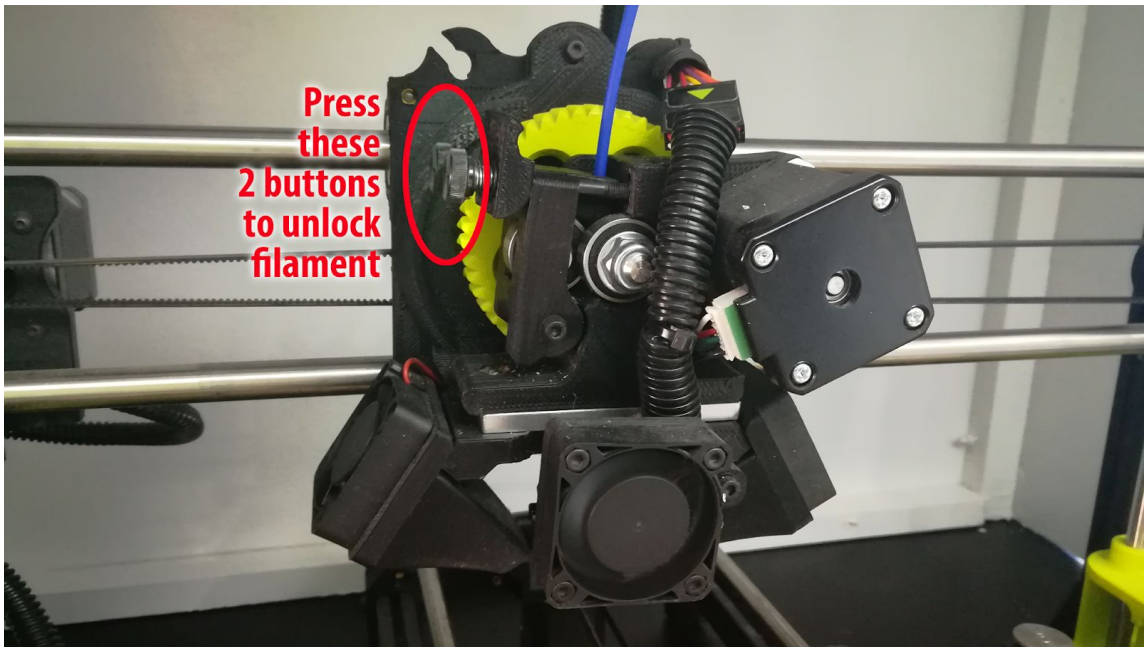
# Troubleshooting 3D Printer

## Clearing the nozzle:

1. Set nozzle temperature to melting point of filament:
    a. PLA – 204 degrees
    b. ABS – 240 degrees

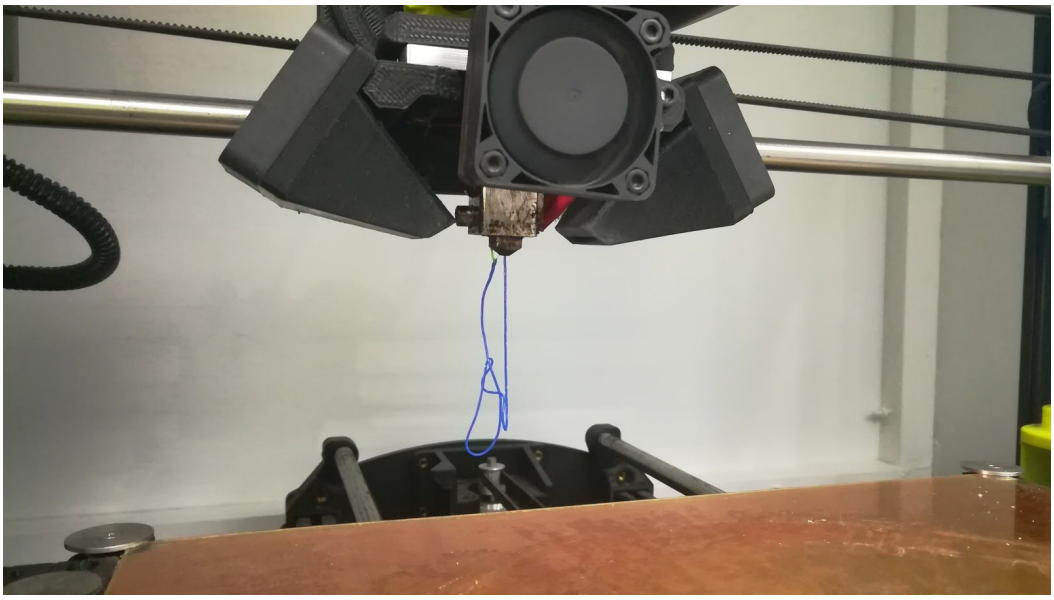

2. Let nozzle reach target temperature

3. Unlock filament and remove from printer extruder

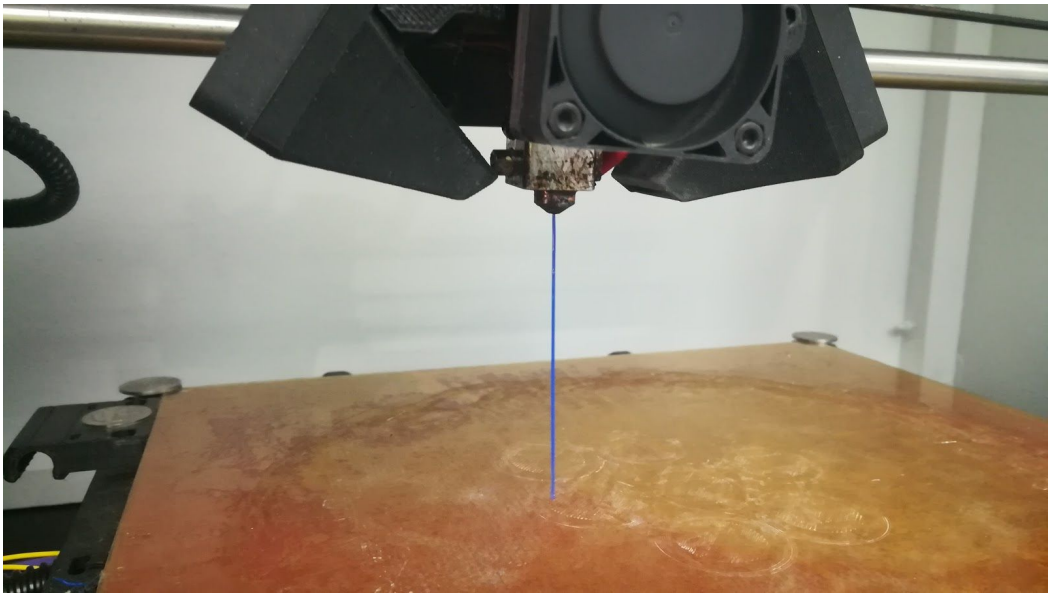



4. Clip off end of filament so that you have a clean starting point.
5. GENTLY clean hot tip of nozzle with ScotchBrite pad and/or wooden stick. Do NOT use metal objects to clean nozzle.
6. Reinsert filament into printer extruder. Before locking in place,
    a. GENTLY push filament down into extruder until it begins to emerge cleanly (filament emerges straight down, without any curling) from nozzle, OR
    b. Lock filament in place and GENTLY turn extruder gear counterclockwise until filament begins to emerge cleanly from extruder. You may need to unlock motors through machine menu.

c. **NOT CLEAN:**



**CLEAN:**



7. Try to print again.

## If print detaches from bed during print:

1. You'll have to start over. There is no way to fix or restart a print that has detached from the bed.

2. The model may need to have a **raft** or **brim** added to it. **Rafts** go all the way under the print and consist of multiple layers, whereas a **brim** is only 1 layer and on the outside of the print.
3. Certain filaments, such as PETG, nylon, and some ABS, require extra adhesion to the bed. The use of a gluestick to coat the bed with a fine layer of adhesive is usually enough.