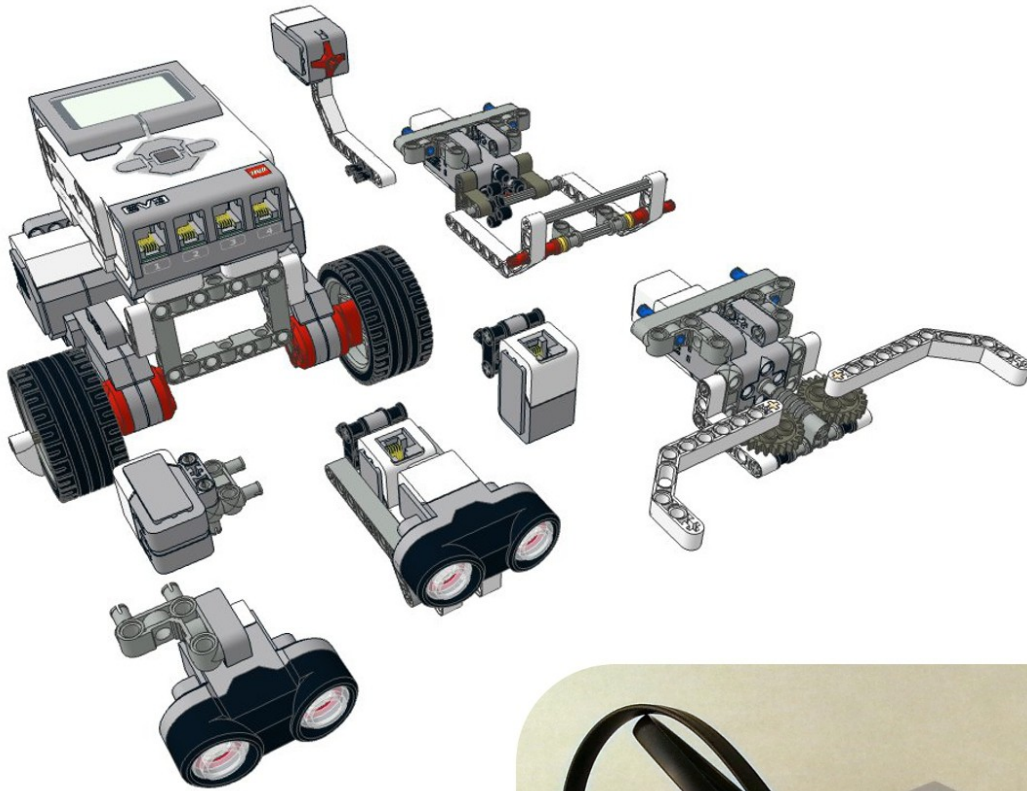


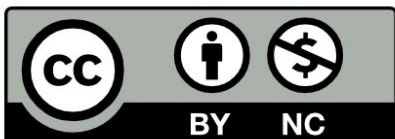
# Building Instructions

## RileyRover Base Design and Attachments



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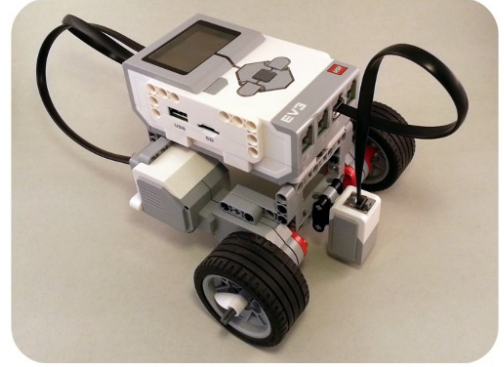
Not for commercial use unless  
prior permission granted.



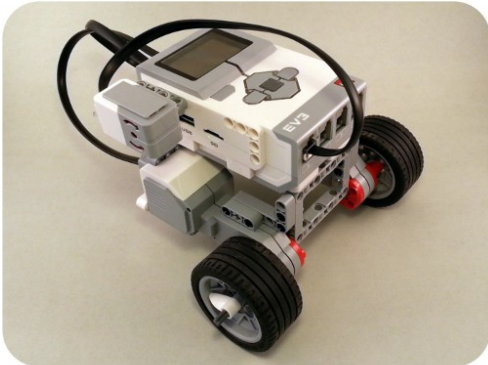
# Sensor and Motor Attachments for the RileyRover Base design



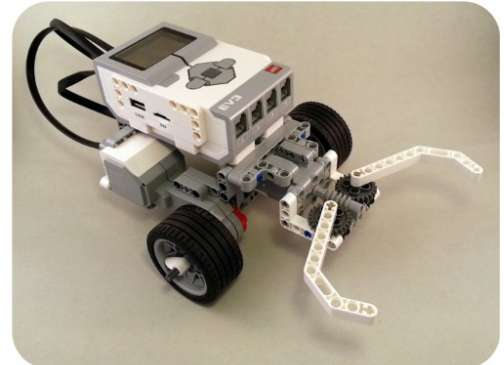
**Ultrasonic Sensor**



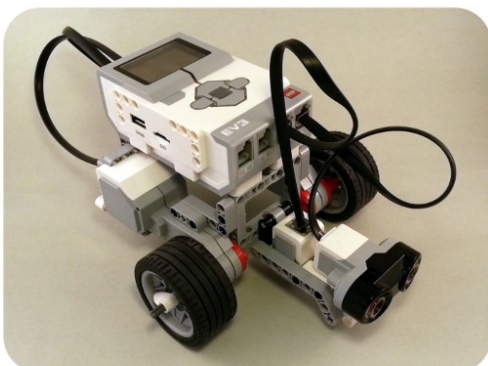
**Colour Sensor**



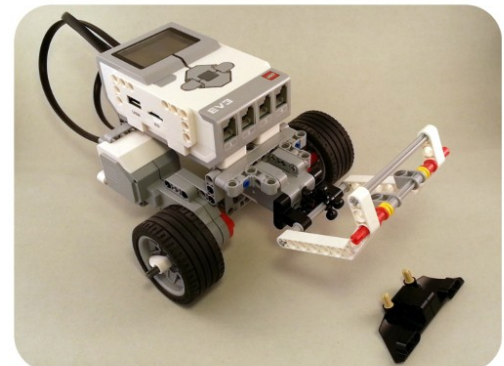
**Gyro Sensor**



**Gripper**



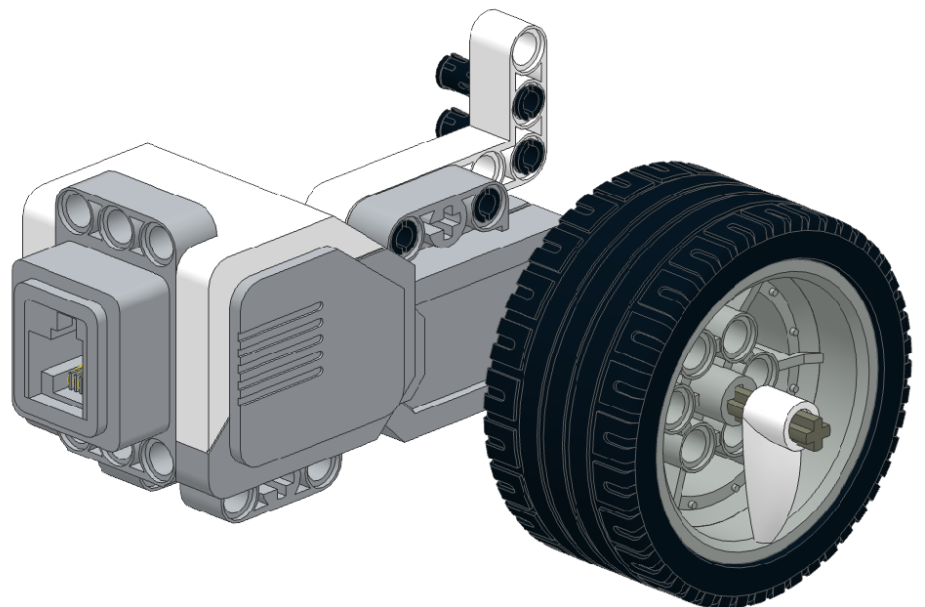
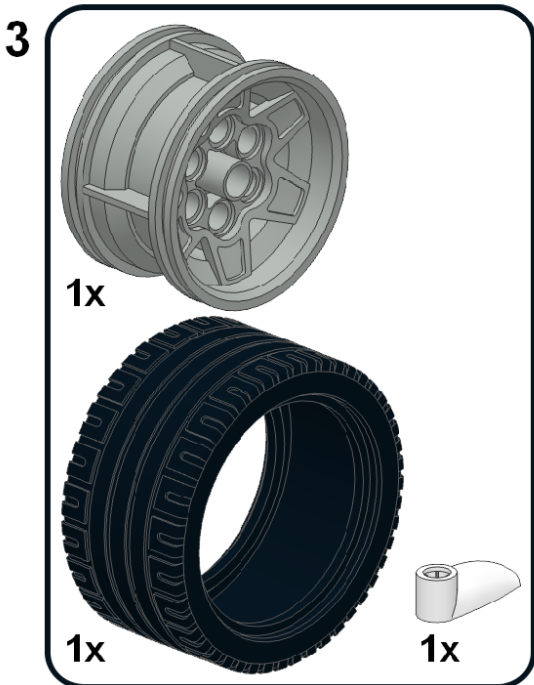
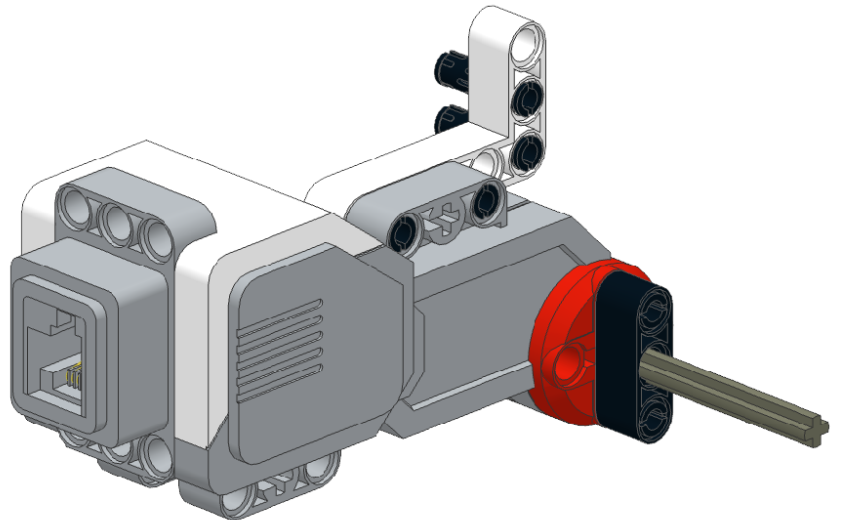
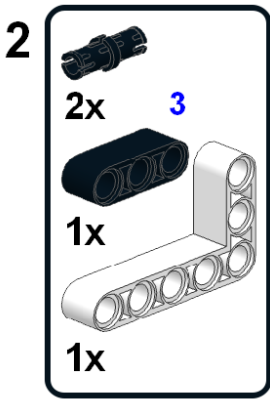
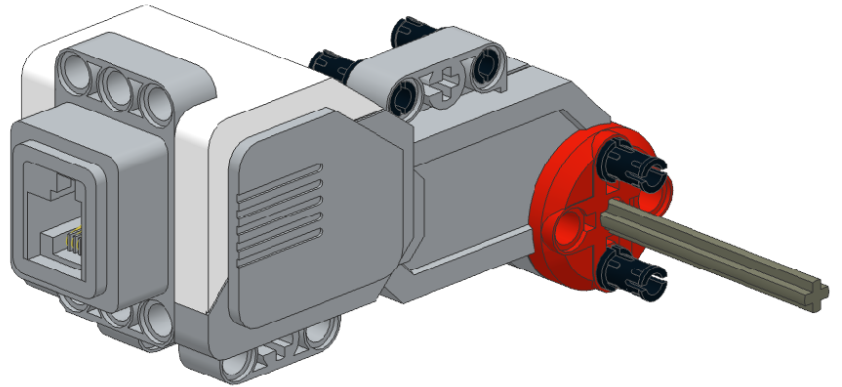
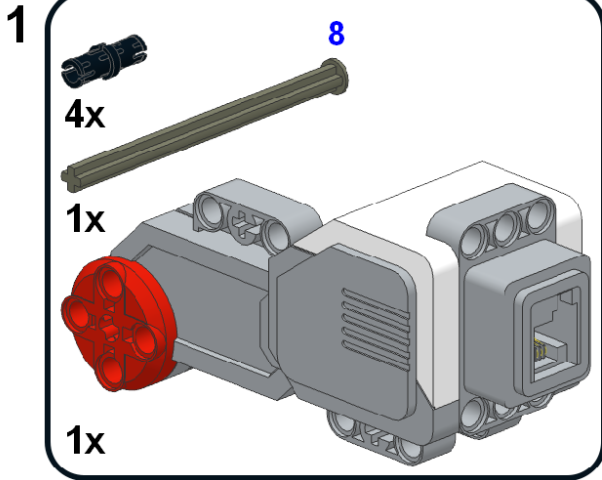
**Colour / Ultrasonic combination**



**Cargo Delivery**

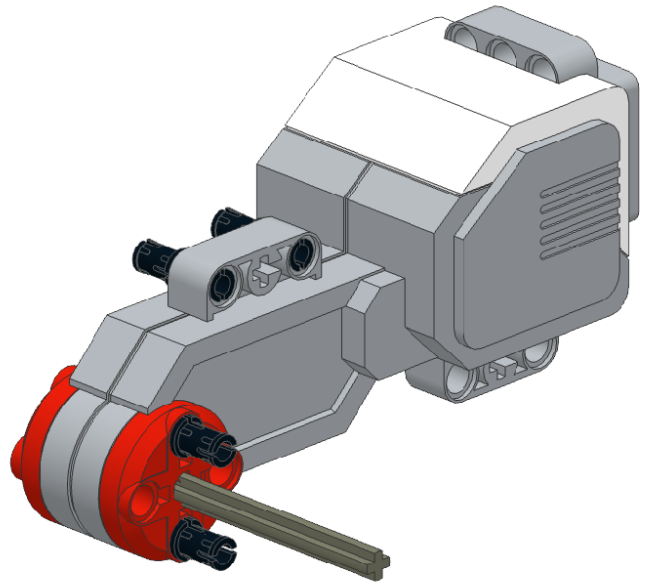
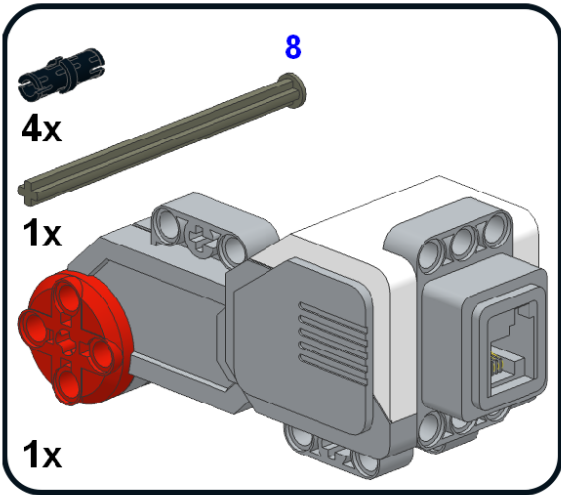


# Right Motor Assembly

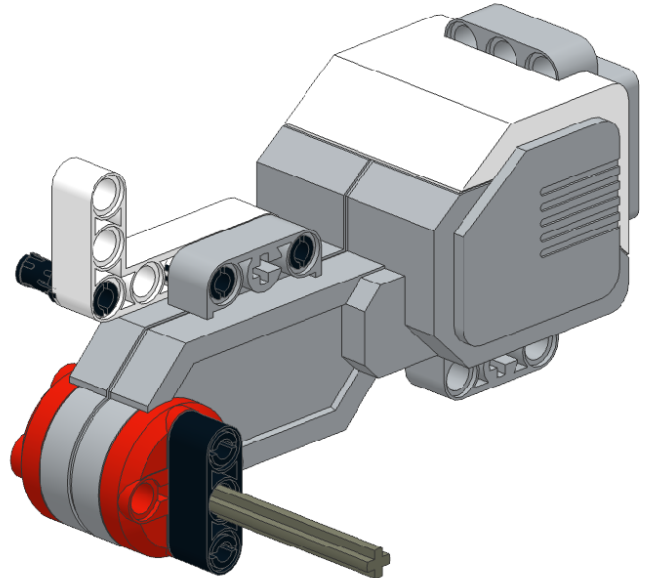
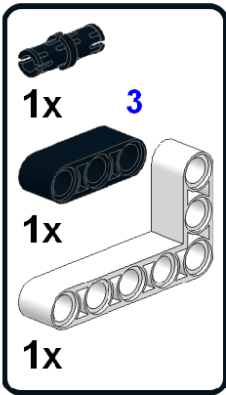


# Left Motor Assembly

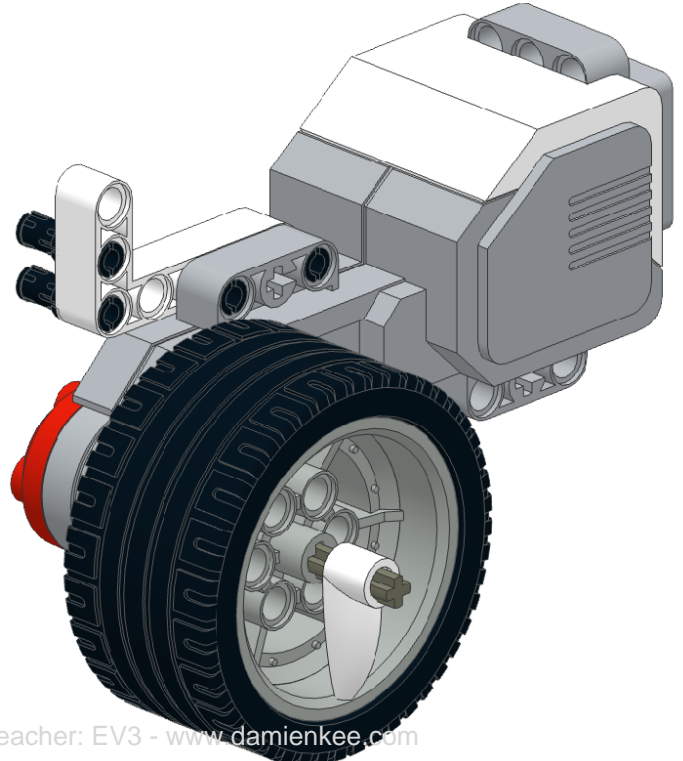
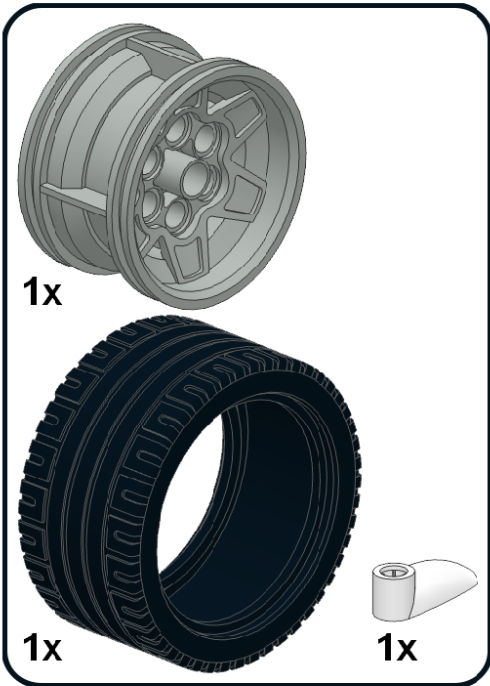
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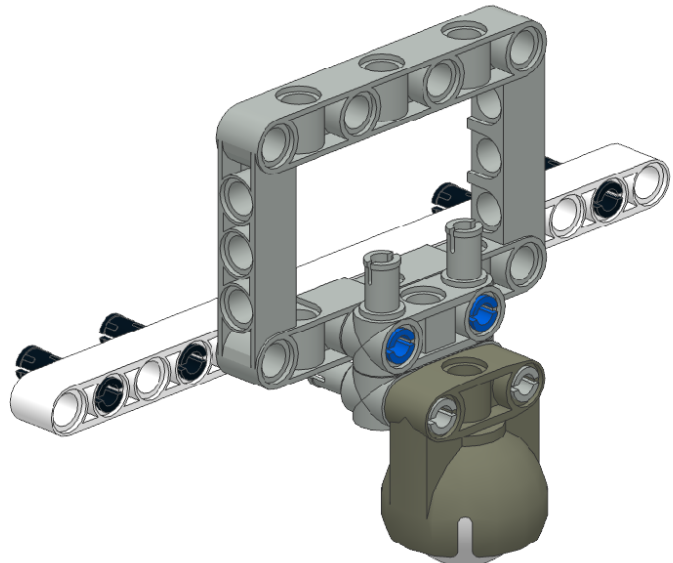
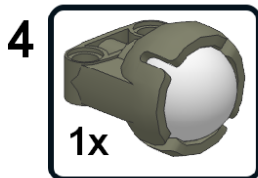
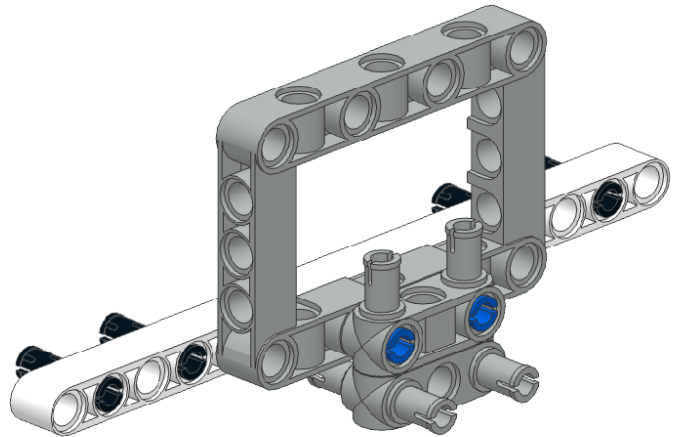
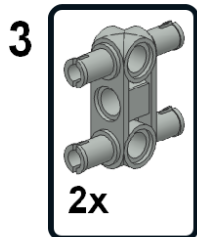
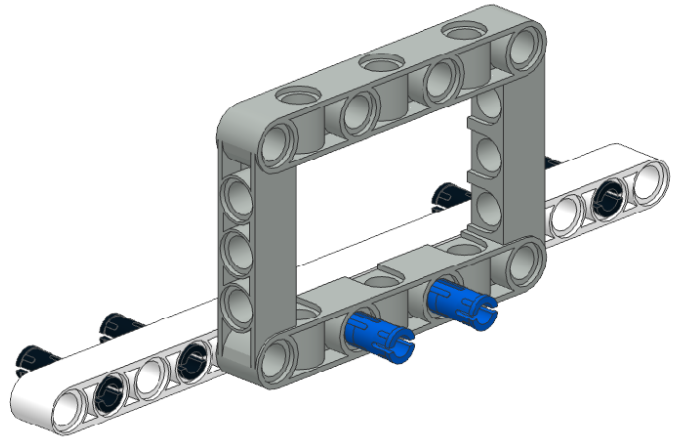
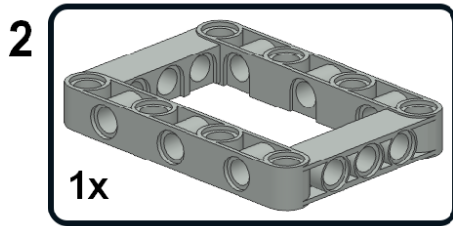
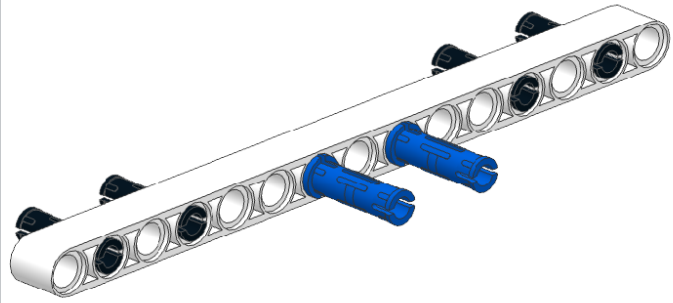
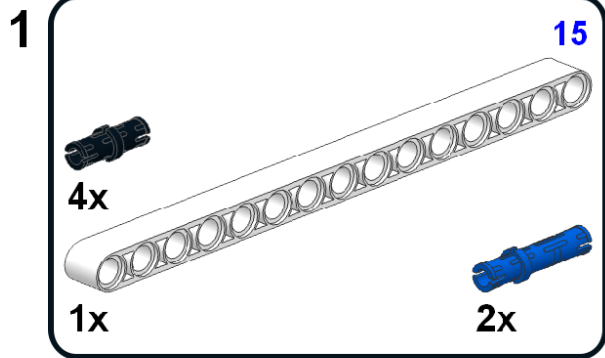


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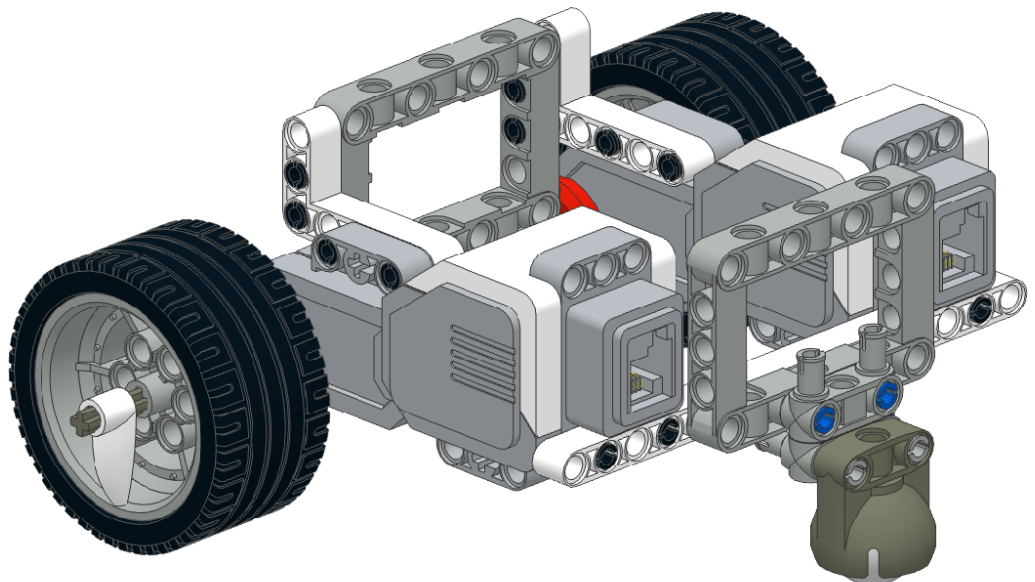
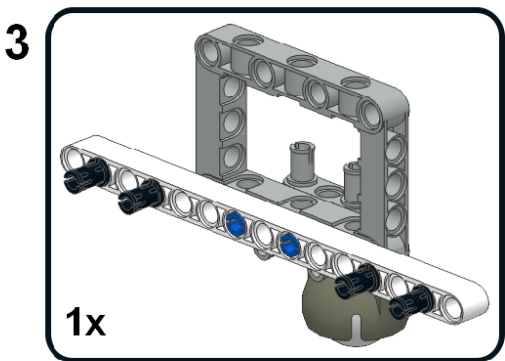
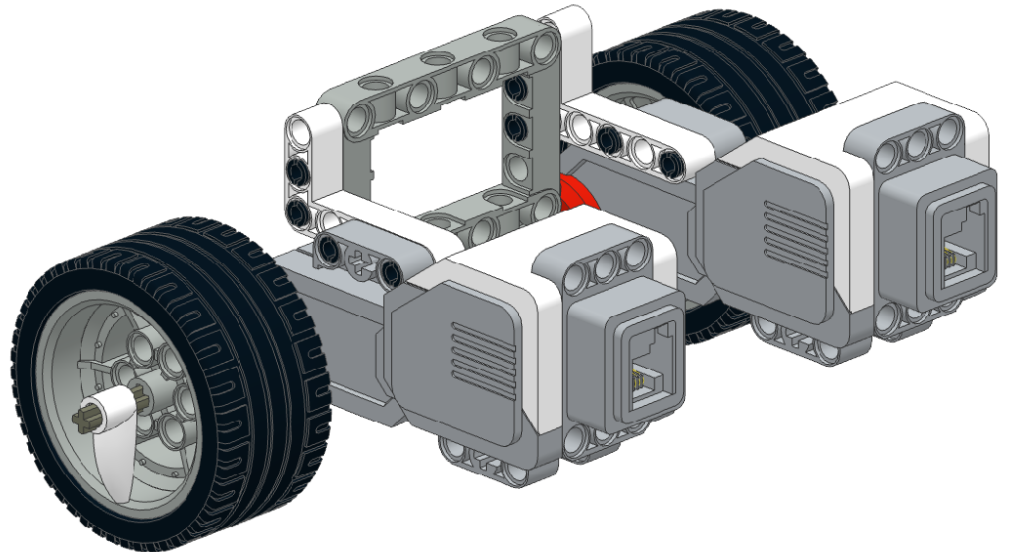
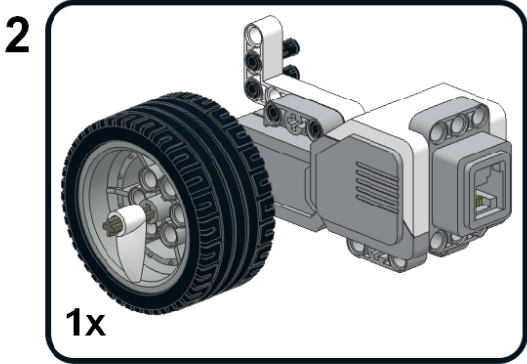
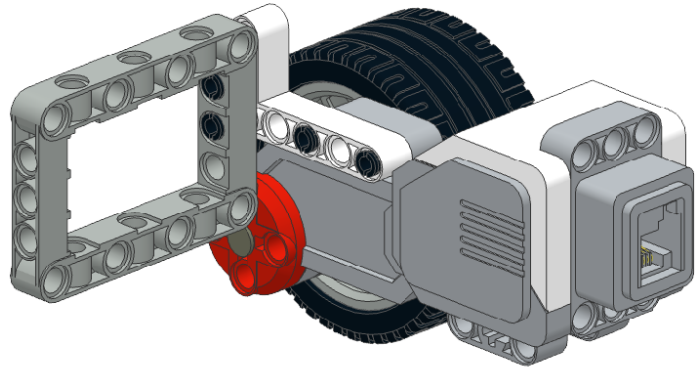
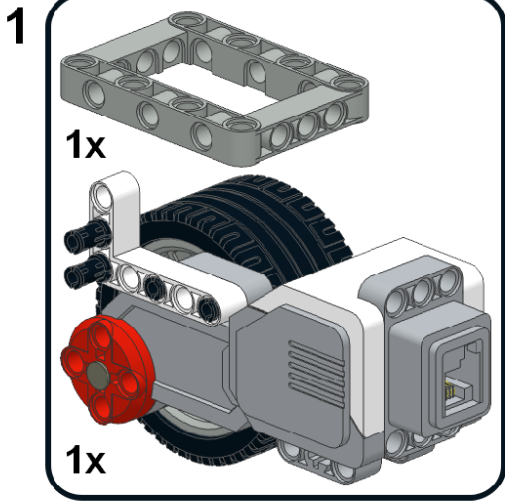




# Back Castor Assembly



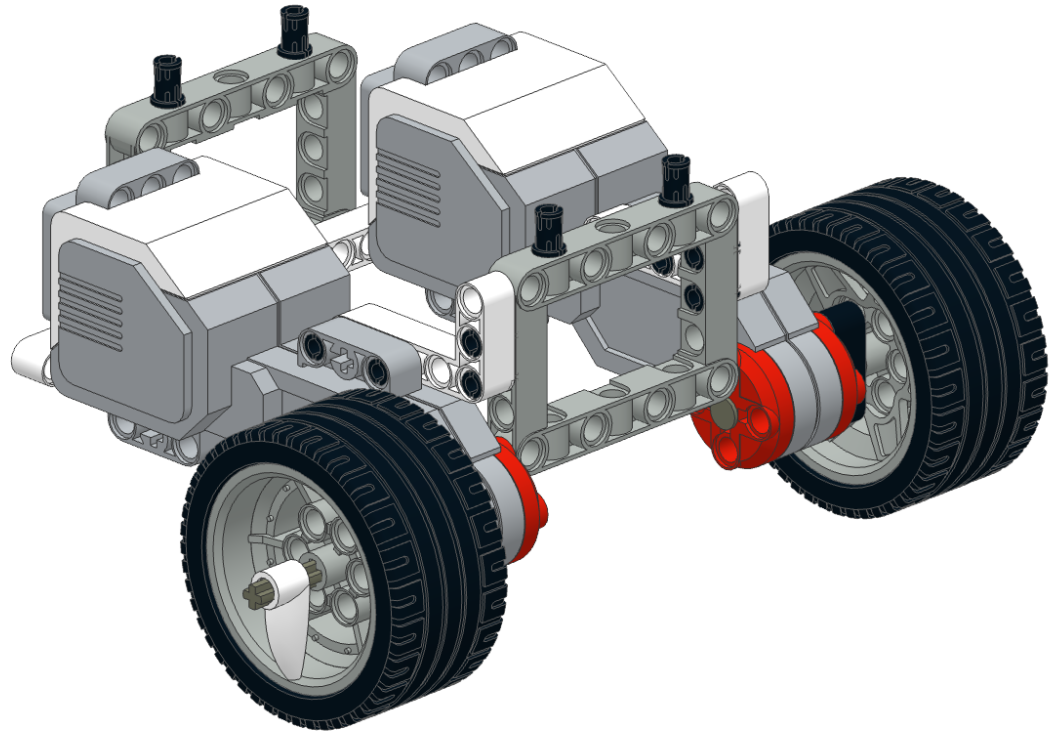
# Assemble Right Motor, Left Motor and Back Castor



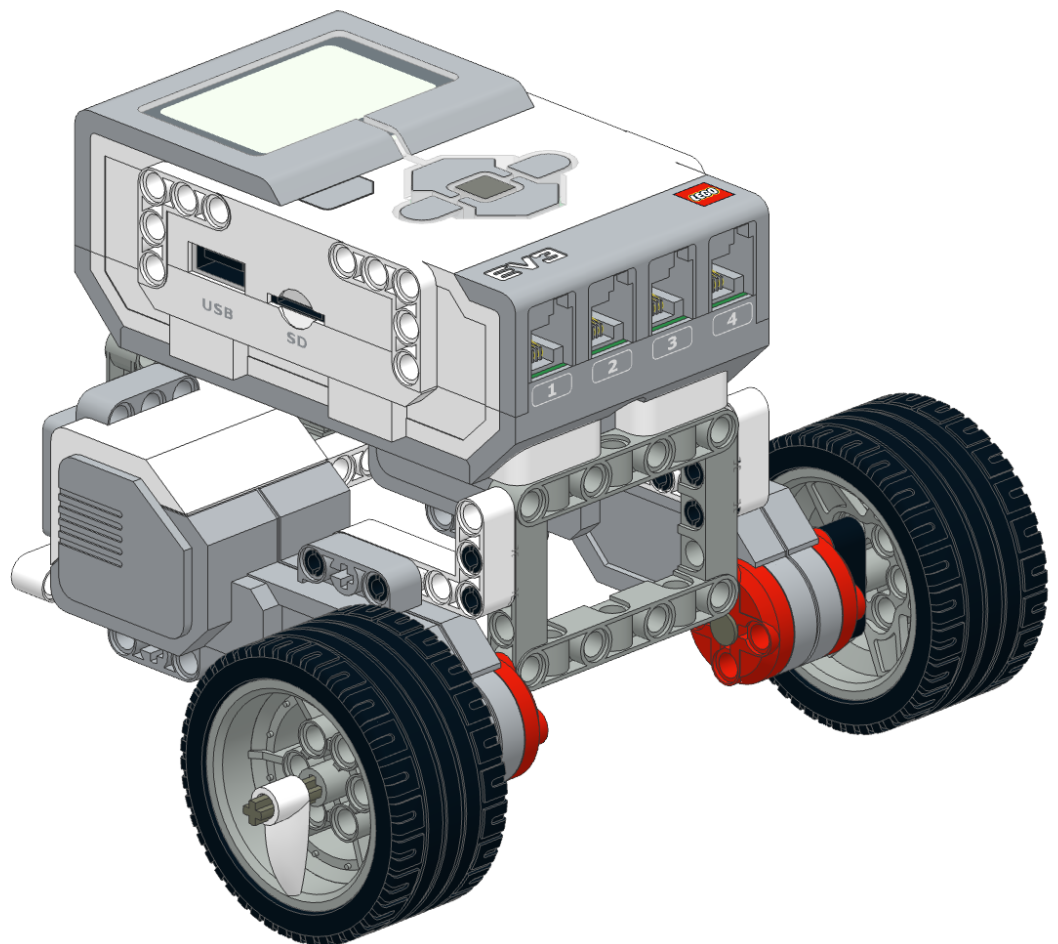
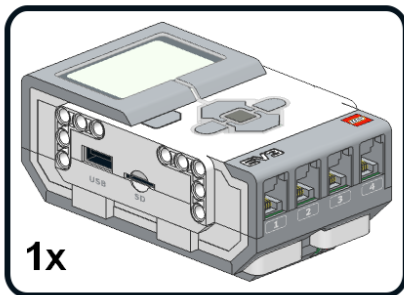


# Turn Base around

4

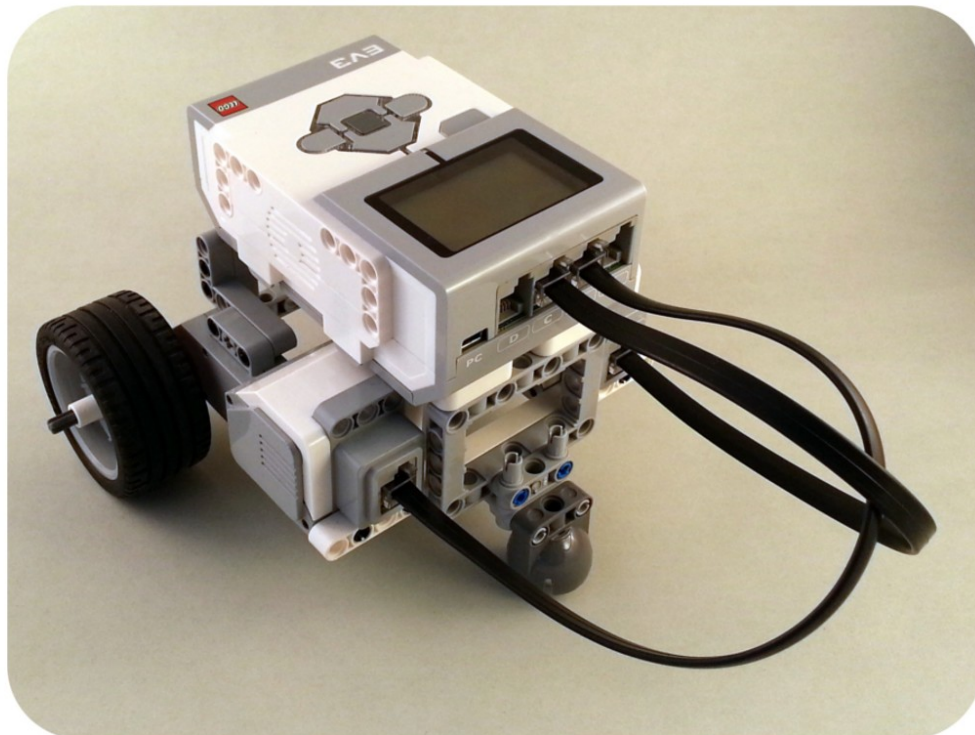
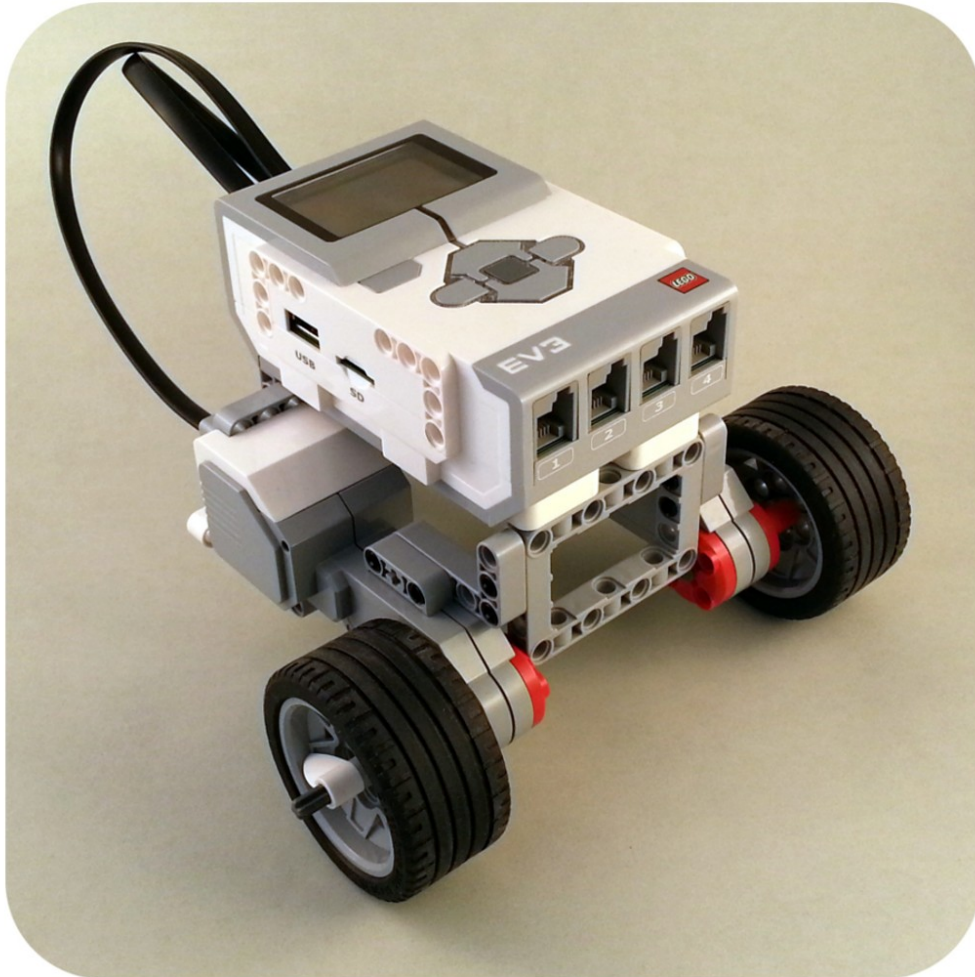


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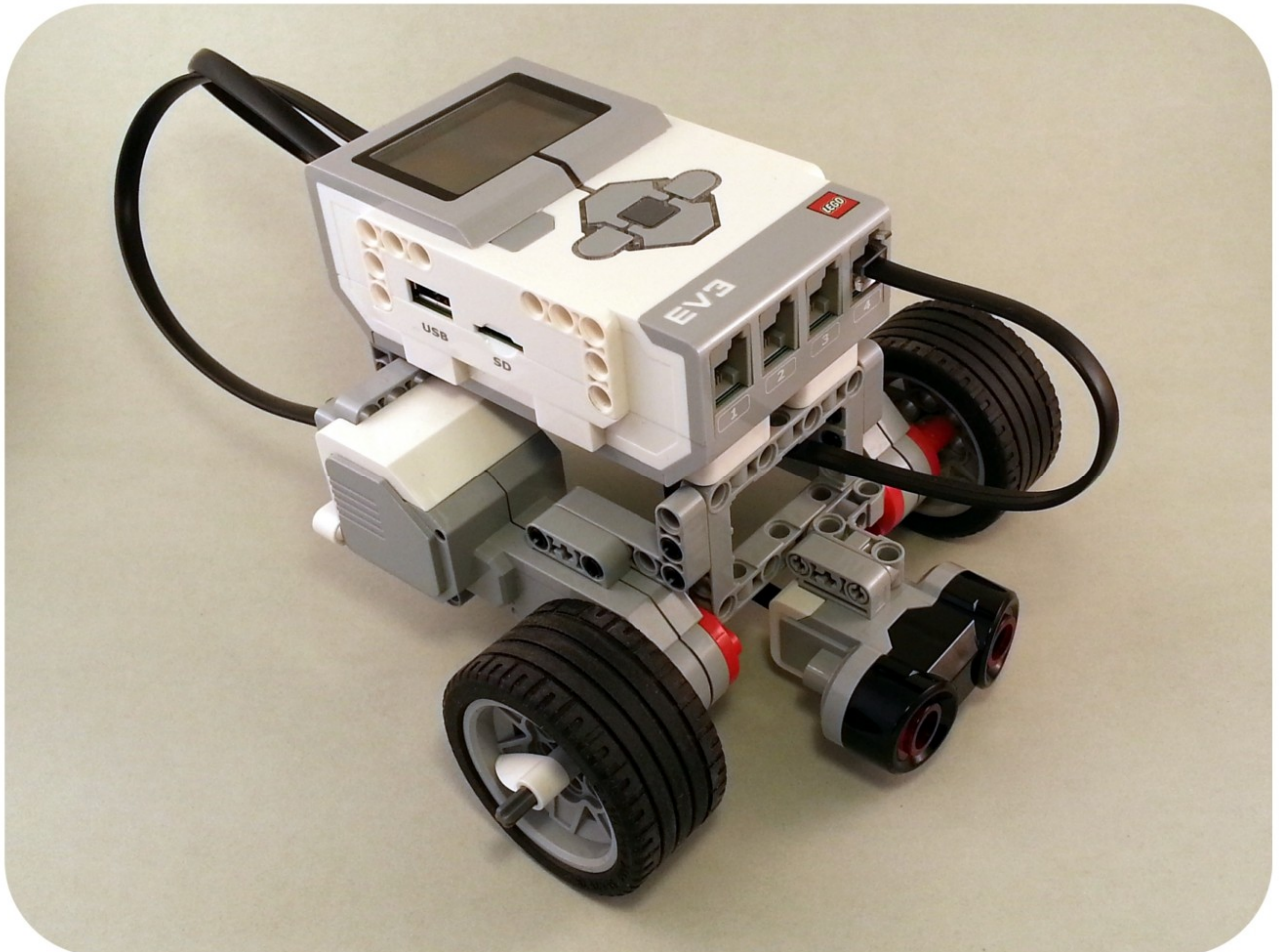
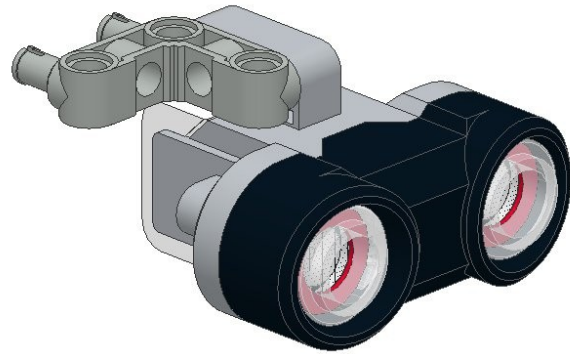
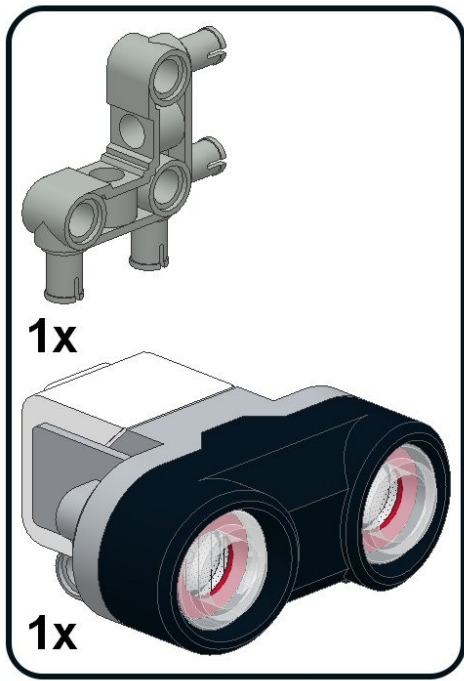
## Connect the Cables

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

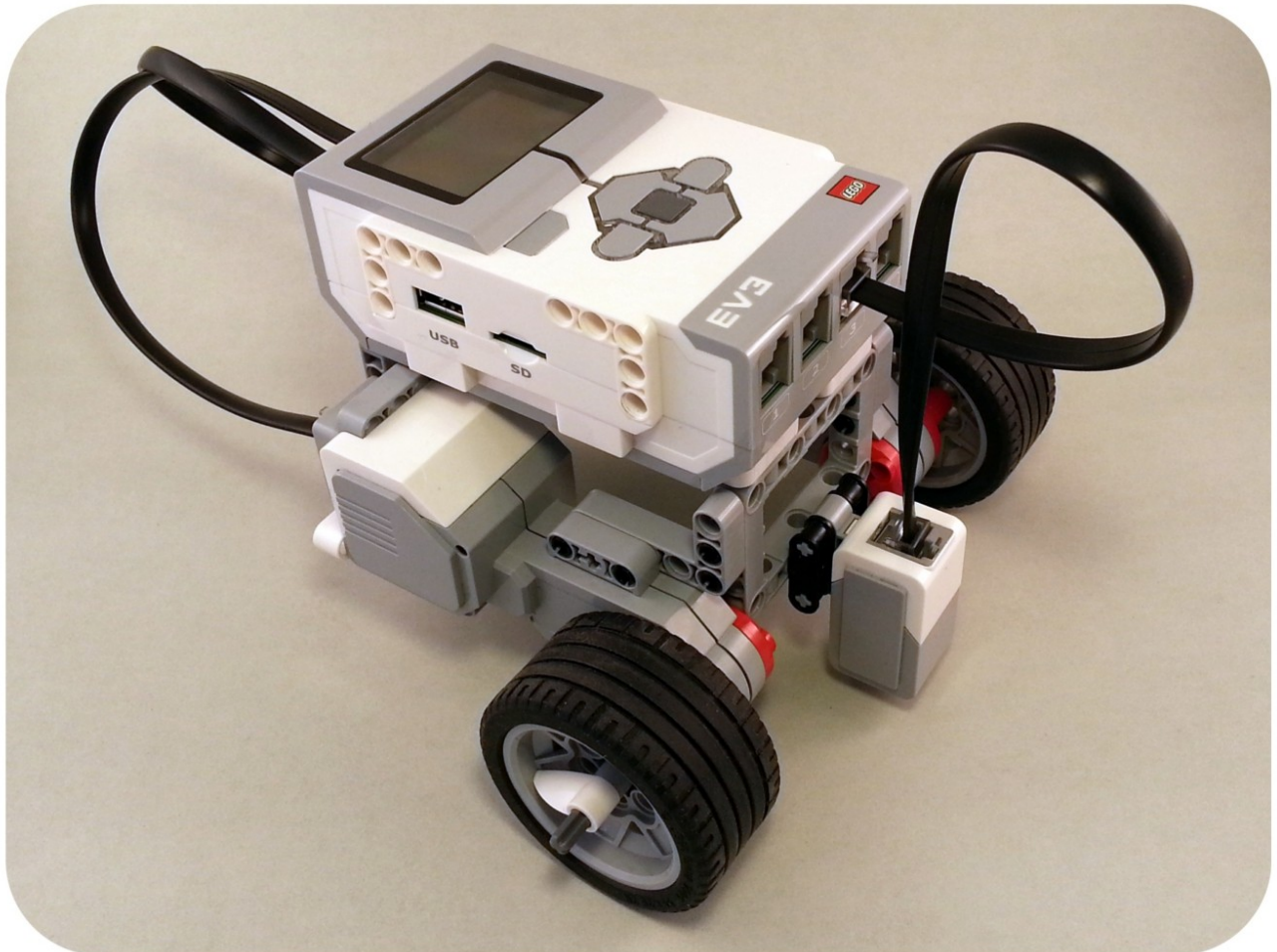
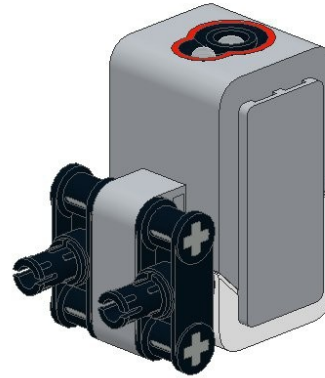
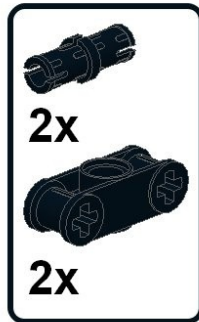
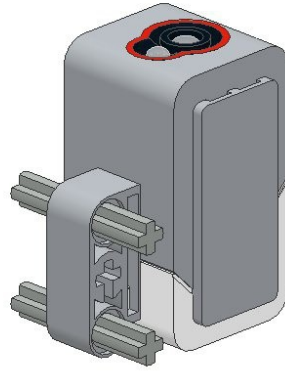
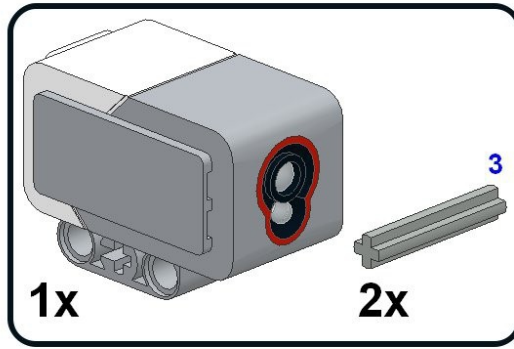




# Ultrasonic Sensor Attachment

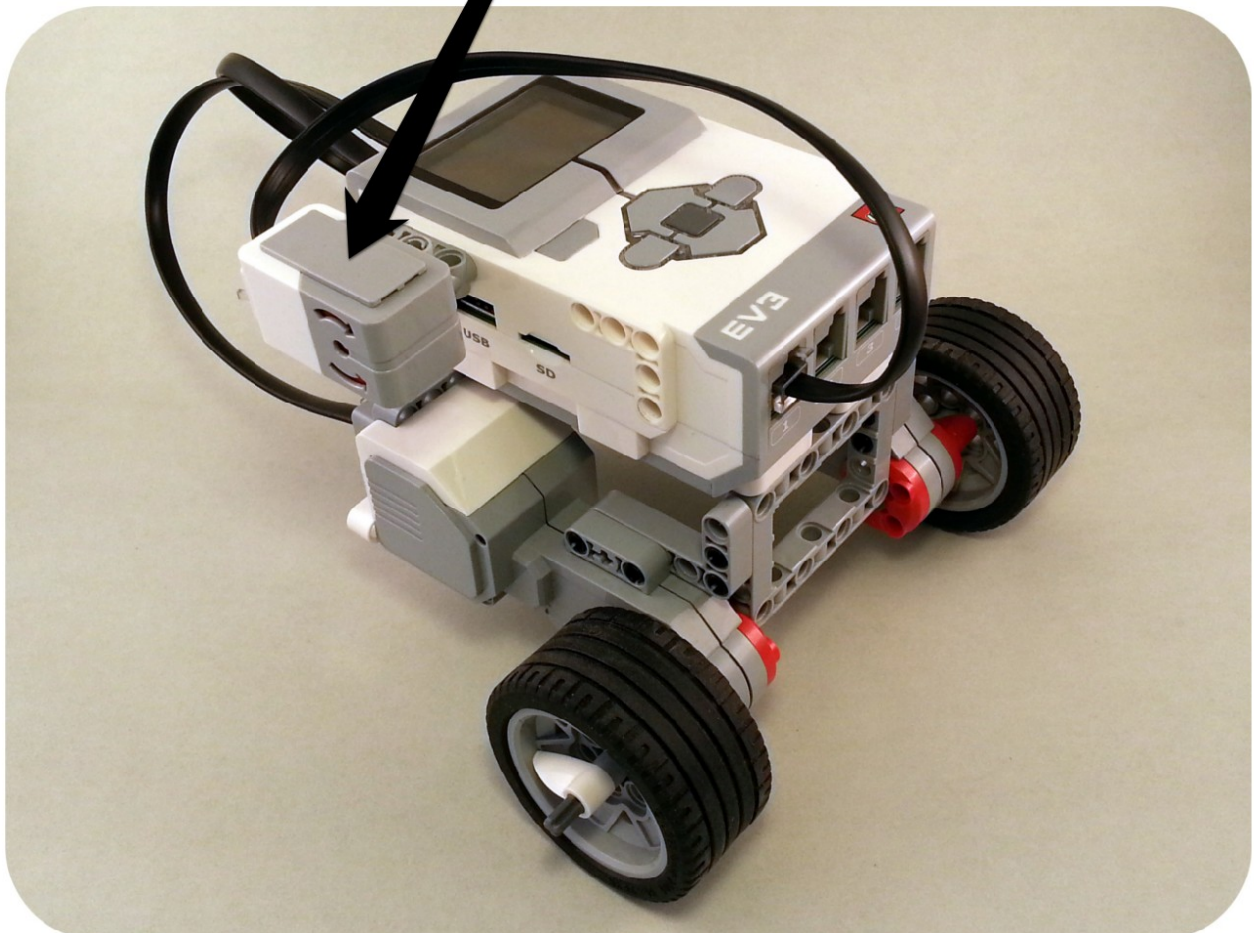
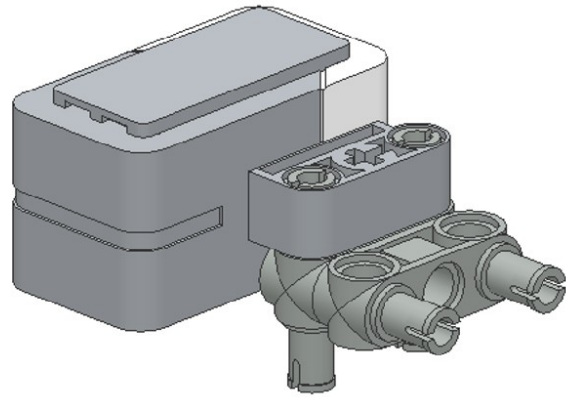
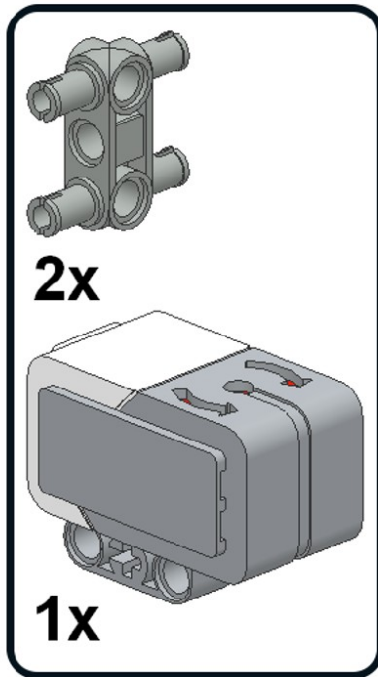


# Colour Sensor Attachment

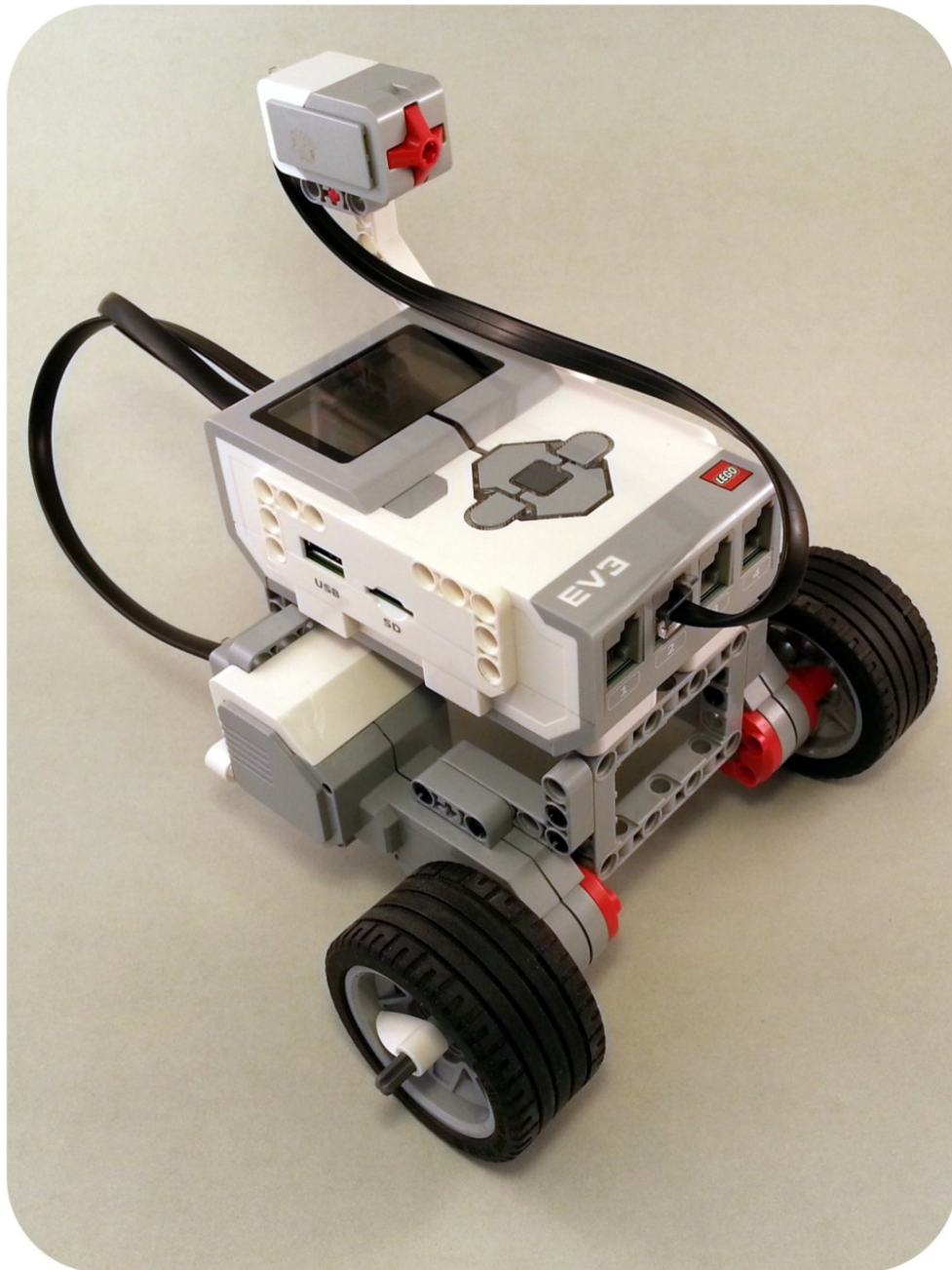
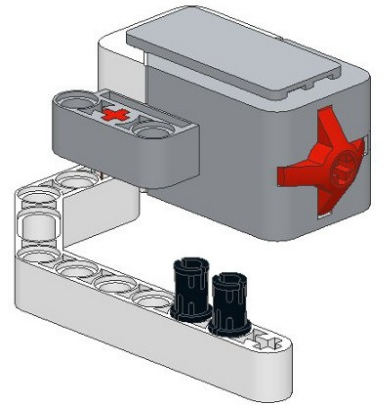
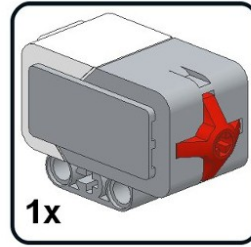
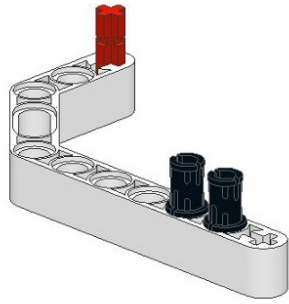
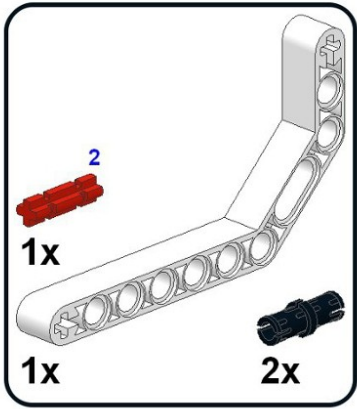




# Gyro Sensor Attachment

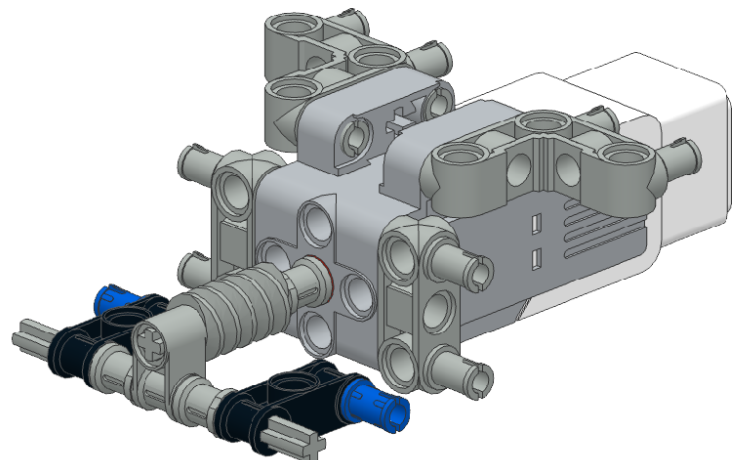
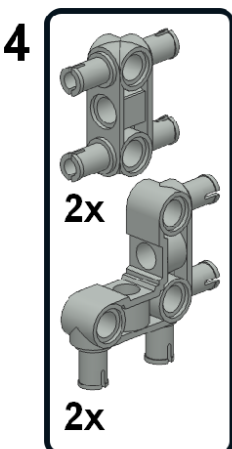
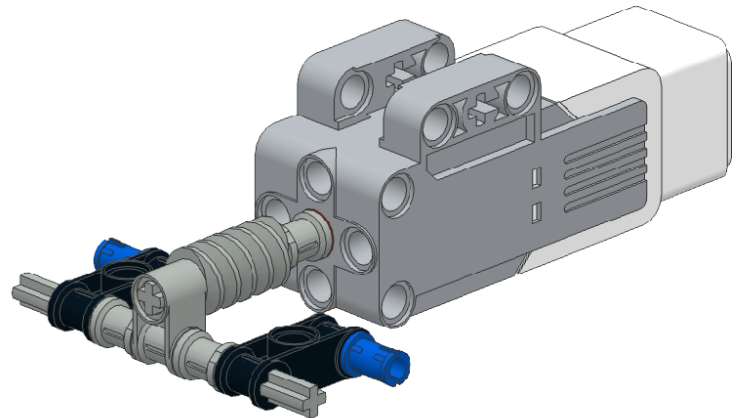
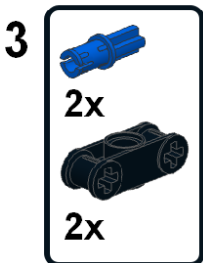
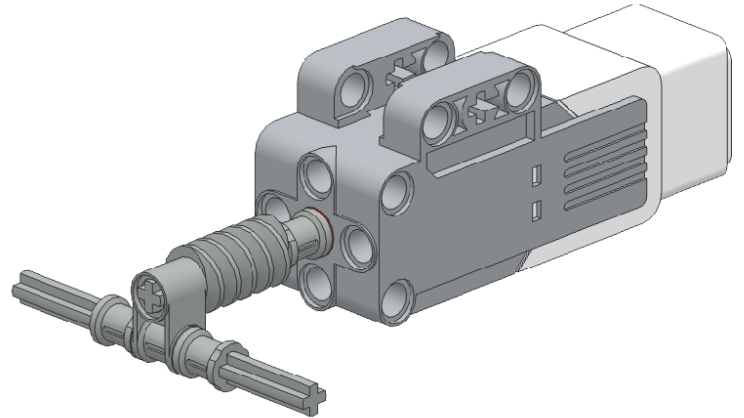
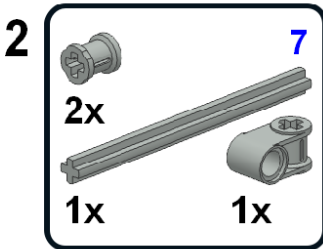
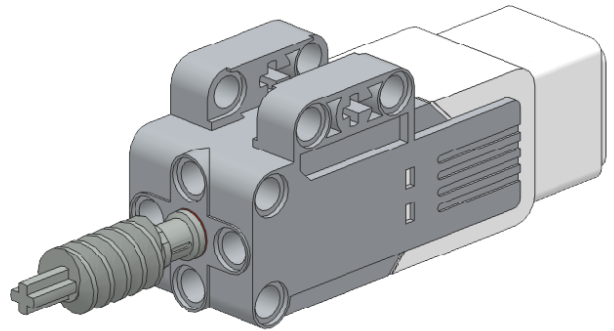
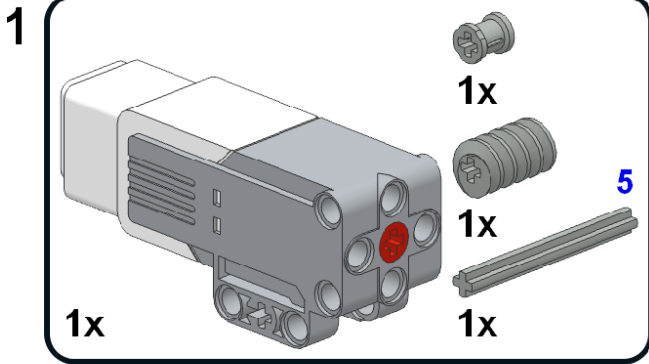


# Touch Sensor Attachment



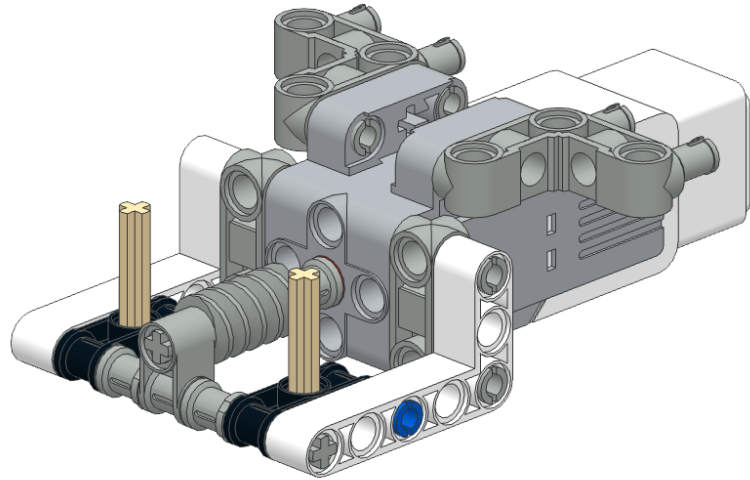
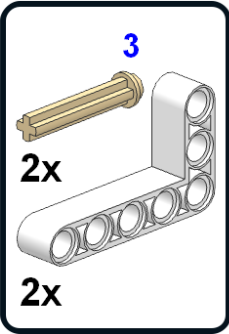


# Gripper Attachment

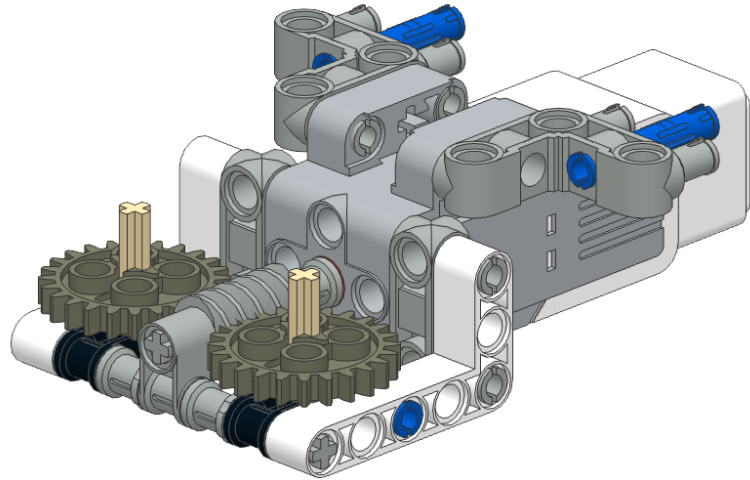
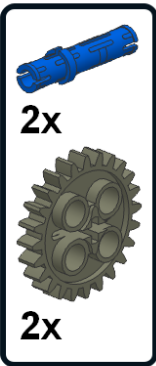




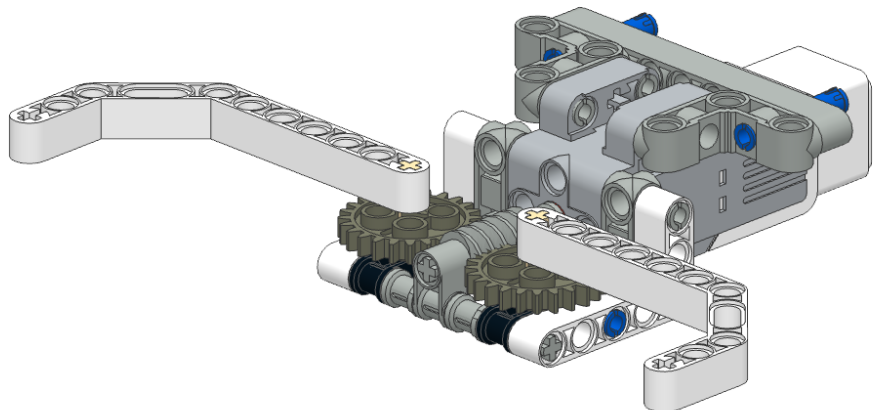
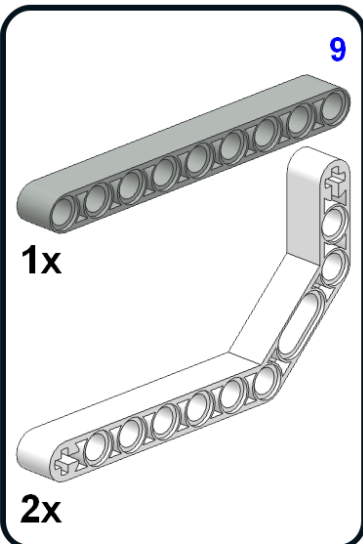
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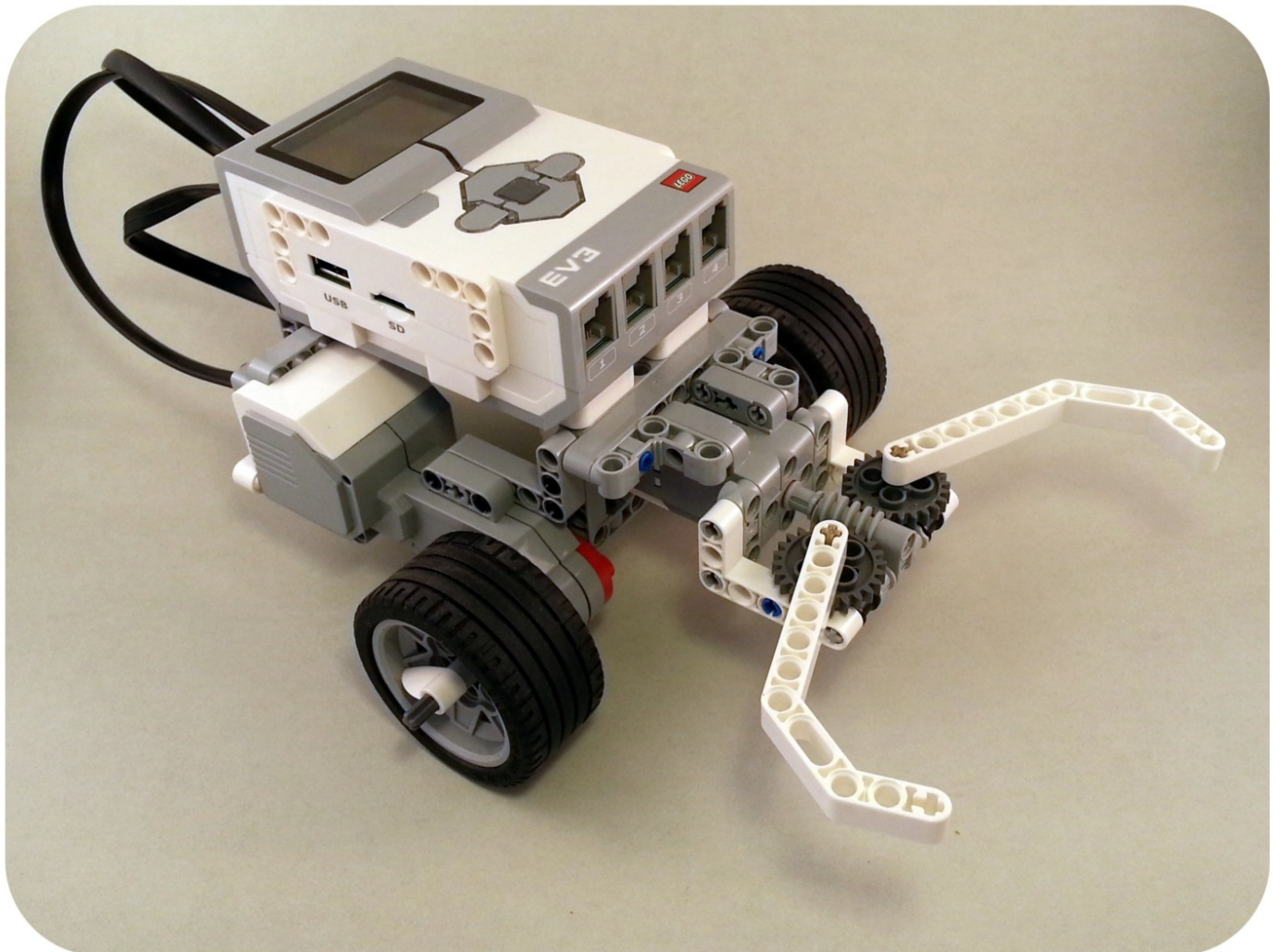
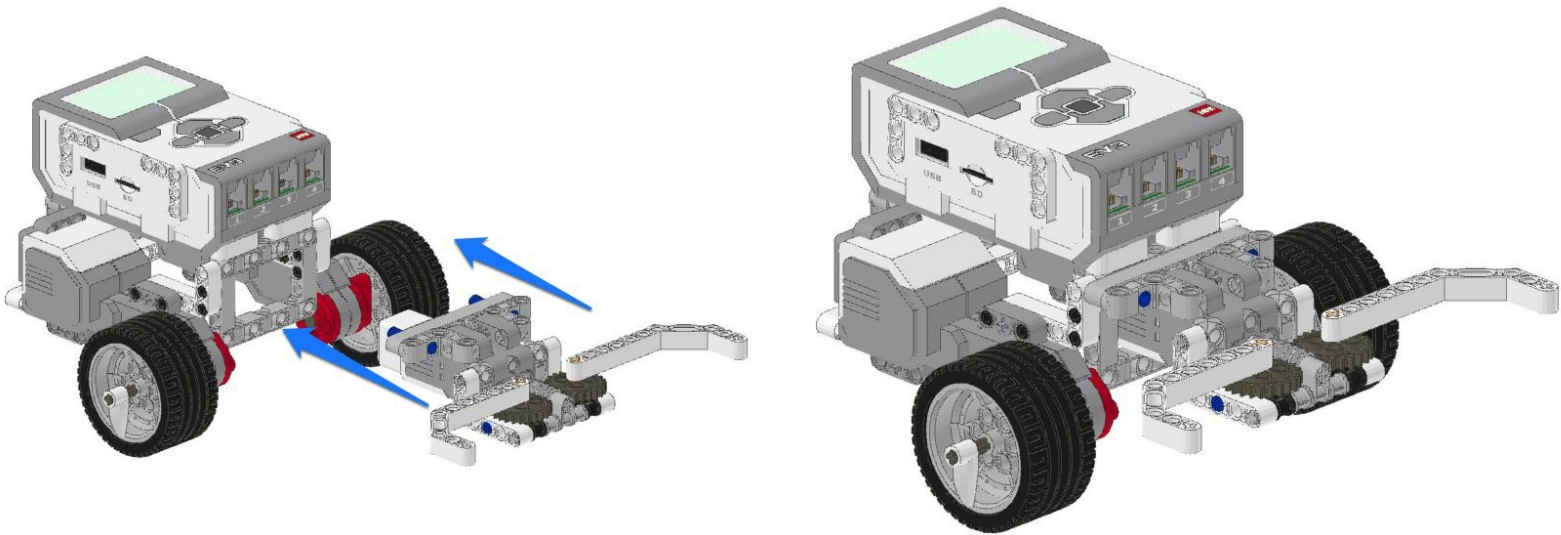
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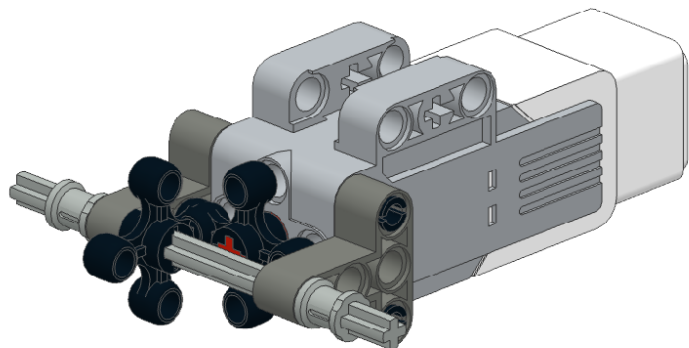
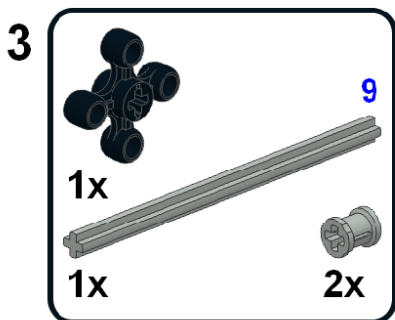
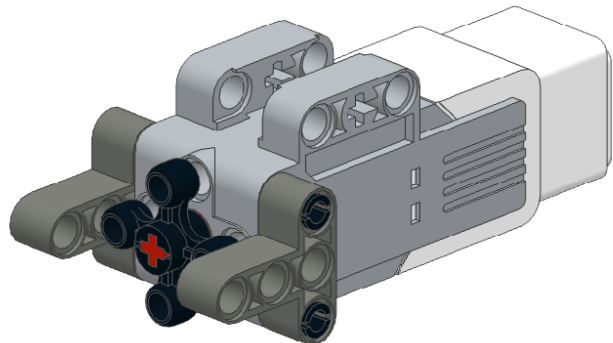
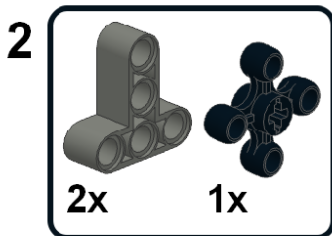
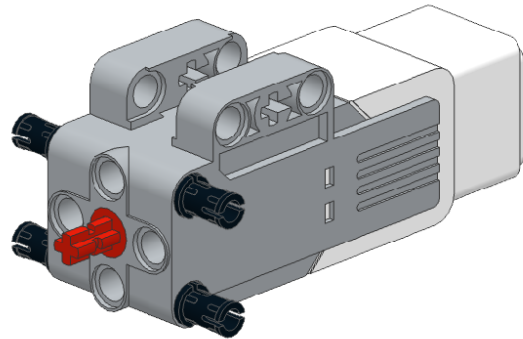
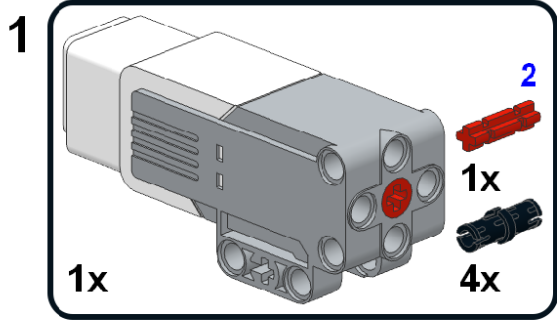


# Attach the Gripper to the front of the Robot

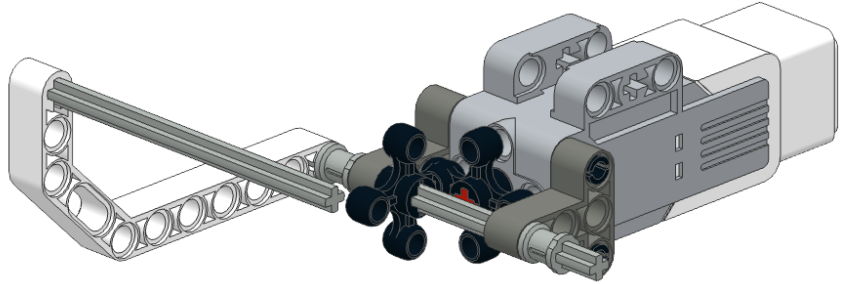
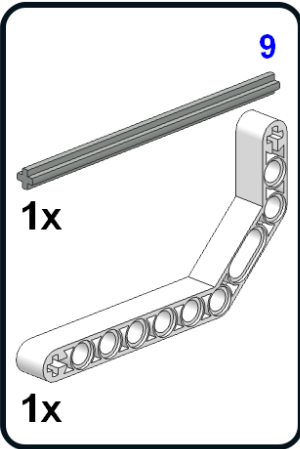




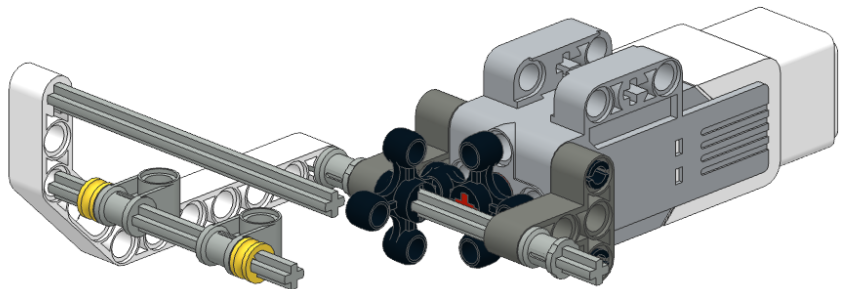
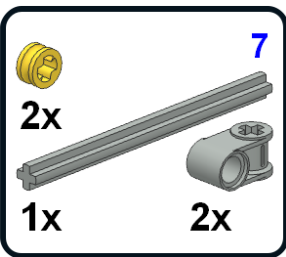
# Cargo Delivery Attachment



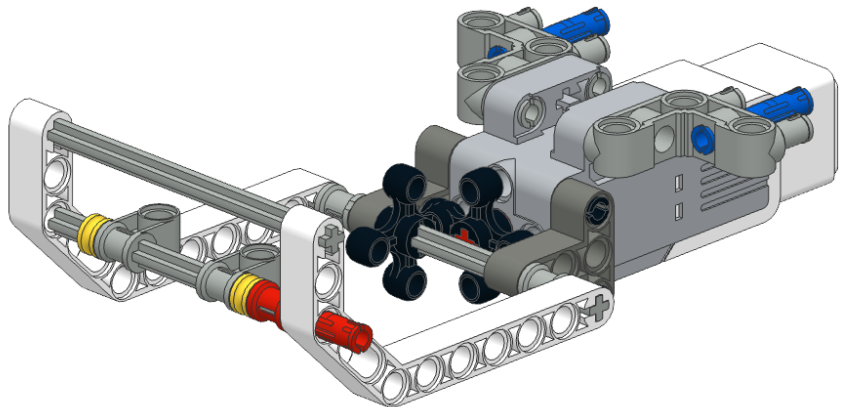
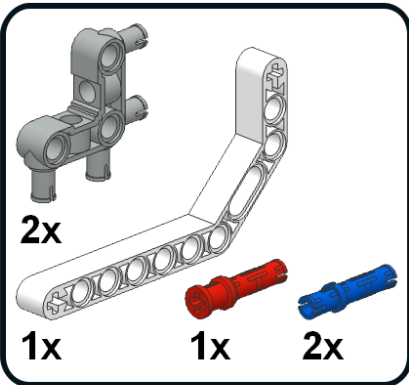
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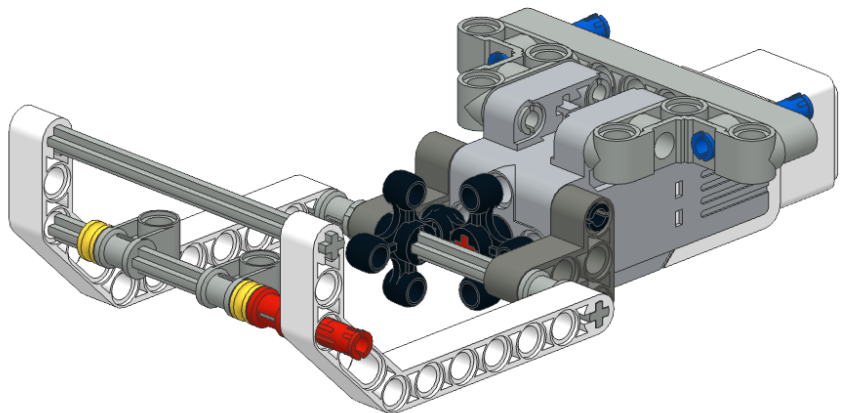
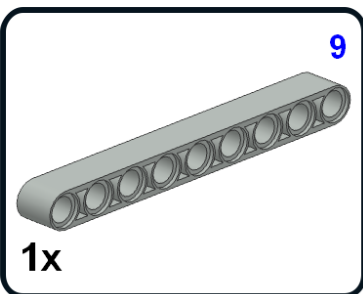
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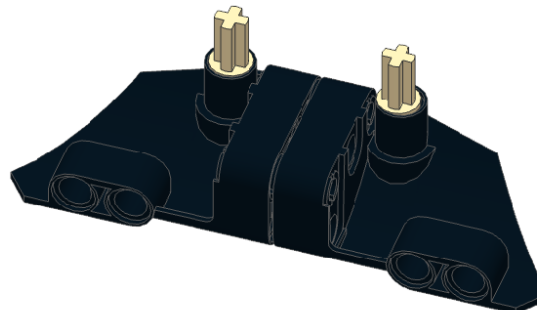
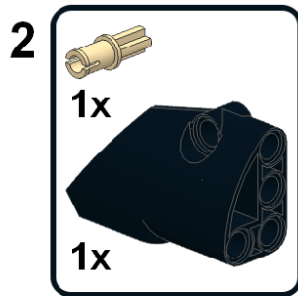
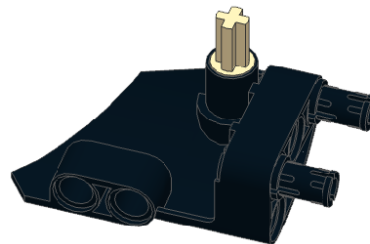
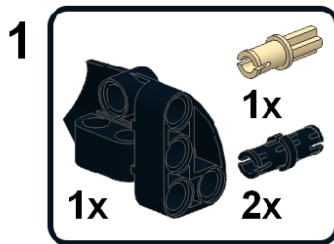
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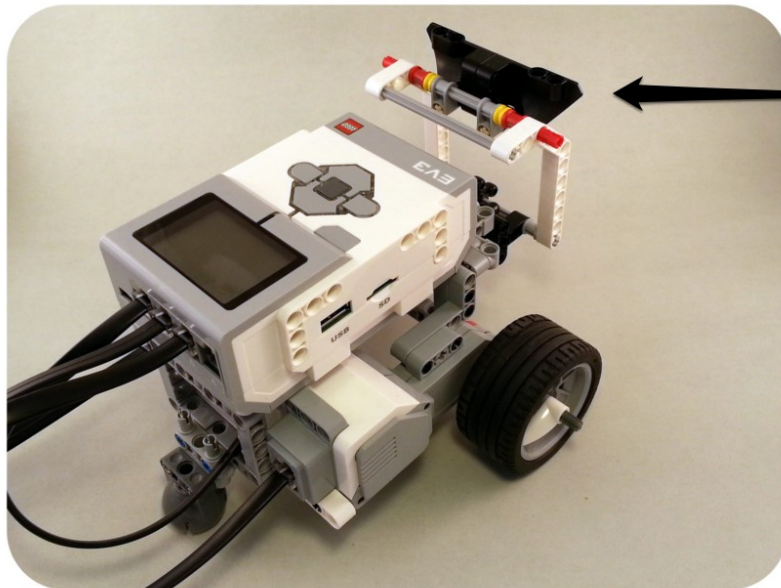
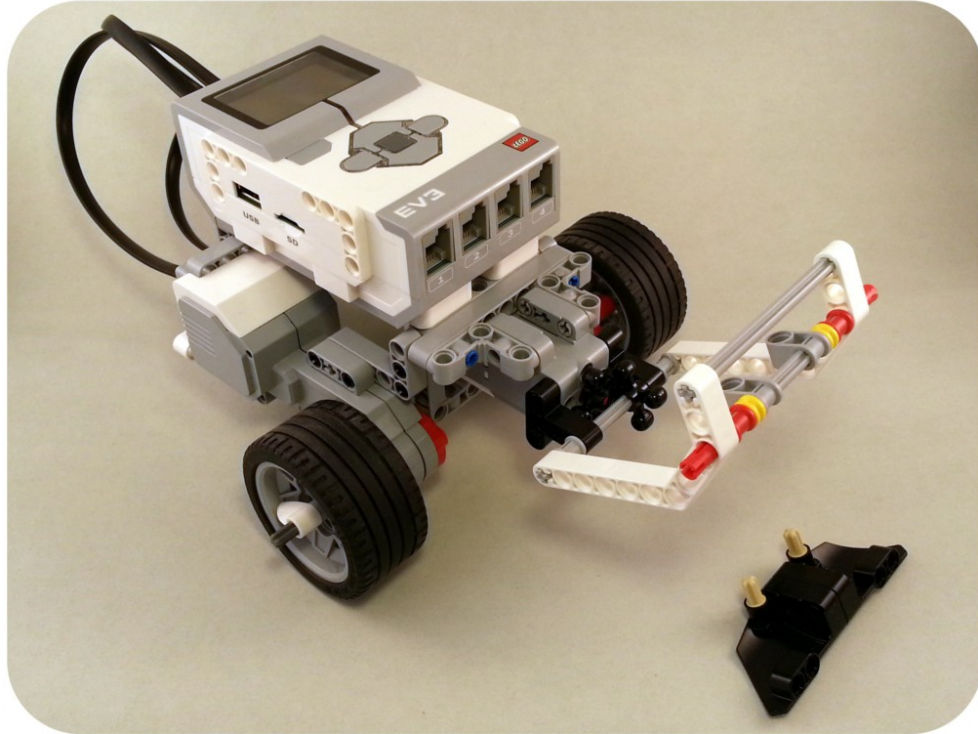


# Signal Repeater

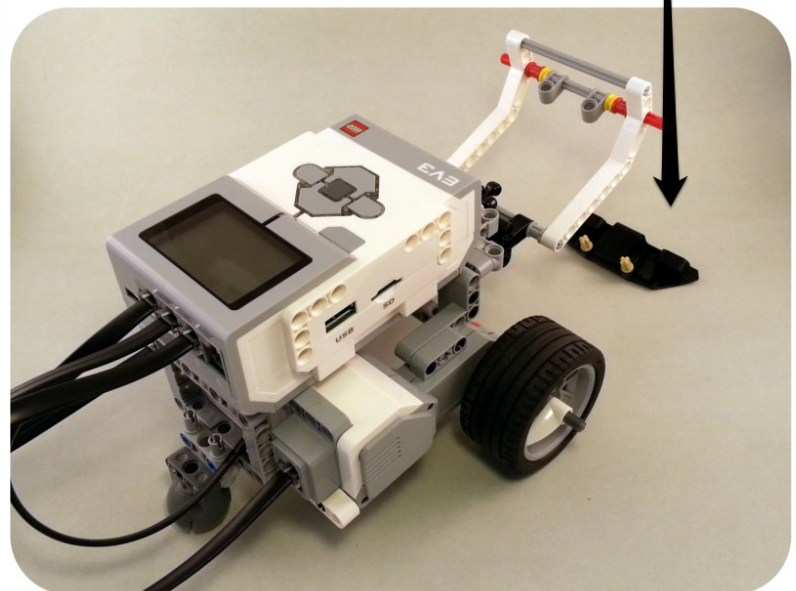
To be used with the Cargo Delivery Attachment



# Attach the Cargo Delivery Attachment to the front of the Robot

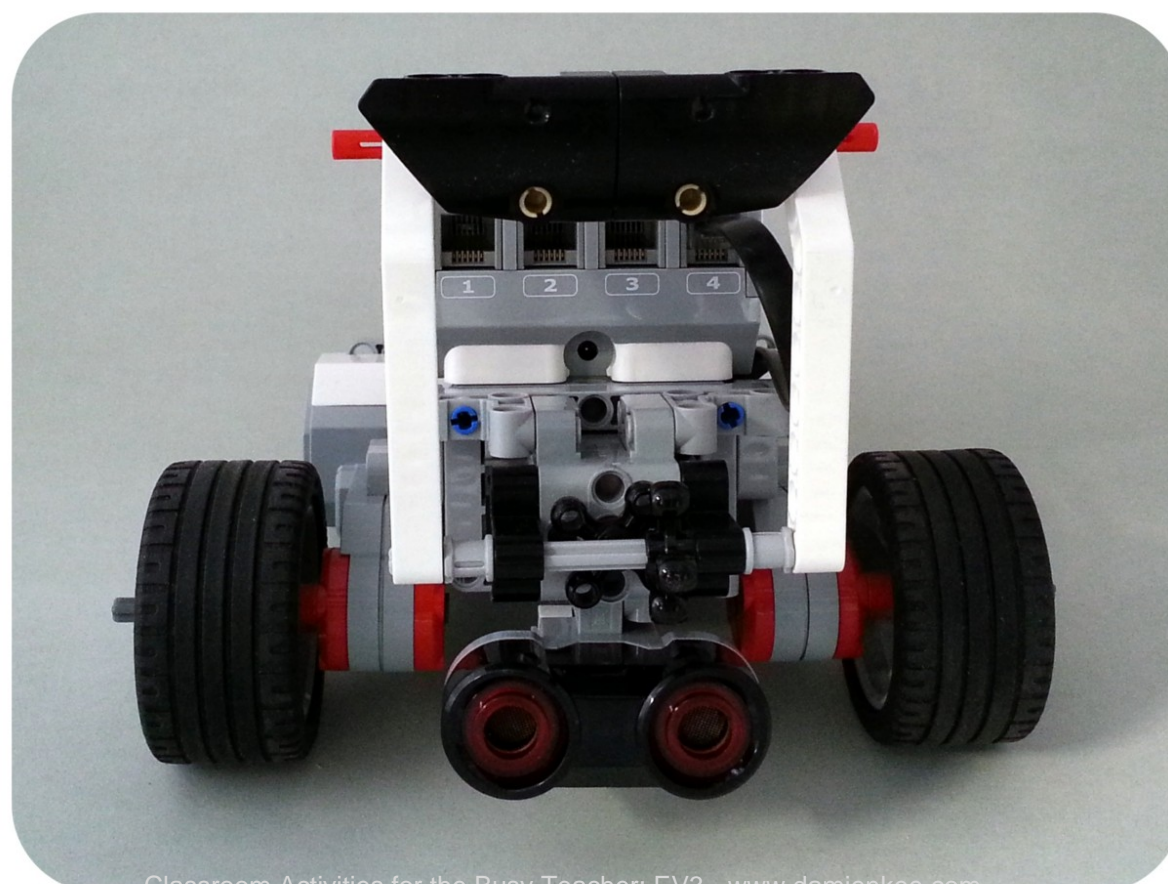
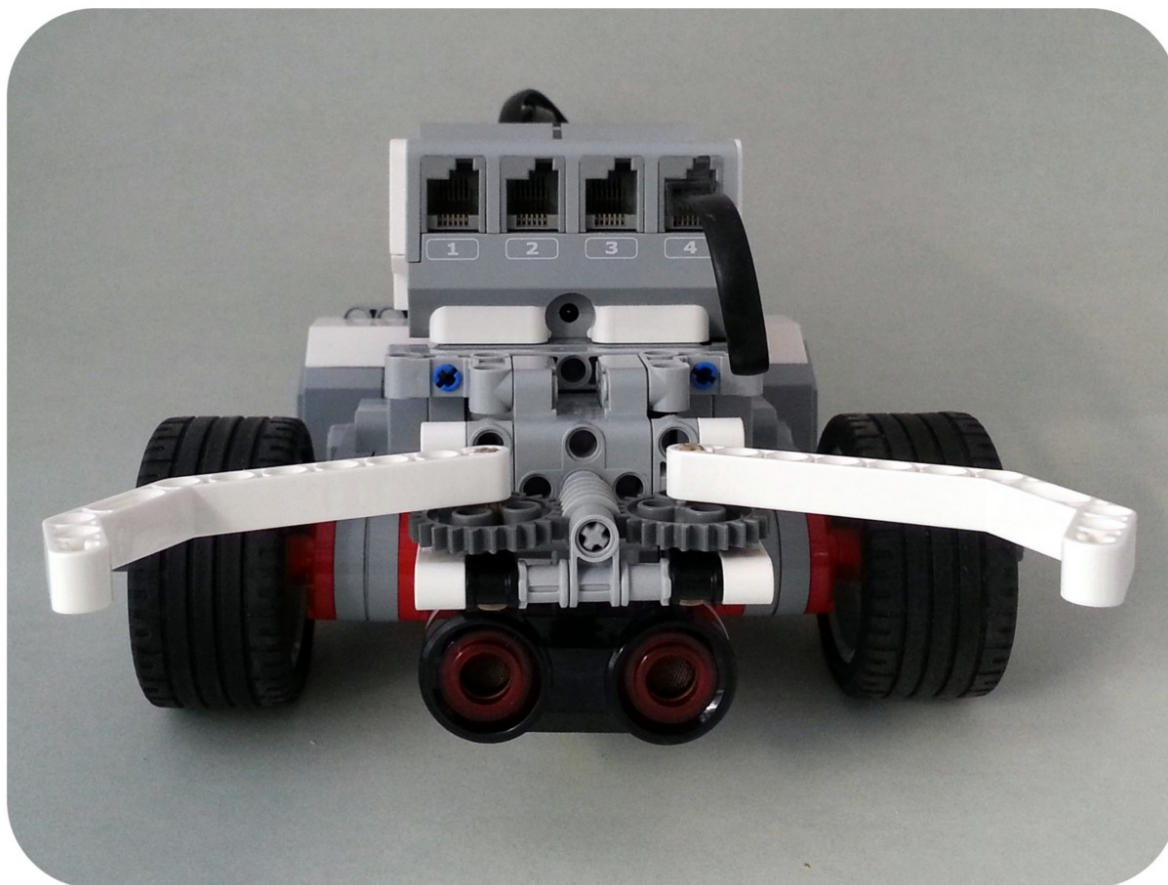


The 'Signal Repeater' will sit loosely in the Cargo Delivery arm when in a raised position. Lower the Cargo Delivery arm to drop the Signal Repeater



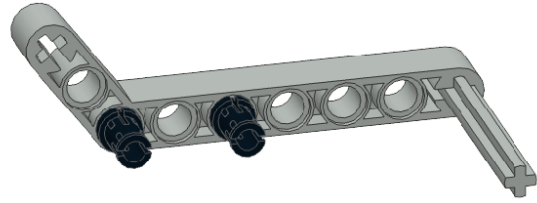
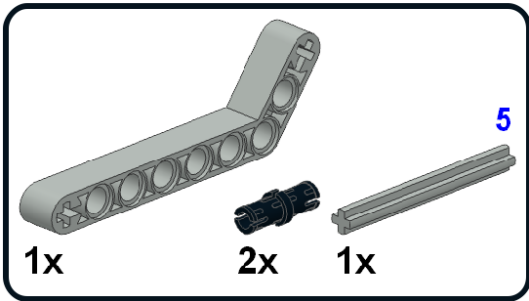


# The Ultrasonic Sensor Attachment can be used with both the Cargo Delivery Attachment and Gripper Attachment

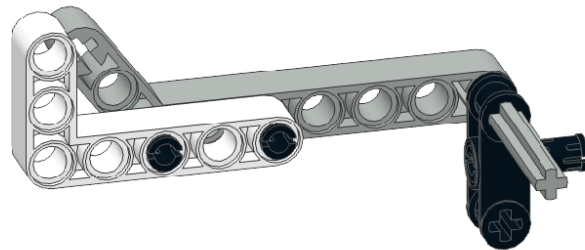
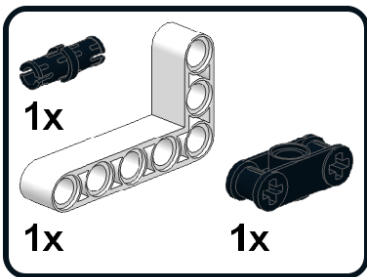


# Combined Colour - Ultrasonic Sensor Attachment

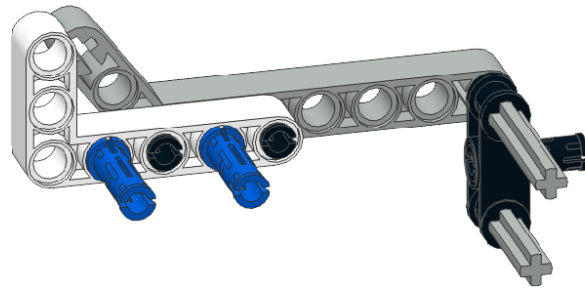
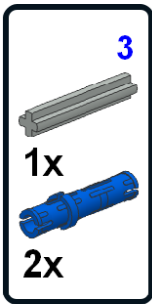
1



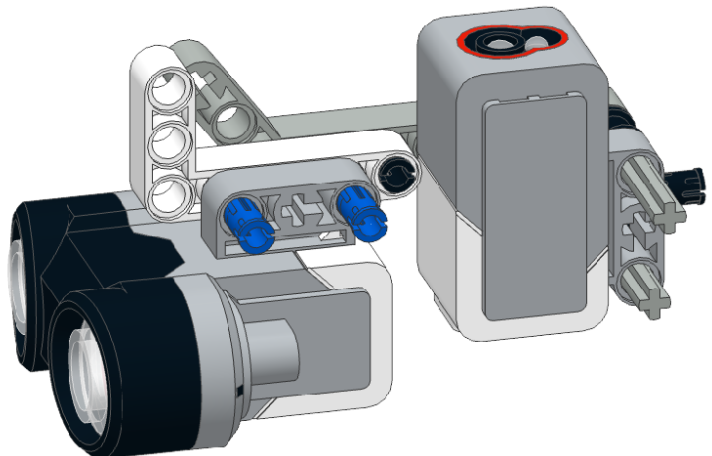
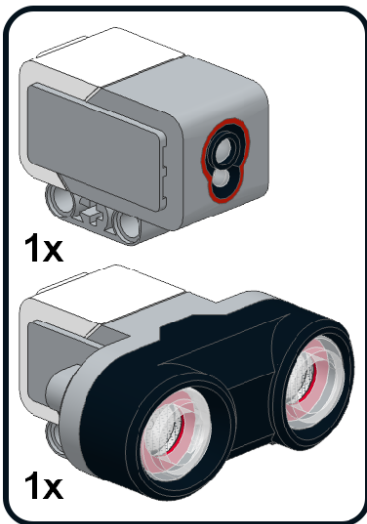
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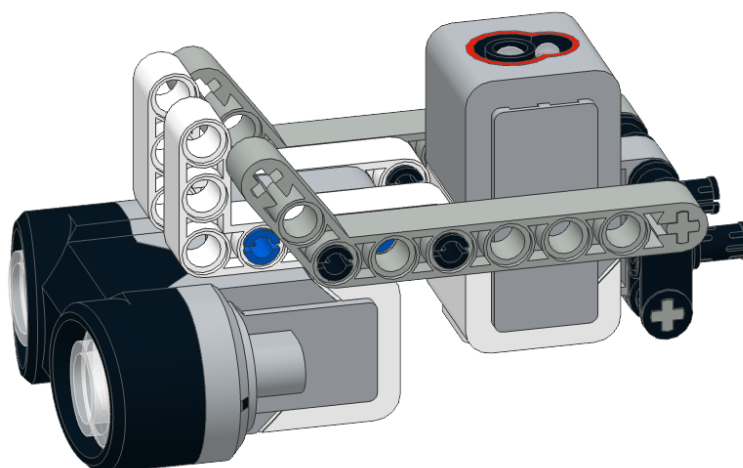
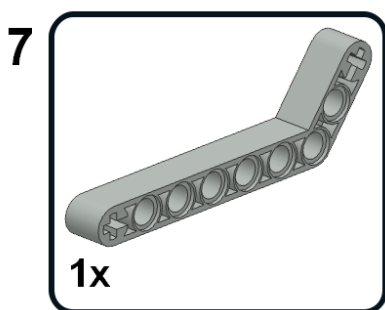
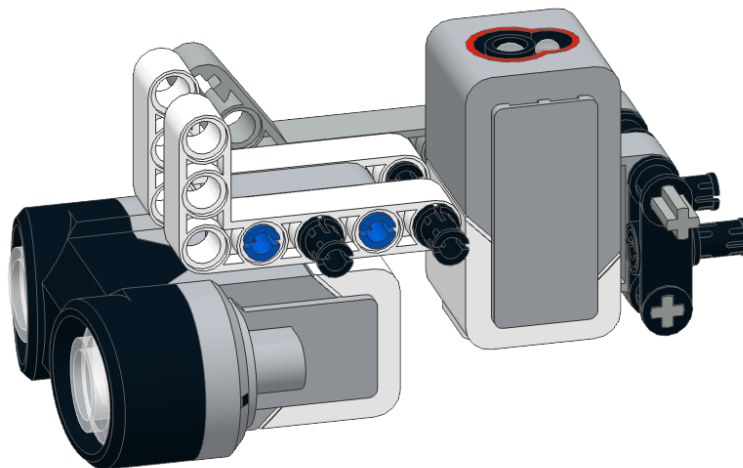
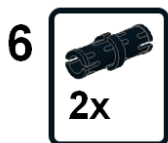
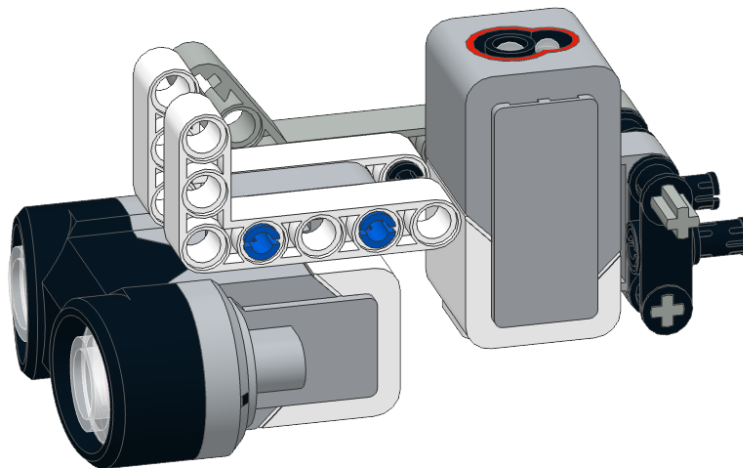
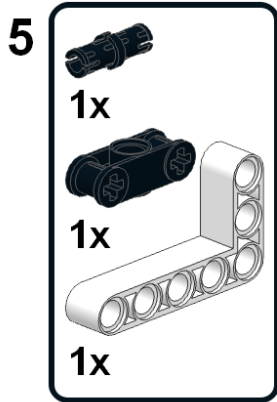


3



4







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

