

Tool Triggered Power Cord For BT3000 and Other Tools

By Jim Frye

For many years, I have been using the power switch on my BT3000 to turn on the shop vac as well as the saw itself. My old shop vac was a low powered unit and together with the BT3K's motor didn't exceed the 20 amp. rating of the contacts in the switch. That all changed when I replaced the shop vac with an industrial model of Shop Vac. After several weeks of forgetting to turn on the vac when I started the saw, I knew I had to go back to the automatic method of starting the dust collector. Fortunately, Sears had the solution for this problem. They have a \$20 tool triggered outlet device that plugs into a standard duplex outlet and provides two outlets that are switched on when the tool that is plugged into the primary receptacle on the device is turned on.

This device worked great, but I had trouble keeping it plugged into the outlets in my shop. It looked like the heavy duty power cords I have put on my power tools were putting too much strain on the whole assembly and the automatic switch would eventually work itself out of the outlet. This arrangement also meant I had two power cords lying on the floor instead of one as I had before. I decided that I could make better use of this switch by putting it on a power cord of it's own and then plug what ever tools into it that I needed to use. I assembled a fairly inexpensive parts list of components to make what is essentially a tool triggered extension cord.

I took a cast aluminum duplex outlet box and added 10 feet of 12/3 rubber covered wire with a high quality closed face three conductor plug to it. I wired this cord to a high quality duplex outlet with a cover. I then plugged the Sears Automatic Power Switch into the duplex outlet. Next, I took a 3/4" wide by 12" long by .031" thick piece of brass strip and wrapped it around the switch and down to the sides of the outlet box. I had previously drilled a 1/4" hole in each end of the brass strip. I marked the location of the holes on the sides of the outlet box and drilled and tapped them to accept a 1/4"x20 bolt. After cleaning out the outlet box, I reassembled everything and bolted the brass strip to the outlet box with short bolts. I also mounted a magnetic surface mount plate to the bottom of the outlet box so I can position the switch on the stand or the side of the saw.

Since my saw is out of warranty, I shortened the saw's power cord from 11' to 3' to reduce any voltage drop that might come from plugging the saw into the extension cord. I only have one power cord on the floor now, my shop vac turns on every time I turn the saw on, and the switch stays put without pulling out of the outlet it's plugged into. I also now have a heavy duty, low voltage loss, tool triggered extension cord for use with other tools in my shop or outside. The pictures below should give the reader a good understanding of the setup and how I use it on my BT3K.



