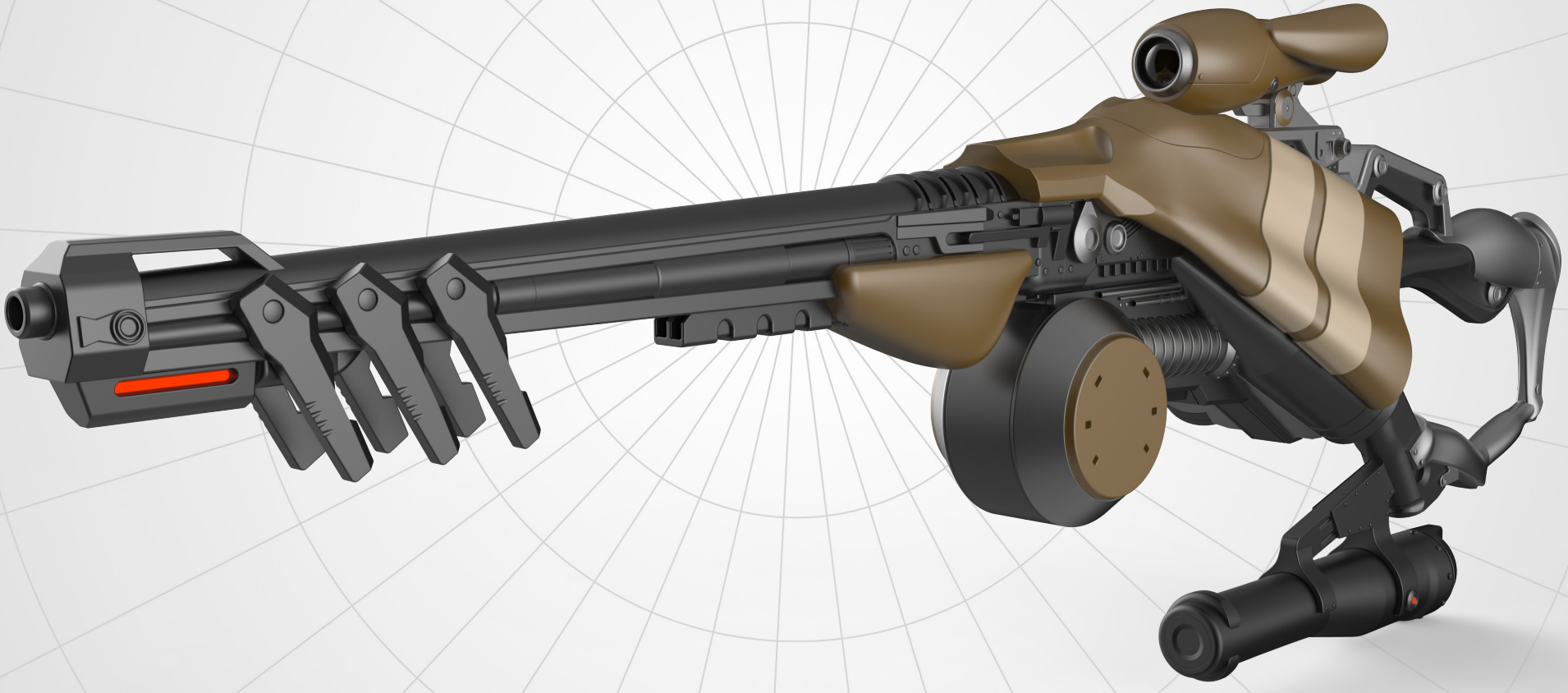
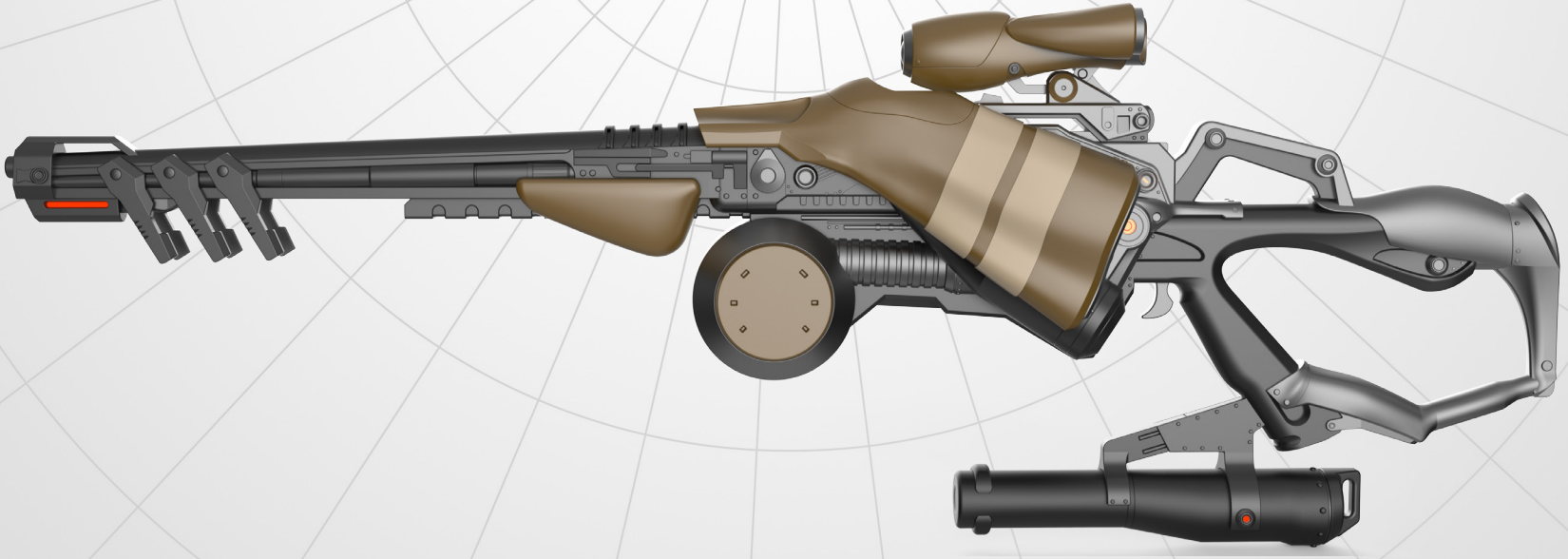
3D Printed Queenbreaker's Bow - Destiny

1:1 Scale



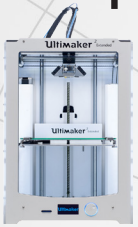
Brief

Hello everyone! Before I go into the instructable, let me first talk about this project for a little. In case you don't know, this is a gun from the game Destiny, and the reason I chose this particular one to do is because I like a good challenge. Being that I managed to already make the **Vex Mythoclast**, I knew that this gun had to be the next step. In total, it has over **80 parts** and took over **100 hours** to make, including this instructable, and in terms of modeling, this was definitely the most difficult model I have *ever* done due to how organic and detailed this gun is (**Detailed renderings** will be at the end). I also made it to be printed in the **different colors** which makes life easy. Along with that, I designed it to have as little support material as possible and I am *extremely* pleased at how it turned out. I will take you from start to finish, explaining where to put support material and ending with how to assemble the gun in clear and concise manner. Now let's get started!

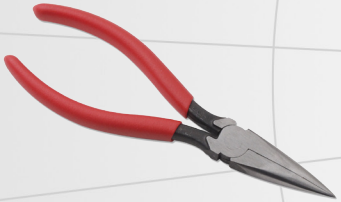


Things You Will Need

-A large format 3D printer - build volume of 12”(z axis) or higher

-Tools for removing support material



-Slicing Software


-Super glue or Epoxy

Step 7: Prepping the Files

This next section will talk about the support material required for each part that needs it. To do this, I will provide you with screenshots from a slicing software called Simplify 3d showing exactly where the support material should be placed to ensure the highest quality prints. A special thanks to Dustin Phillips for helping me out on this part.

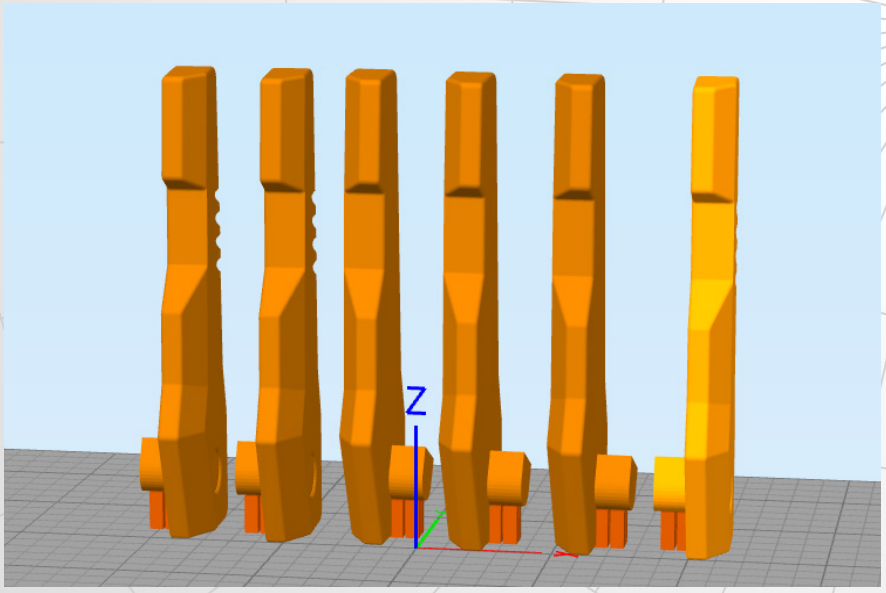
First, the Parts That DON'T Need Supports

Here are the names of the parts that DON'T need supports:

Queenbreaker's Bow - Ammo Body1-1
Queenbreaker's Bow - Ammo Body2-1
Queenbreaker's Bow - Body Face Plate1-1
Queenbreaker's Bow - Body Face Plate2-1
Queenbreaker's Bow - Front Block Bottom1-1
Queenbreaker's Bow - Front Block Bottom2-1
Queenbreaker's Bow - Front Circle SILVER1-1
Queenbreaker's Bow - Front Circle SILVER2-1
Queenbreaker's Bow - Front Circle YELLOW1-1
Queenbreaker's Bow - Front Circle YELLOW2-1
Queenbreaker's Bow - Handle1-1
Queenbreaker's Bow - Handle2-1
Queenbreaker's Bow - Large Cylinder1-1
Queenbreaker's Bow - Large Cylinder2-1
Queenbreaker's Bow - Lense Cover1-1
Queenbreaker's Bow - Lense1-1
Queenbreaker's Bow - Lense2-1
Queenbreaker's Bow - Lense3-1
Queenbreaker's Bow - Scope1-1
Queenbreaker's Bow - Scope2-1
Queenbreaker's Bow - Trigger-1

Next, the Parts that NEED Supports

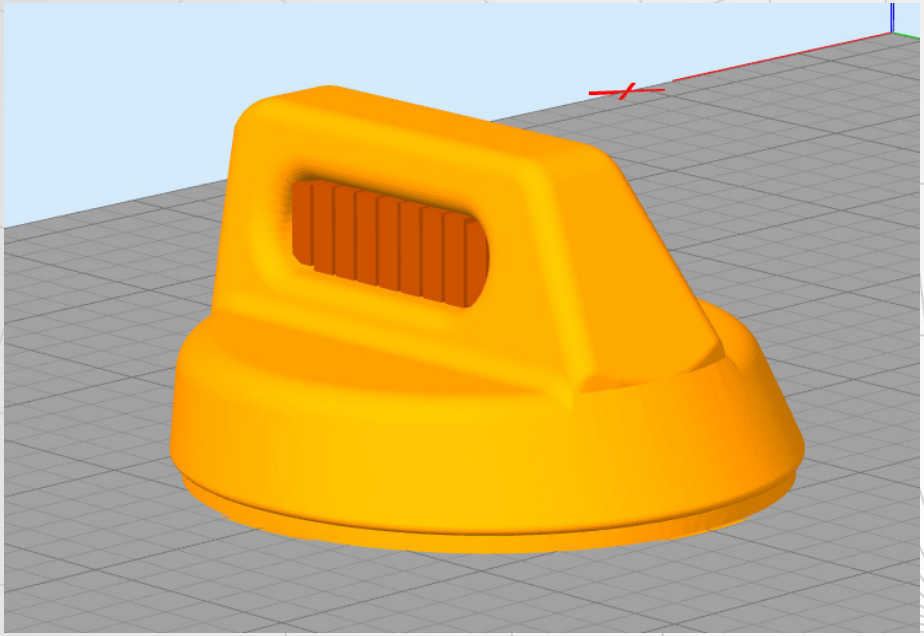
In this section, I will provide you with detailed screenshots of where to put the support material for each part that needs it. If you know how to do this already, skip to step 2 located on page 21.

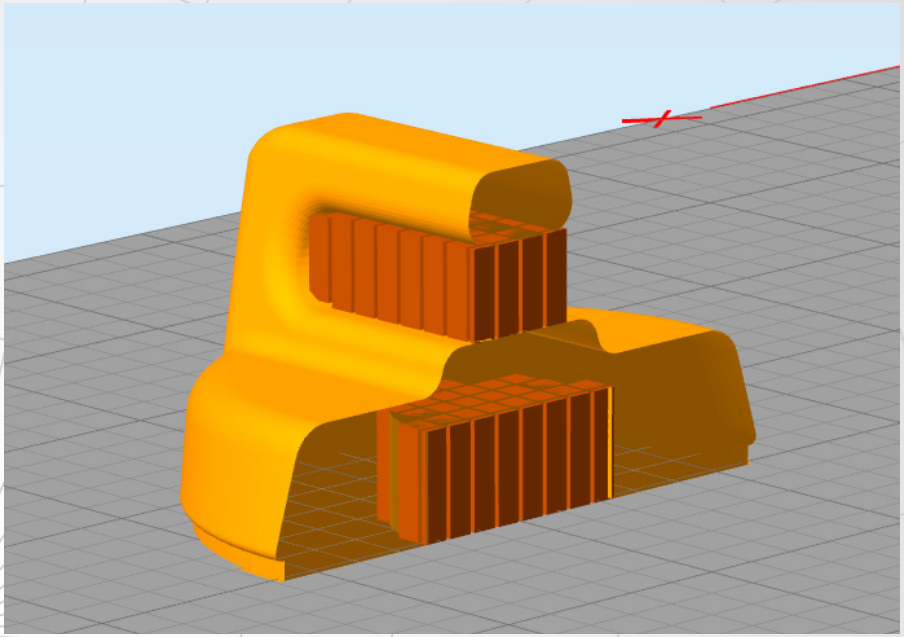


Queenbreaker's Bow - Add-on Wings1-1

Tip:
Technically, you *could* print this flat, but you won't get the highest quality print from it.

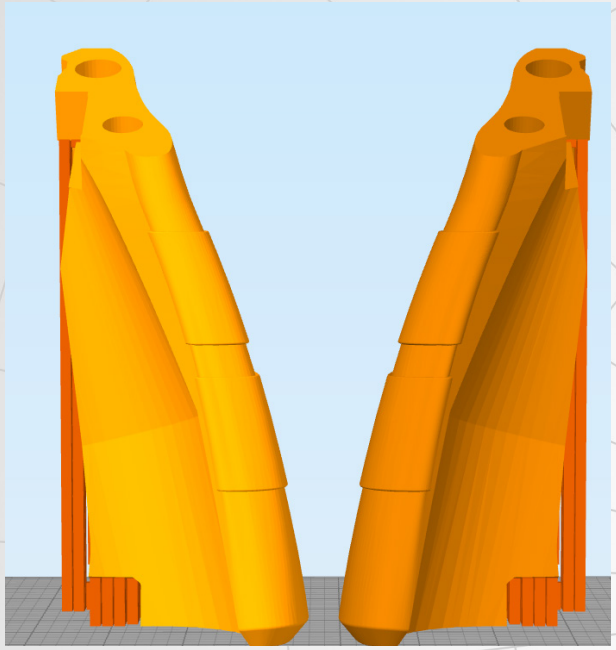
Queenbreaker's Bow - Ammo Back-1

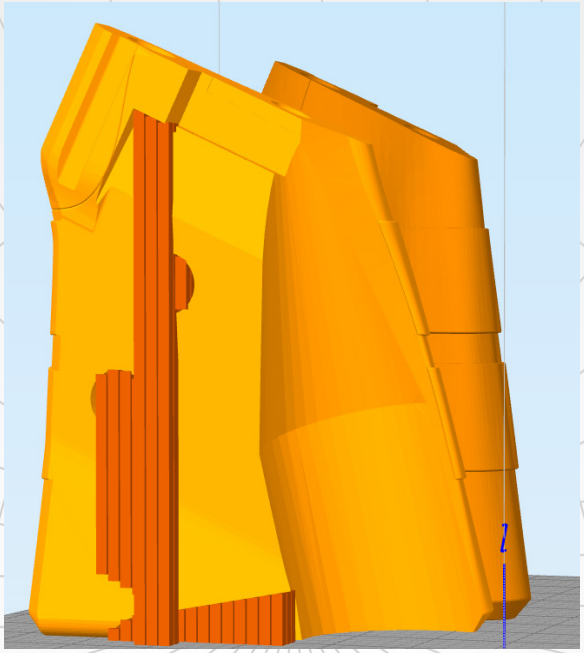


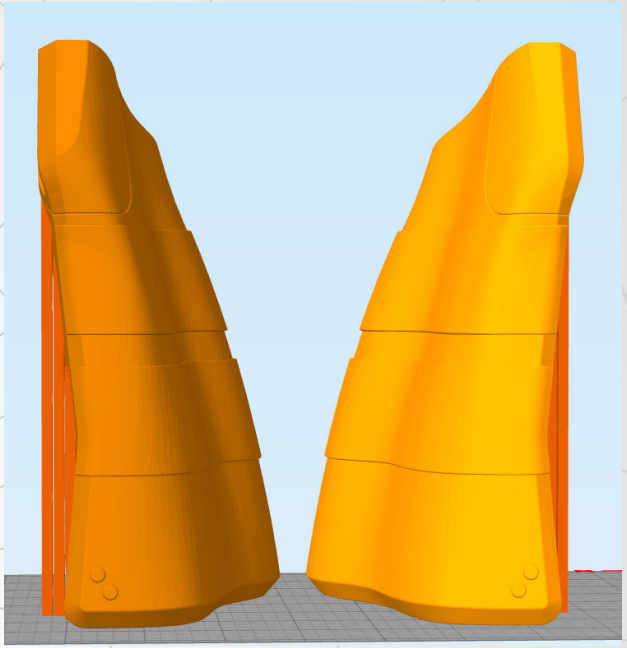


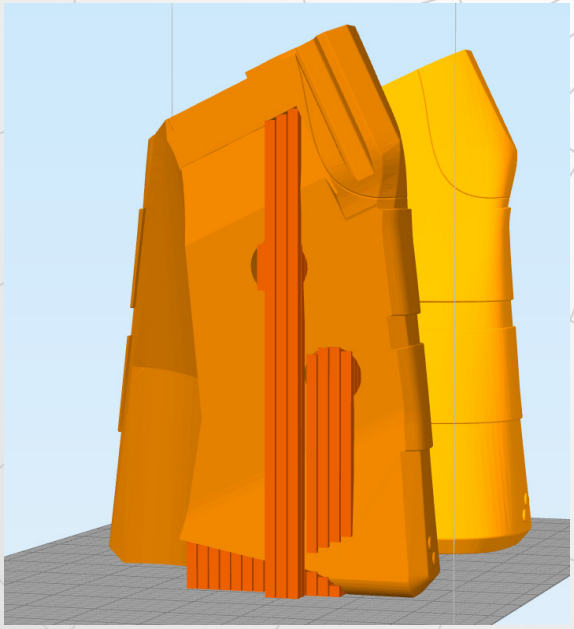
Tip:
Most printers can't handle bridging that well, so placing supports within the object will prevent drooping.

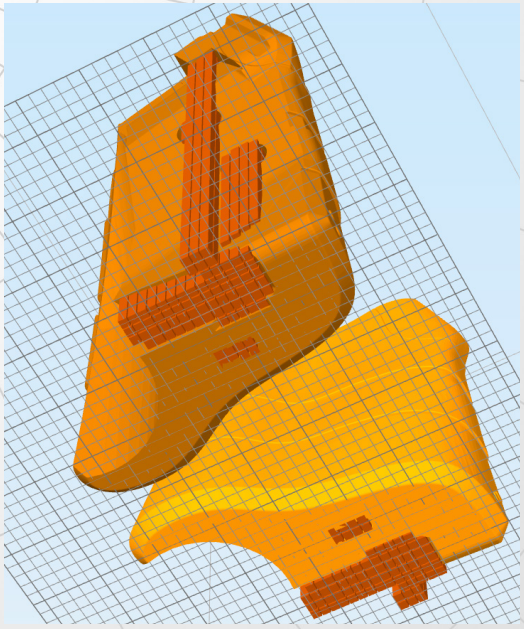
Queenbreaker's Bow - Back MAIN Body



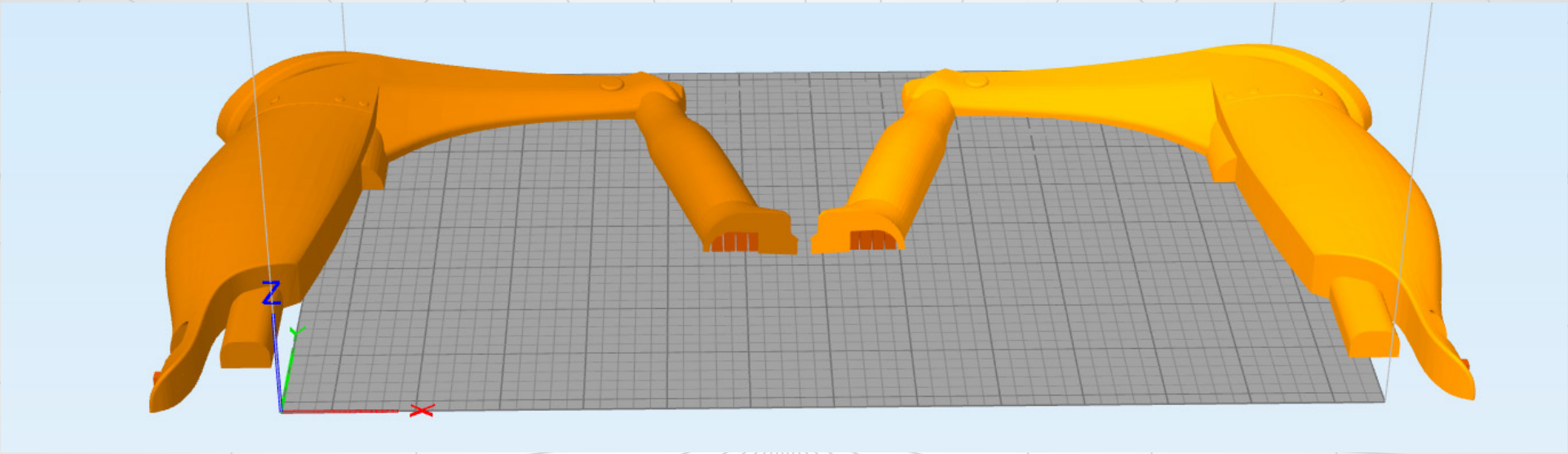


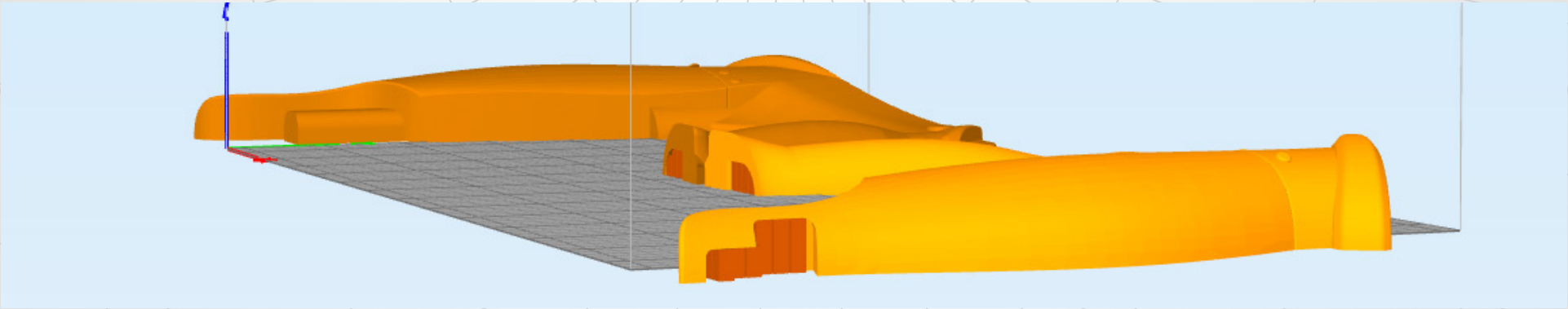




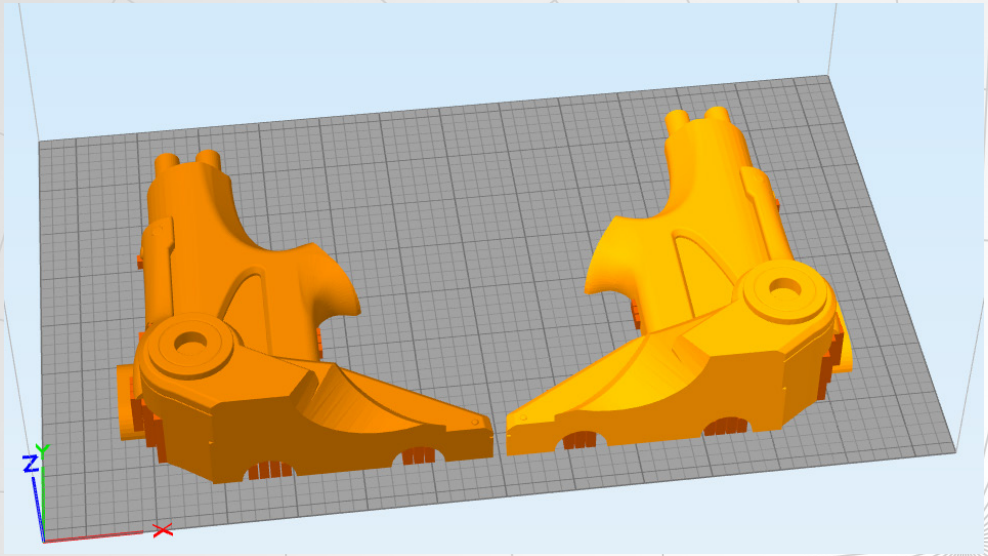


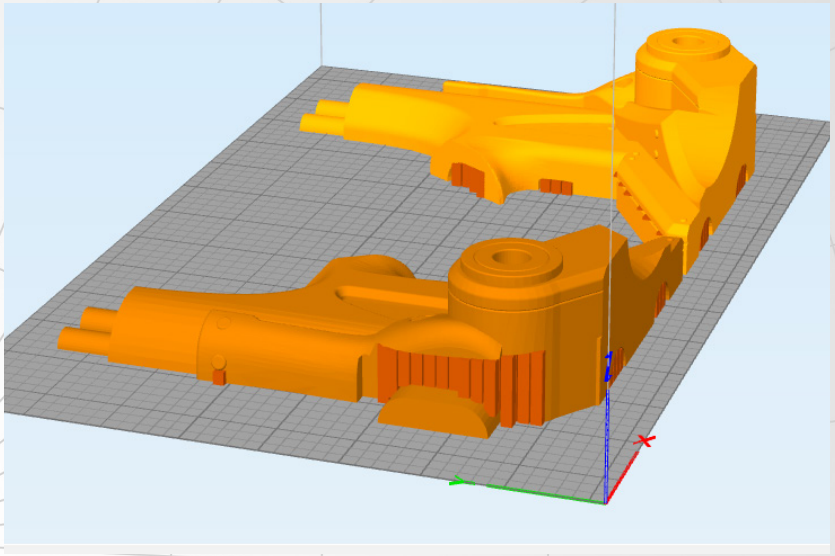
Queenbreaker's Bow - Back Stock

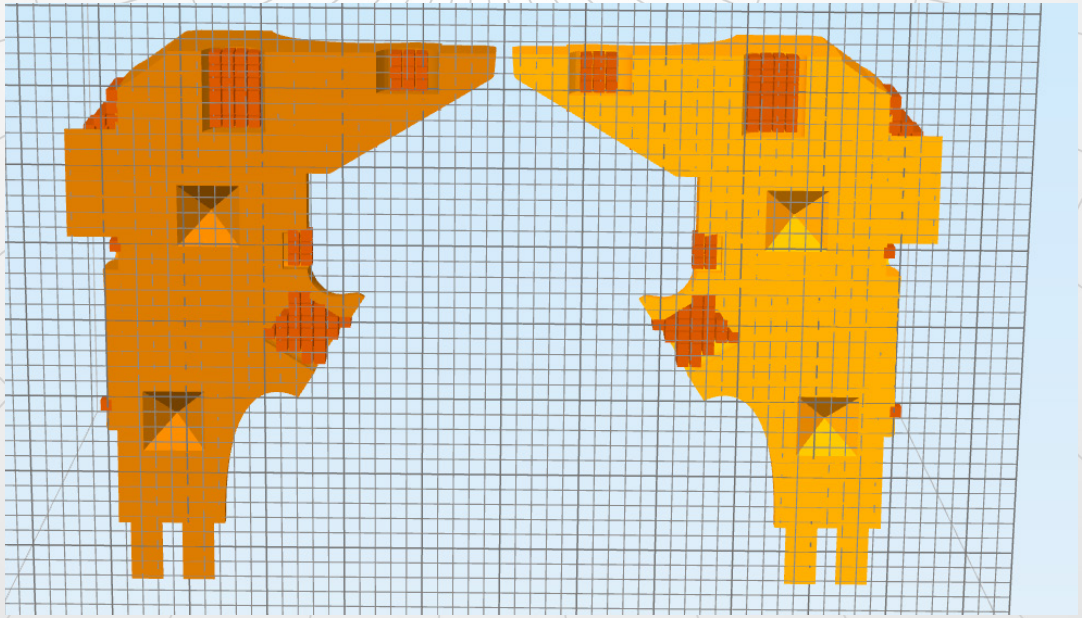




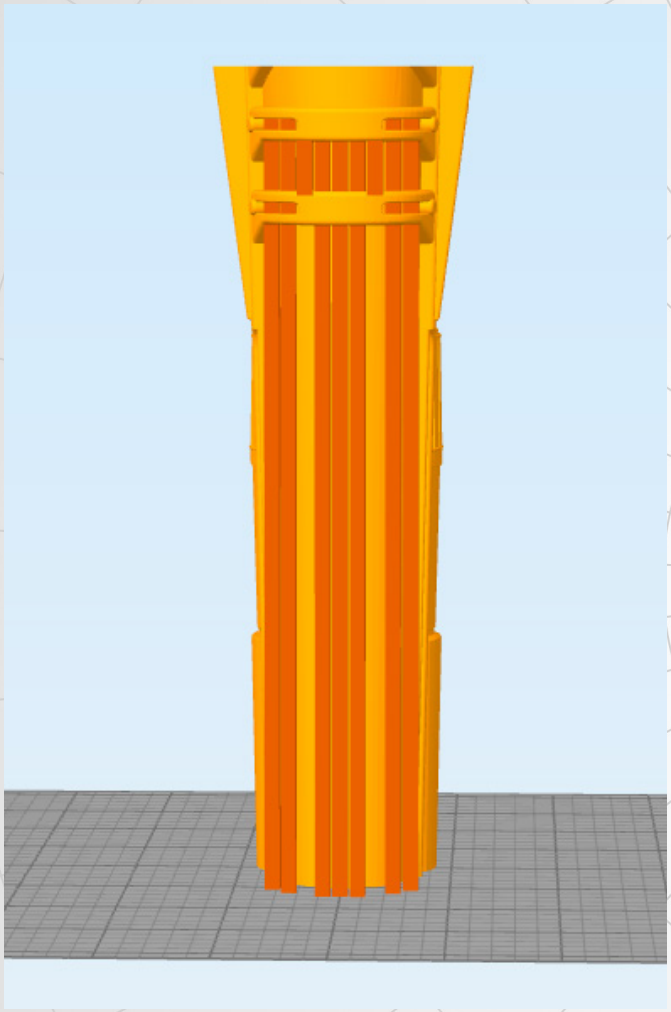
Queenbreaker's Bow - Back Stock Front

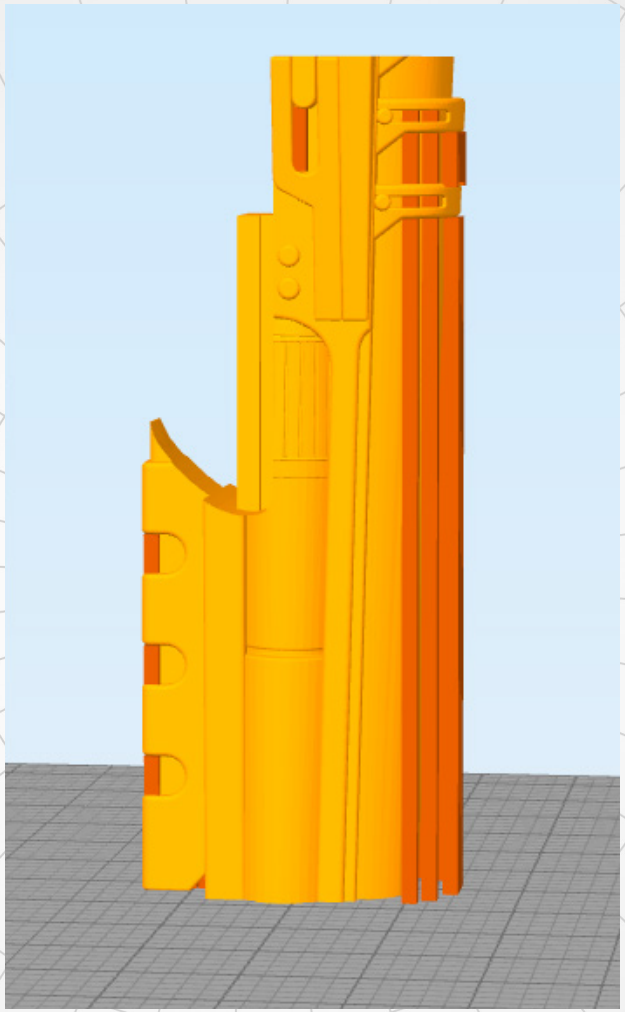


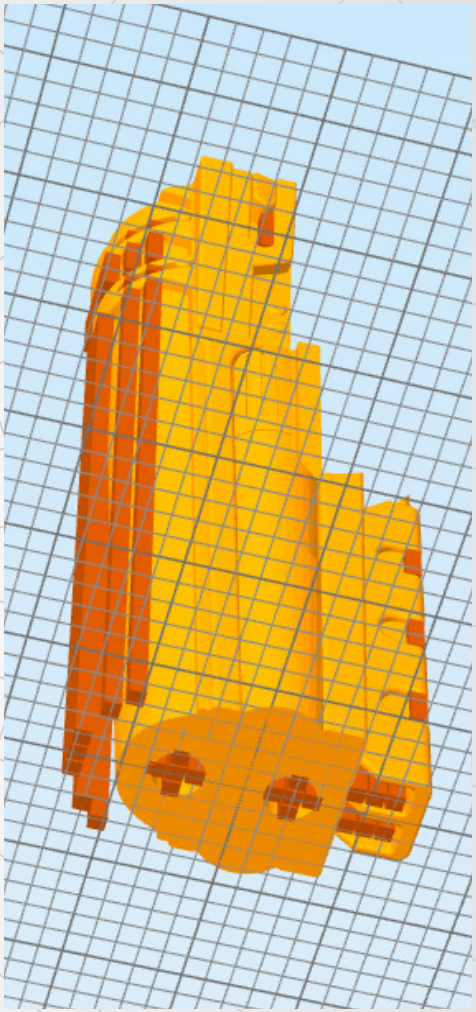




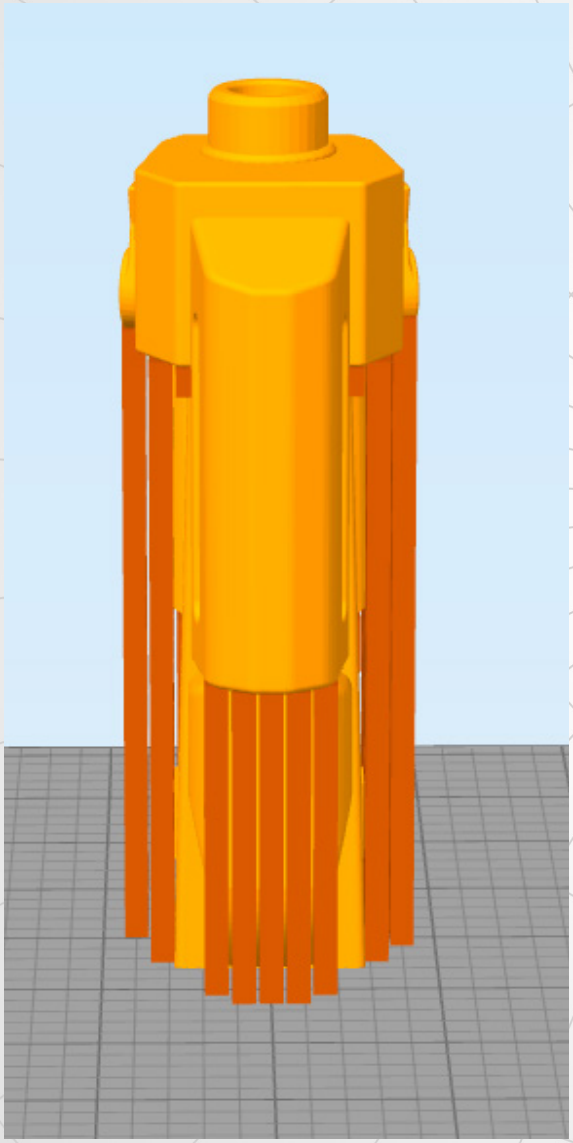
Queenbreaker's Bow - Barrel2

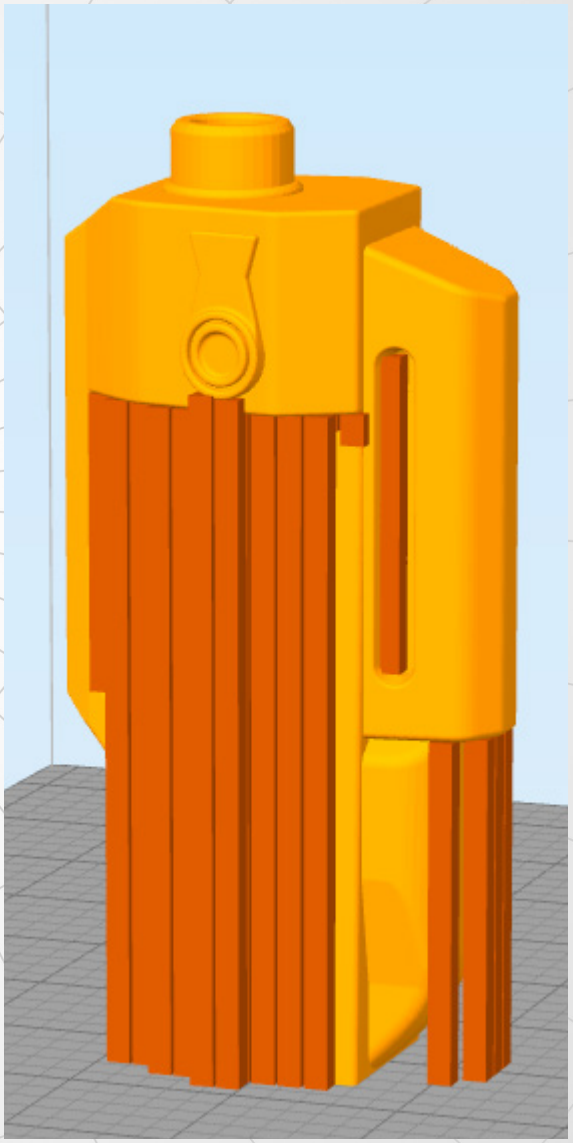




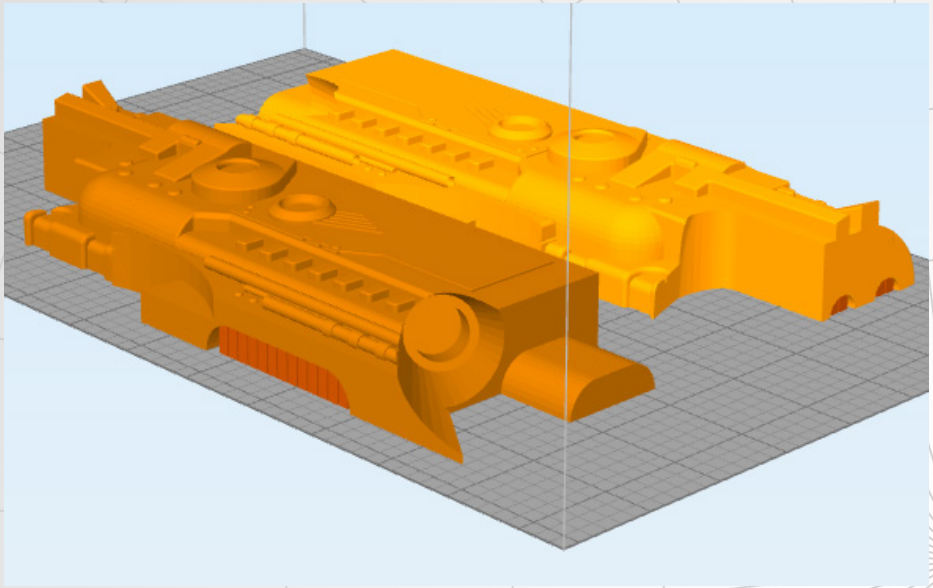


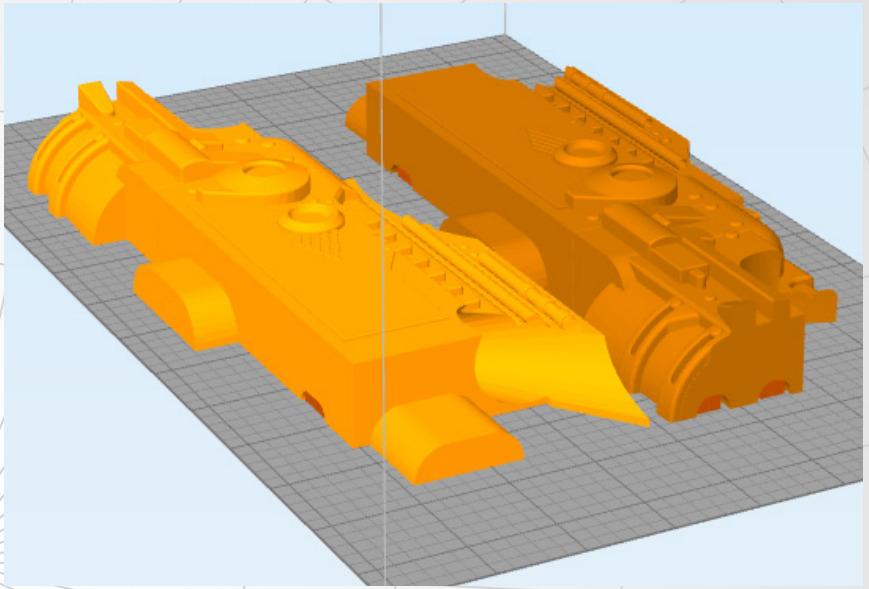
Queenbreaker's Bow - Front Barrel-1

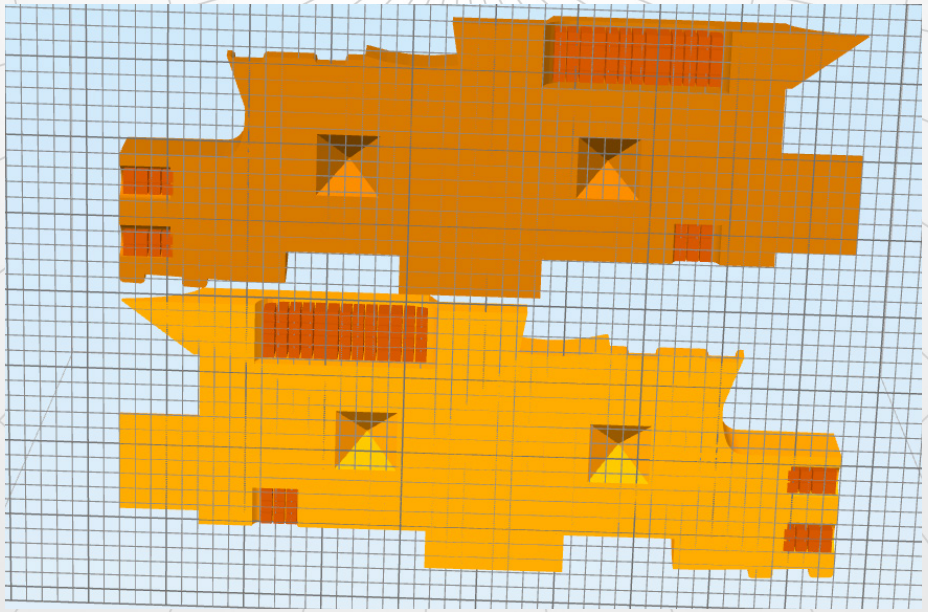




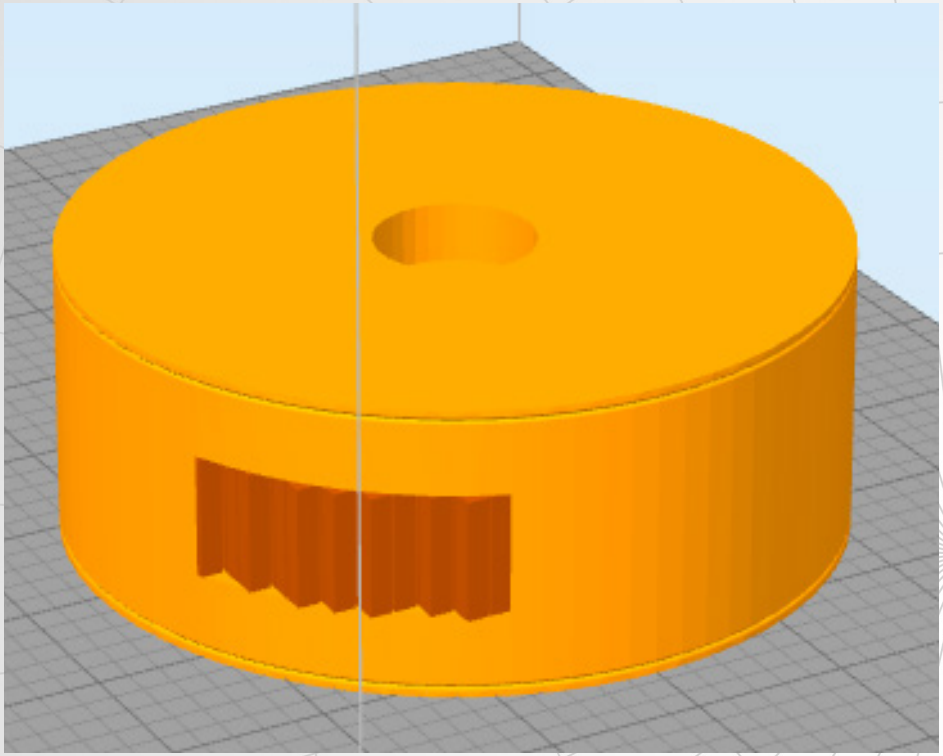
Queenbreaker's Bow - Front Block

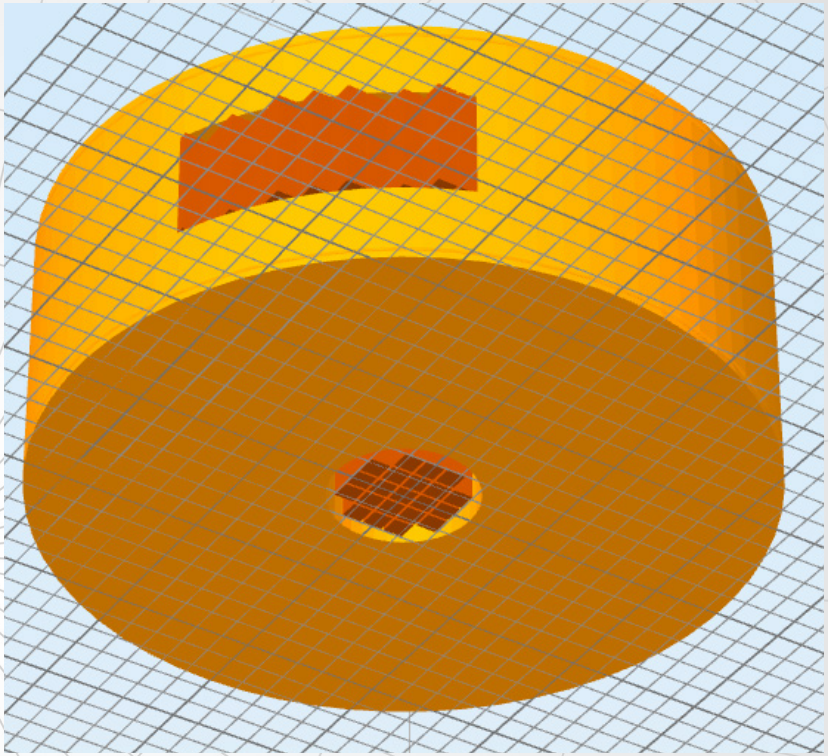






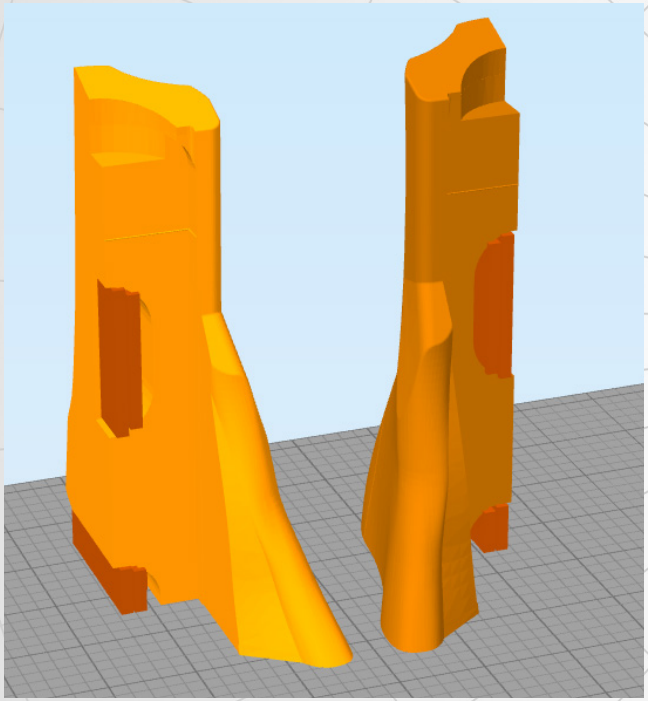
Queenbreaker's Bow - Front Circle GREY

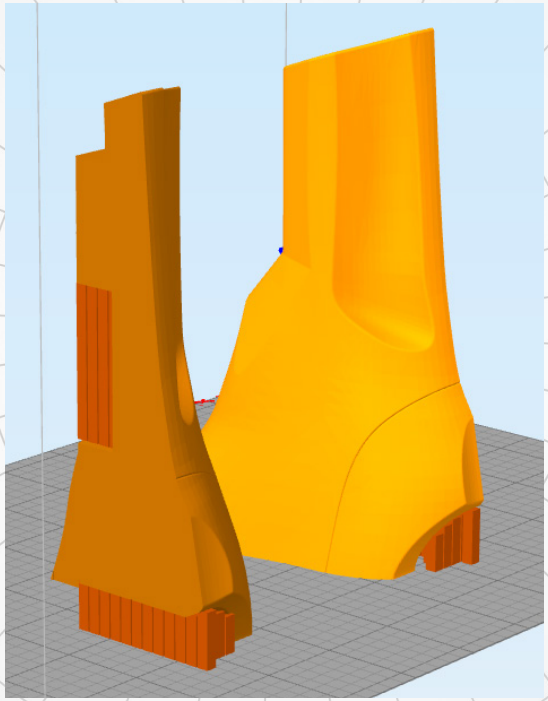


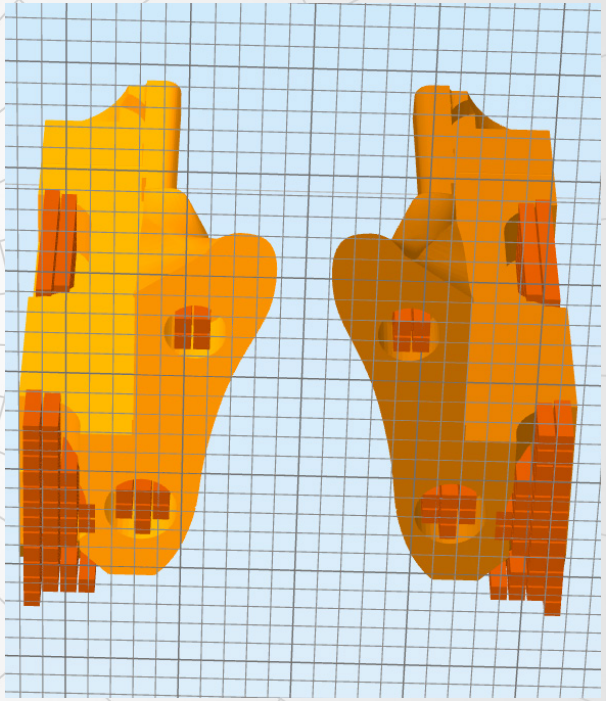


Tip:
If you printer handles bridging well, you may not need support material for these areas. This goes for many of the parts.

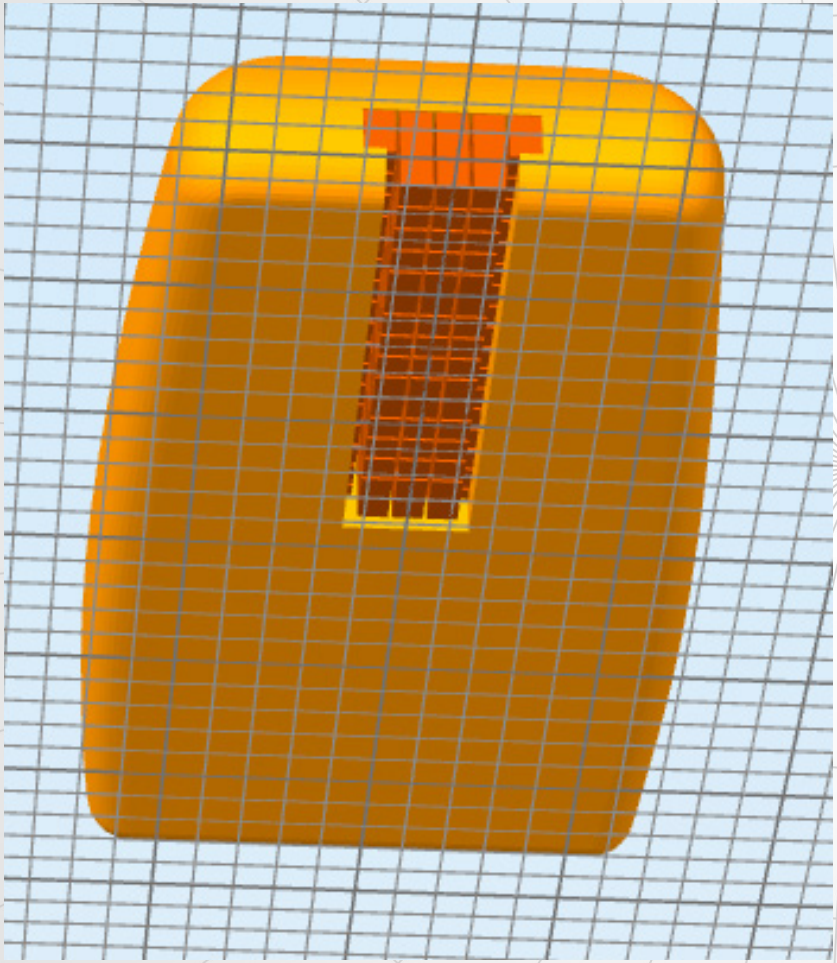
Queenbreaker's Bow - Front MAIN Body

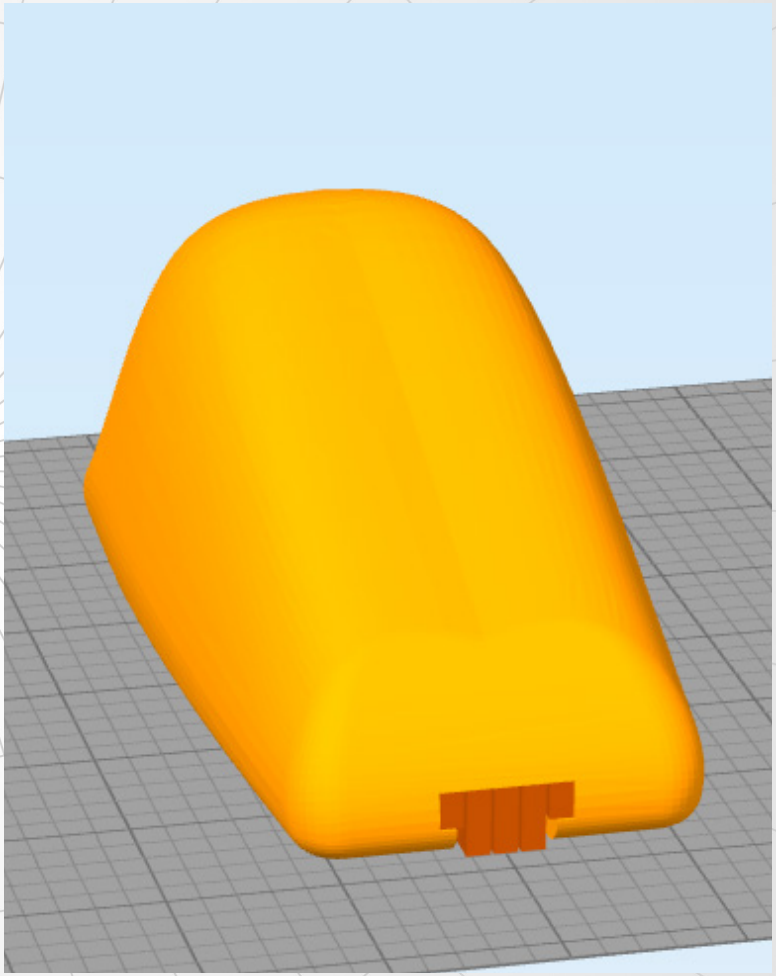




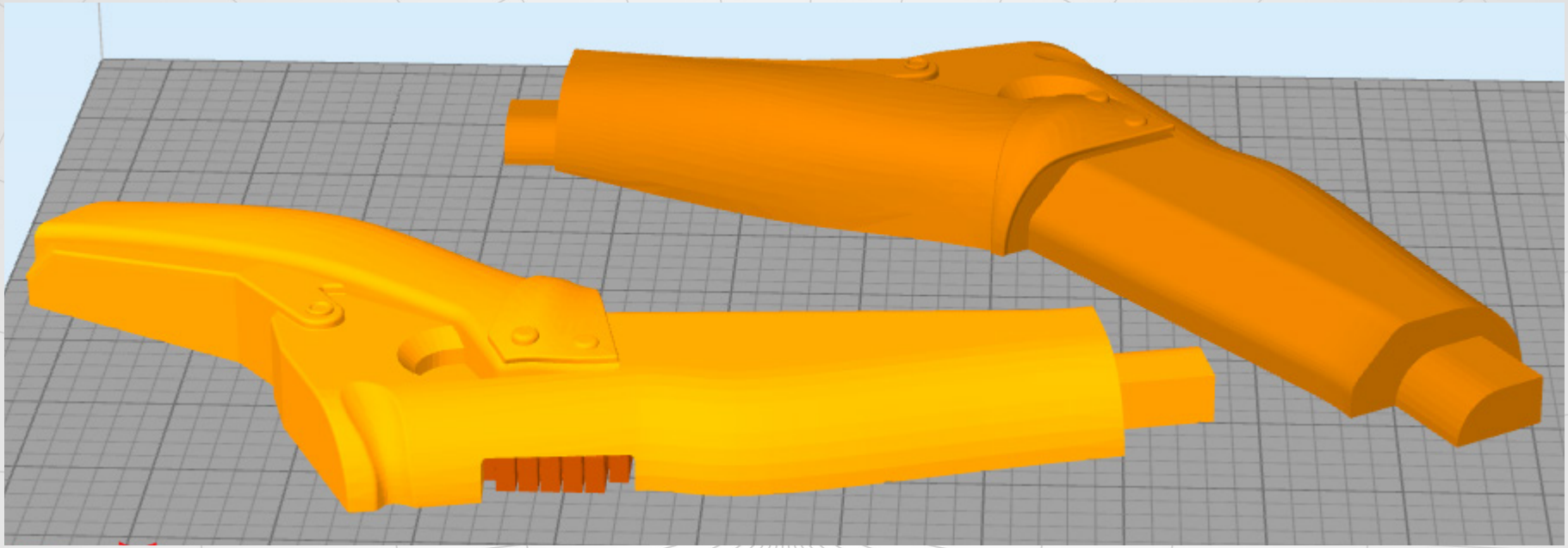


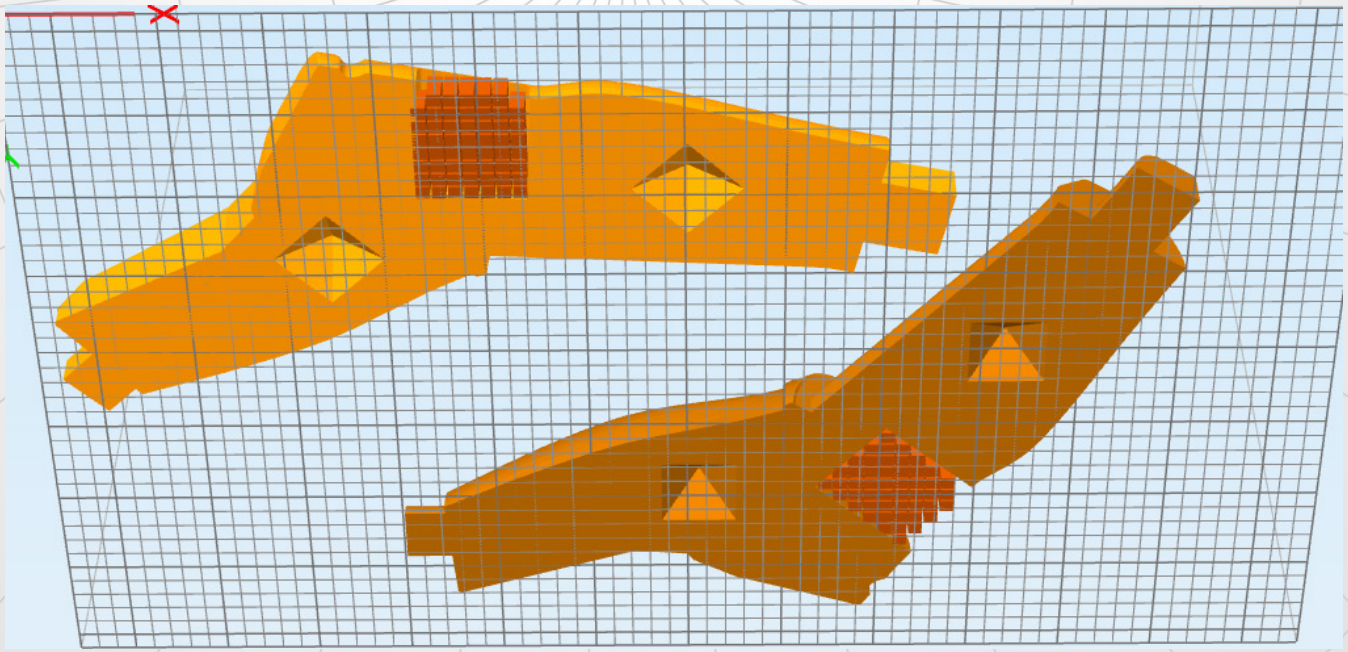
Queenbreaker's Bow - Grip-1



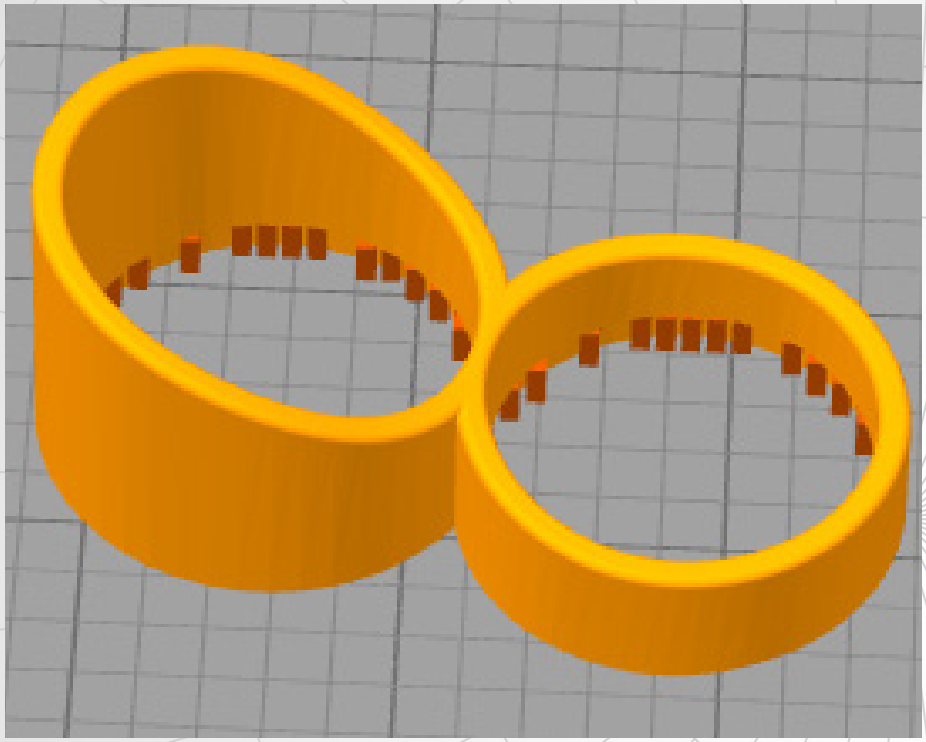


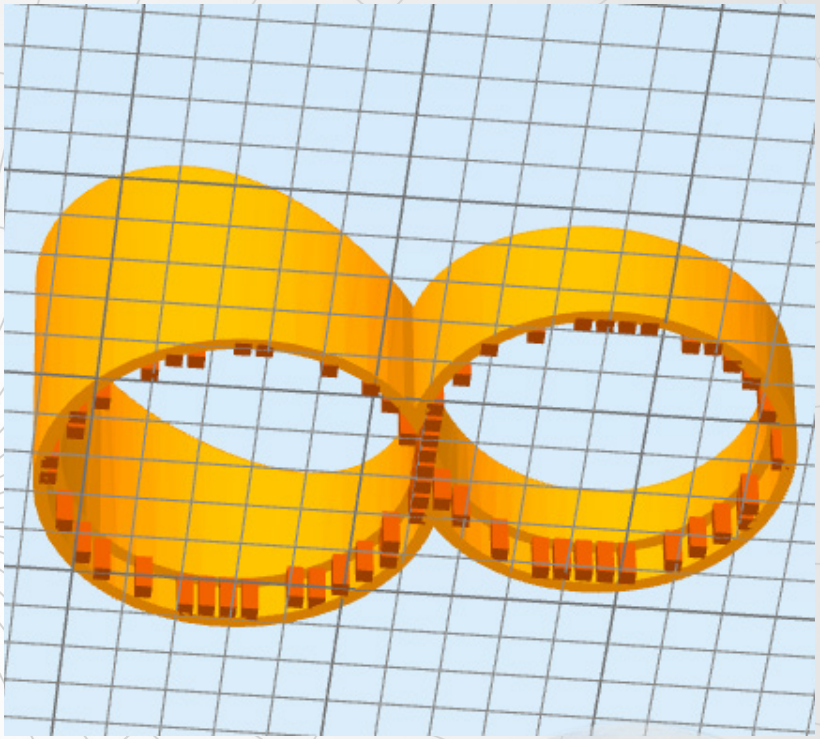
Queenbreaker's Bow - Handle Grip





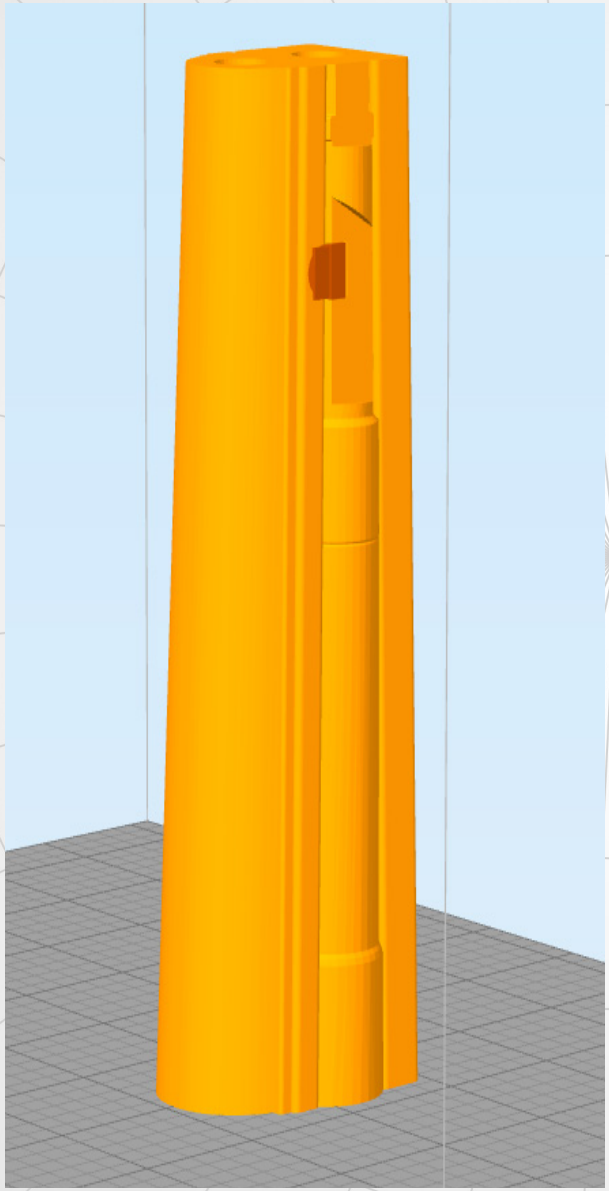
Queenbreaker's Bow - Lens Cover

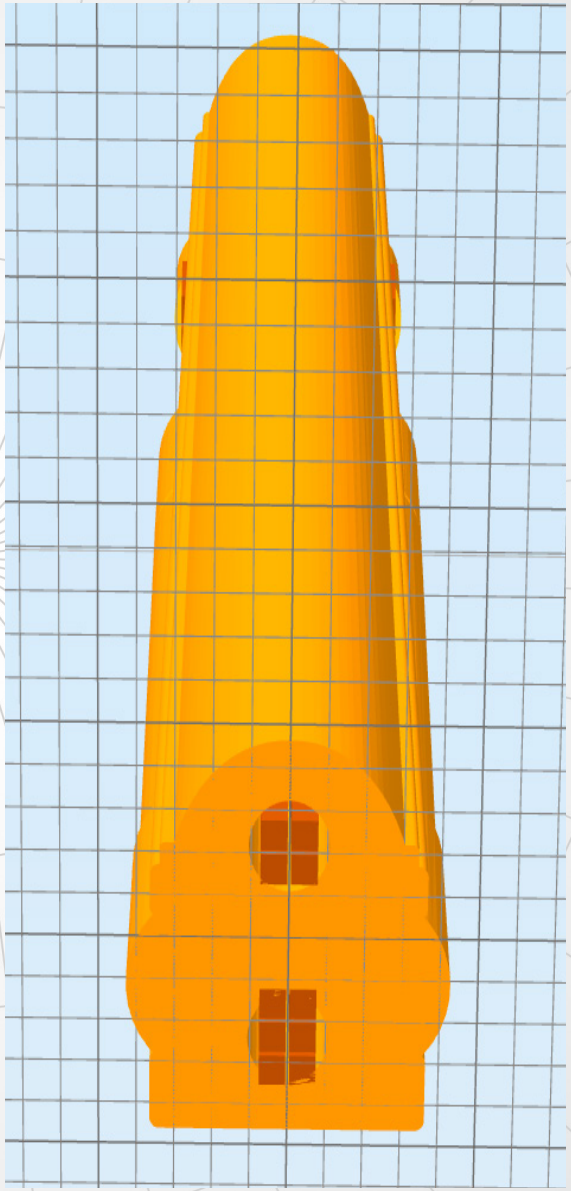




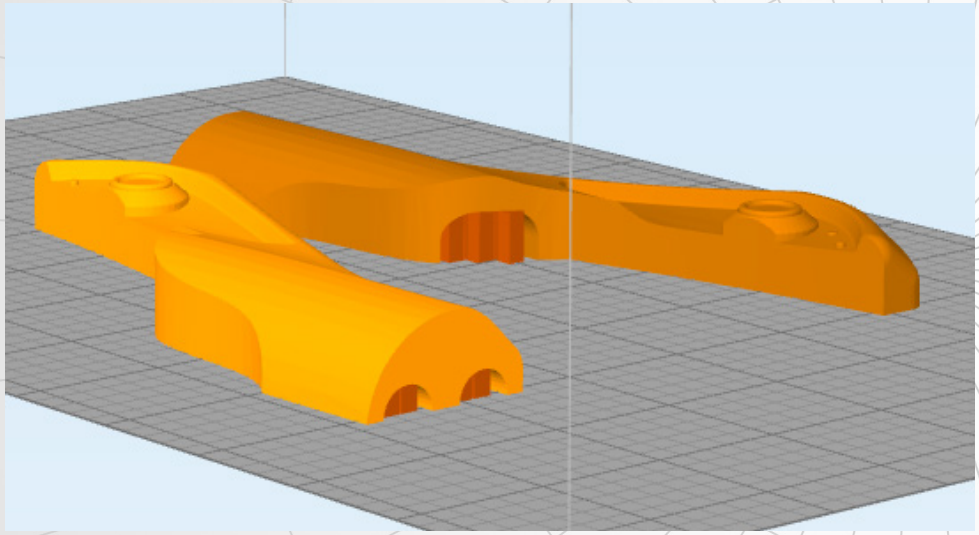
Tip:
If your printer
is tuned well enough,
you *may* not need supports
here, but it's best to have
them as a precaution.

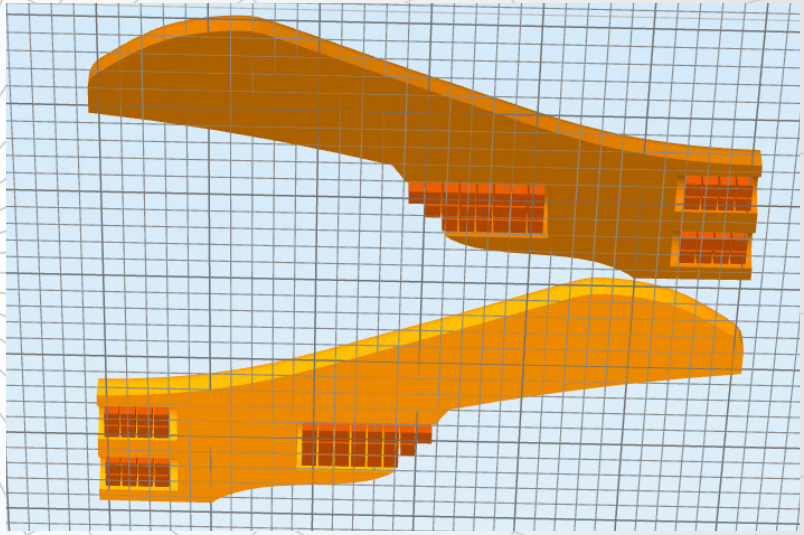
Queenbreaker's Bow - Middle Barrel-1



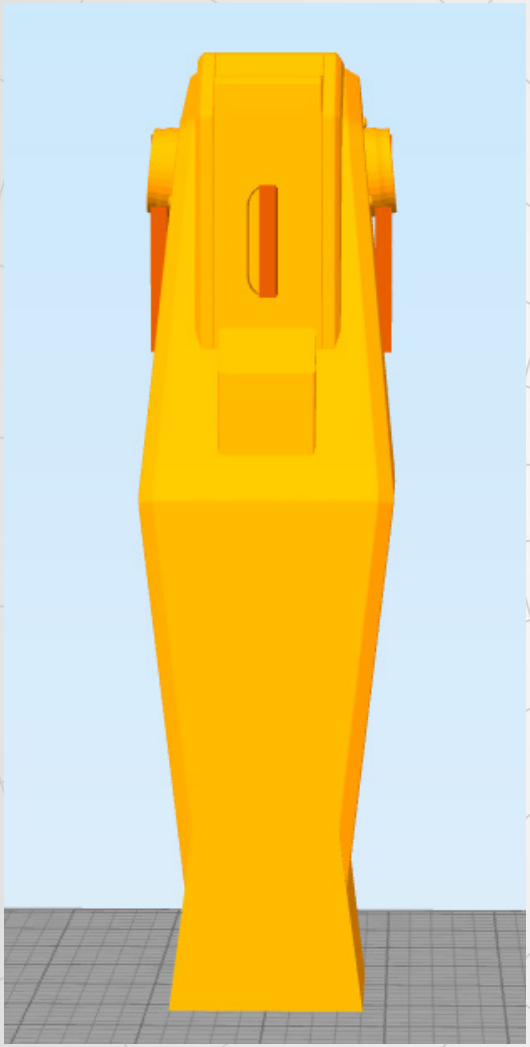


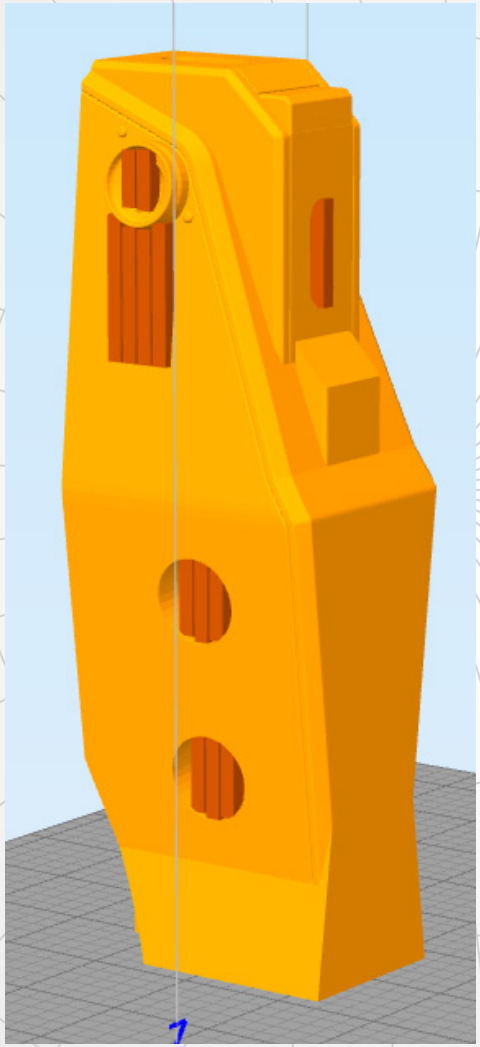
Queenbreaker's Bow - Middle Barrel-1

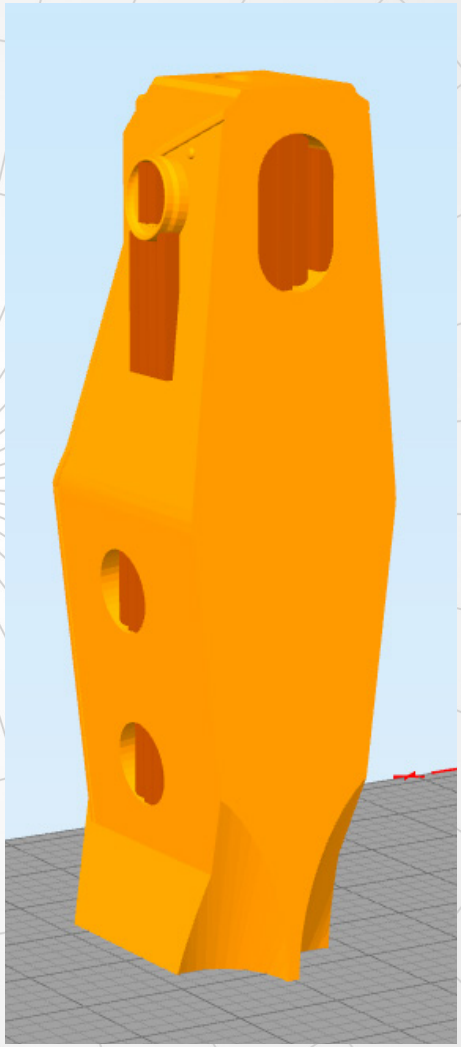


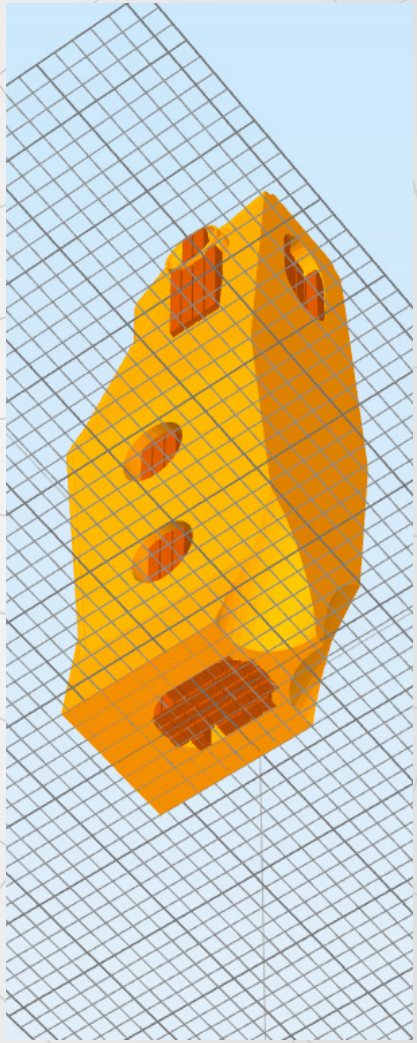


Queenbreaker's Bow - Scope Holding Body-1









Step 2: Time To Organize!

Once you are finished printing and after removing all the support material, you are going to want to organize your parts into separate groups.

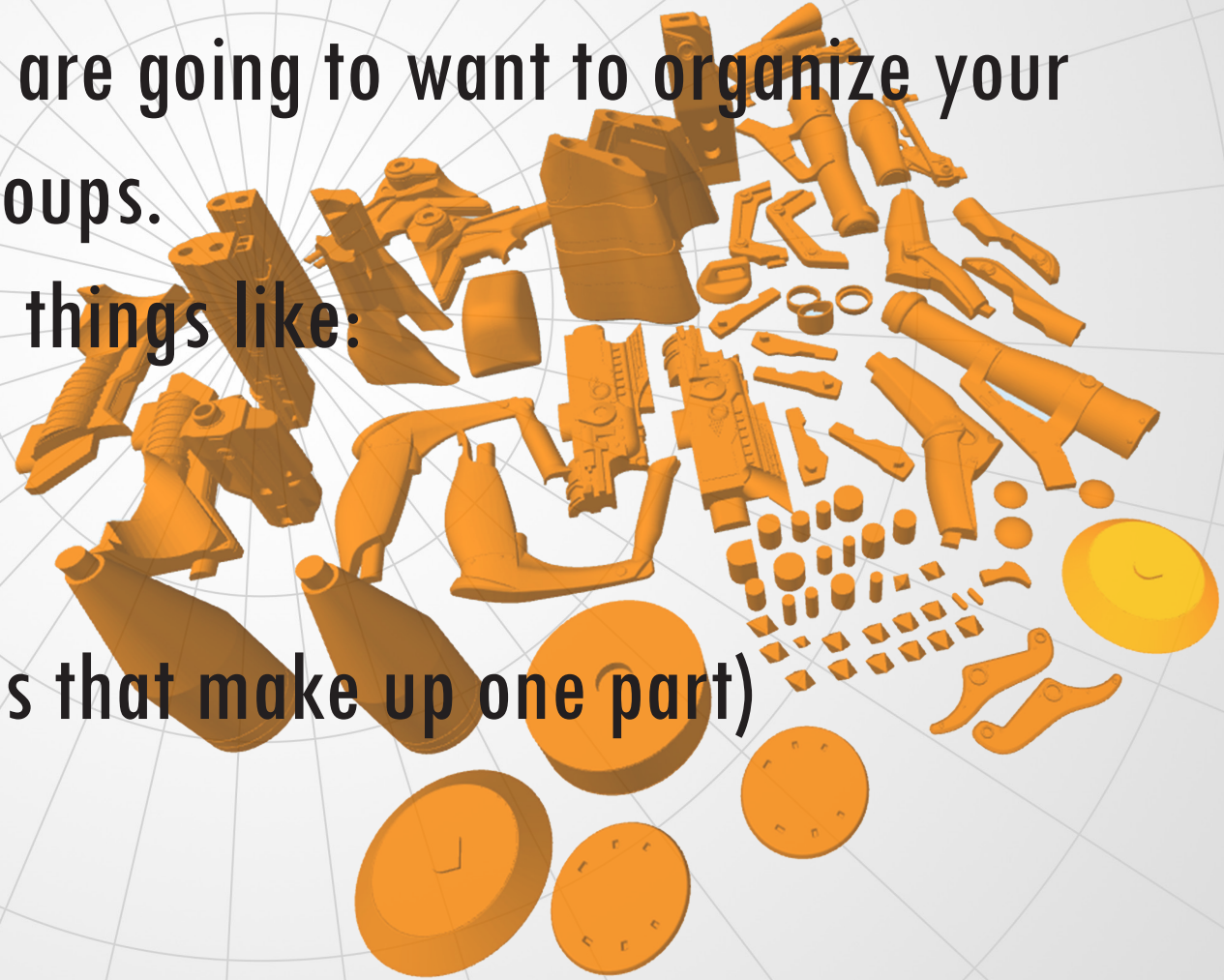
Groups should include things like:

-Pins

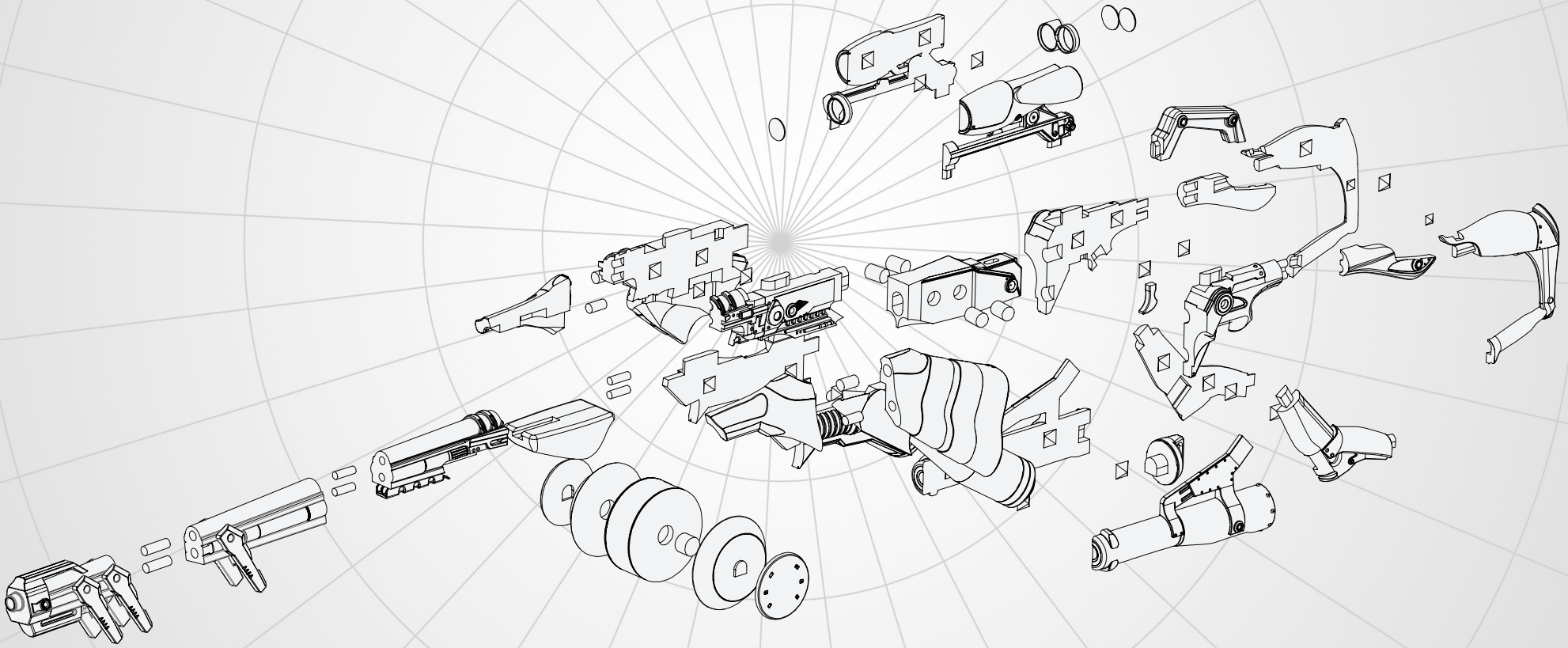
-Keys

-Split Parts (two halves that make up one part)

-Etc.

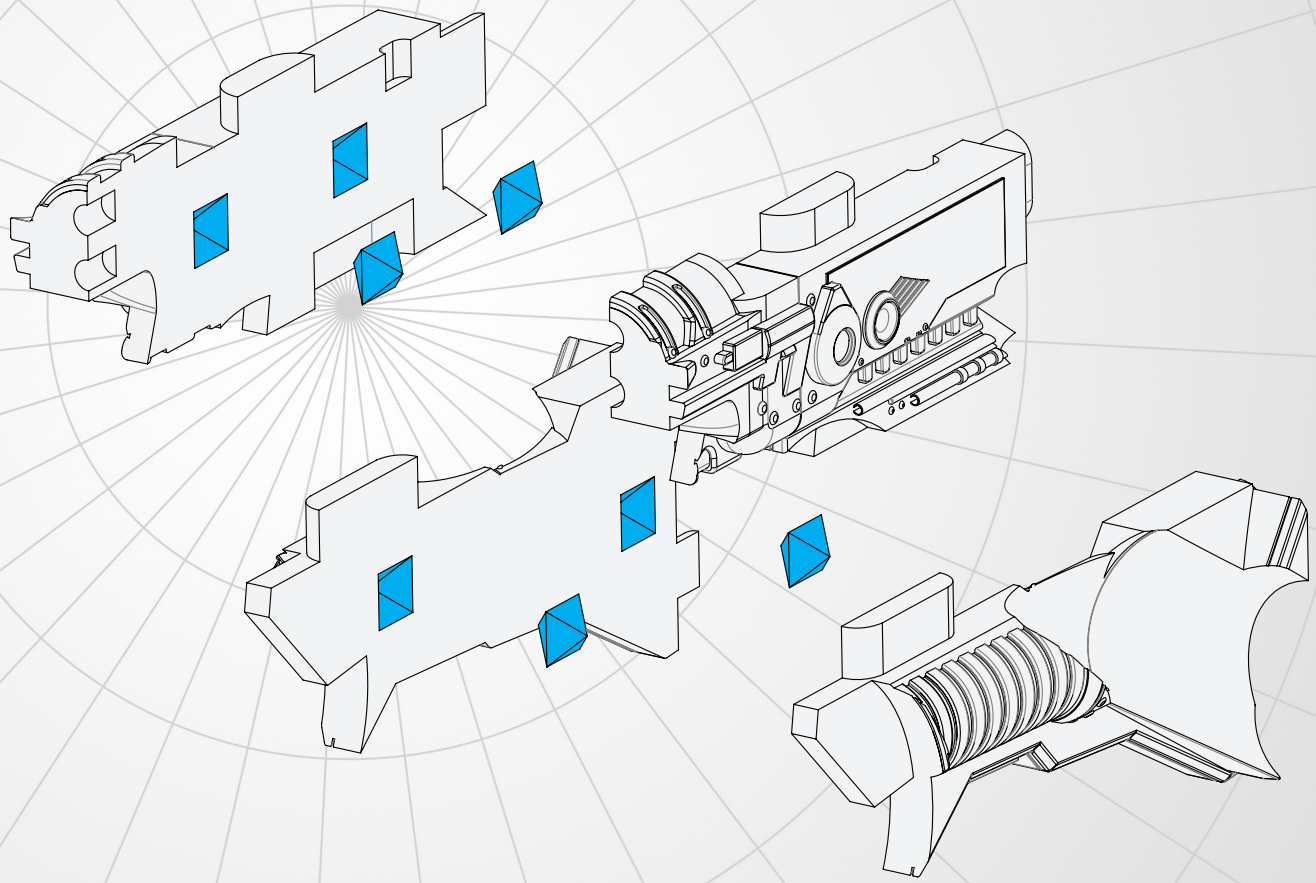


Step 3: Assembly Time!

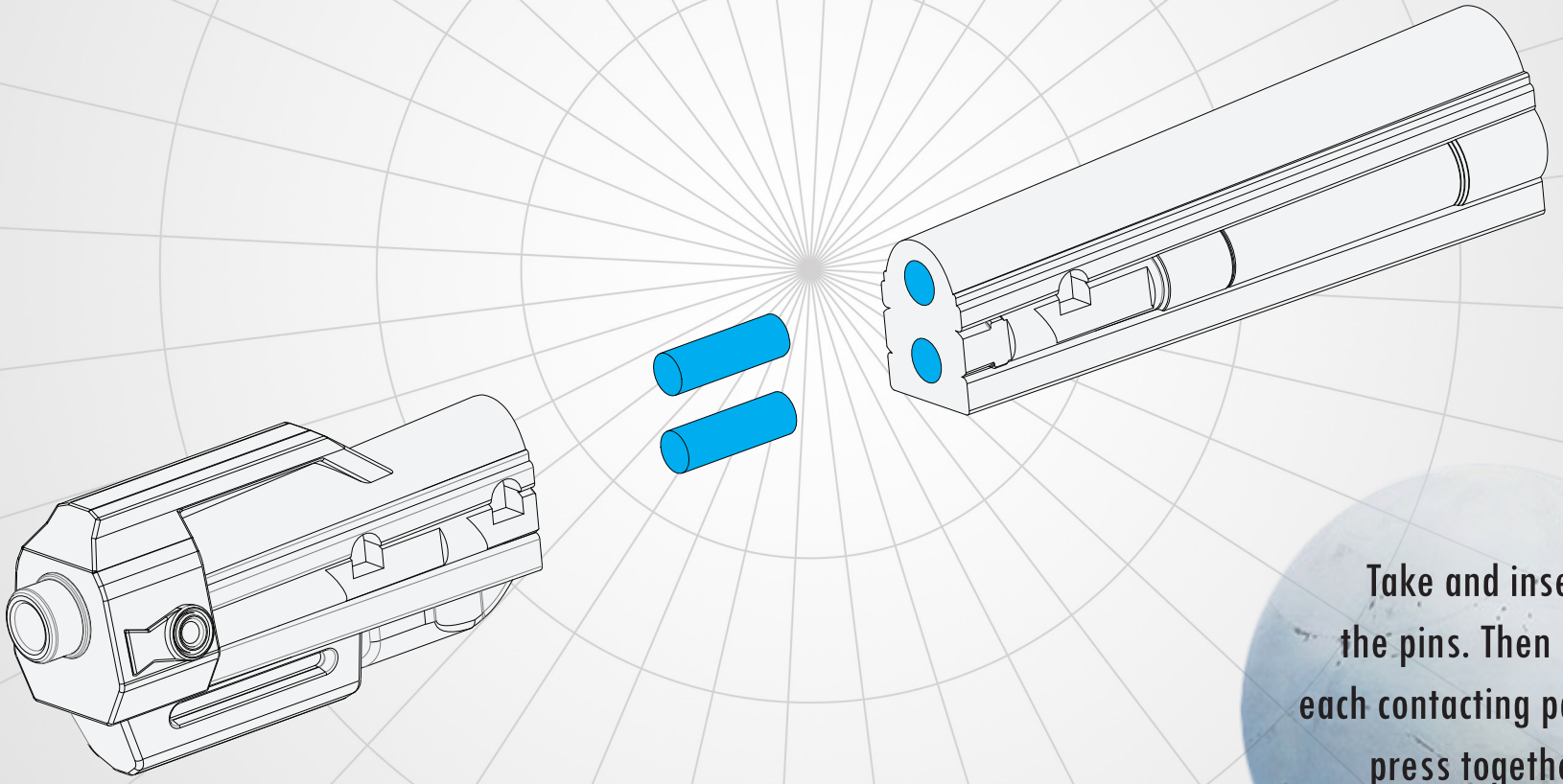


Start By Gluing All the Split Pieces Together

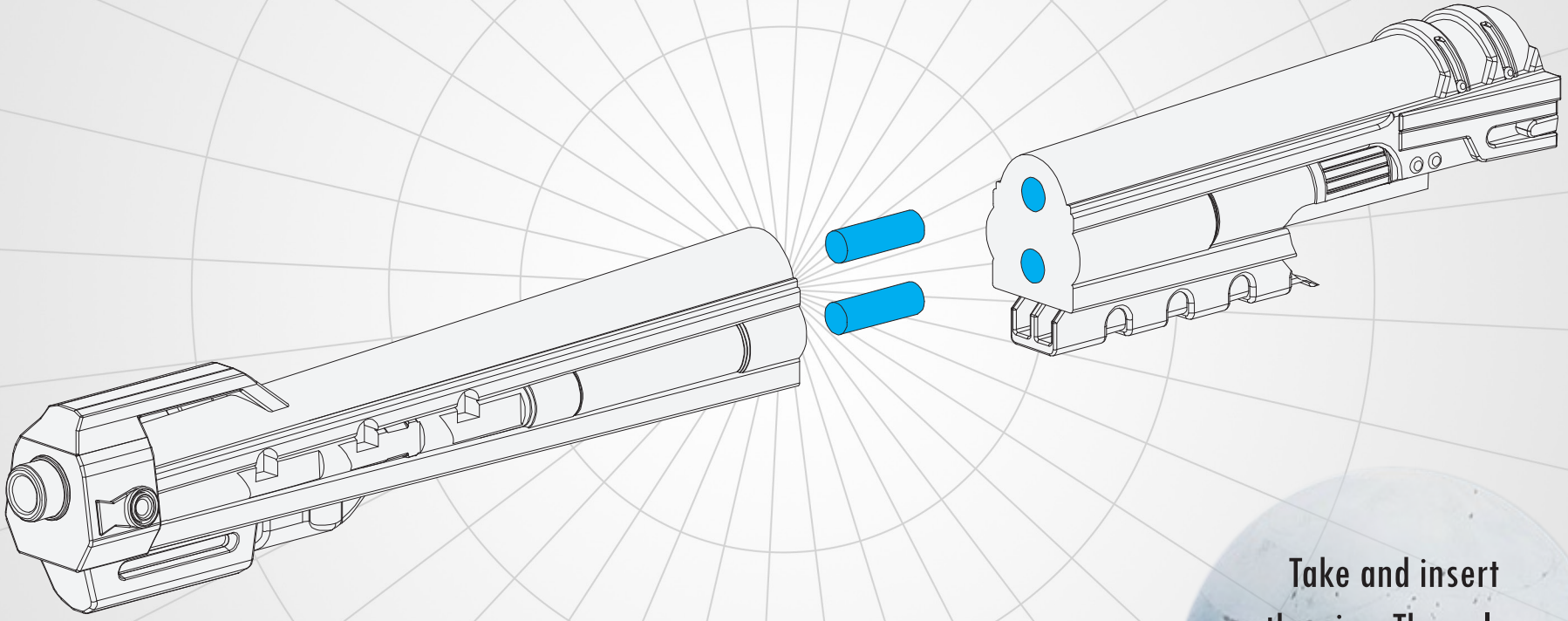
Begin by taking all the parts like these ones on the right and gluing them together. As highlighted with the blue, insert the “keys” into the corresponding areas to lock their position into place. This will ensure that they line up perfectly. Do this for all the split parts.



Once Glued, Start From the Front and Move To the End



Take and insert the pins. Then glue each contacting part and press together.



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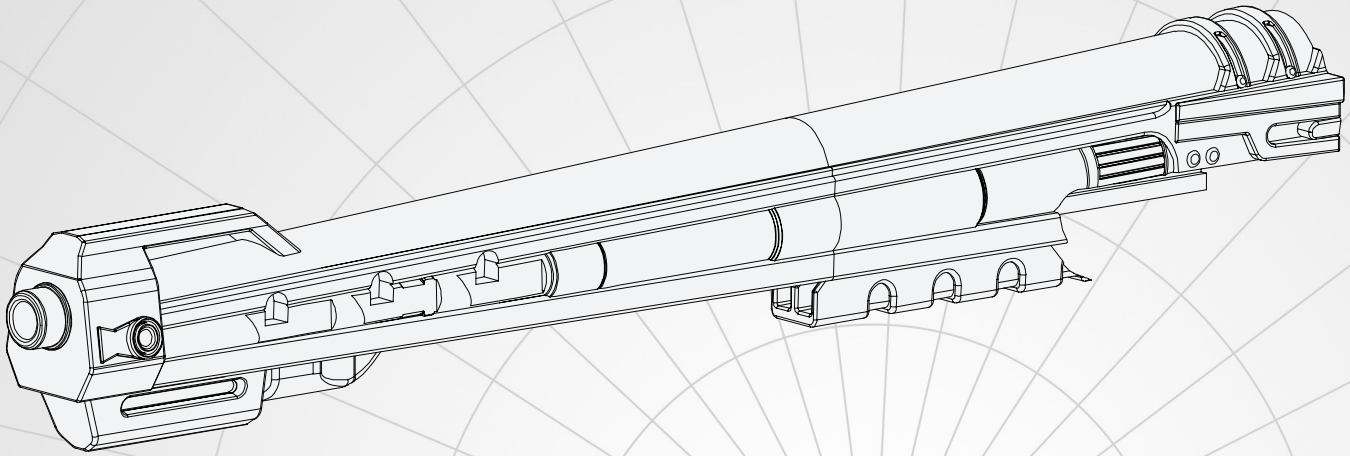
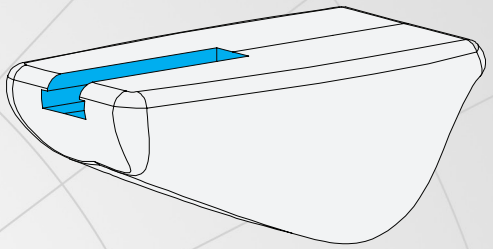
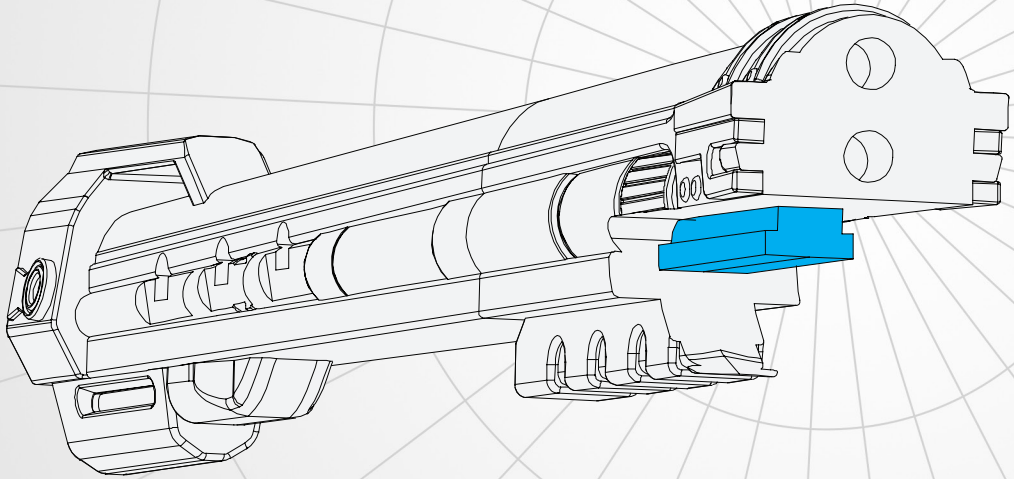
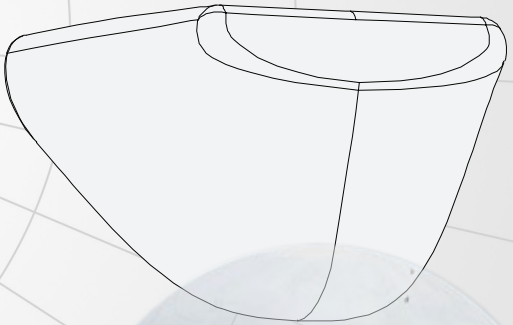
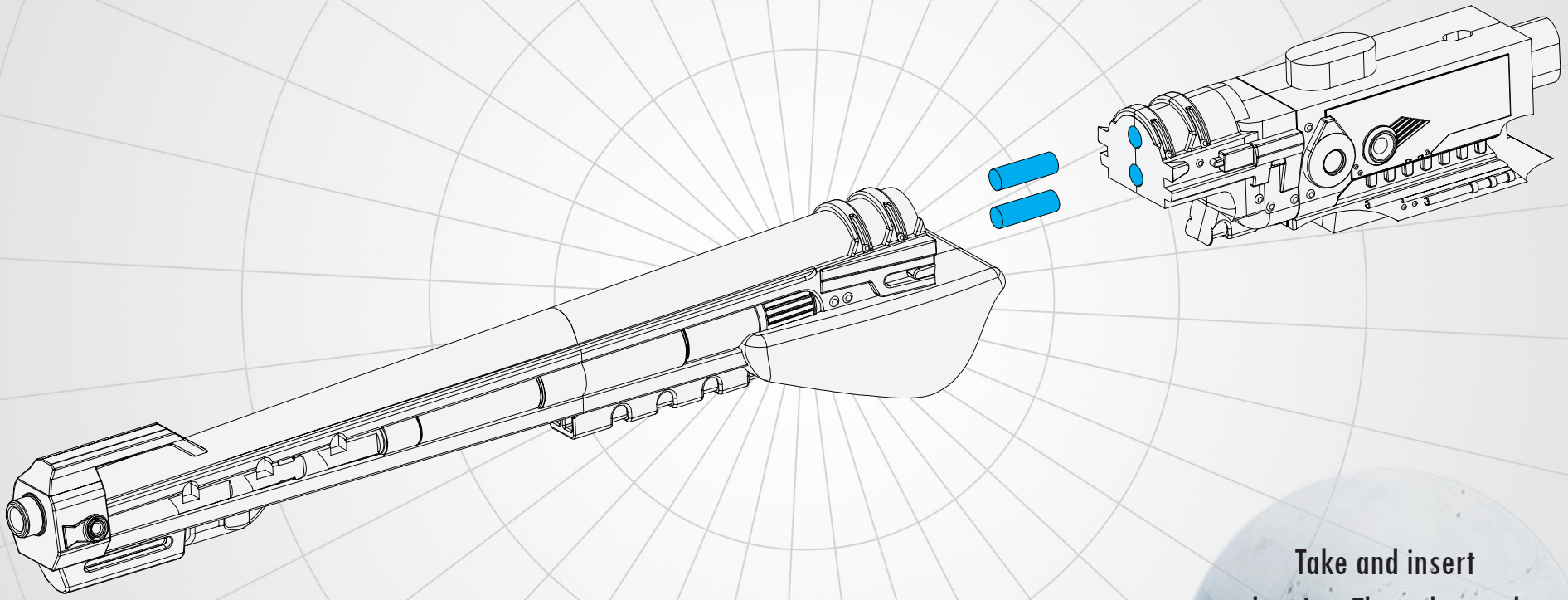




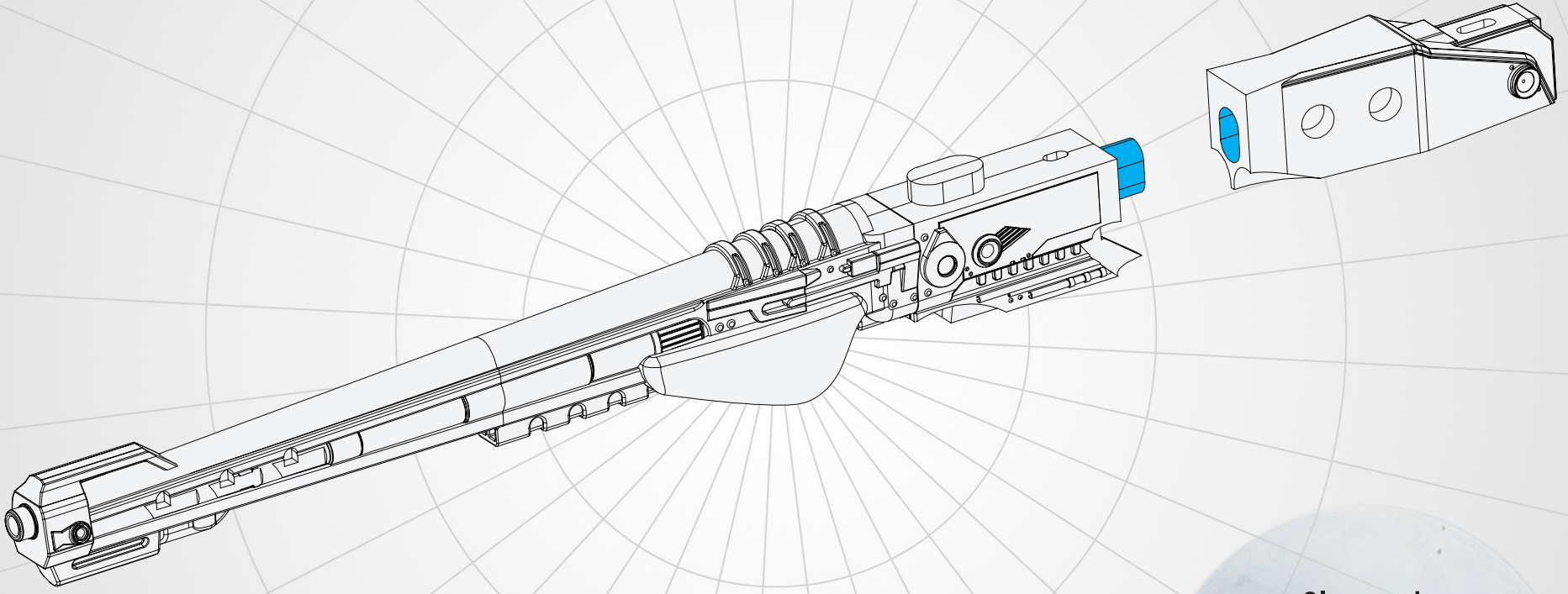




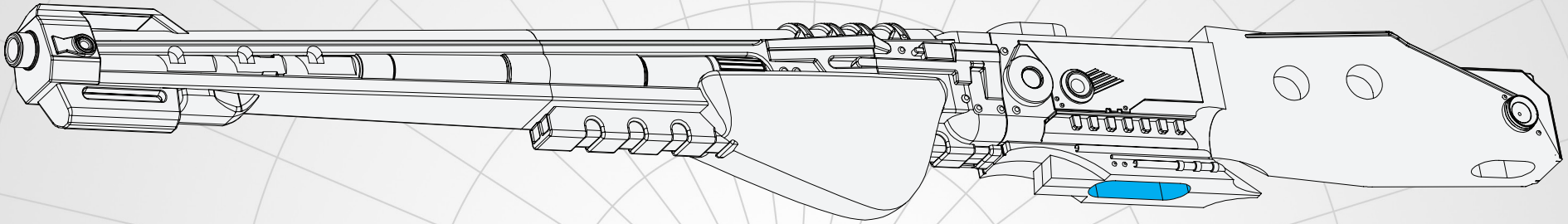
Glue the top of the grip piece and slide along the rail. Make sure you do this before the next step.

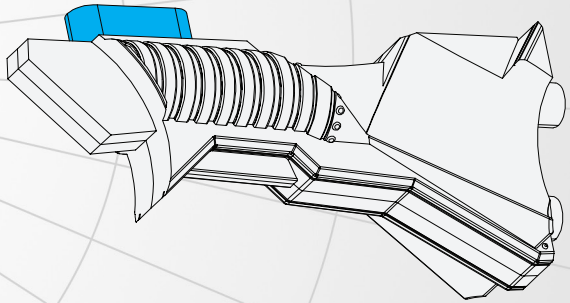


Take and insert the pins. Then glue each contacting part and press together. If the grip doesn't fit, sand the edges until it does.

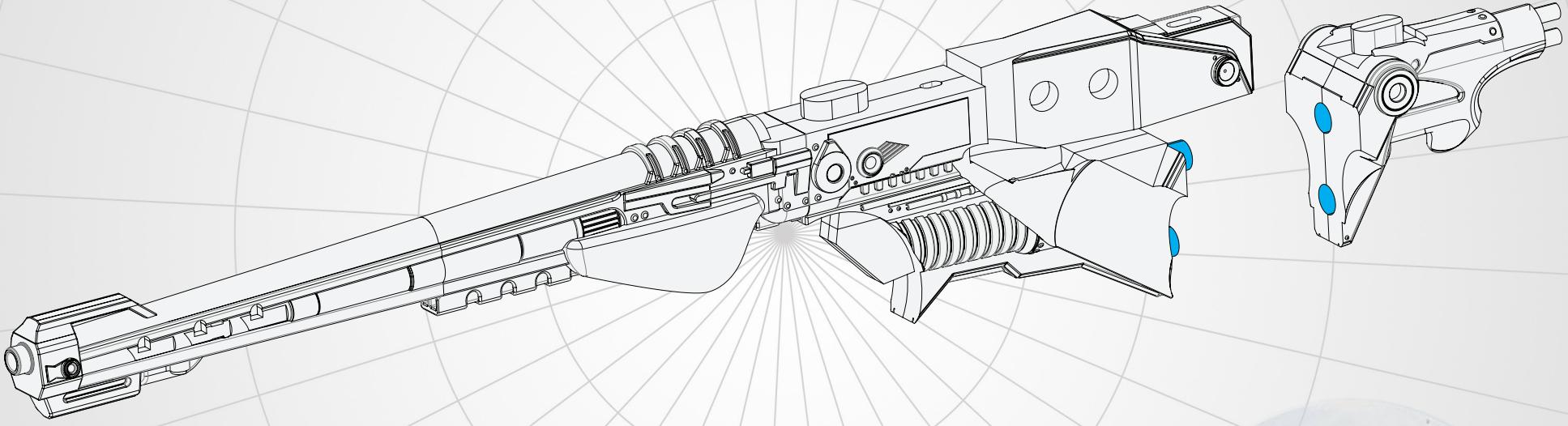


Glue each contacting part and press them into their corresponding slots.

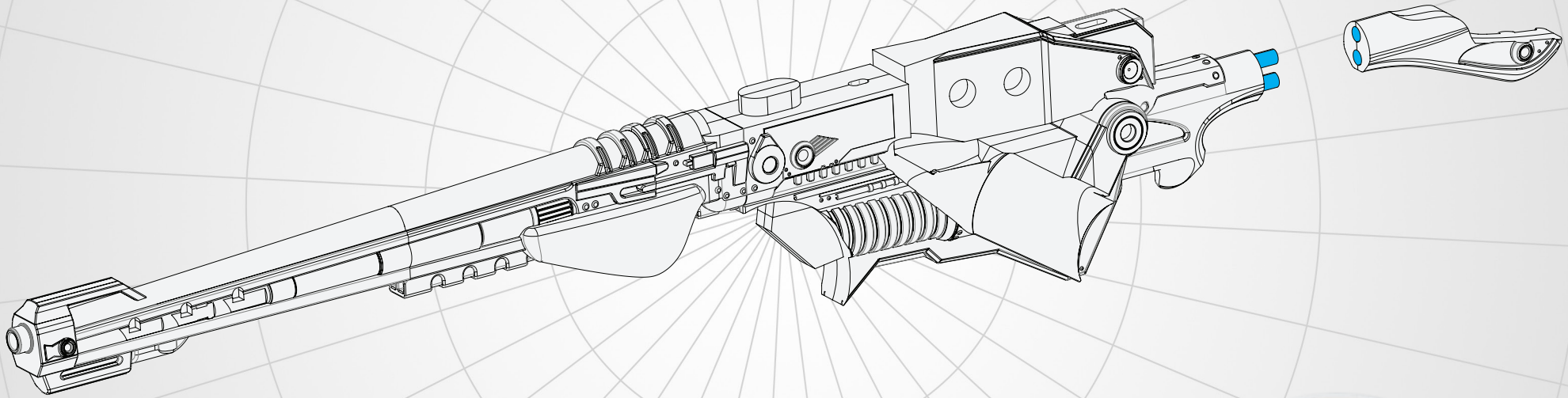




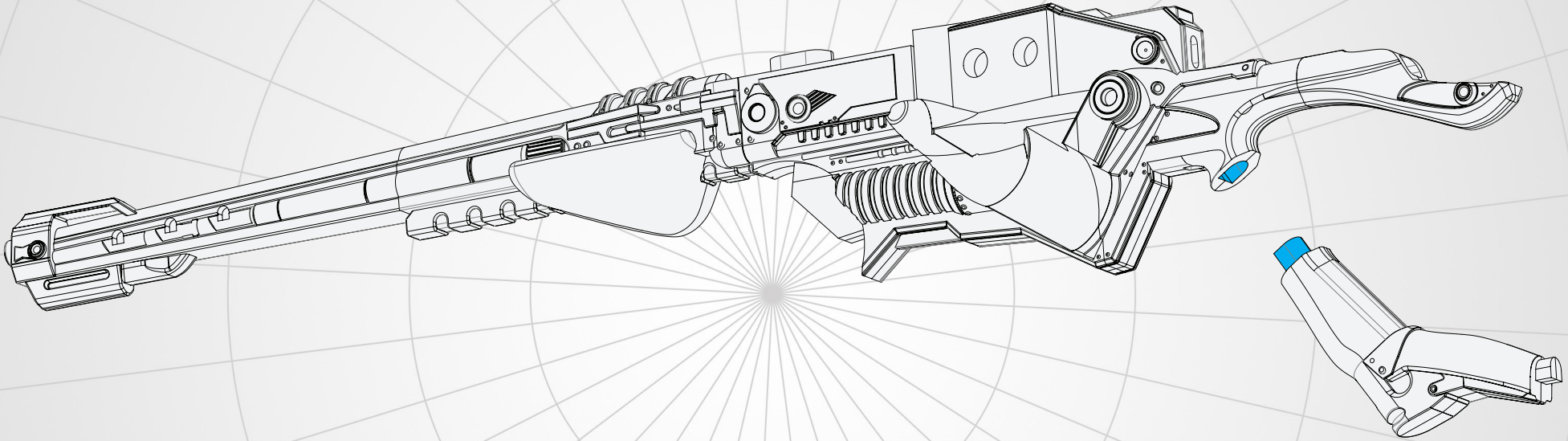
Glue each contacting part and press them into their corresponding slots.



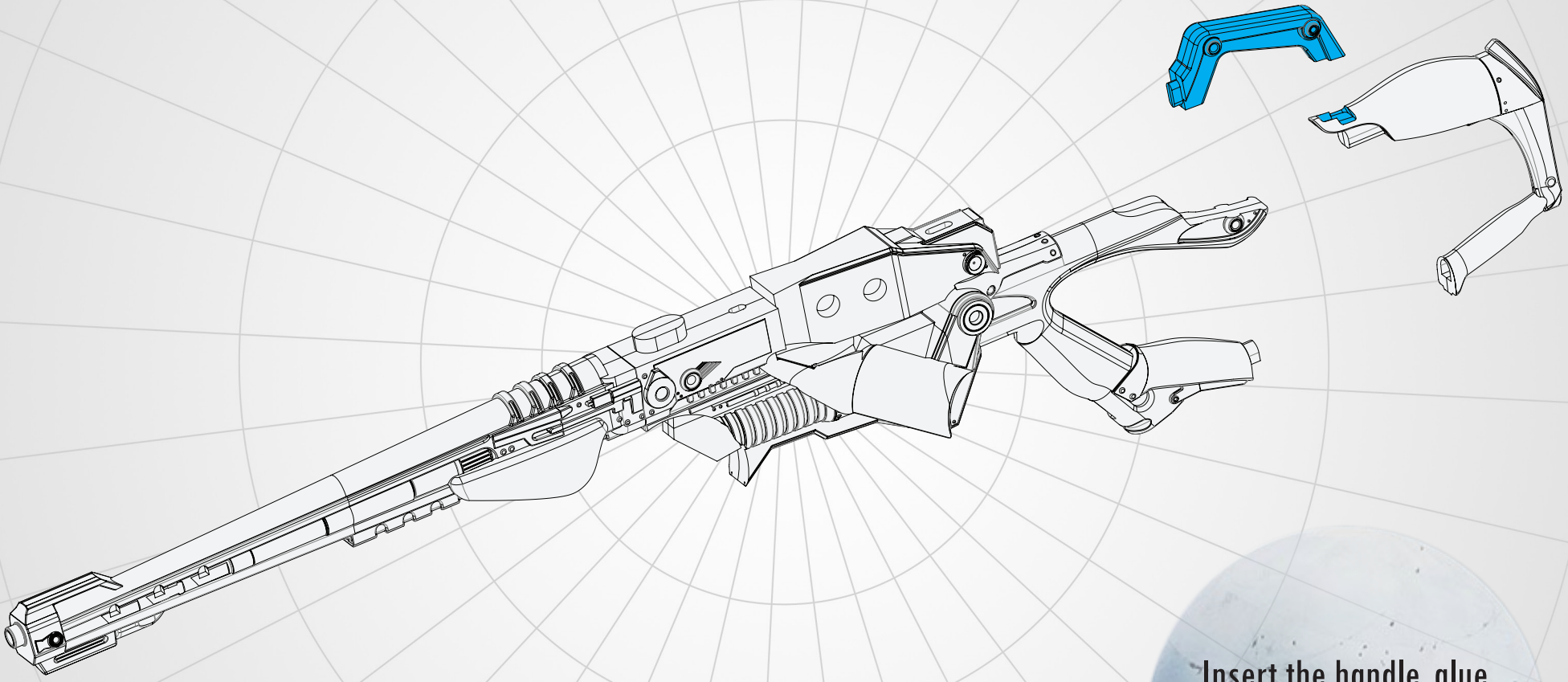
Glue each contacting part and press them into their corresponding slots.



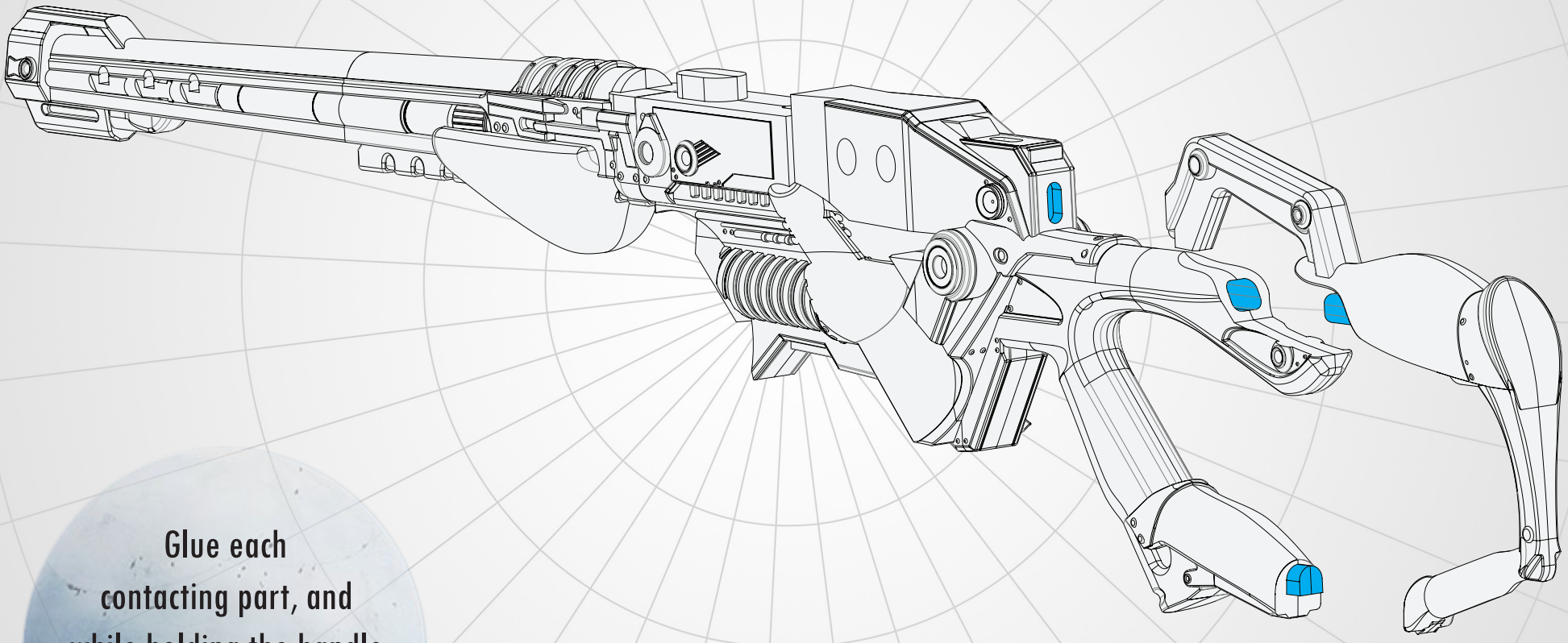
Glue each contacting part and press them into their corresponding slots. **Make sure this part is done in the right order or else it won't work.**



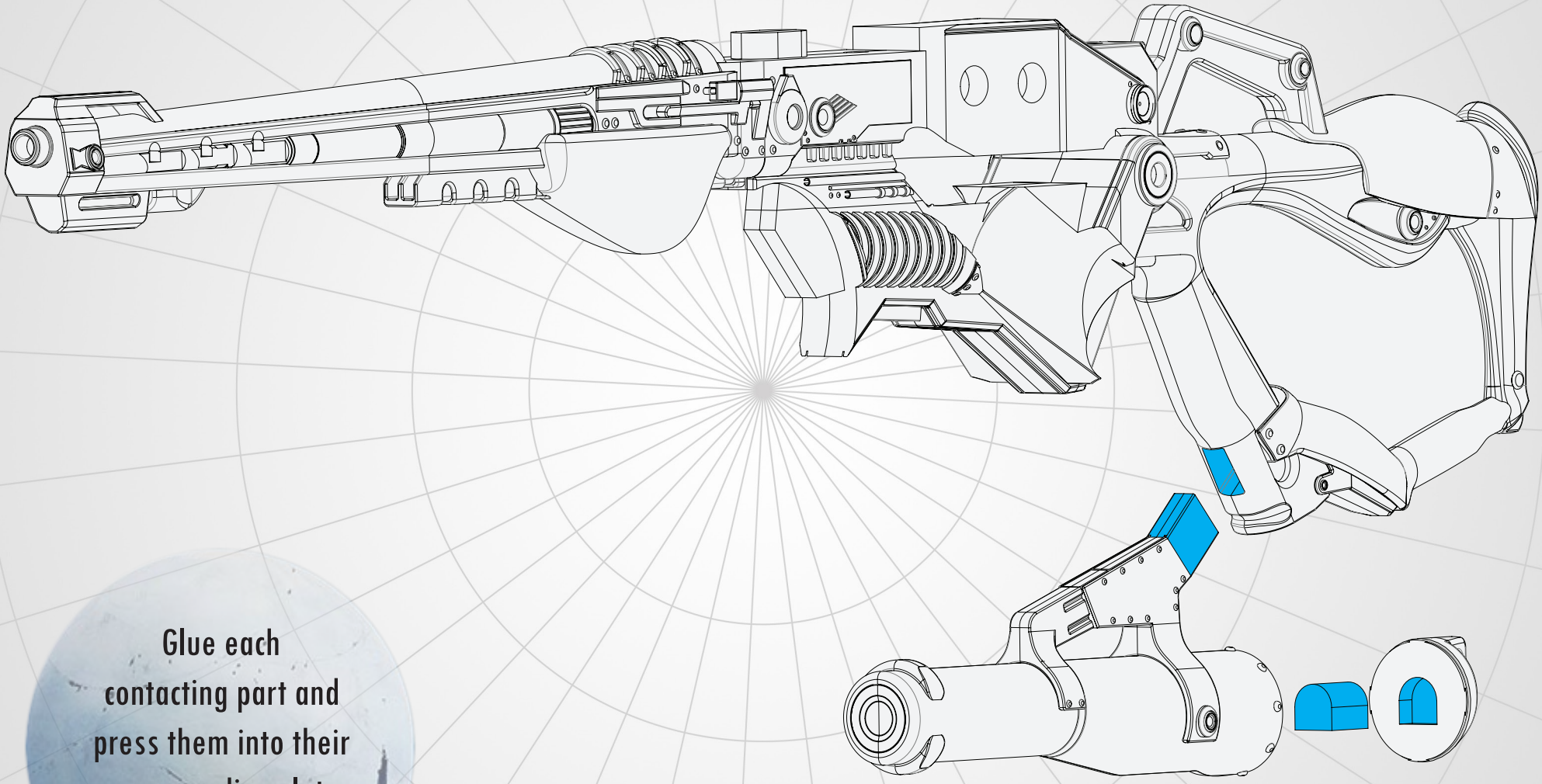
Glue each contacting part and press them into their corresponding slots.



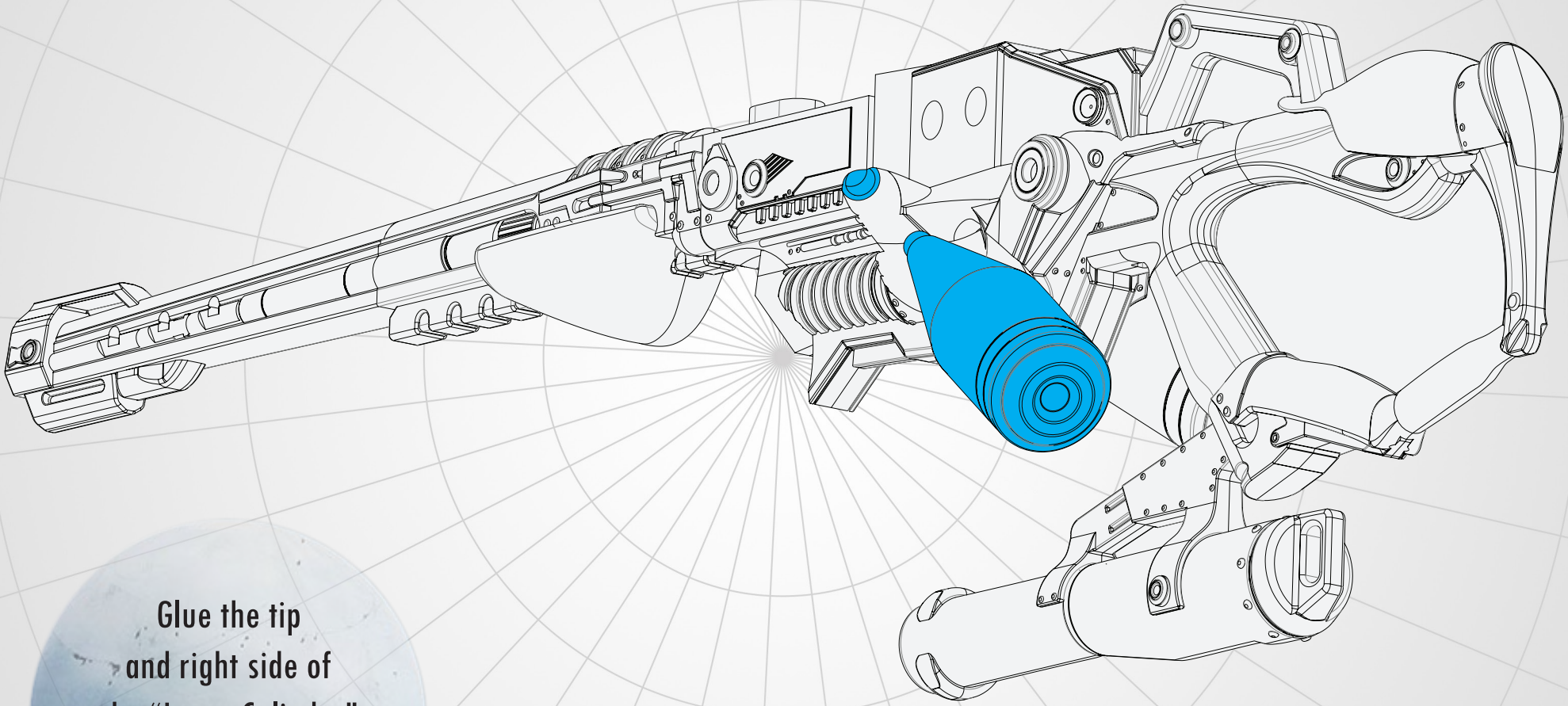
Insert the handle, glue, and hold it there for the next step.



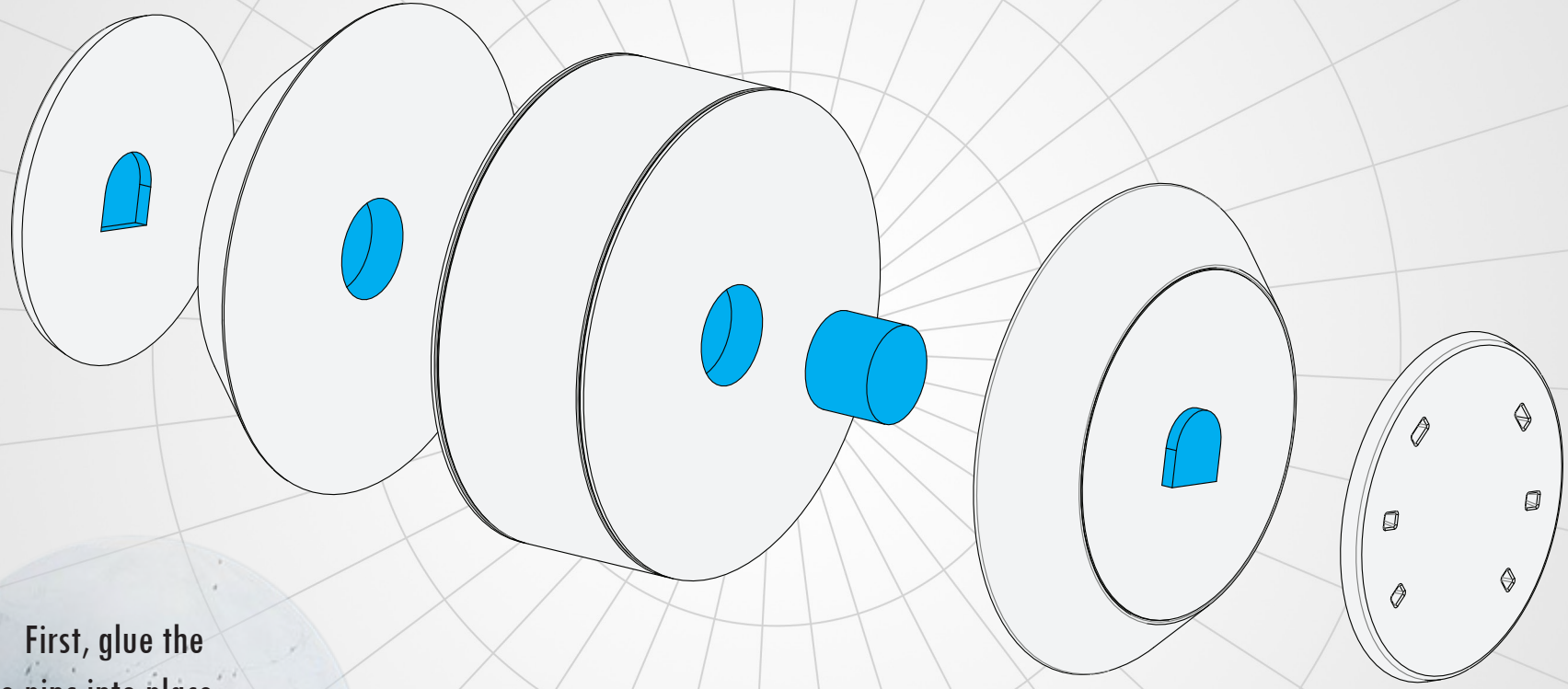
Glue each contacting part, and while holding the handle straight, press them into their corresponding slots.



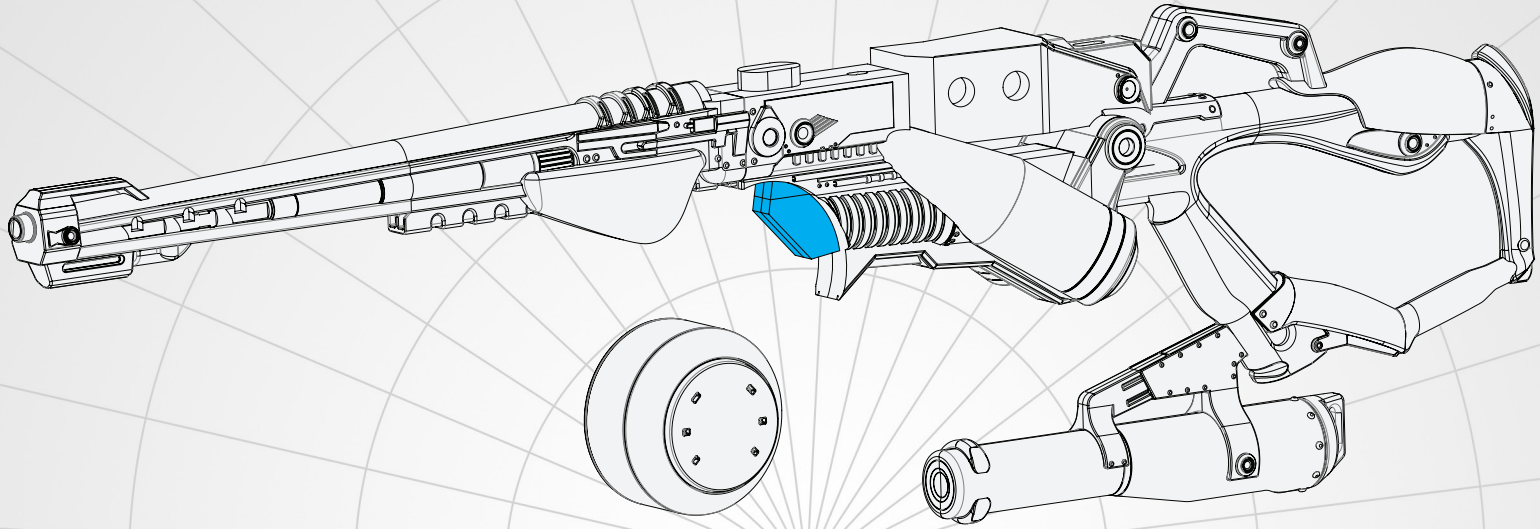
Glue each contacting part and press them into their corresponding slots.

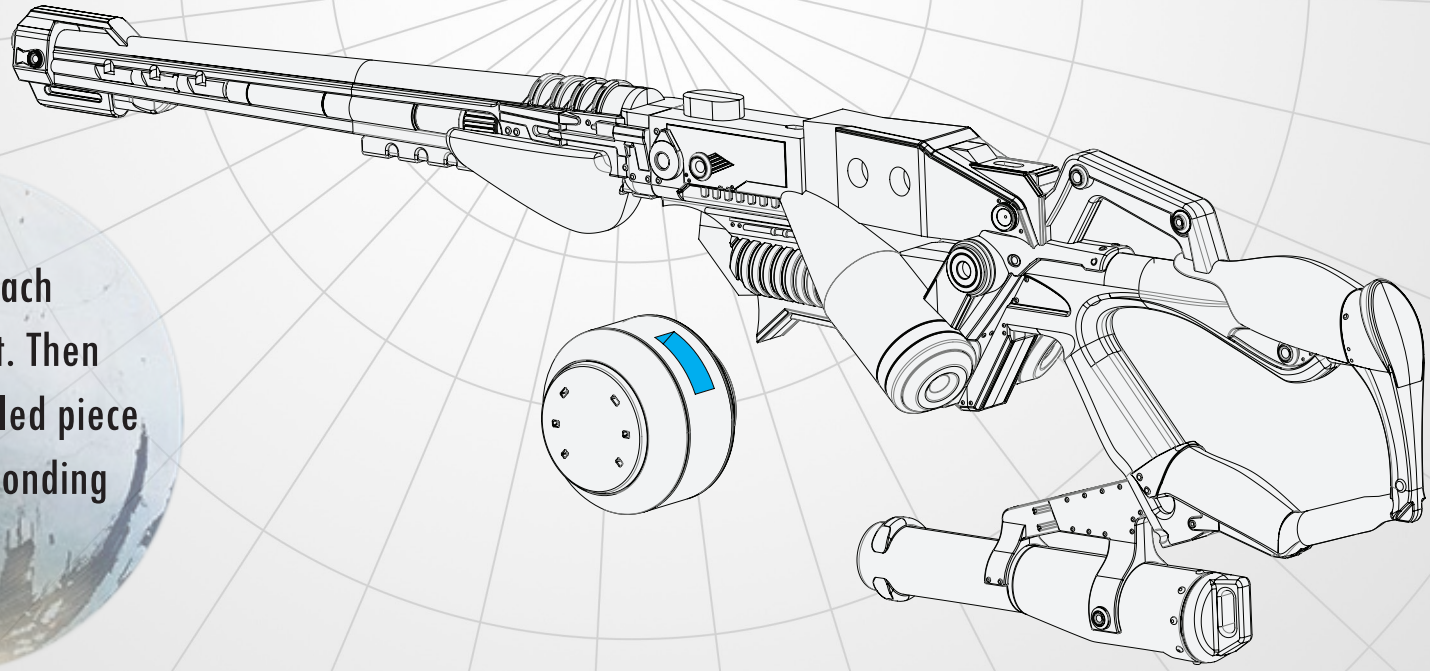


Glue the tip and right side of the “Large Cylinder” and insert into it’s corresponding slot.

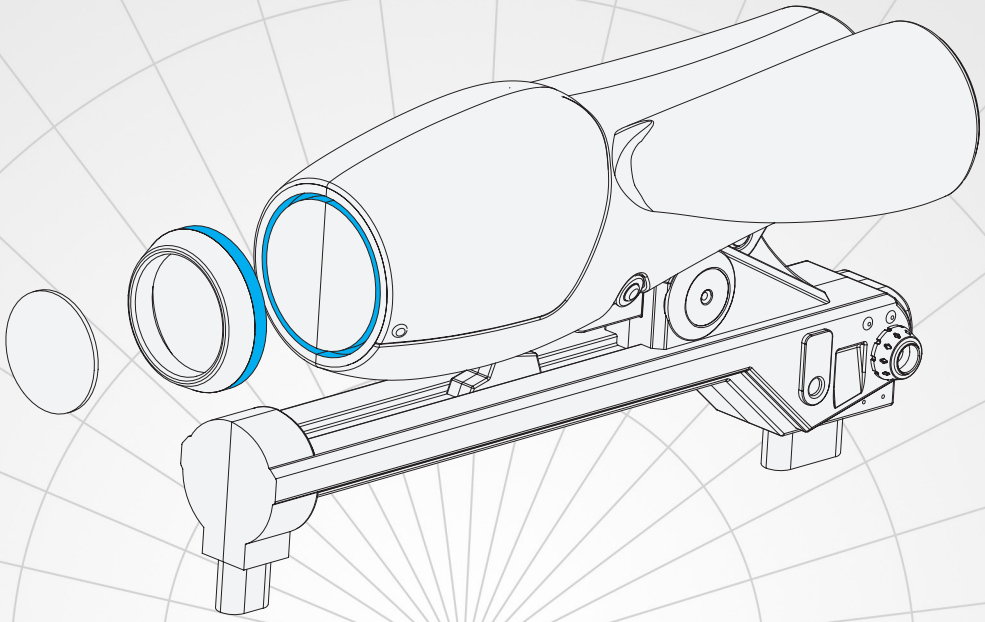


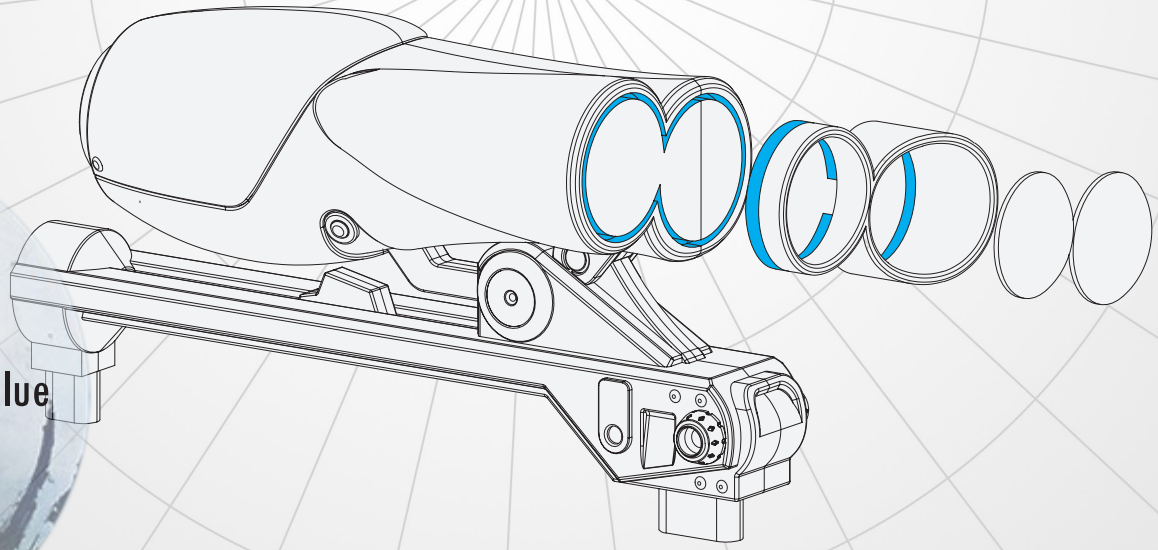
First, glue the two pins into place. Next, lineup the “Front Circle SILVER” and glue. Lastly, lineup the “Front Circle YELLOW” and glue.



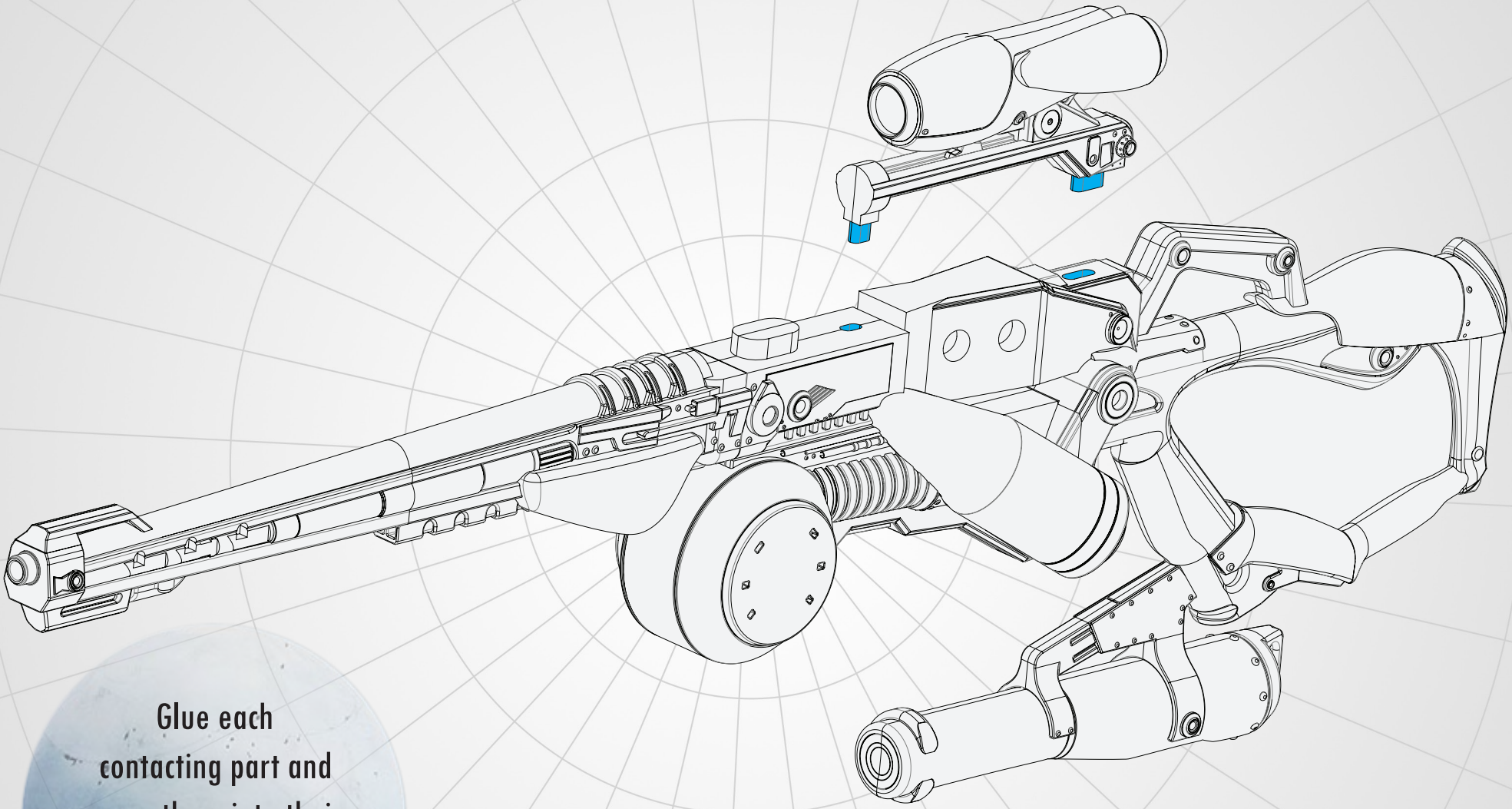


First, glue each contacting part. Then slide the assembled piece into it's corresponding slot.

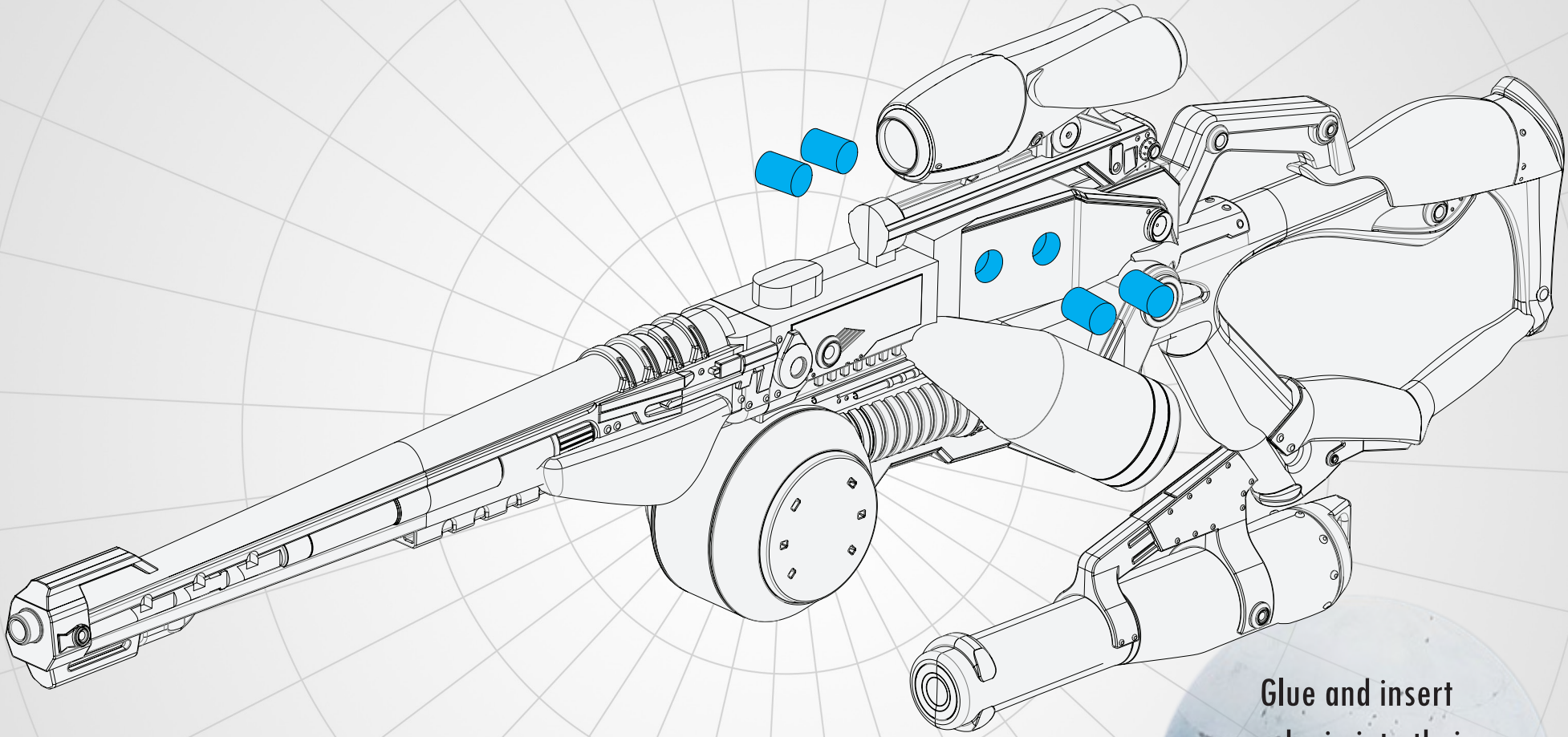




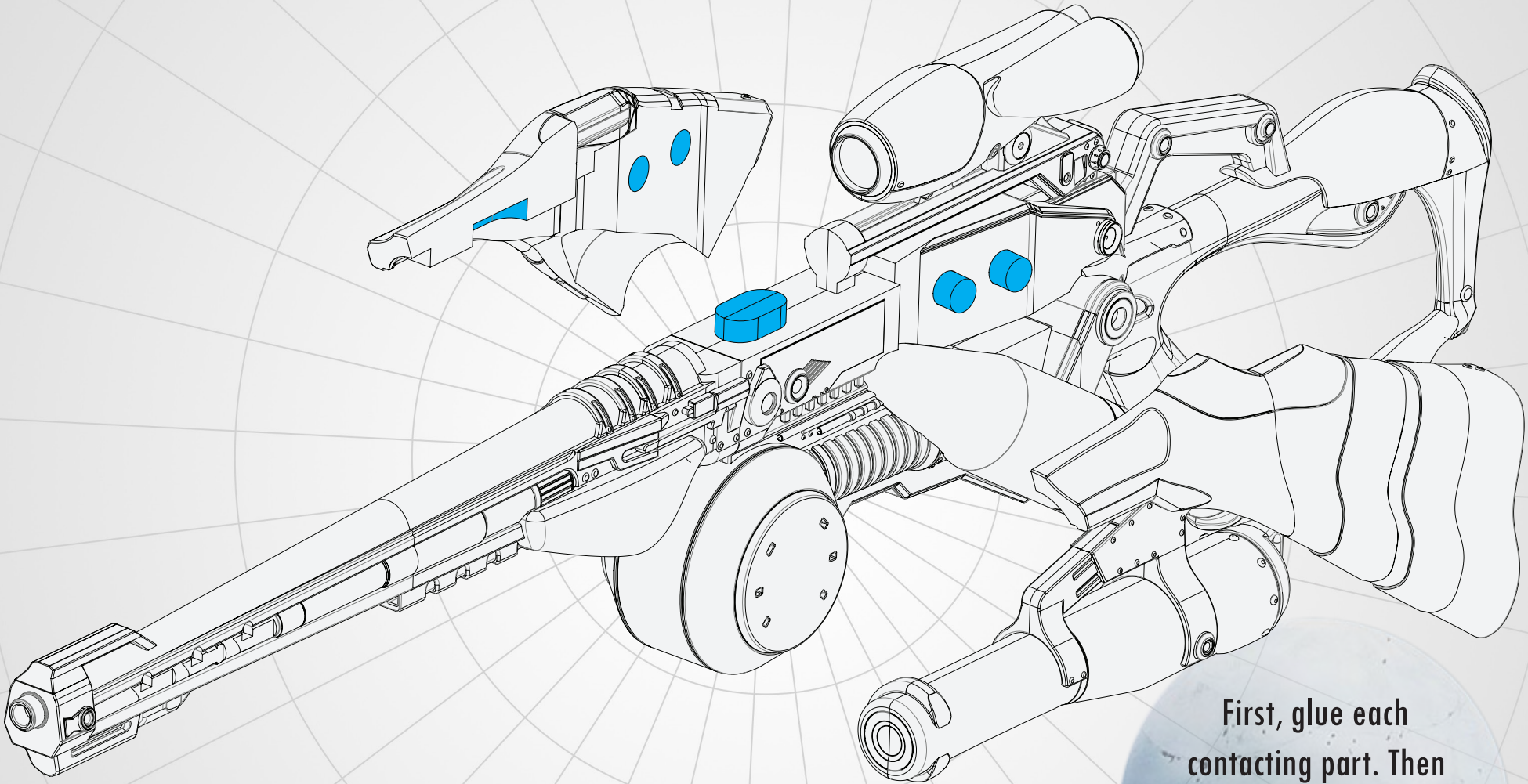
For both sides, glue and insert the lense cover first, then glue and insert the lense.



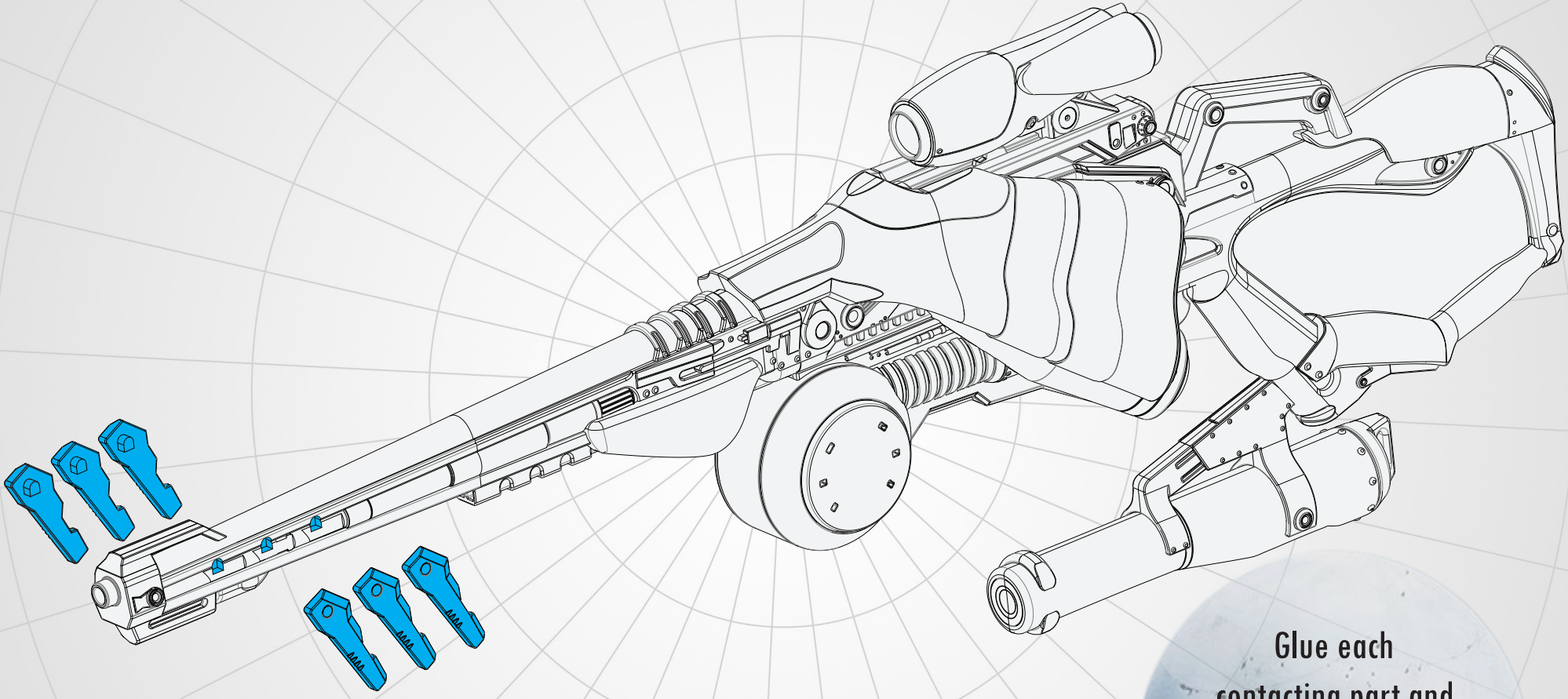
Glue each contacting part and press them into their corresponding slots.



Glue and insert each pin into their corresponding slots.



First, glue each contacting part. Then line up each half with the corresponding pins.



Glue each contacting part and press them into their corresponding slots.

And You're Finished! Now Imagine Owning This...