Preparation | Adafruit Guide To Excellent Soldering | Adafruit Learning System

Preparation

Heat the Iron

Plug an and/or turn on your soldering iron to warm up. If you are using a temperature controlled iron, set it to 700F/370C for 60/40 or 750F/400C for lead-free solder.

While the iron is heating dampen the sponge with a little bit of water.

Clean the Iron

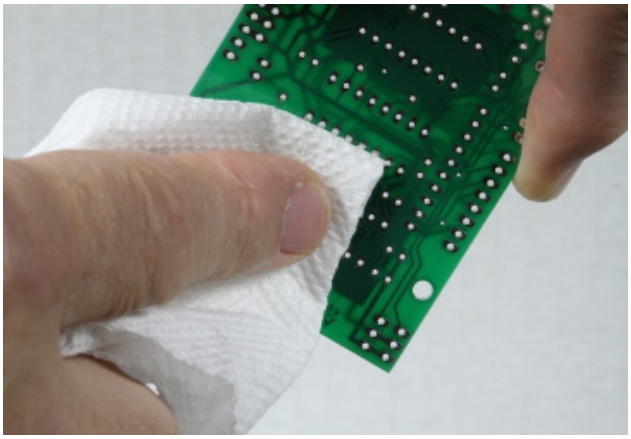
Wipe the tip of the hot iron on the damp sponge to clean off any oxidation.

Do not use files or abrasives to clean the tip. It will damage the plating and ruin the tip.

Tin the Tip

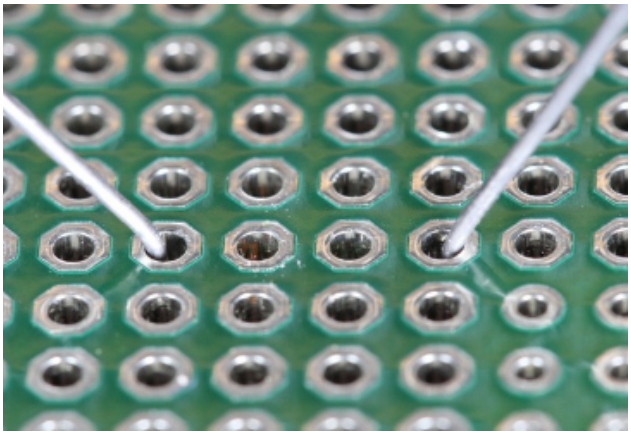
Apply a small amount of solder to the tip and wipe again to tin the tip. You should have a thin, shiny layer of molten solder on the tip of your iron.

If the tip is badly oxidized and difficult to tin, it can usually be reconditioned with some tip-tinning paste.



Make sure that the joint is clean

Dirt, oxidation and oily fingerprints can prevent the solder from wetting the solder-pad to create a solid joint. All Adafruit boards are plated to prevent oxidation, but if your board appears dirty from storage or handling, wipe it down with a little isopropyl alcohol.



Immobilize the Joint

This is very important! The parts being joined must not move during the soldering process. If there is any movement as the molten solder is solidifying, you will end up with an unreliable 'cold joint'.

Most through-hole components can be immobilized by simply bending the leads on the solder-side of the hole.

Steady the Board

A vise is a good way to keep the board from moving around while you try to solder it.

Once the joint is clean and immobilized, you are ready to apply the solder.

TOOLS

MAKING A GOOD SOLDER JOINT

Last updated on 2015-05-04 at 04.27.27 PM
Published on 2012-09-06 at 02.00.50 PM