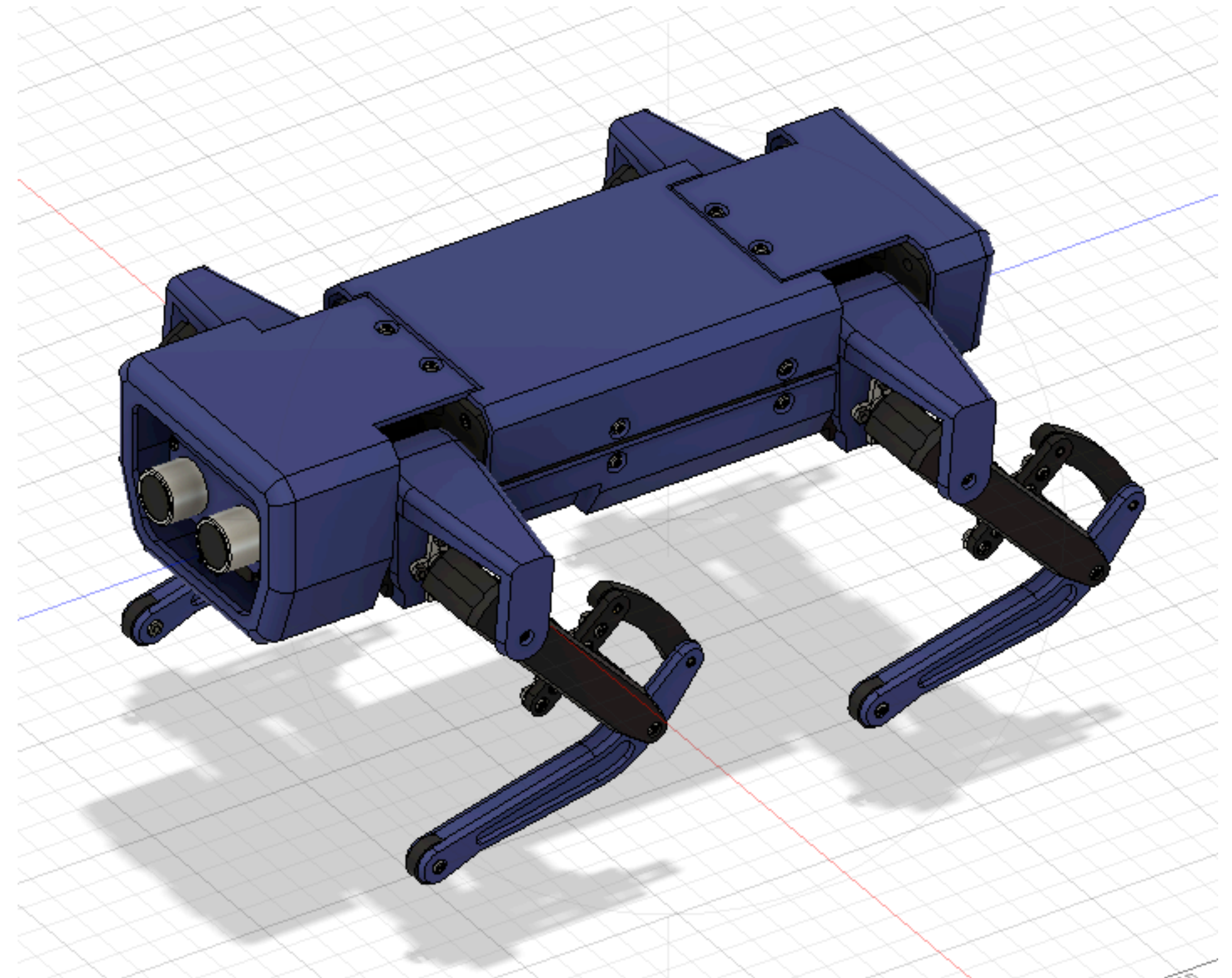


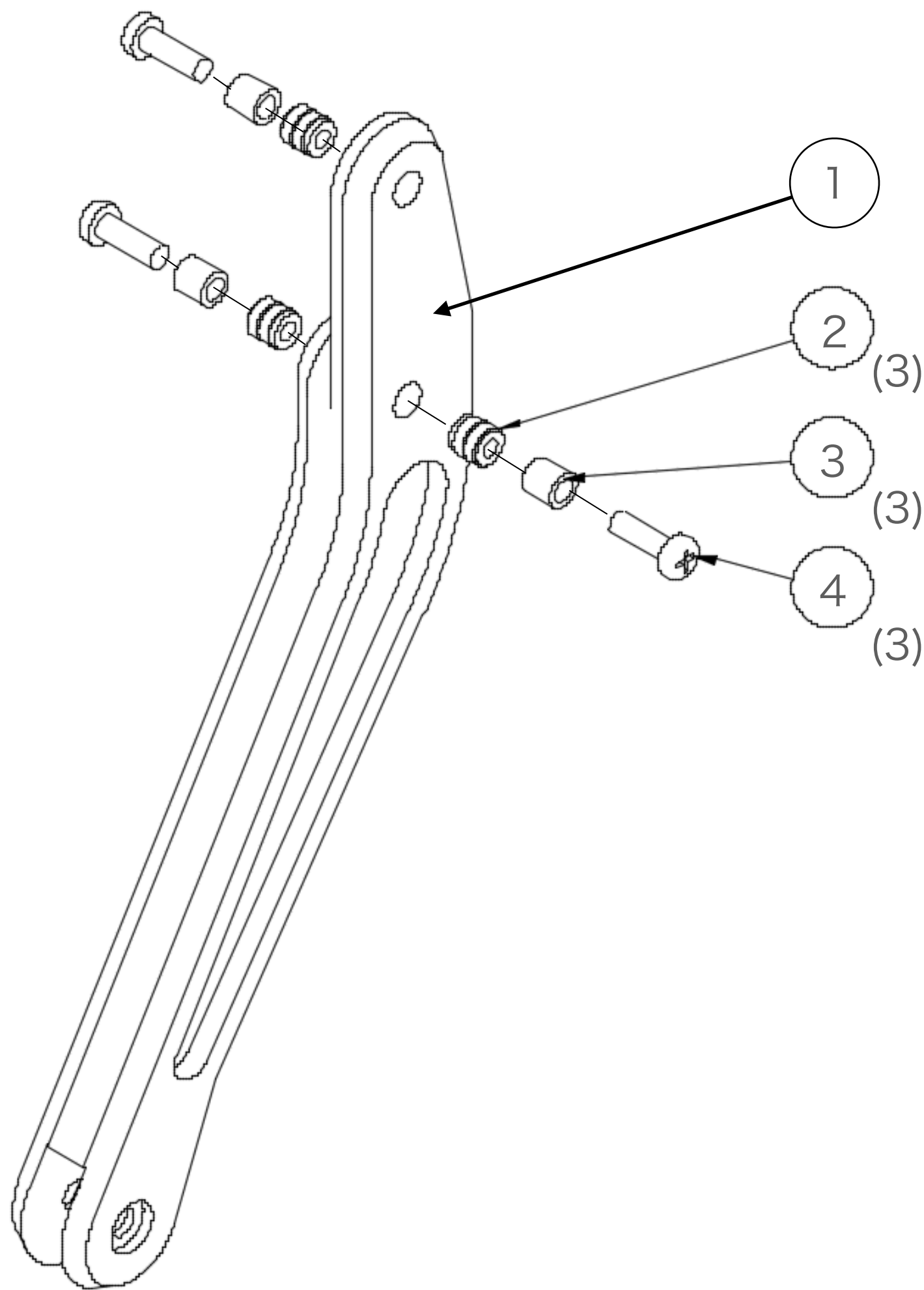
NX15 Quadruped Robot

Assembly materials

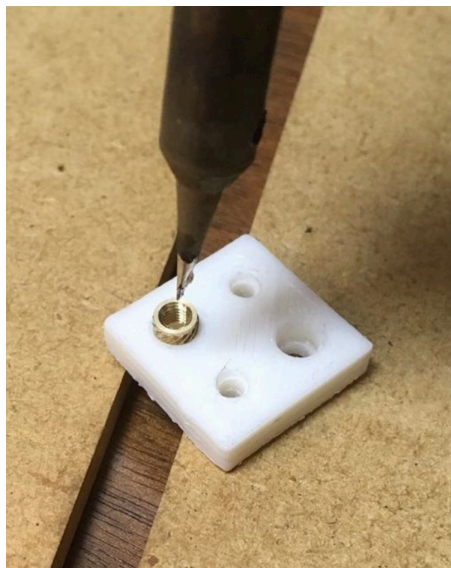


Robo Takao 17.July.2021

Leg Bottom (Left hand) x2

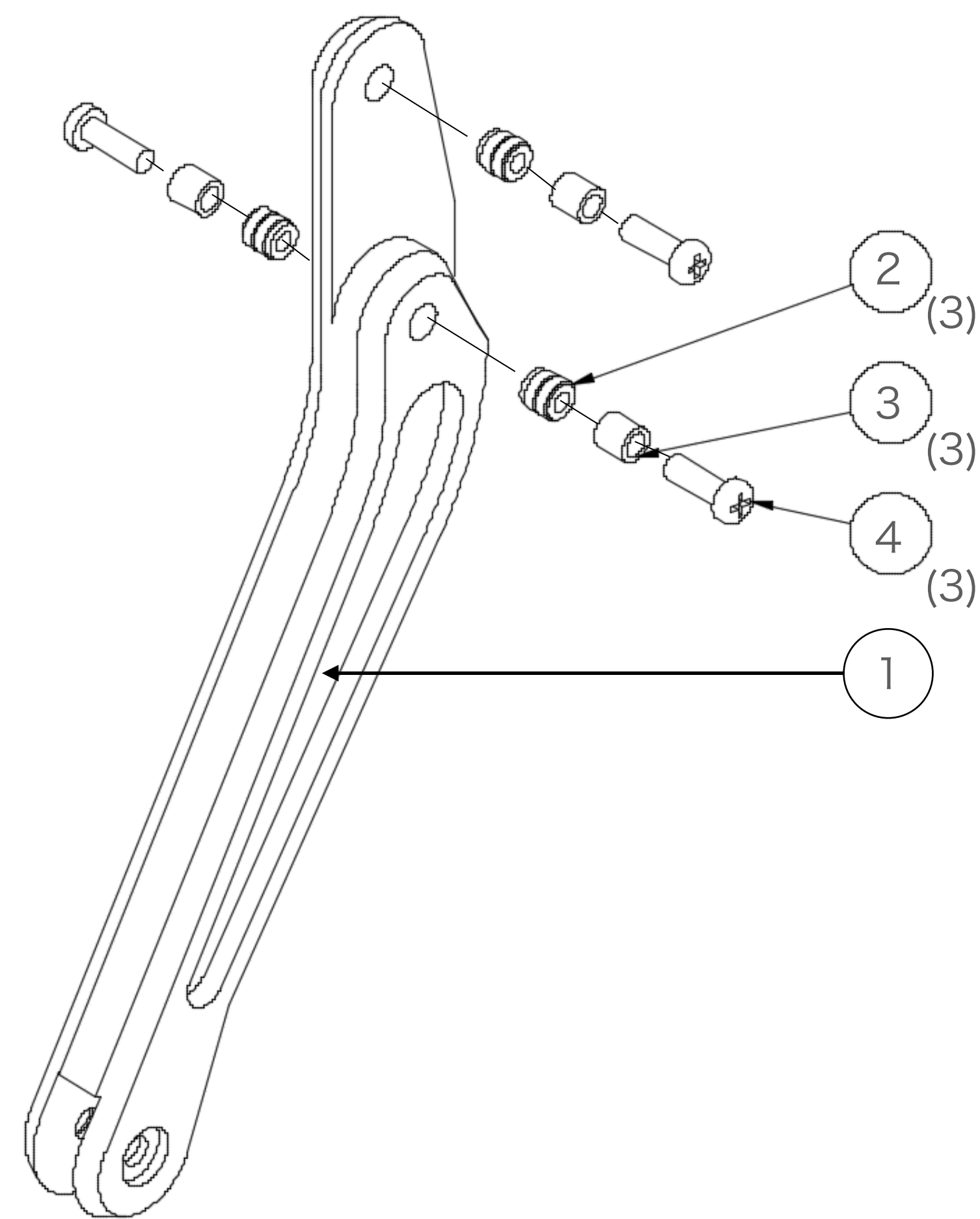


Insert Nut must be pressed-fit by heat.
Ex)Soldering iron



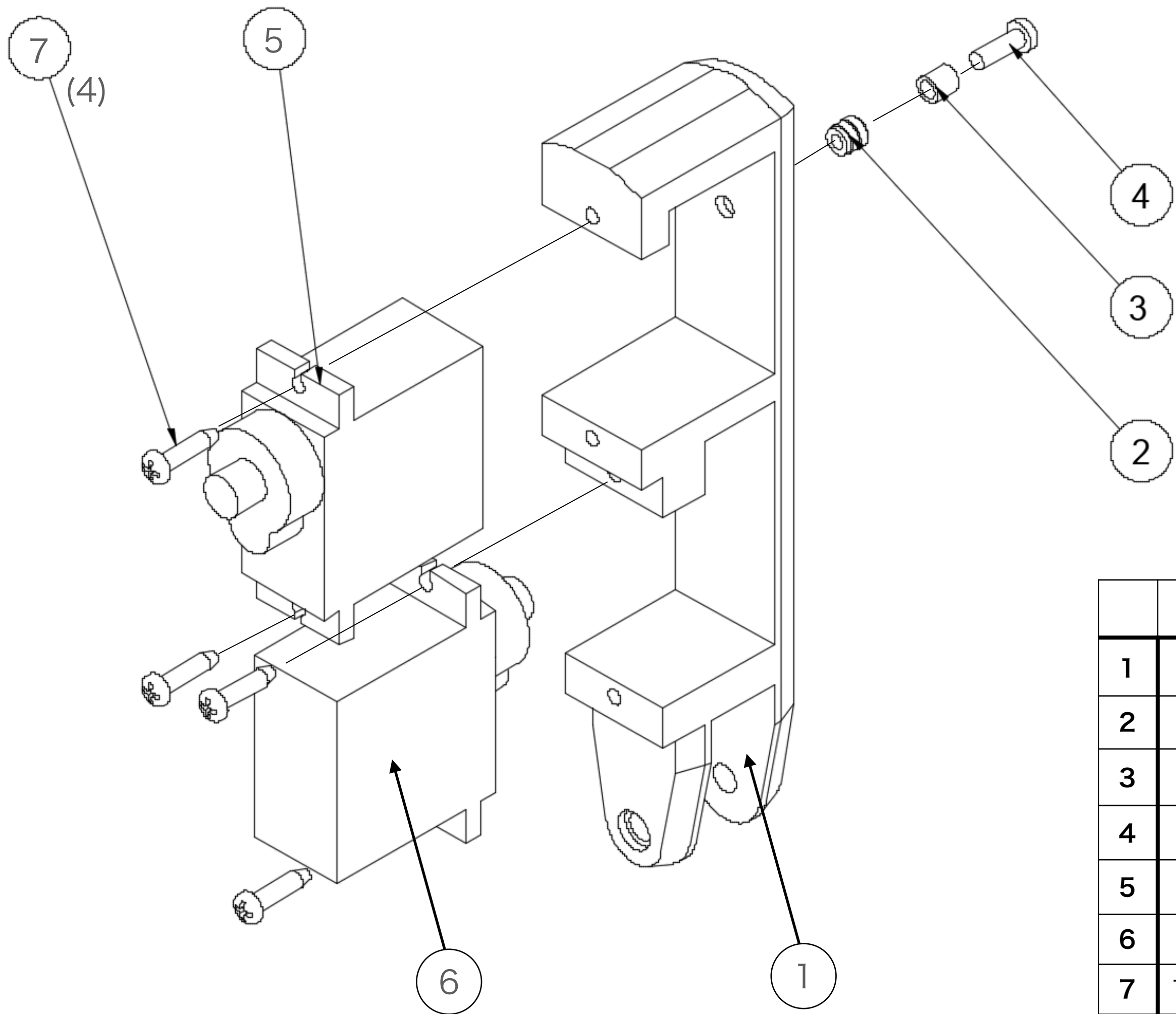
	Part Name	Quantity	Material	Remark
1	Leg_part01	1	PLA	3D Printed
2	Insert Nut M2	3		M2 L3 HSB-203030 https://hirosugi.co.jp/
3	Pipe L3	3	Brass	Outer diameter 4mm / Inner diameter 3mm
4	Screw M2 L6	3		M2 L6

Leg Bottom (Right hand) x2



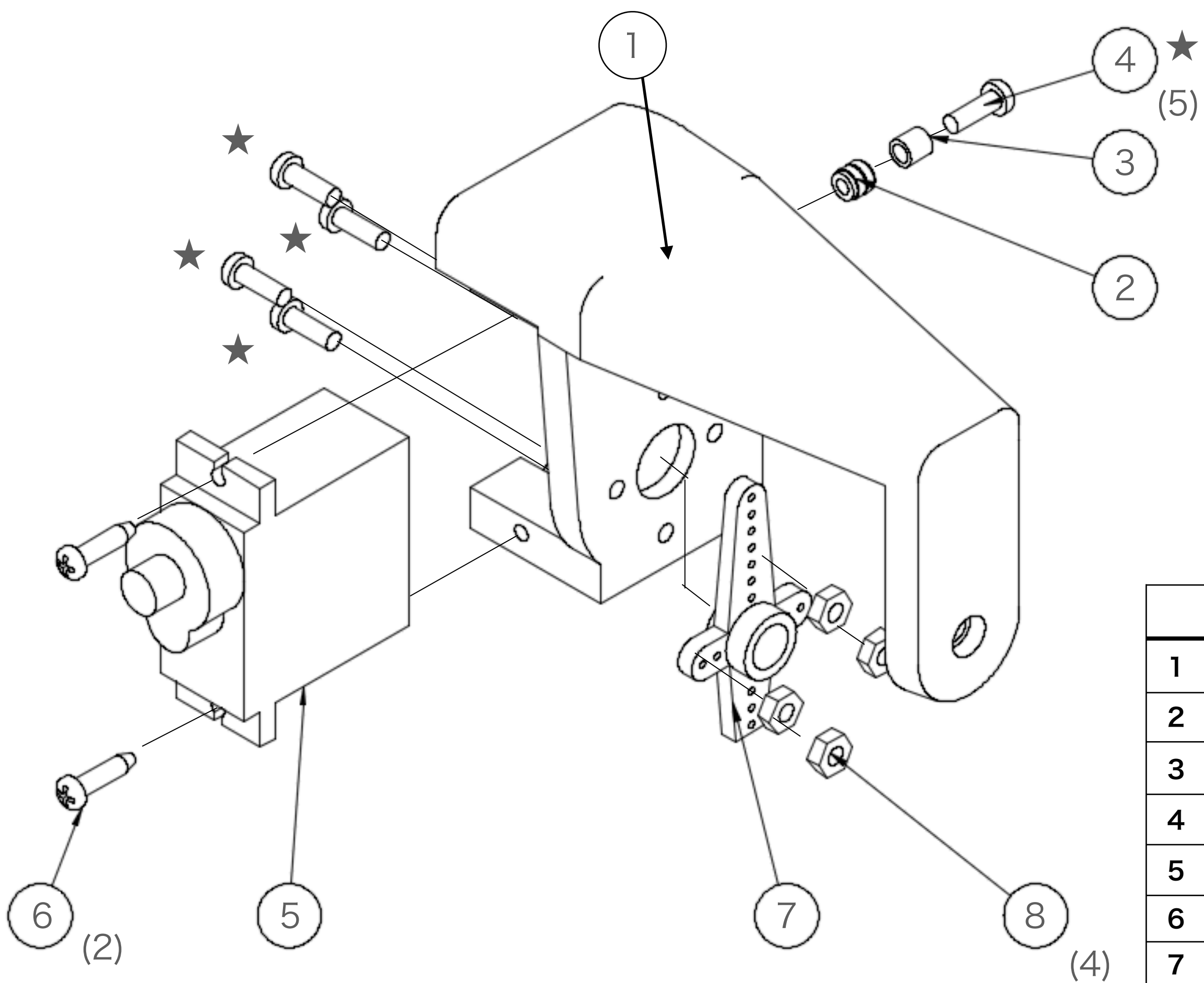
	Part Name	Quantity	Material	Remark
1	Leg_part02	1	PLA	3D Printed
2	Insert Nut M2	3		M2 L3 HSB-203030 https://hirosugi.co.jp/
3	Pipe L3	3	Brass	Outer diameter 4mm / Inner diameter 3mm
4	Screw M2 L6	3		M2 L6

Leg Middle x4



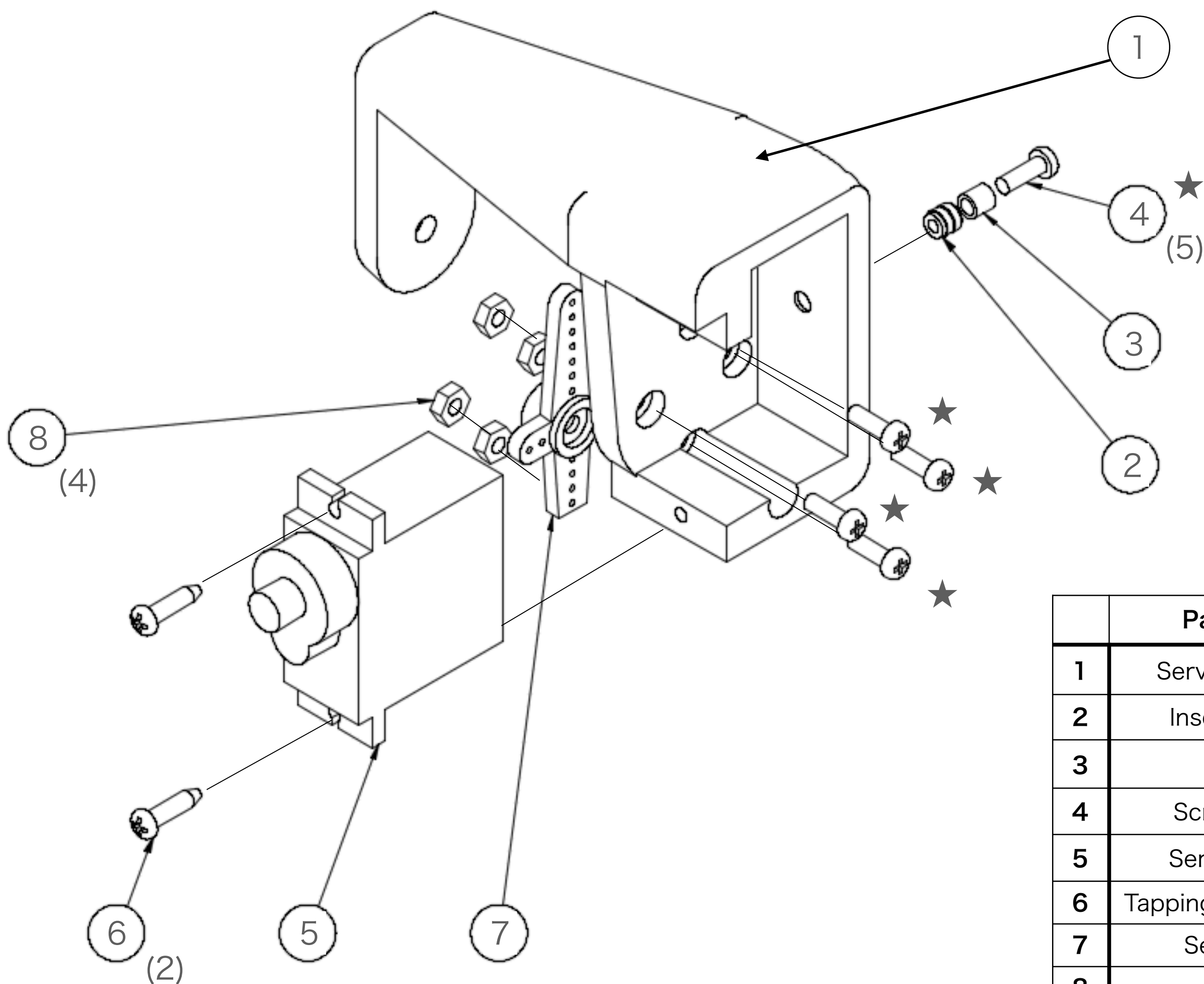
	Part Name	Quantity	Material	Remark
1	ServoBracket03	1	PLA	3D Printed
2	Insert Nut M2	1		M2 L3 HSB-203030 https://hirosugi.co.jp/
3	Pipe L3	1	Brass	Outer diameter 4mm / Inner diameter 3mm
4	Screw M2 L6	1		M2 L6
5	Servo MG90D	1		TowerPro MG90D 2.4kgcm@4.8V
6	Servo MG92B	1		TowerPro MG92B 3.6kgcm@4.8V
7	Tapping Screw M2 L8	4		M2 L8

Leg Upper (Left hand) x2



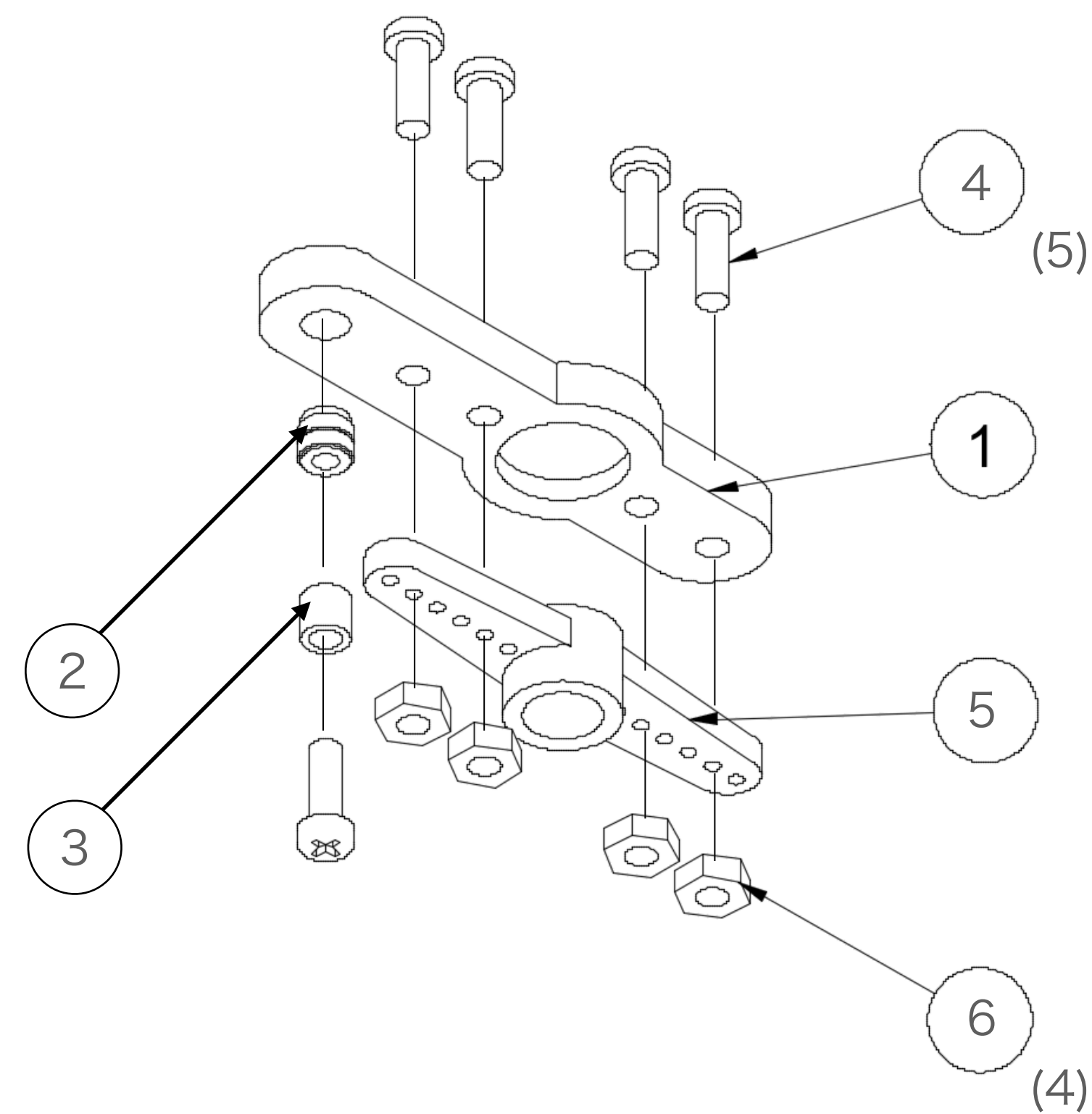
	Part Name	Quantity	Material	Remark
1	ServoBracket01	1	PLA	3D Printed
2	Insert Nut M2	1		M2 L3 HSB-203030 https://hirosugi.co.jp/
3	Pipe L3	1	Brass	Outer diameter 4mm / Inner diameter 3mm
4	Screw M2 L6	5		M2 L6
5	Servo MG90D	1		TowerPro MG90D 2.4kgcm@4.8V
6	Tapping Screw M2 L8	2		M2 L8
7	Servo Horn	1		Cross type
8	Nut M2	4		M2

Leg Upper (Right hand) x2



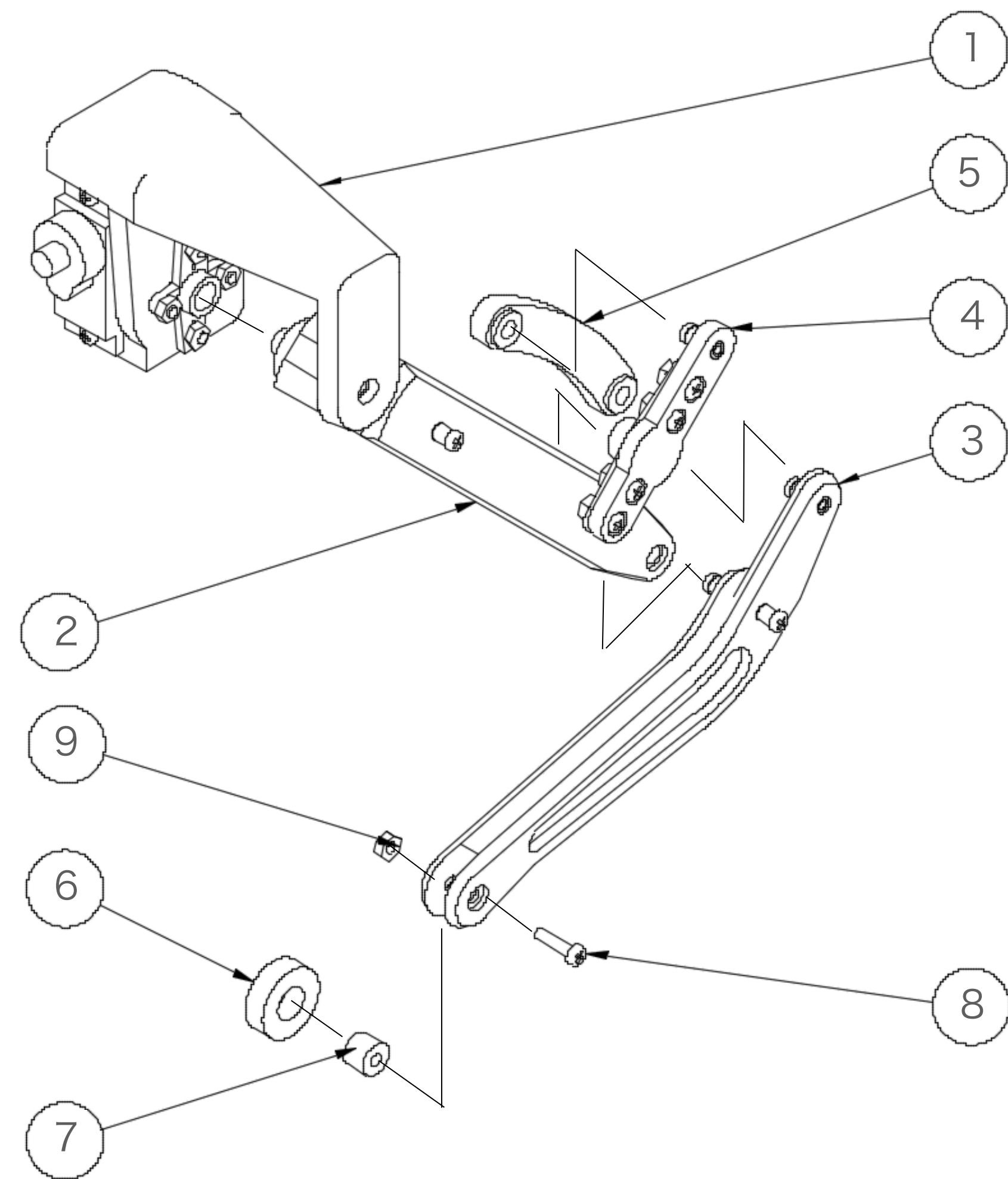
	Part Name	Quantity	Material	Remark
1	ServoBracket02	1	PLA	3D Printed
2	Insert Nut M2	1		M2 L3 HSB-203030 https://hirosugi.co.jp/
3	Pipe L3	1	Brass	Outer diameter 4mm / Inner diameter 3mm
4	Screw M2 L6	5		M2 L6
5	Servo MG90D	1		TowerPro MG90D 2.4kgcm@4.8V
6	Tapping Screw M2 L8	2		M2 L8
7	Servo Horn	1		Cross type
8	Nut M2	4		M2

Link Ass'y x4



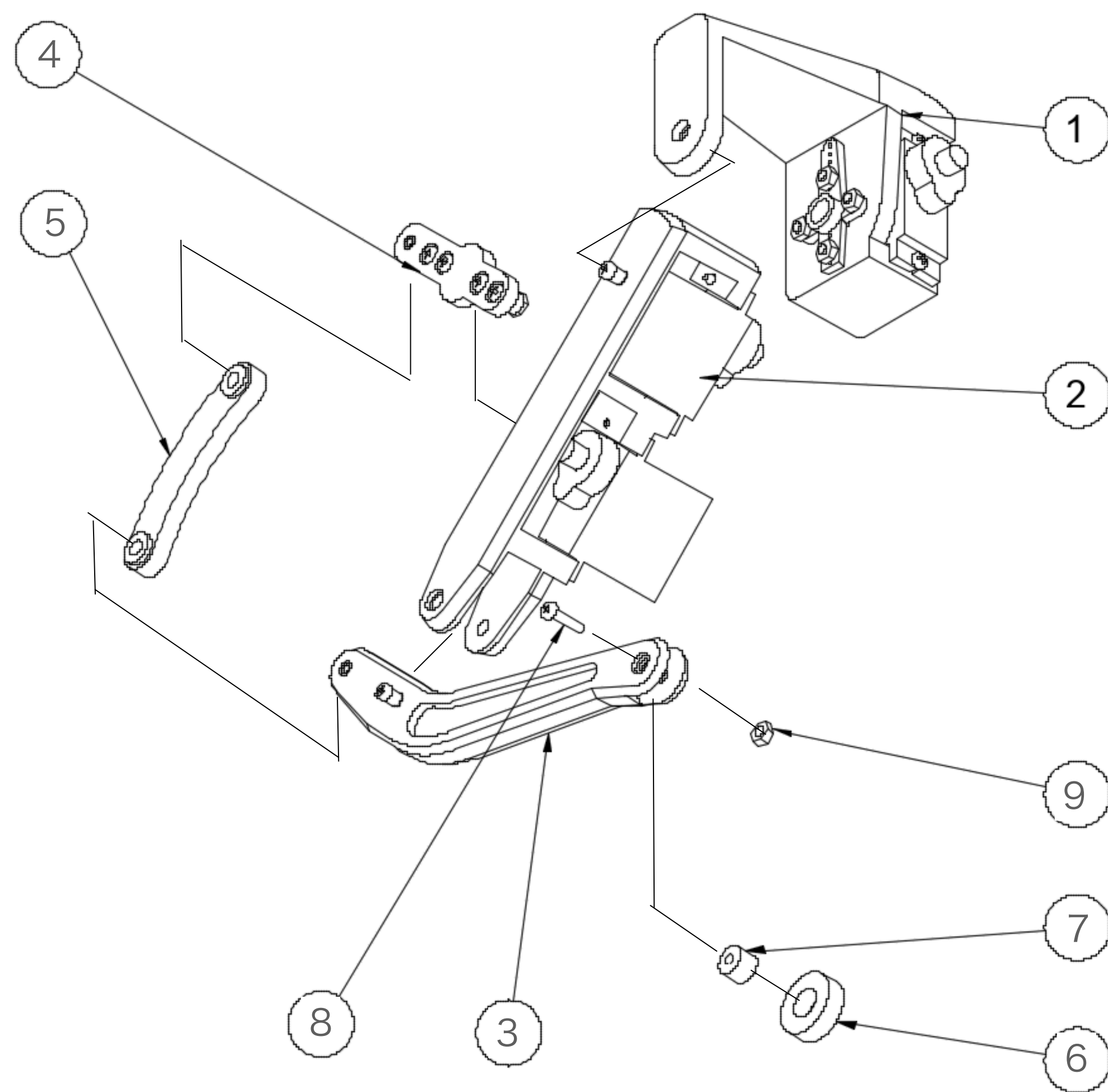
	Part Name	Quantity	Material	Remark
1	ServoHornLink	1	PLA	3D Printed
2	Insert Nut M2	1		M2 L3 HSB-203030 https://hirosugi.co.jp/
3	Pipe L3	1	Brass	Outer diameter 4mm / Inner diameter 3mm
4	Screw M2 L6	5		M2 L6
5	Servo Horn	1		
6	Nut M2	4		M2

Leg Ass'y (Left hand) x2



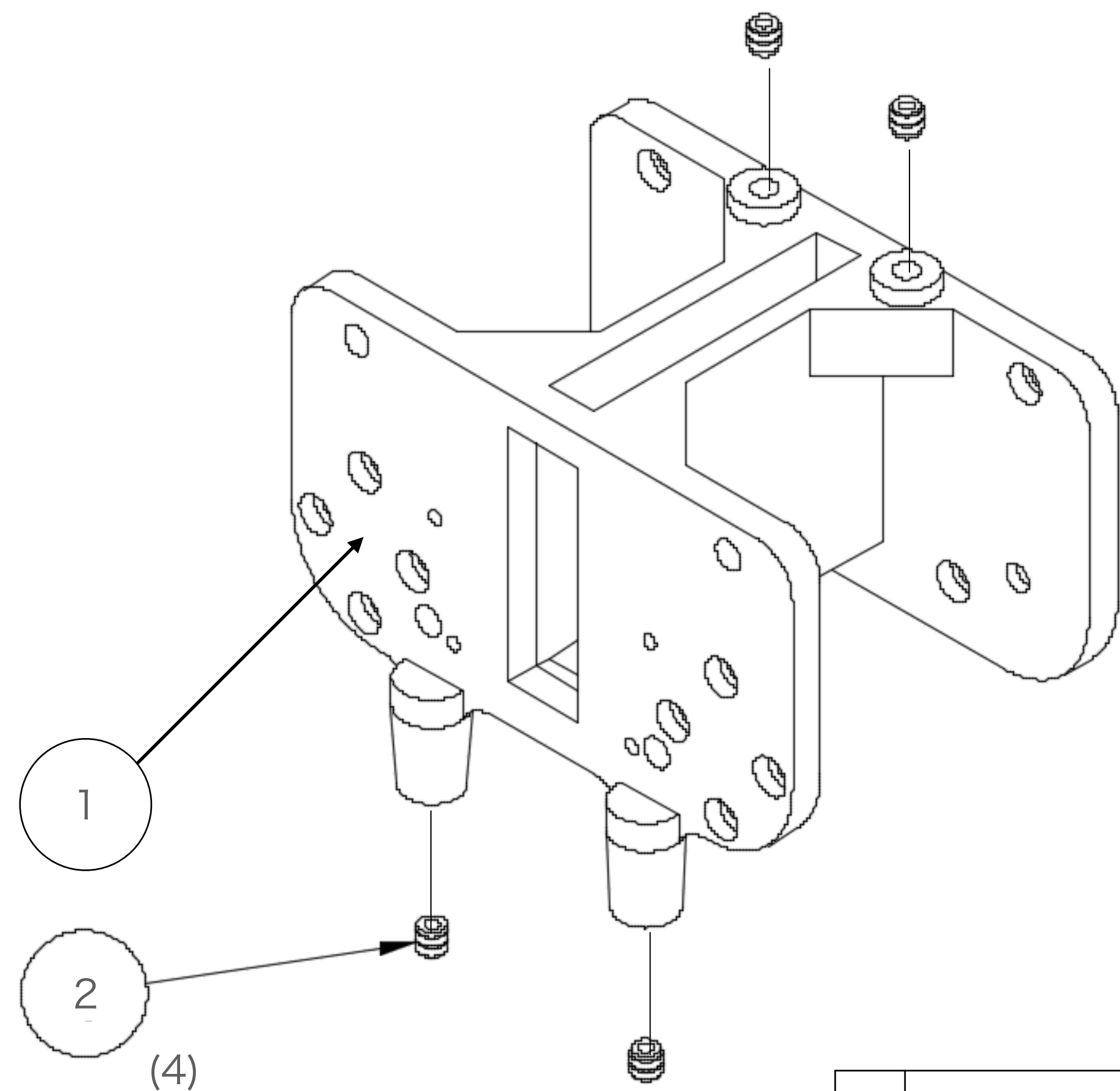
	Part Name	Quantity	Material	Remark
1	Leg Upper LH	1	Ass'y	
2	Leg Middle	1	Ass'y	
3	Leg Bottom LH	1	Ass'y	
4	Link Ass'Y	1	Ass'y	
5	Lever	1	PLA	3D Printed
6	Rubber	1	Rubber	Outer diameter 13mm / Inner diameter 6mm/Thickness 4mm
7	Spacer	1	PLA	3D Printed
8	Screw M2 L8	1		M2 L8
9	Nut M2	1		M2

Leg Ass'y (Right hand) x2



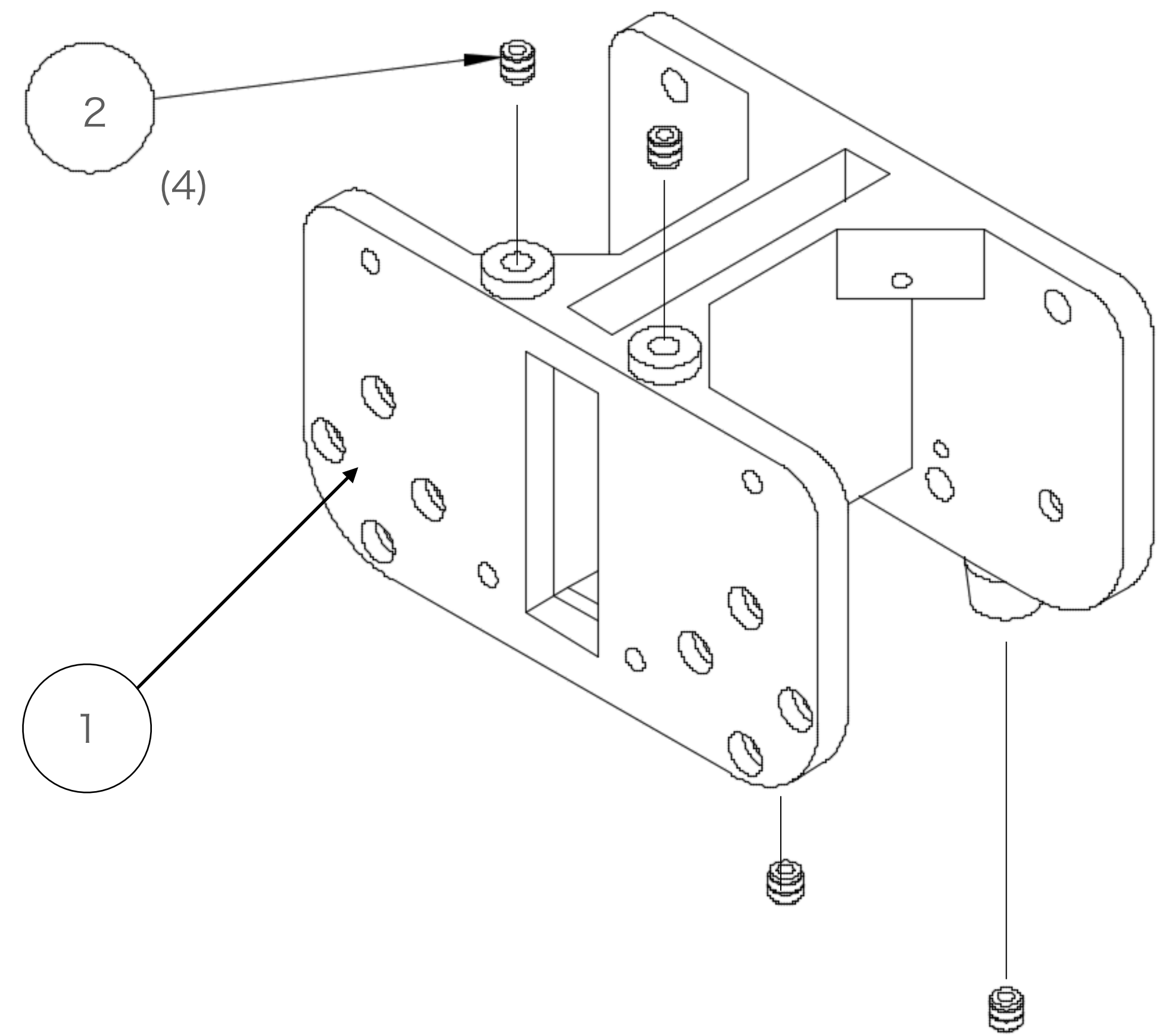
	Part Name	Quantity	Material	Remark
1	Leg Upper RH	1	Ass'y	
2	Leg Middle	1	Ass'y	
3	Leg Bottom RH	1	Ass'y	
4	Link Ass'Y	1	Ass'y	
5	Lever	1	PLA	3D Printed
6	Rubber	1	Rubber	Outer diameter 13mm / Inner diameter 6mm/Thickness 4mm
7	Spacer	1	PLA	3D Printed
8	Screw M2 L8	1		M2 L8
9	Nut M2	1		M2

Front Bracket



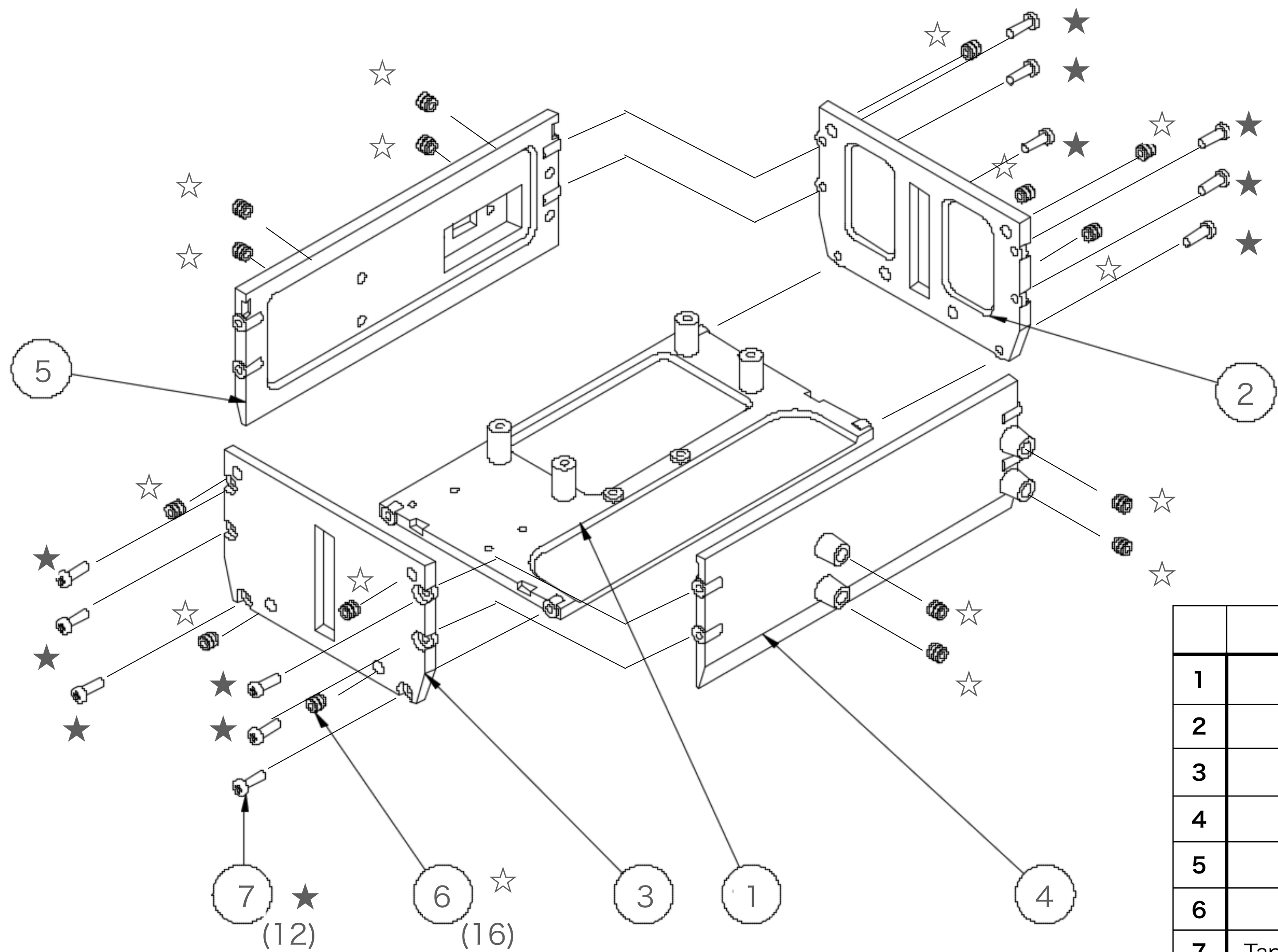
	Part Name	Quantity	Material	Remark
1	ServoBracket04	1	PLA	3D Printed
2	Insert Nut M2	4		M2 L3 HSB-203030 https://hirosugi.co.jp/

Rear Bracket



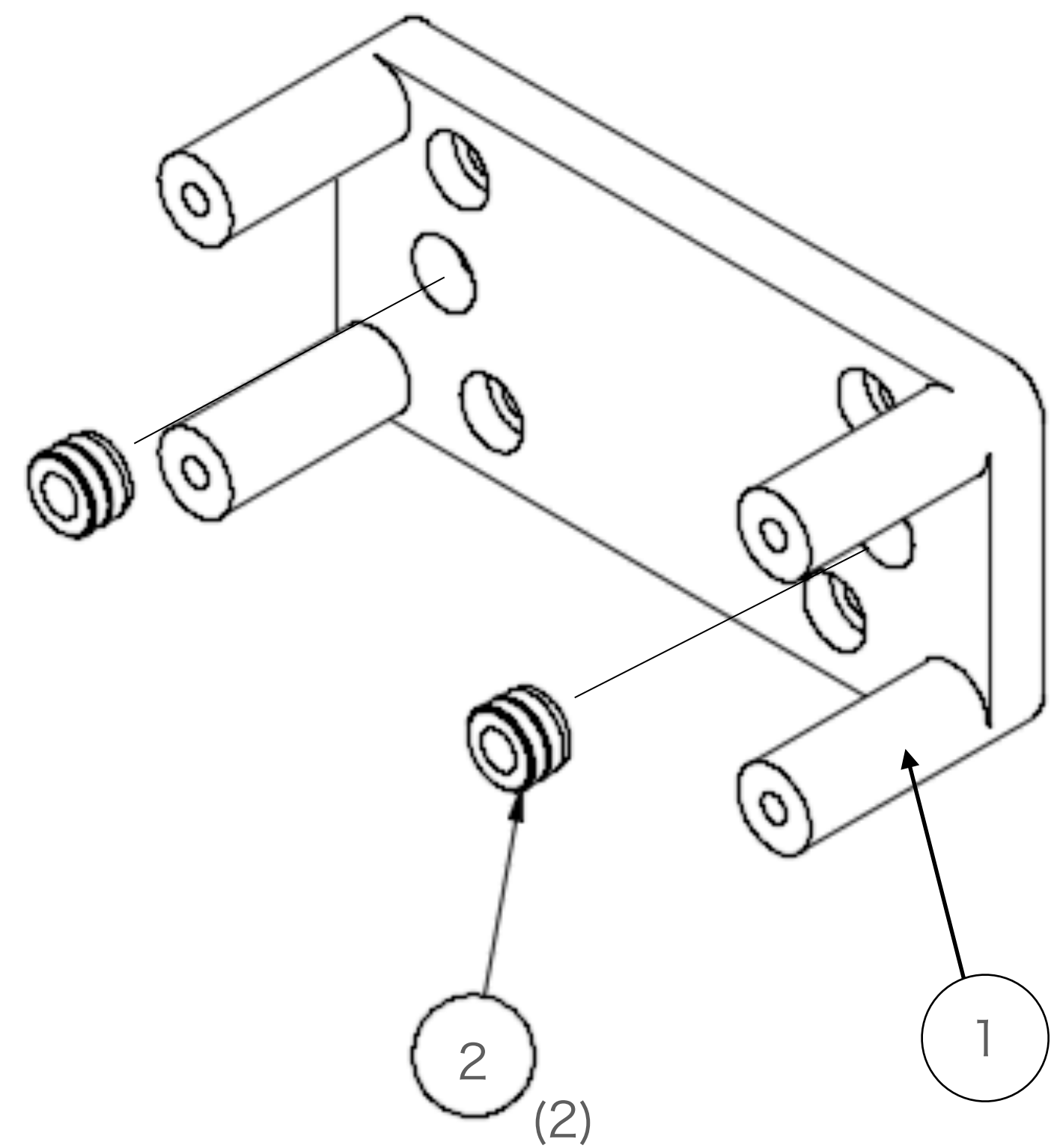
	Part Name	Quantity	Material	Remark
1	ServoBracket04	1	PLA	3D Printed
2	Insert Nut M2	4		M2 L3 HSB-203030 https://hirosugi.co.jp/

Body Box



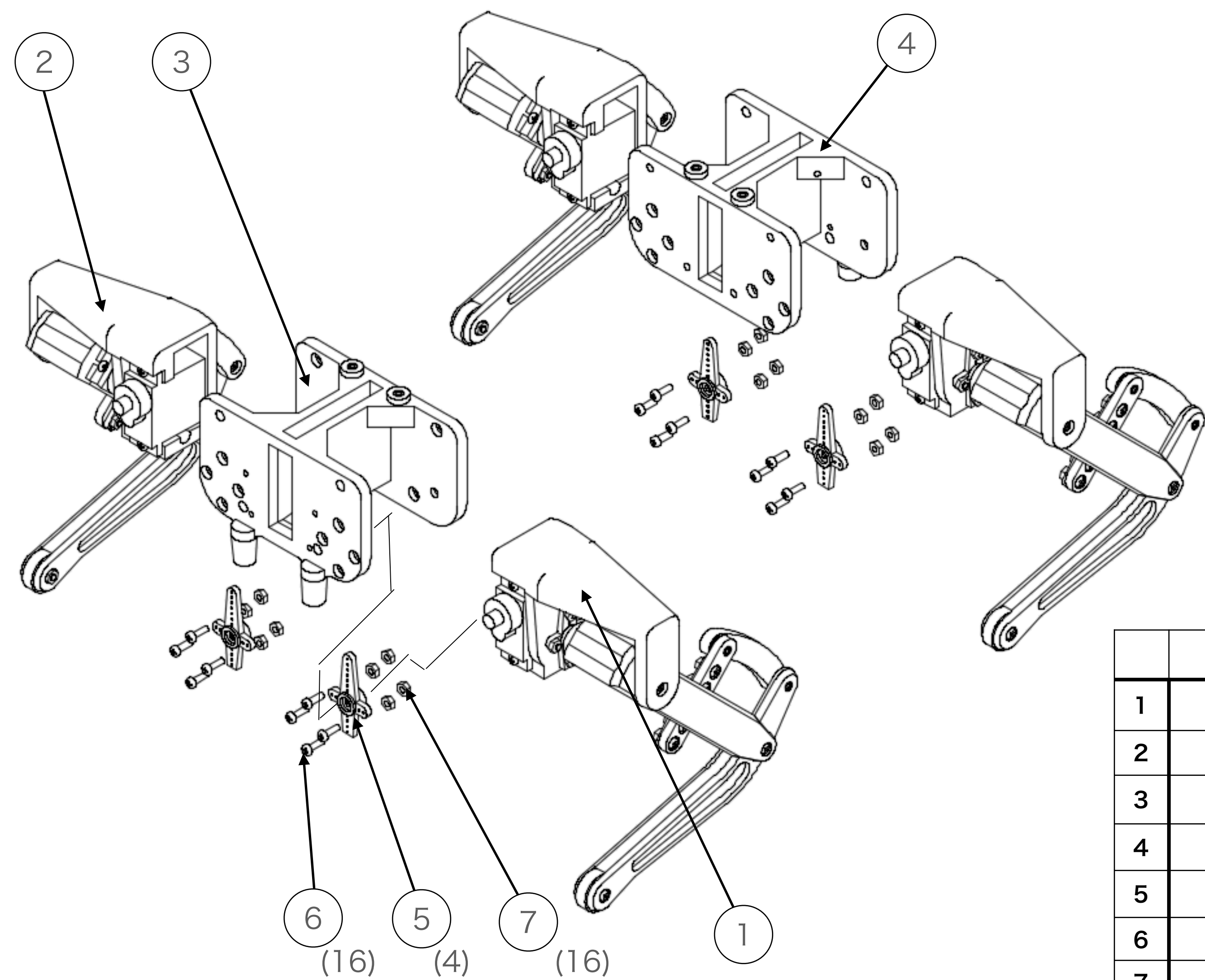
	Part Name	Quantity	Material	Remark
1	BoxBottom	1	PLA	3D Printed
2	BoxFront	1	PLA	3D Printed
3	BoxRear	1	PLA	3D Printed
4	BoxRight	1	PLA	3D Printed
5	BoxLeft	1	PLA	3D Printed
6	Insert Nut M2	16		M2 L3 HSB-203030 https://hirosugi.co.jp/
7	Tapping Screw M2 L6	12		M2 L6

Sensor Brakcet



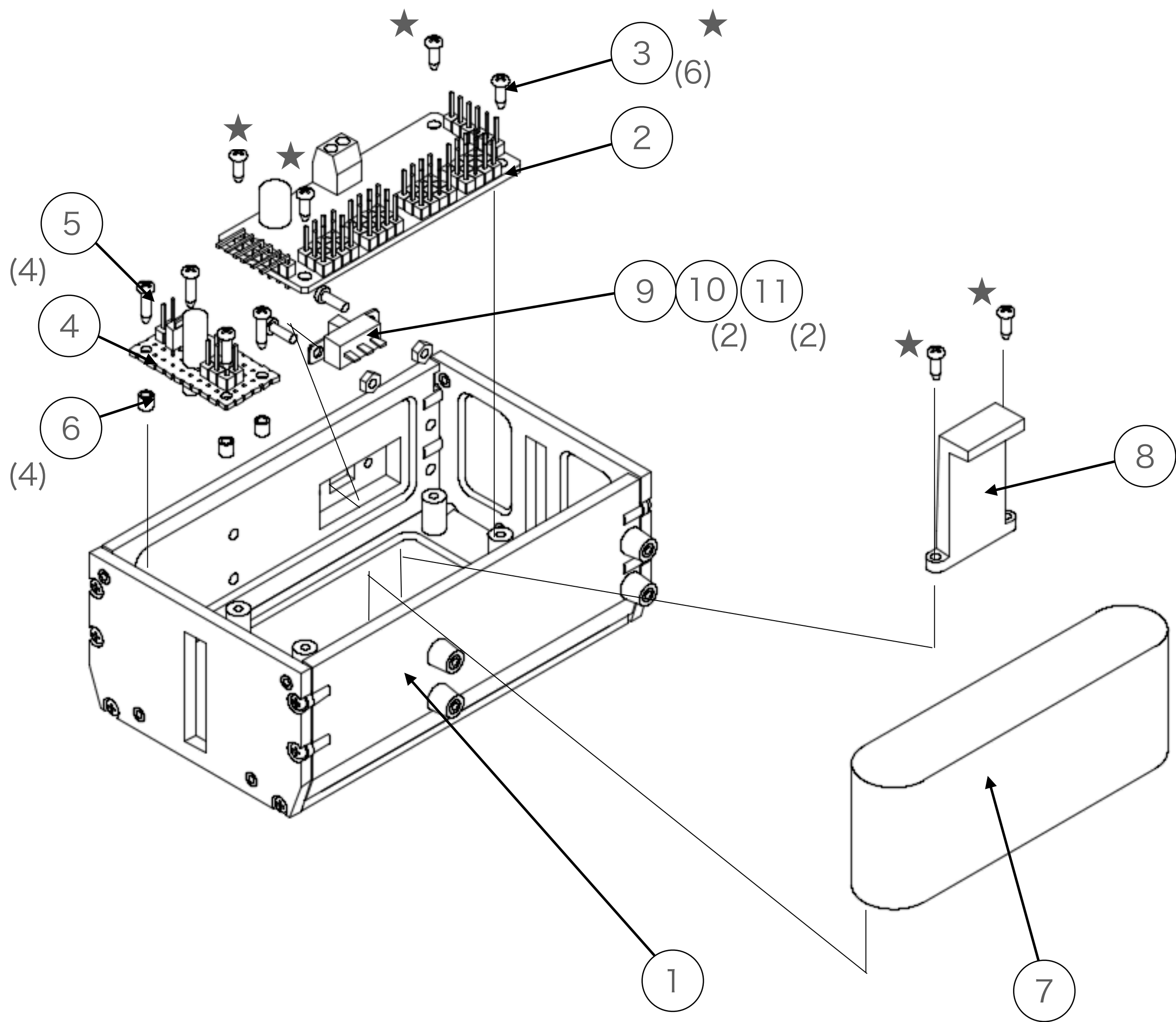
	Part Name	Quantity	Material	Remark
1	Plate01	1	PLA	3D Printed
2	Insert Nut M3	2		M3 L3 HSB-304530 https://hirosugi.co.jp/

Leg Assemblies



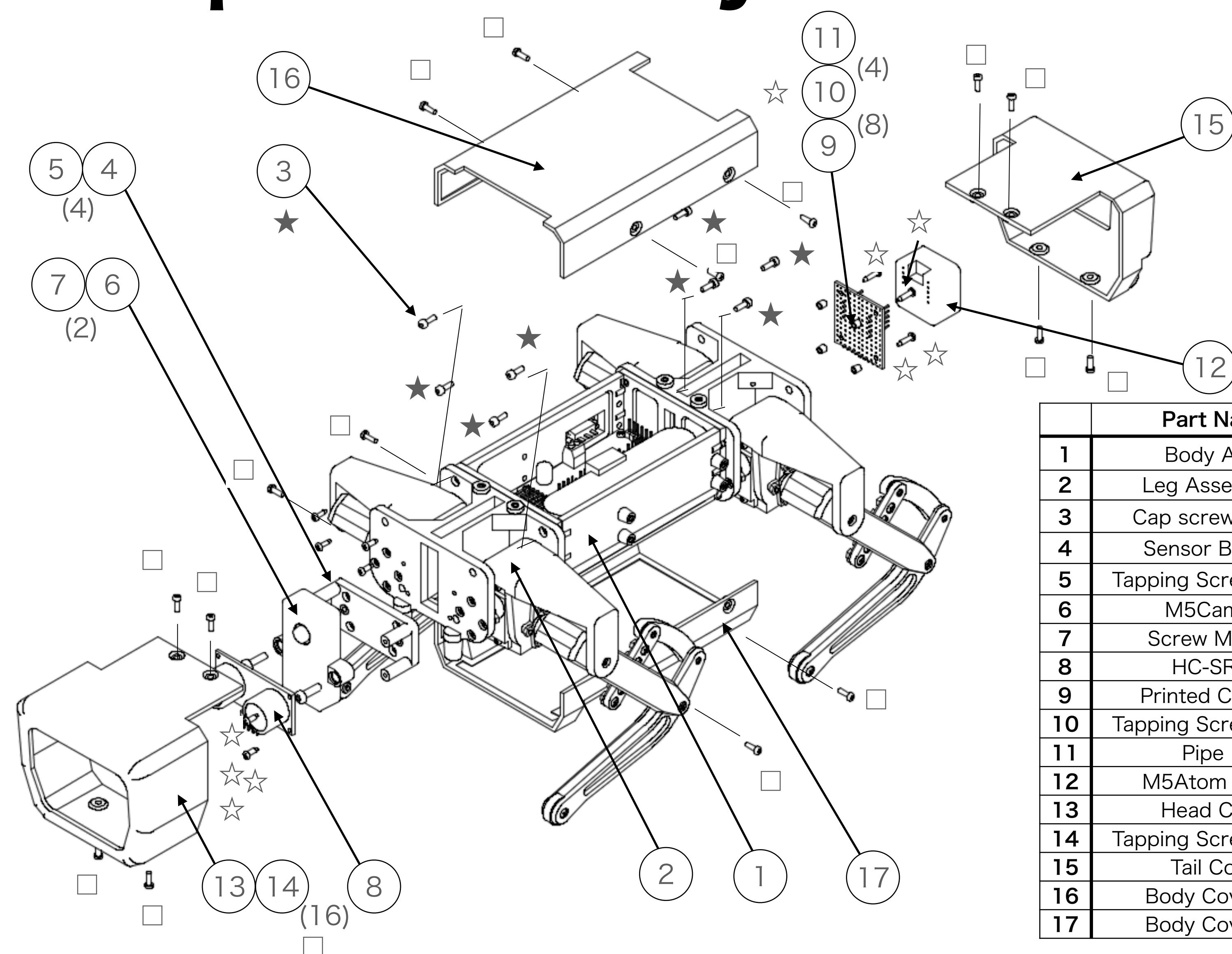
	Part Name	Quantity	Material	Remark
1	Leg Ass'y LH	1	Ass'y	
2	Leg Ass'y RH	1	Ass'y	
3	Front Bracket	1	Ass'y	
4	Rear Bracket	1	Ass'y	
5	Servo Horn	4		Cross type
6	Screw M2 L6	16		M2 L6
7	Nut M2	16		M

Box Assembly



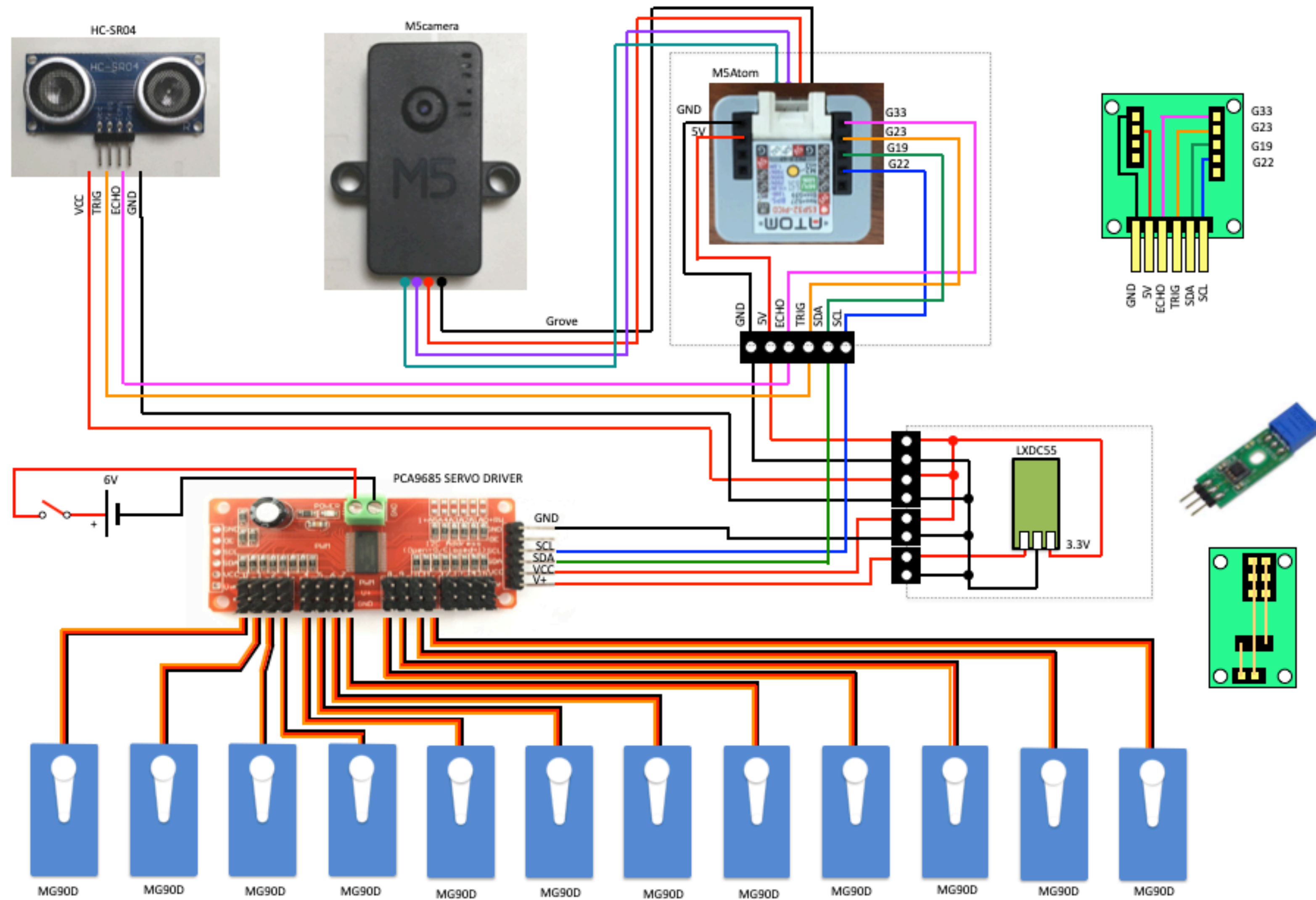
	Part Name	Quantity	Material	Remark
1	Body Box	1	Ass'y	
2	PCA9685	1		Servo Drvier
3	Tapping Screw M2 L6	6		
4	Printed Card 01	1		Power Supply
5	Tapping Screw M2 L8	4		
6	Pipe L3	4	Brass	Outer diameter 4mm / Inner diameter 3mm
7	Battery	1		NiMH 6V
8	Stopper	1	PLA	3D Printed
9	Switch	1		
10	Screw M2 L8	2		M2 L8
11	Nut M2	2		M2

Top Assembly



	Part Name	Quantity	Material	Remark
1	Body Ass'y	1	Ass'y	
2	Leg Assemblies	1	Ass'y	
3	Cap screw M2 L6	8		M2 L6
4	Sensor Bracket	1	Ass'y	
5	Tapping Screw M2 L6	4		
6	M5Camera	1		
7	Screw M3 L10	2		M3 L10
8	HC-SR04	1		Sonic Distance Sensor
9	Printed Card 02	1		For M5Atom
10	Tapping Screw M2 L8	8		M2 L8
11	Pipe L3	4	Brass	Outer diameter 4mm / Inner diameter 3mm
12	M5Atom Matrix	1		M5Atom Matrix
13	Head Cover	1	PLA	3D Printed
14	Tapping Screw M2 L5	16		M2 M5
15	Tail Cover	1	PLA	3D Printed
16	Body Cover 01	1	PLA	3D Printed
17	Body Cover 02	1	PLA	3D

Connection



Completed

