ZONESTAR

How to Adjust Z offset and level the hotbed

Ver: 1.0

Prepare

1 If your printer has 2 Z-axis motors, please set left and right side to the same height.

2 Clean nozzle and bed: make sure there aren't any filament at the end of nozzle, if not, remove it by a diagonal pliers, and then clean the bed.

3 Tighten the screws under the bed, let the hotbed to the lower position.

4 If there is a "z offset adjusting screw" on the carrier of Z axis, or the Z ENDSTOP is movable at different height, please refer to page 3 to adjust the "Z offset adjusting screw" or move the Z ENDSTOP installation position to set the Z offset first.

> Corresponding Printer Model:
> P802C, P802N, P802Q, M8, D805S, D806, Z5, Z6, Z8X, Z9

5 For some new printer made by zonestar, the Z endstop is fixed and there isn't "Z offset adjusting screw", you can set the Z offset in Menu, please refer to page 4 to set the Z offset.

> Corresponding Printer Model:
> Z10

Debug Z axis height

**1**   Power off, move the nozzle to above of the center of hot bed by hand.

2   Move down the hot end or move up the bed by rotating the coupling of the Z-axis motor until the nozzle is closer the bed (about 1mm heigher than the bed，please ensure that the left and right side are placed at the same height.).

3   Adjust the "Z offset adjusting screw" or move the Z endstop, let the Z ENDSTOP can be triggered (switch to ON from OFF) in this height.
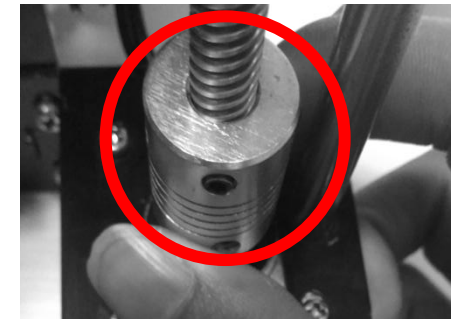
4   Goto page 5 to level the bed.
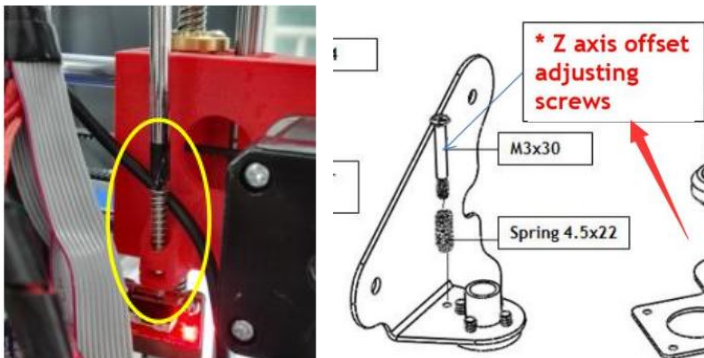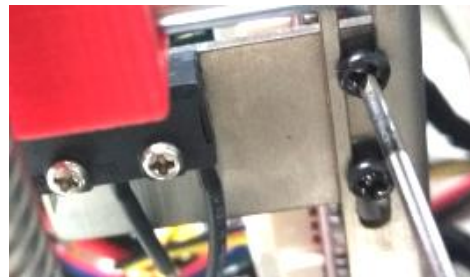
Adjust the "Z offset adjusting screw"   Adjust the "Z endstop"   Rotate "Z motor coupling"

Set Z Offset on LCD Menu

1 Choose "Prepare">> "Auto Home">>, wait the hot end go to the orig position.

2 Choose "Prepare">> "Move axis">>"Move Z">>"Move 10mm",Move Z-axis，Make the nozzle higher than the bed.

3 Choose "Prepare">> "Move axis">>"Move X" or "Move Y">>"Move 10mm",Move X-axis and Y-axis，let the nozzle to the middle of the bed.

4 Choose "Prepare">> "Move axis">>"Move Z">>"Move 0.1mm",Move Z-axis，let the nozzle touch the bed. Remember this hight of Z-axis (e.g: -2.3)

5 Choose "control">> "Motion">>"Z offset",modify this value, the new value = The current value - The value you remember just now. (e.g: new value = -10.00 - (-2.30) = -7.70)

6 Return to"control",then click "Store Settings"

| Main | Move axis | Auto home | Home X | Home Y |

| Main | Move axis | Auto home | Disable steppers | Preheat PLA |

| Control | Z Offset: -10.00 | Velocity | Acceleration | Jerk |

| Main | Temperature | Motion | LCD contrast: 64 | Store settings |

Home all axis → **Move to the middle** → **Set Z offset** → **Store Settings**

4

Level the bed

**1** Choose "Prepare">> "Auto Home">>, wait the hotend go to the orig position.

2 Choose "Prepare">> "Level Corners">>, the nozzle will go to the first corner, adjust the hand nuts under the bed, let the nozzle almost touch the bed. In order to get a properly distance, you can put a A4 paper on the bed, and when the distanse between the nozzle and bed can only insert a paper, it will be perfect.

3 Choose "next corner", and adjust the screw under the nozzle. Repeat this step again and again, until all of the four corner at almost the same height.

4 After started to print, double click the knob of LCD menu and set the "babystep z" if the distance is not perfect, let the filament can stick on the bed well.
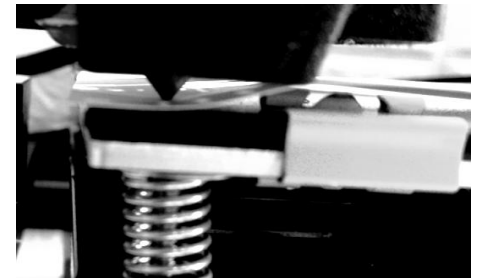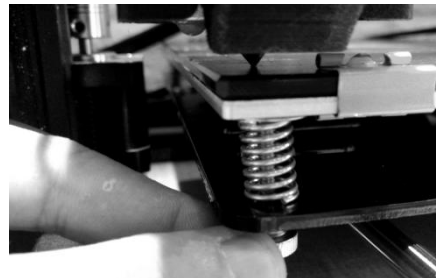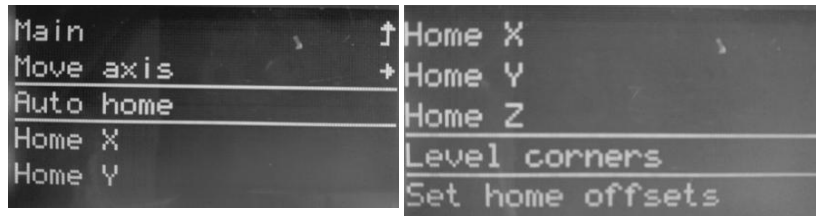
| Home all axis | Start "level corners" wizard | Adjust bed height | put a paper on the bed to measure the height |