Dremel Desoldering Station

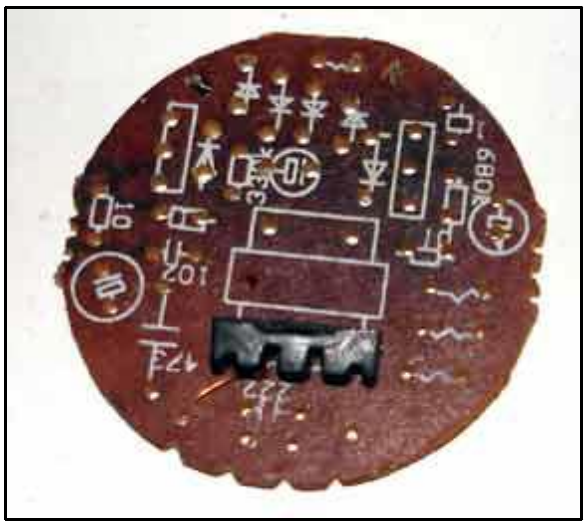
This is a nifty time and money saver for Electronic Hobbyists.

It presumes that (like all self-respecting DIY enthusiasts), you have a Dremel (preferably with flexible shaft) hanging next to your Soldering Iron, and are prone to the same Jackdaw mentality of collecting junk, because you simply hate to throw away anything that could be of some possible use, some rainy day !

Old and dead "populated" PCB boards are a rich source of usable discrete components. Old transistor radios, gadgets and gizmos, and even common house-hold items, like the ballasts from the "money saver" florescent lamps illustrated for this example. I burn out several of them a year, in spite of the manufacturer's guarantees, and plunder them for a supply of SCRs, transistors and coils, capacitors and diodes, all of which are perfectly good, and worth almost what I pay for a new lamp ! It is not just the pennies saved, but the convenience of not having to trudge down to a store for a few cents of components, when you can find them in your scrap box for free.

In the pre-Dremel days, scavenging a PCB like the one alongside was an hour's work with a soldering iron and desoldering pump, and a couple of blistered fingers. And you got maybe 50% to 80% re-usable components.

With a Dremel and a 60 grit sanding drum spinning at 15000 RPM the whole process took less than 5 minutes, with 100% "recovery", even if not every component is worth saving.



Just sand down the back of the PCB, and most of the components drop out. Some need a gentle tug with a long nosed plier. And you get the complete components - see the clean holes in the PCB "after the job" This is not so with a desoldering pump, specially for 3 legged components, or ICs. The illustration shows a "third hand" PCB holder, leaving both hands free to gently guide the drum, but it is not very difficult to hold PCB with one hand, and the flexible shaft with the other.

I have experimented with various wire brushes, but they only "polish" the solder. Grinding stones work slowly, and clog very fast with the solder, A coarse belt is fastest, and gives excellent results.

Your trusty DMM will tell you which components are good, and which are dead - some will have to be dead or your gizmo would be "alive" ! And the good ones are actually easier to work with than new ones, with legs "cut-to-size" and pre-tinned to go onto another PCB.

diy-sam