**Tips & Tricks: From One Tarantula Owner to Another**

[Paul Krajewski](https://www.facebook.com/paul.krajewski.796)·[Tuesday, April 26, 2016](https://www.facebook.com/notes/tevo-tarantula-prusa-i3-owners/tips-tricks-from-one-tarantula-owner-to-another/1036731403087500)

This document is intended to become a quick reference for things and problems that are Tarantula-Specific. Please include any fixes for the frame, rollers, etc. If you have a Blog of a fix, please include a brief description and a link here. Please look over the document and keep like problems and fixes together. Tevo Tarantula Overview: Frame is generic 2020/4020 T-Slot Extruded Aluminum. All the usual Aluminum T-Slot Pros & Cons apply. All parts are of average China-direct quality; there are no name brand parts here. The stock hotend is generic no-name; I think someone said it was equivalent to a Mk5 only set up for Bowden. It comes preassembled; tear it down, clean out any metal shavings and make sure there's clearance so you can insert the PTFE tube all the way to the nozzle. Then reassemble everything carefully and make sure the heater cartridge is tight in the heater block, and that the thermistor is seated properly in its little hole. We have videos for assembly that cover this in the FILES section.

The main board is a generic MKS Base 1.2 with 4 x 20 LCD display.

The steppers are all generic NEMA 17, and the Bowden extruder is also a generic all-metal design.

Known issues:

Cheap Power supply; you may have to resolder a capacitor inside or wait for a replacement.

Hotend has an issue with the feed tube; it is known to break with very little tightening.

Fitting for PTFE tube at Bowden is known to be weak as well, and breaks with little or no provocation.

Both of these issues are easily resolved with this E3D V6 Clone Hotend Kit Complete with Shroud, Fan, PTFE tube & Spare Nozzles/Heatblock for US$11.23 DELIVERED:

[http://www.aliexpress.com/item/3D-Printer-J-head-Hotend-with-Fan-for-1-75-3-0mm-12-v-E3D-v6/32371544116.html](http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.aliexpress.com%2Fitem%2F3D-Printer-J-head-Hotend-with-Fan-for-1-75-3-0mm-12-v-E3D-v6%2F32371544116.html&h=GAQGq7IU_&s=1)

The LCD on my kit had a very dim backlight; it turned out to be a 1000Ω resistor installed where a 100Ω resistor should be; very easy fix.

The frame as supplied is not terribly rigid; we have a set of braces in the FILES section you can print up that make it rock-solid. Usually the first project once you get it tuned reasonably well.

The bottom line here is the bottom line: We have many members who've built this printer; most have had very little trouble, and are getting very good prints for 1/3 the price of any big name brand unit.

Consider that, and realize that you are going to have to pay for the low initial cost with a little more effort getting it set up perfectly. If you go into the project with that understanding, you will NOT be disappointed.

GENERAL TIPS & TRICKS:

Tip by [Jari Tulilahti](https://www.facebook.com/jartza?fref=nf) Tip of the day. I did put some Kapton tape to bed near where the hot end homes. When print starts, the head will travel over the kapton, which has few wrinkles, and the filament oozing from the hot end will be wiped to kapton. Helps at least with PETG.

Start gcode:

G28 ; home all axes G1 X0 Y20 F3000 ; wipe head G1 X2 Y0 F3000 ; wipe head G1 X4 Y20 F3000 ; wipe head G1 X6 Y0 F3000 ; wipe head G1 X8 Y20 F3000 ; wipe head G1 X10 Y0 F3000 ; wipe head

Tip by Paul Krajewski Metal Bracket for Capacitive Sensor (Auto-Level) We recommend to buy the sensor separately on AliExpress or eBay; this bracket is cheap and fits the sensor so you don’t have to monkey around printing a $1 dollar part. 12mm version: [http://www.aliexpress.com/item/M12-...](http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.aliexpress.com%2Fitem%2FM12-Photoelectric-switch-Proximity-switch-Sensor-Fixed-Bracket%2F32453009521.html&h=CAQESsT-2&s=1) 18mm version: [http://www.aliexpress.com/item/M18-...](http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.aliexpress.com%2Fitem%2FM18-Photoelectric-switch-Proximity-switch-Sensor-Fixed-Bracket%2F32455232171.html&h=oAQGs0nHg&s=1)

From Bob Black:

In assembly, I found many of the split washers needed were not included.. found that #10 worked well and were cheaper than Metric 5mm.

when installing the idlers install a flat washer to take up slack after screw is tightened to motor.

push the non eccentric toward the middle when tightening. this give a little bit more range when trying to stiffen up the guide to the rail.

using #6 screws to mount the y motor will allow you to use the second mount plate and thread on a nut between the first and second mount to secure the motor. This is a much stiffer arrangement and allows easy install location of the limit.

using a computer power cord and cutting the female end off will allow you to have a field ground for the power supply. Using the supplied power cord run a second cable to frame to give you an auxillary breakout for 12 volt using a terminal block just by moving its connection beside the board power connection on the power supply. Keeps the wiring much neater

Doron Shalev (originator of the Oldham Coupler) has shared his own tips for a successful first build with the Tarantula in a .pdf here: [https://lookaside.fbsbx.com/file/Ta...](https://lookaside.fbsbx.com/file/Tarantula%20Builder%20Beginner_s%20Advices.pdf?token=AWzFroDyo_hqezwndJTQgk83TW2fN04wigmZo7LZnJ3AZPMv75m1AyUUIl2psnRI9UVsNVpa7rwAevhKT_kgCuwgRR7CUjnZ6siJh4g_fzv1jU13IZ6C6XNixjl71jUbyZYXFuh4jbIF_5d3HogcGIHOzKv3zDKoOGPbD5Ys9ABx8w)