



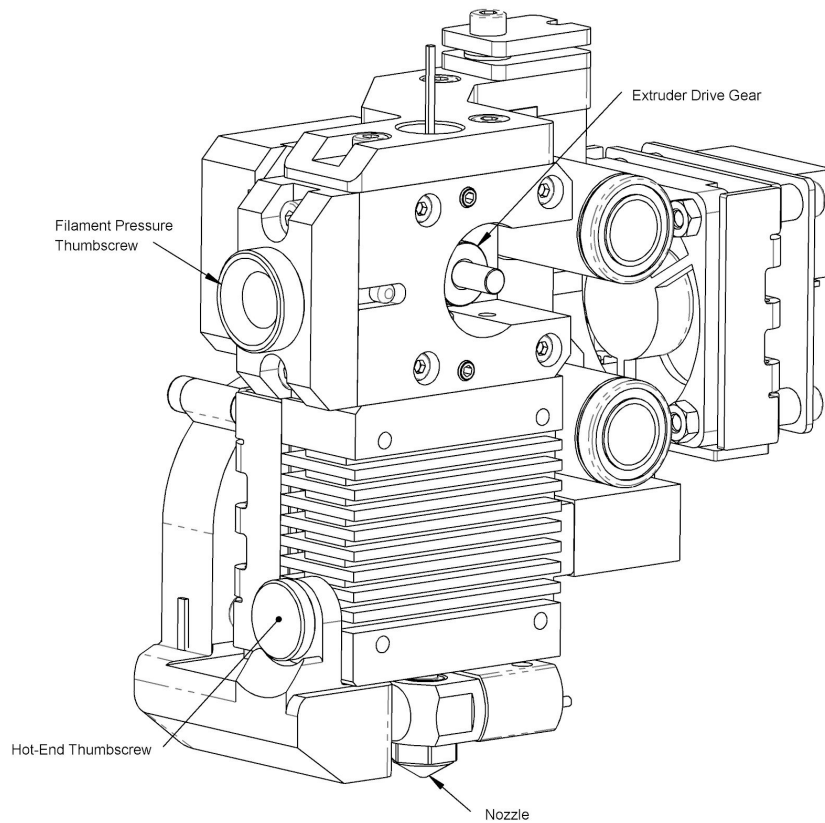
Title	Cleaning Extruder Drive Gear
Models	Bolt, Bolt Pro
Version	1.0
Revision date	
Expected duration	10 minutes

Description
<p>This manual explains how to properly clean the extruder drive gear of a Leapfrog Bolt and Bolt PRO. The extruder gear is mounted on the extruder motor and is used to move the filament through the printhead.</p> <p>Dirt or filament remains can build up / stick to the extruder drive gear. This negatively affects the performance of your printhead as the remains result in reduced grip on the filament of your extruder causing movements to become less accurate / start slipping.</p>

Guideline
<p>This manual will explain step-by-step how to properly clean the extruder drive gear.</p> <p>The same procedure can be applied for the left and right printhead. This manual will focus on just one printhead.</p> <p>Please clean your extruder drive gear regularly using the guidelines from the maintenance manual.</p> <p>Before starting the procedure, we recommend to first read all the steps.</p>

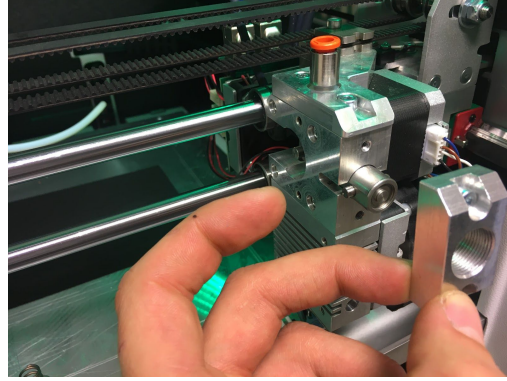
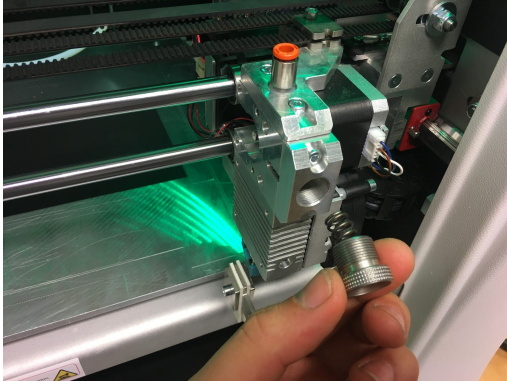
Tools
Allen key: 3
Brush (Yellow-Brush Leapfrog Toolkit)

Step 1 Preparation



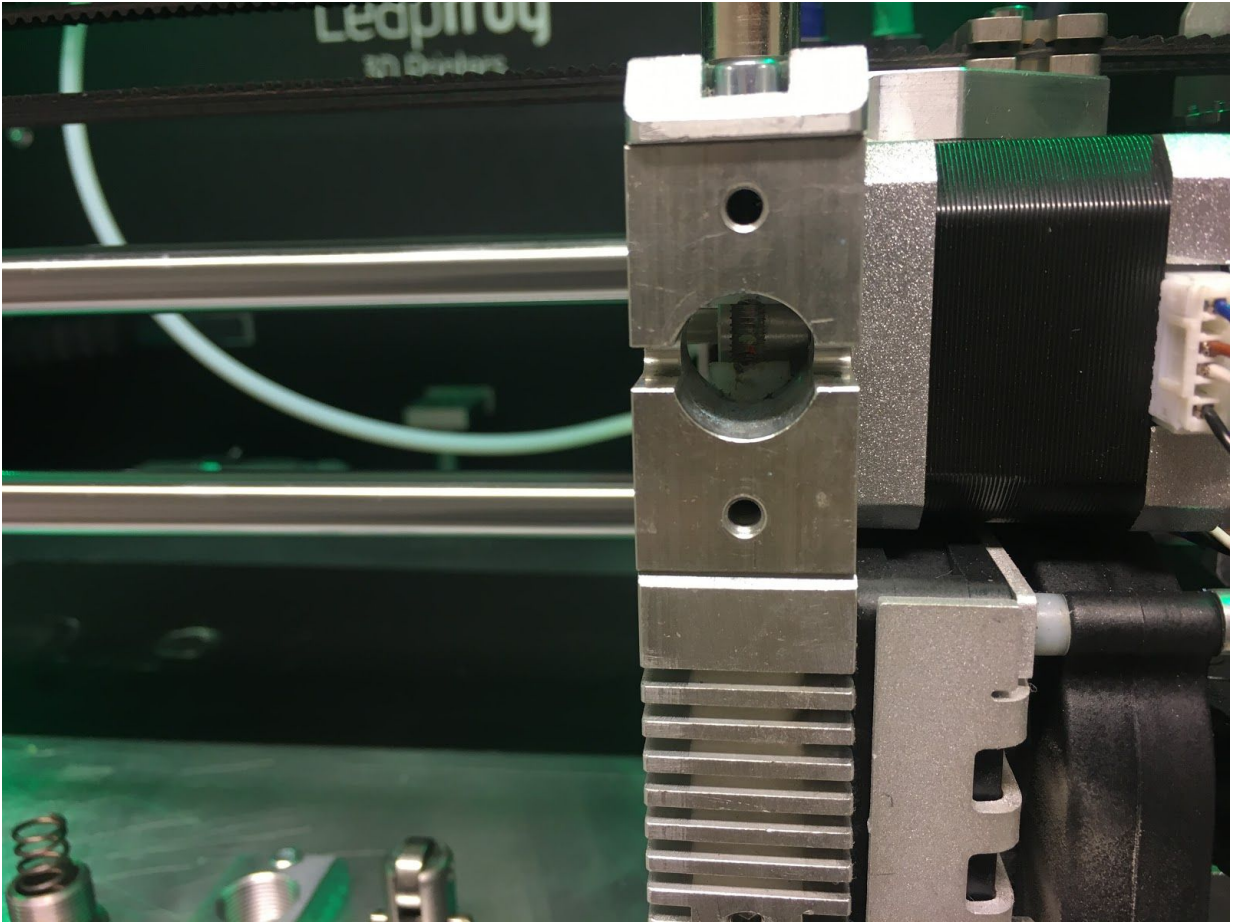
a	Remove any filament from the printhead of which the extruder drive gear will be cleaned.
b.	Make sure the printer is turned of and at room temperature.

Step 2 Gaining access to the extruder drive gear



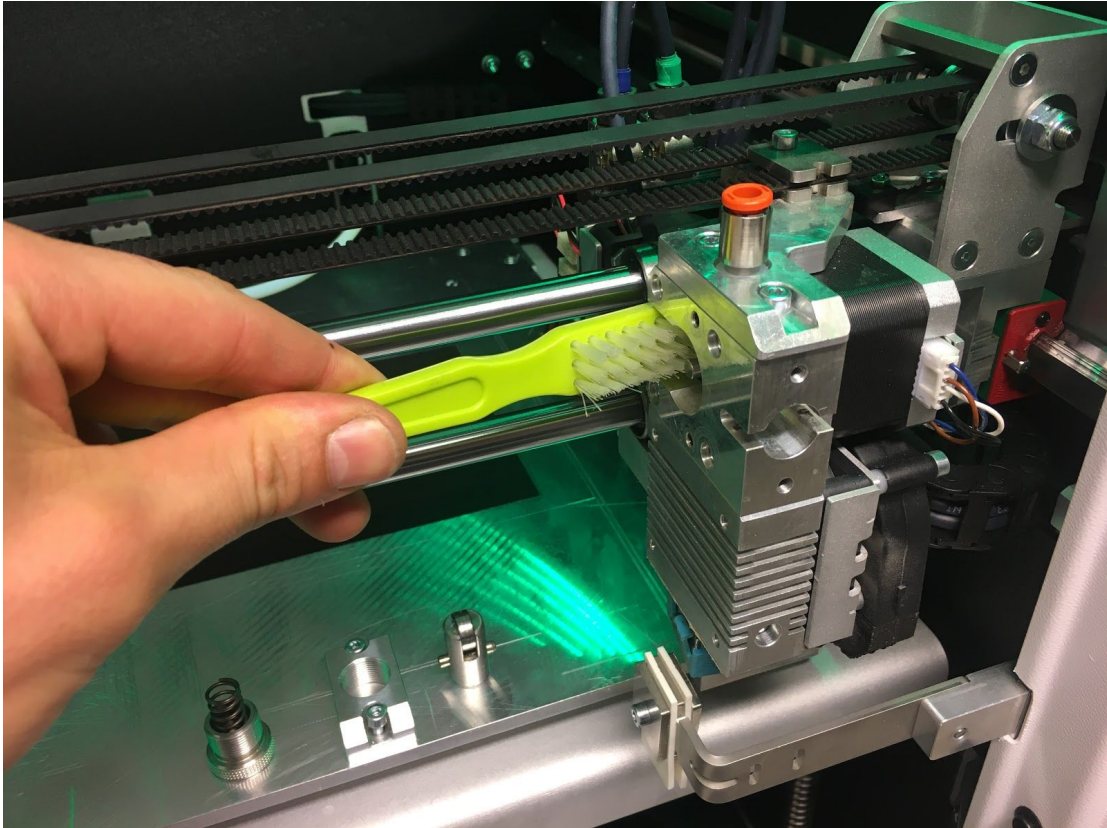
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| a. | Remove the filament pressure thumbscrew and it's inner spring by rotating it anticlockwise. |
| b. | Remove the housing of the filament pressure thumbscrew after first removing the 2 hexagon M4 Bolts. |
| c. | Remove the cylinder that is located behind the filament pressure thumbscrew. |

Step 3 Visually inspection of the extruder drive gear.



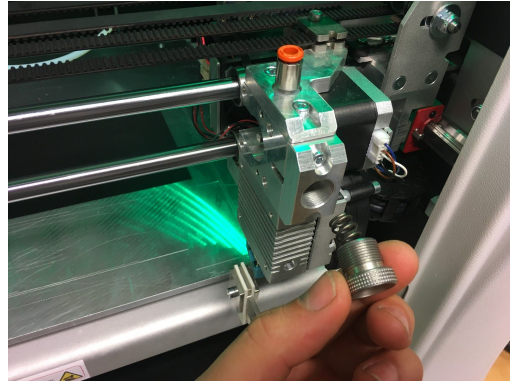
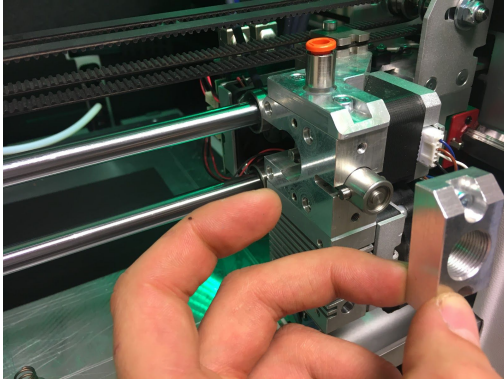
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| a. | Visually inspect if the extruder drive gear contains dirt or filament remainings. (the extruder drive gear may be manually rotated) |
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Step 4 Cleaning the extruder drive gear



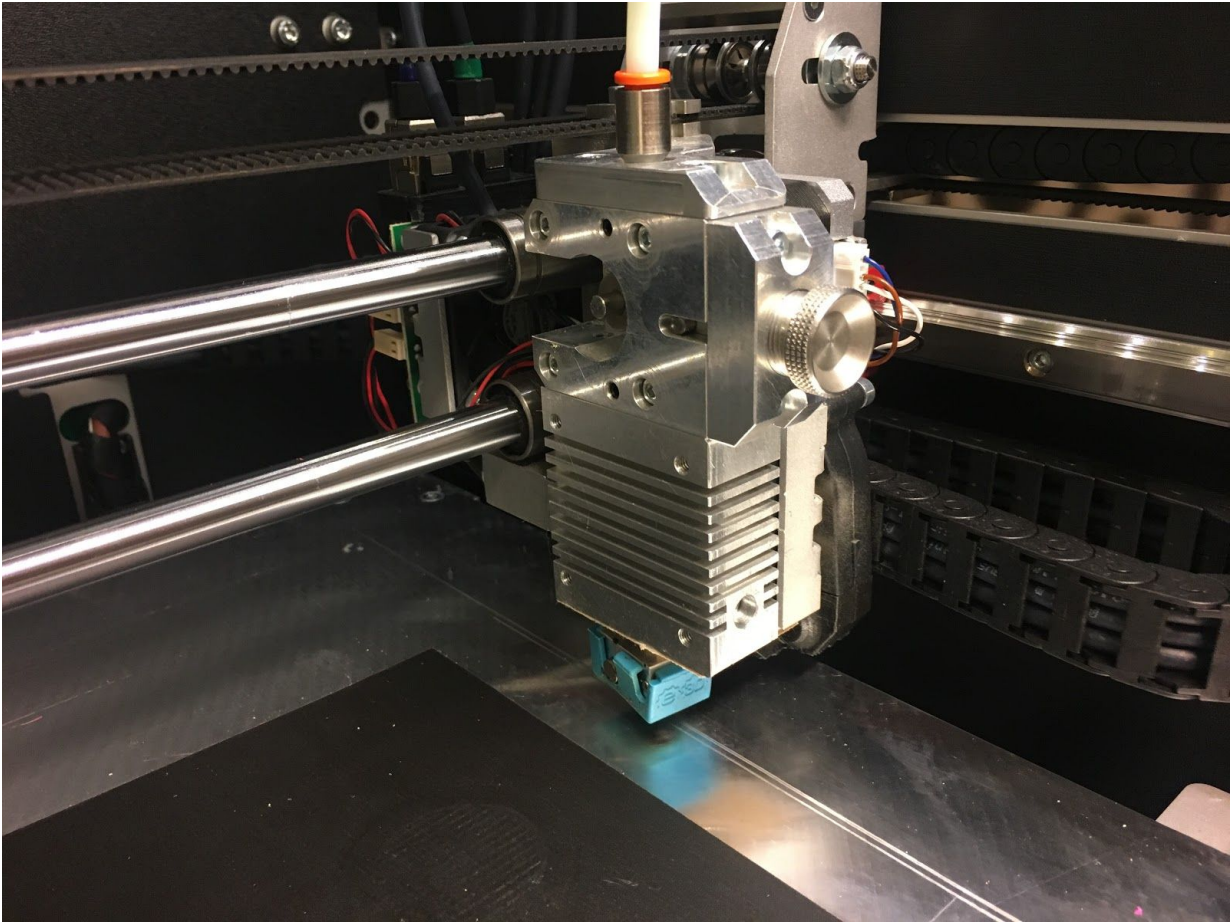
- a. Use the brush to remove dirt / filament remainings from the extruder drive gear. (the extruder drive gear may be manually rotated in order to access all areas)

Step 5 Re-assemble the filament pressure mechanism.



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| a. | Place the cylinder that is located behind the filament pressure thumbscrew. |
| b. | Place the housing of the filament pressure thumbscrew after first removing the 2 hexagon M4 Bolts. |
| c. | Place the filament pressure thumbscrew and it's inner spring by rotating it clockwise. |

Step 6 Final step



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| a. | Make sure the filament pressure thumbscrew is set to the correct tension before starting your next print. The correct tension can be found in the Technical Data Sheet (TDS) for your filament. |
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