

# Extruder PCB Replacement

SOURCE:

<https://support.zortrax.com/m-series-extruder-pcb-replacement/>

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**The extruder PCB is responsible for transferring signal and voltage from the motherboard to all extruder components, including fans, heater&thermocouple and extruder motor. Therefore, if you notice problems with the extruder, such as extrusion or heating issues, or if the extruder motor sprocket wheel is making clicking sounds, at first you should check whether all components plugged into the extruder PCB are functioning properly. If everything seems to be in order, but the problems continue, the extruder PCB should be replaced. This manual provides the correct replacement procedure.**

If you have the extruder PCB v1, you also have to replace the hotend and heater&thermocouple.

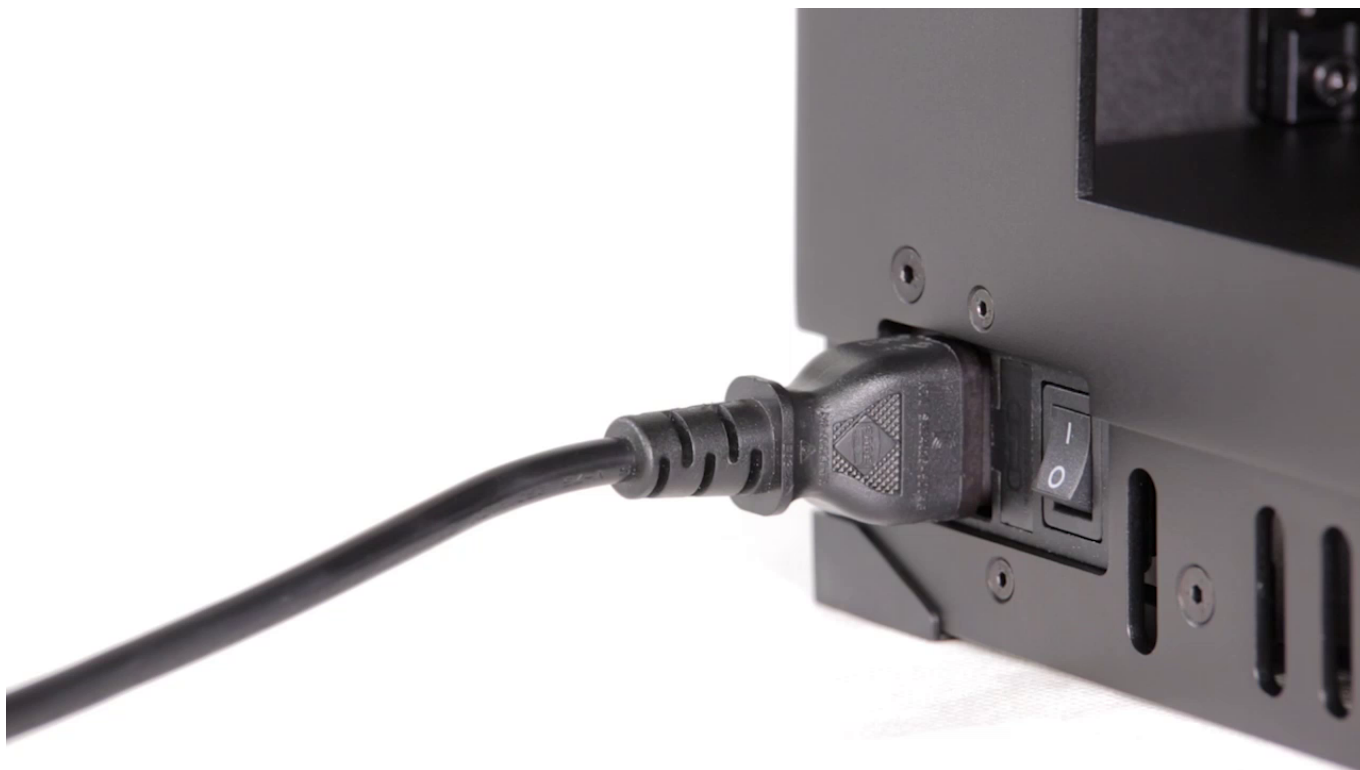
The following manual shows the M200 repair work. For the M300, these procedures are the same.

## Unloading the Material



From the main menu select *Material* and then *Unload the material* option. The extruder will start to heat up automatically. Once it is hot, the motor will start to unload the material.

## Unplugging the Power Cable



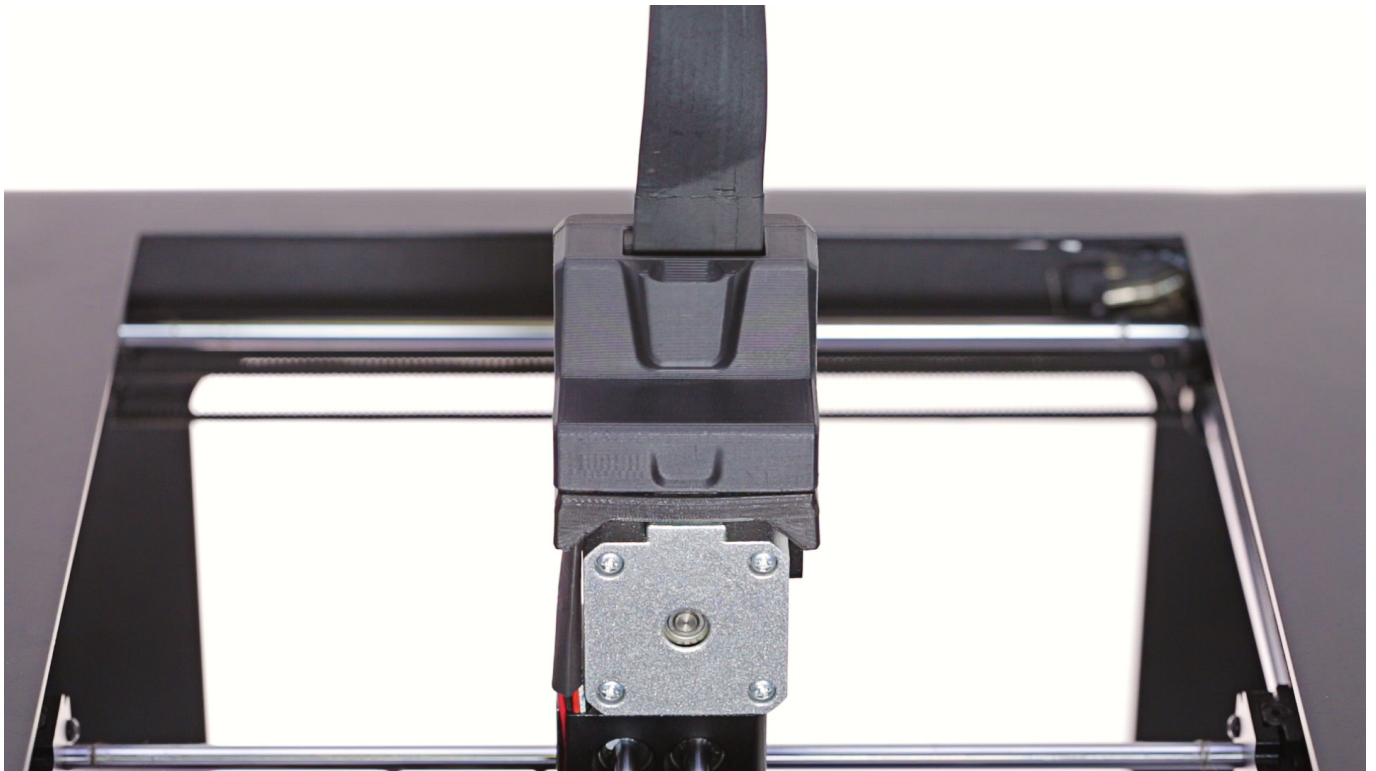
Turn off the printer and unplug the power cable.

## Material Guide Removal



Detach the material guide from the extruder cover. Next, separate the guide from the extruder cable.

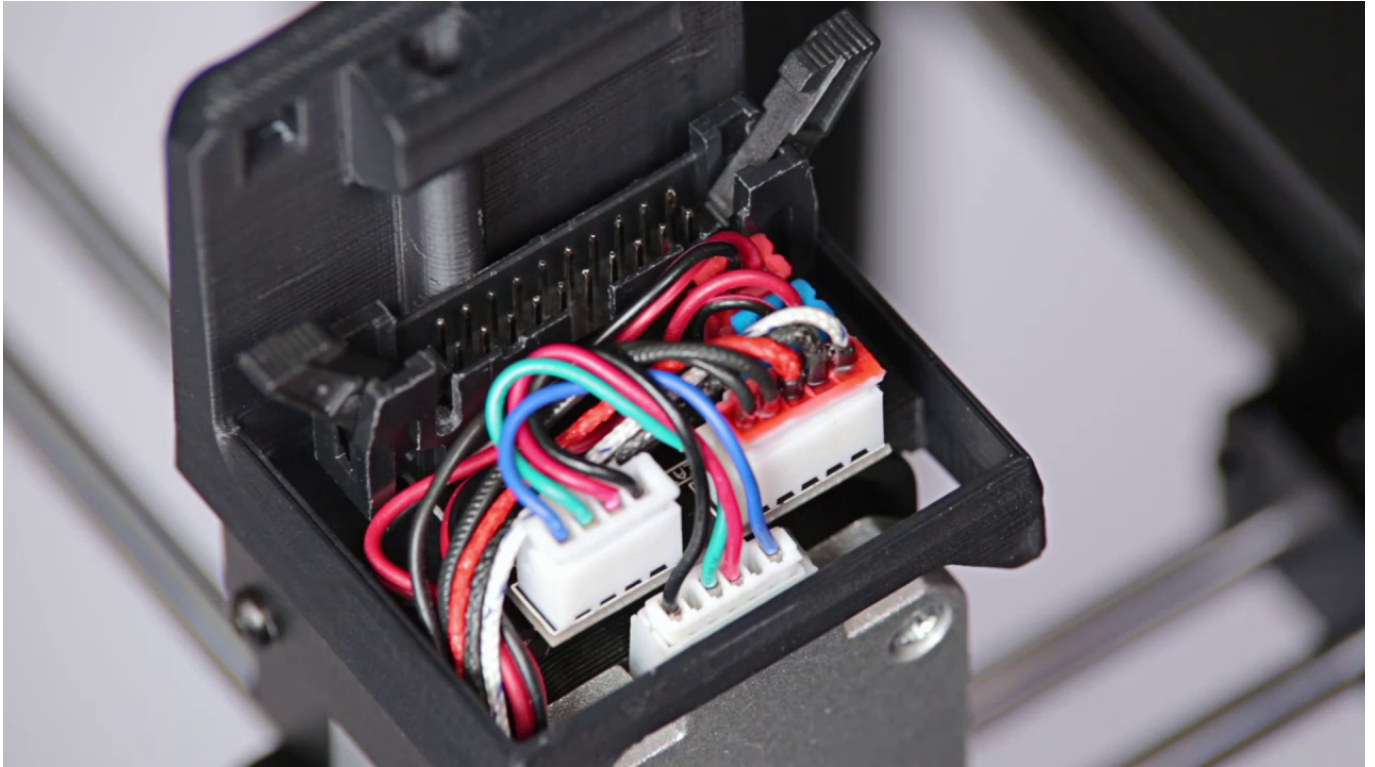
## Unplugging the Extruder Cable



Detach the extruder upper printed cover and unplug the extruder cable.



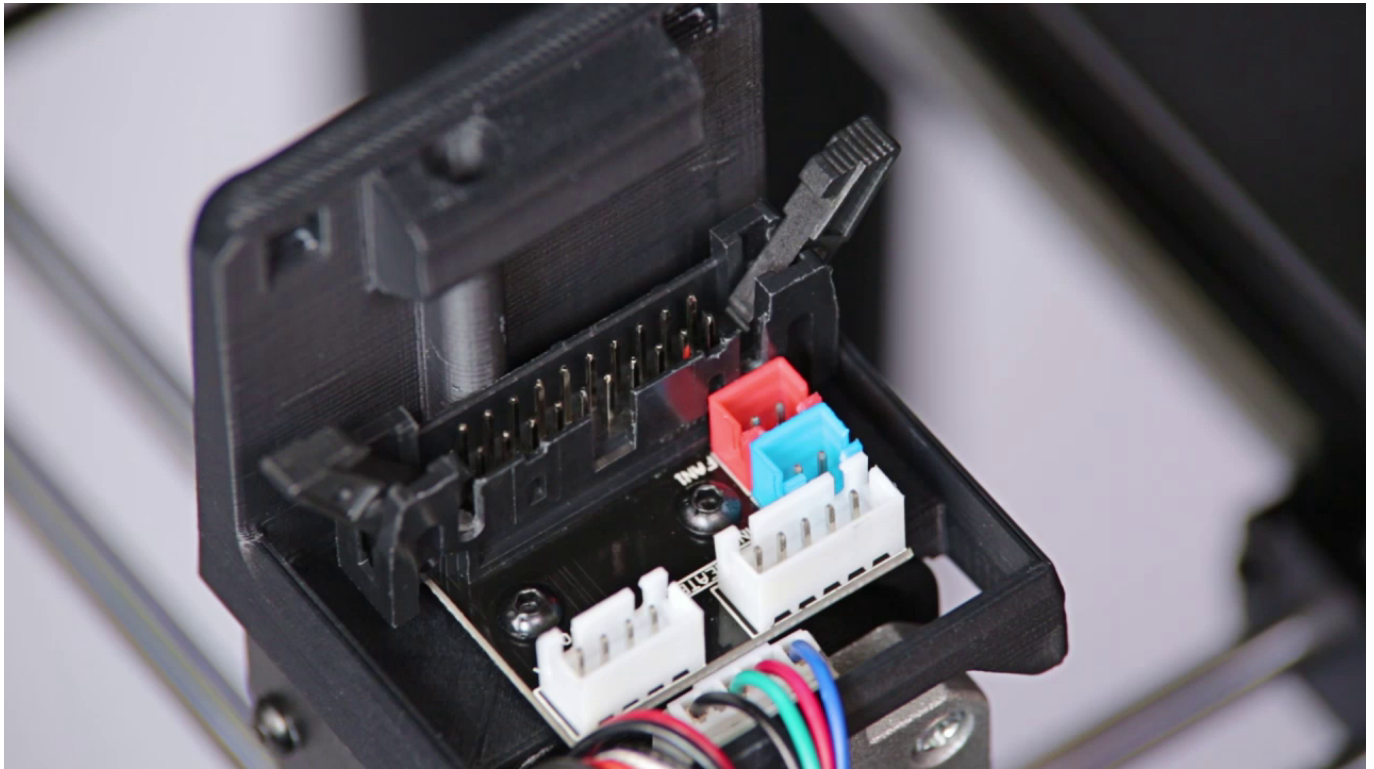
## Unplugging all Cables from the Extruder PCB



Unplug all the cables from the extruder PCB.

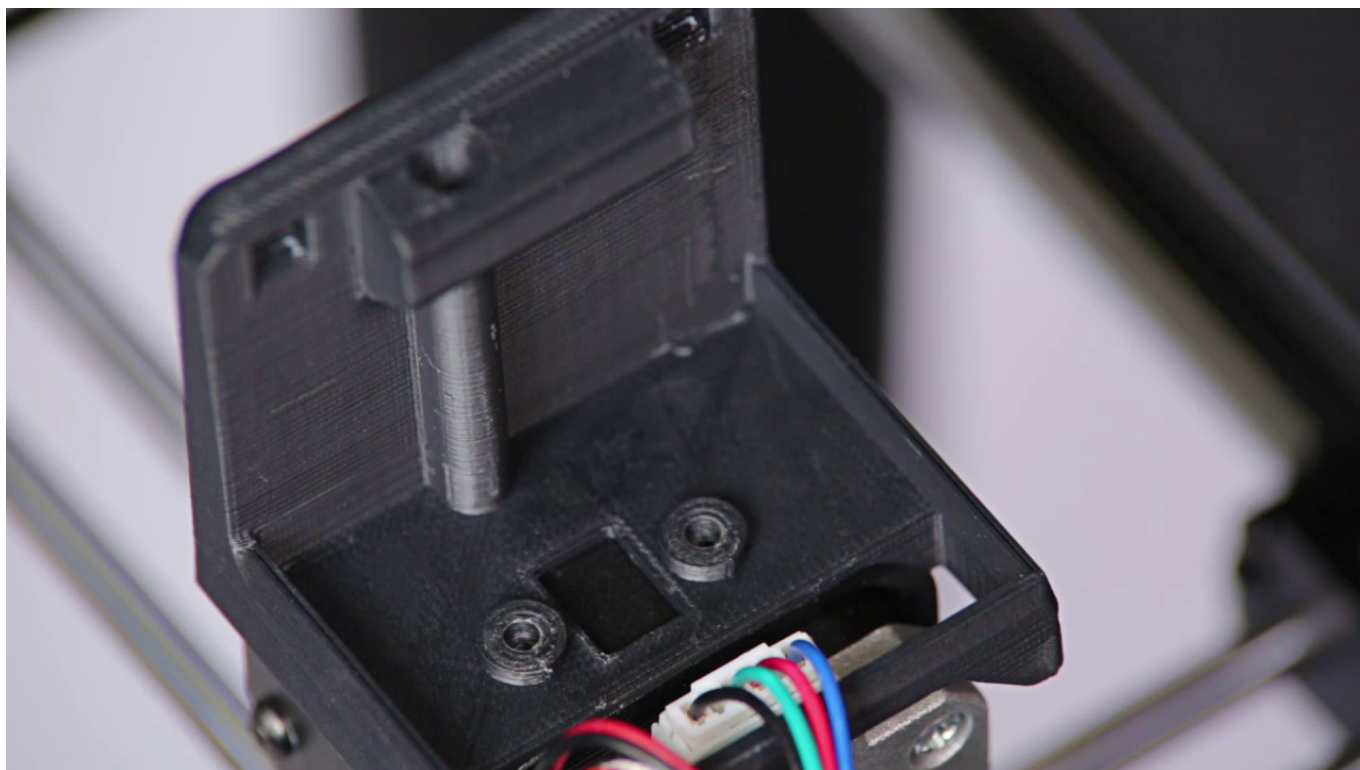


## Unscrewing the Extruder PCB



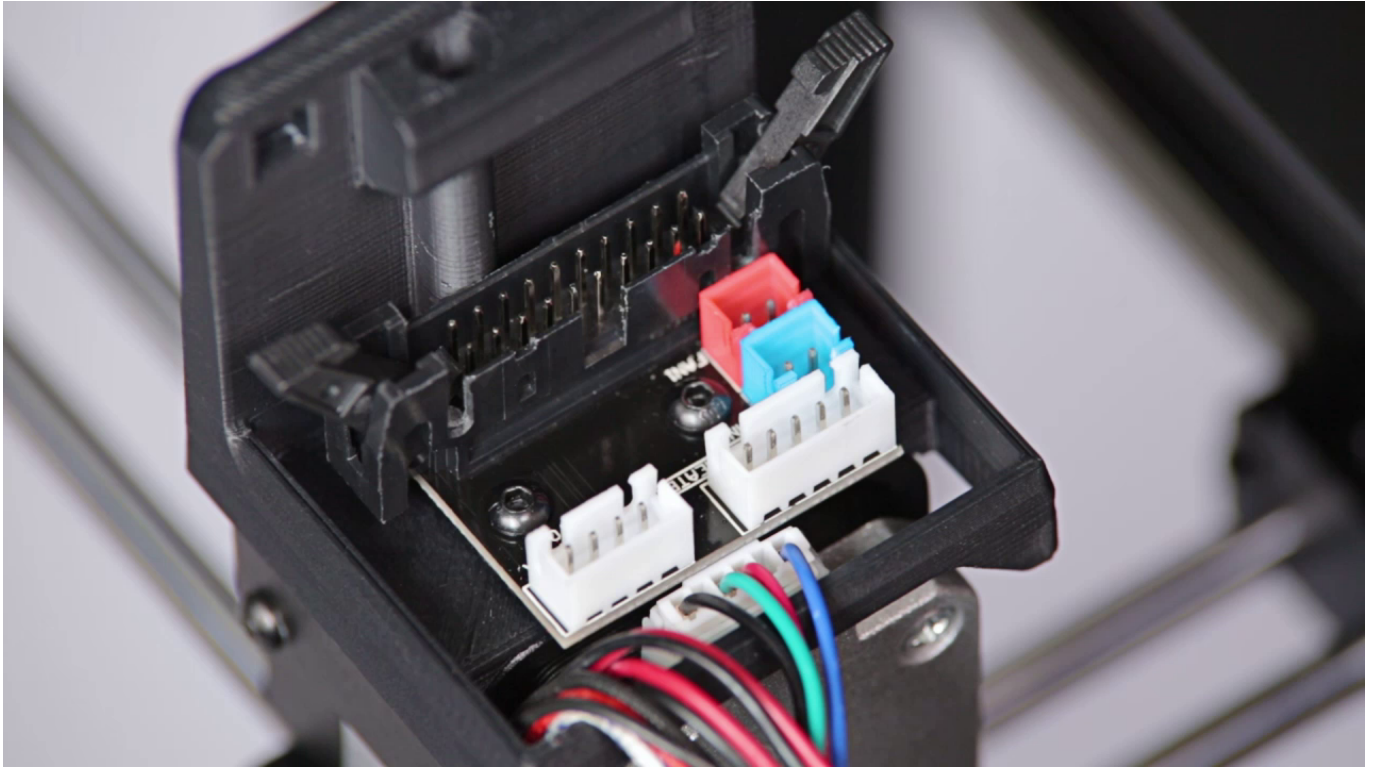
Unscrew the two screws that secure the extruder PCB using a 2mm Allen key. Remove the PCB from the extruder.

## Extruder PCB Assembly



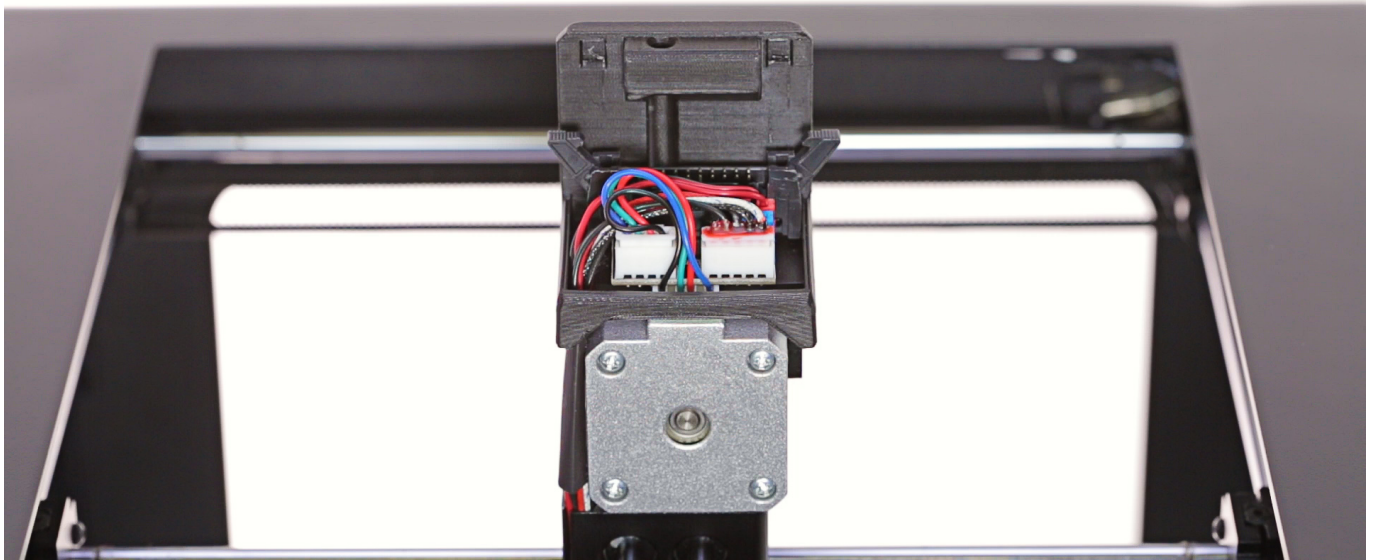
Place the extruder PCB in its place and secure it with the two screws.

## Plugging all Cables into the Extruder PCB



Plug all the cables in. Remember to arrange the cables so that they don't get damaged, e.g. by wrapping against each other.

## Plugging the Extruder Cable



Plug the extruder cable in, and then attach the extruder upper cover to the lower cover.

Make sure the extruder cable is properly plugged in.

## Material Guide Installation



Attach the material guide to the extruder cover. Next, secure the guide to the extruder cable with the material guide clamps.

Make sure the material guide is properly installed in the cover.

## Plugging the Power Cable



Plug the power cable in.