

Shavings

By Glen Friesen

Well, I hope everyone had a wonderful Christmas and start to the New Year. December of the old year was a very busy month for me. My students finished off their projects the week before Christmas day and their classes came to an end. I shot and edited nine YouTube videos, worked on the medicine cabinet for my bathroom renovation which still is not completely done and worked in my shop cleaning and doing regular maintenance. So, life has been busy, but I guess that that is better than doing nothing.



(I promised my wife that the cabinet part of the medicine cabinet would be installed before we celebrated Christmas. I need to make the doors and order the custom mirror for the cabinet.)

As I mentioned, YouTube takes a lot of my time. Shooting and editing two videos a week is a lot. What makes it even harder is when you post a video and you come to the realization that no one is watching it. You feel like you have put the work in and have something interesting to say, but no one tunes in. If you struggle with self-esteem issues, don't start a YouTube channel. I have not felt like such a failure since I started teaching. Oh well, all one can do is continue and see what happens. So, look forward to more content in the future if you watch. And please subscribe if you have not already done so.



(When ever I blow the snow off of my driveway, I shoot it and post it on my YouTube channel. These are the most viewed videos on my channel. Not sure why.)

The video topic that does not generate a lot of interest is that of shop safety. I have always realized that this is a controversial subject. I remember having arguments at I.A. teachers' meetings about weather table saw guards were really necessary. I was horrified that anyone should think that an unguarded table saw blade was acceptable in their own shops let alone a school shop. Perhaps my modified right hand has made me more aware of the potential risks that are needlessly taken in this craft. Working under the constant threat of a law suit kept me very vigilant when I worked with students. So, while the topic is controversial and there are many different opinions, I feel that there is a "core" of what is universally considered as safe. So here we go. If you disagree, comment in my video "A Great Push Stick Mod: Chapter 94." Check out my YouTube channel RLDR Custom Creations for a number of safety videos.

Are Other Table Saws Dangerous?

I love SawStop table saws. When I was about to retire, I would often joke with my principal that one of the shop's two SawStop table saws would make a very nice retirement gift from the school division. It was a joke. Yes, I know that I was delusional expecting a thank you from a soulless and heartless school division, but hey, I am an optimist. However, you don't need a SawStop saw to work safely. I believe that if you use push sticks properly and you have good sticks, you can work just as safely with a normal saw as you can with the SawStop version.

The Lowly Push Stick:

Push sticks are not a sophisticated piece of technology. Mine start with a scrap of $\frac{3}{4}$ inch plywood 3 inches wide and 12 inches long. There are many patterns on the internet, but I like the one that I use. Once the stick is cut out of the wood, I like to sand the edges to make them comfortable in your hands. Then, I dip the handle into red paint about 4.5 inches as a “marker” as to where your hands should go. Once the paint has dried, I drill an almost $\frac{3}{4}$ inch hole in the handle to install a rare earth magnet. The hole to be drilled needs to be slightly less in depth than the thickness of the magnet. I rough up the back of the magnet and install them in the hole with epoxy. Once the epoxy has dried, I have started covering the handle with heat shrink tubing. To finish it off, I mark where the magnet is with a sharpie and then write the name of the tool where it will be used. Then I attach it to the tool that it goes on.



(The push stick design that I use in my shop and the school shop before this. I think that using these correctly can replace a SawStop table saw.)

Using a pair of push sticks on all your cutting tools is all you need to pretty much guarantee that your fingers will be safe. Do they replace a tool like a SawStop table saw? I would like one of those saws, but I simply cannot afford it. Push sticks are cheap and are also useable on my bandsaw and jointer. So, in my shop, my push sticks are my SawStop.



(Push sticks can make all your pieces of equipment much safer to use.)

A note about SawStop. Apparently, they have agreed to share their flesh sensing technology with other companies. James Hamilton on his Stumpy Nubs YouTube channel has been following these developments. There is a movement in the United States congress to legislate table saw safety. Rather than be legislated to share their patents, they choose to do it voluntarily. So, in a few years, you may see other table saw companies using similar technology.



(I always loved the SawStop table saws we had in the school shop. Besides the added safety that you get, it is an excellent saw.)

Using a Push Stick Properly:

Once you have made a proper set of push sticks for all the tools that need them, it is important that you also know how to use them properly. As I taught shop in the school system, I quickly became aware that just like in sports, proper technique was critical. So, I analyzed each tool to see what I

considered the best form to use when using that tool. I watched all the video that I could find, but at the time, there was not a lot of information about this. So, I devised a plan to make my own procedures that my students could follow. One technique that I came up with was the technique that I referred to as “palming your push sticks.”



(This is the heat shrink tubing that I use to secure the magnet in place, mark where the stick should be held and provide a little extra grip.)

Palming Your Push Sticks:

I came up with the philosophy that the only useful push stick was the one in your hand. If you have to stop your cut and reach for it, or worse yet, walk to another tool to find one, they are useless. They have to be in your hands. I taught my kids to hold their push sticks between the base of their thumb and their palm. This way, they can still use their thumb and fingers to hold their boards that they are about to cut. When I taught this technique, I referred to it as “palming your push sticks.” In my opinion, this technique works exceptionally well. Your push sticks are always in your hands and ready to use as soon as they are required. It allows you to make sure that you are always controlling the stock that you are cutting. While I taught this technique on the jointer and bandsaw, it is especially beneficial when using the table saw. Kick back, which is an ever-present problem on the table saw, can be minimized by always controlling the stock. So, in my opinion, push sticks can make using all your stationary tools much safer.



(By palming my push sticks, I can have the sticks in my hands and still control the board with my fingers.)

Storing Your Push Sticks:

One of the bigger problems with push sticks is that they get used and then set down at another place in the shop. Push sticks need to have magnets on them, as I described earlier, and also need to be labelled. There needs to be a set for every tool in the shop. I am in the process of setting this up in my home shop. Yes, I have students in my shop, so it is absolutely necessary. However, it is also important for the home shop. Knowing where all the safety equipment, tool accessories and tools to adjust the saw all in one place just makes a lot of sense.



(The “X” marks where the magnet is and this magnet allows the push stick to stick to your machine.)

Another habit that compliments setting up your tools properly is always putting things back where

they belong. I still fail at this sometimes, but new students in my program in the school shop took awhile to get into the habit of putting face shields and push sticks where they belonged. Repetition makes the continuation of this habit easier to maintain.



(My resaw bandsaw all set up to teach students. All the safety equipment and saw accessories are attached to the front of the saw.)

SawStop or Bust?

So, it may not be a huge concern for your overall safety if you decide not to purchase a SawStop table saw. A simple push stick and good technique can make an ordinary well-maintained table saw safe to use. I am not anti SawStop. I would have one in a second if someone donated it to me. But to purchase with my own money, not at this point in my career. I will use my Rockwell/Beaver contractor saw with my dado head and my Delta Unisaw and live within my means. My Unisaw has a good blade guard and early in the New Year, I plan to fit an Excalibur over-arm guard to my contractor saw with the dado head. I am not overly worried about my safety. But if anyone out there has a

SawStop they want to donate to my shop, I'm in. Enjoy the New Year.