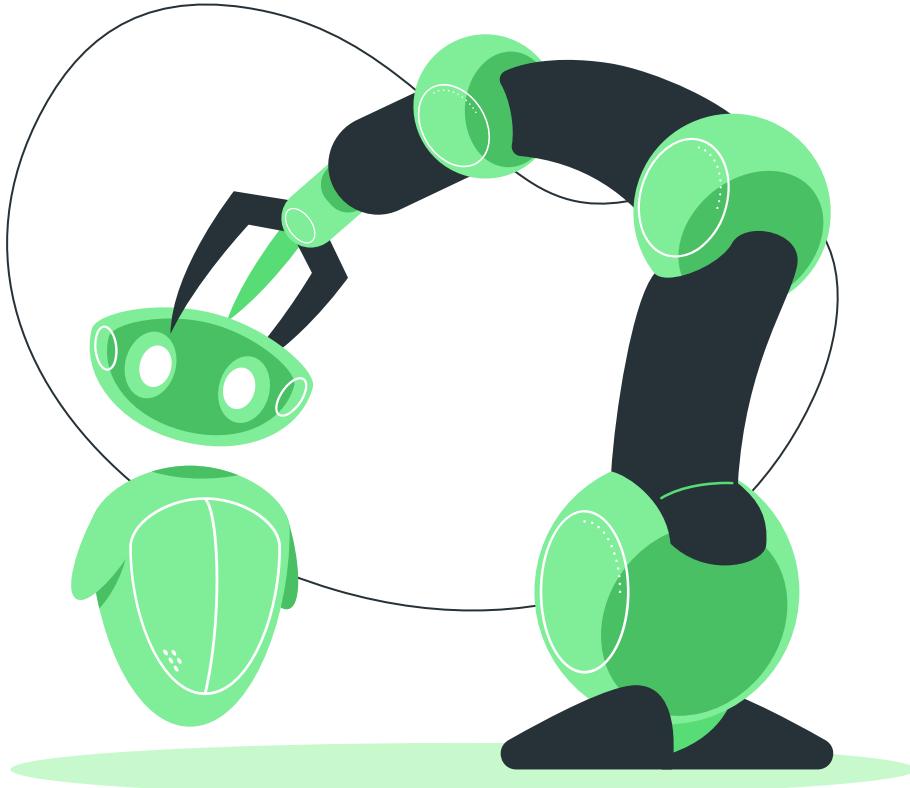


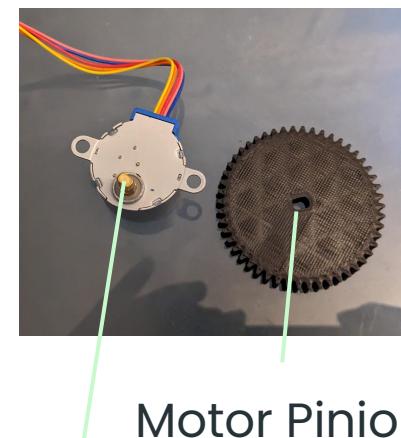
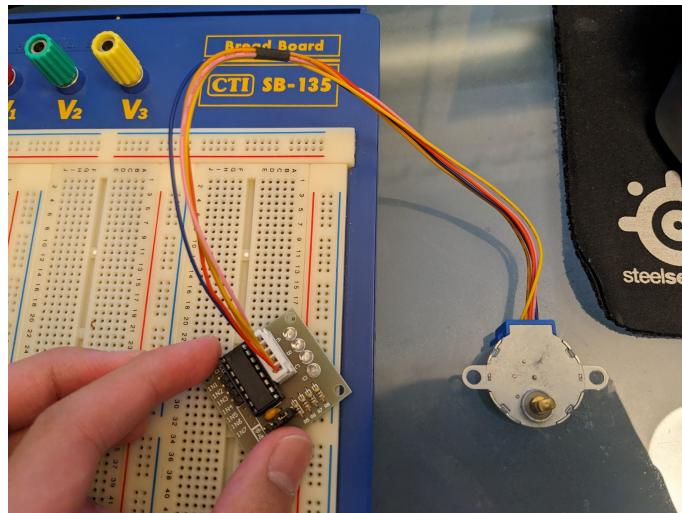
# Build a Module

You'll need 7 modules for  
the full visualizer.



# Set up your motor like this:

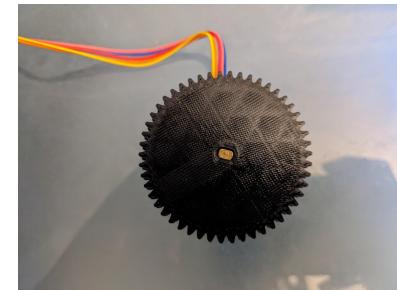
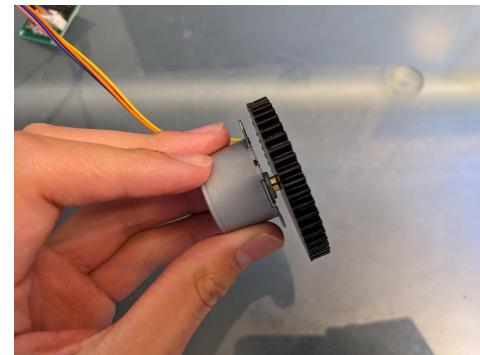
Plug the motor into the controller.



Motor Shaft

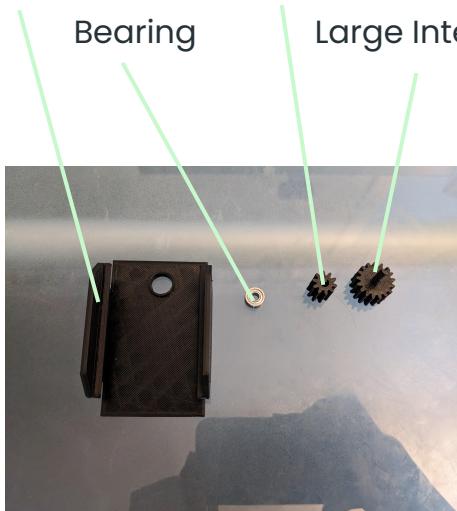
Motor Pinion

Press the Motor Pinion onto the Motor Shaft.

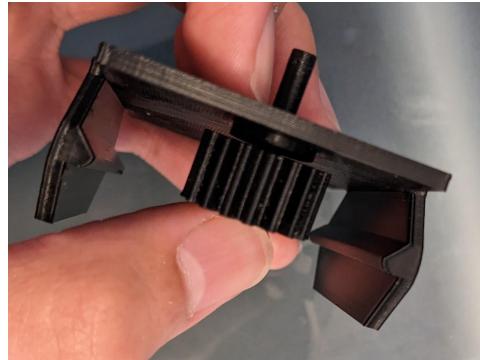


# Setting up the module case

Module Case      Small Interface Part

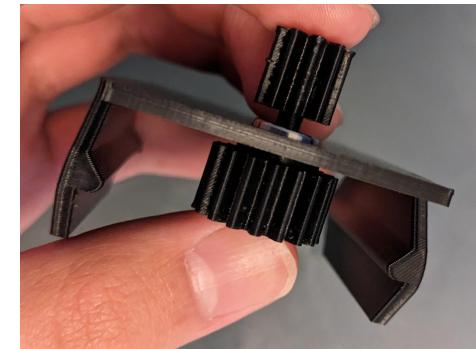


Press the bearing into the module case.



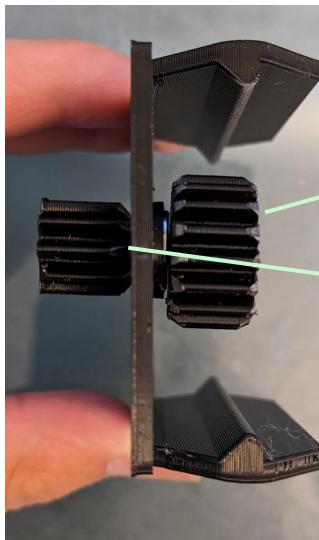
Press the small interface part onto the outstretched shaft of the large interface part, making sure to match the key to the key slot and pressing the interface parts together as far as they can go.

Press the large interface part's shaft in the bearing, with the gear facing in the same direction of the wings of the module case.



# NOTE: Module Case Friction

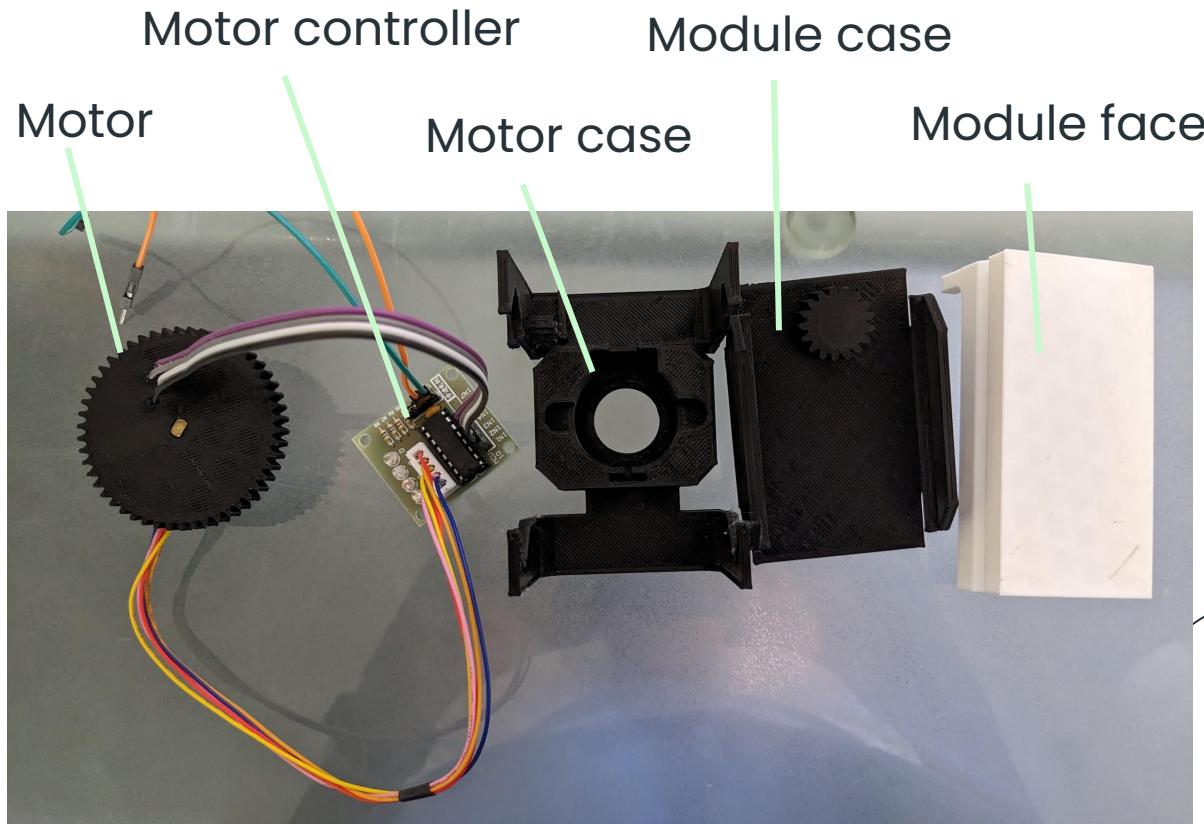
When the module case is fully assembled, there may be a good amount of friction between the small interface part and the module case, and separately, a lot of friction between the large interface part and the module face. To reduce these, cut off the inner end of the small interface gear, and the outer end of the large interface gear. The example has an extra, unnecessary shaving.



Outer end of large  
interface gear

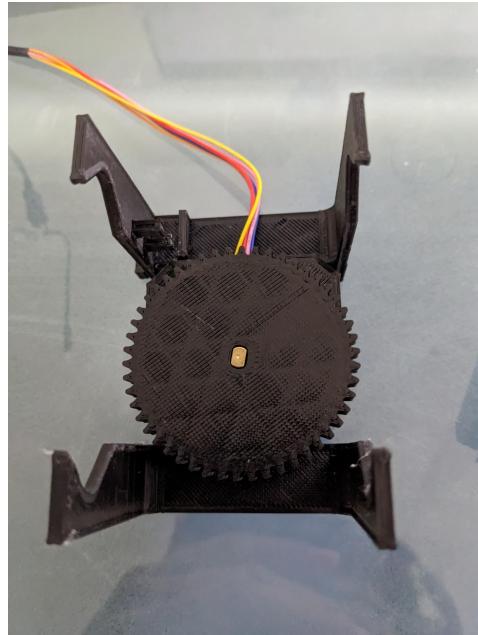
Inner end of small  
interface gear

# Assembling the Module:



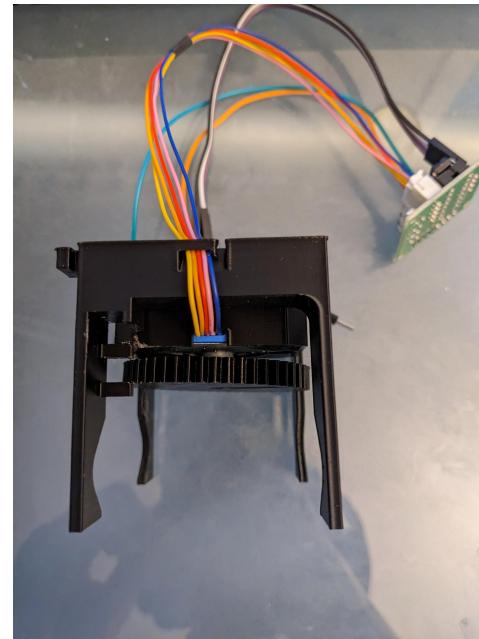
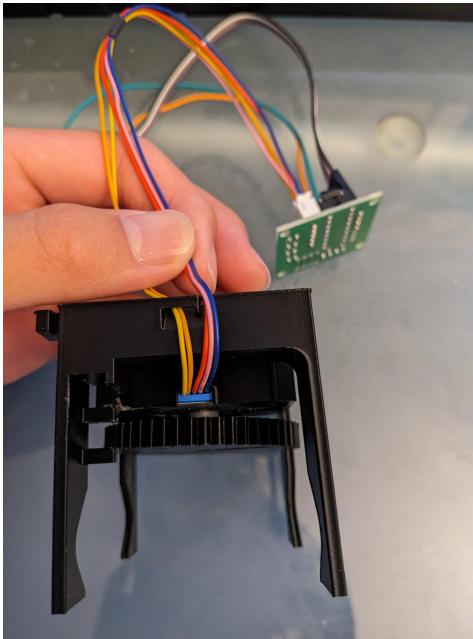
# Step 1:

Press the motor into the motor case (should be hard, because it's a press fit)



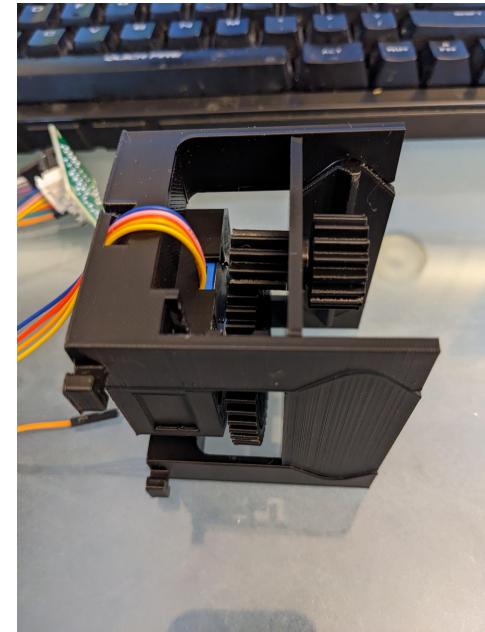
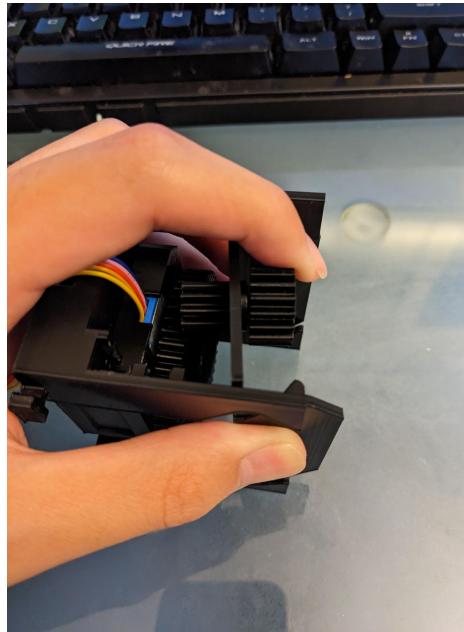
## Step 2:

Straighten up the wires and hook the wires under the wire cover.



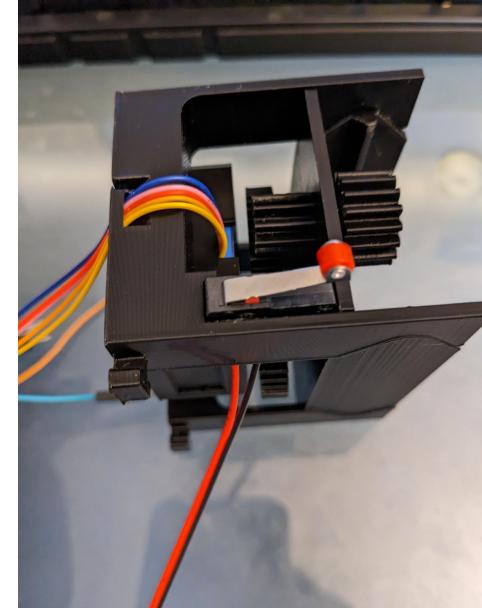
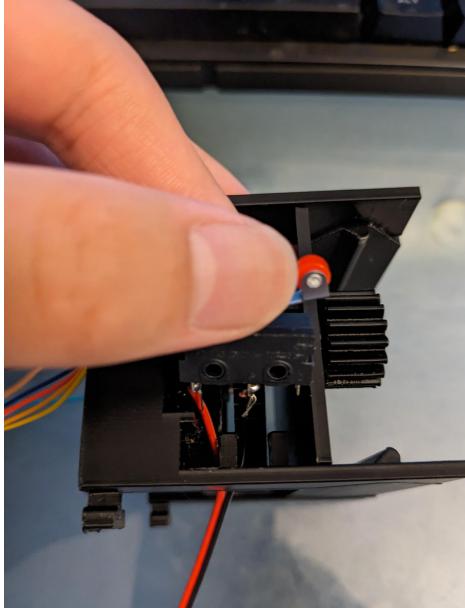
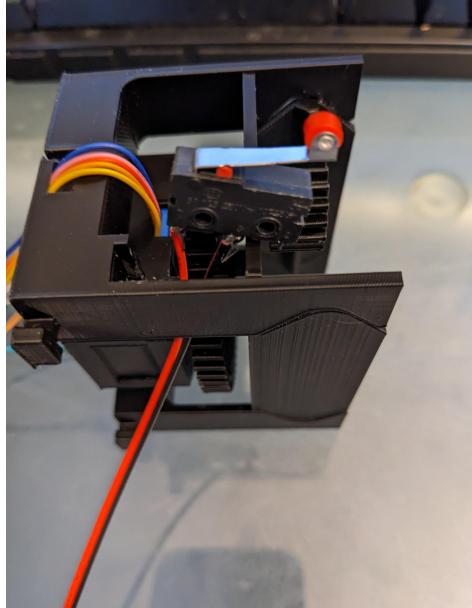
# Step 3:

Hook one side of the module case into the motor case, and pivot it into place while rotating the gear to make the gears interface.



## Step 4:

Insert the limit switch, where the roller tip is towards the module case.



# Step 5:

Put the module face in the module case, and rotate the motor pinion to lower the face.

