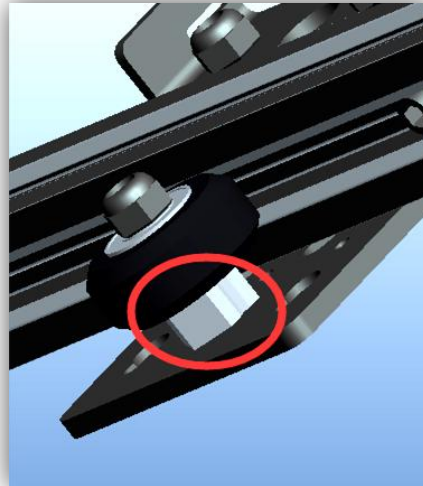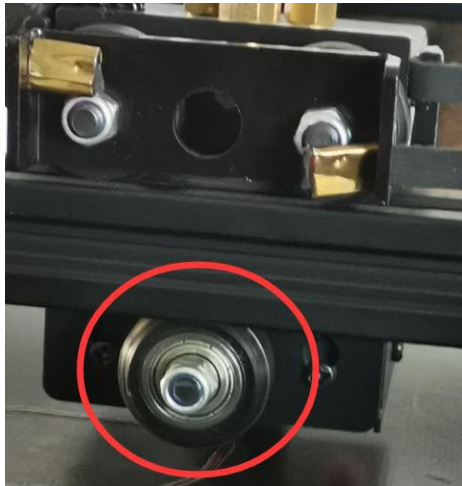# How to deal with the Bed level issue for Z9V5

First and Foremost:

1. The z-axis system of Z9V5 is well designed, and the Z9V5pro uses a glass hotbed, so there is no need to apply the automatic leveling feature if you have fine tuned it.

2. If the hot bed is enough level without auto leveling, don't use bed auto leveling feature, Bed automatic leveling may reduce the printing quality and increase the printing time.

Step 1: Fine tune the X-axis:

- For **Z9V5**, the uneven hot bed is more likely due to the fact that the wheels of X-Carrier does not hold the track well, it will cause the inconsistent height of the print head (HOTEND) when moving left and right, use a a wrench to adjust the eccentric column, so that **the X carrier can move smoothly, but do not shake**

How to deal with the Bed level issue for Z9V5

Step 2: Manual Level:

1 Do "Auto Home">>, wait the hotend go to the orig position.
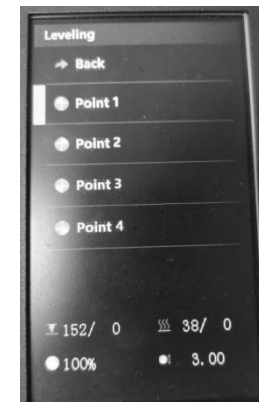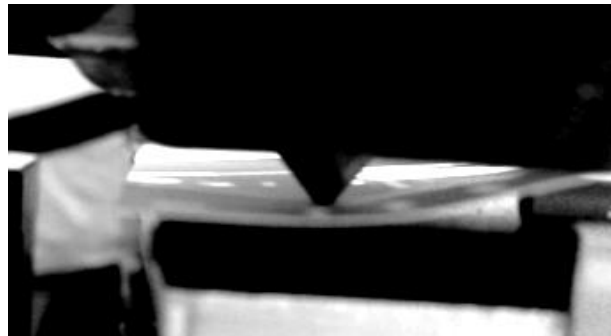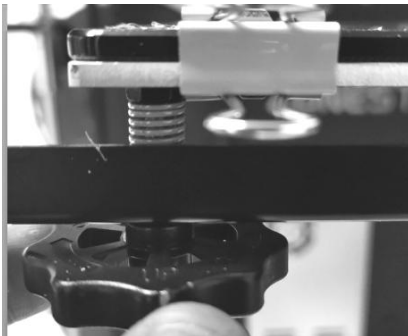
2 Watch the nozzle and make sure the nozzle is higher than the bed about 1mm, otherwise tighten the hand nuts under the bed to pull down the hotbed or loosen these nuts to move up the bed.

3 **Z9V5**: Choose "Motion">> "bed leveling">> "Level Corners",
Z9V5Pro: Choose "Prepare">> "bed leveling">> "Point 1(2/3/4)",
the nozzle will go to the corners of the bed, adjust the hand nuts under the hotbed, let the nozzle almost touch the hotbed. In order to get a properly distance, you can put a A4 paper on the hotbed, and when the distanse between the nozzle and hotbed can only insert a paper, it is perfect.
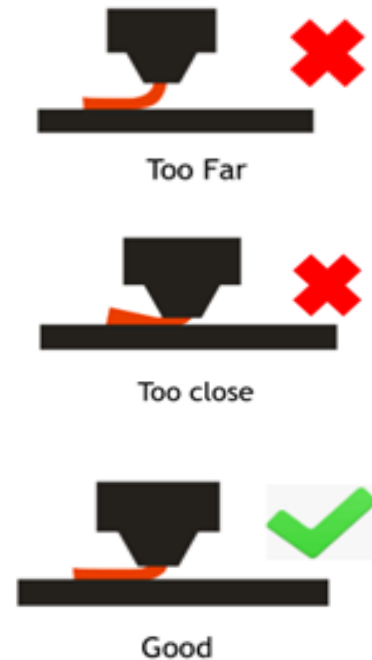
4 Choose the next corner, and adjust again. Repeat these steps again and again, until all of the four corner at the same height.

Step 3: Printing test

- For **Z9V5Pro(With glass bed)**, you can copy "level_test_310.gcode" to the SD card and start to print , when the printer start to print the first layer, you can press the knob twich within 1 second on the "Tune" ICON to call out a "**babysteps**" popup menu, and then rotate the knob to fine tune the height of Nozzle.

- For **Z9V5(Without glass bed), please go to step 4**

Step 4: Bed auto levling

- Please refer to "Auto leveling feature user guide.pdf" to do bed auto leveling.