

# Helpful Parts Not In Circuit

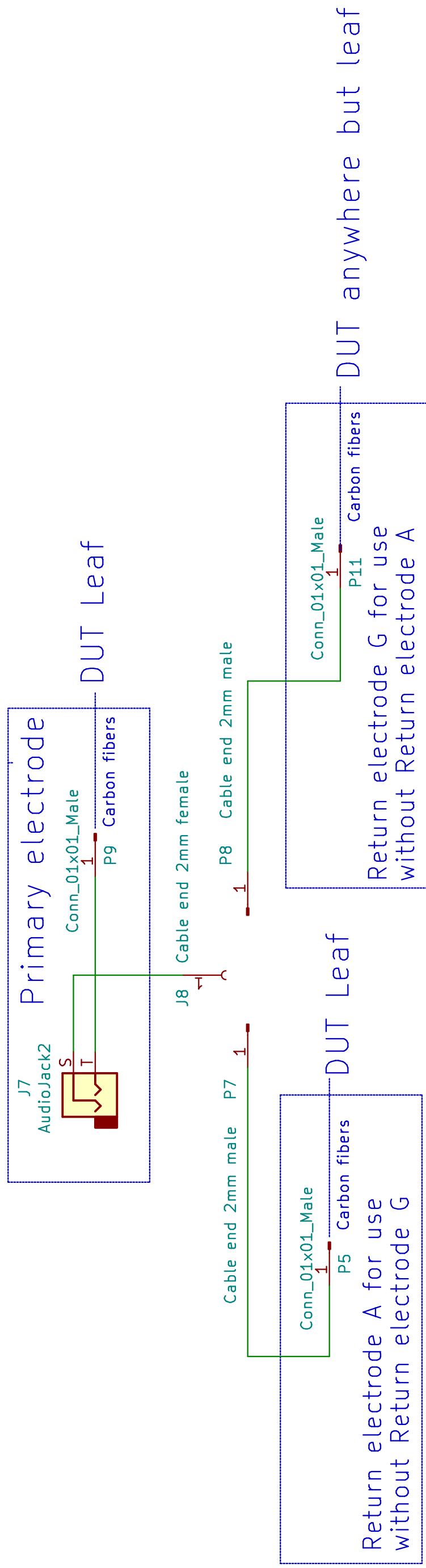
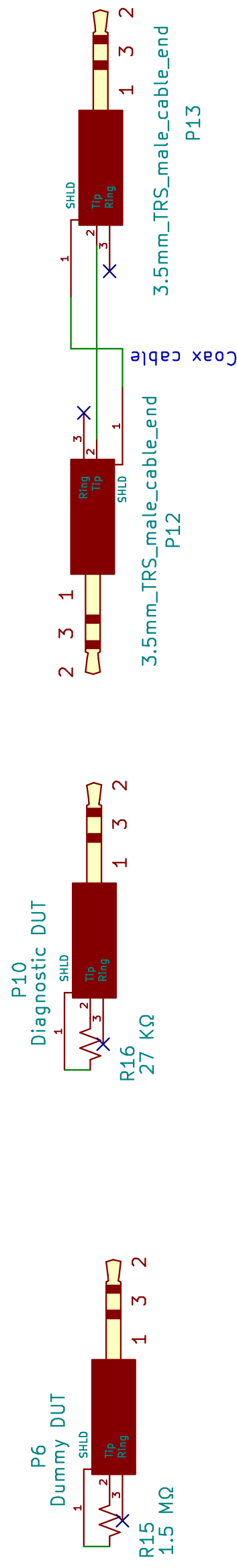
**NOTE: Except where indicated otherwise, component part numbers and vendors are suggested based on likely imperfect research of pricing and availability for the USA in the spring of 2019.**

NOTE — Very high temp solder (K100 not allowed on U4. The best solder will always be "No Heat SAC305" if you can find it, but you still MUST cleanse gold from pads. Avoid Pb (leaded) solder unless you understand the behavior of eutectics, how Pb ruins other solders, and how gold from ENG ruins Pb solder.

**NOTE:** These symbols are required to generate an accurate BOM. To use them in that way, copy them and paste them anywhere into the main page. They do not have to show within any sheet boundary.

Generate the new BOM and delete the symbol copies from the main page, and main page only, when finished, always leaving the original symbols in this sheet.

If the copies are left in the main page when later updating the PCB, they will interfere with the generation of the PCB Gerber files because these have no residencies on the PCB.



The pins inside the electrodes are to enable gold compatible finish electrical contact in the electrode assemblies for the carbon fiber. One pin belongs in each electrode assembly.