



KI-0555 EZ-inMoov Robot Head Kit - Assembly Instructions

HARDWARE LIST

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



x 34

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



x 4

No. 8
Length: $\frac{3}{4}$ "
Flat Head Phillips
Wood/Metal Screw



x 14

M3
Length: 10mm
Pan Head Phillips
Thread forming
Screw



x 37

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



x 25

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



x 4

M3 x 0.5mm
Steel Hex Nut



x 4

2mm
Allen Key

1.27mm
Allen Key

No.2
Phillips
Screwdriver

No.2
Phillips
Screwdriver

No.1
Phillips
Screwdriver

No.1
Phillips
Screwdriver

Needlenose
Pliers



TOOL LIST

OPTIONAL TOOLS & MATERIALS



Electric Precision
Screwdriver for
threading
hardware



Utility Knife
for cleaning
up 3D prints



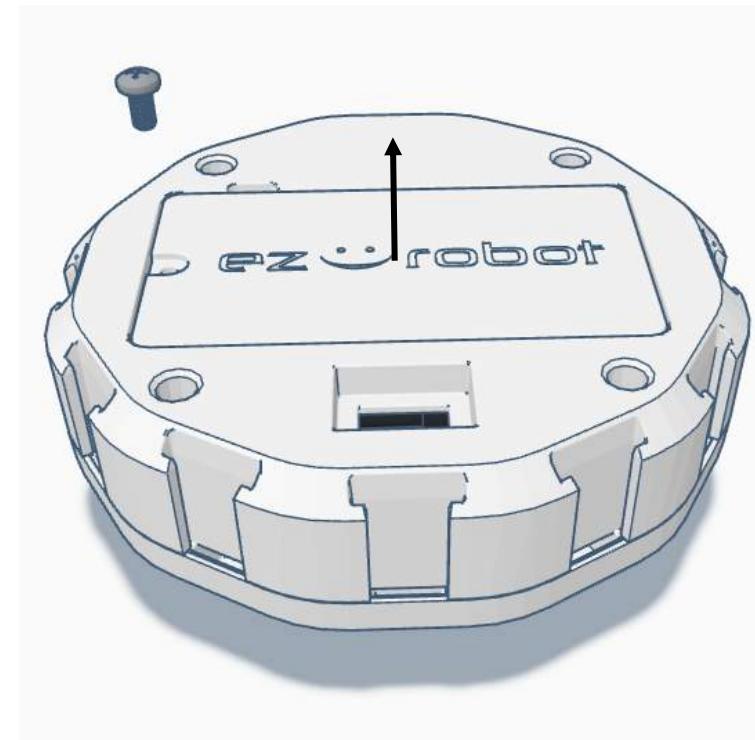
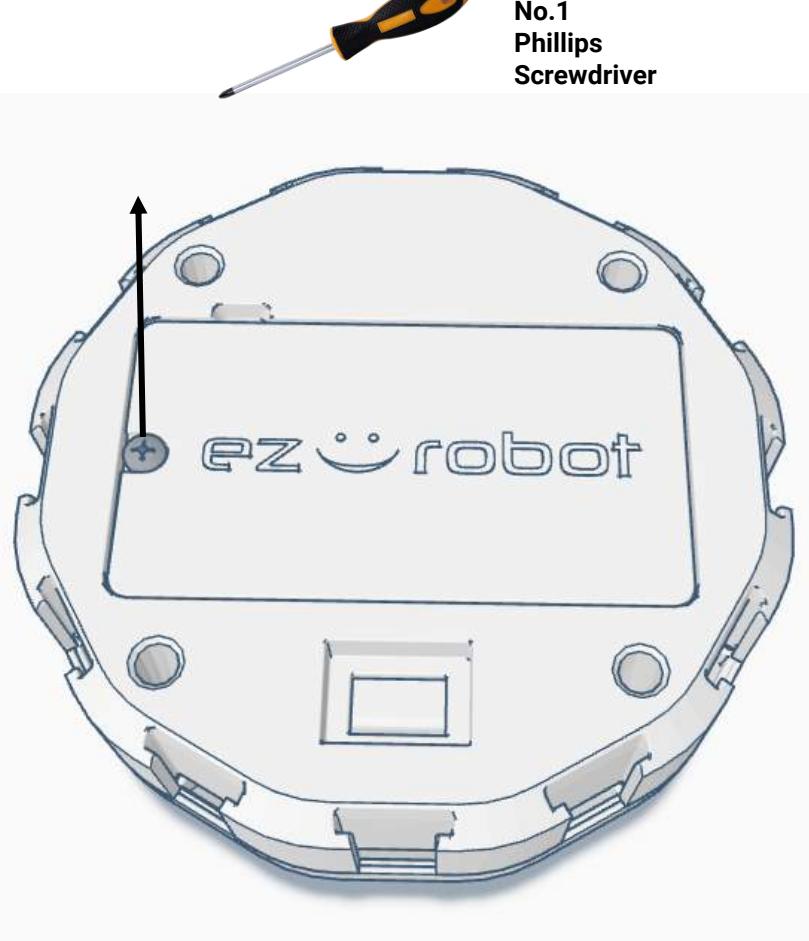
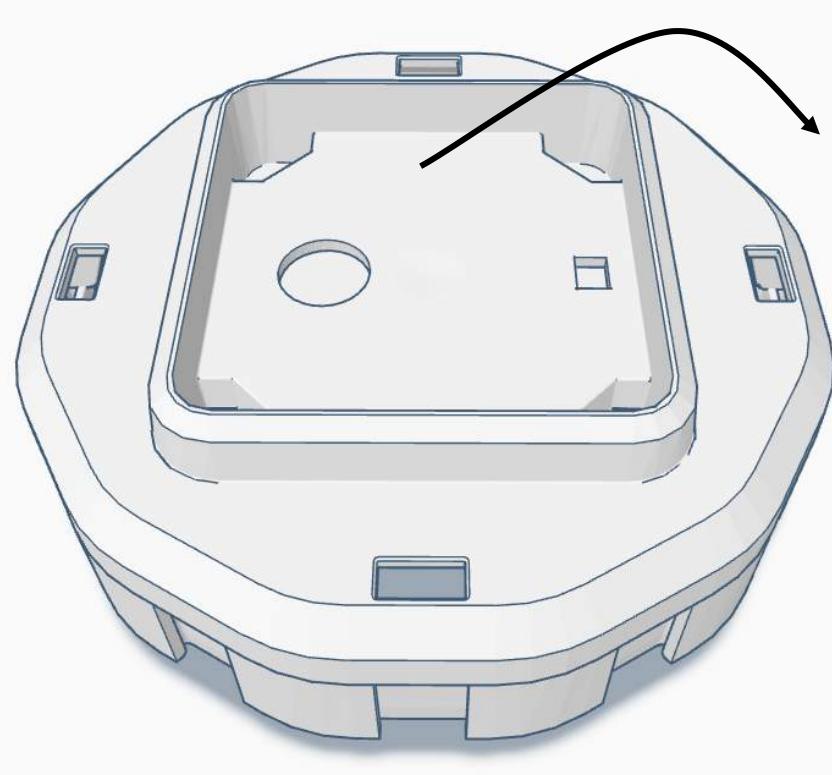
White Lithium
Grease for
lubricating 3D
printed gears

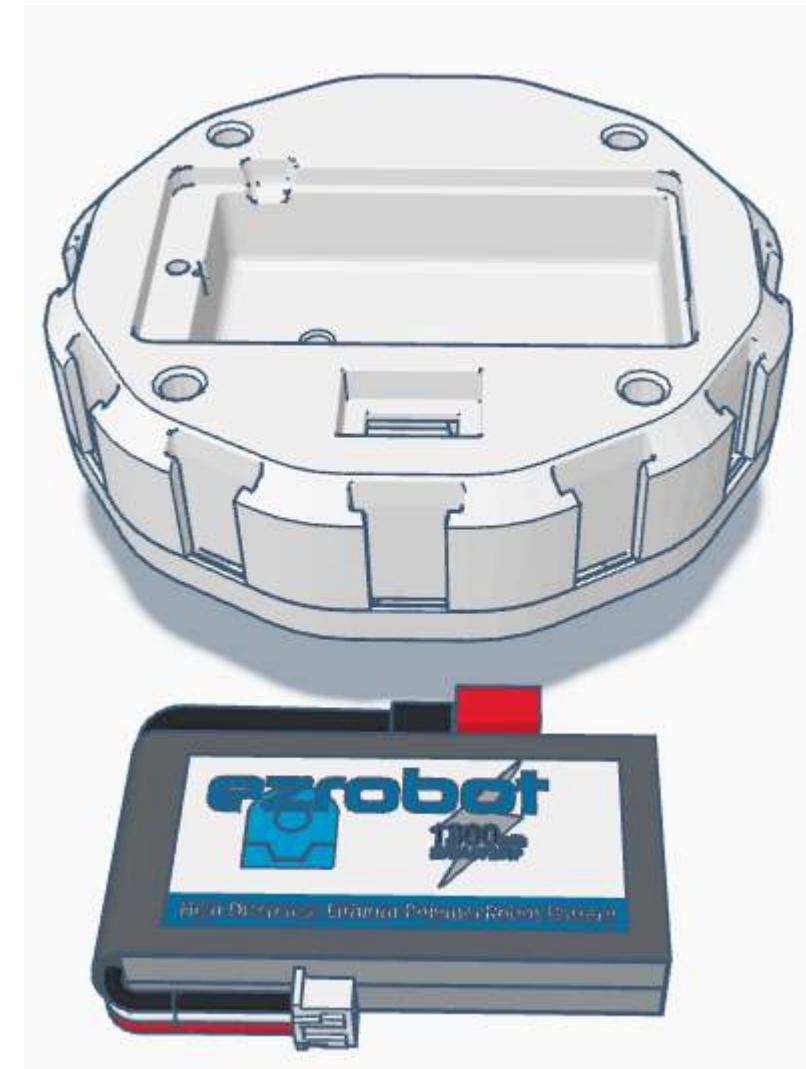
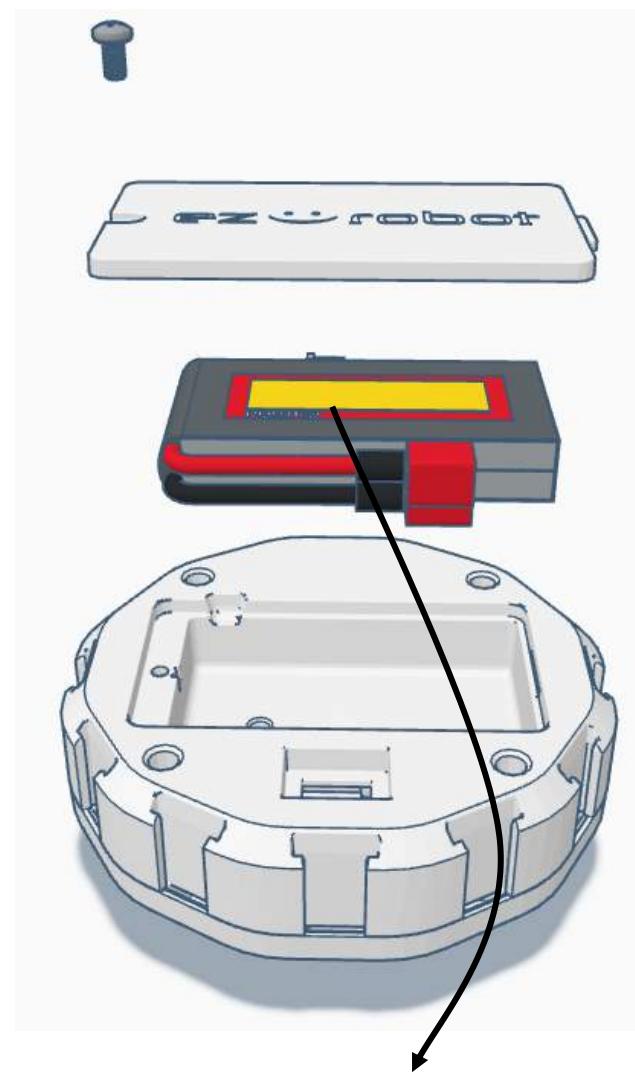
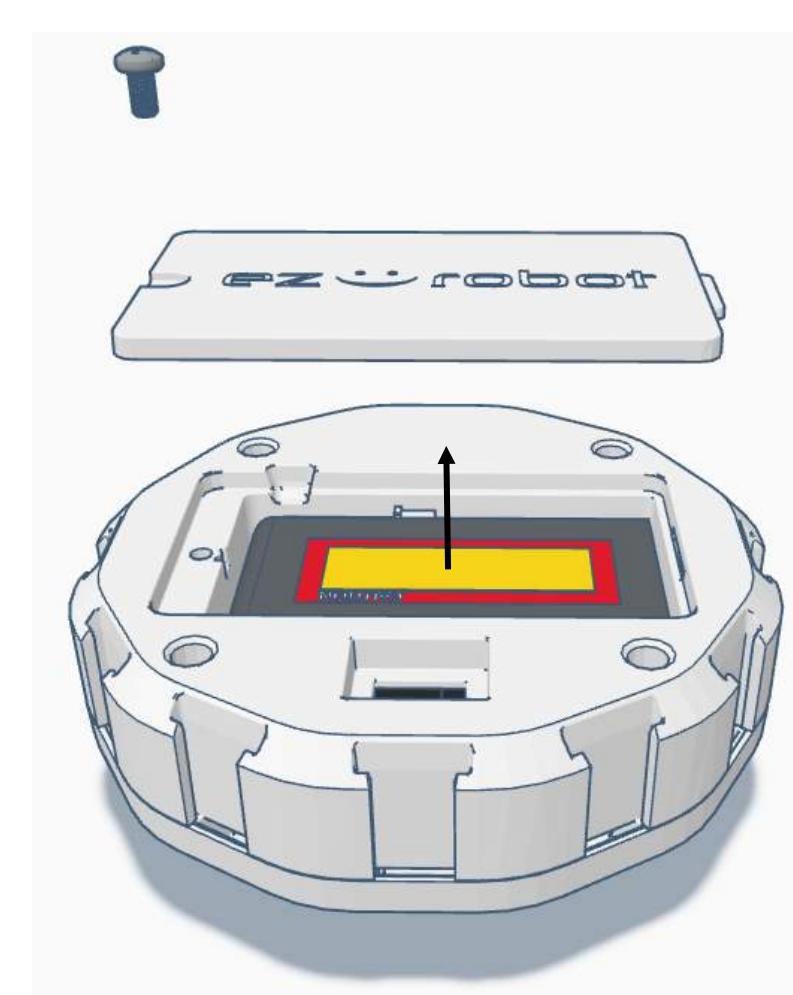


Side cutters
used with Safety
Glasses

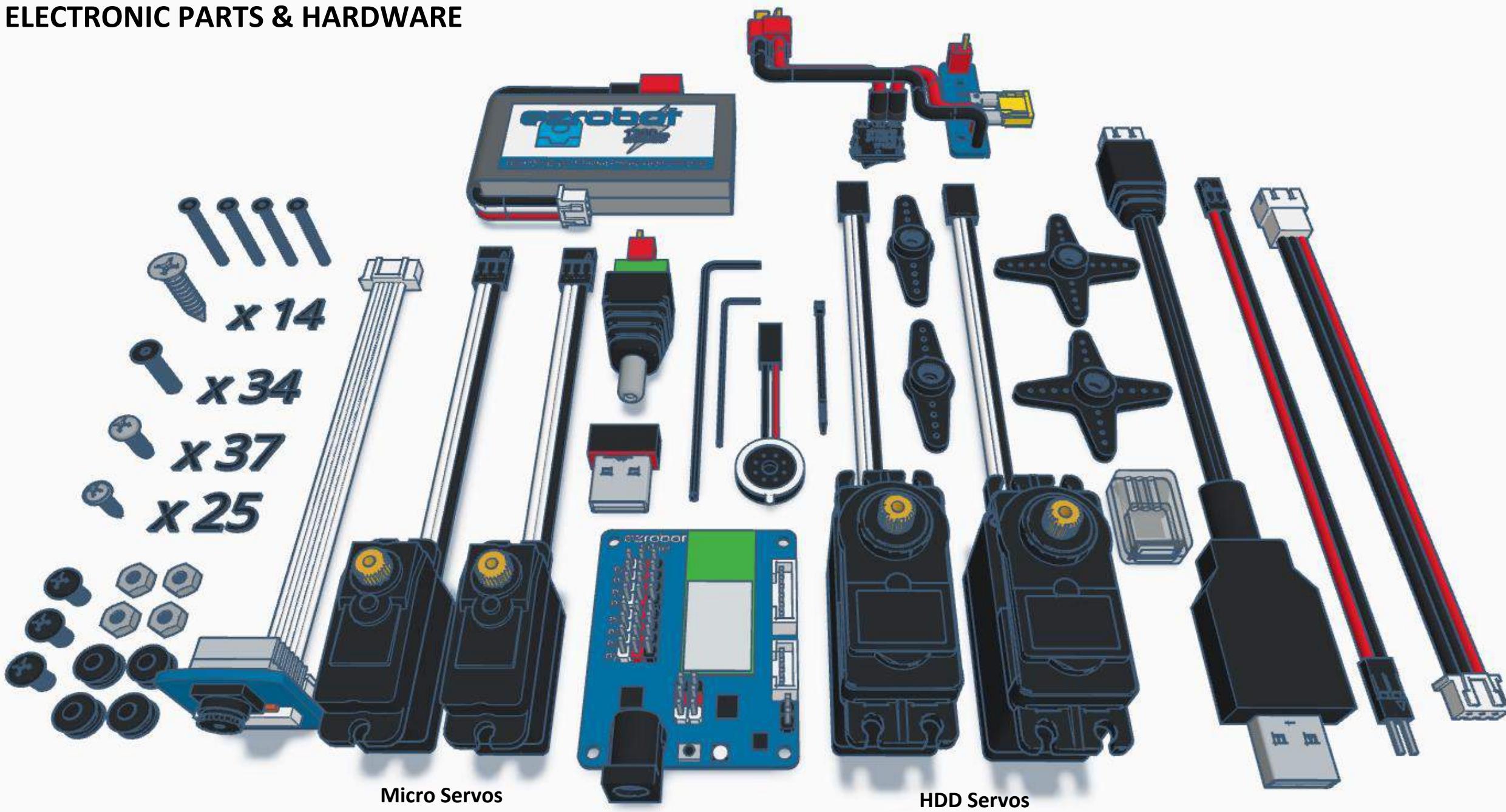


Needle Files
for cleaning
up 3D prints





ELECTRONIC PARTS & HARDWARE

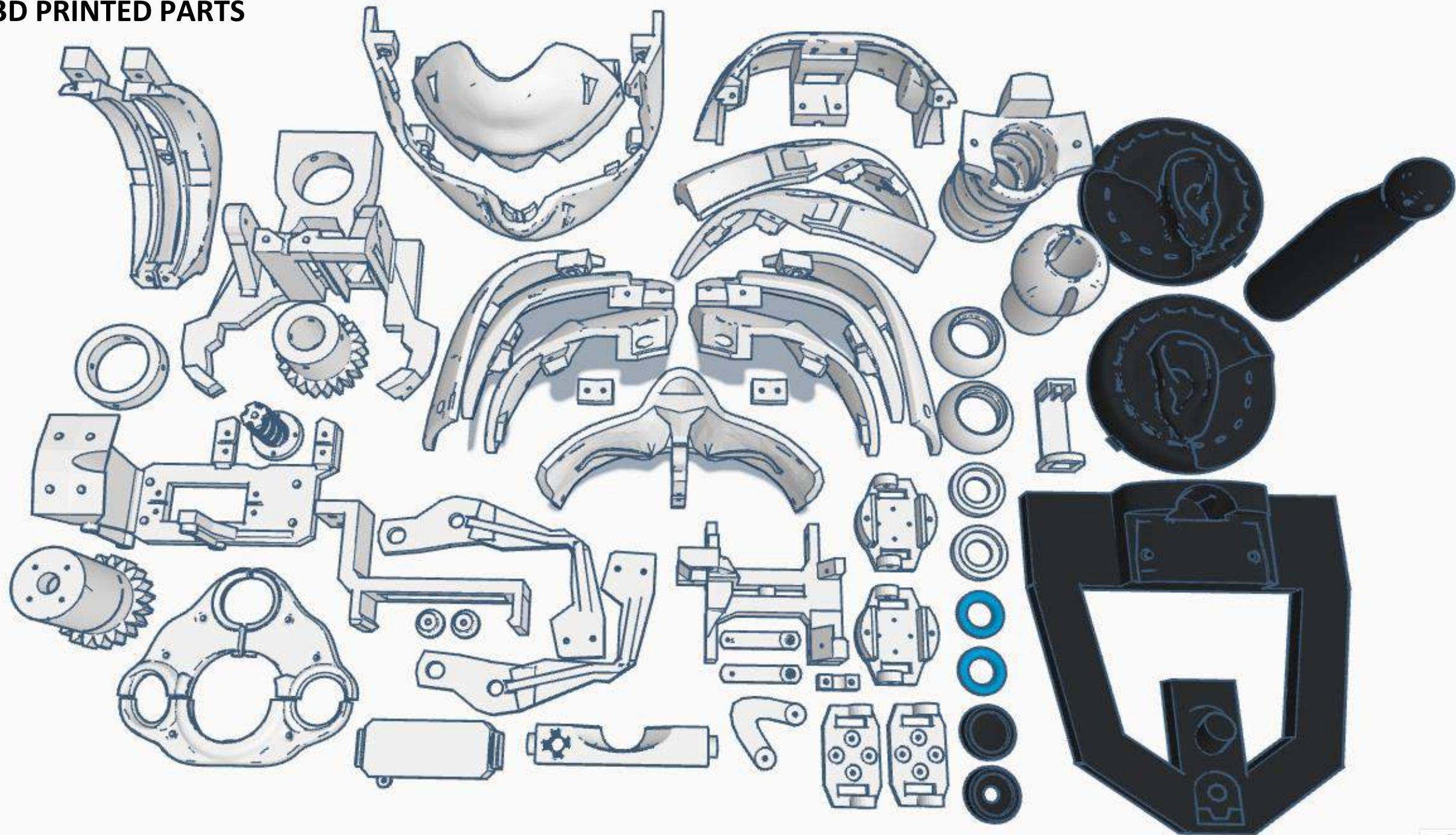


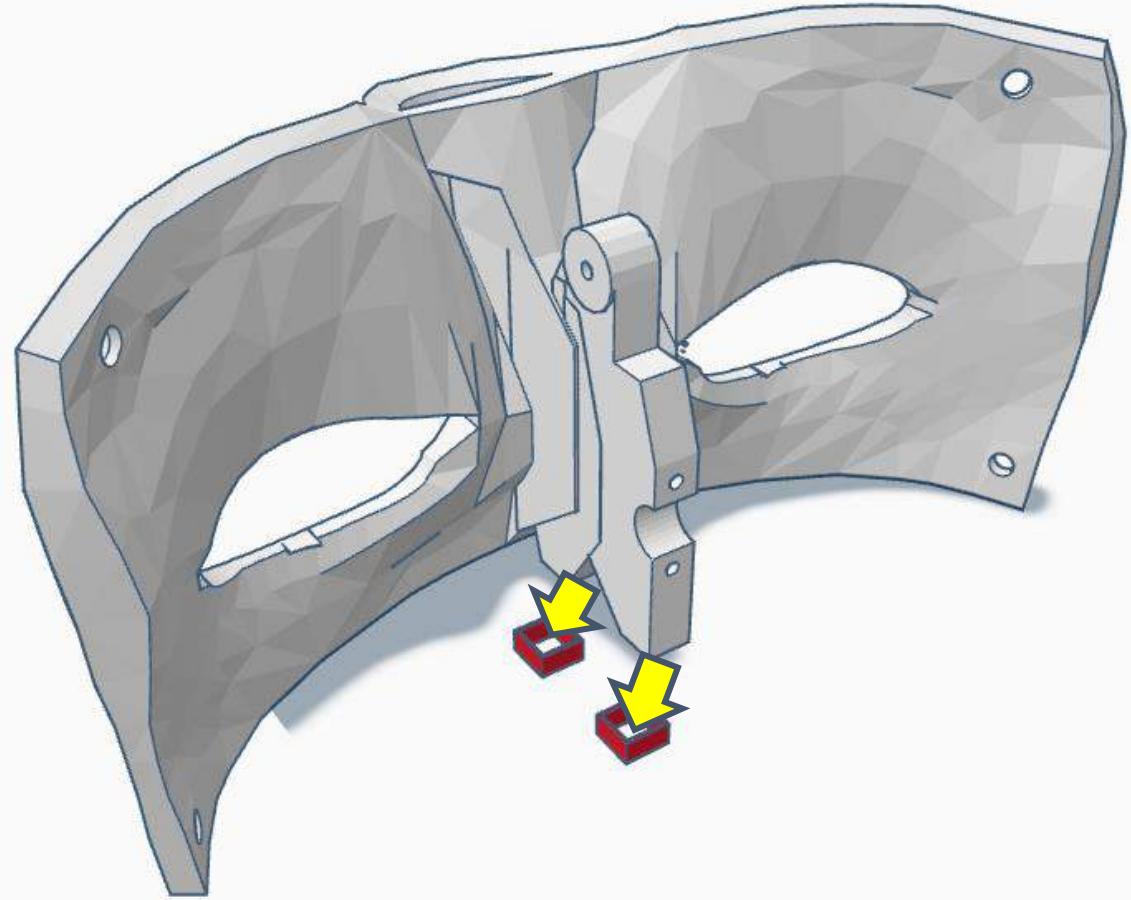
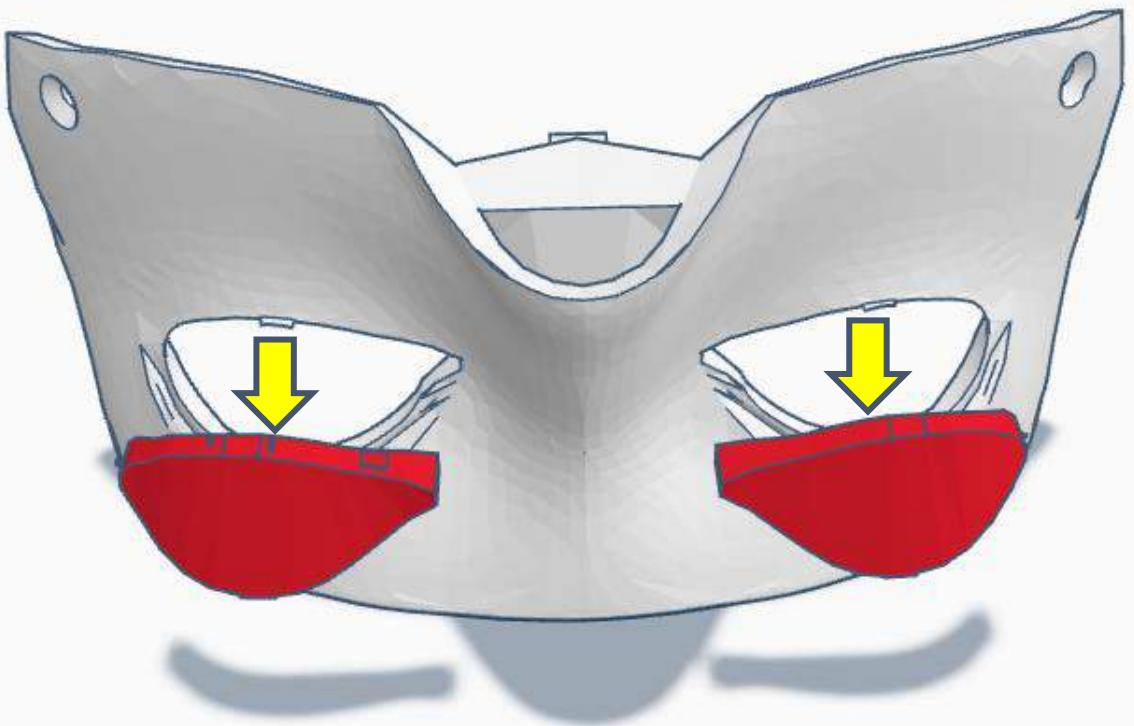
3D PRINTED PART LIST

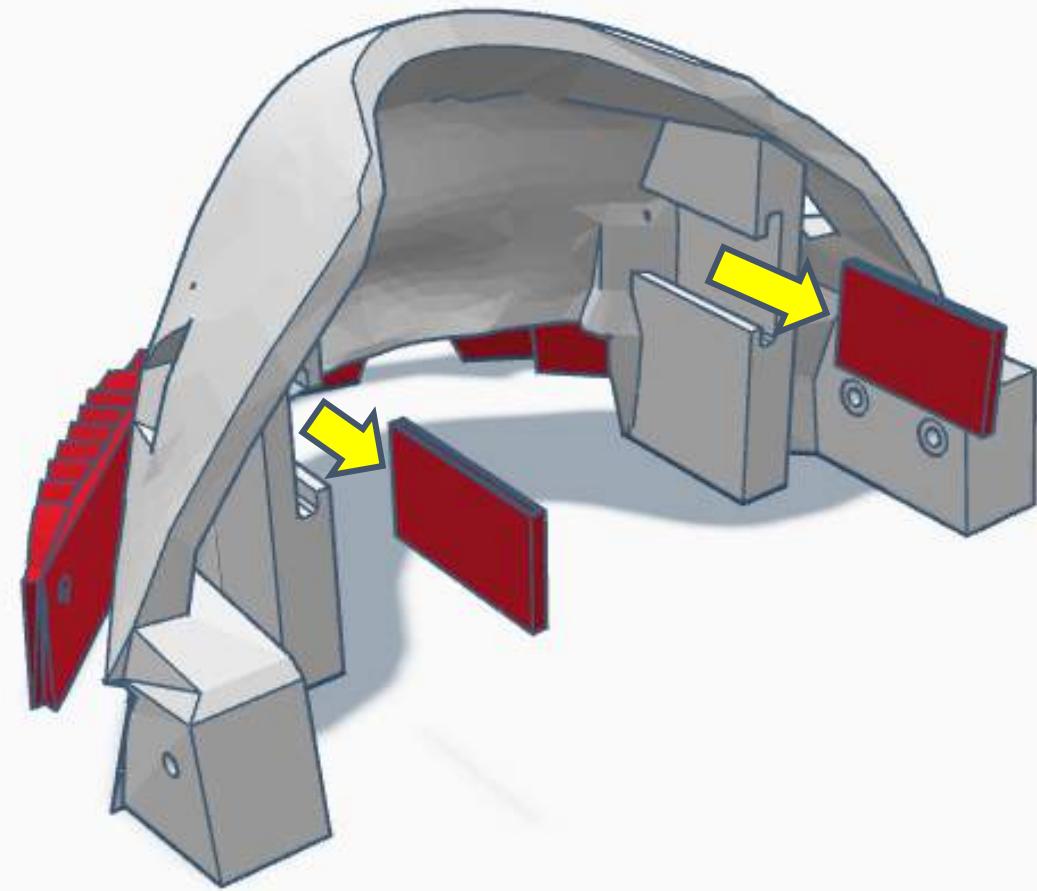
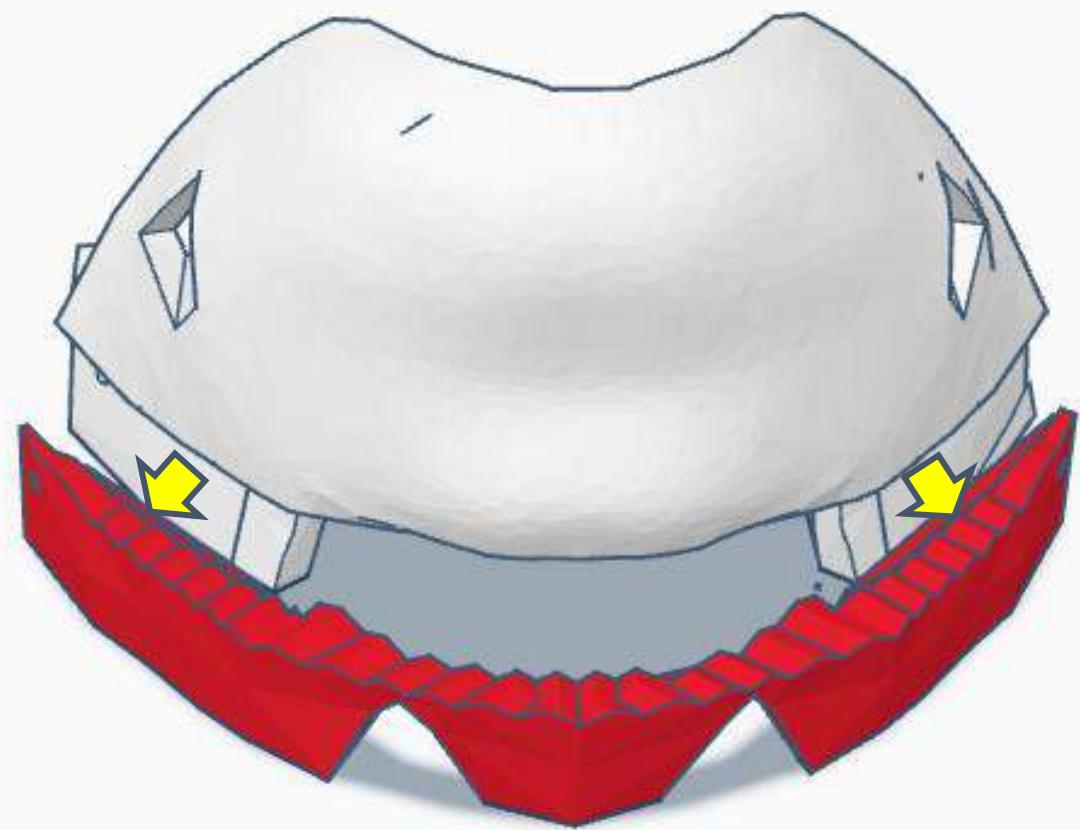
Qty	3D Printed Part	Recommended Color
1	EarLeftV1	Black
1	EarRightV1	Black
2	EyeBallSupportEZcameraV2	Any color
2	EyePlateV2	Any color
1	EyeBallCameraPupil	Black
1	EyeBallSolidPupil	Black
2	EyeBallV2	White
2	EyeBalliris	Blue, Green, Brown, etc.
2	EyeBallInsertV2	White
1	EyeglassV5	White
1	EyeHingeLeftV3	Any color
1	EyeHingeRightV3	Any color
1	EyeHingeCurveV1	Any color
1	EyeSupportV6	Any color
1	EyeHolderV1	Any color
1	ServoGearV3	White
1	MainGearV3	White
1	RingV3	Any color
1	VoiceBoxV1	White
1	JawPistonV2	White

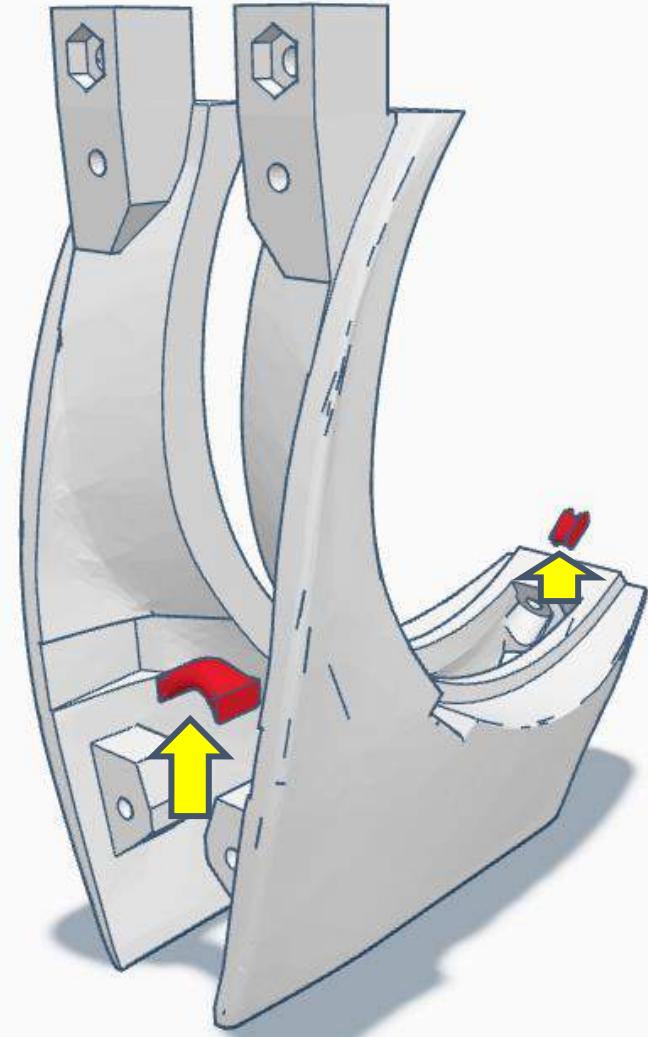
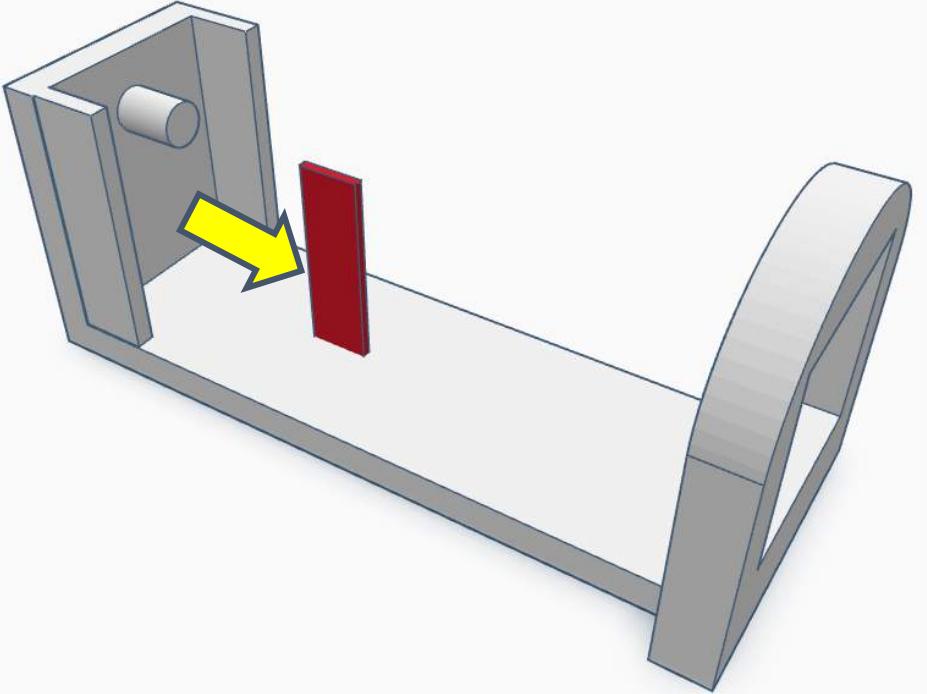
Qty	3D Printed Part	Recommended Color
1	JawSupportV2	White
1	JawHingeV1_wide	White
1	JawV5	White
2	PivotCupV2	Anycolor
1	Head_Stand_EZ-Robot_Logo	Black
1	NeckPistonFrontV2	Black
1	NeckPlateV3	White
1	NeckPlateHighV3	White
1	NeckJointLowerV5	White
1	NeckV3	White
1	LowBackV6	White
1	SideHearV5	White
1	TopBackSkullV5	White
1	TopMouthV5	White
1	TopSkullLeftV5	White
1	TopSkullRightV5	White
1	UnitedInternalSupportV1	Any color
1	BatterySupportV1	Any color
1	SkullServoV2	Any color
1	PowerClipV1	Any color

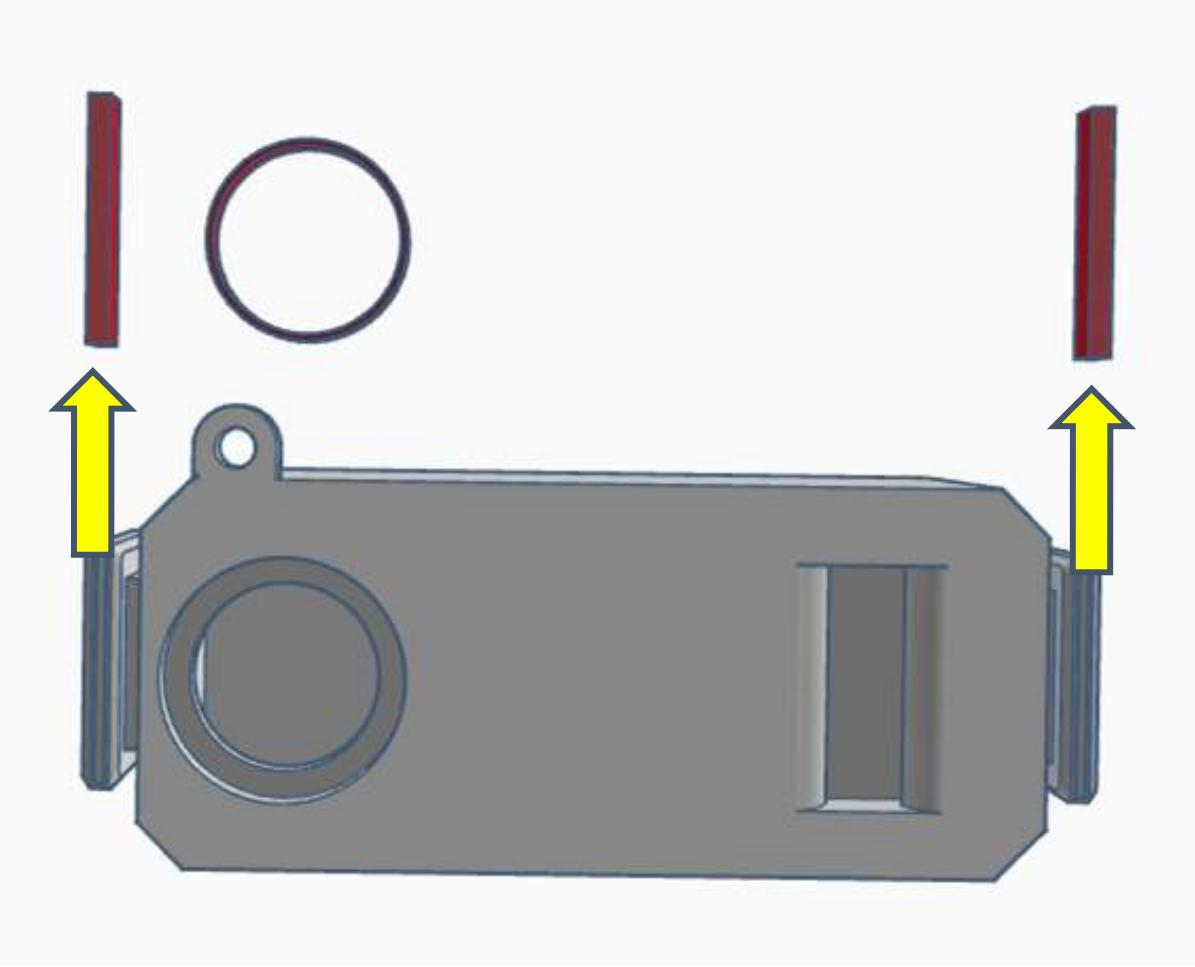
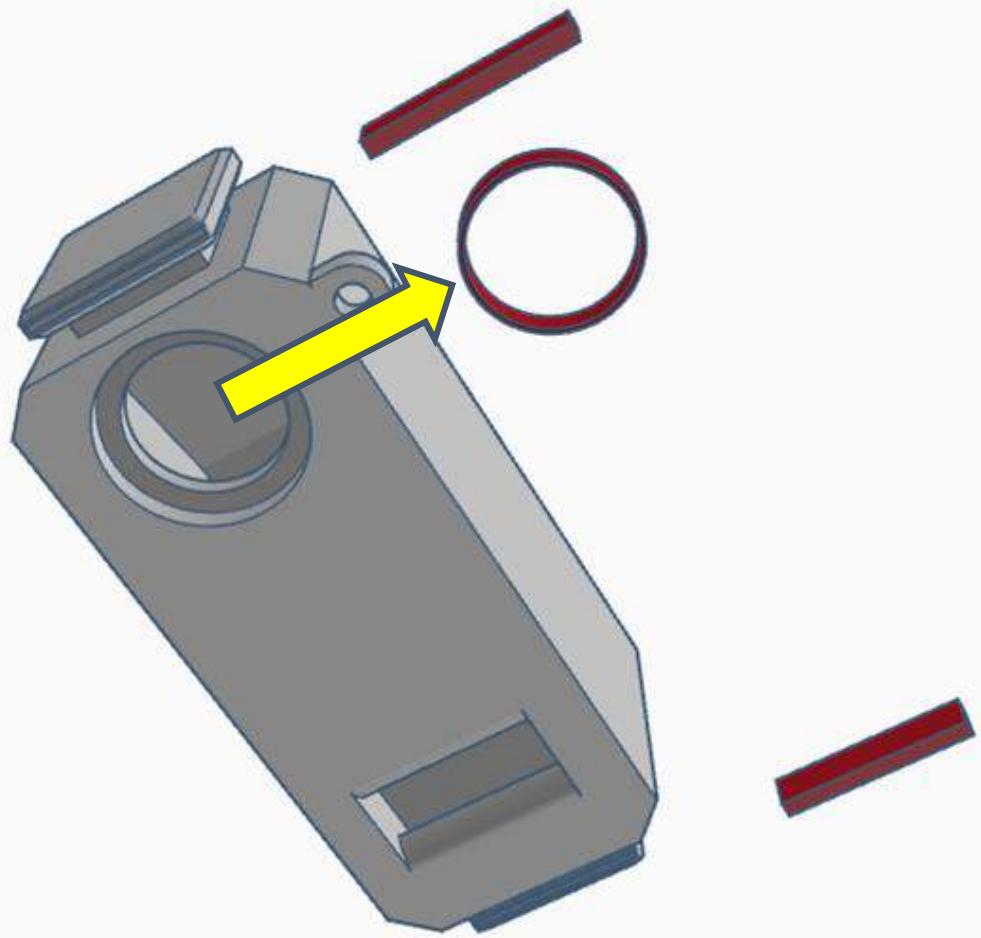
3D PRINTED PARTS

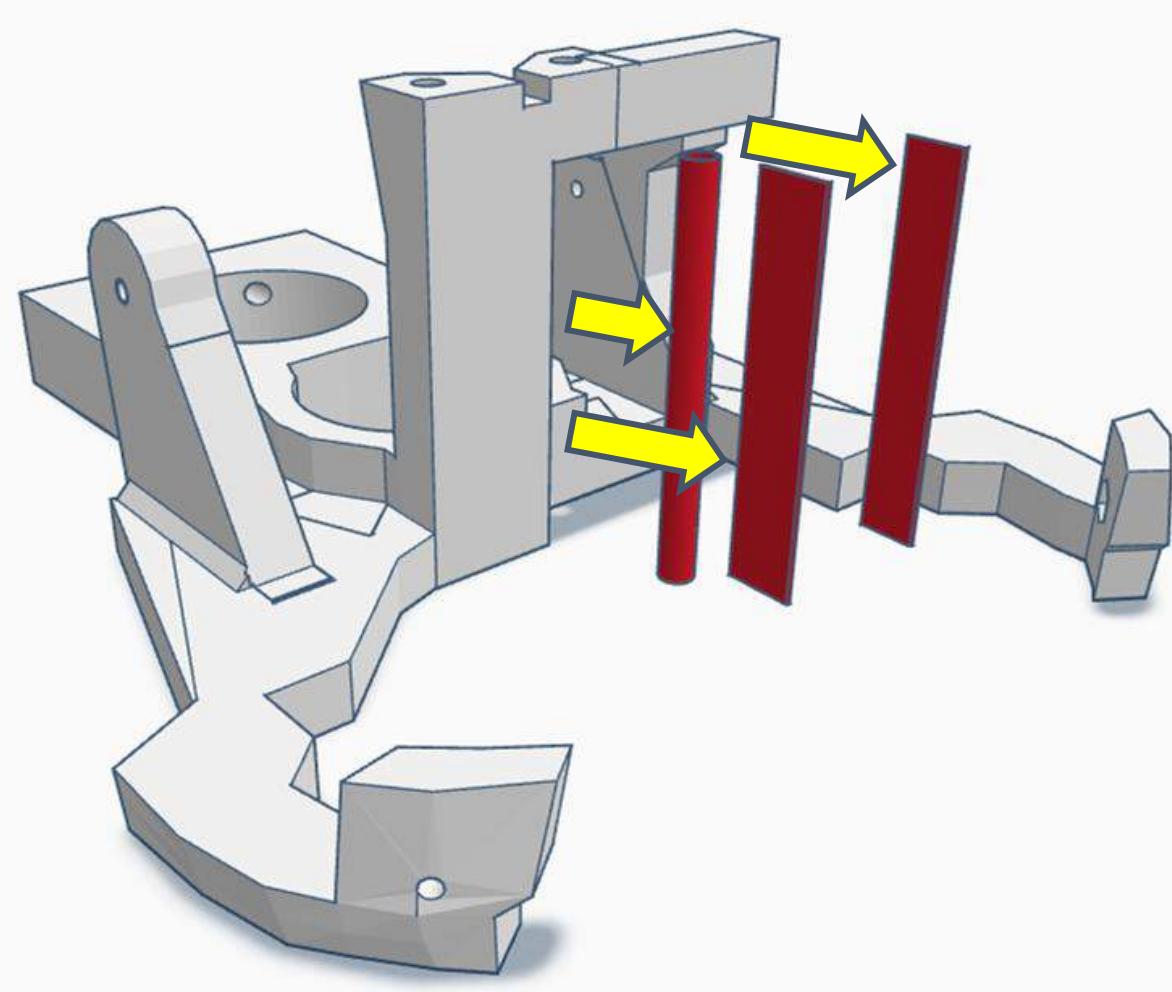
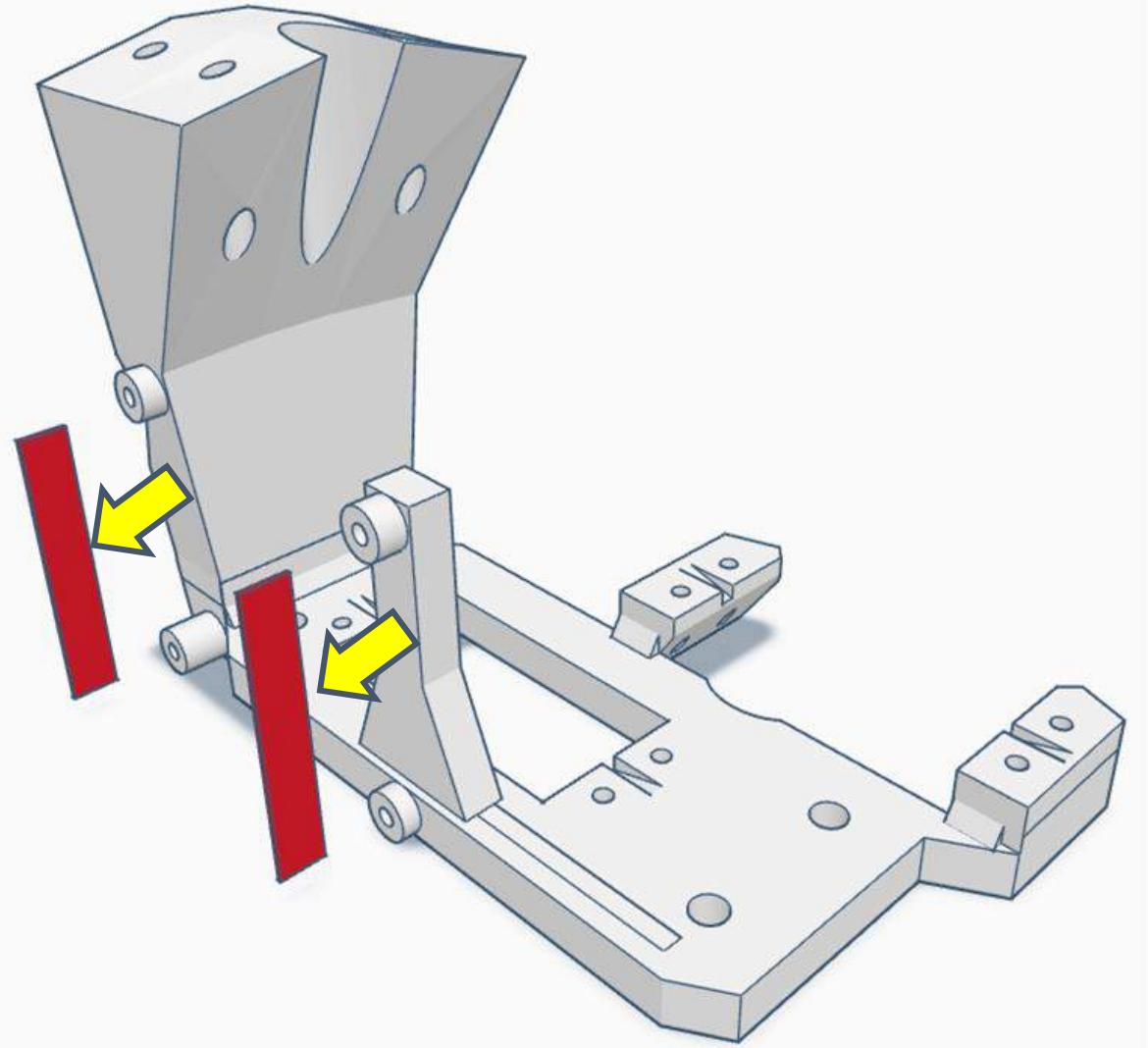


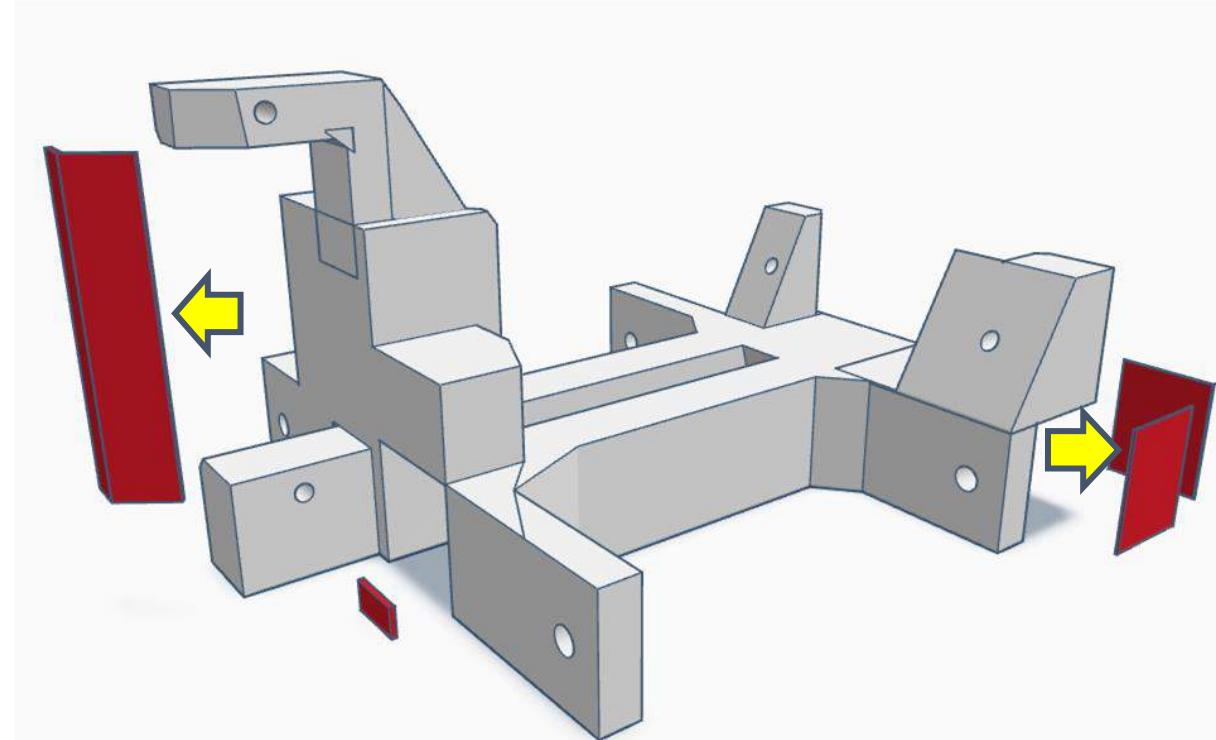
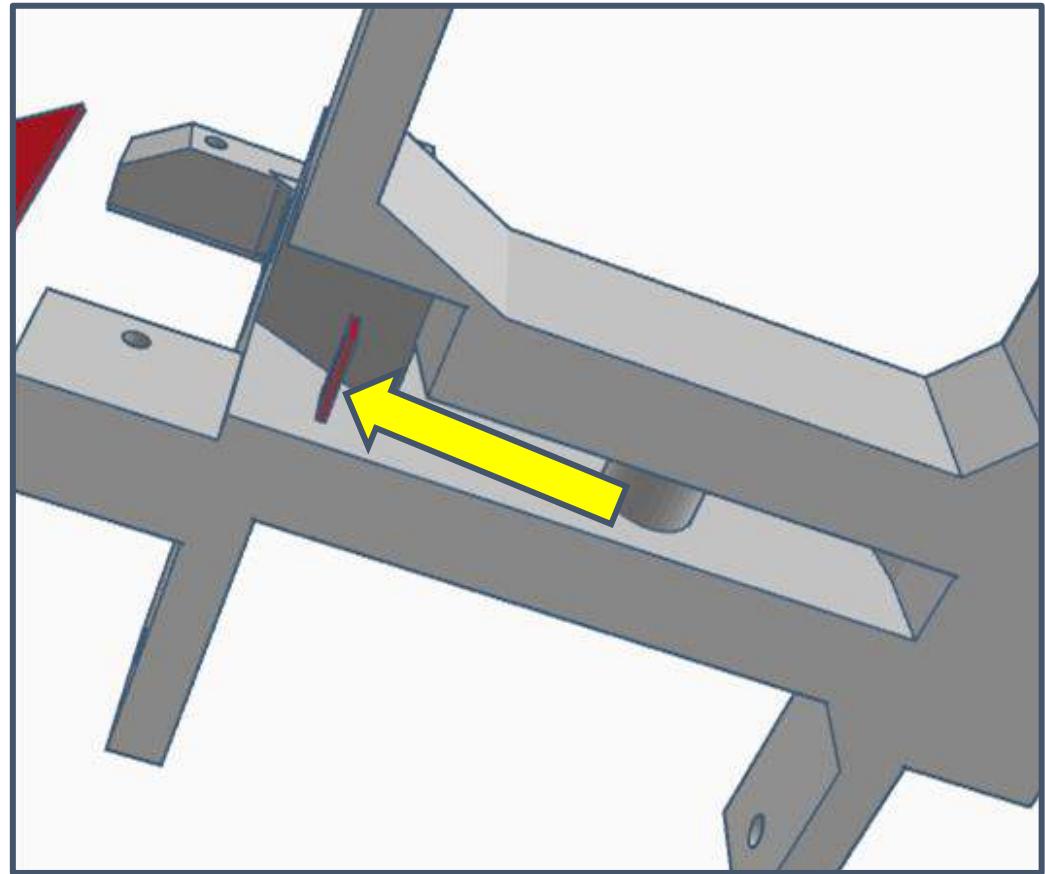
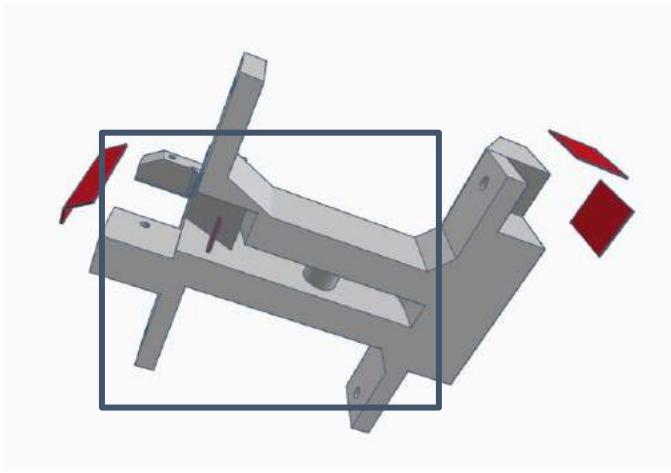


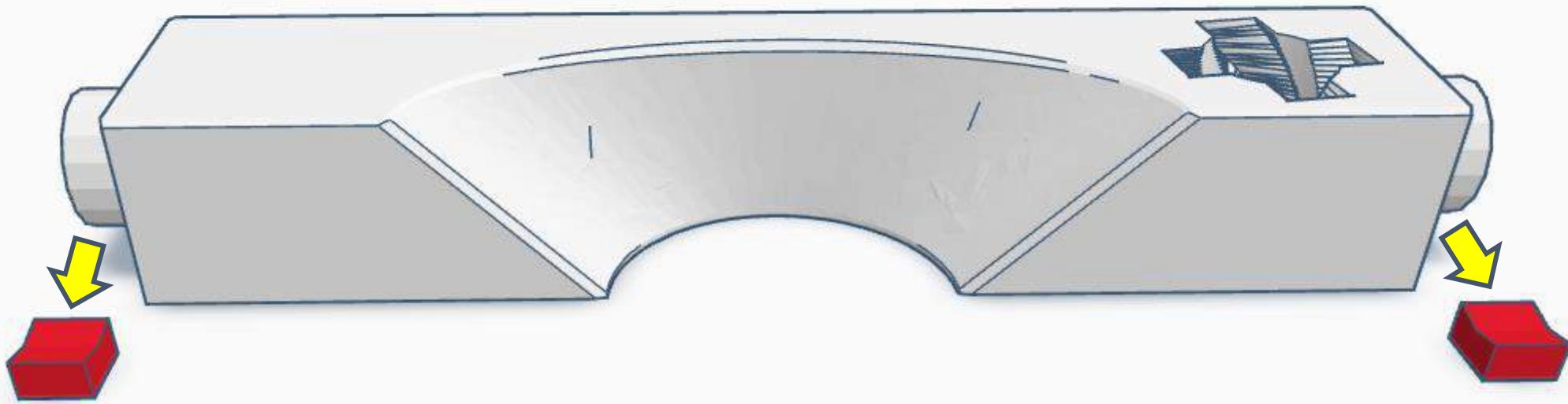






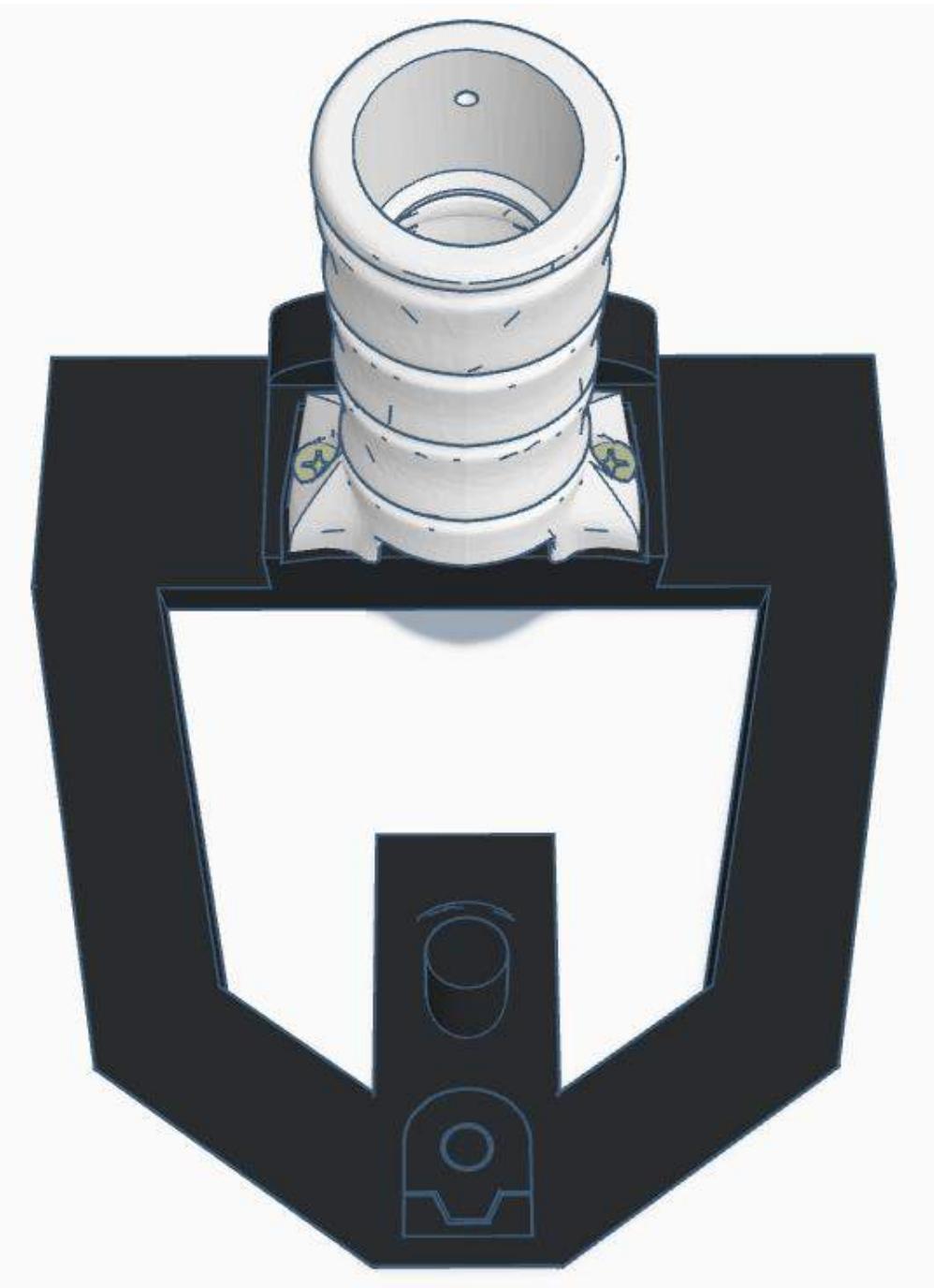
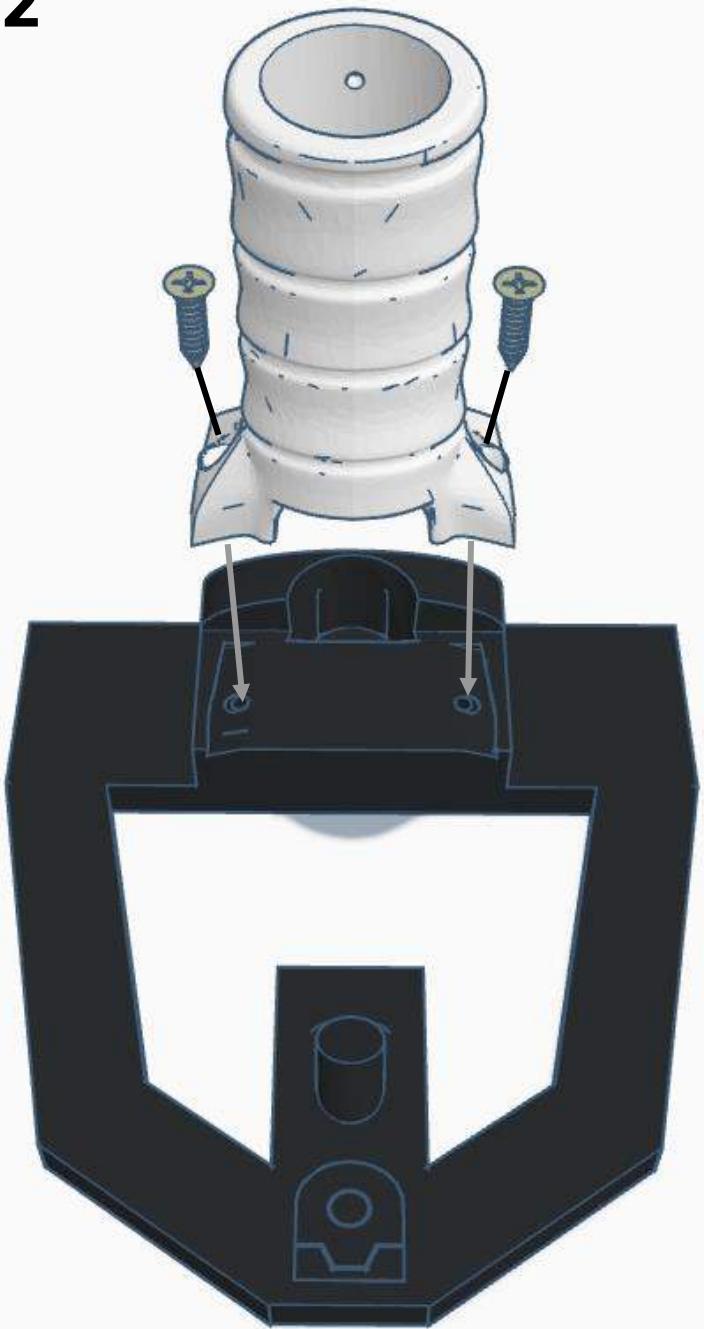






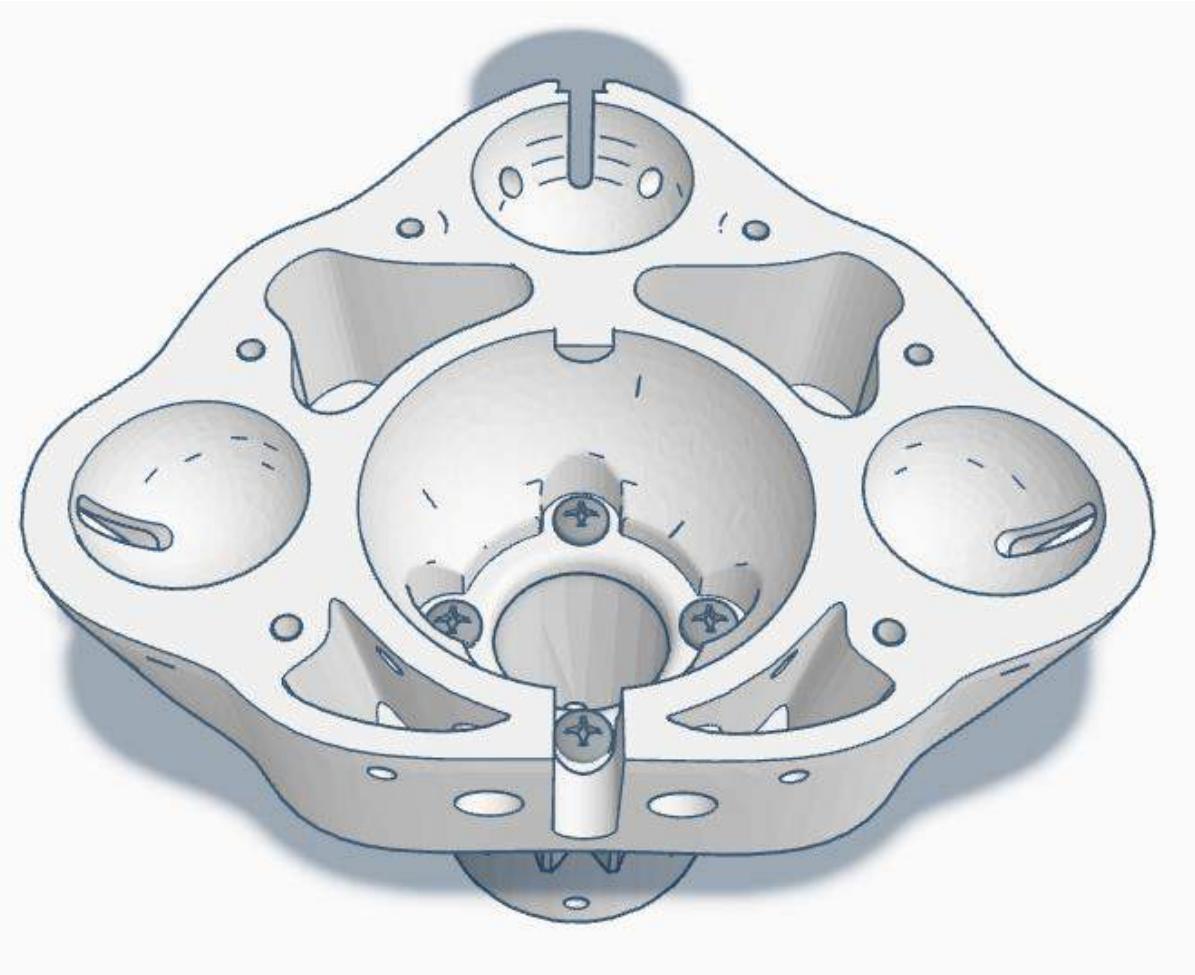
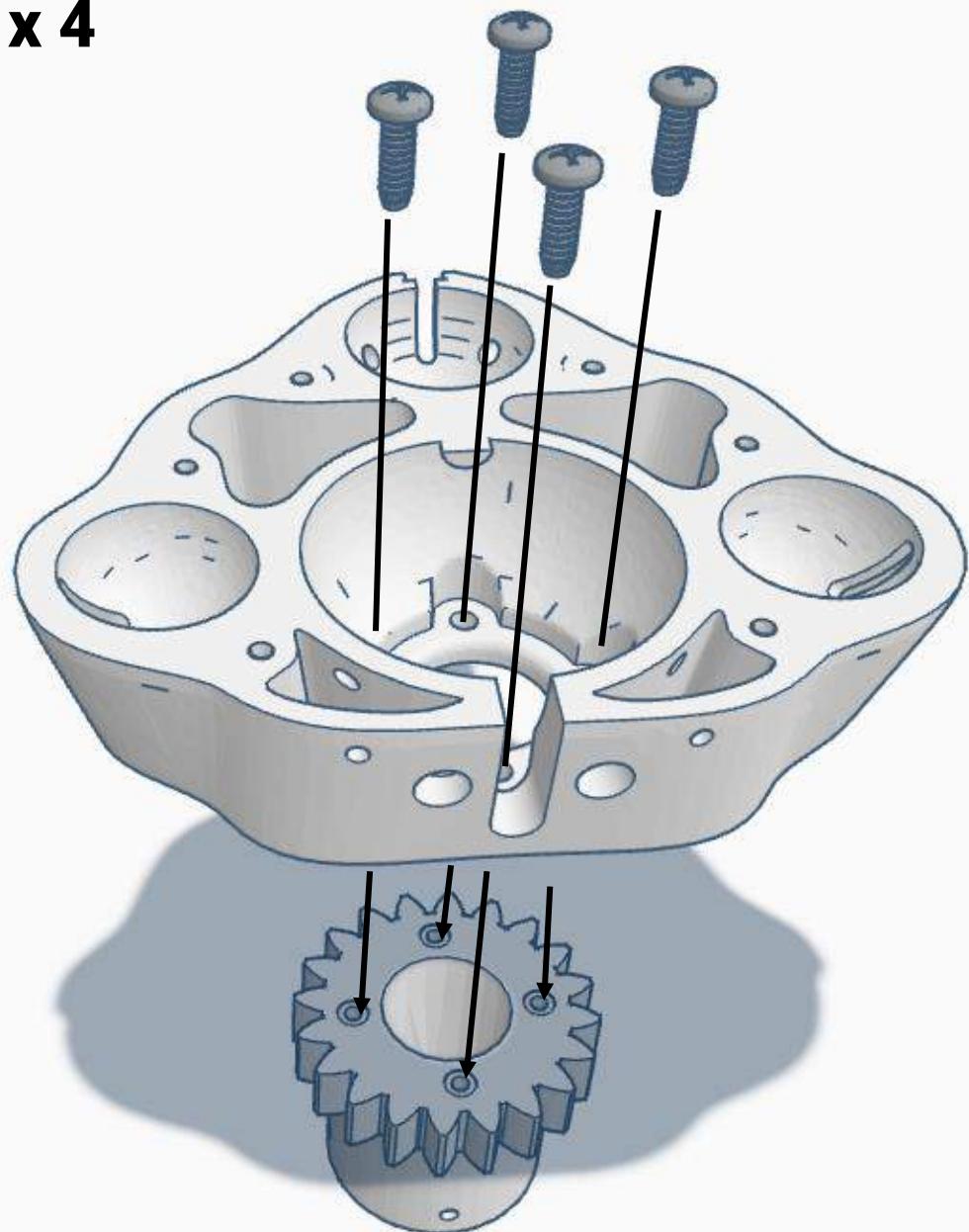


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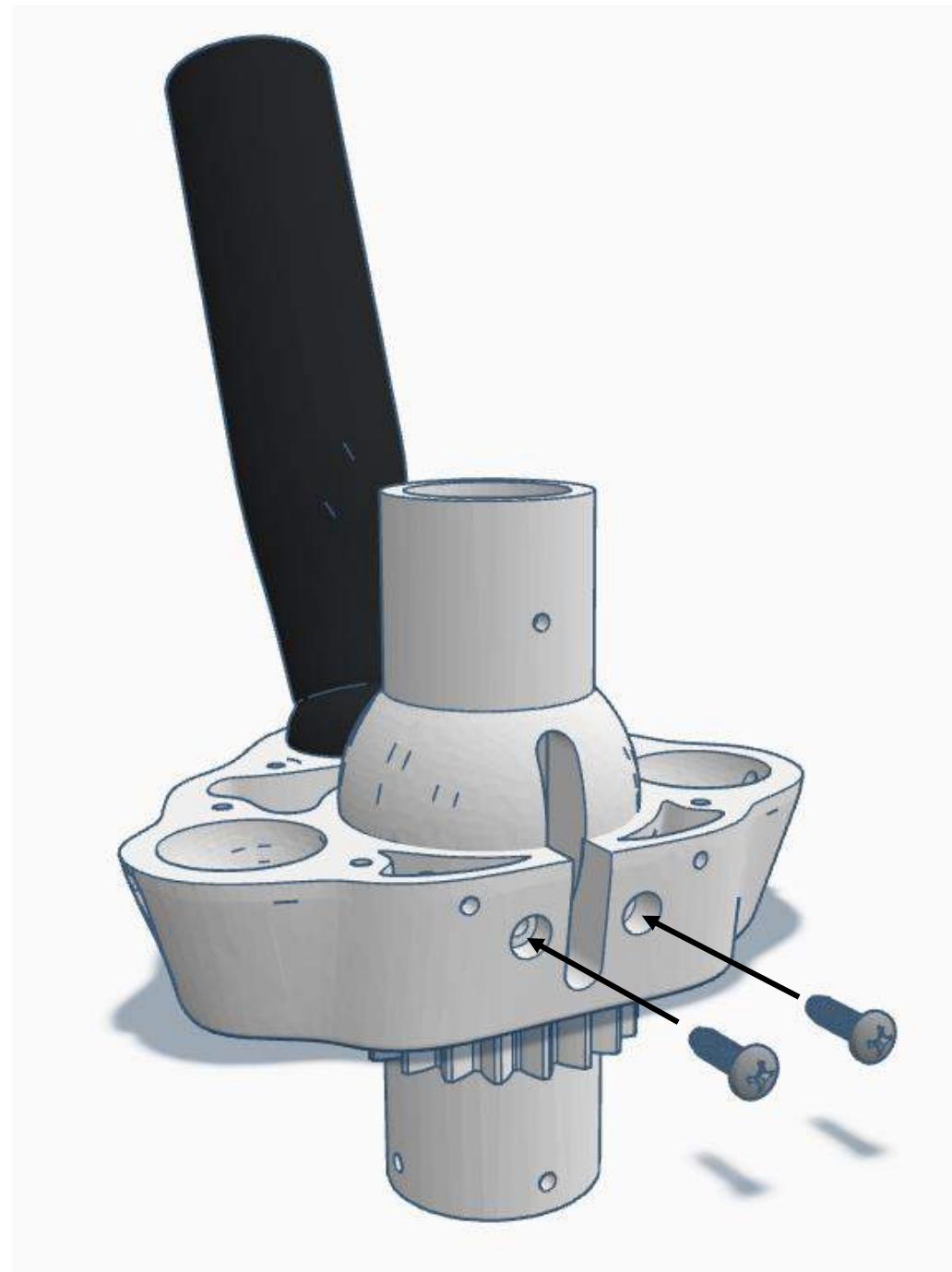


x 4





x 2



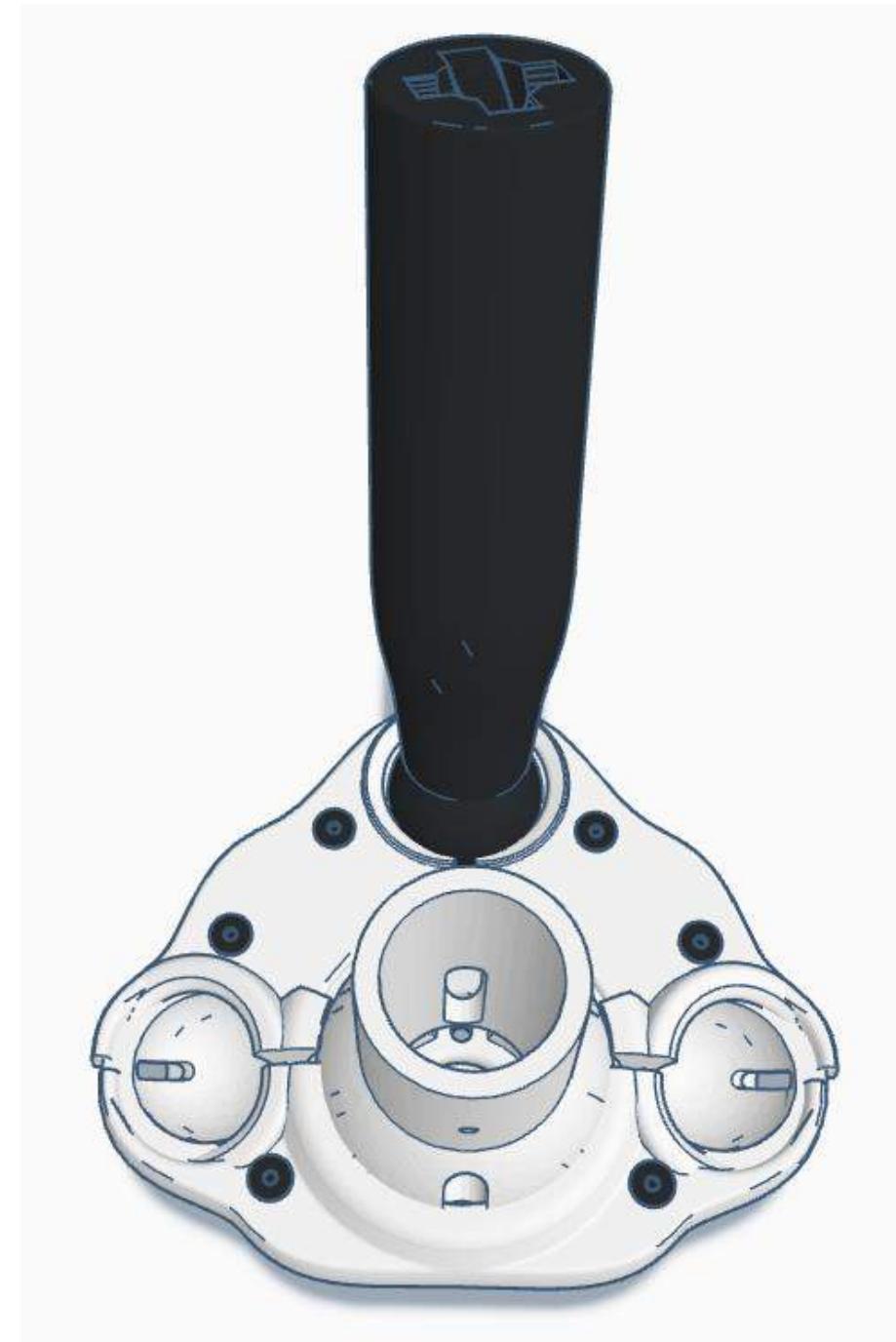


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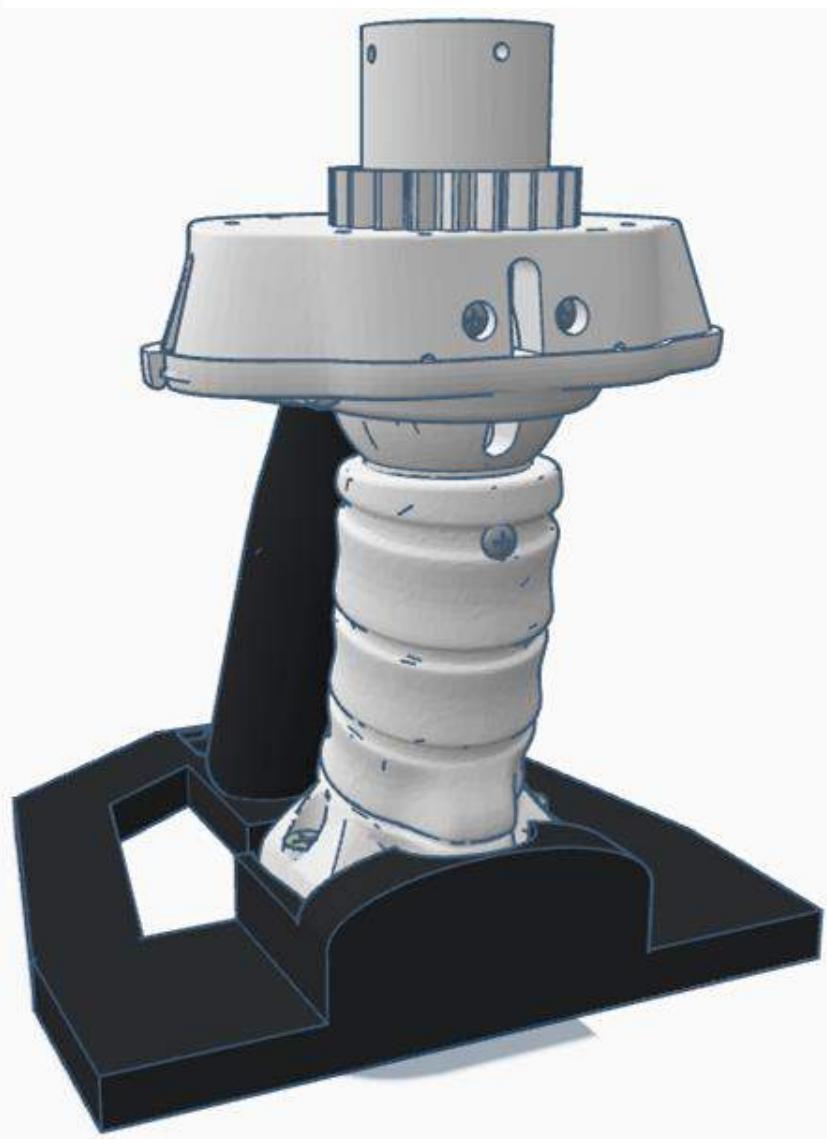
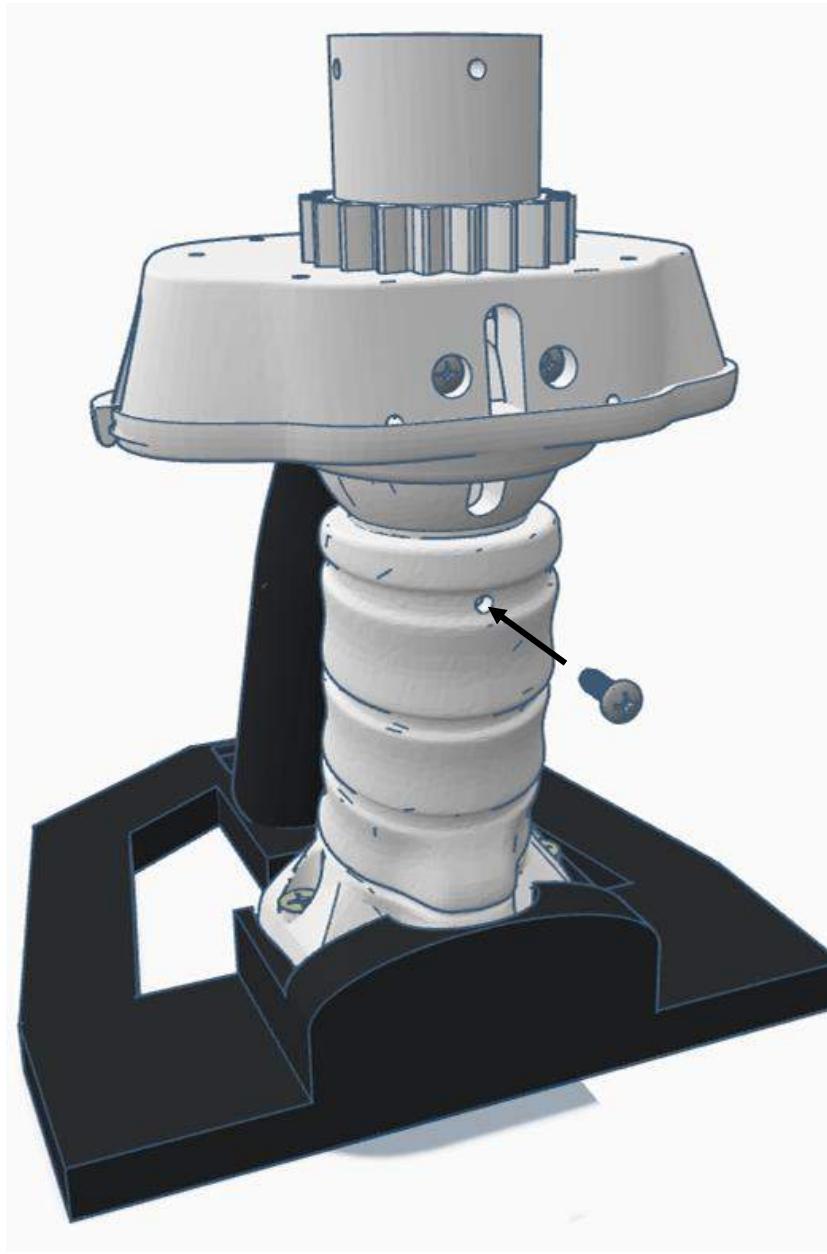
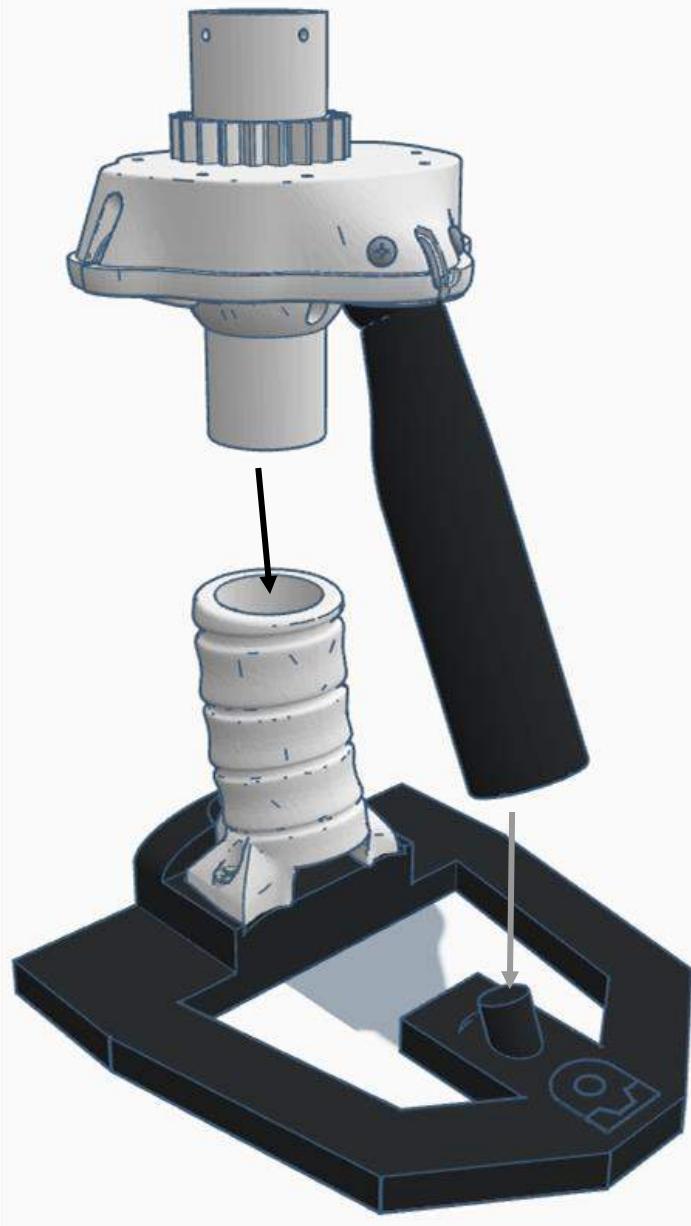


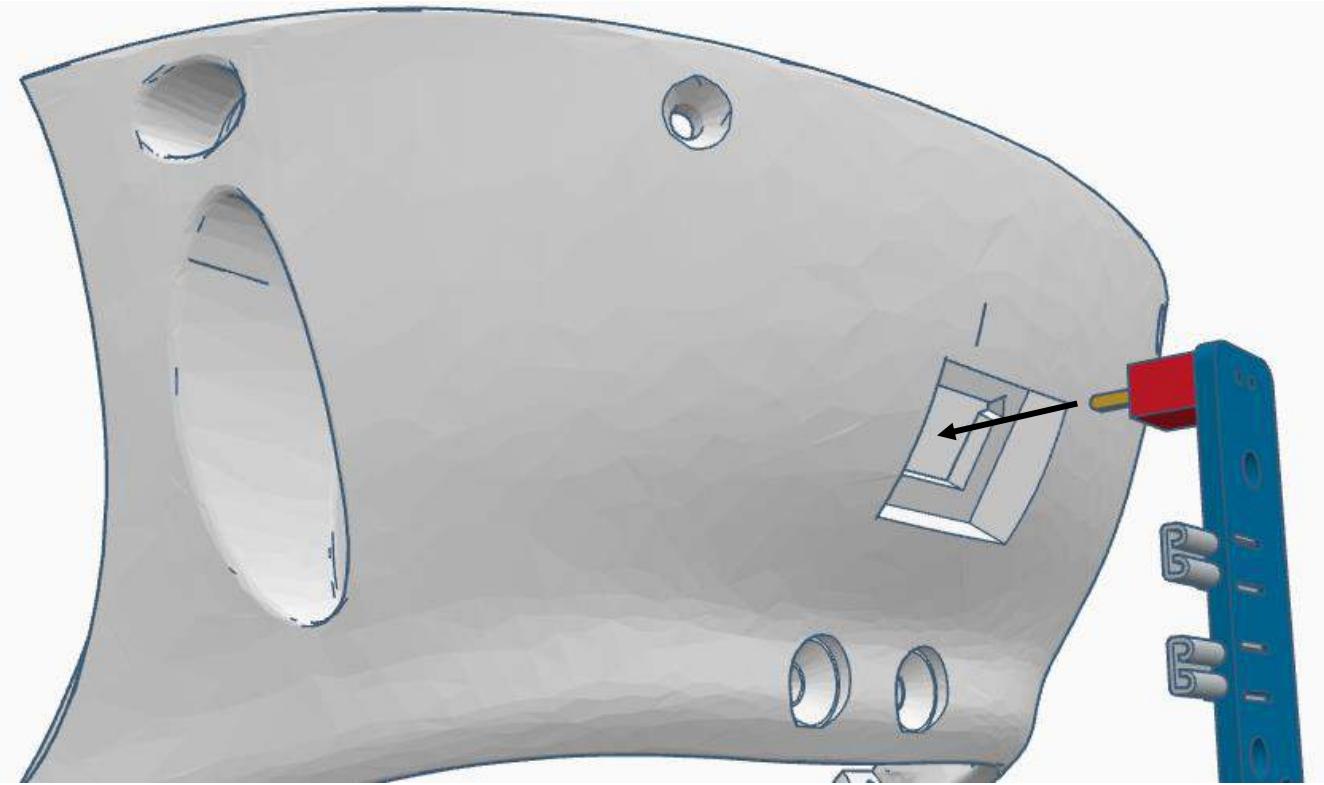
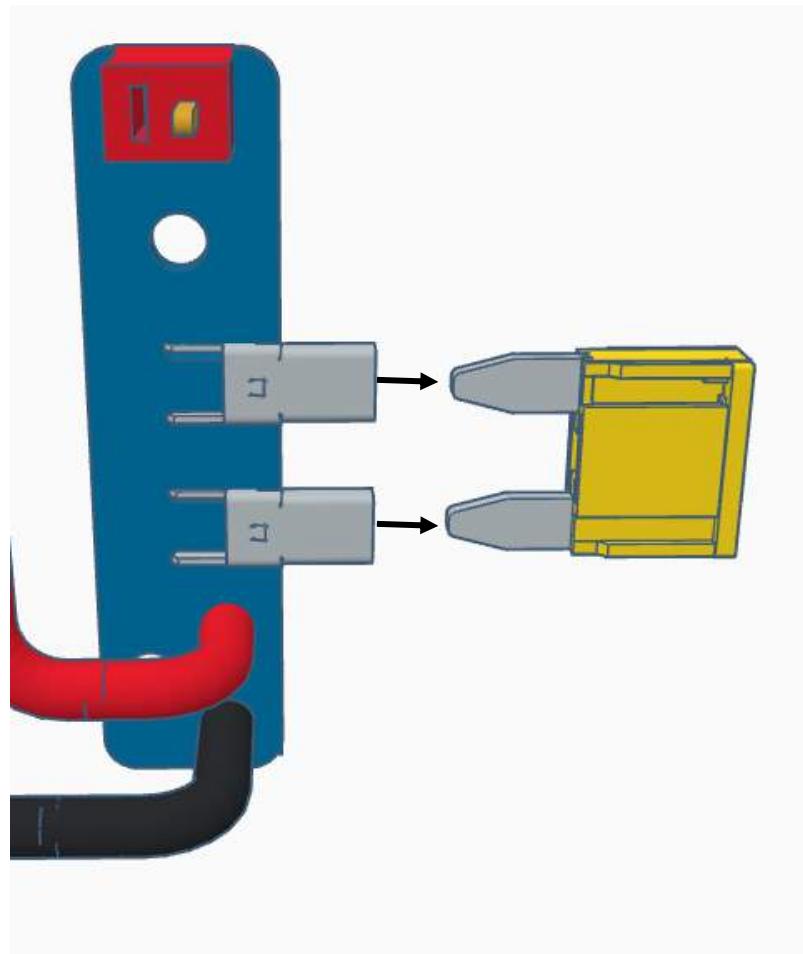
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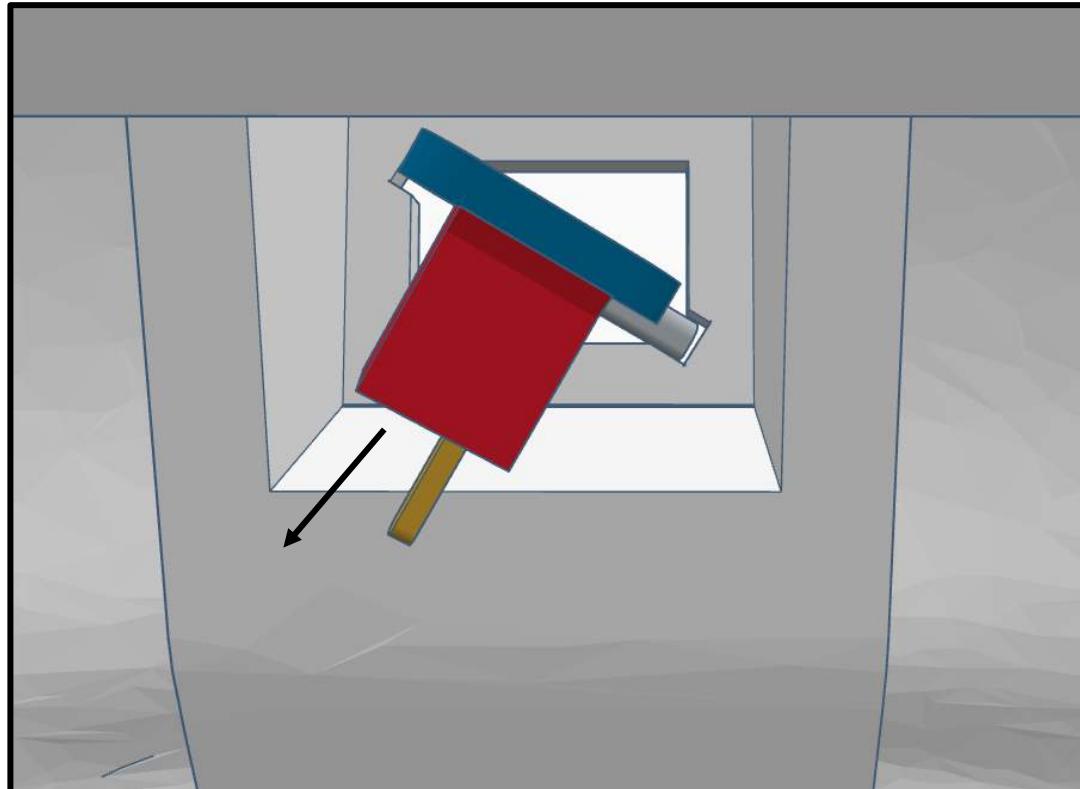
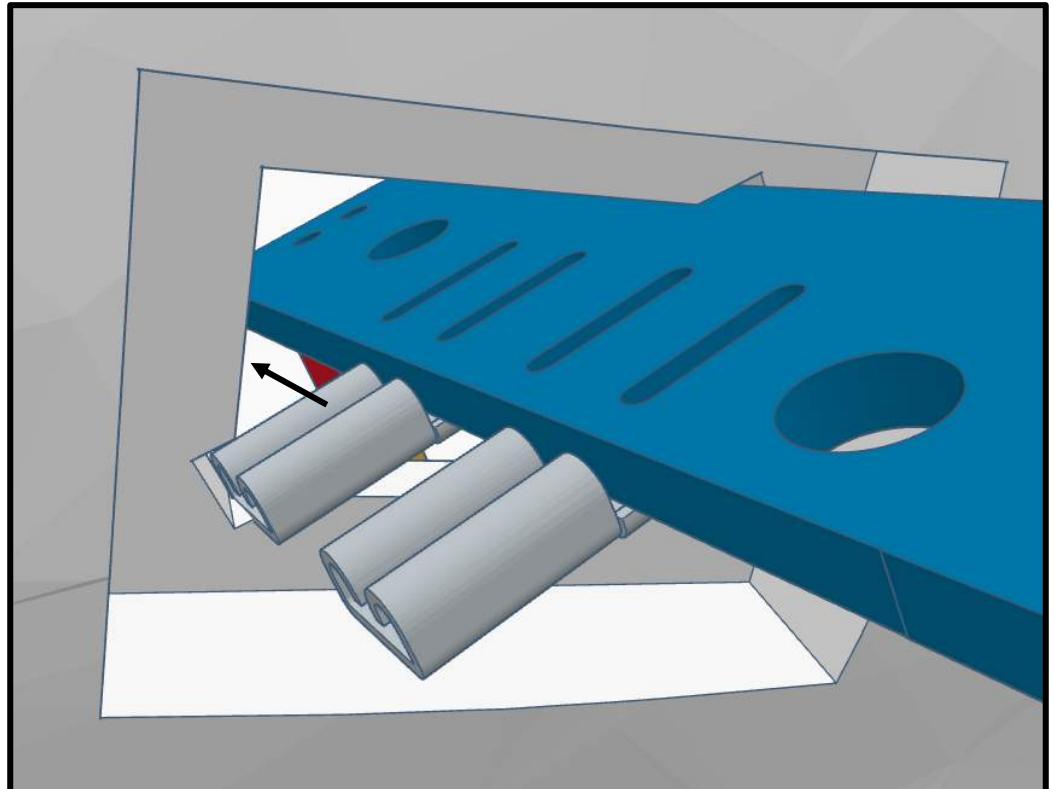
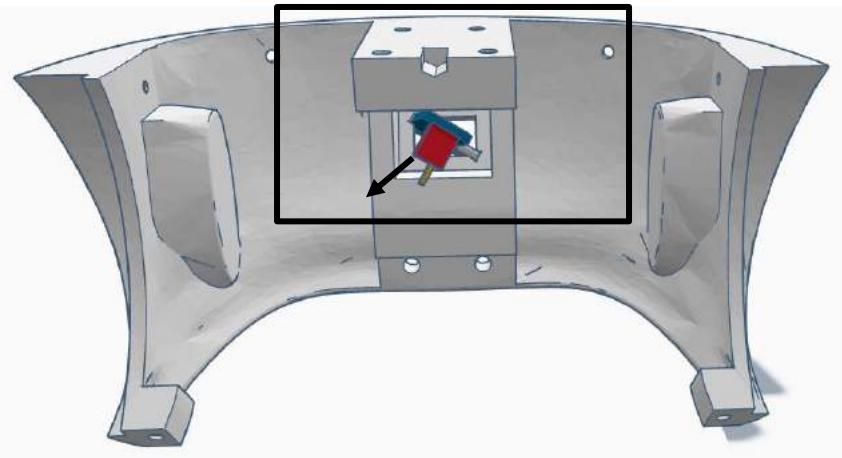
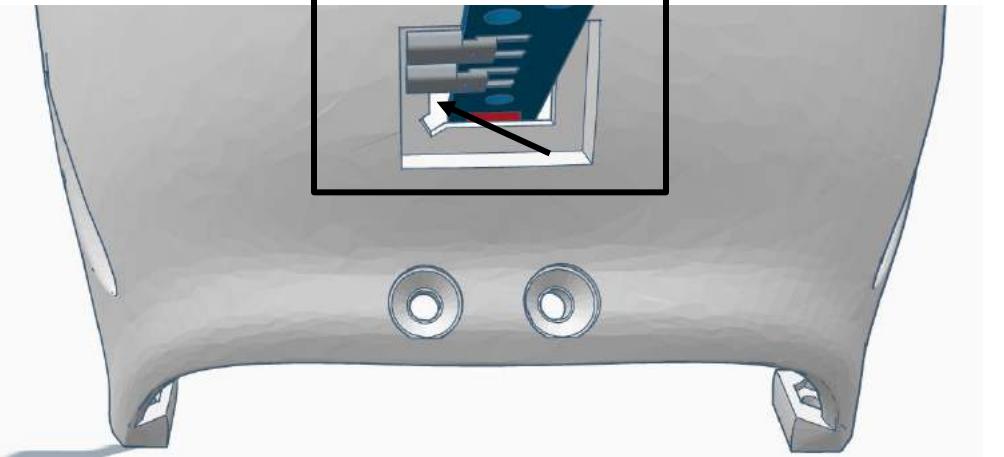


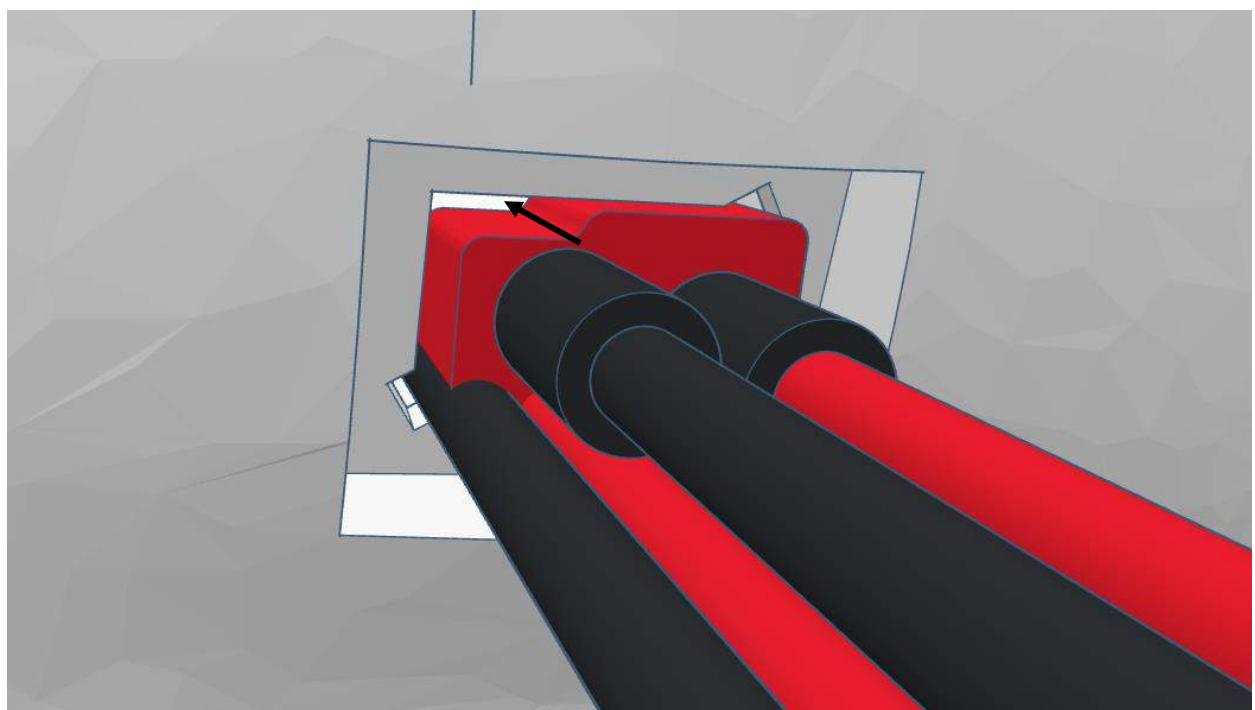
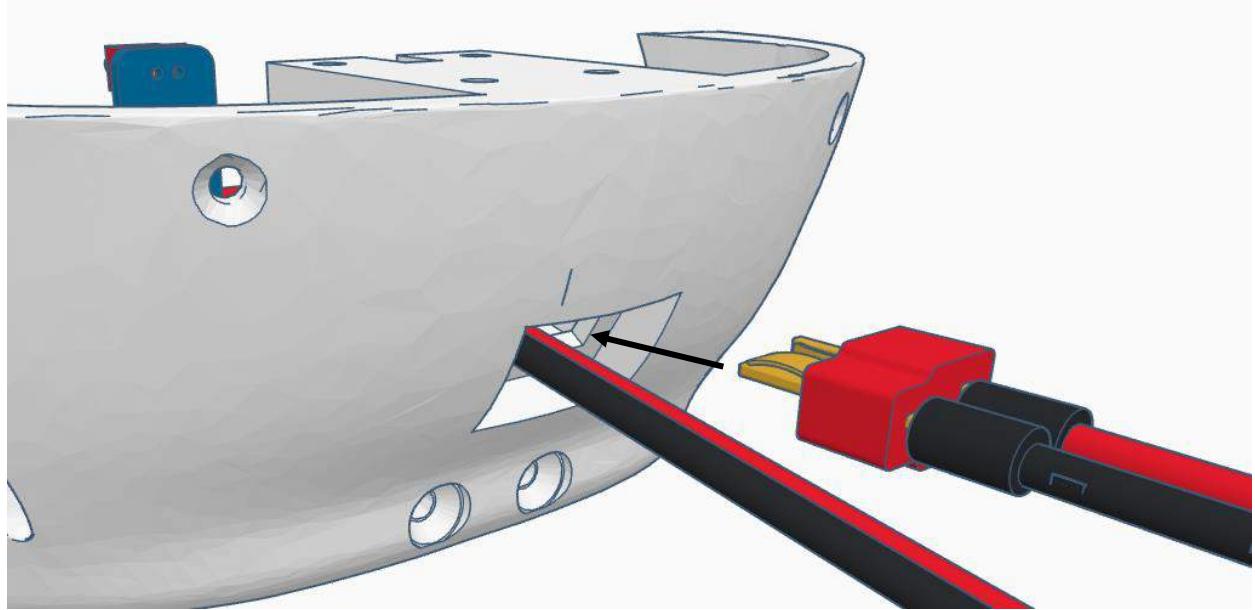
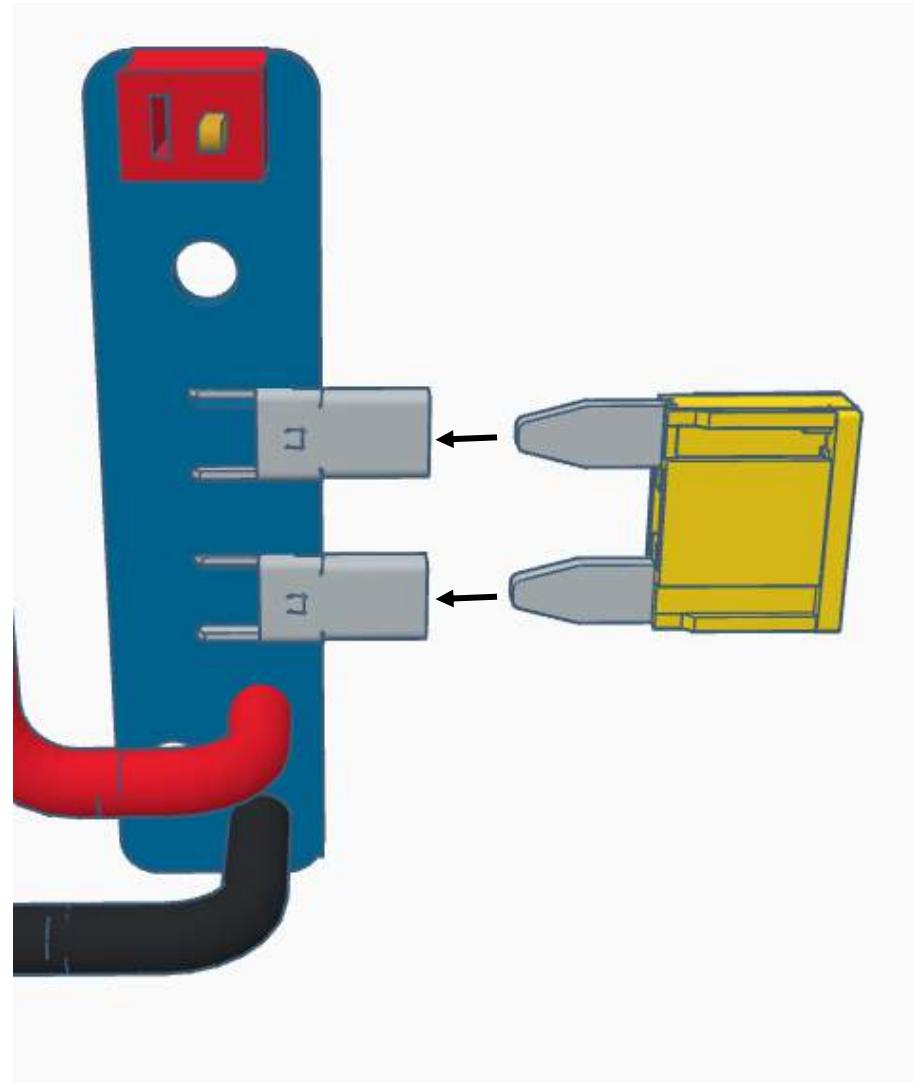


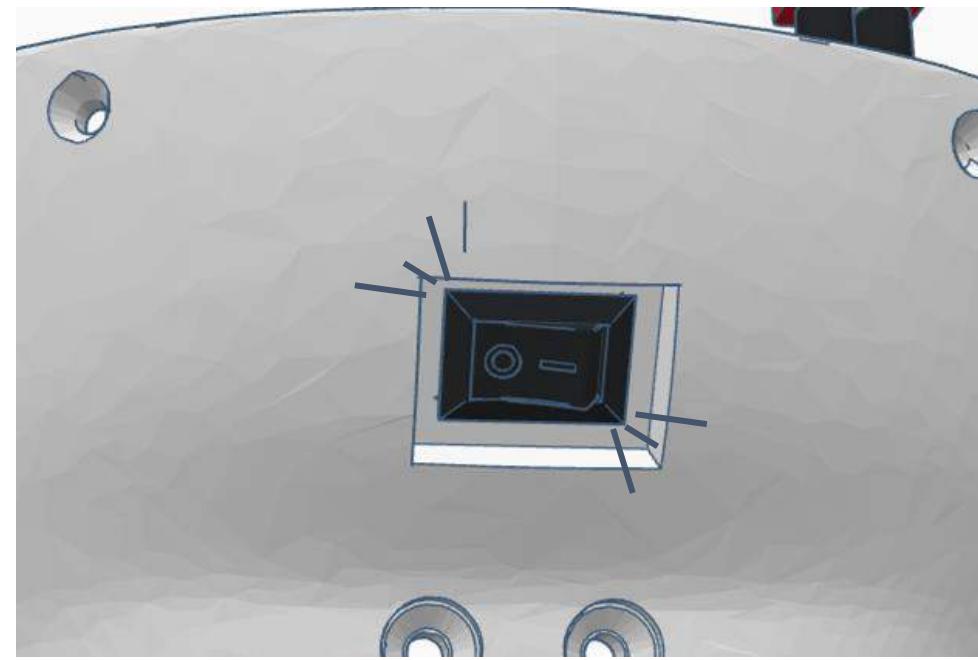
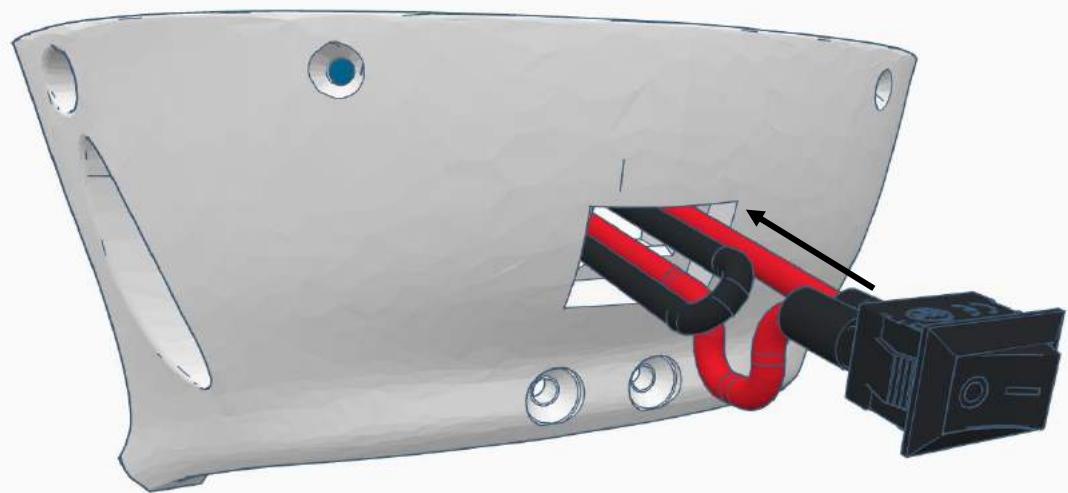
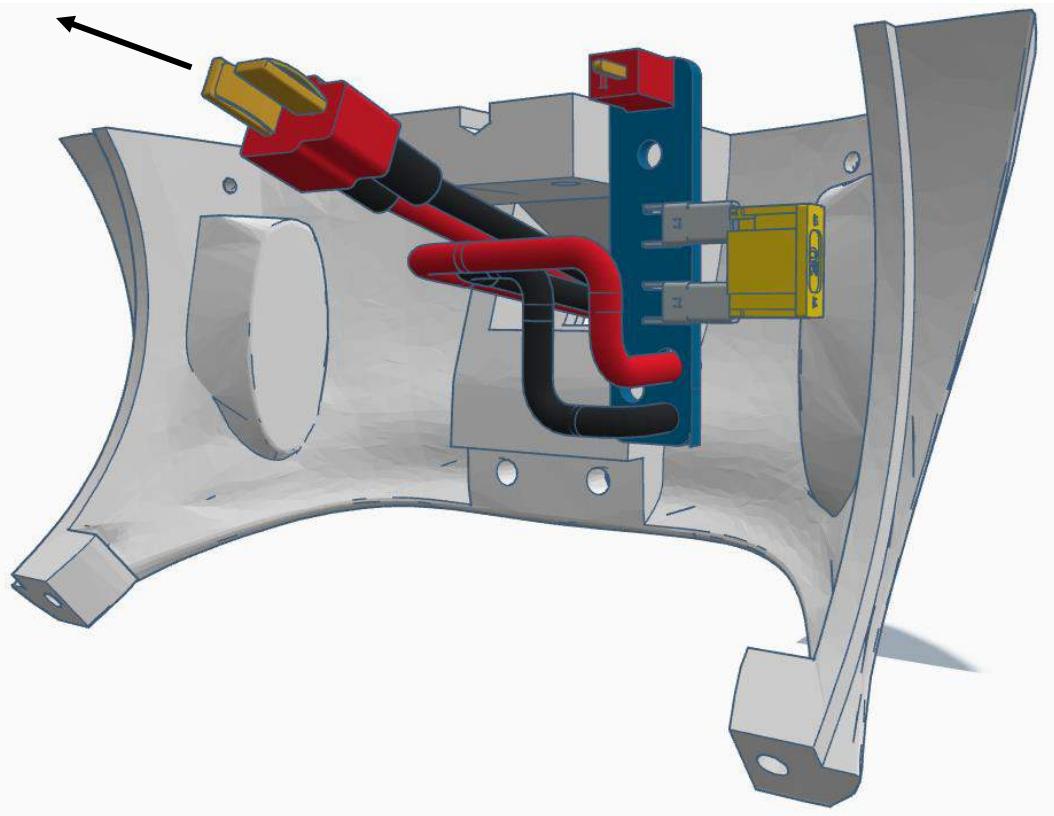
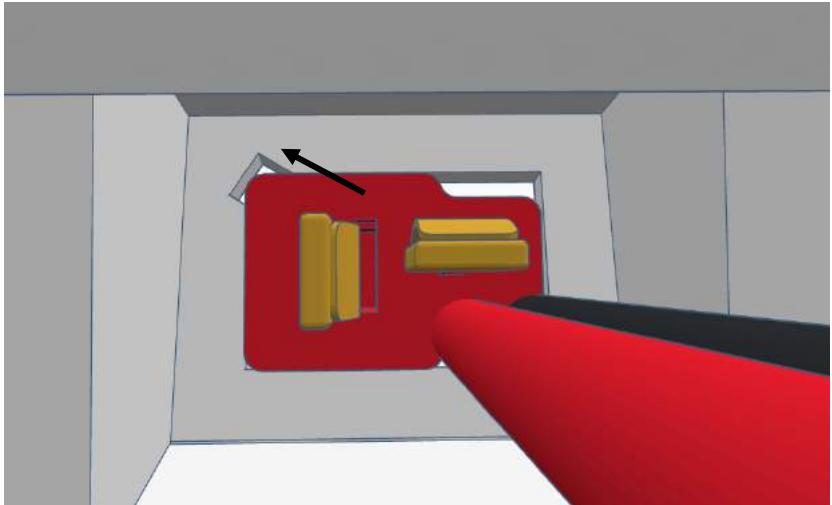
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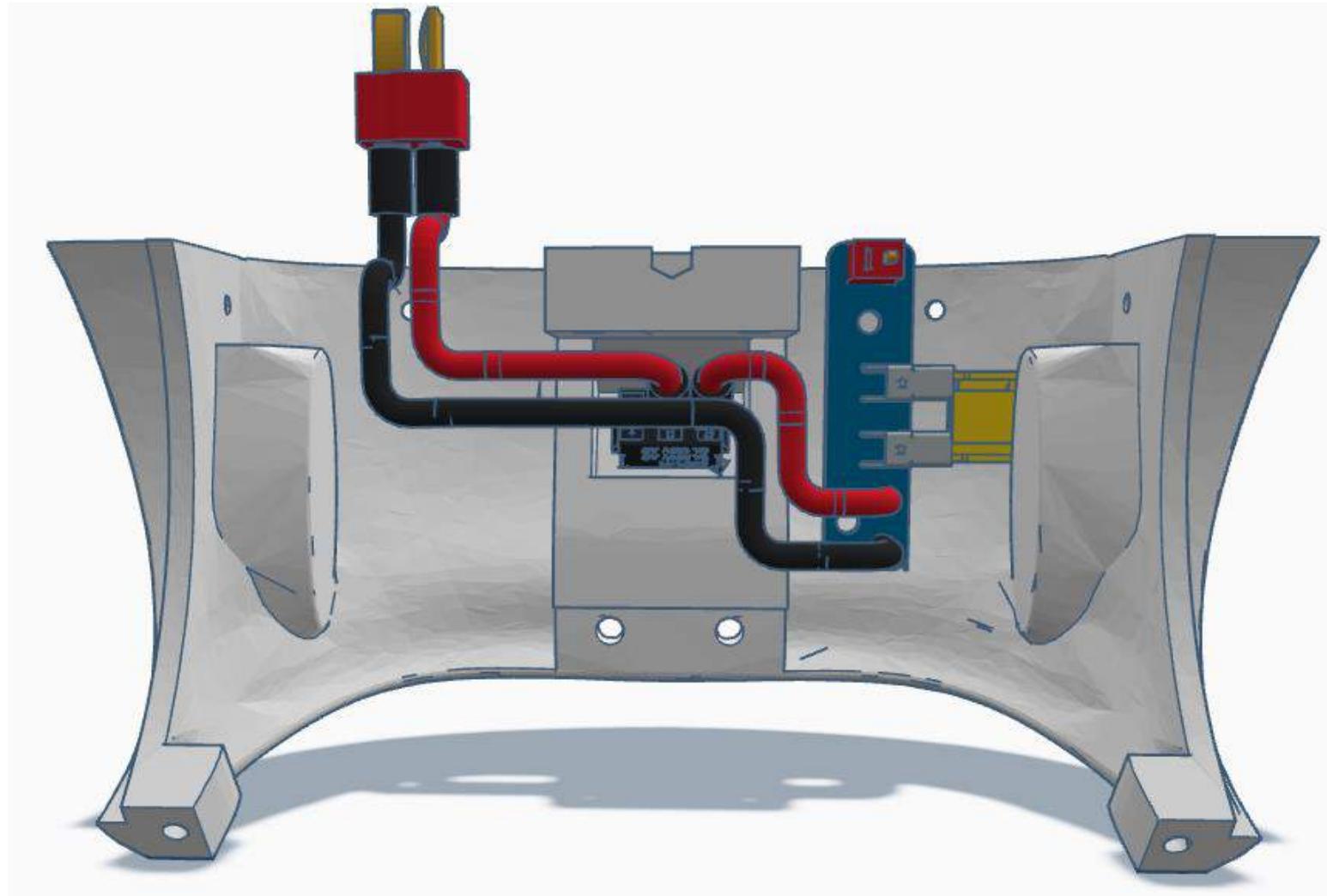
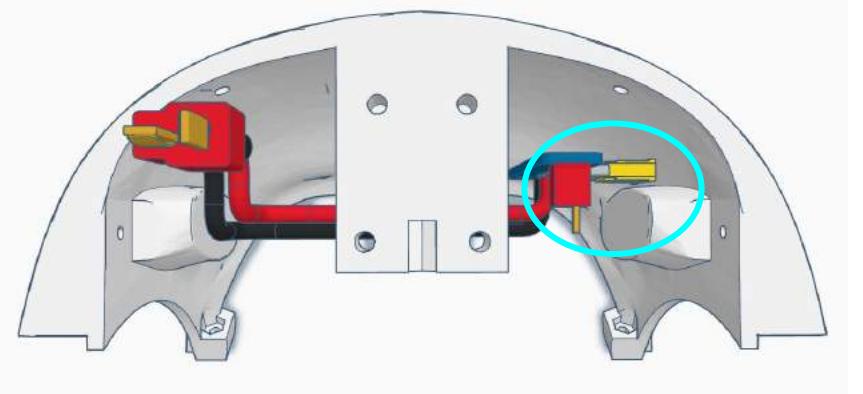


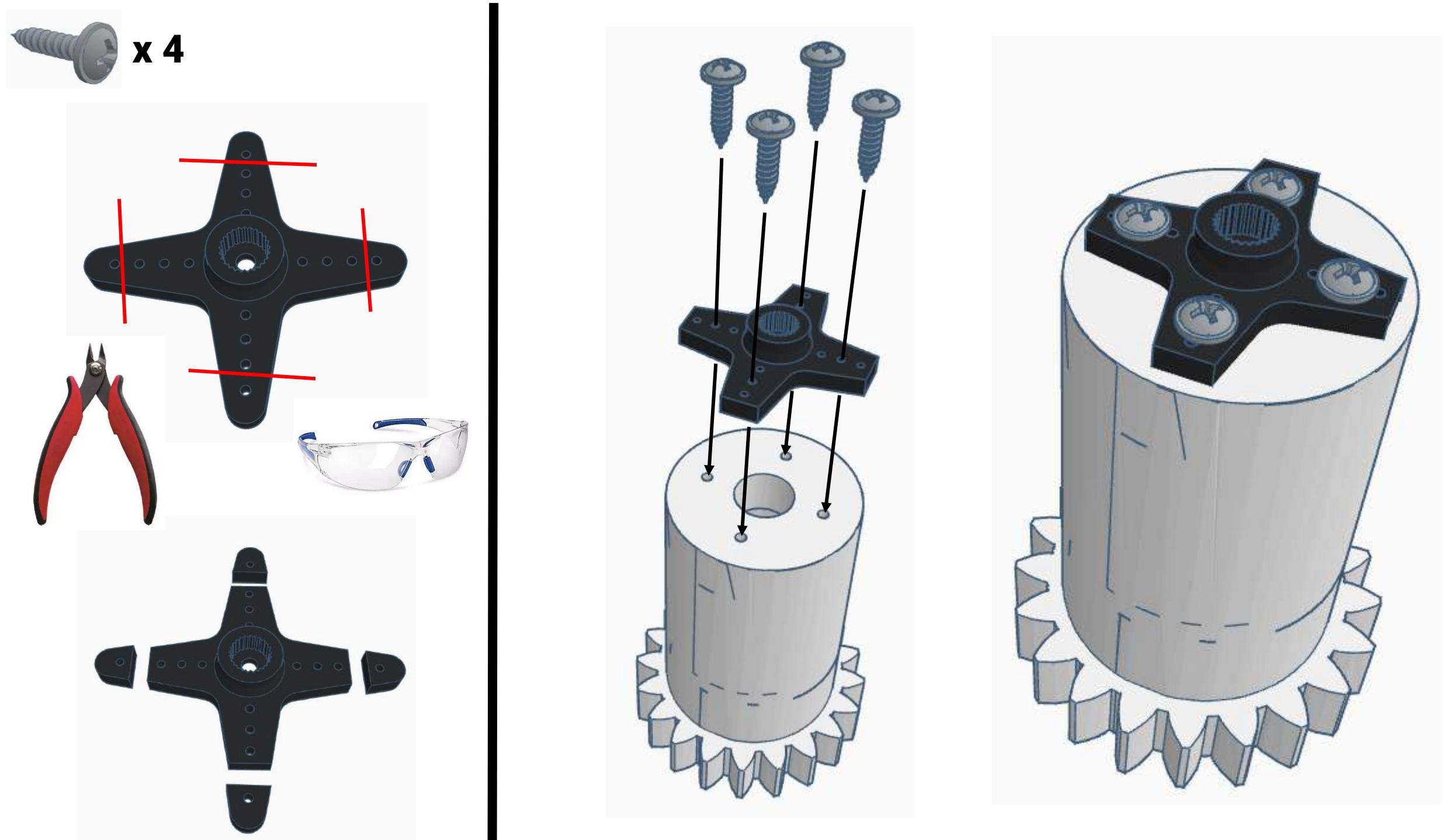


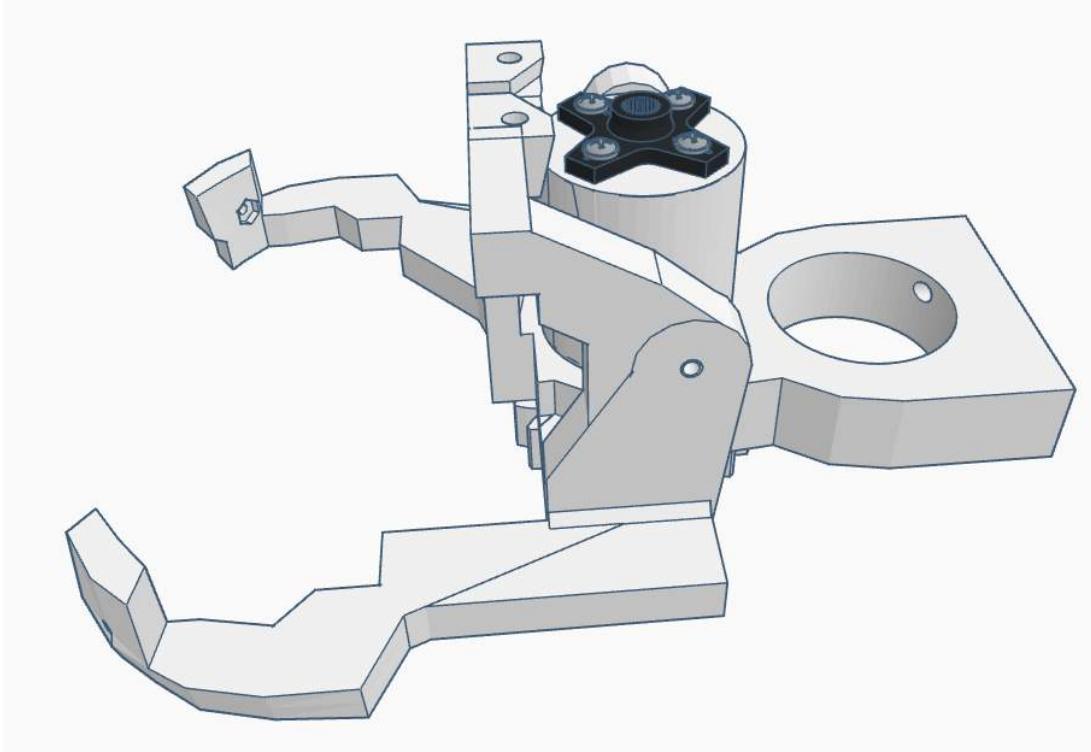
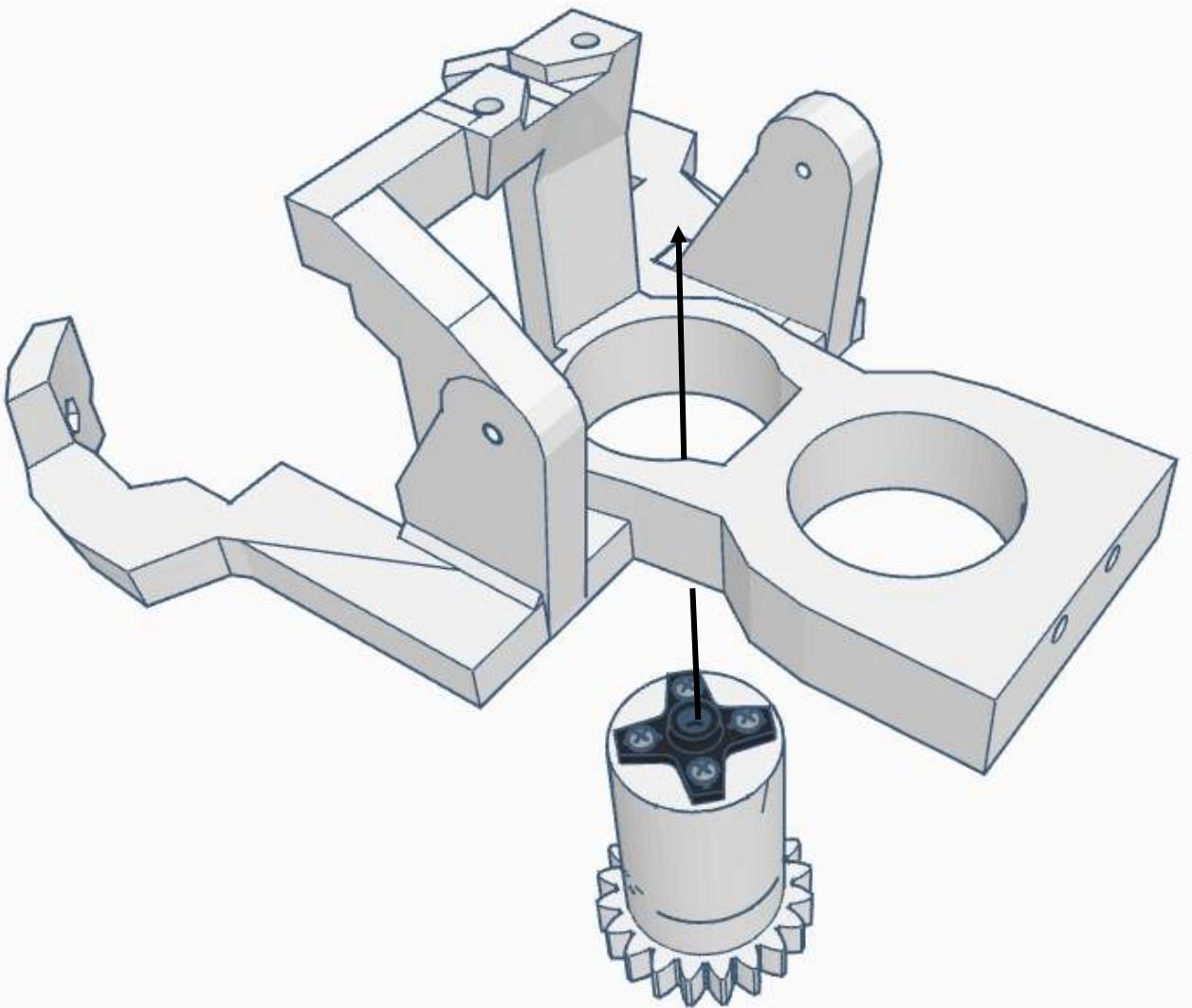


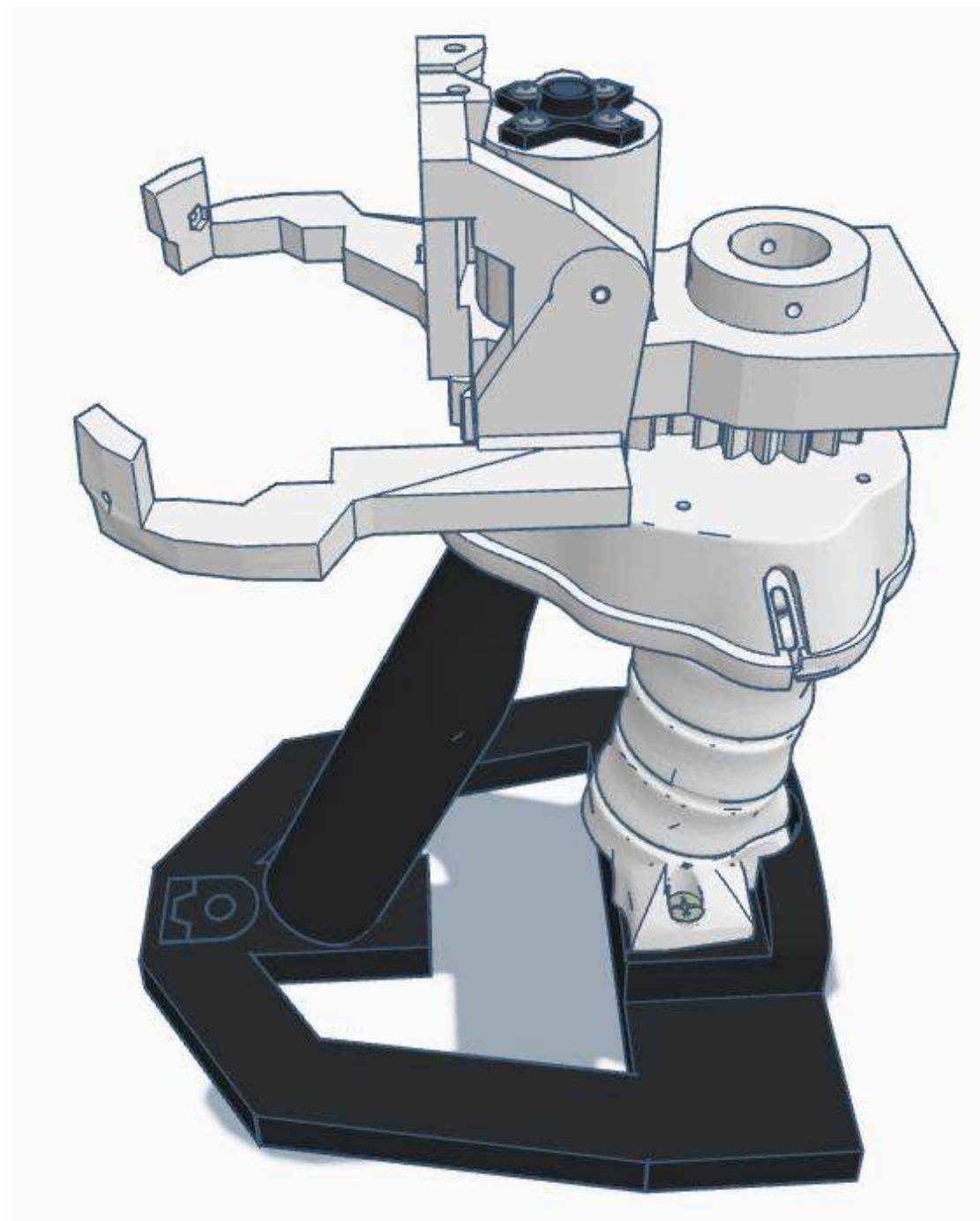
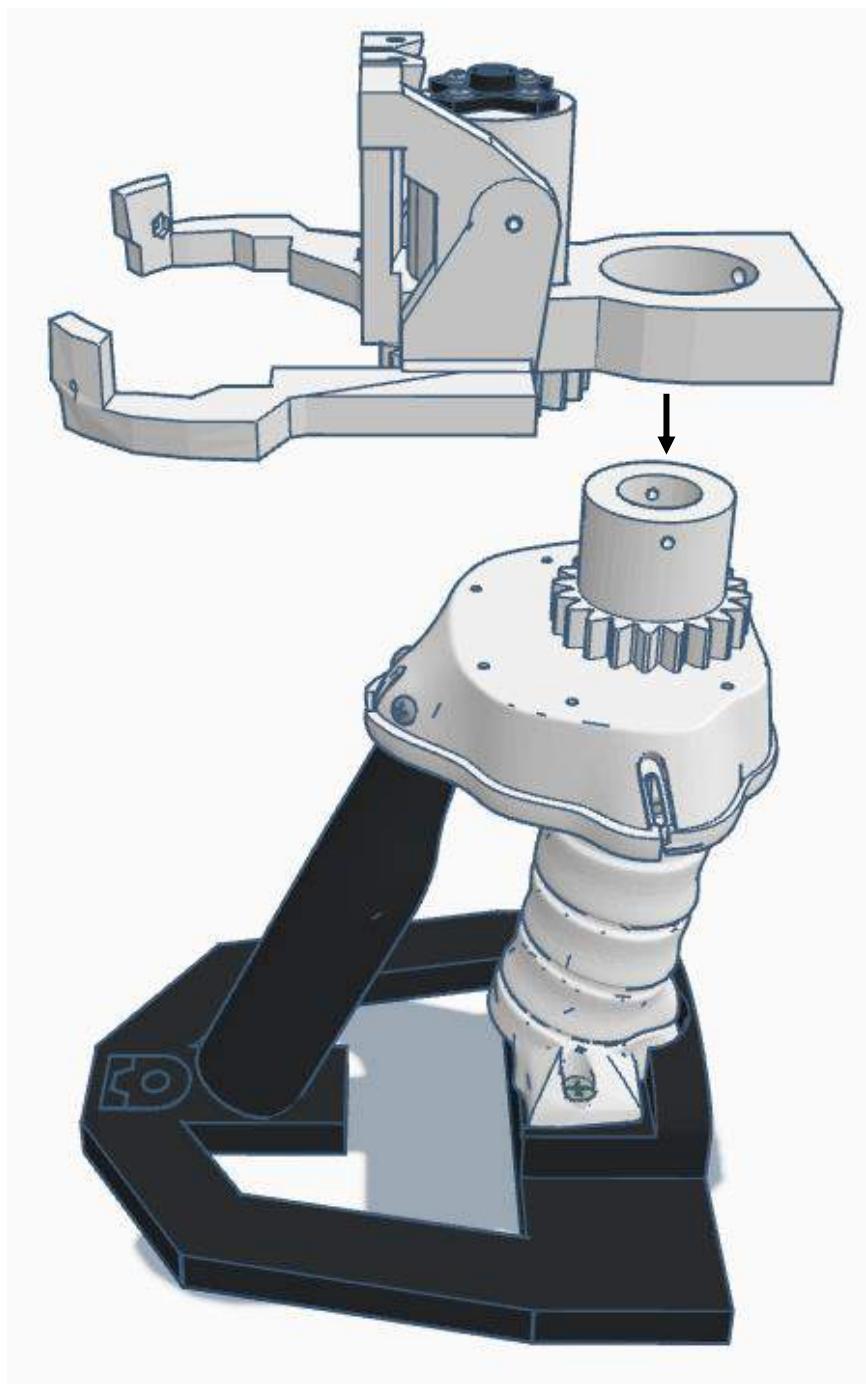


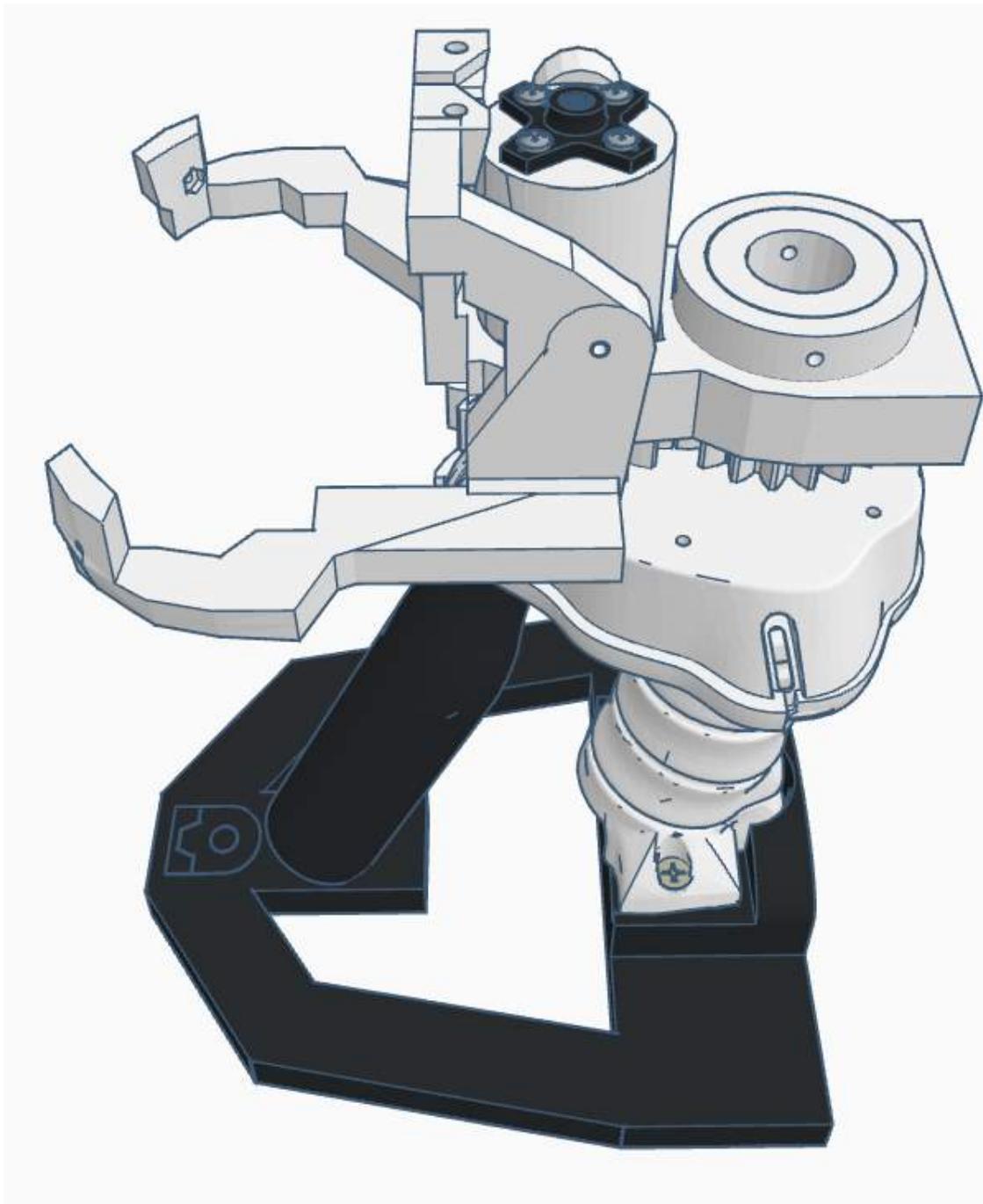
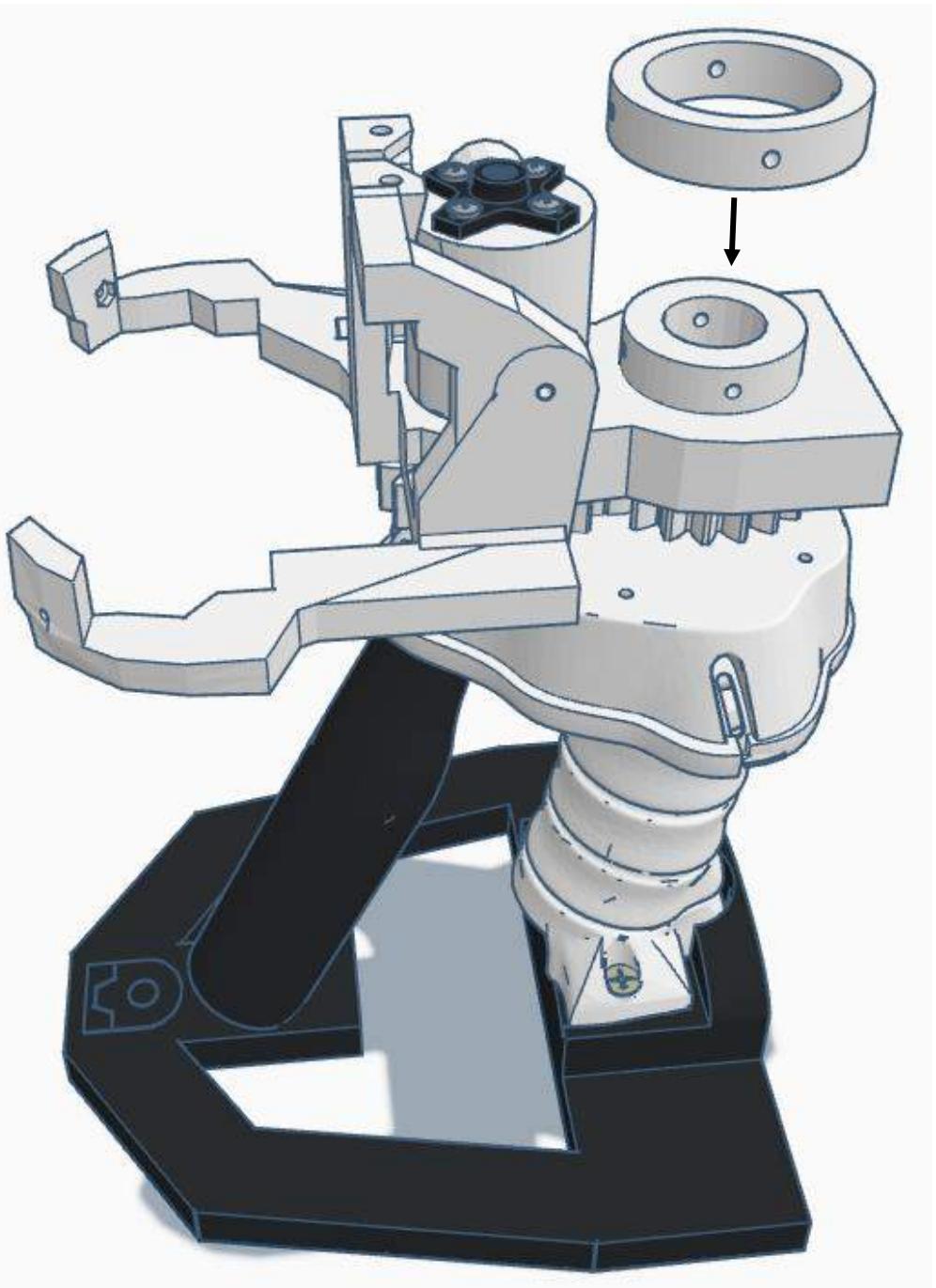








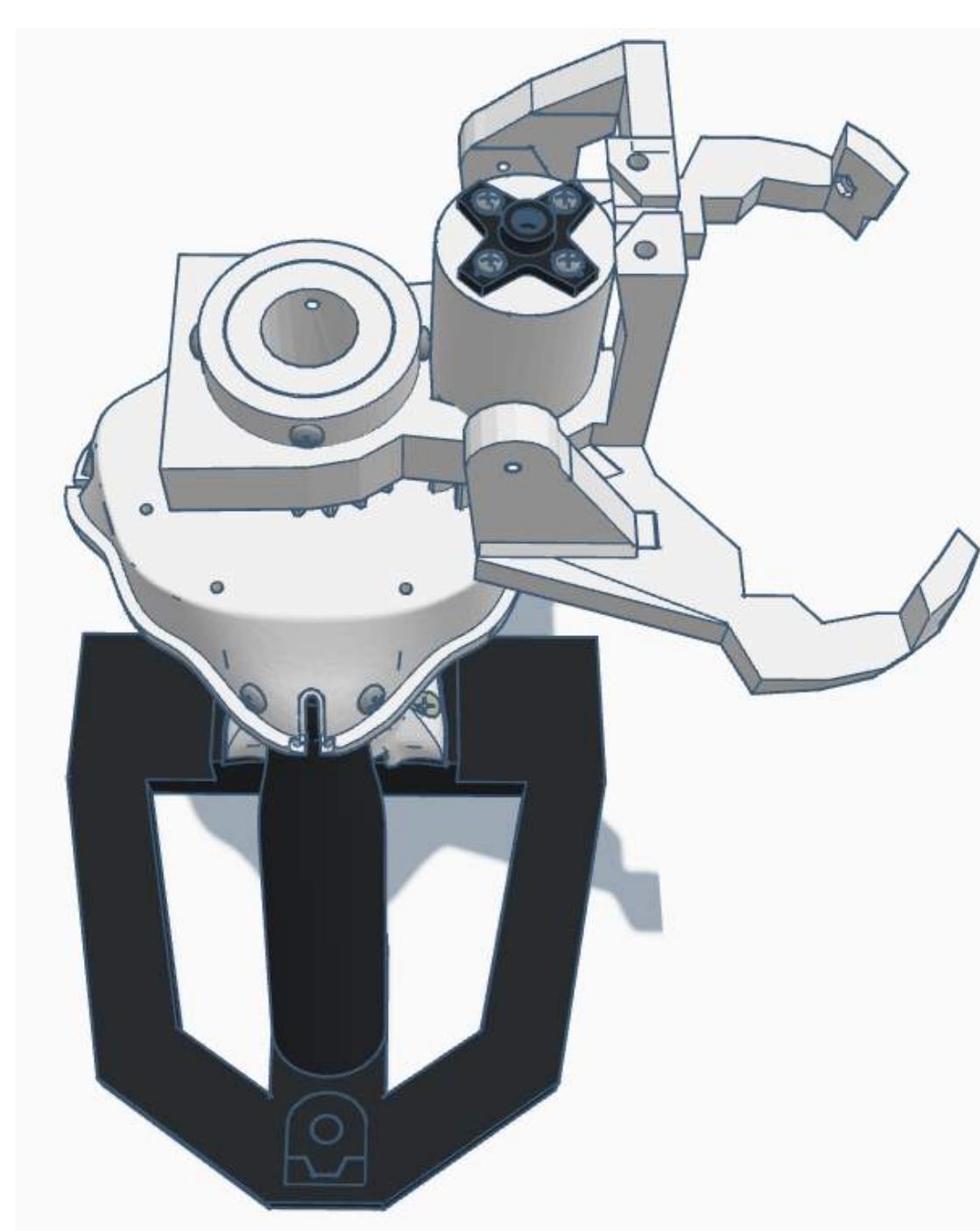
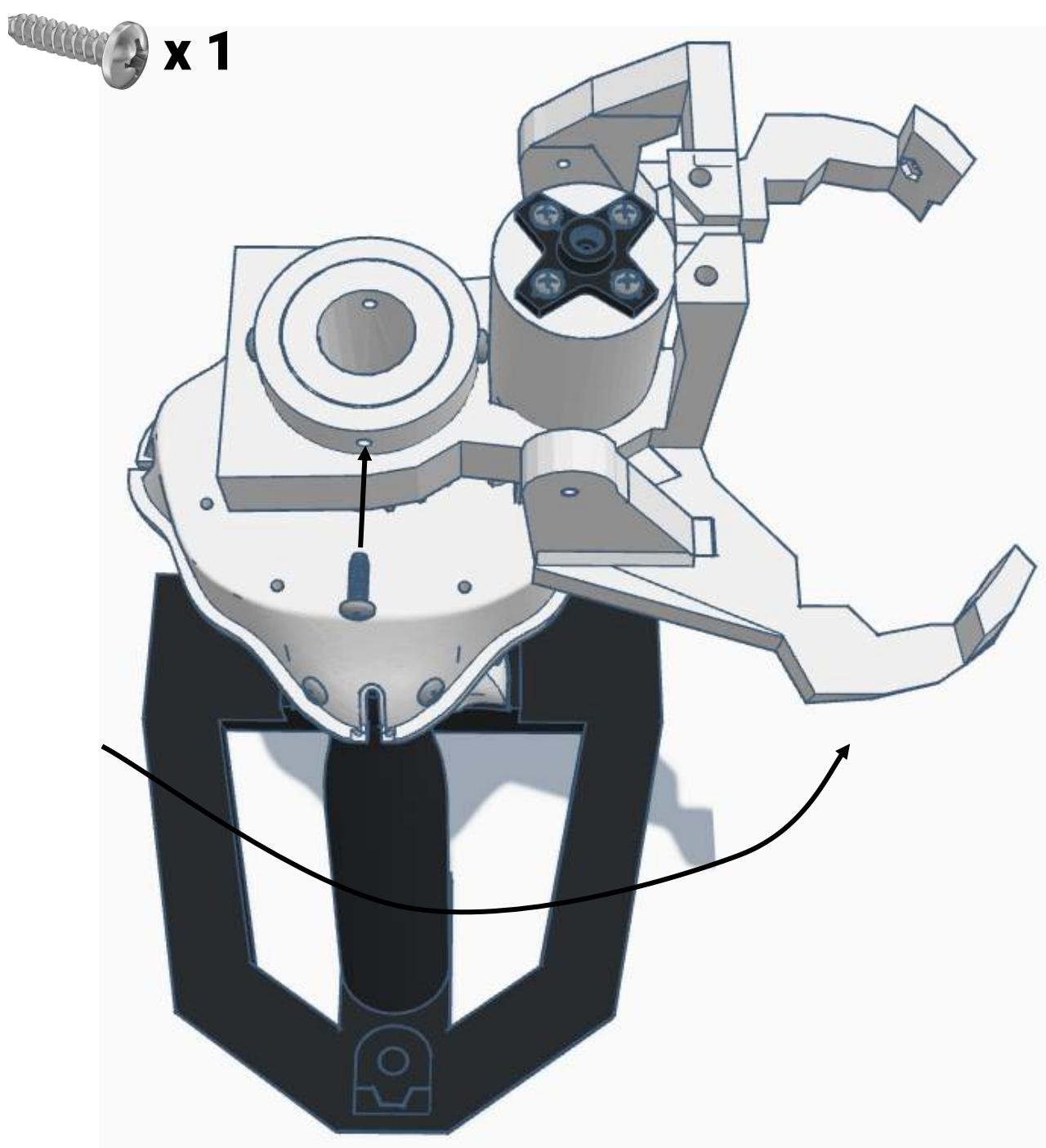






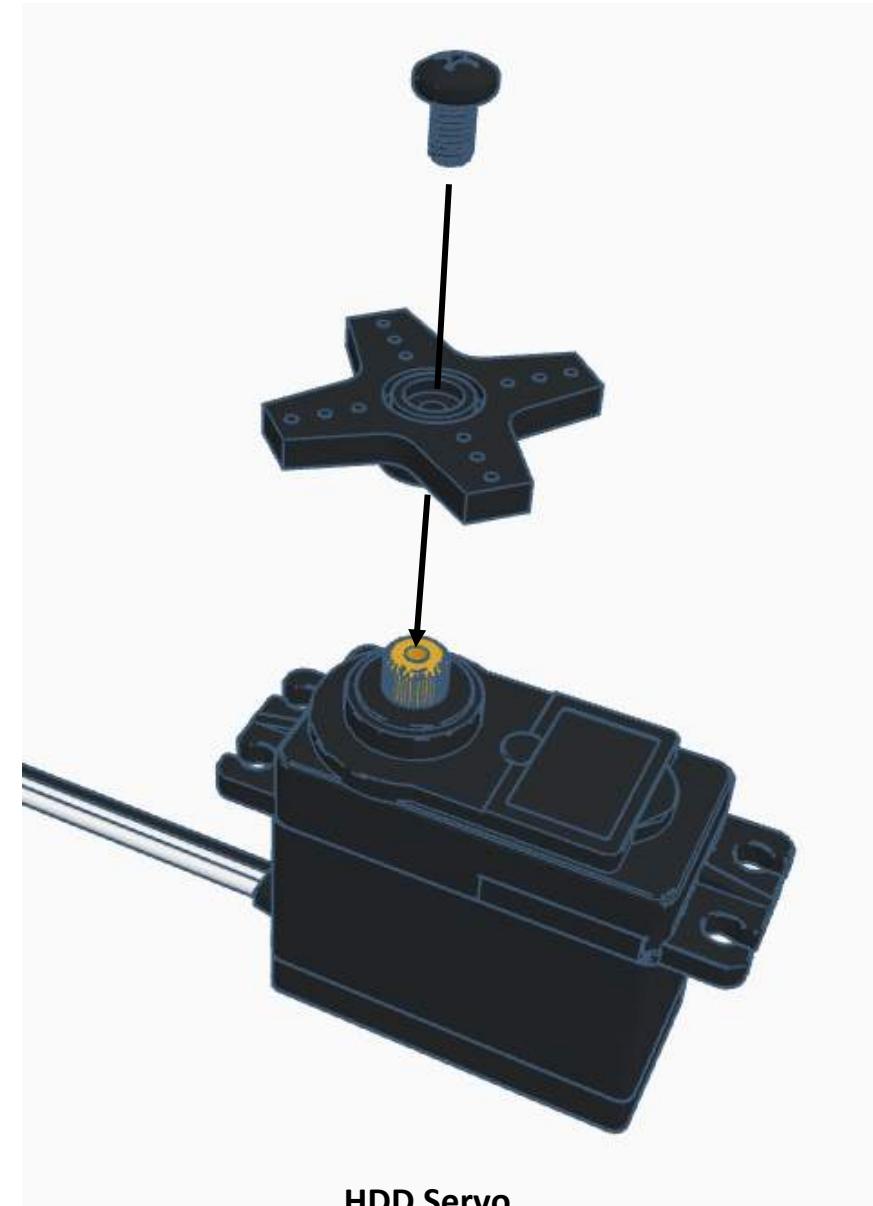
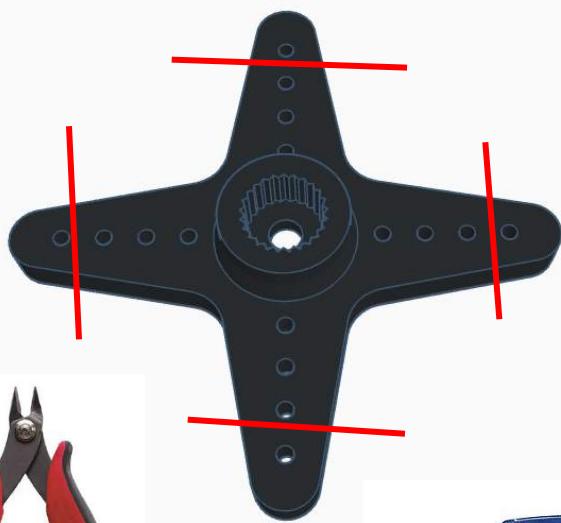
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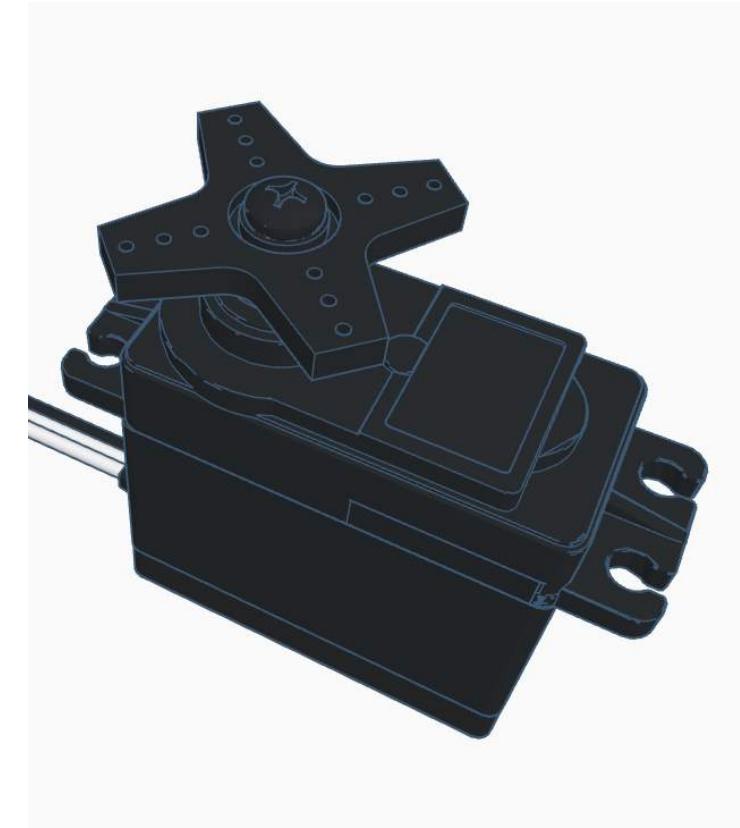




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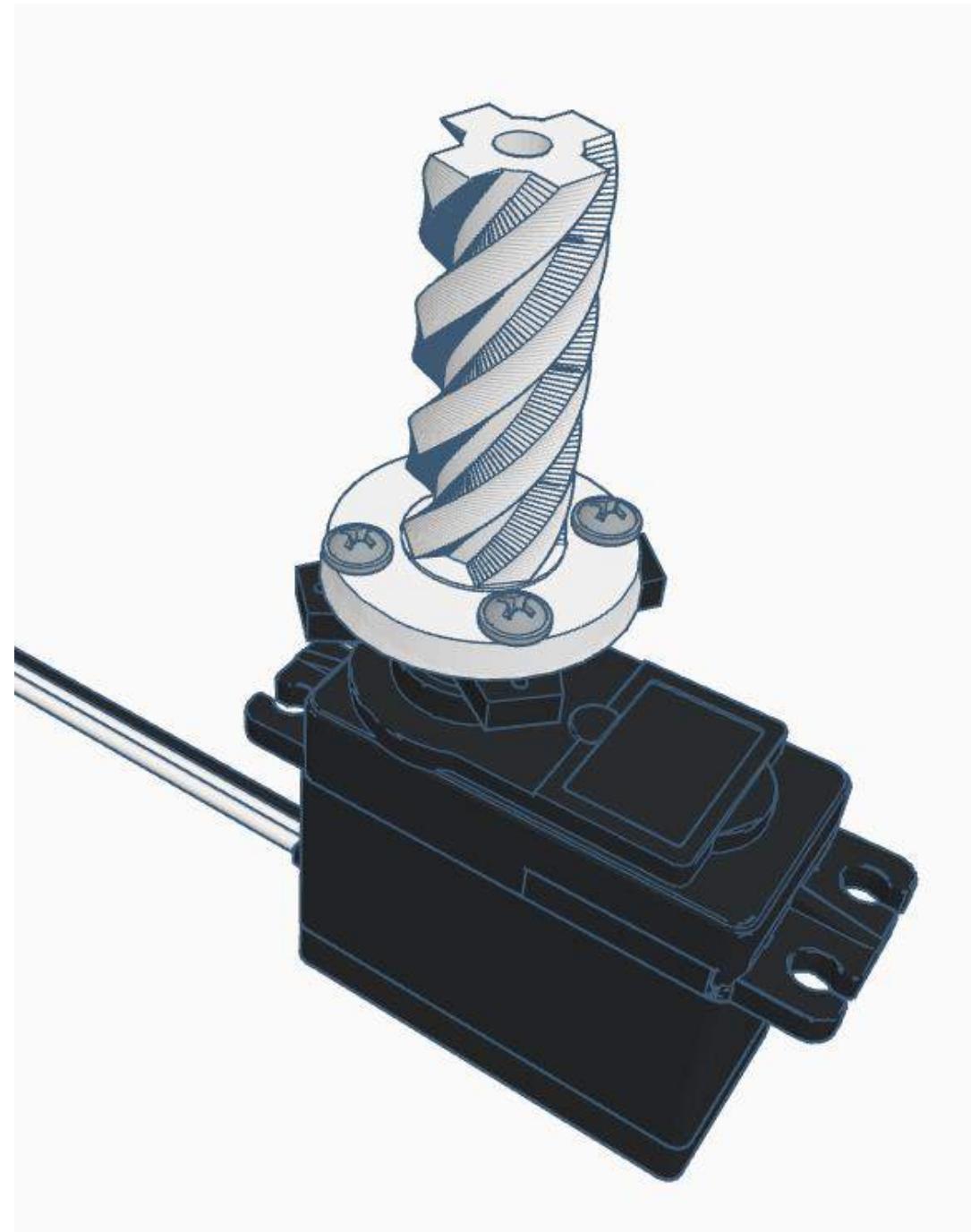
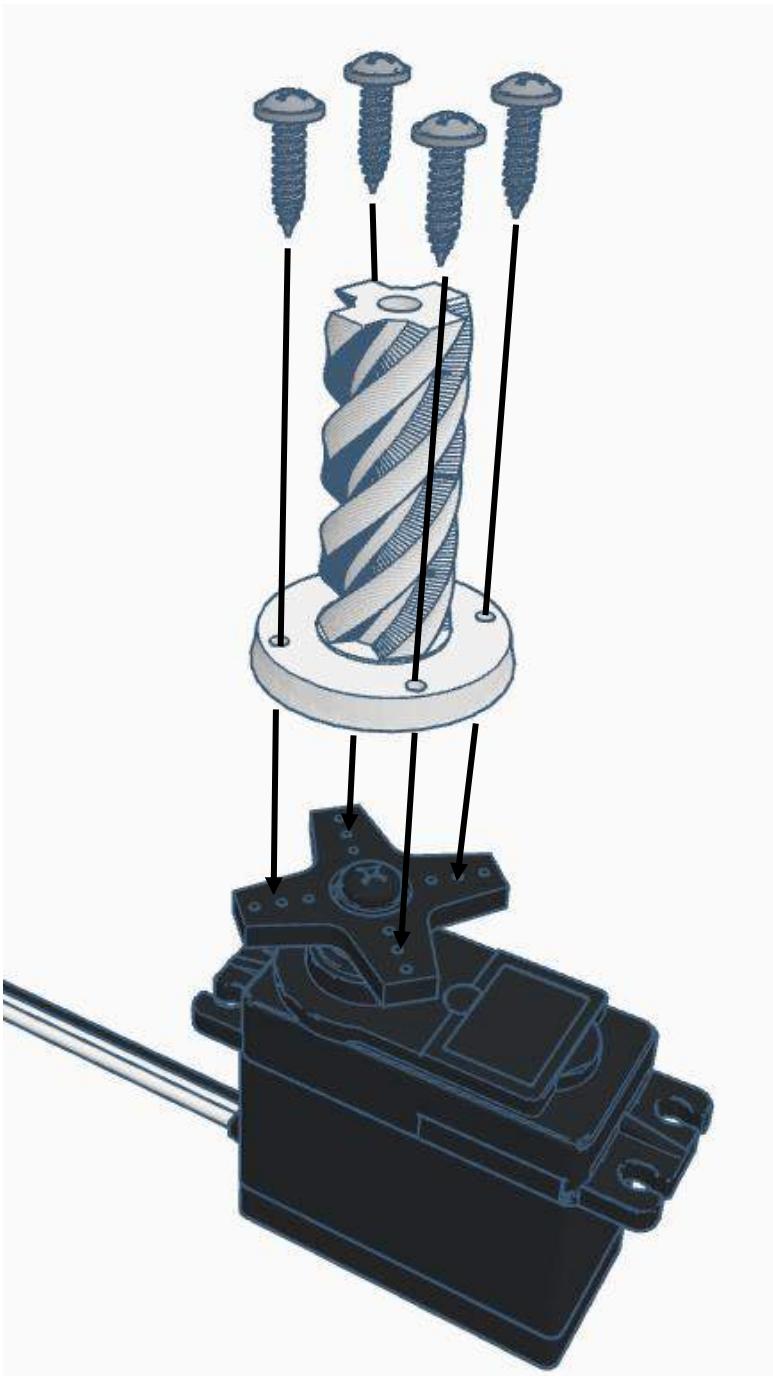


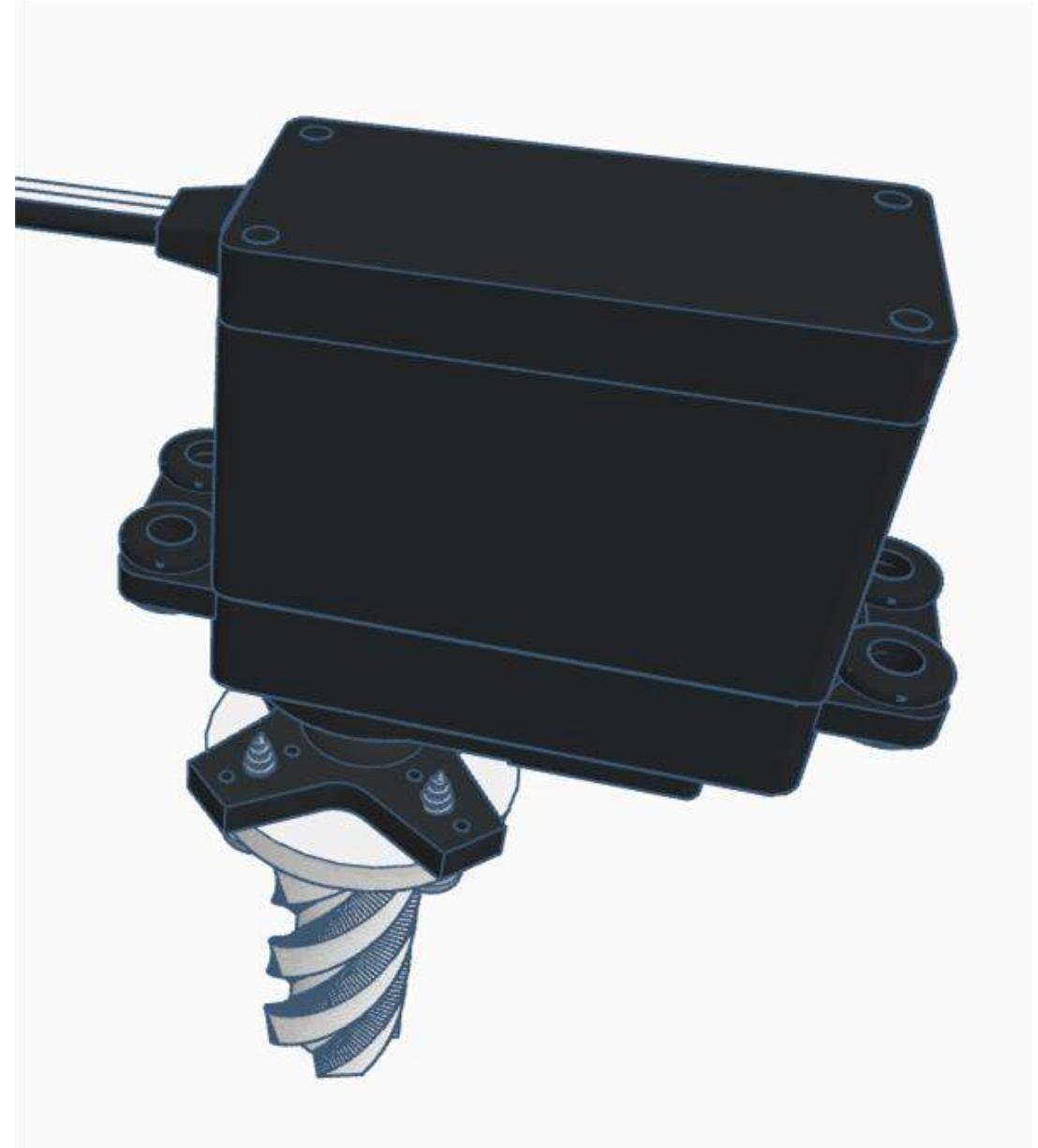
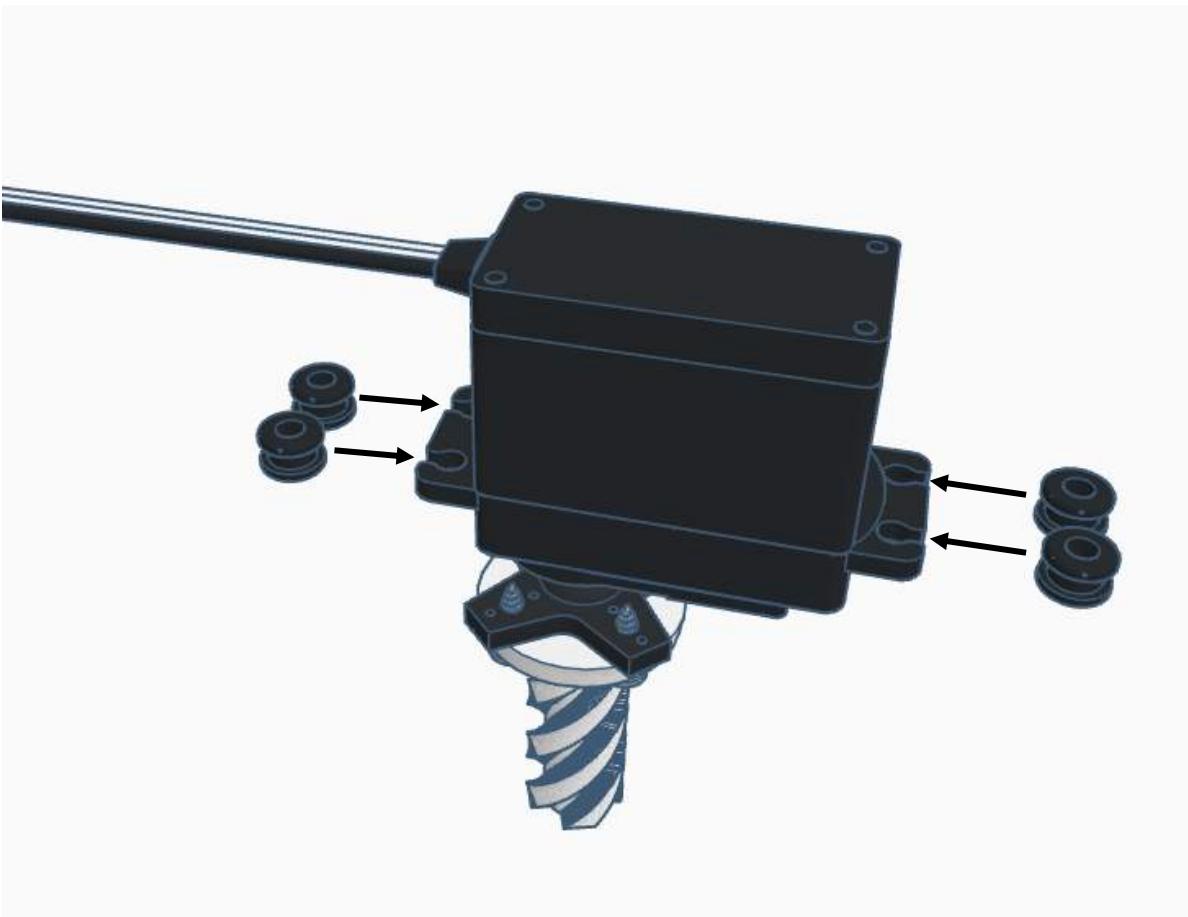
HDD Servo





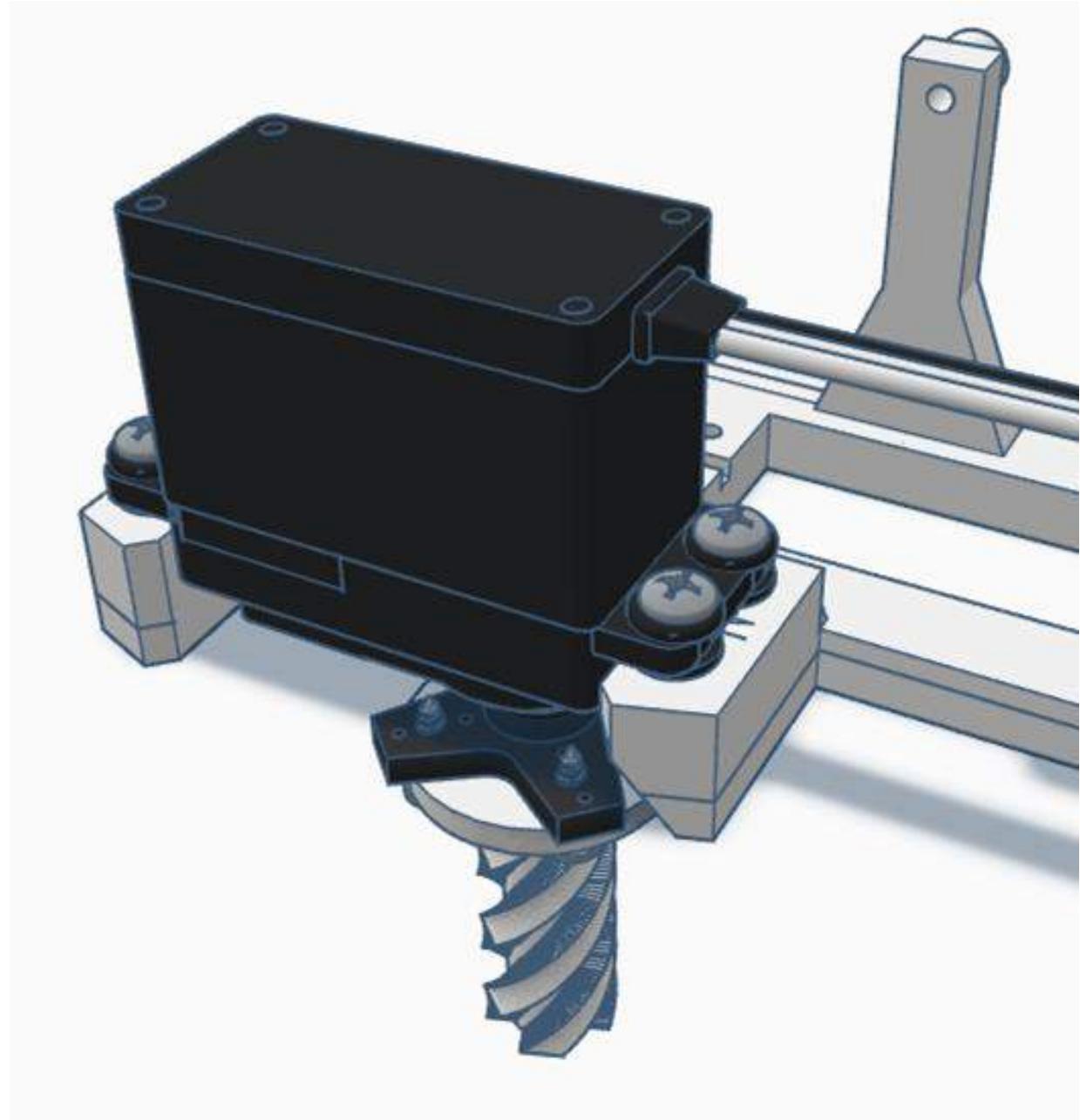
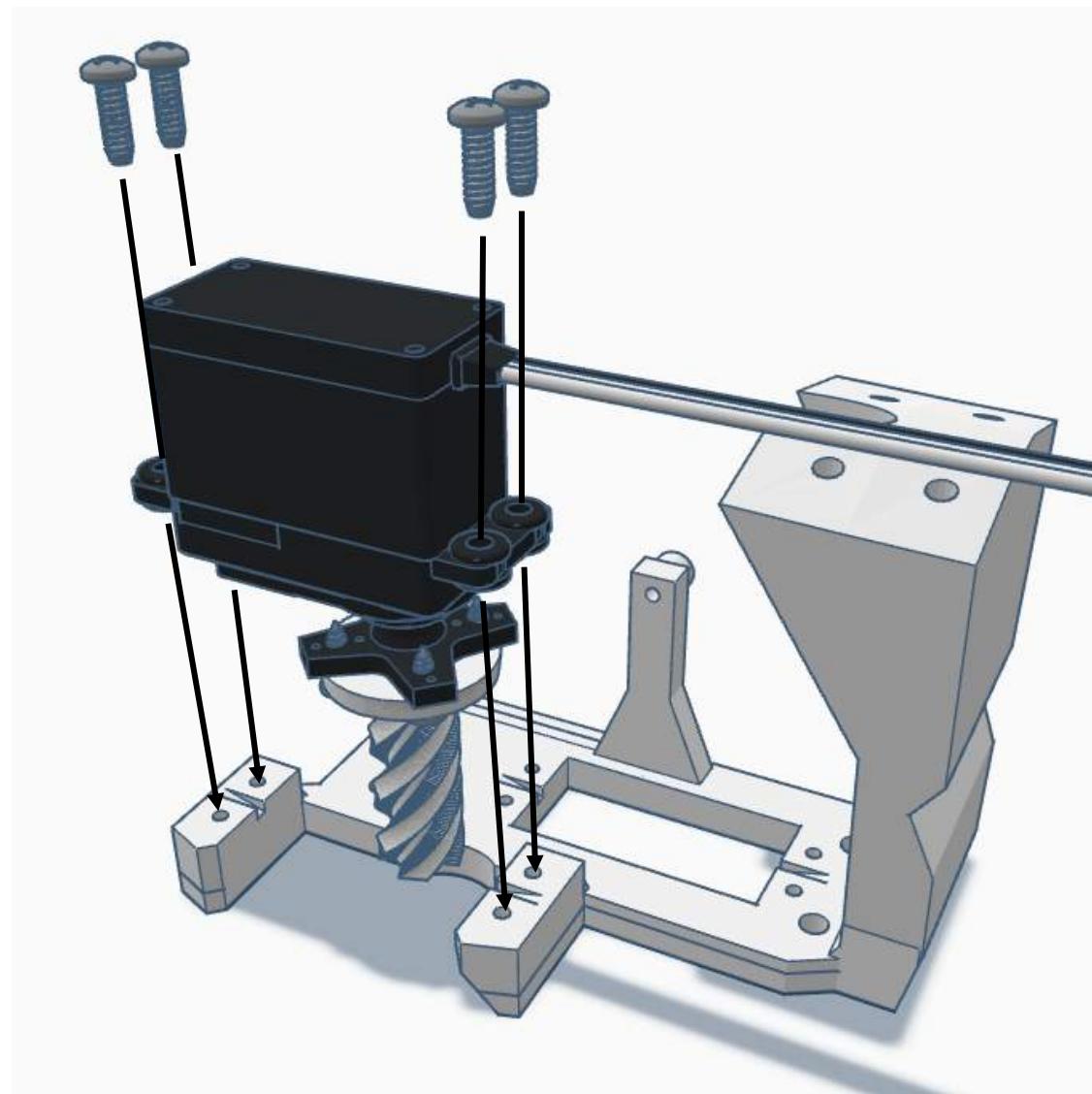
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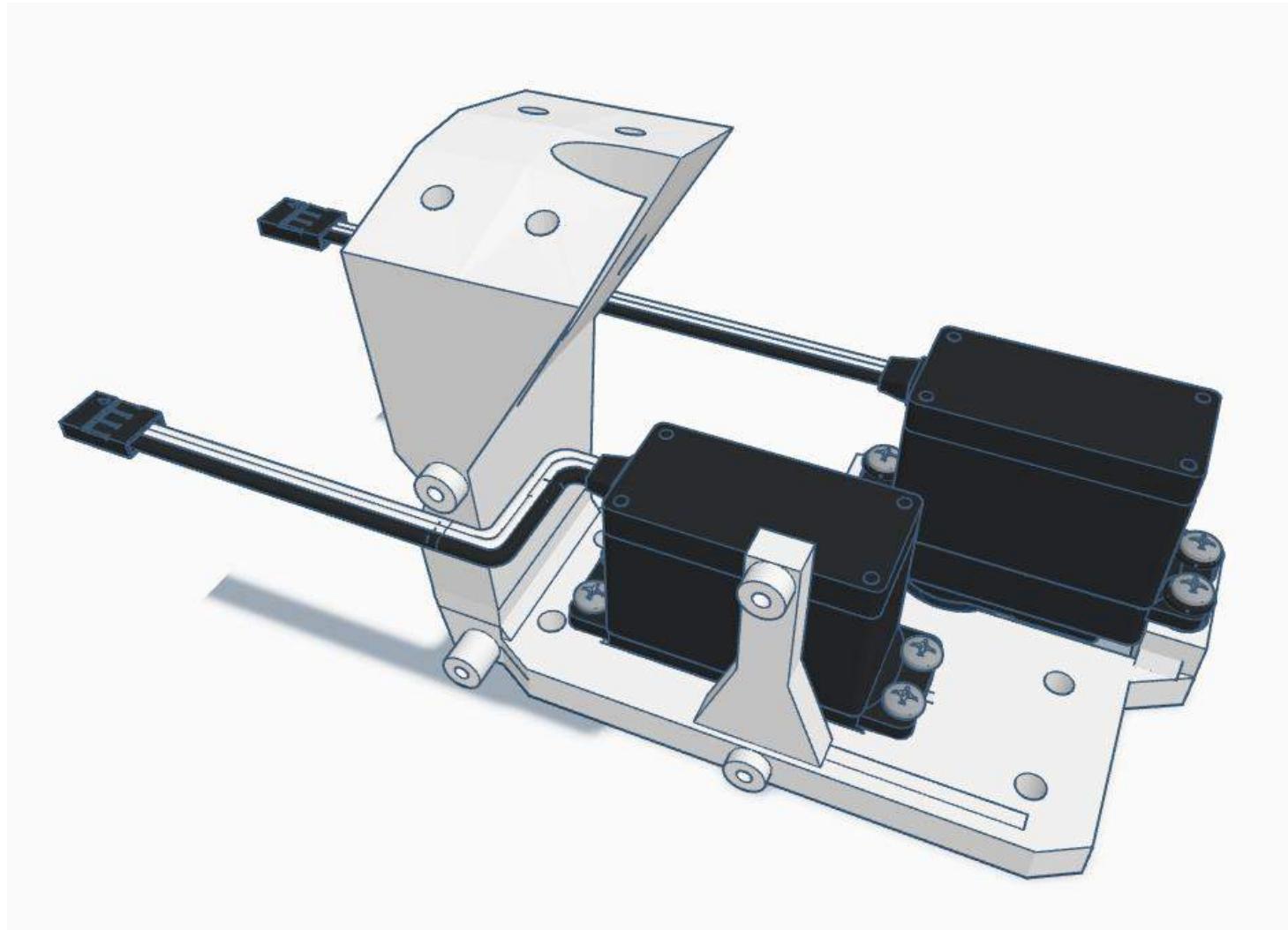
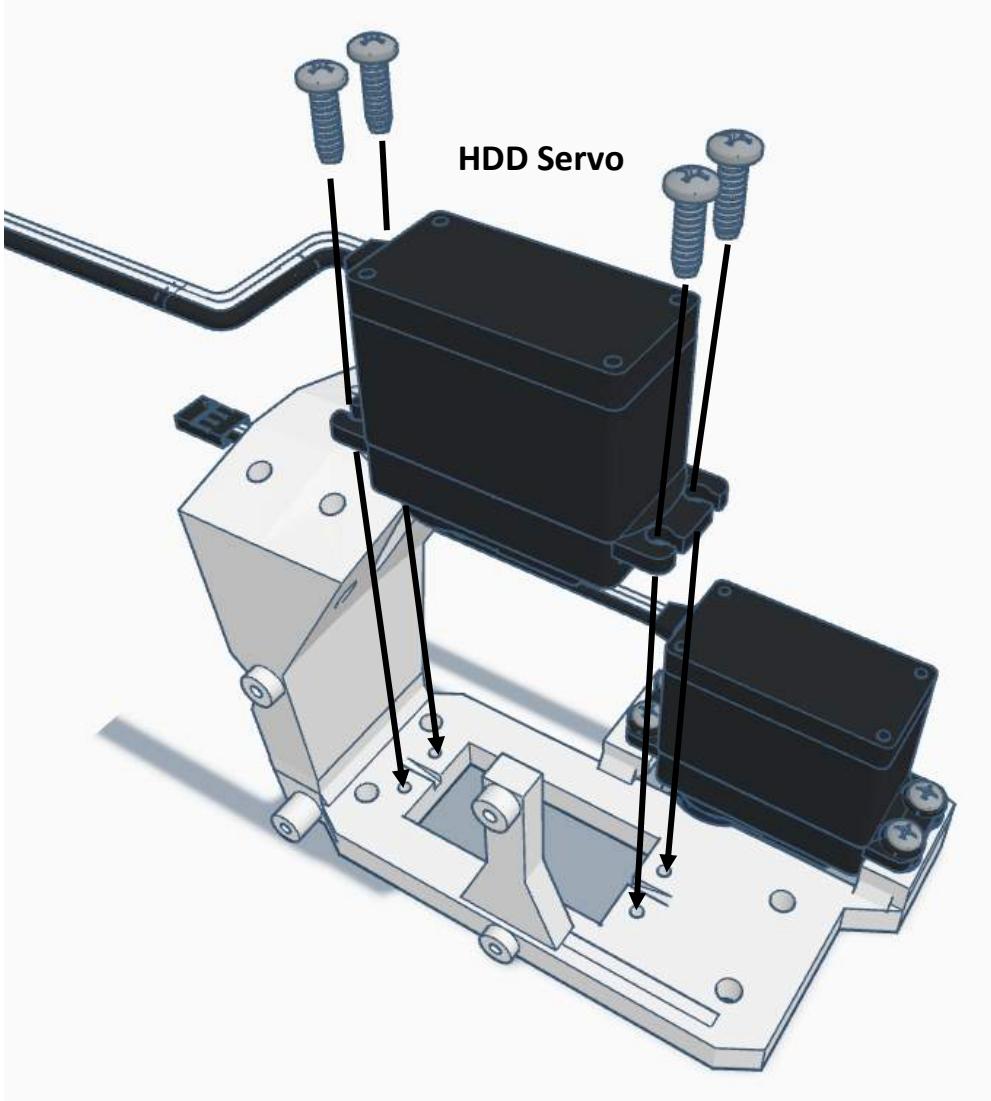


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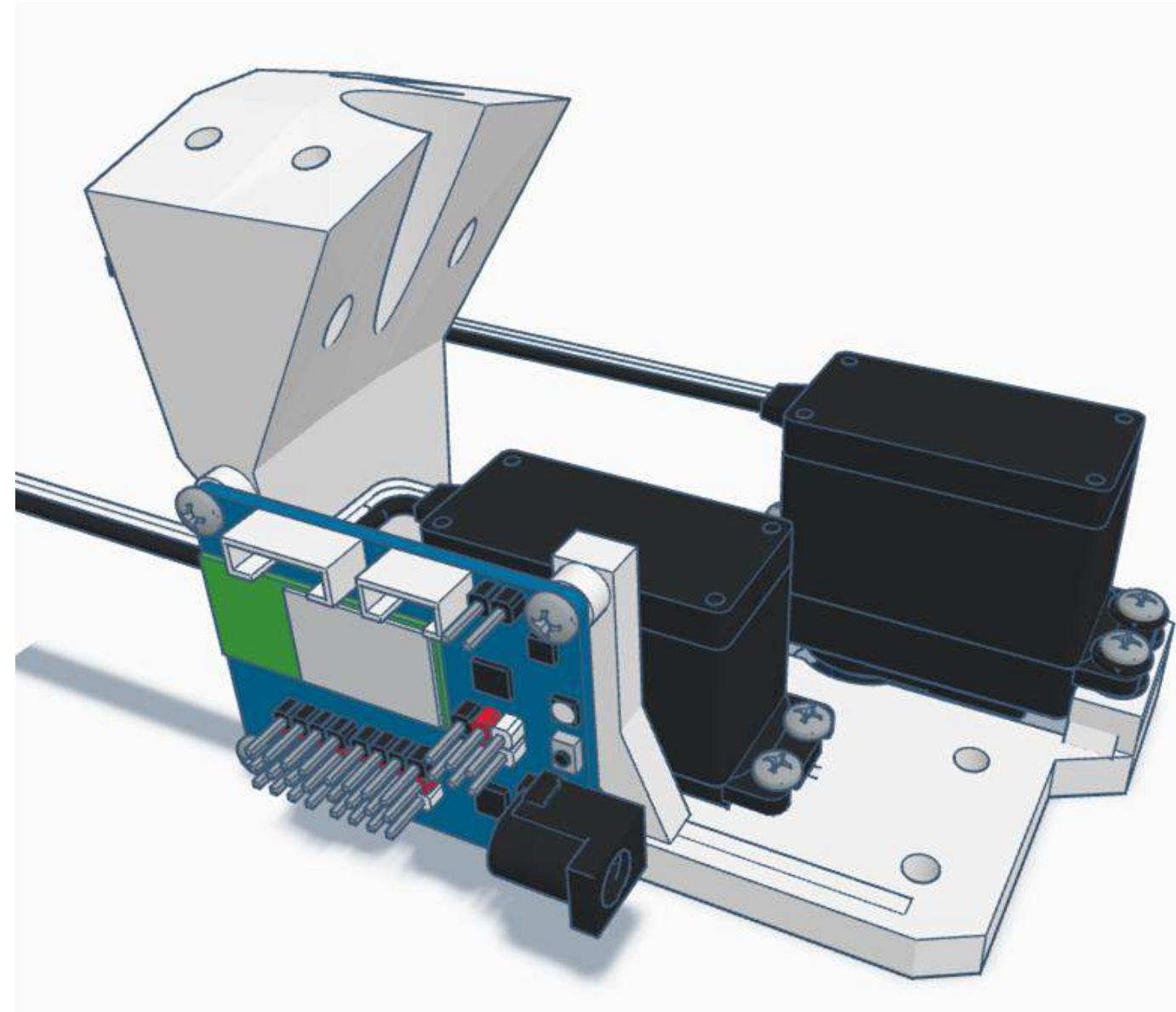
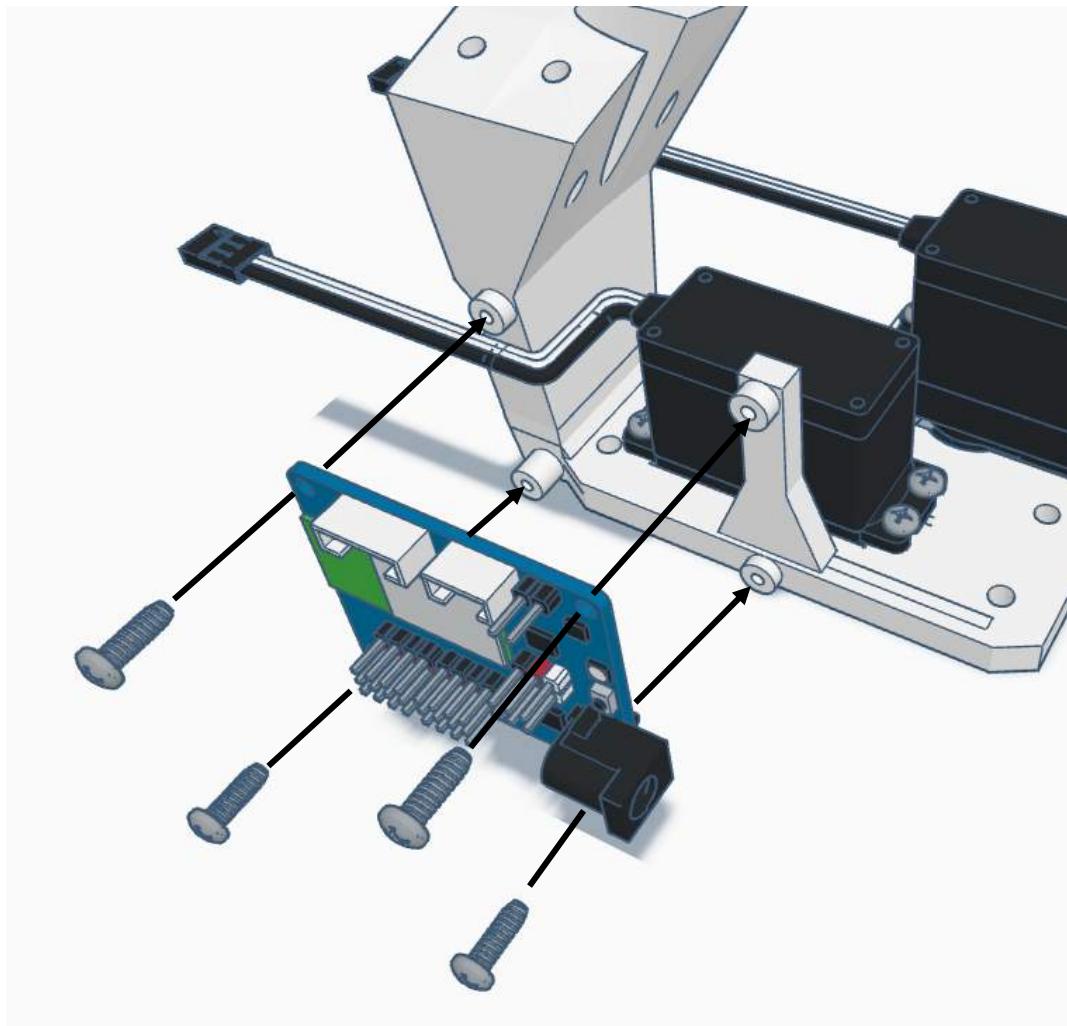


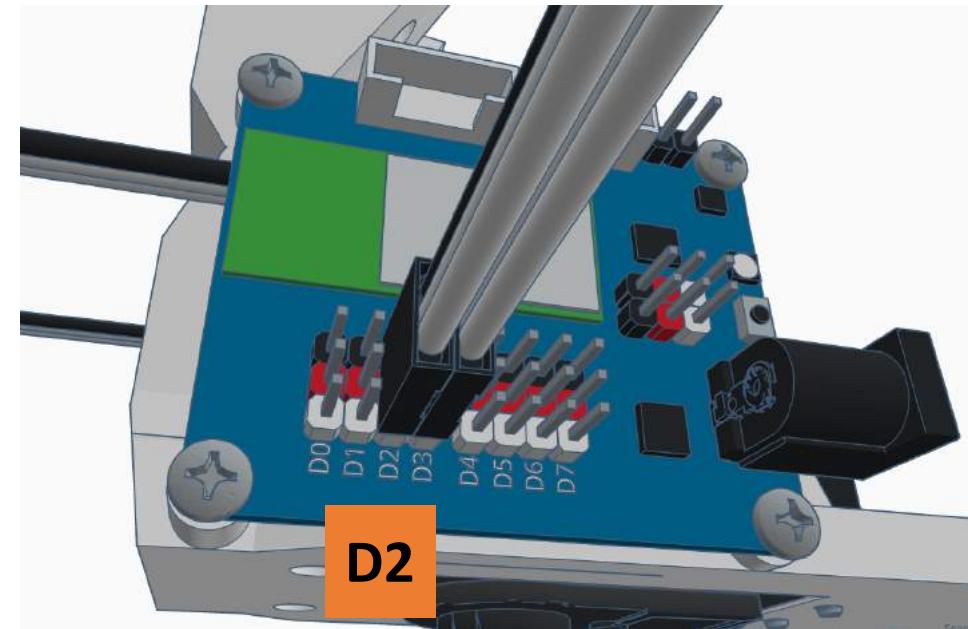
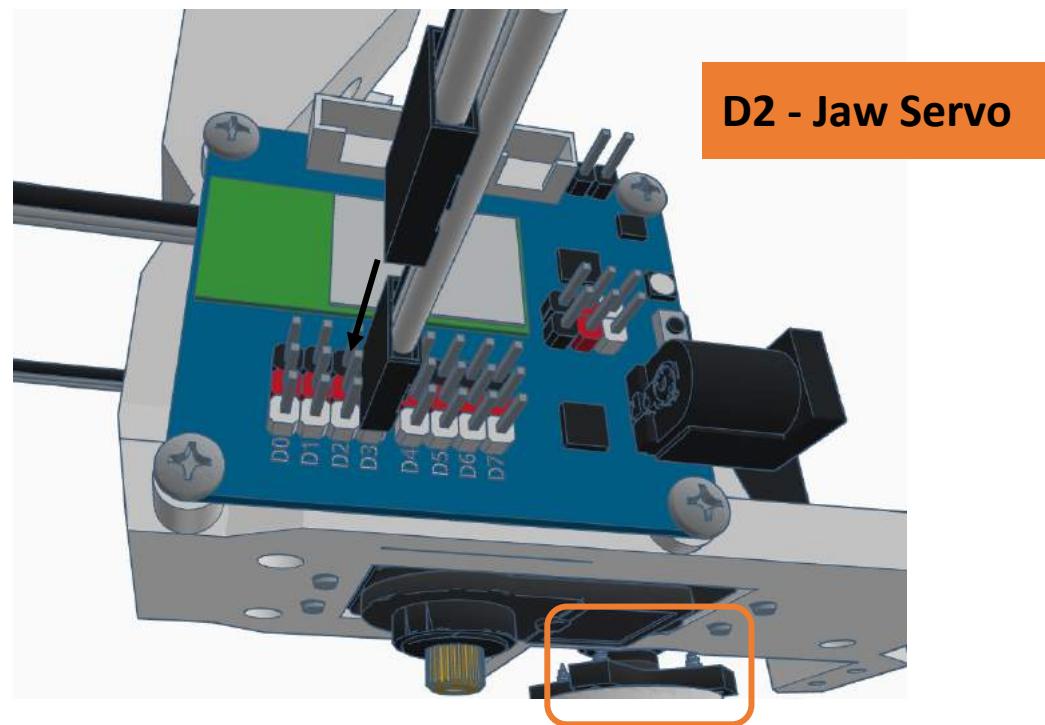
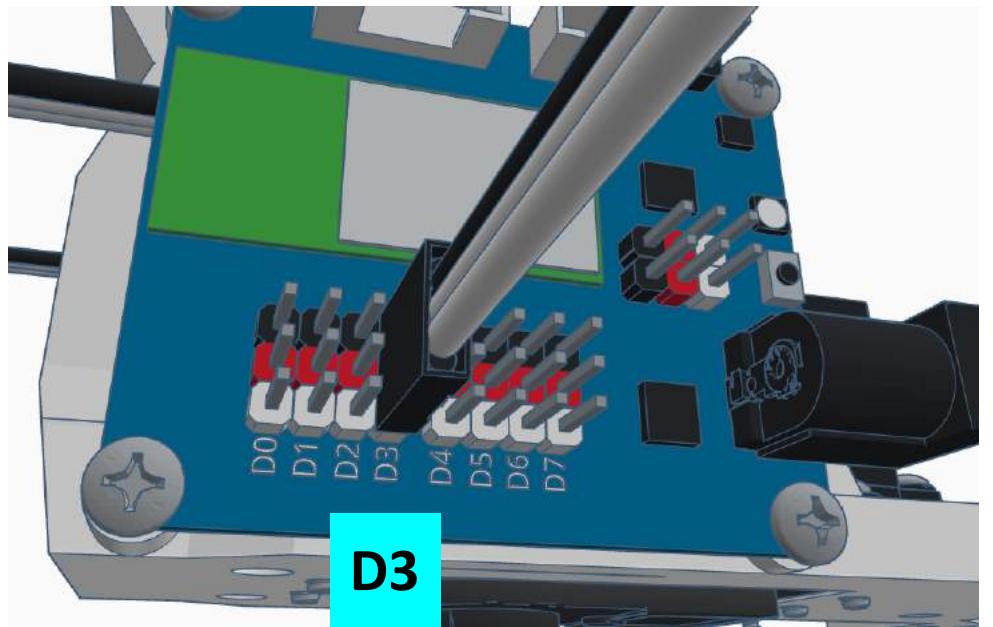
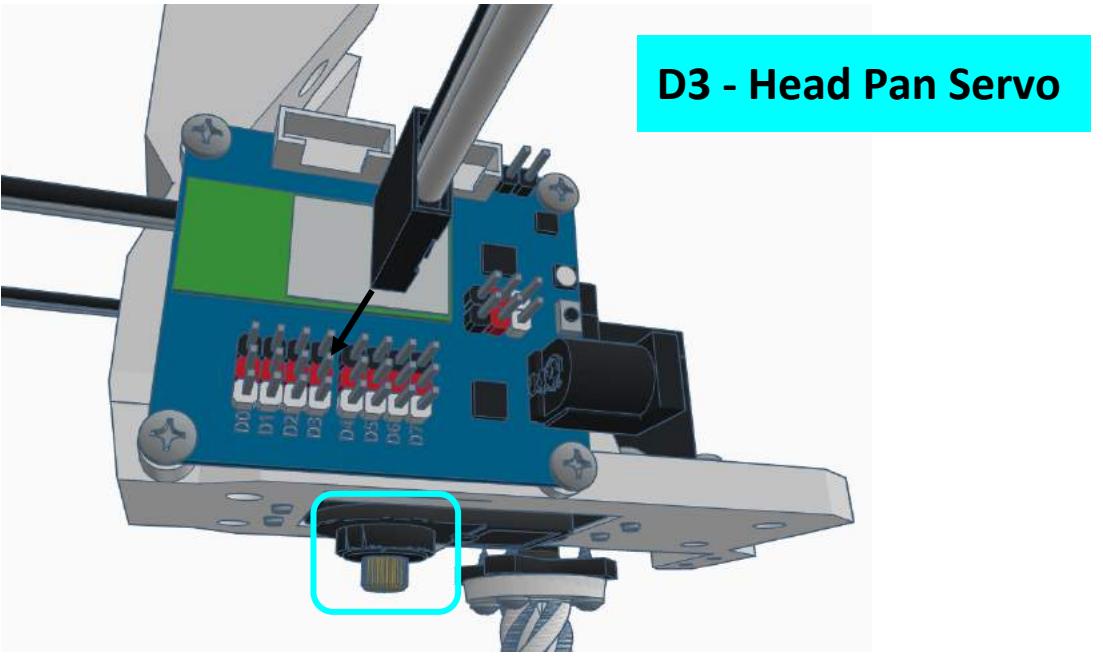
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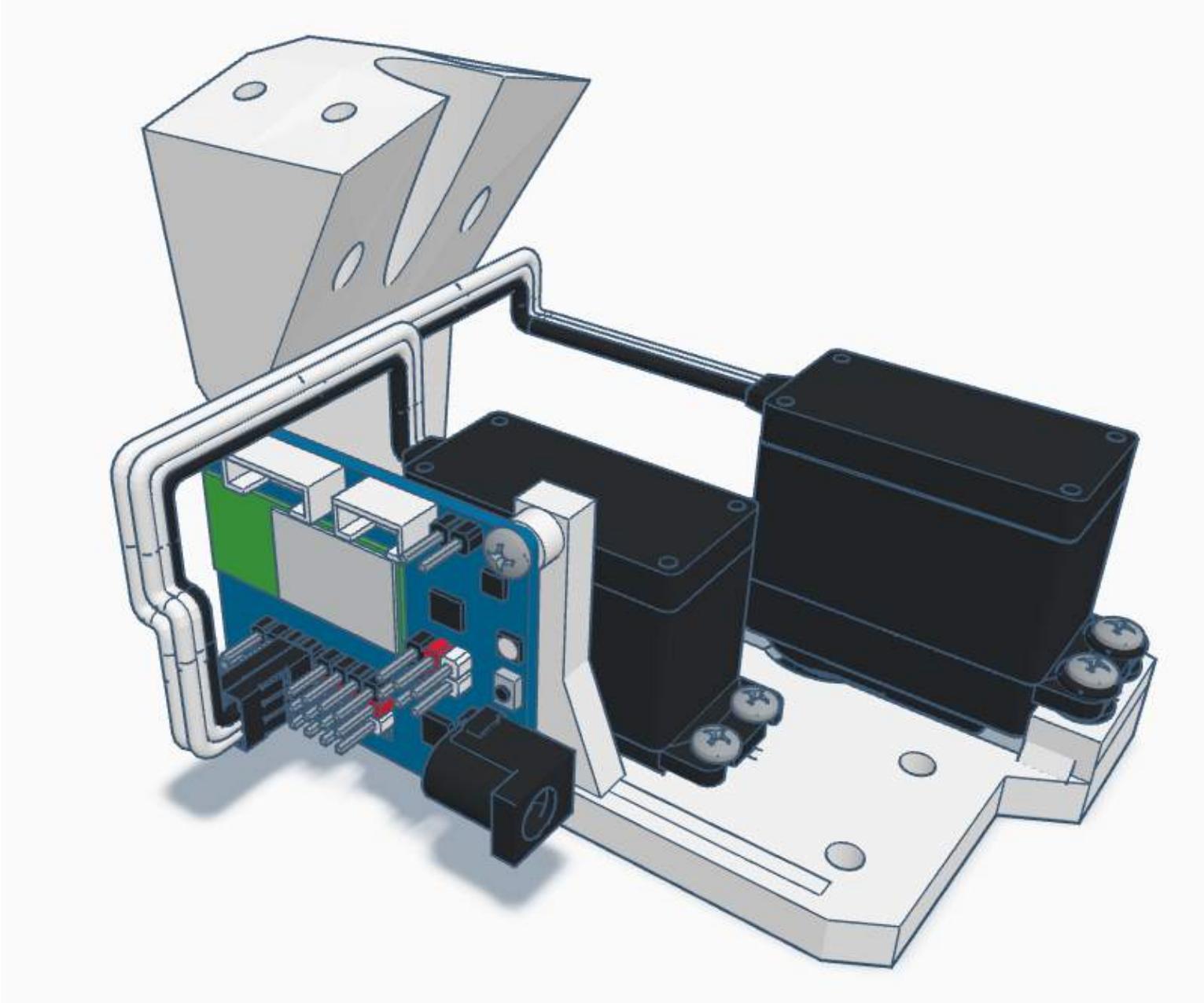


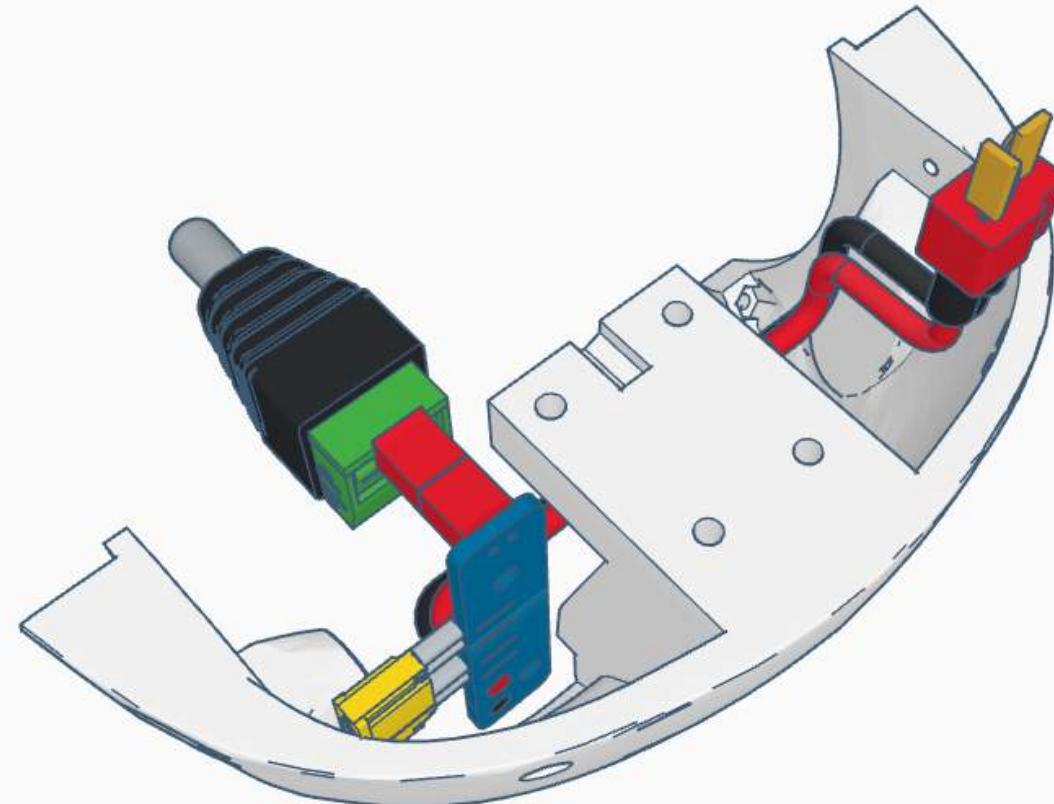
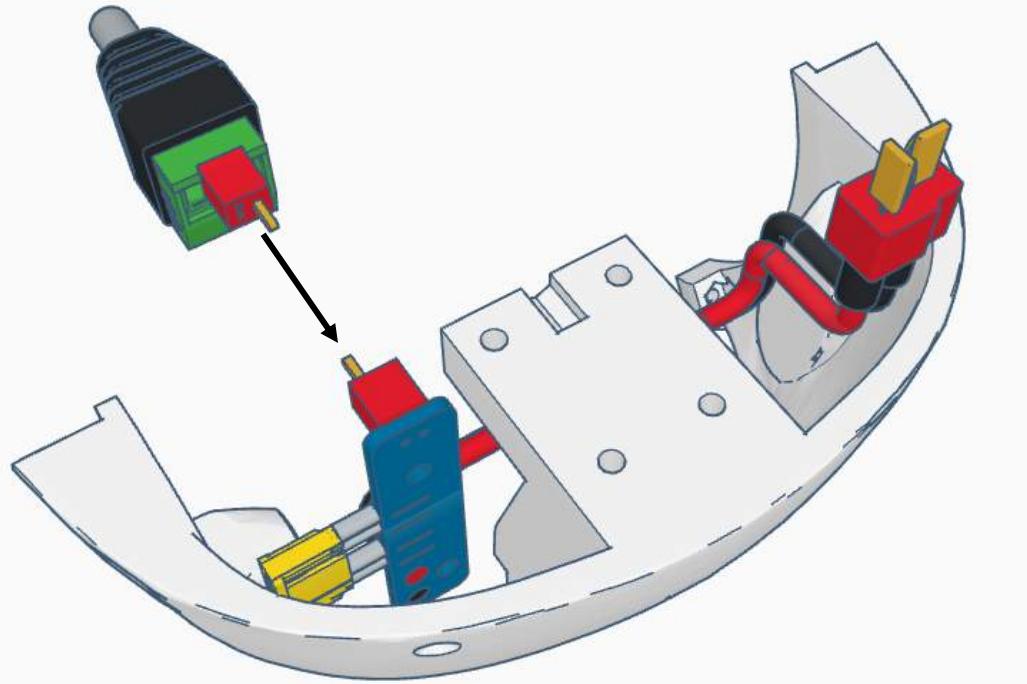


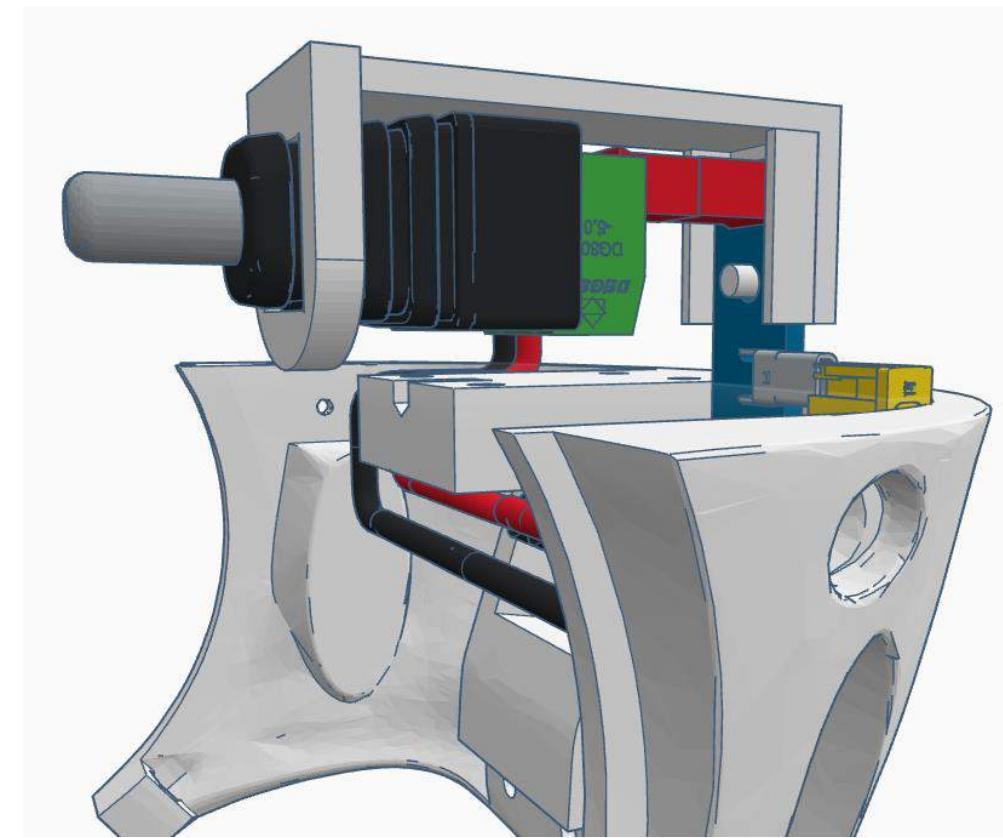
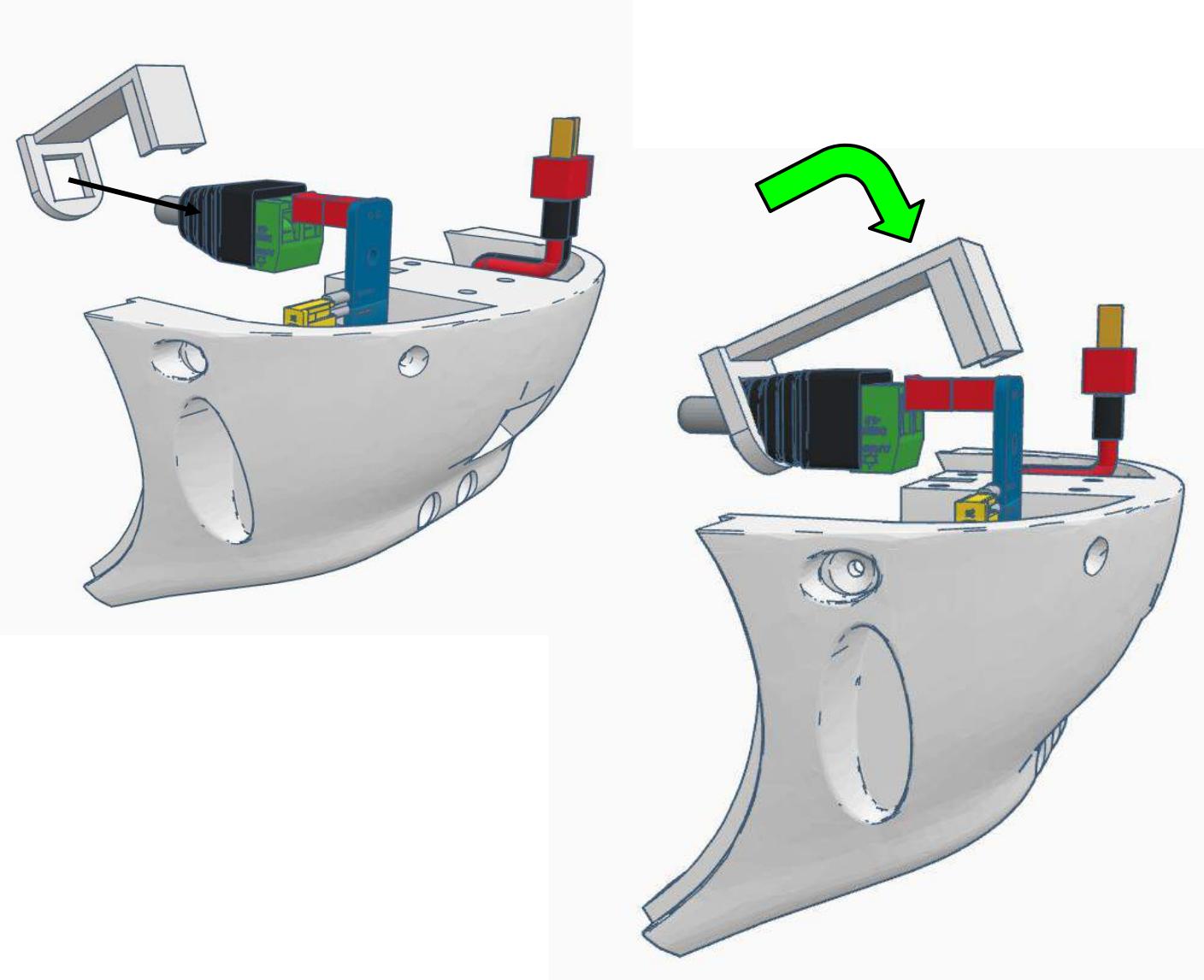
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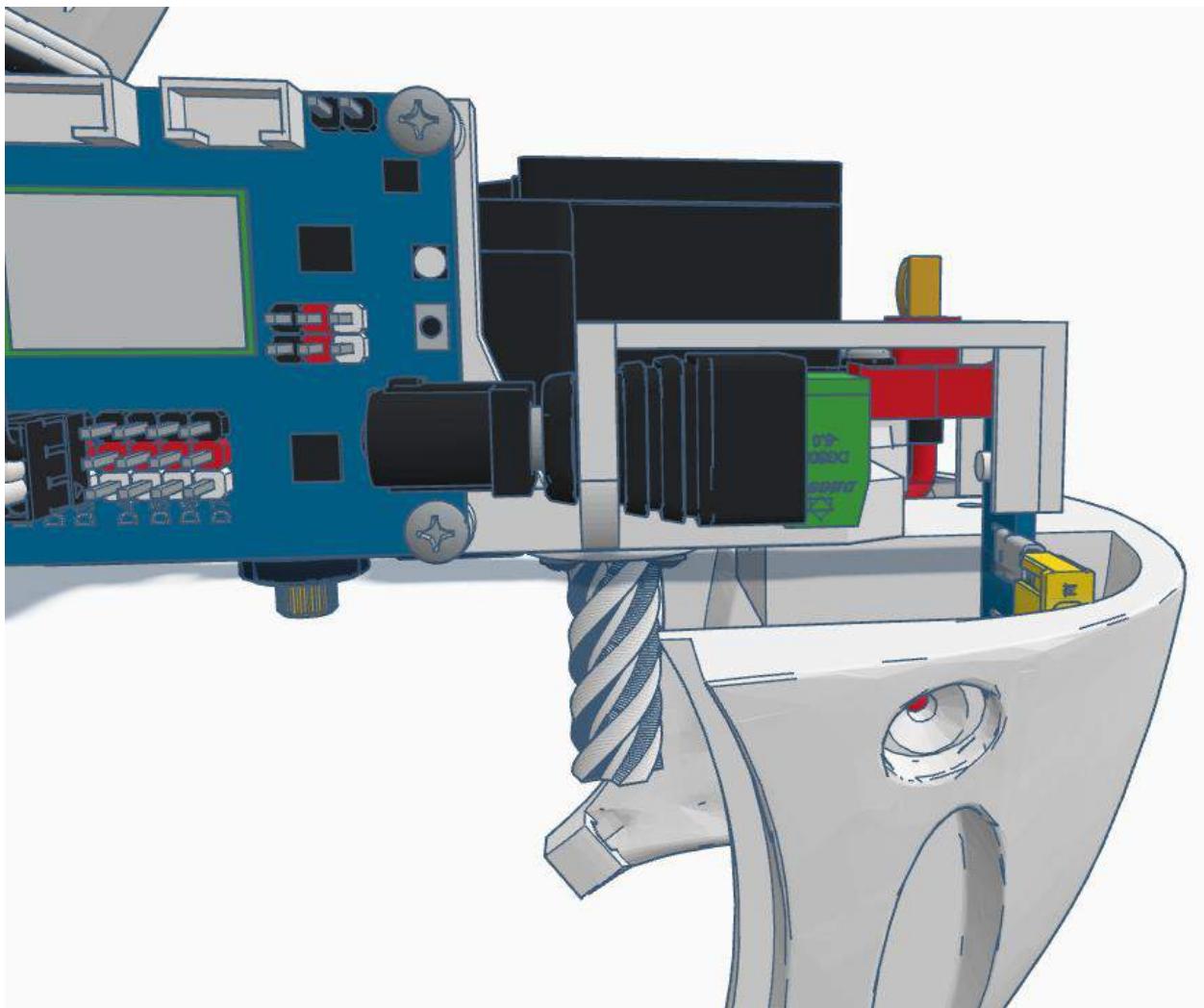
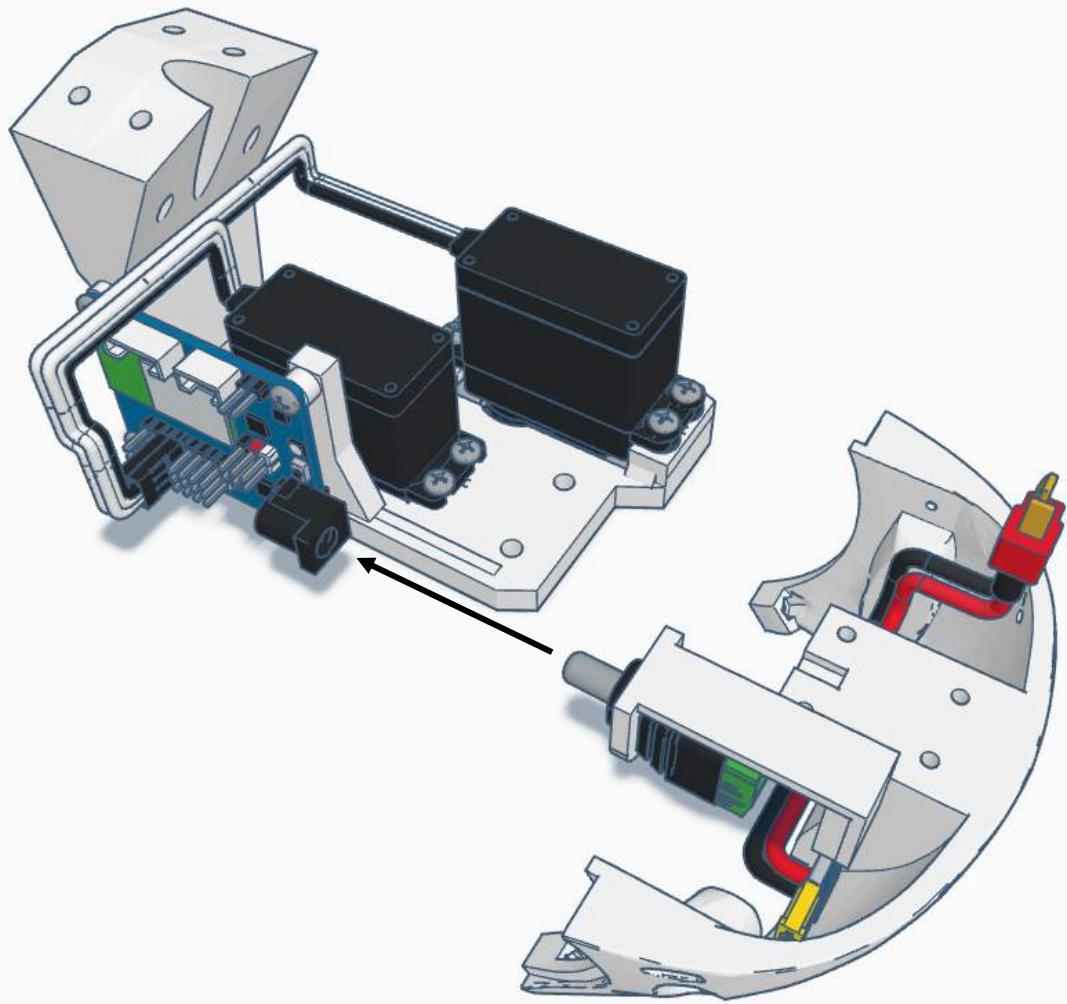






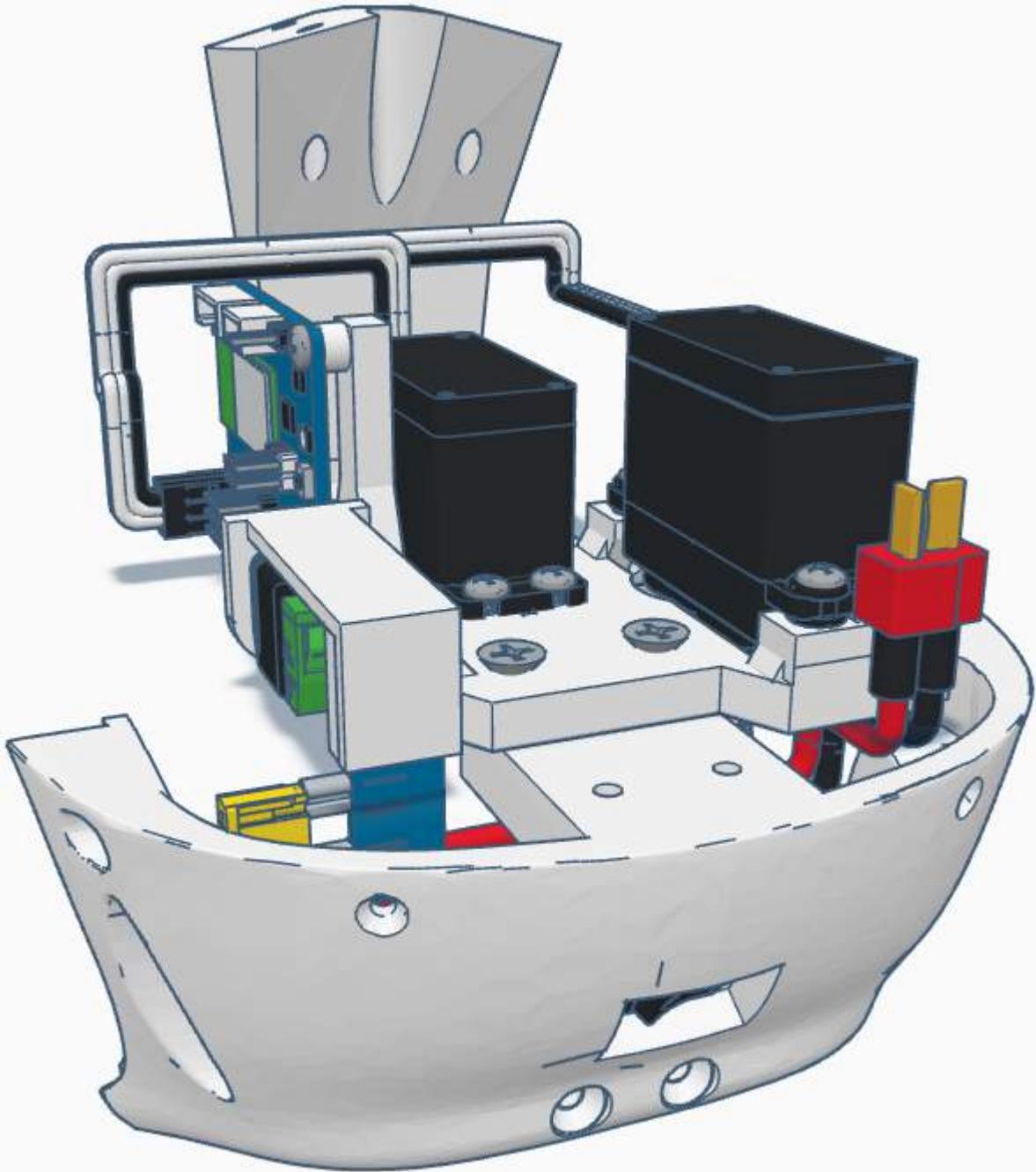
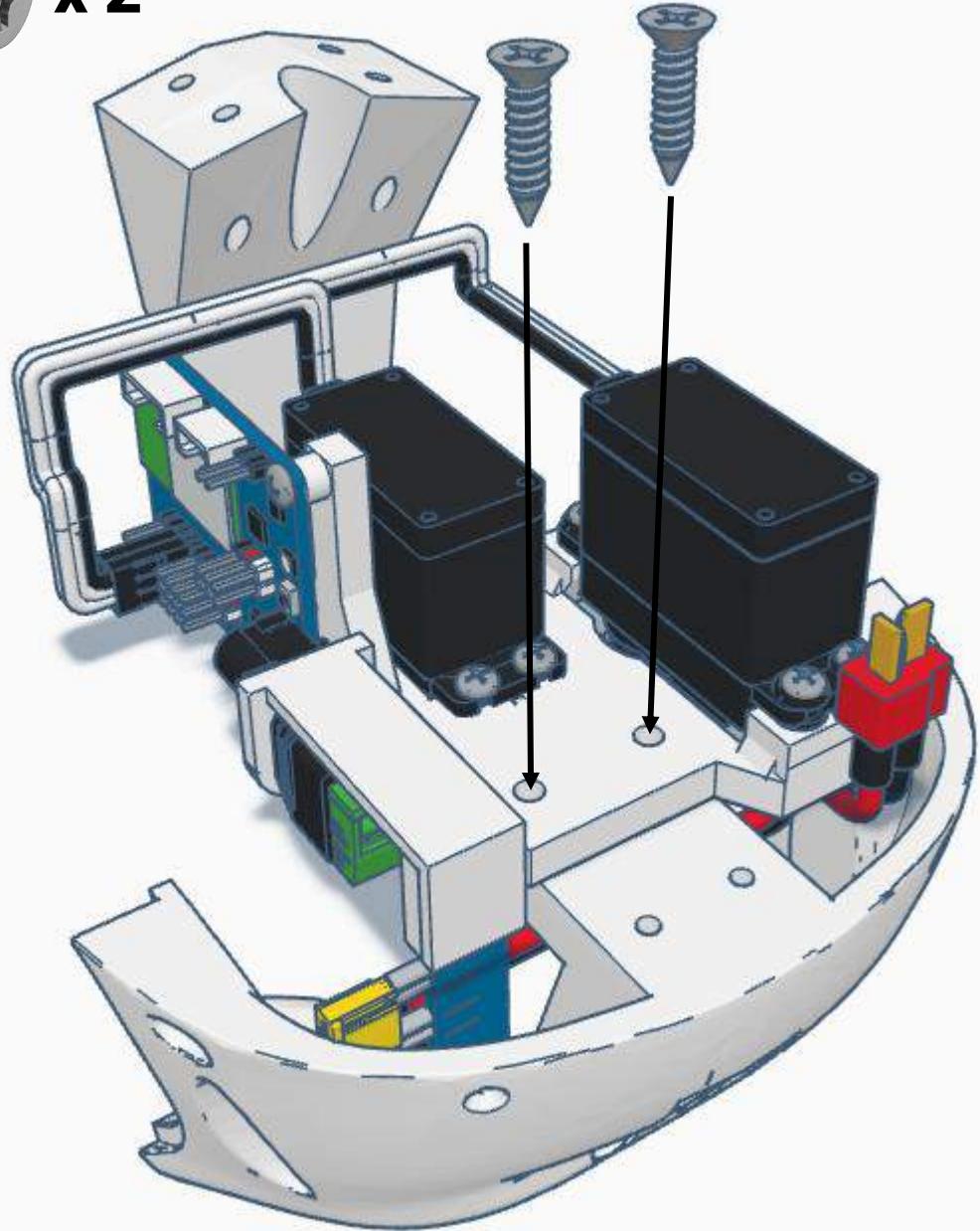


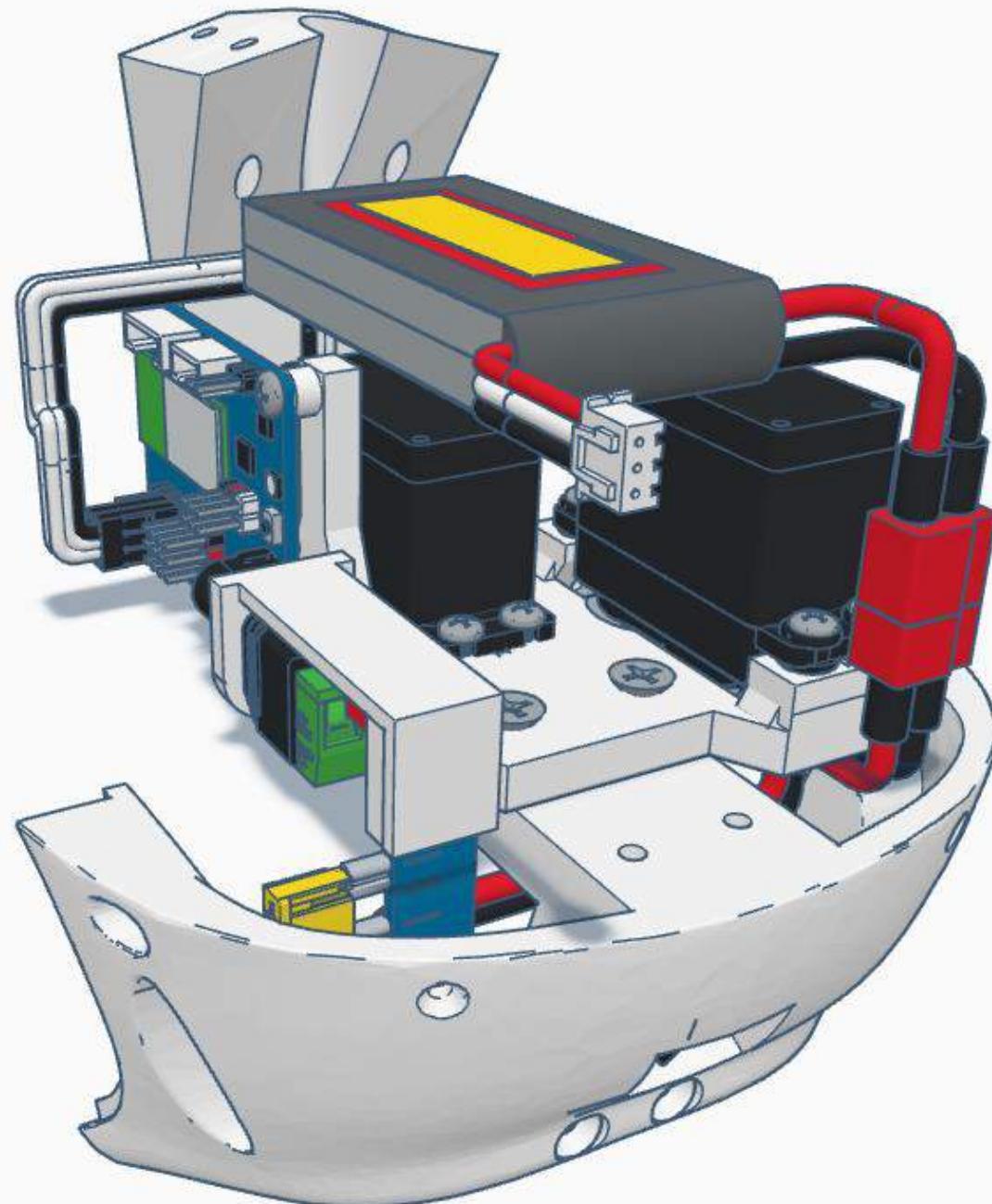
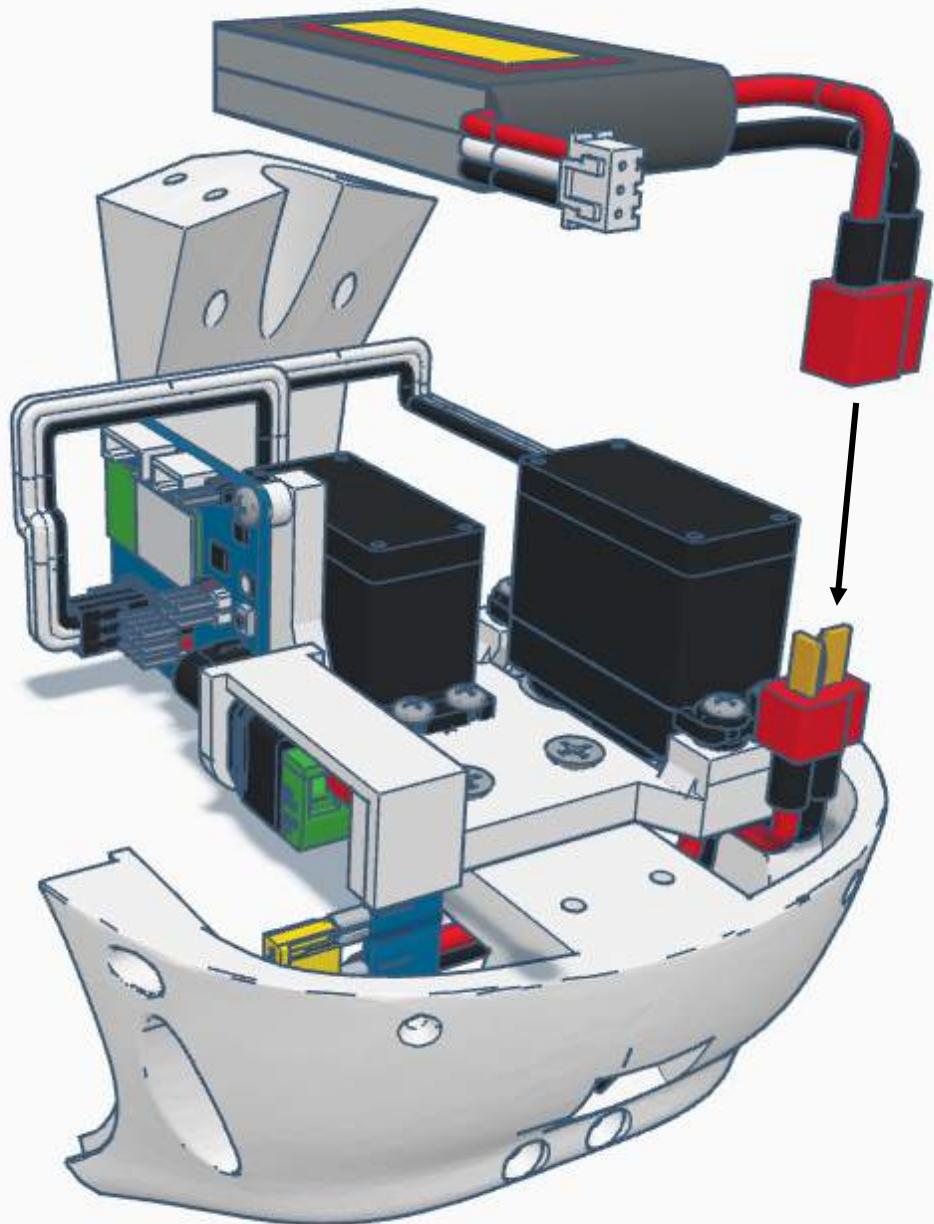


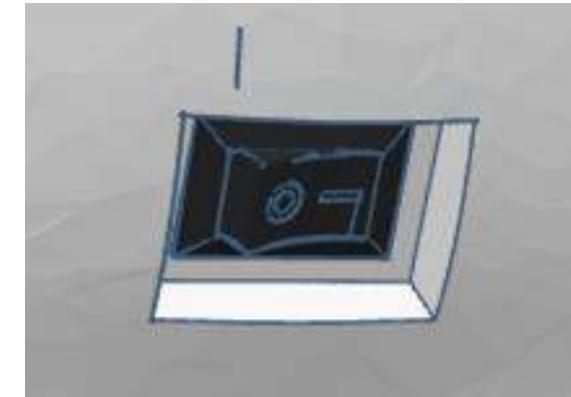
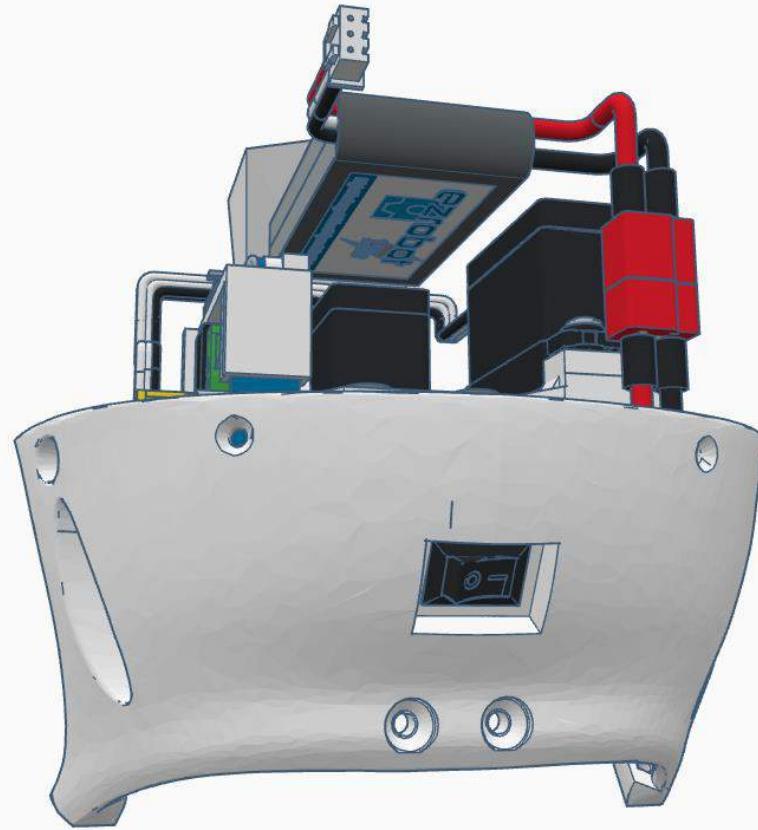
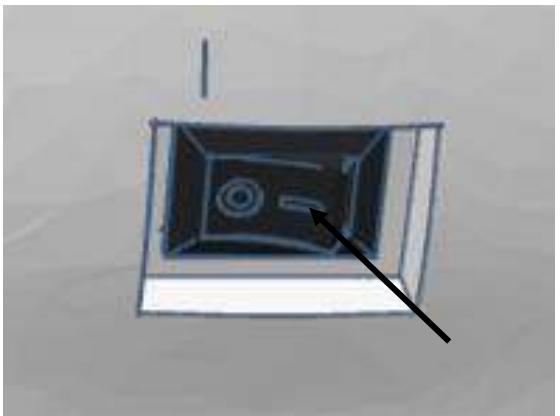




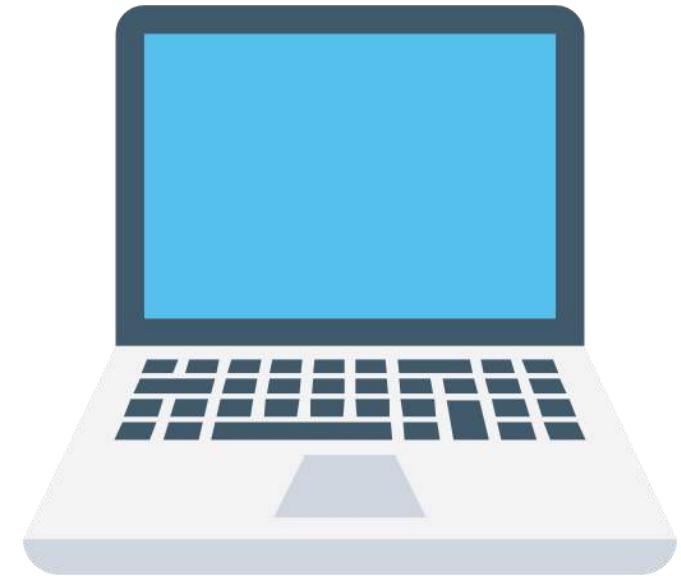
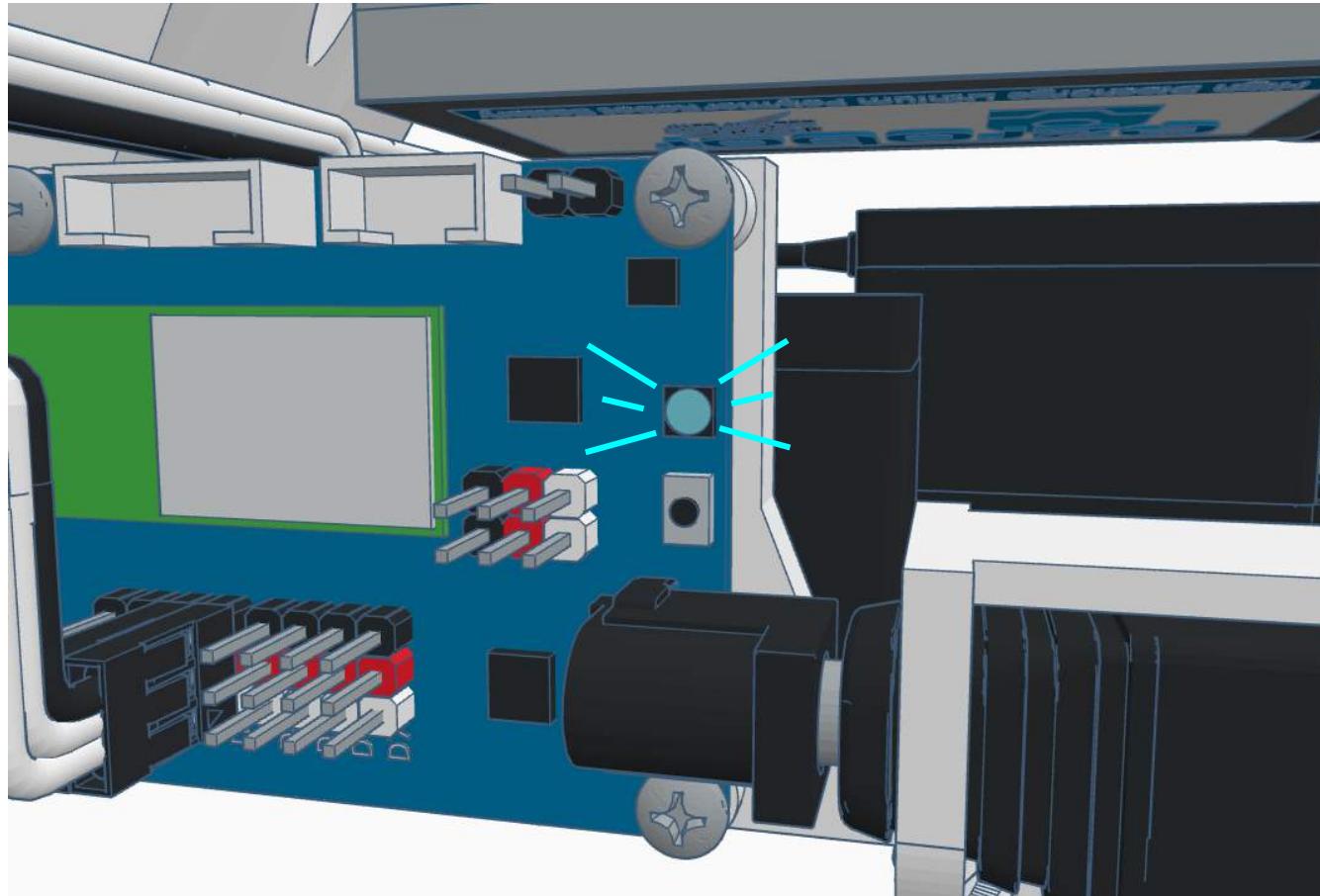
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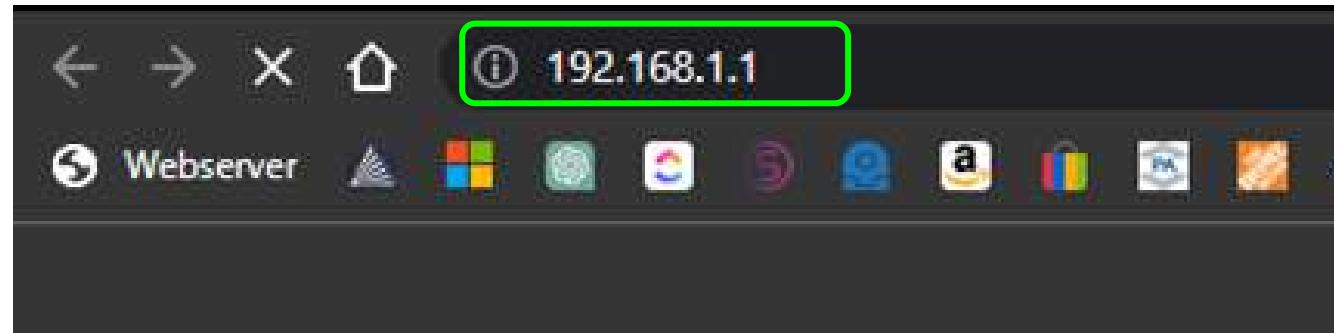






BLUE FLASHING LED ON IOTINY = READY TO CONNECT TO COMPUTER





A screenshot of the IoTiny web interface. The left sidebar has a 'Main Menu' with the following items: Main Menu, Wi-Fi AP Mode, Wi-Fi Client Mode, General Settings, Advanced Settings, and Diagnostics. The 'Wi-Fi AP Mode' item is currently selected and highlighted in blue. The main content area is titled 'IoTiny' and contains the following information:

IoTiny

Introduction: Welcome to IoTiny! This web interface allows you to configure IoTiny's settings. For more information about IoTiny, connect to the internet and visit www.ez-robot.com.

Current Configuration

System Name	EZ-B v4 IoTiny
SSID	EZ-B v4 IoTiny d0bae4103a58
WiFi Mode	Custom AP Mode (Ad-Hoc)
Model	EZ-B v4 IoTiny
Version	WiFi 3165 v2018.09.30.00

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.

Access Point (AP) Mode

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.

Client Mode

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

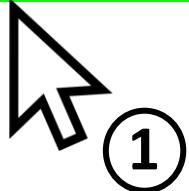
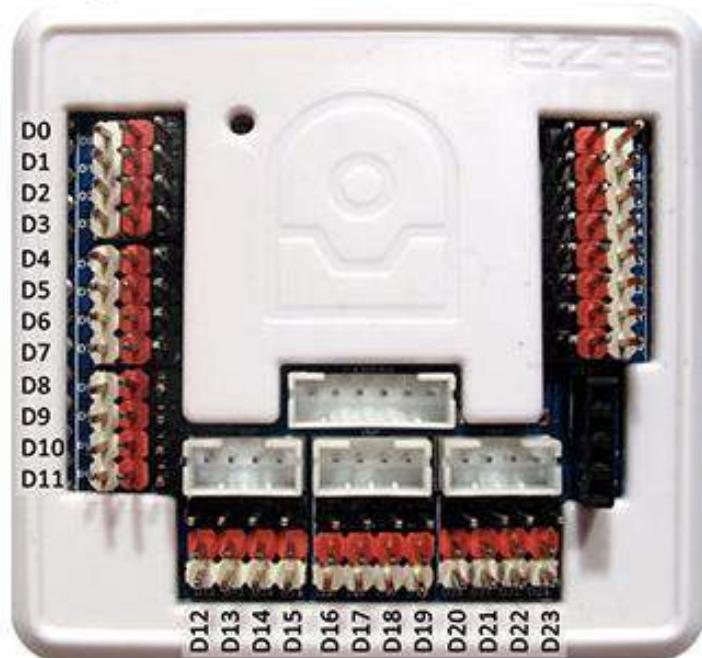
Wi-Fi Client Mode

General Settings

Advanced Settings

Diagnostics

Diagnostics



1

All Servo Ports Release

All Servo Ports to 1 Degree

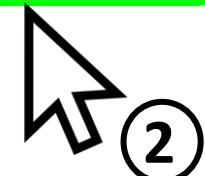
All Servo Ports to 90 Degrees

All Servo Ports to 180 Degree

Alternating Digital I/O Mode 1

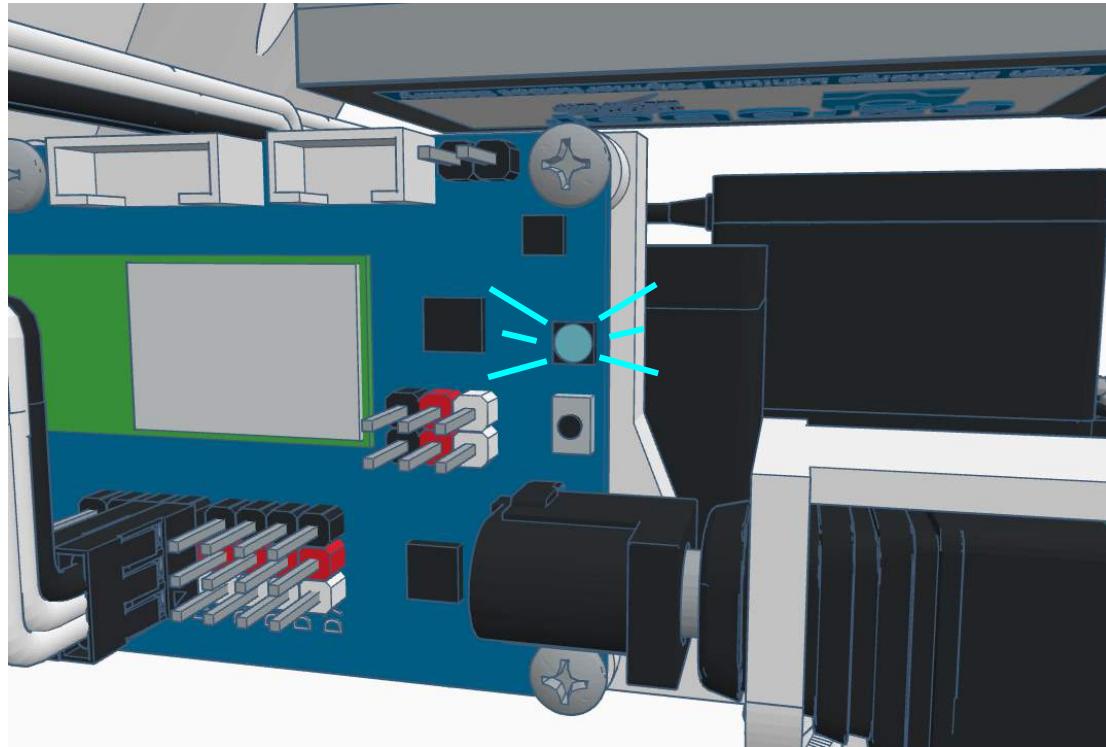
Alternating Digital I/O Mode 2

Reboot EZ-B

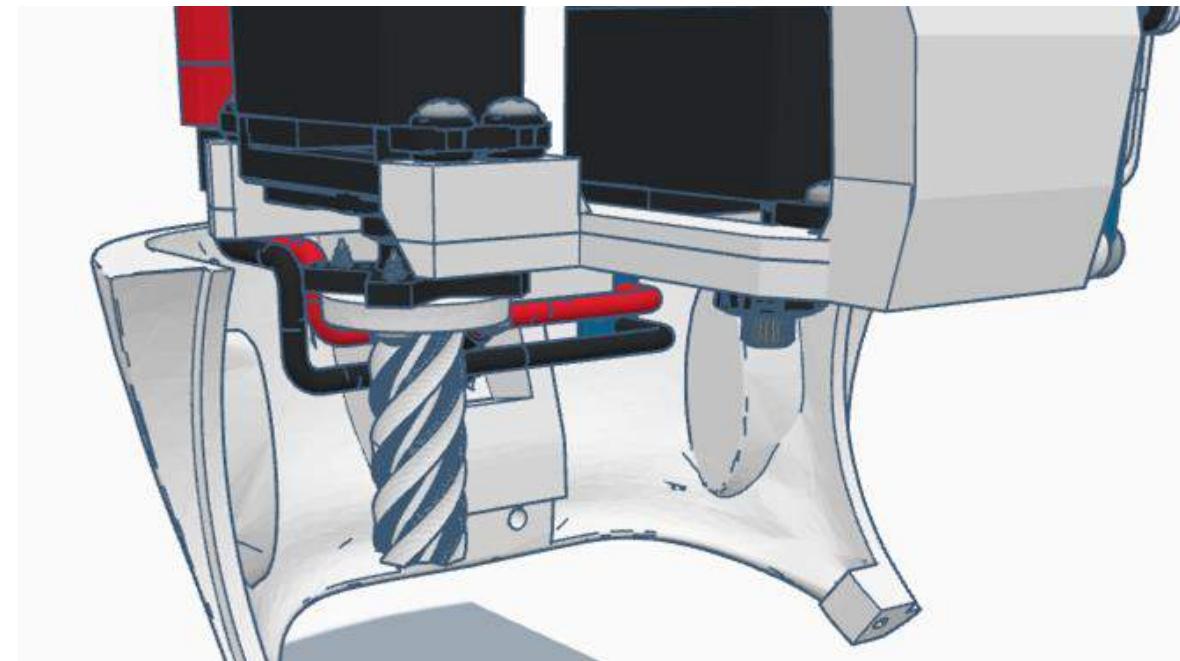


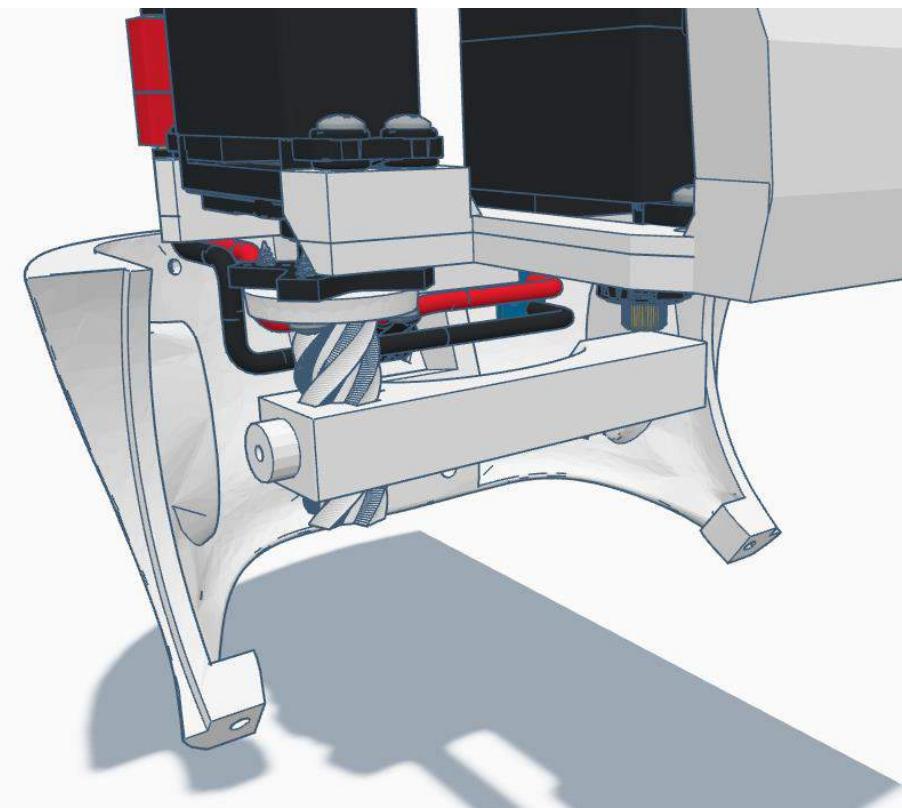
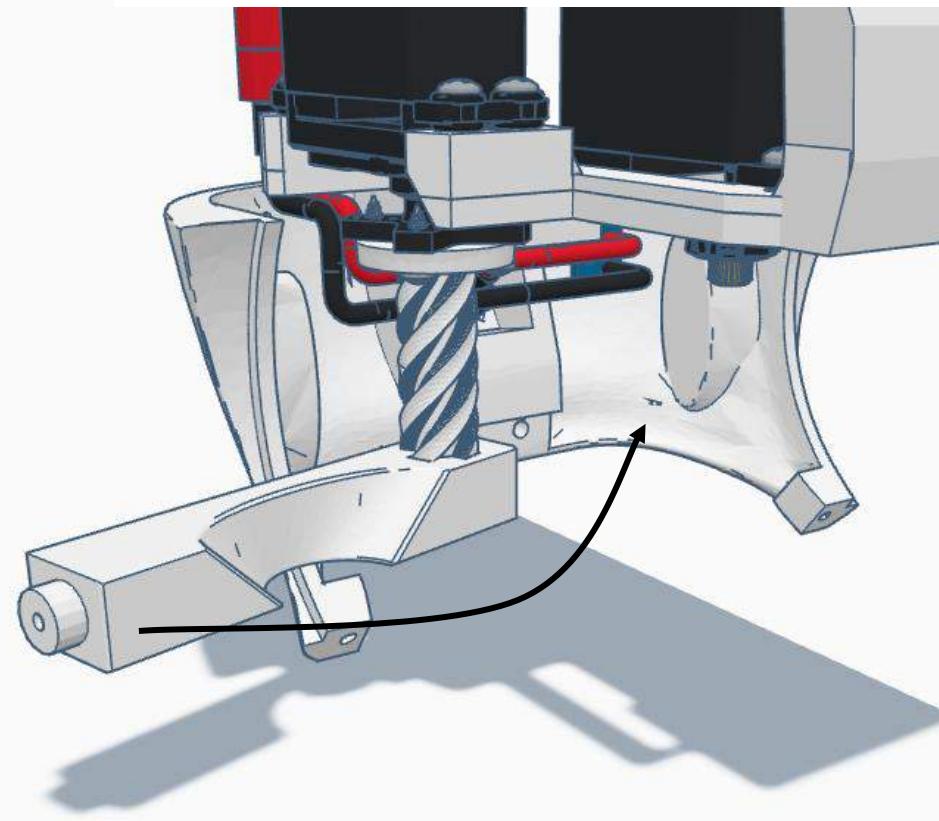
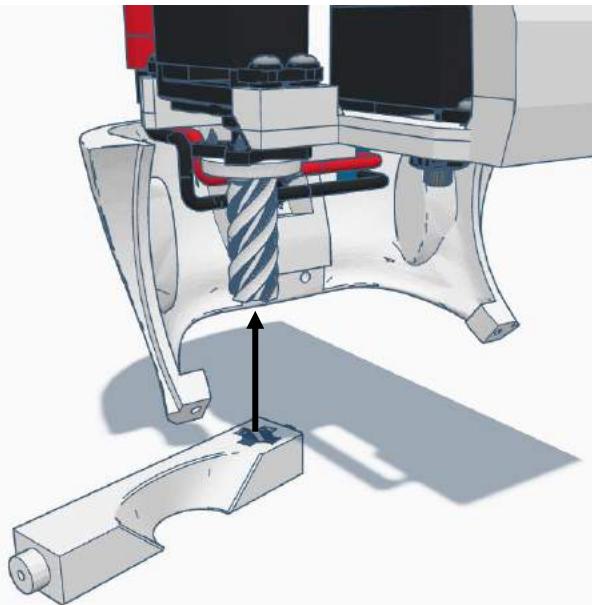
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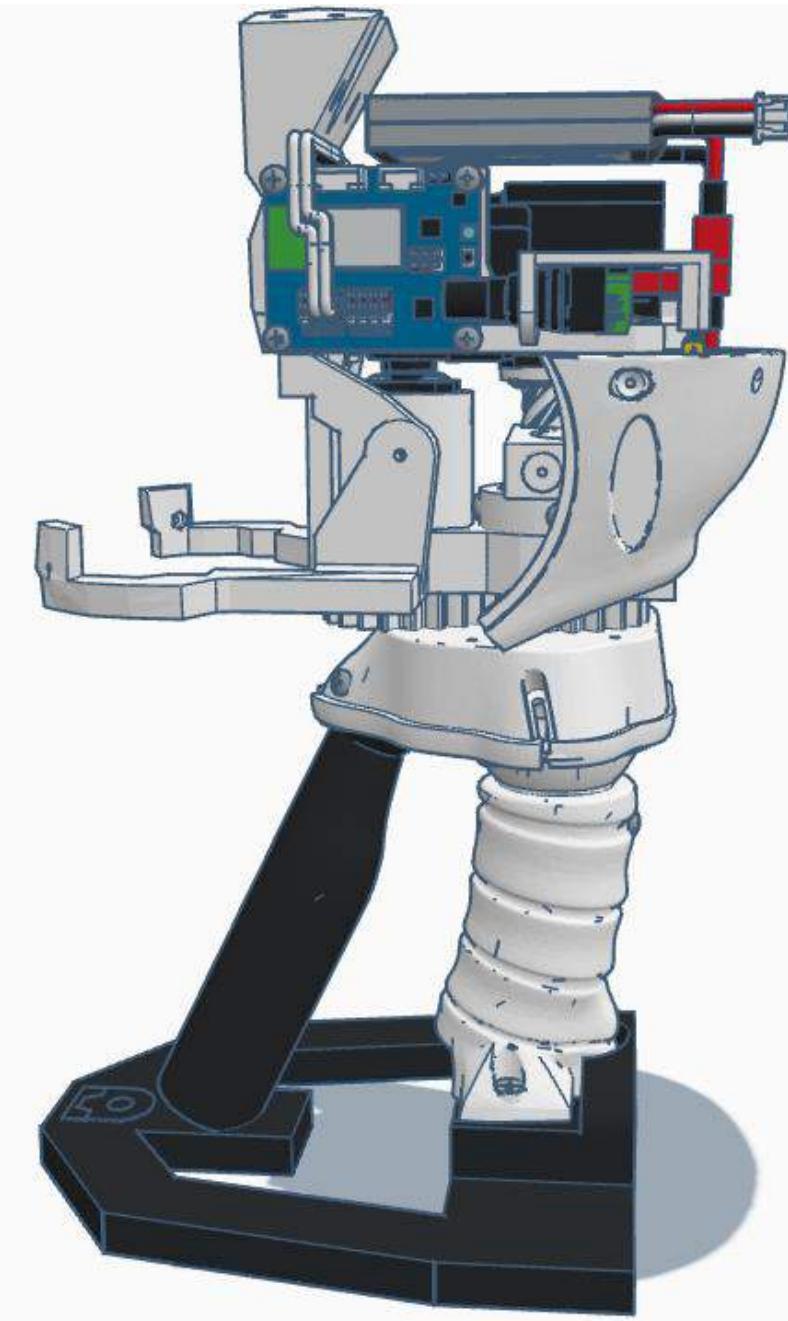
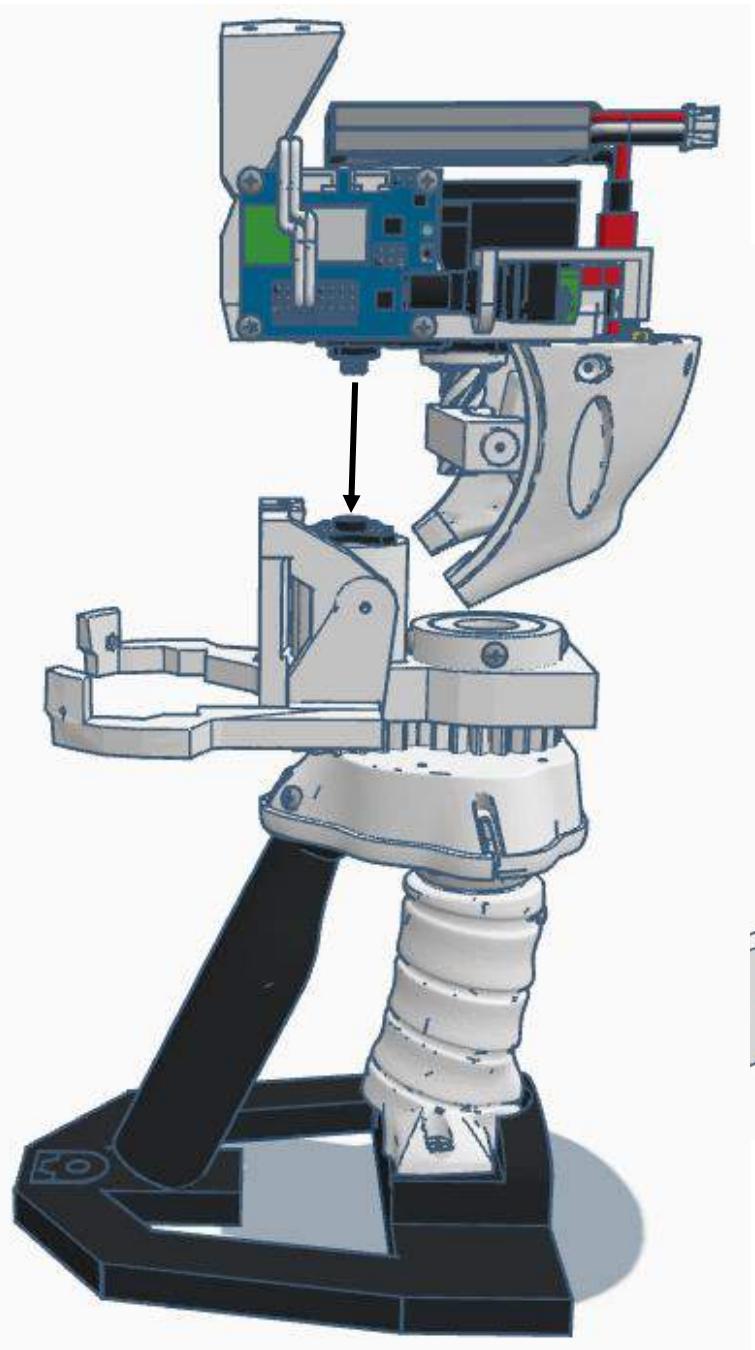
LED WILL CONTINUE TO FLASH BLUE ON IOTINY



SERVOS WILL MOVE TO 90 DEGREE POSITION







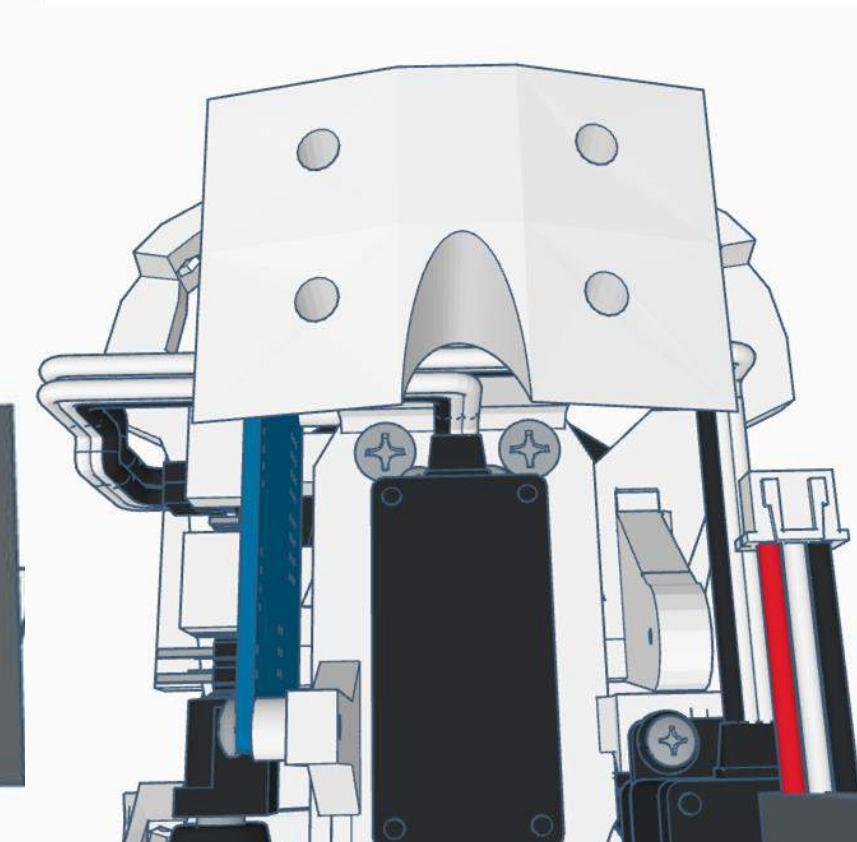
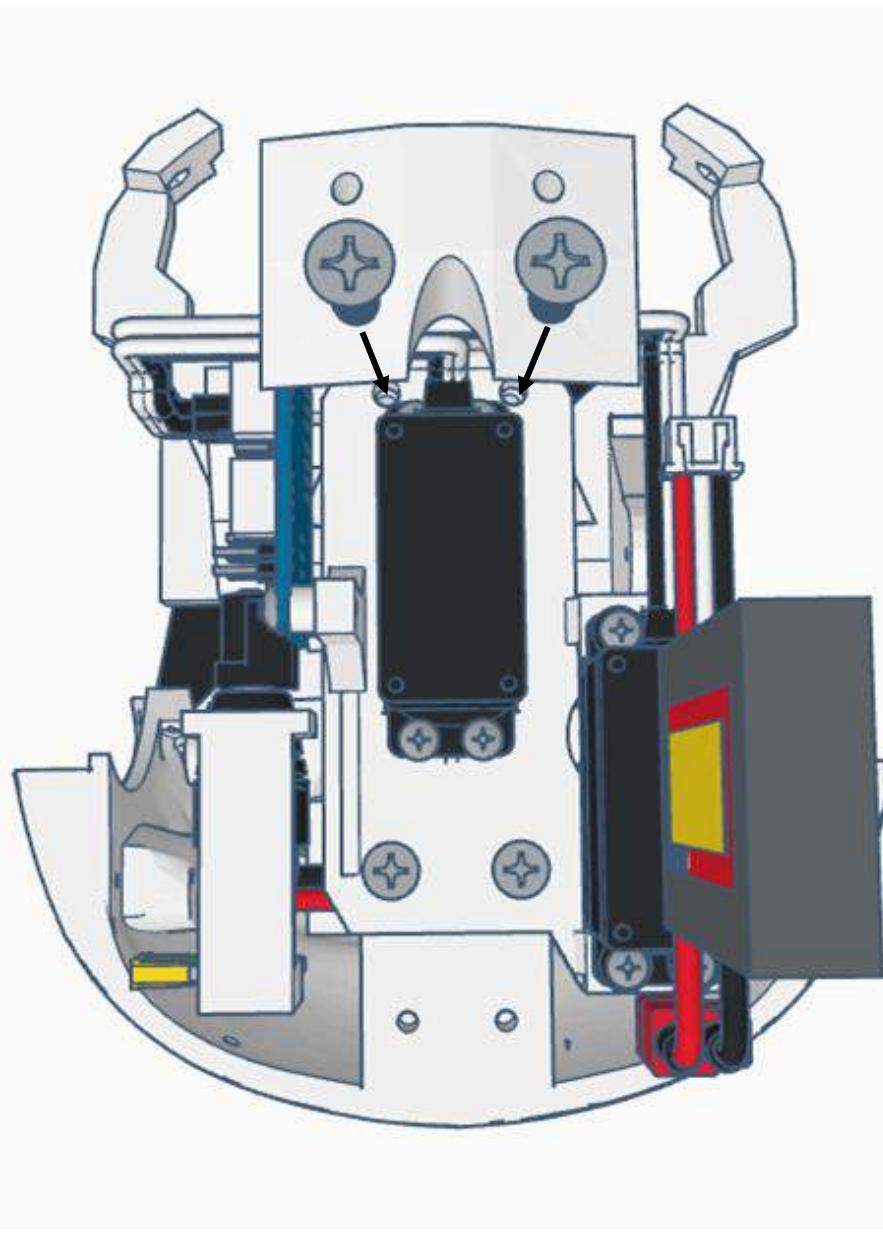
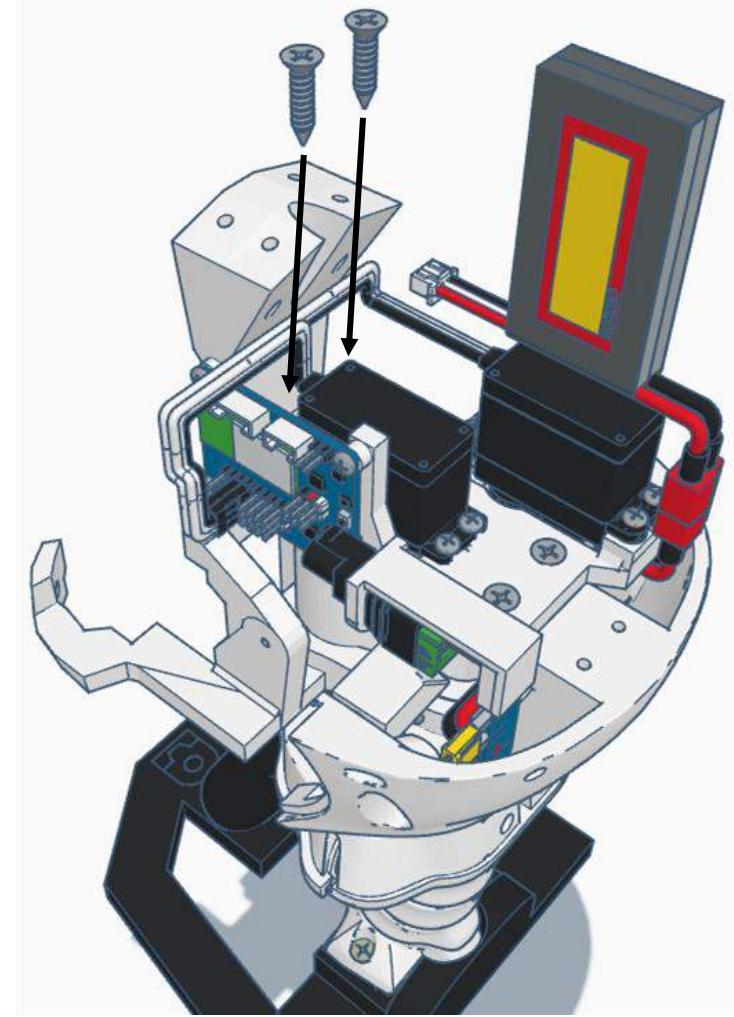


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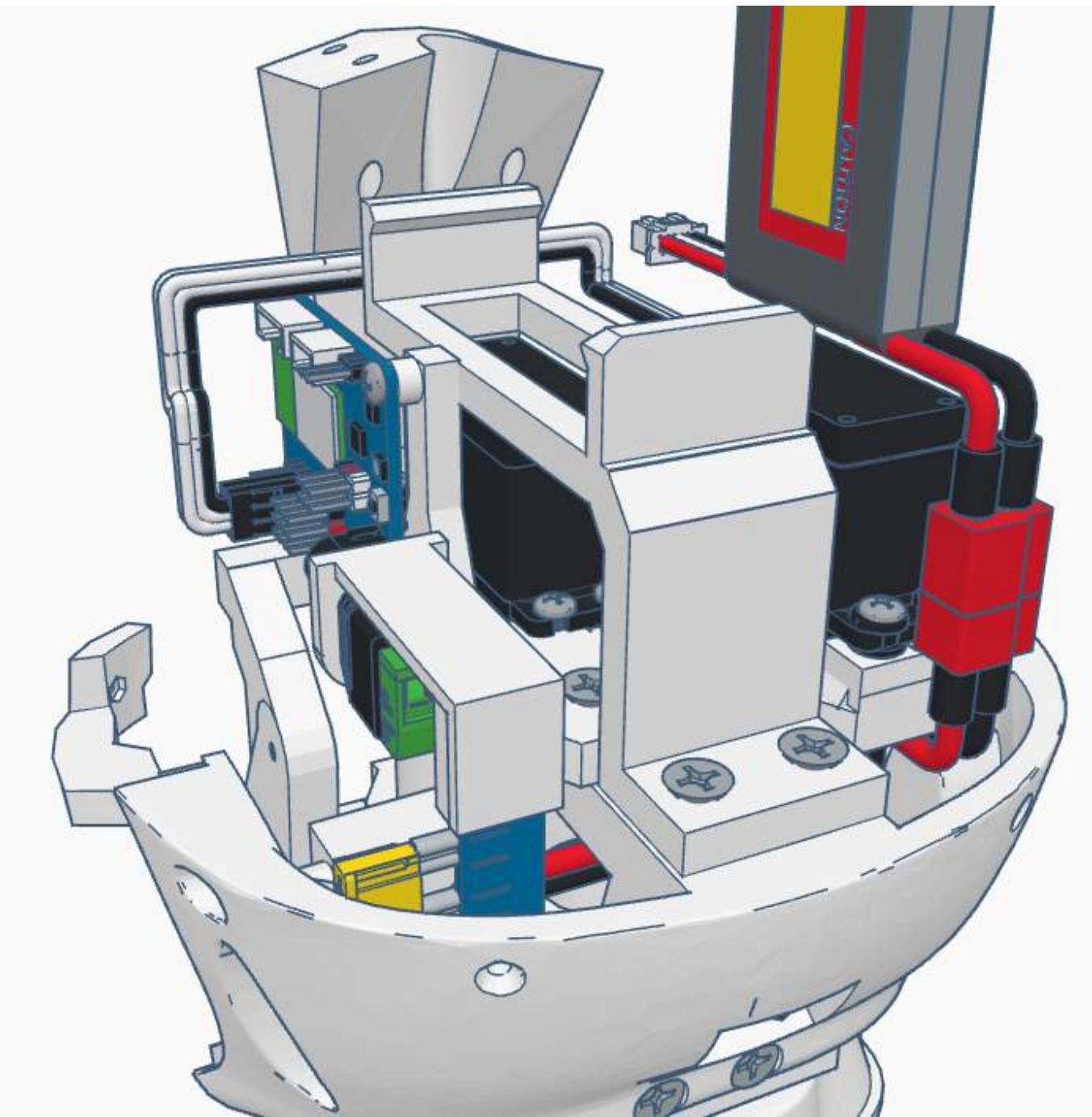
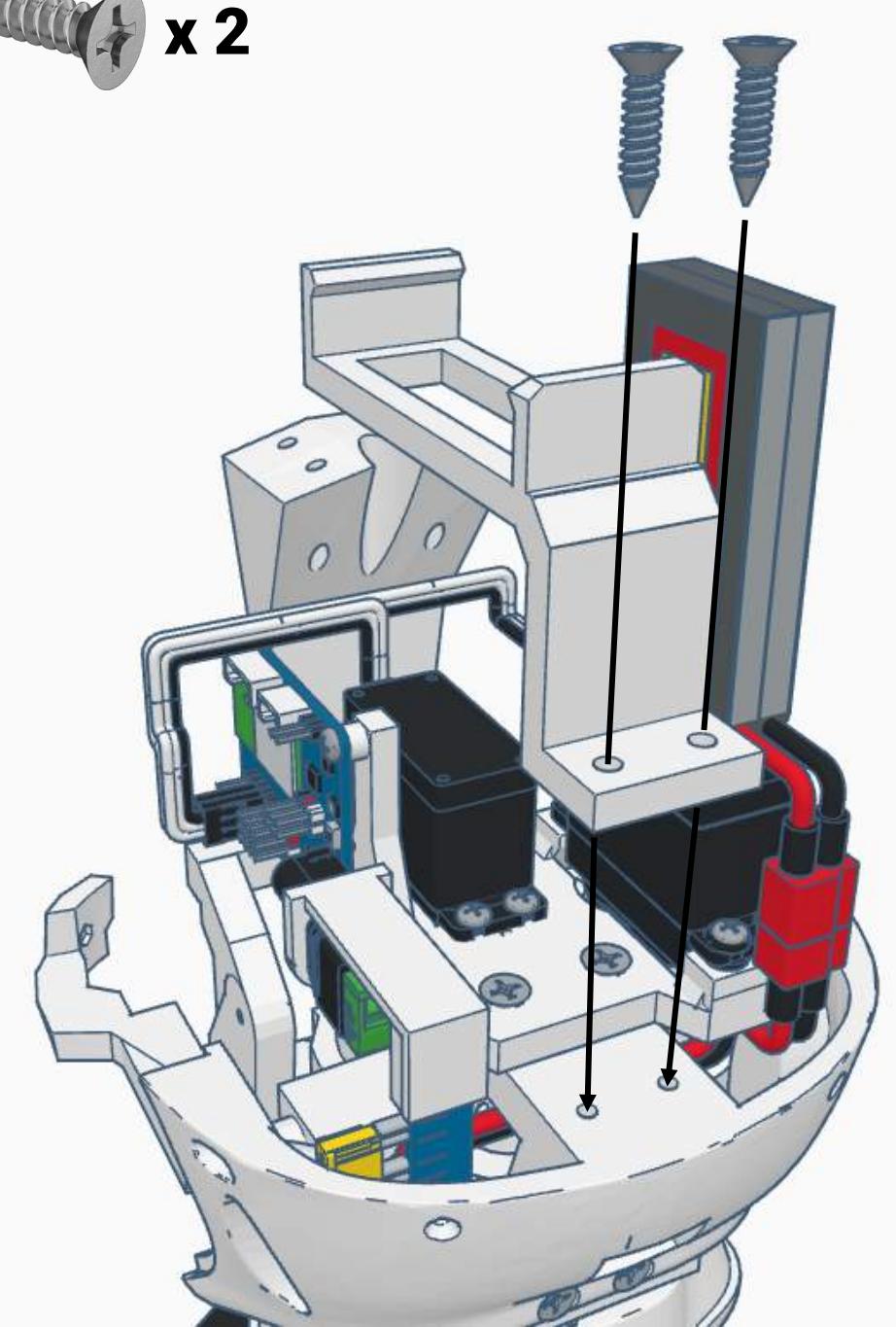


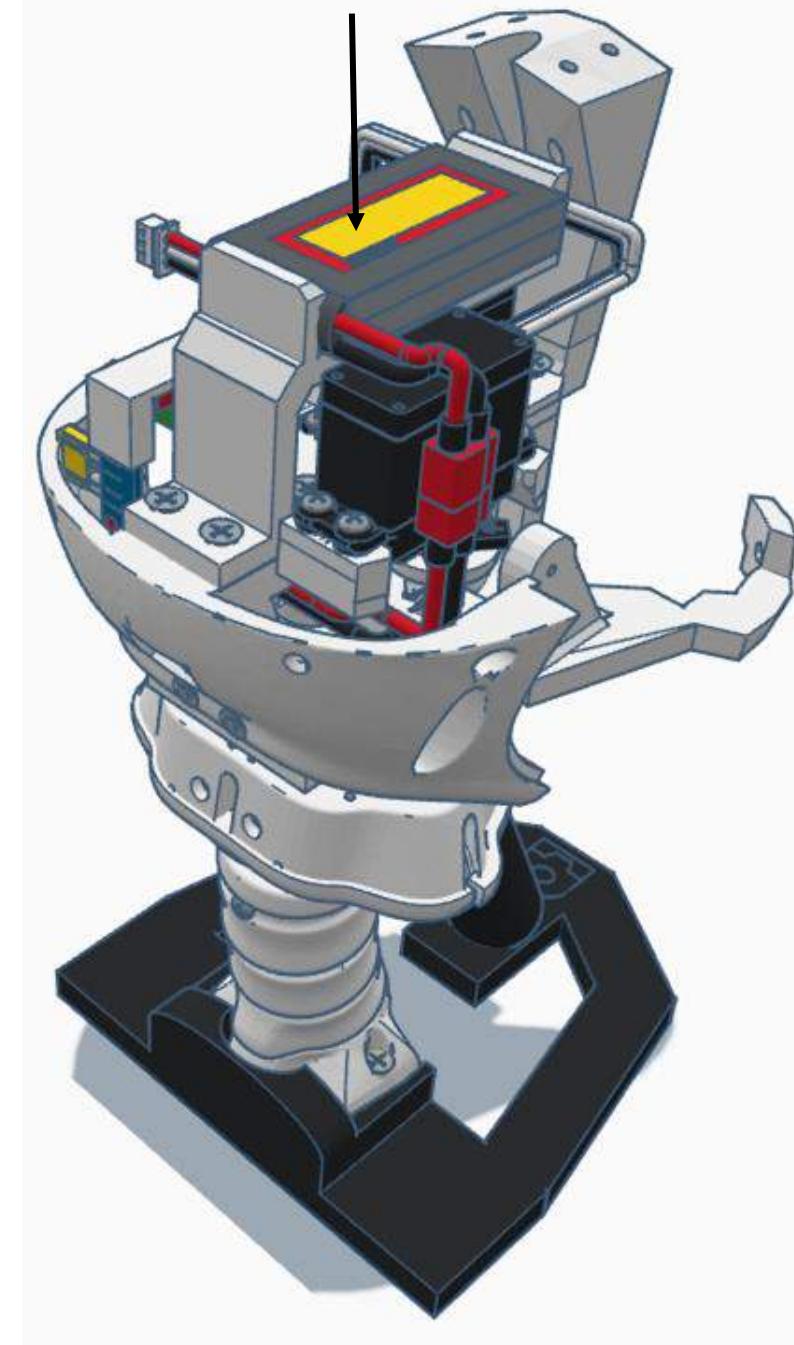
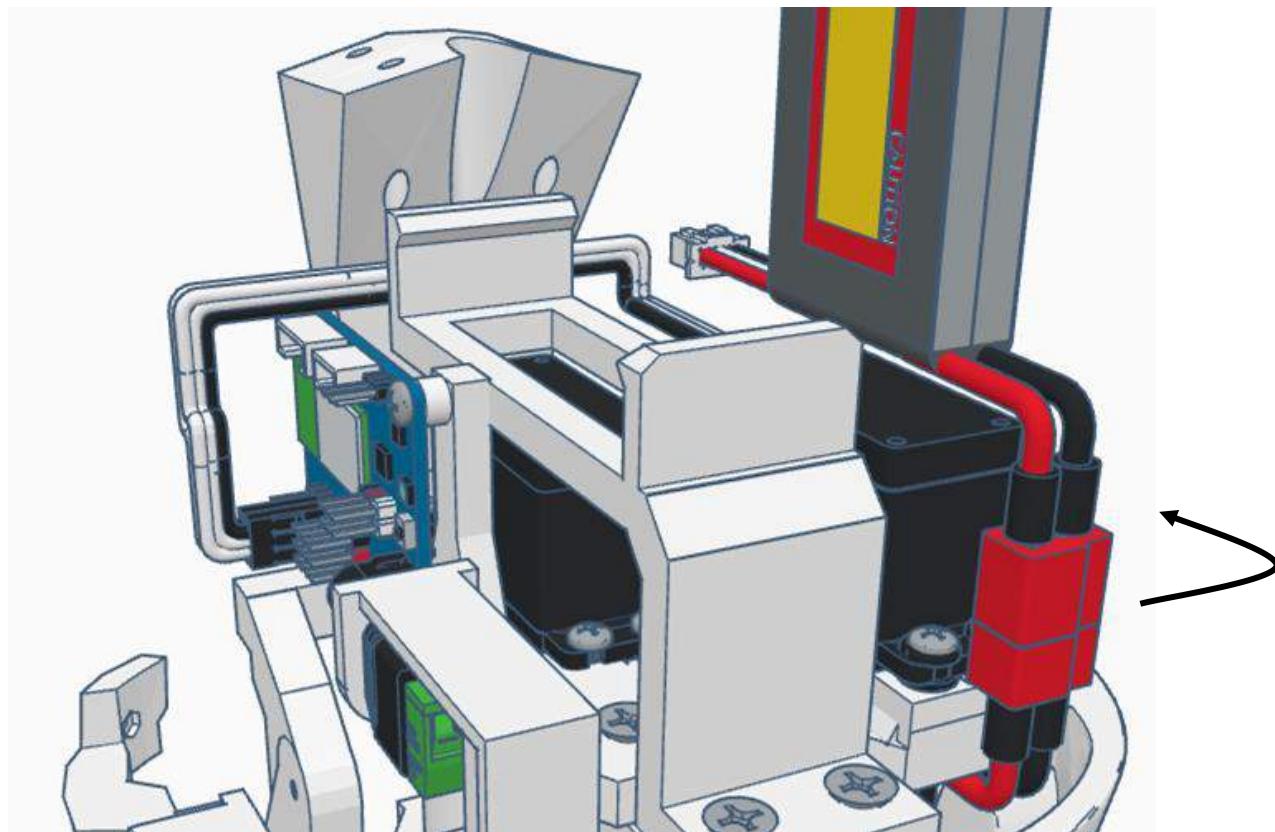
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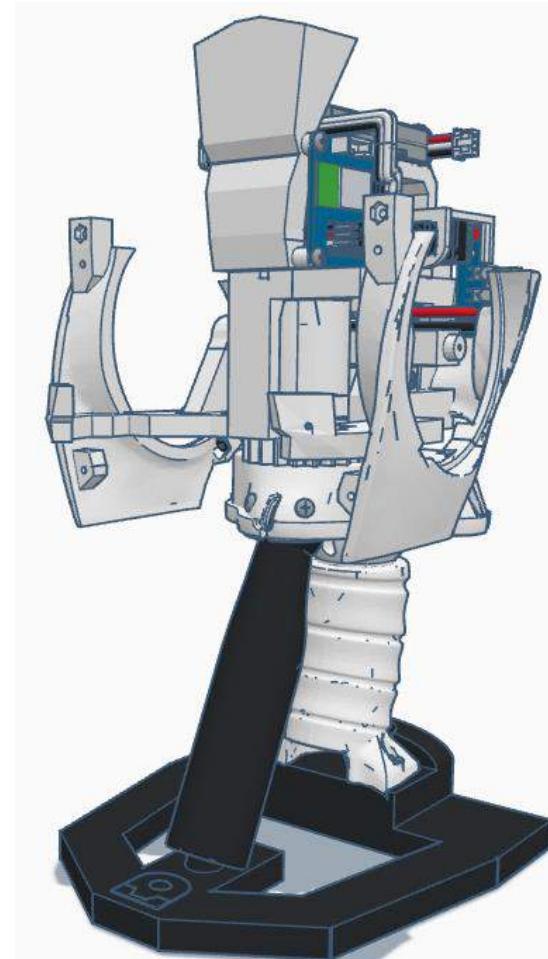
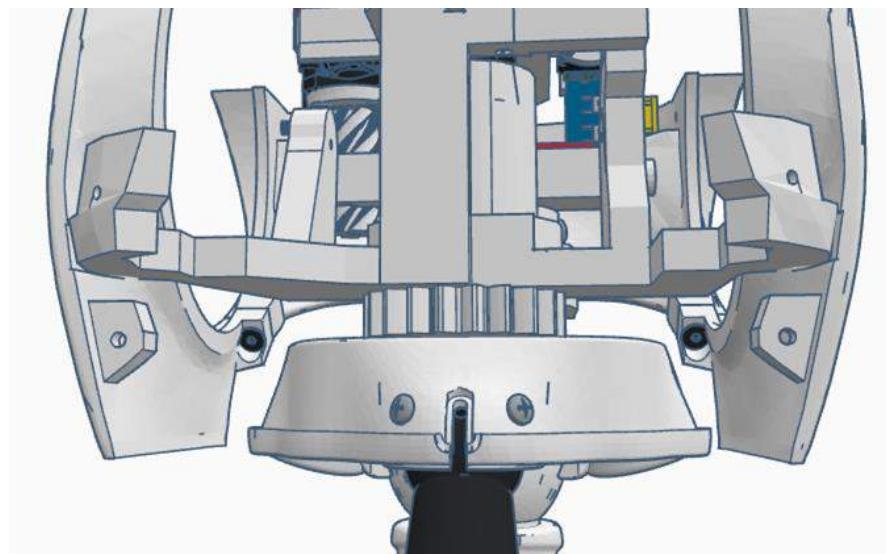
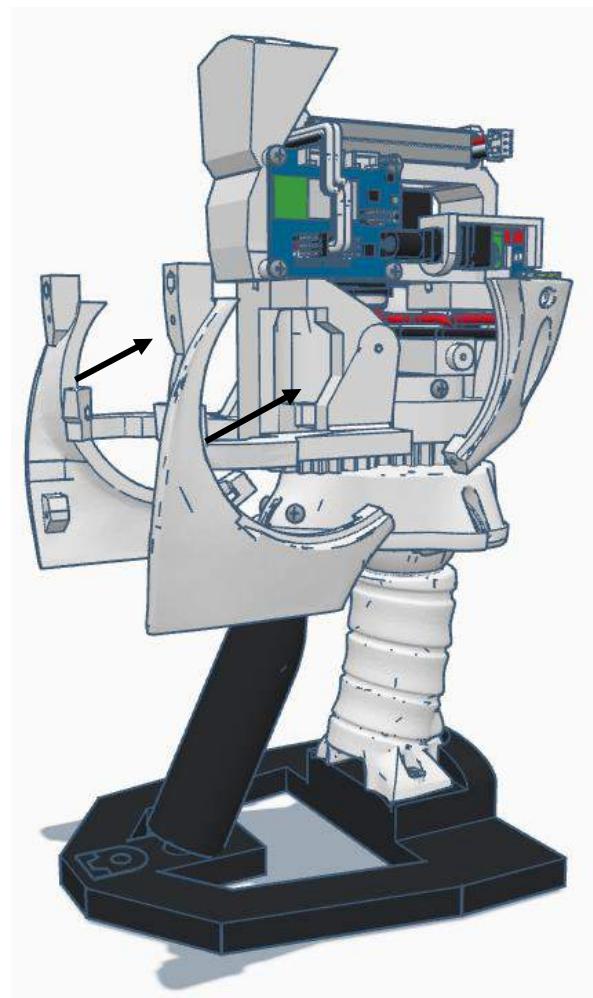




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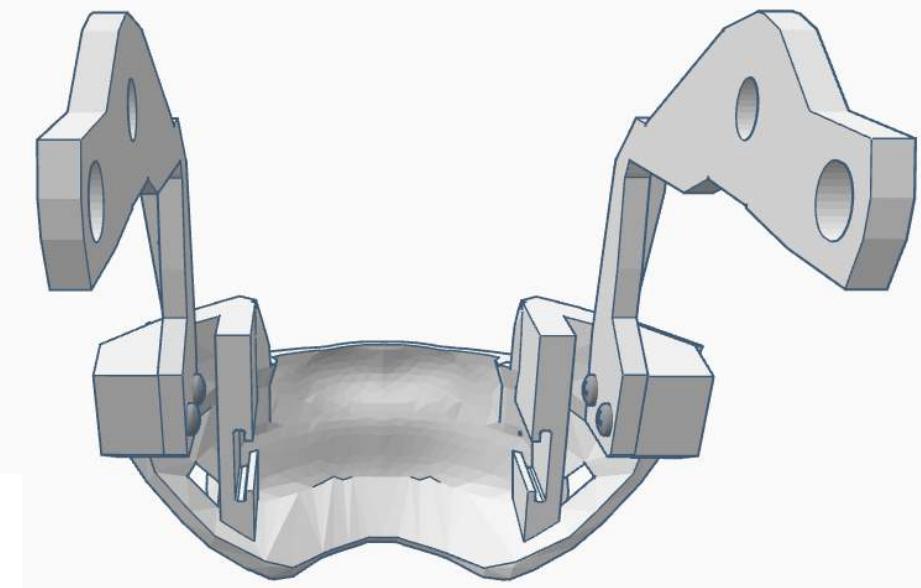
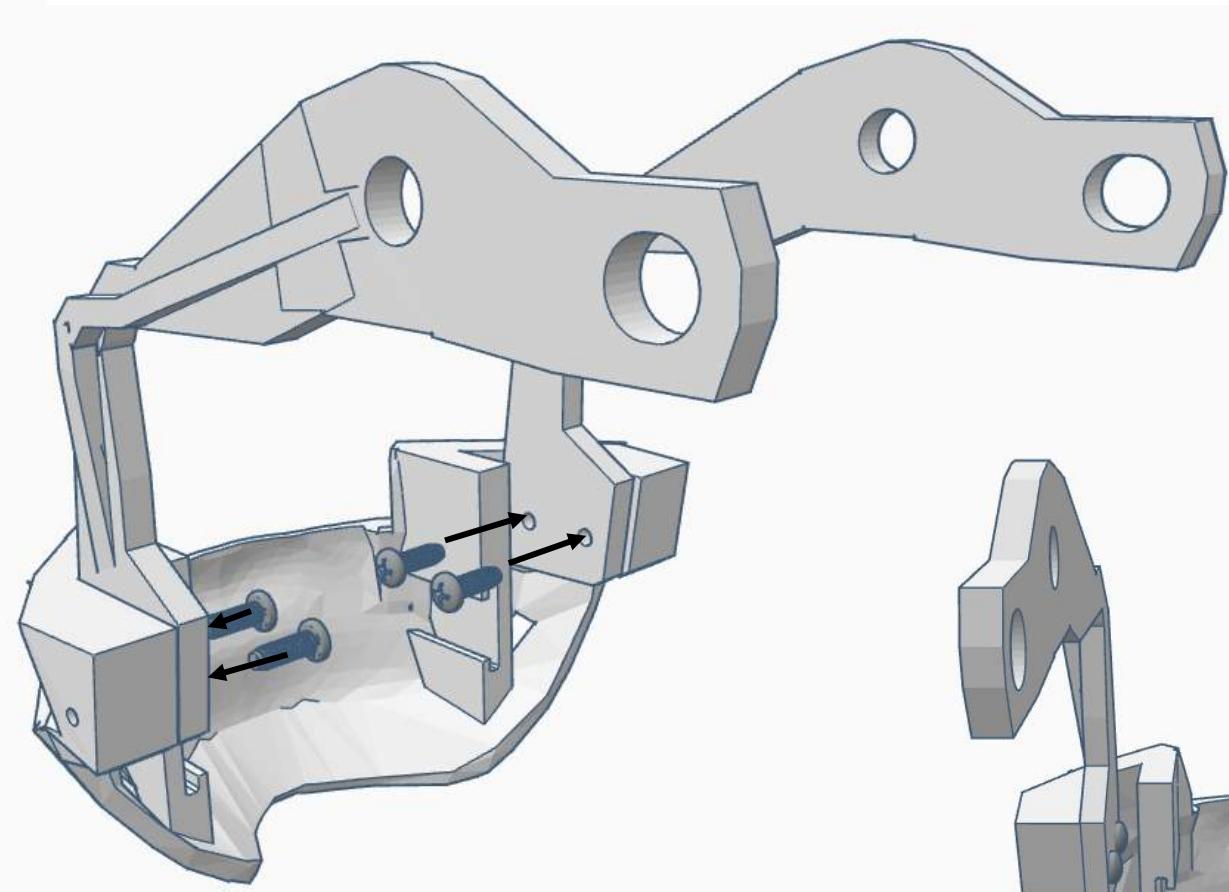
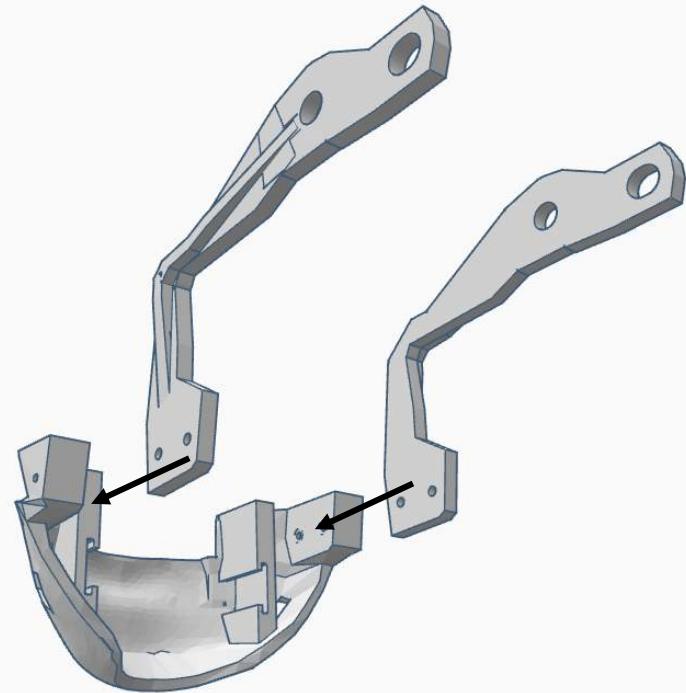


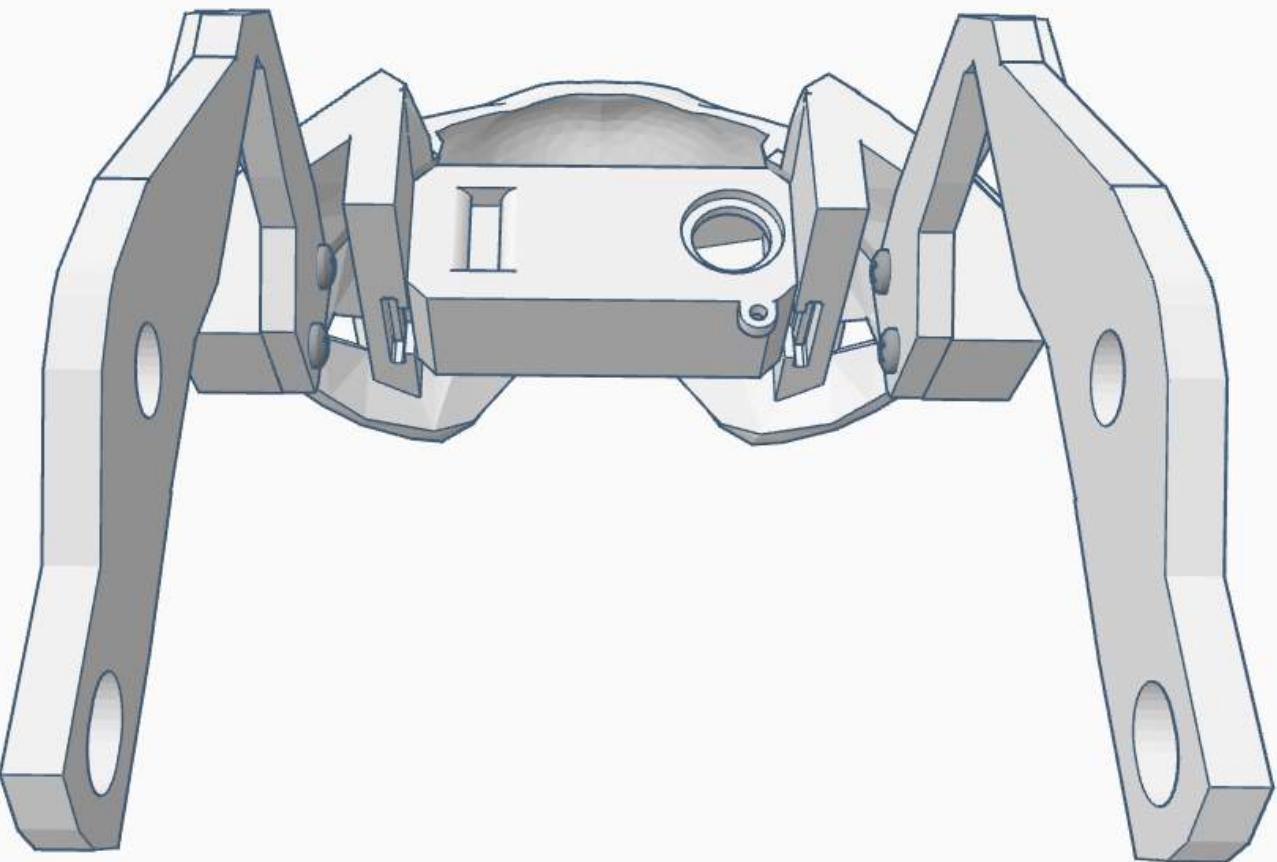
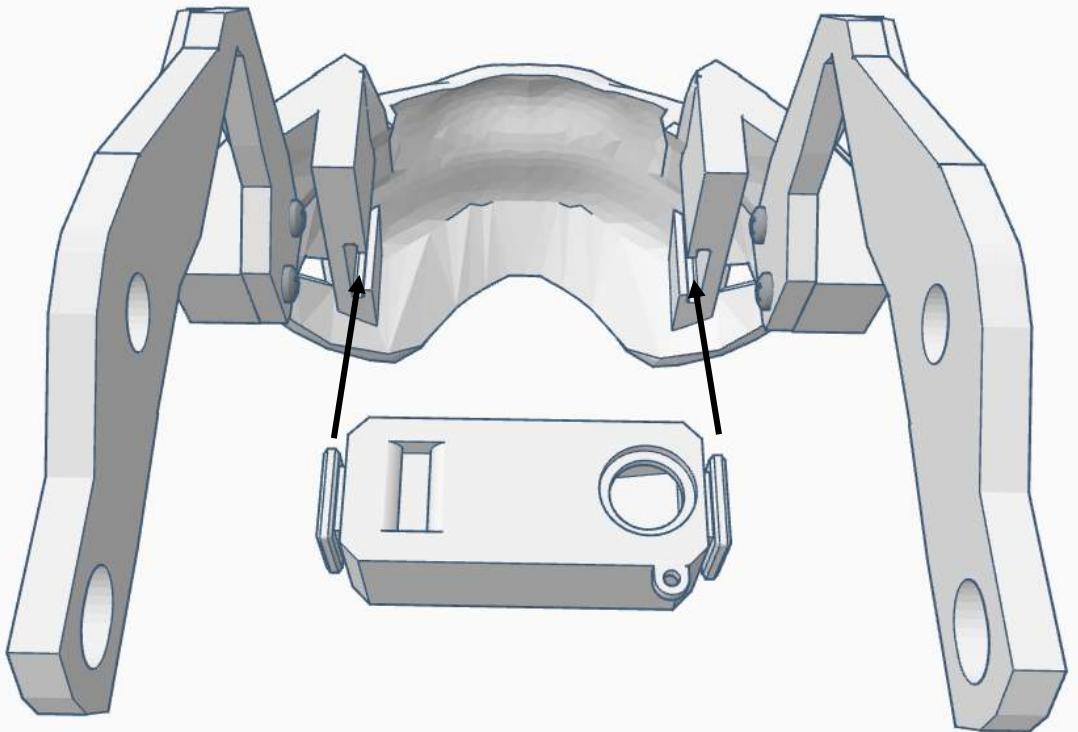




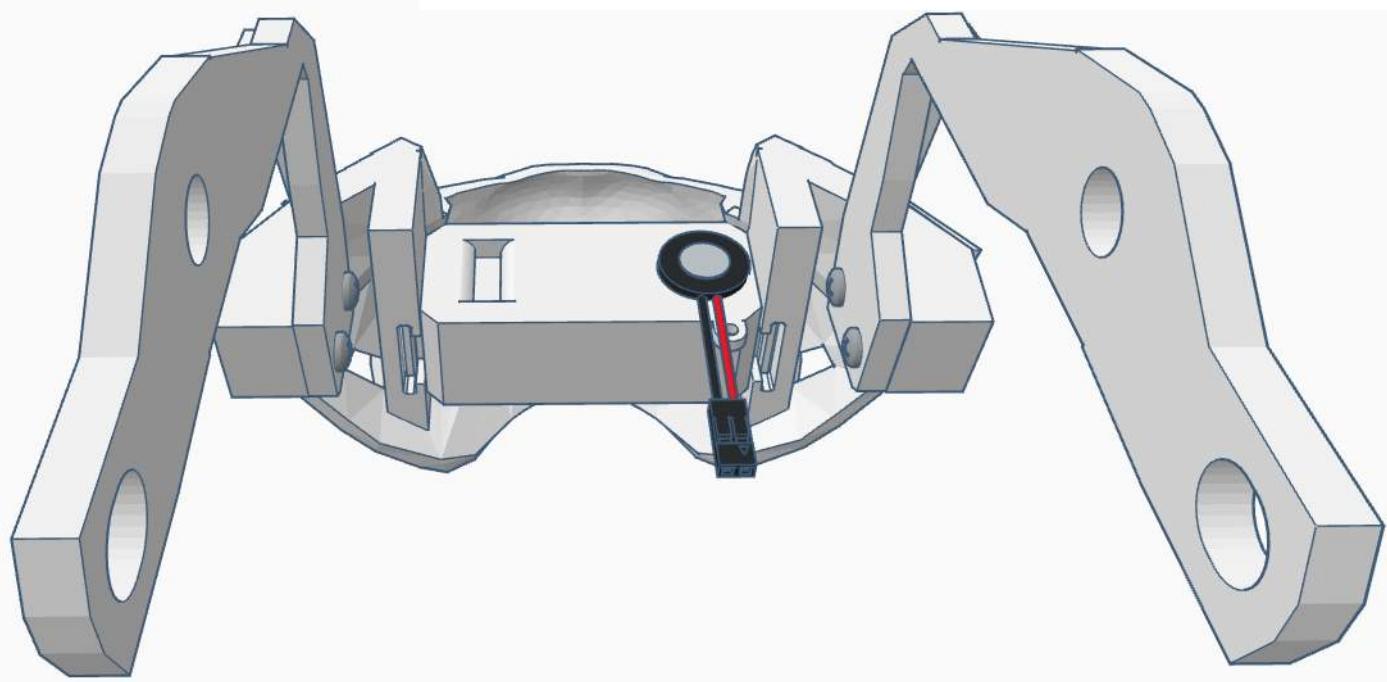
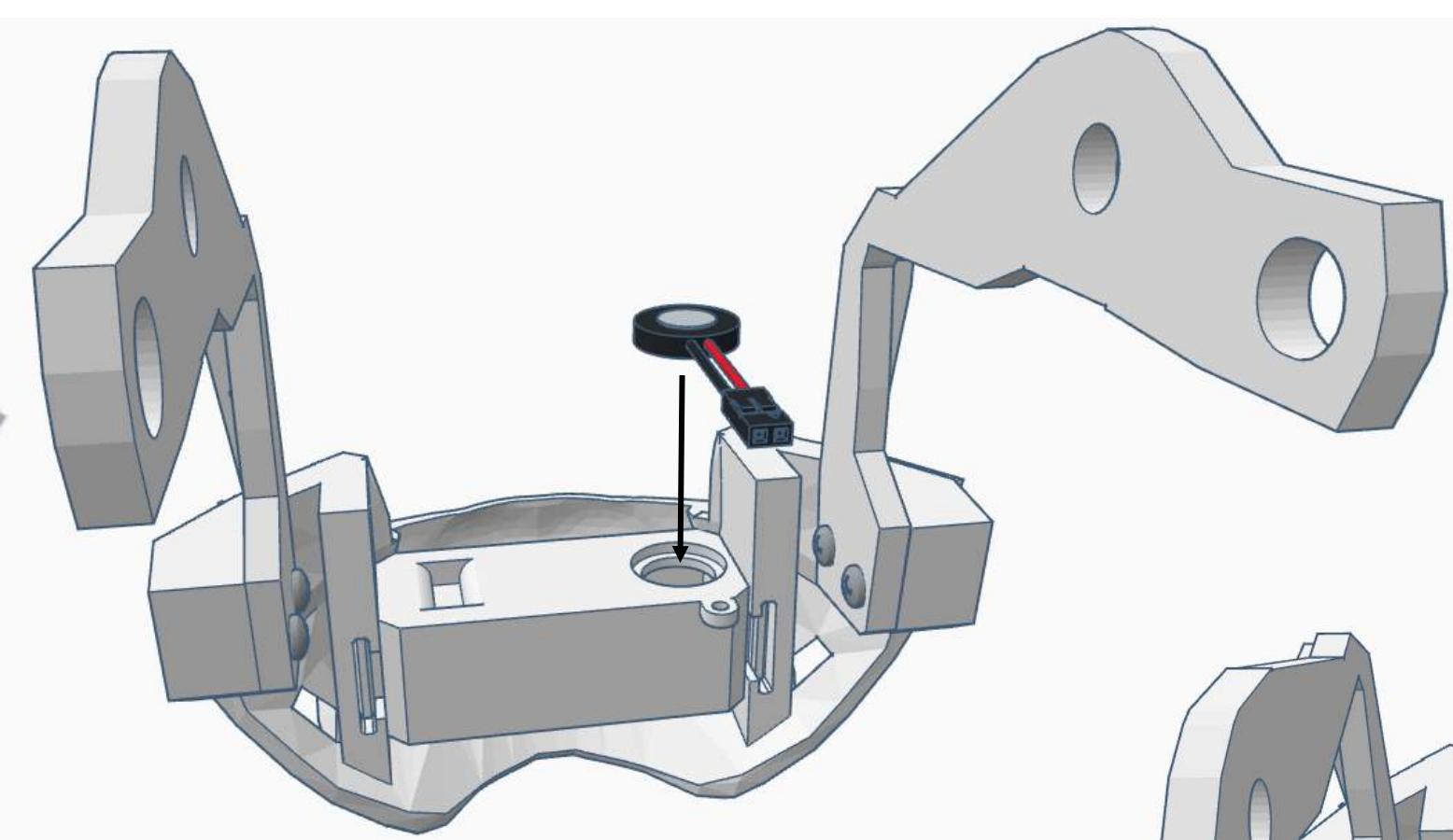


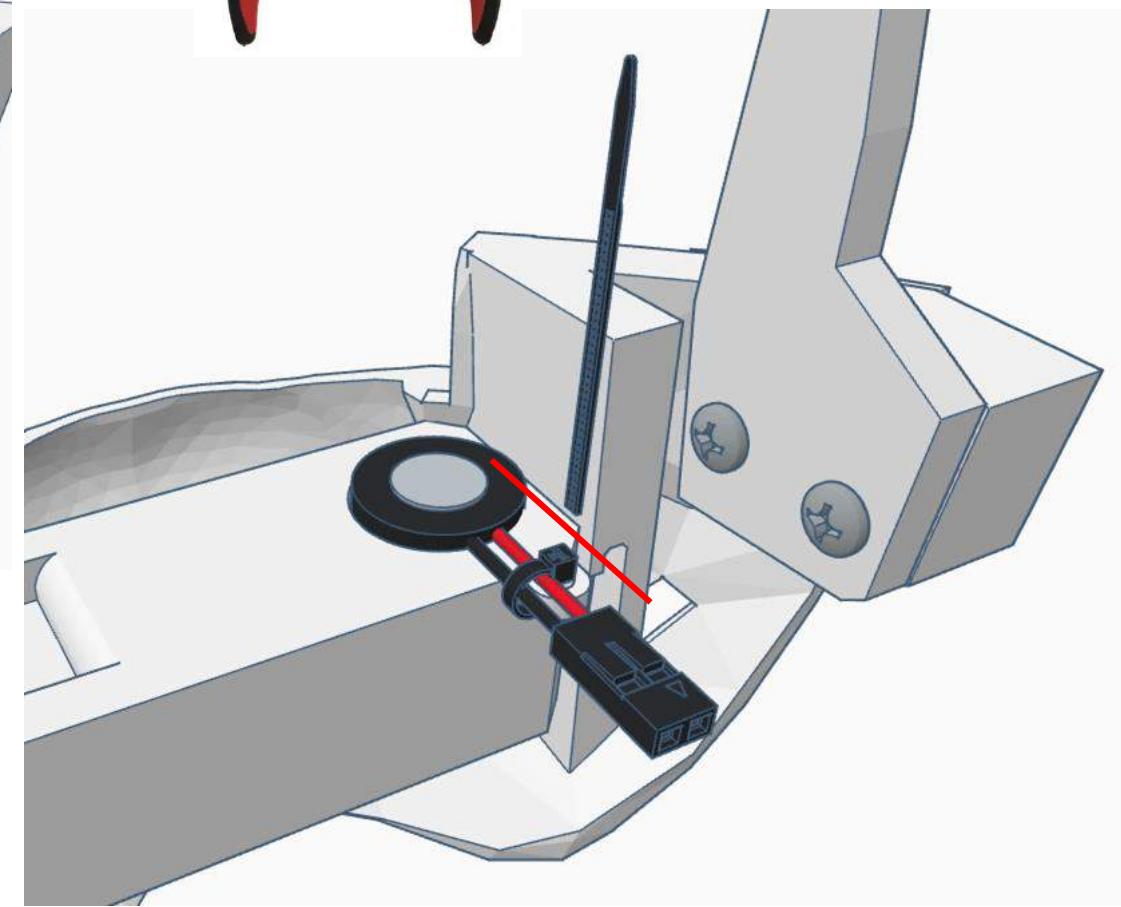
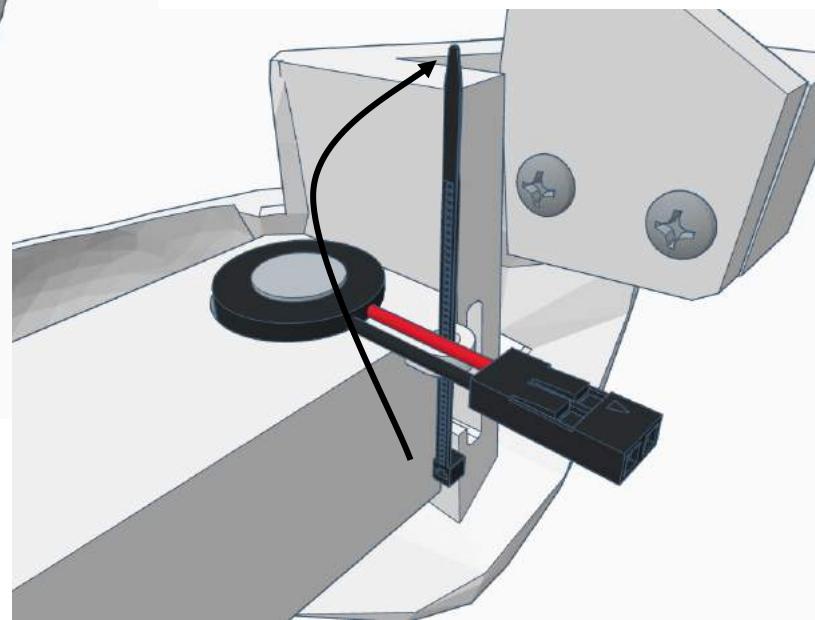
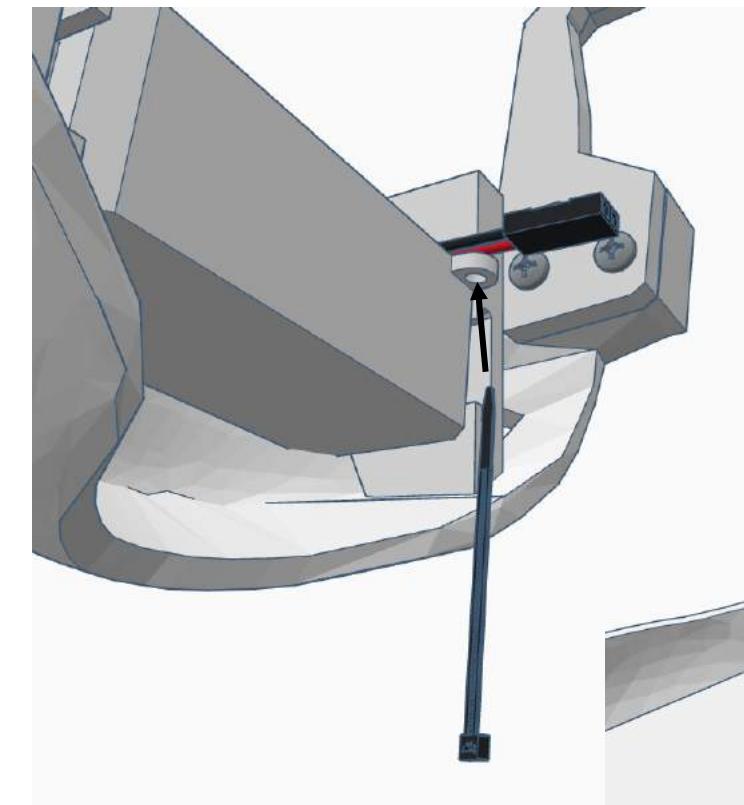
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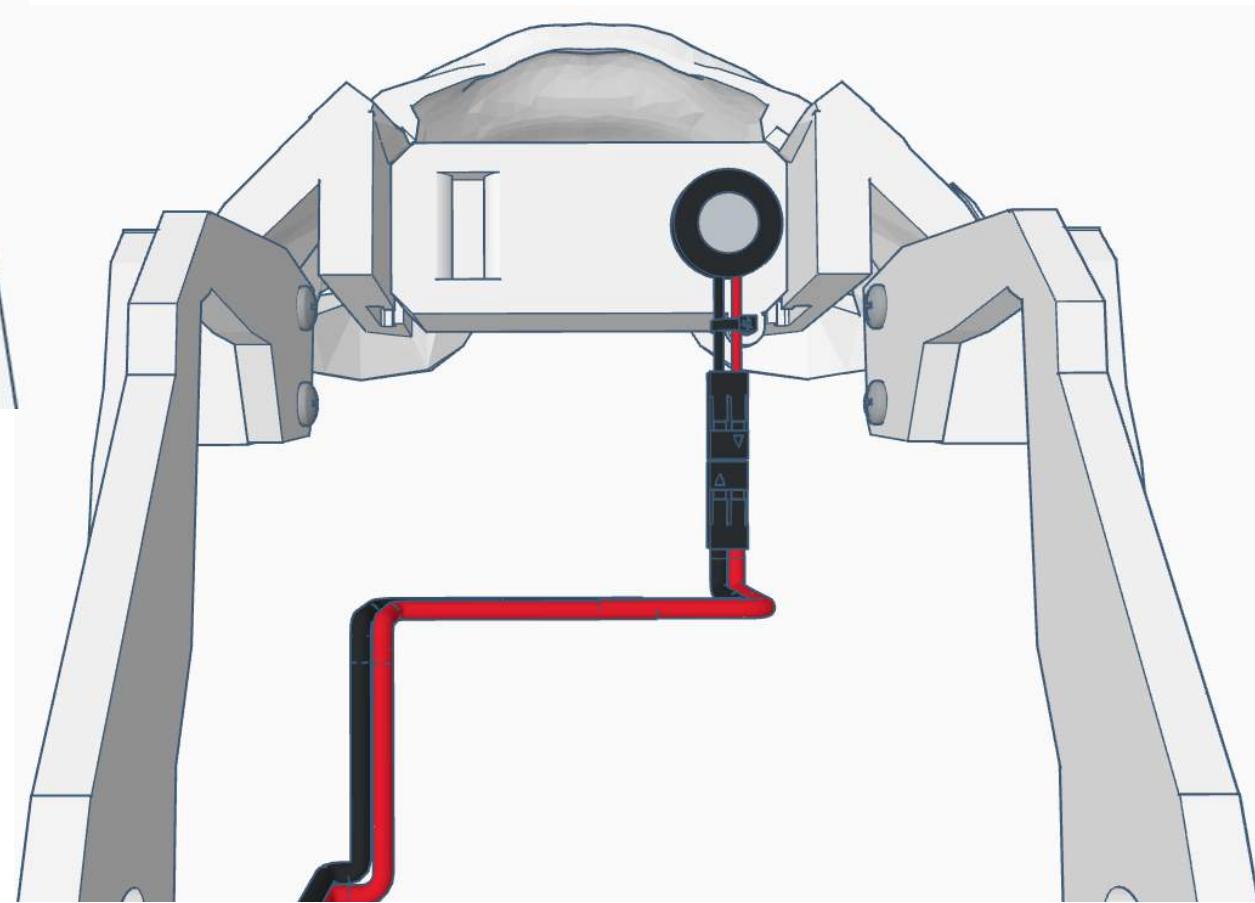
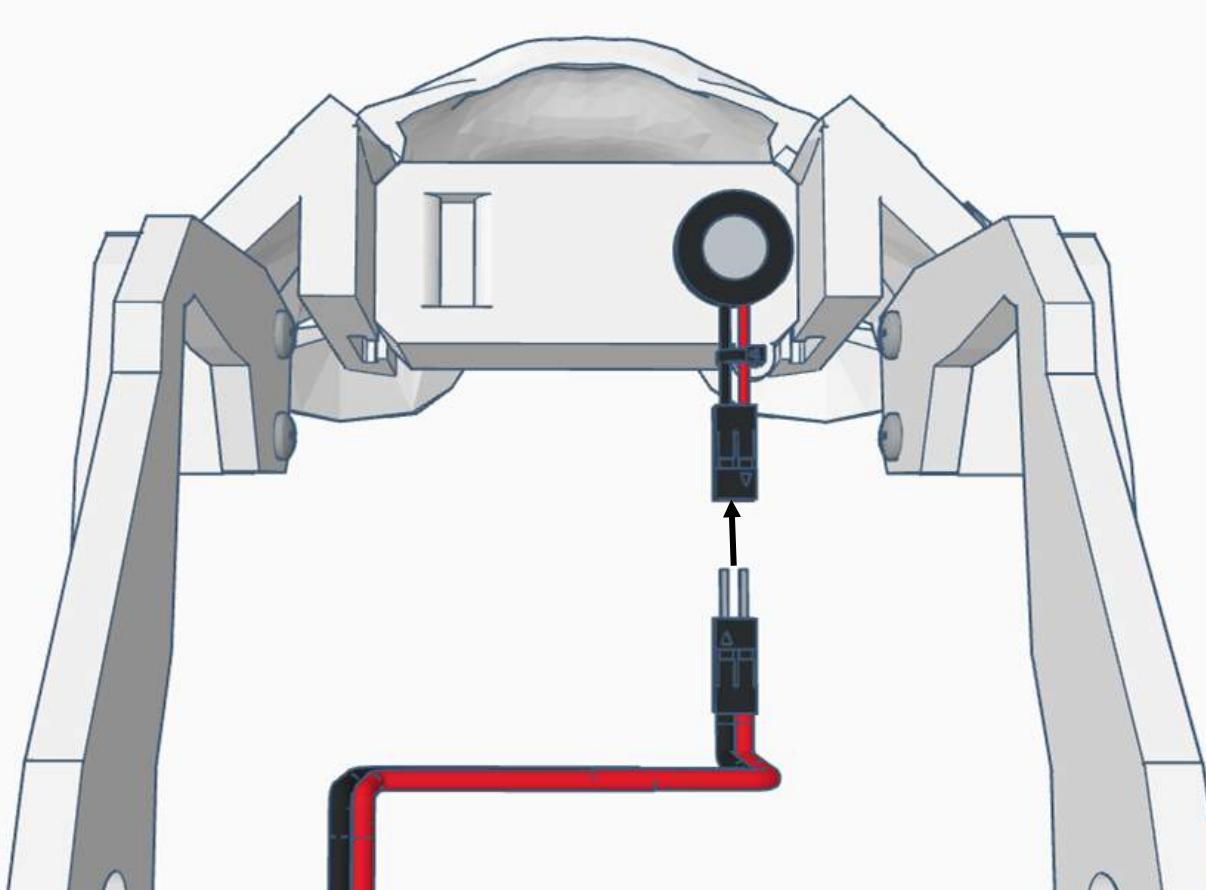


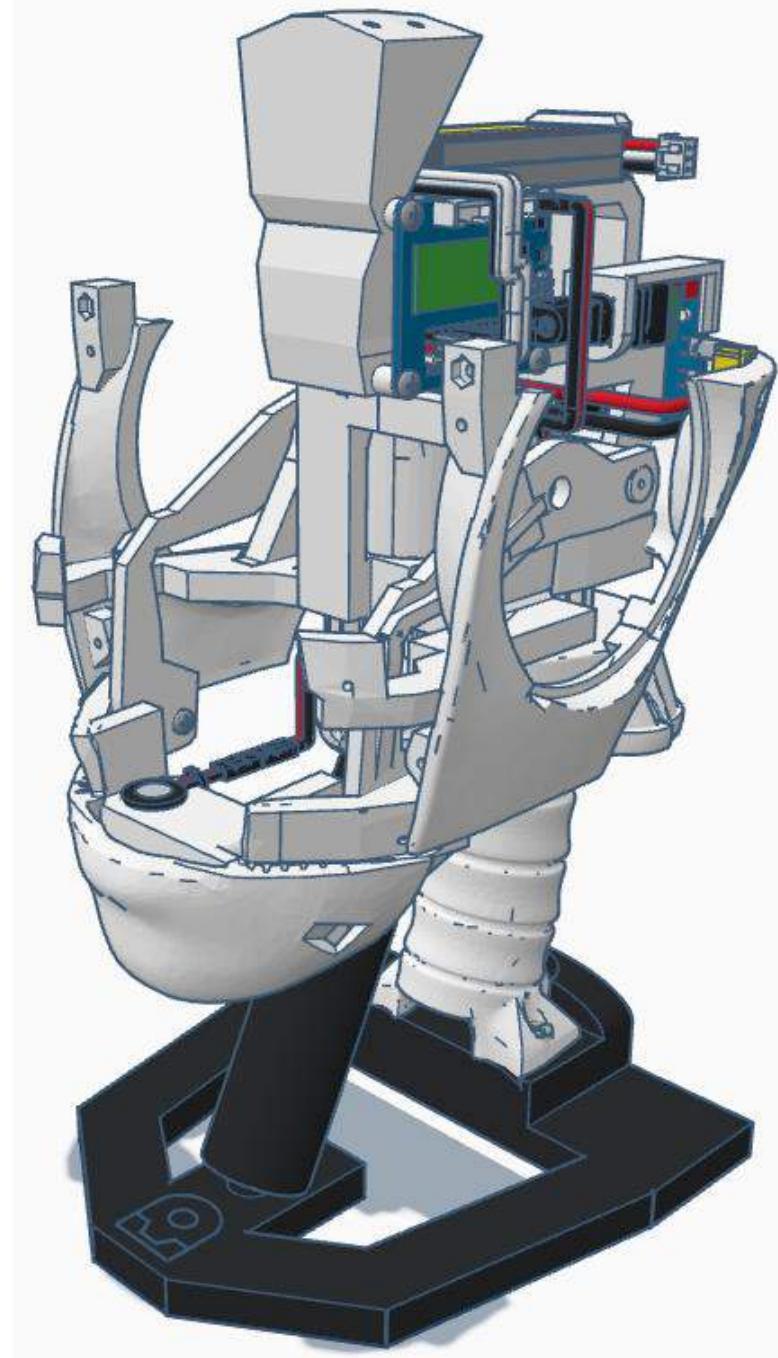
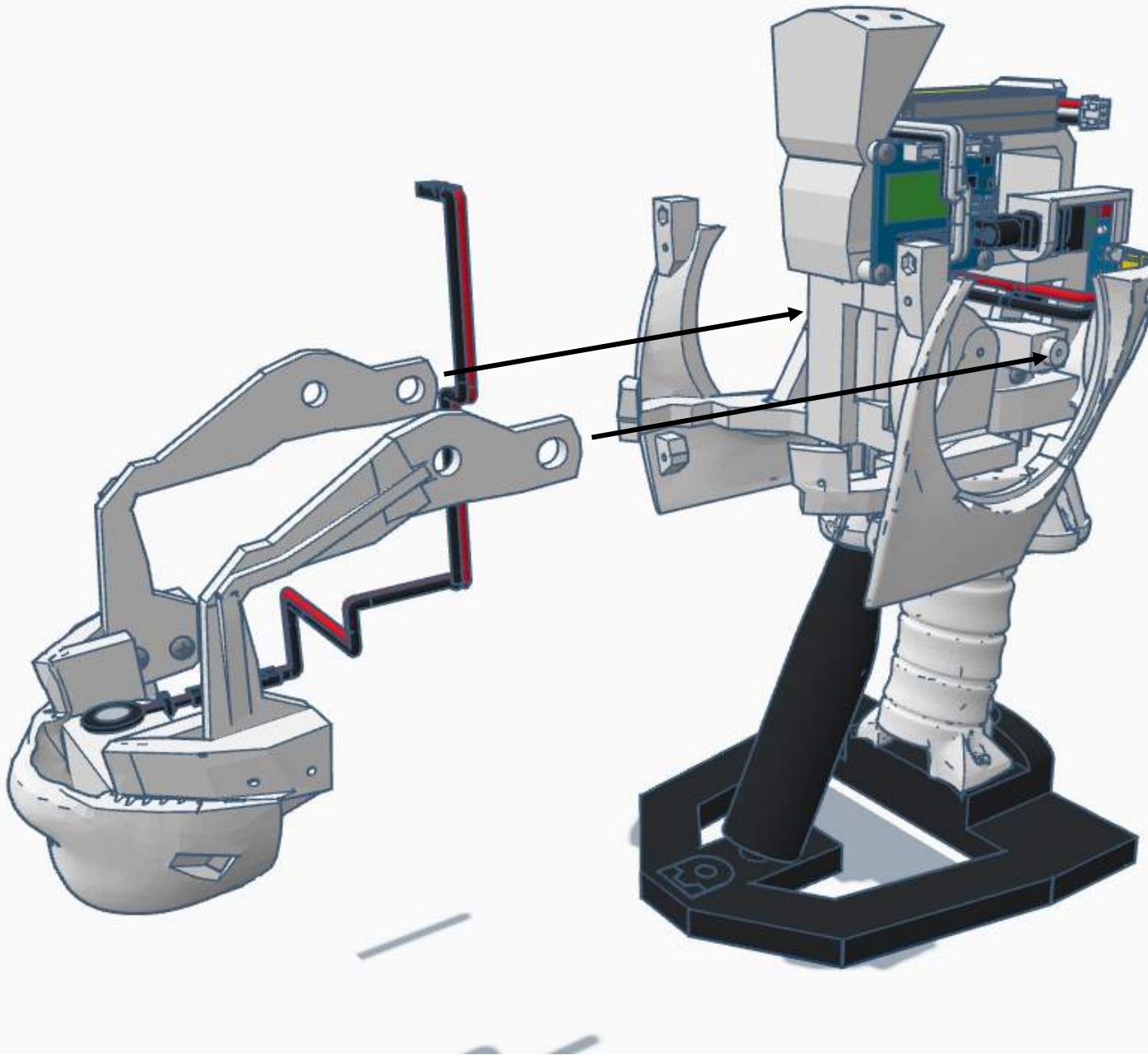




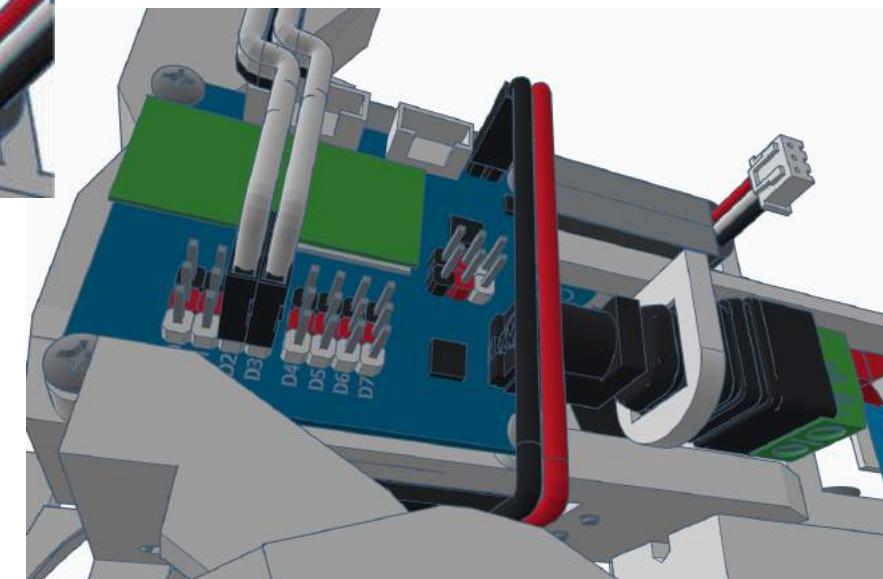
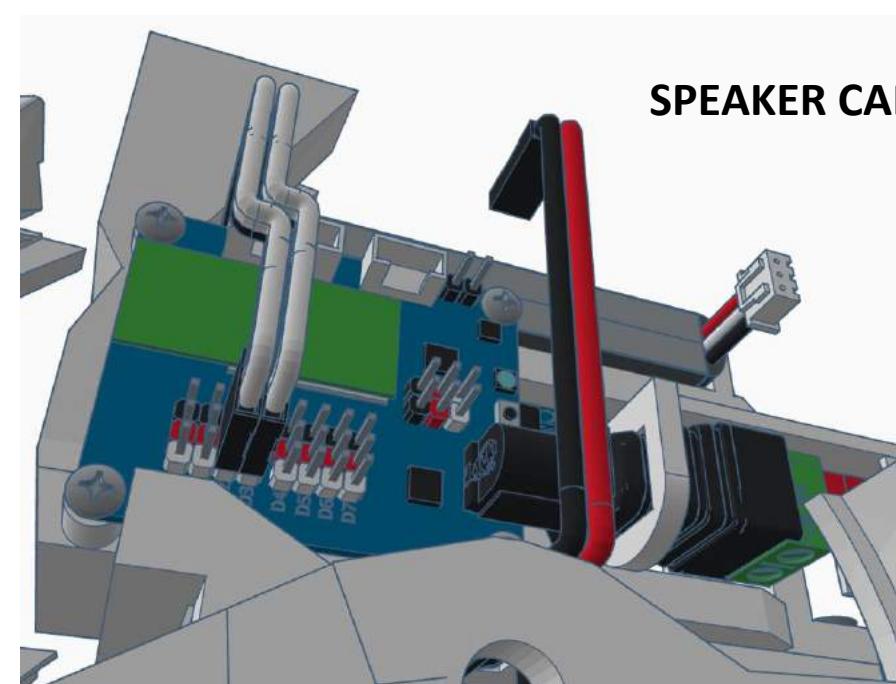


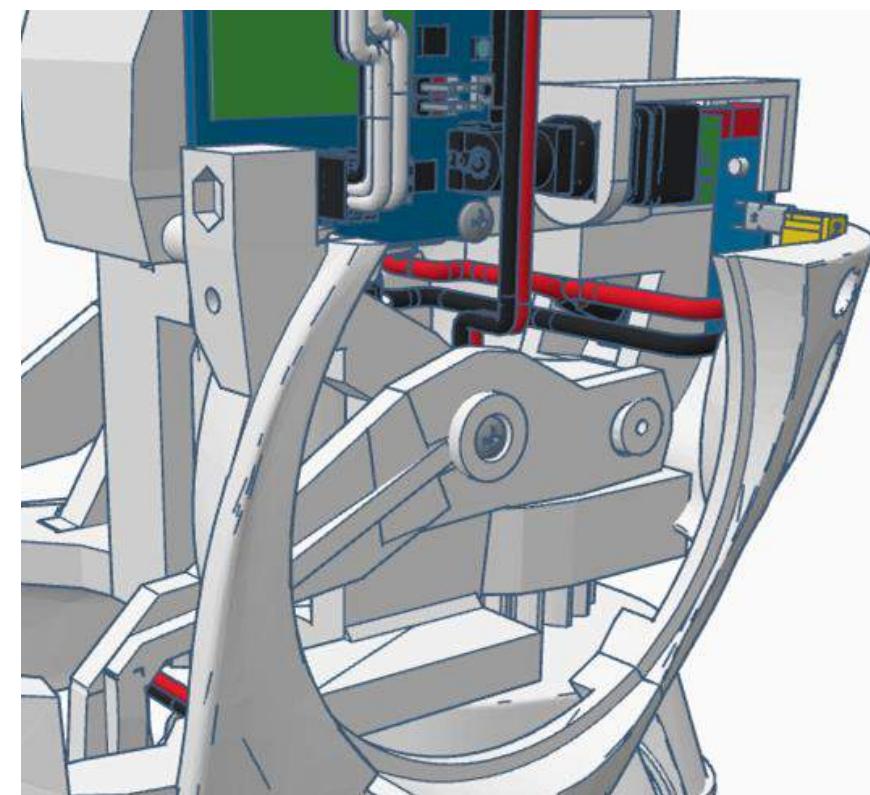
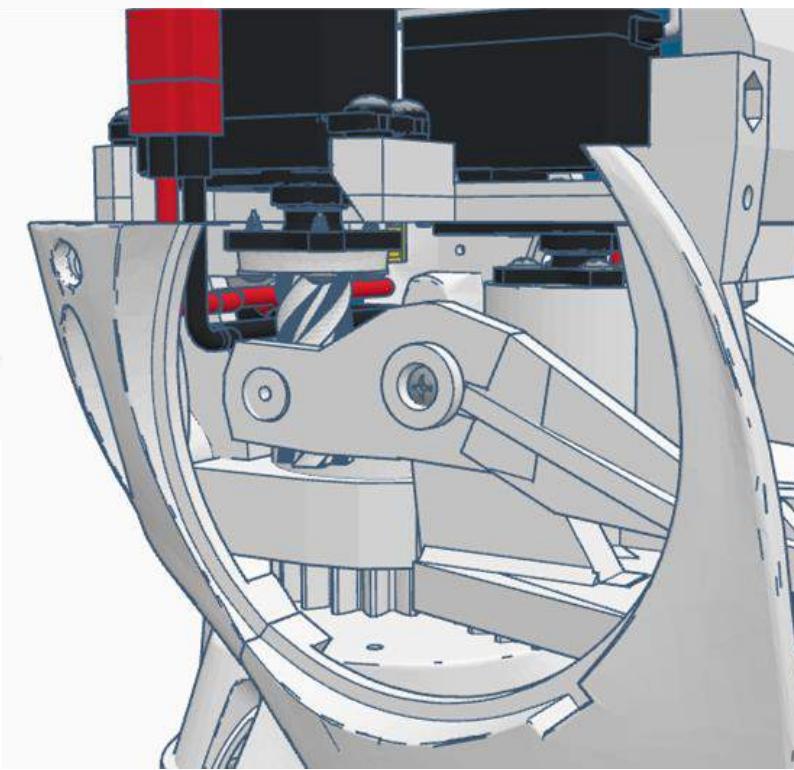
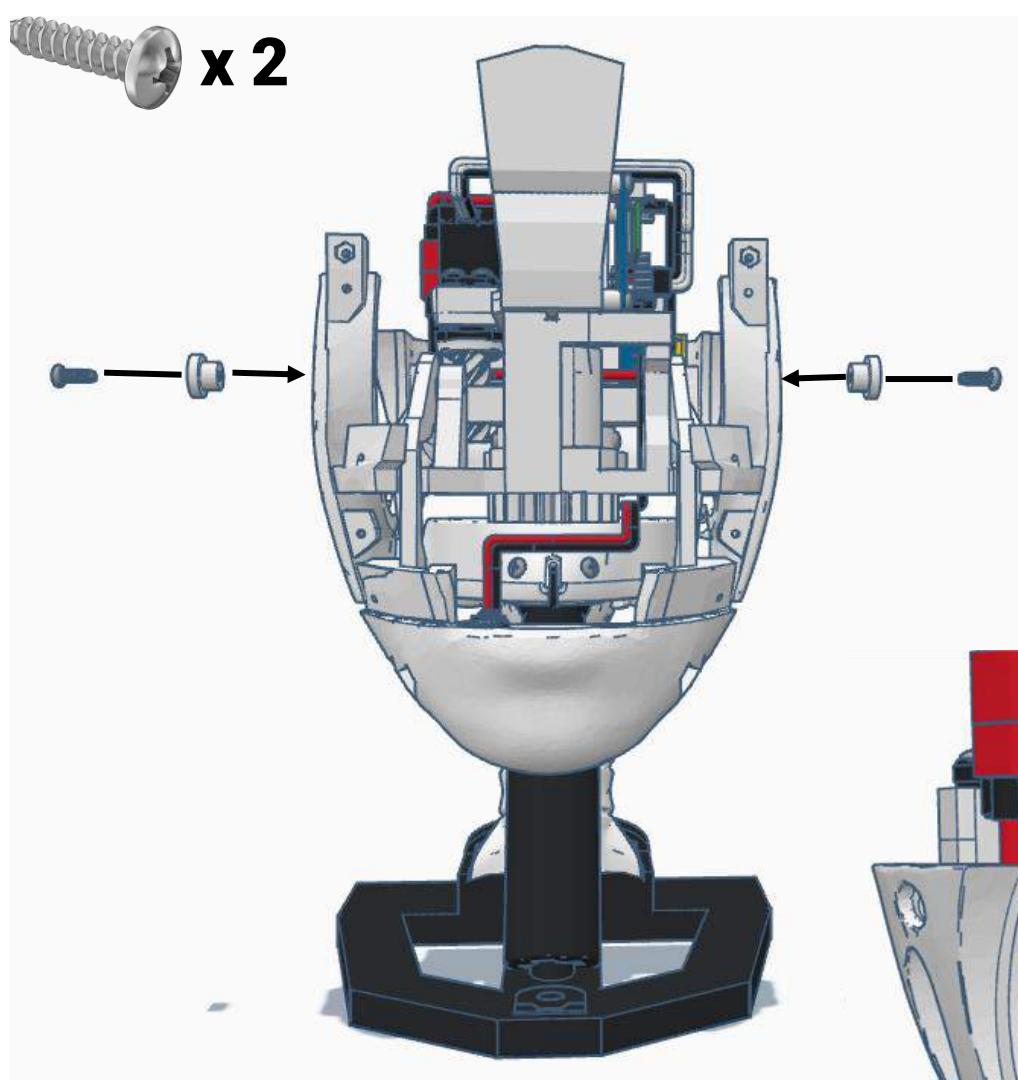




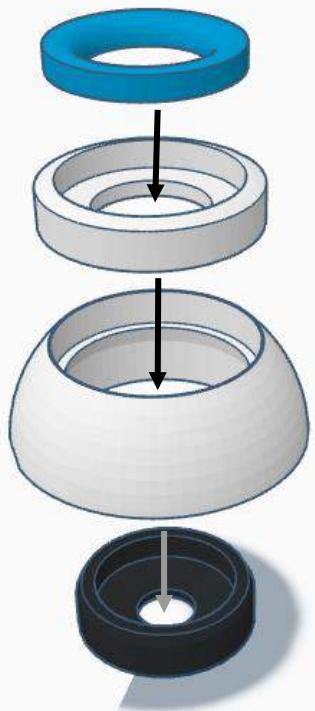


SPEAKER CABLE PLUGS INTO SPKR HEADER

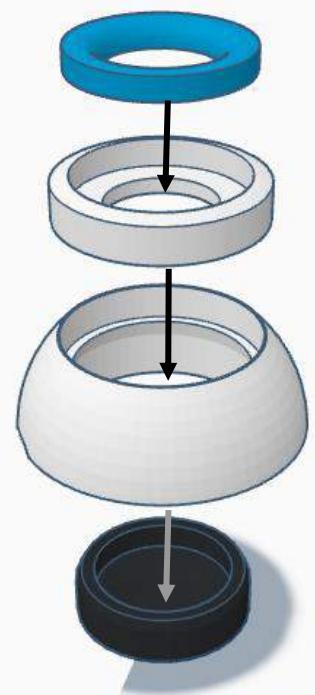


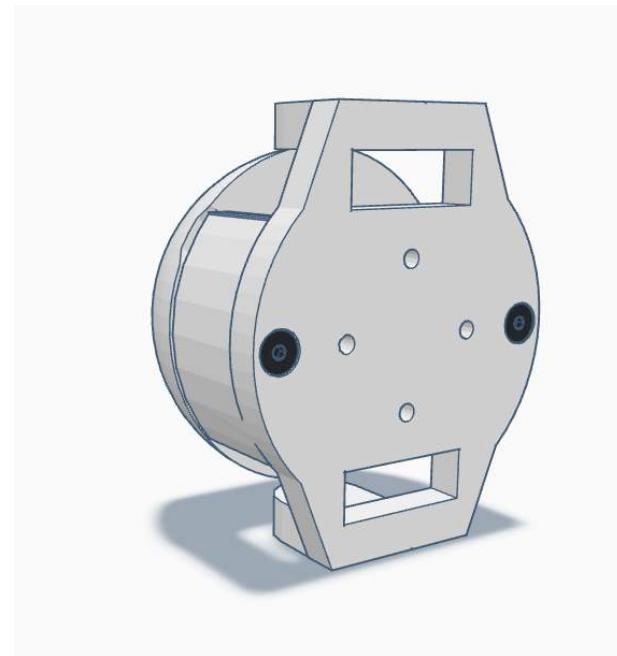
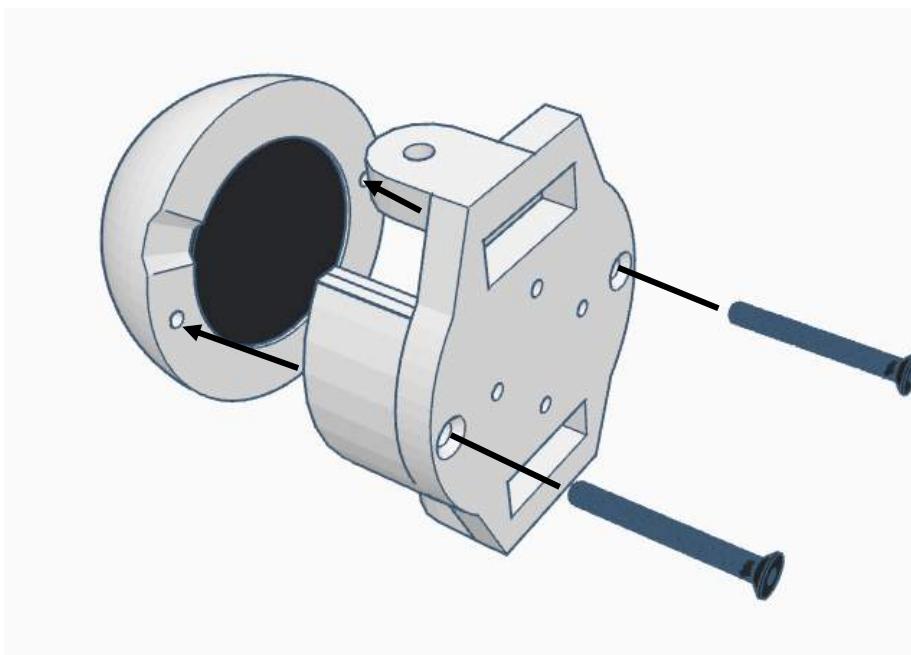
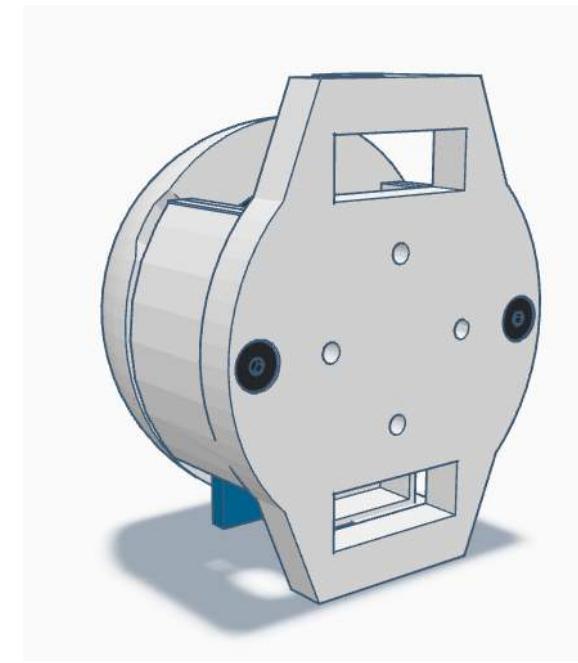
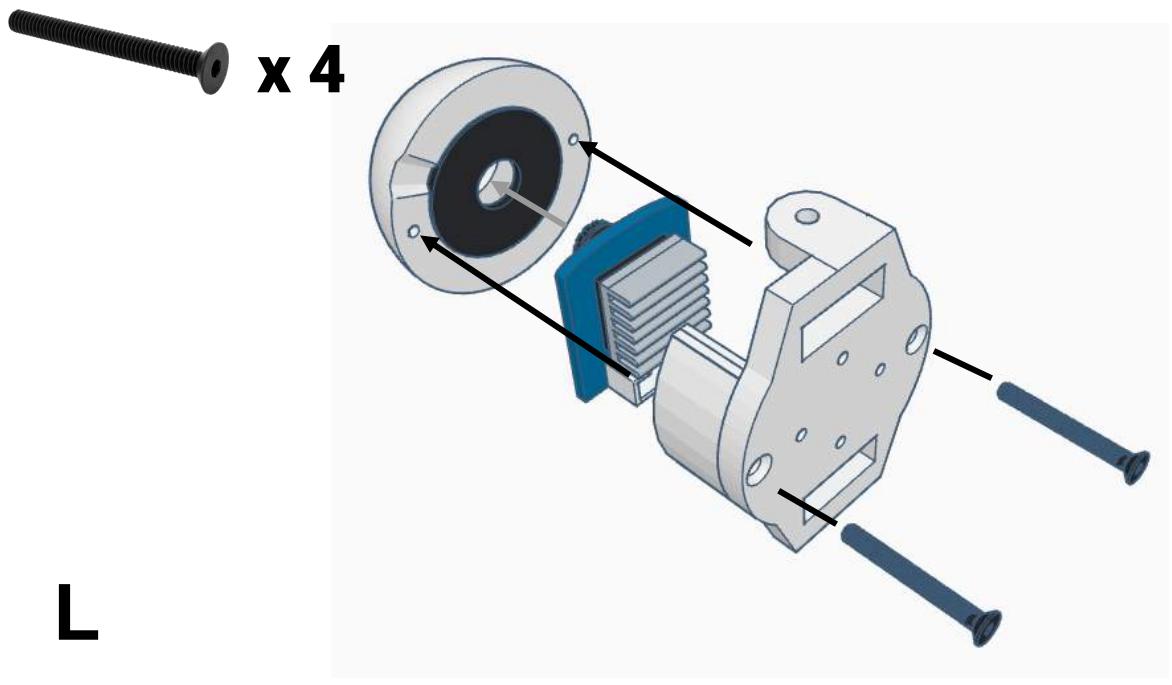


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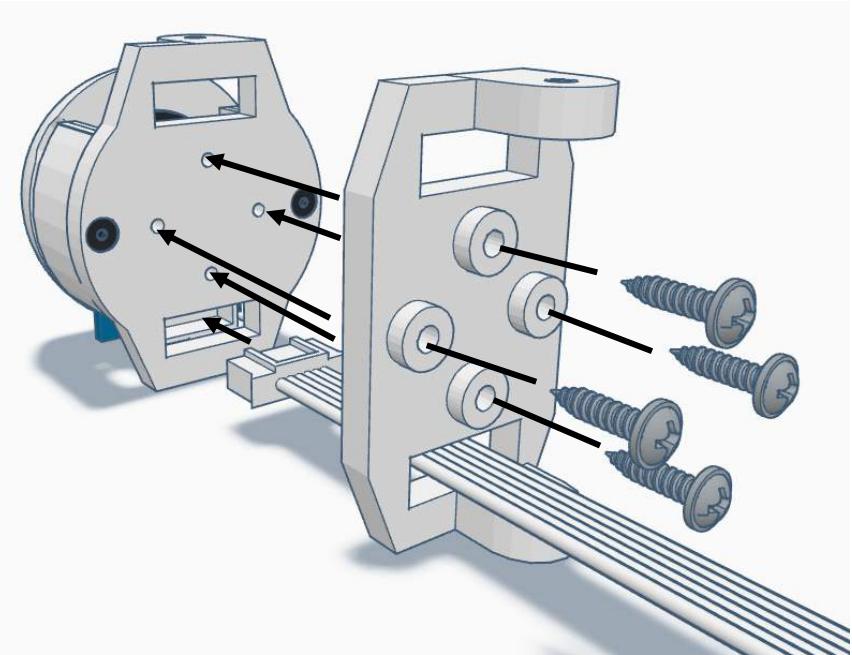
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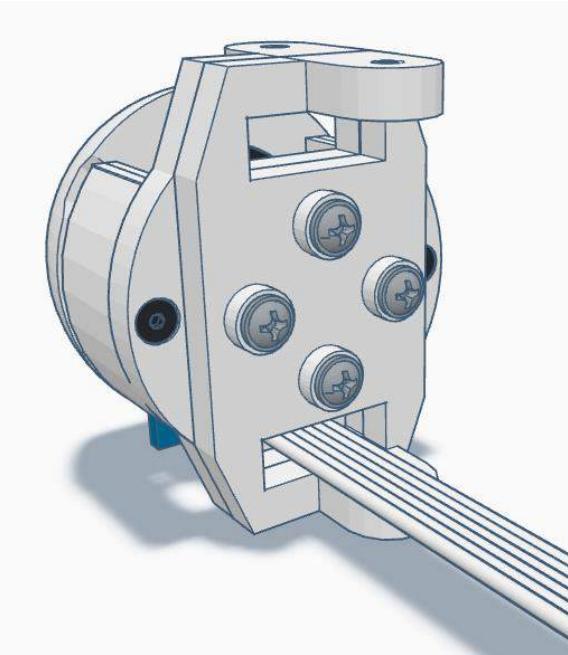




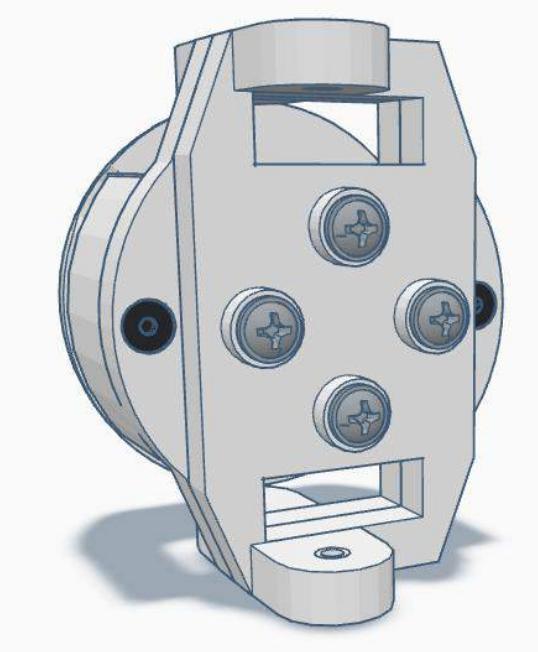
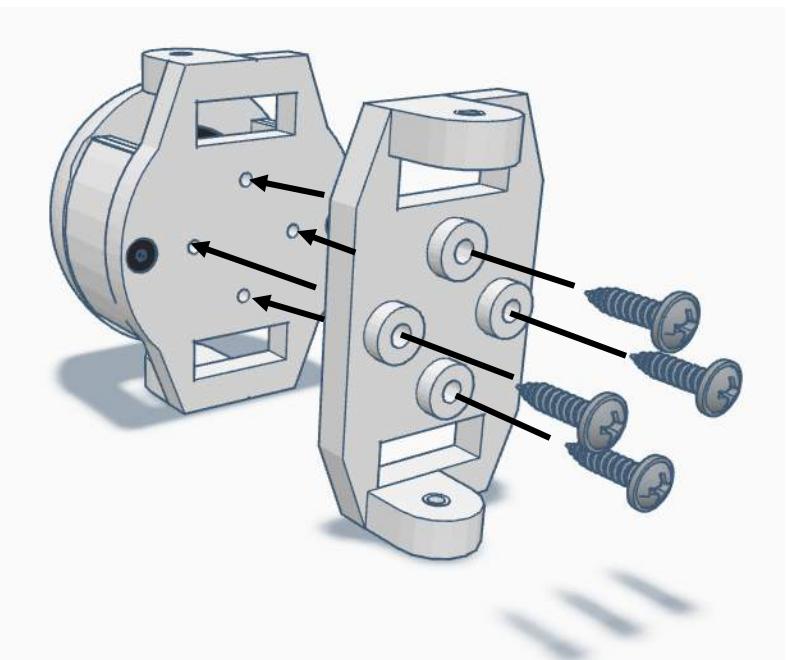
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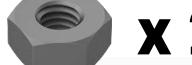
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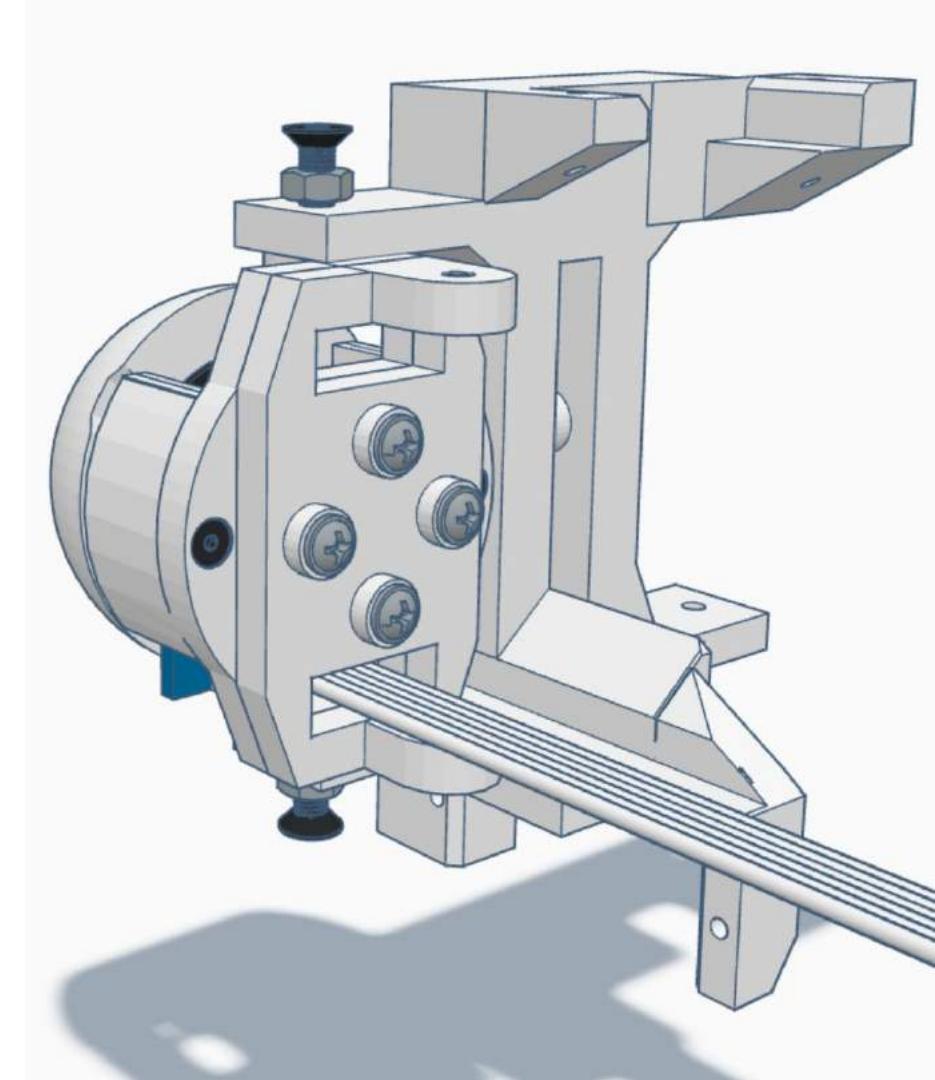
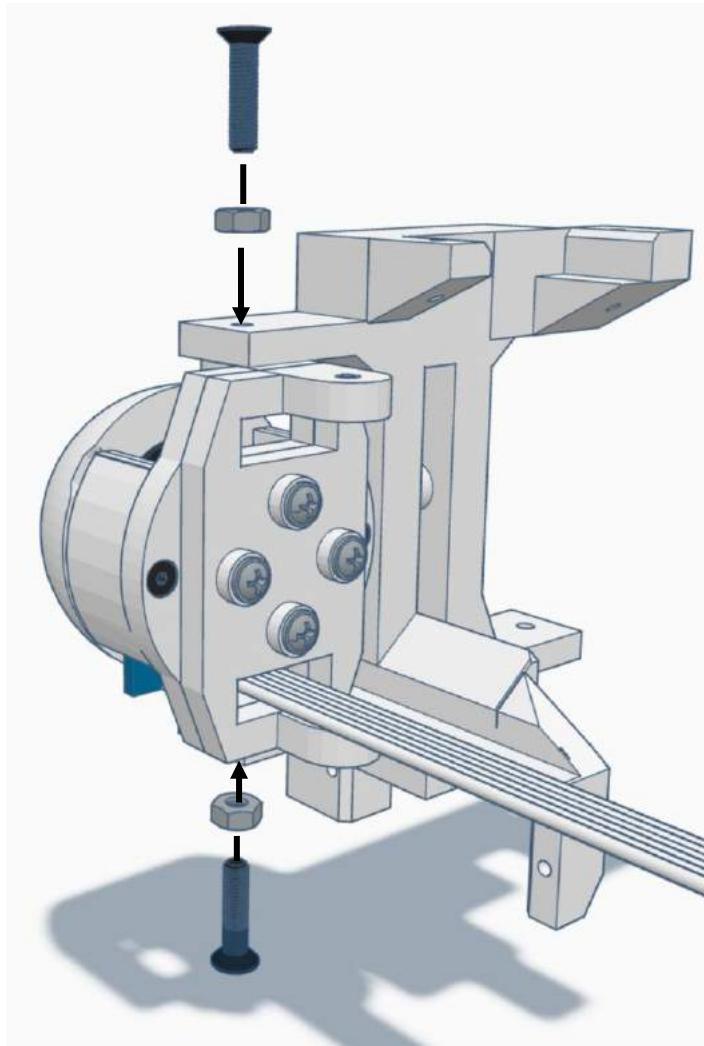
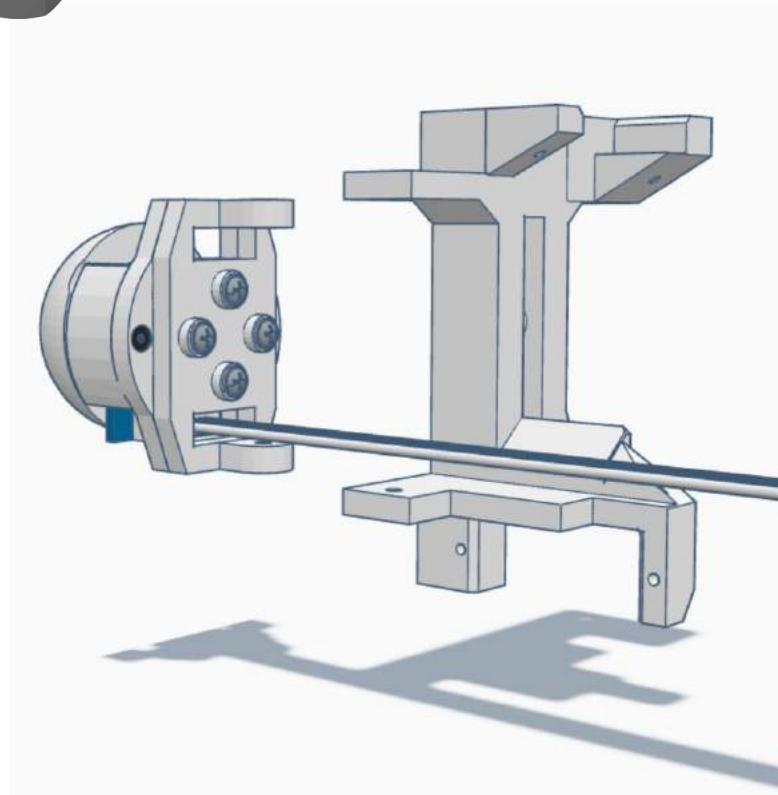


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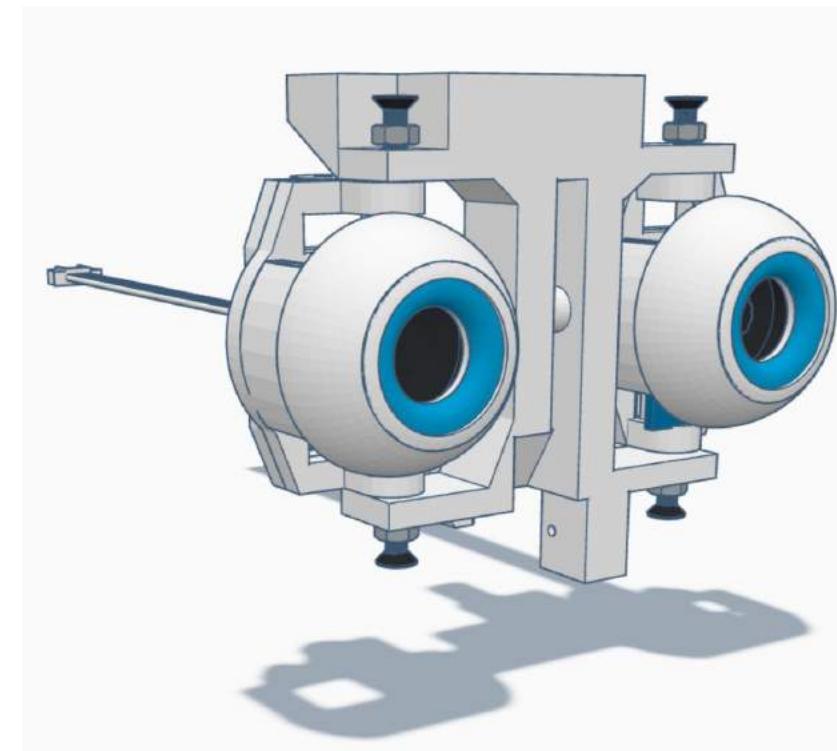
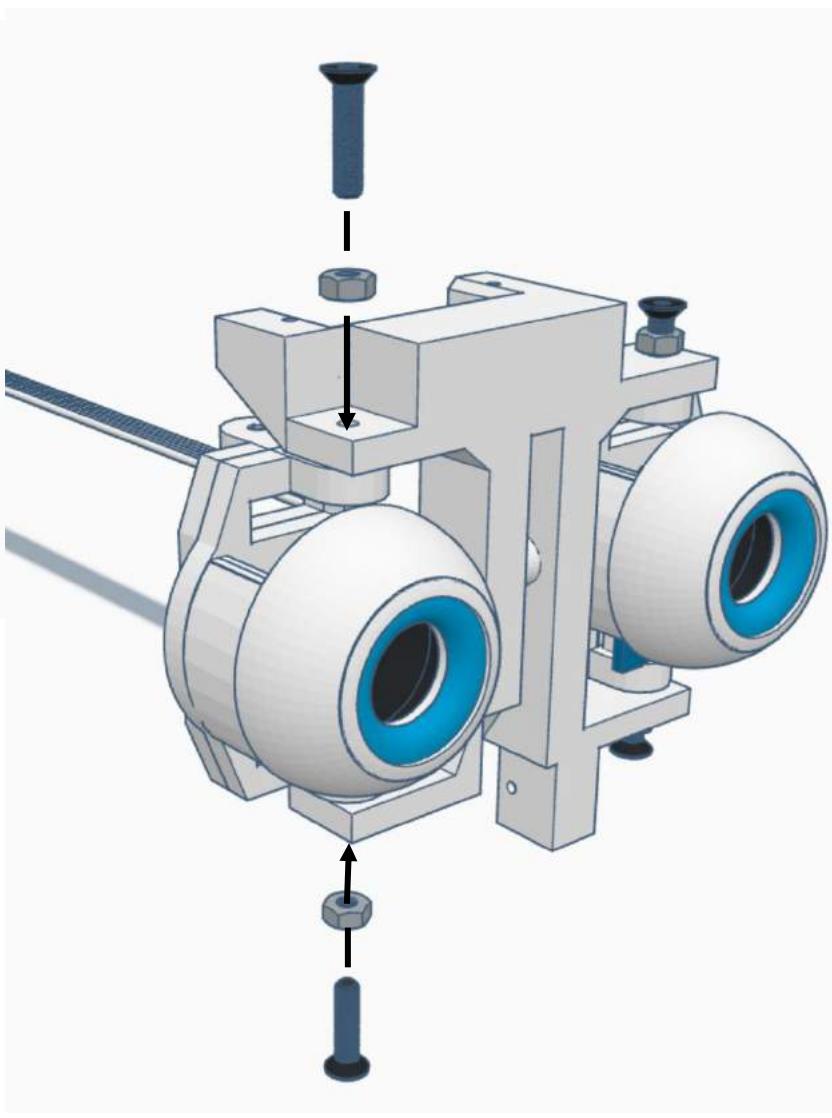
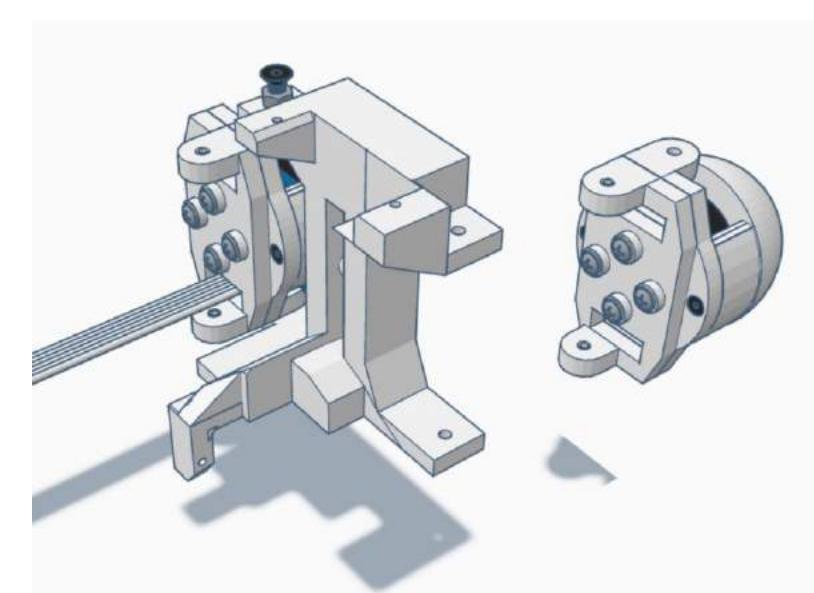
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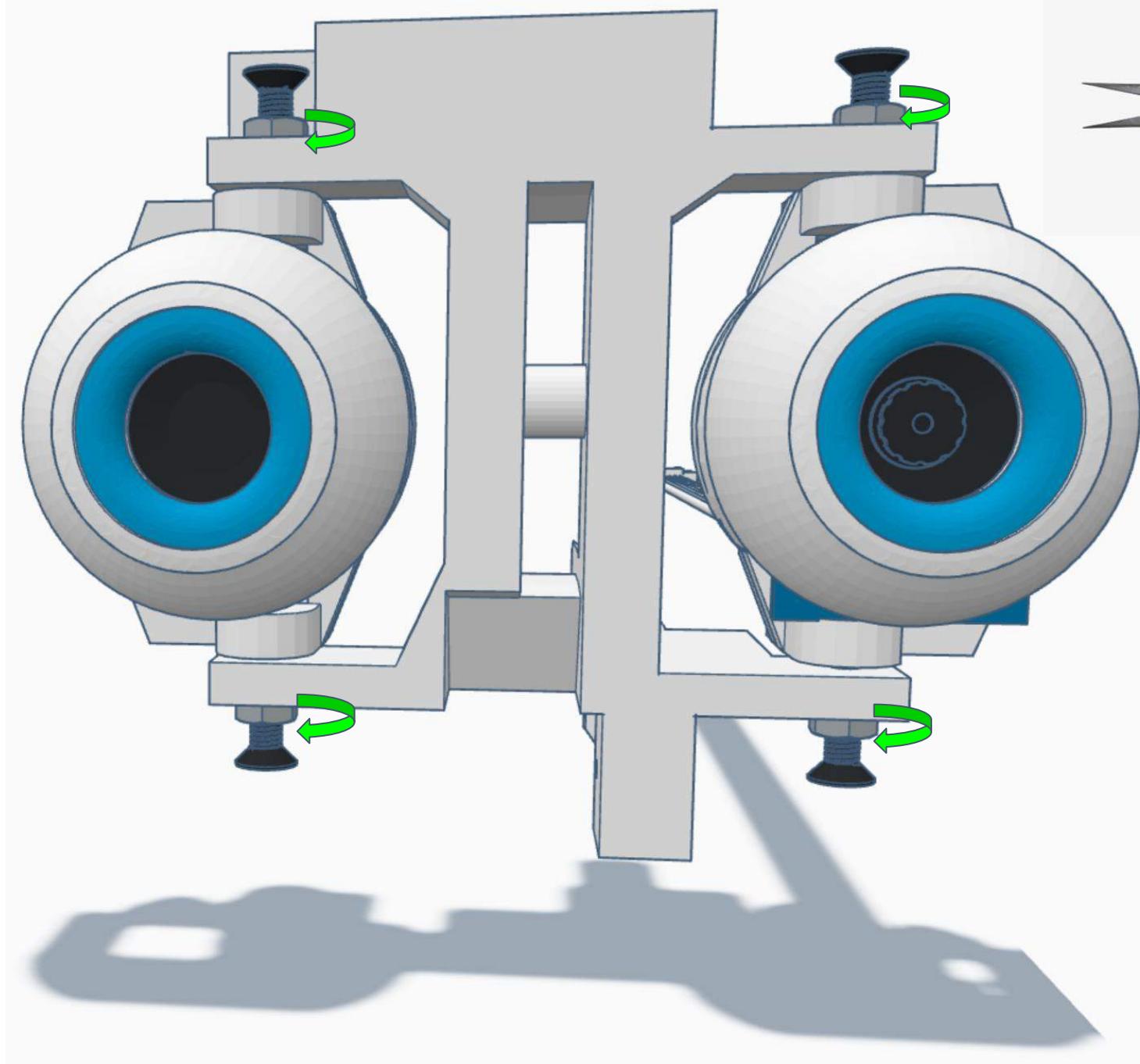
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 x 2

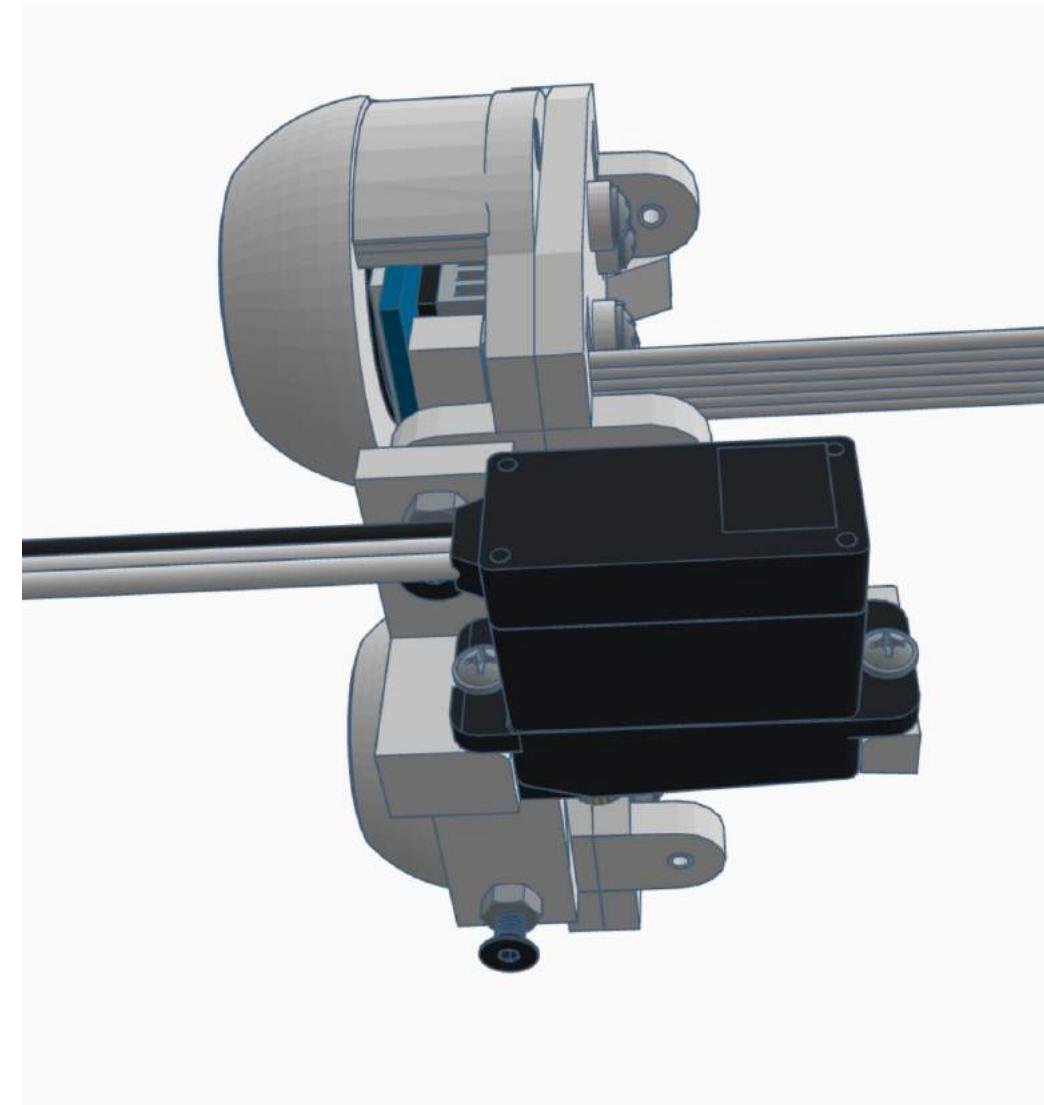
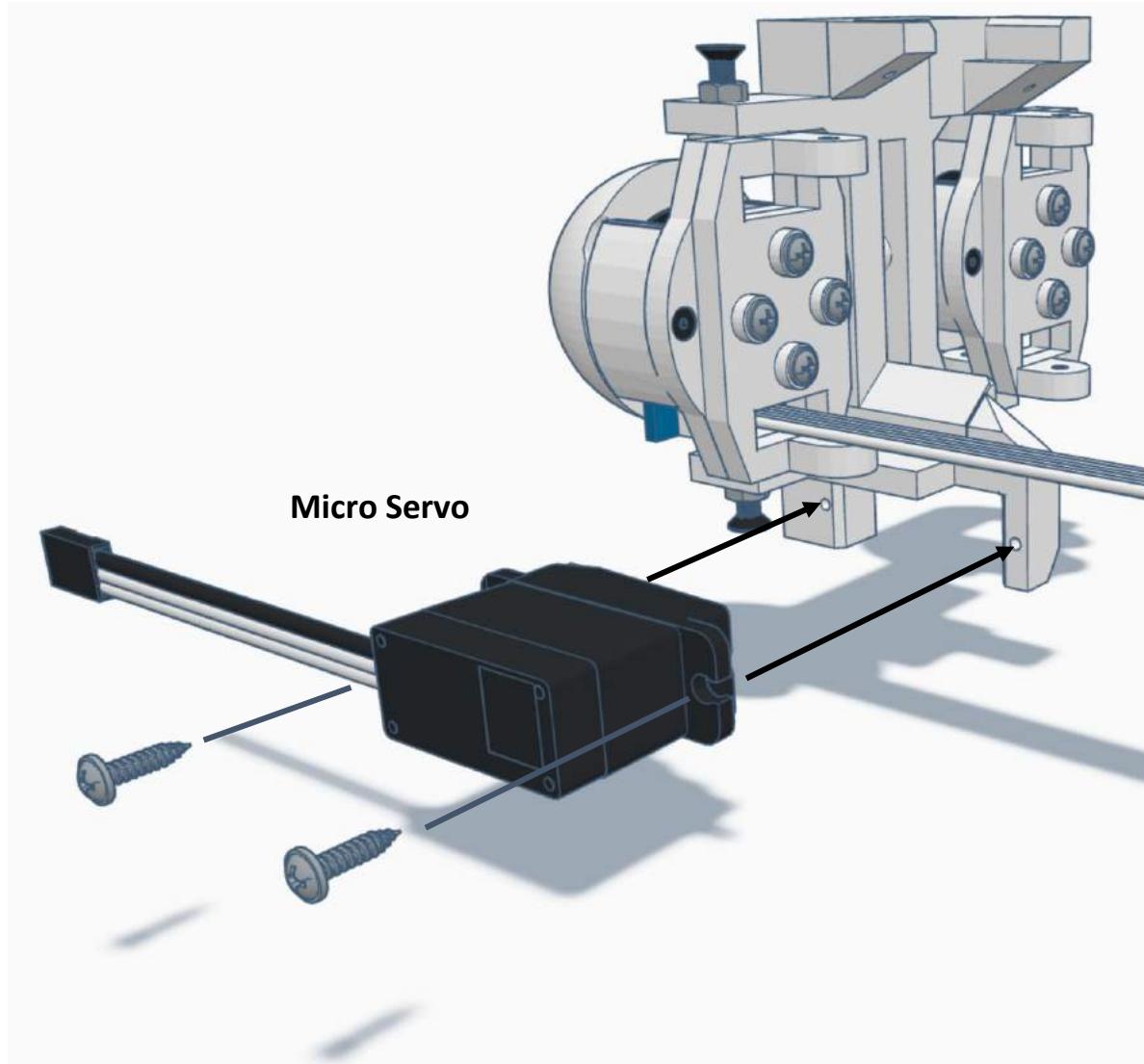
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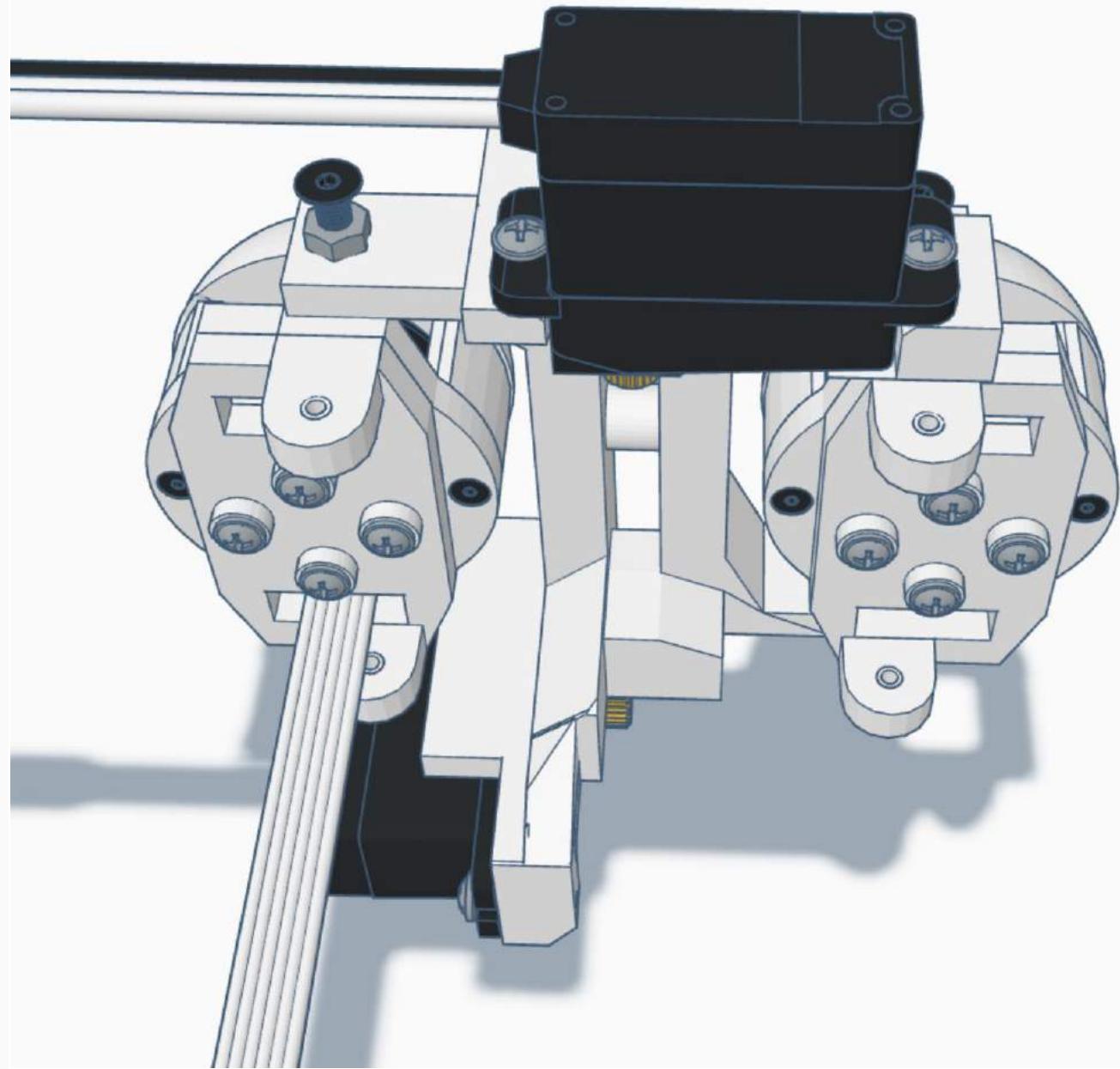
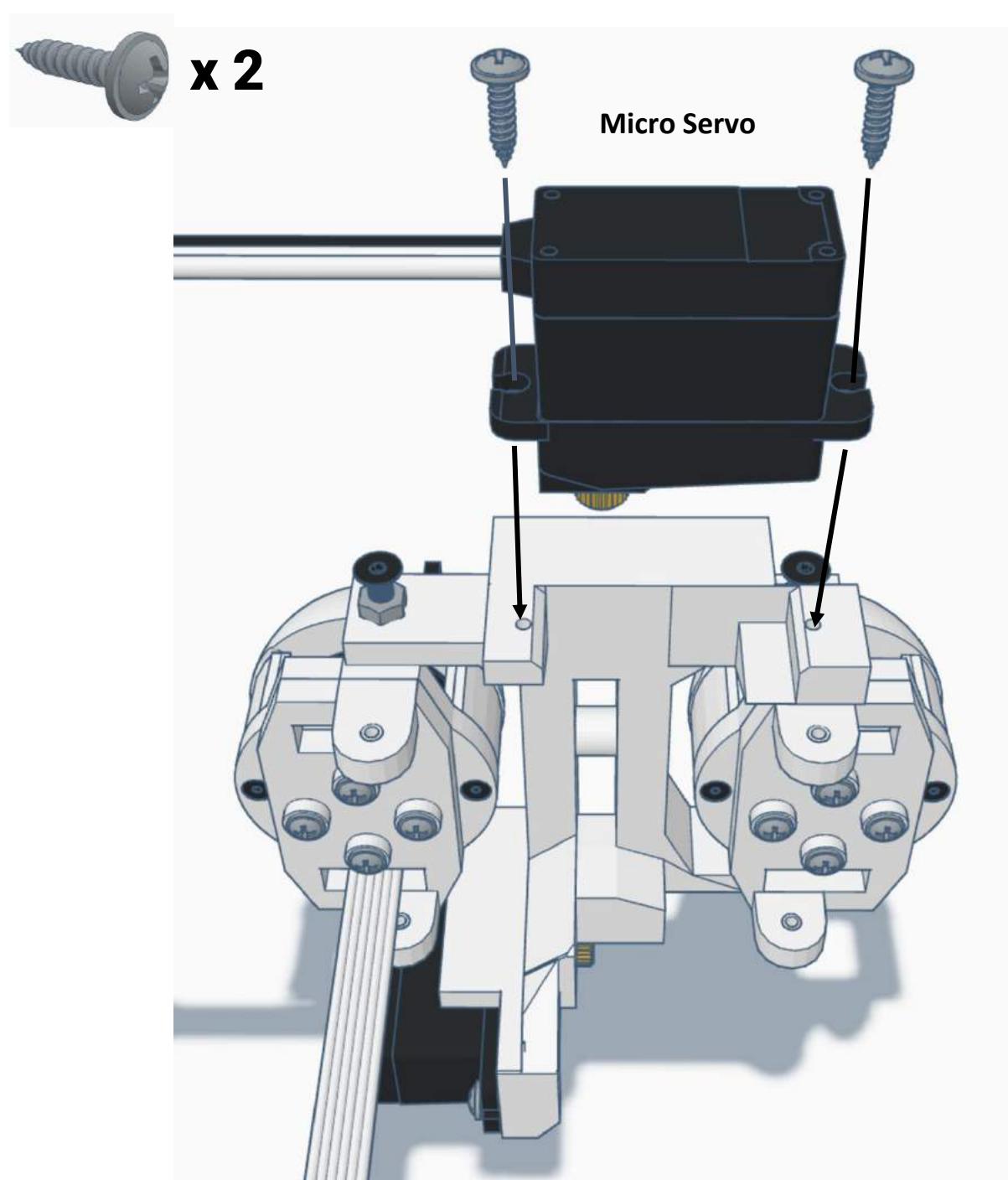


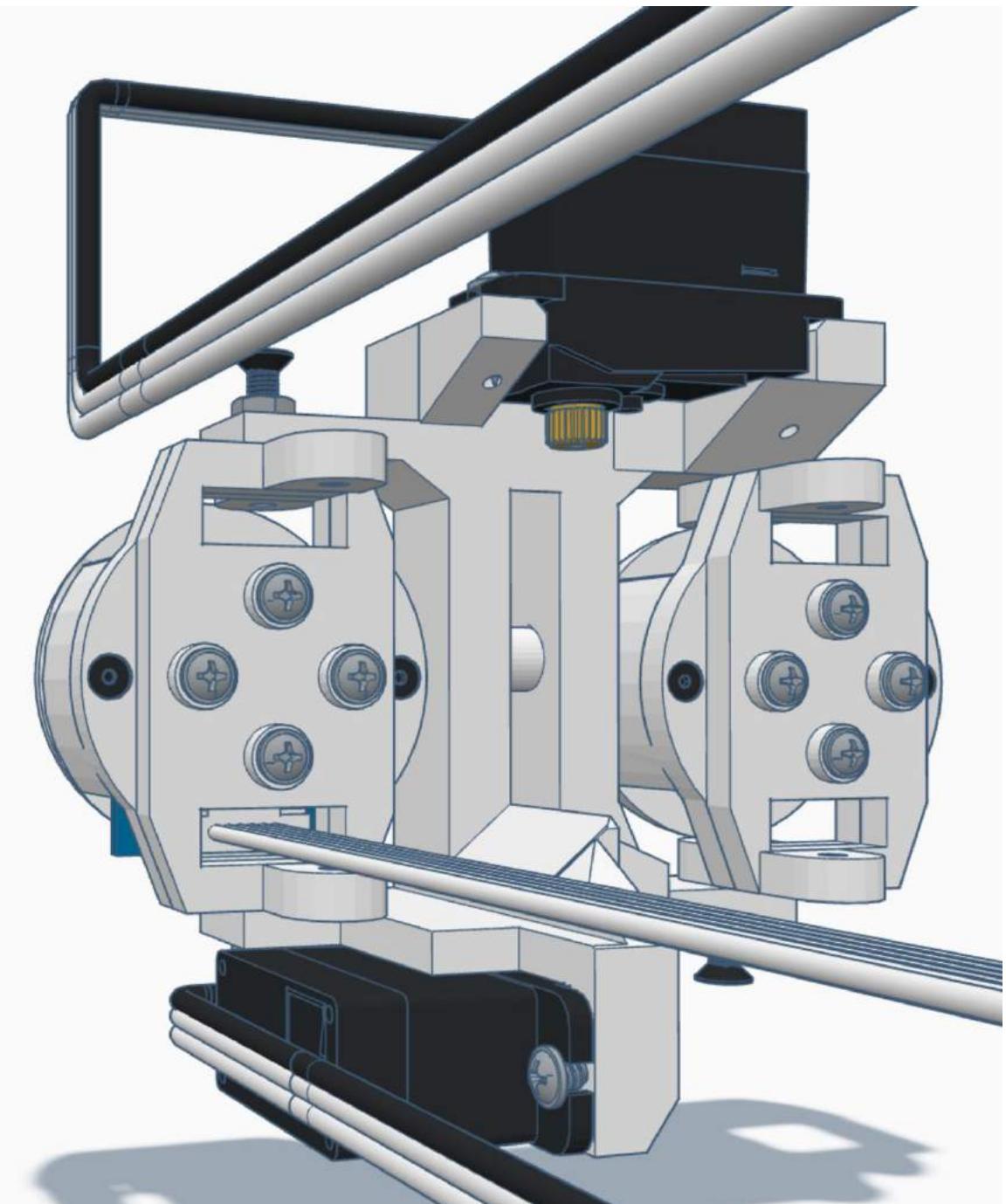
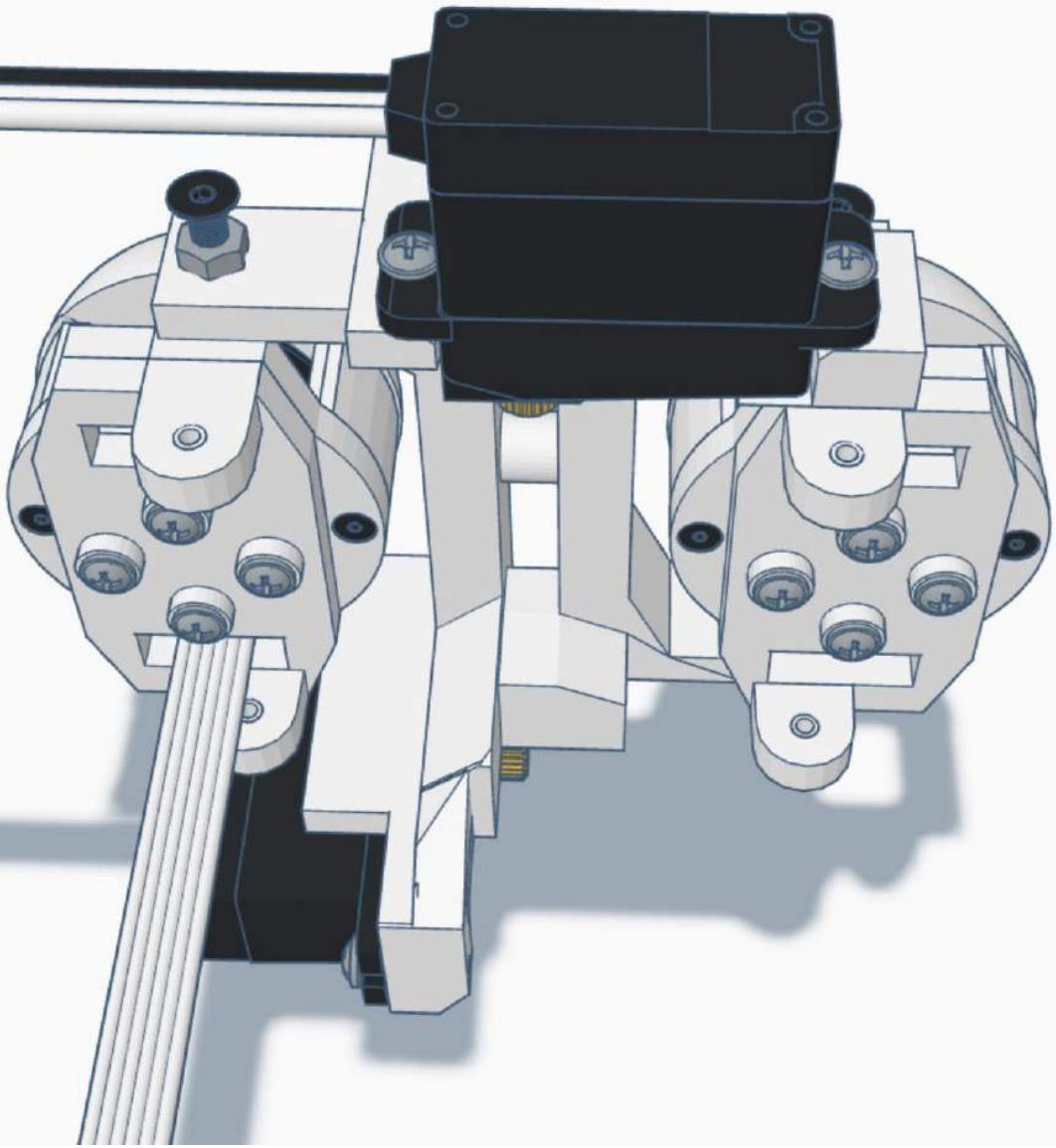




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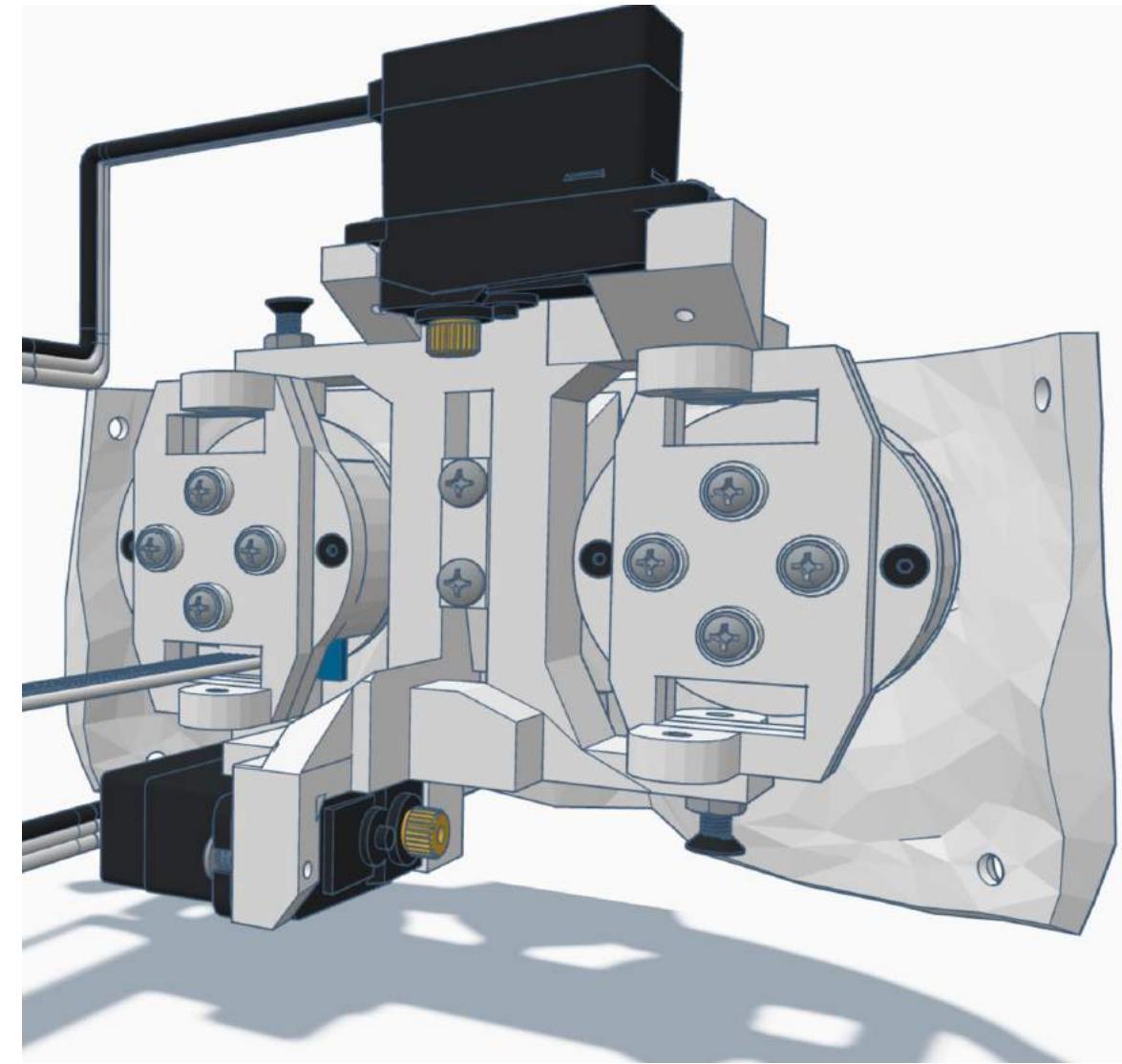
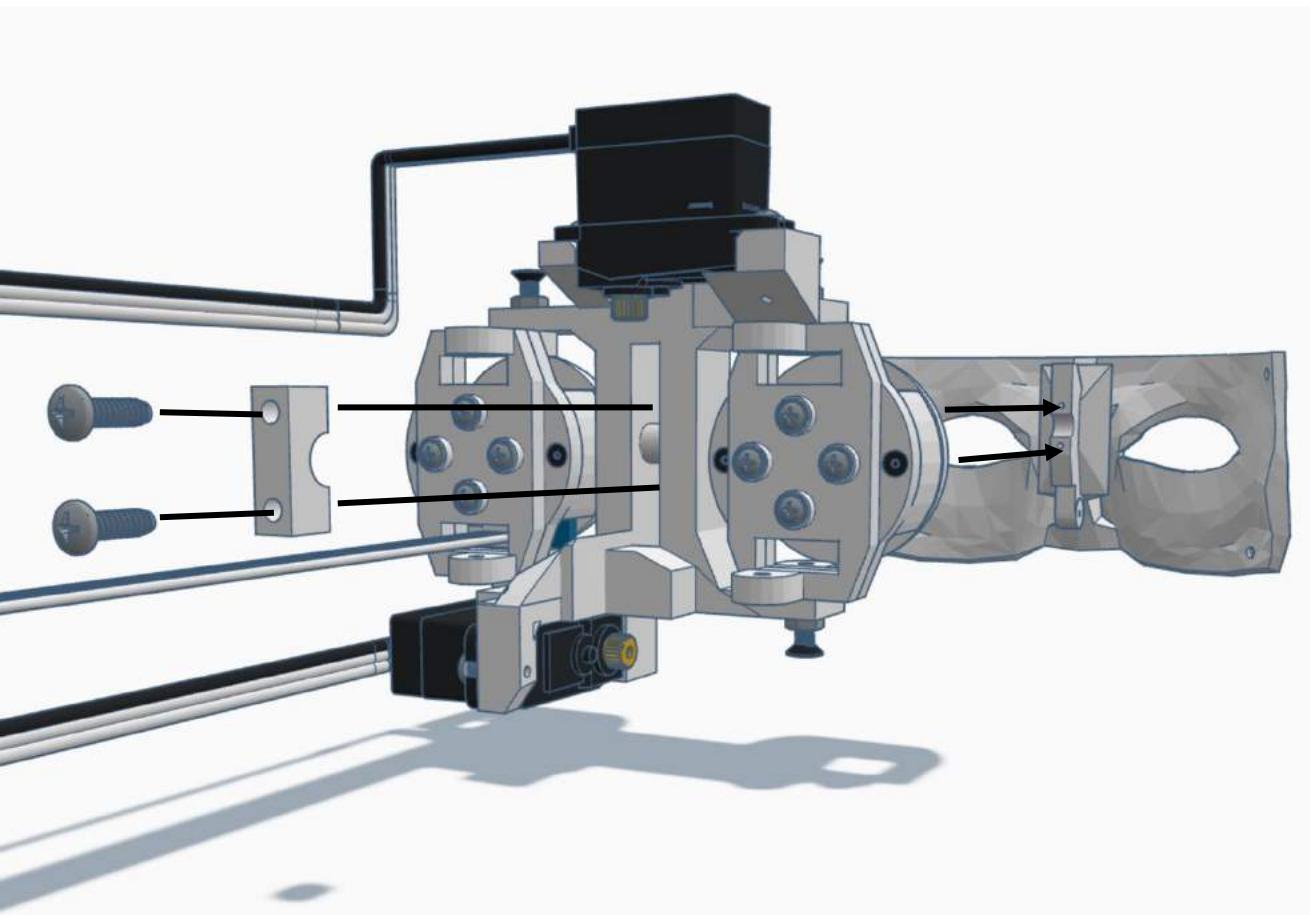






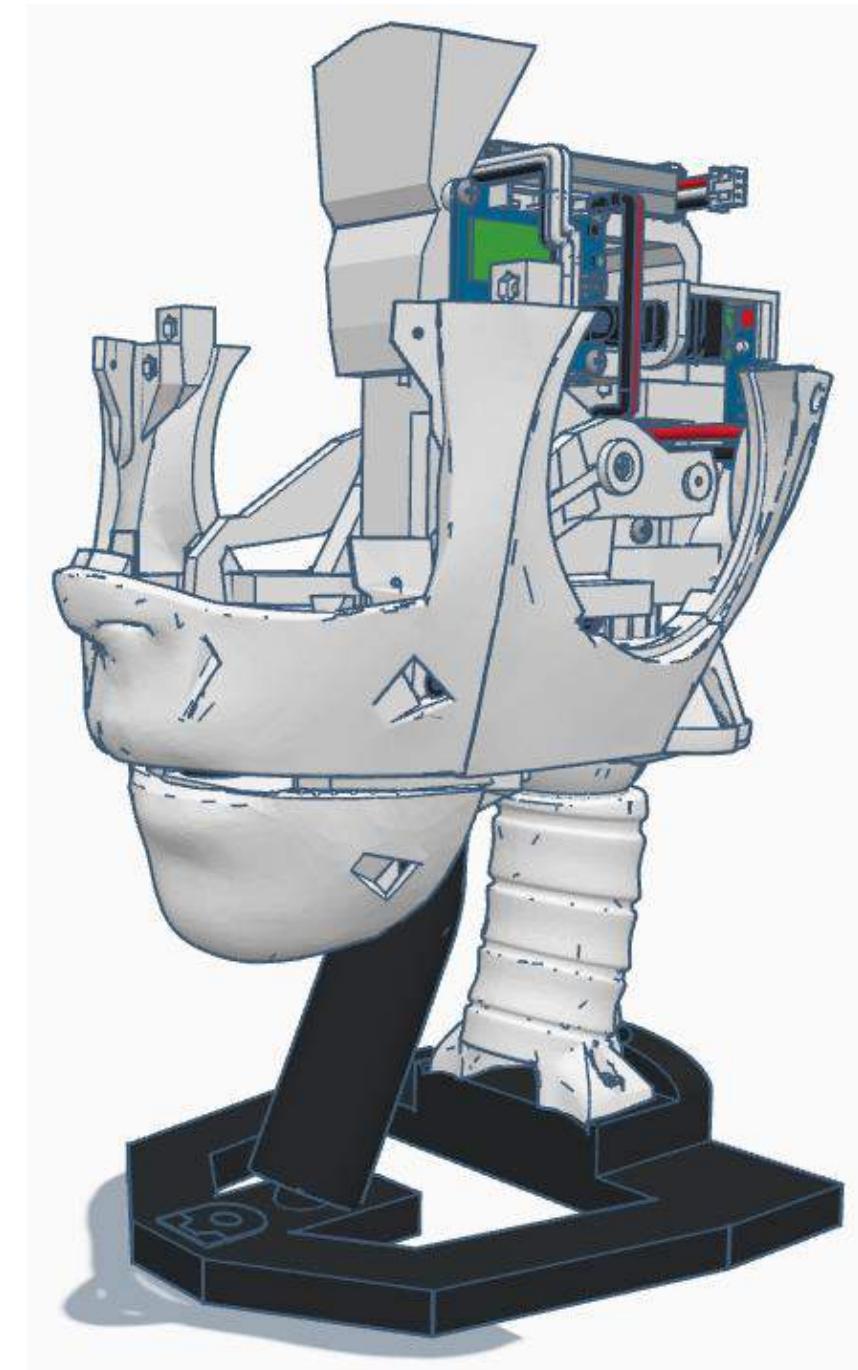
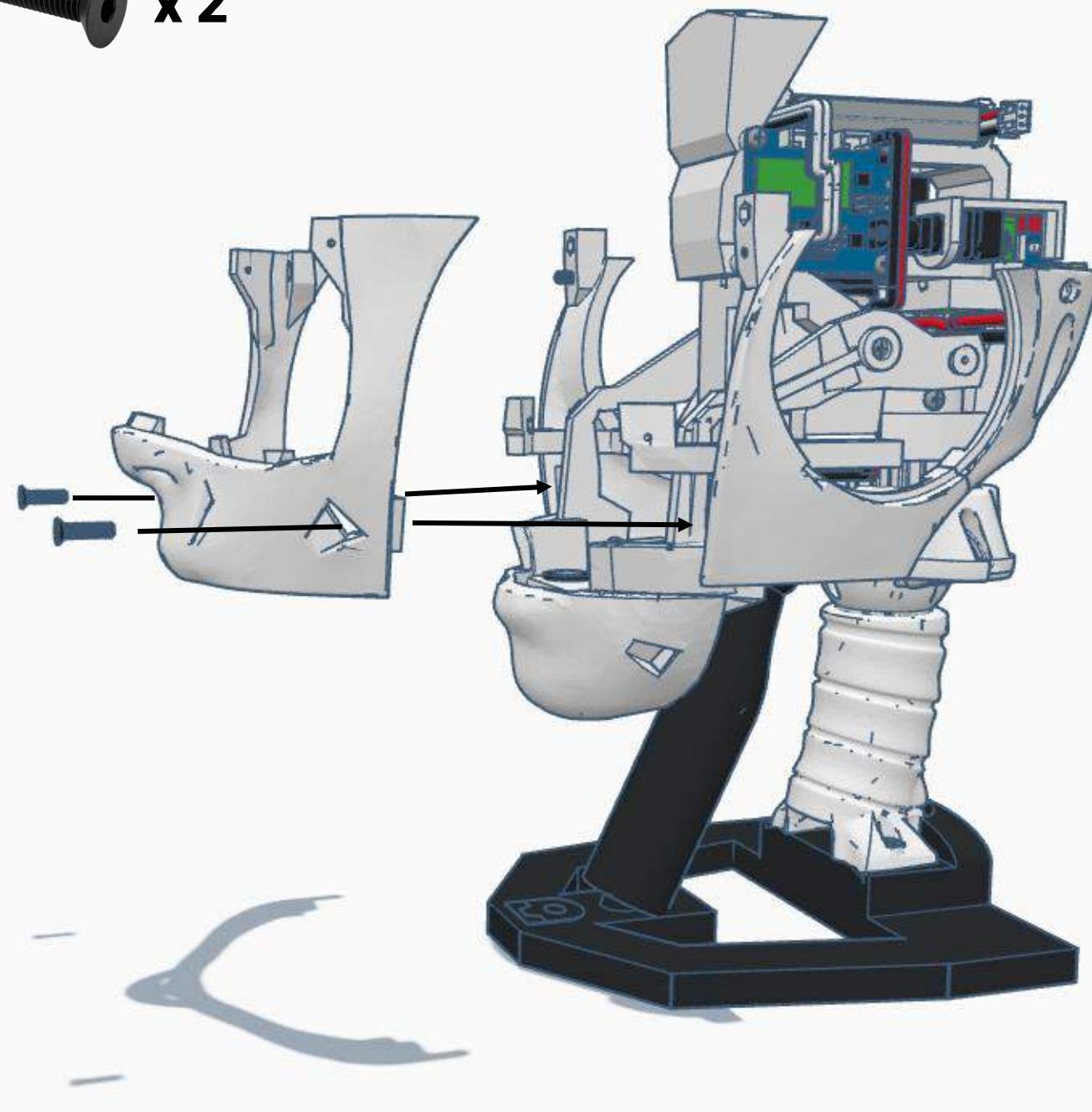


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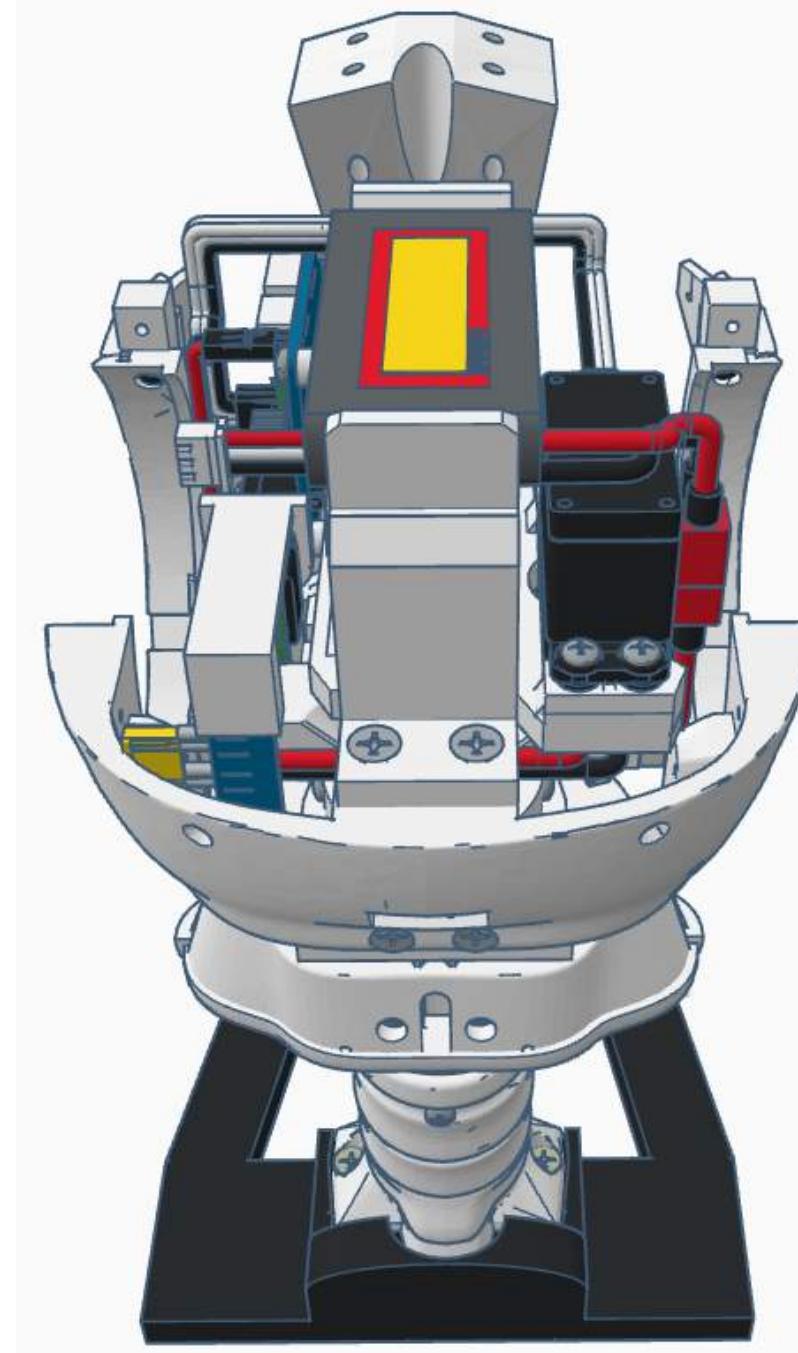


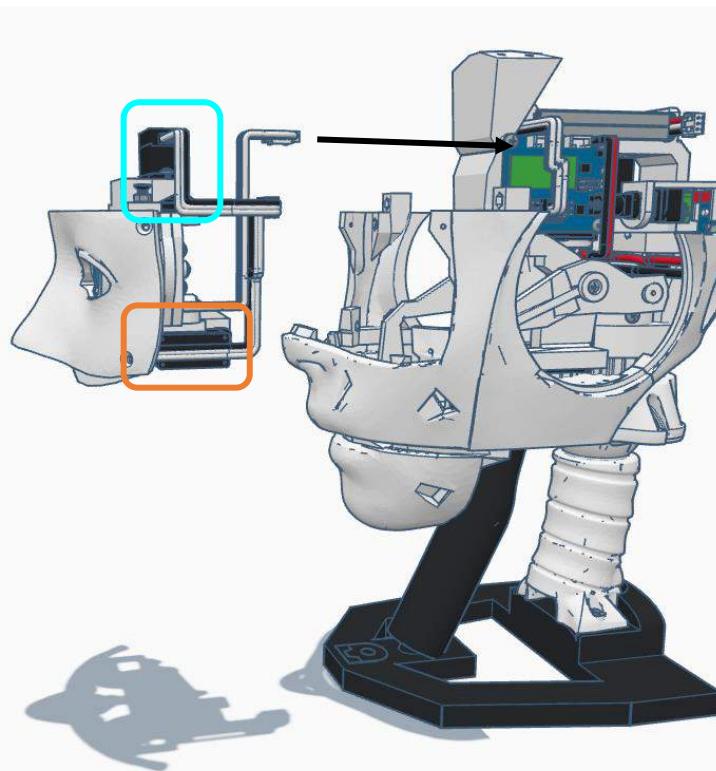
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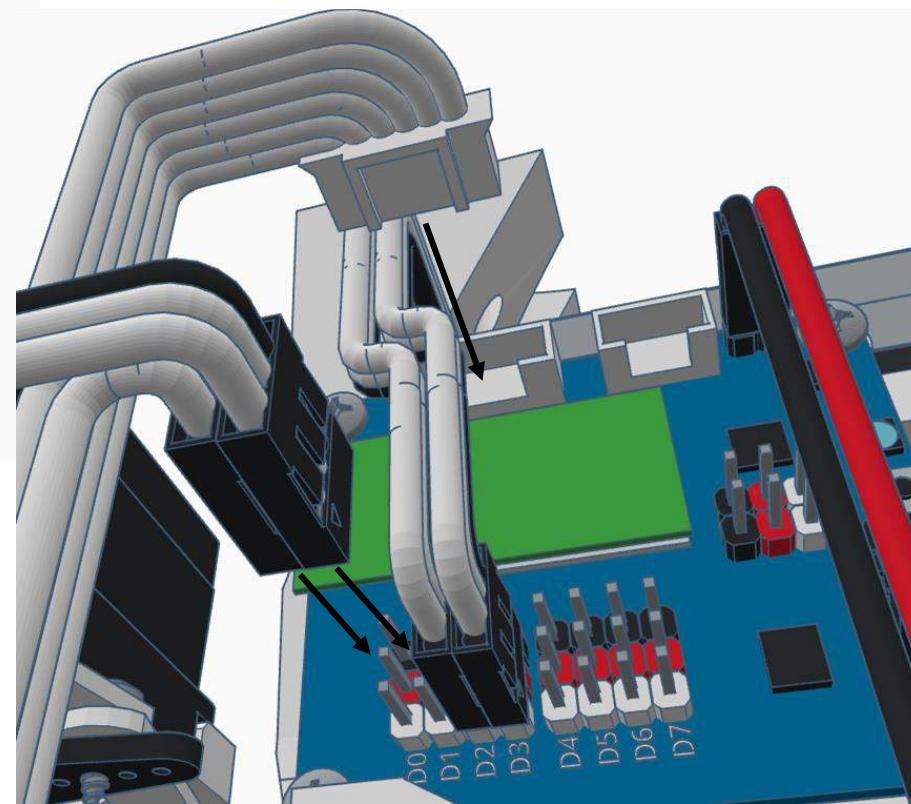


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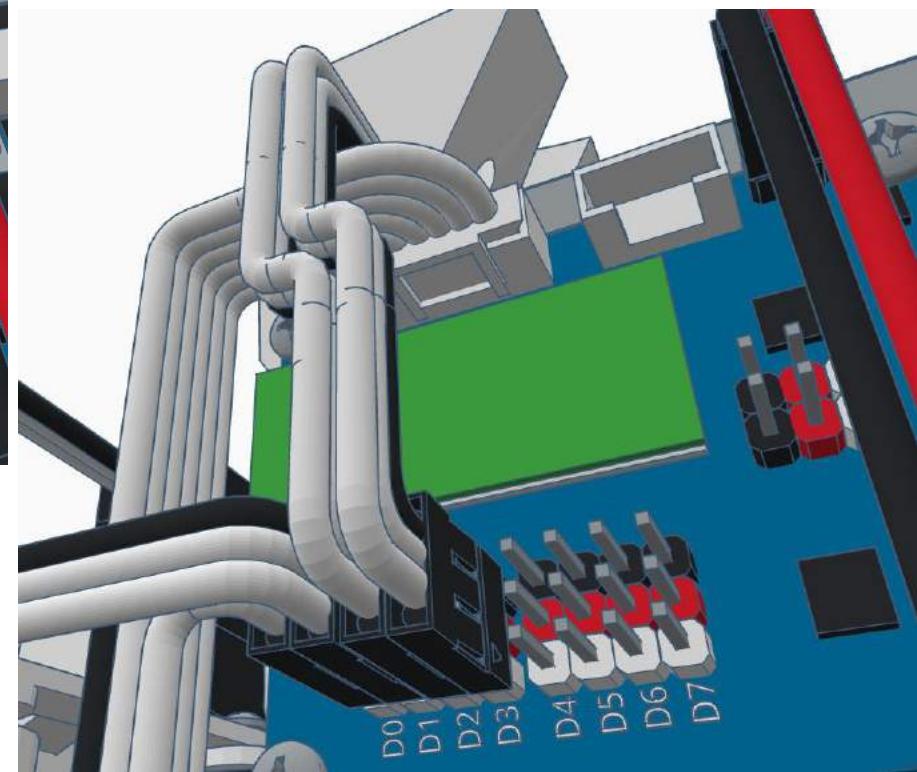


Camera Cable plugs into CAMERA port

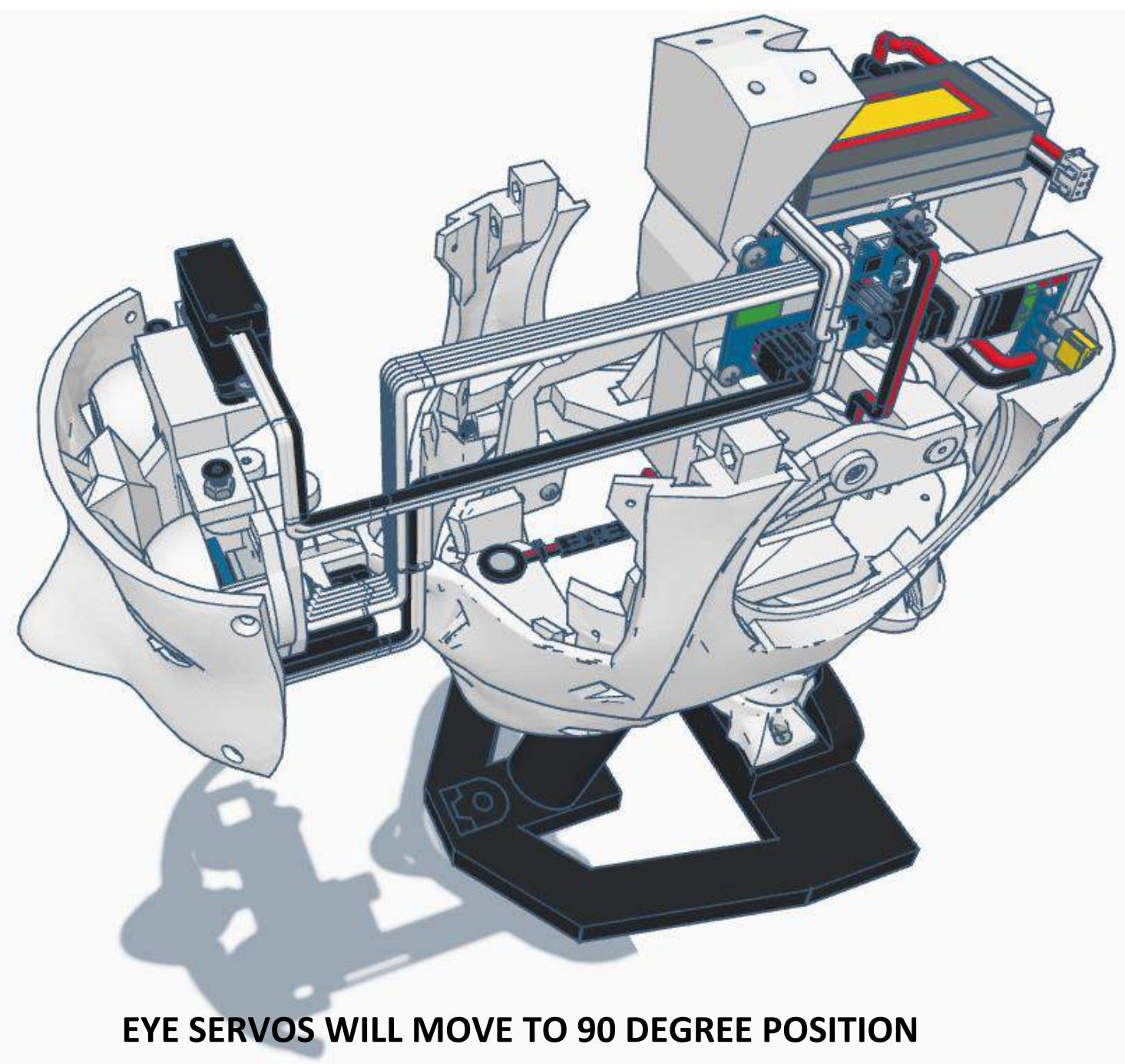
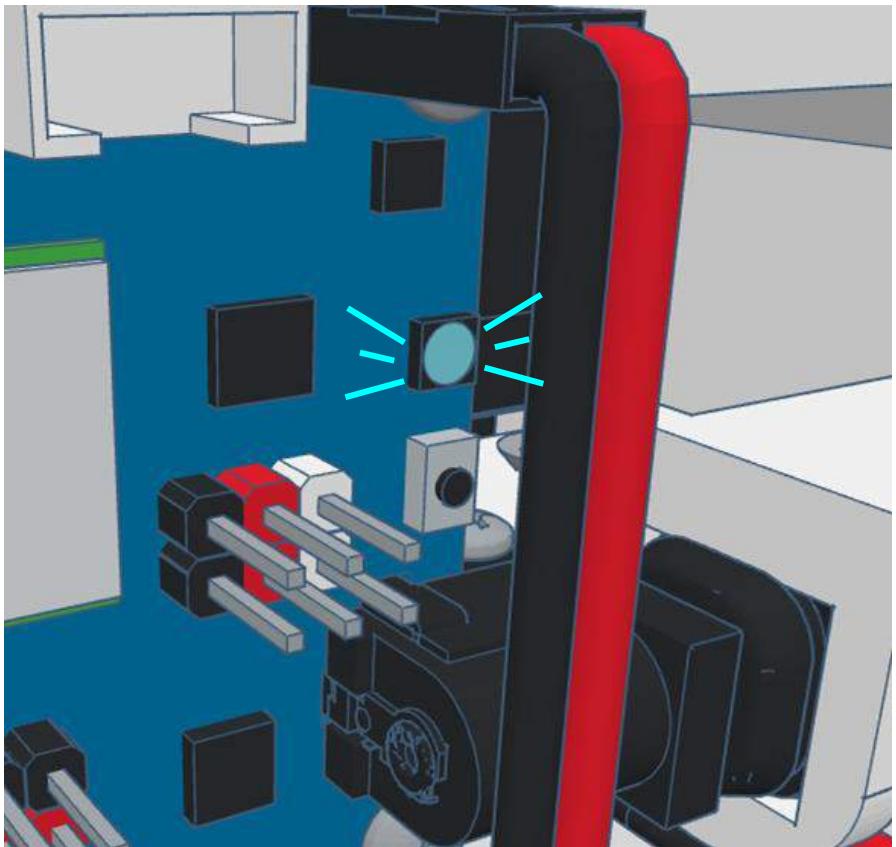


D0 - Eye Tilt Servo

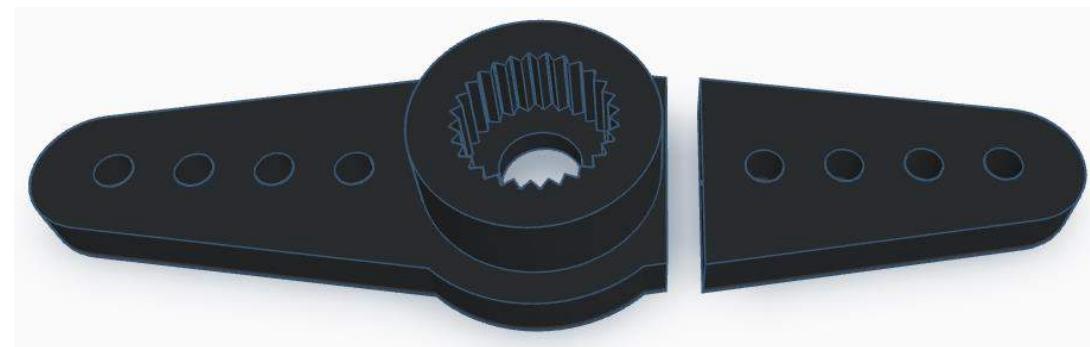
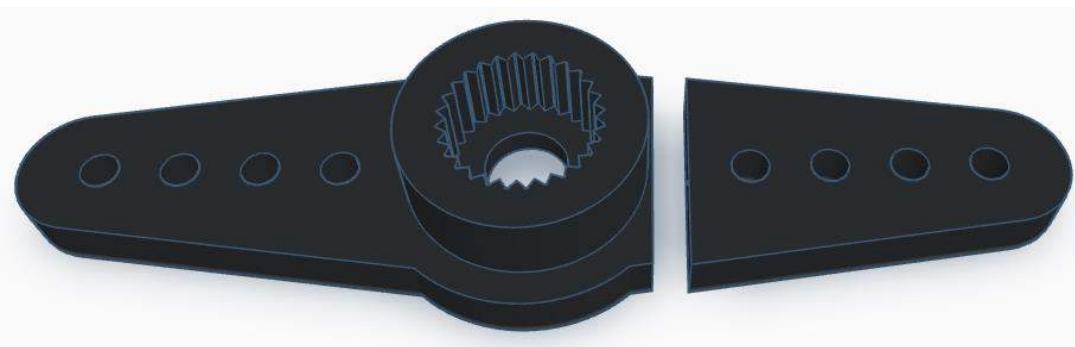
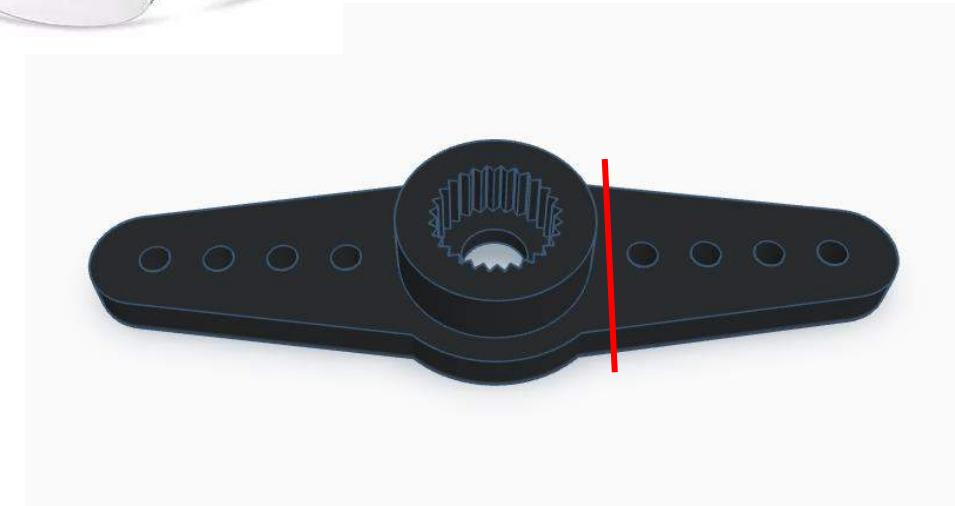
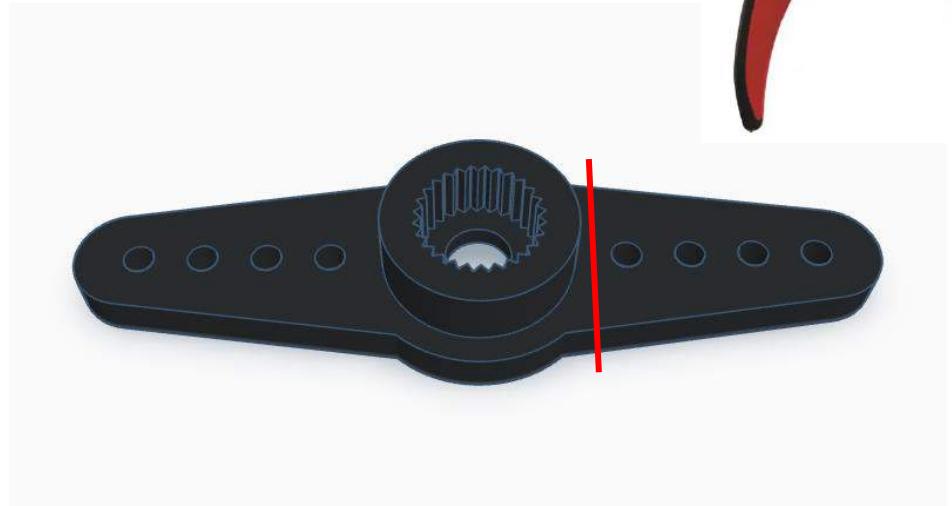
D1 - Eye Pan Servo



ENSURE THE IOTINY LED IS STILL FLASHING BLUE

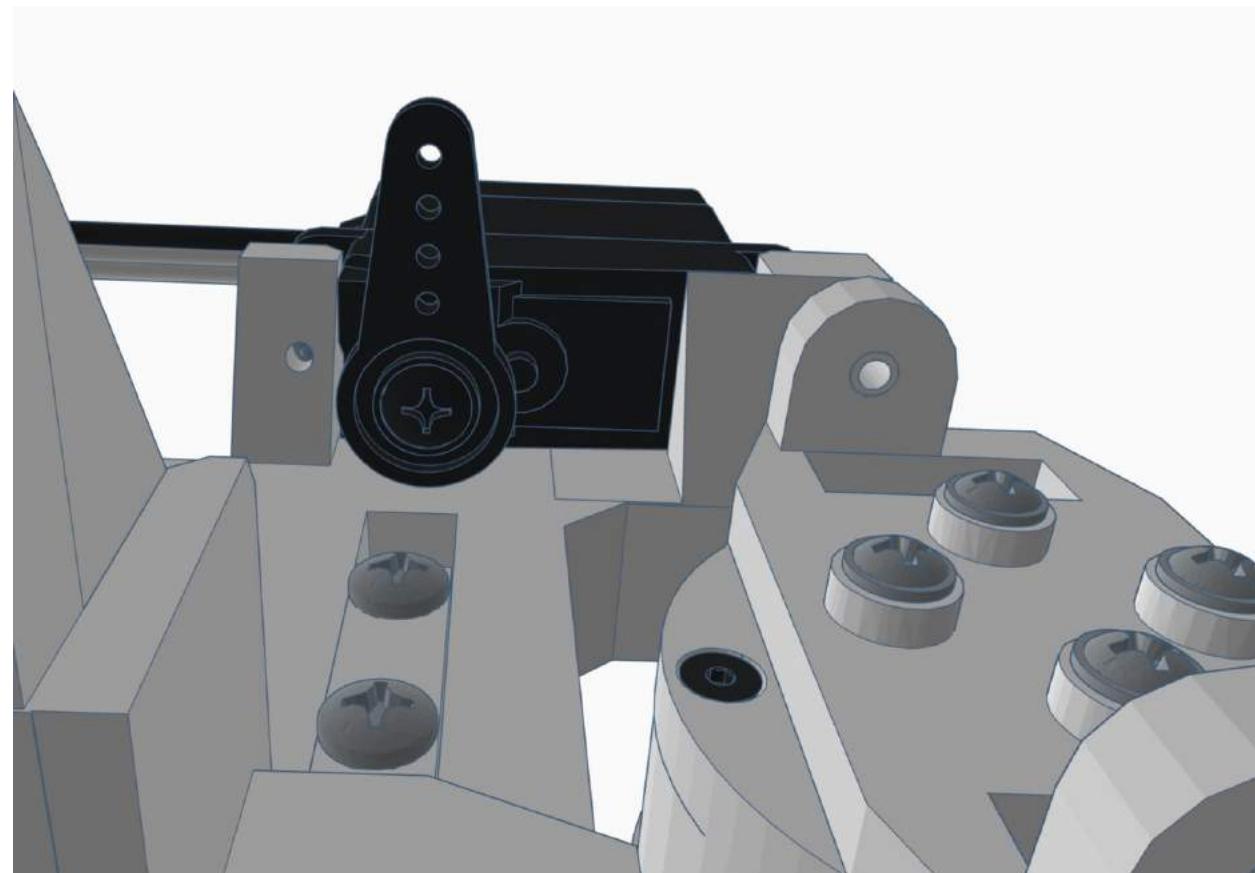
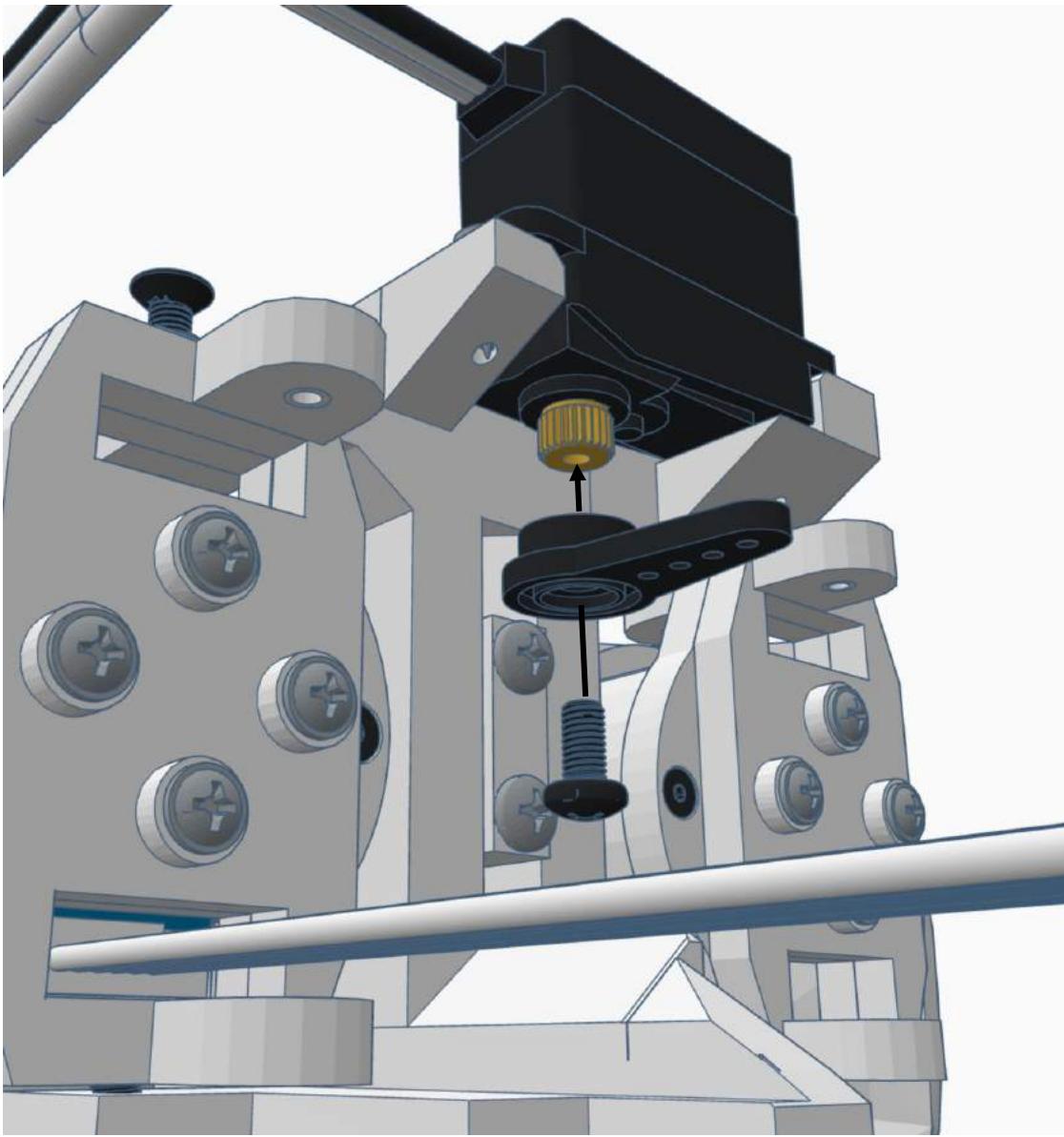


EYE SERVOS WILL MOVE TO 90 DEGREE POSITION



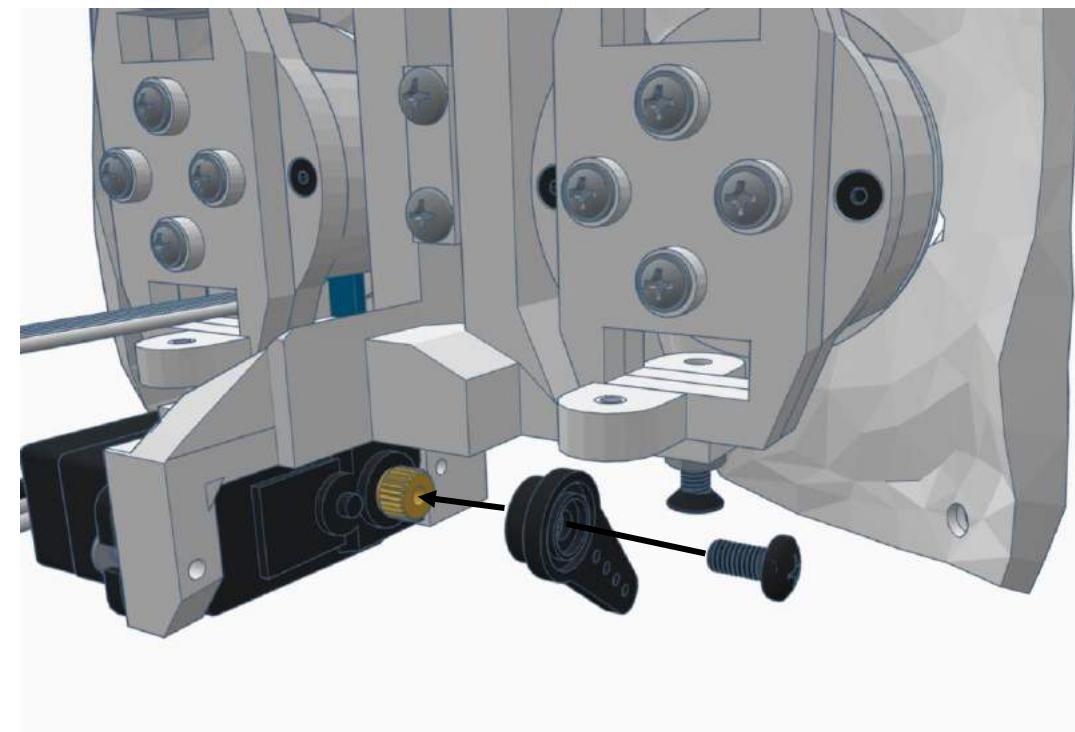


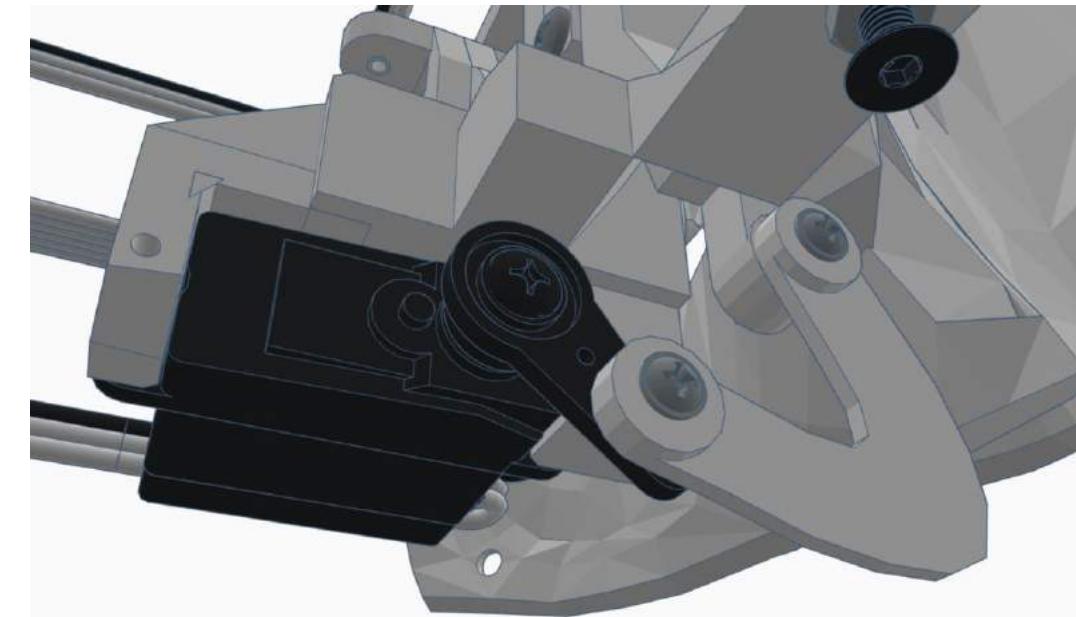
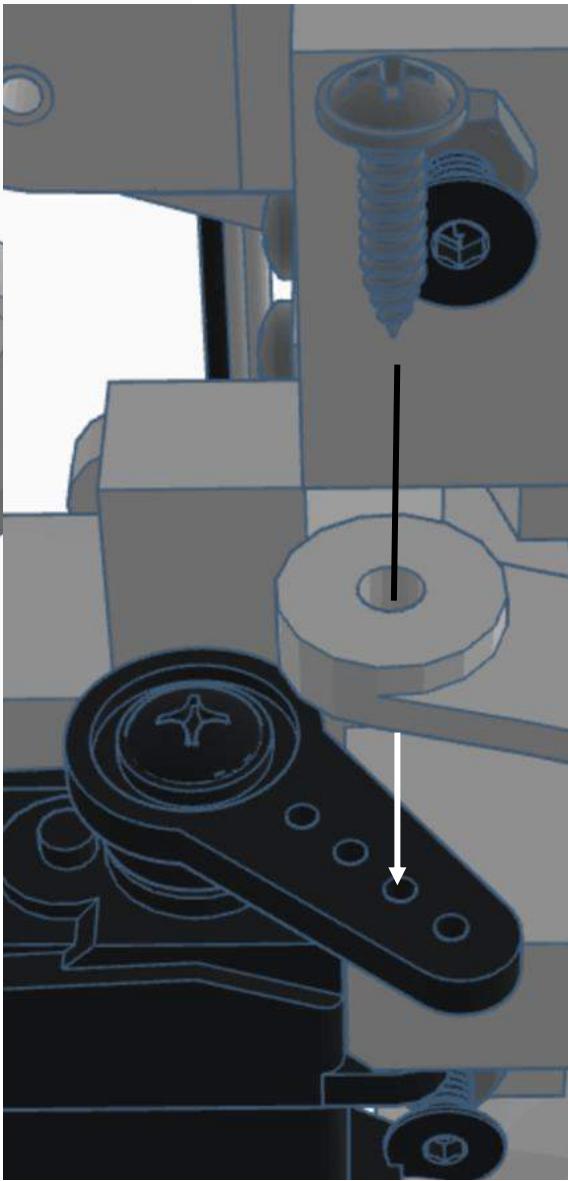
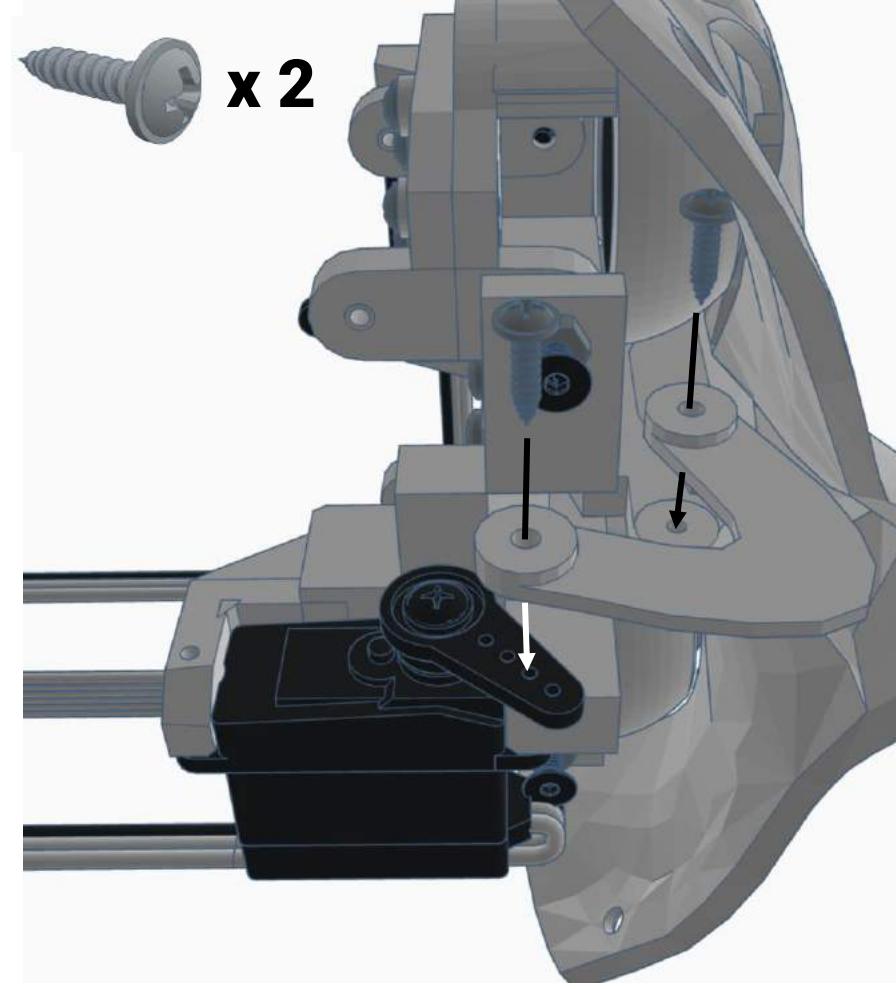
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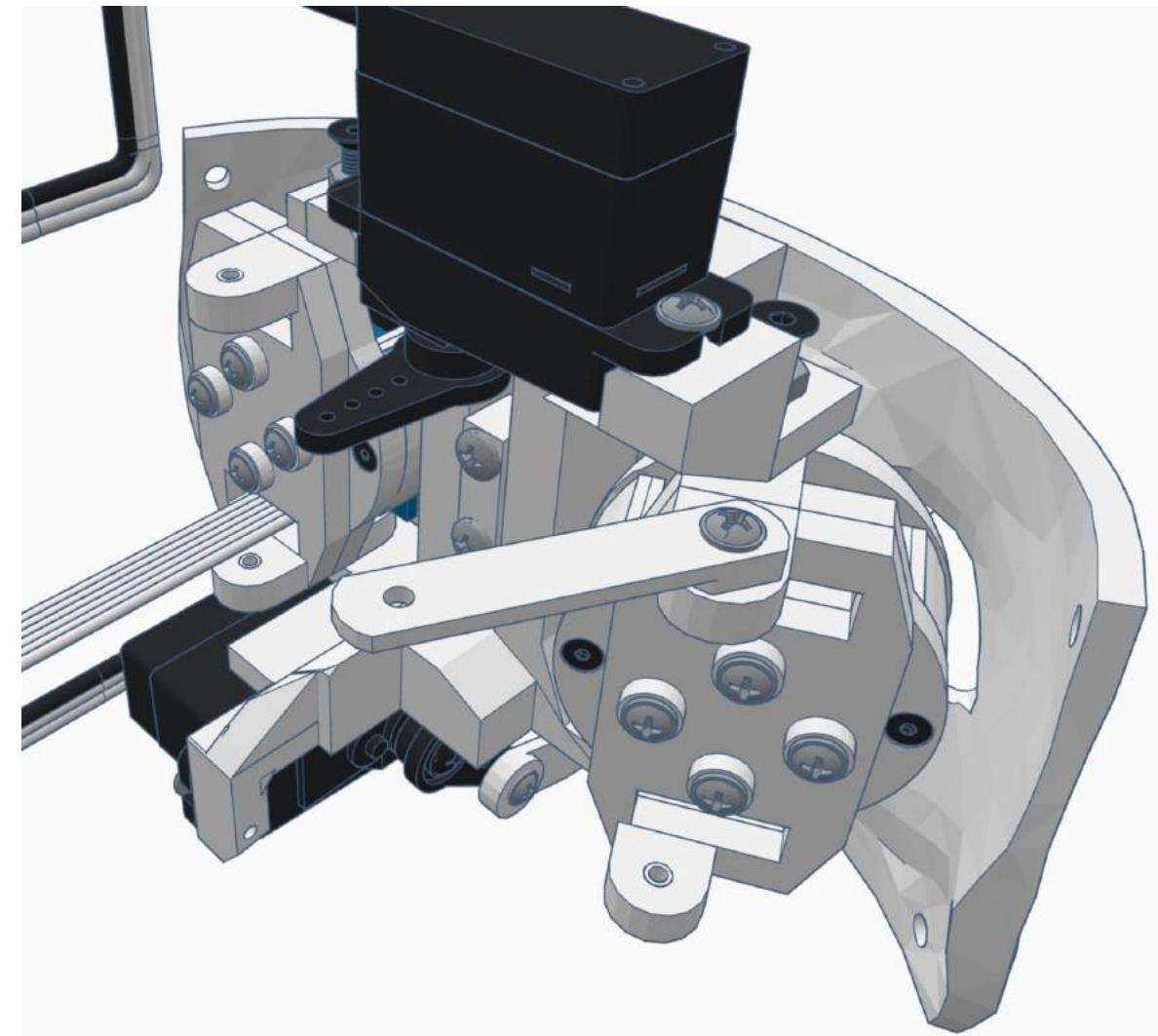
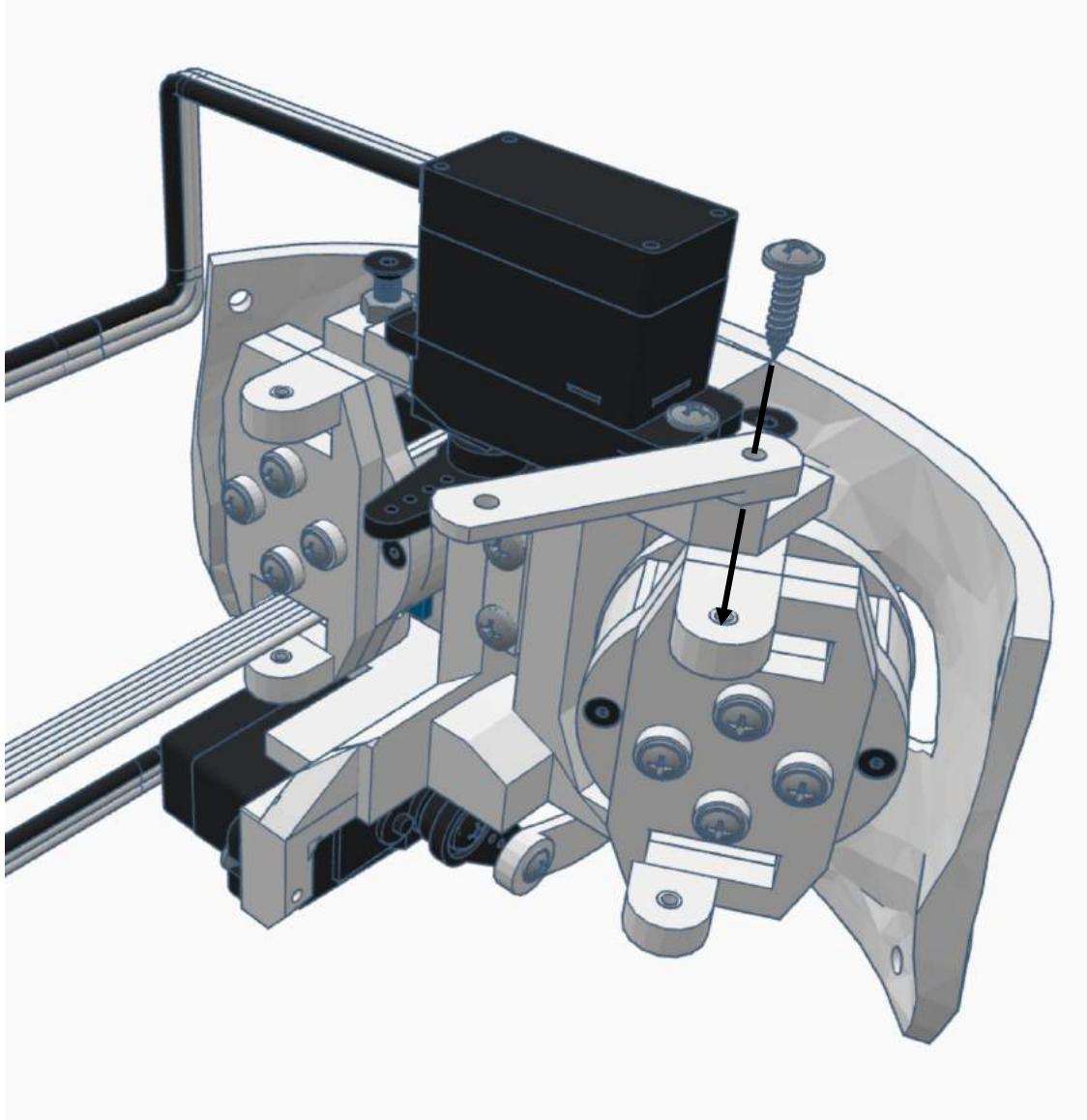
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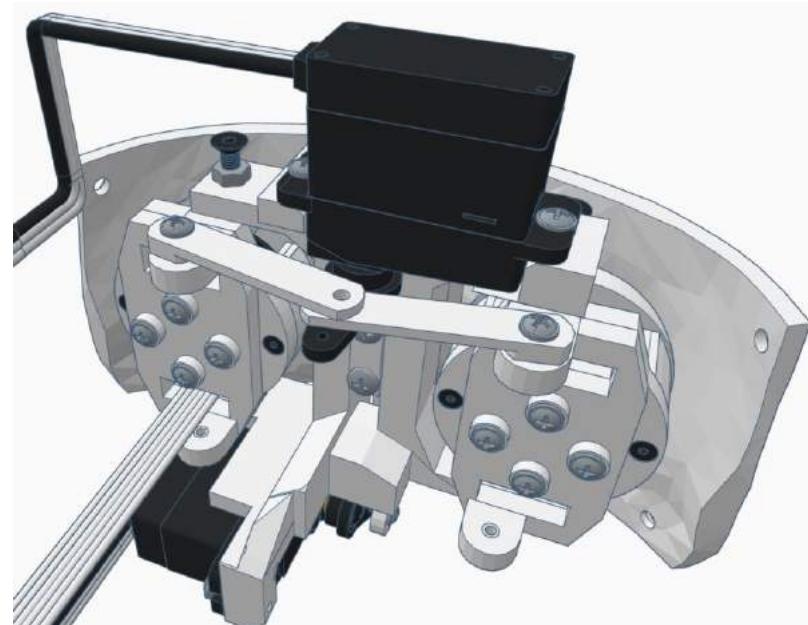
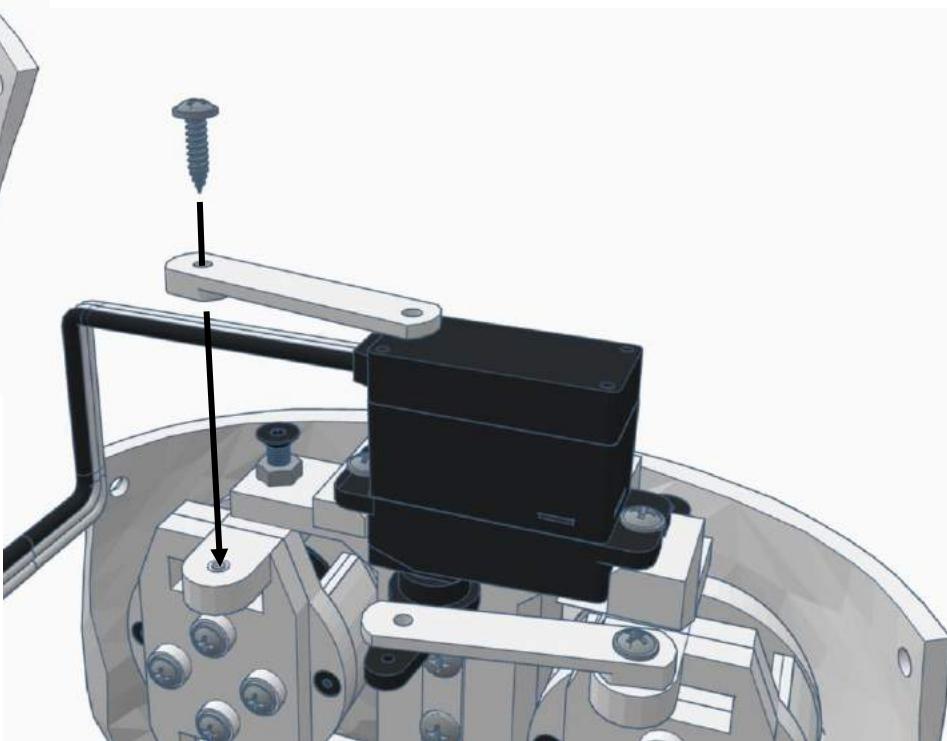
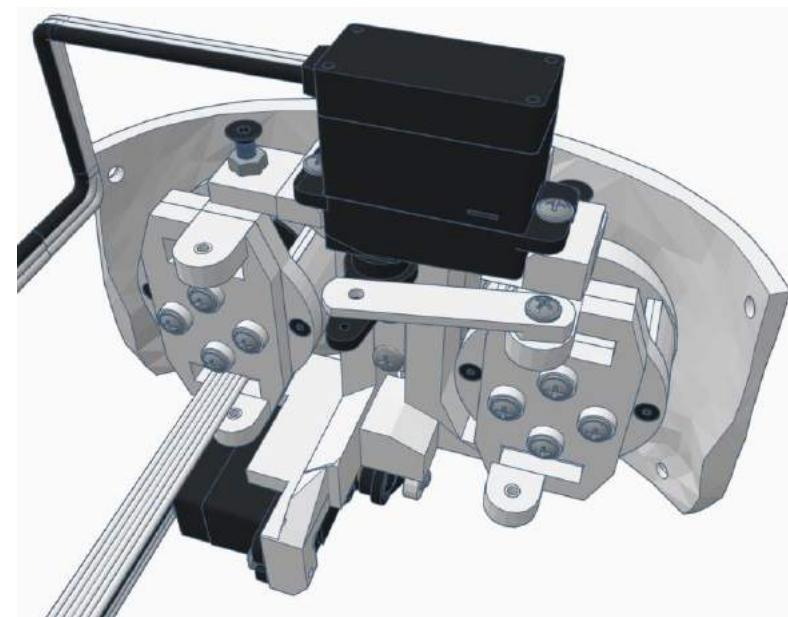


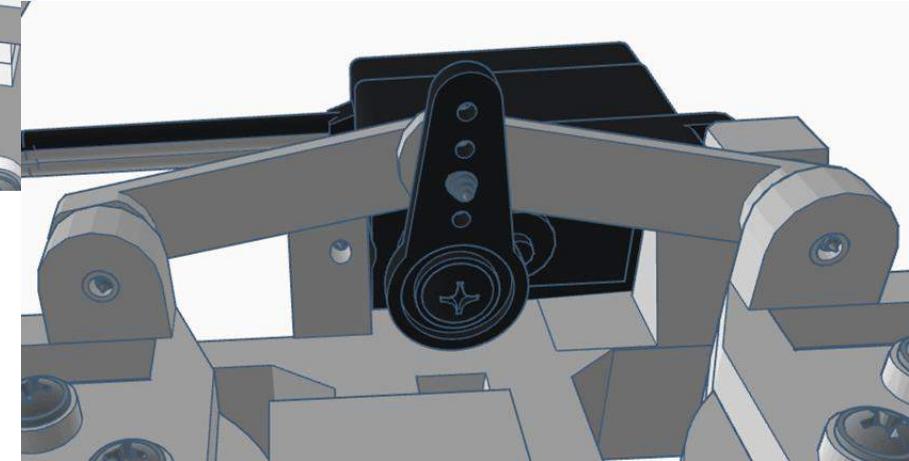
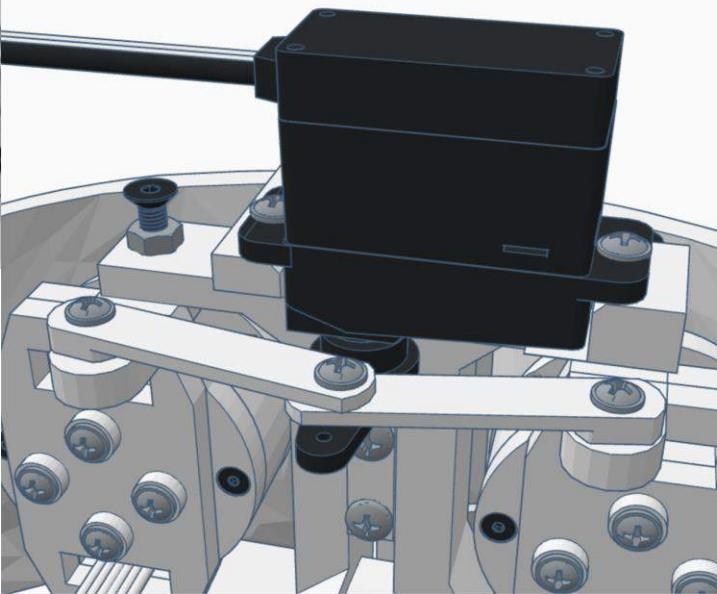
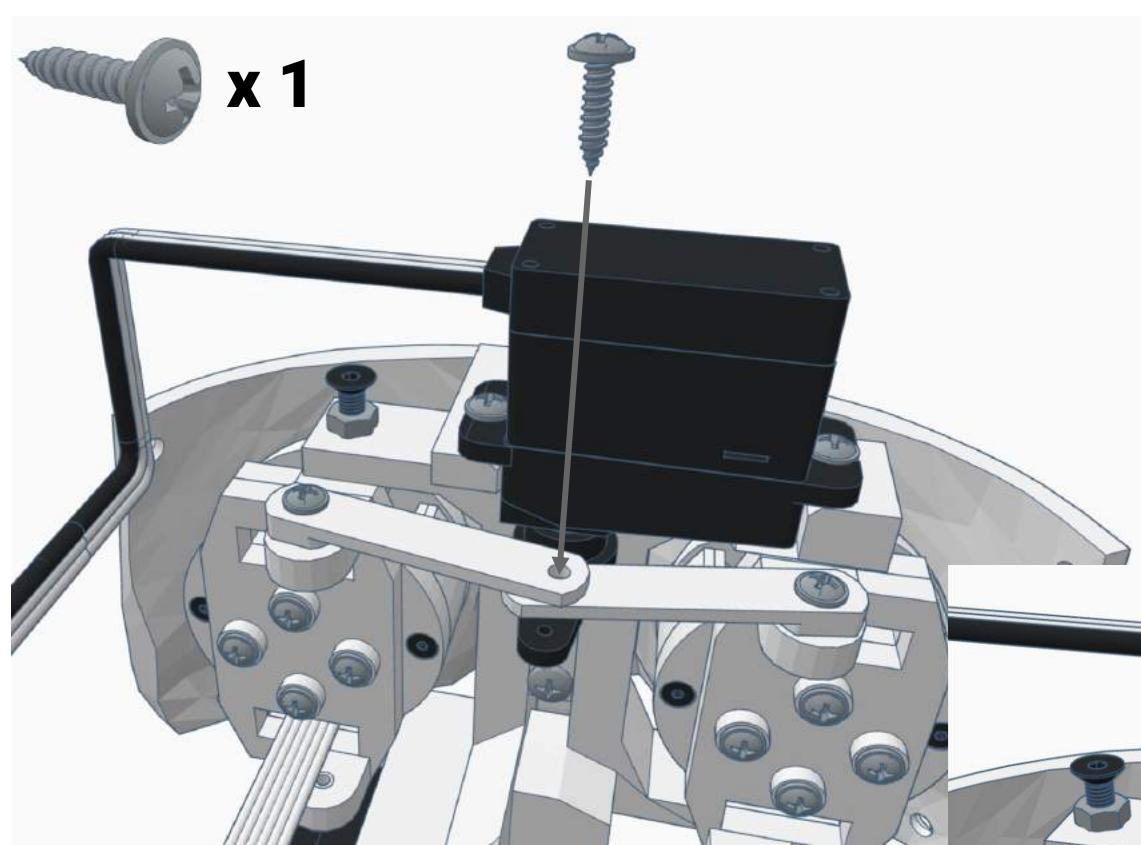
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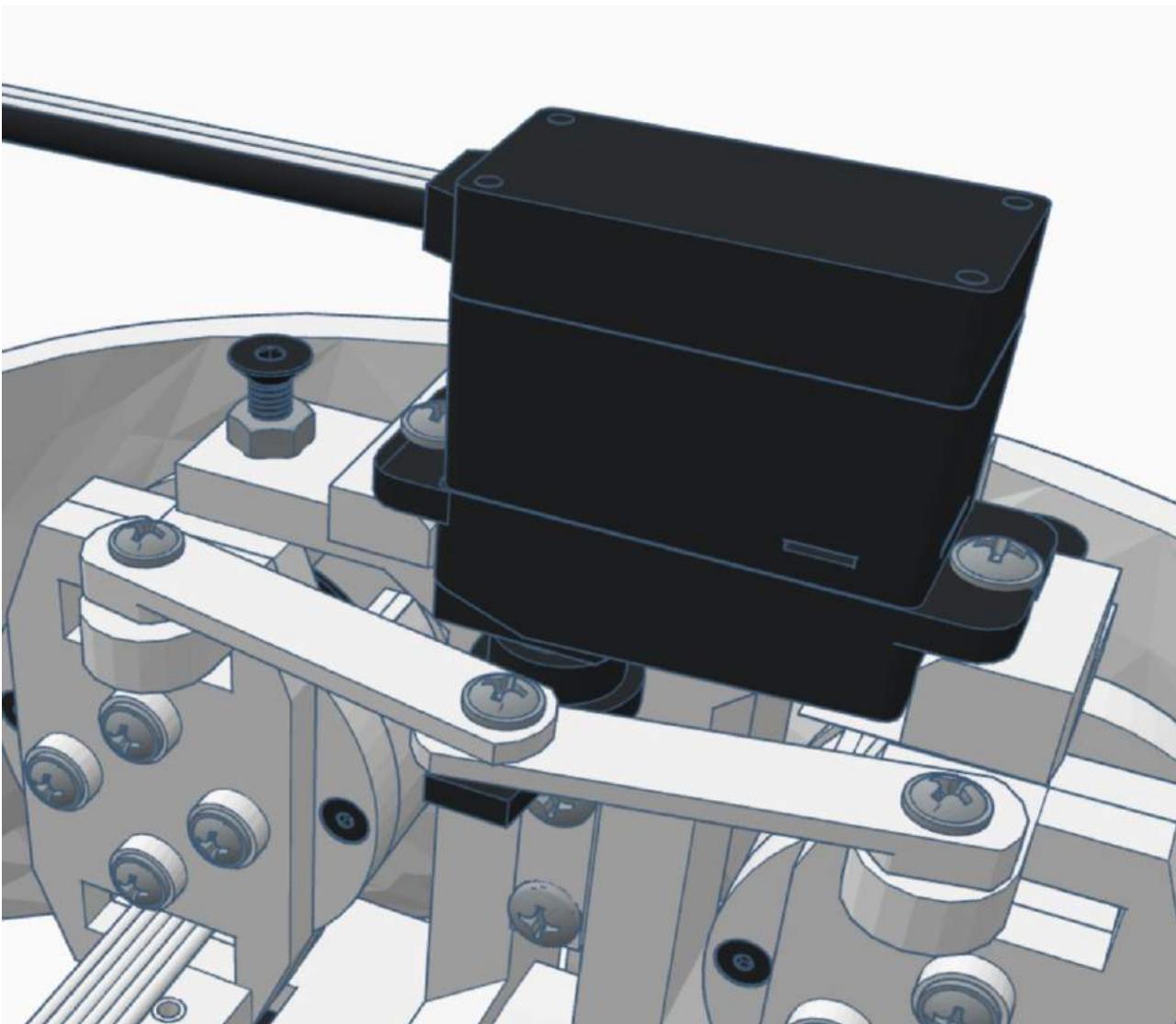
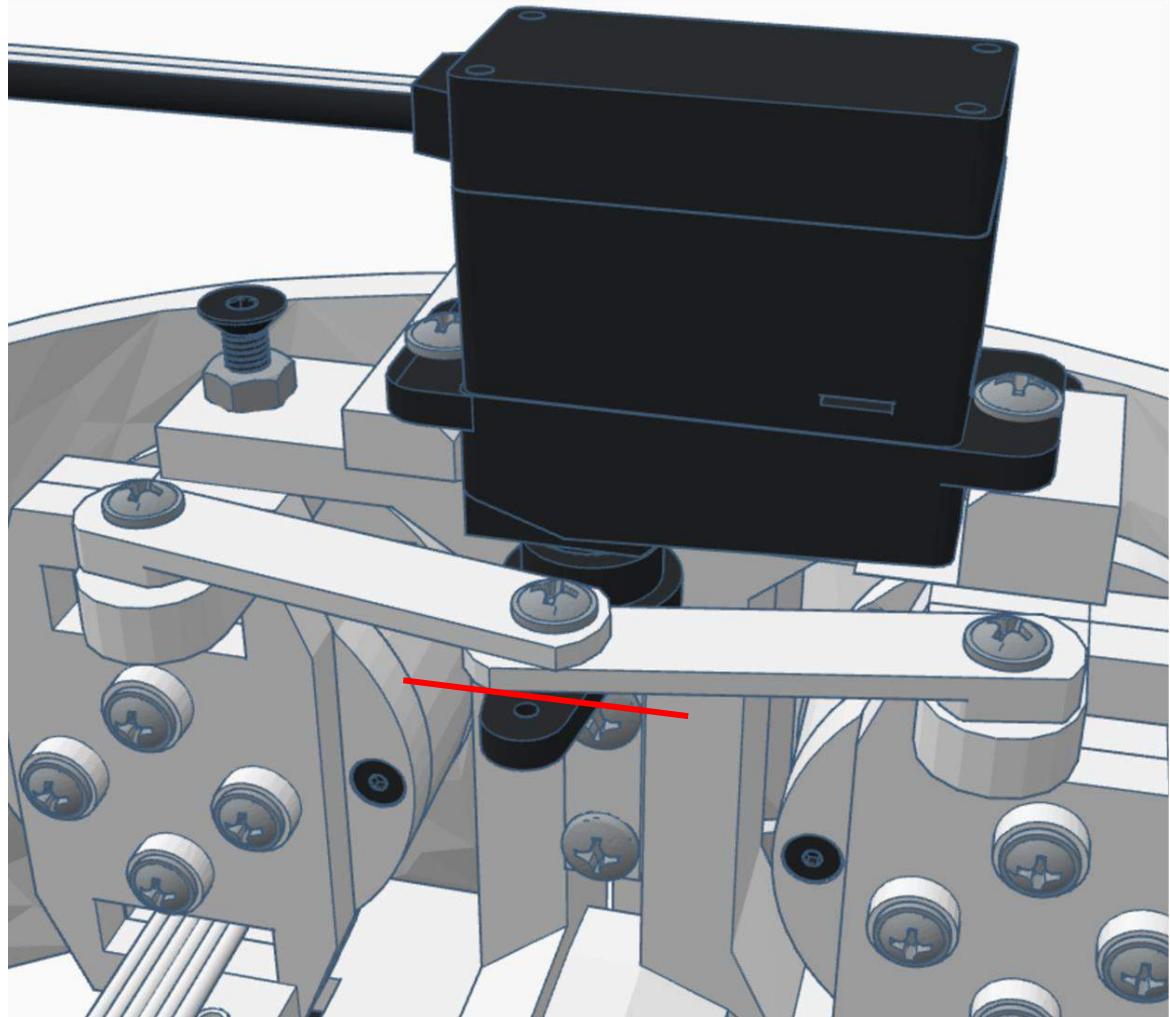


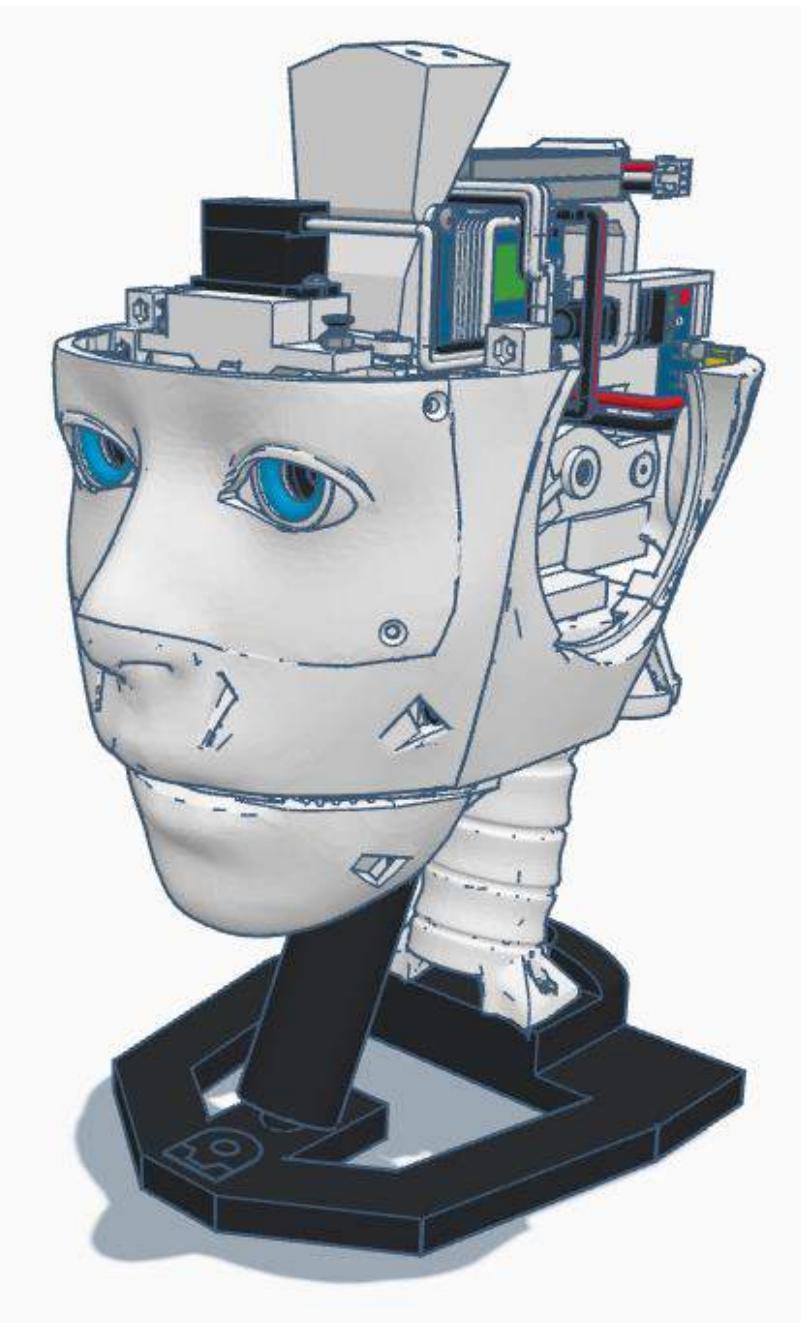
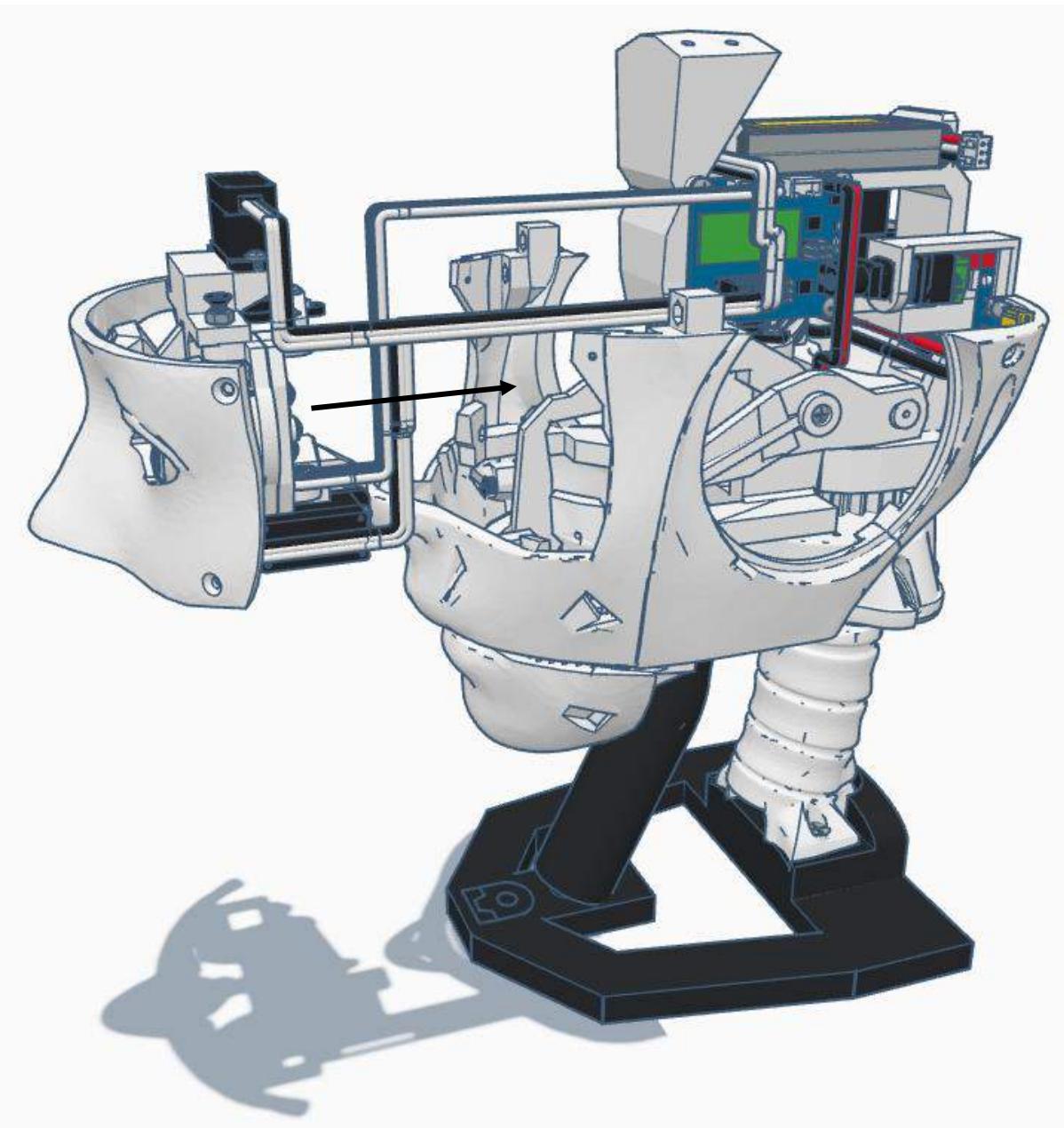


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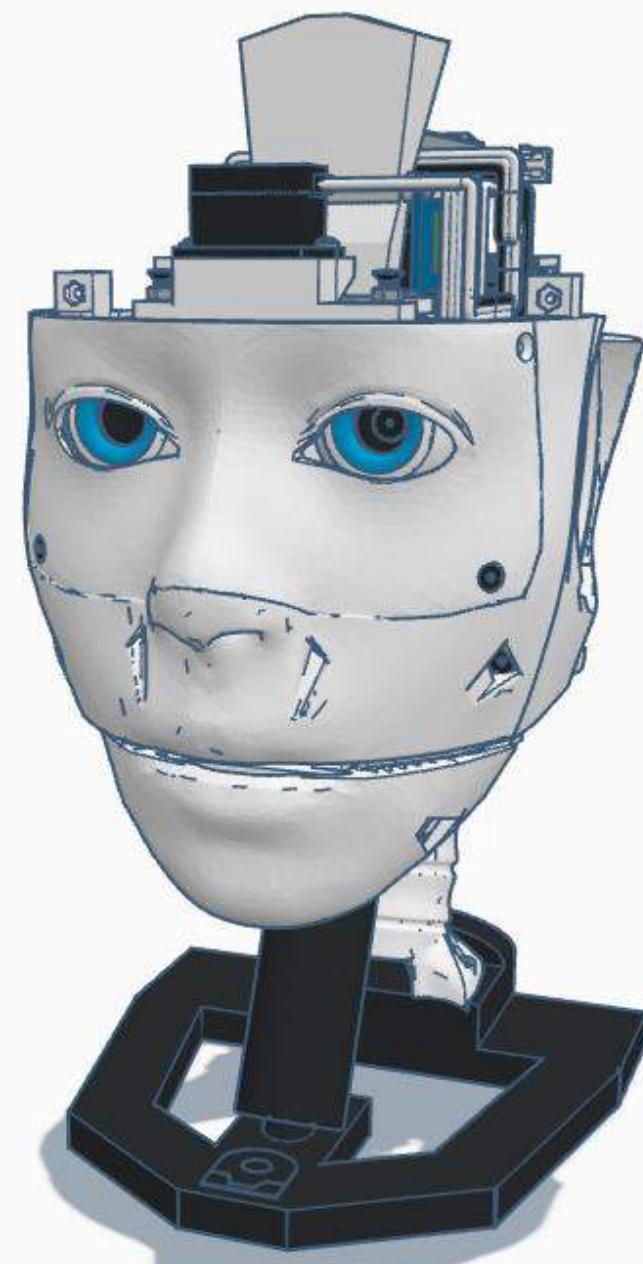
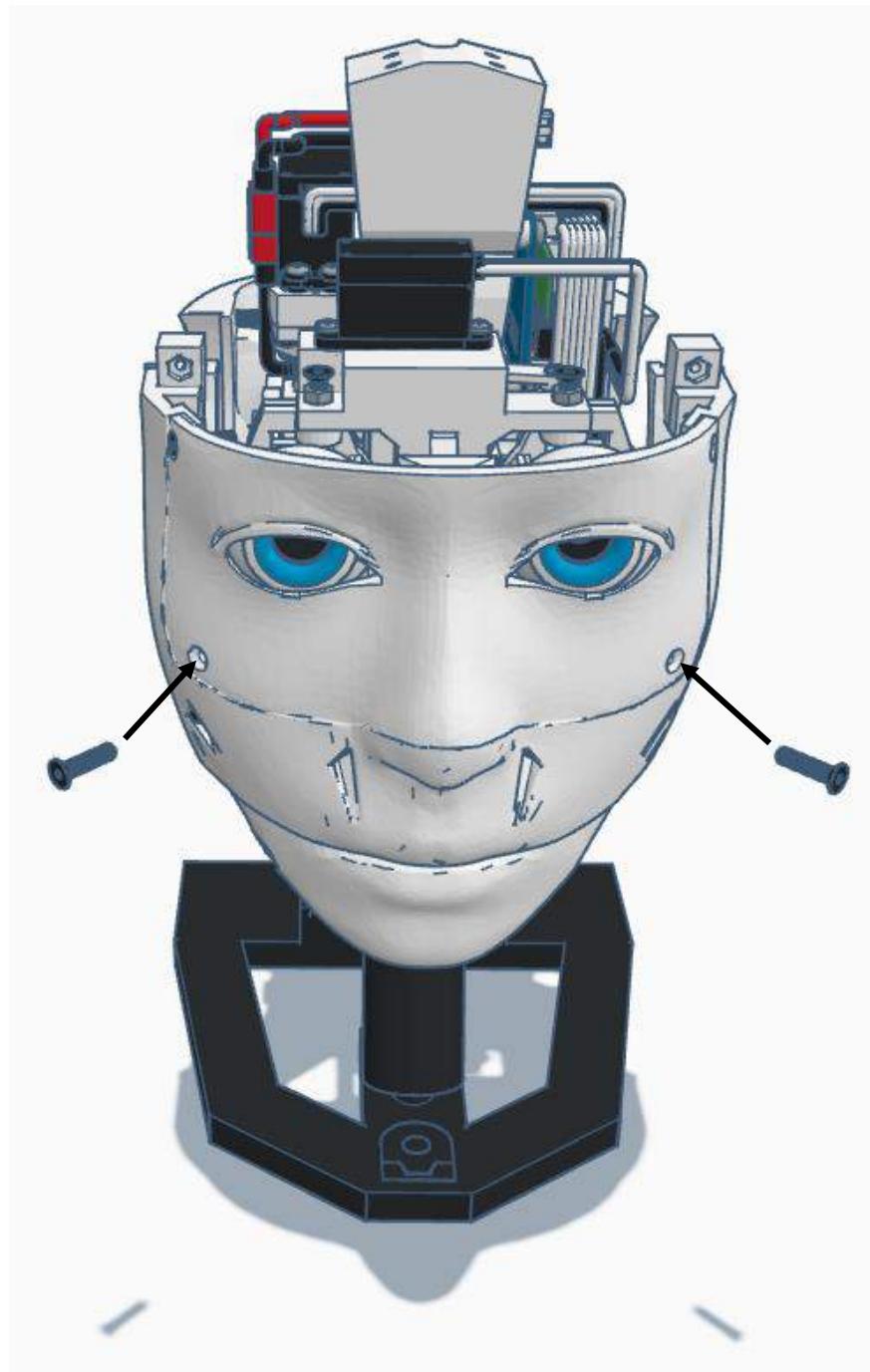


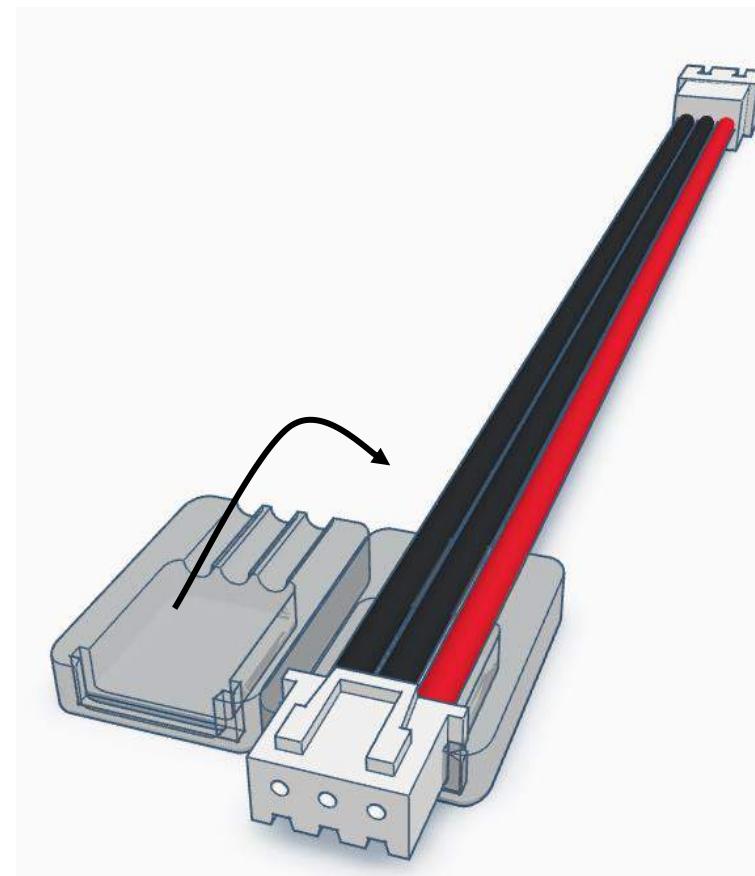
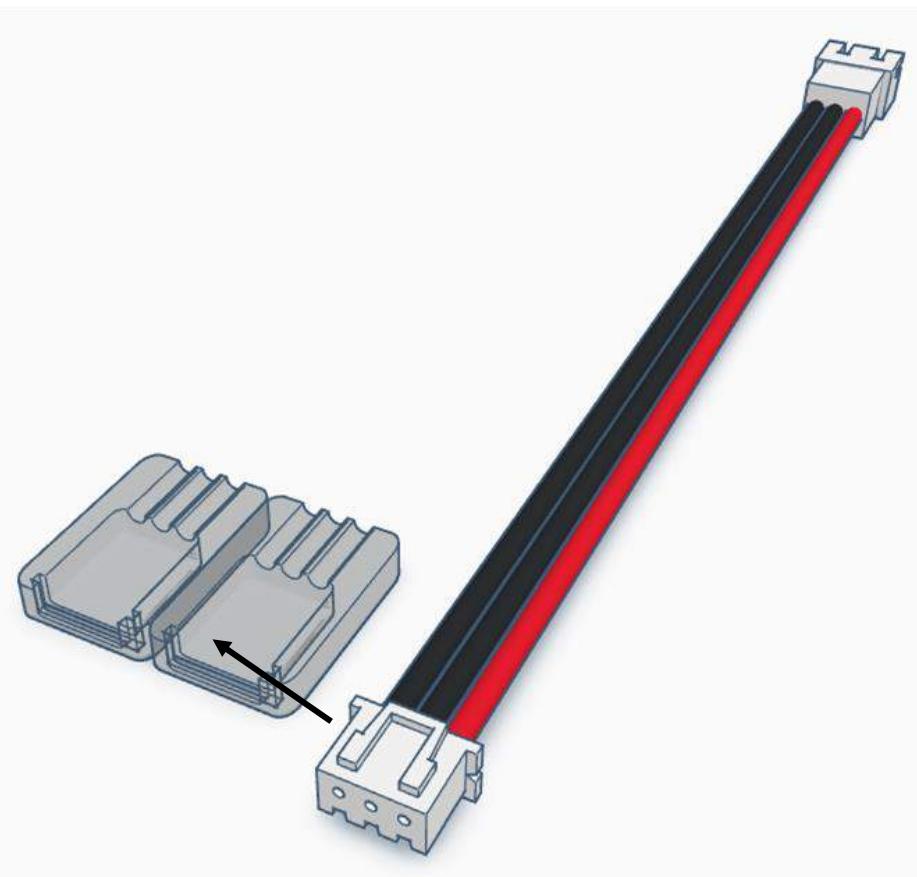
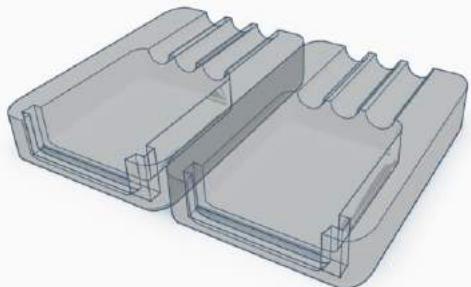
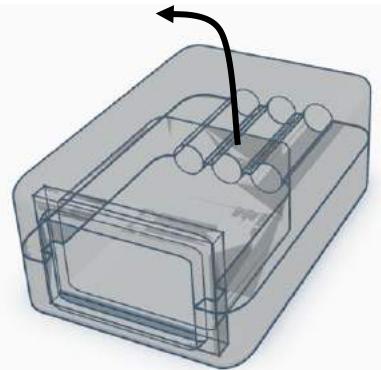


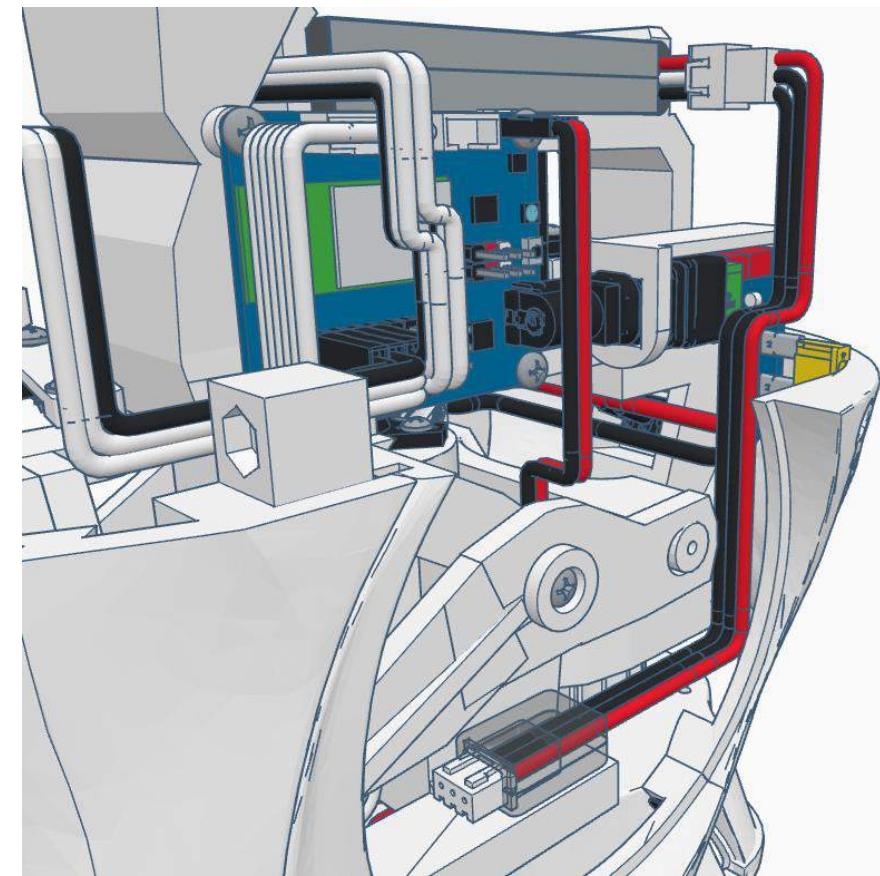
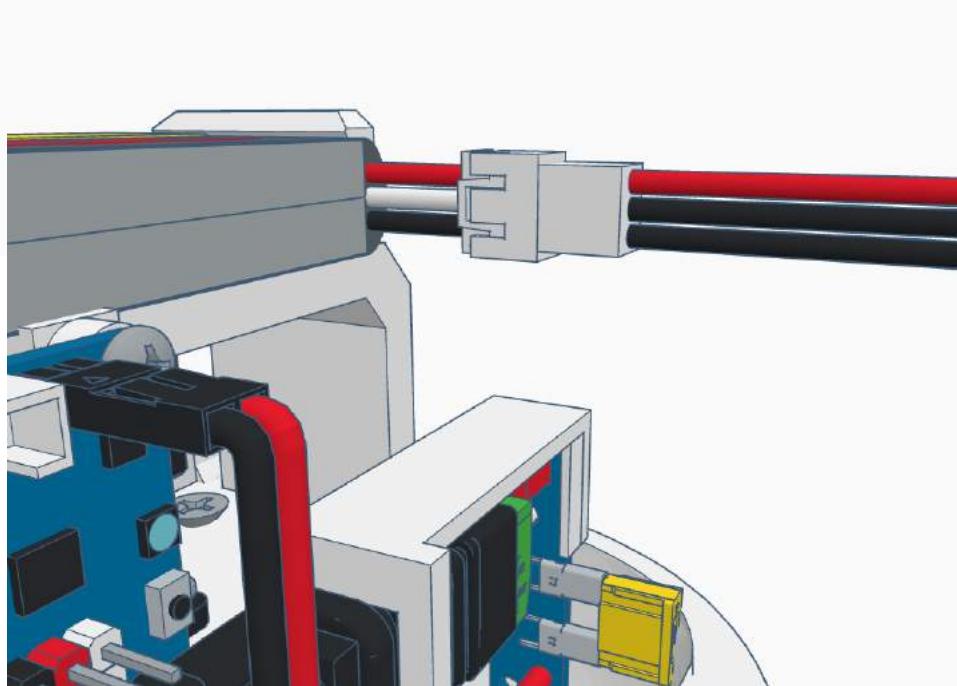
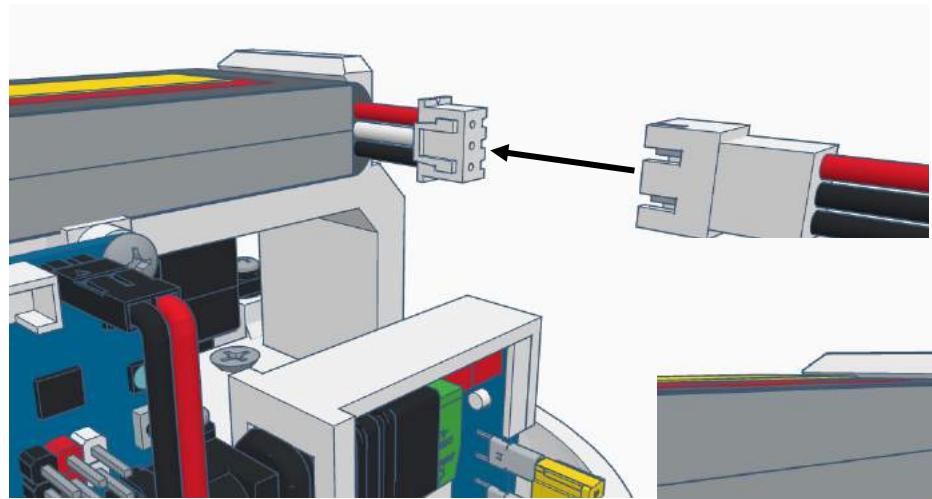




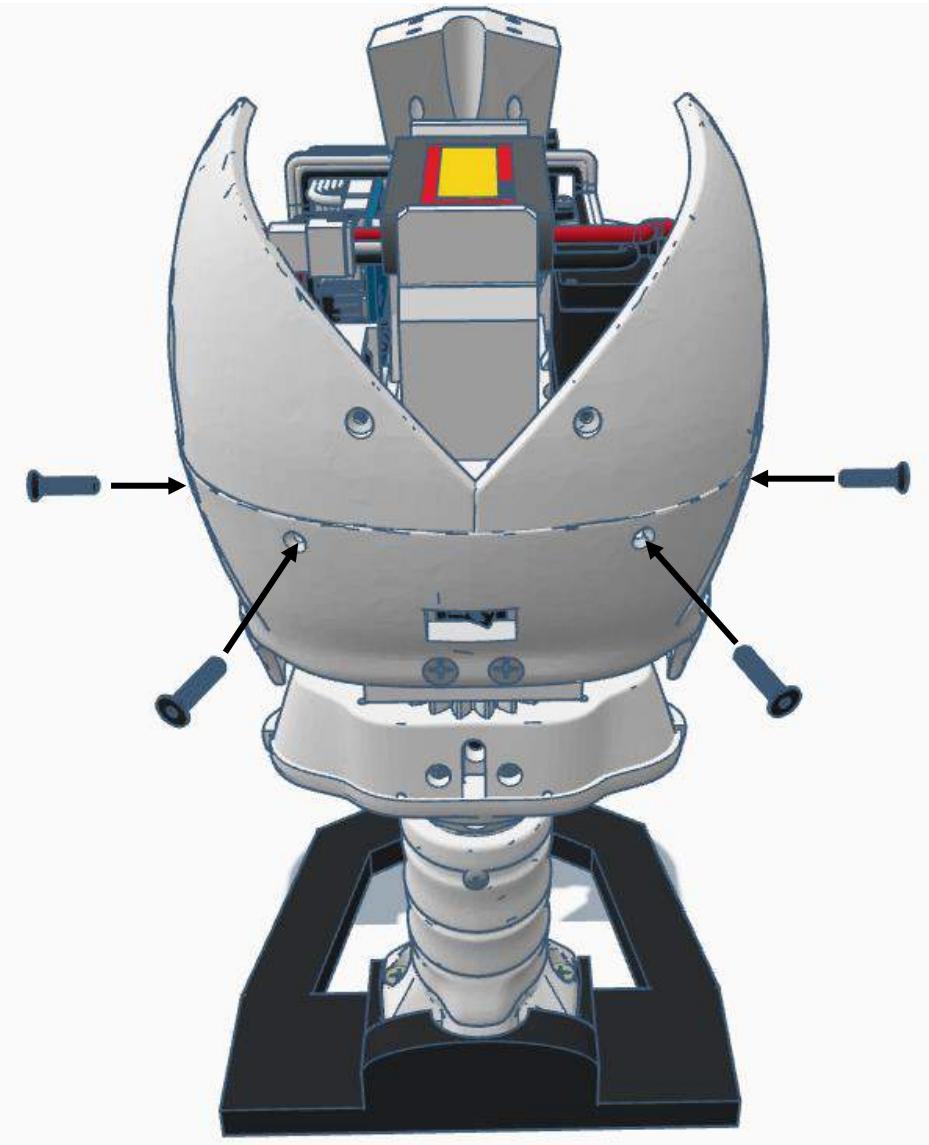
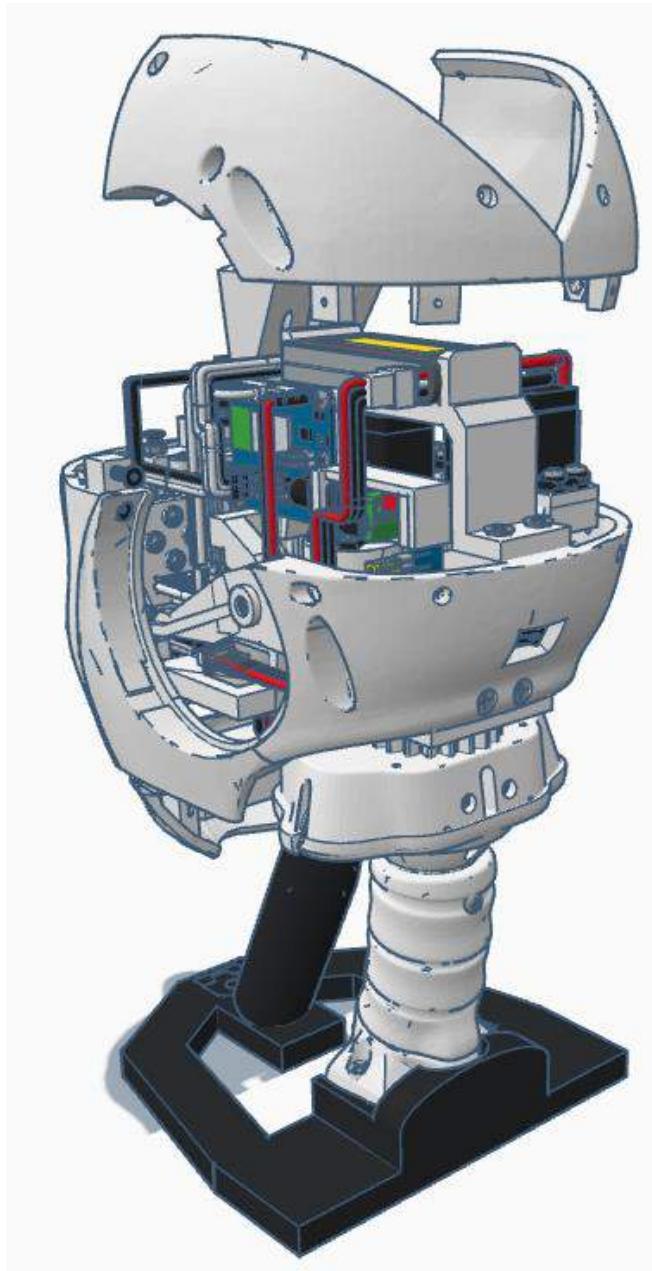
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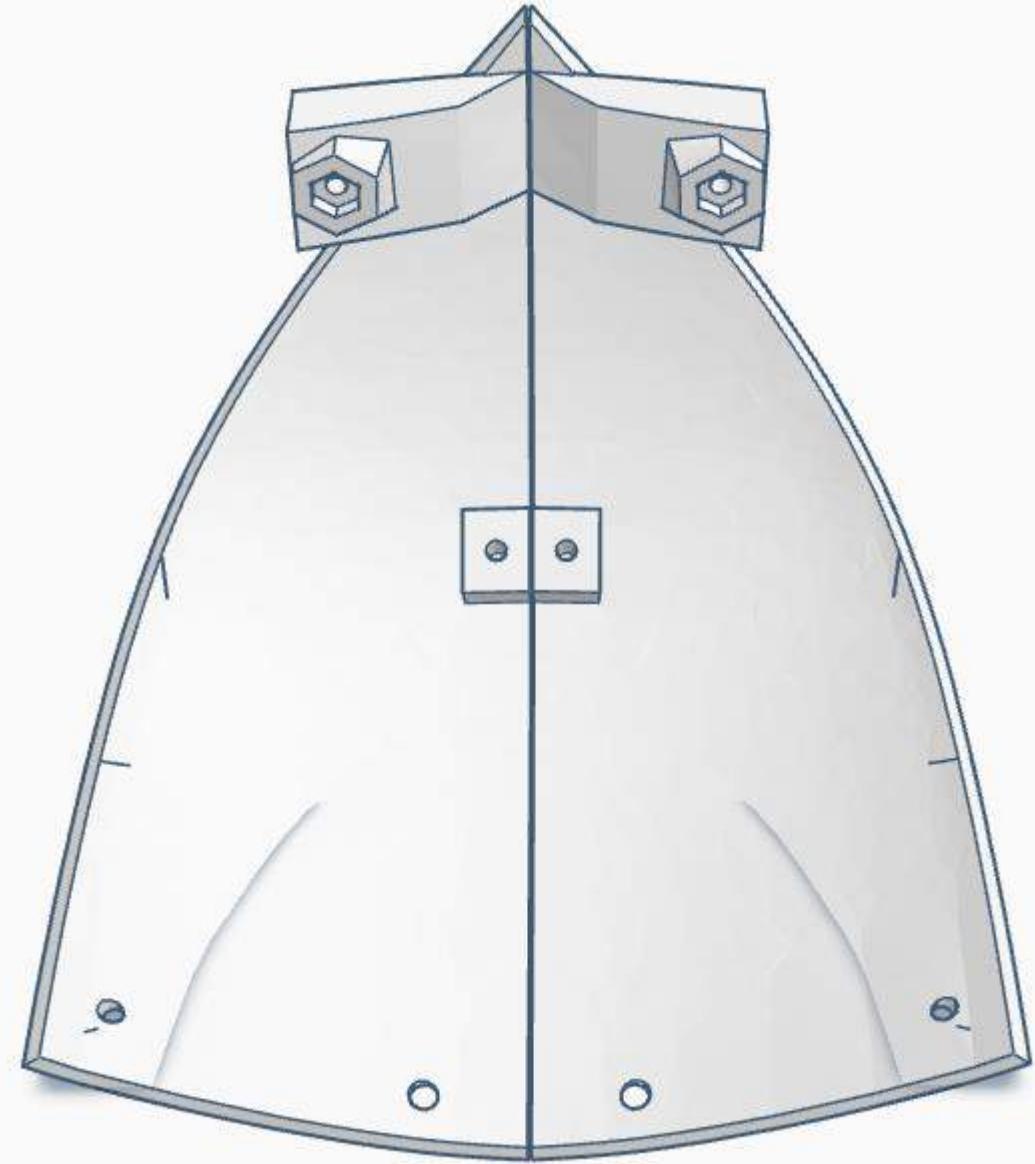
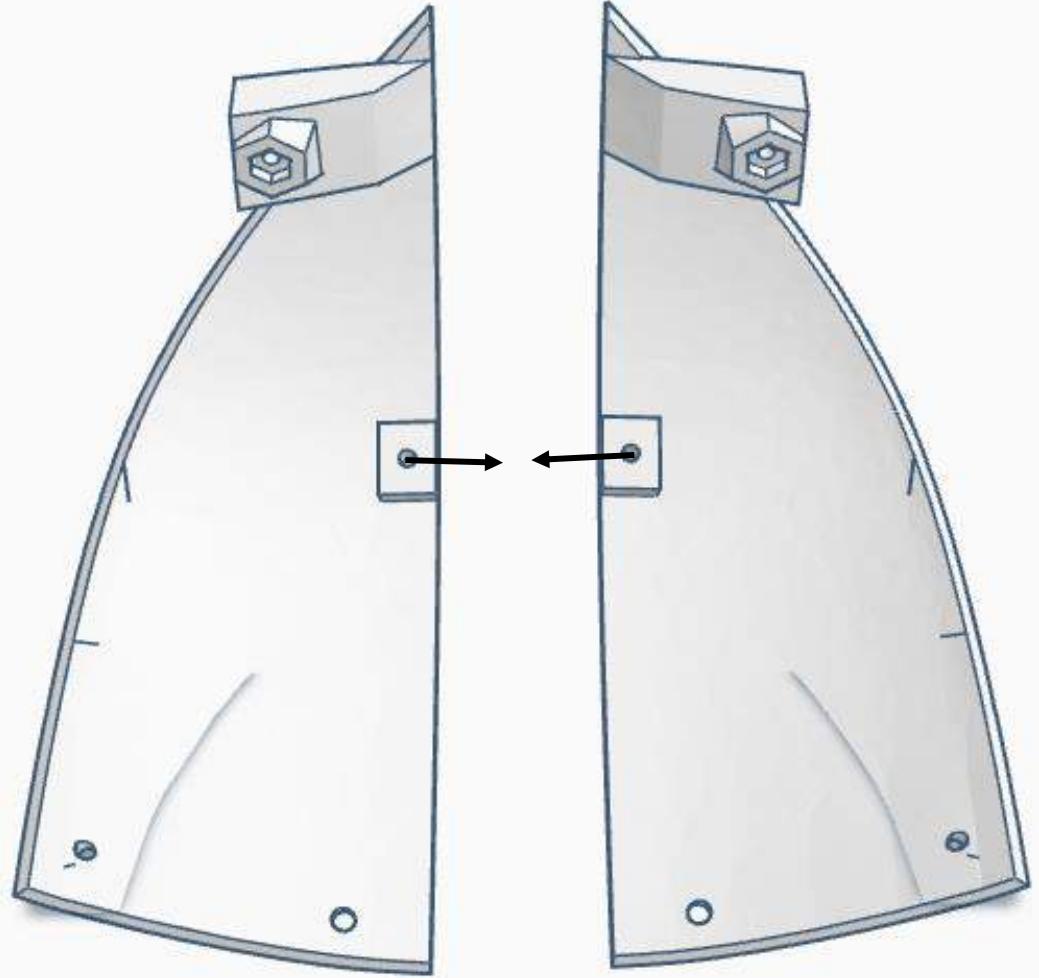






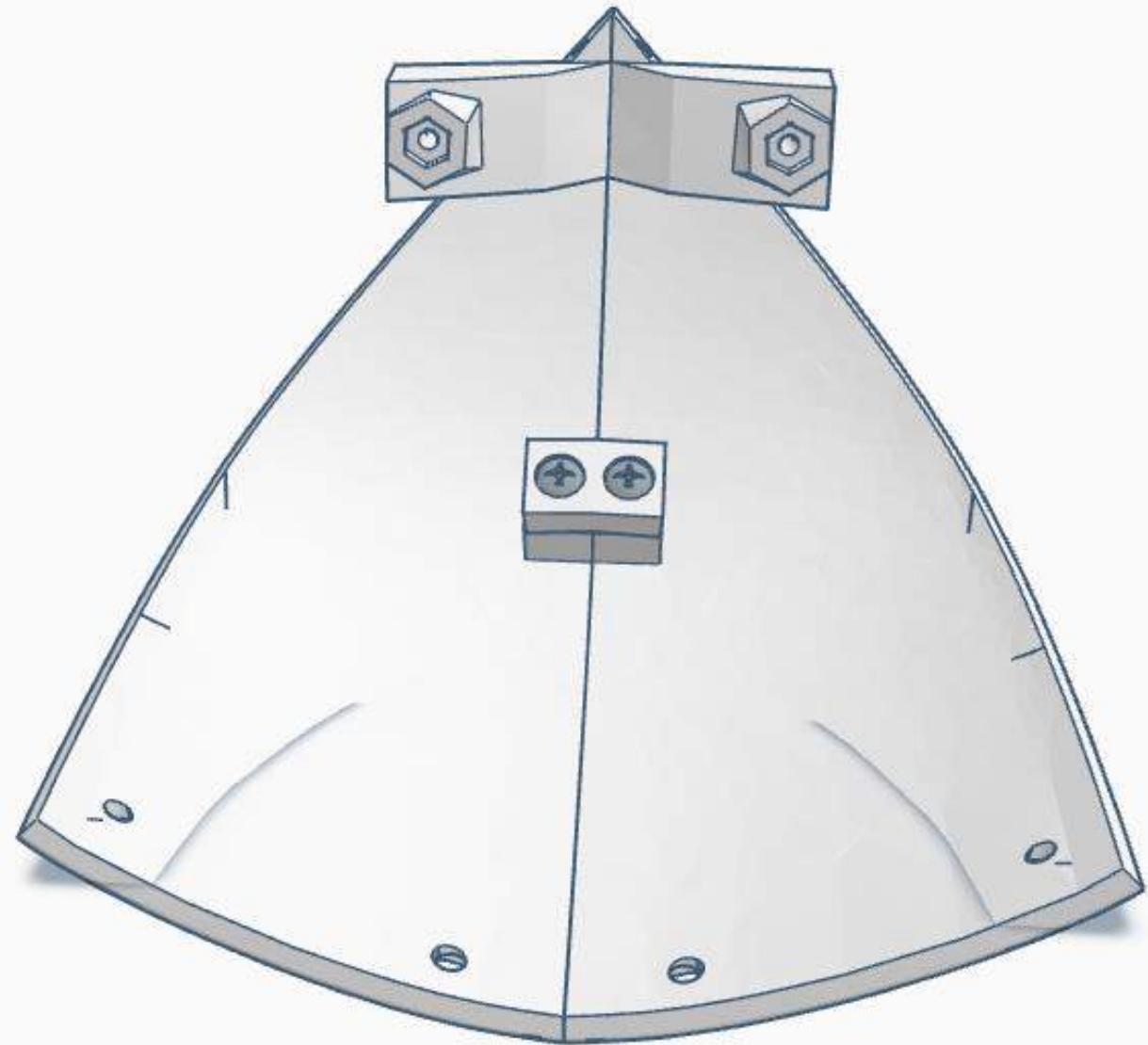
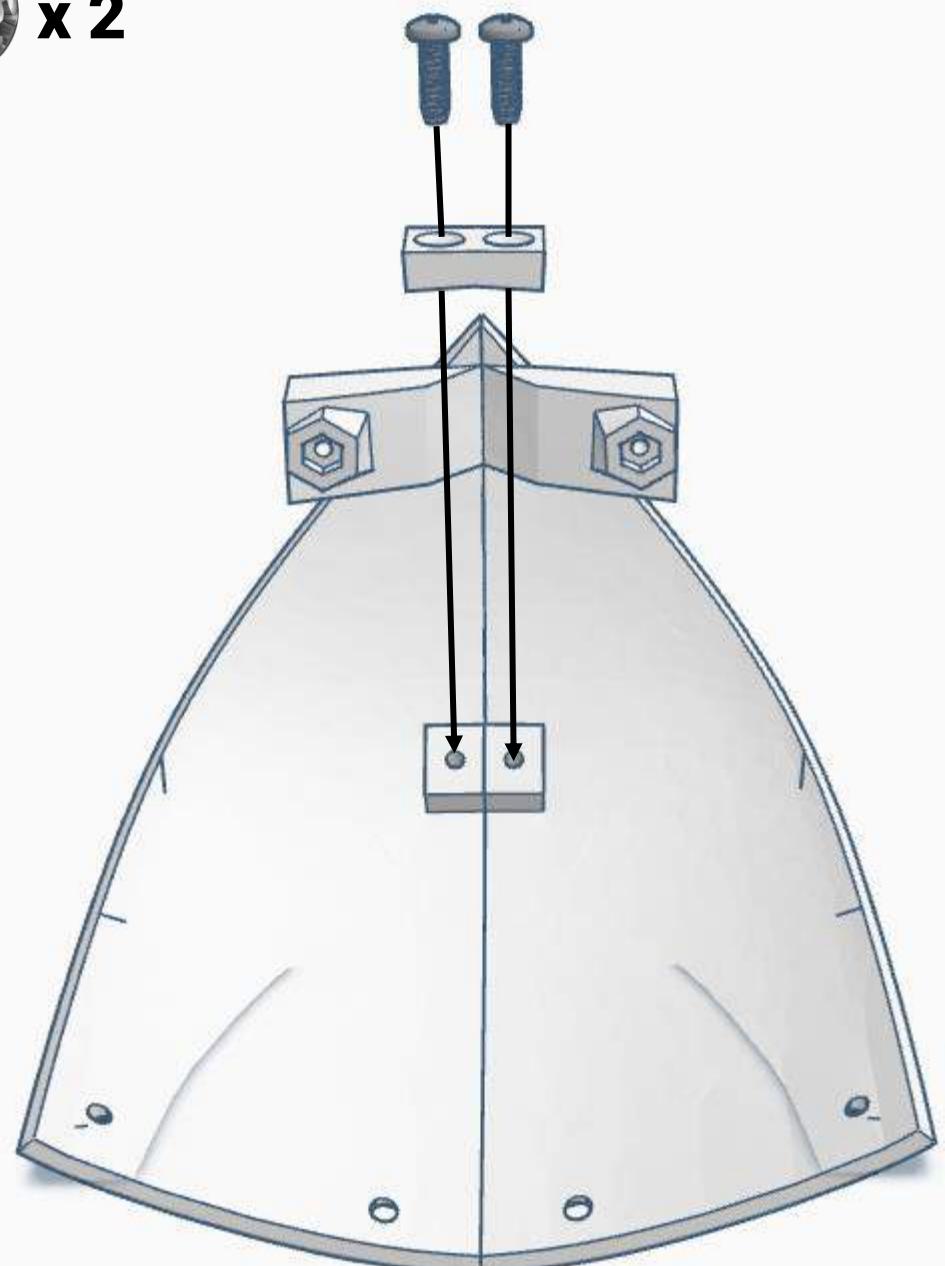
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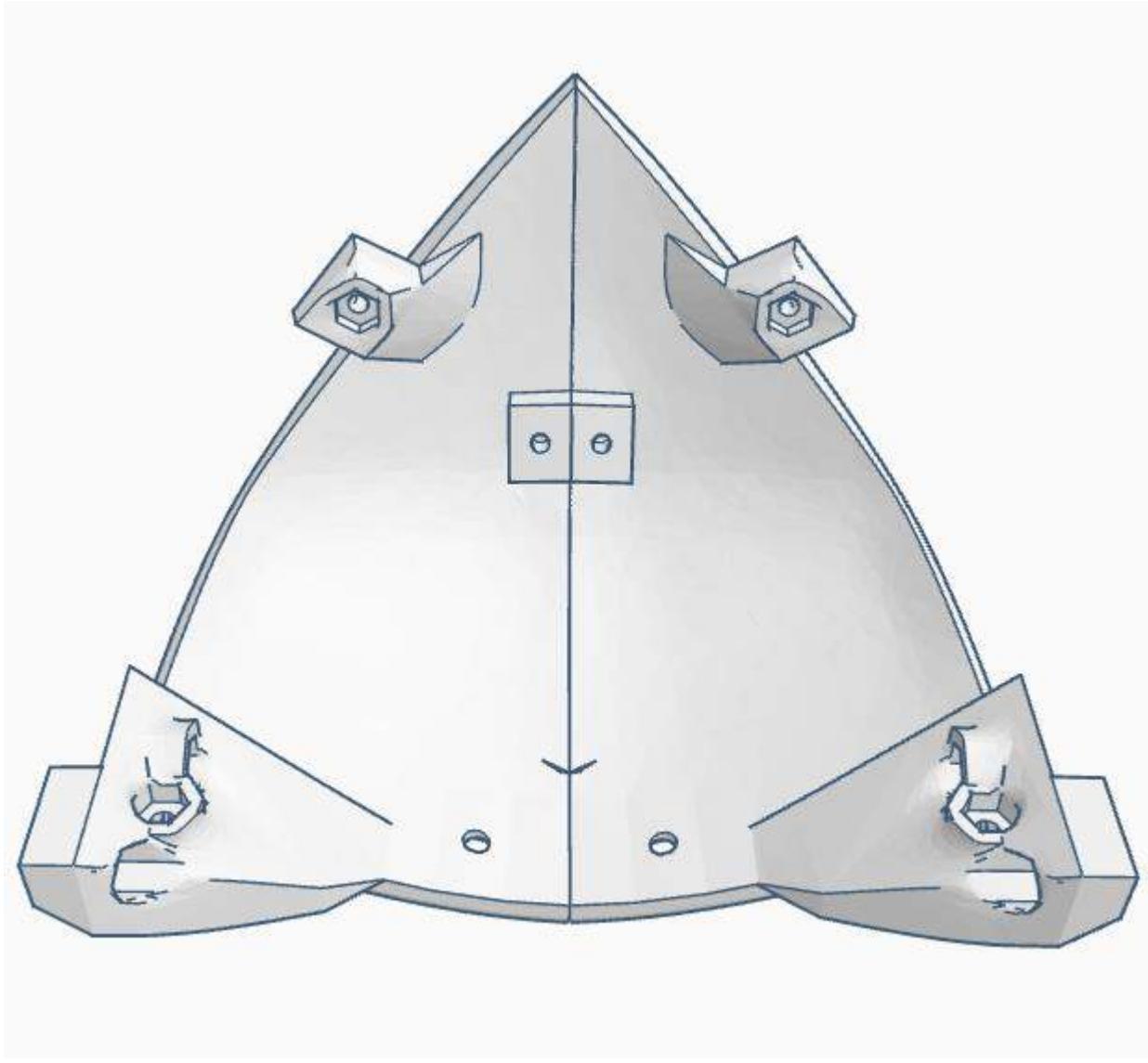
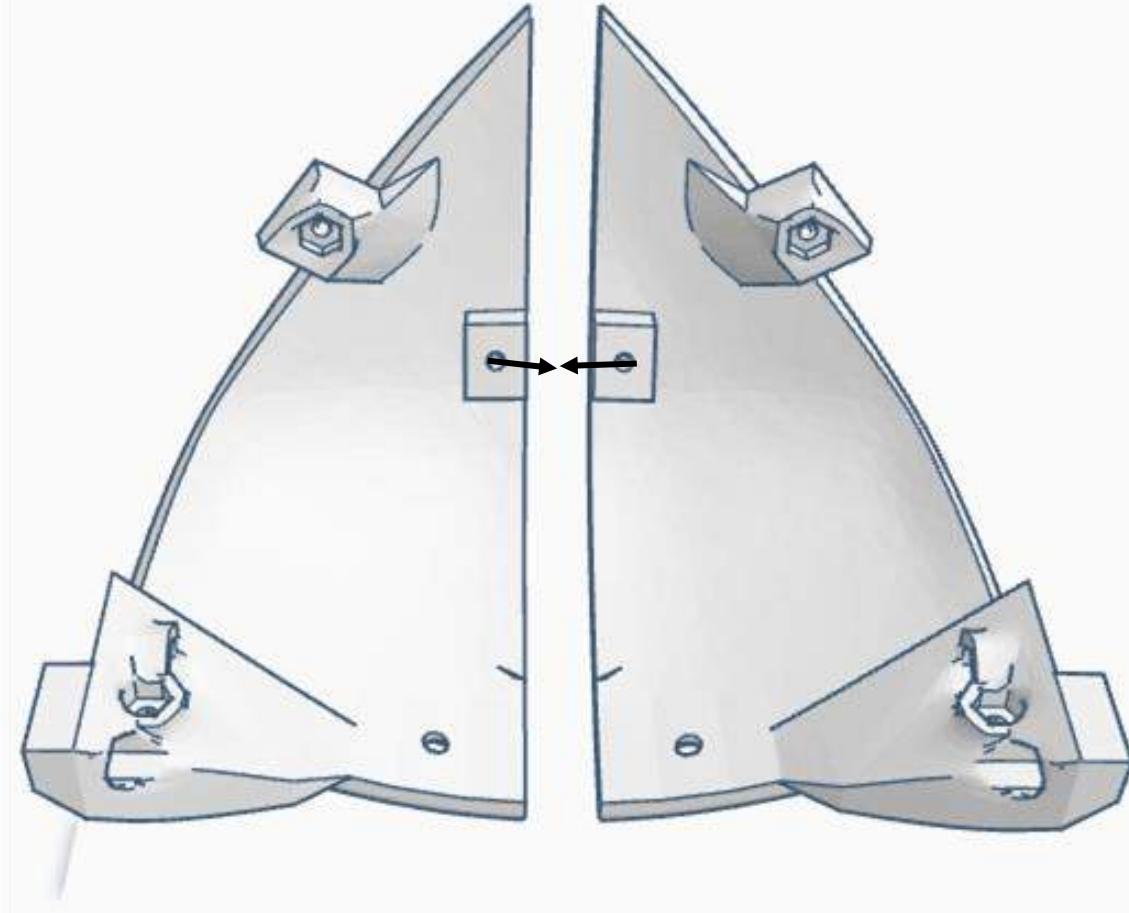






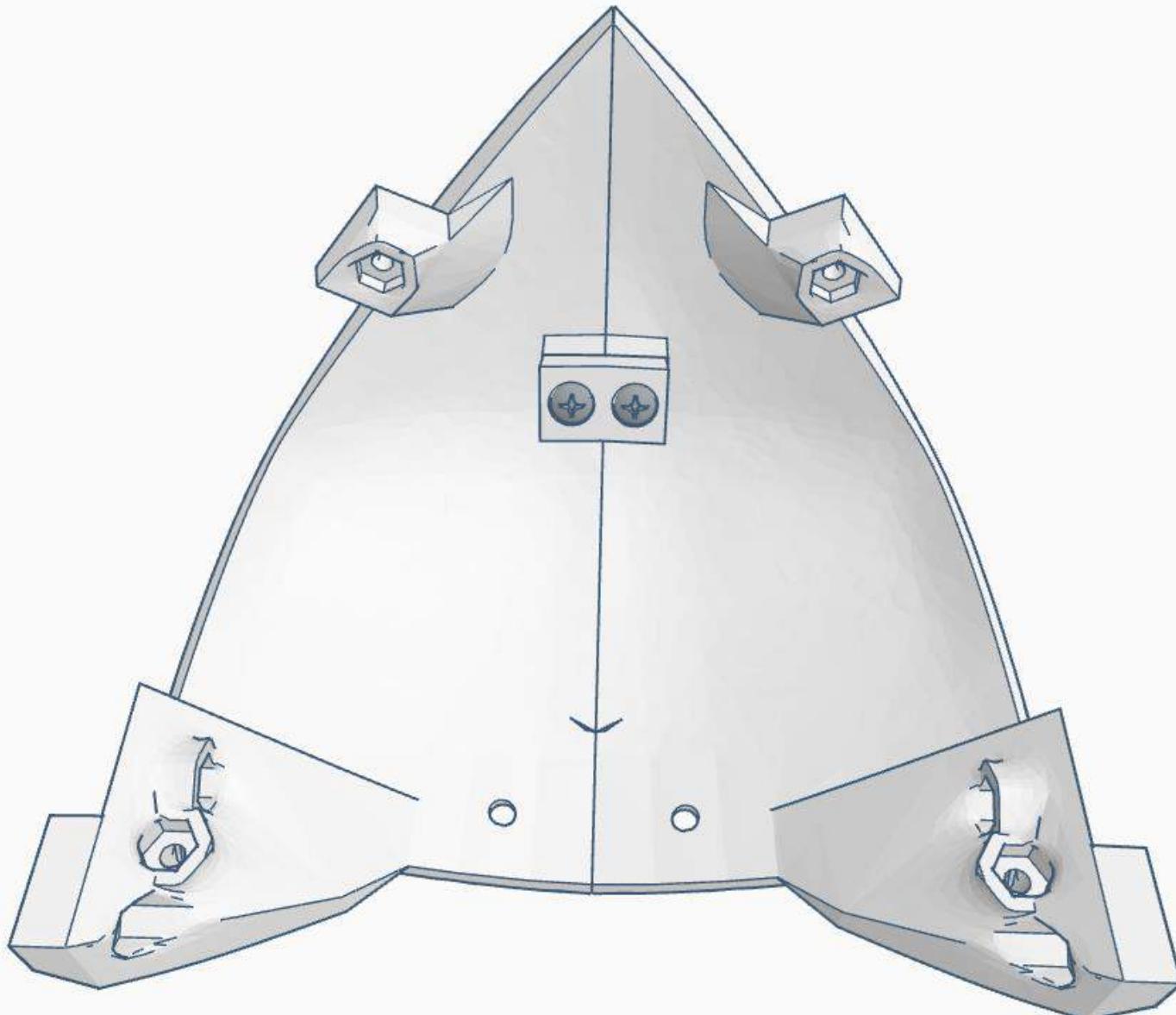
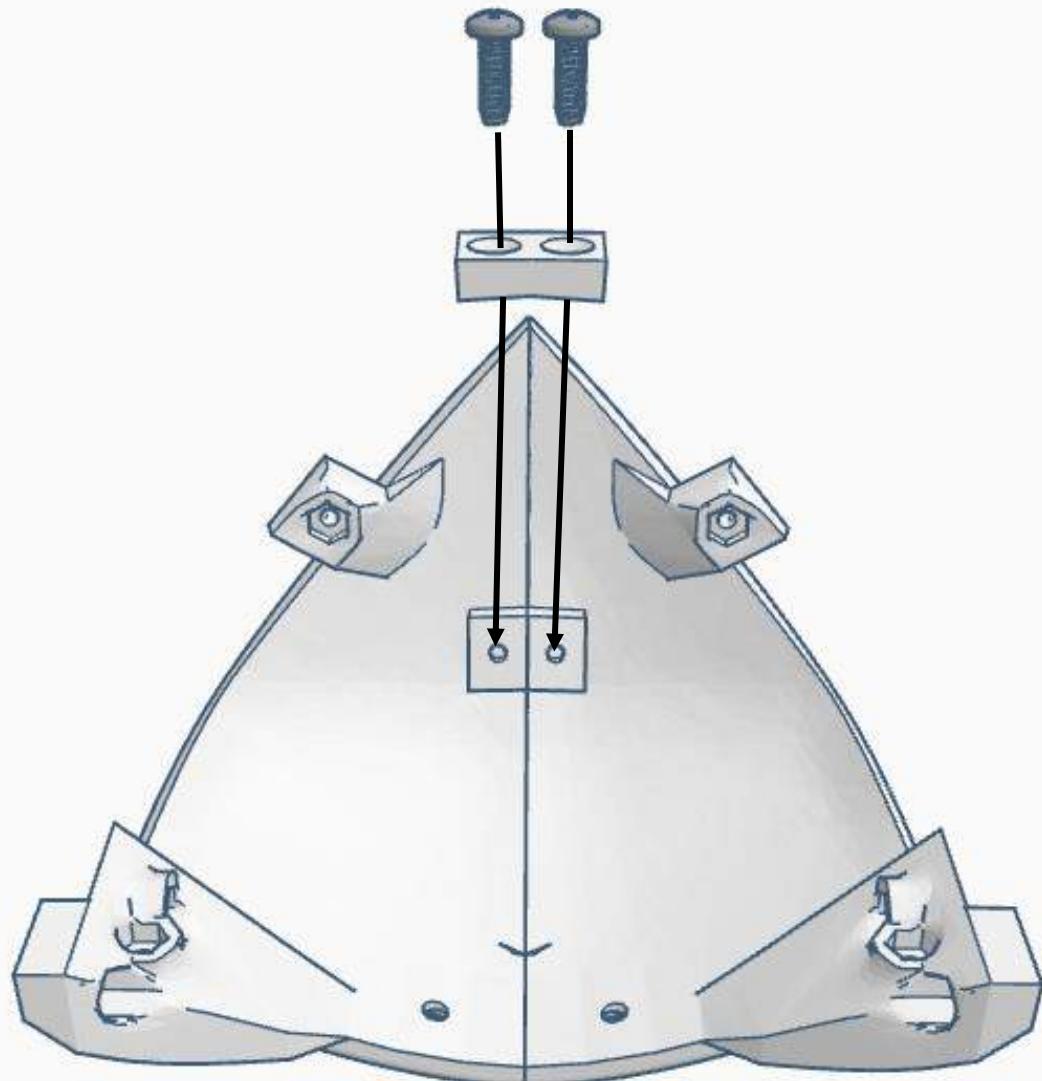
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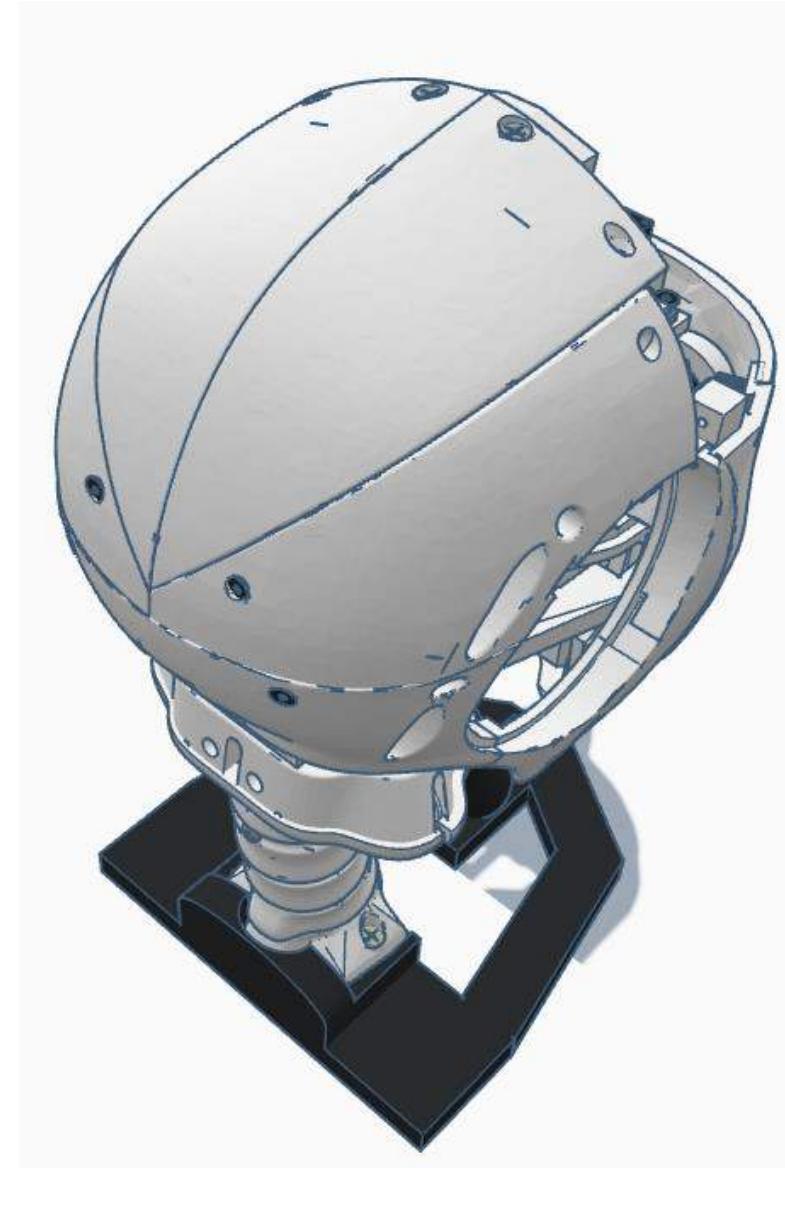
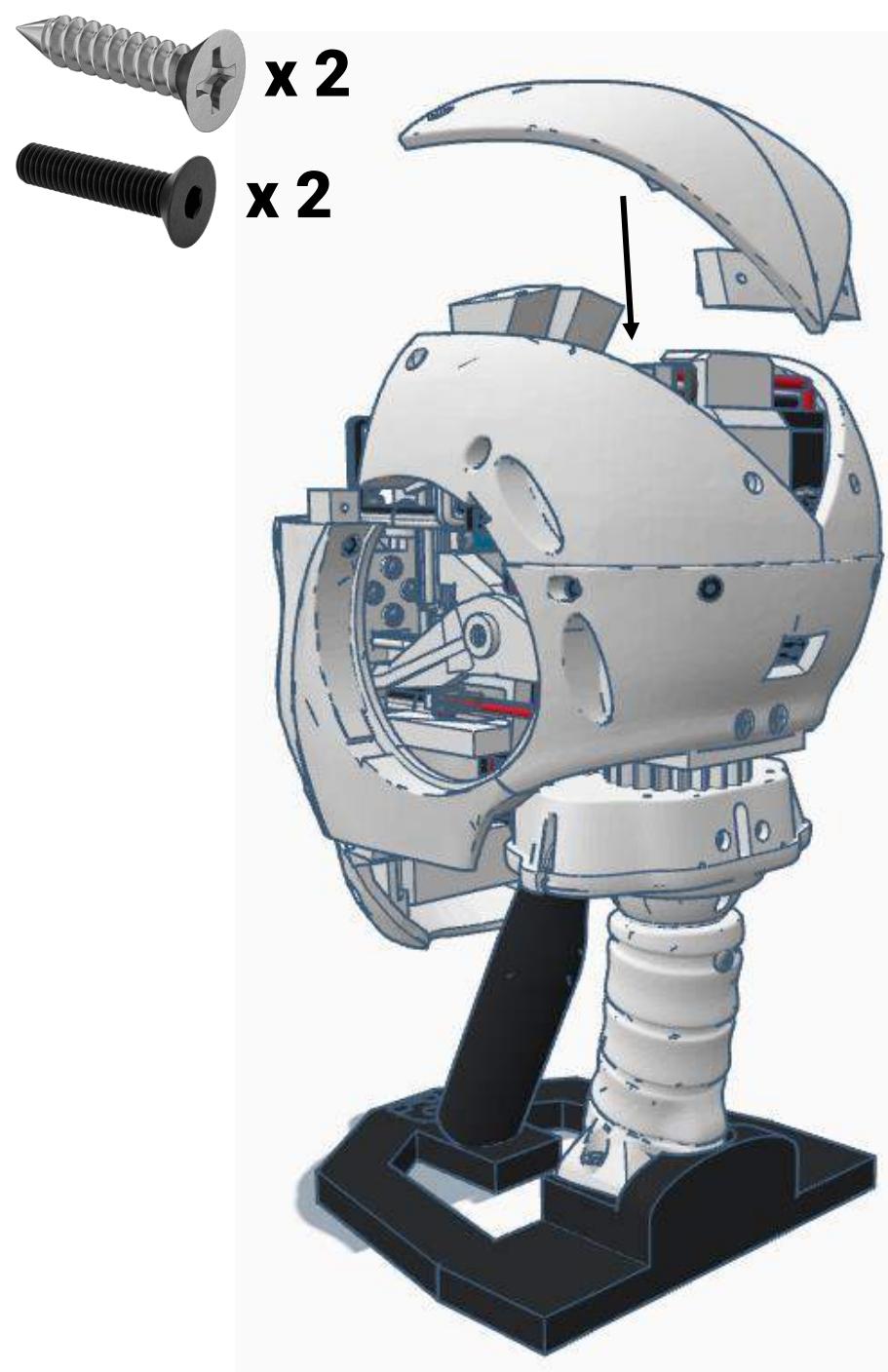






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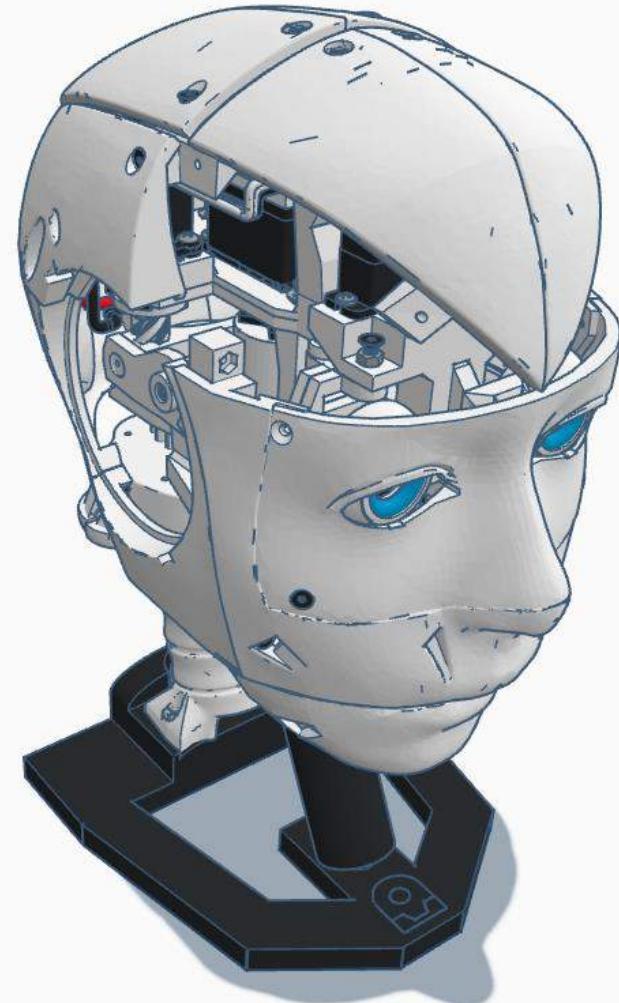
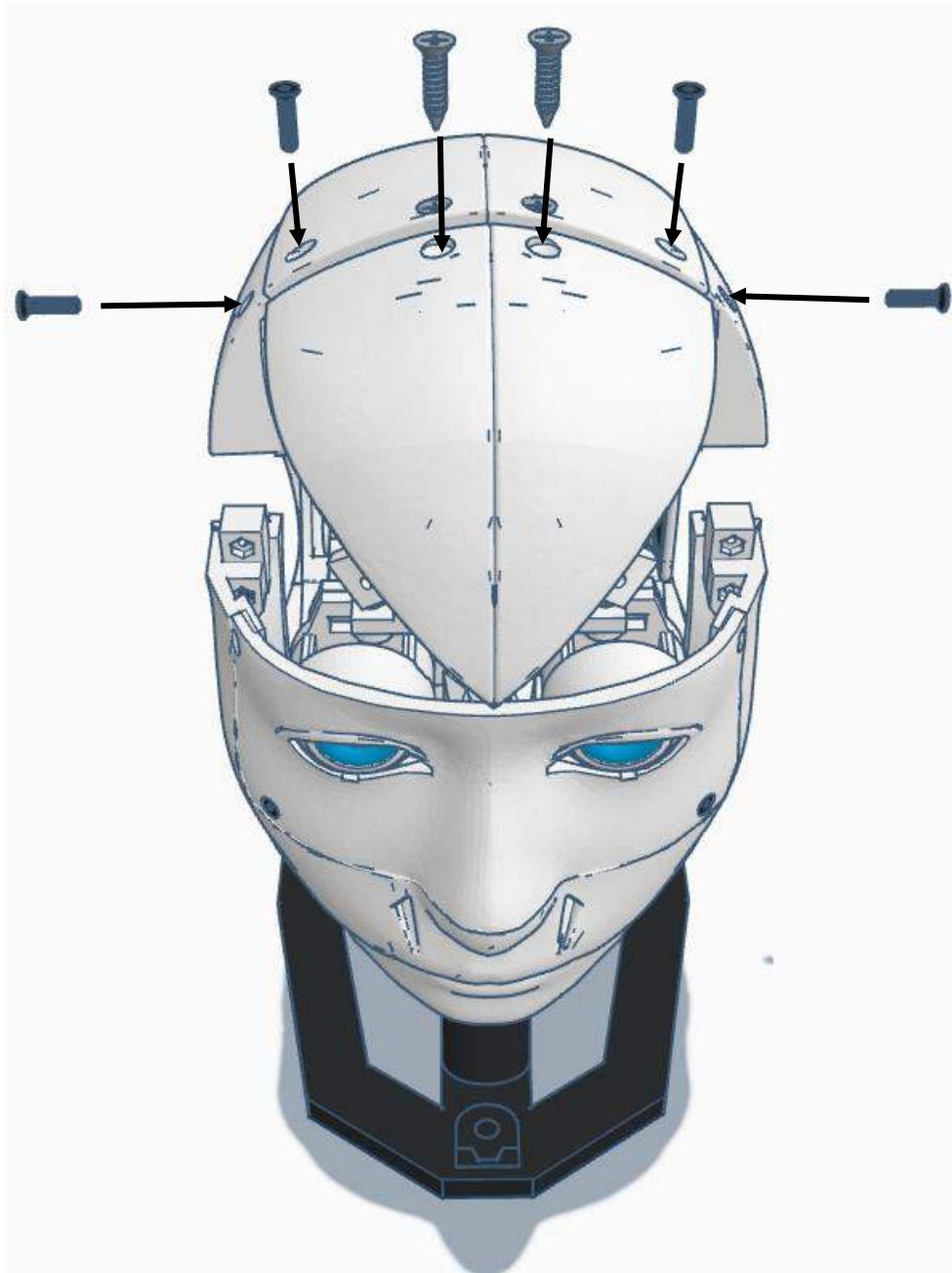
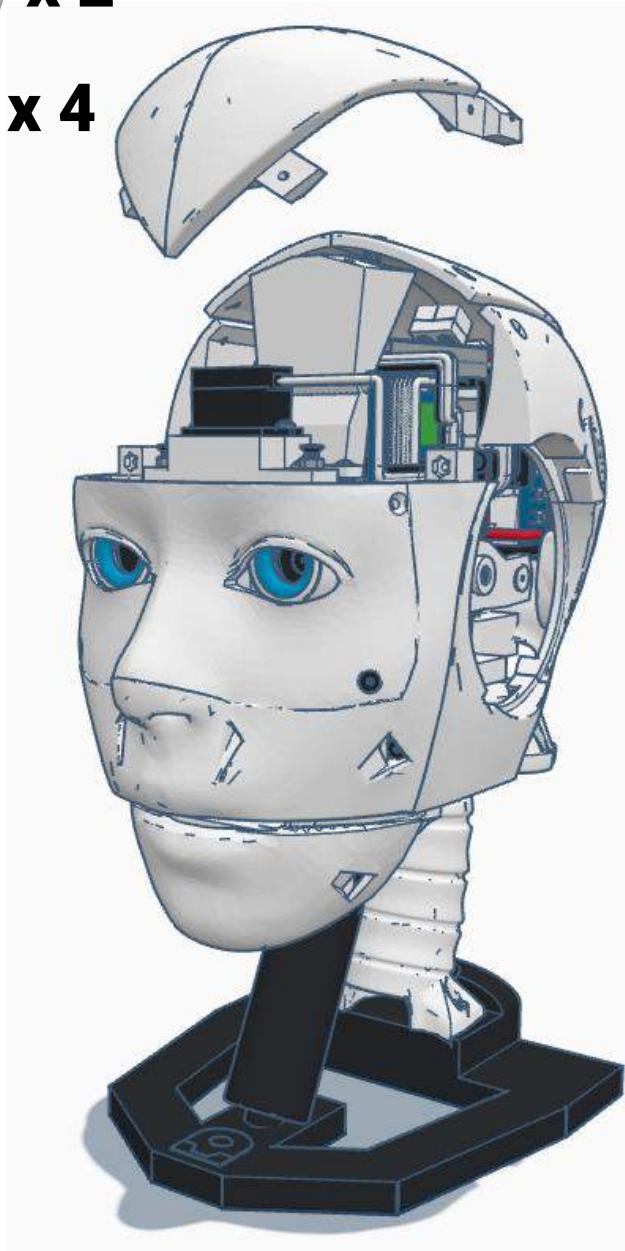






x 2

x 4



x 6

