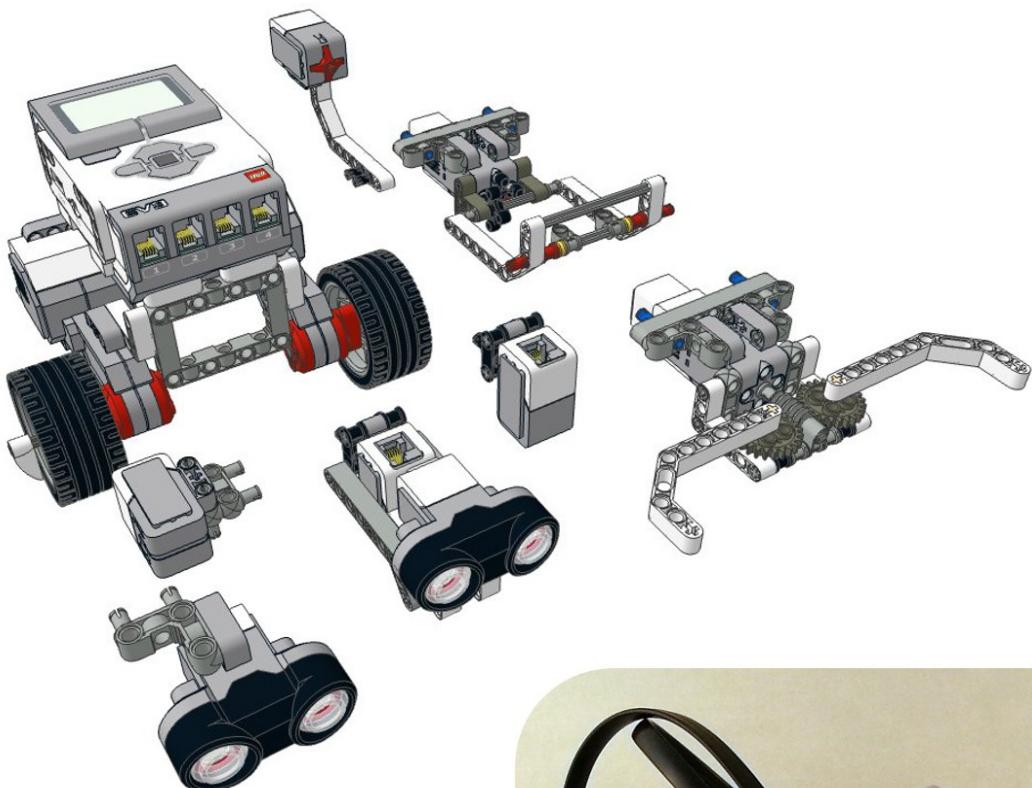


# Building Instructions

## RileyRover Base Design and Attachments



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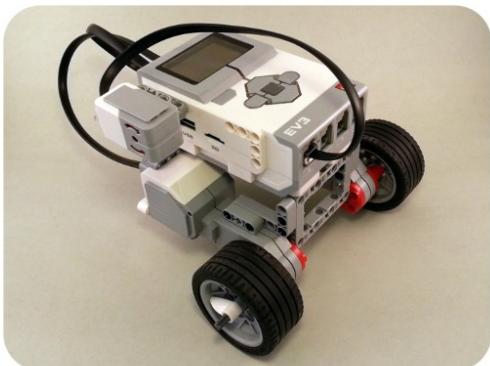
# **Sensor and Motor Attachments for the RileyRover Base design**



**Ultrasonic Sensor**



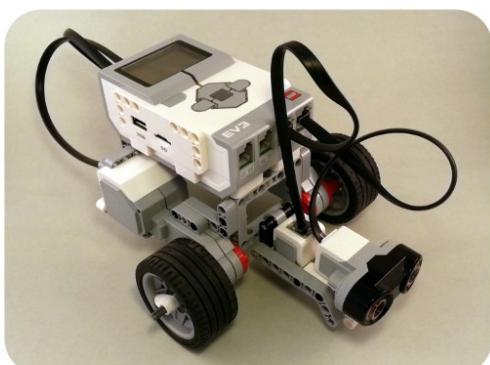
**Colour Sensor**



**Gyro Sensor**



**Gripper**

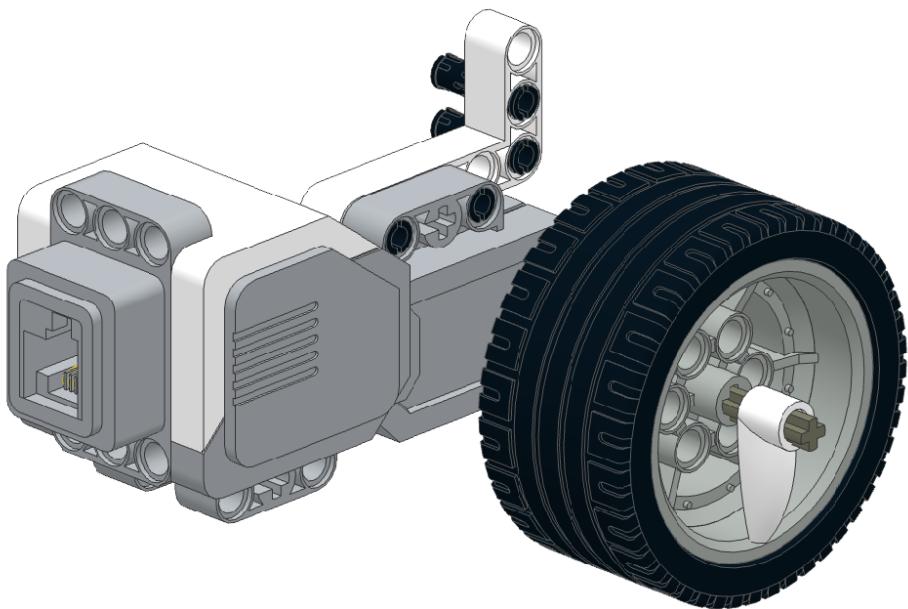
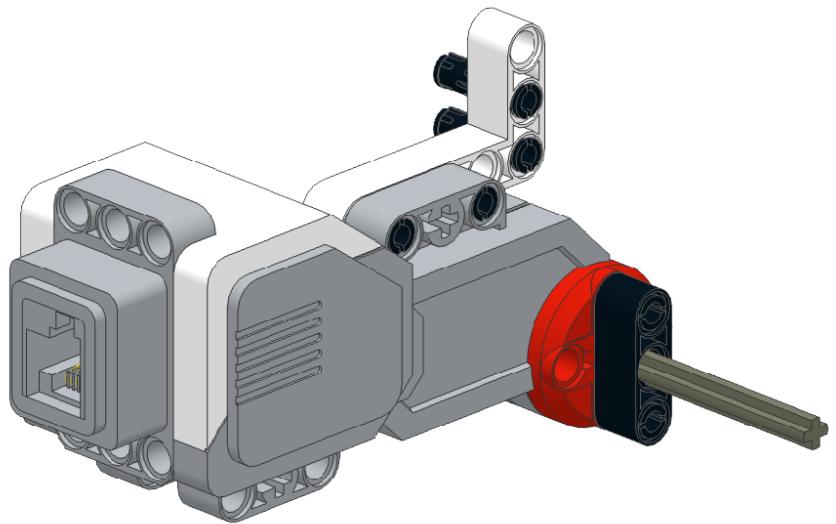
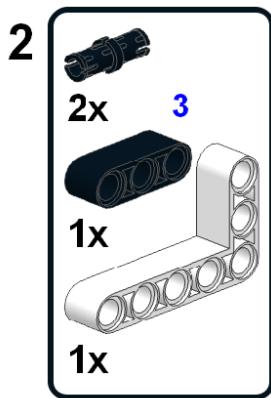
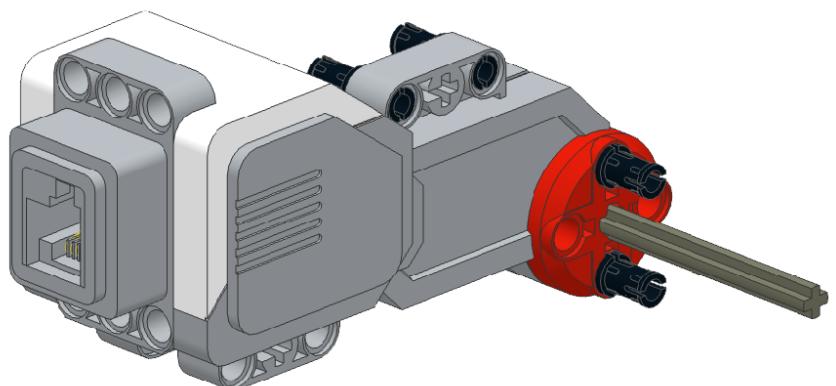
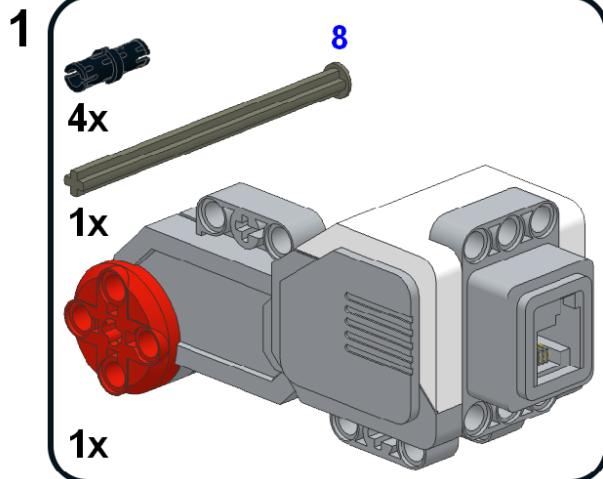


**Colour / Ultrasonic  
combination**

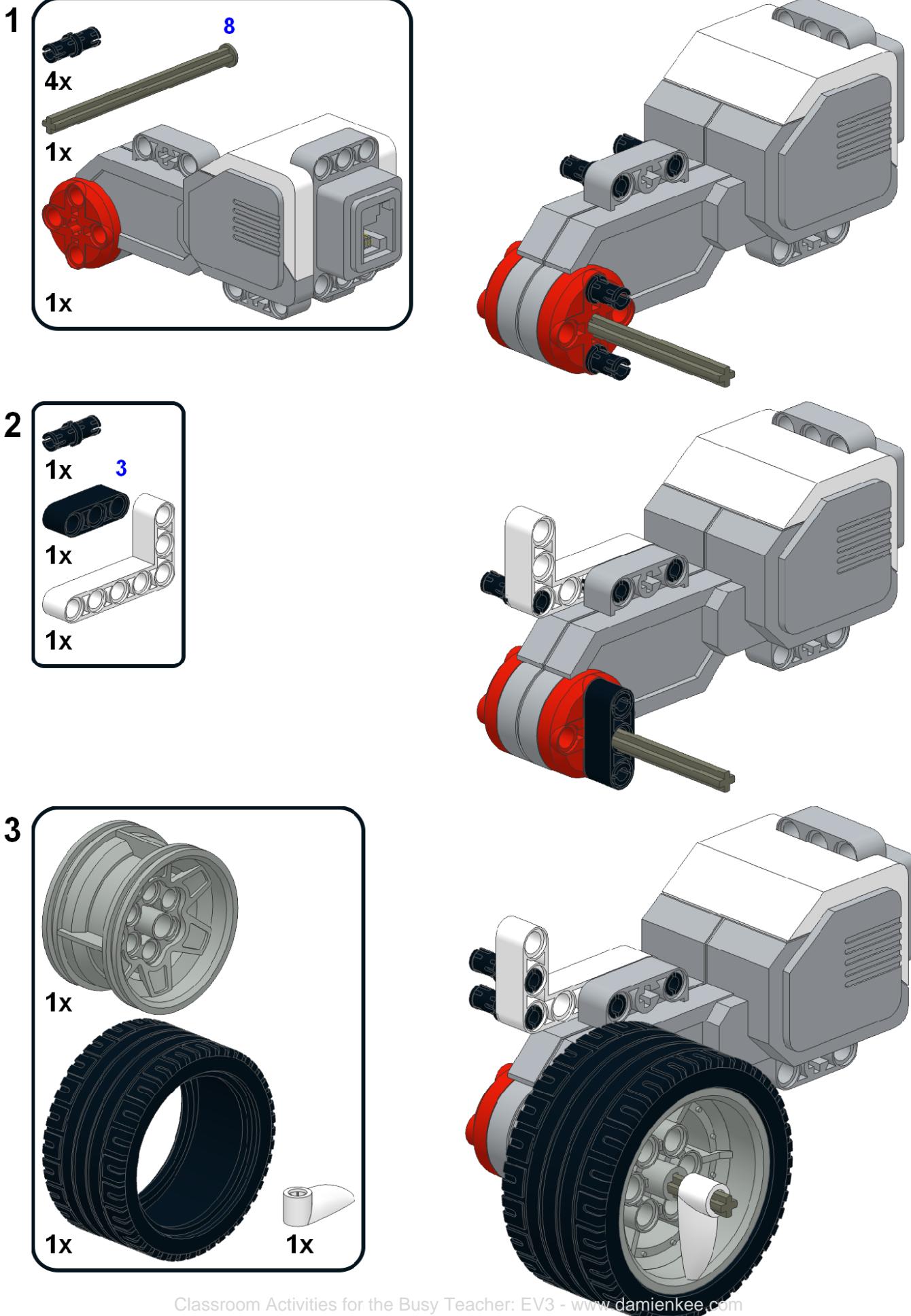


**Cargo Delivery**

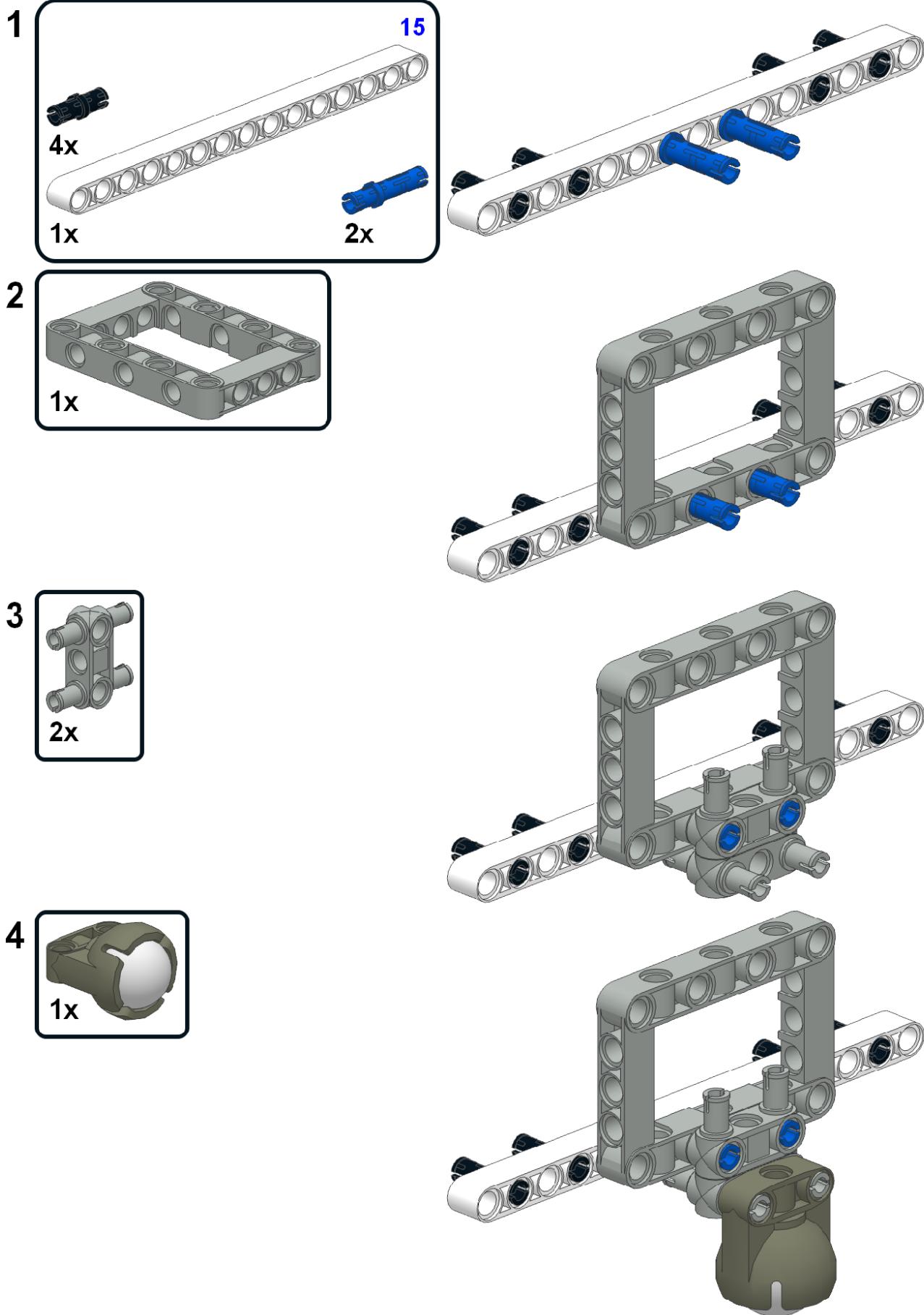
# Right Motor Assembly



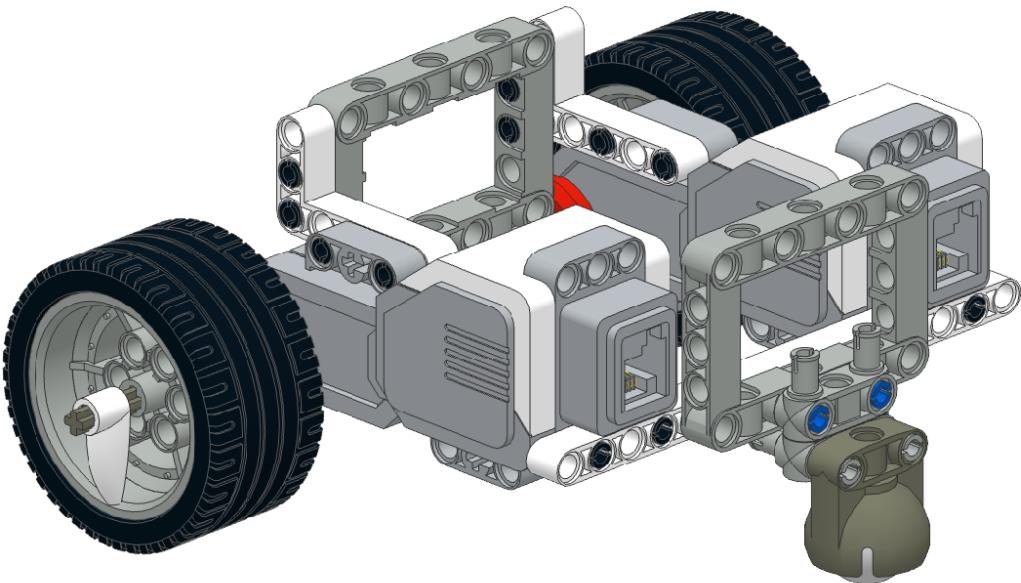
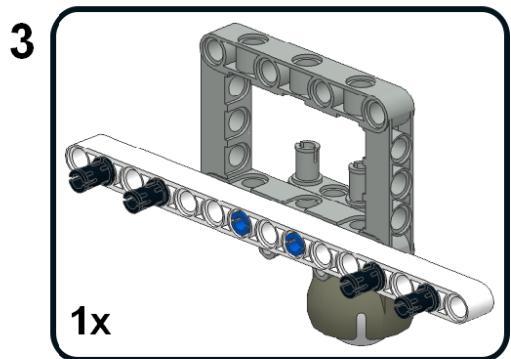
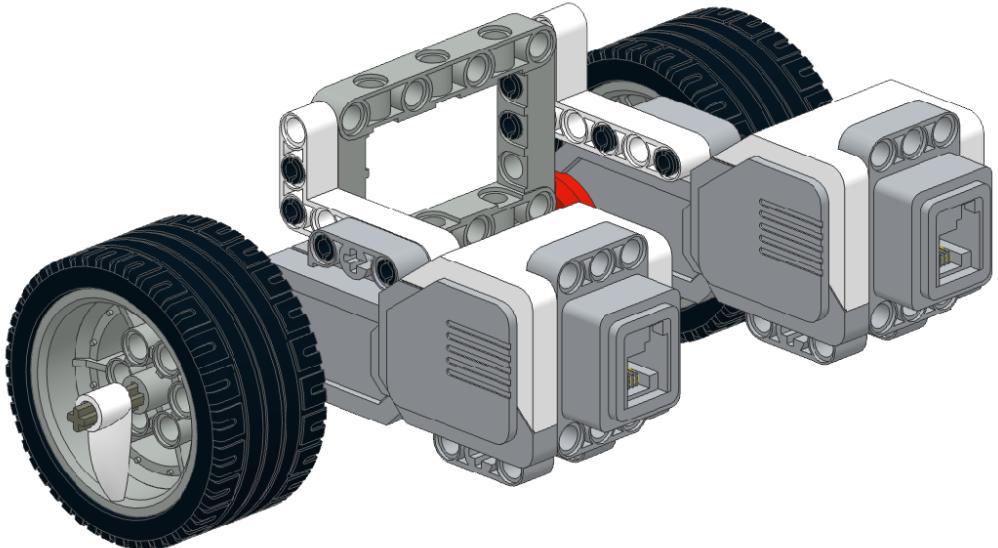
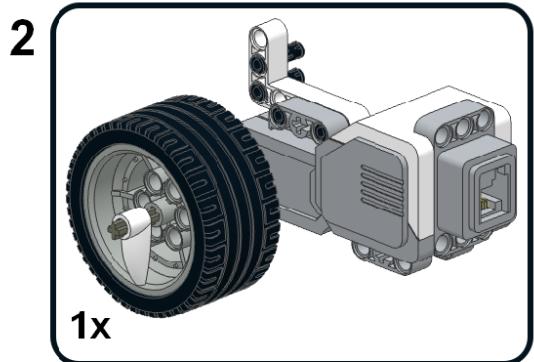
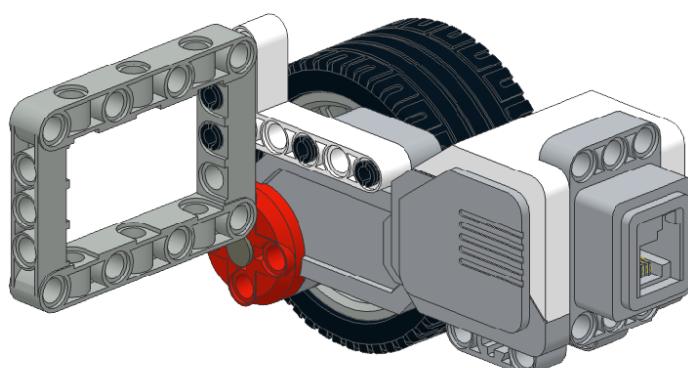
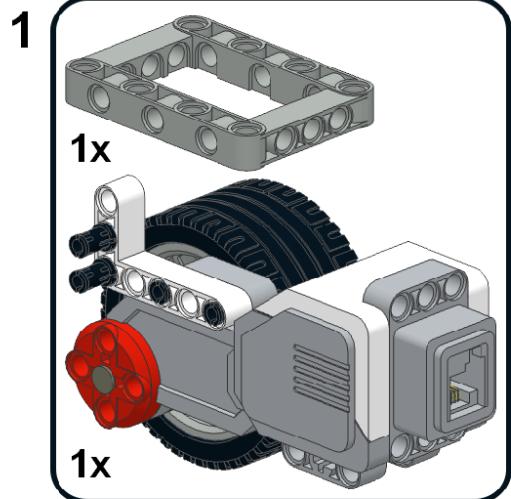
# Left Motor Assembly



# Back Castor Assembly

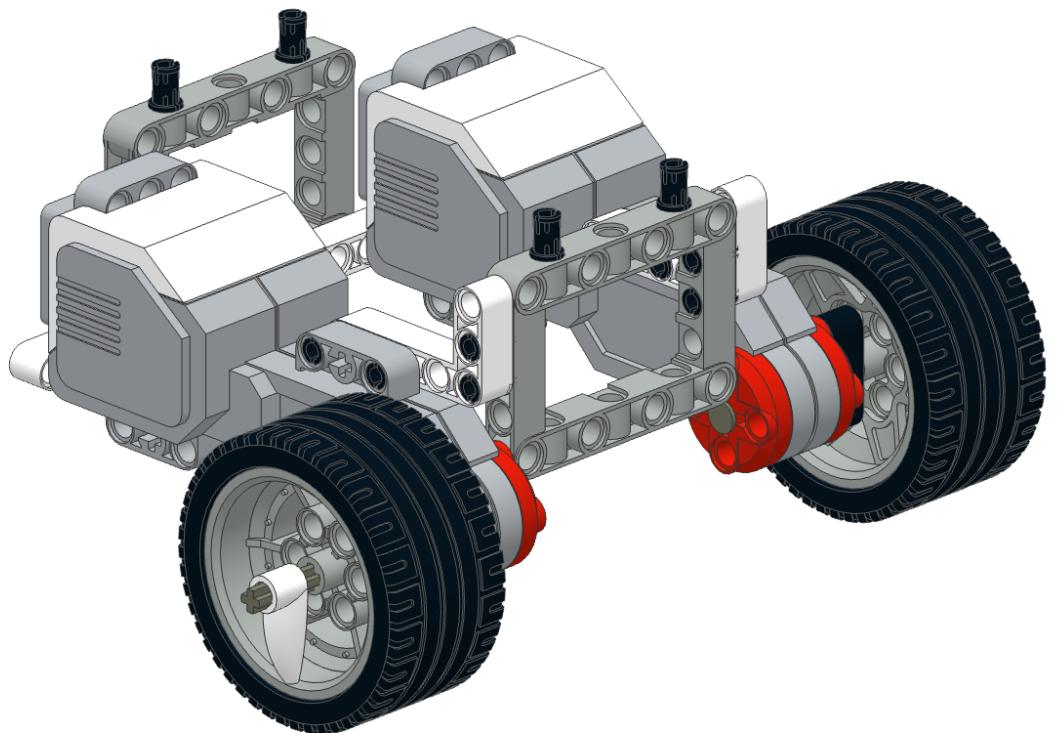


# Assemble Right Motor, Left Motor and Back Castor

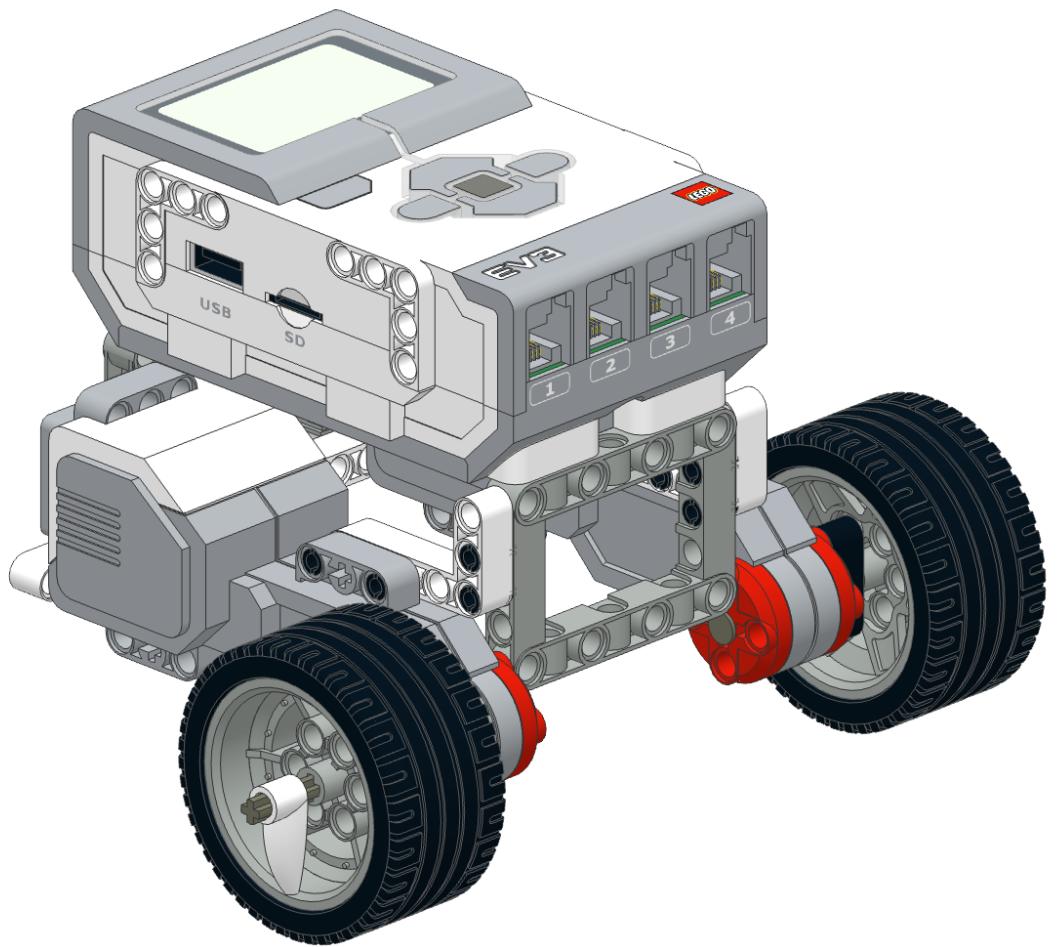
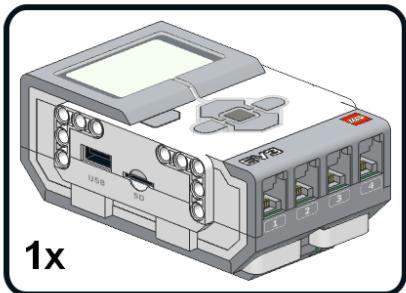


# Turn Base around

4

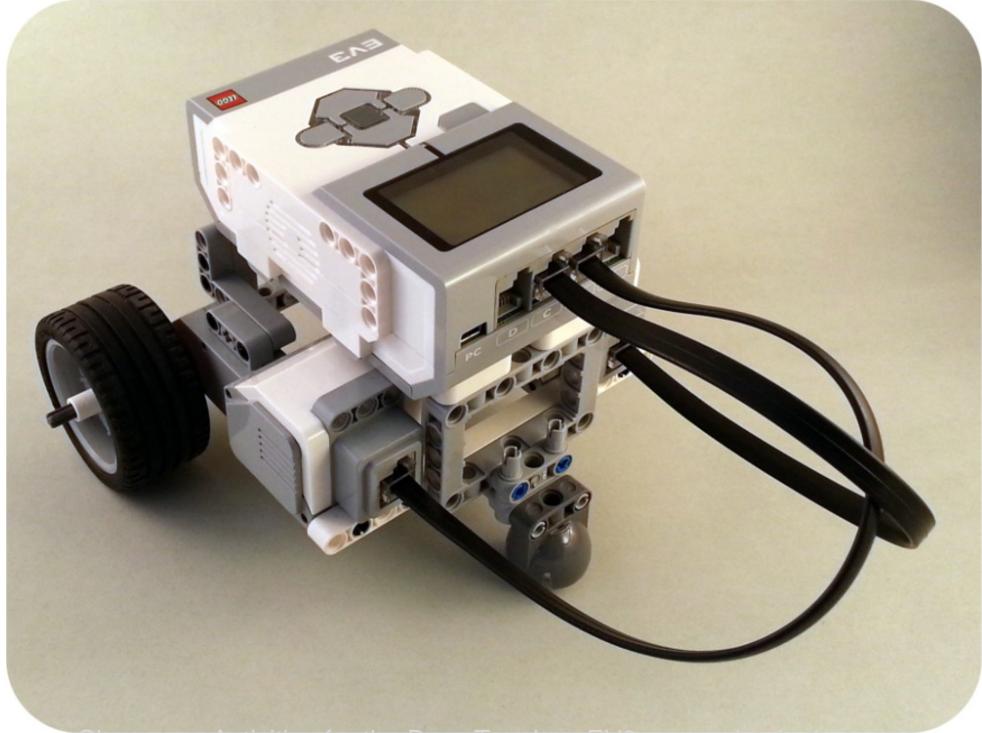
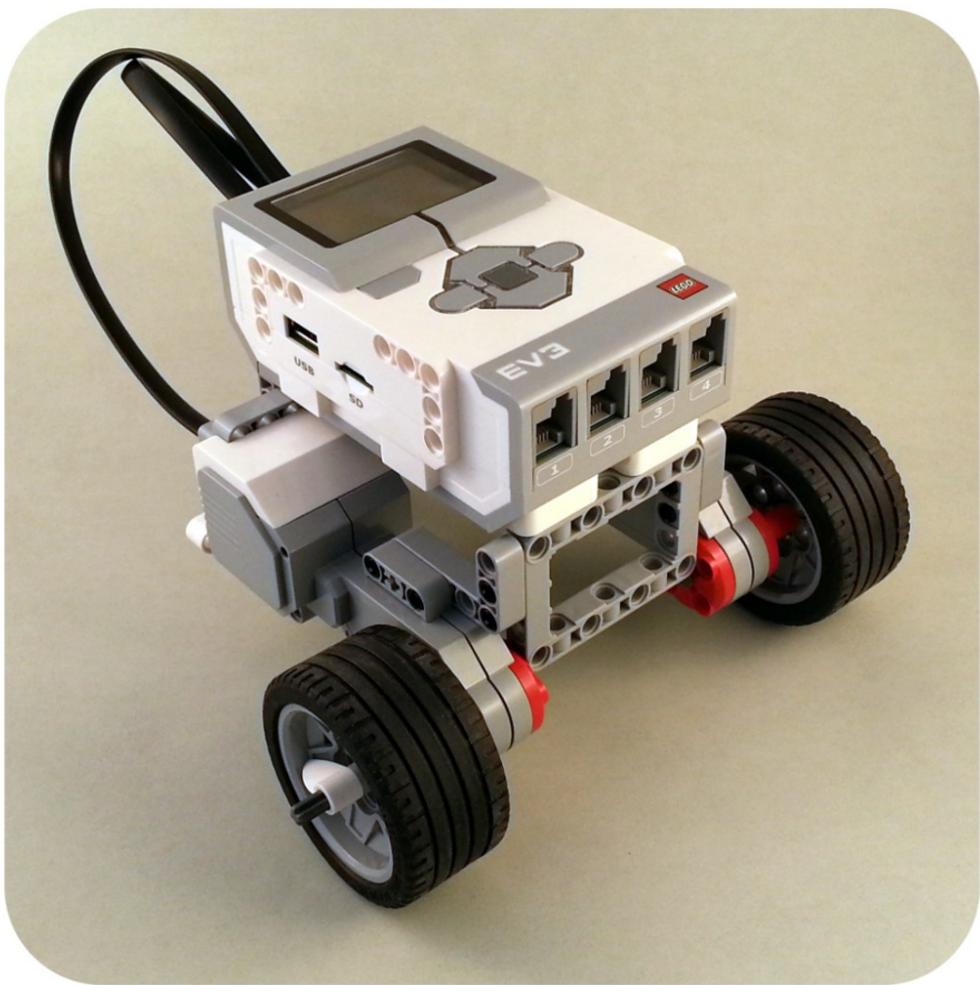


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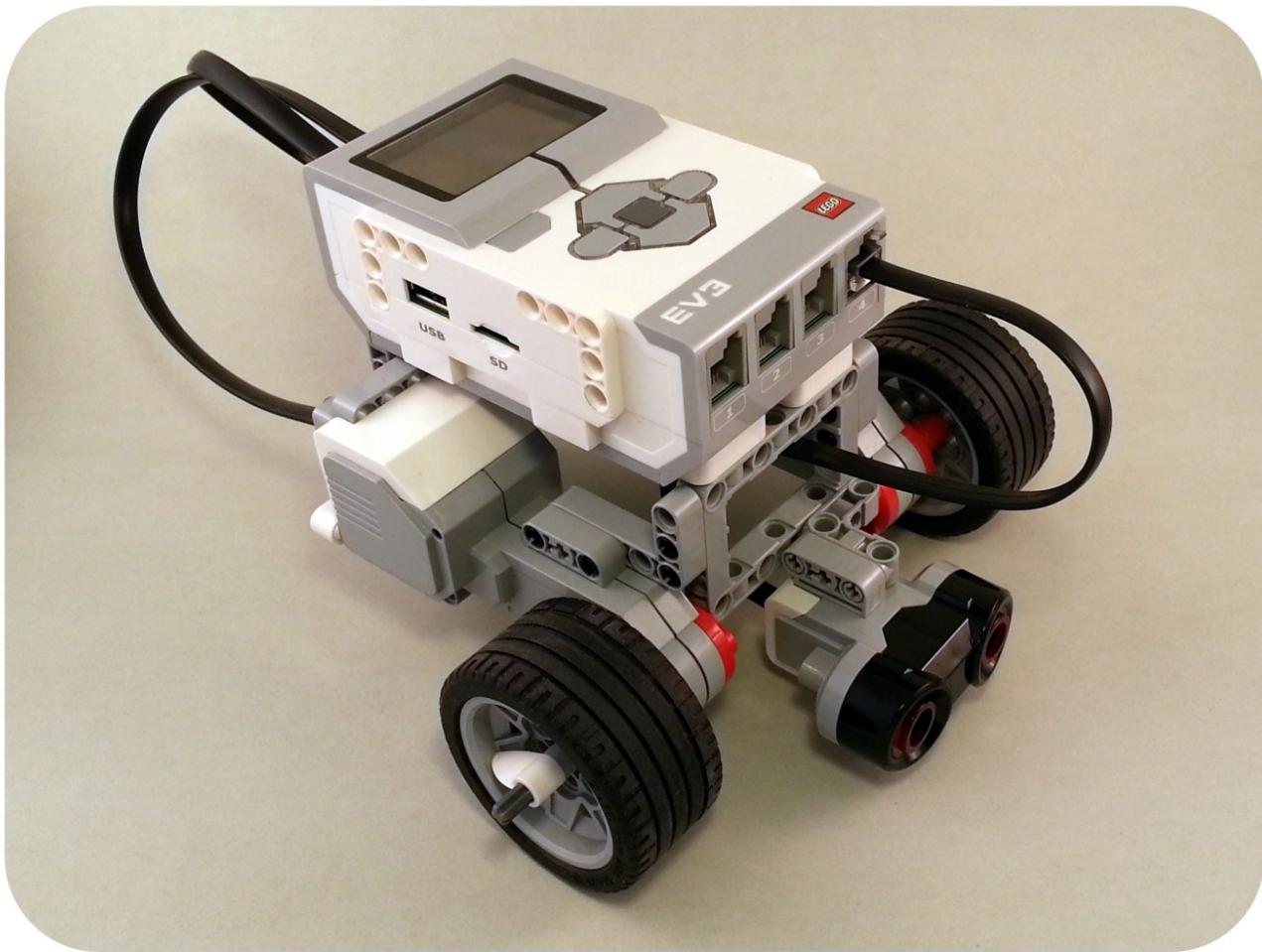
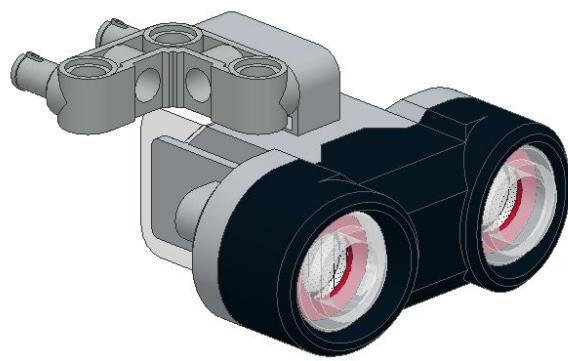
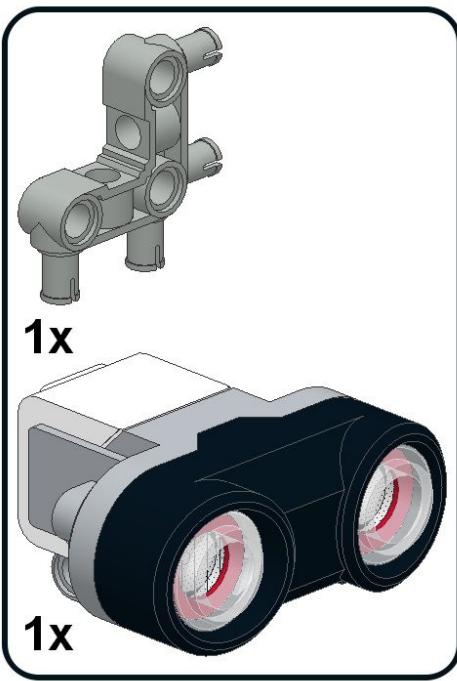


# Connect the Cables

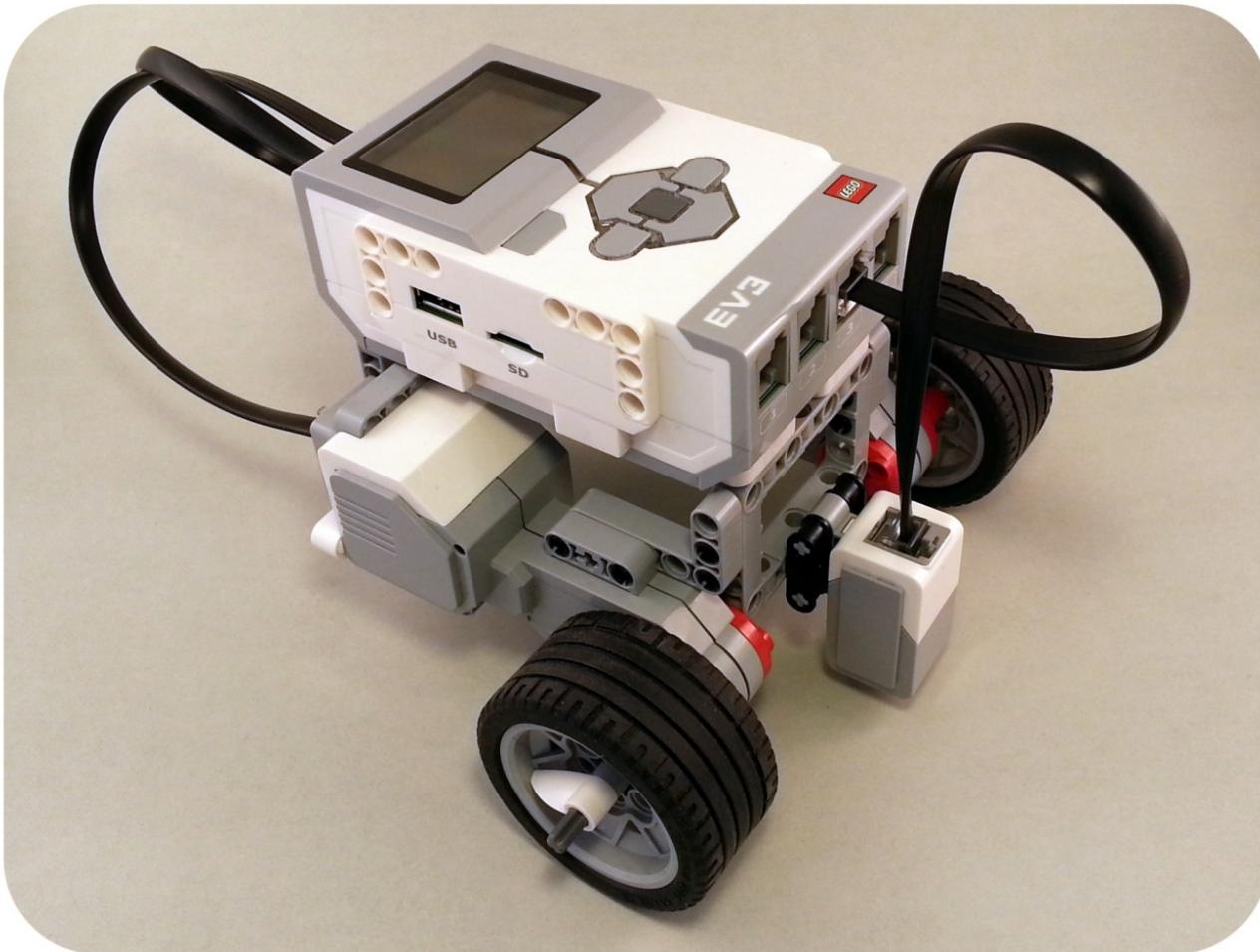
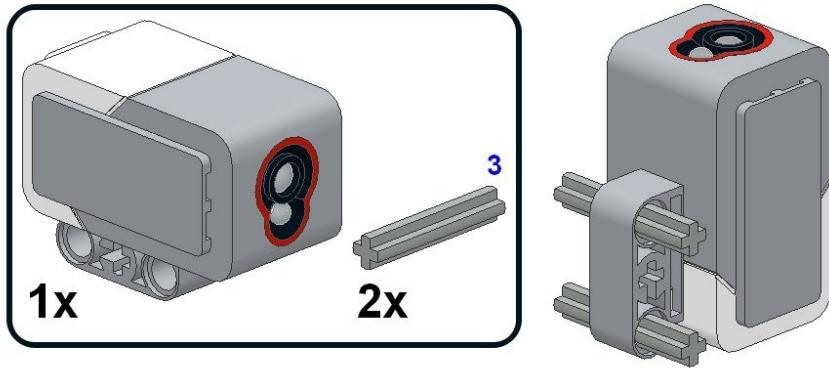
**Left Motor : B - Right Motor : C**  
**(for this design, the cables will cross over)**



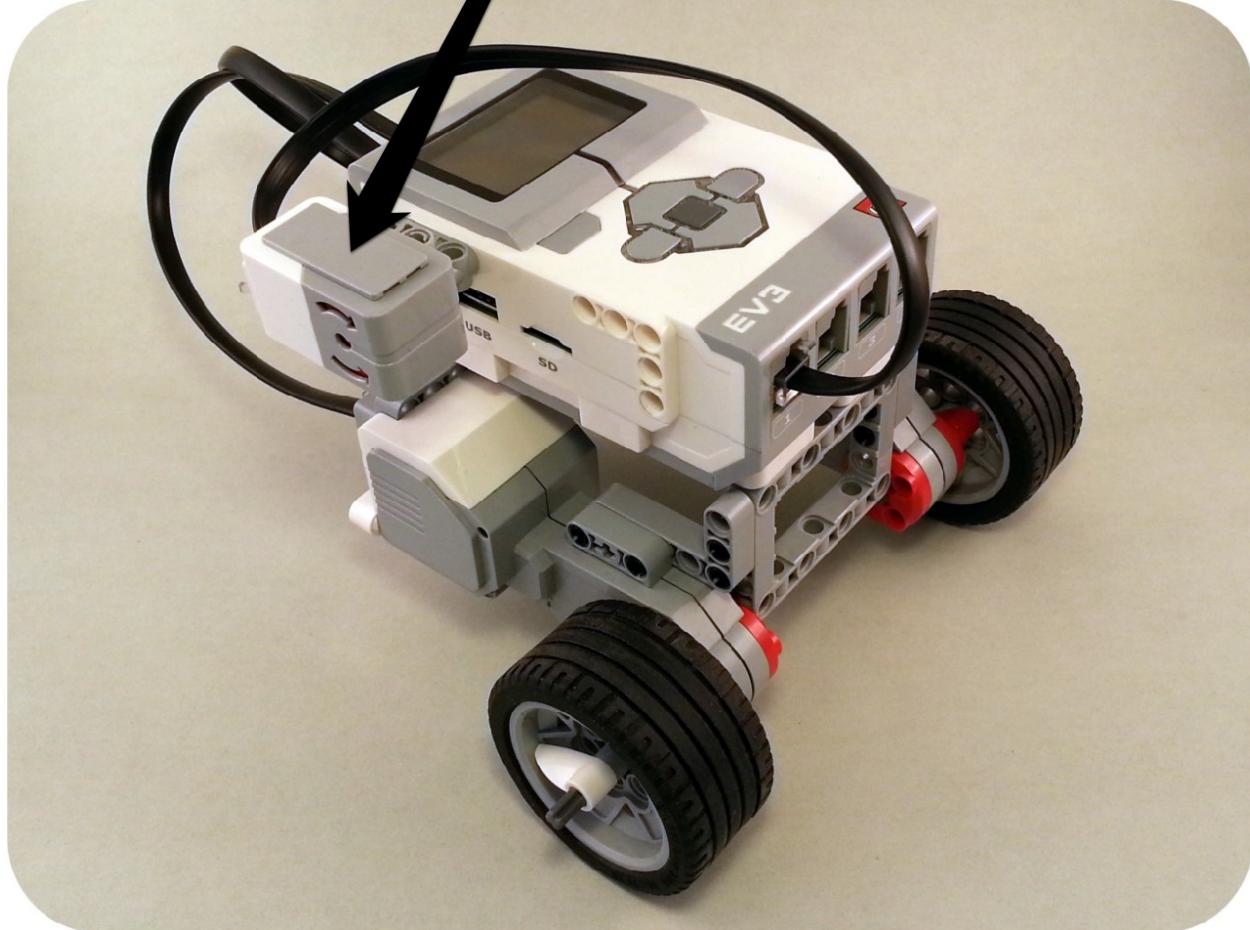
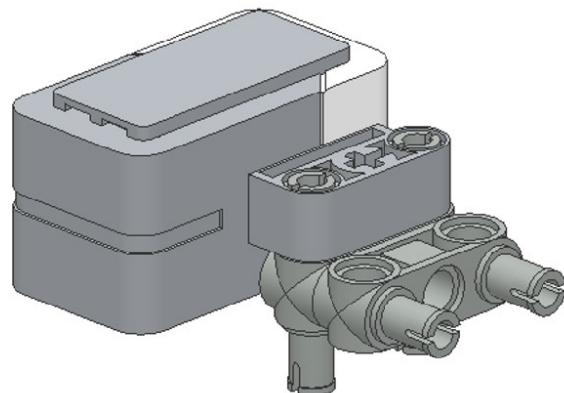
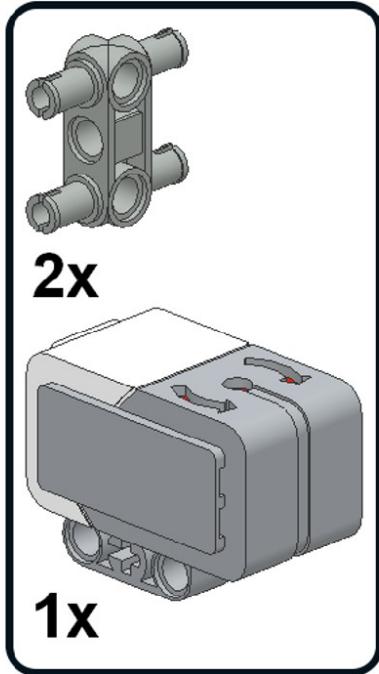
# Ultrasonic Sensor Attachment



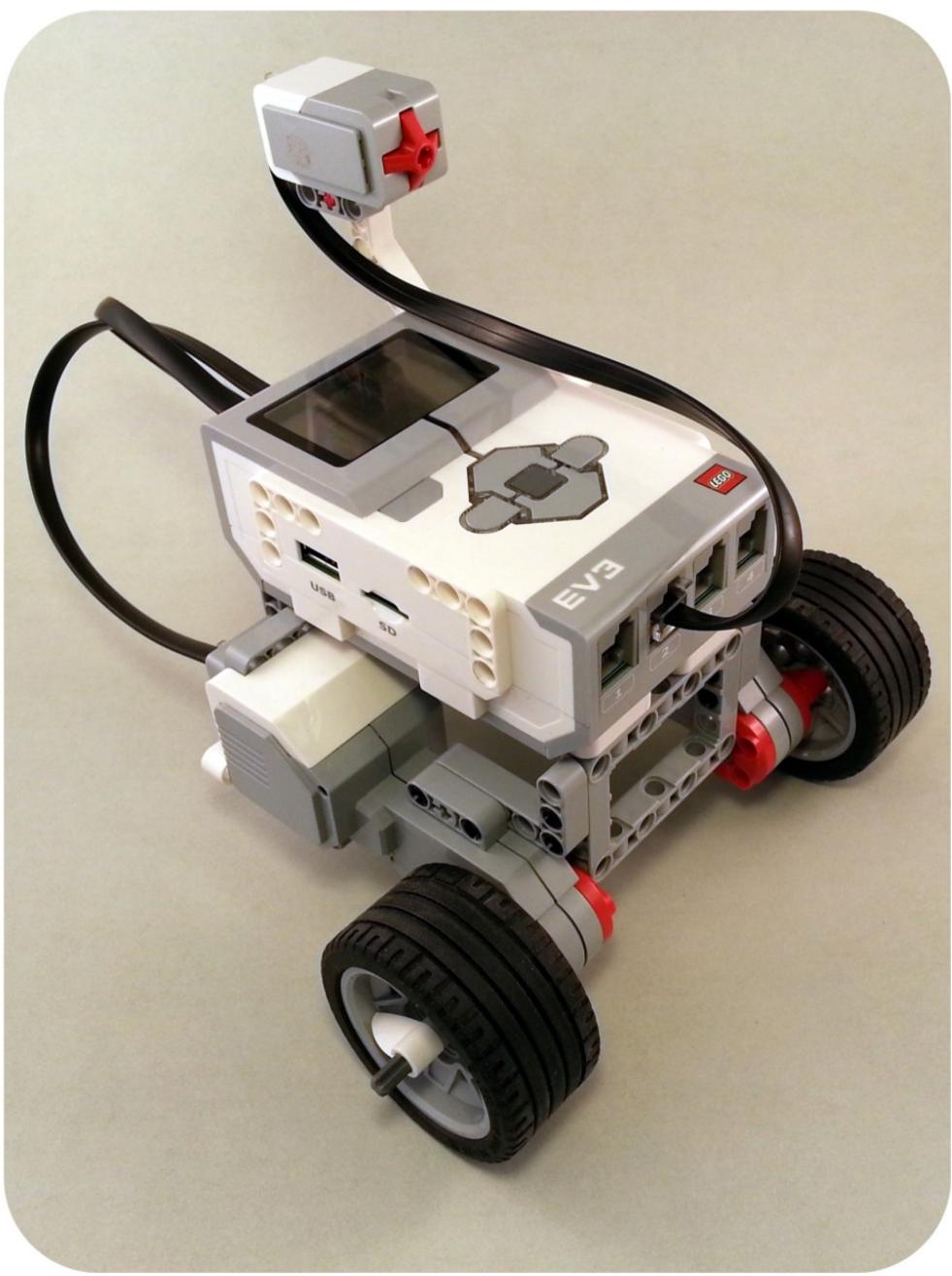
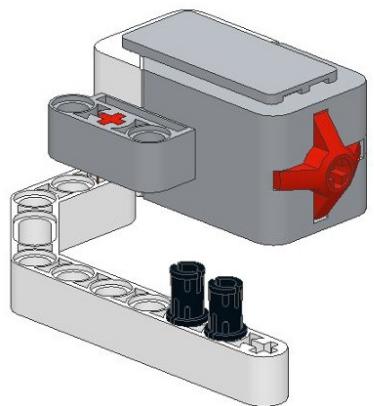
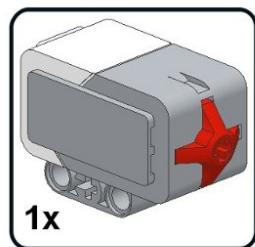
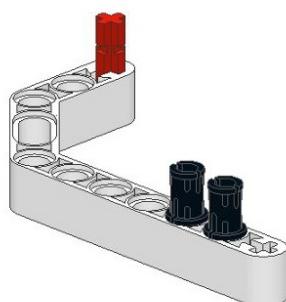
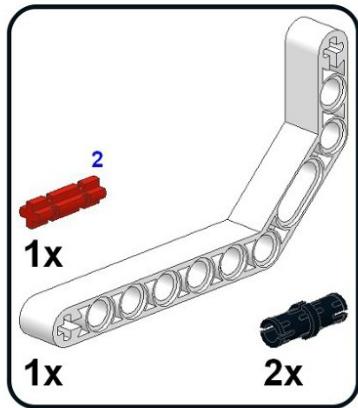
# Colour Sensor Attachment



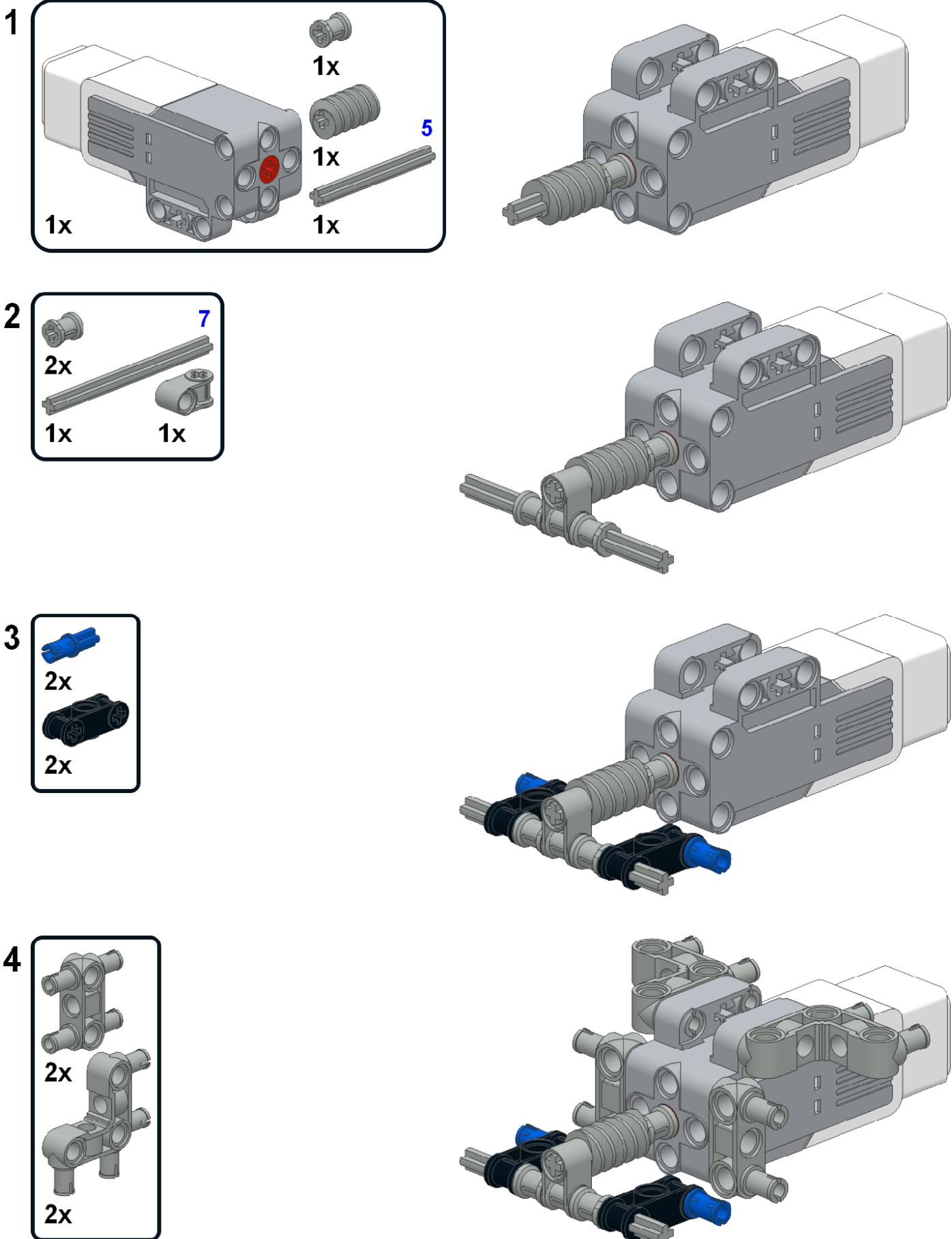
# Gyro Sensor Attachment

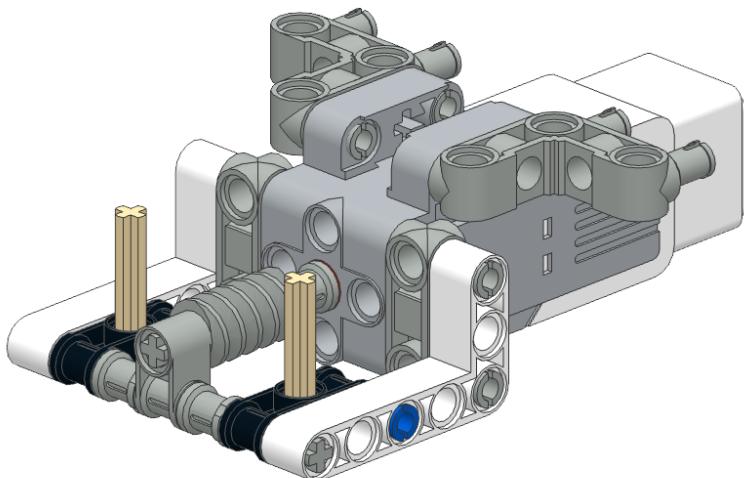
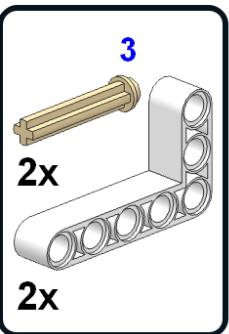
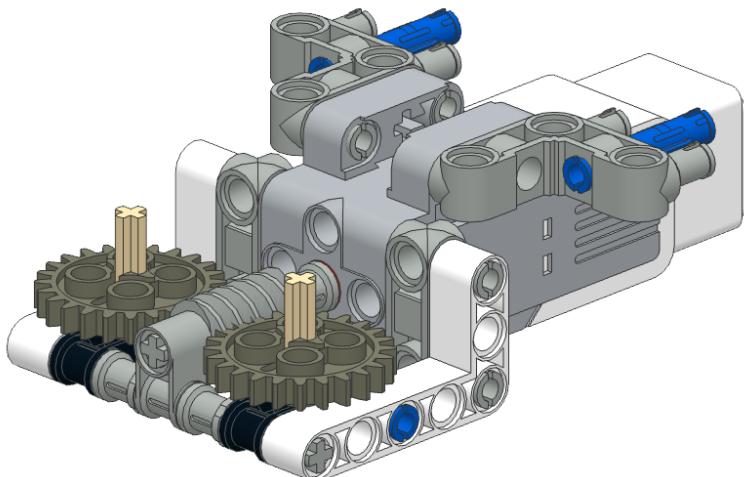
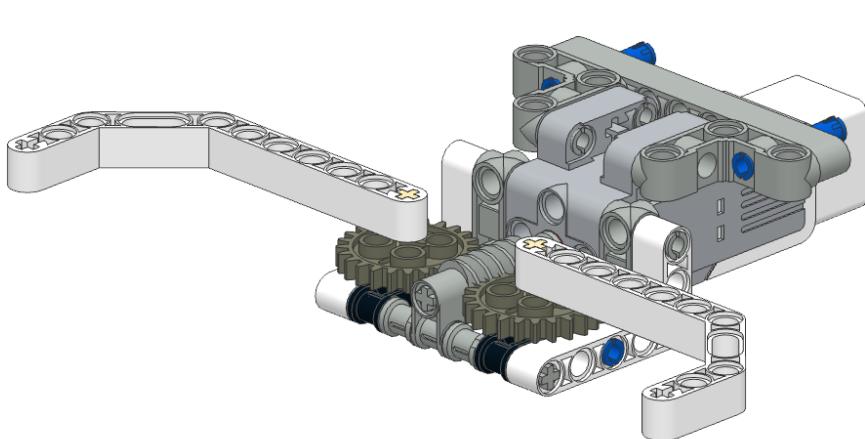
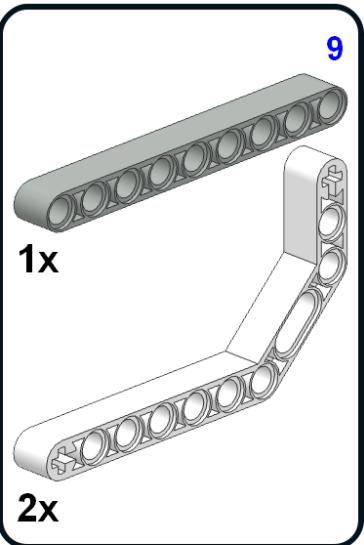


# Touch Sensor Attachment

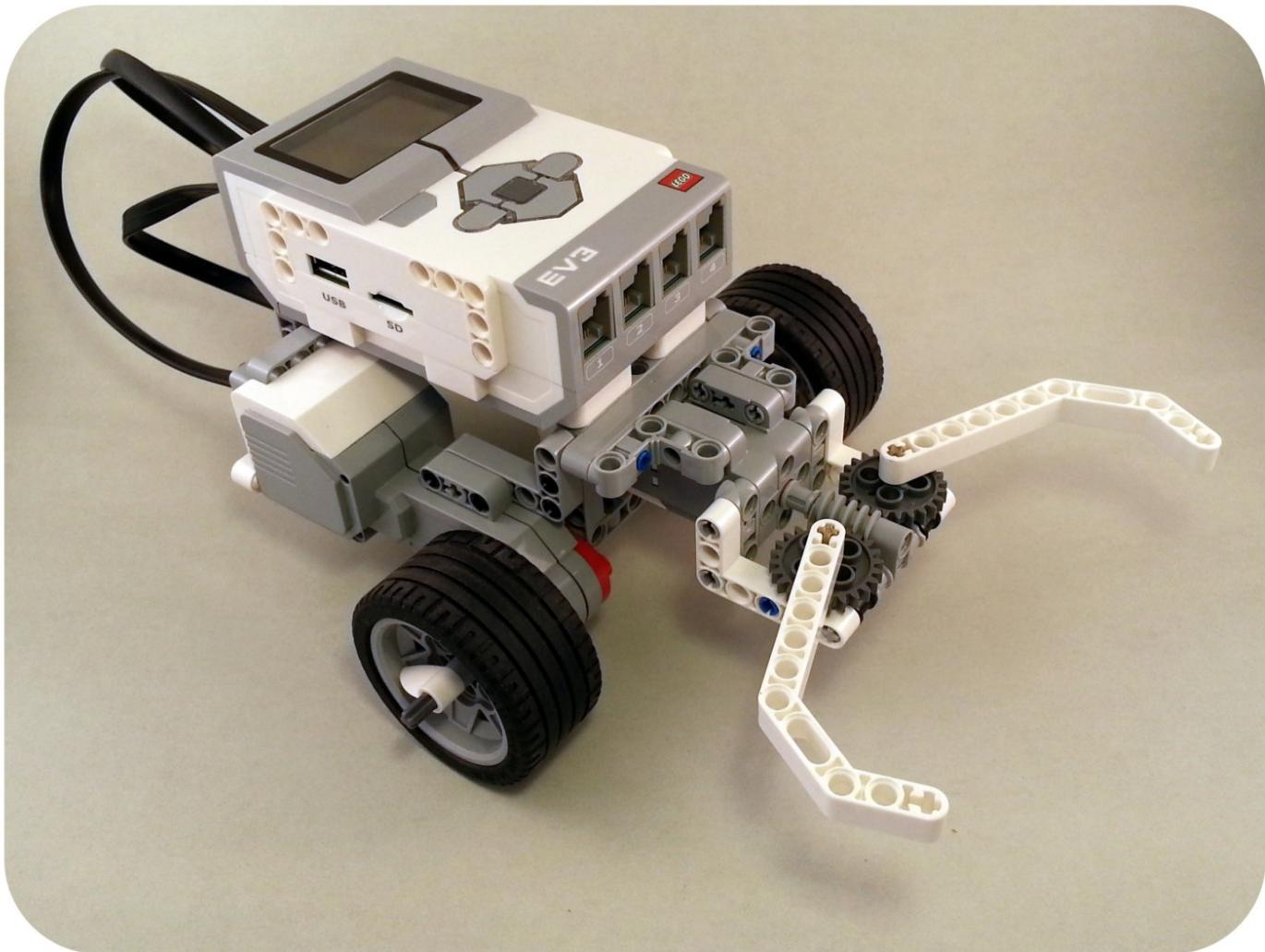
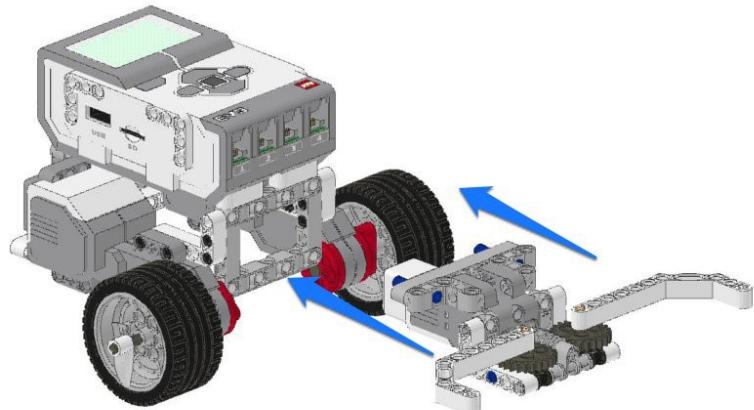


# Gripper Attachment

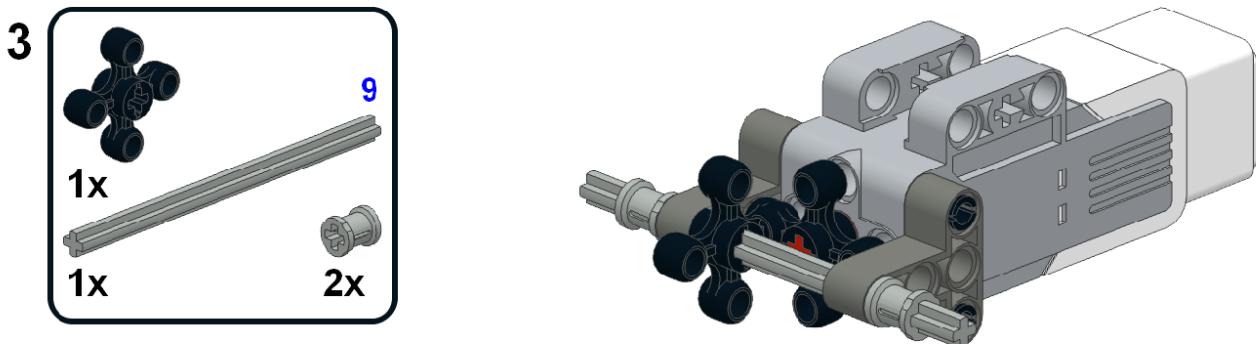
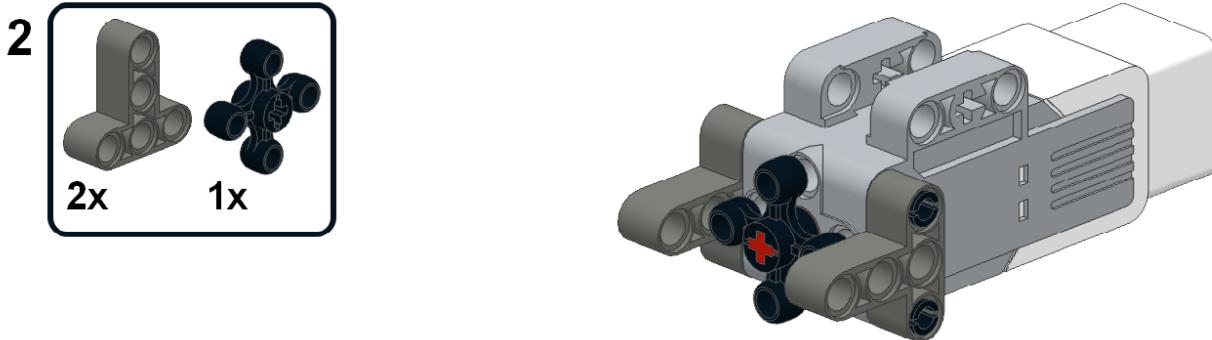
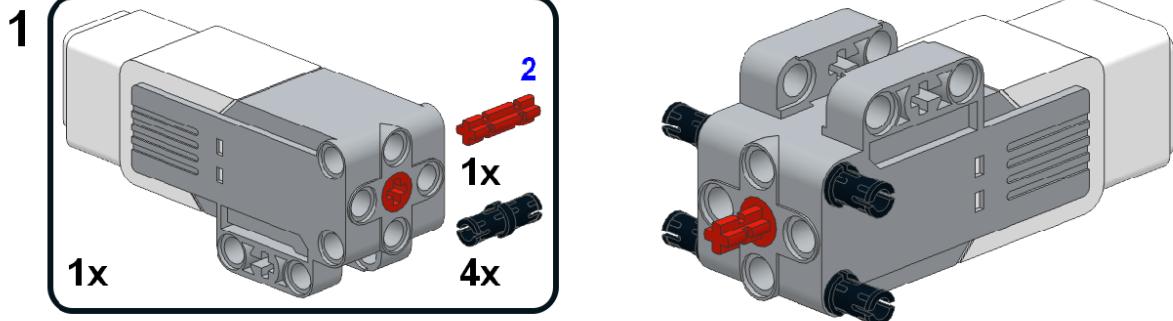


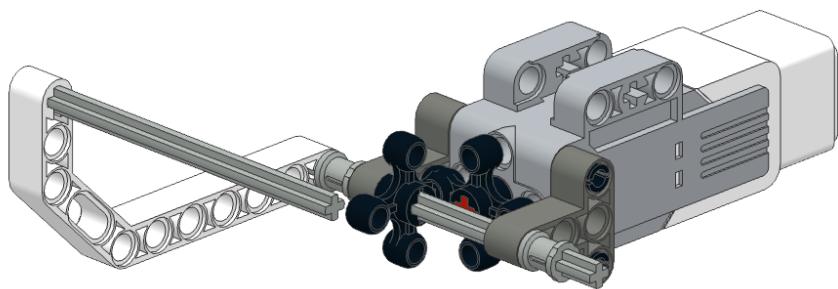
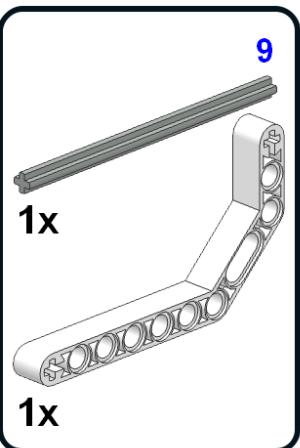
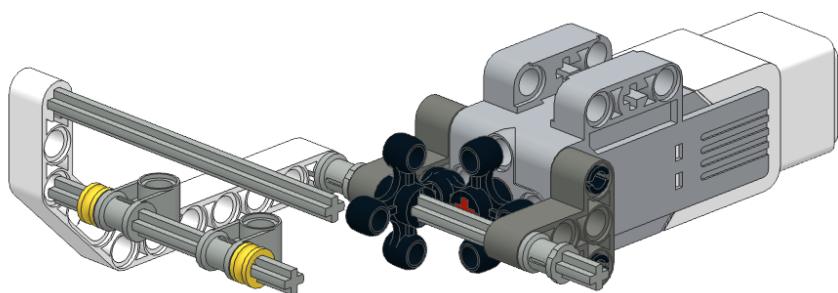
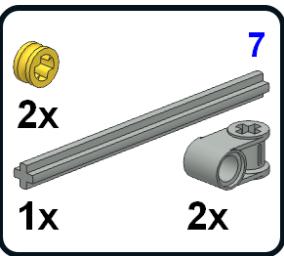
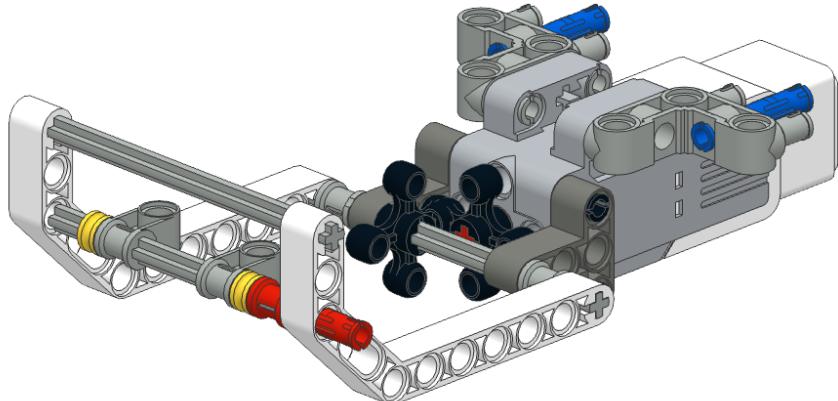
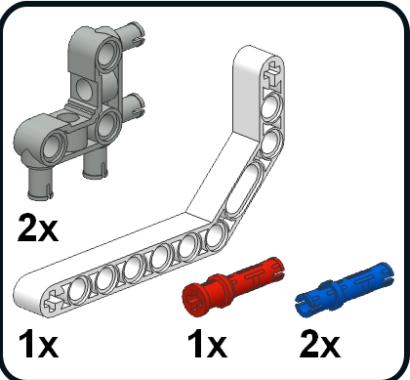
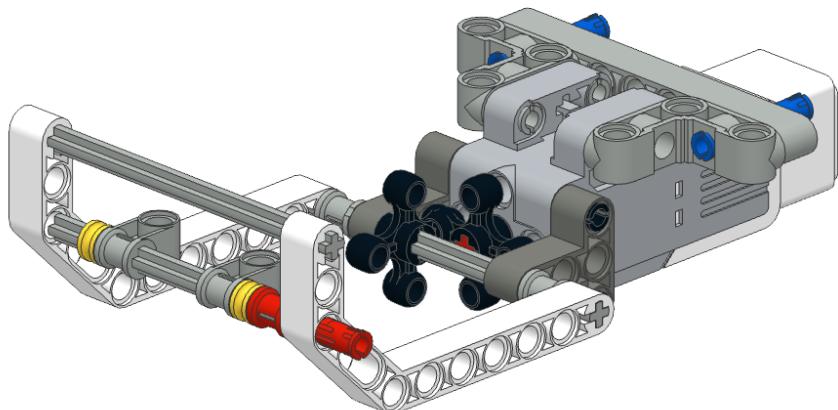
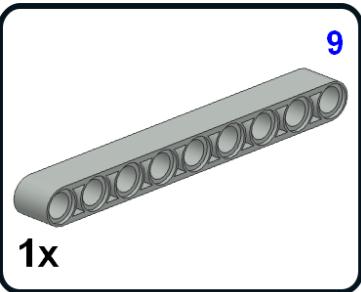
**5****6****7**

## Attach the Gripper to the front of the Robot



# Cargo Delivery Attachment

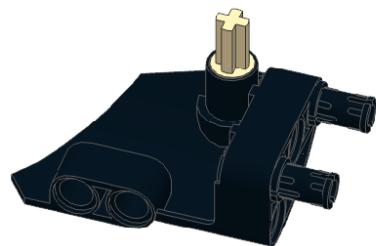
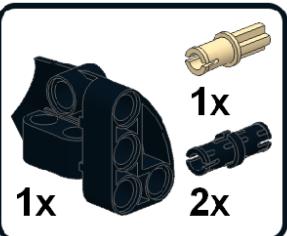


**4****5****6****7**

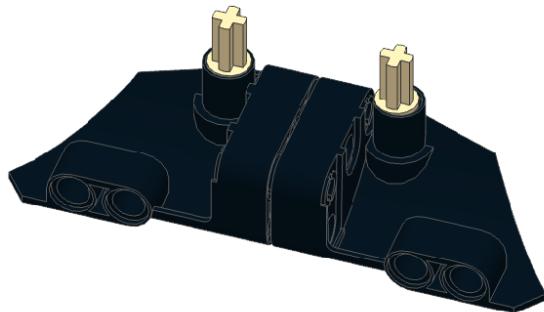
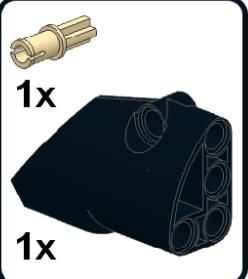
# Signal Repeater

To be used with the Cargo Delivery Attachment

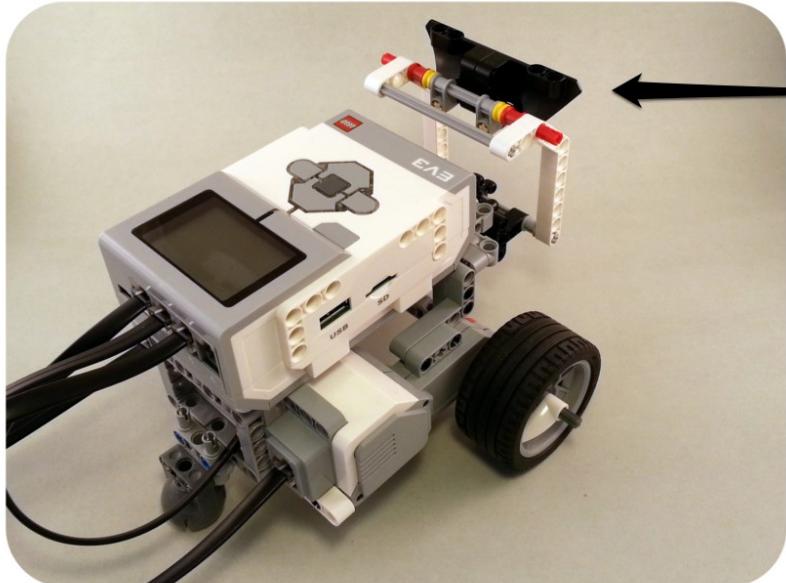
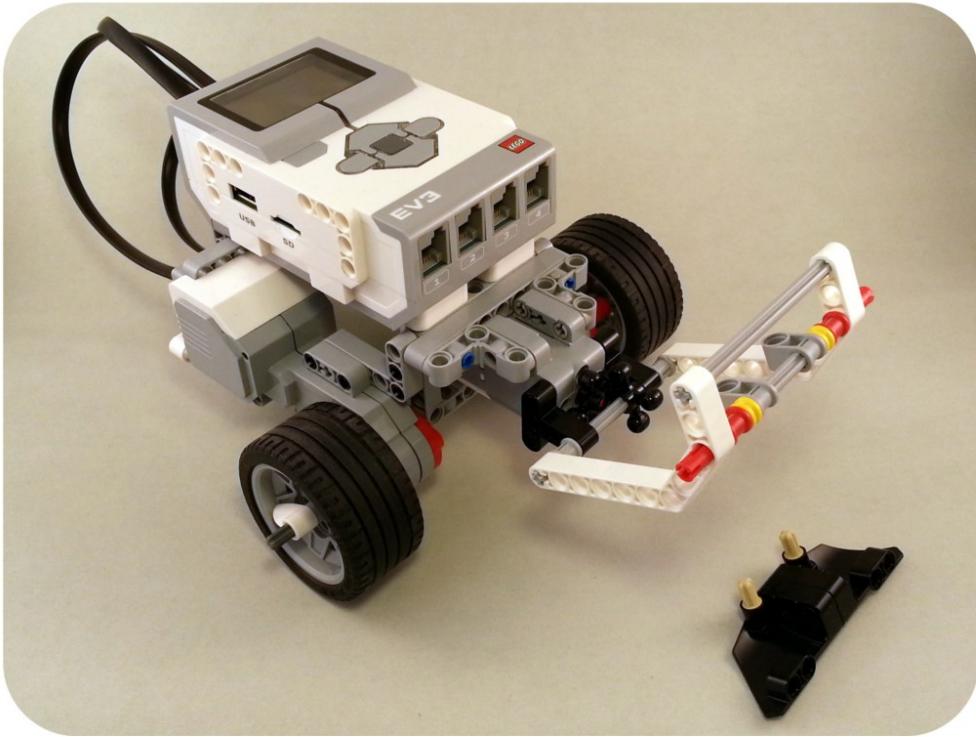
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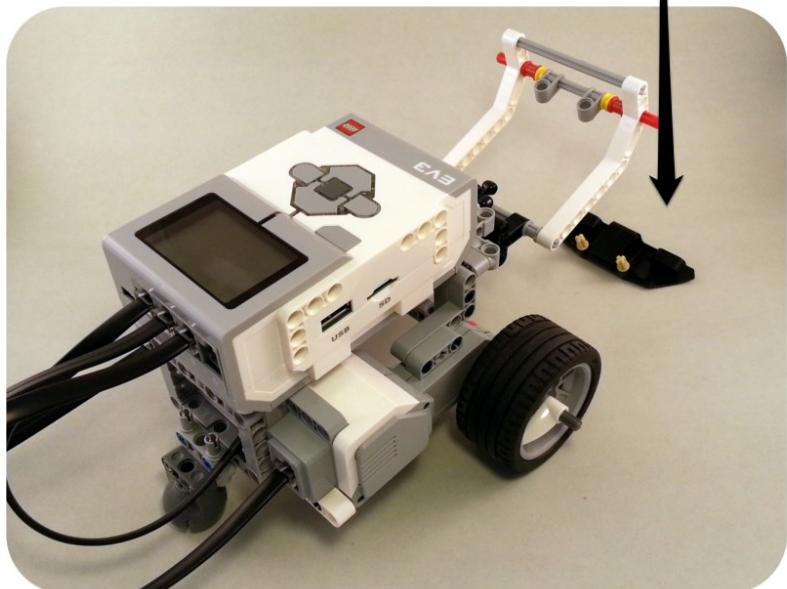
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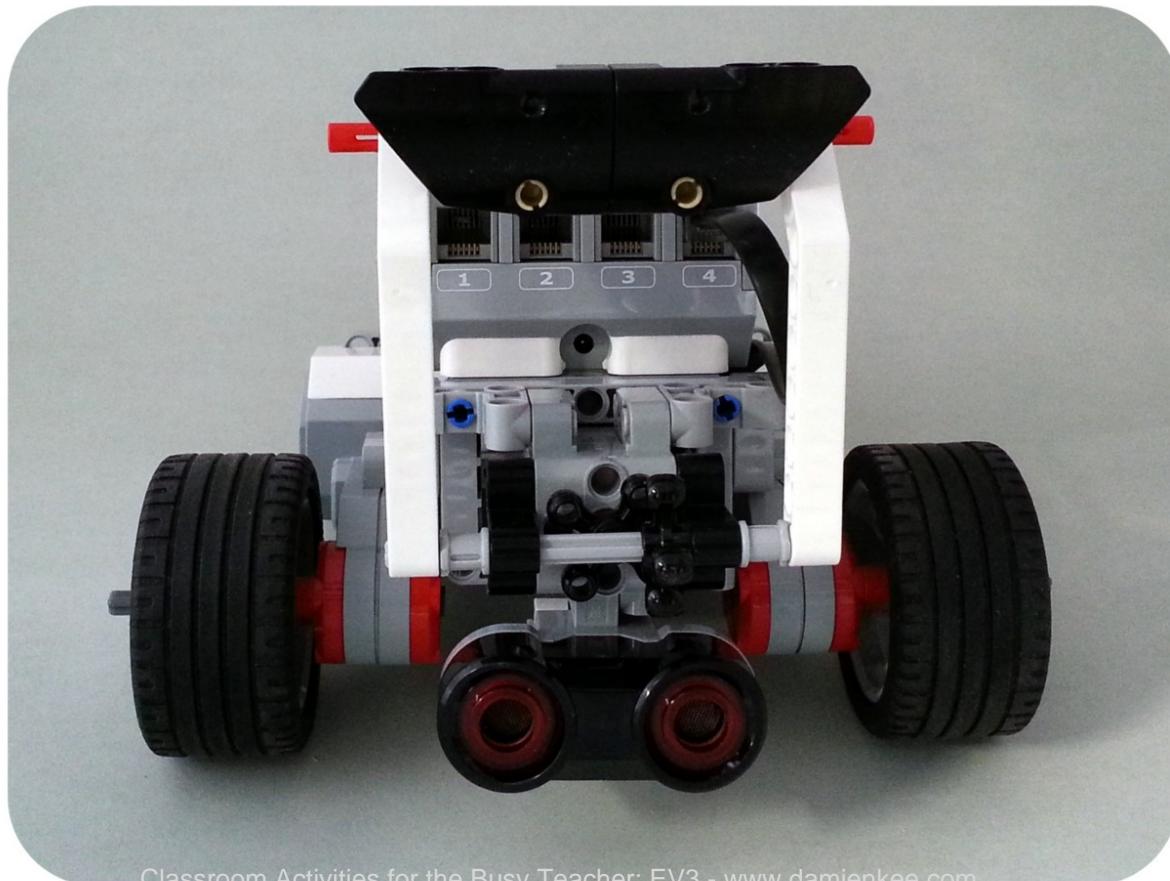
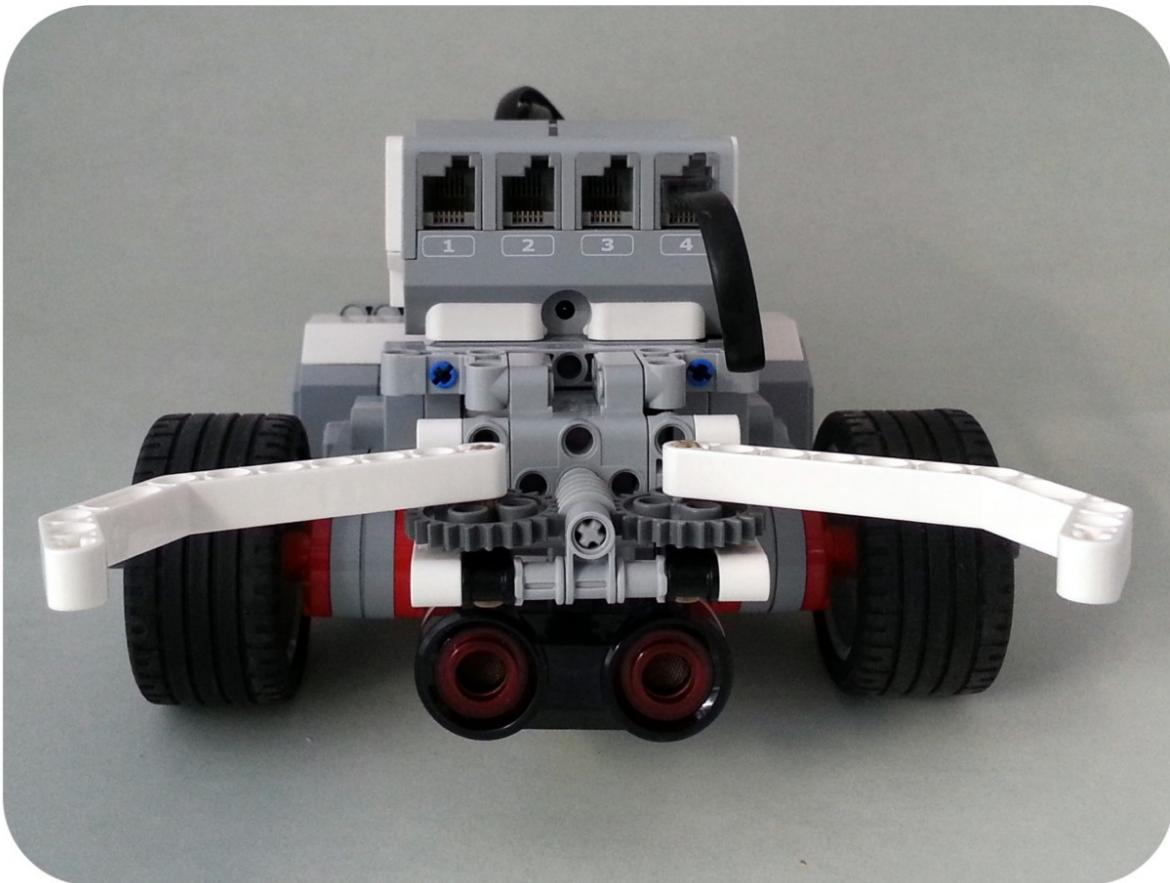
## Attach the Cargo Delivery Attachment to the front of the Robot



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

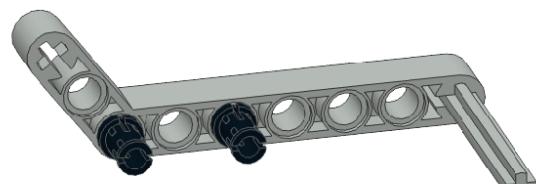
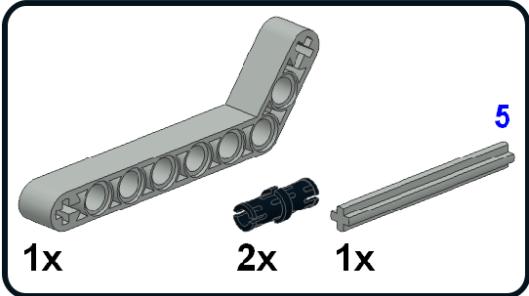


**The Ultrasonic Sensor Attachment can be used with both the Cargo Delivery Attachment and Gripper Attachment**

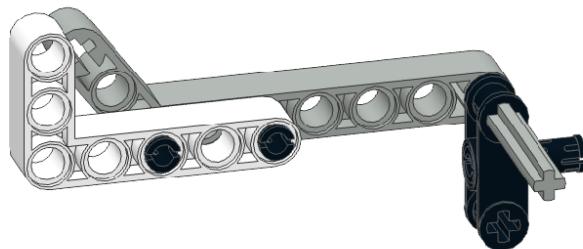
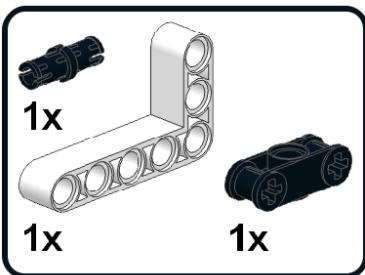


# Combined Colour - Ultrasonic Sensor Attachment

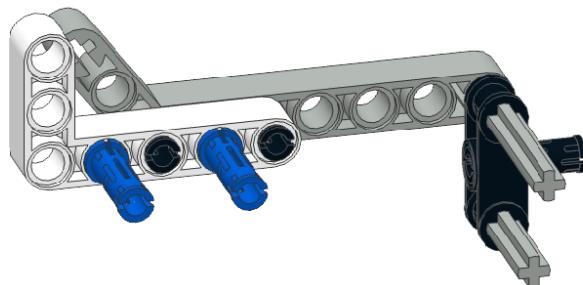
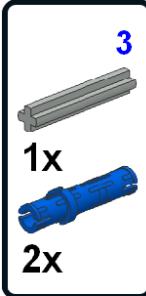
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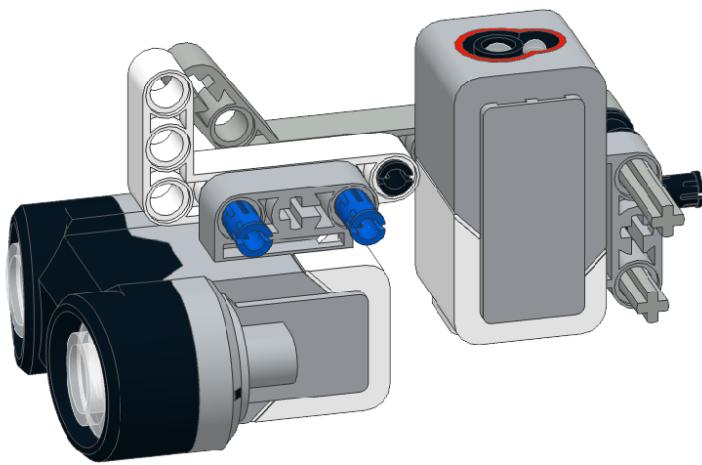
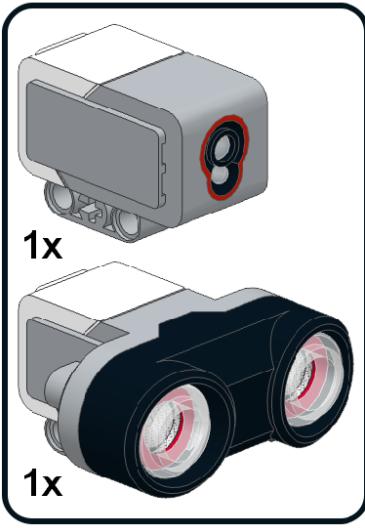
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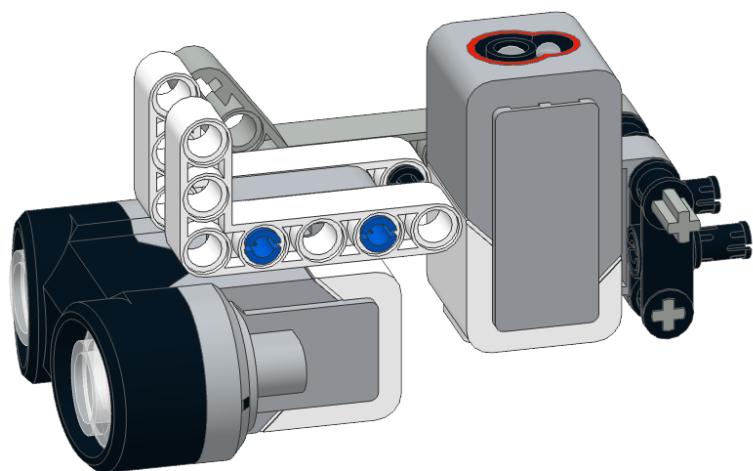
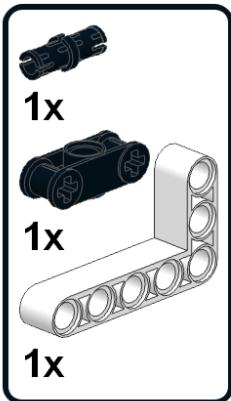
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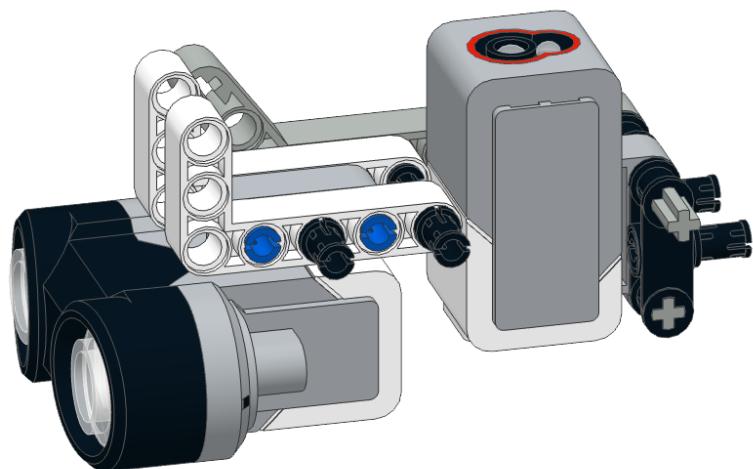
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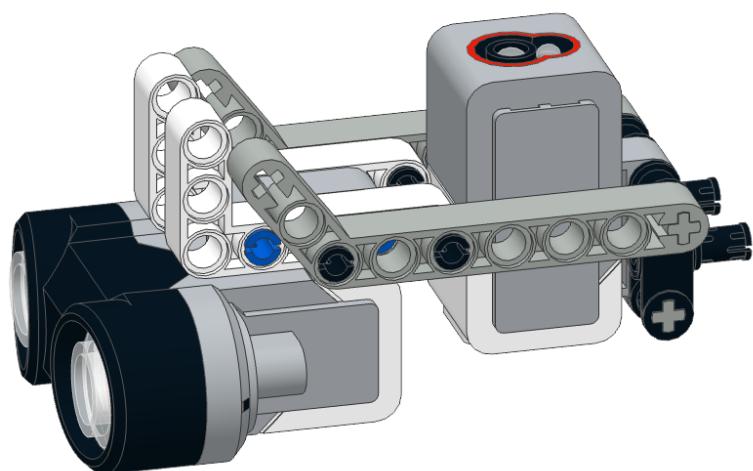
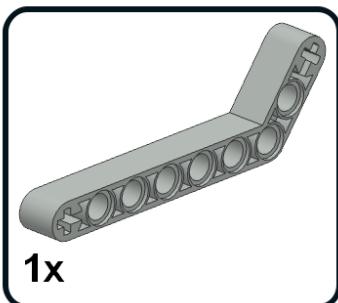
**5**



**6**



**7**



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

