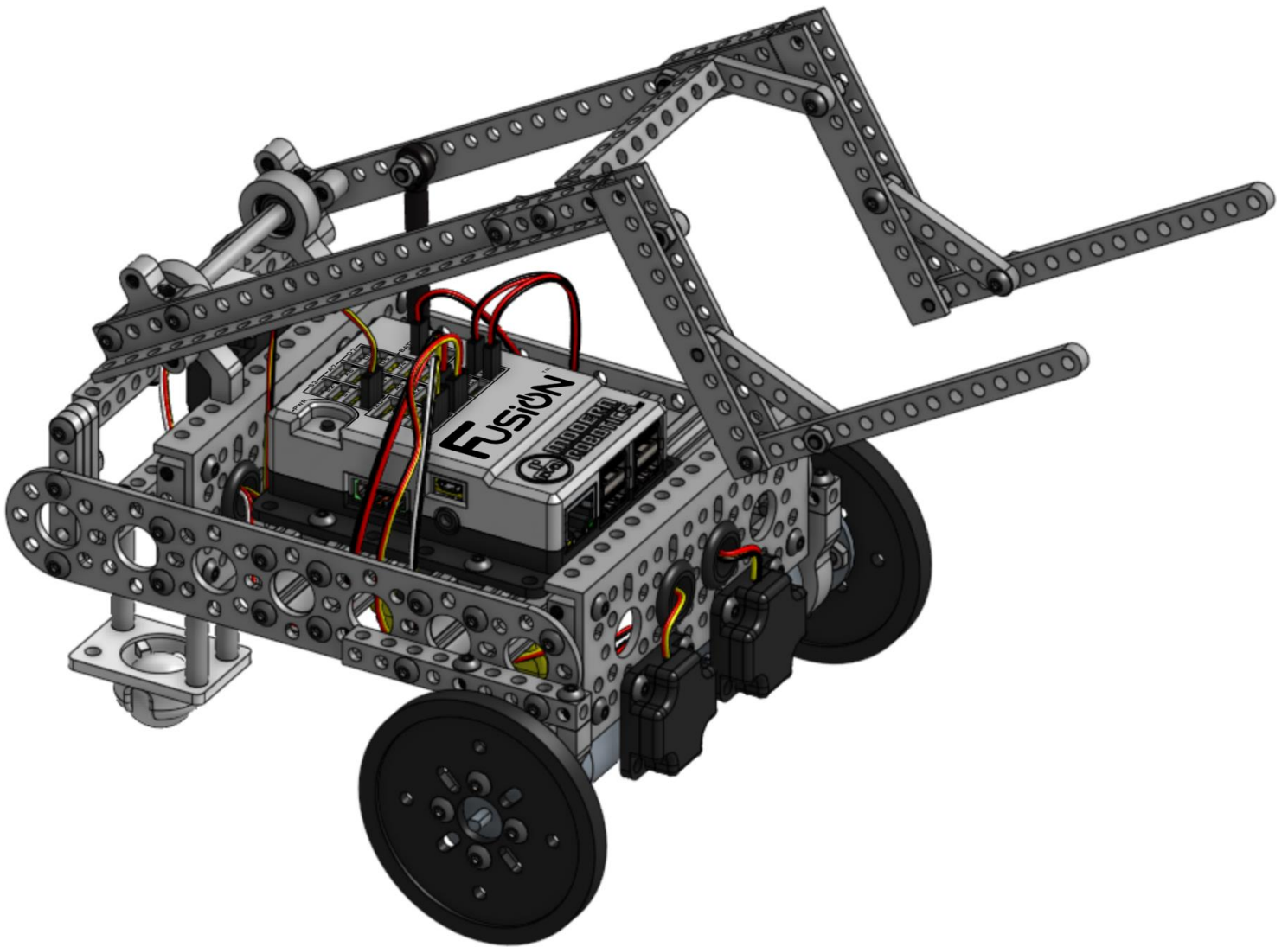
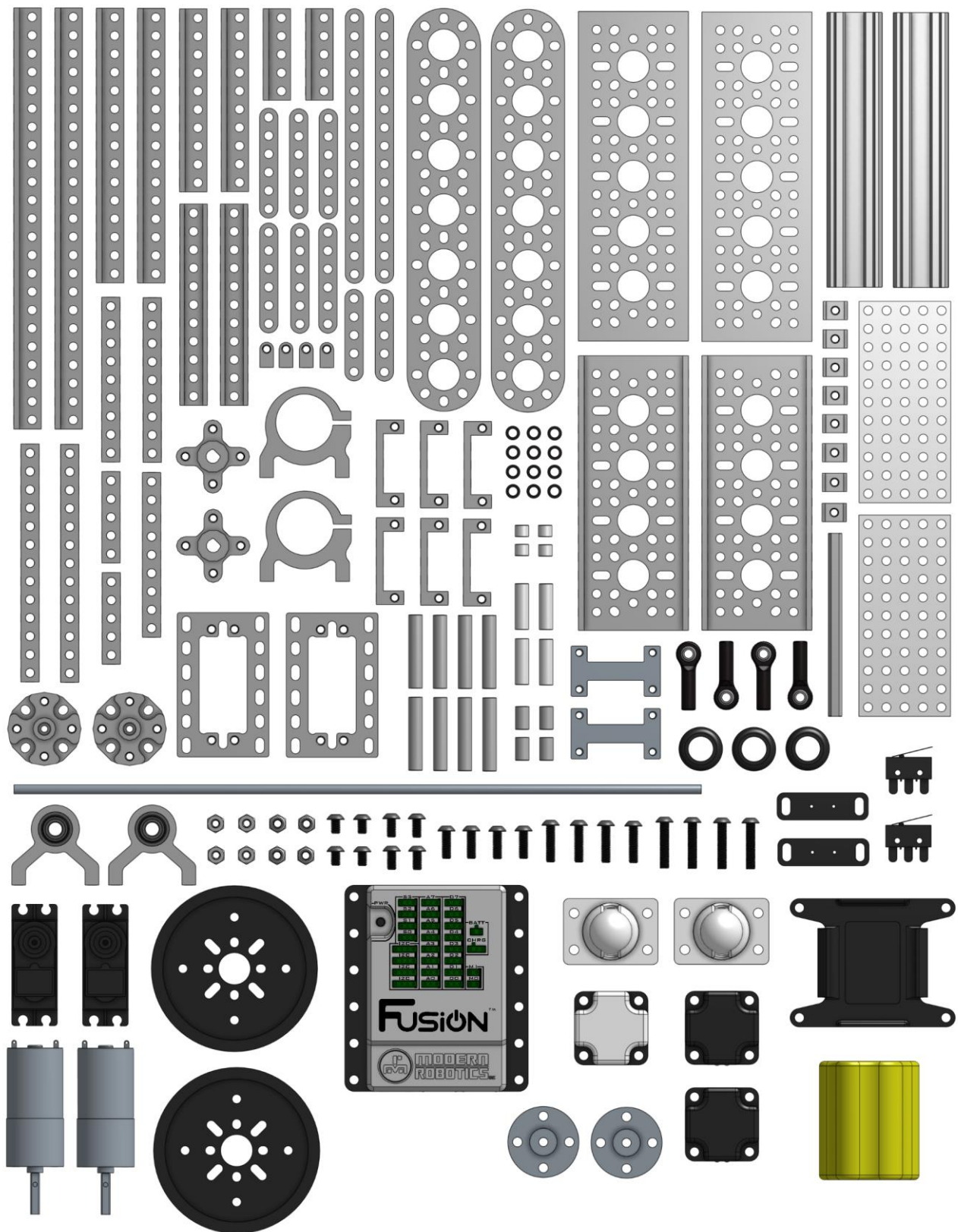


Forklift Bot Building Instructions



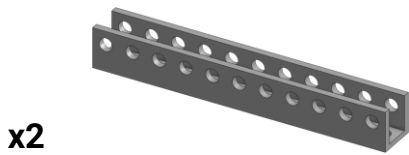
Version 1.0.0
Modern Robotics, Inc.



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Specifications subject to change without notice.

Bill of Materials



x2
1101-0011-0088
11 Hole, 88mm U-Beam



x3
1106-0009-0072
9 Hole, 72mm Square Beam



x2
1500-0001-0004
4mm ID x 6mm OD x 1mm
Thick Wall Plastic Spacer



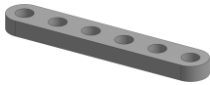
x2
1102-0005-0040
5 Hole, 40mm Flat Beam



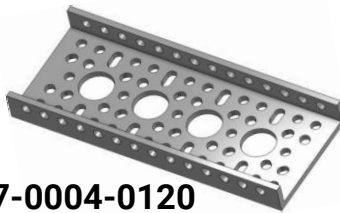
x2
1106-0013-0104
13 Hole, 104mm Square Beam



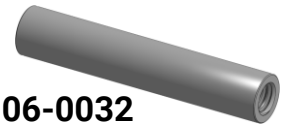
x2
1501-0006-0010
10mm L x 6mm D
4mm Tapped Aluminum
Standoff



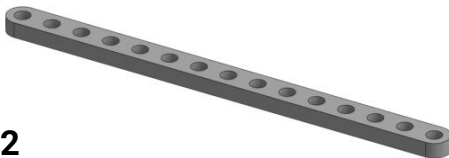
x6
1102-0006-0048
6 Hole, 48mm Flat Beam



x2
1107-0004-0120
4 Hole, 120mm Low U-Channel



x6
1501-0006-0032
32mm L x 6mm D
4mm Tapped Aluminum
Standoff



x2
1102-0015-0120
15 Hole, 120mm Flat Beam



x2
1109-0024-0120
120mm Standard Go-Rail



x2
1602-0032-0006
6mm Bore
Bottom Tapped Pillow Block



x2
1103-0023-0184
23 Hole, 184mm L-Beam



x4
1205-0032-0002
Bridged Attachment Block



x1
1801-0040-0001
Servo Plate (Standard Servo)



x2
1105-0007-0176
7 Hole, 176mm Pattern Plate



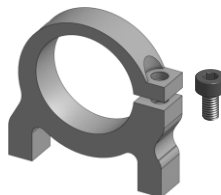
x2
1303-0024-0006
6mm D-Bore Face Mount Set
Screw



x1
1908-0024-0032
Standard Round Servo Horn
(24T)



x2
1106-0005-0040
5 Hole, 40mm Square Beam



x2
1400-0032-0025
25mm Bore Clamp Mount



x1
2101-0006-0080
6mm x 80mm D-Shaft

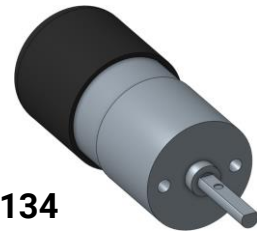
Bill of Materials



x31
2801-0004-0008
M4 x 0.7 Hex Nut



x1
2808-0004-0300
300mm M4 Threaded Rod



x2
14-0134
6V DC Motor



x22
2802-0004-0006
M4 x 6mm Screws



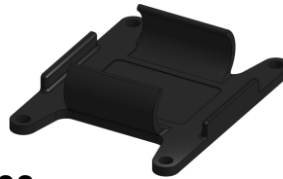
x2
2903-0004-0245
M4 Ball Linkages



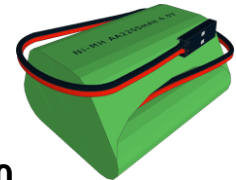
x1
Hitec HS-485HB
Servo



x34
2802-0004-0008
M4 x 8mm Screws



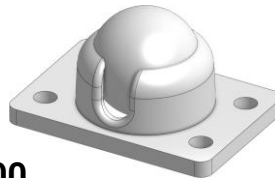
x1
45-0300
Battery Pack Mount



x1
45-1300
6V Battery Pack



x21
2802-0004-0012
M4 x 12mm Screws



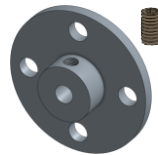
x2
45-2100
19mm Ball Caster



x1
45-2005
Integrating Gyro



x22
2802-0004-0016
M4 x 16mm Screws



x2
60-0026
4-Hole Wheel Hub



x2
45-2006
Optical Distance Sensor



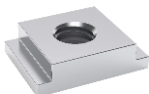
x7
2802-0004-0020
M4x 20mm Screws



x2
3607-0014-0072
72mm Economy Wheels



x1
52-2022
Fusion Controller

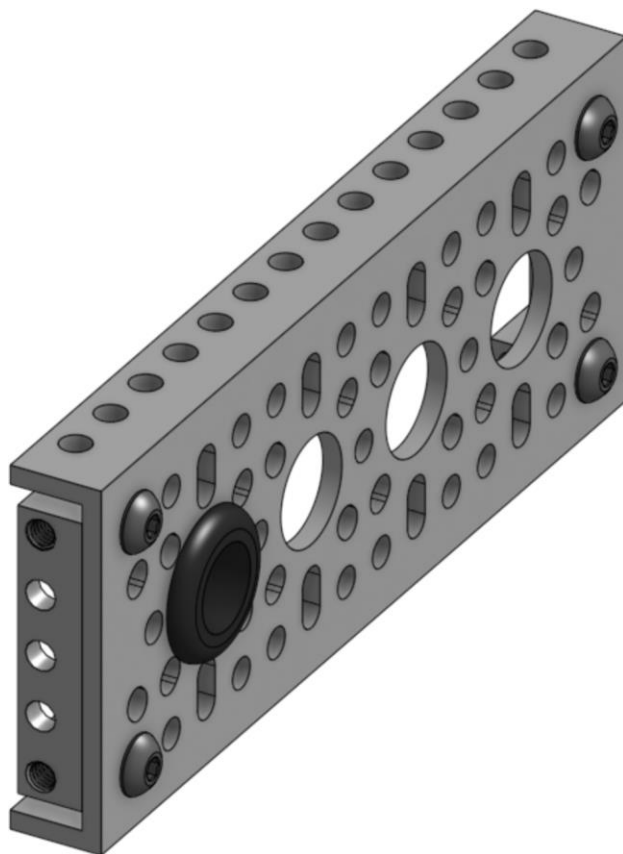
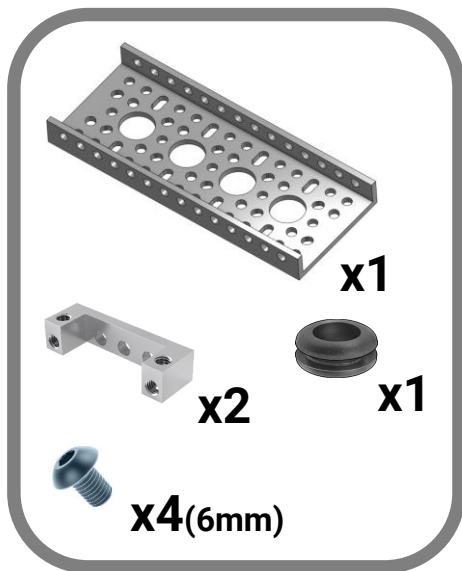


x8
2805-0004-0008
M4, 1 Hole Slide Nut

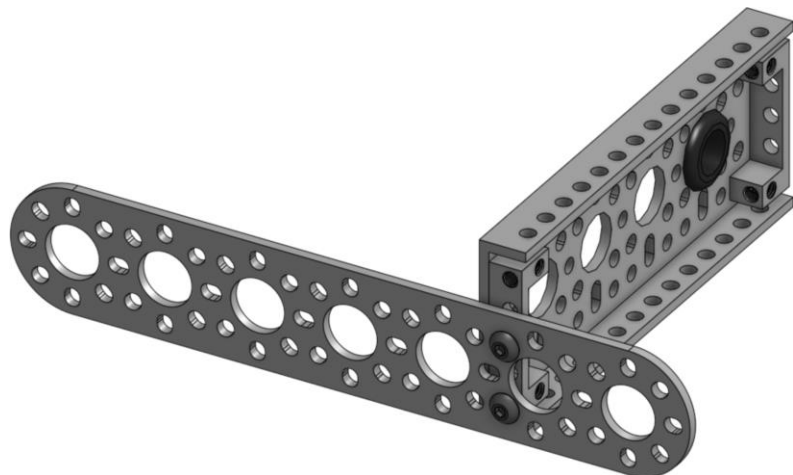
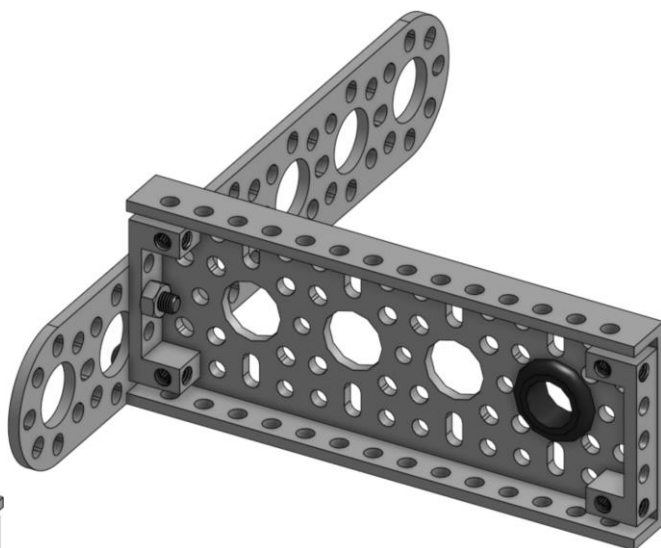
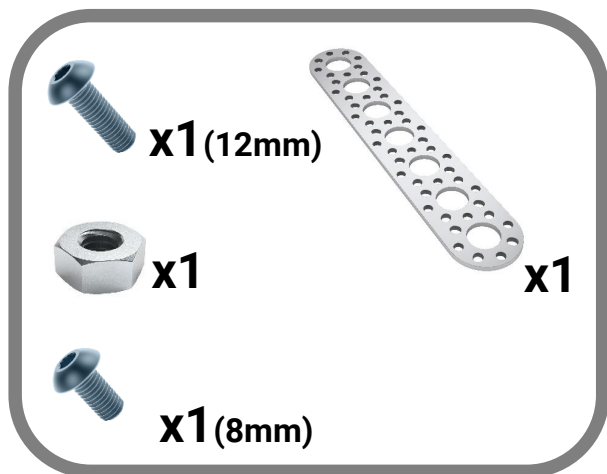


x3
45-1005
Push-In Grommet

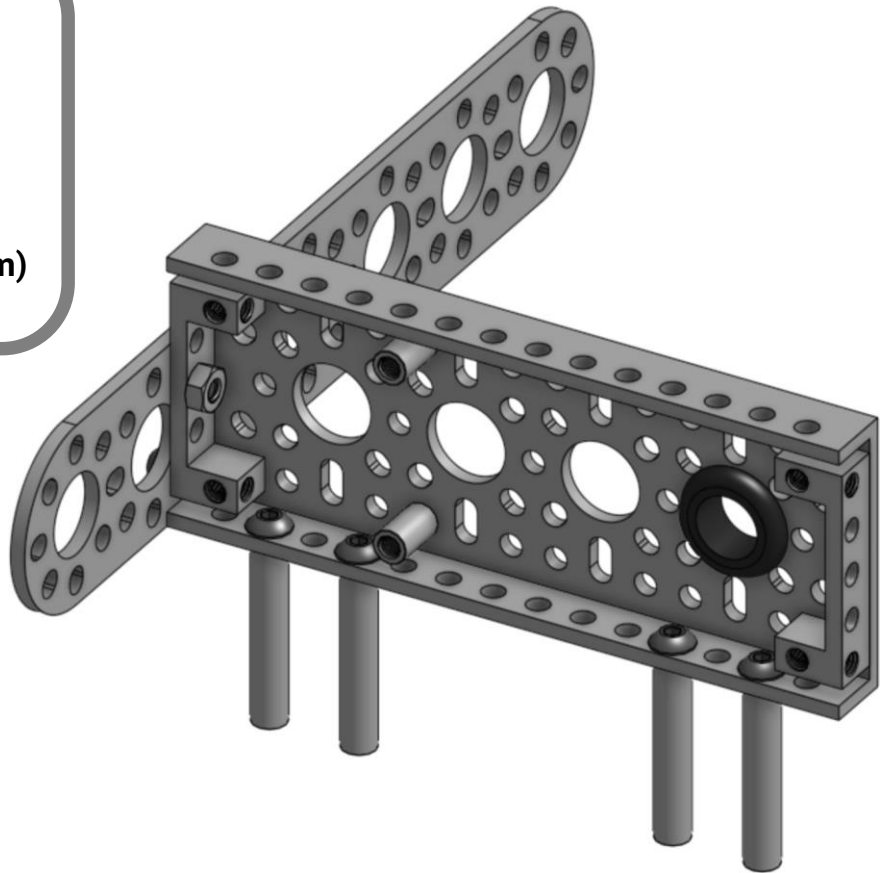
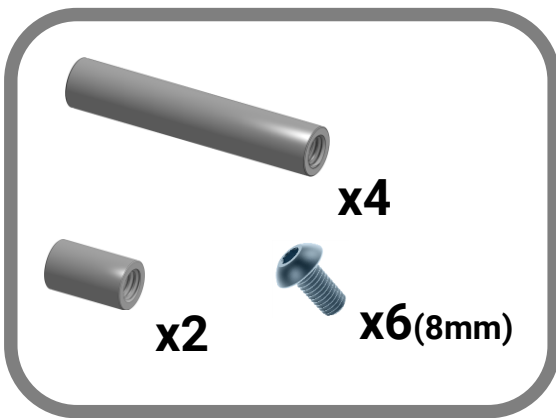
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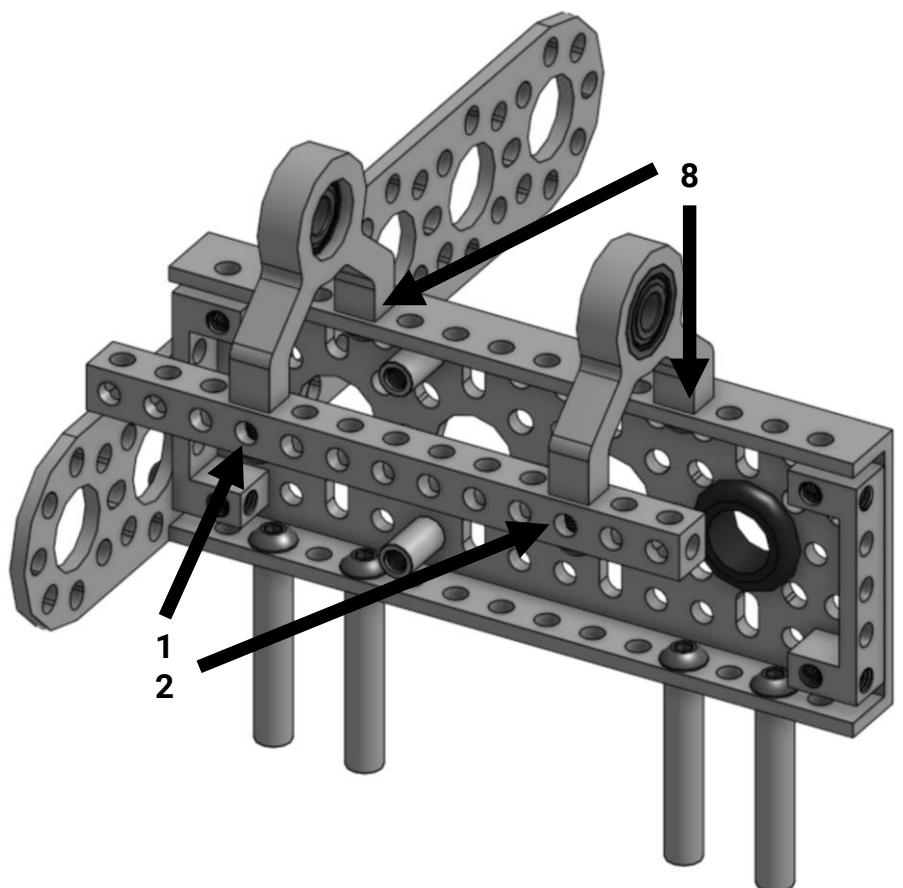
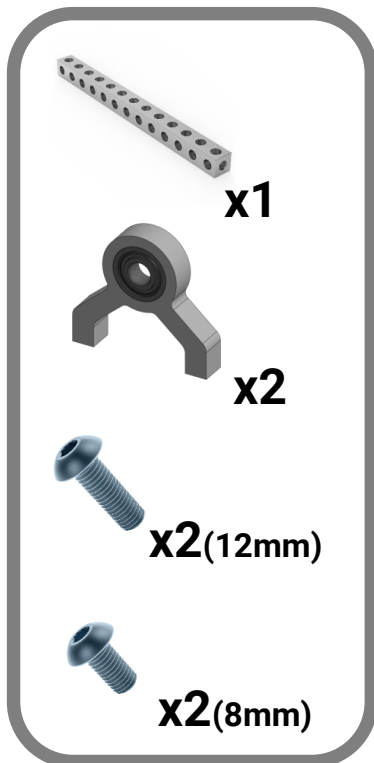
2



3



4



5



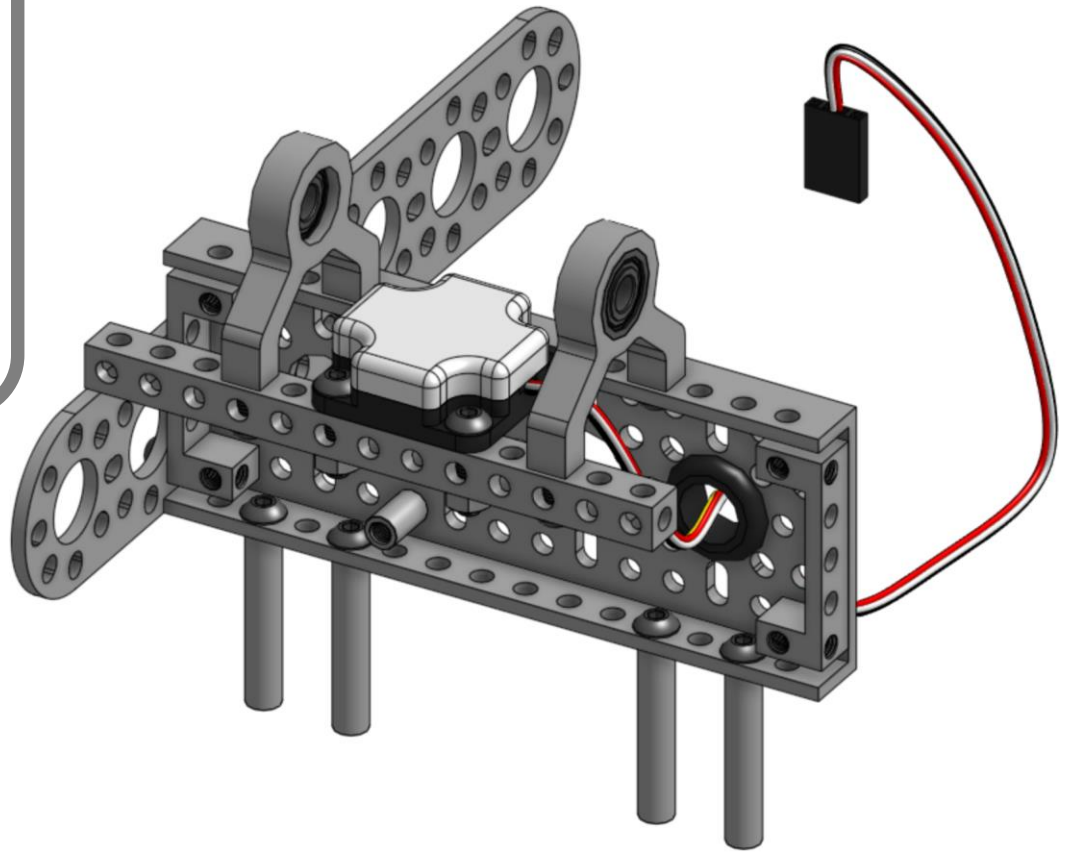
x1



x2(16mm)



x1



6



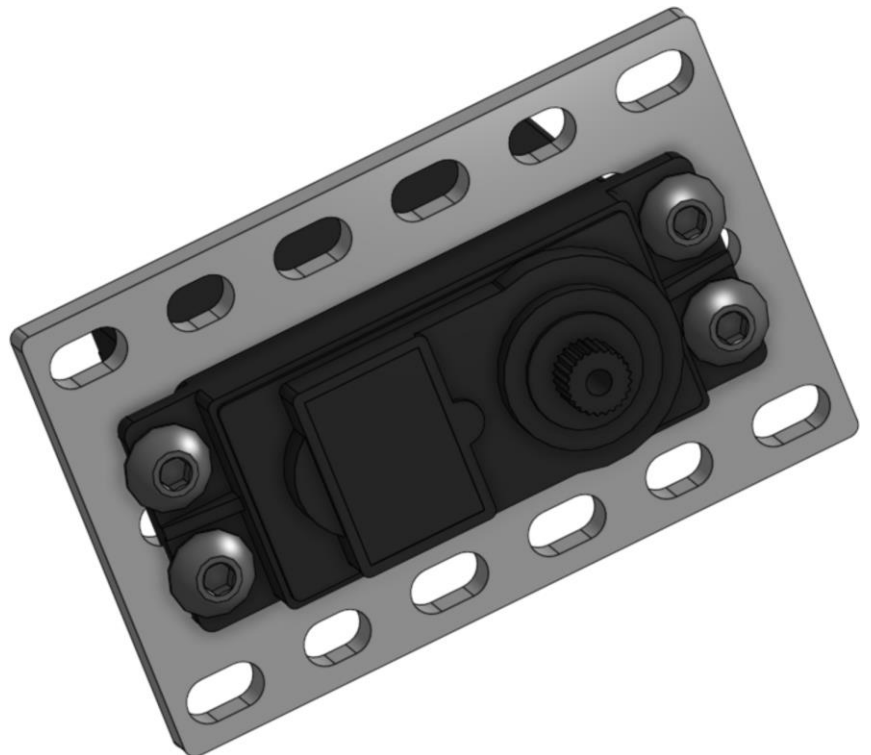
x1



x1



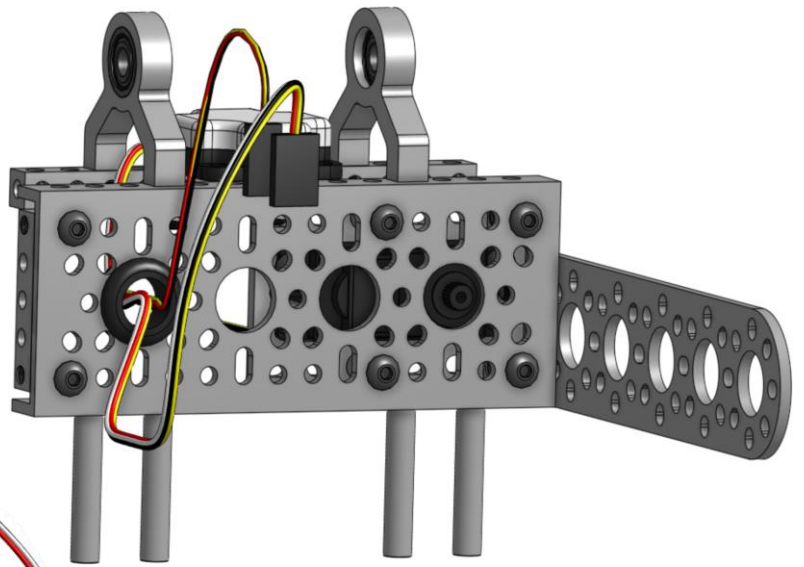
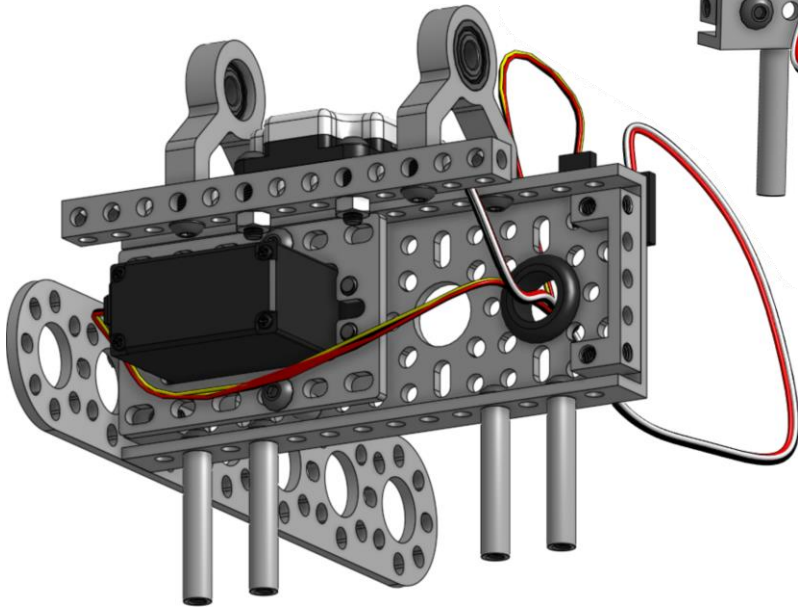
x4(6mm)



7



x2(6mm)



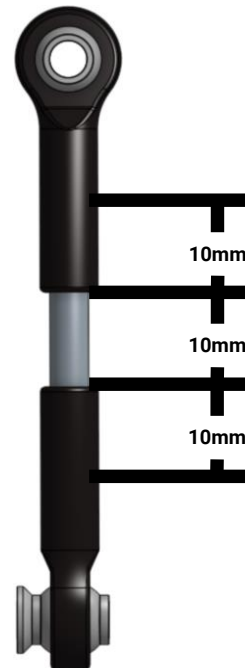
8



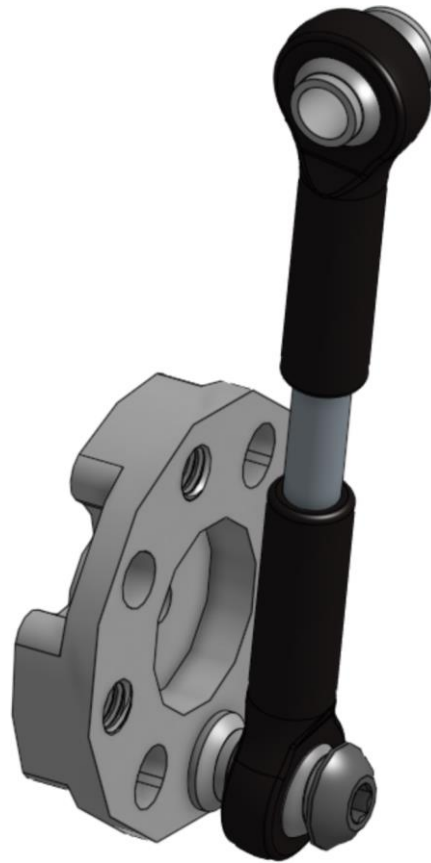
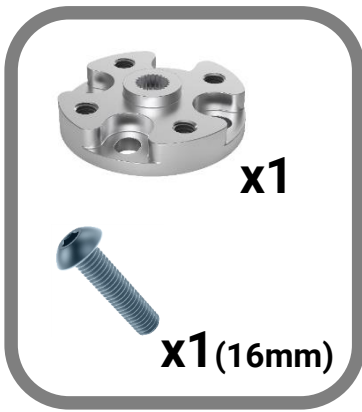
x2



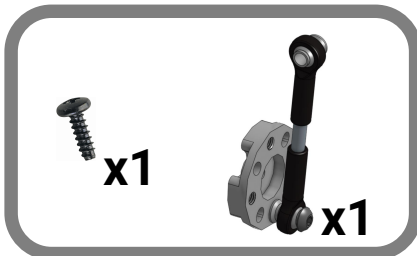
x1 Cut to 30mm



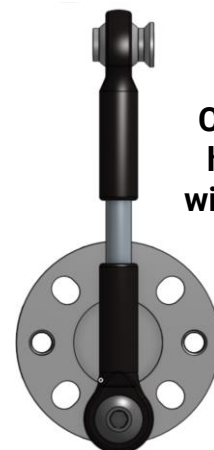
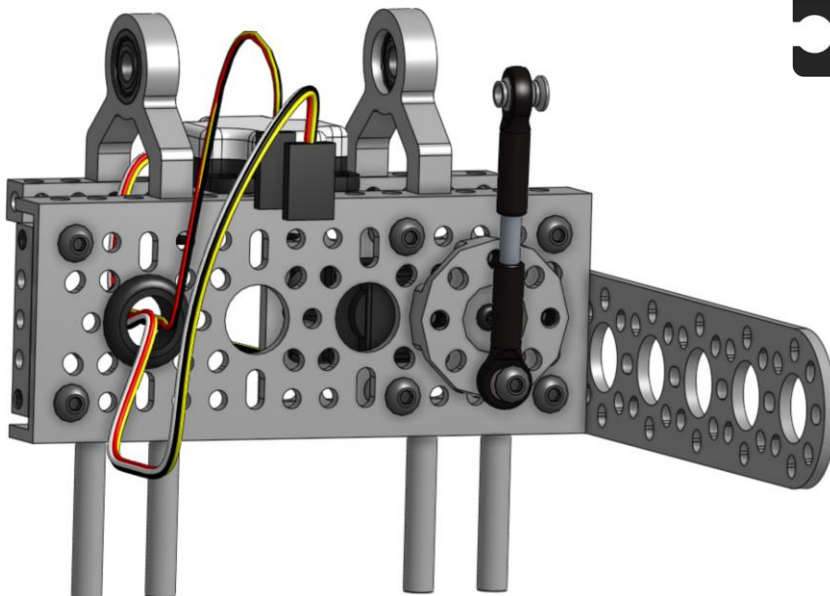
9



10

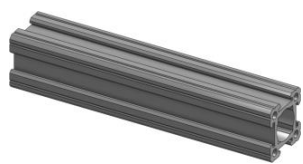


Gently rotate your servo all the way clockwise before completing this step



Connect the servo horn to the servo with the ball linkage at the bottom

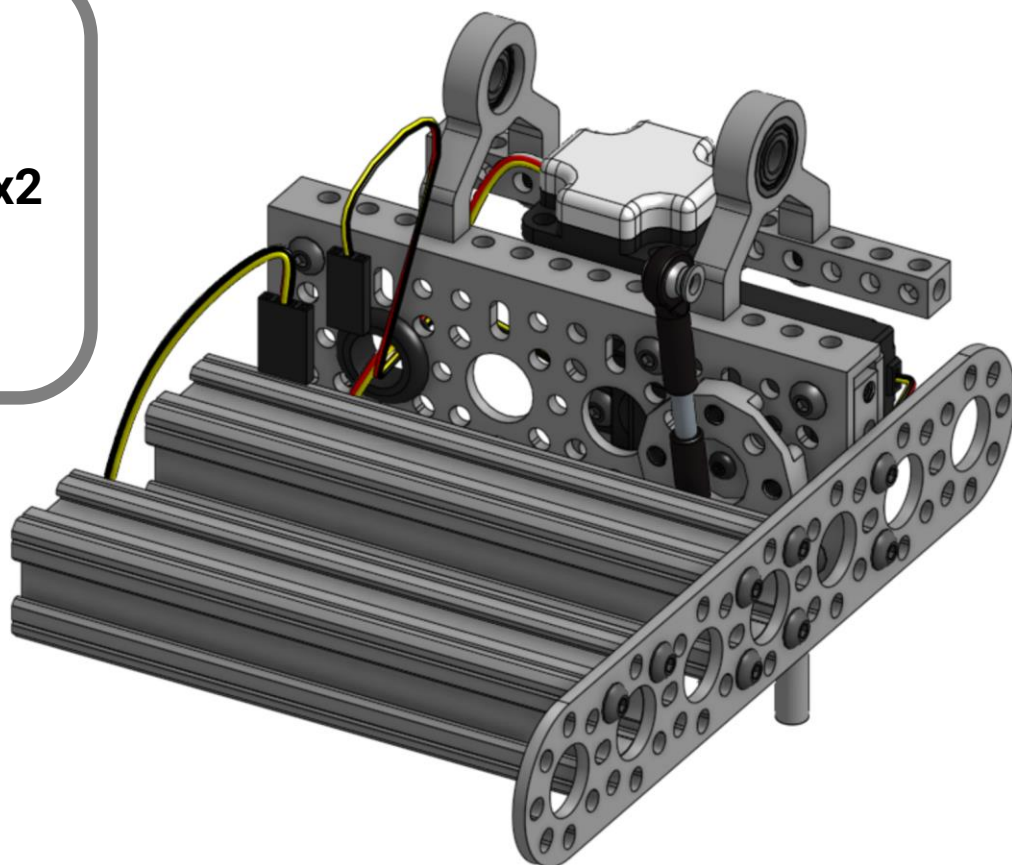
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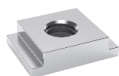
x2



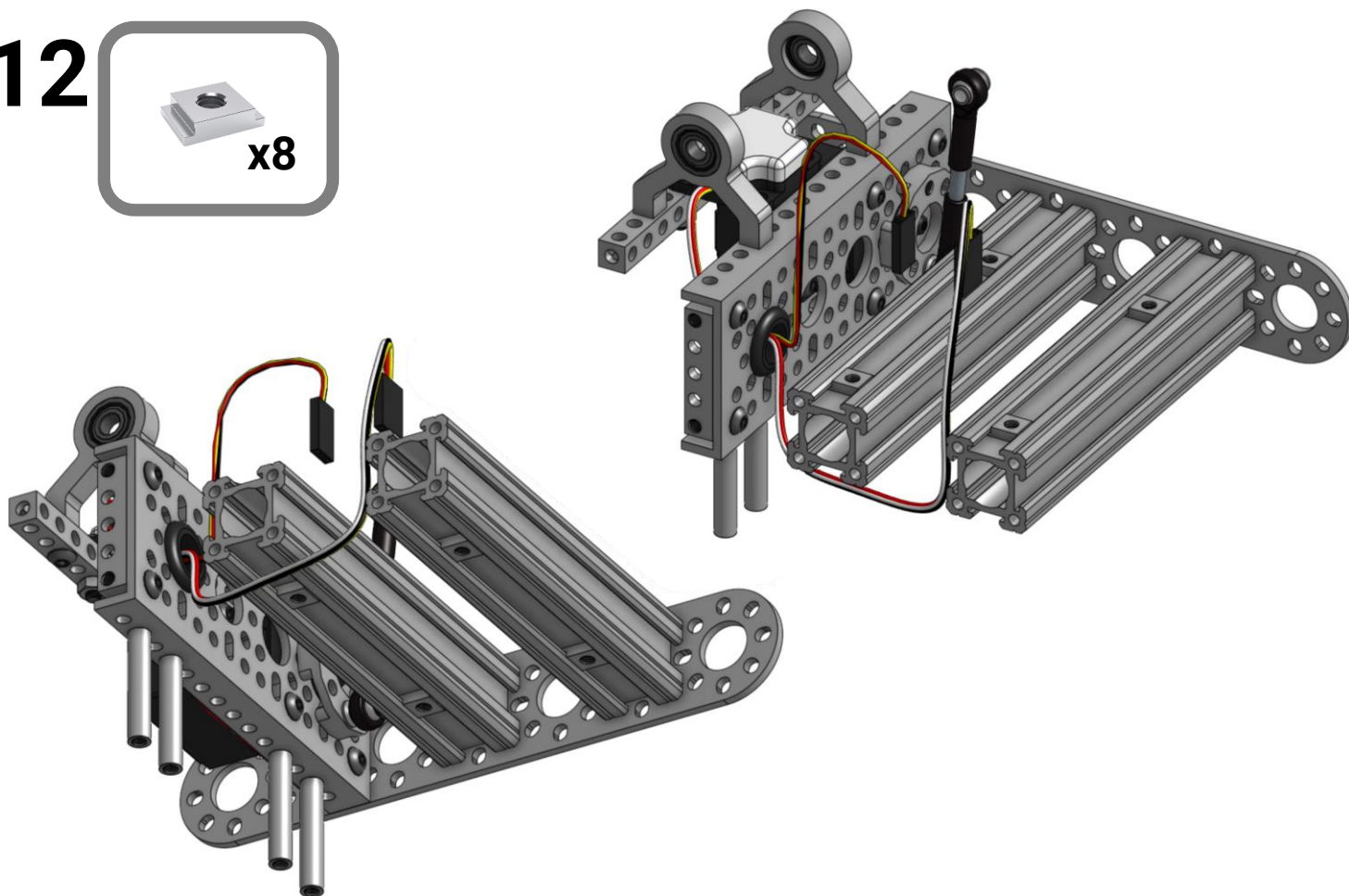
x6(8mm)



12



x8



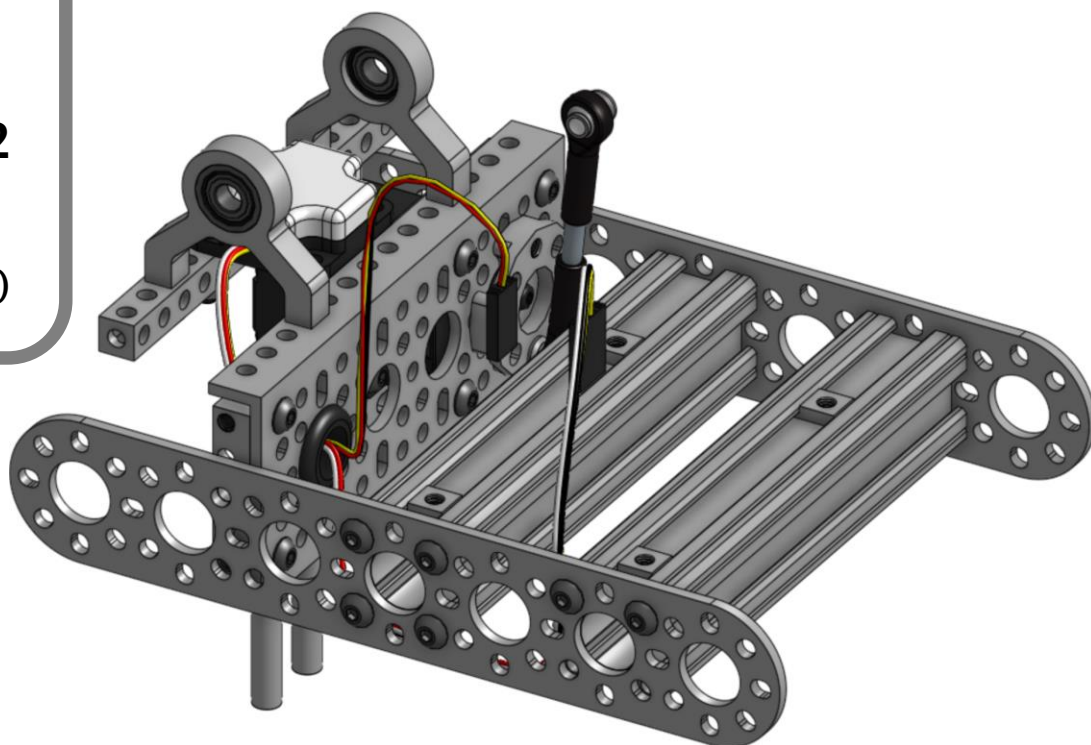
13



x2



x6(8mm)



14



x1(12mm)

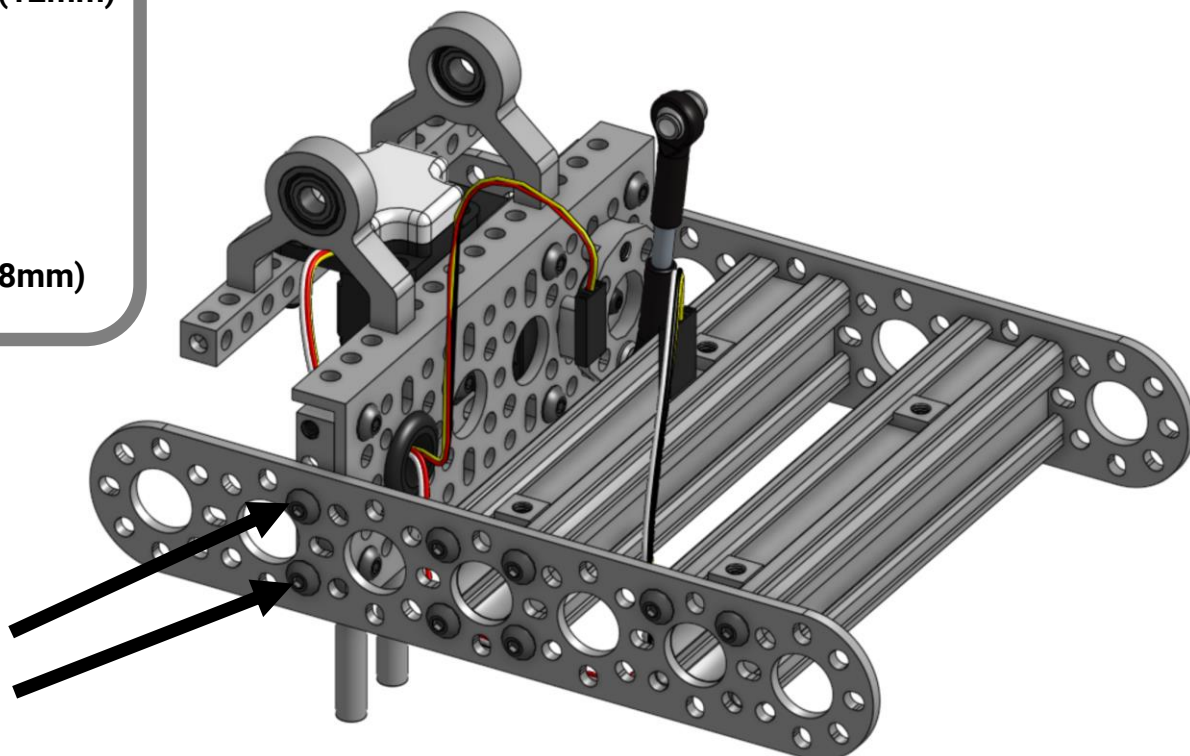


x1

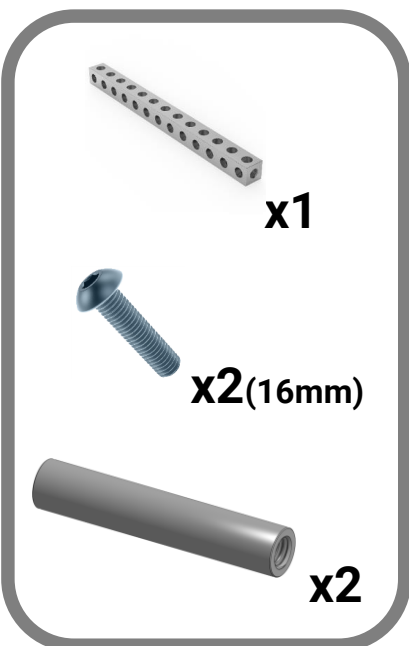


x1(8mm)

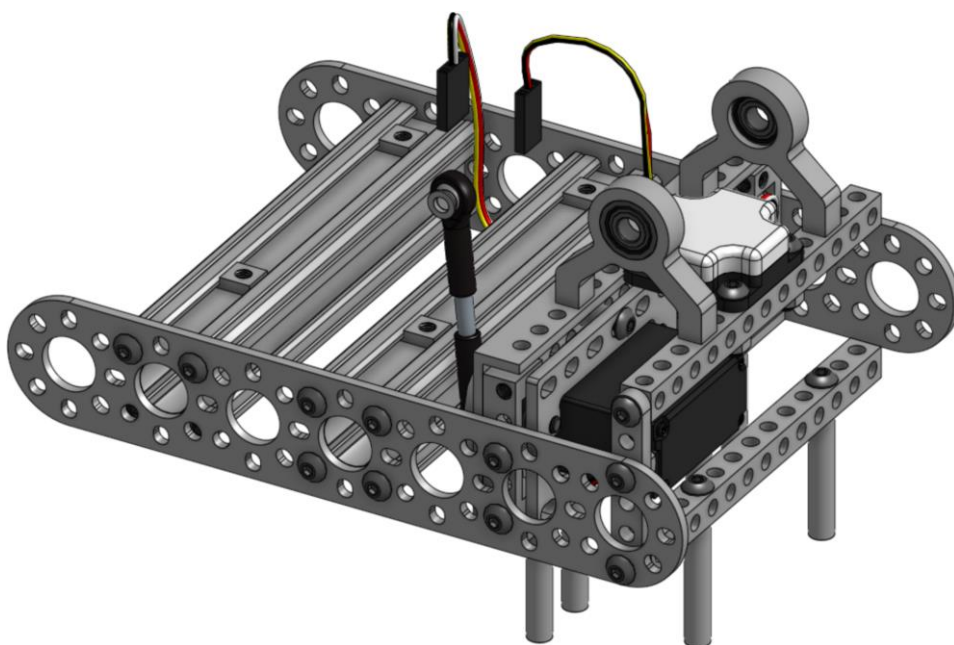
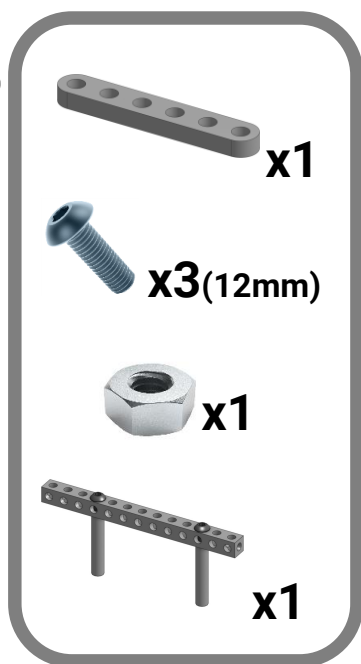
1
2
8



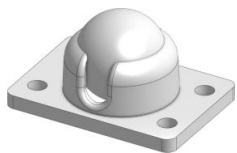
15



16



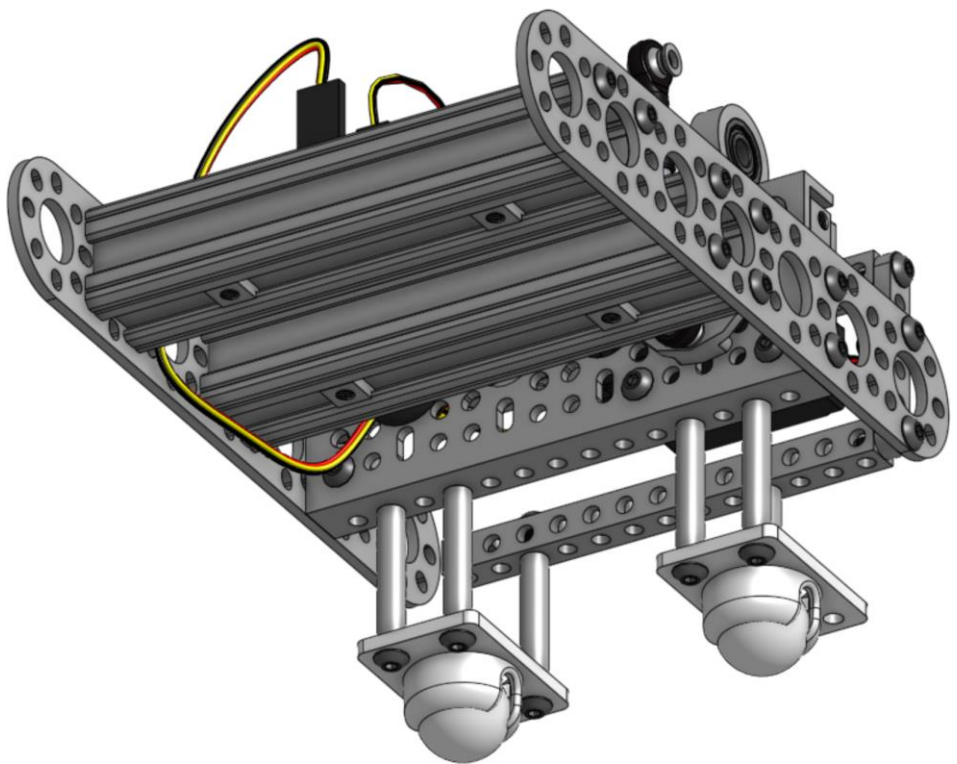
17



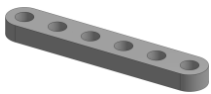
x2



x6(8mm)



18



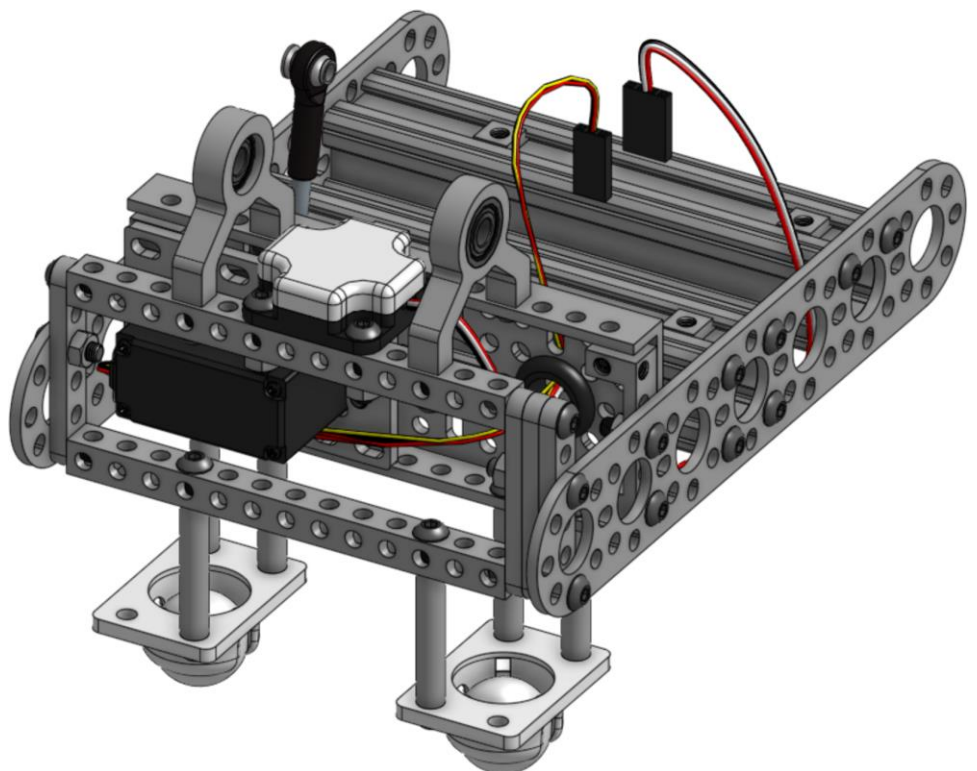
x3



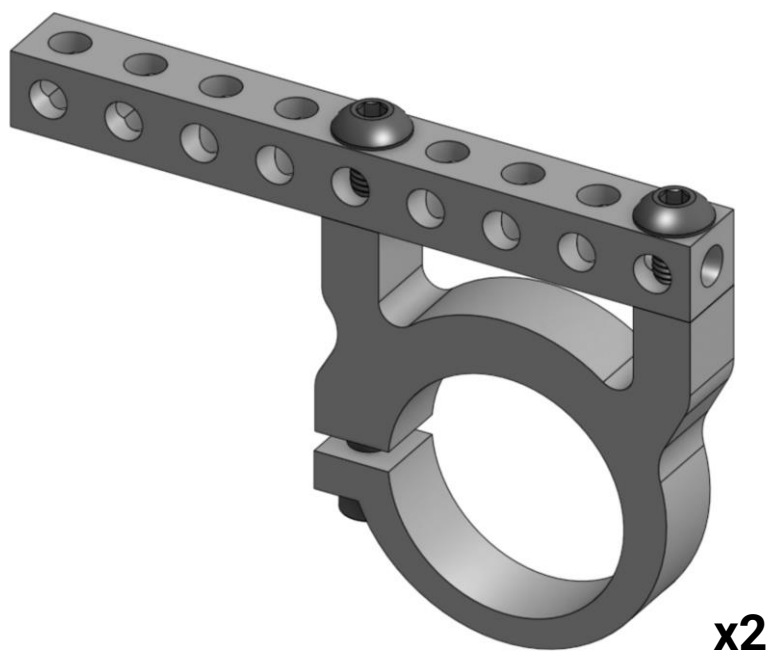
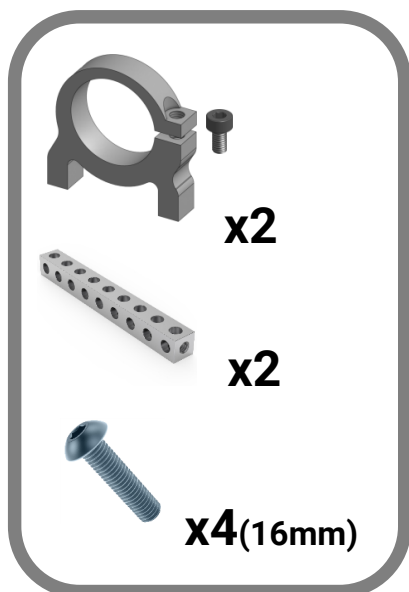
x3(20mm)



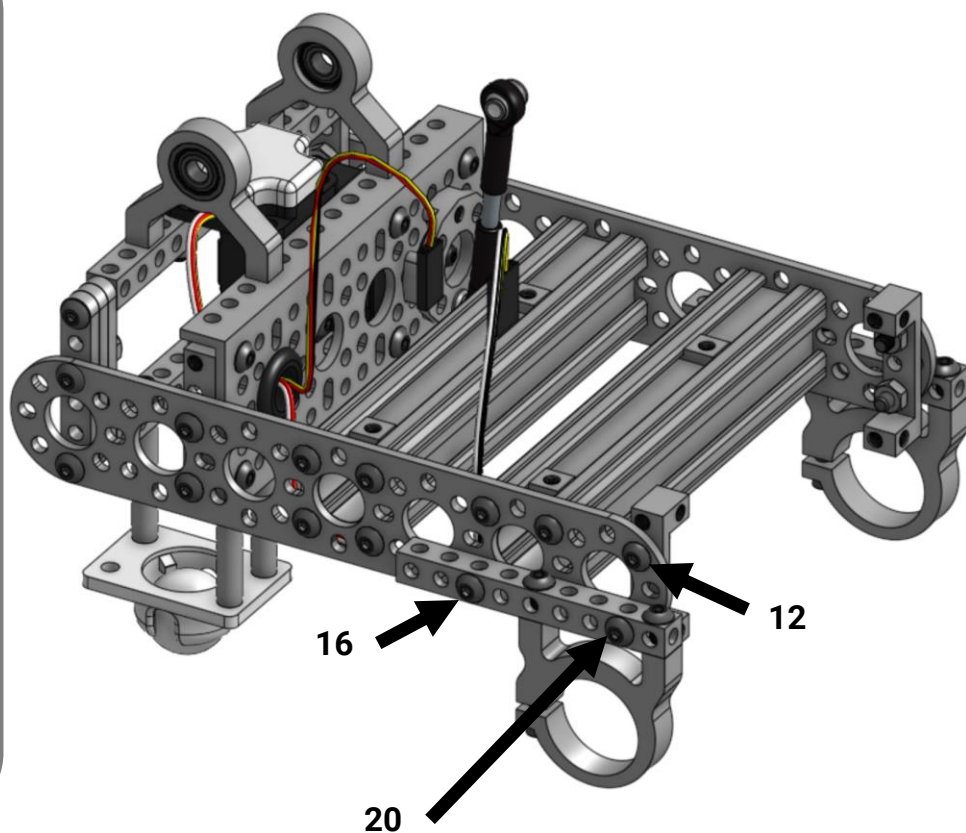
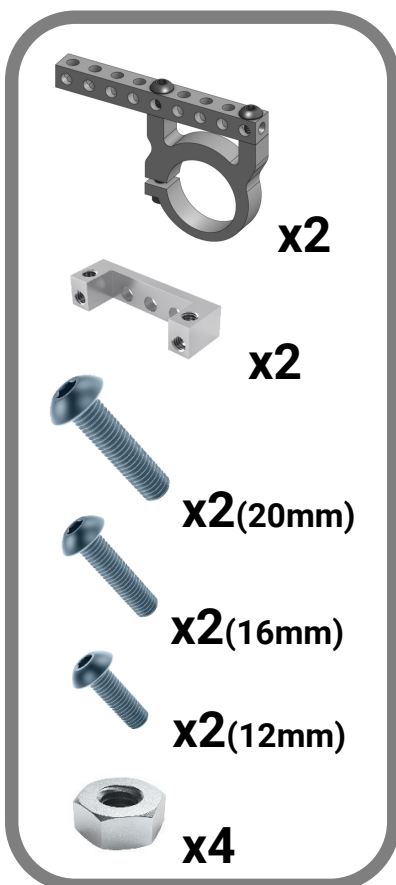
x1



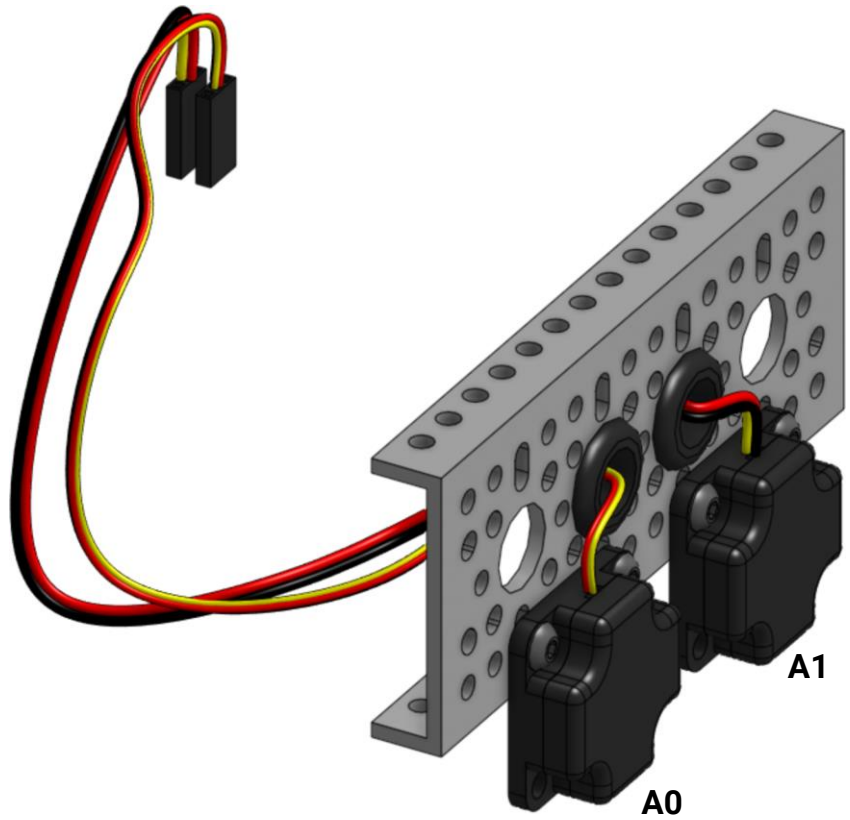
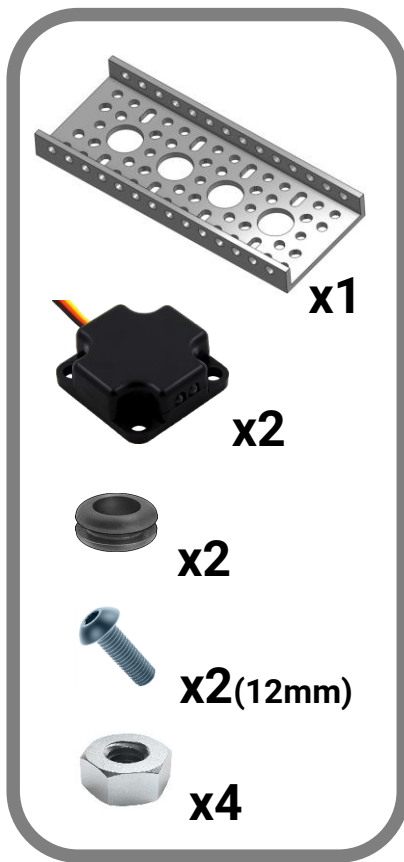
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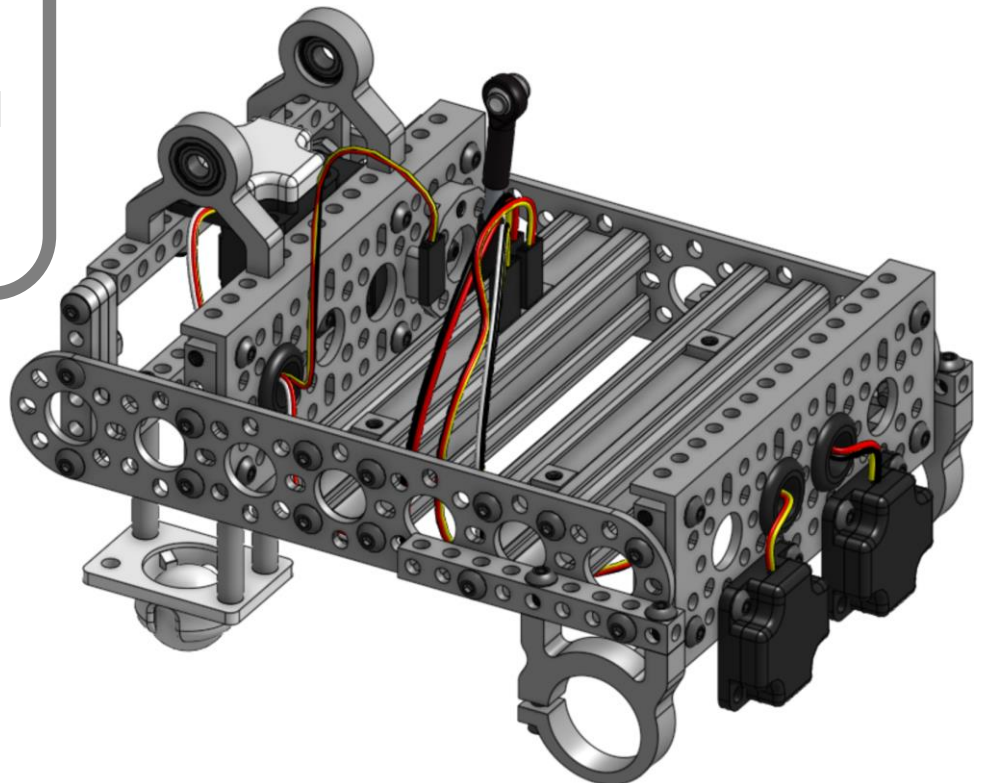
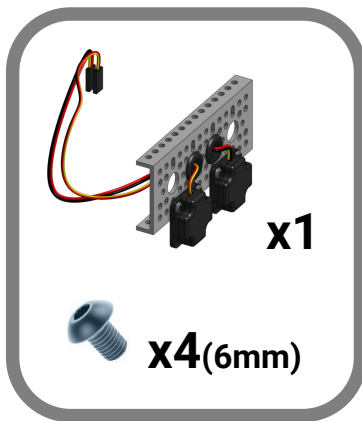
20



21



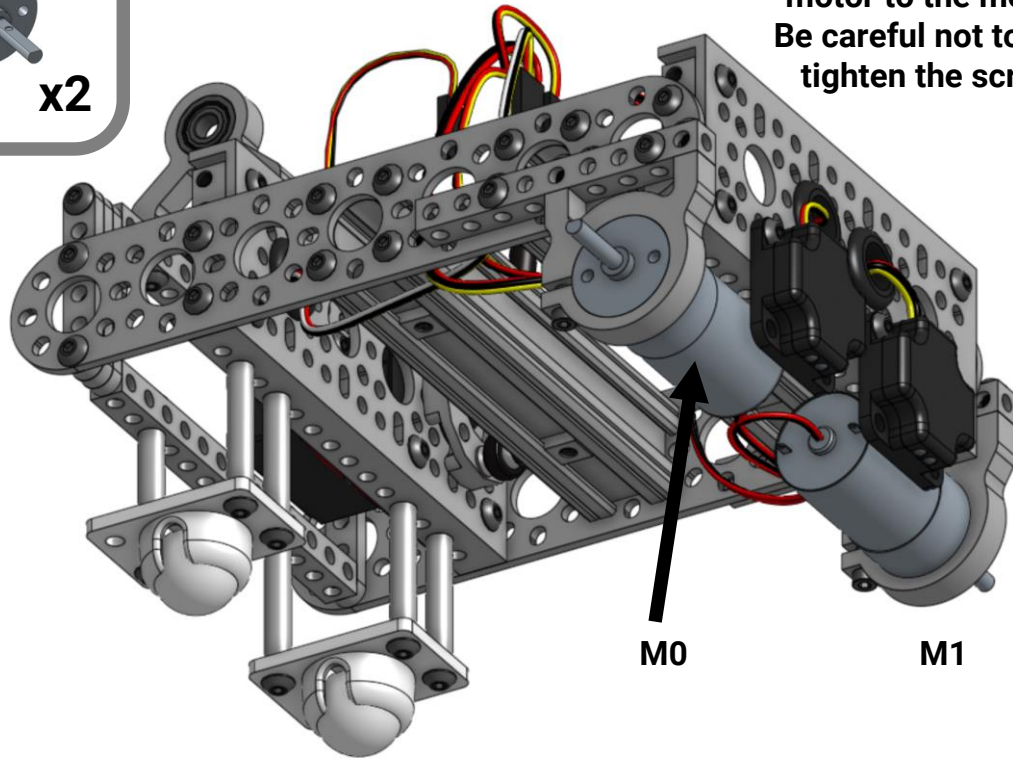
22



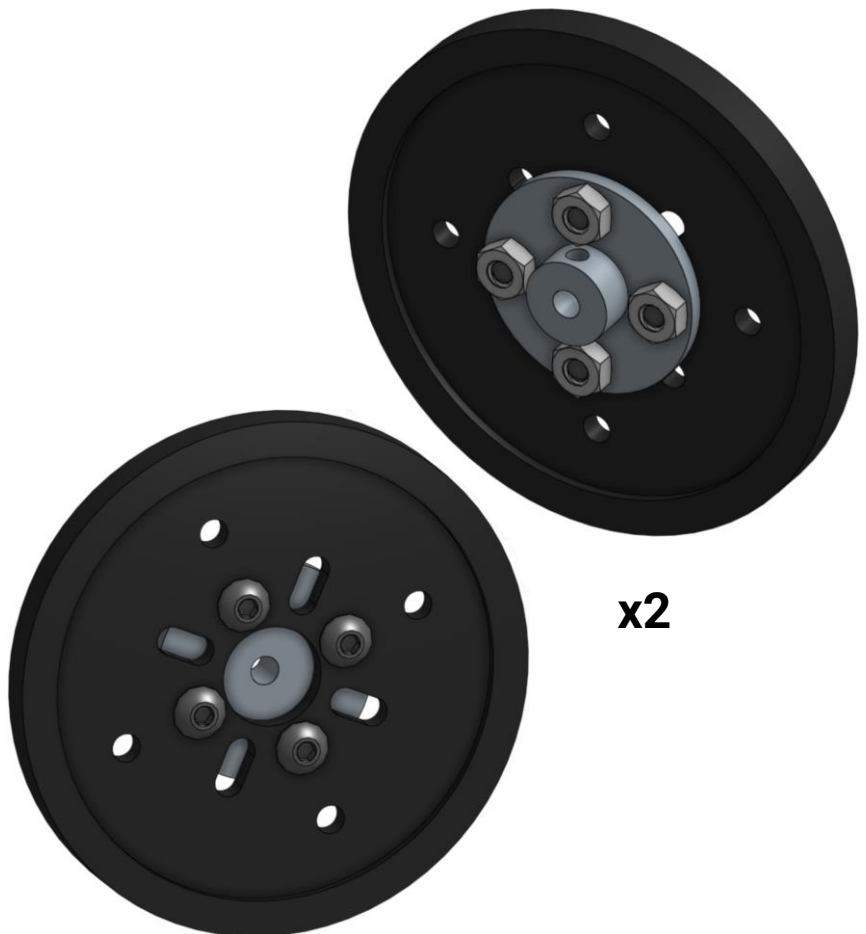
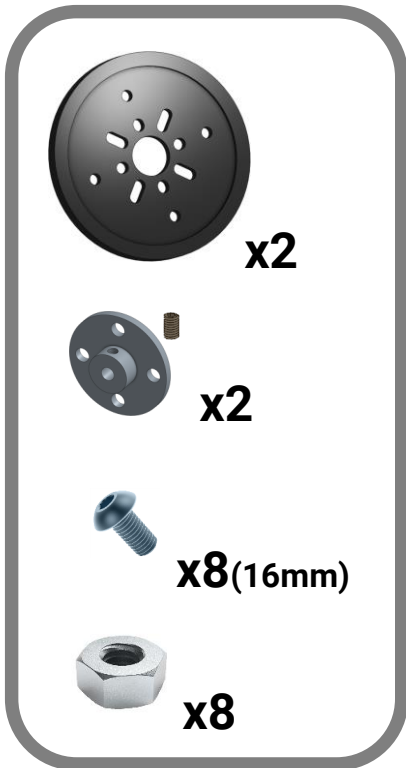
23



Use the screw from Step 18 to fasten the motor to the mount. Be careful not to over tighten the screw.



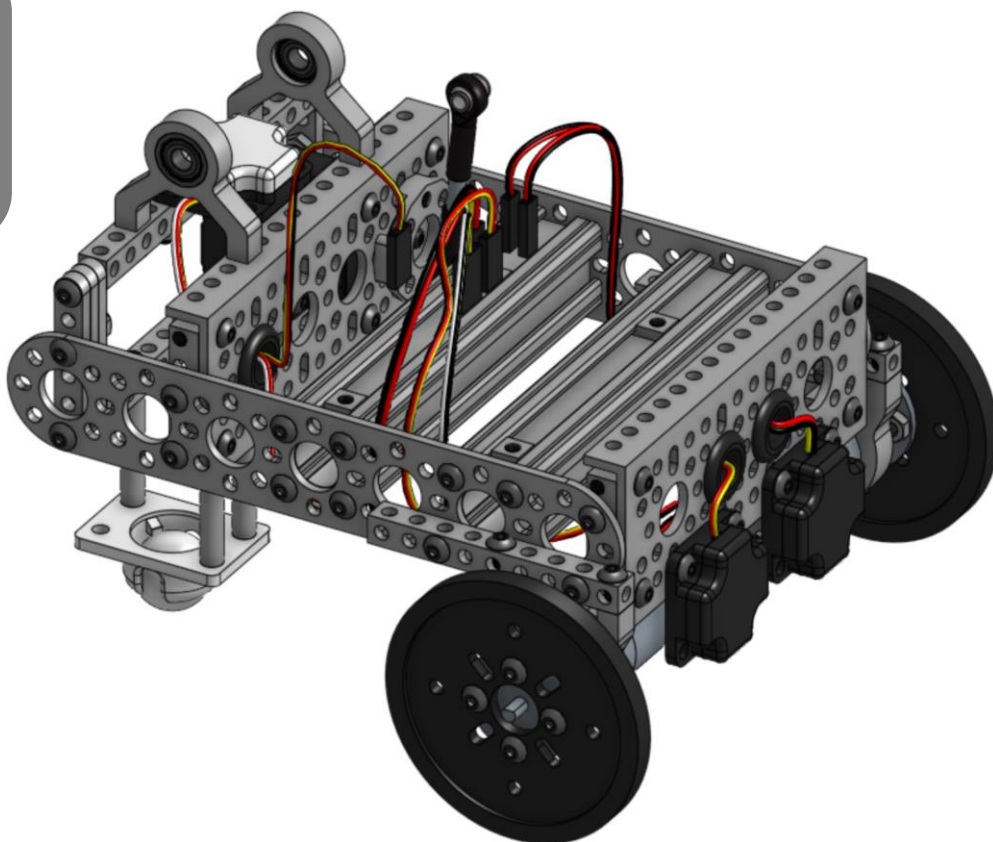
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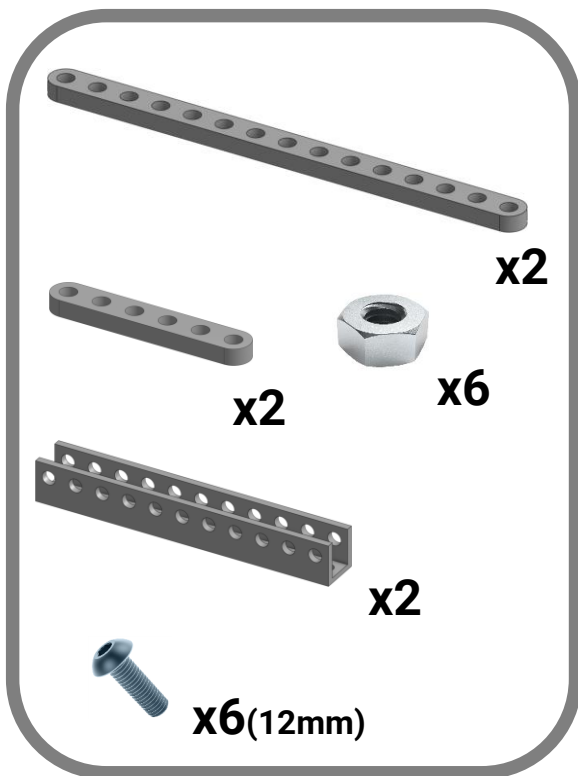
25



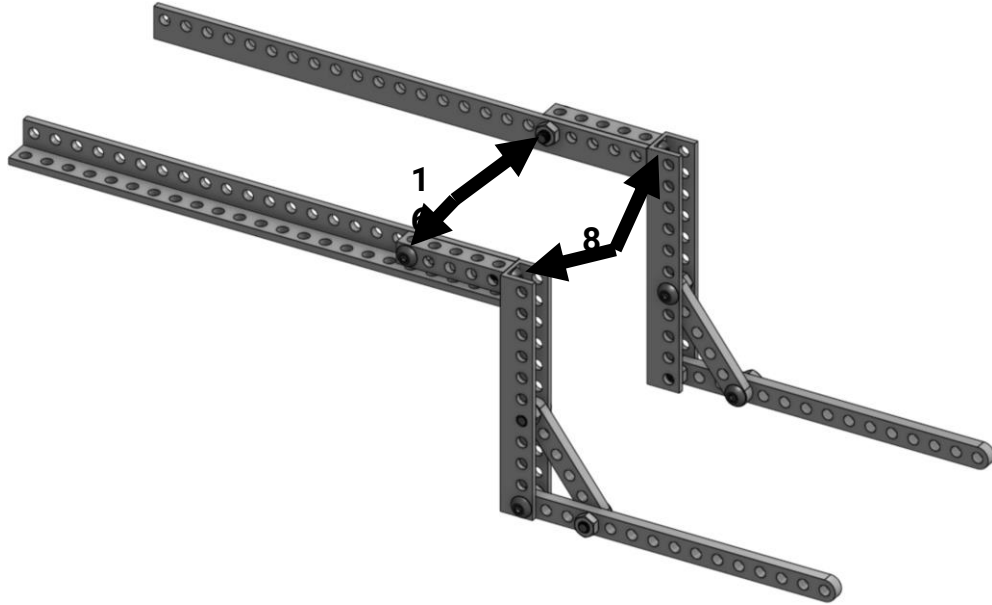
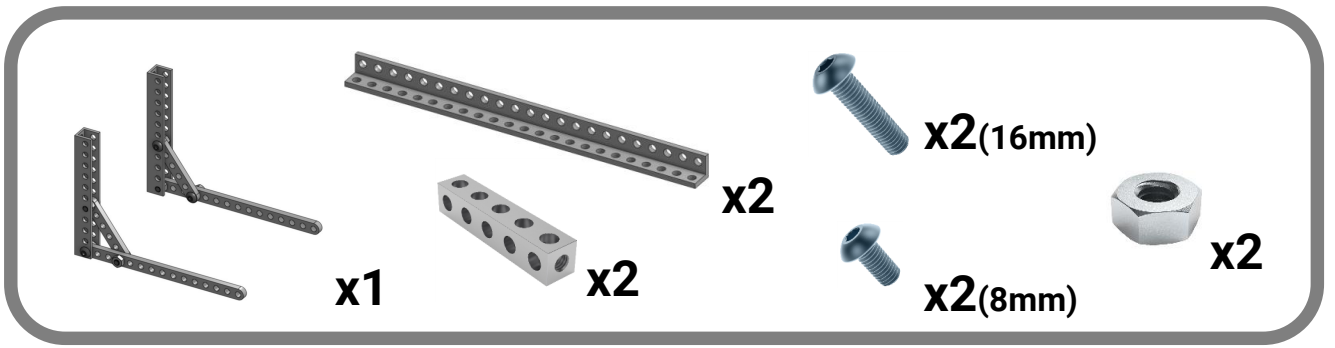
Tighten the
set screw
down on the
motor shaft.



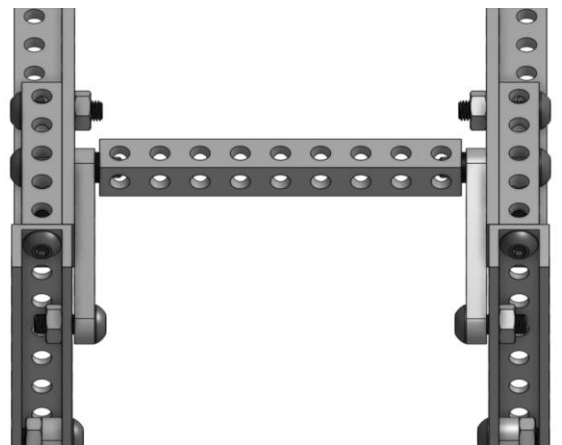
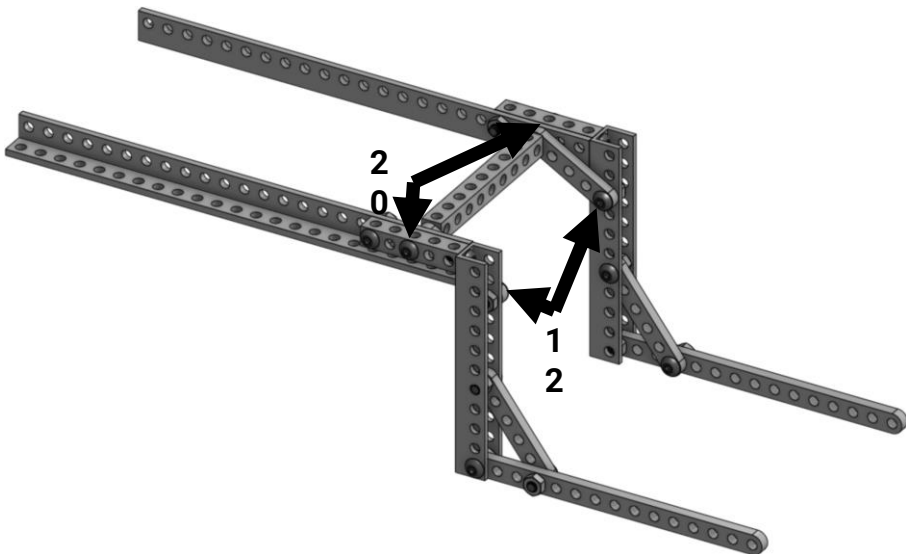
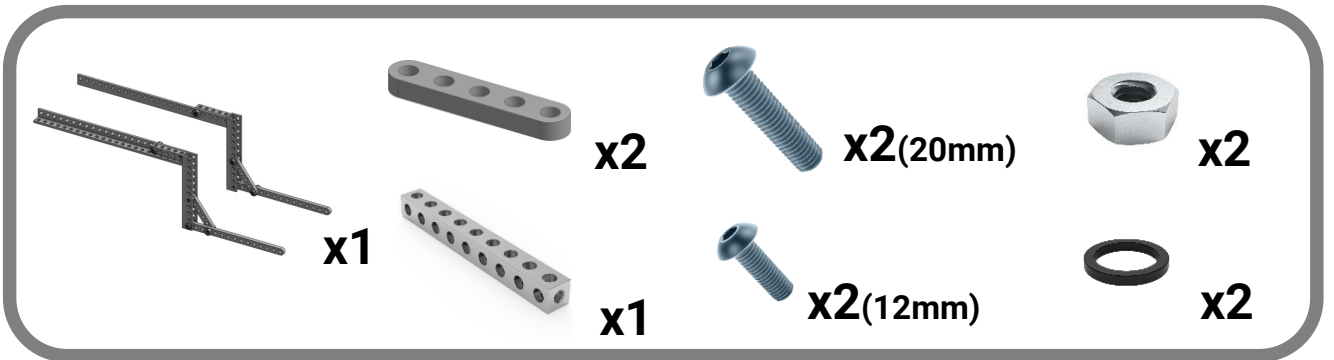
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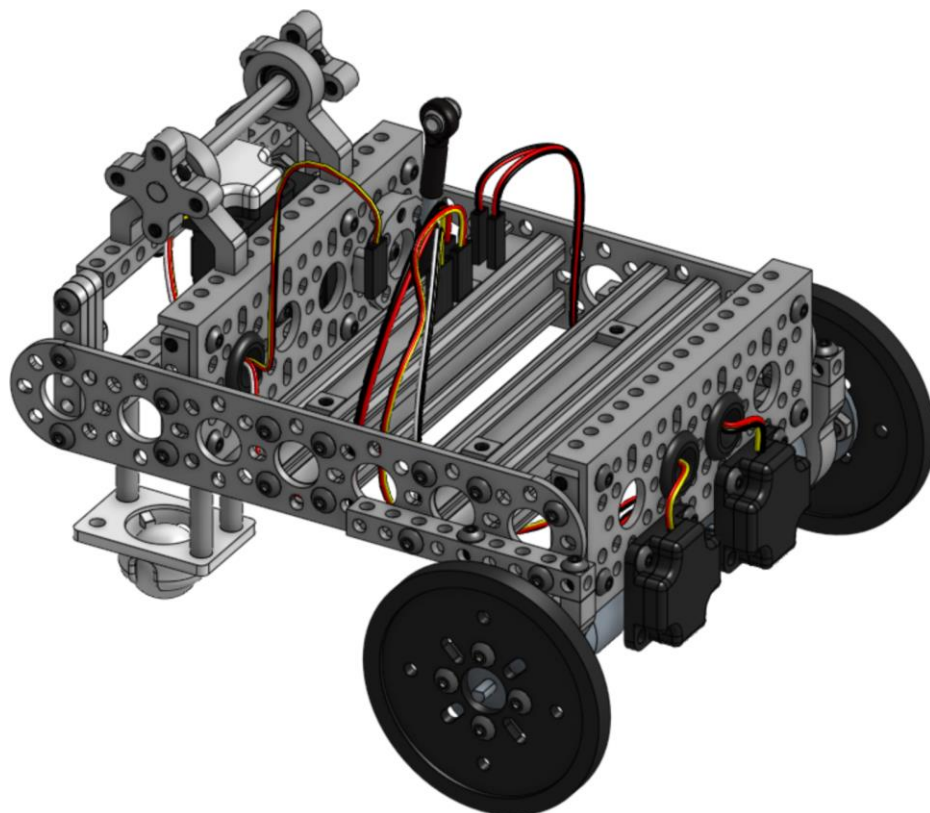
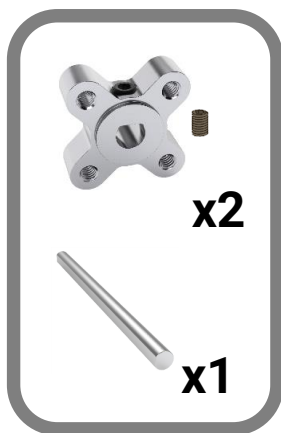
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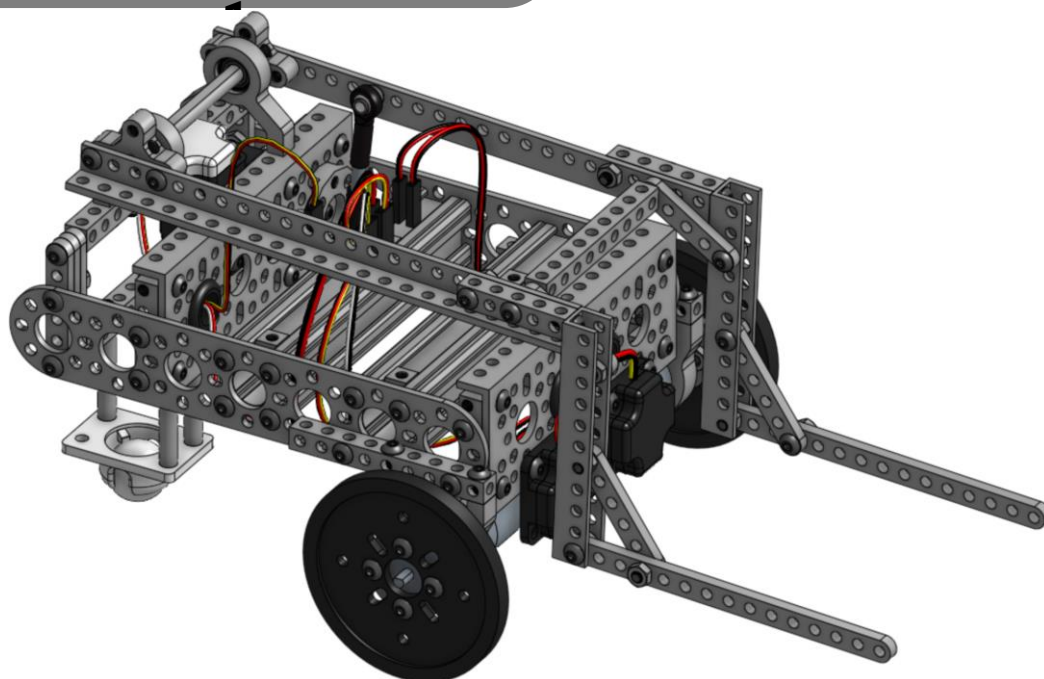
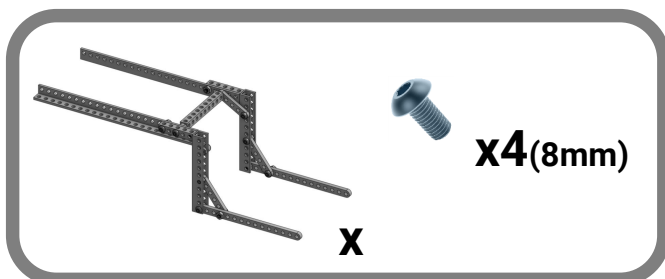
28



29



30



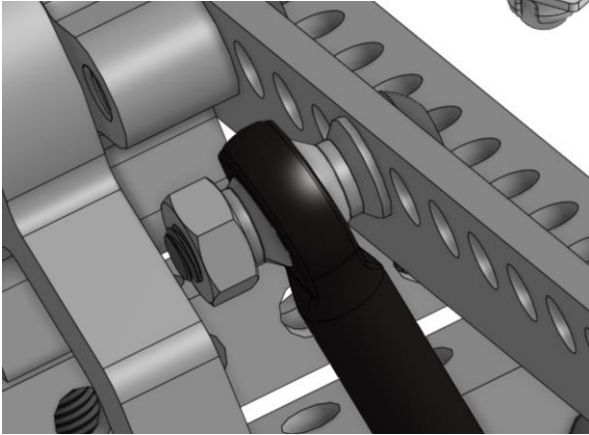
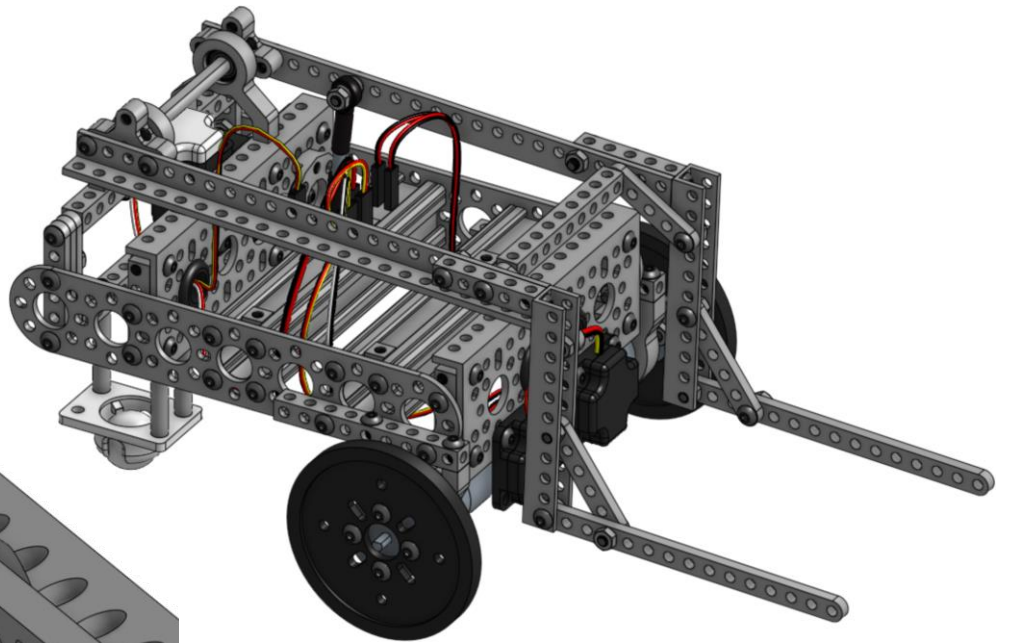
31



x1 (16mm)



x1



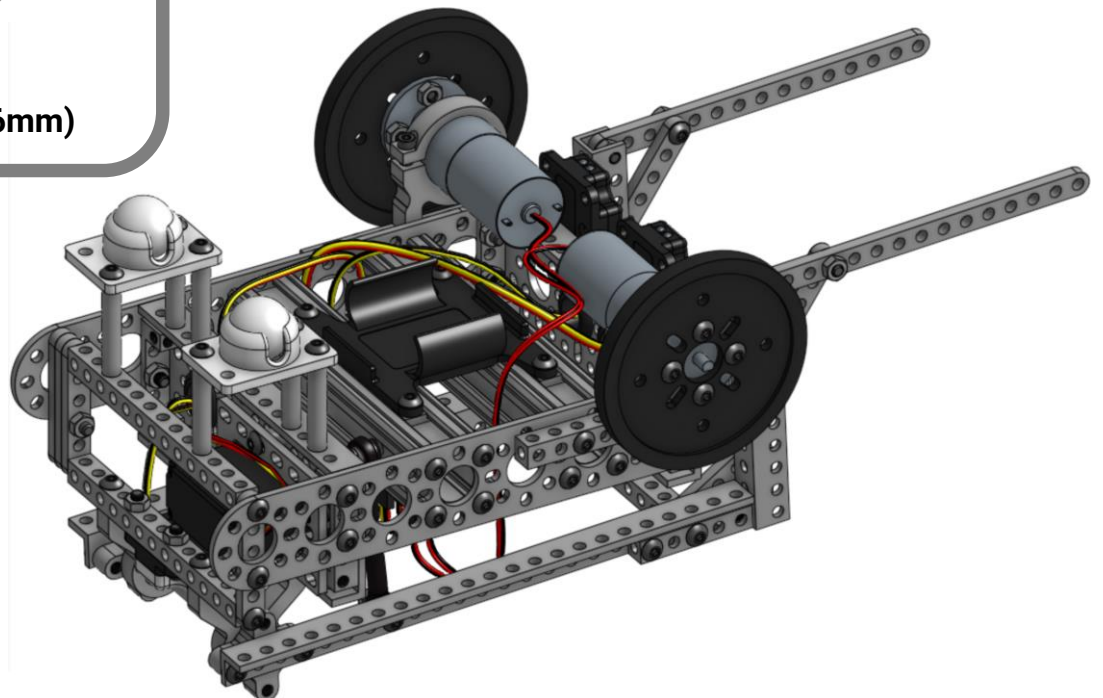
32



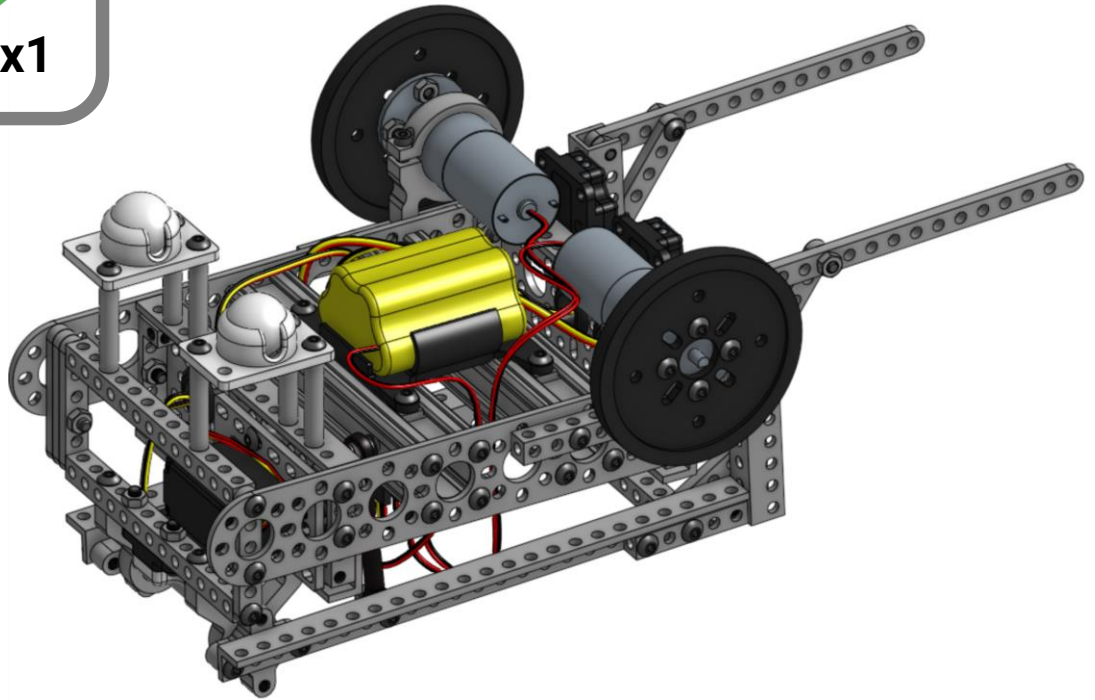
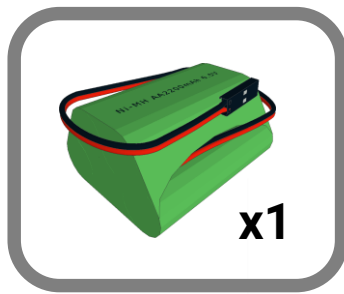
x1



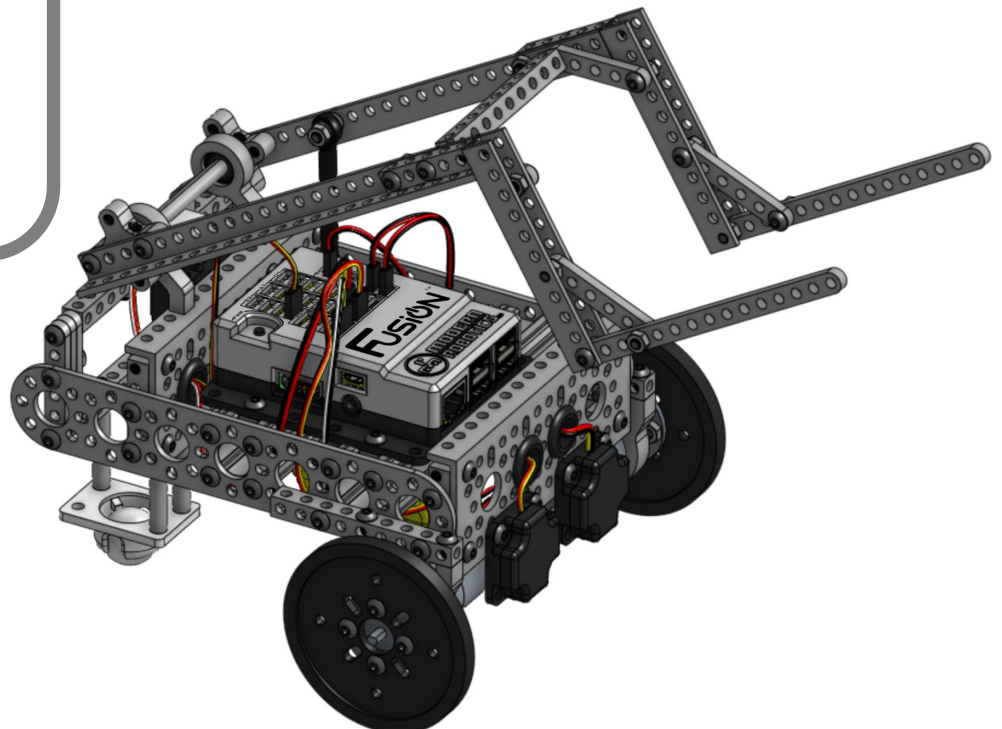
x4 (6mm)

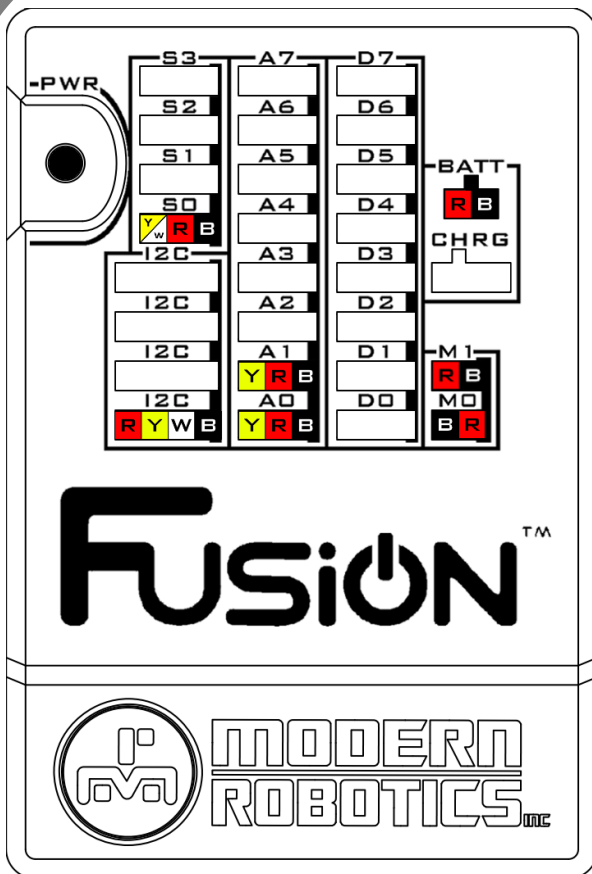


33



34





Right Optical Distance Sensor



A0



Left Optical Distance Sensor



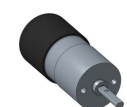
A1



Integrating Gyro



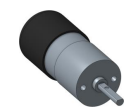
I2C



Right Motor



M0



Left Motor



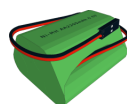
M1



Servo



S0



Battery



BATT

