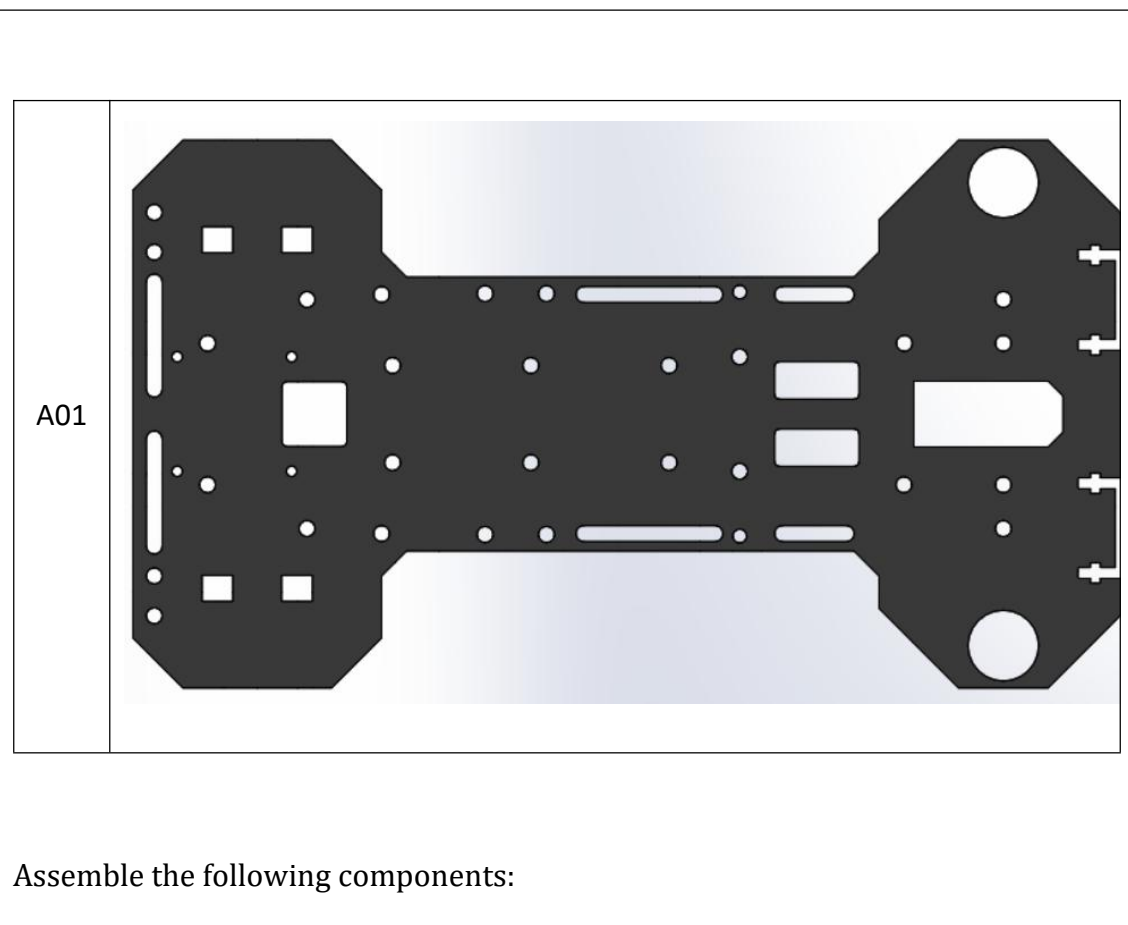
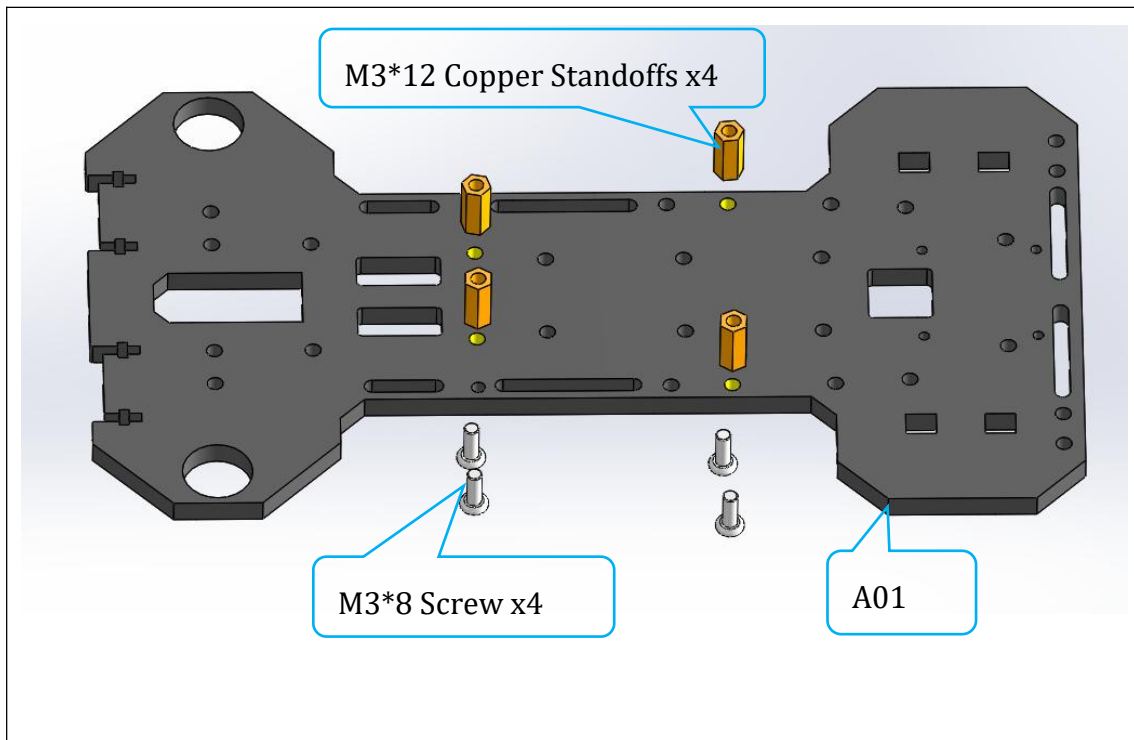


Assembly

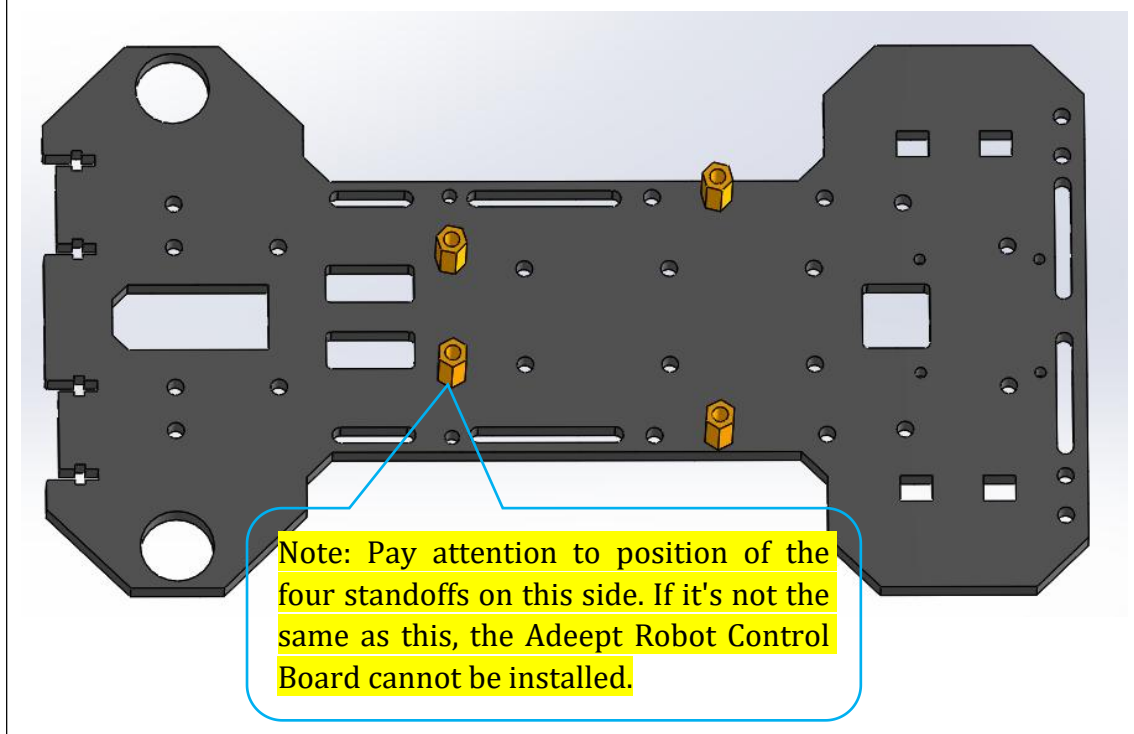
Fix the position

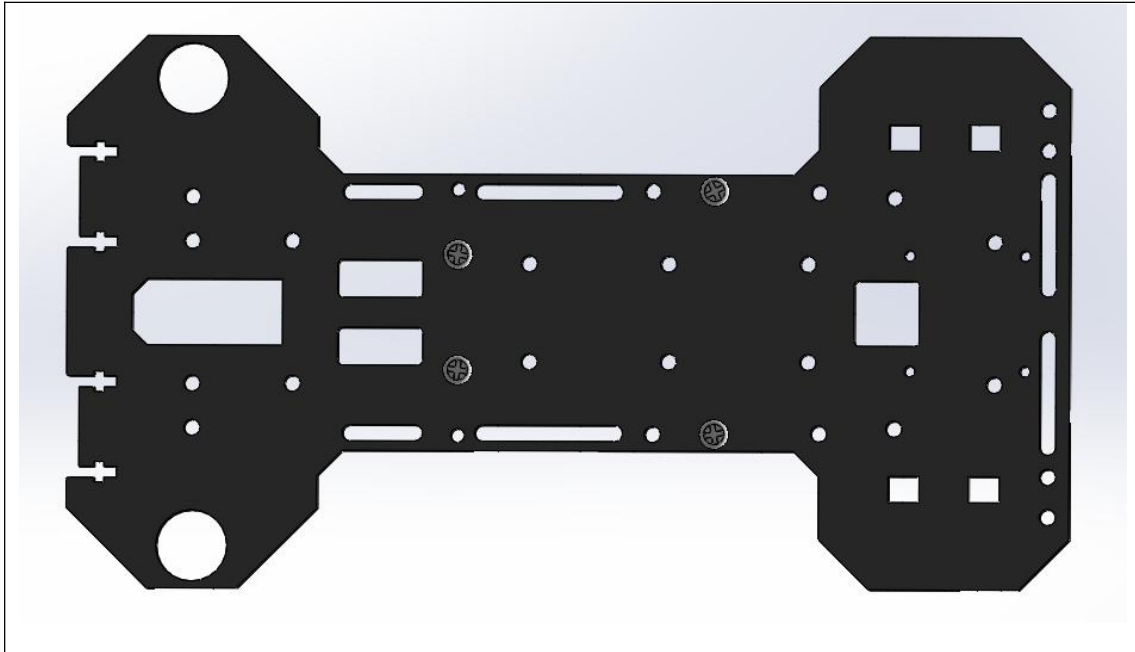
1. Place **four M3*12 Copper Standoffs** on the holes of A12 (acrylic plate), and then fix them with **four M3*8 screws** to determine the direction of subsequent assembly.





Effect diagram after assembling:

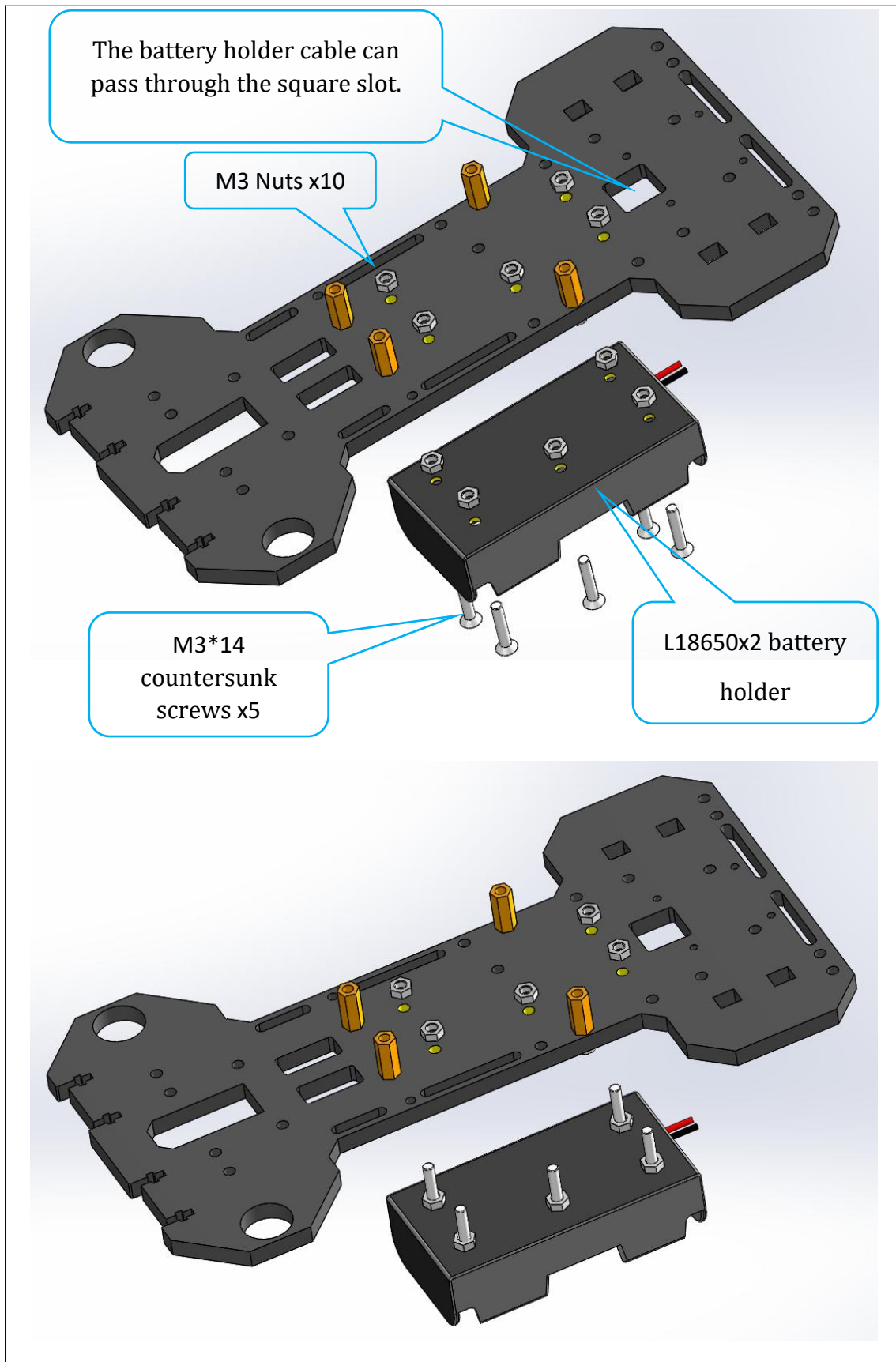




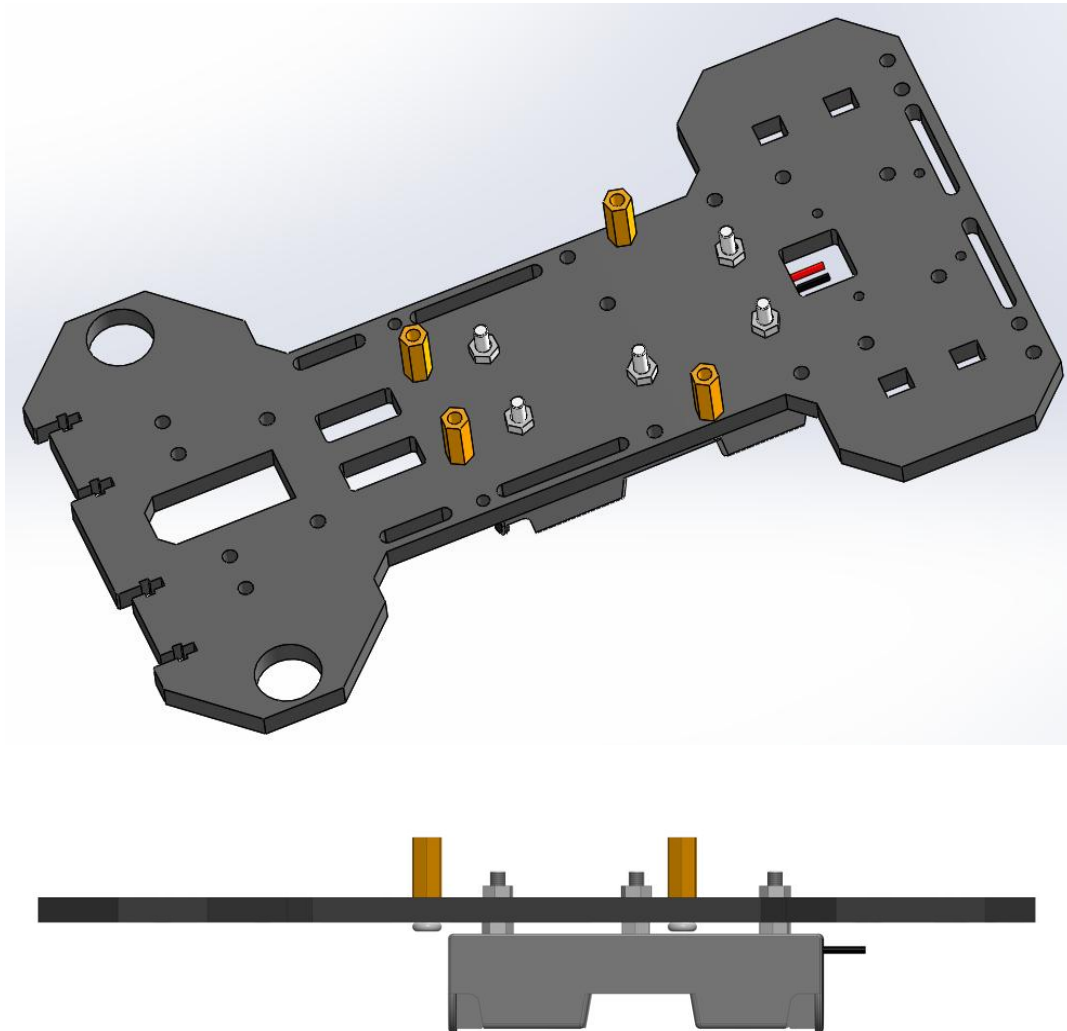
Fix the Battery Holder

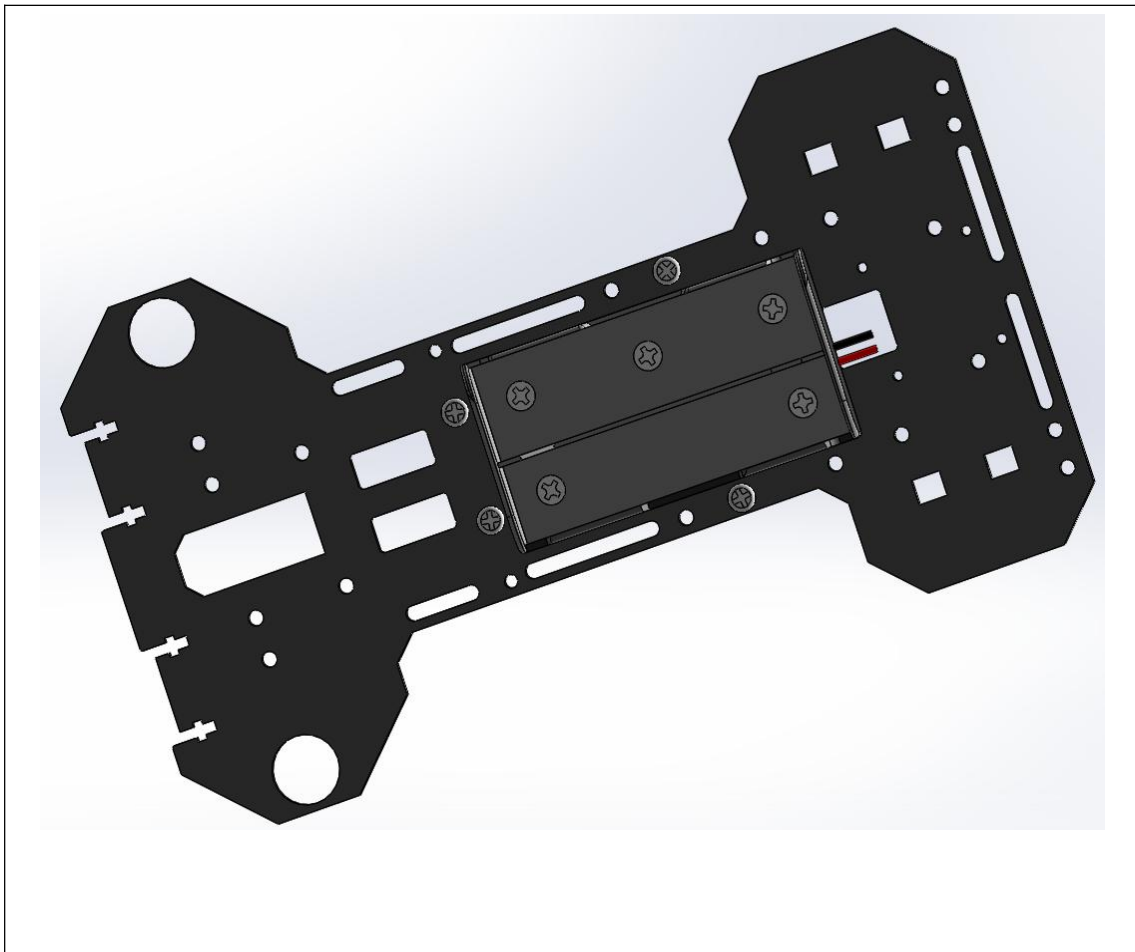
2. Fix the **five M3*14 countersunk screws** to the L18650x2 battery holder with **five M3 nuts** (for support and padding), and then install the battery holder to A01 with five M3 nuts.





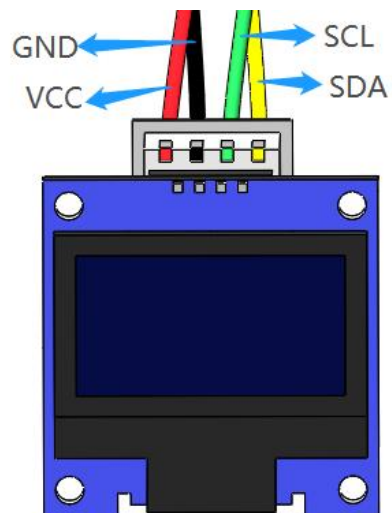
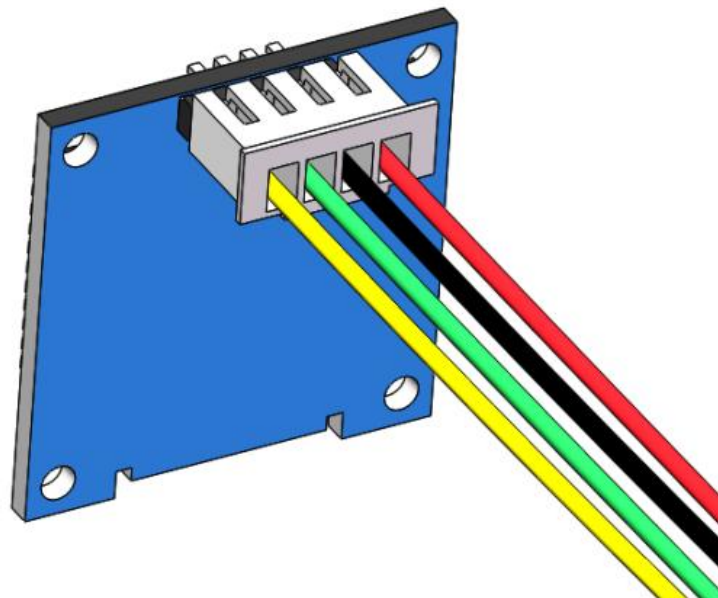
Effect diagram after assembling:



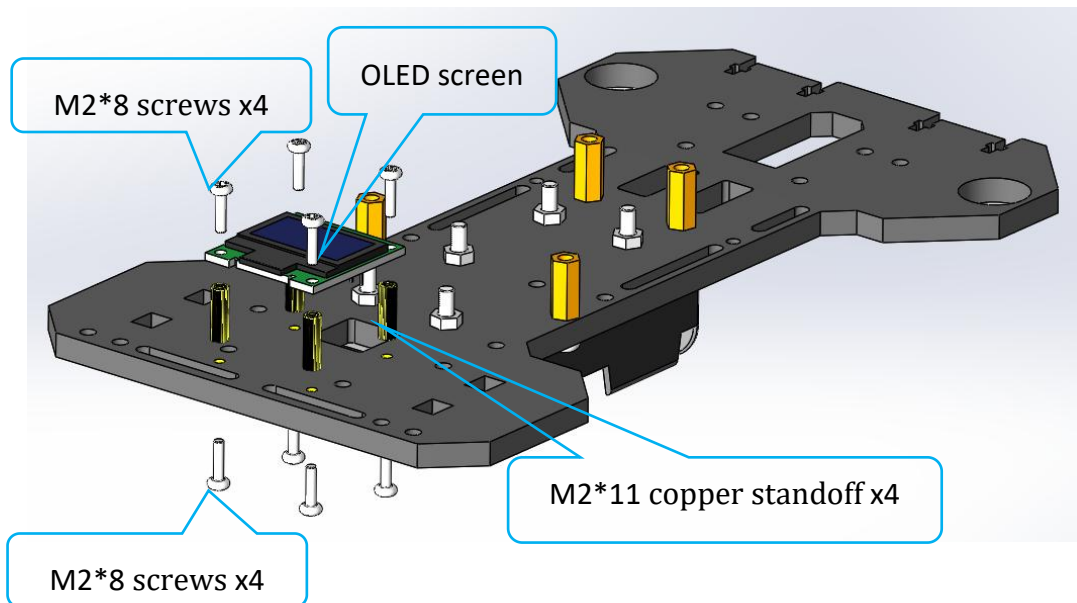


Fix the OLED screen

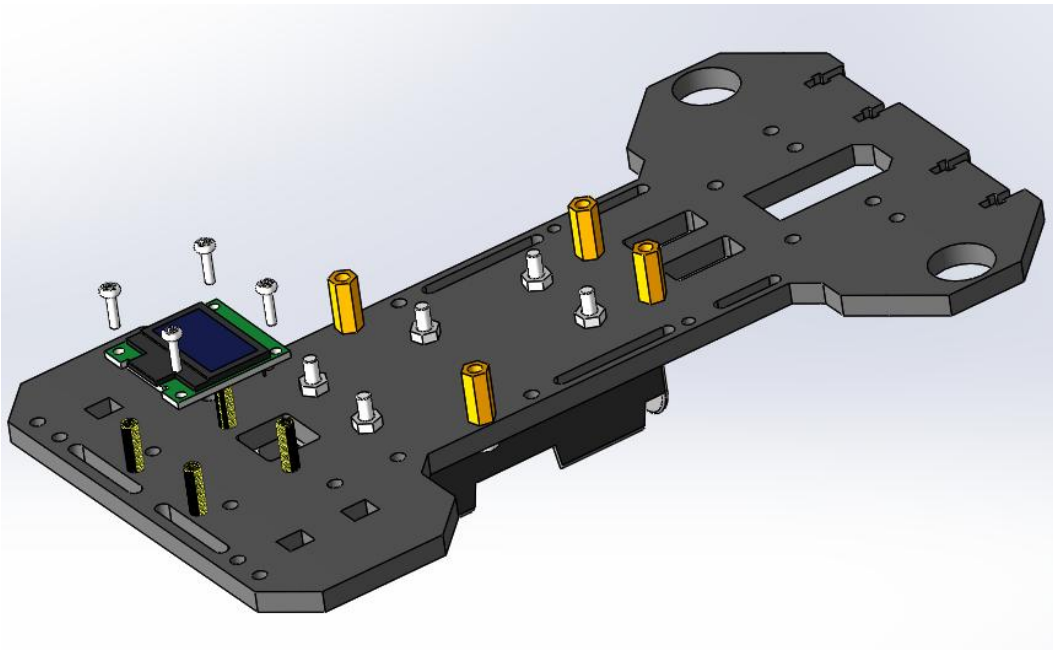
3. Fix **four M2*11 copper standoff** with **four M2*8 screws**. Secure the OLED screen with **four M2*8 screws**. (**Before installing the OLED screen, you need to connect the cables**)

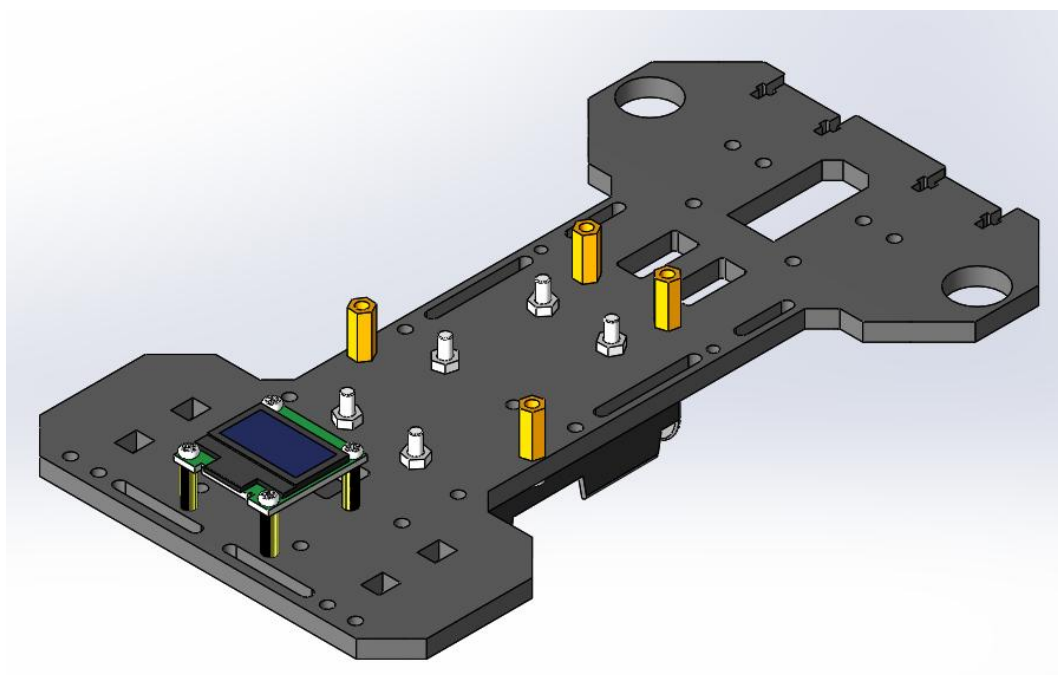
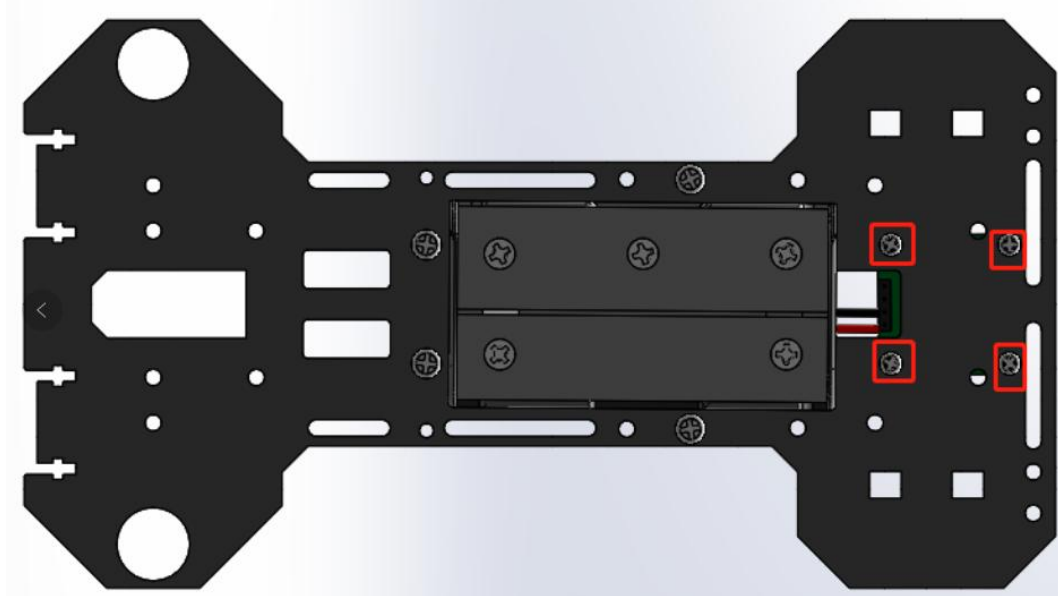


The yellow line corresponds to SDA and the red line corresponds to VCC.



Effect diagram after assembling:

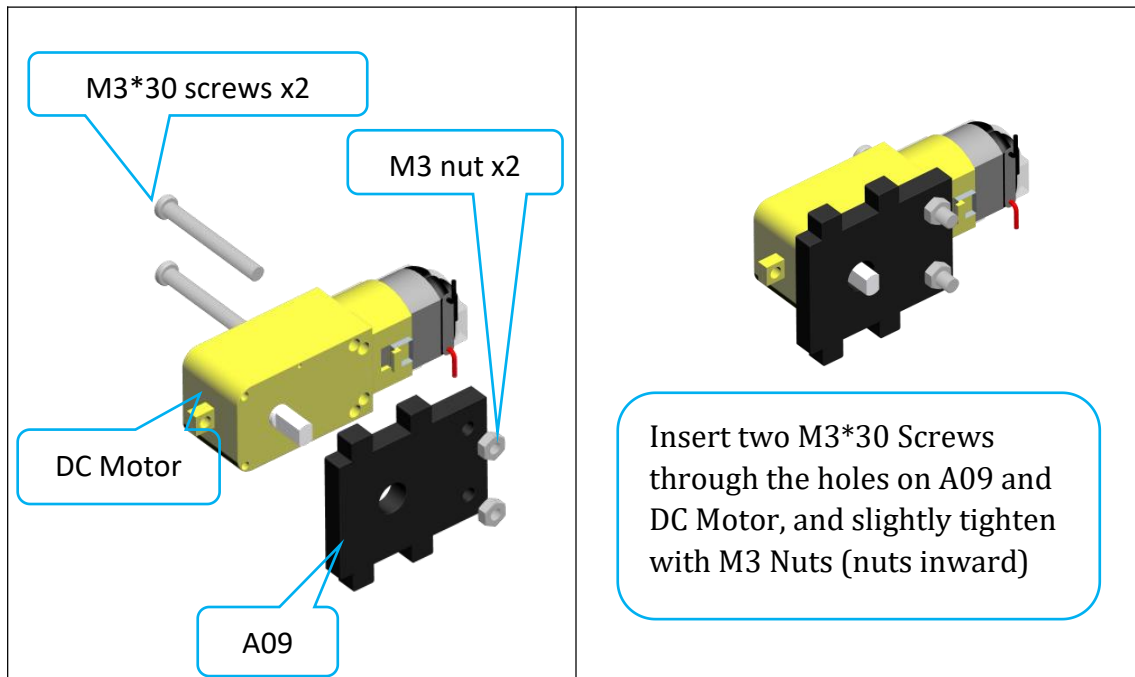




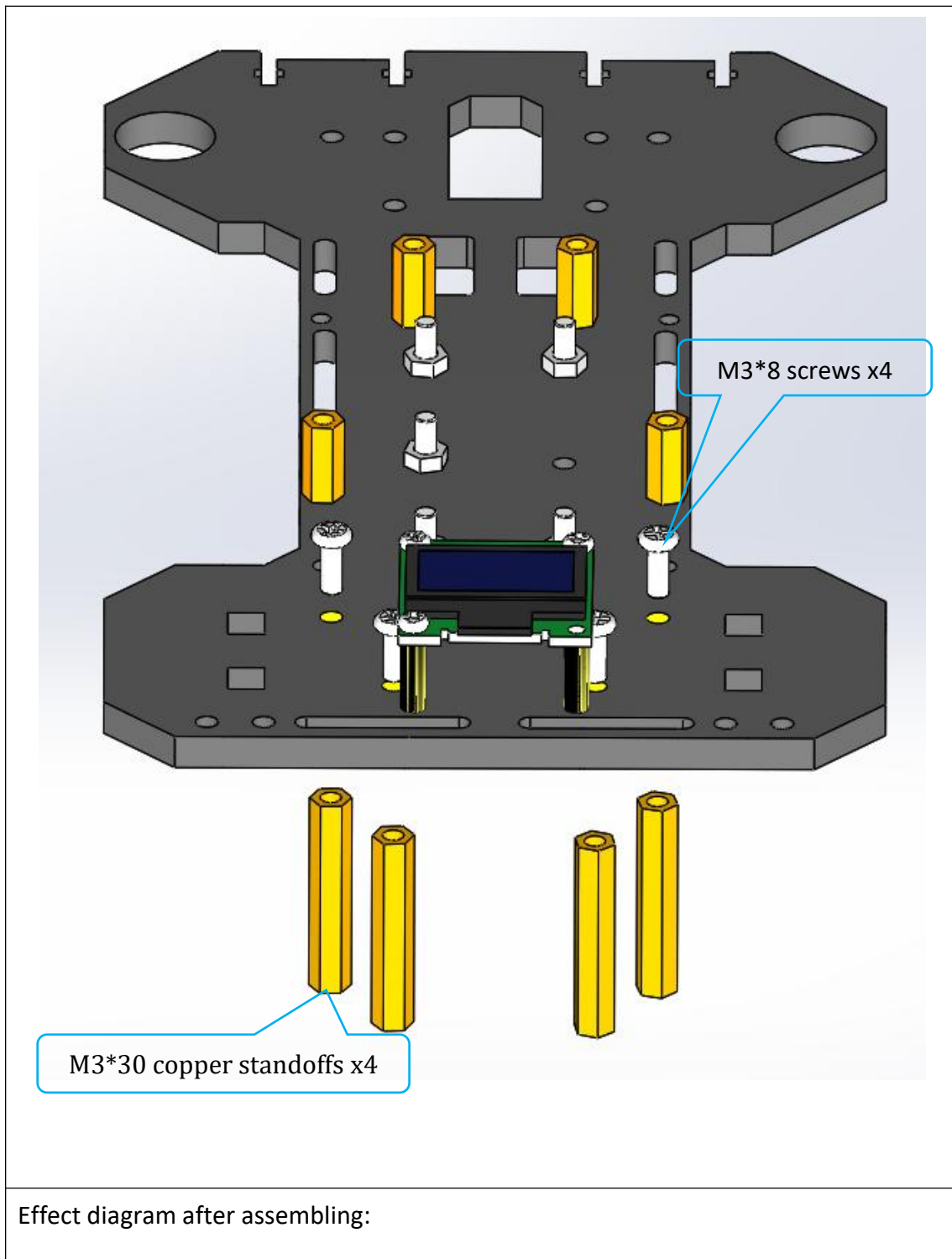
Assemble the rear wheels

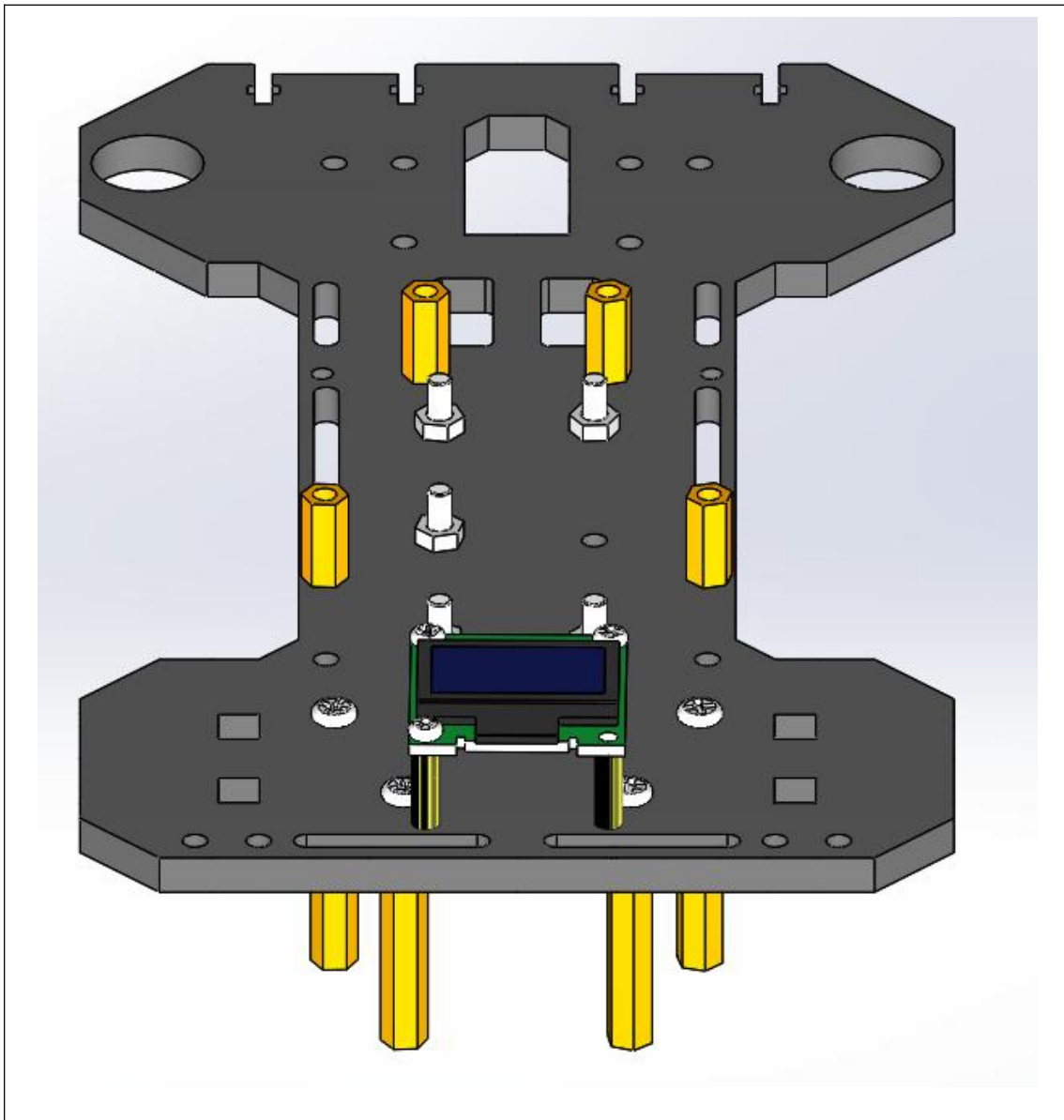
4.1 Use **two M3*30 screws** and **two M3 nuts** to fix the DC motor to A09.

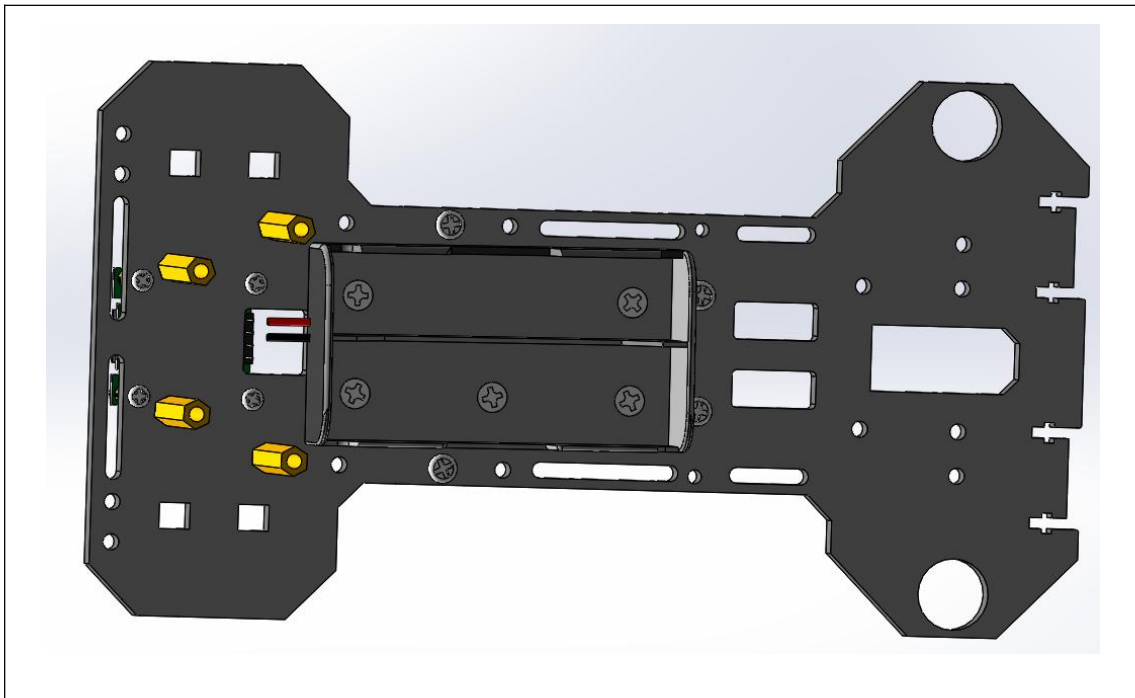
Assemble 2 sets.



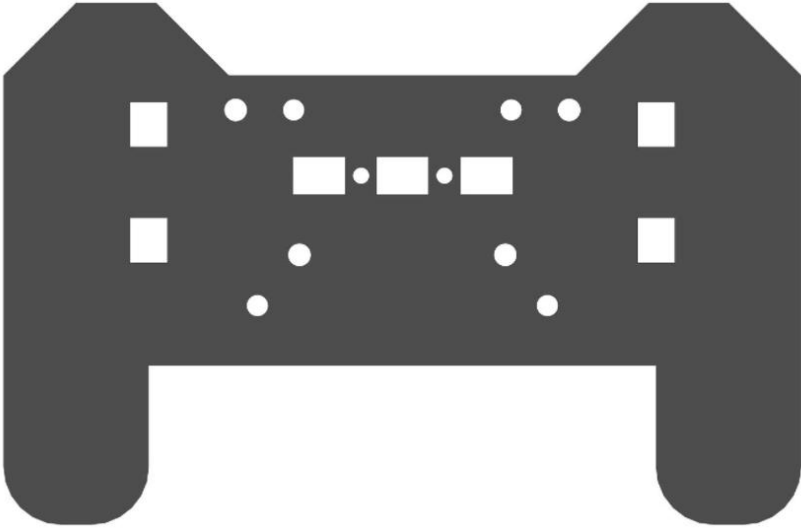
4.2 Use **four M3*8 screws** to fix **four M3*30 copper standoffs** to A01.



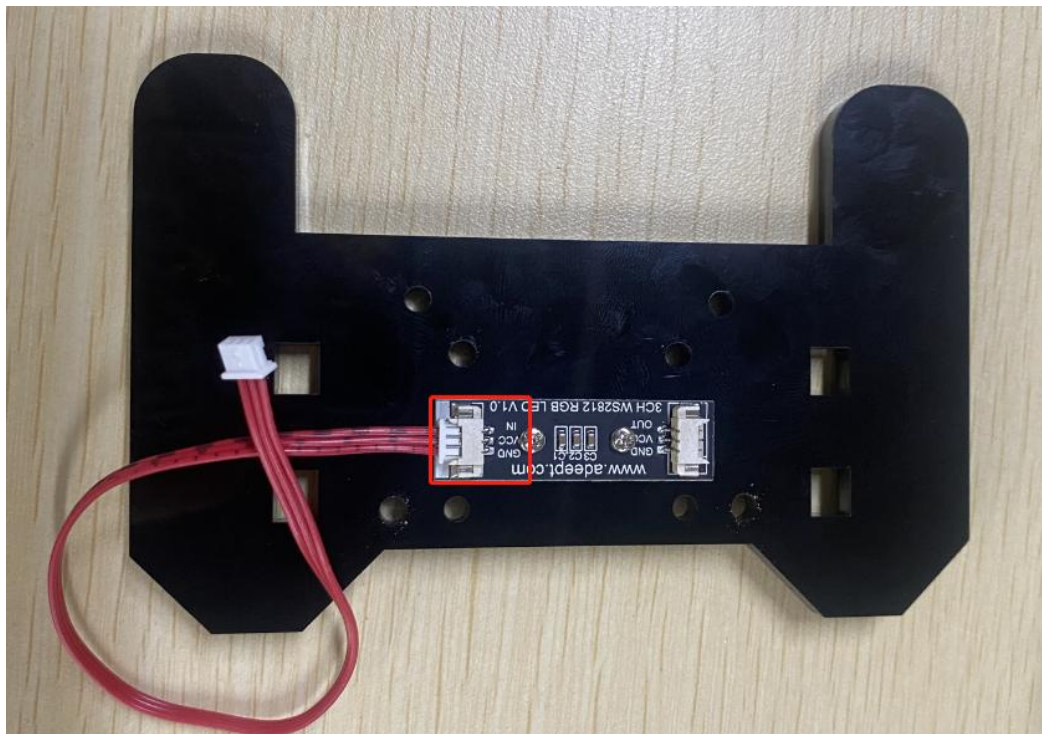




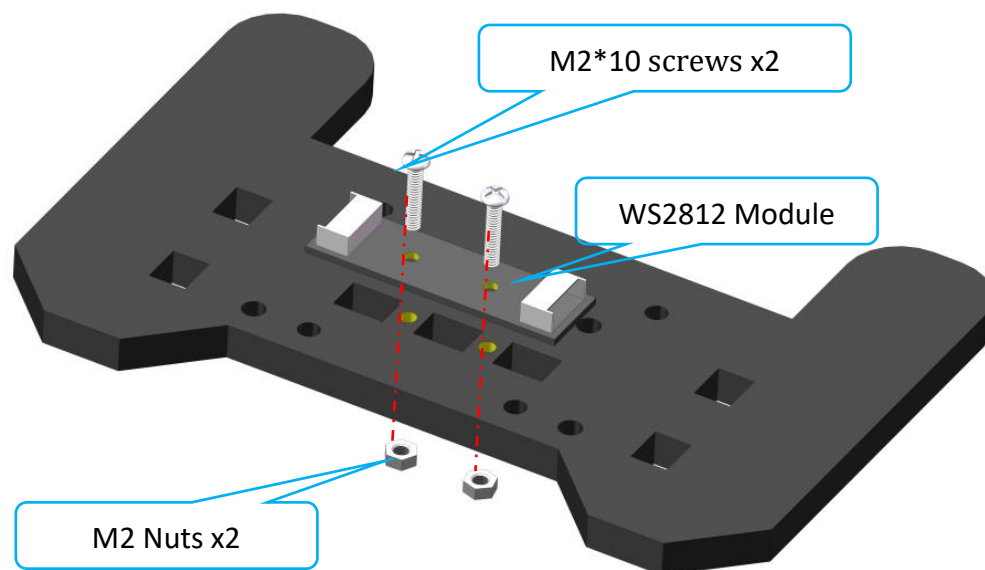
4.3 Install WS2812 to A10.

A10	
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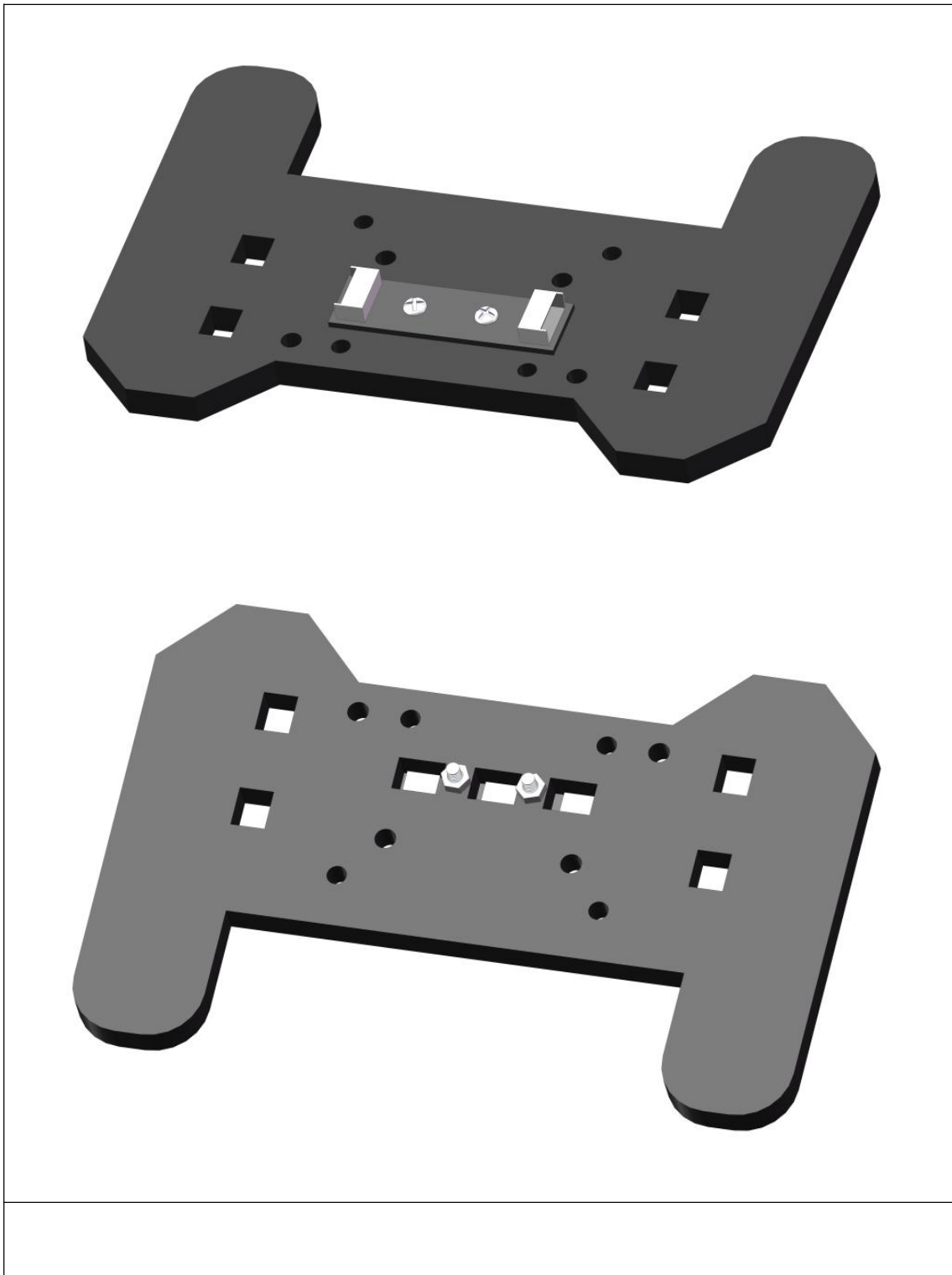
(Note: Before installing WS2812, connect the cable (connected to the IN interface), and the light source faces inward, as shown in the figure below.)



Install WS2812 to A10 use **two M2*10 screws** and **two M2 nuts**.

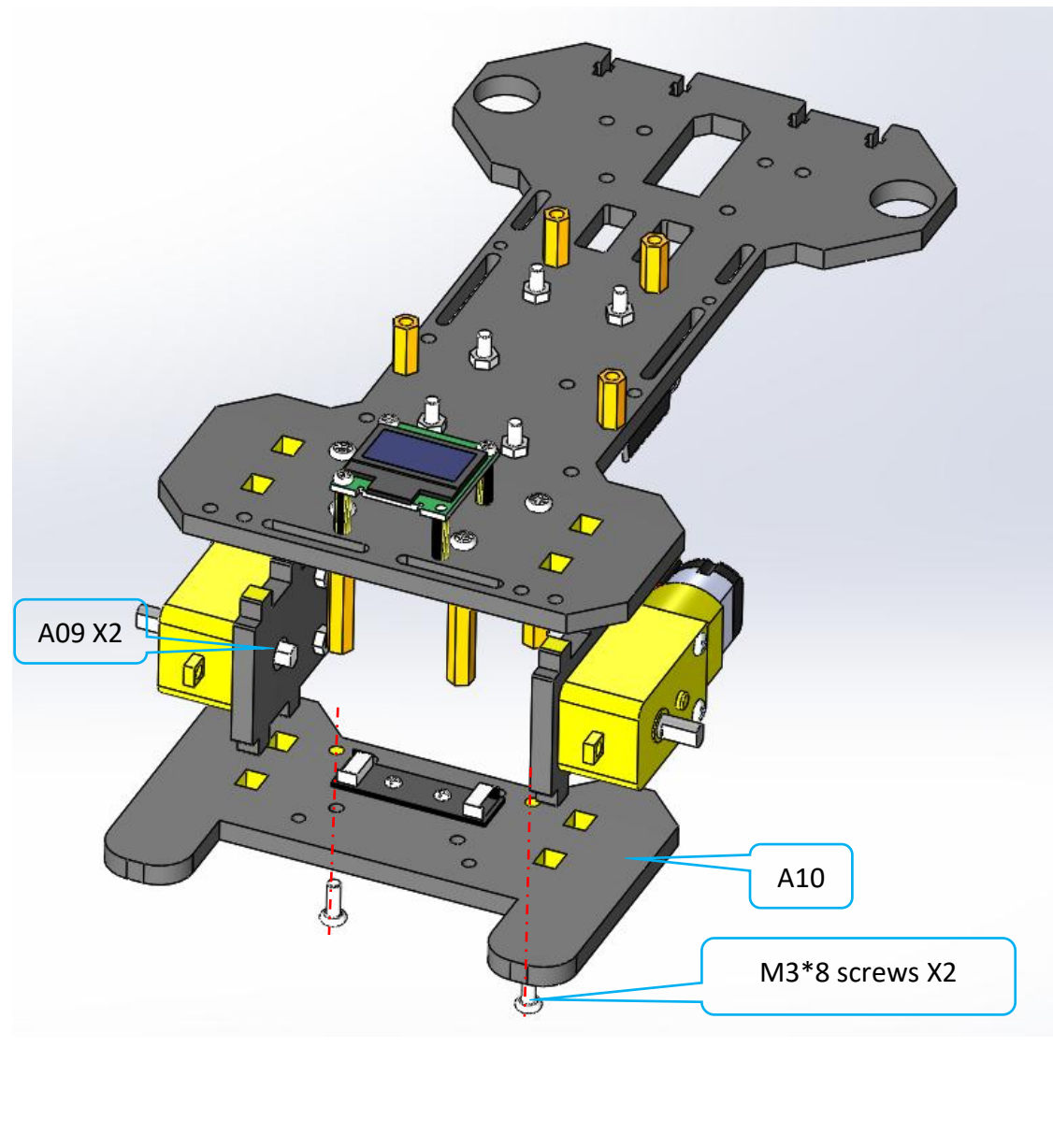


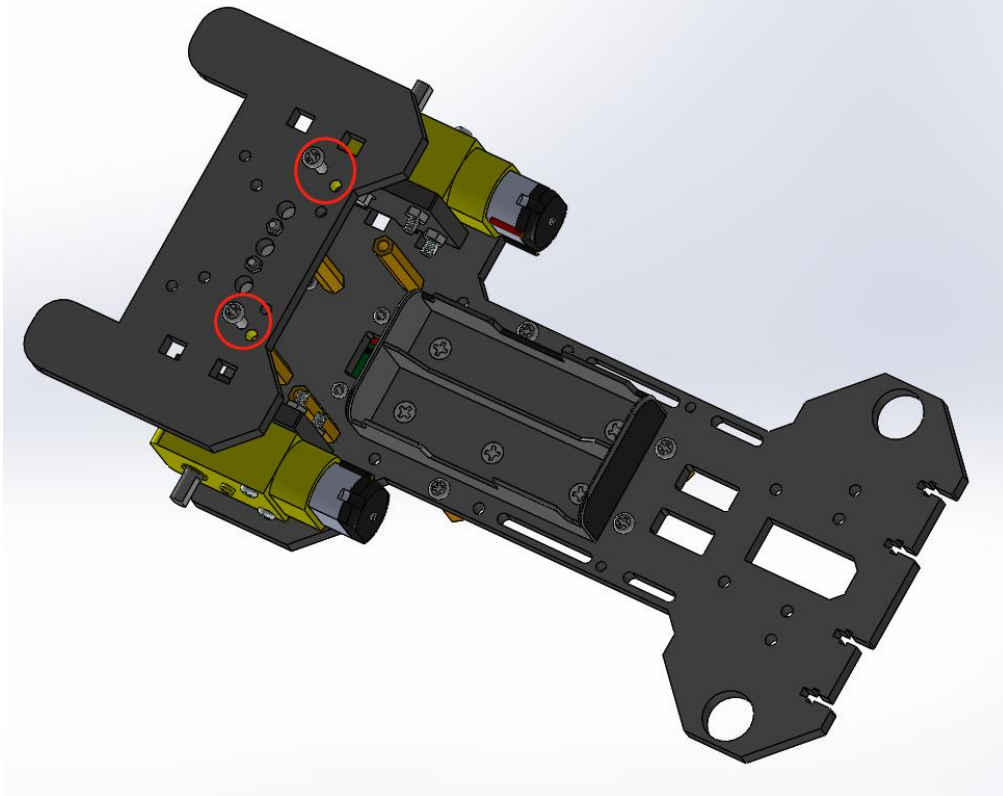
Effect diagram after assembling:



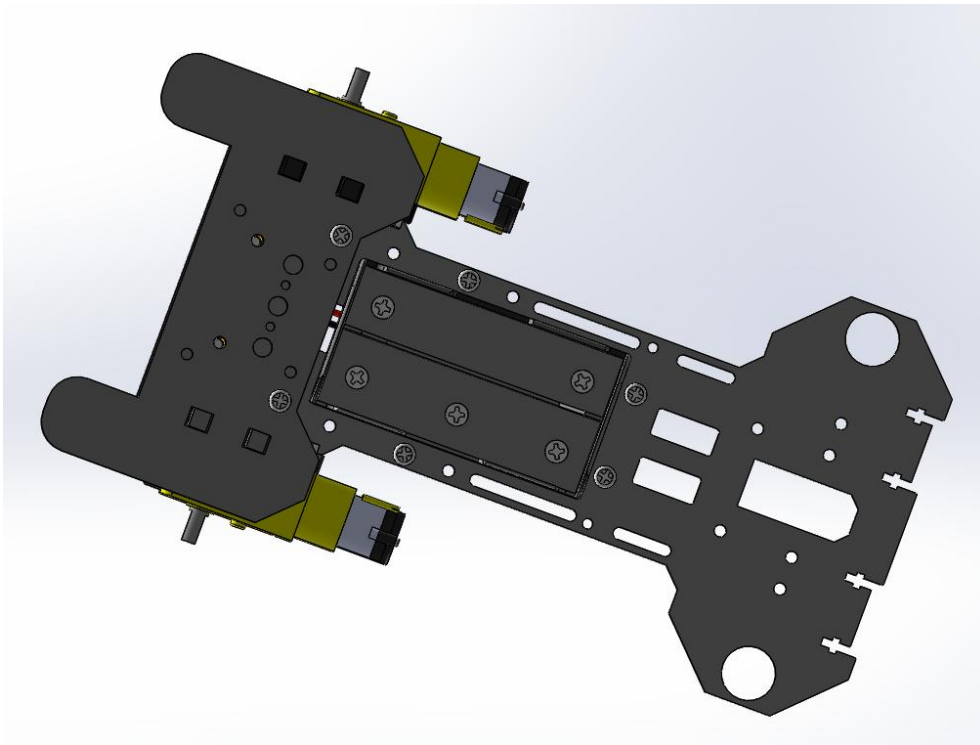
4.4 Fix the components assembled in steps 4.1 and A10 to A01.

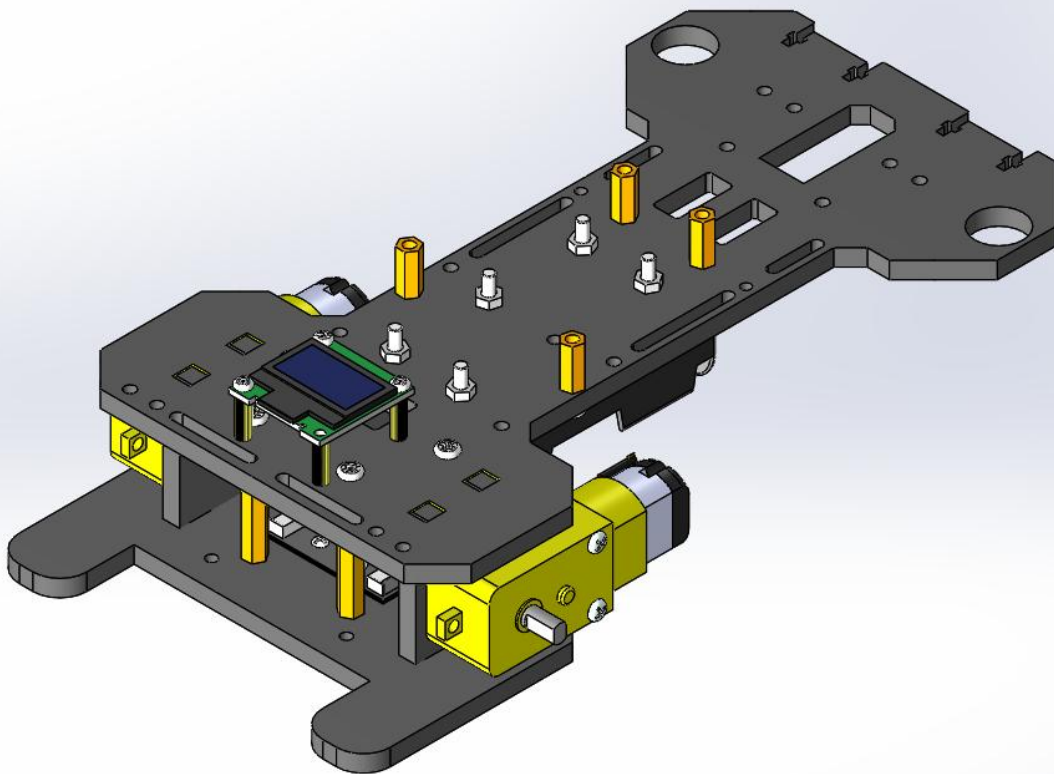
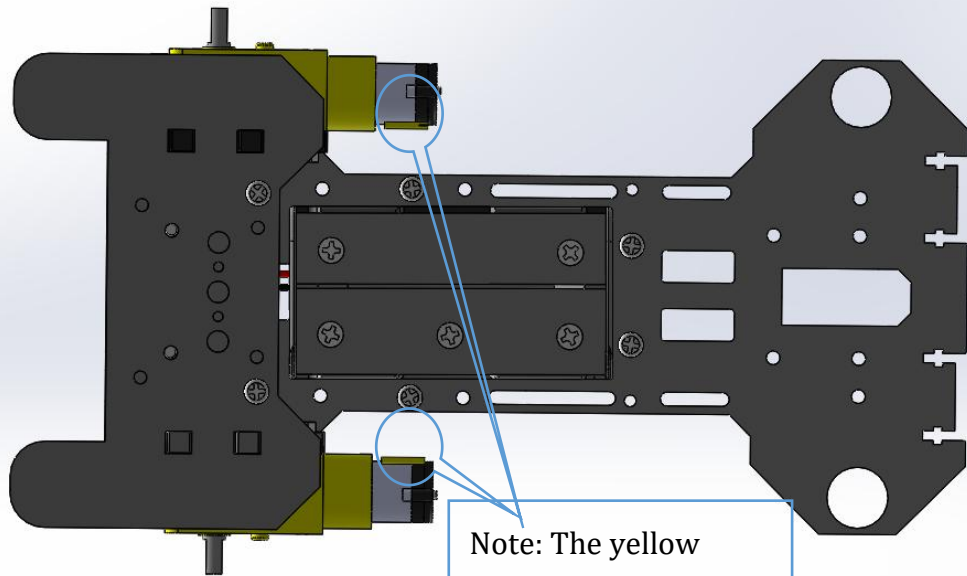
Use two M3*8 screws.



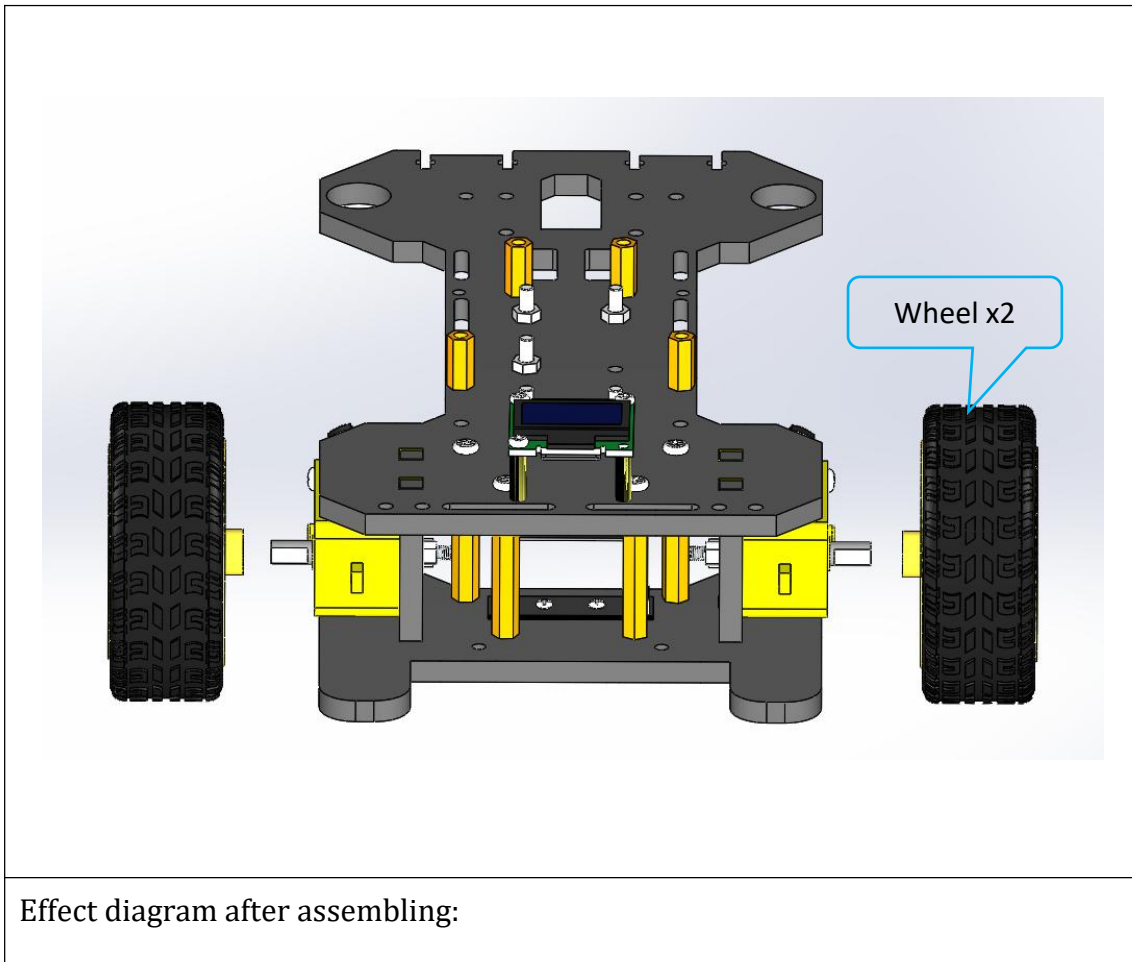


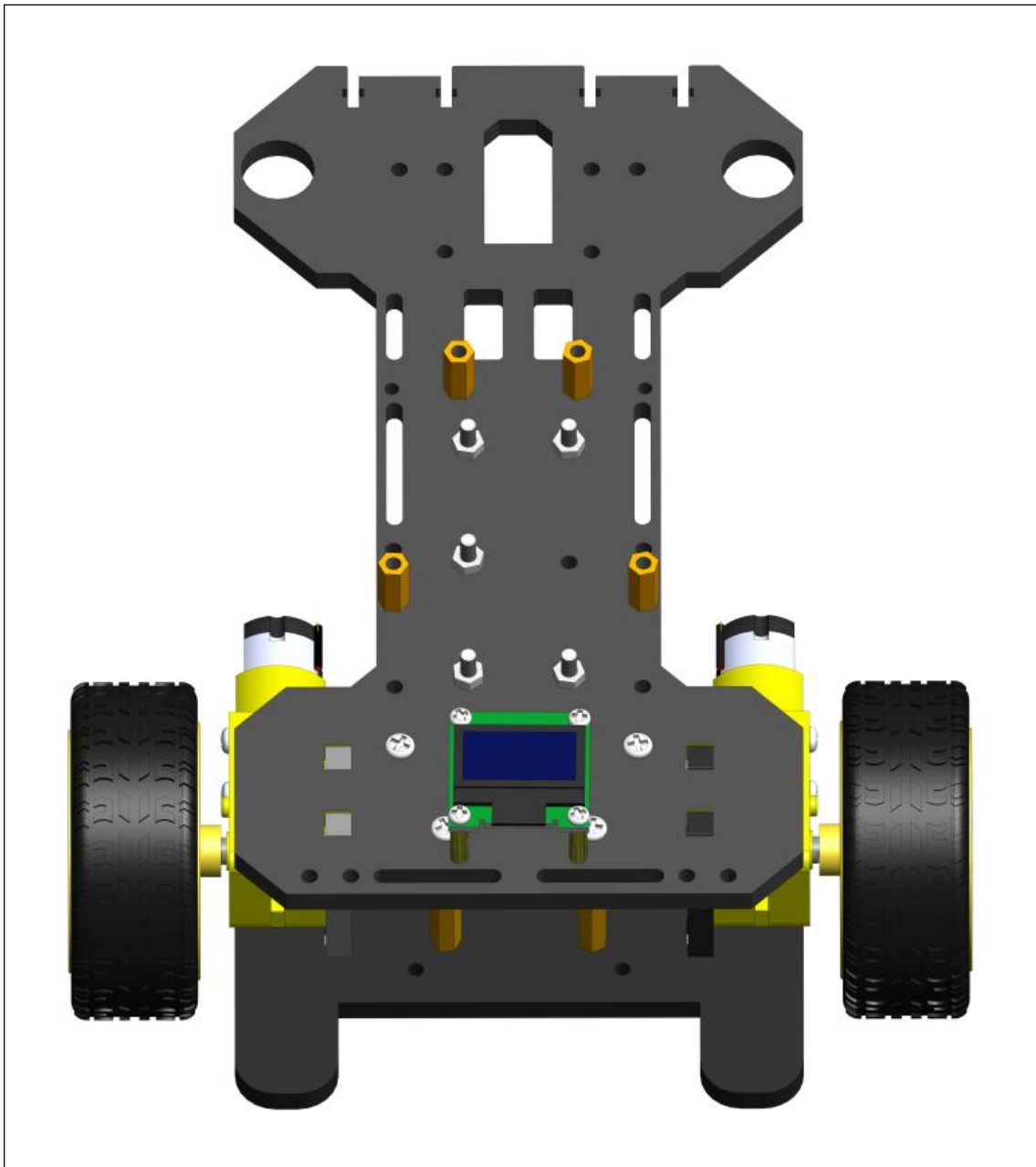
Effect diagram after assembling:





4.5 Install the rear wheel onto the motor shaft.

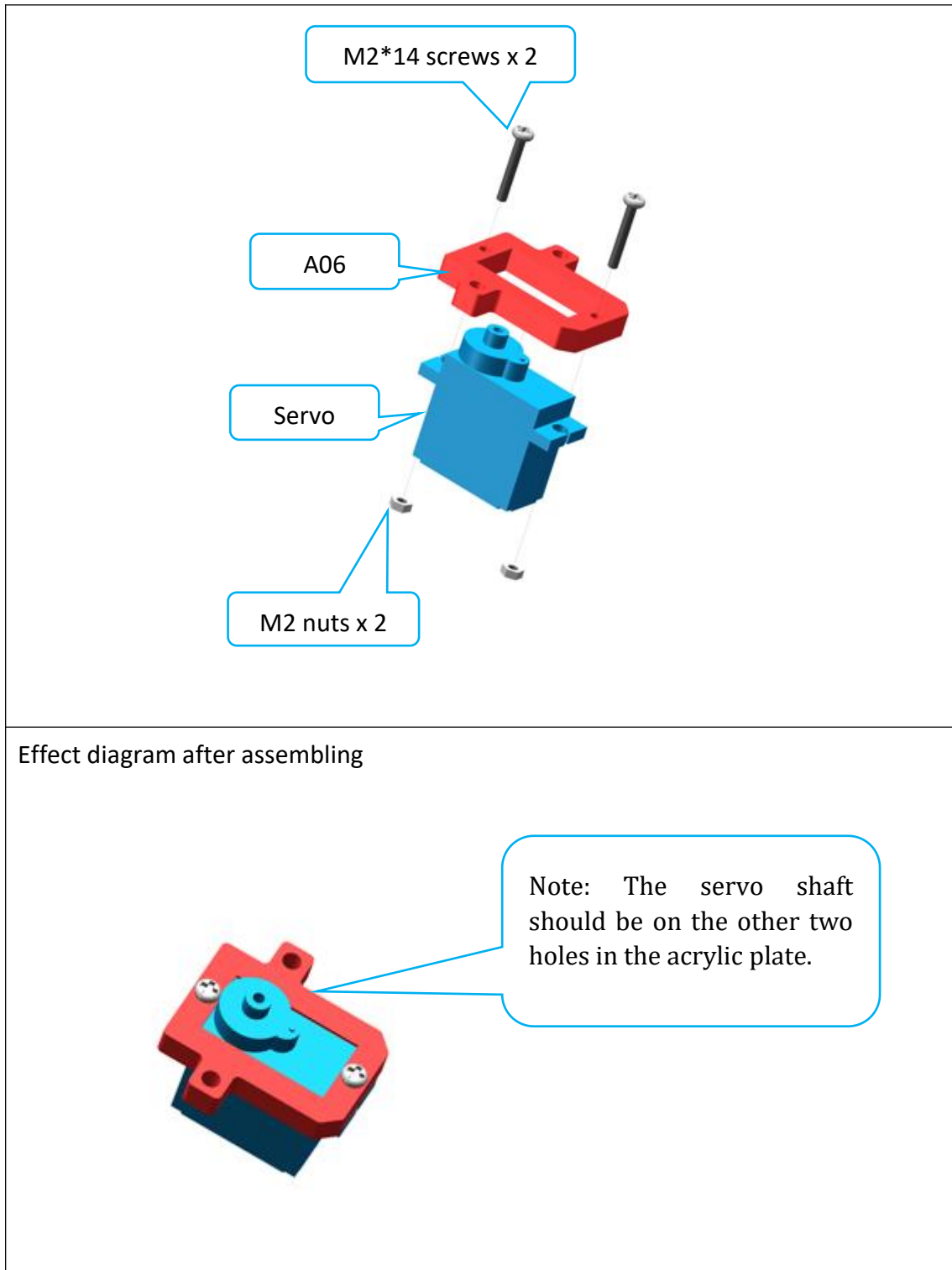




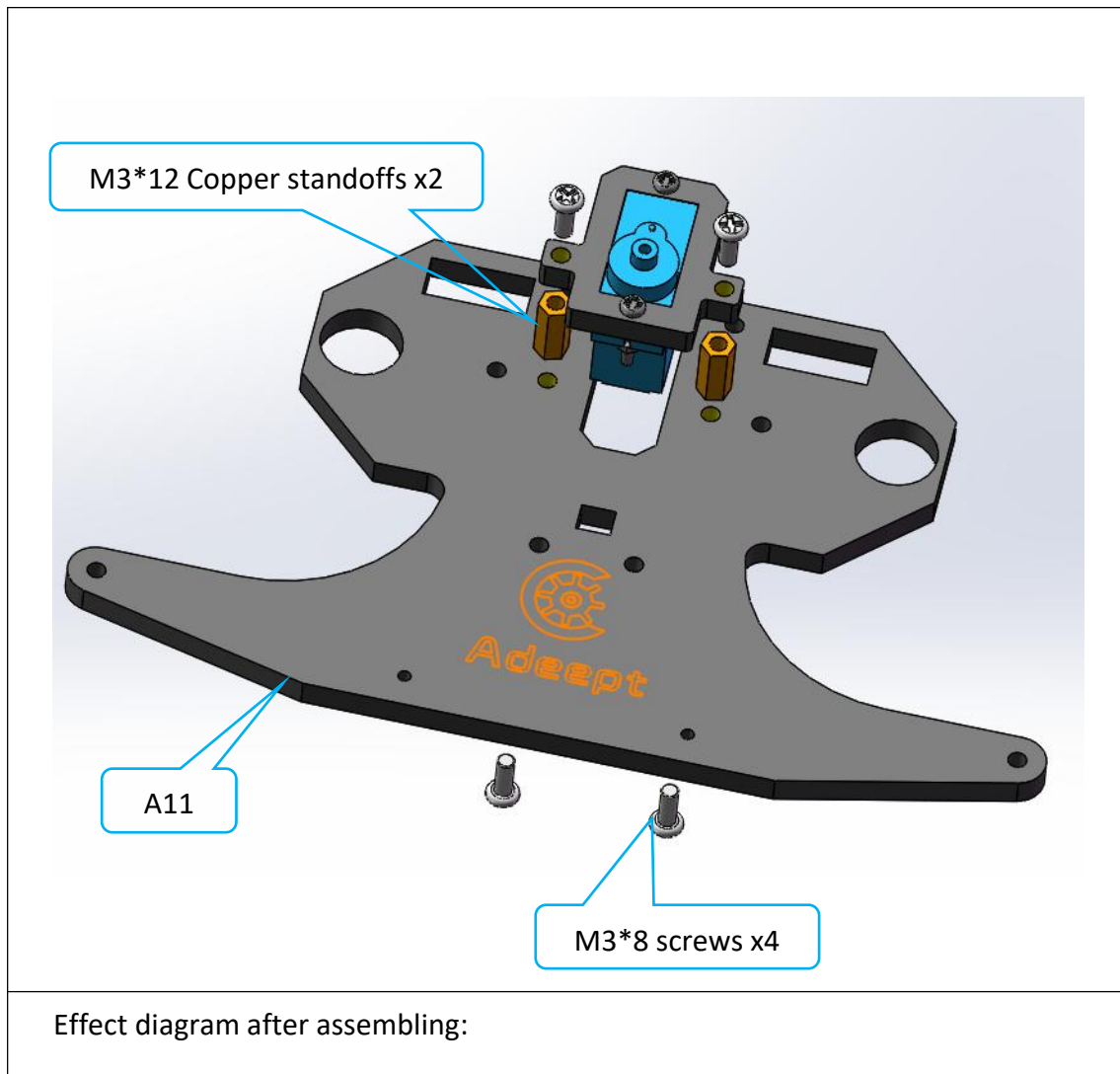
Assemble the front wheels

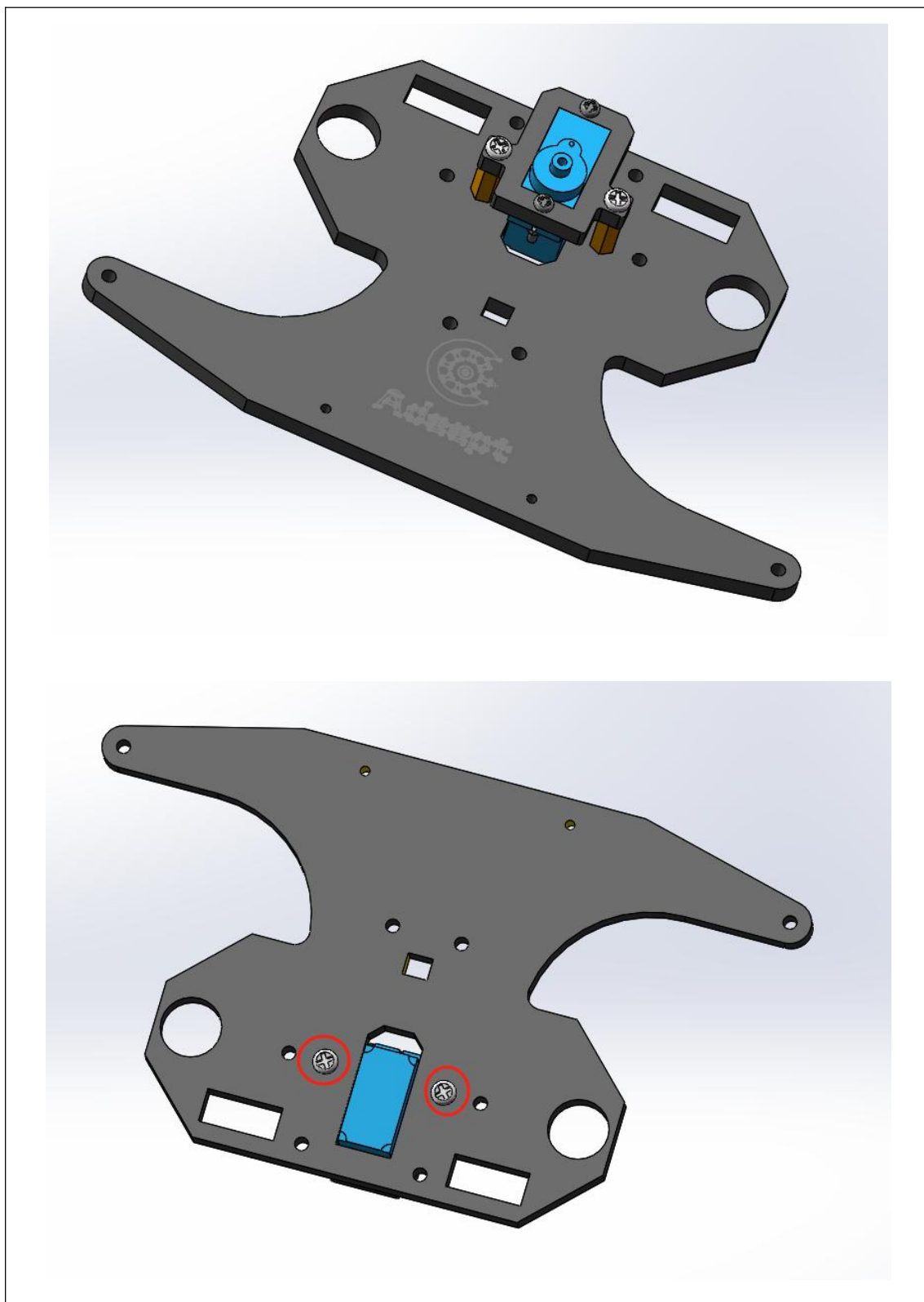
5.1 Before assembly, please confirm whether to adjust the initial angle of the servo to 90 degrees (middle angle) according to the tutorial "[1 Adjust the initial angle of the servo](#)".

5.2 Assemble the servo to the A06 use **two M2*14 screws** (assemble 2 sets, A second set is used when installing an ultrasonic module.)

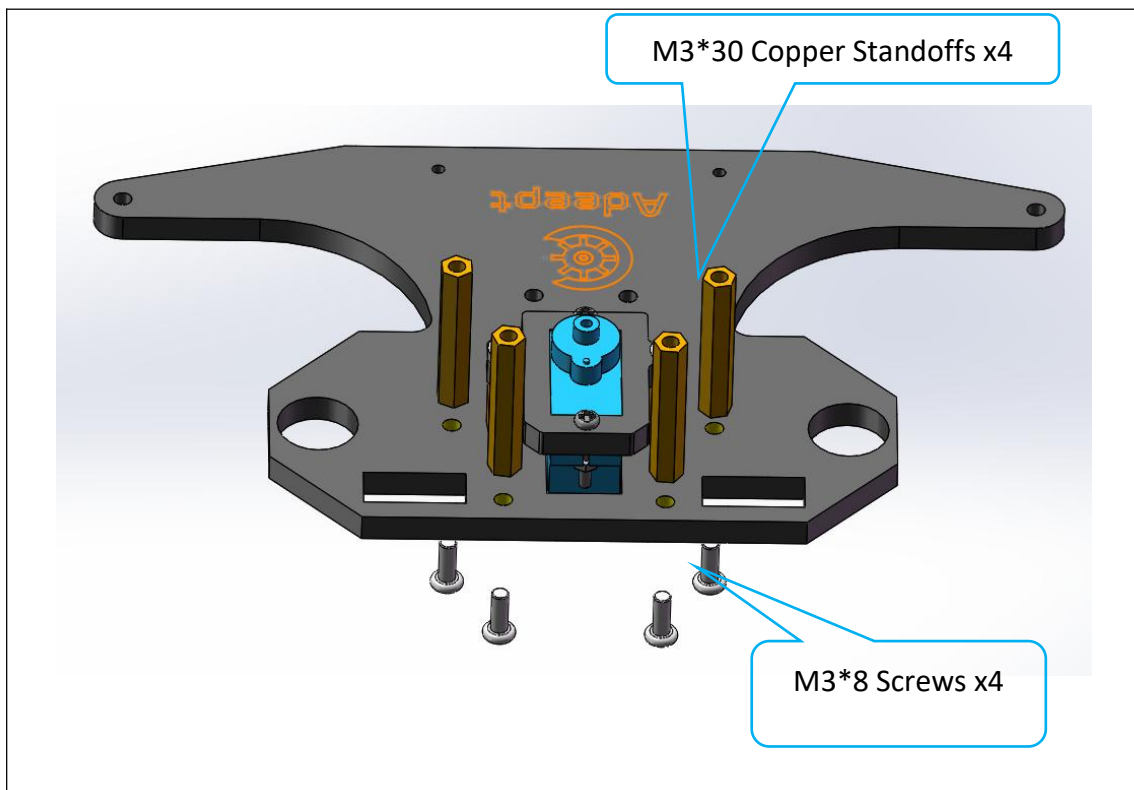


5.3 Install the servo on the A11.

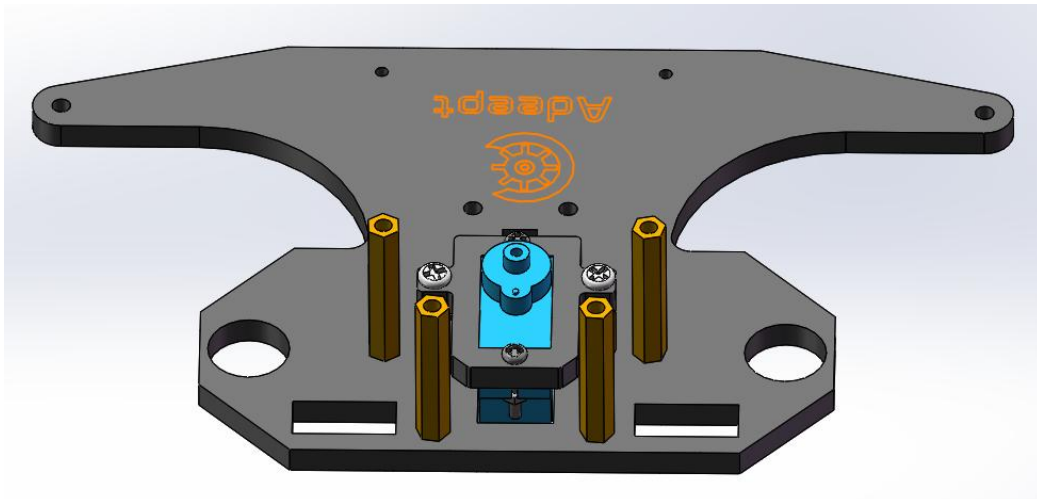


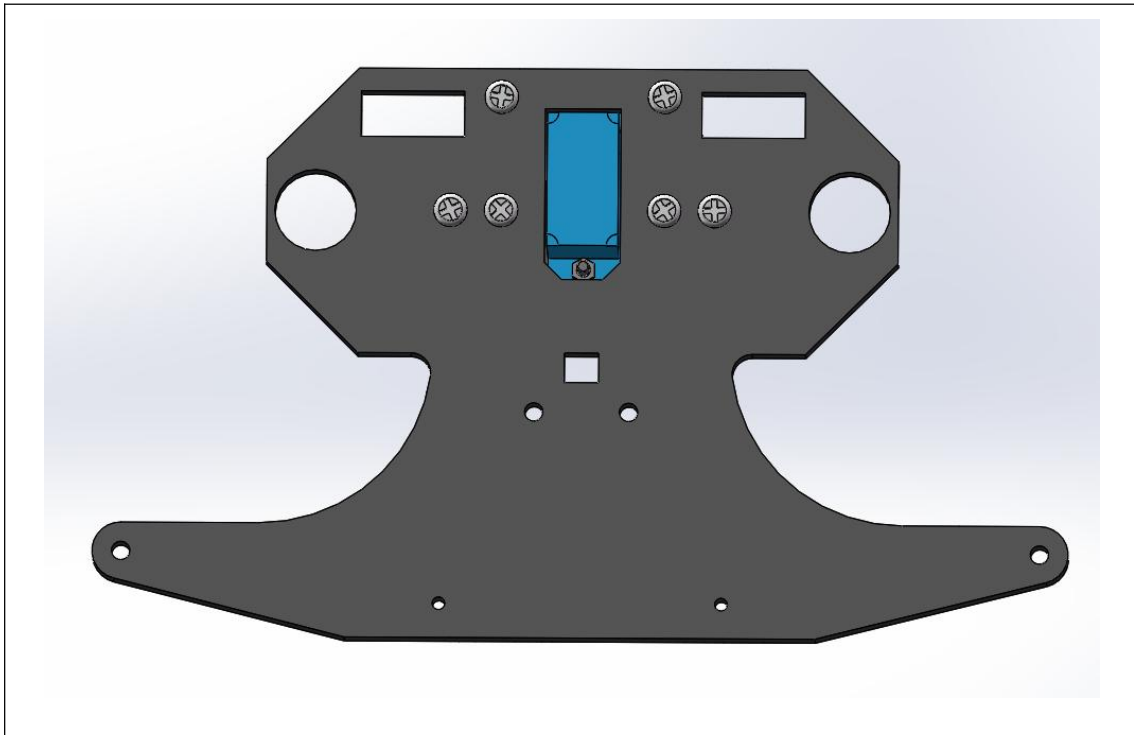


5.4 Fix **four M3*30 copper standoffs** to A11.

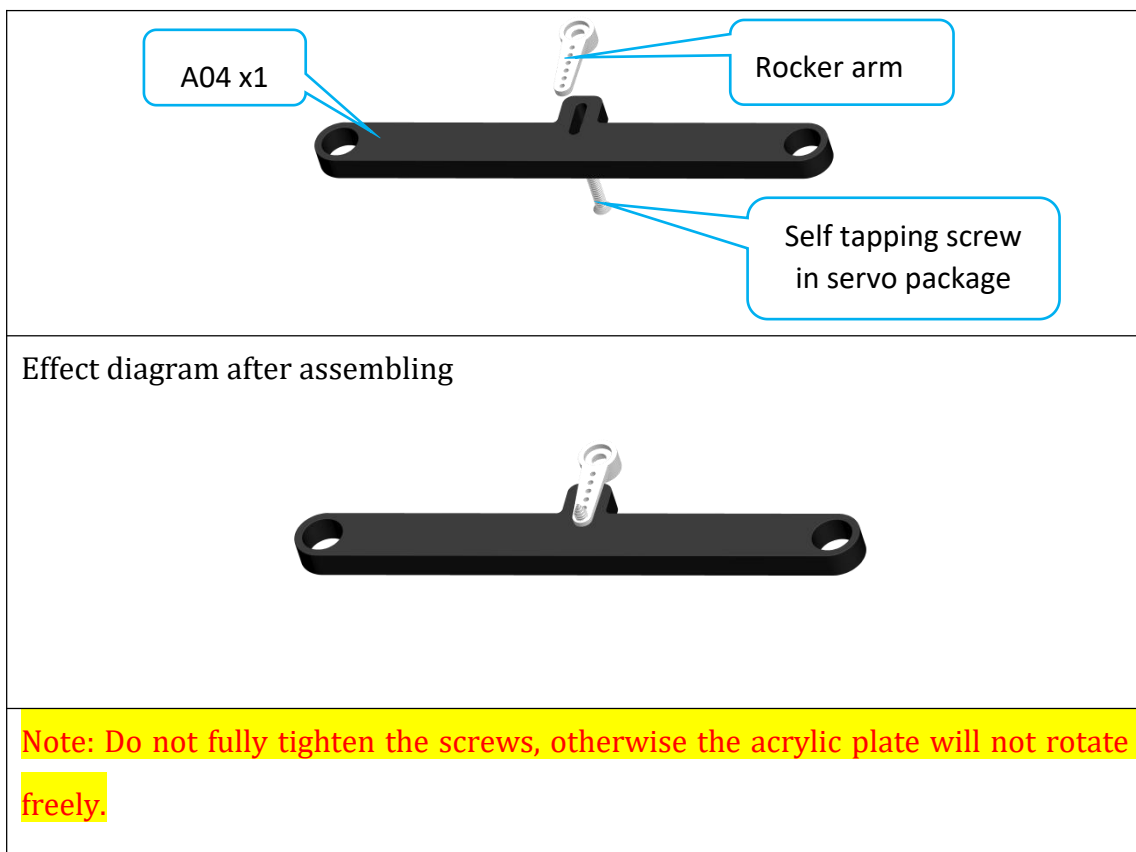


Effect diagram after assembling.





5.5 Install rocker arm and A04.



Leave some space between the screws and the acrylic plate.

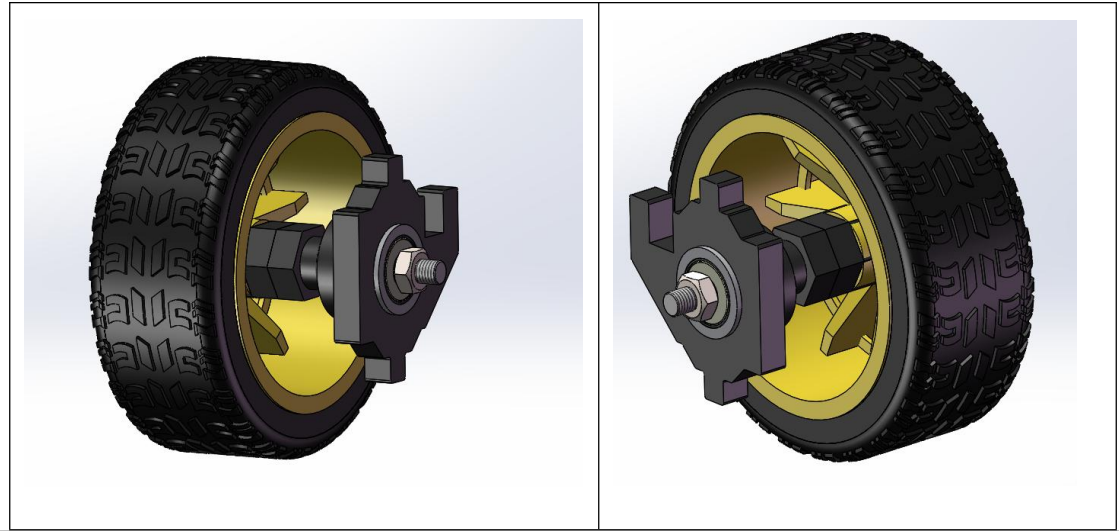


5.6 Install the front wheels (two sets).

Note: The installation direction of A05 in the two sets is different.

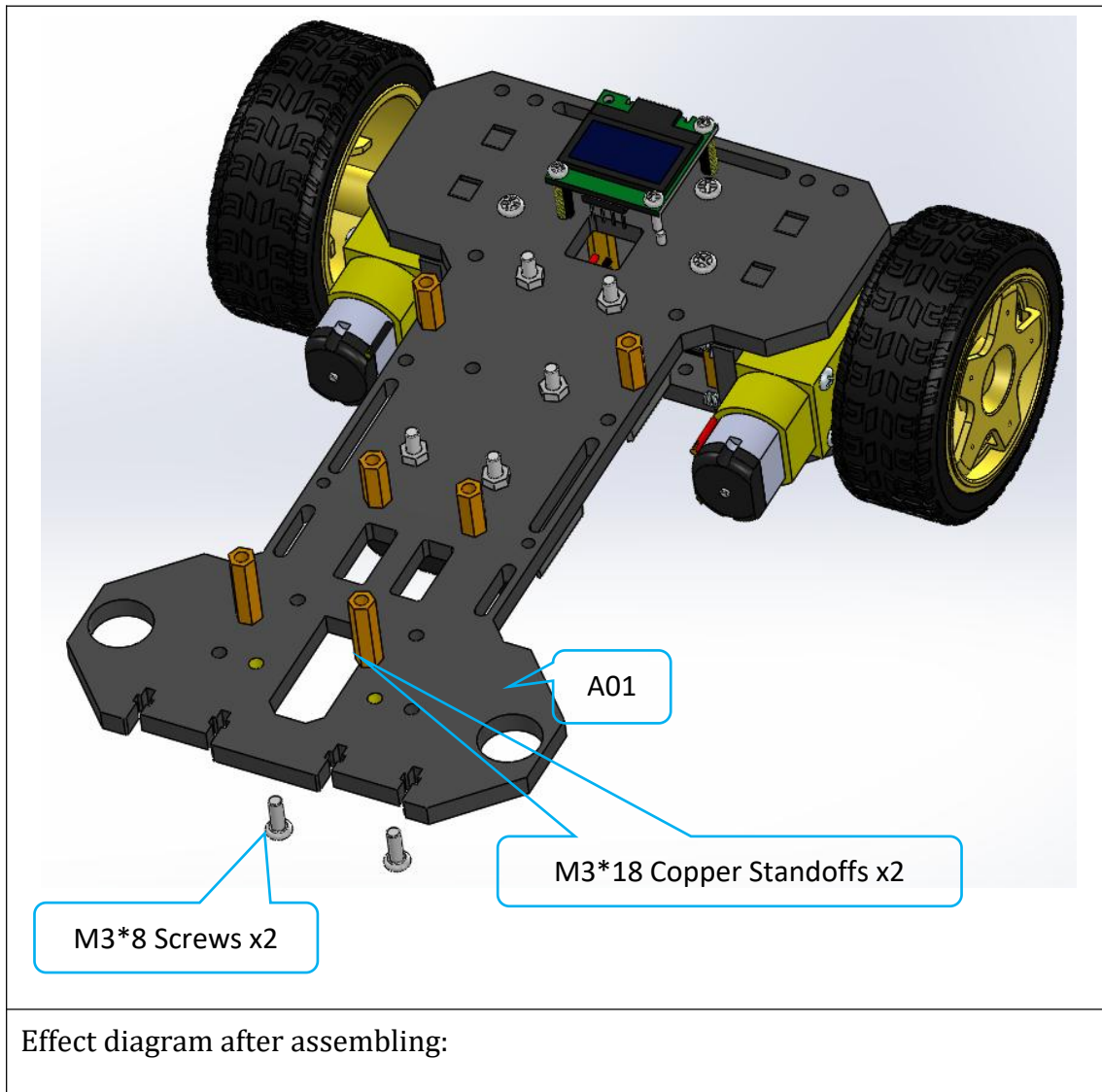
A12	
A02	

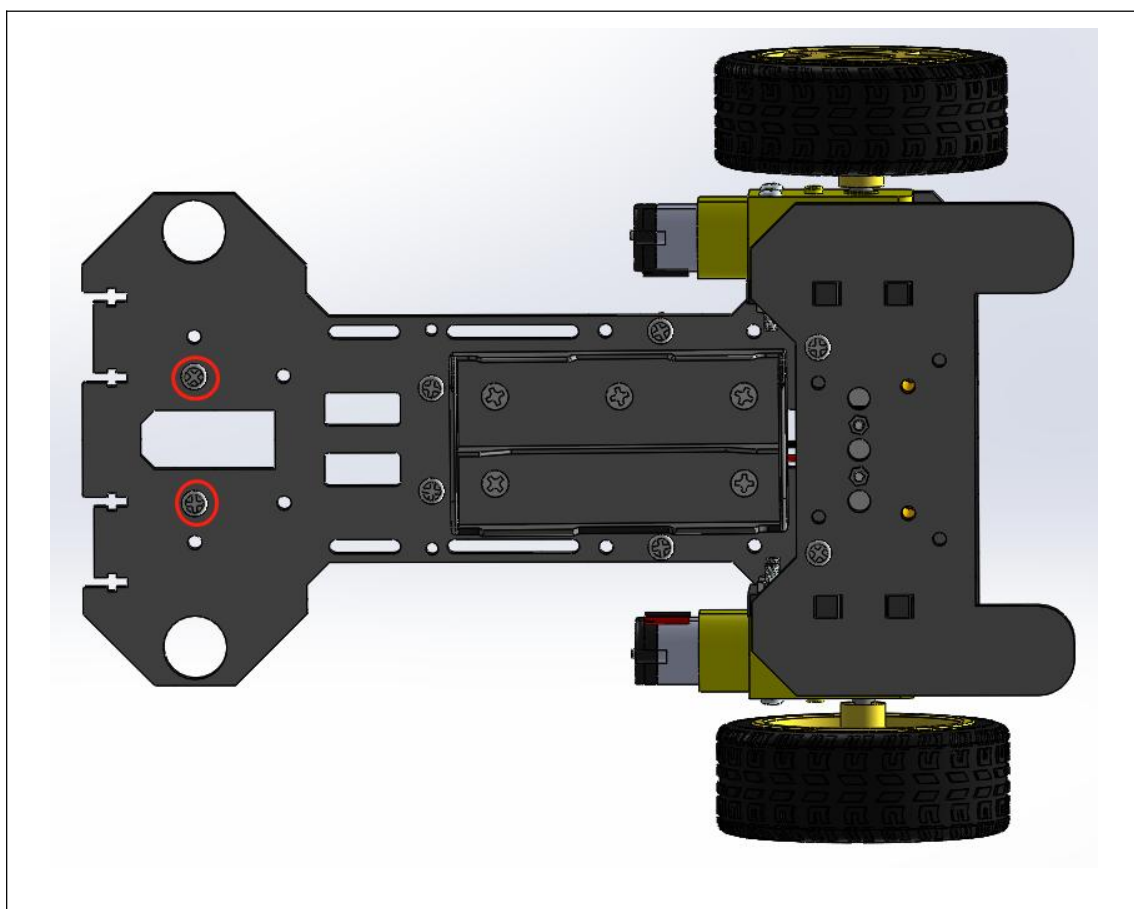
Effect diagram after assembling:

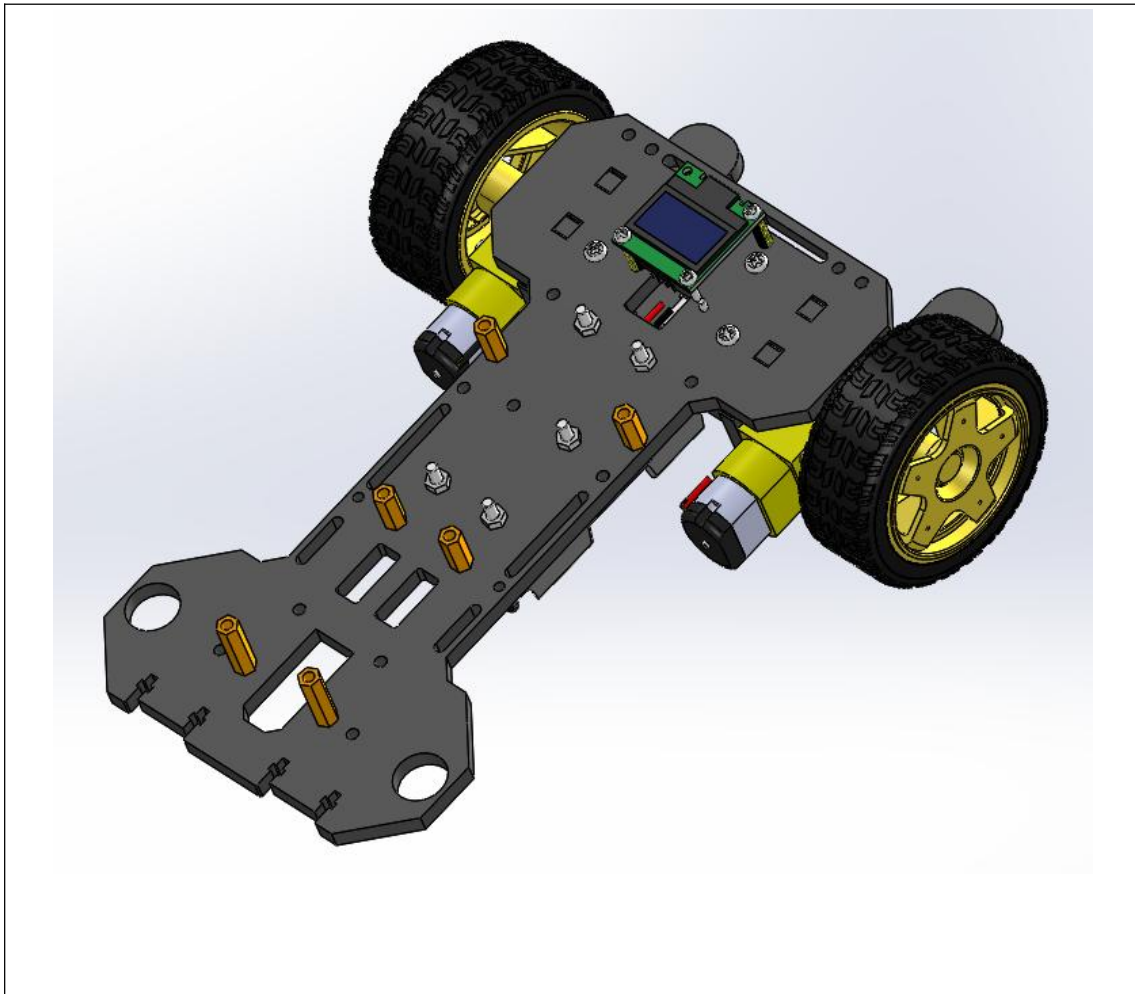


5.7 Fix **two M3*18 copper standoffs** to A01.





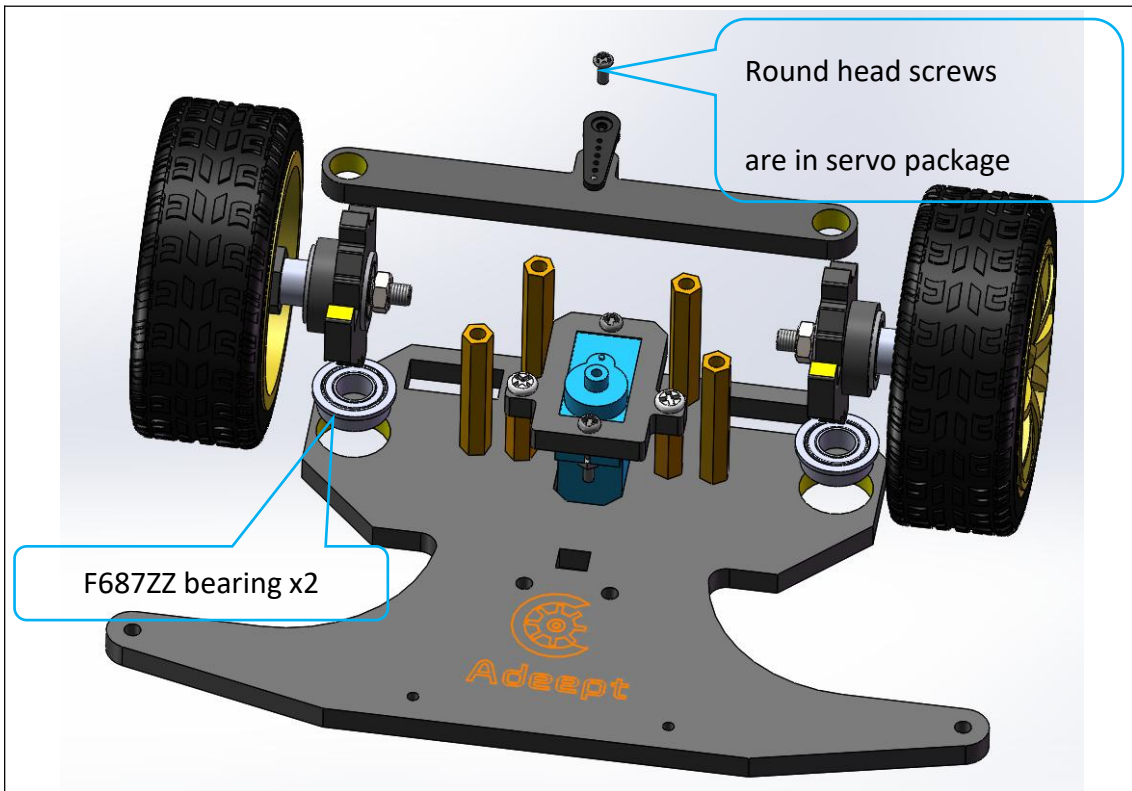




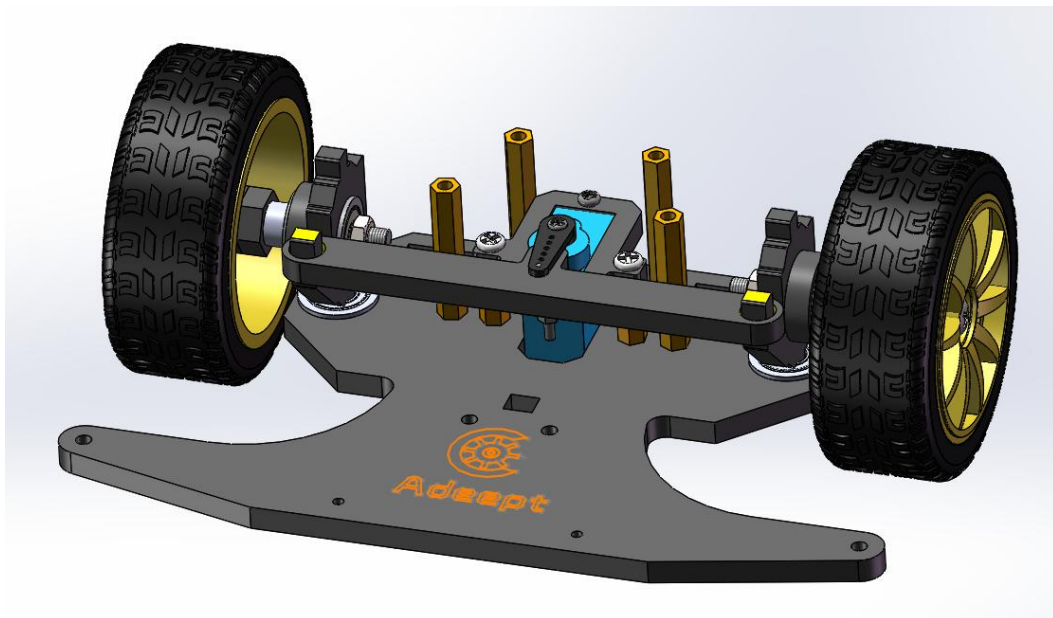
5.8 Install the front wheels and steering components.

The rocker arm should be mounted almost perpendicular to the steering plate, as this way it can be steered left and right to an almost equal degree. But small deviations are acceptable. If the deviation is too large, remove the rocker arm and reassemble it. Do not rotate the servo shaft before successful installation, otherwise you will need to re-rotate the servo to 90 degrees (middle angle).

The bearing direction is shown in the figure.

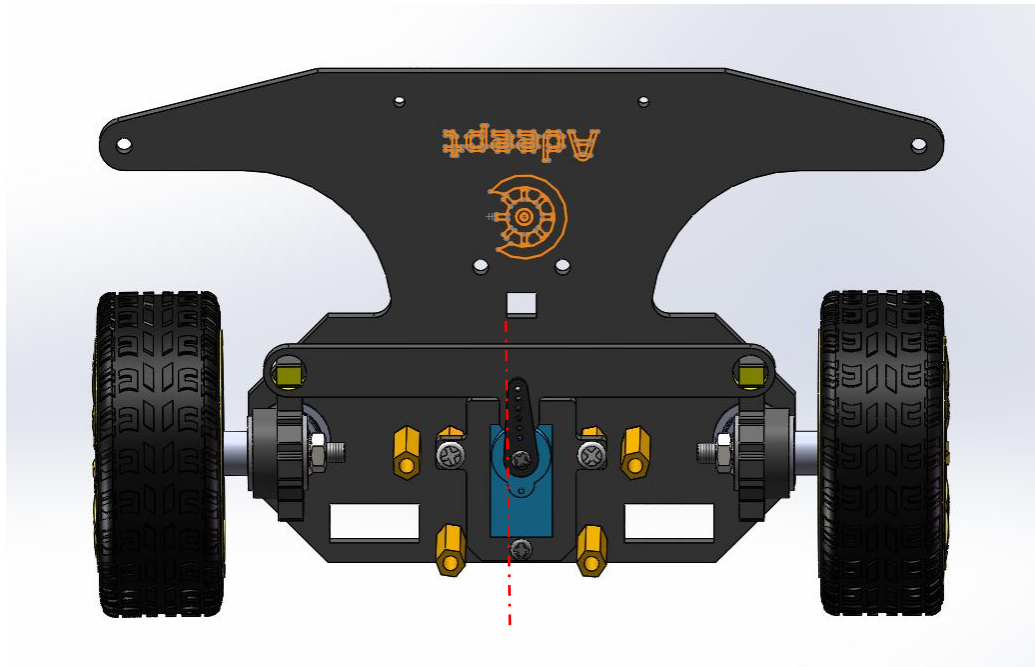


Effect diagram after assembling

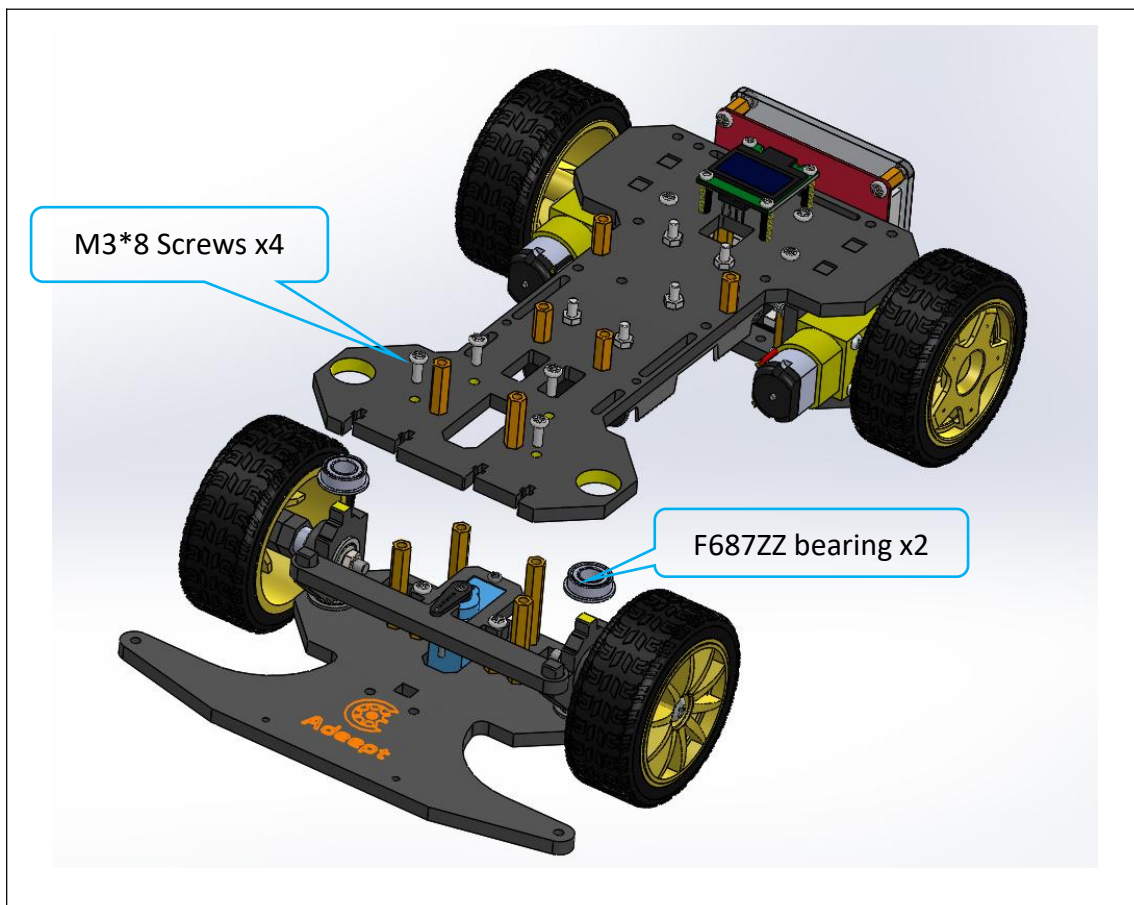


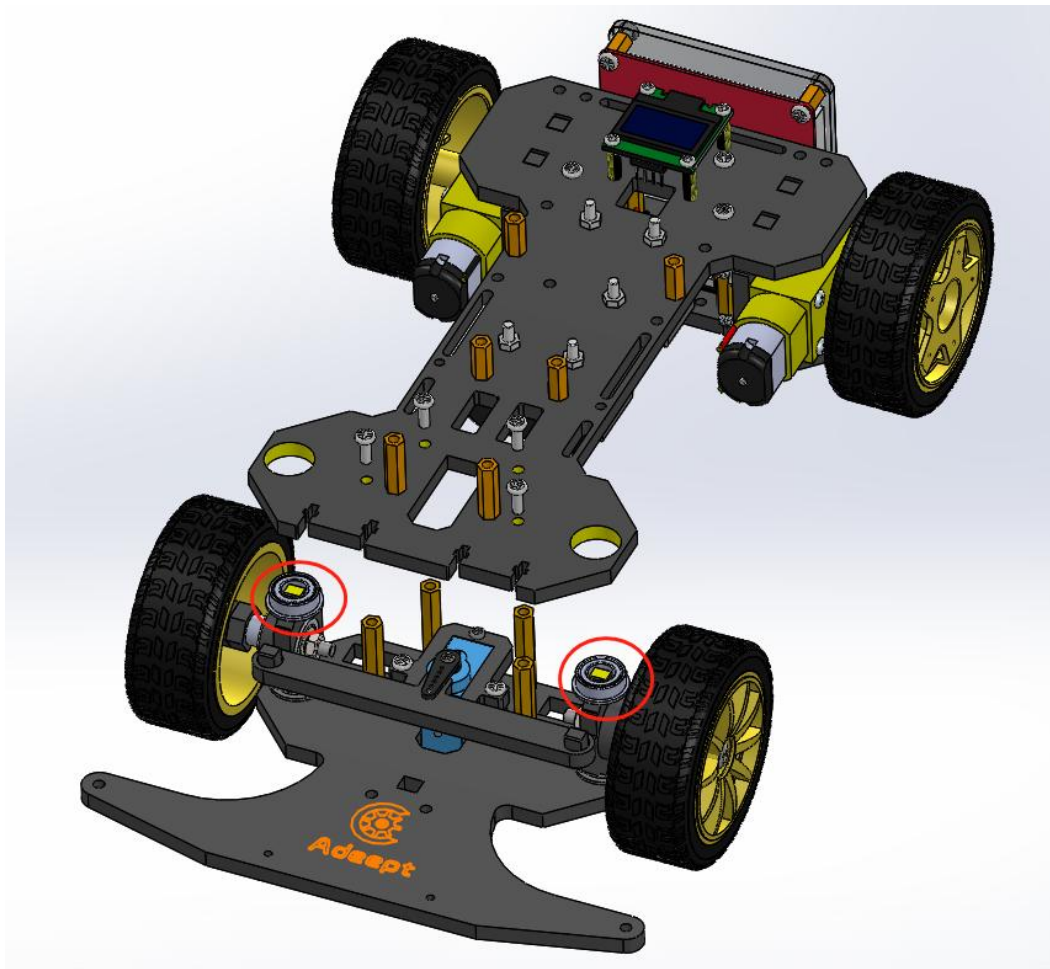
From a top view, the rocker should be in the middle of the rotation range, so it can rotate about 45 degrees to the left and right. Otherwise, you need to readjust it again according to step 5.1 above.

At this point the structure is in an unstable state, continue with the steps below.

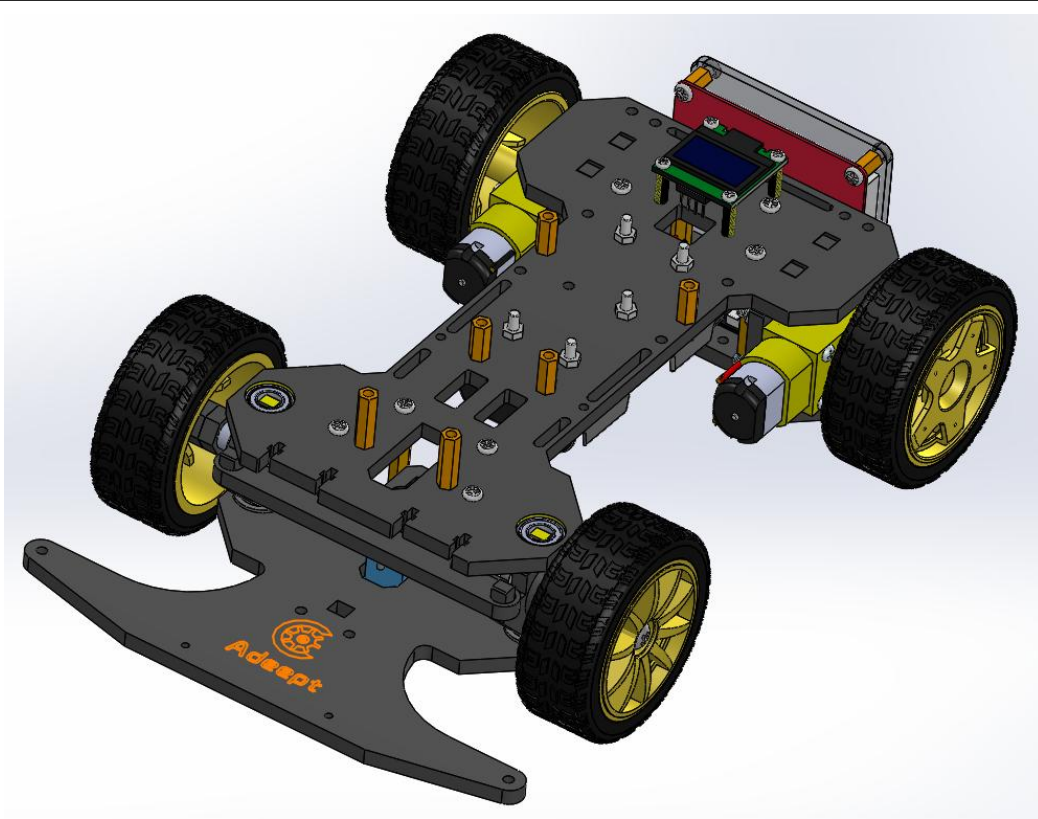


5.9 Fix front wheels and steering components

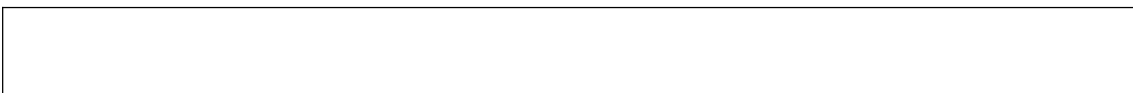




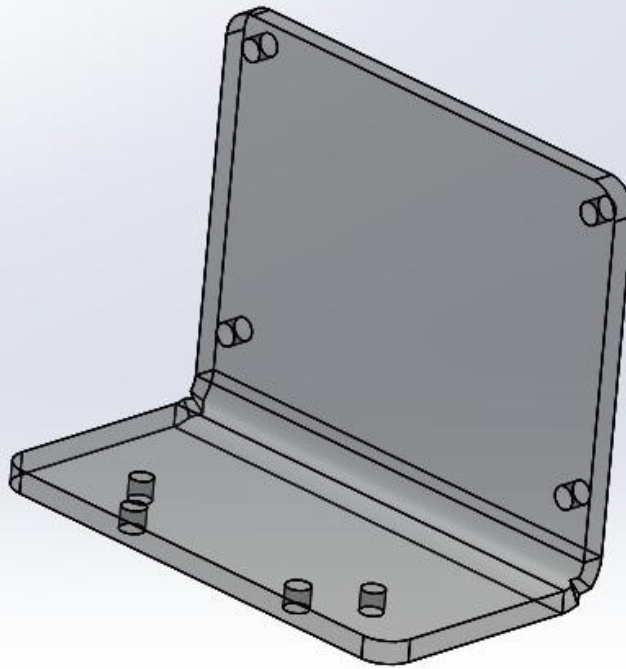
Effect diagram after assembling:



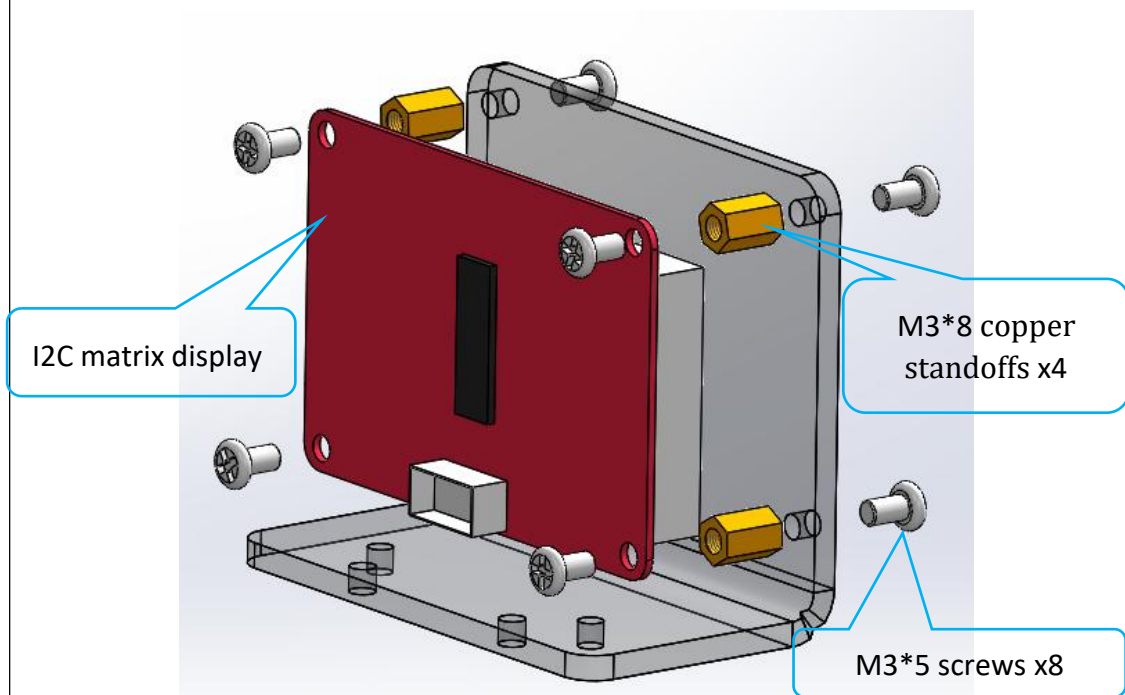
5.10 Install the I2C matrix display.



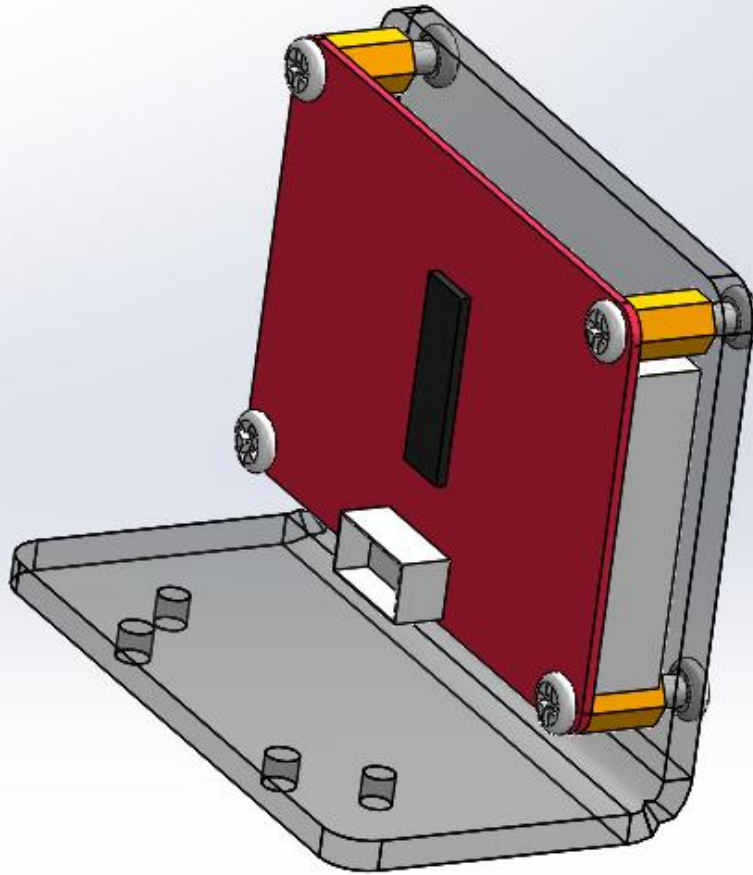
A13

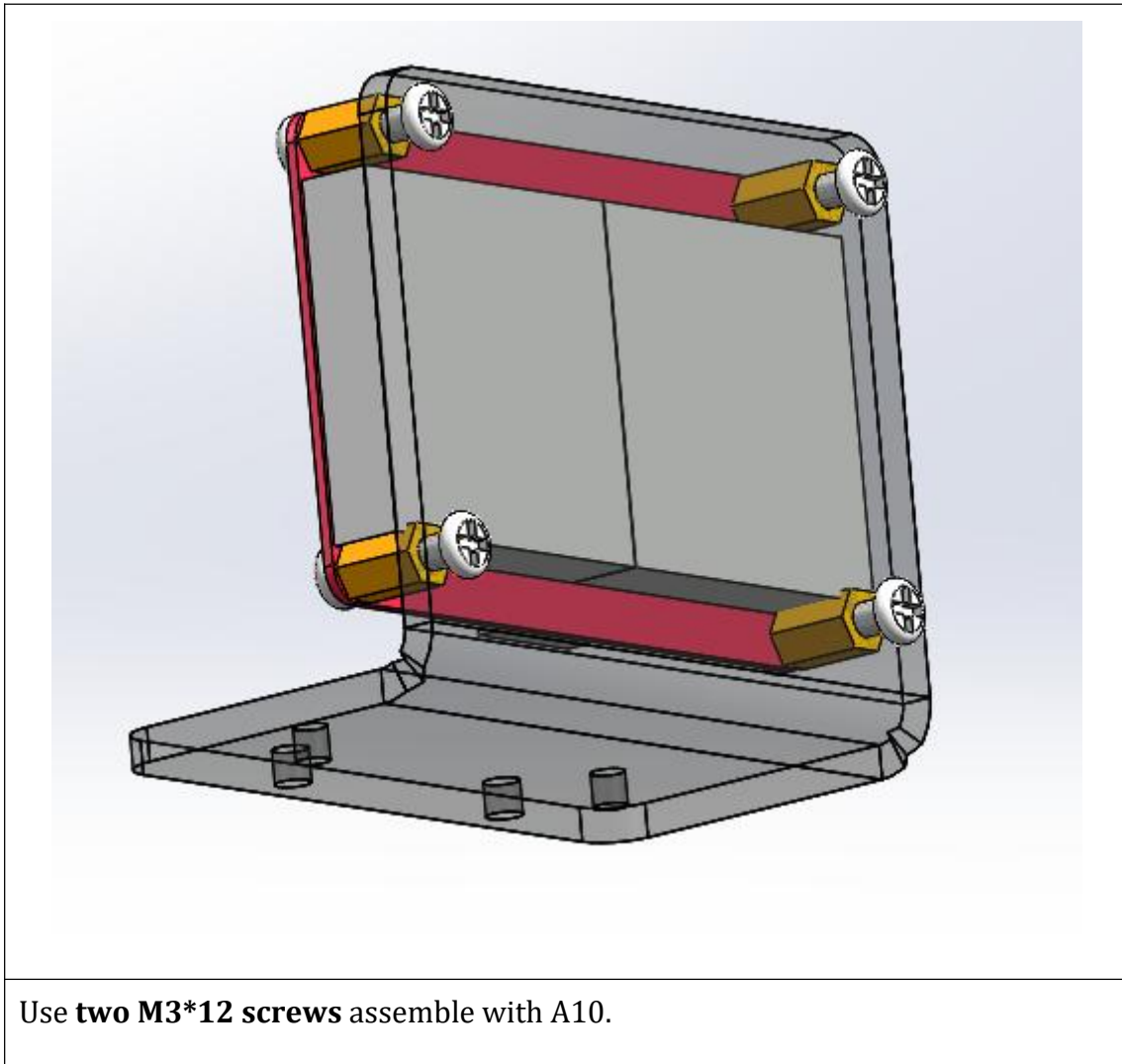


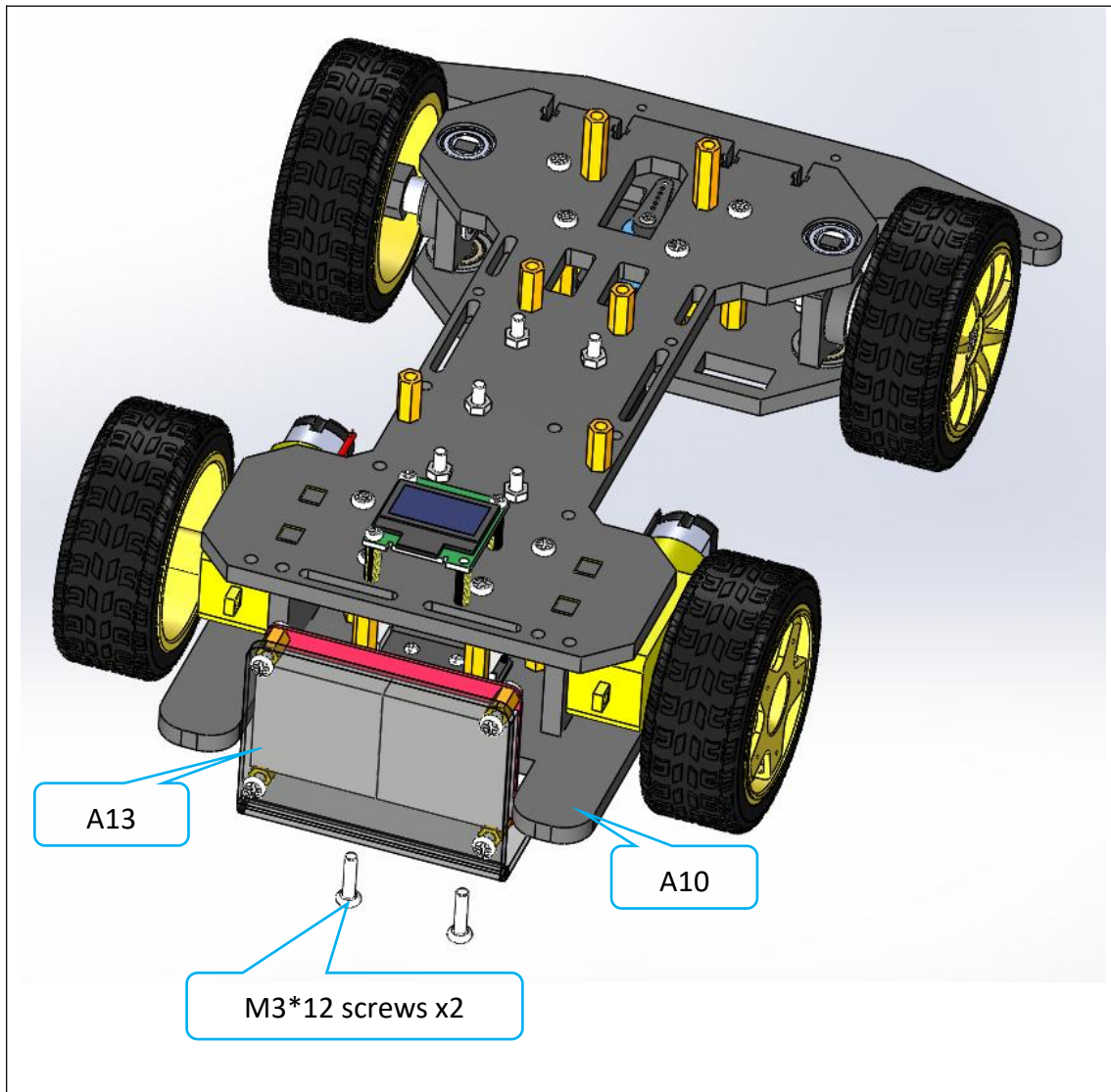
Use 8 M3*5 screws, and 4 M3*8 copper standoffs.

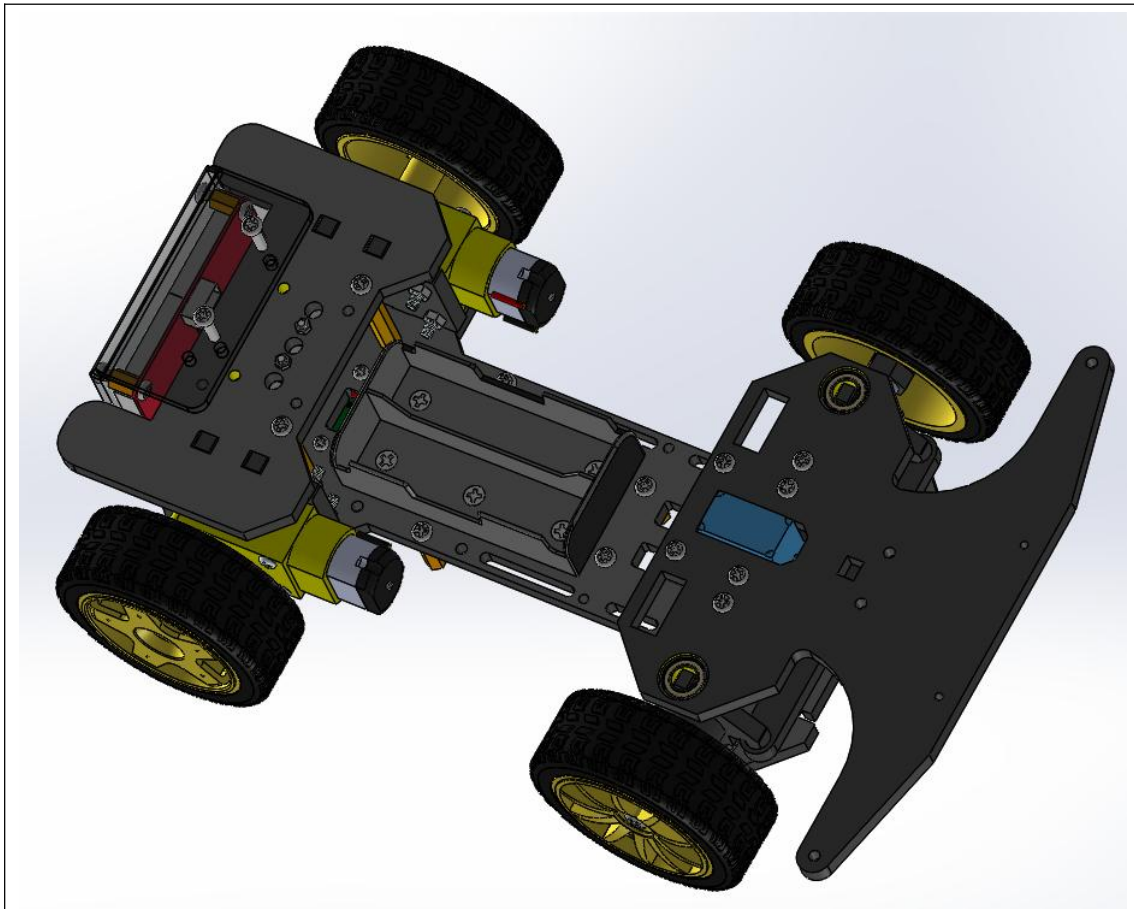


Effect diagram after assembling:

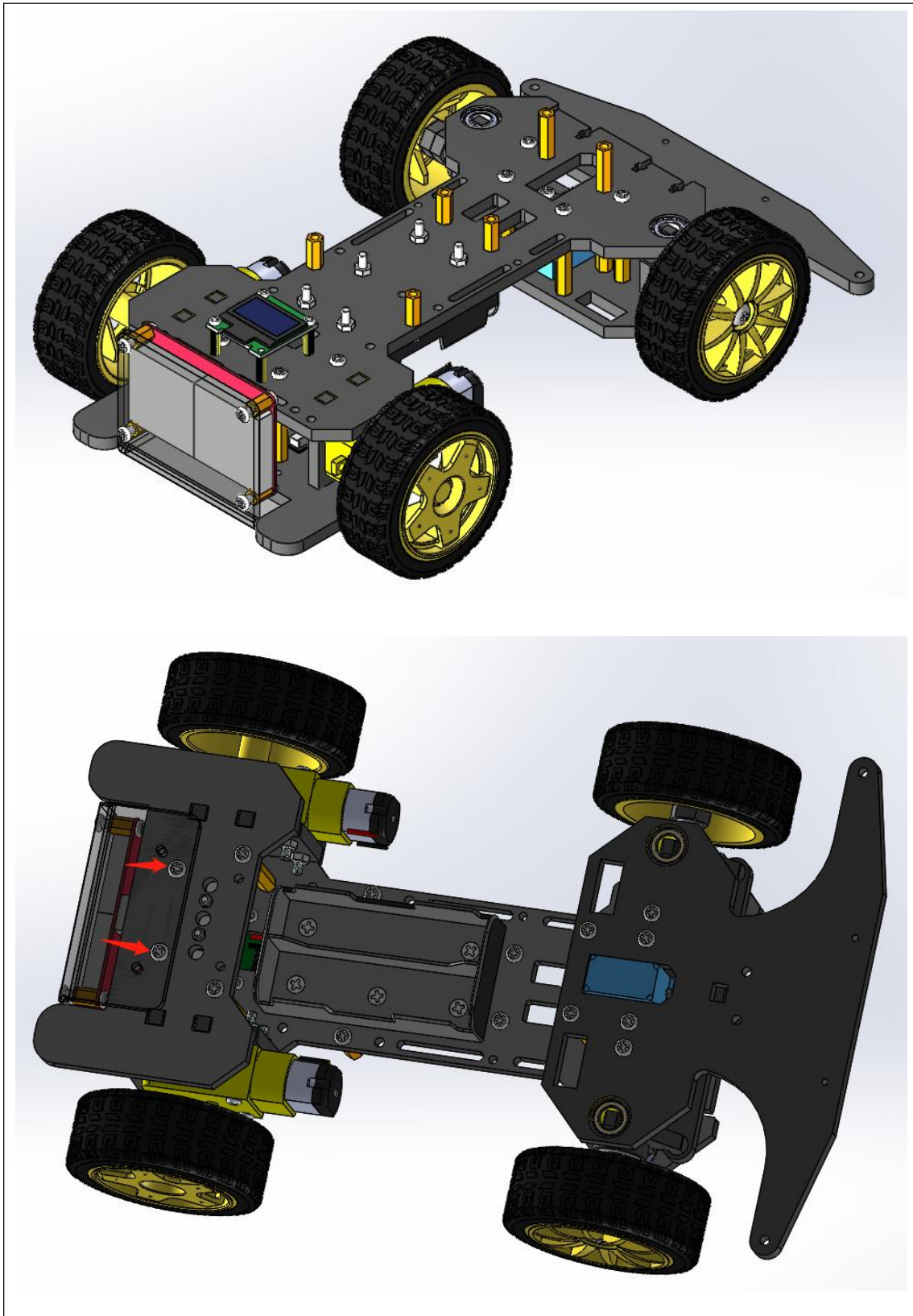






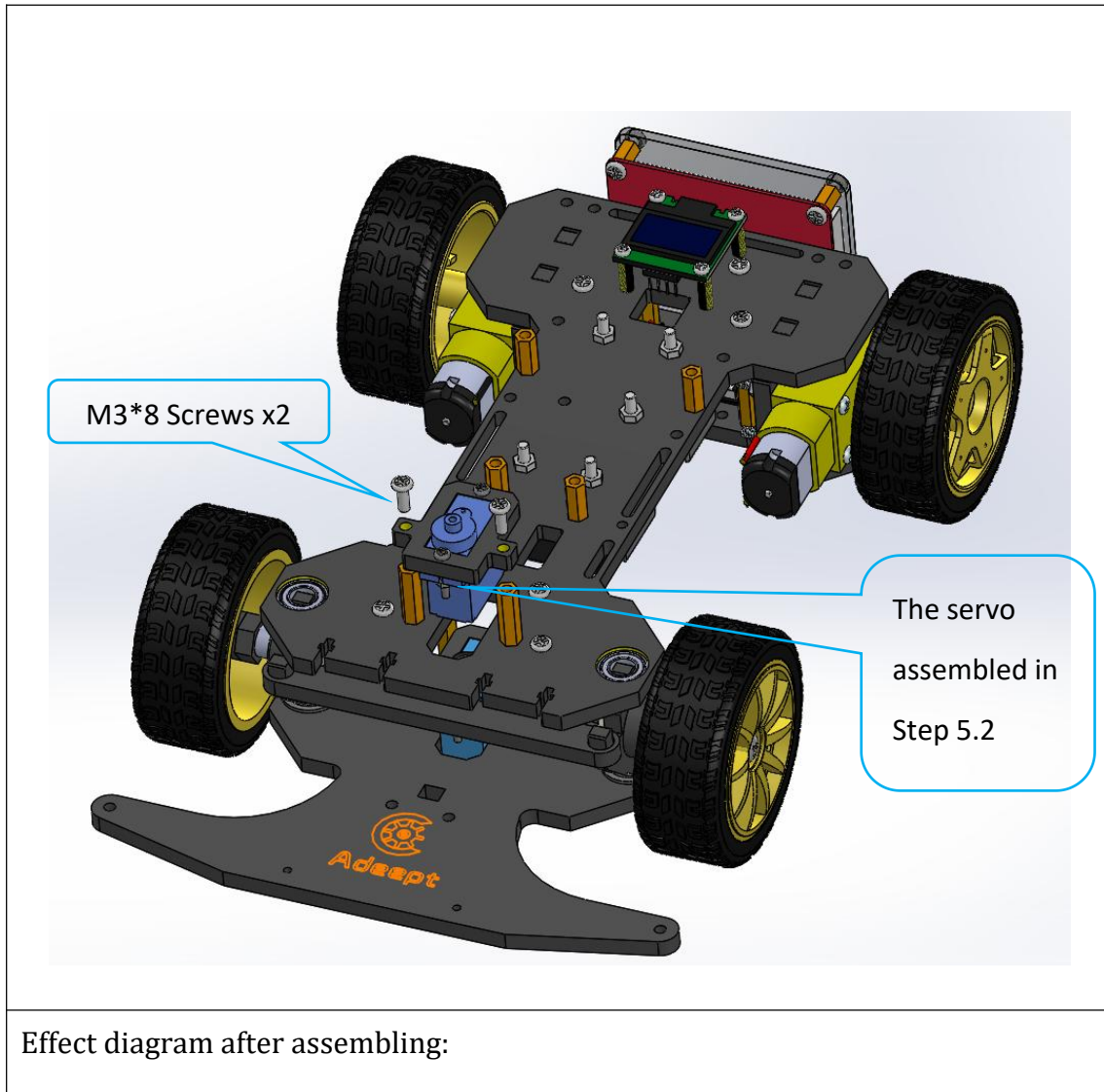


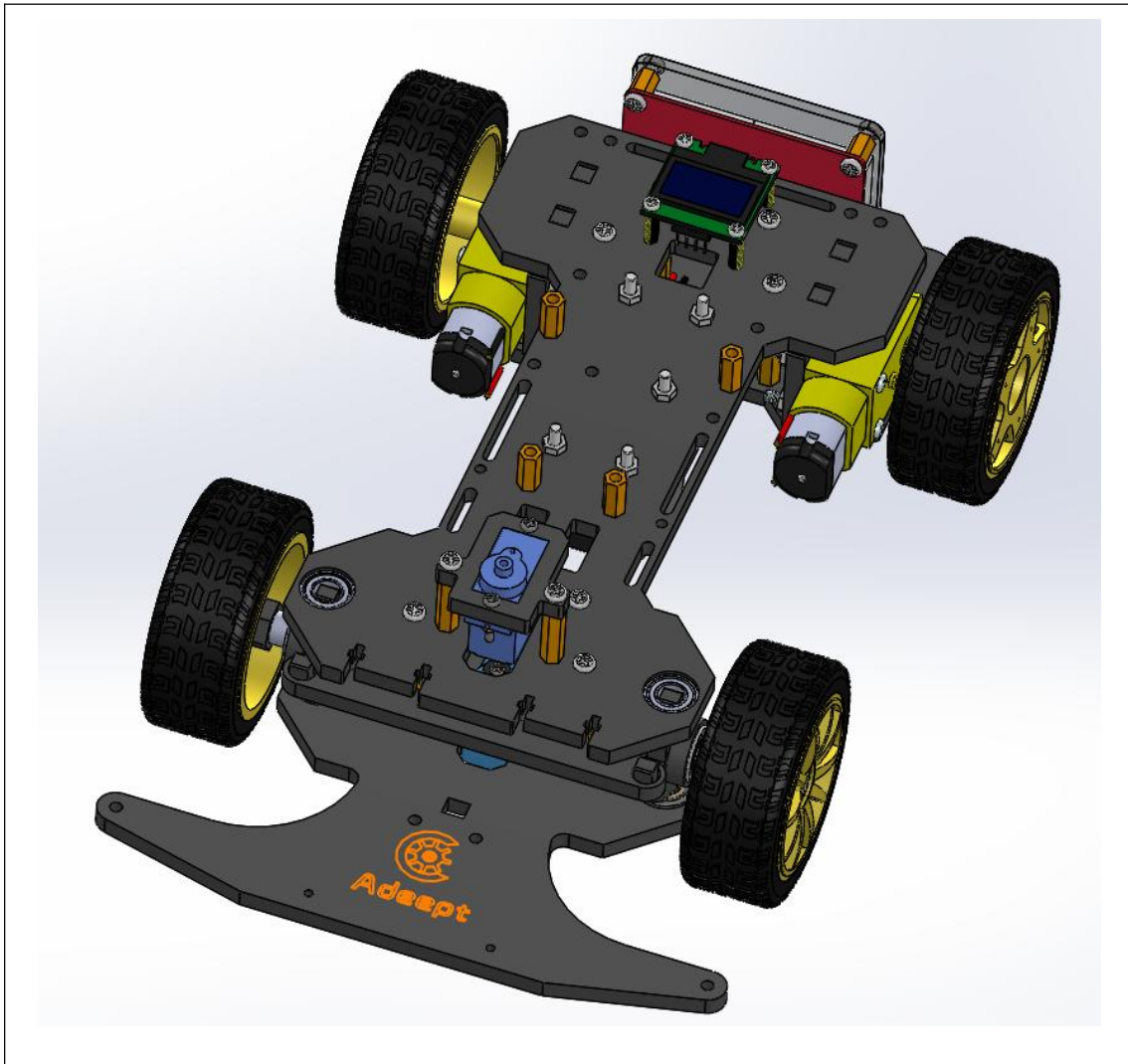
Effect diagram after assembling:



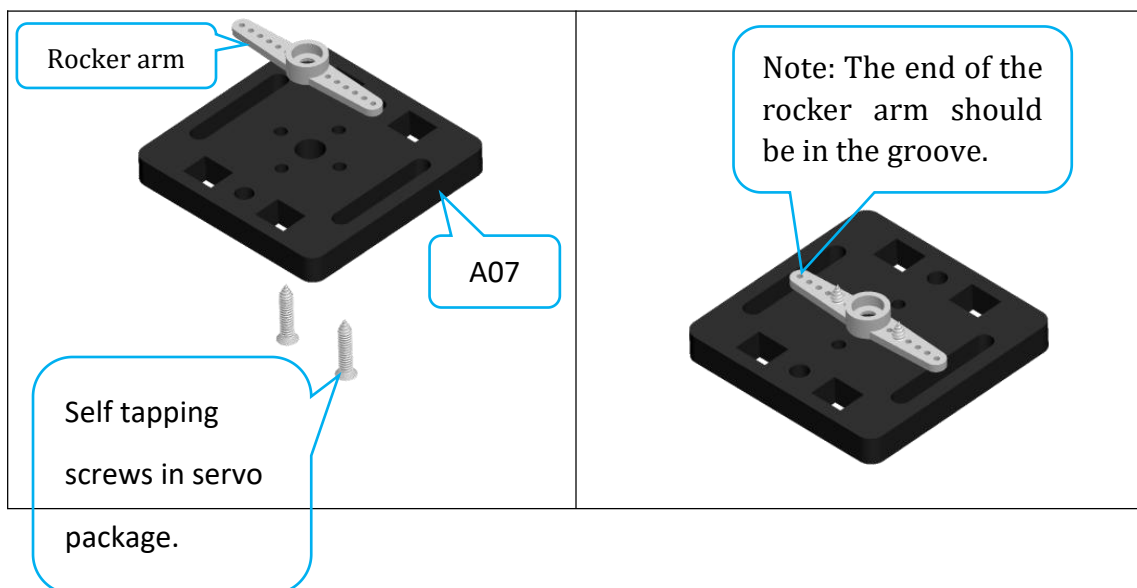
Assemble ultrasonic module

6.1 Install the servo(Use the second set of servo installed in 5.2).

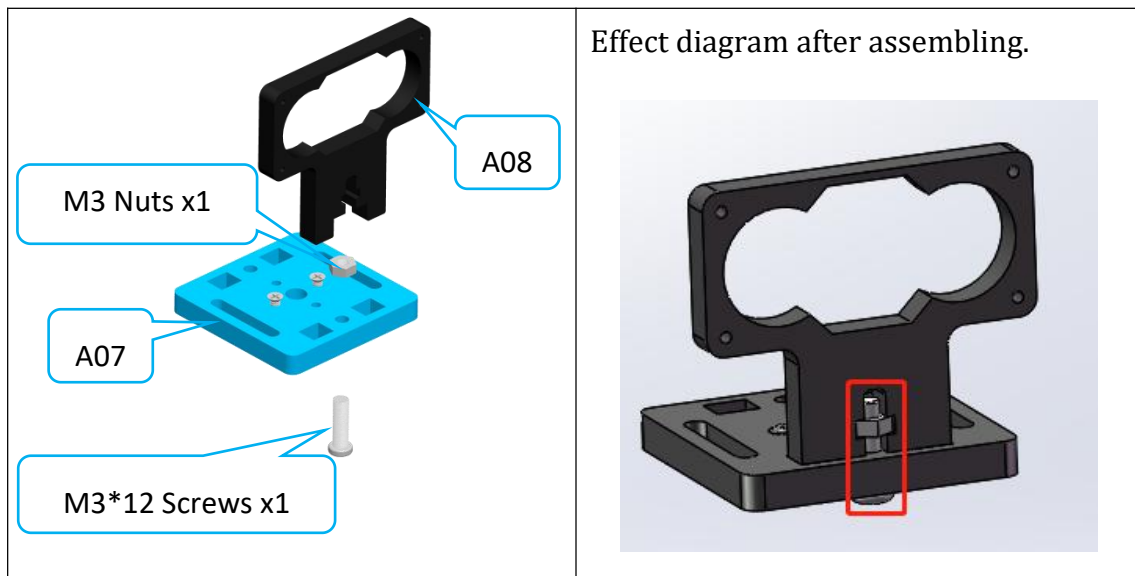




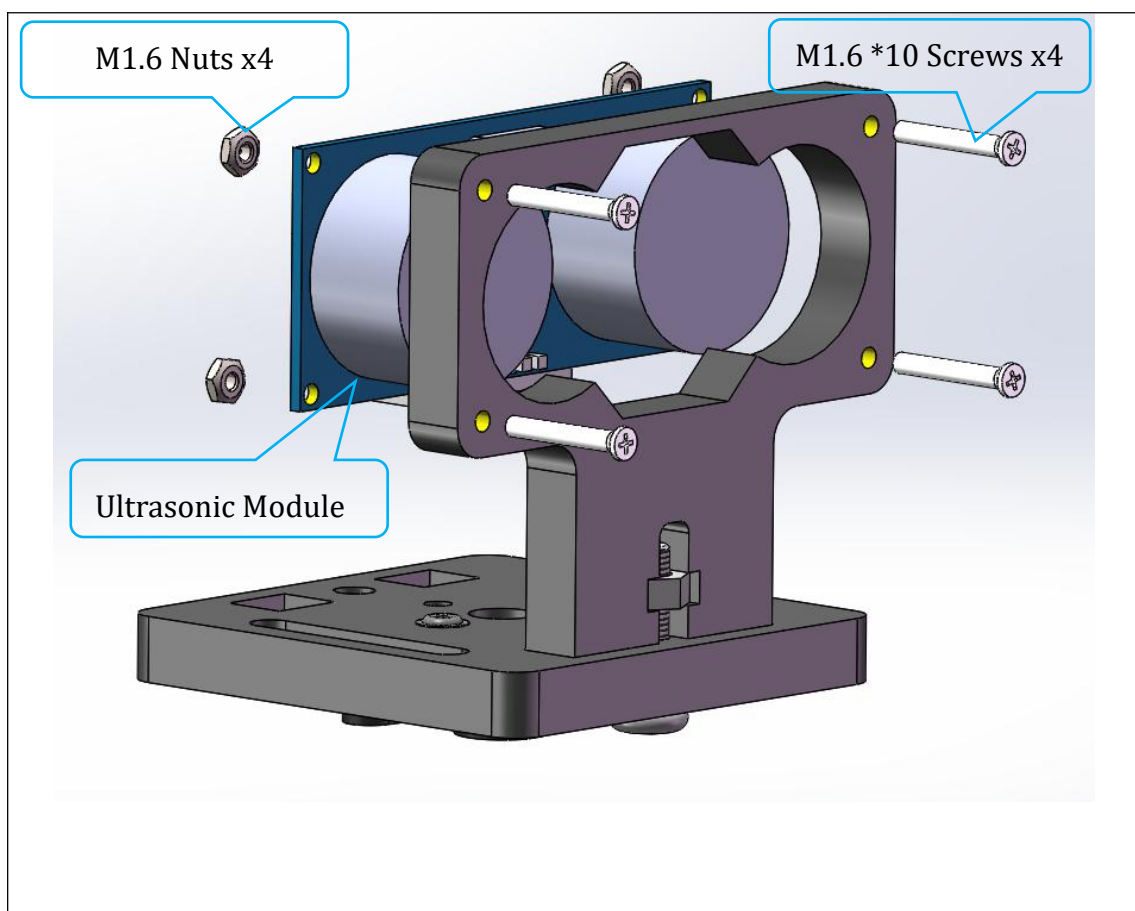
6.2 Fix rocker arm to A07.



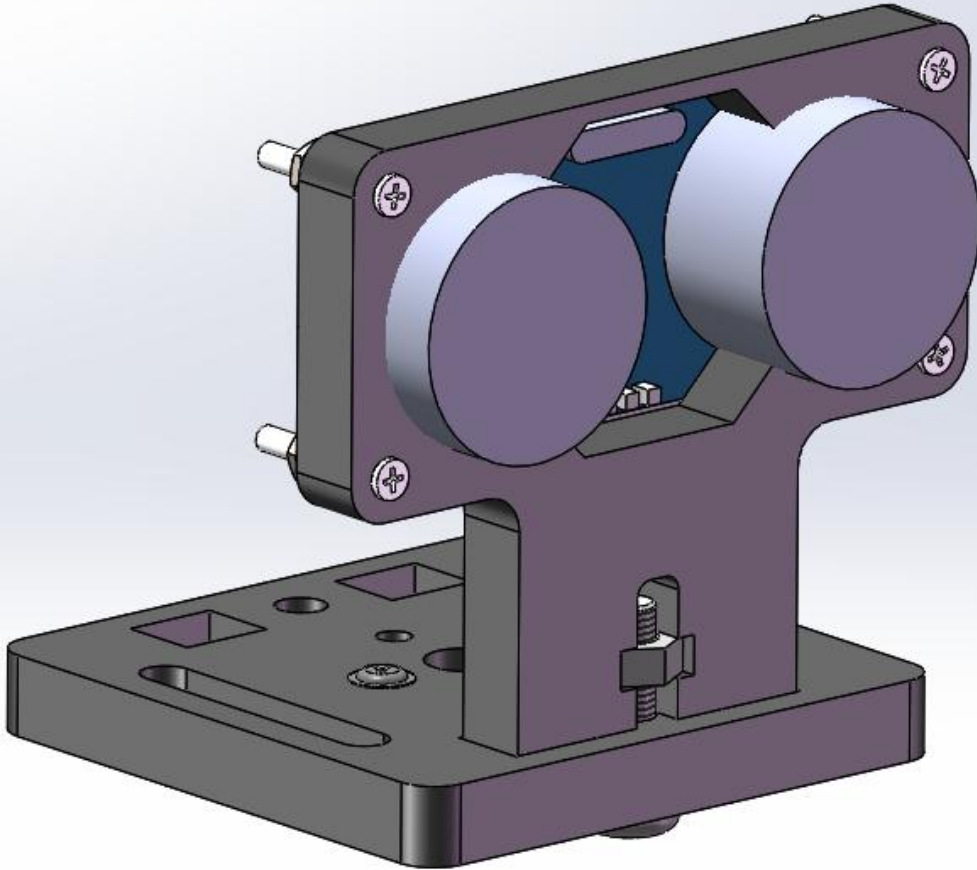
6.3 Assembly A07 and A08.

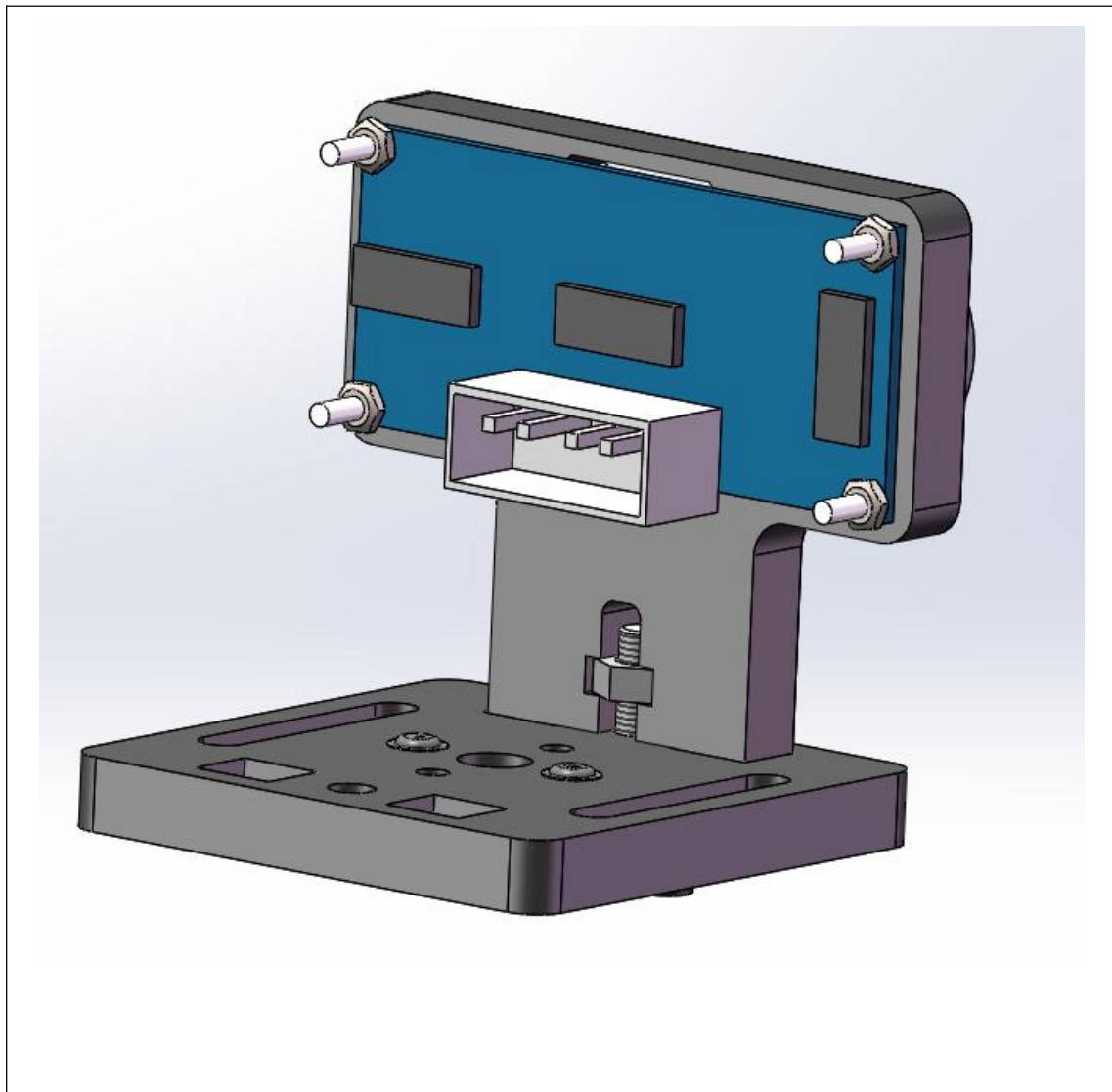


6.4 Install the ultrasonic module to A08

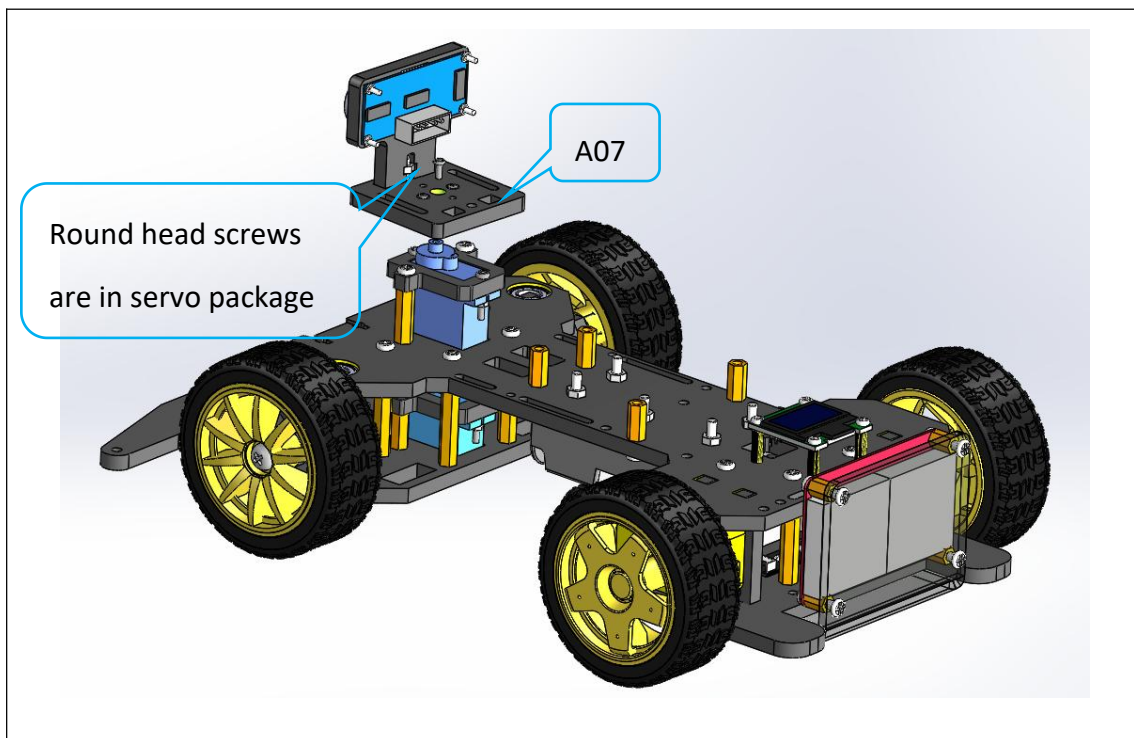


Effect diagram after assembling.

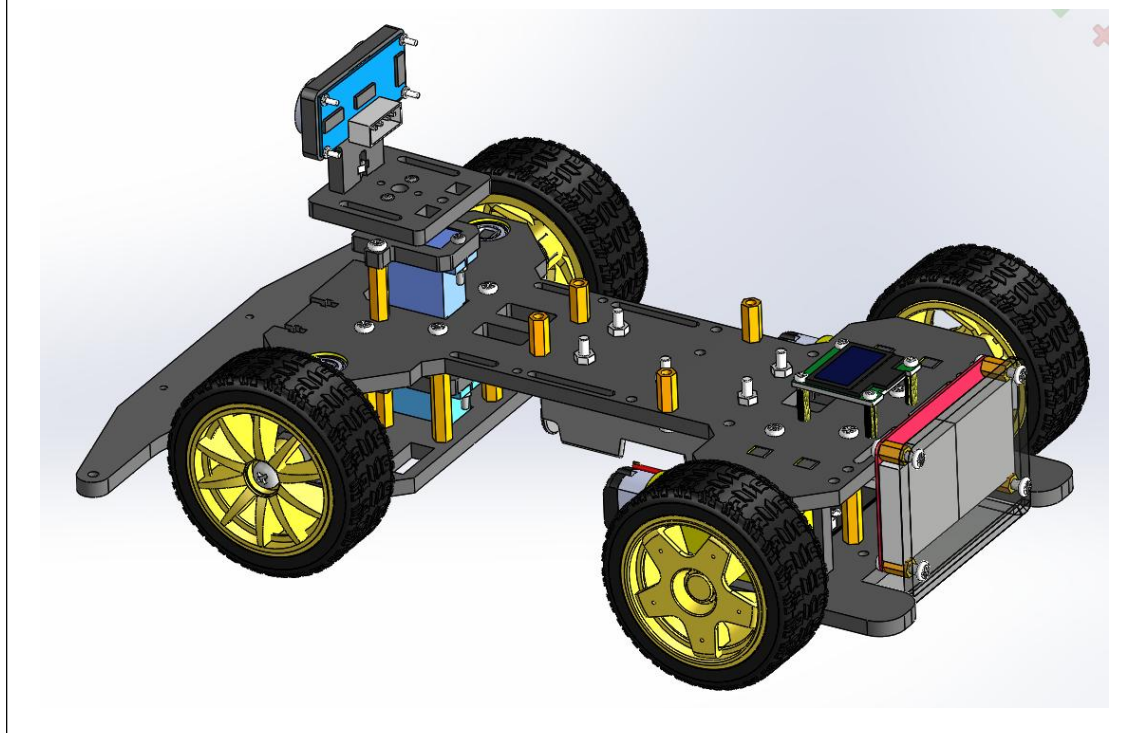


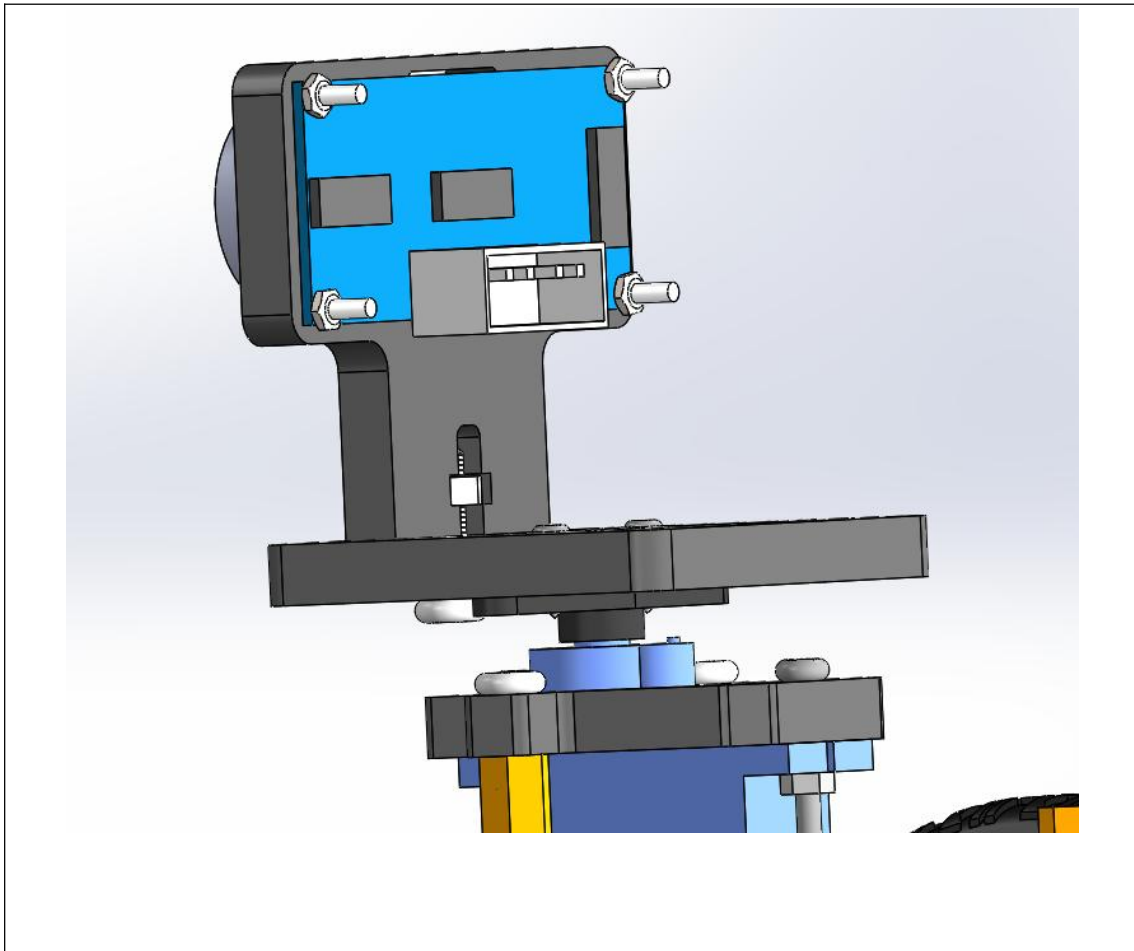


6.5 Assemble A07 to servo.



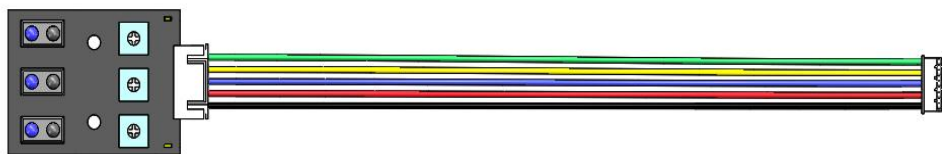
Effect diagram after assembling:





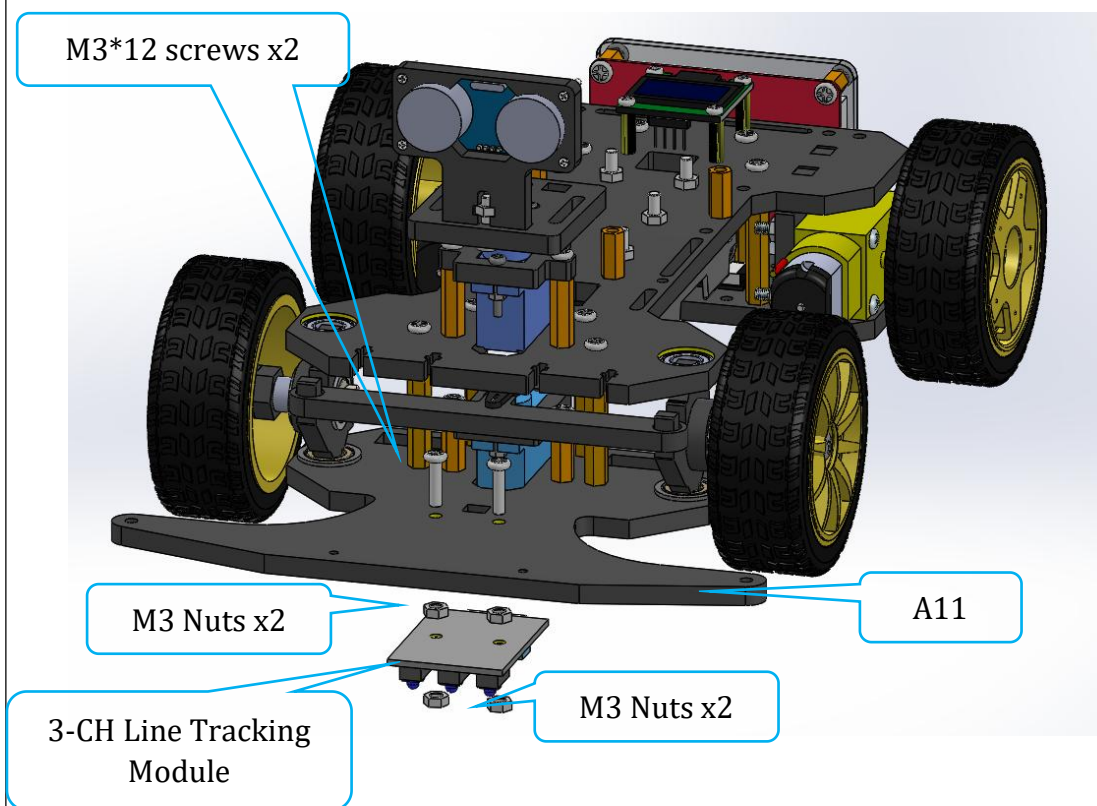
7.1 Install 3-CH Line Tracking Module

Note: Before installing the 3-CH Line Tracking Module, connect the cables (as shown in the following figure).

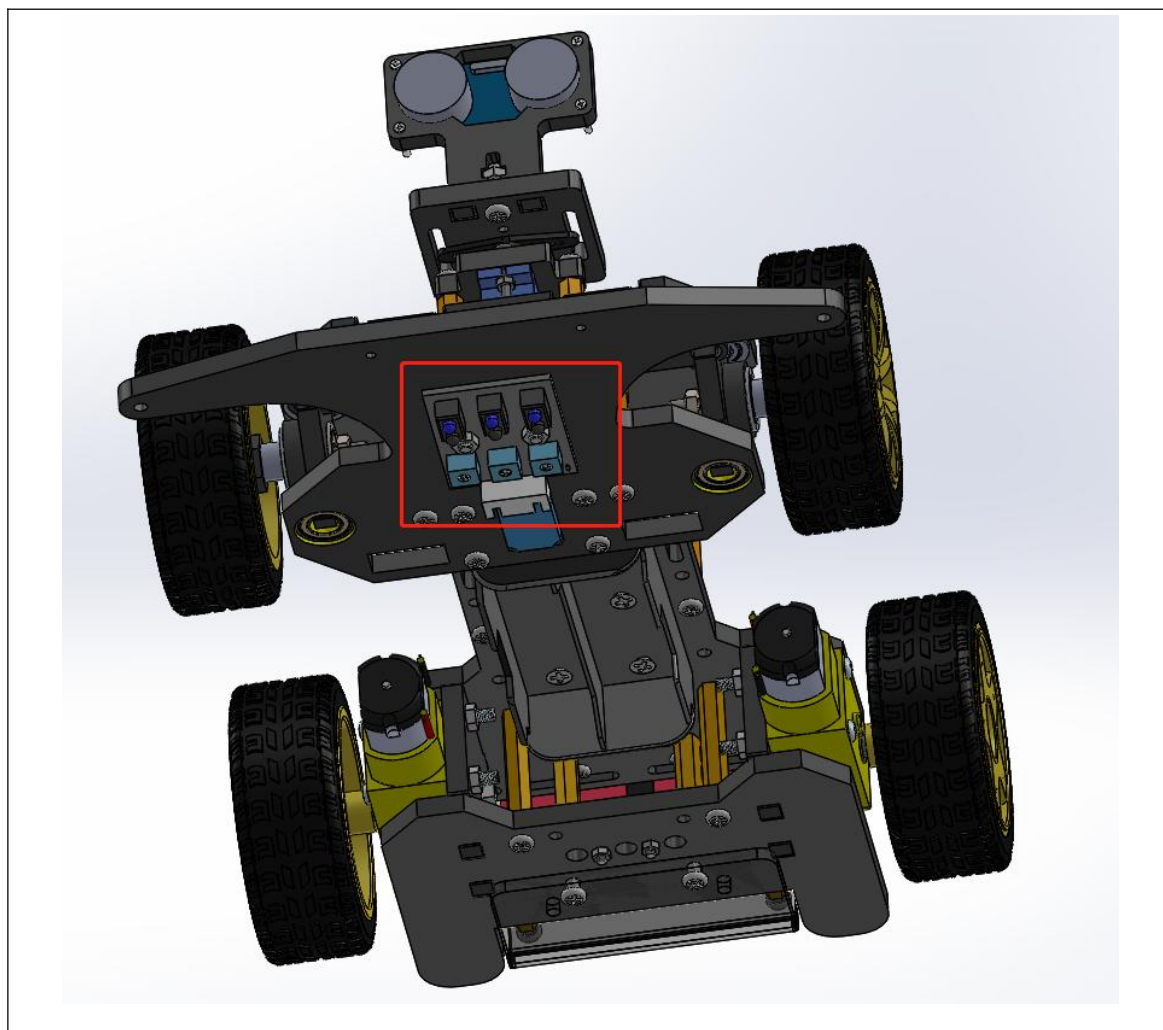


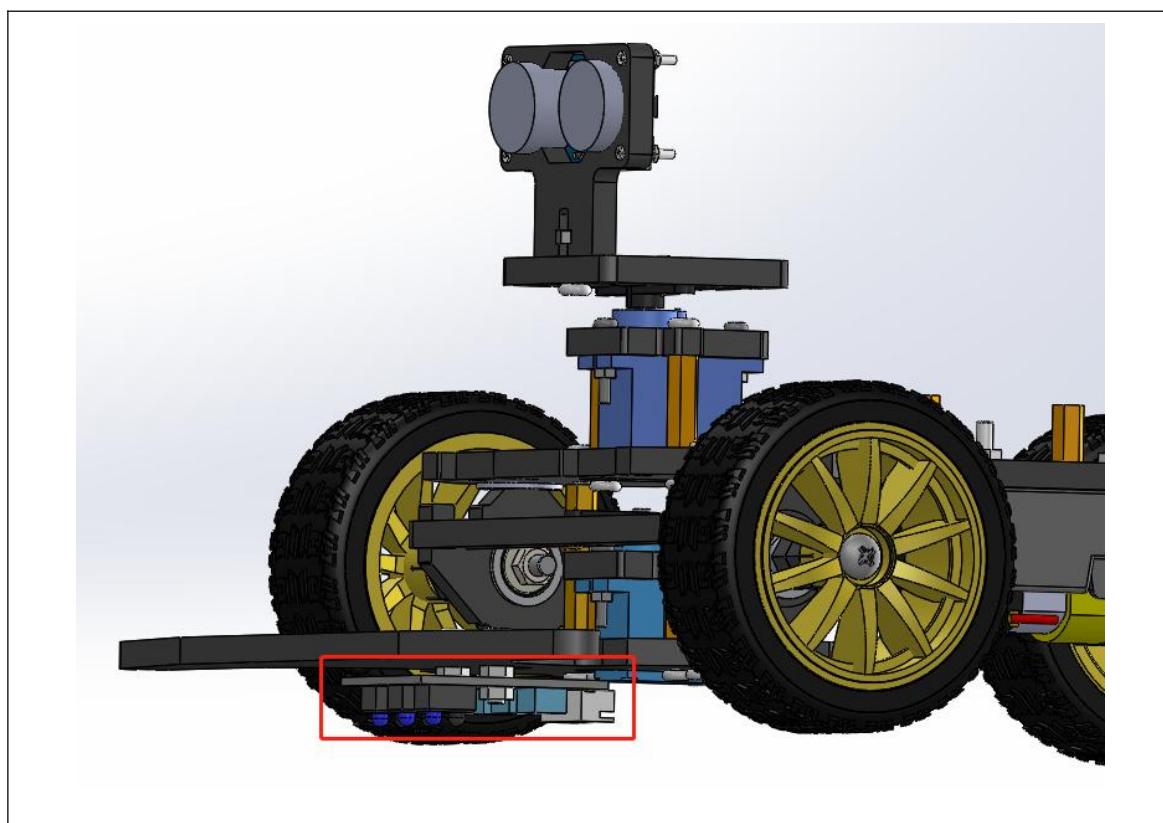
Note: There are two M3 nuts between the 3-CH Line Tracking Module and A11 as the base cushion.

Use two M3*12 screws and four M3 nuts.



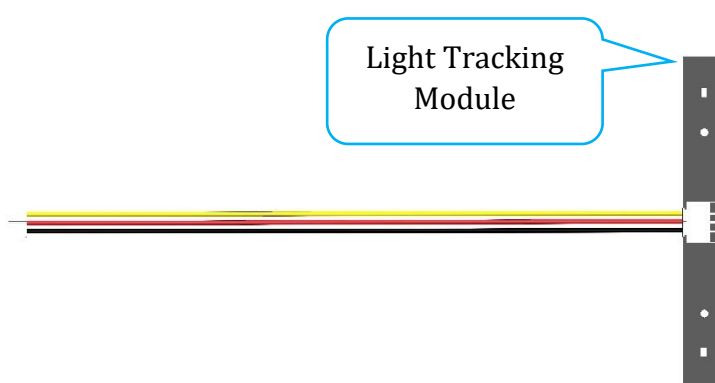
Effect diagram after assembling:

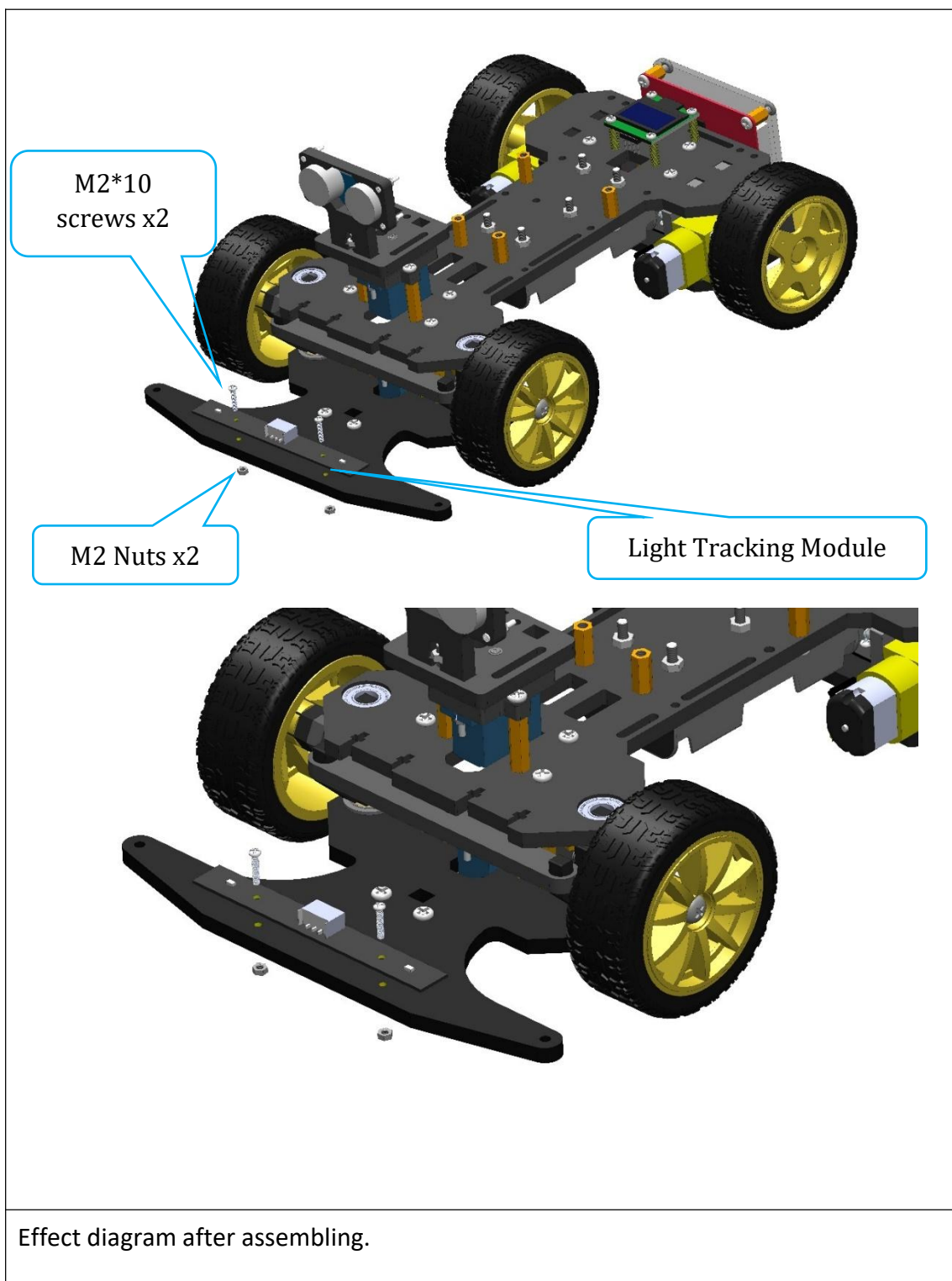


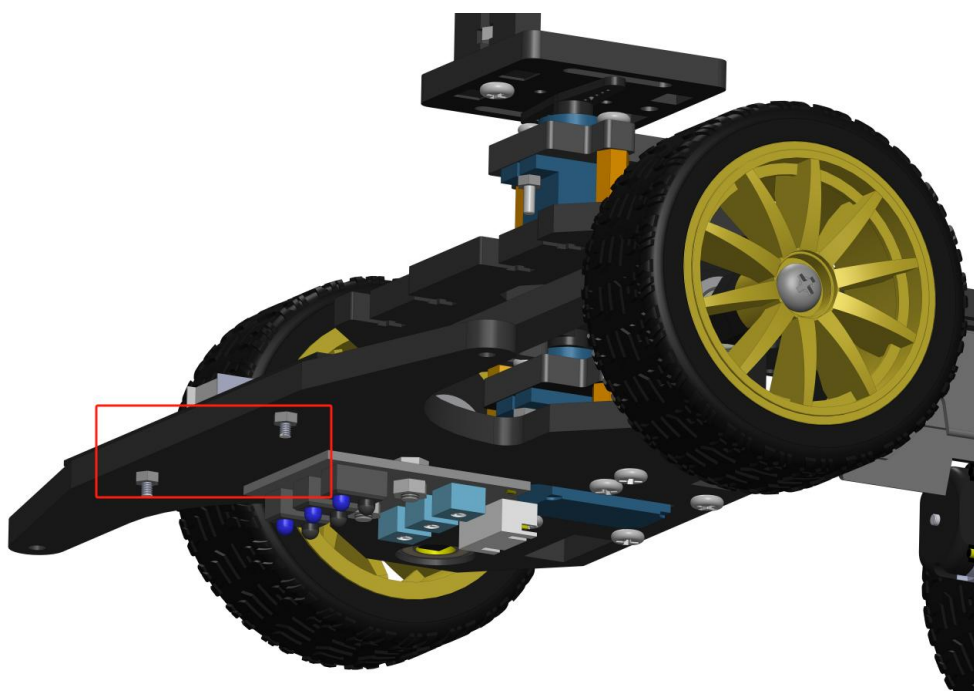
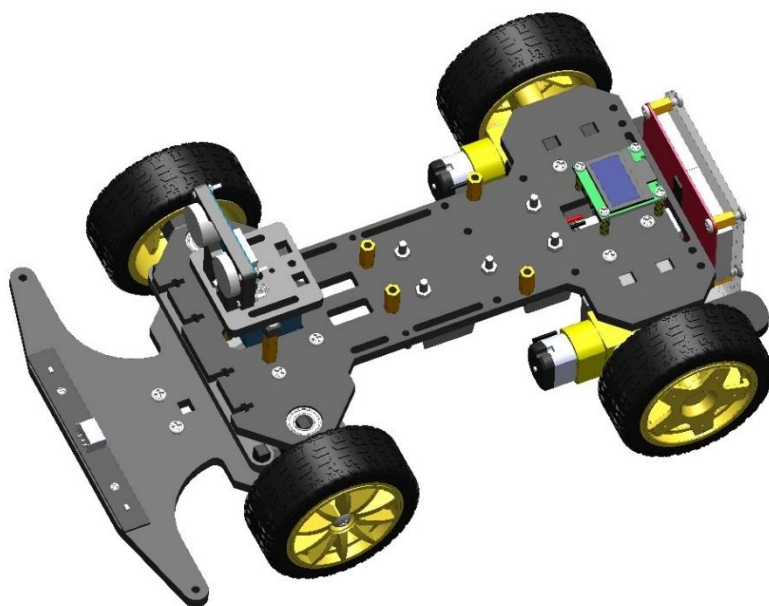


7.2 Assembly Light Tracking Module

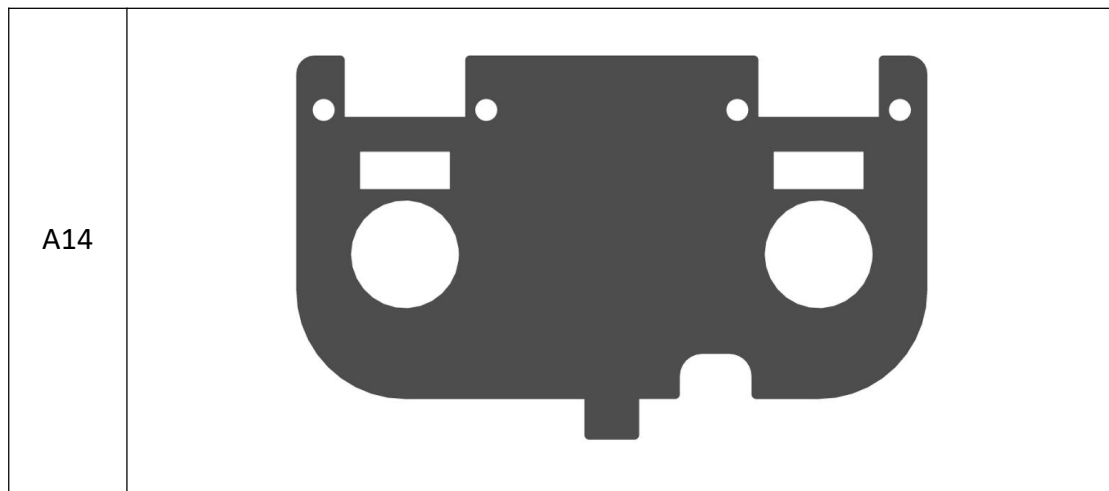
Note: Before installing the cable patrol module, connect the cable (as shown in the figure below), and the wiring port faces inward.



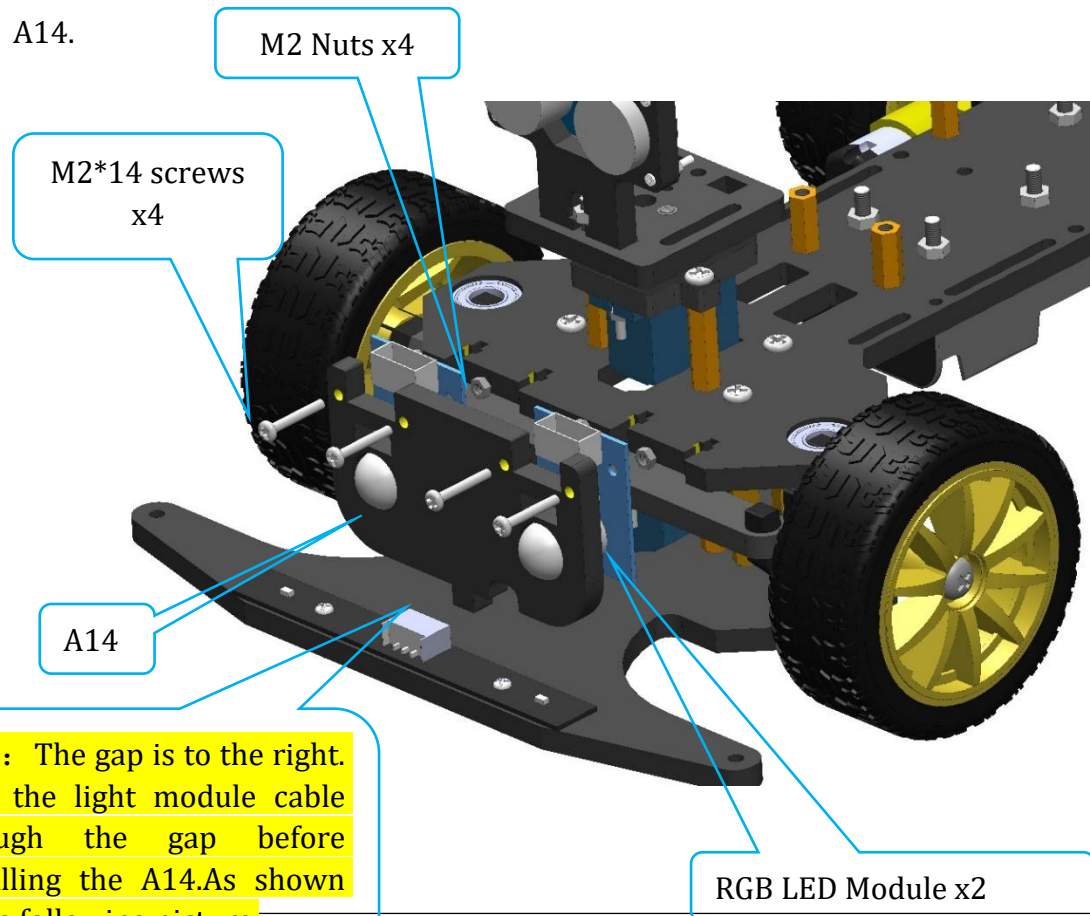


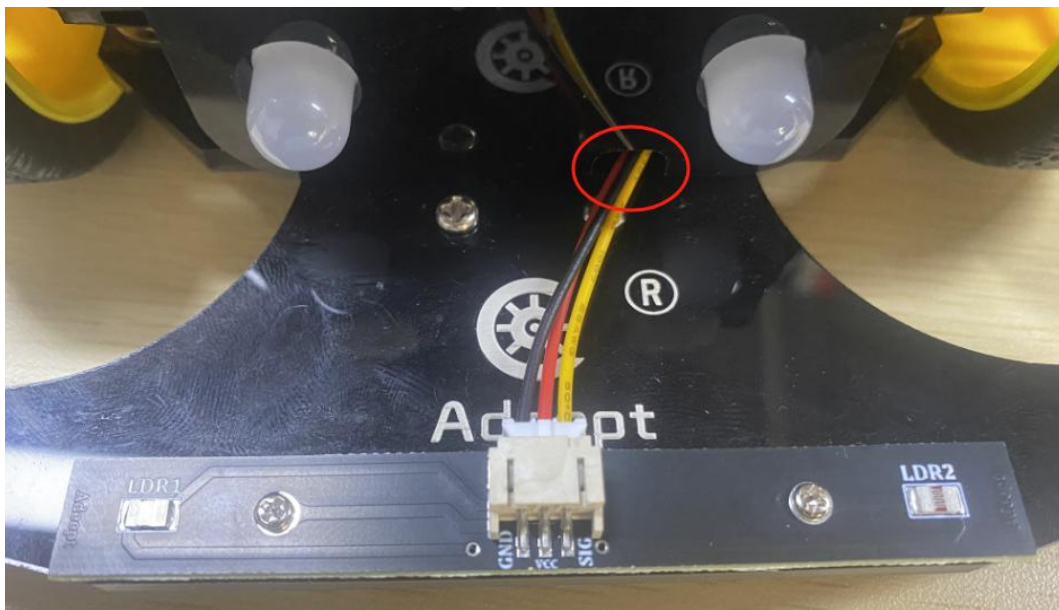


7.3 Assembly RGB LED module

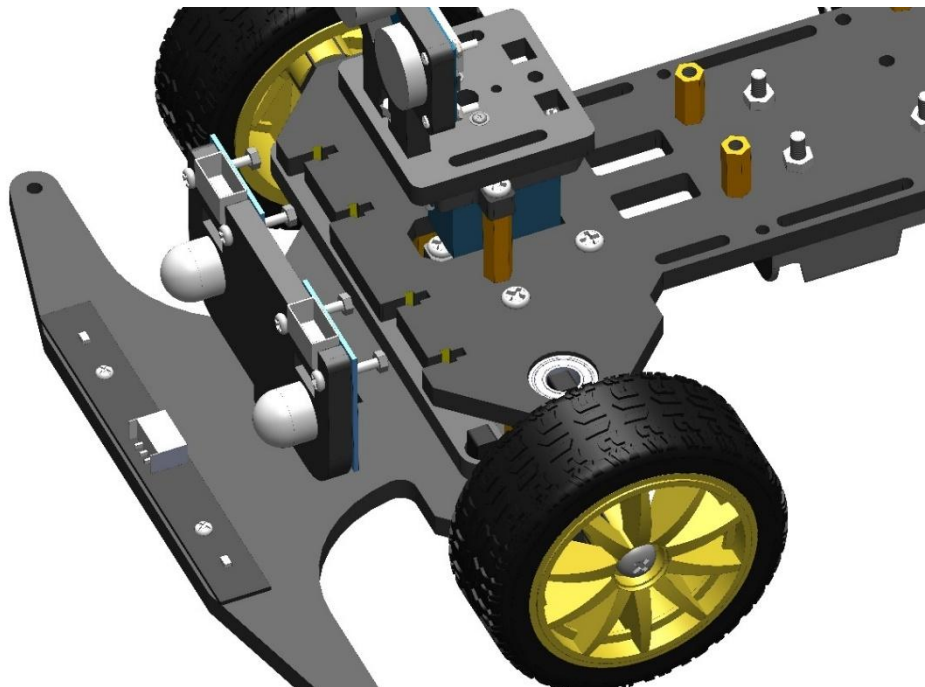


Use **two M2*14 screws** and **two M2 nuts** to install the two RGB modules and A14.

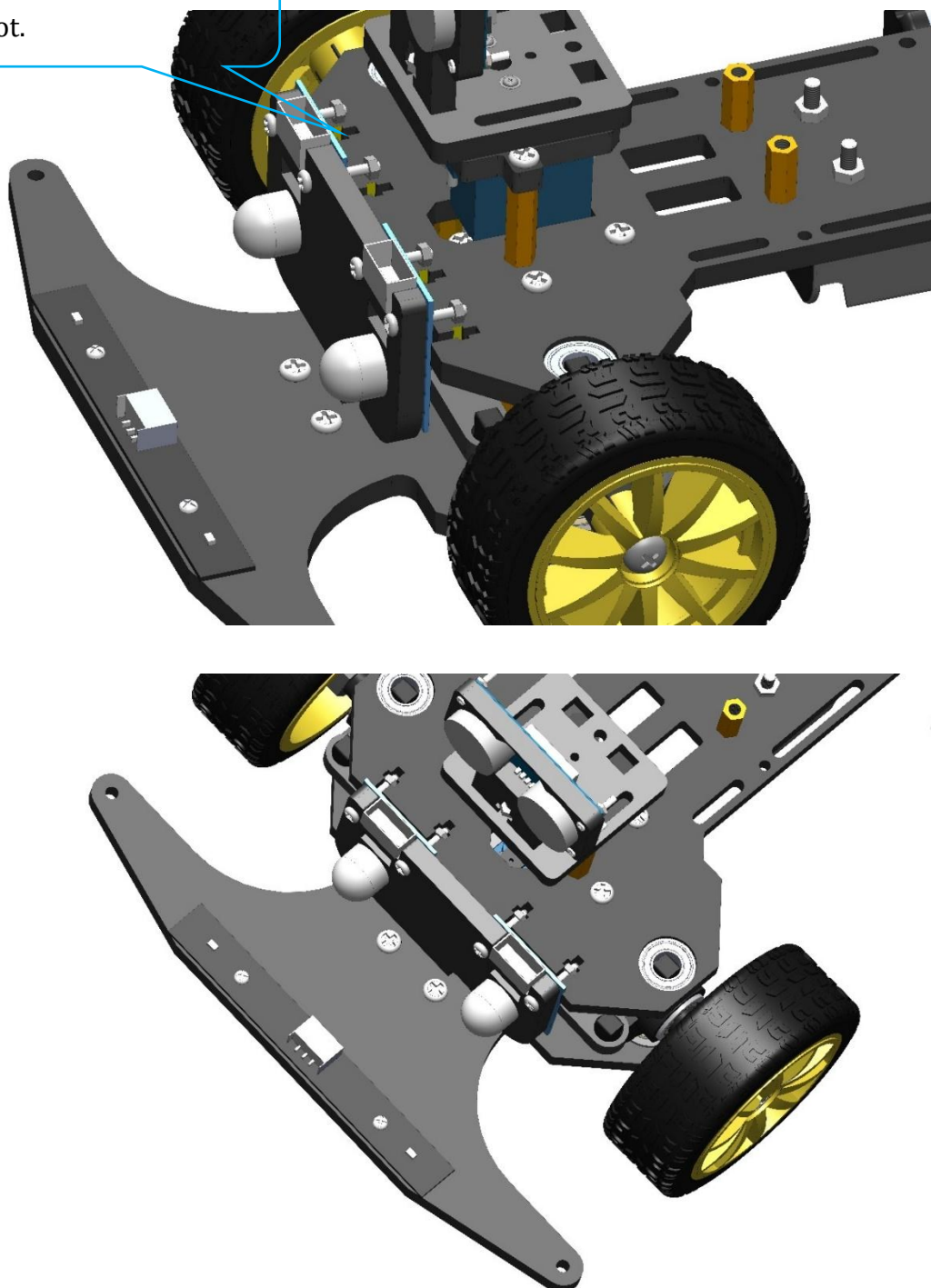


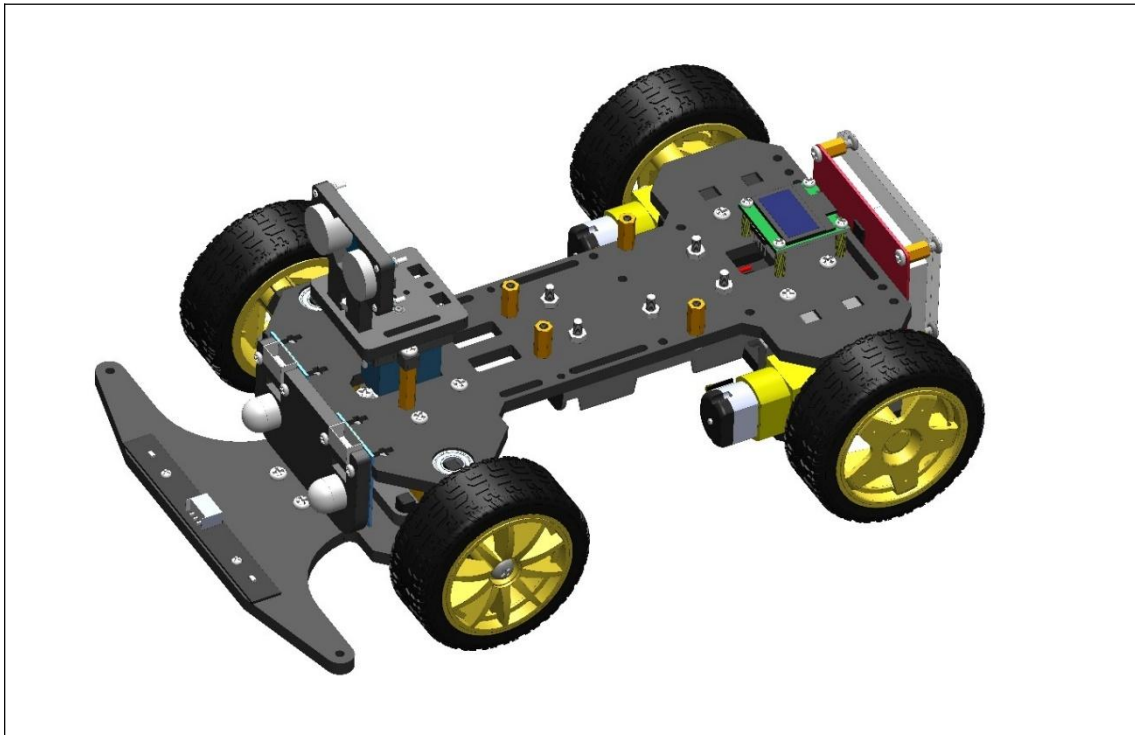


First screw on the nuts, then put it into the corresponding slot, and then tighten them.



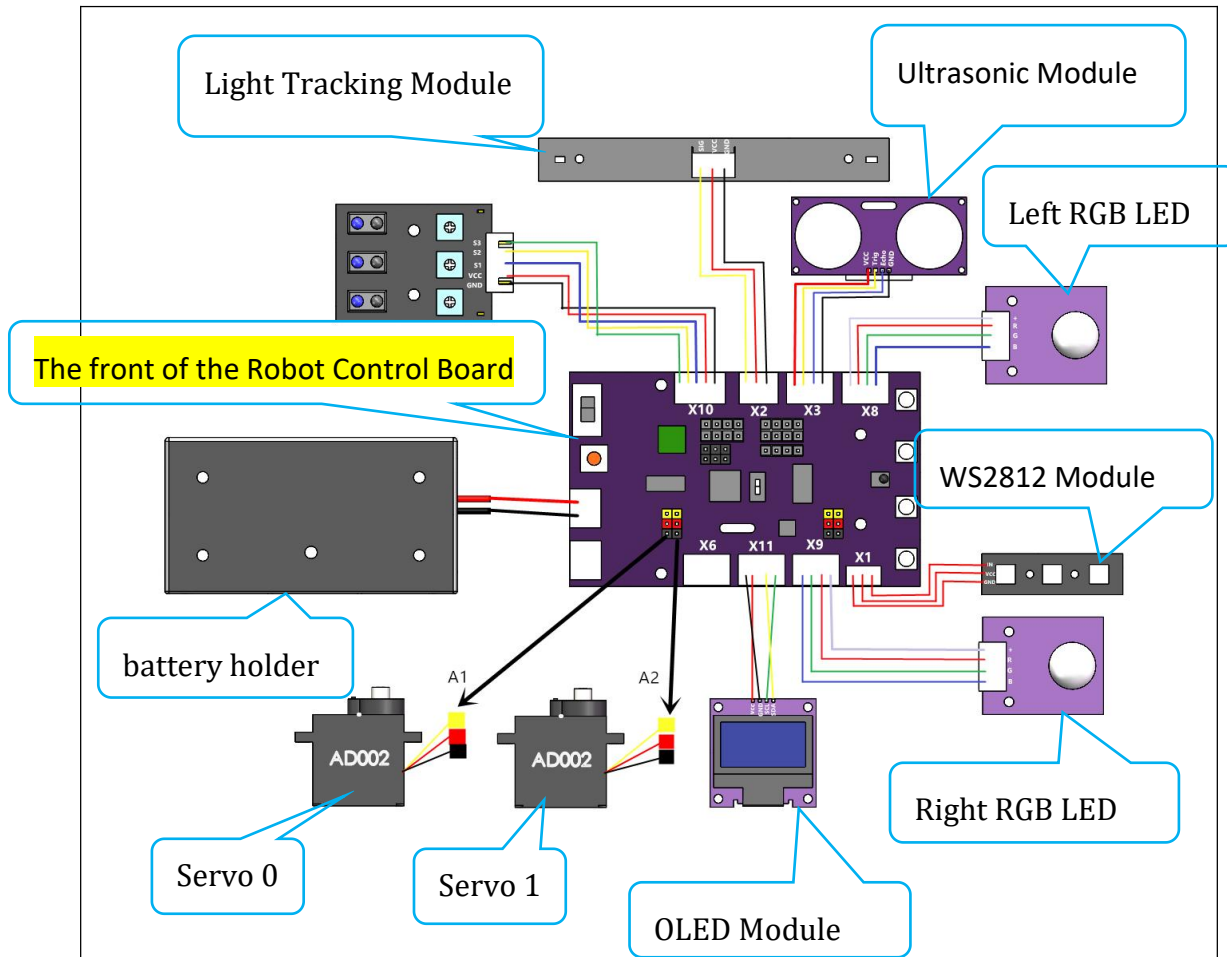
Put in the appropriate
slot.



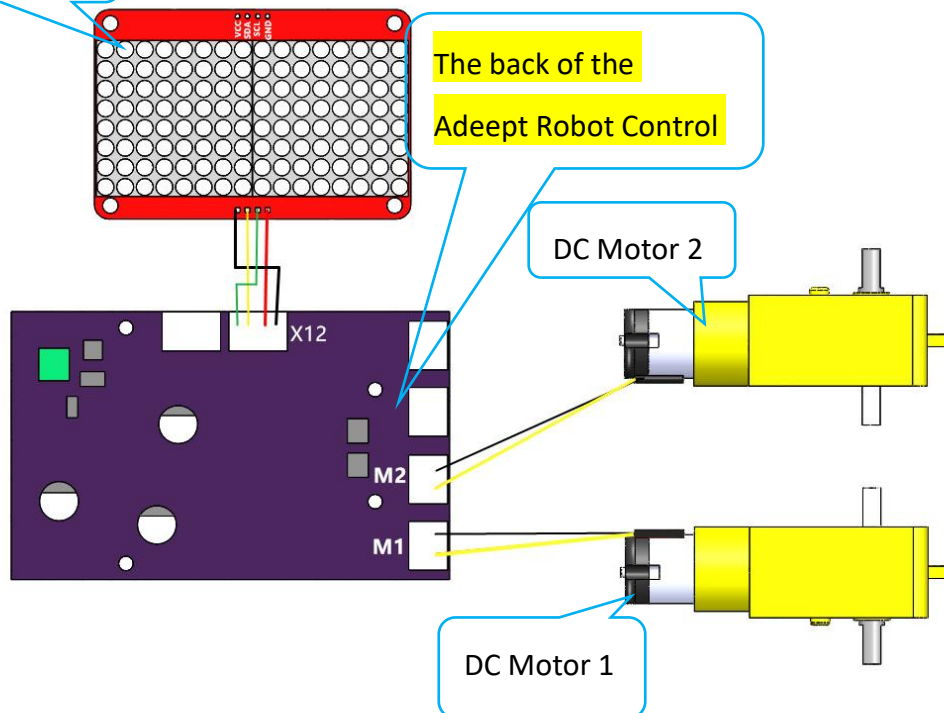


Assemble the Adept Robot Control Board

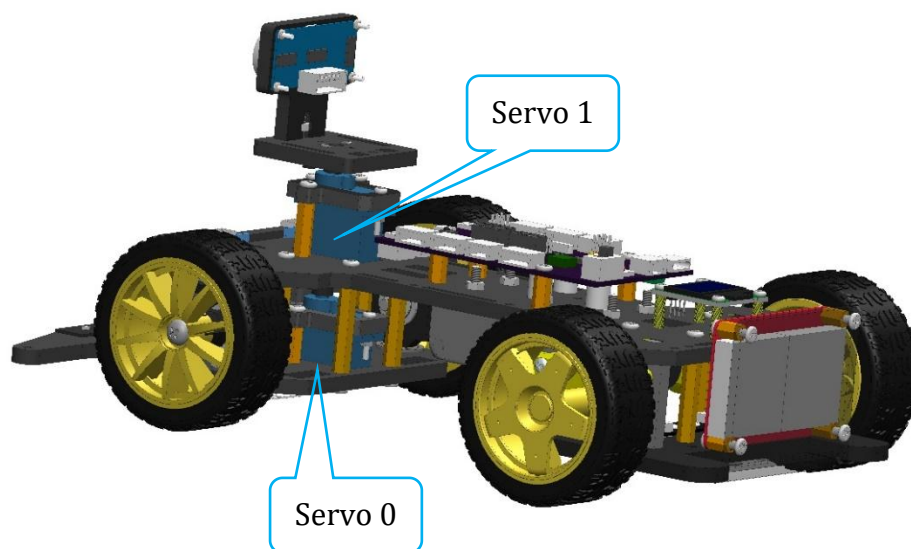
Please connect the circuit correctly before installation. As shown in the following picture.



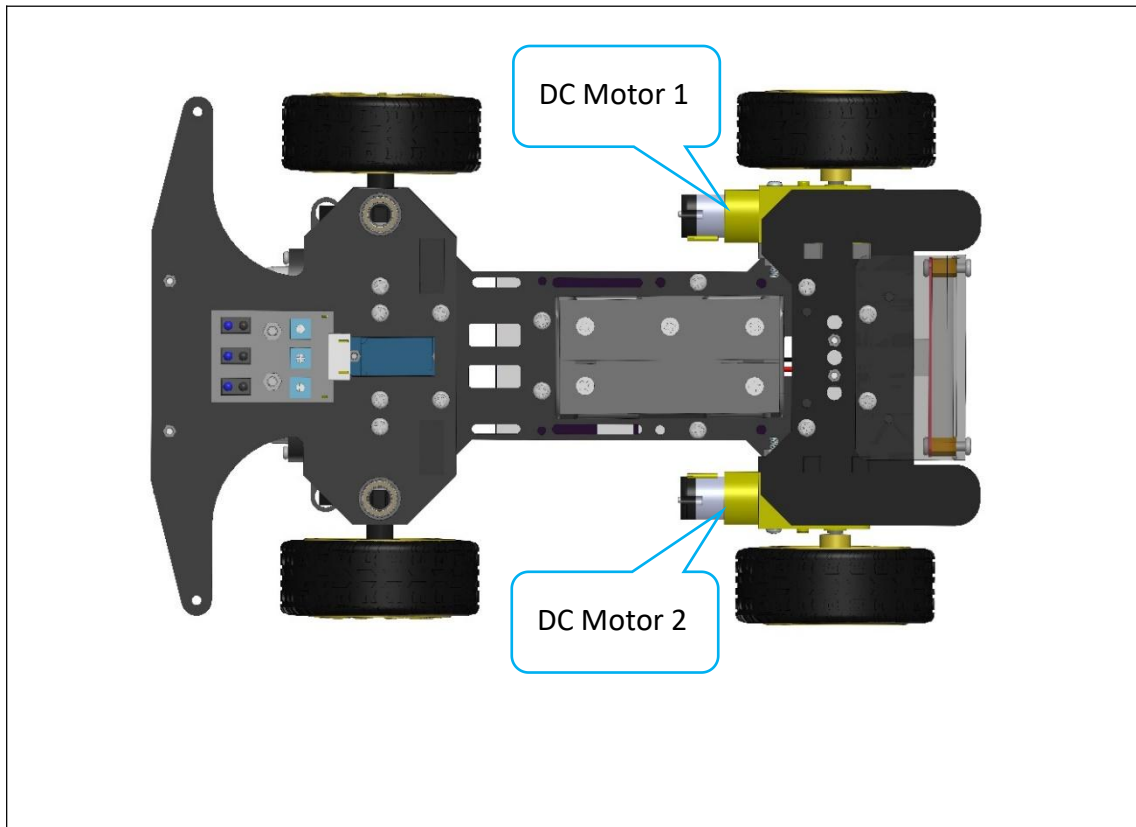
I2C matrix display



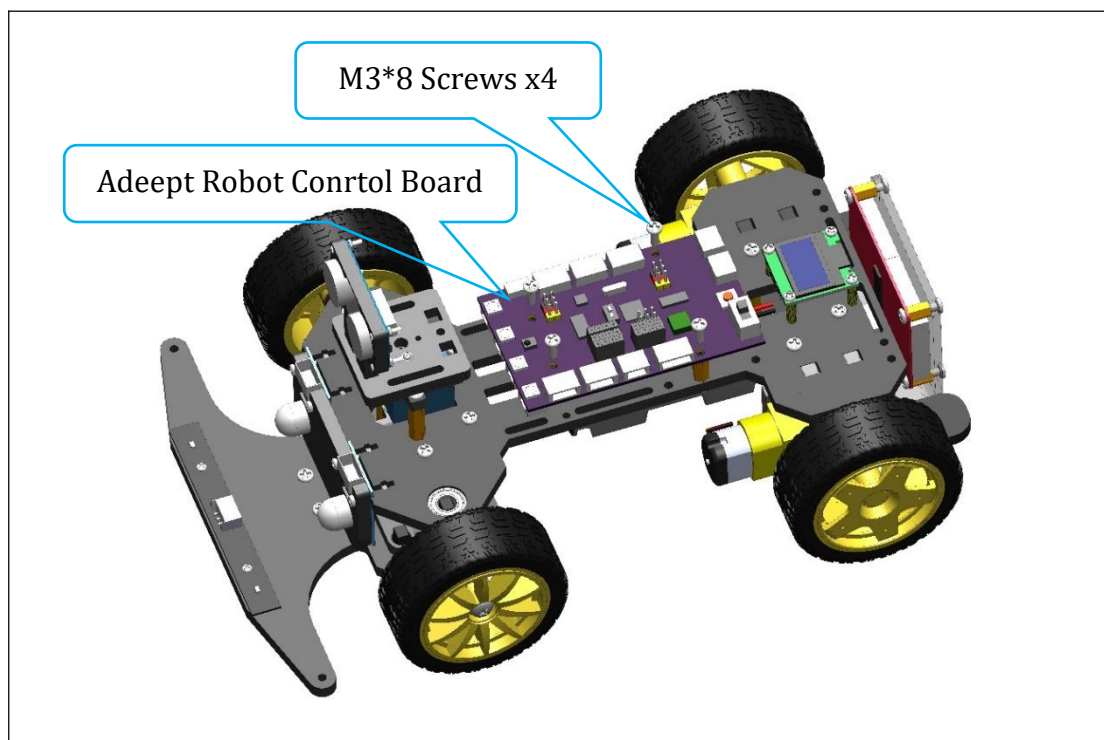
The following figure shows the locations of Servo 0, Servo 1:



The following figure shows the locations of DC Motor 1, DC Motor 2:



8.1 Install the Adept Robot Control Board to A01.



Effect diagram after assembling:

