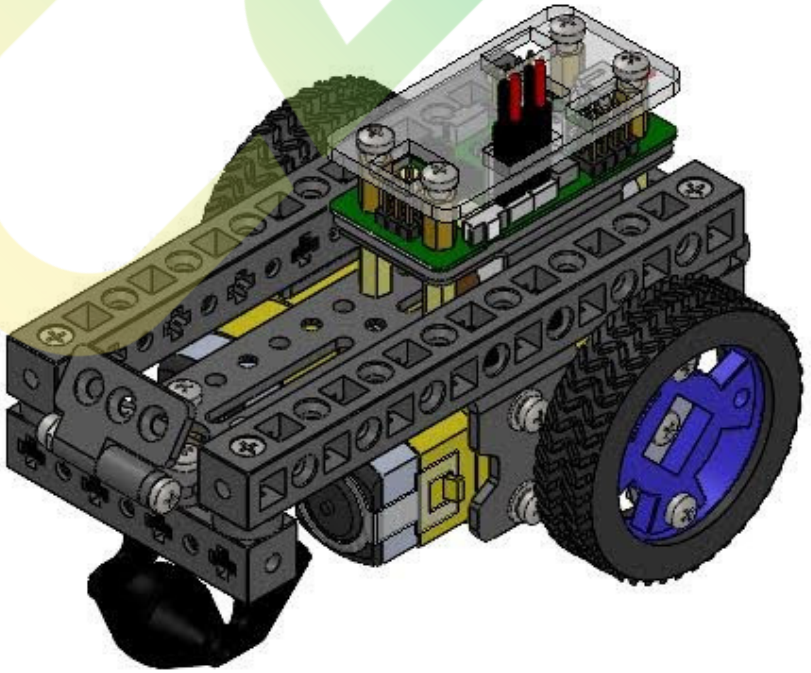
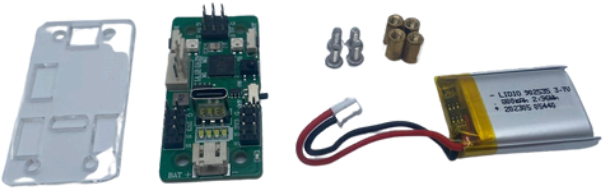
Student Instruction Manual

Bimo X



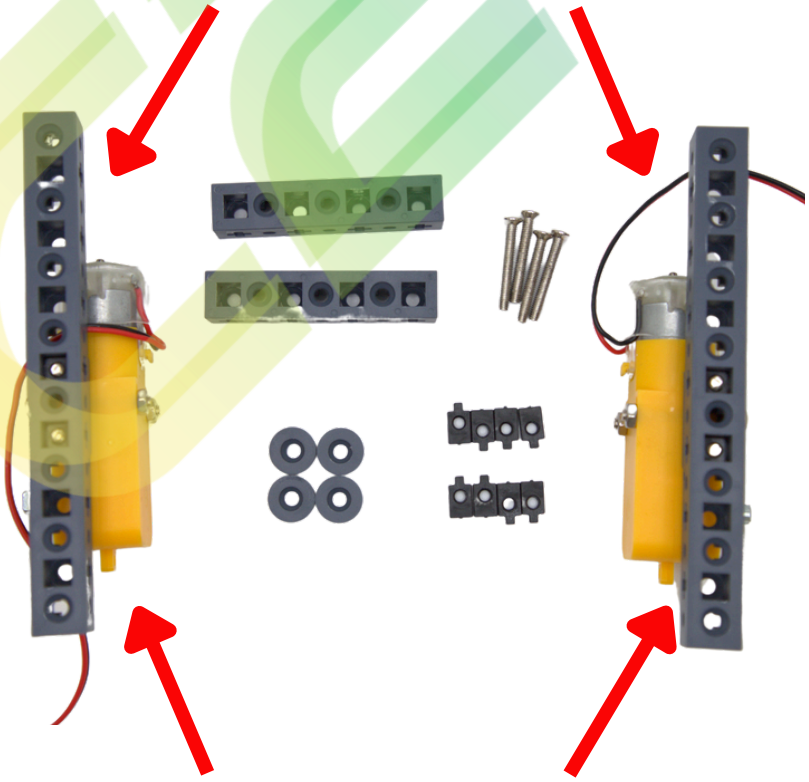
Check for all of Bimo X's parts:



Step 1: Build the Chassis

Find the bag with the DC motors and chassis parts.

Keep in mind that the FRONT of the robot is where the DC motors point towards.



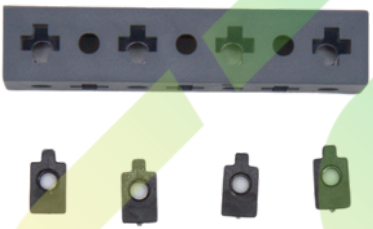
And the BACK of the robot is on the opposite end.

Bimo X Assembly

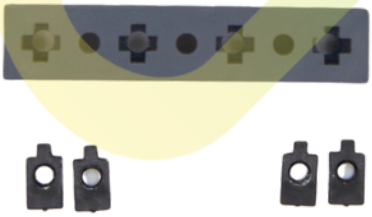
Locate the two smaller bricks and 8 black inserts.

One brick and 4 inserts will be used for the FRONT piece.

+ o + o + o +



Insert them in this pattern.



Insert them in this pattern.

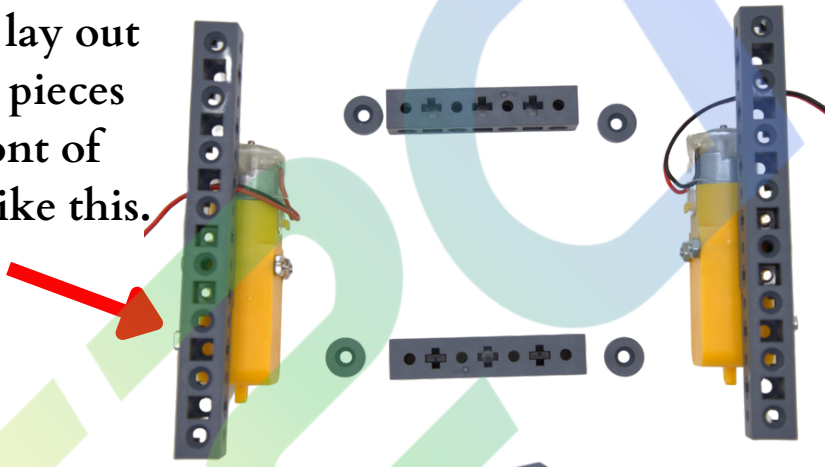
The second brick and last 4 black inserts will be used for the BACK piece.

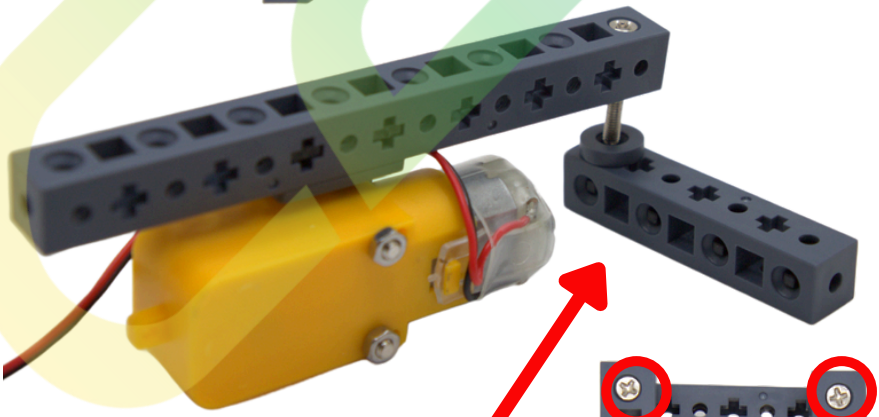
o + o + o + o

+ o + o + o +

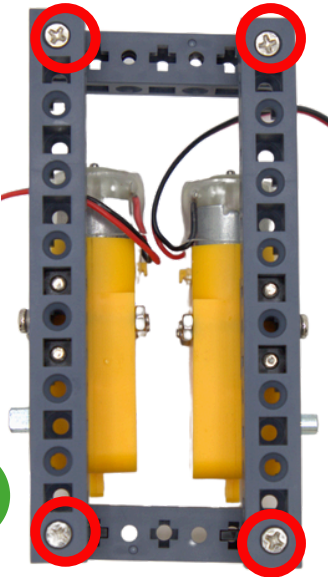
HINT: Pay attention to the patterns on the bricks.

Next lay out these pieces in front of you like this.





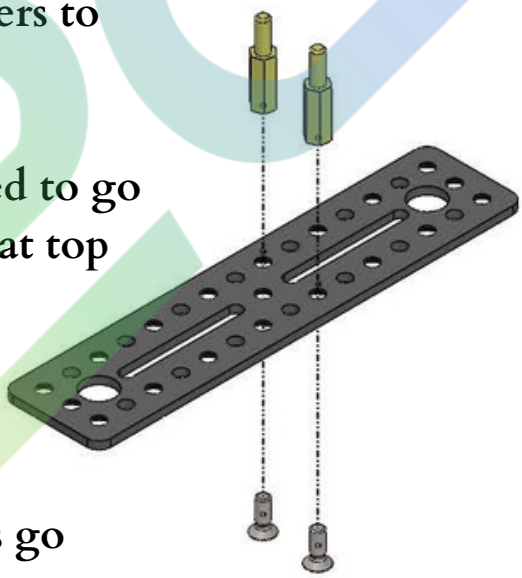
Stack the spacers on top of the outer circle on the brick.
Then line it up and attach with the long screw.
Repeat on all 4 corners.



Step 2: Center Plate Assembly

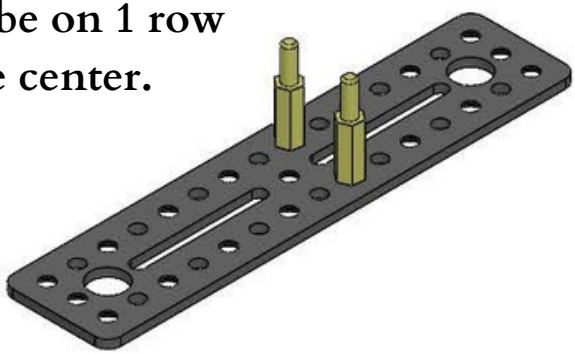
Attach the brass spacers to the center plate.

The brass spacers need to go on the smooth and flat top side.

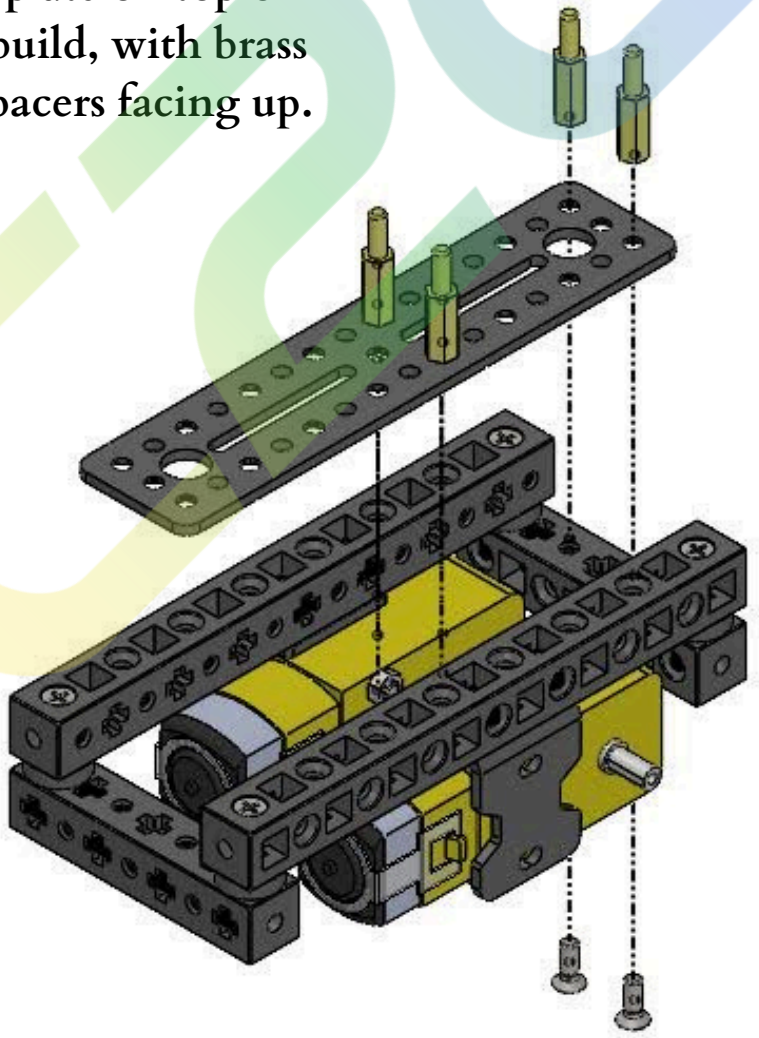


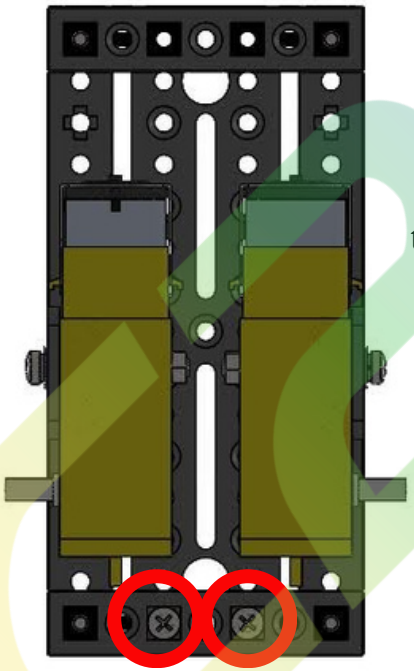
Make sure the screws go through the bottom.

They should be on 1 row over from the center.

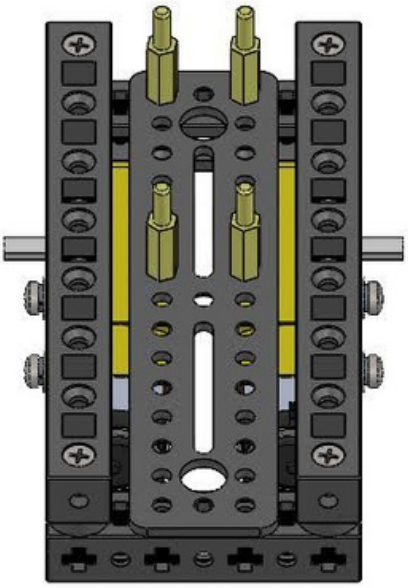


Line up the center plate on top of build, with brass spacers facing up.





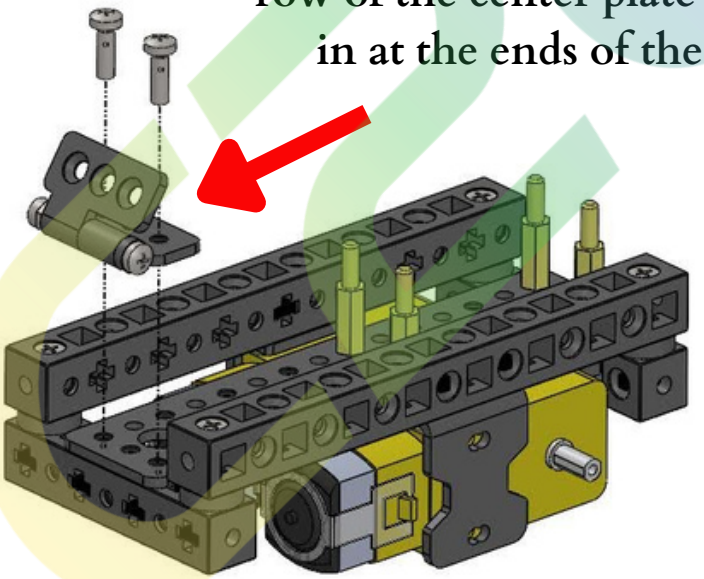
Then put the screws through the square holes located on back of build, through the bottom.

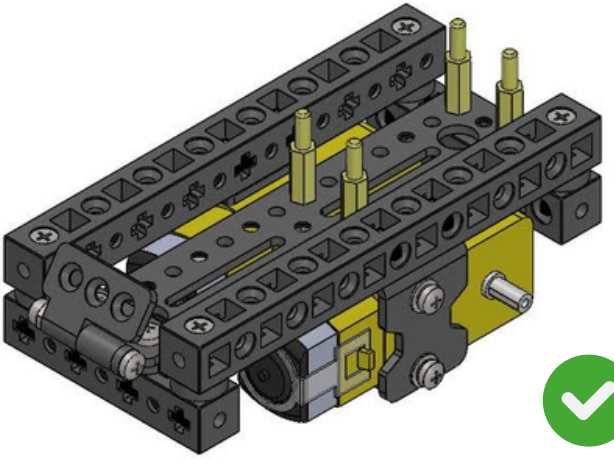


Finally, twist the brass spacers into the screws on the top of the center plate.

Step 3: Attaching the Front Hinge

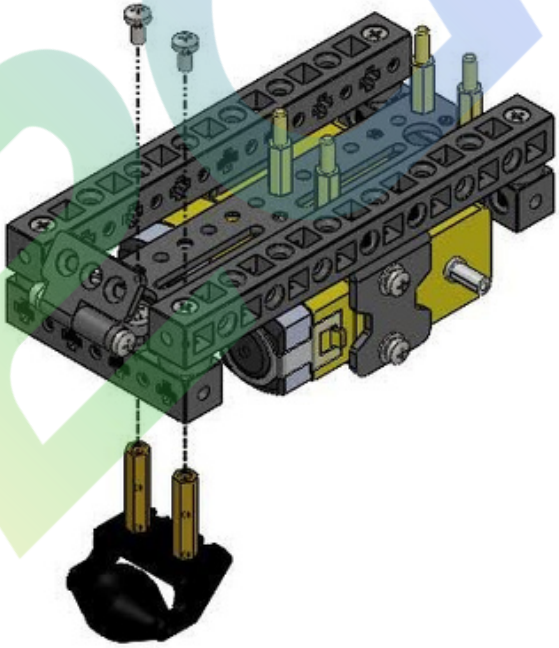
Line up the hinge to the first row of the center plate and screw in at the ends of the hinge.

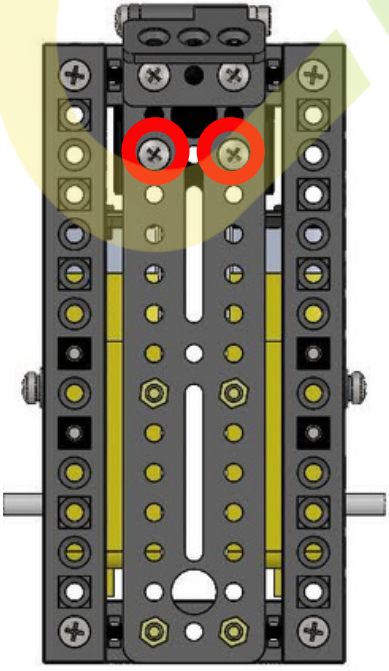




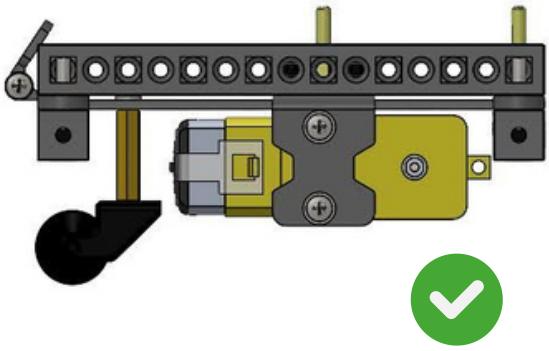
Step 4: Attaching the Universal Wheel

Line up the universal wheel, to the 3rd hole from the front of the center plate.

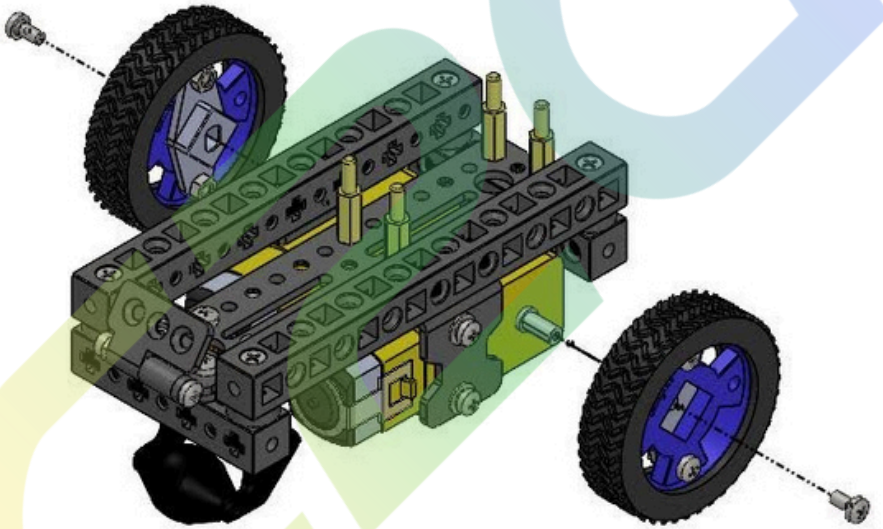




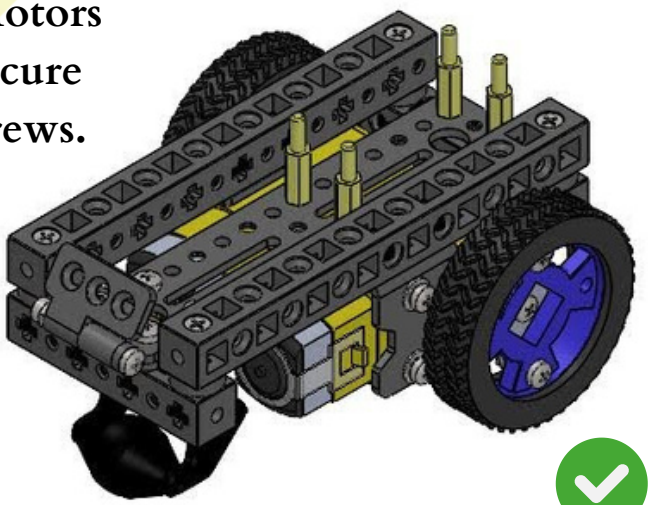
Screw in the wheel threw the top.



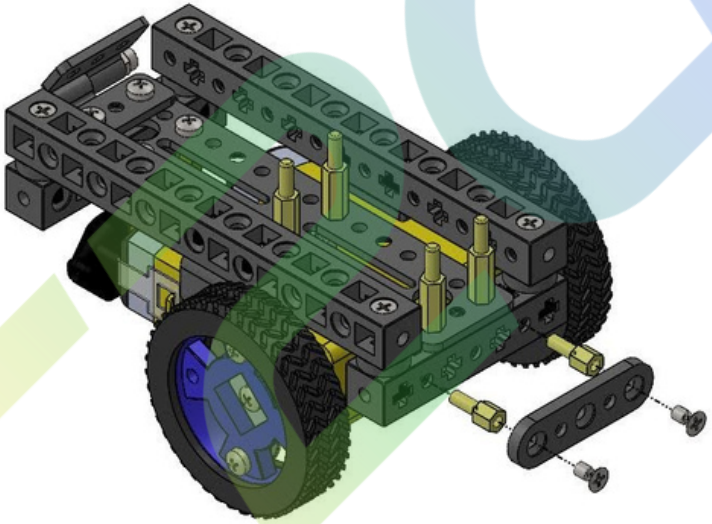
Step 5: Attaching the Wheels



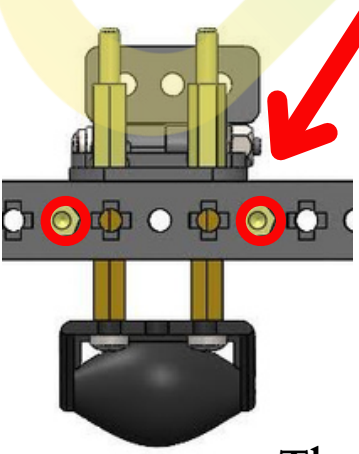
Line up the wheels to the DC Motors and then secure with the screws.

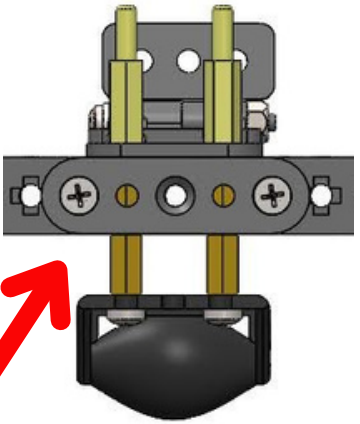


Step 6: Attaching the Rear Bumper



Twist the brass spacers on the back of build .

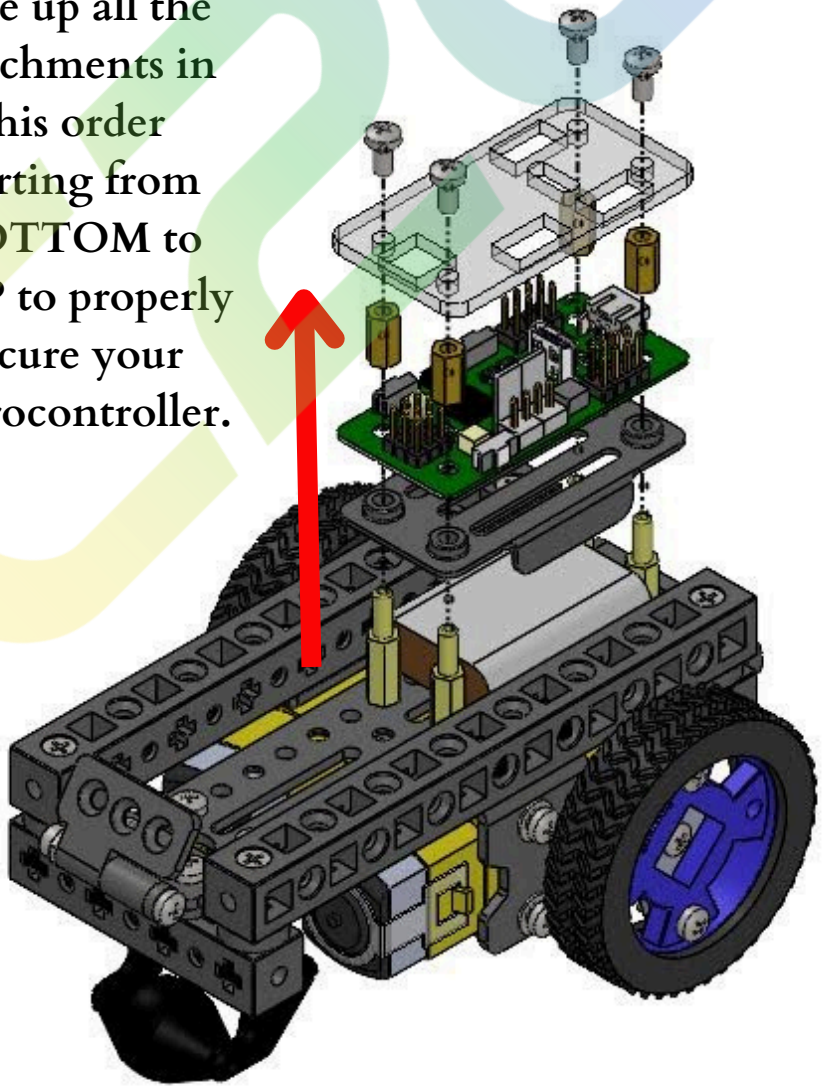




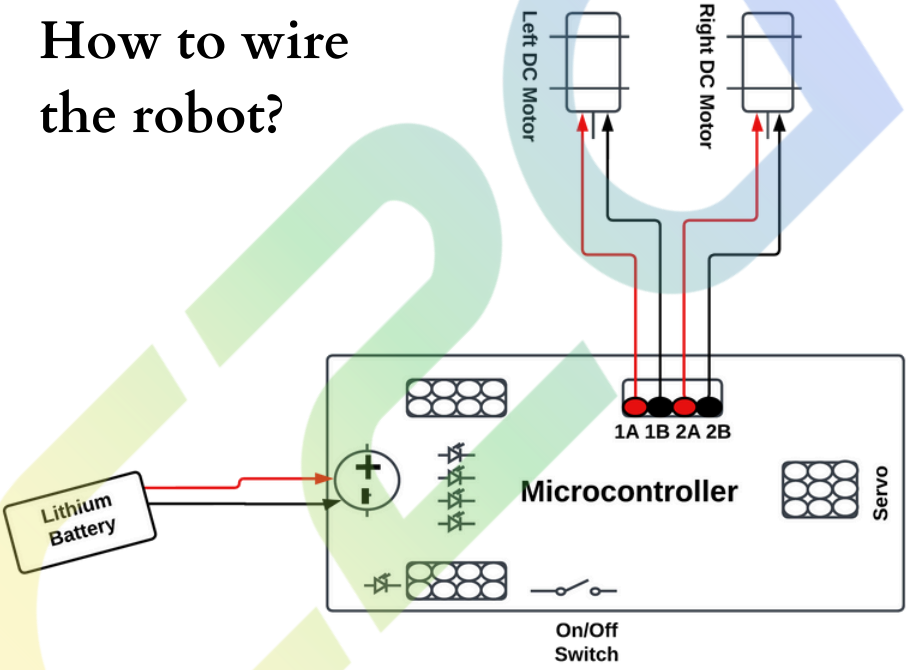
Then lay bumper on top of brass spacers and screw in, on first and third hole.

Step 7: Attaching C2G Mini Microcontroller

Line up all the attachments in this order starting from BOTTOM to TOP to properly secure your microcontroller.



How to wire the robot?



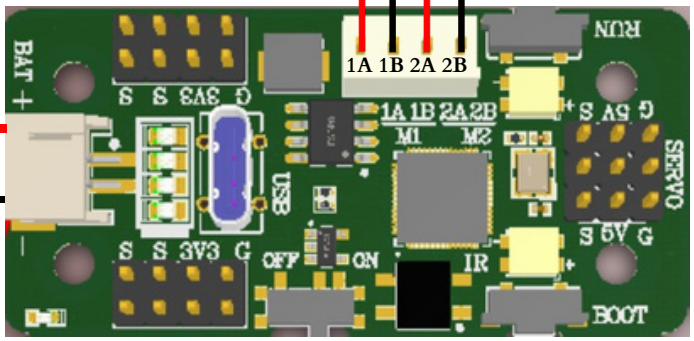
1B: Black wire of left motor

1A: Red wire of left motor

2A: Red wire of right motor

2B: Black wire of right motor

Lithium Battery Wiring



Congratulations on completing the Bimo X build.