

Adjustable Taper Jig

I recently needed to cut some tapers for a project and didn't want to invest in a manufactured jig. So I built the simple jig you see above.

This taper jig is accurate and can accommodate a wide variety of lengths, widths, and thicknesses of

stock. It also works great for making straight rip cuts on narrow pieces of stock.

The jig's base is a piece of $\frac{3}{4}$ " plywood with three long slots used to attach an adjustable fence. Each slot is recessed on the bottom for the head of a carriage bolt (detail 'a').

An adjustable $\frac{1}{2}$ " plywood fence sits on top of the base. It has slots in the base for adjusting the angle of the taper. Four holes in the fence accept $\frac{1}{4}$ " carriage bolts for the hold-downs.

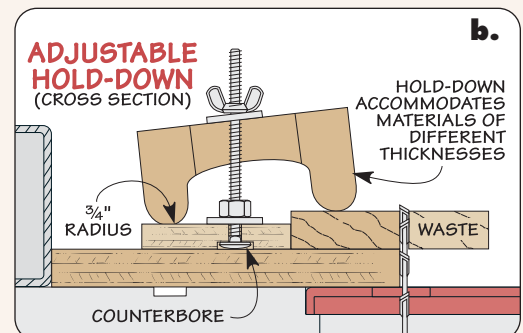
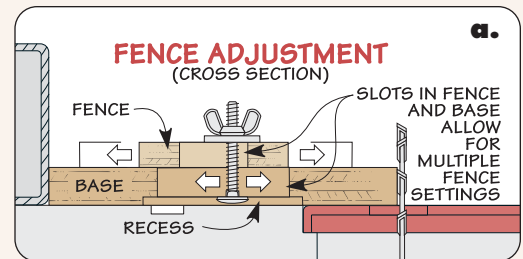
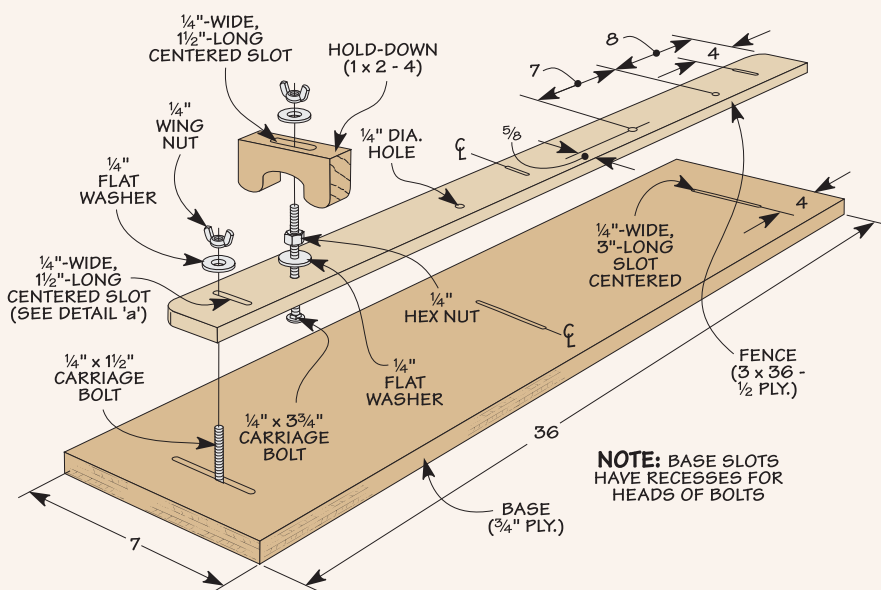
I made four hold-downs from 1"-thick hardwood, as in detail 'b.'

A slot at the top allows you to quickly position and then tighten them down with a wing nut.

To use the taper jig, adjust the fence to the desired taper and lock it in place. Then swing the hold-downs over the workpiece and firmly tighten the wing nuts.

Finally, set the rip fence of the table saw so the blade lines up with the edge of the jig. Then simply push the sled along the fence. That's all it takes to cut perfect tapers every time.

*Frank Penicka
Mount Pearl, Nfld., Canada*



Shop-Made Set-Up Gauge

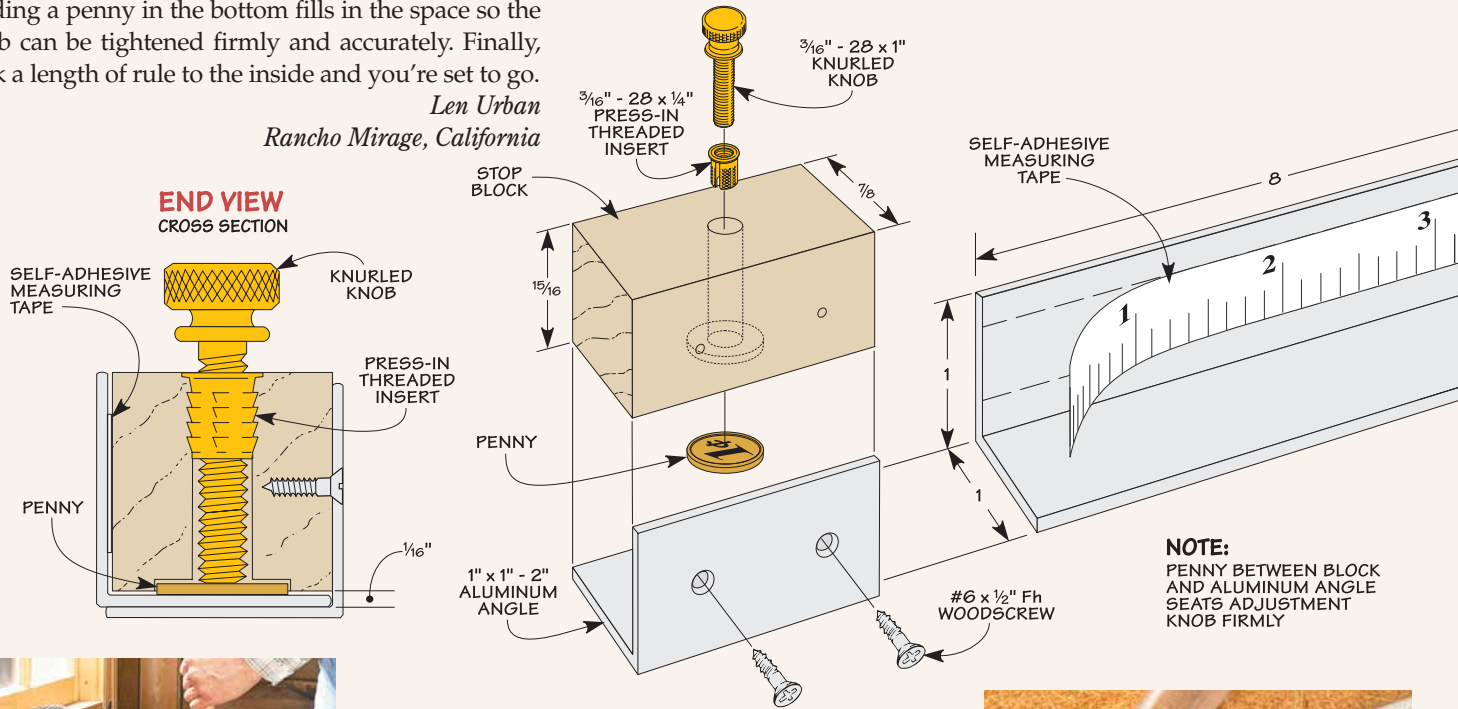
Locating the depth of drill bit collars, determining the length of dowels, or setting the cutting depth for tools accurately can be challenging. To make this task easier, I built the set-up gauge shown in the photo at right.

The gauge frame is simply made of a piece of 1" x 1" aluminum angle. To this I added a second piece of shorter aluminum angle with a wood stop block attached, like you see illustrated in the drawing below.

A threaded insert on the top of the wood block accepts a knurled knob that is used to set the tool. Adding a penny in the bottom fills in the space so the knob can be tightened firmly and accurately. Finally, stick a length of rule to the inside and you're set to go.

Len Urban

Rancho Mirage, California



Quick Tips

▼ To secure wood plugs, **David Richards** of Rochester, MN, uses the same finish he plans to use on the project. Just dip the plug into the finish and insert it in place. It's fast and you won't see any glue lines.



◀ A vacuum extension mounted to the wall lets **Mike Oslund** of San Antonio, TX, get rid of his dust pan. He just sweeps the dust to the nozzle.



▲ Gripping threaded hardware firmly without damaging the threads is always a difficult task. So **David Jenkins** of Phoenix, AZ, cuts small pieces of hollow tubing and slips them over the jaws of the pliers to protect the threads of the hardware.