

DREMEL® 3D40

Nozzle Gap Calibration

If you are having first layer issues, calibrating your nozzle gap (or z-gap) could be the solution to your printing issues. If the nozzle gap is too small, you may be hearing a clicking at the beginning of your print, or you may have a first layer that appears "smashed" or too flat. If your nozzle gap is too large, your first layer may print in air, or just have poor bed adhesion. If you have 1st layer issues multiple prints in a row, try following these directions to calibrate your nozzle gap.

Step 1: Test the machine

- a. Level the printer before moving forward – Navigate to the leveling screen by pressing level on the home screen, and following the instructions on screen.
- b. Navigate to “Filament” and follow the on screen instructions to load filament.
- c. Build the “Test Print” file on the machine to ensure the 3D40 printer is working correctly.
- d. If prints are not adhering to the build plate, the z-axis offset may need to be adjusted. If so, continue to step 2.



Step 2: Adjusting the z-axis offset

- a. Navigate to the z-axis offset screen, following: Tools→Settings→ Z-Axis Offset.
- b. Follow the on-screen instructions to either increase or decrease the offset.
- c. Always adjust the z axis offset once (0.1mm increments/ decrements) and test by repeating Step 1 above, before making any further z axis offset adjustments.