

## Tools

Tooling Used	
Tool Name	Function
3D Printer (Anet A8)	Printing parts
Box-cutter	Stripping small wires and cutting other items such as paint off of Lack tables
Calipers	Measuring accuracy of printed parts and creating drawings
Center Punch	Creating guide hole in jig and tool plate before drilling
Clamps (Bar, Spring, etc.)	Securing parts while cutting and assembling
Computer and peripherals	Creating designs and researching processes
Drill	Drilling holes in Lack table
Drill bits	Used in drill
Drill Press (used off site)	Aluminum bed plate mounting holes
Hacksaw	Cutting metal rods and plastic
Hand drill	Drilling small holes or where power drill would not fit
Heat Gun	Removing stringing from Paper Basket Torture Test
Heat Gun	Shrinking heat shrink tube
Hex wrenches	Hotend and set screws required head
Hot Glue Gun	Temporarily attaching toggle clamps
Many types of screwdrivers	Screwing in screws
Metal hammer	Cleaning up large prints and stress-testing unused parts
Multi-grips	Removing lid from acrylic cement and other
Multimeter	Checking for voltage resistance and continuity
Needle-nose pliers	Cleaning up prints, threading wires, etc.
Nitrile Gloves	Prevent solvent during solvent welding from contacting hands
PanaVise 201	Holding parts while drilling small holes and cleaning up
Putty Knife	Scraping prints off of bed and cleaning up prints
Respirator Dust Mask	Protect from wood dust
Ruler	Measuring distances where stiff surface was needed
Safety Glasses	Protect from air-born solder and flying wood and plastic particles
Sandpaper	Sanding down rough surfaces on parts and changing size to make parts fit better
Self-closing tweezers	Gripping hard to hold wires and small parts
Skewer	Applying glue to parts
Small wooden hammer	Adjust dimensions/squareness of frame and cleaning up prints
Soldering Iron	Soldering wires
Soldering Tools from Maplin	Cleaning up prints
Solvent Applicator	Solvent welding acrylic
Square	Making frame square
Tape Measure	Measuring distances larger than calipers can span
Thick Gloves	Guard against tools when cleaning up prints
Utility Knife	Removing stringing from Paper Basket Torture Test
Ventilation Fan	Suck out 3d printing and soldering fumes
Wire cutters	Cleaning up prints and cutting wires
Wire Strippers	Cleaning up prints and stripping large wires