



ENDER ALUMNI *WORKFLOW*

Maintenance

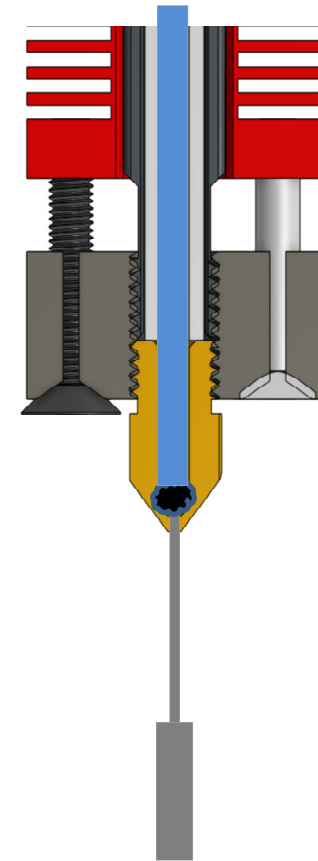
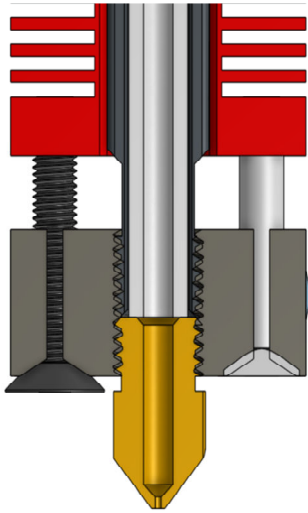
October 2023

T&P list: Nozzle, Belts, Cams, Gear, IPA



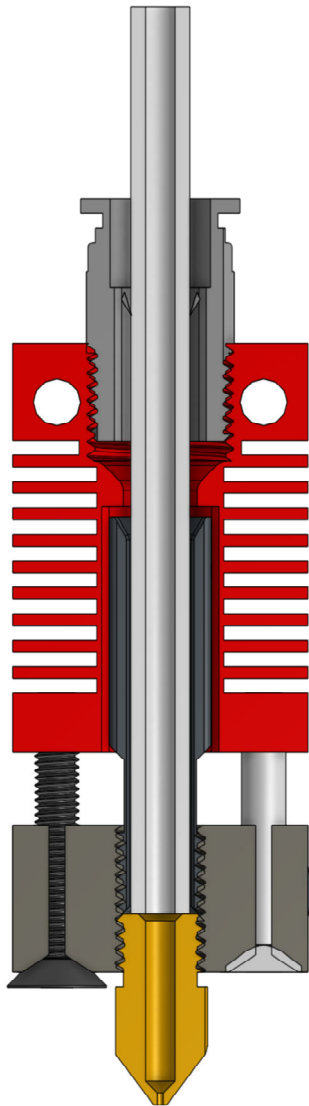
Cleaning Nozzle Workflow

1. Heat Hot End (Prepare/Prepare PLA/End)
2. Hold 0.4 reamer to nozzle to heat
3. Find hole and dislodge gunk
4. Remove reamer
5. Feed out filament to purge





Replace Nozzle Workflow

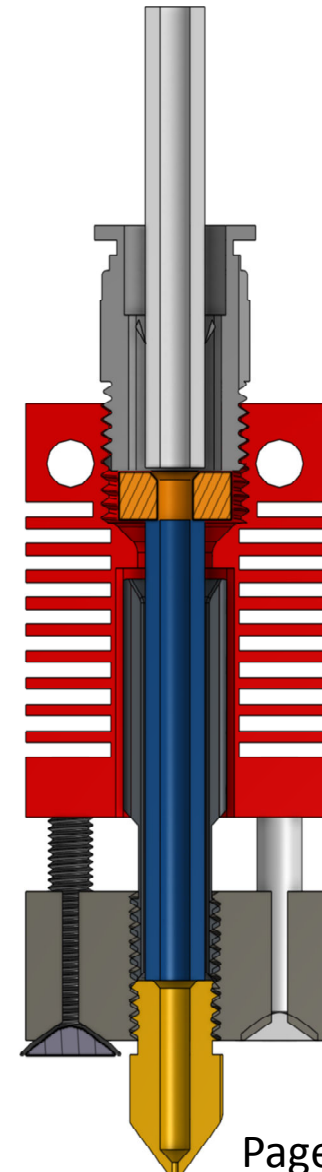
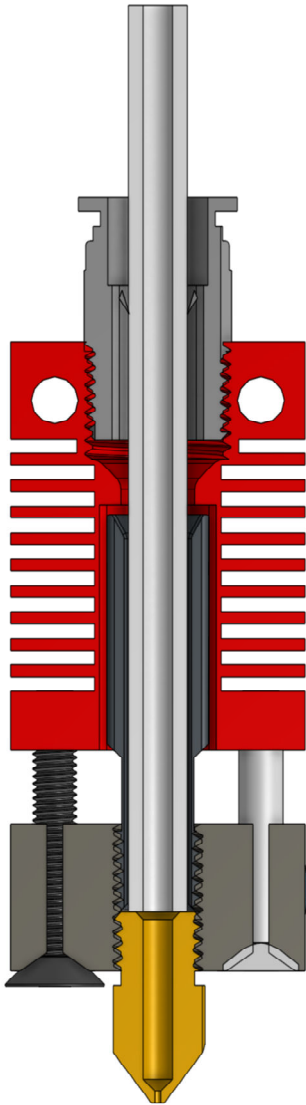


1. Heat Hot End (Prepare/Prepare PLA/End)
2. Remove filament
3. Remove Nozzle
4. Unlock Pneumatic fitting collar
5. Push PTFE tube to release and remove
6. Inspect
7. Remove pneumatic fitting
8. Brush out bore
9. Mount nozzle
10. Back off 1/8 turn
11. Replace Pneumatic fitting
12. Push filament all the way down to nozzle
13. Tighten nozzle 1/8 turn
14. Insert blue clip on pneumatic fitting
15. Load filament
16. Prepare/Move Axis/Extruder/10mm (pump out filament)
17. Measure diameter of output should be .47 to .59 mm



Capricorn Nozzle Fix Workflow

1. Heat Hot End (Prepare/Prepare PLA/End
2. Remove filament
3. Remove Nozzle
4. Unlock Pneumatic fitting collar
5. Push PTFE tube to release and remove
6. Inspect
7. Remove pneumatic fitting
8. Brush out bore
9. Mount nozzle
10. Measure Depth
11. Determine Capricorn length & Cut (Square!)
12. Insert Capricorn
13. Insert spacer
14. Loosen Nozzle 1/8 turn
15. Insert pneumatic fitting to compress spacer and Capricorn
16. Tighten Nozzle 1/8 turn
17. Shorten original PTFE tube by Capricorn and spacer
18. Insert PTFE tube
19. Reload filament
20. Test Extrude





Belt Tension 3 opinions



We found the BEST belt tension for 3D printers

youtube.com/watch?v=gB8m6_eGShs

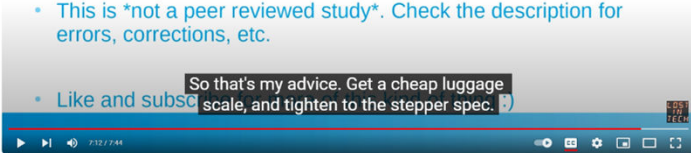


3D Printer Belt Tension Effects on Creality Ender 3

youtube.com/watch?v=_m9TTzEh5xM&t=3s

Conclusion

- Also bear in mind tuning to a frequency requires you to know the span length.
- You can use displacement if you have enough displacement, the gates guide for how.
- This is **not a peer reviewed study**. Check the description for errors, corrections, etc.
- Like and subscribe. So that's my advice. Get a cheap luggage scale, and tighten to the stepper spec.



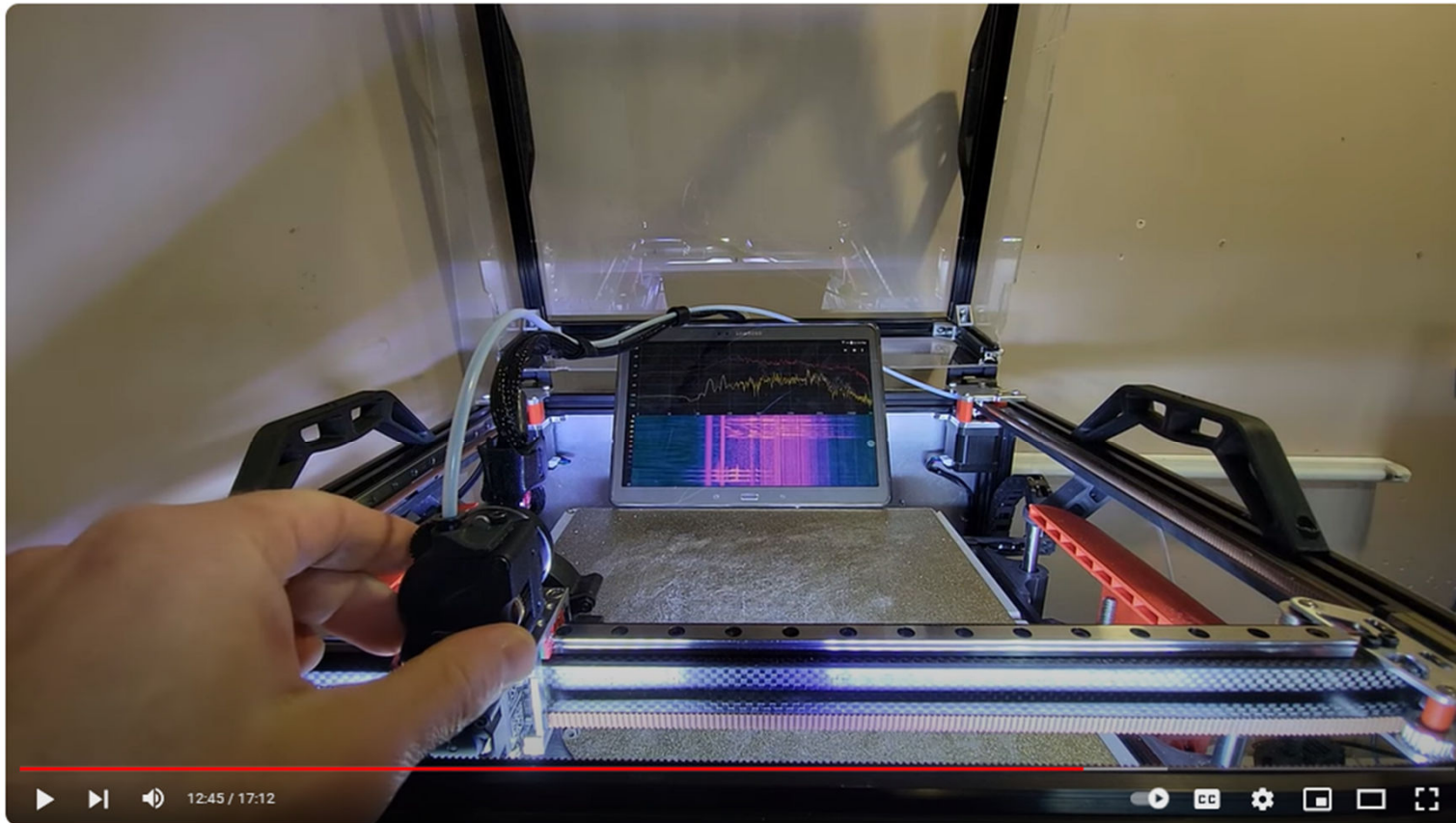
I know what the correct 3D printer belt tension is! Let me explain what it is and how to set it!

youtube.com/watch?v=zoKmmT0a7jk



Belt Tension "Tuning"

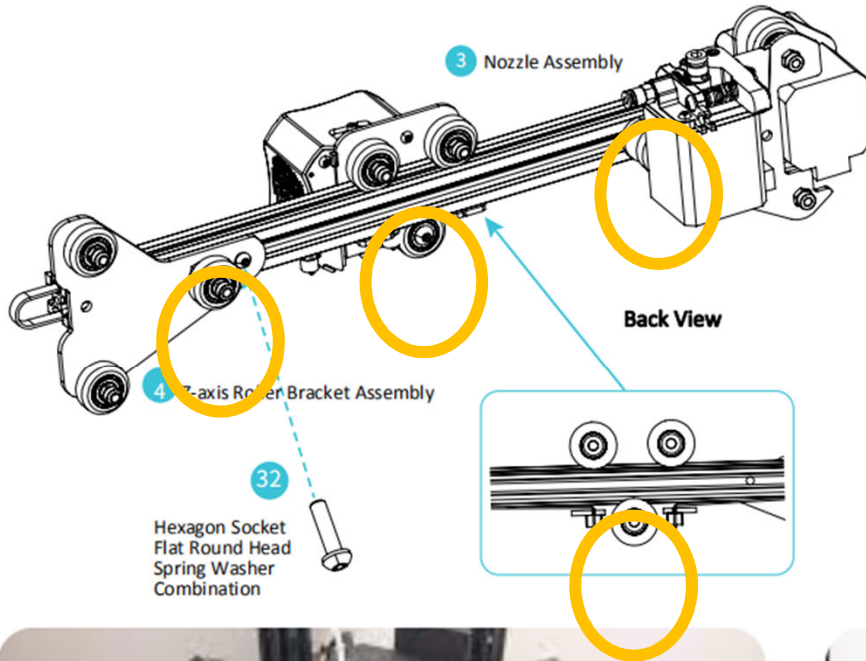
youtube.com/watch?app=desktop&v=qNMxW6MUV5E



VzBoT belt tensioning



Cam Roller





Hobbed Gear chewing





Paul's RoT: Every print

Wear resistant and scratch resistant, easy to clean

After using for several times, the platform will be clean by using alcohol or acetone

