NOTE: This is pdf version of a .docx file provided by Doug Free

I have put together a document that I hope will help you all adapt to the new CNC Router and the differences. The spoiler board is new and brings some new changes.

I will describe how I powered up the new router and used it. I am sure you may have your own way, but this may help you get there.

General Comments:

The new spindle acts a bit slower when initializing and shutting down so be patient. It is not a huge change but a change.

You must use the new collet. There is a 1/8th and ¼ inch version.

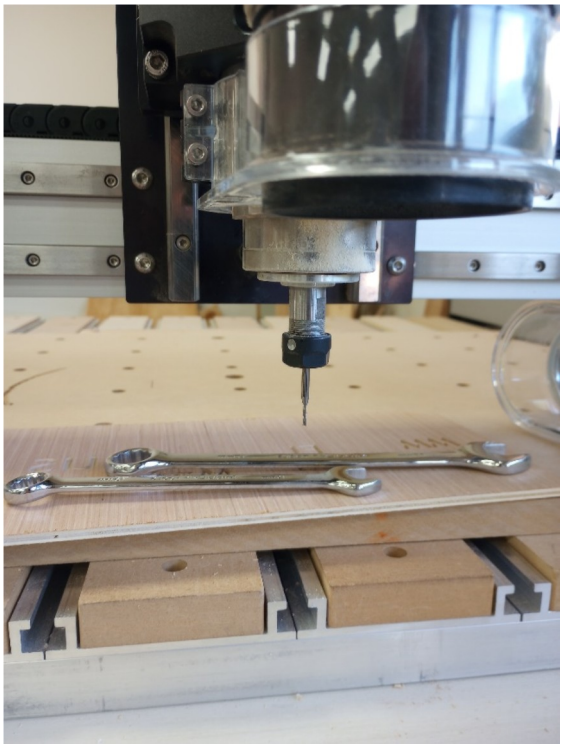
The precision of the cuts are awesome. I had some parts made that fit together to make a sleigh. With the old router I had a lot of sanding to do but with the new router the cuts and tabs were so precious they just fit together with very little effort.

Here is the process I used

1 Turn on computer with pin 2021
2 Turn on cutter
3 Push green start button (this used to turn on the spindle immediately but now just powers the VDF spindle and dust collector).

4 vdf controller should look like,

5 if the lower light is off, push the button. When the lower light is lite the spindle is ready to power on **when your program starts**. The top led is flashing 0.0.
6 plug in thumb drive
7 check your vcarve file and generate gcode
8 Select the carbide motion software.
9 Initialize machine as you normally did.
10 Insert cutter bit. this requires the use of new **precision collets** and tighten **using two wrenches, with cutter inserted.**



11 hit resume to measure bit
12 jog the cutter out of the way to setup your work. Note: Front edge of the new spoiler board **is not square**. Don't use it to square your work piece. The spoiler board screw holes **are definitely square** so use them to align your work piece. We may need to

square up new spoiler or square your workpiece to the screw holes. hold down. I used the holes for alignment today on four projects and it worked fine.

13 Zero out x,y,z
14 Load gcode file
15 Execute job, your program will control the rpms. You won't be prompted to turn on the router. If the lower circular light is not on (see step 4 above), the router will not spin and you will crash the bit. (Trust me I know from experience.)
16 When your spindle fires up, the VDF controller will look like this: This job happened to want 22,000 rpms per the program but showed 22,260 on the VDF.

17 The rest is as normal
18 When the VDF powers down it takes a minute or two to discharge the capacitor, so it will appear to be on for a bit.

I have not included all steps in the process assuming you know some of them already. I tried to highlight what I saw as changes to what I normally do.

Suggestions:
We may want to secure the cables and the controller some. I was moving some stuff and got caught up in the new controller wires.
We may want to square up the front edge of the new spoiler board.

We may want to secure the Collets in a special storage case.

It is quiet: