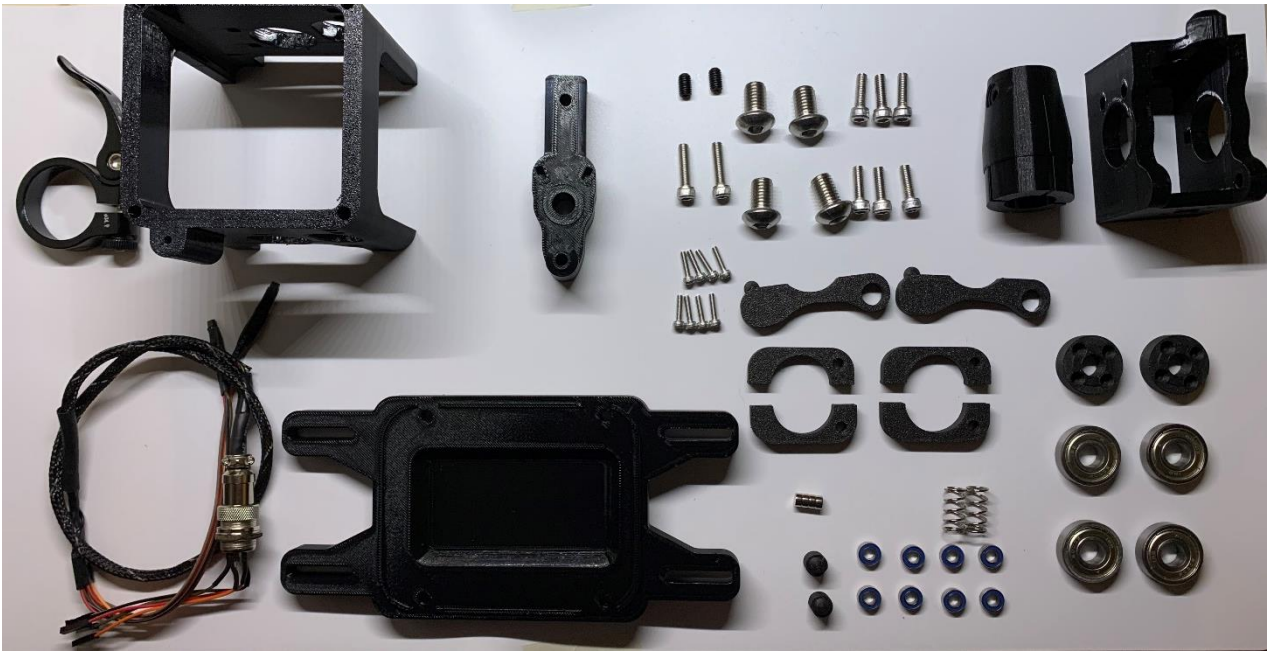


Assembly instructions

Note:

The project is still under development so some parts of this manual may differ slightly from the printed files. I will try to keep them as updated as possible.

Furthermore, there are different versions of some parts that can be chosen and which are not included in this guide.



Step 1

Printed parts:

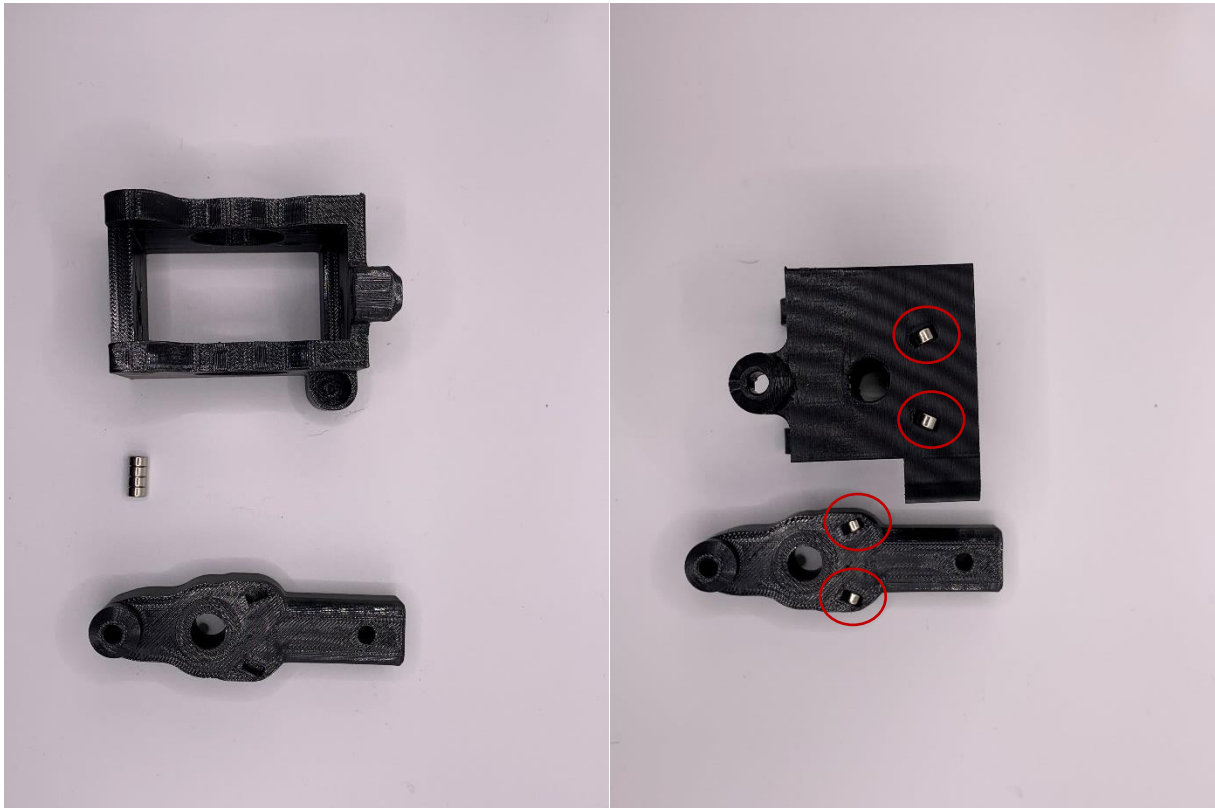
- Lever
- X axis main body

Hardware:

- 4 pcs Magnet 6mmx3mm

Assembly:

Insert the magnets in the slots.



Step 2

Printed parts:

- Lever
- Clutch disc

Hardware:

- 4 pcs Scerw M3x12mm

Assembly:

Screw the clutch disc to the lever using four screws.



Step 3

Printed parts:

- Lever

Hardware:

- 2 pcs ball bearing OD 10mm, ID 5mm, W 4mm
- 1 pcs screw M5x16mm

Assembly:

Screw the bearings to the lever.



Step 4

Printed parts:

- X axis main body
- Clutch disc

Hardware:

- 4 pcs Scerw M3x12mm

Assembly:

Screw the clutch disc to the X axis main body using four screws.



Step 5

Printed parts:

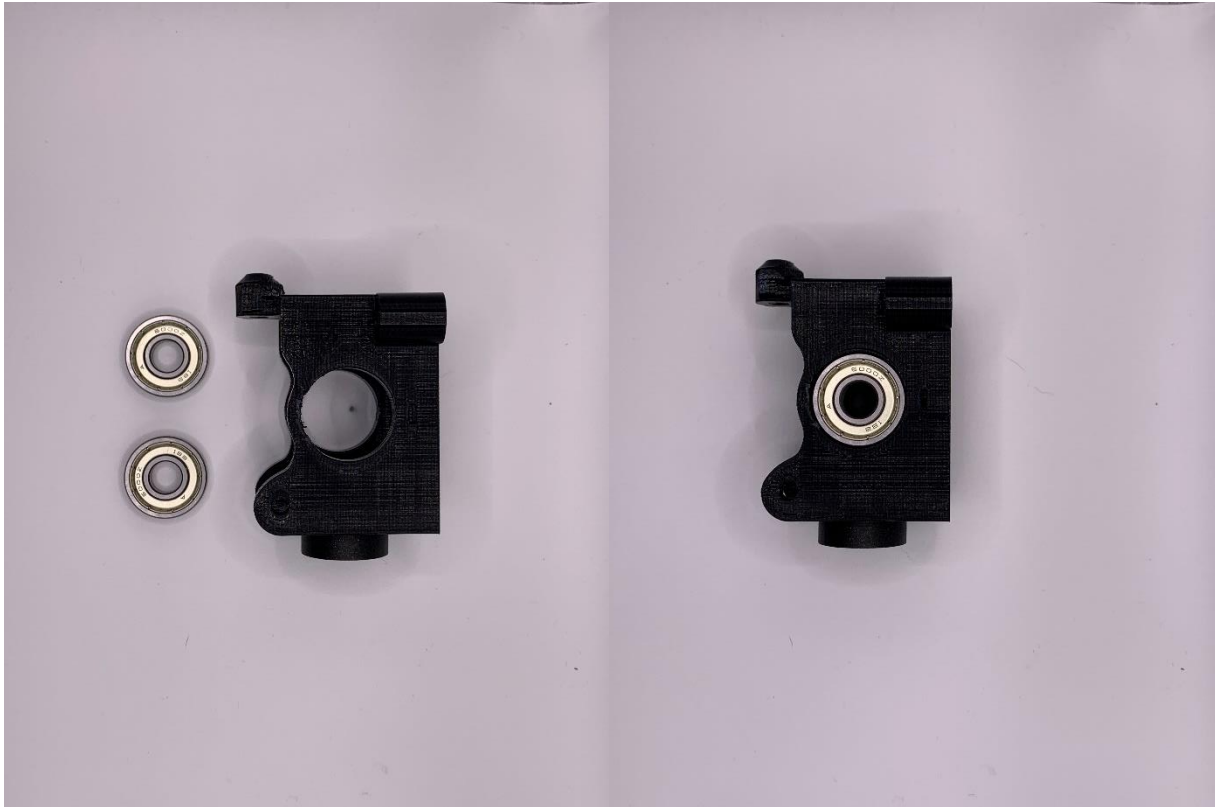
- X axis main body

Hardware:

- 2 pcs ball bearing OD 26mm, ID 20mm, W 8mm

Assembly:

Insert the bearing in the X axis main body slots.



Step 6

Printed parts:

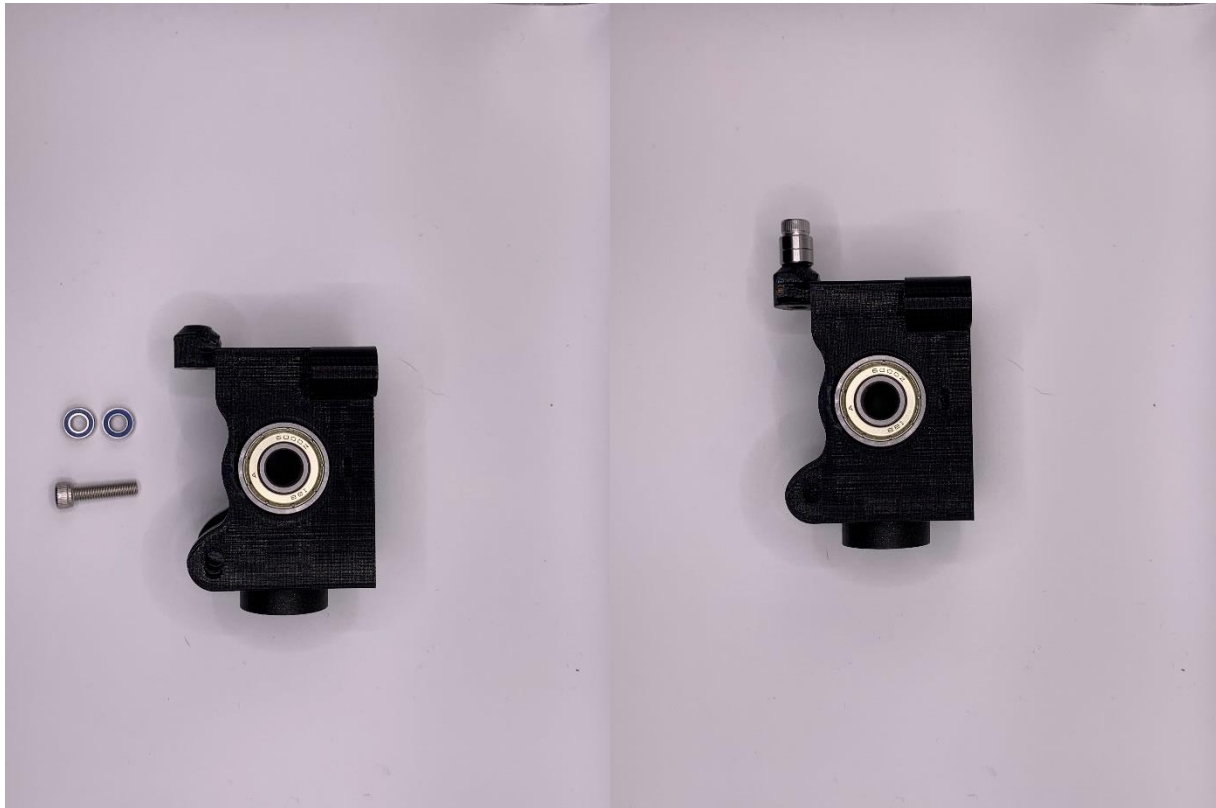
- X axis main body

Hardware:

- 2 pcs ball bearing OD 10mm, ID 5mm, W 4mm
- 1 pcs screw M5x16mm

Assembly:

Screw to the X axis main body.



Step 7

Printed parts:

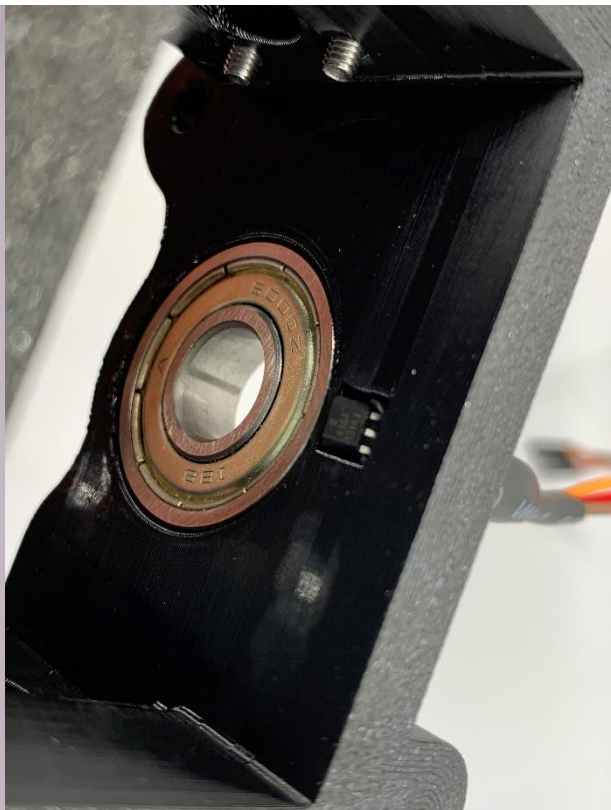
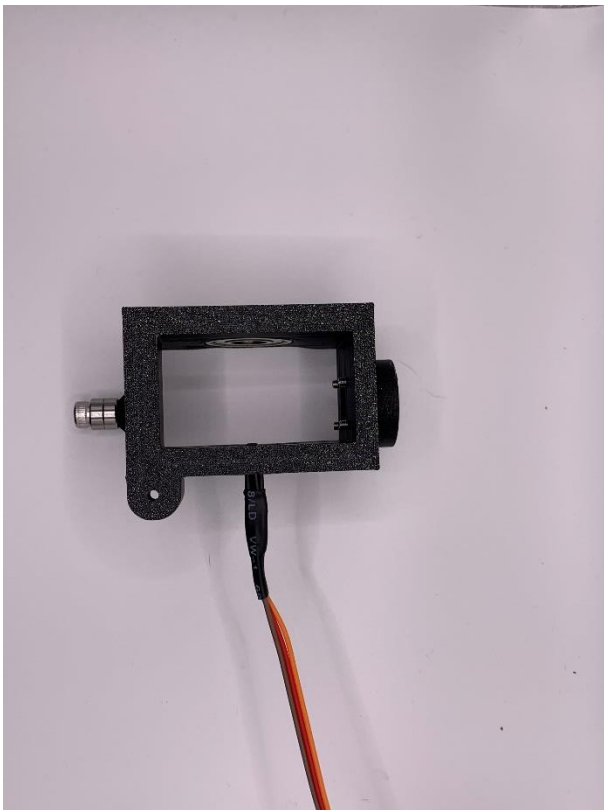
- X axis main body

Hardware:

- 1 pcs Hall Effect Sensor SS496A1 with the wiring

Assembly:

Place the hall sensor in the slot located above the ball bearing. The face (the side with the writing) must point towards to the center of the main body.



Step 8

Printed parts:

- X axis main body
- Lever

Hardware:

- 2 pcs screw M10x16mm

Assembly:

Insert the lever into the X main body and secure it with the two screws. Be careful to insert the lever from the right side. See the images below.



Step 9

Printed parts:

- X axis main body
- Clutch caliper part A
- Clutch caliper part B

Hardware:

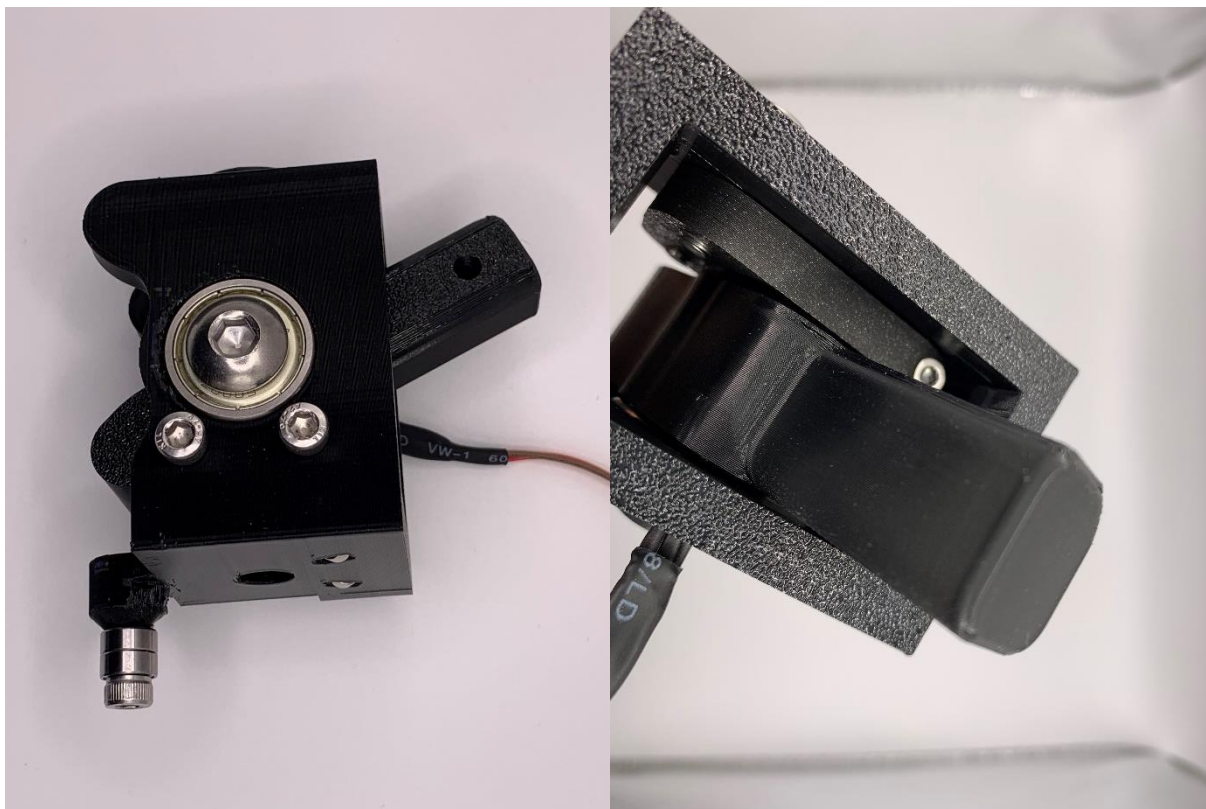
- 2 pcs screw M5x12mm
- 1 pcs screw M3x16mm
- Grease

Assembly:

Put some grease to both Clutch caliper part.



Place the Clutch caliper part A above and caliper part B below the clutch disc and secure them with two M5 screws. Insert the M3 screw through both Clutch caliper.



Step 10

Printed parts:

- X axis main body
- 1 pcs cam
- 1 pcs spring setting piston

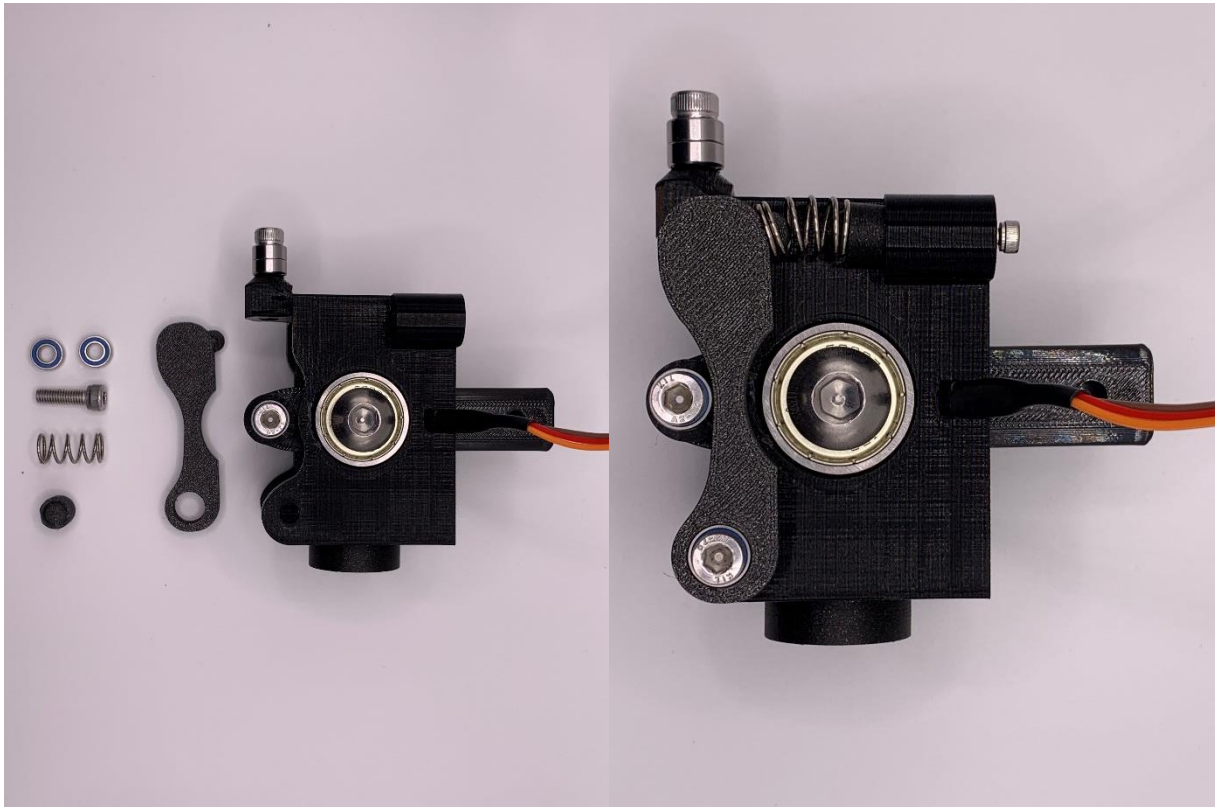
Hardware:

- 1 pcs screw M5x12mm
- 1 pcs allen screw M3x10mm
- 2 pcs ball bearing OD 10mm, ID 5mm, W 4mm
- 1 pcs spring 9.5x20mm

Assembly:

Insert both bearings into the housing in the cam. Secure the cam to the main body using the M5 screw.

Insert the M3 screw and piston into the spring setting barrel. Put the spring between the cam and the regulating setting piston.



Step 11

Printed parts:

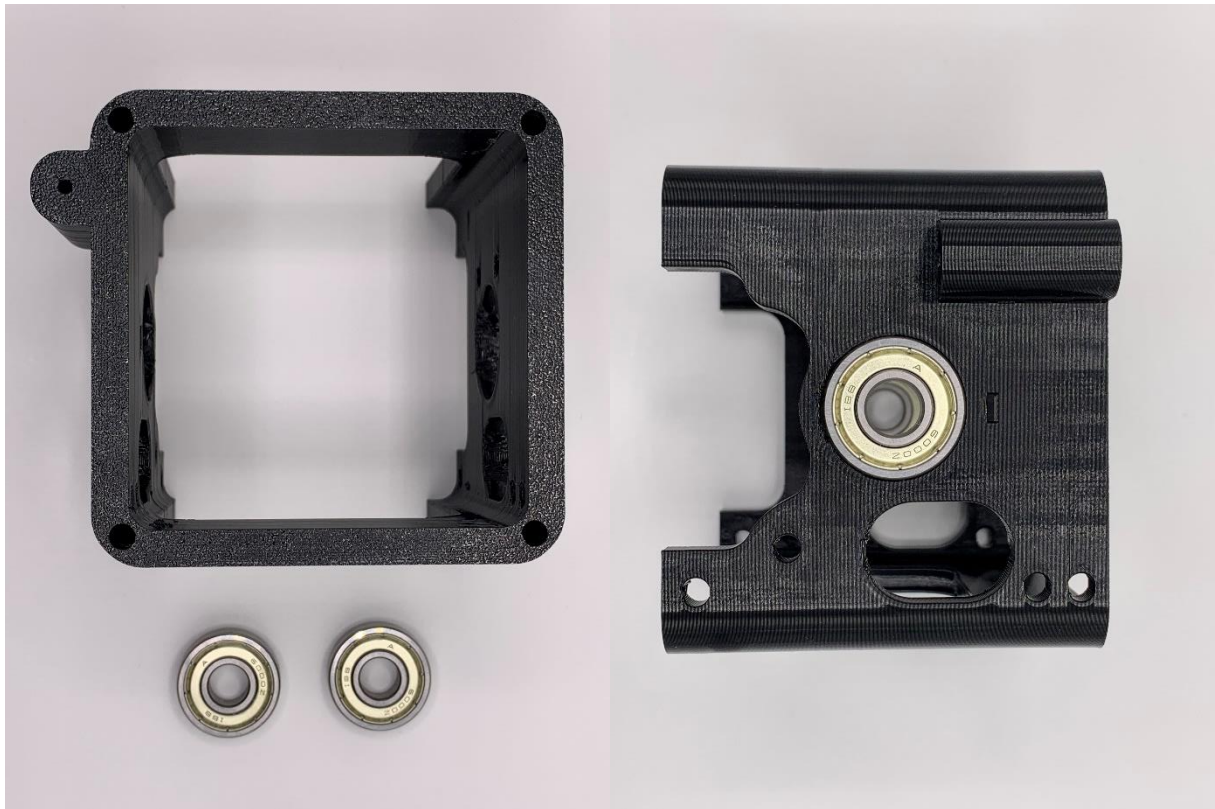
- Y axis main body

Hardware:

- 2 pcs ball bearing OD 26mm, ID 20mm, W 8mm

Assembly:

Insert the bearing in the Y axis main body slots.



Step 12

Printed parts:

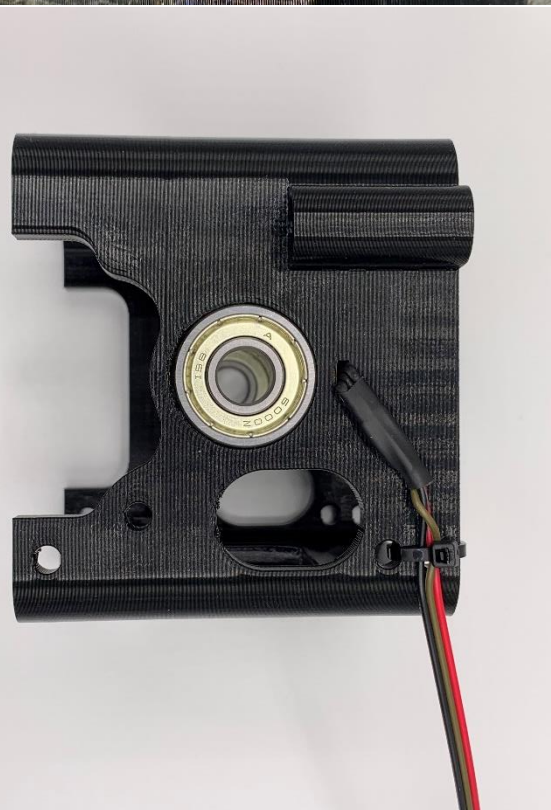
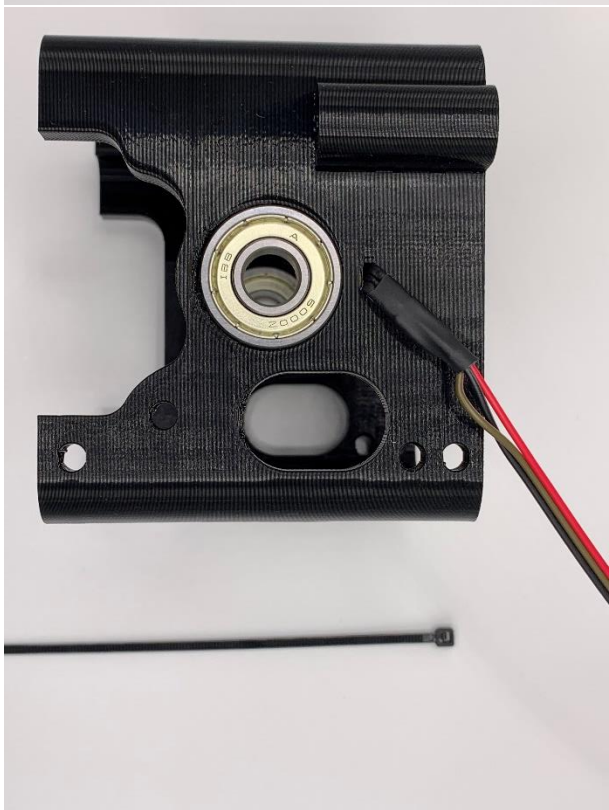
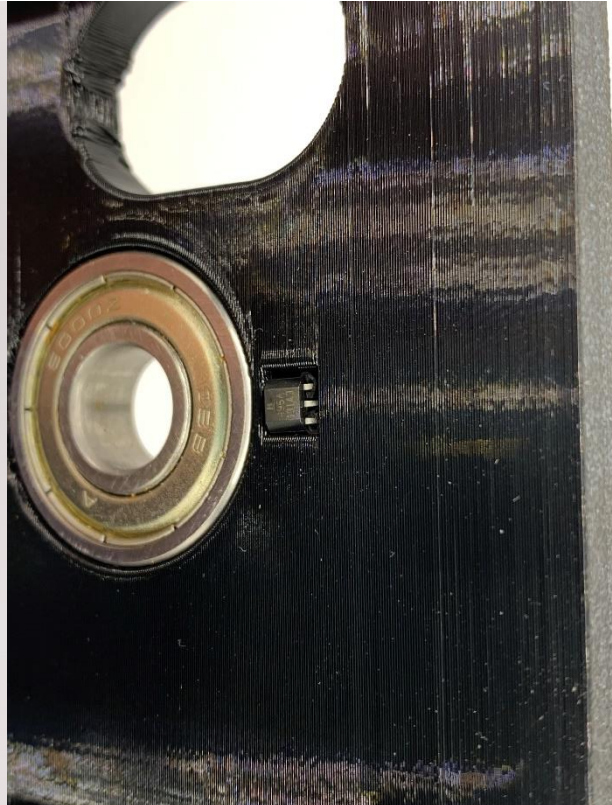
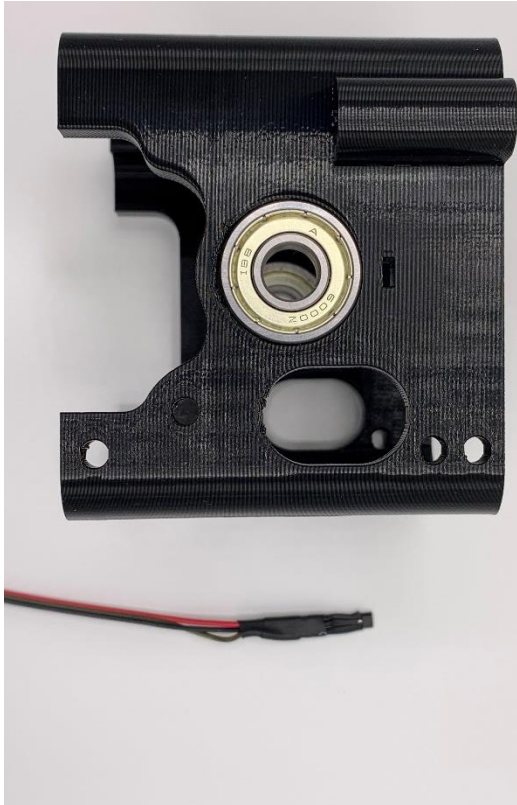
- Y axis main body

Hardware:

- 1pcs Hall Effect Sensor SS496A1 with the wiring

Assembly:

Place the hall sensor in the slot located above the ball bearing. The face (the side with the writing) must point towards to the center of the main body.



Step 13

Printed parts:

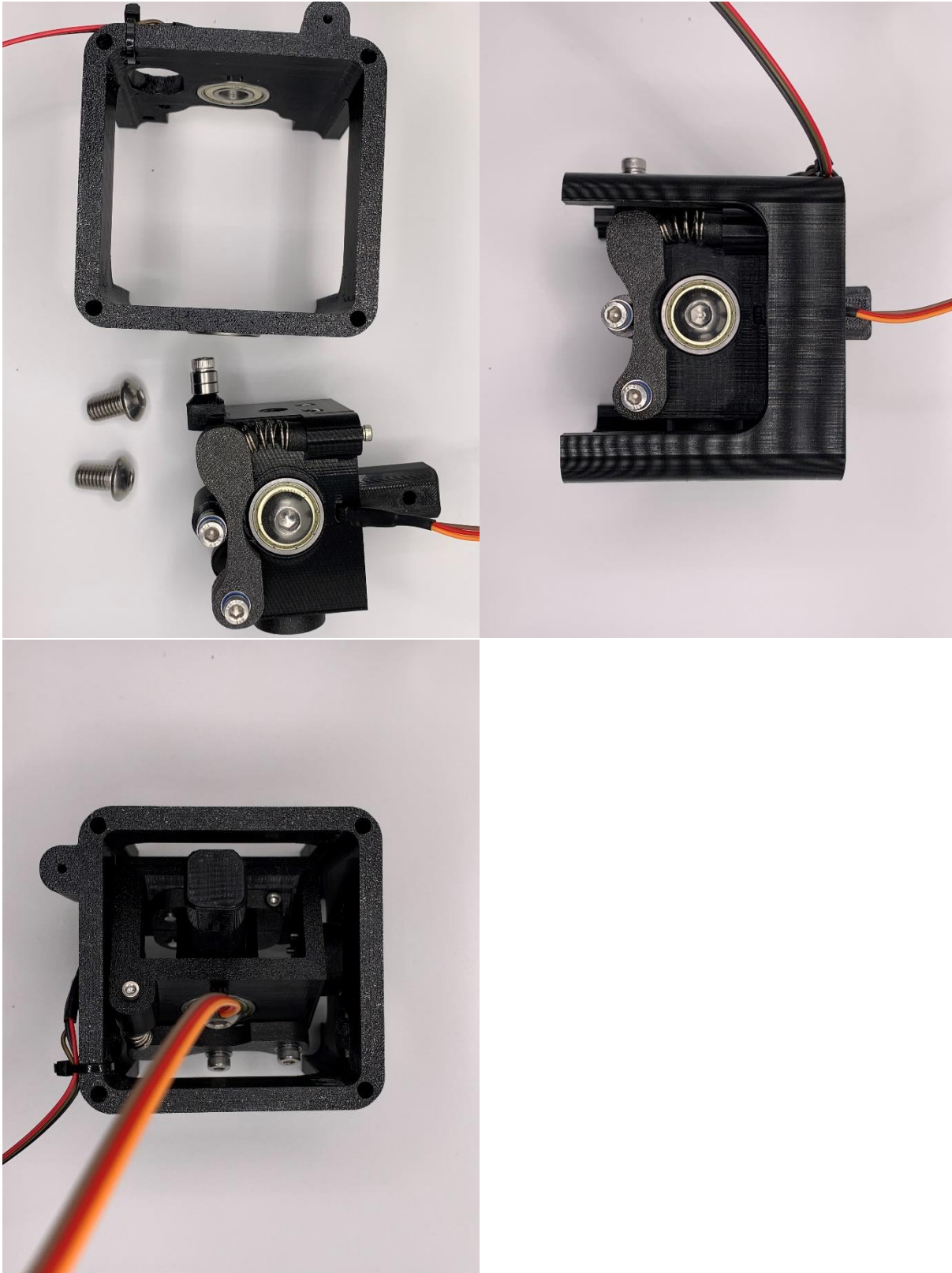
- Y axis main body
- X axis main body

Hardware:

- 2 pcs screw M10x16mm

Assembly:

Insert Y axis main body into the X main body and secure it with the two screws. Be careful to insert the lever from the right side. See the images below.



Step 14

Printed parts:

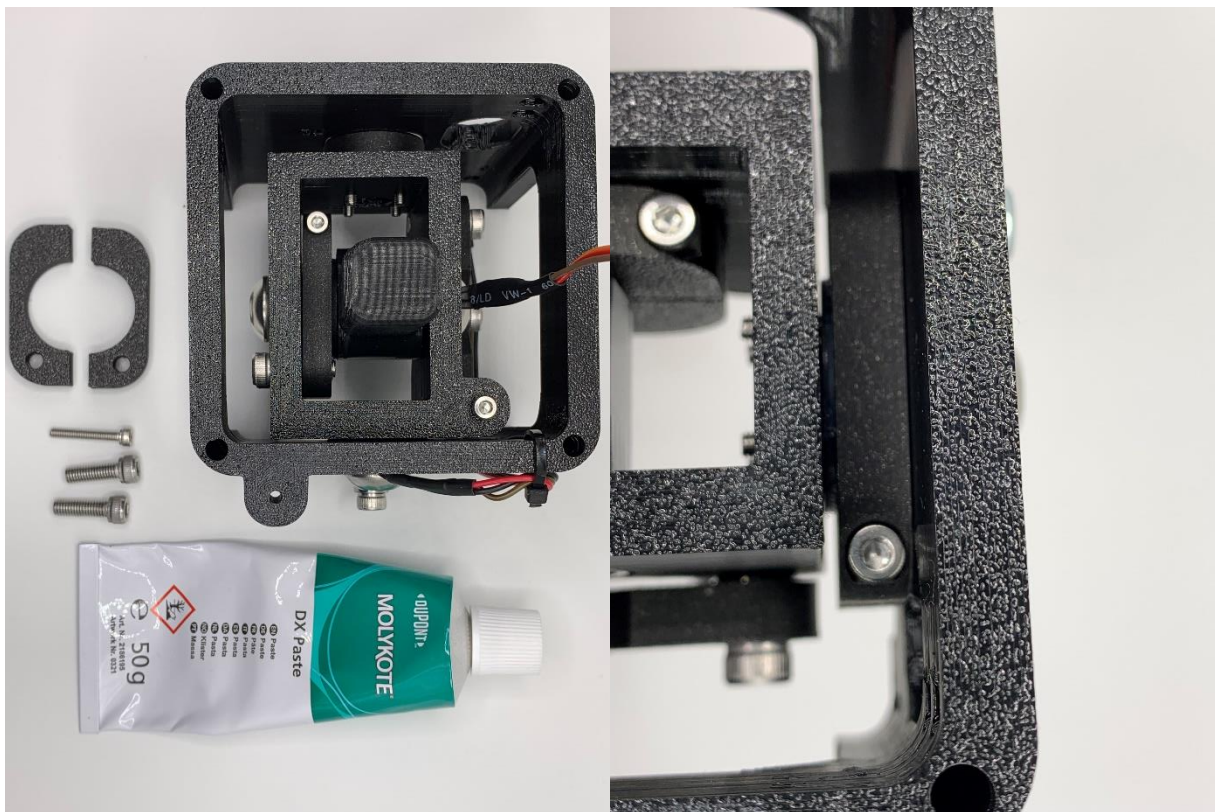
- X axis main body
- Clutch caliper part A
- Clutch caliper part B

Hardware:

- 2 pcs screw M5x12mm
- 1 pcs screw M3x16mm
- Grease

Assembly:

Put some grease to both Clutch caliper part. Secure the Clutch caliper part A above and caliper part B below the clutch disc and secure them with two M5 screws. Insert the M3 screw through both Clutch caliper.



Step 15

Printed parts:

- Y axis main body
- 1 pcs cam
- 1 pcs spring setting piston

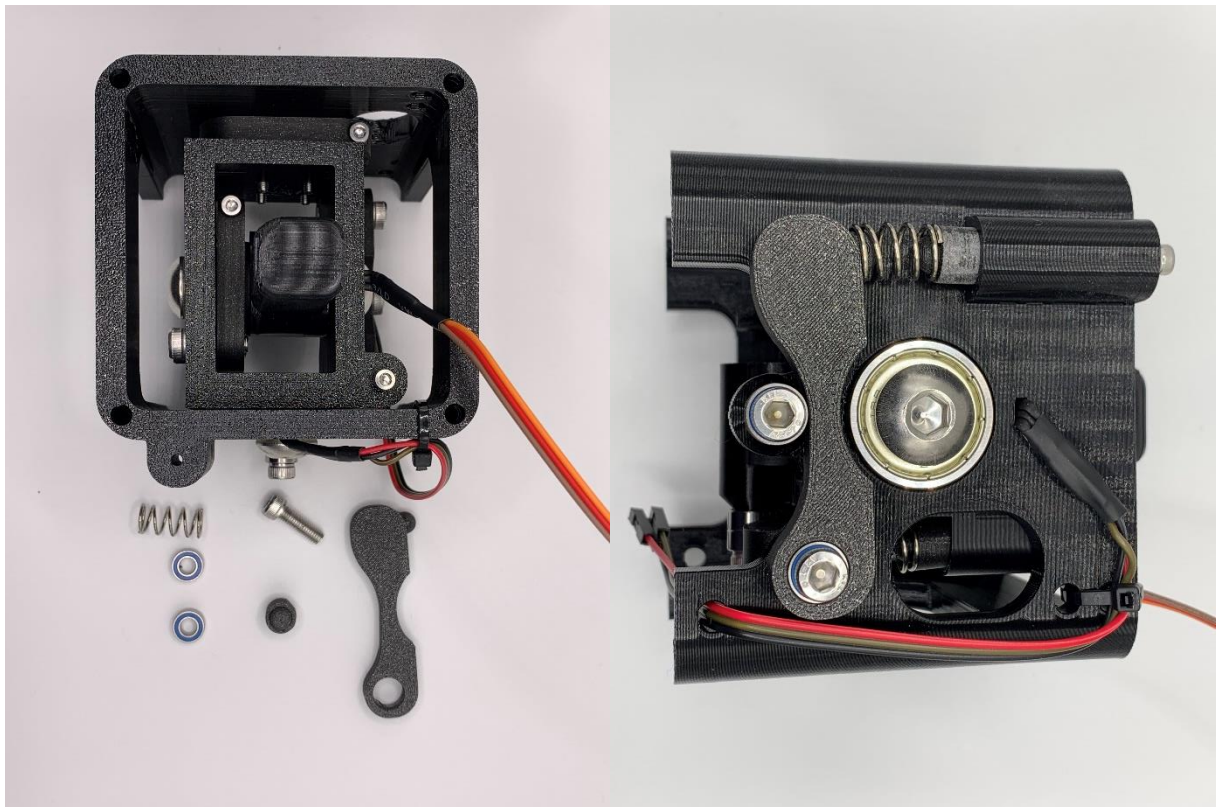
Hardware:

- 1 pcs screw M5x12mm
- 1 pcs allen screw M3x10mm
- 2 pcs ball bearing OD 10mm, ID 5mm, W 4mm
- 1 pcs spring 9.5x20mm

Assembly:

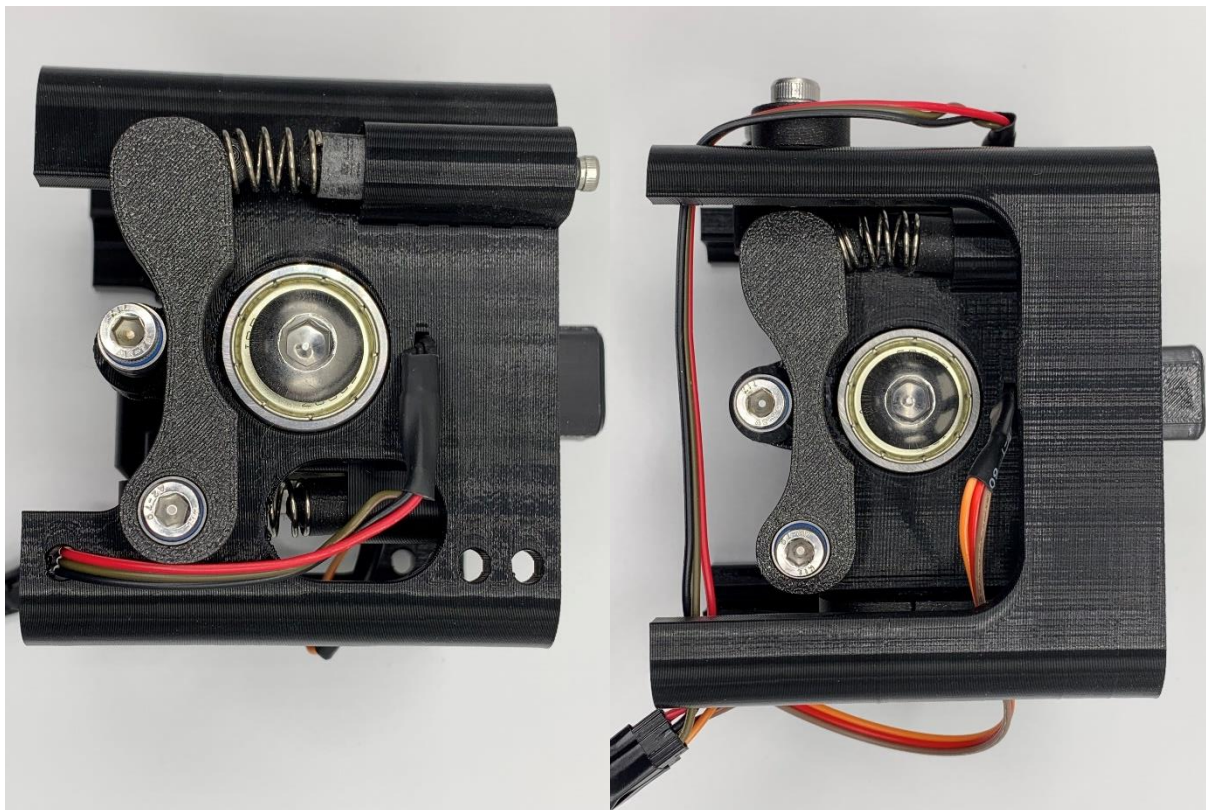
Insert both bearings into the housing in the cam. Secure the cam to the main body using the M5 screw.

Insert the M3 allen screw and piston into the spring setting barrel. Put the spring between the cam and the regulating setting piston.



Step 16

Fix the wiring with some cable ties.



The gimbal base assembly is complete. For the optional parts, electronics and firmware refer to the specific guides.

