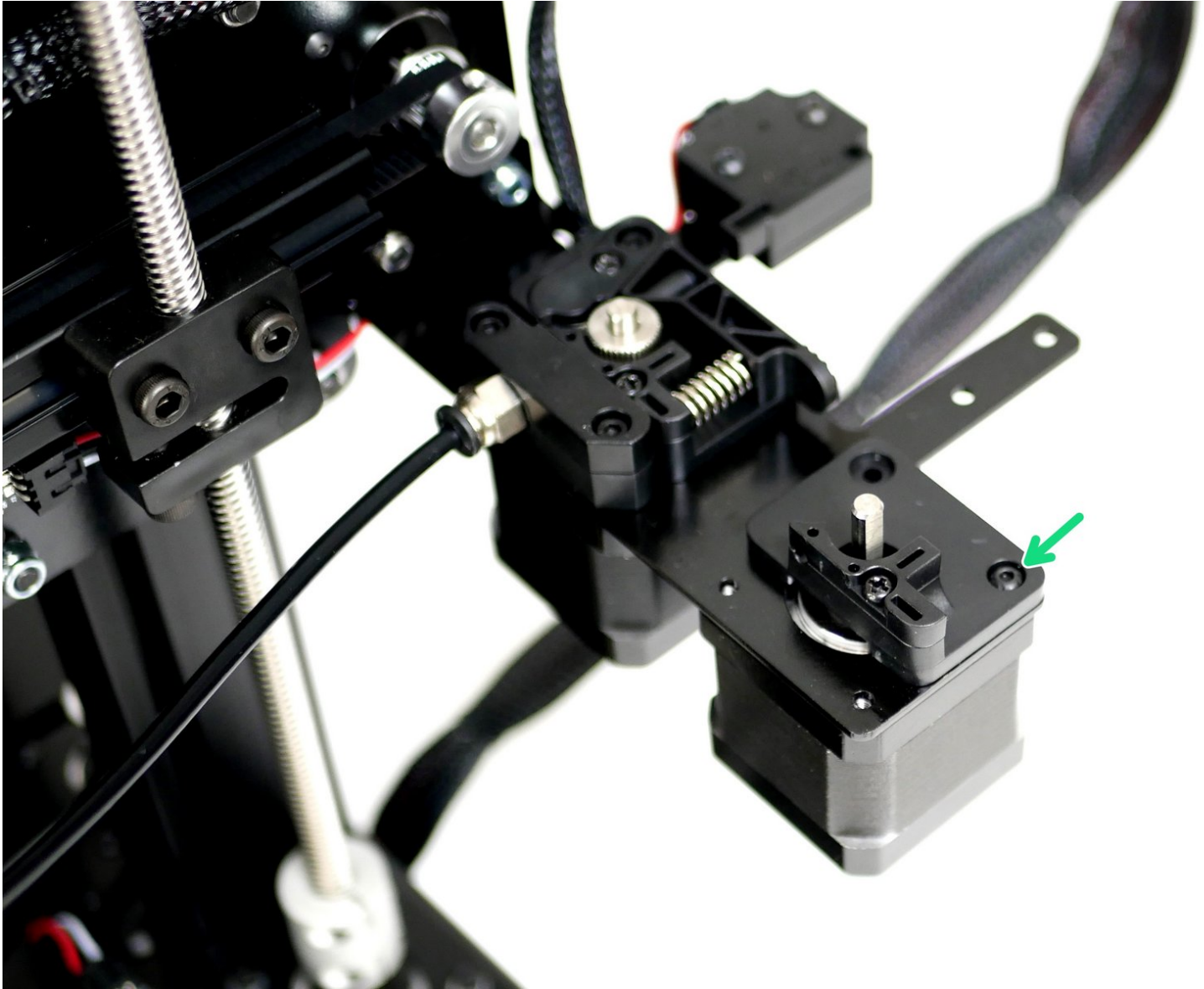


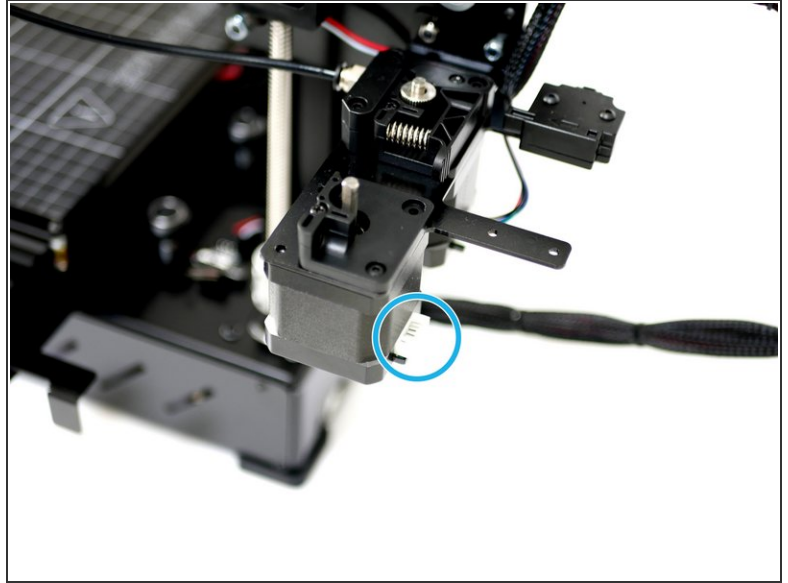
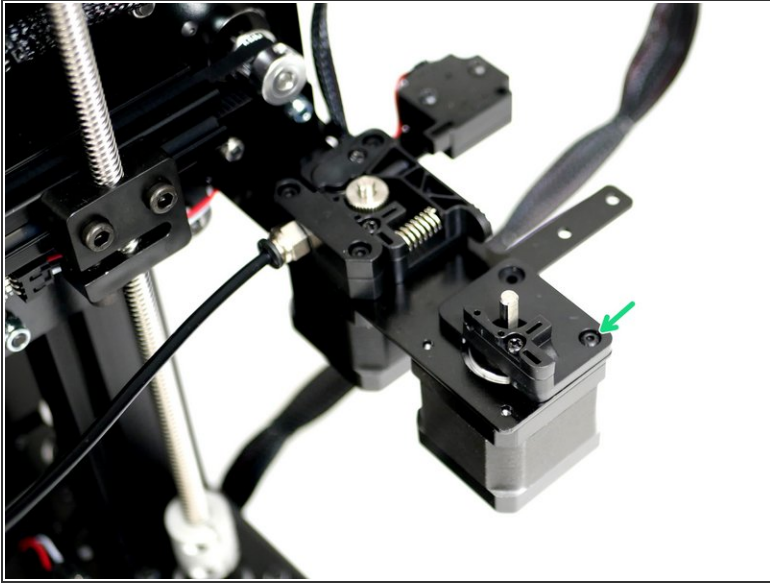
Makertech

DSE Stage 01 - Extruder

Written By: Makertech

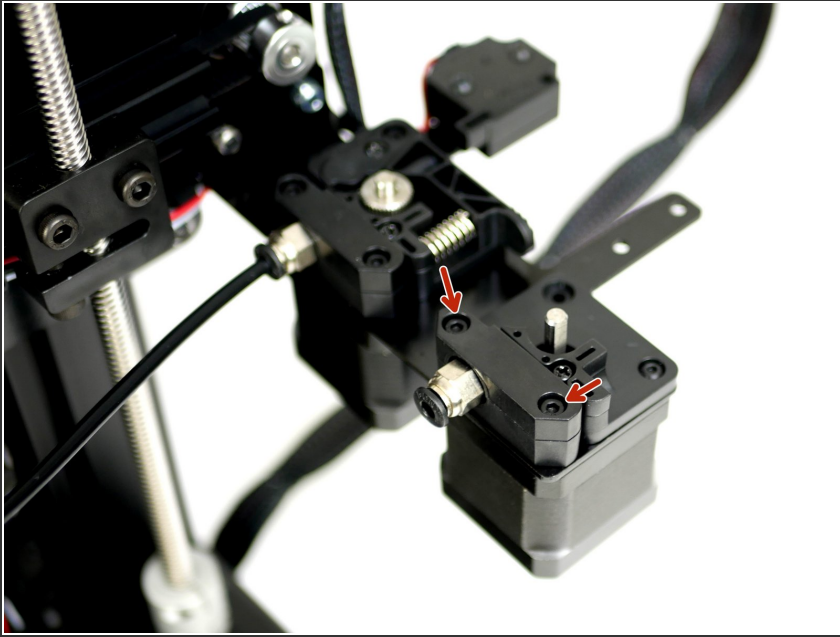


Step 1 — Extruder Back Plate



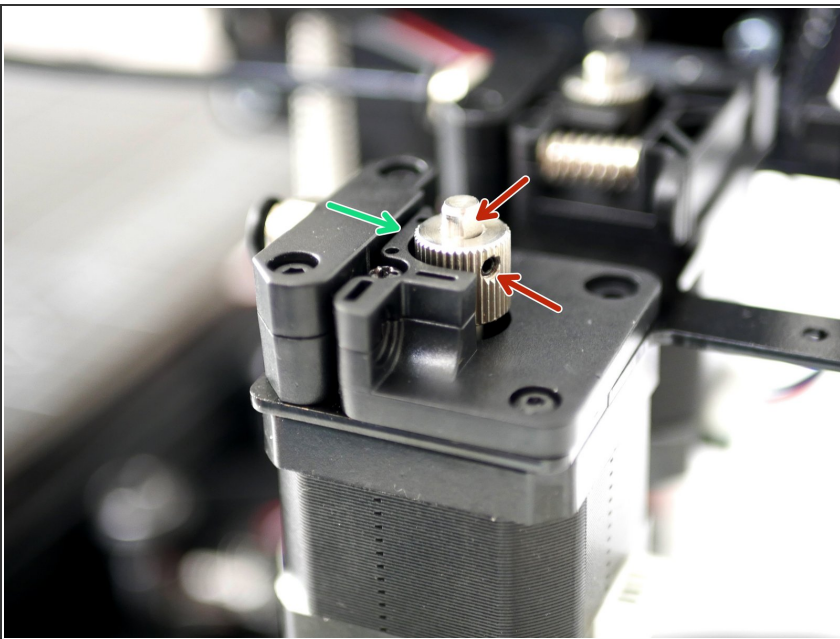
- ❗ The second extruder is identical to the first and installed in the same way as outlined in [Stage 8](#).
 - Begin by fixing the extruder face plate and motor to the mount with a single M3x8mm bolt.
 - The motors cable connector should be pointing to the back of the bracket.
- 👉 Ignore the PTFE tubing if building from the Proforge 2/2S guide.

Step 2 — Coupling Bracket



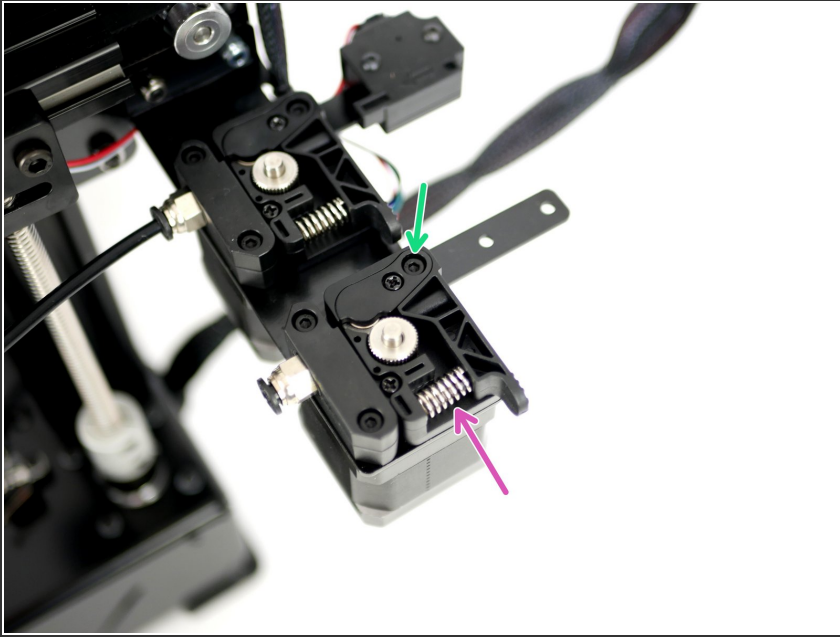
- Fix the Coupling Bracket onto the motor with two M3 x 18mm bolts.

Step 3 — Drive Gear



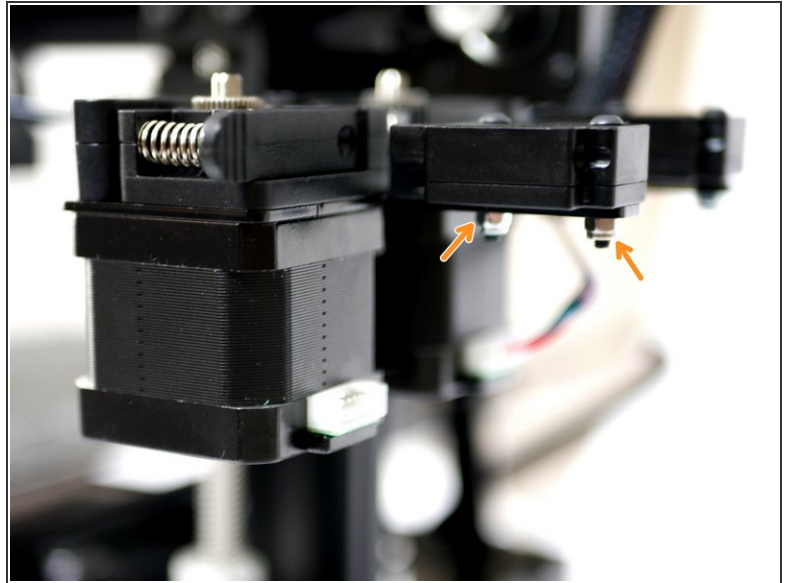
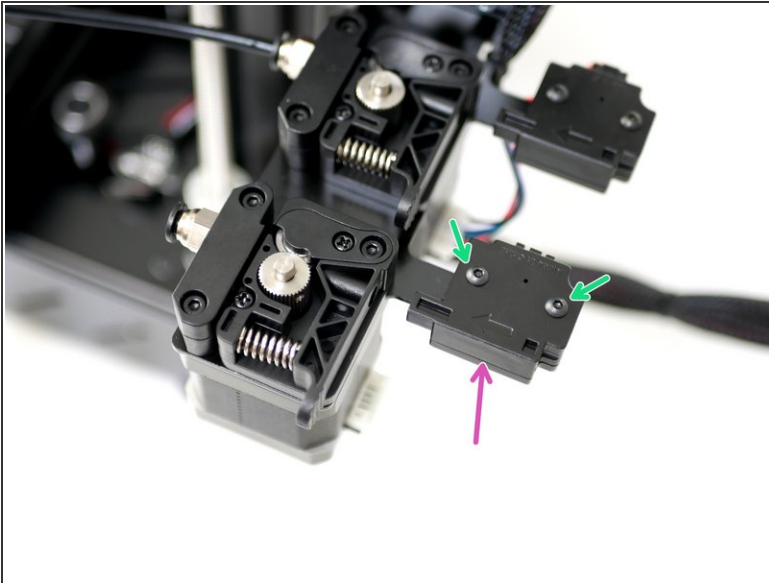
- ① Fix the Drive Gear to the shaft of the motor.
- The top of the drive gear should only be a few millimetres above the top of the back plate.
- Tighten the set screw onto the flat of the shaft. Tighten firmly.


Step 4 — Idler Arm







- Place in position the Extruder Spring on the Back Plate.
 - Drop in a M3 x 18mm bolt.
 - Compress the spring with the Idler Arm and tighten down the M3 x 18mm bolt.
- ⚠ Do not over tighten, the arm should still be able to pivot.

Step 5 — Filament Sensor

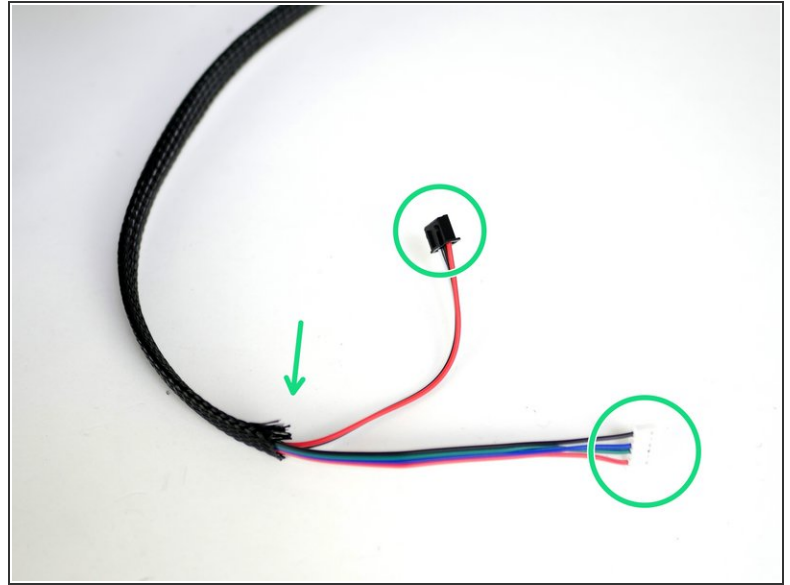
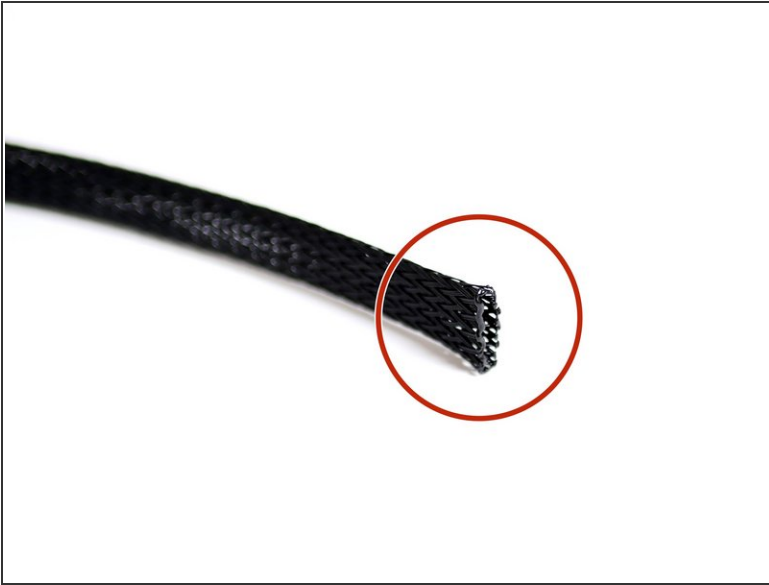


 Fix the filament sensor to the Extruder Mounting Bracket:

-  Filament Sensor
-  M3 x 20mm bolt
-  M3 Nyloc Nut

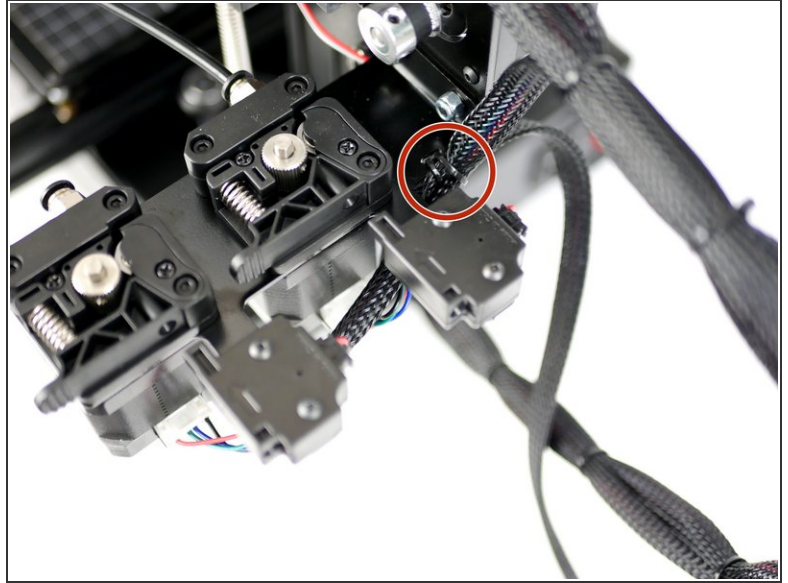
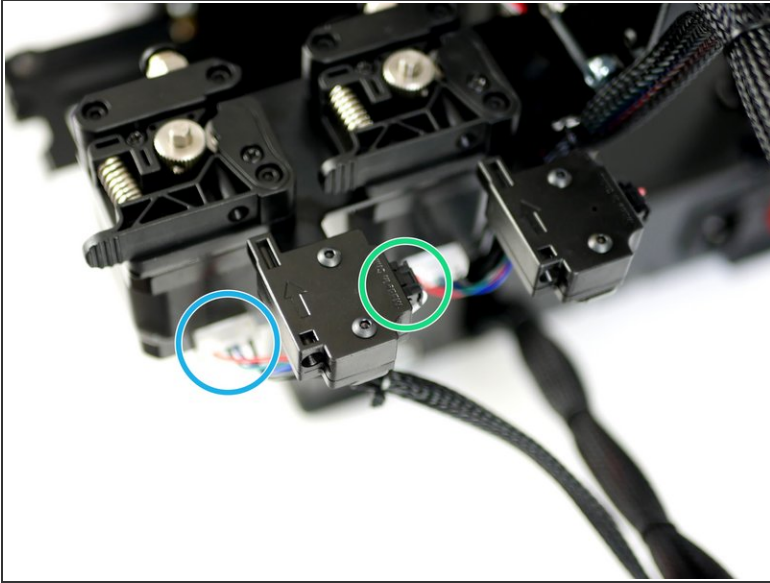
 Match the orientation of the Filament Sensor as shown in the photos.

Step 6 — Cable Sleevings



- ⓘ Cut 70CM of Braided Cable sleeving
 - Melt the ends with a lighter to prevent them from fraying out.
 - Feed the cable sleeving over the extruder motor and filament sensor cable as shown.
- 📌 Like shown in the second image, the sides of the cables that connect to the motor and filament sensor should be on the same side of the sleeving.

Step 7 — Connecting the Cables



- Connect the filament sensor cable to the filament sensor.
- Connect a motor cable to the motor.
- Cable tie the cables to the mounting bracket.