

Our New Portable Powder Coat Booth

I started to play around with powder coating when I was rebuilding a 1961 Sportster XLH. For purposes of painting (tank, fenders, etc.), I built a crude rotating platform that allowed me to be stationary while rotating the part for full coverage. It worked like a charm. As mentioned, I also powder coated some small parts that I could fit into my vacuum oven for curing. Unfortunately, I had to rely on an outside source for powder coating the wheels and other parts too big for my oven. Once the painting was completed, I put the rotating platform away and forgot about it until we considered powder coating our knives.

When we started making and throwing our own knives, we came to realize that we needed some way to find them, in the grass or the woods behind the targets, when we inevitably missed the target. Since powder coating provides a tough finish, we went with that. Next we selected a color that was bright and easy to spot. We first tried yellow, not bright enough, and ended up with neon green.

We still needed a platform for powder coating, so we got out the old rotating table, from the Harley project. We replaced the single support with two upright supports for attaching the knives on a rod. We placed stainless steel tubes with ends that had been sawed endwise to remove half of each tube. The rod would rest in the ends of the tubes attached to the upright supports which had the high voltage source attached. We stapled cardboard sides to reduce overspray. We also added a fan to pull the powder outside. It sort of worked. We still had a bit (Actually, a lot!) of a powder coat mess to clean up afterwards. If you watched our video of The Bearded RAT making knives, you saw how crude it was (picture below).

As we continued to powder coat more knives we realized that we needed something more substantial, yet still easy to store when not in use. We also realized that we needed a well lit system that would provide a good draft to exhaust the excess powder coat outdoors.



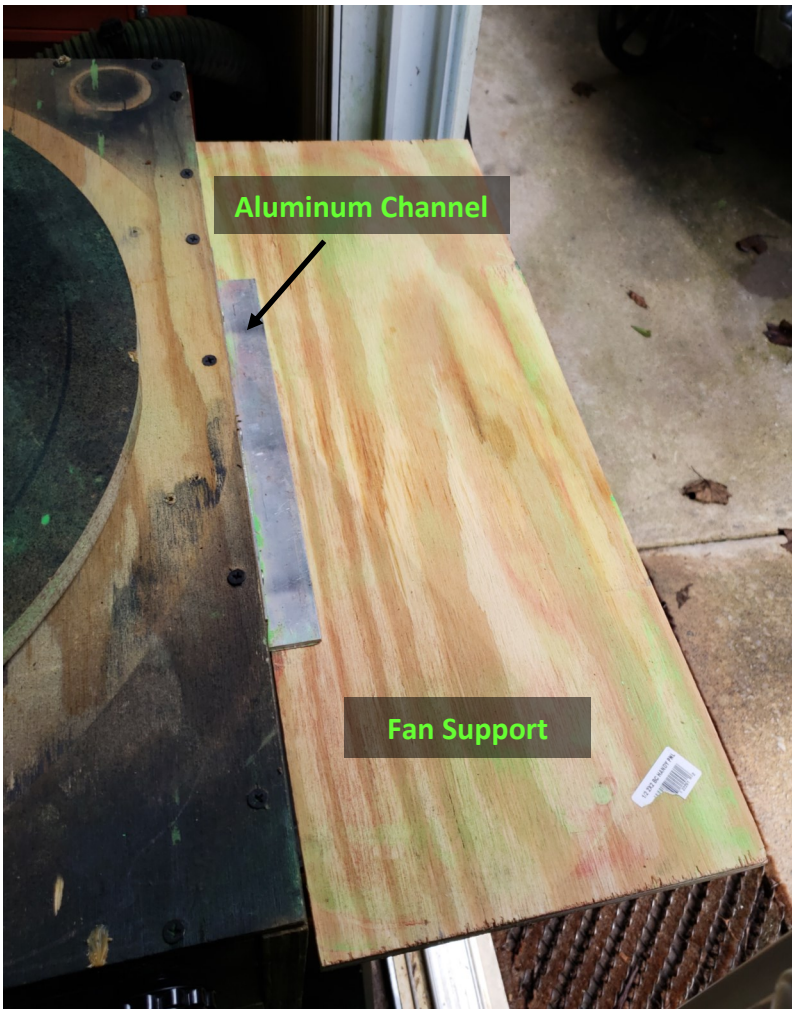
We wanted to use mostly parts and components that were already here. What we came up with is still a bit crude, but it satisfies our design goals of easy storage, easy assembly, good exhaust system and good lighting.

We started with the original rotating platform. We added bolt-on sides and a top. The sides and top were equipped with LED lights that we plug in once assembled. The last piece was a fan that sits on a removable shelf at the opposite end of the platform. The system works extremely well and has eliminated the inside mess (powder residue) that was always left after a powder coat job. Components are shown below:

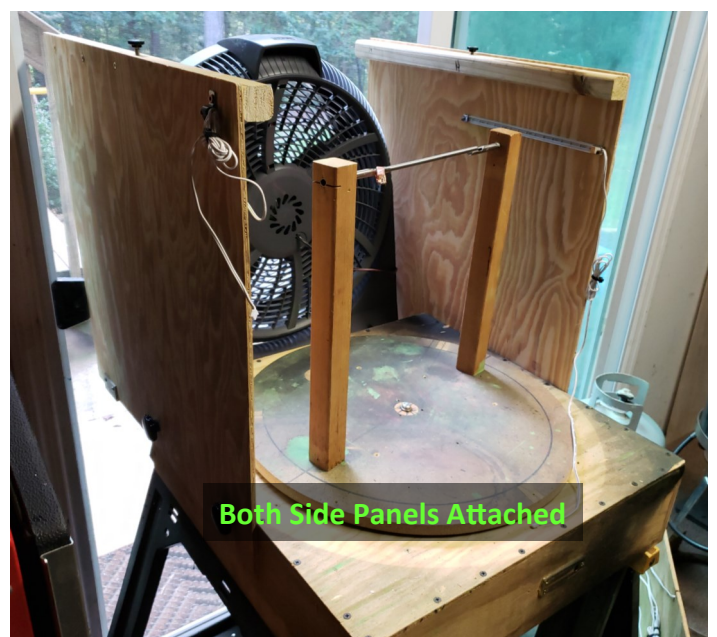
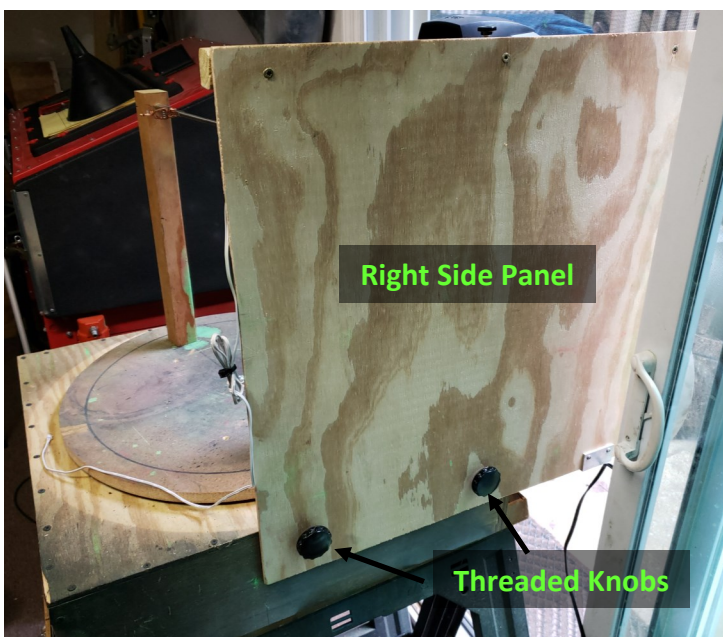


Portable Powder Coat Booth Assembly

1. Attach fan support to platform by sliding into aluminum channel. Then, place exhaust fan on platform.



2. Attach both side panels to platform, using threaded knobs attaching to Tee nuts in platform.



3. Attach top section, plug in LED light bars and turn them on.



If you want to powder coat knives , a simple home-made booth like this does an excellent job! I'm sure you can come up with your own variations and improvements. Have fun!



Note:

An exhaust filter (not shown) was added later to reduce mess outside.

Why We Like Neon Green for Our Knives

