

Workbench Design Challenge Entry By Pierce Jensen

As a young engineer(14), I have chosen the items by my own personal experience. This is a smaller, more basic workbench that could fit on a tabletop so, it could be used by people who are just getting started, and who don't know if they are going to continue with electronics. For the first project to get you started, you could make your own power supply, and in doing so, save money by not having to buy a very expensive power supply and gain experience. It is a very good first project, and then you could use it later.

Also, this bench is a cheap way to get you started, for people who have a limited budget. It requires you to buy parts as you decide to build projects, but gives you a place to store extra components that you don't use.

This workbench is a good way to get smaller, more basic projects done, and to get started in electronics.

Clarification email response:

Vern:

I am replying to your email about not allocating the full 100 dollars in the budget for our design. I didn't use the entire amount because I ran out of possible items to purchase, I was saving some money for the first project, and/or in case anything comes up that needs to be purchased. Using the remaining money to make a power supply will save more money than buying a power supply, and will give you good experience.

Also, I ran out of items to include in my list. An oscilloscope is a great addition, but I could not include it because I could not find one for less than 30 dollars. I consider my workbench design completed.

The fact remains that a cheaper, more basic workbench is more viable to the entry level hobbyist because it doesn't cost as much to start and try electronics than an advanced workbench would cost.

Item	Vendor	Mfr Part #	Price
Solder Sucker	Ramsey Electronics	SS01	\$4.95
Long Nose Pliers w/ Cutter	Ramsey Electronics	MPP4	\$5.95
Solderless Breadboard 500 Contacts	All Electronics	PB-400	\$4.00
350 PCS Jumper Wire Kit	All Electronics	JW-350	\$12.95
Economy Digital Multimeter	All Electronics	DVM-810	\$7.95
20-30 AWG Wire Stripper	Jameco Electronics	159291	\$10.15
35W Soldering Iron	Jameco Electronics	208987	\$3.49
0.31" Diameter Tube Solder	Jameco Electronics	170457	\$1.39
2 PC PVC Insulated Tweezer Set	Jameco Electronics	253092	\$2.59
Precision Screwdriver Set	Jameco Electronics	226094	\$4.49
10 PC Alligator Clip Test Leads	Jameco Electronics	10444	\$4.39
Third Hand	Jameco Electronics	26690	\$5.95
Bug Cage	Jameco Electronics	11332	\$8.95
Total:			\$77.20