

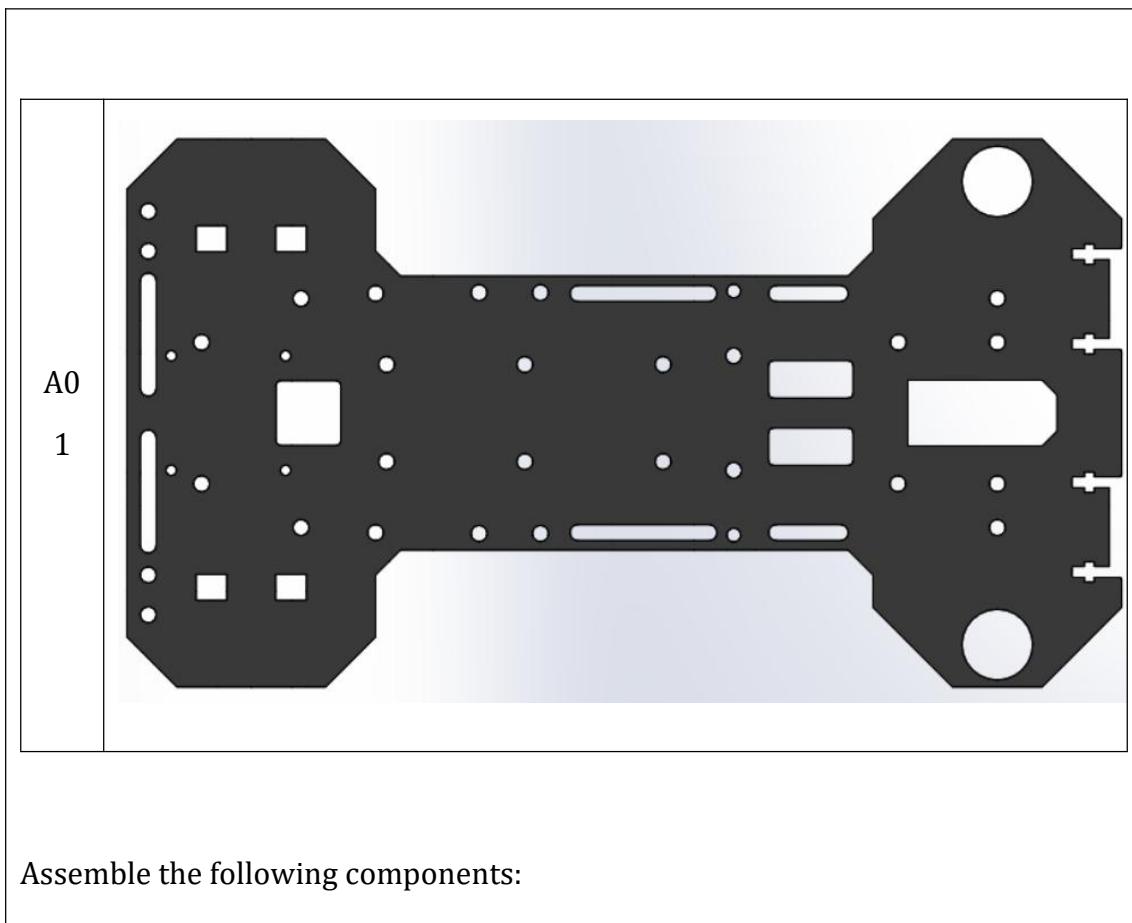
## Assembly

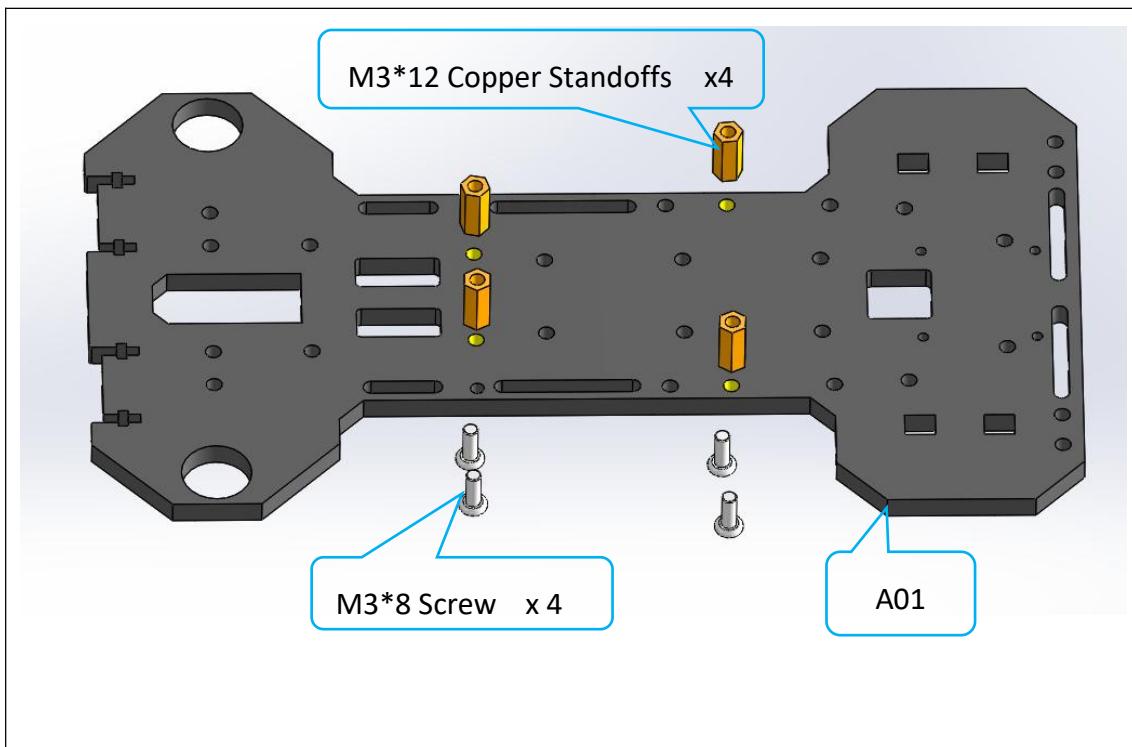
Please see "1 Adjust the initial angle of the servo " before assembling.

There is a protective paper on the surface of the acrylic, you can tear off the protective paper.

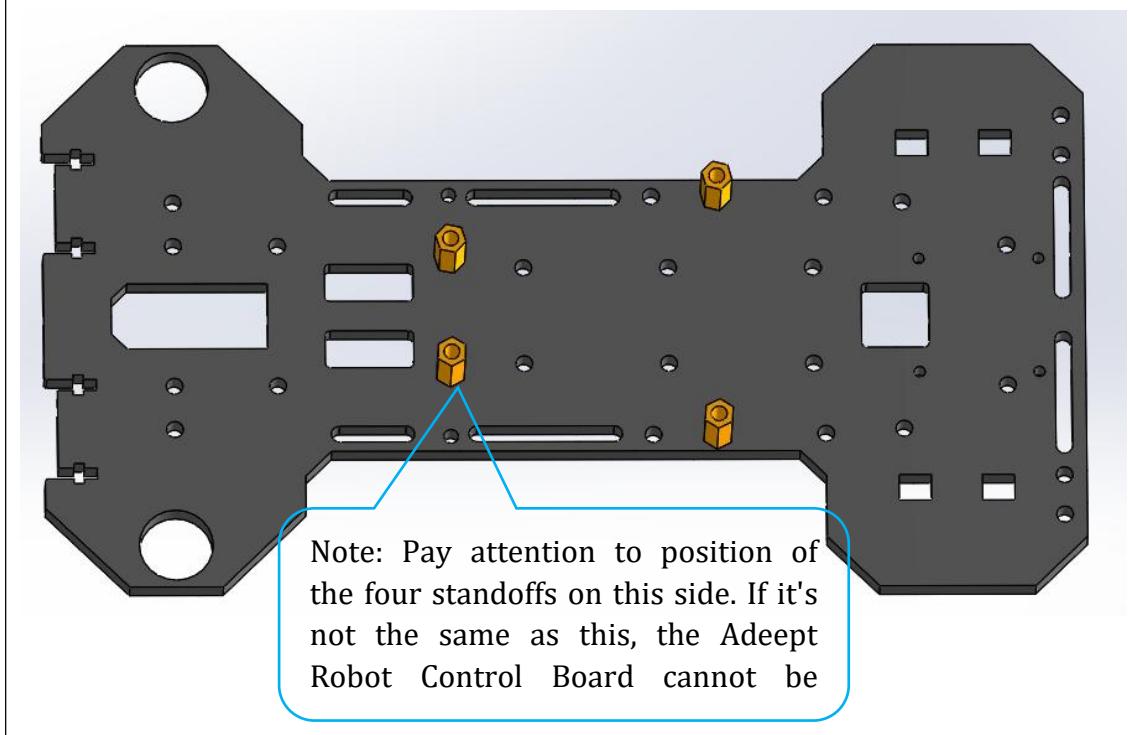
### Fix the position

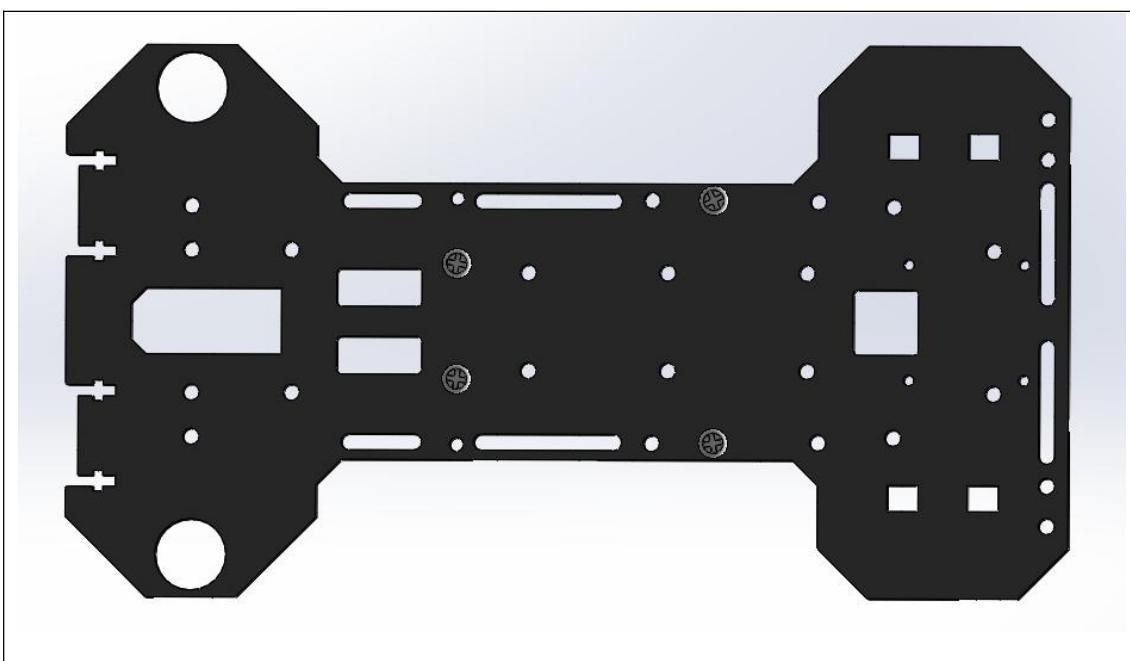
1. Place four M3 \* 12 Copper Standoffs on the holes of A12 (acrylic plate), and then fix them with four M3 \* 8 screws to determine the direction of subsequent assembly.





Effect diagram after assembling:



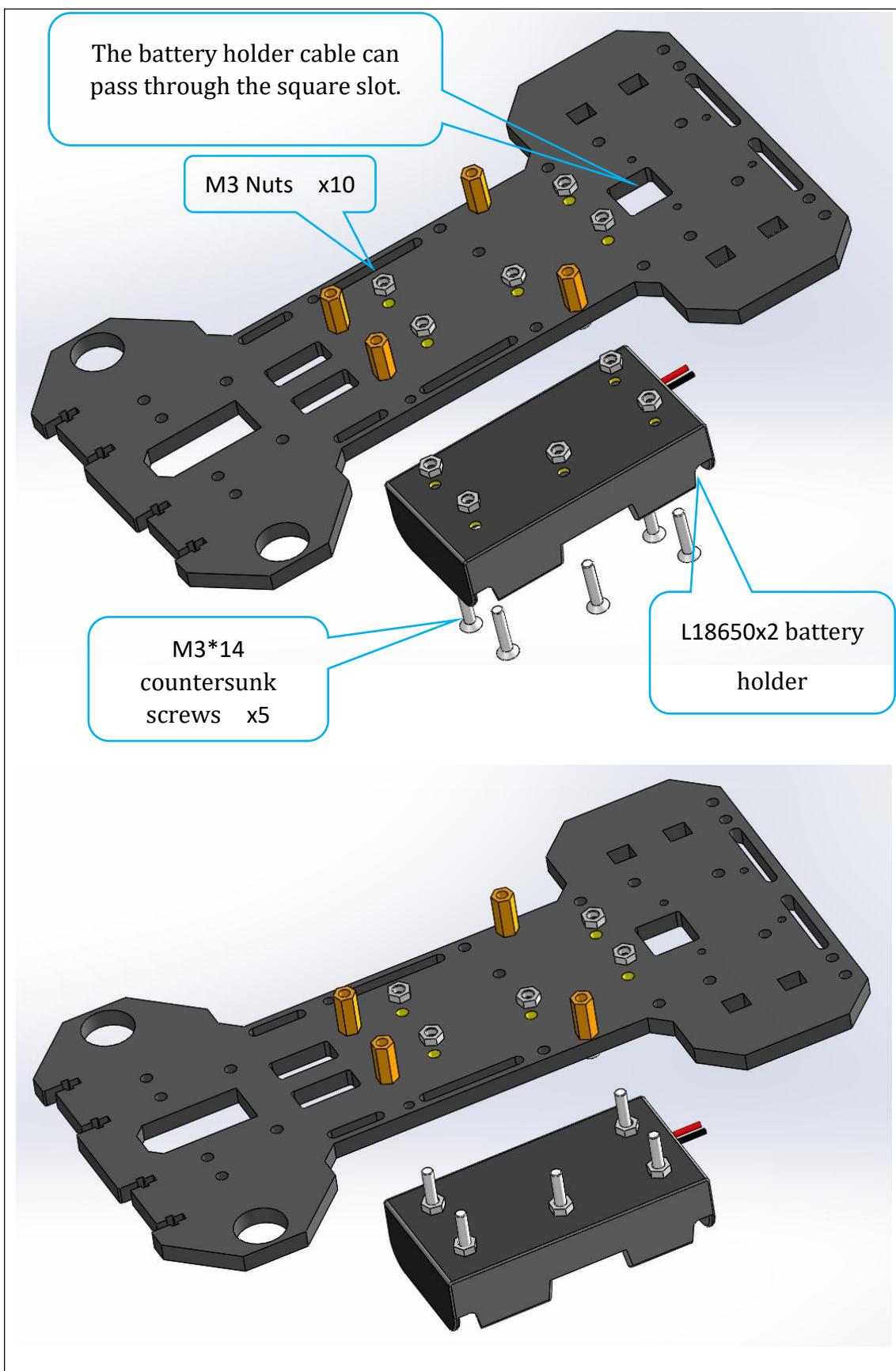


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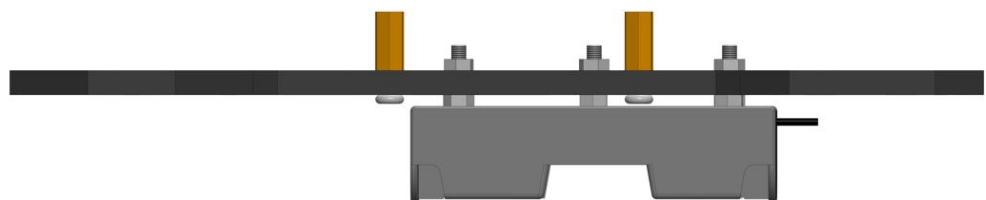
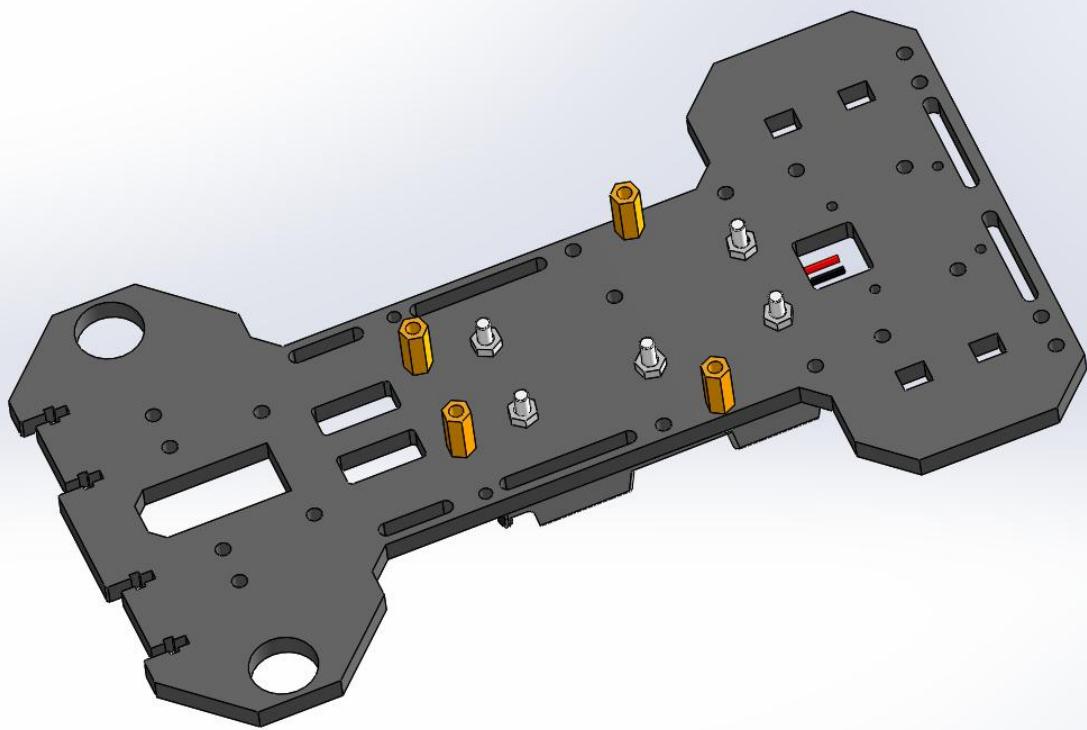
## Fix the Battery Holder

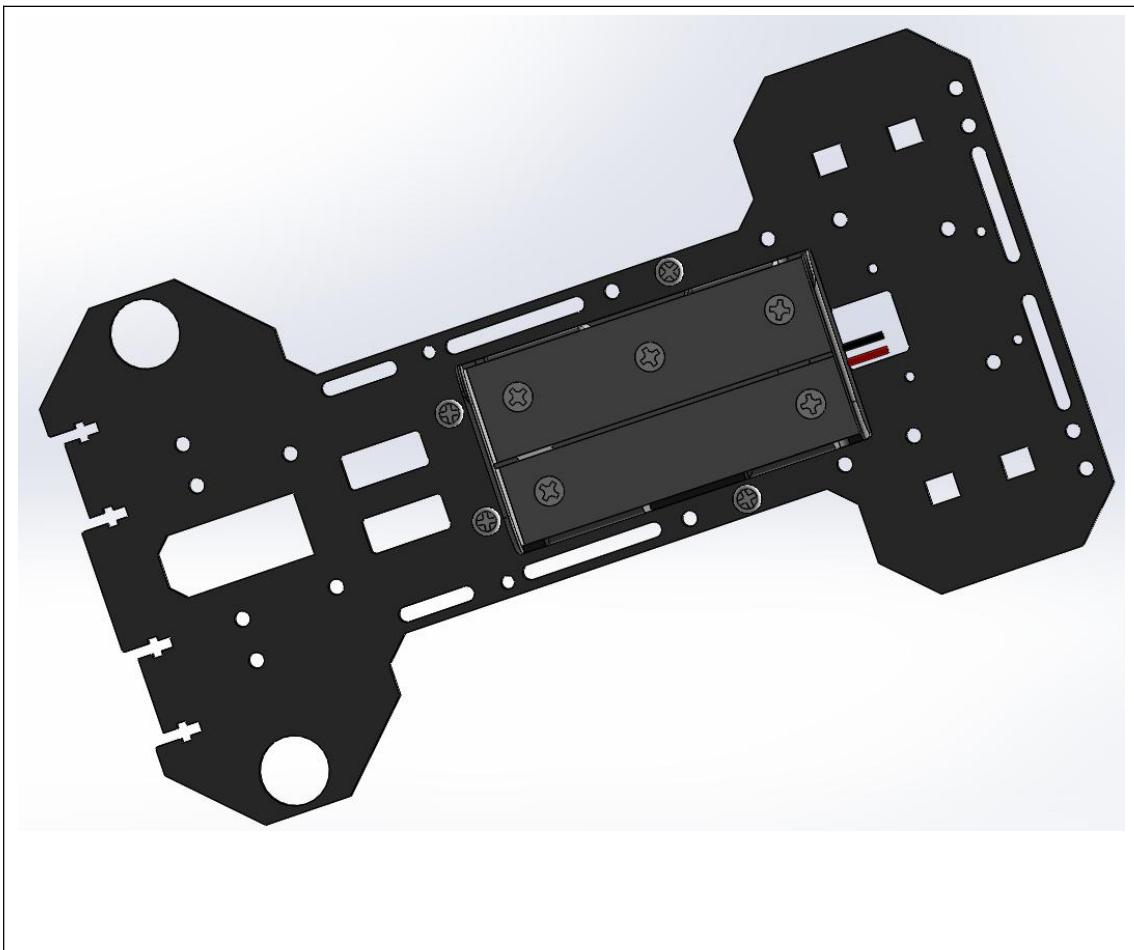
2. Fix the countersunk screws to the L18650x2 battery holder with five M3 nuts (for support and padding), and then install the battery holder to A01 with five M3 nuts.





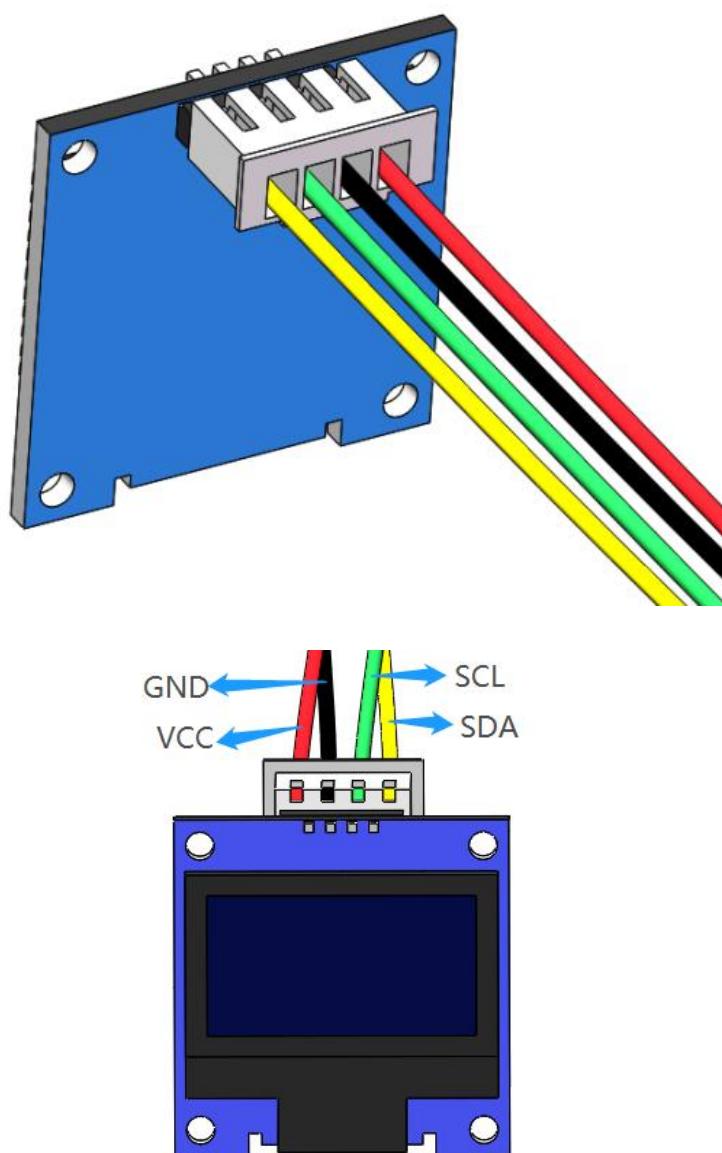
Effect diagram after assembling:



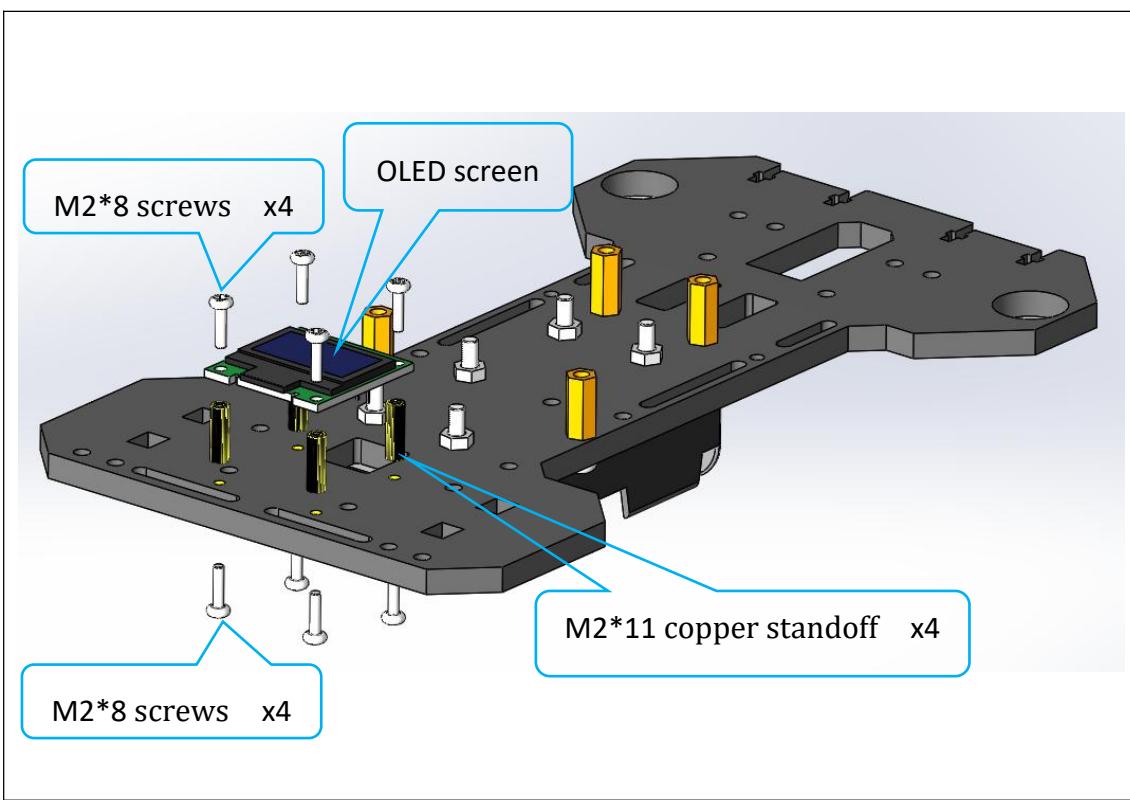


## Fix the OLED screen

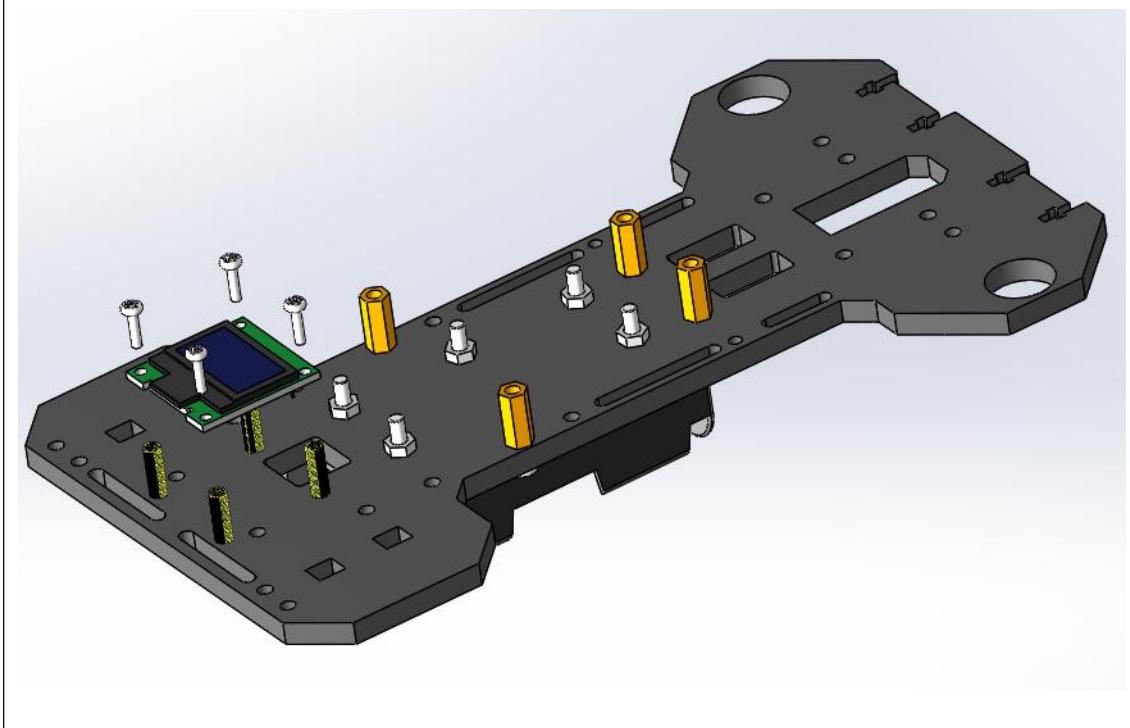
3. Fix four M2\*11 copper standoff with four M2\*8 screws. Secure the OLED screen with four M2\*8 screws. (**Before installing the OLED screen, you need to connect the cables**)

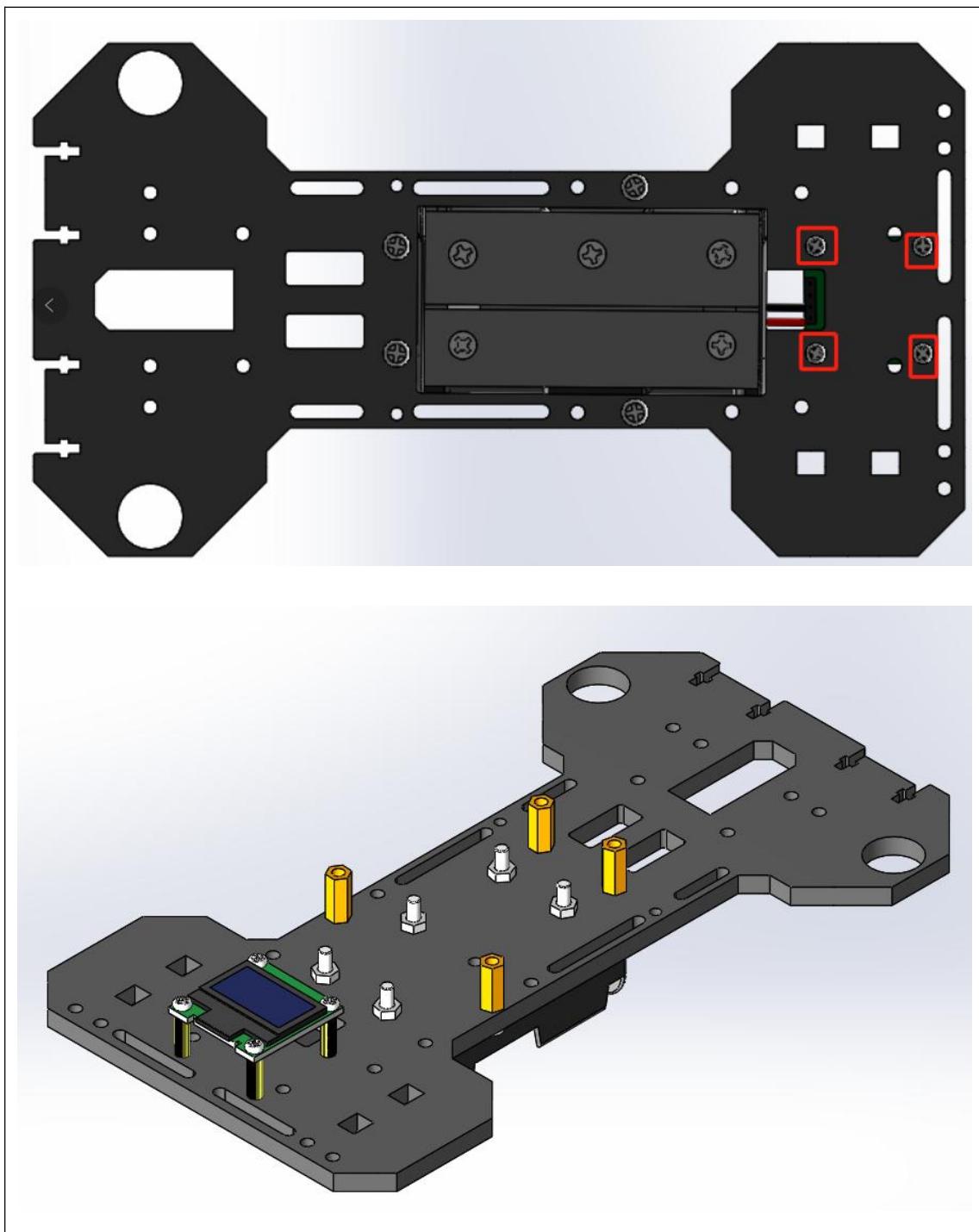


The yellow line corresponds to SDA and the red line corresponds to VCC.



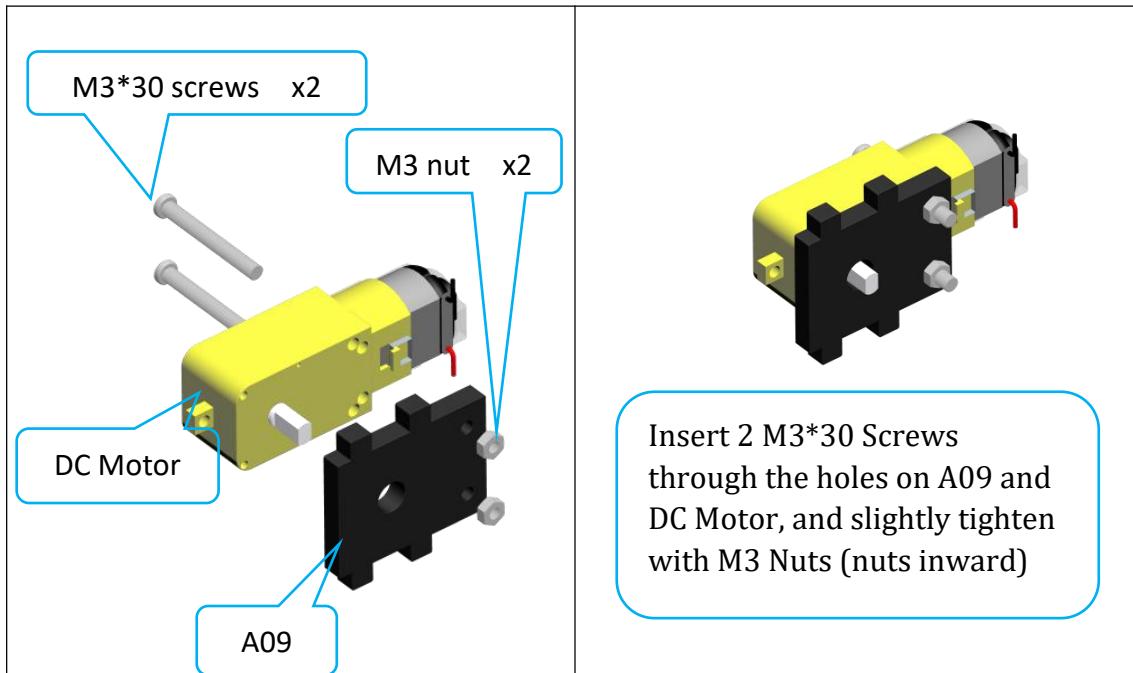
Effect diagram after assembling:



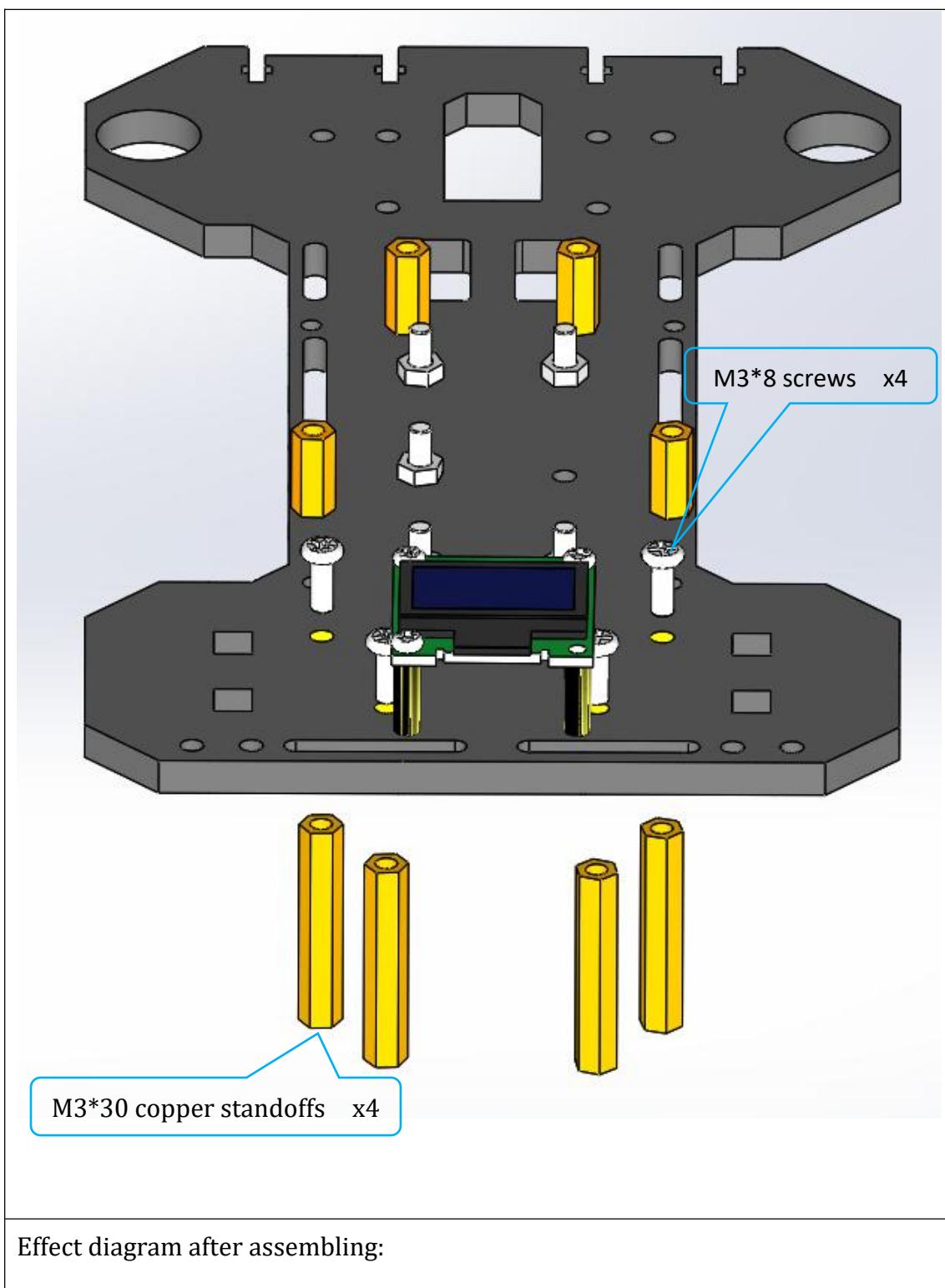


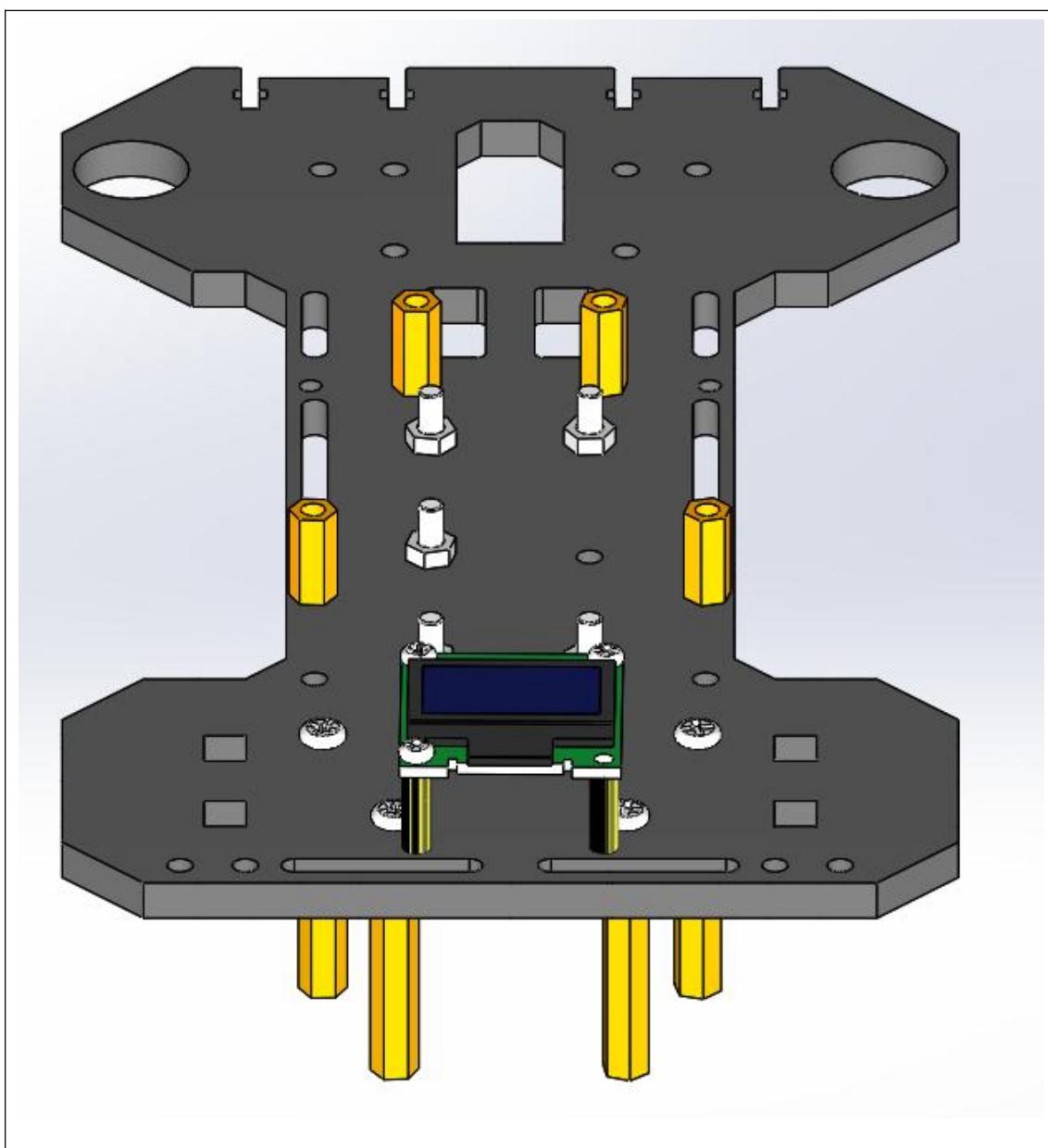
## Assemble the rear wheels

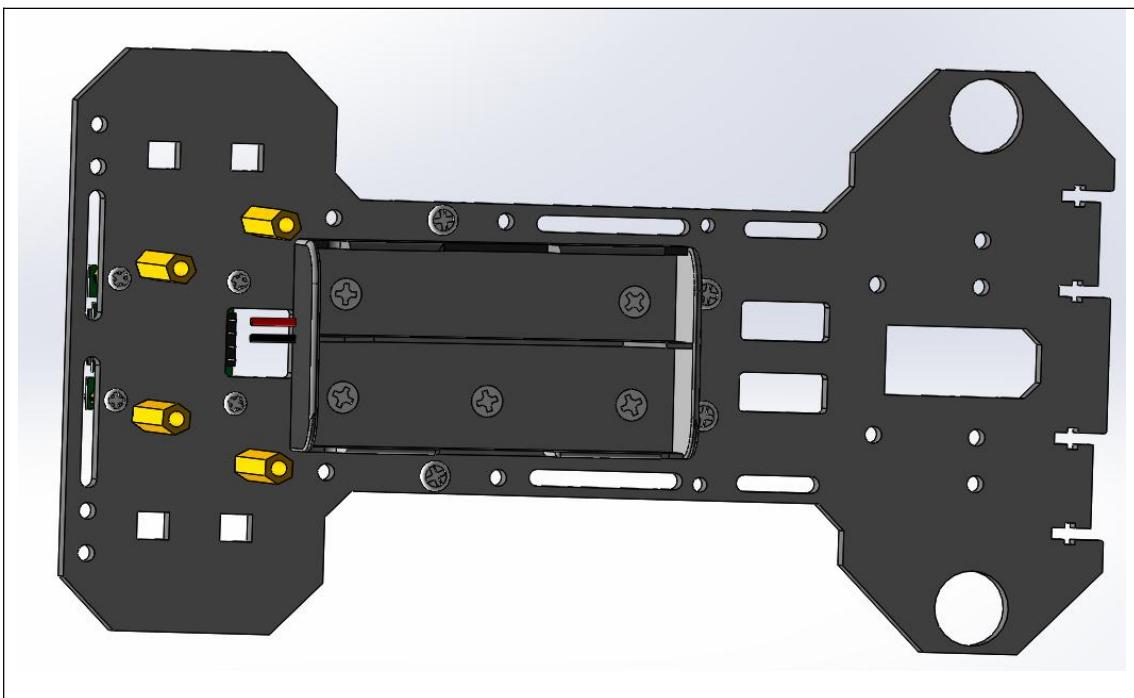
4.1 Use 2 M3 \* 30 screws and 2 M3 nuts to fix the DC motor to A09. Assemble 2 sets.



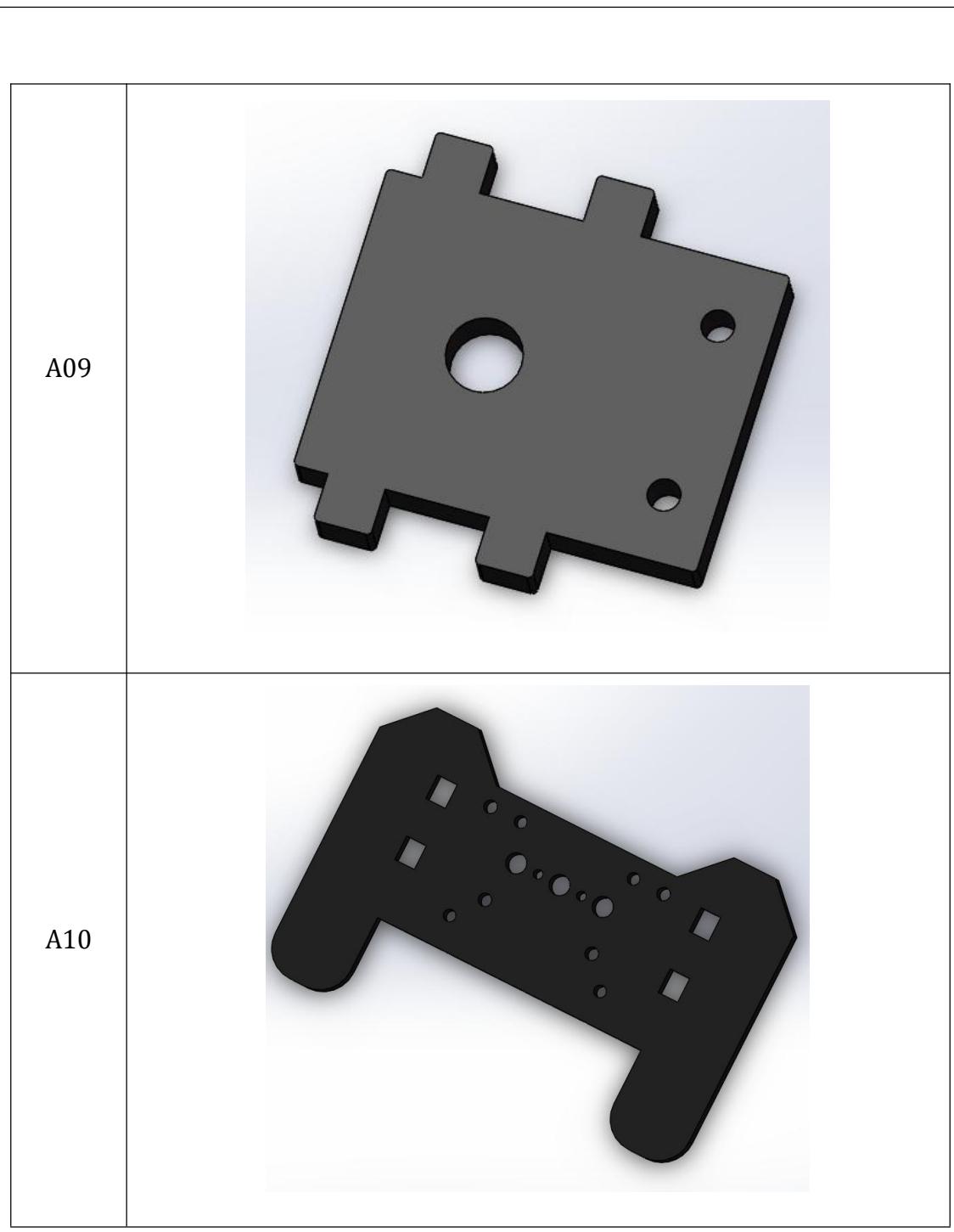
4.2 Use four M3 \* 8 screws to fix four M3 \* 30 copper standoffs to A01.



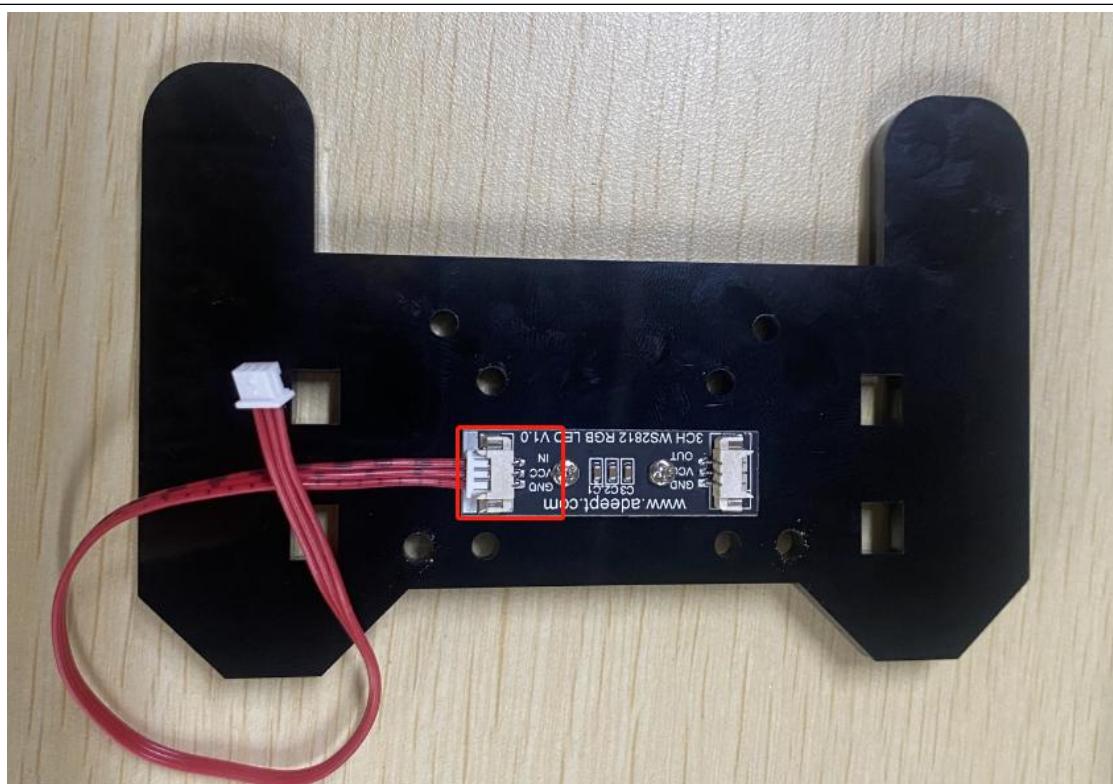




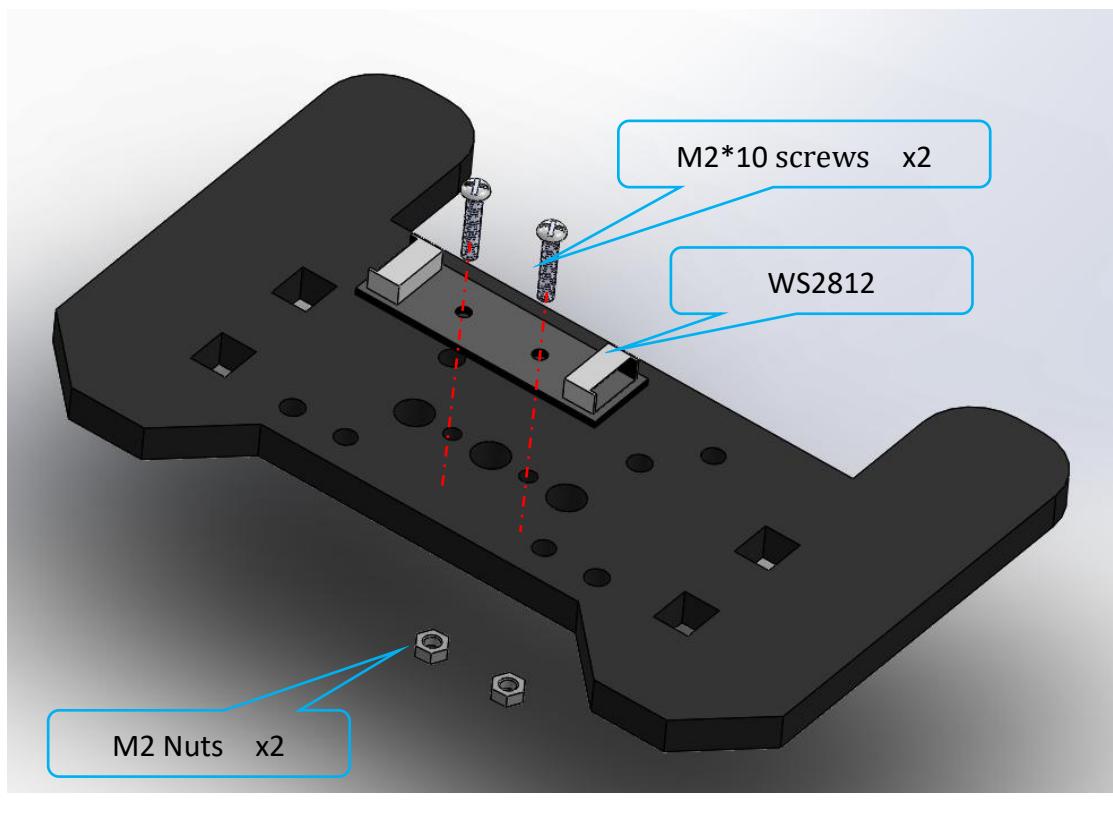
## 4.3 Install WS2812 to A10.



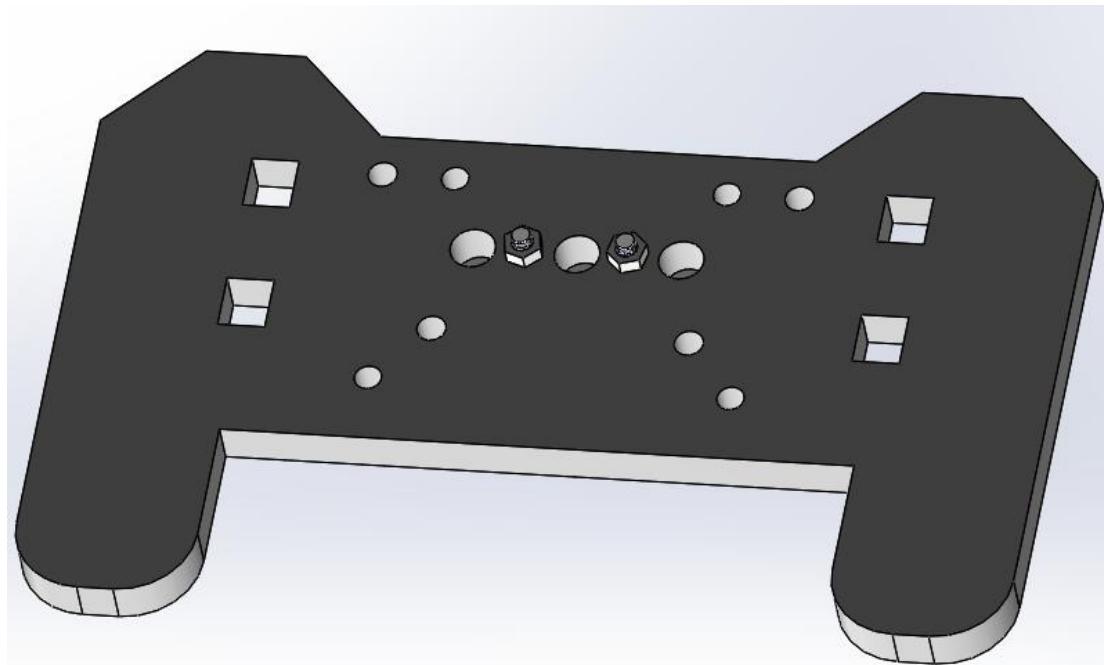
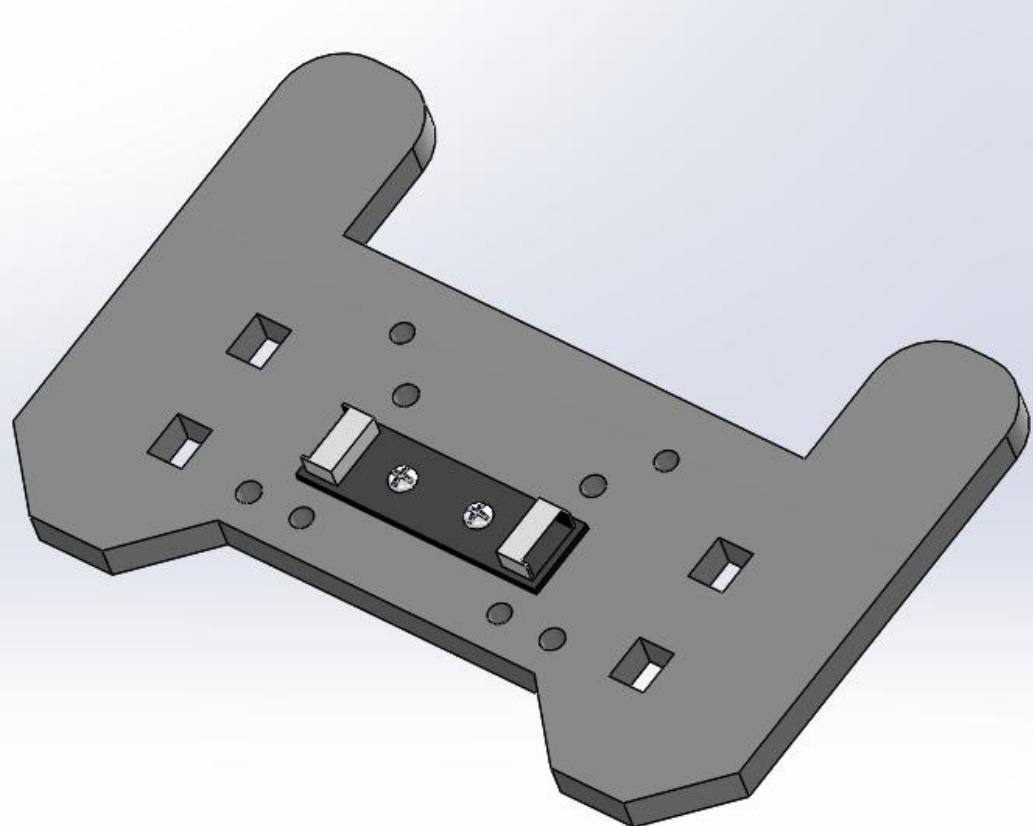
(Note: Before installing WS2812, connect the cable (connected to the IN interface), and the light source faces inward, as shown in the figure below.)



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

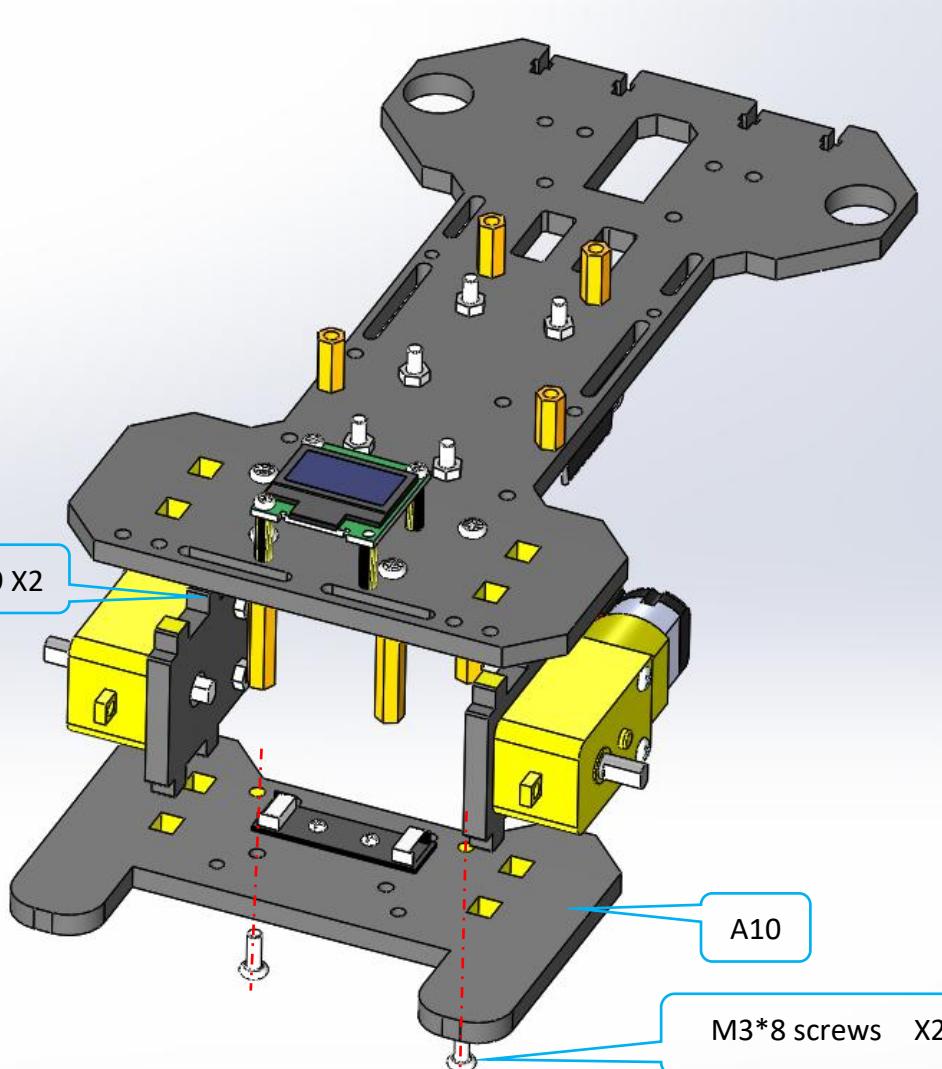


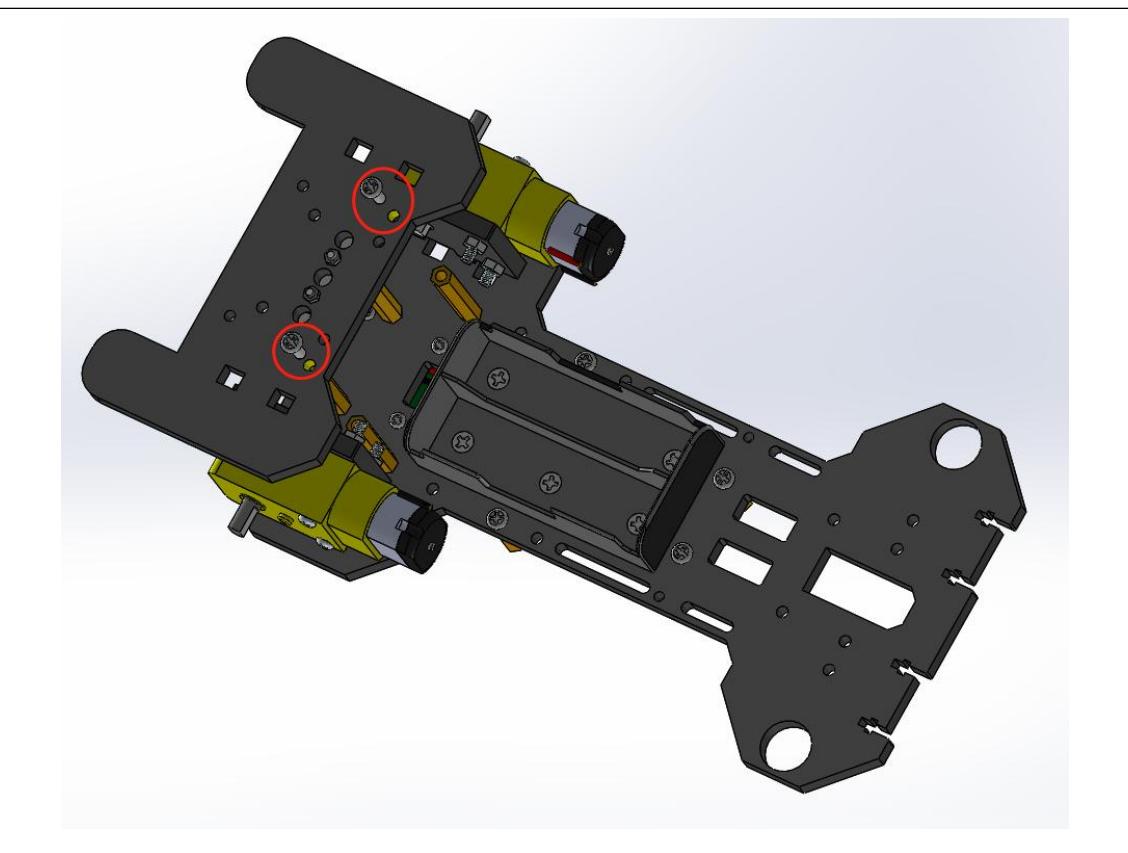
Effect diagram after assembling:



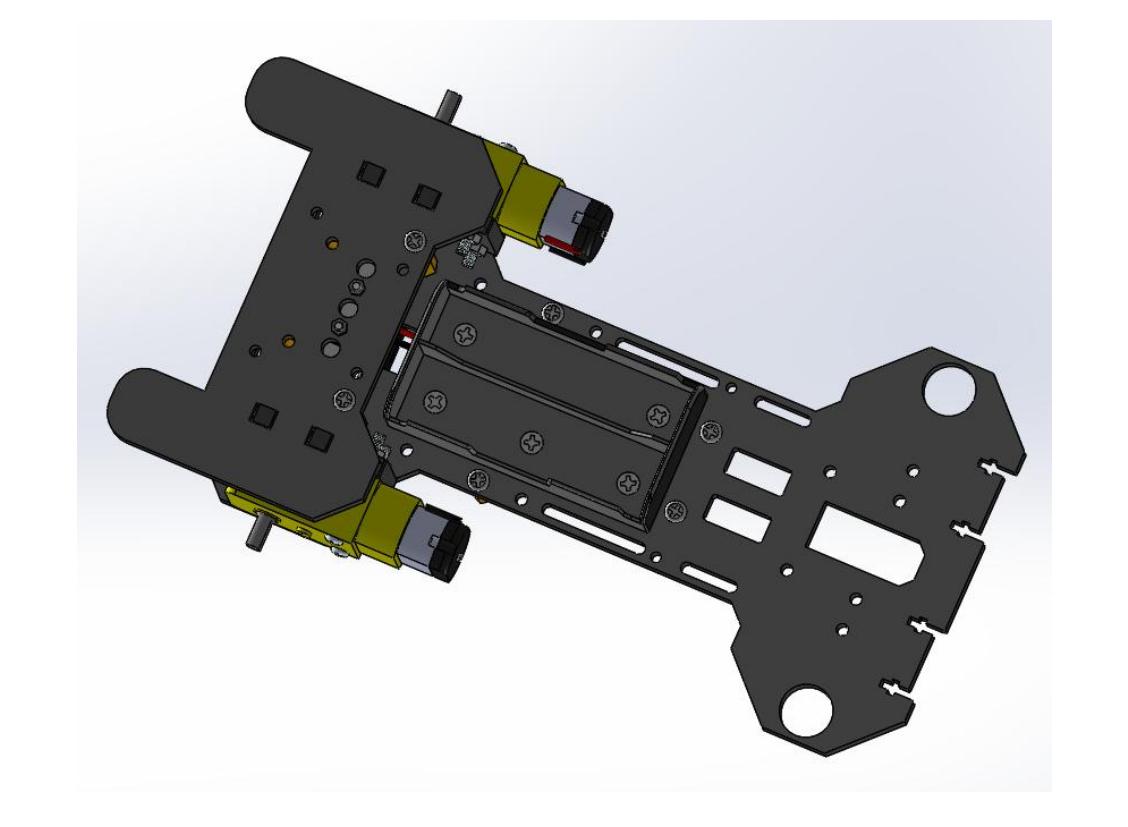
4.4 Fix the components assembled in steps 4.1 and A10 to A01.

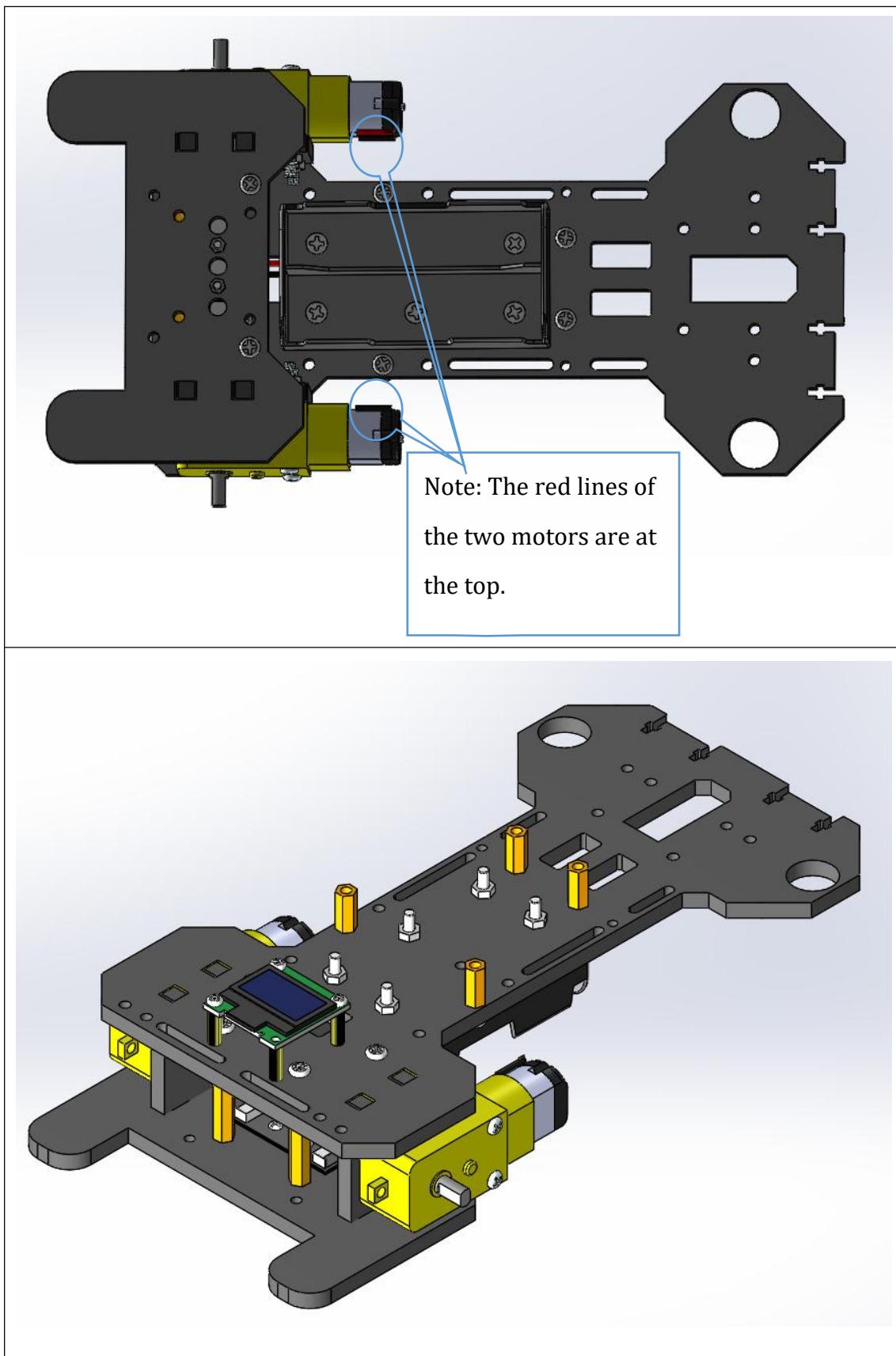
Use 2 M3\*8 screws.



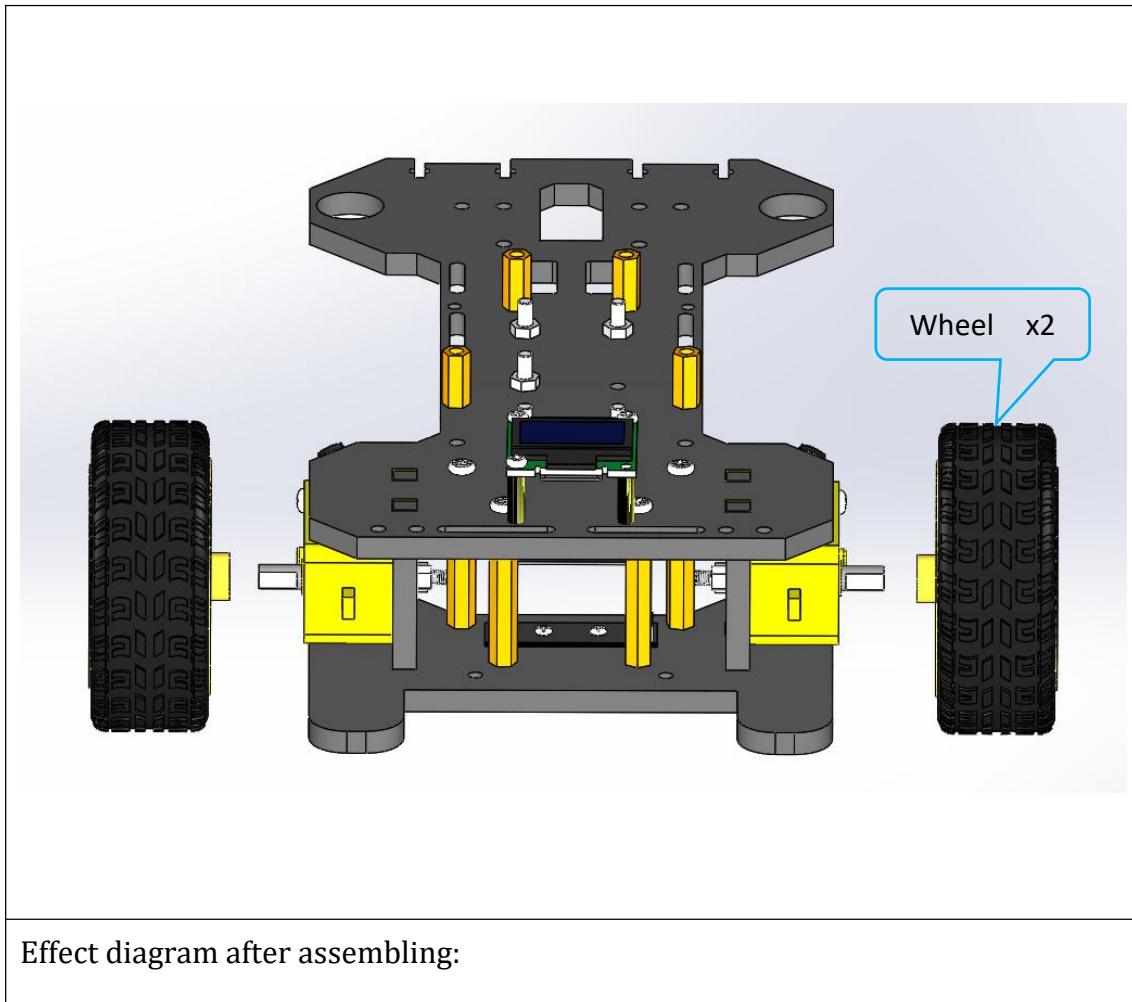


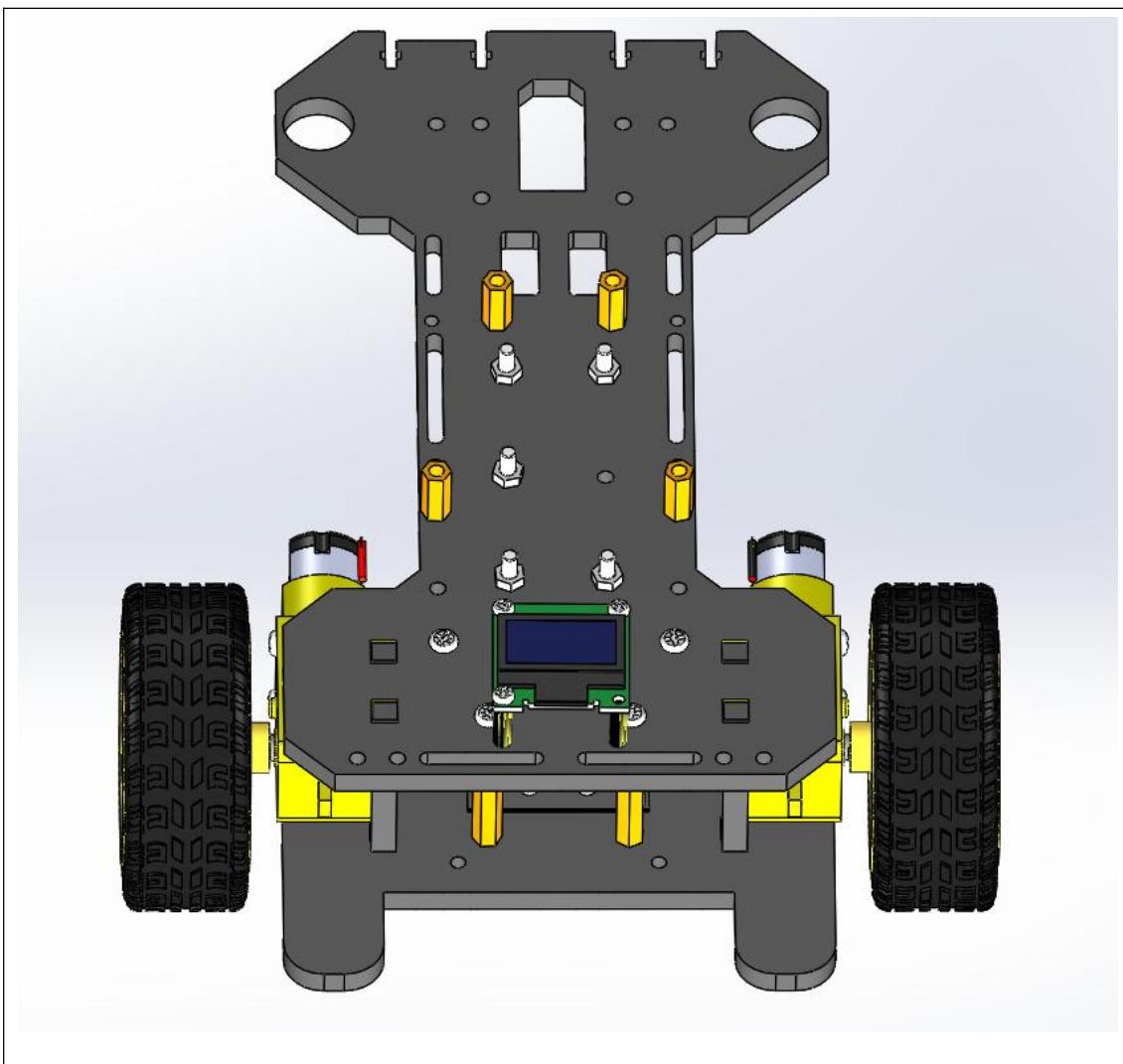
Effect diagram after assembling:





4.5 Install the rear wheel onto the motor shaft.



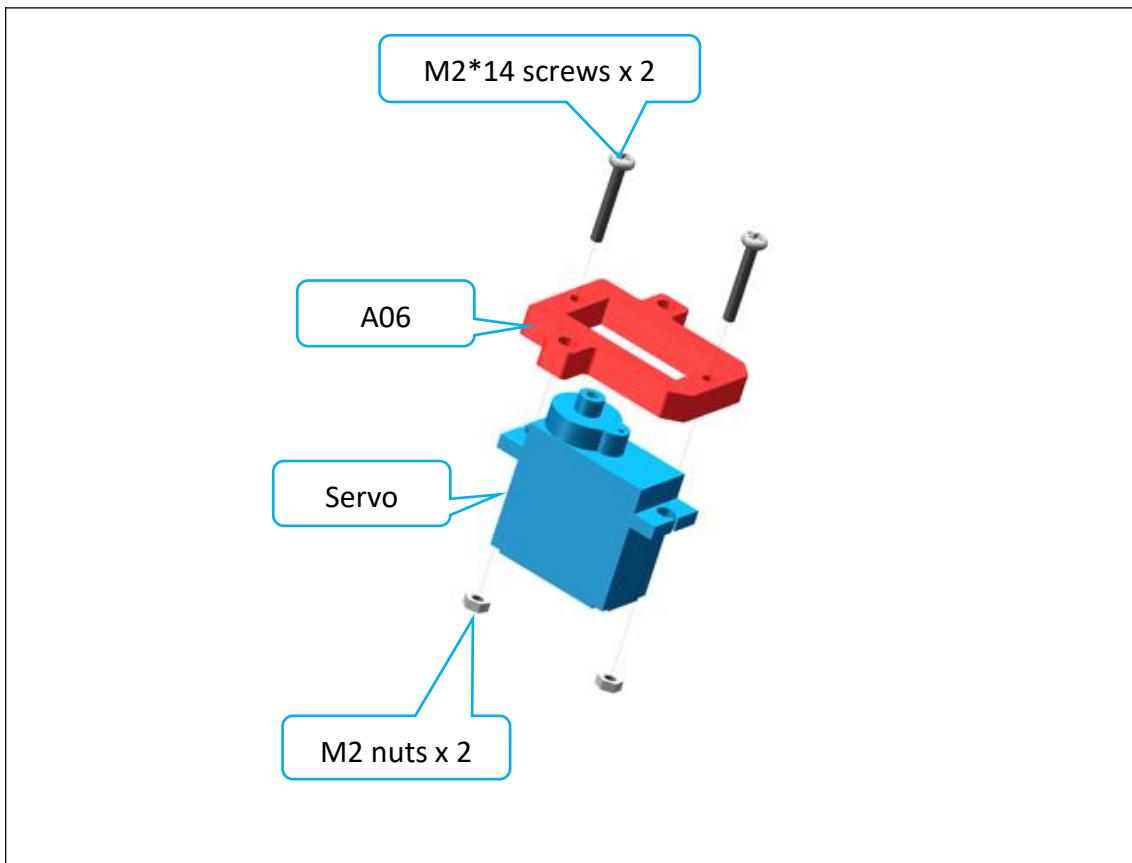


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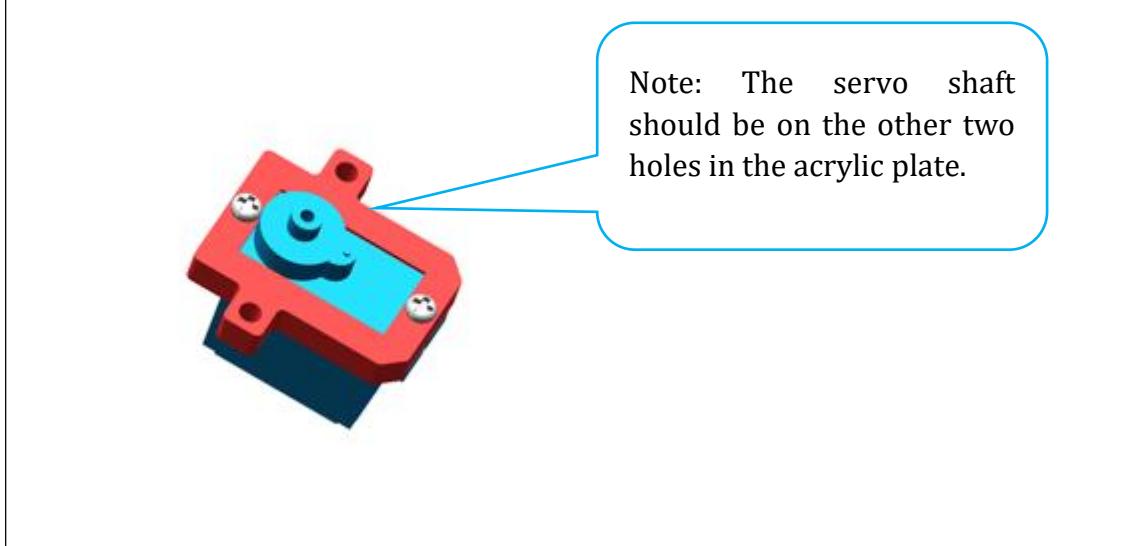
## Assemble the front wheels

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](#)".

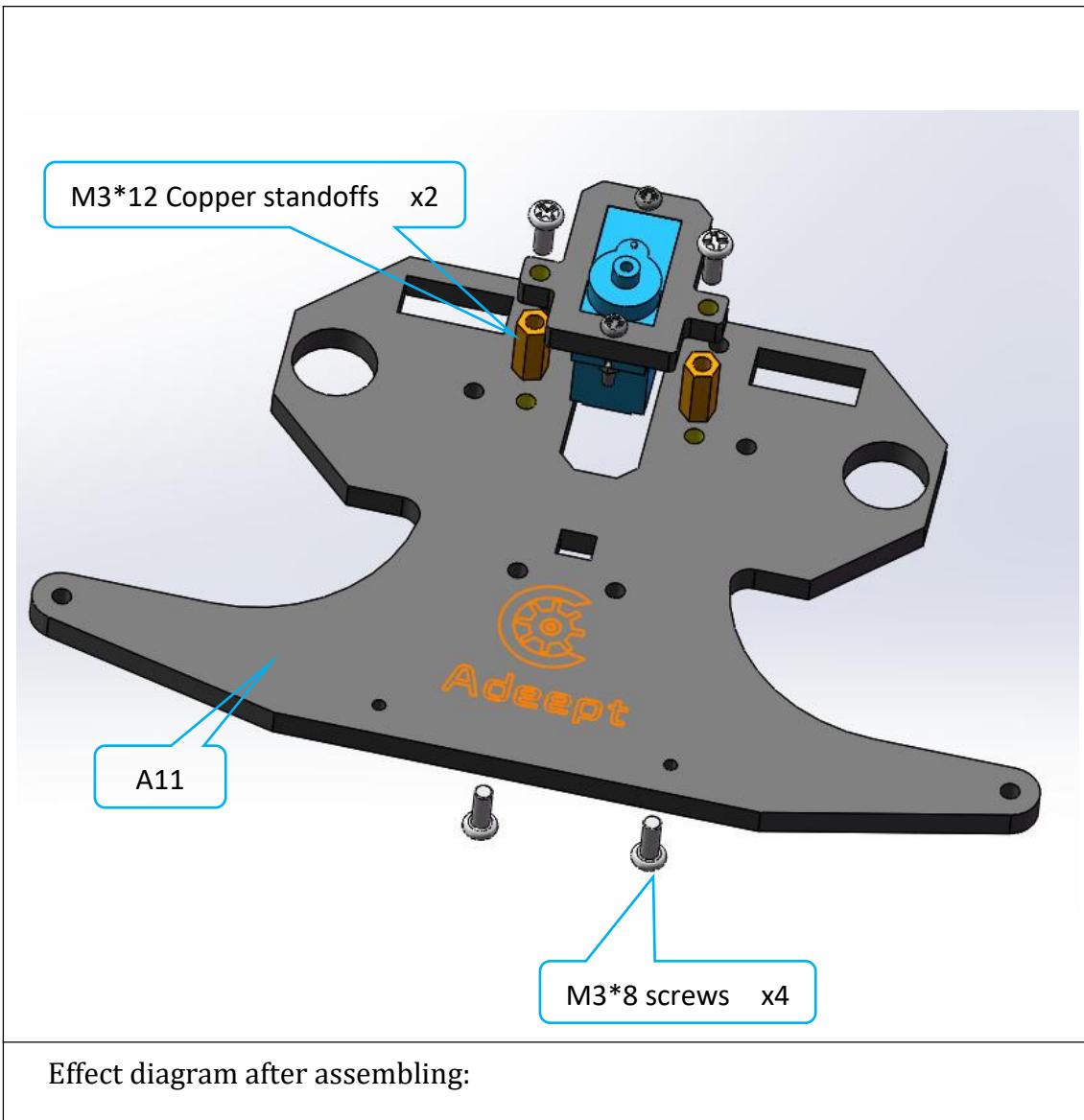
5.2 Assemble the servo to the A06 using M2\*14 screws (assemble 2 sets, A second set is used when installing an ultrasonic module.)

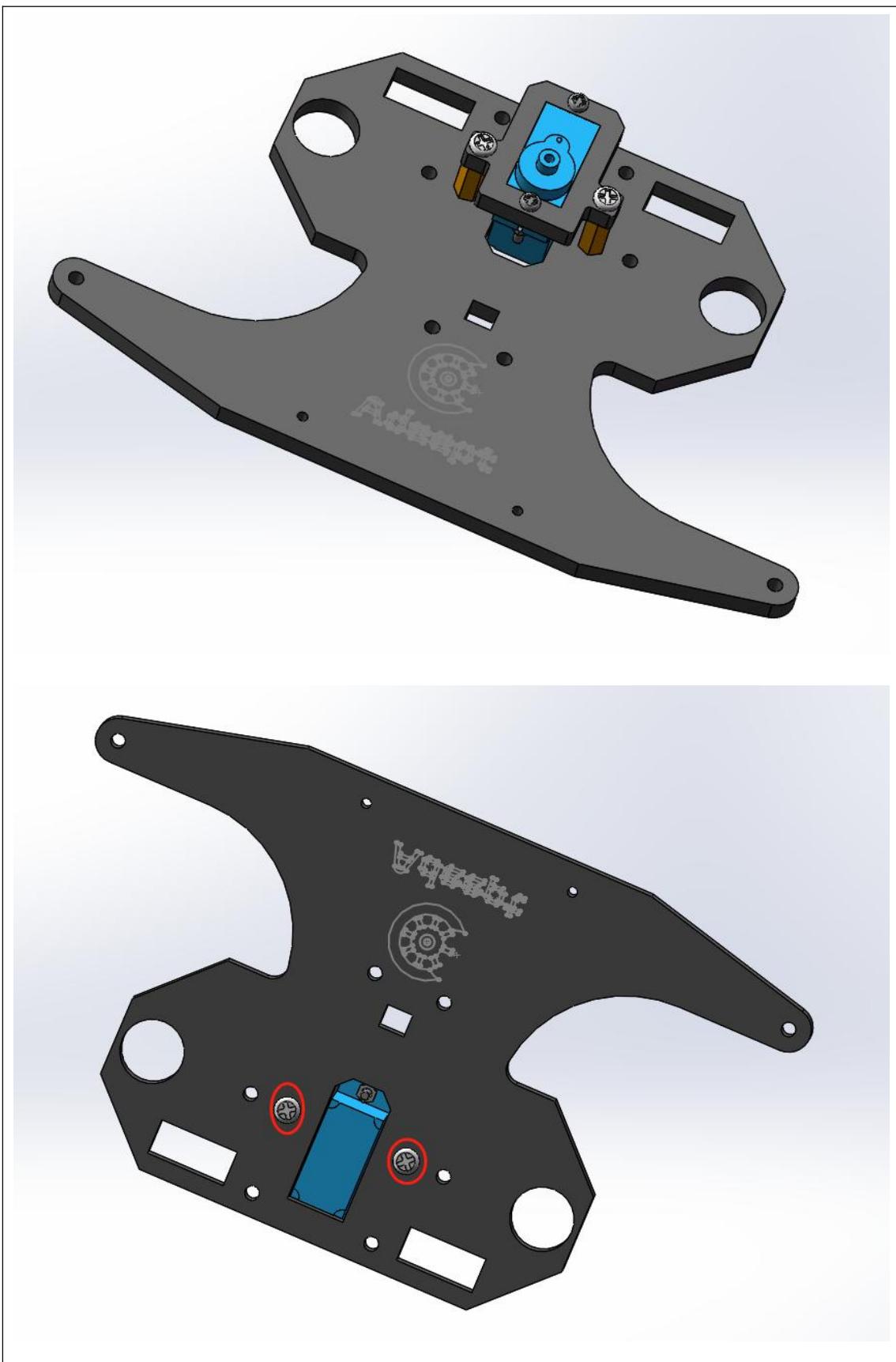


Effect diagram after assembling

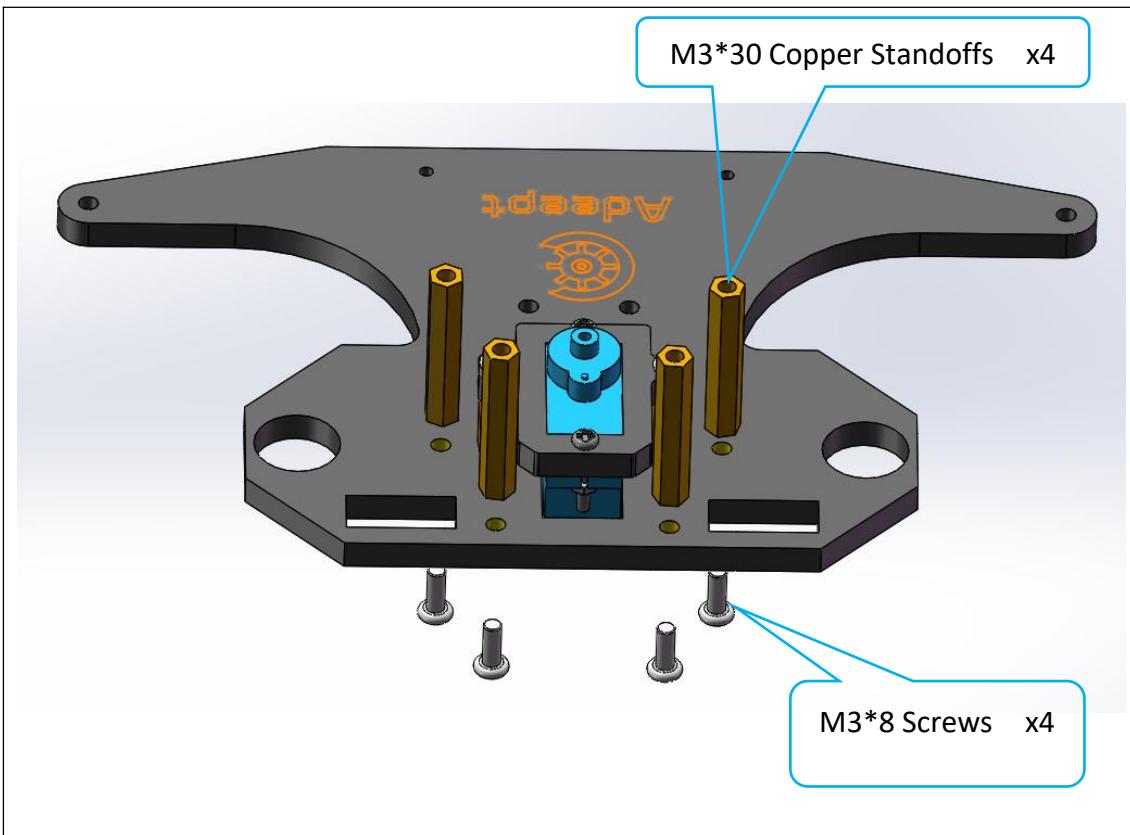


### 5.3 Install the servo on the A11.

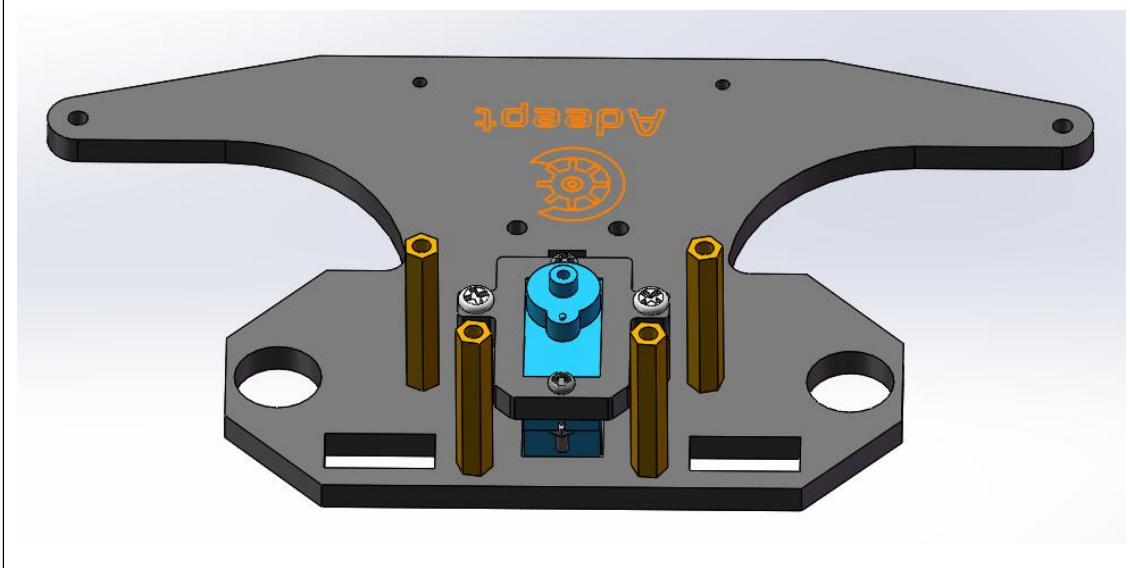


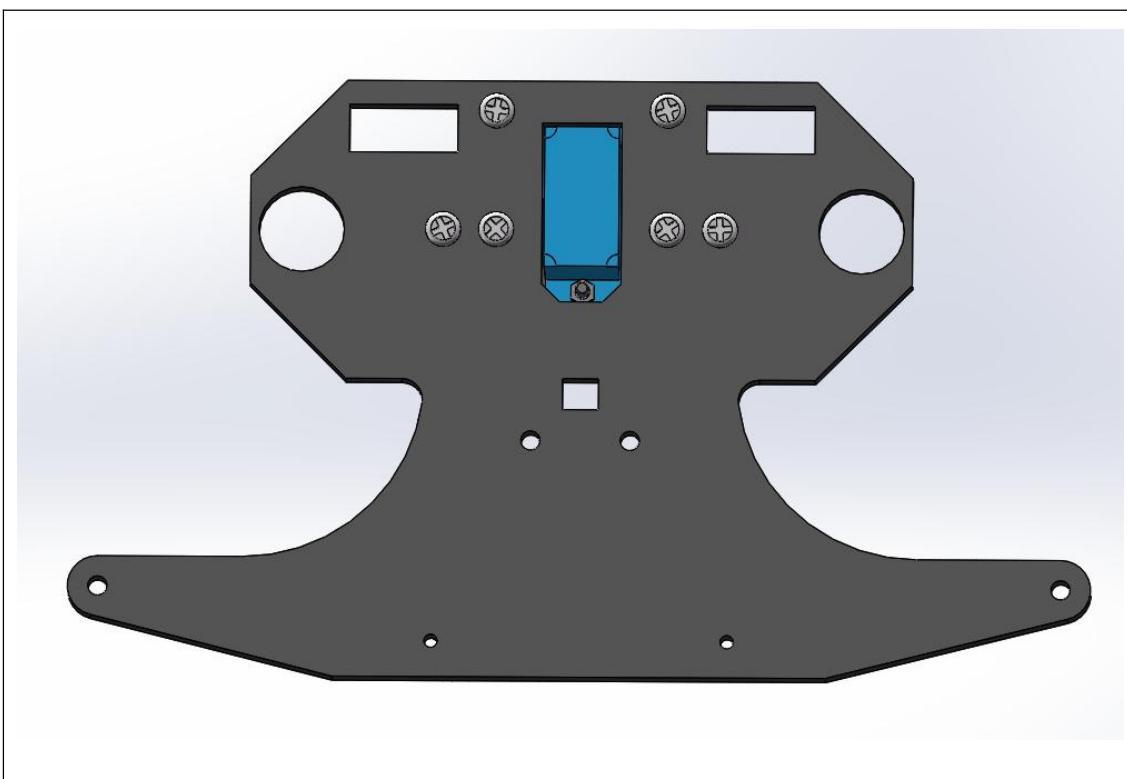


5.4 Fix four M3 \* 30 copper standoffs to A11.

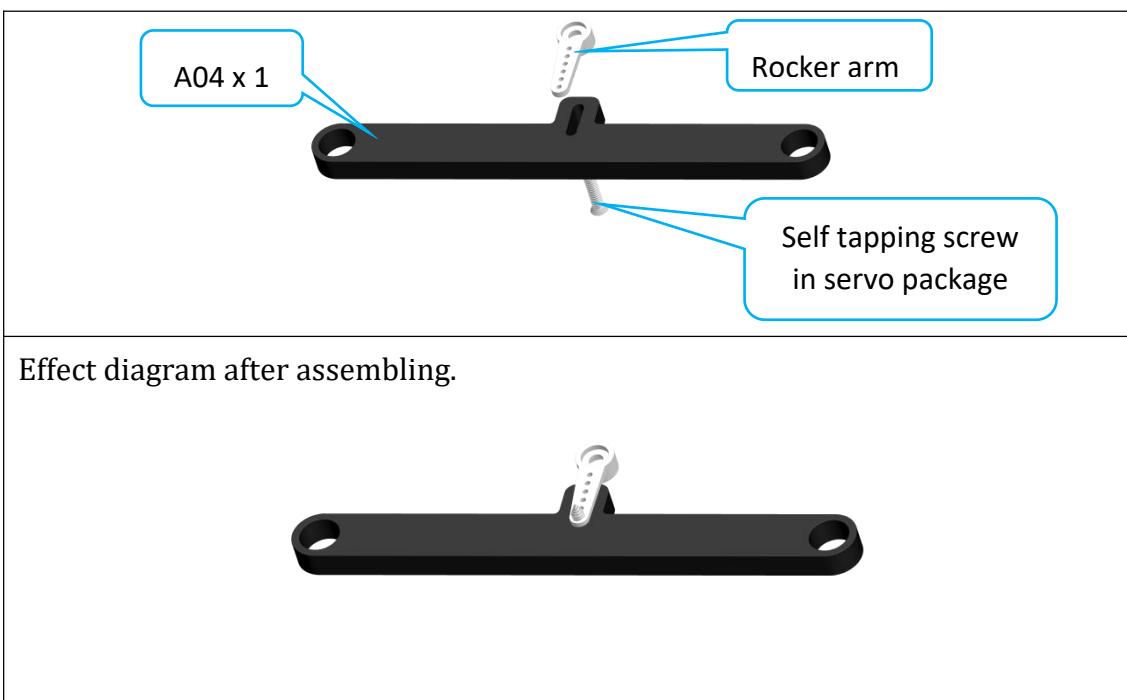


Effect diagram after assembling.





### 5.5 Install rocker arm and A04.



Note: Do not fully tighten the screws, otherwise the acrylic plate will not rotate freely.

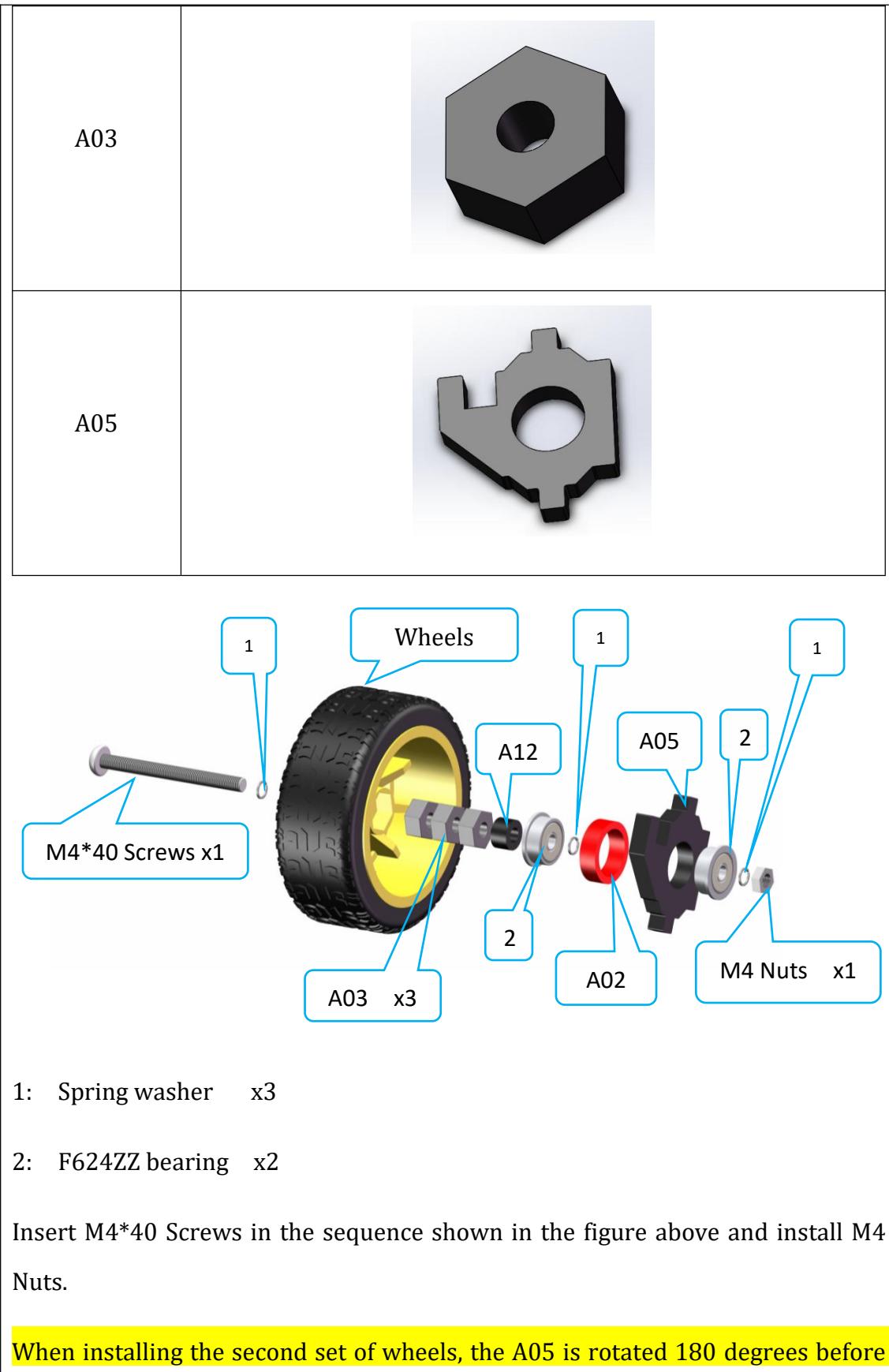
Leave some space between the screws and the acrylic plate.



#### 5.6 Install the front wheels (two sets).

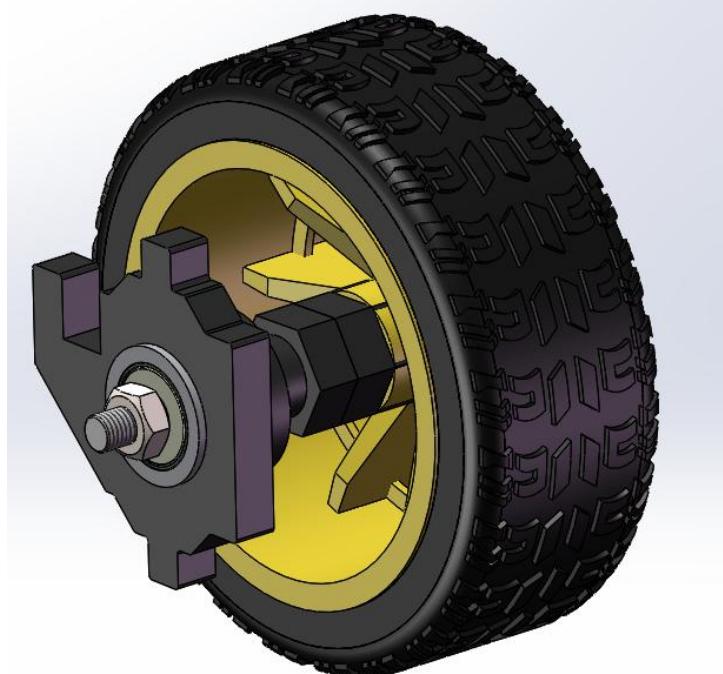
**Note:** The installation direction of A05 in the two sets is different.



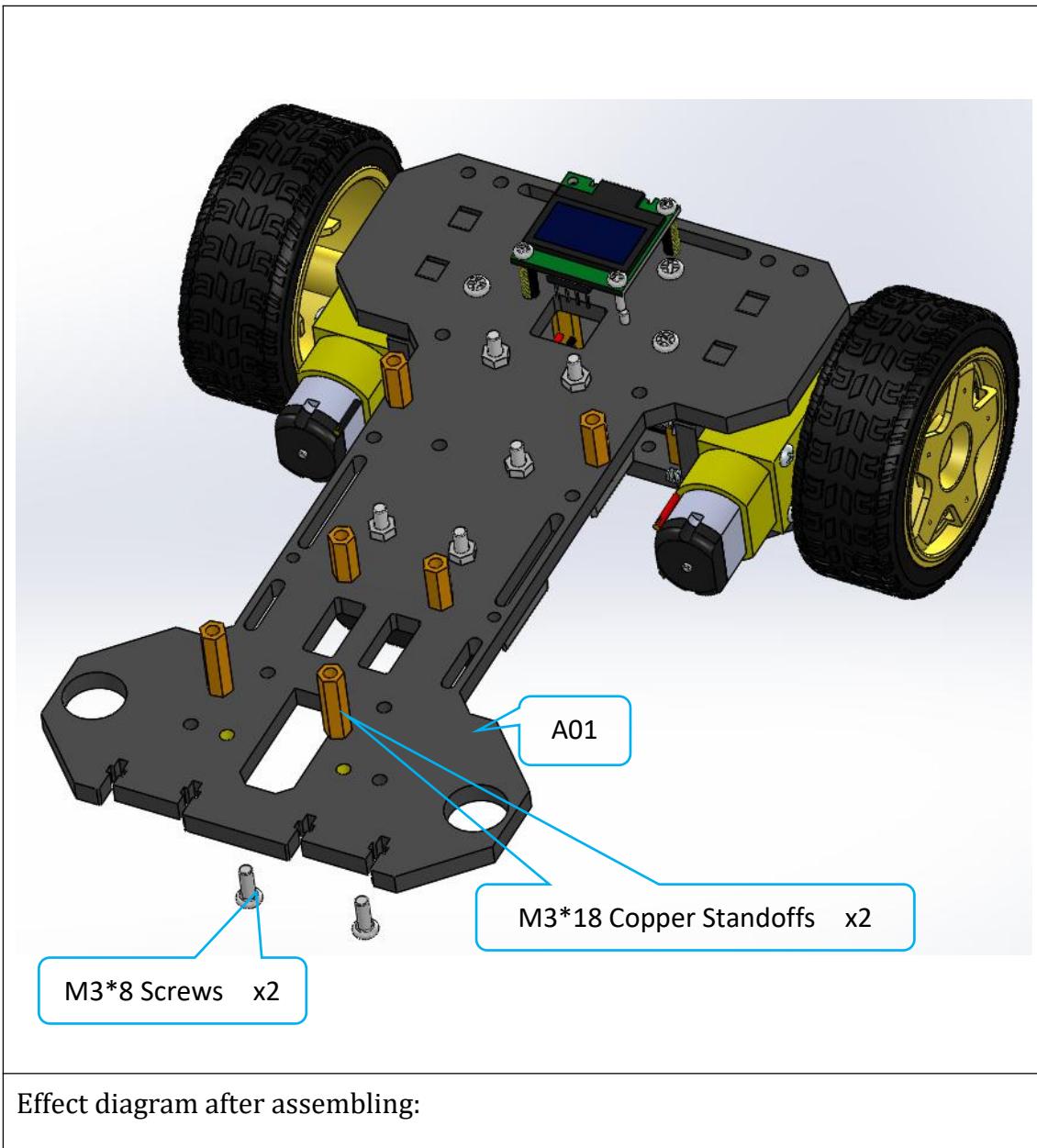


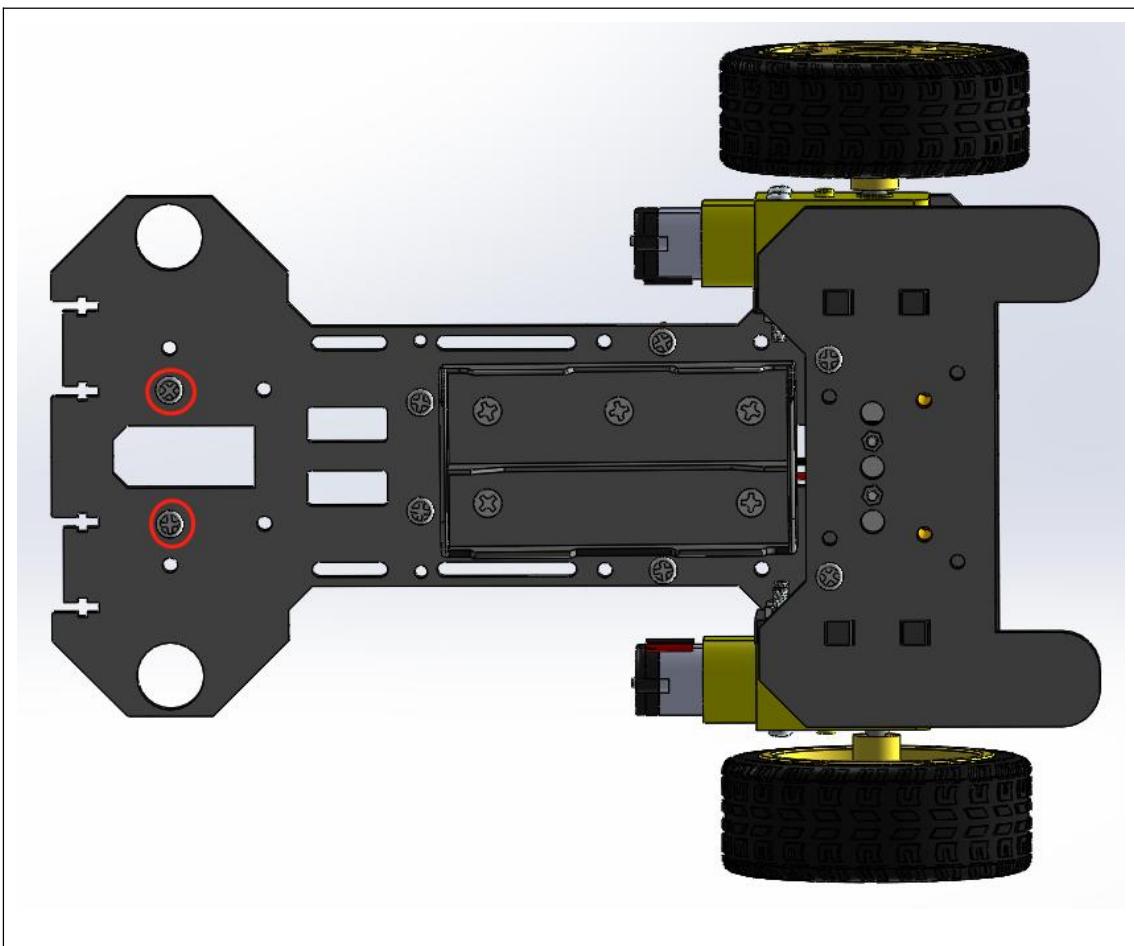
installation (other same).

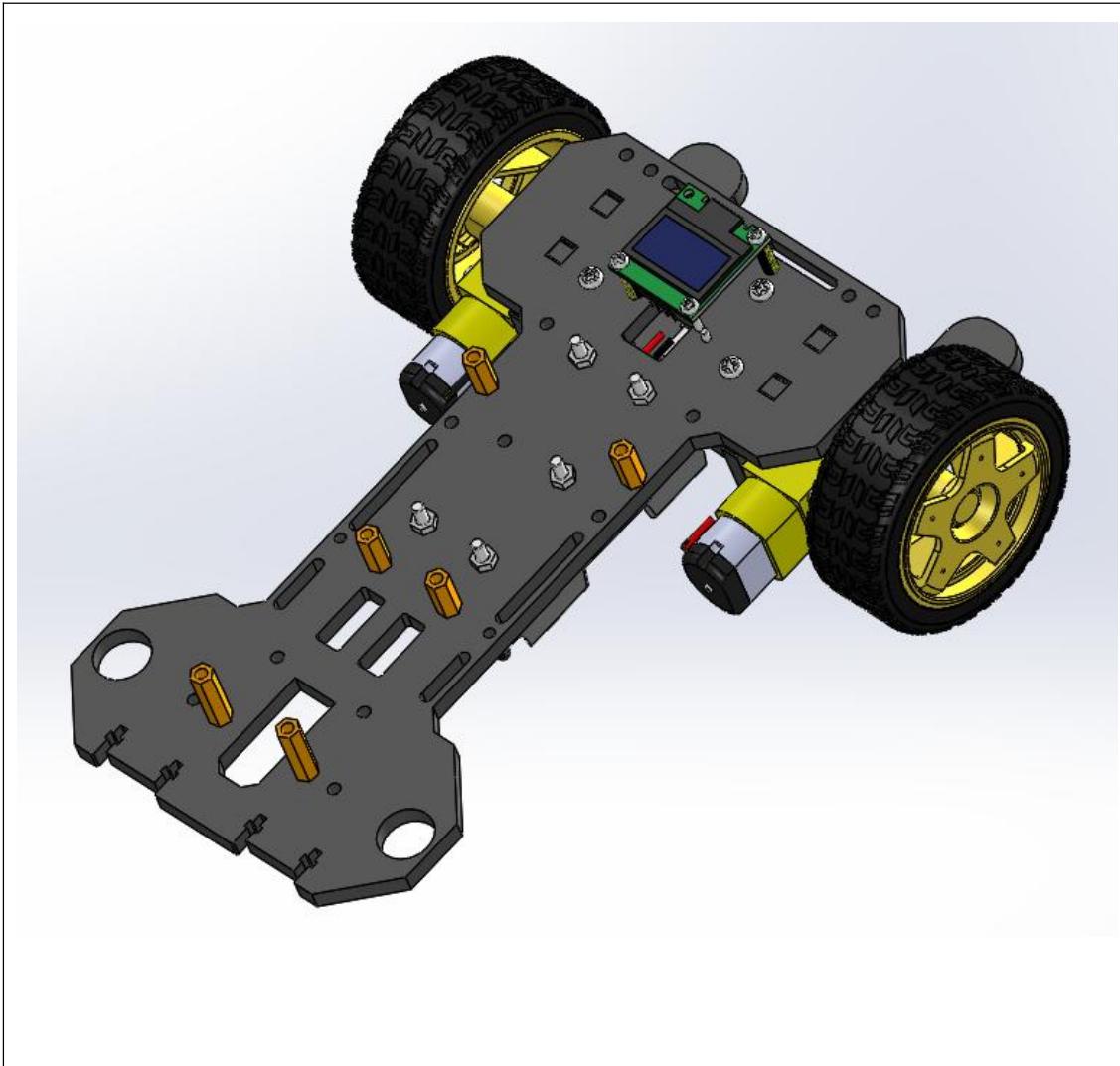
Effect diagram after assembling:



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



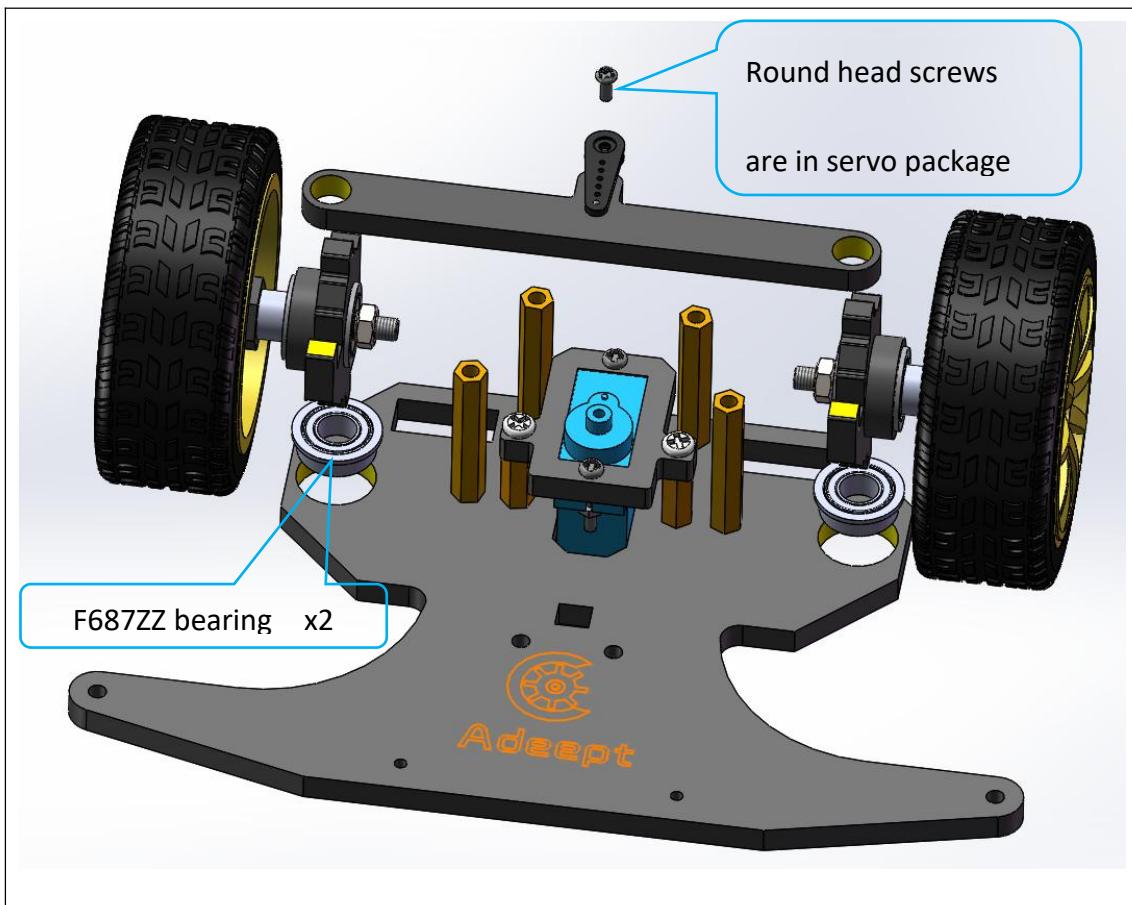




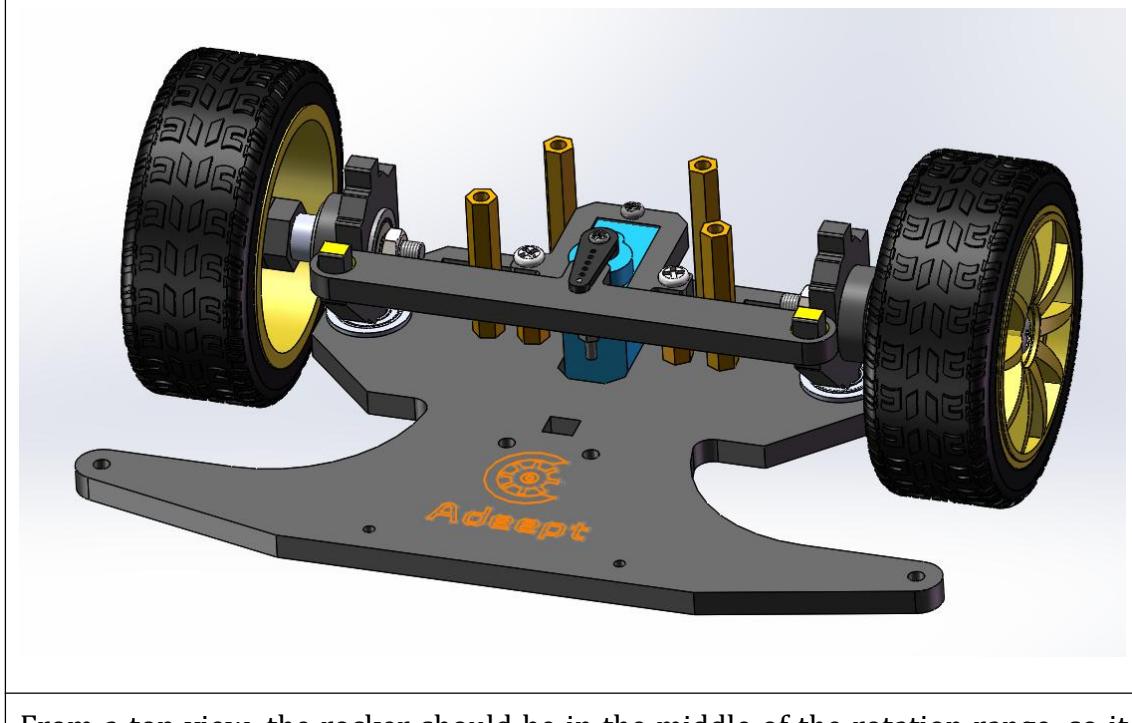
### 5.8 Install the front wheels and steering components.

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.



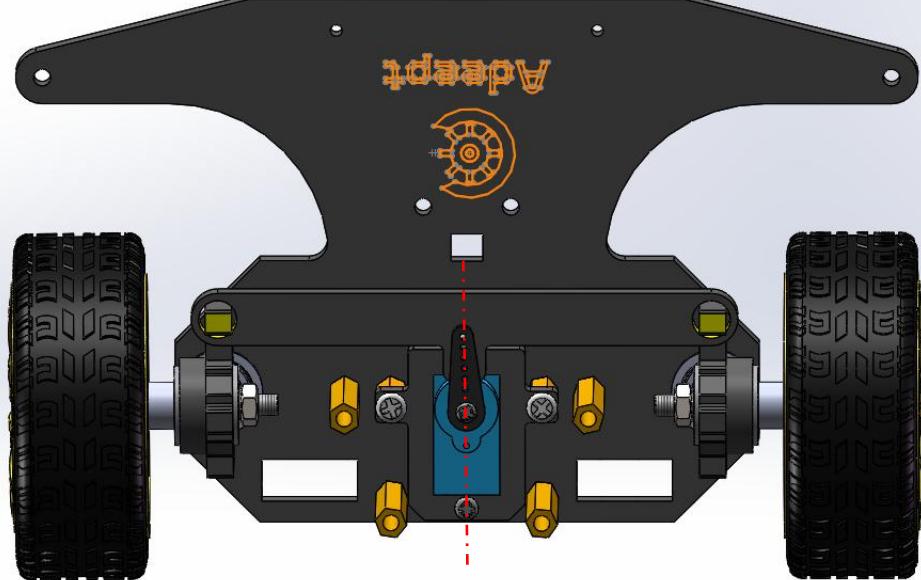
Effect diagram after assembling



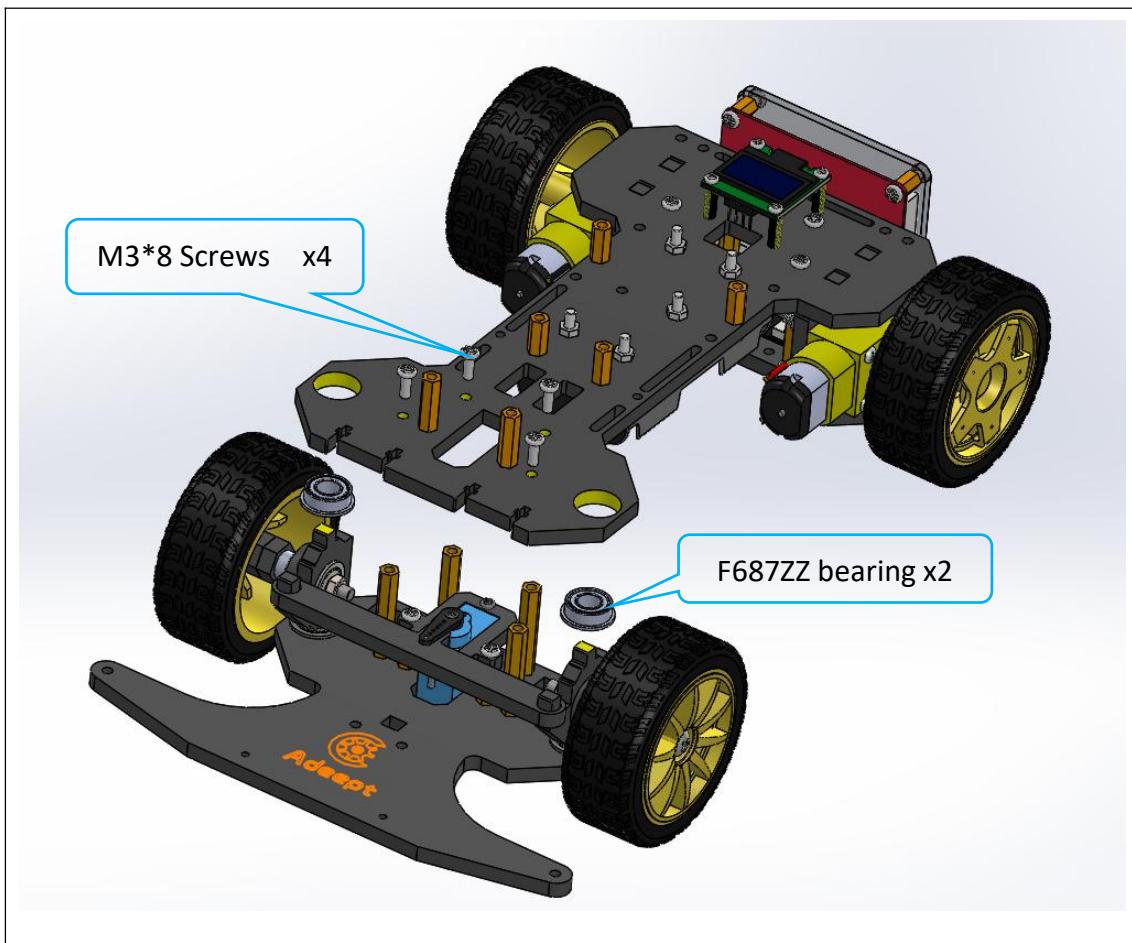
From a top view, the rocker should be in the middle of the rotation range, so it

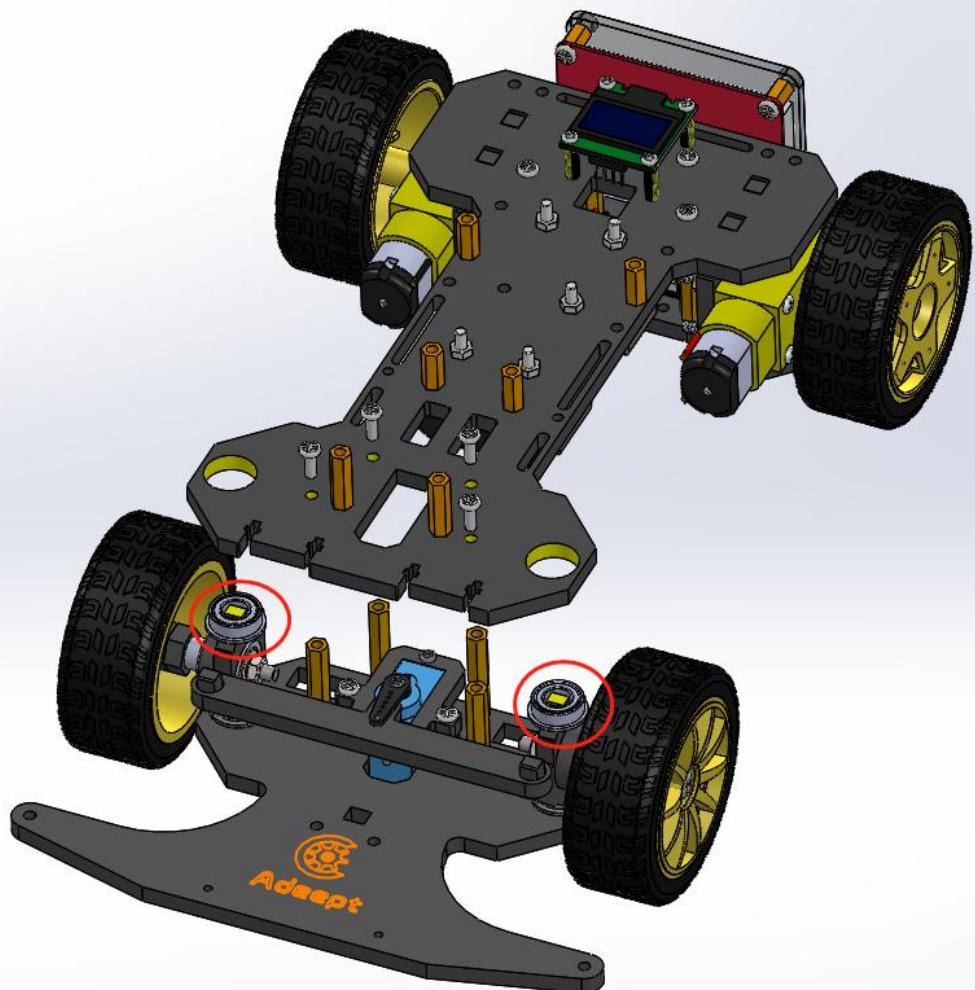
can rotate about 45 degrees to the left and right. Otherwise, you need to readjust it again according to step 5.1 above.

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

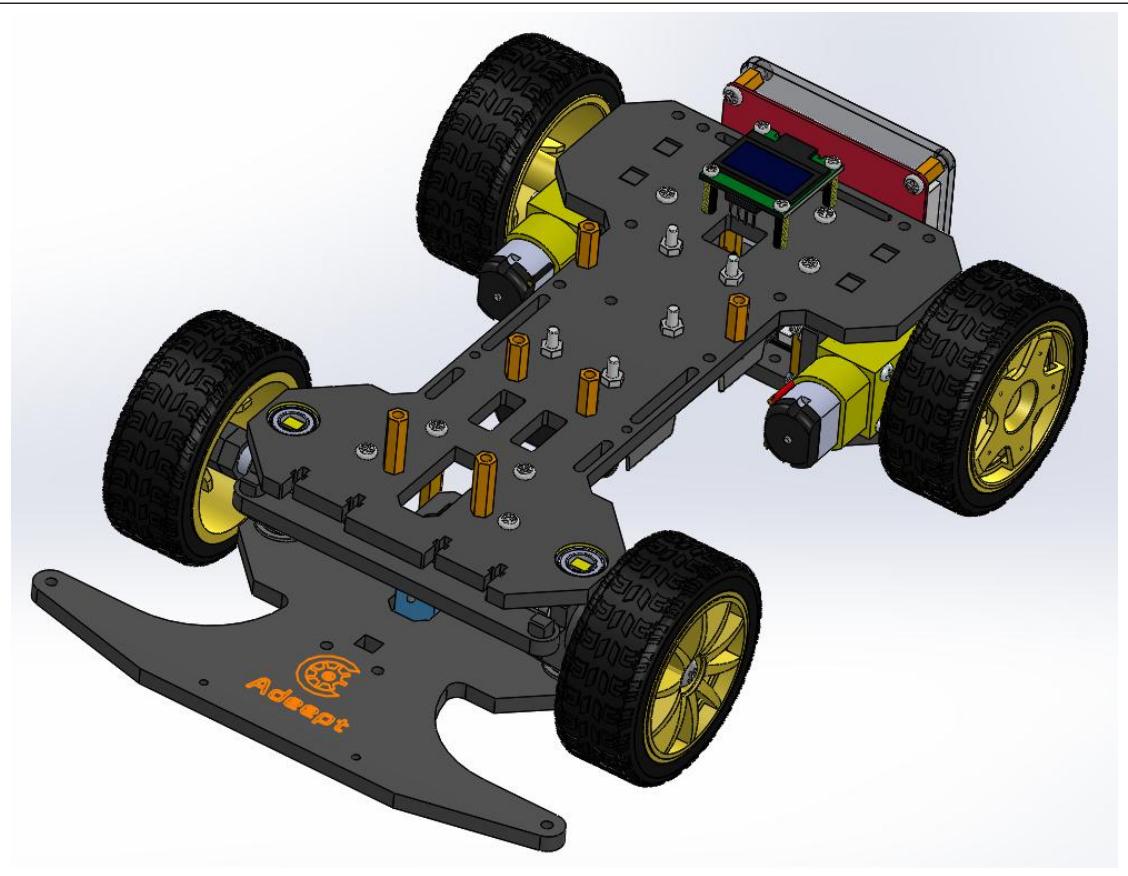


5.9 Fix front wheels and steering components.



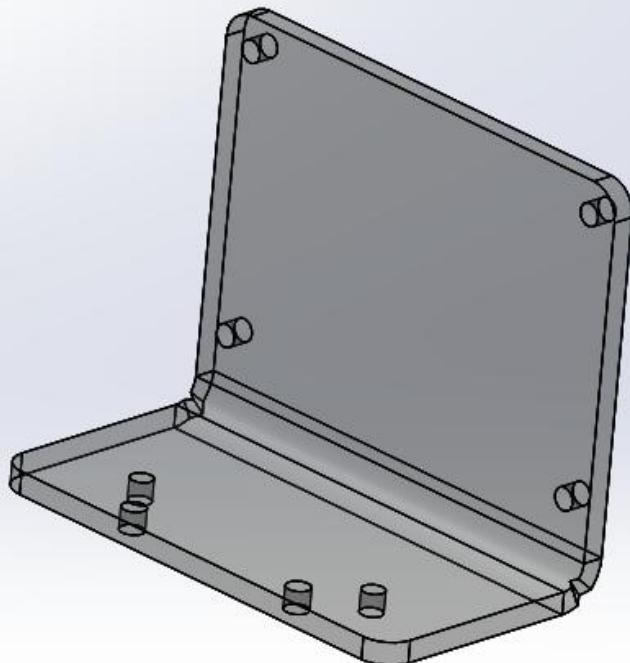


Effect diagram after assembling:

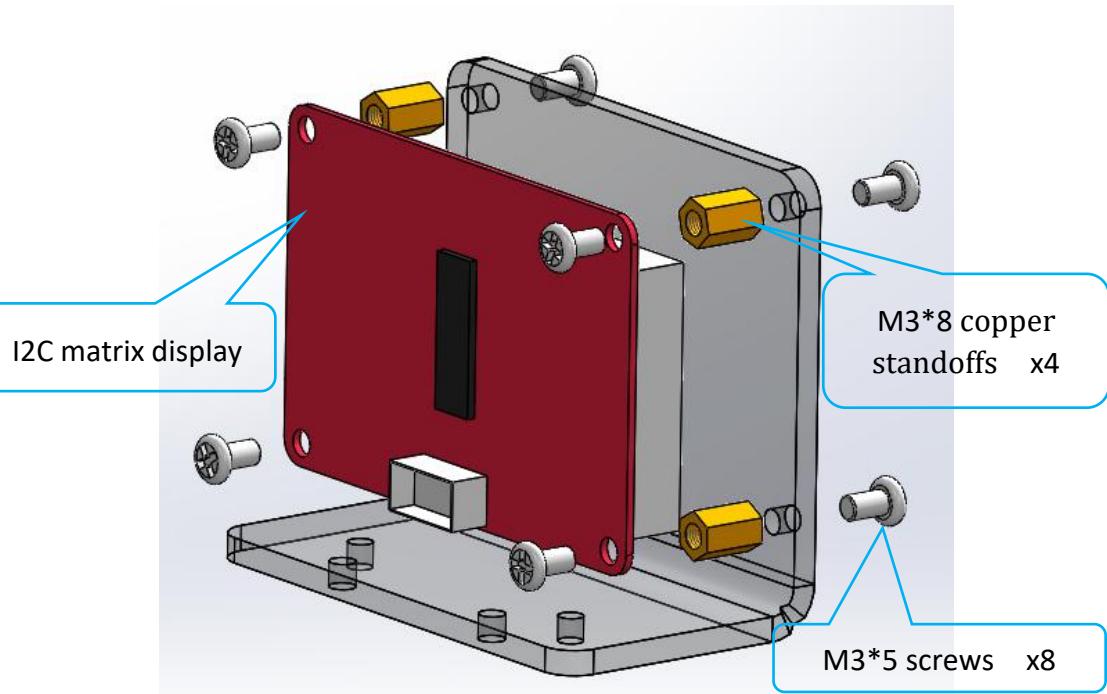


5.10 Install the I2C matrix display.

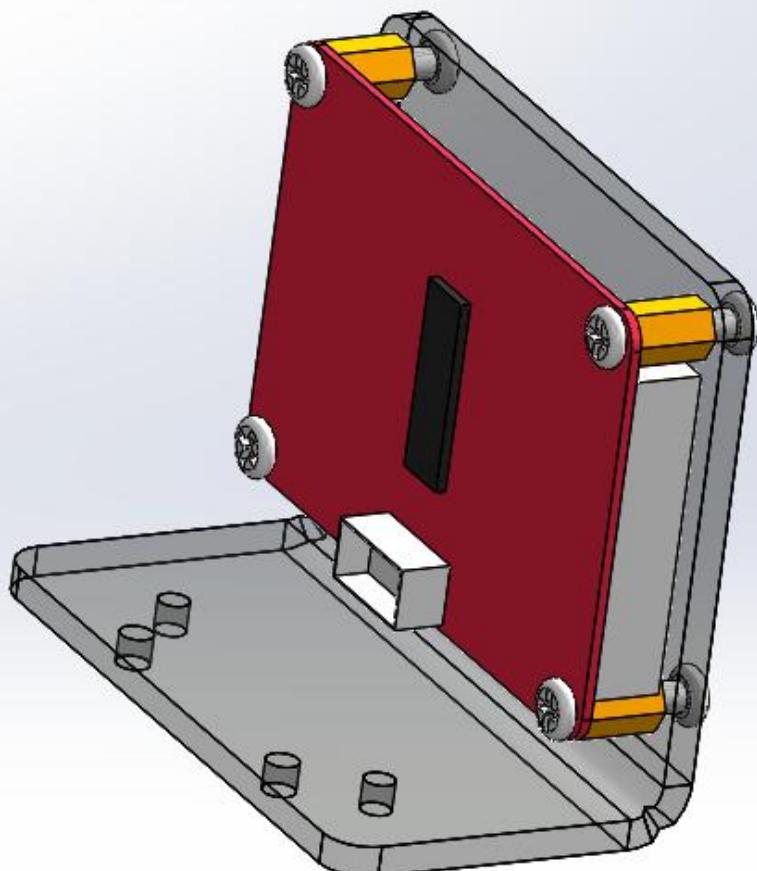
A13

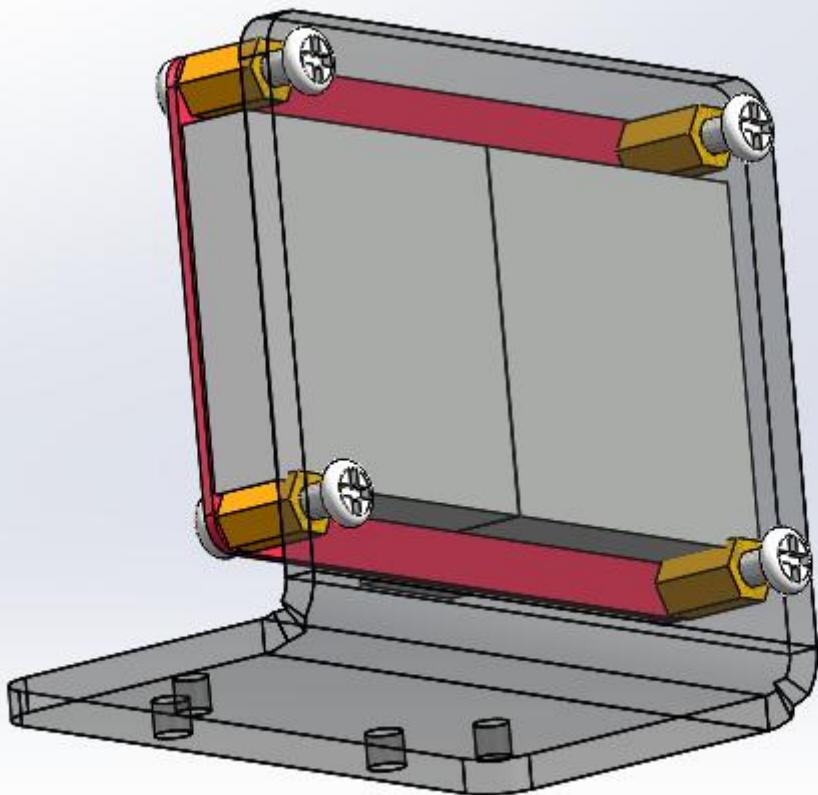


Use 8 M3\*5 screws, and 4 M3\*8 copper standoffs.

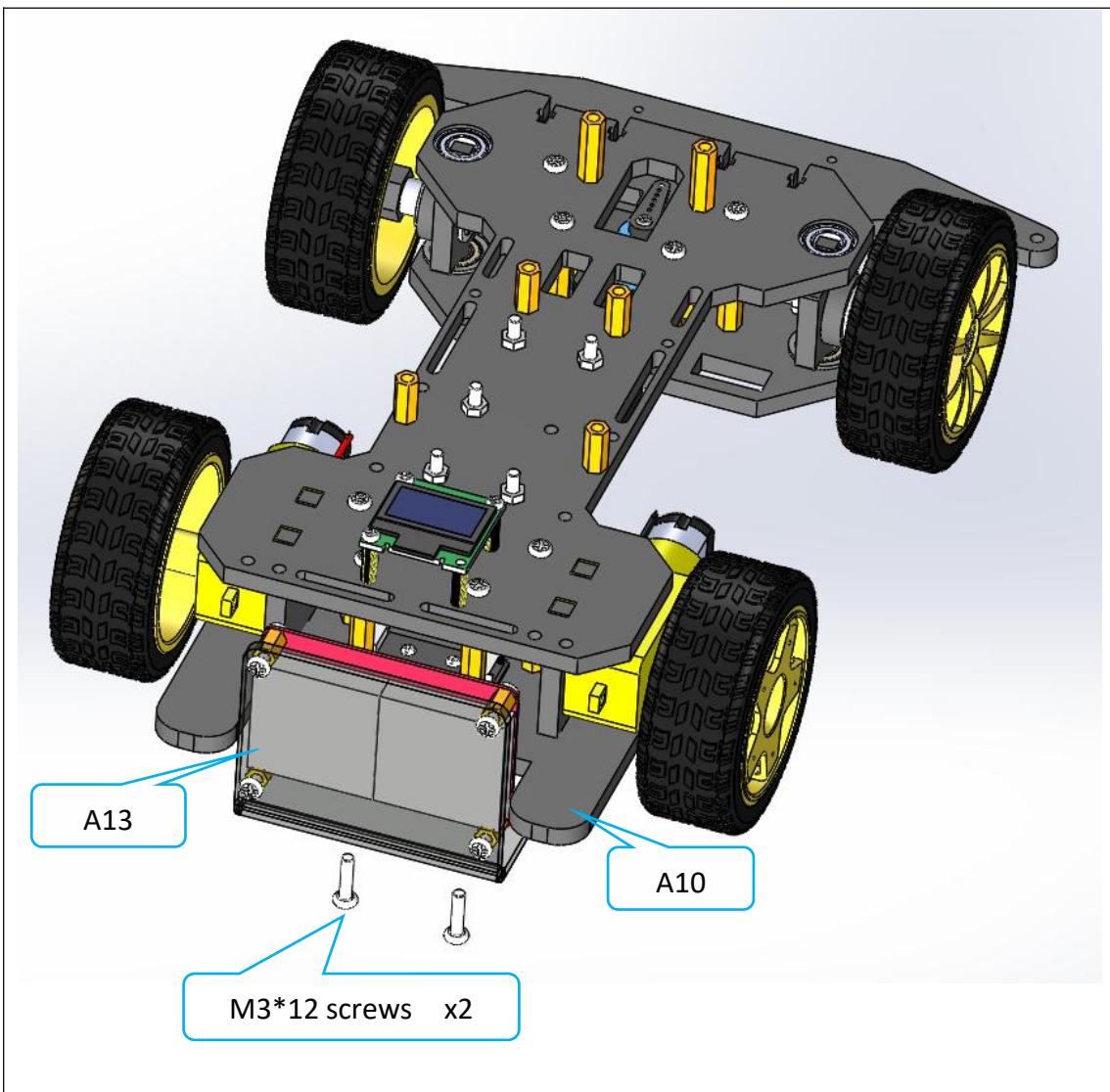


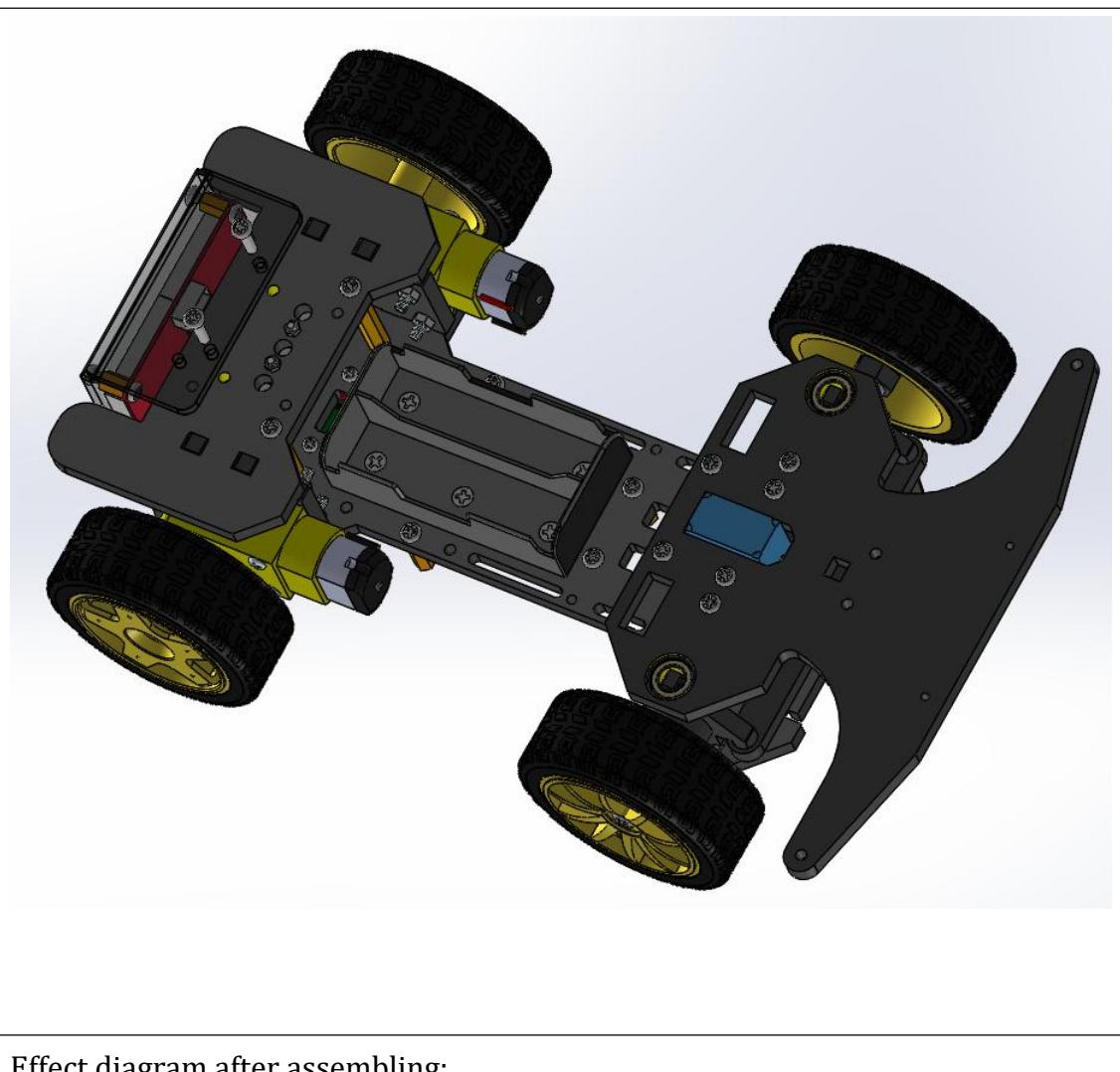
Effect diagram after assembling.



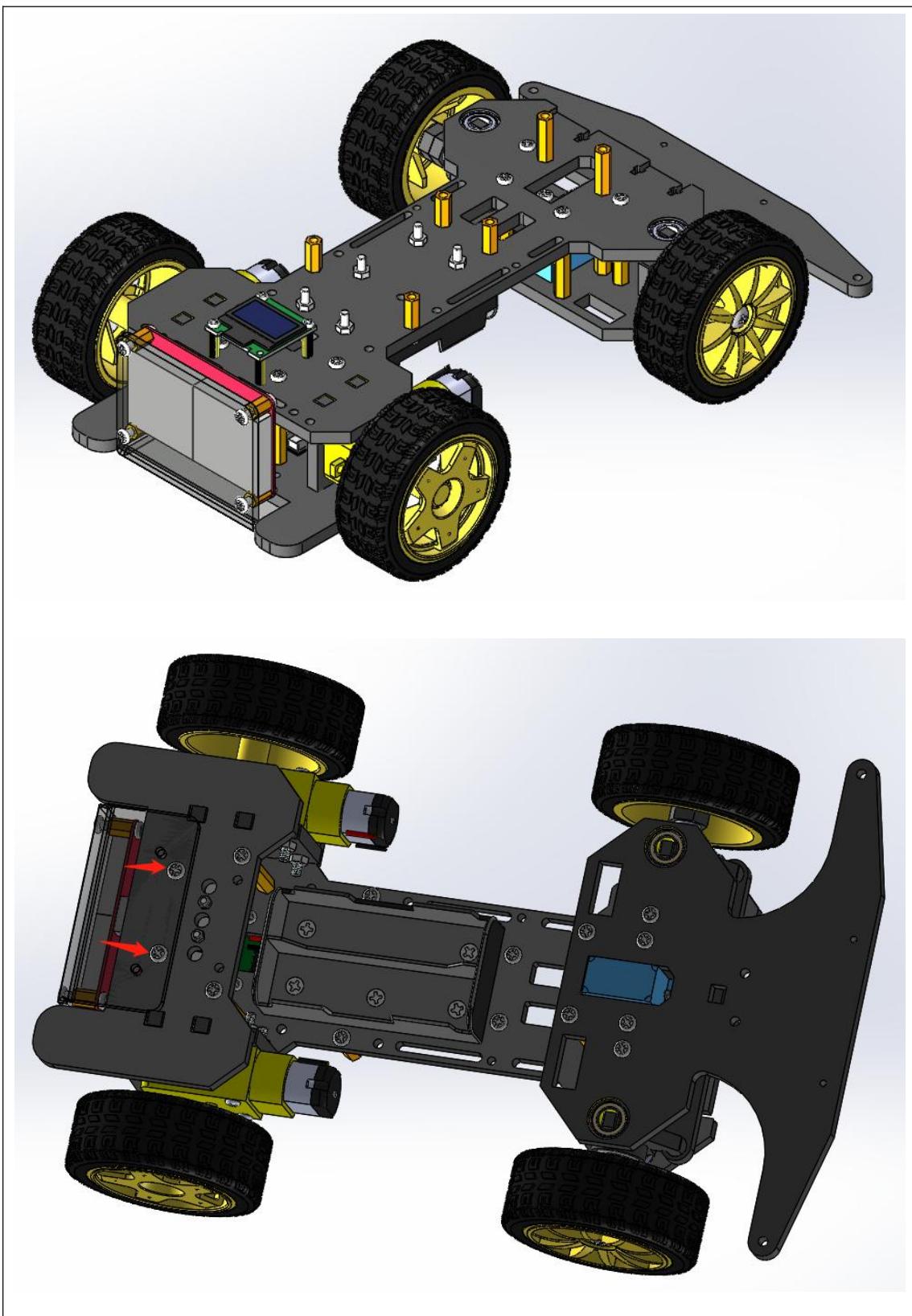


Attach to the copper standoffs on the A10 using two M3\*12 screws.



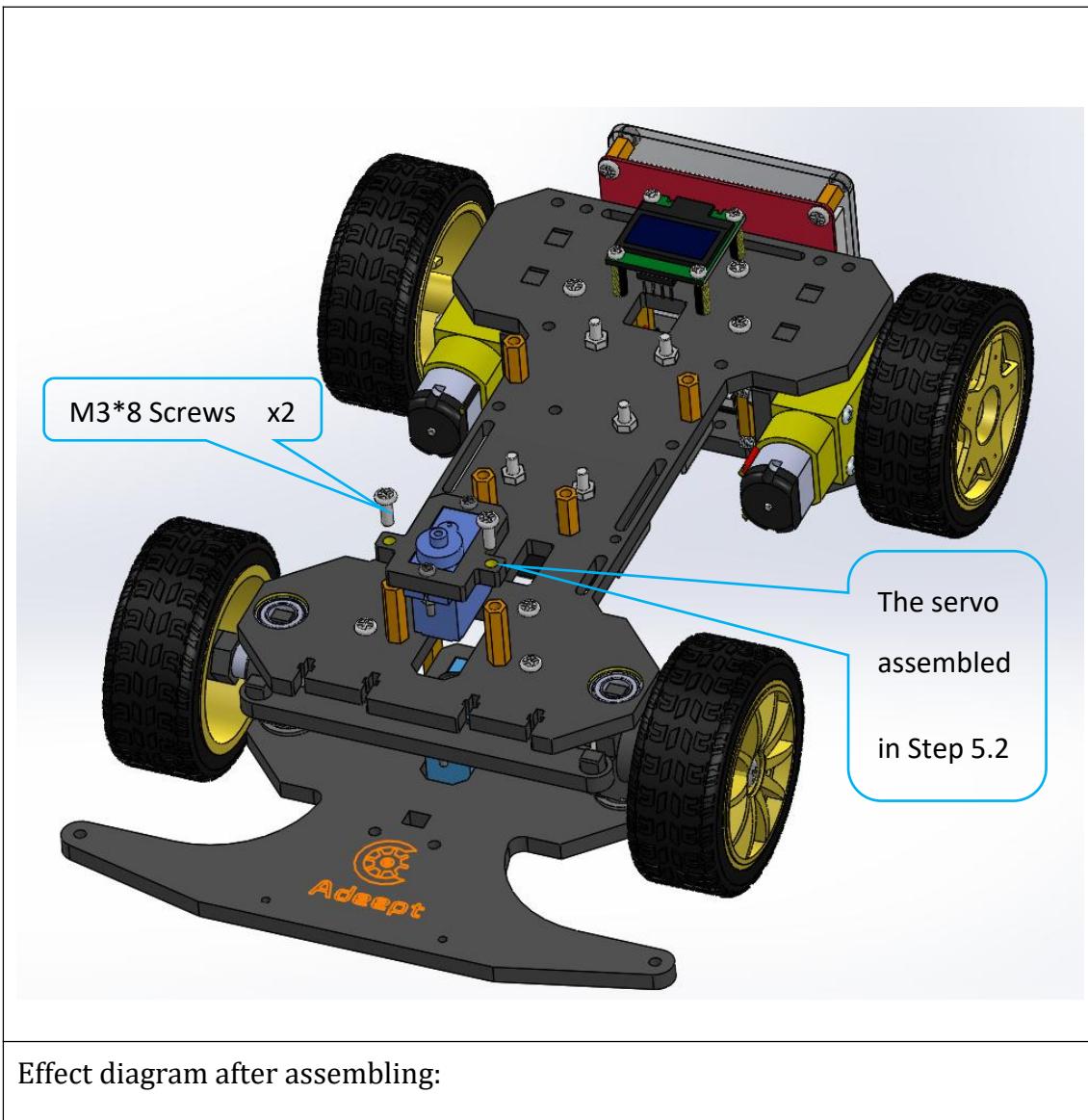


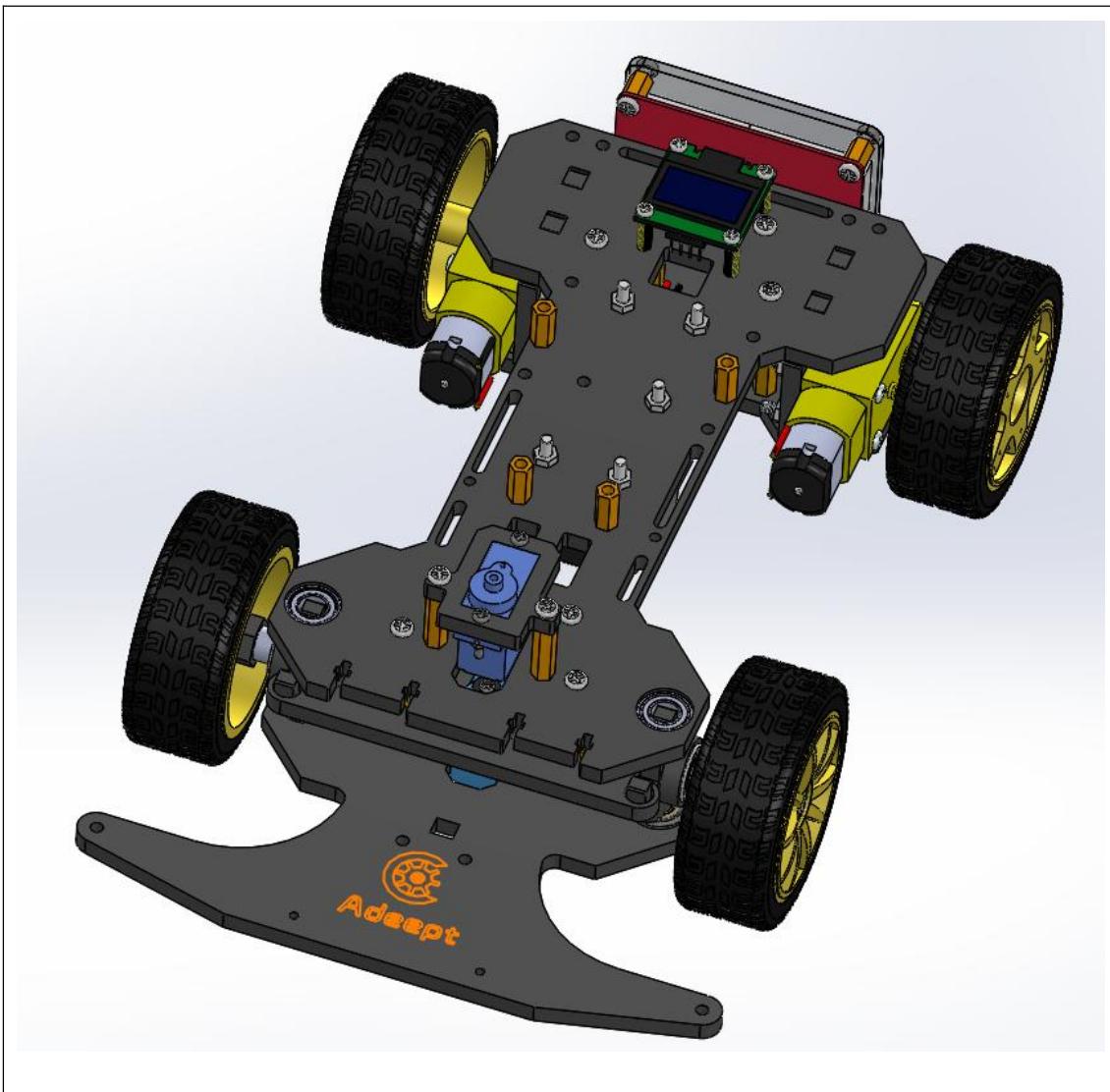
Effect diagram after assembling:



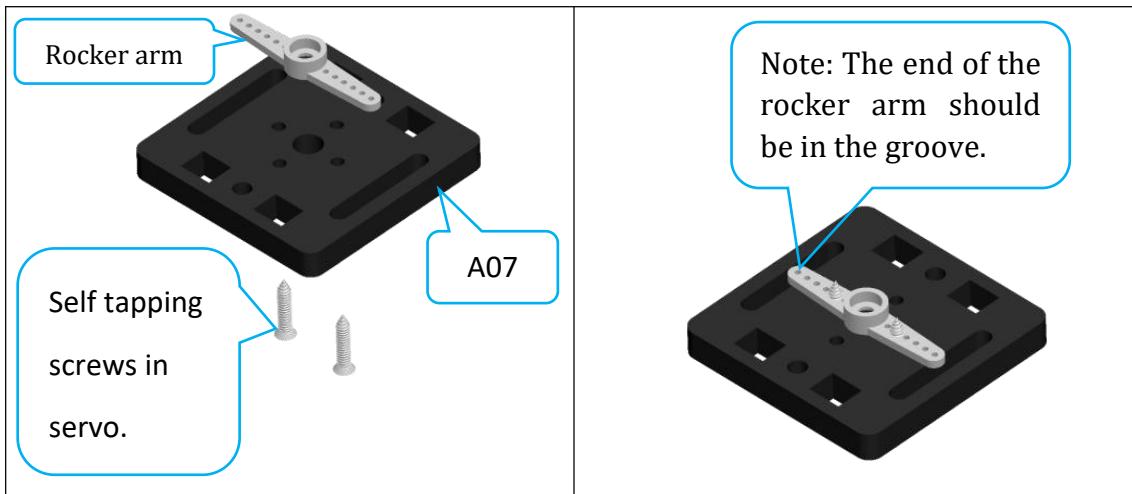
## Assemble ultrasonic module

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

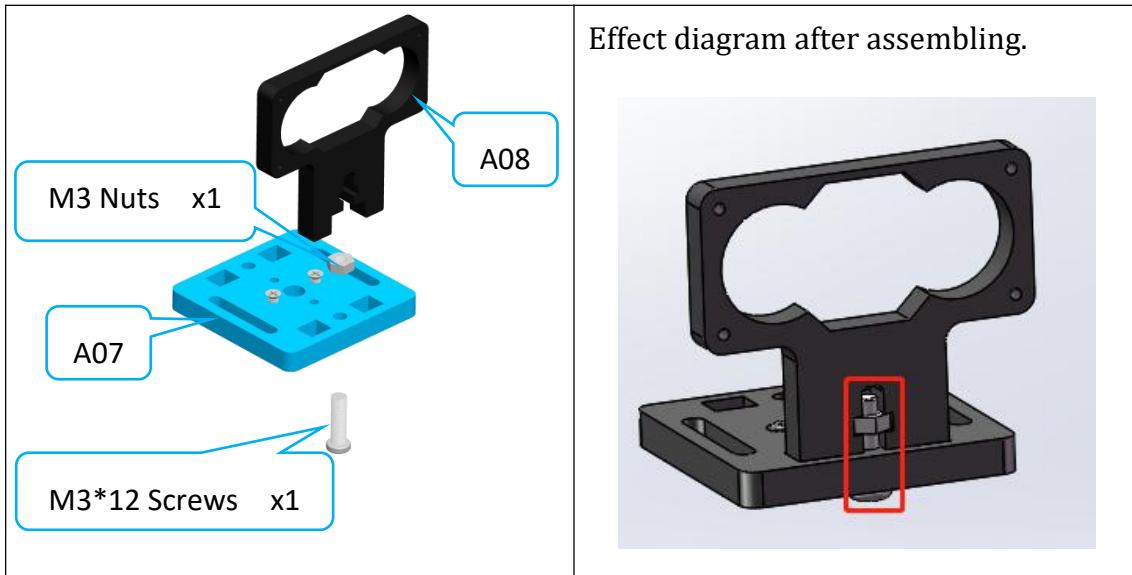




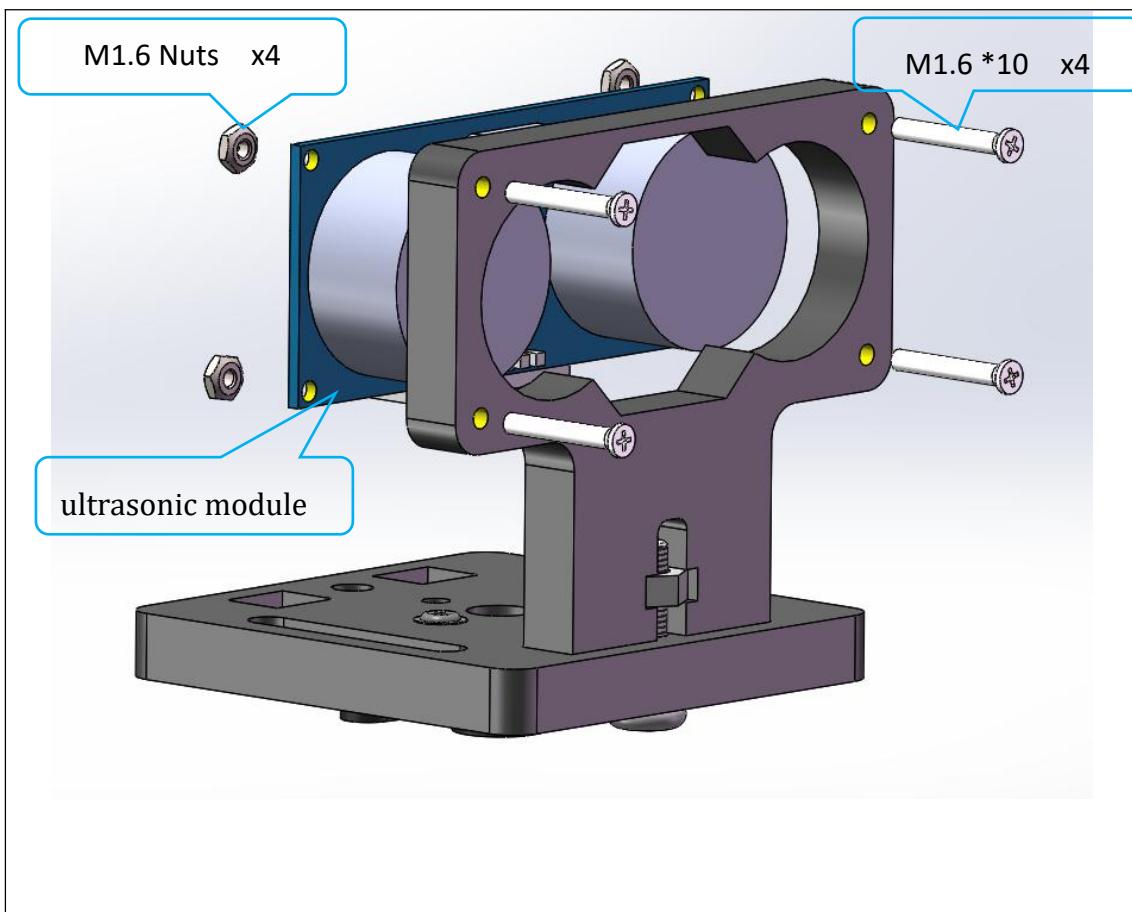
## 6.2 Fix rocker arm to A07.



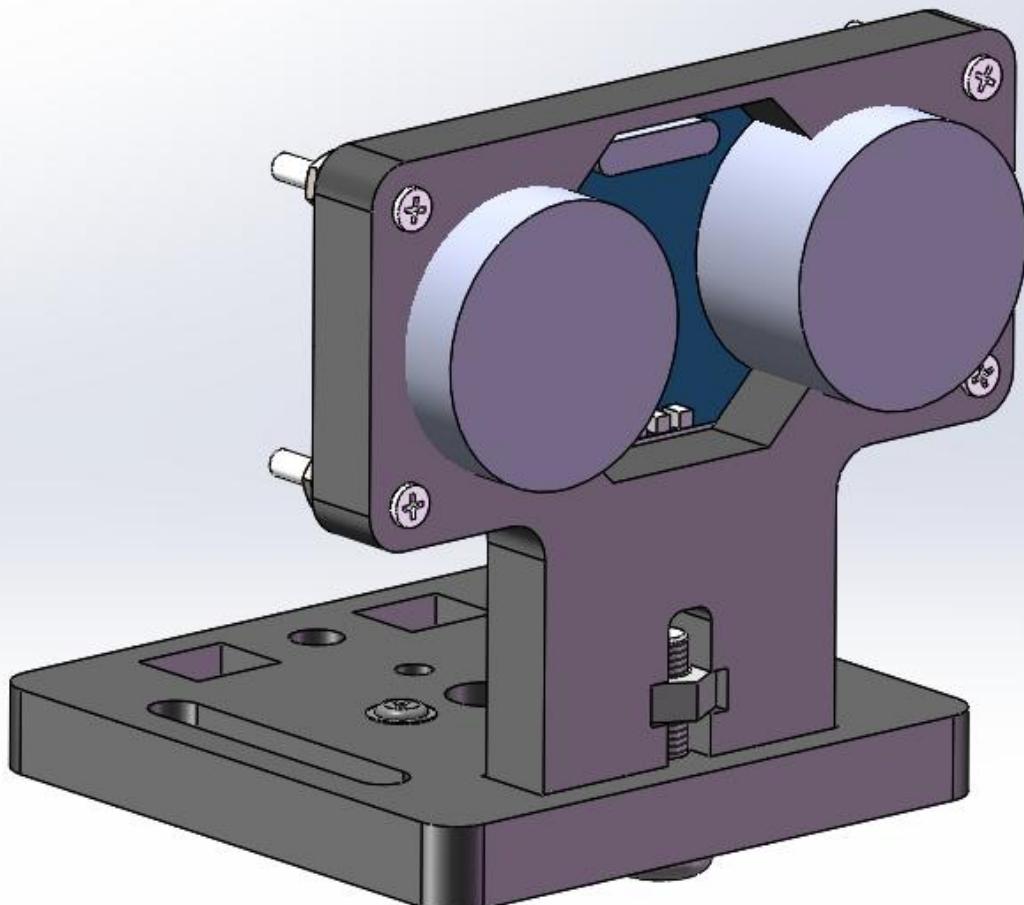
### 6.3 Assembly A07 and A08.

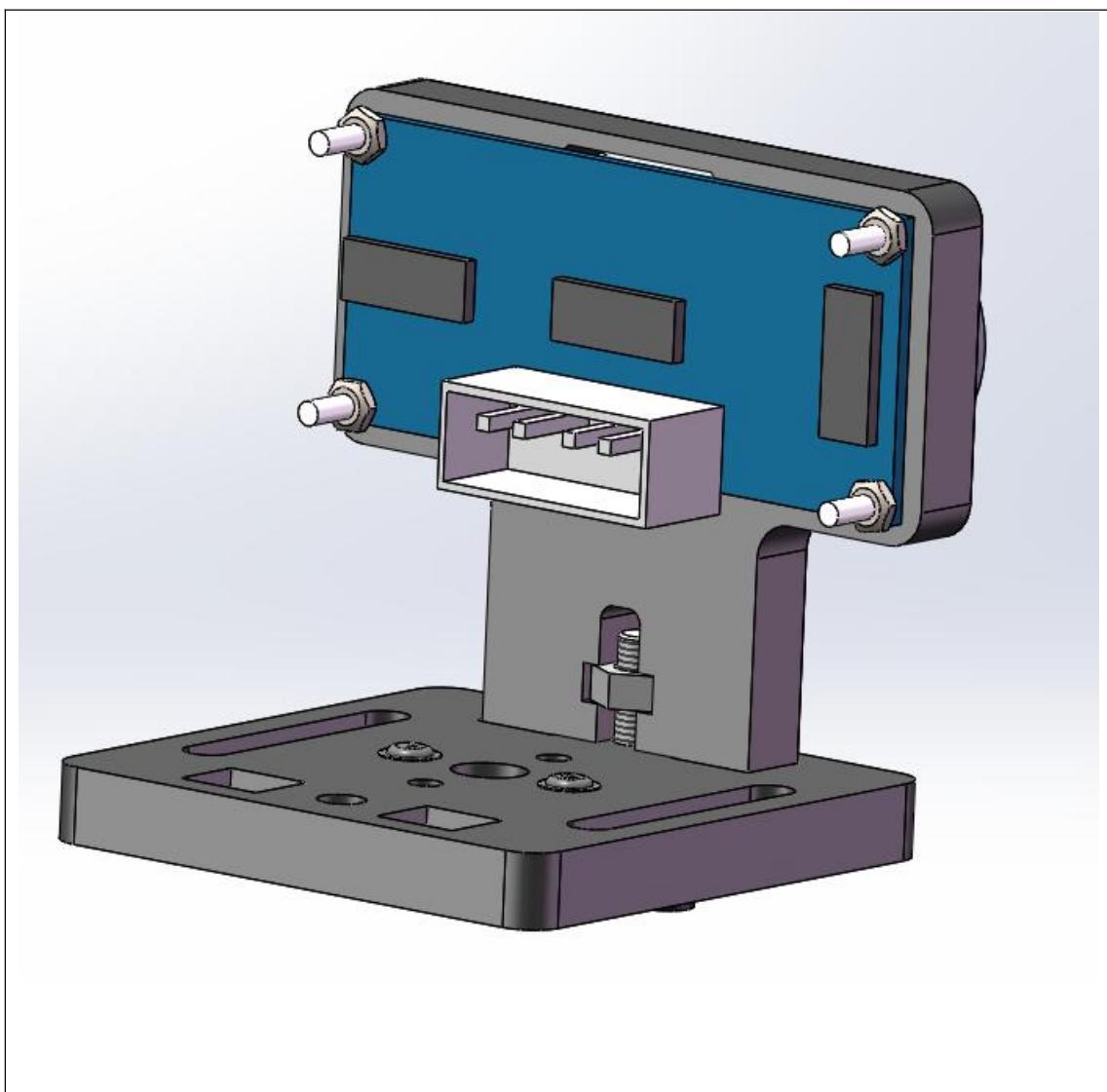


### 6.4 Install the ultrasonic module to A08.

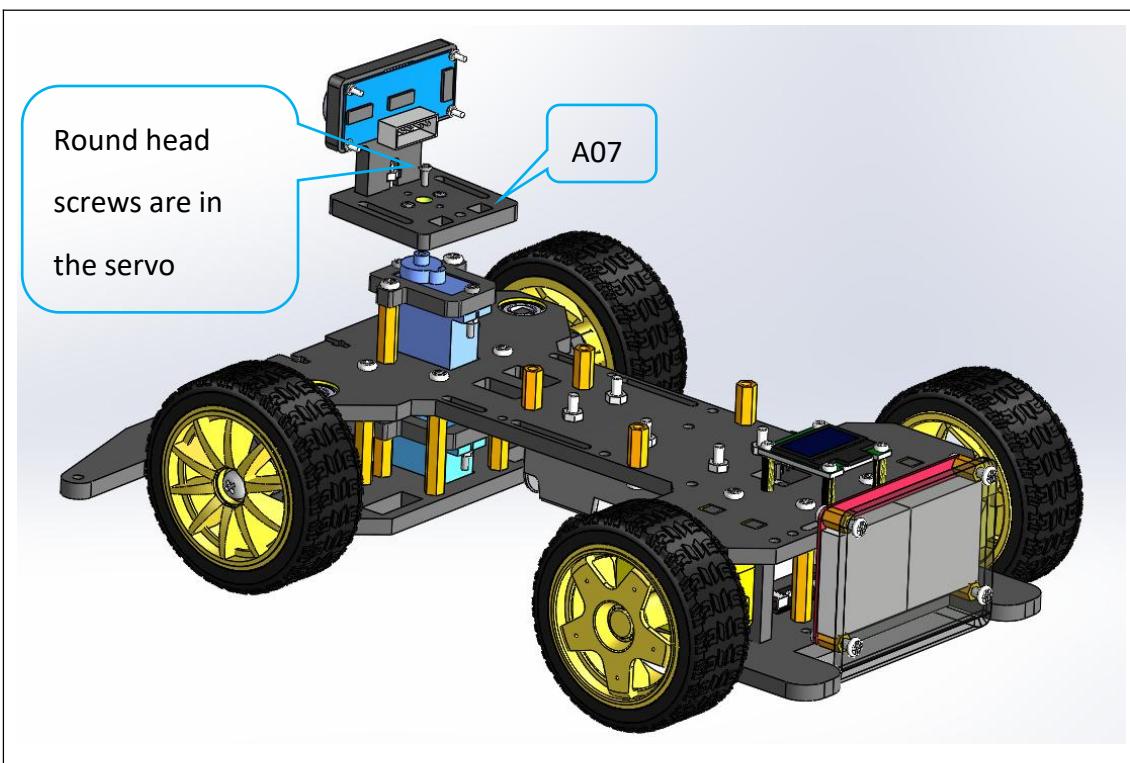


Effect diagram after assembling.

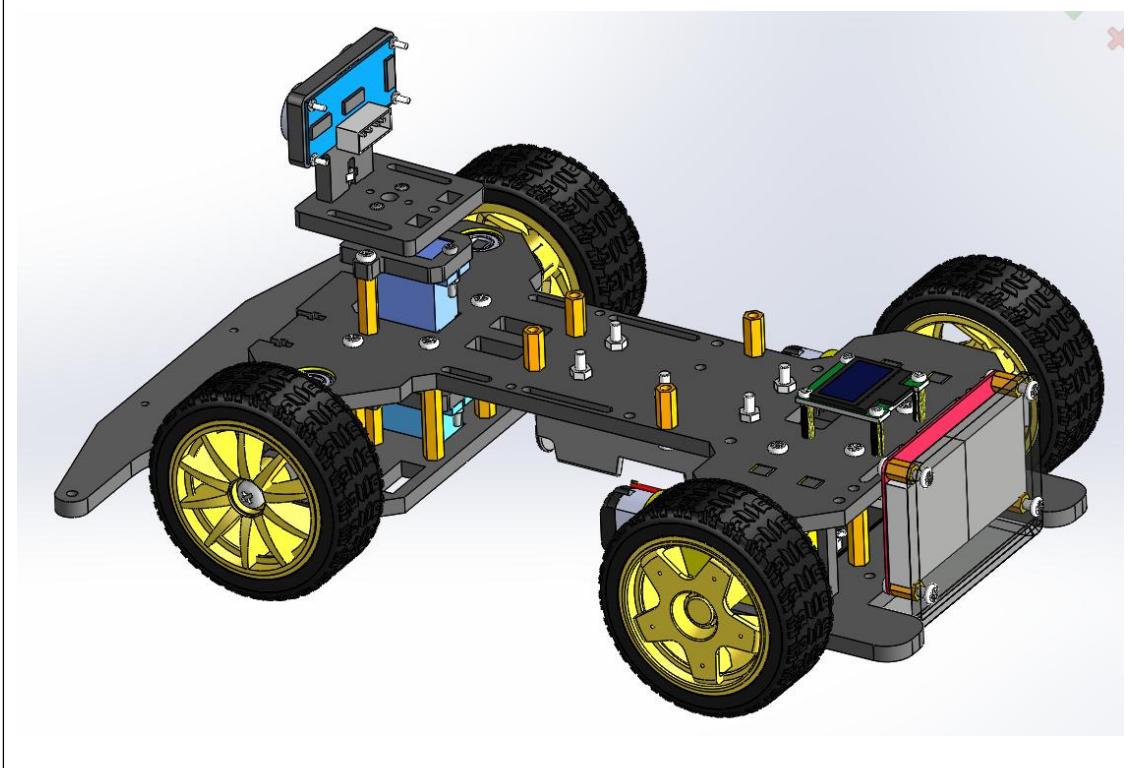


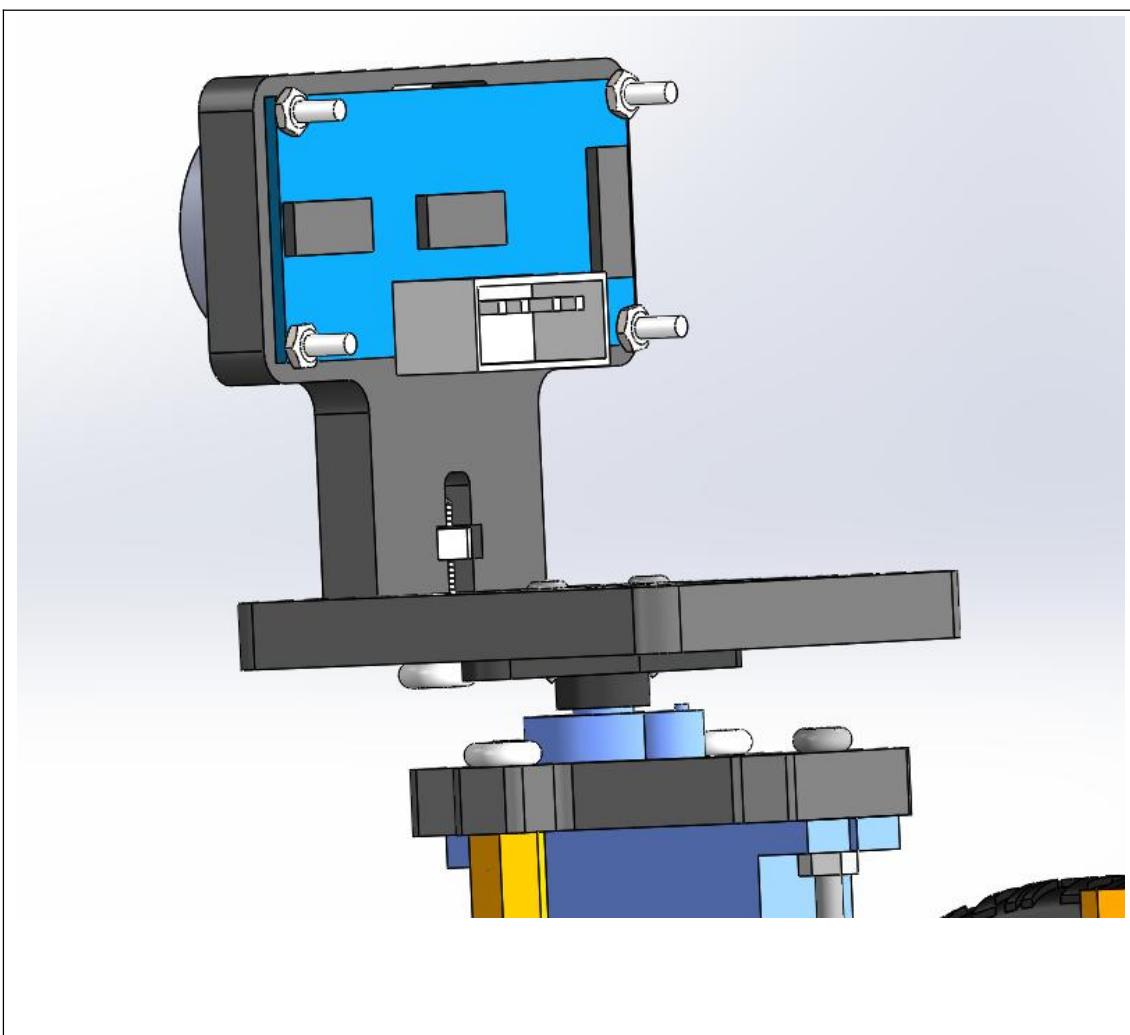


6.5 Assemble A07 to servo.



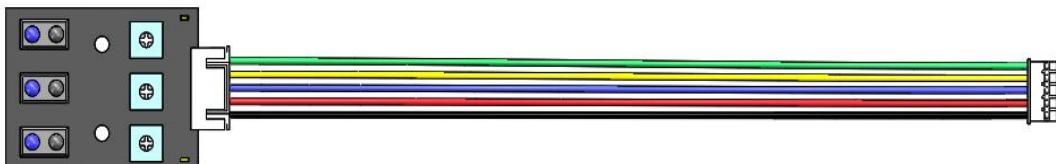
Effect diagram after assembling:





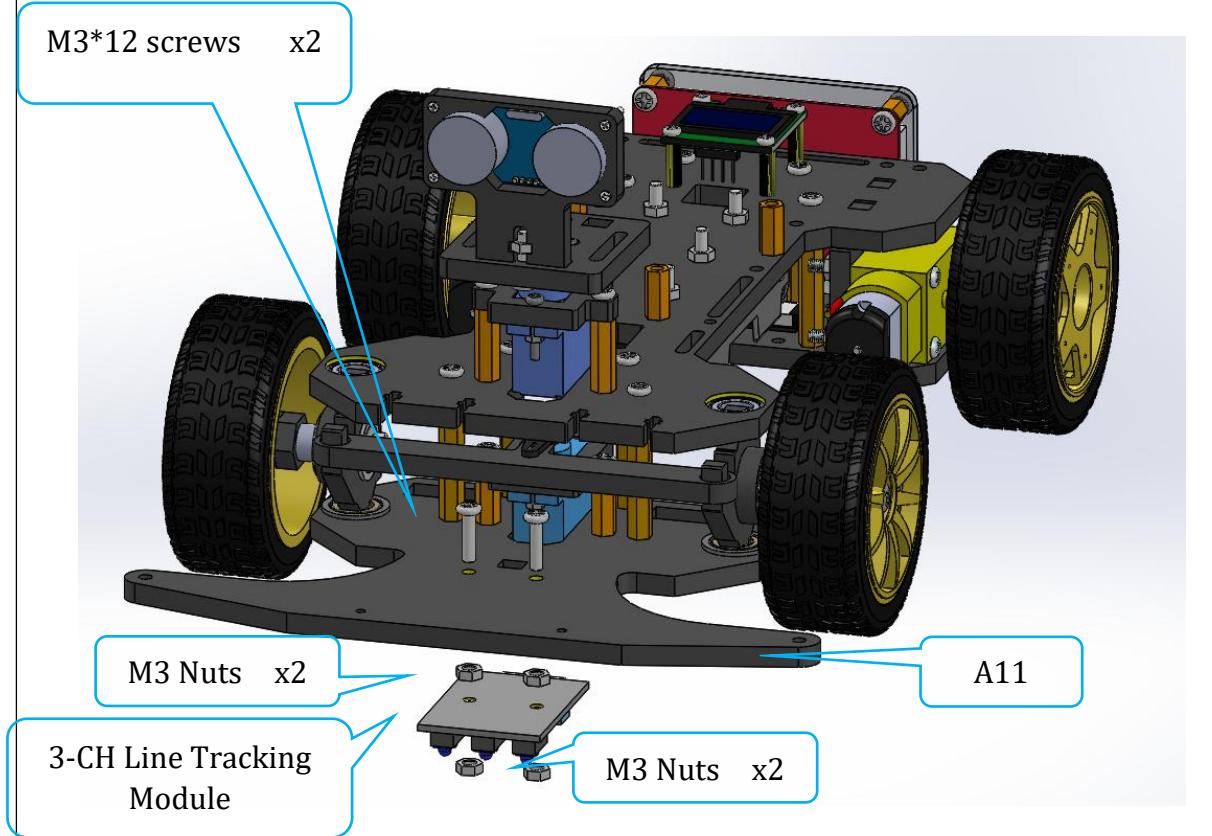
## 7.1 Install 3-CH Line Tracking module.

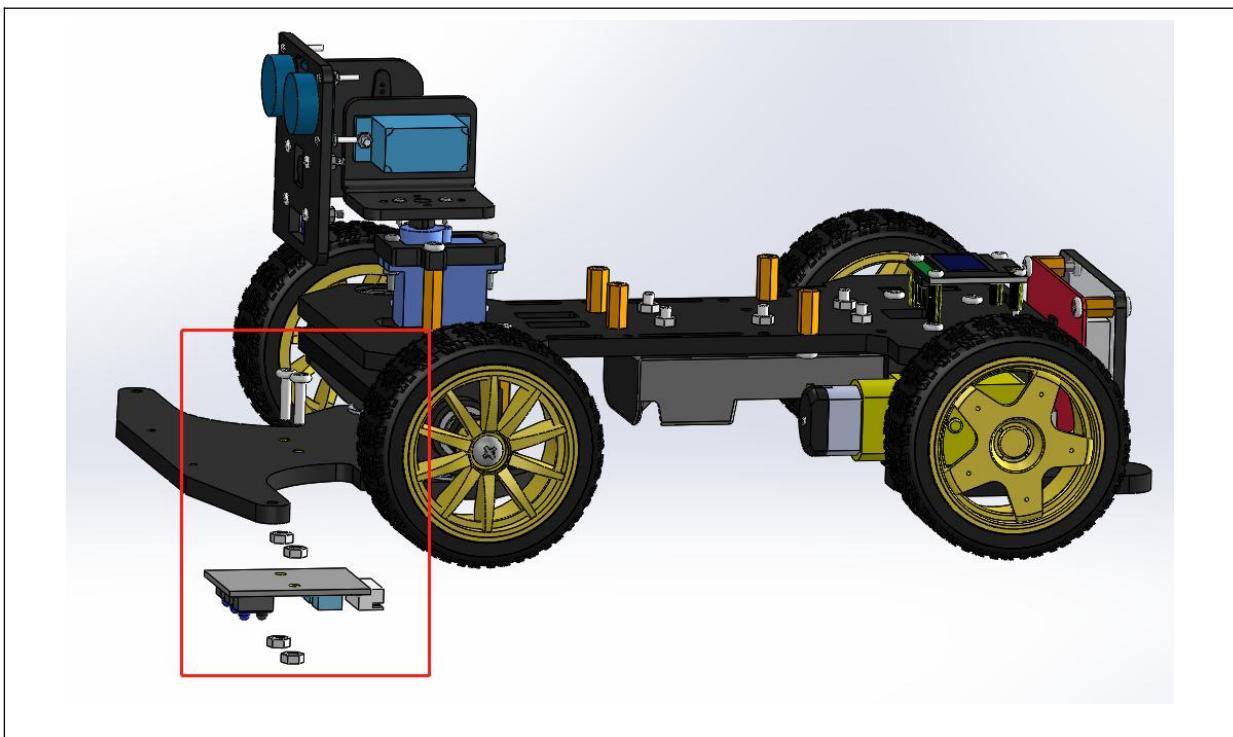
Note: Before installing the circuit 3 module, connect the cables (as shown in the following figure).



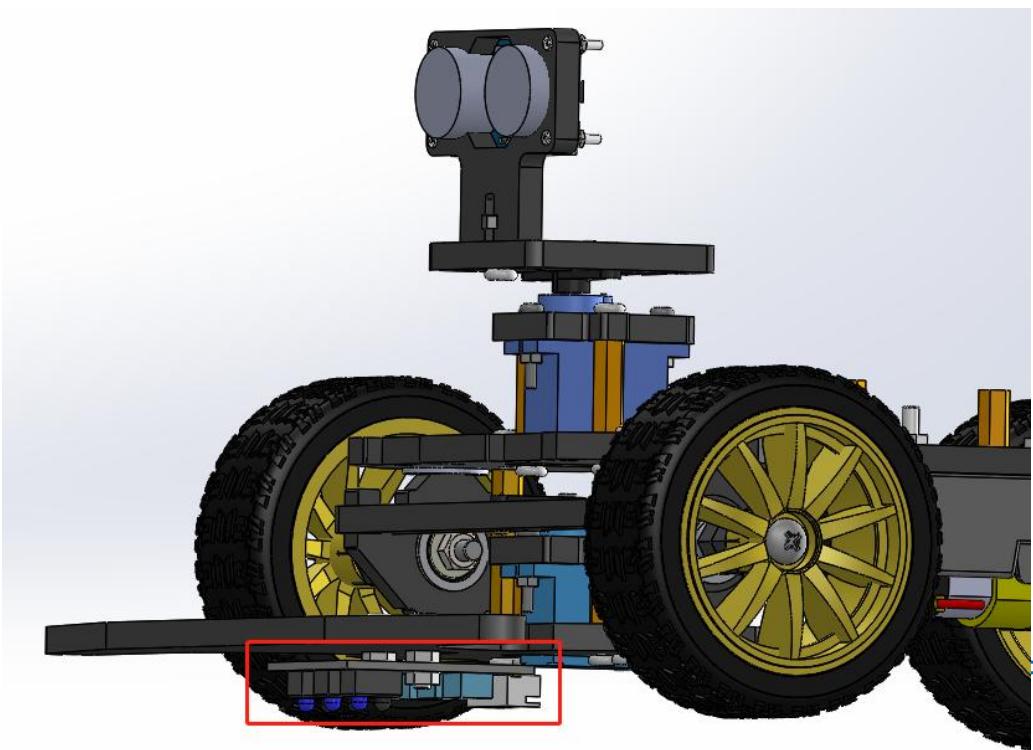
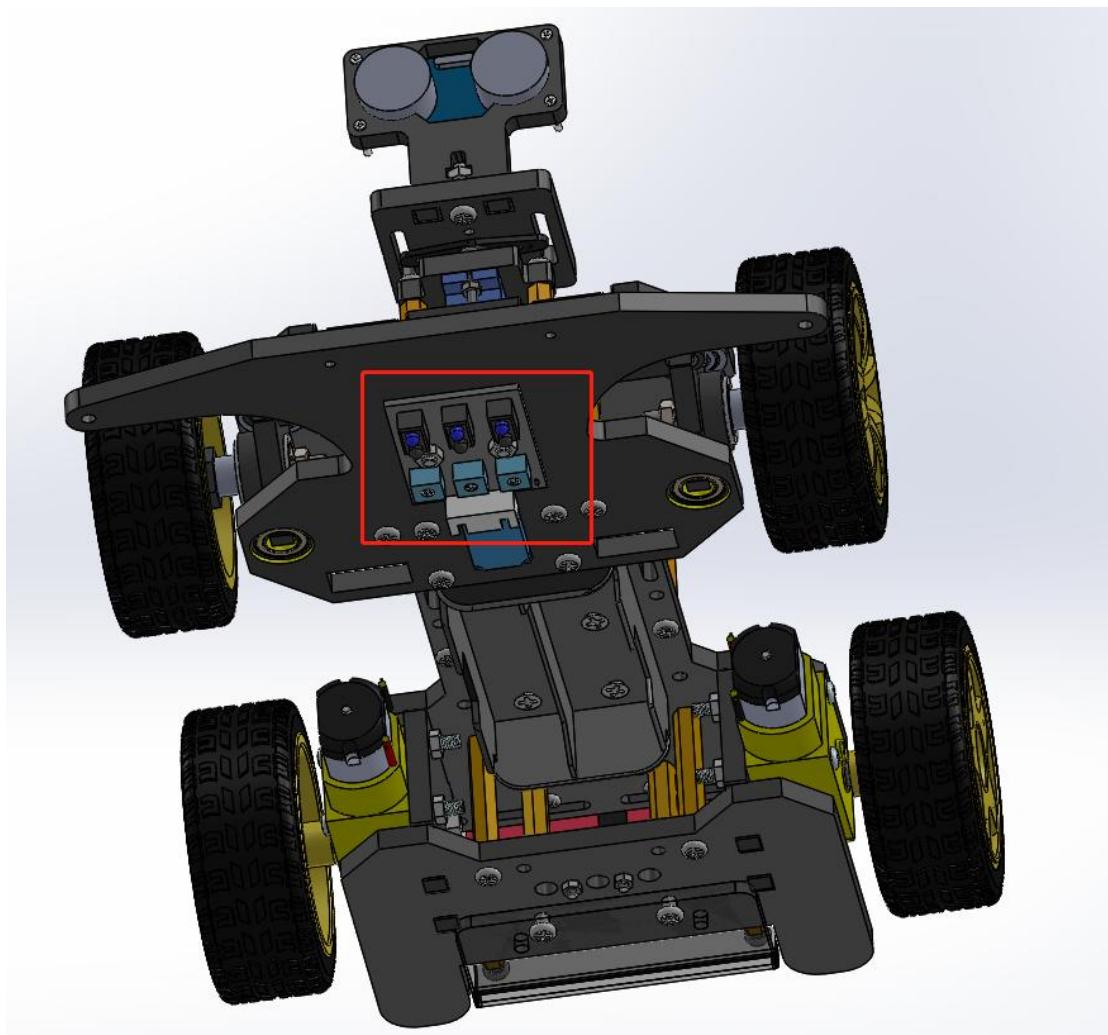
Note: There are two M3 nuts between the 3-CH Line Tracking Module and A11 as the base cushion.

Use 2 M3\*12 screws and 4 M3 nuts.



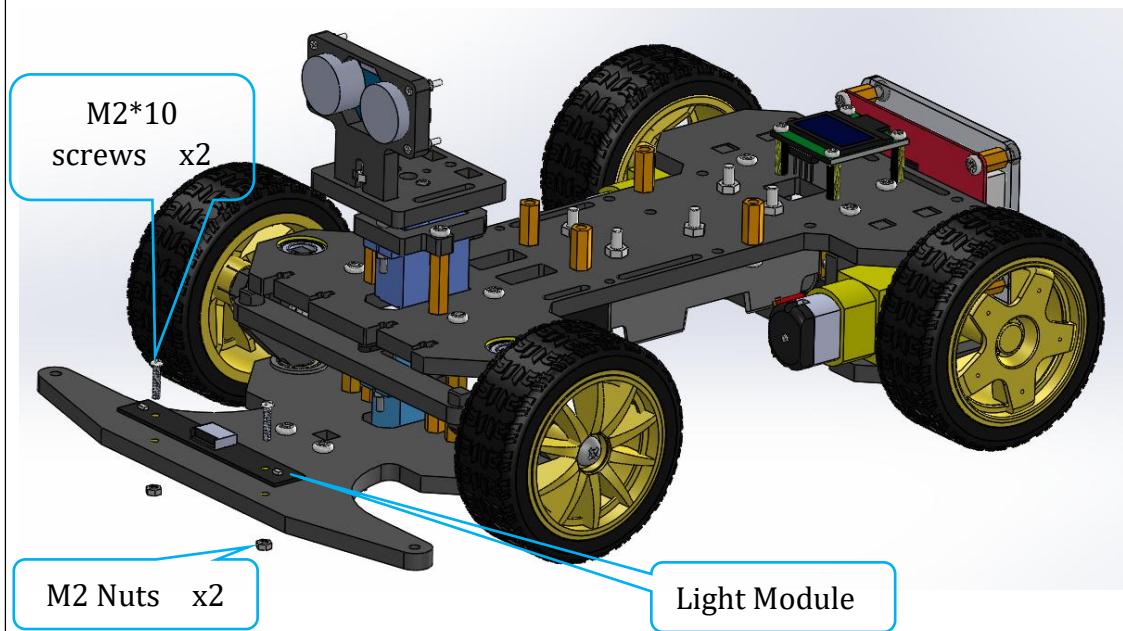
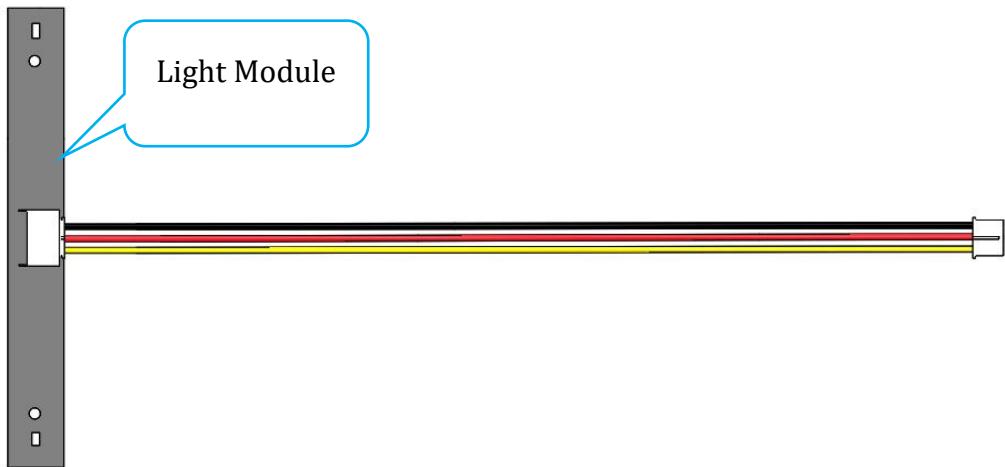


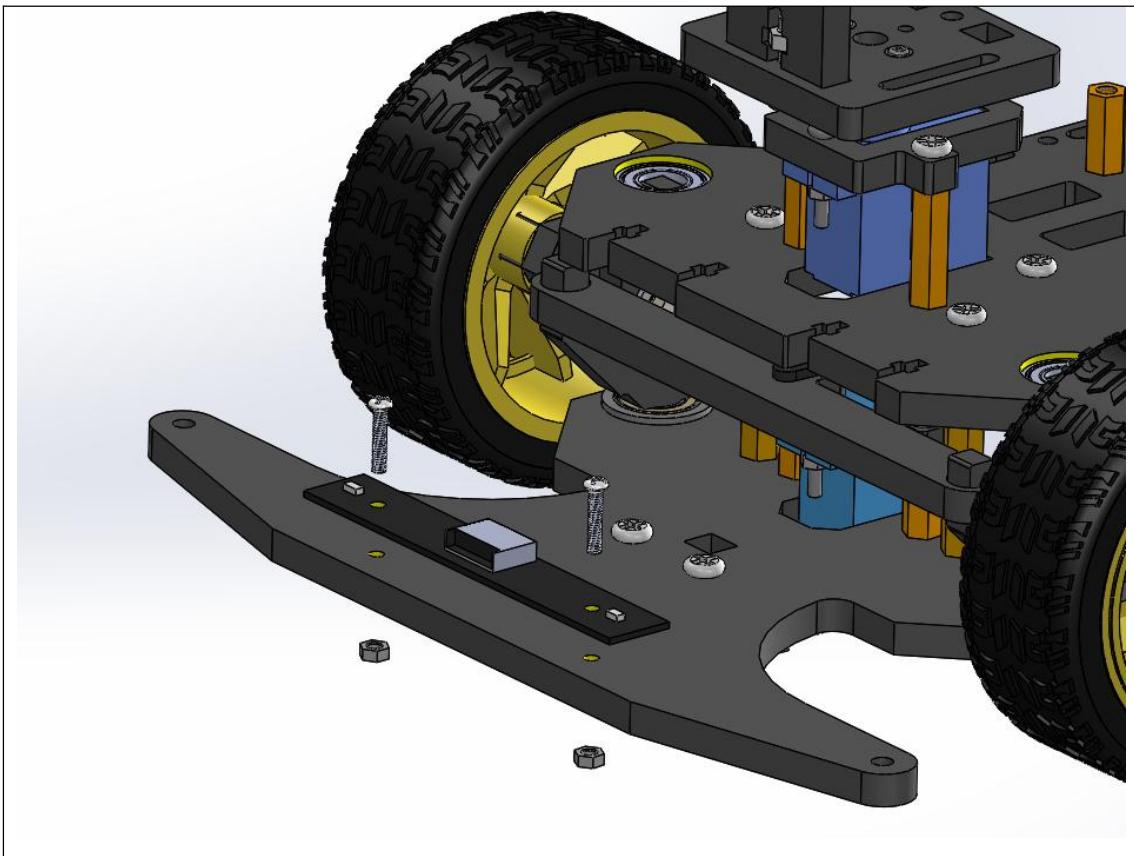
Effect diagram after assembling:



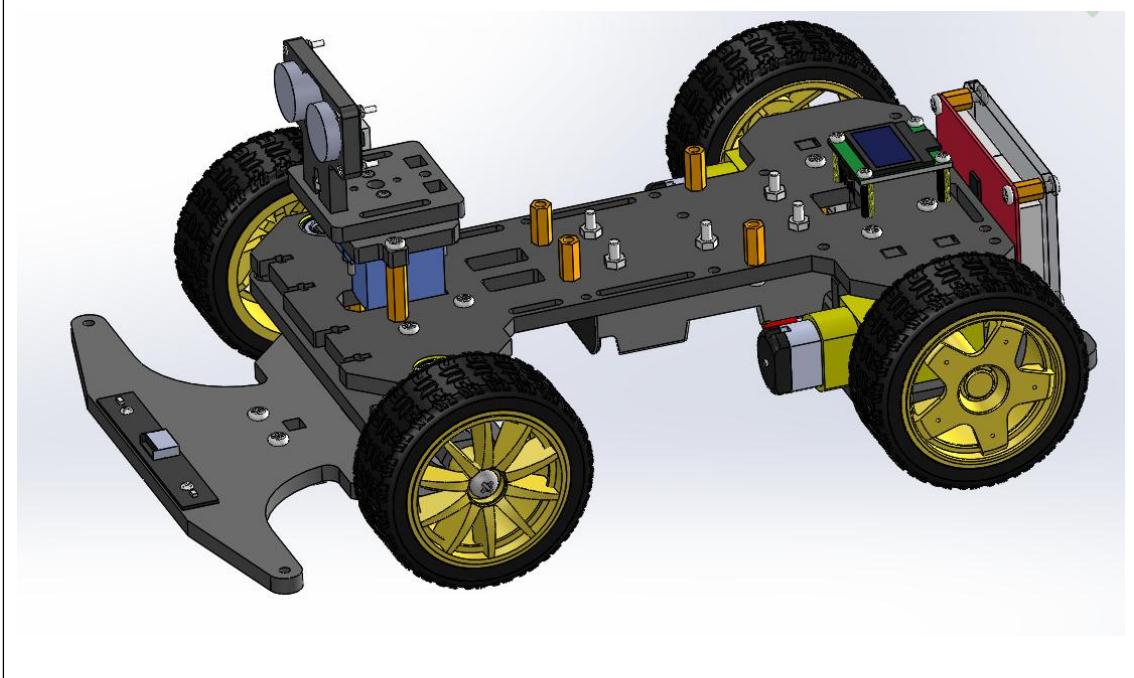
## 7.2 Assembly light module.

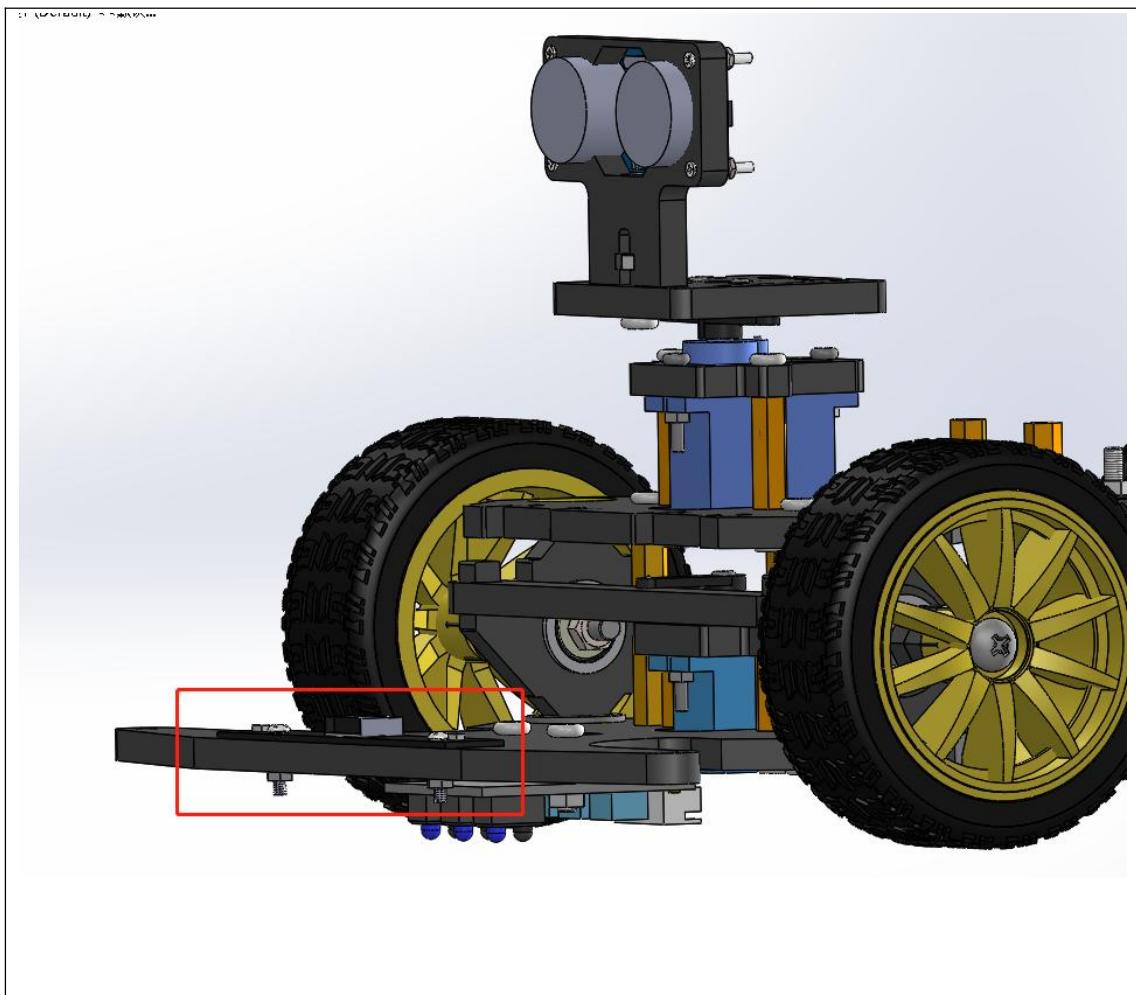
Note: Before installing the cable patrol module, connect the cable (as shown in the figure below), and the wiring port faces inward.



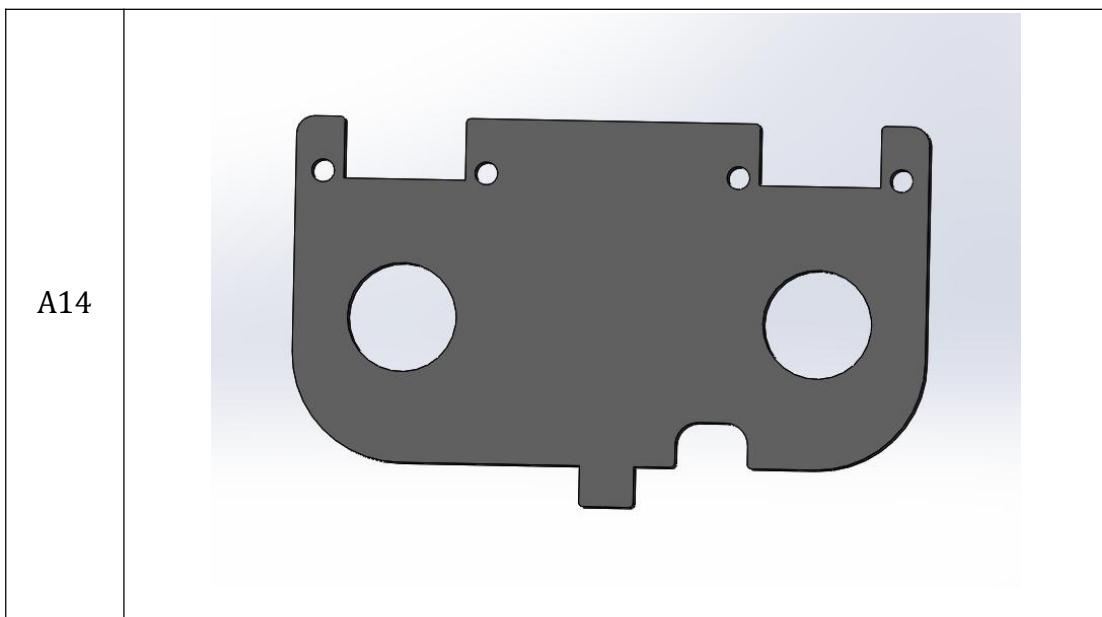


Effect diagram after assembling.

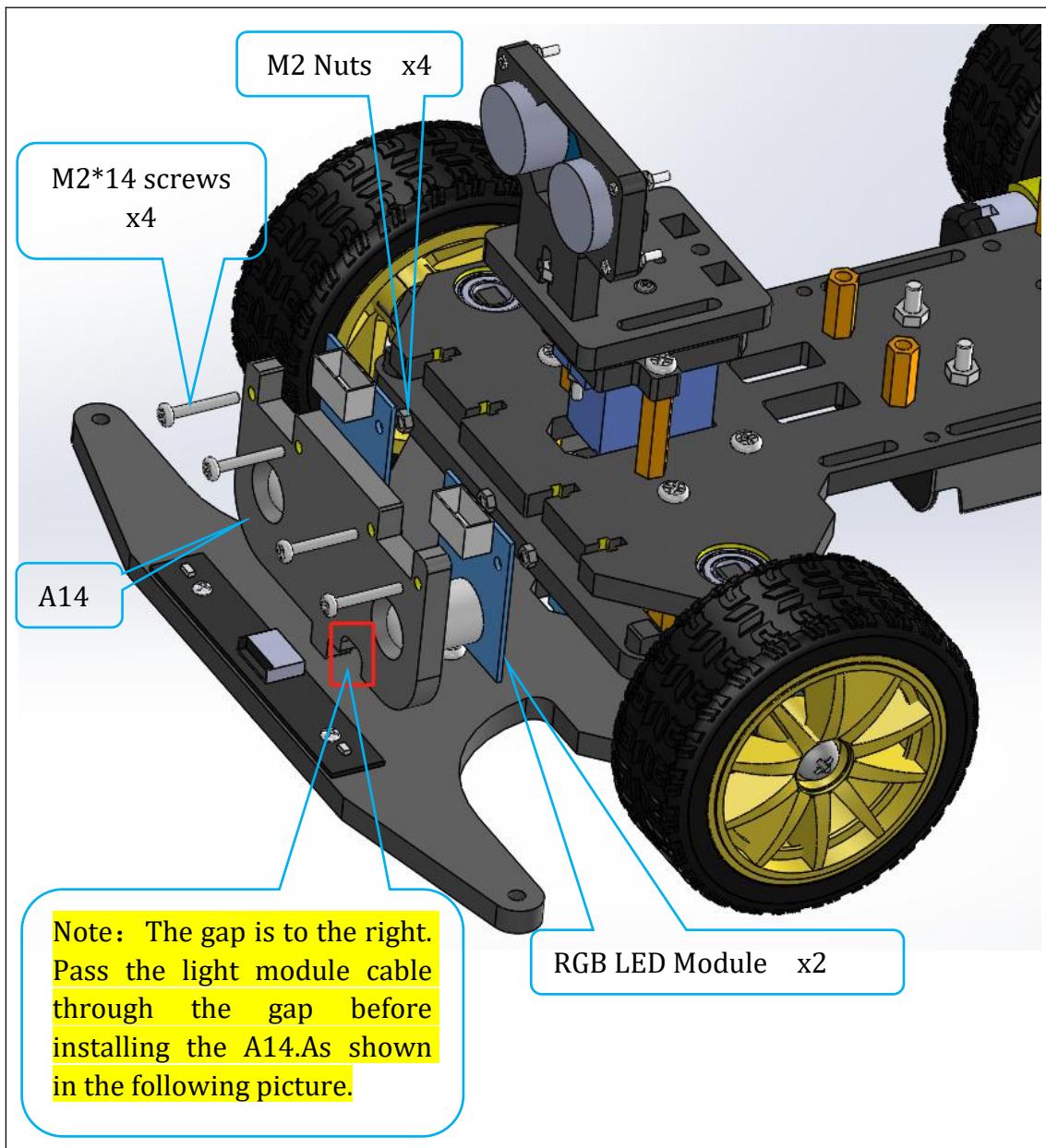


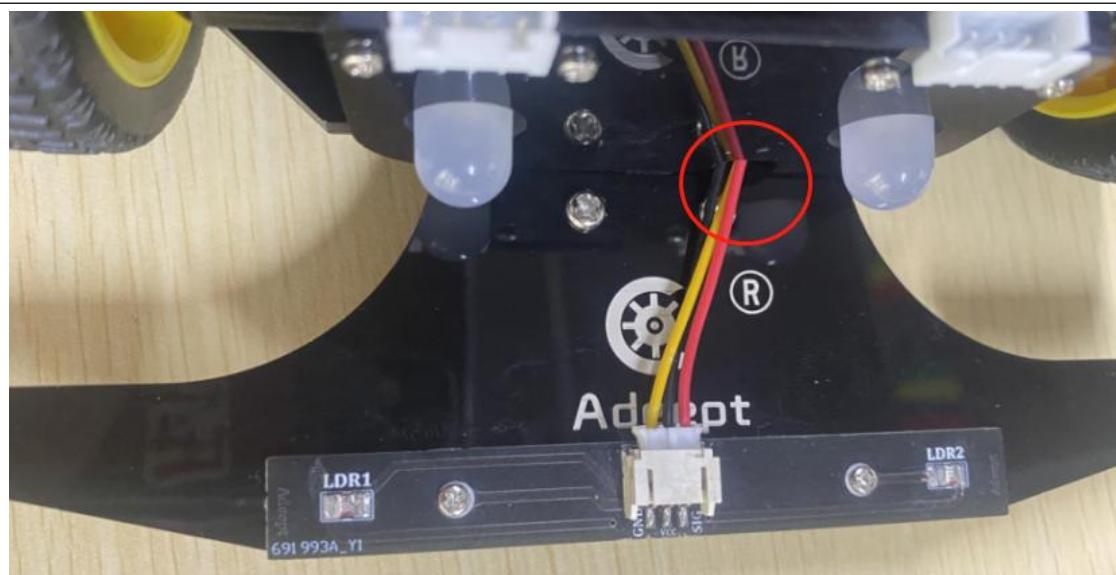


### 7.3 Assembly RGB LED module.

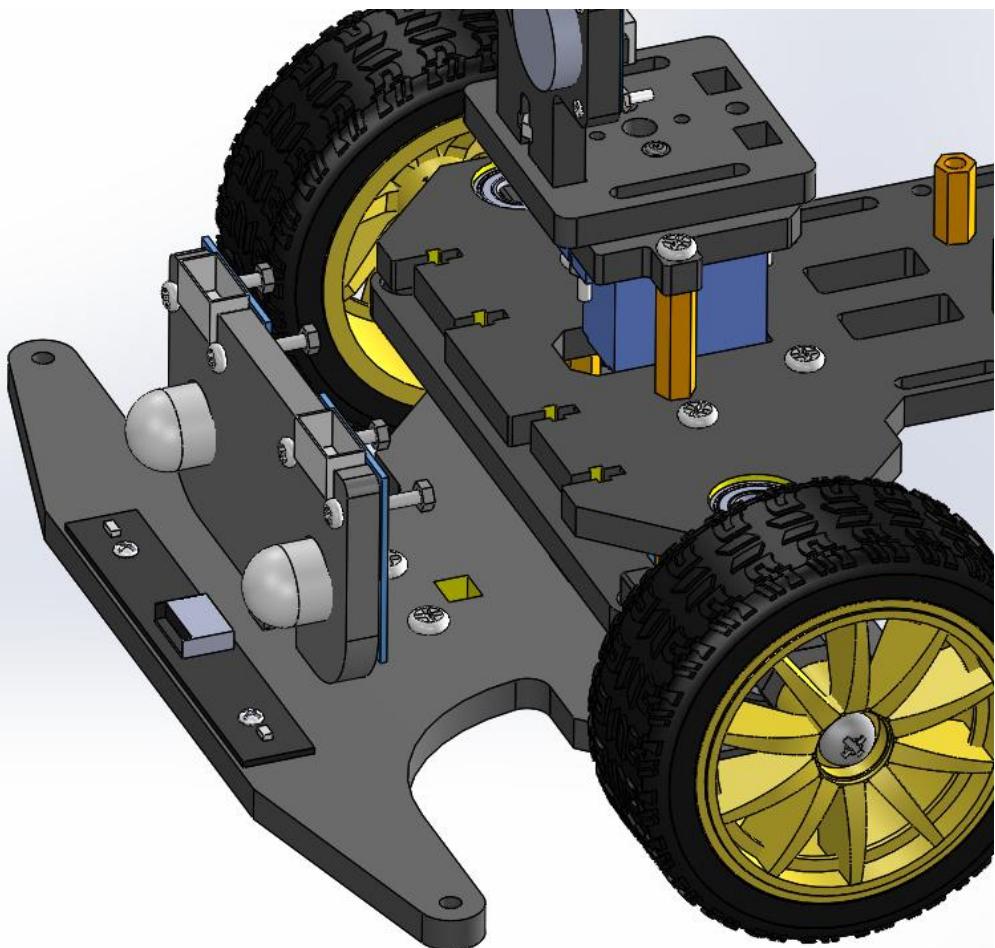


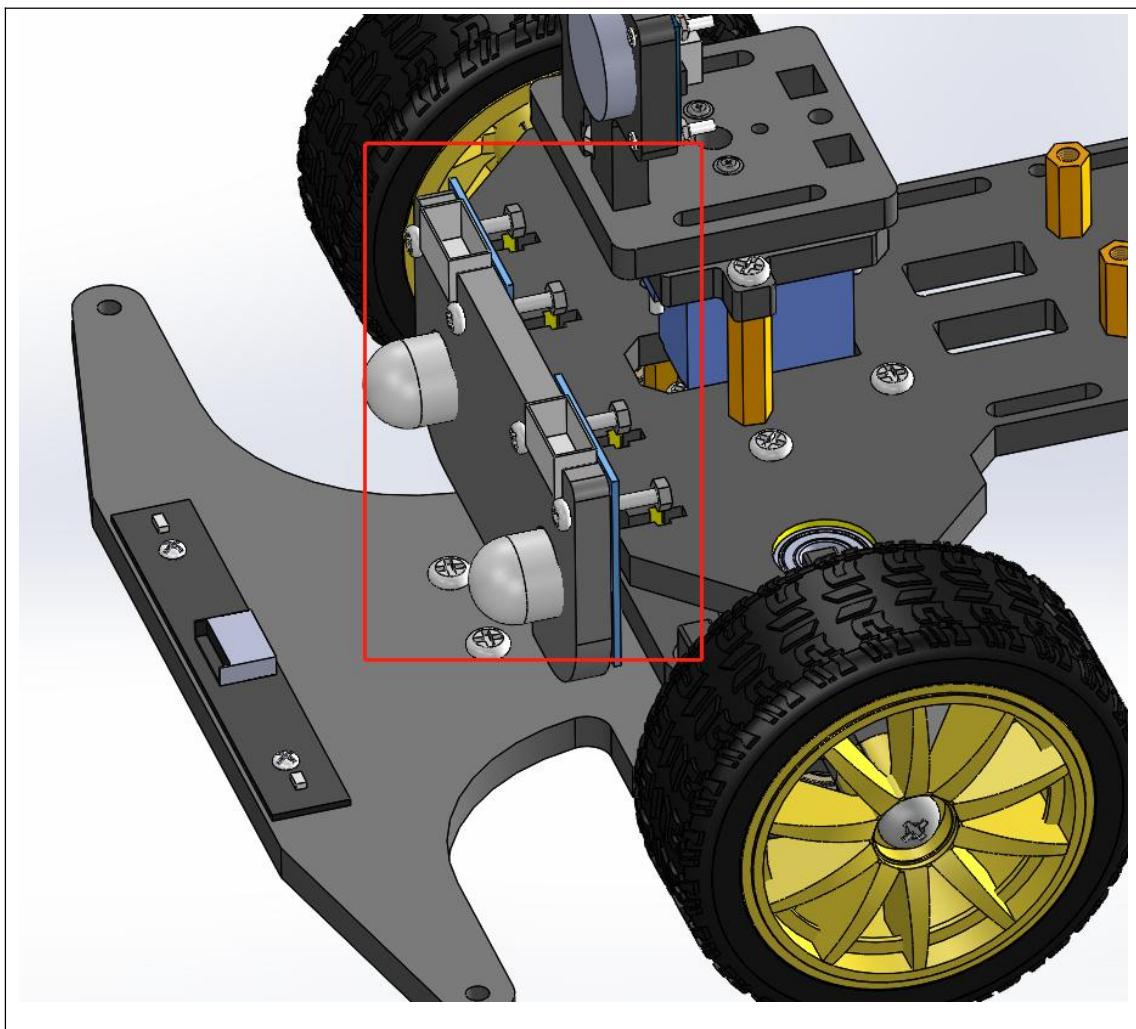
Use two M2\*14 screws and two M2 nuts to install the two RGB modules and A14.

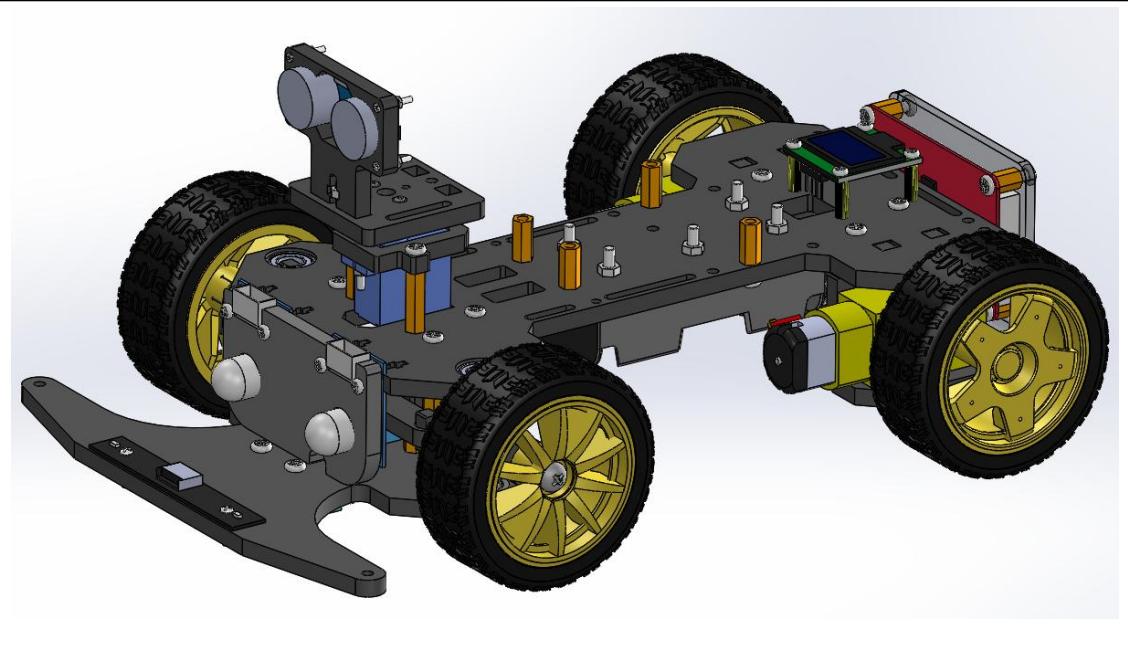
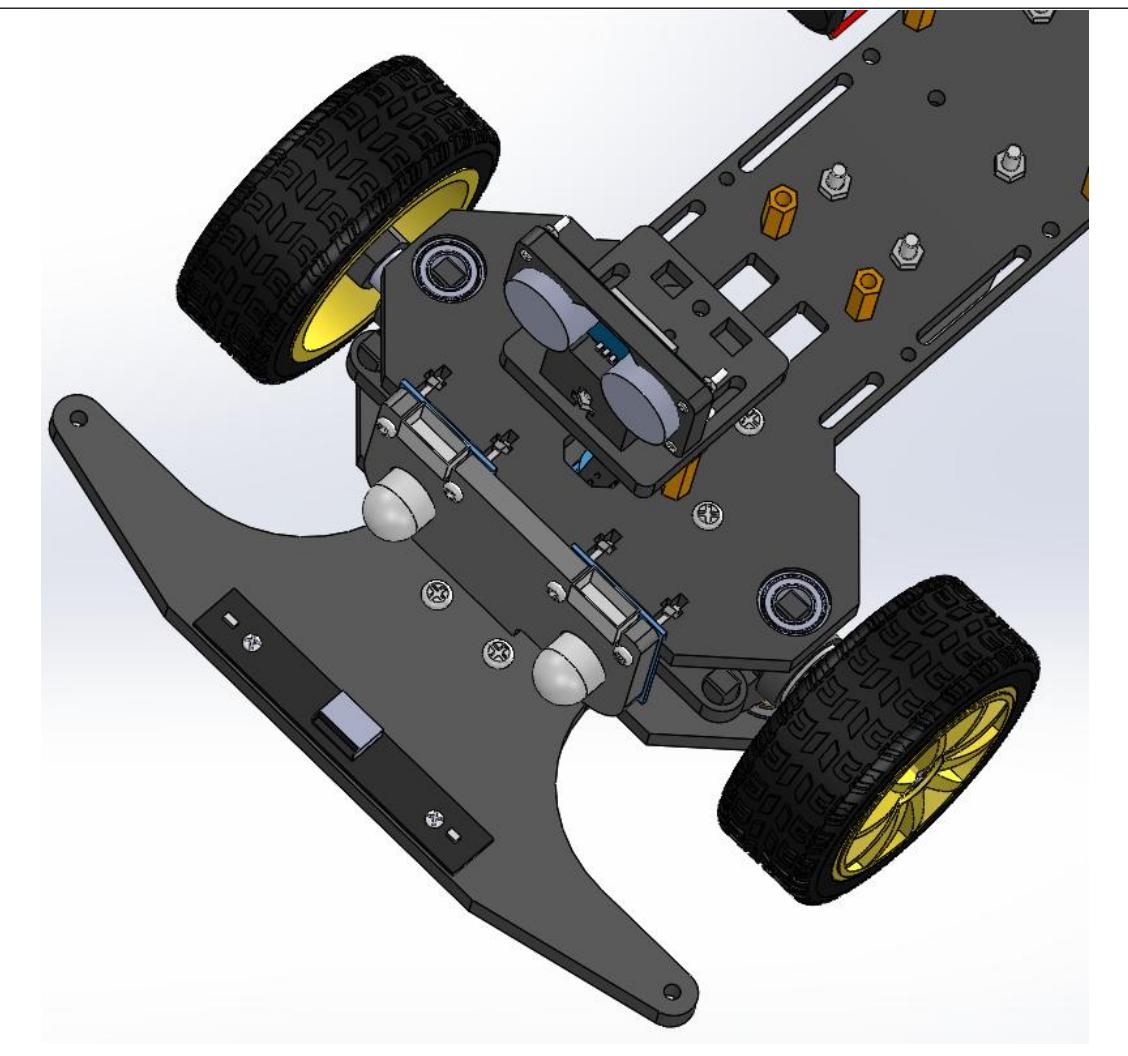




First screw on the nuts, then put it into the corresponding slot, and then tighten them.

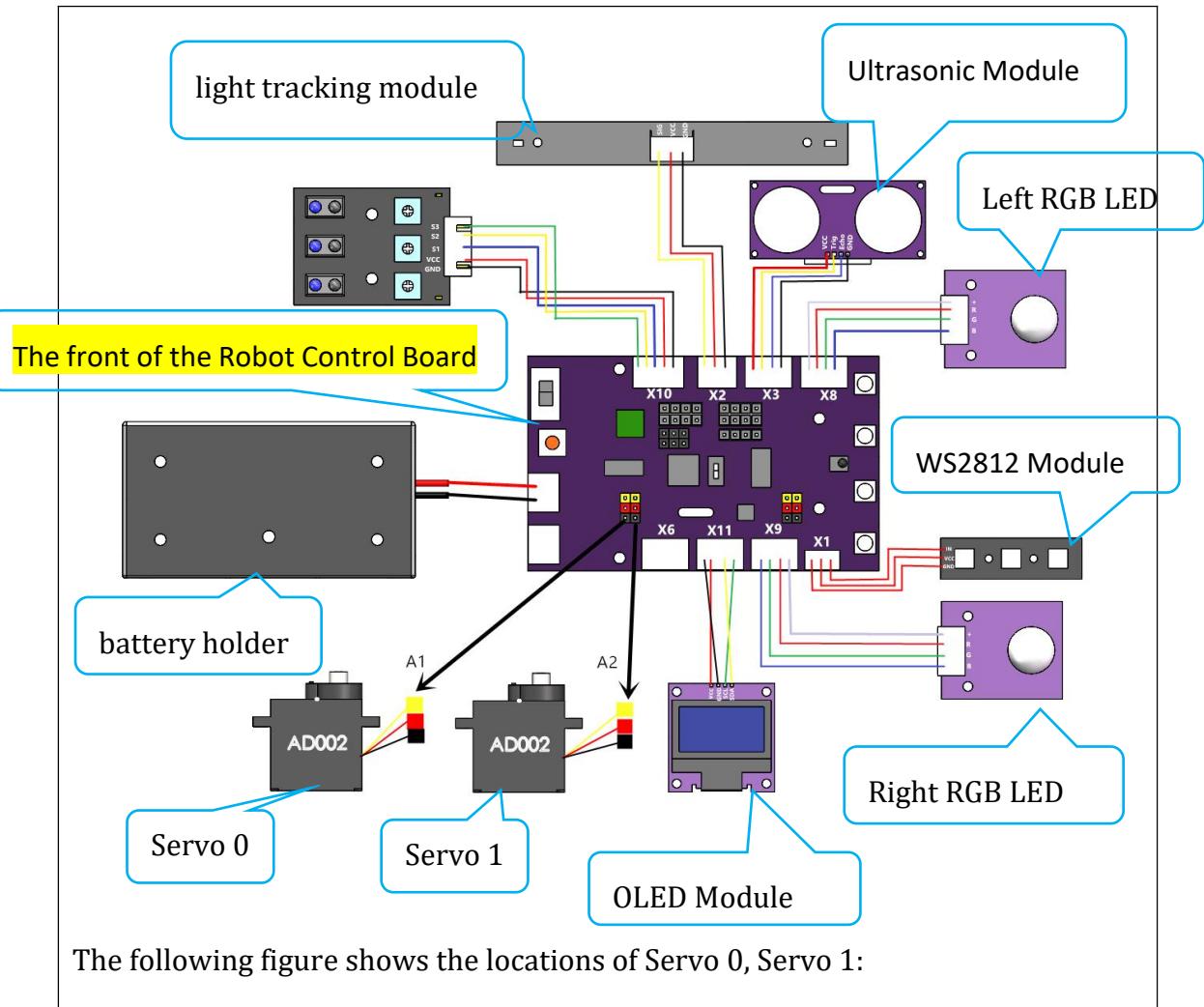


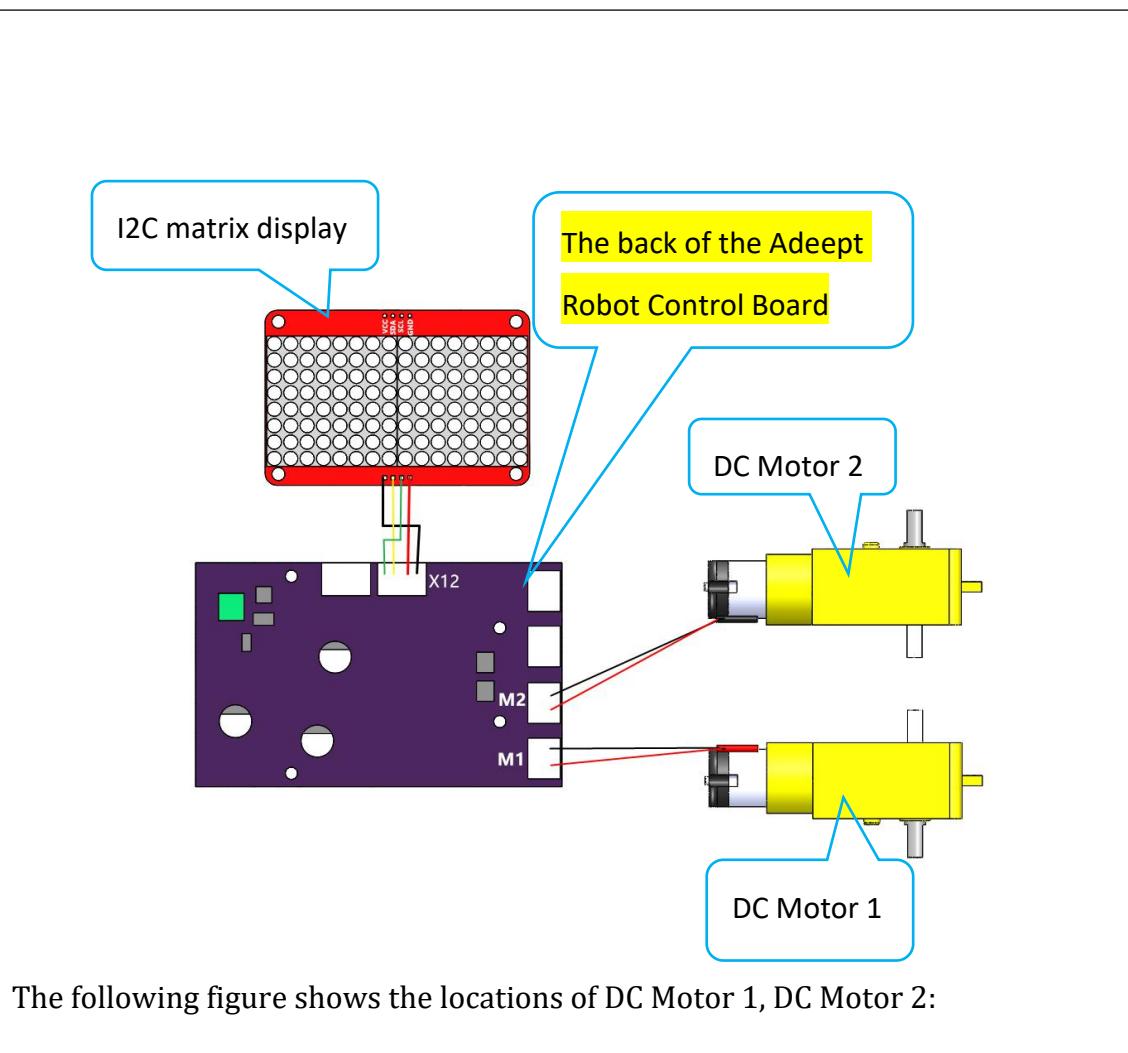
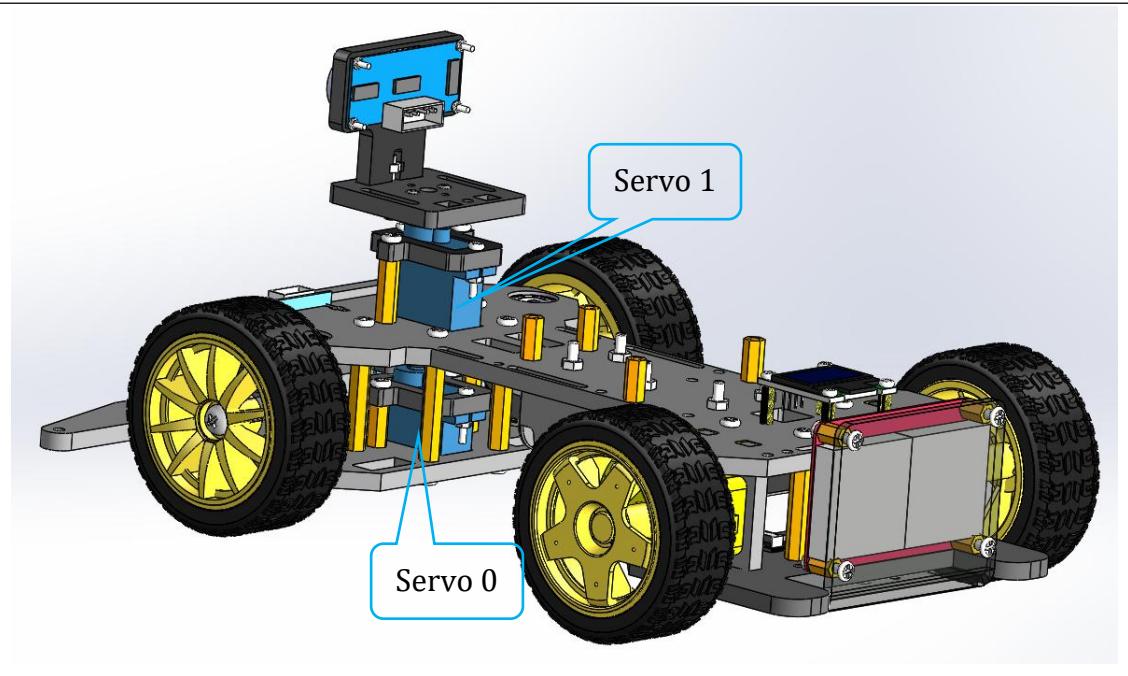


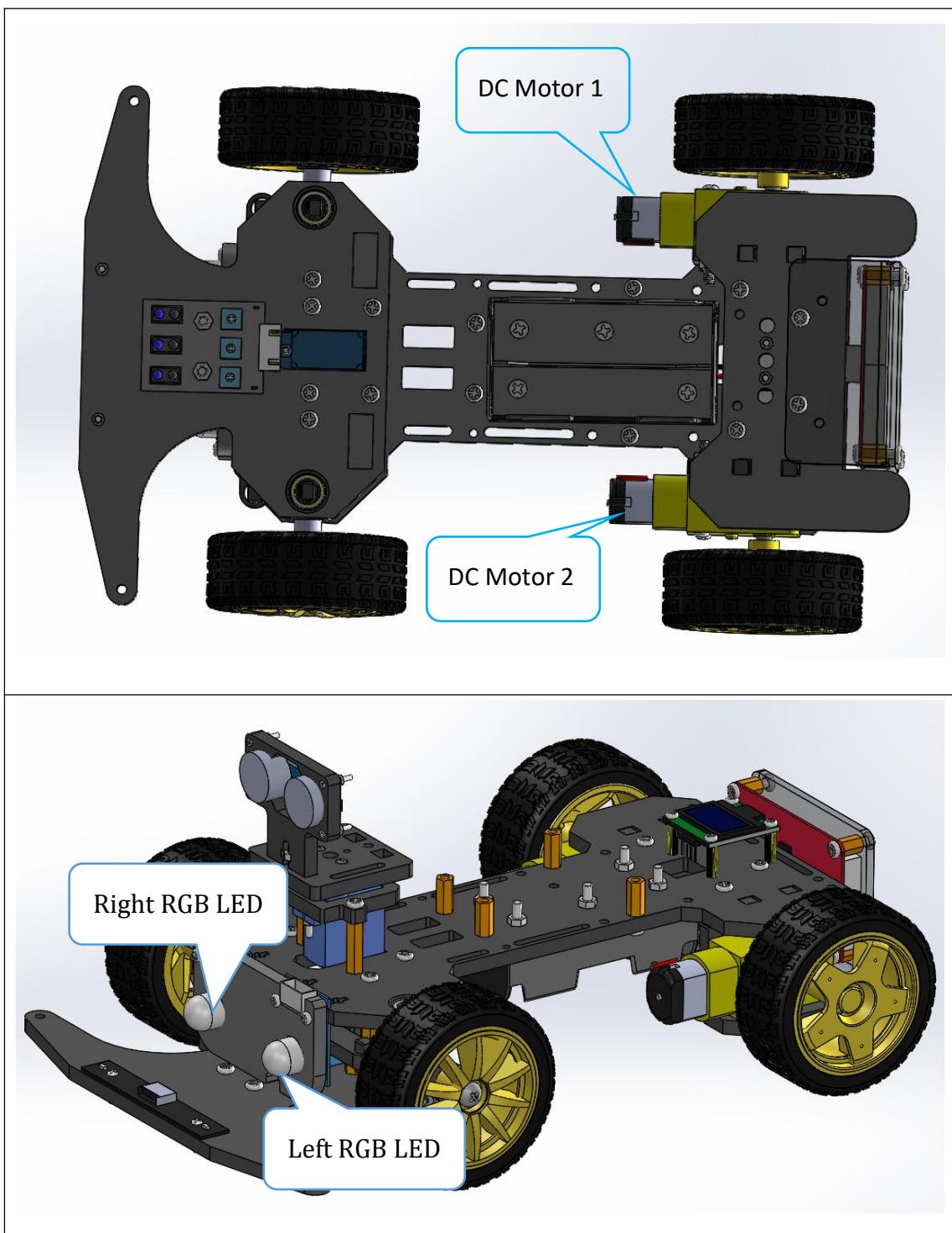


## Assemble the Adeept Robot Control Board

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







### 8.1 Install the Adeept Robot Conrtol Board to A01.

