Demonstration of Brushed Motor Control with a Hacked InkJet Printer

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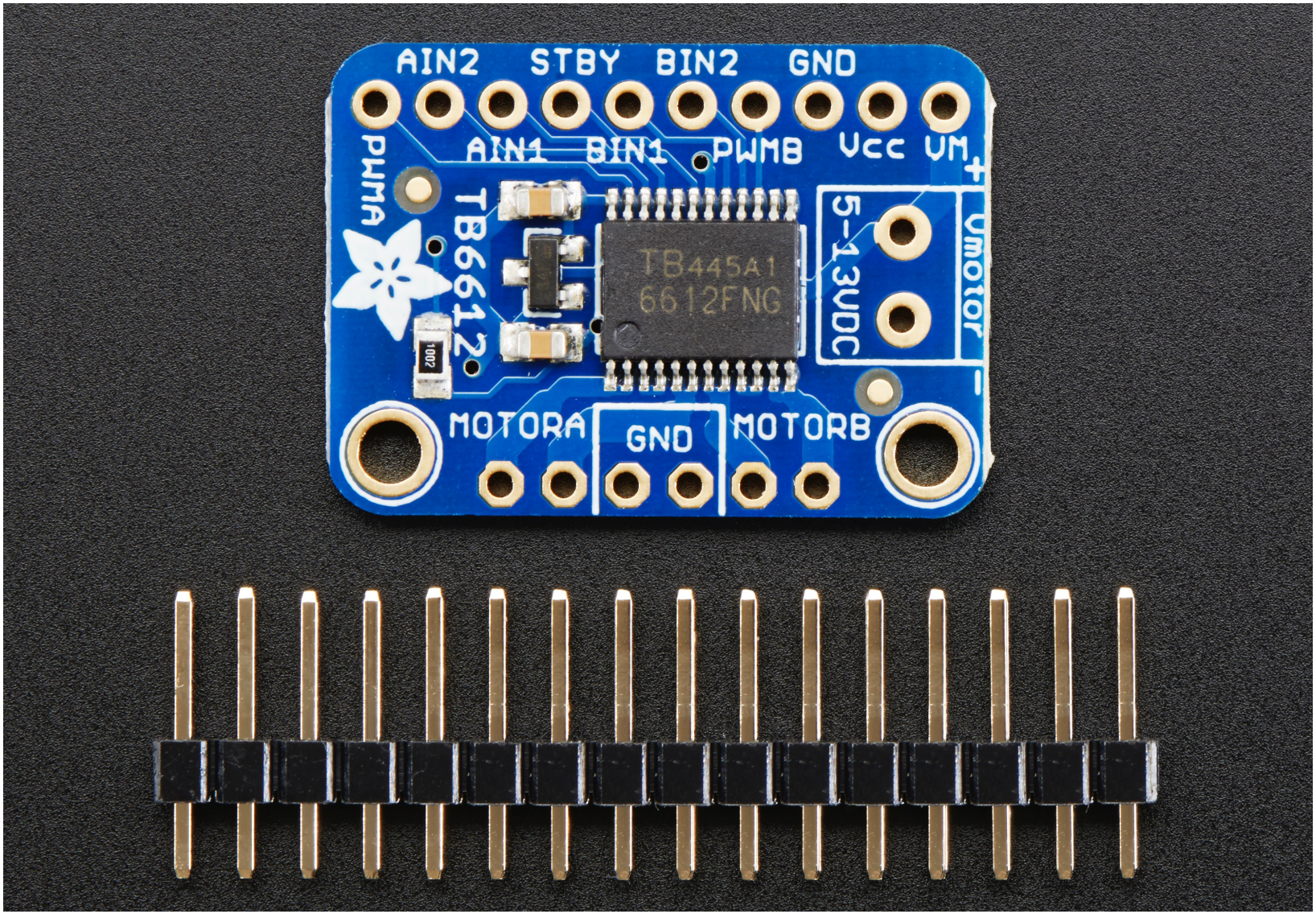
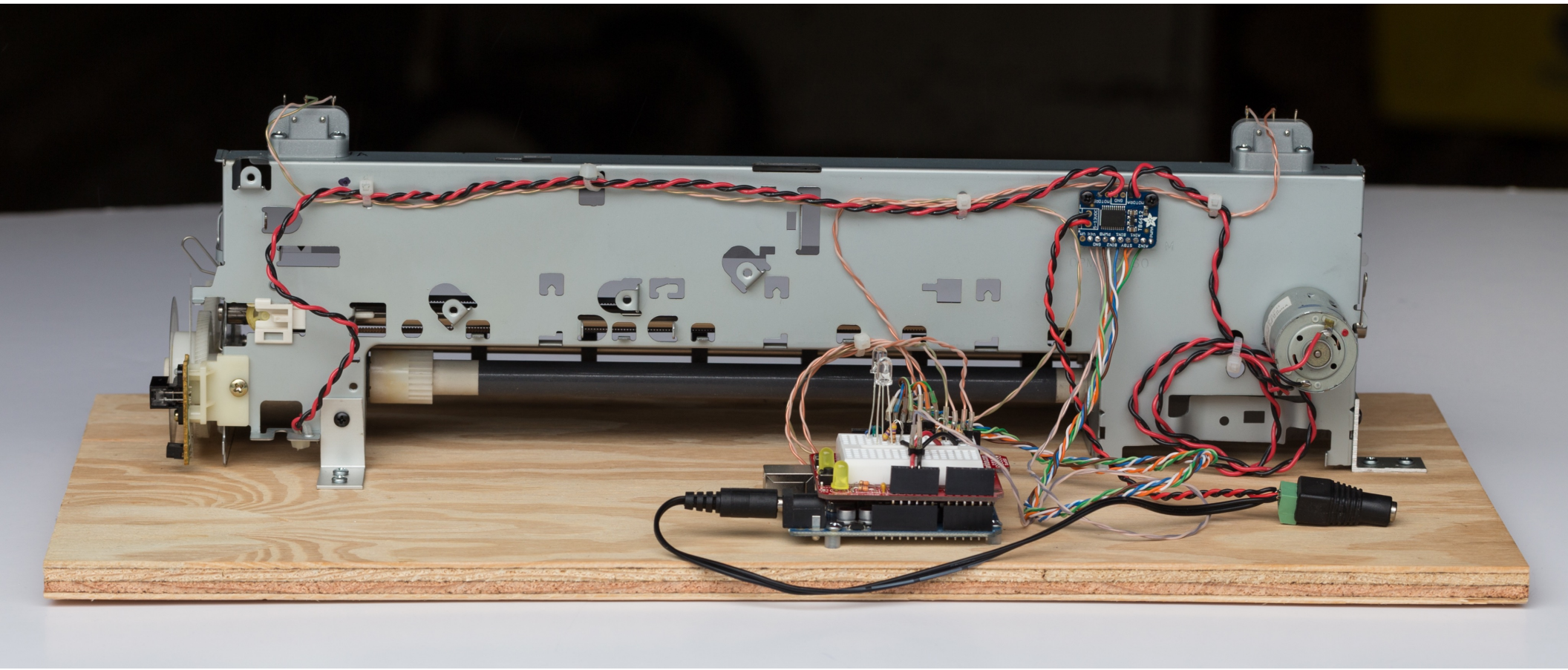
Use an Obsolete Desktop Inkjet Printer as a Motion Control Device

- Partially disassemble the printer
- Retain motion control system for the print head
  - Motor, timing belt, slide rod, bearing
- Retain motion control system for paper advance
  - Motor, gears, drive rods
- Replace power supply and motor controller with TB6612 breakout board

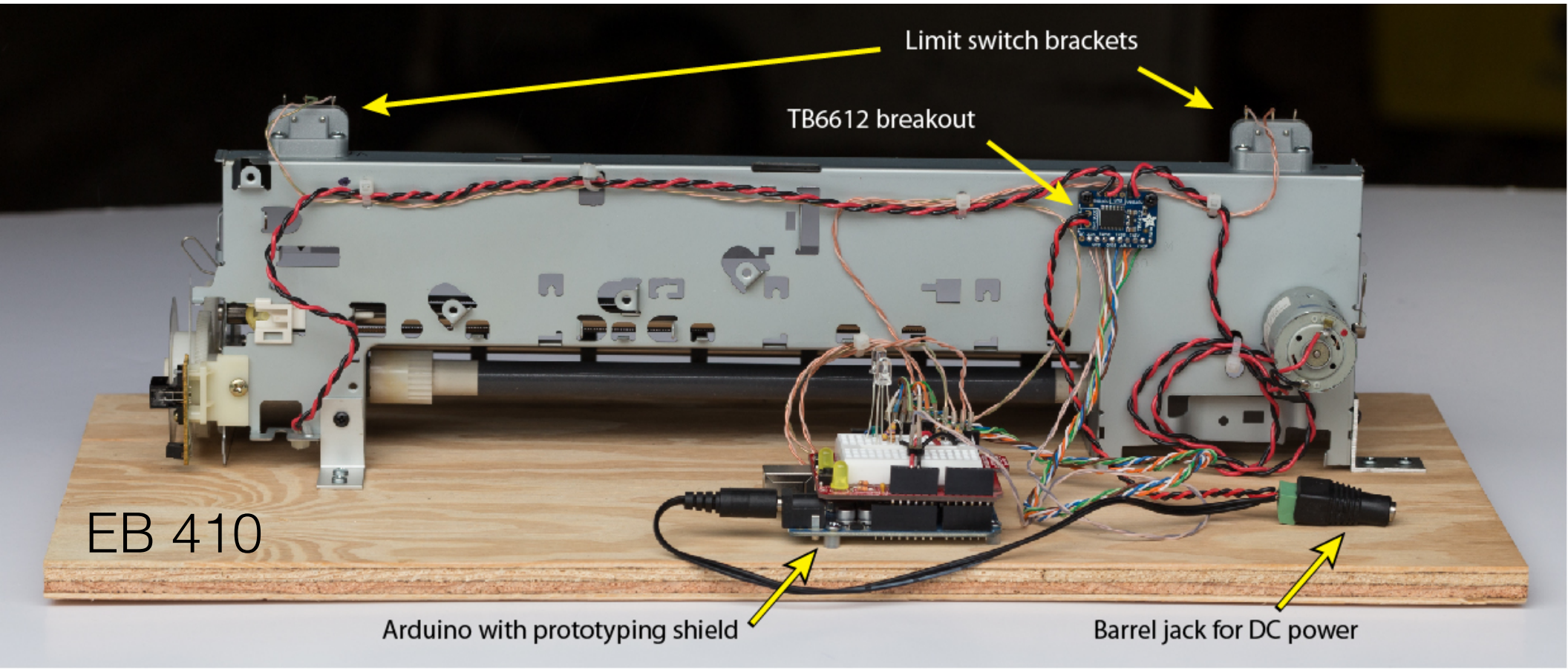
TB6612 Breakout Board



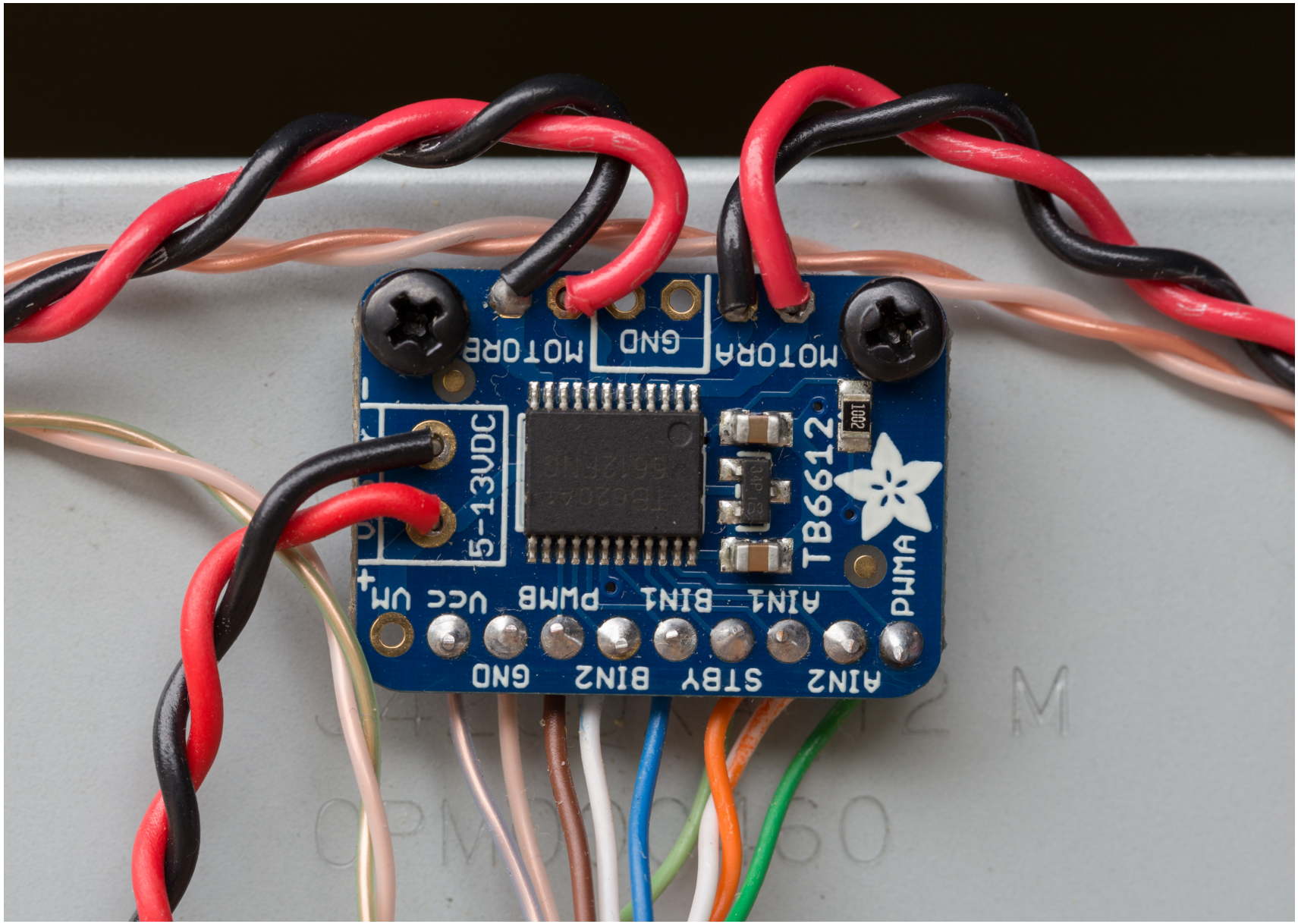
Hacked Printer



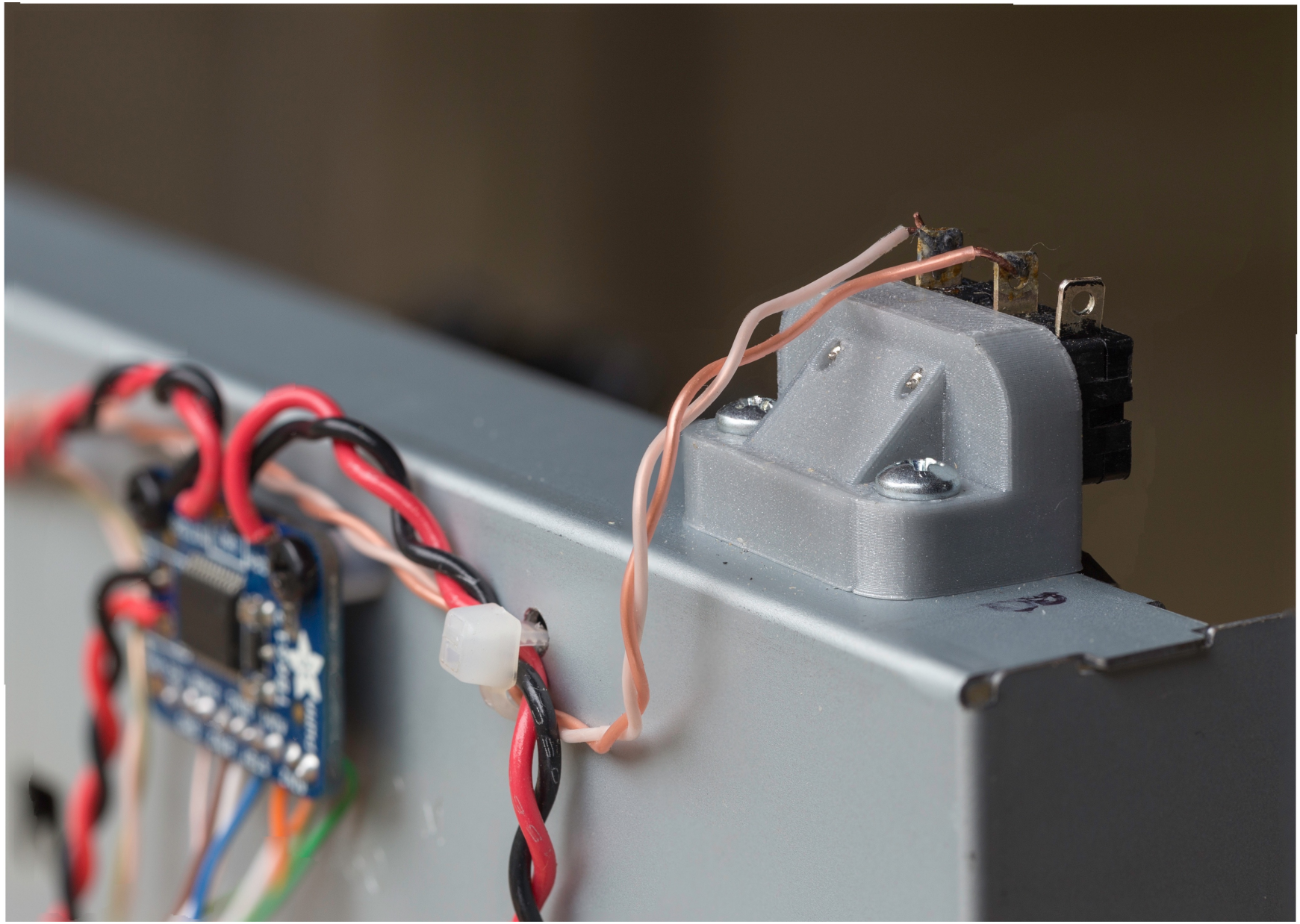
Hacked Printer



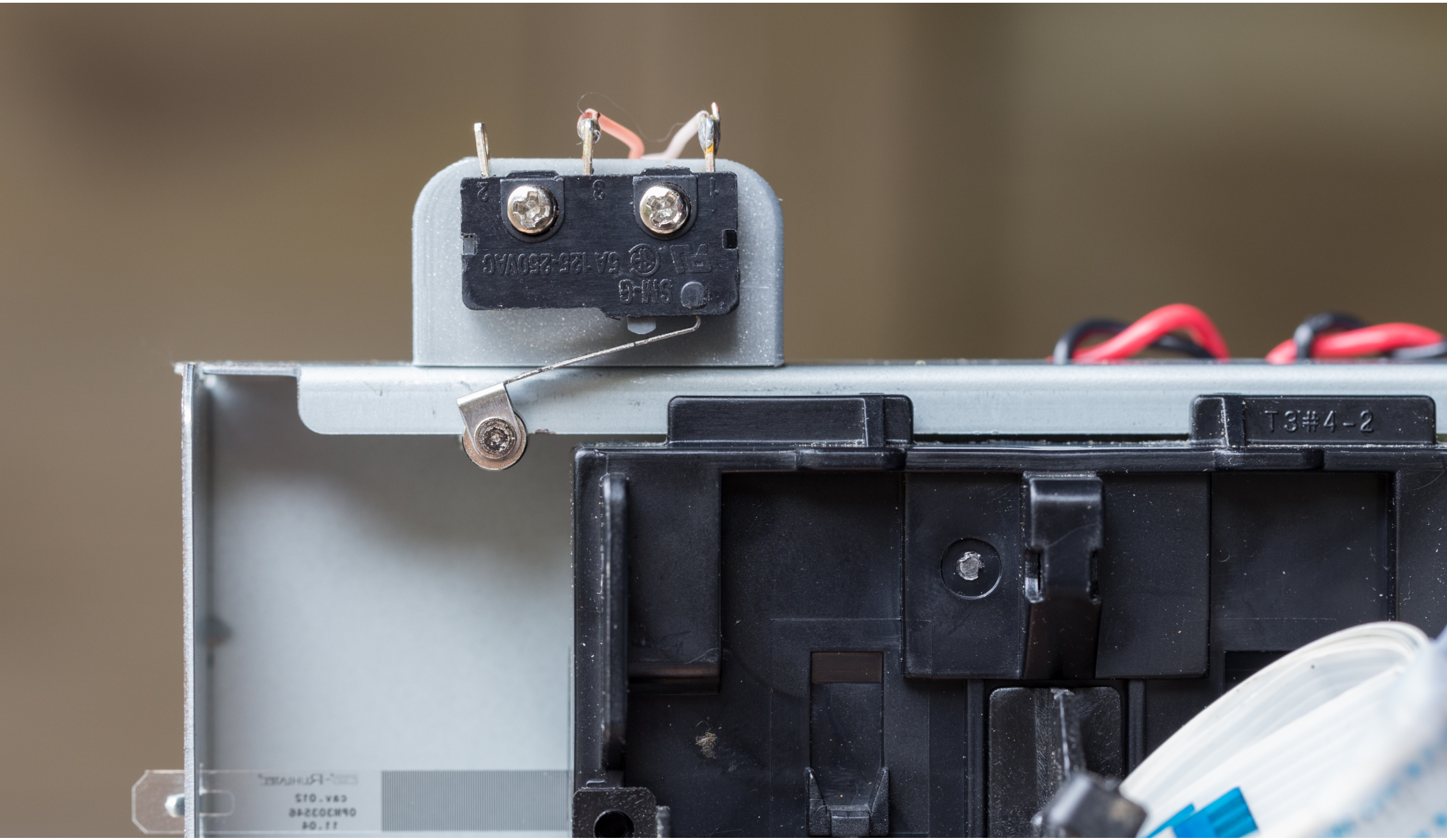
TB6612 Installed



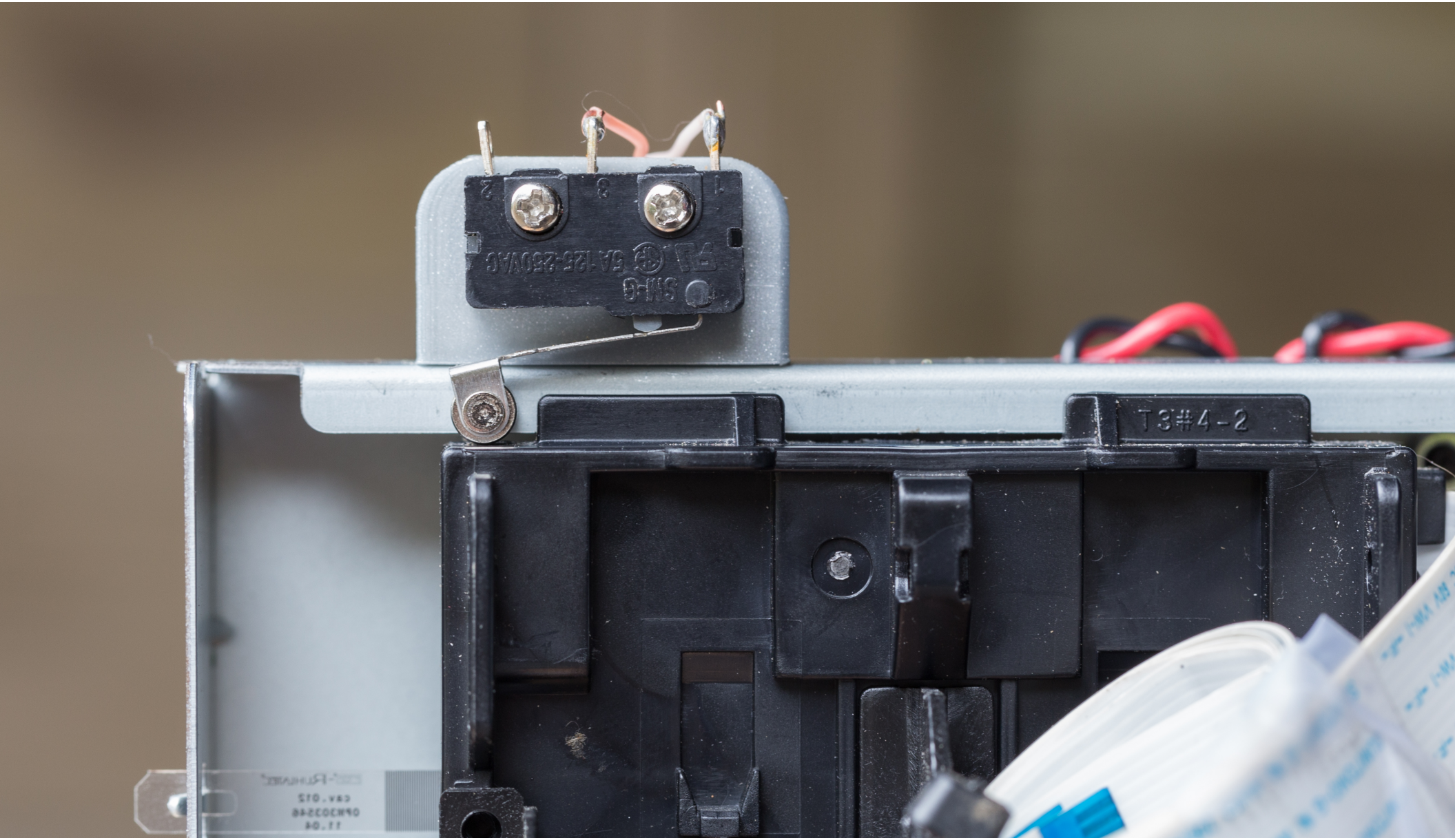
Limit switches are mounted on 3D printed brackets



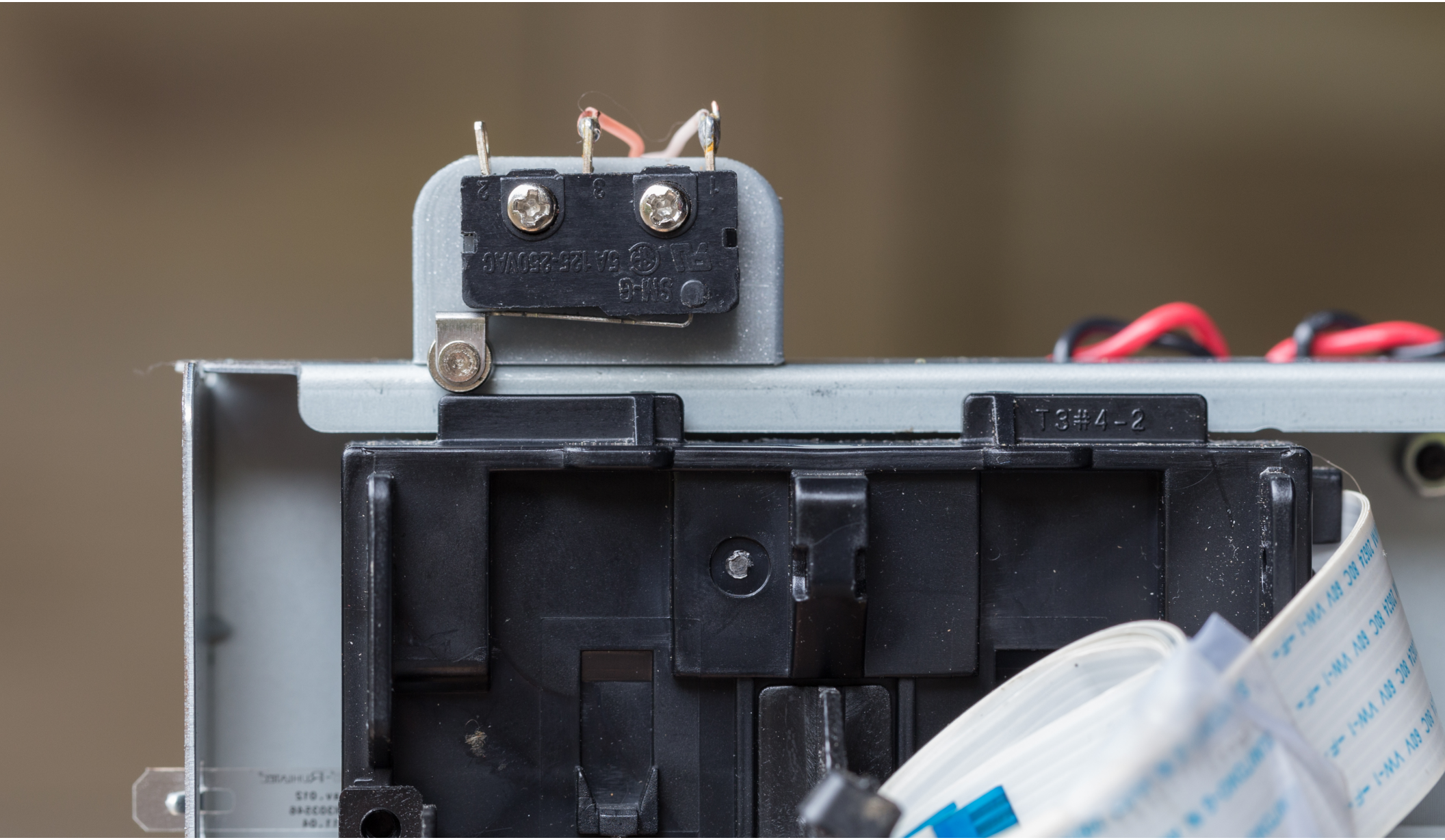
Limit switch in Action



Limit switch in Action



Limit switch in Action



Other Information

- See *Resources* page on the ME 491 web site
- Adafruit tutorial
- Sparkfun tutorial