

# Makertech

## DSE Only - Stage 02: Extruders

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## Step 1 — Extruder Assembly



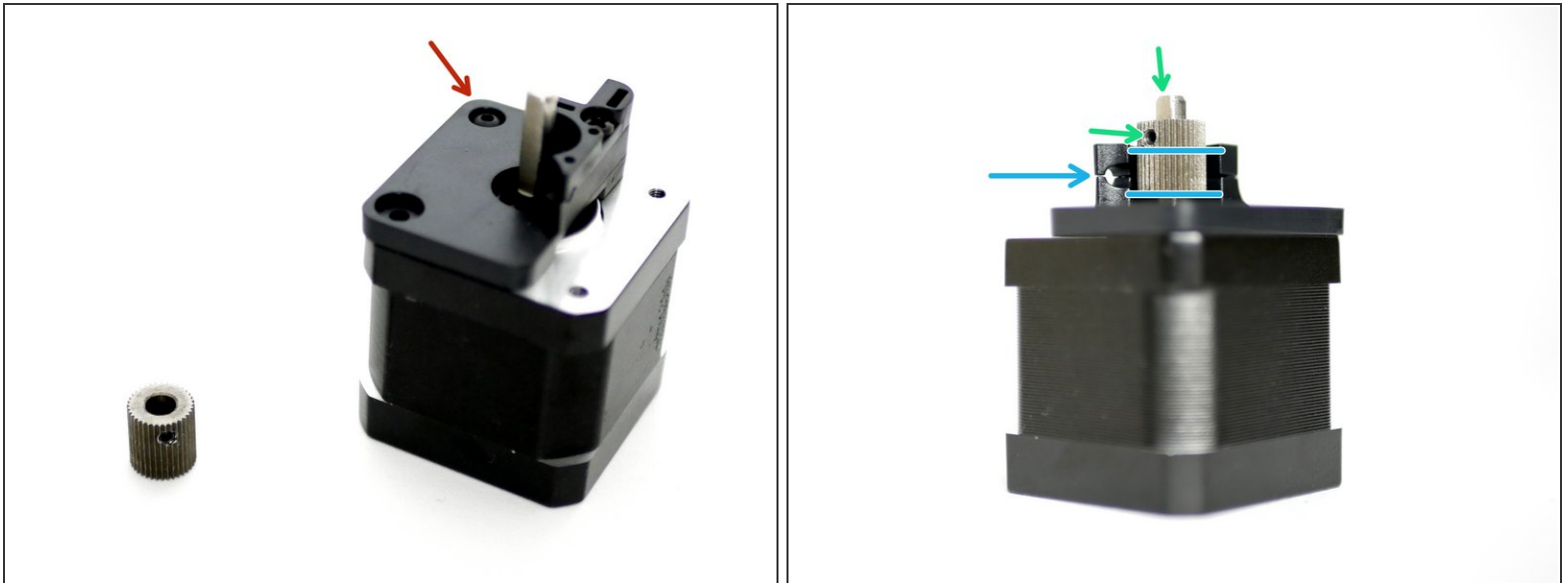
- i Note, the DSE ONLY kit contains one extruder feeder, NEMA 17 stepper motor and stepper driver.
- i It assumes that you will be using your original extruder, motor and driver.
- i The type of extruder you use doesn't matter as long as it can be converted for bowden style use. Marlin firmware will be able to configure each individually.

## Step 2 — Extruder Components



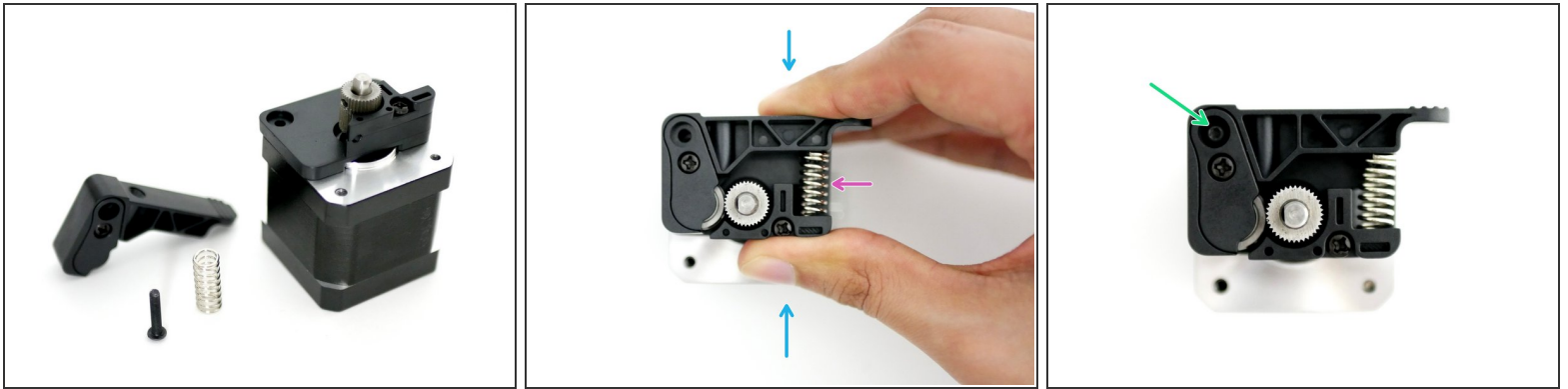
- Coupling Mount
- Back Plate
- Idler Arm
- Drive Gear
- Extruder Spring

### Step 3 — Backplate and Drive Gear



- Fix the backplate to the motor with an M3 x 6mm bolt
- Fix the drive gear onto the shaft of the motor.
  - Tighten the set screw onto the flat of the motors shaft.
- Make sure the drive gear is aligned with the filament path holes on the backplate like shown in the second image.

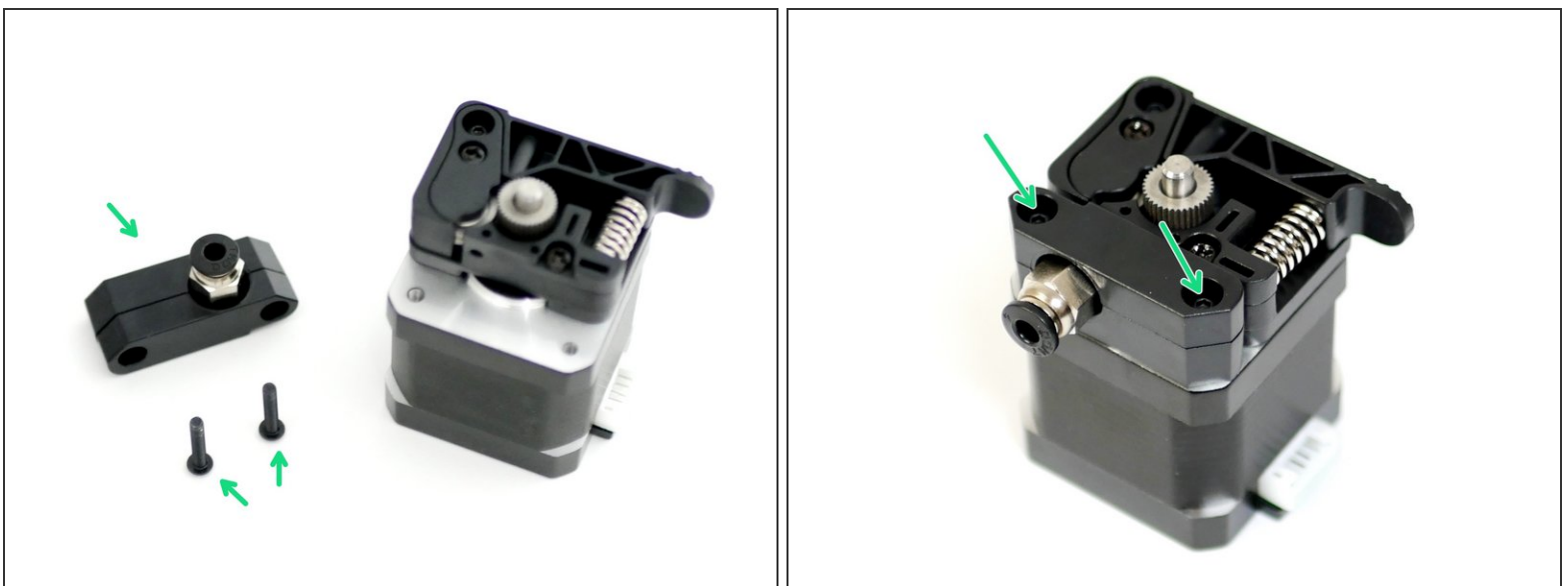
## Step 4 — Idler Arm



**i** Take the Idler arm, Spring and M3x16mm bolt.

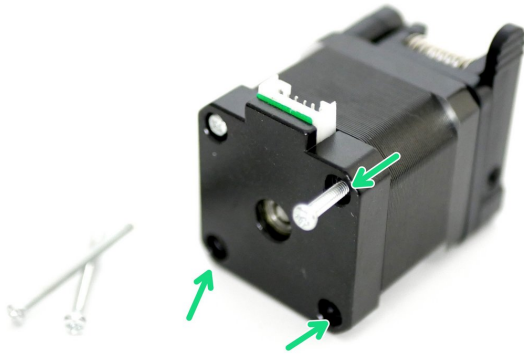
- Place in position the Extruder Spring on the Back Plate.
- Compress the spring with the Idler Arm as shown in the second image.
- Drop in a M3 x 16mm bolt like shown in the third image.
- Tighten down the bolt.
- ⚠ Do not over tighten, the arm should still be able to pivot.

## Step 5 — Coupling Bracket



- Fix the Coupling Bracket onto the motor with two M3 x 16mm bolts.

## Step 6 — Mounting the Extruder



- Remove three of the four bolts from the rear of the motor.
- ⓘ Depending on your mounting solution use three longer bolts to mount the extruder to your frame.