

## Installation Tutorial

1. Remove the finger parts, if the film, tear off the surface of the film, the number of parts were 1、4、4、5、5



2. First assemble the big finger parts, use M2X3 screws, M2X6 copper pillar, the first joint of the big finger to use wide parts.



Complete the assembly:



3. Assemble the other finger parts still use M2X3 screws, M2X6 copper pillar.

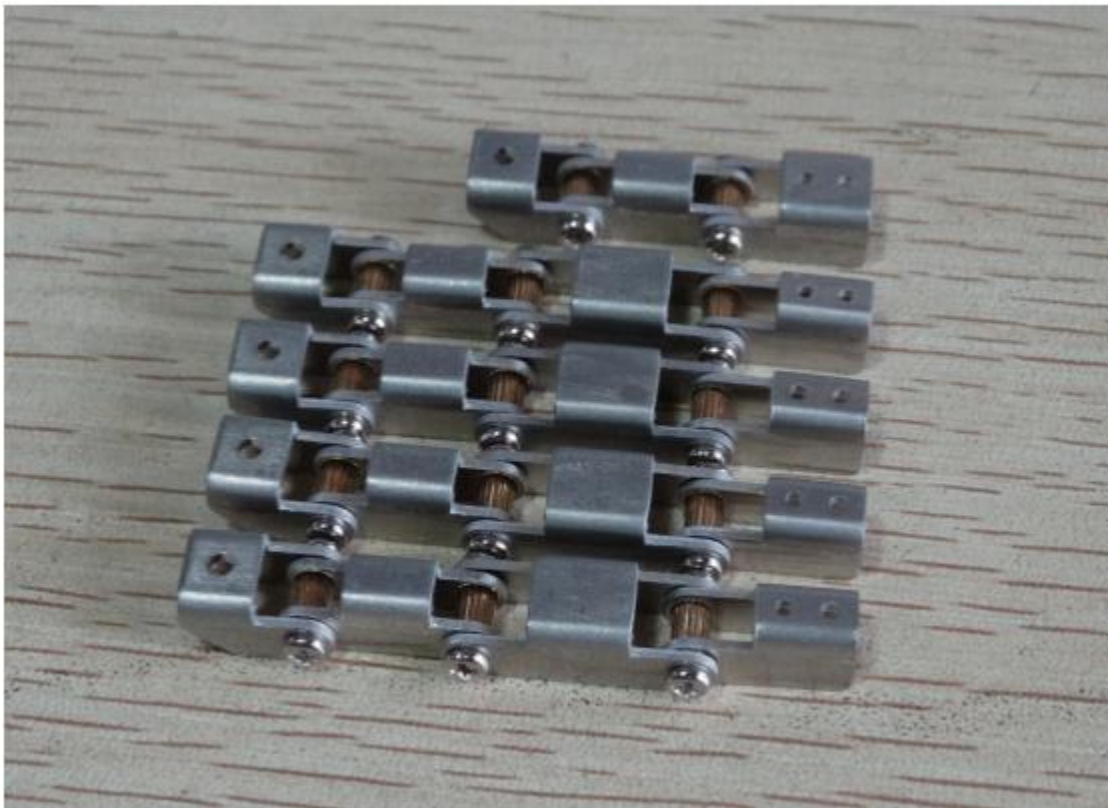




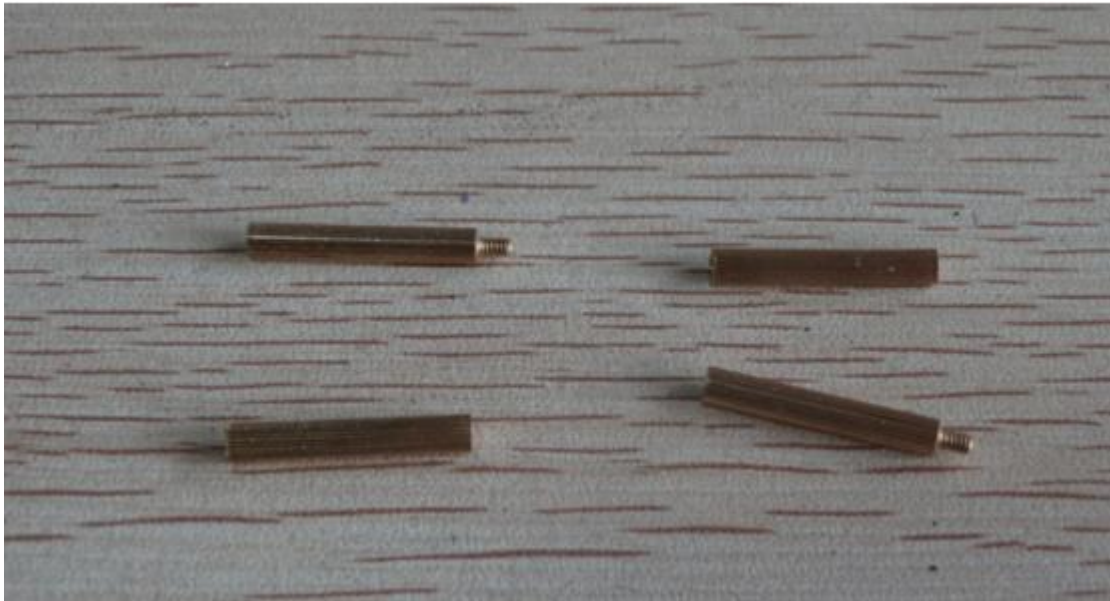
Complete the assembly:



4. Followed by the completion of the remaining fingers of the assembly, in addition to big fingers different, the remaining three fingers are the same.



5. Next we have the overall assembly . Assemble the copper column, using M2X20 root M2X20 + 3. Parts are in the same bag.



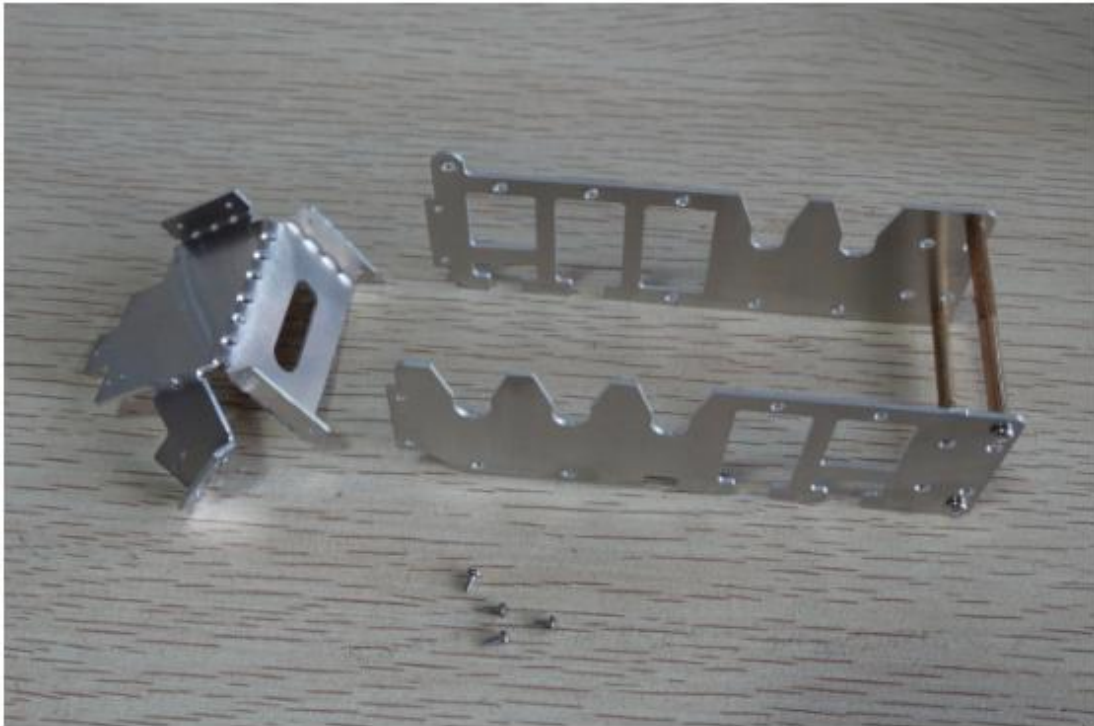
6.If the right arm is installed as follows (if left can be skipped):

Just assemble the copper column with the arm connected to the use of M2X3 screws.

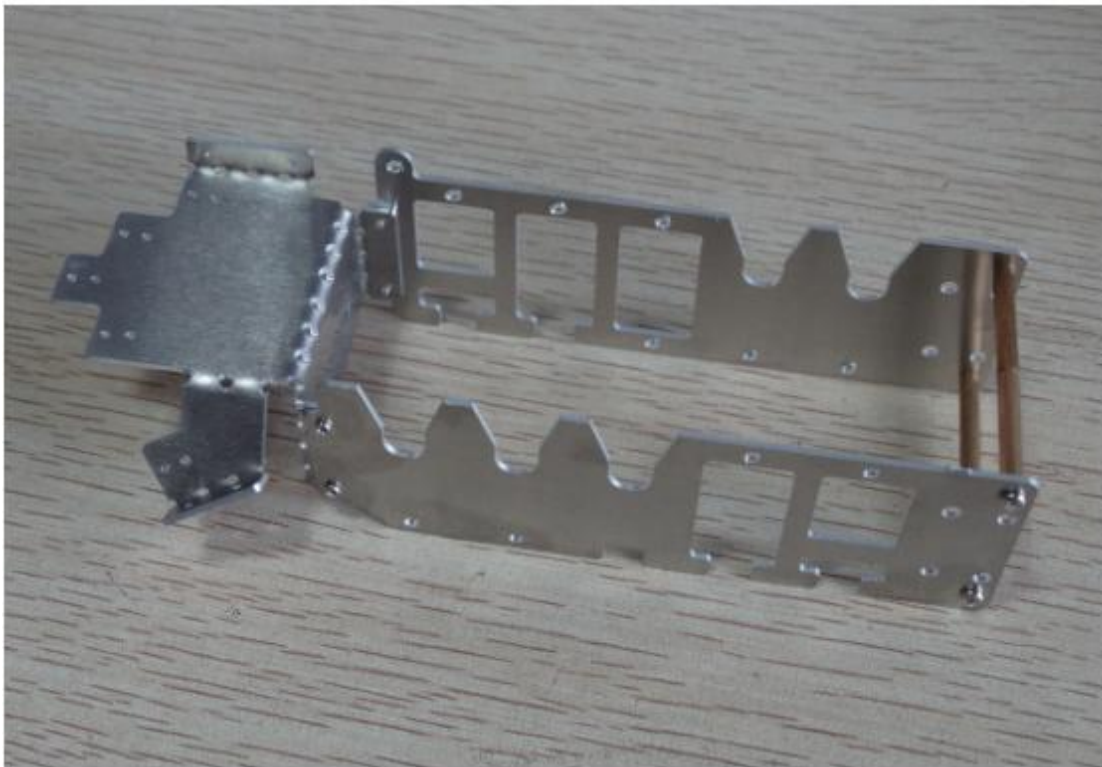




7. Then take out the right palm.



Assemble the arm connecting piece with the palm of the hand, using the M1.4 \* 3 screws, the 1.4 screws as a self-tapping screws, forced into the aluminum plate. When the screw on the left one, the right one on the first do not tighten, then the remaining two, to be screwed into four screws, and then lock the screws

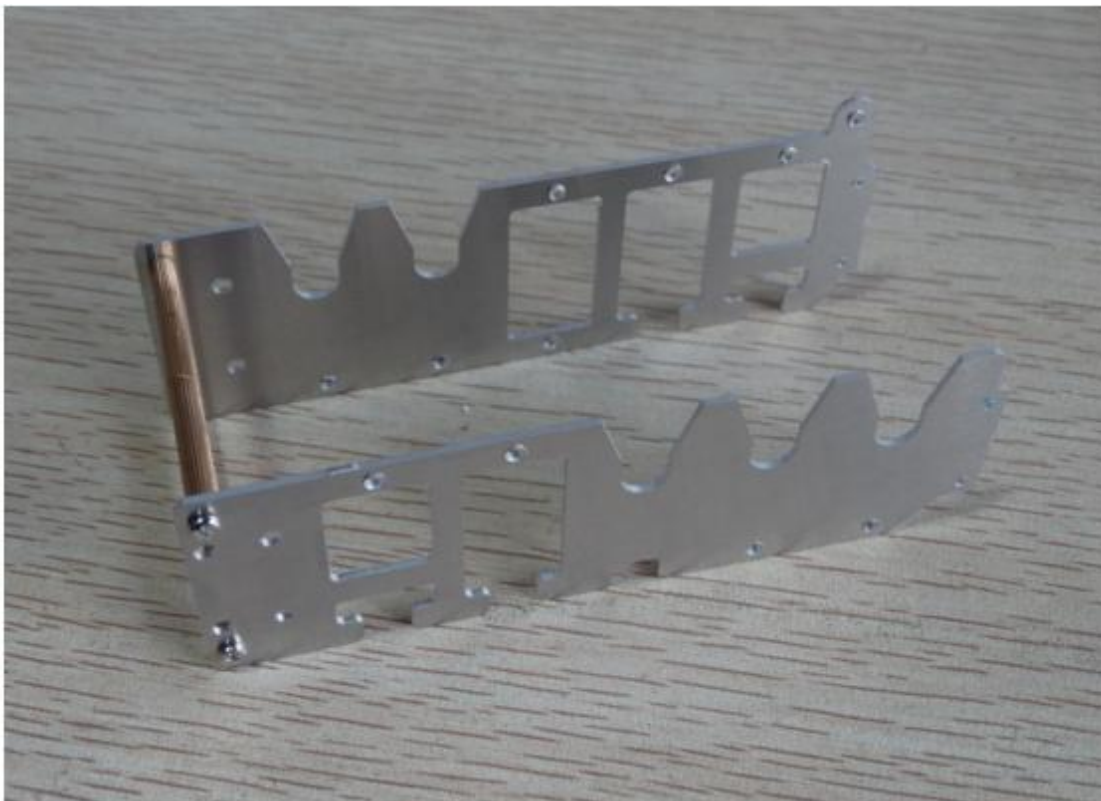


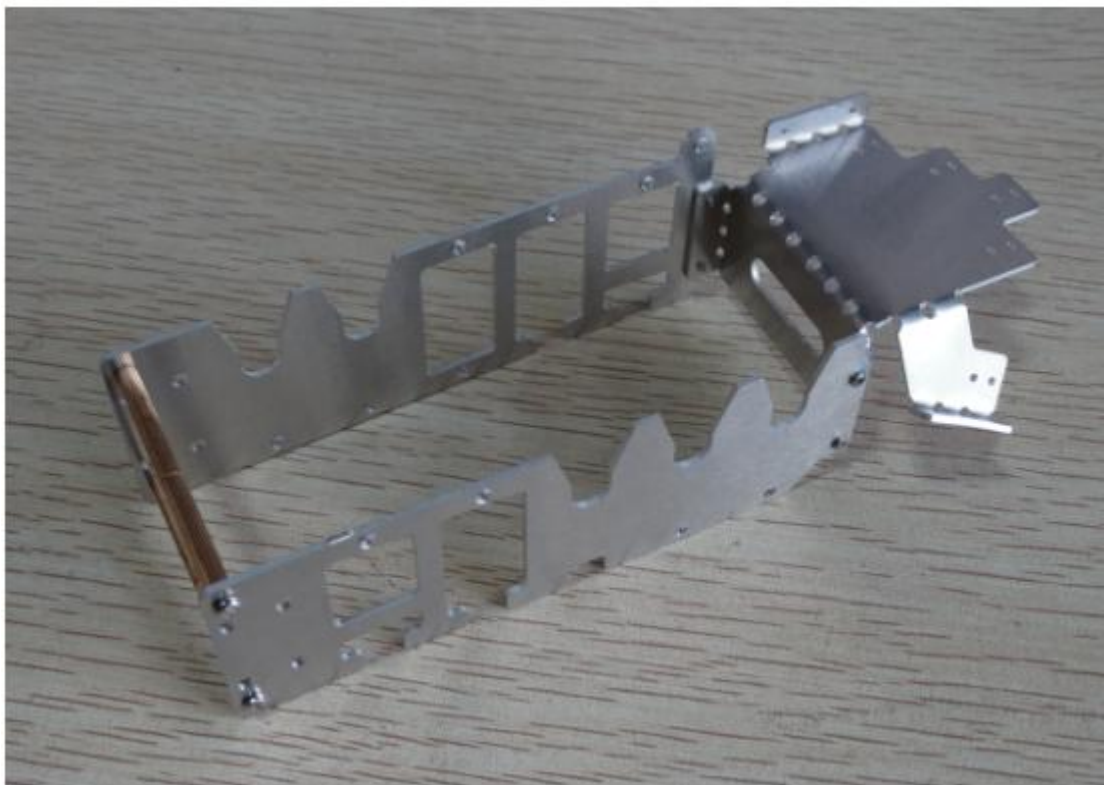
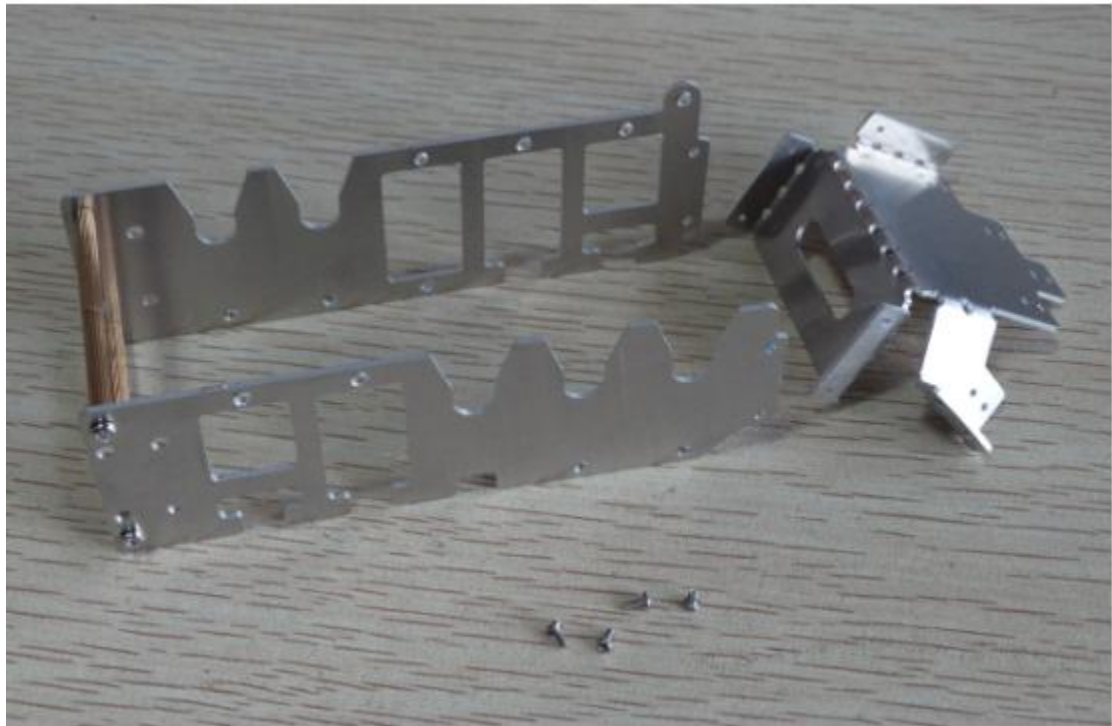
**8.If it is left as shown in the installation:**

Using the same arm parts, pay attention to distinguish between right-handed installation in different ways.



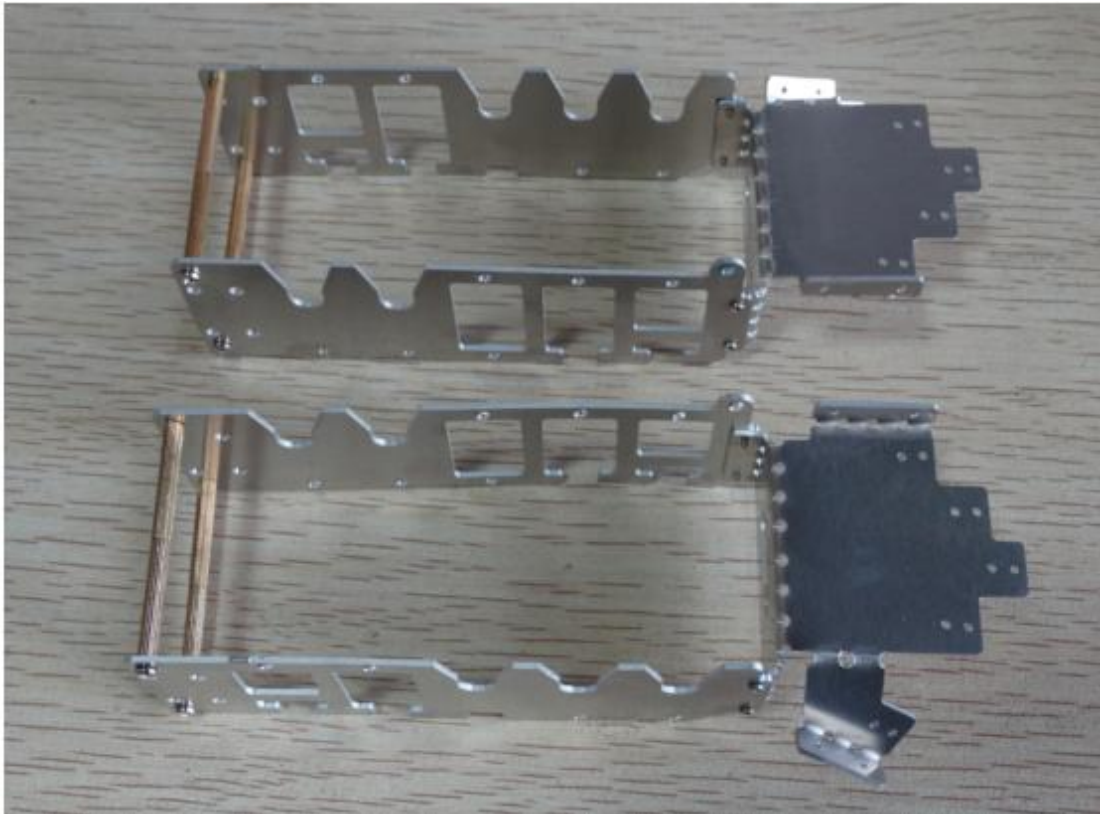
Assemble the arm connecting piece with the palm of the hand, using the M1.4 \* 3 screws, the 1.4 screws as a self-tapping screws, forced into the aluminum plate. When the screw on the left one, the right one on the first do not tighten, then the remaining two, to be screwed into four screws, and then lock the screws







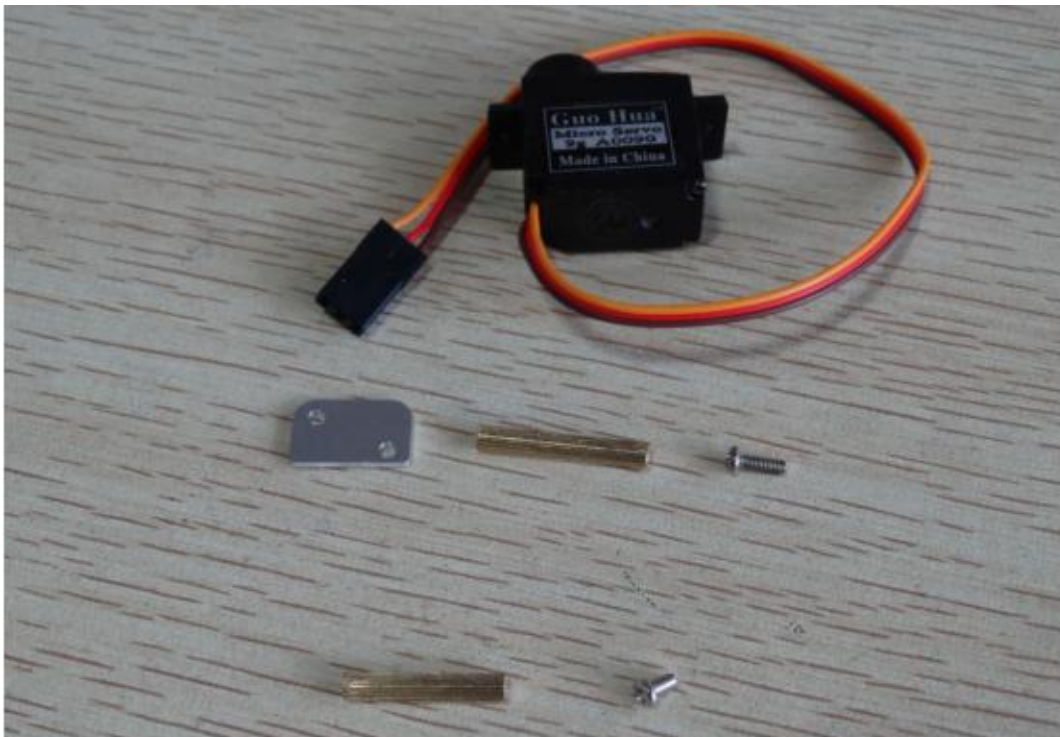
9. Left and right arm installation is complete



10. The installation of the right-hand finger servo is as follows (For the left-hand servo install, see step 22):

(Note: Before installation, adjust the servo return middle)

Installation of the first finger servo, which is M2 \* 21 copper pillars with M2 \* 18, screws M2 \* 6, M2 \* 3.



11. Screw the screw into the servo mounting hole first, and do not tighten it.

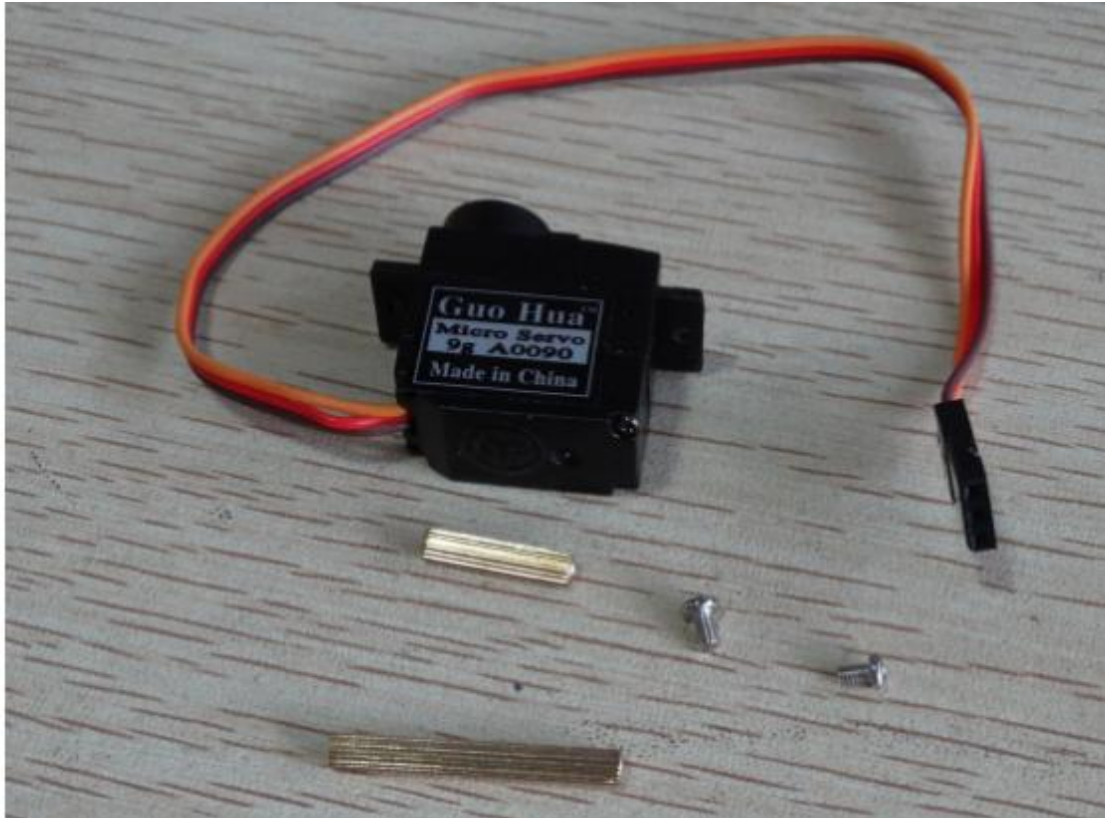


12. And then screw together with the screw into the copper column, this time also tighten the screws, the above is a copper pillar M2 \* 21, and the below is M2 \* 18.

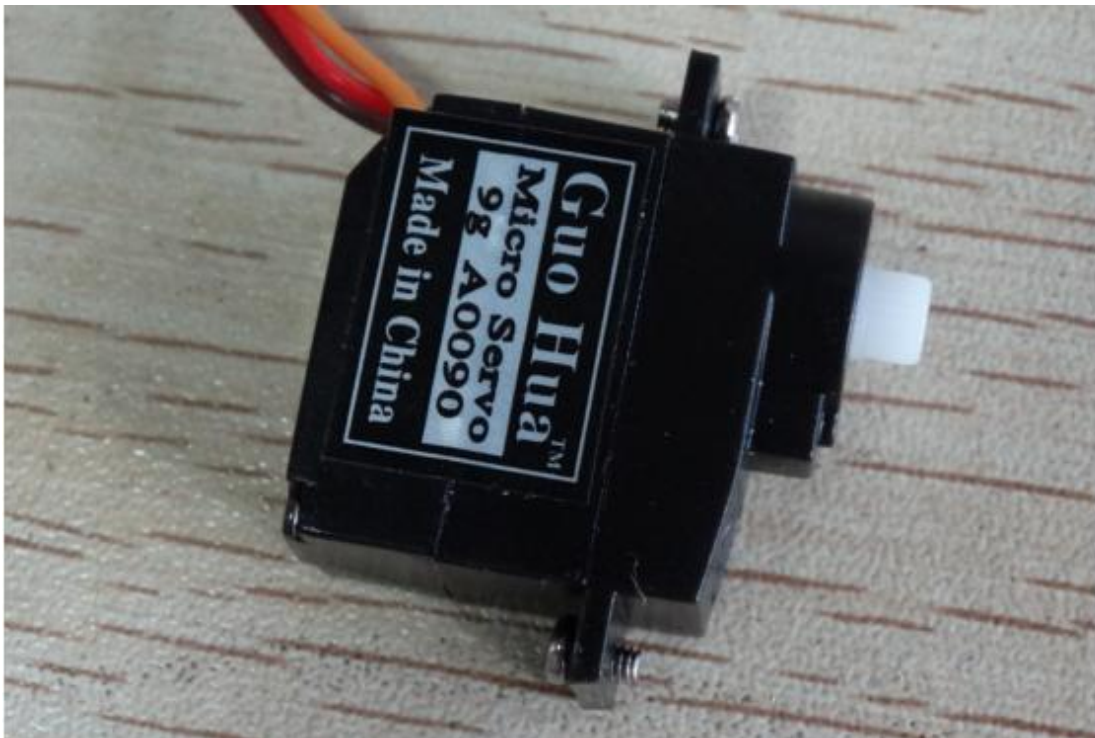




13. Take the second finger servo part, copper column is M2\*14 and M2\*25. The screw is M2\*3

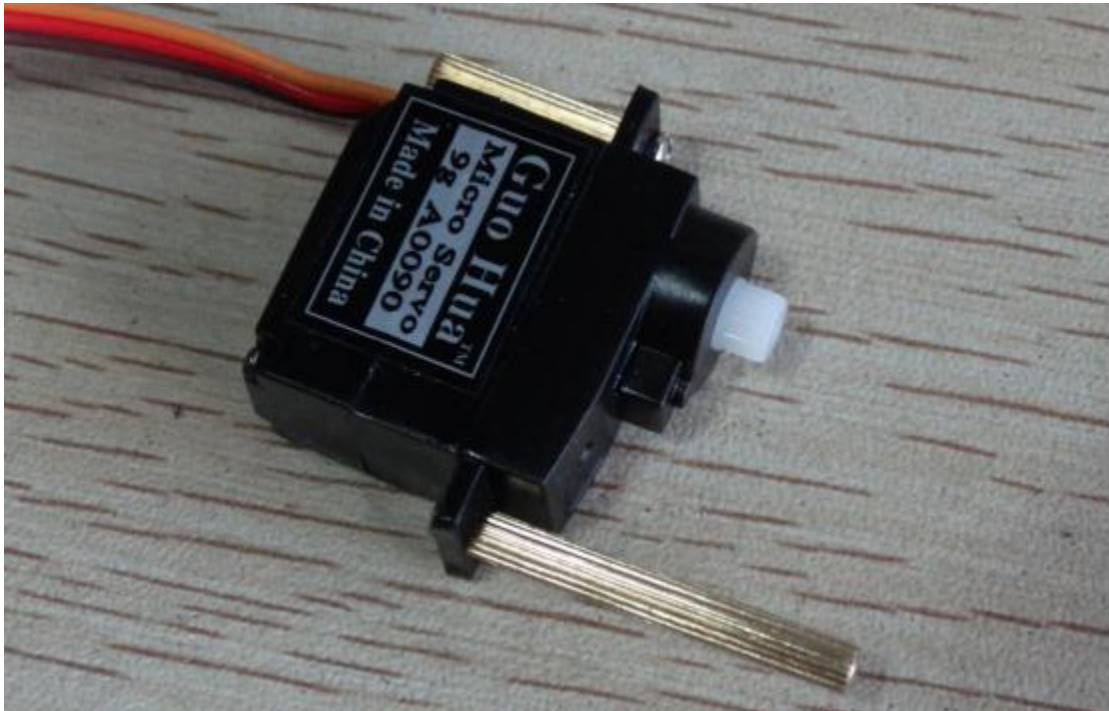


14. Also screw the screw into the mounting hole of the steering gear and do not tighten it.

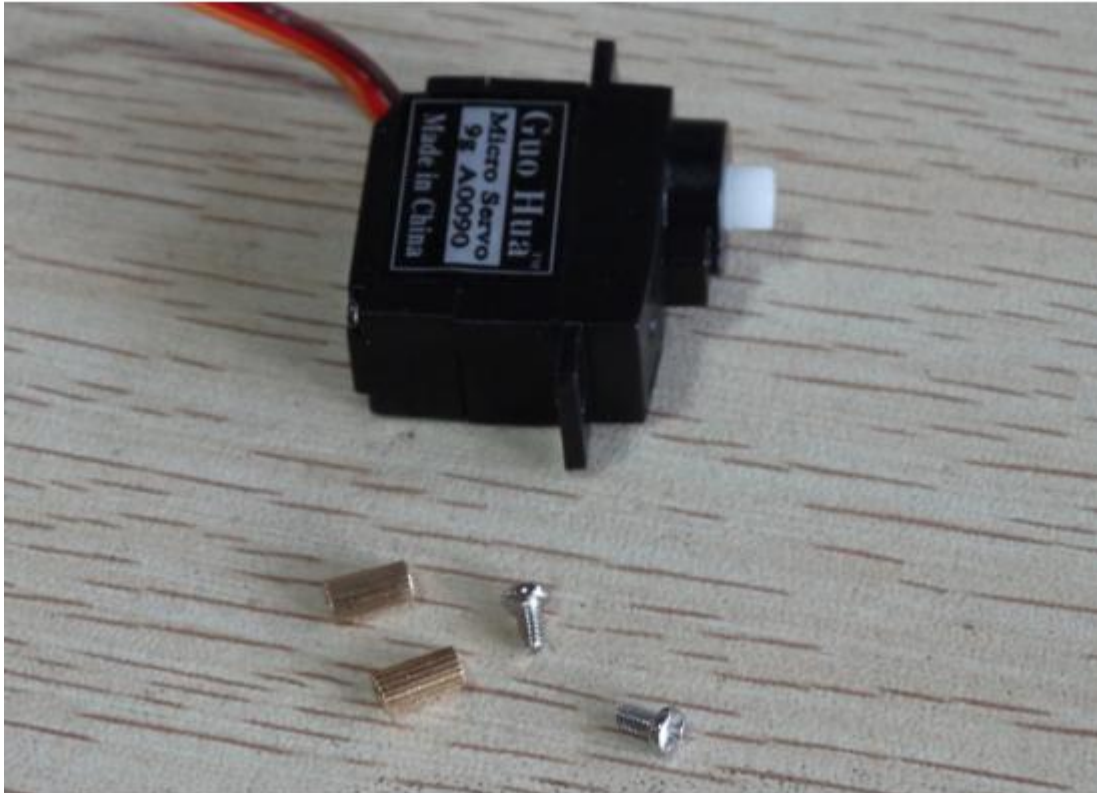




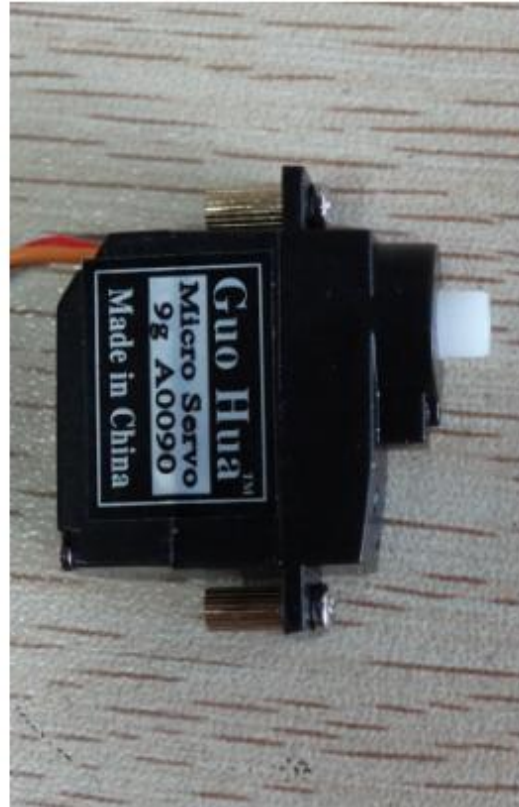
15. Then screw the screw into the copper stud and tighten. The above is M2\*14, the below is M2\*25.



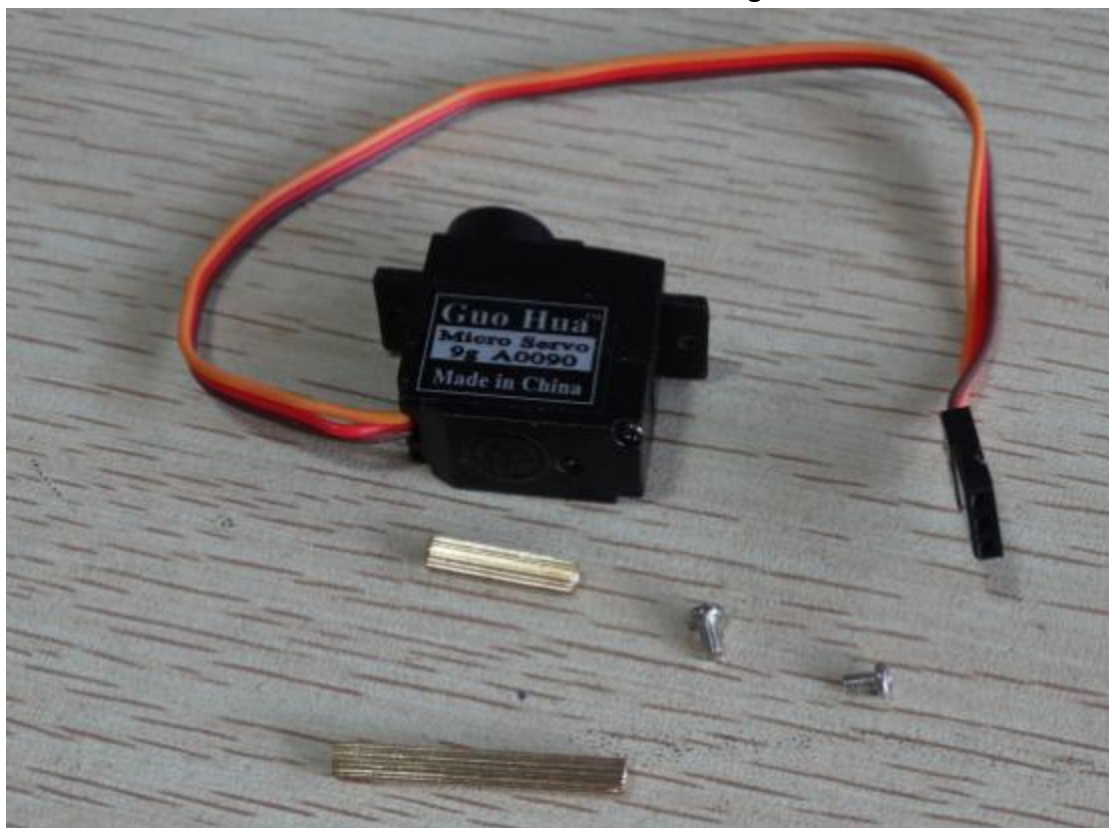
16. Take the third finger steering gear parts, in which the screw is still M2\*3, the copper column is M2\*6.



17. Screw the screw into the mounting hole of the steering gear and tighten it with the copper stud.

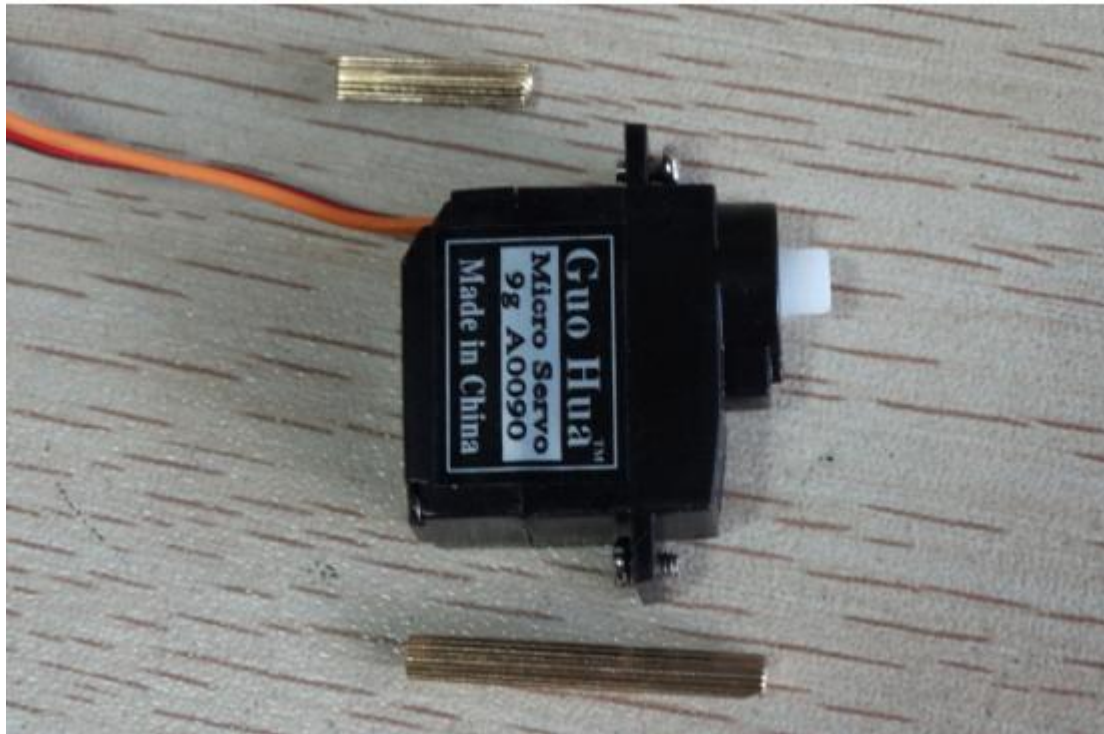


18. Take the fourth finger servo parts, copper pillars for the M2\*14, M2\*25. The screw is M2\*3. The material is the same as the second finger.

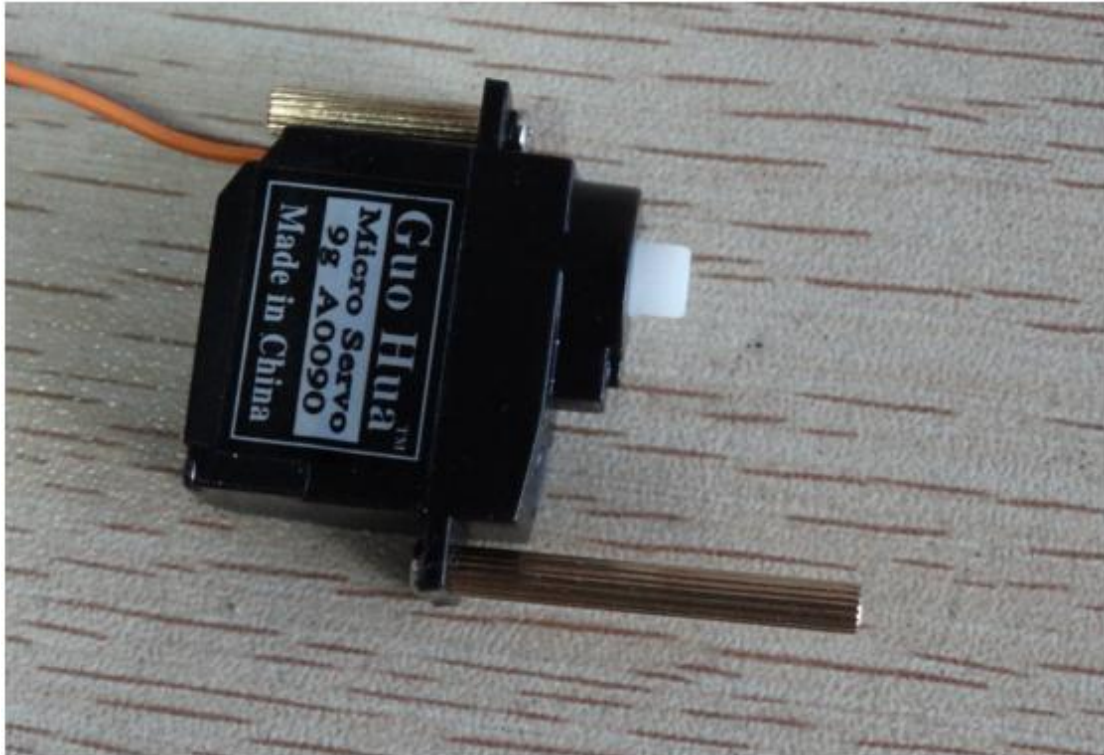




Screw the screws in the same way.



Then screw the screw into the copper stud and tighten. The above is M2\*14, the below is M2\*25. As with the second finger actuator, the assembly method is the same.

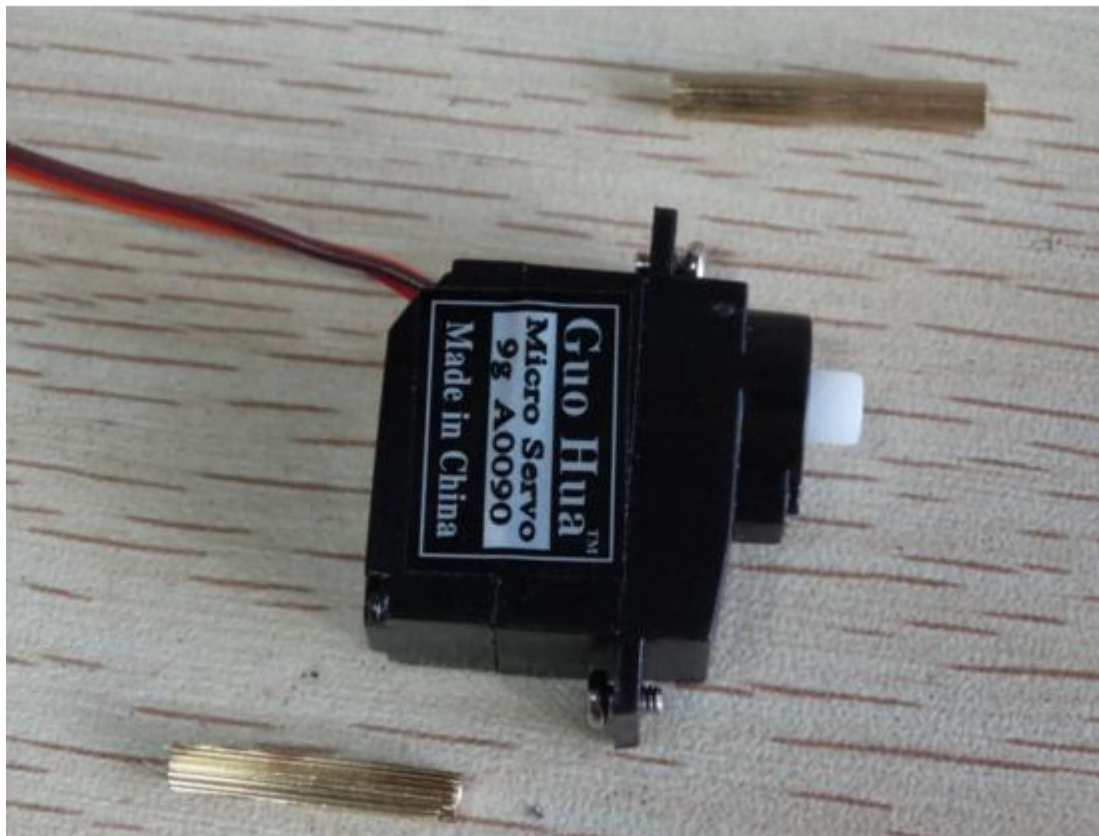




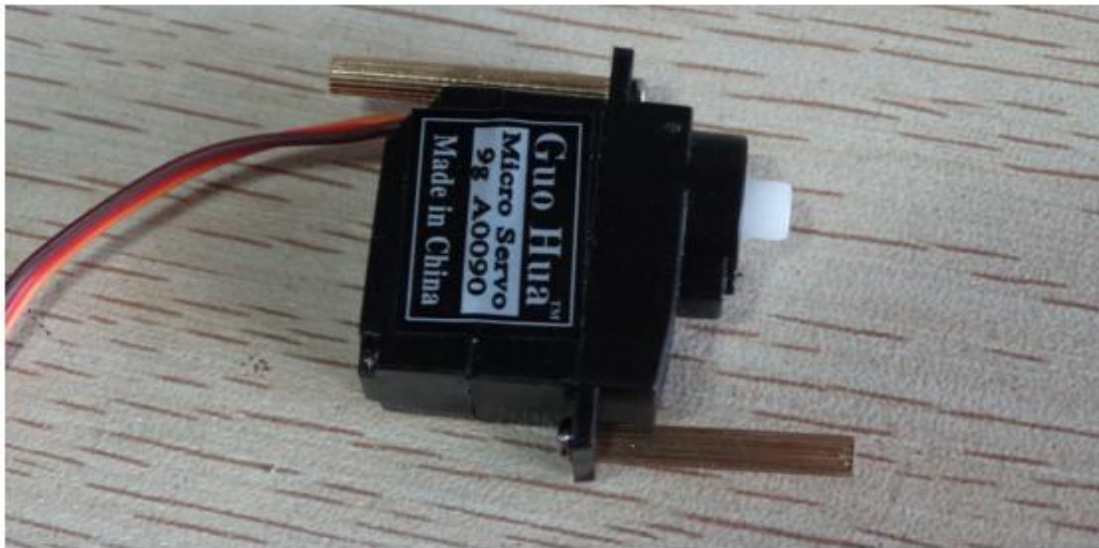
19. Take the fifth finger part, except that there are no blanks. The other parts are the same as the first finger part. The screw is M2\*3. The copper pillars are M2\*18 and M2\*21.



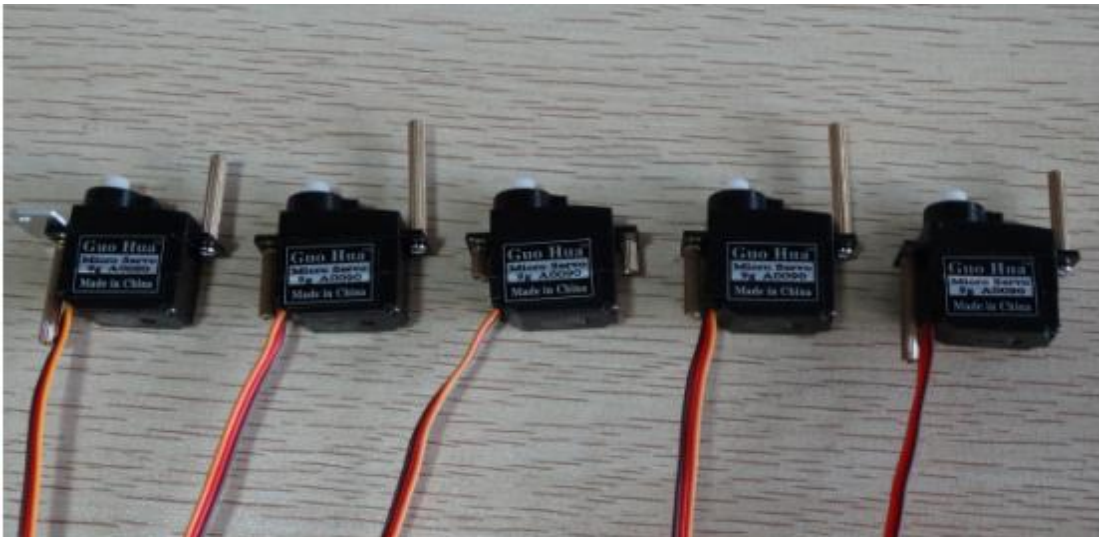
Screw in part of the screws M2\*3, do not tighten.



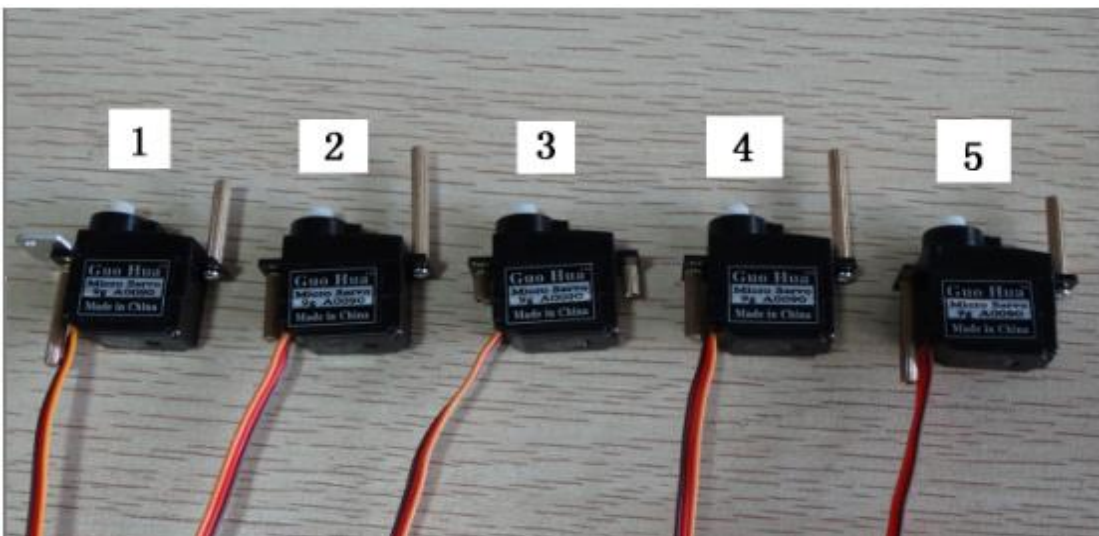
Into the copper column tighten the screws, the above is M2\*21, the below is M2\*18 copper pillar.



20. Complete right-hand servo assembly.



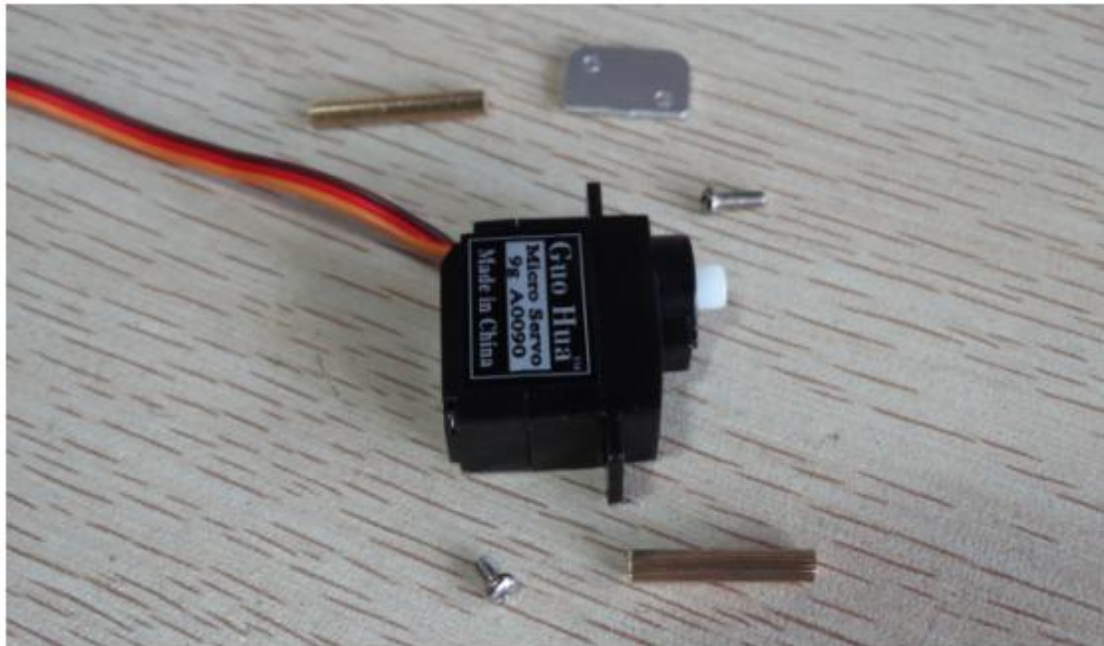
21. Note the number of the servo installation for the different fingers.



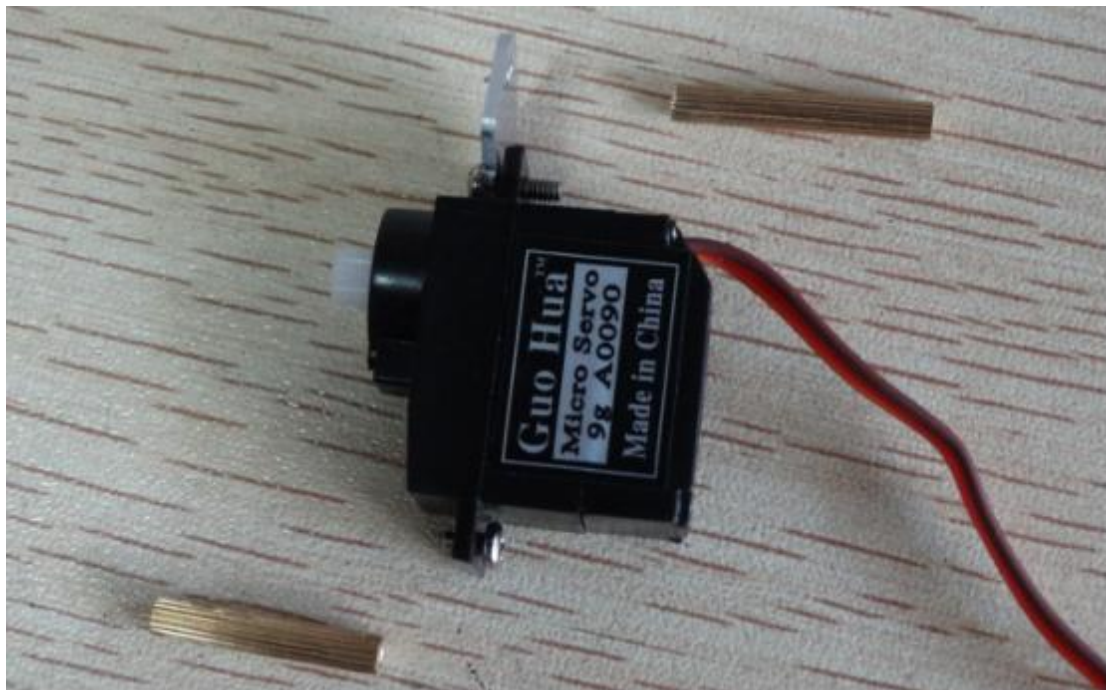


22. If the left-hand steering gear is installed as shown below:

Installation of the first finger servo, which is M2\*21 copper pillars with M2\*18, screws is M2\*6 and M2\*3.

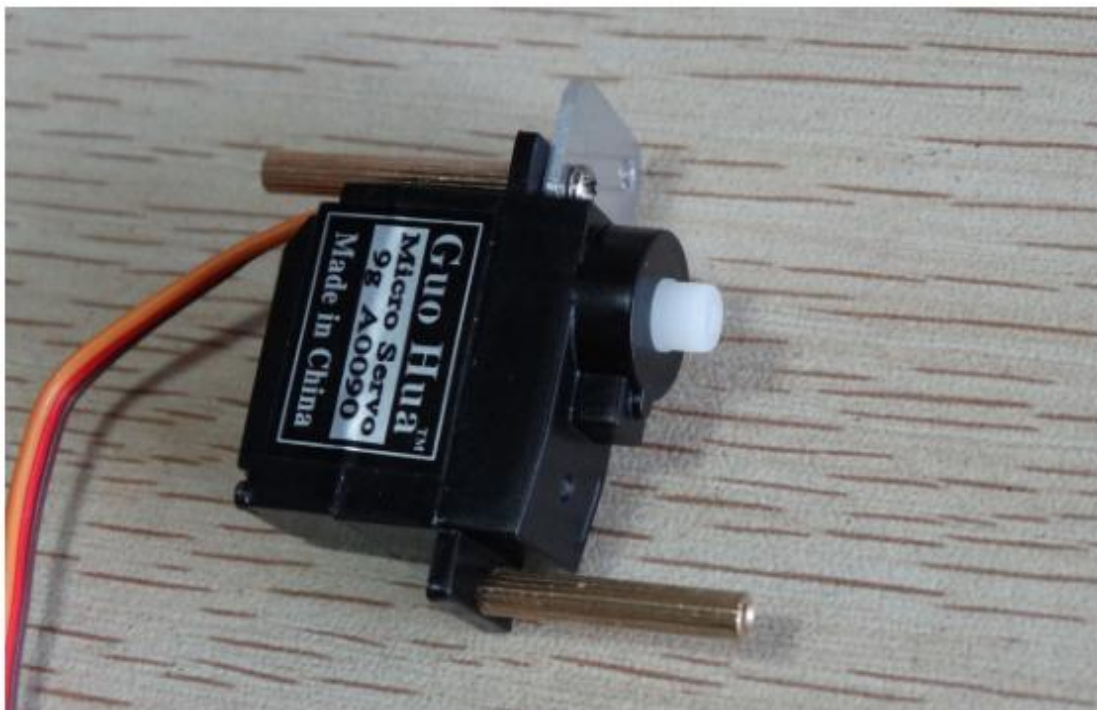
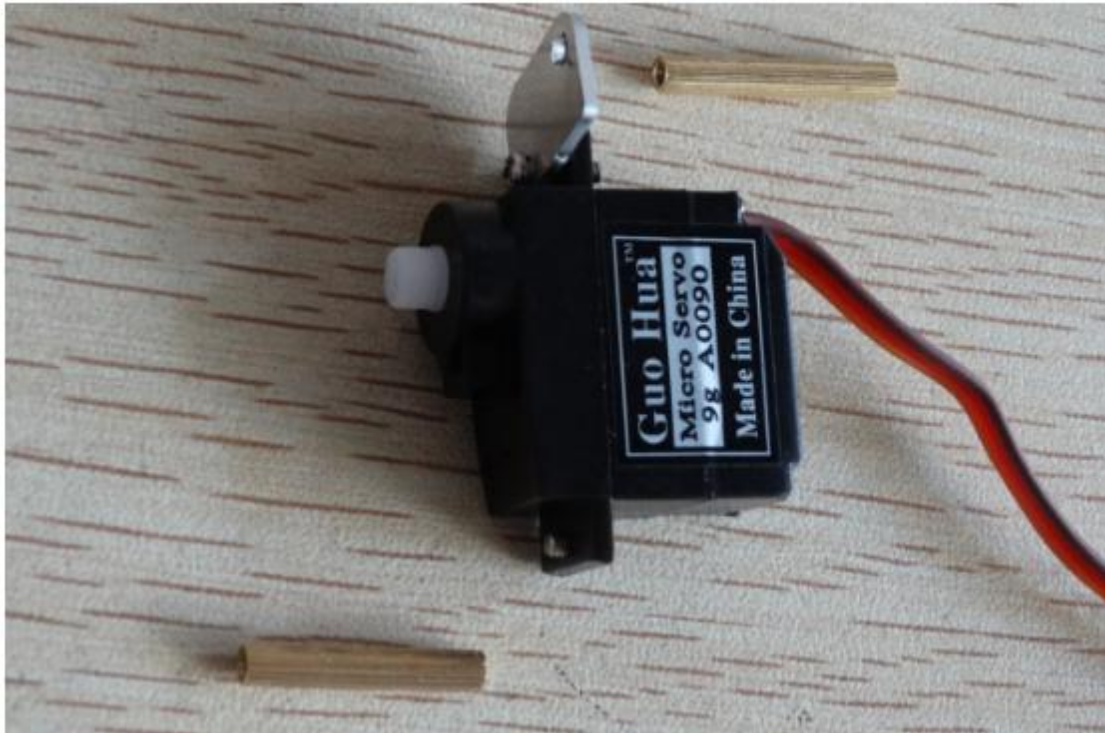


M2\*6 screws with the bracket screwed into the servo mounting hole, only part of the screw, do not screw too tight.



Finally, the copper column into and tighten the screws. The above is M2\*21 , the below is M2\*18 copper pillar.

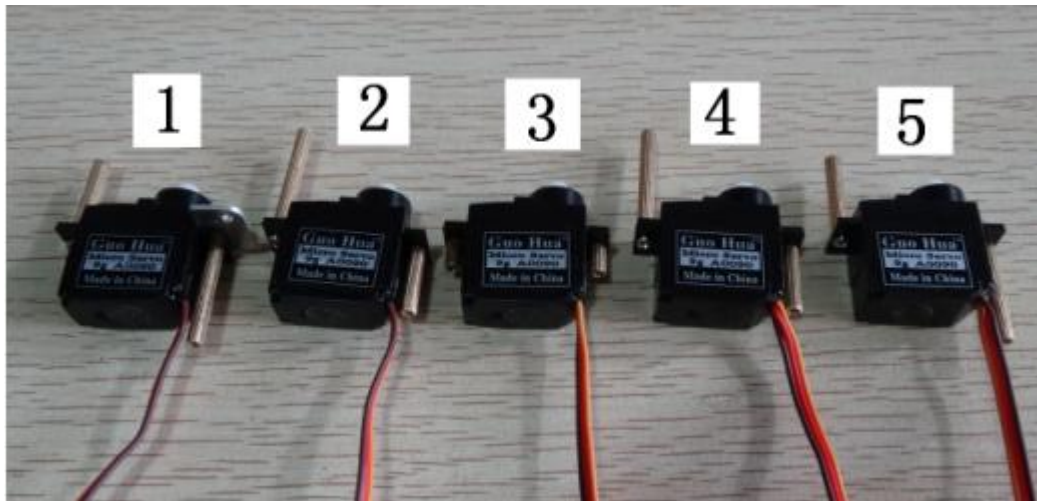




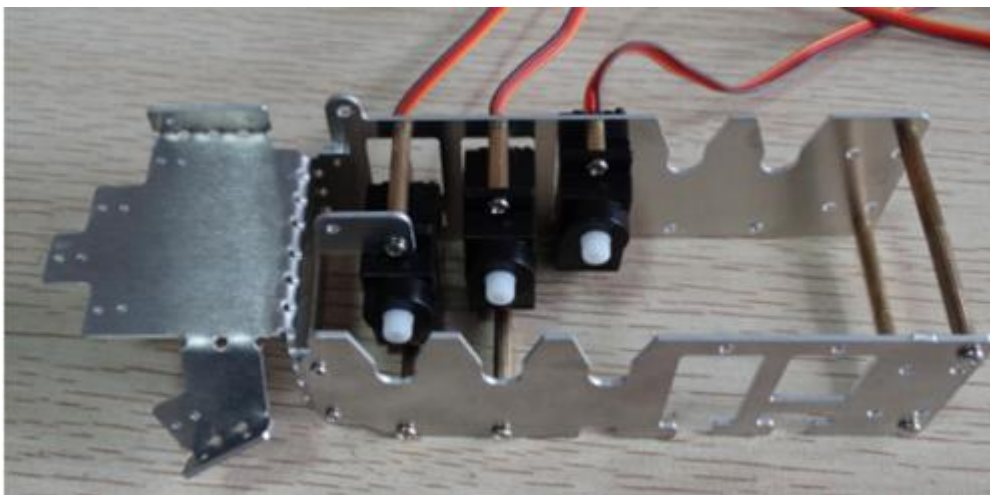
Subsequent section 2.3.4.5 of the servo installation method with the right-hand steering gear exactly the same. Refer to right-hand 2.3.4.5 Actuator Installation. Complete the installation of the left hand finger servo.



According to figures to determine the sequence of each finger servo, do not install errors.

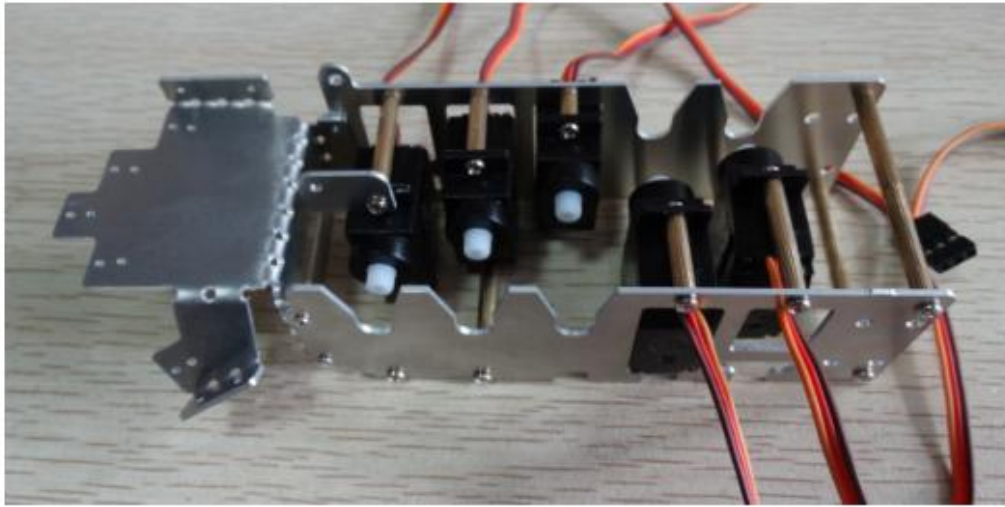


23. The overall installation of the right hand, in the case of left hand Please skip:  
Install the right-hand finger servo 1、2、3 on the right-hand arm in sequence, using the M2\*3 screws.

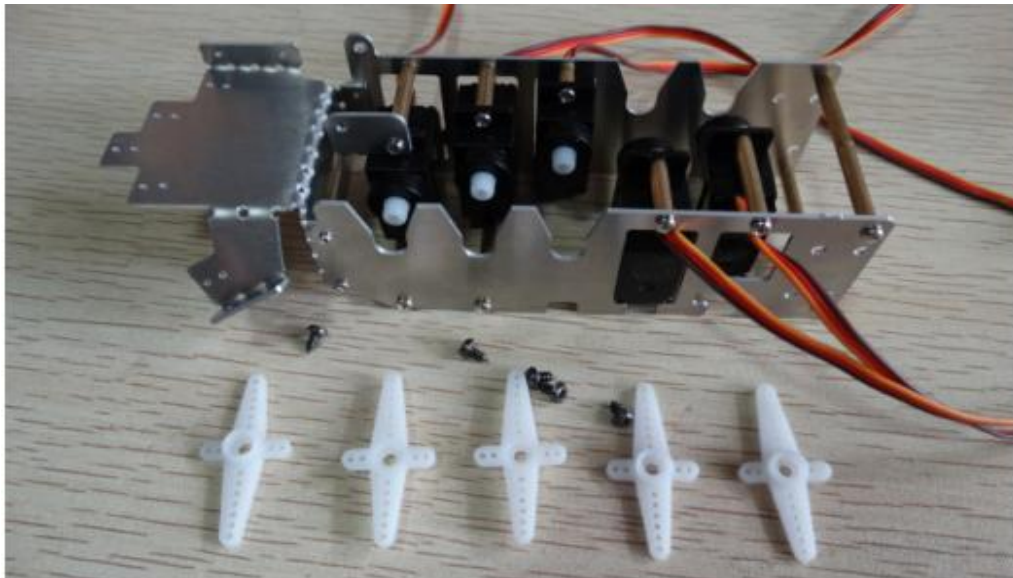




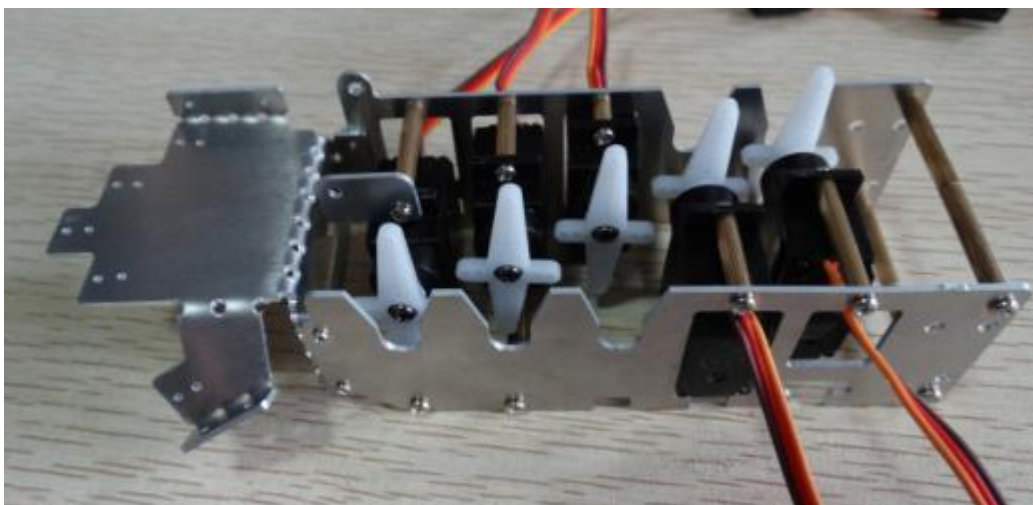
Next, install the right-hand 4、 5 finger servo. Still use M2\*3 screws.



Take the cross arm and the screw used to mount the rocker arm.

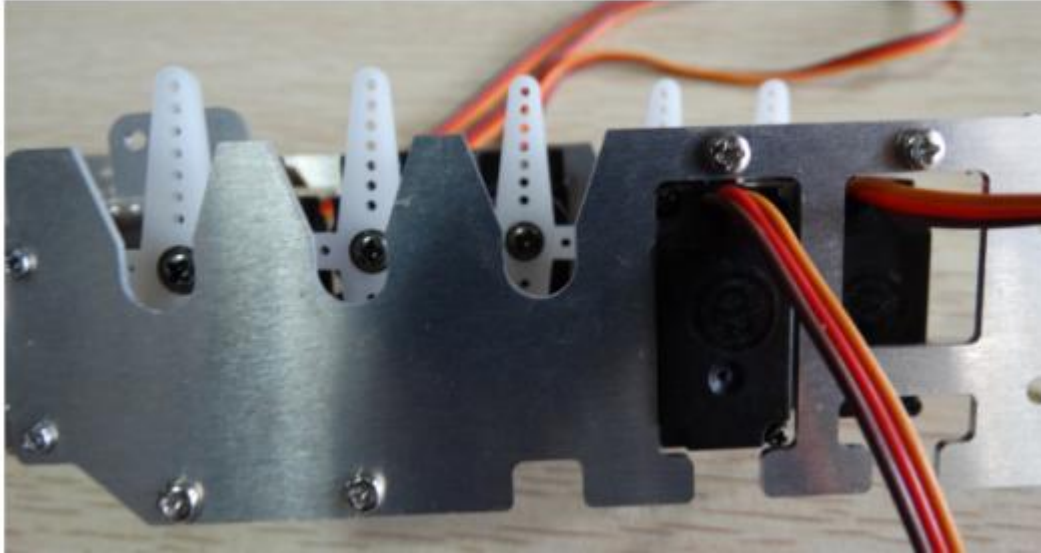


Rocker with a screw directly into the servo . Note that the two long arms of the cross arm have a long side and a short side, the long side is on and the short side is down.

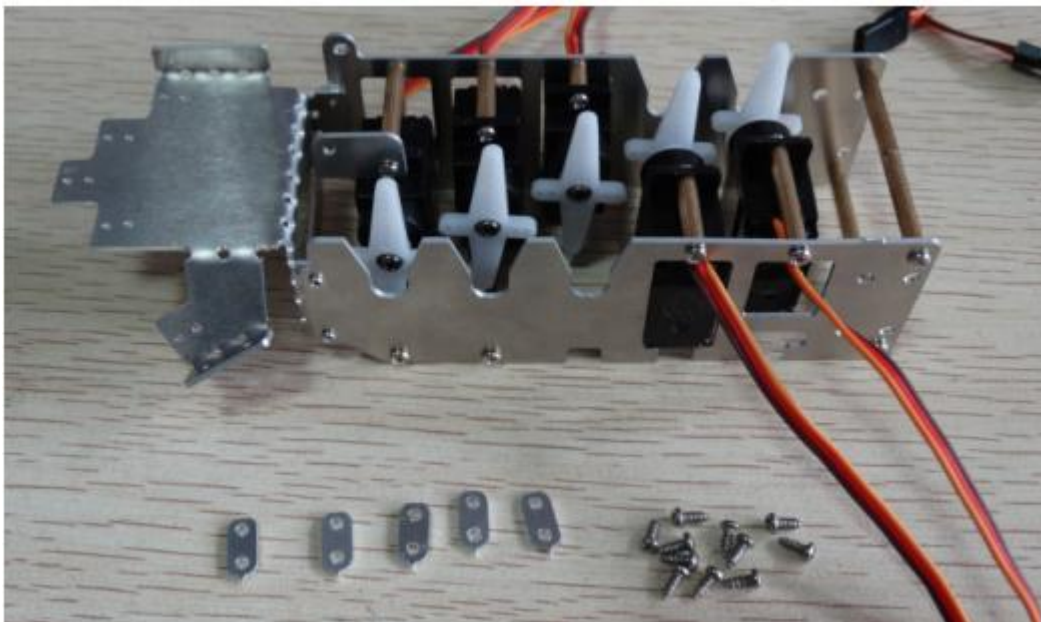




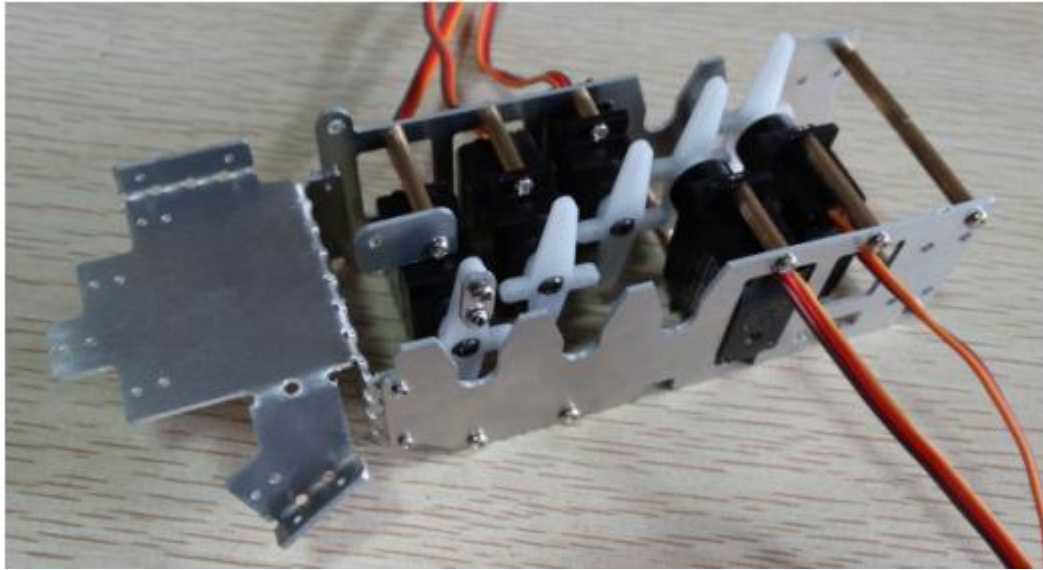
Long arm with the steering gear as far as possible to ensure parallel installation and screw into the screw, screw in the end can be screwed, do not continue to screw into, remember to slide easily. If the swing arm is screwed parallel to the steering gear, it can rotate the steering wheel. If it is not parallel, turn the steering arm, then remove the rocker arm, then re-center and re-install the rocker arm.



Take the self-tapping screw with the small clamp plate and M2\*5.



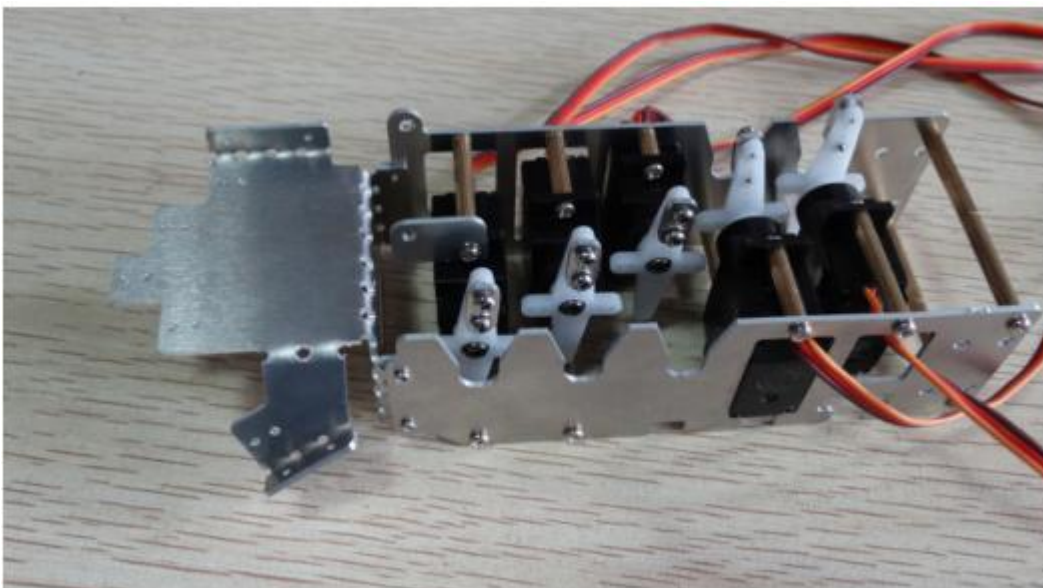
Turn the cable tie plate into the rocker arm, do not twist left margin. The small tip on the platen faces down. Small tip is no practical use only processing side, down is to prevent scratching your fingers.



Screw into the longest side of the first arm and 4 holes.

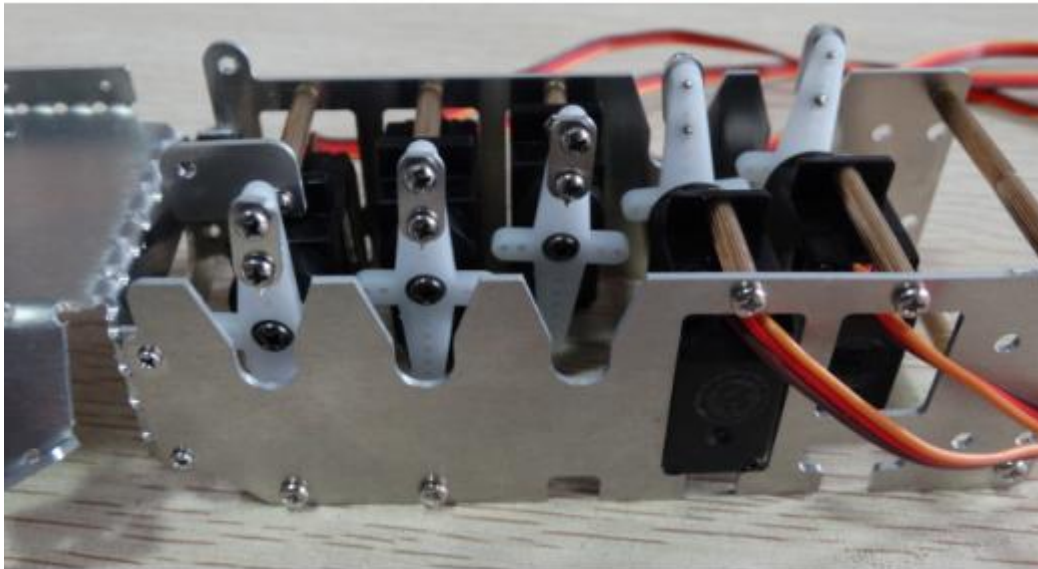


Install all tie bars in sequence.

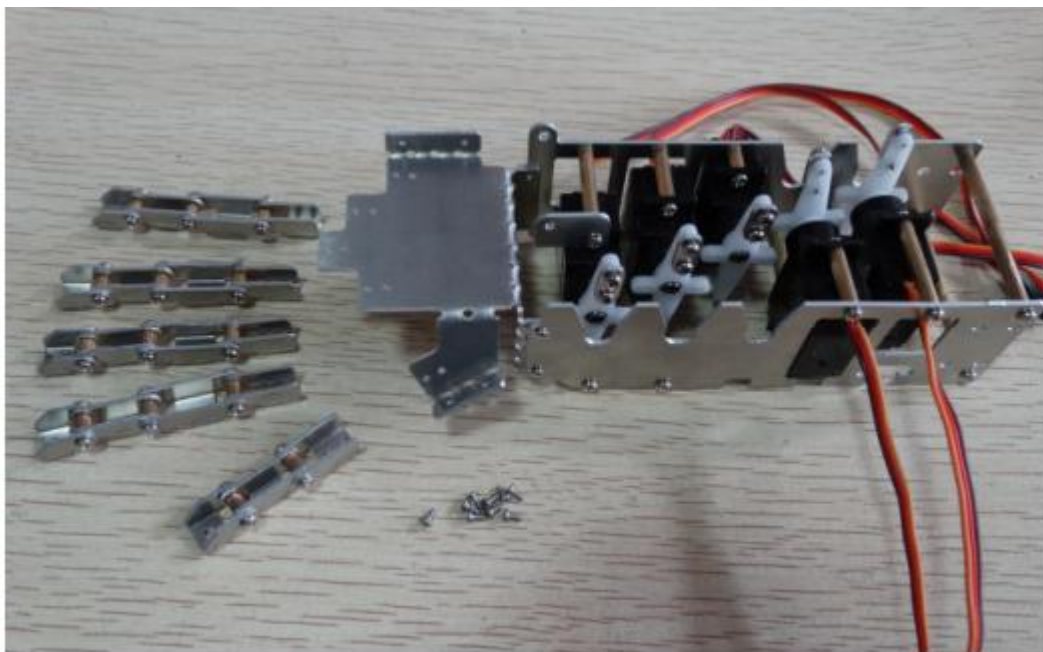




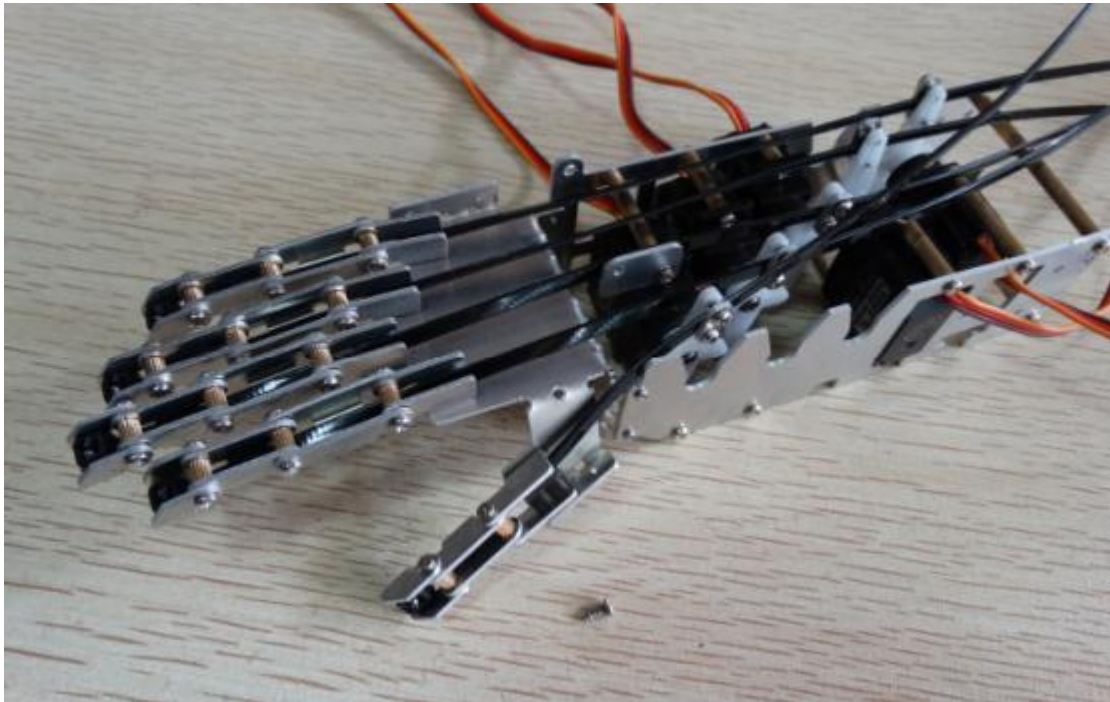
Finish close-up, note tip down.



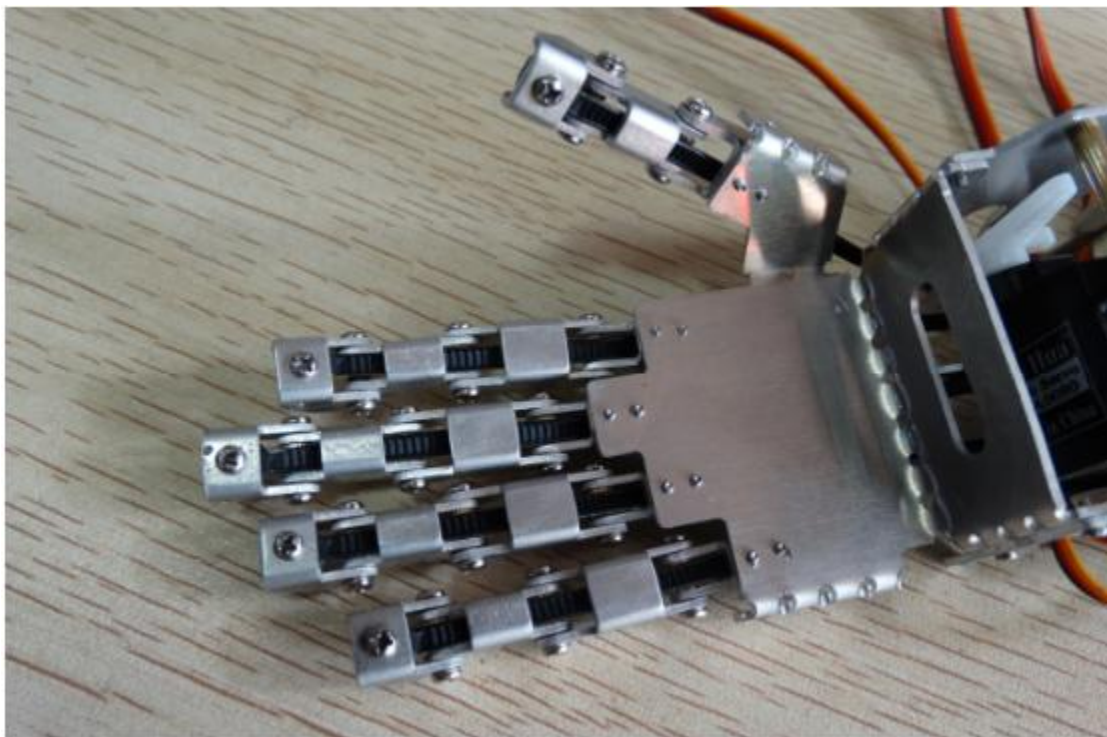
Use the M1.4\*3 stainless steel screw. The stainless steel screw can not be sucked with a screwdriver, but it is strong and can be used as a self-tapping screw to force the finger into the palm of the hand and secure it. To be screwed, the hand to remove all the fingers, to prevent finger movement when the interference.



Take the cable tie with the M2\*5 self-tapping screws into the cable tie into the fingers, pay attention to the mouth of a silk mouth down, rocker arm toward the mouth of the rocker arm.

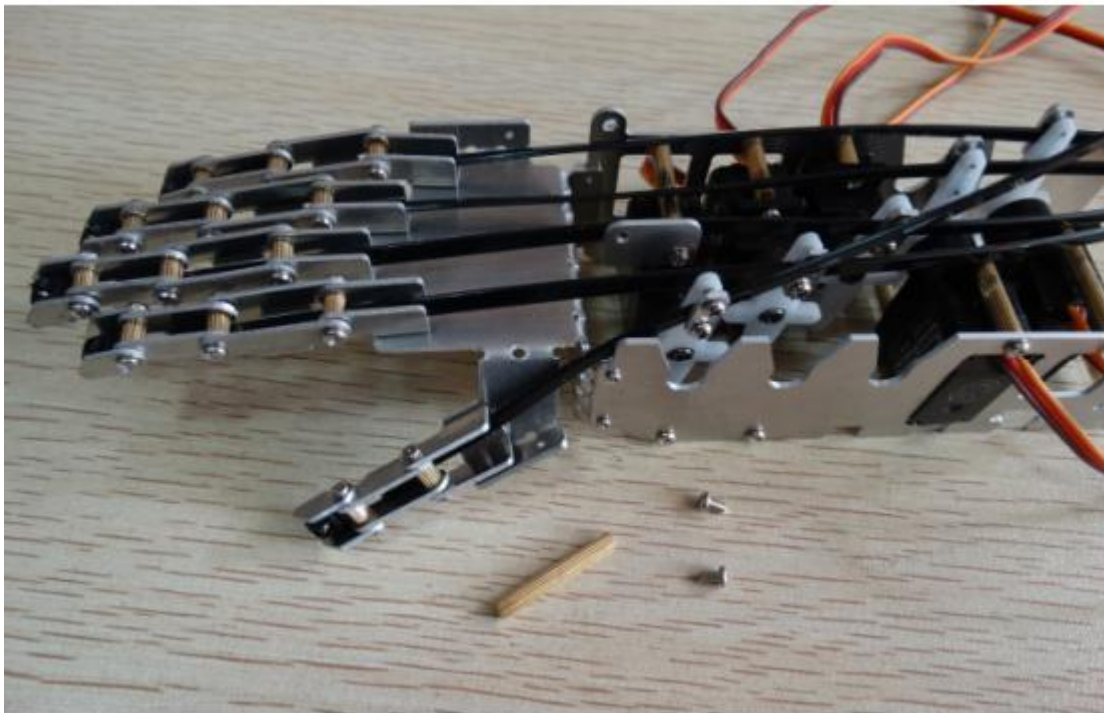


Screw the self-tapping screw directly into the head of the cable tie and secure the cable tie.

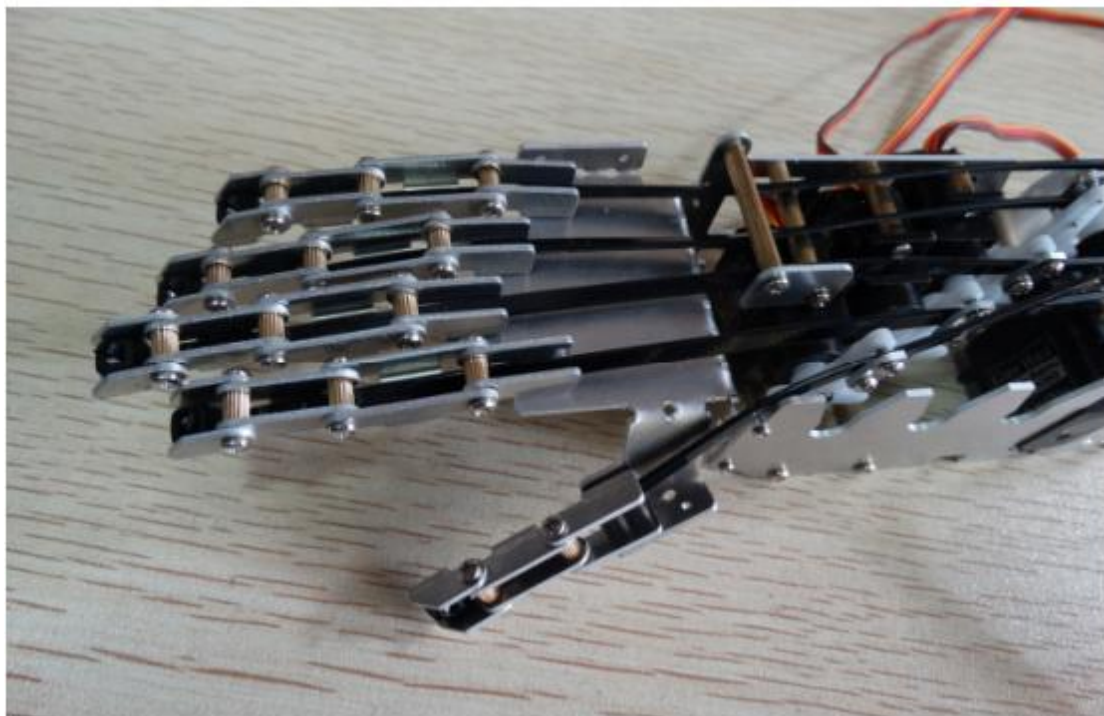




Take M2\*23 copper studs and secure with M2\*3 screws.



Here the use of copper pillars in order to suppress the work of the cable ties, so as not to upturned.

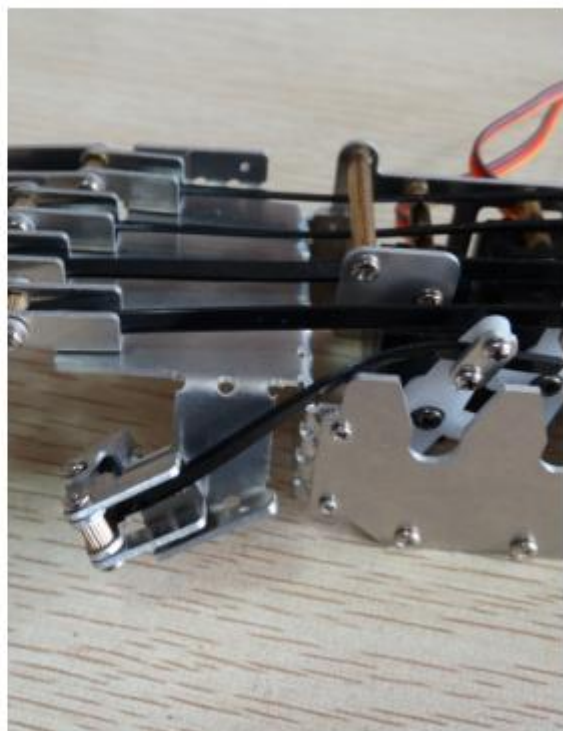
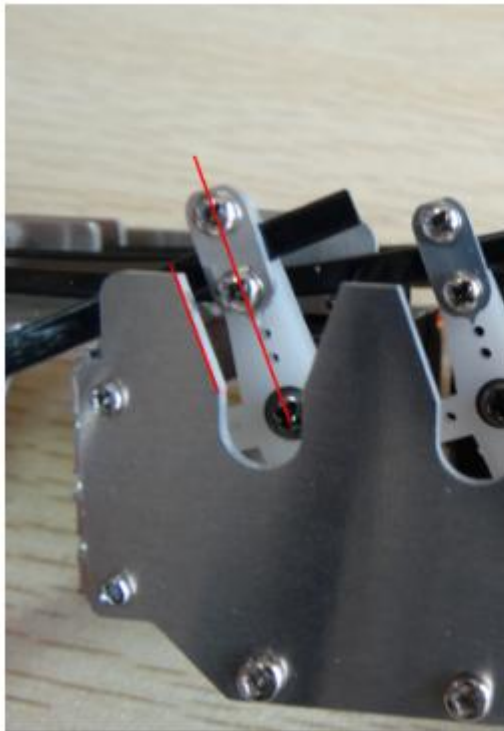


Began to adjust the cable ties, start with the big finger, push forward the cable tie fingers upturned, and then push the first finger to ensure that the first steering gear arm with the arm parallel to the side when the fingers can be slightly upturned, Then tighten the 2 screws. And cut, leaving margin, as shown below.



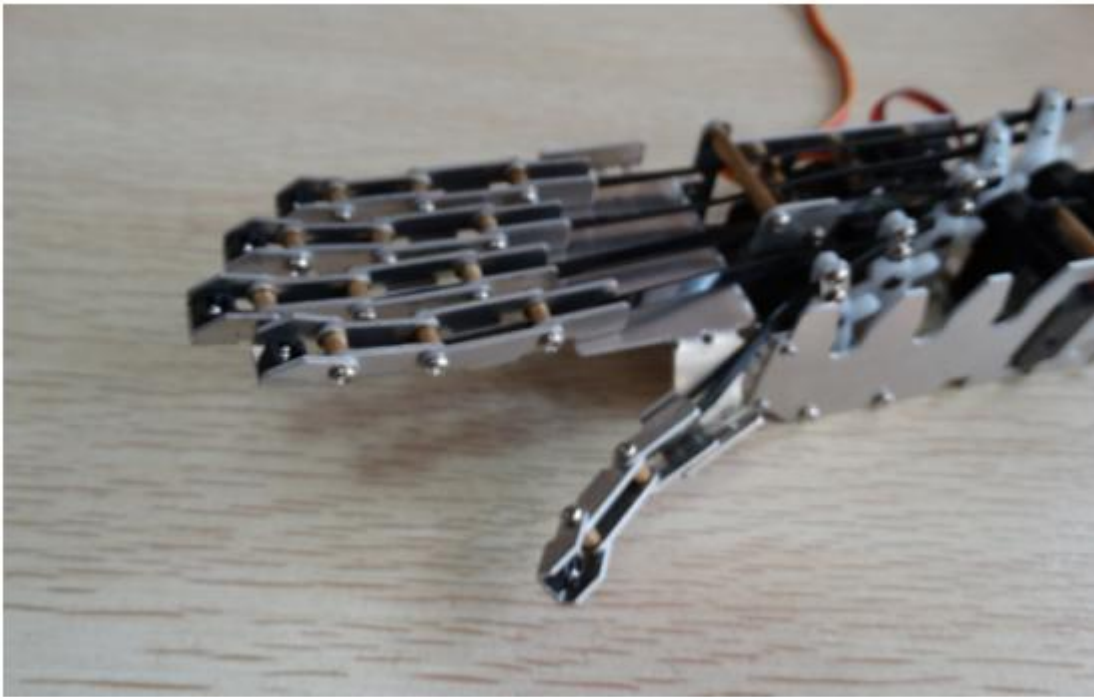
And then pull the rocker arm to do the test, this time the first finger to complete debugging.

Note: If the steering servo arm is easy to move when the arm is not moving, use the steering gear tester or steering gear control panel to control the rotation, otherwise it is easy to teeth

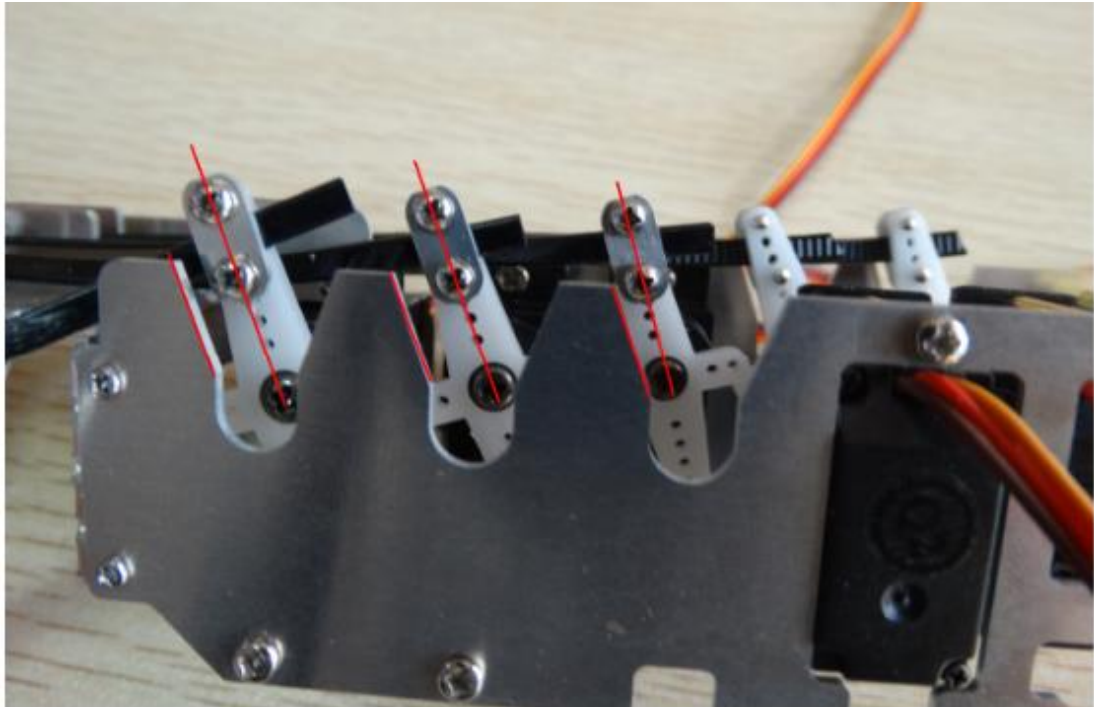




Adjust the 2, 3, 4, and 5 finger servos in the same way as the 1st servos.

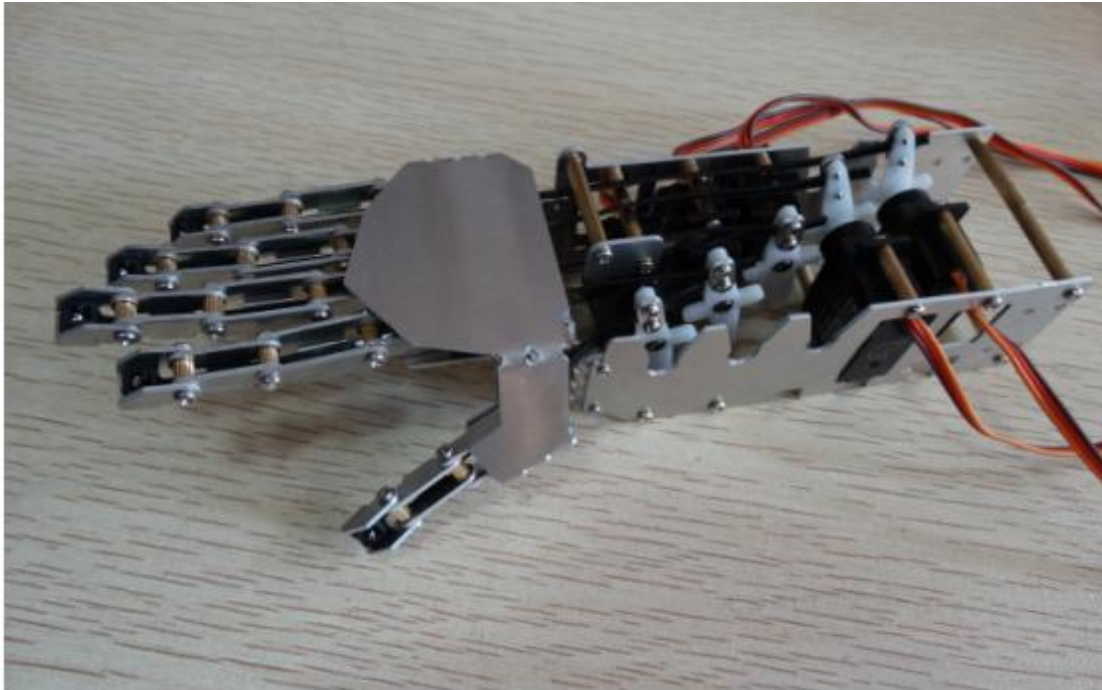


To ensure that two parallel red edge under the fingers slightly upturned, where the maximum straight position for the finger is the maximum stroke position of the steering gear.

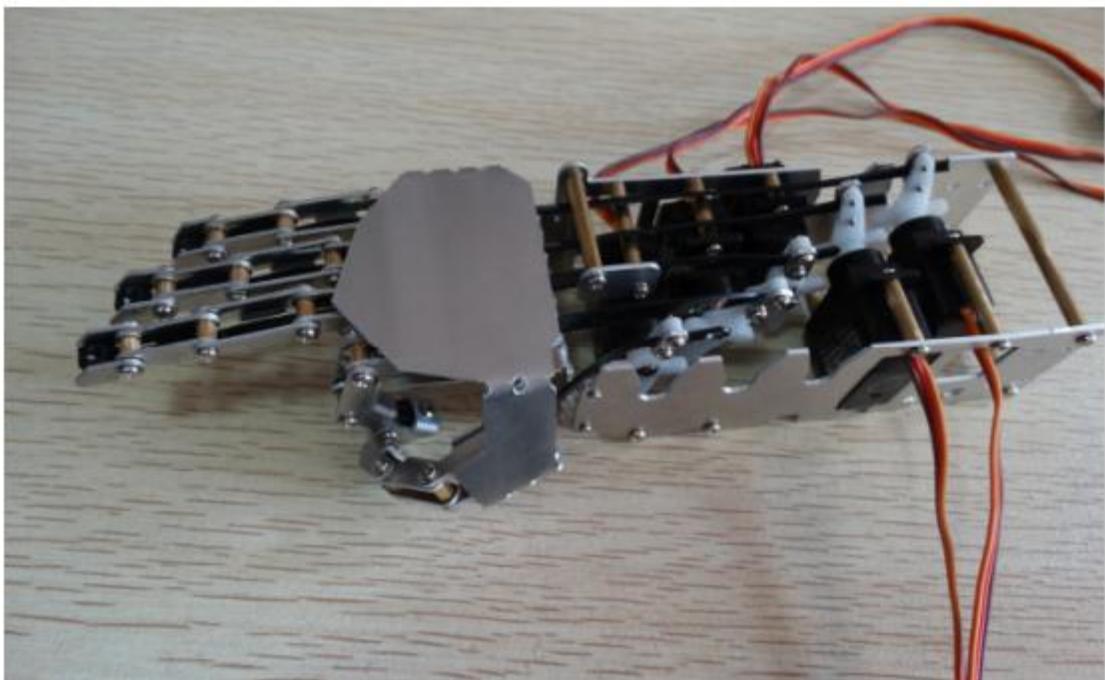


After the completion of the last back on the back, using four M1.4 \* 3 stainless steel screws, the screw as a self-tapping screw forced into. Note that here the first left a screw, right a screw, do not tighten. To be screwed into the other two screws, and other four screws are screwed into the palm of the hand, the last in turn tighten the

screws to secure the back of the hand. Here the right hand to complete the assembly.



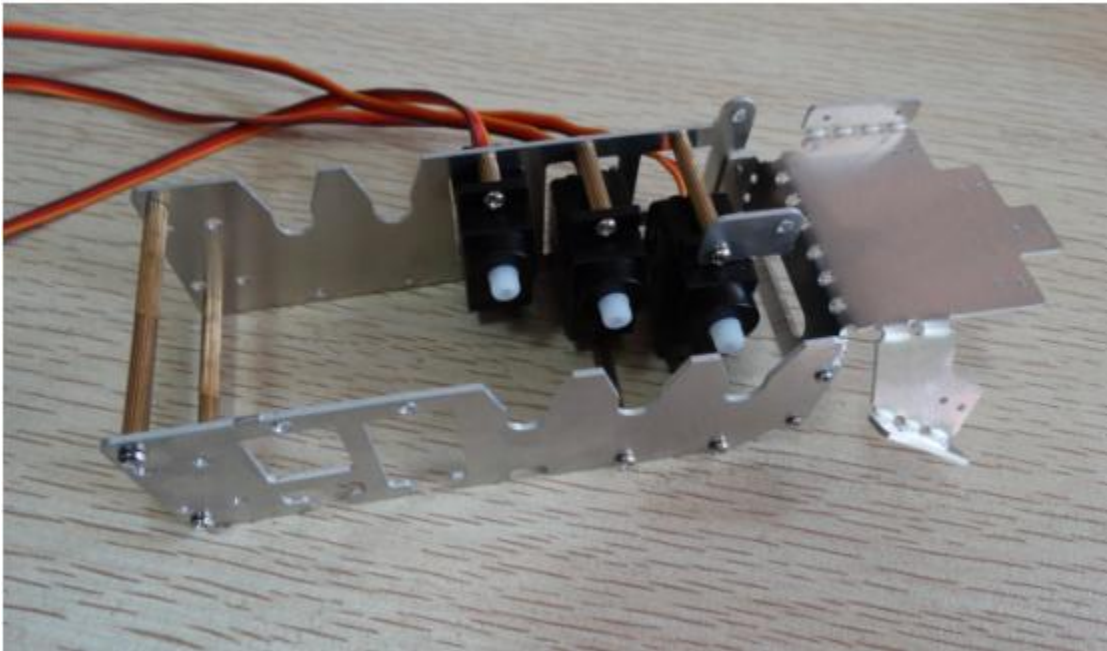
It can be tested by the servo knob or servo control panel. And then in front of the steering gear back to the power supply program.



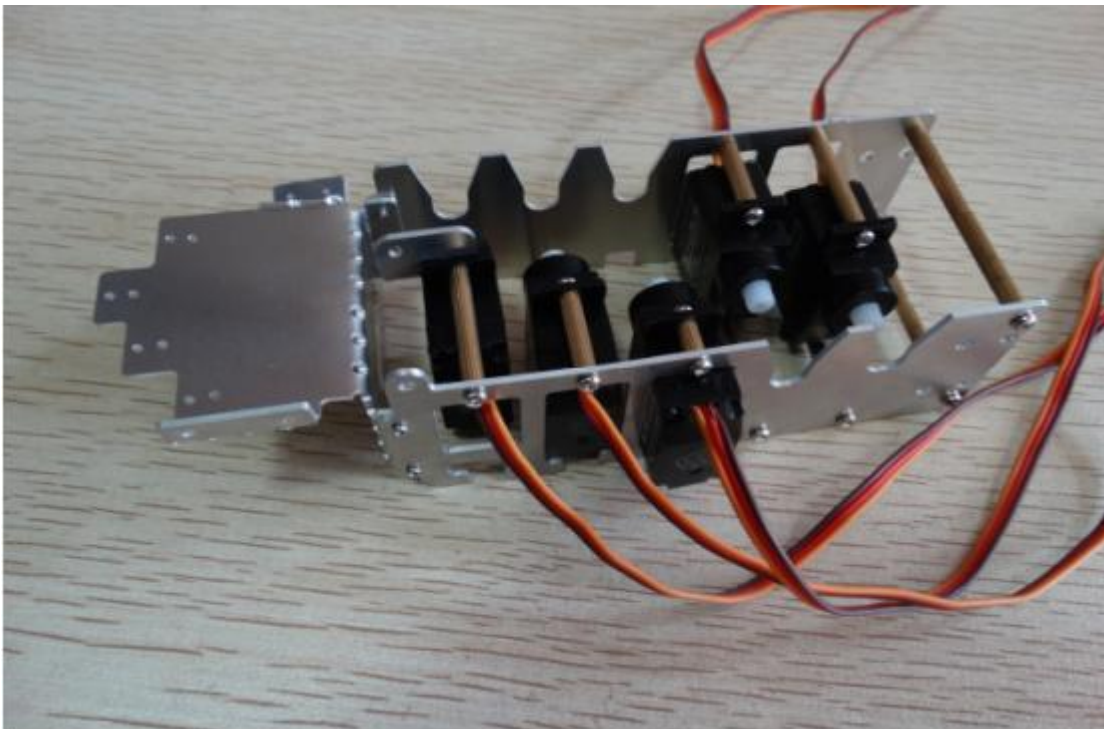


24. Then the overall installation of the left hand, the case of the right hand, please skip:

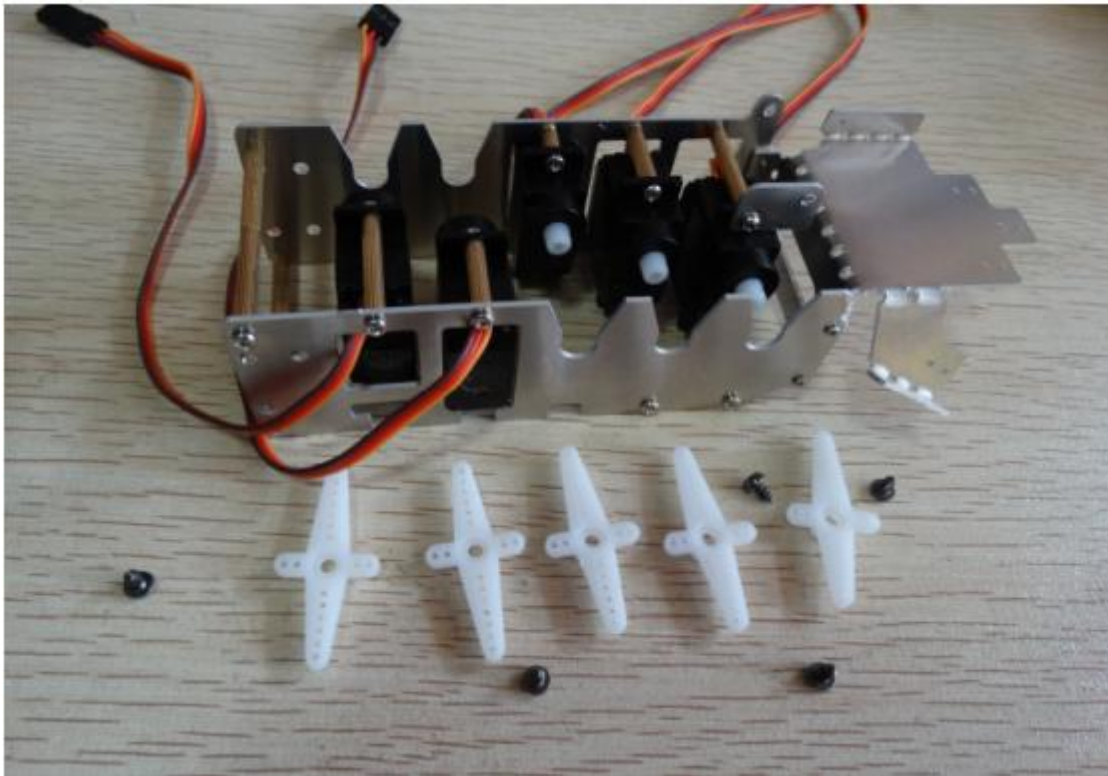
With the right hand, first install 1 2 3 servo, using M2\* screws.



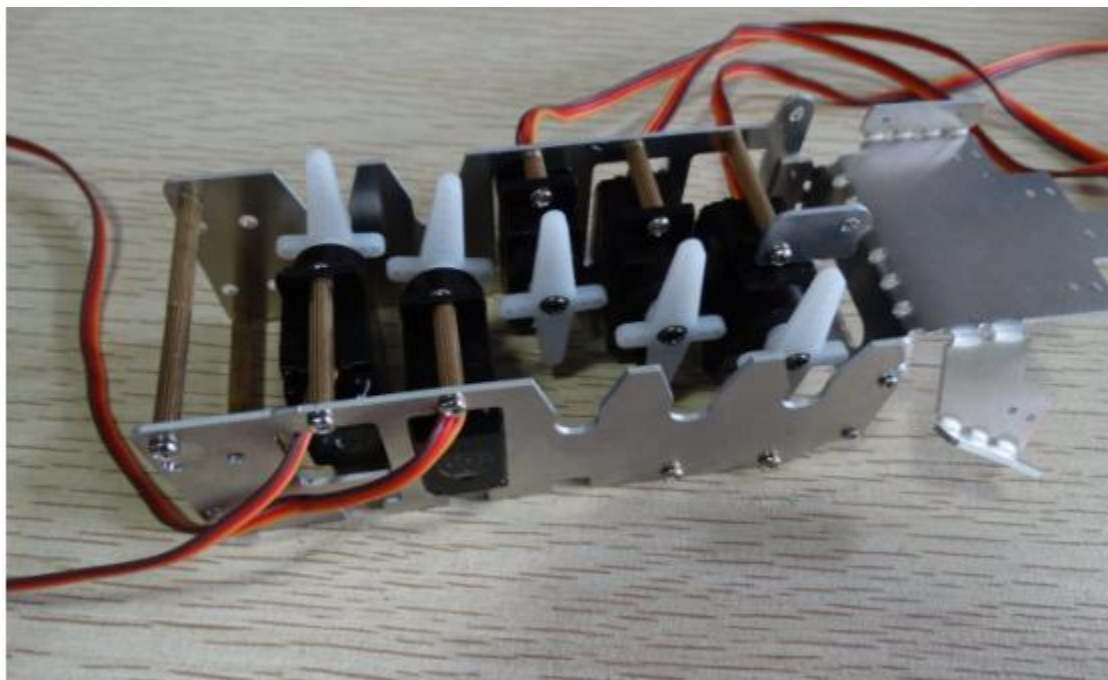
Next install the 4,5 servos and use the M2\*3 screws as well.



Take the cross arm and the mounting screws for the rocker arm.

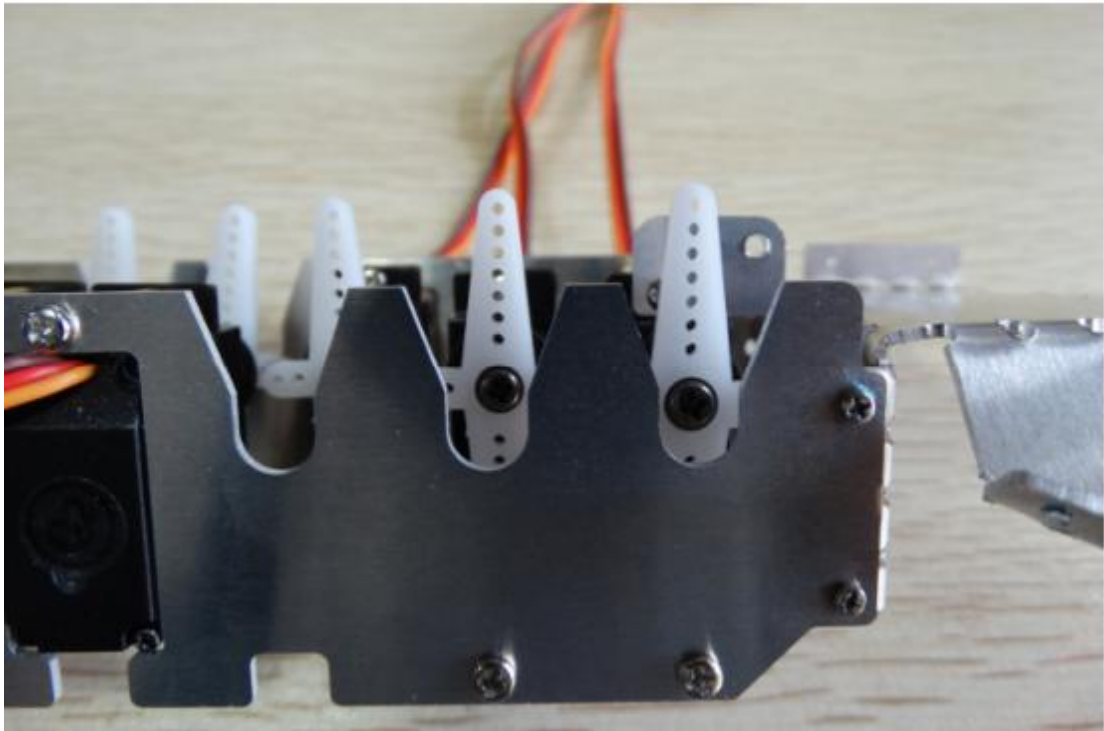


Rocker with screws screwed into the servo, pay attention to distinguish the long side, long side has long and short. Ensure that the longest edge is on.

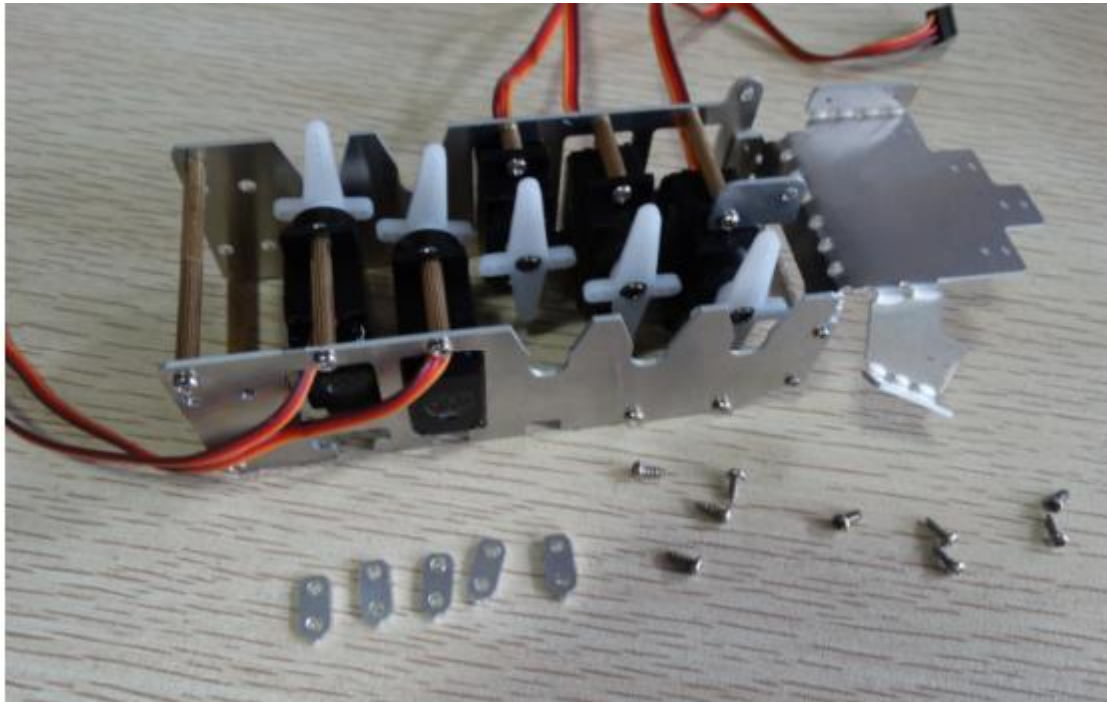


The longest side of the cross arm faces upwards and ensures that the long side is loaded into the rocker arm in parallel with the servos. As long as the relative parallel can not guarantee absolute parallel.

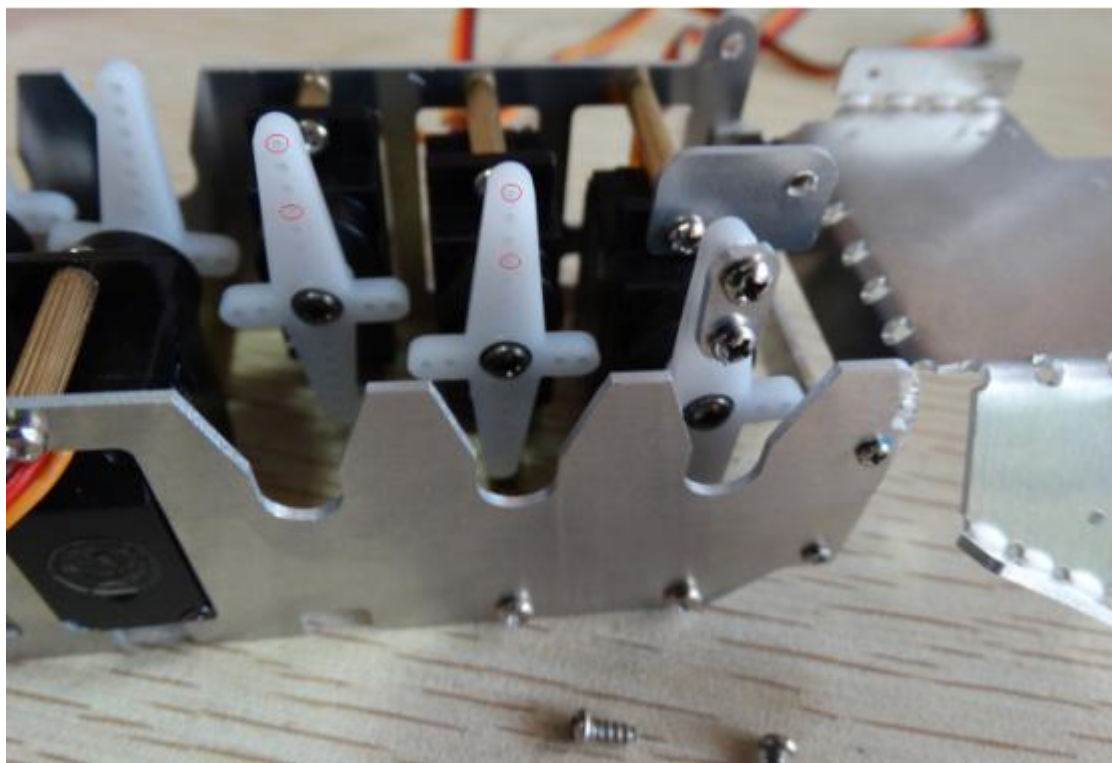
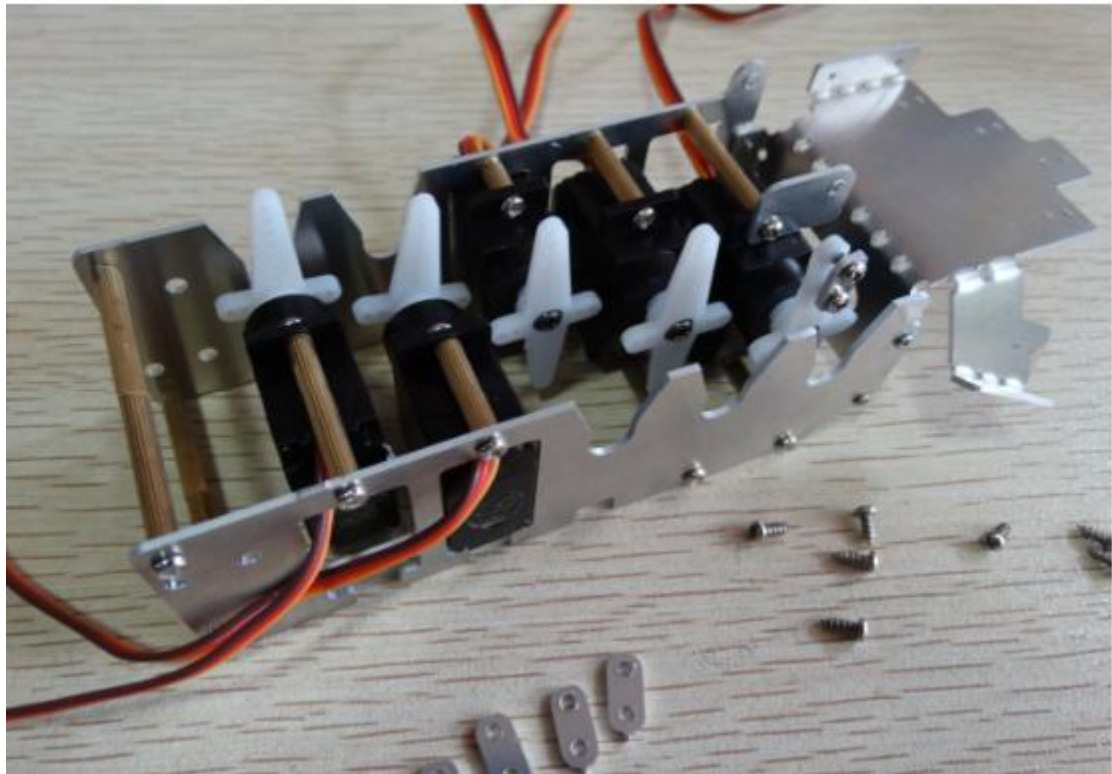




Next remove the platen part and the M2\*5 tapping screw.

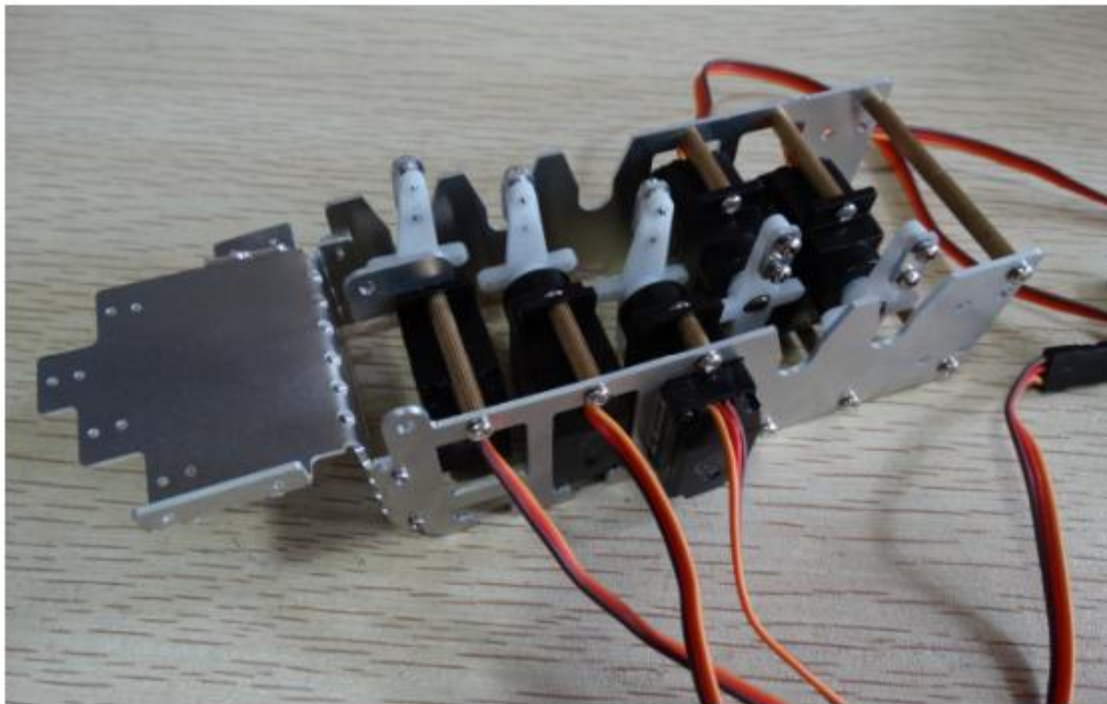


Tip down into the rocker arm, do not tighten, leaving margin. Note that the first and fourth holes are used here.

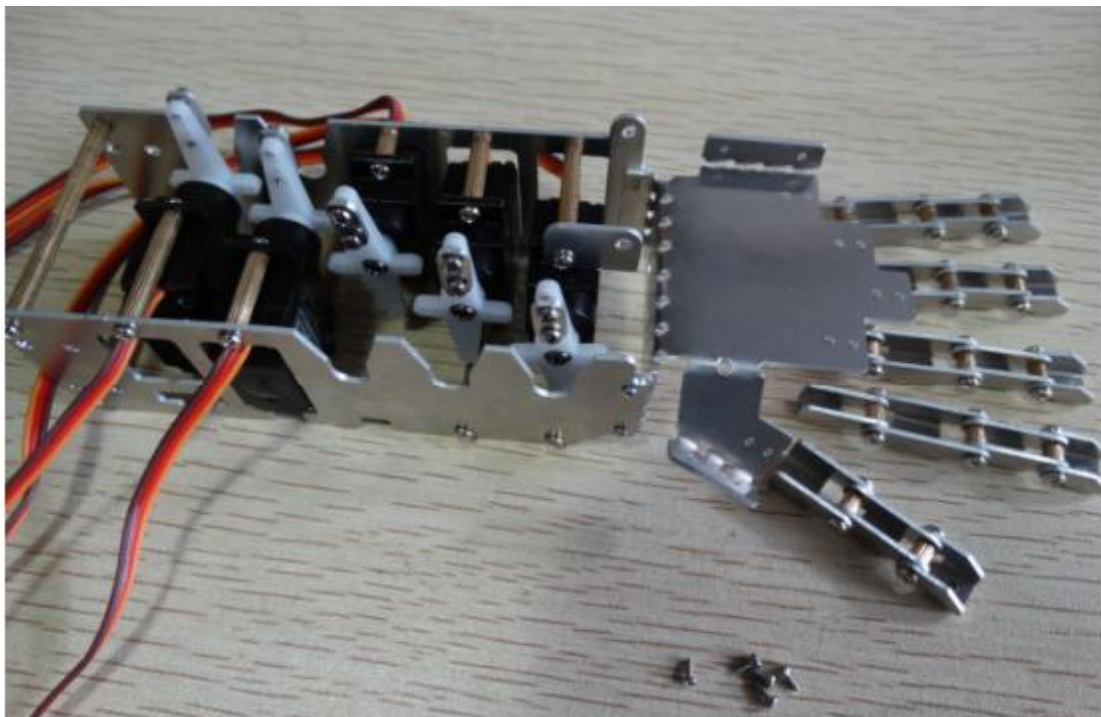




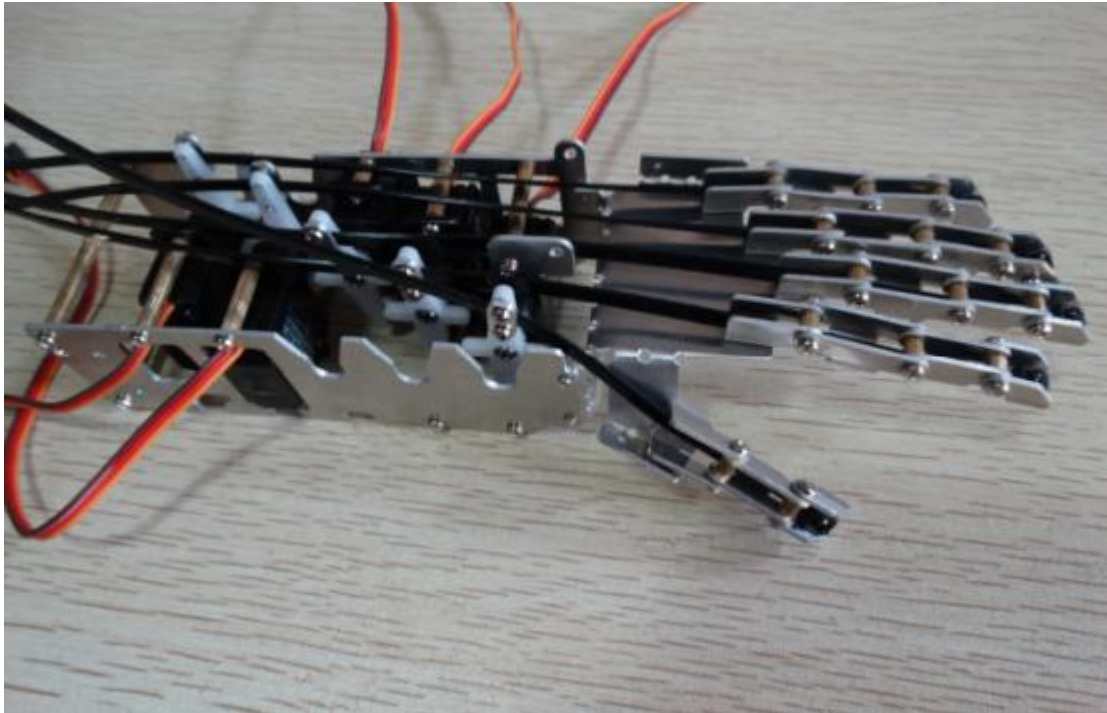
Screw on the plate in order to ensure that the tip down.



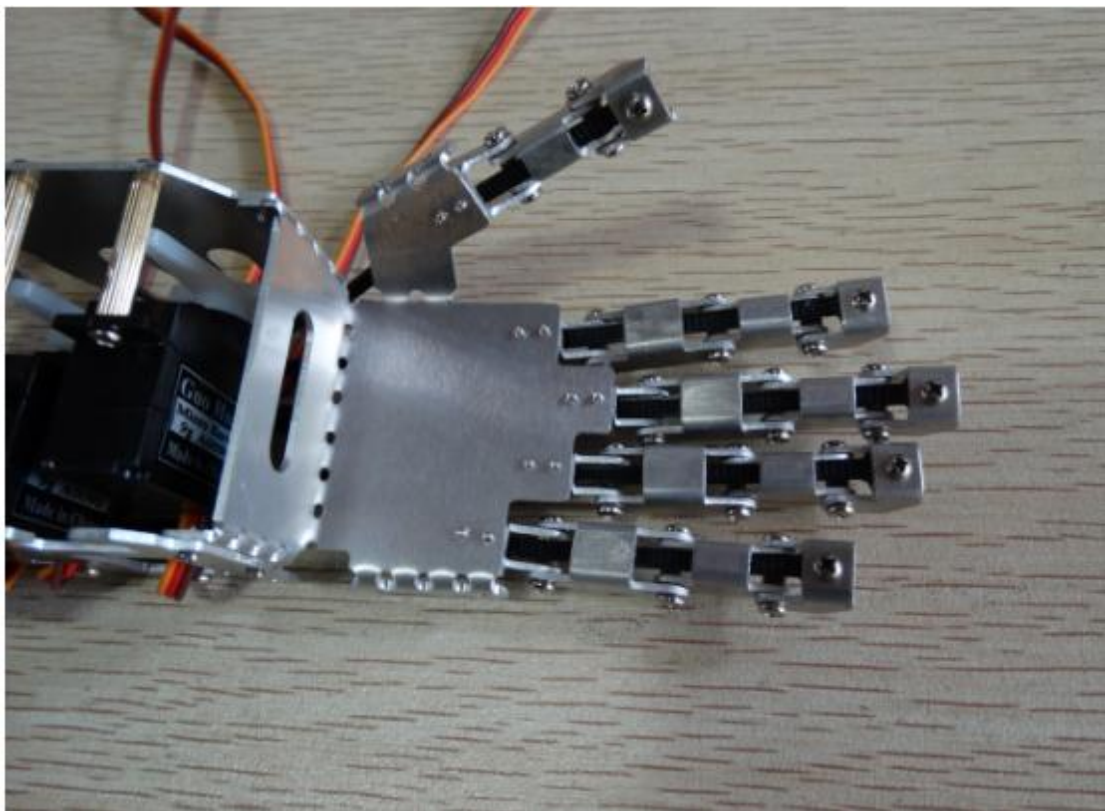
Then take the left-hand part with the M1.4\*3 screws. Use 1.4 screws in turn to force the fingers into the palm of the hand and fixed.



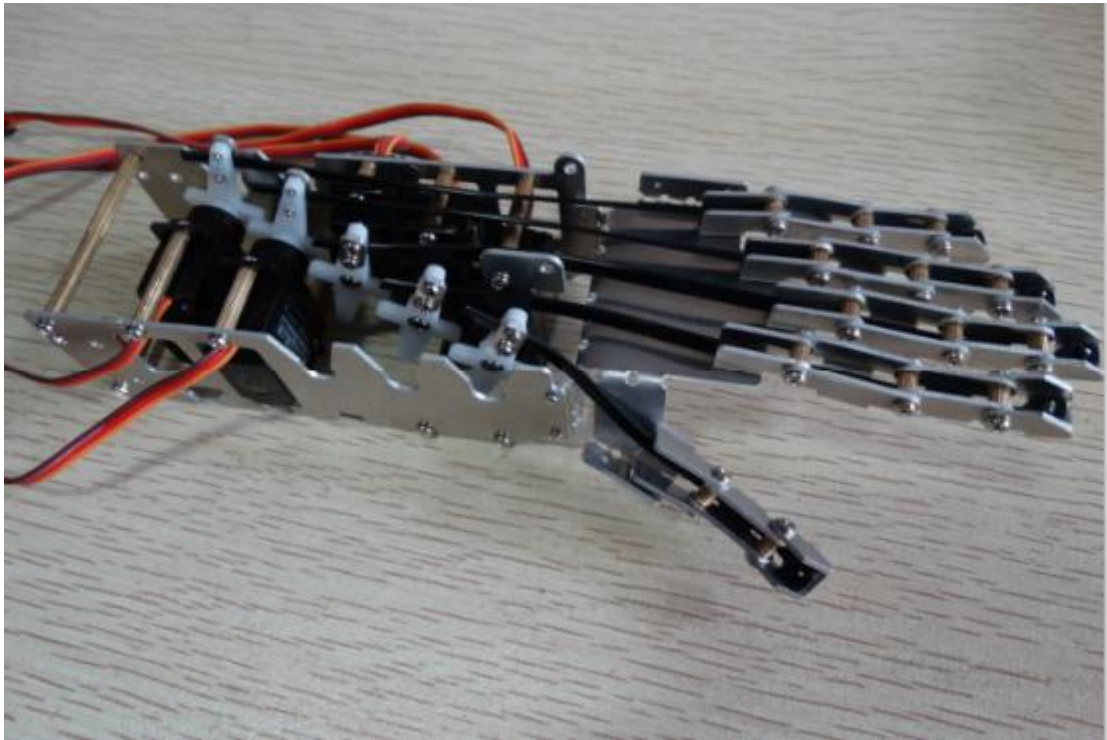
After fixing your finger, use M2\*5 self-tapping screws to secure finger straps. Cable tie in the mouth of the mouth down in the rocker arm toward the rocker arm. Tie the tail into the pressure plate.



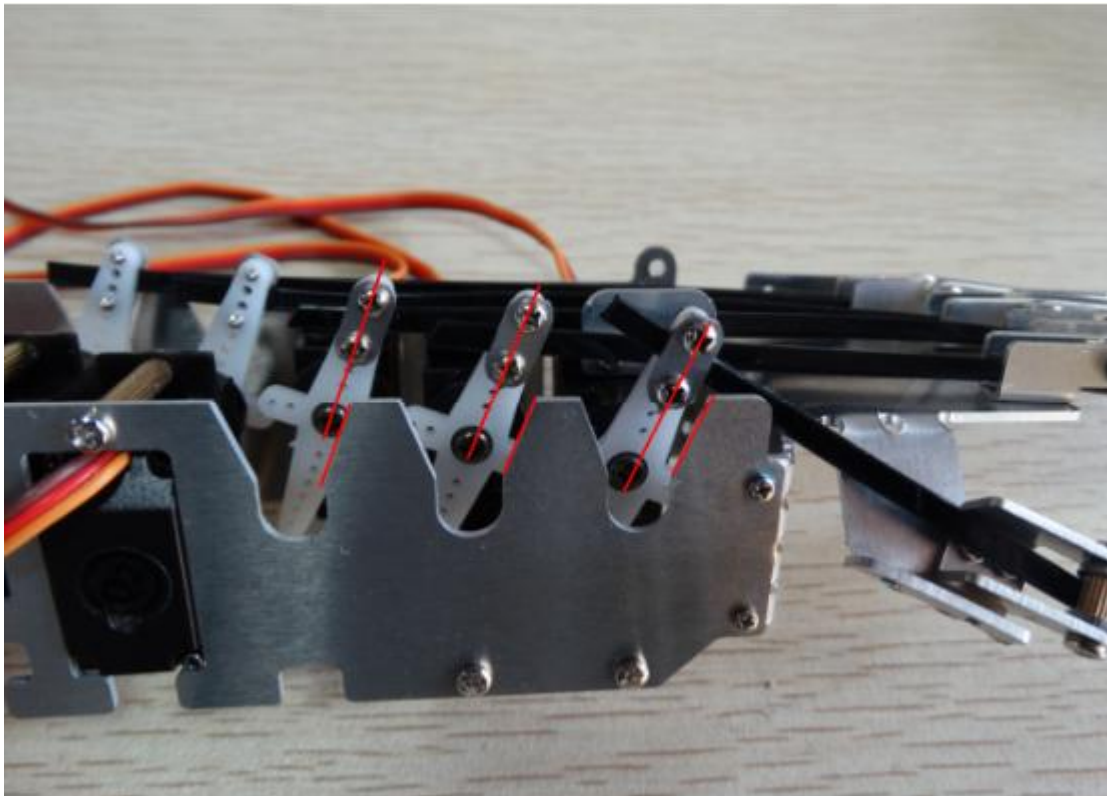
Adjust the length of the tie, which can refer to the right hand here. Note: If the steering servo is easily moved by hand when moving the rocker arm, use the servo tester or the servo control panel to control the servo rotation.



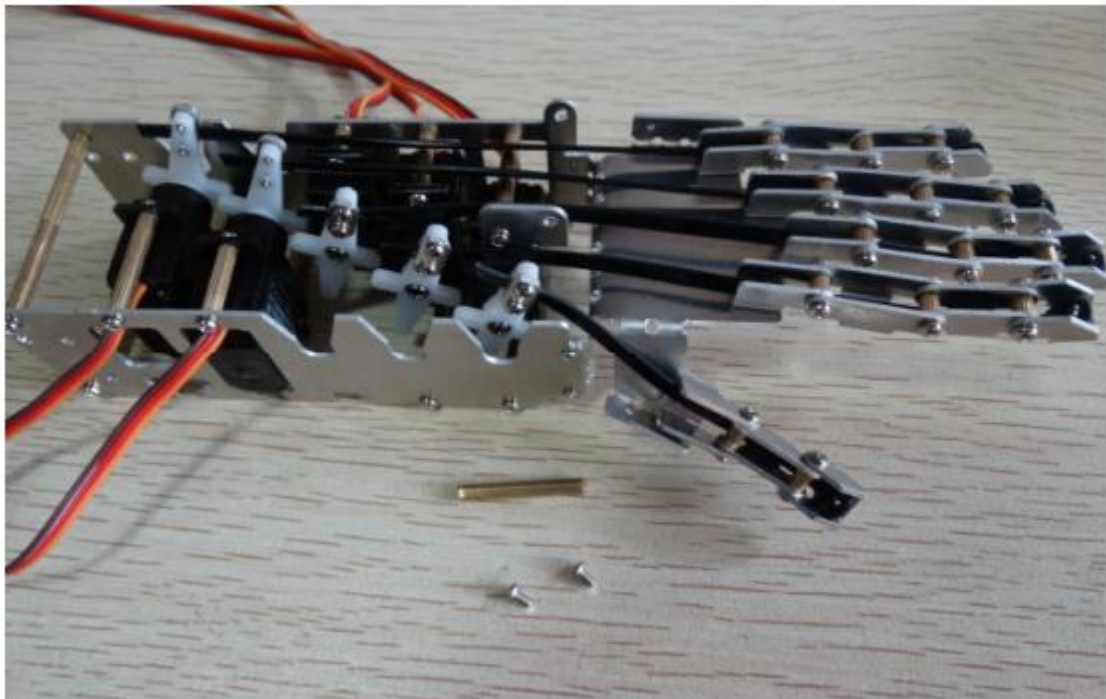




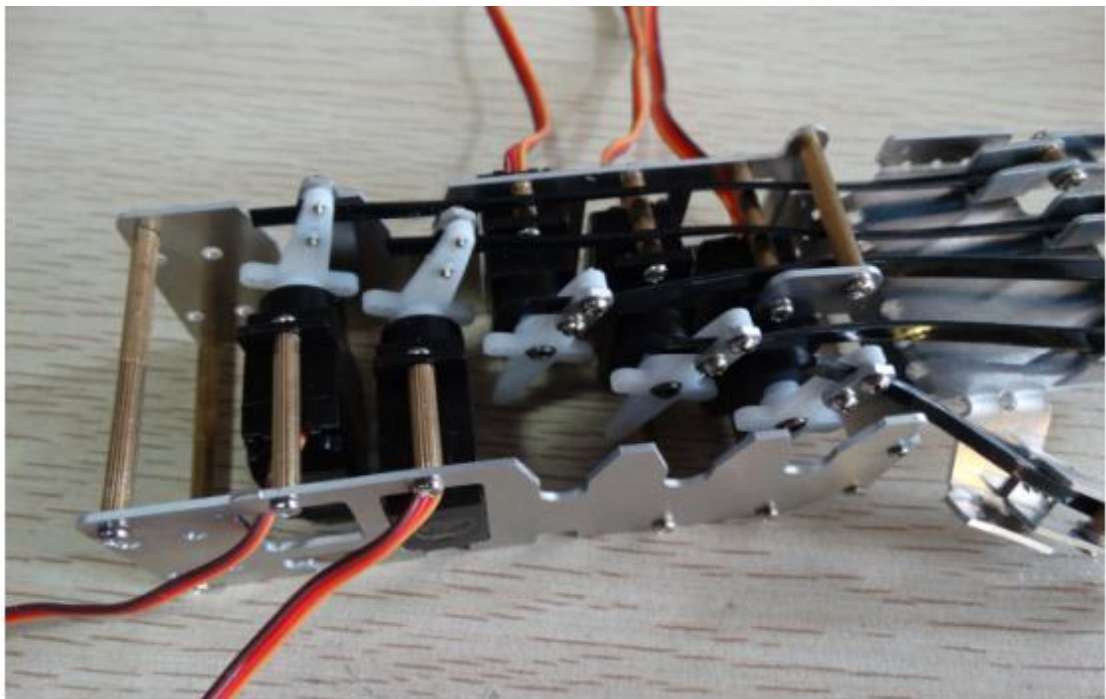
Adjust the cable tie Figure 2 lines remain parallel to the state, the fingers can be slightly upturned, tighten the screws, and cut cable ties and left margin.



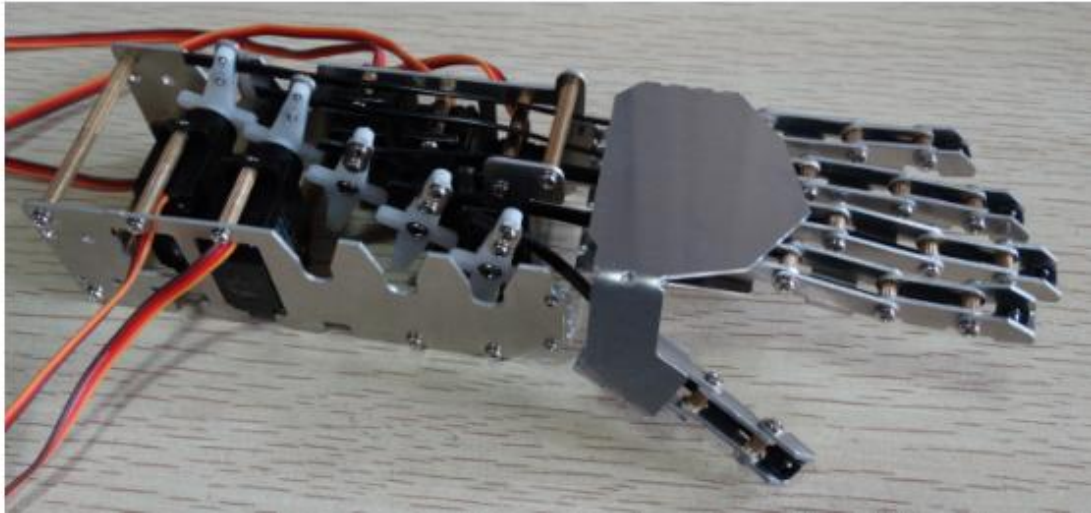
Take the M2\*23 copper studs using two M2\*3 screws.



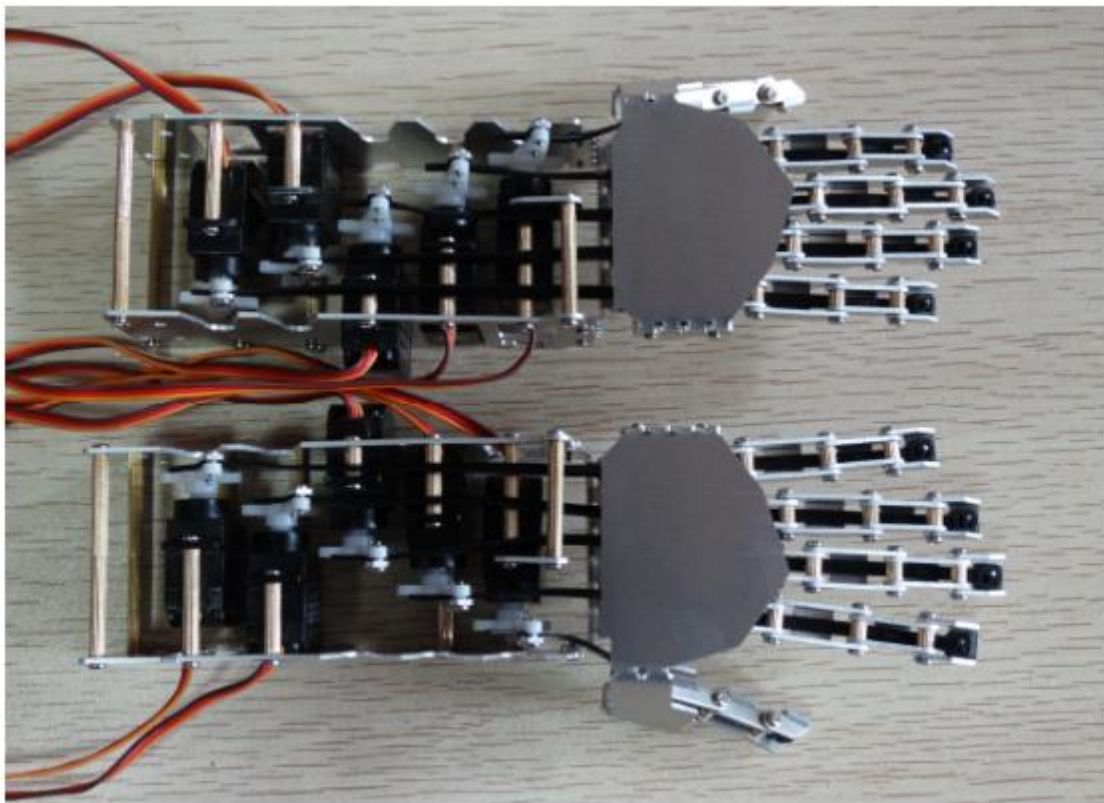
After the completion of the last back on the back, using four M1.4 \* 3 stainless steel screws, the screw as a self-tapping screw forced into. Note that here the first left a screw, right a screw, do not tighten. To be screwed into the other two screws, and other four screws are screwed into the palm of the hand, the last in turn tighten the screws to secure the back of the hand. Here, the assembly is completed.





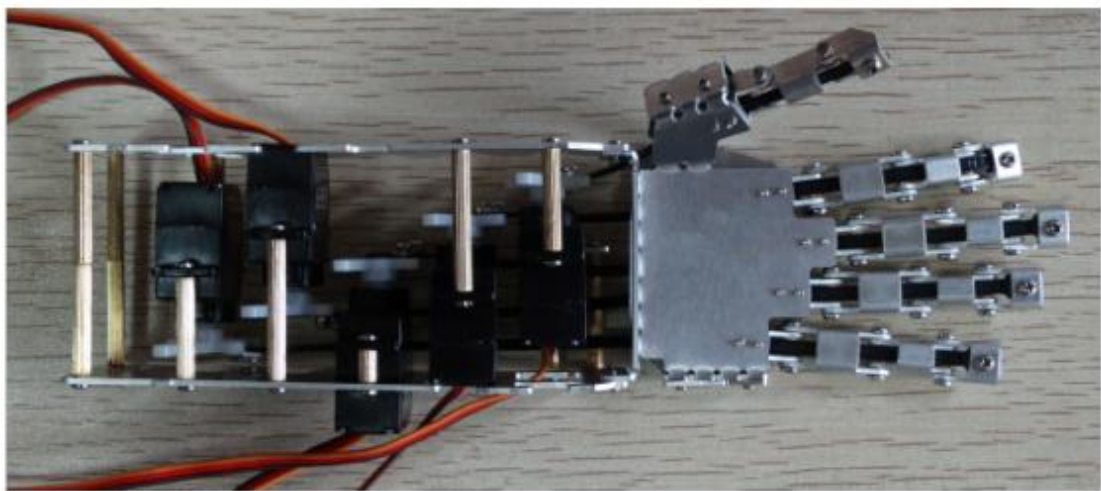
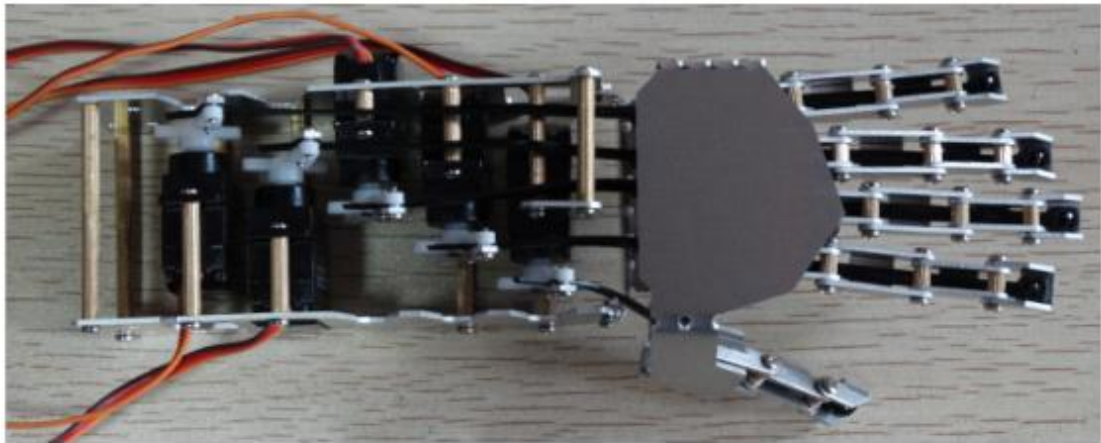


**Left and right hand to complete the finished product map.**

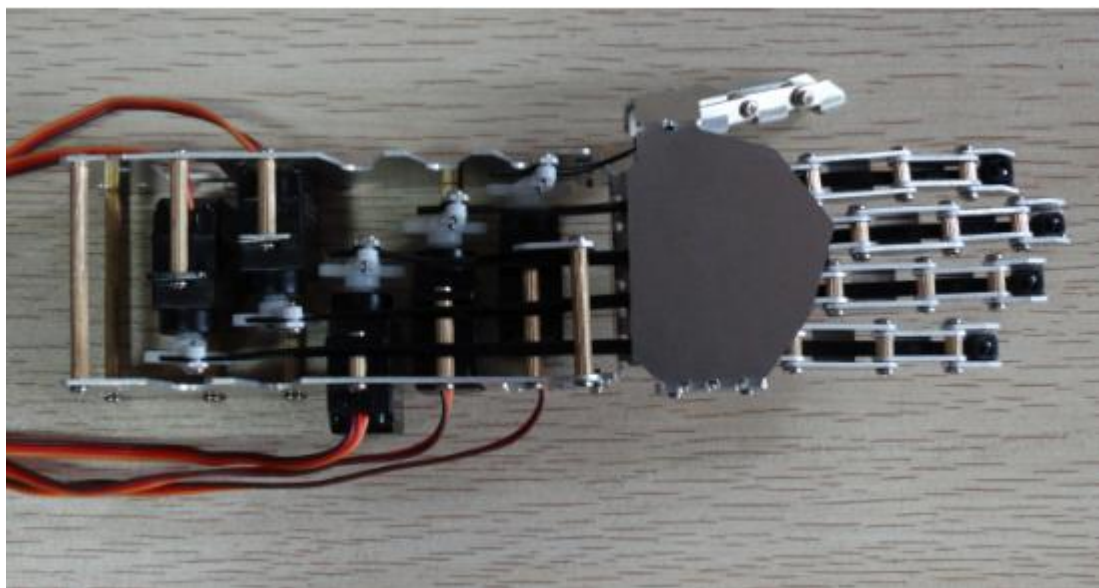


Note: When using the robot finger, try not to let the small servo for a long time in a large or the smallest position, that is, the fingers hold the straight with the two states, and always pay attention to the small servo heat. If the heat is too large, so that the small steering gear back to the middle of the state, or stop working. Let the steering gear cool down. And re-adjust the length of the lower band.

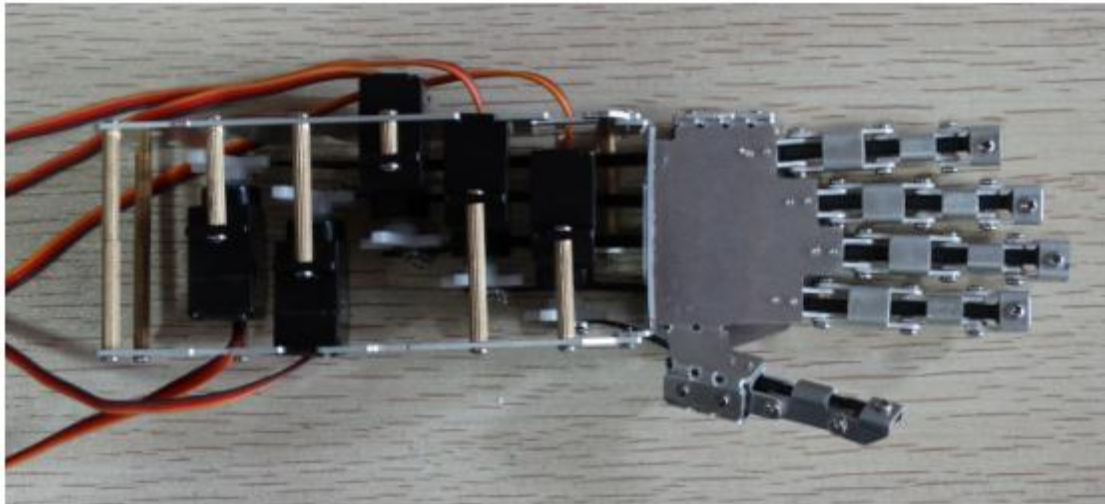
**Left hand front and back**



**Right hand front and back:**







Note that the left and right behind the four M2.5 screw holes, is used to expand the use of connecting the steering gear, generally do not use.

Use the time to set into the robot steering gear, and use the M2X6 black, left and right of the two self-tapping screws fixed.

