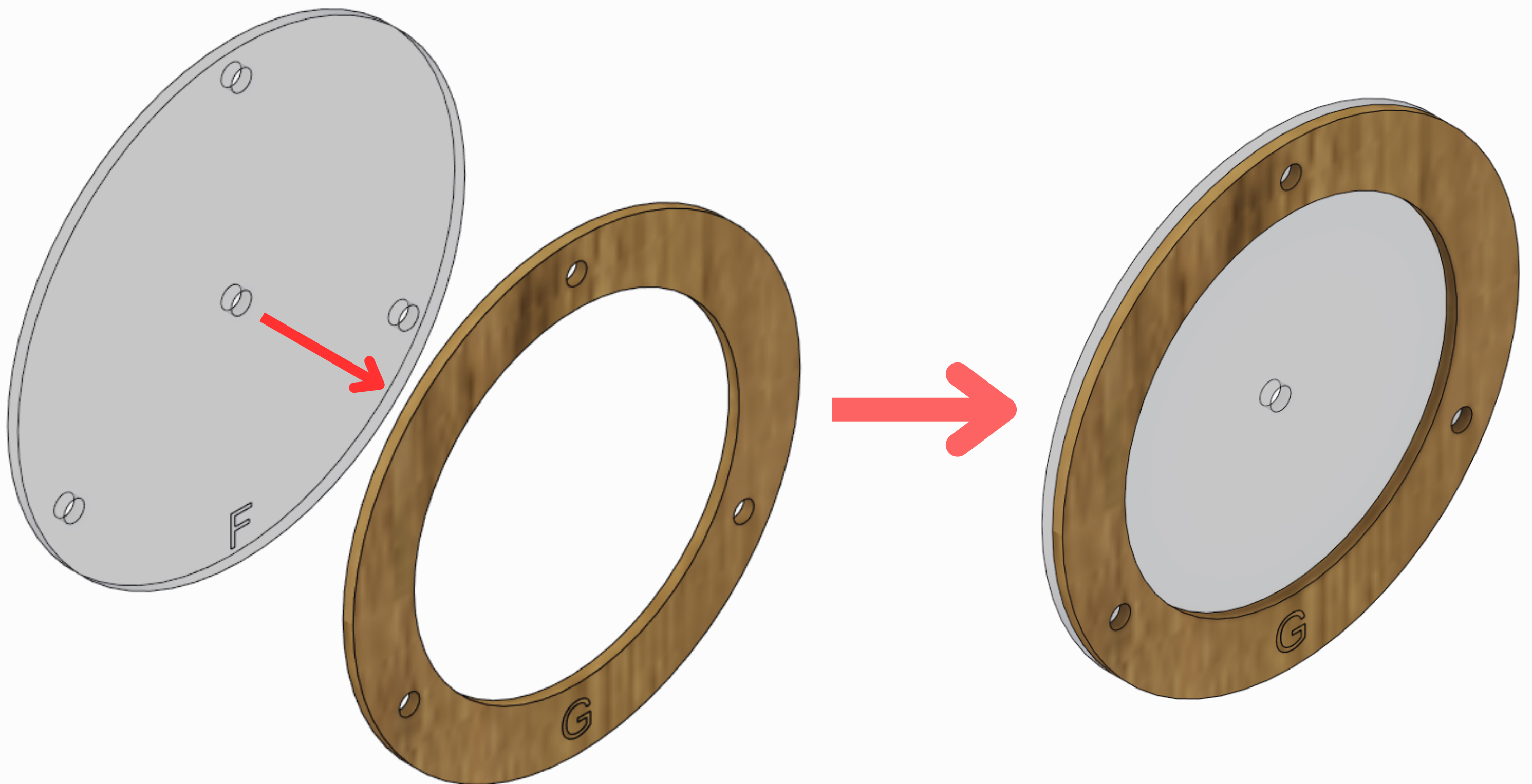


G



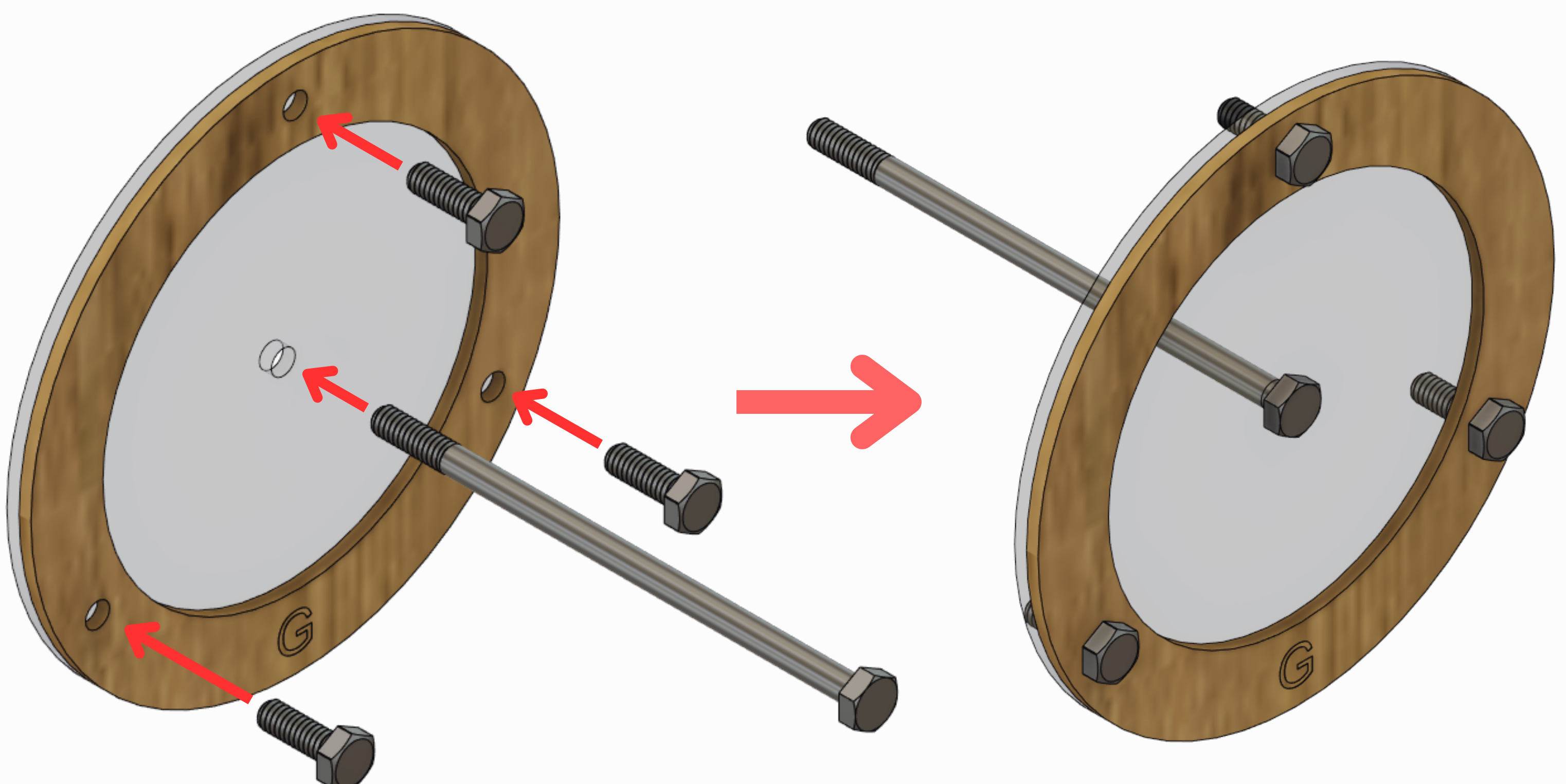
1

Lightly add some Glue to the back of Part G (DO NOT add glue into the holes). Line up the outer holes in Part F to the holes in Part G and attach the glued end of Part G to Part F.



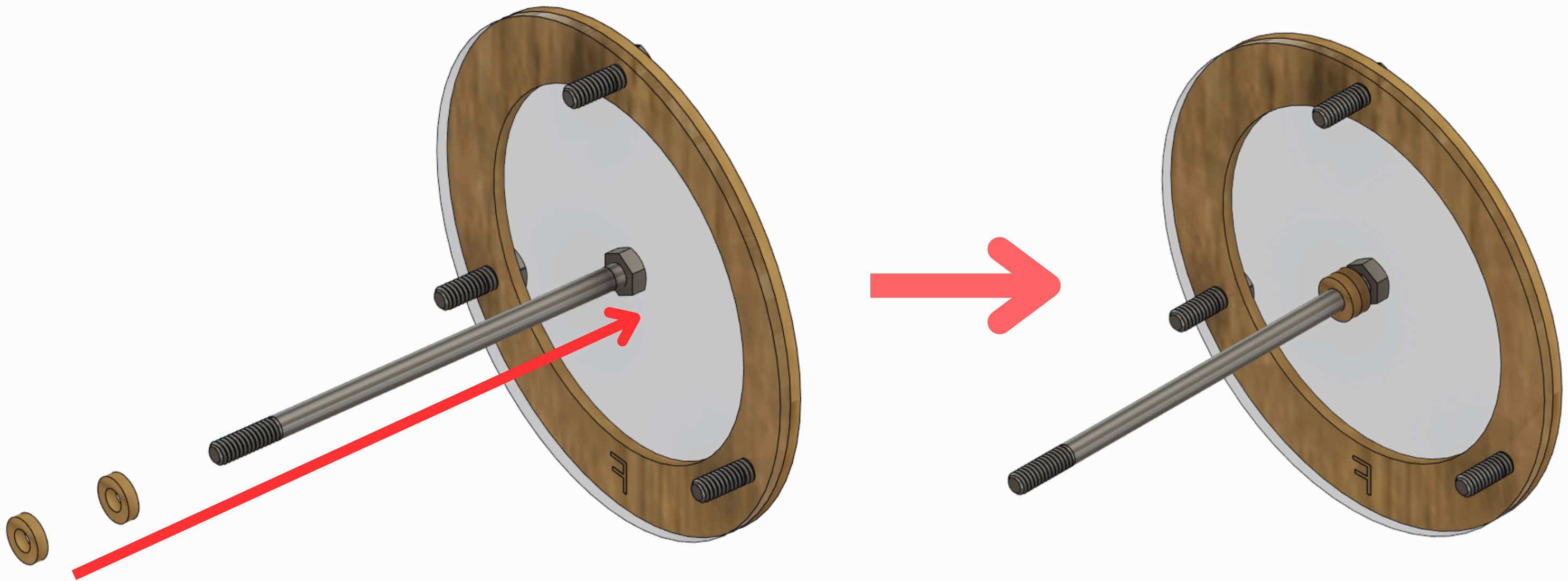
2

Take the three 3/4" Bolts and slide them through the three holes in Part G. Then, slide the 5" Bolt through the center hole in Part F. (Make sure the head of each Bolt is as shown in the images below)



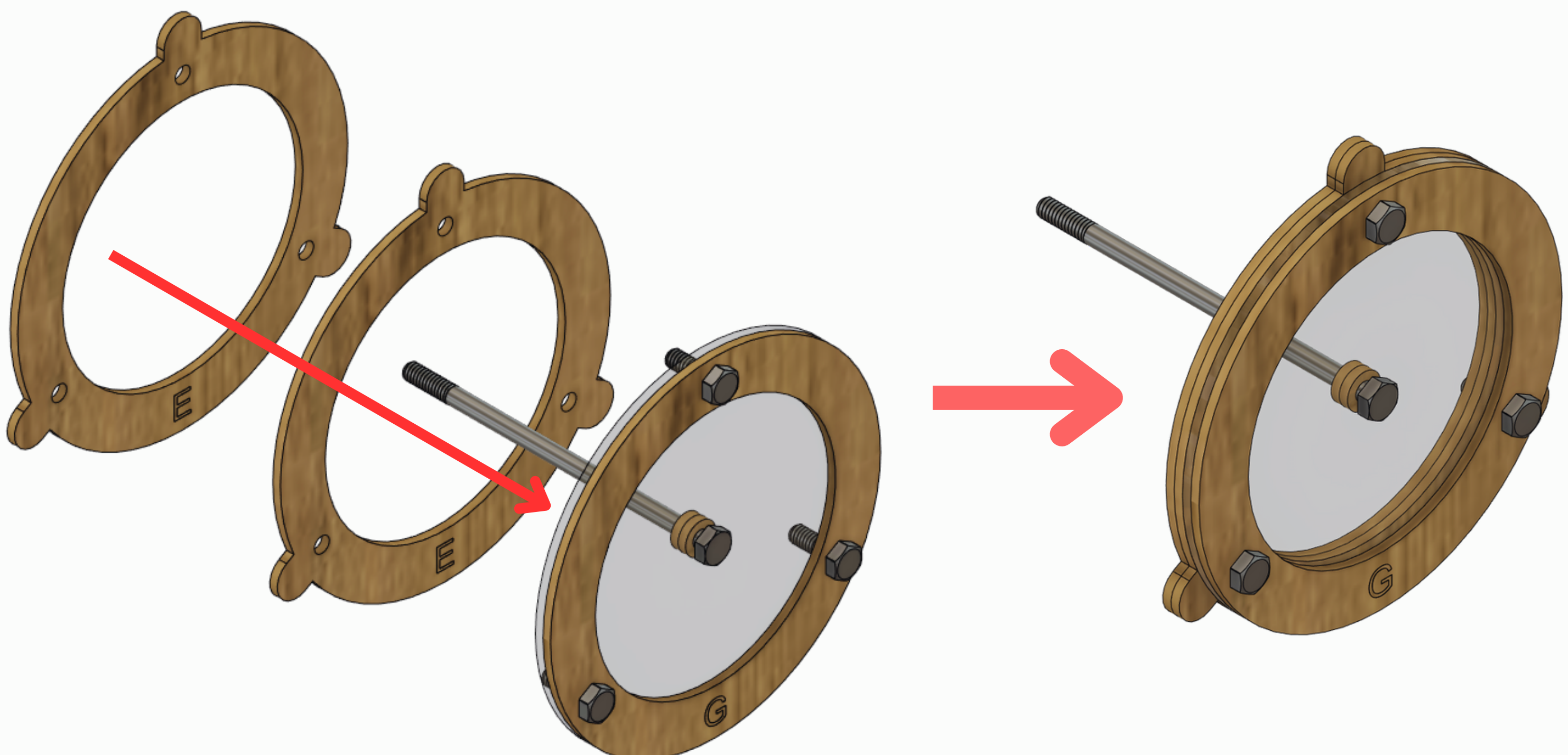
3

Lightly add some Glue to the front of both Spacers (DO NOT add glue into the hole). Attach the front face (glued) of a Spacer to the back (non-glued) of the other Spacer. Then, slide the neck of the 5" Bolt through the hole within both Spacers (glued end towards Part F) and stick the Spacers to Part F.



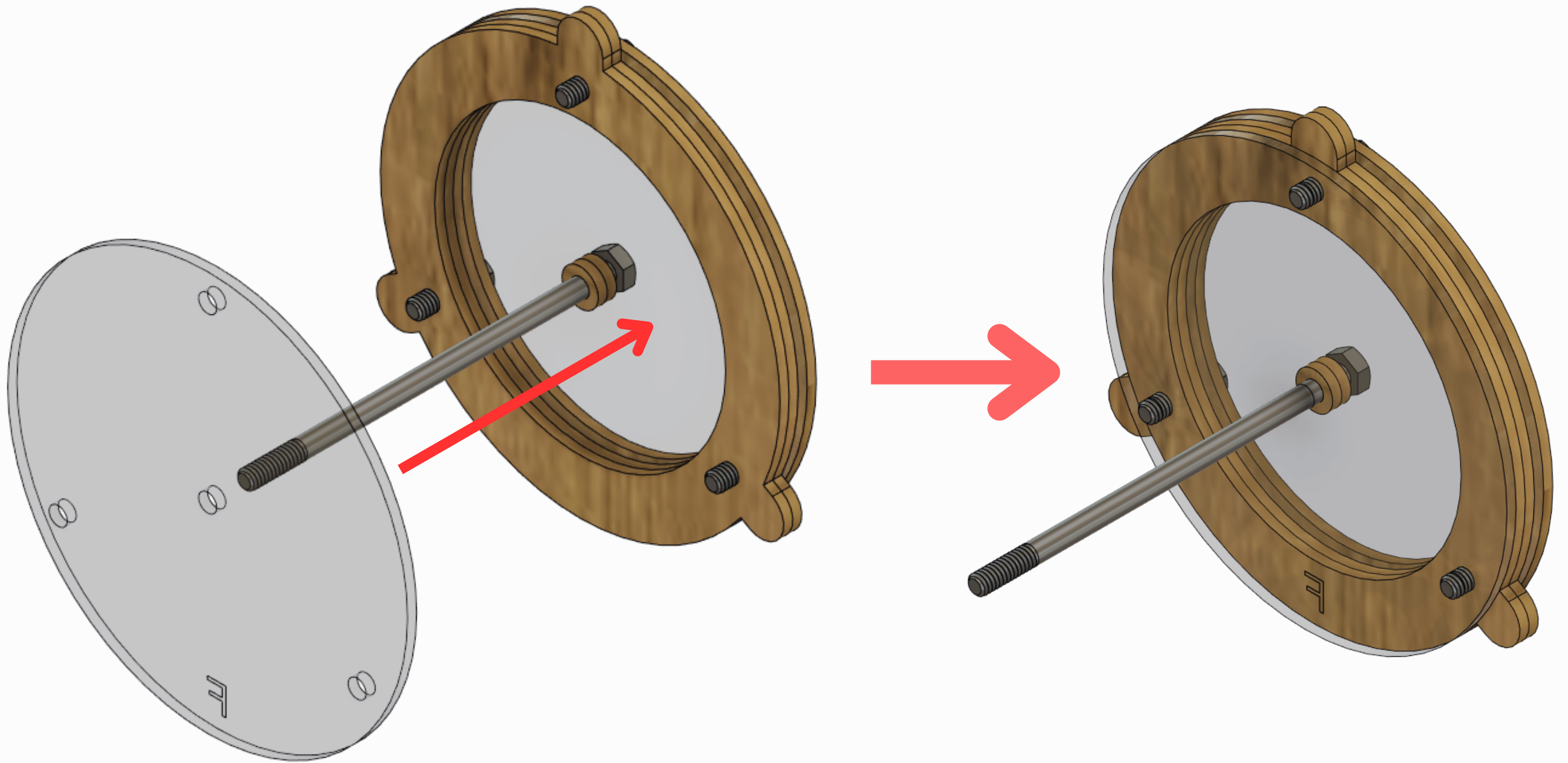
4

Lightly add some Glue to the front of both Part Es (DO NOT add glue into the holes). Attach the front face (glued) of one Part E to the back (non-glued) of the other Part E. Then, slide the neck of the 3/4" Bolts through the holes within both Part Es (glued end towards Part F) and stick both Part Es to Part F.



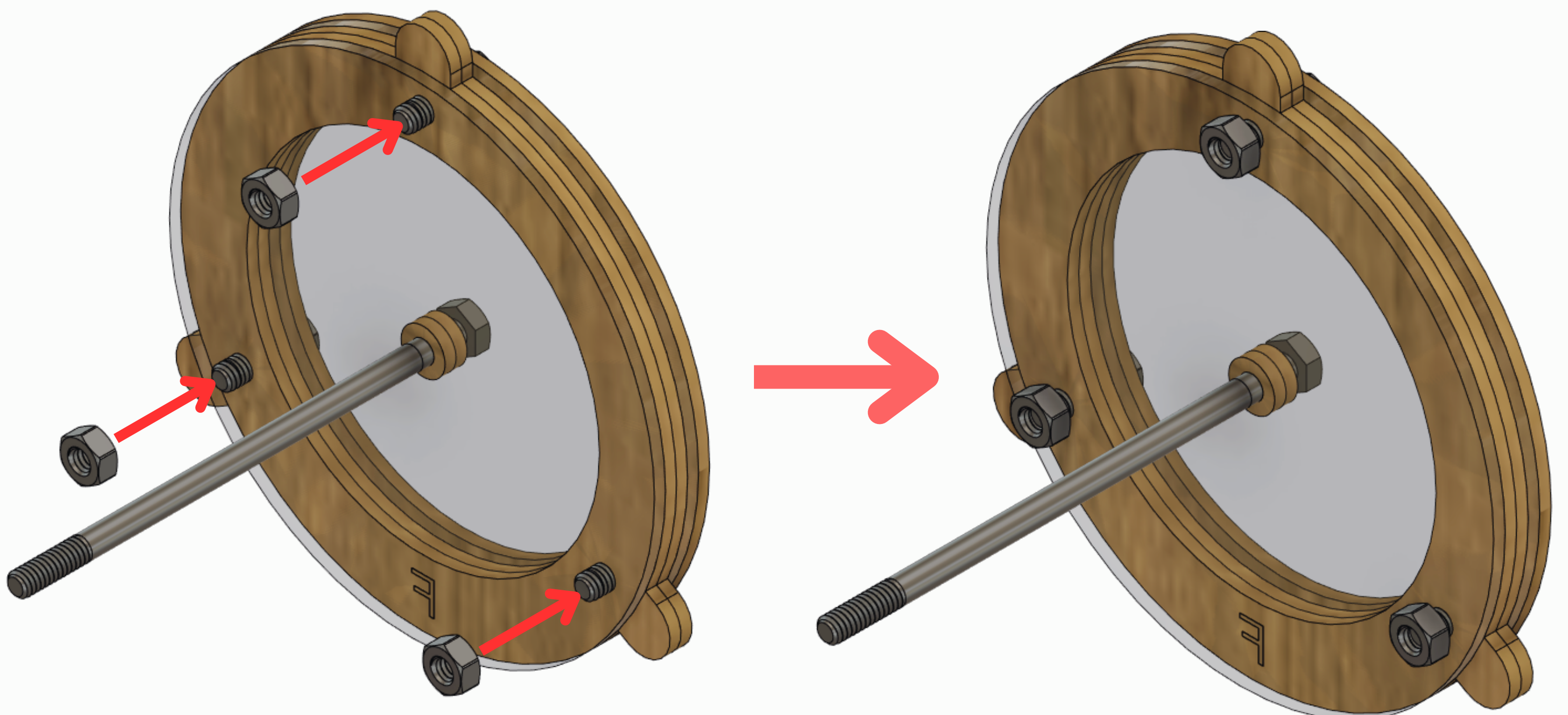
5

For Step 5, NO GLUE is needed. Slide the three 3/4" Bolt through the outer holes of Part F and the 5" Bolt through the center hole in Part F.



6

Using 3 of the 4 Hex Nuts, twist the Hex Nuts along the 3/4" Bolts to tighten them down and lock the Assembly in place.



7

Part A is a 9" x 1.5" rectangle (excluding the tab at the bottom). Cut 03 strips of Mirror Paper so that they are a 9" x 1.5625" (1 9/16") rectangle.

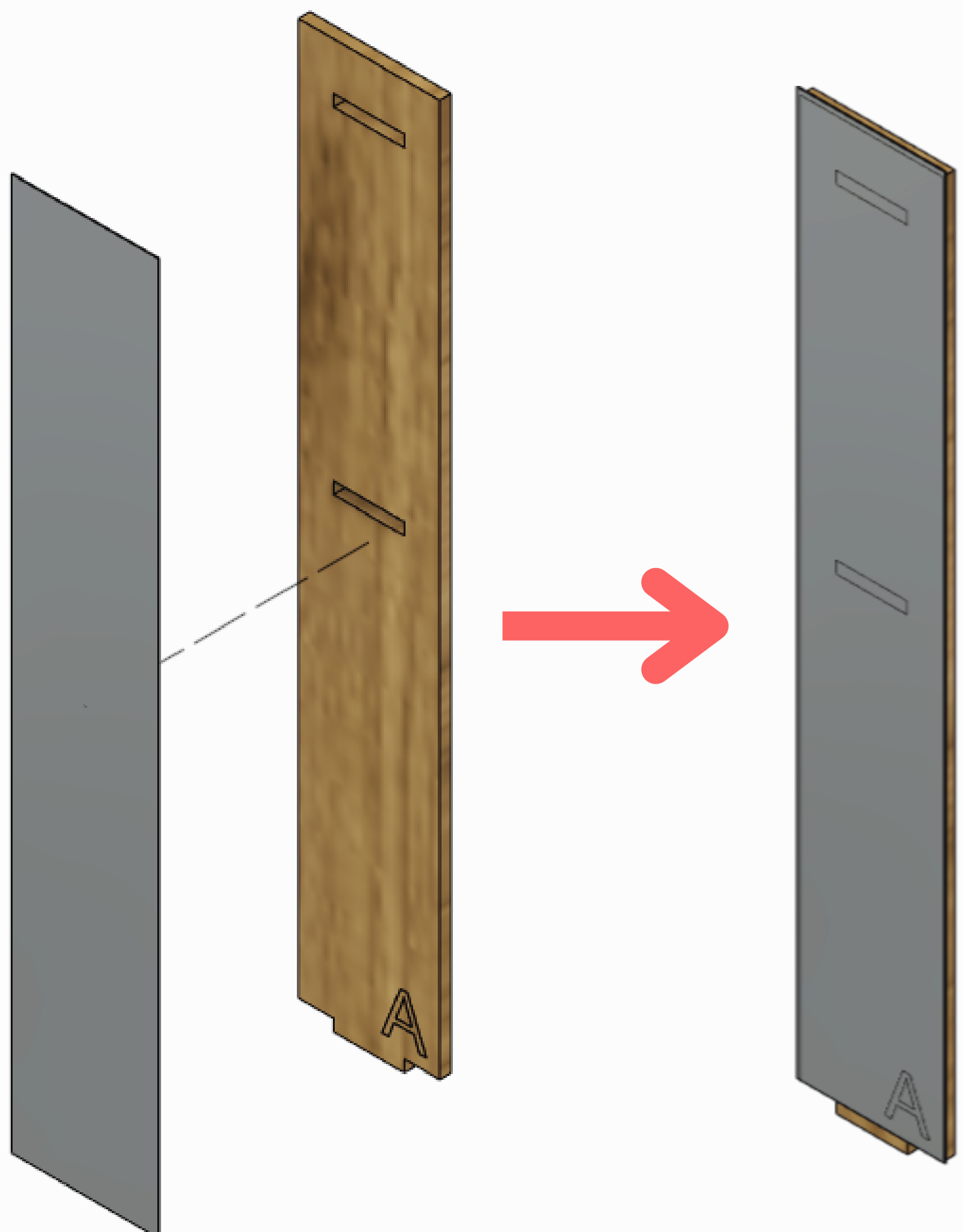


8

Before adding the Mirror Paper to **Part A**, make sure that the Mirror Paper is lined up evenly around **Part A** (there will be some overlap, see image on right). Then, remove the back of the Mirror Paper and stick it to one side of **Part A**. Remove the blue shield (if any) to reveal the shiny mirrored paper. Repeat this step 3x.

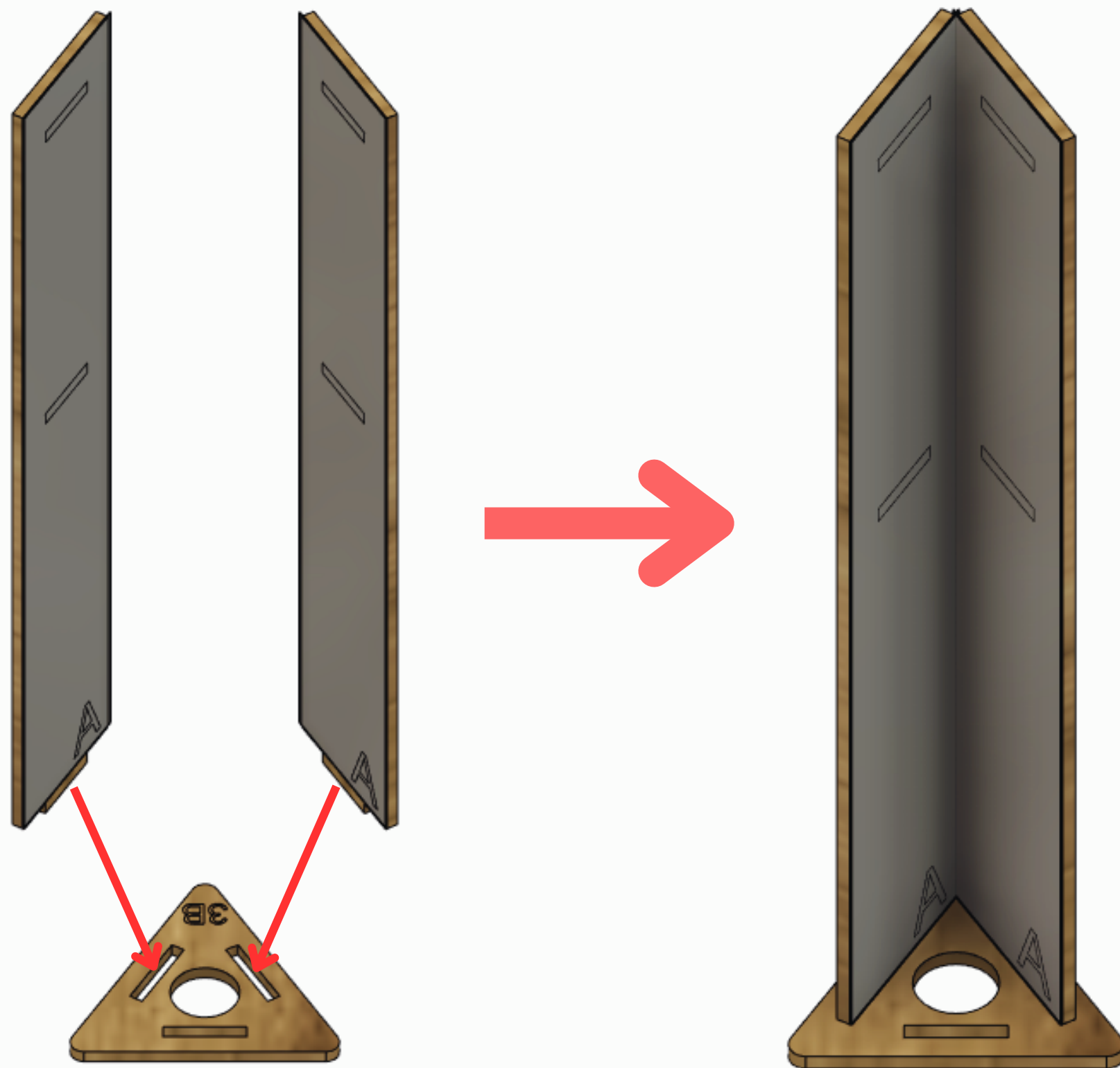


When lining up the Mirror Paper, it **SHOULD NOT OVERLAP** with the tab at the bottom of **Part A**. Also, make sure that there is no air bubbles between the Mirror Paper and **Part A**!



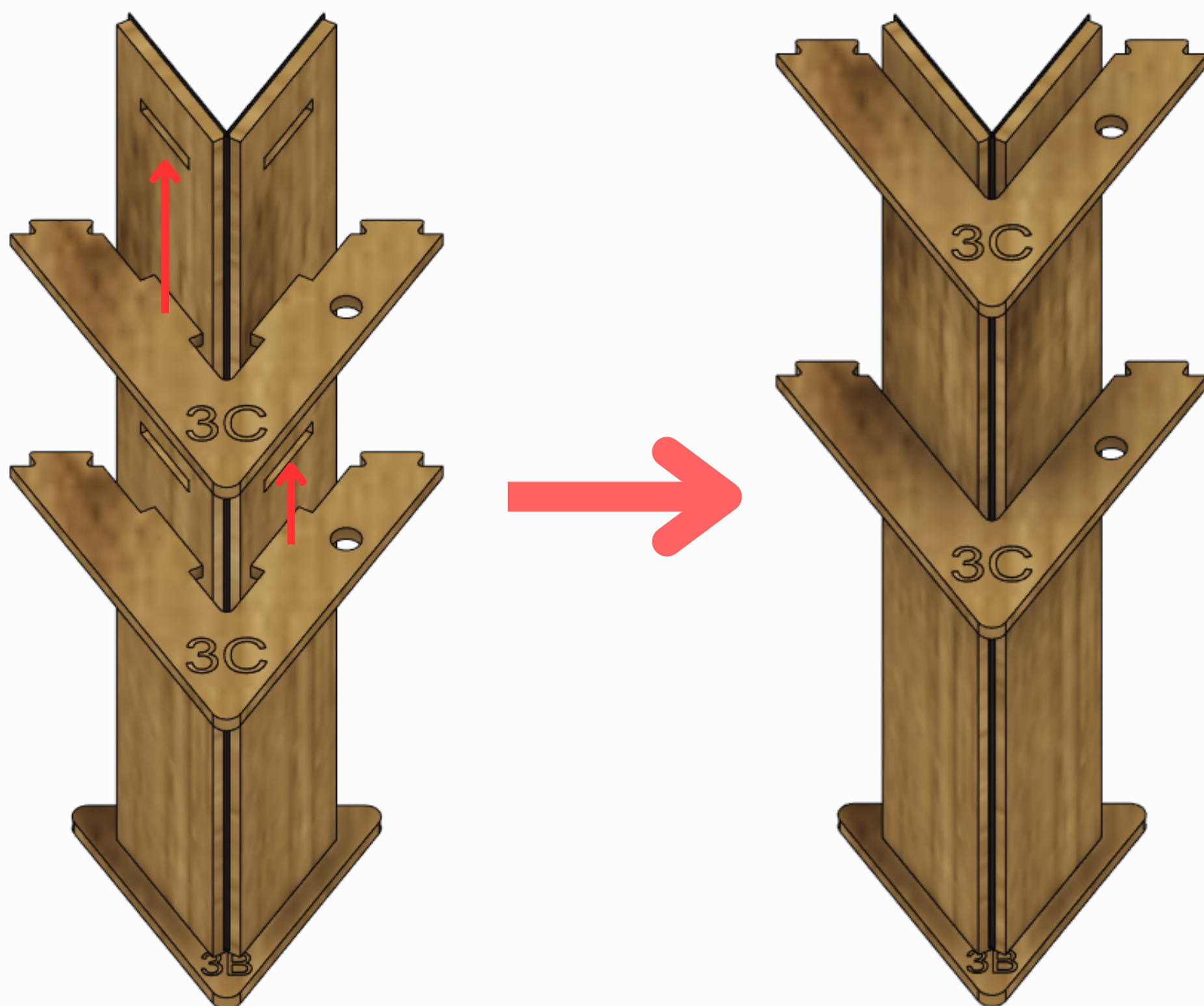
9

Using 2 of the 3 Part As, add Glue to the tab at the bottom and insert them into two of the rectangular slots in Part 3B. Make sure that the Mirror Paper is facing INWARD.



10

Add Glue to the inside tabs of Part C. Starting with the lowest slot in both Part As, insert the inner tabs of one Part C into both slots. Repeat this step for the top slots (make sure the holes in both Part Cs line up).



TIP!



Lightly squeezing both Part As in towards each other can help with wiggling the tabs in Part C into the slots in Part A!

11

Using the remaining Part A, add Glue to the tab at the bottom and insert it into the remaining rectangular slot in Part 3B. Make sure that the Mirror Paper is facing INWARD.



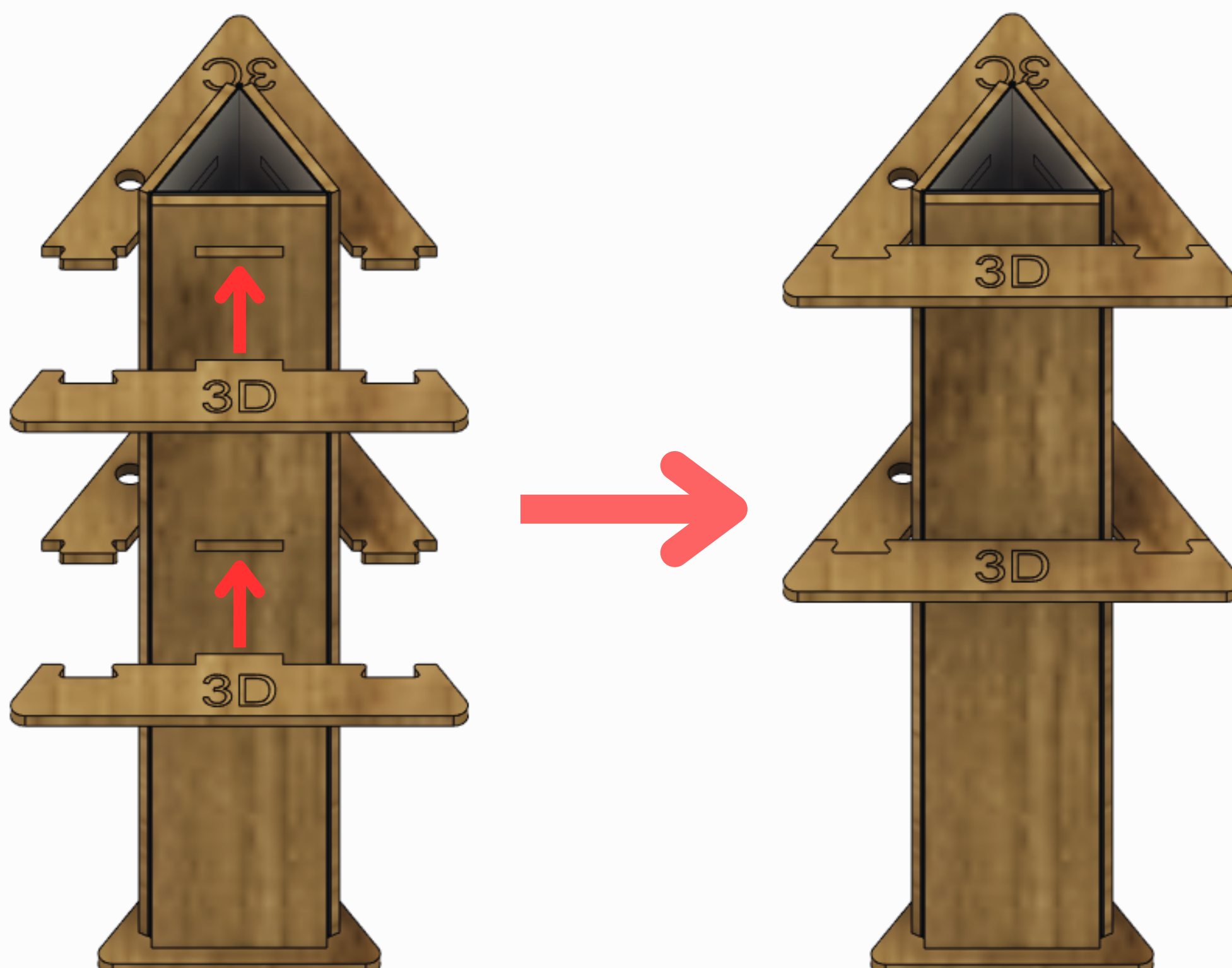
12

Add Glue to the inside tab and to the puzzled notches of Part D. Starting with the lowest slot in Part A, insert the inner tab of one Part D into the slot in Part A and connect the puzzled ends of Part C and Part D together. Repeat this step for the top slot.



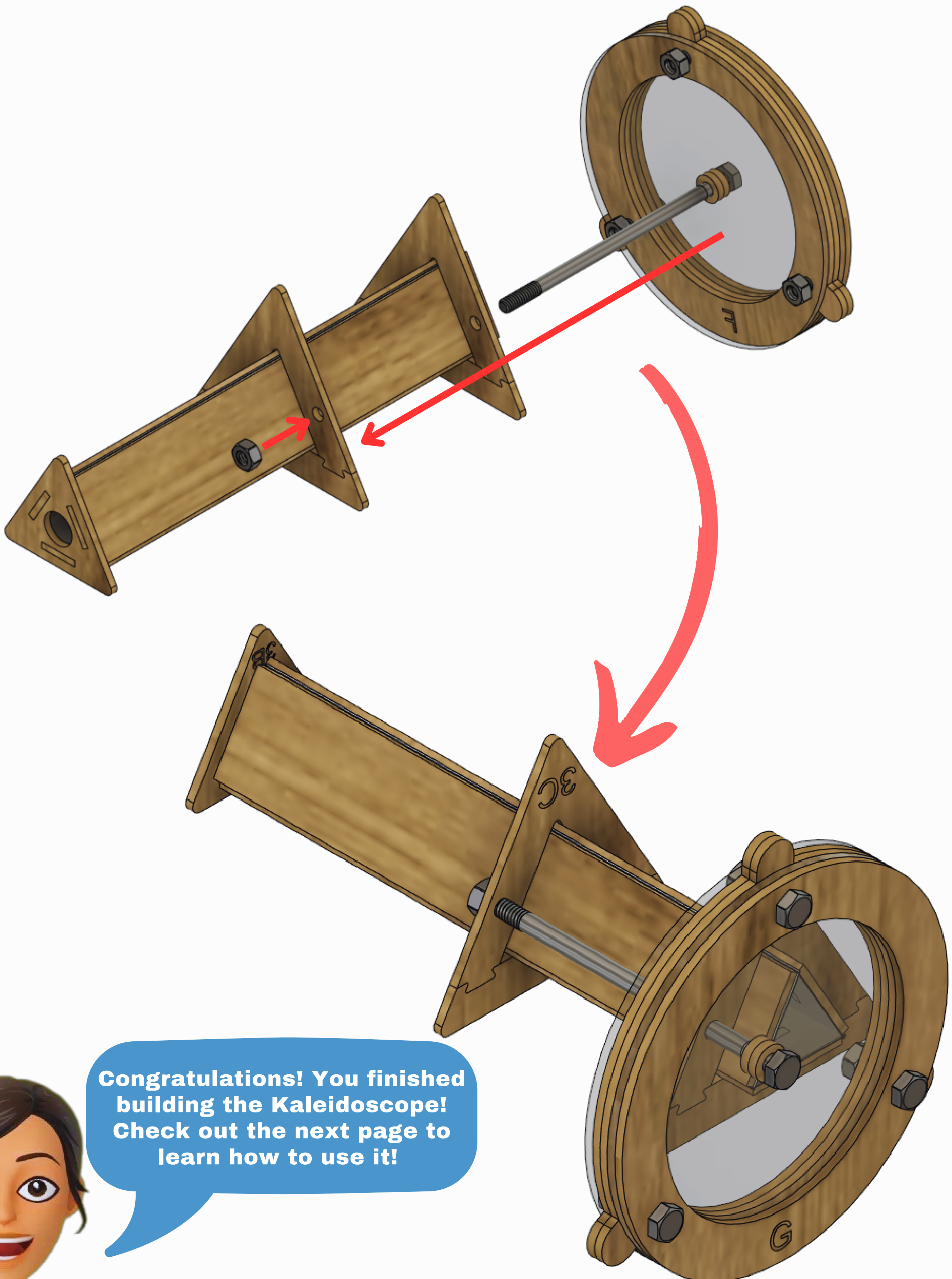
TIP!

Lightly press DOWN on both puzzled ends of Part C as you wiggle the tab on Part D into the slot in Part A!



13

Slide the neck of the 5" Bolt through the holes in both Part Cs. Using the last Hex Nut, twist the Hex Nut along the 5" Bolt to tighten it down and lock the Kaleidoscope Assembly in place.

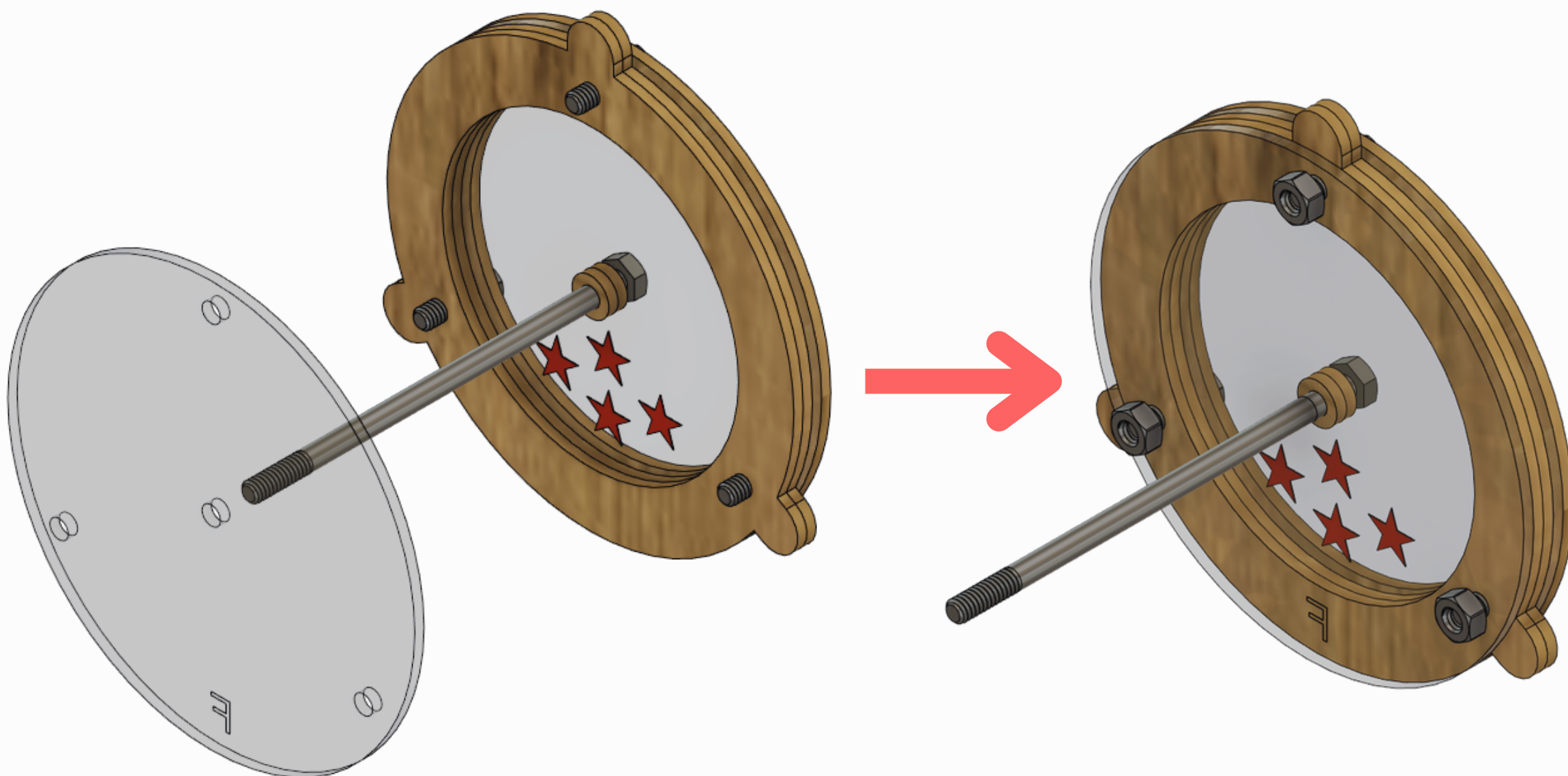


Congratulations! You finished building the Kaleidoscope! Check out the next page to learn how to use it!



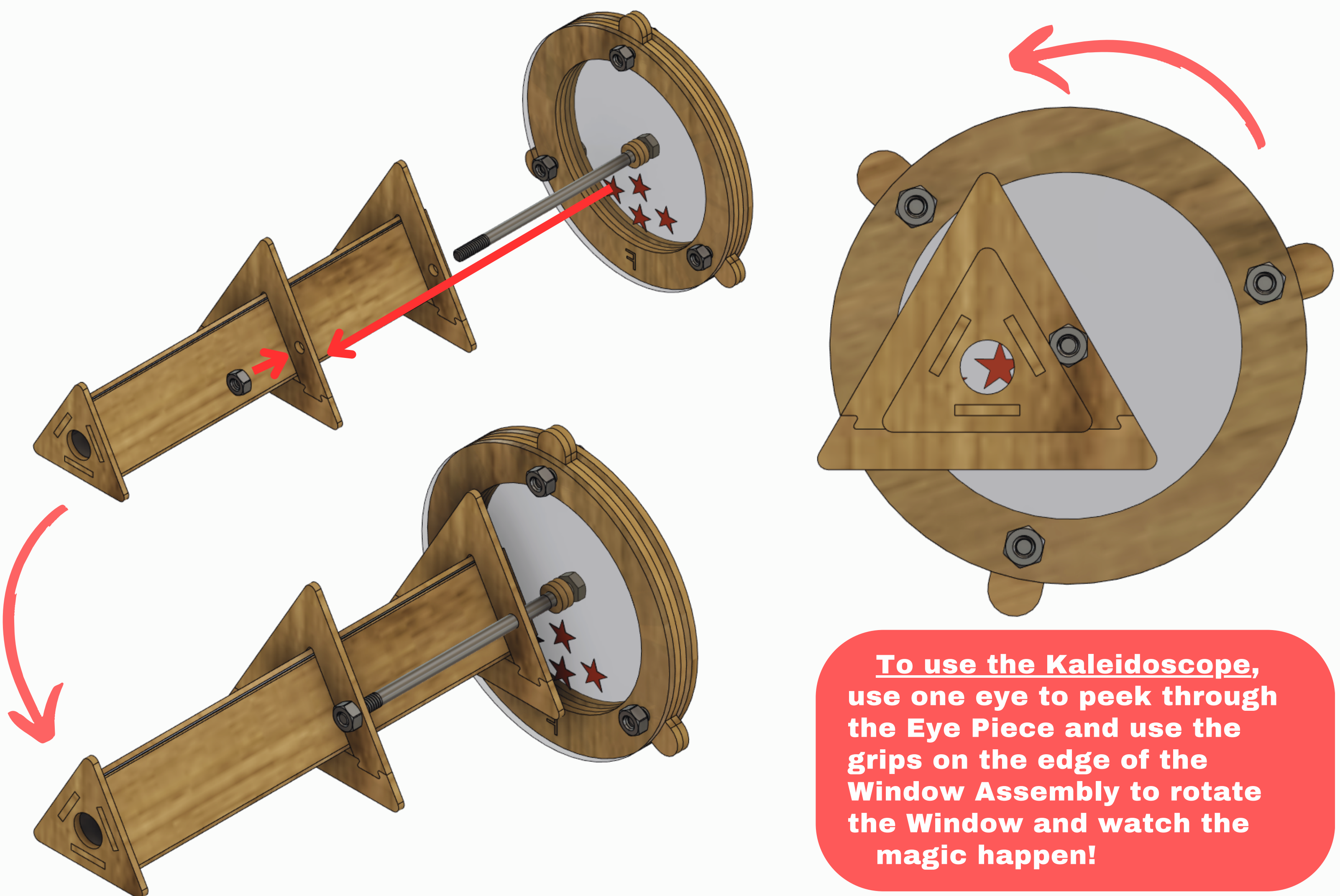
1

Add anything you would like to see within the open space of the Window Assembly. Close the Assembly by placing the back Window onto the Assembly and using the Hex Nuts to lock the parts in place.



2

Attach the Window Assembly to the Kaleidoscope body by sliding the neck of the 5" Bolt through the holes in both Part Cs and then using a Hex Nut to tighten and lock the Assemblies in place.



To use the Kaleidoscope, use one eye to peek through the Eye Piece and use the grips on the edge of the Window Assembly to rotate the Window and watch the magic happen!