



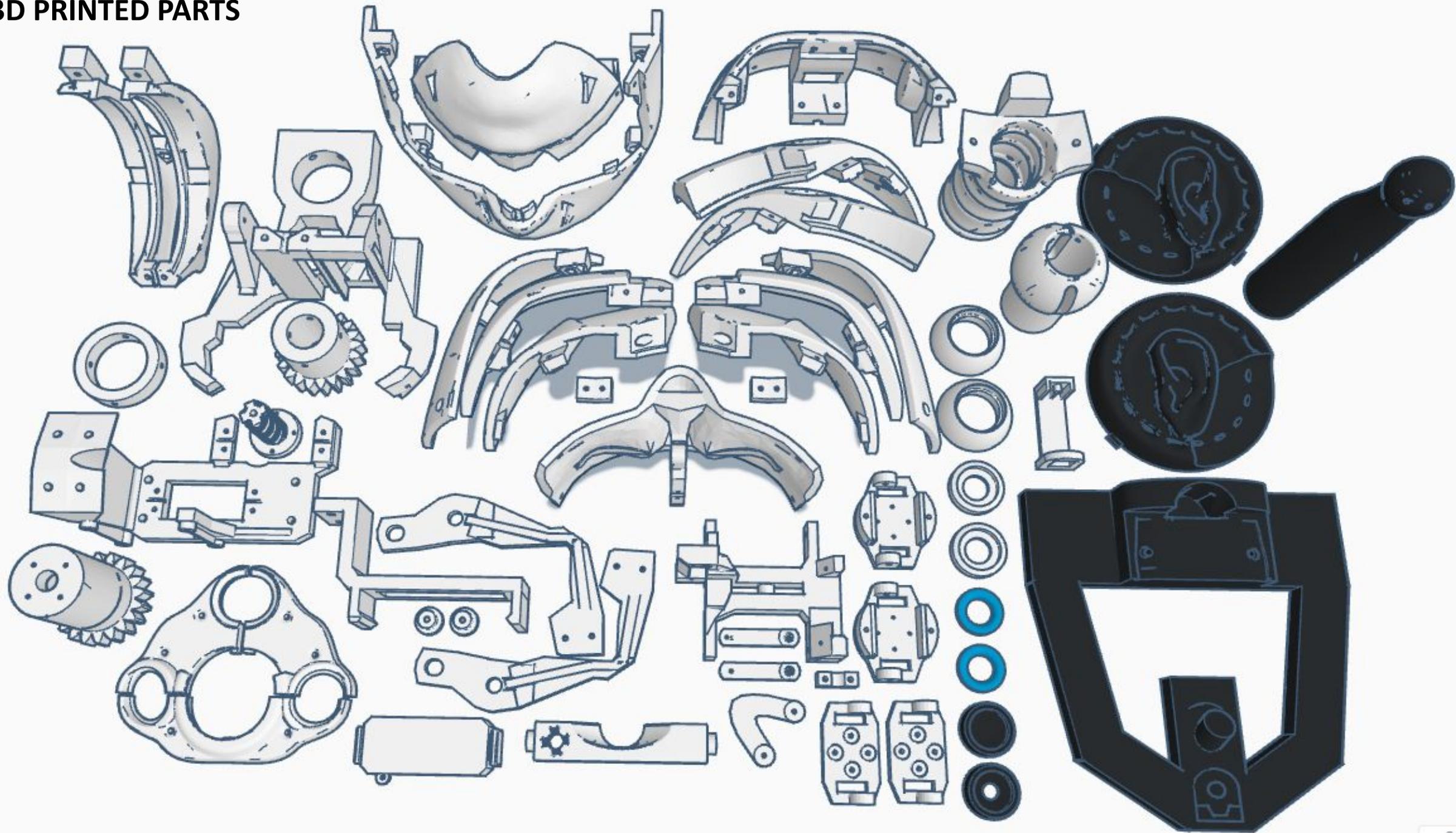
## KI-0555 EZ-inMoov Robot Head Kit - Assembly Instructions v0.3

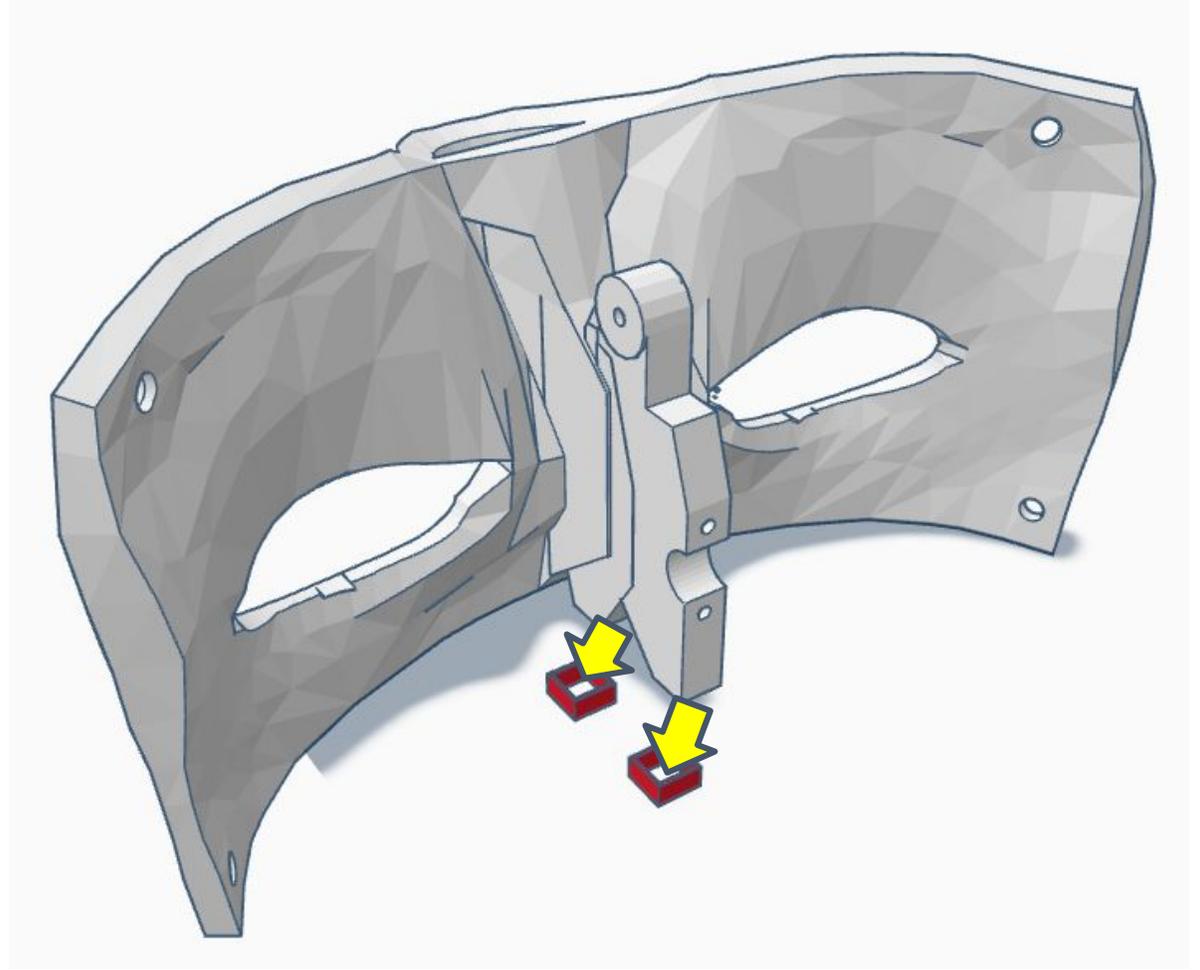
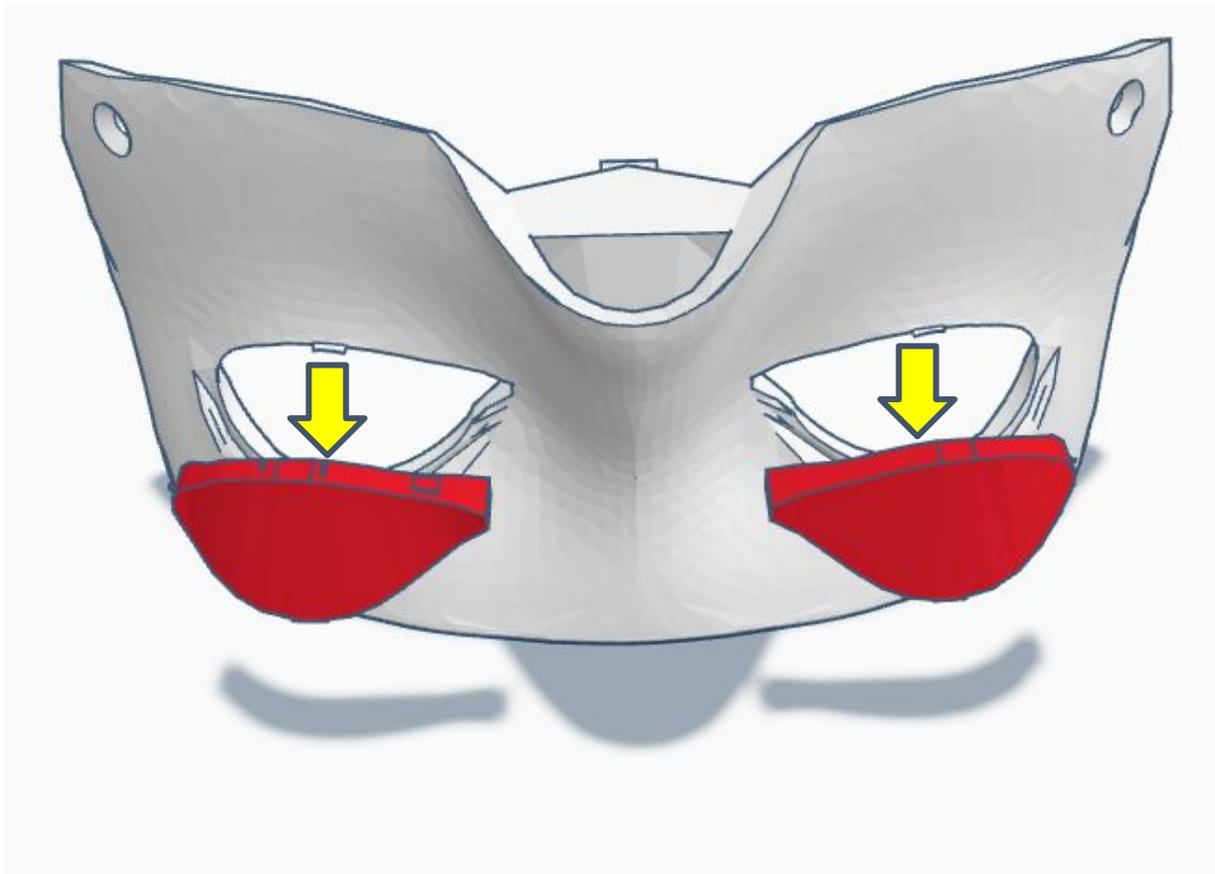
## 3D PRINTED PART LIST

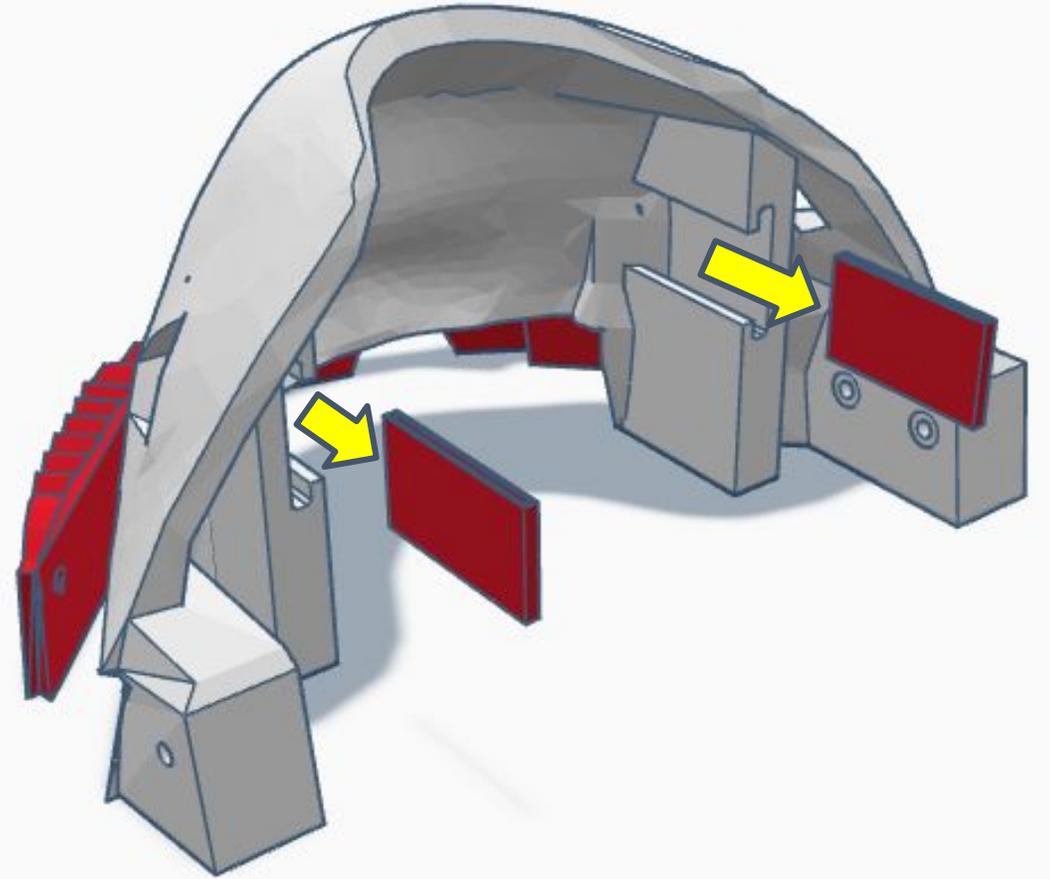
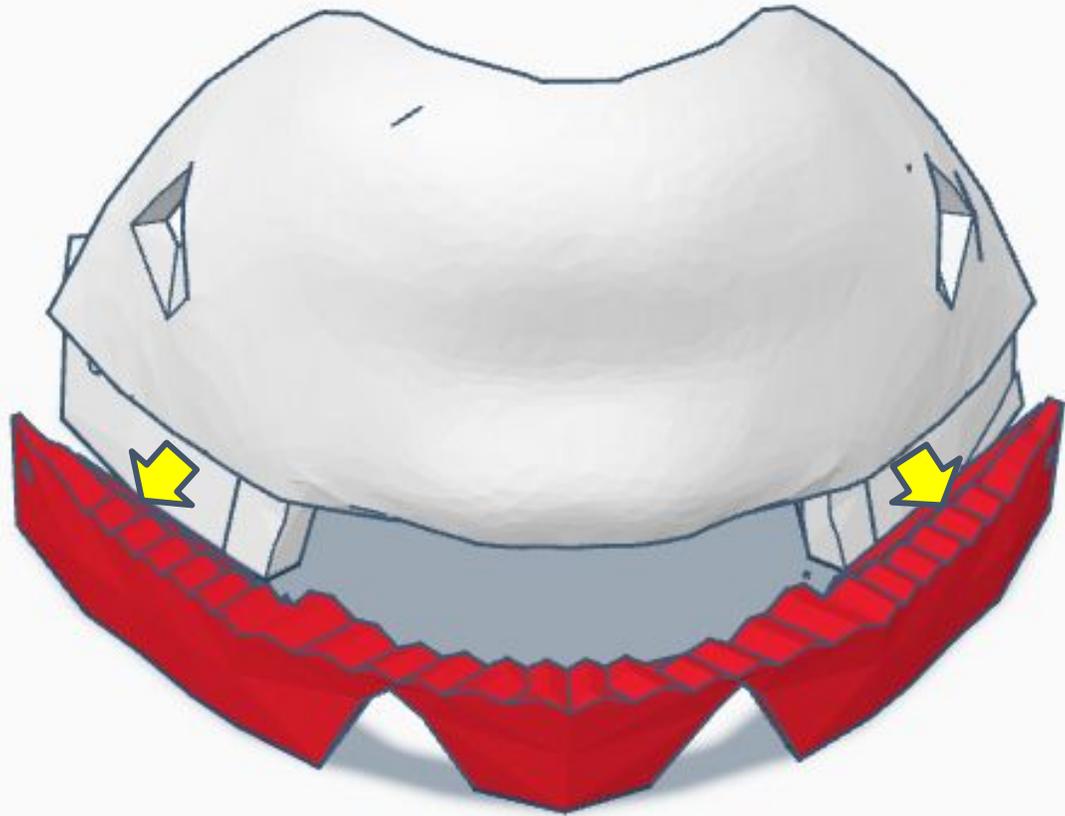
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1	<input type="checkbox"/>	EarLeftV1	Black
1	<input type="checkbox"/>	EarRightV1	Black
2	<input type="checkbox"/>	EyeBallSupportEZcameraV2	Any color
2	<input type="checkbox"/>	EyePlateV2	Any color
1	<input type="checkbox"/>	EyeBallCameraPupil	Black
1	<input type="checkbox"/>	EyeBallSolidPupil	Black
2	<input type="checkbox"/>	EyeBallV2	White
2	<input type="checkbox"/>	EyeBalliris	Blue, Green, Brown, etc.
2	<input type="checkbox"/>	EyeBallinsertV2	White
1	<input type="checkbox"/>	EyeglassV5	White
1	<input type="checkbox"/>	EyeHingeLeftV3	Any color
1	<input type="checkbox"/>	EyeHingeRightV3	Any color
1	<input type="checkbox"/>	EyeHingeCurveV1	Any color
1	<input type="checkbox"/>	EyeSupportV6	Any color
1	<input type="checkbox"/>	EyeHolderV1	Any color
1	<input type="checkbox"/>	ServoGearV3	White
1	<input type="checkbox"/>	MainGearV3	White
1	<input type="checkbox"/>	RingV3	Any color
1	<input type="checkbox"/>	VoiceBoxV1	White
1	<input type="checkbox"/>	JawPistonV2	White

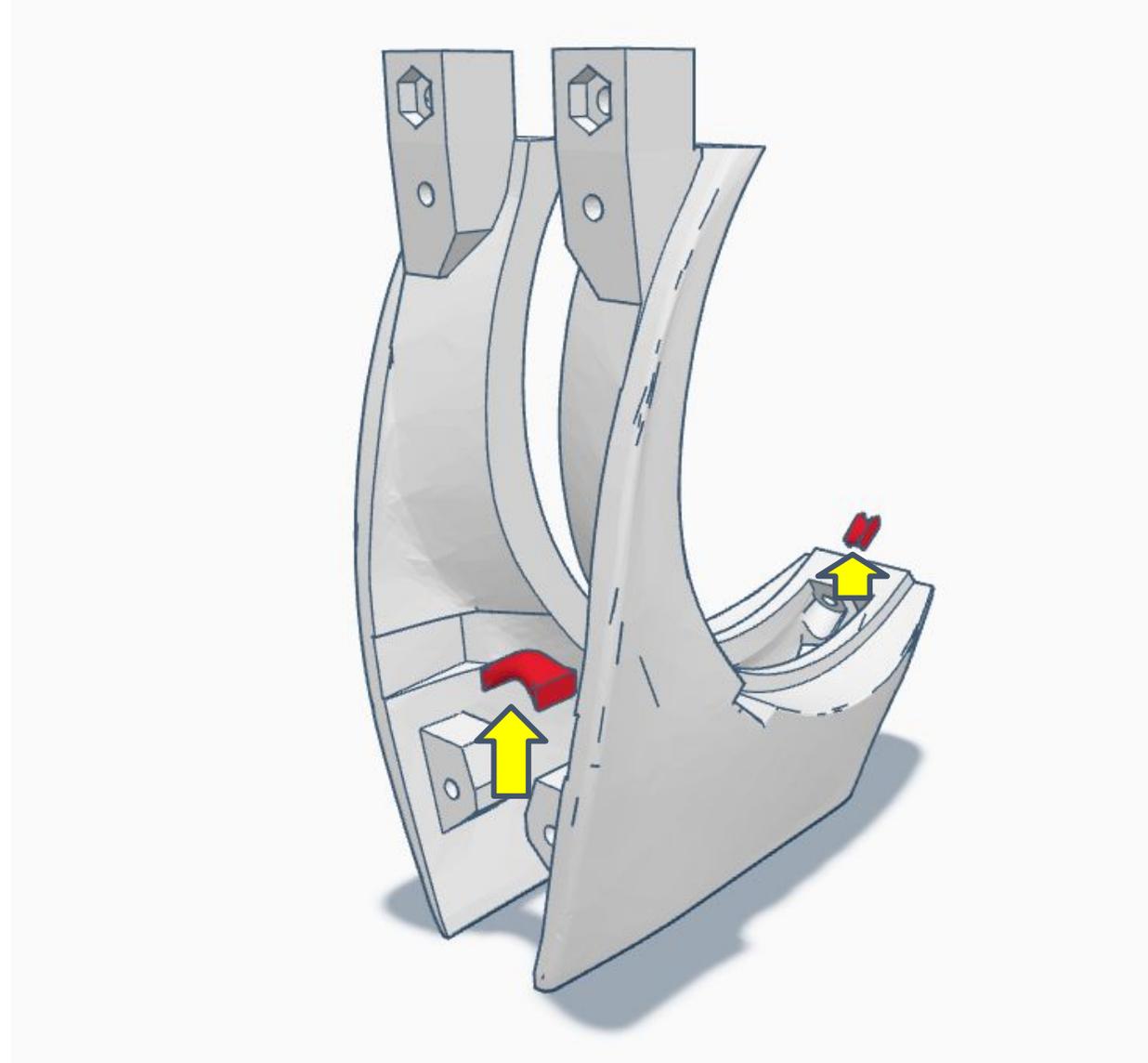
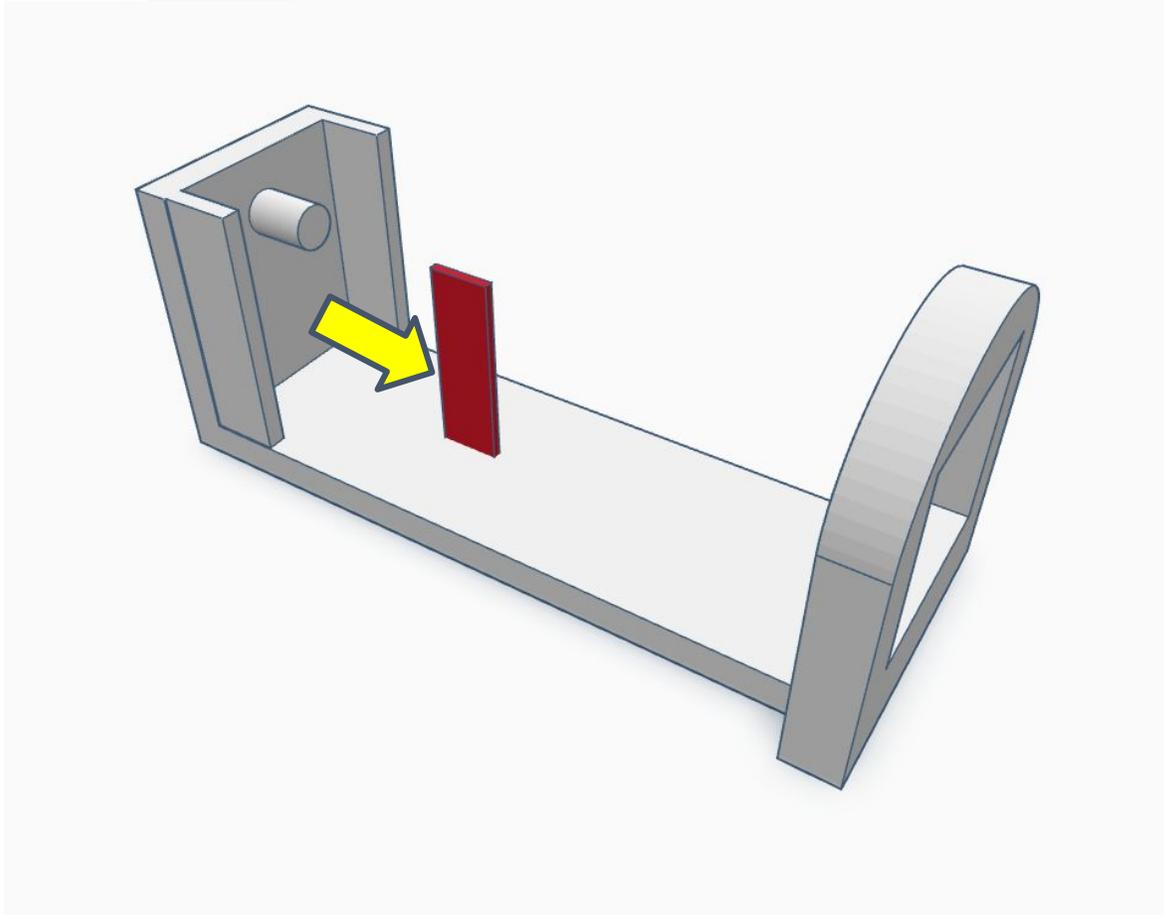
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1	<input type="checkbox"/>	JawHingeV1_wide	White
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2	<input type="checkbox"/>	PivotCupV2	Anycolor
1	<input type="checkbox"/>	Head_Stand_EZ-Robot_Logo	Black
1	<input type="checkbox"/>	NeckPistonFrontV2	Black
1	<input type="checkbox"/>	NeckPlateV3	White
1	<input type="checkbox"/>	NeckPlateHighV3	White
1	<input type="checkbox"/>	NeckJointLowerV5	White
1	<input type="checkbox"/>	NeckV3	White
1	<input type="checkbox"/>	LowBackV6	White
1	<input type="checkbox"/>	SideHearV5	White
1	<input type="checkbox"/>	TopBackSkullV5	White
1	<input type="checkbox"/>	TopMouthV5	White
1	<input type="checkbox"/>	TopSkullLeftV5	White
1	<input type="checkbox"/>	TopSkullRightV5	White
1	<input type="checkbox"/>	UnitedInternalSupportV1	Any color
1	<input type="checkbox"/>	BatterySupportV1	Any color
1	<input type="checkbox"/>	SkullServoV2	Any color
1	<input type="checkbox"/>	PowerClipV1	Any color

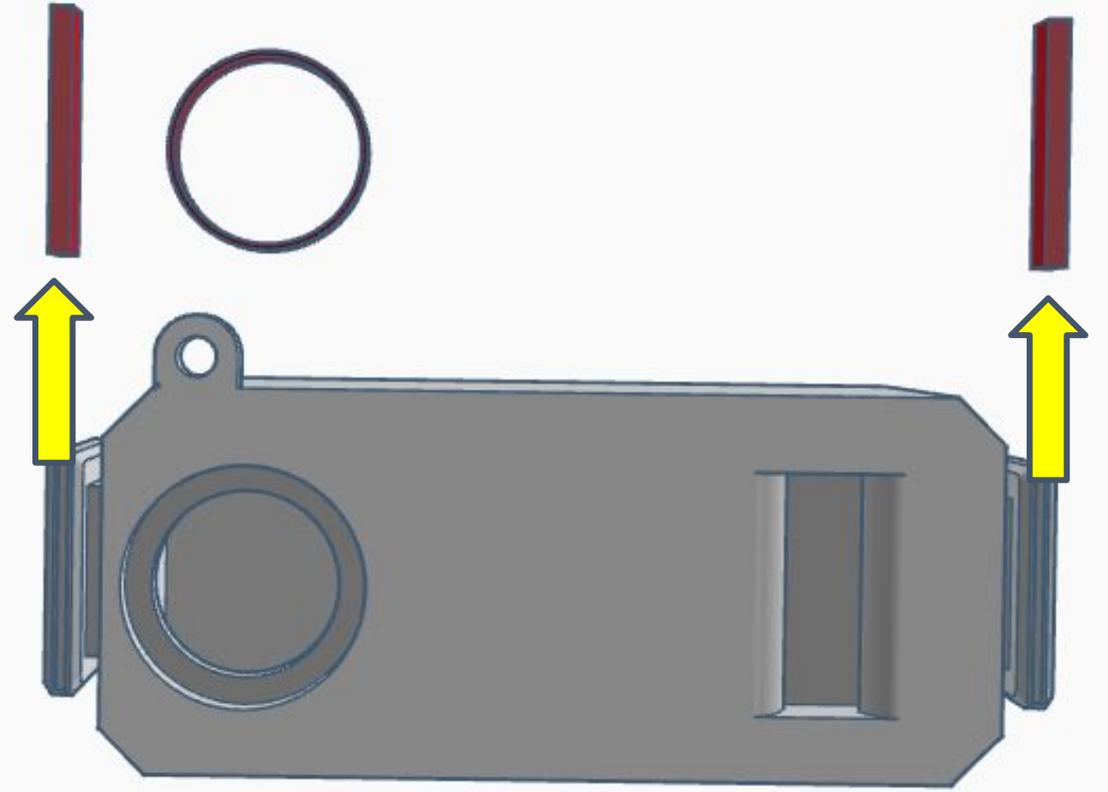
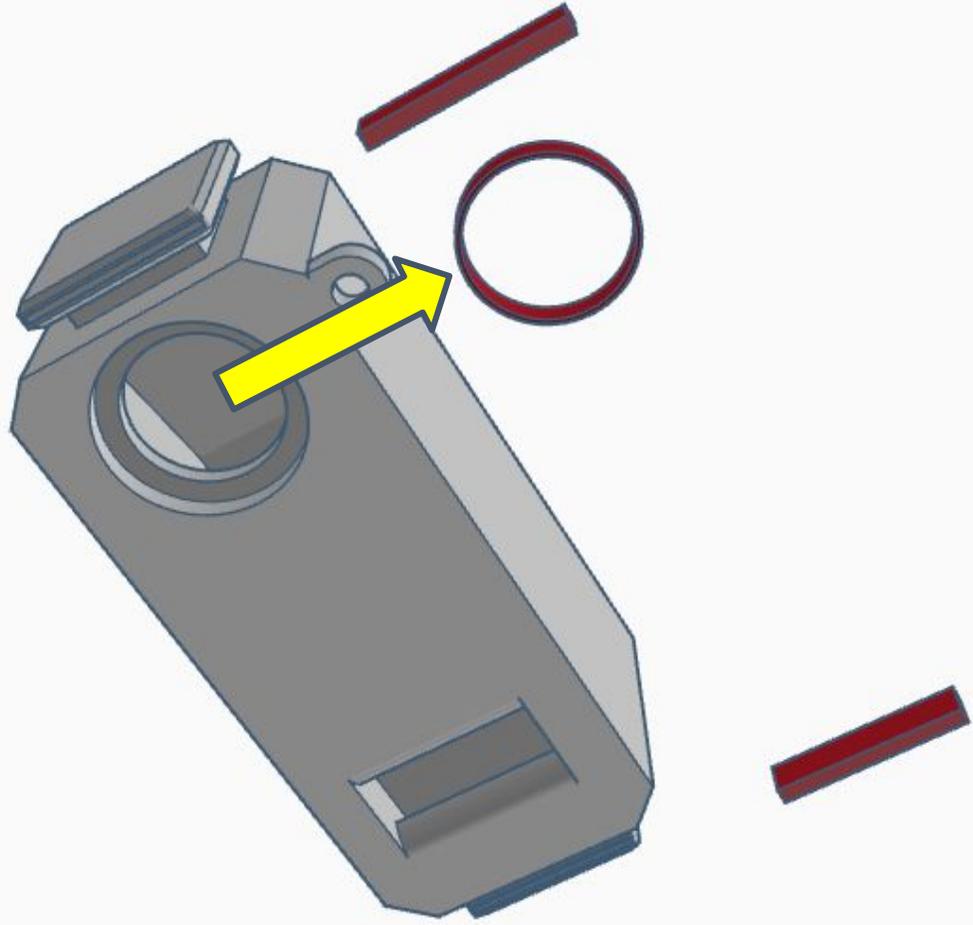
# 3D PRINTED PARTS

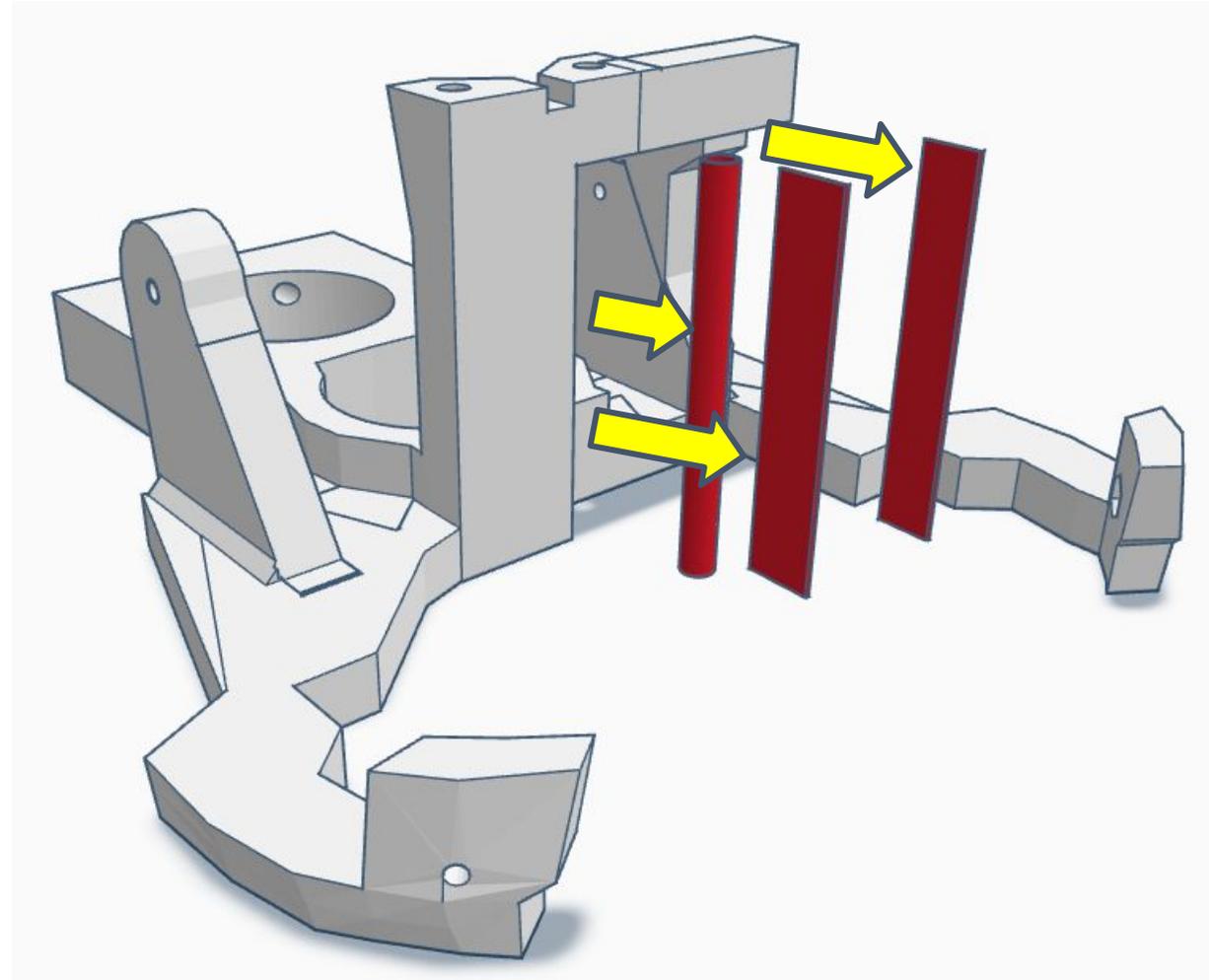
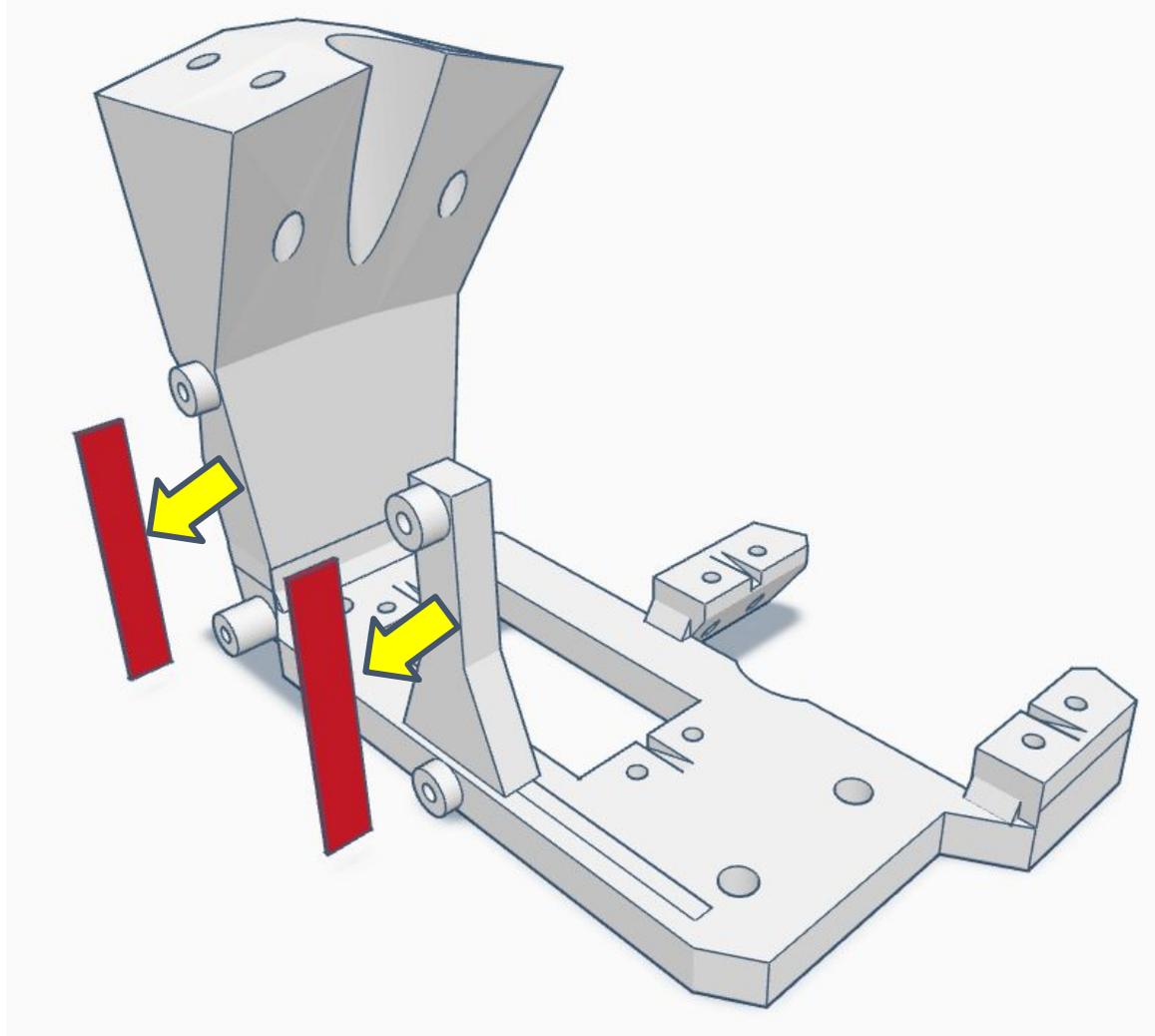


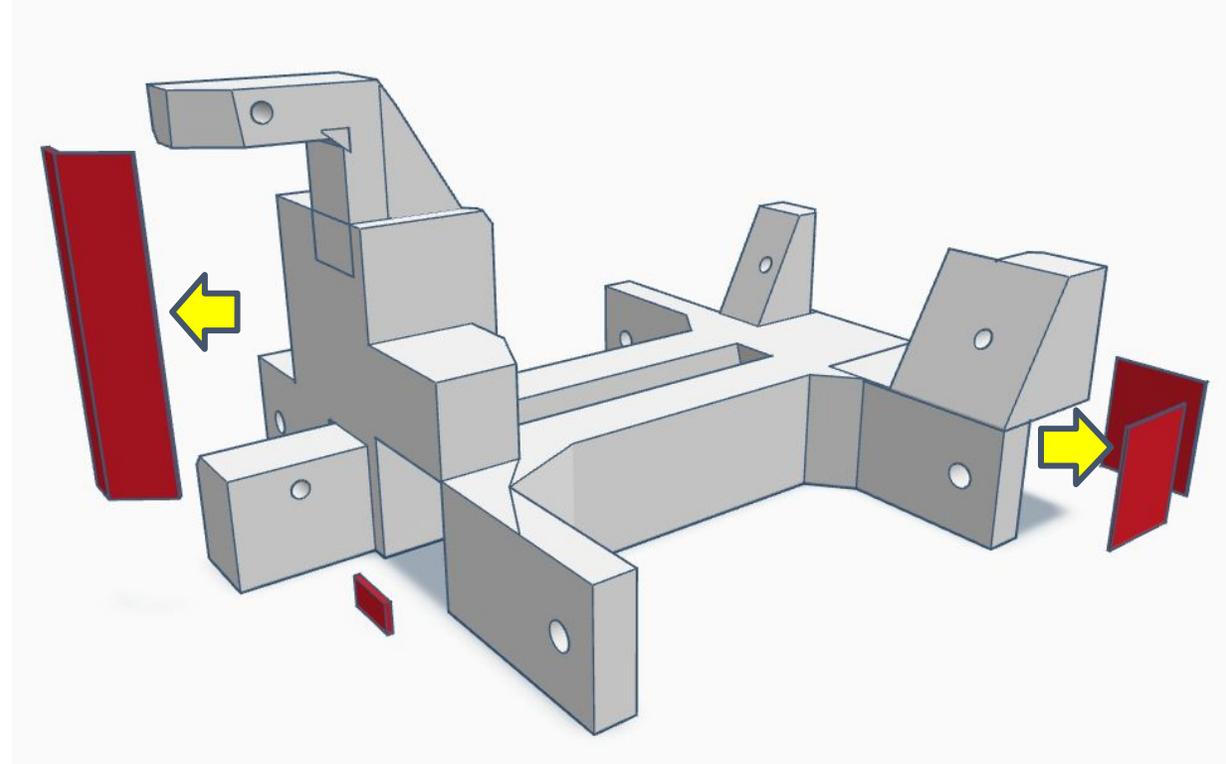
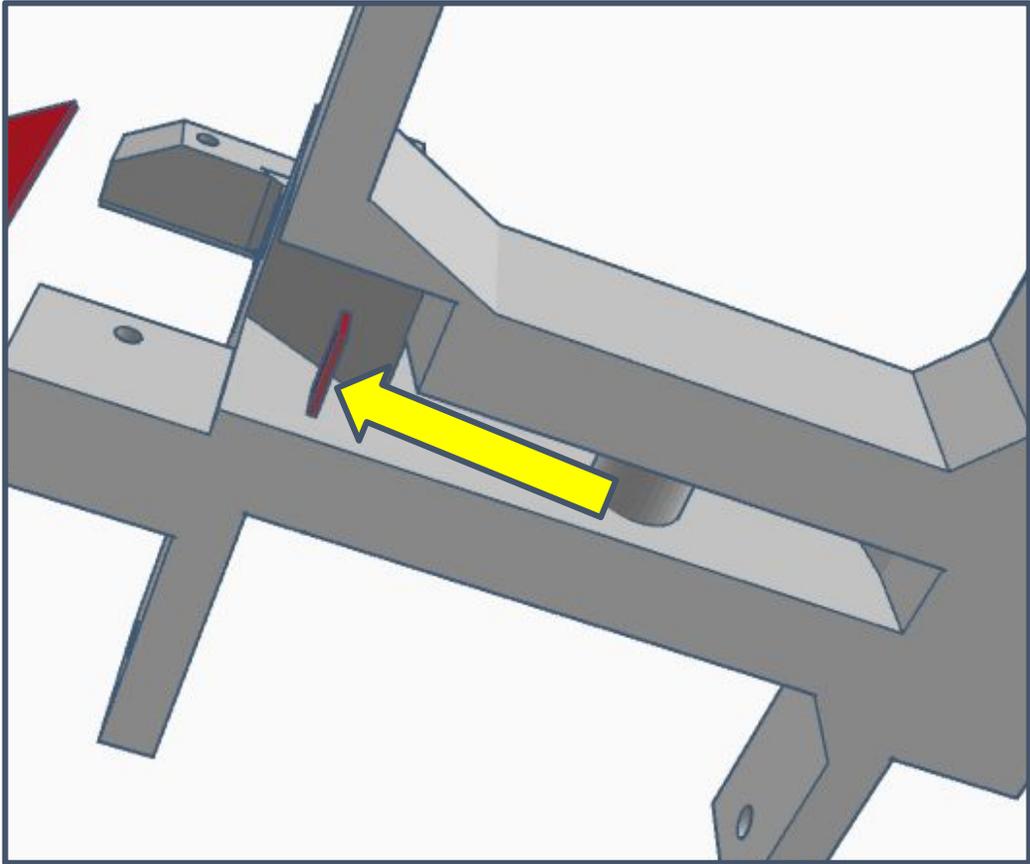
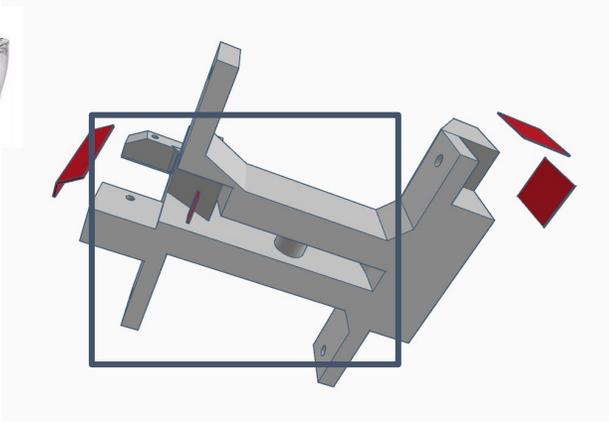


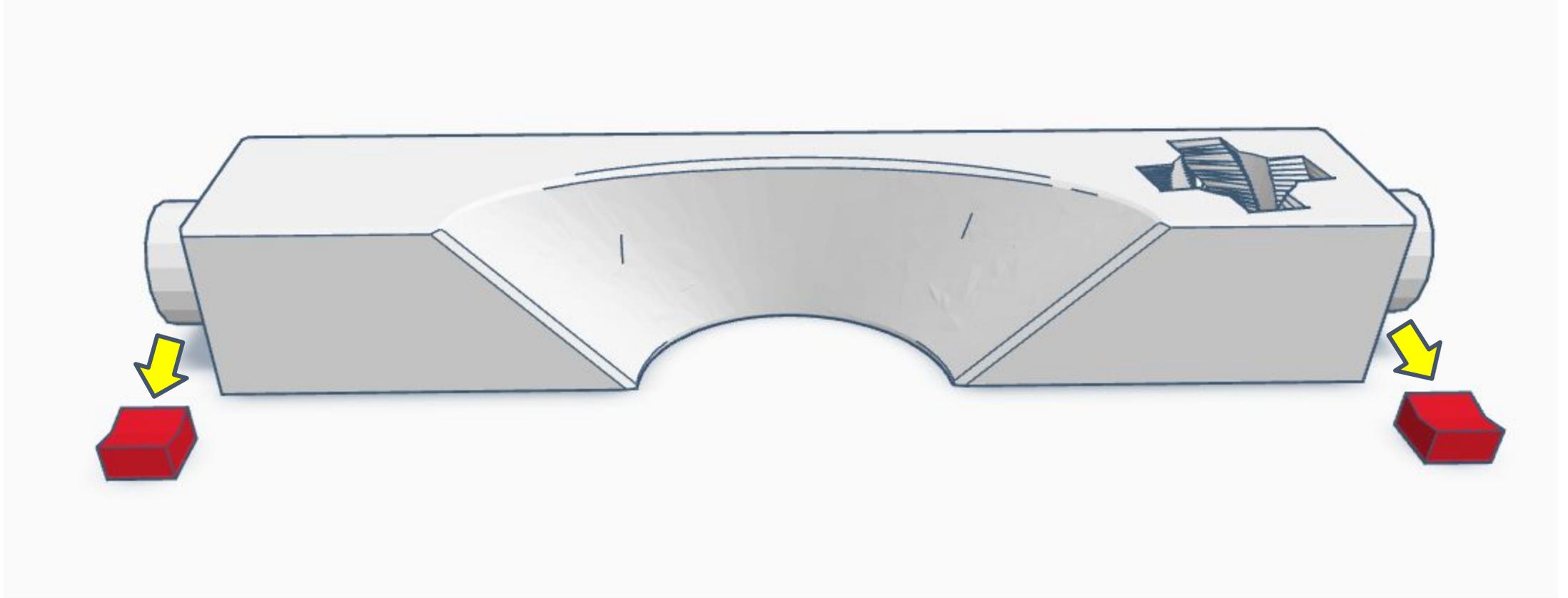












# ELECTRONIC PARTS & HARDWARE



Micro Servos

HDD Servos

# HARDWARE LIST

M3 x 0.5mm  
Length: 14mm  
Black-Oxide  
Hex drive Flat Head  
Machine Screw

M2 x 0.4mm  
Length: 20mm  
Black-Oxide  
Hex drive Flat Head  
Machine Screw

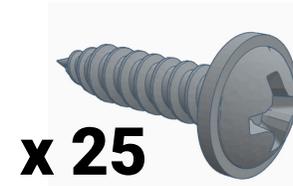
No. 8  
Length: 3/4"  
Flat Head Phillips  
Wood/Metal Screw

M3  
Length: 10mm  
Pan Head Phillips  
Thread forming  
Screw

M2  
Length: 10mm  
Flange Head Phillips  
Wood/Metal Screw

M3 x 0.5mm  
Length: 6mm  
Black-Oxide  
Pan Head Phillips  
Machine Screw

M3 x 0.5mm  
Steel Hex Nut



2mm  
Hex Ball driver  
(included in kit)

1.27mm  
Allen Key  
(included)

No.2  
Phillips  
Screwdriver  
(not included)

No.2  
Phillips  
Screwdriver  
(not included)

No.1  
Phillips  
Screwdriver  
(not included)

No.1  
Phillips  
Screwdriver  
(not included)

Needlenose  
Pliers  
(not included)

# TOOL LIST

# OTHER HELPFUL TOOLS & MATERIALS



Electric Precision Screwdriver for threading hardware (not included)



Utility Knife for cleaning up 3D prints (not included)



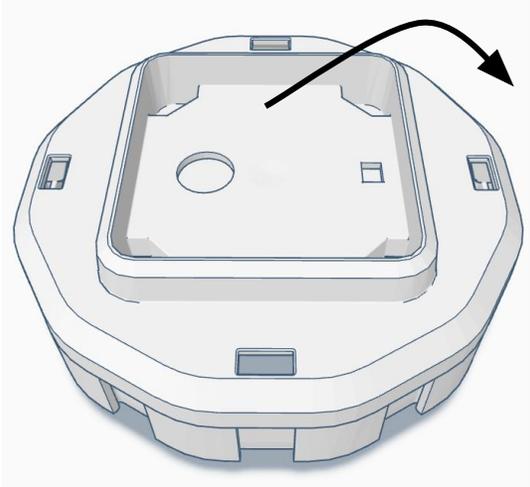
White Lithium Grease for lubricating 3D printed gears (not included)



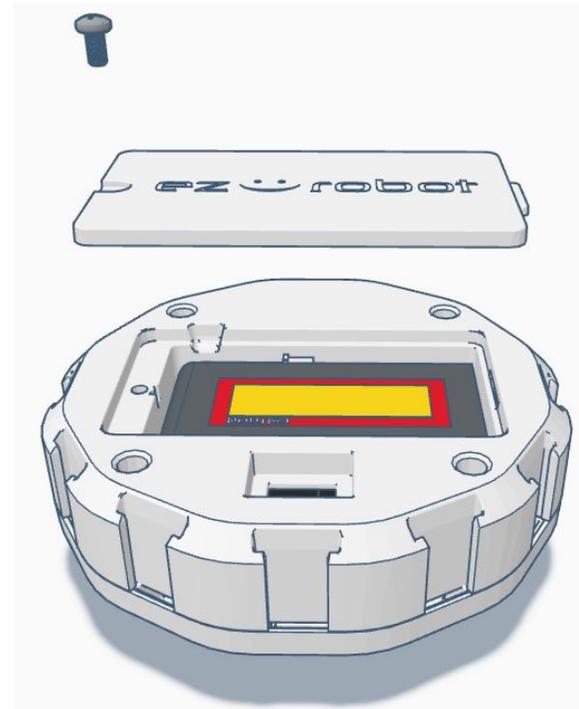
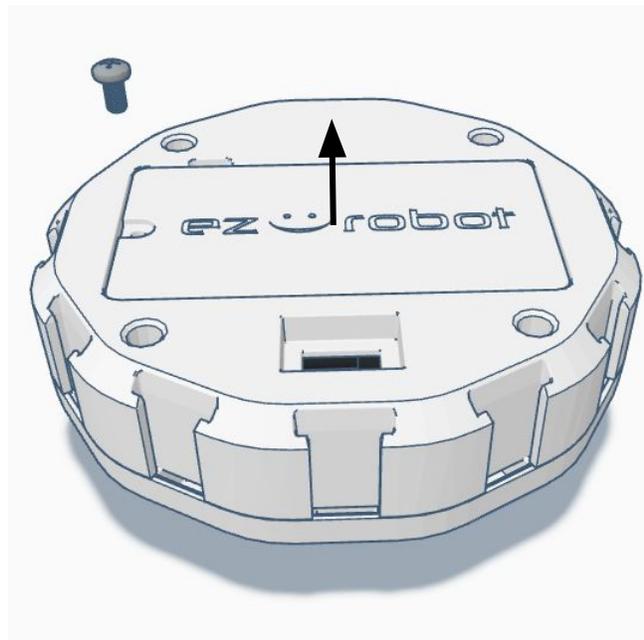
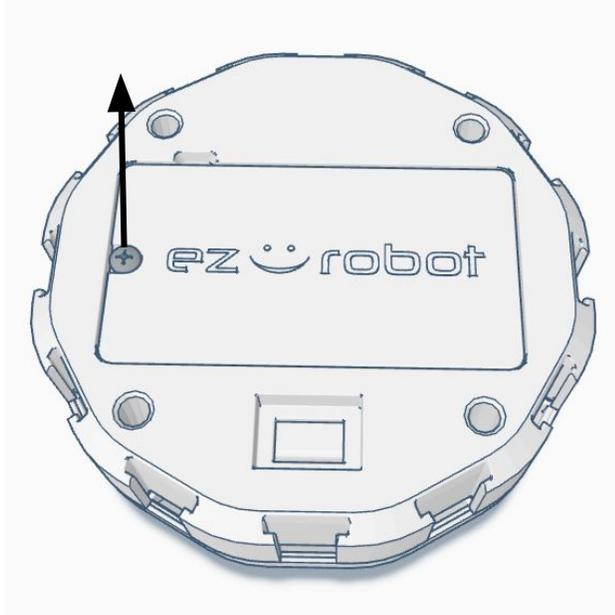
Side cutters used with Safety Glasses (not included)

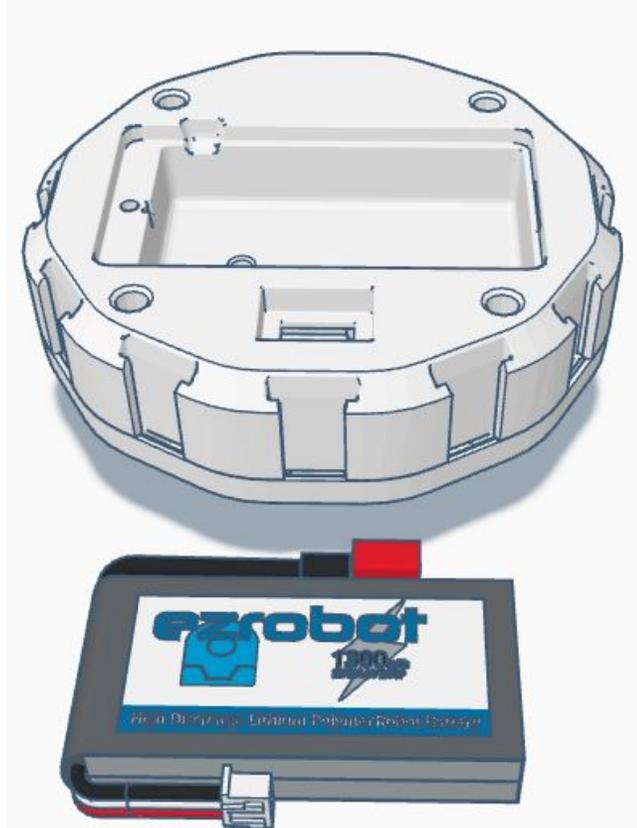
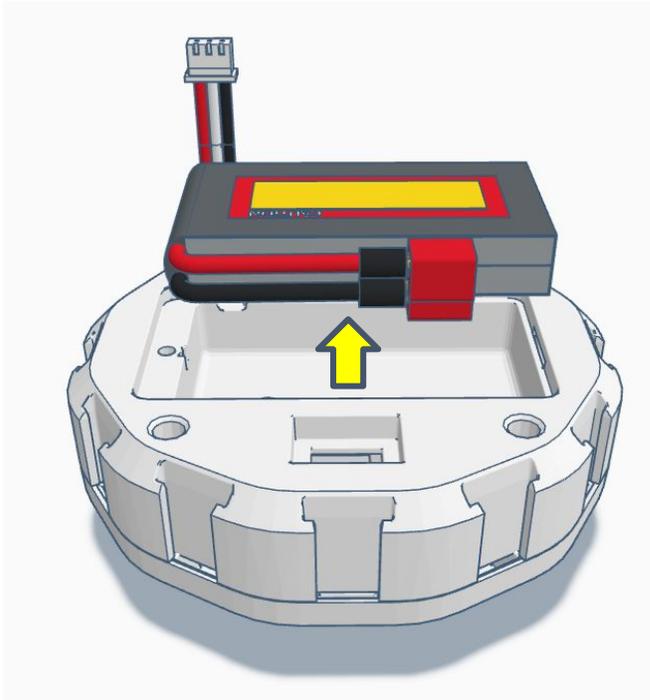
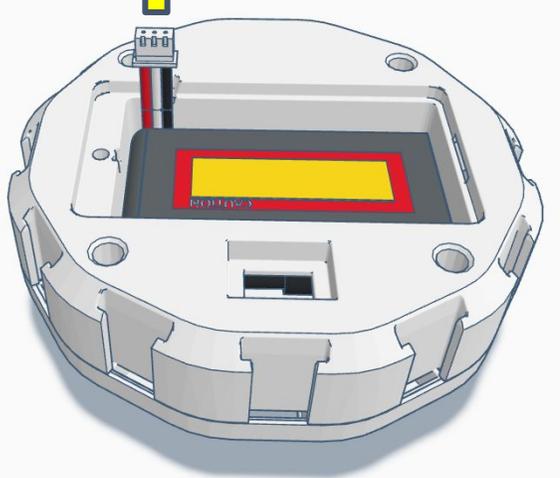
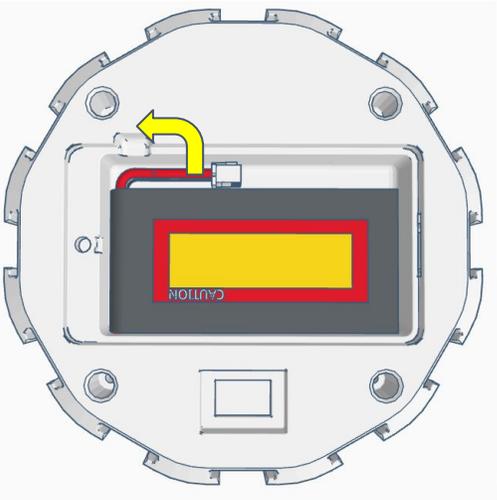


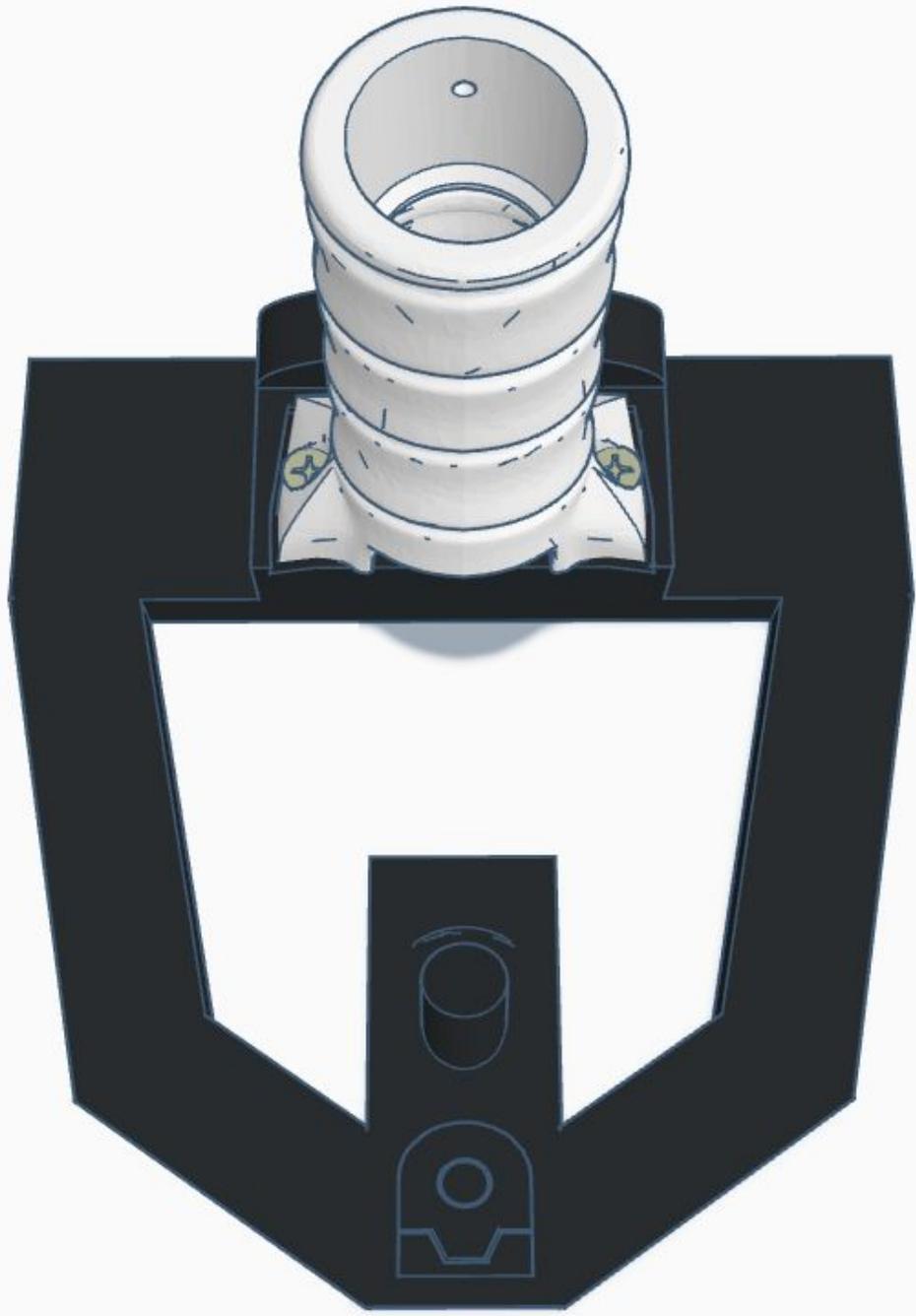
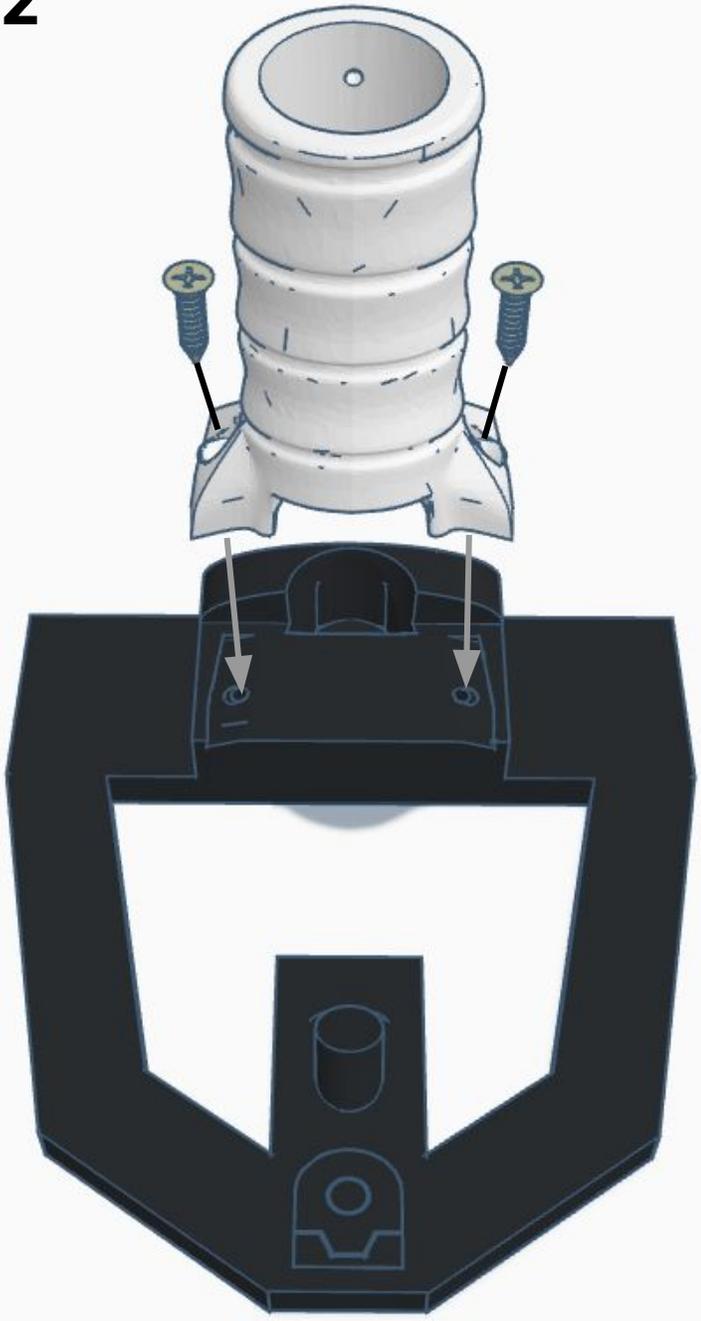
Needle Files for cleaning up 3D prints (not included)



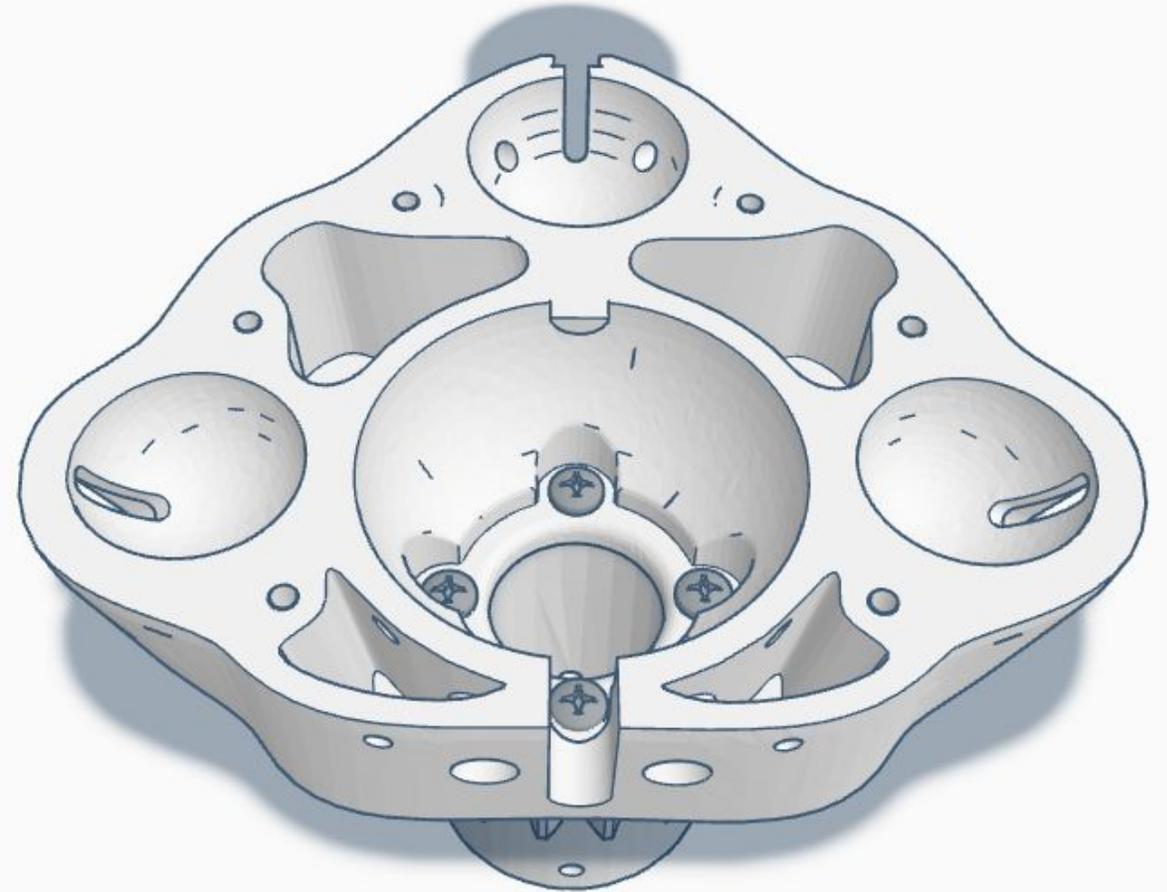
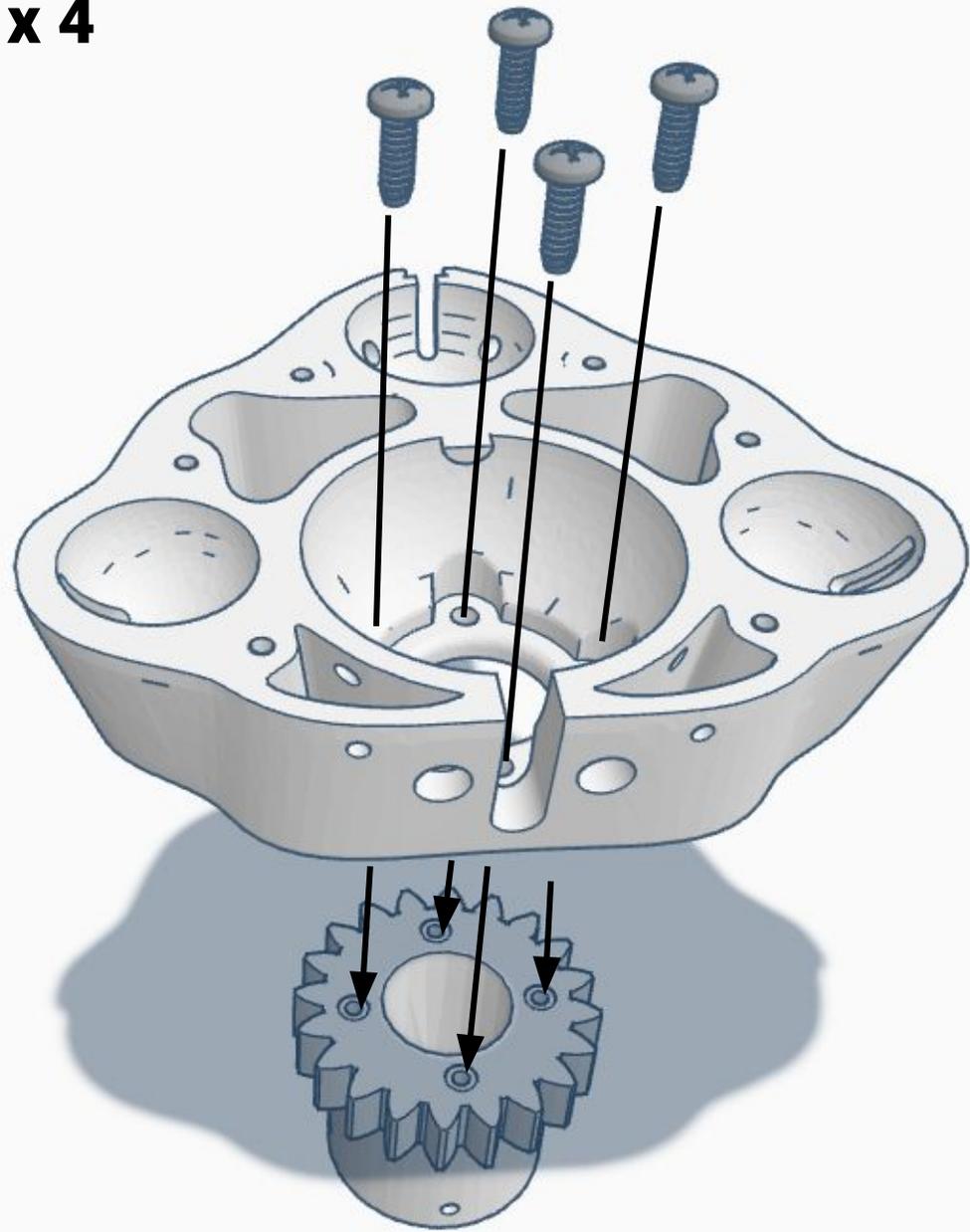
No.1  
Phillips  
Screwdriver



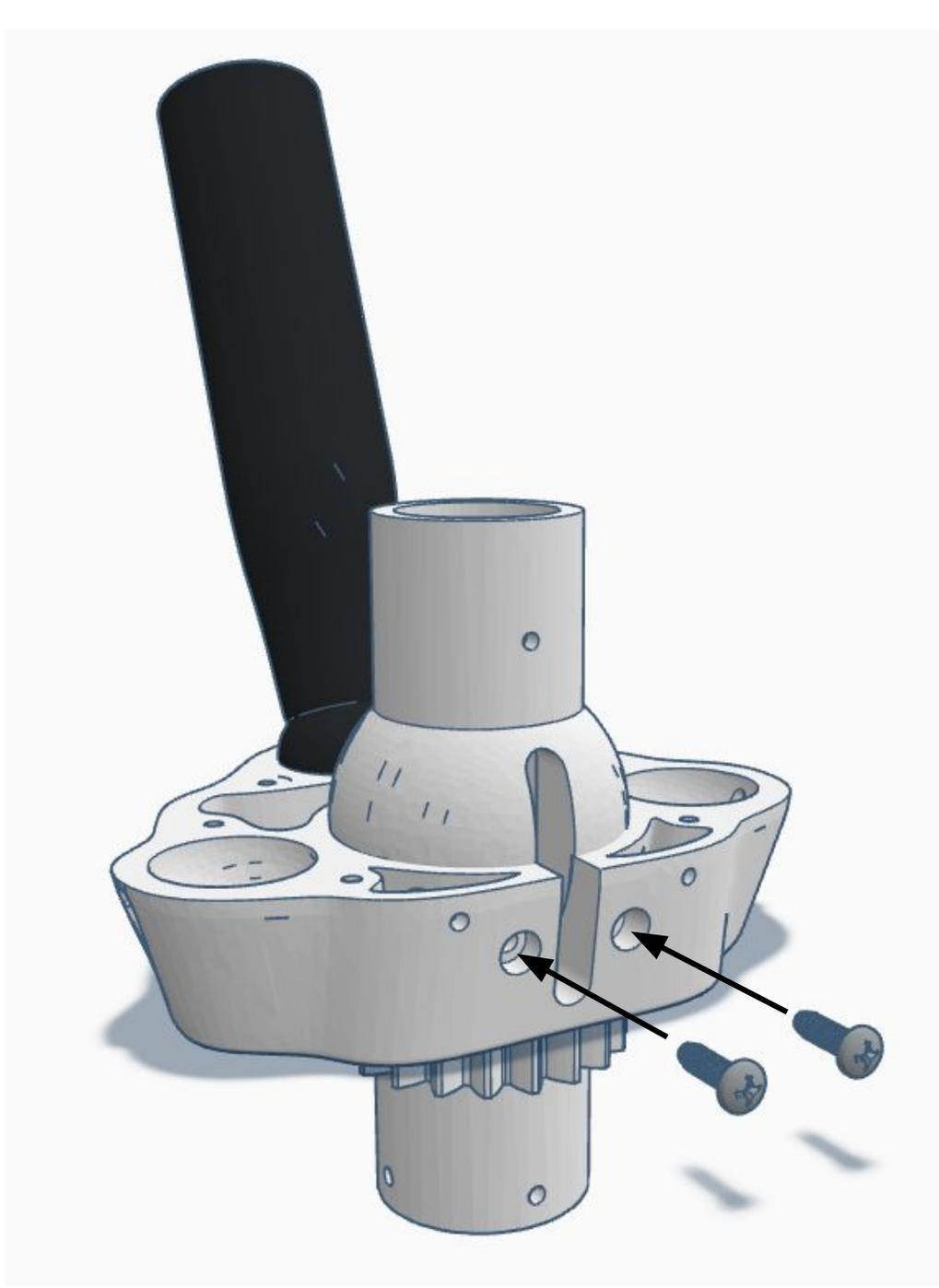
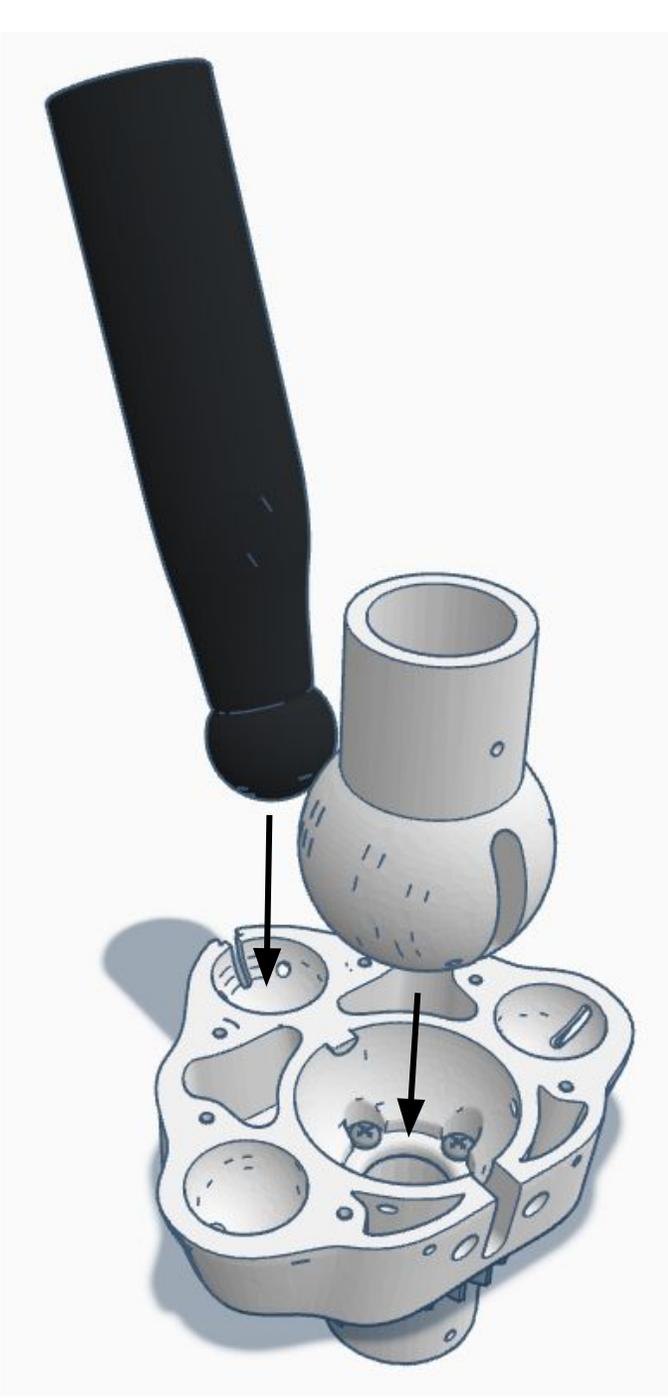




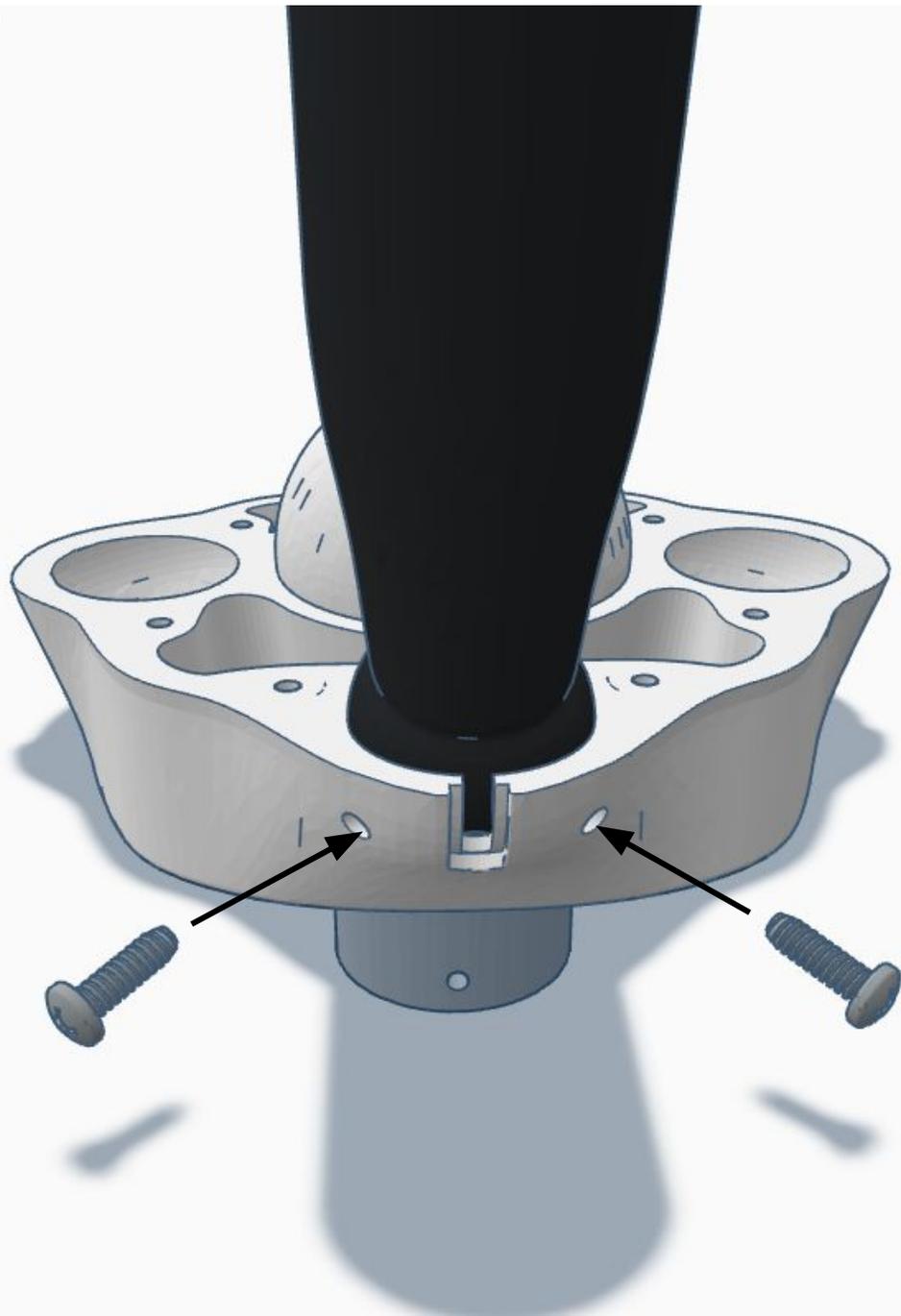
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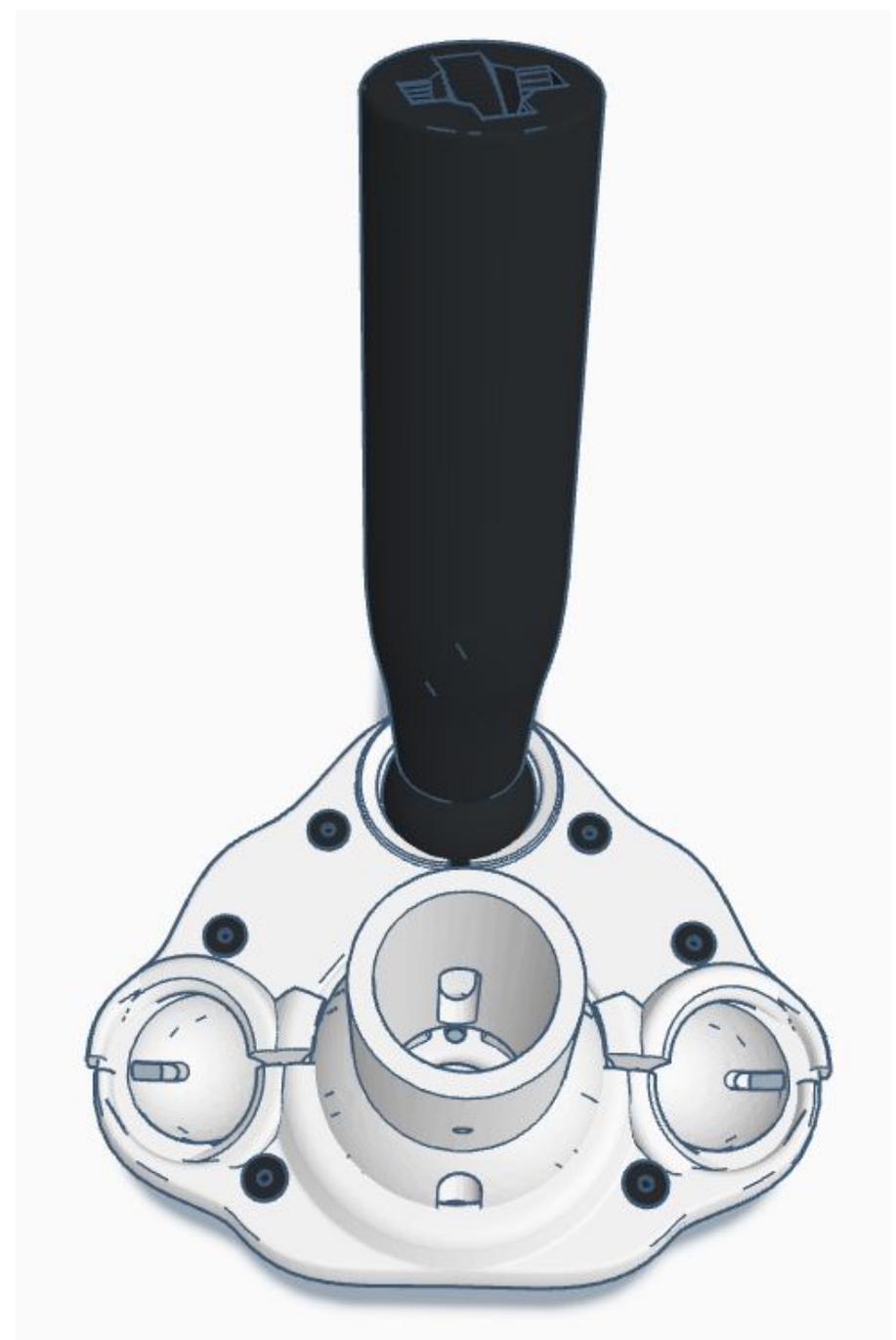
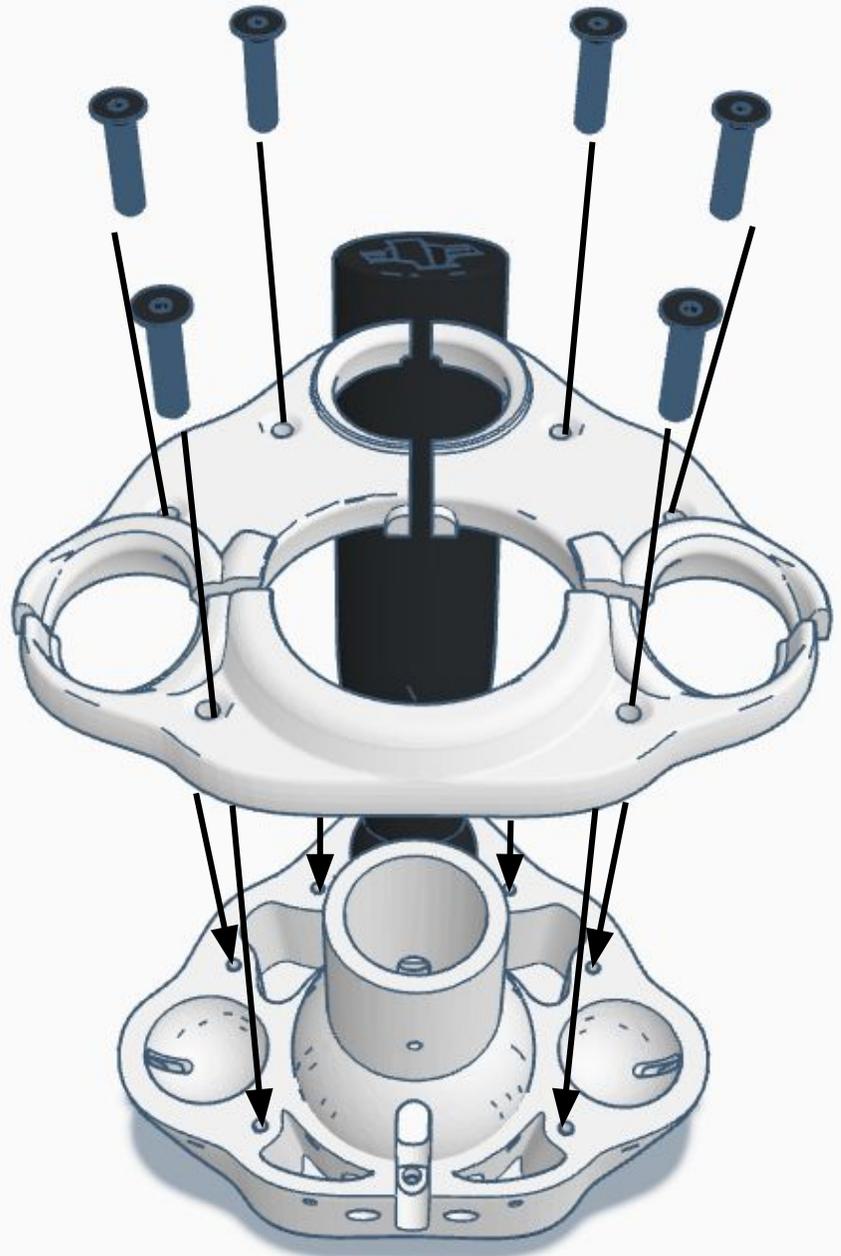
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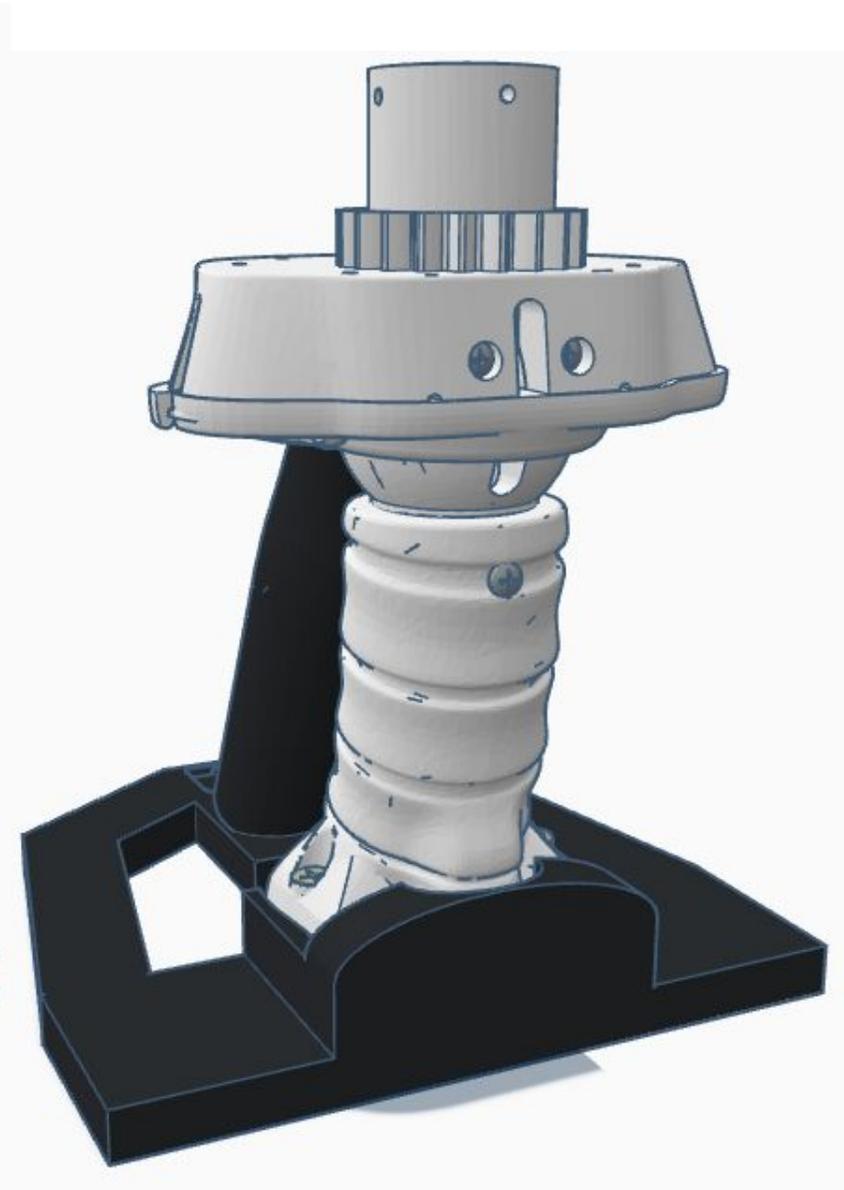
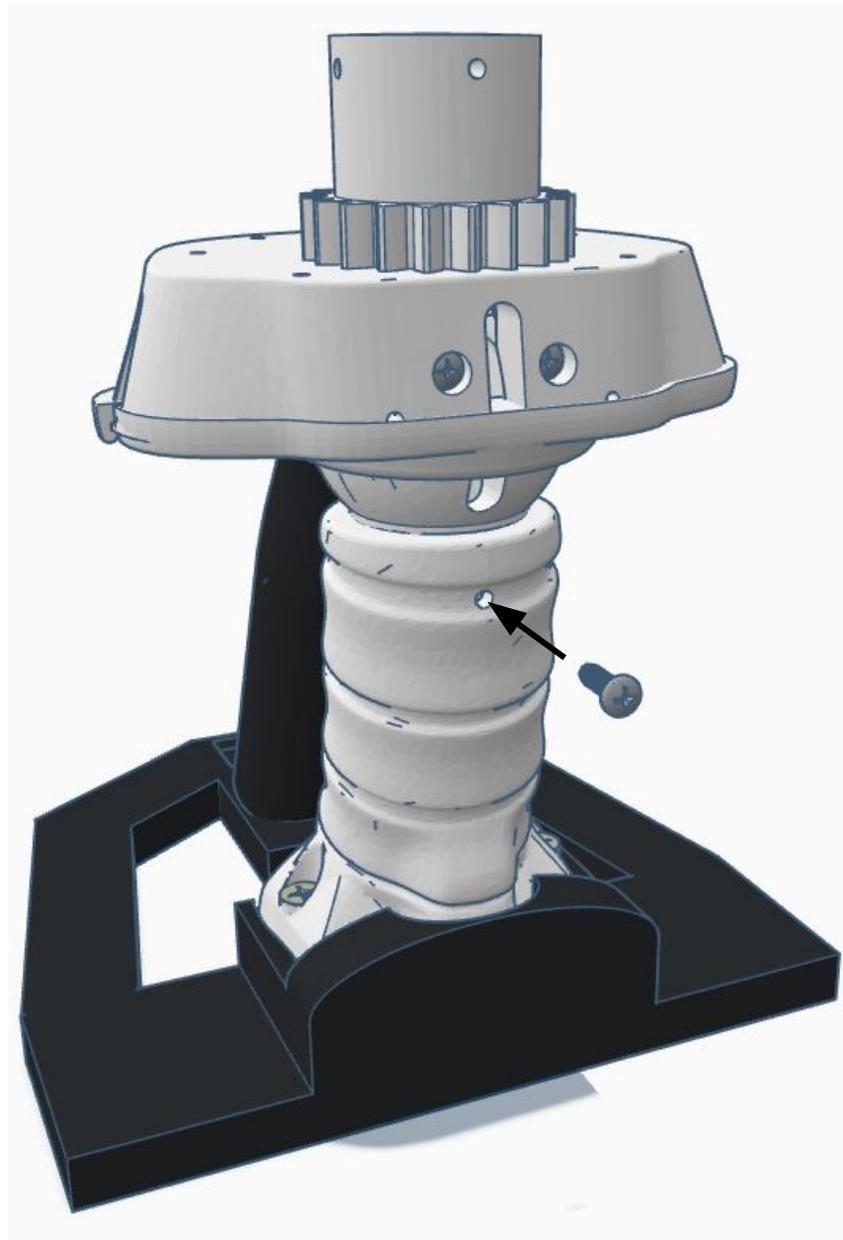
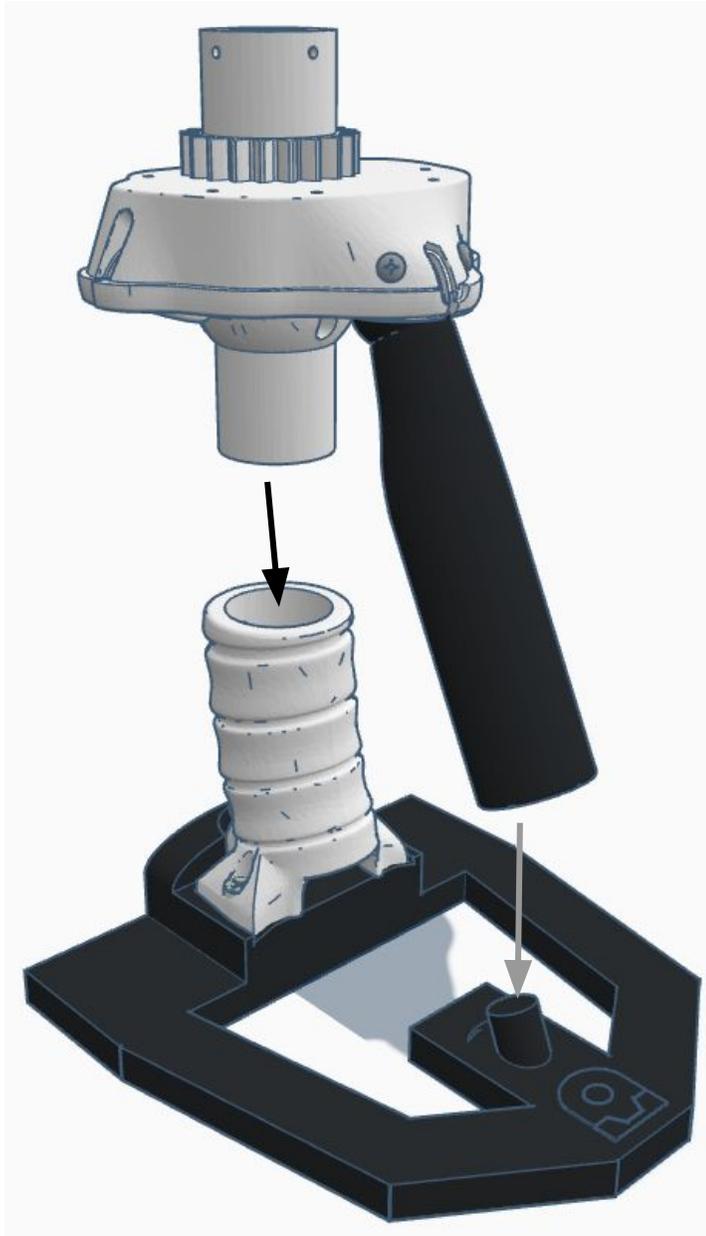
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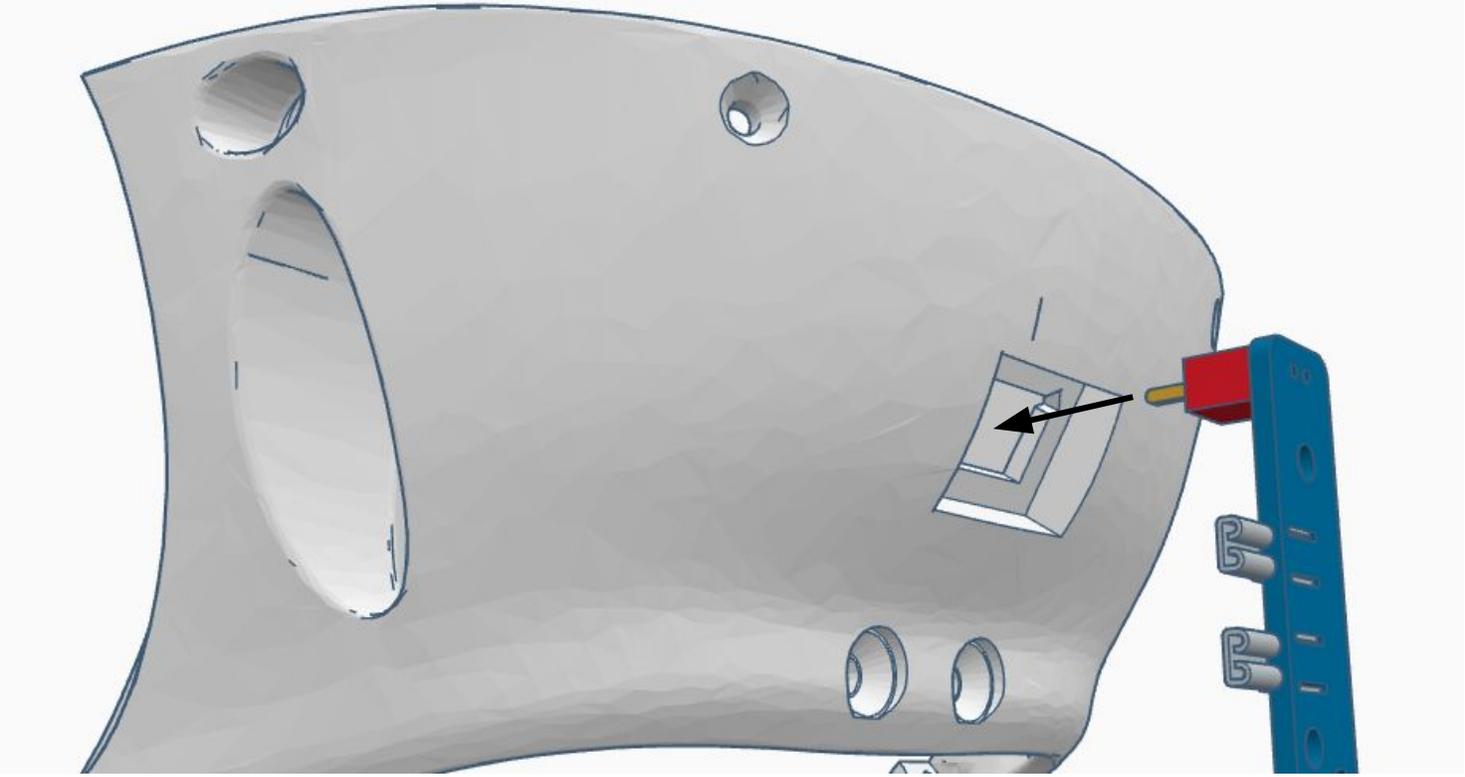
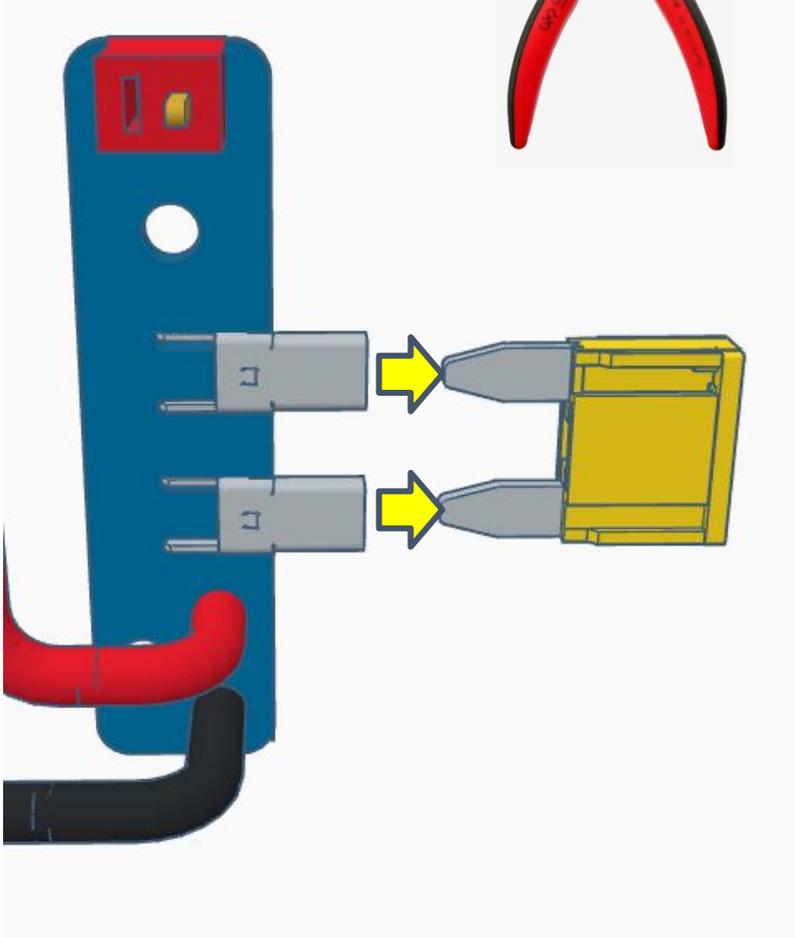


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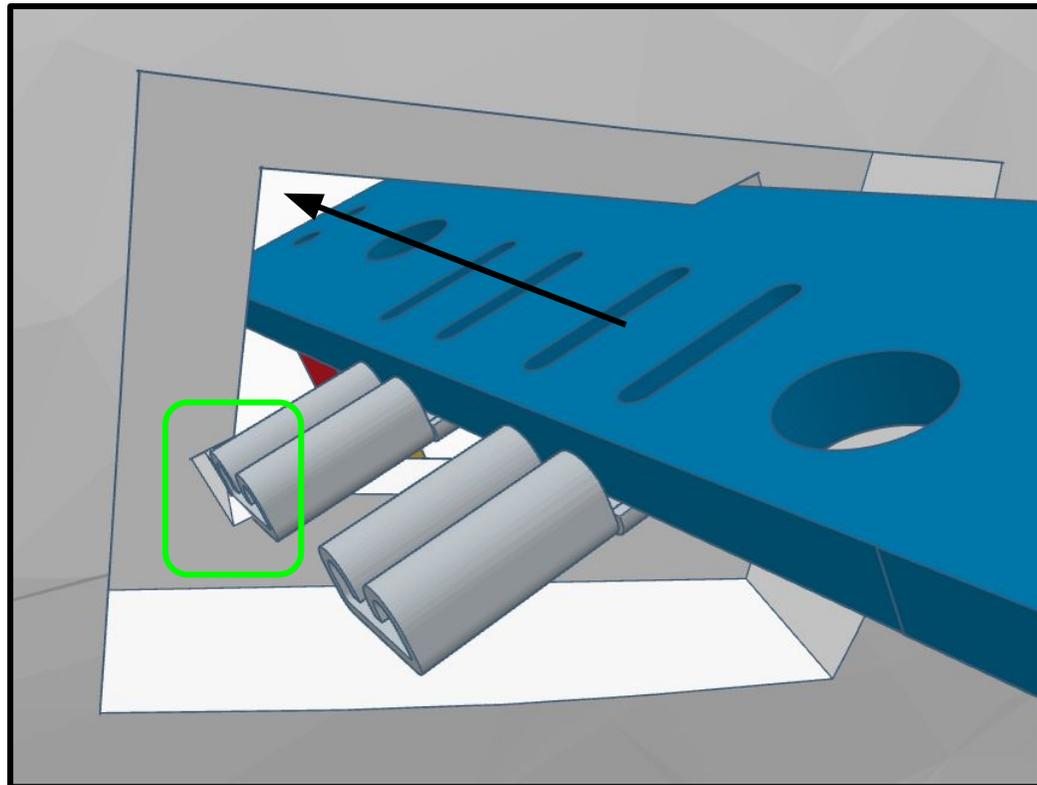
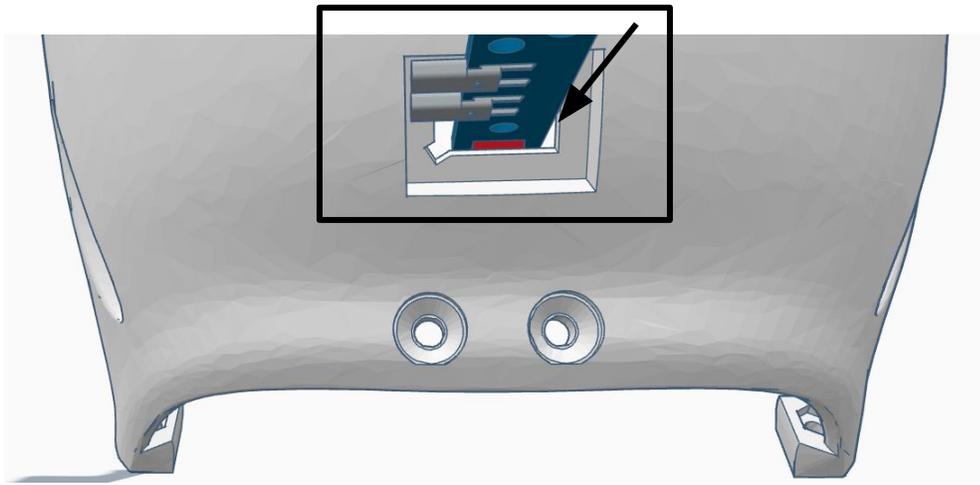


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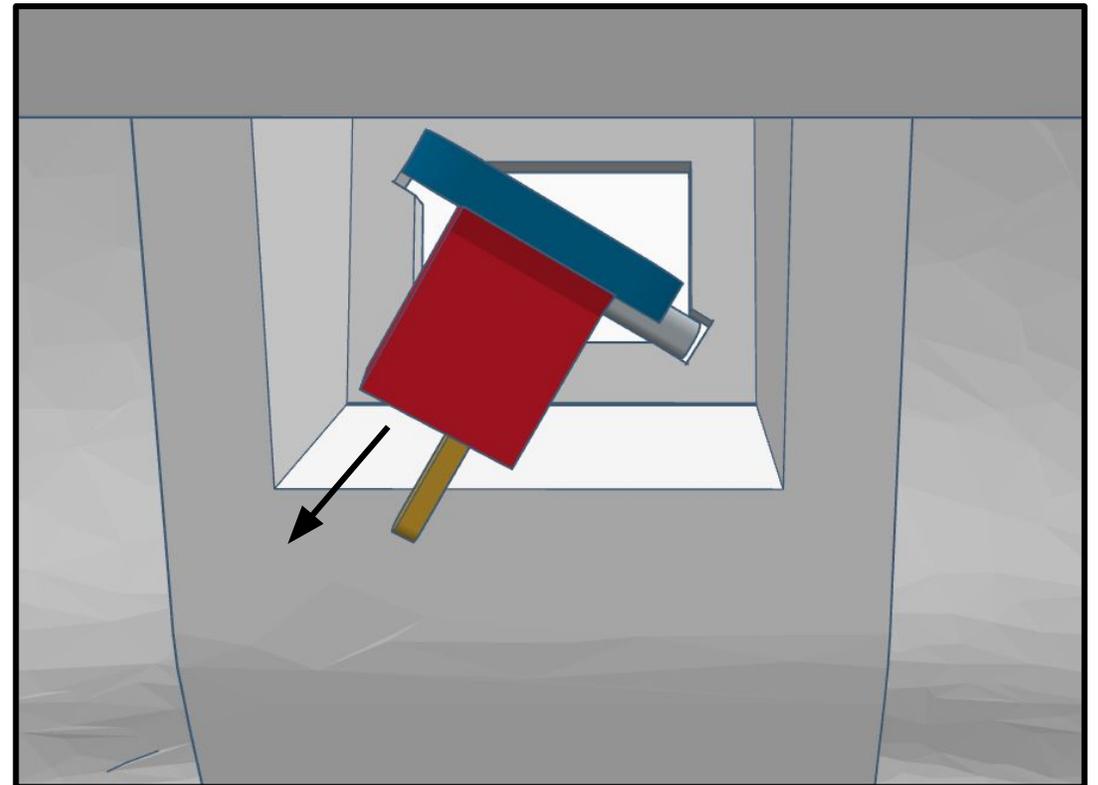
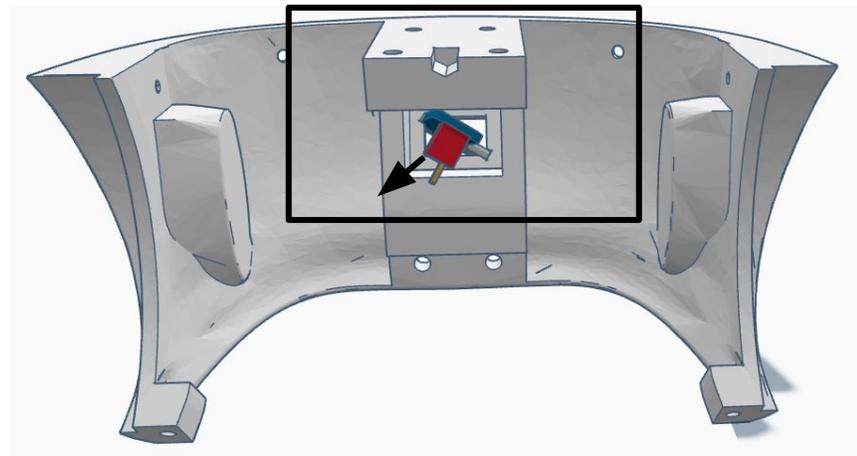


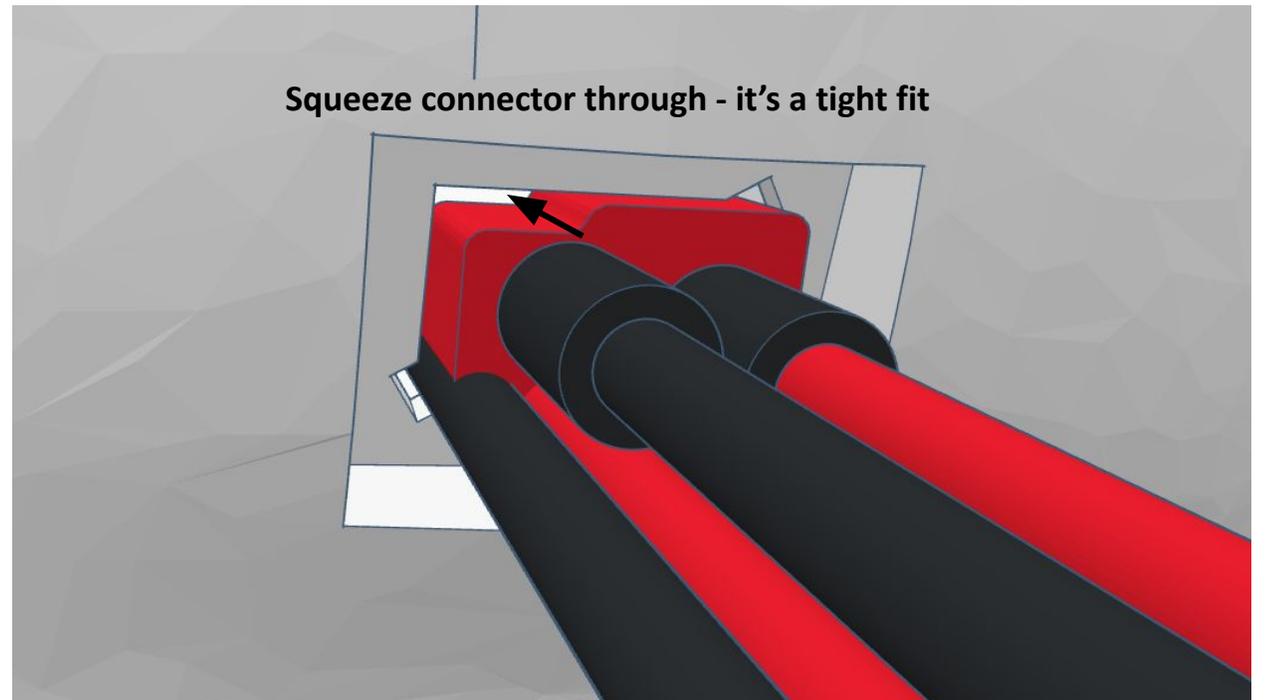
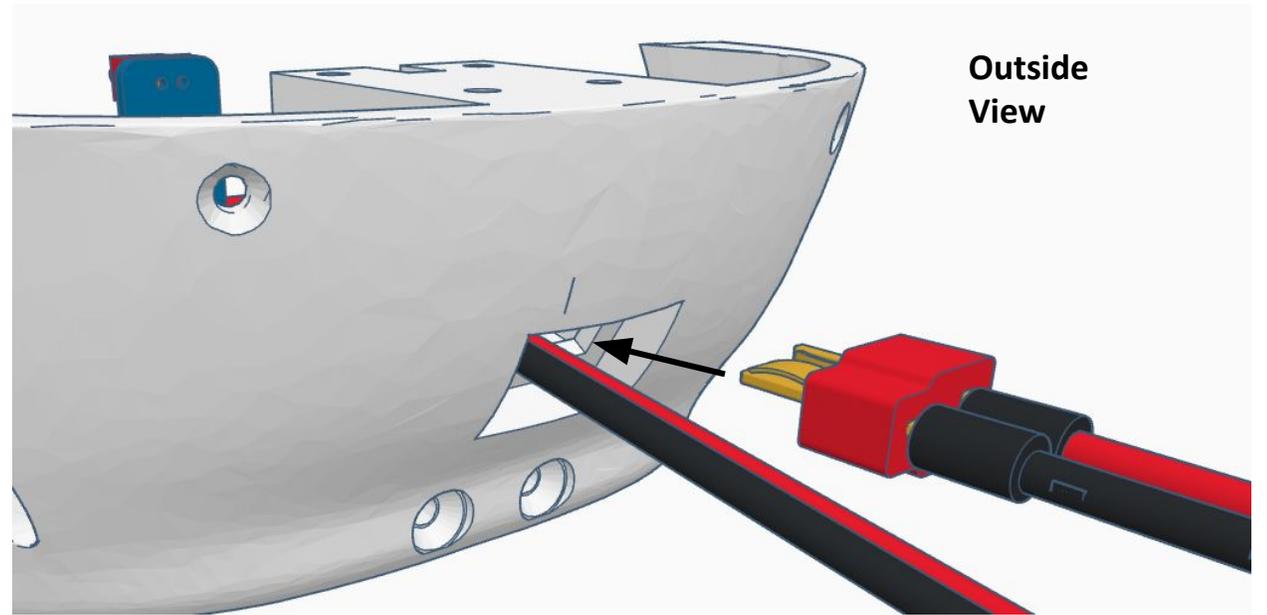
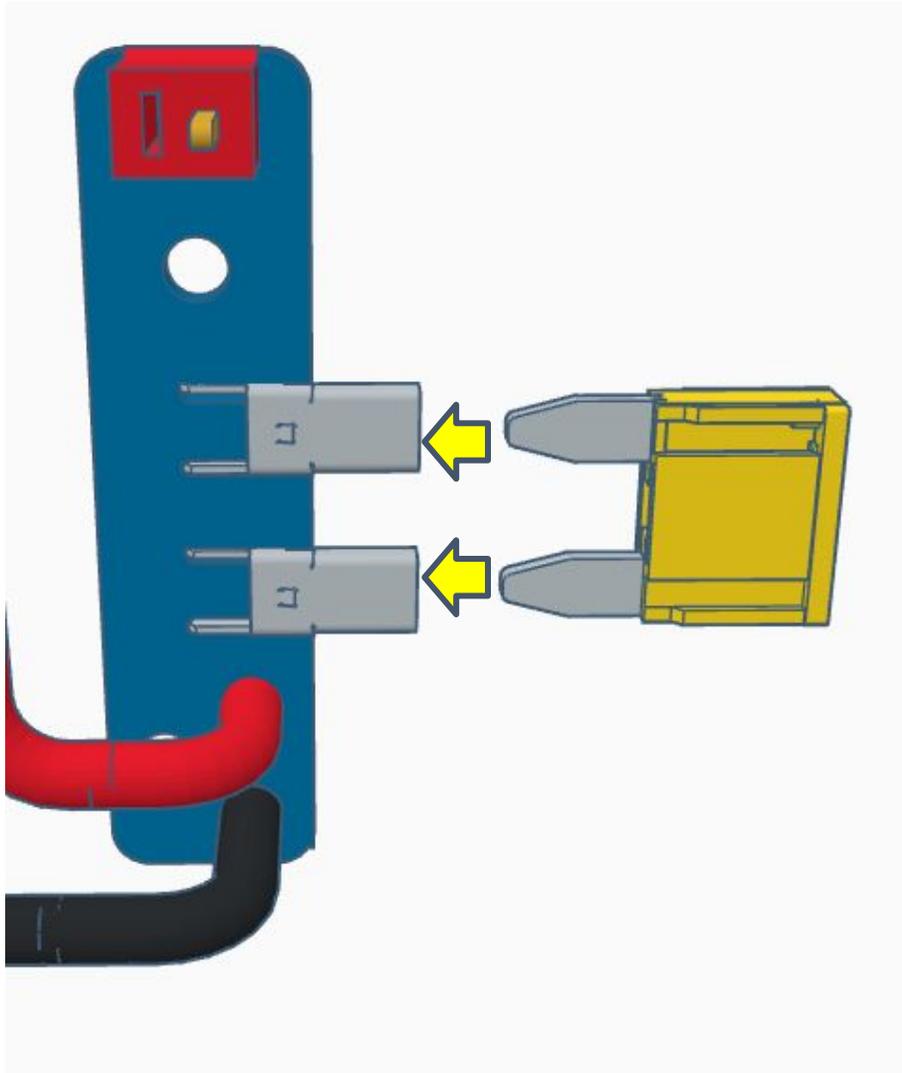


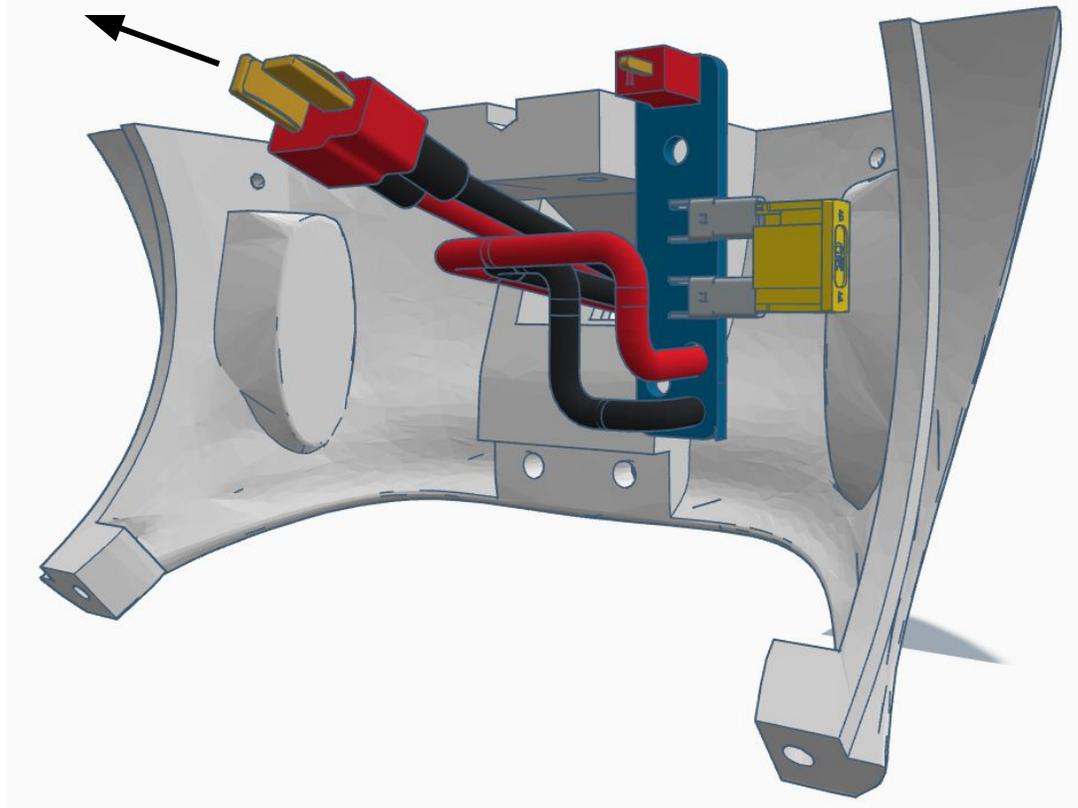
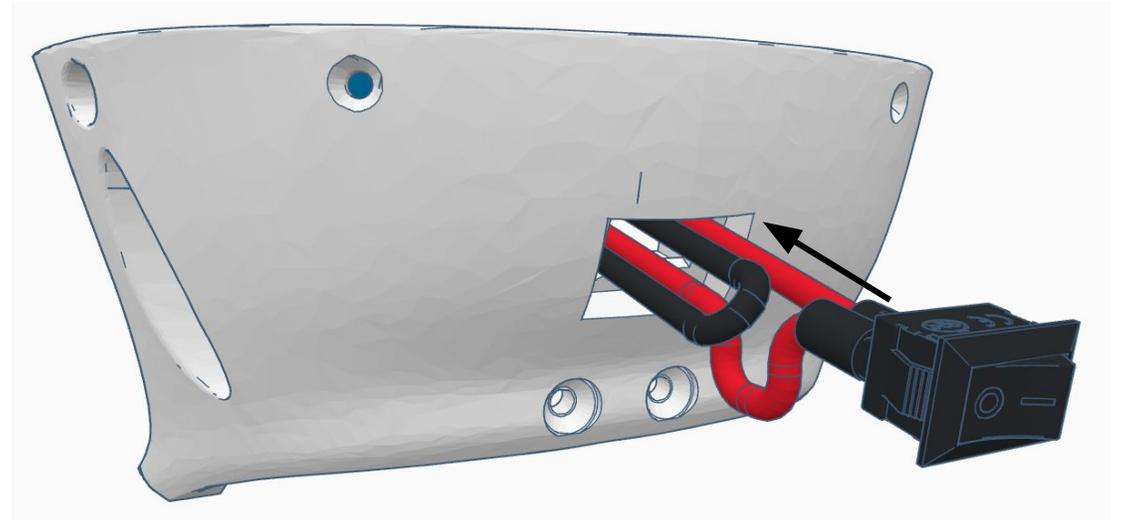
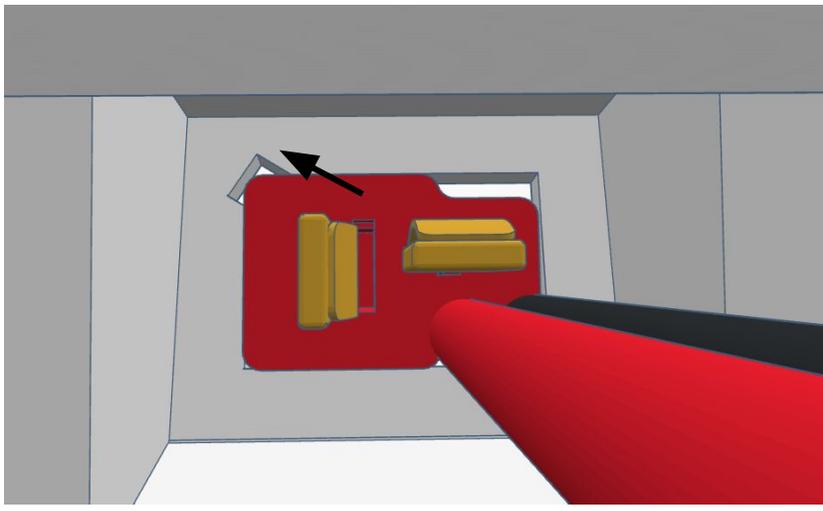
Outside View



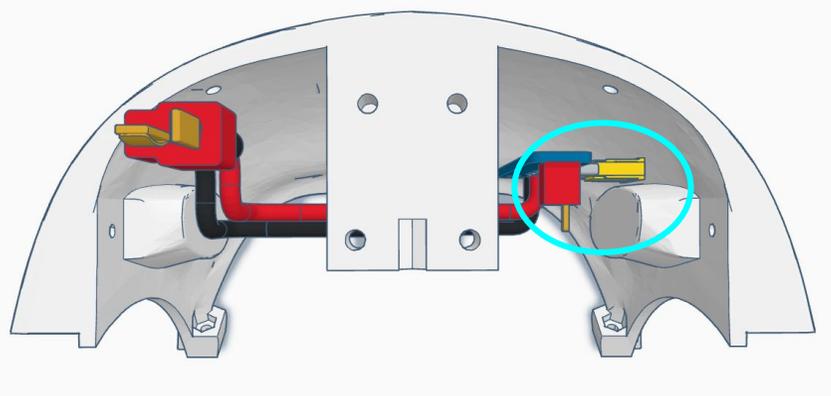
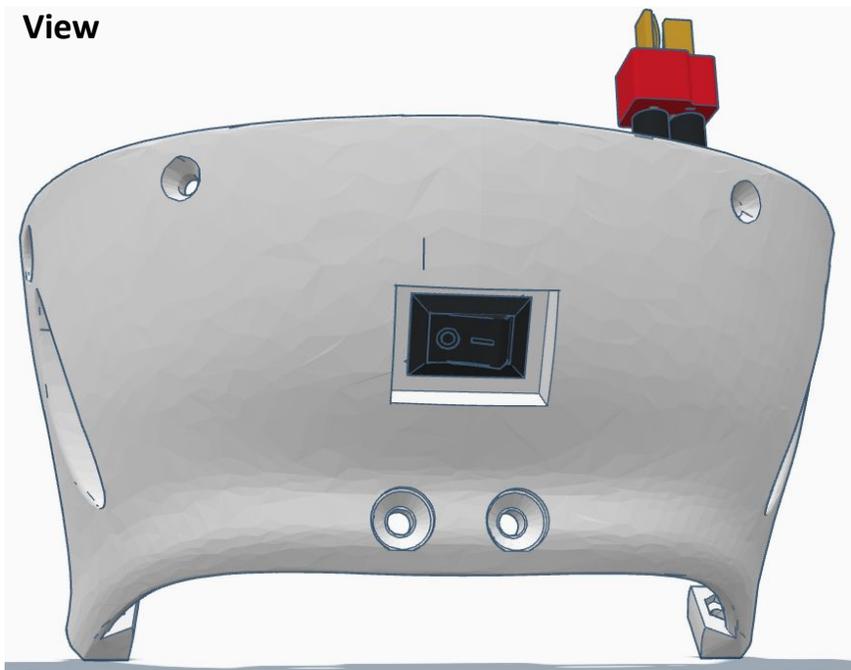
Inside View



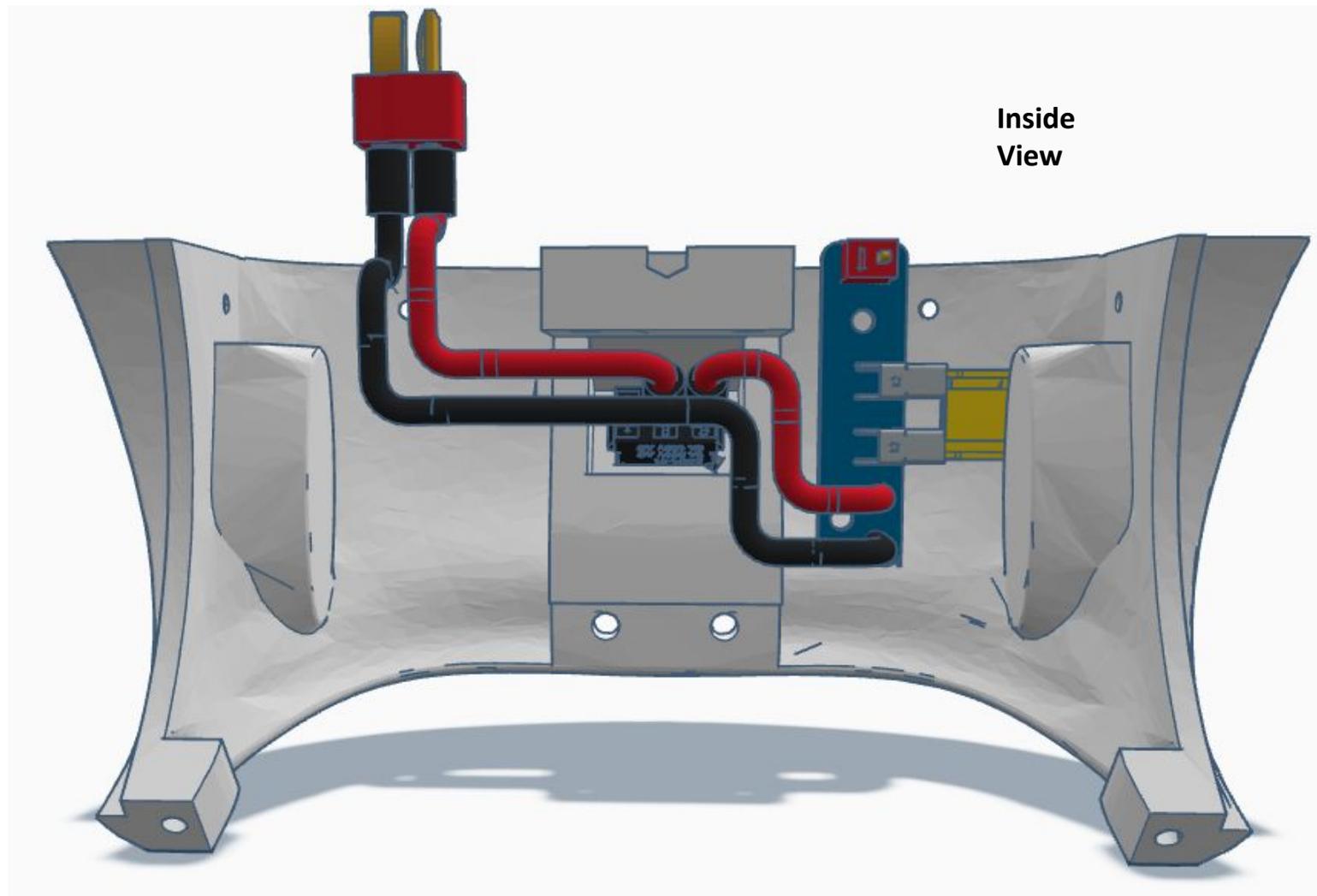


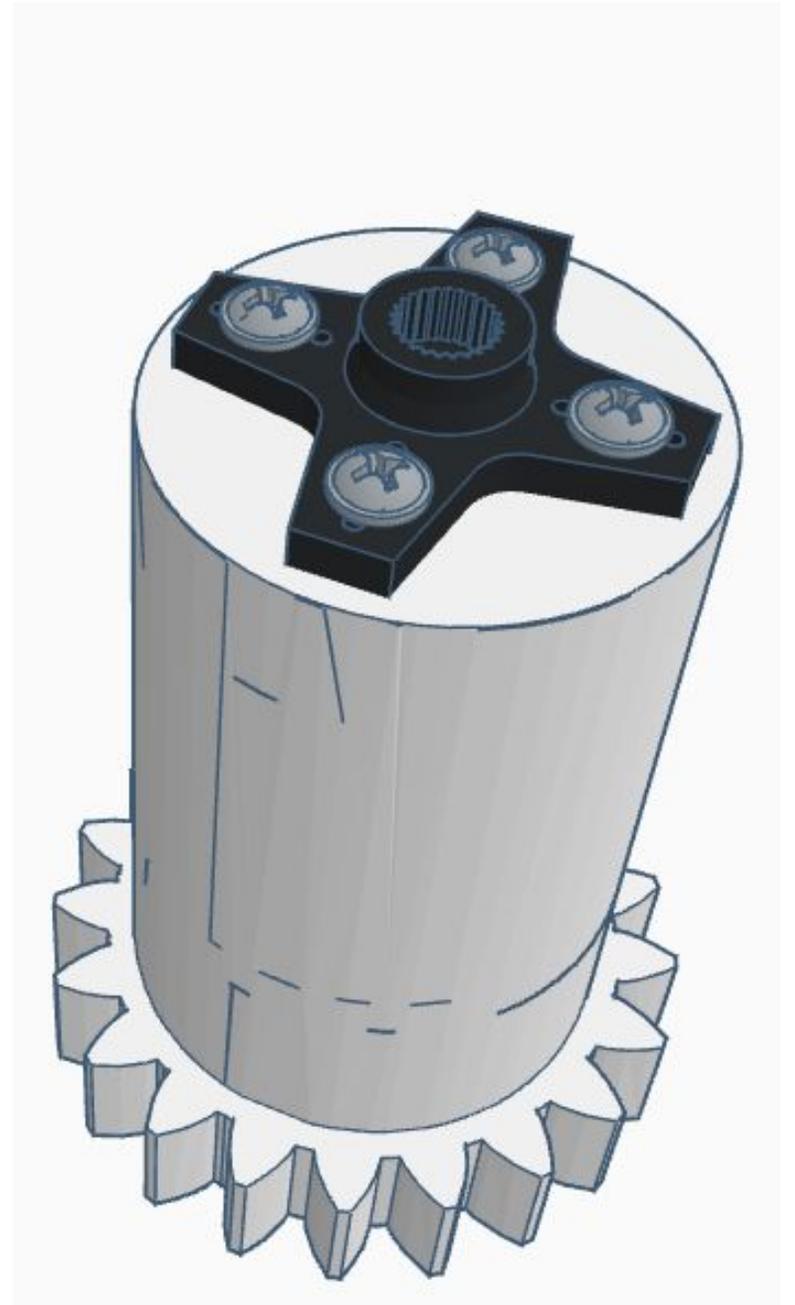
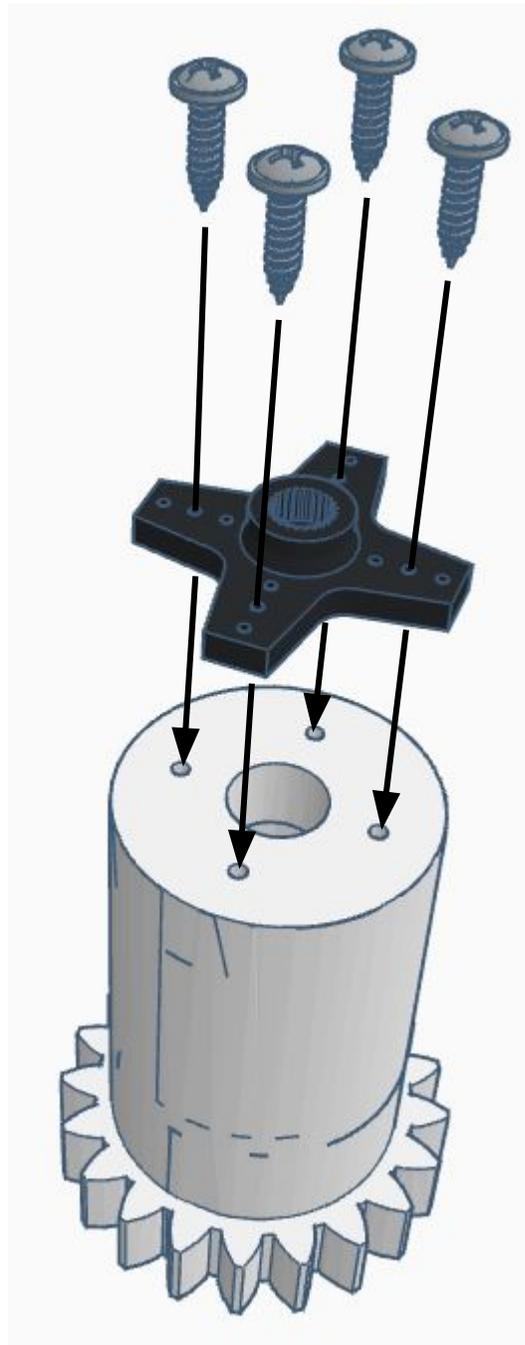
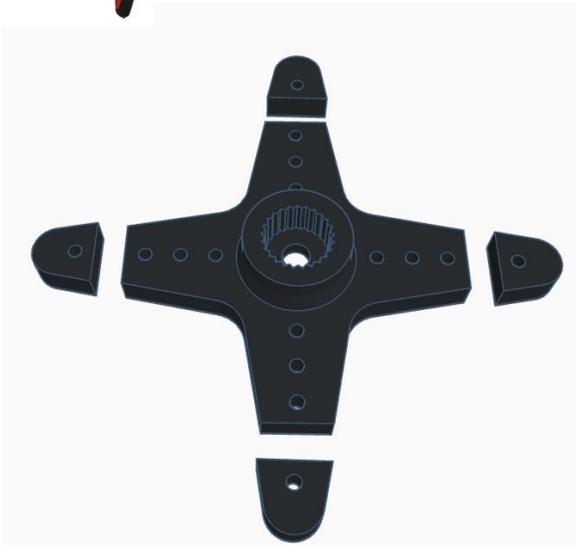
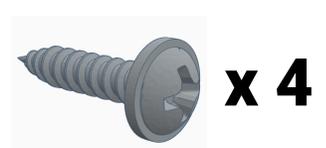


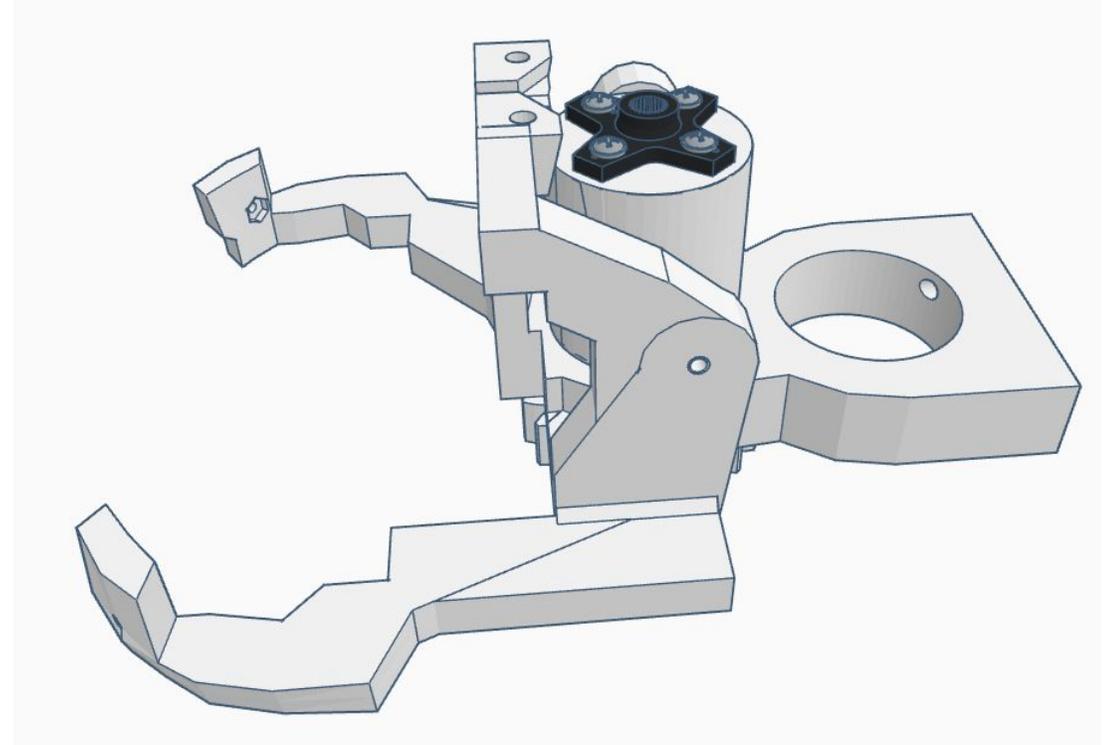
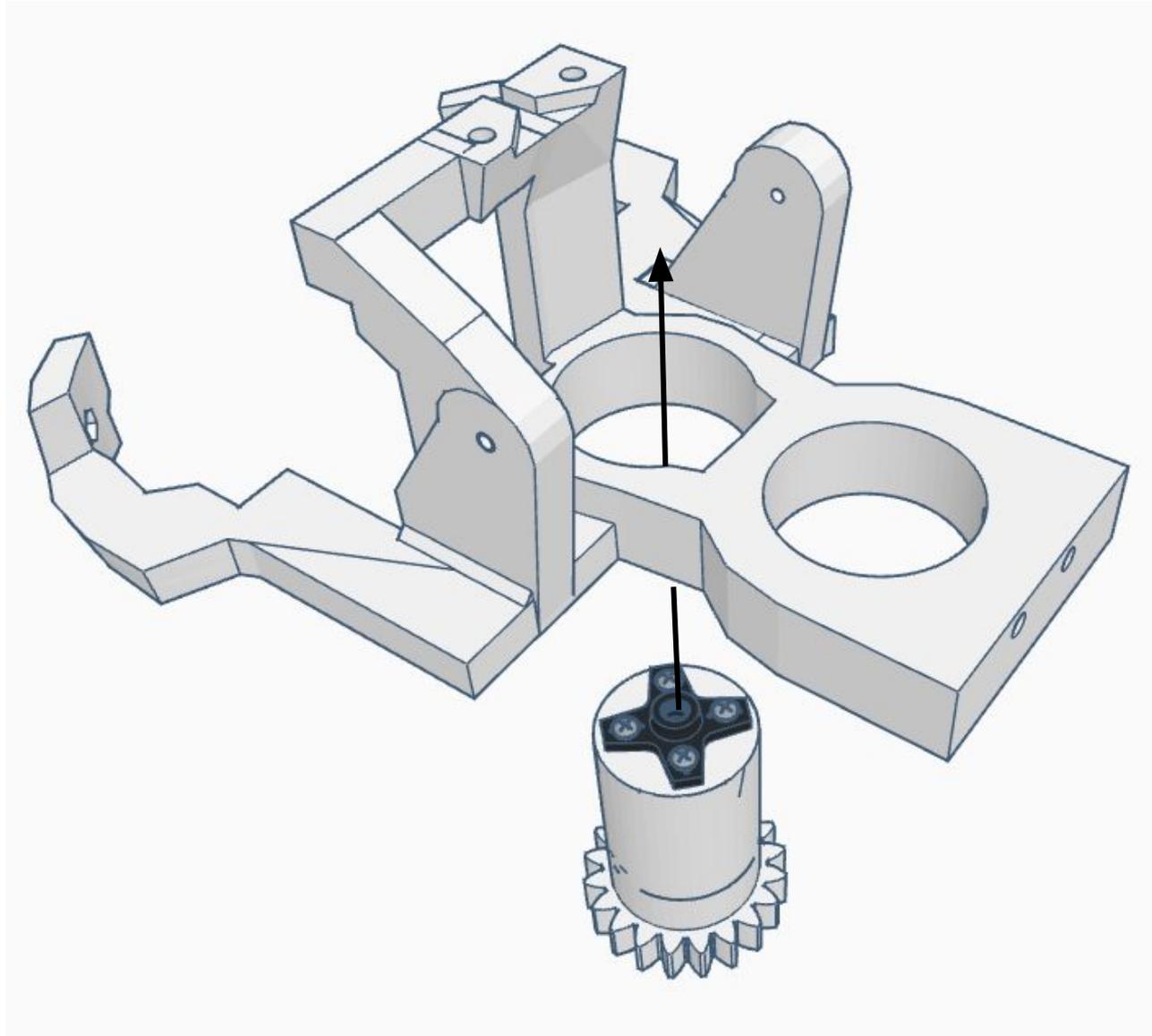
**Outside  
View**

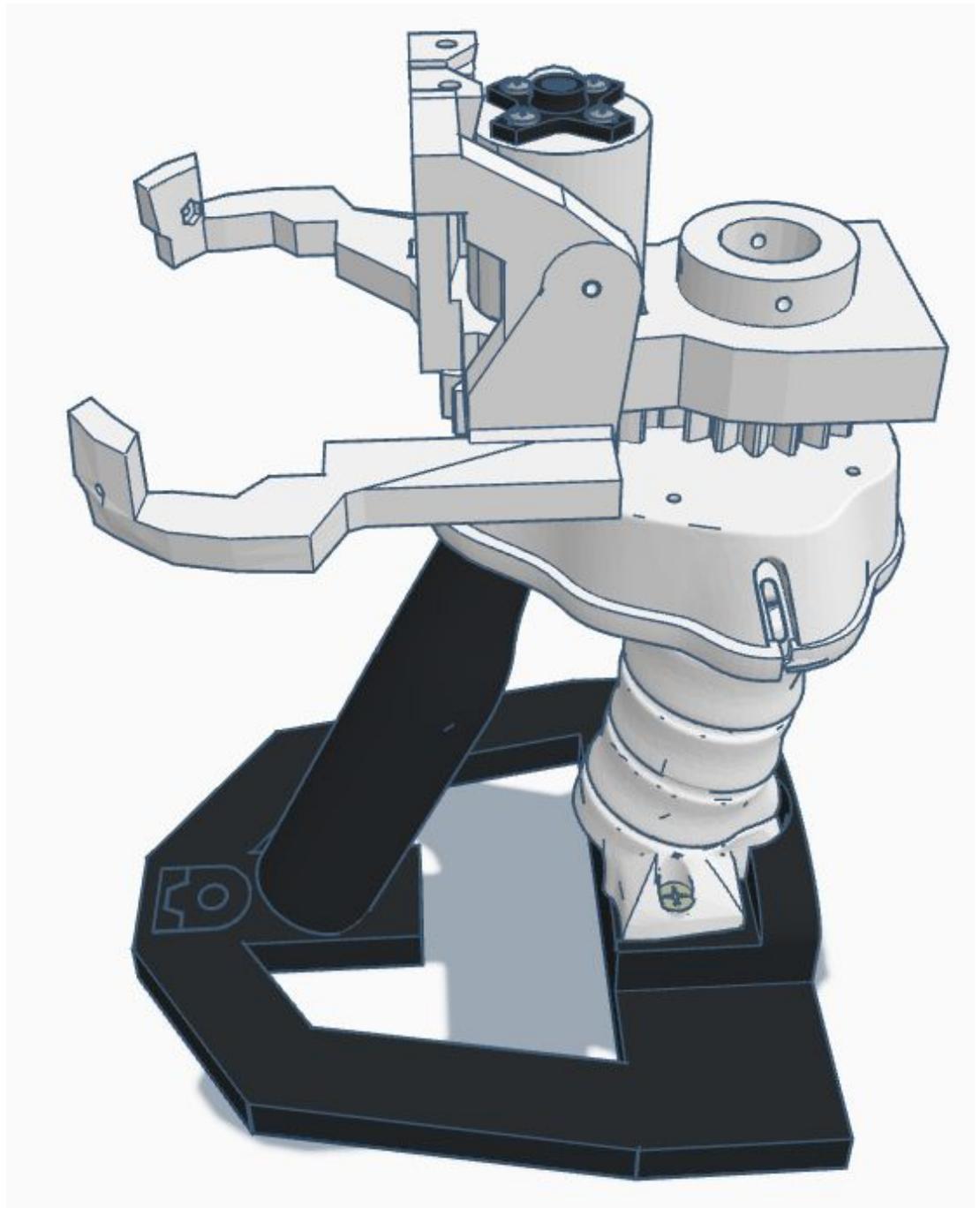
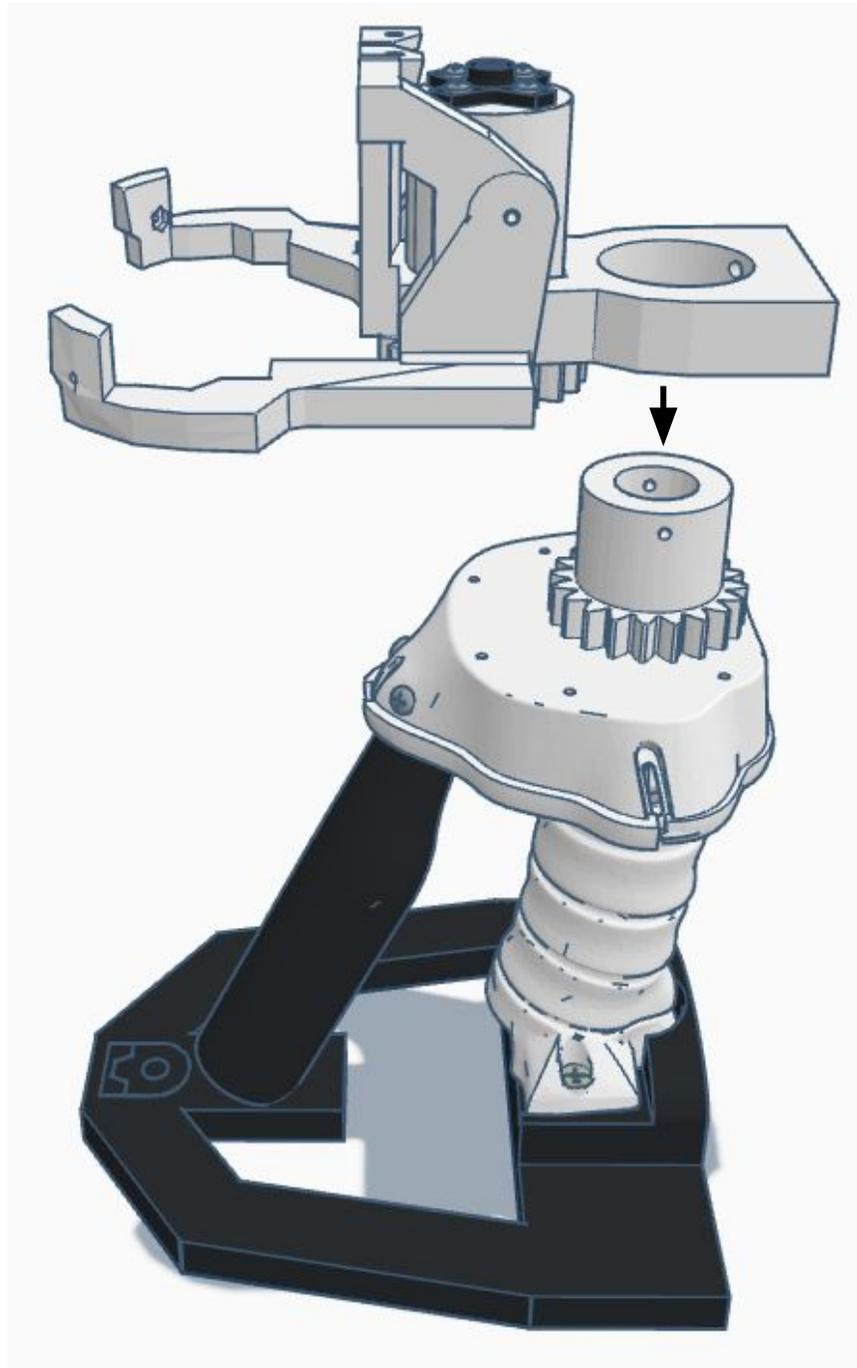


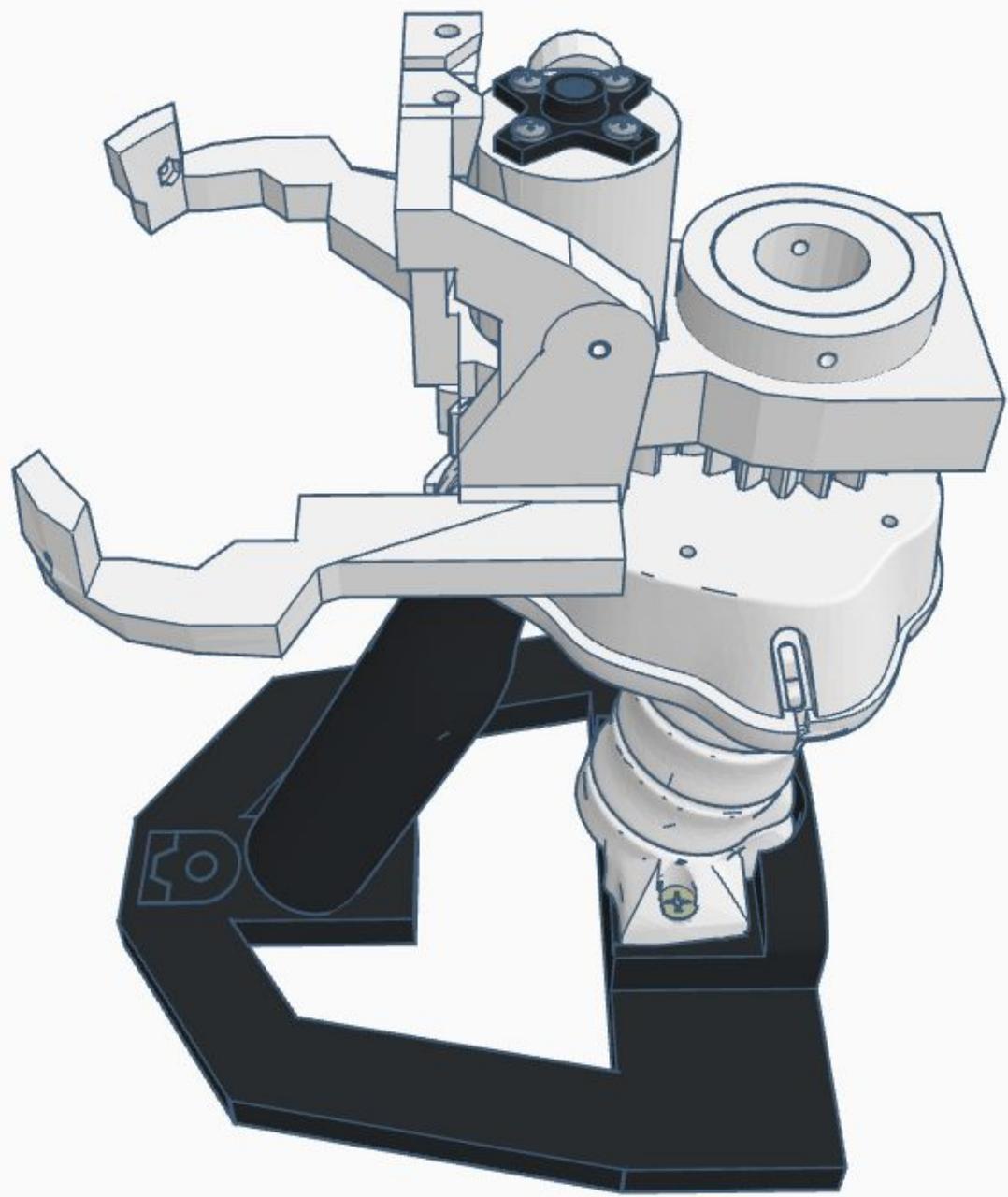
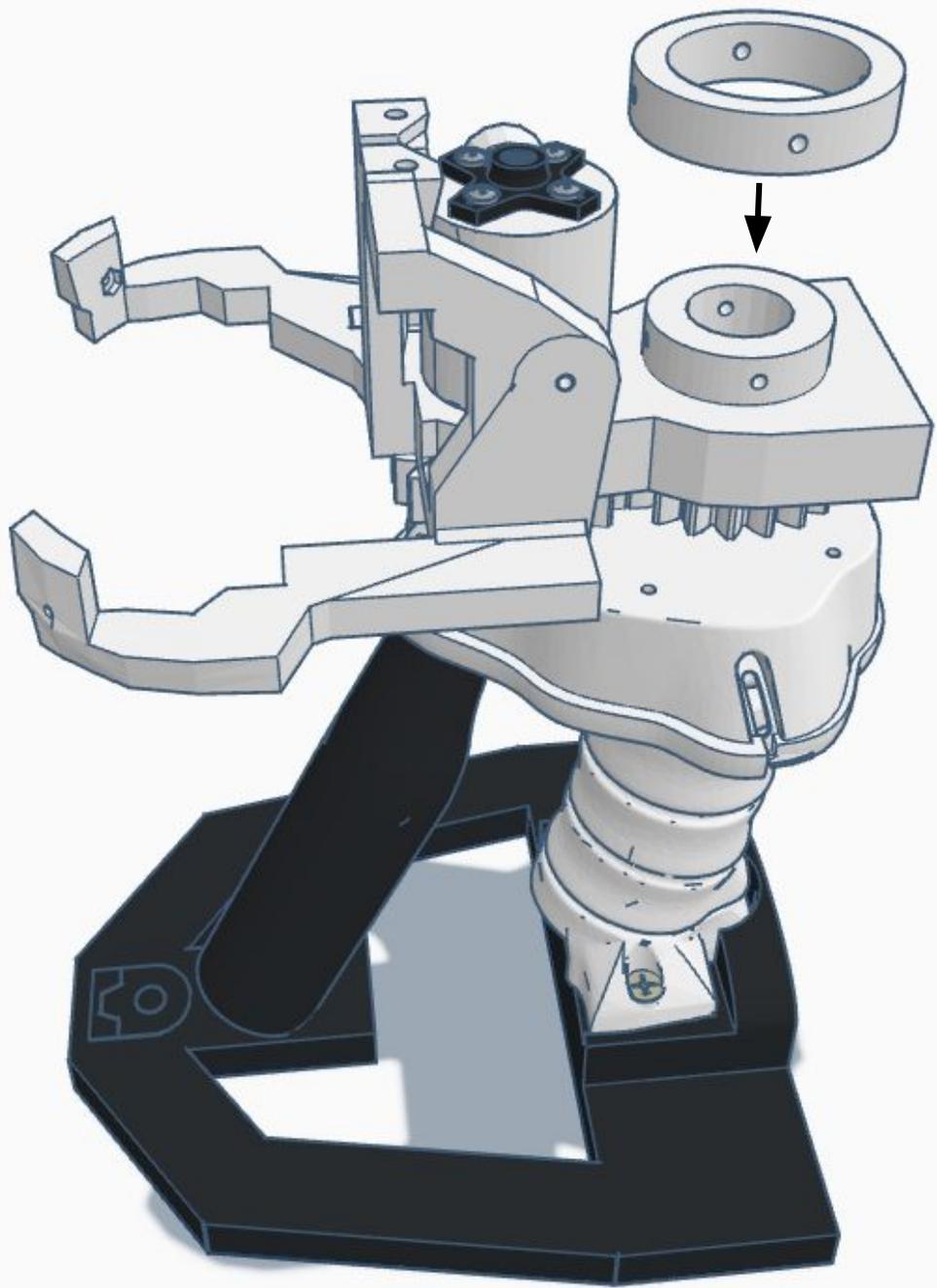
**Inside  
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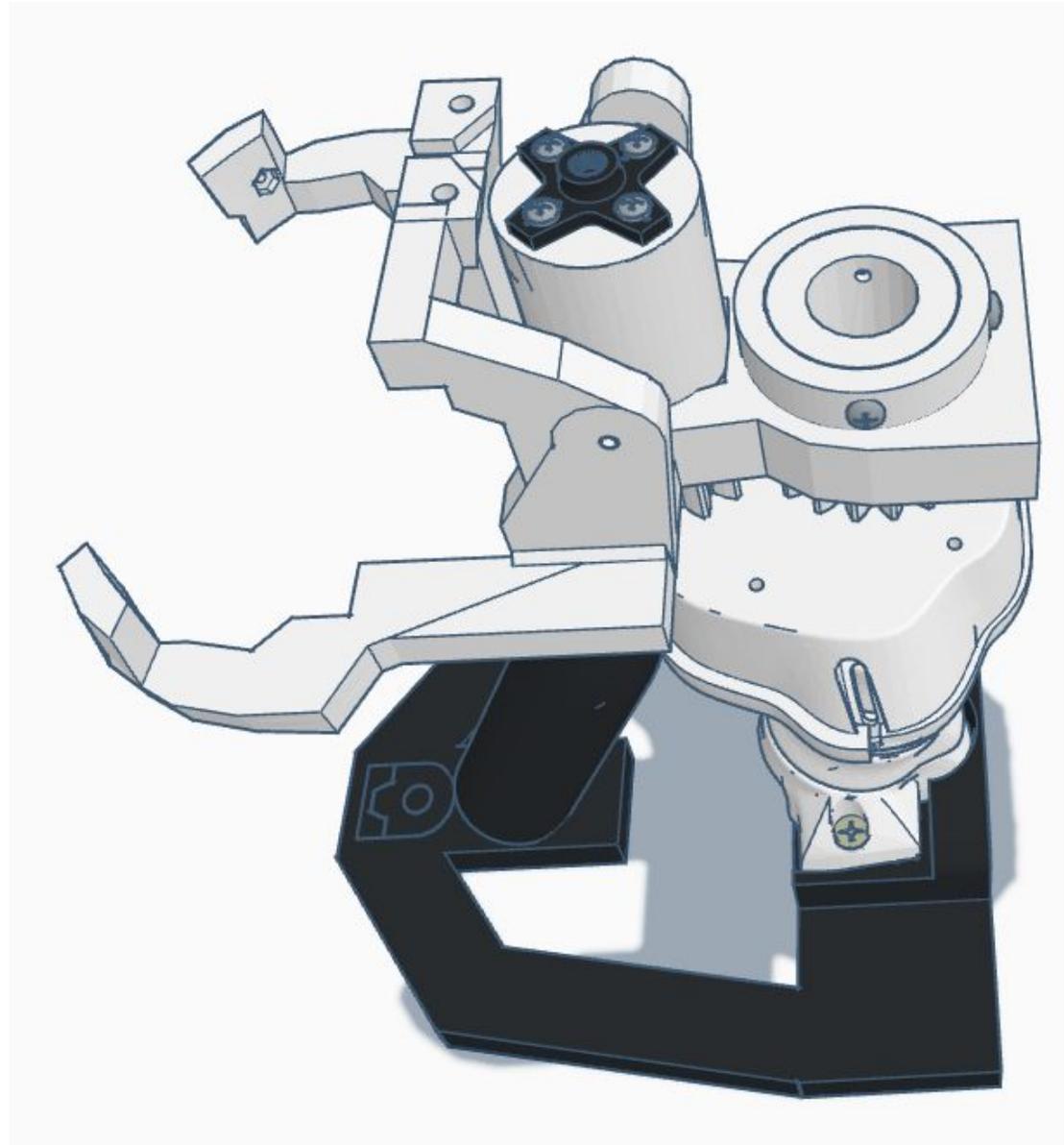
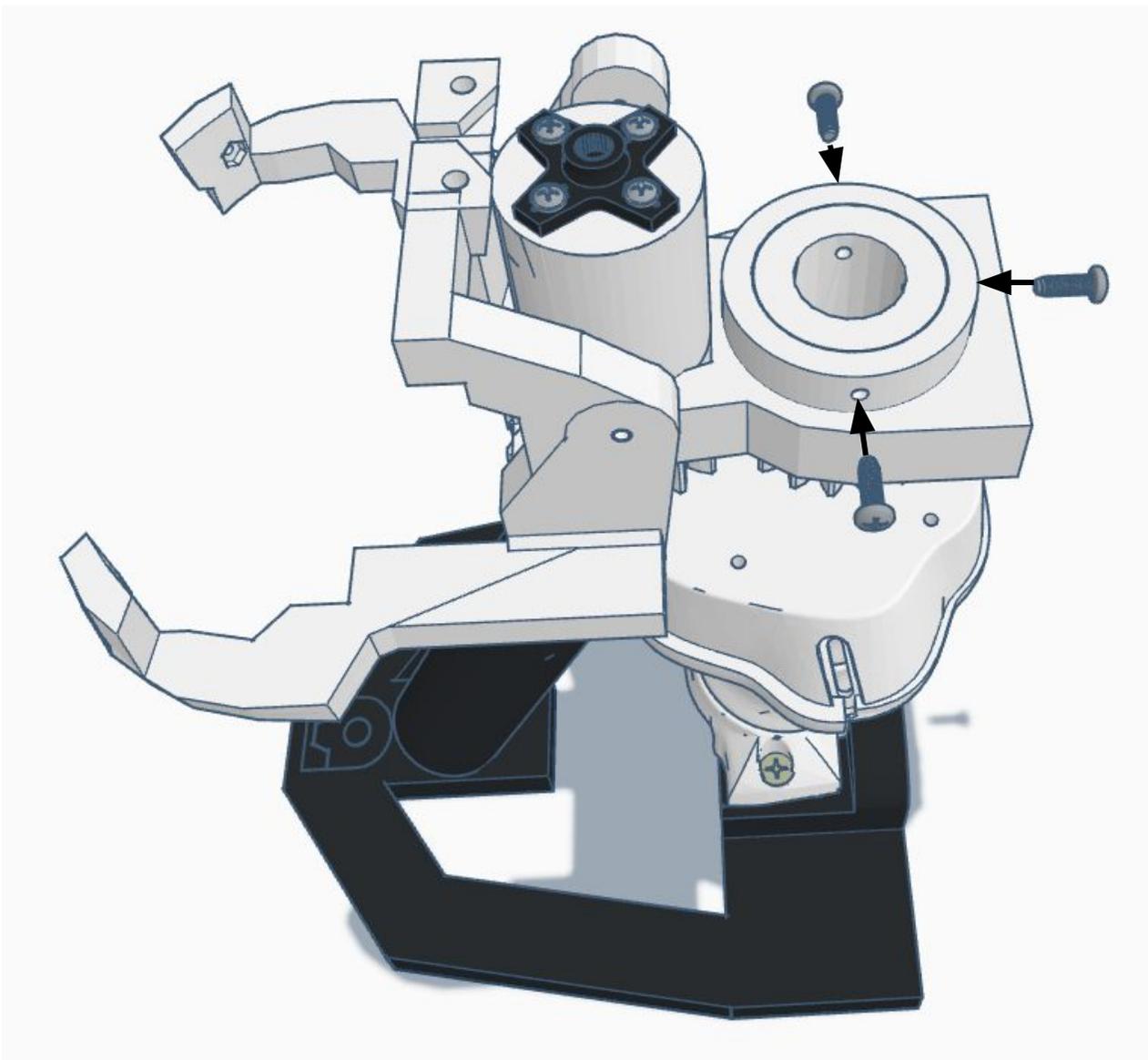




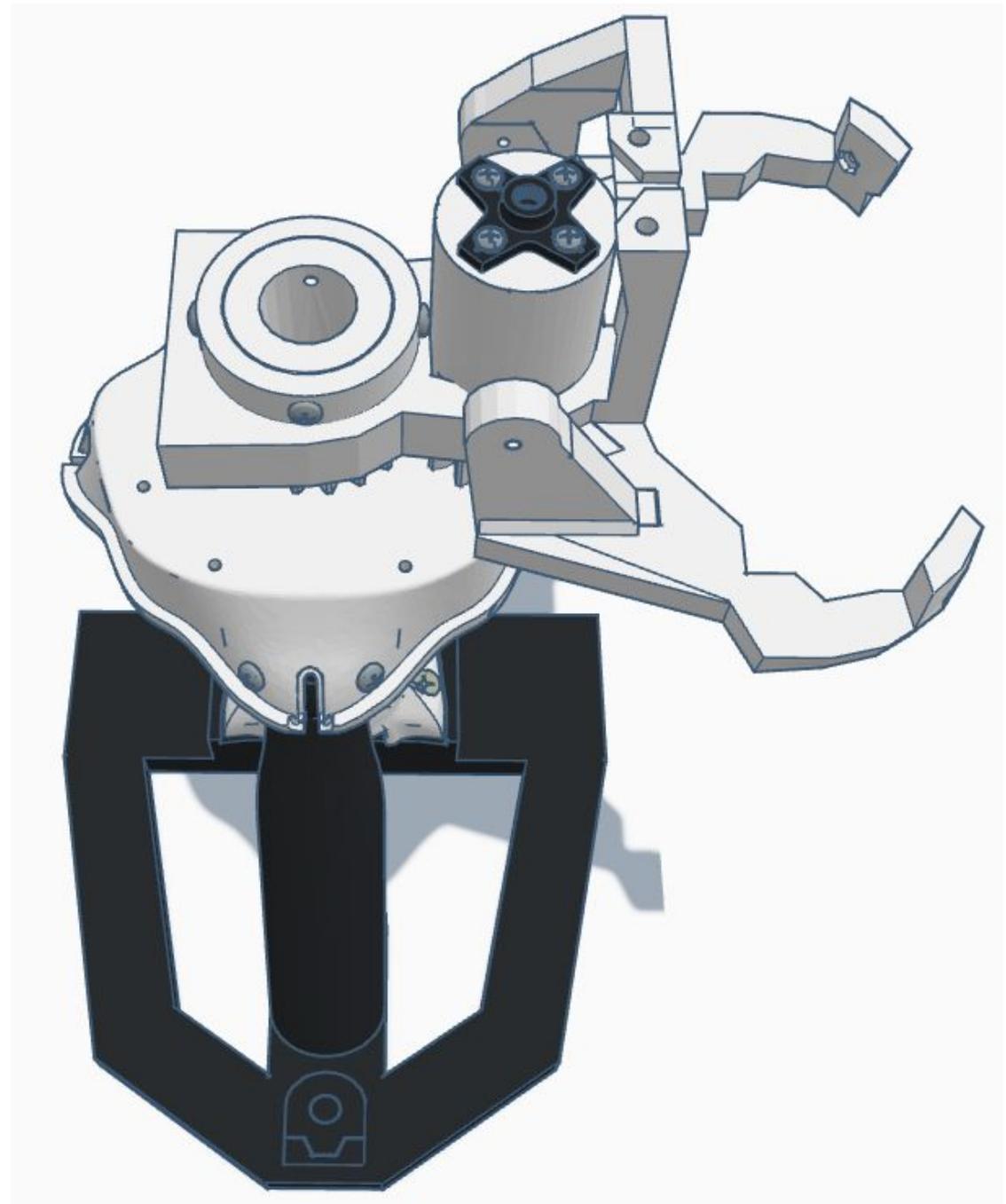
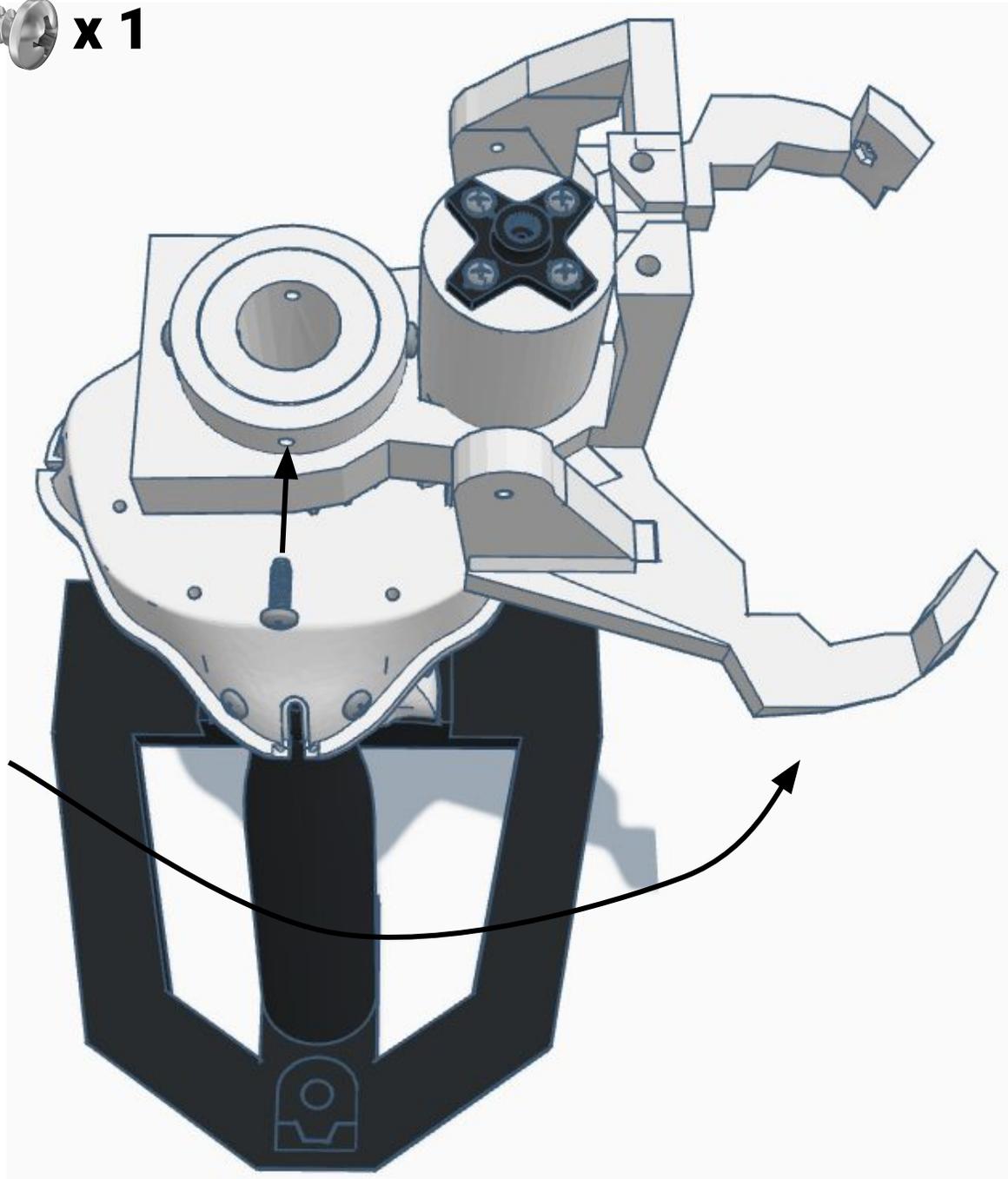




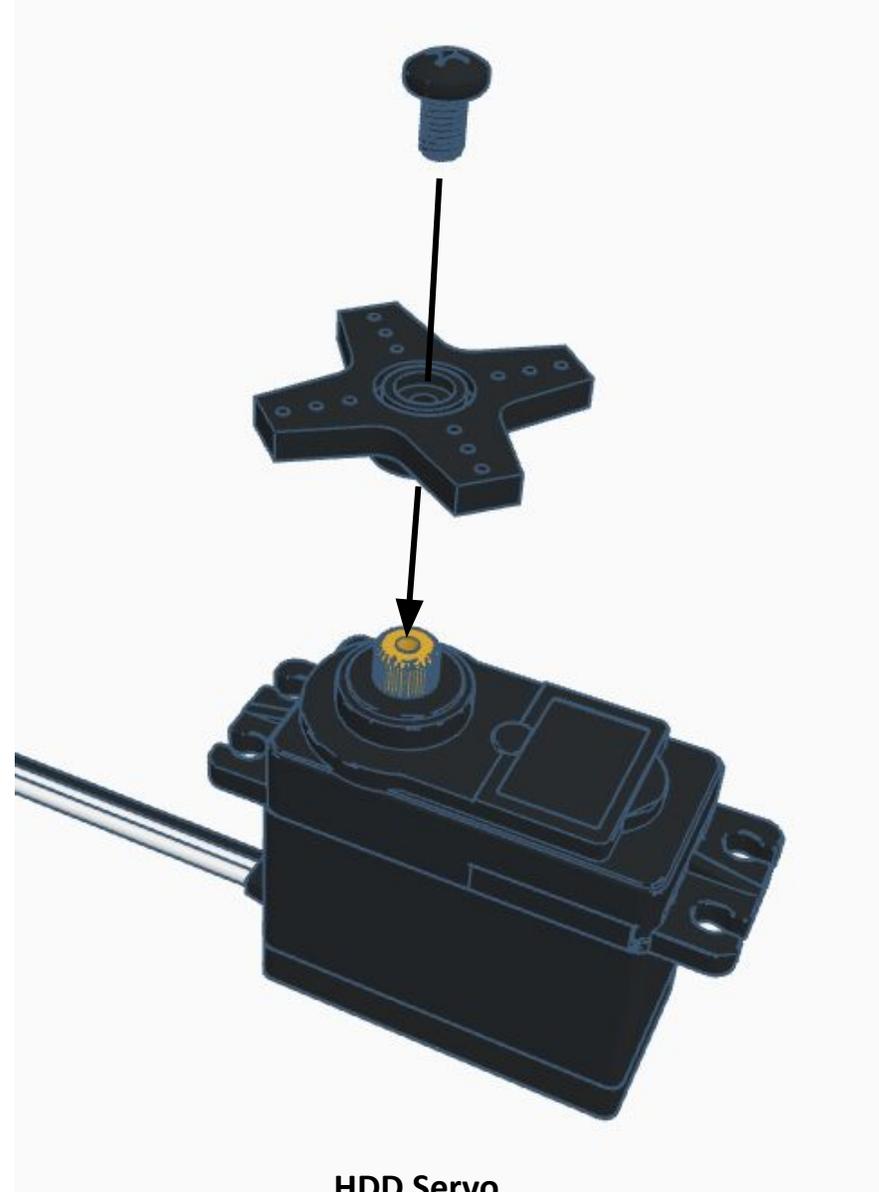
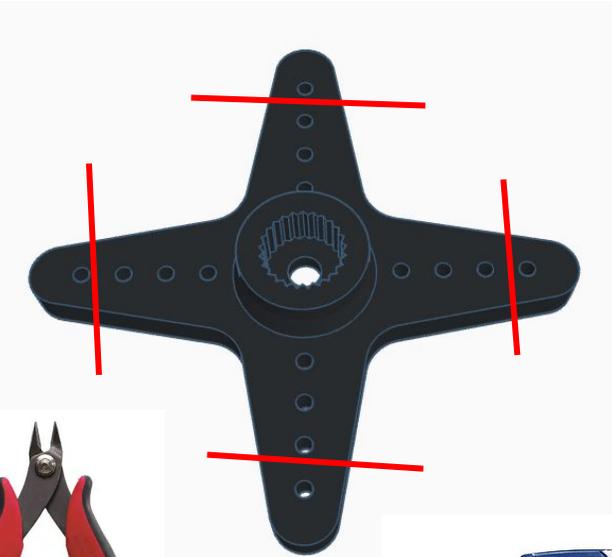
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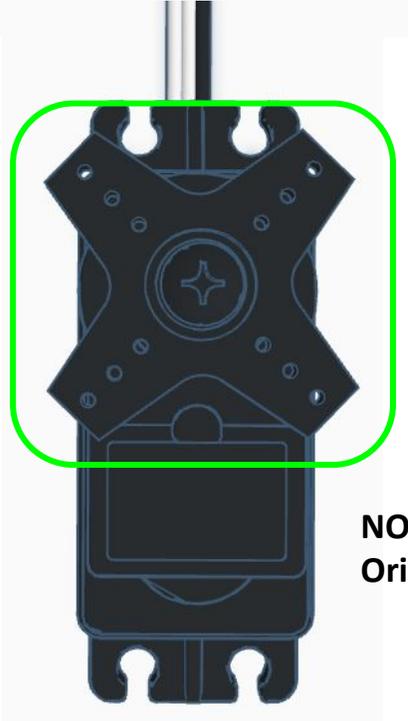
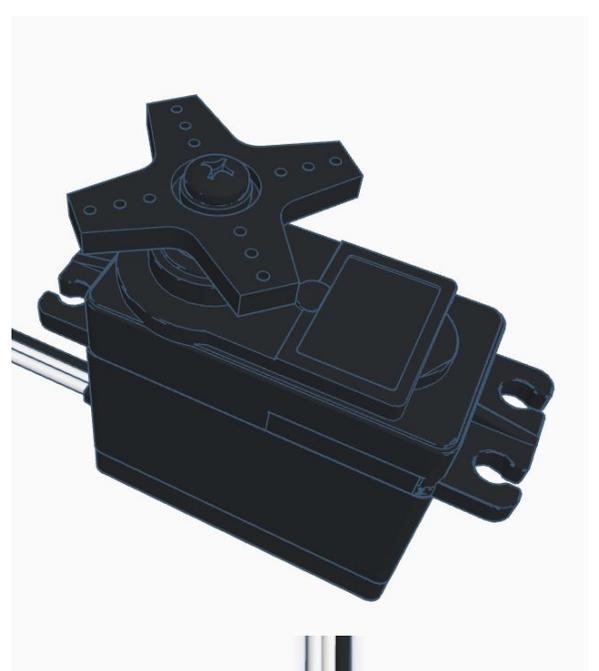
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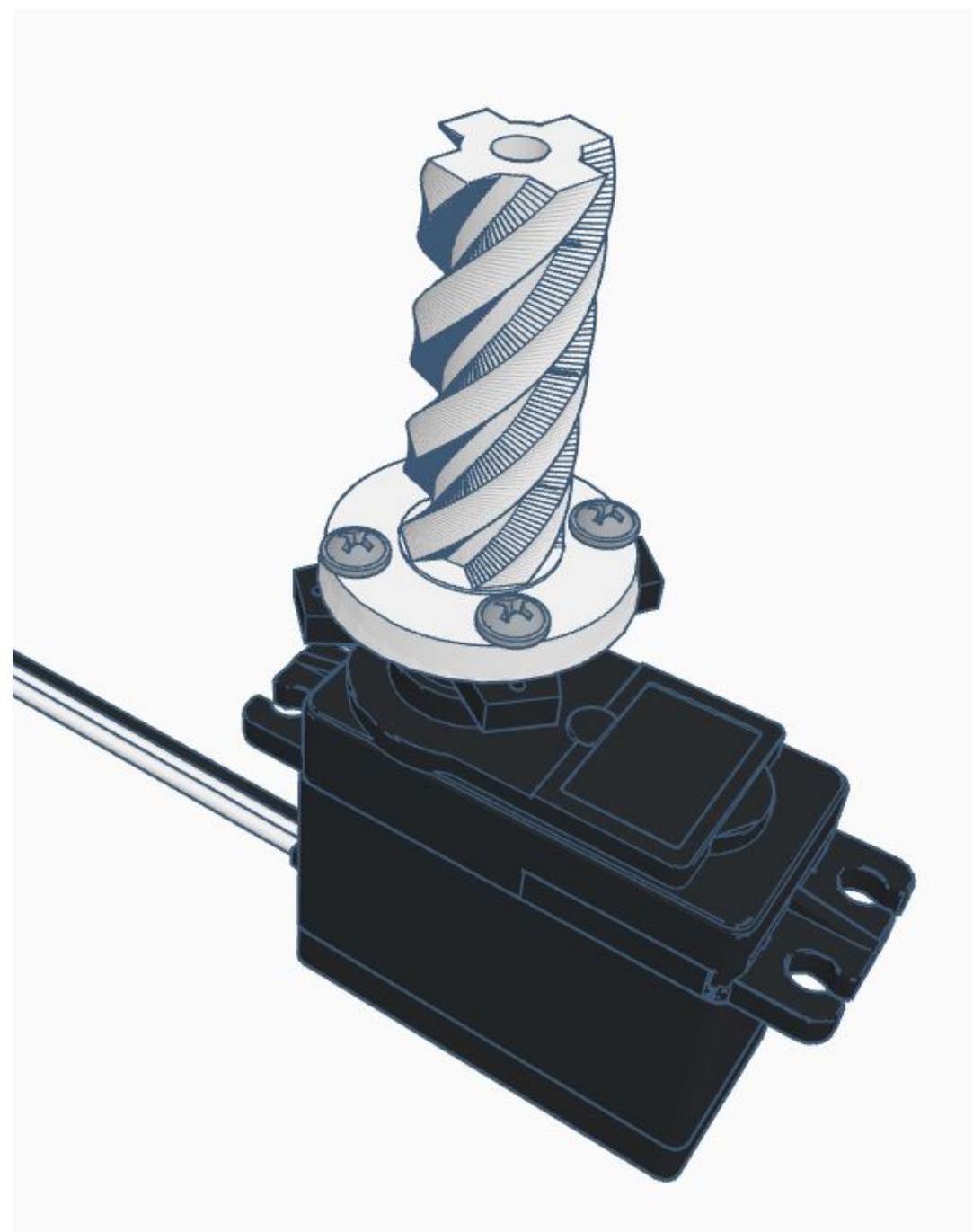
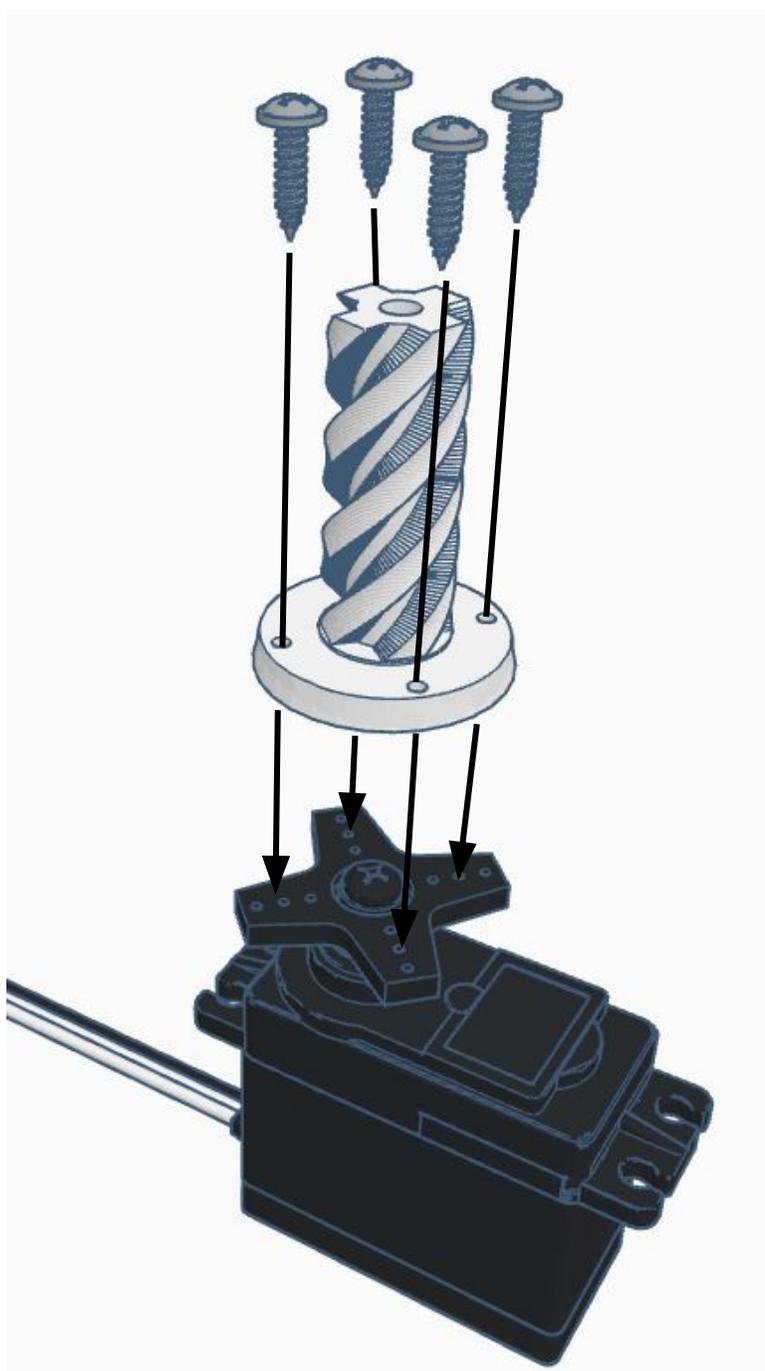
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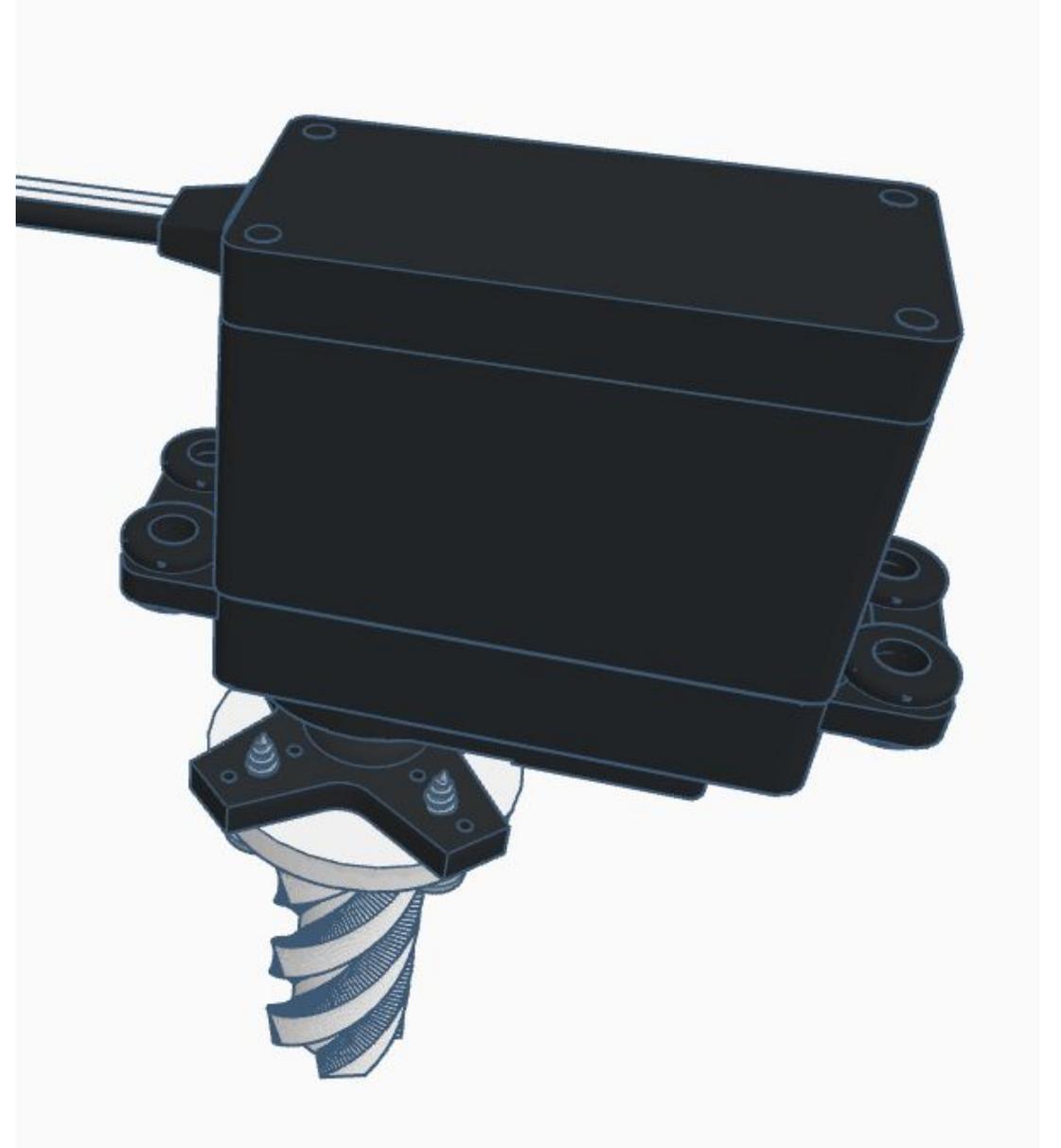
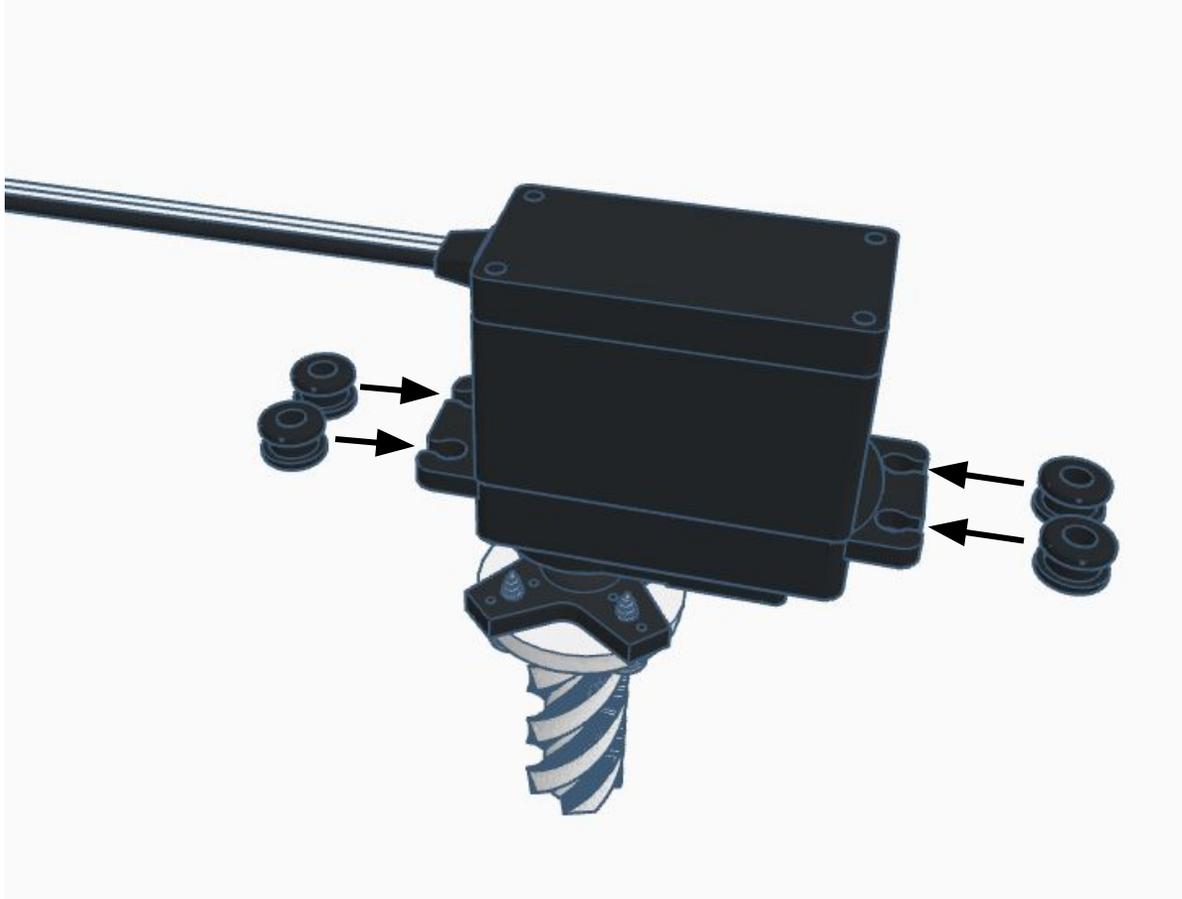


HDD Servo

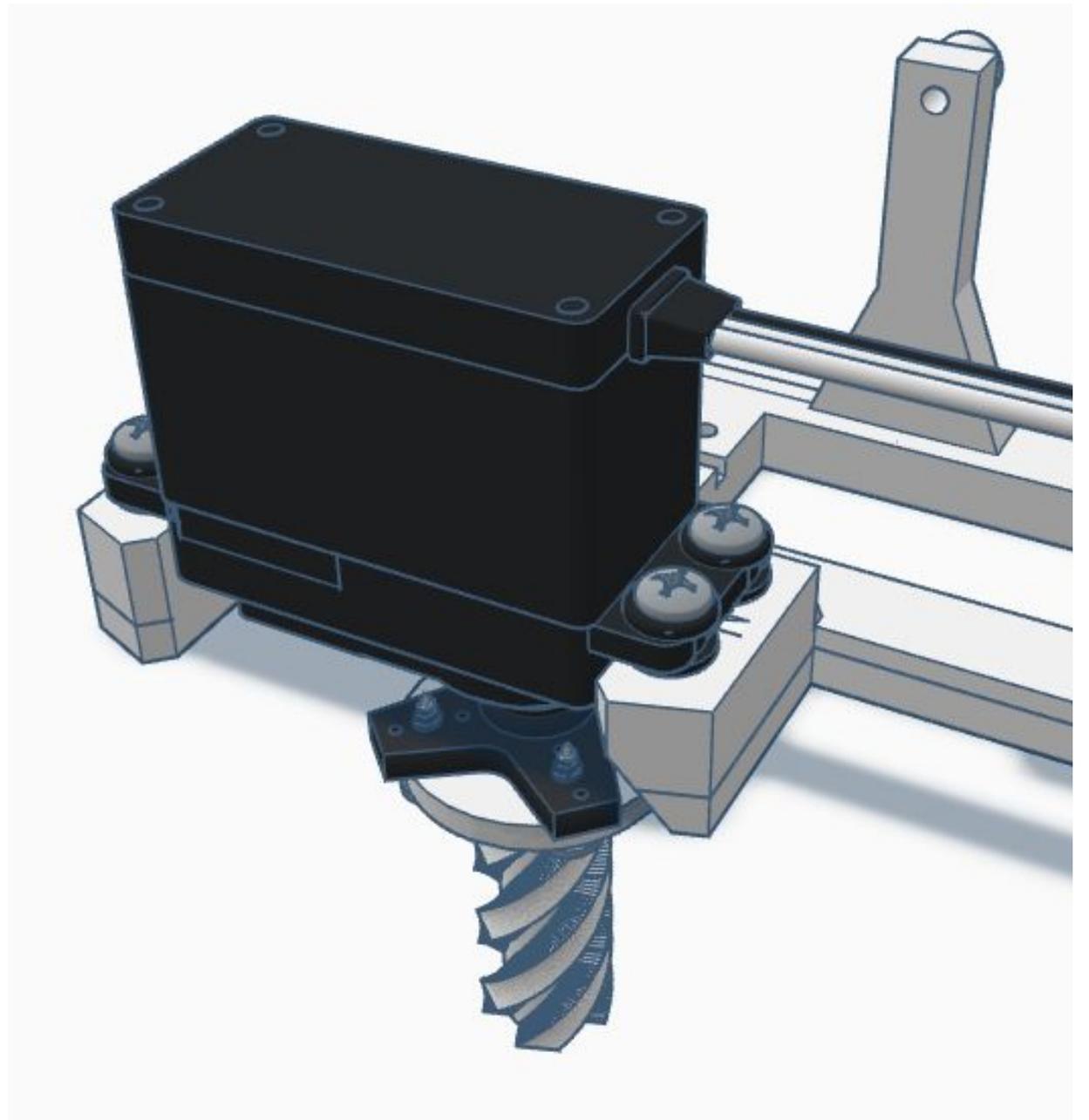
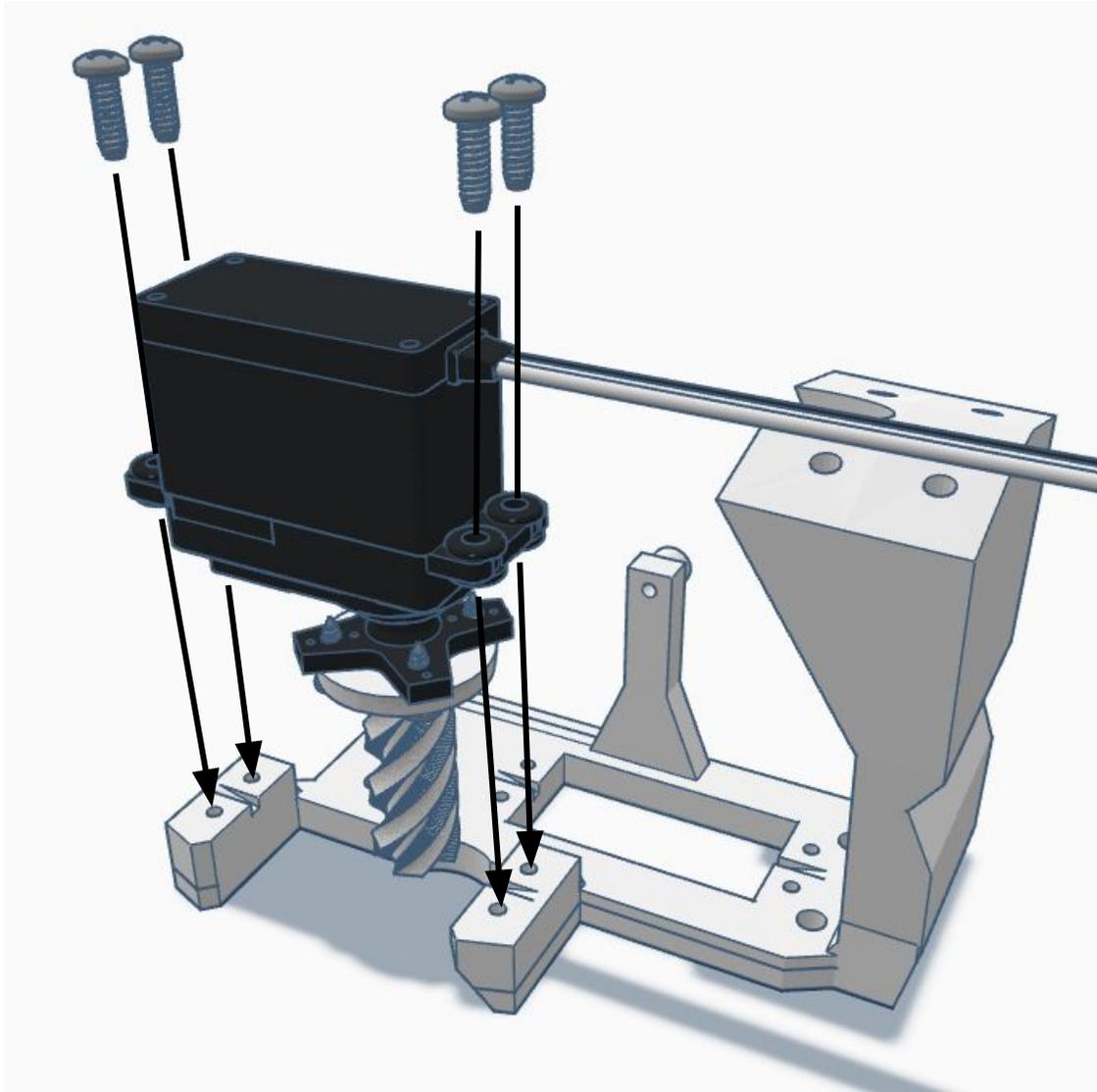


**NOTE:**  
Orientation

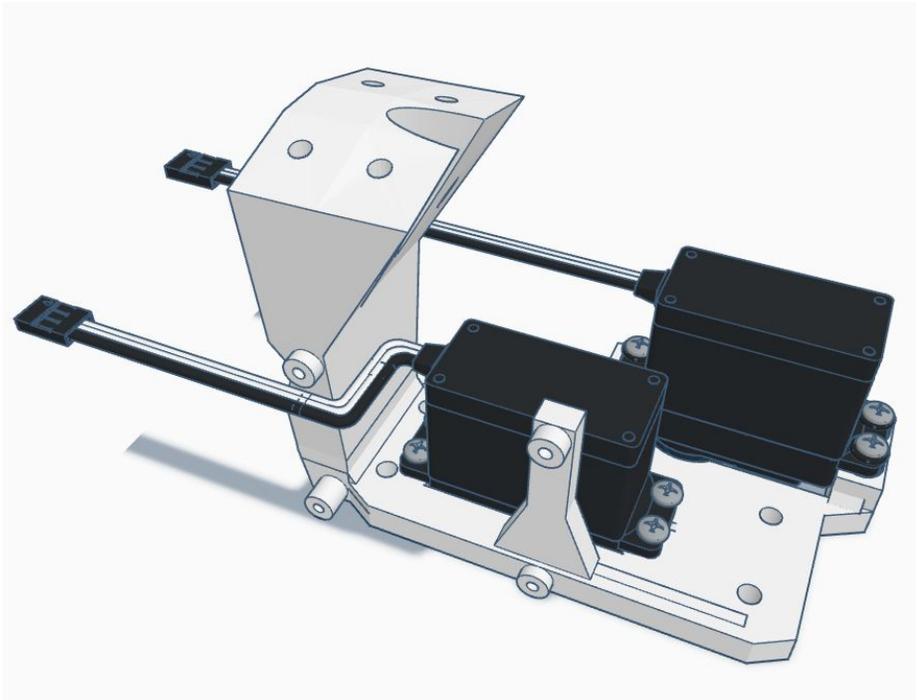
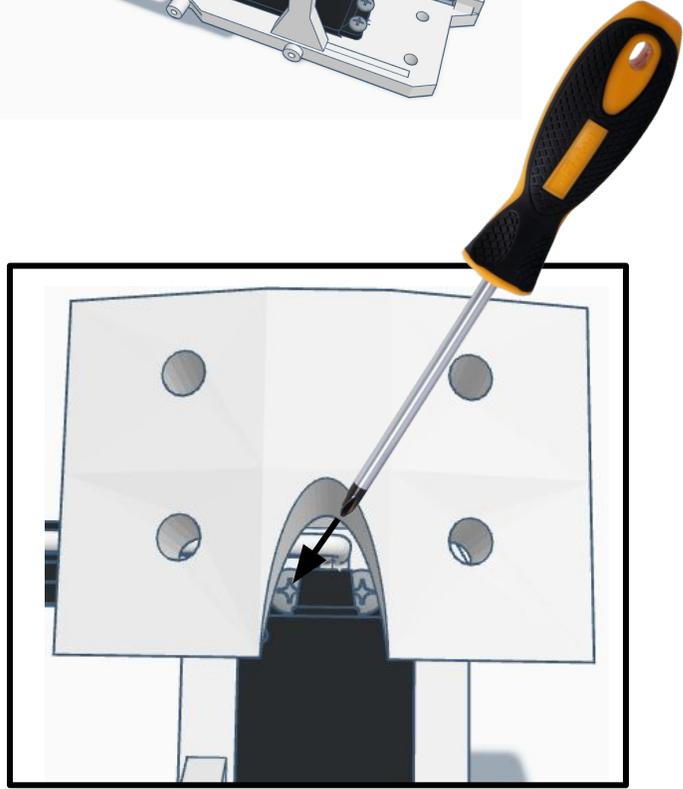
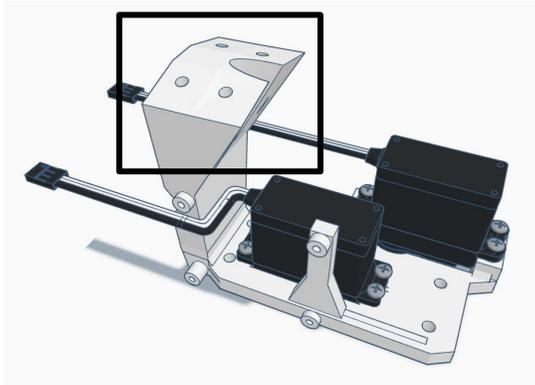
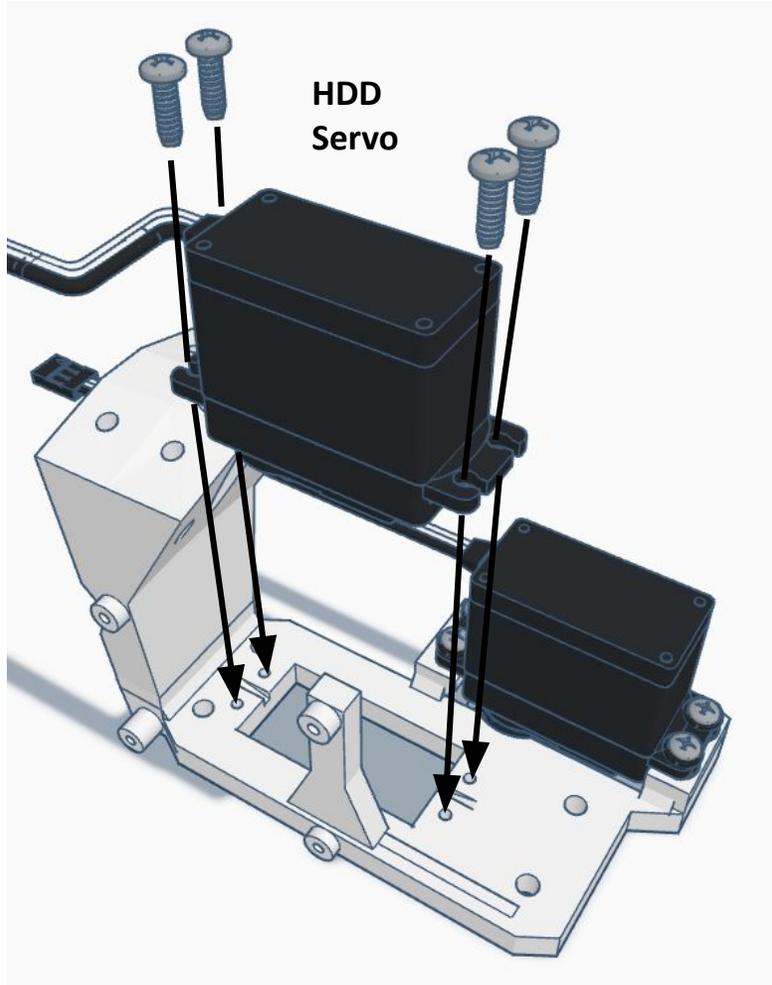




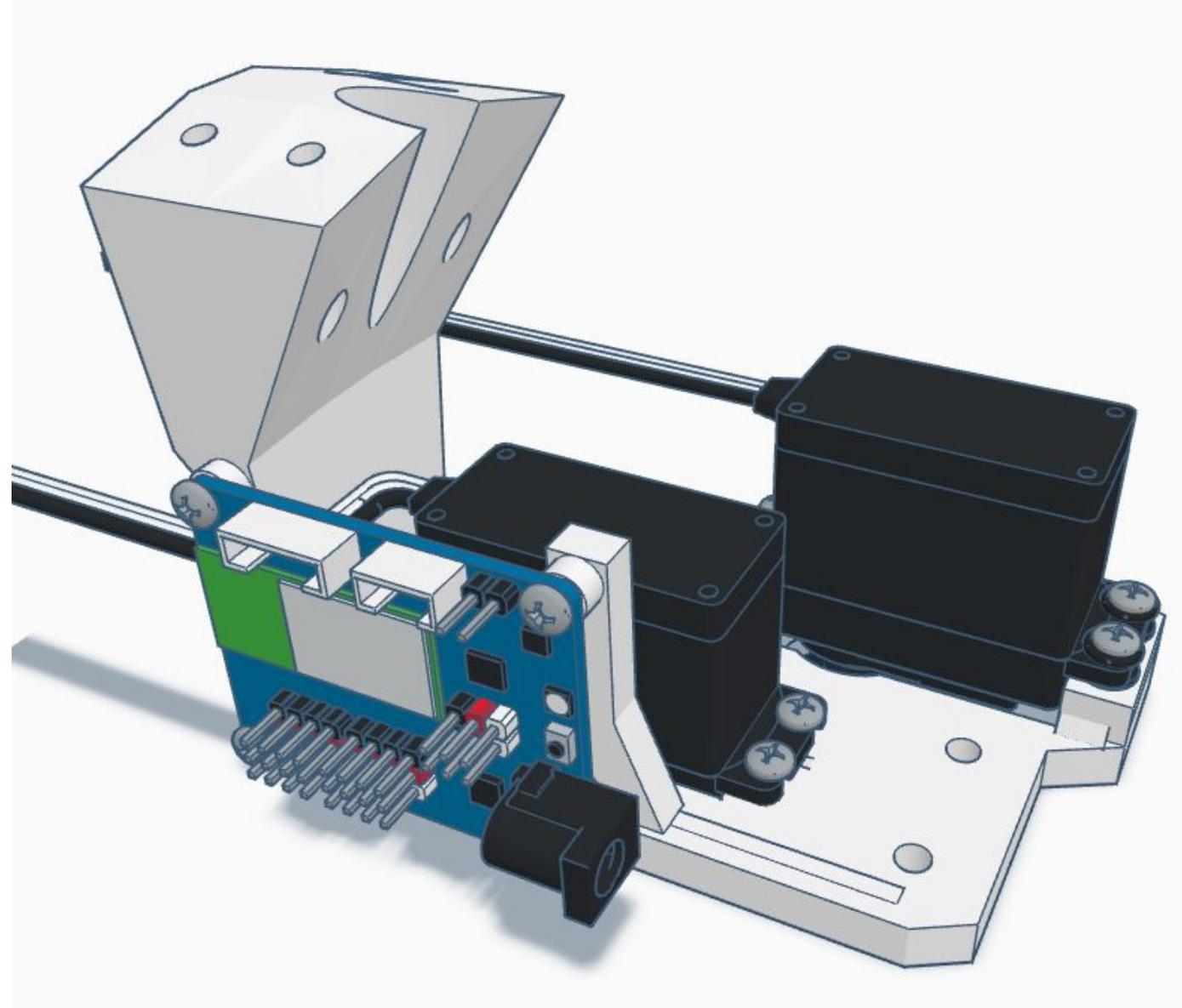
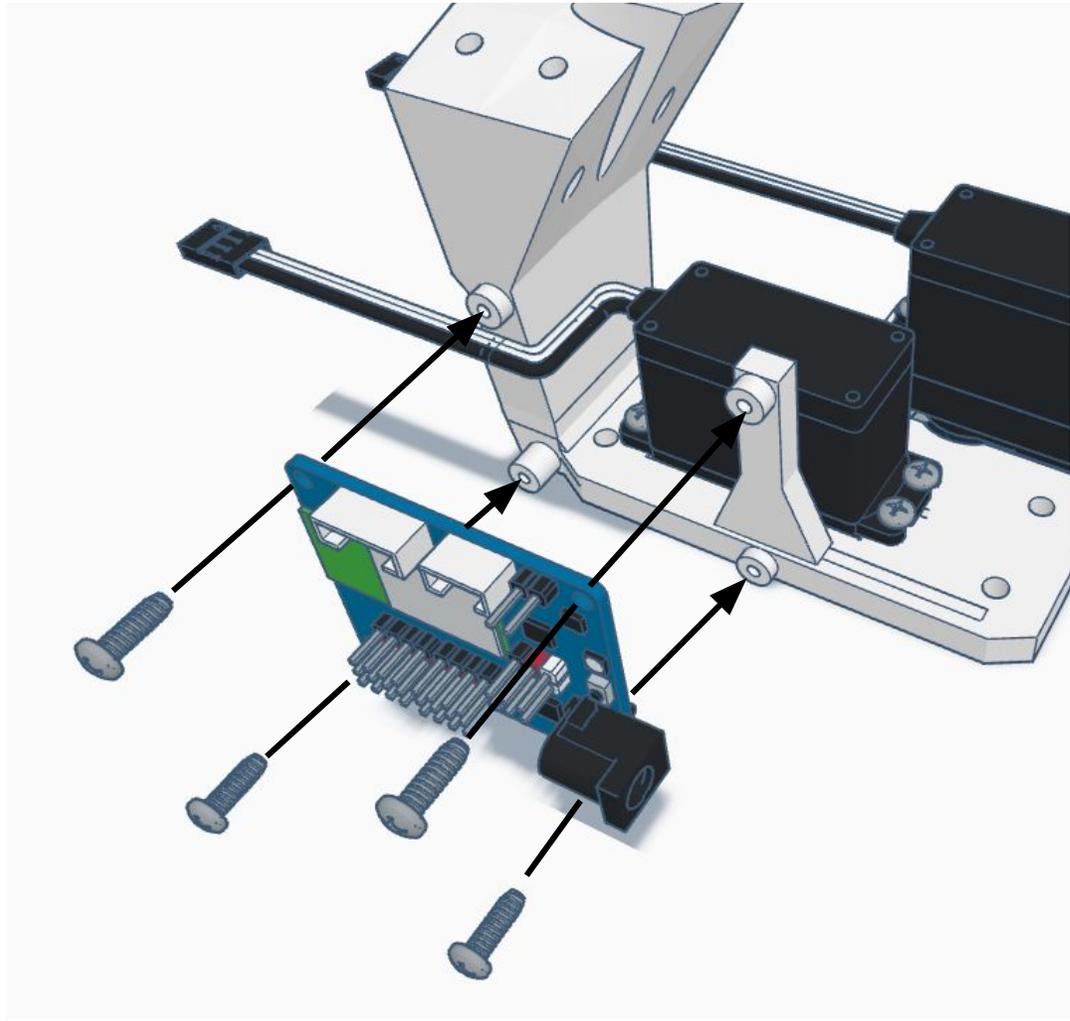
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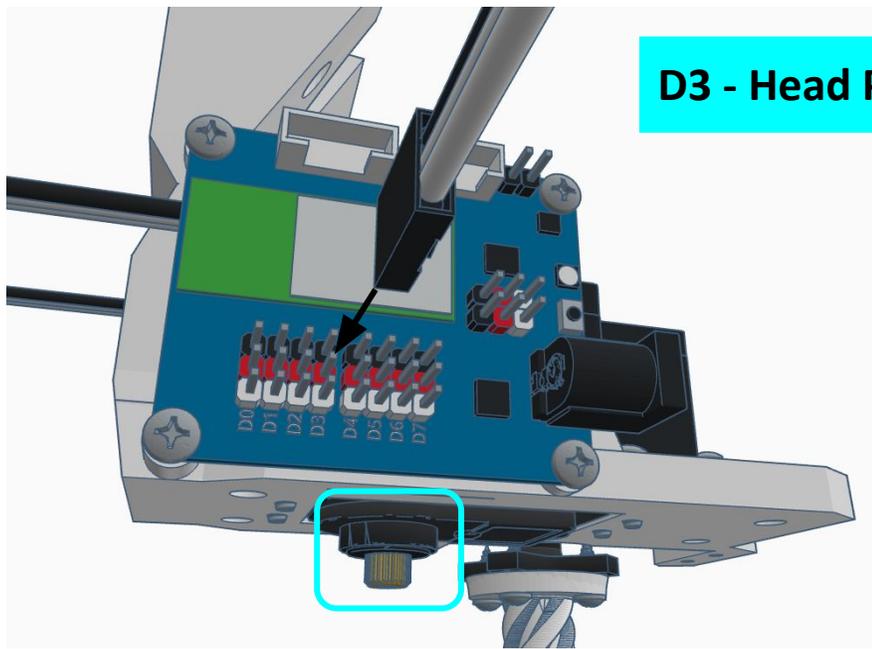
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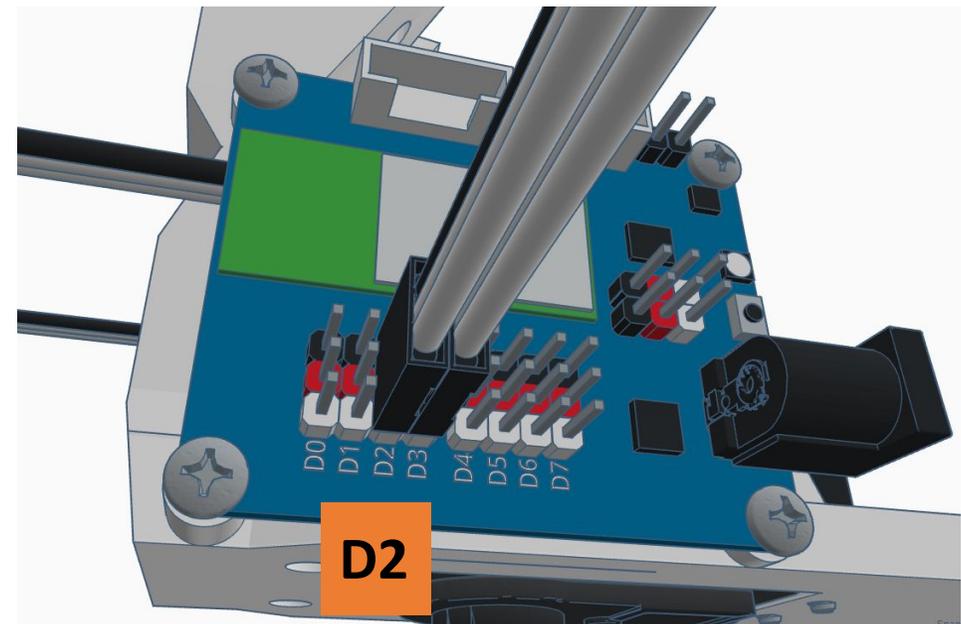
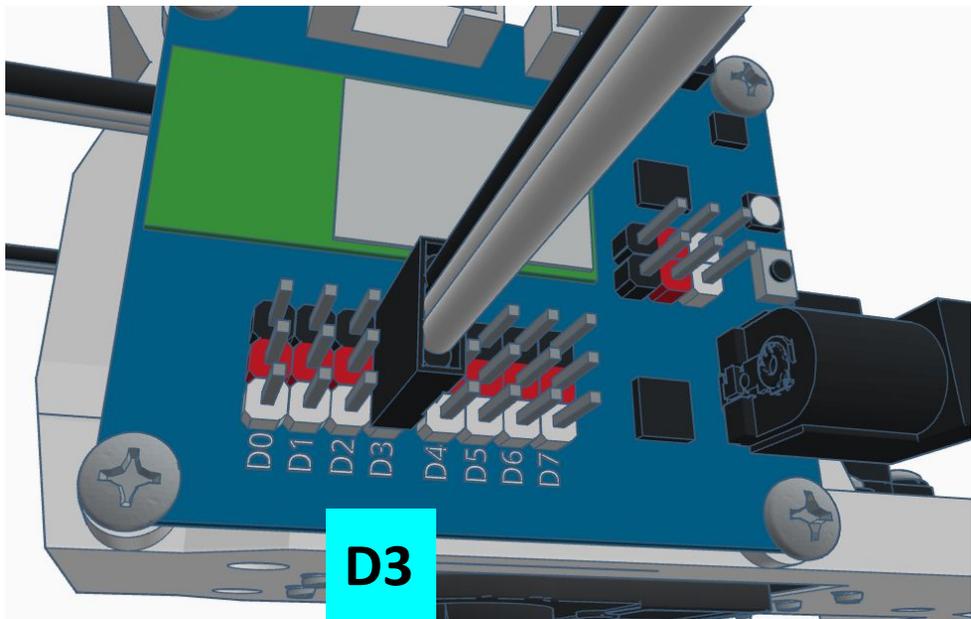
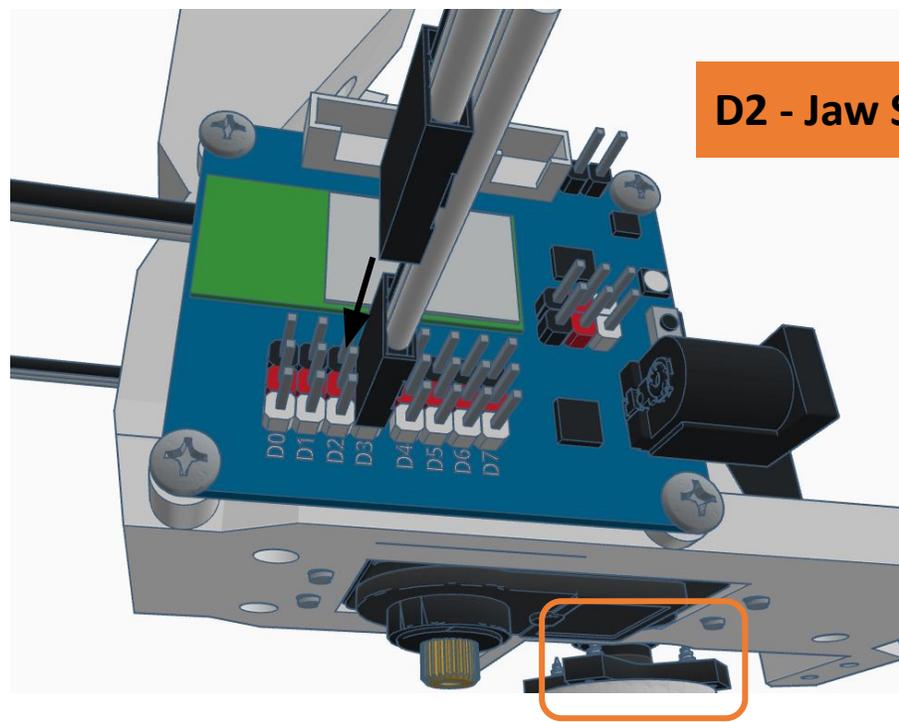
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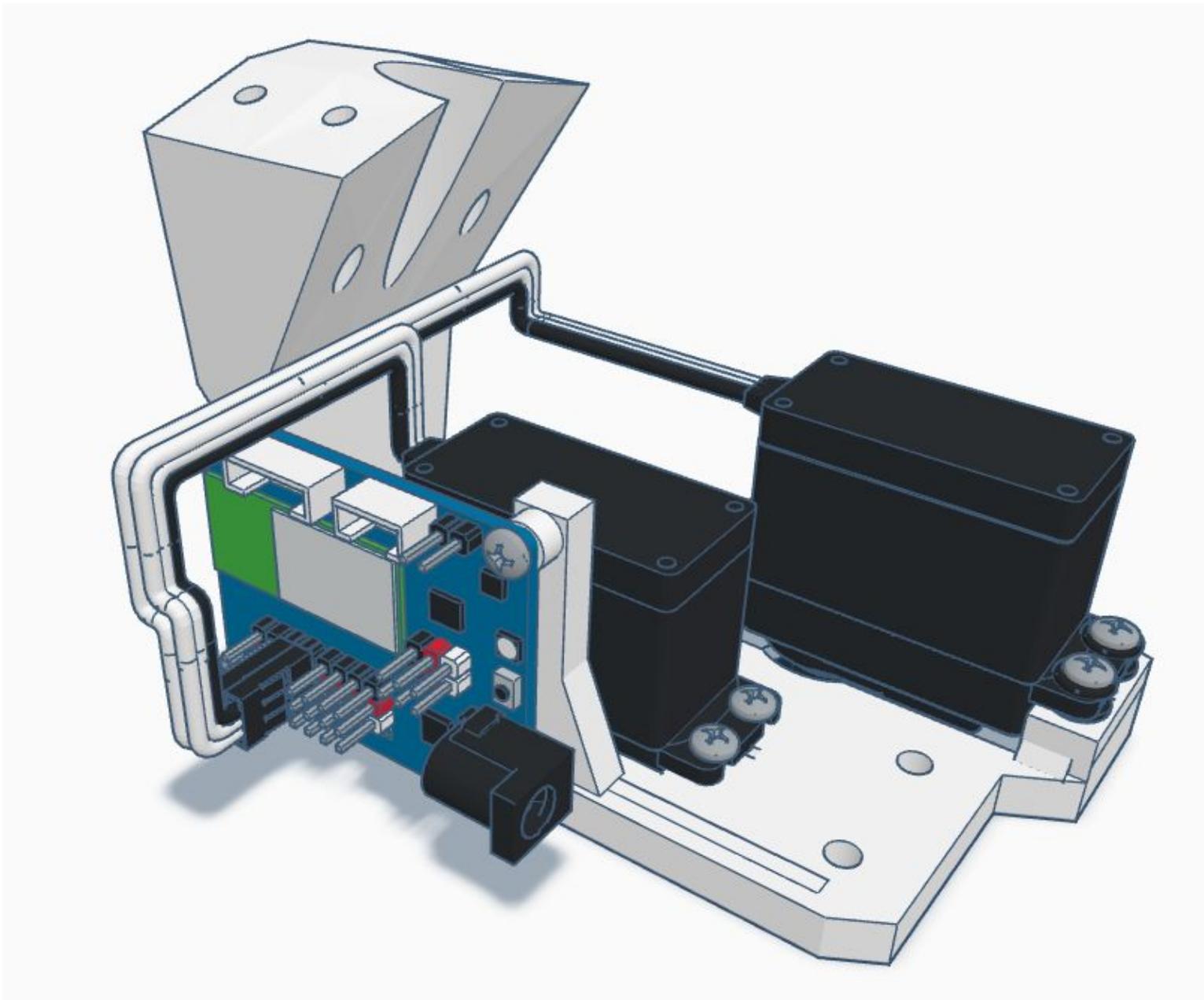


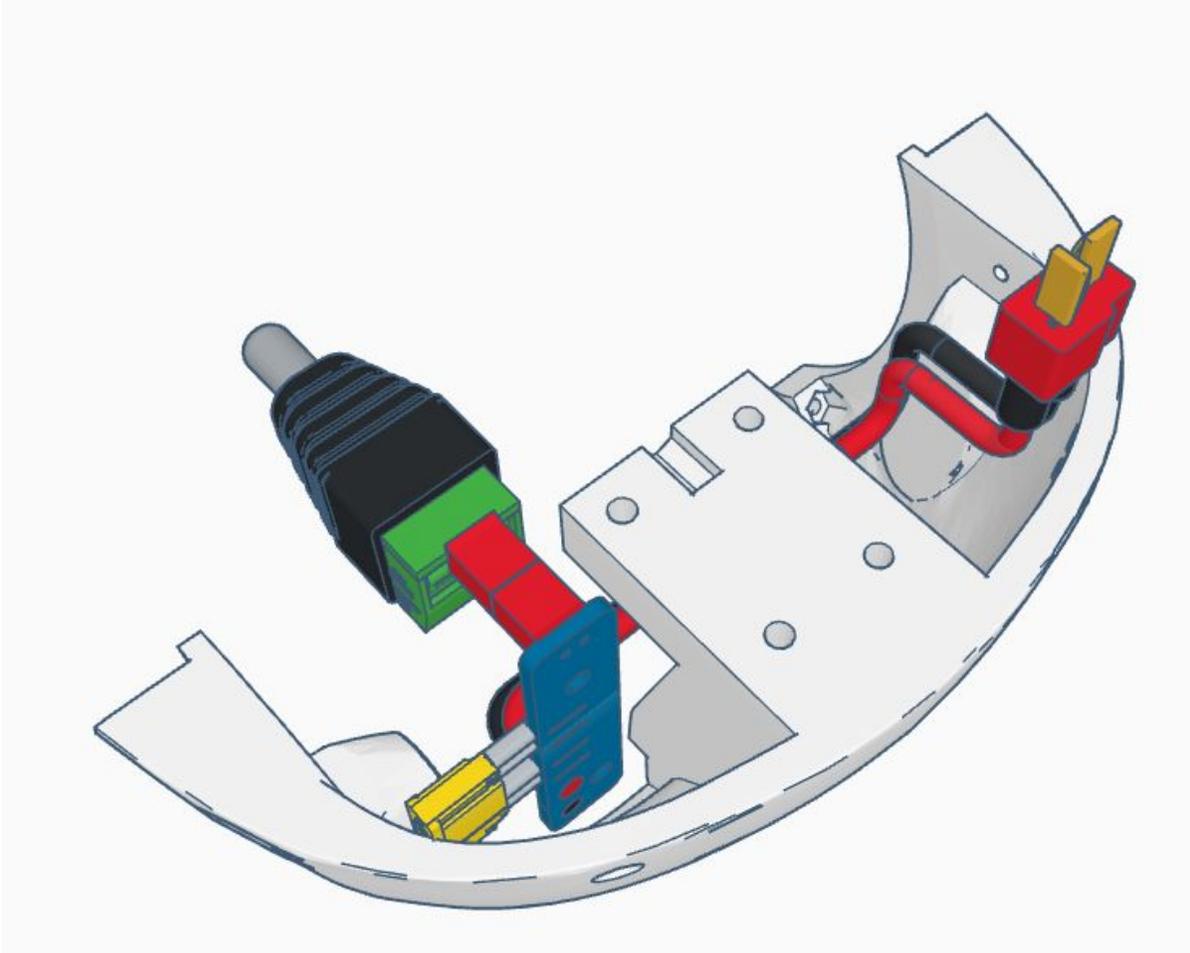
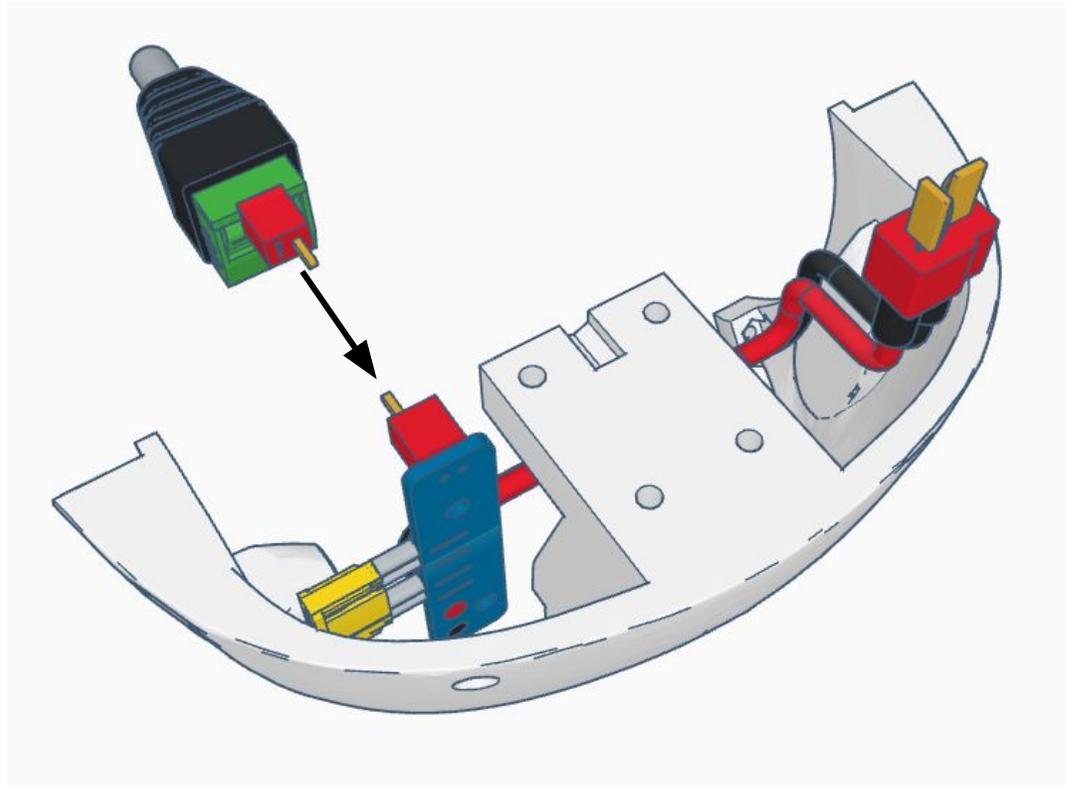
**D3 - Head Pan Servo**

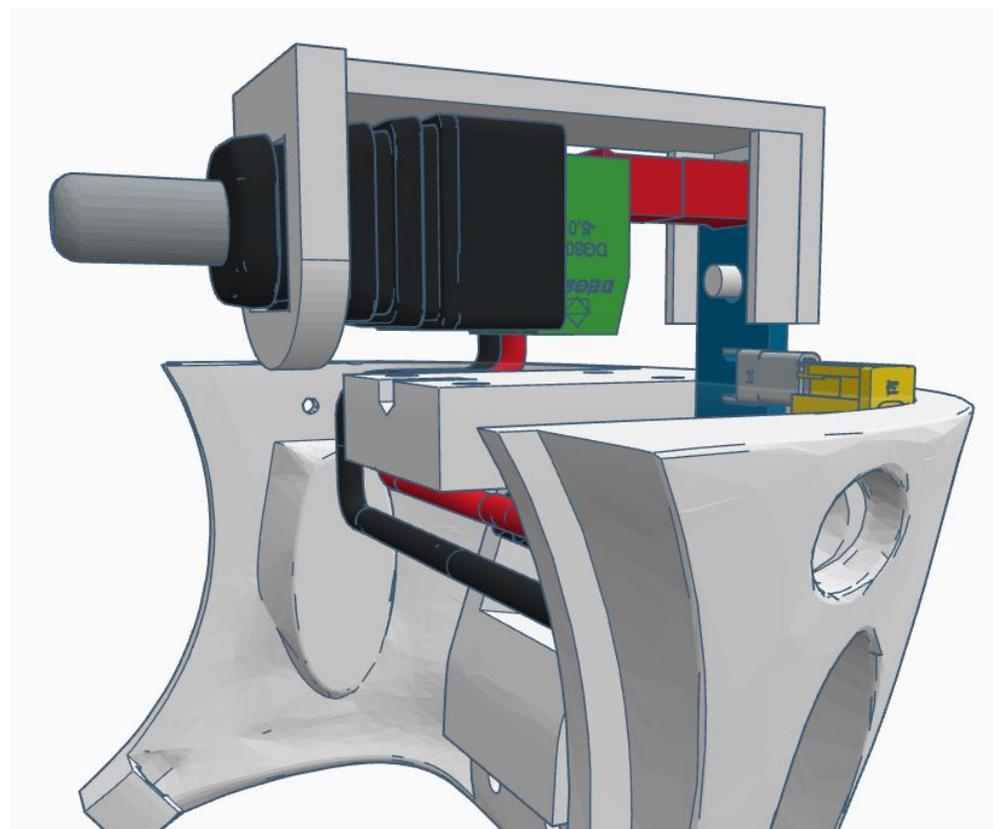
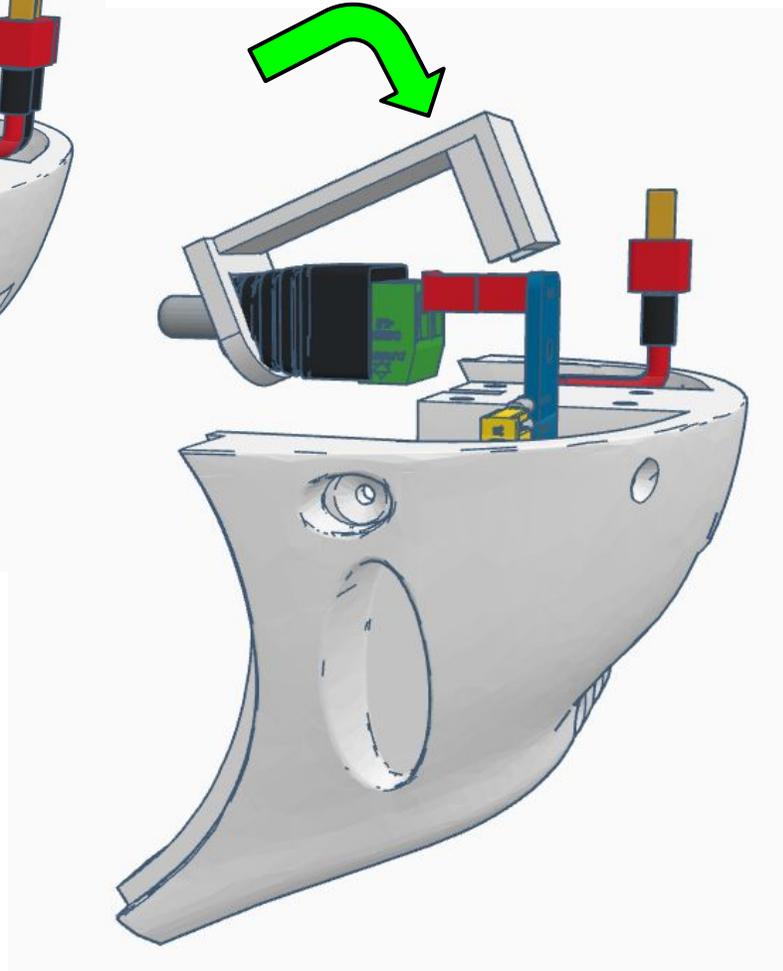
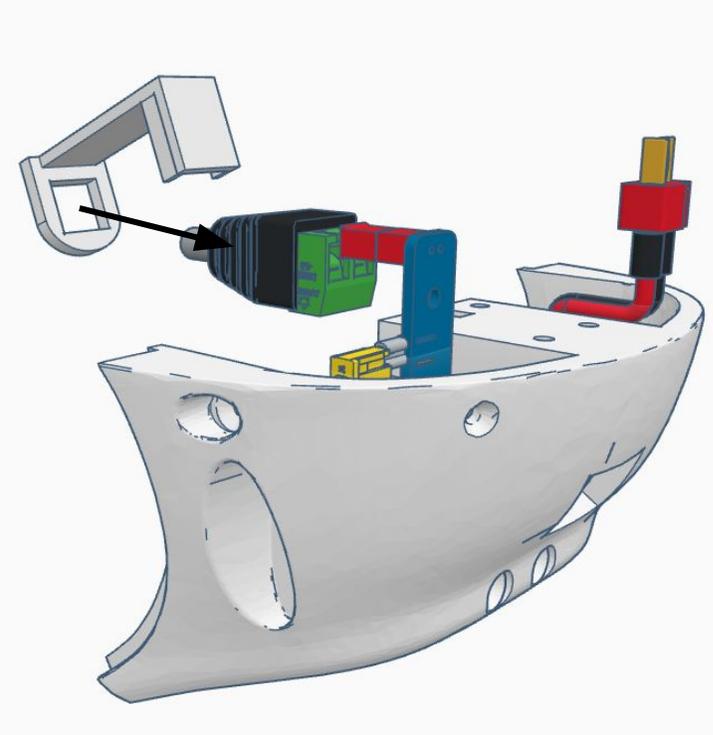


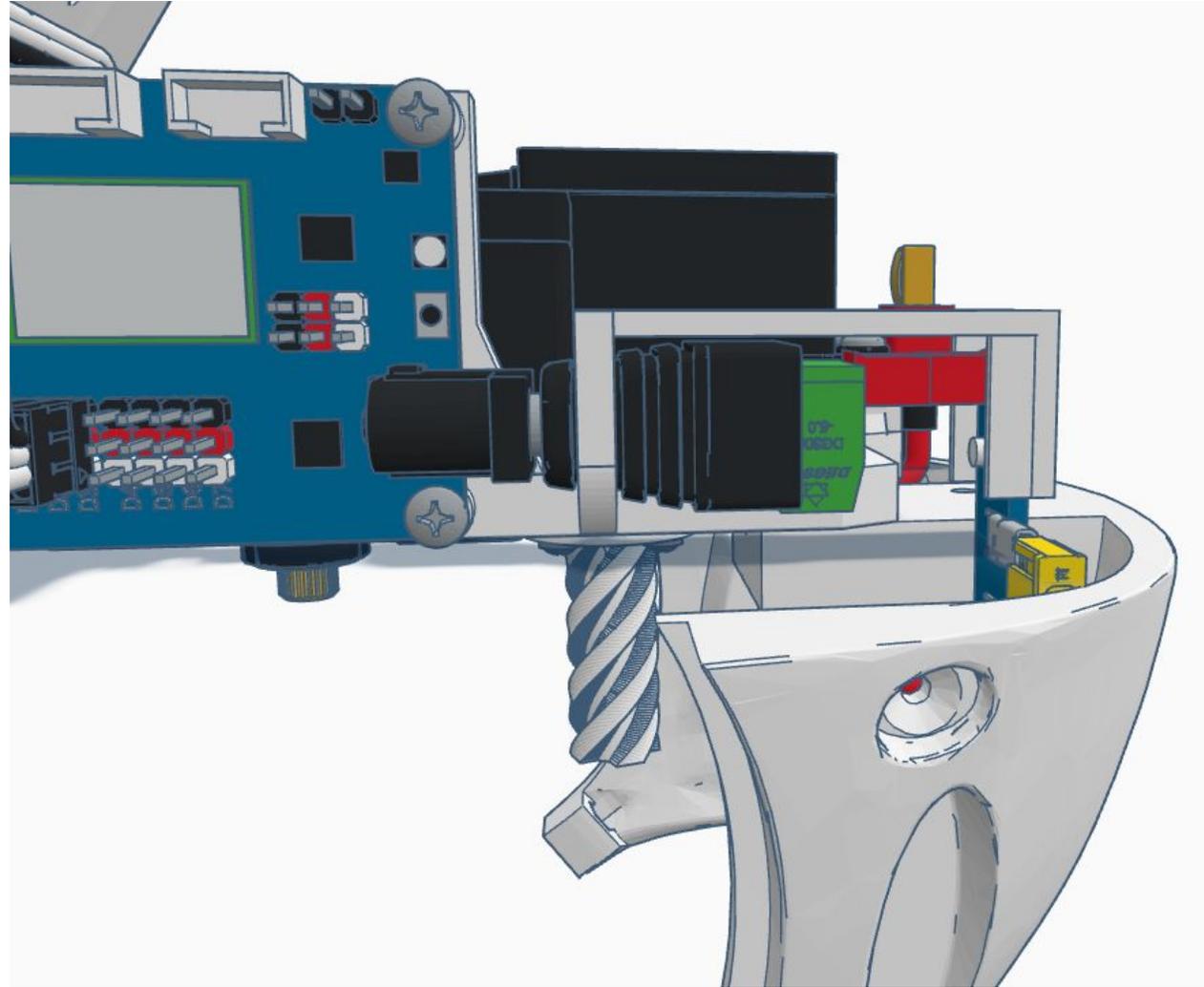
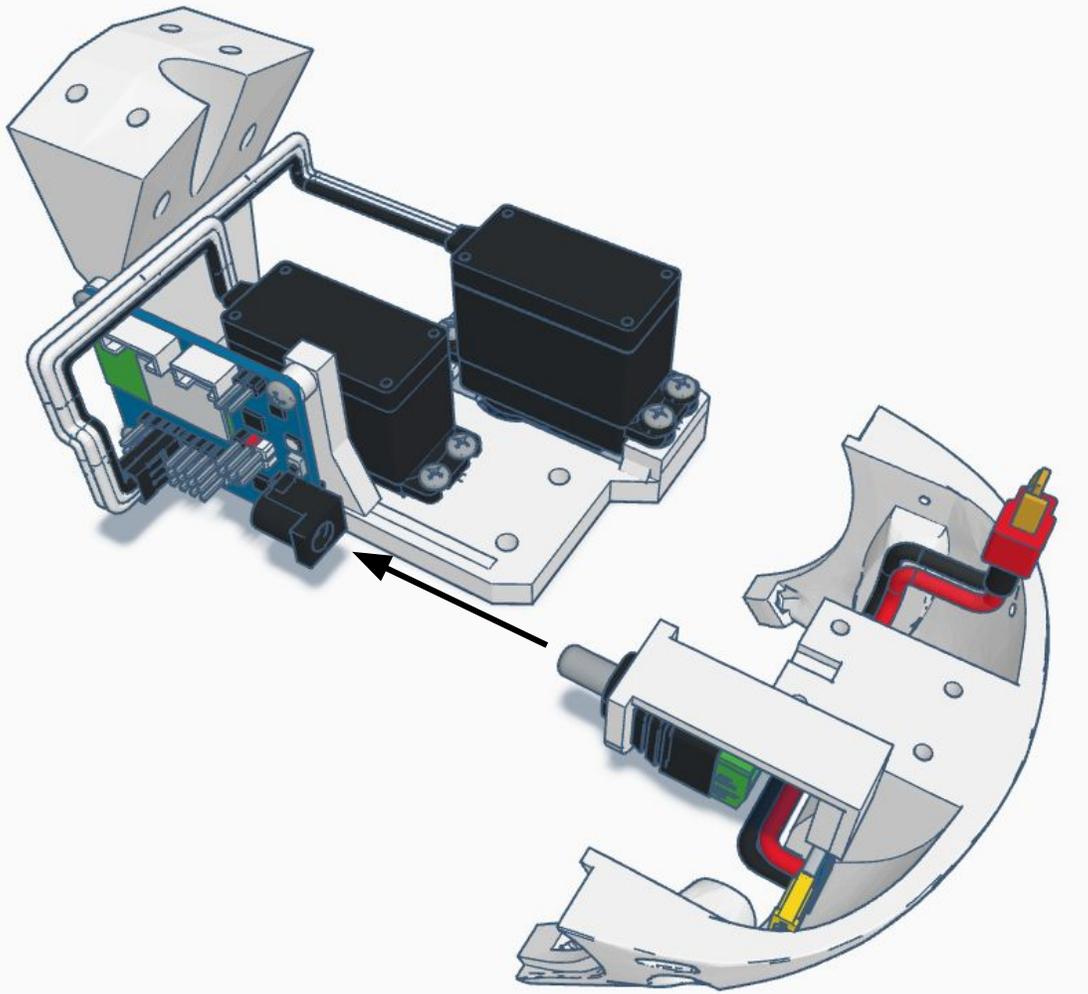
**D2 - Jaw Servo**



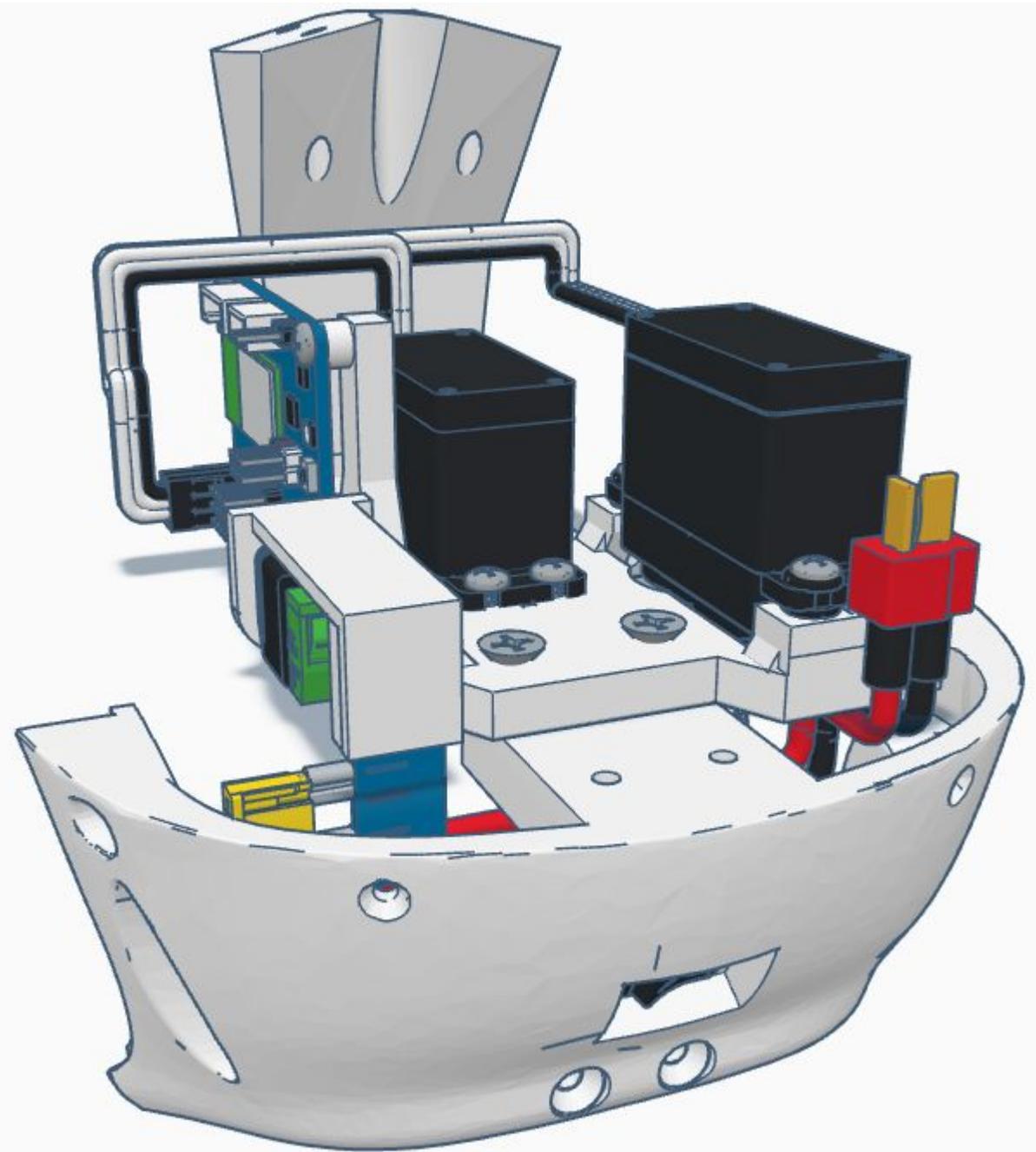
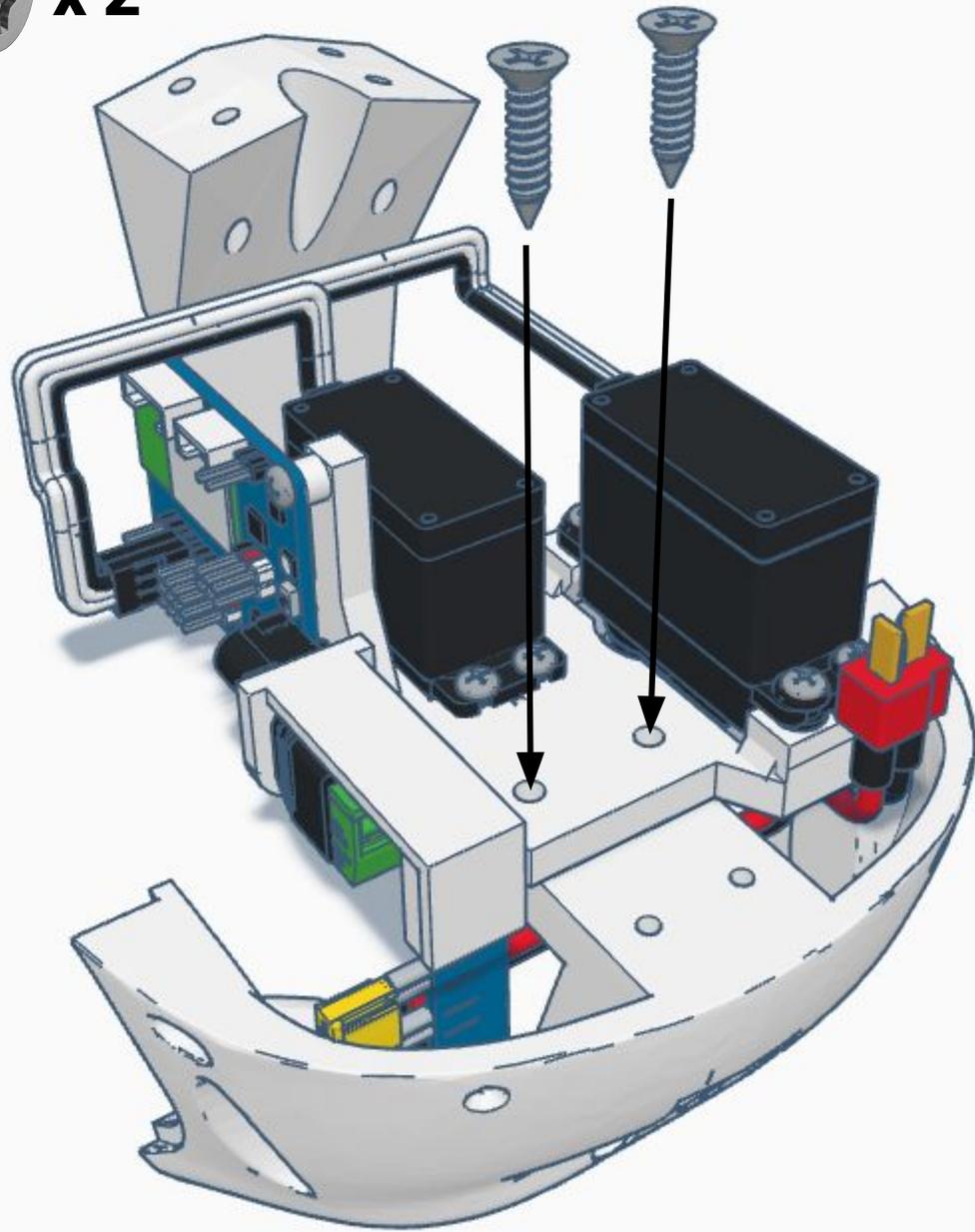


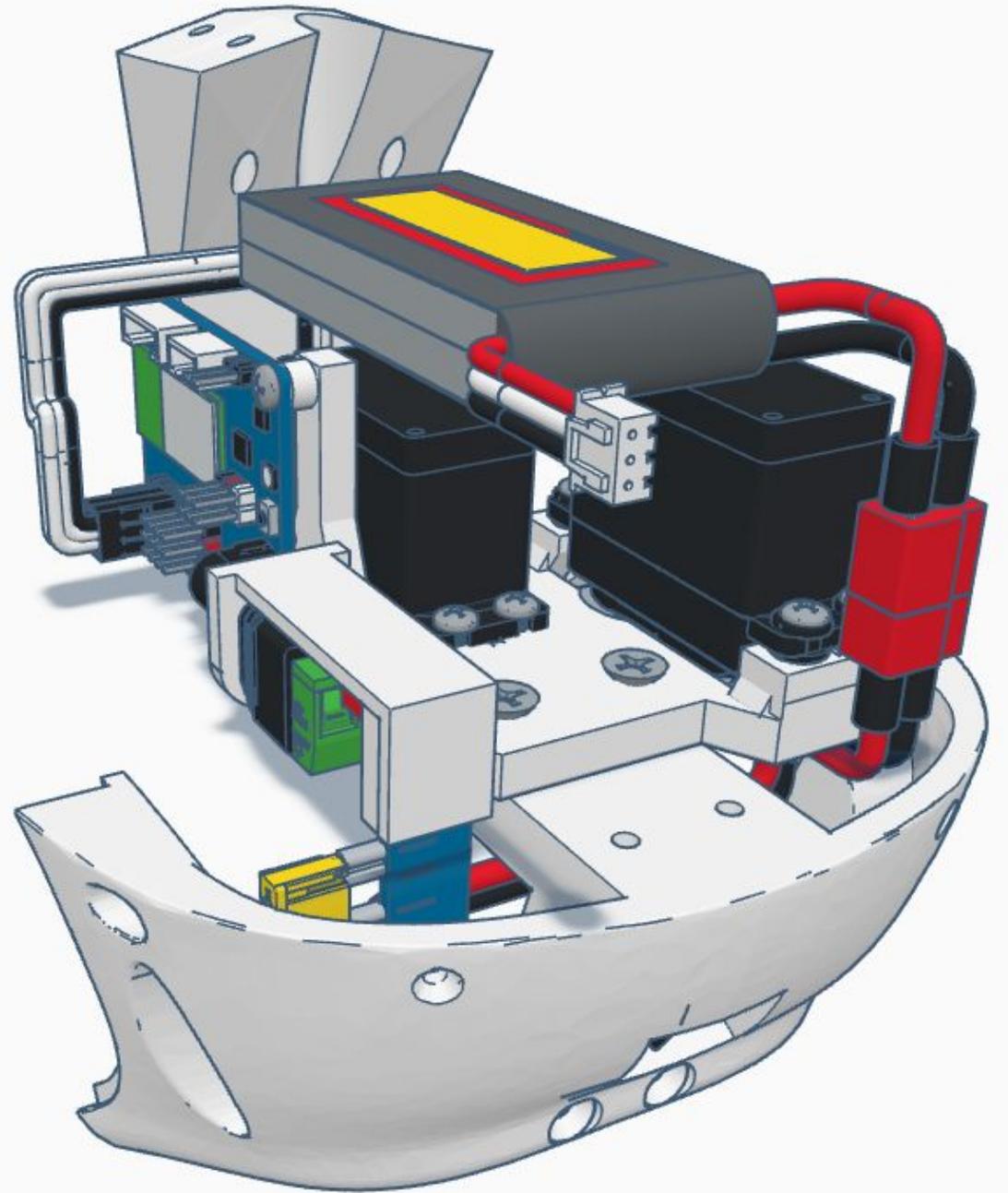
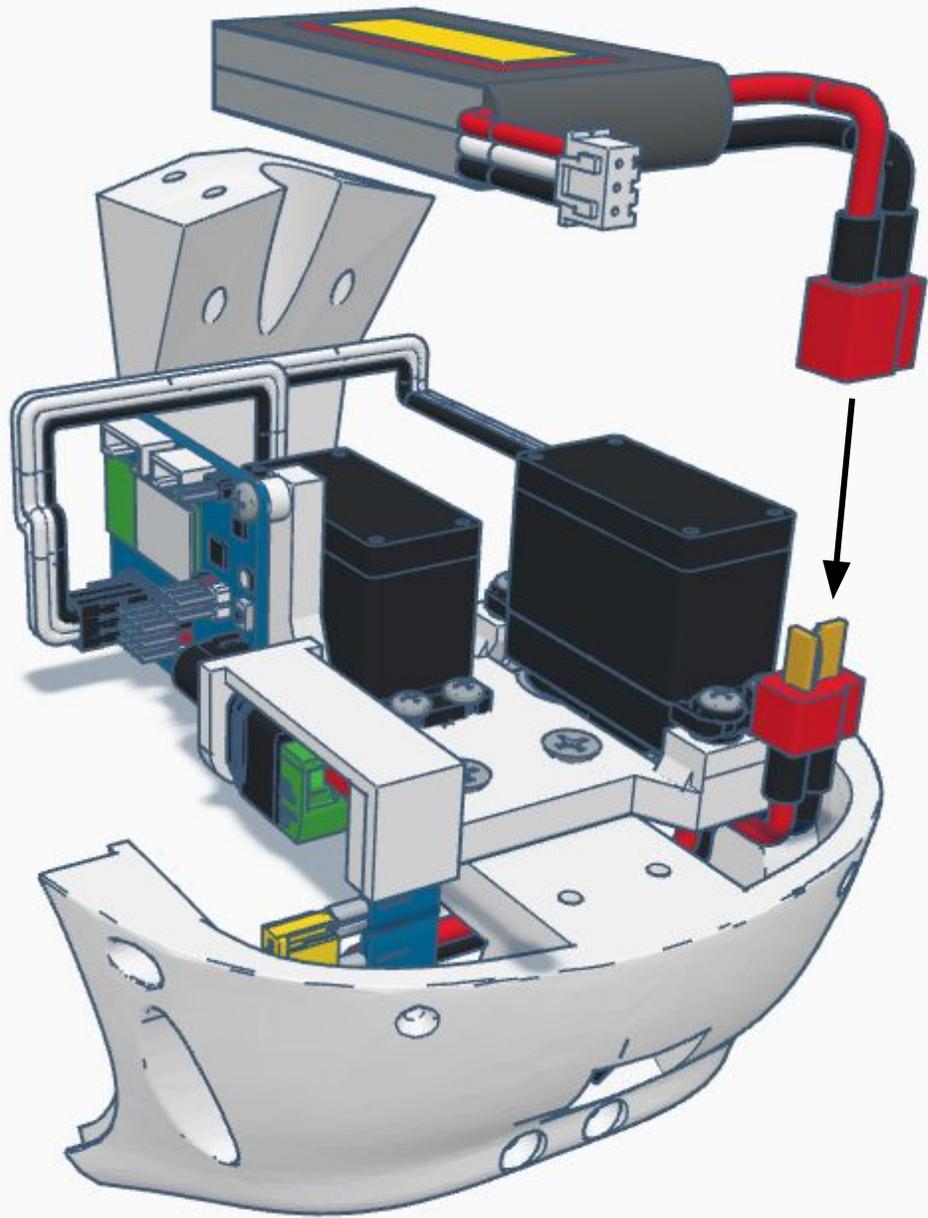


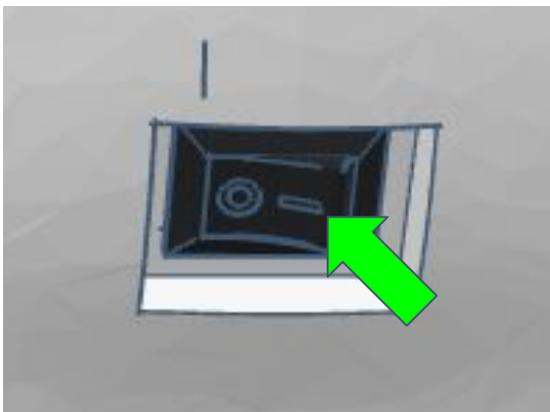
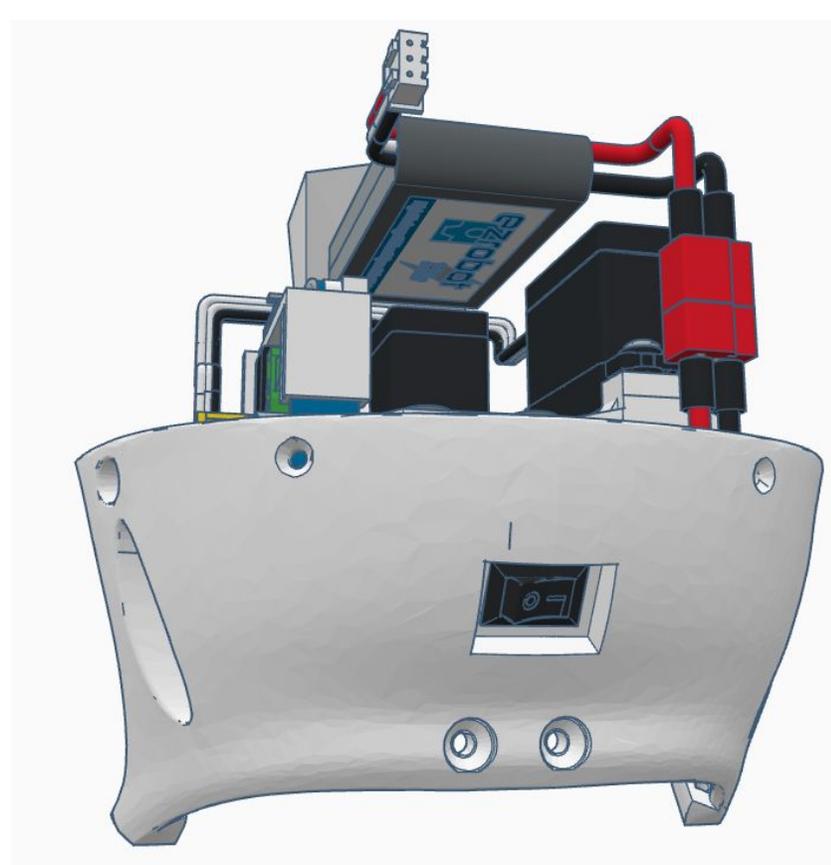
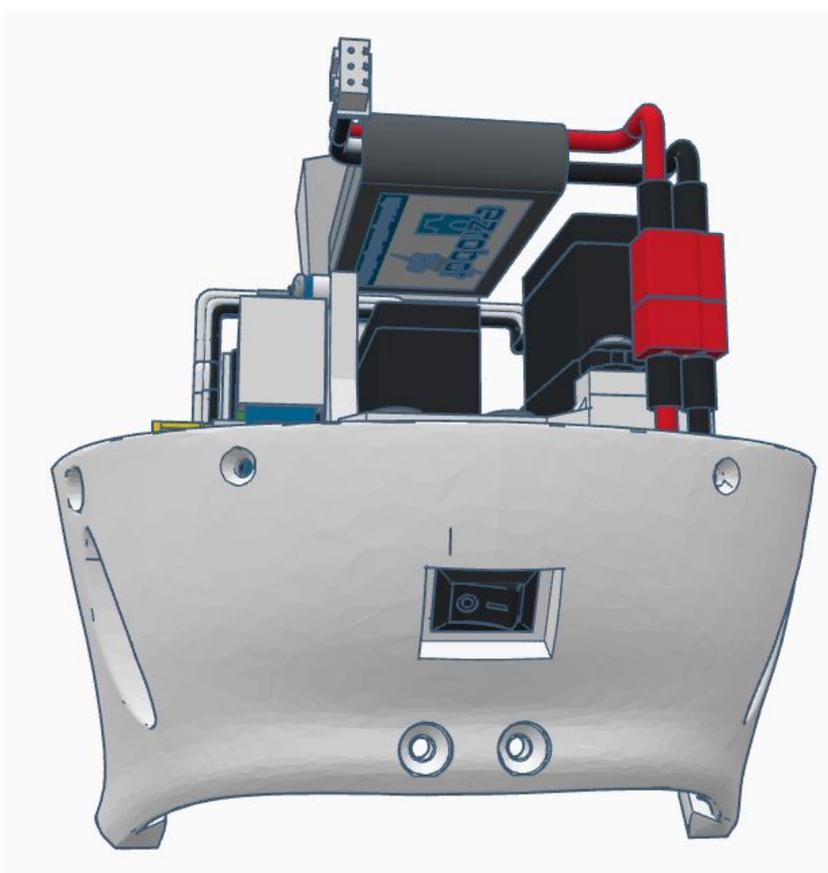




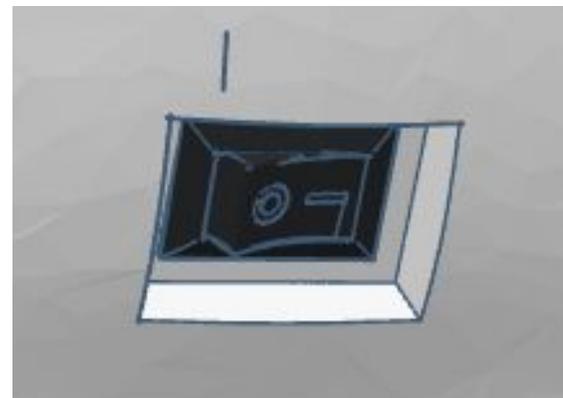
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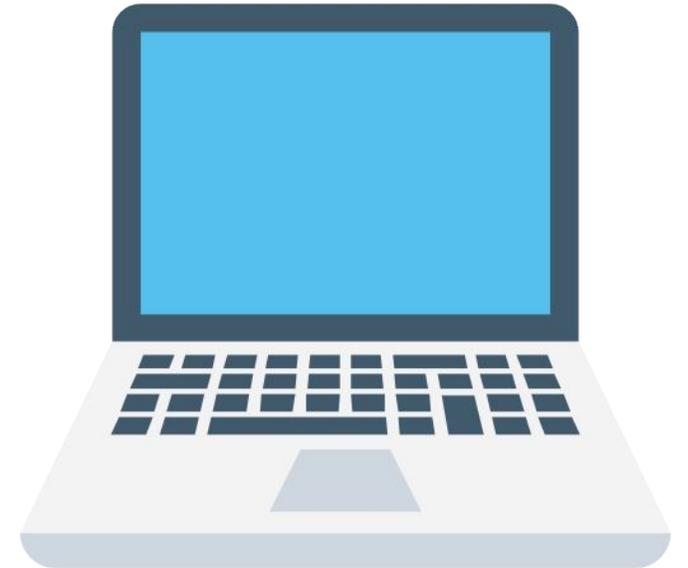
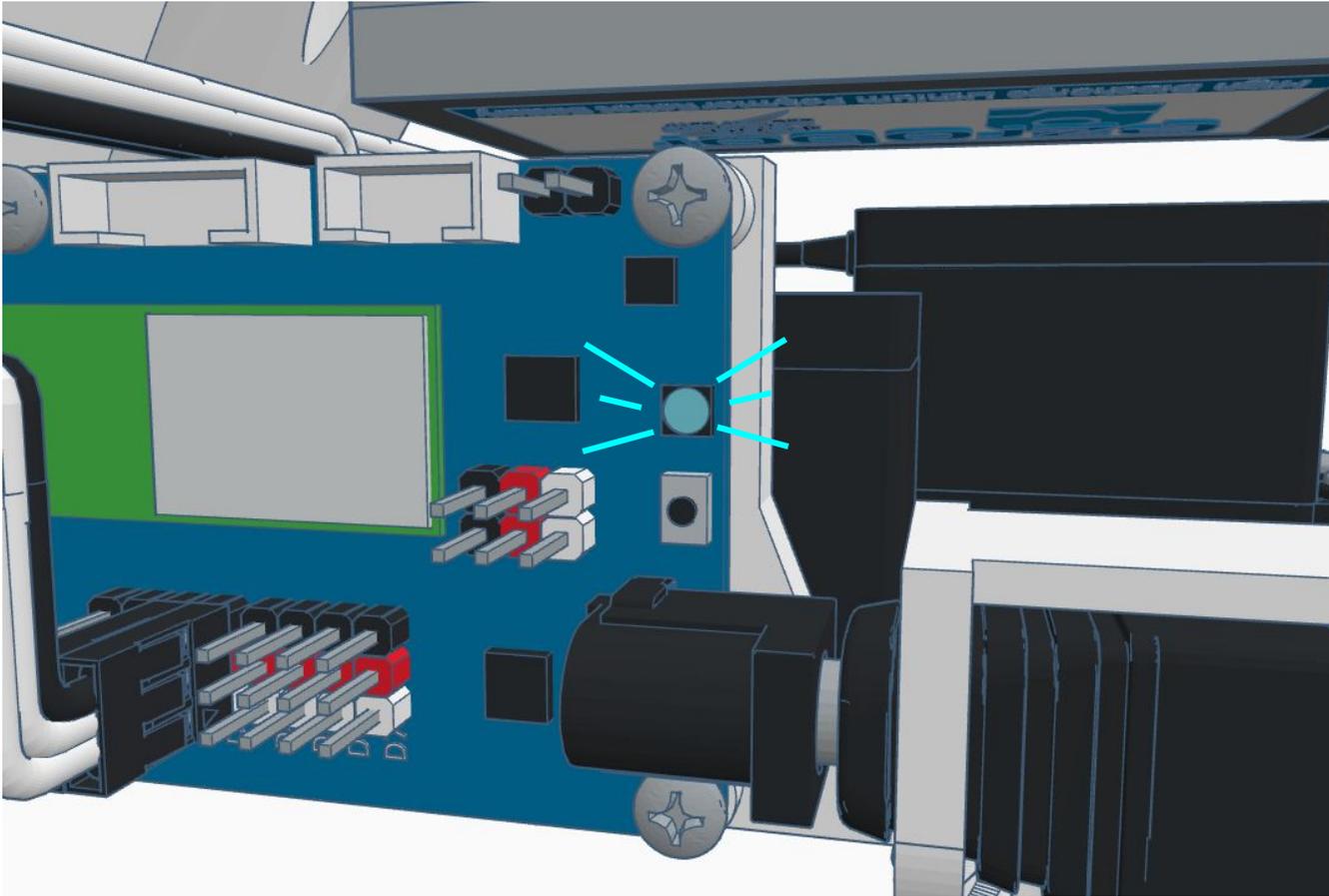


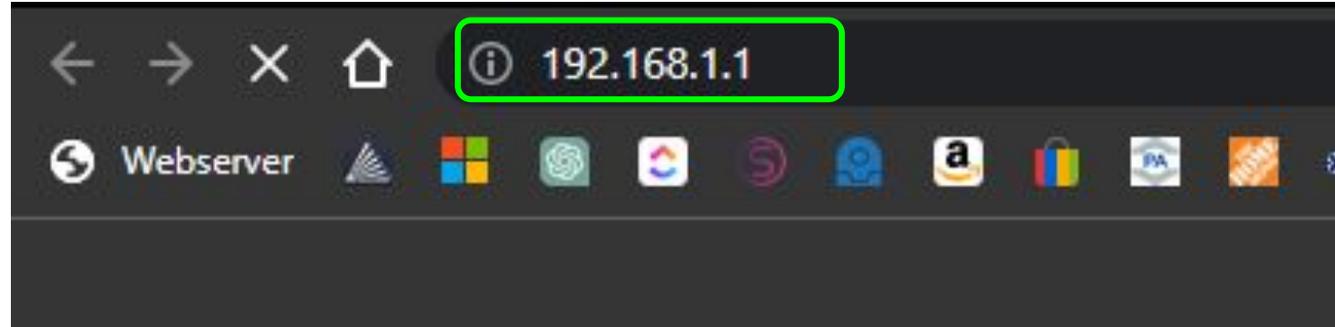
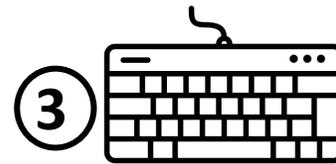


Press  
Switch  
ON



**BLUE FLASHING LED ON IOTINY = READY TO CONNECT TO COMPUTER**





### IoTiny

Main Menu	<b>IoTiny</b>
Wi-Fi AP Mode	<b>Introduction</b> Welcome to IoTiny! This web interface allows you to configure IoTiny's settings. For more information about IoTiny, connect to the internet and visit <a href="http://www.ez-robot.com">www.ez-robot.com</a> .
Wi-Fi Client Mode	<b>Current Configuration</b>
General Settings	System Name: EZ-B v4 IoTiny SSID: EZ-B v4 IoTiny d0bae4103a58 Wi-Fi Mode: Custom AP Mode (Ad-Hoc) Model: EZ-B v4 IoTiny Advanced Settings: Version: WiFi 3165 v2018.09.30.00
Diagnostics	

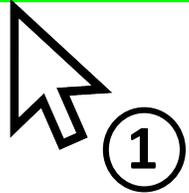
#### WiFi Modes

**Wi-Fi Access Point (AP) Mode**  
IoTiny becomes a Wi-Fi Server which allows your device to connect to it. This is the default setting for IoTiny. In this mode, your device (i.e. Computer, iPad, iPhone, etc.) will connect directly to IoTiny over its Wi-Fi network. You will lose access to the internet if connected this way, unless your device has two network adapters.

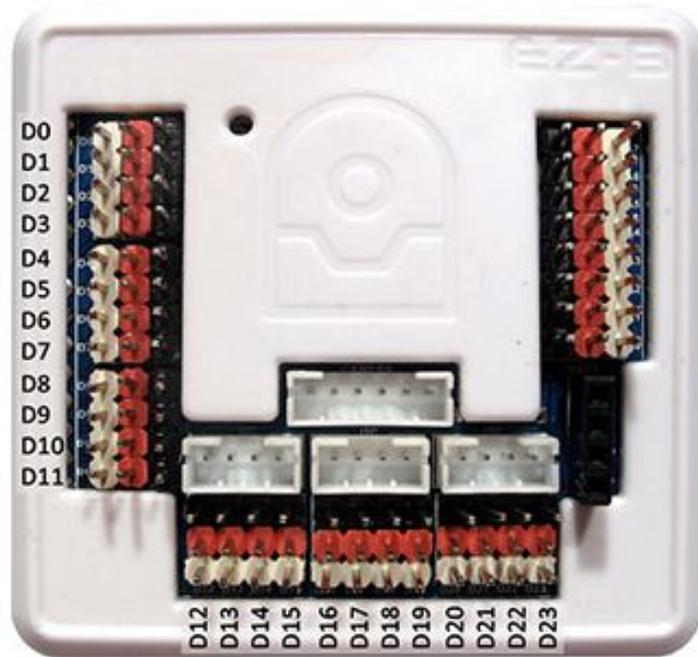
**Wi-Fi Client Mode**  
IoTiny will connect to an existing Wi-Fi network as a client, much like how your iPhone, iPad and Computer connects to your home network. When IoTiny is connected to your Wi-Fi network, you may not know the IP Address that it is assigned. The EZ-Builder software includes a network scan tool which will find all EZ-B's on your network.

**Reset to Defaults**  
To reset IoTiny to default network & factory settings, use a paperclip and gently press and release the reset button located on the top of IoTiny while powered. Once the reset has been acknowledged by IoTiny, a message will be spoken out of the speaker confirming the reset to factory defaults. The factory default will configure IoTiny for Ad-Hoc mode, with the WiFi SSID including the MAC Address for identification.

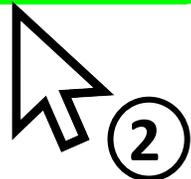
- Main Menu
- Wi-Fi AP Mode
- Wi-Fi Client Mode
- General Settings
- Advanced Settings
- Diagnostics**



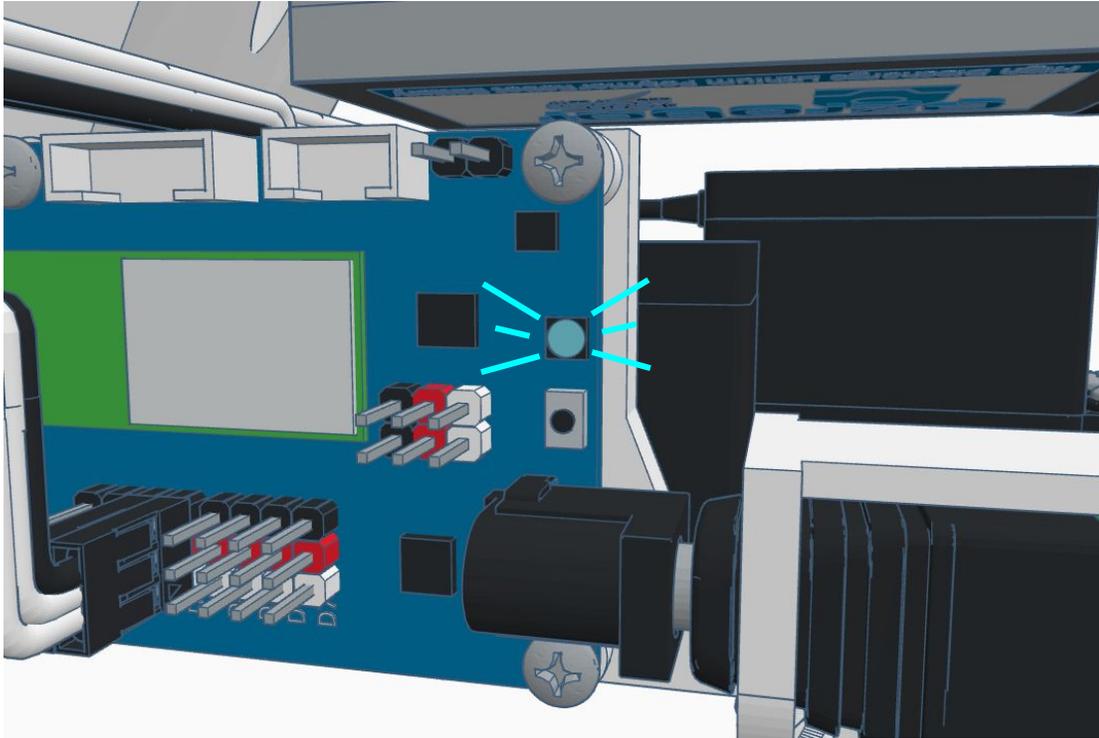
### Diagnostics



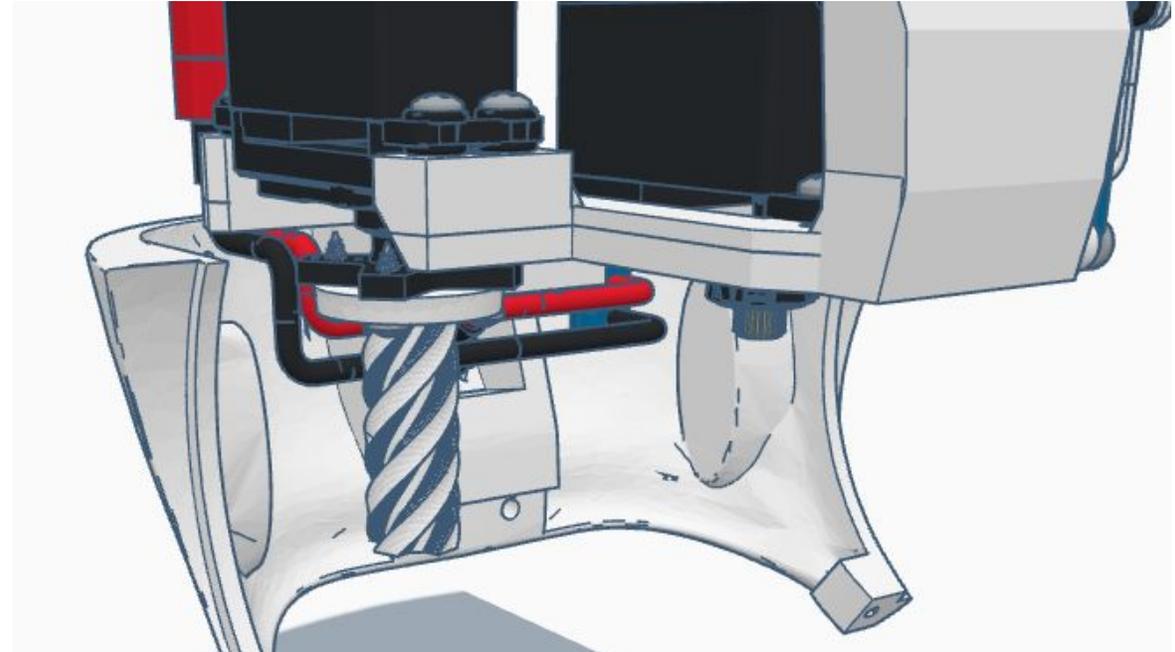
- All Servo Ports Release
- All Servo Ports to 1 Degree
- All Servo Ports to 90 Degrees**
- All Servo Ports to 180 Degree
- Alternating Digital I/O Mode 1
- Alternating Digital I/O Mode 2
- Reboot EZ-B



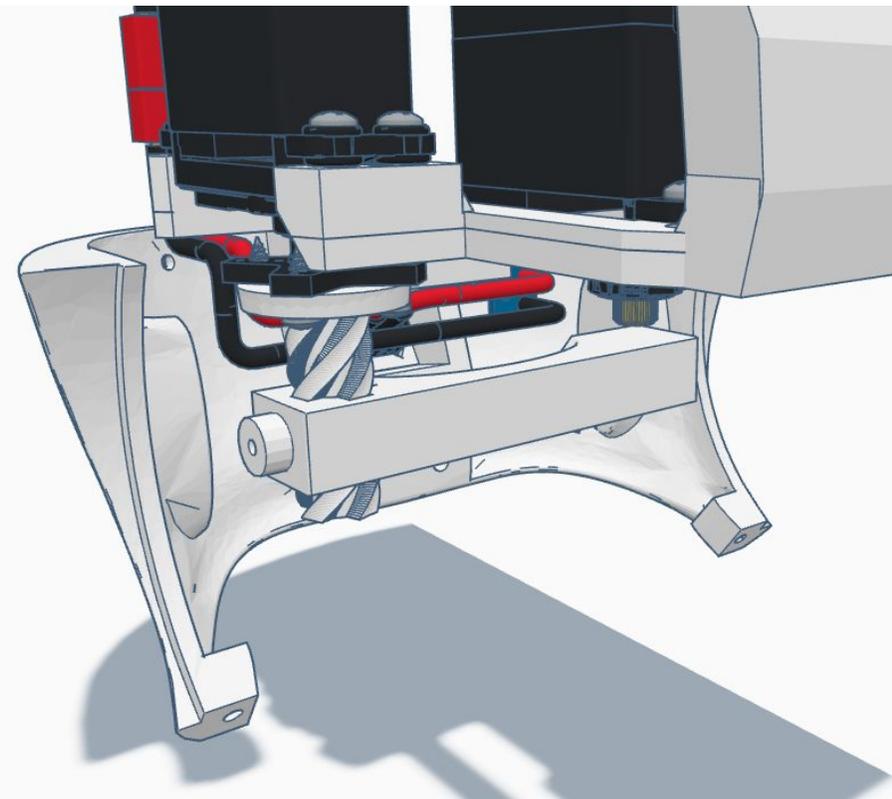
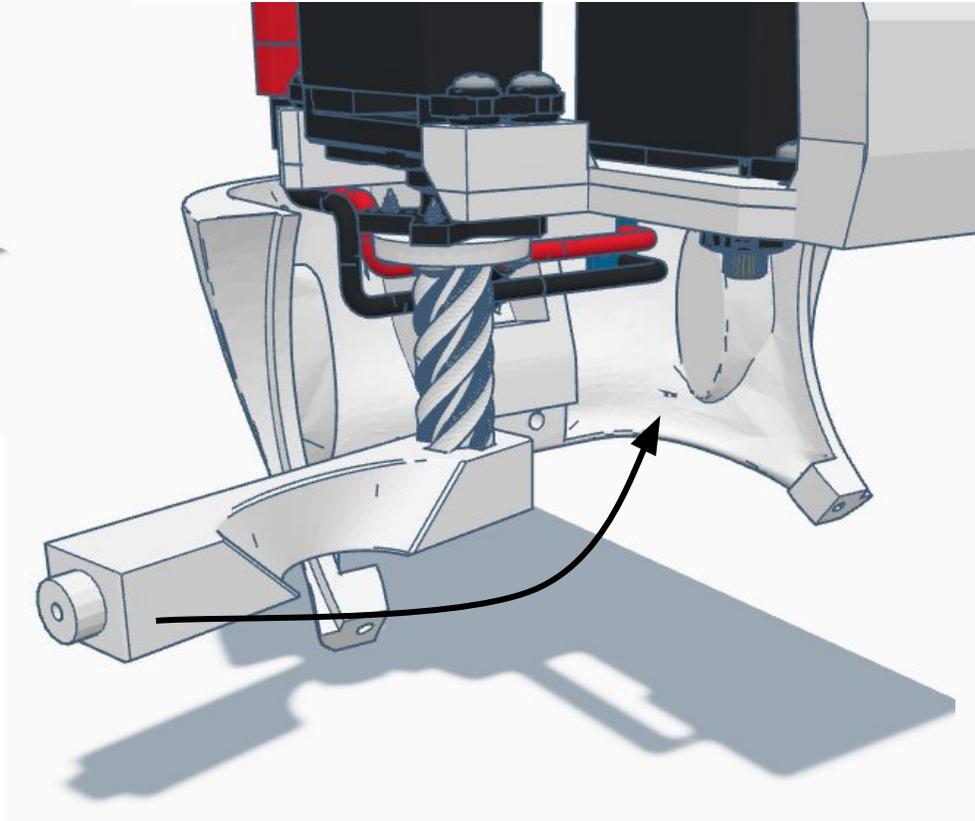
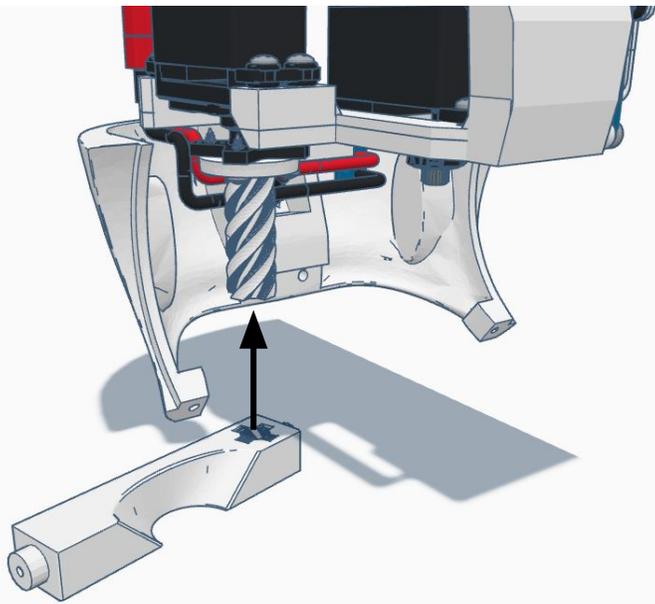
**LED WILL CONTINUE TO FLASH BLUE ON IOTINY**

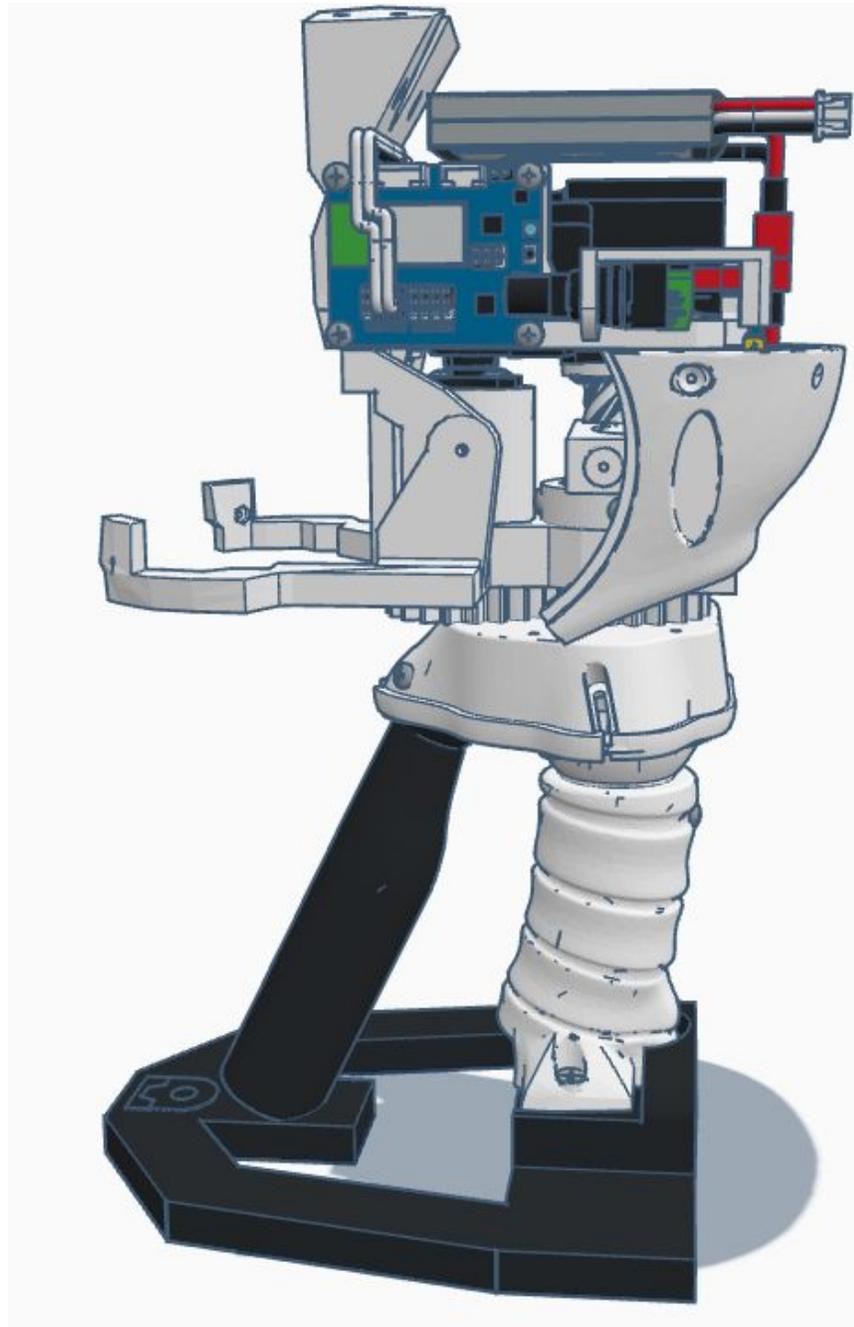
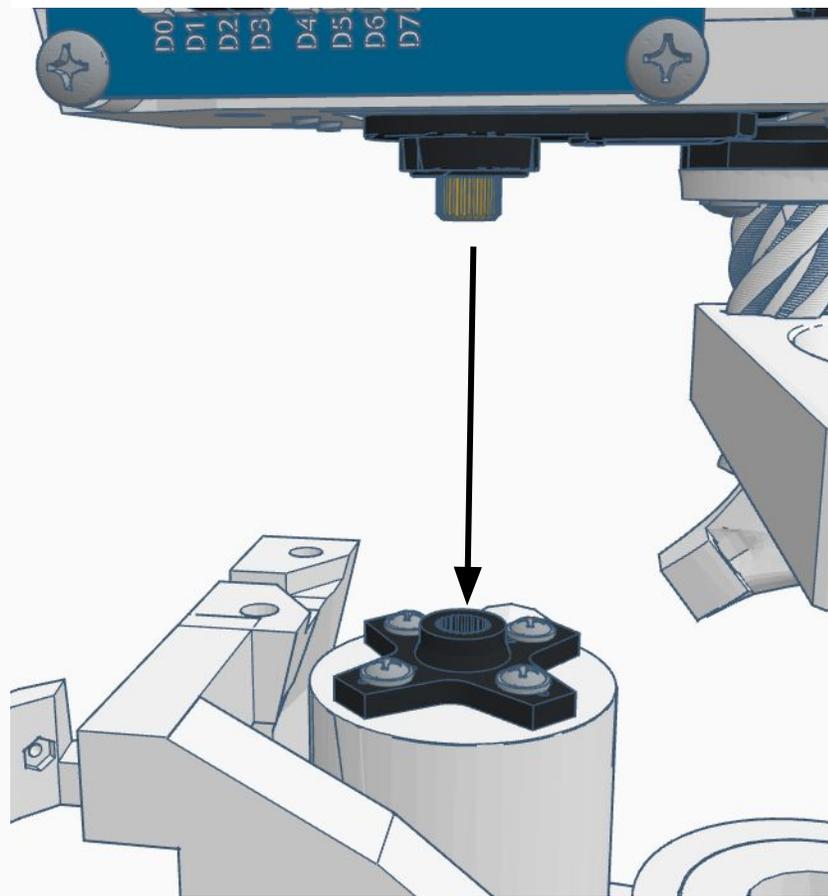
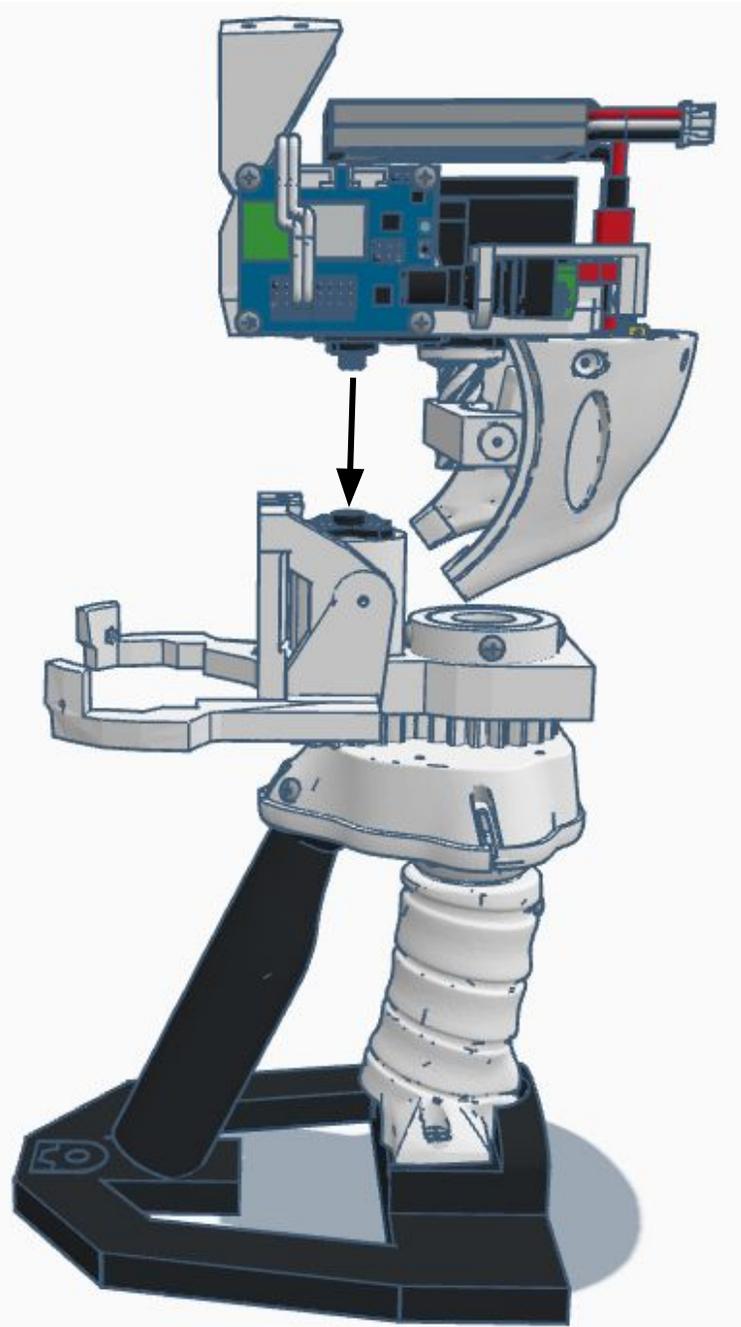


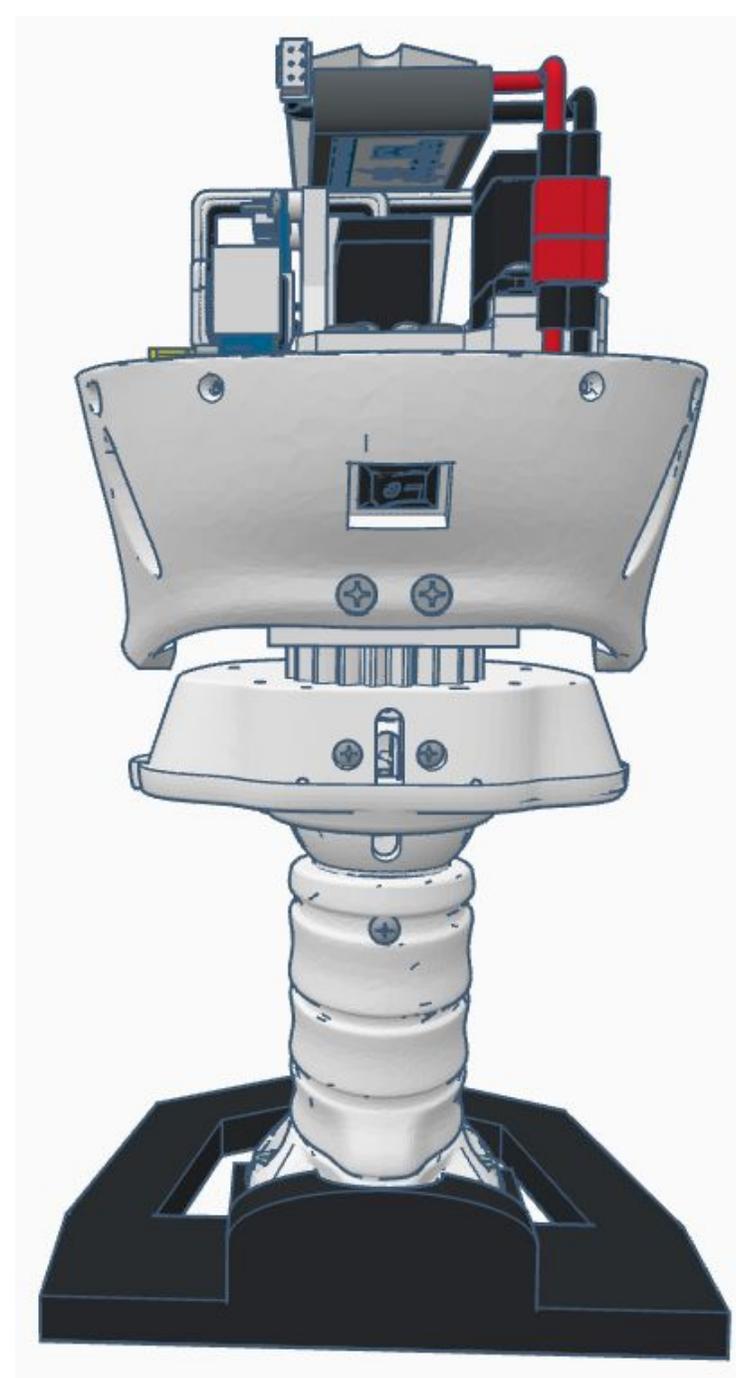
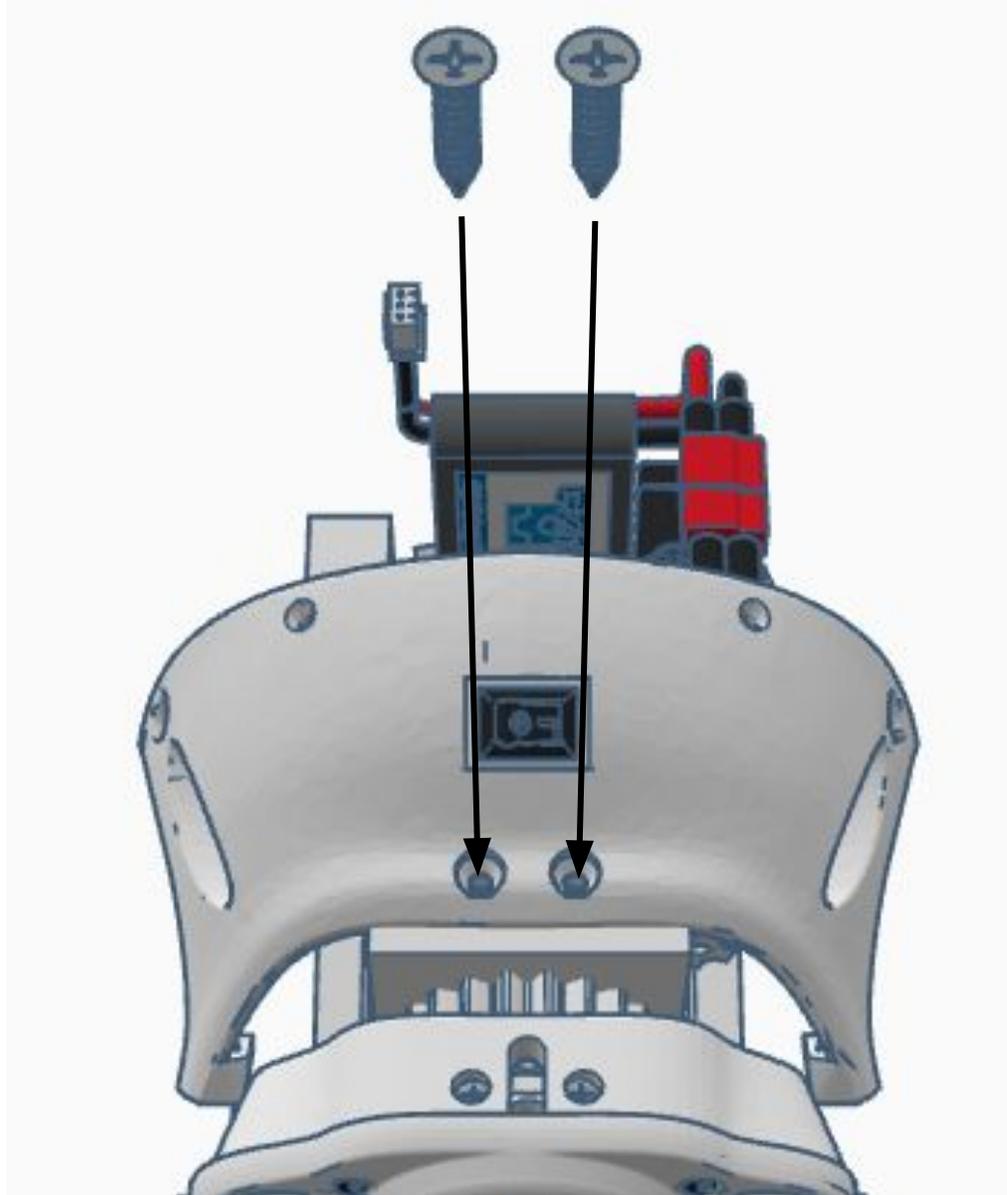
**SERVOS WILL MOVE TO 90 DEGREE POSITION**

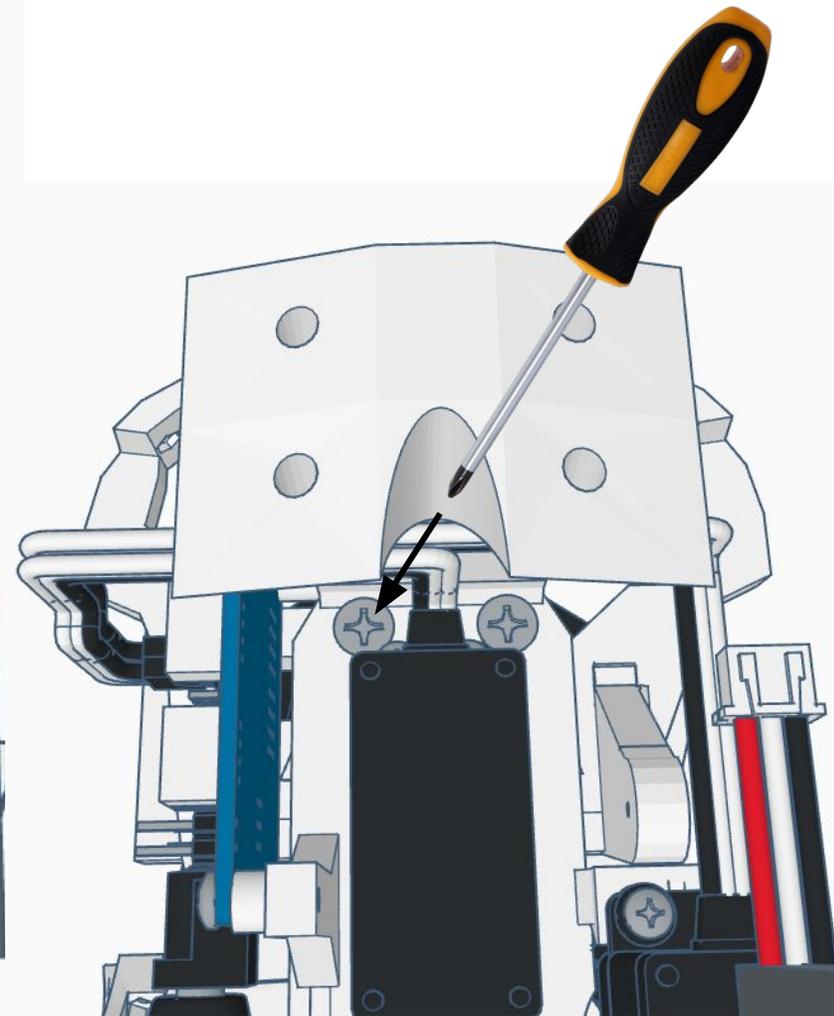
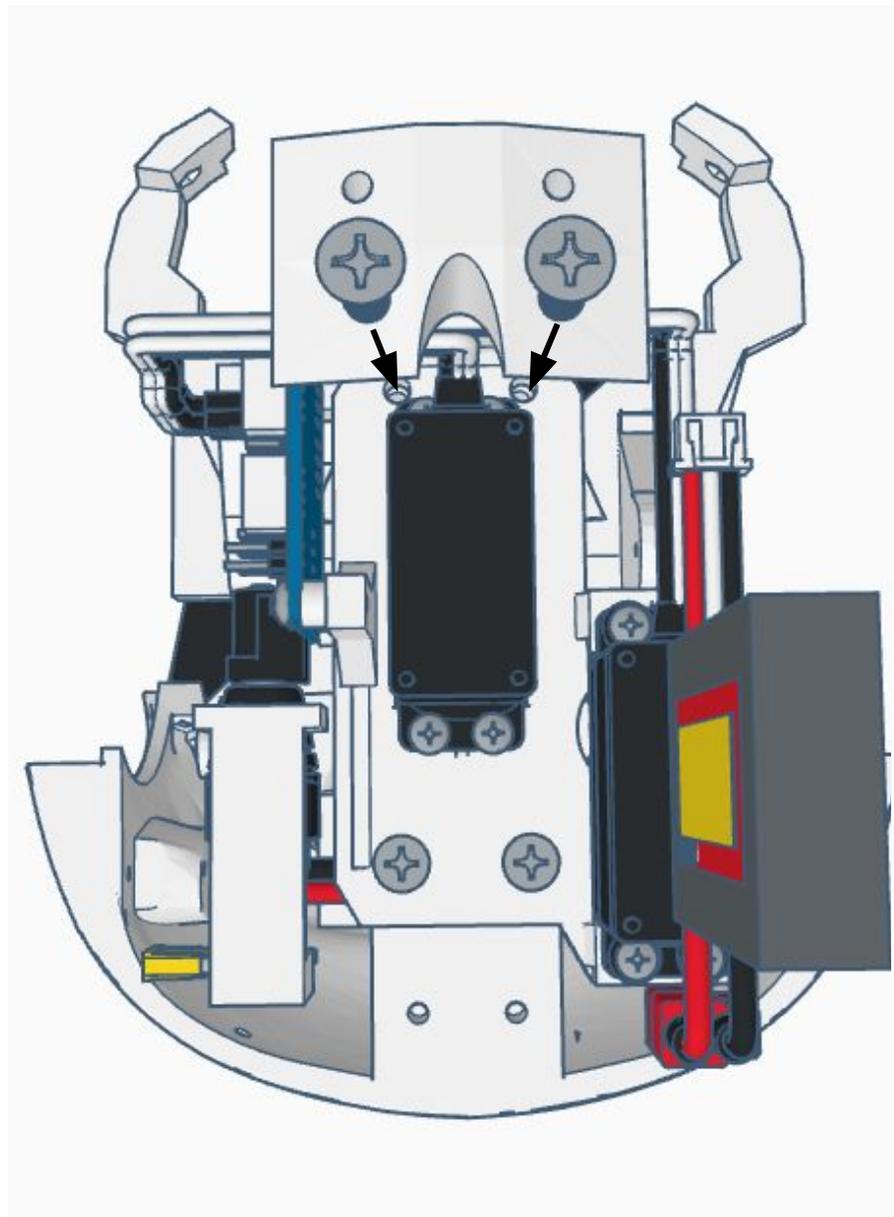
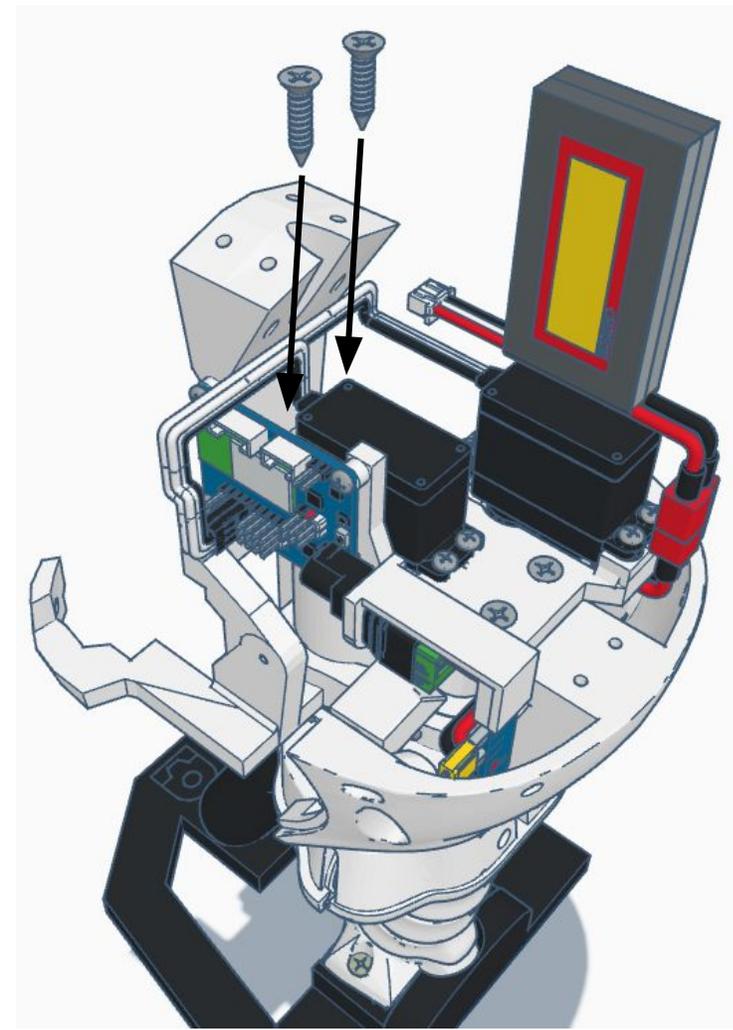


**NOTE: IF ALREADY AT 90 DEGREES THE SERVOS WILL NOT MOVE**

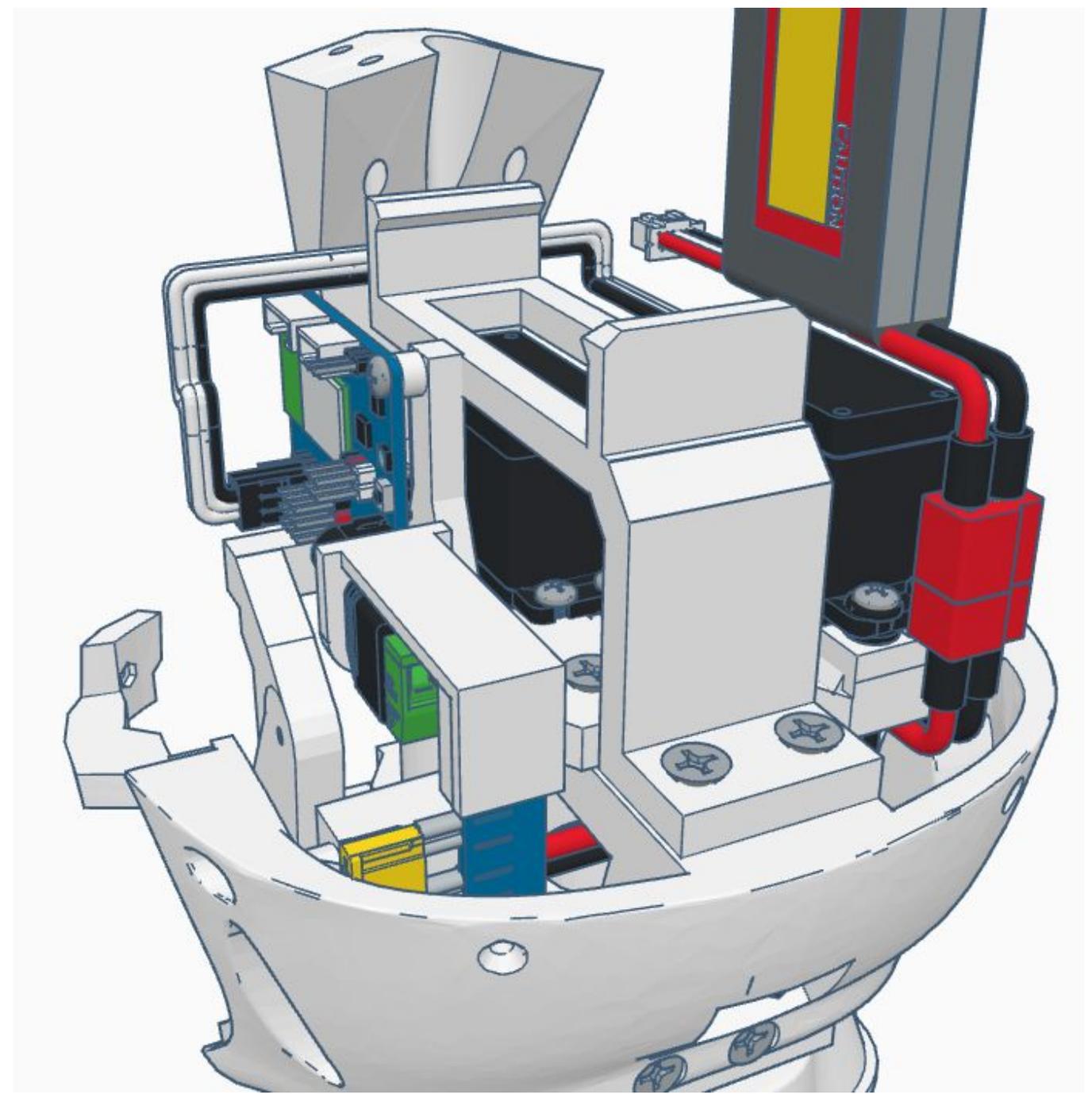
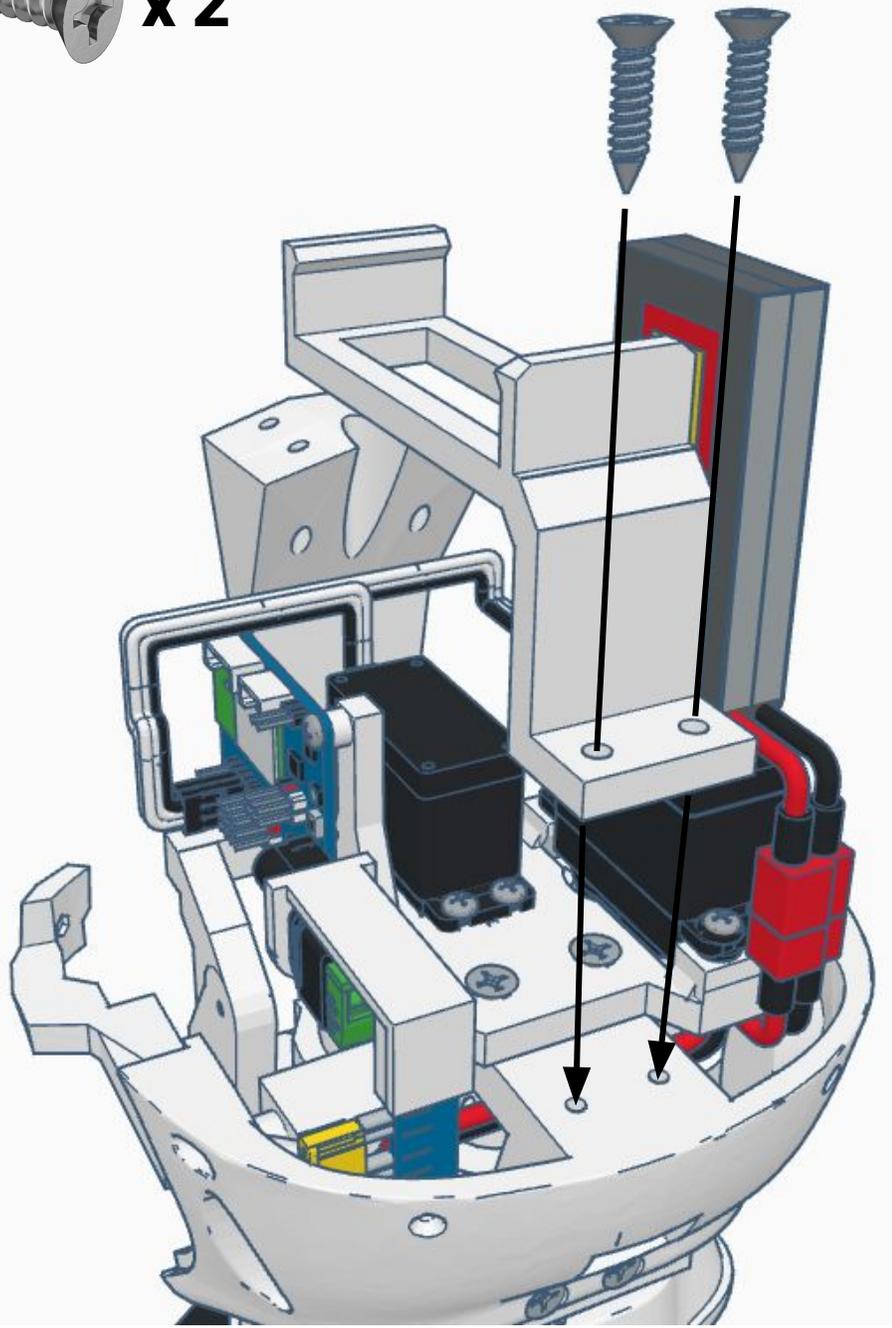


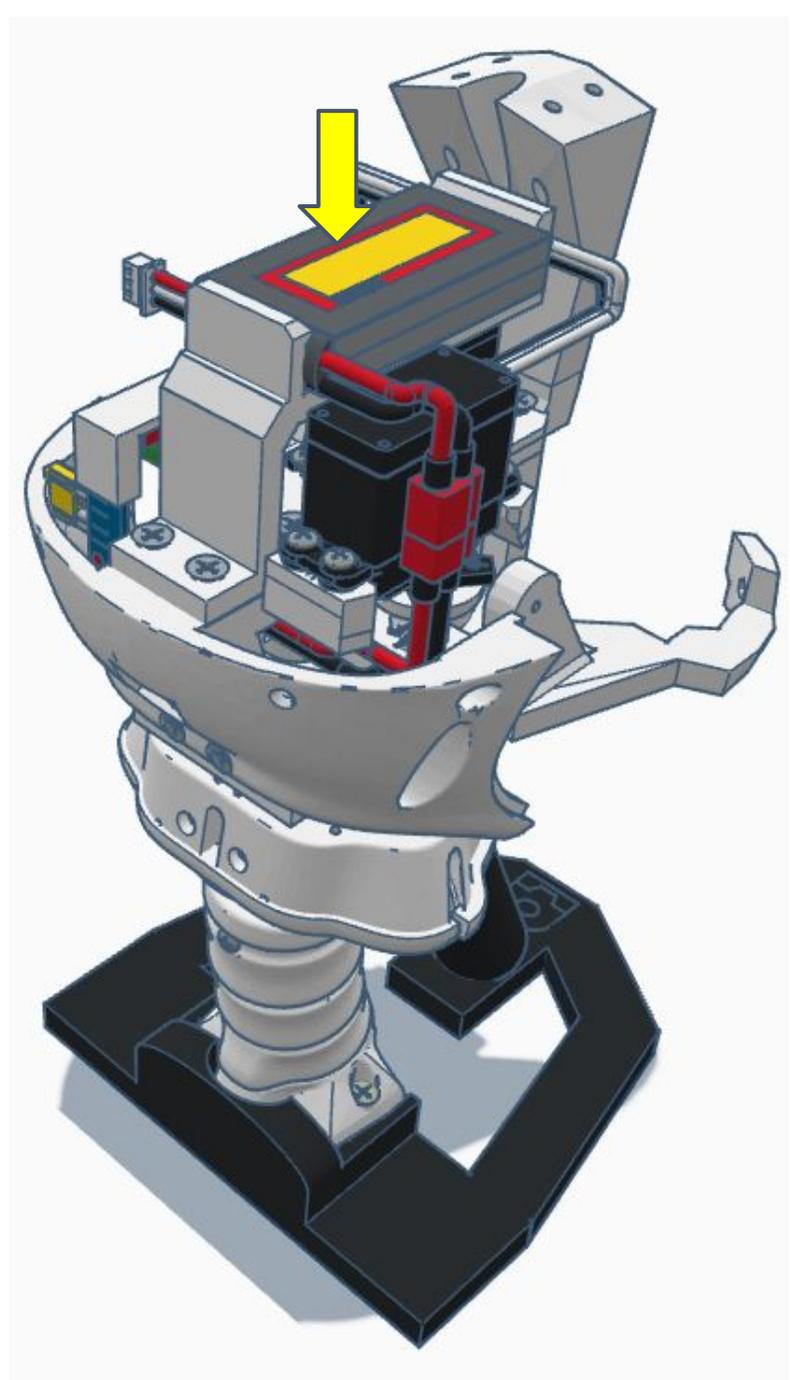
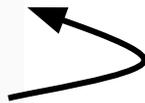
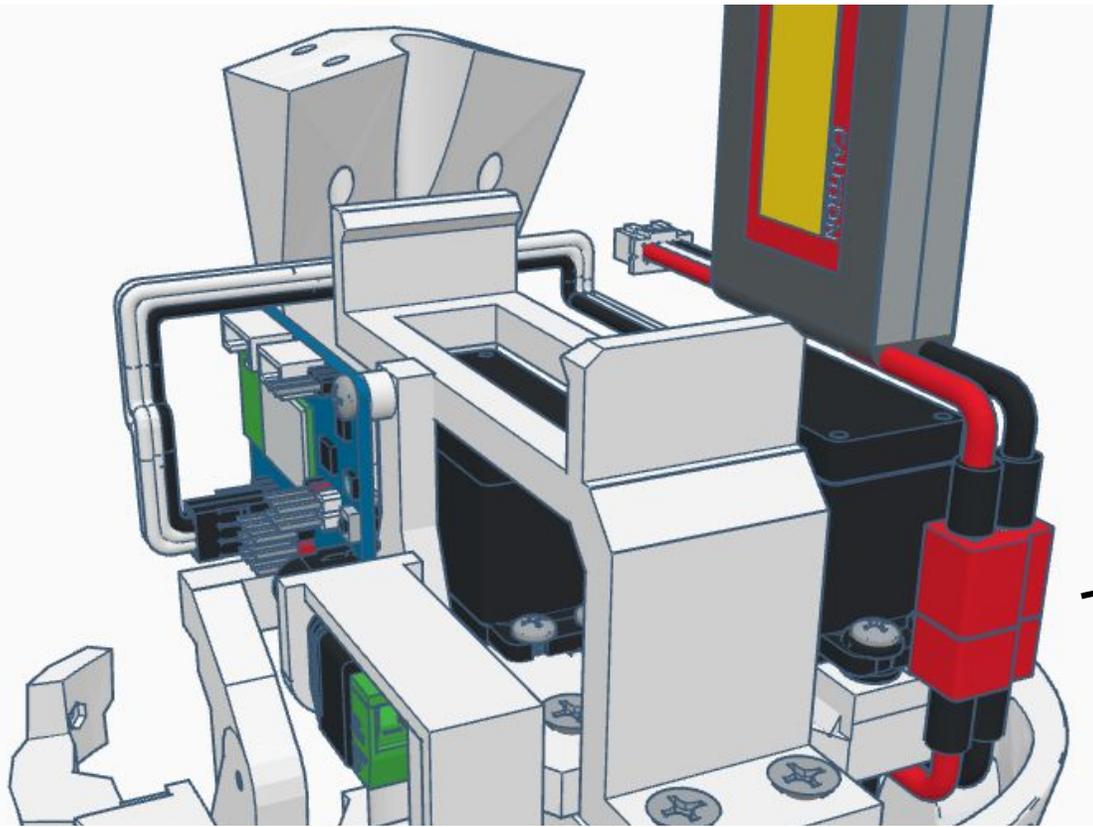




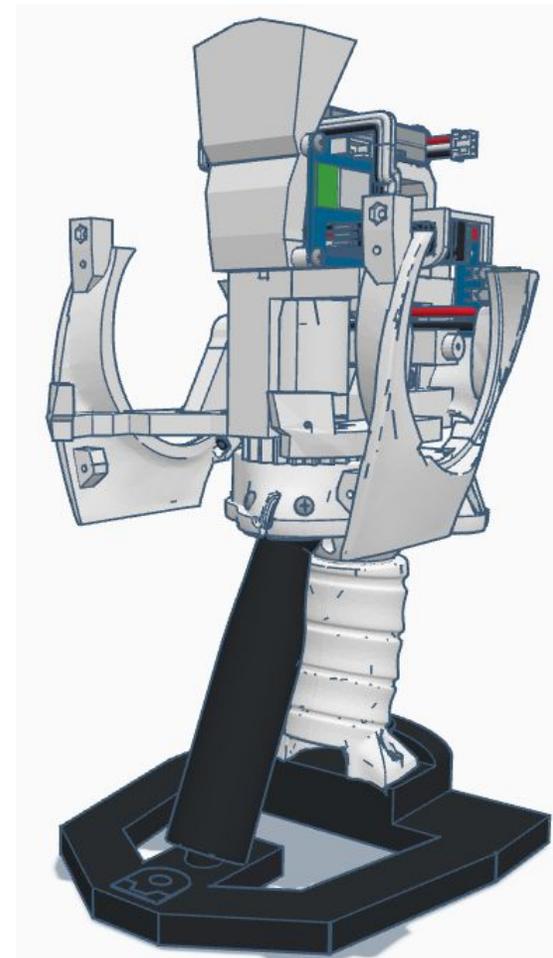
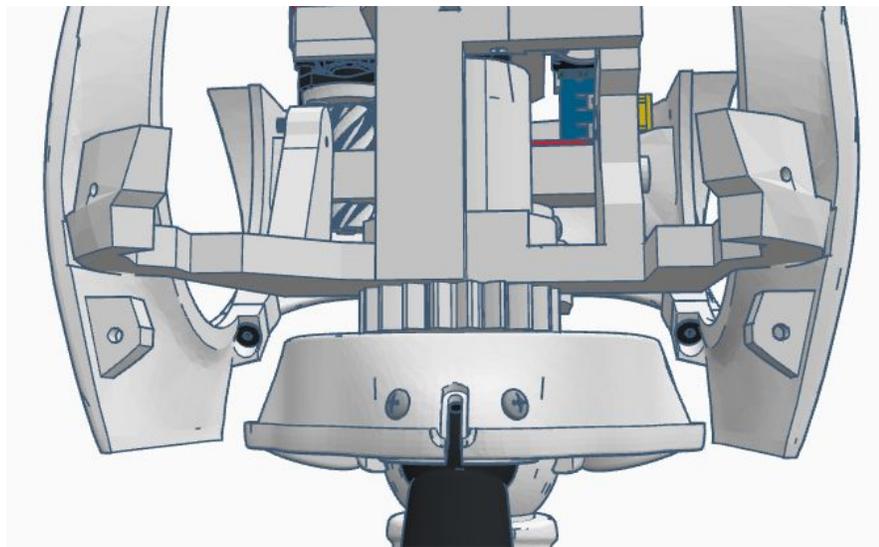
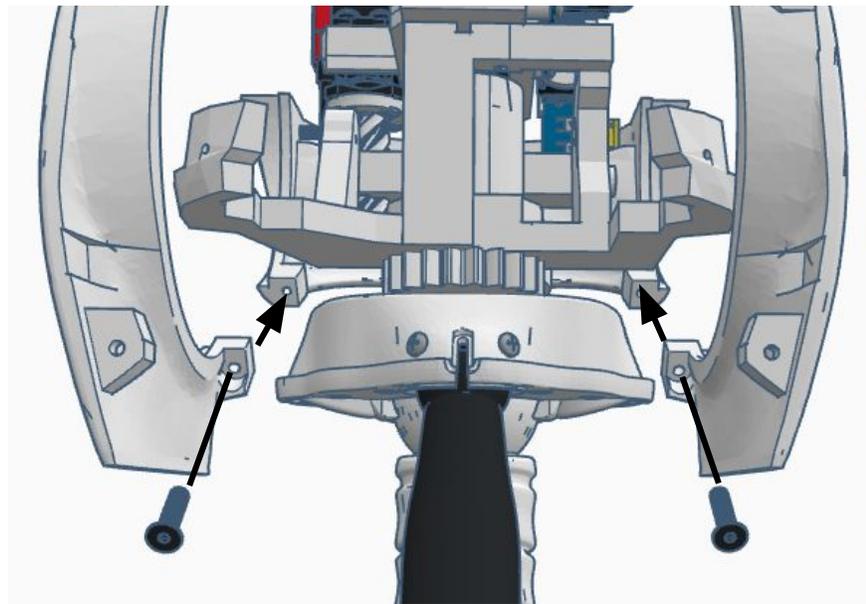
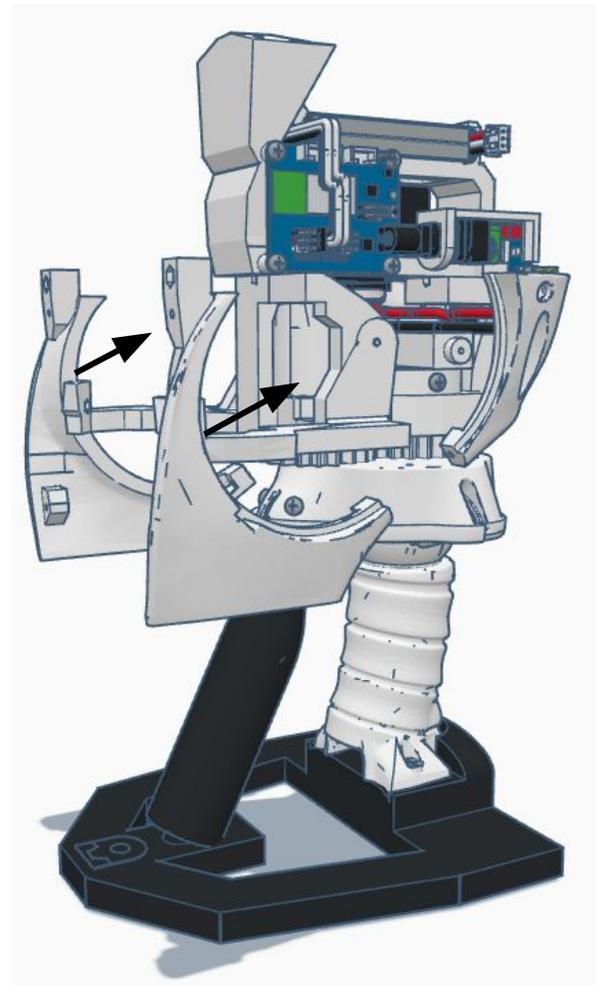


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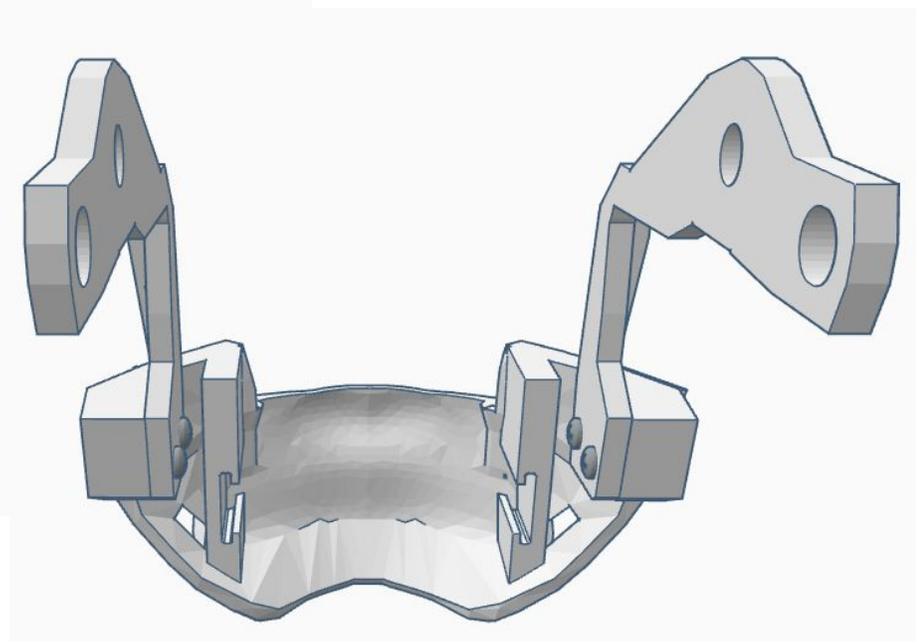
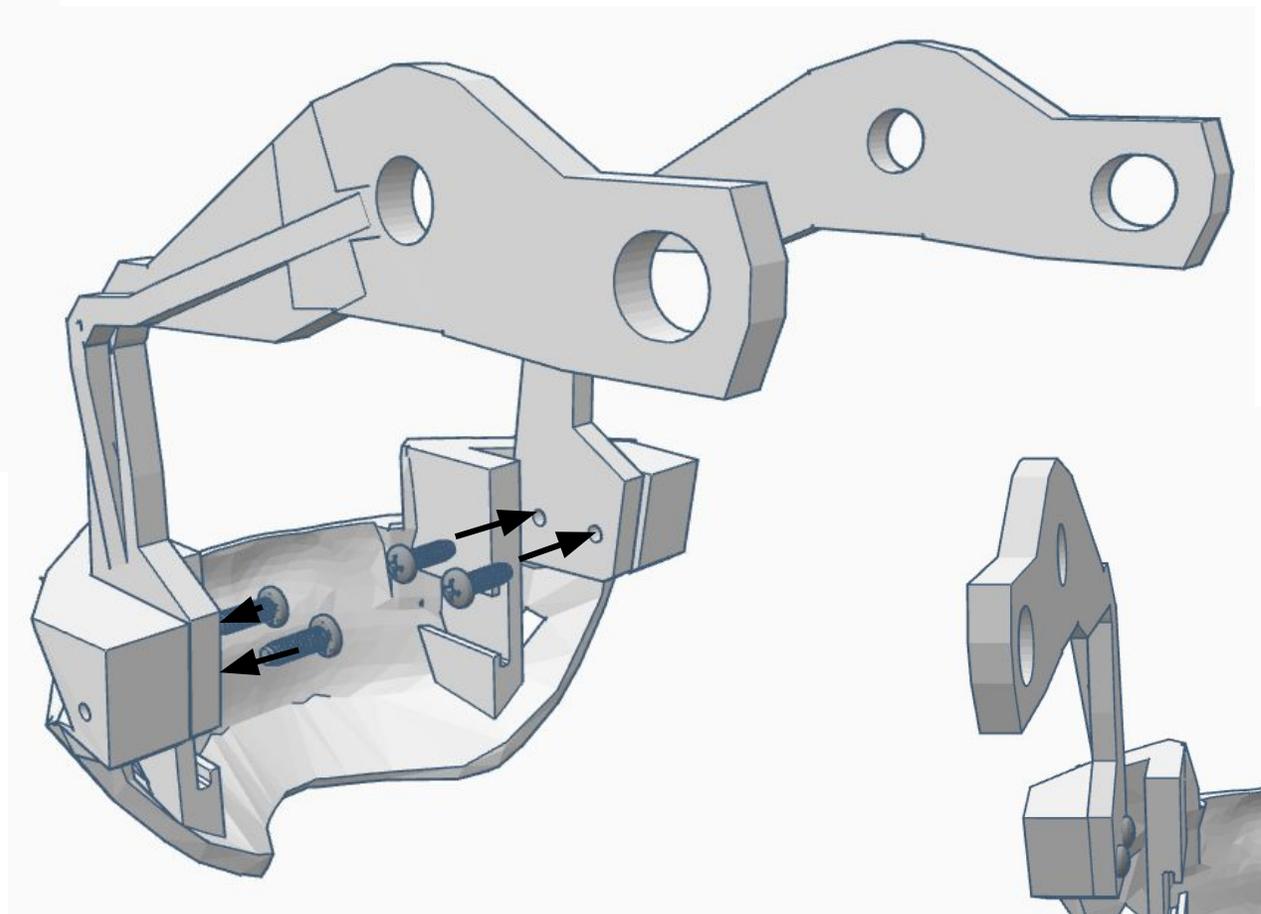
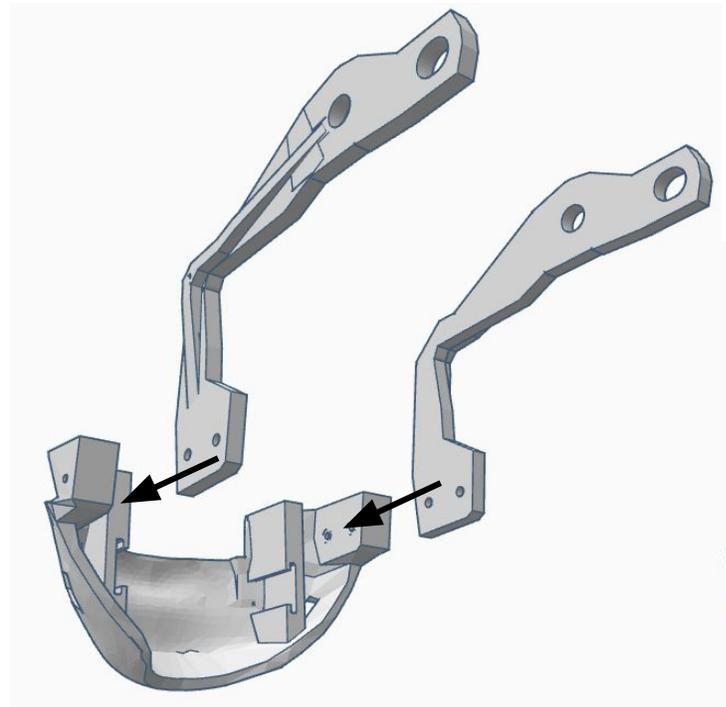


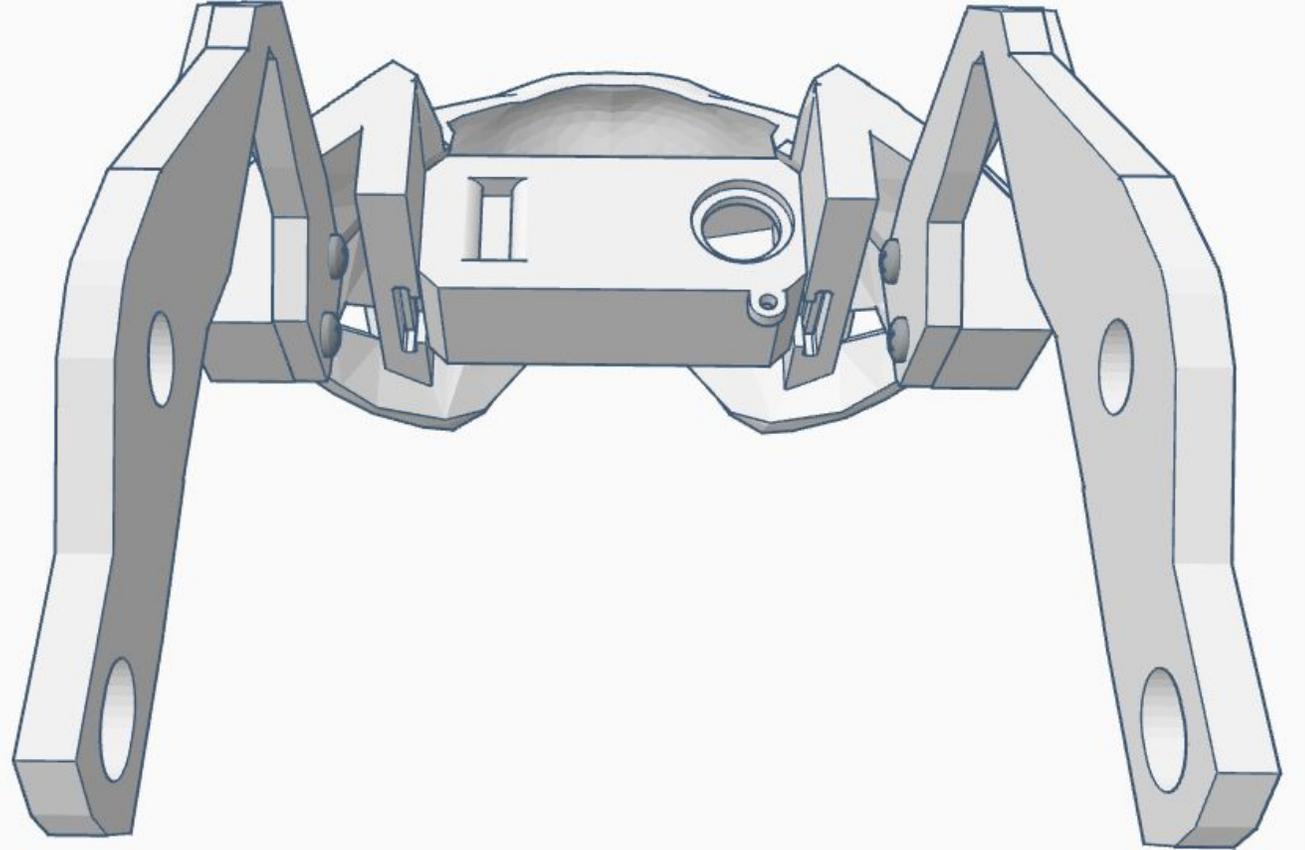
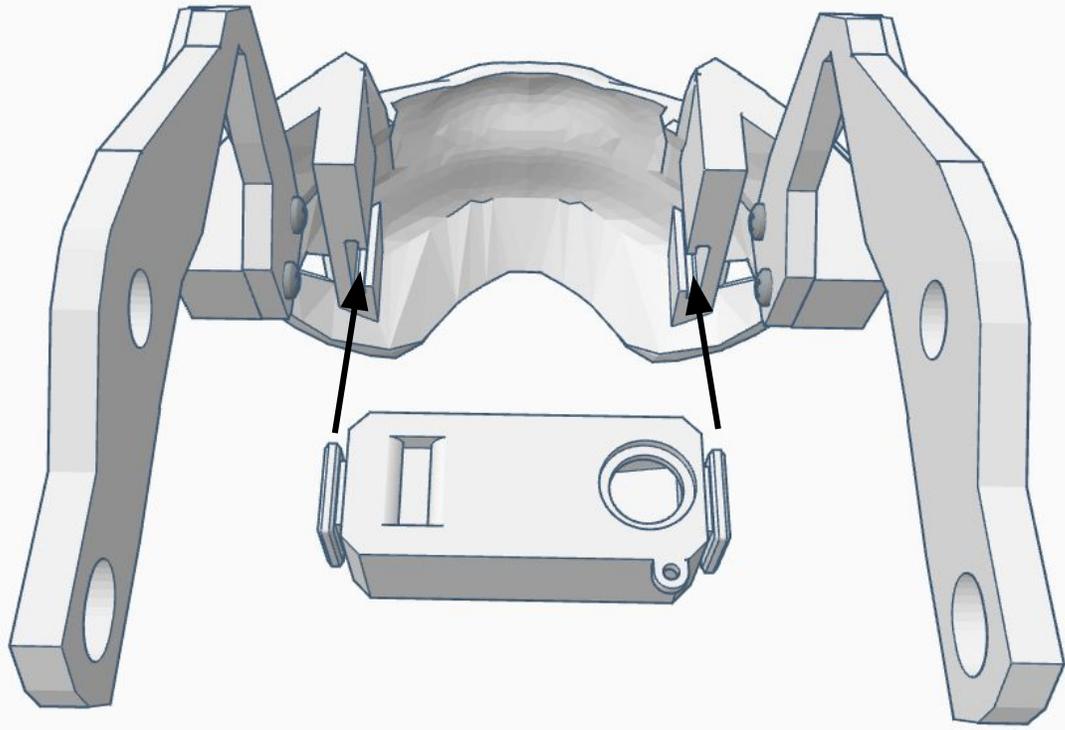


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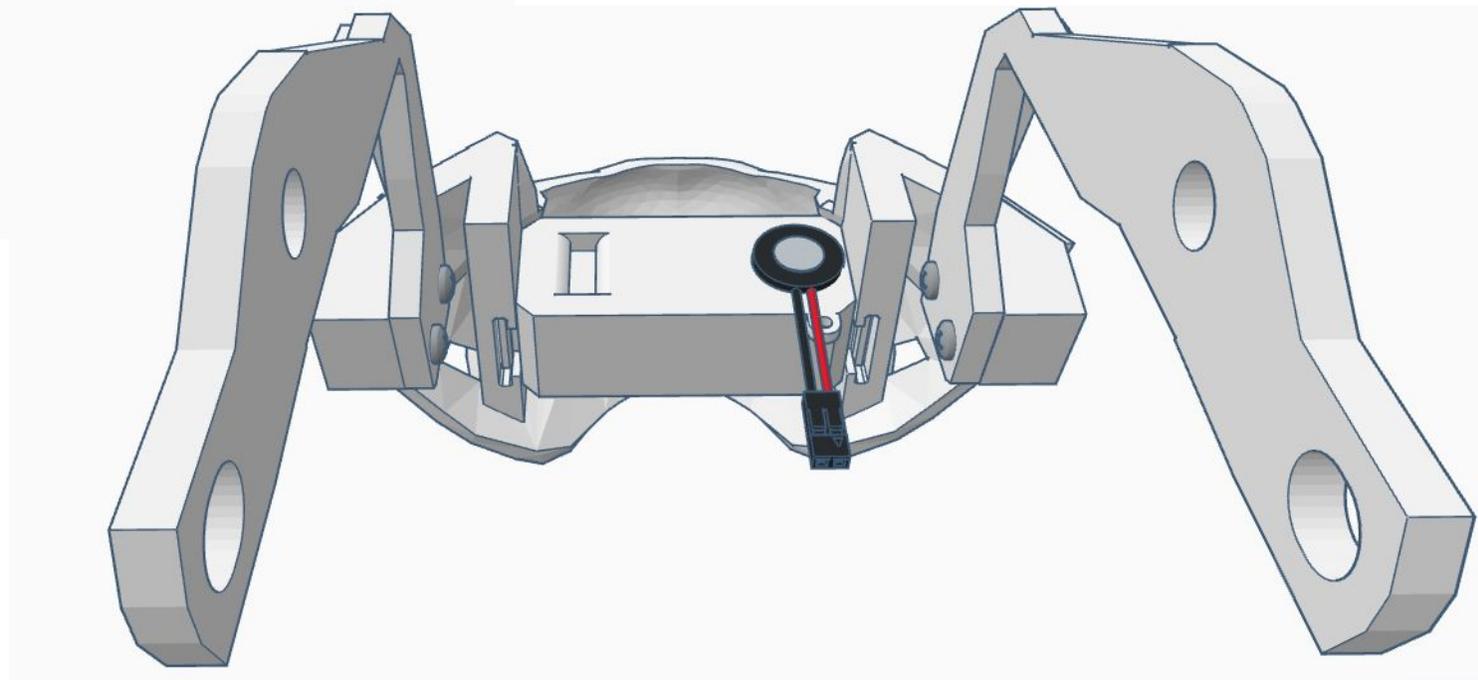
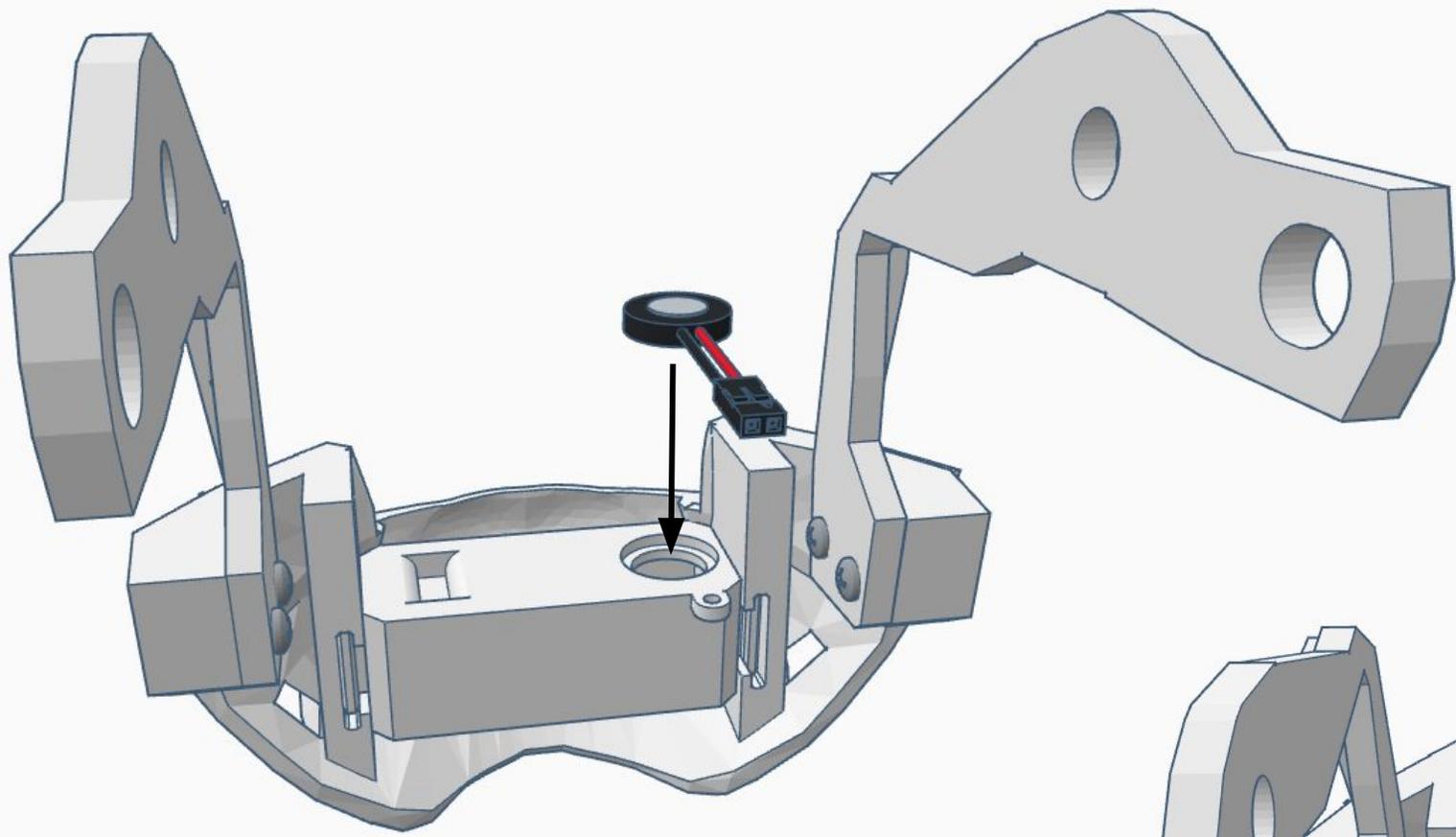


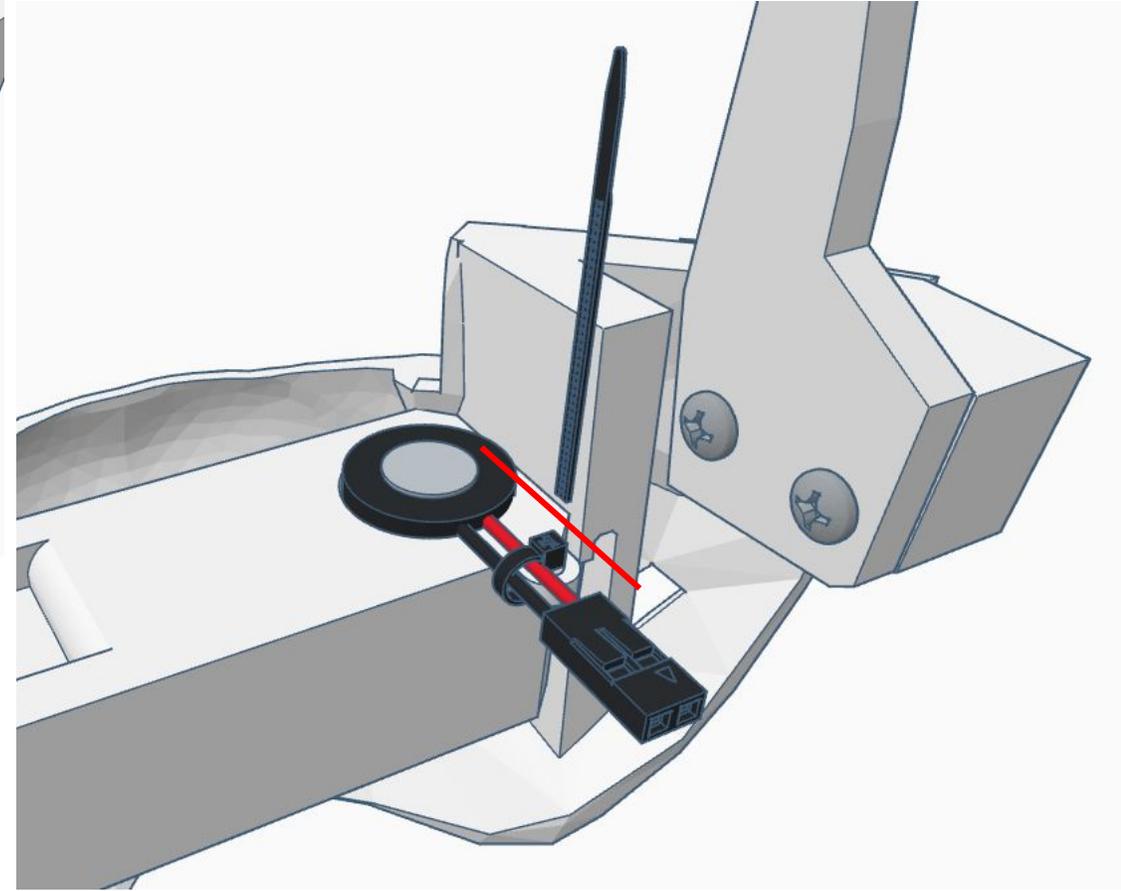
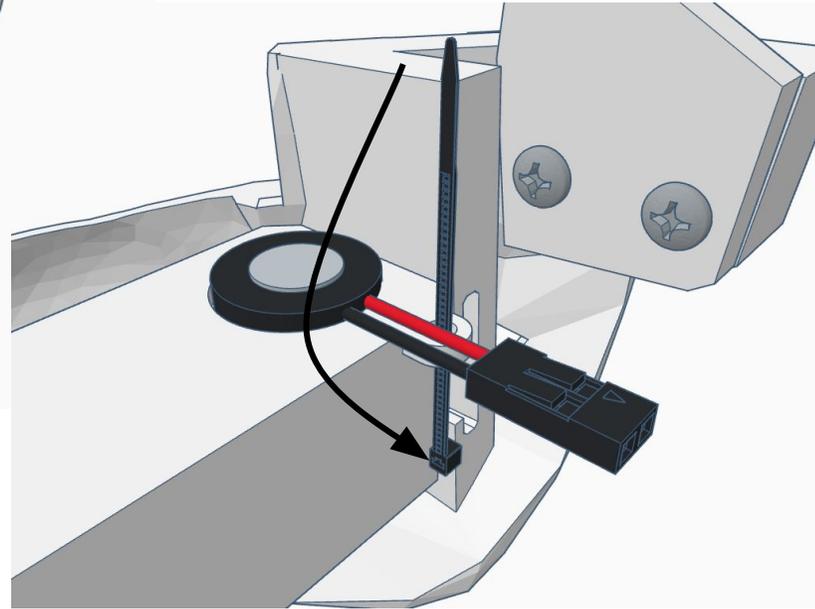
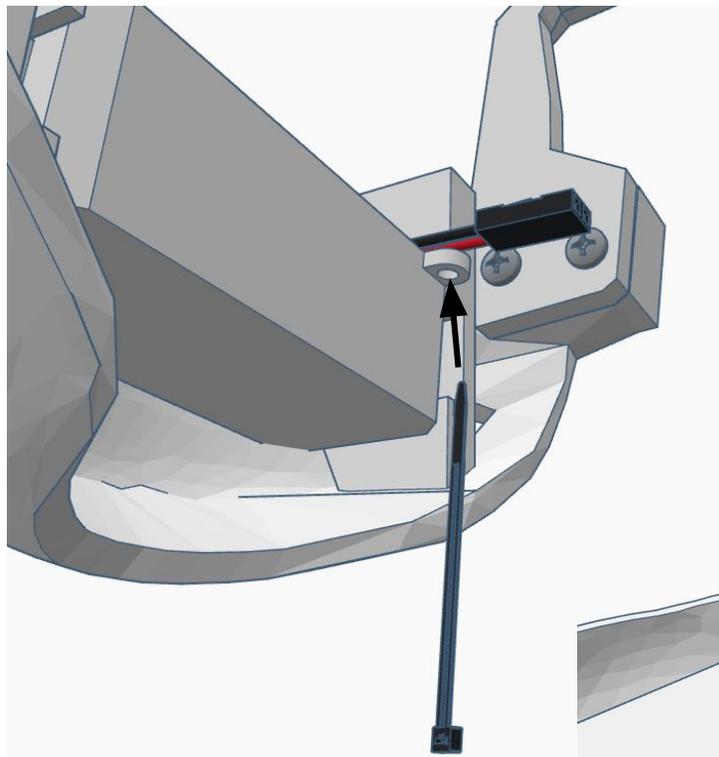
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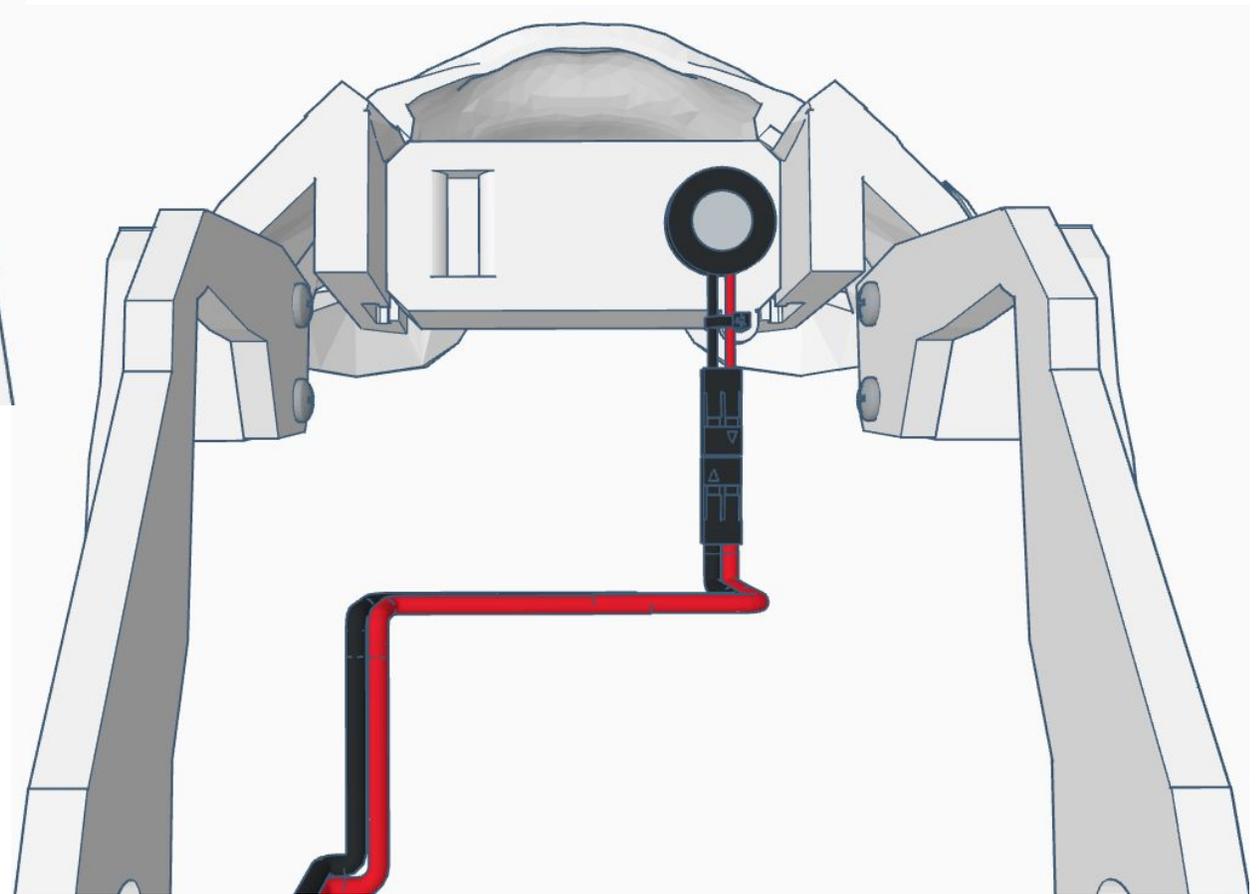
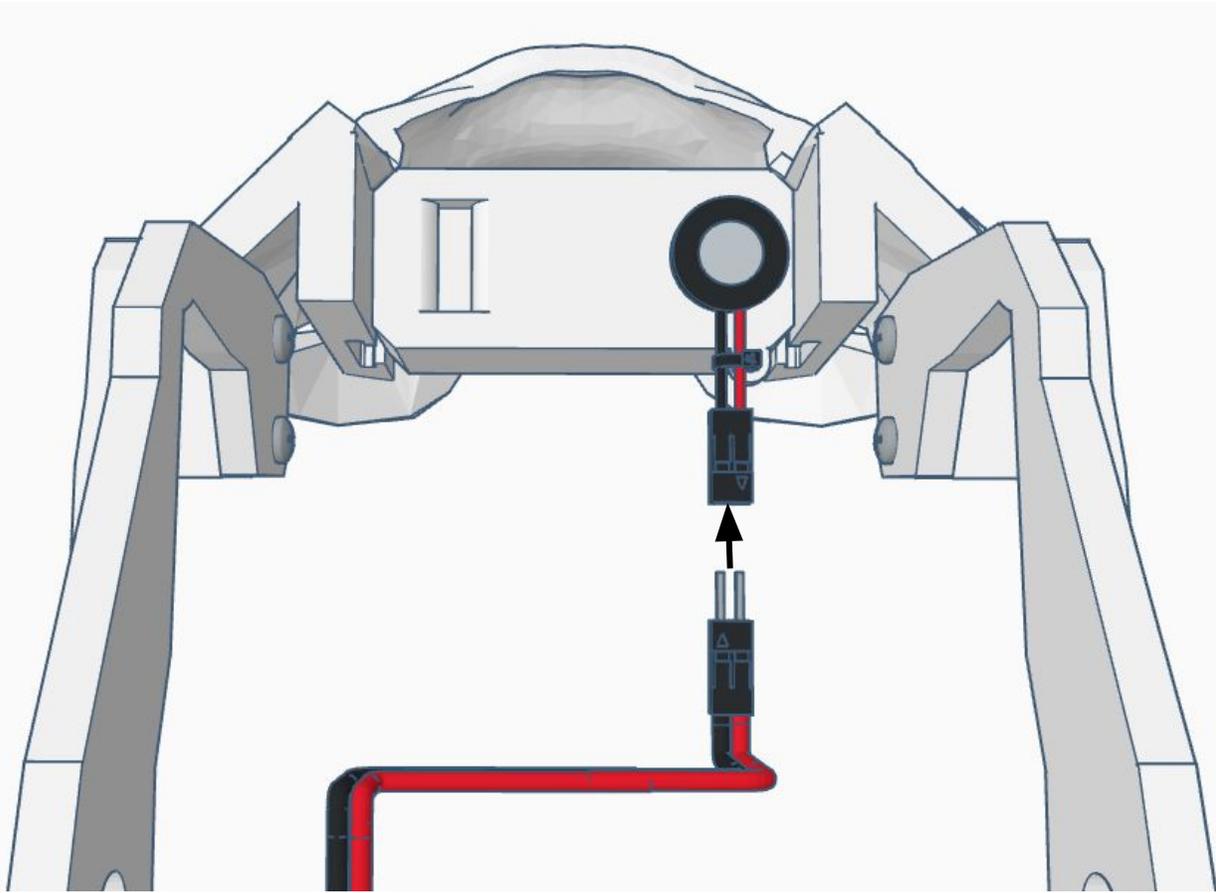


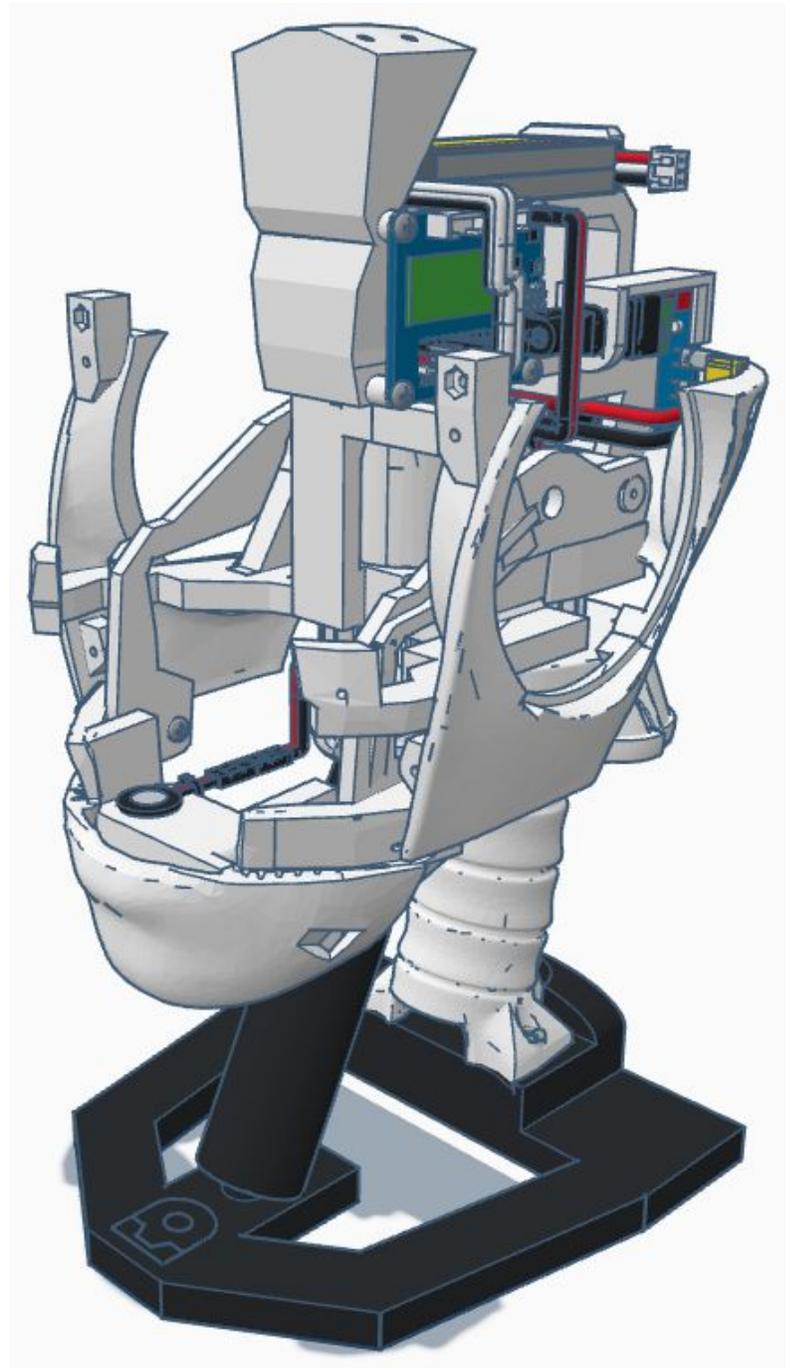
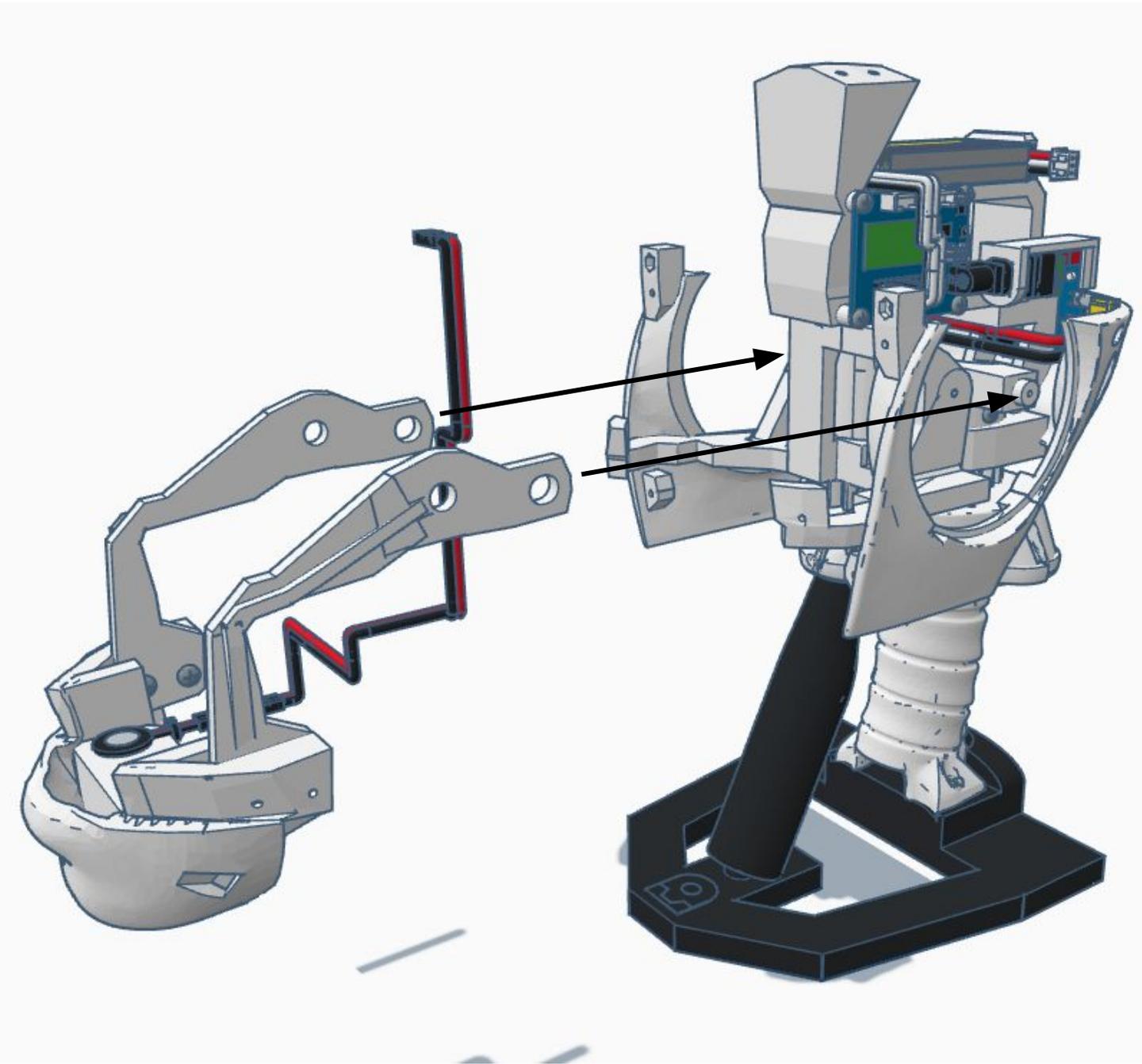




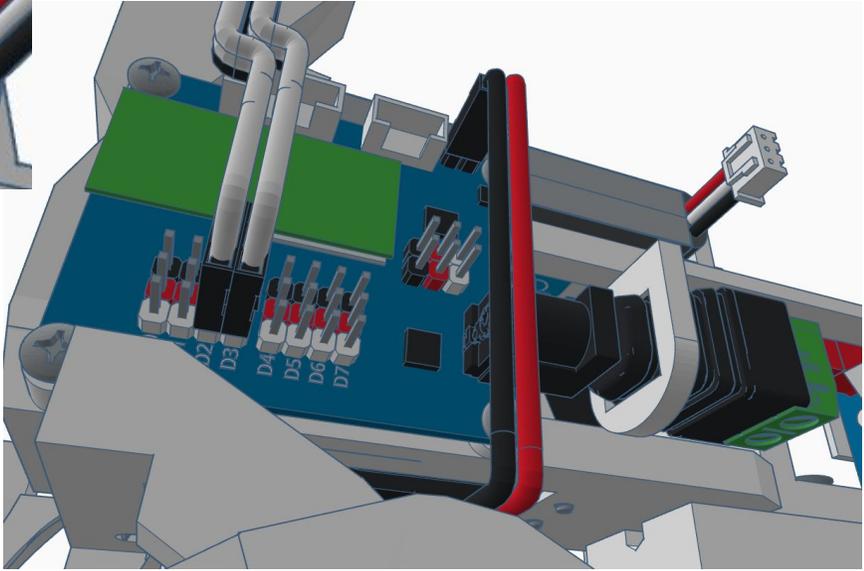
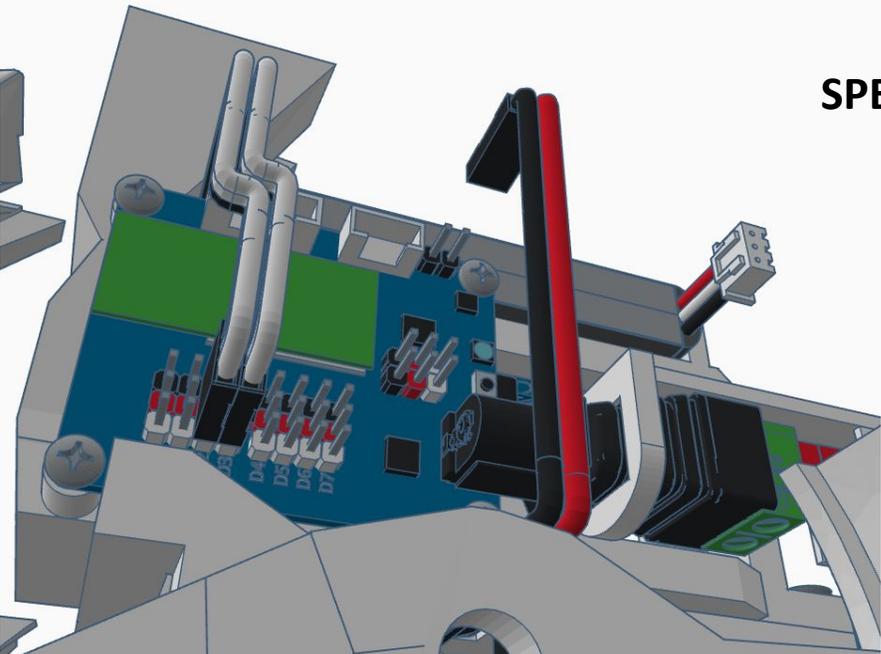




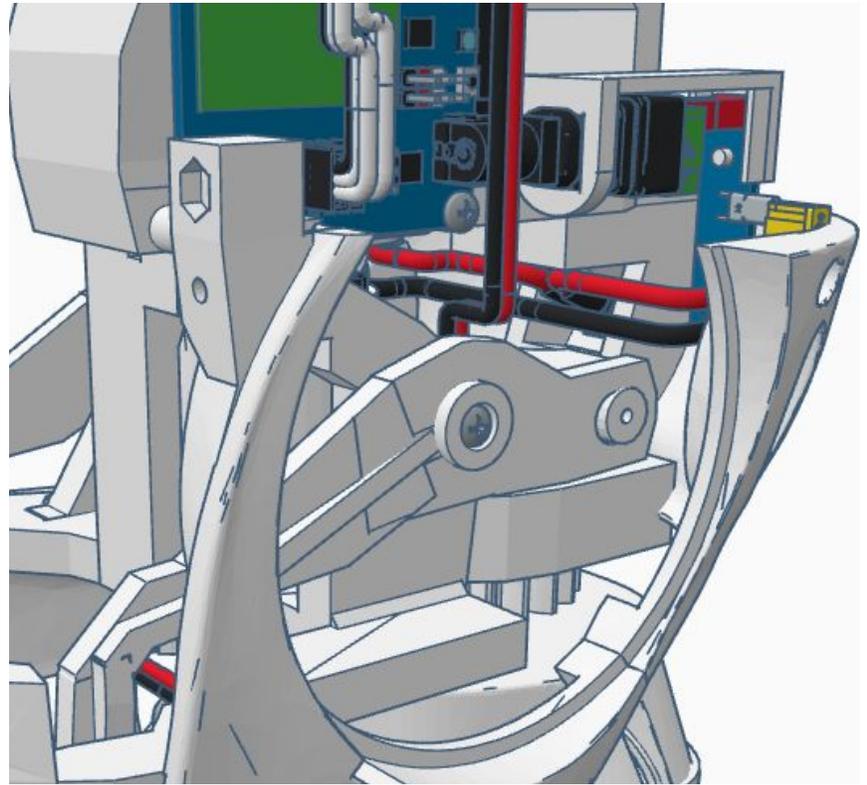
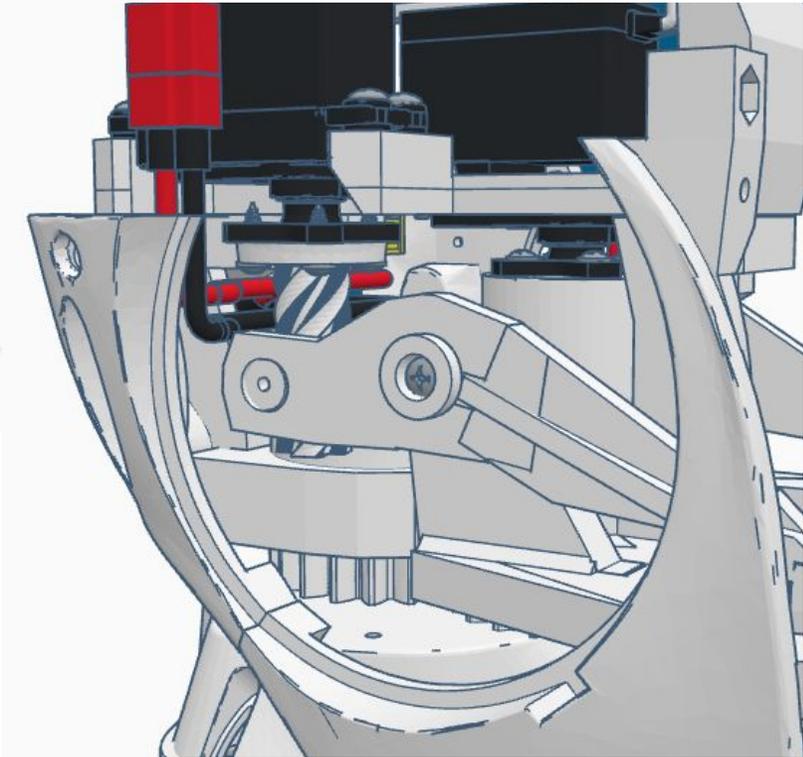
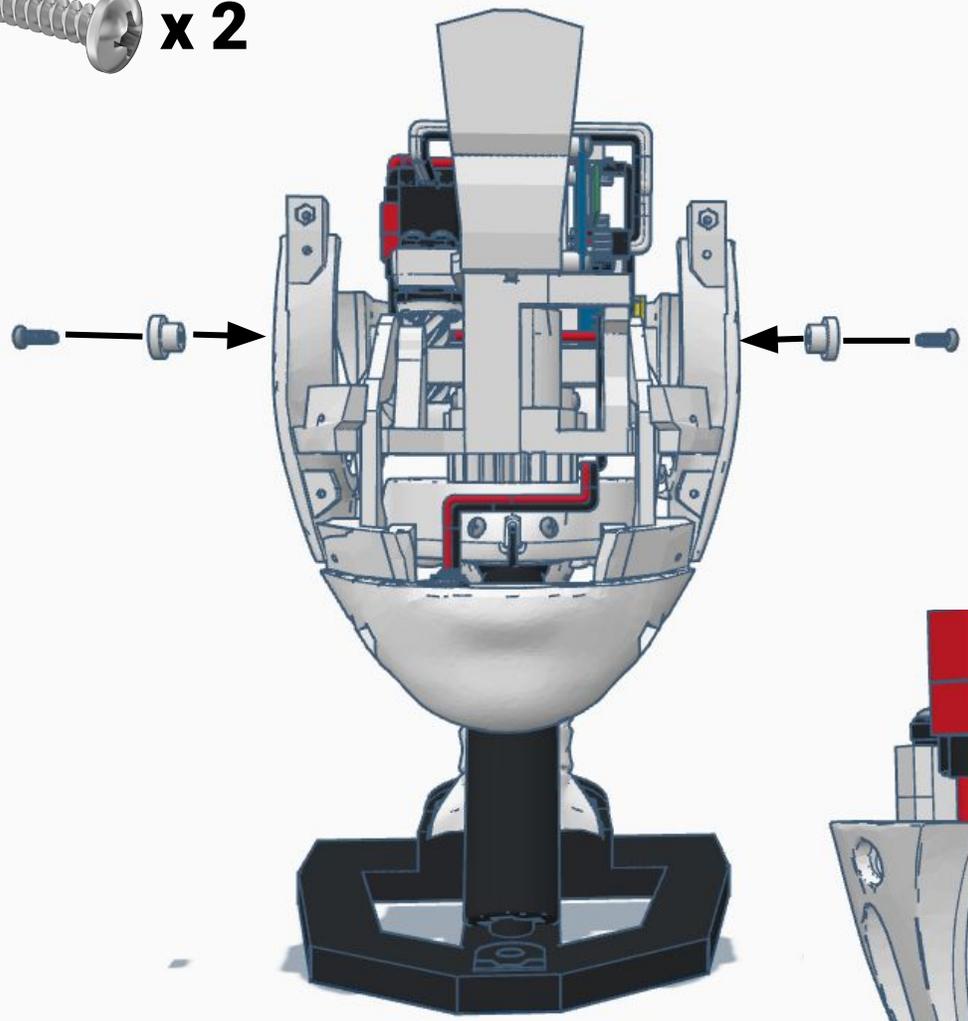




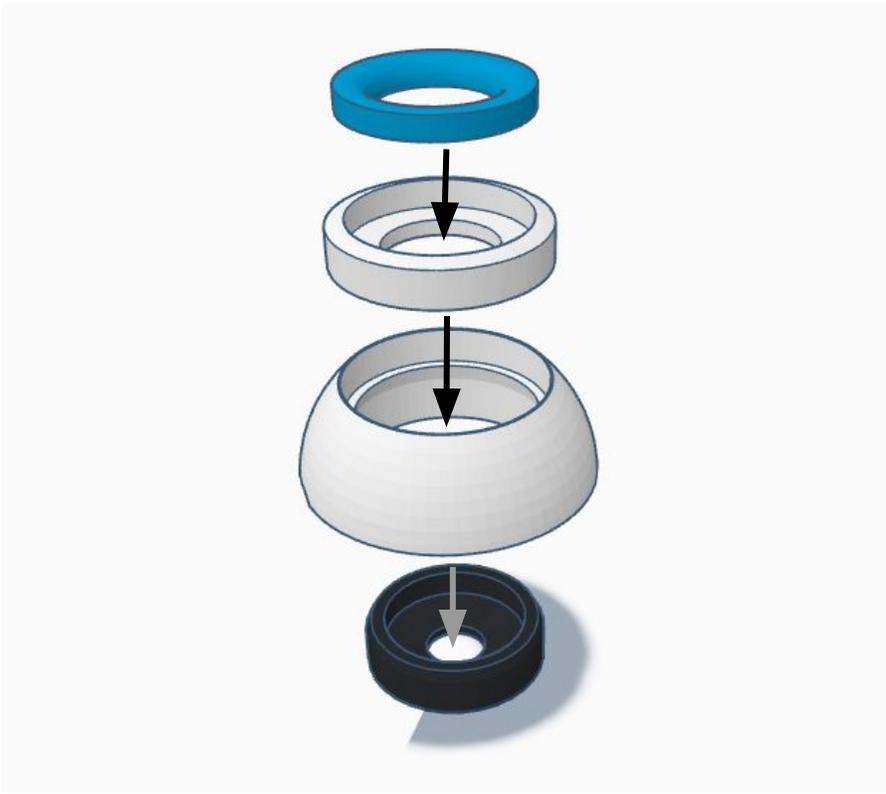
**SPEAKER CABLE PLUGS INTO SPKR HEADER ON IOTINY**



 x 2



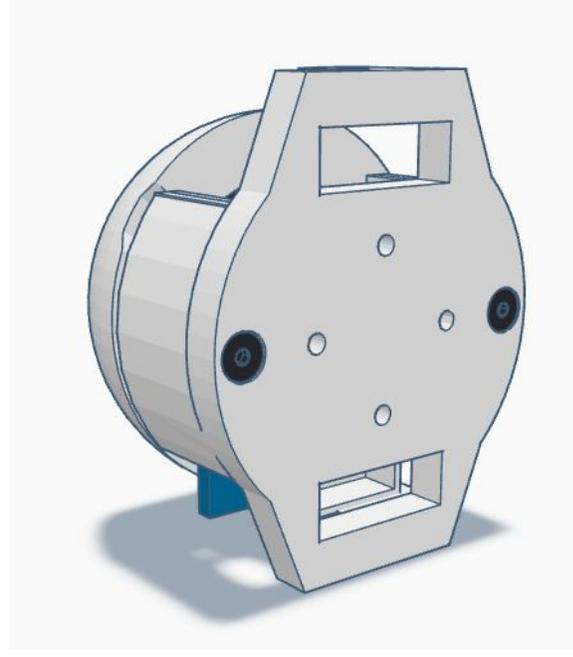
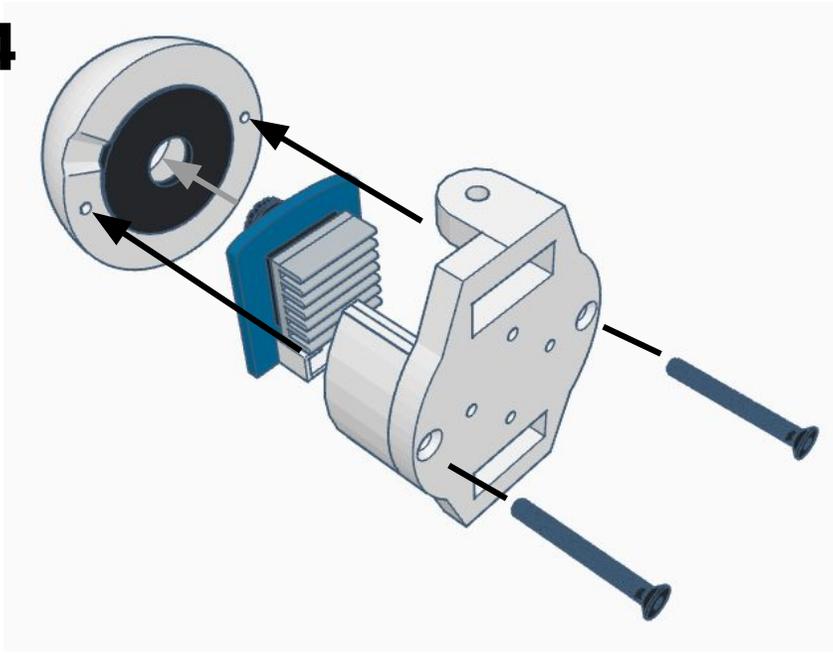
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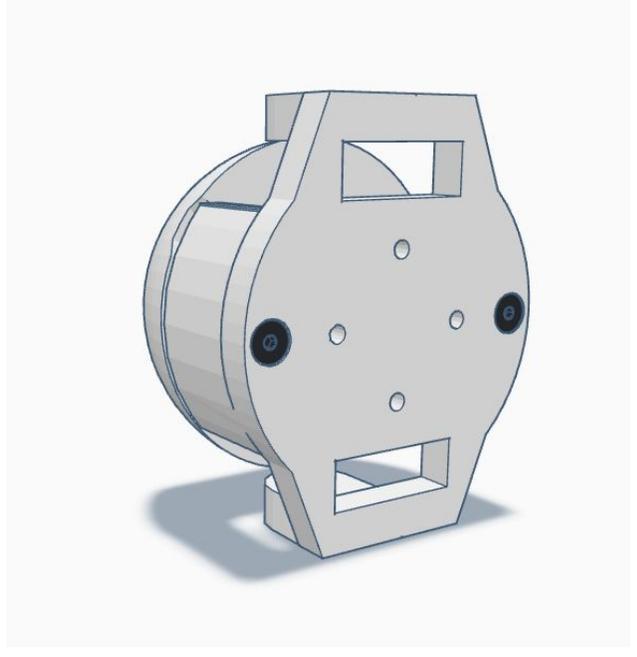
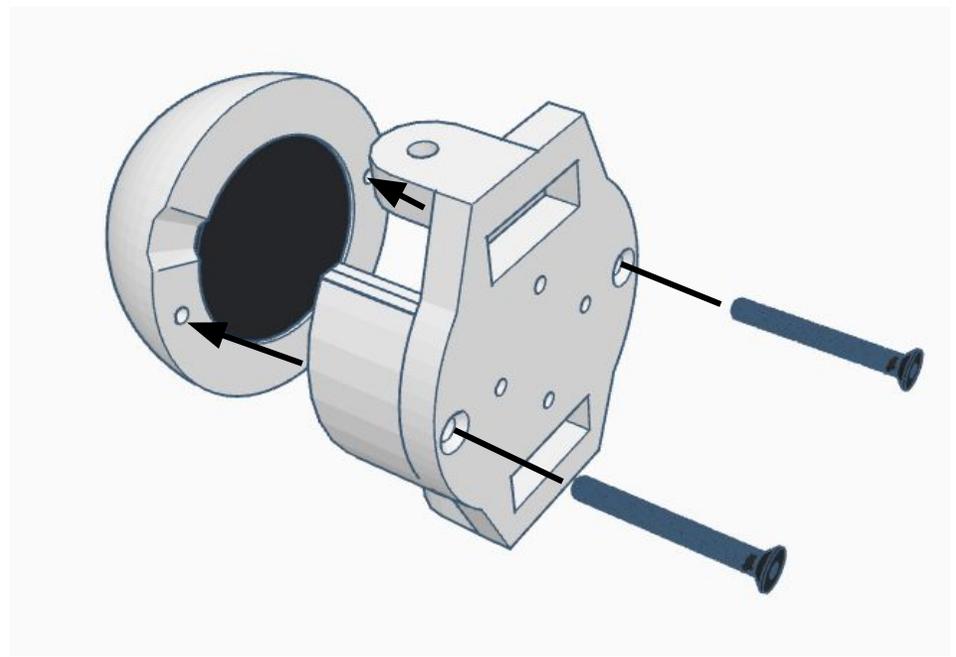


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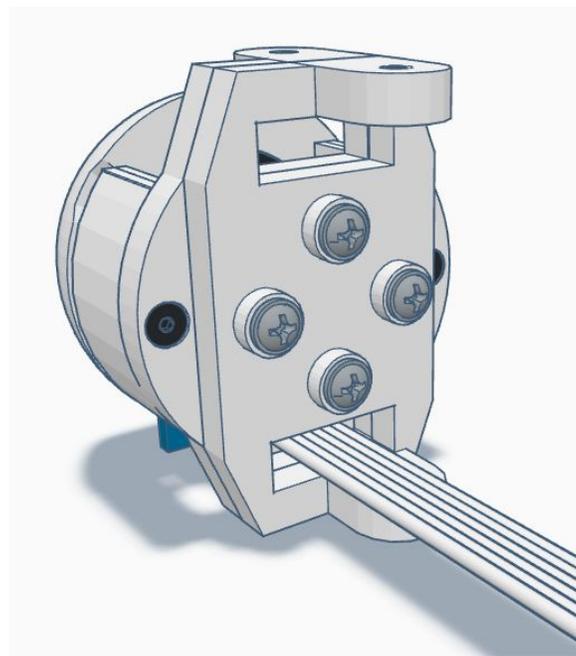
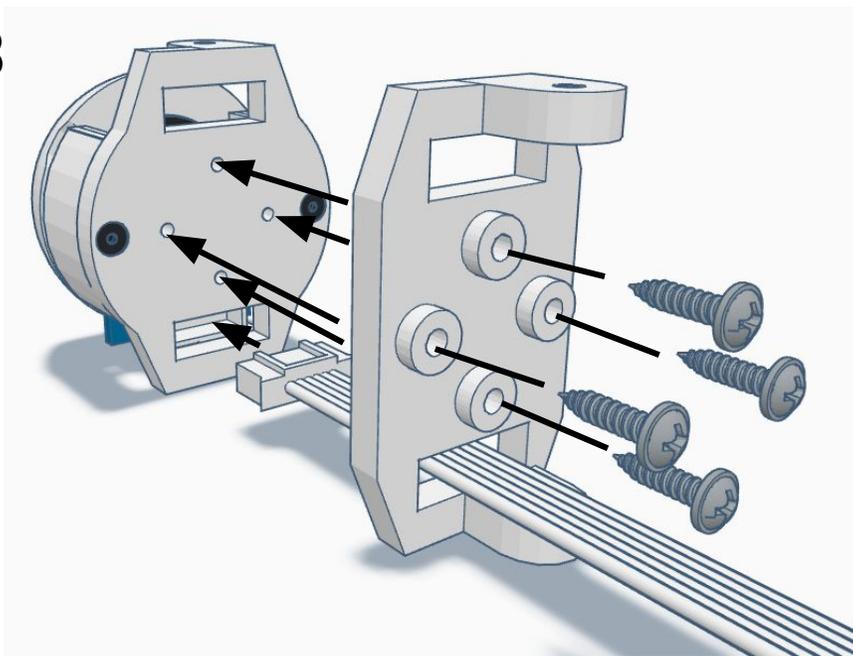
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**R**

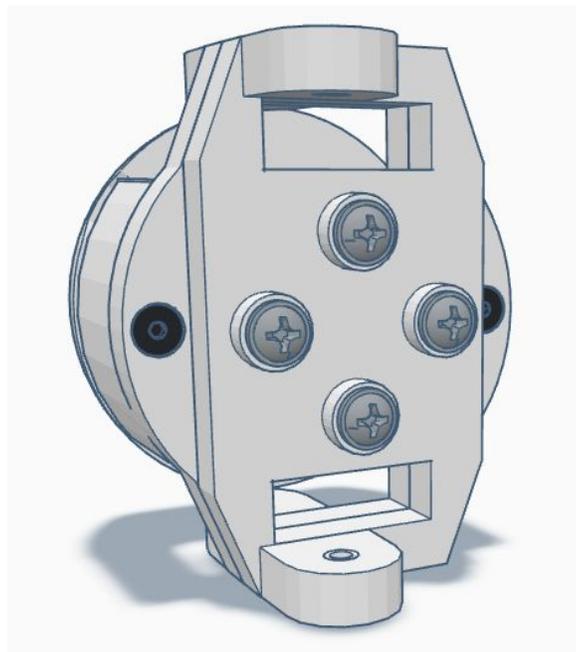
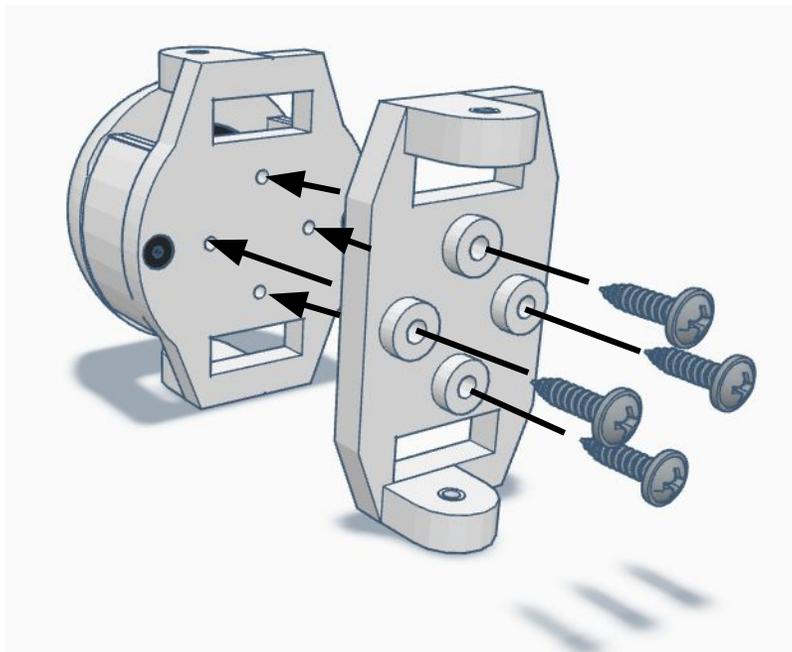




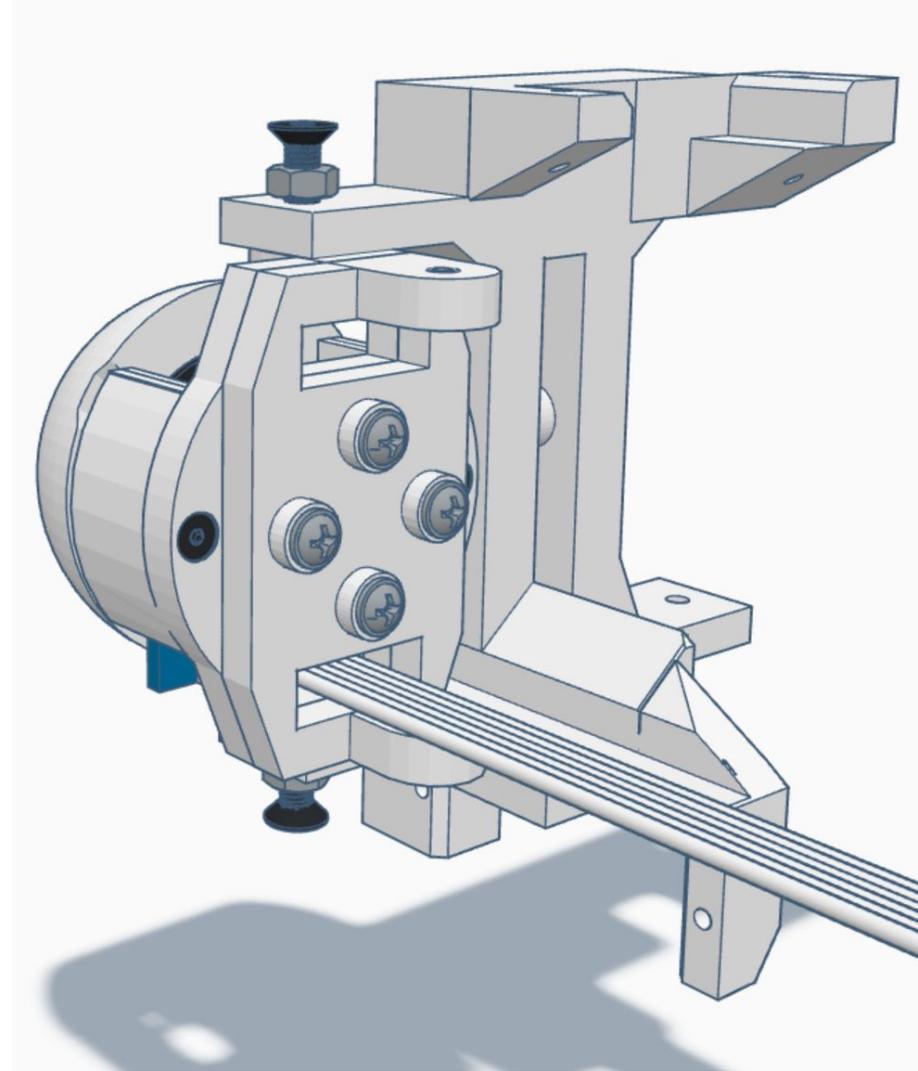
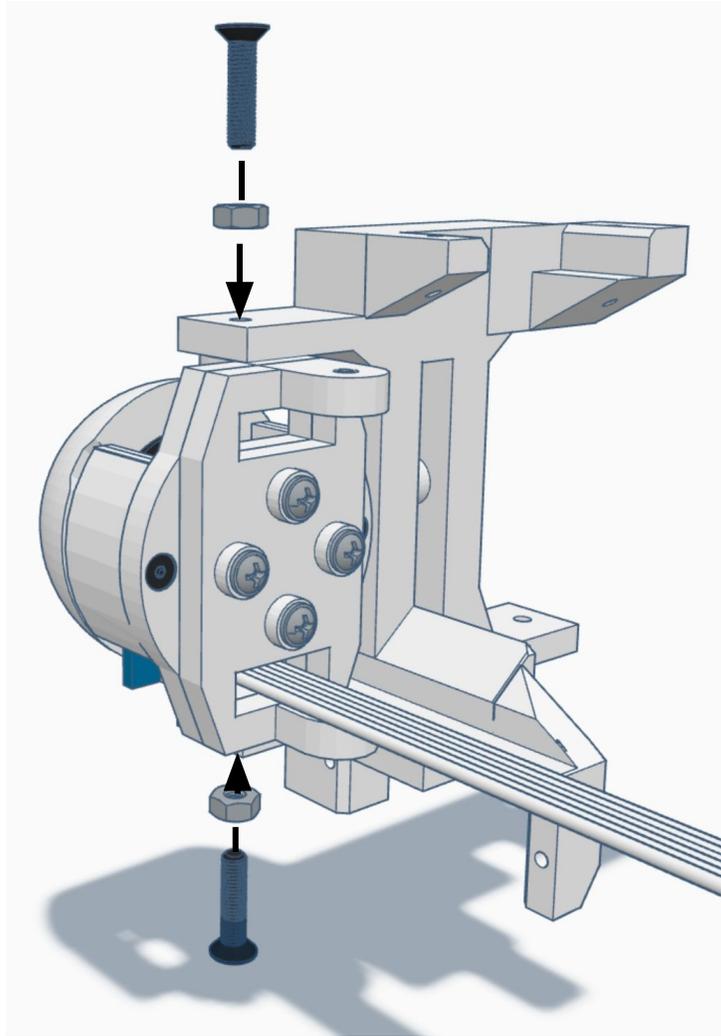
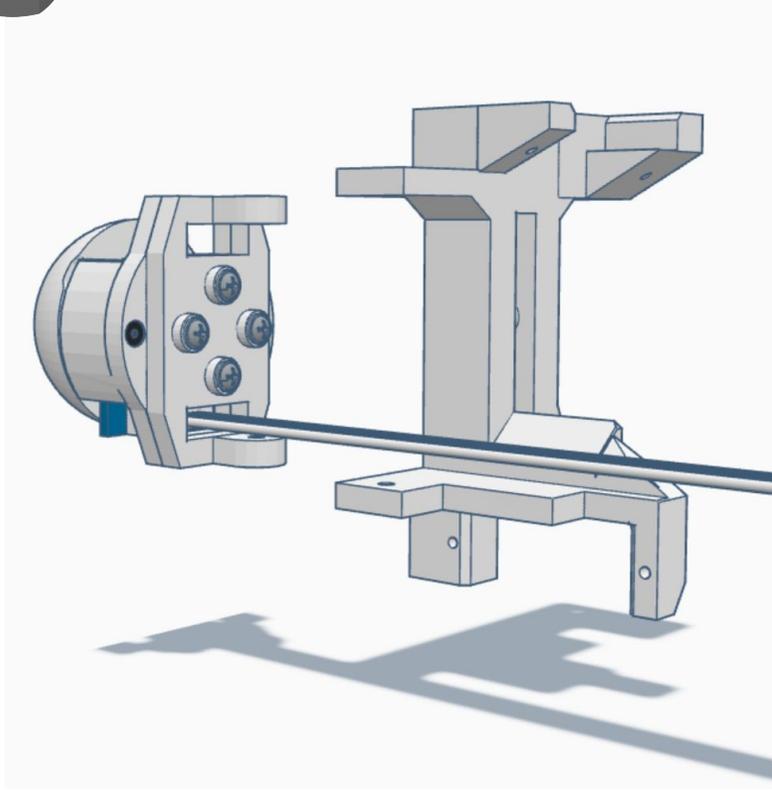
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R

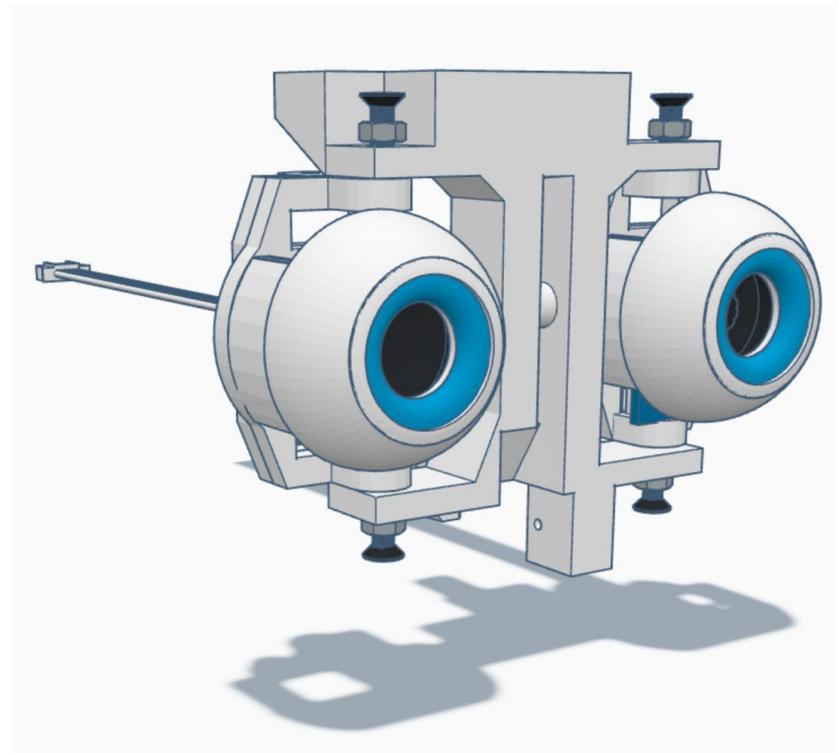
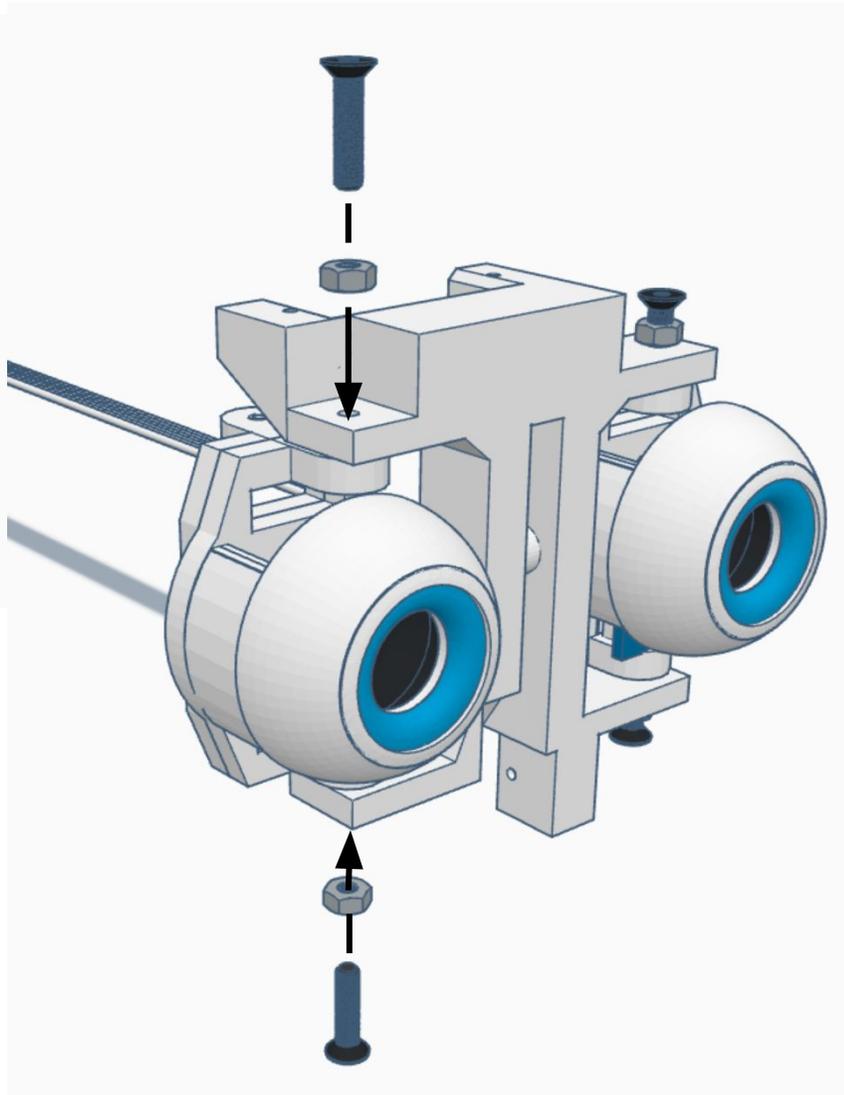
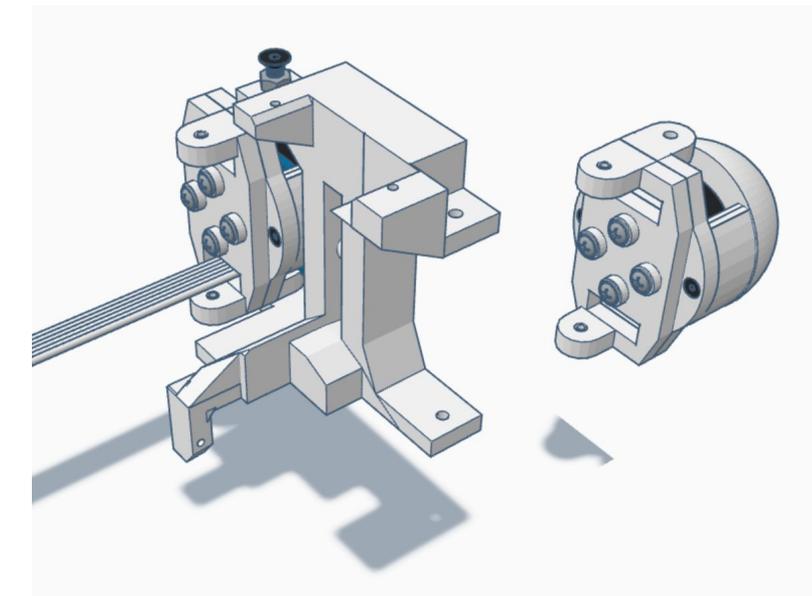


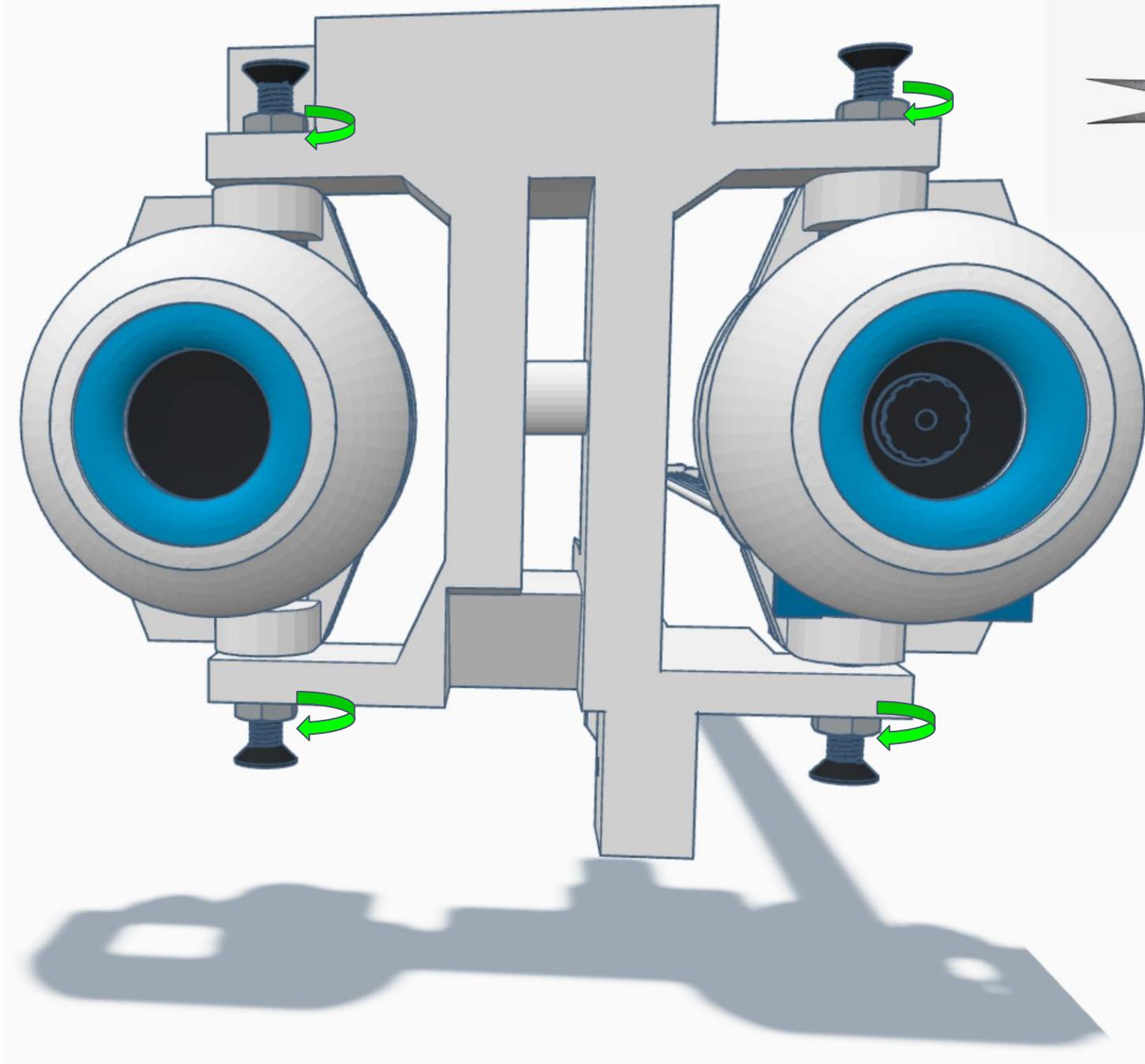
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**x 2**



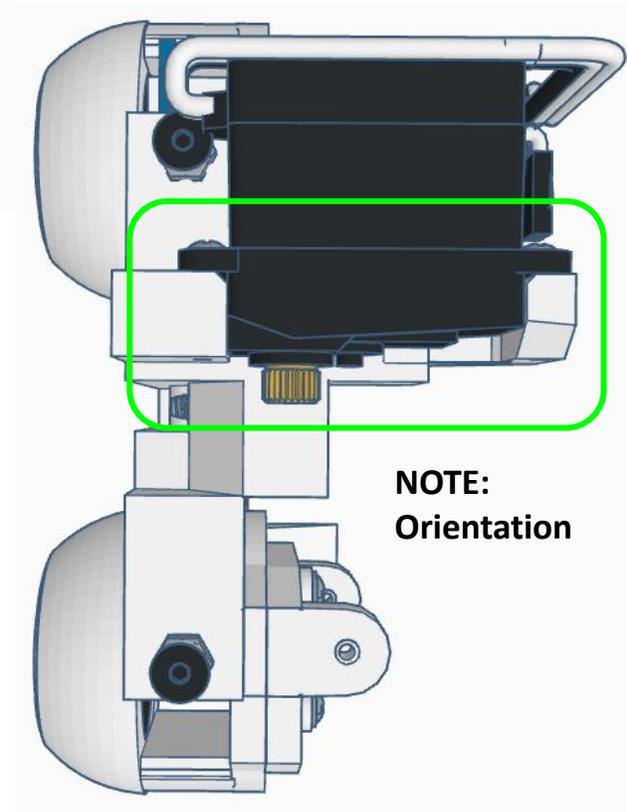
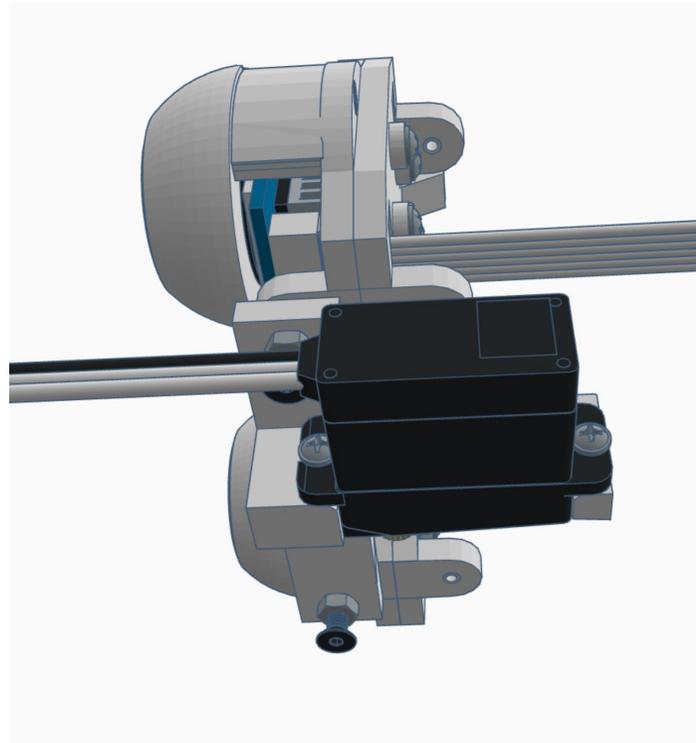
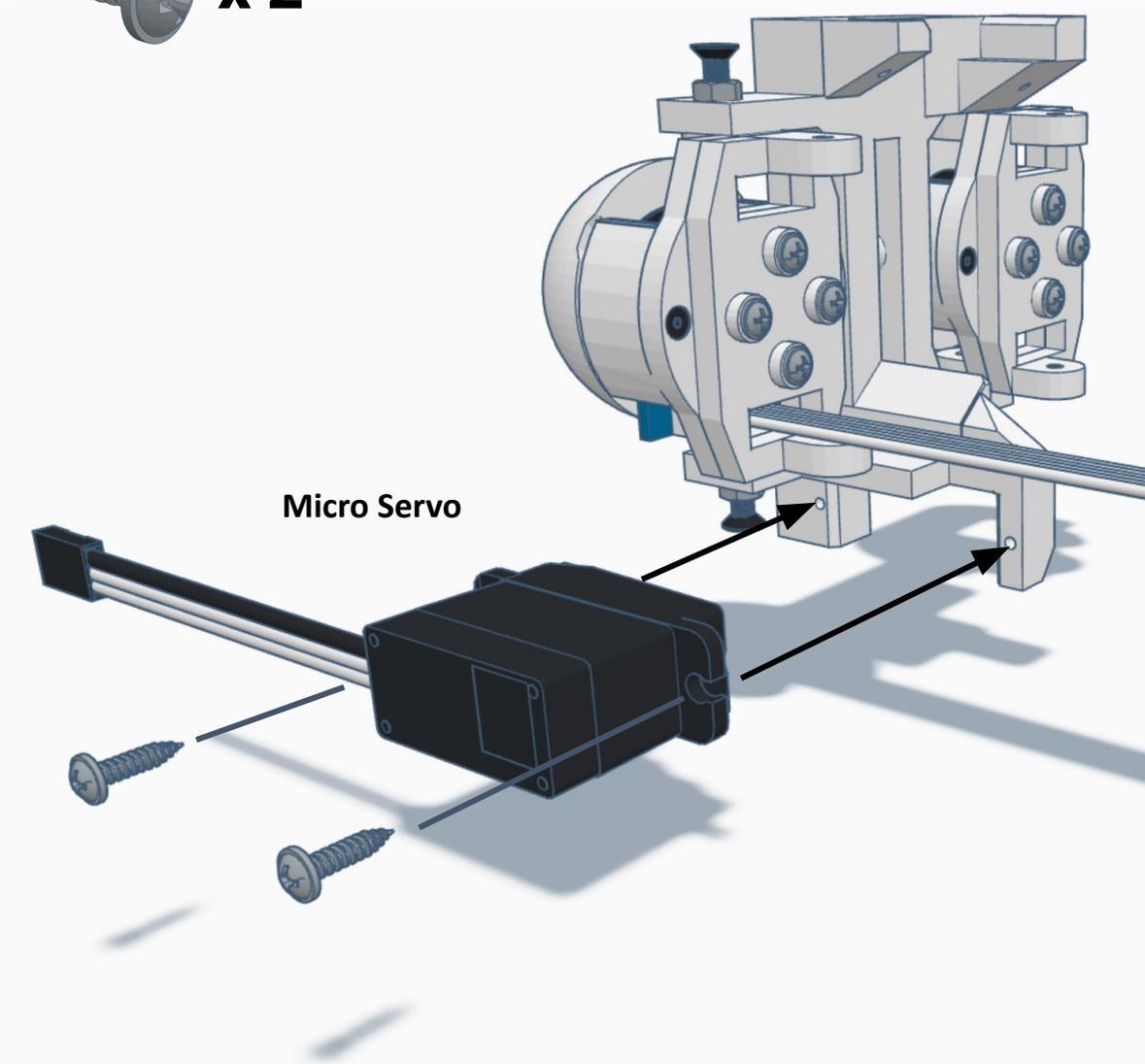
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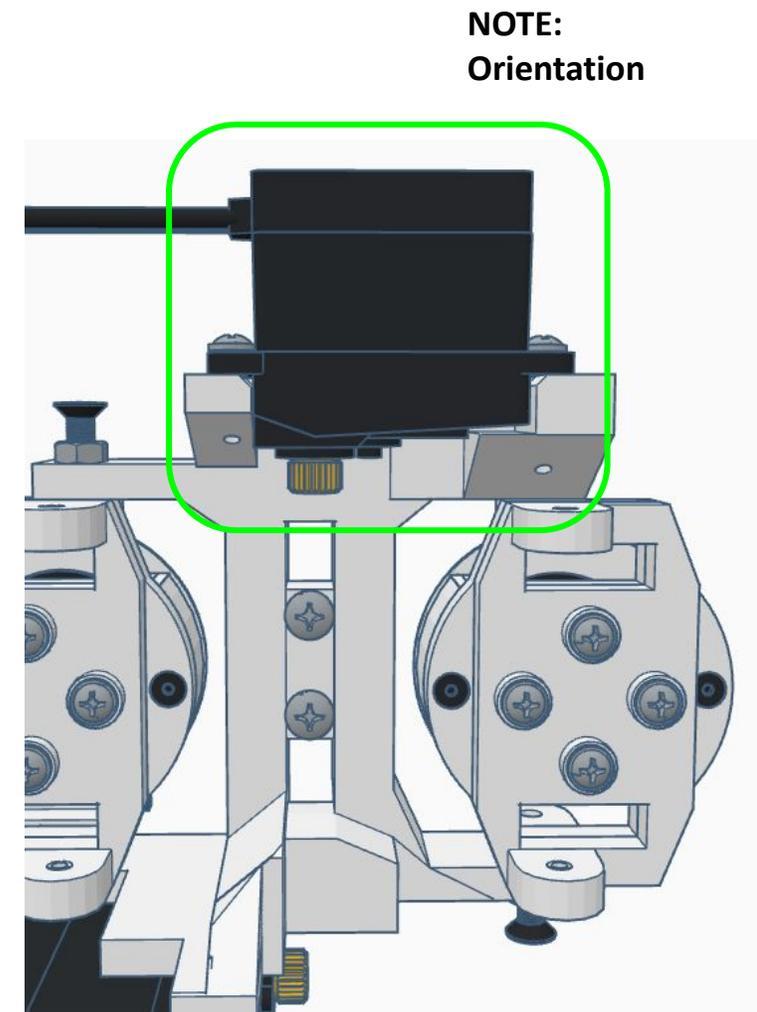
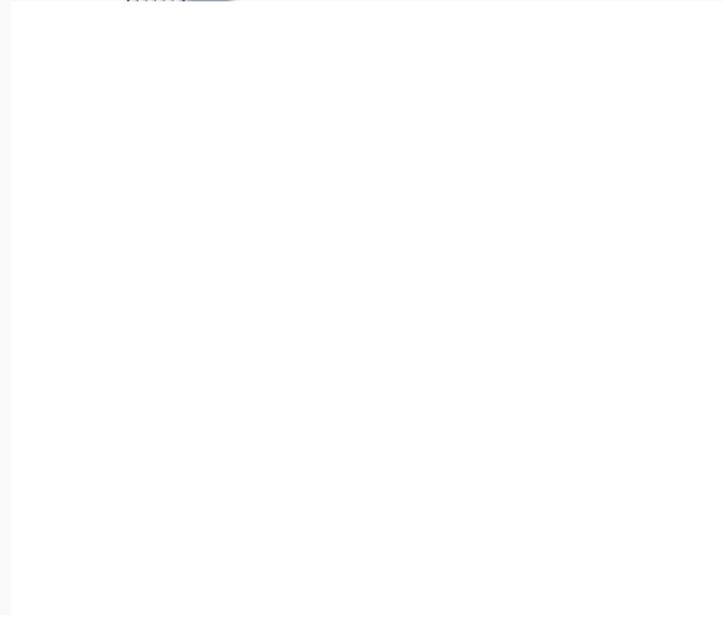
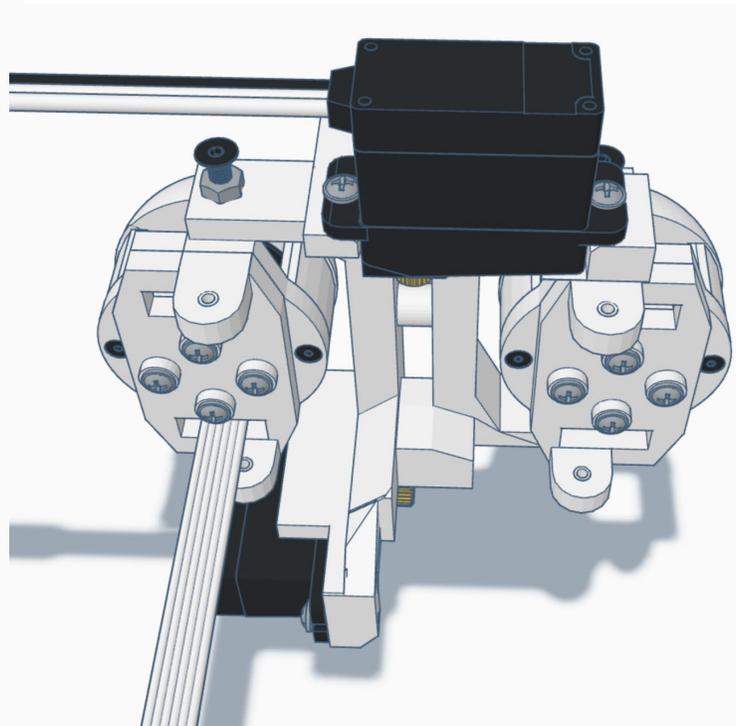
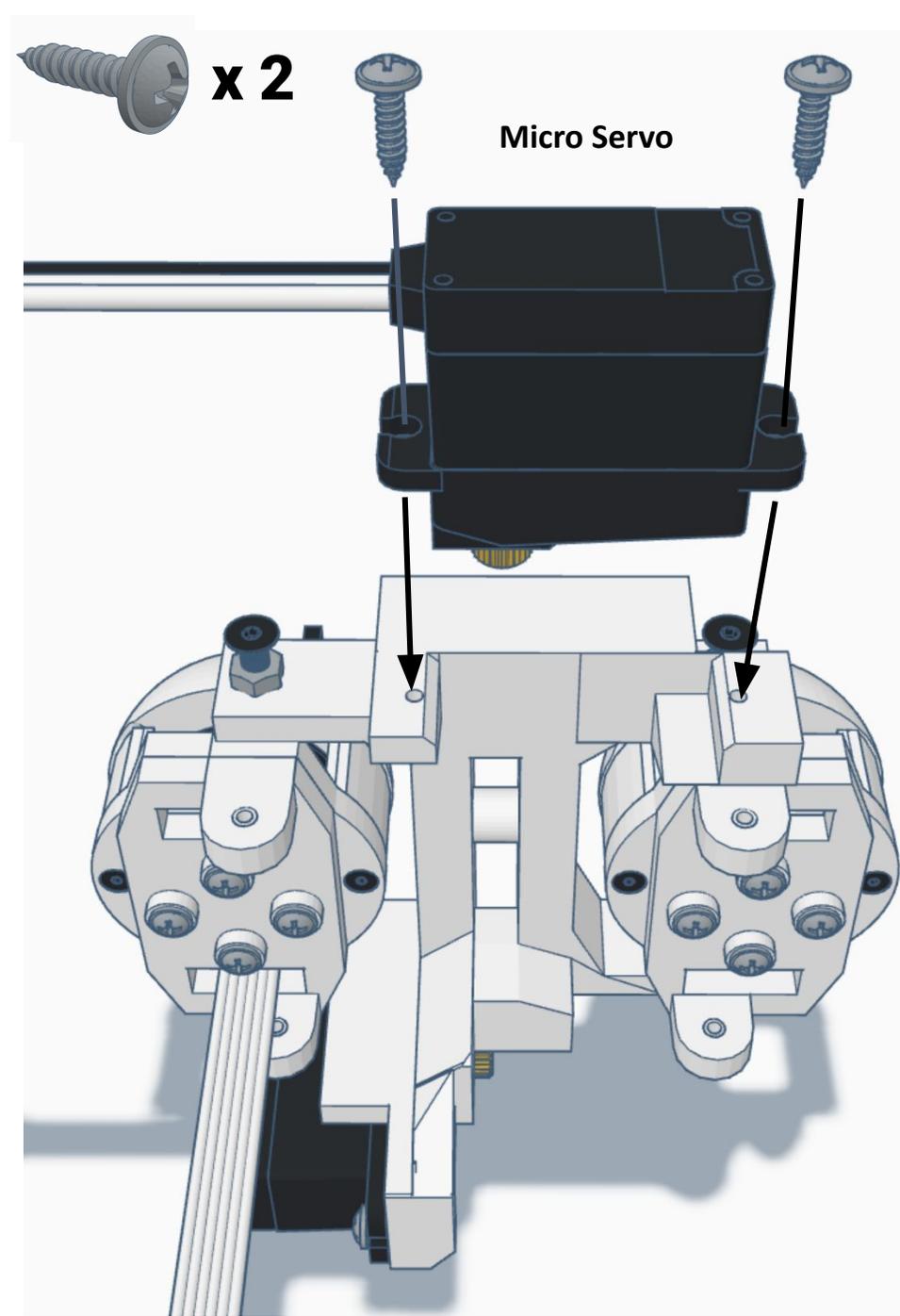
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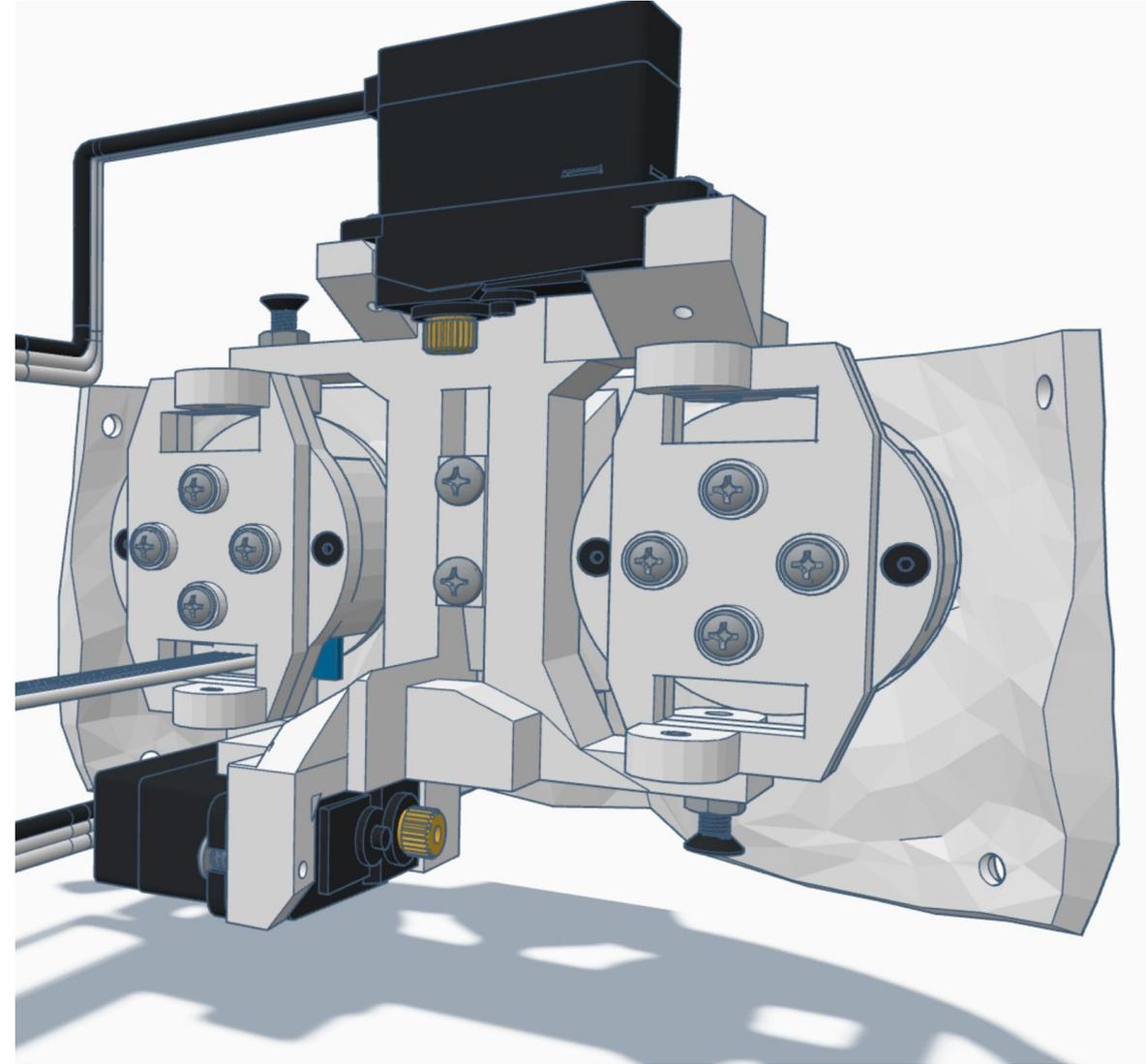
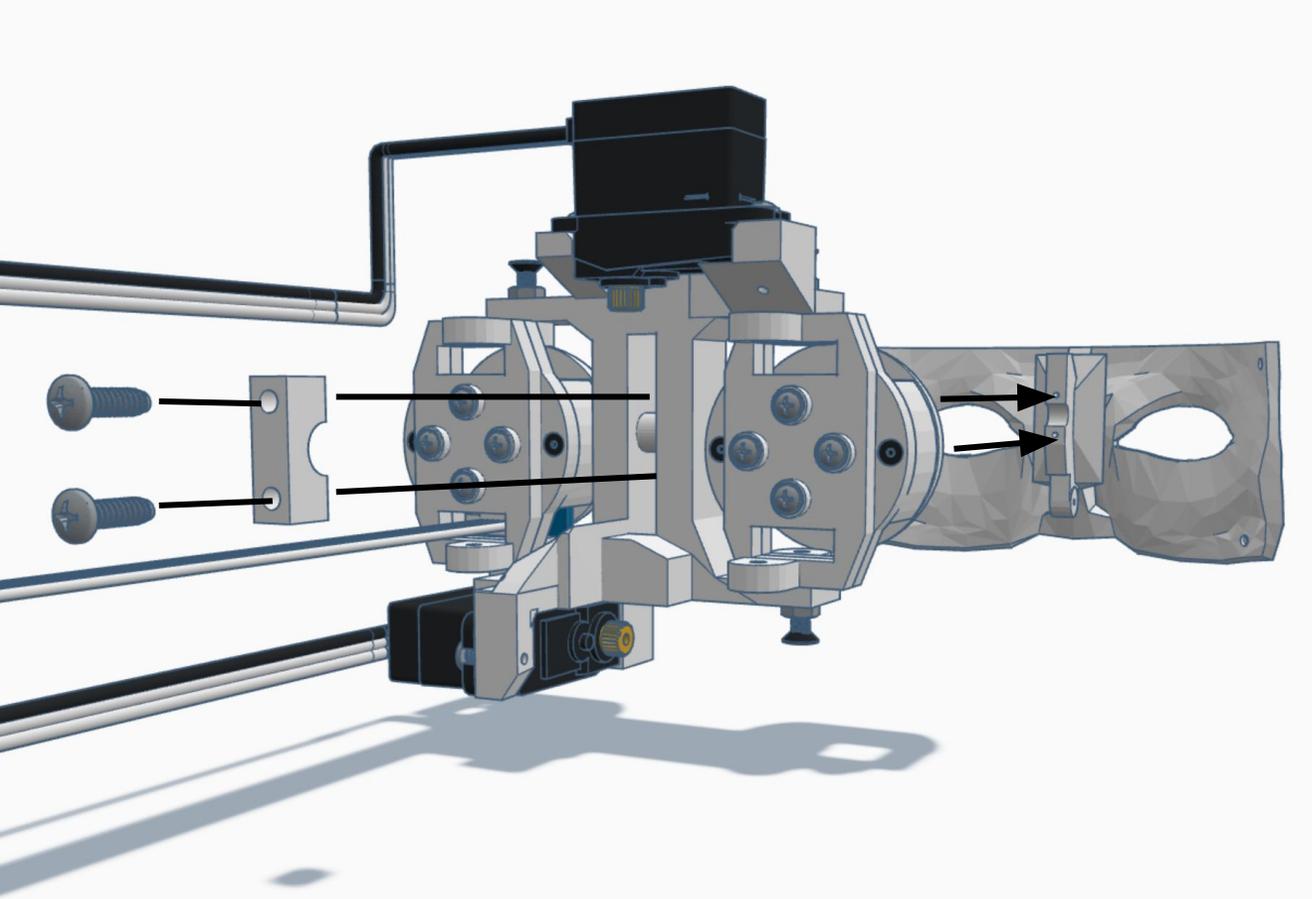


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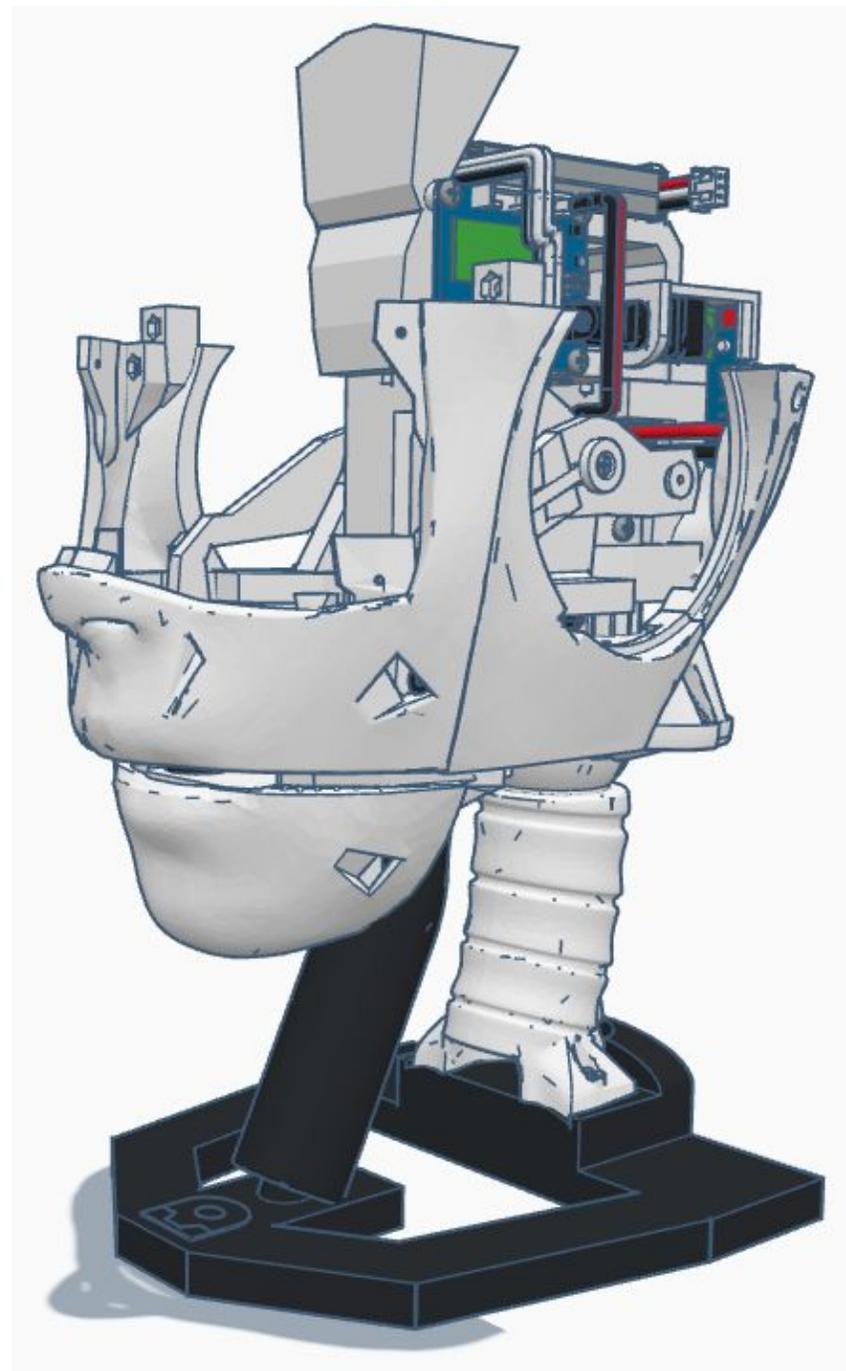
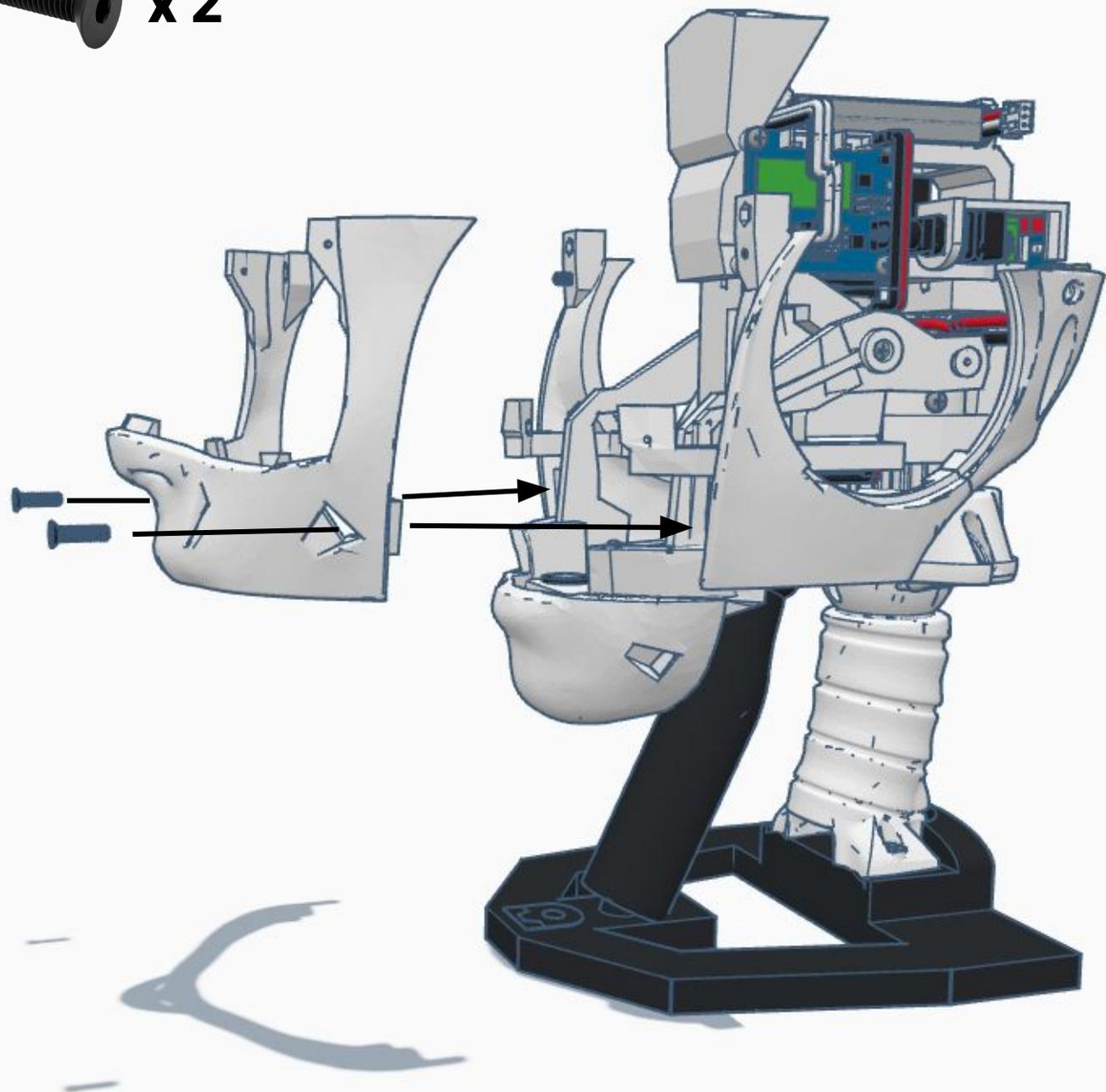




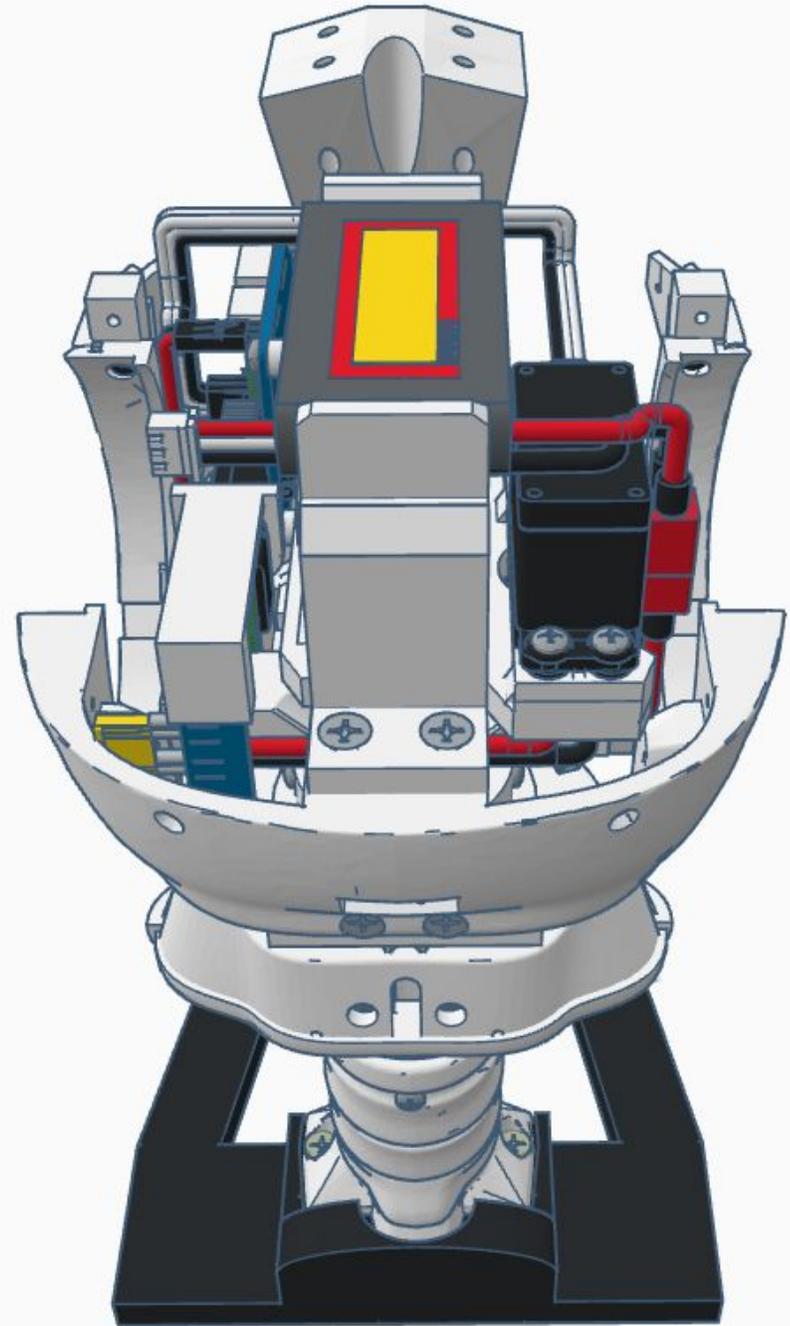
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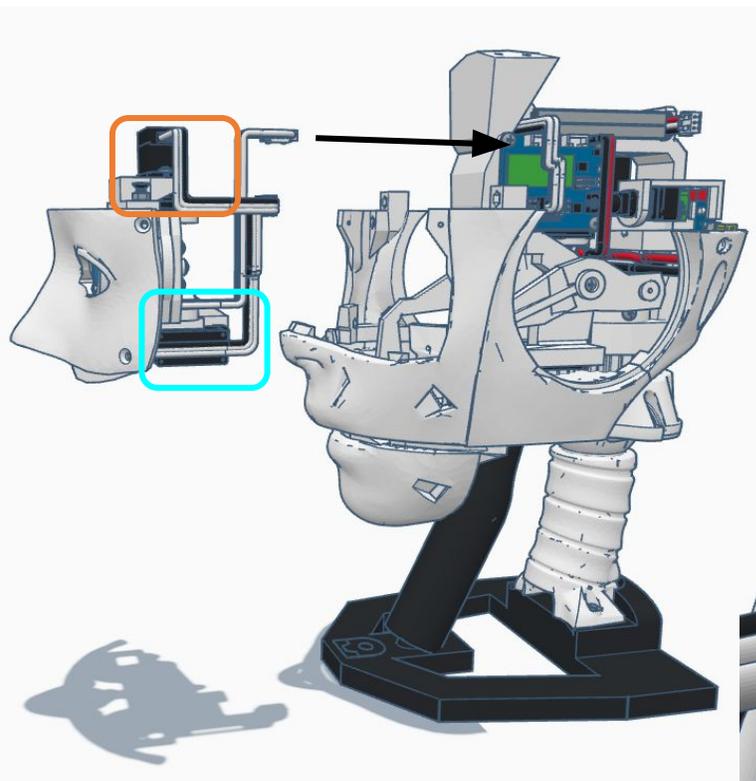


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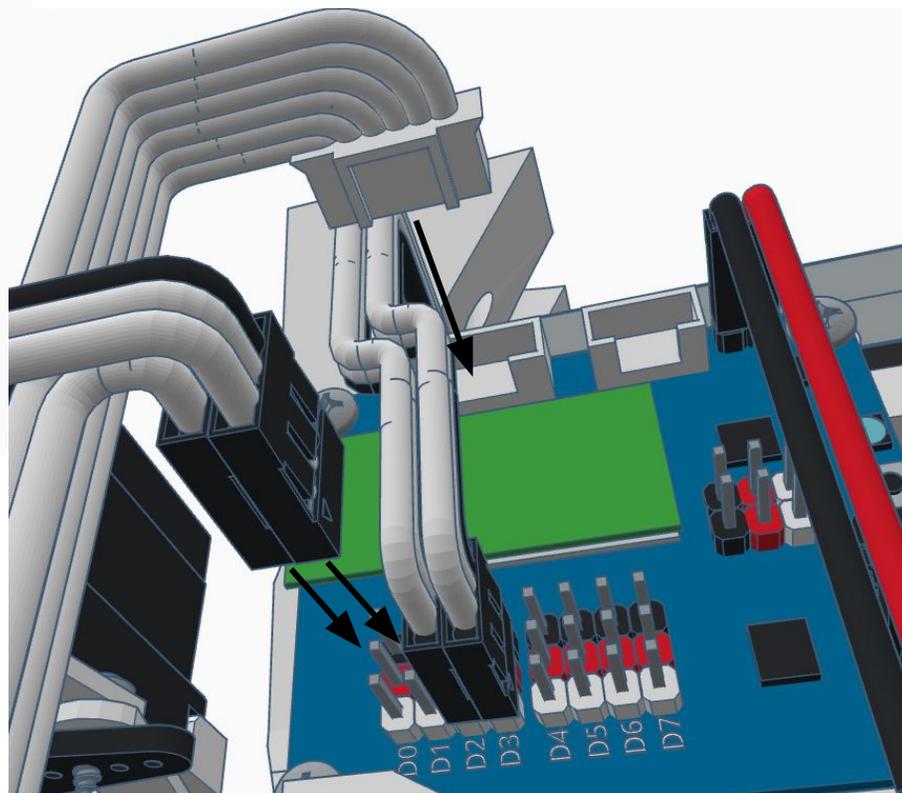


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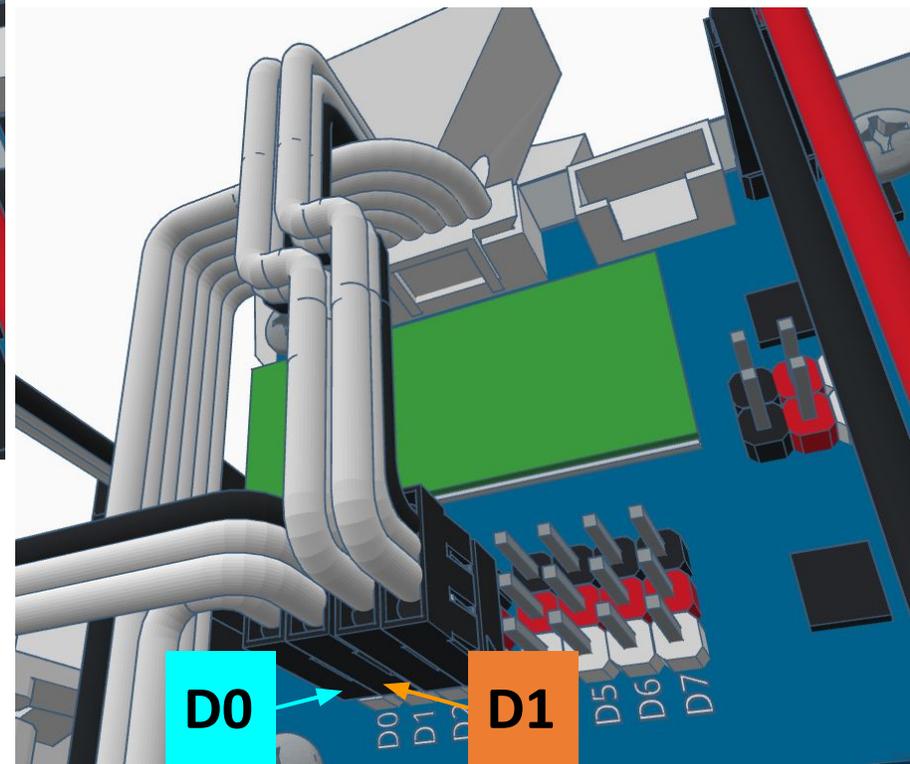


Camera Cable plugs into CAMERA port

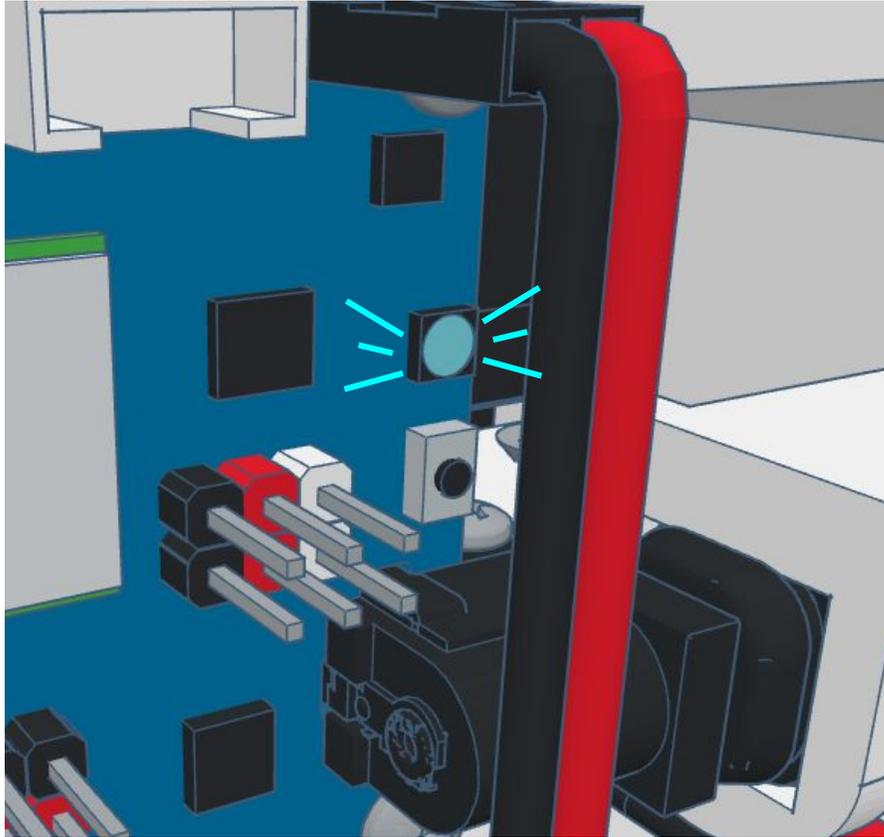


D0 - Eye Tilt Servo

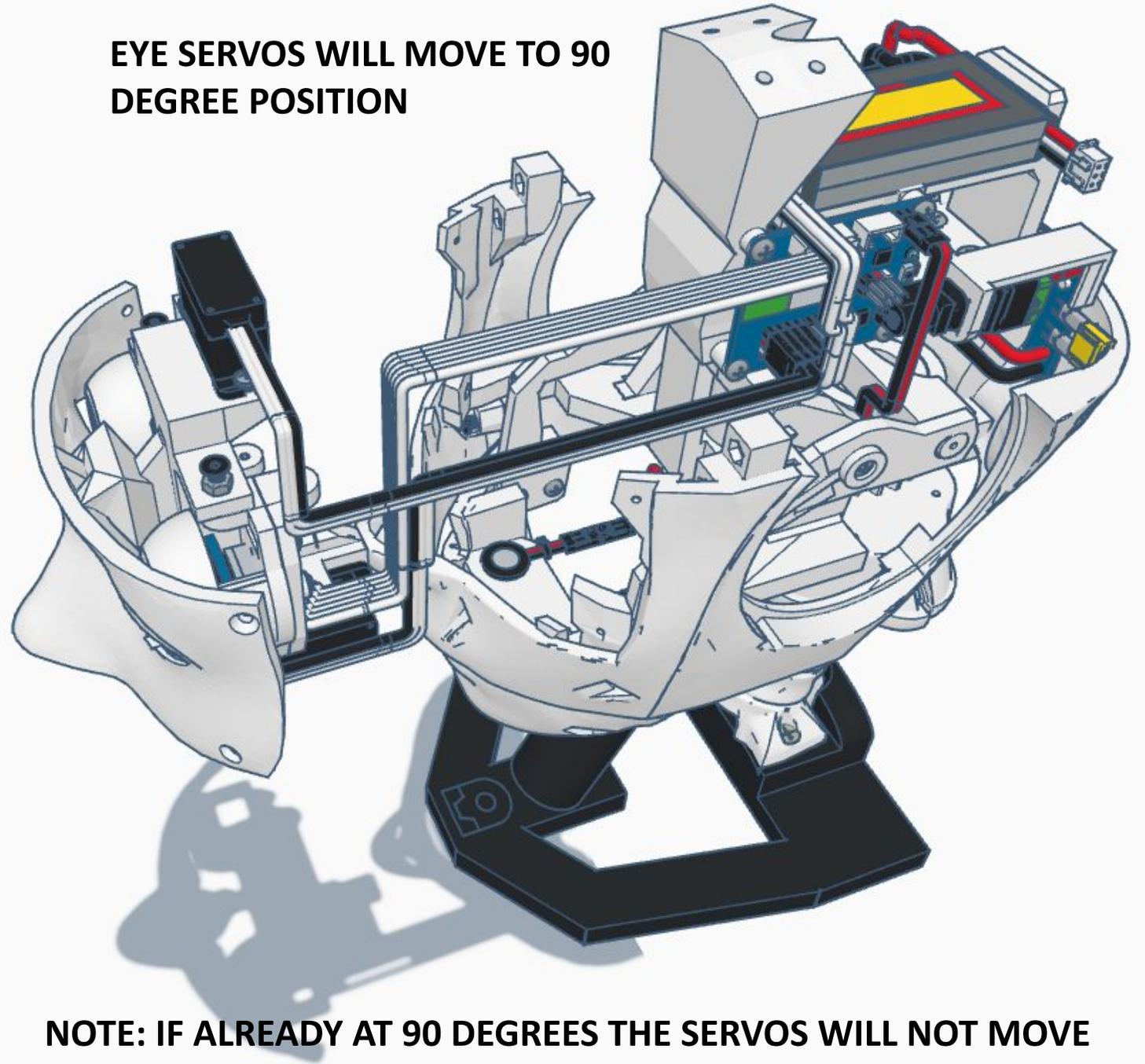
D1 - Eye Pan Servo



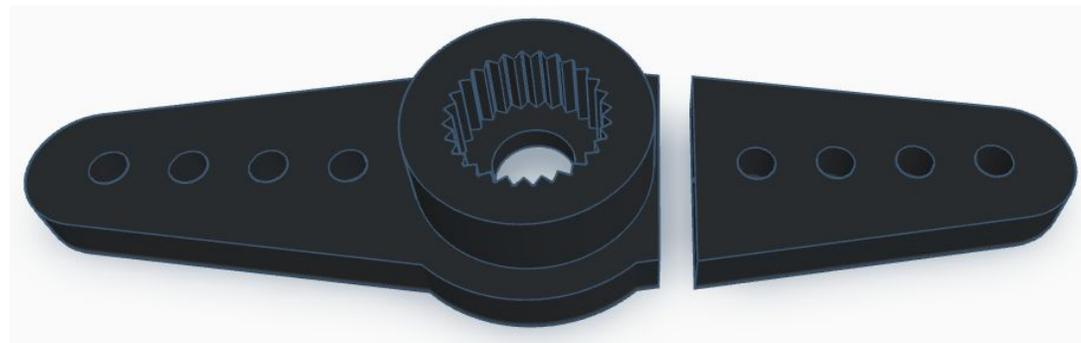
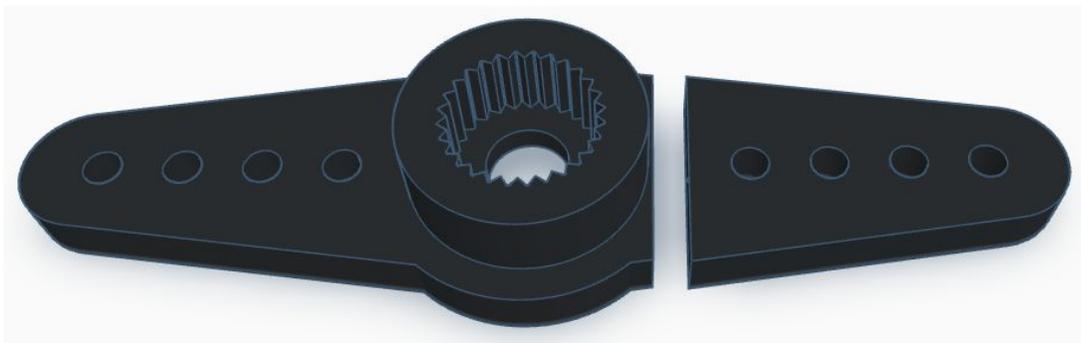
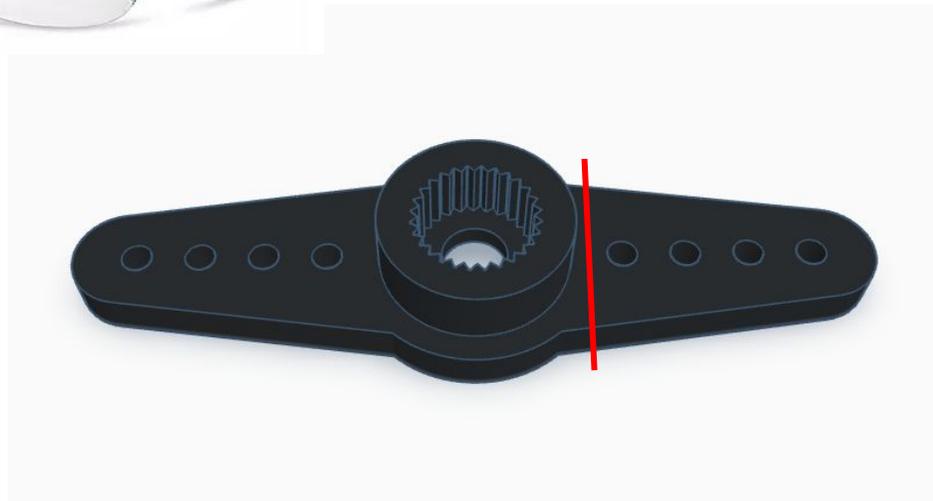
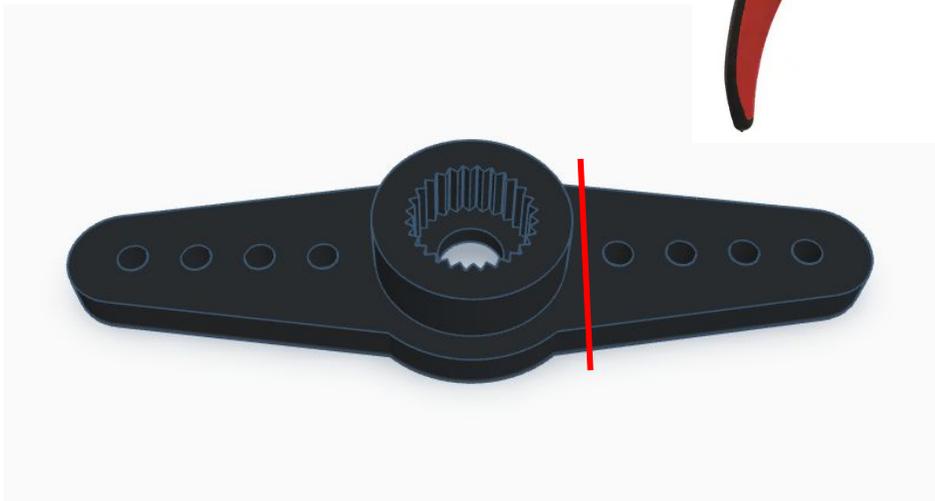
**ENSURE THE IOTINY LED IS STILL FLASHING BLUE**



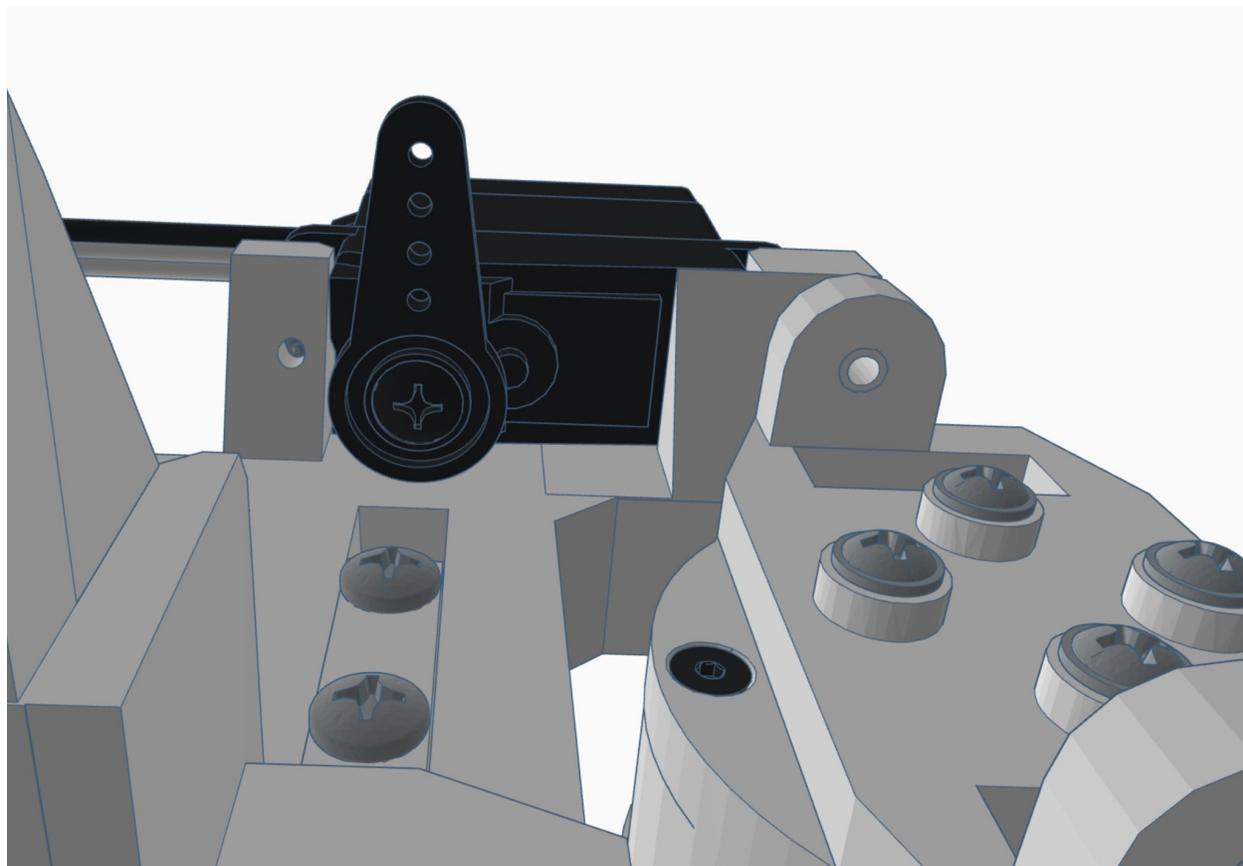
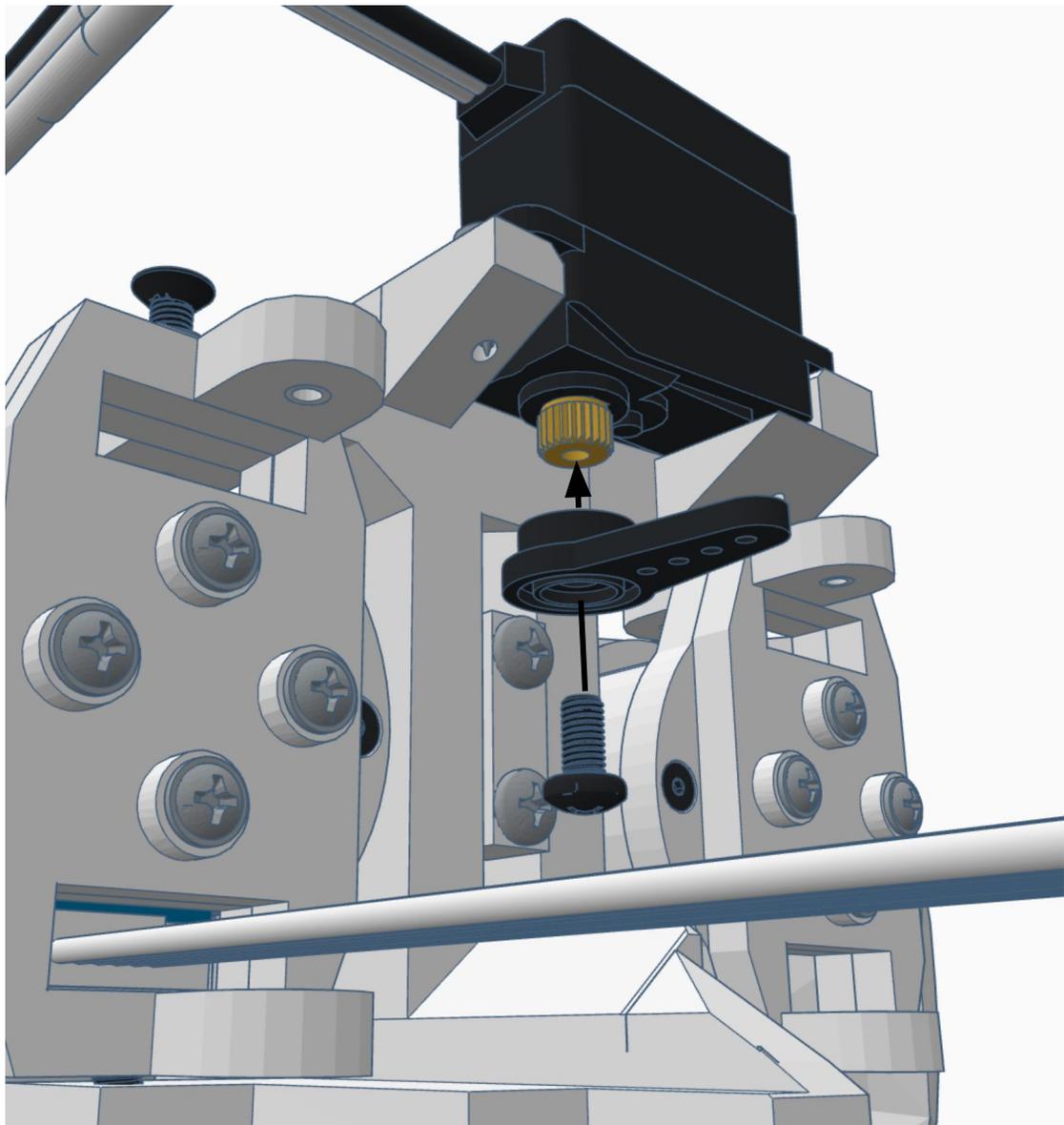
**EYE SERVOS WILL MOVE TO 90 DEGREE POSITION**



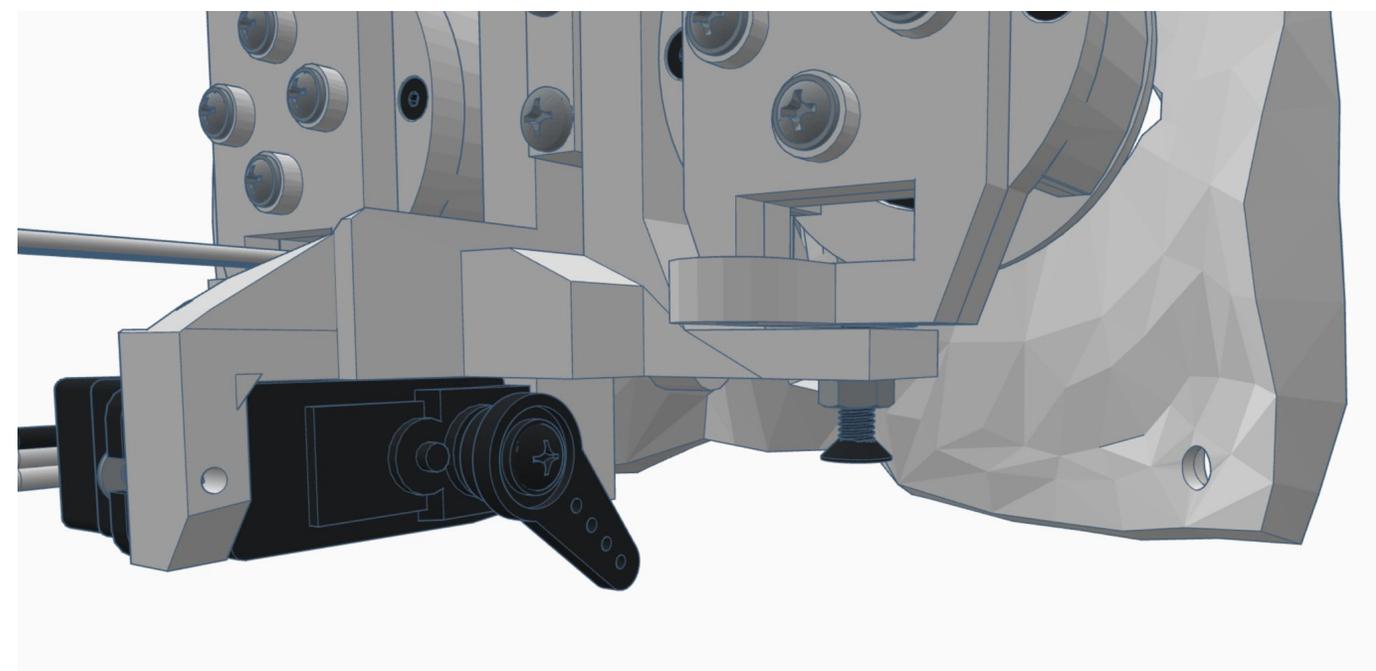
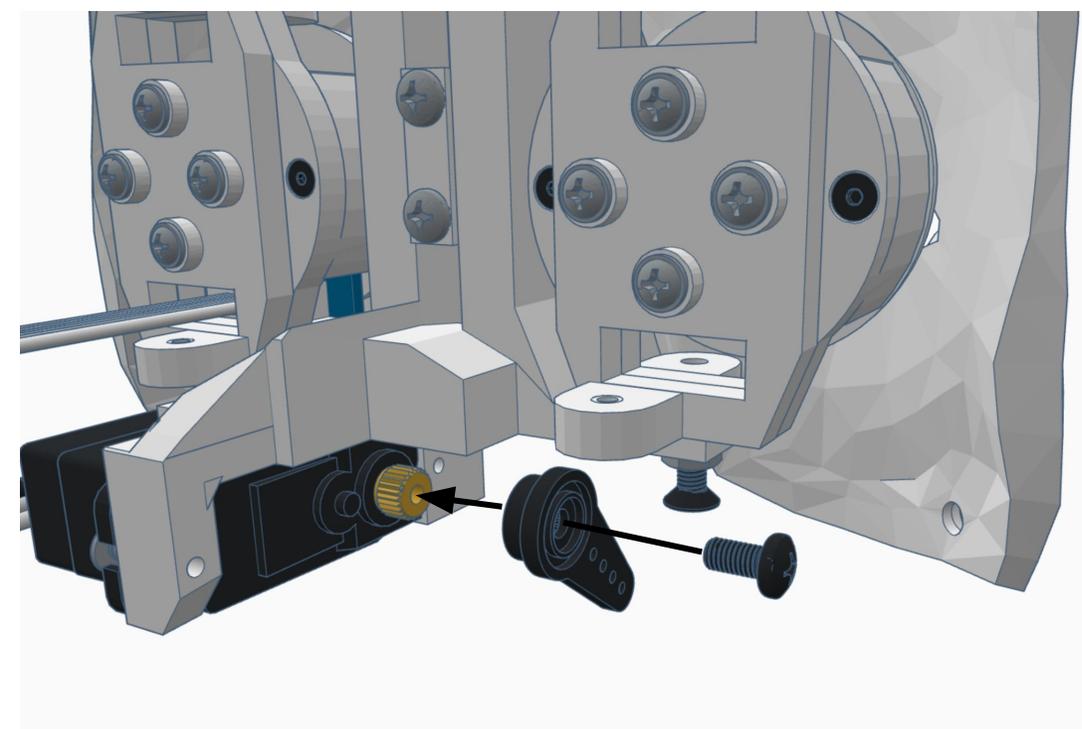
**NOTE: IF ALREADY AT 90 DEGREES THE SERVOS WILL NOT MOVE**



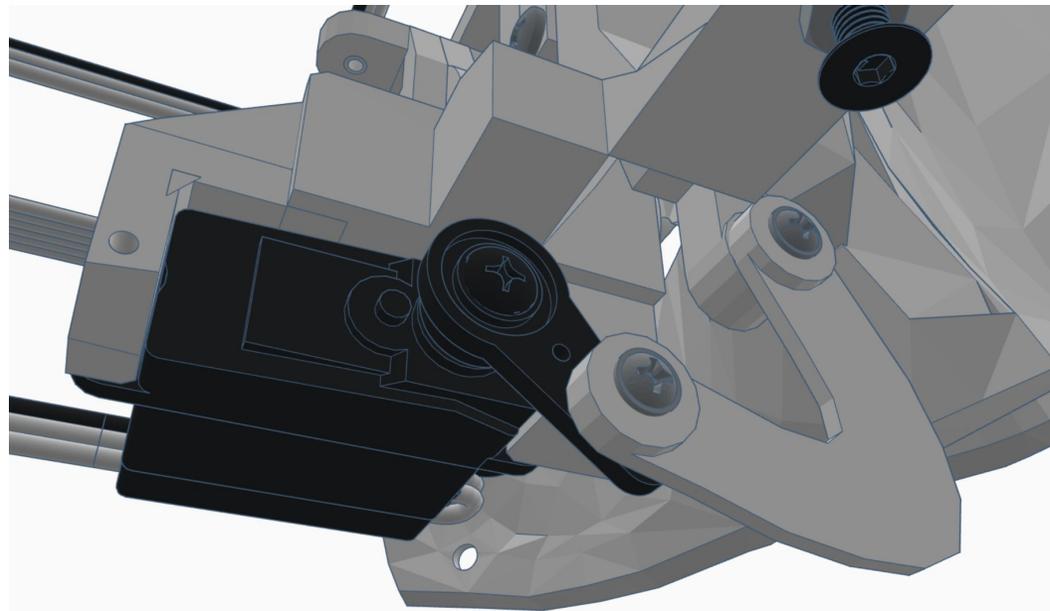
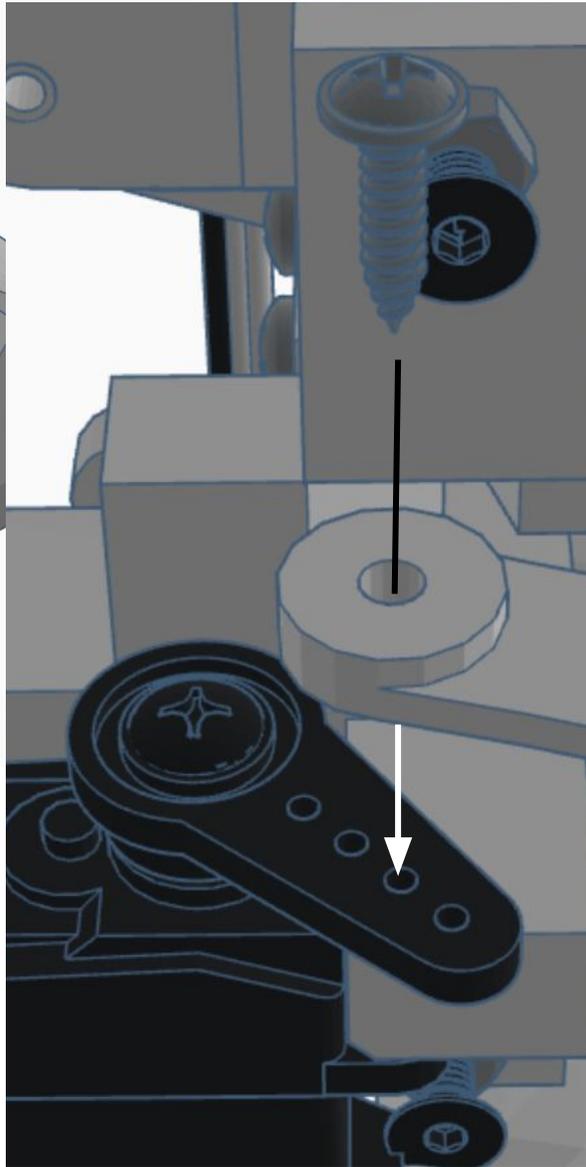
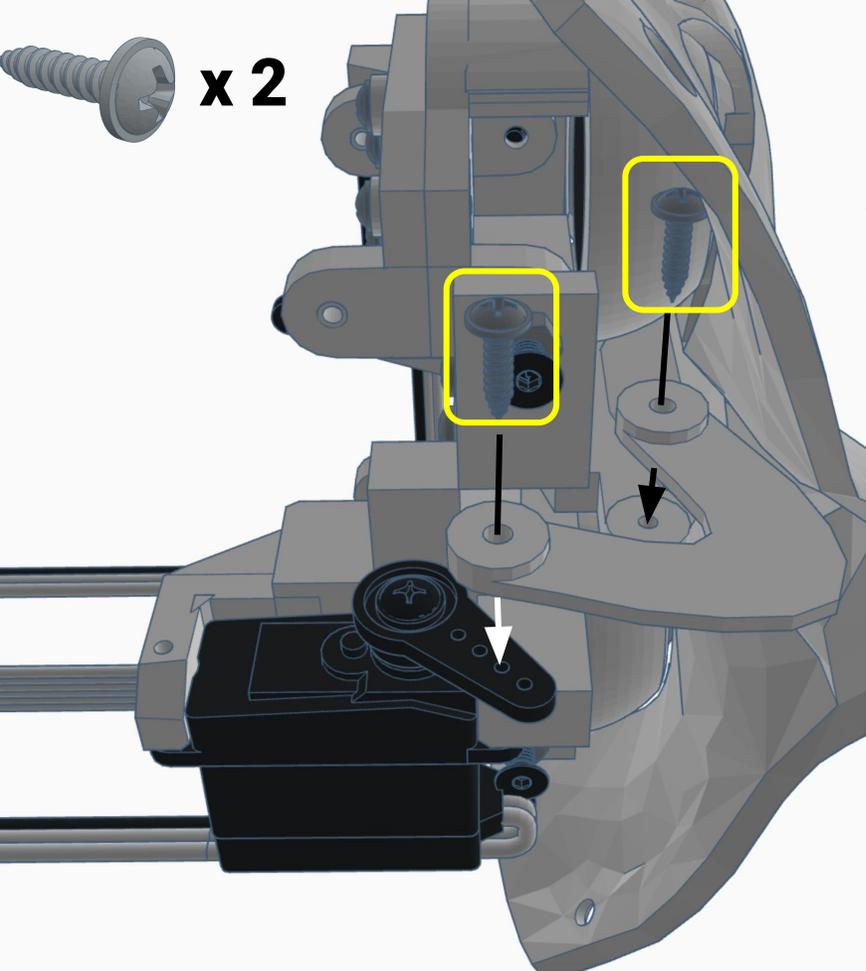
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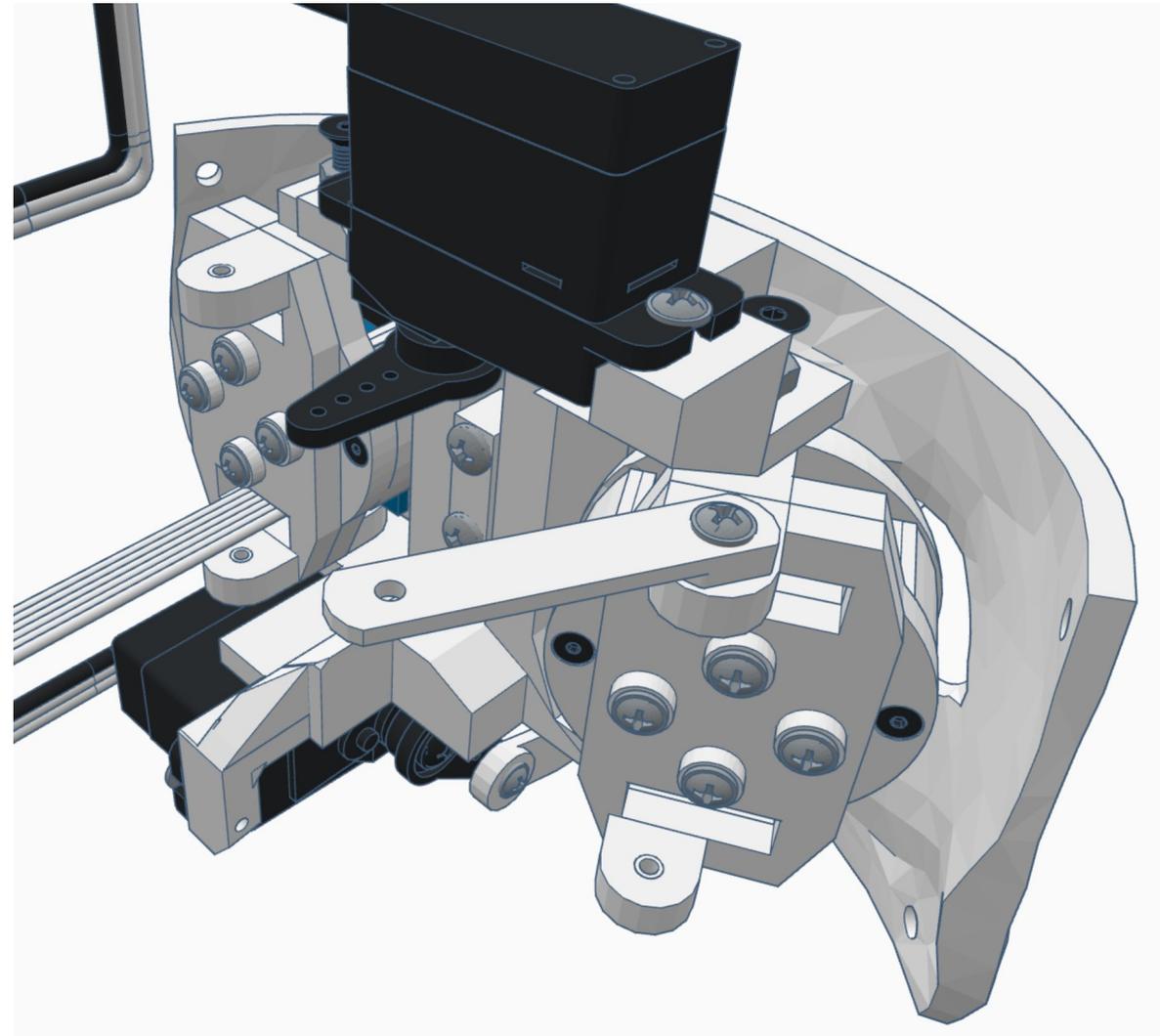
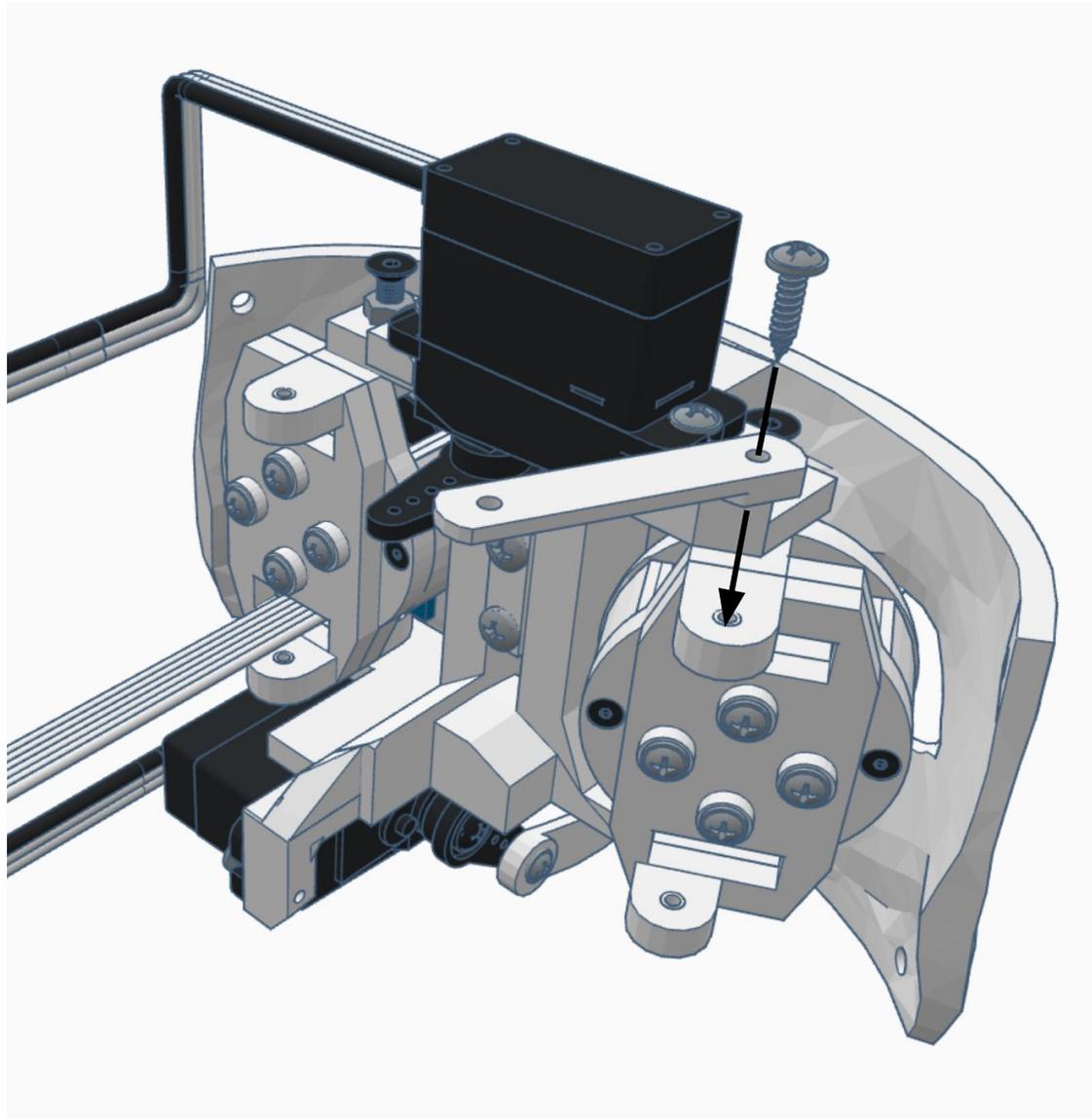


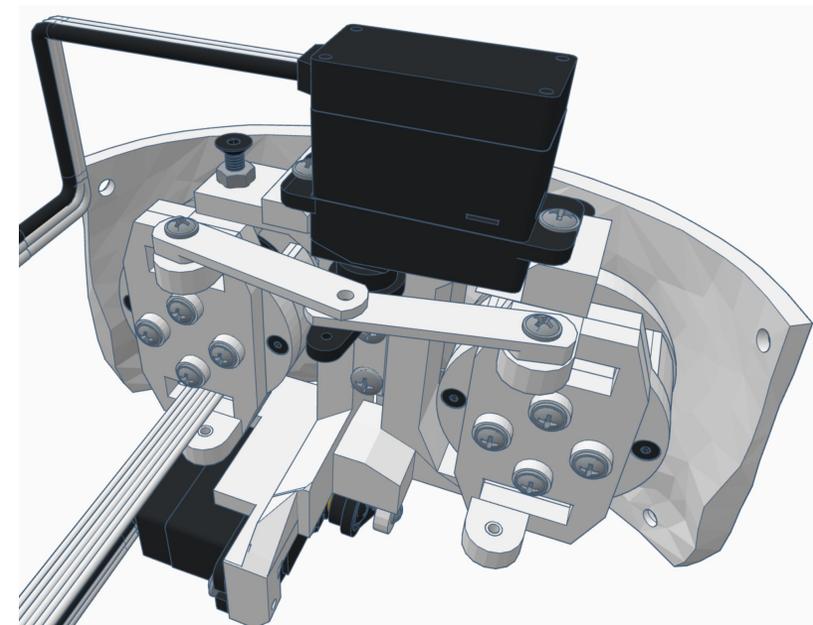
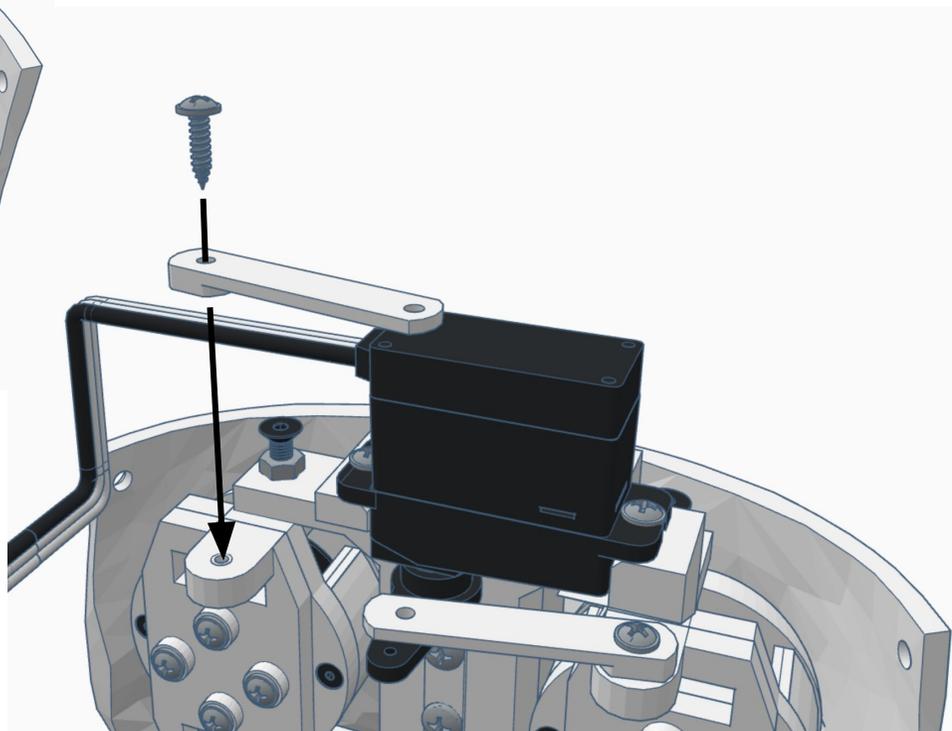
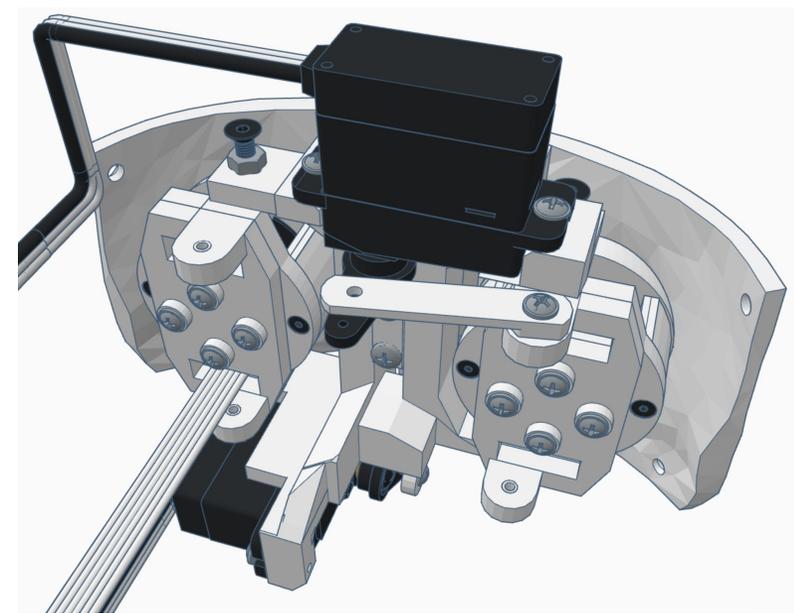
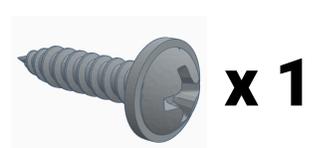
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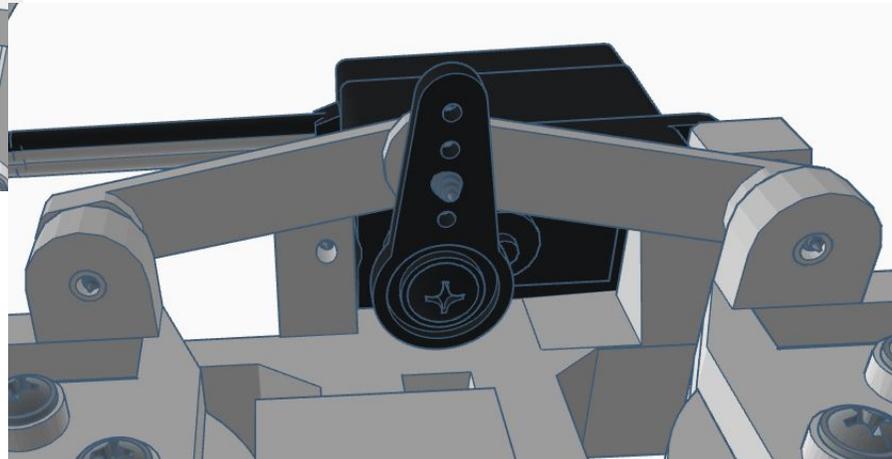
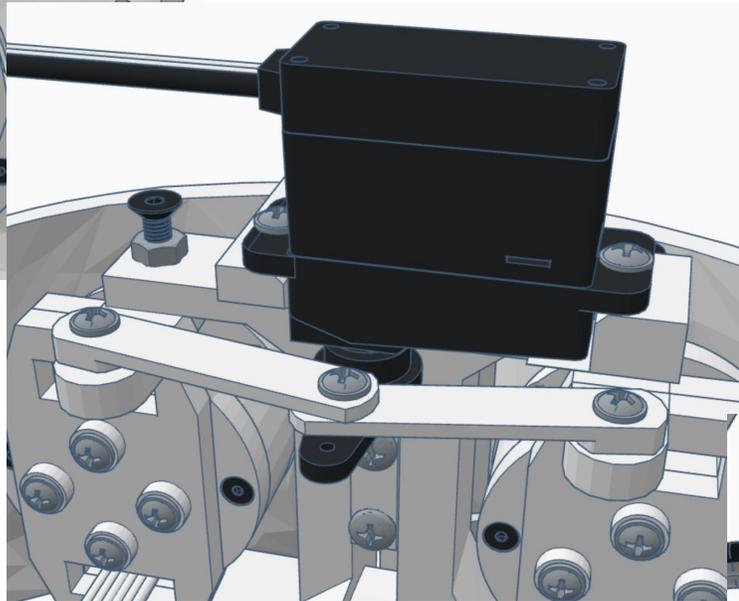
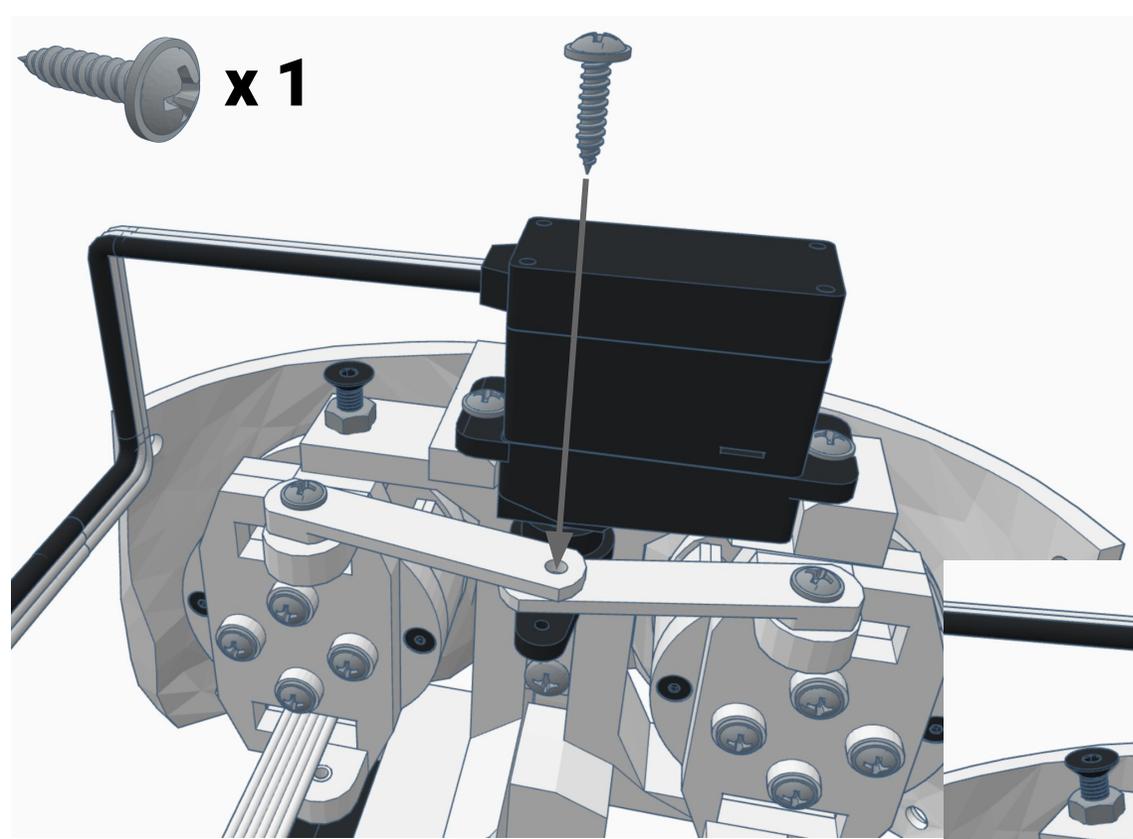


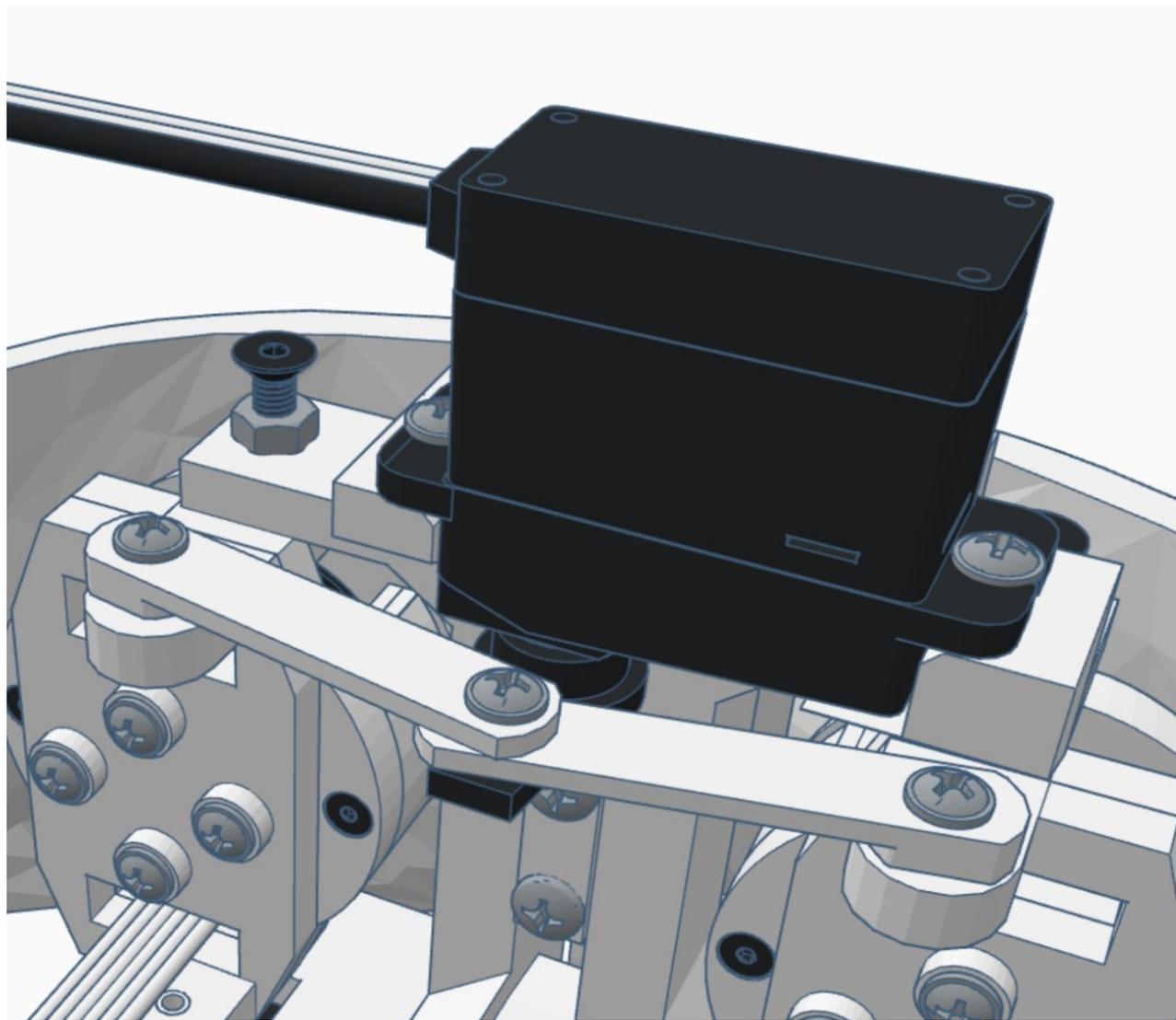
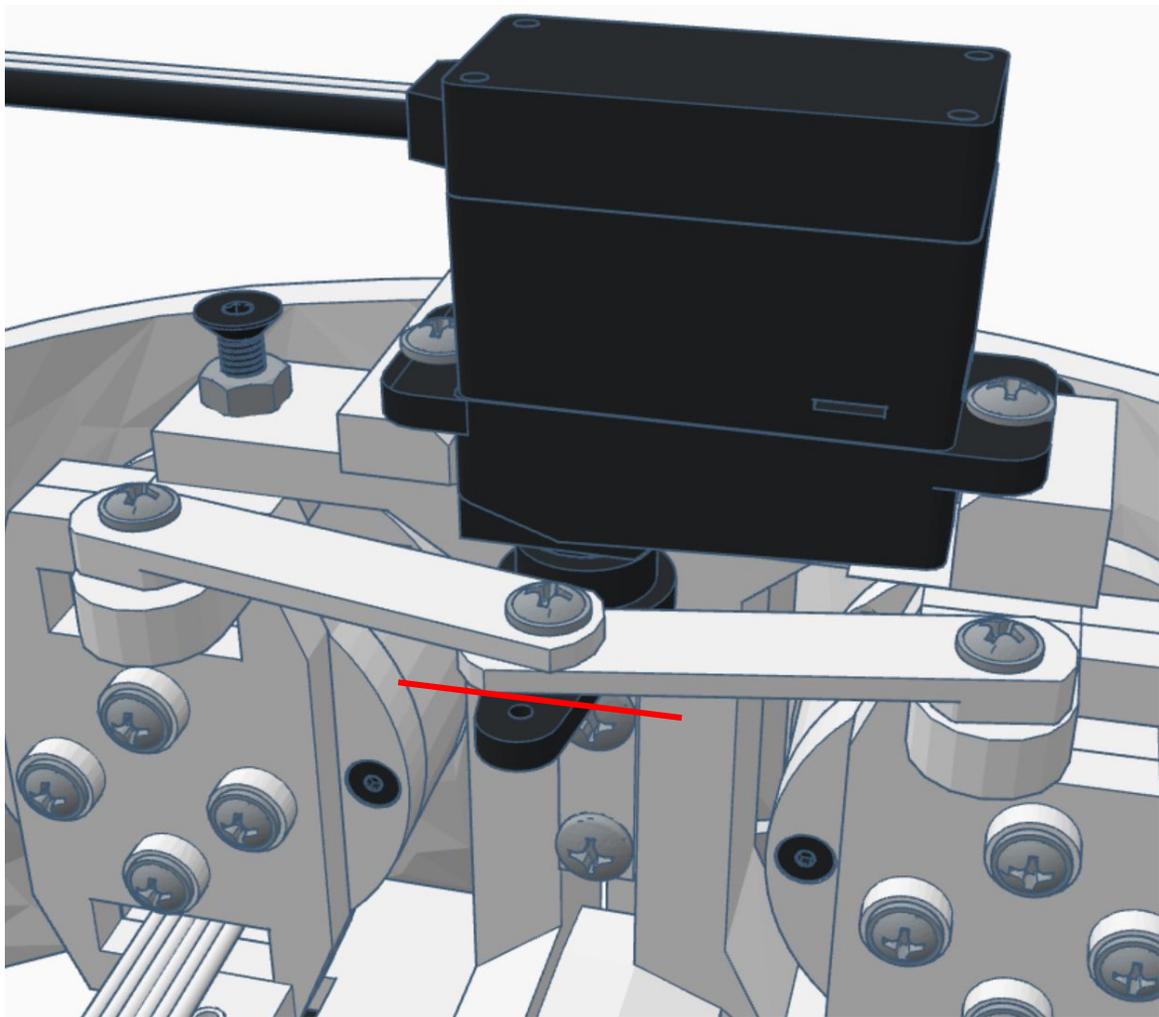
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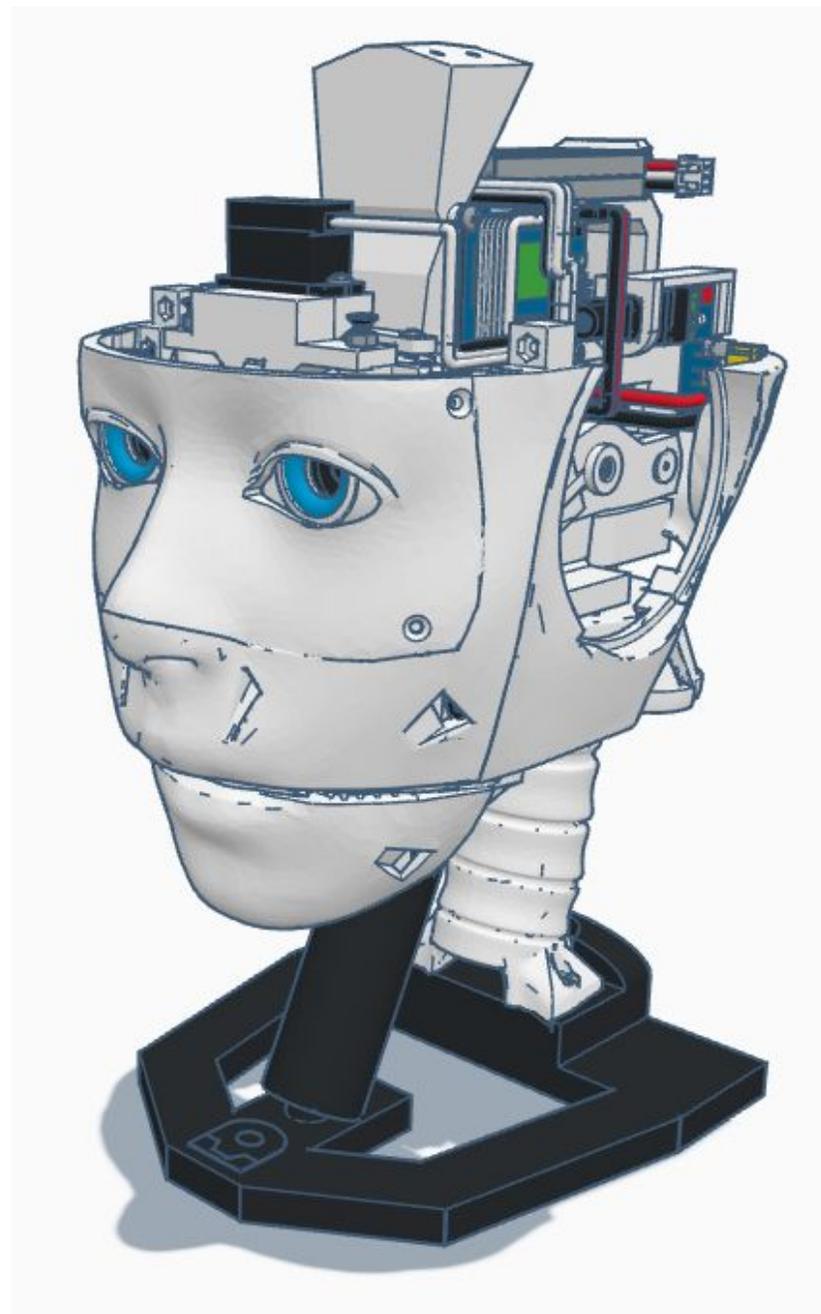
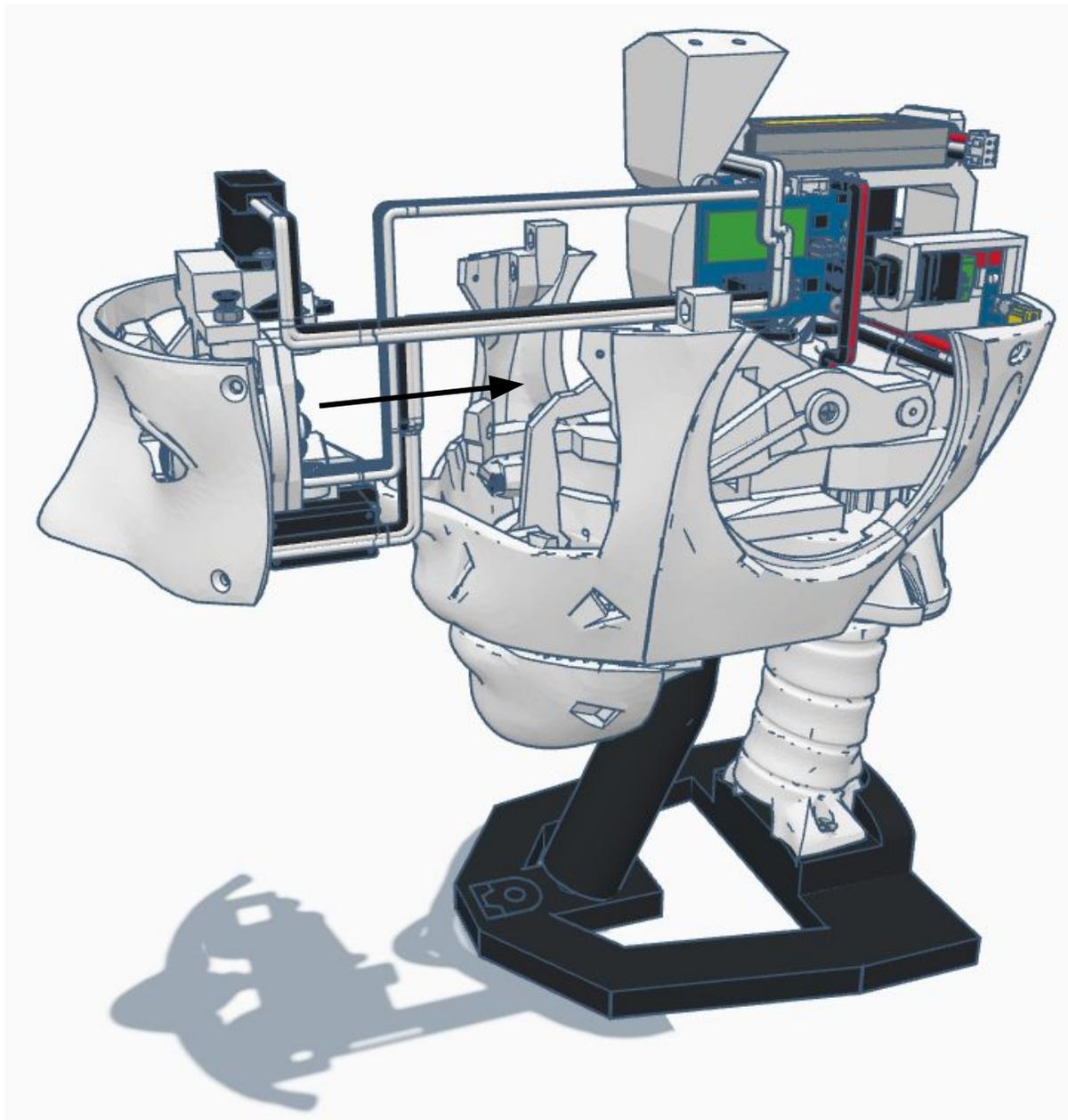




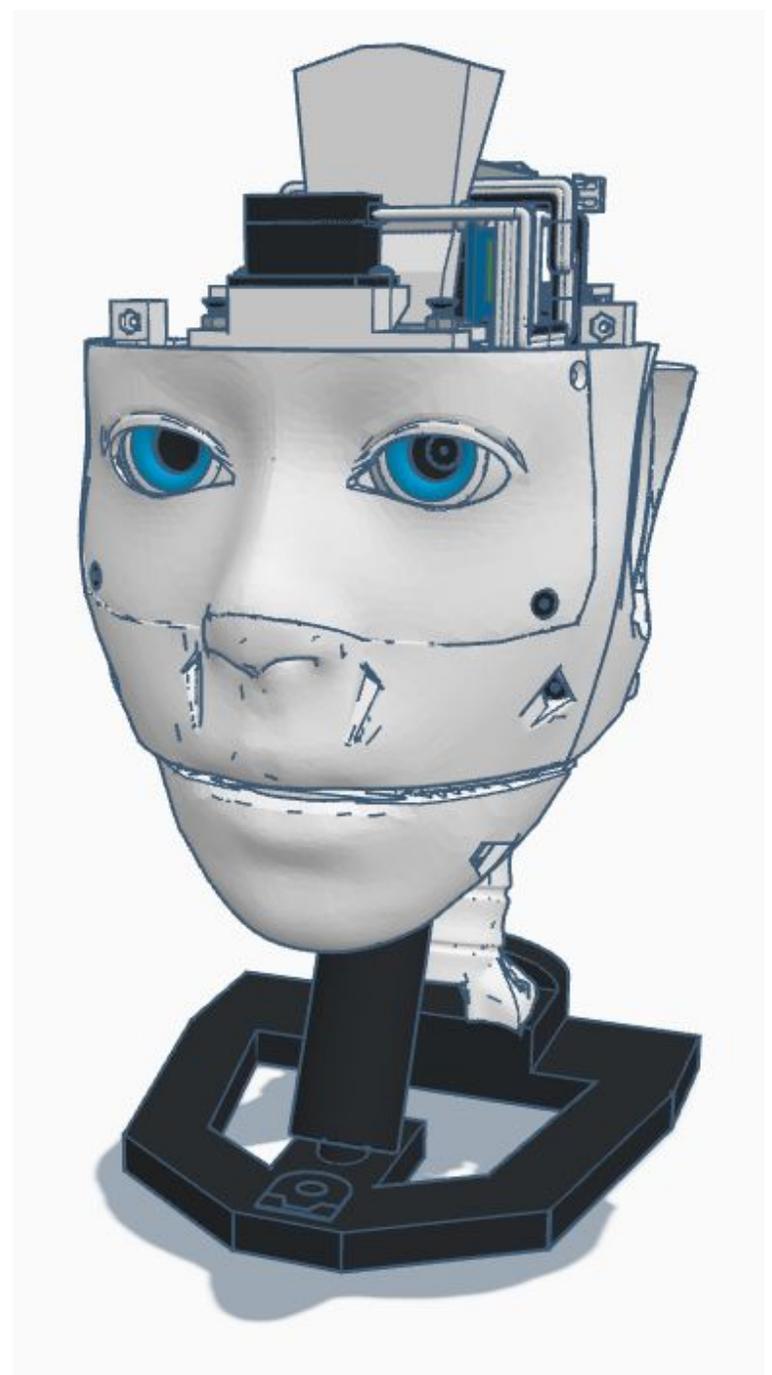
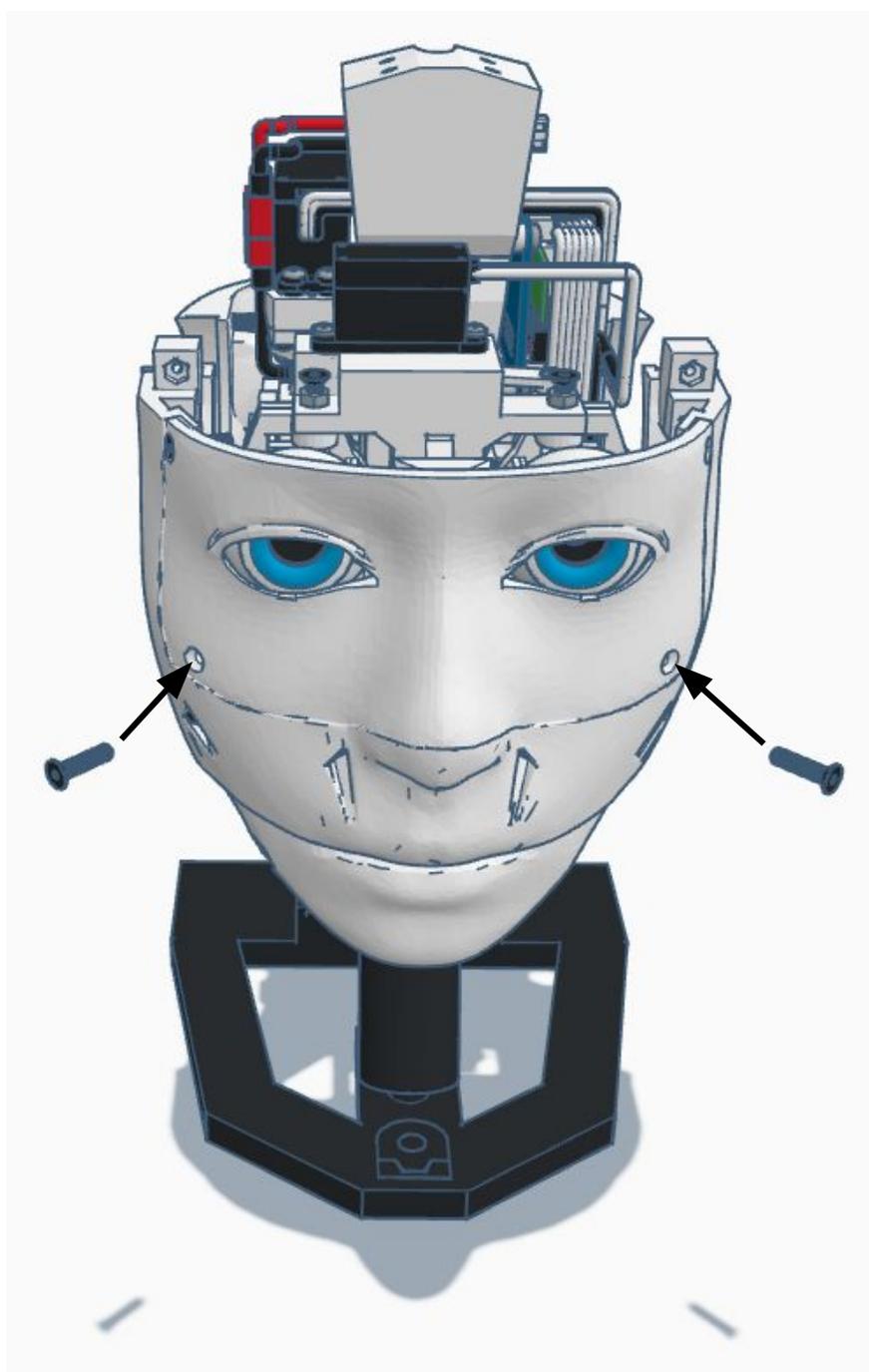


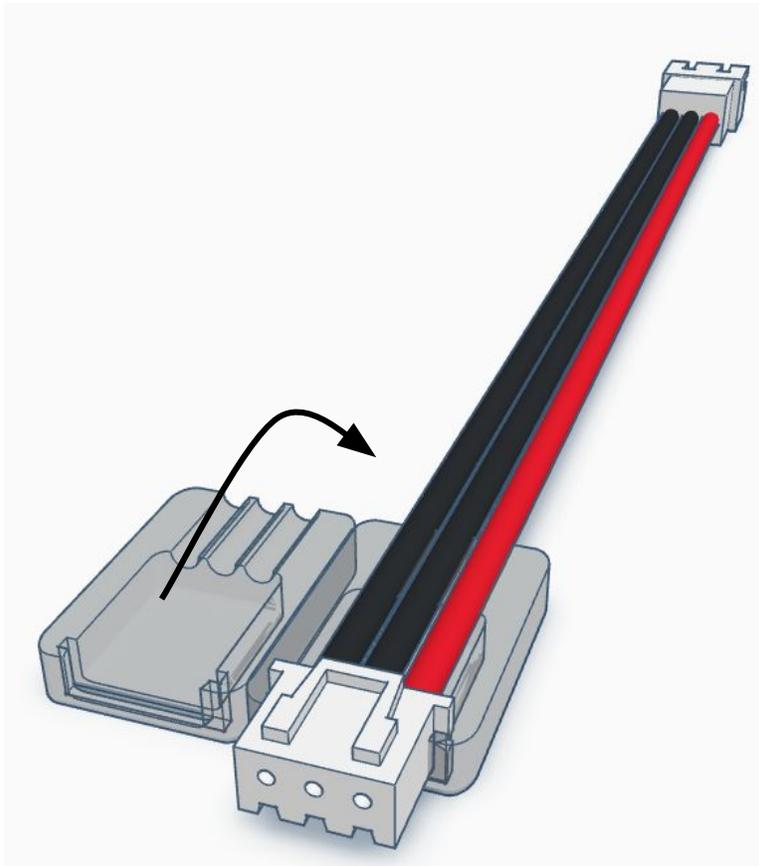
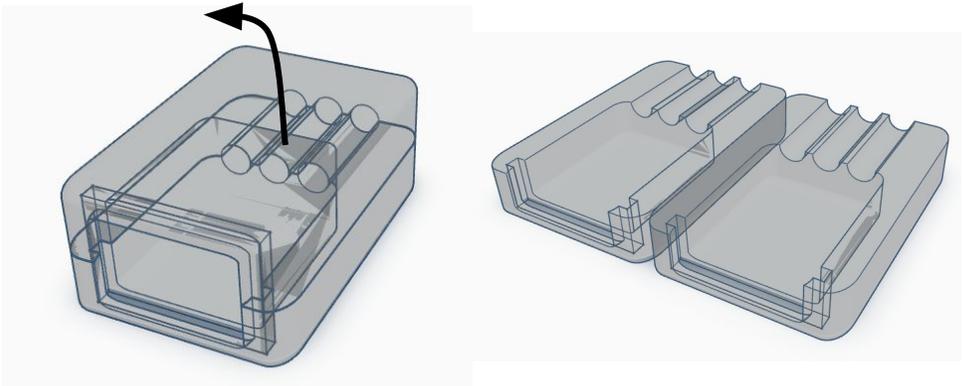


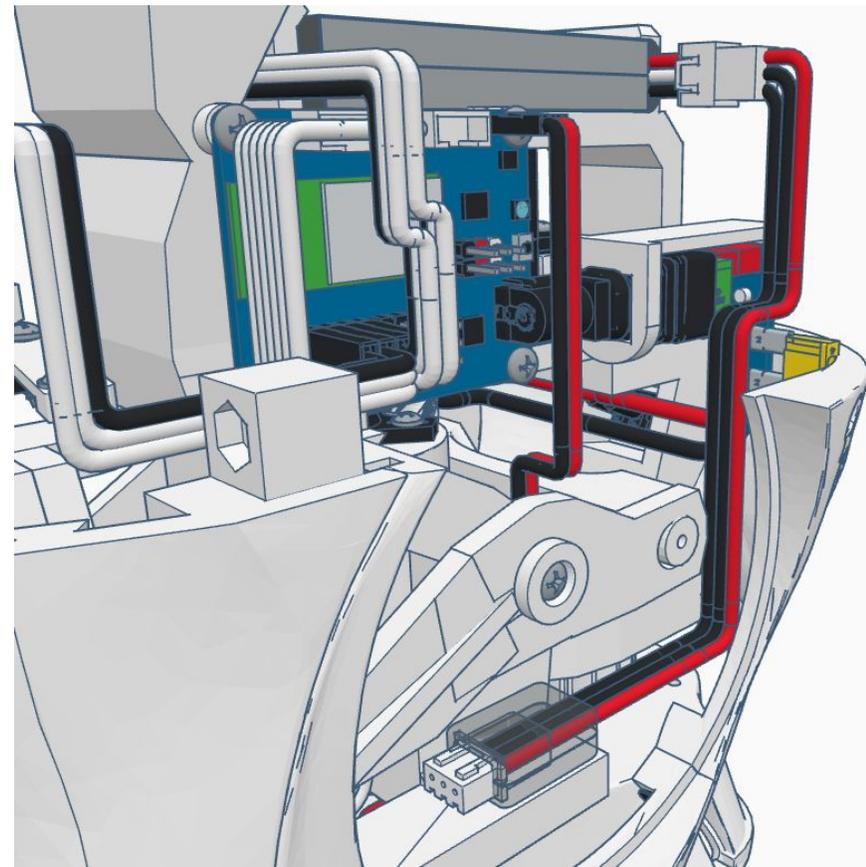
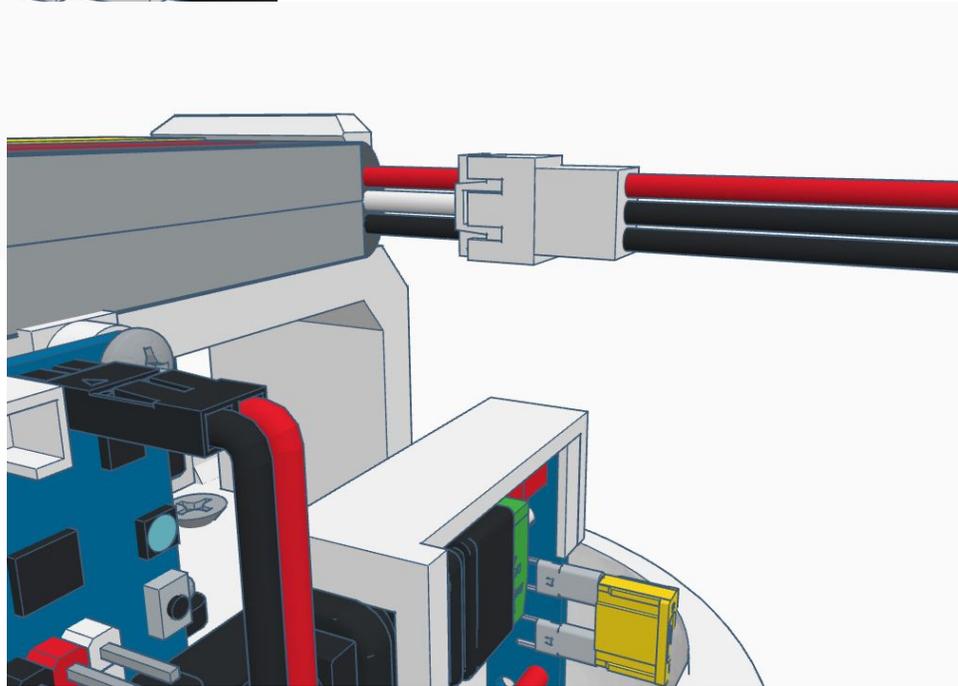
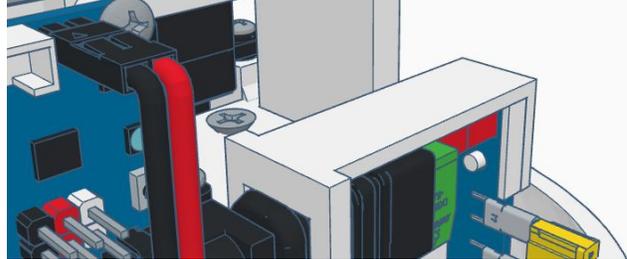
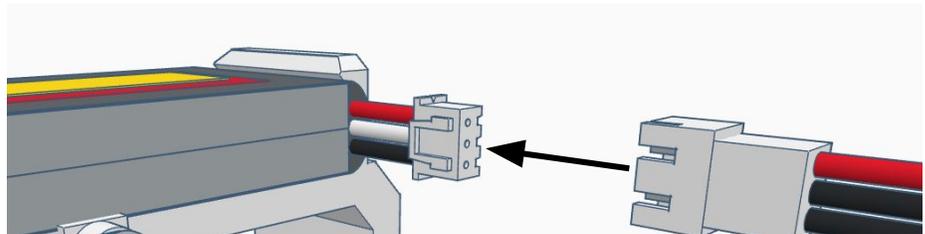




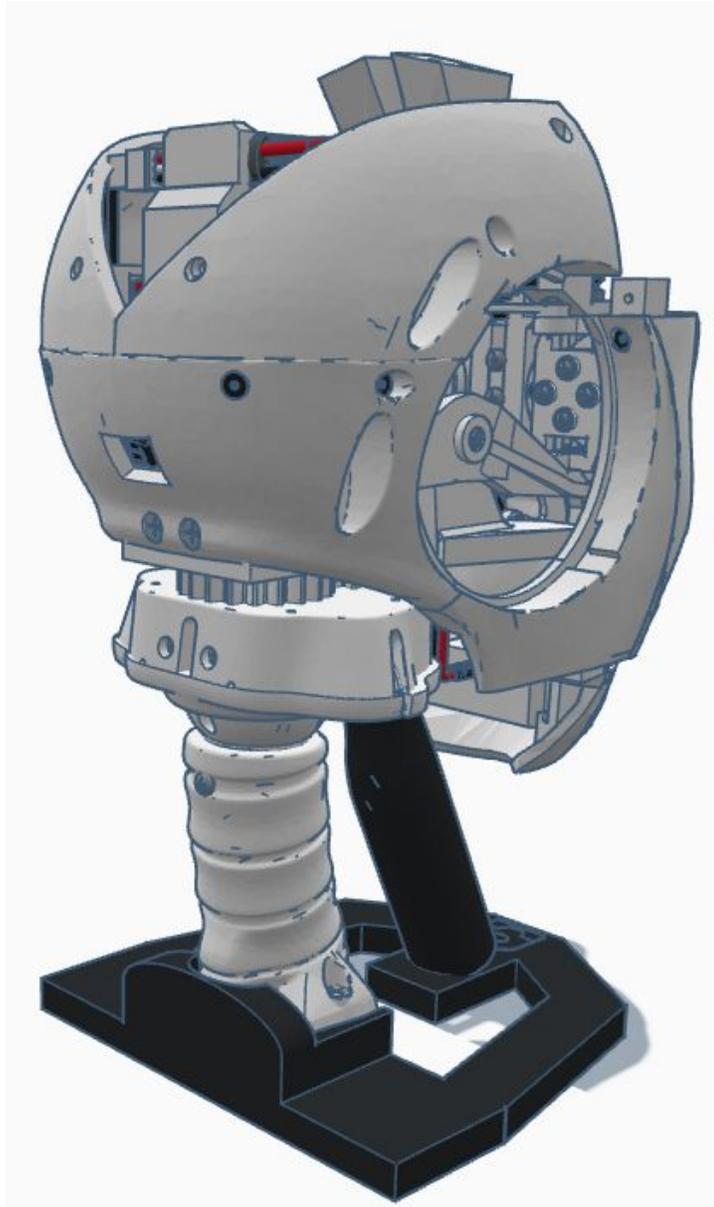
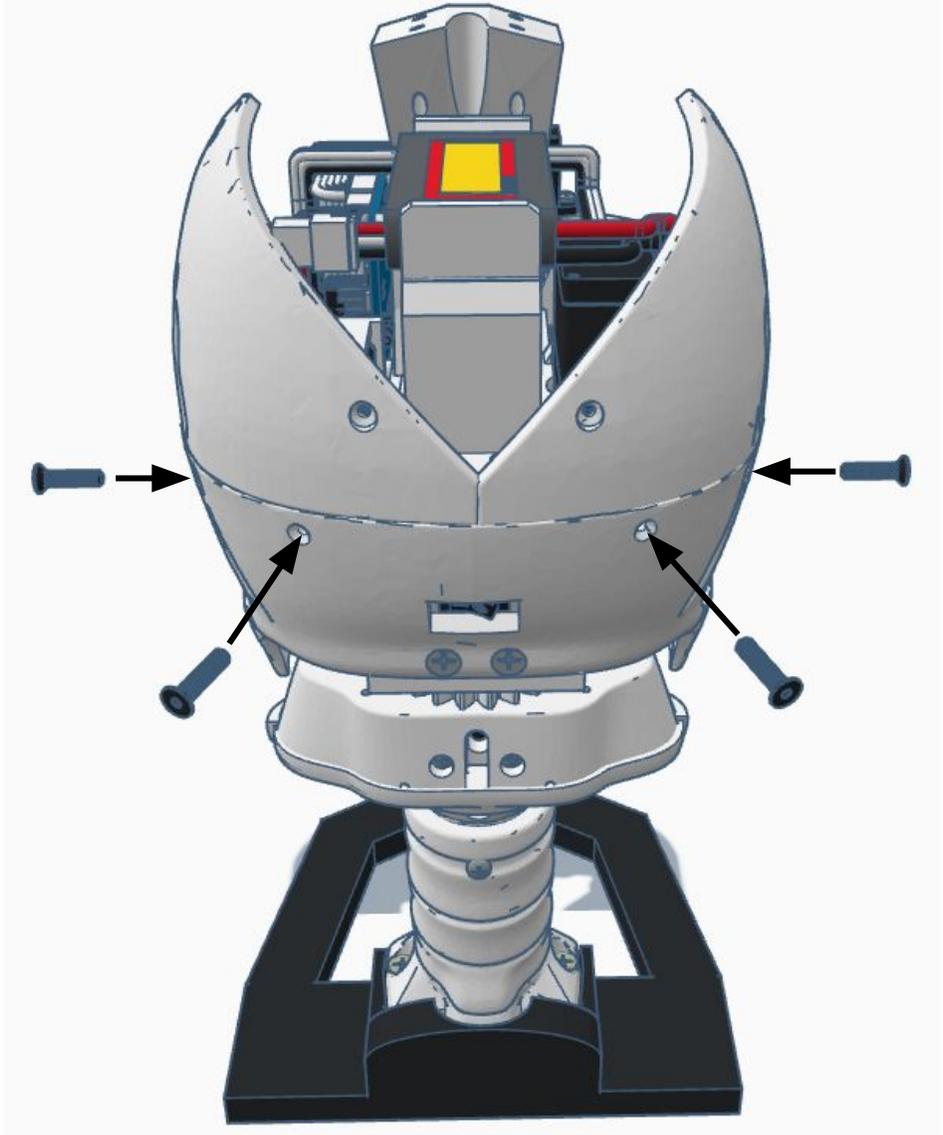
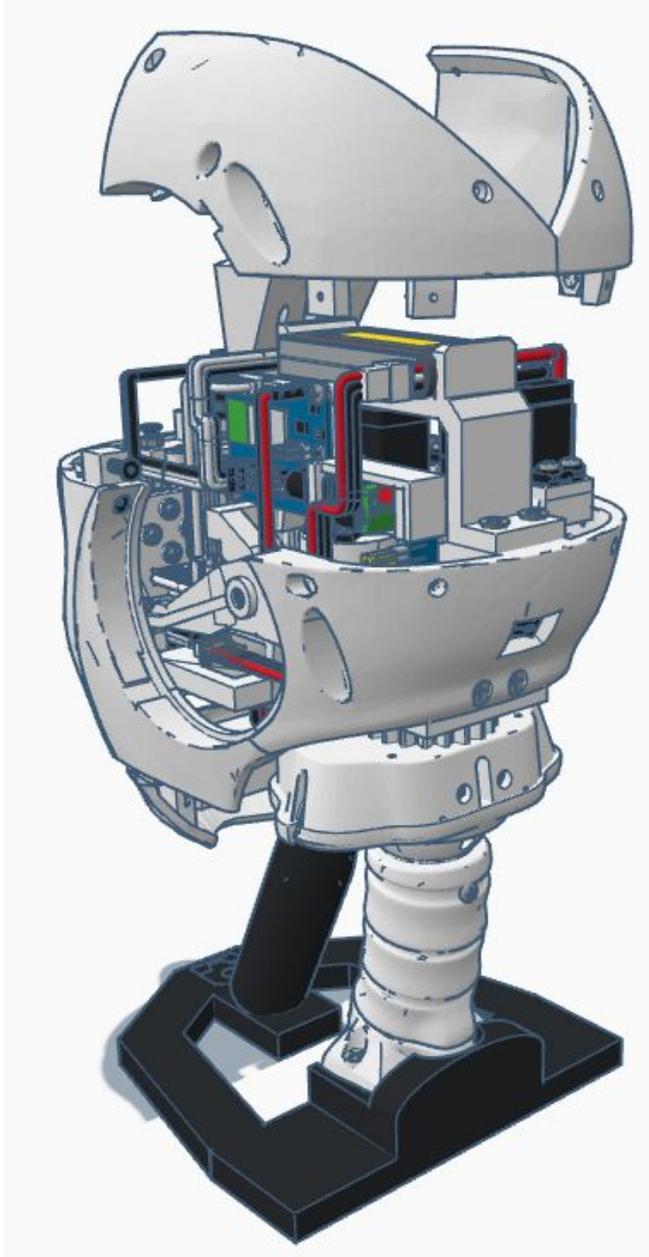
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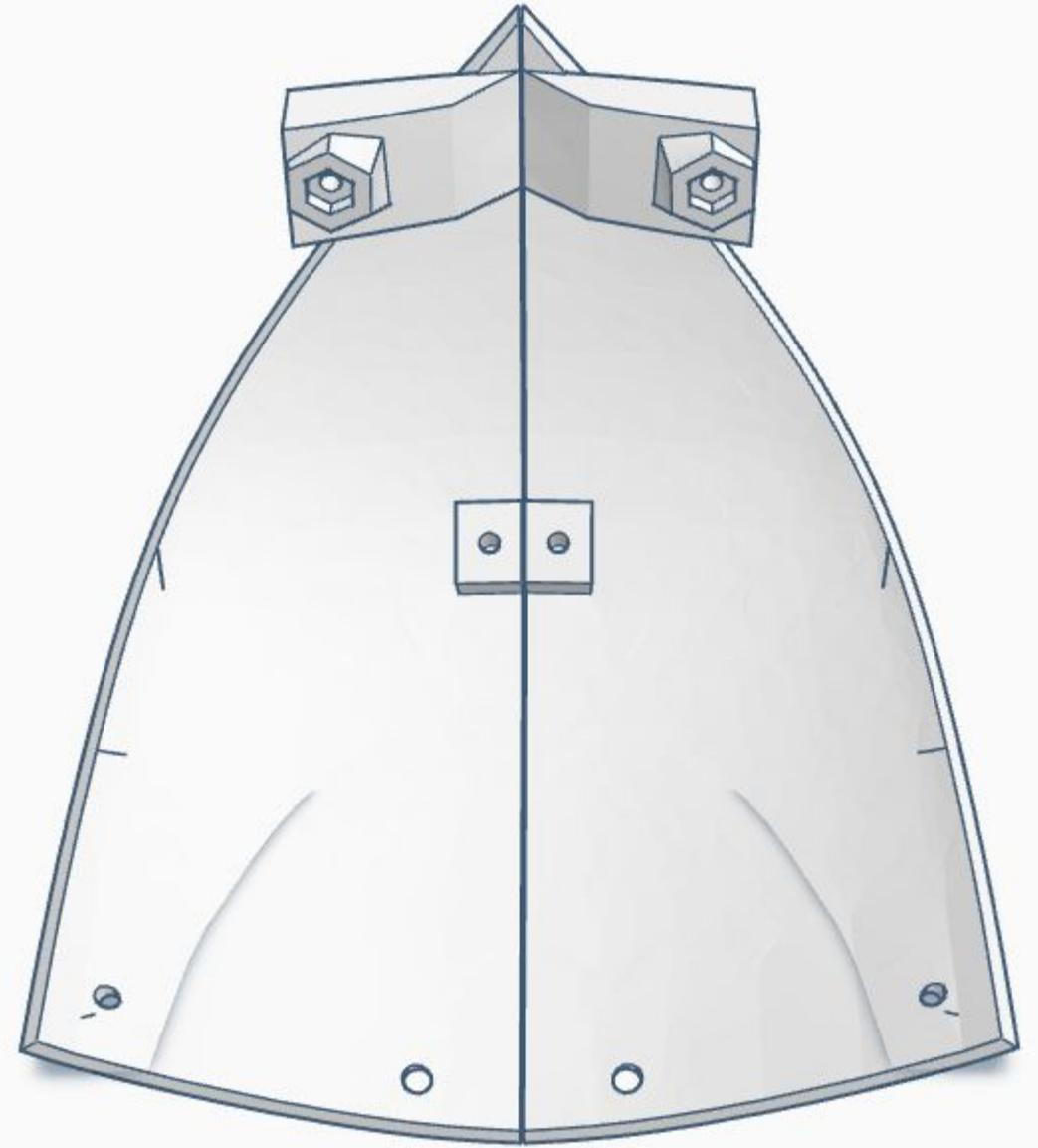
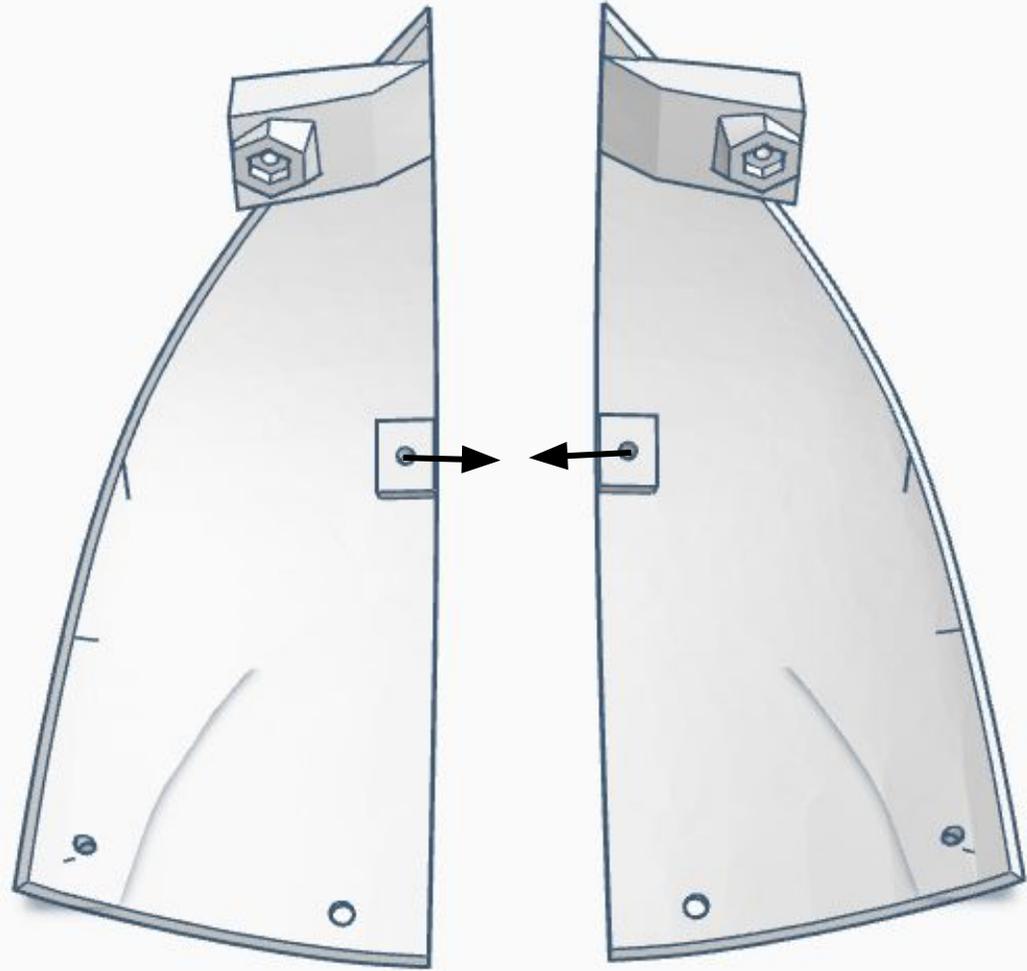




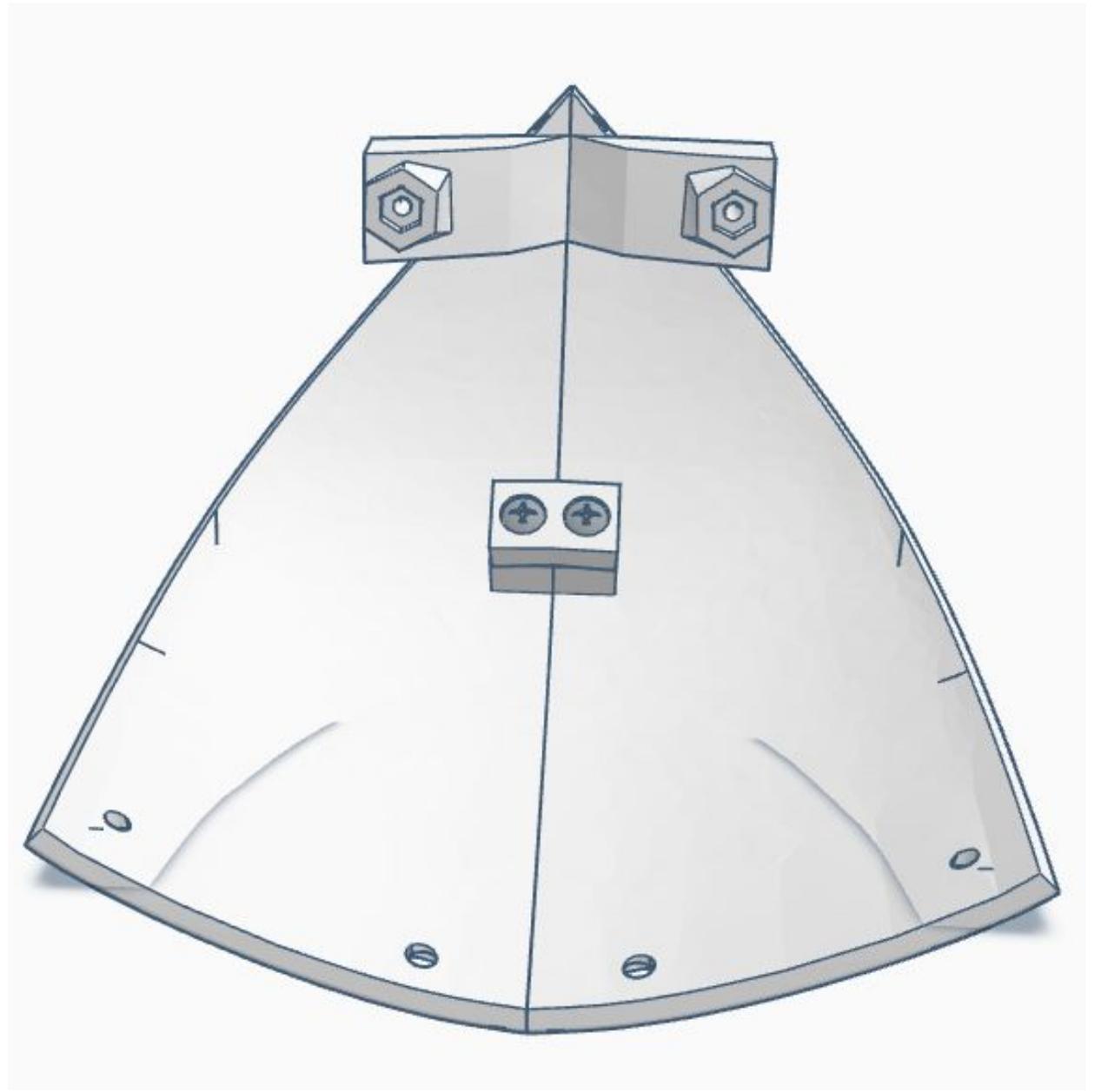
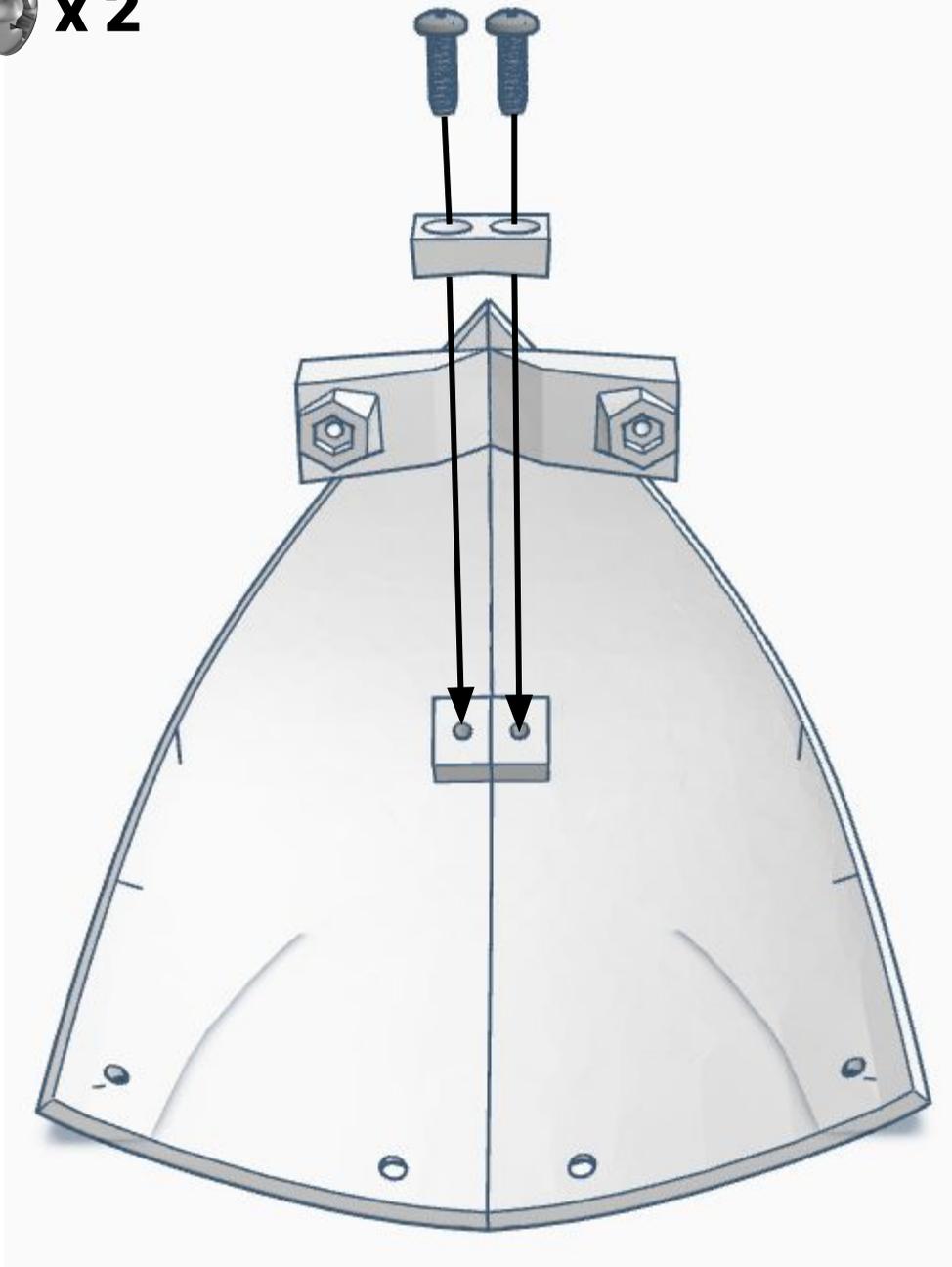


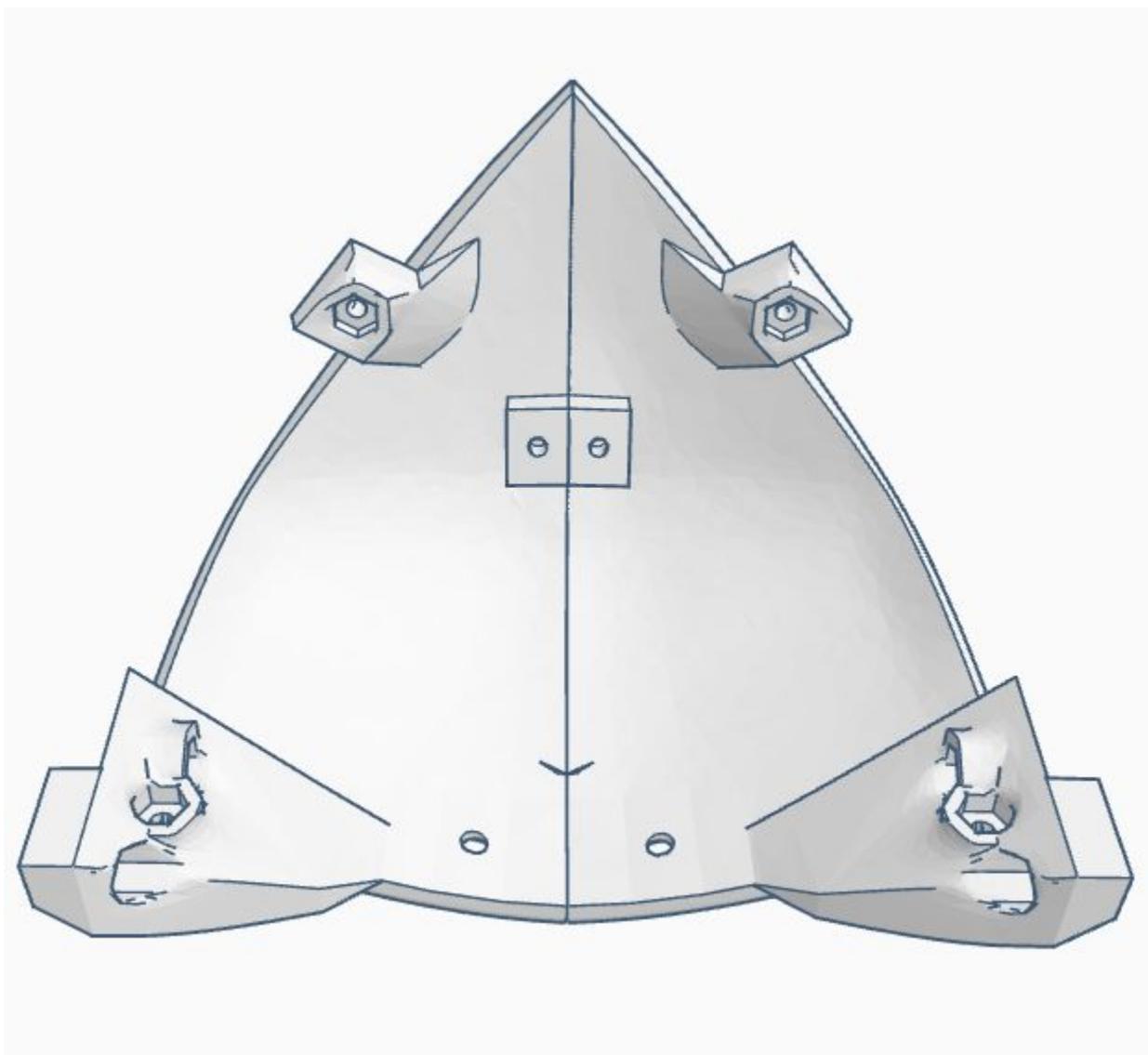
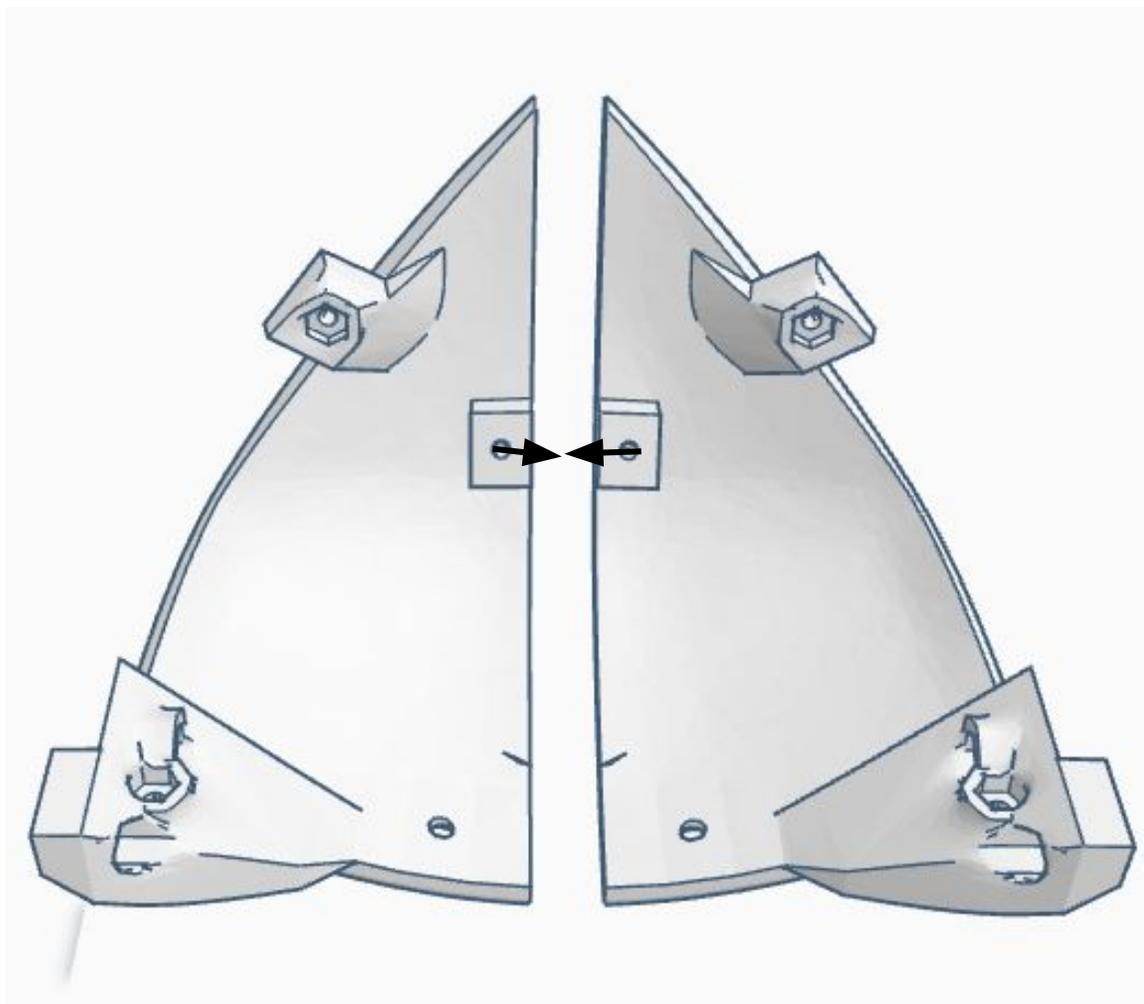
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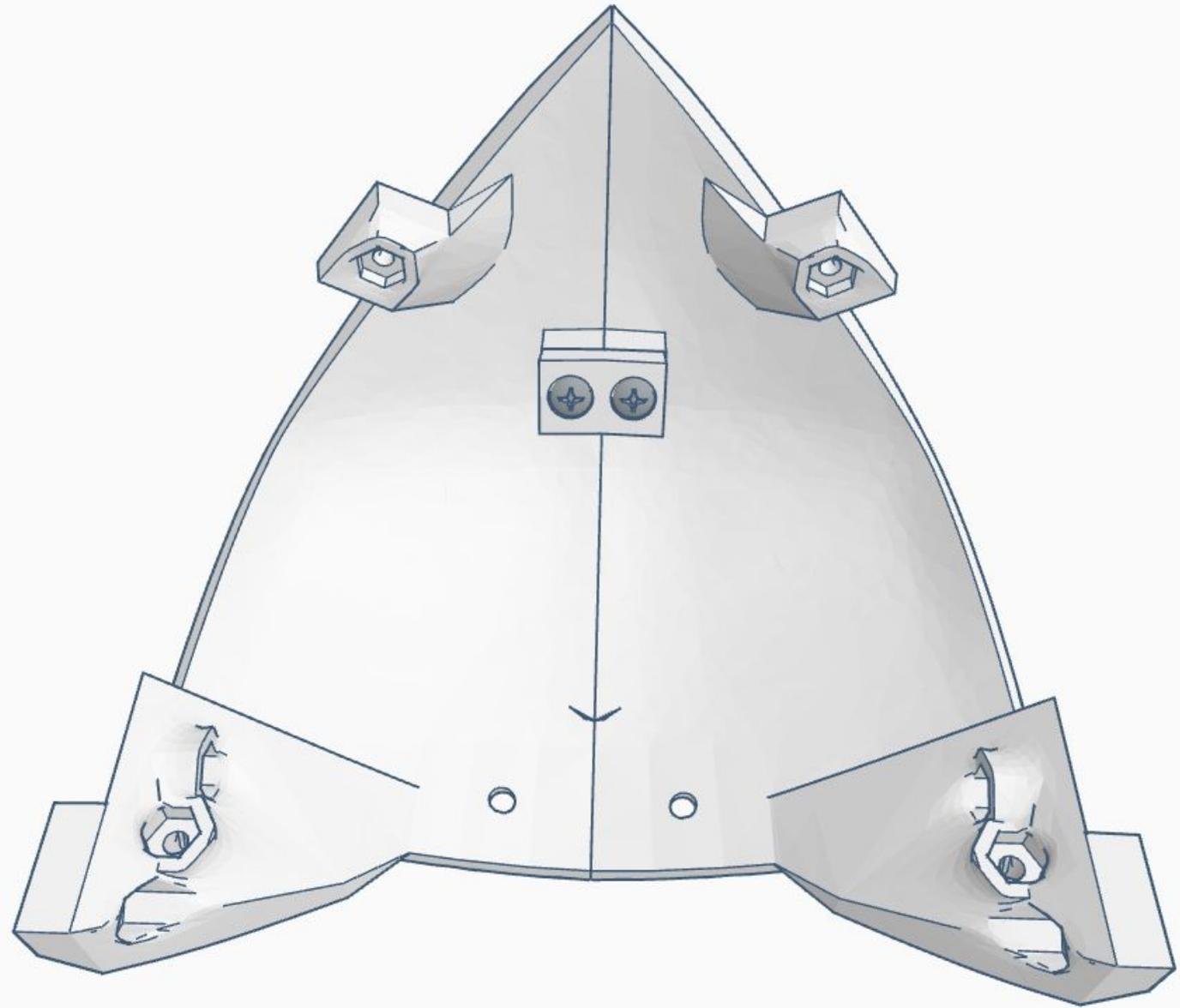
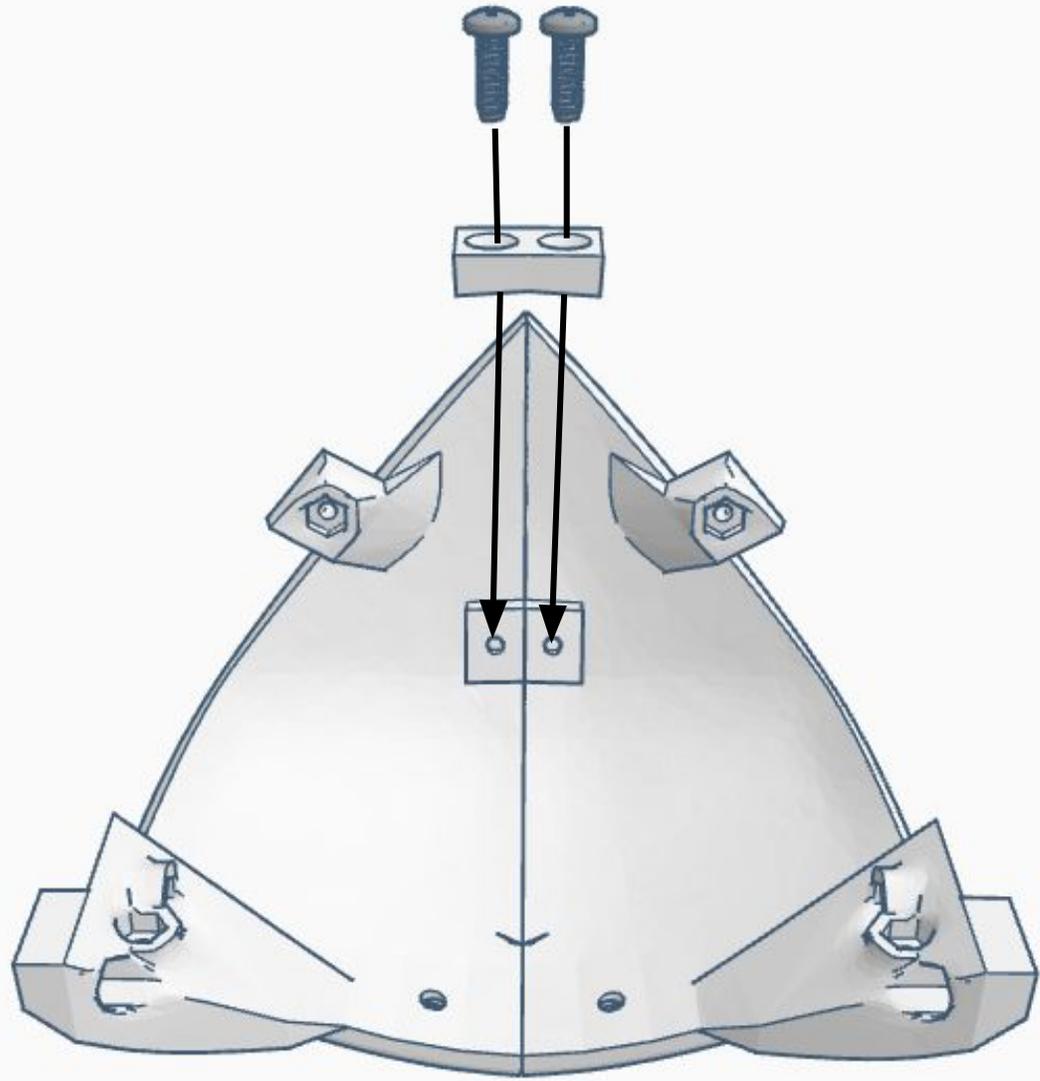


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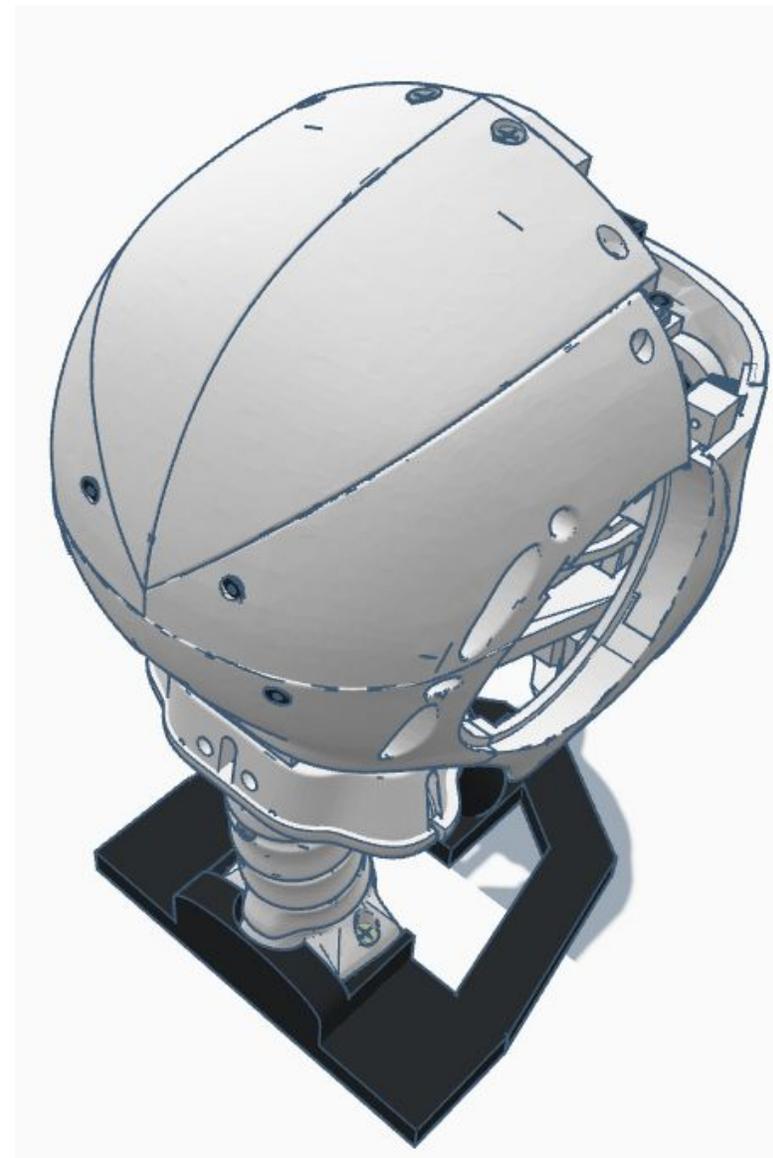
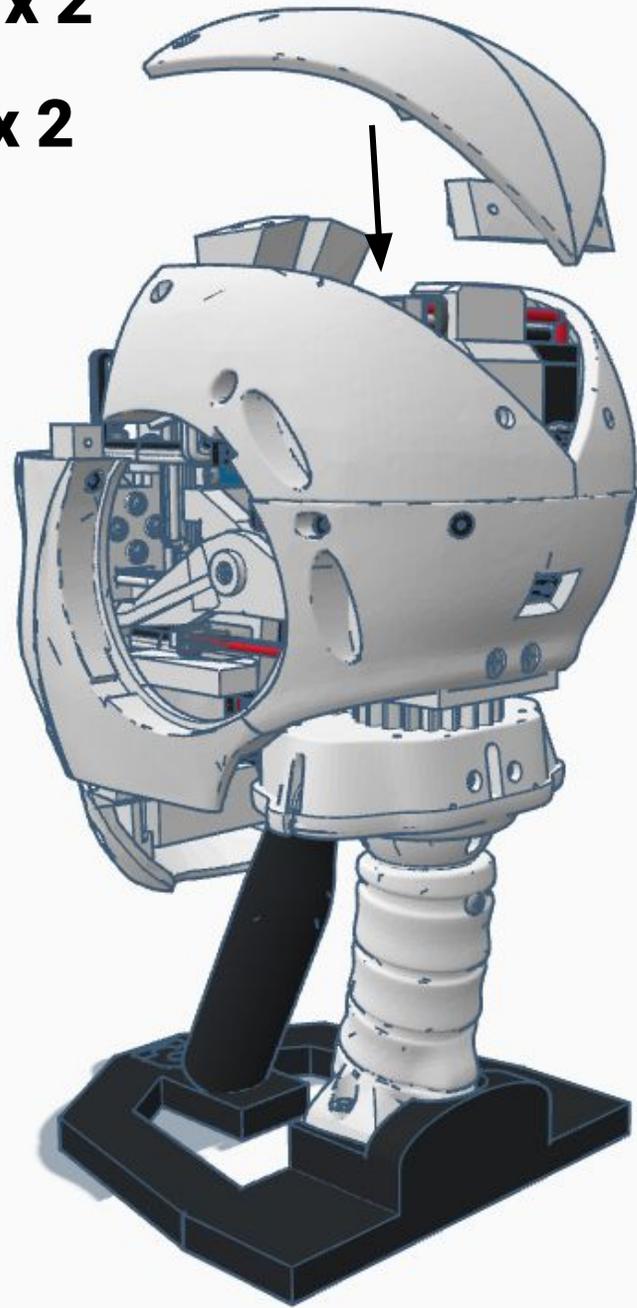




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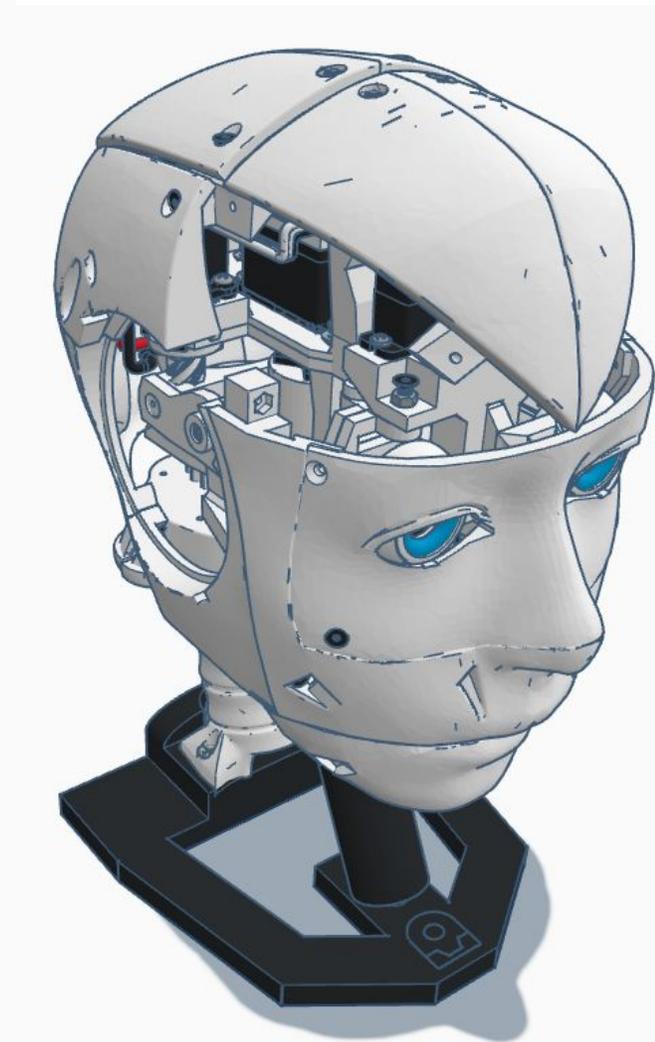
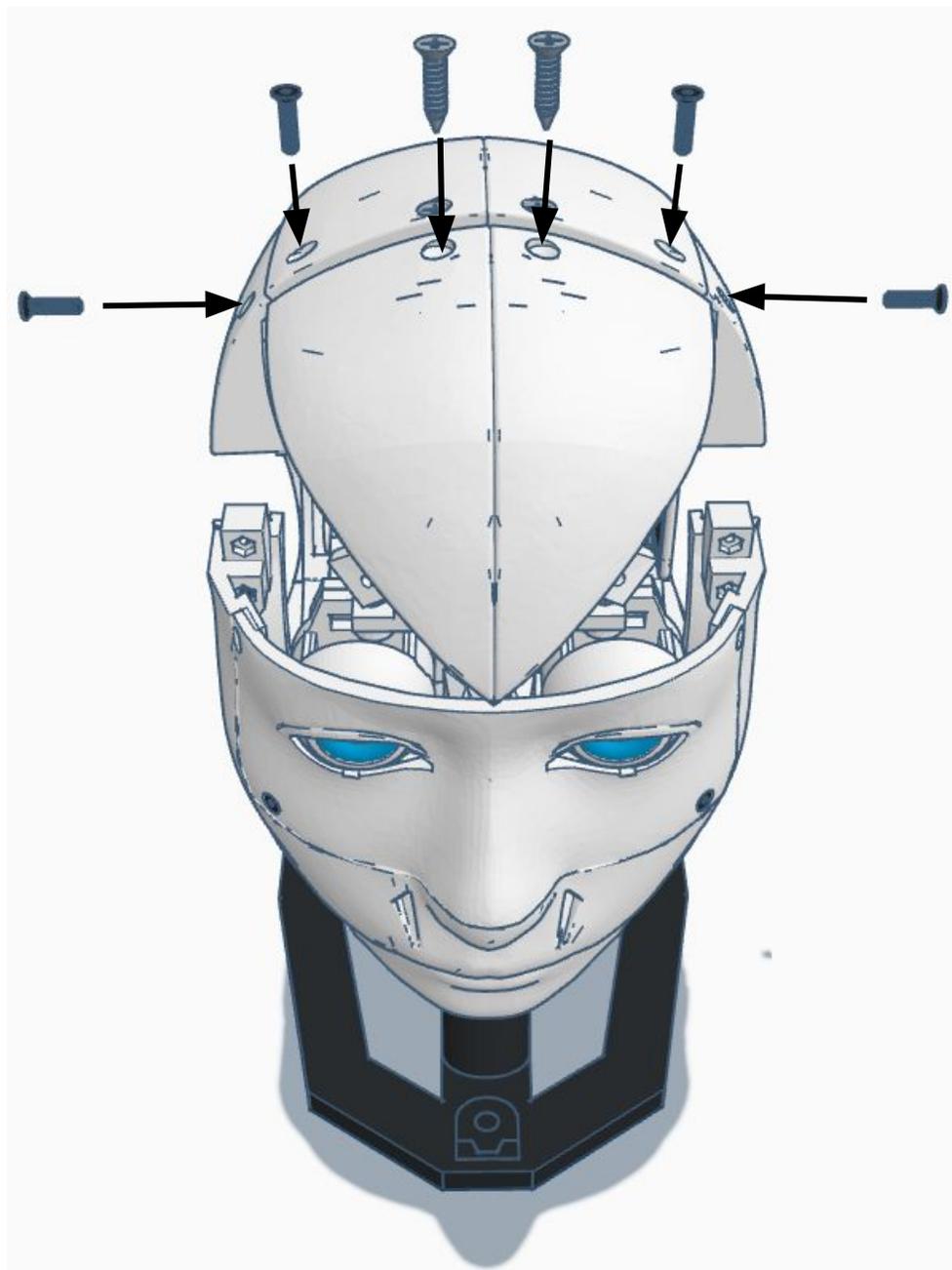
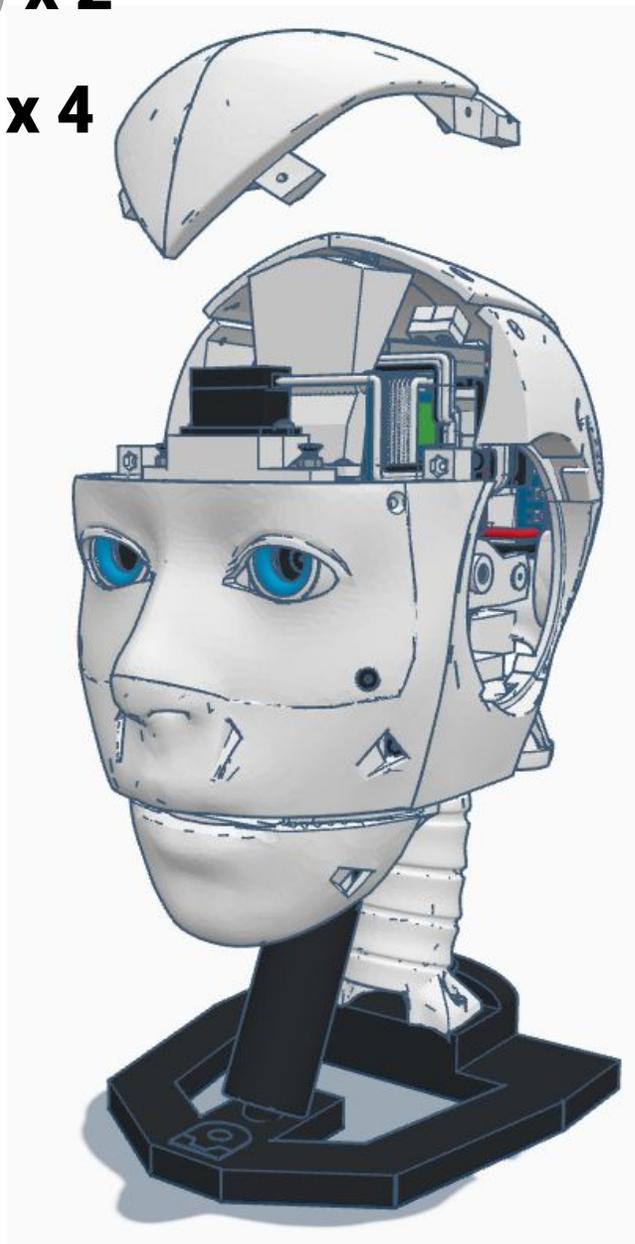


 **x 2**  
**x 2**

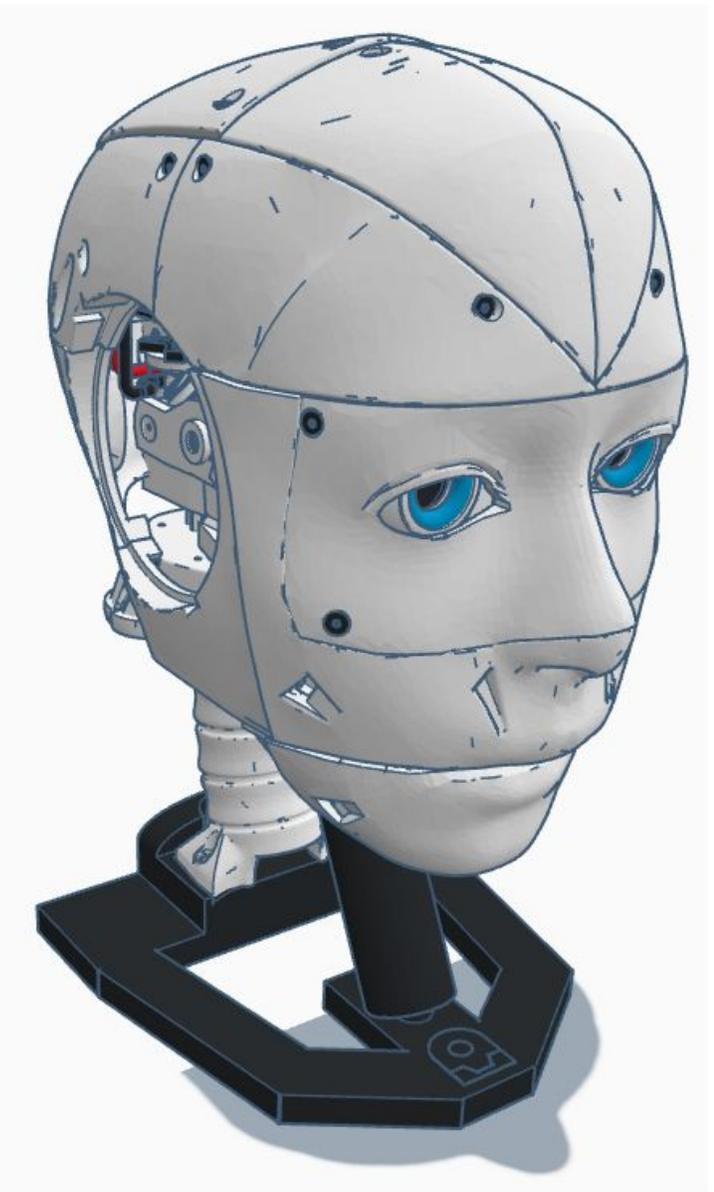
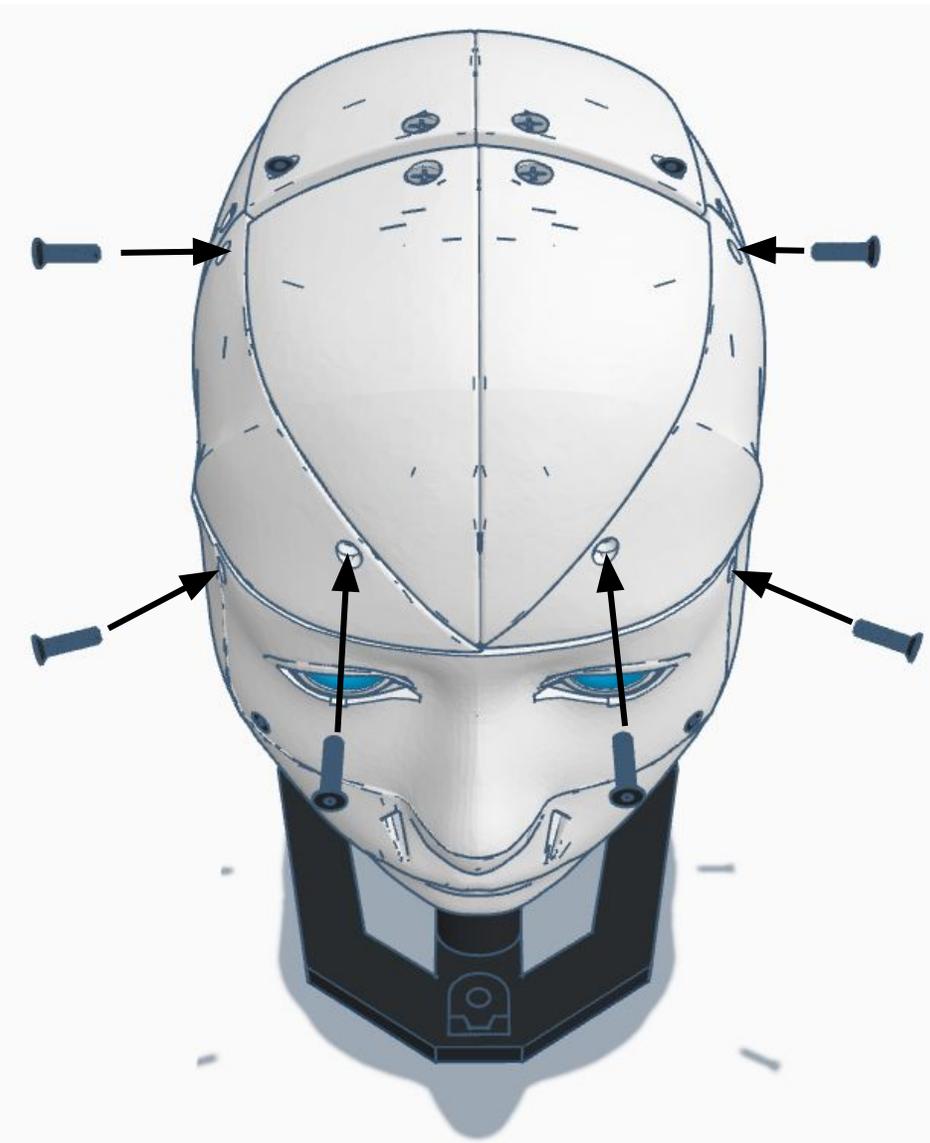
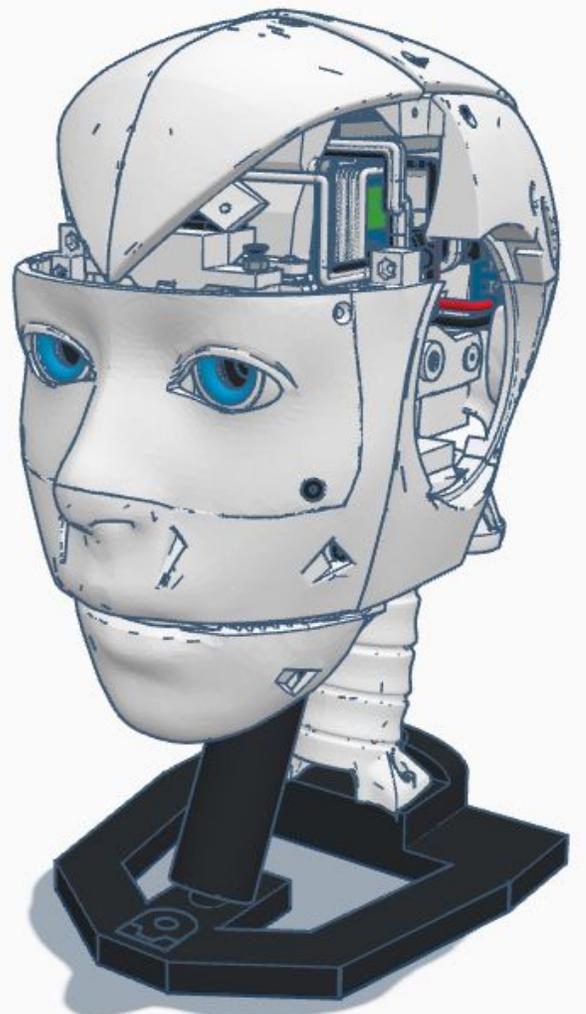
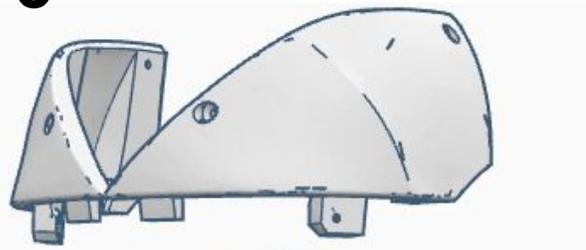


 x 2

 x 4



 x 6



 x 2

