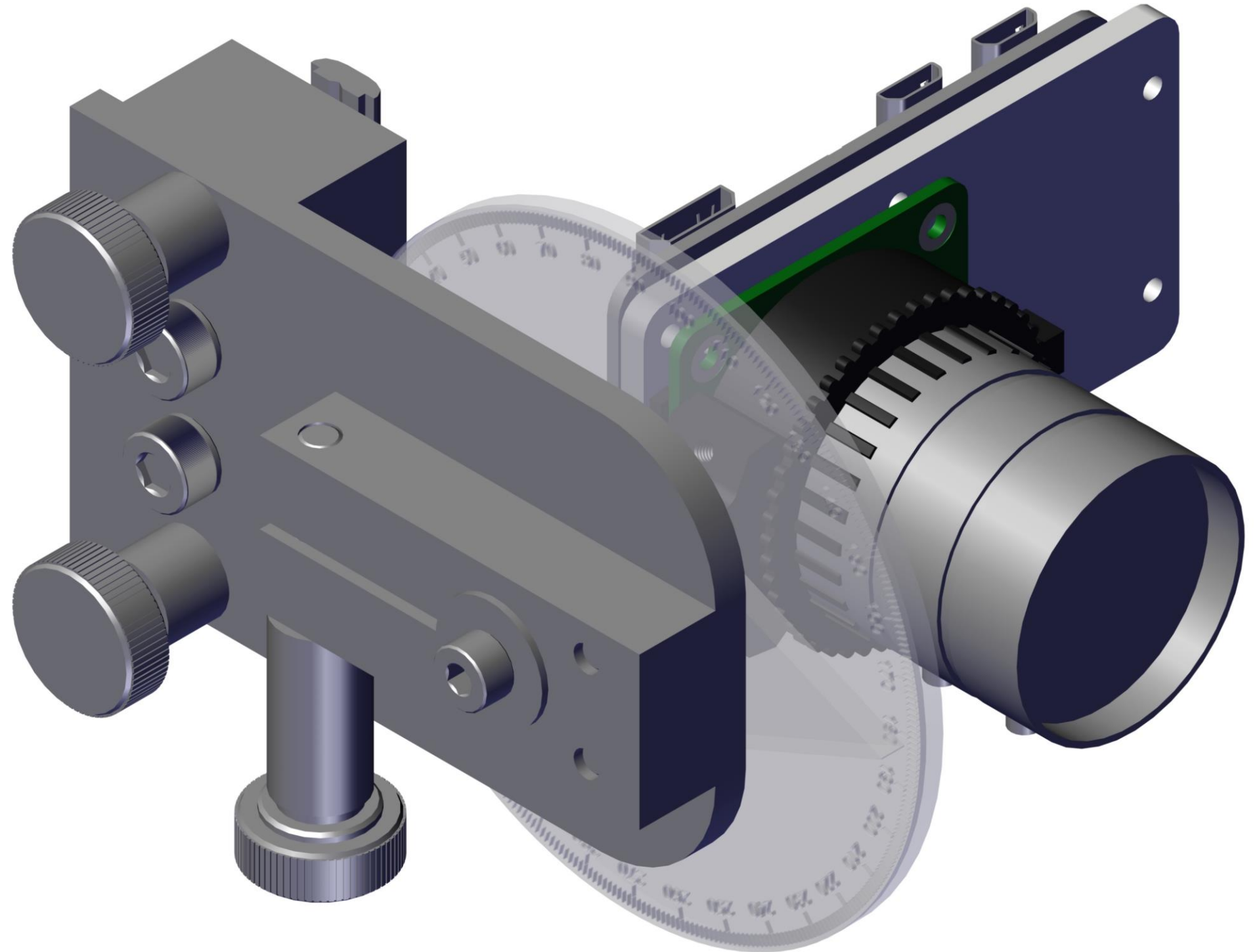


ROME

ROBOTICS FOR MICROFARMS

BOM & Assembly Instructions

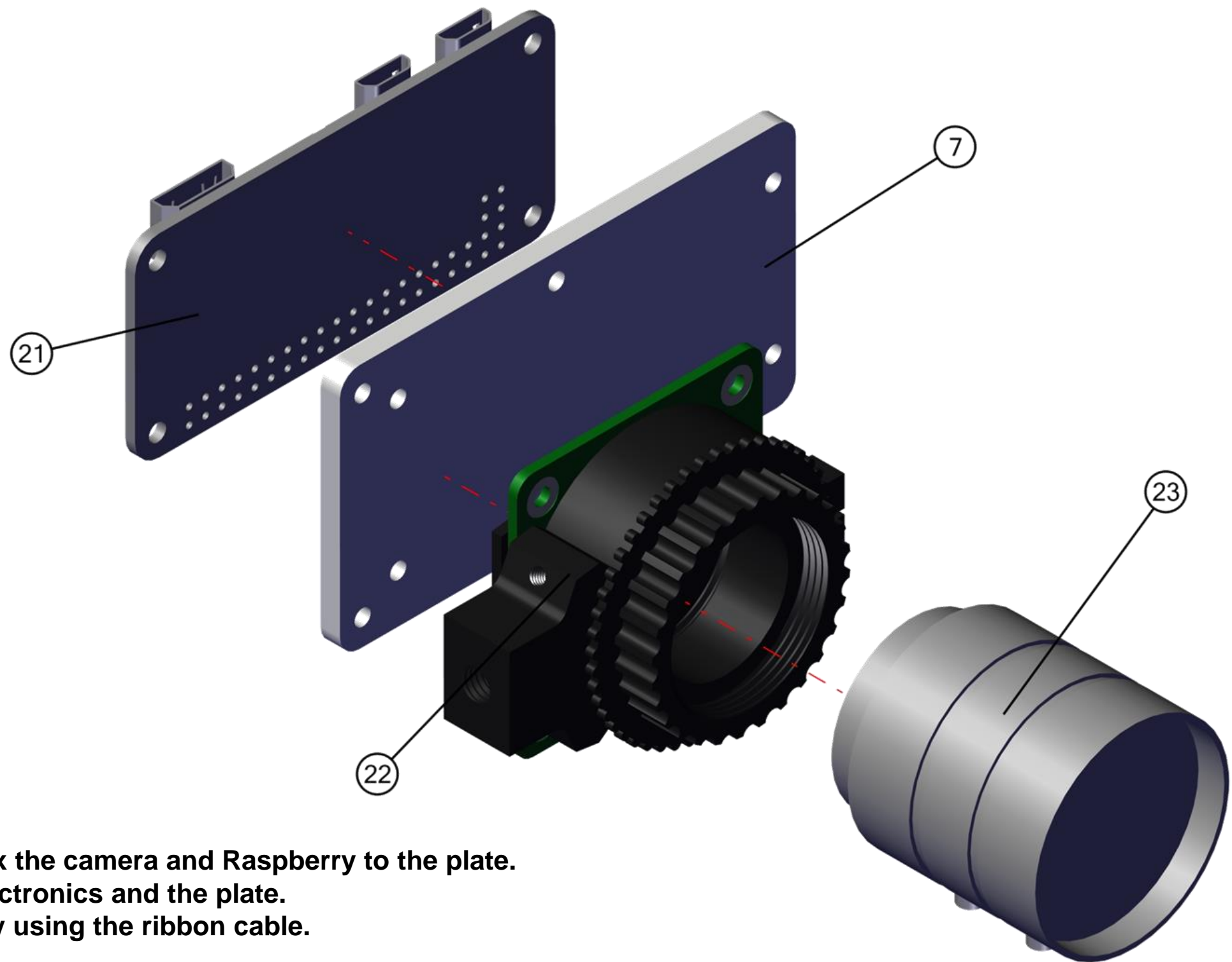
Manual Gimbal



BOM

ID	Name	Qty	Off the shelf / Custom	Material	Manufactureur	Serial number
1	MG004	1	Custom	Aluminium		
2	MG009	1	Custom	Aluminium		
3	MG010	1	Custom	Aluminium		
4	MG012	1	Custom	Aluminium		
5	MG011	1	Custom	PMMA	RS PRO	434-295
6	MG014	1	Custom	PMMA		
7	Mounting Plate Rpi Zero Hq Camera	1	Custom	PMMA		
8	Protractor dial deg	1	Custom	PMMA		
9	Spacer M5x8	2	Off the shelf		Vis express	8470100818
10	Spacer M5x20	1	Off the shelf		Vis express	8470102018
11	Bouton de serrage M5	3	Off the shelf		RS PRO	771-673
12	M5x40 Socket Head	1	Off the shelf		RS PRO	293-353
13	M5x30 Socket Head	2	Off the shelf		RS PRO	290-130
14	M5x12 Socket Head	2	Off the Shelf		RS PRO	281-079
15	M4x16 Flat Head	2	Off the Shelf		RS PRO	171-837
16	M4x12 Socket Head	1	Off the shelf		RS PRO	281-035
17	M3x8 Socket Head	2	Off the Shelf		RS PRO	280-997
18	Bosch nut	2	Off the Shelf		Bosch Rexroth	3842523142
19	Washer M4 L	1	Off the Shelf		Vis express	3534000402
20	IGUS GTM-0818-020	2	Off the Shelf		IGUS	GTM-0818-020
21	RaspberryPiZeroW	1	Off the Shelf			
22	Raspberry Pi HQ Camera	1	Off the Shelf			
23	6mm CS-mount lens	1	Off the Shelf			
24	Ribbon cable	1	Off the Shelf			
25	5mm M2.5 nylon screws	8	Off the Shell			
26	M2.5 nylon nuts	8	Off the Self			

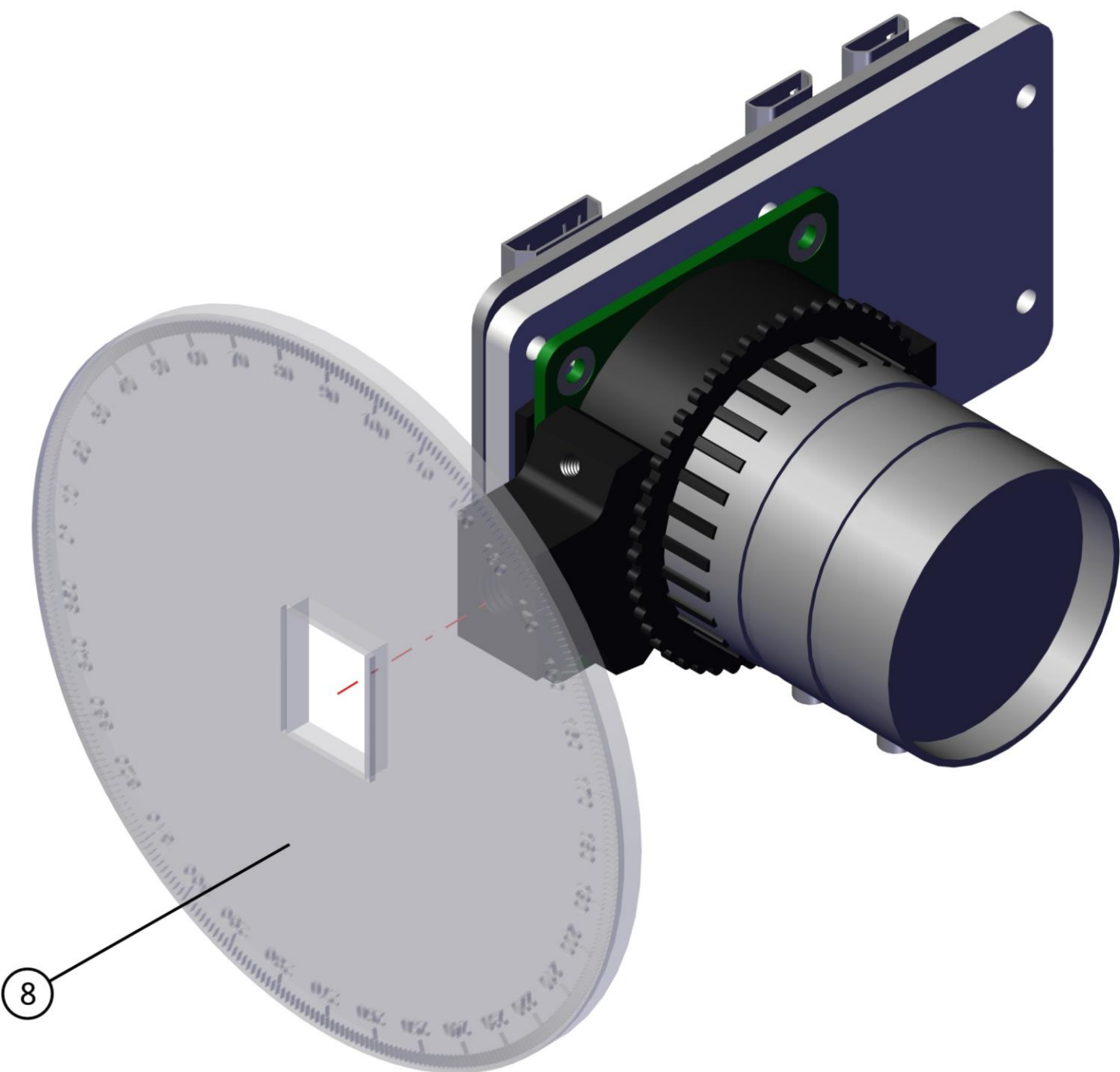
1



Use the 2.5mm screws and nuts to fix the camera and Raspberry to the plate.
Add nuts as spacers between the electronics and the plate.
Connect the camera to the Raspberry using the ribbon cable.

ID	Name	Qty	Off the shelf / Custom	Material	Manufactureur	Serial number
7	Mounting Plate Rpi Zero Hq Camera	1	Custom	PMMA		
21	RaspberryPiZeroW	1	Off the Shelf			
22	Raspberry Pi HQ Camera	1	Off the Shelf			
23	6mm CS-mount lens	1	Off the Shelf			
24	Ribbon cable	1	Off the Shelf			
25	5mm M2.5 nylon screws	8	Off the Shell			
26	M2.5 nylon nuts	8	Off the Self			

2

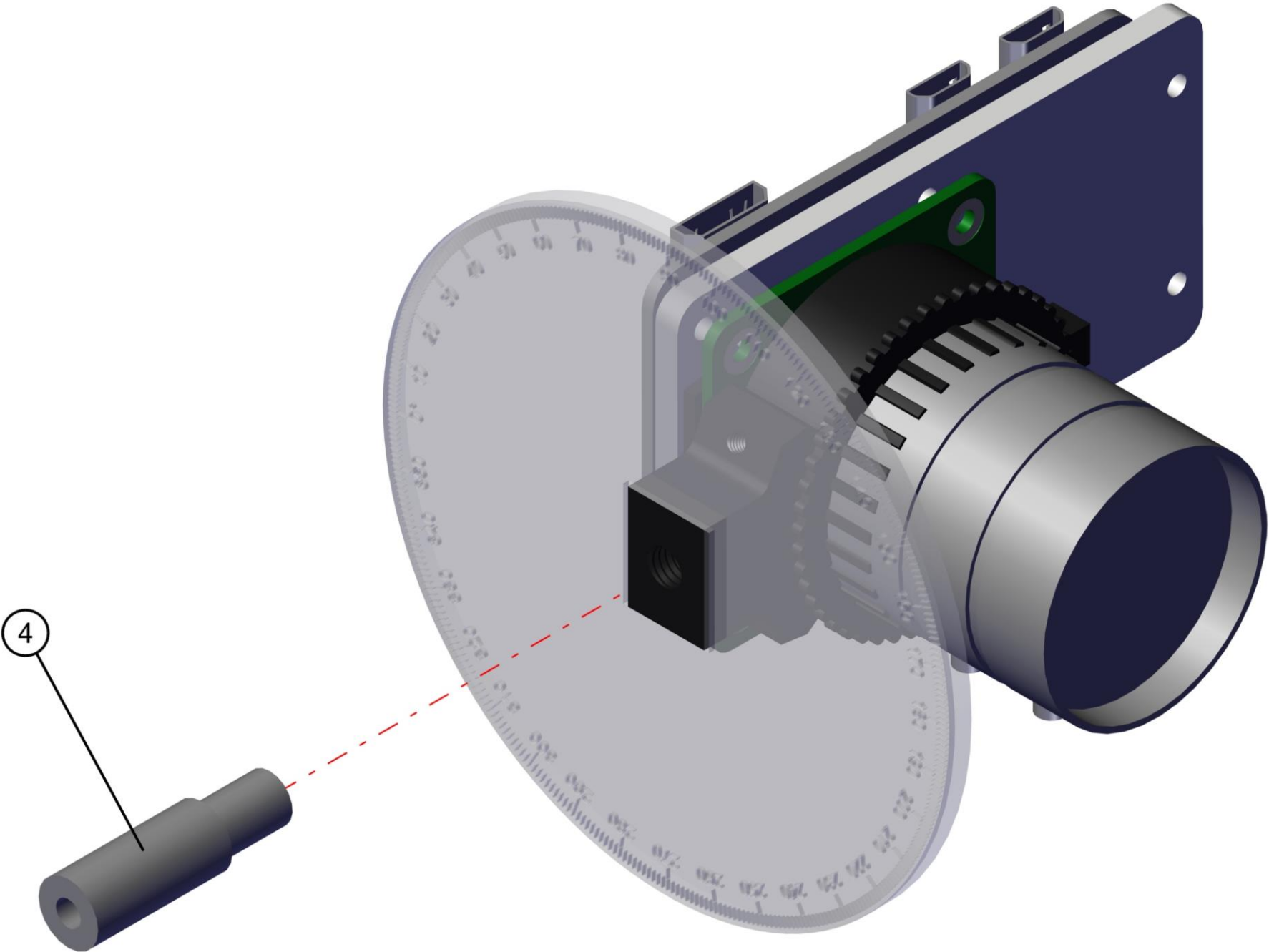


If the cut out is a bit too large add glue to fix item 8.

ID	Name	Qty	Off the shelf / Custom	Material	Manufactureur	Serial number
8	Protractor dial deg	1	Custom	PMMA		

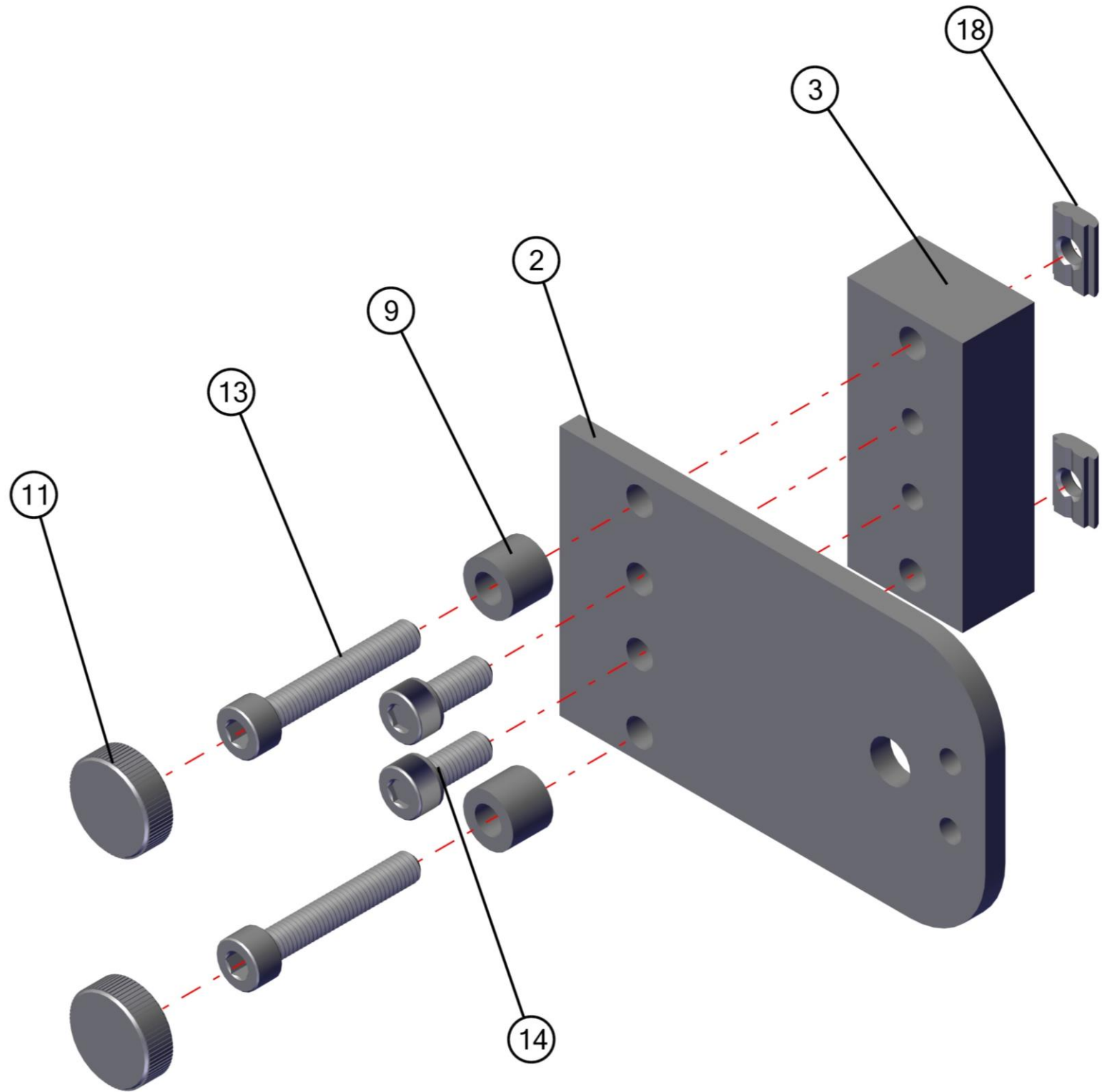
3

Add Loctite on the threads



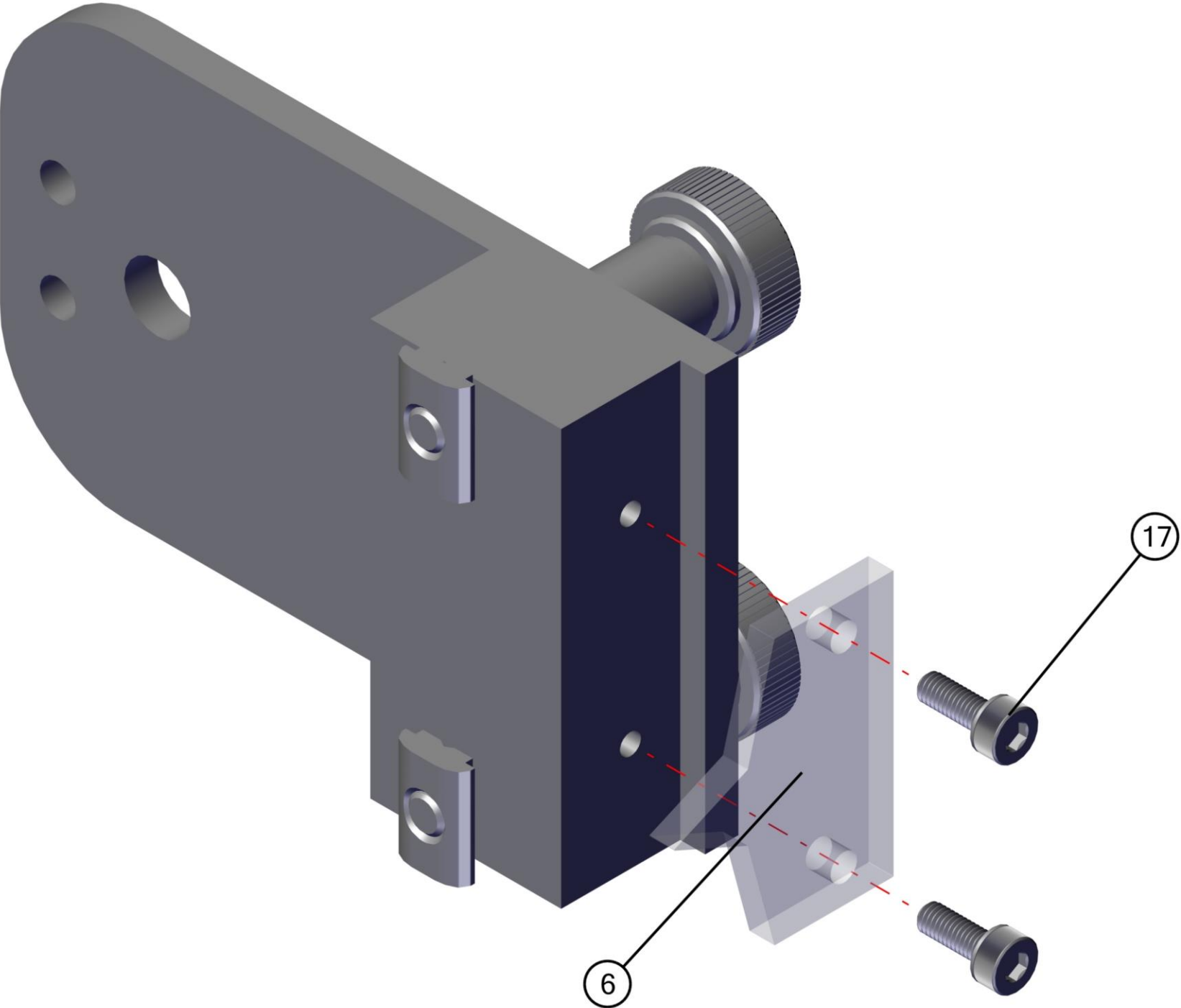
ID	Name	Qty	Off the shelf / Custom	Material	Manufactureur	Serial number
4	MG012	1	Custom	Aluminium		

4



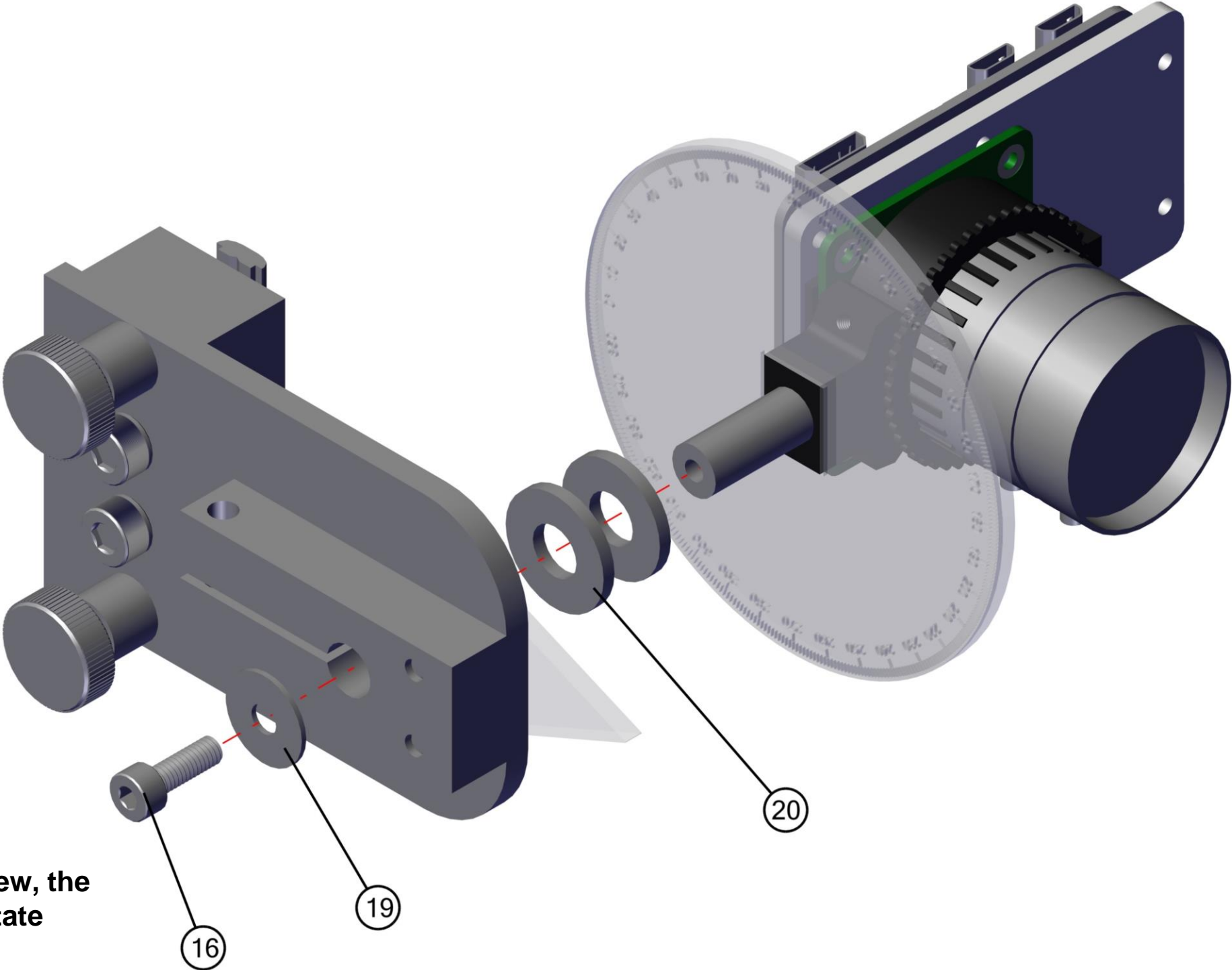
ID	Name	Qty	Off the shelf / Custom	Material	Manufactureur	Serial number
2	MG009	1	Custom	Aluminium		
3	MG010	1	Custom	Aluminium		
9	Spacer M5x8	2	Off the shelf		Vis express	8470100818
11	Bouton de serrage M5	2	Off the shelf		RS PRO	771-673
13	M5x30 Socket Head	2	Off the shelf		RS PRO	290-130
14	M5x12 Socket Head	2	Off the Shelf		RS PRO	281-079
18	Bosch nut	2	Off the Shelf		Bosch Rexroth	3842523142

5



ID	Name	Qty	Off the shelf / Custom	Material	Manufactureur	Serial number
6	MG014	1	Custom	PMMA		
17	M3x8 Socket Head	2	Off the Shelf		RS PRO	280-997

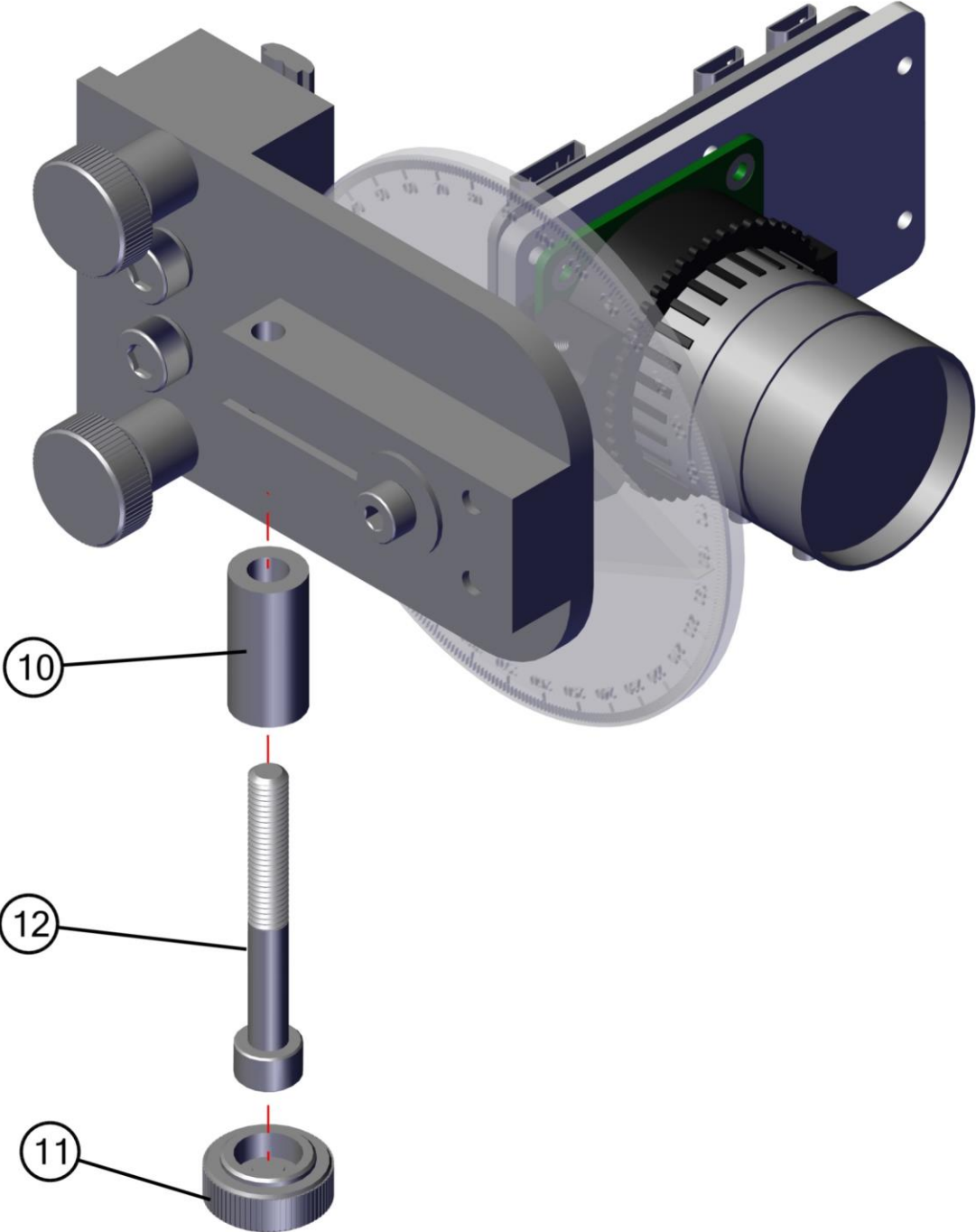
6



Do not overtighten the screw, the camera must be able to rotate

ID	Name	Qty	Off the shelf / Custom	Material	Manufactureur	Serial number
16	M4x12 Socket Head	1	Off the shelf		RS PRO	281-035
19	Washer M4 L	1	Off the Shelf		Vis express	3534000402
20	IGUS GTM-0818-020	2	Off the Shelf		IGUS	GTM-0818-020

7



ID	Name	Qty	Off the shelf / Custom	Material	Manufactureur	Serial number
10	Spacer M5x20	1	Off the shelf		Vis express	8470102018
11	Bouton de serrage M5	1	Off the shelf		RS PRO	771-673
12	M5x40 Socket Head	1	Off the shelf		RS PRO	293-353