

railcore

H) Z Motors and Leadscrews

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**TOOLS:**

- [Allen Key](#) (1)

**PARTS:**

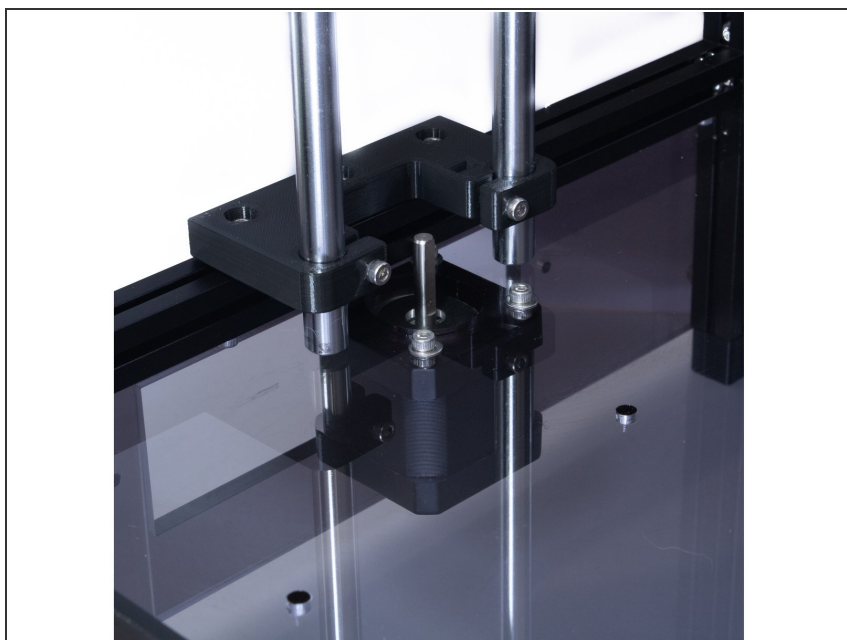
- [Nema17 Stepper Motor \(0.9 Degrees\)](#) (3)
- [130mm Leadscrew](#) (3)
- [M5 / M8 Leadscrew Coupler](#) (3)
- [Anti-BackLash Nut](#) (3)
- [M3 x 10 Socket Head Screw](#) (24)
- [M3 Washer](#) (12)

Step 1 — Thread Anti-Backlash Nuts on Leadscrews (x3)



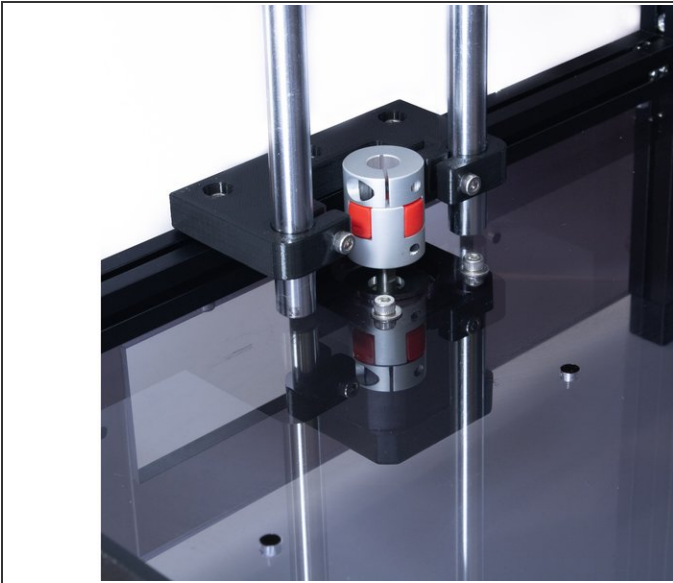
- Compress the anti-backlash nut and thread it onto the leadscrew. Once the threads are fully through the nut, release the tension on the spring.
- Thread the nut half way up the leadscrew.

Step 2 — Install Z Motors (x3)



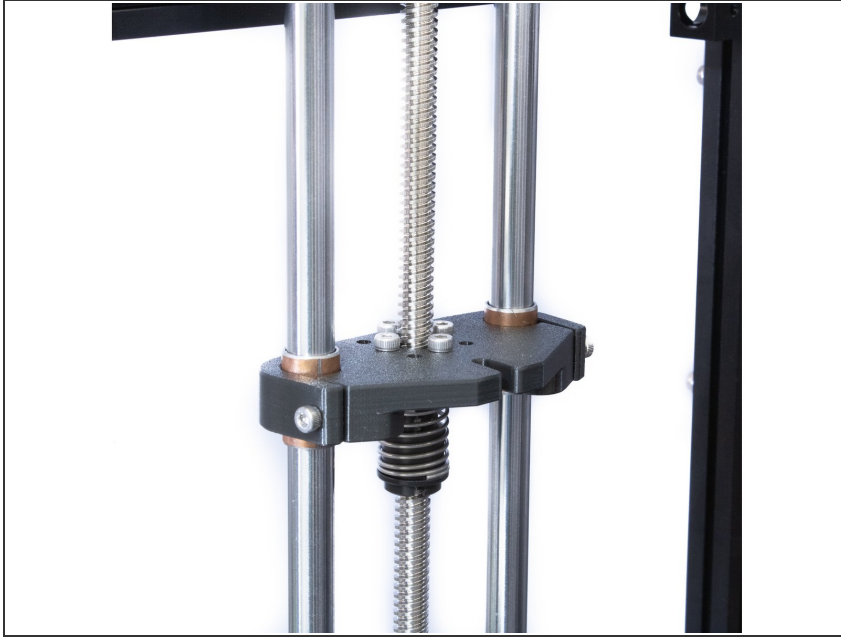
- Using (4) M3 x 10 socket head screws and (4) M3 washers attach the stepper motor to the base.
- ⓘ For easy cable management later, point the cable plugs toward the rear of the machine.
- ⚠ If your Z towers are still loose, make sure they are centered over the mounting holes for the stepper motors before installing the motors.

Step 3 — Install Leadscrews (x3)



- Slide the small side of the coupler on the stepper shaft and tighten the set screw on the bottom half.
- Raise the Z yoke and slide the leadscrew up through the yoke.
- Set the leadscrew in the top half of the coupler and tighten the set screw.
- Slide the yoke half way down the Z tower so it is flush with the top of the anti-backlash nut.

Step 4 — Tighten Z Yokes to Anti-backlash Nuts (x3)



- Using (4) M3 x 10 socket head screws, attach the Z Yokes to the anti-backlash nuts.
- If your Z towers are still loose, or not aligned with the leadscrew, now is the time to align and tighten them.
- ① Turn the coupler by hand to make sure the yoke move freely.

⚠ Be careful when tightening the screw attaching the yokes to the anti-backlash nuts. POM will easily strip if you are not careful.