Not another Taper jig! Well, I had fun making it – and it works... -By Rod Kirby

Although I designed this for my Aluminum SMT Extension (see SMT Extension), you can also run it along the rip fence. As built, there is 20-³/₄ between the front of the saw and the miter fence bracket.

The sizes listed (if they look "odd" - converted from millimetres) are as I made it, for my setup – make it whatever size fits your BT3K arrangement.

Materials:

Base: ³/₄MDF 18-¹/₂ x 13-¹/₂ Miter fence bracket: 1" MDF 11-¹/₂ x 2-¹/₂ Taper fence: ³/₄ plywood 19-¹/₂ x 2-¹/₂, Clamp blocks: ³/₄ plywood 4-¹/₂ x 2", Clamp pads (glued on) ¹/₄ plywood 2" x ³/₄

Hardware:

¹/₄20, 3-¹/₂ Tee bolts (2), 1-³/₄ Tee bolts (2), ¹/₄20, 1-1/8" knobs (4), ¹/₄" washers (4). Also used: ¹/₄" straight bit, 5/8" dia slot cutter. (I got all of this from woodhaven.com (I'm not on commission) but I can't get this kind of "stuff" in Australia, so I go there because it's a "one stop shop" for all the hardware I need for jigs etc.)

Some notes:

The slotted taper fence was made years ago for my disk sanding table. Now it does double duty for this jig.

The thru slots are all $\frac{1}{4}$ and the back of the taper fence has a 5/8" counterbored slot 1/8" deep (see pic), I used the slot cutter for this. This is to allow the clamp tee bolts to slide. Note: cut the counterbored slot first. To cut the tee slots, you first use the $\frac{1}{4}$ " straight bit set slightly lower (say 1/16") than the position of the slot. Then change to the slot cutter to finish the "T". Make sure your alignment is "spot-on" after you change bits.

The knobs may appear small but I recommend you don't use larger ones – you don't need much clamping pressure to hold everything safely.

To ensure maximum grip (and safety), keep the clamps flat by placing a scrap piece the same thickness as the work piece, at the back end of the clamps (see pics). I know – I could use bolts, but it's much quicker using scraps.

I deliberately used only one coat of clear acrylic on everything, with no sanding afterwards. This "lifts" the surface of the ply and MDF and makes them "rough" enough to give better gripping faces.

In use, I have the base as close to the saw as I can without actually touching. Be aware: this will test just how well your SMT is set up - if it's not parallel to the saw blade, you'll soon find out. In fact, attached to the SMT, you can use the jig to align the SMT.











