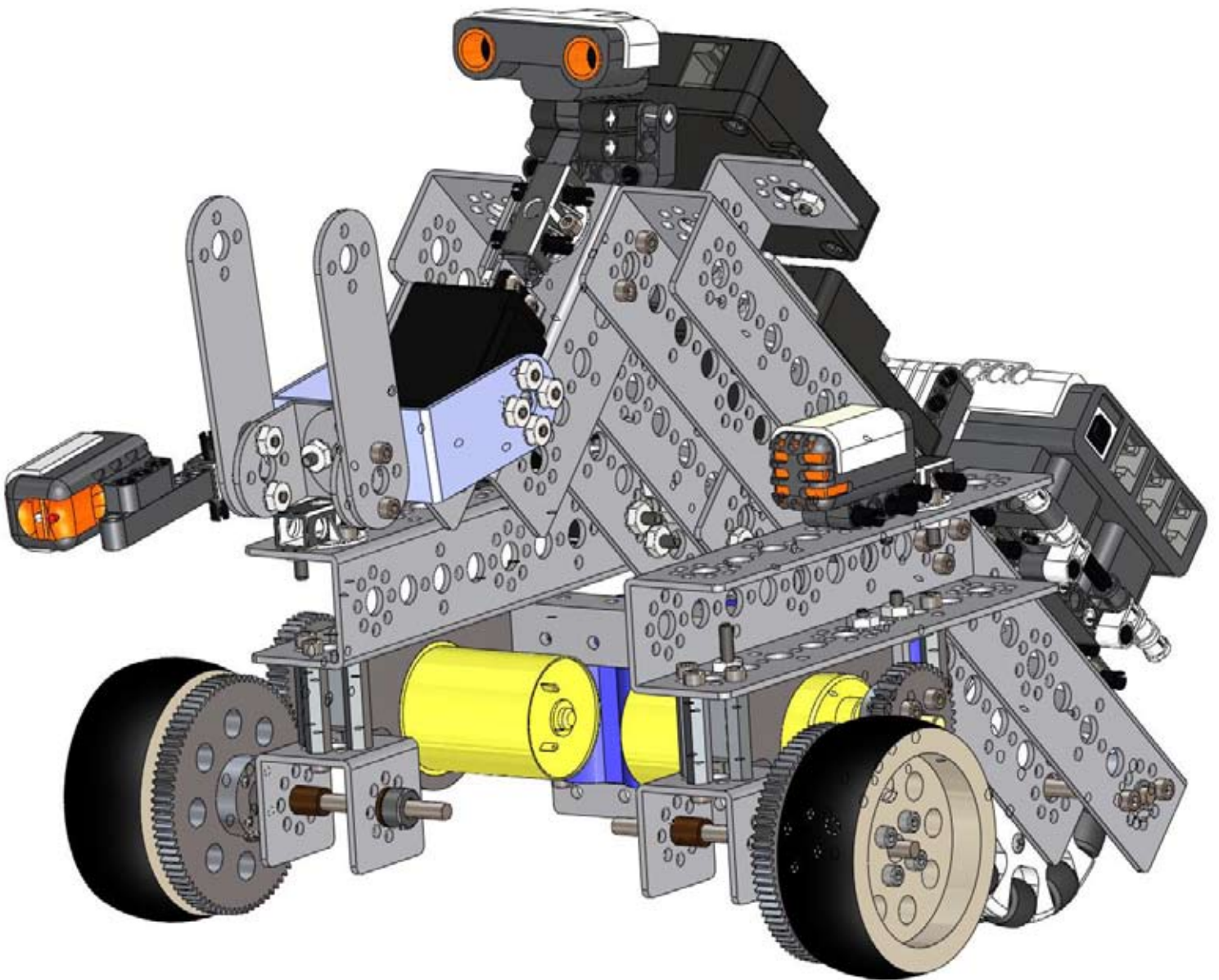
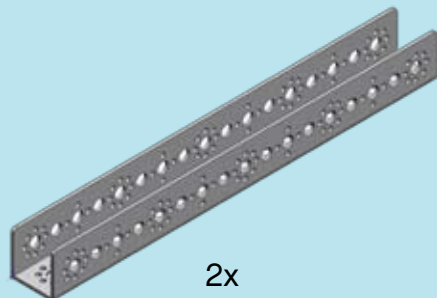


Indirect Drive Mantis Instructions



Mantis Step 1

Parts Needed



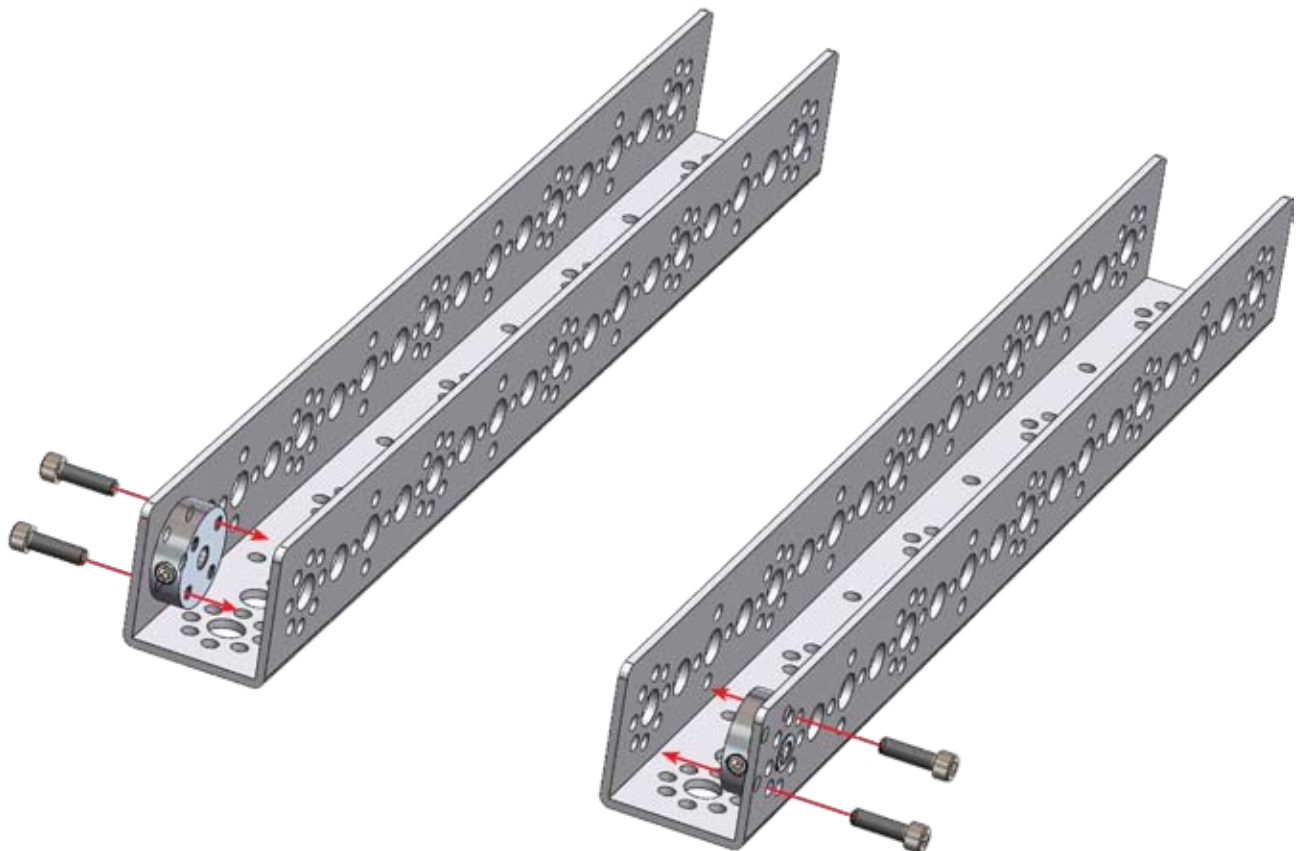
2x
Channel 288mm



2x
Hub Motor Shaft

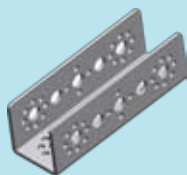


4x
Screw SHCS 6-32 x 0.5



Mantis Step 2

Parts Needed



1x

Channel 96mm



4x

Screw SHCS 6-32 x 0.5



4x

Nut Hex 6-32 Kep Lock



Mantis Step 3

Parts Needed



2x

Omni Single Wheel



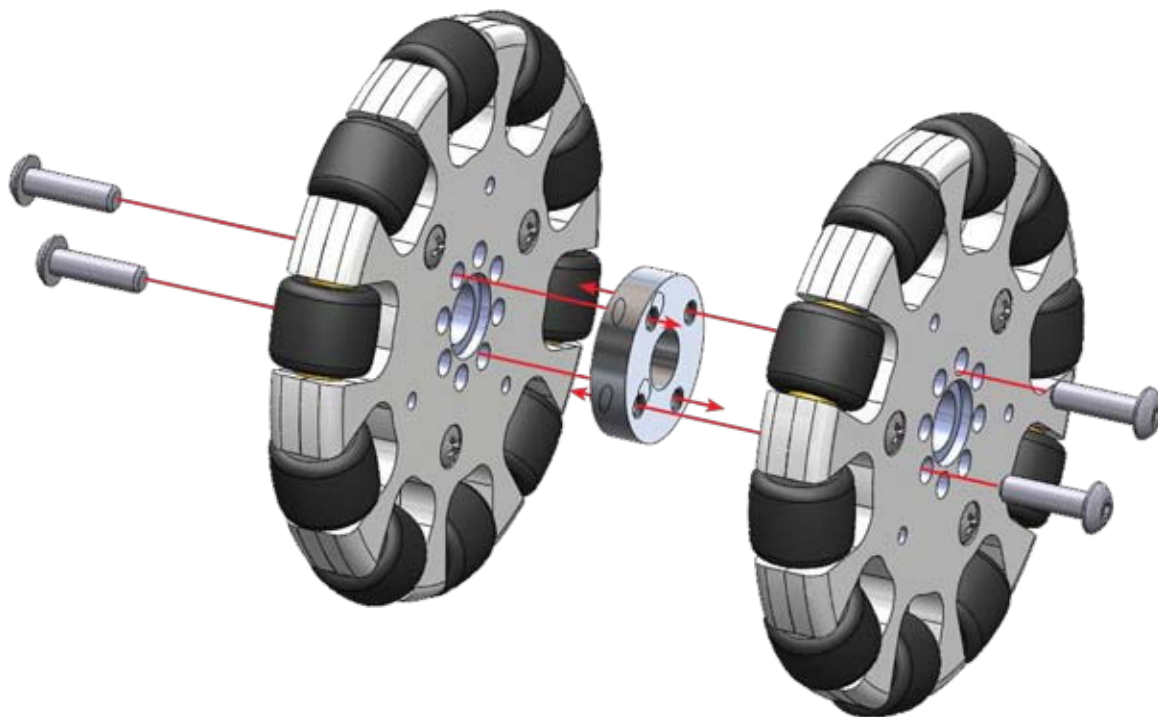
1x

Omni Wheel Hub



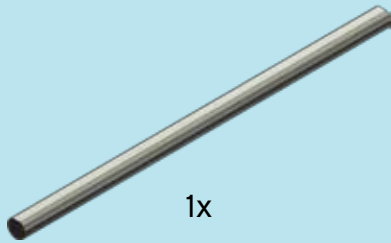
4x

Screw BHCS 6-32 x 0.375



Mantis Step 4

Parts Needed



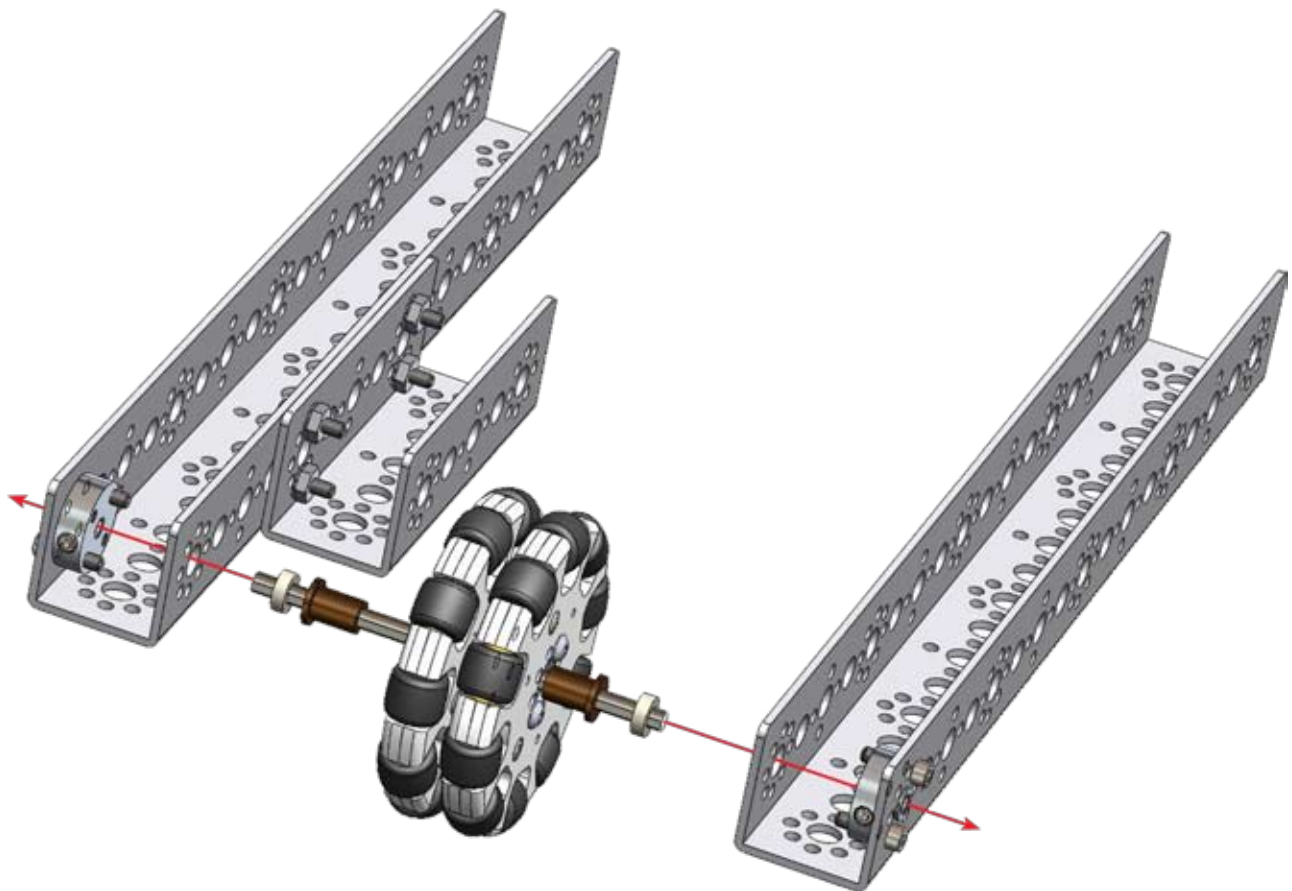
1x
Axle D-Shaft



2x
Nylon Spacer Small



2x
Axle Bronze Bushing



Mantis Step 5

Parts Needed



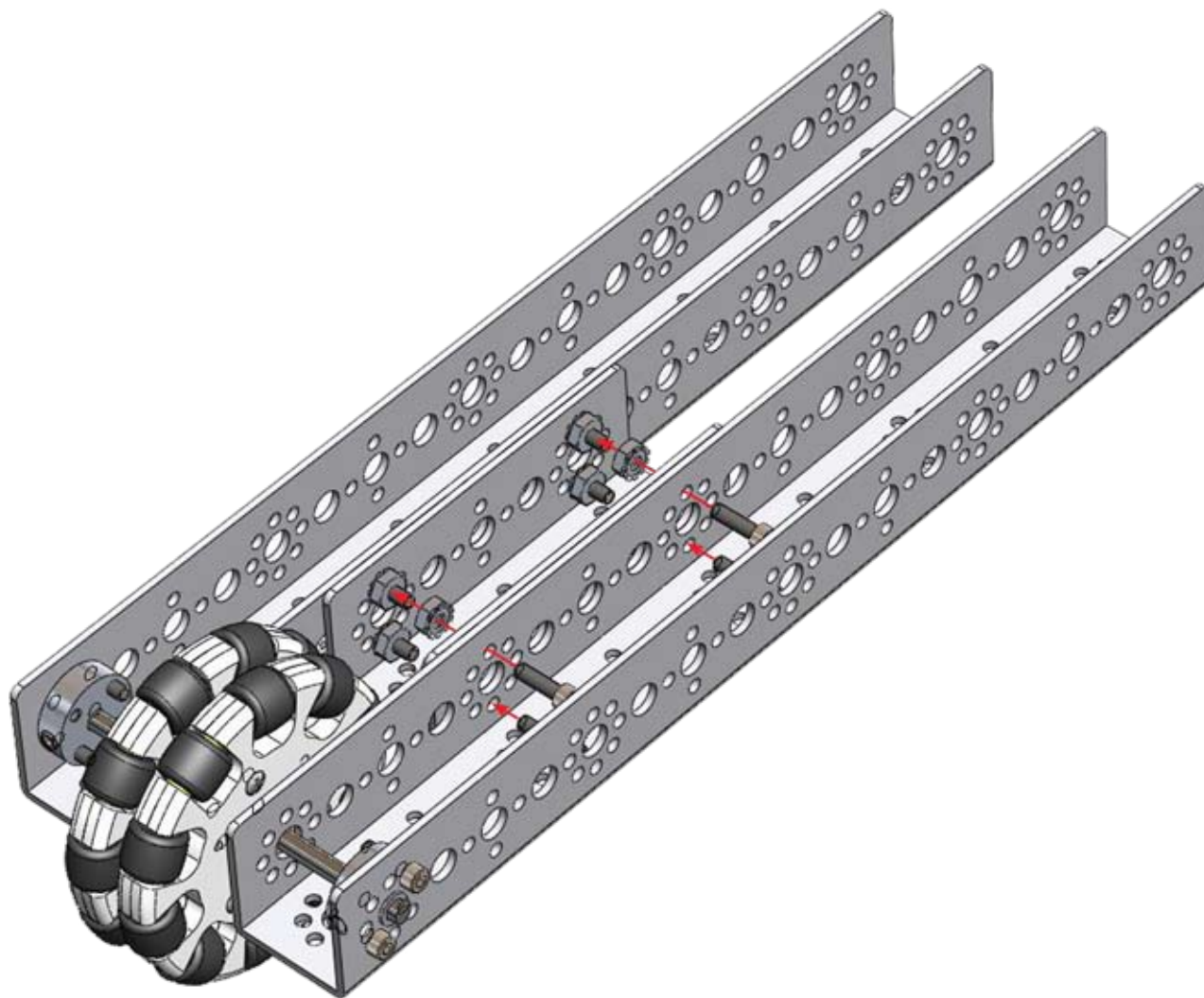
4x

Screw SHCS 6-32 x 0.5



4x

Nut Hex 6-32 Kep Lock



Mantis Step 6

Parts Needed



4x

LEGO HPC



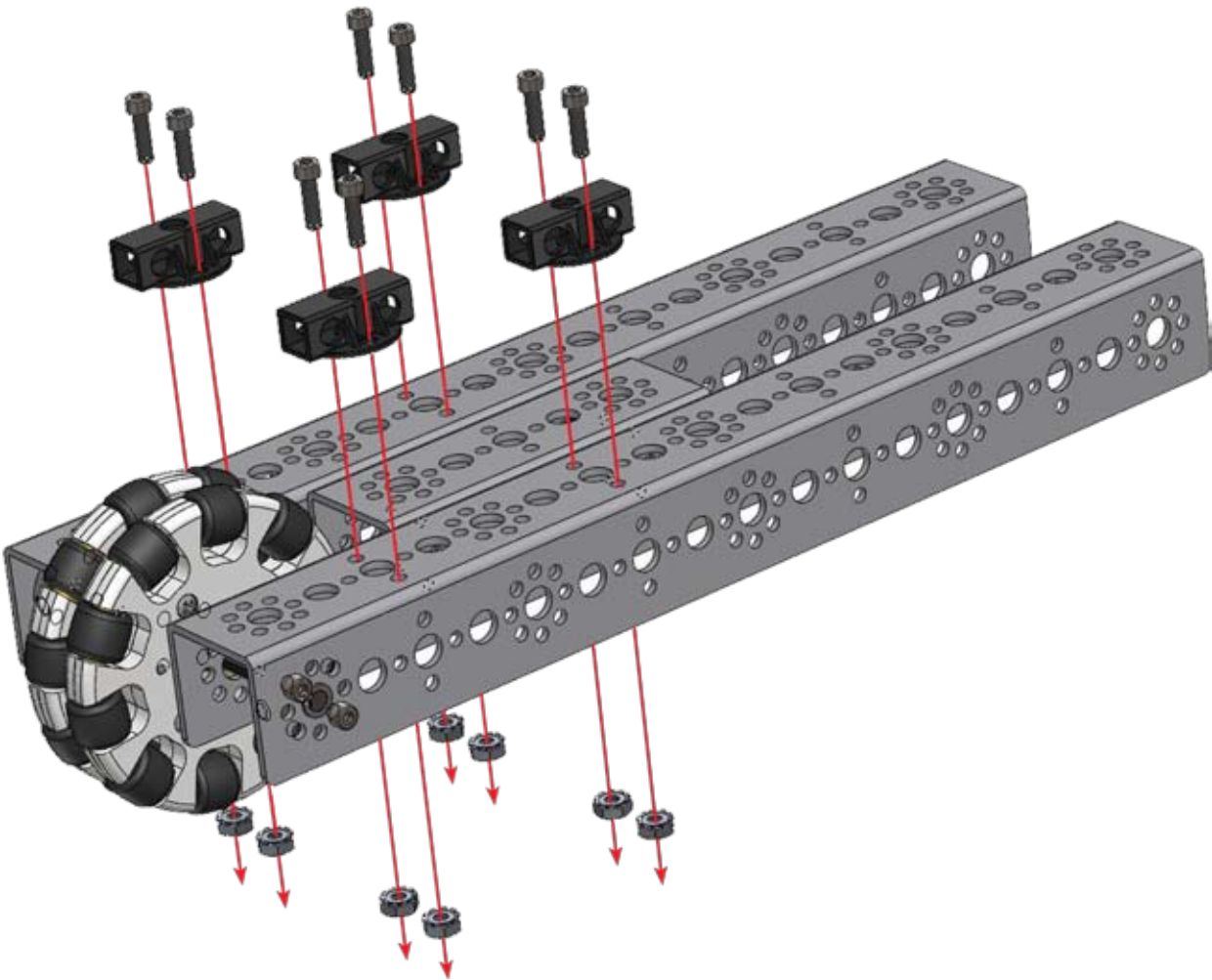
8x

Screw SHCS 6-32 x 0.5



8x

Nut Hex 6-32 Kep Lock



Mantis Step 7

Parts Needed



2x

Channel 32mm



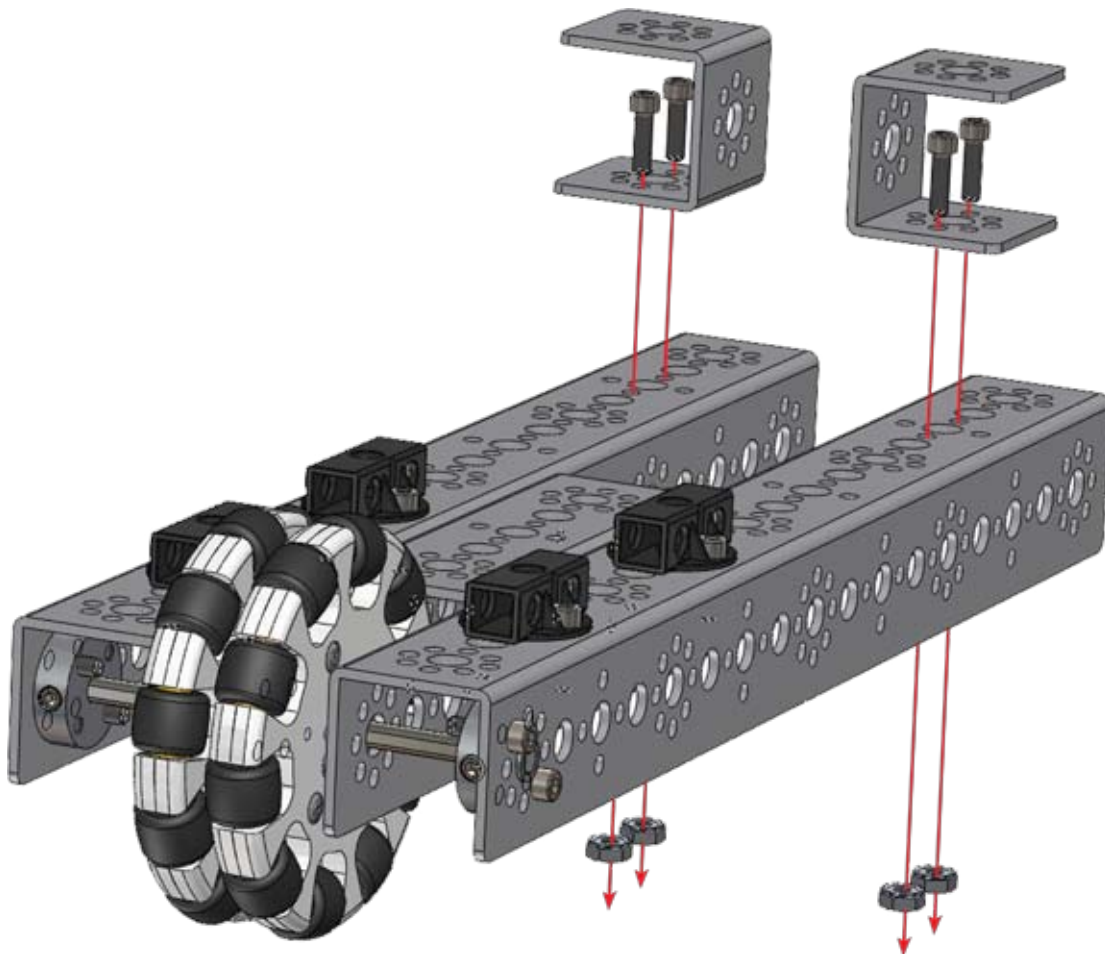
4x

Screw SHCS 6-32 x 0.5



4x

Nut Hex 6-32 Kep Lock



Mantis Step 8

Parts Needed



1x

TETRIX DC Controller



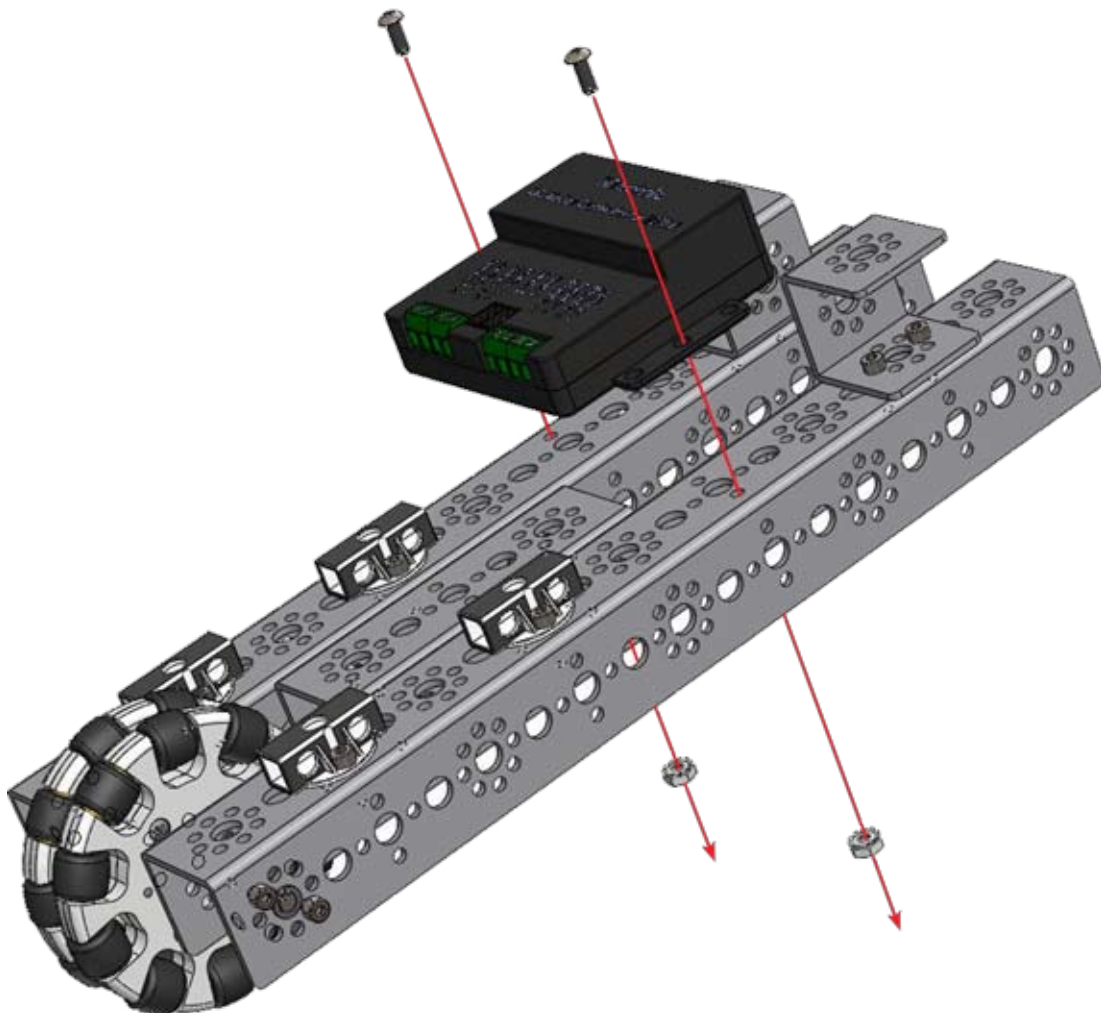
2x

Screw BHCS 6-32 x 0.375



2x

Nut Hex 6-32 Kep Lock



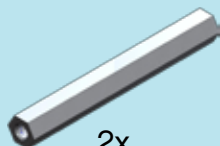
Mantis Step 9

Parts Needed



2x

Channel 160mm



2x

Standoff 2-Inch



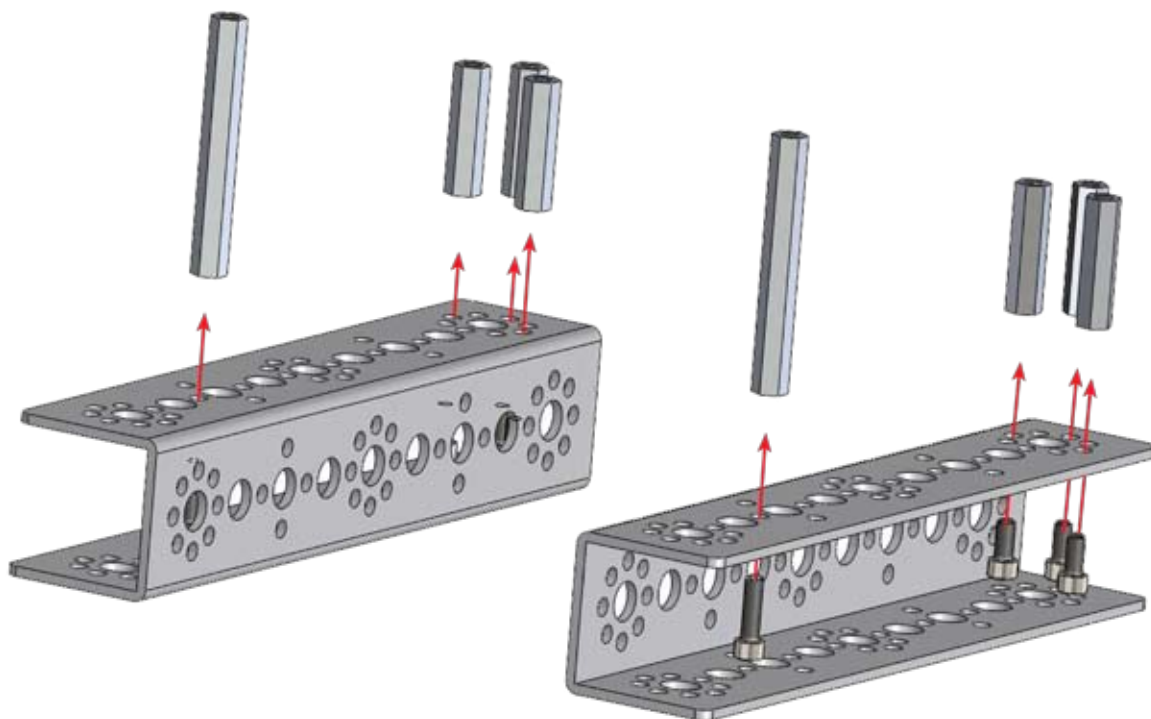
6x

Standoff 1-Inch



8x

Screw SHCS 6-32 x 0.5



Mantis Step 10

Parts Needed



3x

LEGO HPC



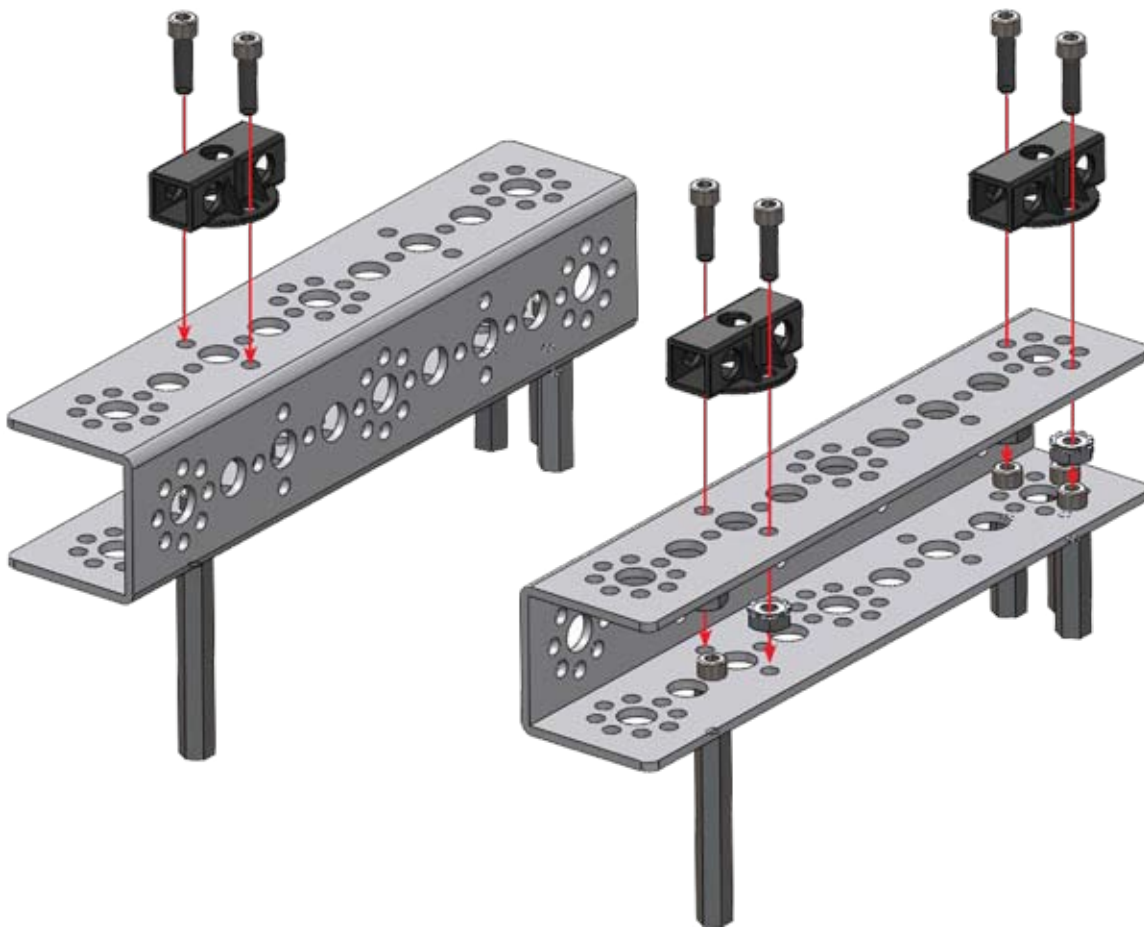
6x

Screw SHCS 6-32 x 0.5



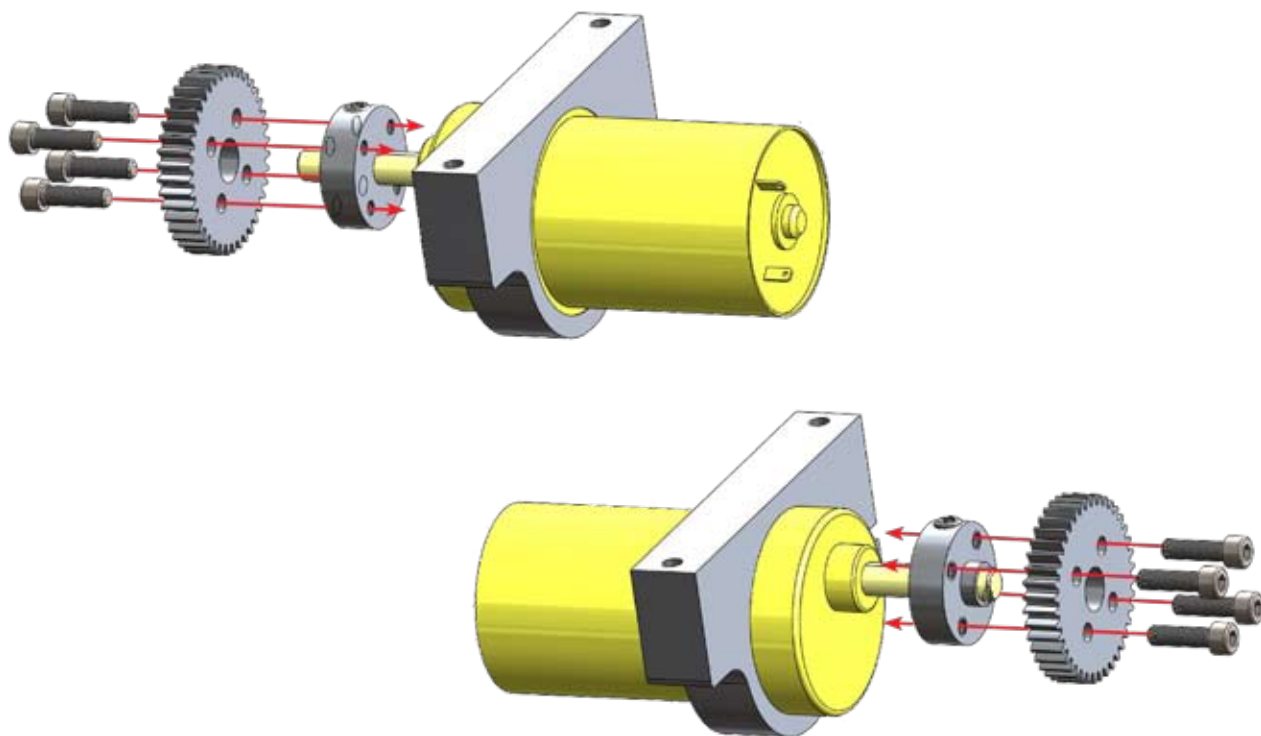
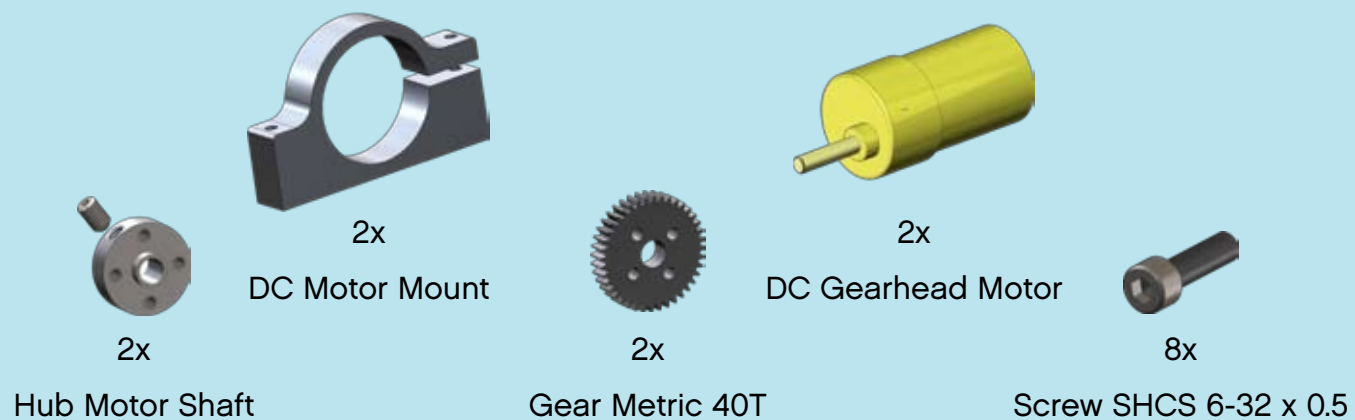
6x

Nut Hex 6-32 Kep Lock



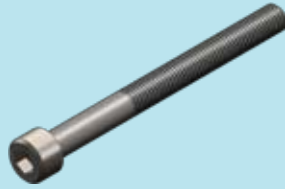
Mantis Step 11

Parts Needed



Mantis Step 12

Parts Needed



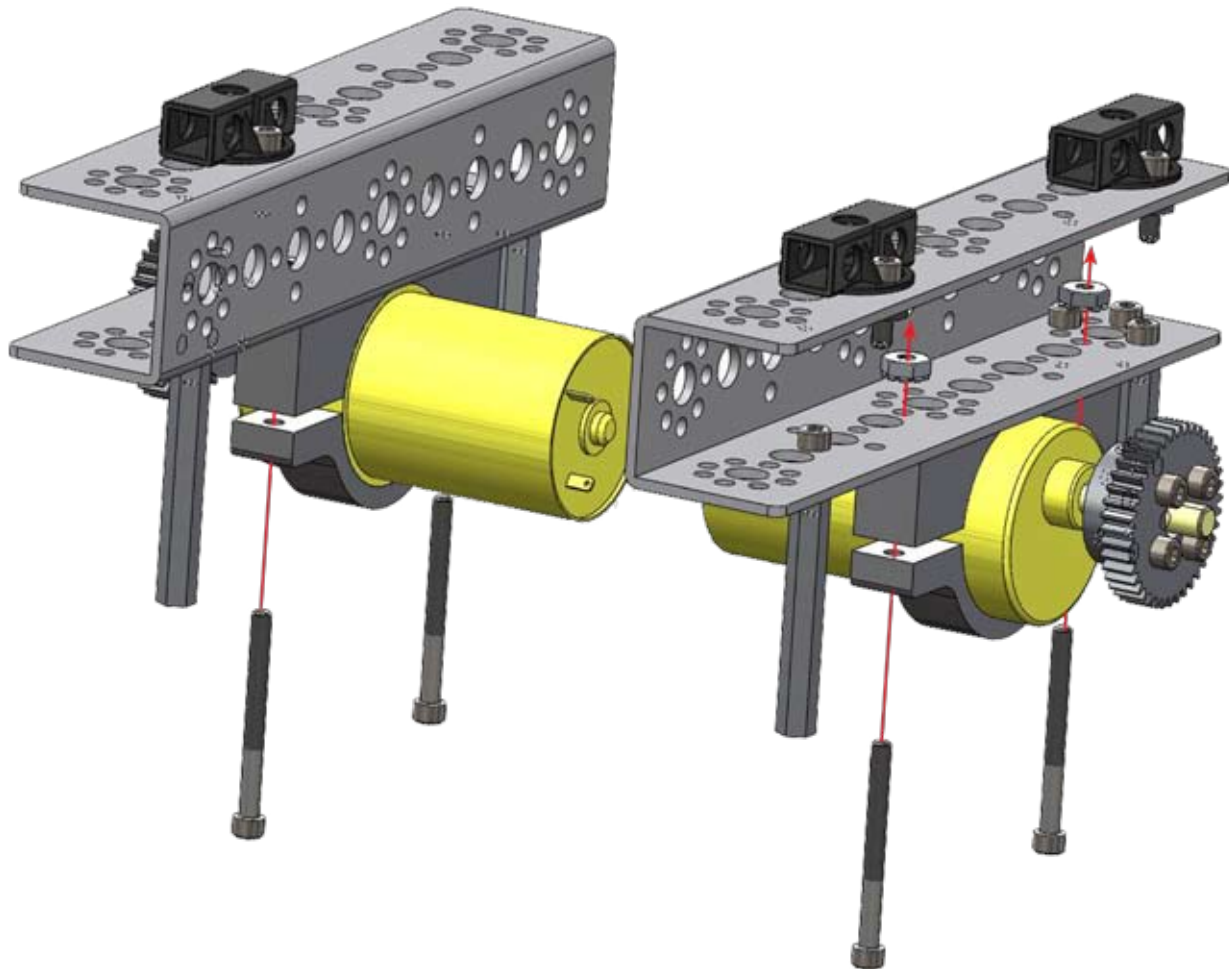
4x

Screw SHCS 6-32 x 1.5



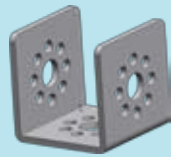
4x

Nut Hex 6-32 Kep Lock



Mantis Step 13

Parts Needed



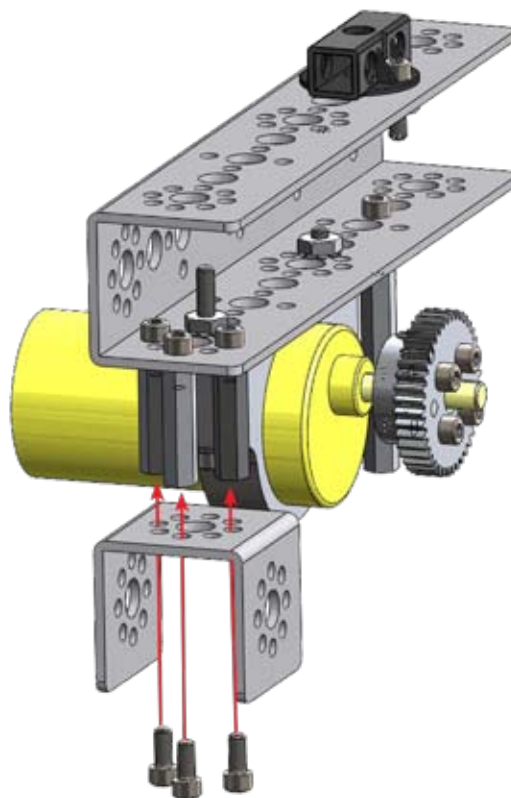
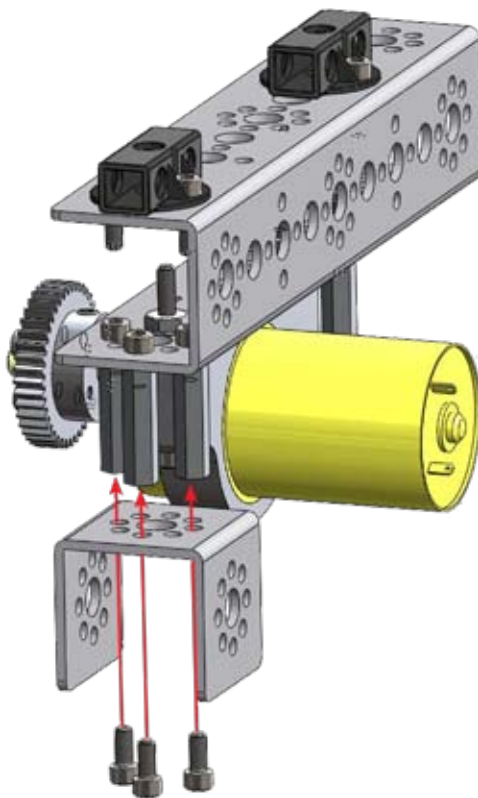
2x

Channel 32mm



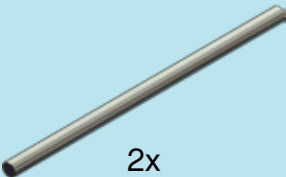
6x

Screw SHCS 6-32 x 0.5



Mantis Step 14

Parts Needed



2x
Axle D-Shaft



2x
Hub Motor Shaft



2x
Gear Metric 80T



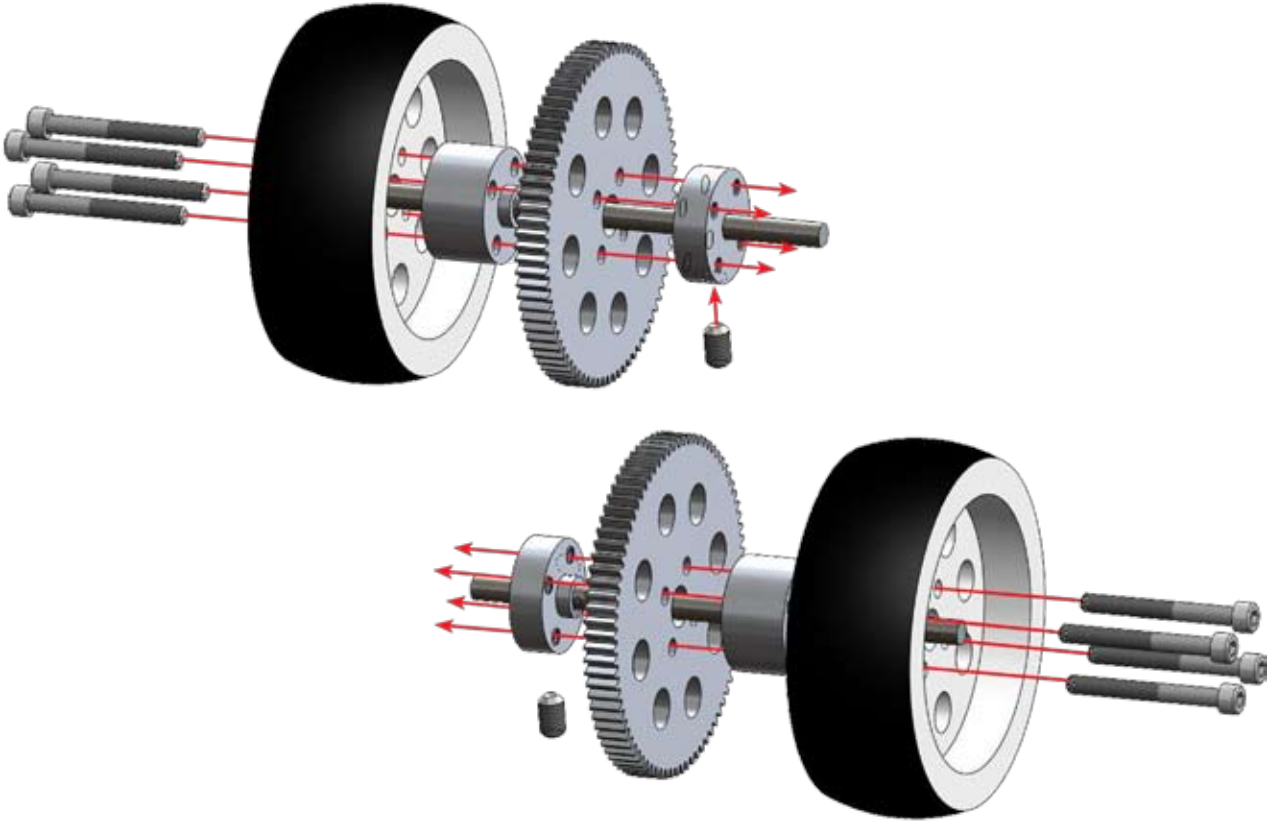
8x
Screw SHCS 6-32 x 1.5



2x
Wheel 76mm



2x
Hub Spacer



Mantis Step 15

Parts Needed



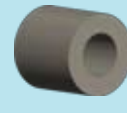
4x

Axle Bronze Bushing



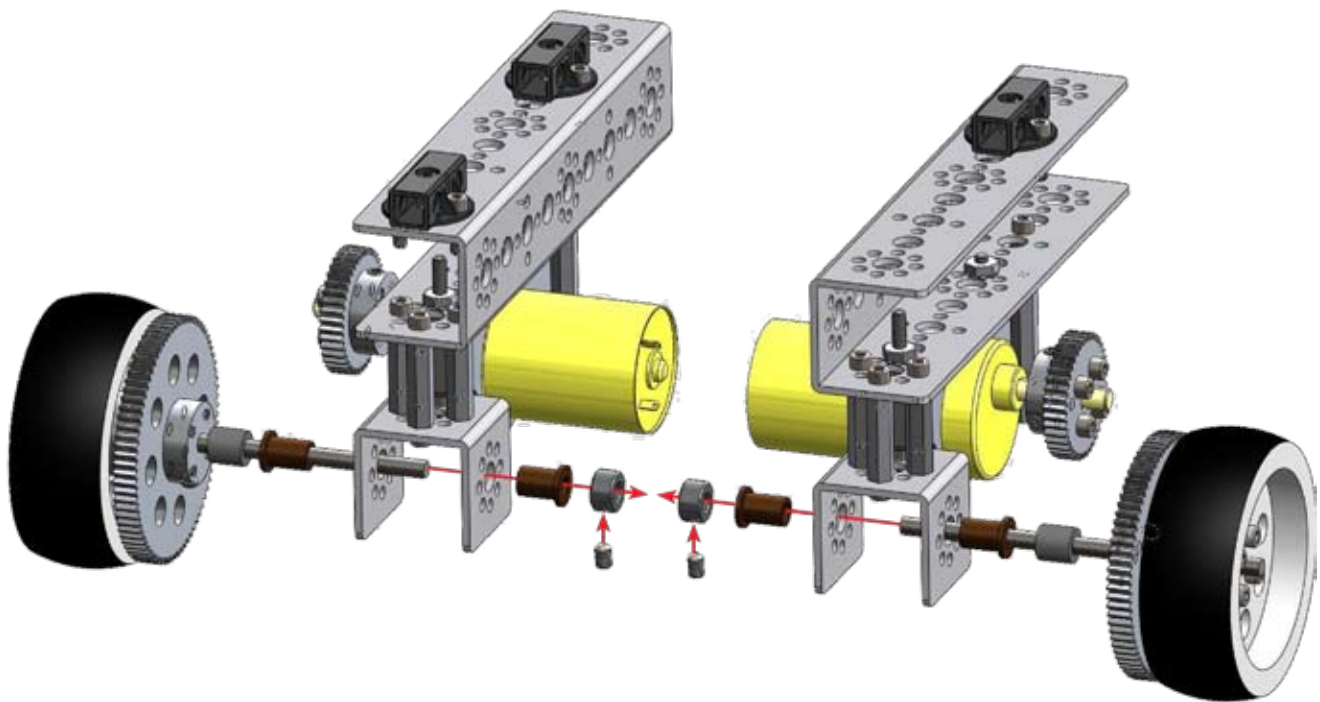
2x

Axle Set Collar



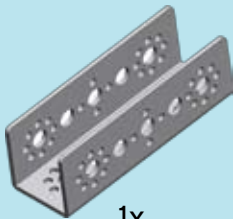
2x

Nylon Spacer Large



Mantis Step 16

Parts Needed



1x

Channel 96mm



1x

LEGO HPC



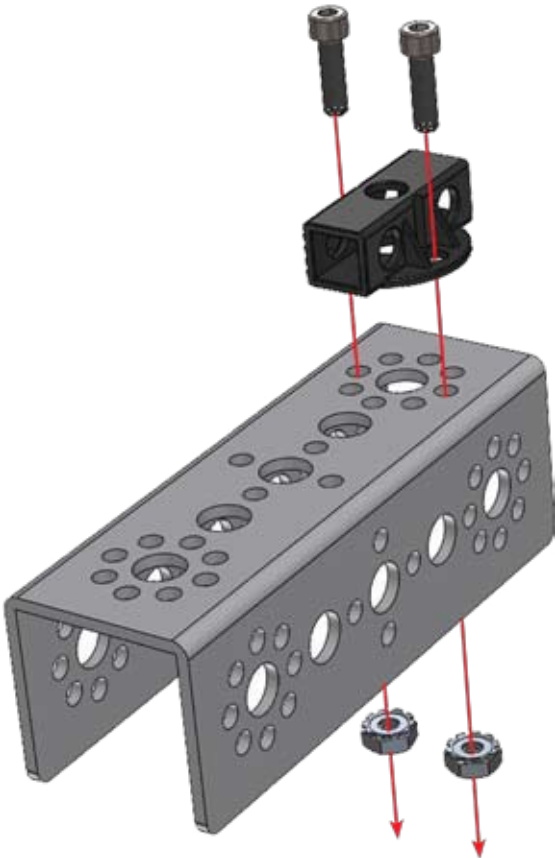
2x

Screw SHCS 6-32 x 0.5



2x

Nut Hex 6-32 Kep Lock



Mantis Step 17

Parts Needed



1x

Joint Pivot Bracket



1x

Servo Metal Horn



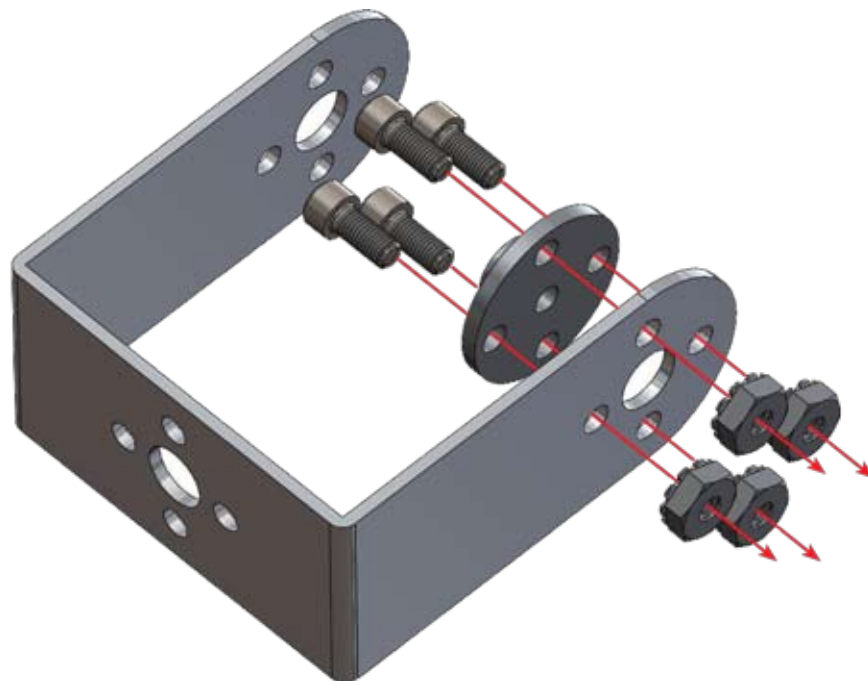
4x

Screw SHCS 6-32 x 0.5



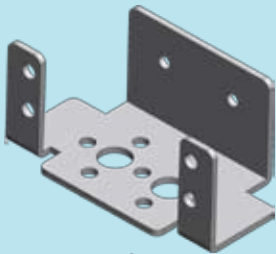
4x

Nut Hex 6-32 Kep Lock



Mantis Step 18

Parts Needed



1x

Single Servo Bracket



1x

Washer Metric 3mm



1x

Screw Metric Pan



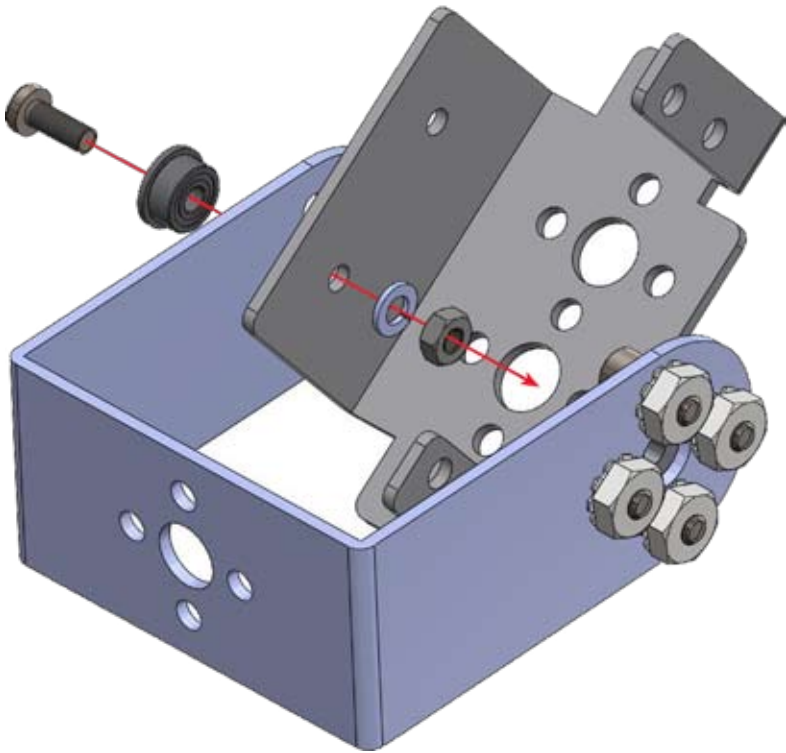
1x

Nut Metric 3mm



1x

Bearing Flange



Mantis Step 19

Parts Needed



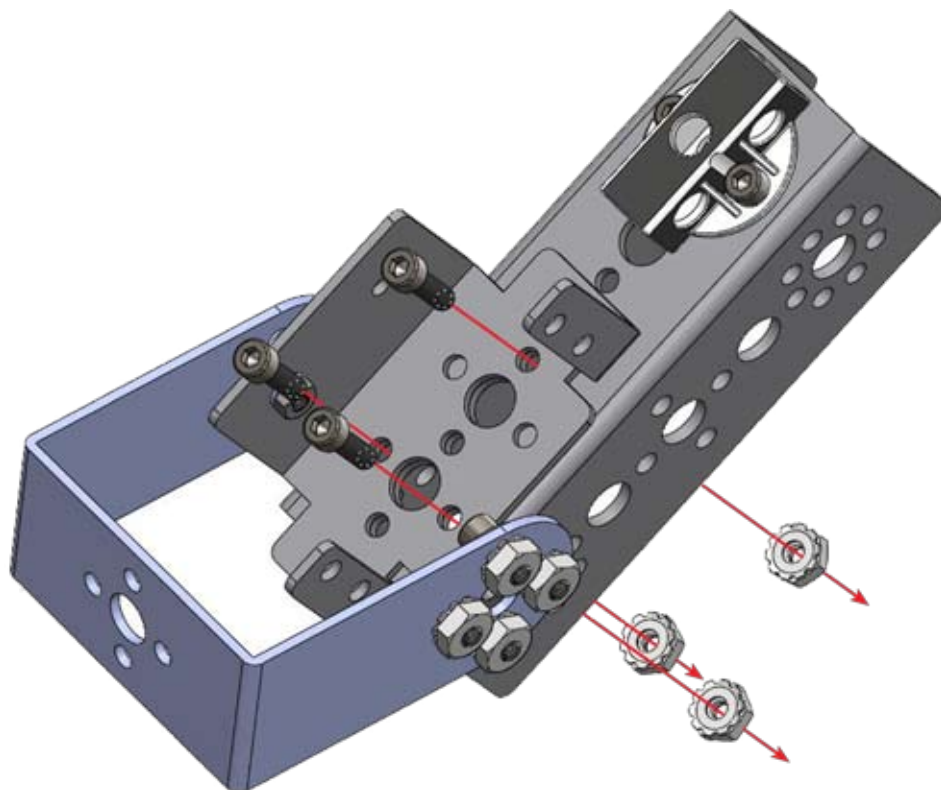
3x

Screw SHCS 6-32 x 0.5



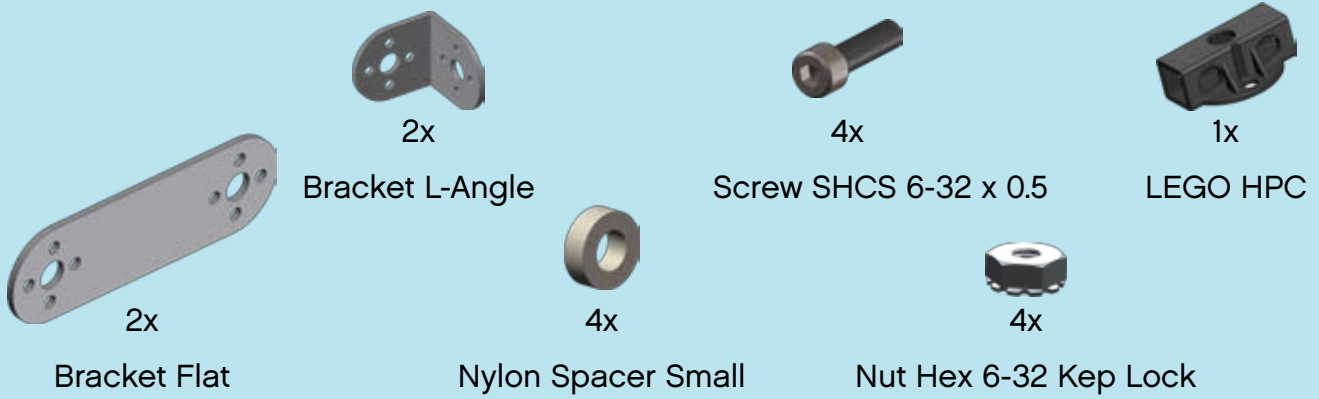
3x

Nut Hex 6-32 Kep Lock



Mantis Step 20

Parts Needed



Mantis Step 21

Parts Needed



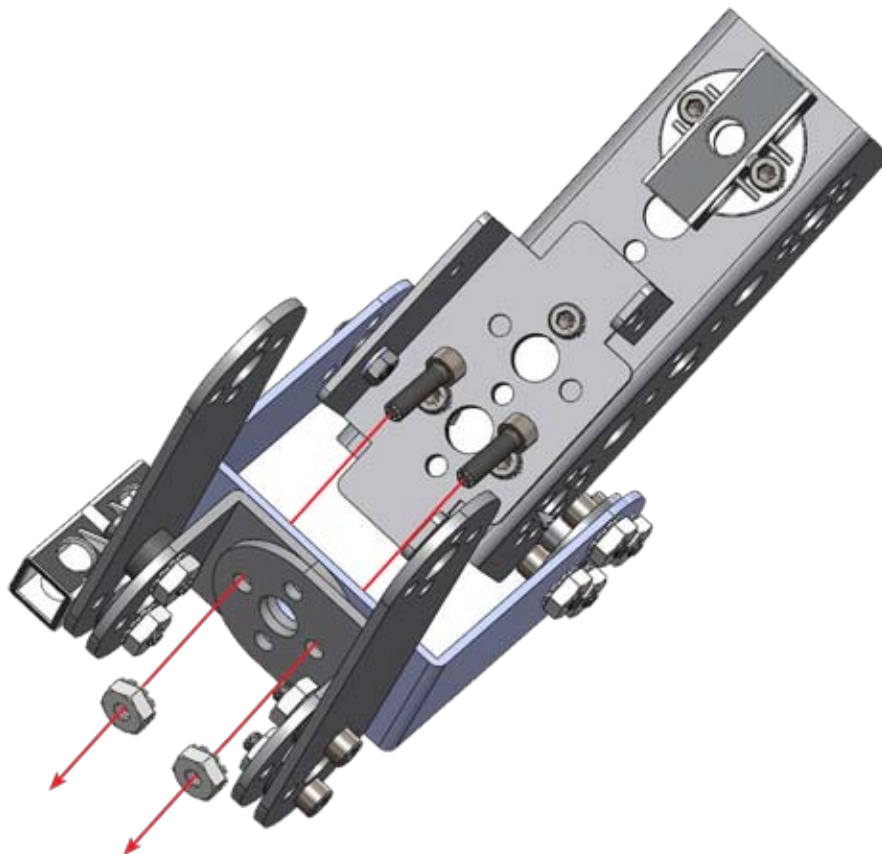
2x

Screw SHCS 6-32 x 0.5



2x

Nut Hex 6-32 Kep Lock



Mantis Step 22

Parts Needed



1x

Servo Motor HS475



1x

Screw Servo



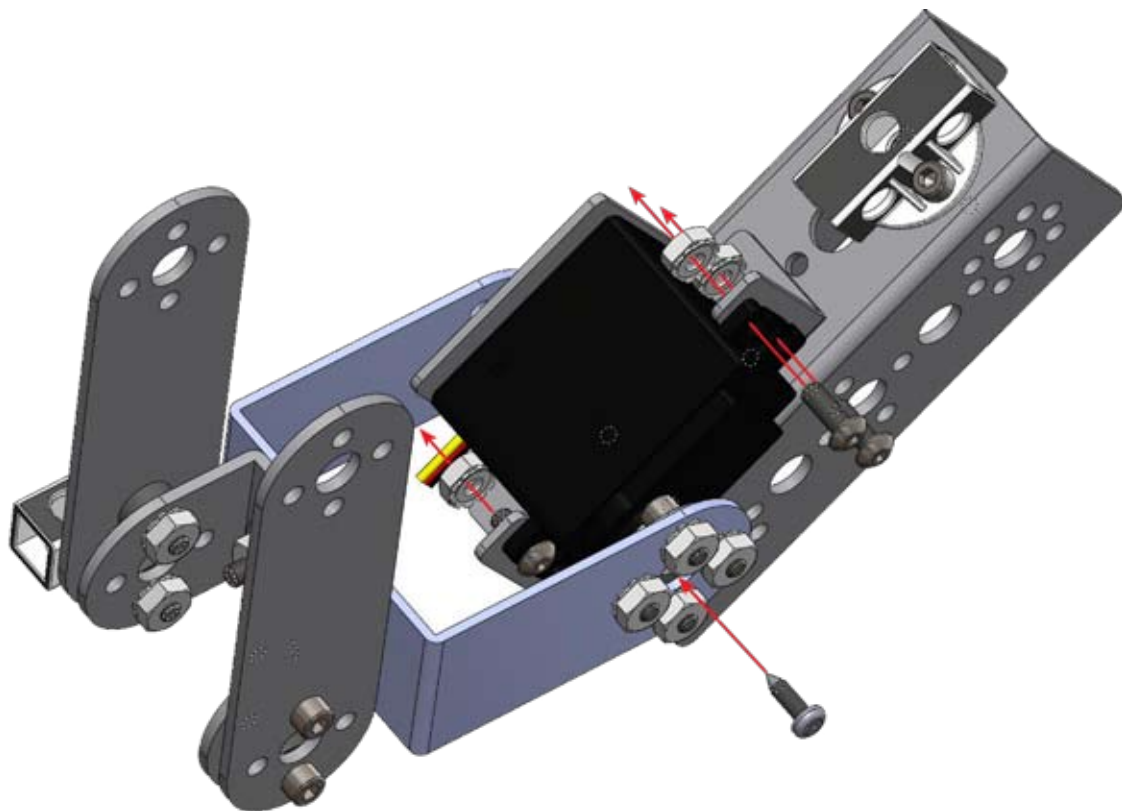
3x

Screw BHCS 6-32 X 0.375



3x

Nut Hex 6-32 Kep Lock



Mantis Step 23

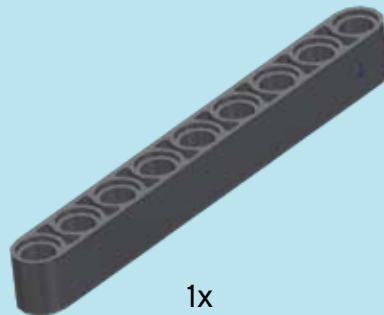
Parts Needed



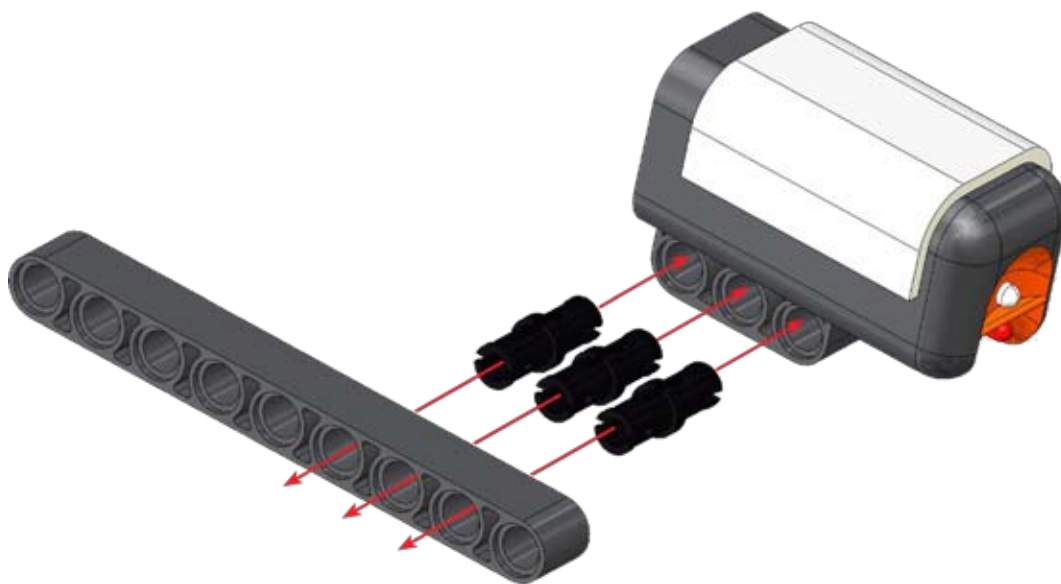
1x
Light Sensor



3x
Connector



1x
Beam 9



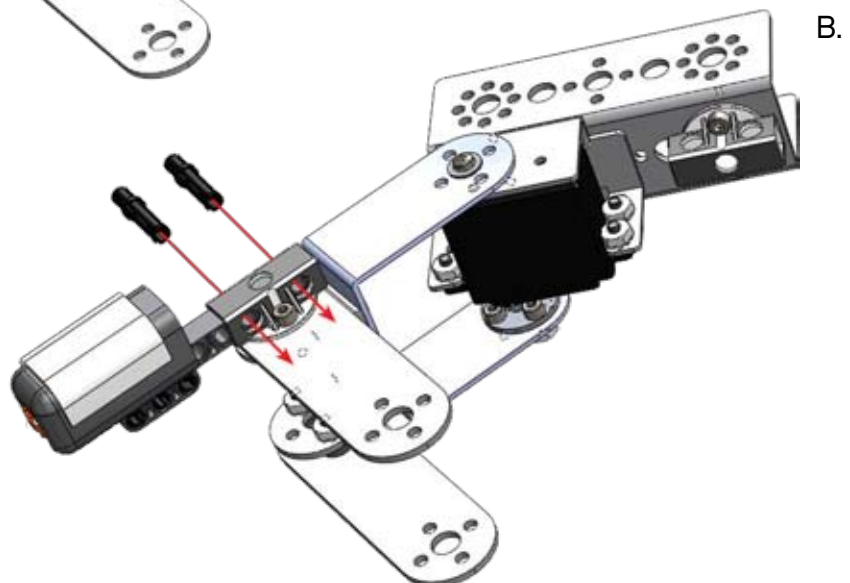
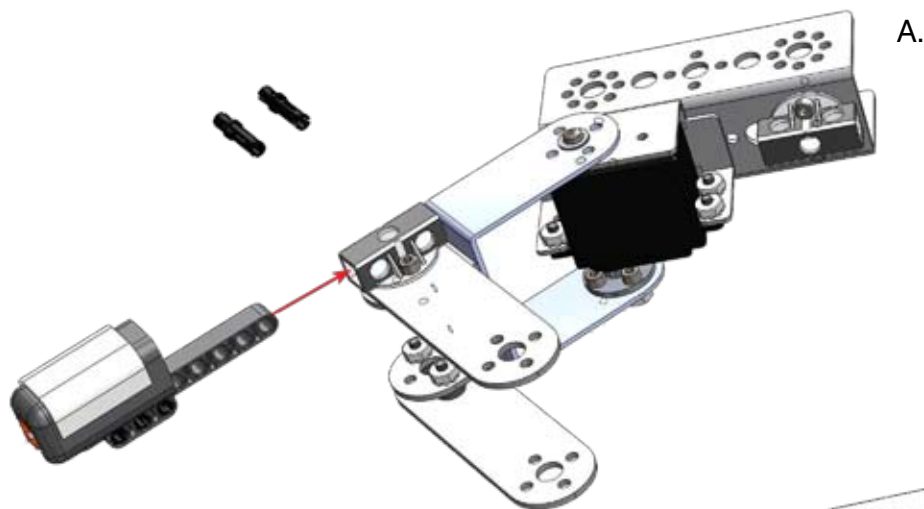
Mantis Steps 24 A,B

Parts Needed



2x

Long Connector 3



Mantis Step 25

Parts Needed



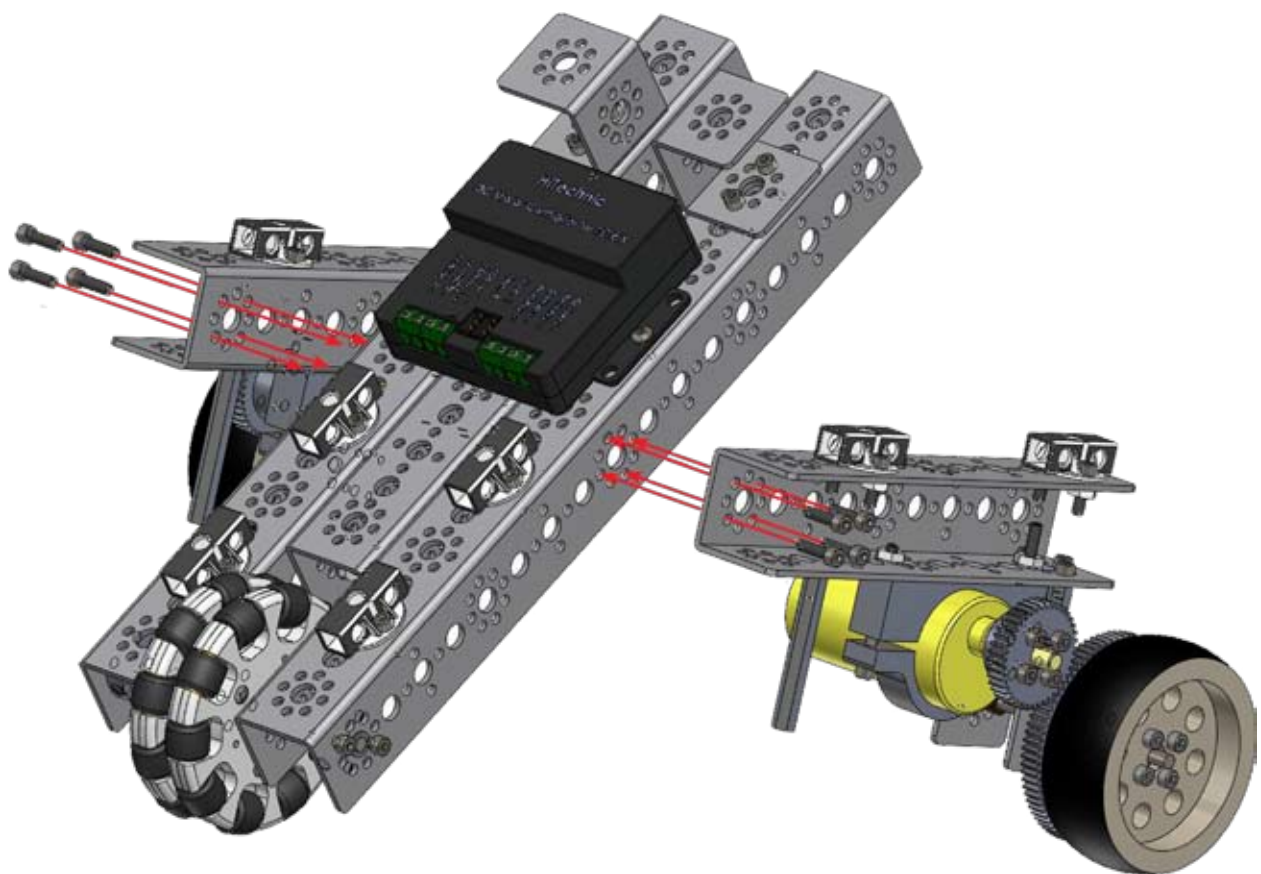
8x

Screw SHCS 6-32 x 0.5



8x

Nut Hex 6-32 Kep Lock



Mantis Step 26

Parts Needed



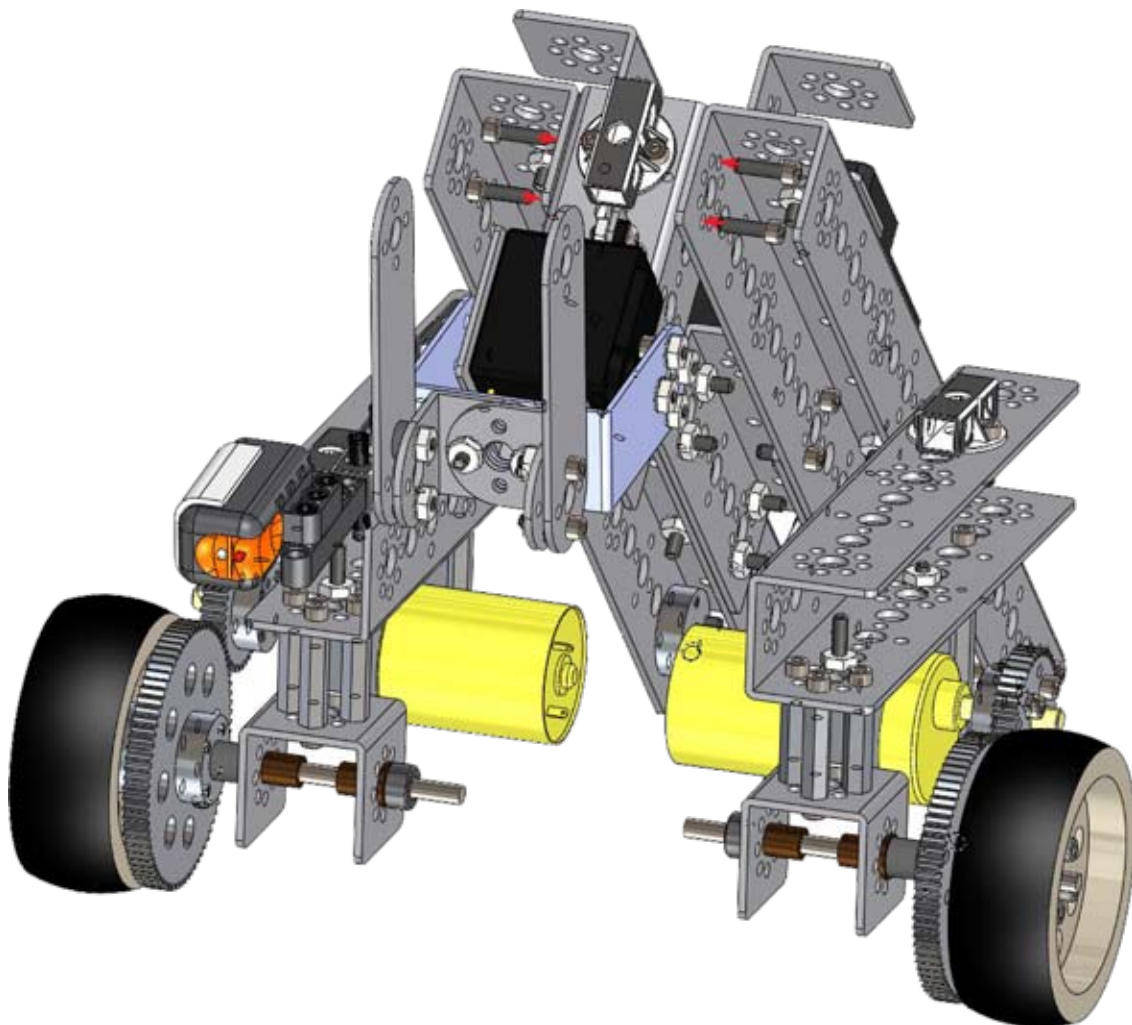
4x

Screw SHCS 6-32 x 0.5



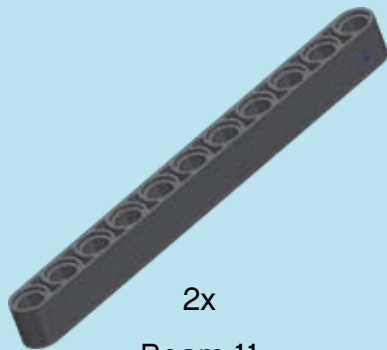
4x

Nut Hex 6-32 Kep Lock



Mantis Step 27

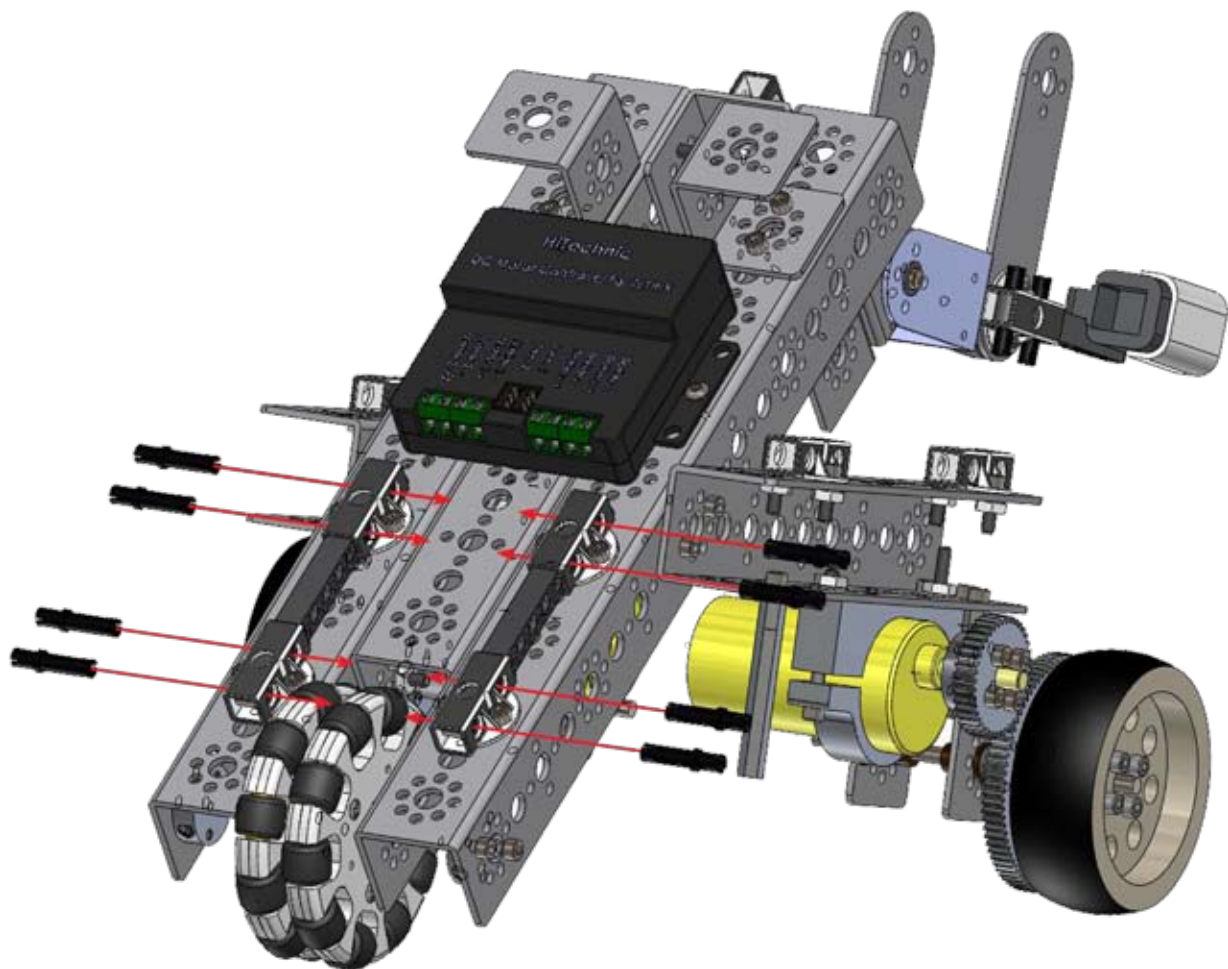
Parts Needed



2x
Beam 11

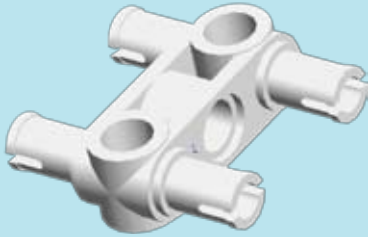


8x
Long Connector 3

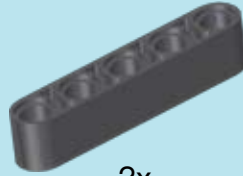


Mantis Step 28

Parts Needed



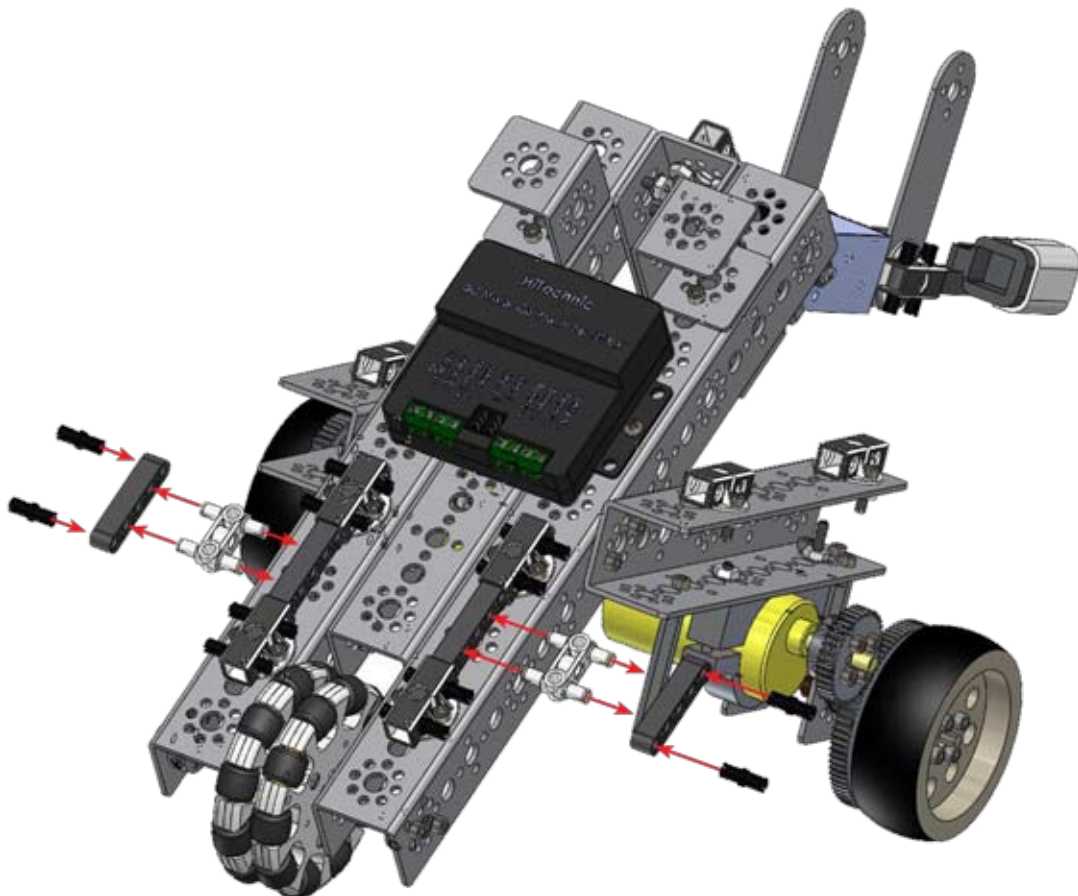
2x
Technic Beams
with Stops 3W



2x
Beam 5



4x
Connector



Mantis Step 29

Parts Needed



2x
Axle 10



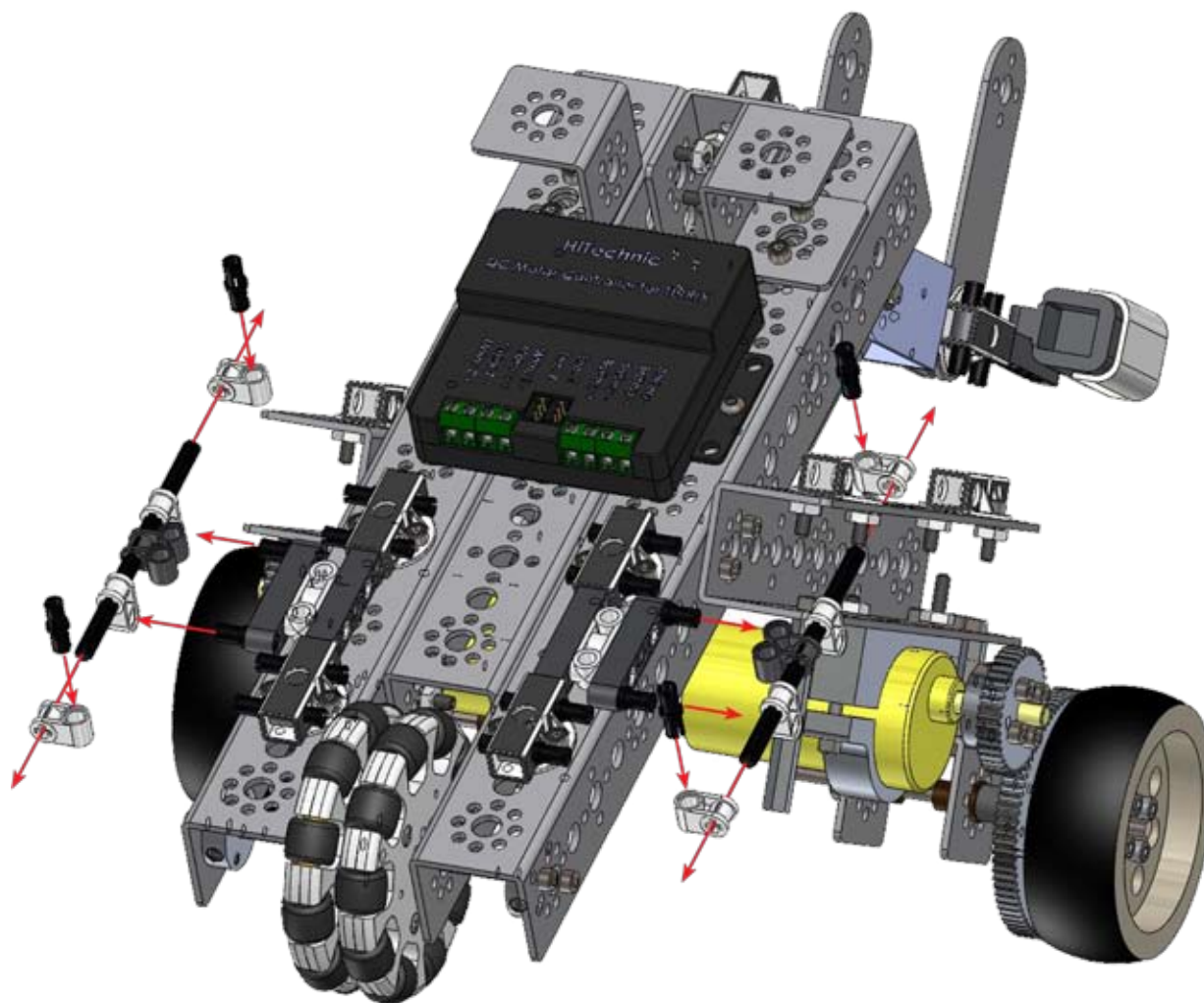
2x
Crossblock



8x
Crossblock 2

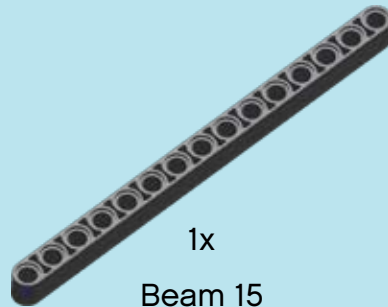


4x
Connector



Mantis Step 30

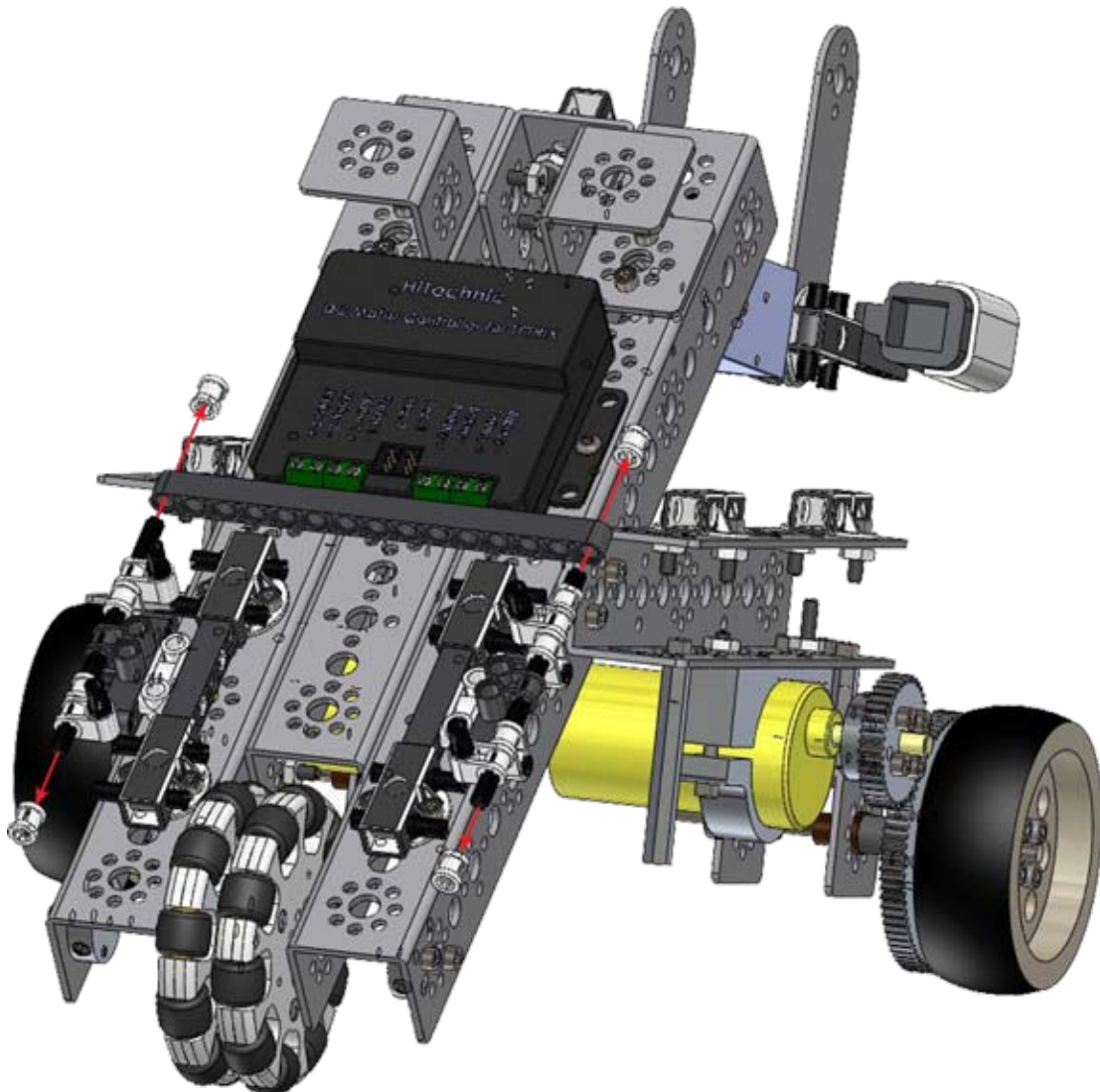
Parts Needed



1x
Beam 15

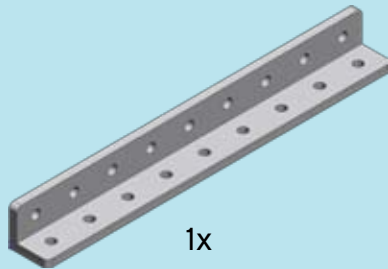


4x
Bushing



Mantis Step 31

Parts Needed



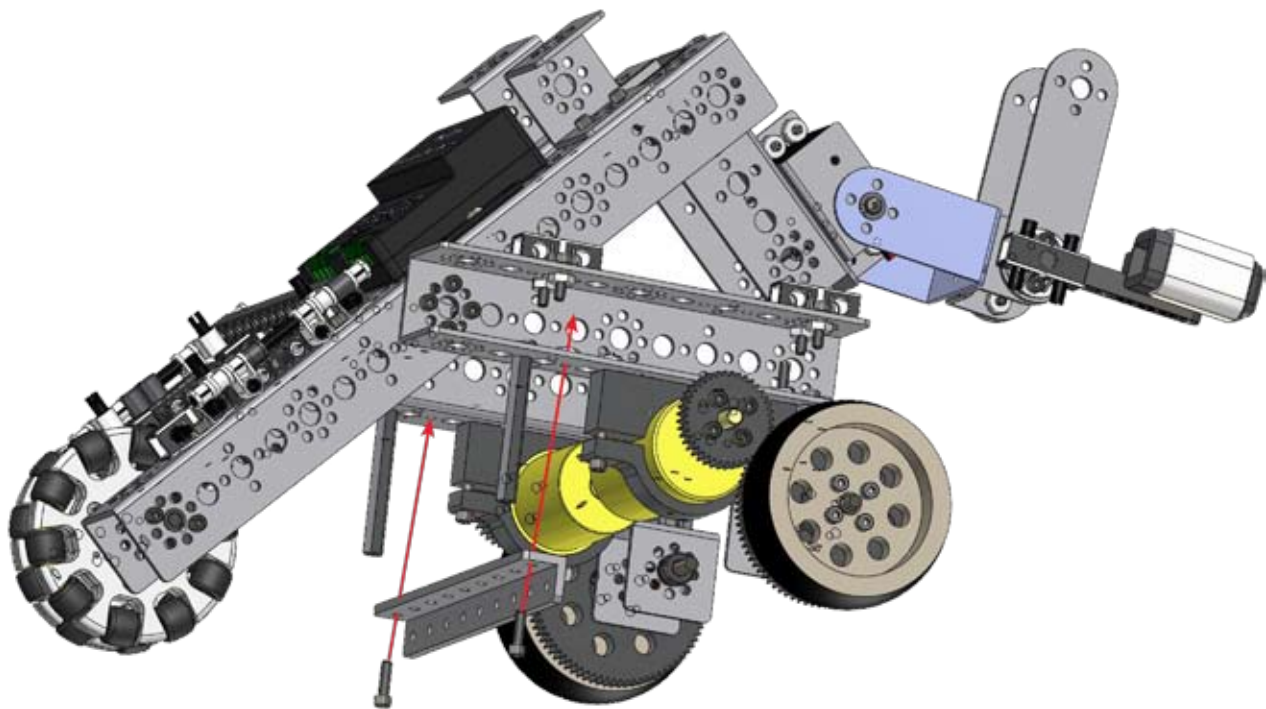
1x
Angle 144mm



2x
Screw SHCS 6-32 x 0.5

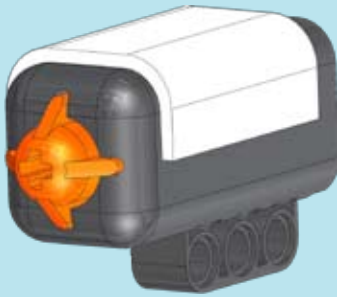


2x
Nut Hex 6-32 Kep Lock



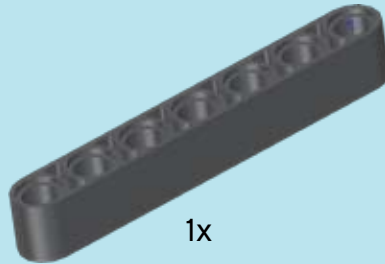
Mantis Step 32

Parts Needed



1x

Touch Sensor



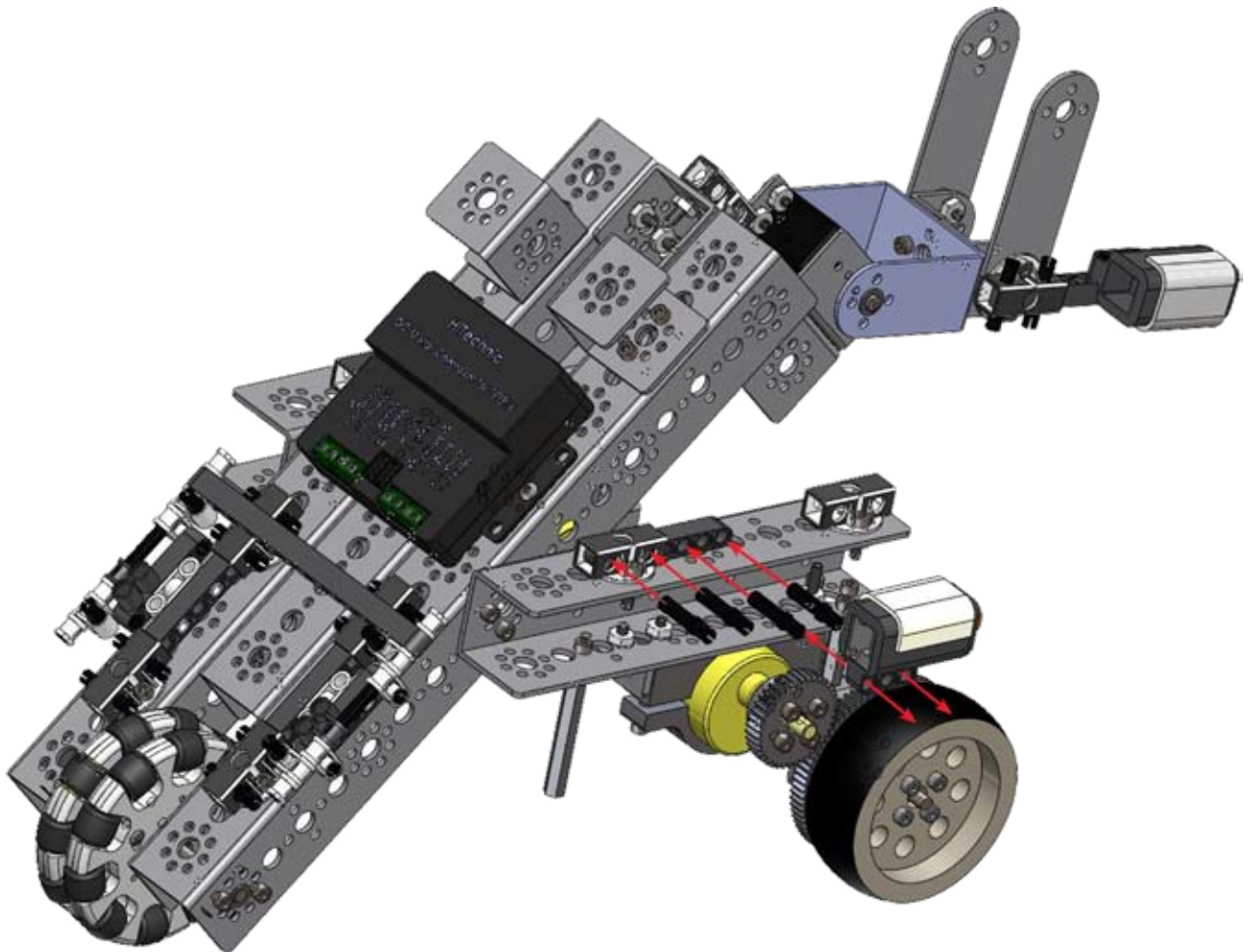
1x

Beam 7



4x

Long Connector 3



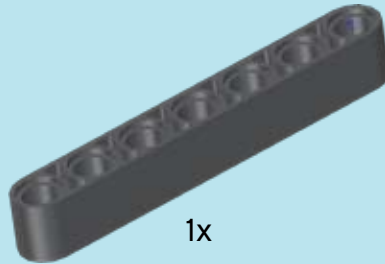
Mantis Step 33

Parts Needed



1x

Sound Sensor



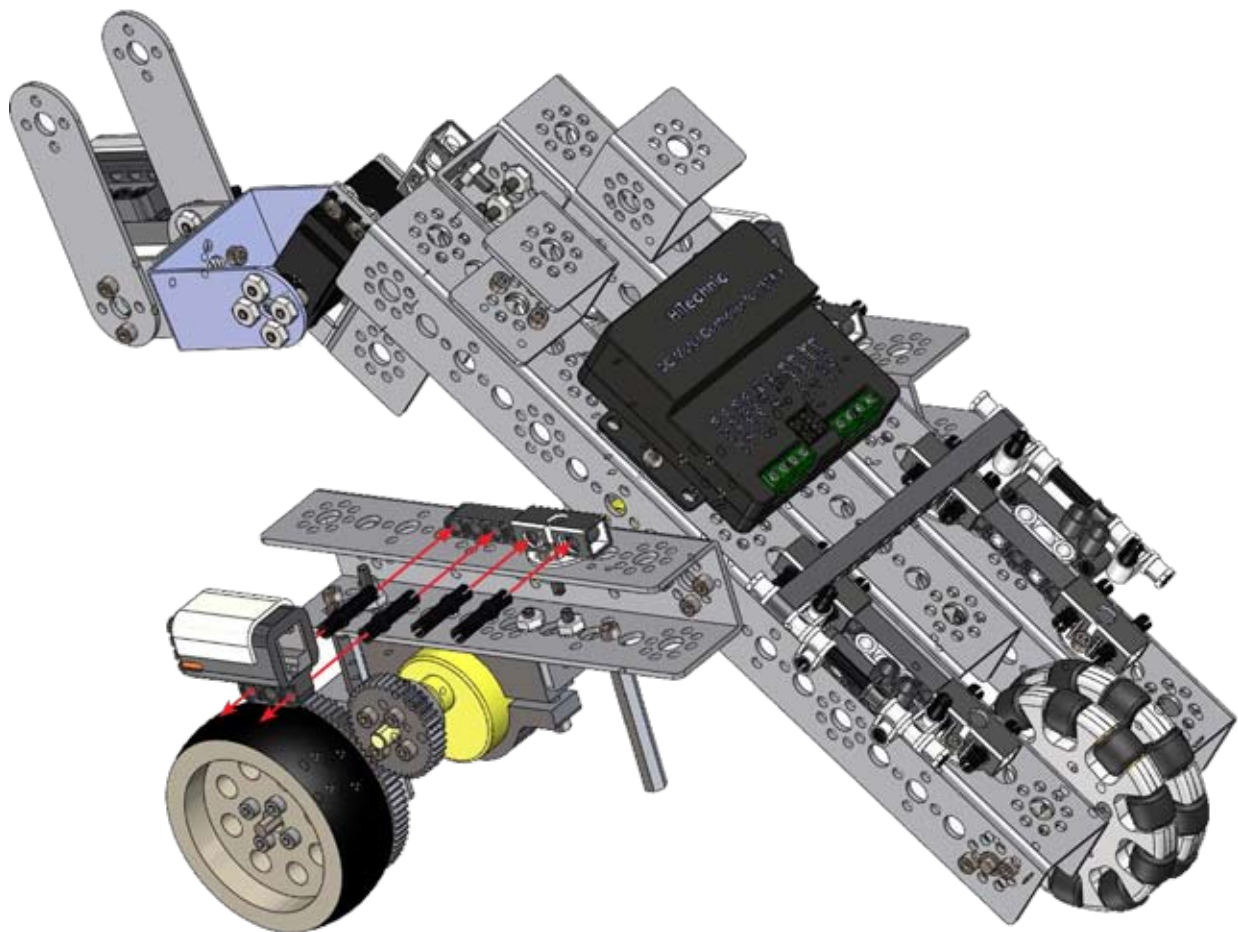
1x

Beam 7



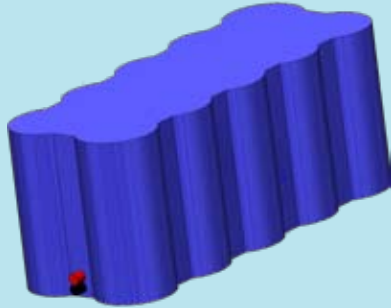
4x

Long Connector 3



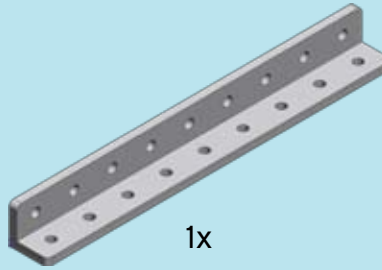
Mantis Step 34

Parts Needed



1x

Battery Pack



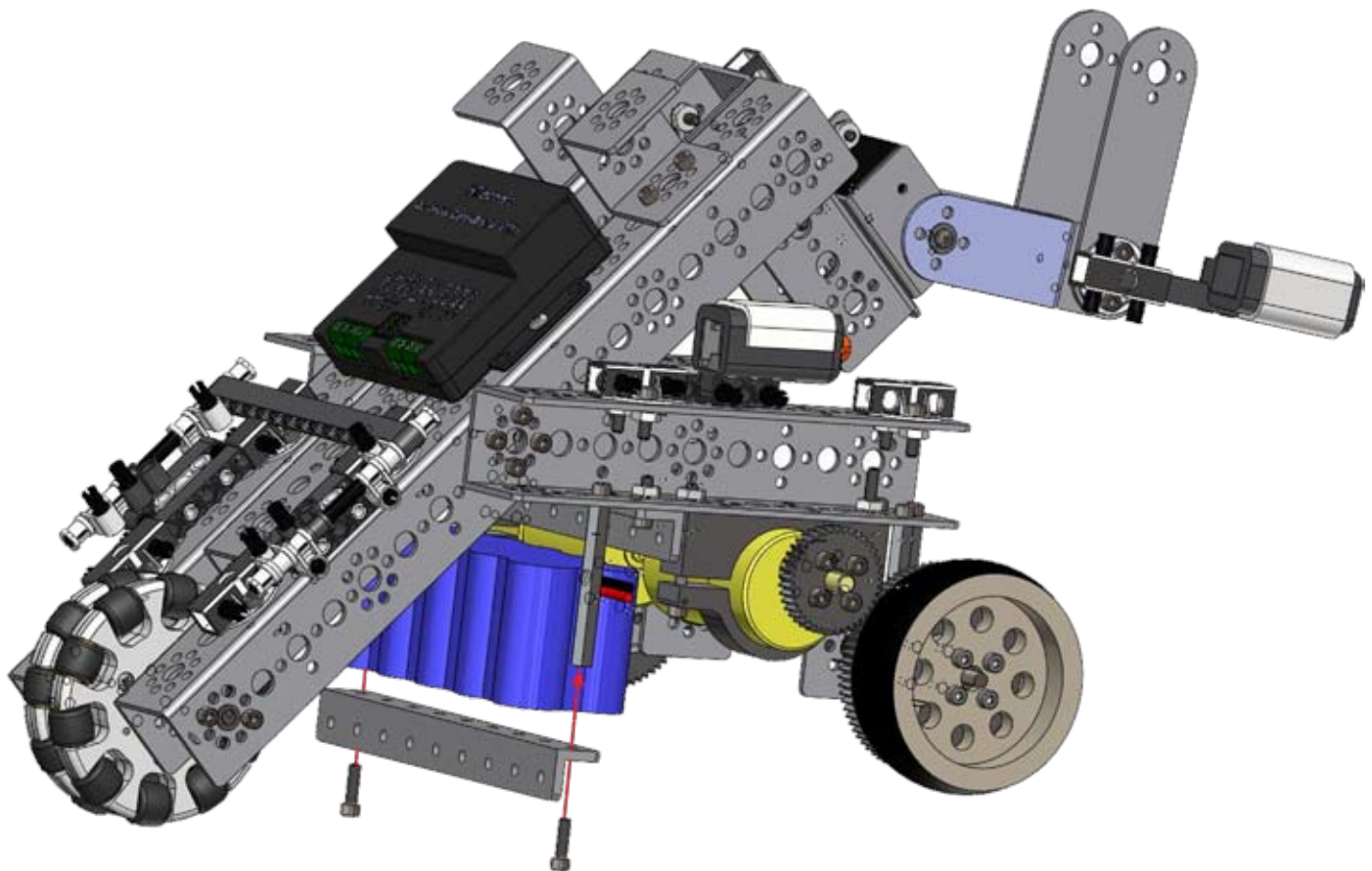
1x

Angle 144mm



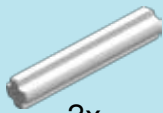
2x

Screw SHCS 6-32 x 0.5



Mantis Steps 35 A, B, C

Parts Needed



3x
Axle 3



1x
Angle Beam



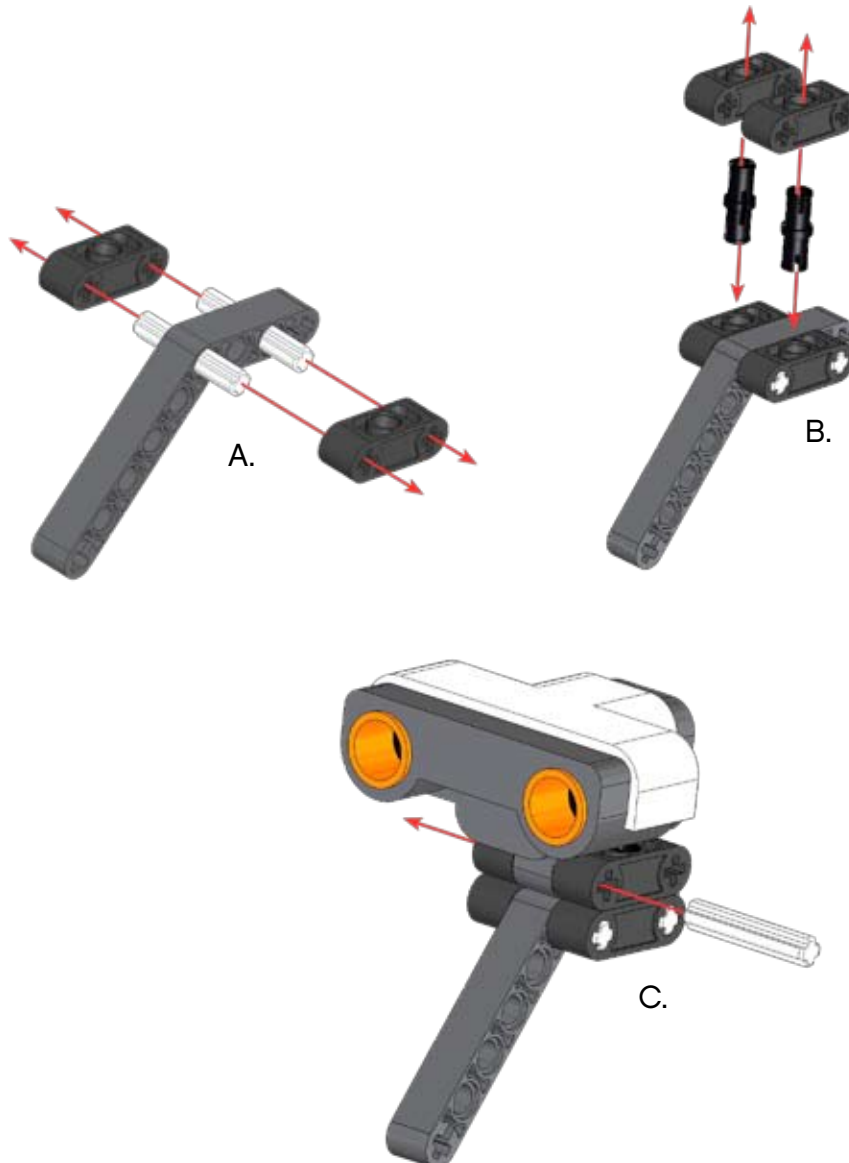
4x
Crossblock Black



2x
Connector



1x
Sonar Sensor



Mantis Steps 36 A, B

Parts Needed



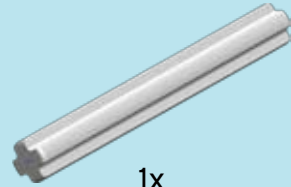
1x
Beam 5



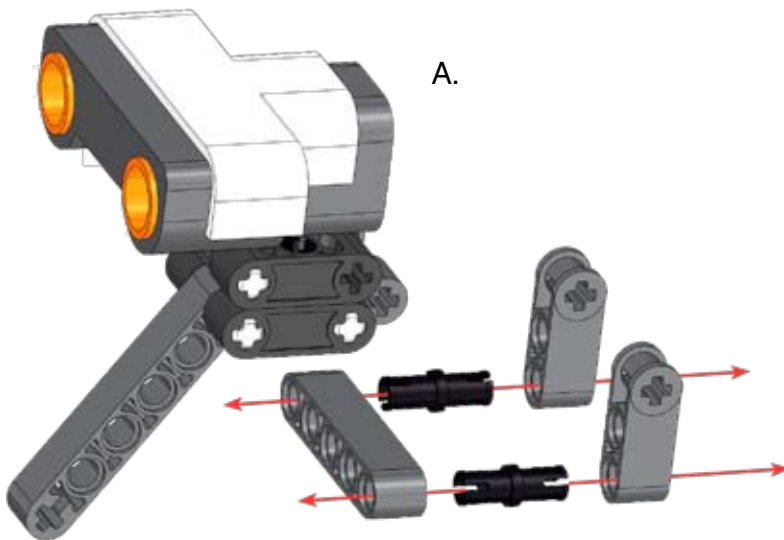
2x
Connector



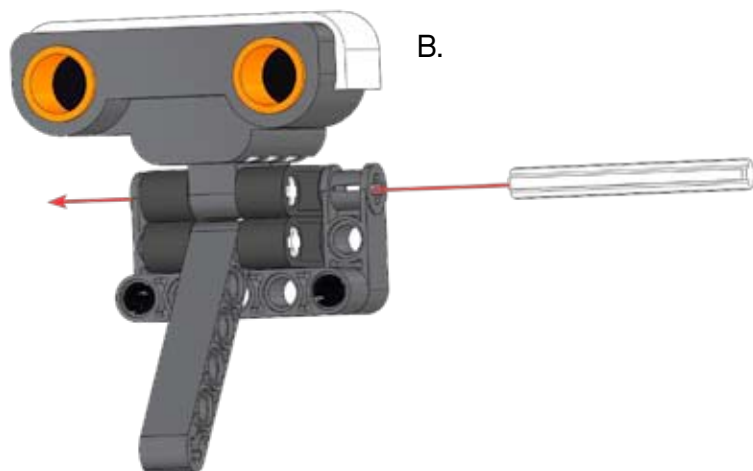
2x
Crossblock 3



1x
Axle 5



A.



B.

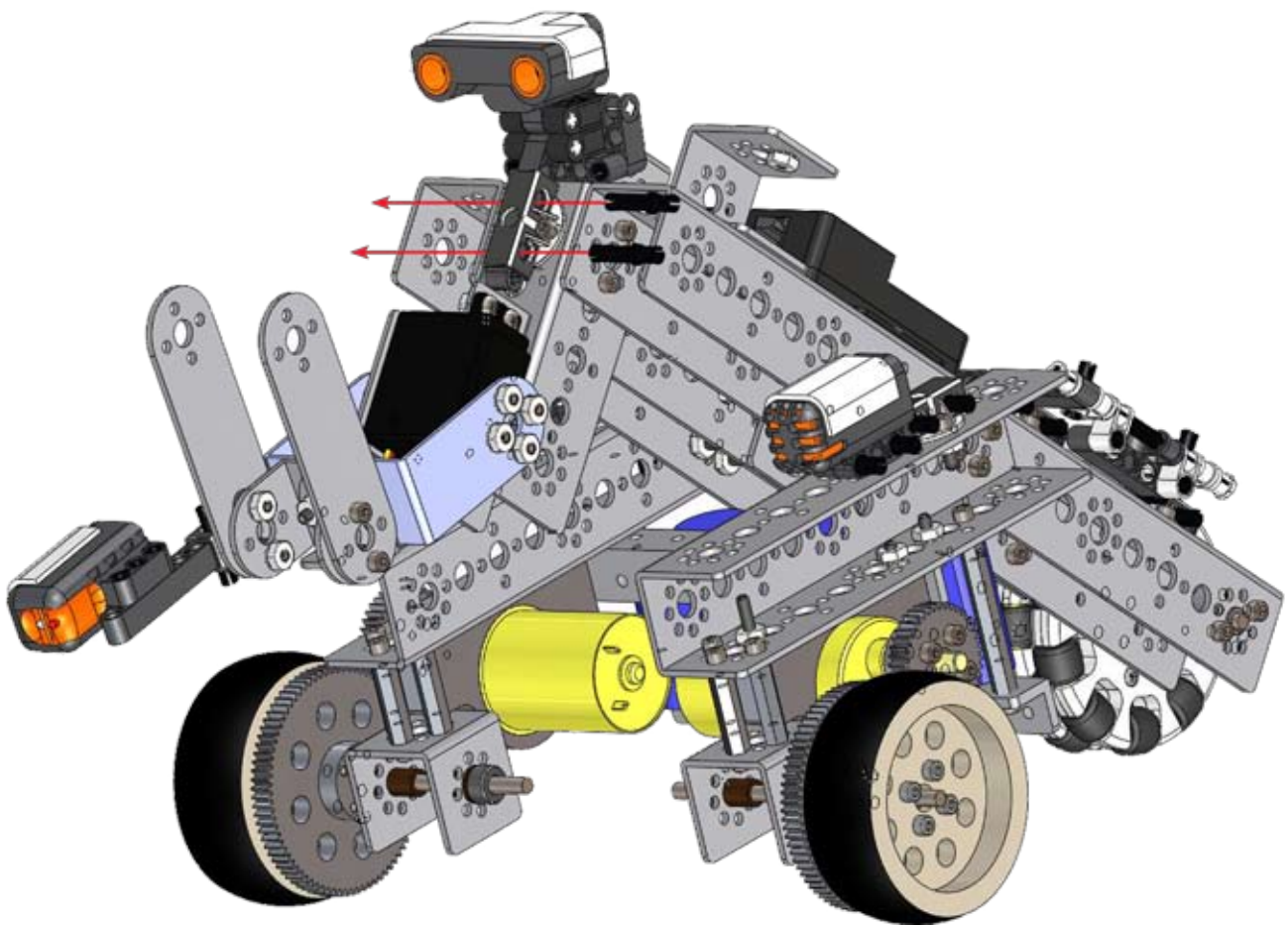
Mantis Step 37

Parts Needed



2x

Long Connector 3



Mantis Step 38

Parts Needed



1x

TETRIX Servo Controller



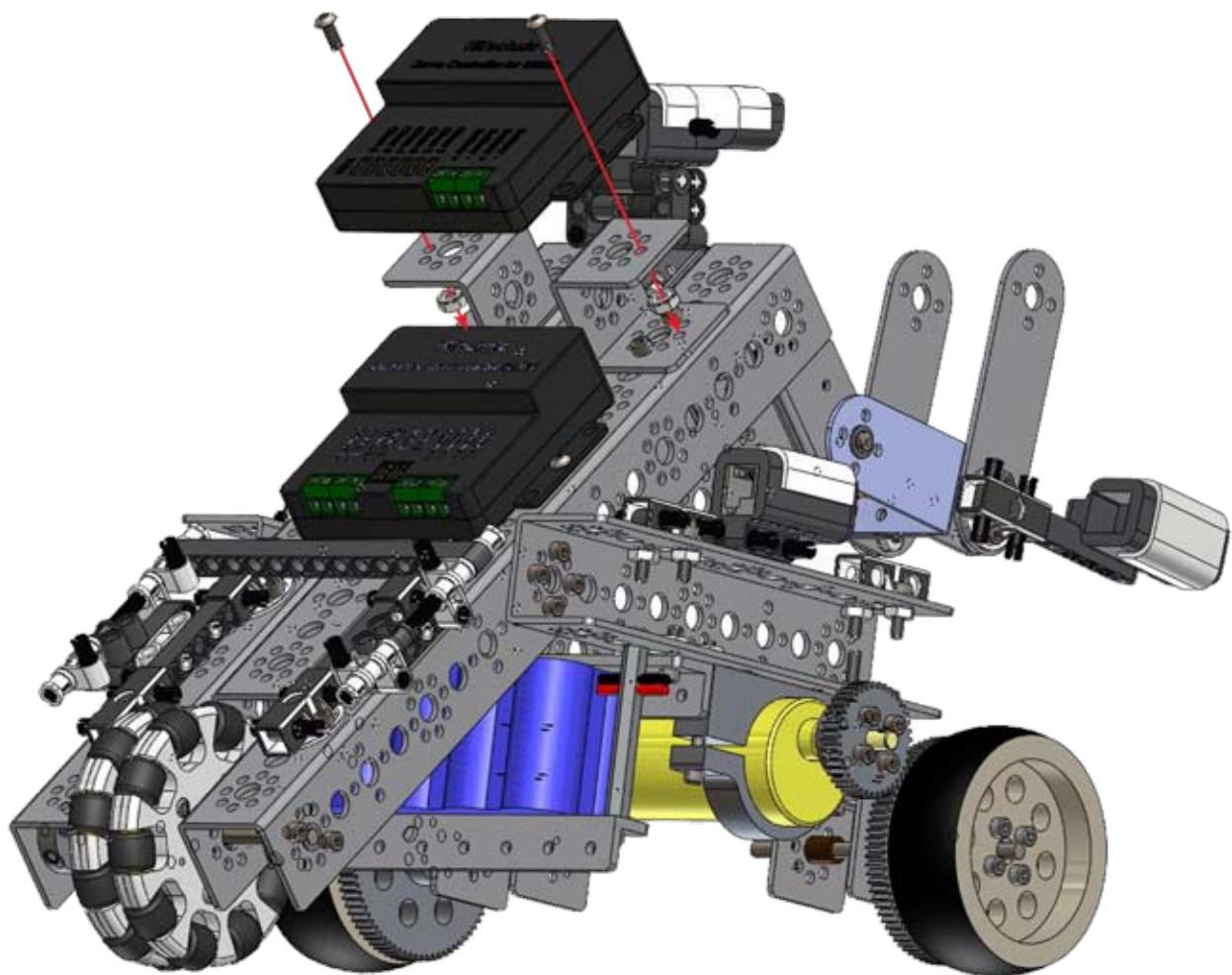
2x

Screw BHCS 6-32 x 0.375



2x

Nut Hex 6-32 Kep Lock



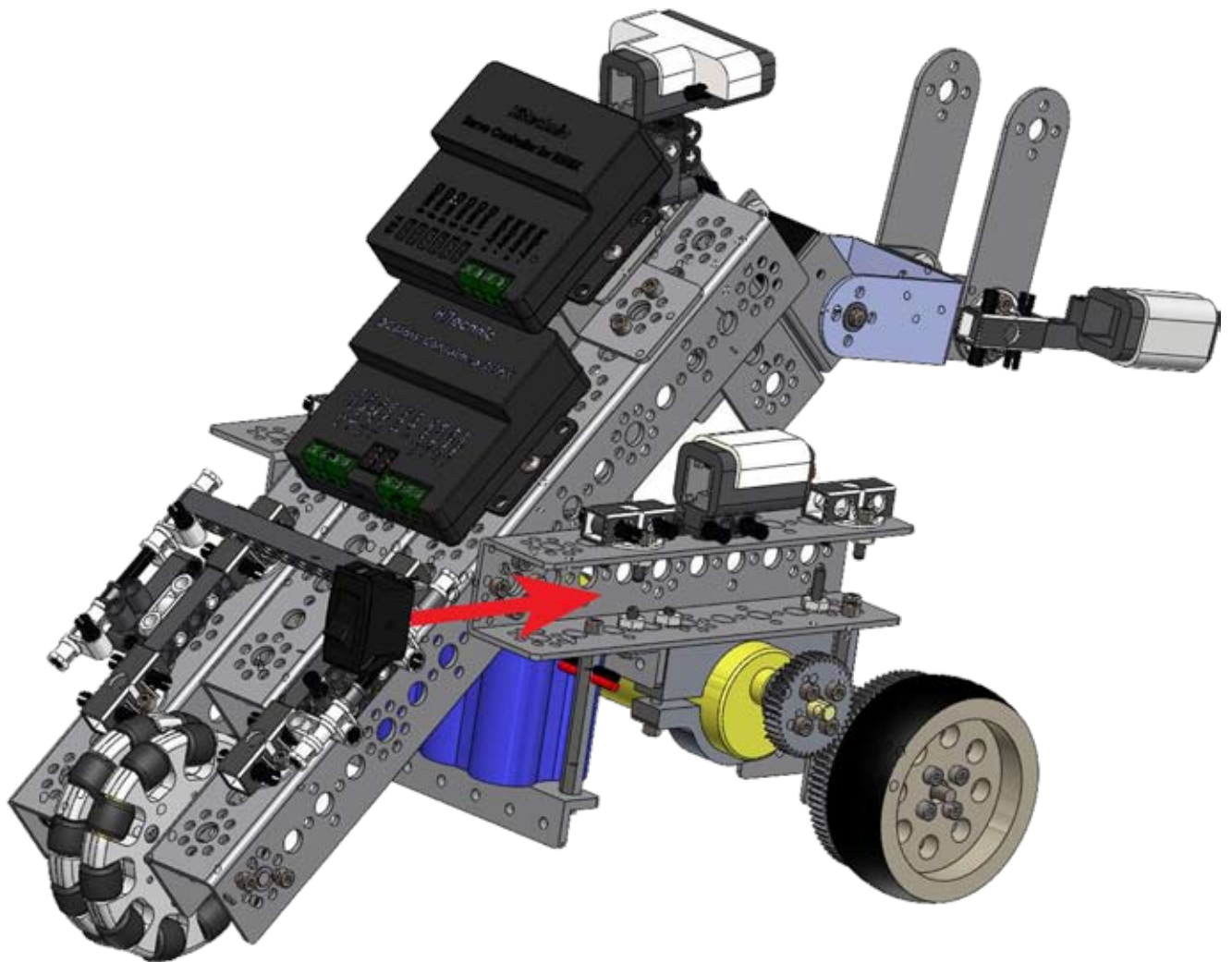
Mantis Step 39

Parts Needed



1x

Switch Power Rocker



Mantis Step 40

Parts Needed



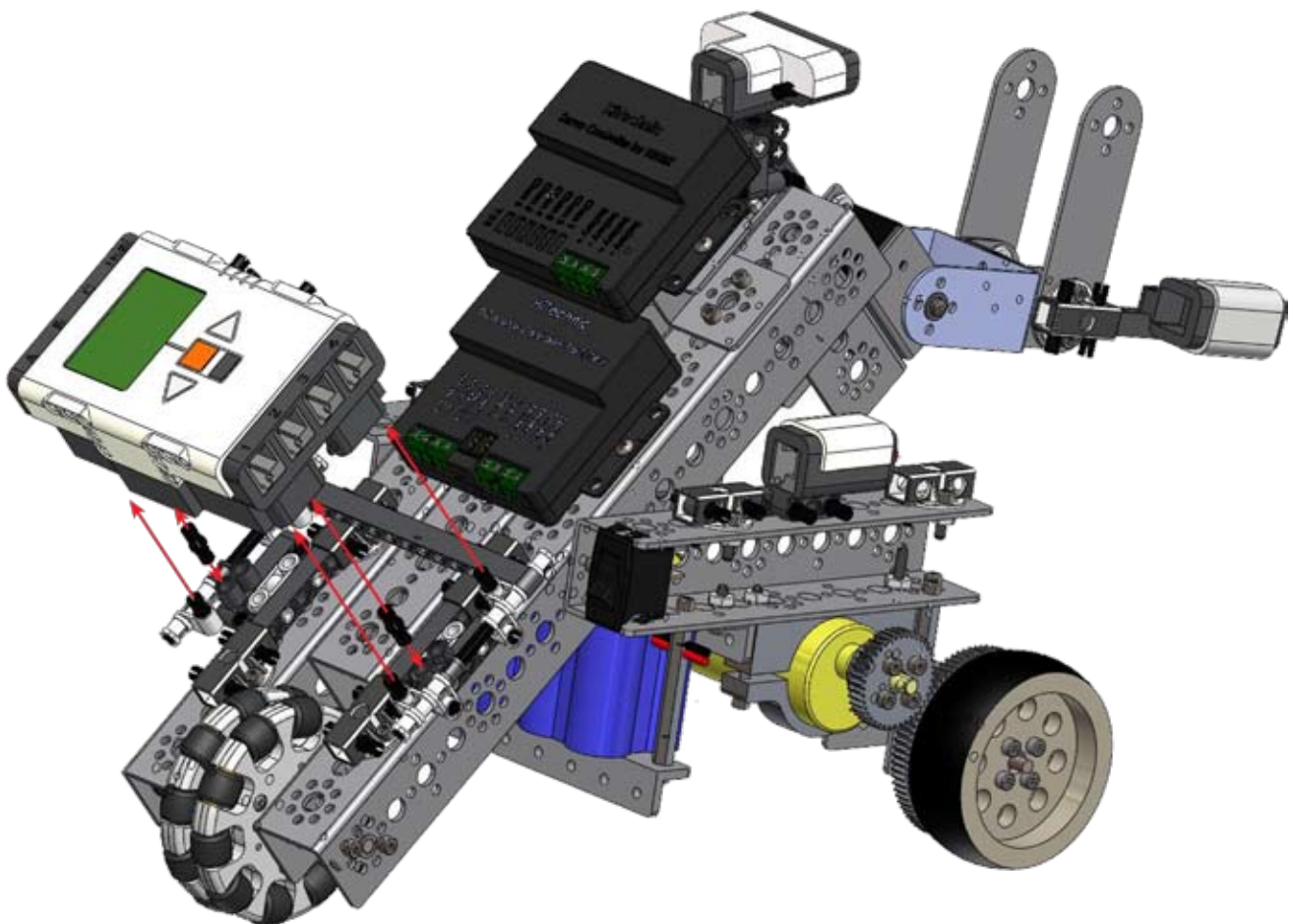
1x

NXT Programmable Brick



2x

Connector



Mantis Step 41

Parts Needed



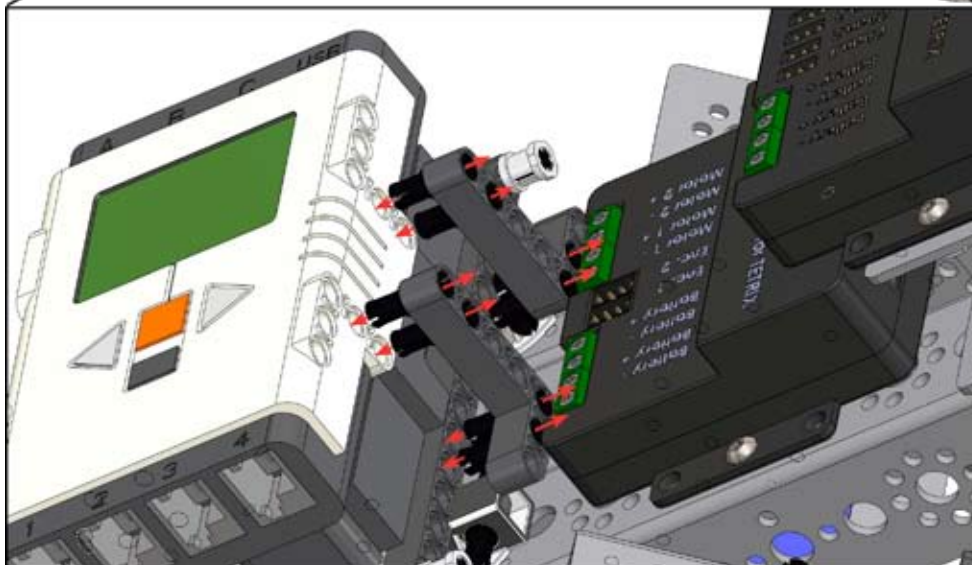
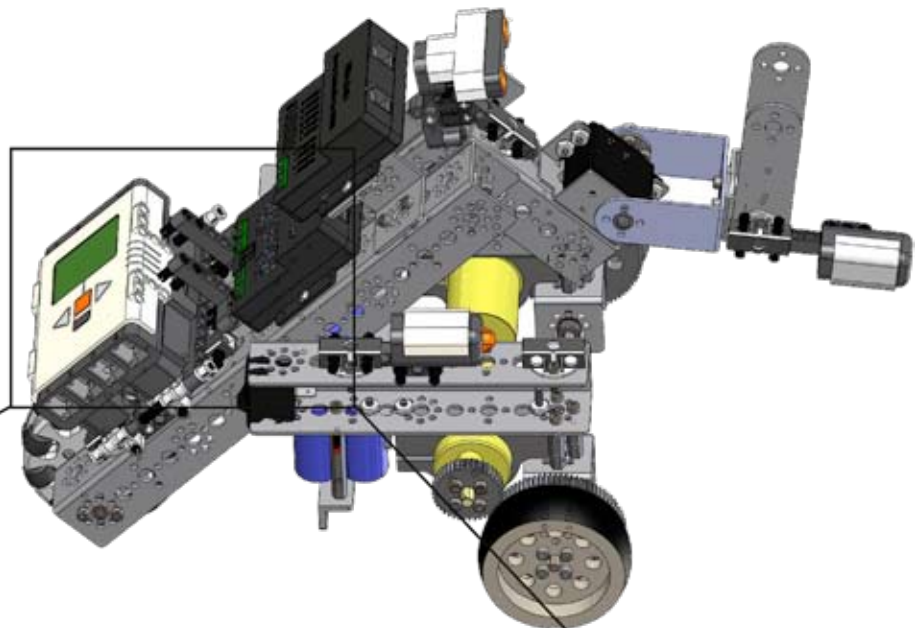
2x

Angle Beam 5x3

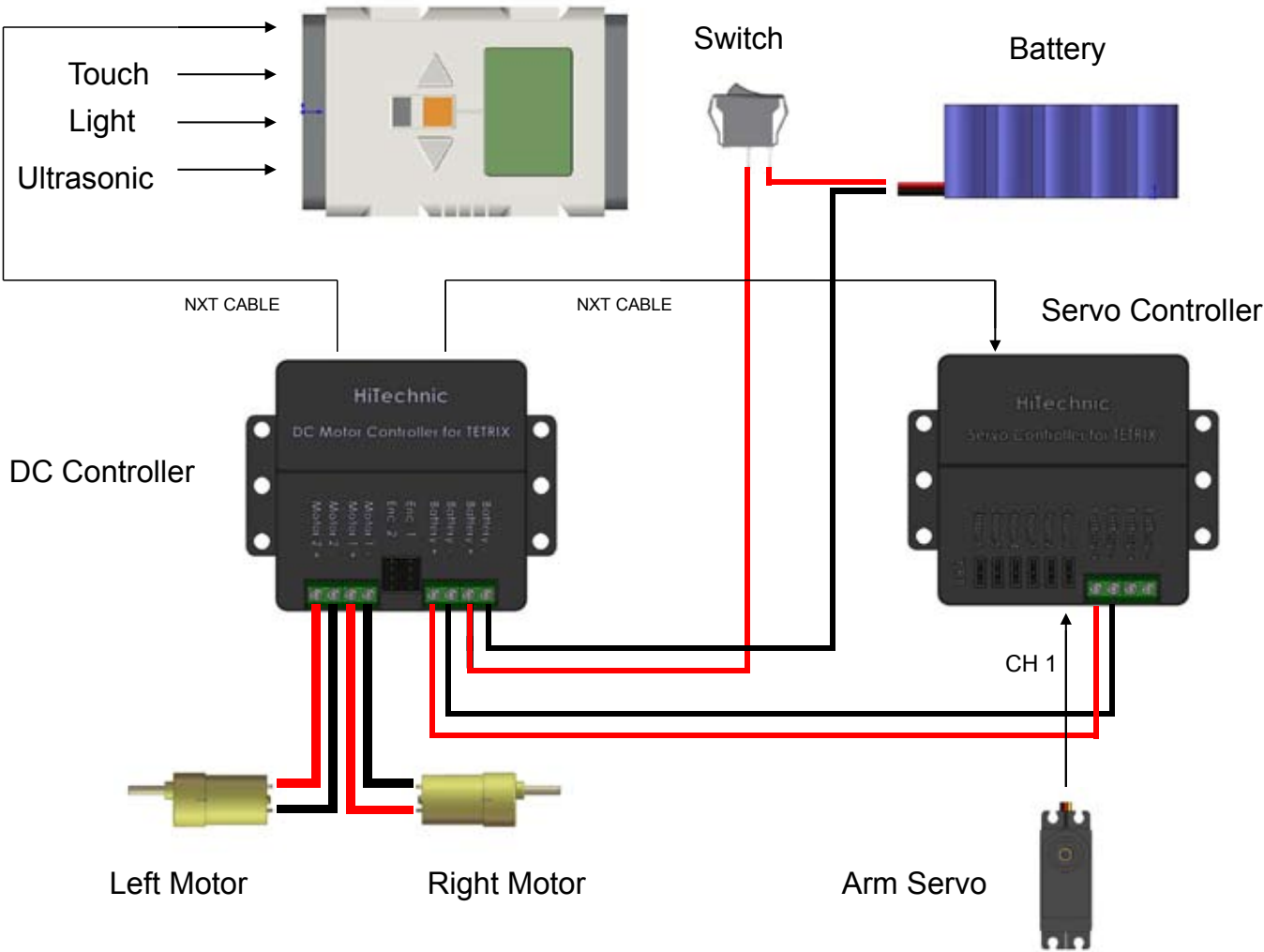


8x

Connector



Mantis Wiring Diagram



Mantis Build Completed

