

uStepper Robot Arm 4.0

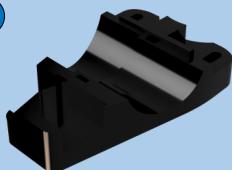
Vacuum Gripper System



Bill Of Materials

1

1 x



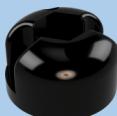
2

1 x



3

1 x



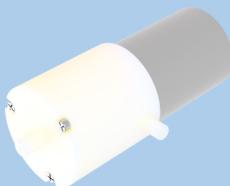
1 x Vacuum End Effector



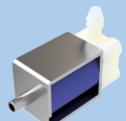
2 x M3 x 20 mm



1 x Cable Tie 2.4x150 mm



1 x 12 V Vacuum Pump



1 x 5 V Solenoid Valve

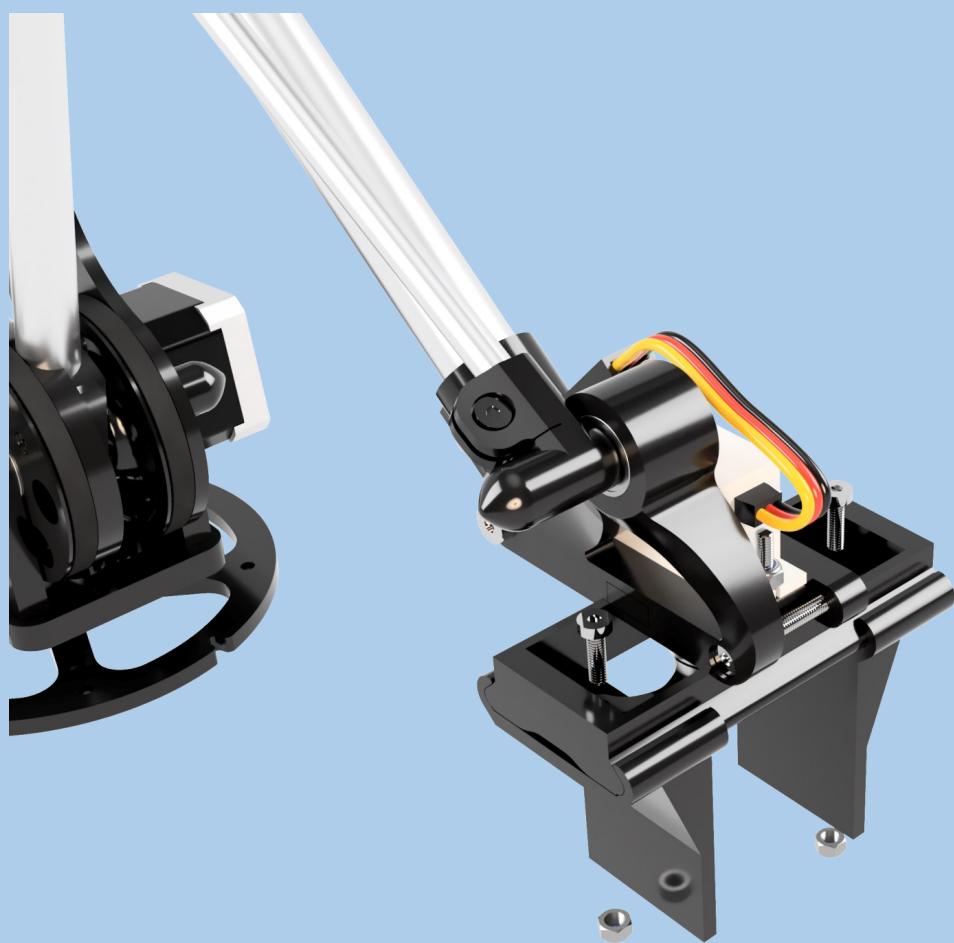


0.5 m 4 mm OD x 2 mm ID Silicone Hose

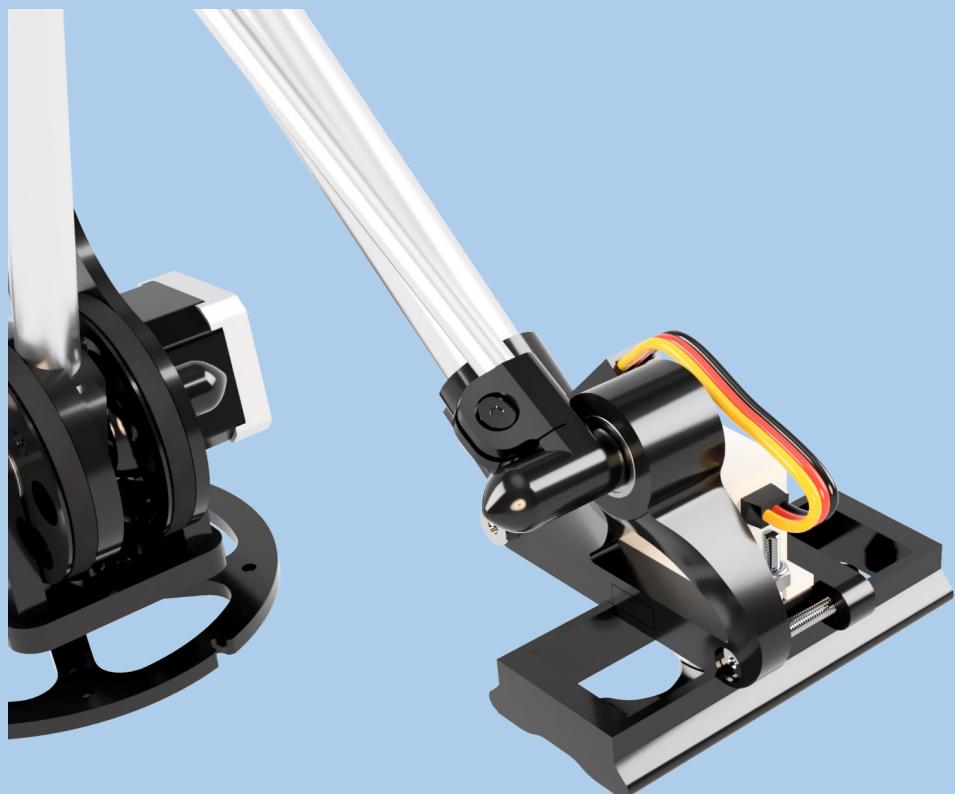
0 1 2 3 4 5 6 7 8 9 10

Disassembly of standard gripper

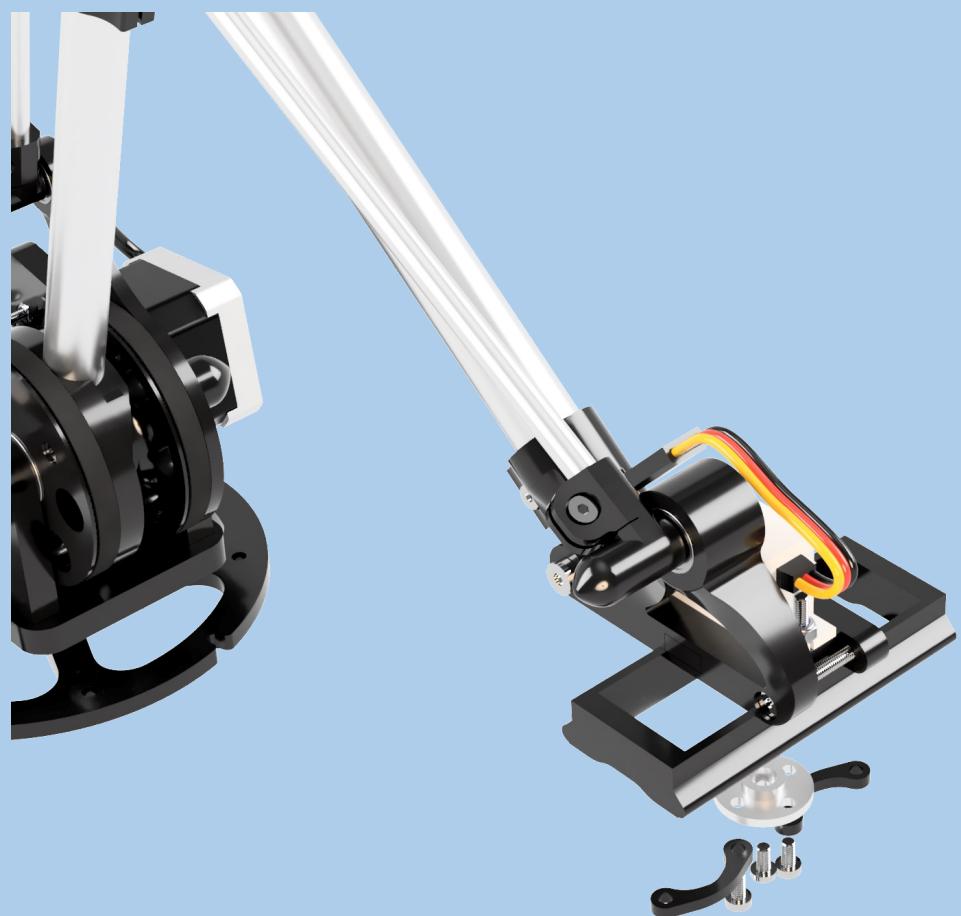
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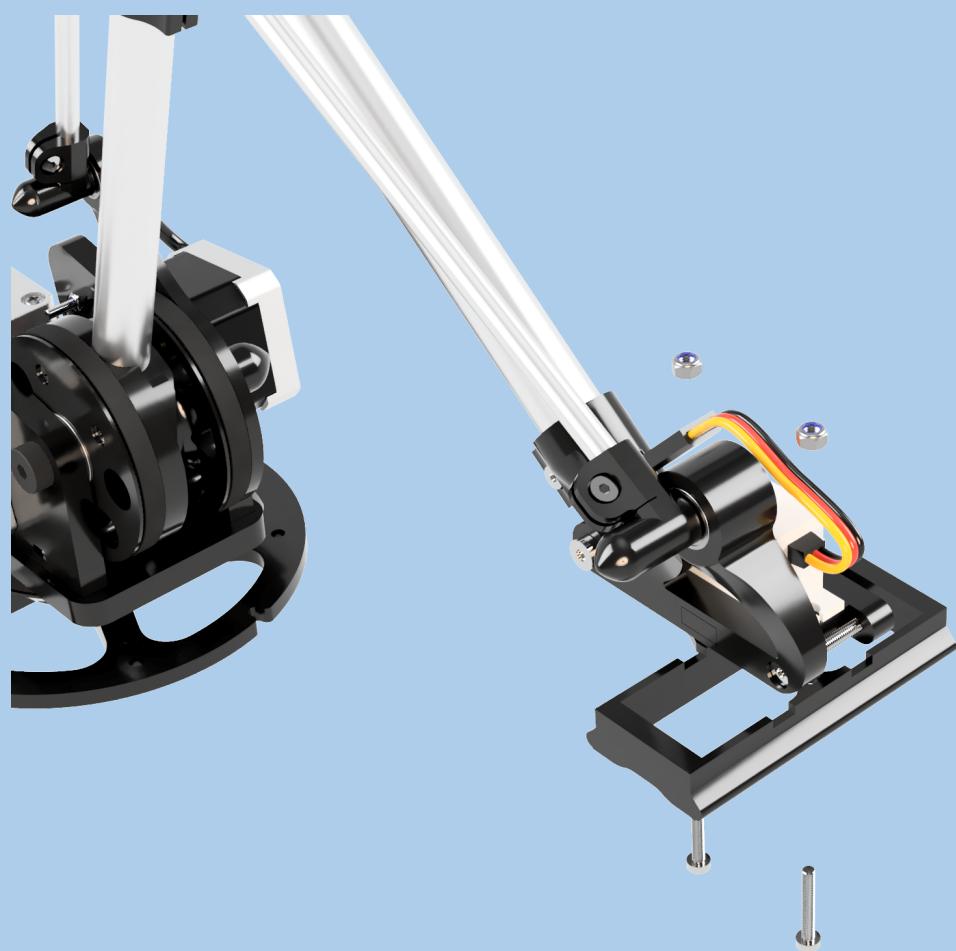
2



3



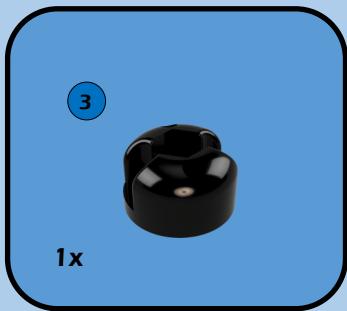
4



5



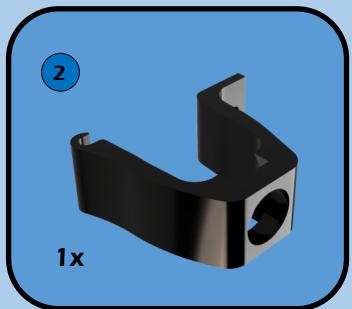
Assembly of Vacuum Gripper System



6

Mount the servo horn and use the $2 \times M3 \times 6 \text{ mm}$ bolts for mounting as shown





7



8

Mount the M3 x 20 mm bolt and M3 SL nut re-moved previously





1x

9

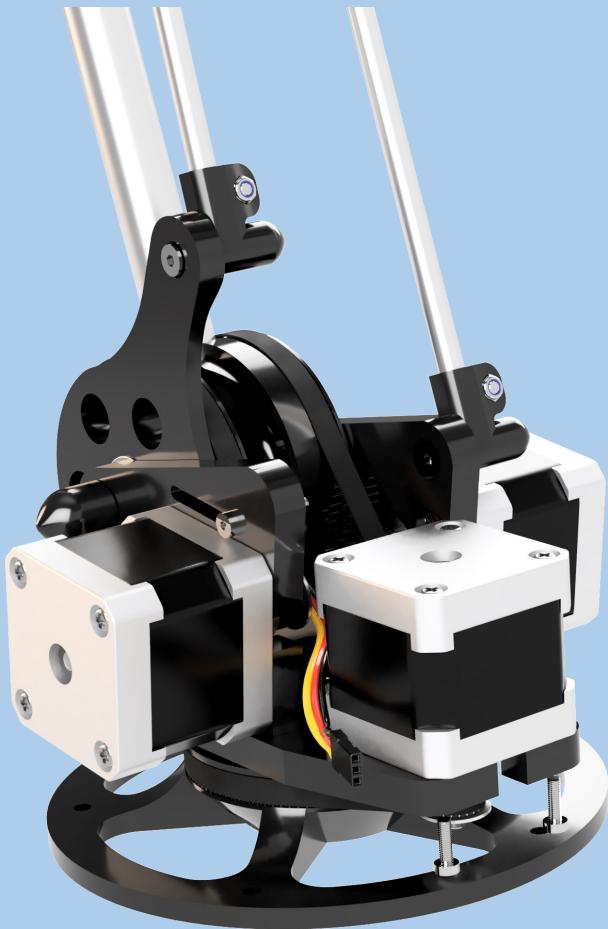


10

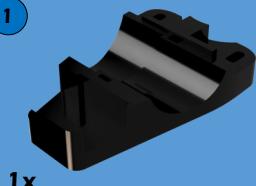


11

Remove 2 x M3 x 10 mm bolts



1



M3x20

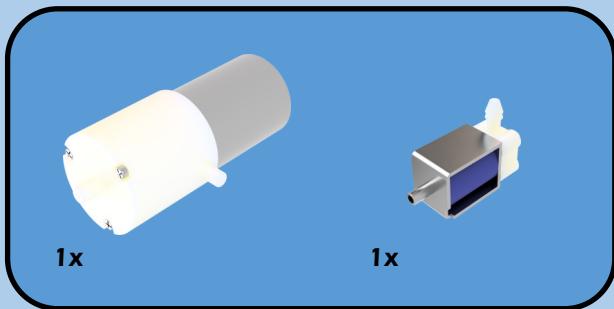


1x

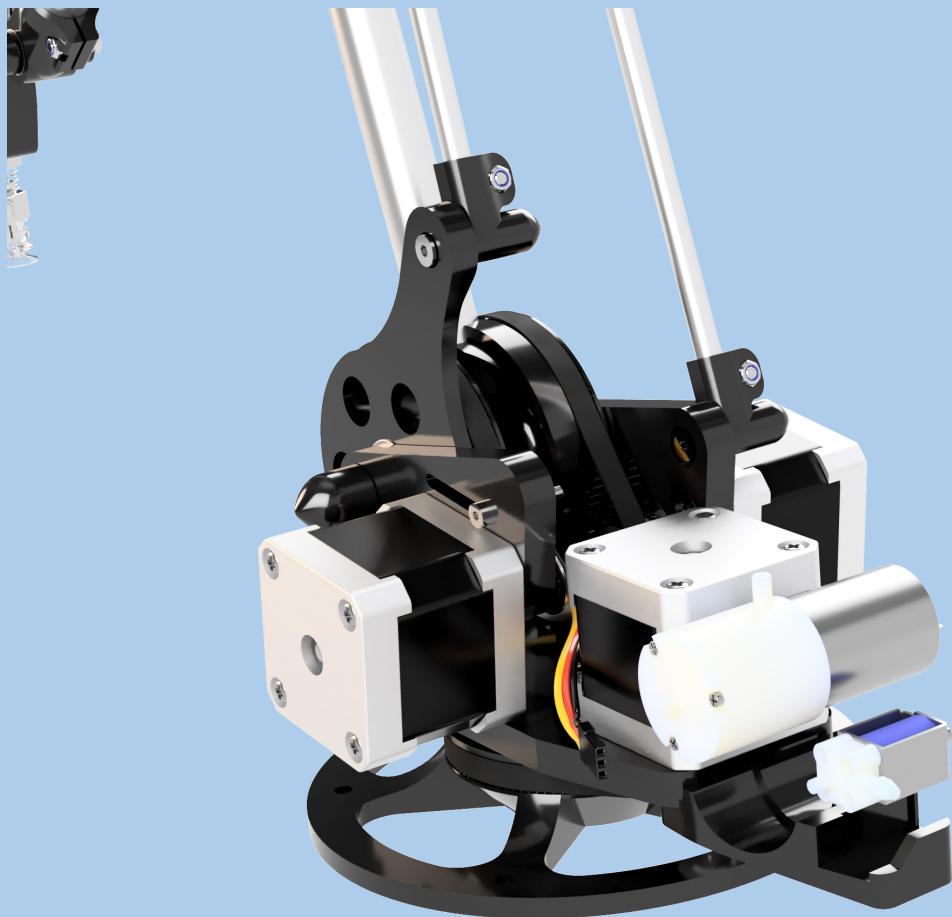
2x

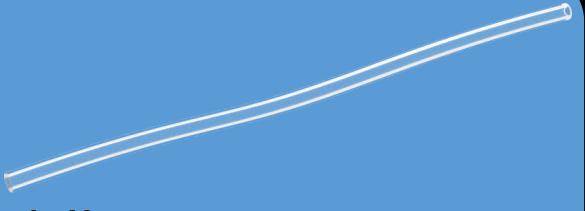
12





13





14

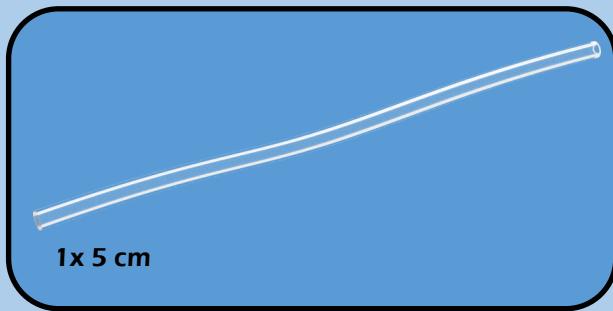
Feed the hose through 15 mm tubing from end effector side like shown



15

Feed the hose through 15 mm tubing from end effector side like shown

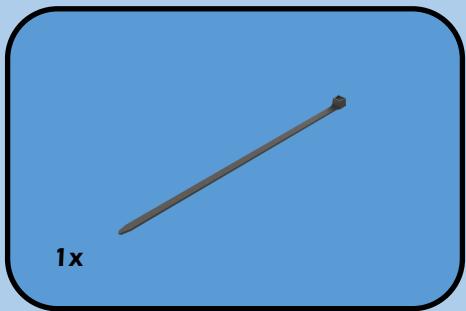




16

Connect hose to valve, and connect hose from pump to valve as shown





1x

17





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