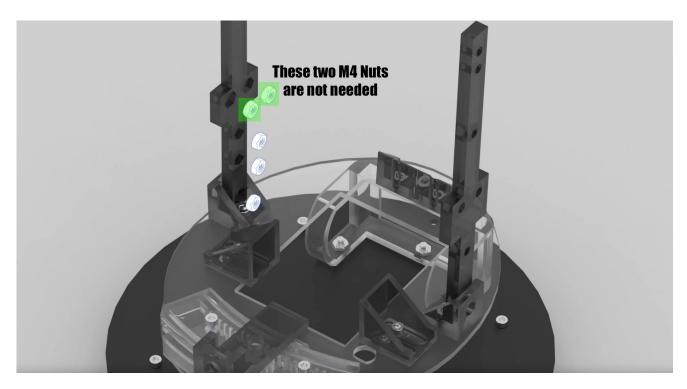
## **R1 ROBOT INSTRUCTION README**

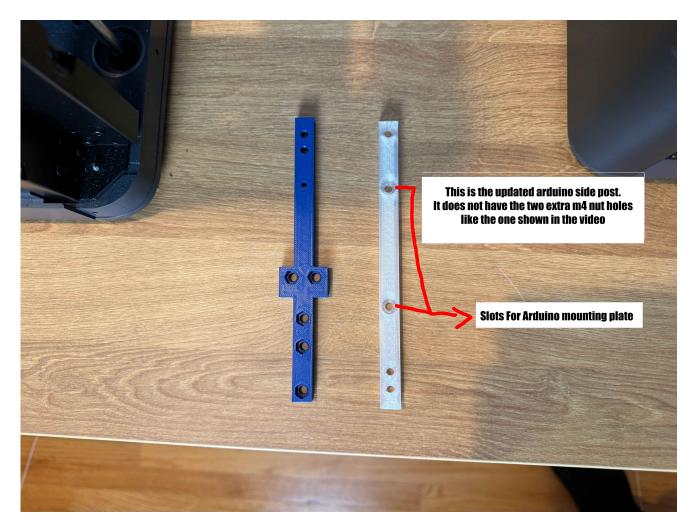
Because this kit is designed to be easily assembled at home, the two piece external shell from the old R1 has been replaced with a simpler face sheet that can be easily built. Due to this change, some of the instructions in the R1 build video will be slightly different to what you will be building here. Highlighted below are the changes made to be aware of when watching the instruction build video:

**In Step 22**, The M4 Lock Nut may have a different colored gasket than the blue that is mentioned in the video.

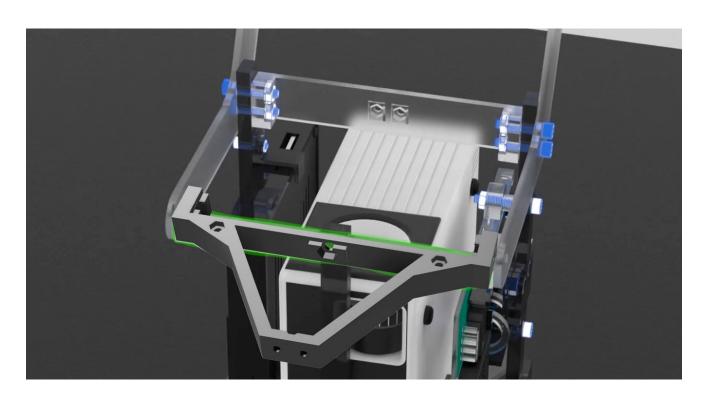
**In Step 33**, The Computer Side Post no longer requires the two parallel M4 nuts that go in the protruded areas.



**In Step 34**, the Arduino Side Post shows a post with a side protrusion for two M4 nuts. The updated post does not have these protrusions and does not need the nuts placed there. **(See Image Below)** 



In **Step 67**, the Front Crossmember shown differs from the one you will be working with in the DIY kit. The installation of the crossmember remains the same. Shown below is the step with the new front crossmember.

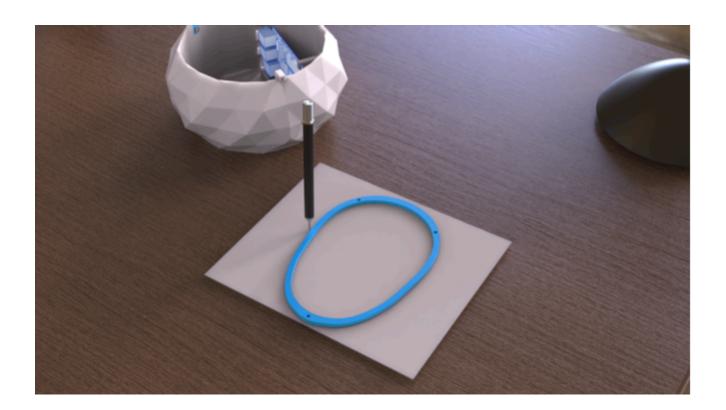


The two mirrors used in the Robot are **the same size** in the DIY kit. Due to this, the mention of the larger rear mirror beginning just before **Step 82**, can be ignored as both mirrors are the same size.

The Build Instruction video skips from **Step 105** to **Step 123**, as the skipped steps are related to the old R1 and not required for the DIY kit.

\*\*The Mounting of the Face Bezel and PET sheet are not shown in the instruction video. See below for these instructions:

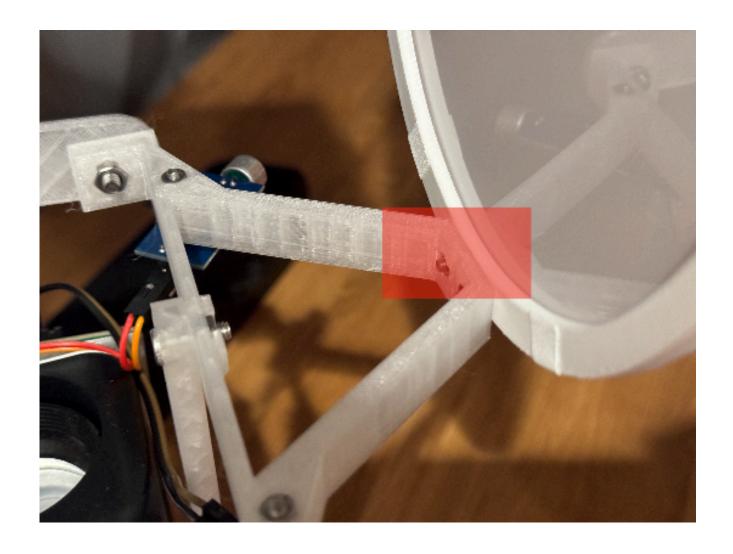
**Step 1:** Place the Face Bezel over the PET sheet and use it as a stencil, cutting out the PET into the shape and size of the Face Bezel.



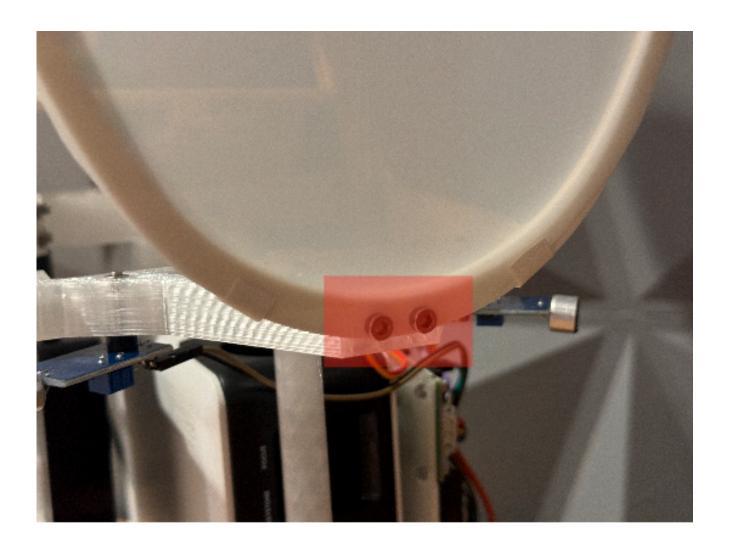
**Step 2:** With the PET sheet cut to the correct size, it will look like the image below.



**Step 3:** The new Front Crossmember mounts the same way as the instructional video demonstrates. The difference is the two M3 nuts that must be inserted into the two recessed nut holes in the back side of the Front Crossmember, highlighted red in the below image. **(See Image Below)** 



**Step 4:** With the Front Crossmember installed, use two **M3x10** screws to install the Face Bezel on to the front of the crossmember, screwing it into the two M3 nuts opposing it. Using tape or any sort of adhesive, you can now freely mount the cut PET sheet on to the Face Bezel. **(See Image Below)** 



This concludes the instructional changes for building the DIY kit. If you have any questions, please feel free to reach out to me at: <a href="mailto:hello@stemlabkit.com">hello@stemlabkit.com</a>