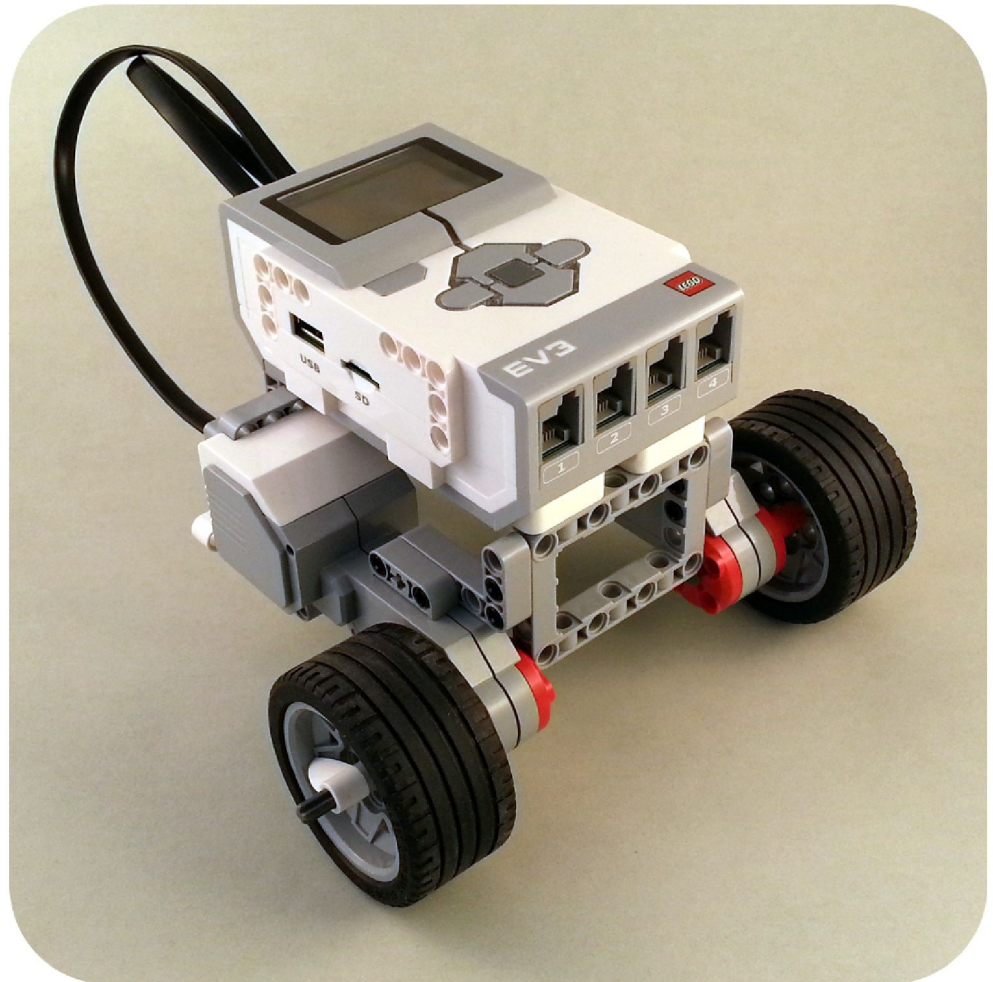
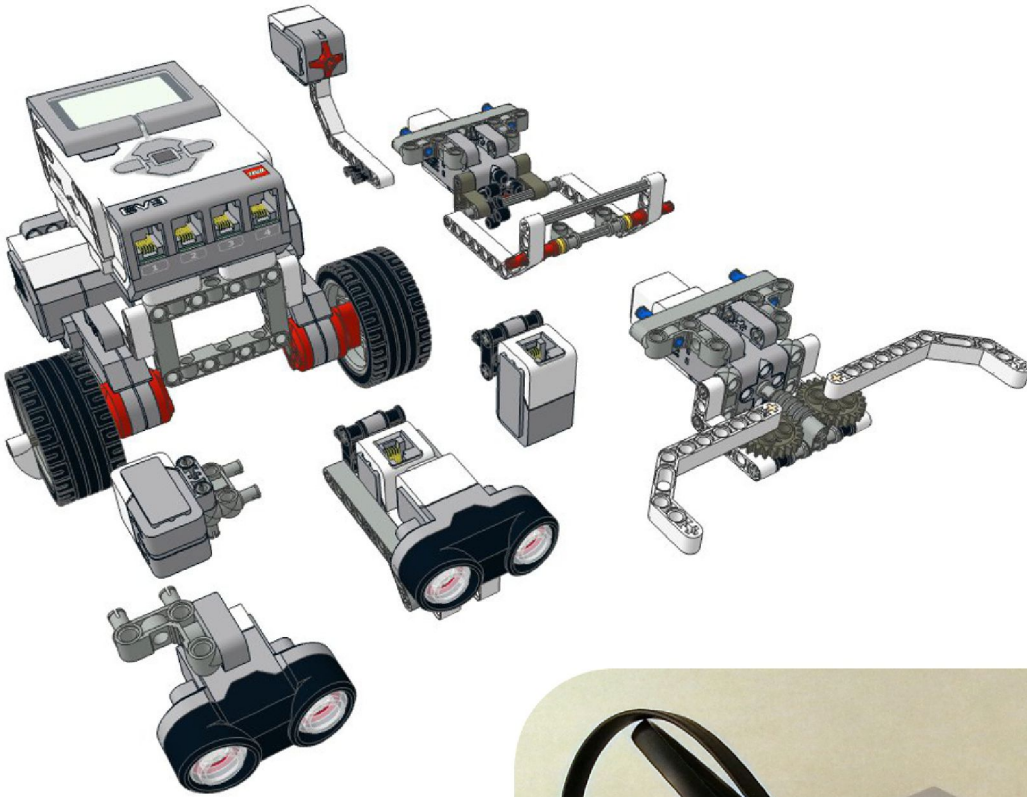


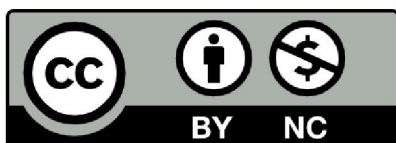
Building Instructions

RileyRover Base Design and Attachments

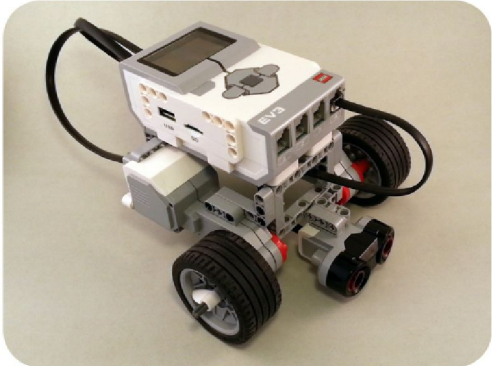


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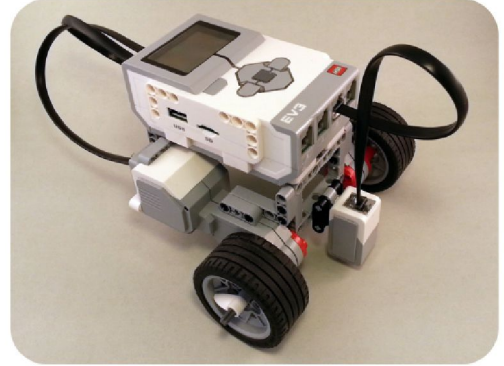
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prior permission granted.



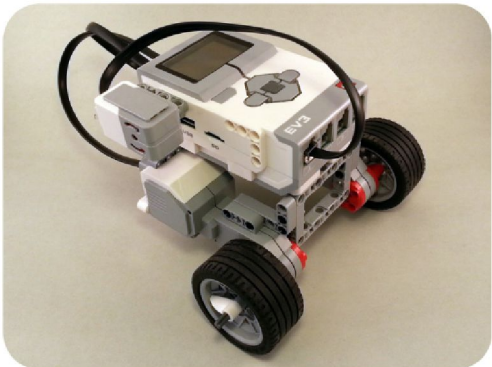
Sensor and Motor Attachments for the RileyRover Base design



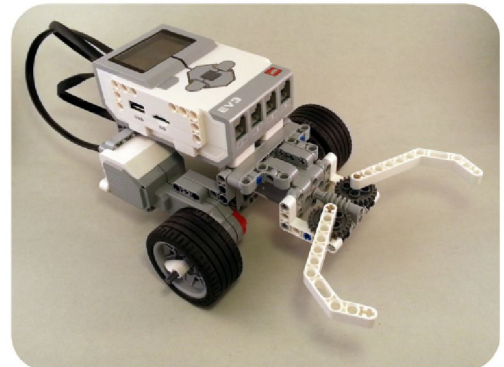
Ultrasonic Sensor



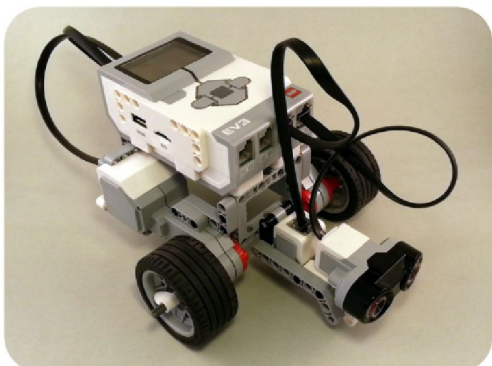
Colour Sensor



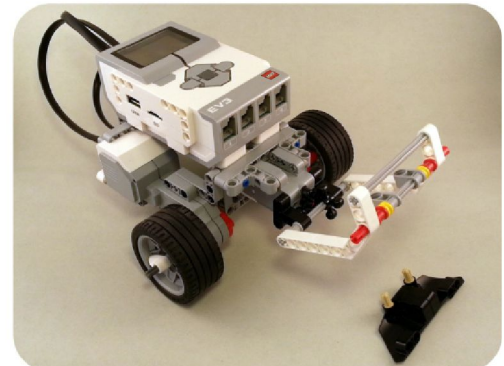
Gyro Sensor



Gripper

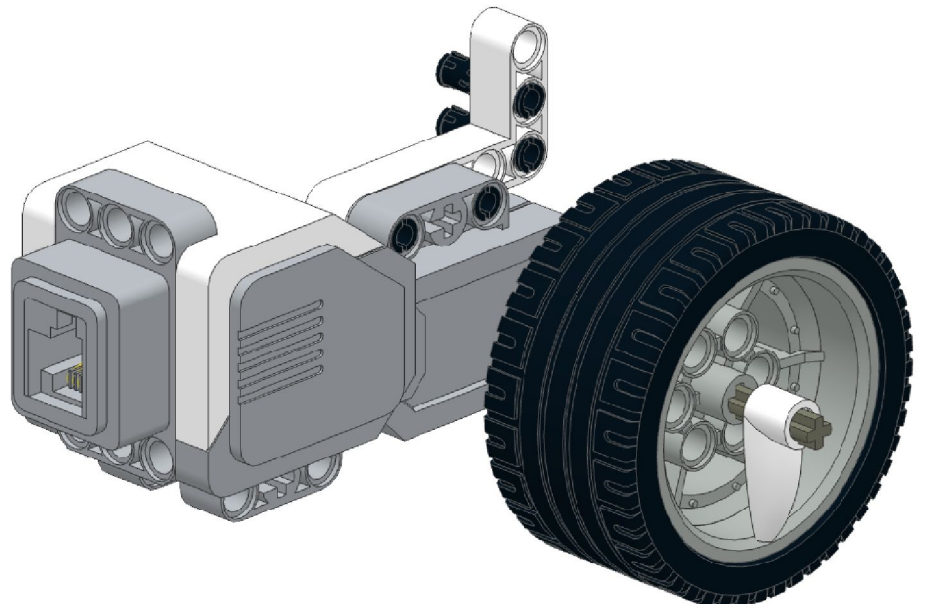
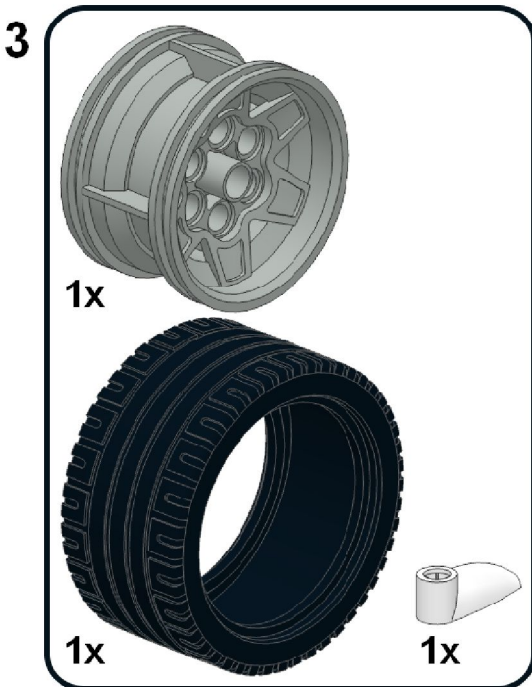
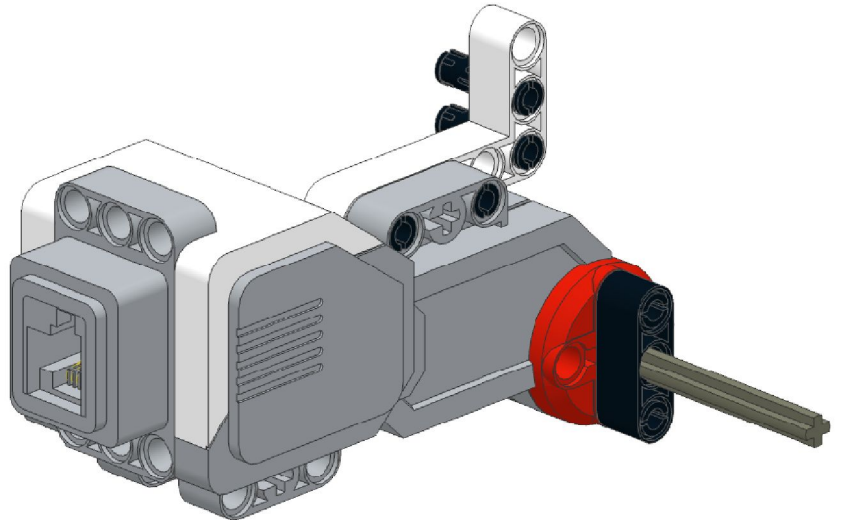
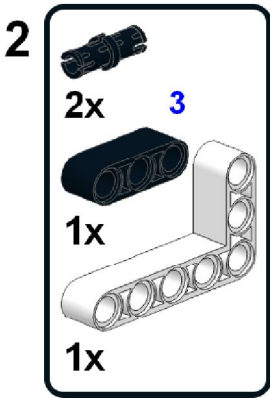
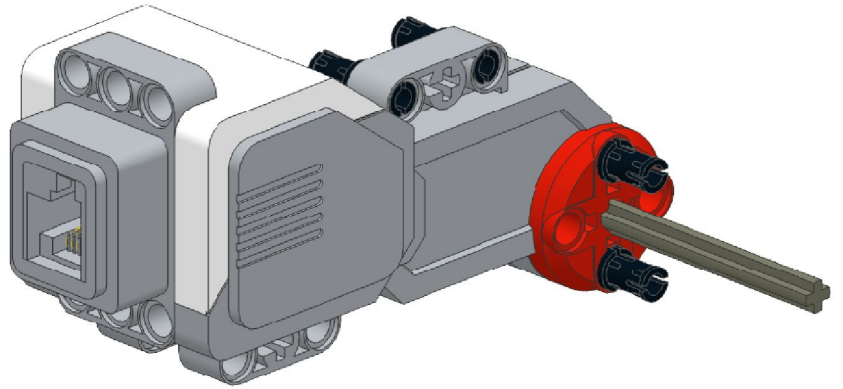
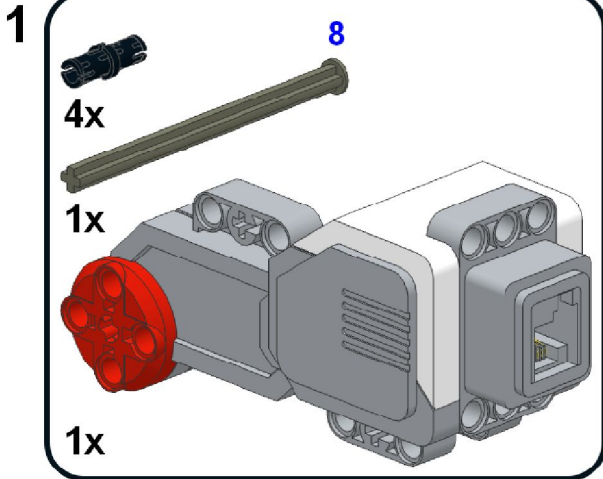


**Colour / Ultrasonic
combination**



Cargo Delivery

Right Motor Assembly

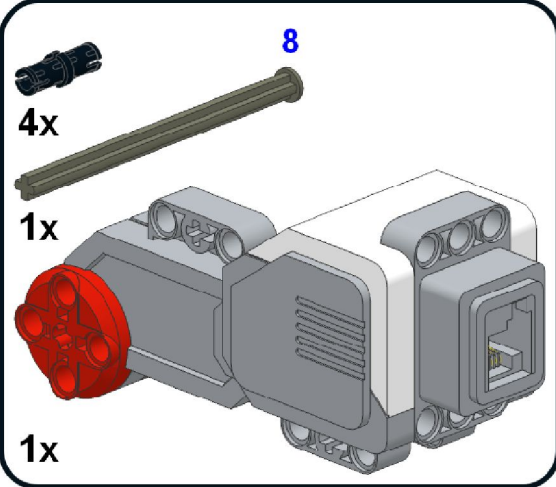


Left Motor Assembly

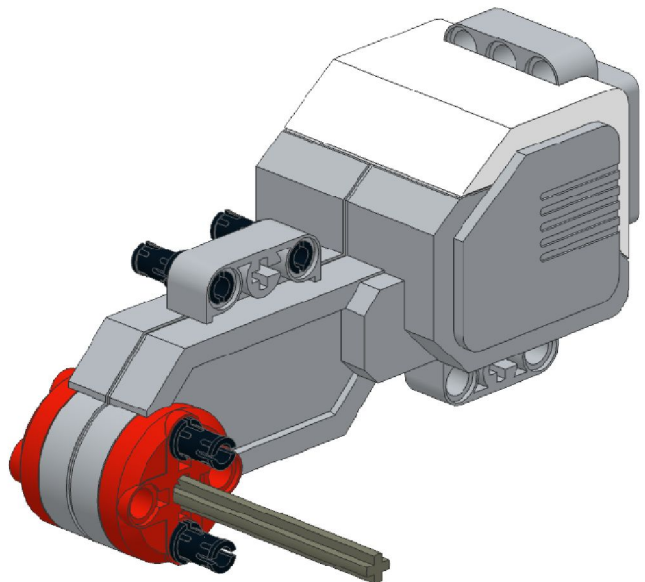
1

4x
1x
1x

8



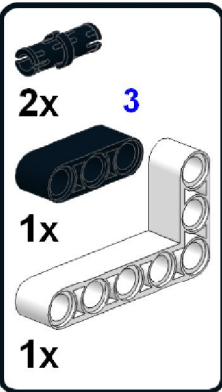
This block shows the parts for the first step. It includes a list of 4 black pins, 1 grey axle, and 1 motor assembly. The motor assembly is shown with a red gear on its front. A blue number '8' is positioned above the axle.



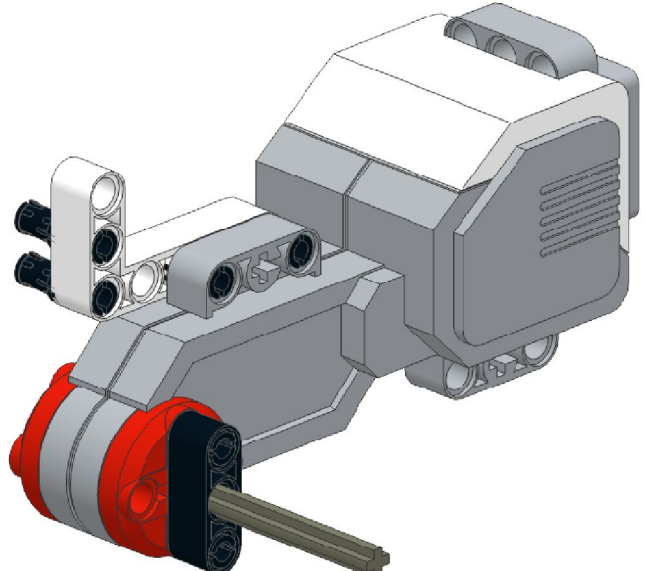
2

2x
1x
1x

3



This block shows the parts for the second step. It includes a list of 2 black pins, 1 black connector, and 1 grey axle. A blue number '3' is positioned above the black connector.

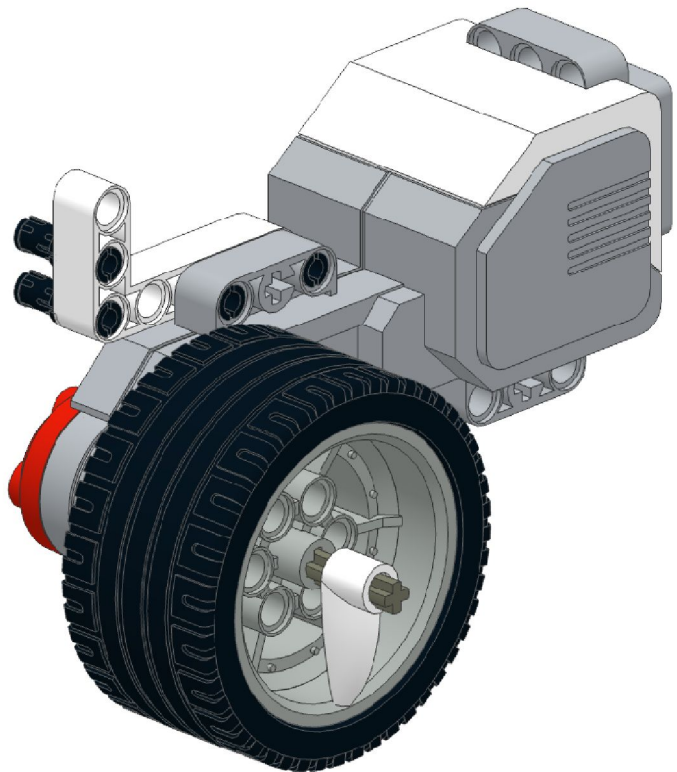


3

1x
1x
1x



This block shows the parts for the third step. It includes a list of 1 grey wheel, 1 black tire, and 1 white axle.



Back Castor Assembly

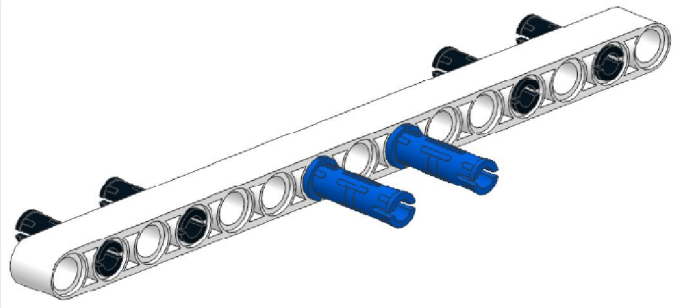
1

4x

1x

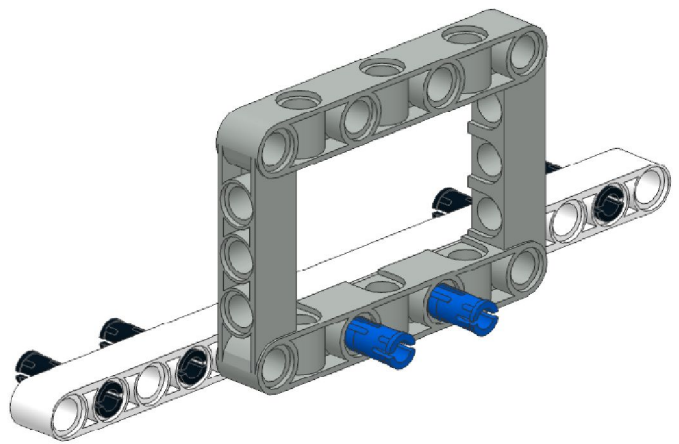
2x

15



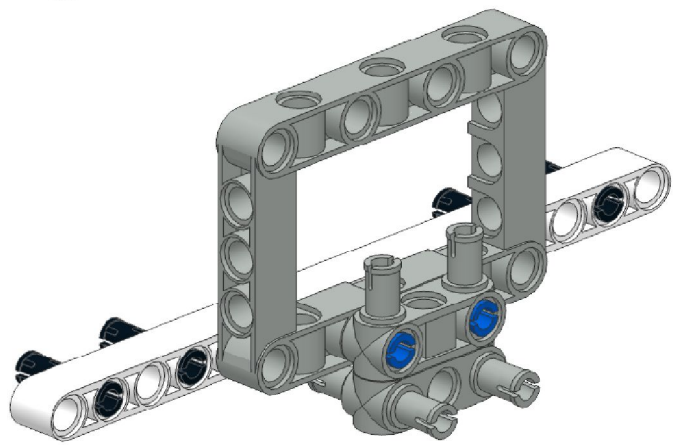
2

1x



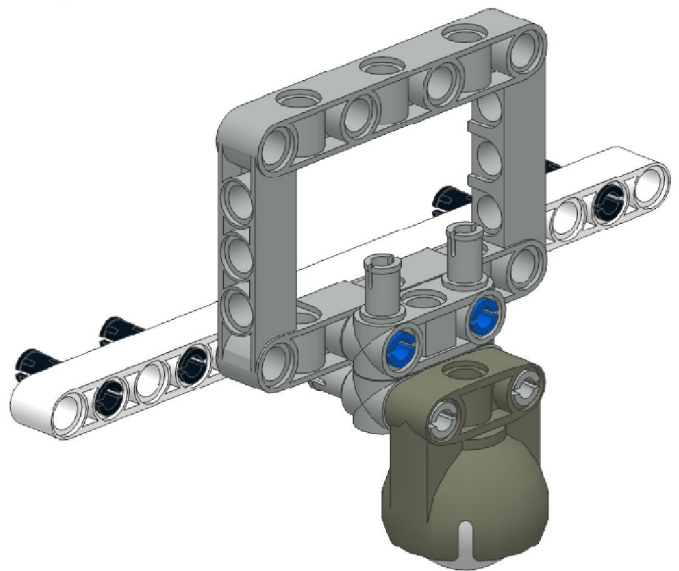
3

2x



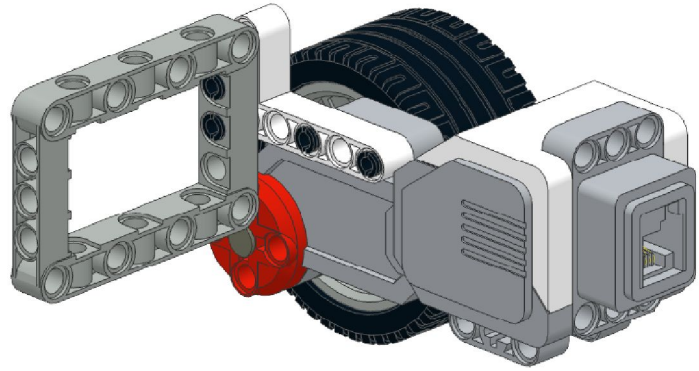
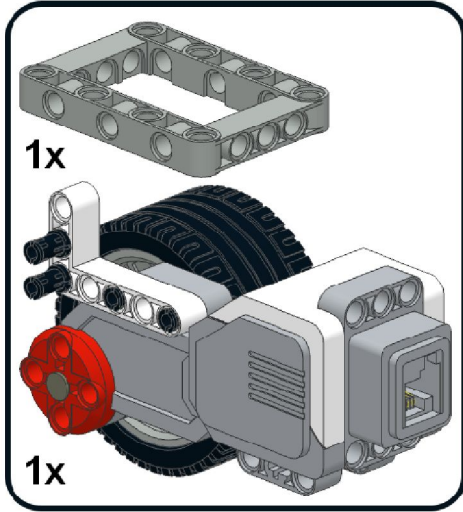
4

1x

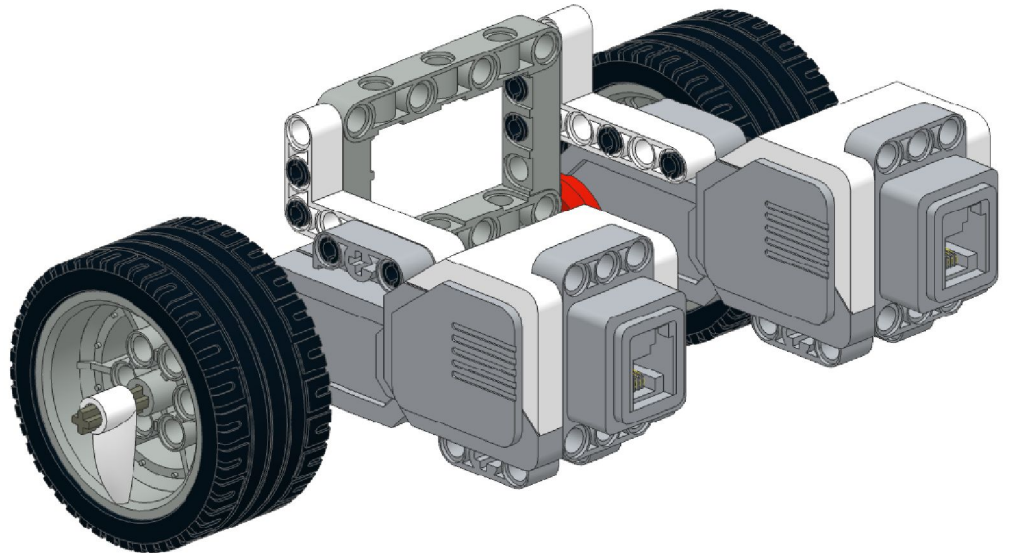
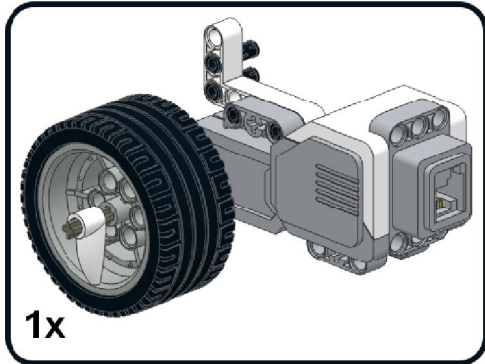


Assemble Right Motor, Left Motor and Back Castor

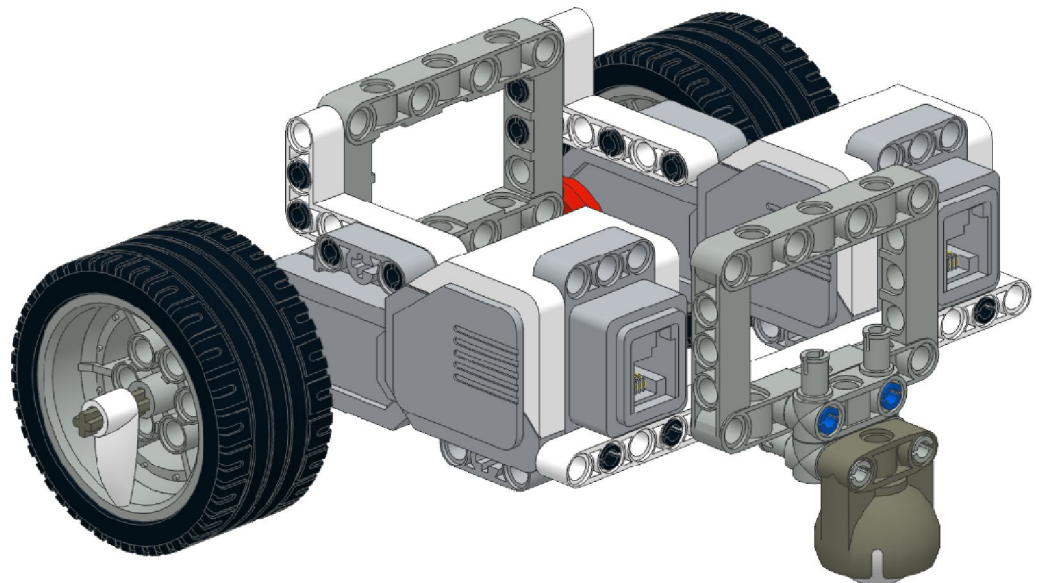
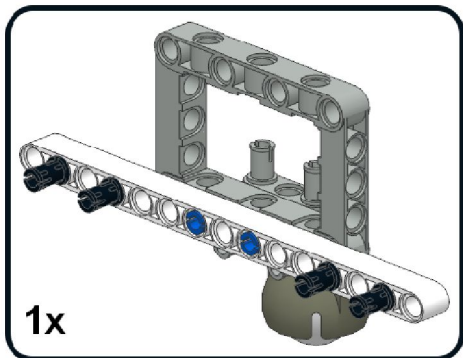
1



2

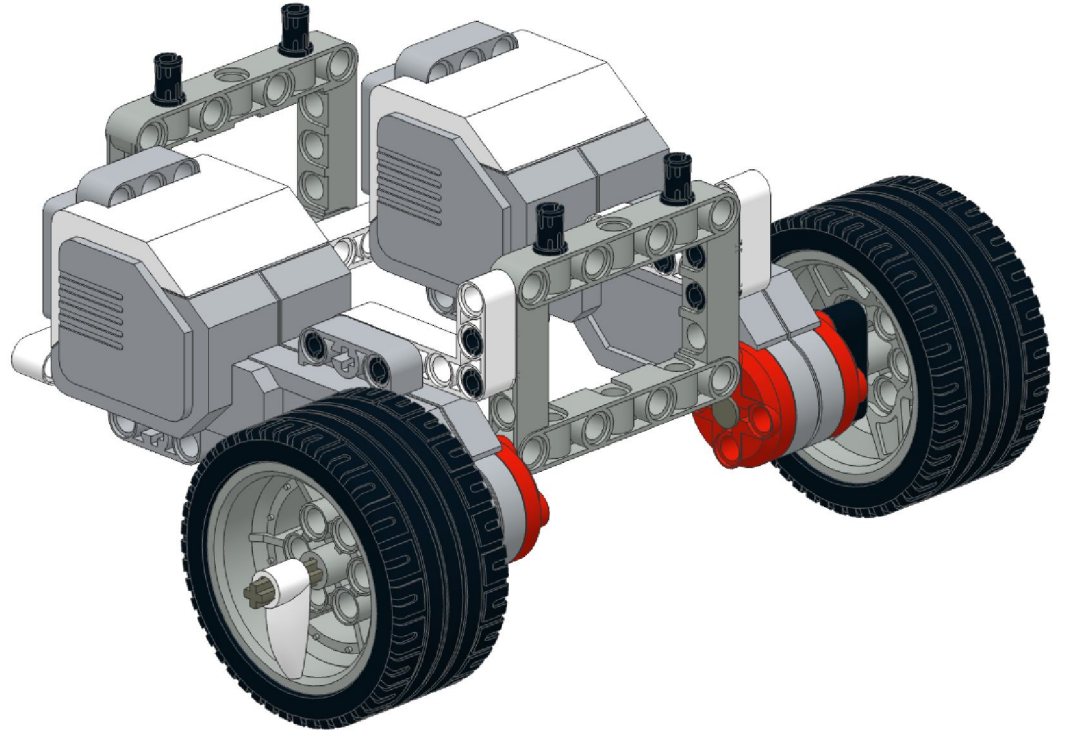


3

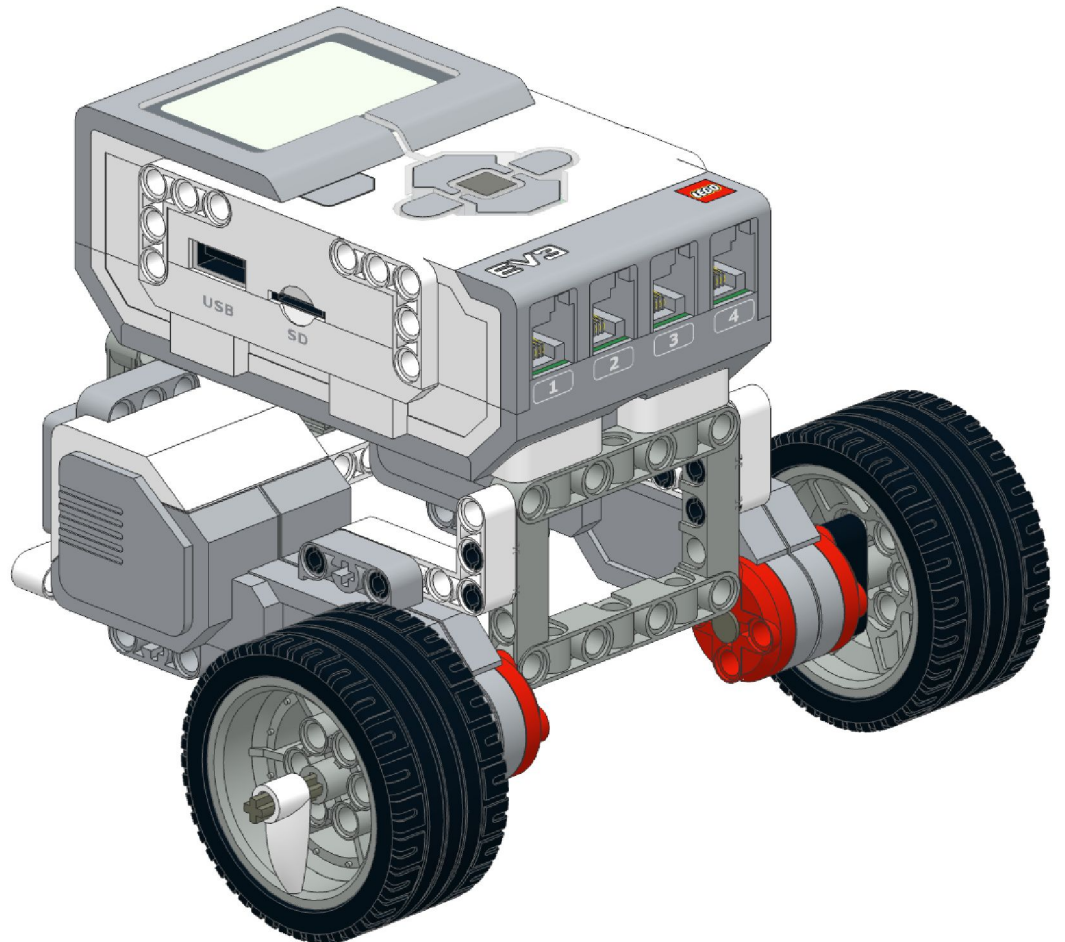
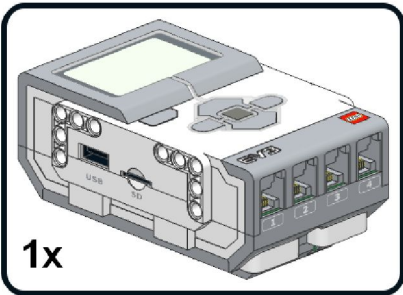


Turn Base around

4

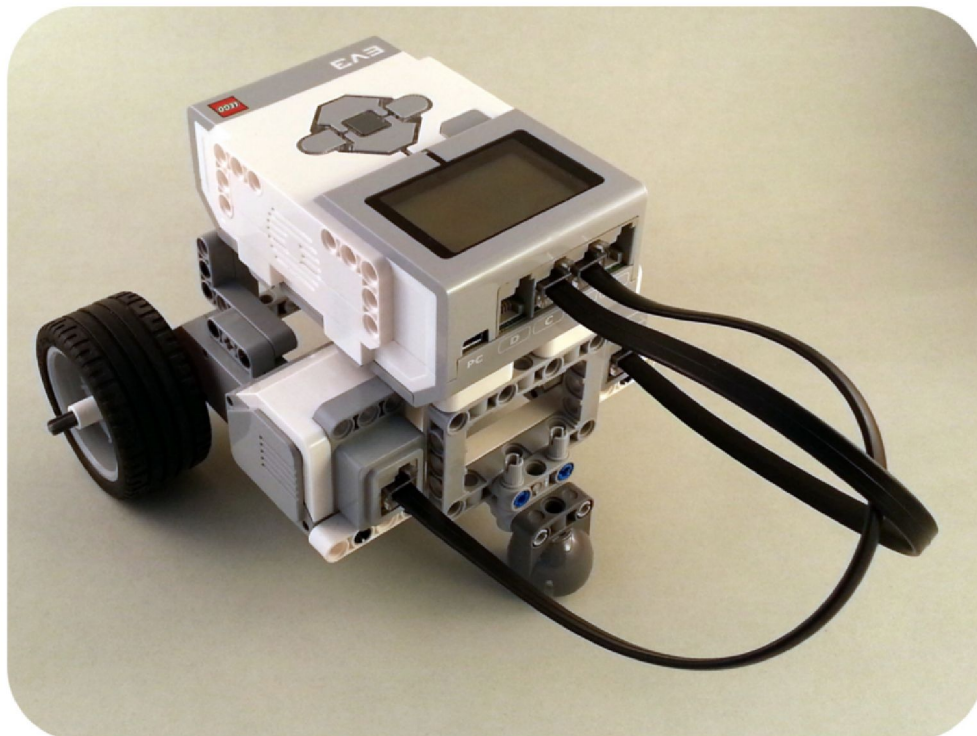
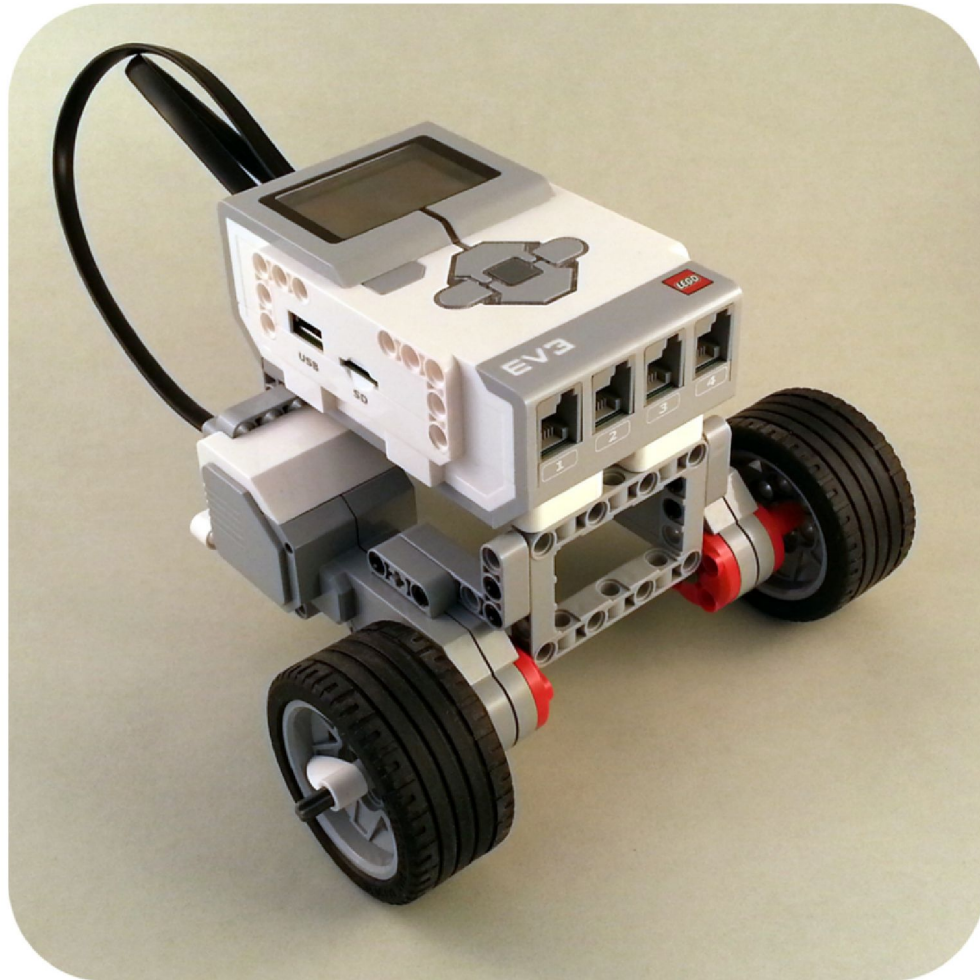


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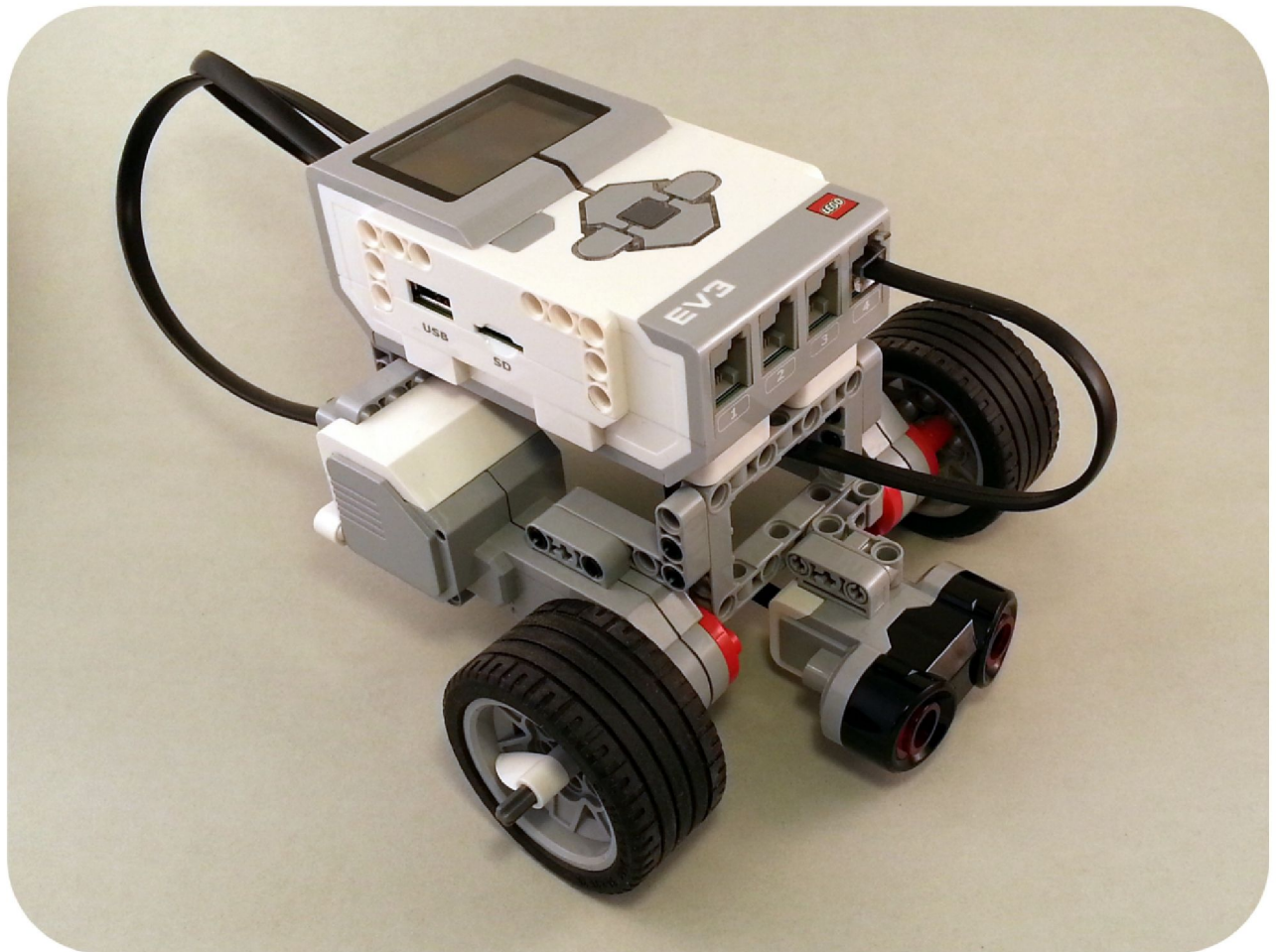
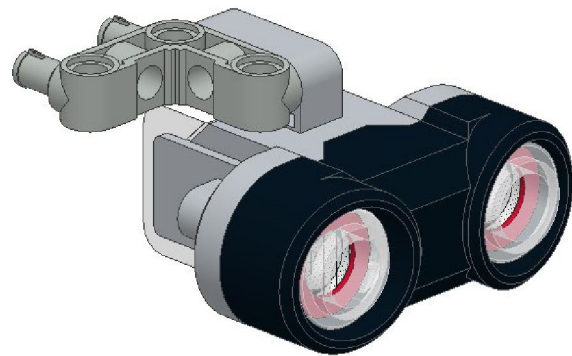
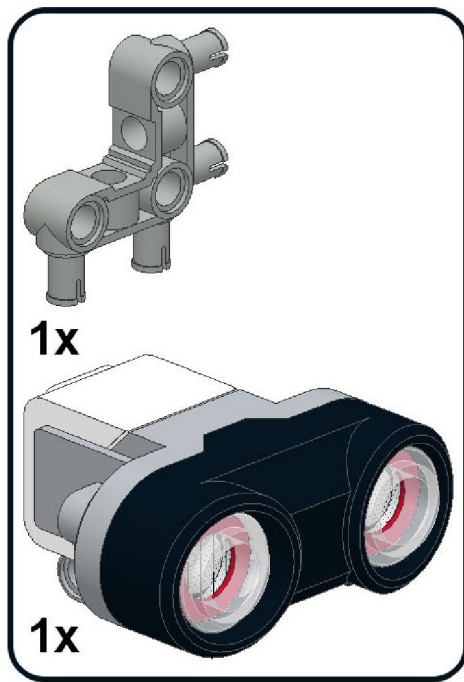


Connect the Cables

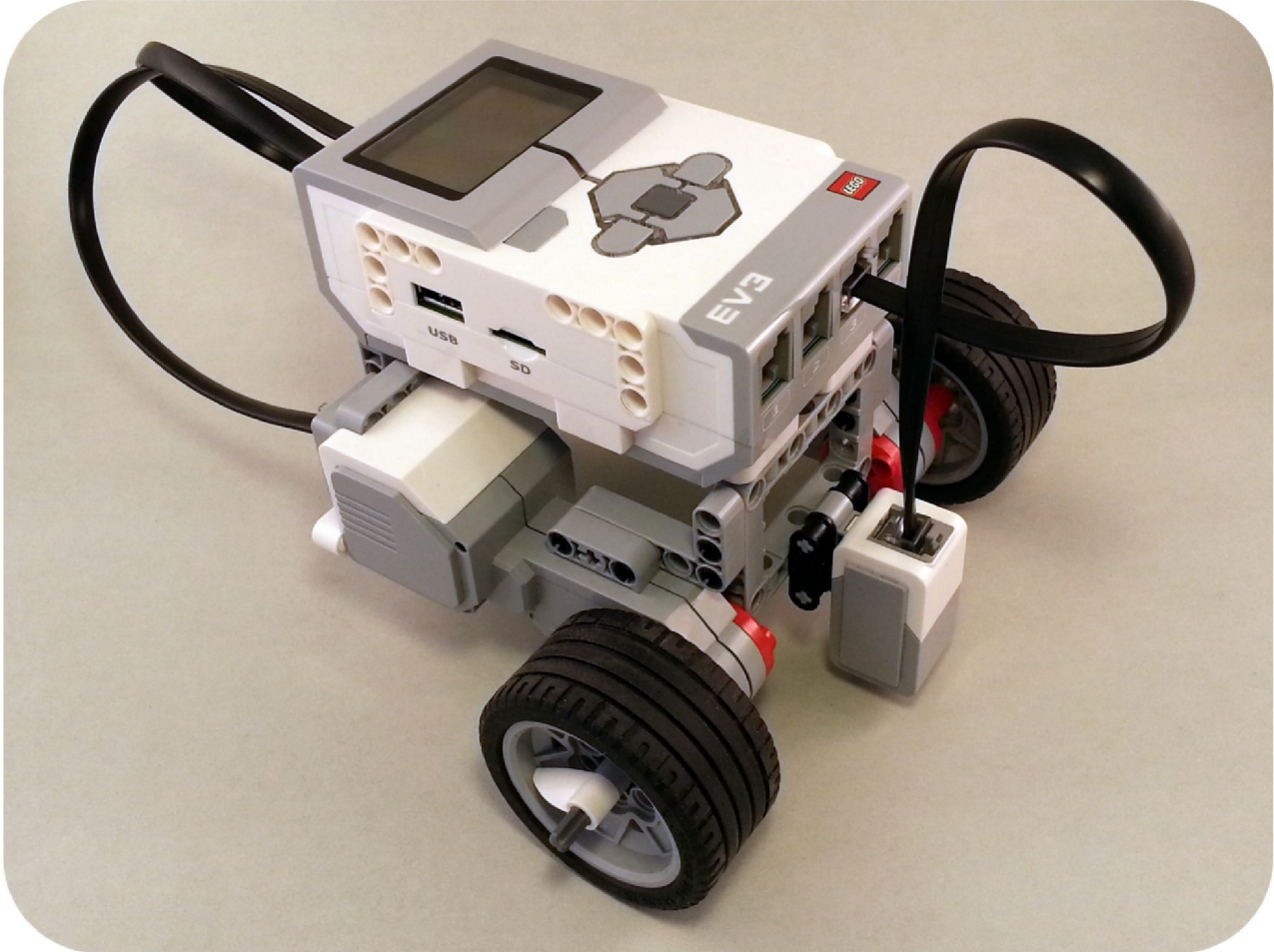
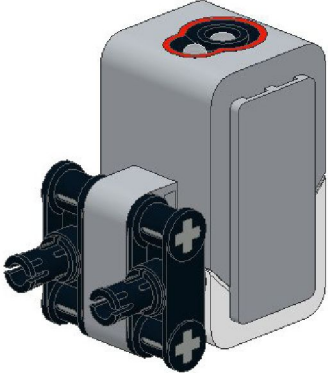
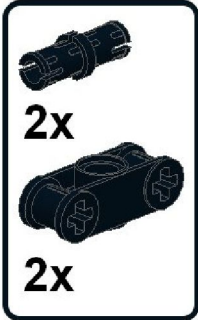
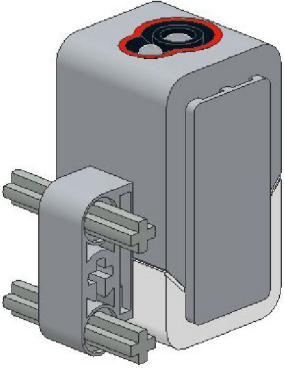
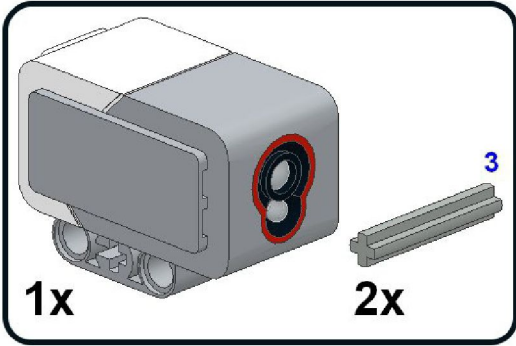
Left Motor : B - Right Motor : C
(for this design, the cables will cross over)



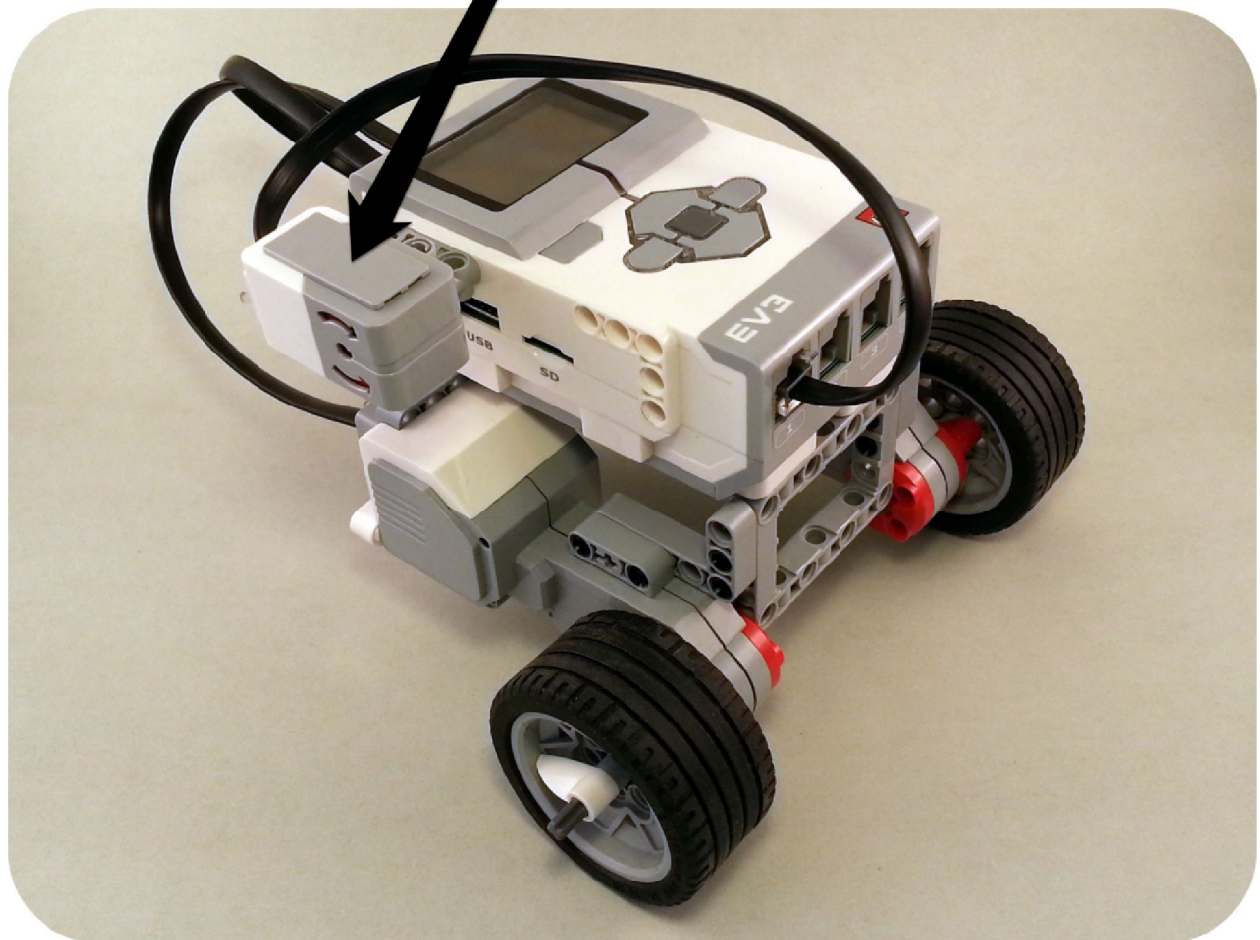
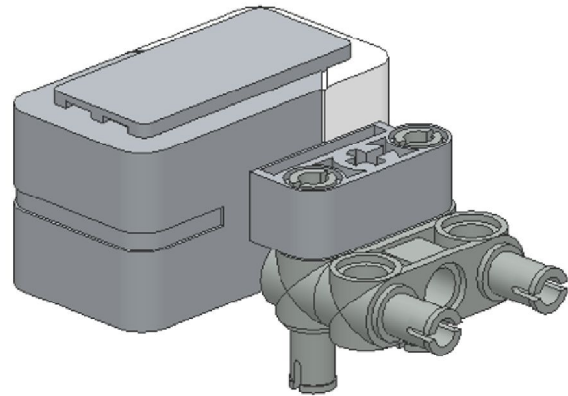
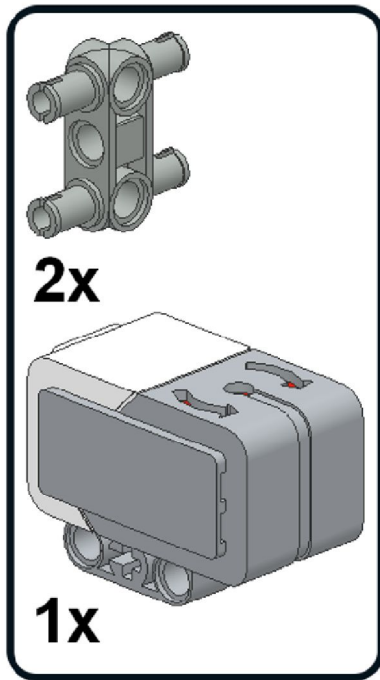
Ultrasonic Sensor Attachment



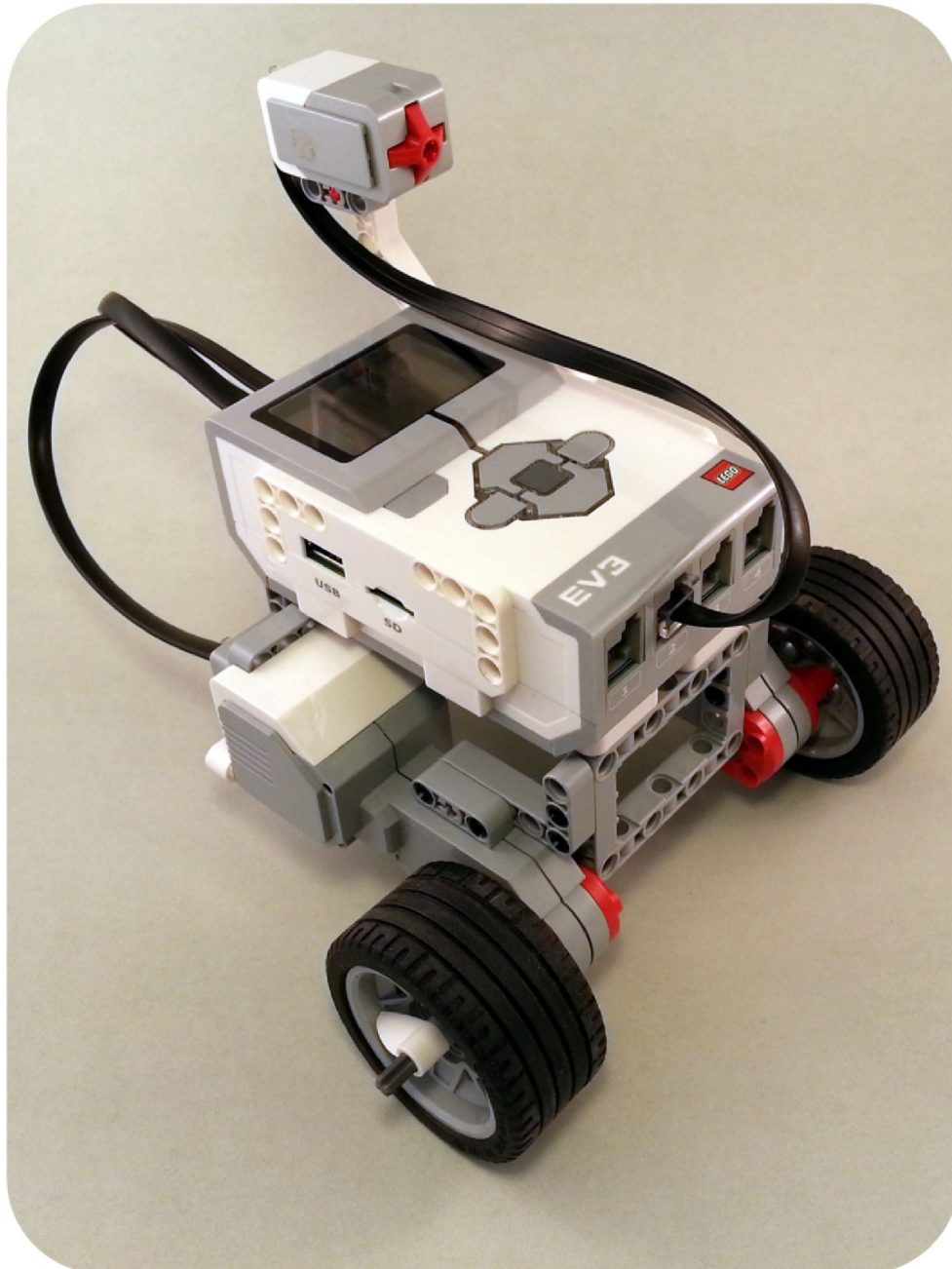
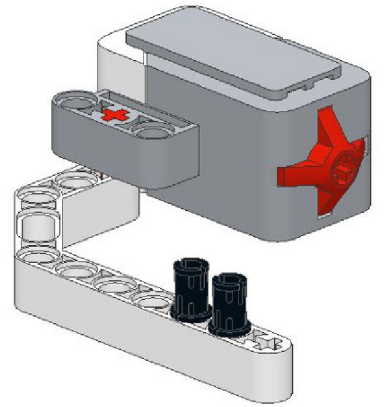
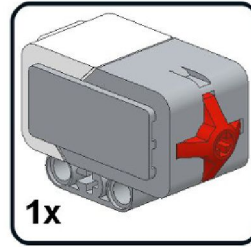
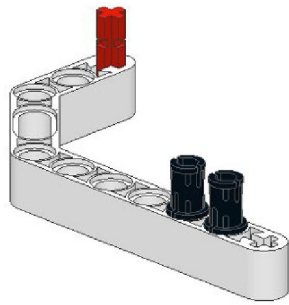
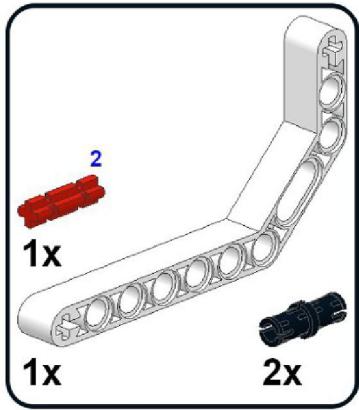
Colour Sensor Attachment



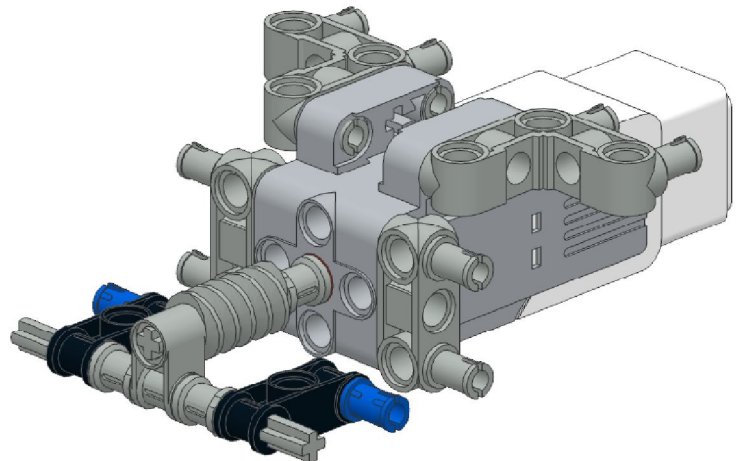
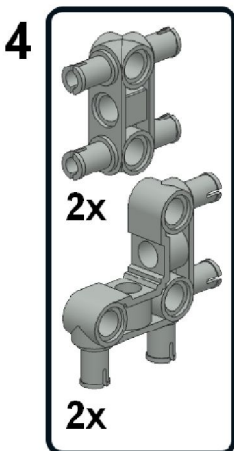
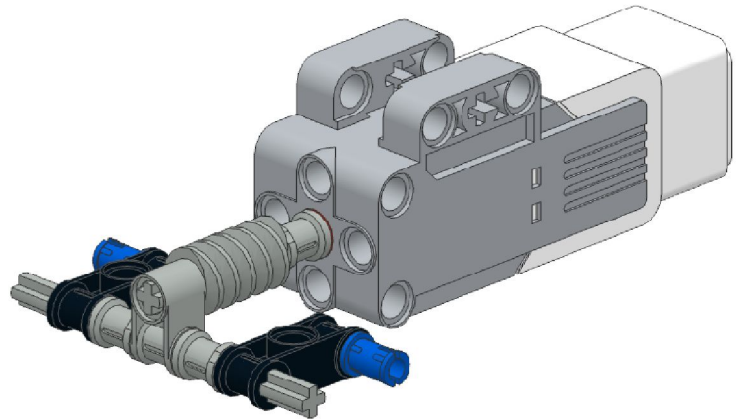
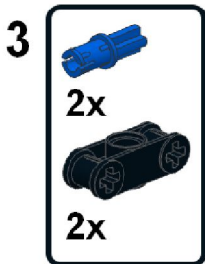
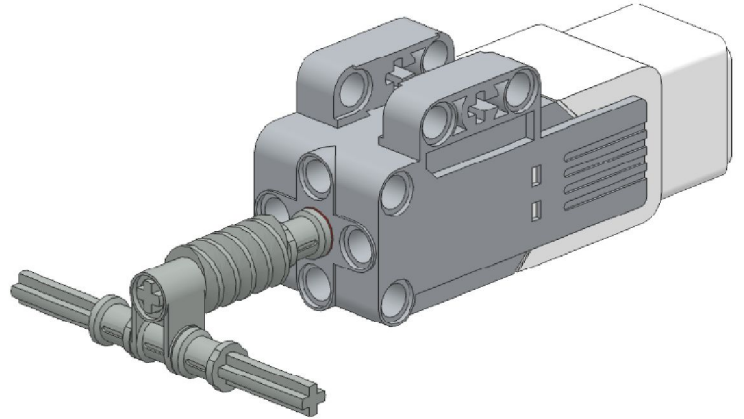
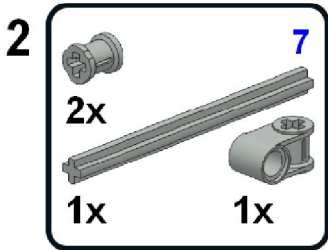
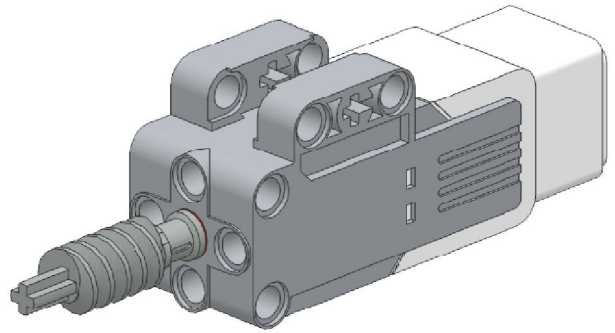
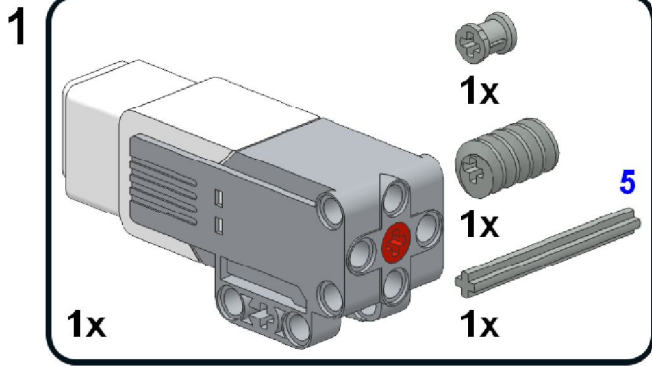
Gyro Sensor Attachment



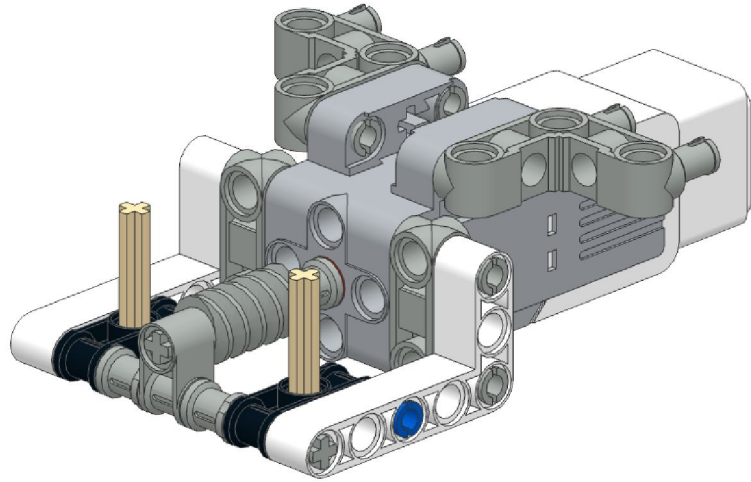
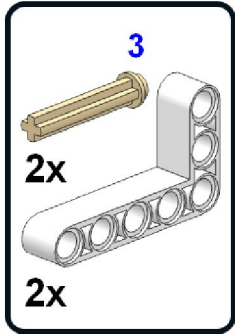
Touch Sensor Attachment



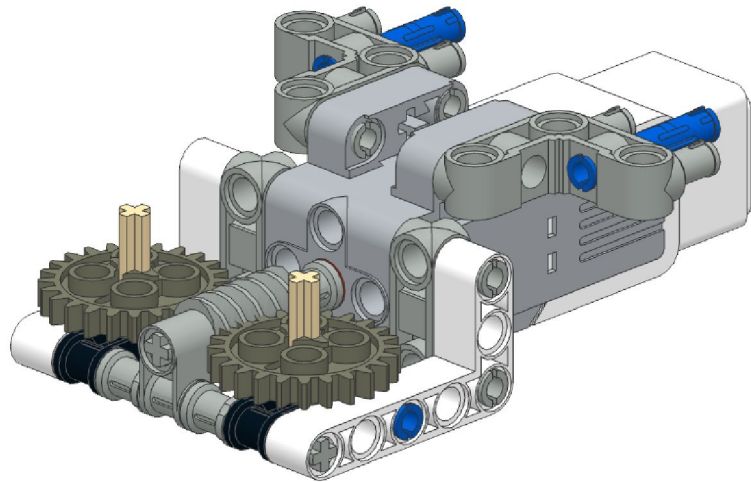
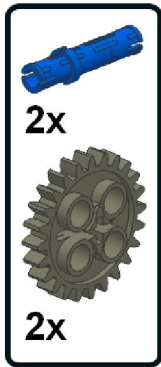
Gripper Attachment



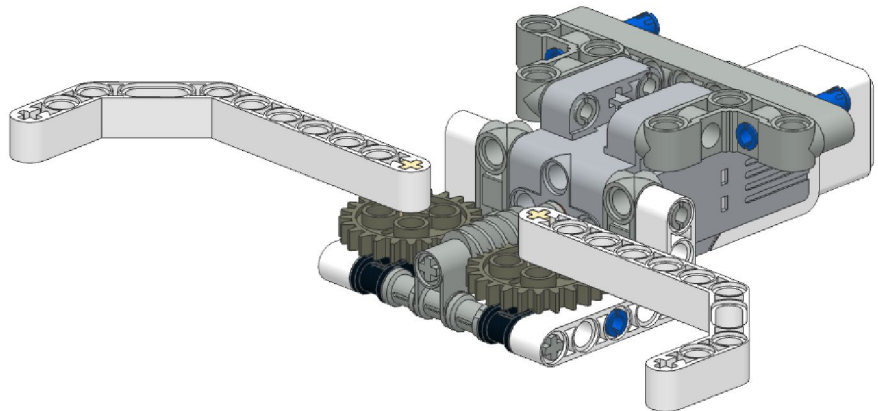
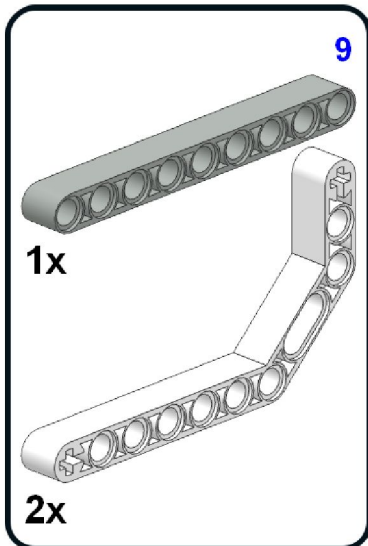
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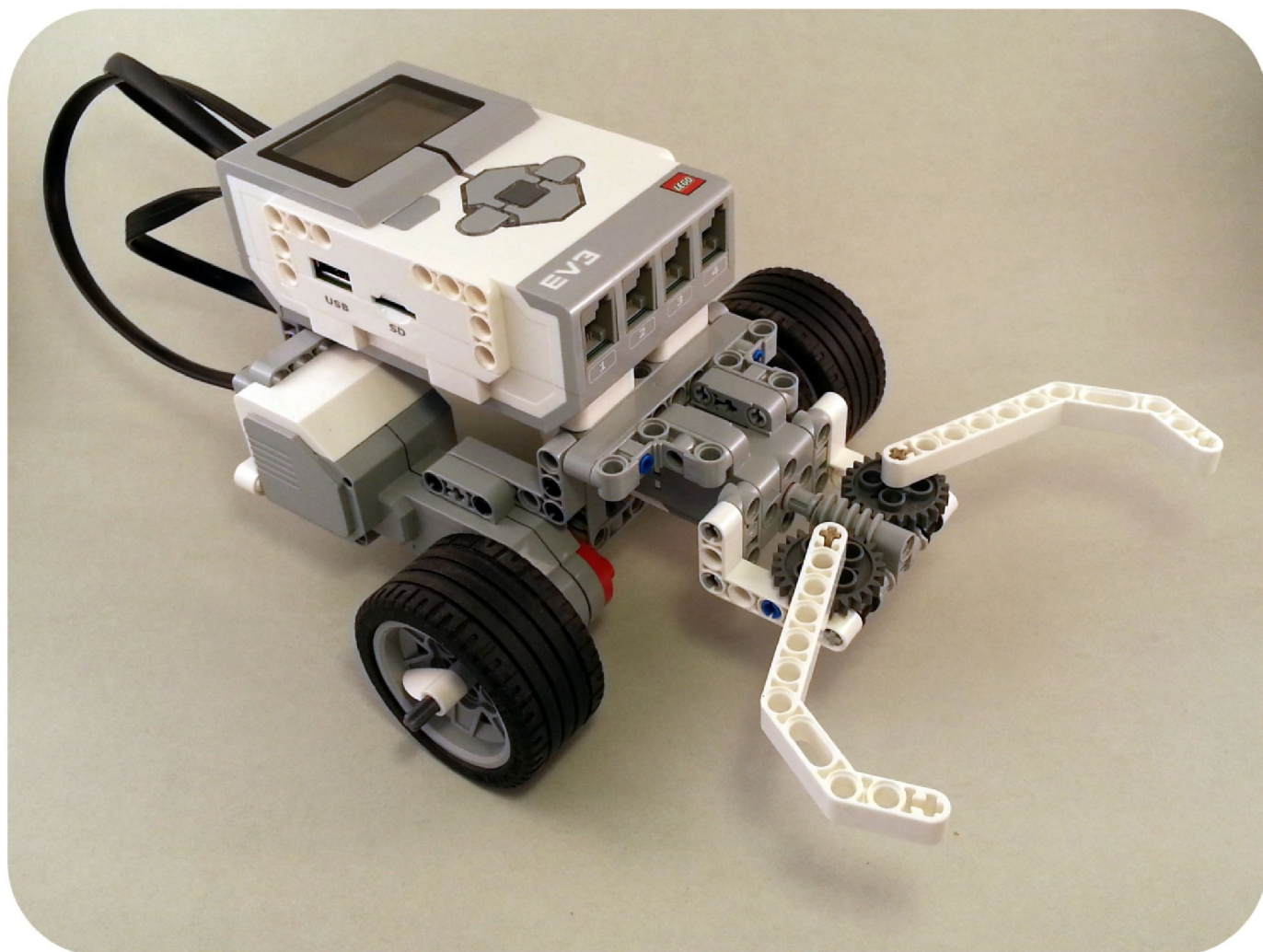
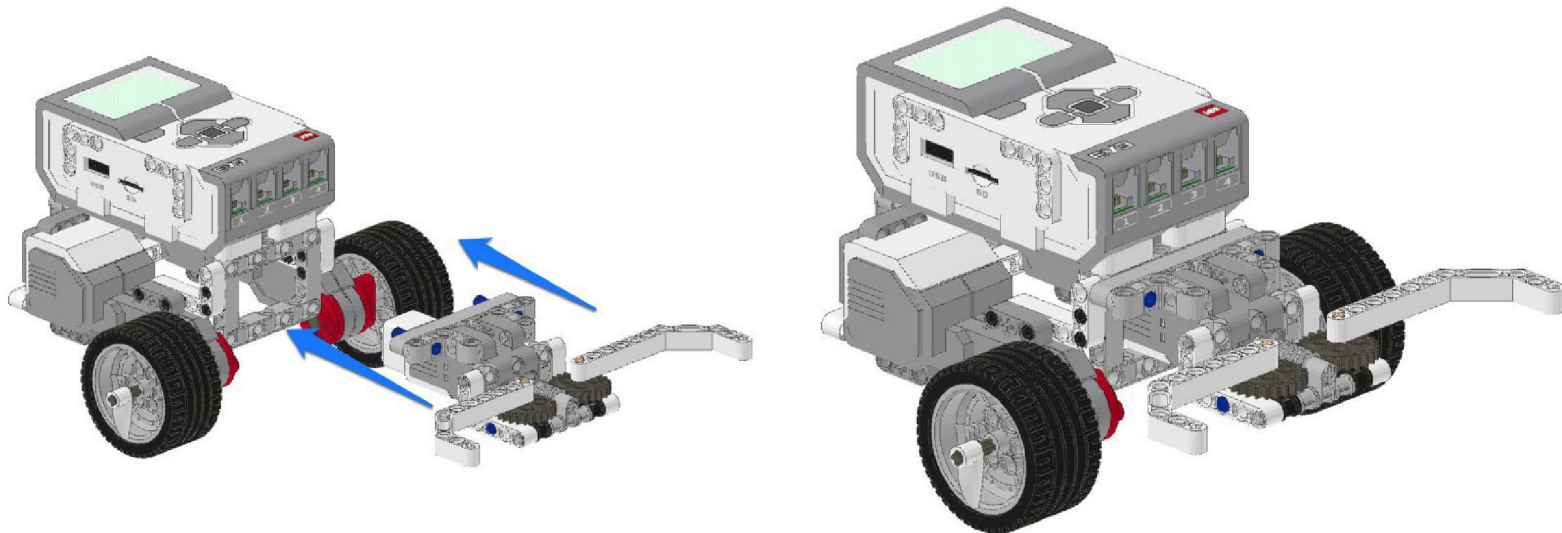
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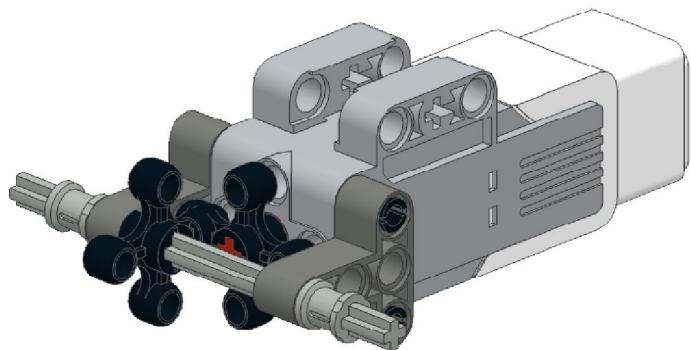
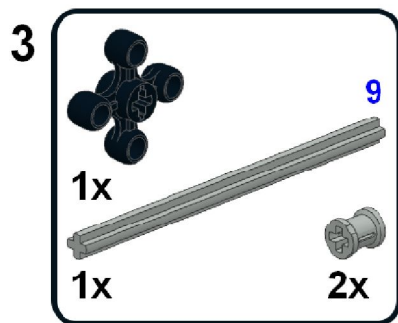
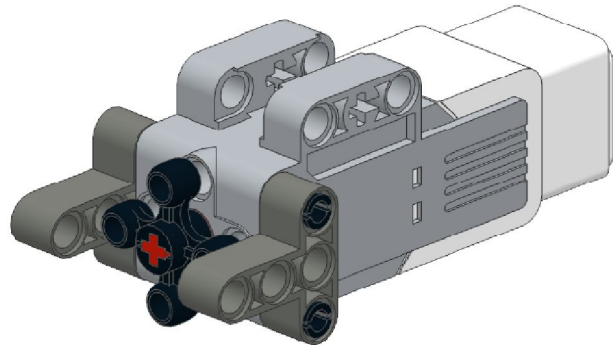
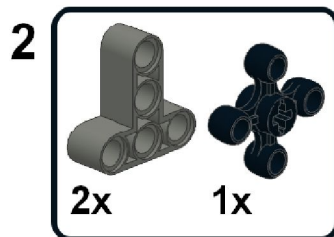
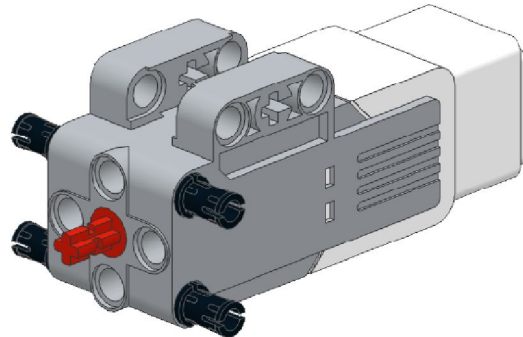
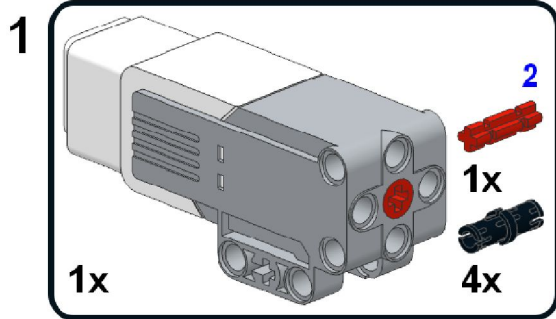
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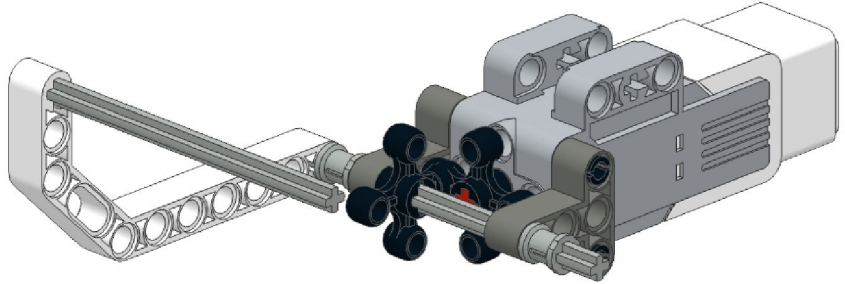
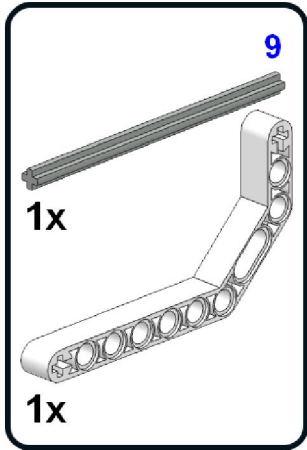
Attach the Gripper to the front of the Robot



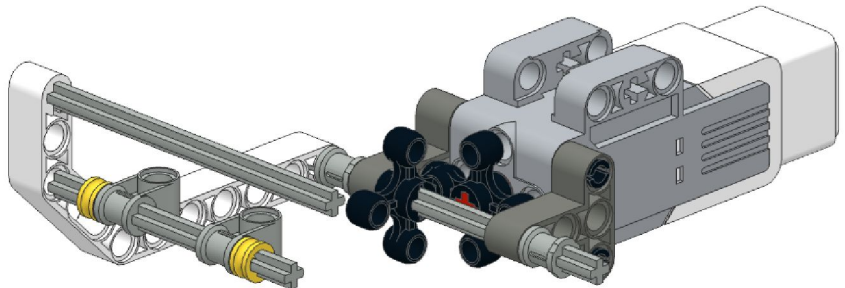
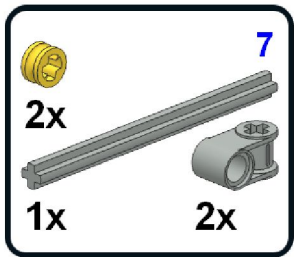
Cargo Delivery Attachment



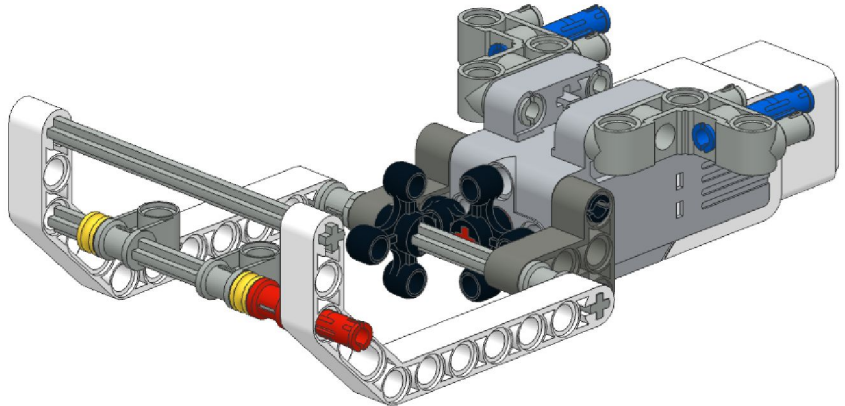
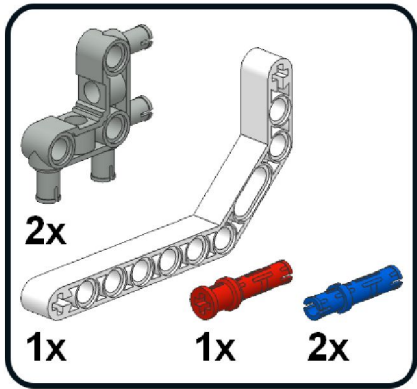
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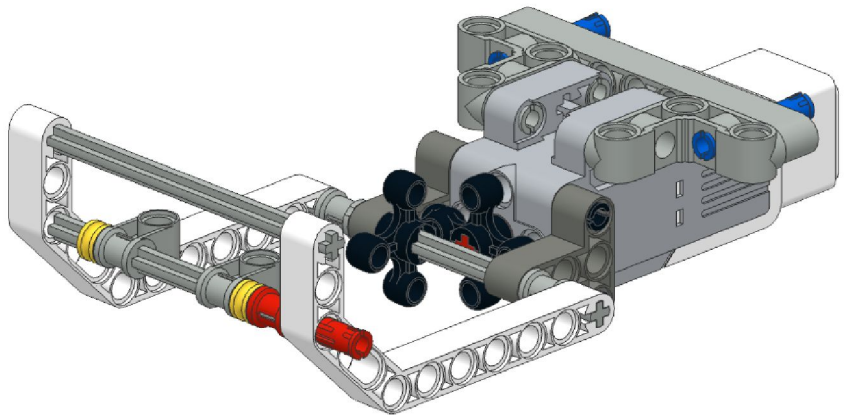
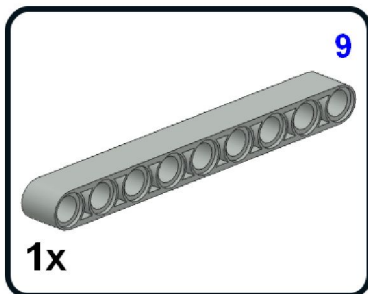
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6

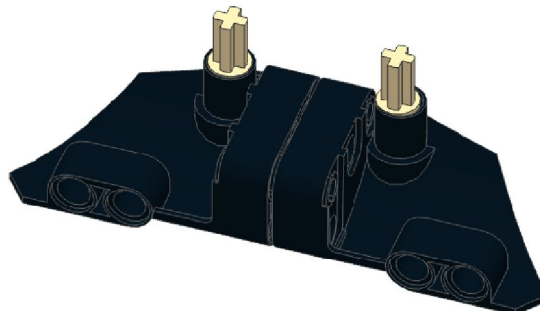
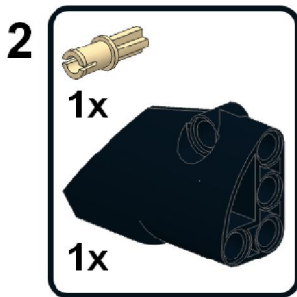
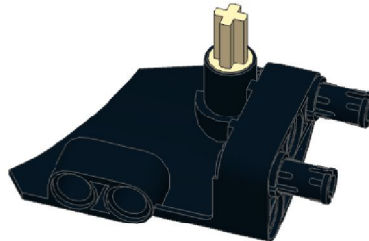
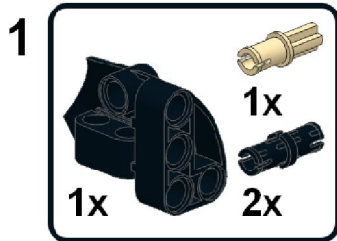


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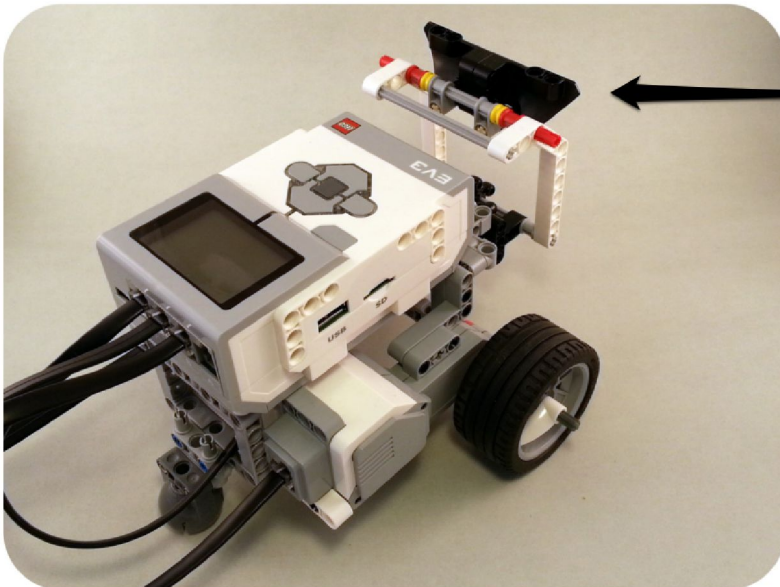
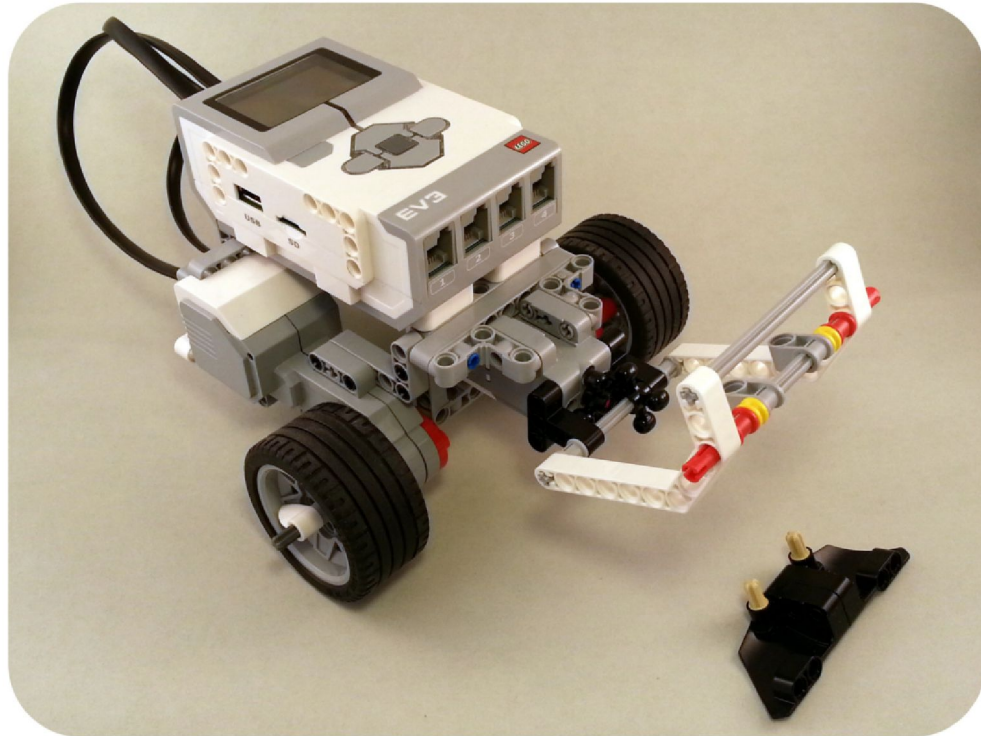


Signal Repeater

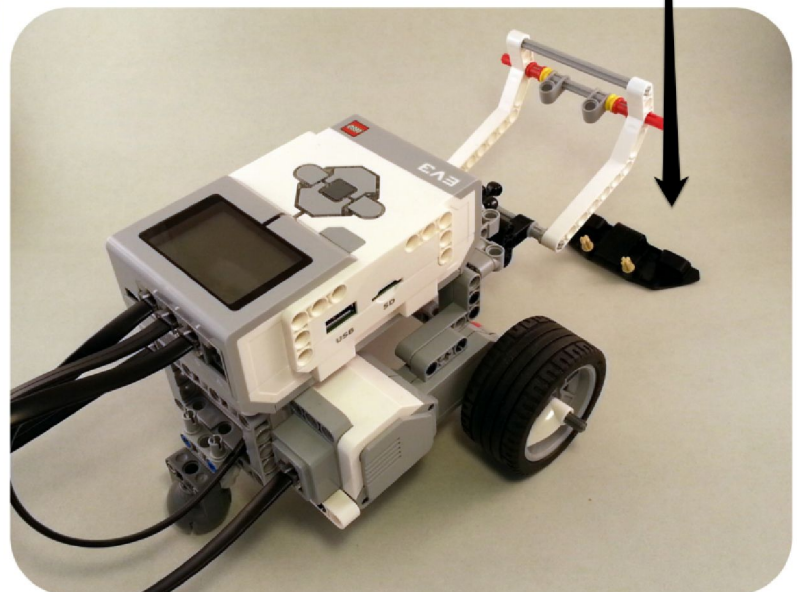
To be used with the Cargo Delivery Attachment



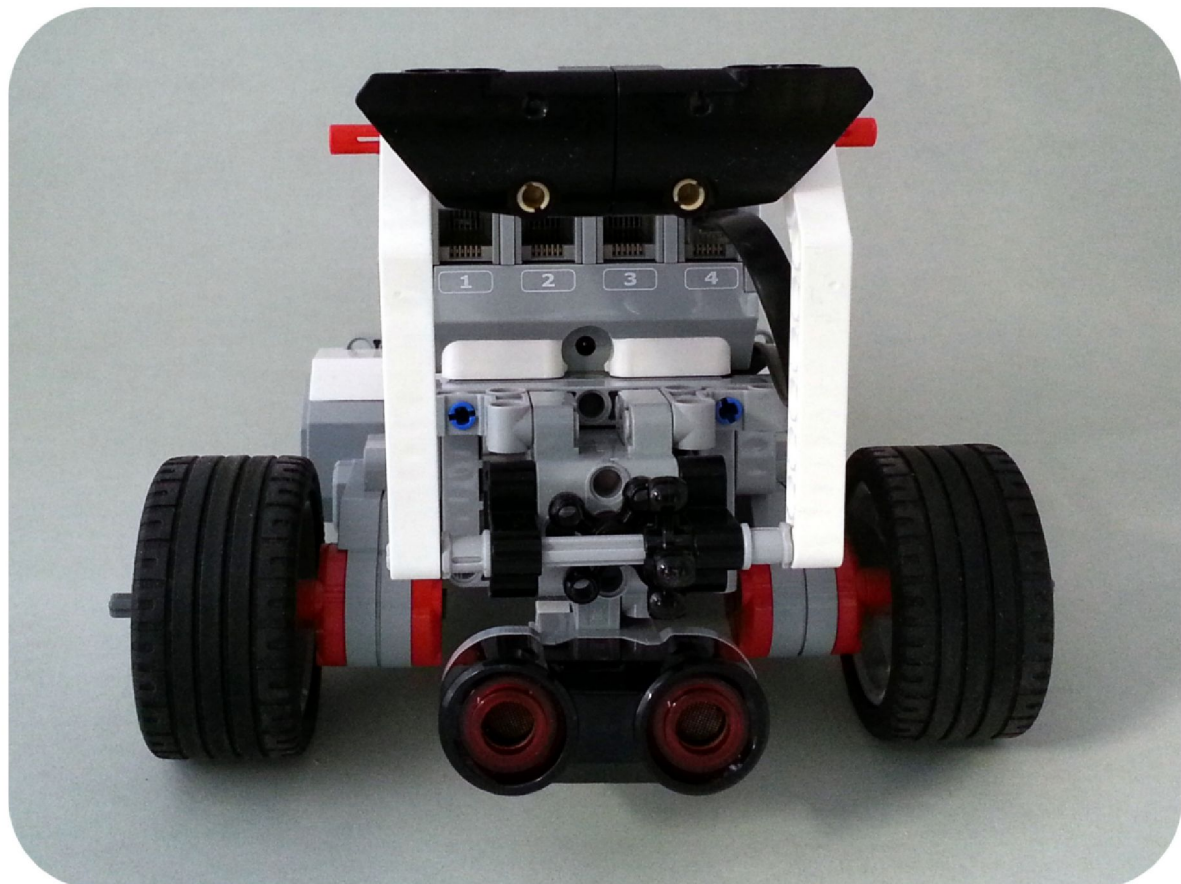
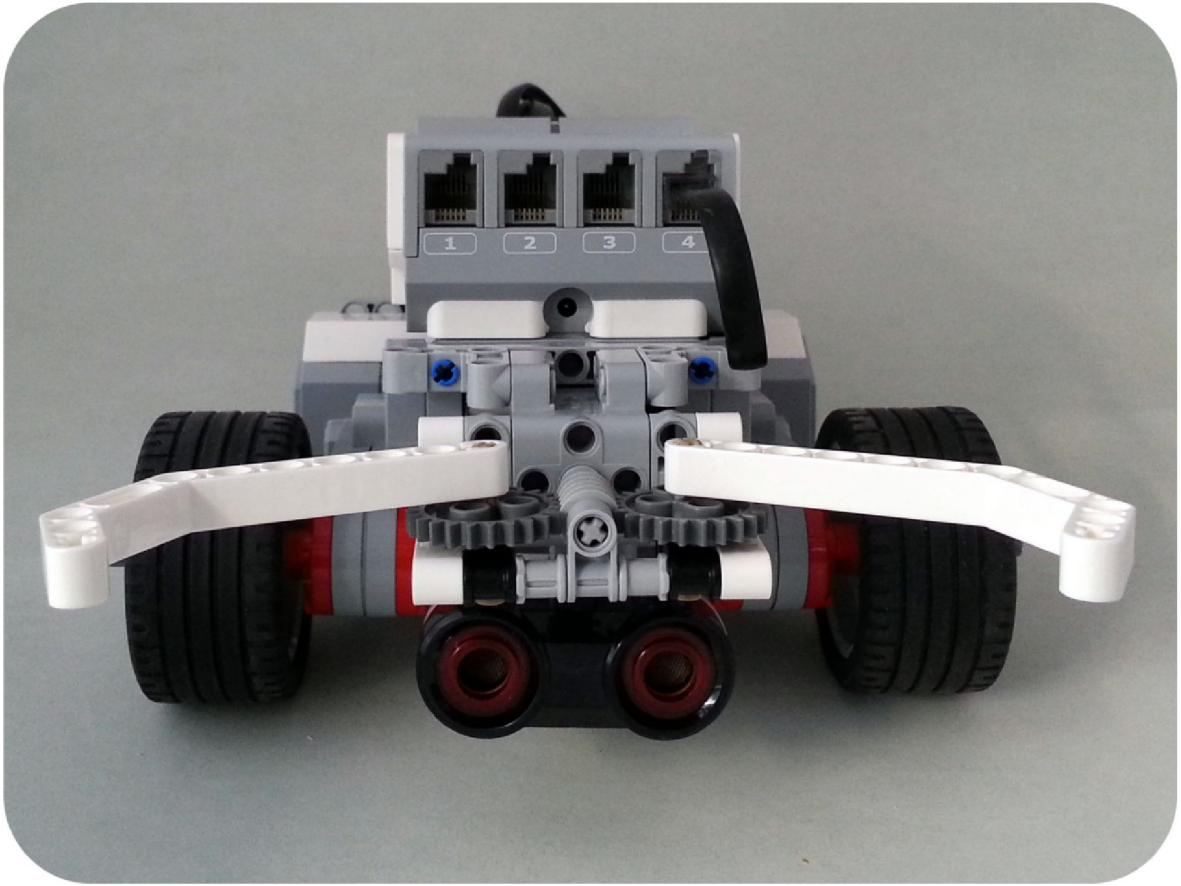
Attach the Cargo Delivery Attachment to the front of the Robot



The 'Signal Repeater' will sit loosely in the Cargo Delivery arm when in a raised position. Lower the Cargo Delivery arm to drop the Signal Repeater

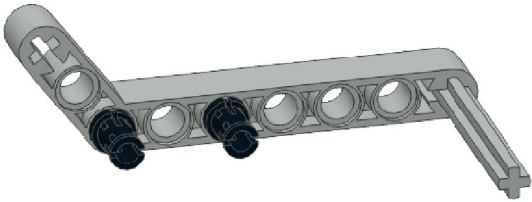
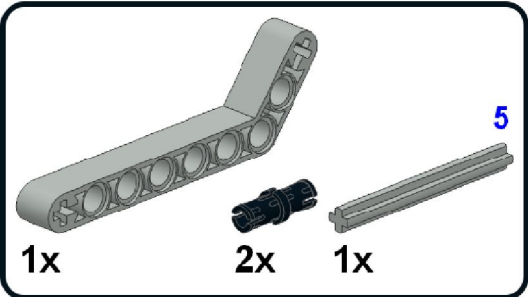


The Ultrasonic Sensor Attachment can be used with both the Cargo Delivery Attachment and Gripper Attachment

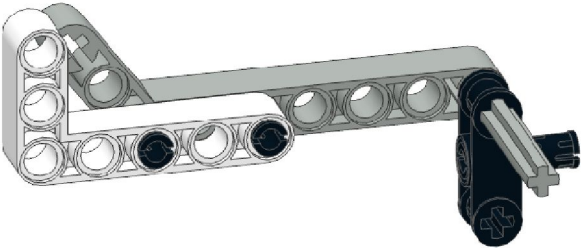
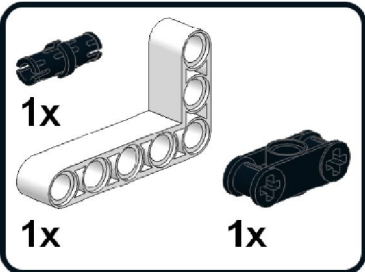


Combined Colour - Ultrasonic Sensor Attachment

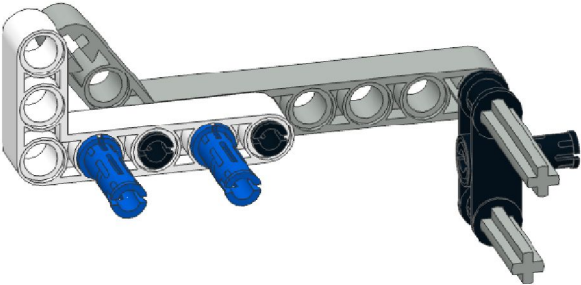
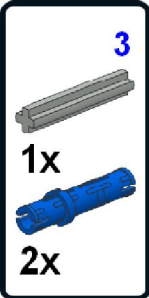
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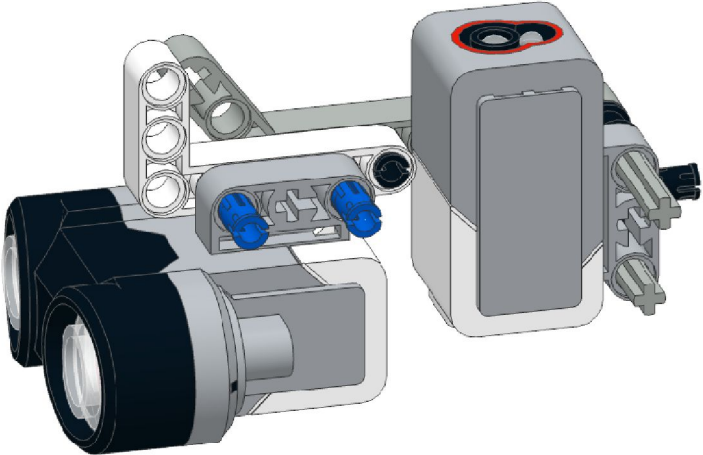
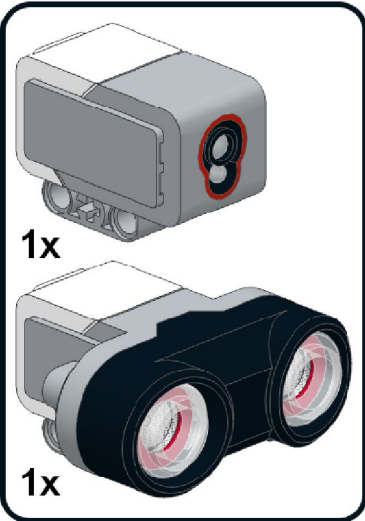
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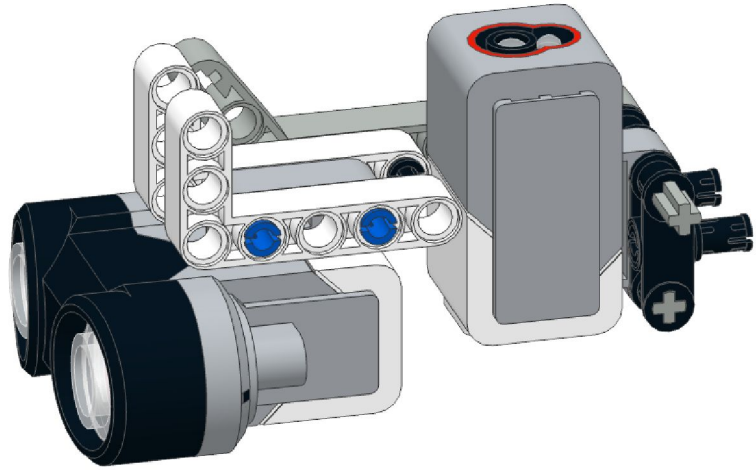
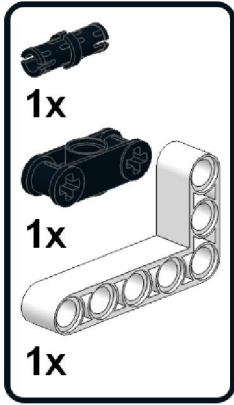
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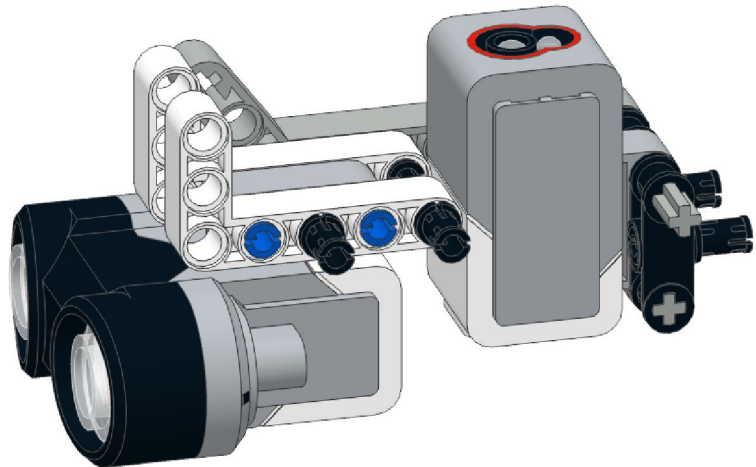
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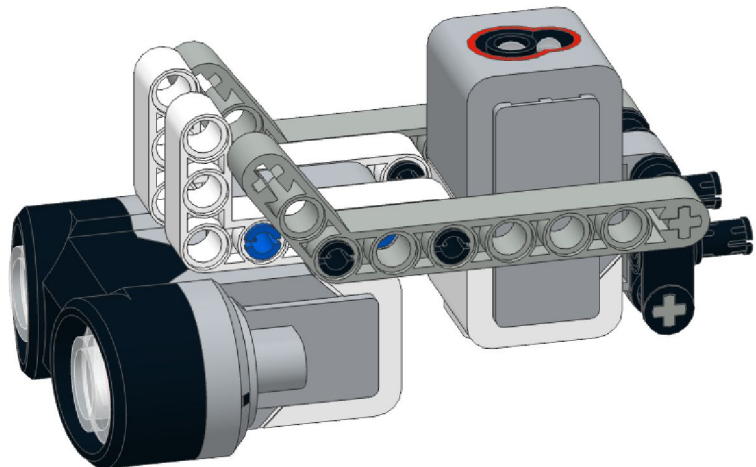
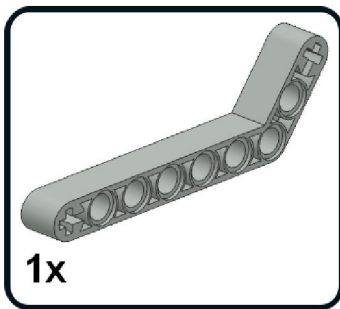
5



6



7



Snap the combined Colour-Ultrasonic Sensor Attachment to the front of the robot

