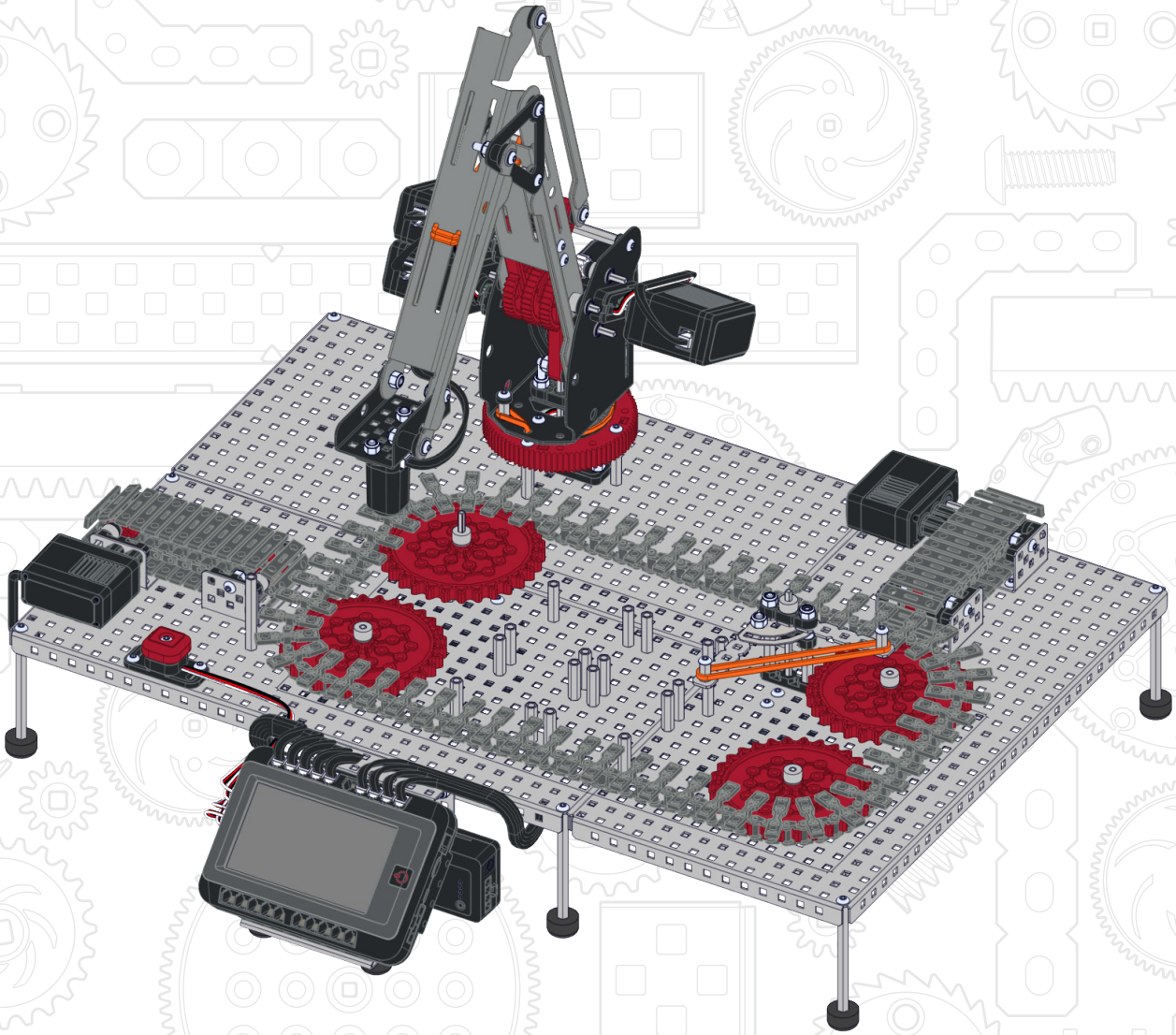


Lab 9: Using a Conveyor System

V5 Workcell STEM Labs

Parts List

All V5 Control System, gears, wheels, wires, and structure are not to scale
All other parts listed are 1:1 scale



6x High Strength Gear Insert



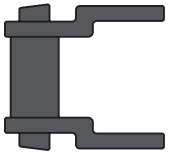
10x Gear Insert Metal



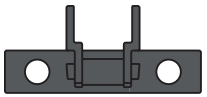
31x #8-32 x 1/4" Star Drive Screw



41x #8-32 x 1/2" Star Drive Screw



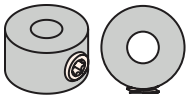
56x High Strength Chain Attachment Link



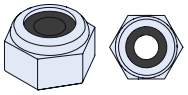
54x High Strength Attachment Link



56x High Strength Conveyor Chain



14x Star Drive Shaft Collar



19x #8-32 Nylock Nut



8x 0.125" Spacer



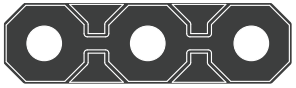
4x 0.25" Spacer



1x 0.375" Spacer



1x 1x3 Center Lock Beam



17x Flat Bearing



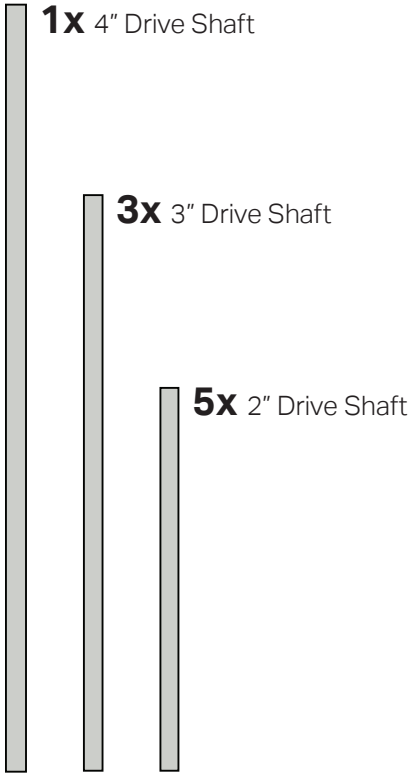
2x Rubber Bumper



1x #32 Rubber Band



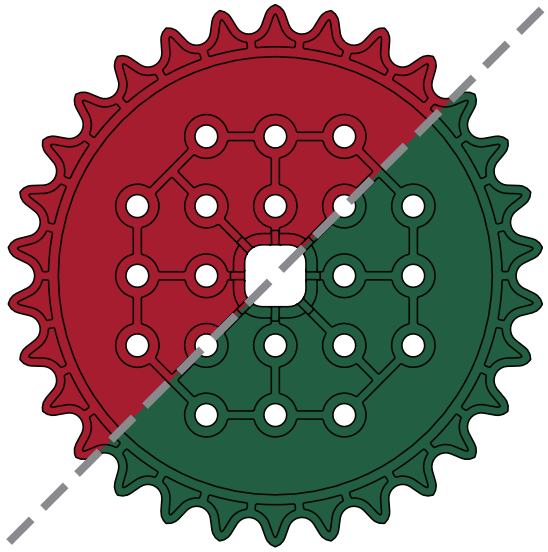
4x 6T High Strength Sprocket



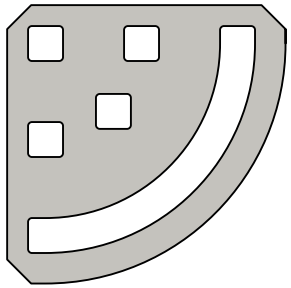
1x 4" Drive Shaft

3x 3" Drive Shaft

5x 2" Drive Shaft



4x 30T High Strength Sprocket



1x Angle Gusset



10x 1/2" Standoff



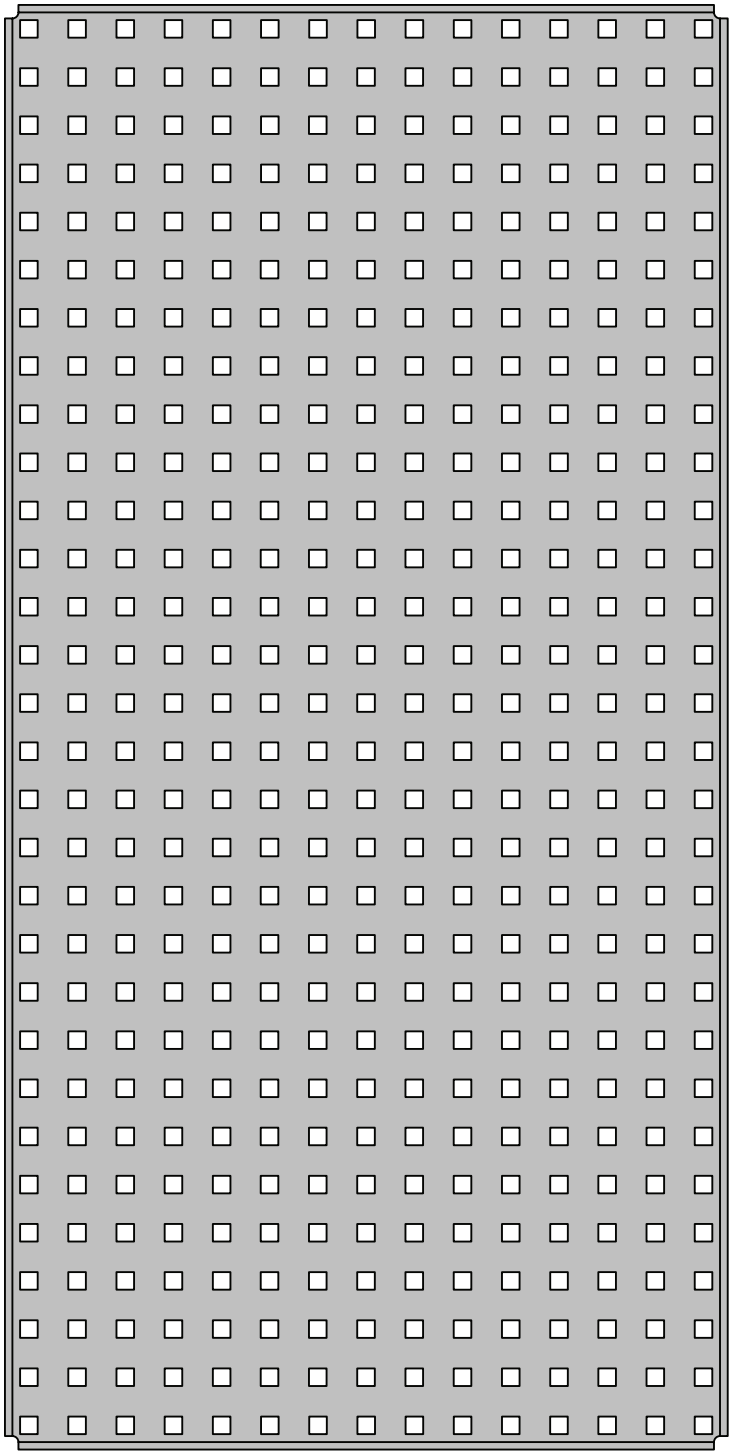
18x 1" Standoff



3x 2" Standoff



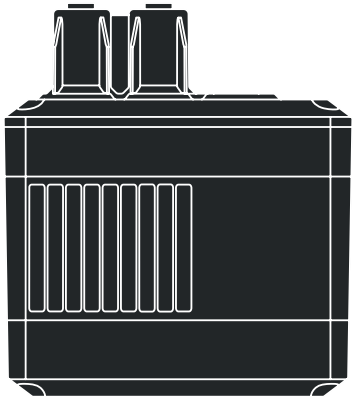
2x 3" Standoff



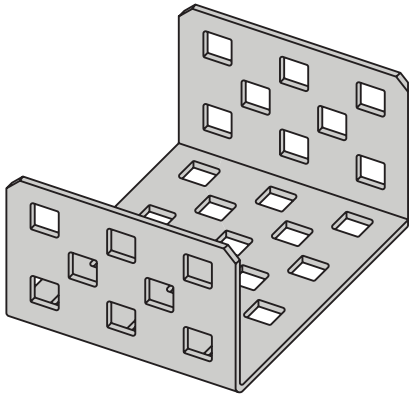
1x 15x30 Base Plate



1x 1x25 Steel Bar



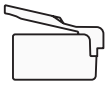
4x V5 Smart Motor (5.5W)



4x Input Output Conveyor Bracket

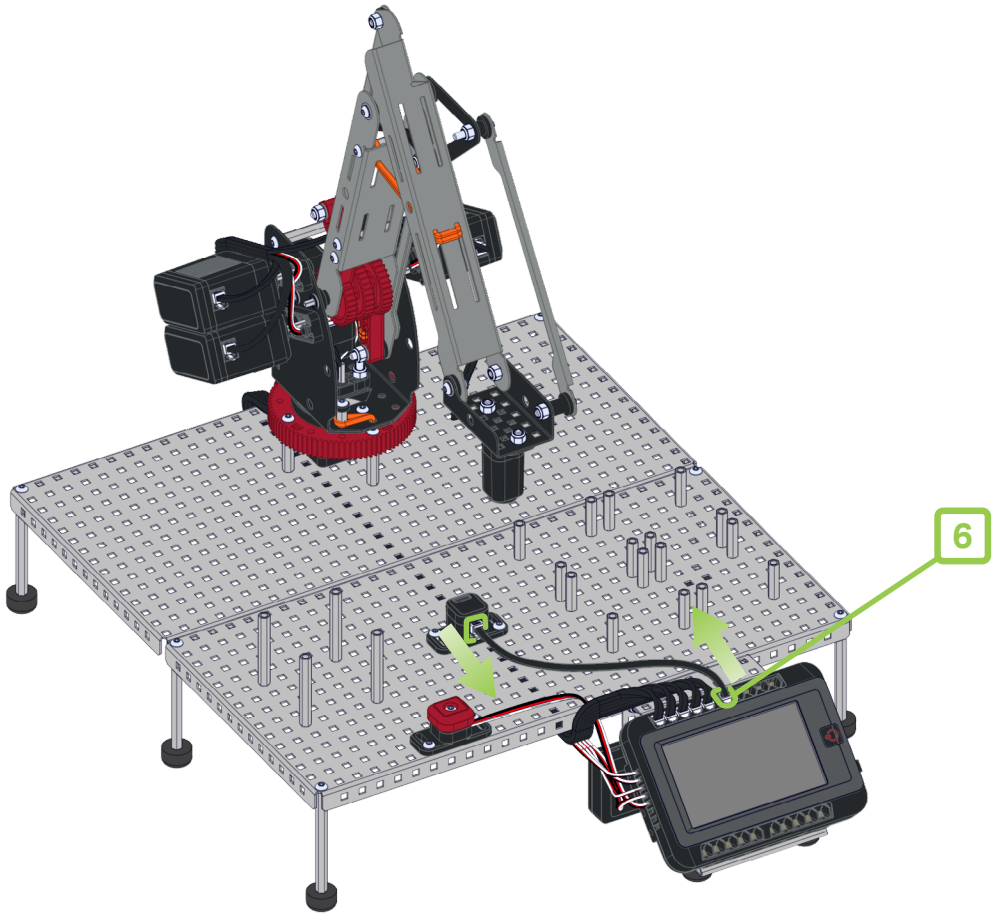


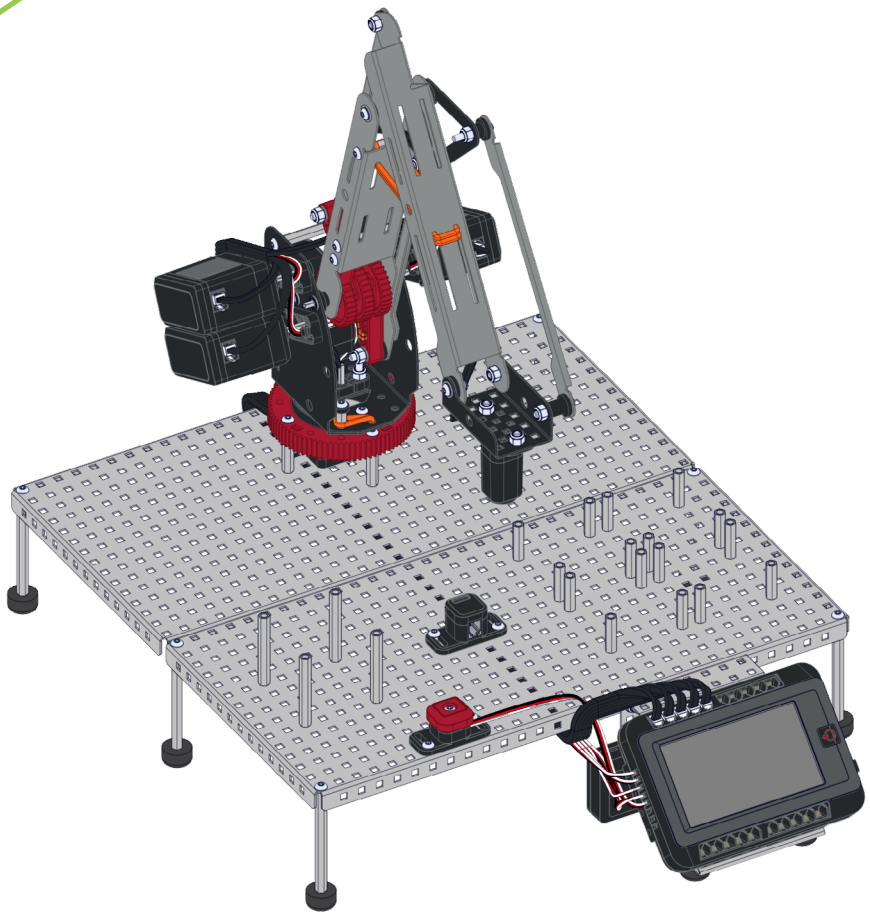
1x V5 Smart Cable Stock (8m)



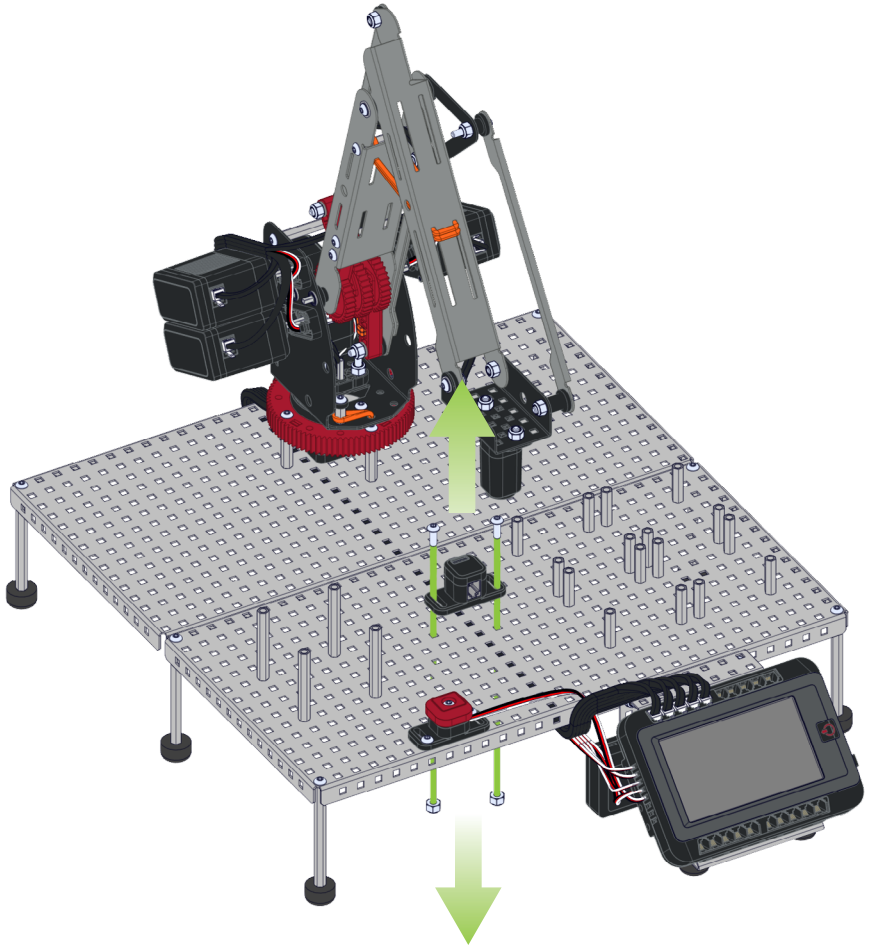
8x V5 Smart Cable Connector

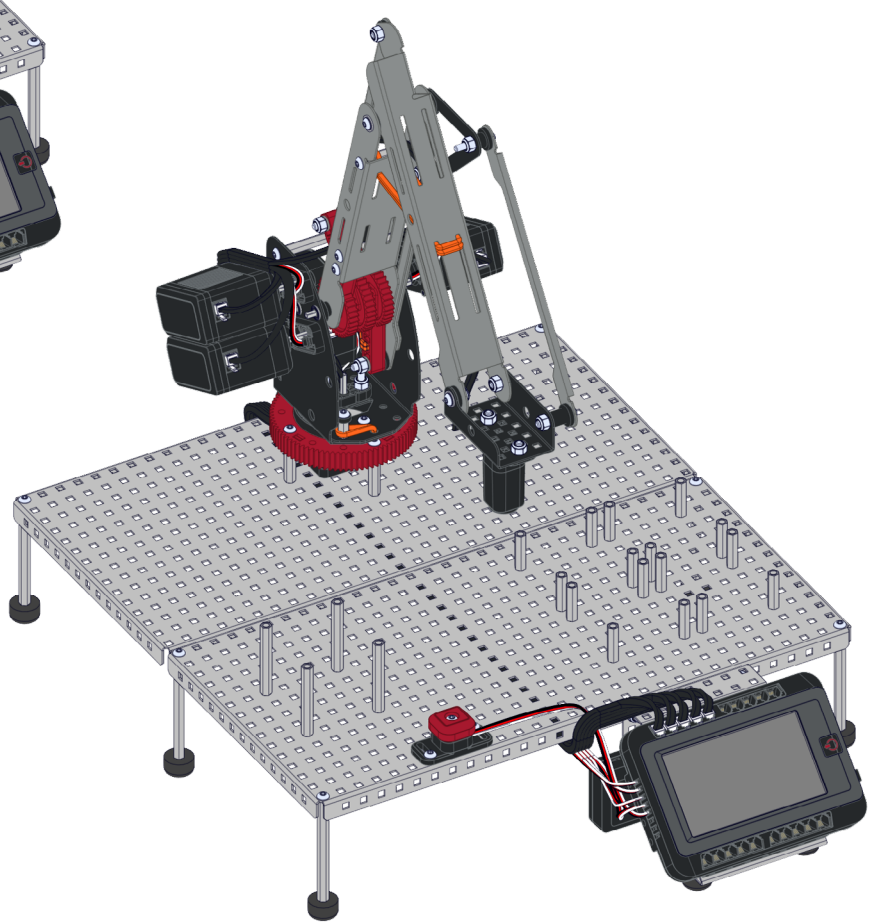
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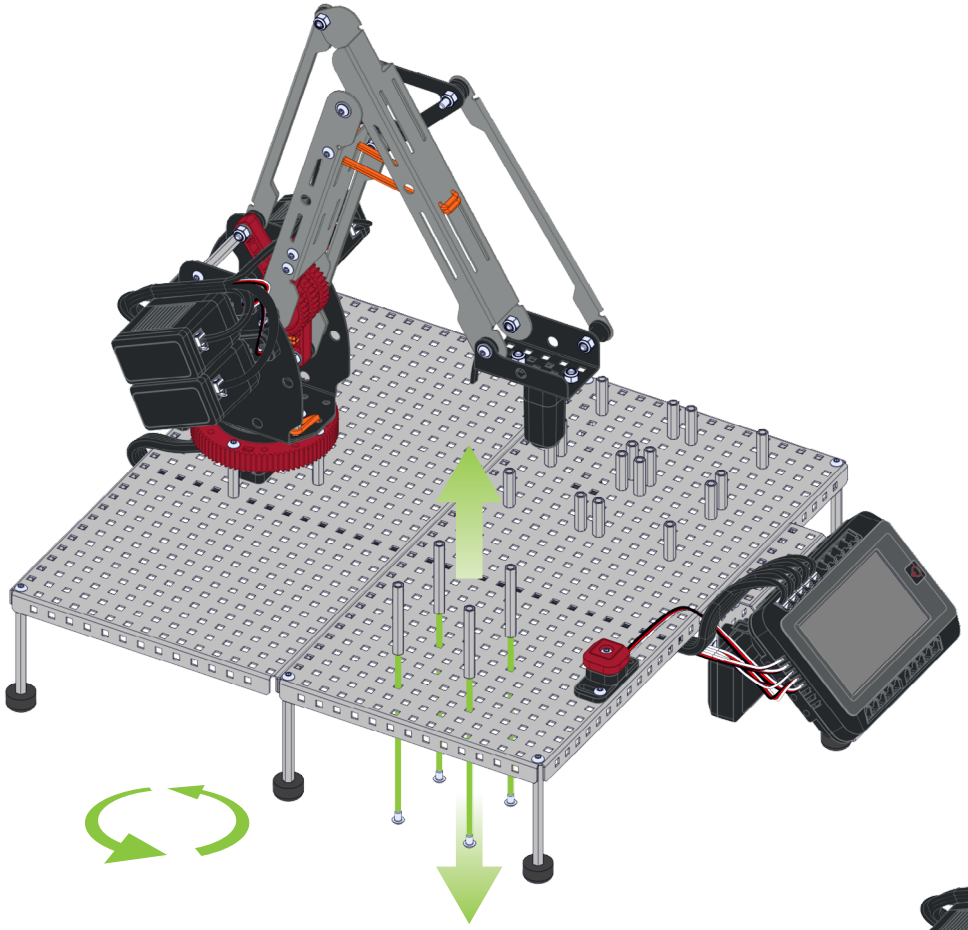


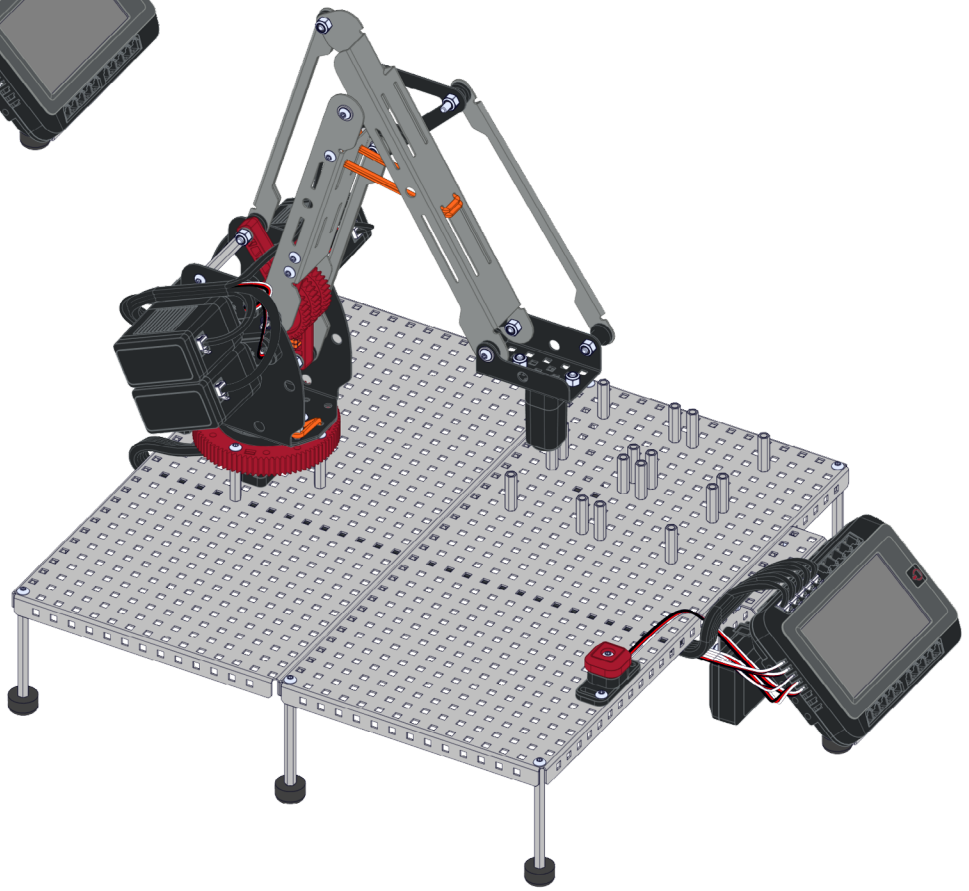


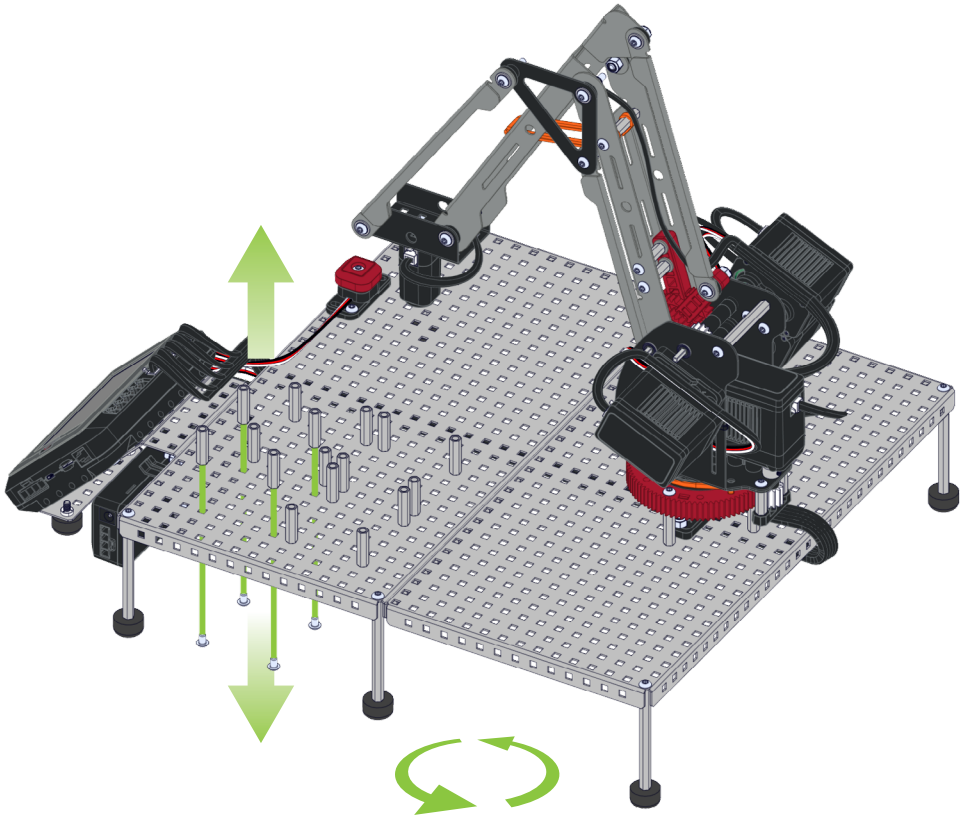
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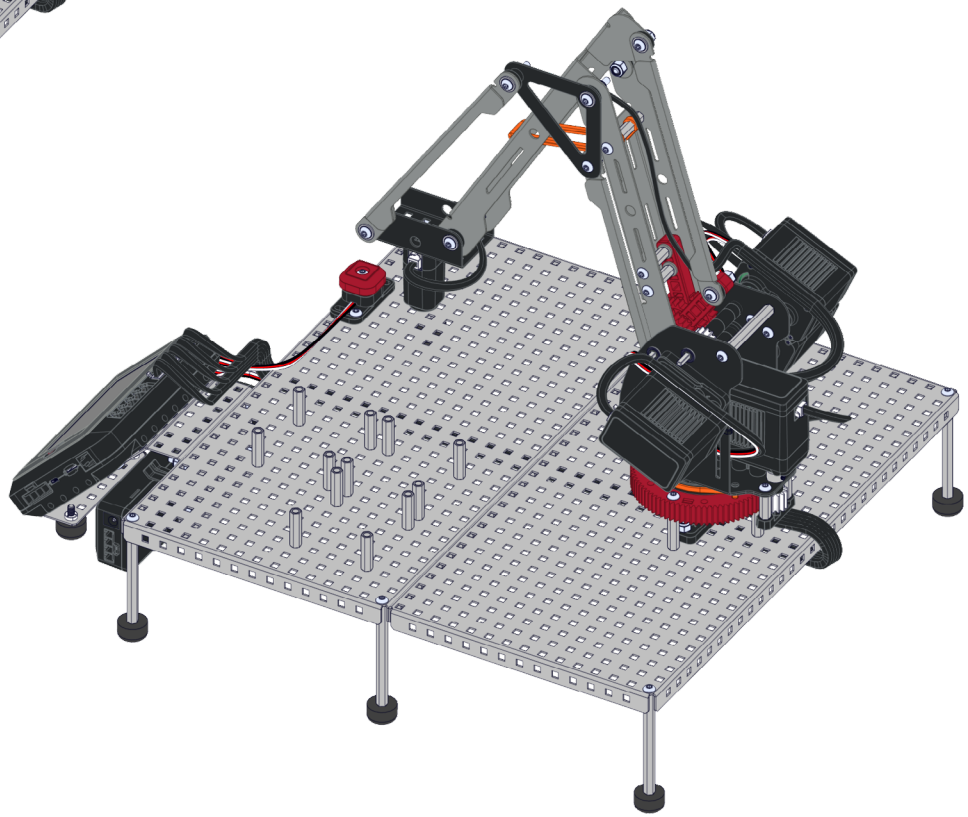


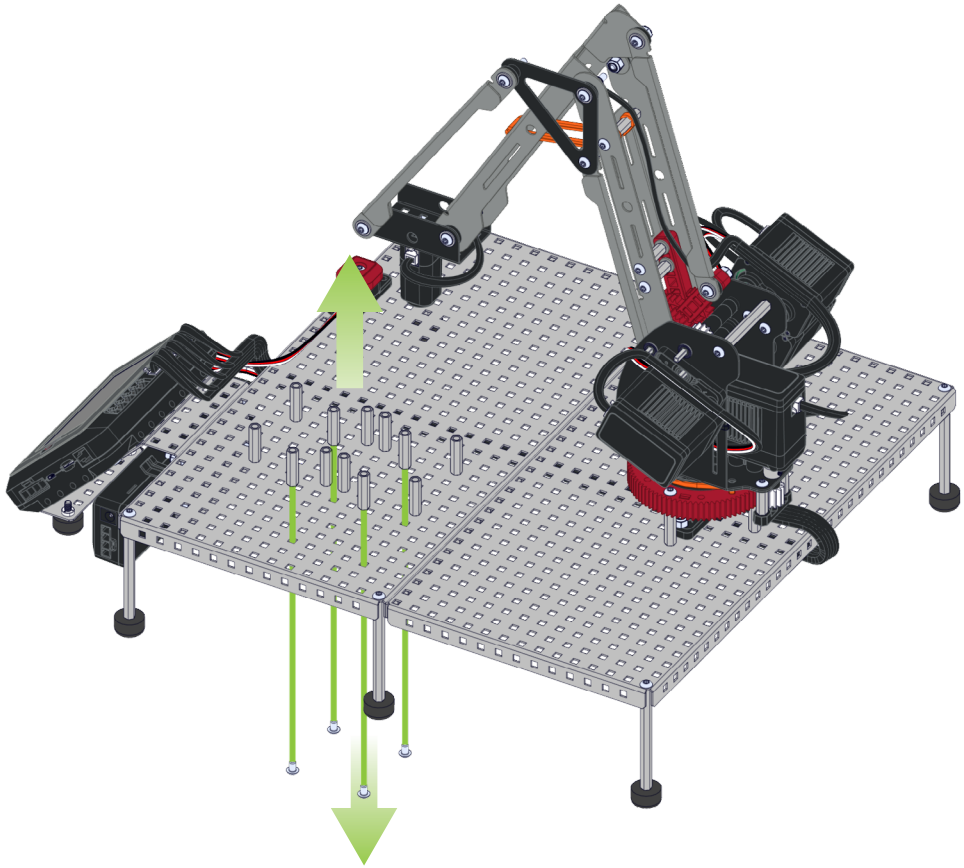


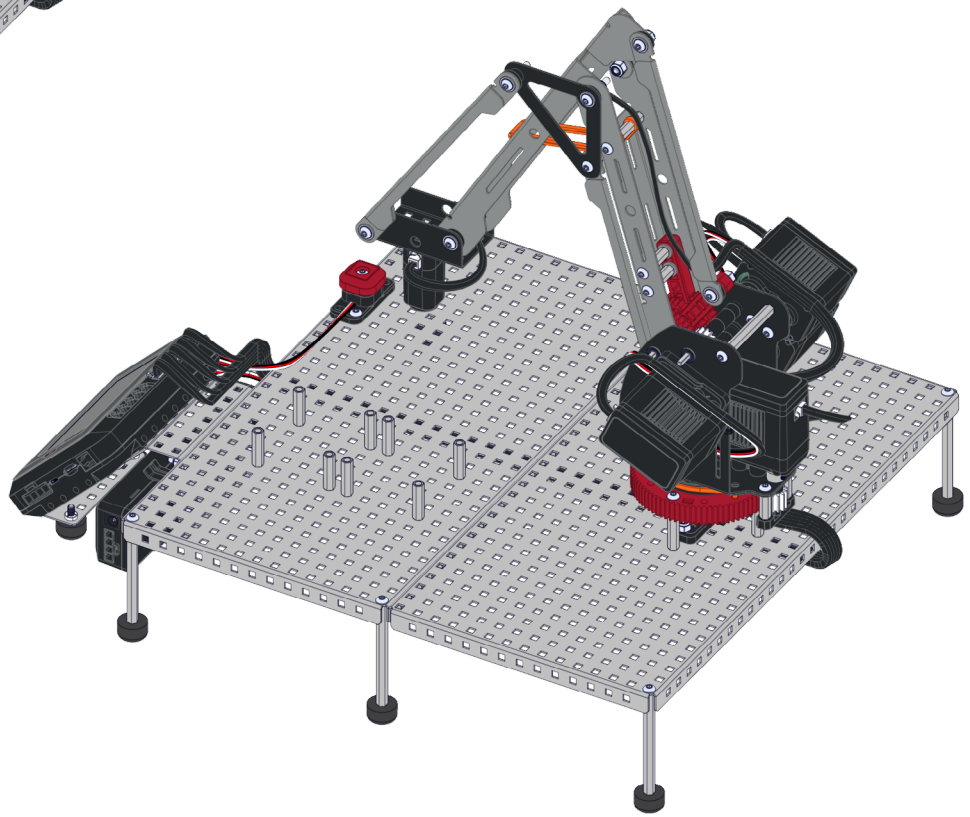


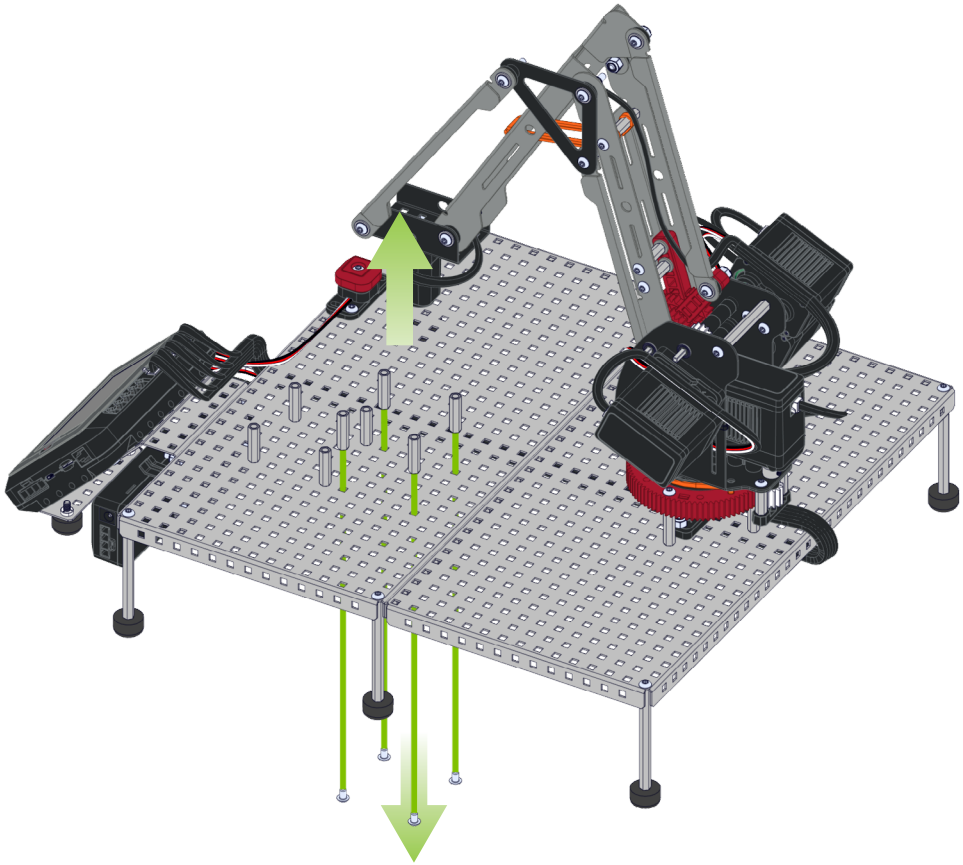




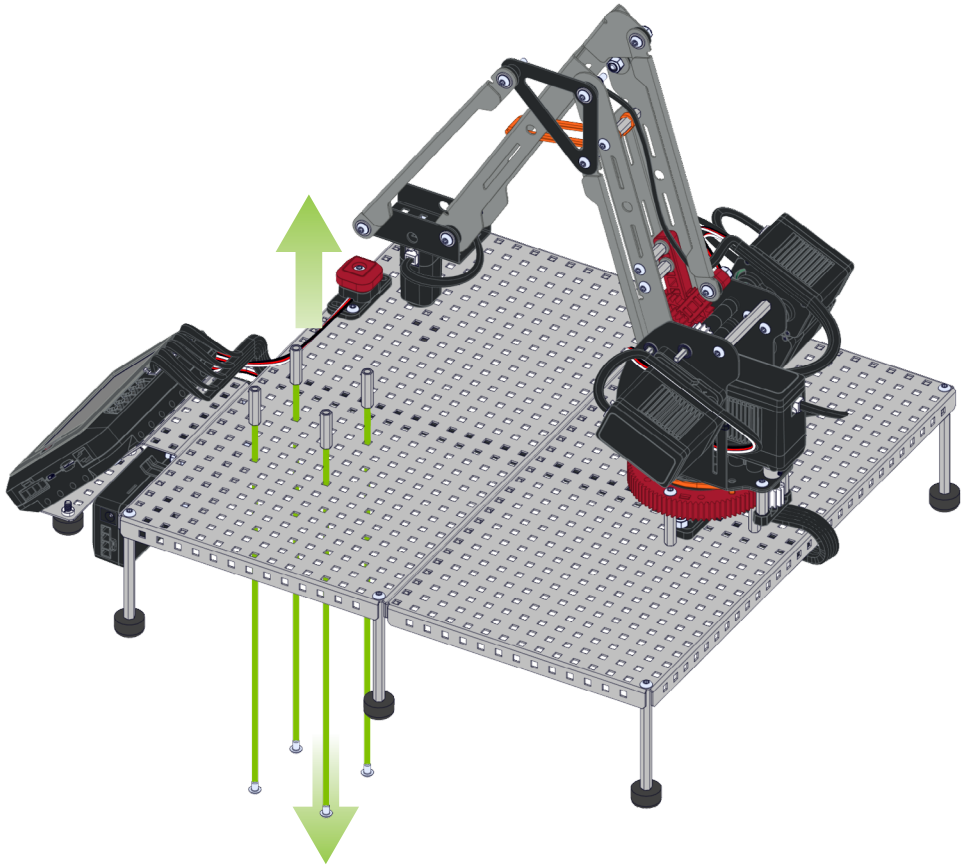










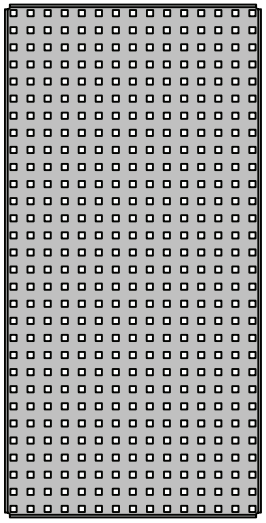




8



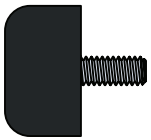
2x #8-32 x 1/4" Star Drive Screw



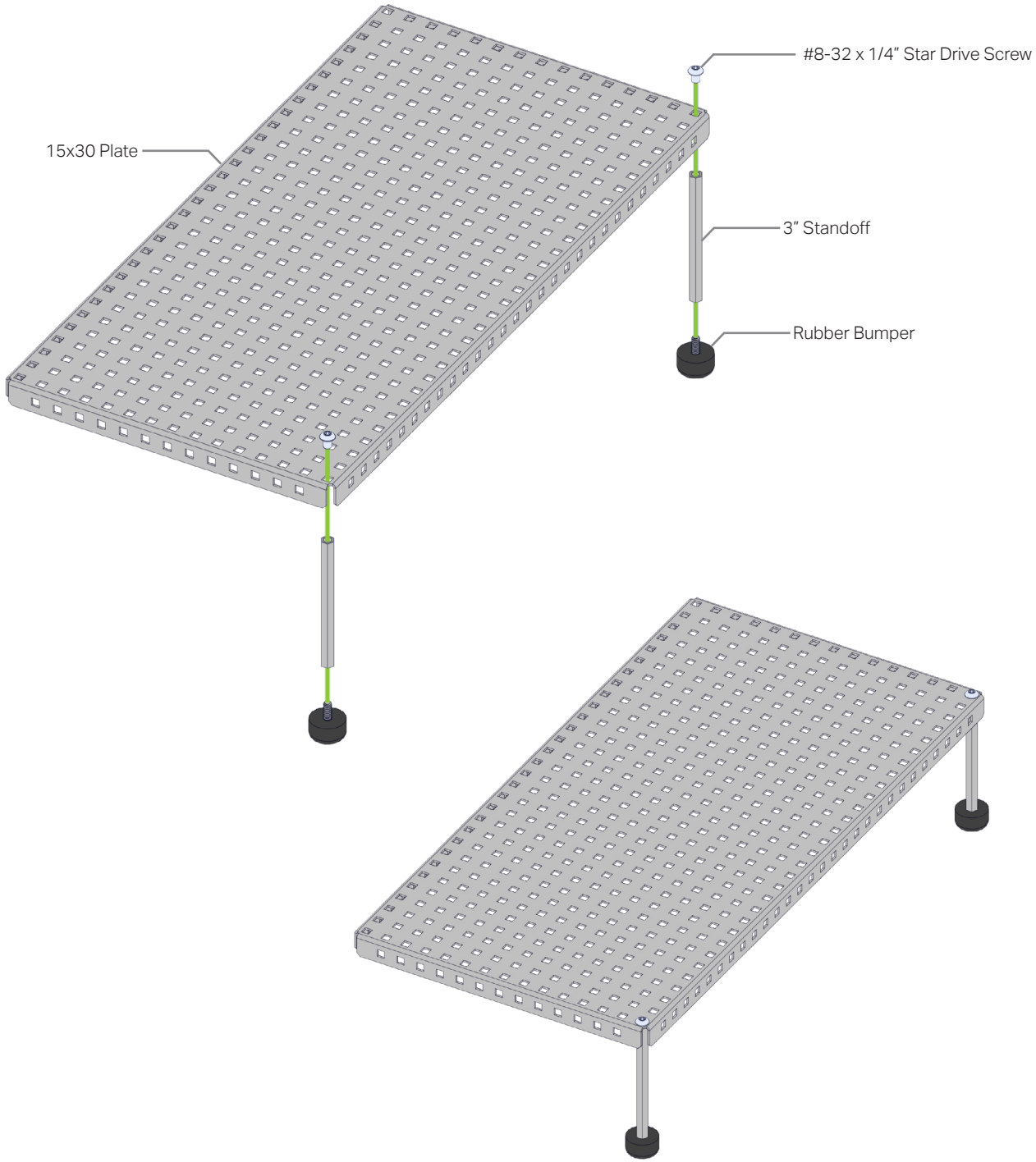
1x 15x30 Plate



2x 3" Standoff



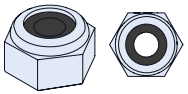
2x Rubber Bumper



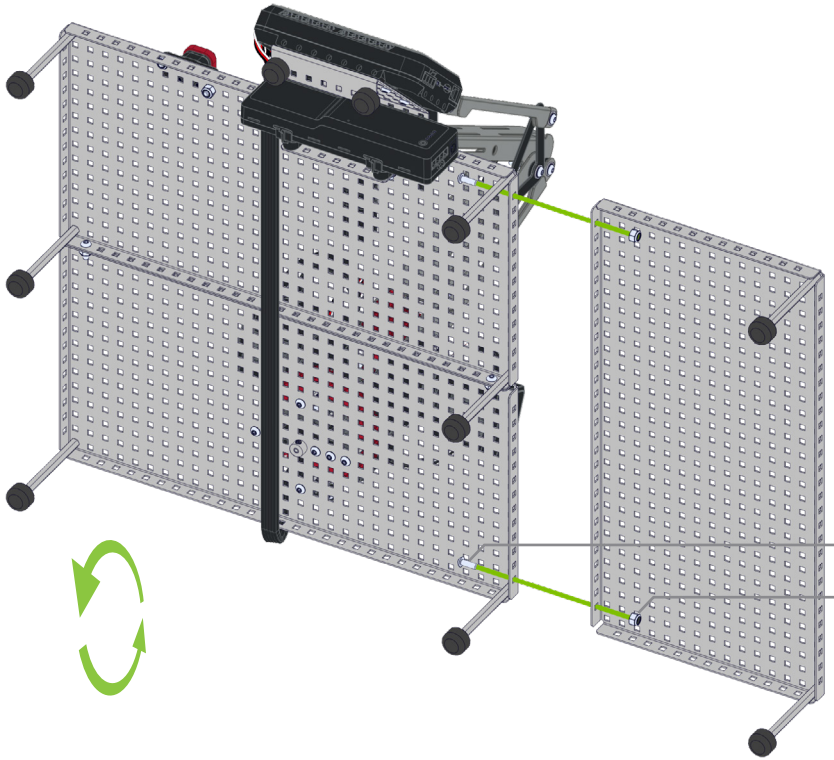
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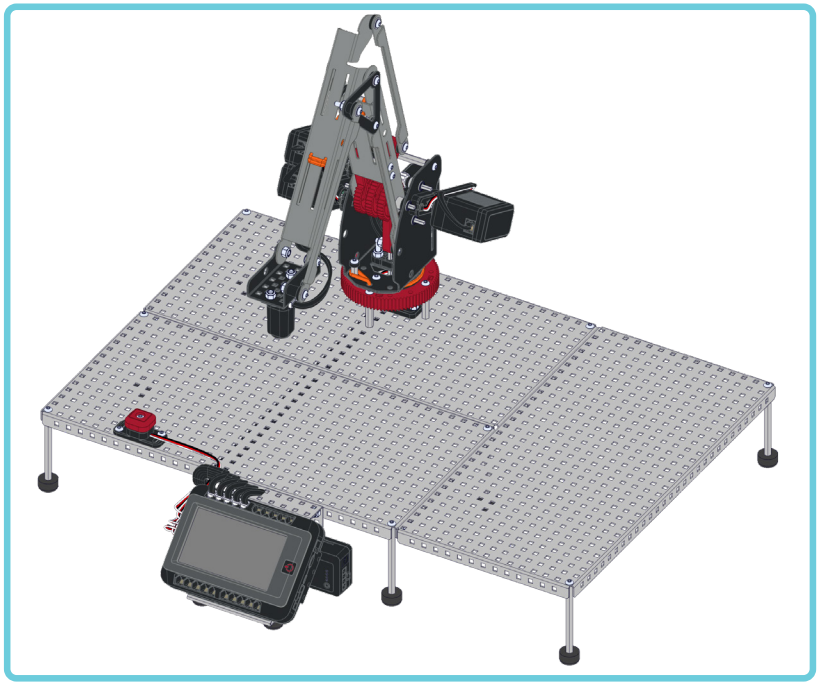
2x #8-32 x 1/2" Star Drive Screw



2x #8-32 Nylock Nut



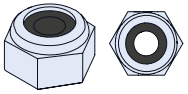




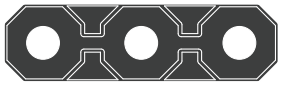
10



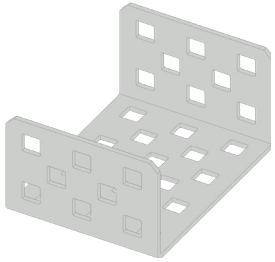
2x #8-32 x 1/2" Star Drive Screw



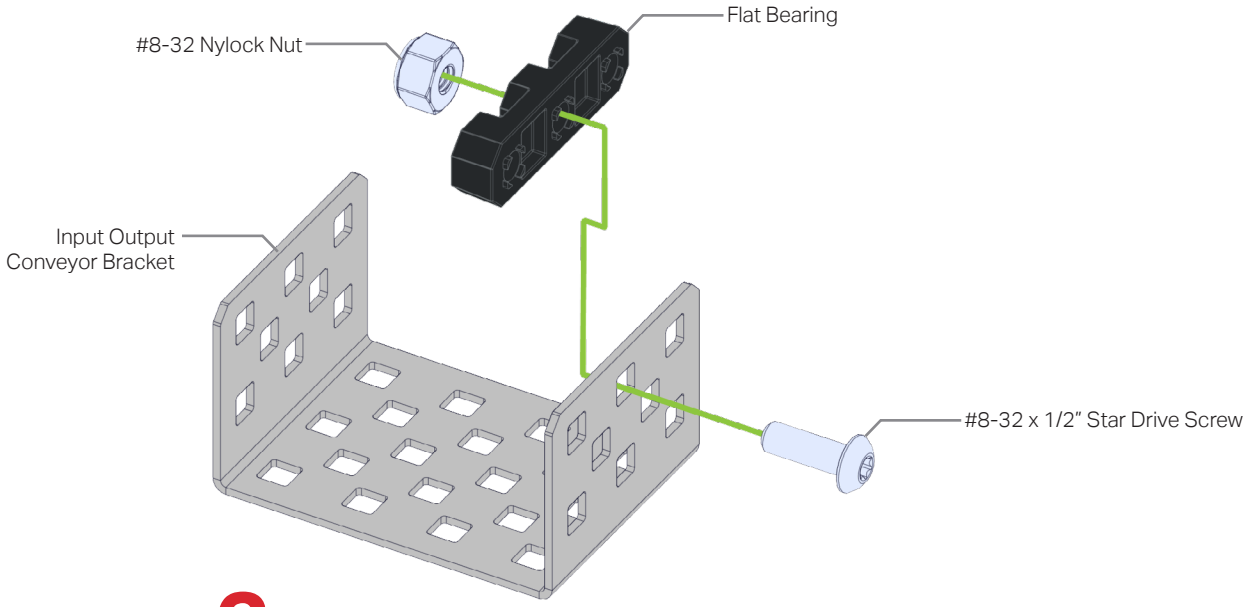
2x #8-32 Nylock Nut



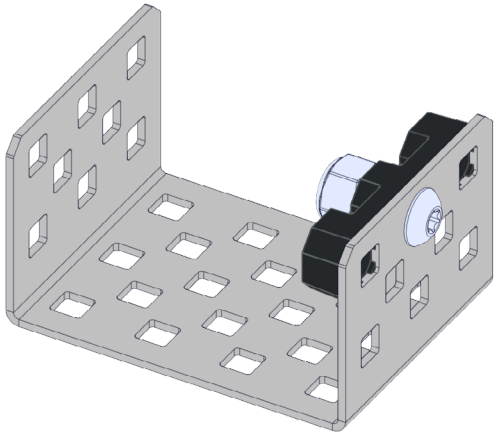
2x Flat Bearing



2x Input Output Conveyor Bracket



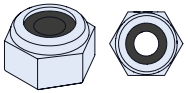
2x



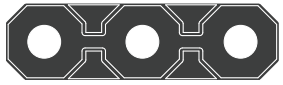
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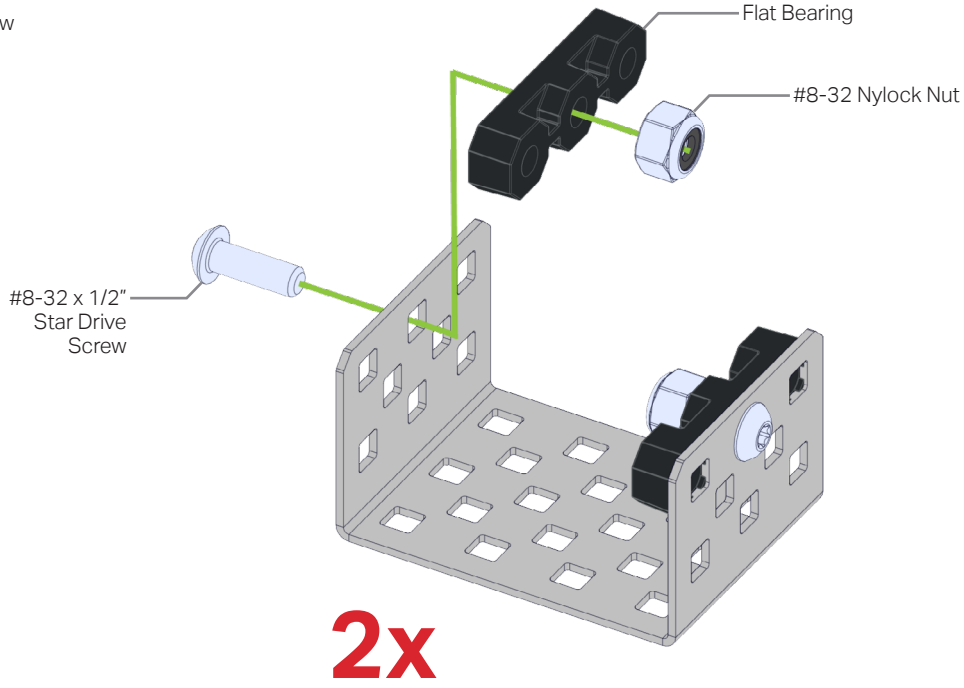
2x #8-32 x 1/2" Star Drive Screw



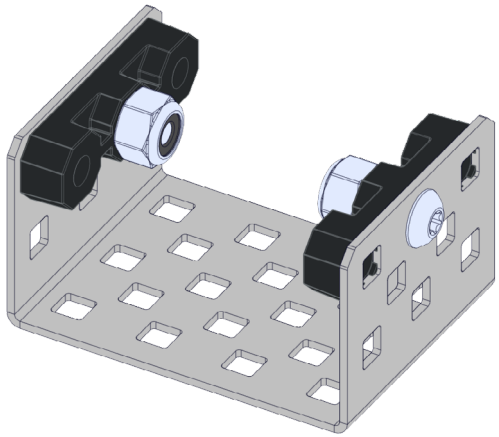
2x #8-32 Nylock Nut



2x Flat Bearing



2x



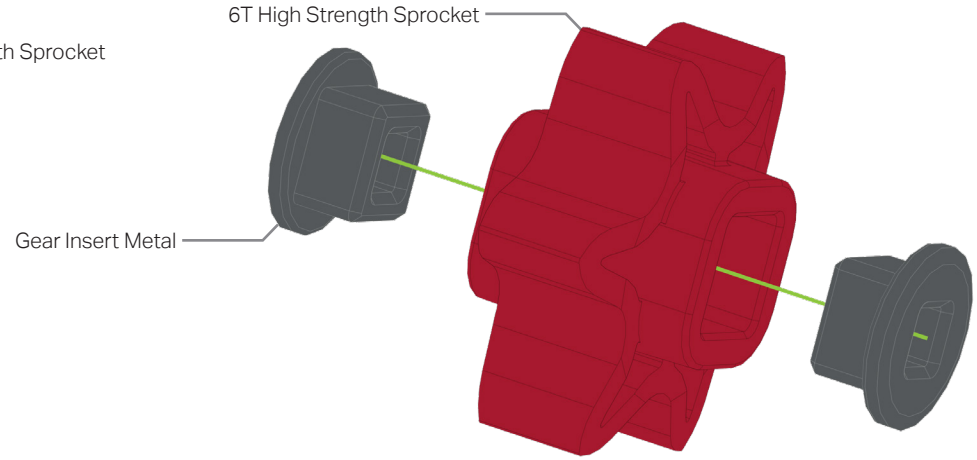
12



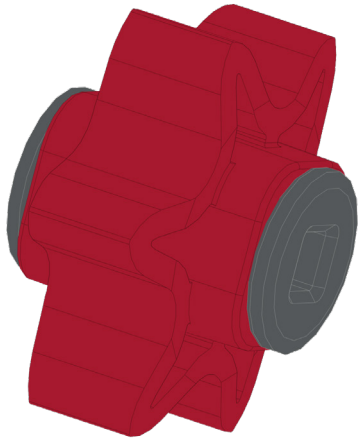
4x Gear Insert Metal



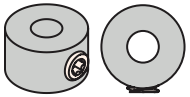
2x 6T High Strength Sprocket



2x



13



2x Star Drive Shaft Collar



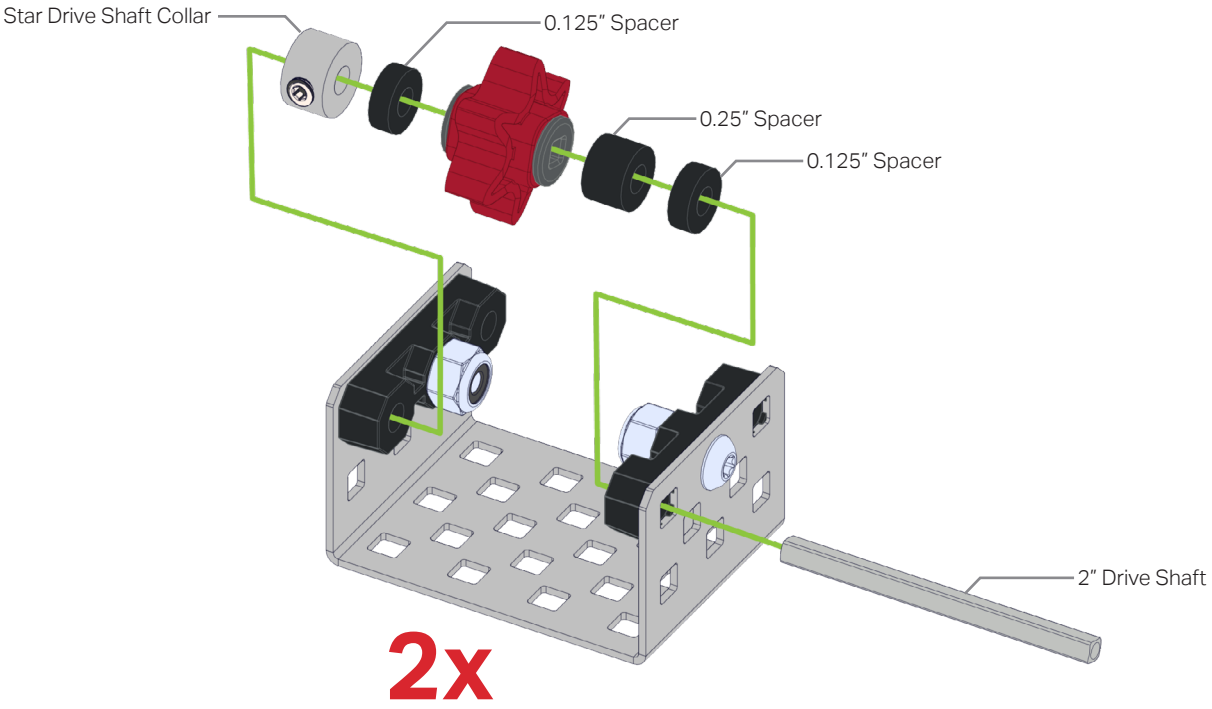
4x 0.125" Spacer

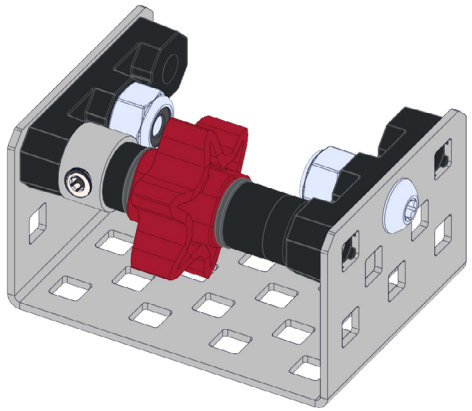


2x 0.25" Spacer



2x 2" Drive Shaft

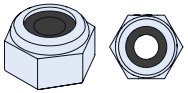




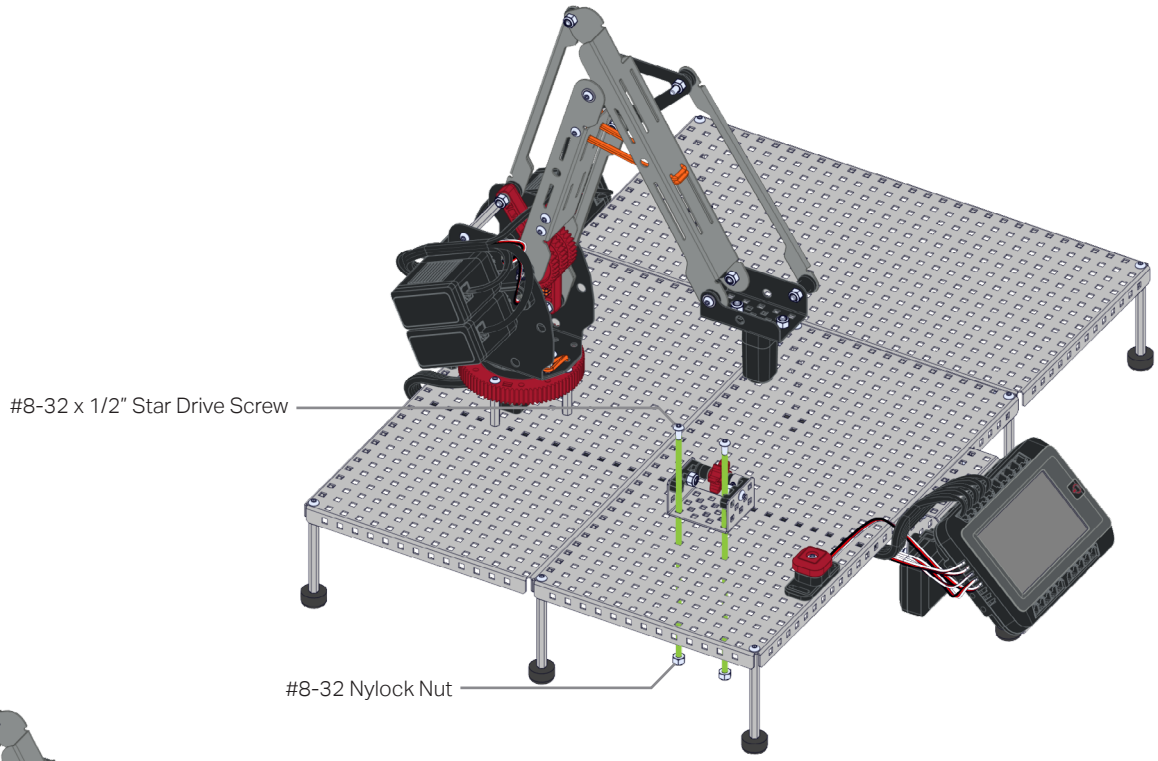
14

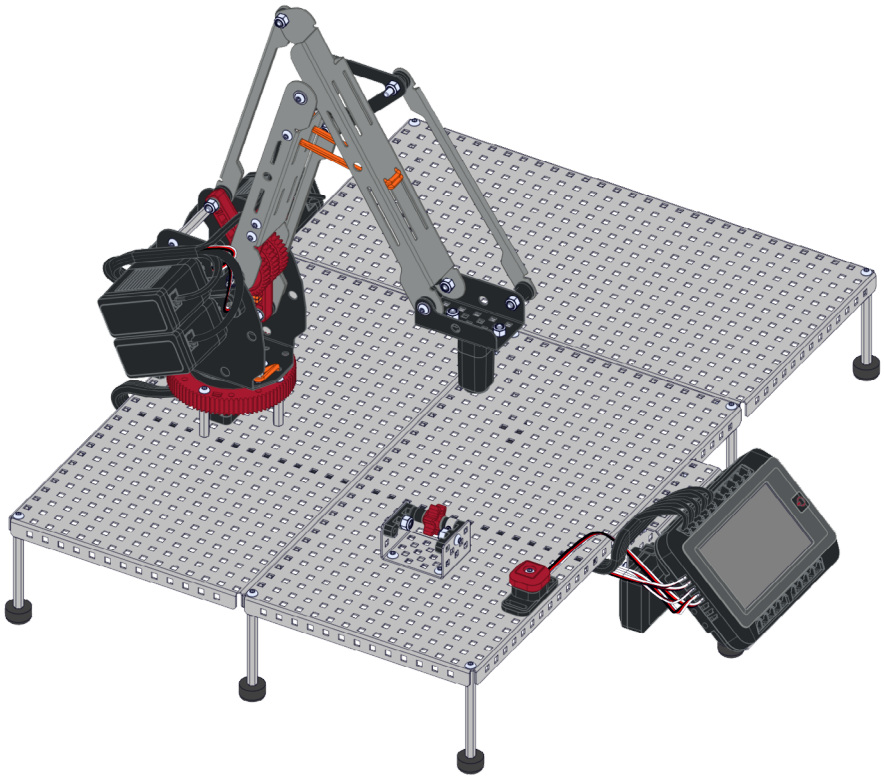


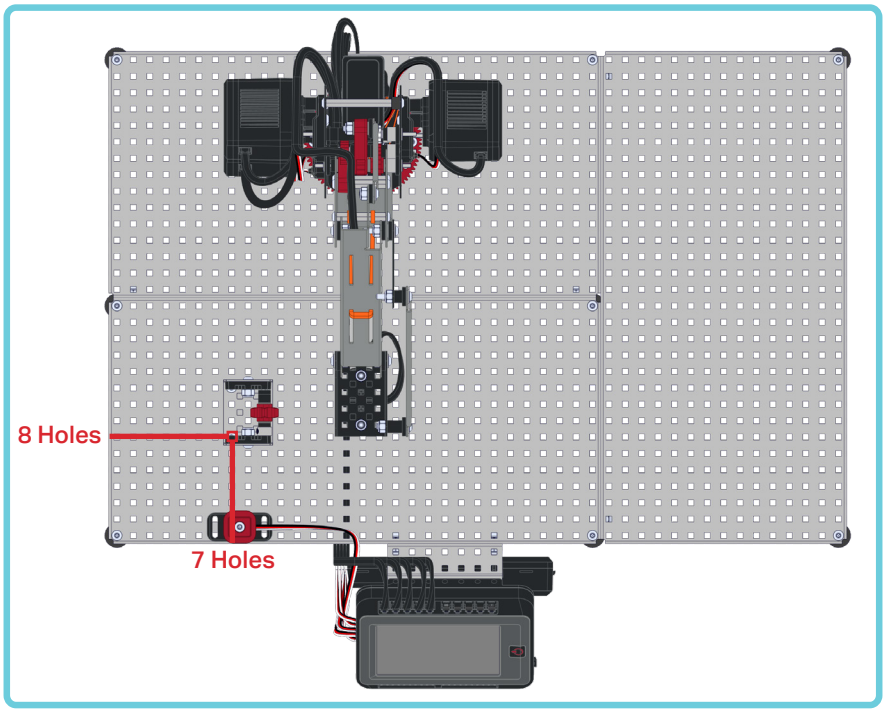
2x #8-32 x 1/2" Star Drive Screw



2x #8-32 Nylock Nut



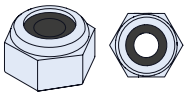




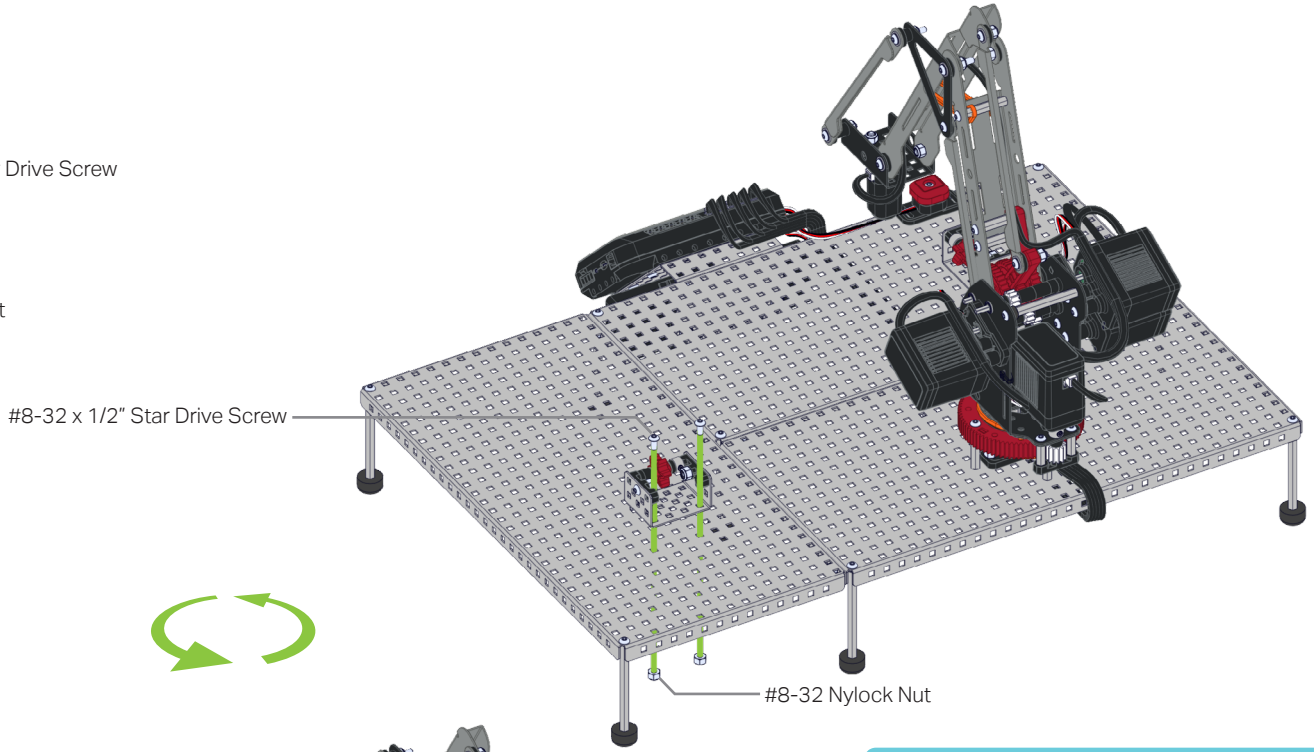
15

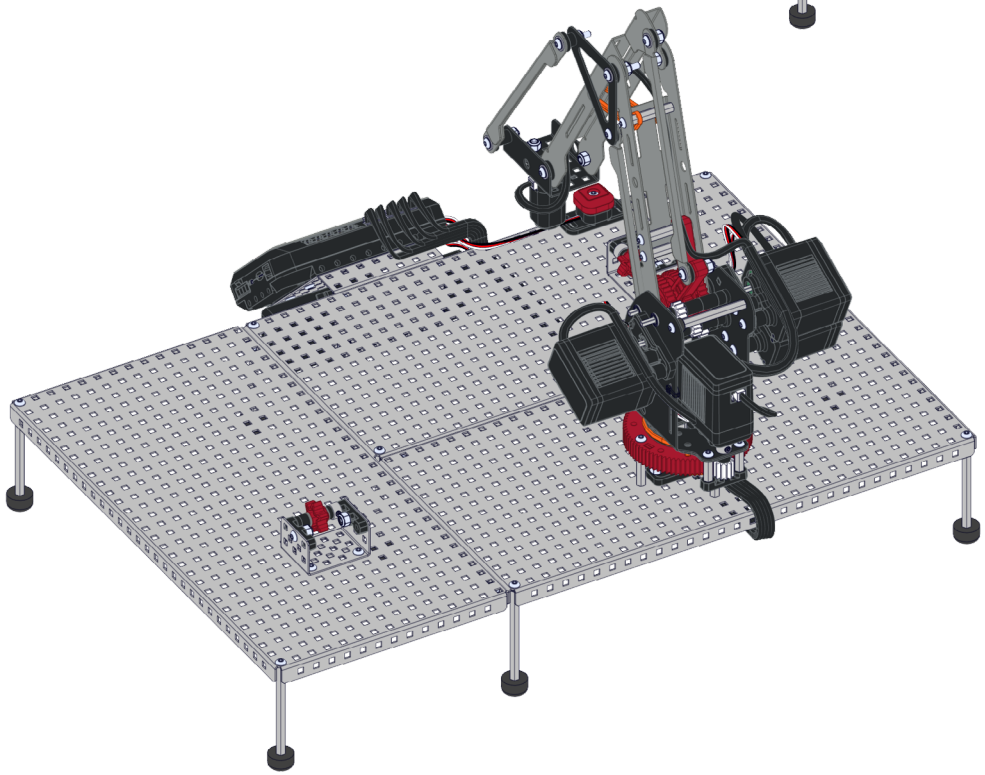


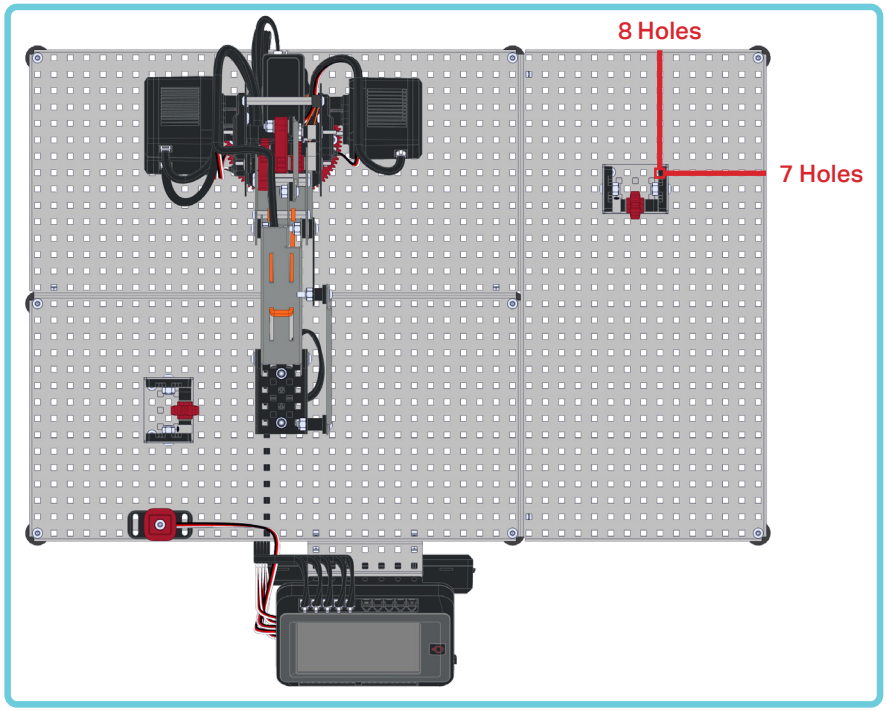
2x #8-32 x 1/2" Star Drive Screw



2x #8-32 Nylock Nut



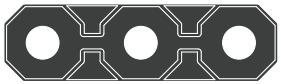




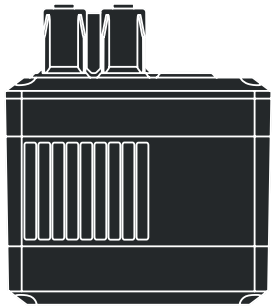
16



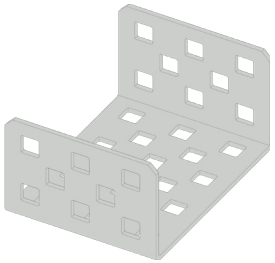
4x #8-32 x 1/2" Star Drive Screw



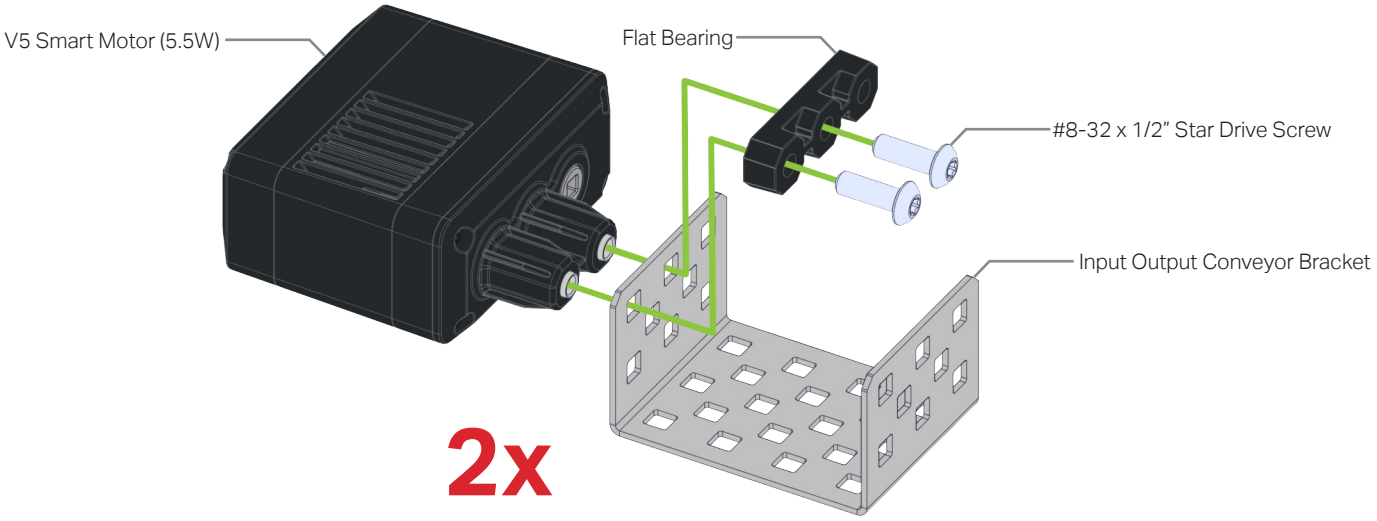
2x Flat Bearing

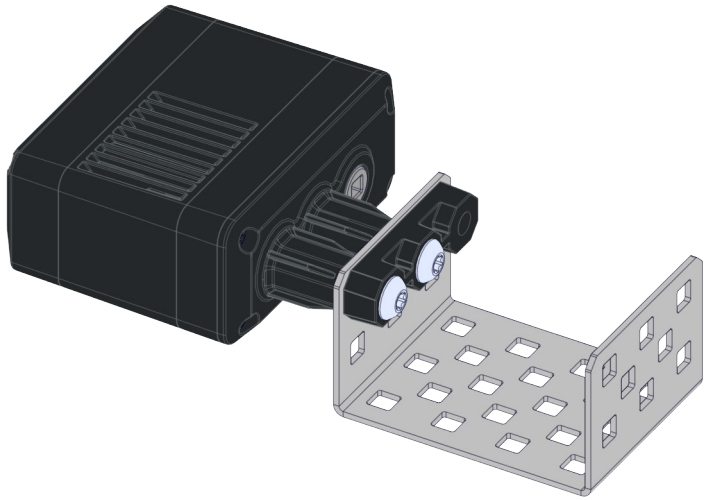


2x V5 Smart Motor (5.5W)



2x Input Output Conveyor Bracket

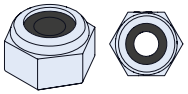




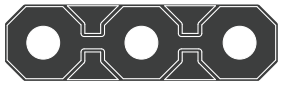
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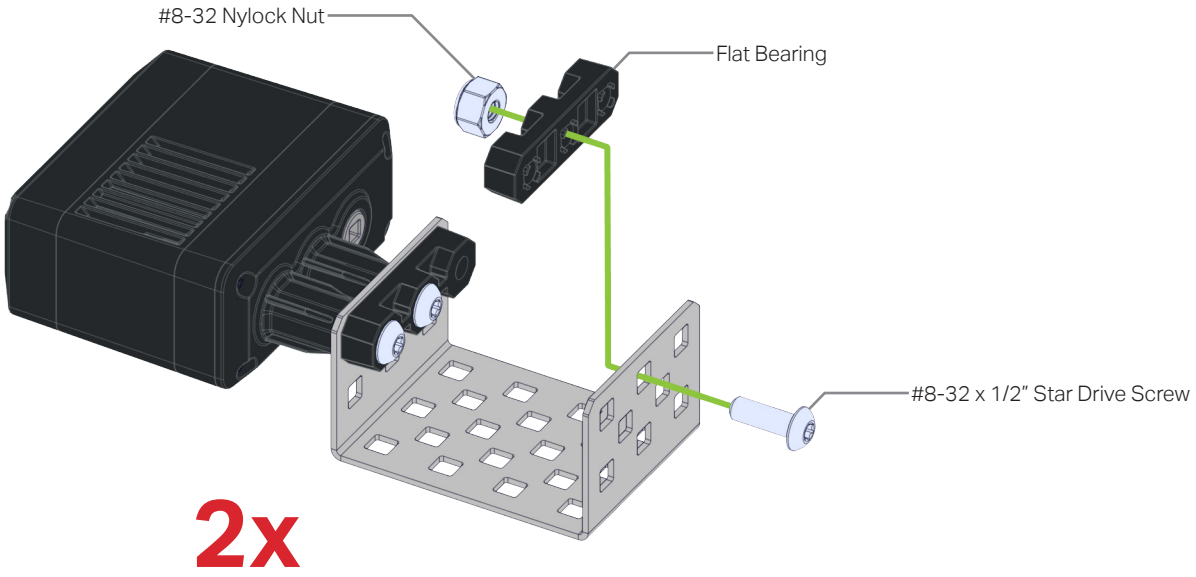
2x #8-32 x 1/2" Star Drive Screw



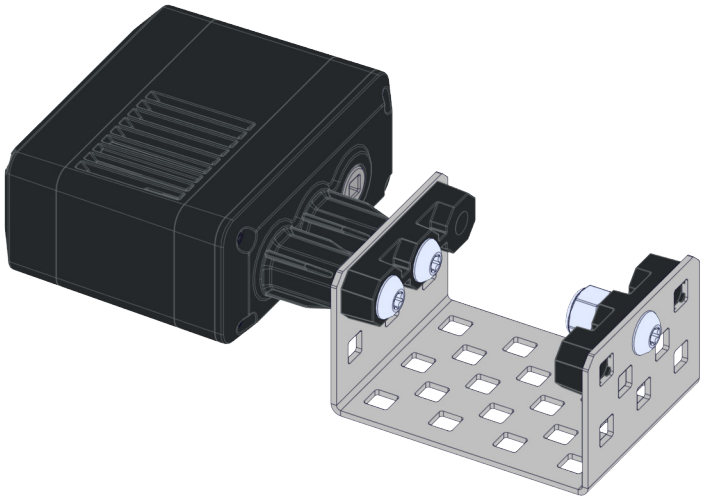
2x #8-32 Nylock Nut



2x Flat Bearing



2x



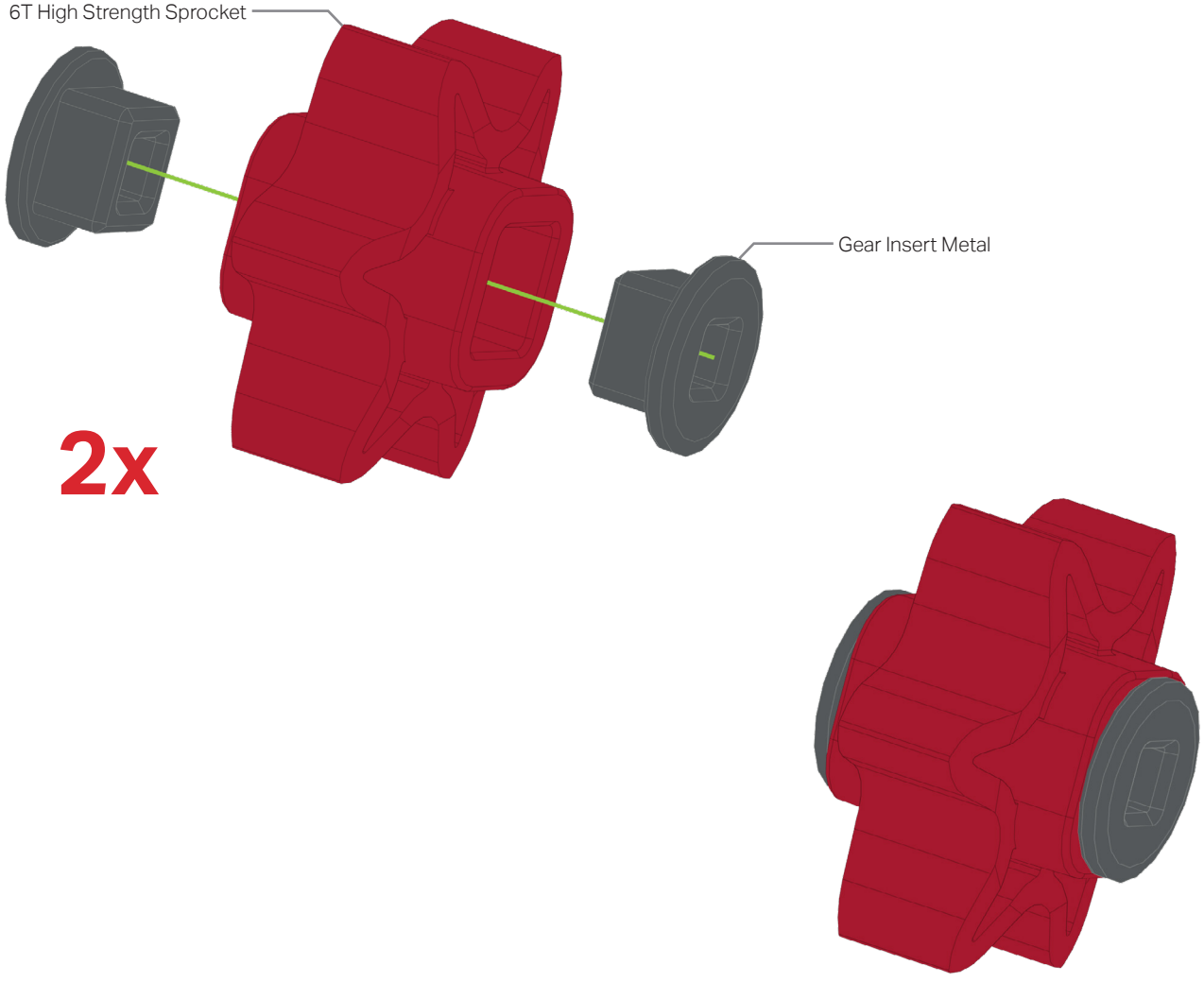
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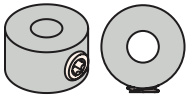
4x Gear Insert Metal



2x 6T High Strength Sprocket



19



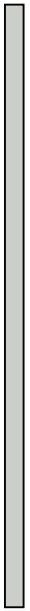
2x Star Drive Shaft Collar



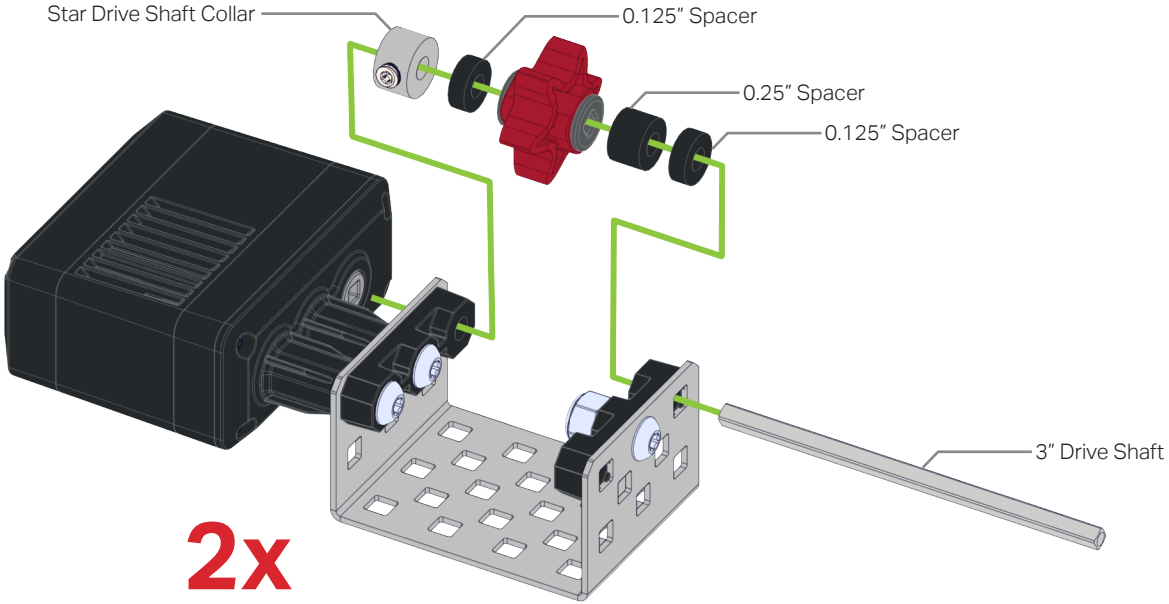
4x 0.125″ Spacer

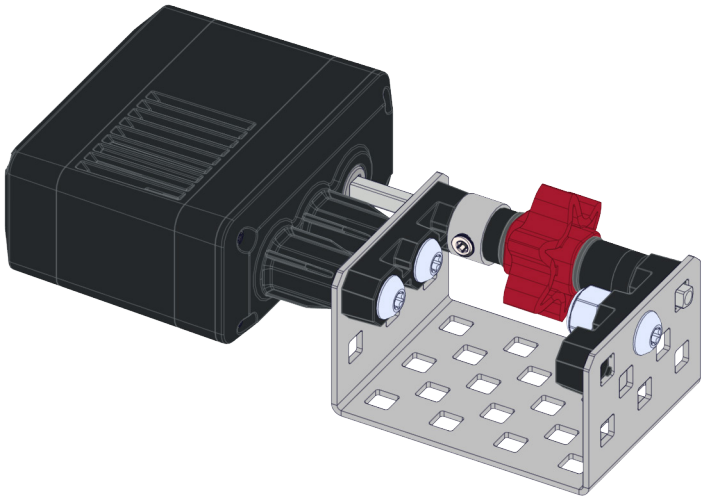


2x 0.25″ Spacer



2x 3″ Drive Shaft

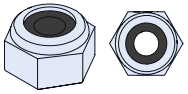




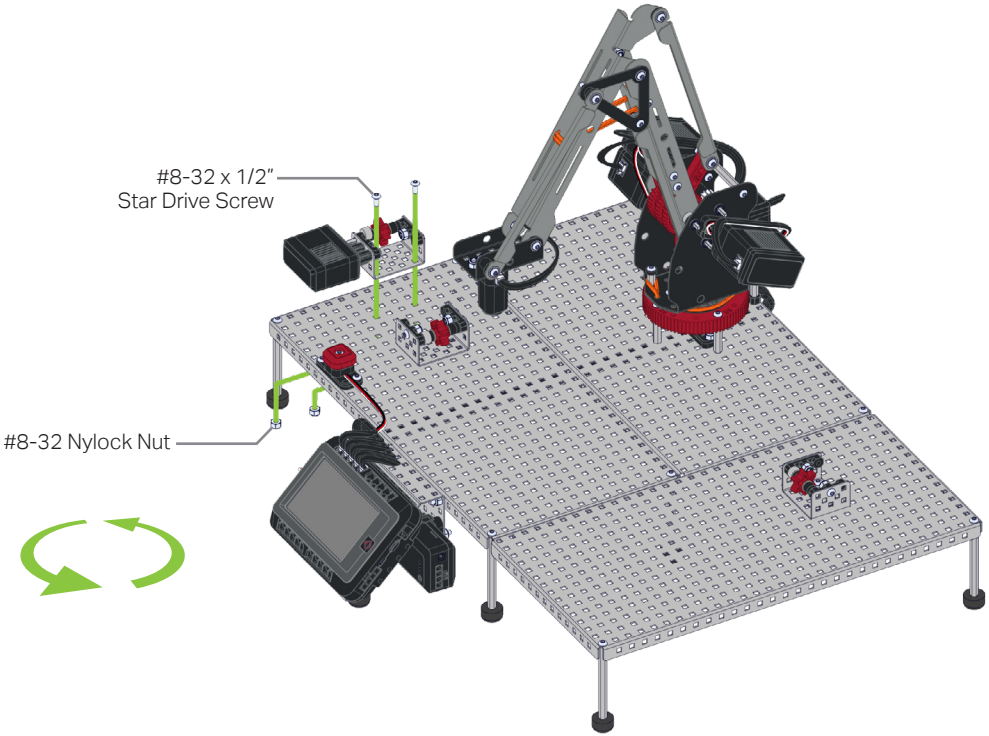
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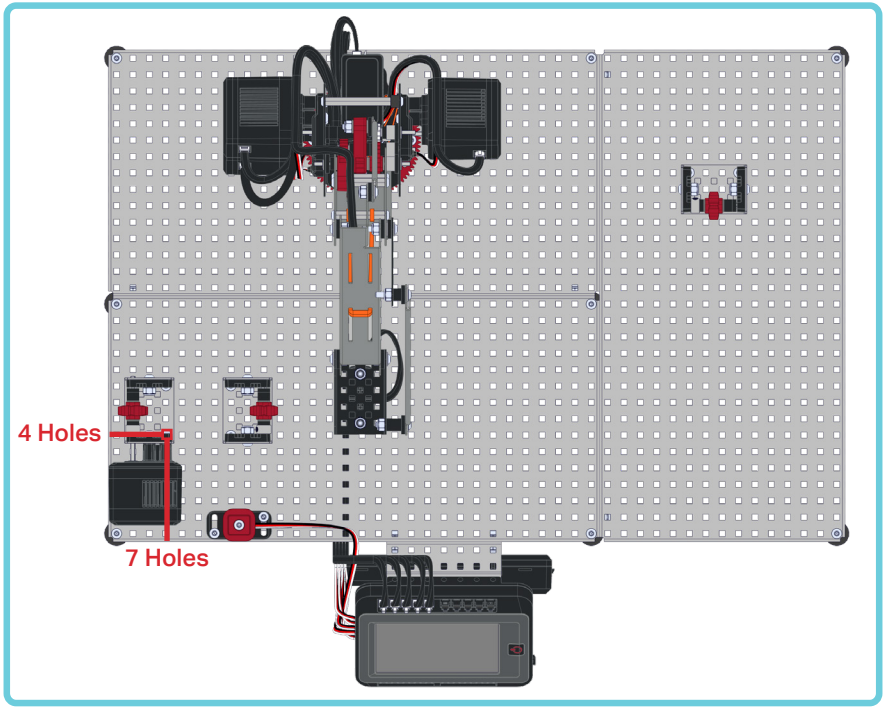
2x #8-32 x 1/2" Star Drive Screw



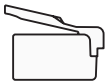
2x #8-32 Nylock Nut







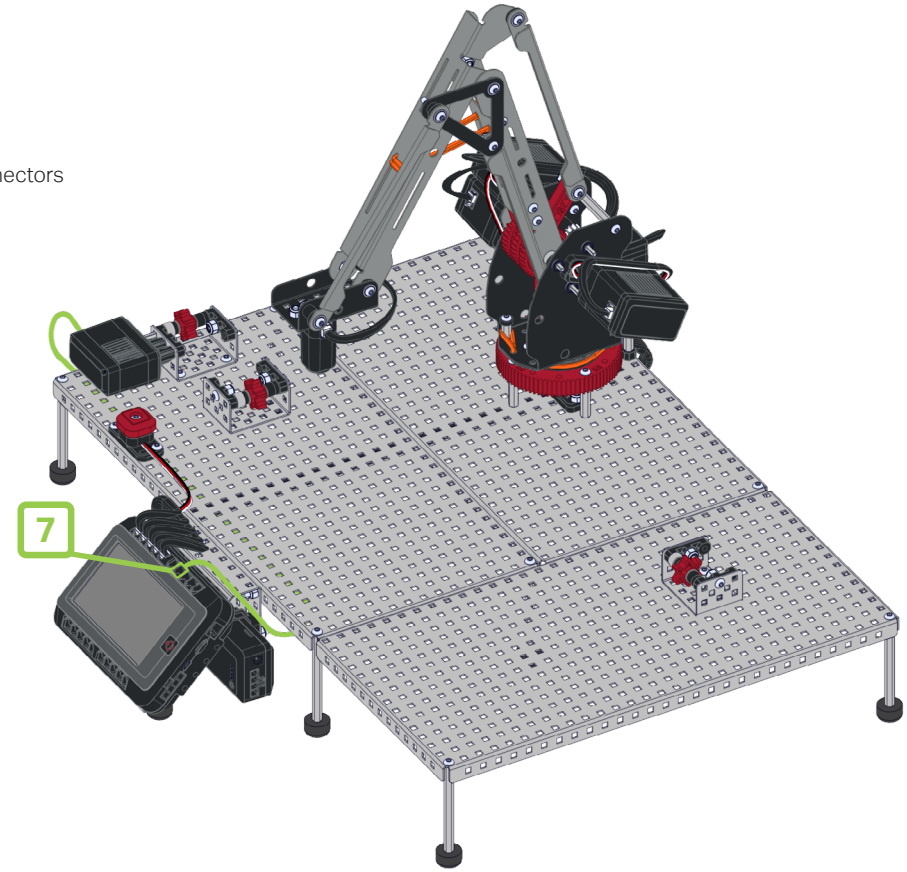
21



2x V5 Smart Cable Connectors



1x V5 Smart Cable Stock (8m)



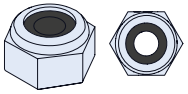
To make cables for steps 21, 23, 32, and 37, please view the Knowledge Base article here.



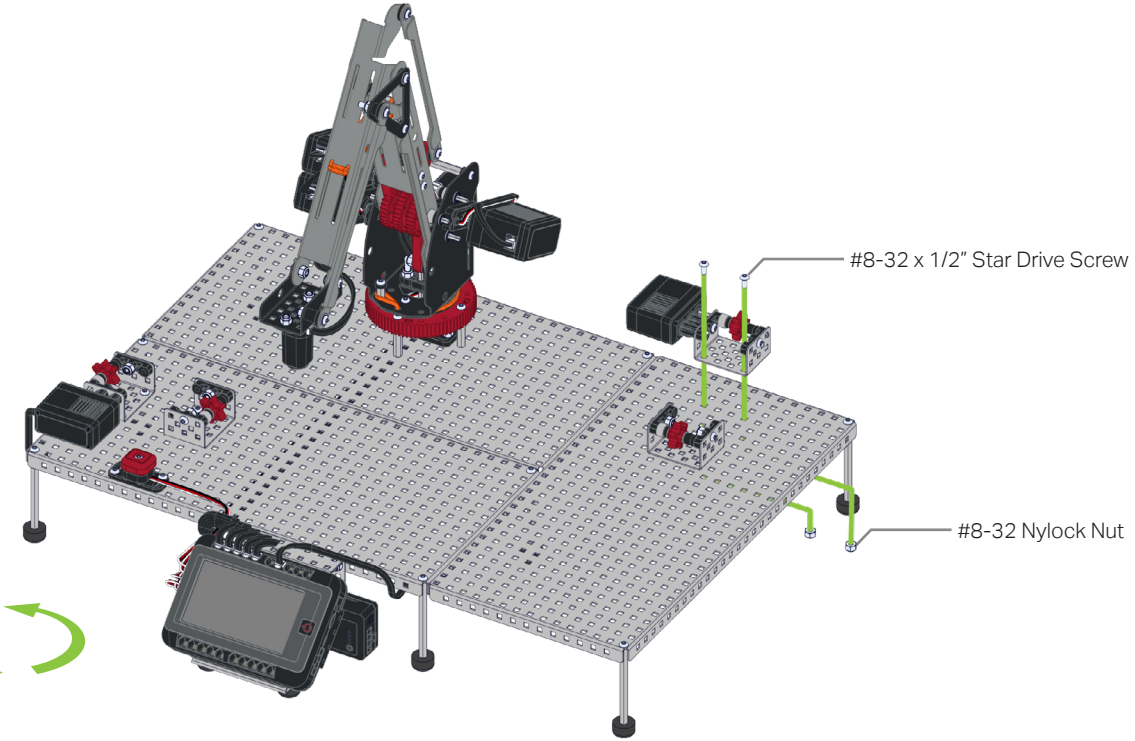
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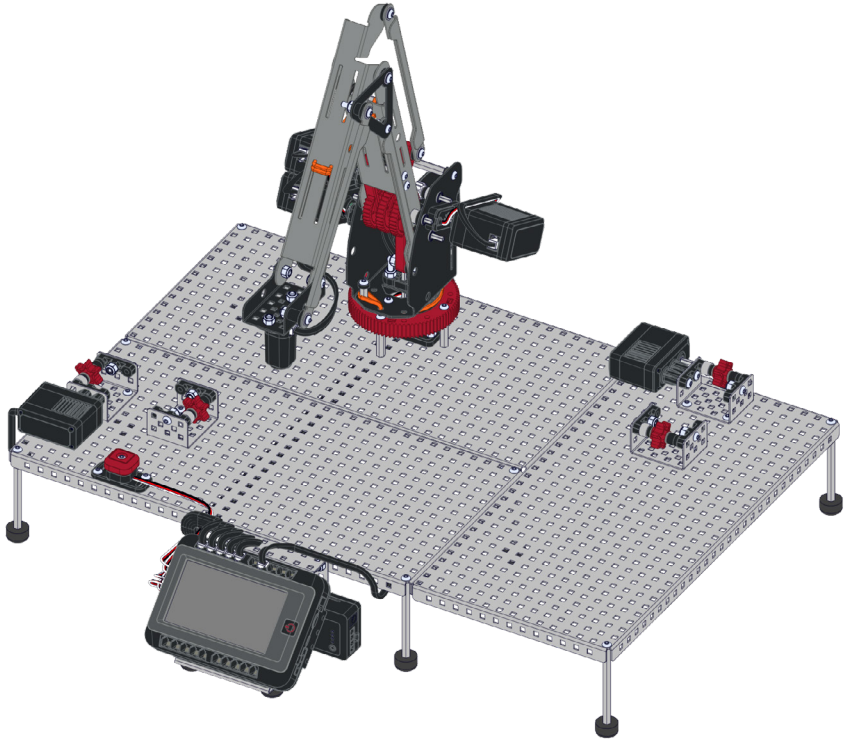


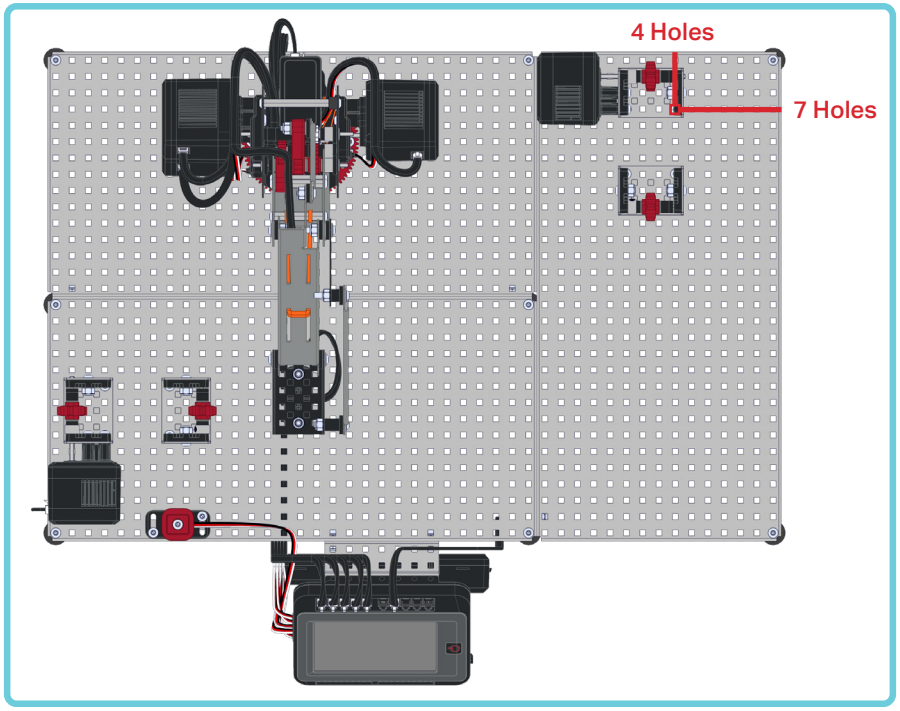
2x #8-32 x 1/2" Star Drive Screw



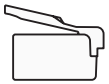
2x #8-32 Nylock Nut







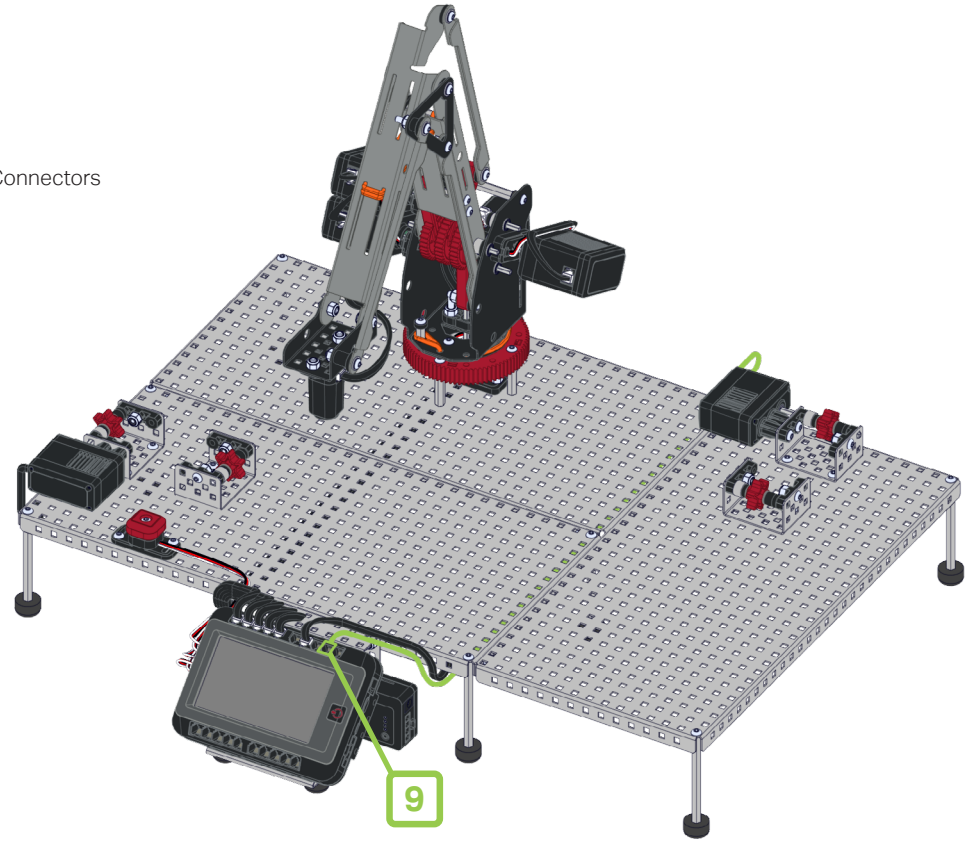
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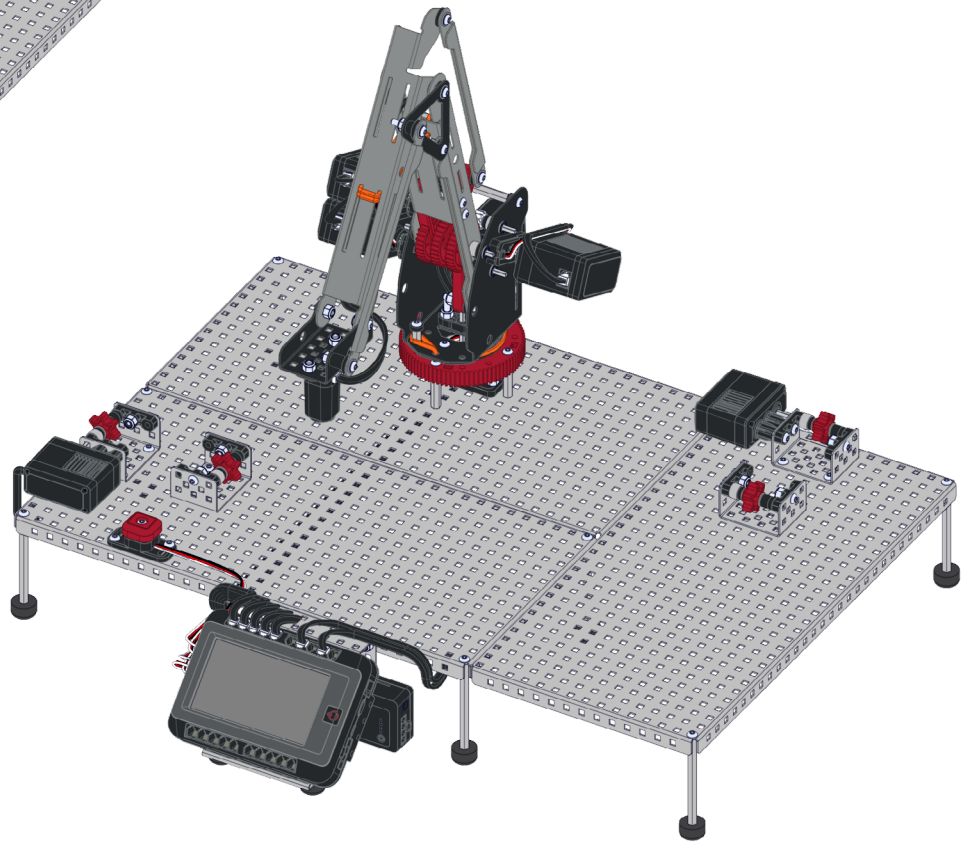
2x V5 Smart Cable Connectors



1x V5 Smart Cable Stock (8m)



To make cables for steps 21, 23, 32, and 37, please view the Knowledge Base article here.



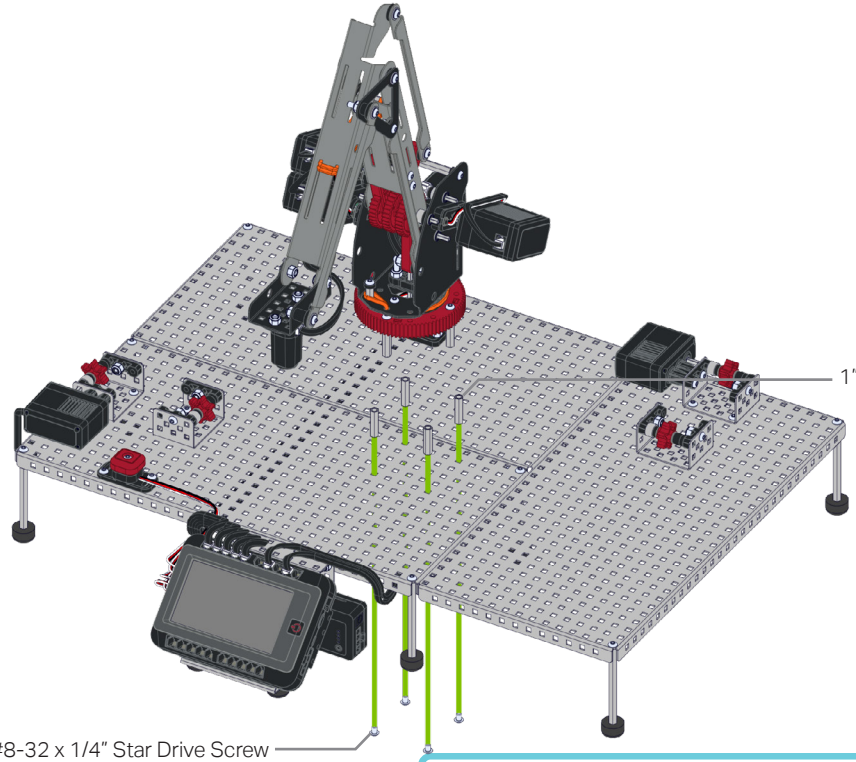
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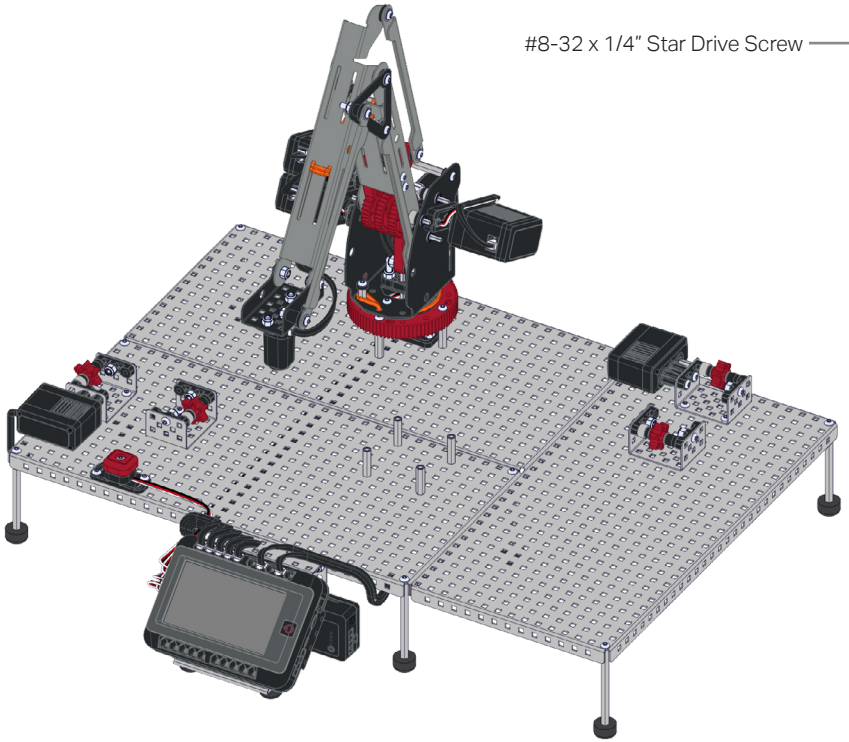


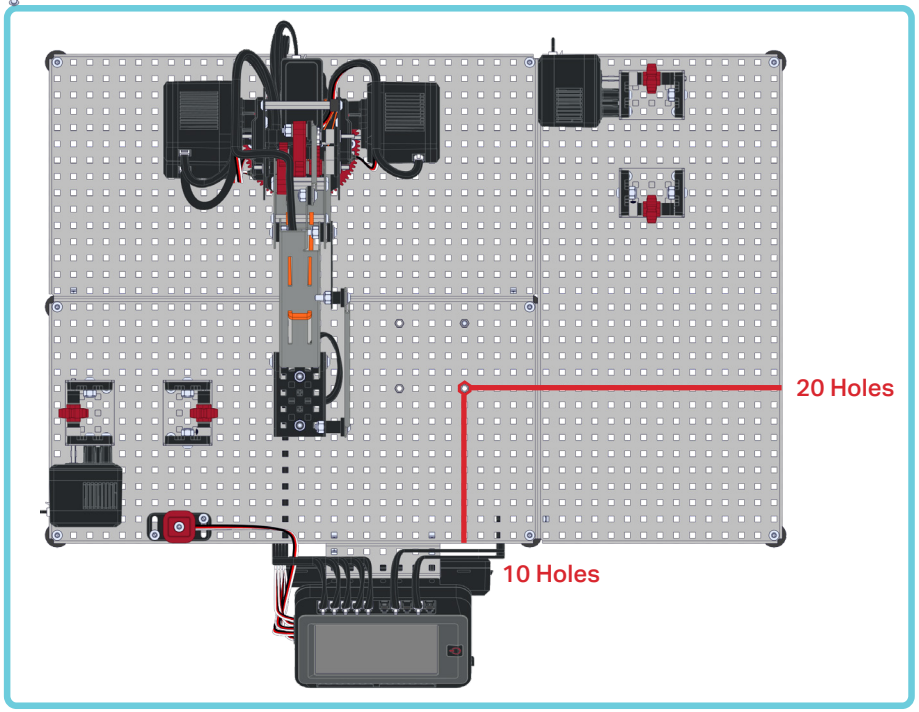
4x #8-32 x 1/4" Star Drive Screw



4x 1" Standoff







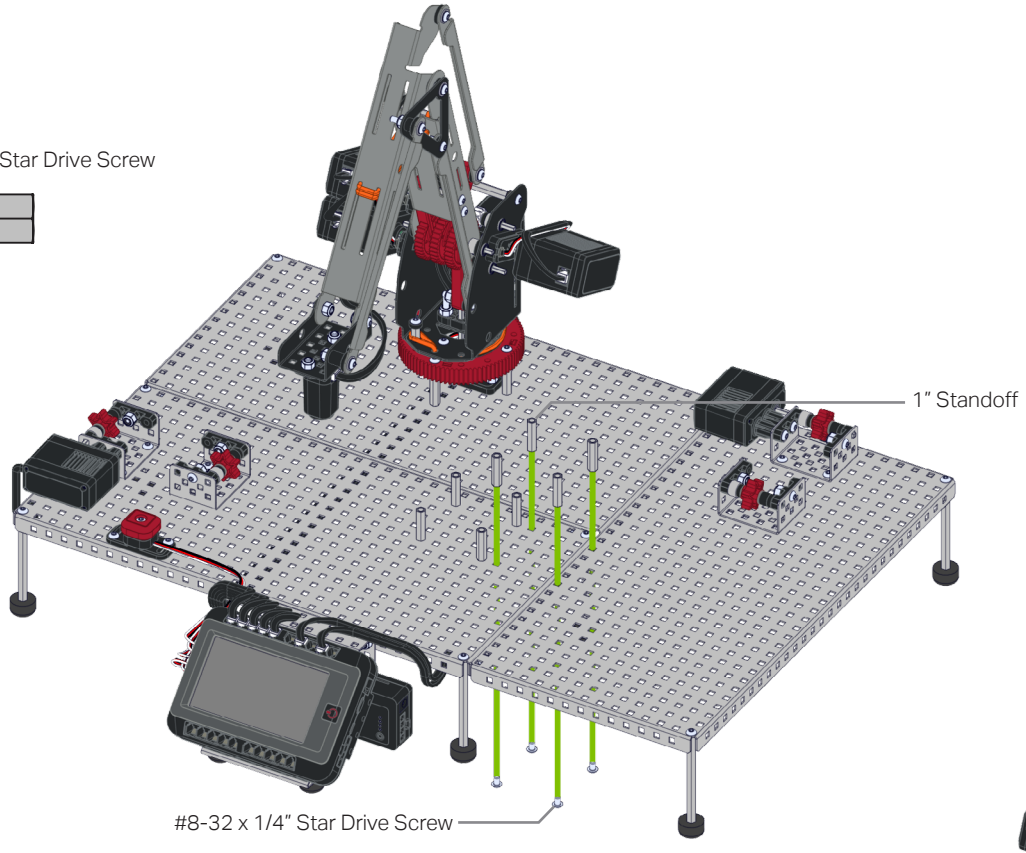
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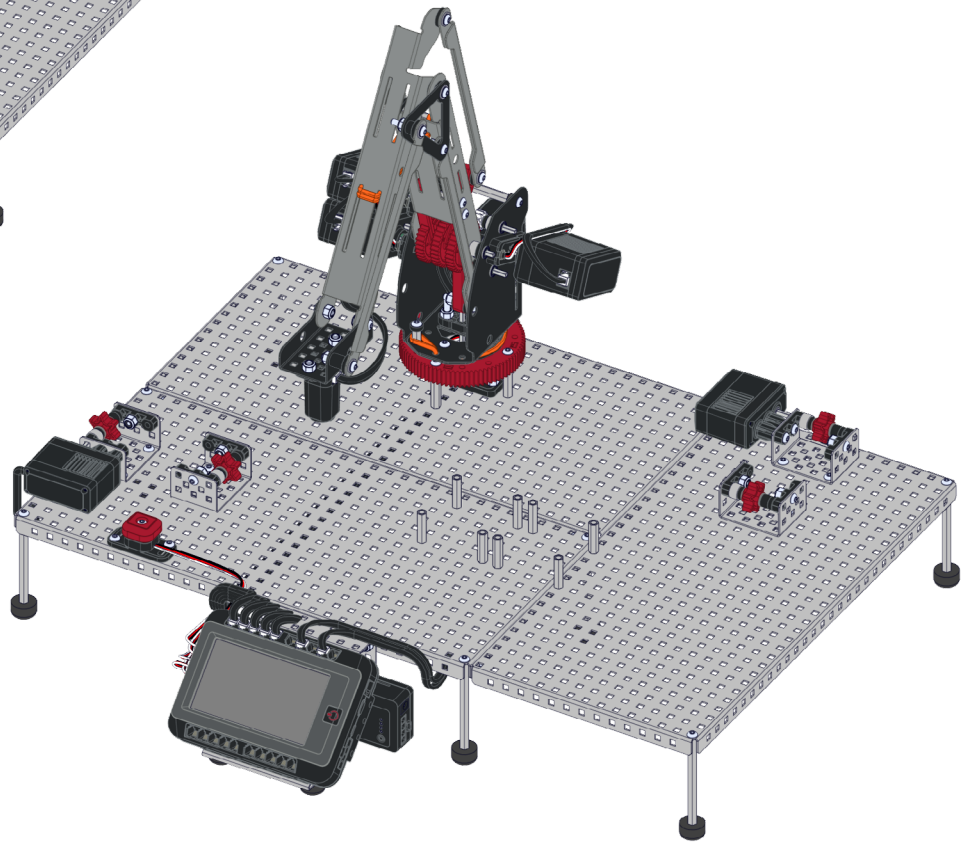


4x #8-32 x 1/4" Star Drive Screw



4x 1" Standoff





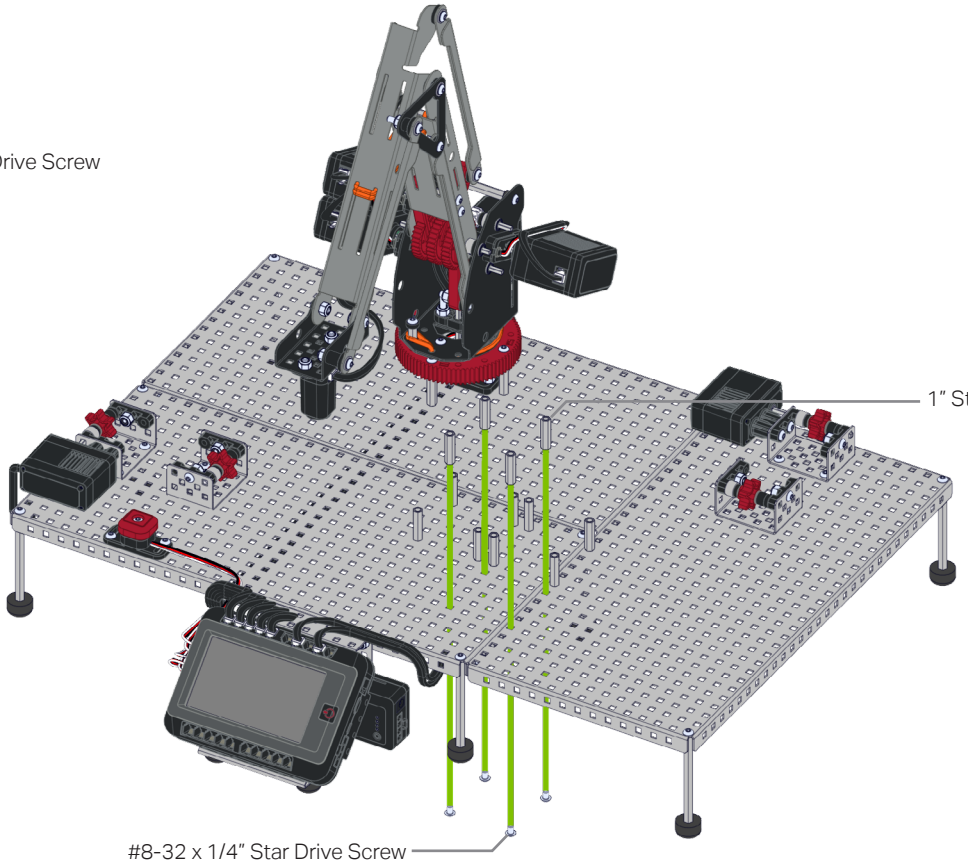
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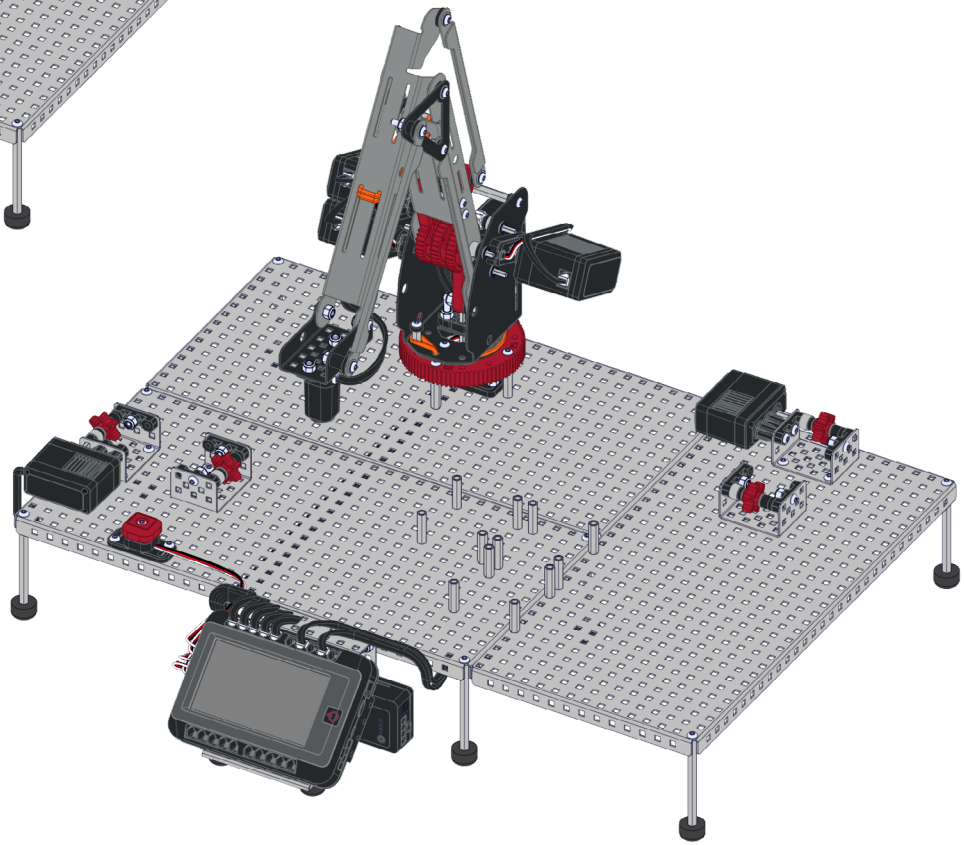


4x #8-32 x 1/4" Star Drive Screw



4x 1" Standoff





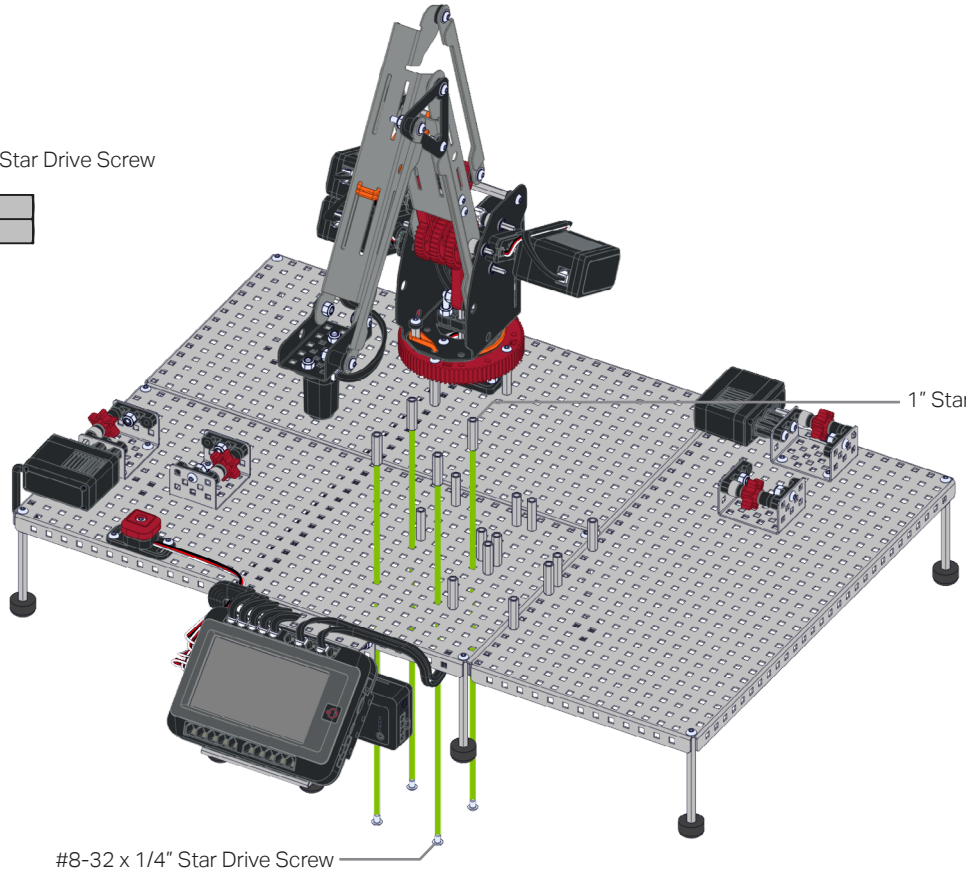
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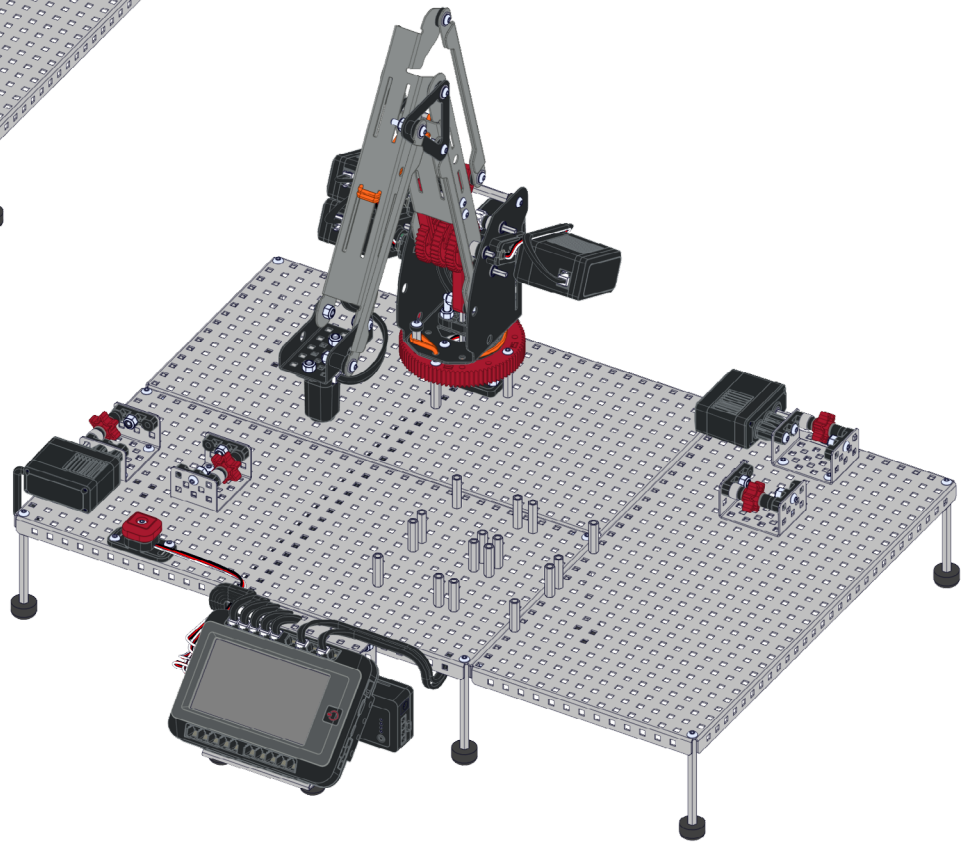


4x #8-32 x 1/4" Star Drive Screw



4x 1" Standoff





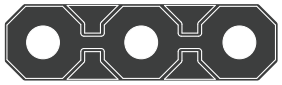
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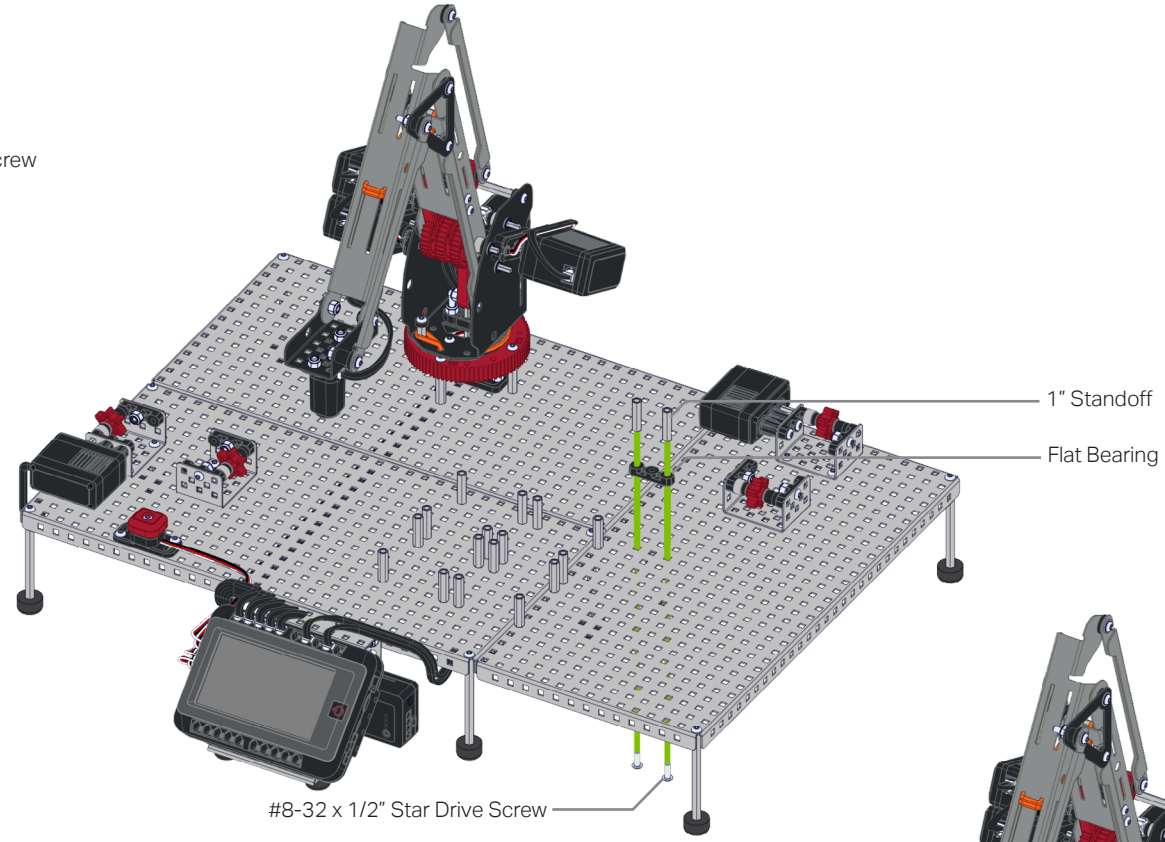
2x #8-32 x 1/2" Star Drive Screw

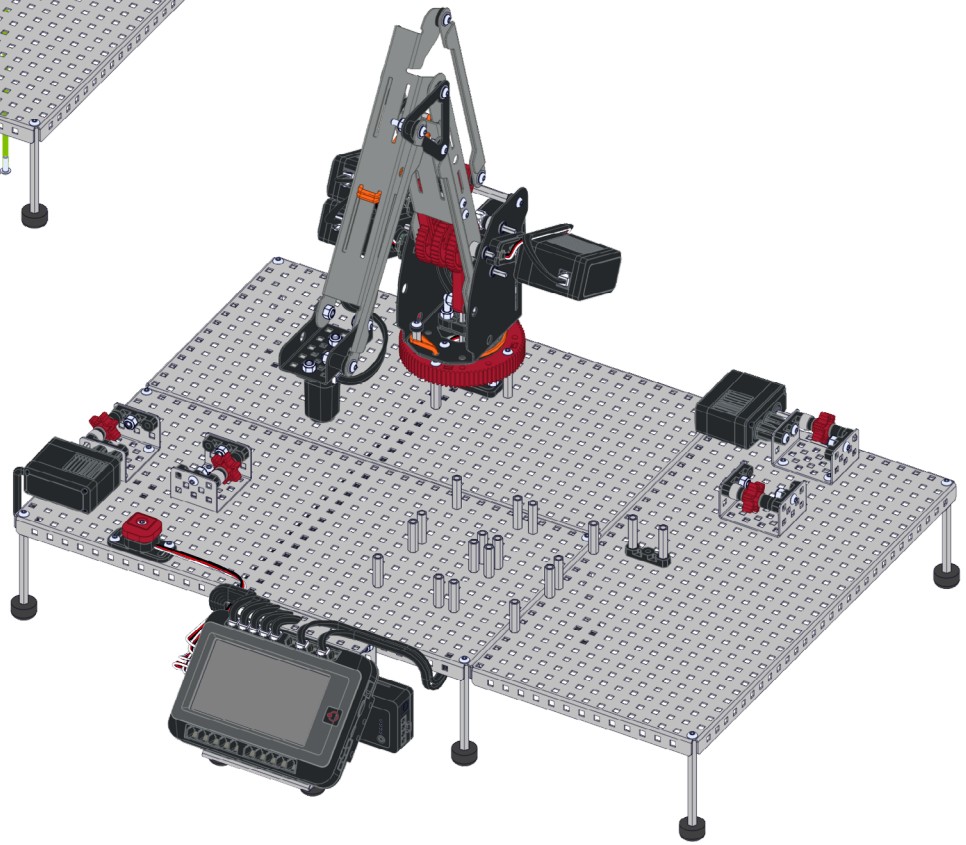


2x 1" Standoff



1x Flat Bearing

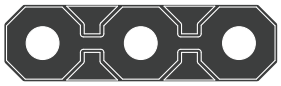




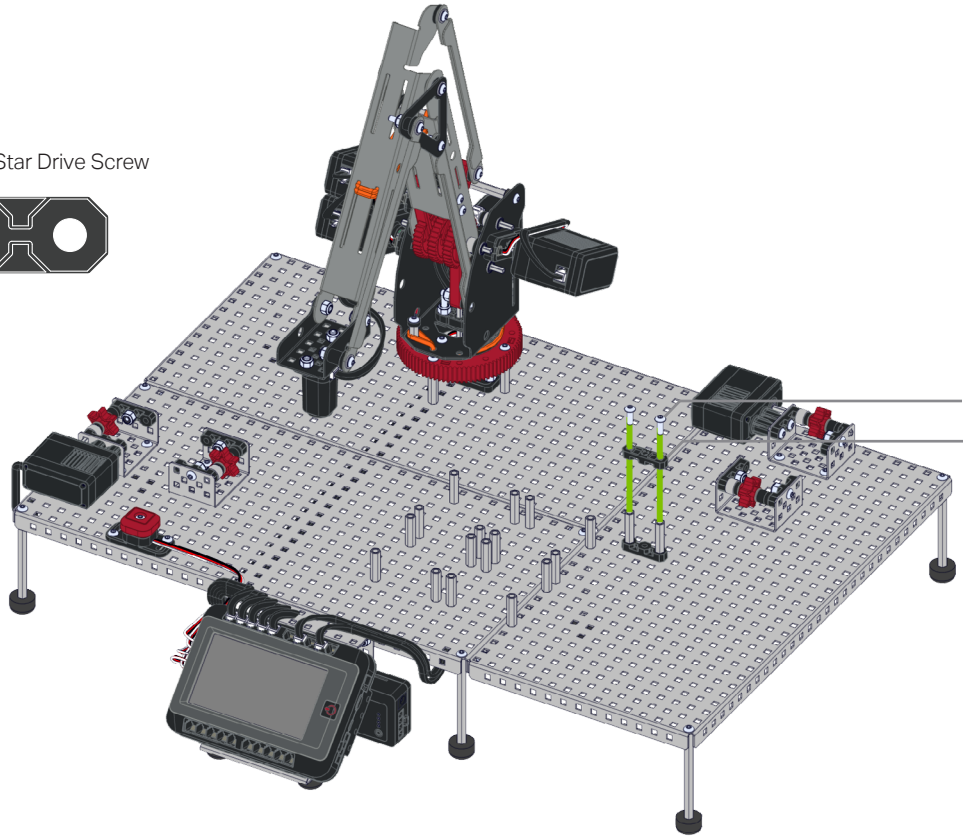
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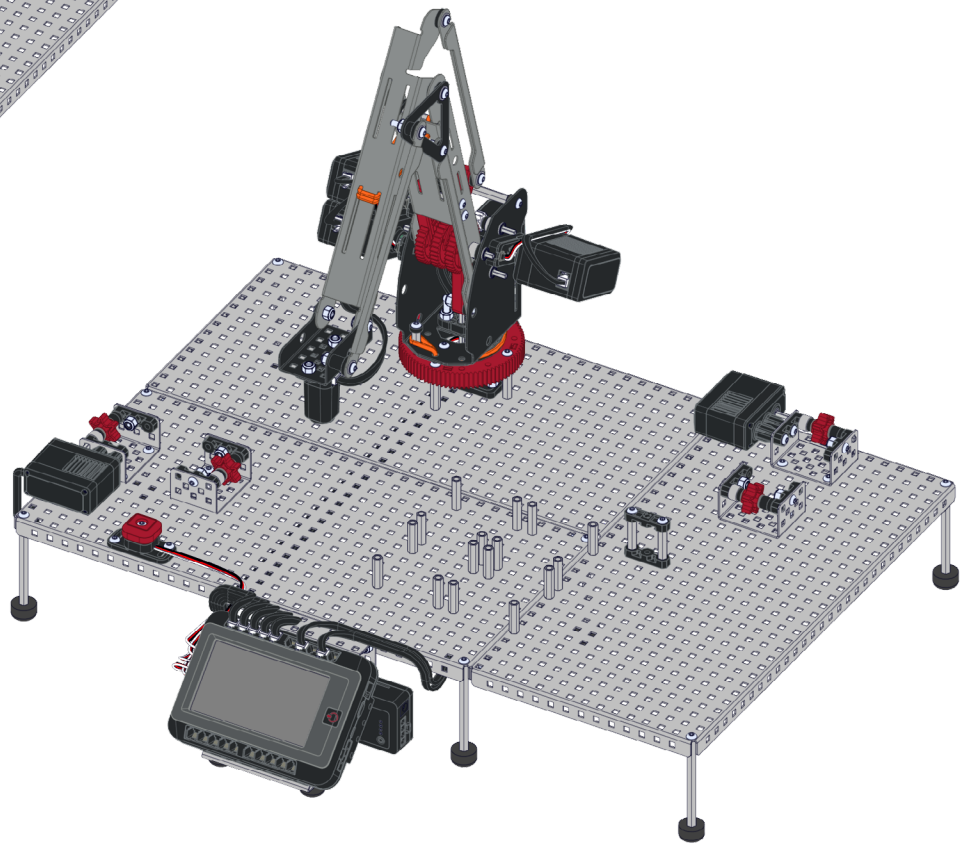


2x #8-32 x 1/2" Star Drive Screw

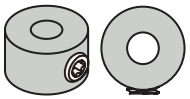


1x Flat Bearing





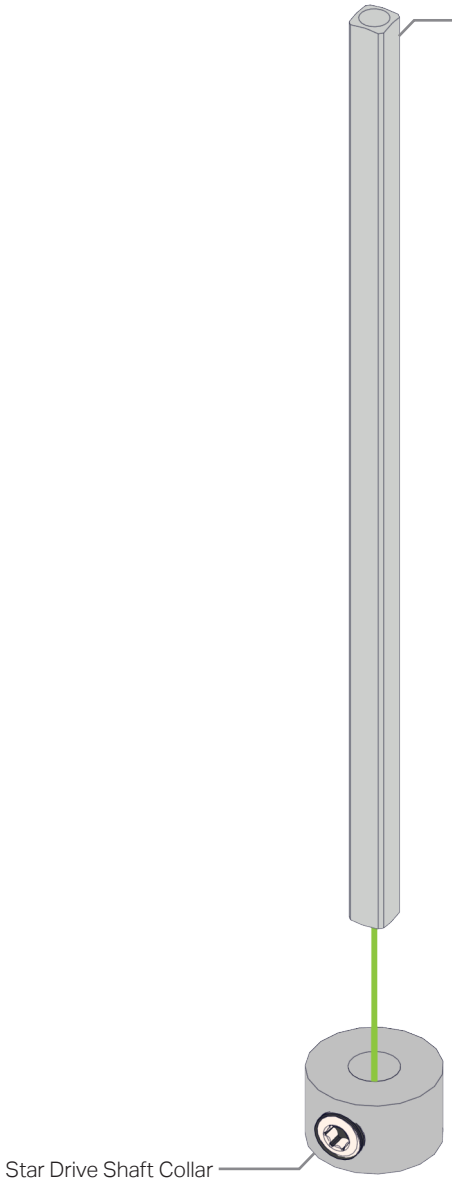
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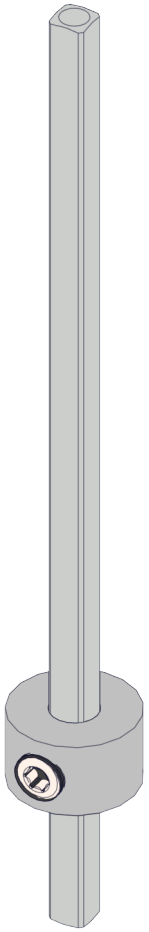


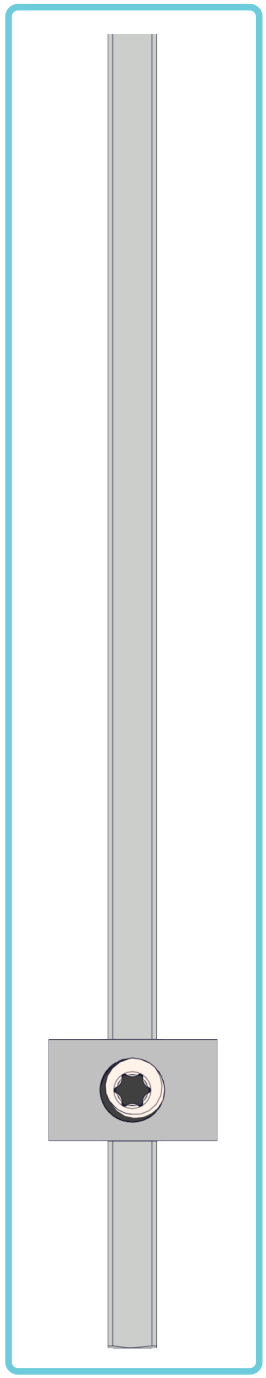
1x Star Drive Shaft Collar



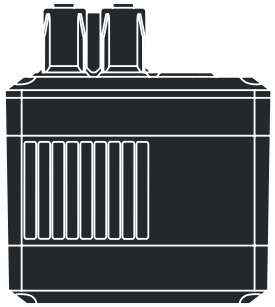
1x 4" Drive Shaft







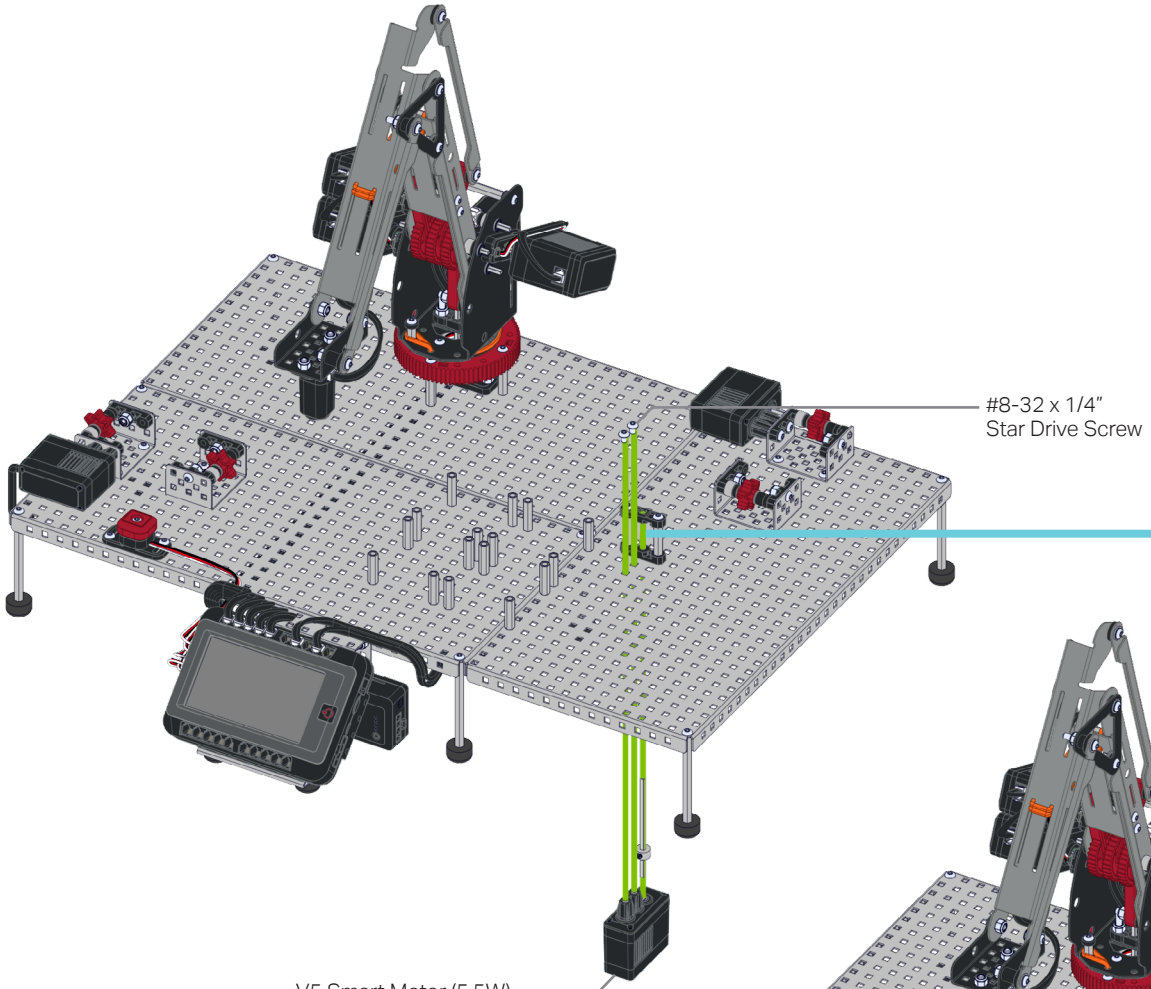
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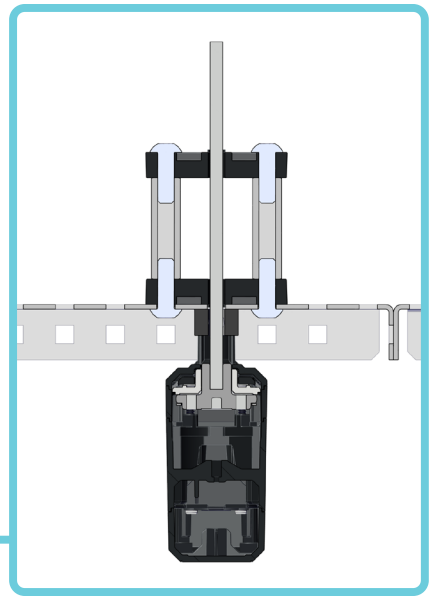


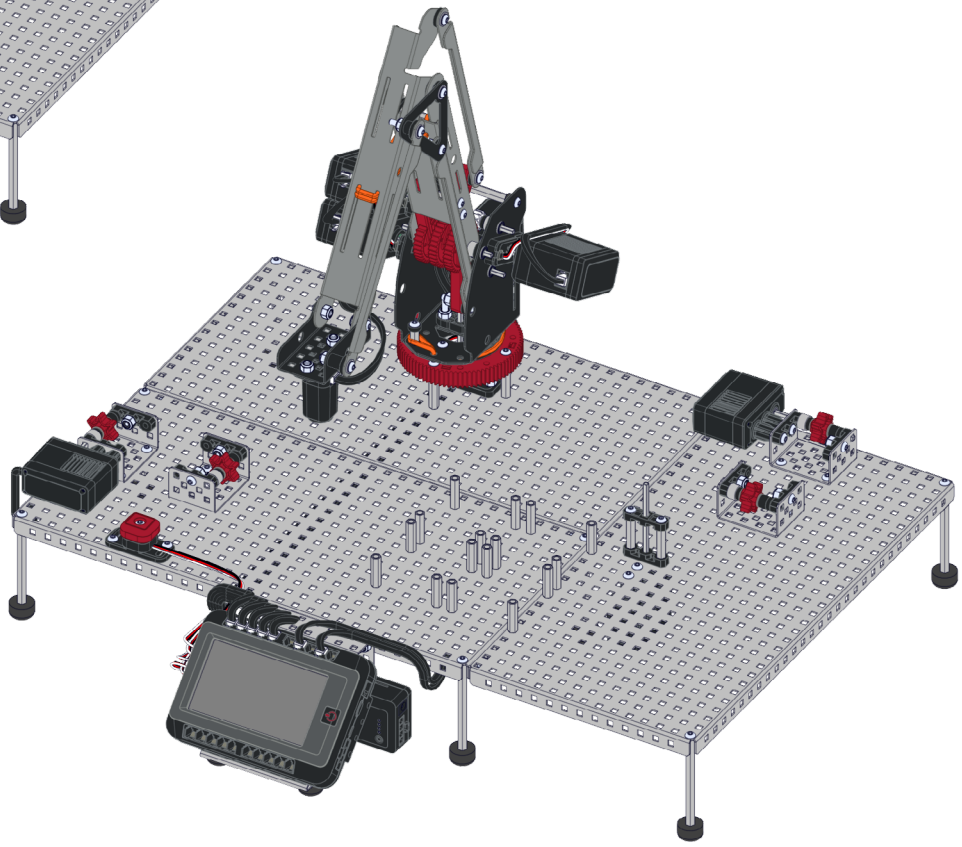
1x V5 Smart Motor (5.5W)



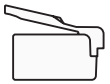
2x #8-32 x 1/4"
Star Drive Screw







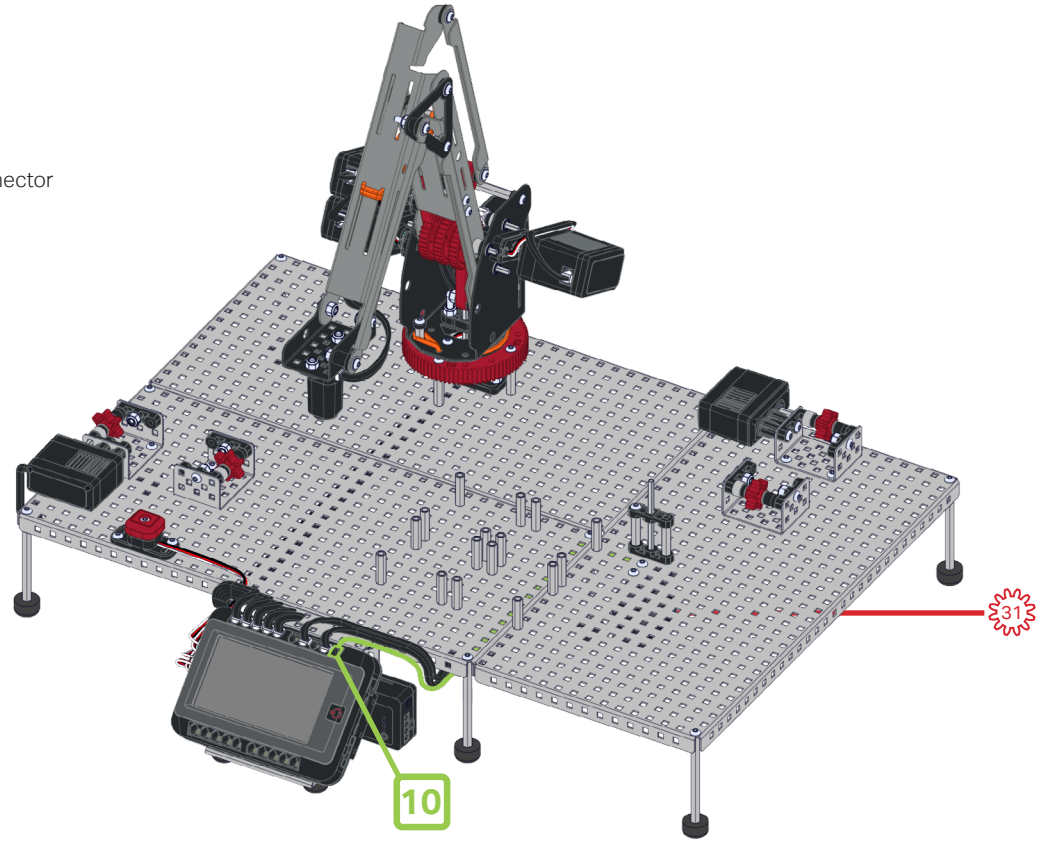
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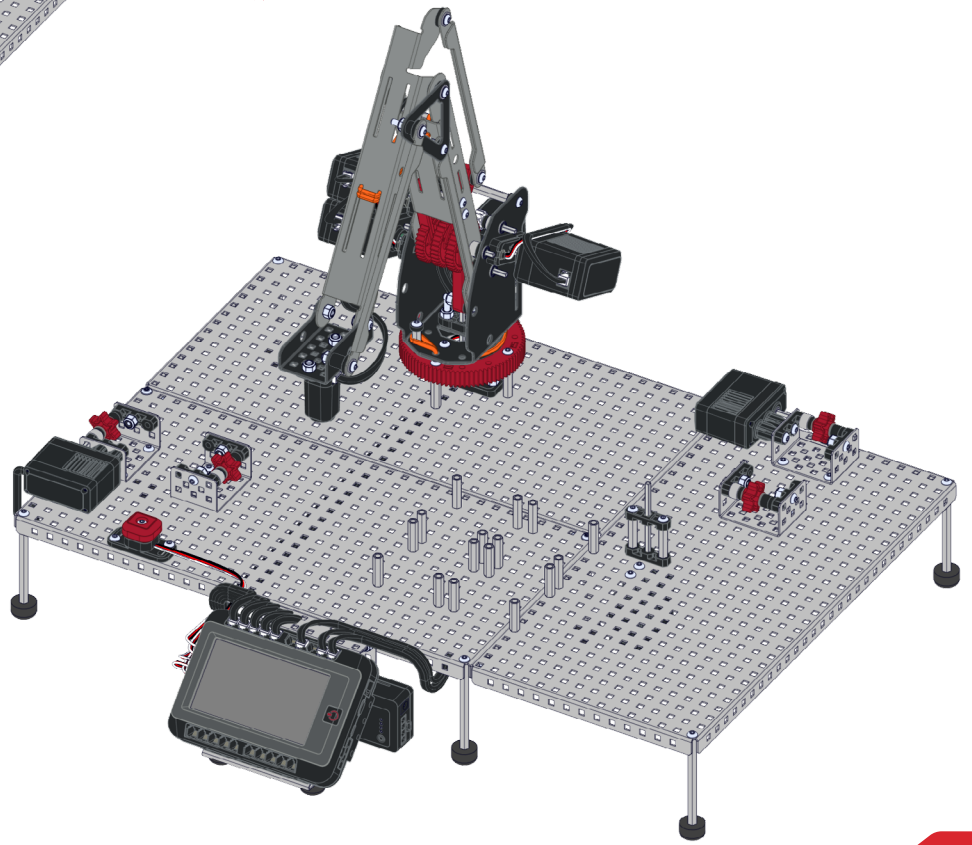
2x V5 Smart Cable Connector



1x V5 Smart Cable Stock (8m)



To make cables for steps 21, 23, 32, and 37, please view the Knowledge Base article here.



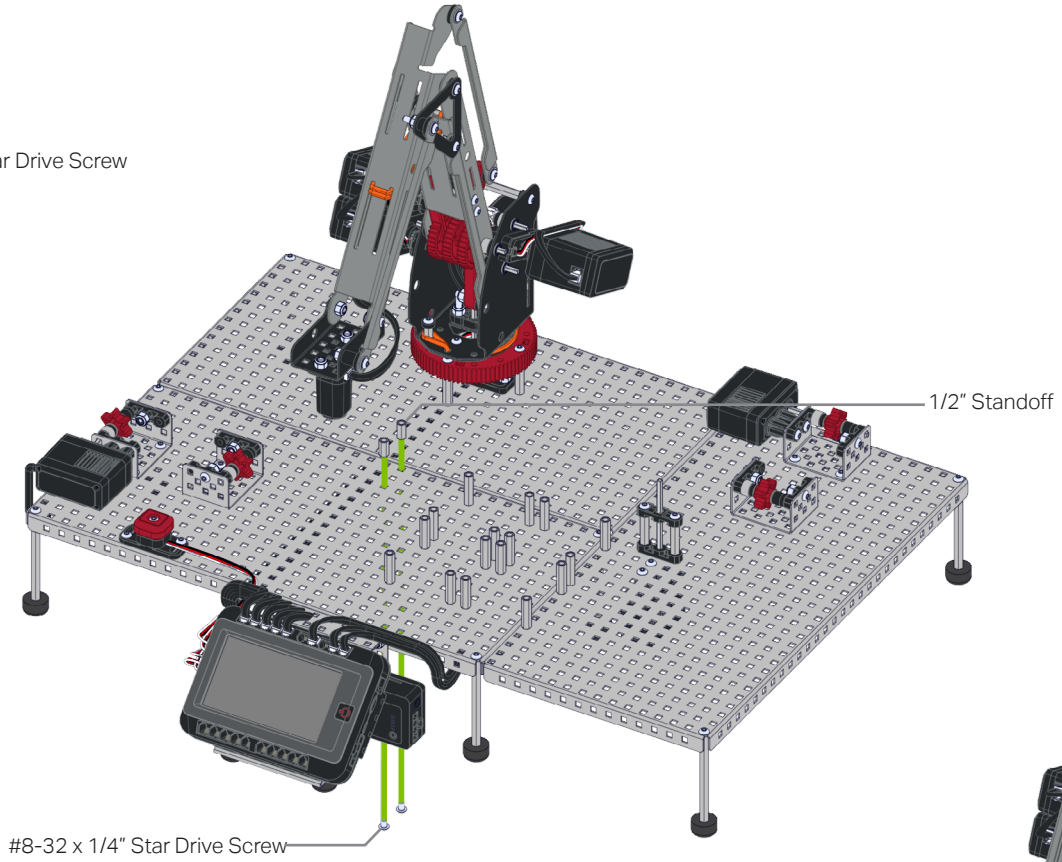
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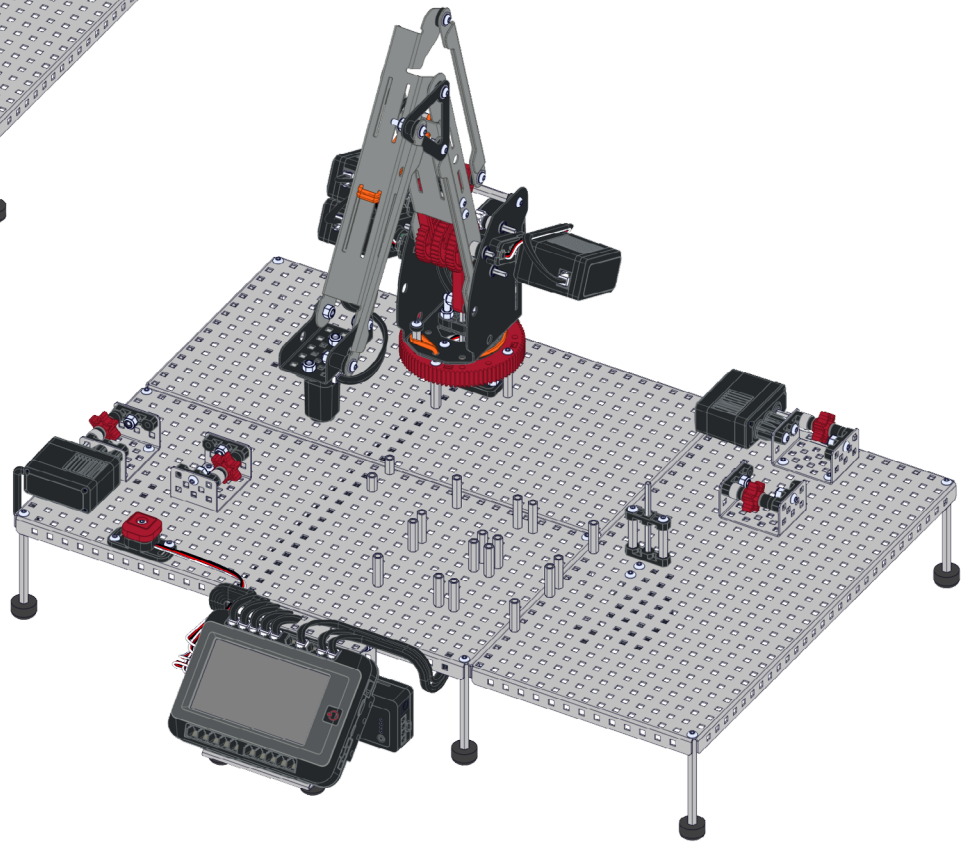


2x #8-32 x 1/4" Star Drive Screw



2x 1/2" Standoff





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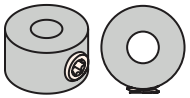


2x #8-32 x 1/2" Star Drive Screw



1x Flat Bearing

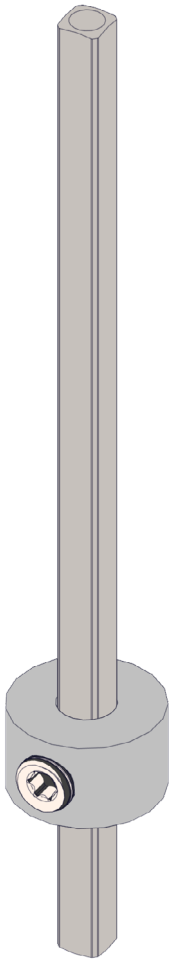
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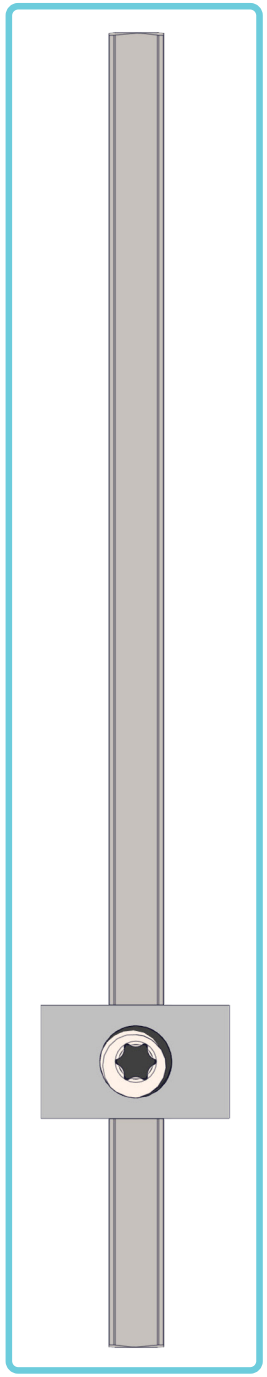


1x Star Drive Shaft Collar

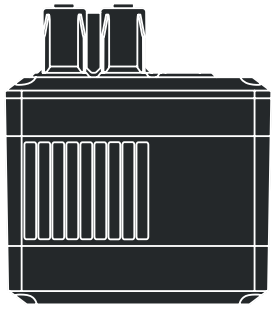


1x 3" Drive Shaft





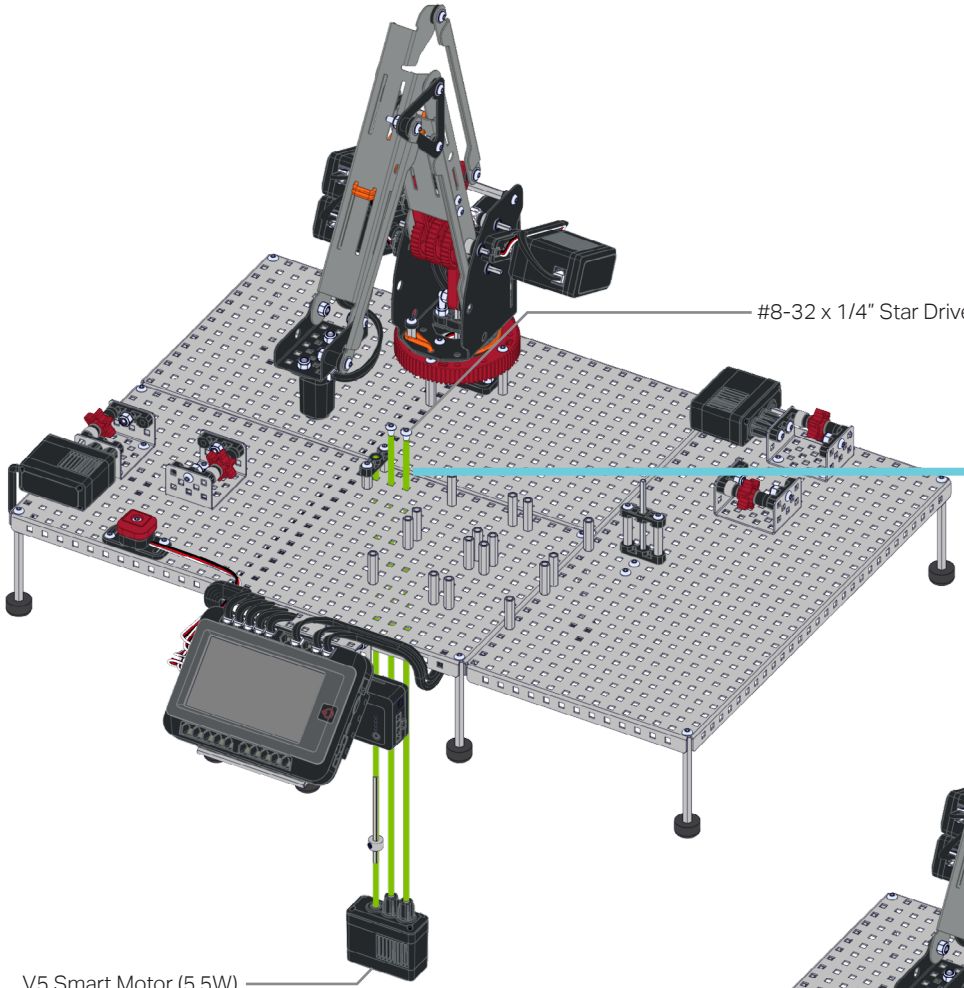
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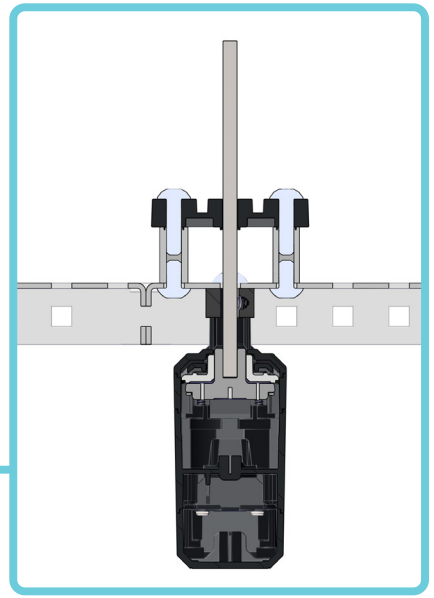


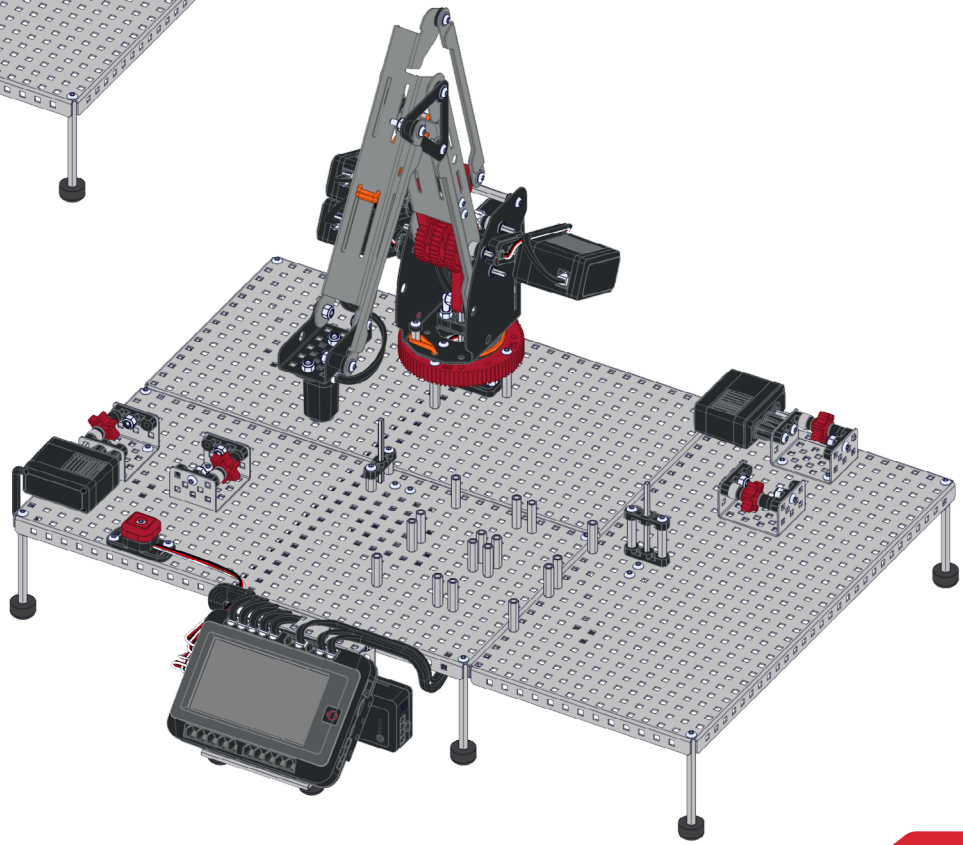
1x V5 Smart Motor (5.5W)



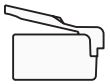
2x #8-32 x 1/4" Star Drive Screw







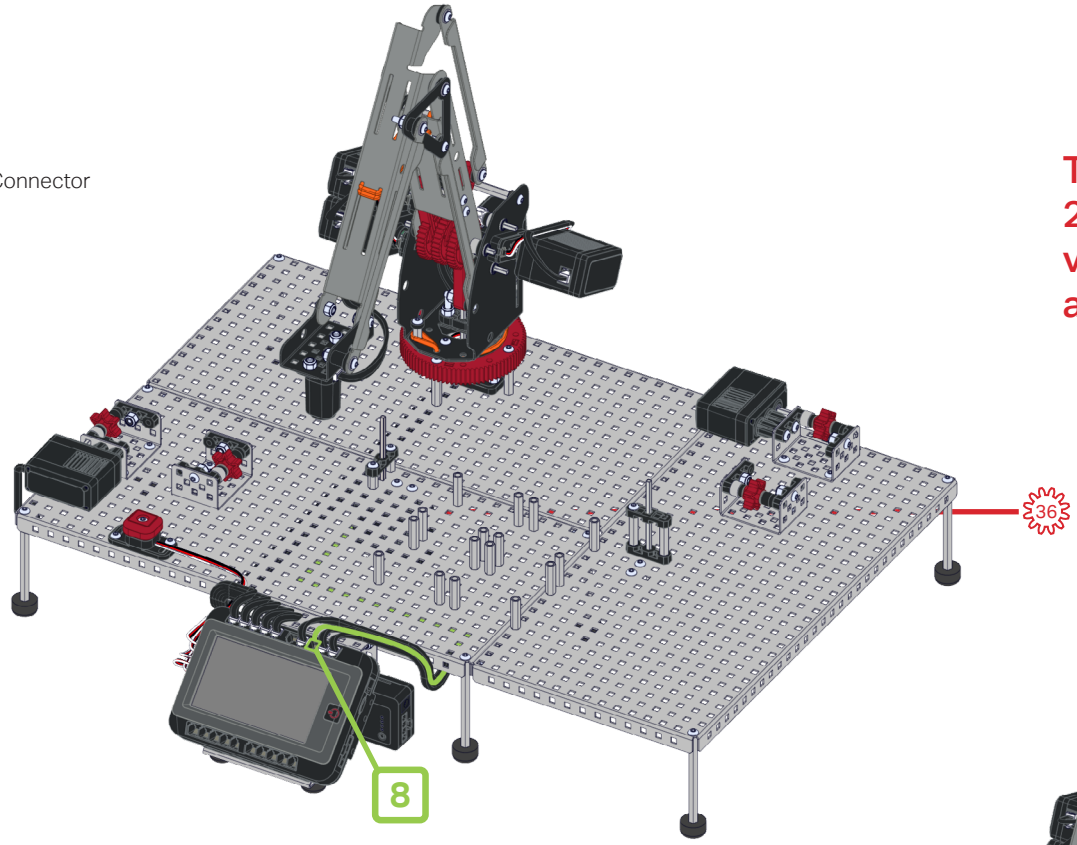
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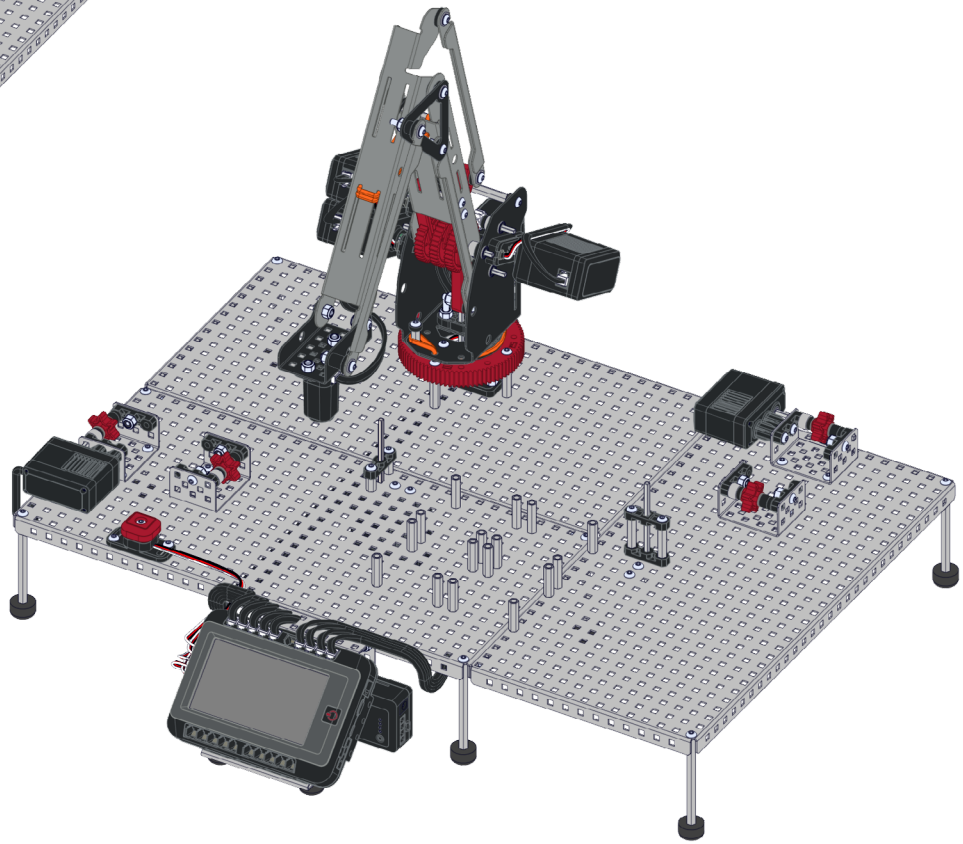
2x V5 Smart Cable Connector



1x V5 Smart Cable Stock (8m)



To make cables for steps 21, 23, 32, and 37, please view the Knowledge Base article here.



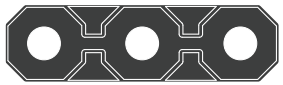
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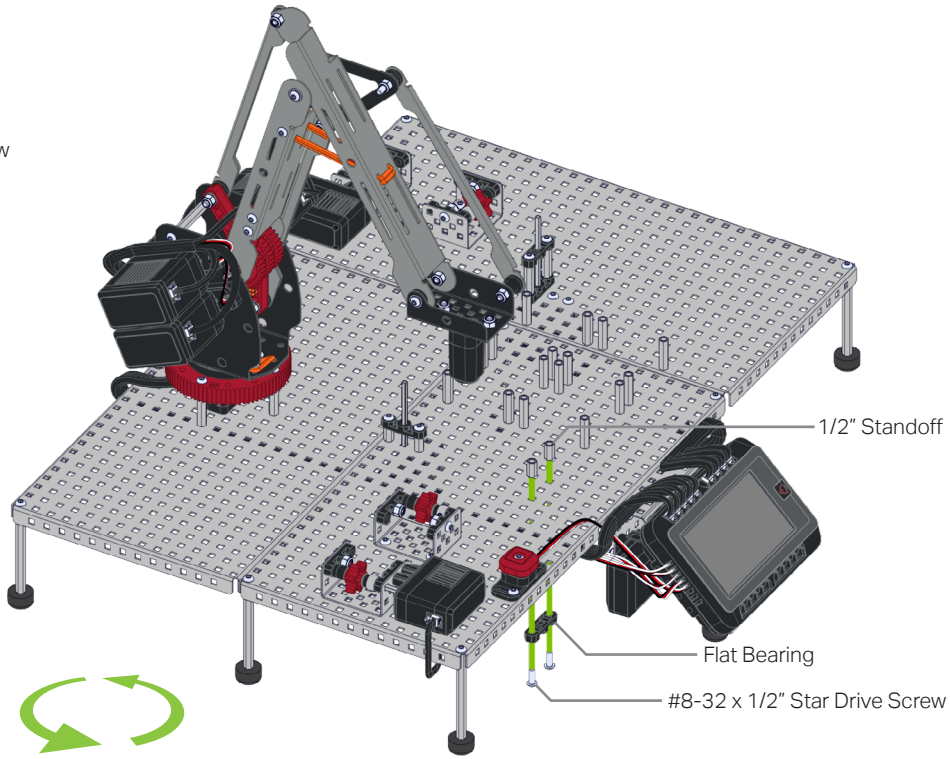
2x #8-32 x 1/2" Star Drive Screw

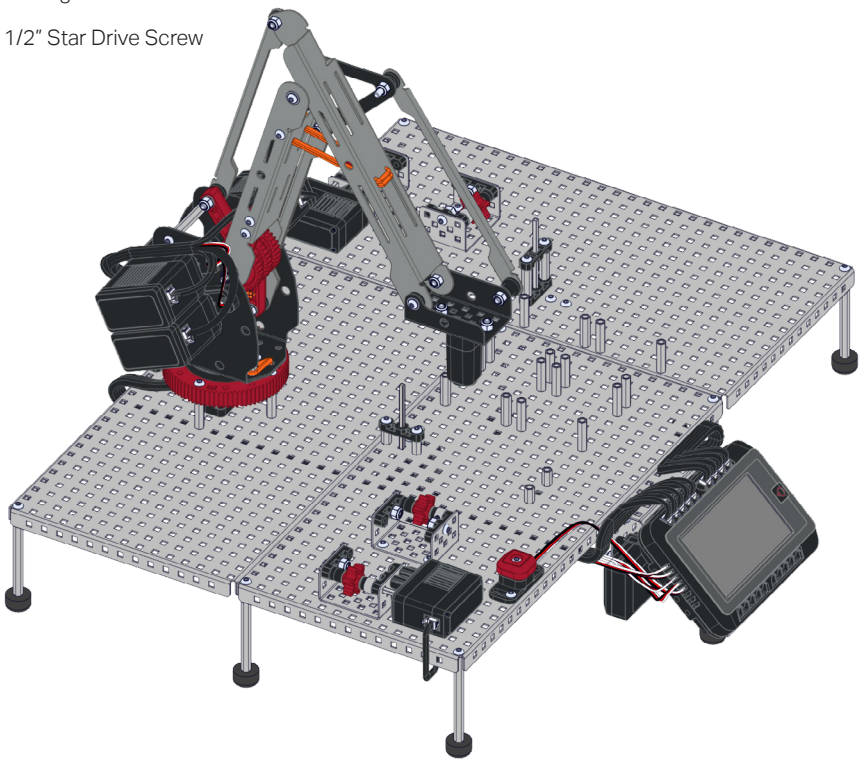


2x 1/2" Standoff



1x Flat Bearing





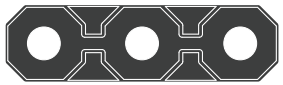
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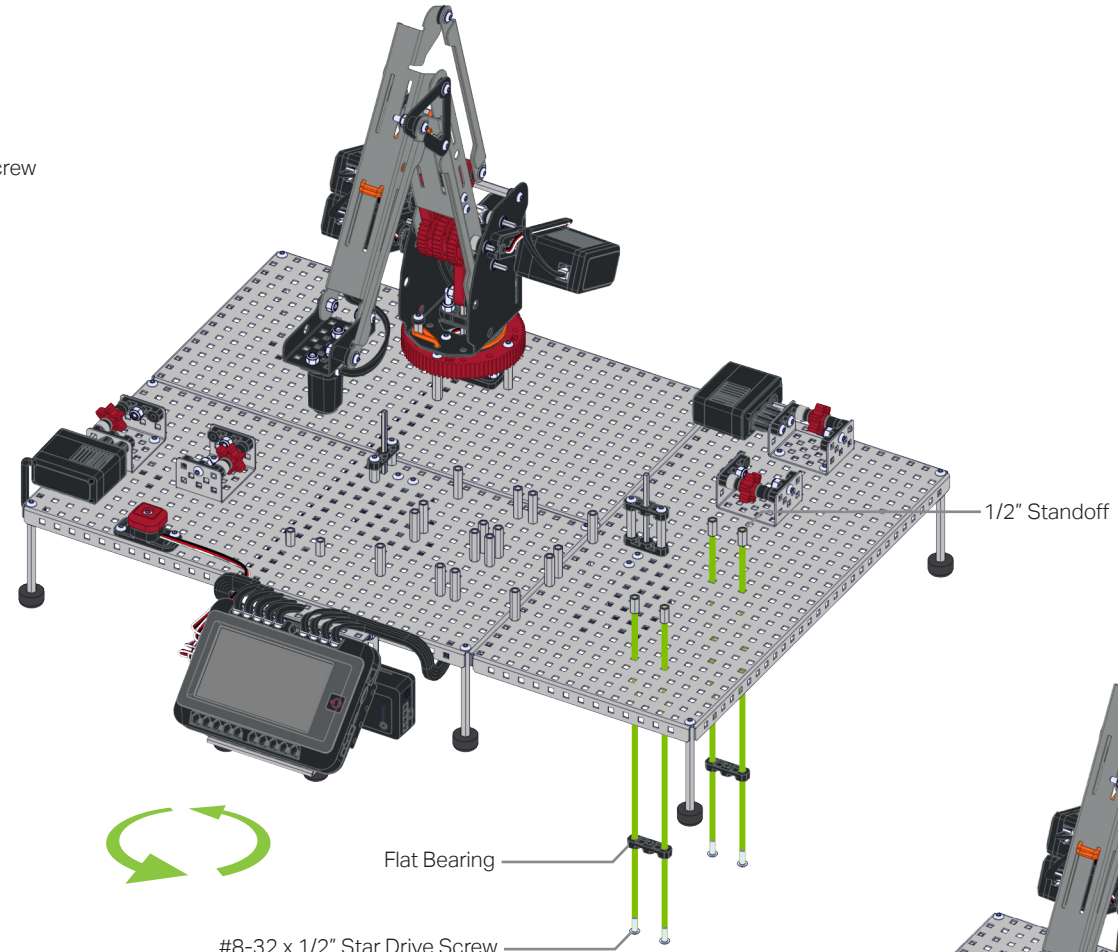
4x #8-32 x 1/2" Star Drive Screw

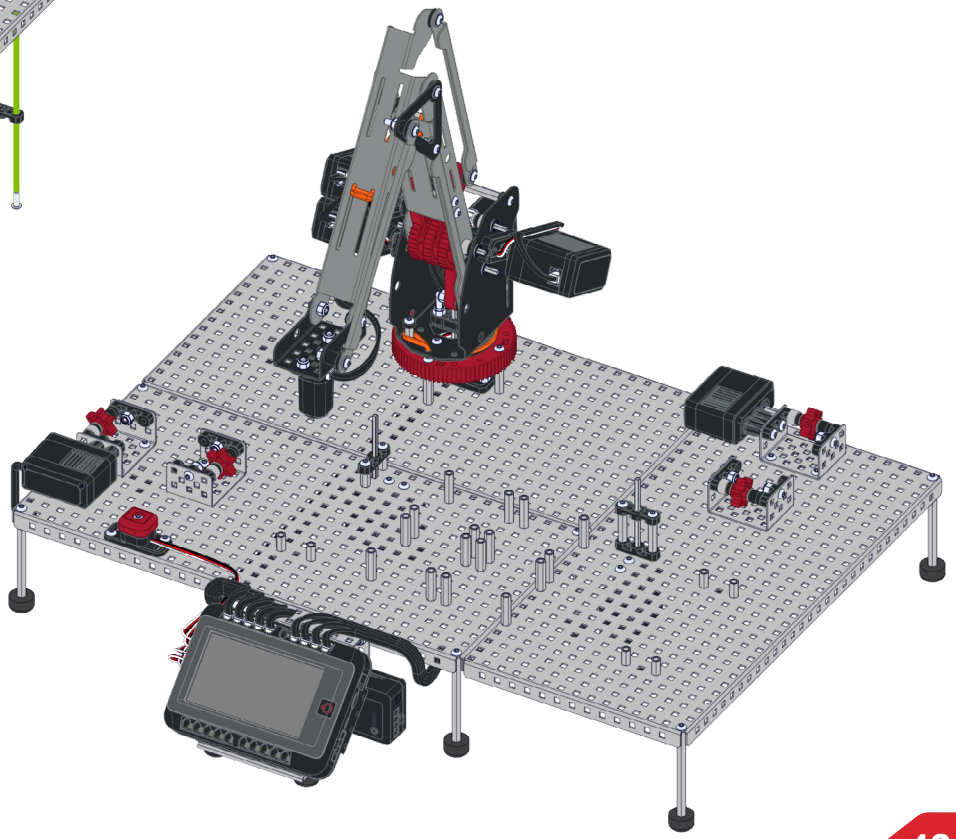


4x 1/2" Standoff

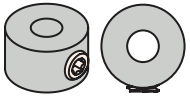


2x Flat Bearing





40

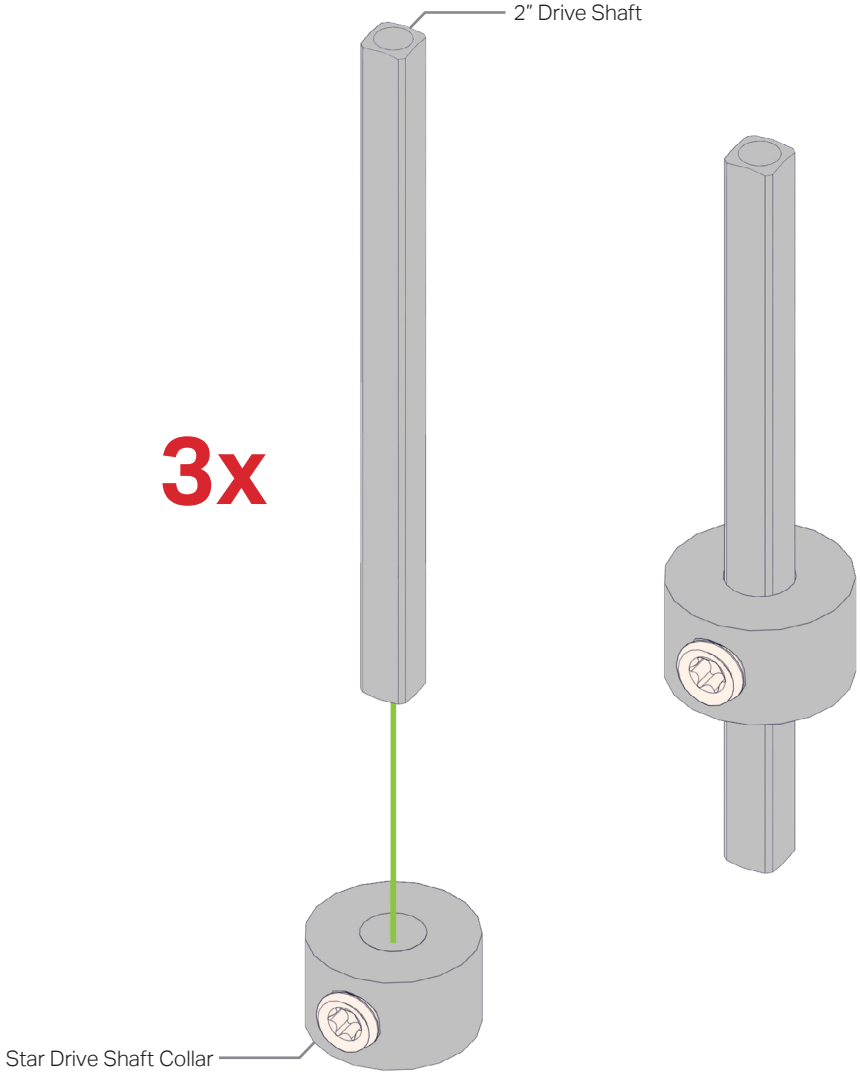


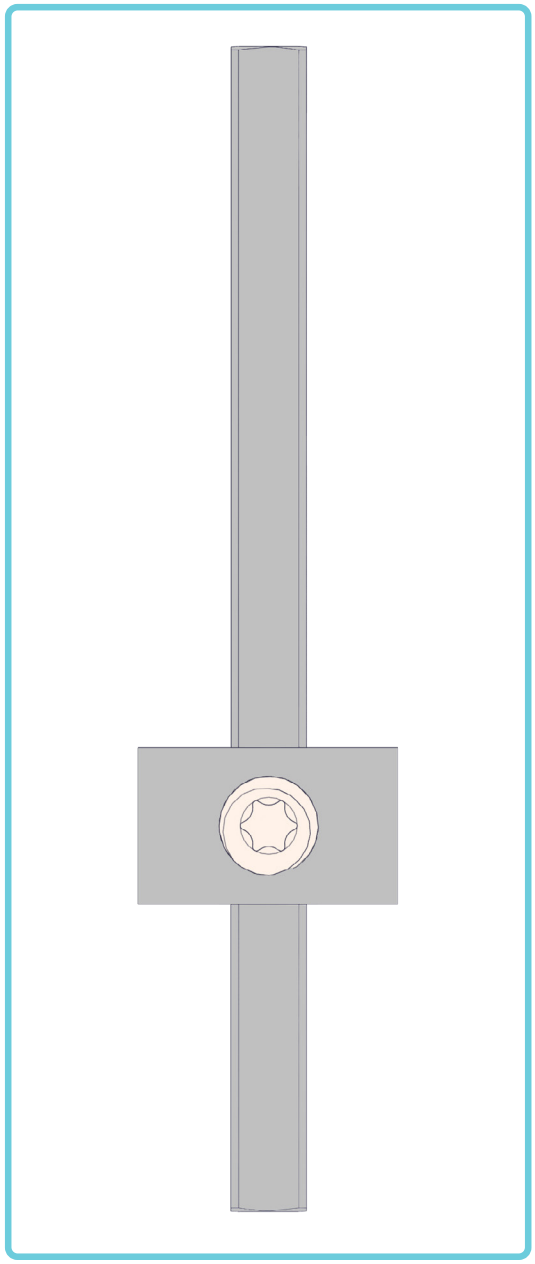
3x Star Drive Shaft Collar



3x 2" Drive Shaft

3x

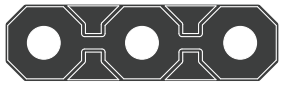




41



6x #8-32 x 1/2" Star Drive Screw

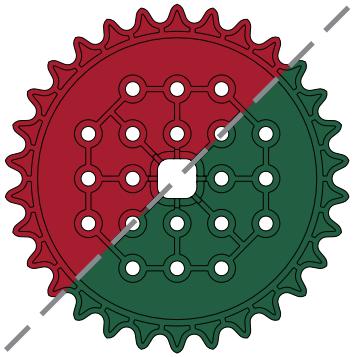


3x Flat Bearing

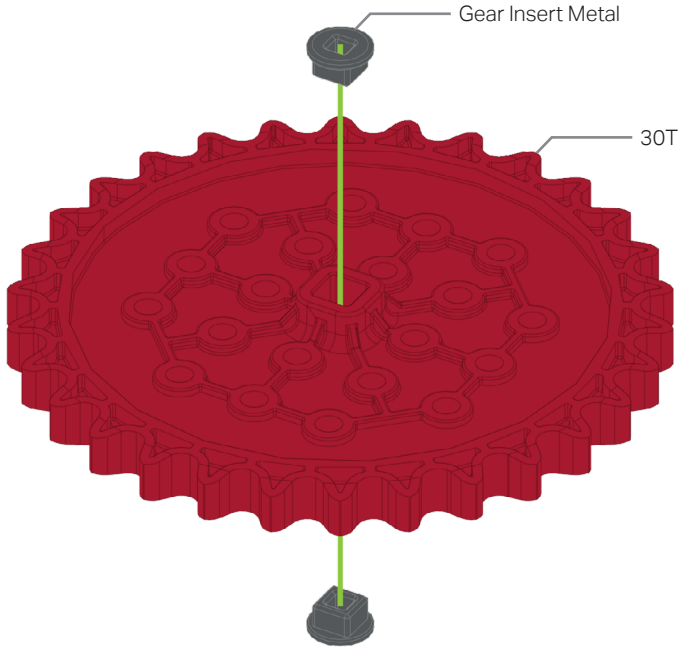
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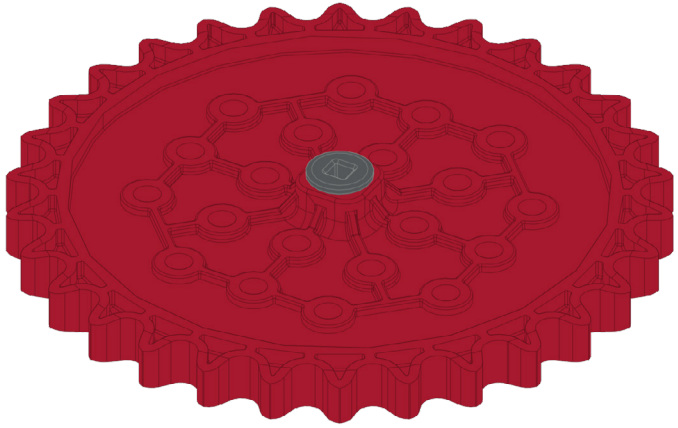


2x Gear Insert Metal

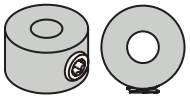


1x 30T High Strength Sprocket

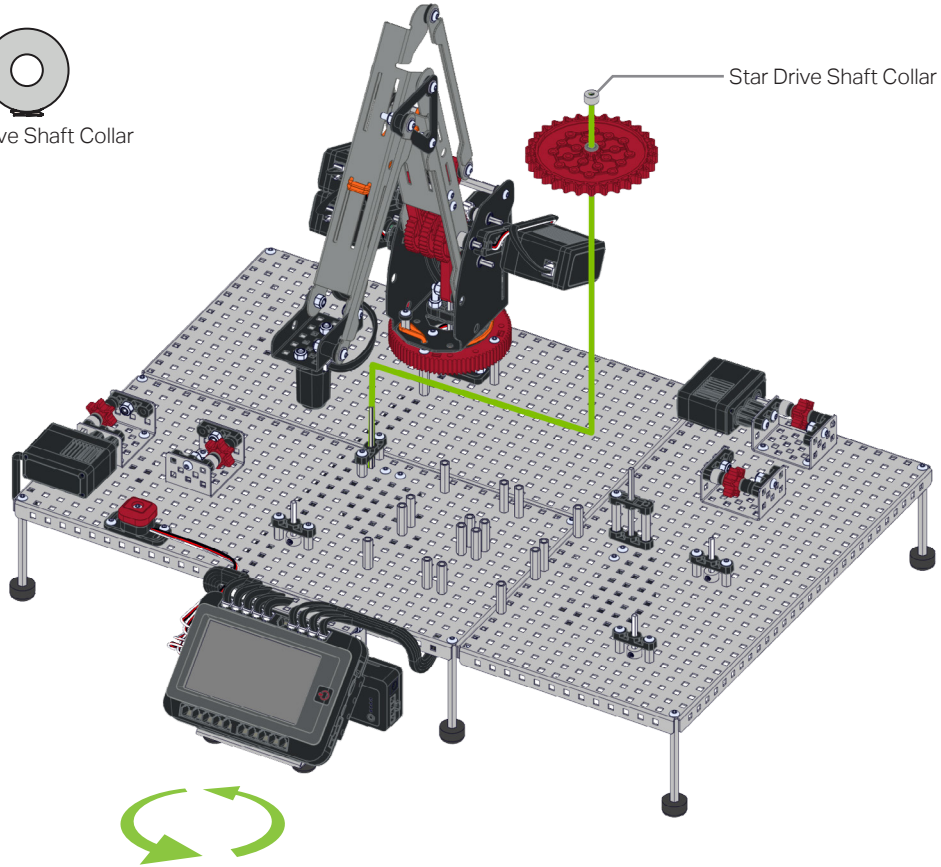


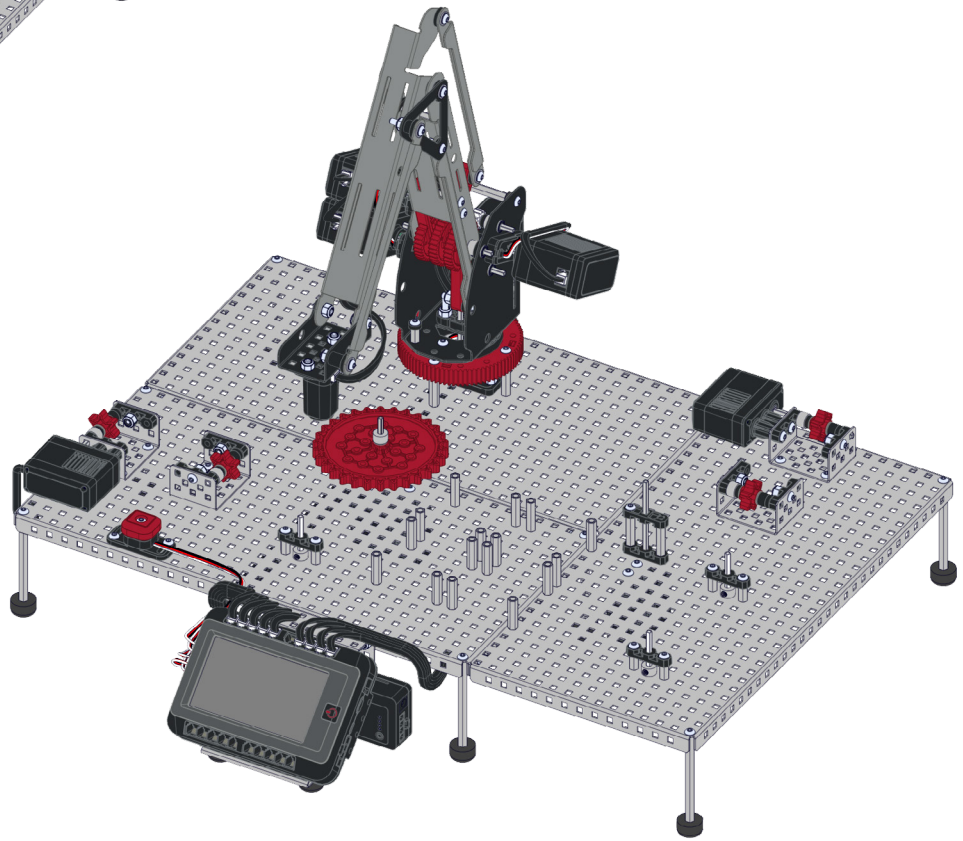


43



1x Star Drive Shaft Collar

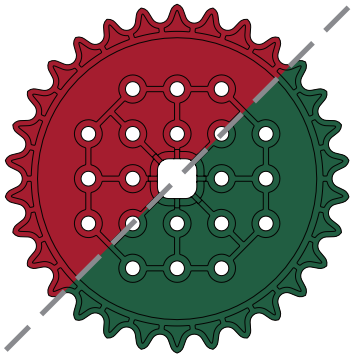




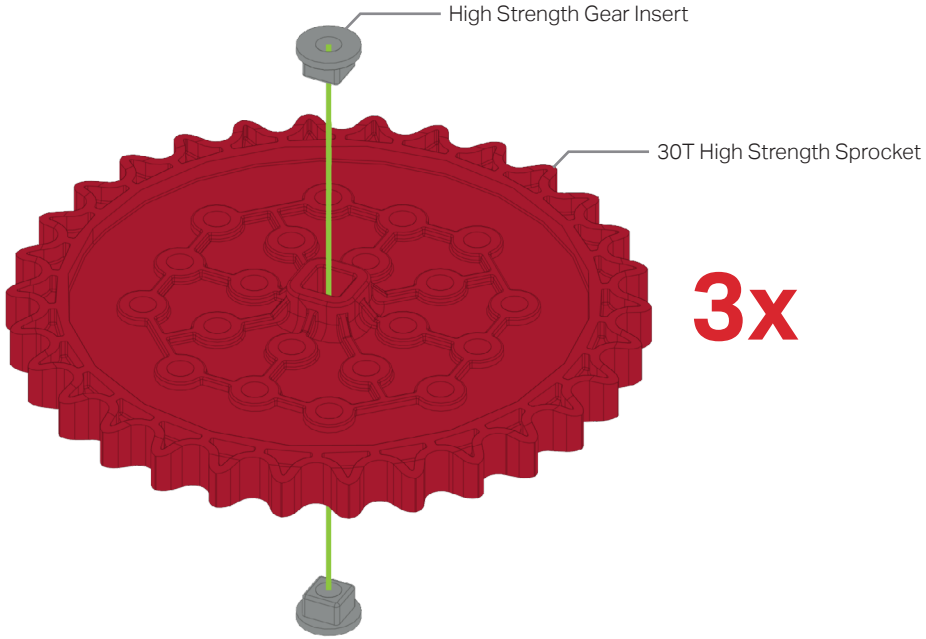
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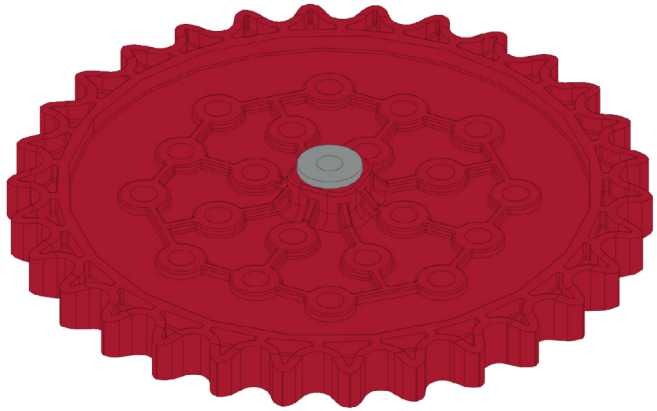
6x High Strength Gear Insert



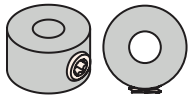
1x 30T High Strength Sprocket



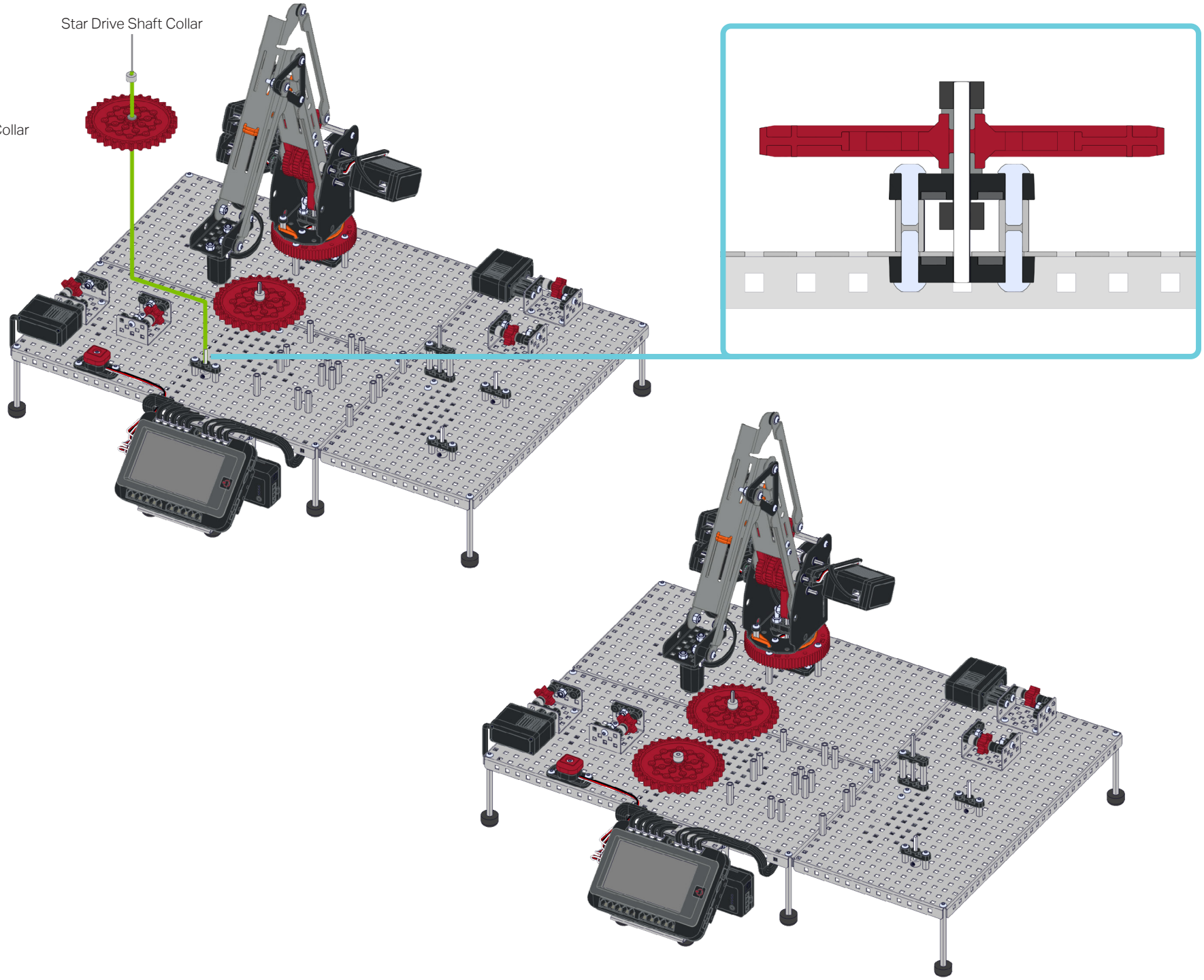
3x



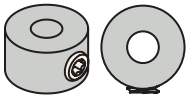
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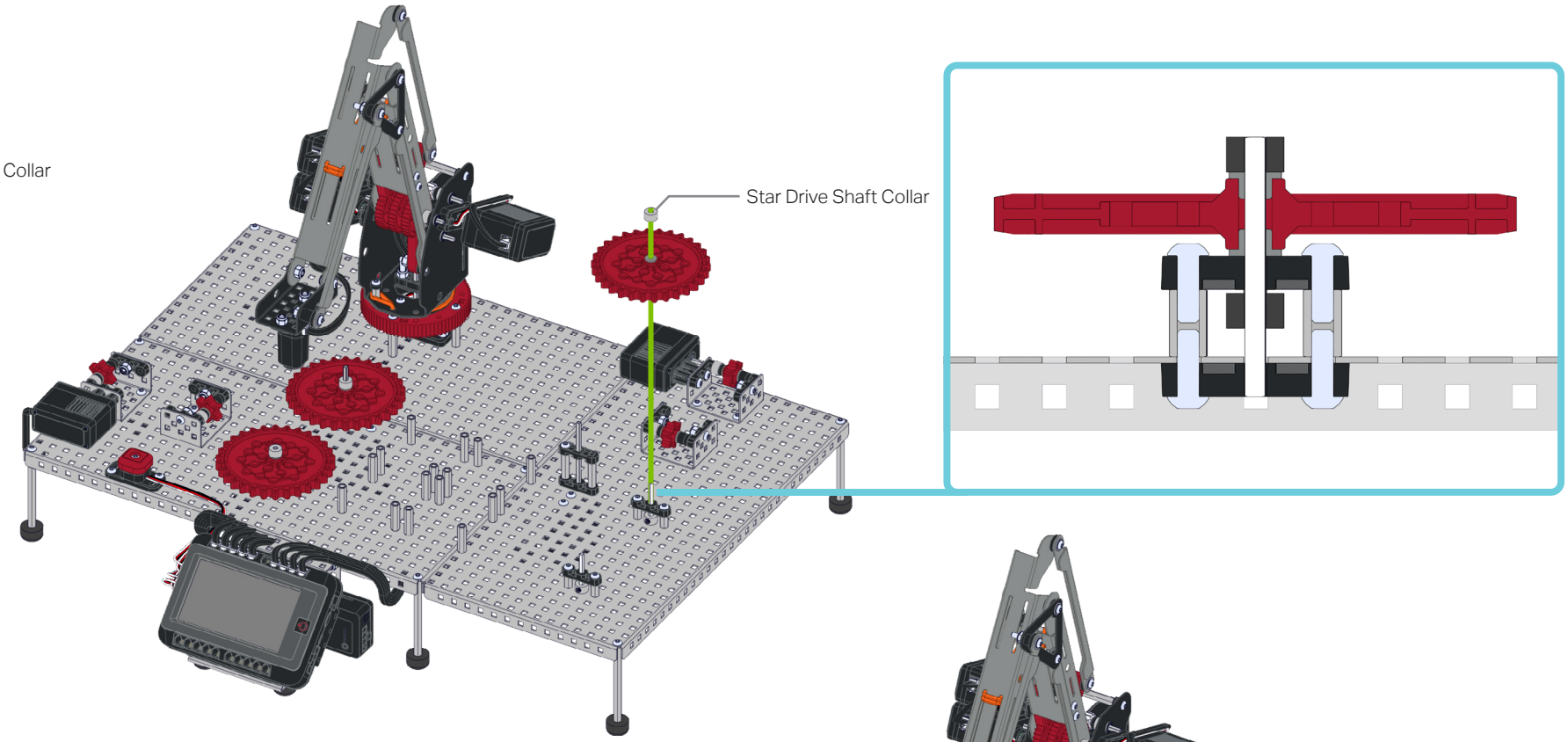
1x Star Drive Shaft Collar

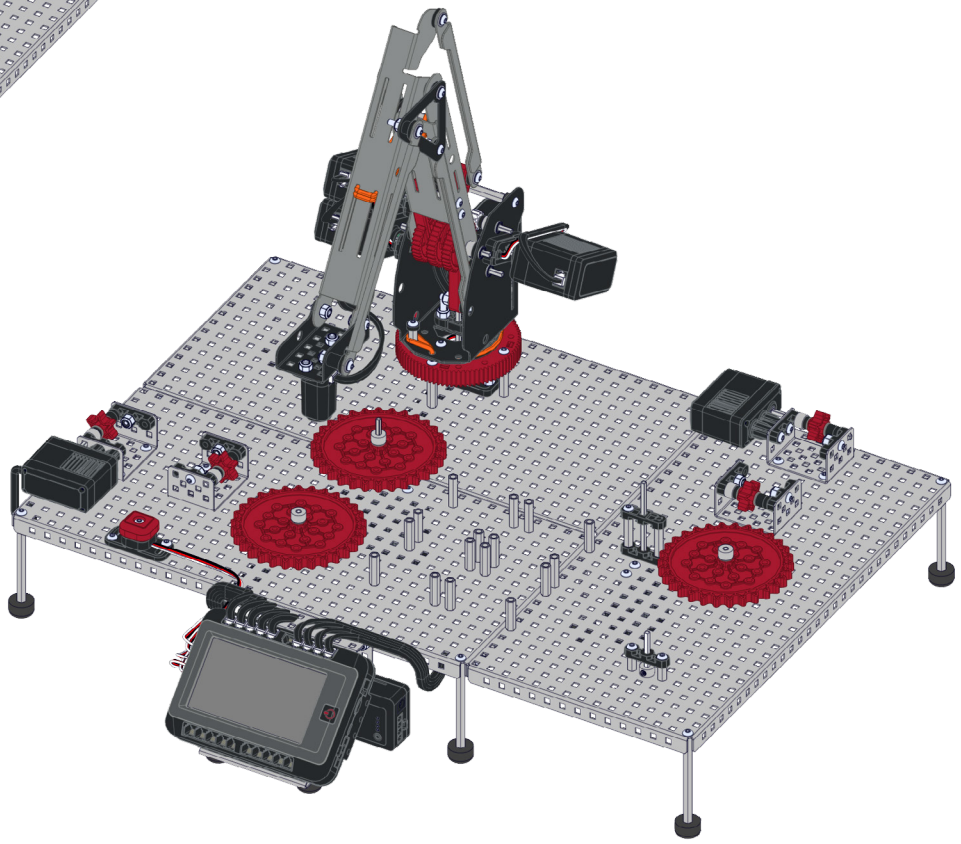


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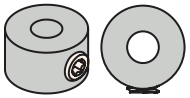


1x Star Drive Shaft Collar

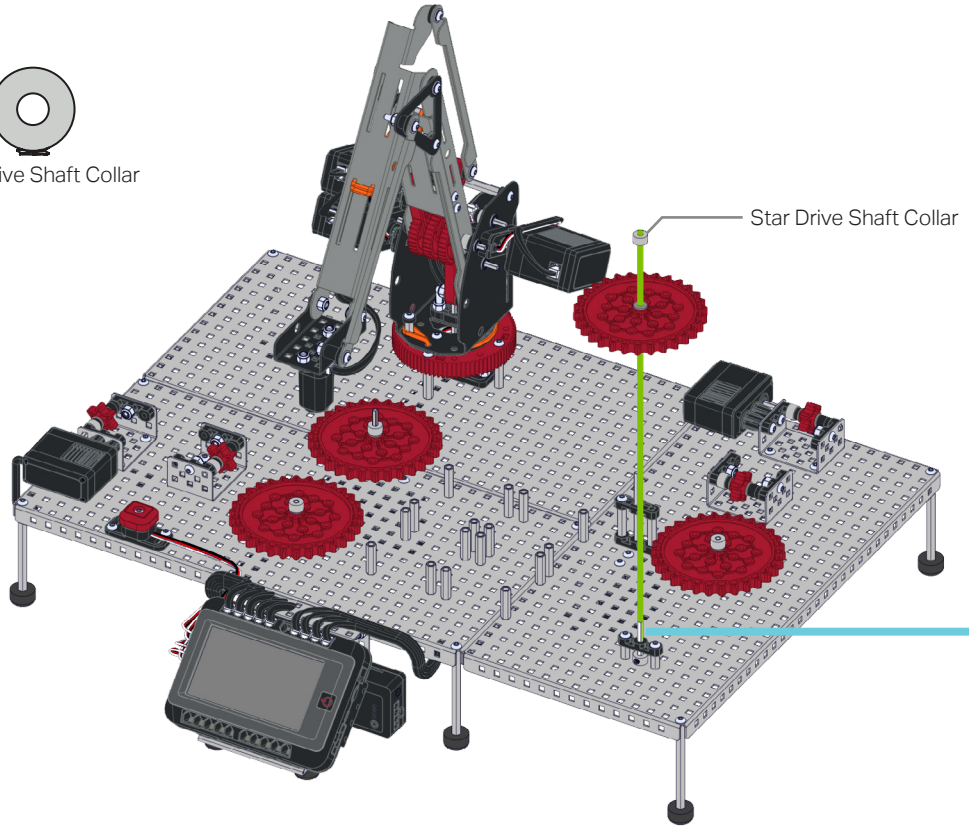


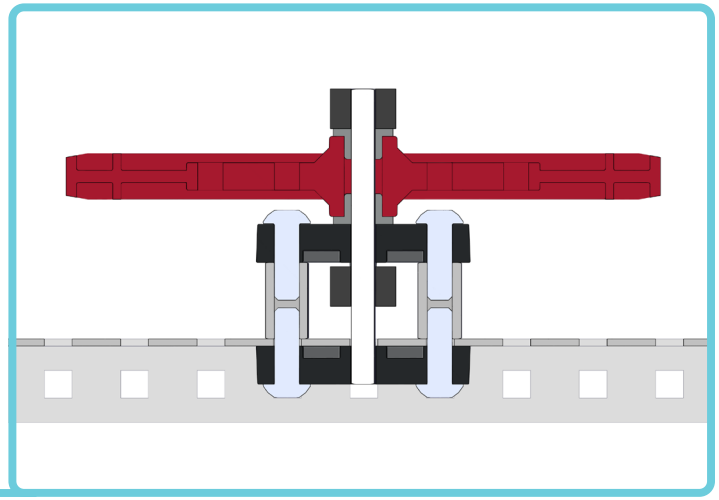


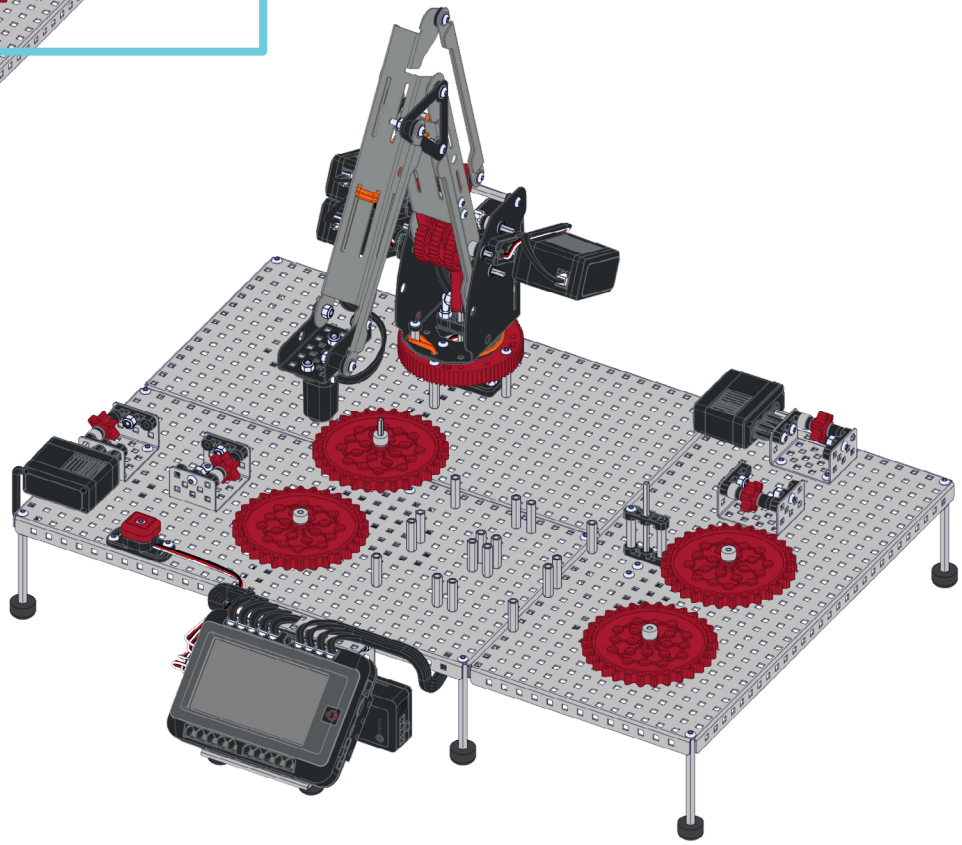
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1x Star Drive Shaft Collar







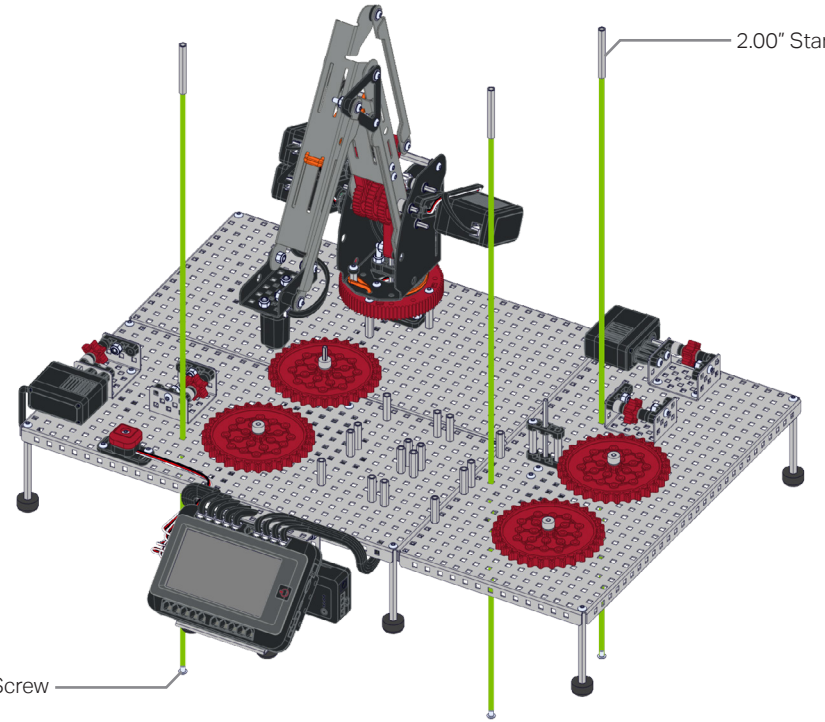
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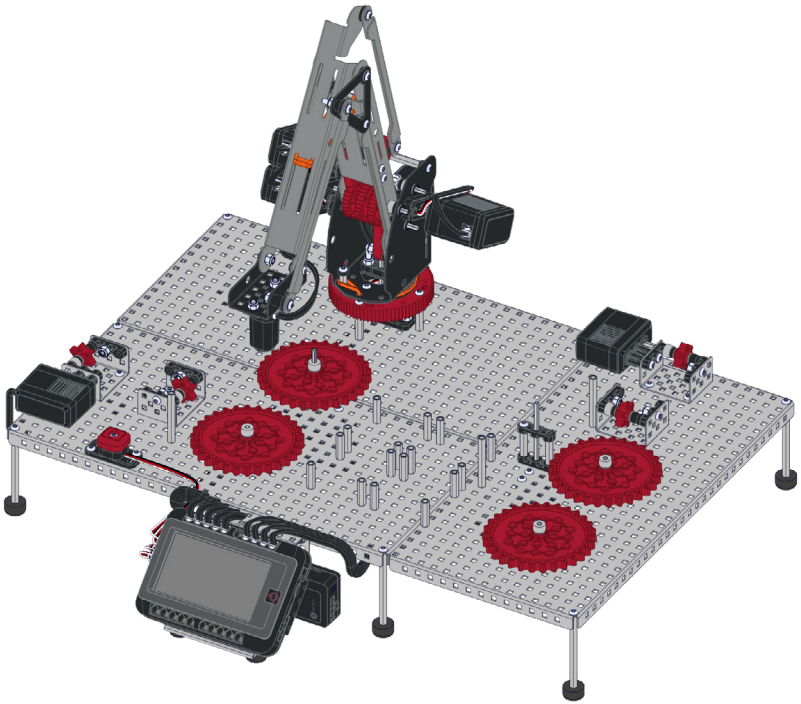


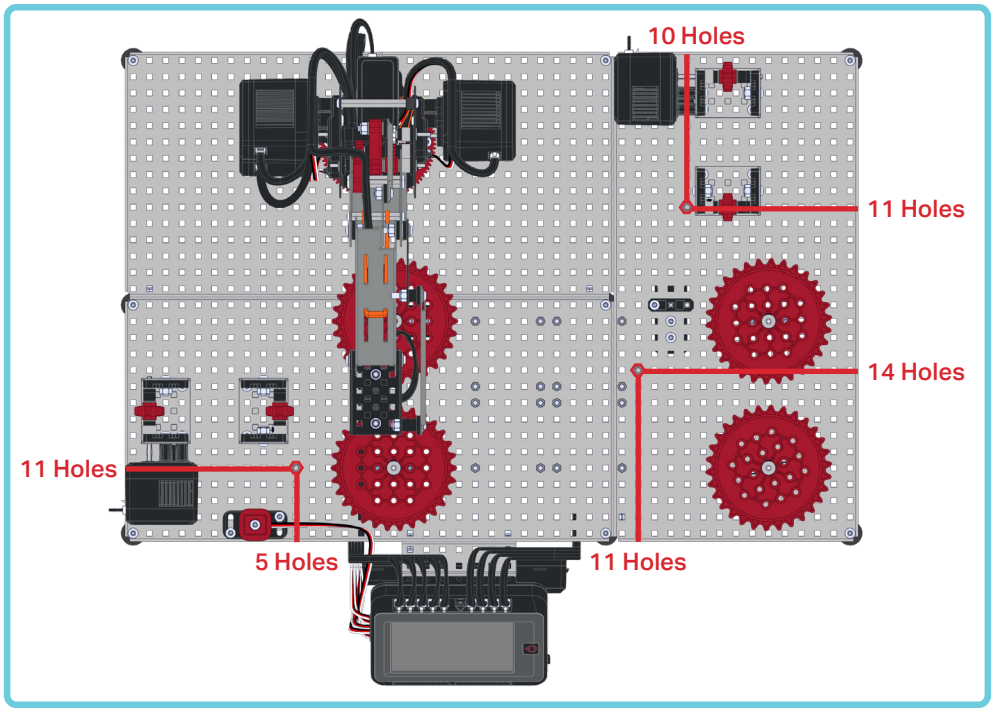
3x 2.00" Standoff



3x #8-32 x 1/4" Star Drive Screw



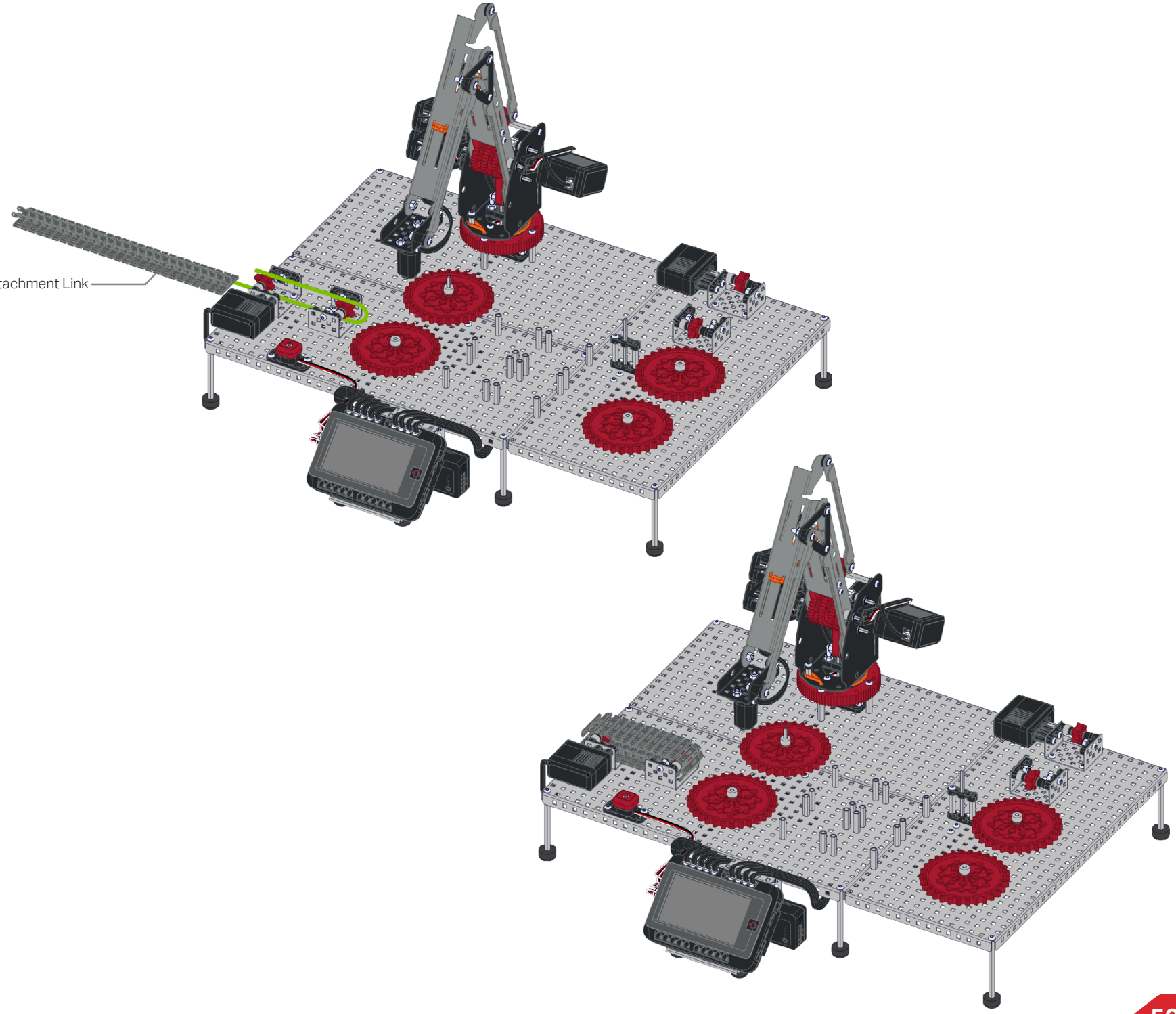




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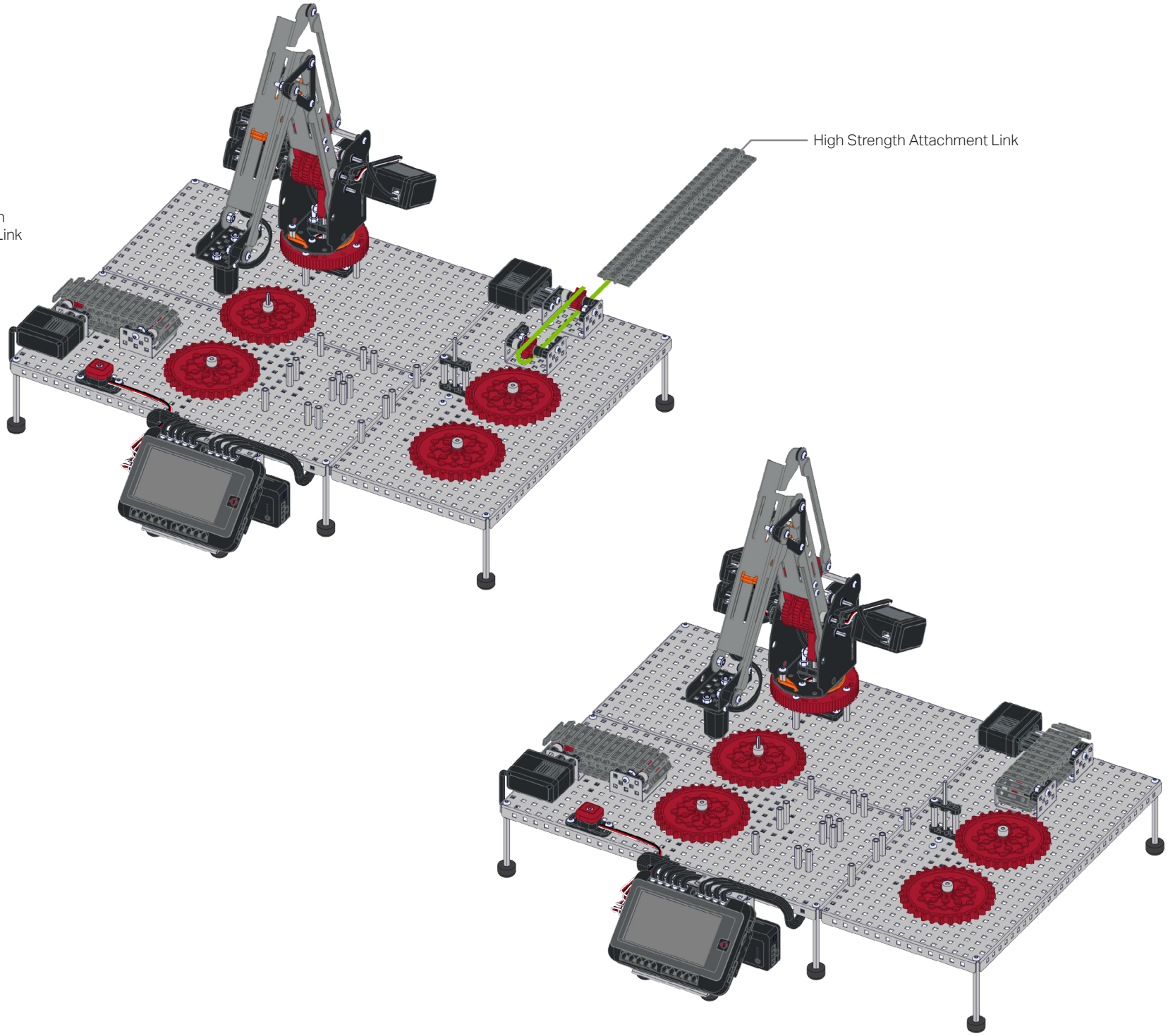
27x High Strength Attachment Link



50



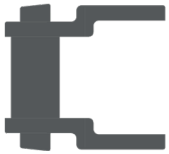
27x High Strength Attachment Link



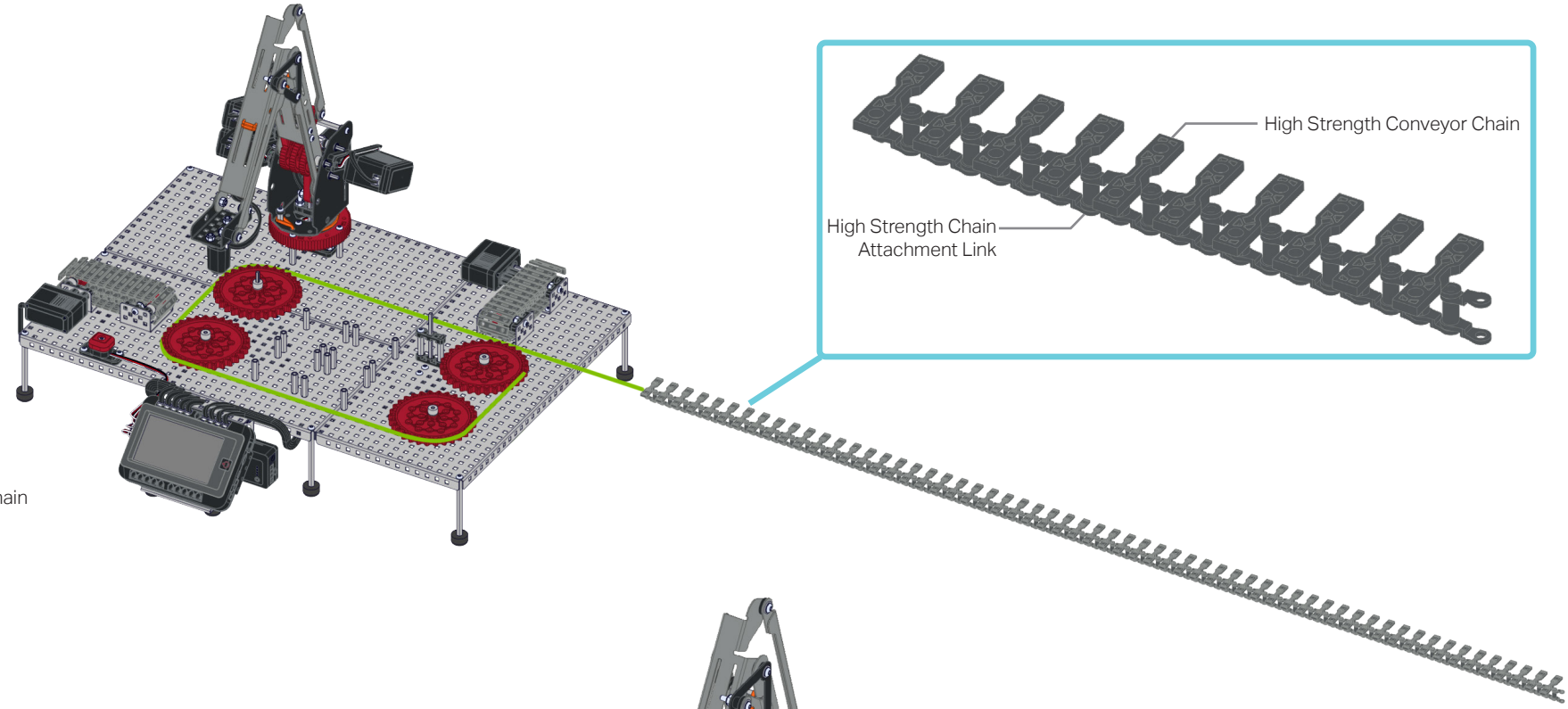
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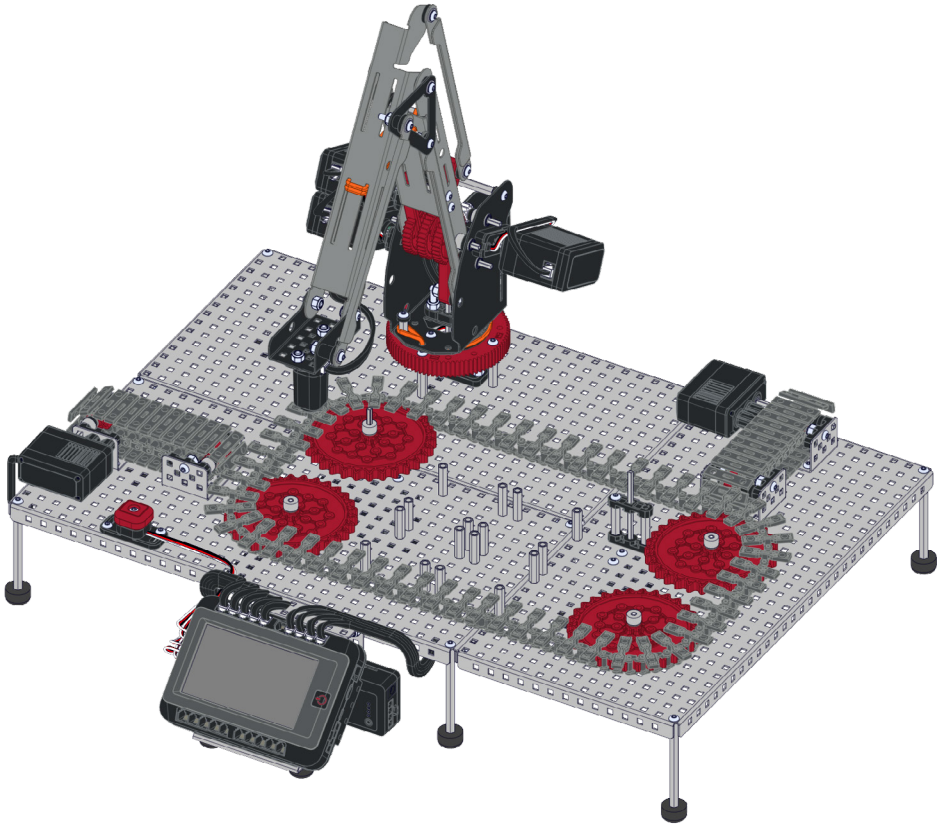


56x High Strength Conveyor Chain



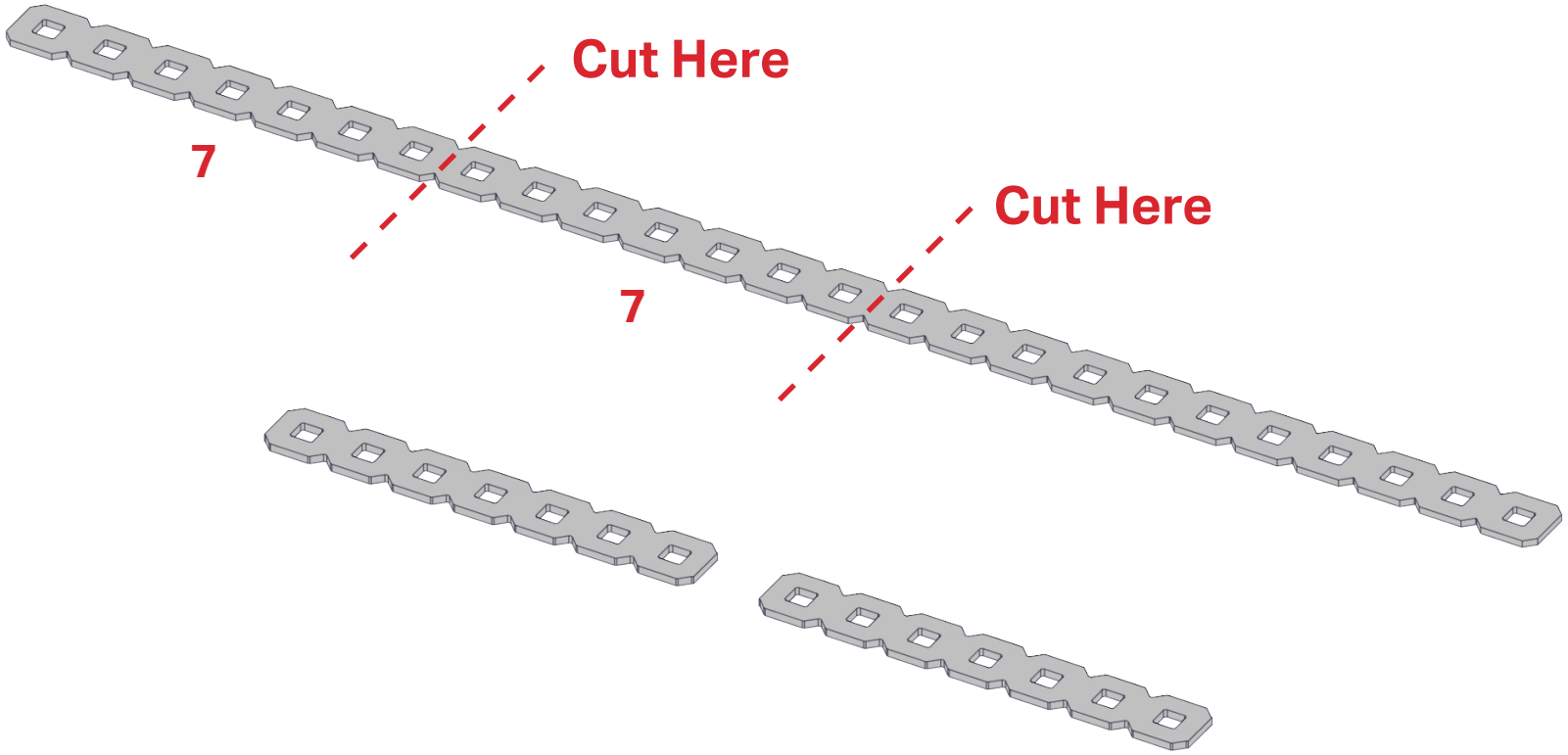
56x High Strength Chain Attachment Link

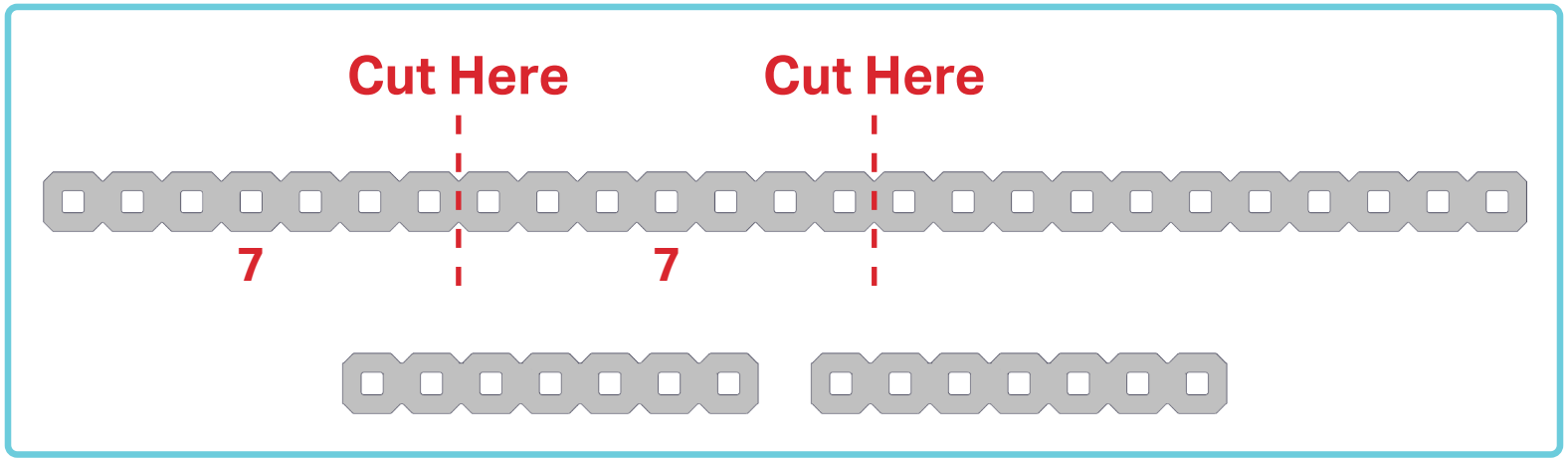




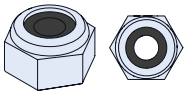


1x 1x25 Steel Bar





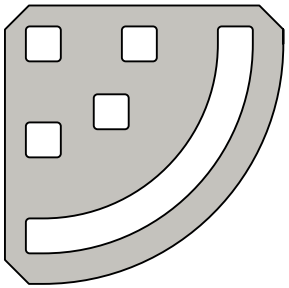
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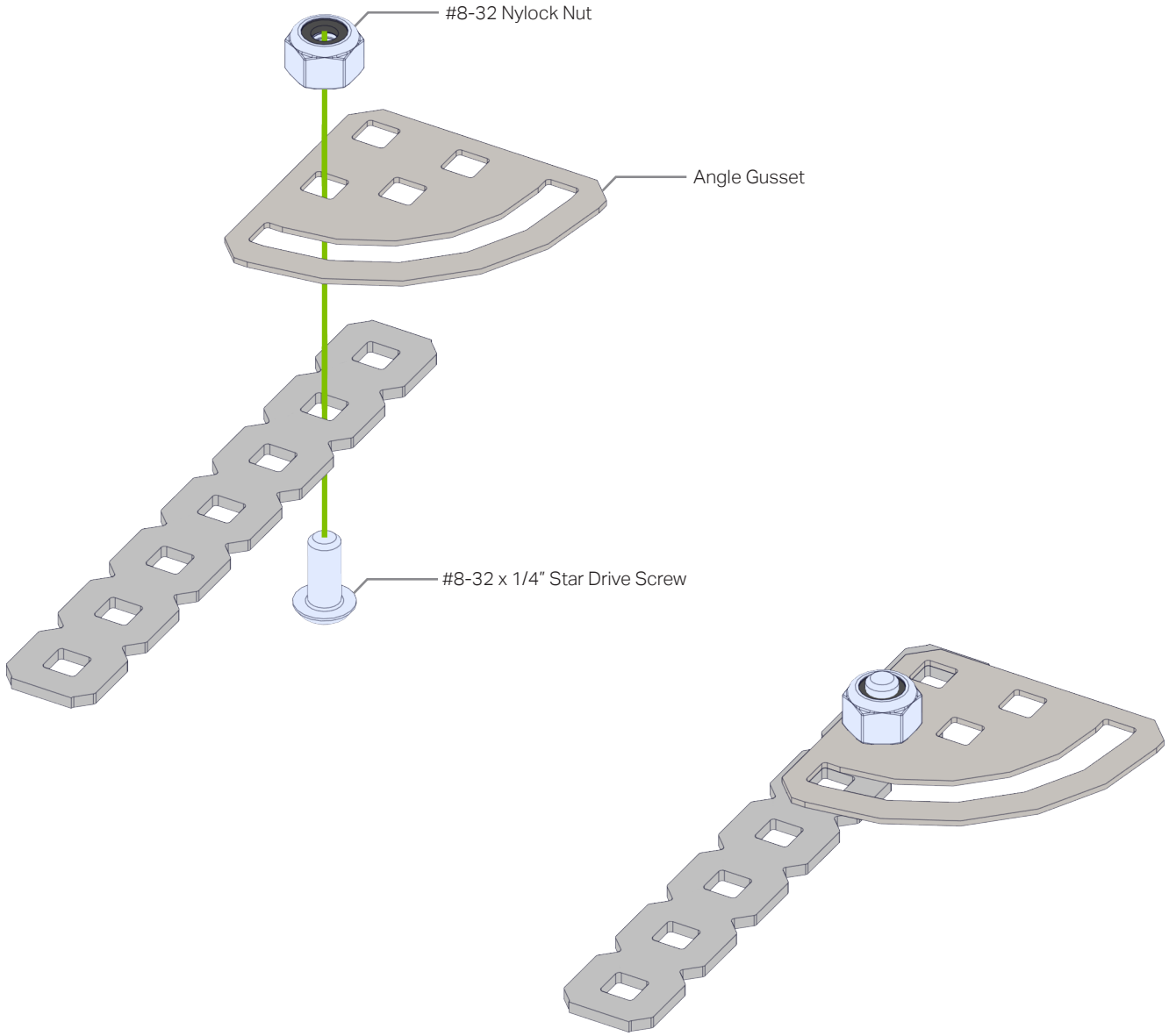
1x #8-32 Nylock Nut



1x #8-32 x 1/4" Star Drive Screw



1x Angle Gusset



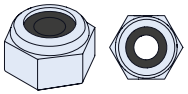
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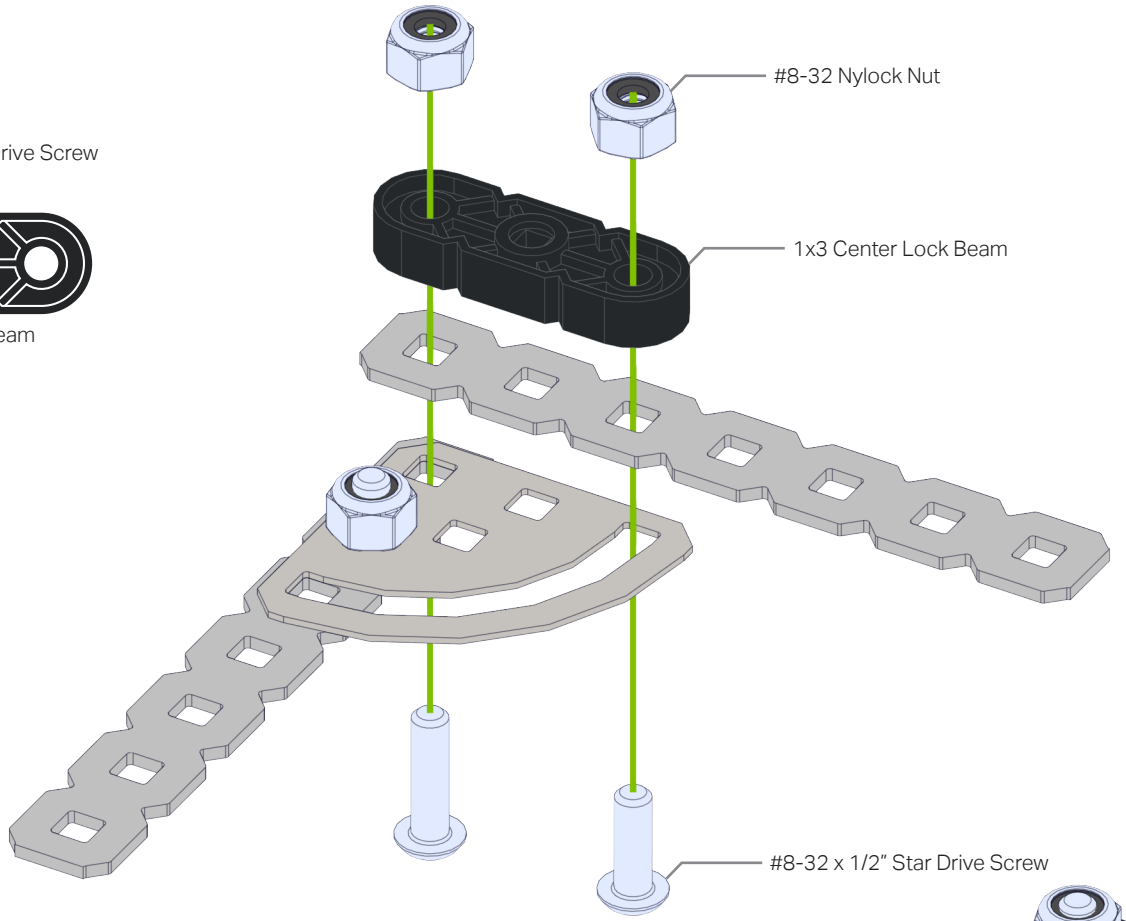
2x #8-32 x 1/2" Star Drive Screw

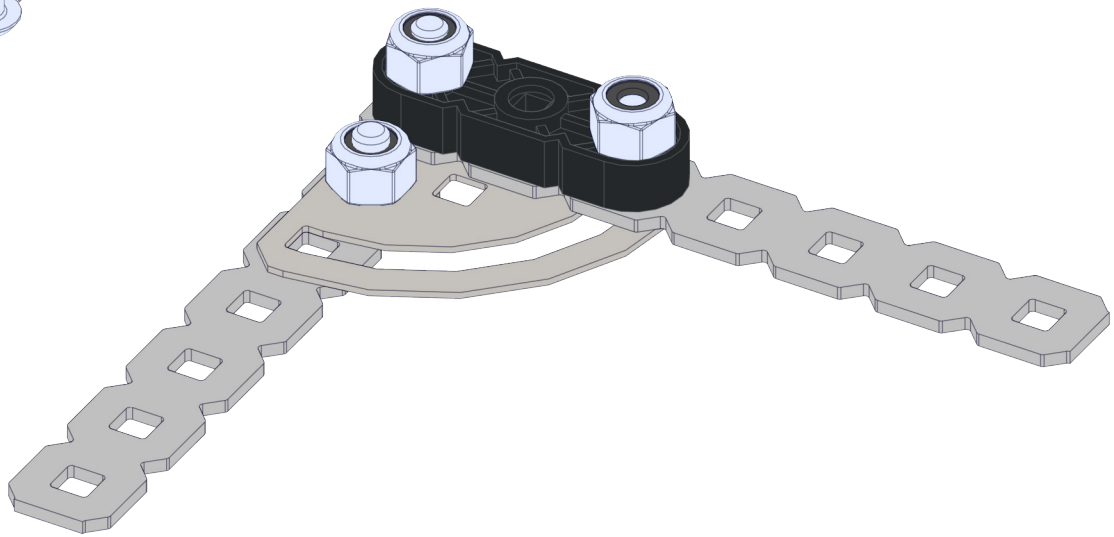


1x 1x3 Center Lock Beam



2x #8-32 Nylock Nut

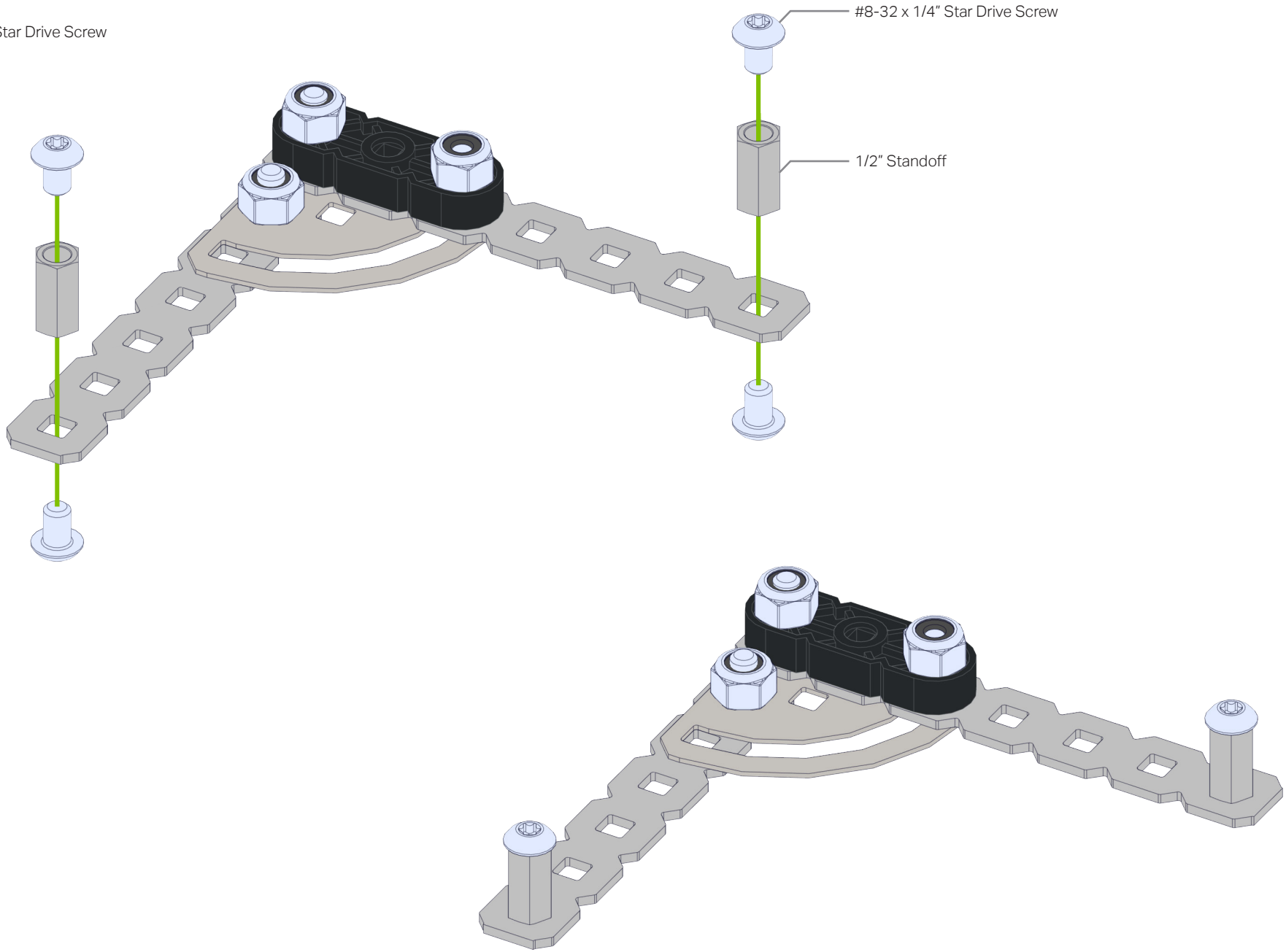




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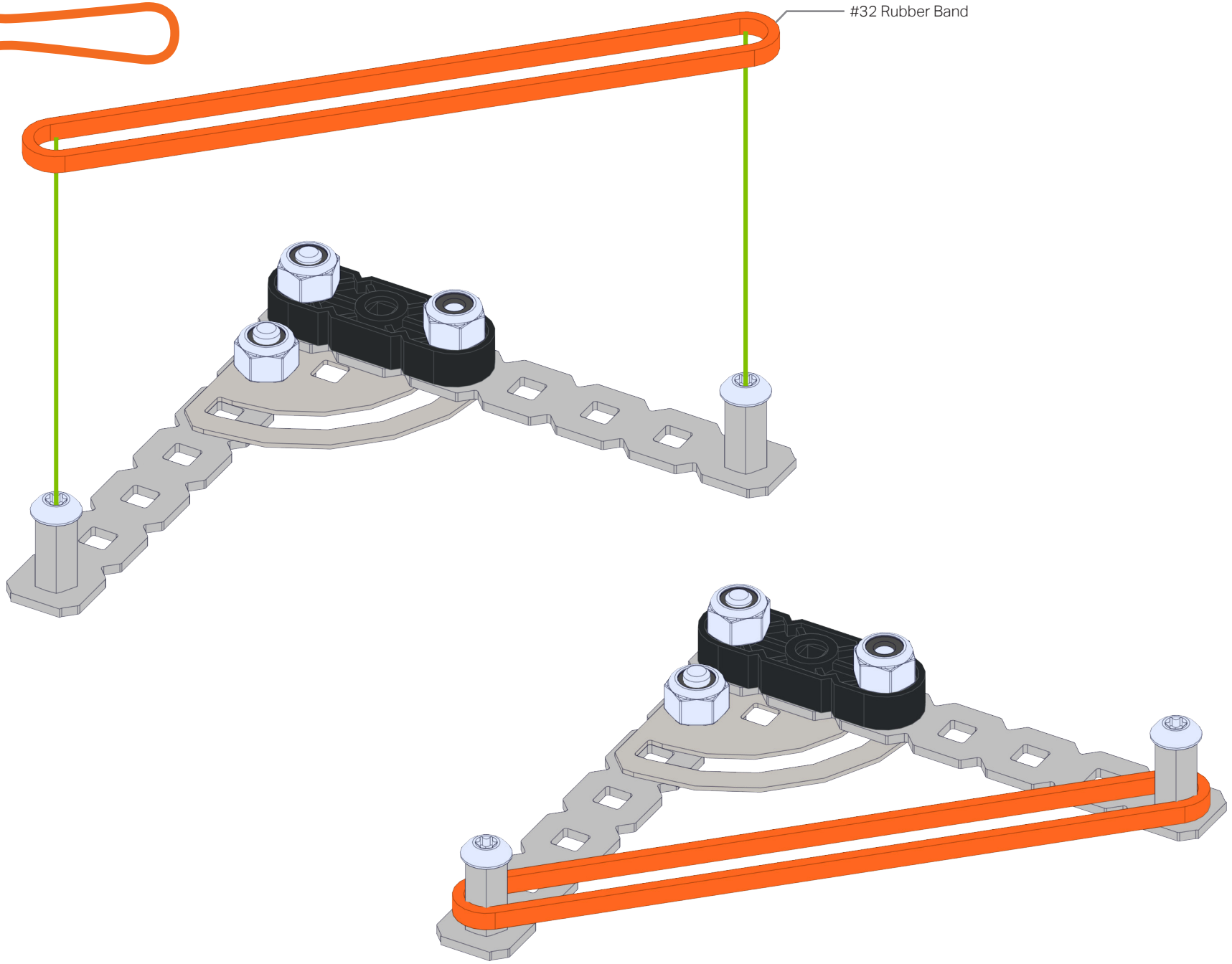
4x #8-32 x 1/4" Star Drive Screw

2x 1/2" Standoff

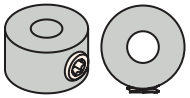




1x #32 Rubber Band



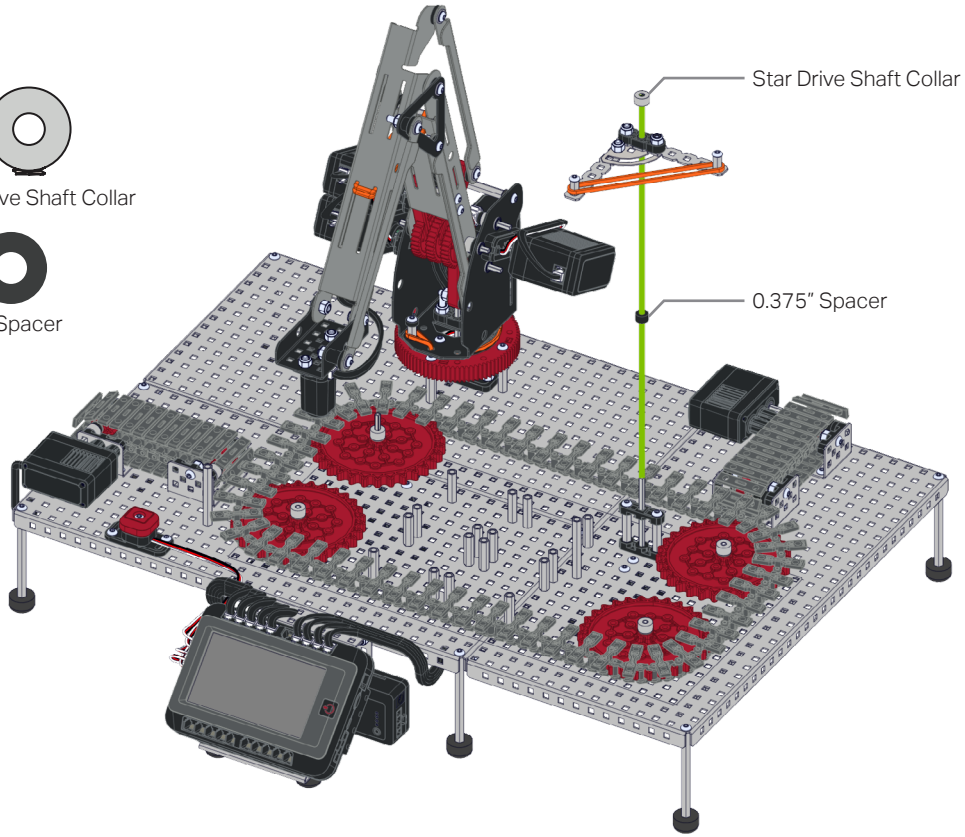
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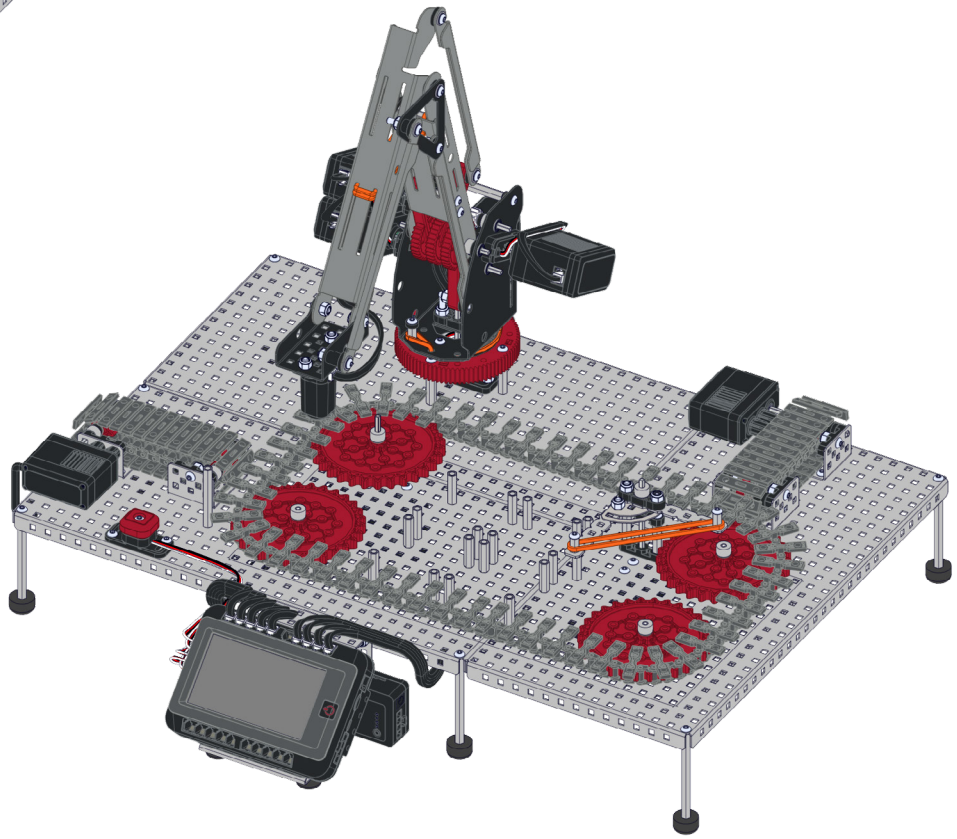


1x Star Drive Shaft Collar



1x 0.375" Spacer





Lab 9: Using a Conveyor System

V5 Workcell STEM Labs

Rev10

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