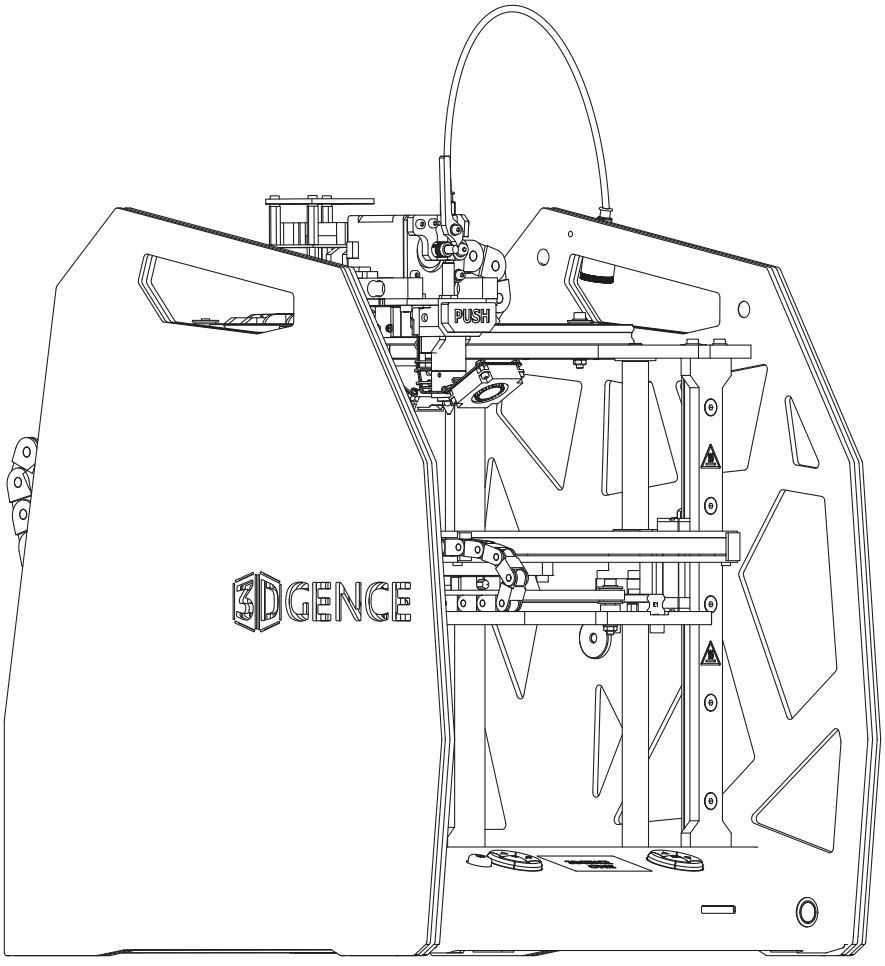
Service manual:

Z-AXIS LIMIT SWITCH ADJUSTMENT

3DGence ONE



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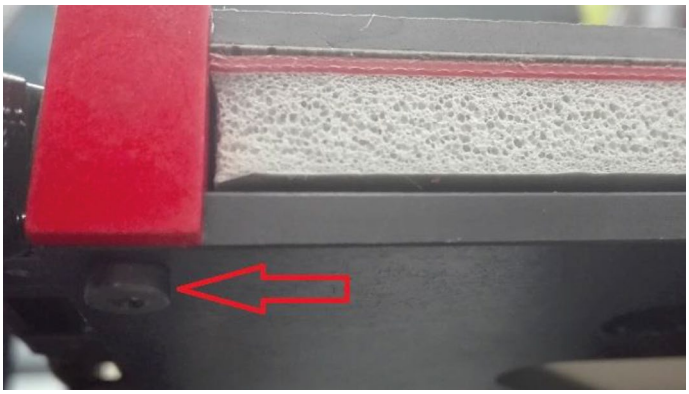
1. Remove filament from the hotend by choosing following commands from printer's menu:
OK ⟶ **Prepare** ⟶ **Unload filament.**

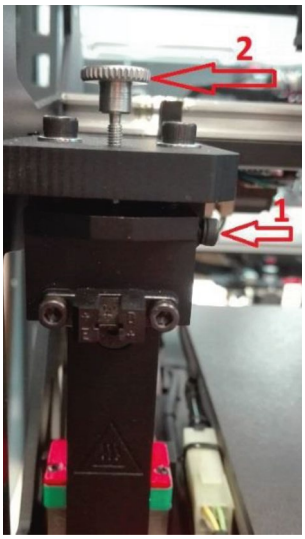
2. Remove all of dirt and leftover filament from the nozzle and the heatbed with a spatula or tweezers:
– if the dirt is hard to remove, heat the hotend first (around 230°C) and then remove the dirt with a spatula or tweezers,
– cool down the hotend to room temperature by **Cooldown** command.

3. Turn off the printer and then unplug the printer from the power supply (in order to avoid electric shocks).

4. Check if the screws are tightened under the heatbed.



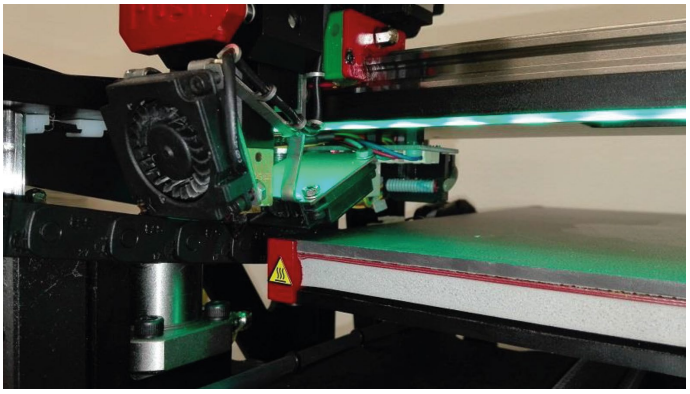
5. Loosen the screw from Z-axis slider (1) and use knurled bolt (2) to lower a slide a few millimeters (clockwise), in order to move the hotend from the heatbed (for safety).
WARNING! Screwing the knurled bolt clockwise will increase the distance between the heatbed and the hotend. Moving the screw counter – clockwise will decrease the distance. One full turnover of the knurled bolt will decrease or raise the limit switch around 0.5 mm.



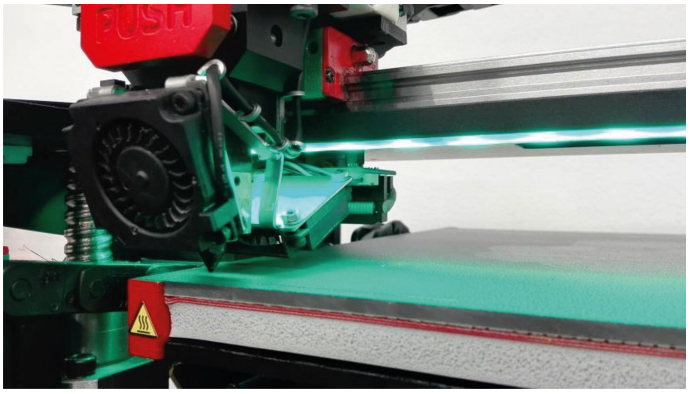
6 Warm up the heatbed by choosing following commands from printer's menu:
OK ⟶ Tune ⟶ Temperatures ⟶ Heatbed ⟶ OK
set the temperature to 75°C and wait 10 minutes to warm up the heatbed and stabilize the temperature.

7 Move the heatbed to the back, move the X-axis rail block to the base position (to the left position) – in such manner that the hotend does not rise above the heatbed (for safety).

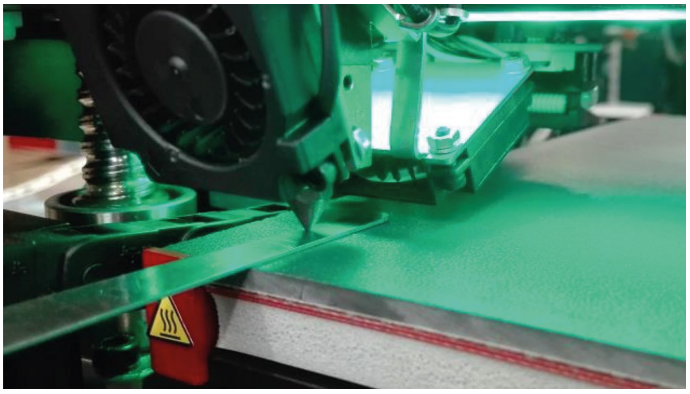
8 Distort the printer by choosing following commands from printer's menu:
OK ⟶ Configuration ⟶ Hardware Test ⟶ Home Z.



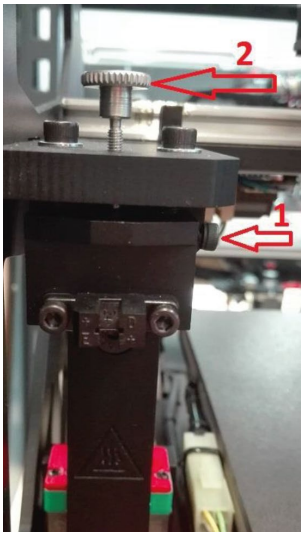
9 Move the heatbed slowly to the front to such position that the hotend is above the front left corner of the heatbed – be careful so the heatbed do not hit the hotend (hotend should be a few milimeters above the heatbed).



10 Adjust the distance between the nozzle and the heatbed with the knurled bolt to 0.8 mm by following steps:
– check the distance between the nozzle and the heatbed using a feeler (or typical credit card). It should be 0.8 mm,

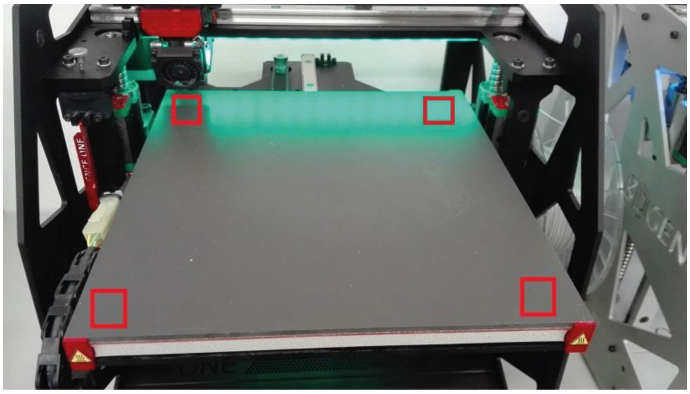


– when the distance is more or less than 0.8 mm, adjust it manually using the knurled bolt – turn the knurled bolt in the appropriate direction (we recommend not more than a half of turnover – for safety),

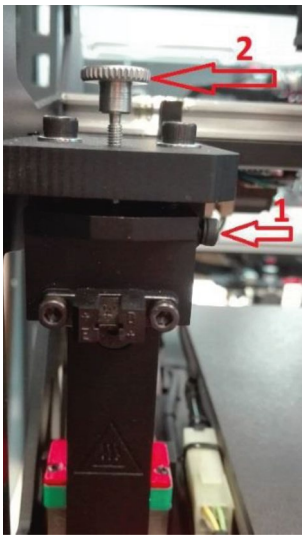


– base Z axis in order to check the location of the nozzle by using the **Home Z** command,
– check the distance between the nozzle and the heatbed using the feeler (or credit card). It should be 0,8 mm,
– repeat these steps until the distance between the nozzle and the heatbed will be 0.8 mm.

11 Check if the distance in all four corners is 0.8 mm by manual movement of the heatbed and the hotend to all corners.



– if the distance is maintained, tighten the screw from Z-axis slider (1) and again check the distance in all corners. Then run Heatbed Scan by choosing the following commands from printer's menu:
OK ⟶ Calibration ⟶ Heatbed Scan



– if the distance is not within the range of 0.7 mm to 0.9 mm – contact the 3DGence service.