

Funnyarm

DIY ROBOTIC ARM KIT FOR ARDUINO

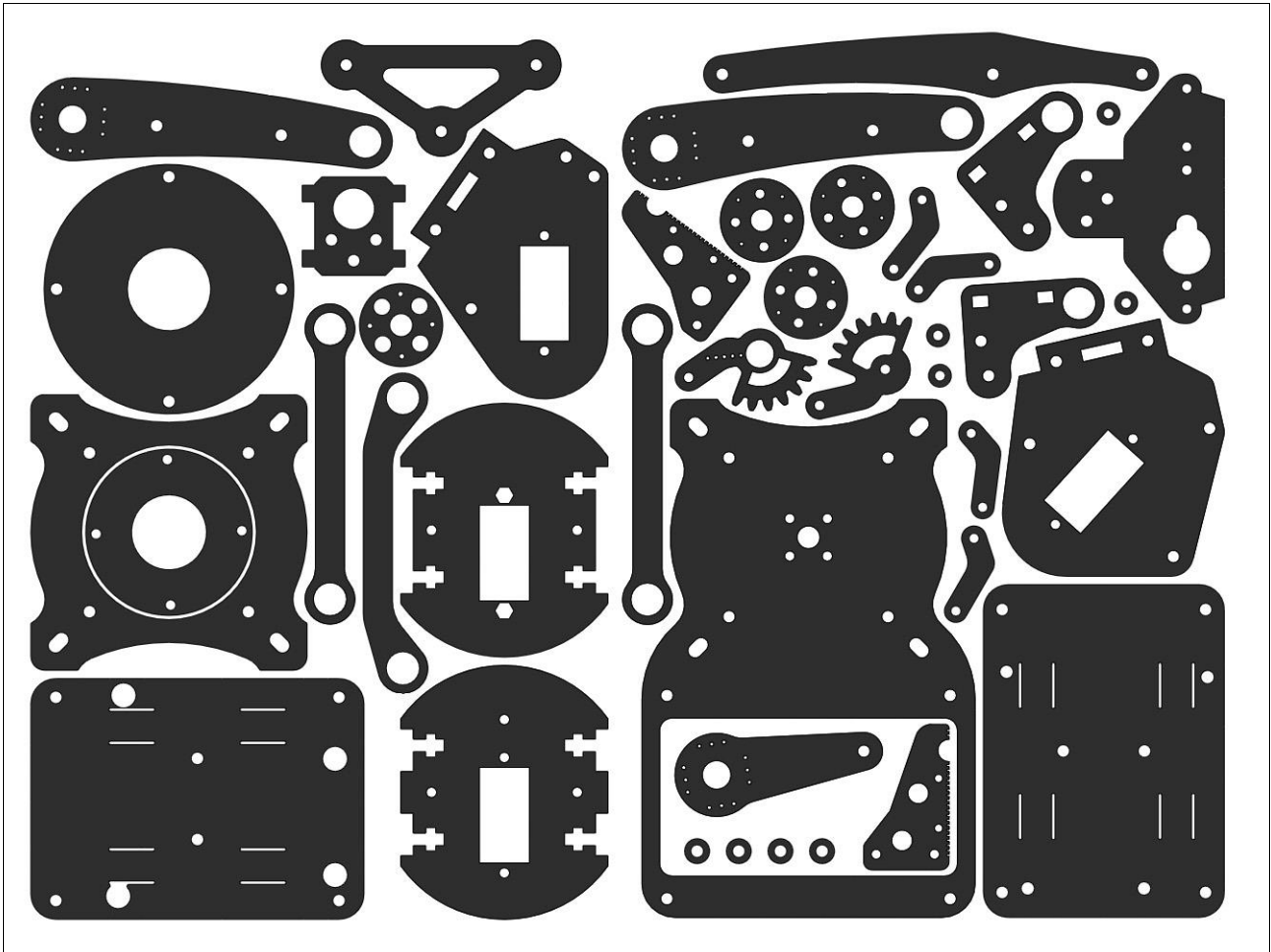
1. Introduction

1.1 Overview



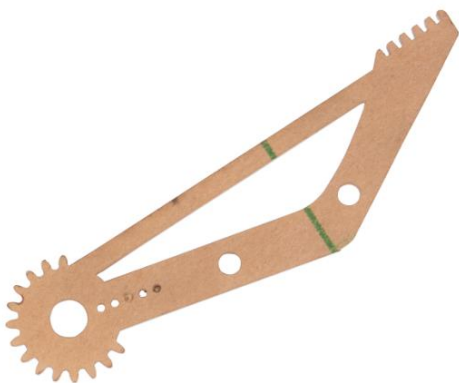
2. Components List

2.1 Acrylic Plates



Prior to assembling the Funnyarm, you need to remove the residues in the holes of the plates and the stickers on the plates. Here we take the Joint 1 fixing plate for example.

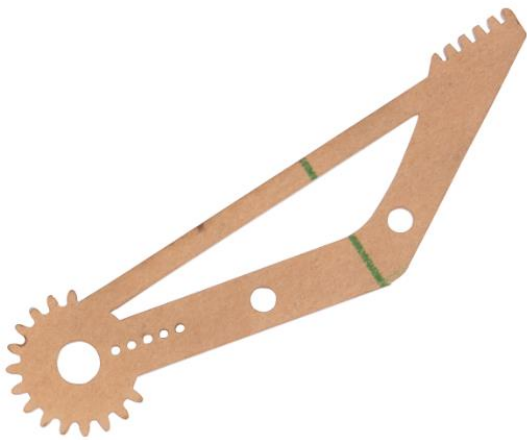
1. Check whether there are some residues in the holes of the acrylic plate.



2. Use a tool with a pointed end to remove the residue.



3. Make sure that all the residues are cleared.



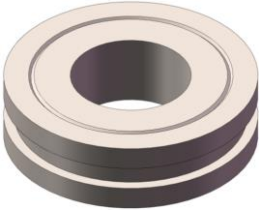
4. Use the pointed tool to scratch off the sticker on the plate.





2.2 Connecting Components

NO	Name	Component	Qty.
1	M1.2*4 Self-tapping Screw		8+2
2	M1.4*8 Self-tapping Screw		4
3	M2*8 Screw		6
4	M2 Nut		6
5	M2.5*12 Screw		2+7

6	M2.5*14 Screw		4
7	M2.5 Nut		4
8	M3*12 Flat-Head Screw Screw		6
9	M3*10 Screw		23+3
10	M3 Nut		14+3
11	M3 Self-locking Nuts		9
12	M3*9+6 Single copper pillar		4
13	M3*18 Double pillar		1

14	M3*20 Double pillar		6
15	ϕ 3x8x0.9 Gasket		1
16	ϕ 3* ϕ 8*4 Band Edge Bearing		9
17	Bearing		1

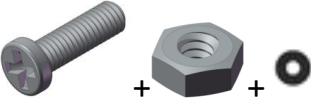
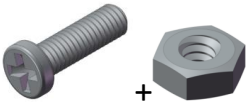
2.3 Electronic Components

	Name	Component	Qty.
18	3 X Servo (9g)		3
19	18650*2 Battery Holder		1

2.4 Tools (not included)

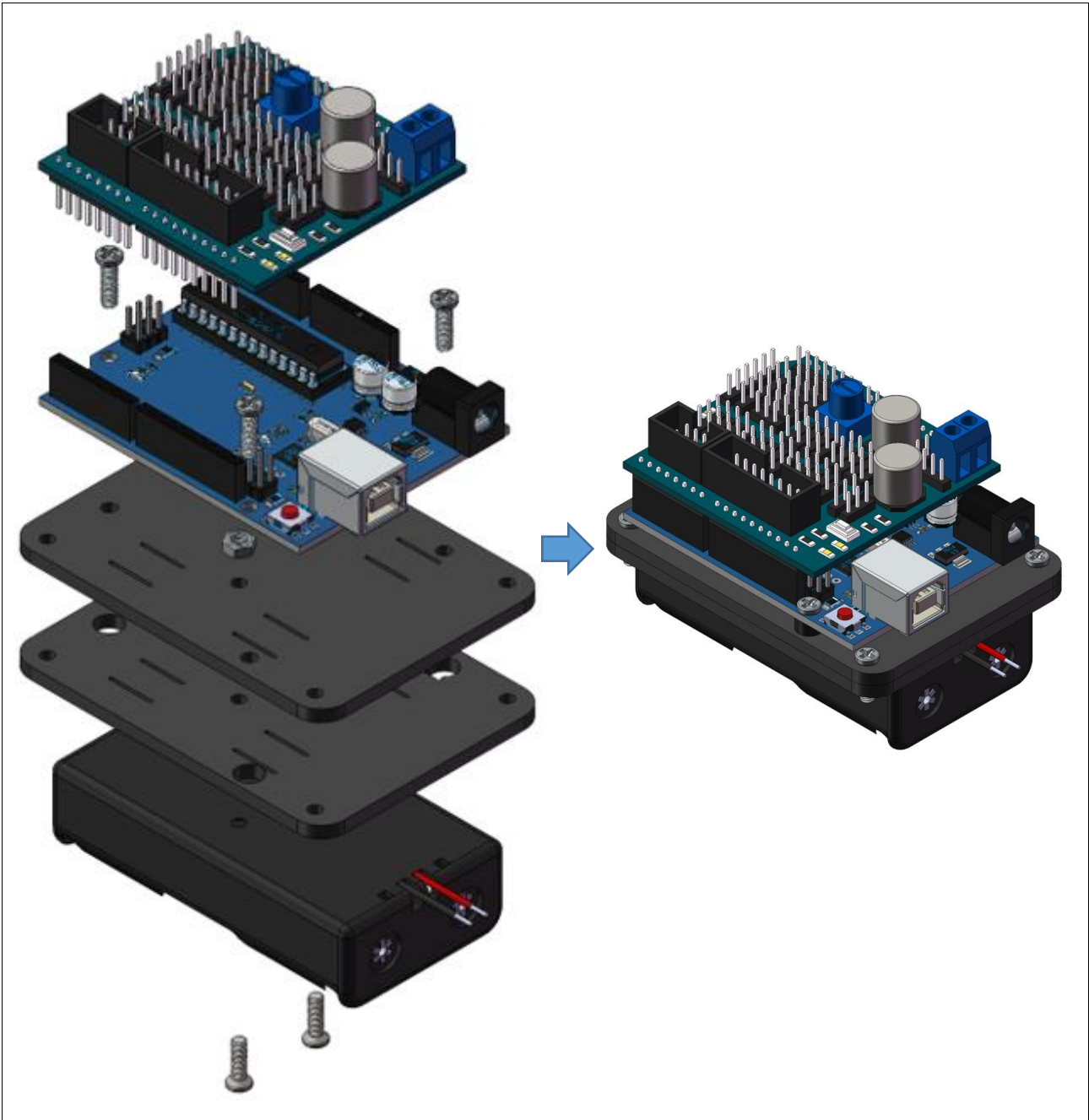
Screw Driver		1
Cross sleeve		1


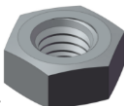
The paw components (not include , sold separately)

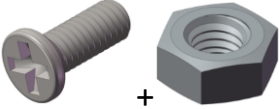
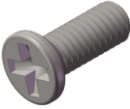
21+22	M2*8 Screw + M2 Nut+Acrylic gasket		Fix the servo	2+2+4
23+24	M2.5*12 Screw + M2.5 Self-locking Nuts nut		Fix the paw	7+7
25+26	M3*10 Screw + M3 Nut		Fix the paw	3+3

3. Assembly

3.1 Assemble the battery case

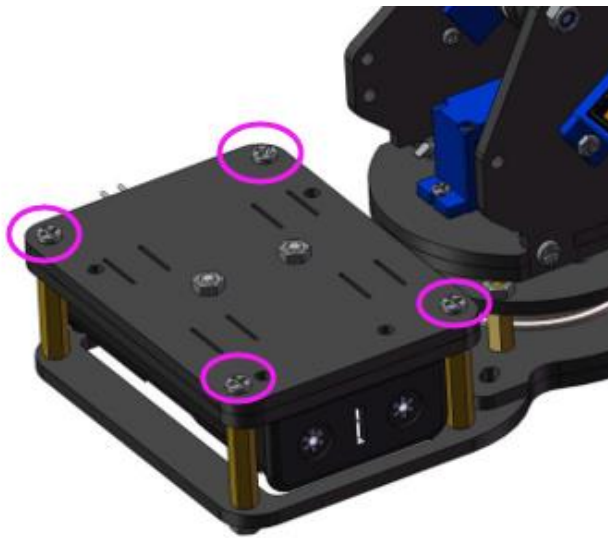


NO.	Name	Pic	Action	Qty
9+10	M3*10 Screw +M3 nut	 + 	Fix the UNO Board	2/4+2/4

8+10	M3*12 Screw +M3 nut		Fix the battery case	2+2
8	M3*12 Flat-Head Screw		Fix the UNO Board Base	2/4

NOTE:

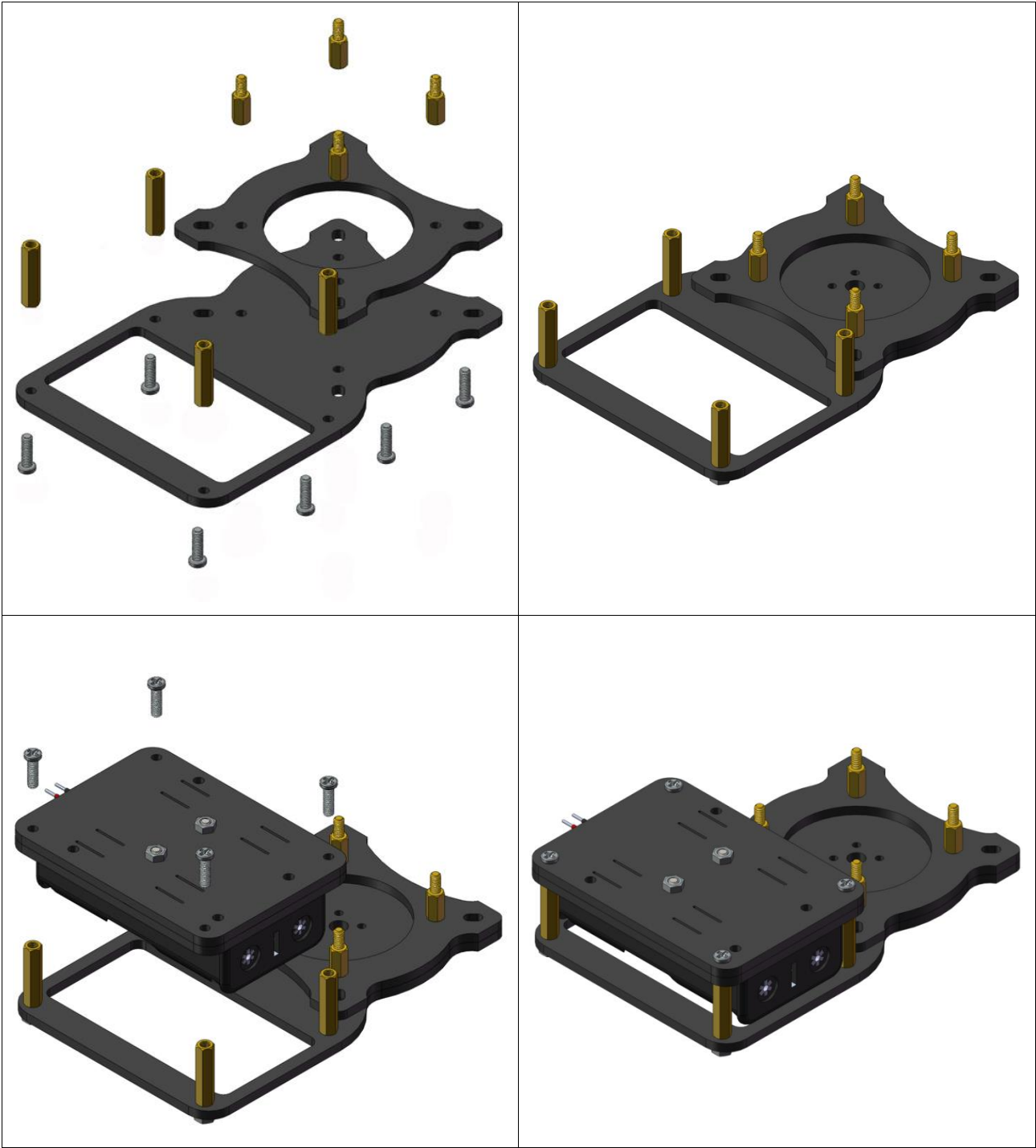
1) Before fixing the UNO board ,you need put 2/4 (2: diagonal) M3*12 Flat-Head Screw on the UNO Board base as the picture:

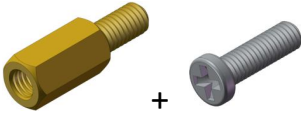


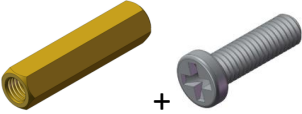
2) Don't miss the nuts when fixing the battery case:



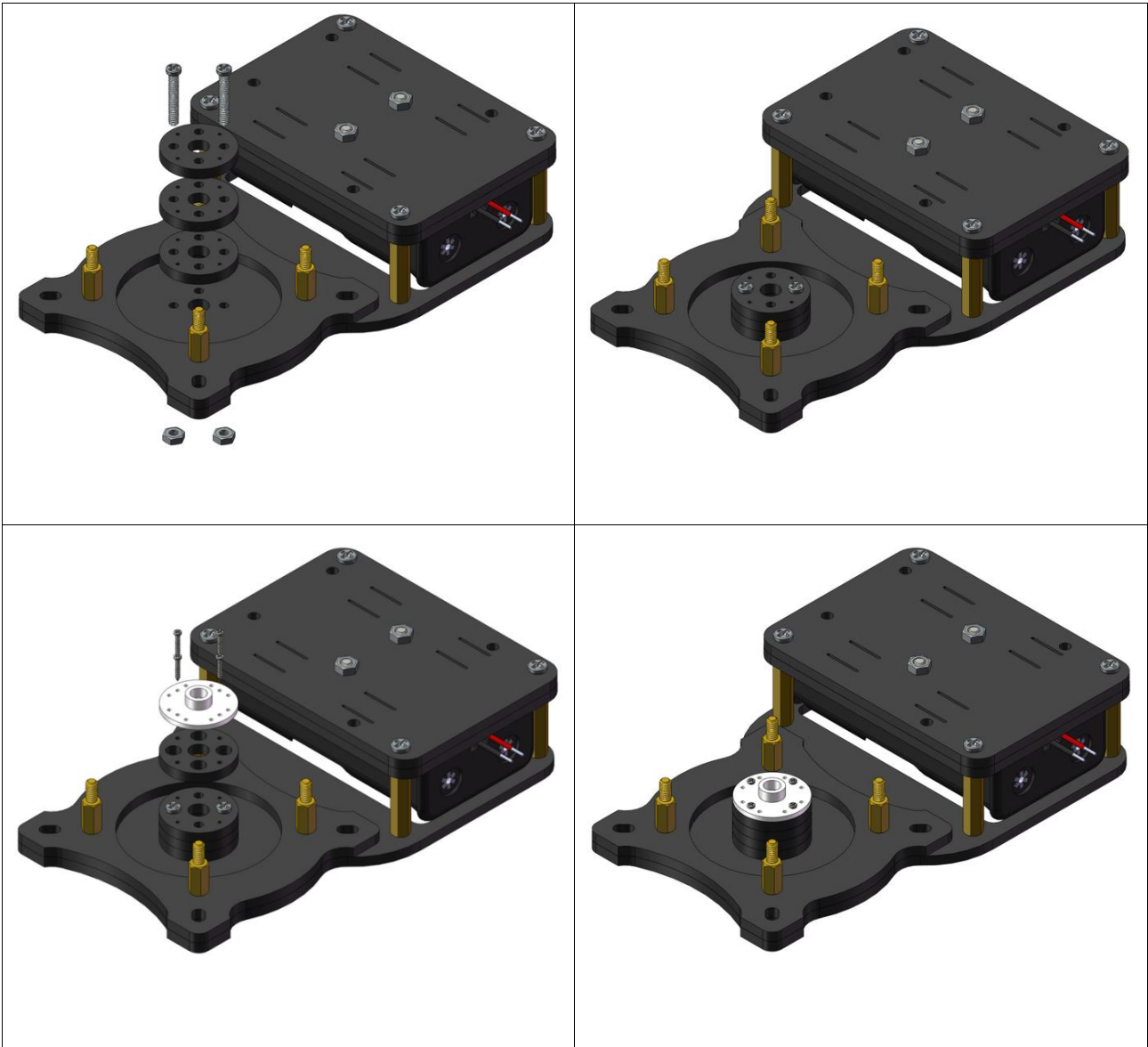
3.2 Battery box + base

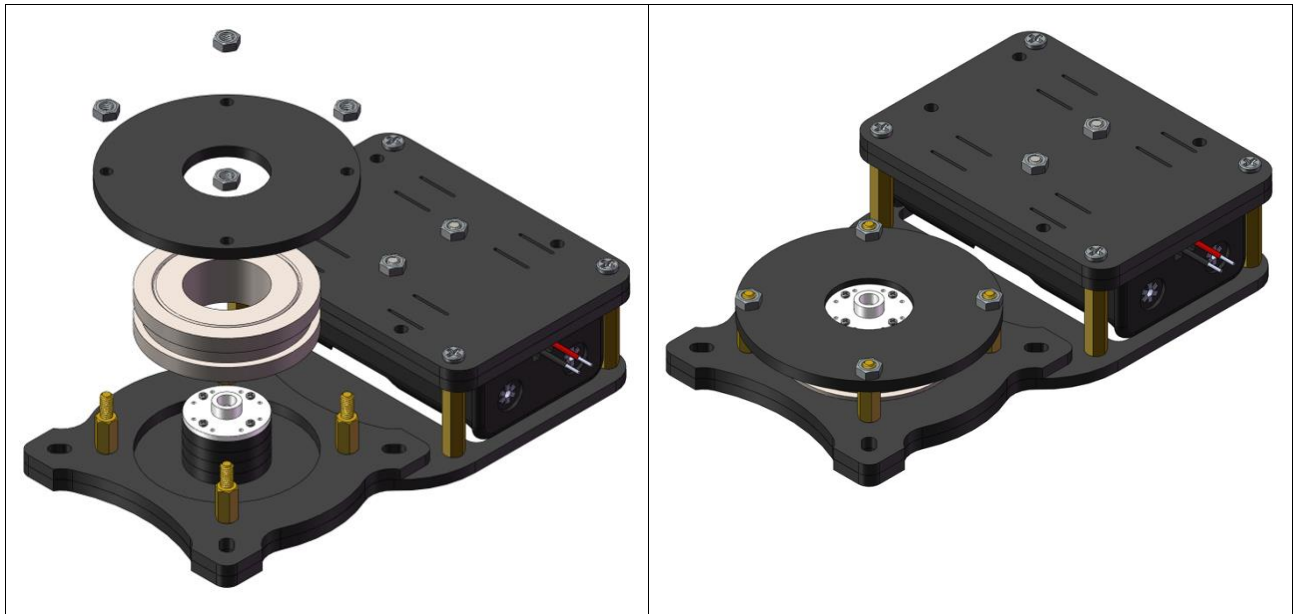


12+9	M3*9+6 Single copper pillar + M3*10 Screw		Fix the arm Base	4+4
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15+9	M3*20 Double pillar +M3*10 Screw		Fix the Board Base	4+8(4 have been putted on step 3.1)
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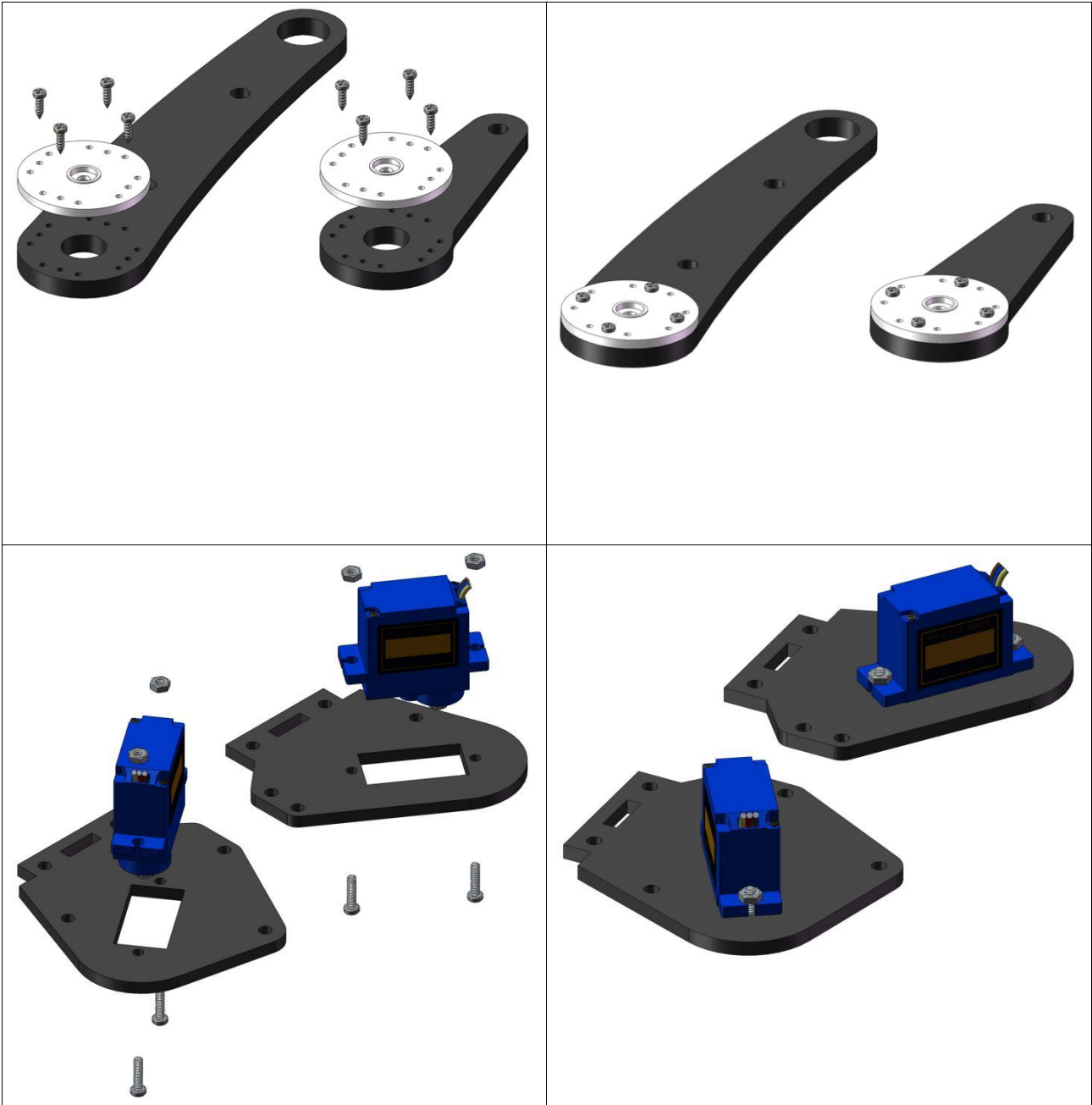
3.3 Base + rudder plate

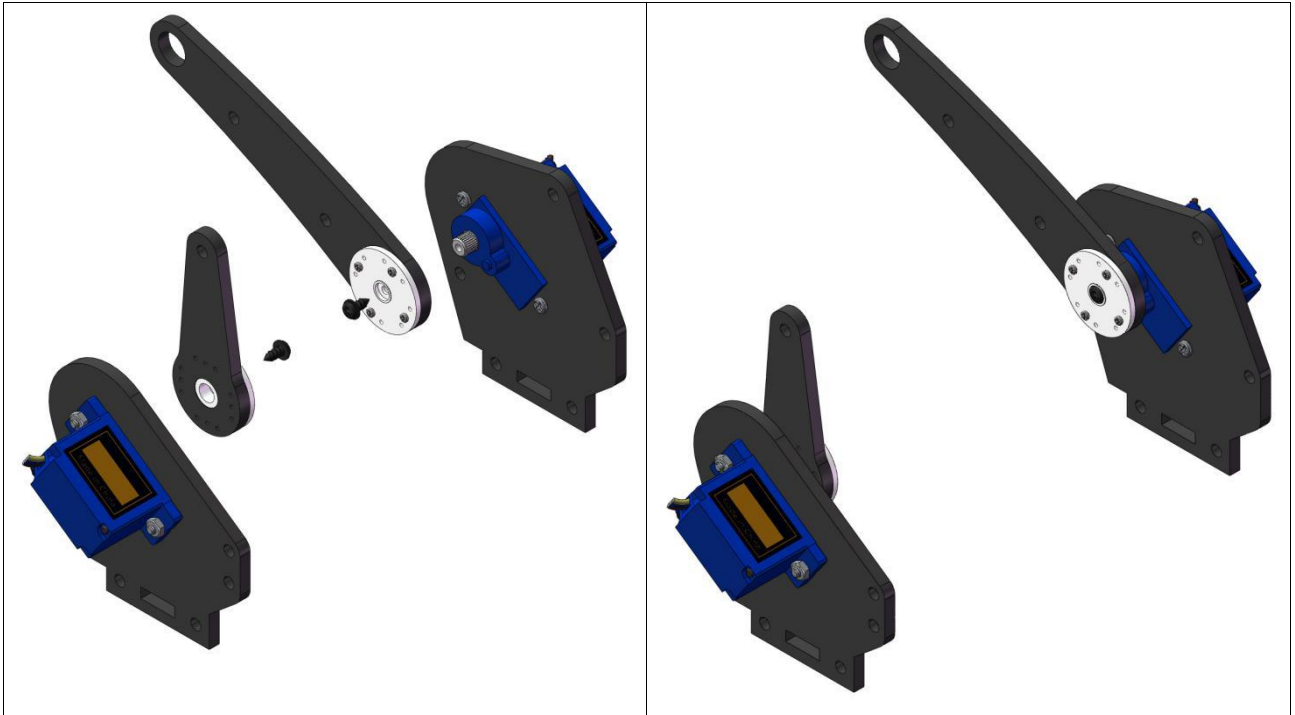



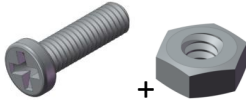



5+7	M2.5*14 Screw+ M2.5 Nut		Fix the small turntable	2+2
2	M1.4*8 Self-tapping Screw		Fix the Rudder plate	4
10	M3 Nut		Fix the Board Base	4
17	Bearing		Fix the Board Base	1

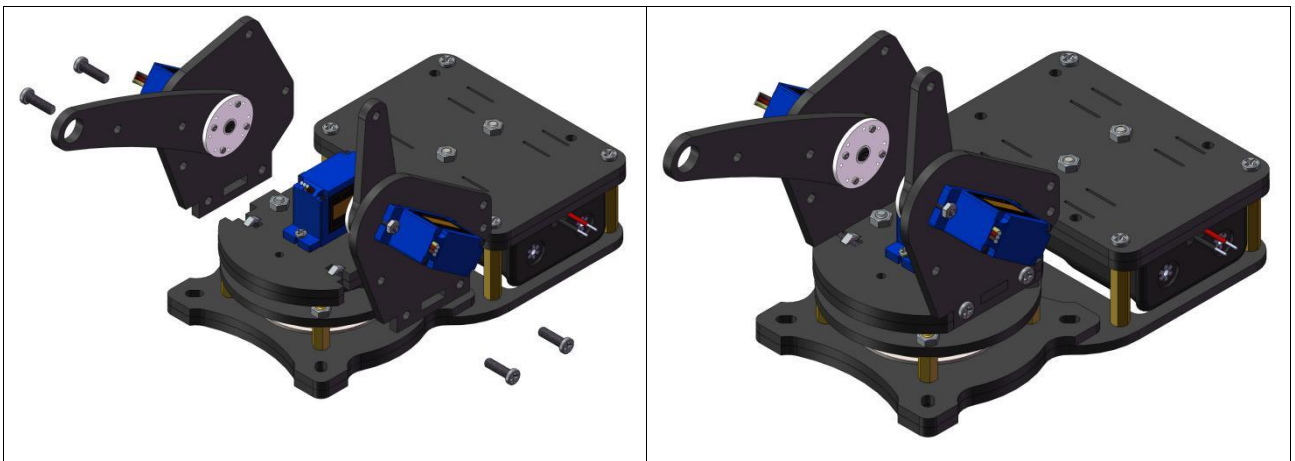
3.4 Steering gear + rudder plate

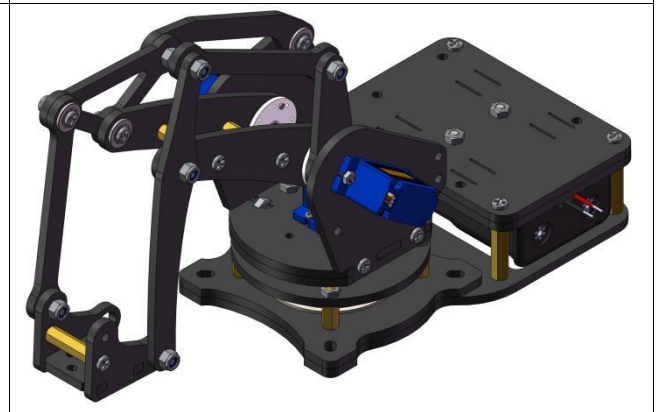
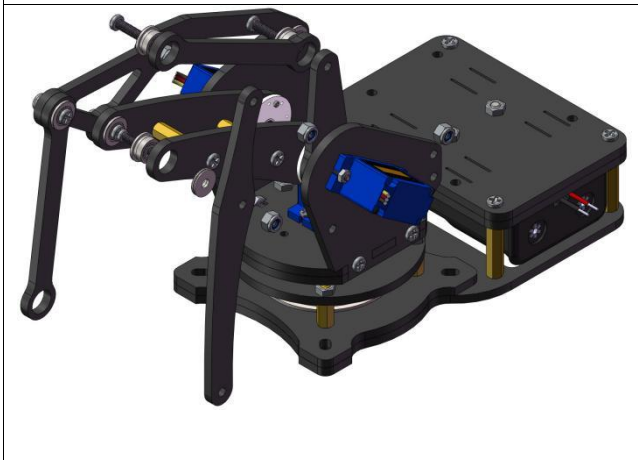
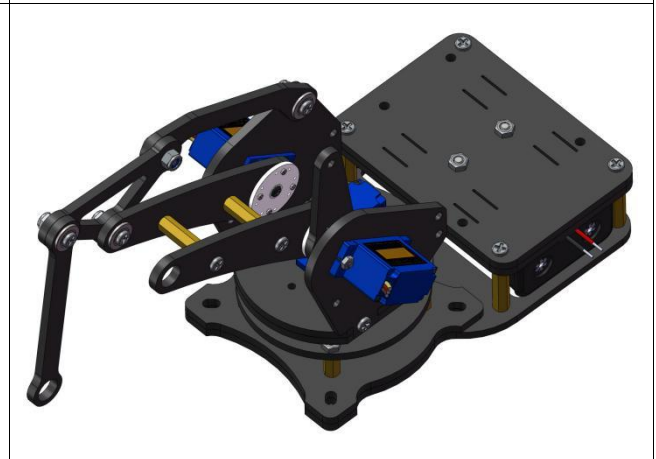
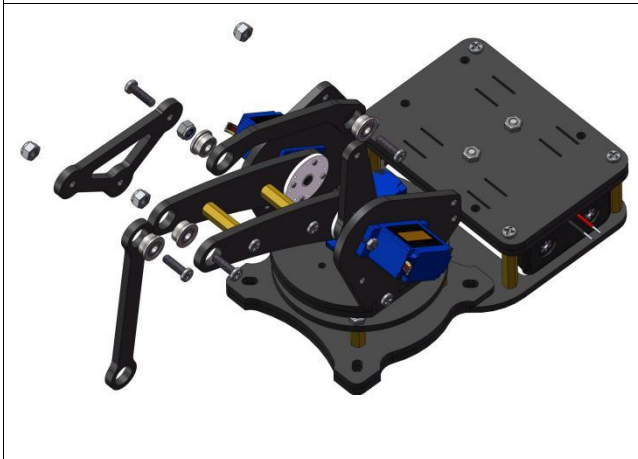
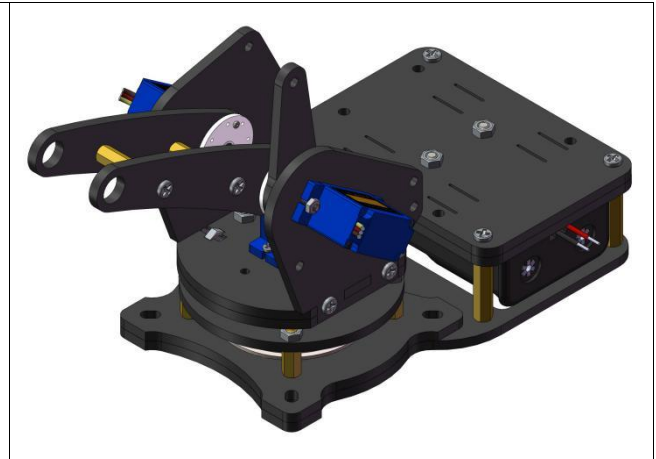




1	M1.2*4 Self-tapping Screw		Fix the Rudder plate	8
3+4	M2*8 Screw + M2.5 Nut		Fix the servo	4+4
18	Servo screw (the smallest)		Fix the Rudder plate	2

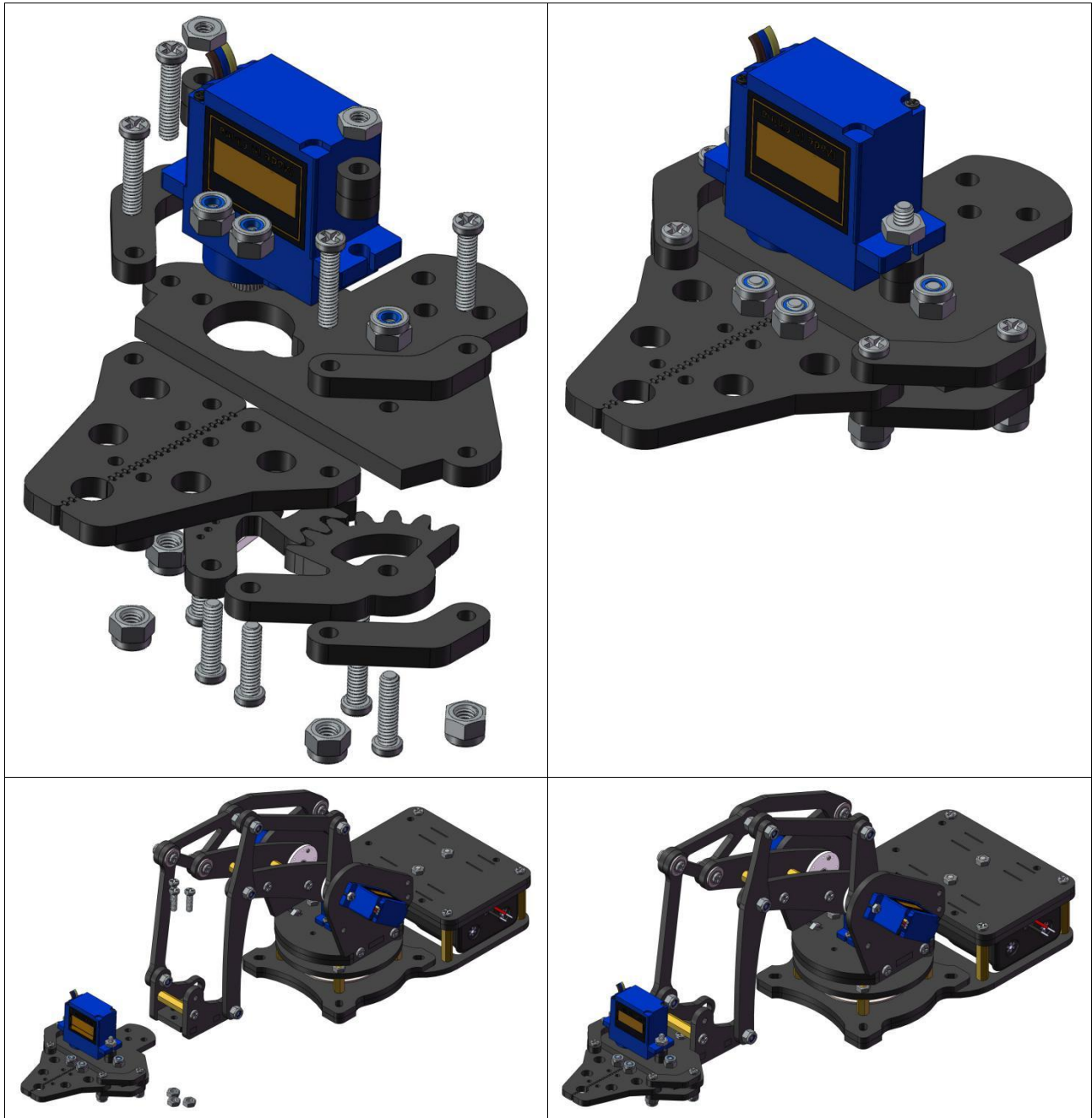
3.5 Base + link

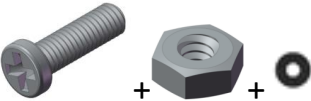
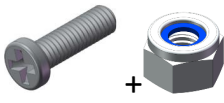


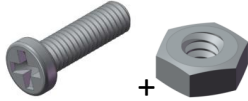


3+4	M2*8 Screw + M2 Nut		Fix the servo	2+2
9+10	M3*10 Screw + M3 Nut		Fix the servo	4+4
6+7	M2.5*14 Screw + M2.5 Nut		Fix the servo	2+2
9+14	M3*10 Screw + M3*20 Double pillar		Fix the arm	4+2
16+11 +9	$\phi 3 * \phi 8 * 4$ Band Edge Bearing+ M3 Self-locking Nuts+ M3*10 Screw		Fix the arm	9+9+ 9
13+15 +9	M3*18 Double pillar + $\phi 3 \times 8 \times 0.8$ Gasket + M3*10 Screw		Fix the arm ,here: 	1+1+ 2

3.6 Connecting rod + fixture(not include , sold separately)



21+22	M2*8 Screw + M2 Nut+Acrylic gasket		Fix the servo	2+2+4
23+24	M2.5*12 Screw + M2.5 Self- locking Nuts nut		Fix the paw	7+7

25+26	M3*10 Screw + M3 Nut		Fix the paw	3+3
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