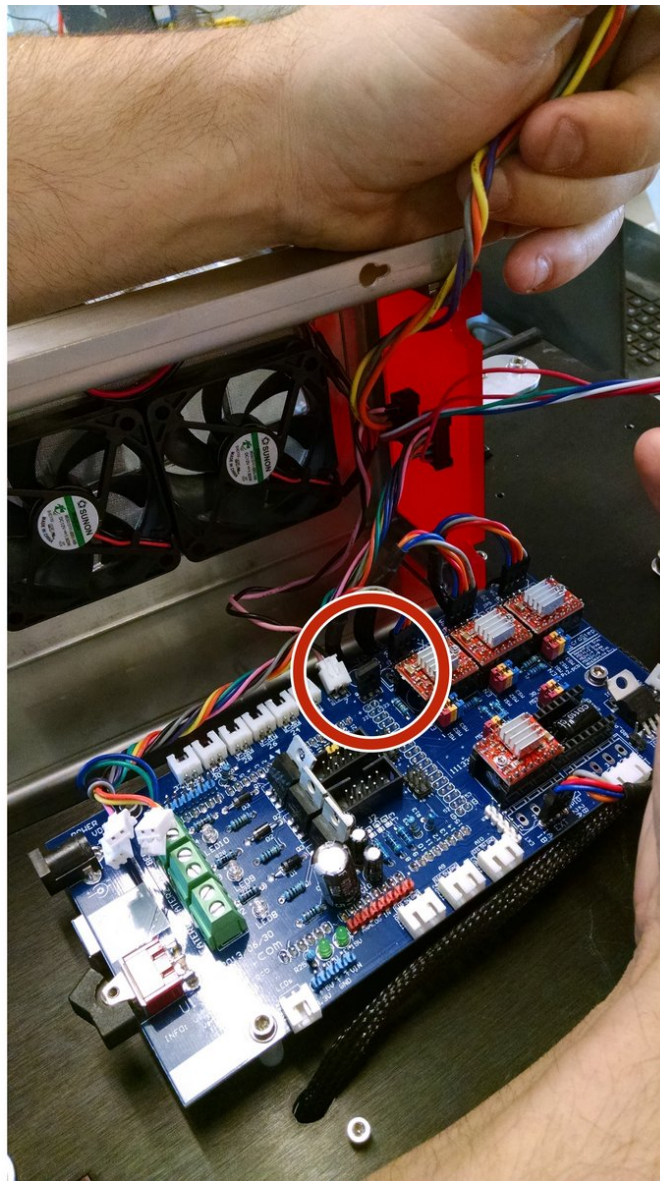




Transistor Replacement without removing board.

Written By: Just Helping



INTRODUCTION

Quick and dirty fix for the Q4 transistor that controls 3D printer fan and Laser diode power.

If both are not working and the machine detects the proper heads (and the wires are not damaged and are connected) this is the issue.



TOOLS:

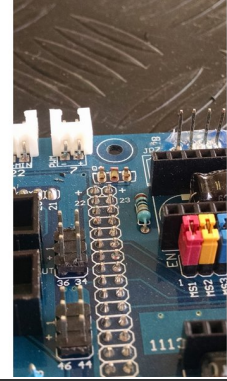
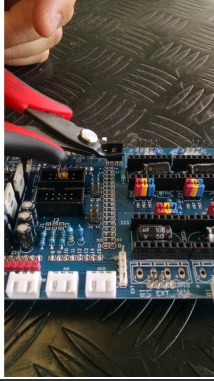
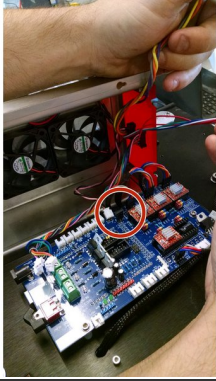
- [Soldering Iron](#) (1)



PARTS:

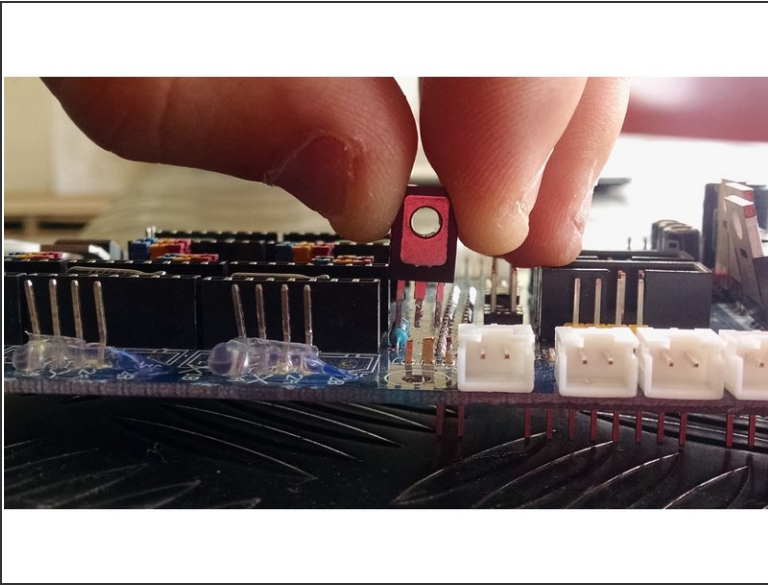
- <http://www.digikey.com/product-detail/en/fairchild-semiconductor/BD679AS/BD679AS-ND/976566> (1)

Step 1 — Transistor Replacement without removing board.



- Disconnect power and USB from the machine and remove the back cover.
- locate the transistor. Enlarge the first image for a clearer view. It's on the left side of the board between the little red stepper driver chips and the limit switch wires. It is a small black part with 3 legs withOUT a metal portion protruding above it.
- Clip the old transistor off at the base of the black portion leaving the original legs intact. (alternatively you can just heat the legs and remove them for a "proper" repair).

Step 2



- match the direction of the original transistor and set the new legs over the original legs.
- Solder the old legs to the new legs being careful not to allow the transistor to heat up from the soldering iron. Do this one leg at a time, remove the tip, and allow it to cool between legs.