

Maintenance for 3D printer

3D printer is high-precision equipment, the precision will be influenced if you disassemble the nozzle, so you need adjust and position of the Z end-stop and the spring of the hotbed again.

Calibration

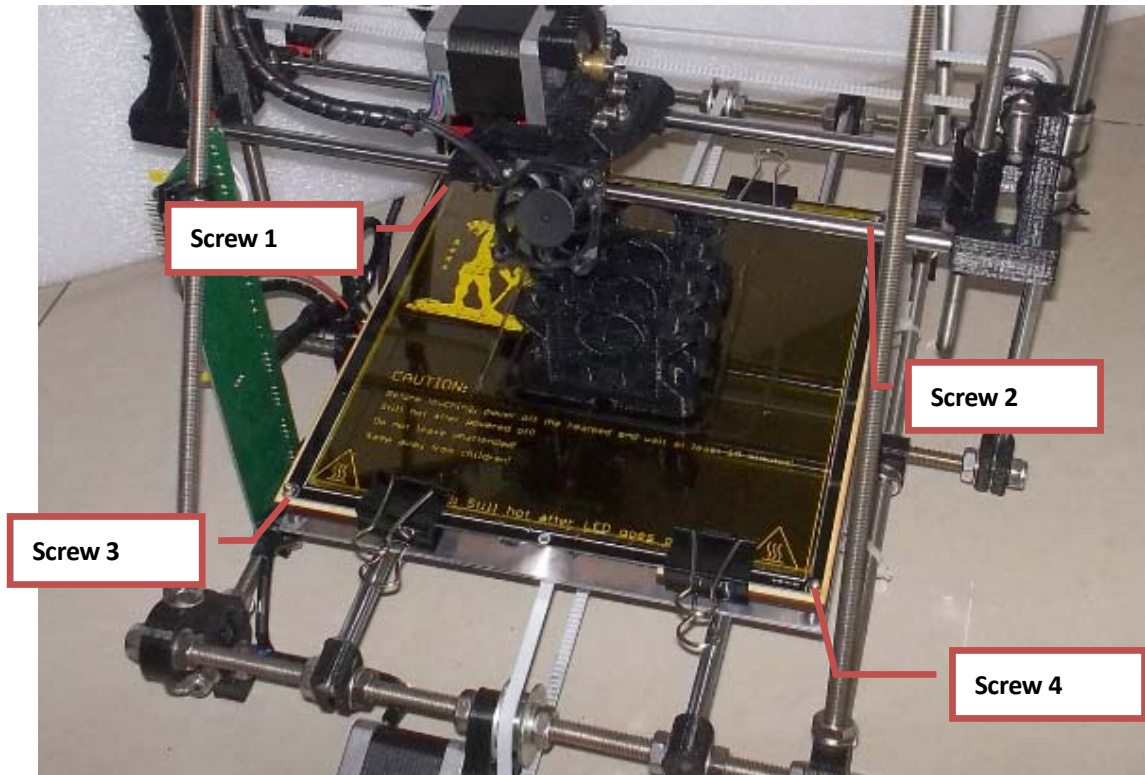
Items to be adjusted

1. whether the hot bed is flat
2. height between the nozzle and hotbed

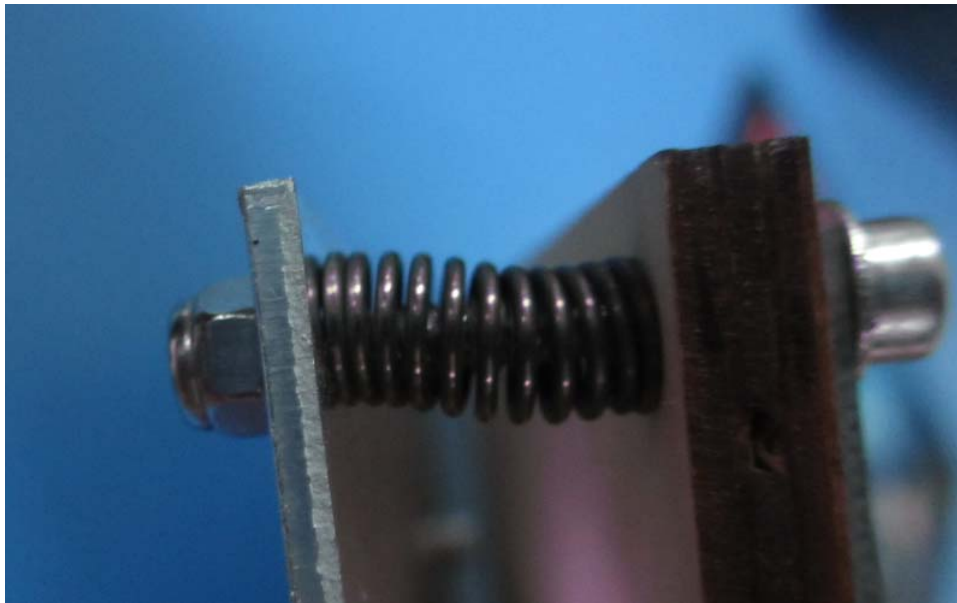
Details :

1. Whether the hot bed is flat

There are 4 screws, see the picture



The formation of the screw



First, click   in the host

software to zero the nozzle position,

Put a name card on one corner of hot



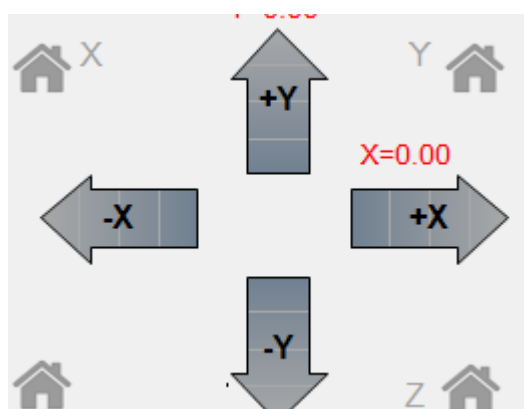
bed, Click ,1mm every click,

when the nozzle fall to the position,

where the name card can be moved,

but you can feel the resistance, then the

height of this corner is OK, click



X and Y and move

the nozzle to other 3 corners, move in

small distance, about 1mm every click,

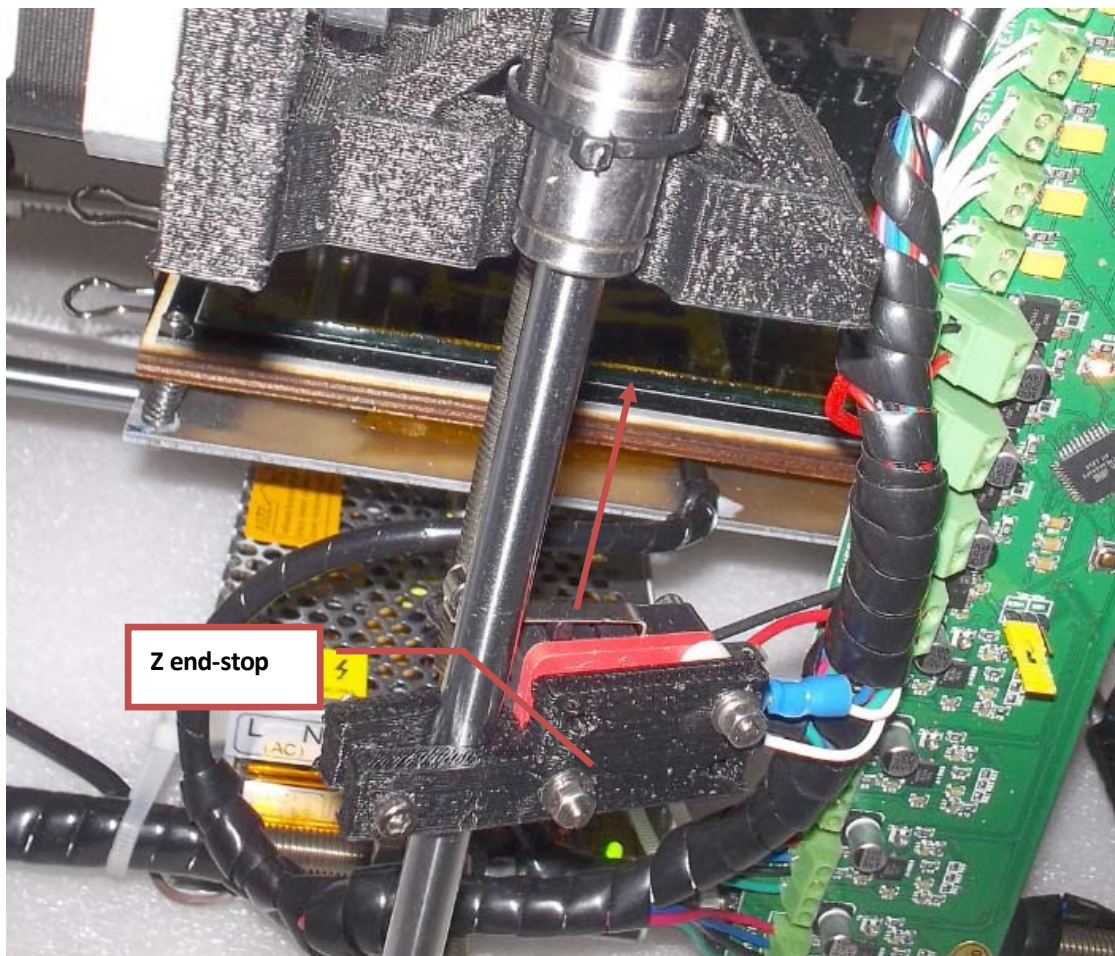
do just above mentioned to adjust the height. If the height is too large, loosen the nut, if too small, tighten the nut.



After that your hot bed is flat now.

Step 2 now:

Height between hotbed and nozzle.

Firstly, adjust the Z end-stop upwards



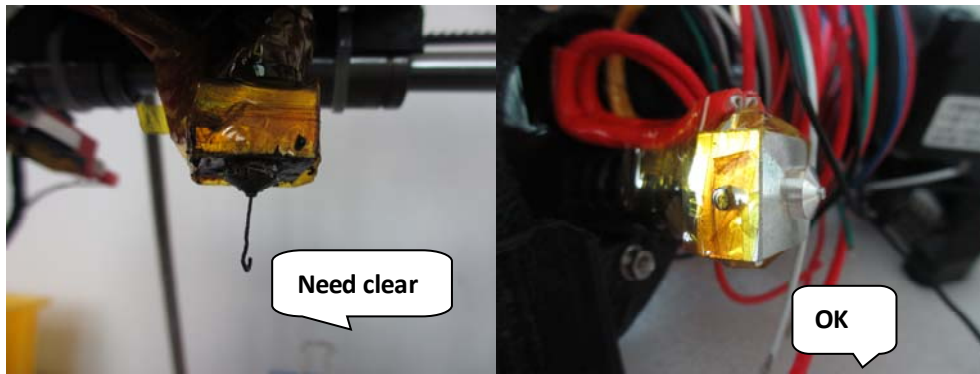
Click  , nozzle would fall until the end-stop close, now there might be certain distance between the nozzle and the hotbed , then we adjust the end-stop down in small distance every time, after every adjustment, press  , until the name card can move but you can feel the resistance, then the calibration is OK, tighten the screw of Z end-stop

PS: the criteria of the height between nozzle and hot bed is that the first layer just be flattened.

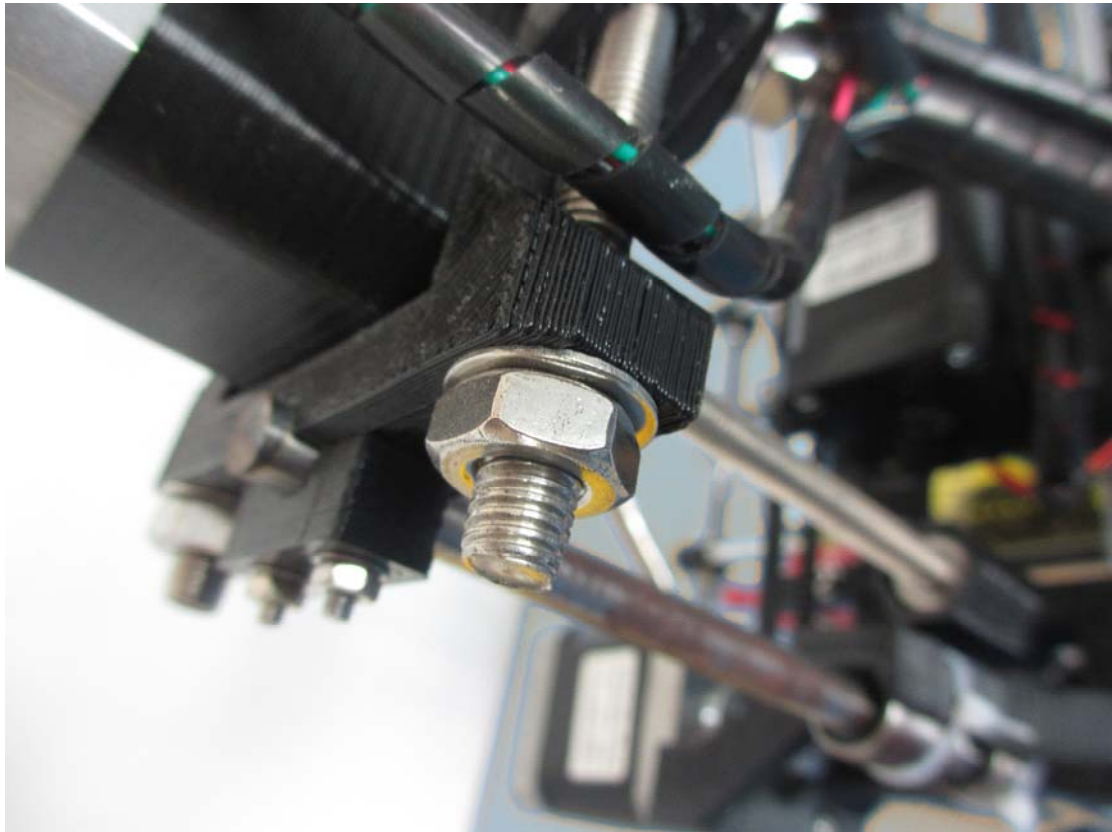
Regular Maintenance

1. After print many times, there might be some filament adhere to the nozzle. The filament will be carbonized, if the carbonized filament fall to the printed parts, maybe your printed show would be ugly, what ' s more, the filament extruded will also adhere to the carbonized, bad for your printing.

After print one or two times, you can use knife or graver to scrape the carbonized filament, or clear the nozzle with acetone.

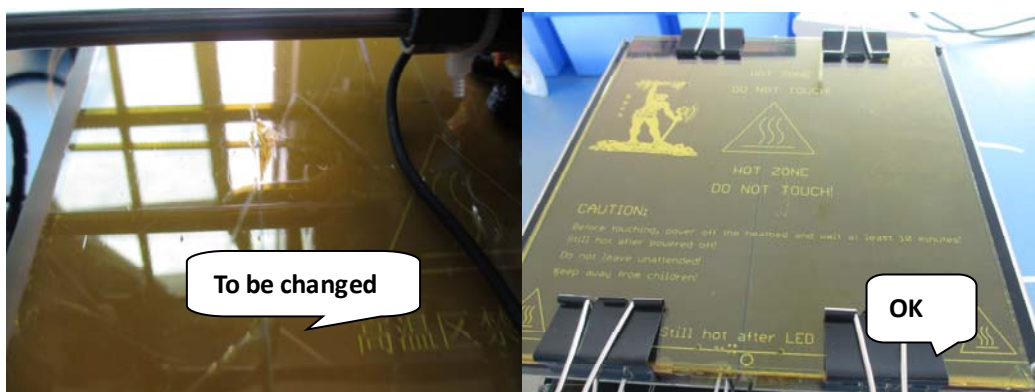


2. When printing, the machine will vibrate, so the screw will loosen, which will influence the printing. Regularly, check the screws and nuts, including the M8 nuts, hollow-lock socket set screw in the pulley, extruder driving gear, and the Z axis coupling



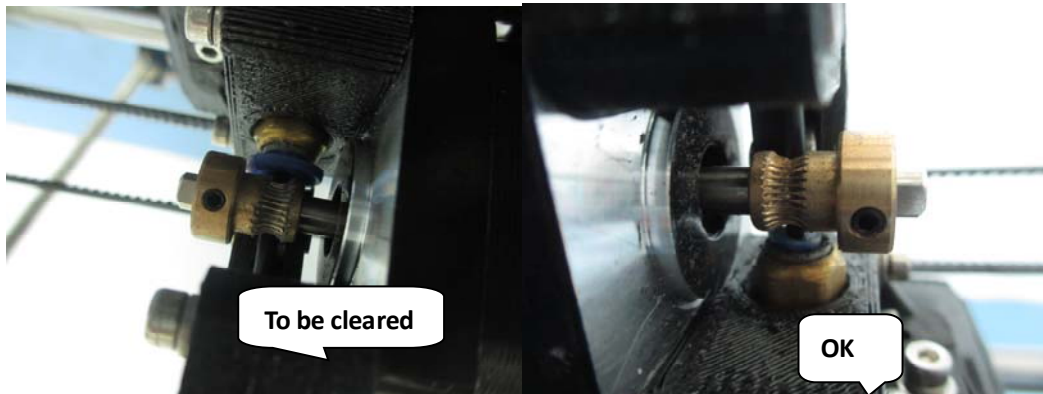
3. The high-temperature adhesive tape could make the printed parts adhere to the hotbed easily. If the you use it for a very long time. The tape might be

damaged if the nozzle is too near to the tape, then printed parts won't adhere to the bed or the first layer is not flat. So you should often change the tape.

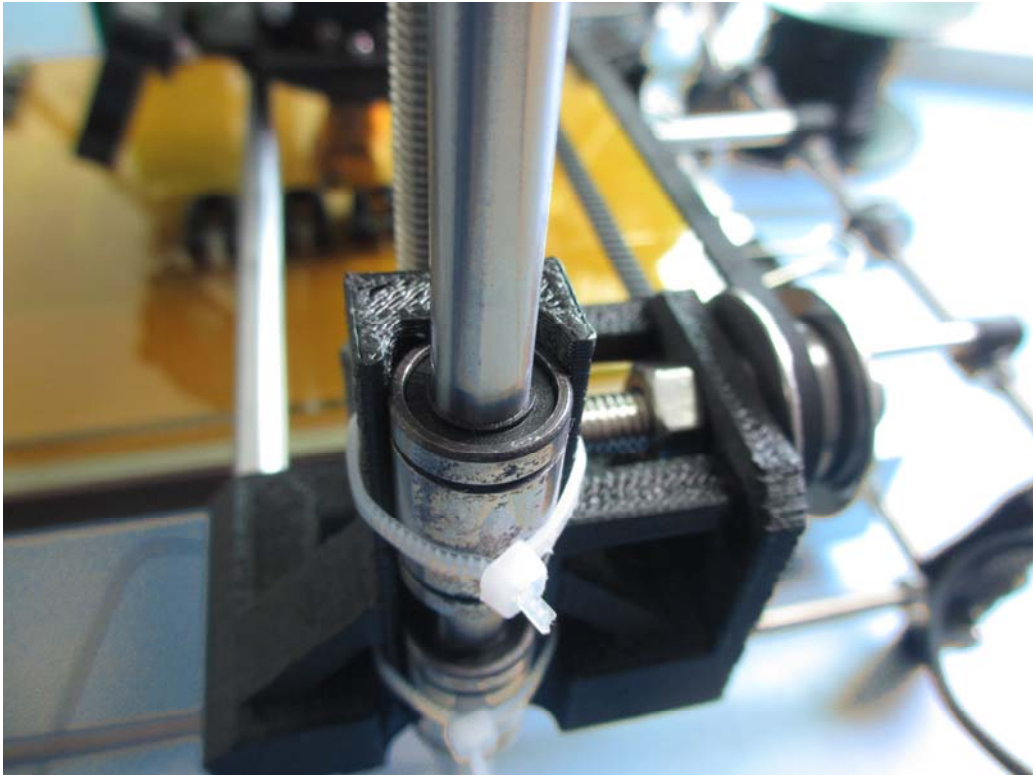


4. The driving gear is a very important set for extruder the filament. During extruding, some very little filament will adhere to the gear and fill the groove, then the gear cannot extrude the filament fluently because the friction

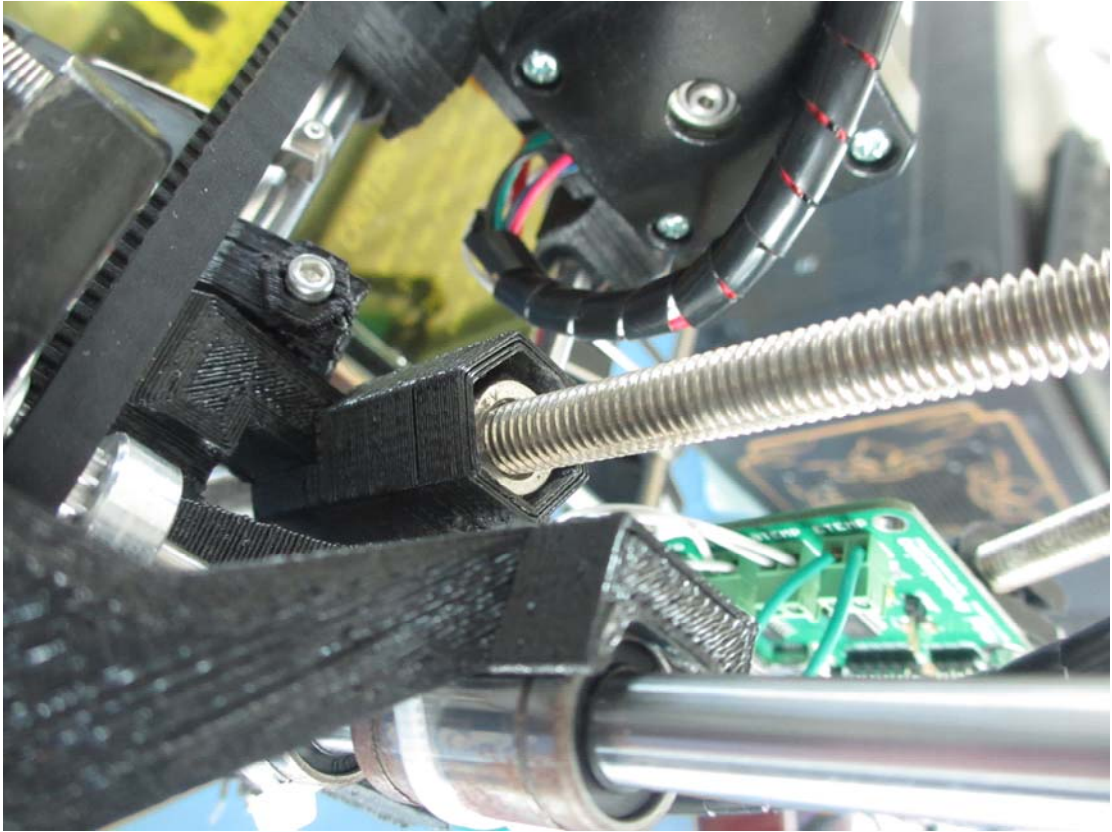
force is not enough. So you should clear the groove with little graver, awl, needle or any pointed objects.



5. After some time, the linear bearing's oil would dry and it won't move well and rust easily. So you should often drop the engine oil



6. You should also drop the engine oil to the Z axis M8 nut of both side.



7. The belt will loosen after some time, if it is too loose, you should tighten them.

