



Z9V5 Linear Rail Upgrade Kit Installation Guide



Do not slide the slider out of the linear rail, otherwise the balls will slide out of the slider and damage the slider.



Parts

5/27/2023 readme.md



- 1. linear rail with slider 2. Y carrier(right) 3. Y carrier(left) Carrier Metal sheet
- 5. Idlers Screws

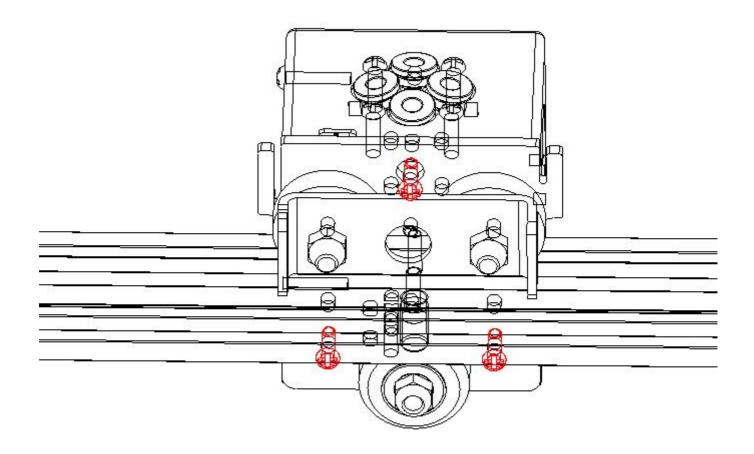
- 6. Belts

- 4. X
- 7. 10x10 square nut 8.

Installation

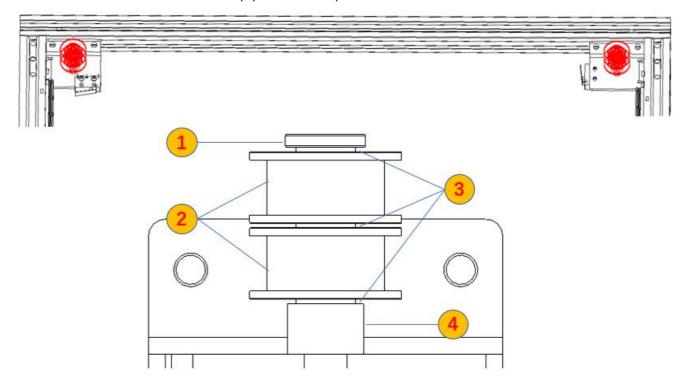
1. Take down the hot end (print head) from the X carrier.

Loosen the screws which fixed the print head on the X carrier and take down the print head.



- 2. Remove the belts.
- 3. Replace idlers.

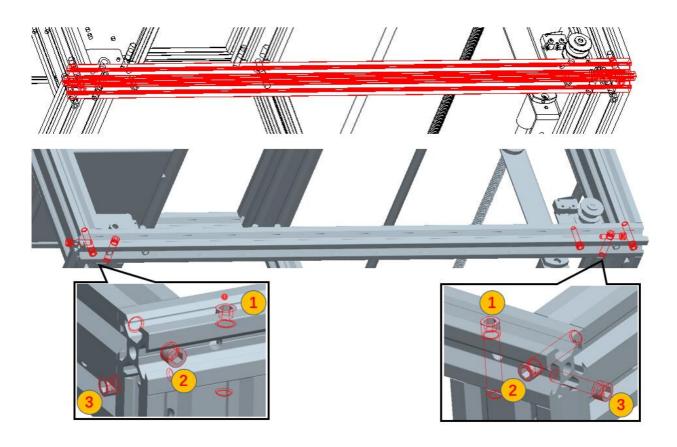
Take down the idlers from the front-top profile and replace with the new idlers.



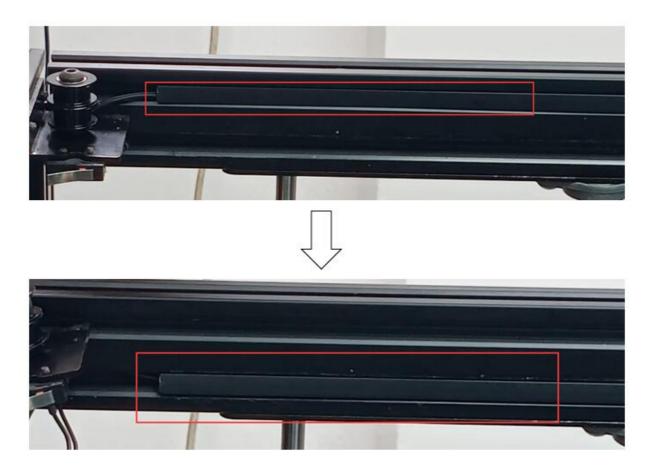
- Screws (use the original one)
 (use the orignal one)
- 2. New idler wheels
- 3. New shim 4. Pole

4. Take down the front-top profile.

Remove the screws shown on picture below to take down the front-top profile. **Note**the screw shown in Figure 3 only exists in the nearest Z9V5.

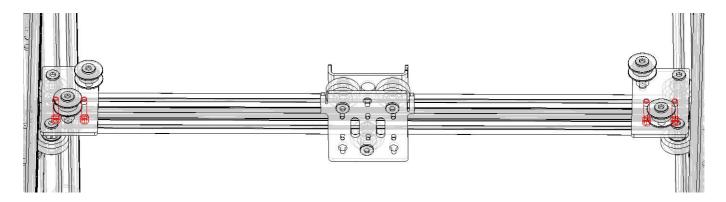


- 5. Take down the X axis assembly.
- 6. Move the wires of X and Y ENDSTOPs from the top groove to the bottom groove of Y profiles.



7. Remove the original X and Y carrier from X axis assembly

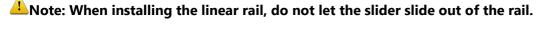
7.1 Take down the 4 screws which fixed the Y carriers to X profiles

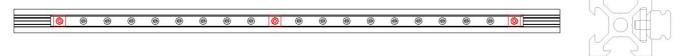


7.2 Take down X carriers from X profile.

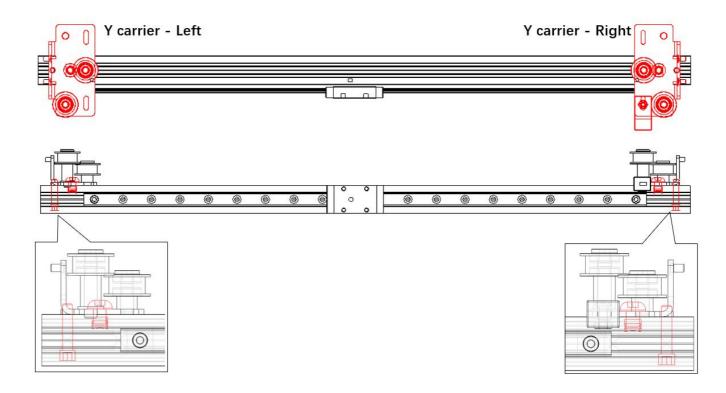
8. Install a linear rail to the X profile.

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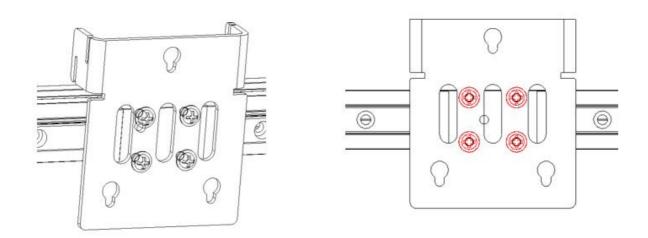


- Fix 3 screws and square nuts to the linear guide rail.
- Slide the linear guide rail from one side of the X profile, and place the square nut in the groove of the profile.
- Roughly align at the middle of the linear rail and the X profile (deviation of 1-2mm is not related), and then fix the screws.
- 9. Install the new Y carriers (left and right) to the X profile.

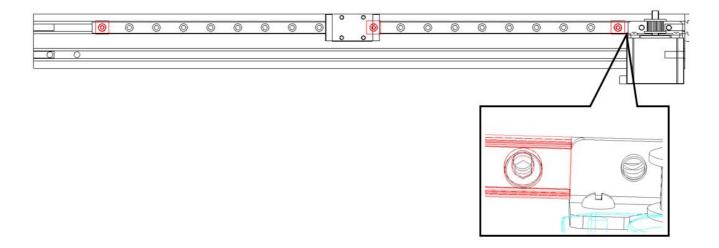


- Pay attention to differentiation left and right Y carrier, there is a plastic print on the right Y carrier.
- The carrier is fixed by a M4 screw that has been removed from the bottom and a M5 screw with boatnut installed on the sheet metal rom the top. When fixing the boat-nut, first rotate the screws counterclockwise for 2-3 turns, and then tighten by rotating clockwise. Do not tighten the screws too tightly at this step.

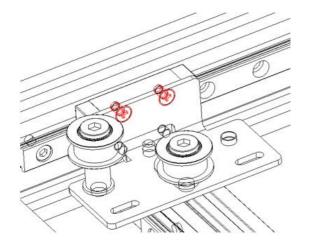
10 Install X carrier metal sheet to the silder of X linear rail.

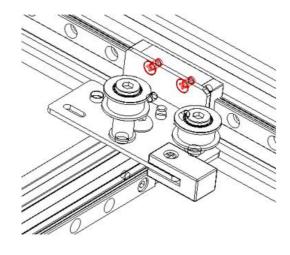


11. Install linear rails to Y profile



- Fix 3 screws and square nuts to the linear guide rail
- Slide the linear guide rail from one side of the Y profile, and place the square nut in the **top groove** of the Y profile.
- Move the linear rail to the innermost of the Y profile (touched to the motor metla piece), and then fix the screw.
- 12 Reinstall the top-front profile back.
- 13 Install the X axis assembly to the sliders of Y carrier.





- 14. Install belts
- 15. Install the hot end back.