

Woodwork In Peace

By

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My shop is located in Mariposa and may be too far for most who would like to visit. However, if anyone is interested, please call me at 209 742 6020.

The shop is a multipurpose building used for storage, garden tools, other hobbies and my woodworking area. The woodworking area is about 800 square feet and has most of the tools and equipment needed for most projects. As you can see from the Photos P01-P04, the equipment is in a relatively confined space but since most of the equipment is on wheels, I can move unneeded equipment out of the way for a project.



Photo 03



Photo 01



Photo 04



Photo 02

The major tools include a table saw, radial arm saw, router table, scroll saw, band saw, jointer, planer, compressor, several sanders (disk, belt, and oscillating), and a small dust collector. Photo P05 shows the rolling clamp rack and parts bin. Photos P06 – P08 show some other individual tool views.



Photo 05



Photo 08



Photo 06

I've been working toward getting the shop ready to build the kitchen cabinets that I promised to my wife about five years ago. I'm almost there and have started the planning and design phase of the project. The process of getting the shop ready included, mobilizing equipment, developing dust and debris collection, and acquiring the necessary accessories for cabinet making. I thought I would focus on two areas of my project which are the router table and dust collection.

The router table (Photo P09) is almost all shop built with the exception of the Porter Cable router, the PRL (Precision Router Lift accurate to .002" from Woodpeckers Supply), the aluminum fence bracket from Rockler, the metal cabinet, and the vacuum cleaner.



Photo 07

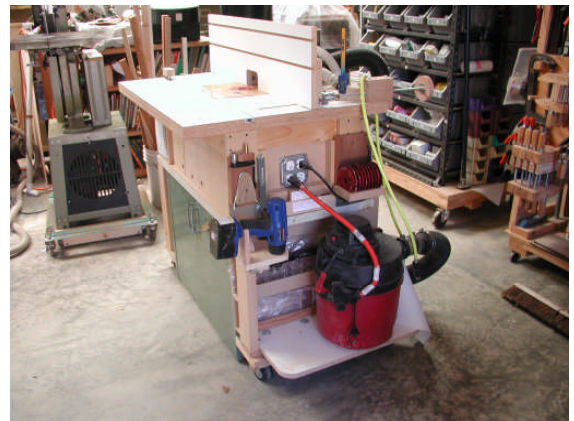


Photo 09

The table is double layer ¾" x 36" x 24" Melamine with hinges to provide a 30 degree lift angle (Photo P10) and full access to the motor and PRL.



Photo 10

The fence is also double layer Melamine bonded together and routed with "tee" slots for feather boards (shop made) and other accessories. The matching interface between the fence and the Rockler bracket is surfaced flat and maintains the fence perpendicular to the table top. The Rockler angle bracket by itself did not maintain perpendicularity of the fence which is corrected by the interface. The router and lift are supported with angle iron stretchers (Photo P11) to reduce table sag and keep the surface flat and stable.

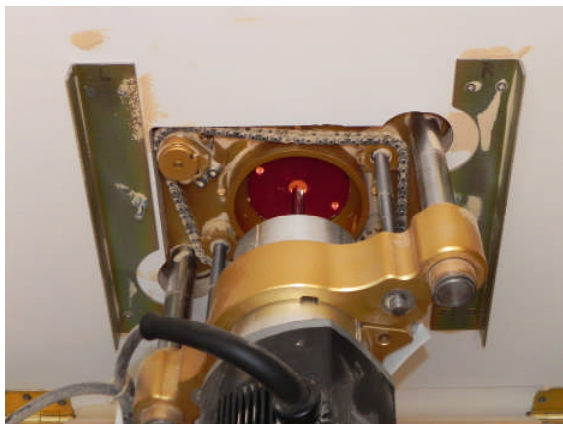


Photo 11

The fence is fitted with two hand wheel driven screw adjusters (Photo P12) which move the fence in or out by 1/16" per revolution of the hand wheels. You can easily guess at 1/8 of a turn which moves the fence 1/128" and there is no backlash.

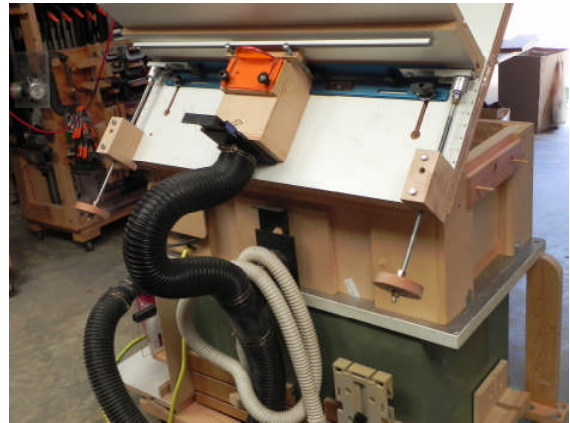


Photo 12

The vacuum cleaner is connected to the cavity under the table and to a collector box behind the fence for collection at the router bit above the table. The front of the table (Photo P13) has two sliding panels (removable) and a removable center panel which provides access to the router speed and power switches. For convenience, there is an external power switch for the router and vacuum.

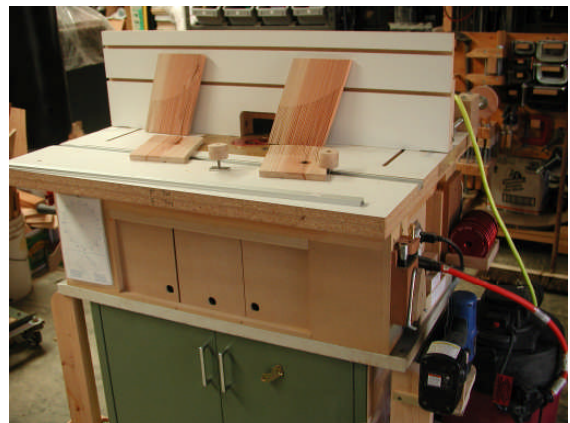


Photo 13

The sanding center (Photo P14) has its own dedicated dust collection center.



Photo 14

I modified (stripped down) a house upright vacuum cleaner to mount under the disk sander, small belt sander and the oscillating spindle sander. Although I have to switch the hose from port to port, the vacuum works extremely well for the disk and oscillating sanders. The little belt sander (30") spews debris but not too much.

The small dust collector (Photo P15) is a Jet unit (600 CFM) which is barely enough for one large tool but it does work well for any one of my power tools.



Photo 15

This unit is dedicated to three tools of which, each has a blast gate. These three tools are in close proximity to each other so the hose does not have to move far. The unit is connected to a tee which connects to the radial arm saw (Photo P16).



Photo 16

The other branch of the tee has a longer hose and connects to either the planer or table saw. I've fabricated a dust collector vent for the radial arm and I've enclosed the Ridgid Table saw with 1/4" MDF removable panels (Photos 17-18)



Photo 17



Photo 18

The last item is the dust collector itself (Photo 15). This tiny dust collector bag would fill up really fast until I added a plastic trash barrel to the collector end. The bottom of the bag is open and mounted to a plastic collar which fits into a chip board top. The base wheel plate is removed and

mounted under the new platform which holds the barrel and a pedestal which now holds the dust collector. Since the debris is now dropped into the barrel, the dust collector bag provides continuous breathing room for the collector and therefore is more efficient.

As you might have guessed from many of the photos, I make a lot of changes to the equipment and I make a lot of the accessories which is part of the enjoyment of having a work shop.

I know I said that the dust collector was the last item in the dust collection system but there is one more. My lathe and band saw both make a lot of dust really fast, so until I fabricate something for them, the floor is my last line of dust collection.