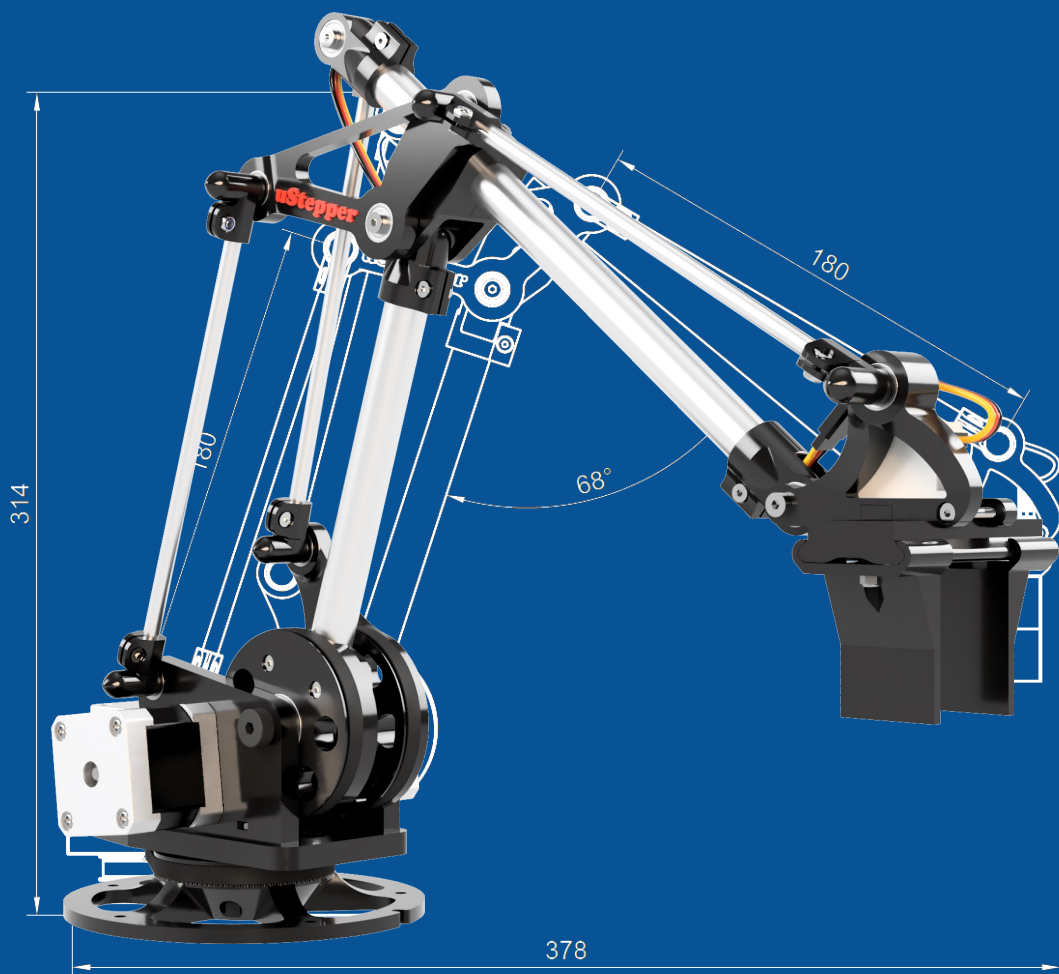
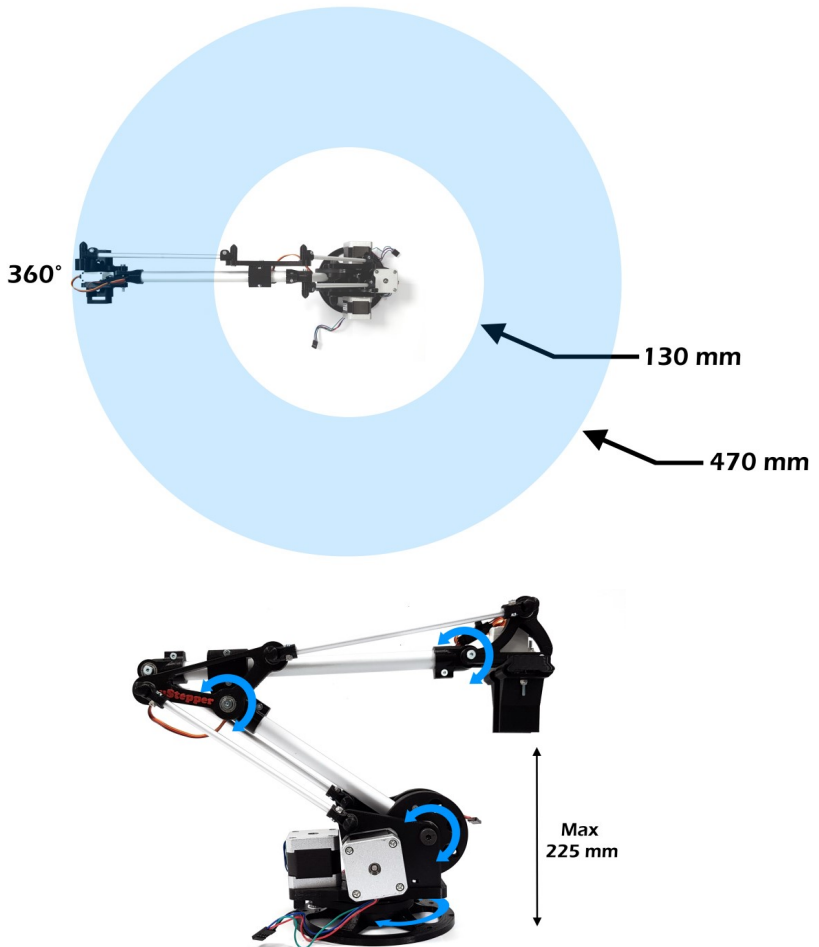


uStepper Robot Arm 4.0

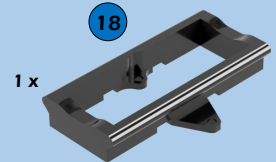
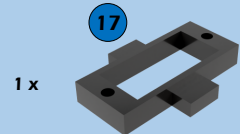
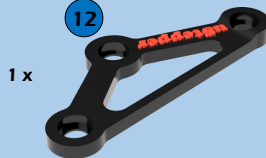
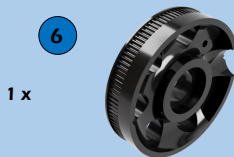
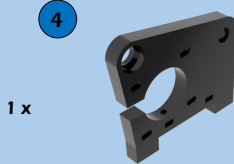
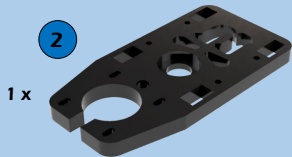


Specifications

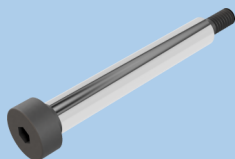


Weight (including stepper motors)	1460 g
Material	PLA plastic and Aluminum (tubes)
No. of axes	3
Maximum lift (close to base / furthest from base)	700 g / 350 g
Gear ratios (all axes)	5.1:1
Stepper motor torque	0.42 Nm
Mini servo torque	0.25 Nm @ 5 V

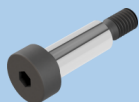
Bill Of Materials



Bill Of Materials



1 x shoulder bolt 7379-8-M6-55



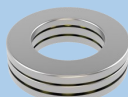
1 x shoulder bolt 7379-8-M6-20



5 x 608ZZ Bearing



12 x 624ZZ Bearing



1 x 51105 Bearing



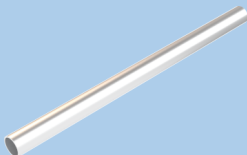
1 x F8-16M Bearing



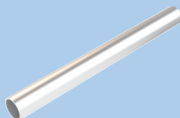
3 x GT2 20T motor gear



3 x Belt GT2 228



1 x Tube 15 mm x 225 mm



1 x Tube 15 mm x 155 mm



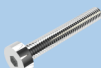
2 x Tube 6 mm x 170 mm
1 x Tube 6 mm x 180 mm



2 x M3 x 6 mm



26 x M3 x 10 mm



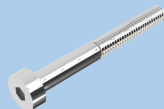
7 x M3 x 20 mm



3 x M3 x 25 mm



5 x M4 x 20 mm



3 x M4 x 35 mm



7 x M3 nut



16 x M3 SL nut



8 x M4 SL nut



2 x M6 SL nut



5 x M4 washer

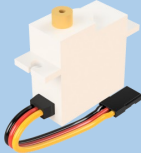


1 x M6 washer



1 x M8 washer

Bill Of Materials



1 x HK15148B Digital MG Servo



1 x 60 cm Servo Cable



1 x 25T x 20 mm Servo Horn Set

1:1 Nuts & Bolts

M3 x 6 mm



M3 x 10 mm



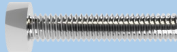
M3 x 20 mm



M3 x 25 mm



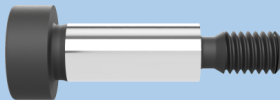
M4 x 20 mm



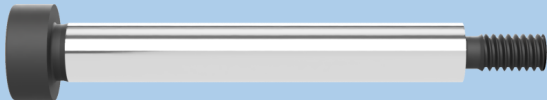
M4 x 35 mm



M6 x 20 mm



M6 x 55 mm



M3 nut



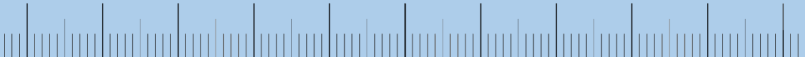
M4 nut



M6 nut



0 1 2 3 4 5 6 7 8 9 10

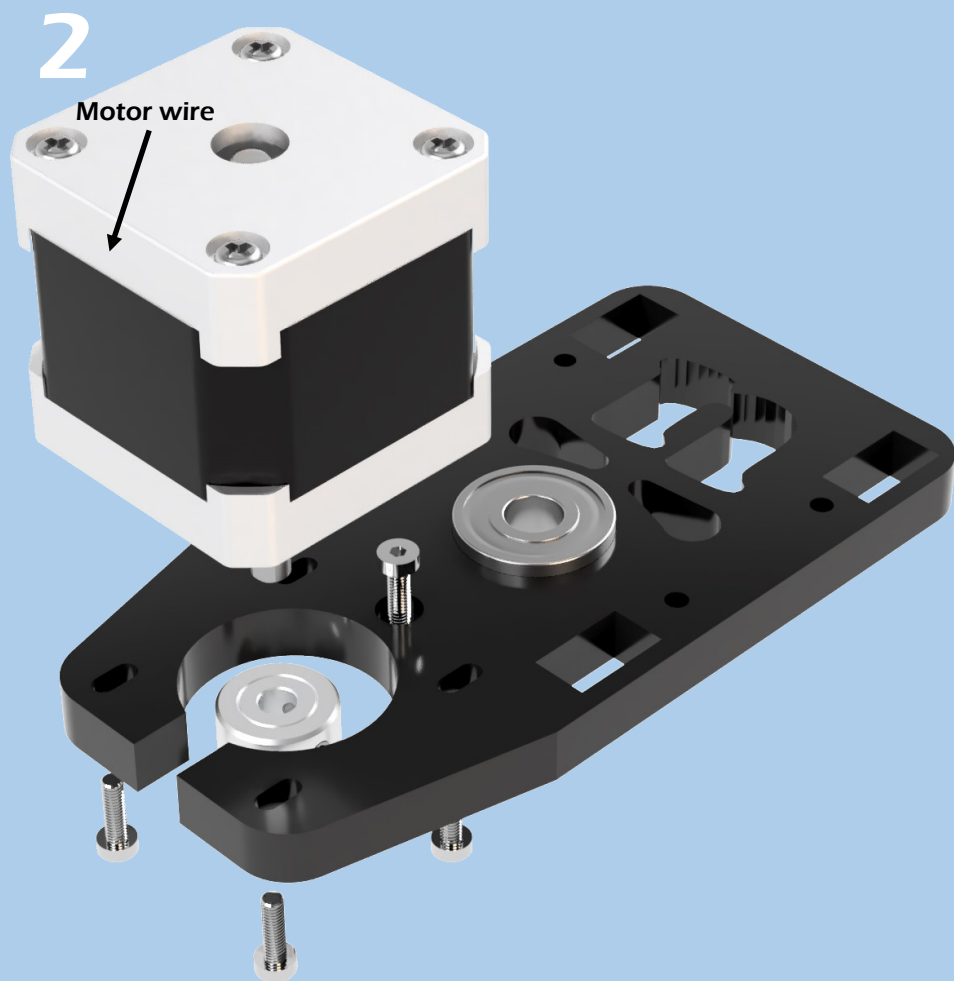
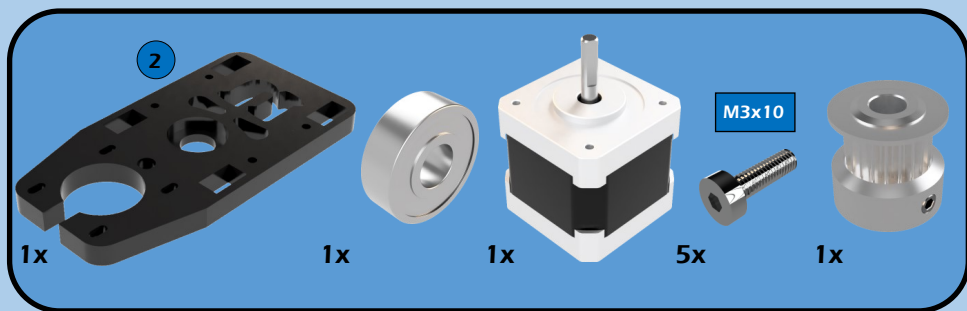


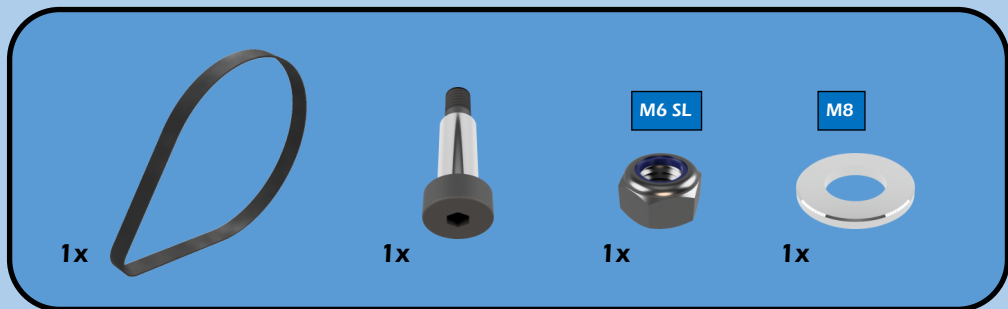
Robot Arm Assembly



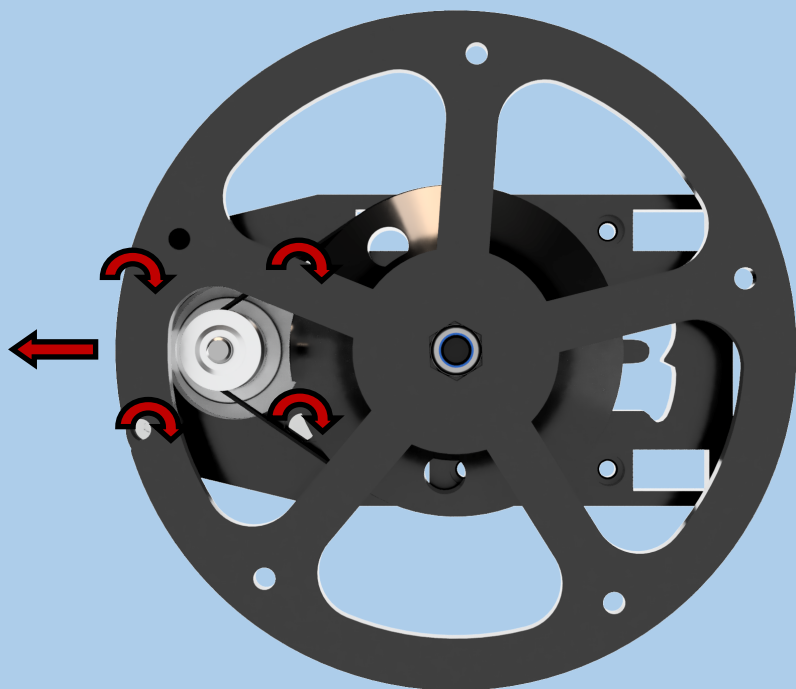
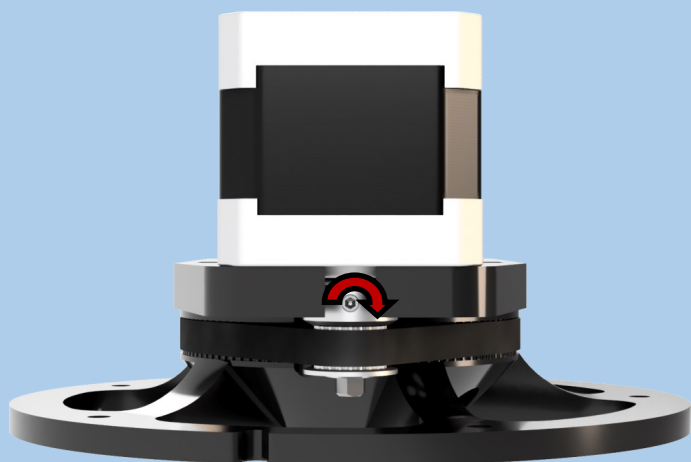
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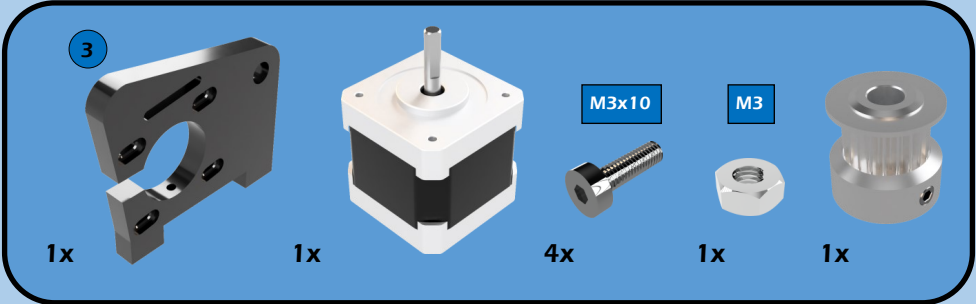




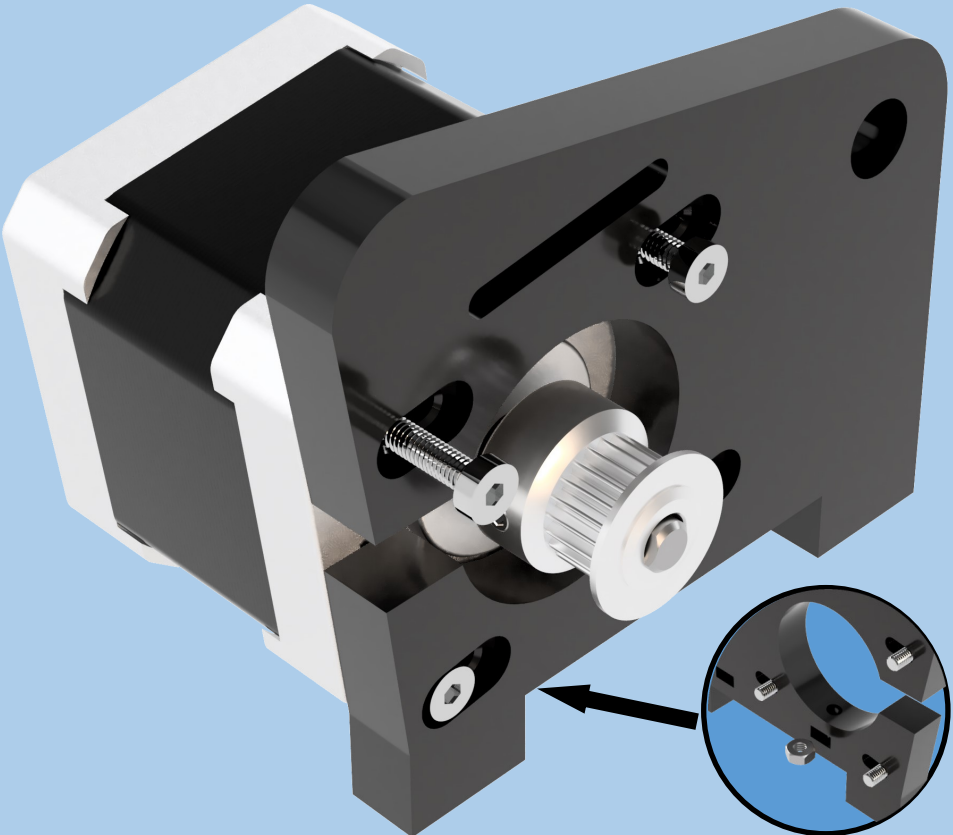


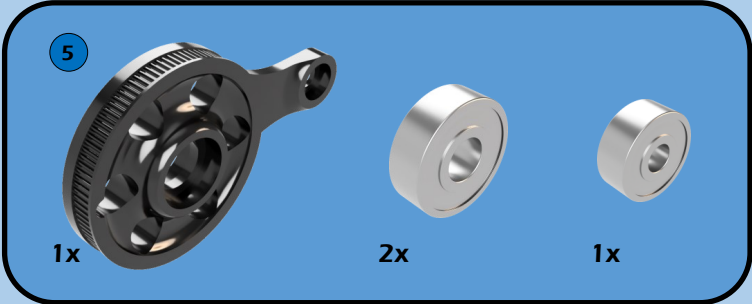
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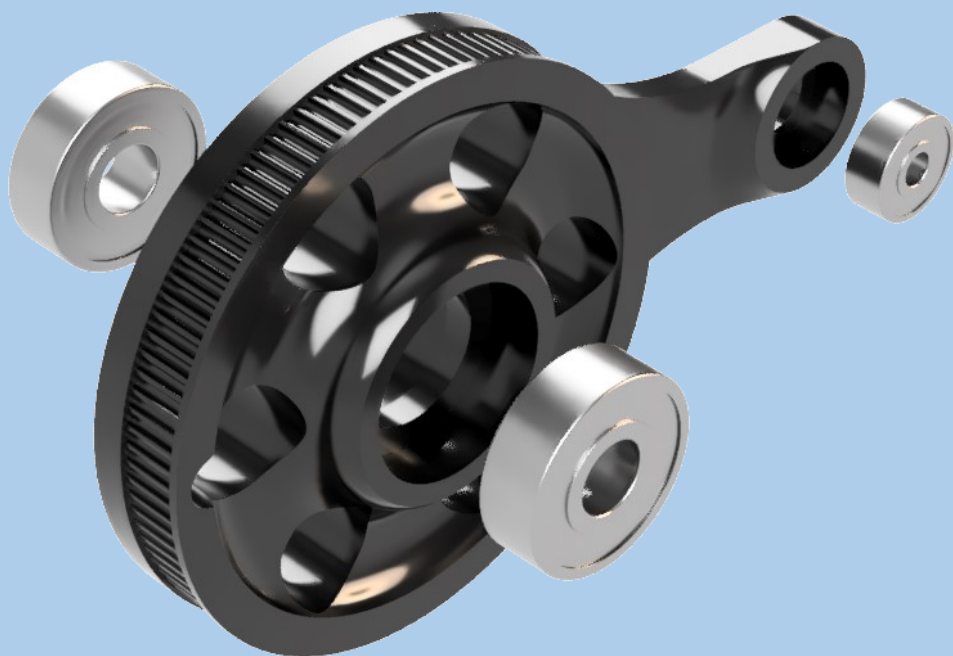


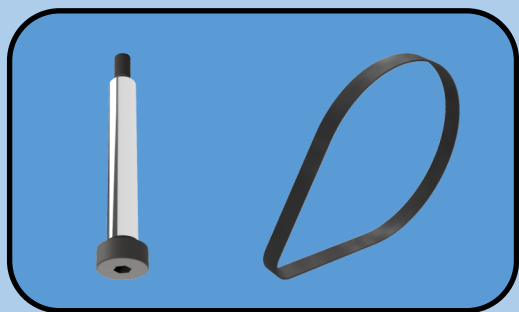
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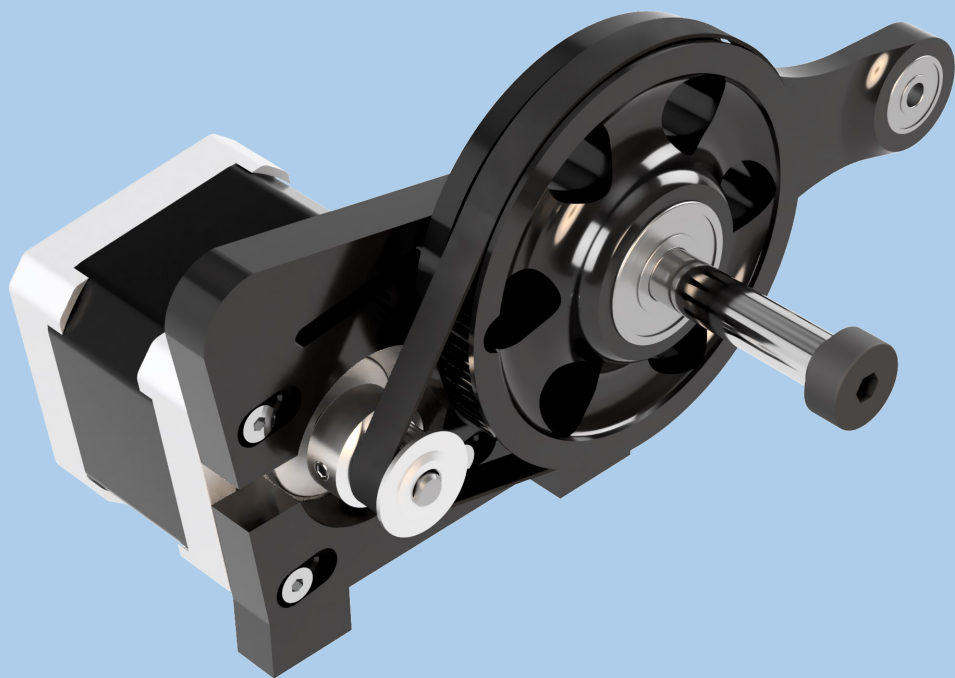


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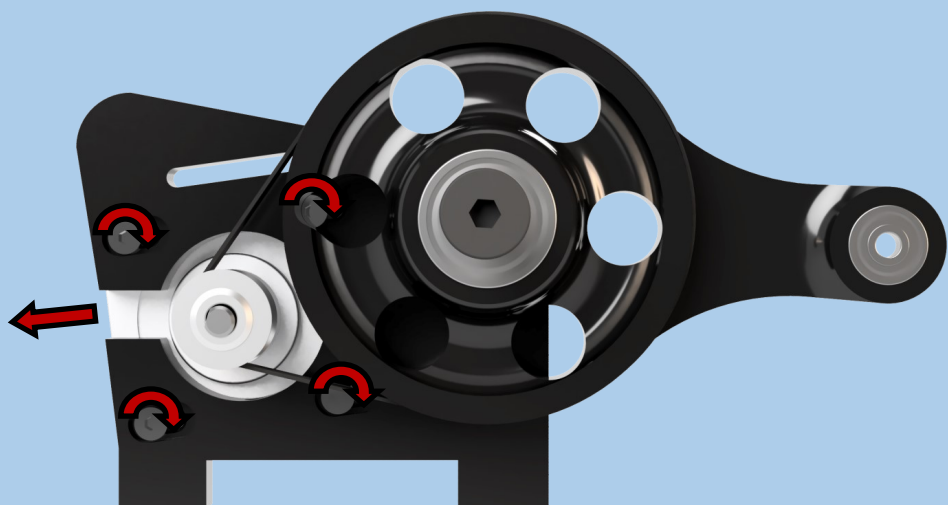
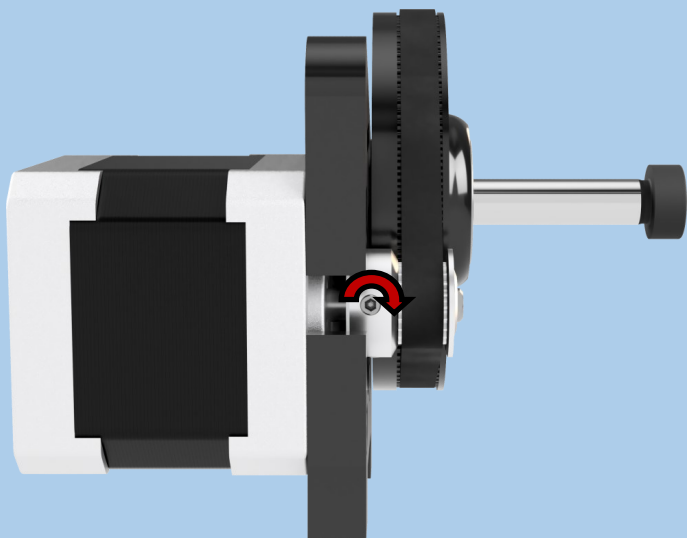


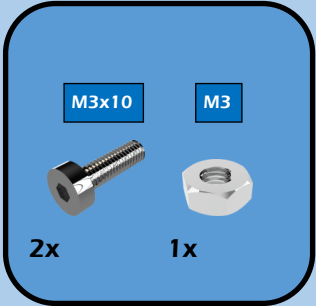


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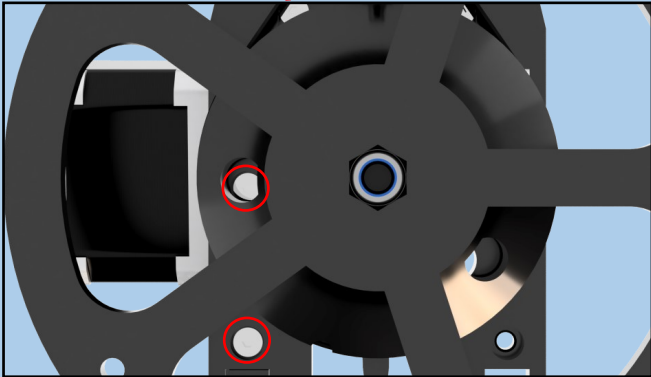
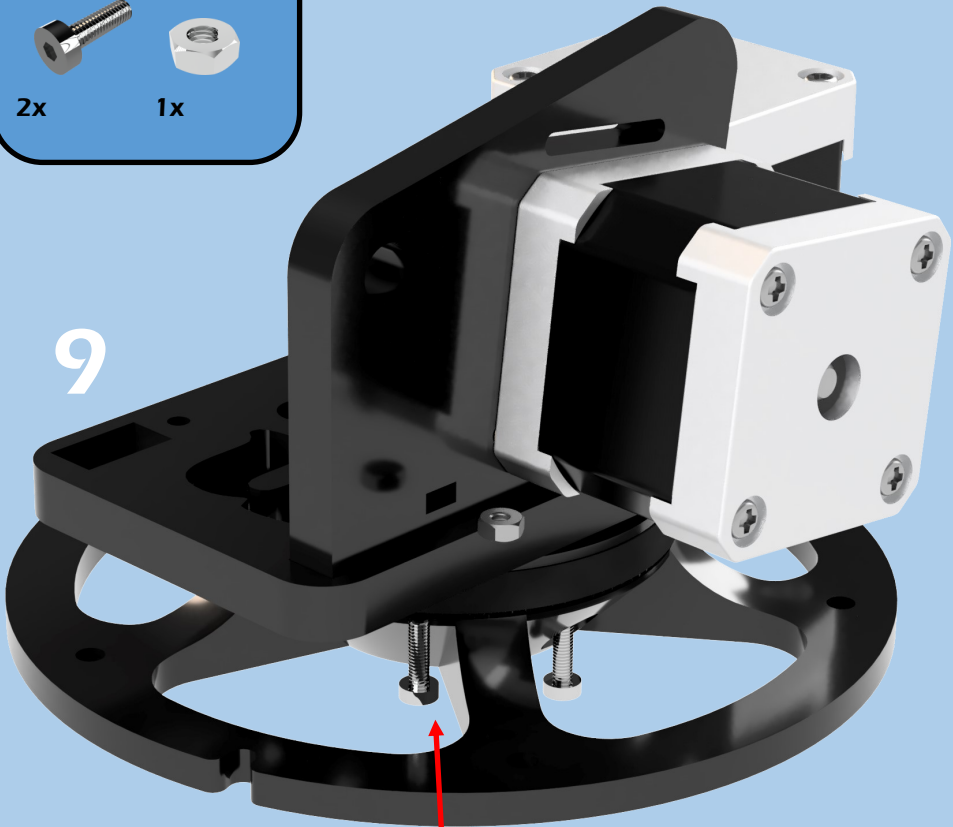


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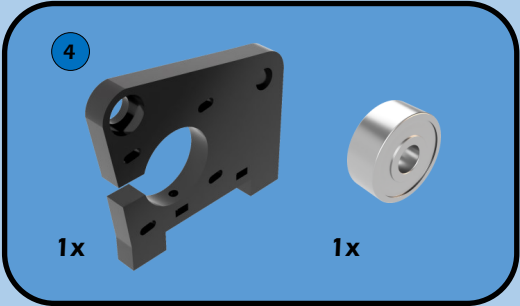




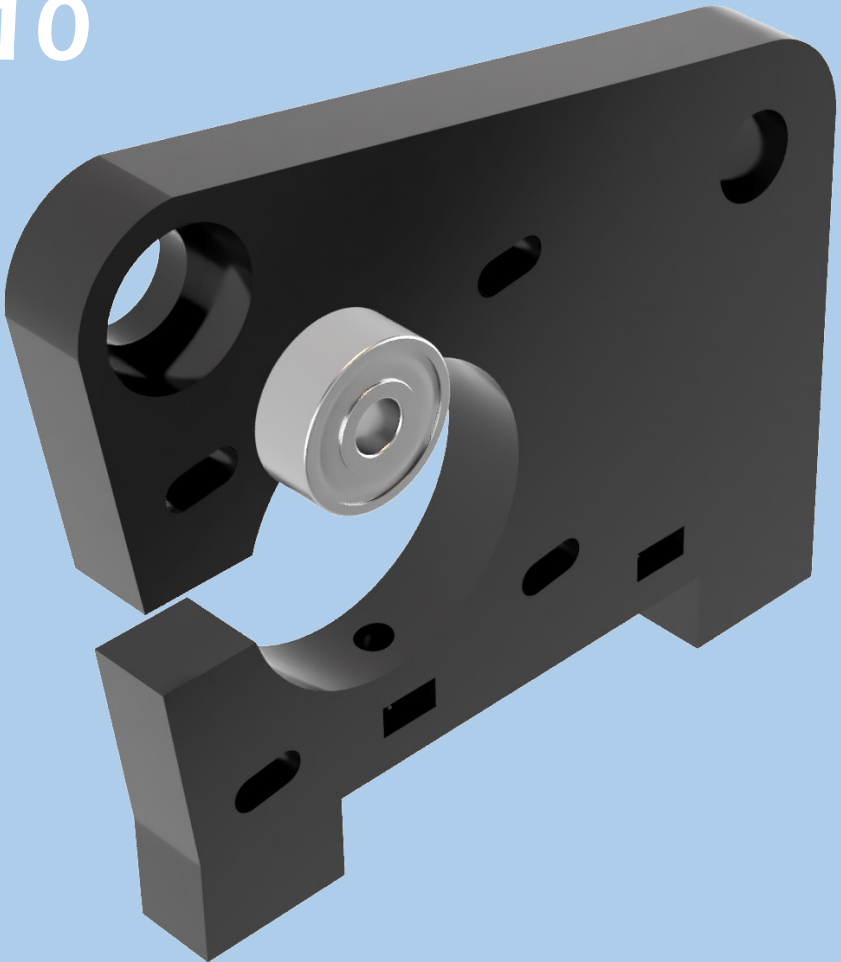
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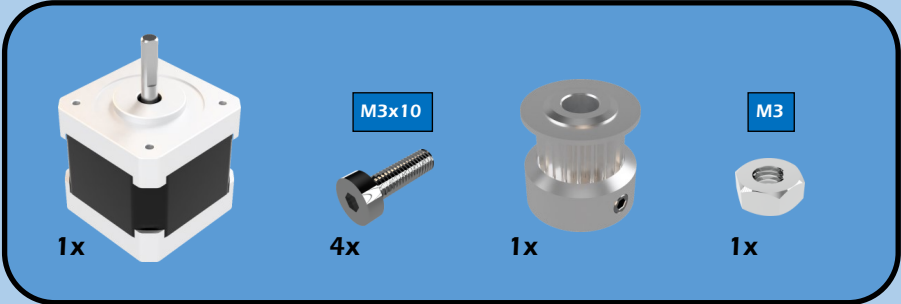


Bottom View

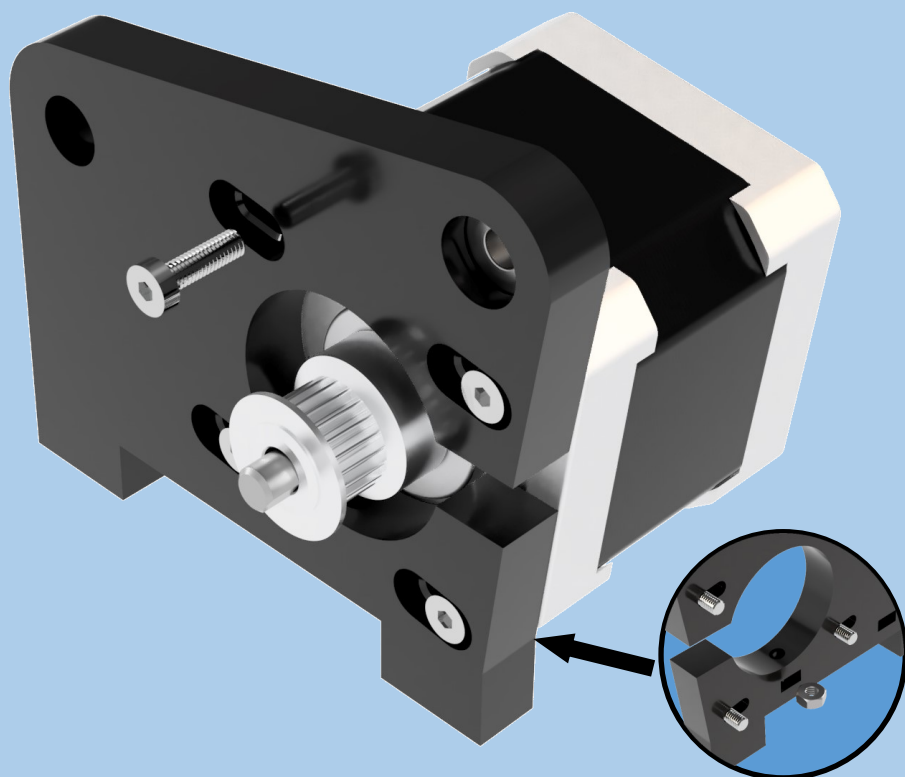


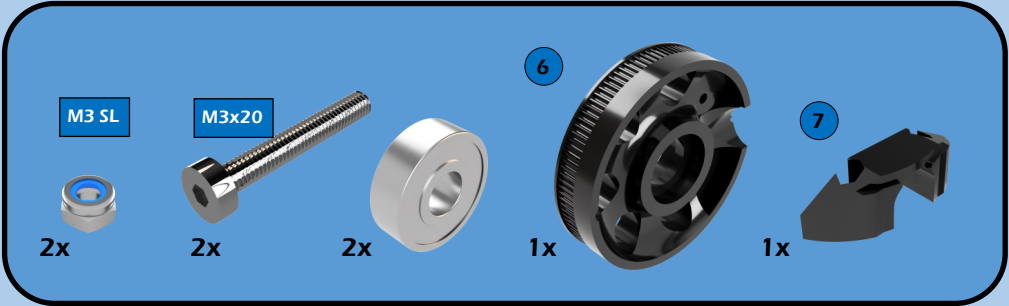
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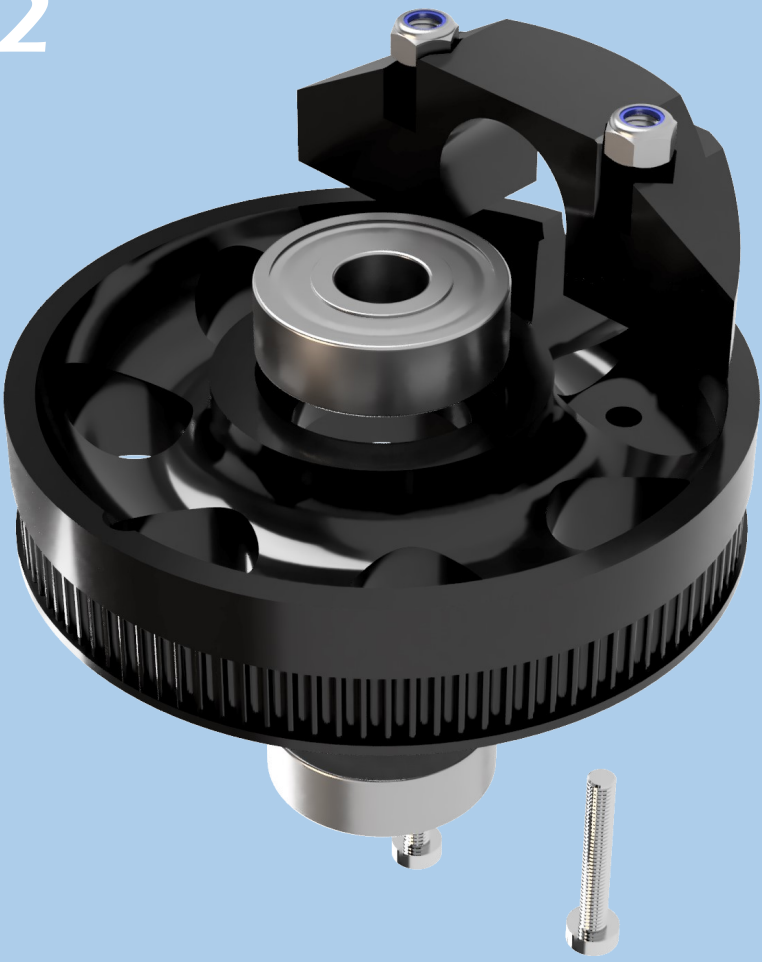


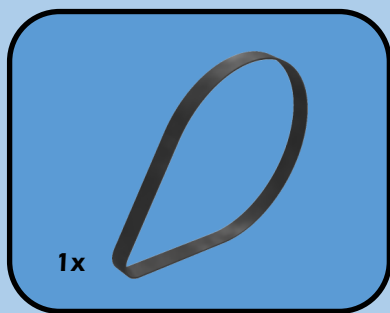
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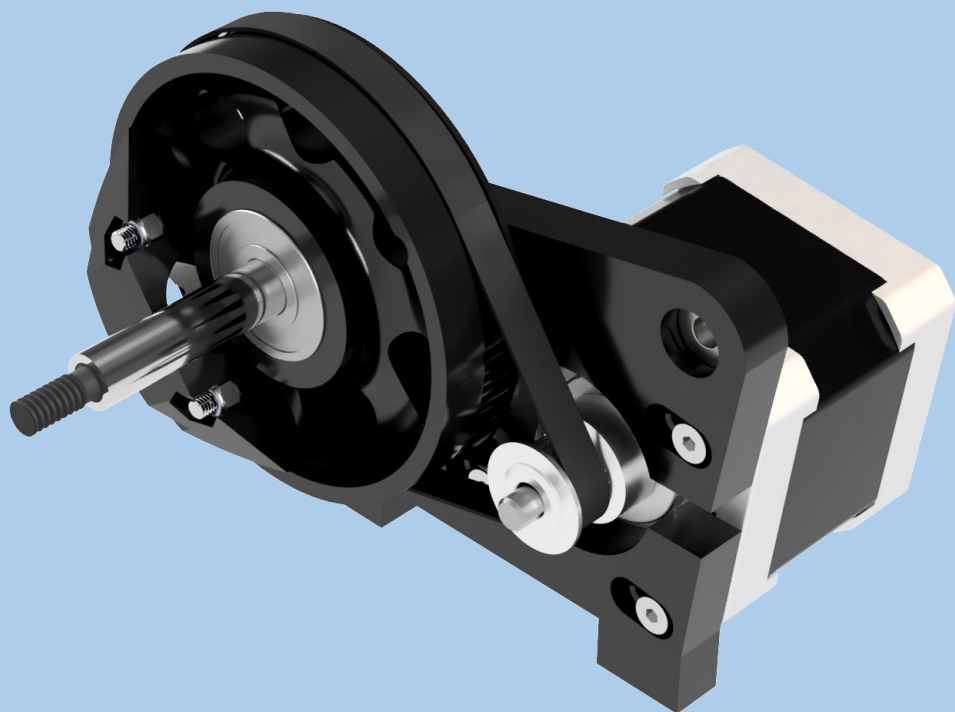


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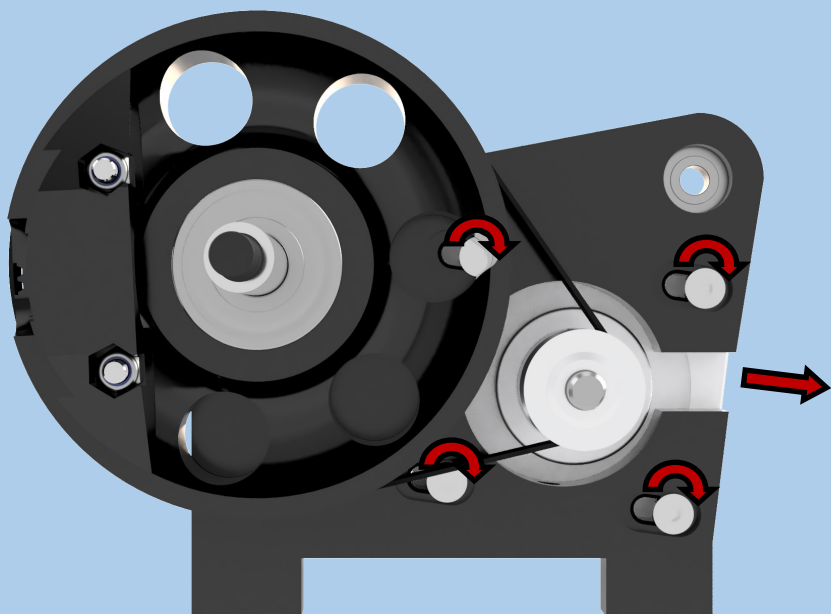
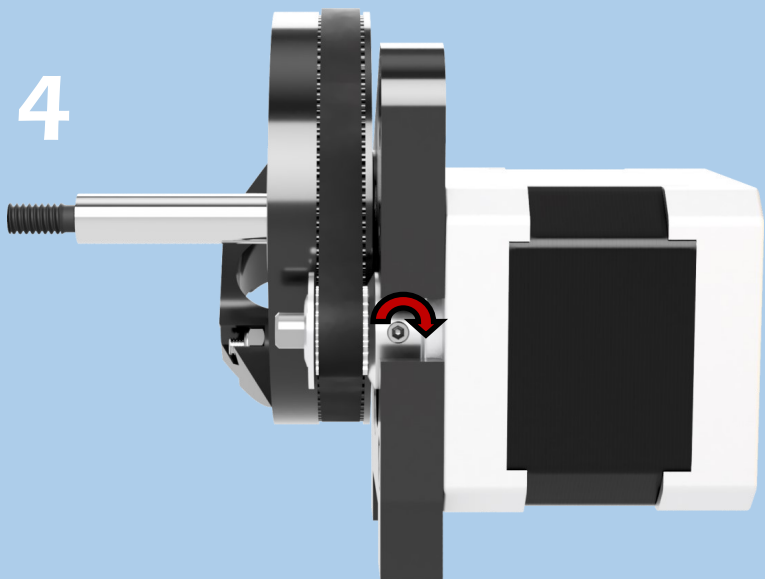


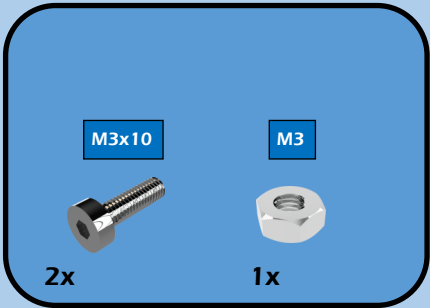


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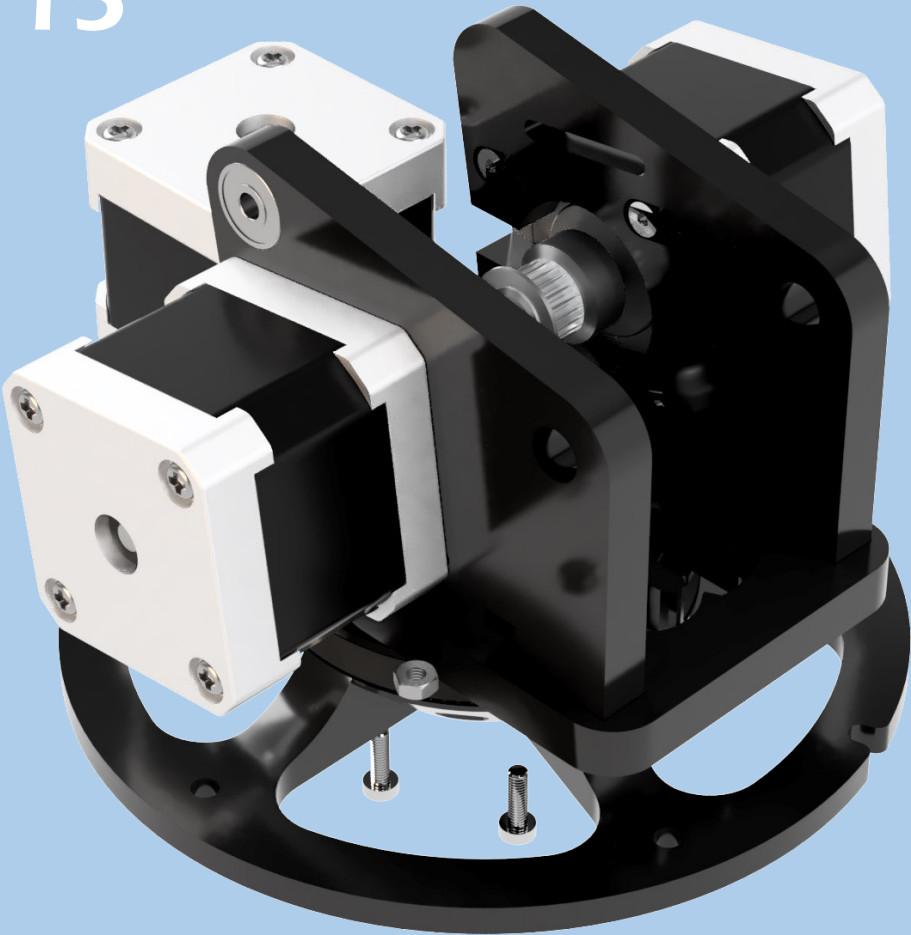


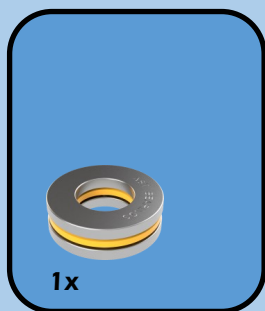
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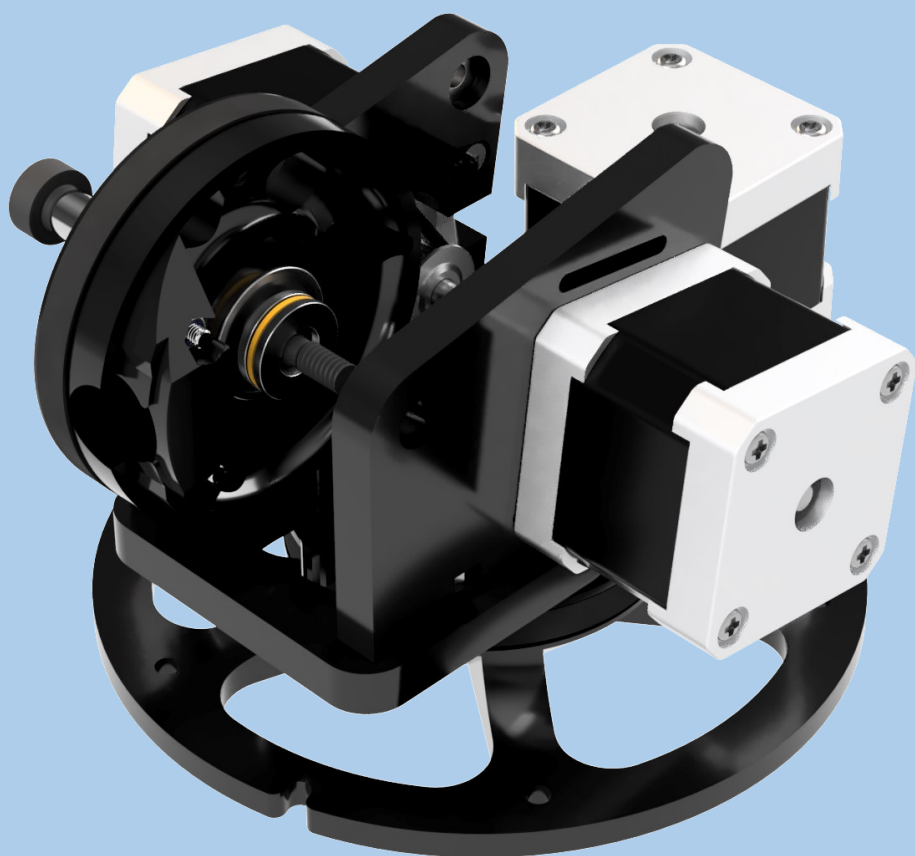


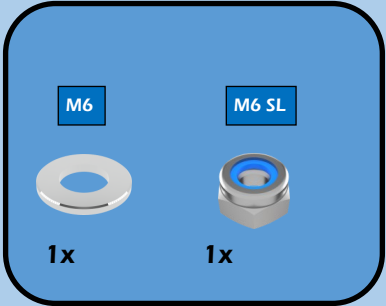
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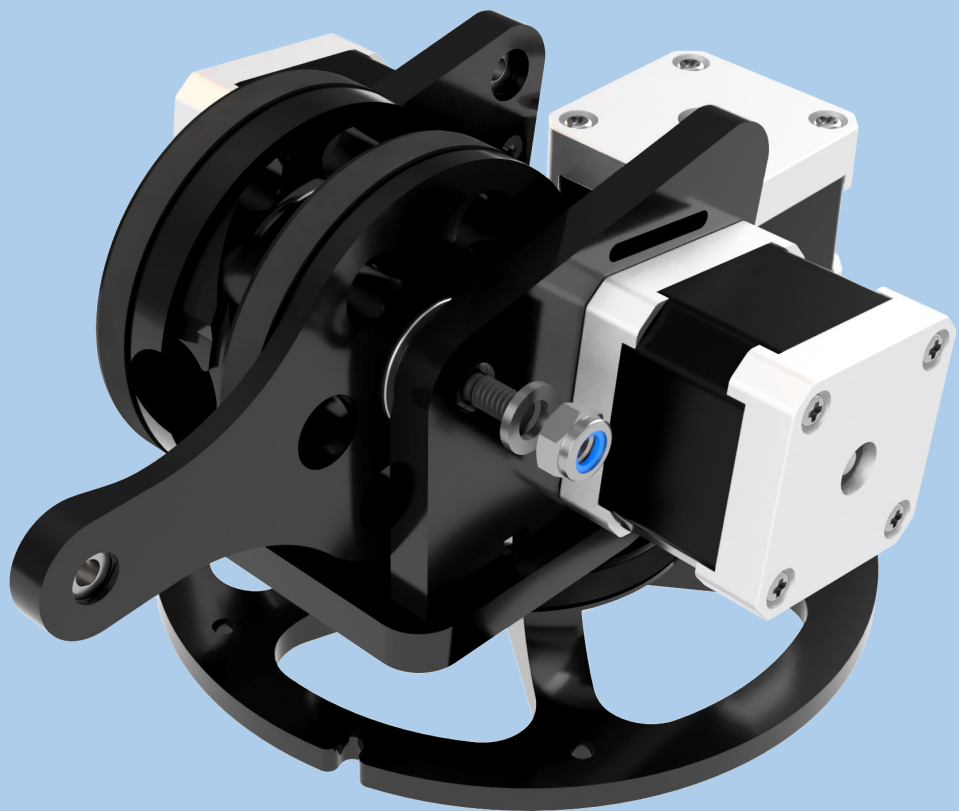


16





17

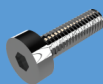


10



3x

M3x10



3x

M3 SL



3x

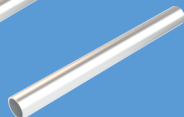


6x

1x



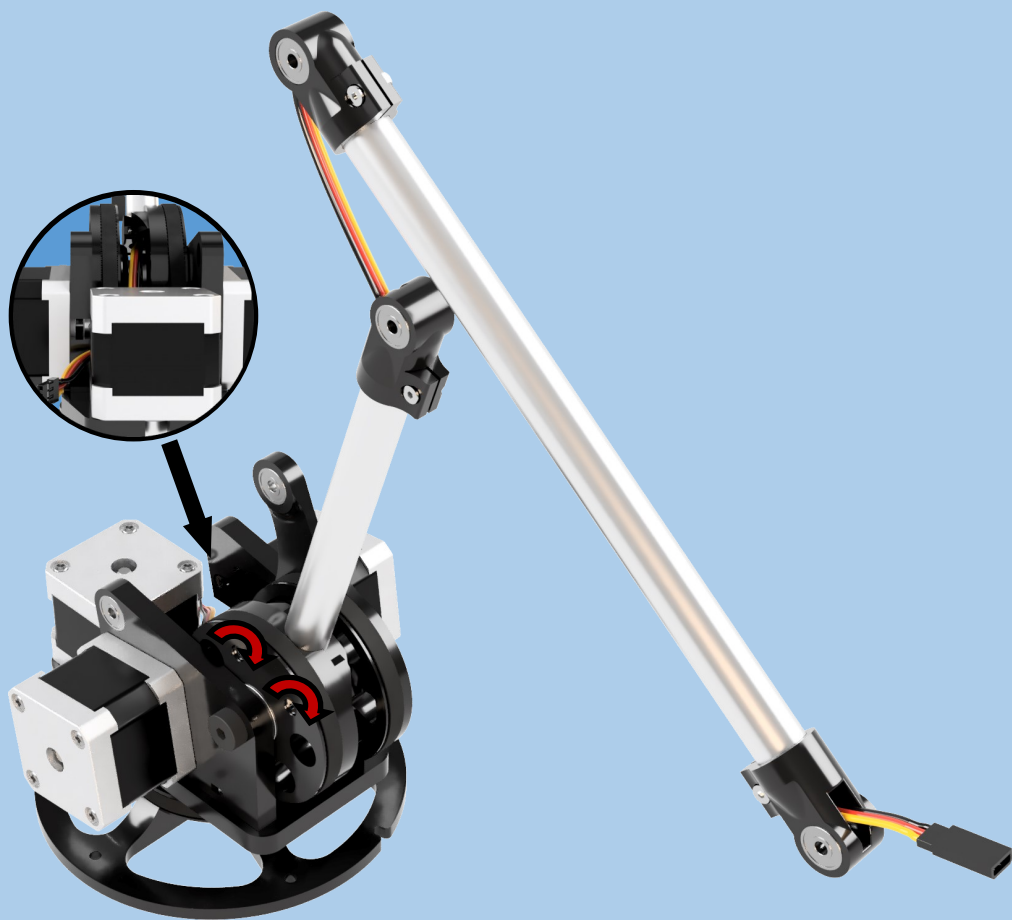
1x



18



19



M3x25

2x



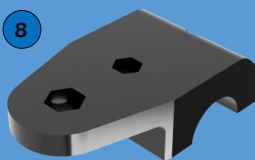
M3

2x



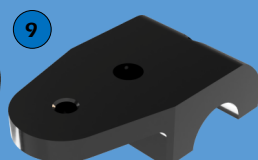
8

1x

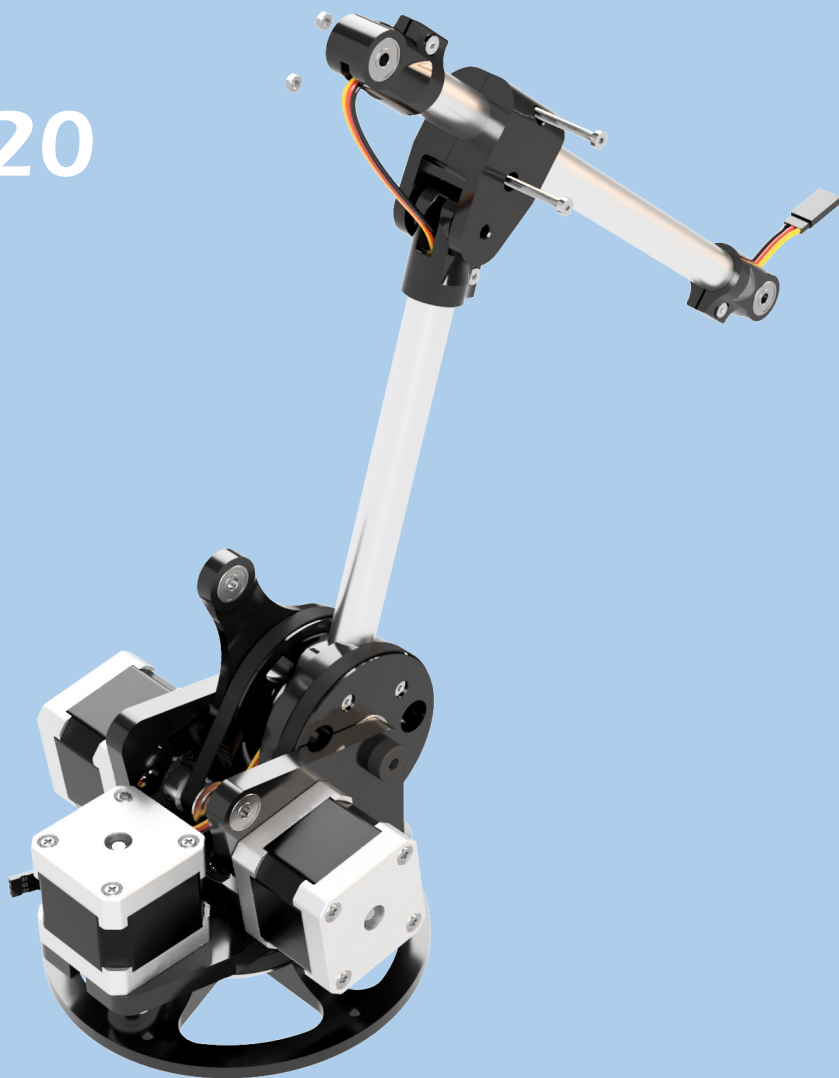


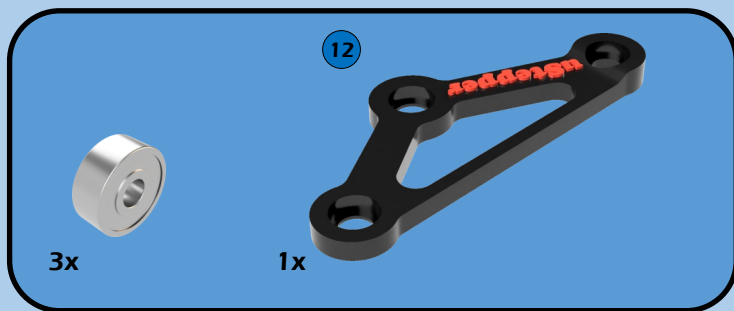
9

1x



20

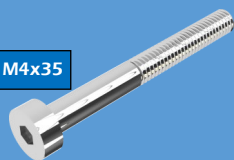




21



M4x35



1x

M4 SL



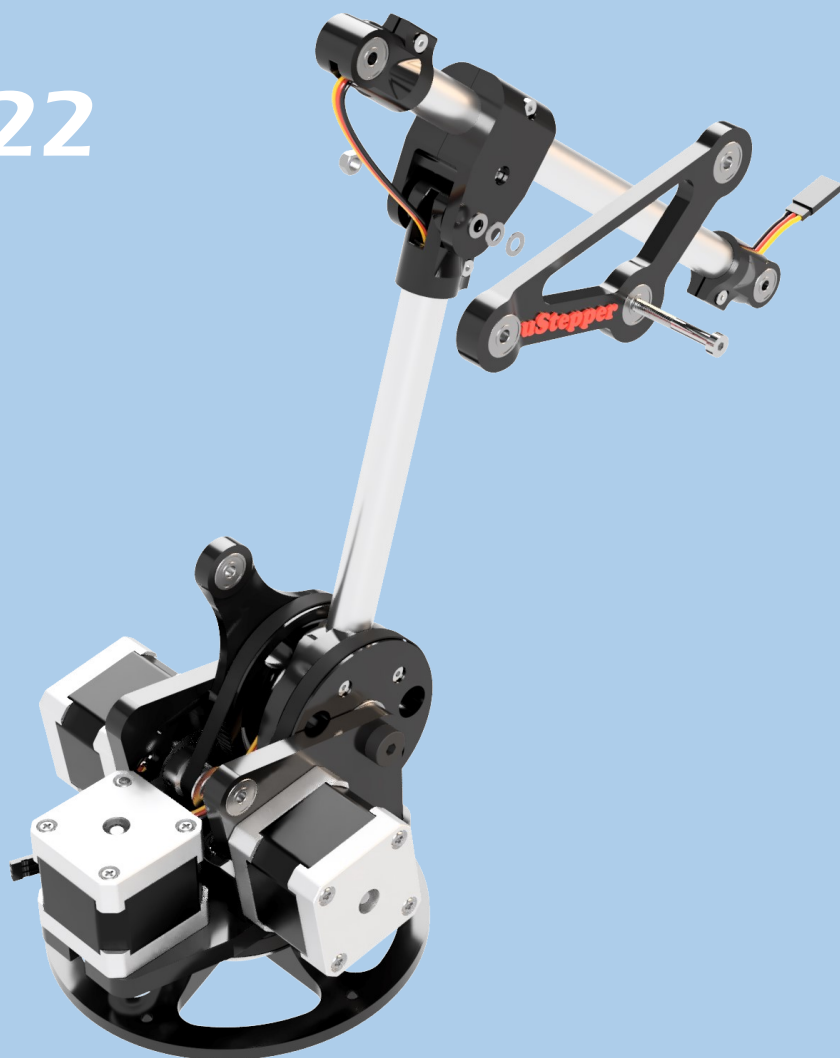
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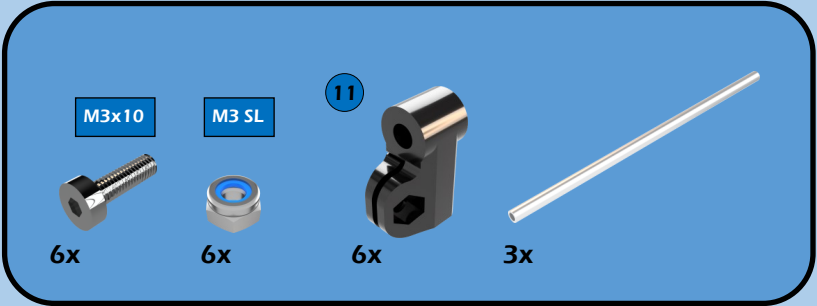
M4



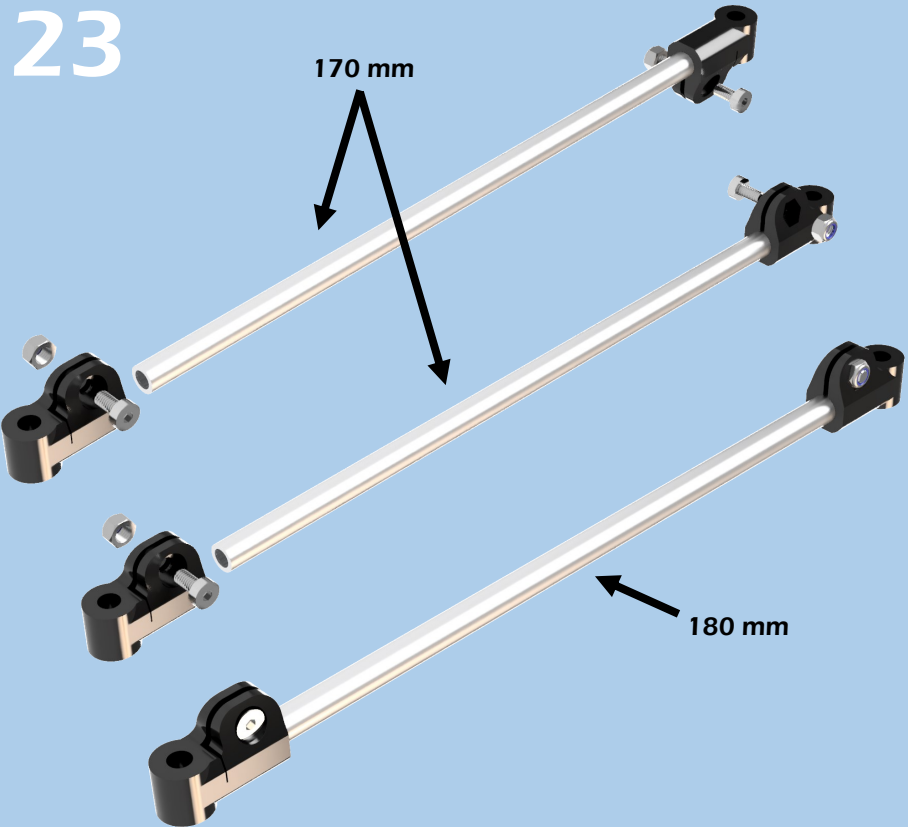
3x

22

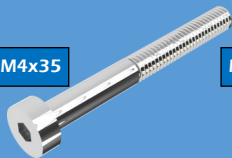




23

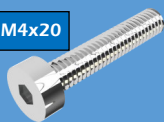


M4x35



1x

M4x20



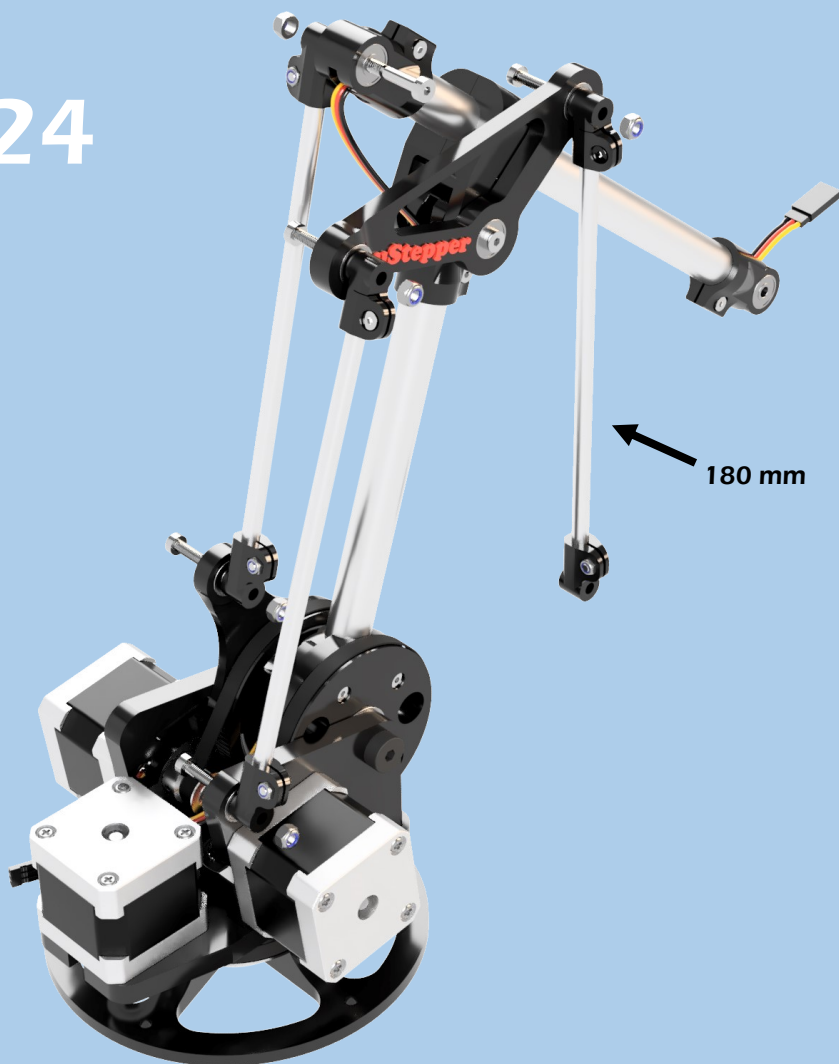
4x

M4 SL



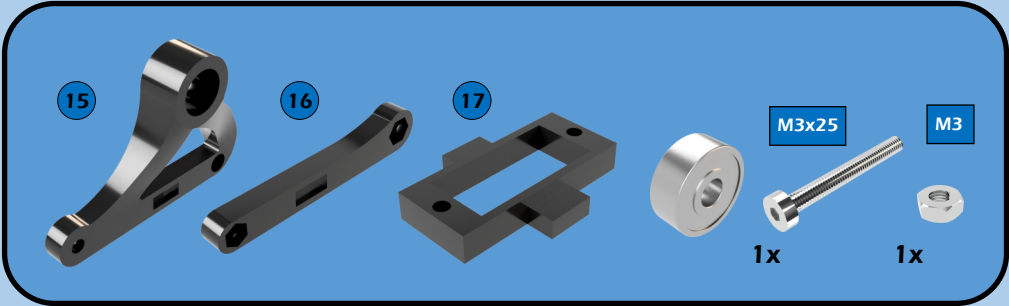
5x

24

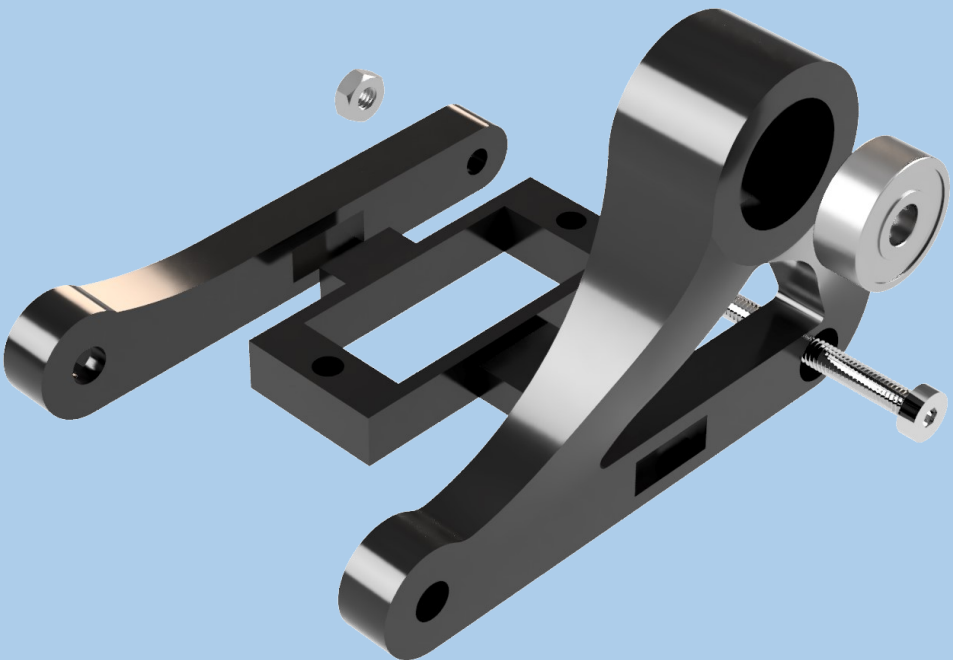




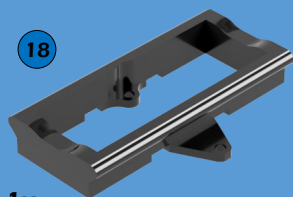
Robot Arm Gripper Assembly



25

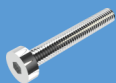


18



1x

M3x20

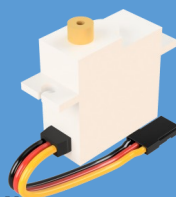


2x

M3 SL

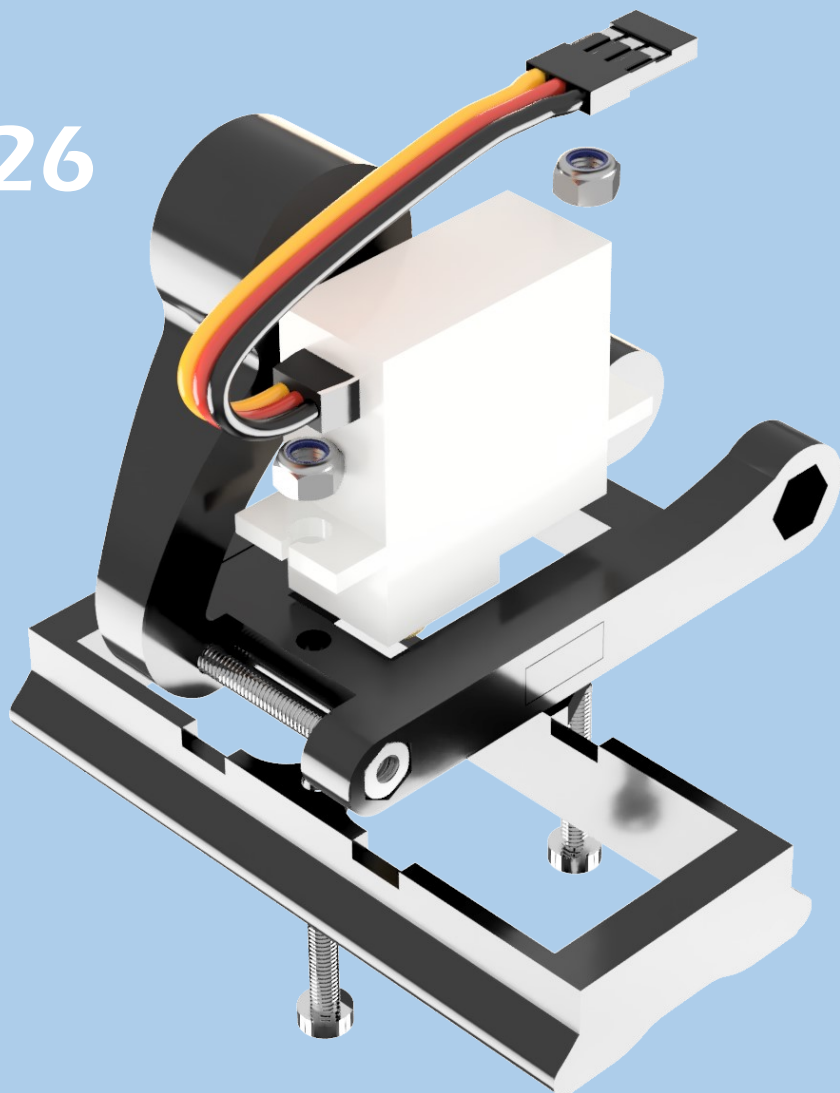


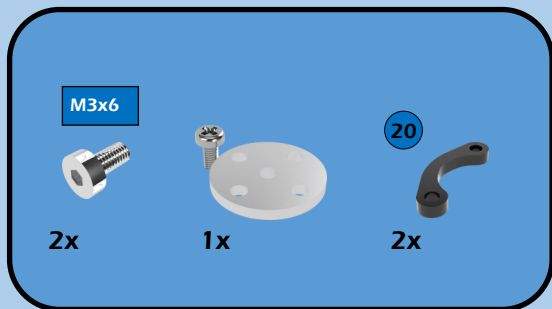
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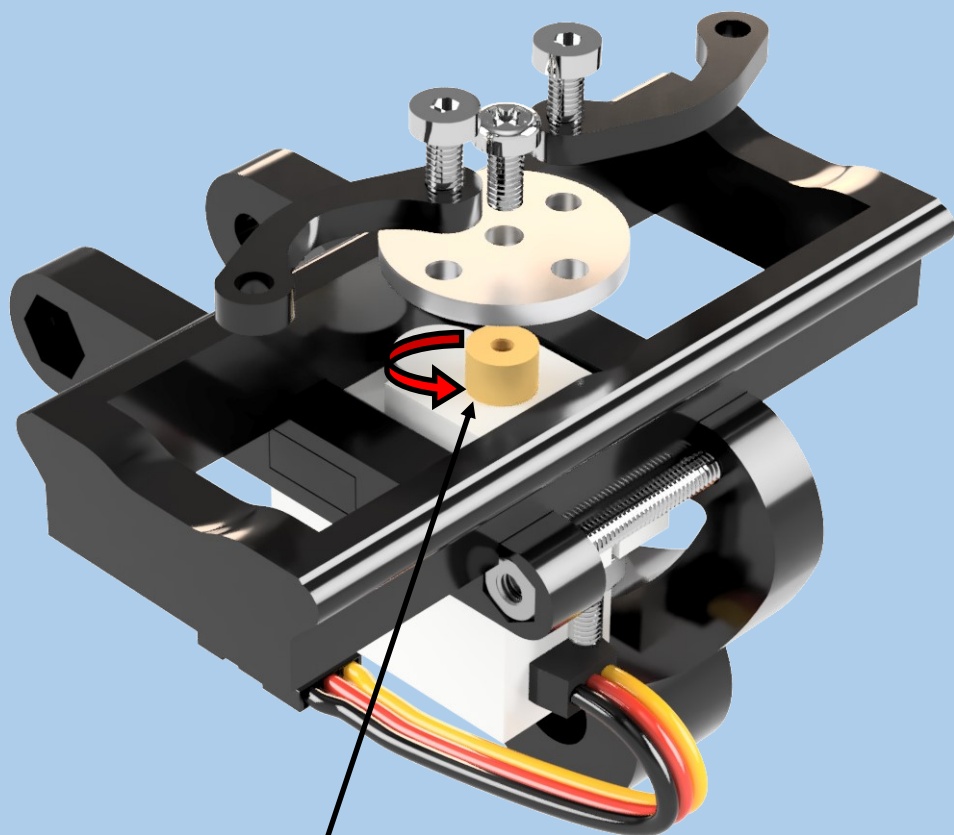
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26

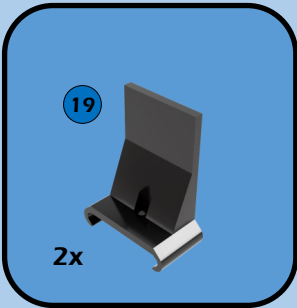




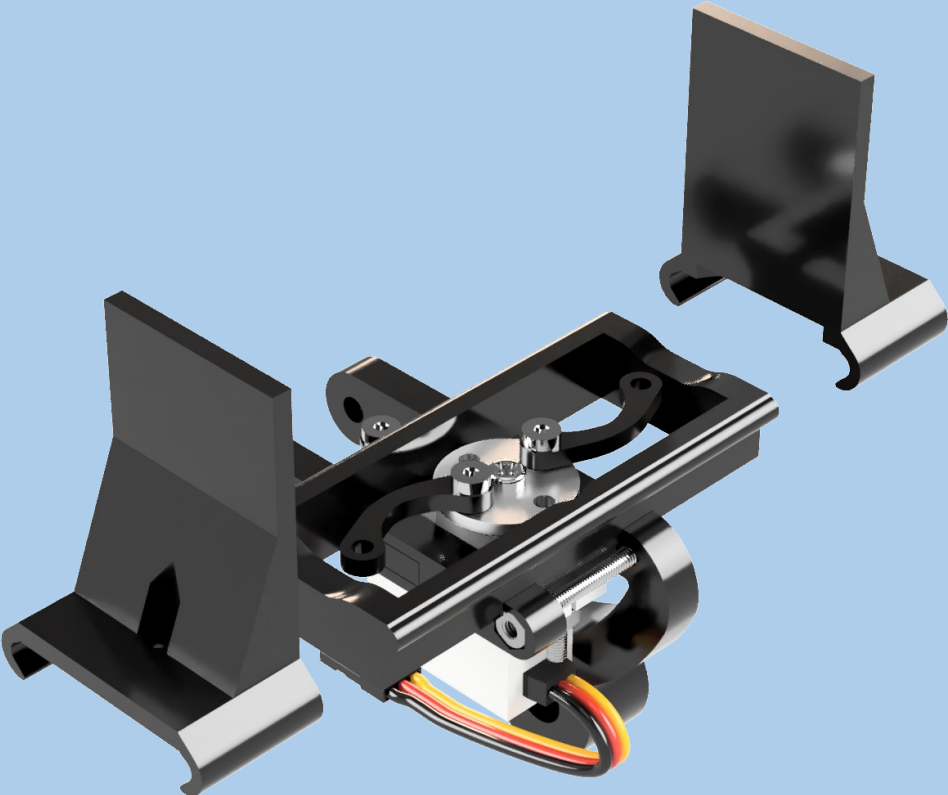
27



Make sure that the servo is at the furthest counter clockwise position



28



M3x20

M3 SL

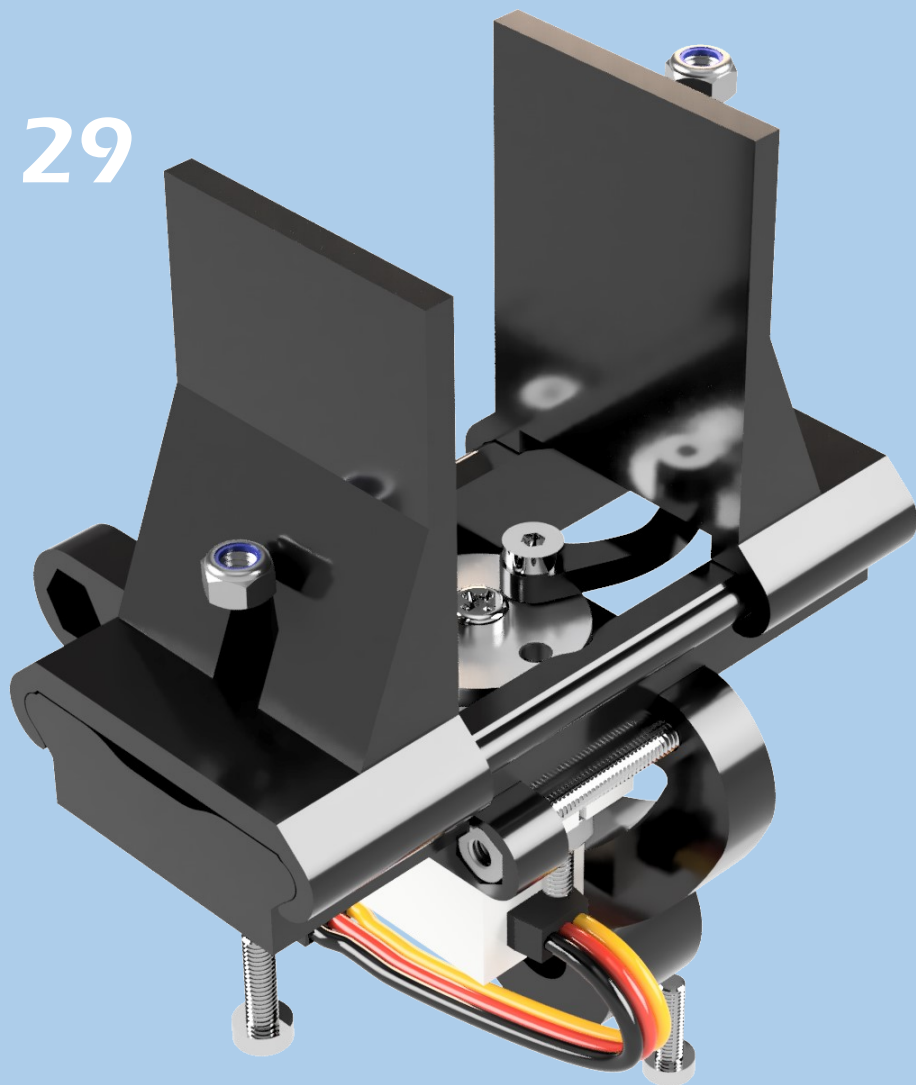


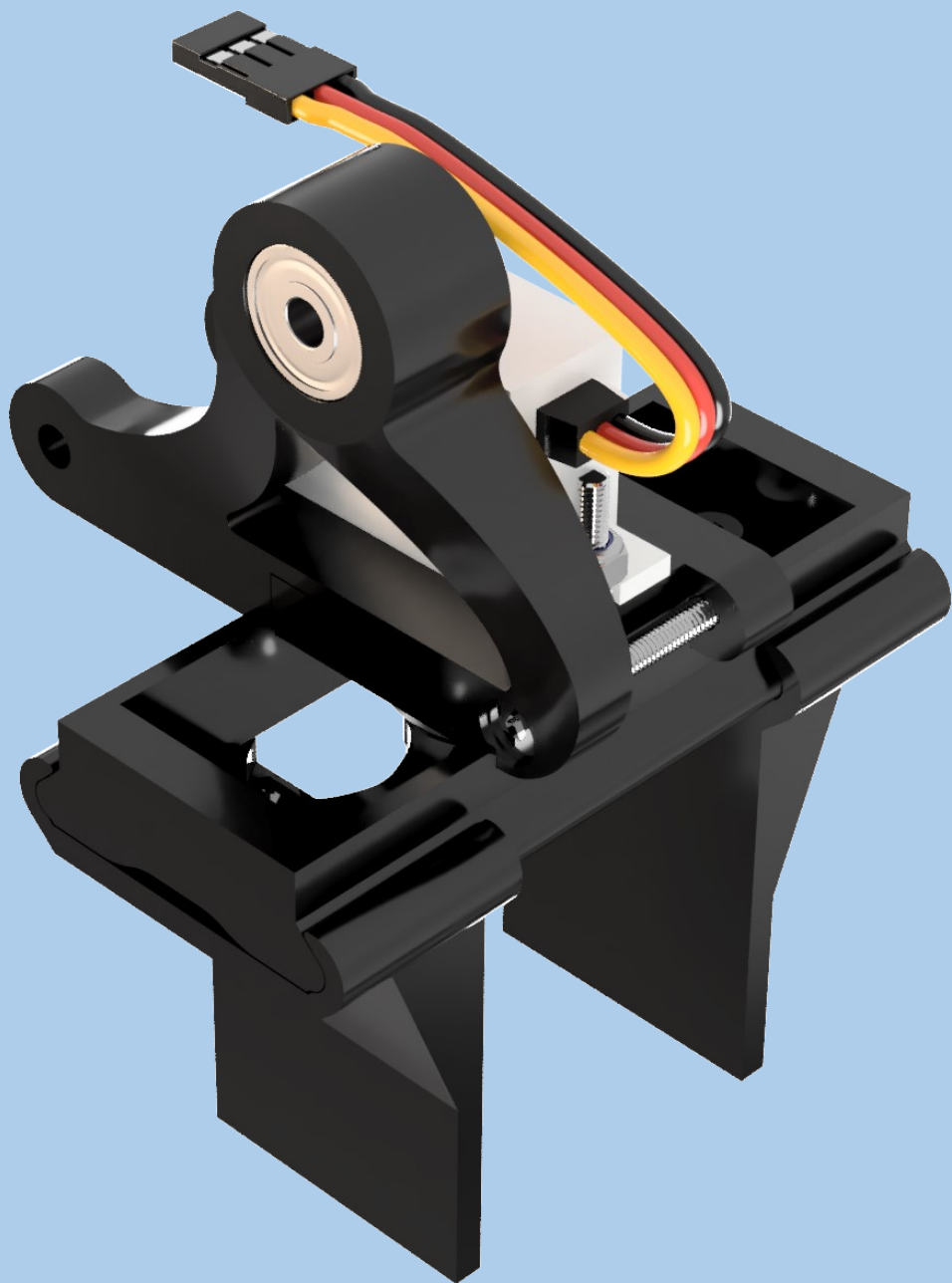
2x



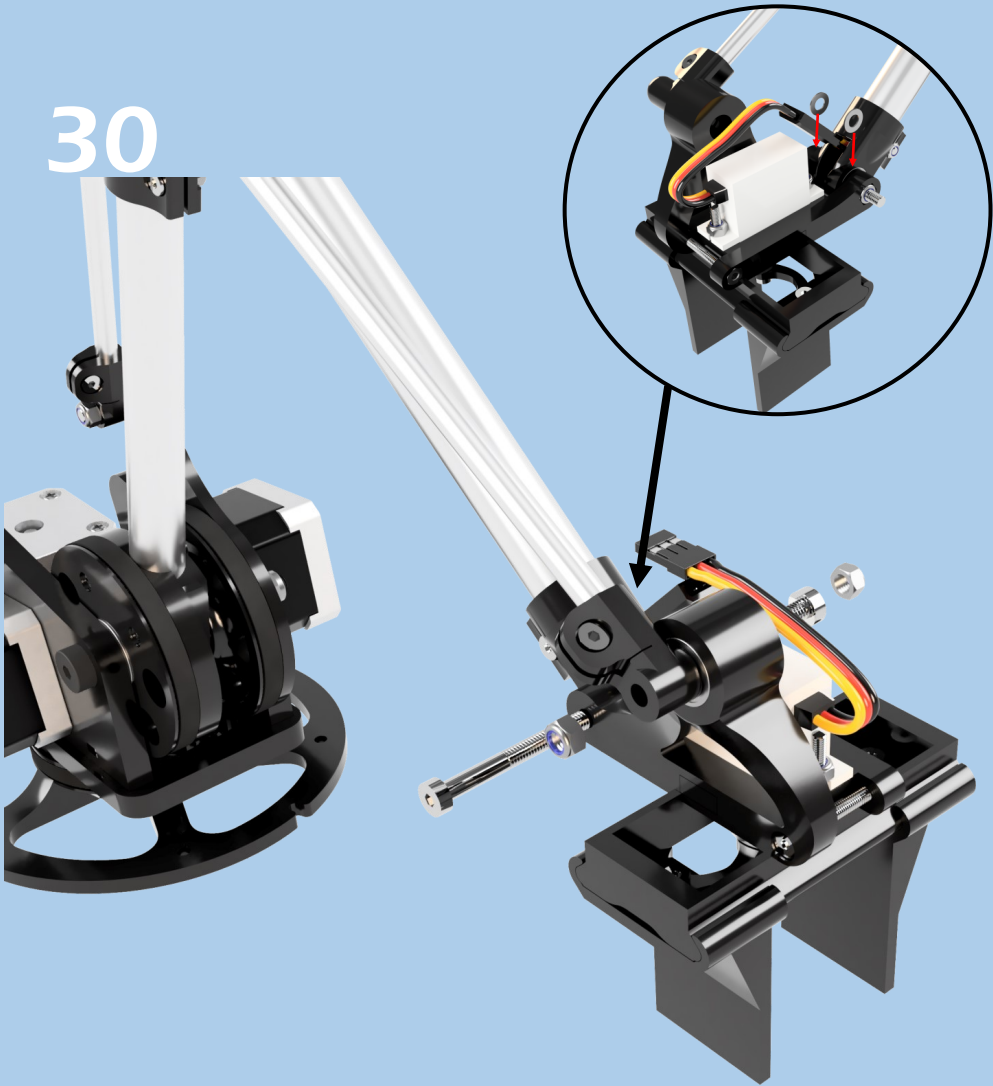
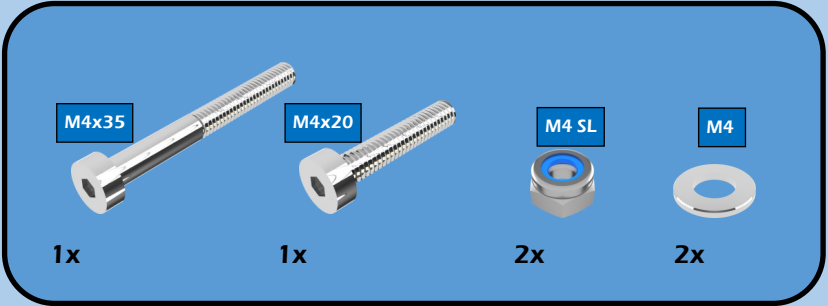
2x

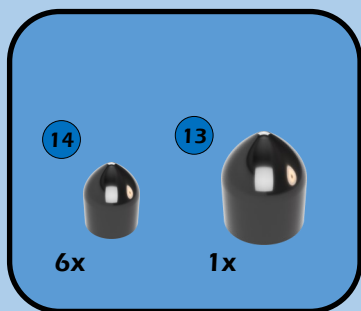
29





Robot Arm Gripper Mounting

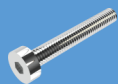




31



M3x20



1x

M3 SL



1x

32



Disclaimer

1 Disclaimers and Limitation of Liability

1.1 uStepper ApS and/or ON Development IVS (or any individuals affiliated with either of the two companies) can not be held responsible for any damage inflicted upon mounting or interfacing with uStepper products This also includes damage to stepper motors (both electrical and mechanical) or any other 3rd party hardware connected to or interfacing with any uStepper products. Most stepper motor cases are made of aluminum, and care must be taken when preparing the mountings for uStepper.

1.2 uStepper ApS and/or ON Development IVS (or any individuals affiliated with either of the two companies) can not be held responsible for any damage inflicted upon assembly of the uStepper Robot Arm. This includes damage to 3D printed parts, which must be considered to be of prototyping quality compared to injection moulded parts. Care must be taken while assembling 3D printed parts, and use of excessive force may lead to damage of the parts.

1.3 By using the uStepper products (including, but not limited to, hardware and software) you acknowledge that uStepper ApS and/or ON Development IVS (or any individuals affiliated with either of the two companies) can not be held responsible for any personal injuries and/or damage to any 3rd party hardware that may occur when using the uStepper products.

1.4 To the extent permitted by law, uStepper ApS and/or ON Development IVS will not be liable for any indirect or consequential loss or damage, of any kind, (including without limitation loss of business, opportunity, data, profits) arising out of or in connection with the use of any products (including, but not limited to, hardware and software), developed, produced or sold by uStepper ApS and/or ON Development IVS (or any individuals affiliated with either of the two companies).

1.5 Nothing in these Terms and Conditions shall be construed so as to hold uStepper ApS and/or ON Development IVS liable for death or personal injury as a result of the negligence of uStepper ApS and/or ON Development IVS or that of its employees or agents.

2 Indemnity

2.1 You agree to indemnify and hold uStepper ApS and/or ON Development IVS and its employees and agents harmless from and against all liabilities, legal fees, damages, losses, costs and other expenses in relation to any claims or actions brought against uStepper ApS and/or ON Development IVS arising out of any breach by you of these Terms and Conditions or other liabilities arising out of your use of this Website.

2.2 You agree to indemnify and hold uStepper ApS and/or ON Development IVS and its employees and agents harmless from and against all liabilities, legal fees, damages, losses, costs and other expenses in relation to any claims or actions brought against uStepper ApS and/or ON Development IVS arising out of any breach by you of these Terms and Conditions or other liabilities arising out of your use of products (including, but not limited to, hardware and software) developed, produced or sold by uStepper ApS and/or ON Development IVS (or any individuals affiliated with either of the two companies).

3 Severance

If any of these Terms and Conditions should be determined to be invalid, illegal or unenforceable for any reason by any court of competent jurisdiction then such Term or Condition shall be severed and the remaining Terms and Conditions shall survive and remain in full force and effect and continue to be binding and enforceable.

