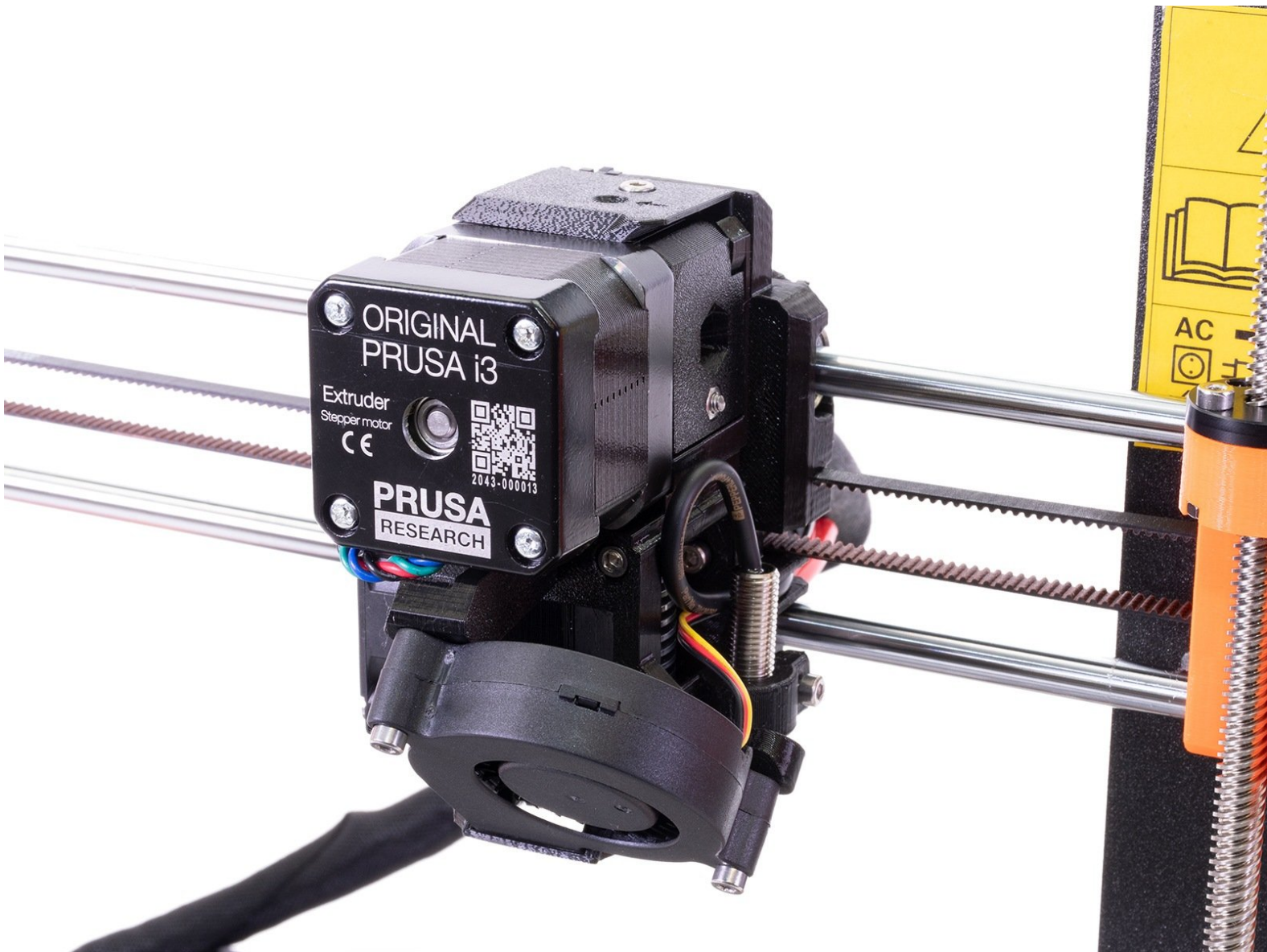




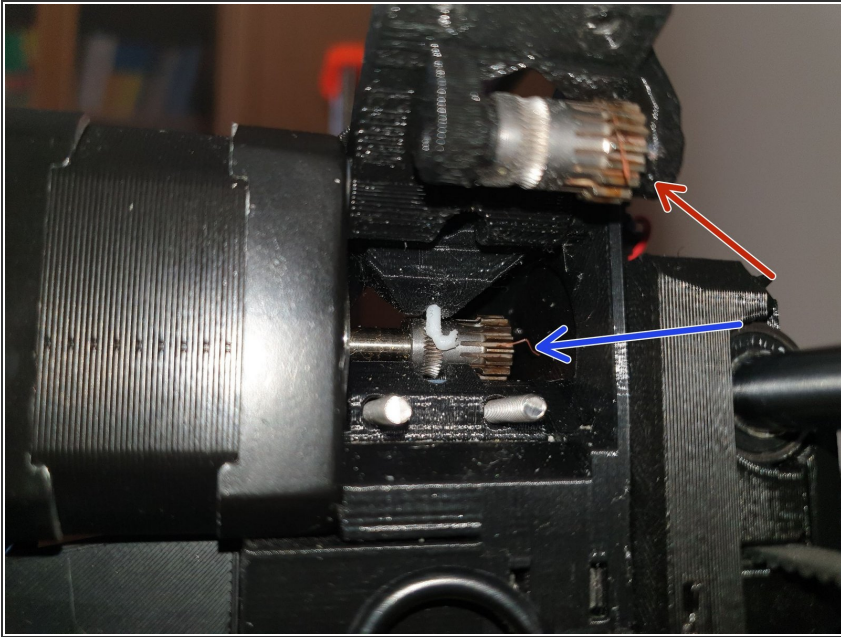
Extruder Maintenance

Maintenance on the extruder of the Prusa i3 MK3s+.

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Step 1 — Cleaning the extruder driver gears



- The MK3/S/+ printers are equipped with two Bondtech gears, made of hardened carbon steel.
- One is the pulley gear, secured on the extruder's motor shaft by a set screw.
- The other is the idler gear, which spins freely mounted on the idler door.
- Open the Extruder idler door by releasing the screw(s) on the left side of your extruder.

⚠ Be sure to cover the PTFE tube to avoid any debris falling in. You can use a cotton swab - it will reliably cover the tube without damaging it). After you're done cleaning, give it a good puff of air to clear any remains, while the PTFE tube is still covered.

- Both hobbed gears can have a build-up of filament shavings stuck in the grooves. Using a brass brush, clean what you can, then rotate the gear a few degrees and repeat until you do a full turn. They can also be cleaned one at a time using the acupuncture needle that comes with the printer.

- The gears can be covered by rust. There is no need to worry. The gears themselves should not be damaged. Remove any problematic bits of filament and clean them with a brush.

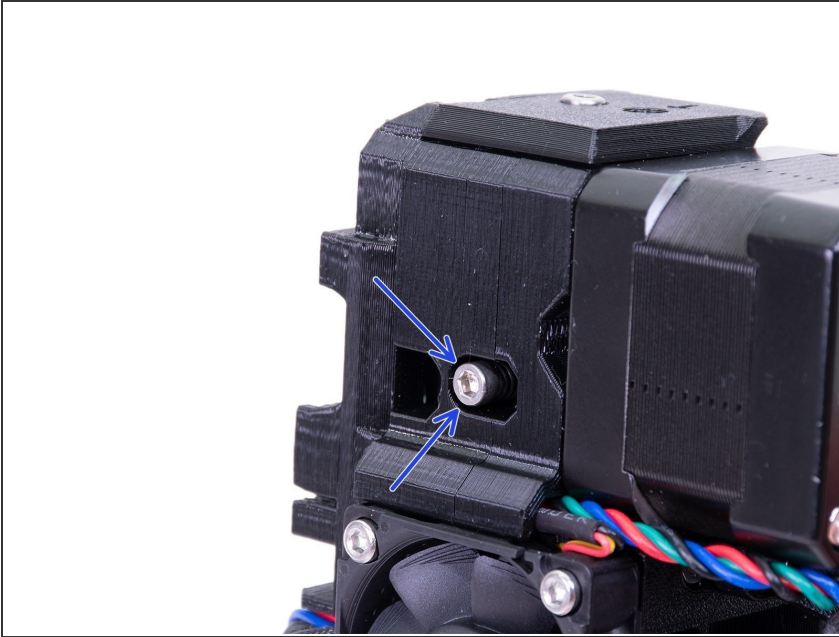
Step 2 — Lubricating the extruder driver gear



- Apply a tiny amount of the grease only to the teeth protruding outwards from the gear.

⚠ Make sure that the lubricant never gets in contact with the filament teeth.

Step 3 — Correct the idler tension



- The idler screw should be about flush to protruding 0.5 -1 mm with the plastic part when the filament is not loaded

Step 4 — Clean fans of debris



- Use tweezers to pull any debris or plastic strands in the hotend fan and part cooling fan.
- Compressed air can be used to clean off any small debris or dust.

⚠ Hold the propeller of the fan to prevent it from spinning while cleaning it with canned air. Otherwise, it can get damaged.

Step 5 — Run cleaning filament



- Unload any filament from the printer.
- At the printing temperature of the previously loaded filament, load cleaning filament until the printer extrudes it cleanly.
- Unload the cleaning filament.
- New filament can now be loaded.

 **Cooldown the printer if not in use.**

Please remember to log this task when complete by

- Initialing the printer checklist, and
- Filling the printer maintenance Airtable form. This can be accessed by scanning the QR code on top of the printer power supply.