Project Plans:

Table Saw Jigs Pt.2

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Introduction:

These plans are to build the table saw jigs as depicted in part 2 of the table saw jig video series on the Fisher's Shop YouTube channel. The three table saw jigs in these plans are the **Tapering Jig**, **Spline Jig**, and **Fisher's Box Joint Jig 2.0**. When it comes to woodworking in a shop, jigs quickly become essential to maintaining consistency, efficiency, and safety. These three jigs definitely bring all of that to the table and more! I can personally testify that my woodworking skill has increased by incorporating these jigs into my regular crafting routine. I'm sure the same will happen for you too!

Approximate cost: <**$90**

You can get all three of these jigs out of a 4' x 4' sheet of plywood with room to spare. So if your local home goods store or lumber yard will sell plywood in that size, then you're good to go.

Also, I purchased some T-track, knobs, and bolt kits from Rockler but you can easily substitute the bolts with Johni bolts and make your own knobs to save on cost. This will leave you with just the T-track to purchase and there are other suppliers that sell cheaper options.

Tools Needed:

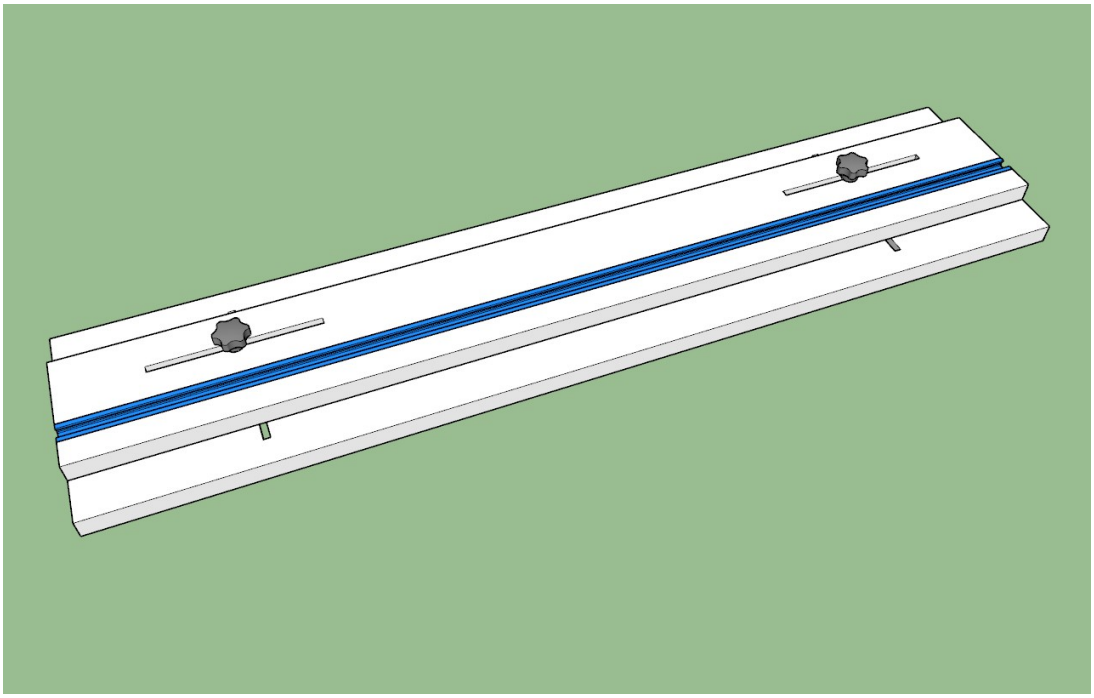
NOTE: Orange tool names indicate alternatives

Basic Tools:	**Power Tools**:
• Measuring tape • Pencil / Marking gauge or knife • Clamps (spring clamps, squeeze clamps, short F-style clamps) • Scissors • Hammer • 1/4" Chisel • Combination square • Framing square • Speed square • Awl / Centerpunch • Drill bits • Dado Stack / Flat toothed table saw blade • Screwdrivers • Countersink bit • Calipers • Utility knife • 3/8" & 3/4" straight router bits	• Table Saw • Miter Saw / Hand saw / Hack saw • Router • Drill Press • Spindle Sander / Round file & Sandpaper • Drill & Driver • Angle grinder w/ cut-off disc

Materials Needed:

- 100” (Approximately 8 1/2’) of T-track
- 7 T-track bolts (4 long, 2 medium, 1 short) / Johni bolts
- 7 T-track knobs / Home-made knobs / 1/4” wing nuts
- 2 of 2 1/2” carriage bolts (3/16”-1/4” bolt thickness, 1/16” washer thickness)
- 4 of 3/16” washers (1/16” washer thickness)
- 18 of <3/8” countersunk screws (Might have to sand off points of 1/4” screws to get them small enough)
- Plywood (Approximately 4’ x 4’ of 3/4” plywood)
- Wood Glue
- Craft Adhesive
- CA Glue & Activator / Epoxy
- 8 of 1/2” washers (for spacers)
- 4 of 2 1/2” countersunk screws
- Painter’s tape
- Notched tiling trowel (notch size is up to you, 1/4” used in video)

Tapering Jig:



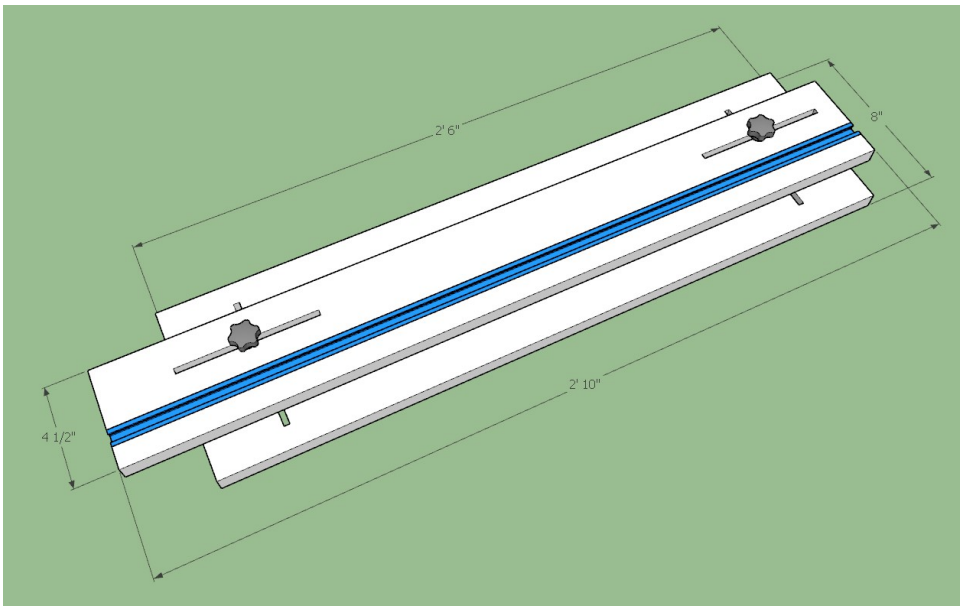
A jig just for cutting tapers?? Why would I need that? Let me tell you! Sure this jig can cut a taper but its real usefulness is just the ability to become a flat reference for you against the table saw fence. When you have a live-edge slab or even a piece of scrap plywood that doesn't have a straight edge on it, this jig can help you clean up one edge so that you can use the piece for your project.

Or perhaps you don't own a jointer. This jig can put a perfect flat edge on a board without you having buy another piece of expensive machinery! Simply clamp the piece securely, adjust your table saw fence so that you'll be trimming off the exposed edge of your board, and let'er rip!

Let's make one!

Cutting out the Pieces:

This one is pretty straightforward. The first step is to cut out the two pieces of plywood that make up this jig.



The bottom (larger) piece is 2' 6" x 8" and the top (smaller) piece is 2' 10" x 4 1/2".

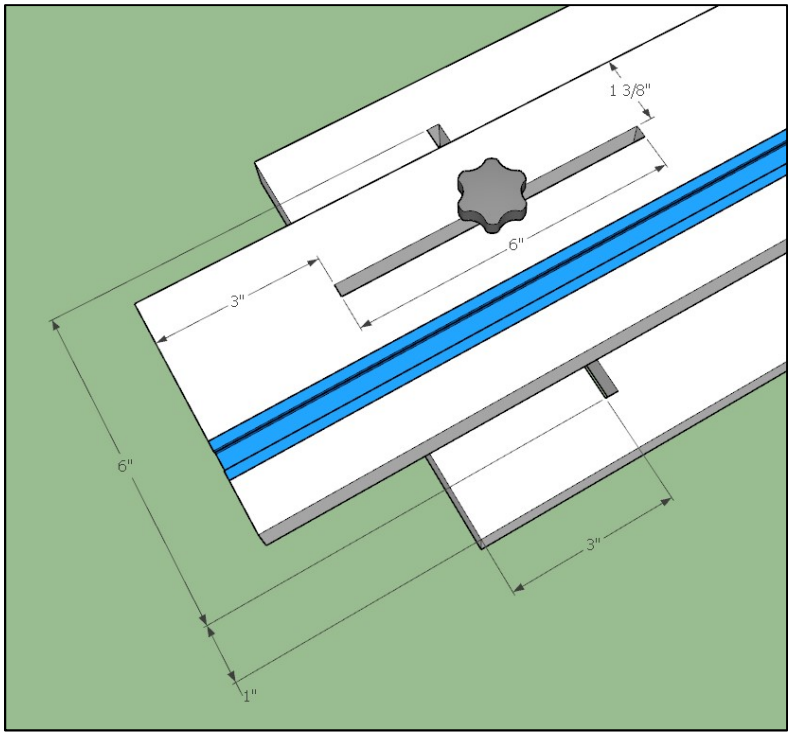
The overall length of the jig is pretty arbitrary and you can tweak this design to accommodate your shop needs. A longer jig will obviously allow you to more easily cut tapers or straight lines on longer material. I found this length to be good for me and my small shop but if you have a larger shop and will be cutting boards much longer than 3', then you might consider adjusting the length of this jig to meet your needs.

When it comes to dimensioning out these two pieces, it's critical that you make sure the edges end up exactly straight. These will be your reference edges moving forward so if they're not straight and true, it renders this jig pretty much worthless so take your time and do it right. Rip them to width on the table saw and then to length at the miter saw.

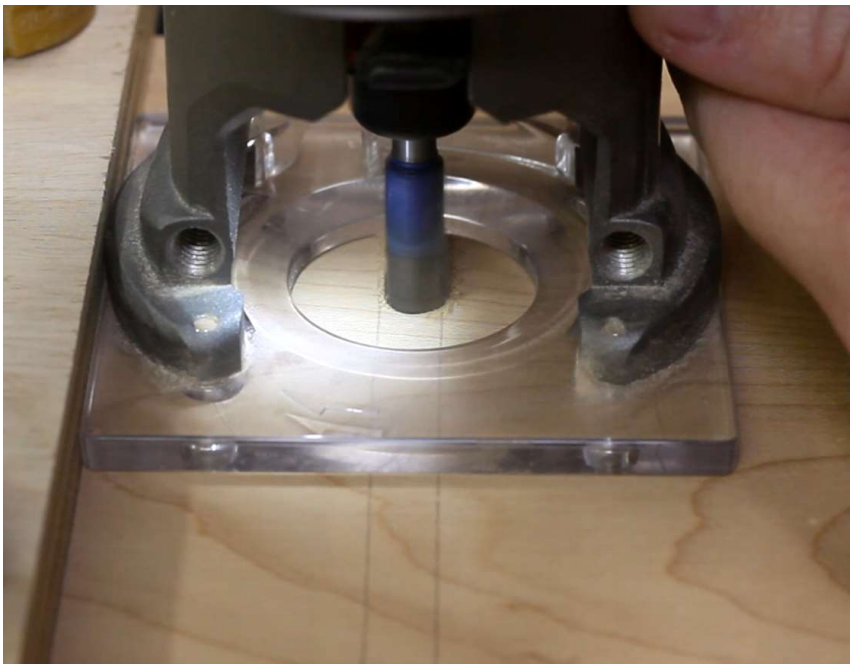
Feeling Groovy:

Now we want to carve the grooves for the two main bolts that hold our jig together. For this, I recommend using a hand-held router but this task can be done on a router table as well if that's all you have.

Each groove will be 3/8" to easily accommodate a T-track bolt. Start by marking out on the pieces where the grooves are to go. The bottom piece gets a 6" groove cut that is 3" from the end and centered leaving 1" of material on either side. The top piece gets a 6" groove going perpendicular to the previous groove that is 3" from the end and spaced 1 3/8" in from the side opposite the T-track side (refer to picture).



Once you have things marked out, measure the distance between the edge of your 3/8" router bit and the edge of the router faceplate. Offset a fence (use a straight edge) that distance and clamp it down tightly to the board and trace a reference line down it. Then clamp the entire board down to your work bench, lest it drift away on you while you're working like mine did. If you're not using plunge-capable bits in your router, you'll have to drop it in on an angle and backtrack to clean up the cut. Take shallow passes and increase the depth of cut little by little until eventually you're all the way through the 3/4" plywood.



Once you're through, repeat the process for the other three grooves that need to be cut. Then swap out the 3/8" bit for the 3/4". We now need to cut a recess into the bottom of the groove on the bottom piece to allow room for the head of the bolts. You shouldn't need to adjust your fence from the previous location so just line it up on the same line you use previously, adjust the depth of cut to be just slightly more than the thickness of the head of your bolt, and make your cut.

If things go according to plan, you should be able to drop your bolts in and have them sit just below the surface of the board.

At this point, you should have four grooves cut with two recesses for your bolts on the bottom piece.

Use some sandpaper and soften any sharp edges that the grooves might have and then you can proceed on to the next step.

Staying on Track:

Next step is to plow the channel for the T-track on the top piece. Whether you decide to use a dado stack, a flat-toothed blade in your table saw, or a router, set your fence appropriately so that you leave 1" of material between the edge of the piece and the T-track groove.

I recommend making a couple practice cuts first to make sure you've got the right channel size before cutting the piece for your jig. We're shooting for a perfect fit here with no slop but yet not too tight AND the groove should let the T-track sit **JUST BELOW** the surface (maybe 1/32" to 1/16").

Next up is cutting the T-track. First, lay the T-track into the channel and position it so that the screw holes (if the T-track is pre-drilled with holes) are even.

Mark both ends where it needs to be trimmed. I found using a utility knife to be very effective at giving me a precise and easily-readable mark on the T-track. Now you're ready to make the cuts using your miter saw or hacksaw.

Since T-track is just aluminum, you can cut it easily with most shop tools. Just go slow, be gentle, let the tool do the work, and be conscious that you're still cutting metal… so the offcut could go shooting off if it catches the blade!

When affixing the T-track into the channel, I chose to use epoxy and screws. The screws I had were just a touch too long and needed to have the tips sanded off so that they wouldn't protrude out the bottom. You've got less than 3/8" of material to work with under the T-track so there's no doubt that you'll have to shorten the screws.

As long as you pre-drill the holes to the correct size, the screws don't really need a sharp point so whether you choose to use CA glue or Epoxy to glue in the T-track, make sure that your screws you use are short enough!

Assemble and Use:

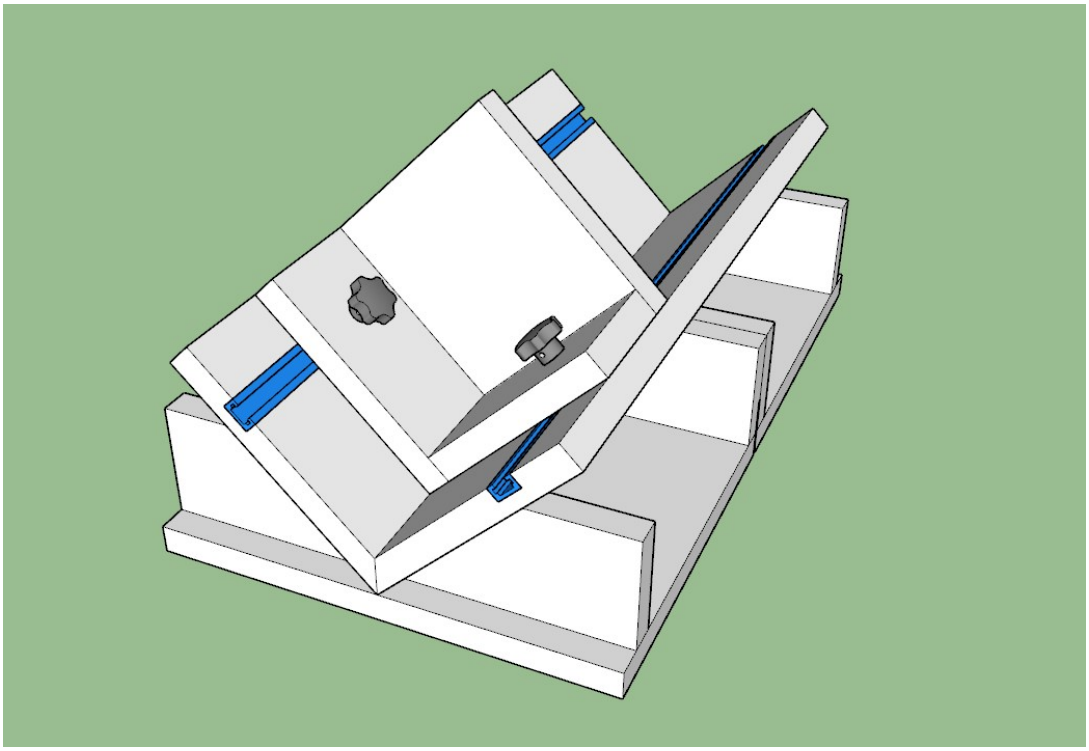
Assembly is as easy as pushing two bolts up through both the pieces, dropping on a washer, and threading on some knobs.

Slide on your hold-down clamps into the T-track and you're ready to go!

Depending on the width of the piece that you're cutting, you'll want to adjust the top piece as far to the right as you can, leaving just the section that you want to remove as the overhang. This will give you the most support underneath your piece as well as a surface to clamp against for your hold-downs. Adjust your table saw fence appropriately and verify that you won't be cutting any part of your jig prior to actually pushing things through the blade.

In the video you'll notice that once I pushed the jig through the saw blade that I pulled it back. This isn't necessarily a good practice, but I was being careful to keep it pressed against the fence as I did so. Ideally, you'll have an outfeed table so you won't have to pull the jig back towards you. Just be careful… and enjoy cutting some tapers!

Spline Jig:

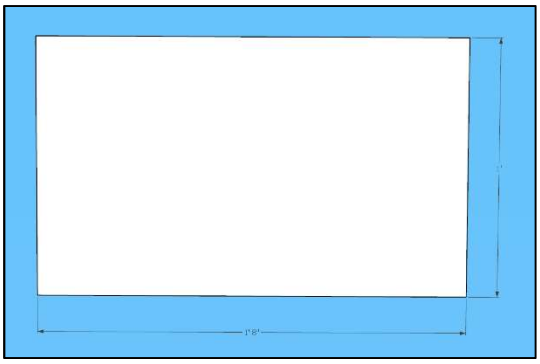


Splines are thin pieces of wood that are inserted into a cut that is perpendicular to a miter joint in order to add additional support. Whether you're making jewelry boxes, picture frames, or basically anything with miter joints, you can reinforce those corners with splines. The tricky part is cutting for them. In order to cut evenly across a corner, your project piece needs to be held at 45-degrees as it's passed over the table saw.

There are a few different typical designs for spline jigs but I'm quite partial to this one since it sits on top of a sled and has a large cradle with an adjustable fence. By using T-track, the fence can easily move side to side to give you a square clamping surface while you cut. Additionally, you could even build two of the fences and sandwich in your project piece to add even more support.

Alright, let's get to it!

Making the Sled:

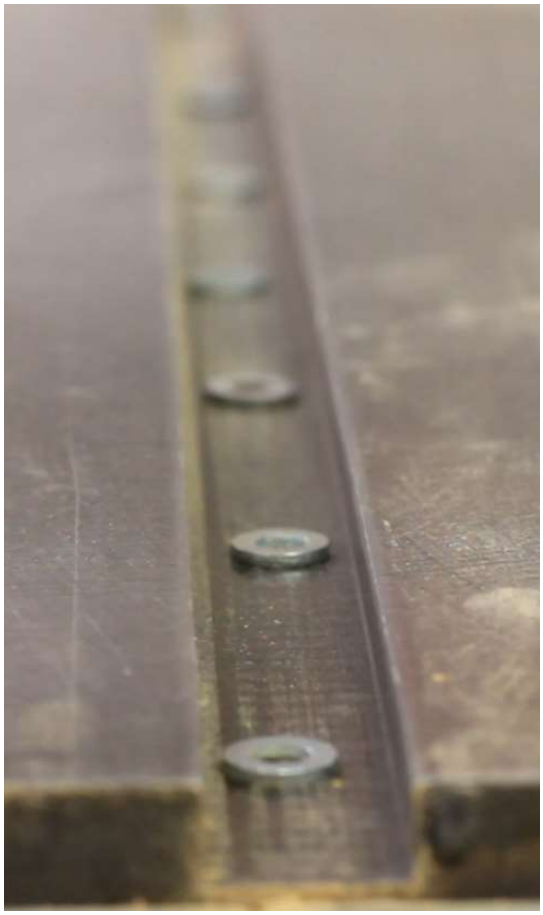


The first step to making this jig is to prepare the sled base. Cut out a 1’ x 1’ 8” piece of 3/4” plywood.

The next thing to cut will be the runners that we’ll mount on the bottom.

I recommend using a hardwood or even a poly-plastic material (often found in plastic cutting boards) for your table saw jig runners.

Cut two runners the length of your base and make sure it fits snugly into the miter slot and just below the surface of your table saw.



You might find that you need to sand the edges of your runner a bit to get it to slide easily within the miter slot. Be careful to sand it evenly and to take off just a tiny bit at a time so you can sneak up on the perfect fit. It’s important that you don’t introduce any side-to-side “slop” in the runners because this just invites inaccuracy to the jig. Once you’ve got a good fit, we’re ready to stick it onto the bottom of the sled.

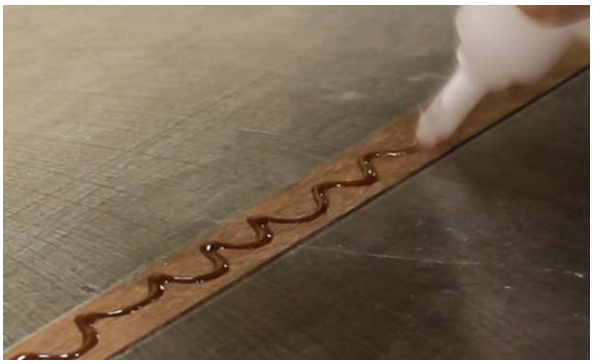
Use a handful of washers to act as spacers within your table saw miter slot so that once you place your jig runners in they will be breaking the surface just a little bit.

At this point, drop your runners in and verify that they’re above the surface. You’ll want to use your table saw fence as a guide to help you drop the base down squarely, so position that appropriately so that the center of the base is lined up with the blade.

Then, squirt on some CA glue (not TOO much, we don’t want squeeze-out) onto the runners or the table saw and gently lay your base down onto it while keeping it square to the table saw fence.

Once the CA glue sets, you should be able to very carefully slide the sled backwards off the surface and flip it over upside down. Scrape off any squeeze-out that there might be.

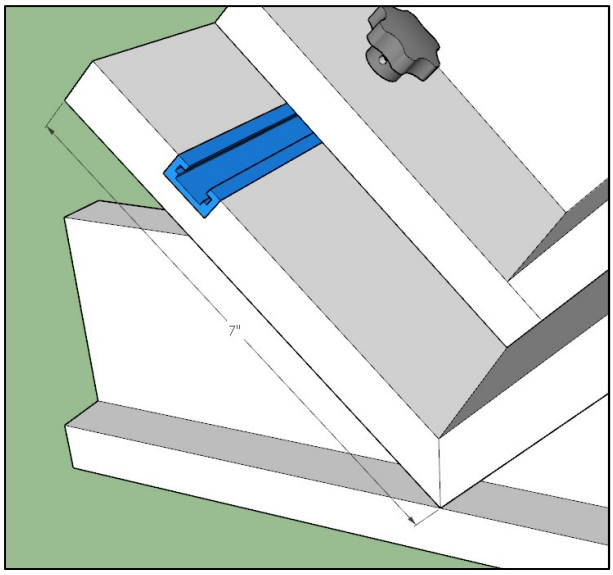
Now we can drill, countersink, and screw the runner in to add more support. There's enough material for you to put in 1/2" screws without the need for you to shorten them.



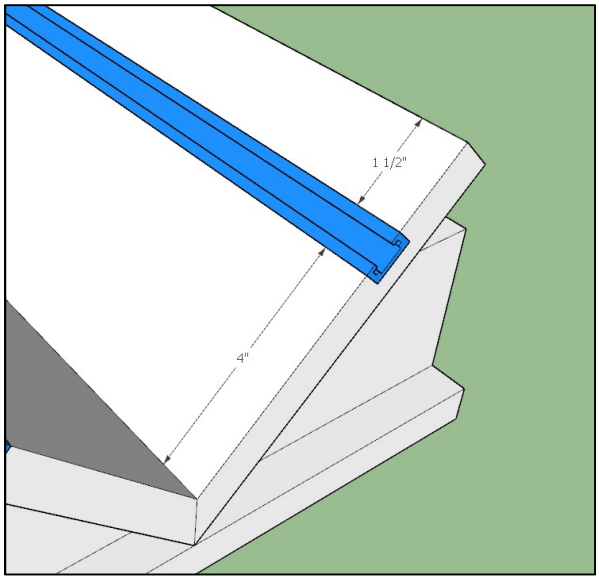
You might find that you need to do a touch more sanding to get the sled to slide smoothly. Just be careful not to take off too much. I used a bit of paste wax on the runners and on the bottom of the sled to help as well.

Building the Cradle:

To make the cradle, start off by cutting two sections that have a 45-degree angle on one edge and are 7" wide (from edge to point). Then cut the strips to length, which should be the width of your sled (1' 8").

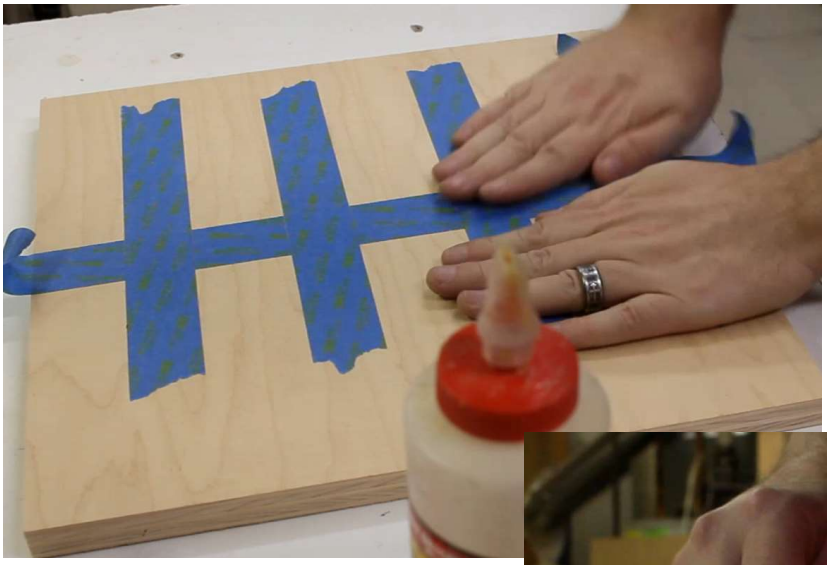


One of the steps I forgot when building this jig myself was to cut the grooves for the T-track before gluing up the cradle pieces. Whoops! So to make things easier on yourself, cut the grooves in the two pieces now and save yourself a headache. Each groove needs to be 4” in from mitered edge which should leave 1 1/2” of material on the other side.

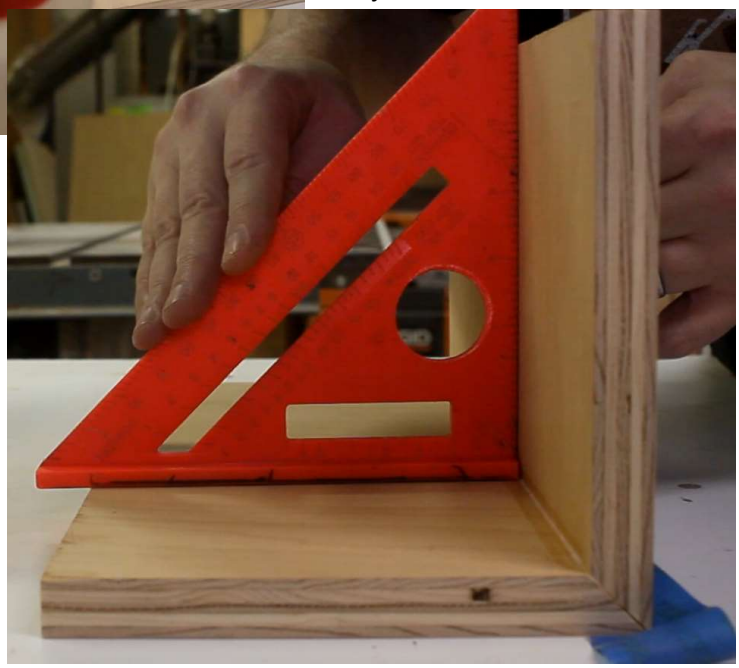


Use your dado stack, flat-toothed sawblade, or router to cut the grooves. Make sure the track sits about 1/16” to 1/32” under the surface of the cradle! Trim the T-track to fit, and then epoxy and screw it into place.

At this point you can then glue together to two sides and form the cradle.



To glue up the cradle pieces, lay them together upside down and put the edges of the mitered joint together. Once they’re lined up perfectly, place a strip of painter’s tape down the joint. Then add some more strips of tape perpendicularly to reinforce the joint. Gently flip the two pieces over, add some glue, and close up the joint.

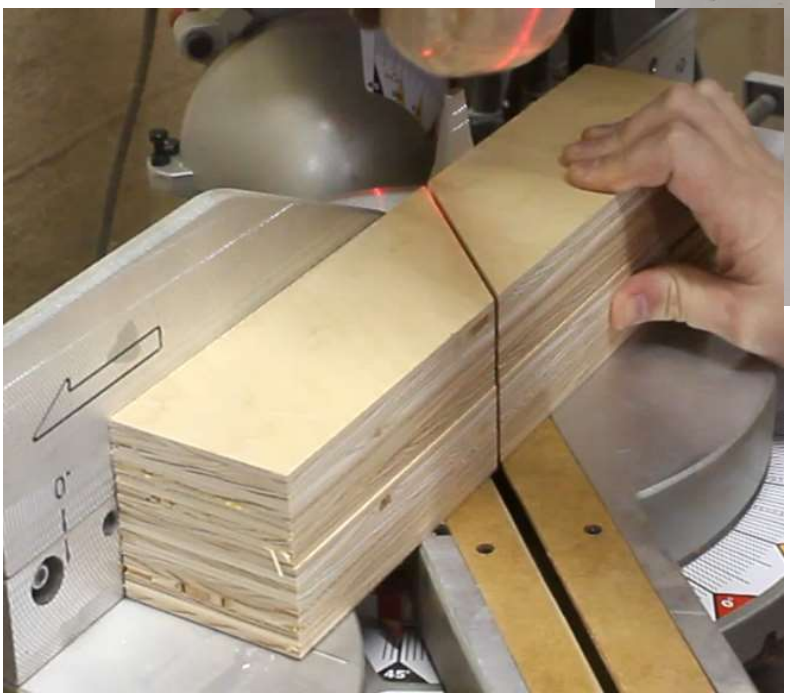


Use some more tape to pull the two pieces into square. It’s important that you get this at a perfect 90-degrees so move quickly before the glue sets and make any adjustments that you need to.

Cradle supports:

The cradle supports are all 3” tall so start by cutting some strips out on the table saw. The center support needs to be comprised of two pieces, so laminate up a couple of the strips once you have them cut out.

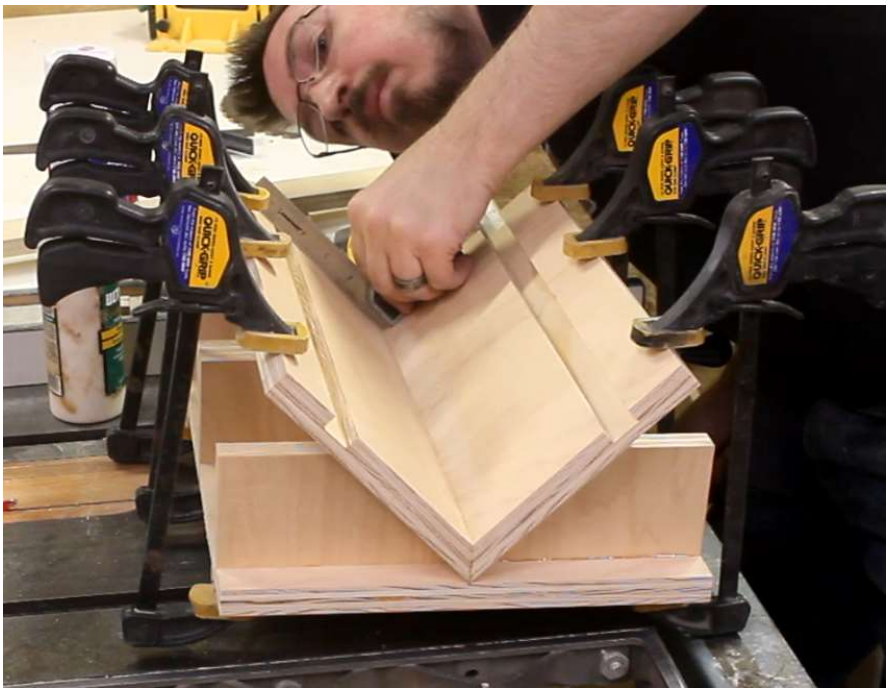
Once that’s dry, cut all the strips with a 45-degree angle using your miter saw.



Next, cut each of the supports to their proper length which should be 6” along the bottom edge.

At this point, I found it easiest to draw out a center line on the sled base itself and then to also draw some reference lines where each of the supports are to be glued down.

Once you have things mapped out, glue down each of the supports onto the base using wood glue or CA glue. Make sure that the supports remain square and that the angled edges are coplanar to each other so that when they dry, the cradle will rest evenly within them.

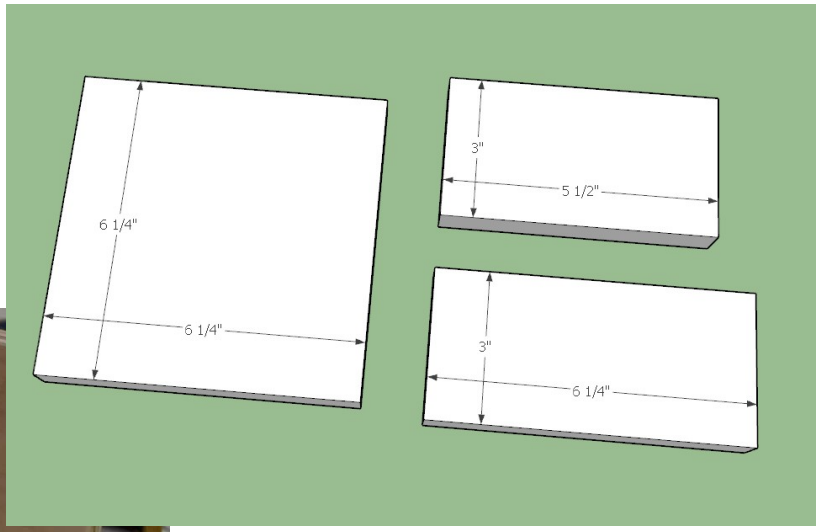


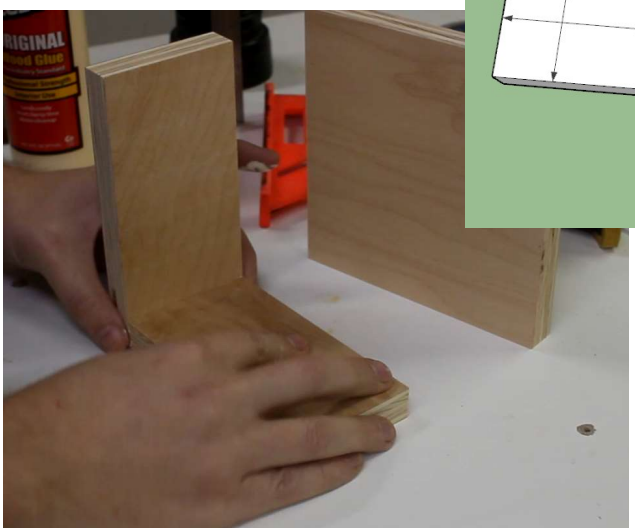
Once all the supports are completely dry, use wood glue (for the longer work time) and coat the angled edges of each support. Then drop the cradle into position and apply gentle and even clamping pressure with some squeeze clamps. Check the cradle thoroughly and often to make sure that it's in square before the glues starts to set.

Making the Adjustable Fence:

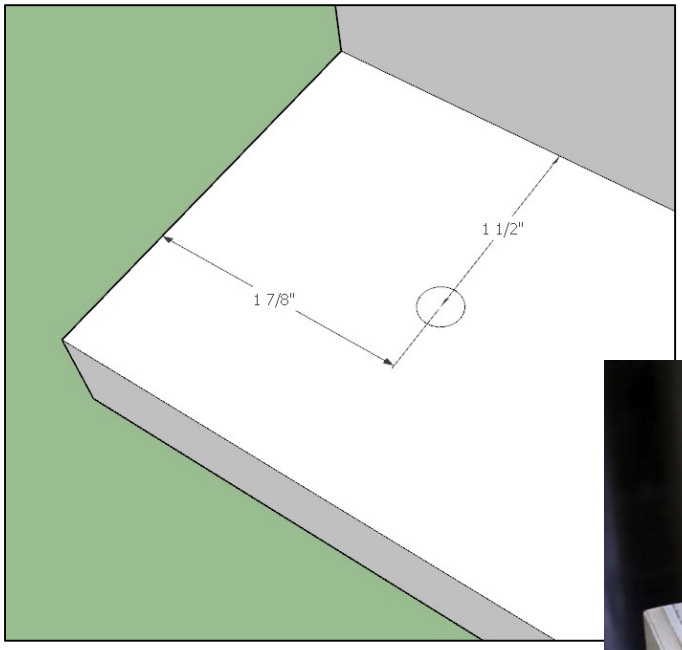
The adjustable fence is made up of three pieces that are just butt-jointed together. The bottom pieces are 5 1/2" x 3" and 6 1/4" x 3".

The large piece that acts as the fence is 6 1/4" x 6 1/4".





Assemble them with glue making sure to keep them as square as you possibly can… after all, this is going to be your fence so you'll want it to be perfect.



Once it's all glued up and dry, you can drill the holes for the T-track bolts. I'm sure you're wondering why I didn't have you drill for them prior to gluing things up. It's just that I figured it would be nice to be able to measure precisely by placing the assembled fence into the cradle and being able to accurately mark where holes need to go.

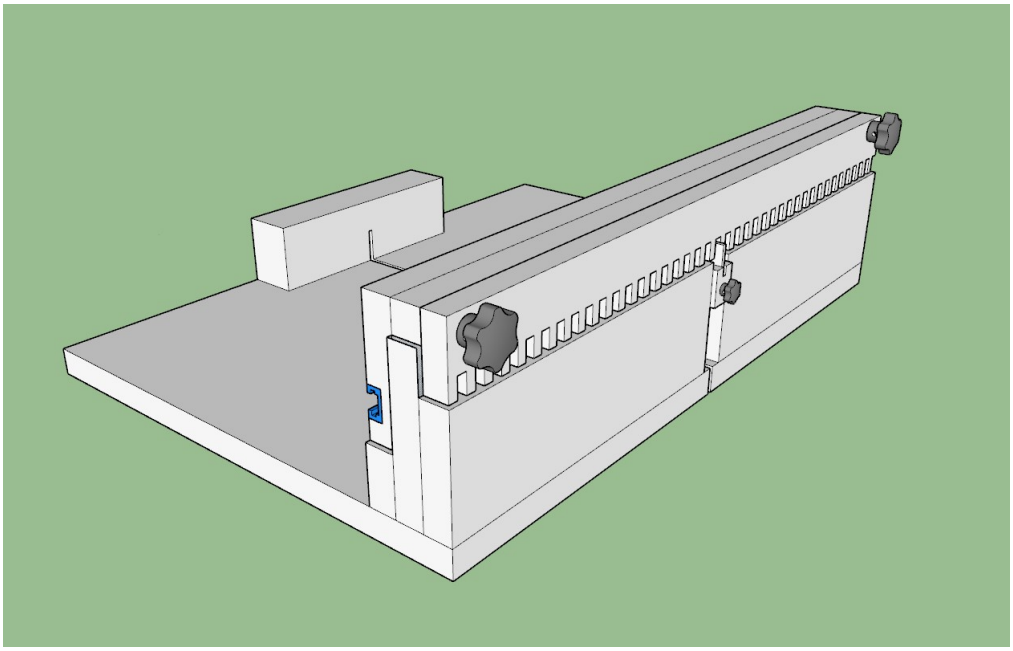
If everything went according to plan, the holes should be just about 1 7/8" in from the top edges and centered at 1 1/2" from the back of the fence.

At this point, you should be able to insert the T-track bolts, add the knobs, and slide the fence onto the jig.

Then you're ready for the inaugural cut. Don't have your blade set too high though! Better to start out low and only cut higher into the jig if your project calls for it.

And now you're done! Enjoy your awesome new spline jig!

Fisher's Box Joint Jig 2.0:



Box joints, also called finger joints, are a neat joinery technique that adds a lot of character to your project. A typical glued 45-degree miter joint lacks in strength because it's end-grain to end-grain. With that in mind, a benefit of using box joints is the stability and rigidness that it offers since it's essentially a combination of glued face-grain to face-grain and edge-grain to end-grain surfaces.

The issue that most people have is cutting consistent fingers and gaps so that the two pieces marry up to one another easily. If your indexing key is off just a hair, the error will propagate and grow exponentially the more cuts you make resulting in a joint that will never go together. Furthermore, creating varying-width fingers is almost an impossible task if you don't have a dado stack or router table. The Fisher's Box Joint Jig 2.0 lets you do just that!

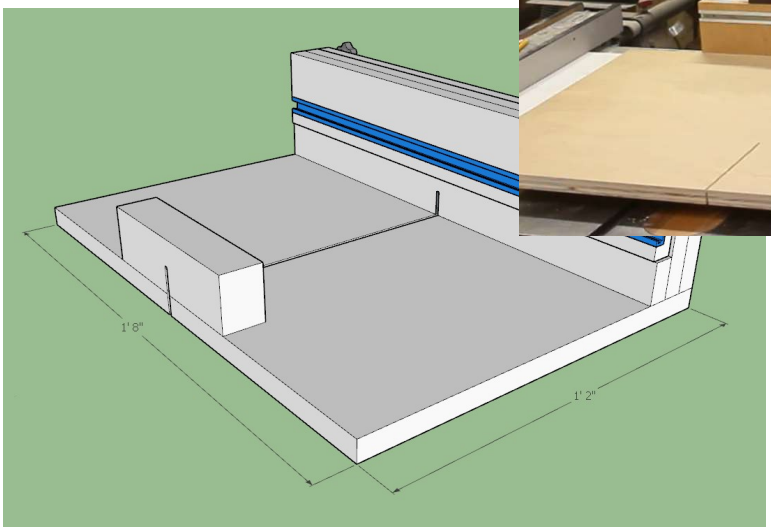
With this jig, all you need is you table saw and an indexing key that is the same width as your blade and you're all set! You can then create box joints with fingers of varying thicknesses rather quickly and easily using your template. If you're anything like me, you'll be excited to make a collection of different templates to use in the jig so that you can create just the right-sized box joint for your project to really make it stand out.

Enough talking… let's build it already!

Making the Base:

By now you're probably a pro at making these base sleds for table saw jigs. This one isn't much different from any of the others that you've already made.

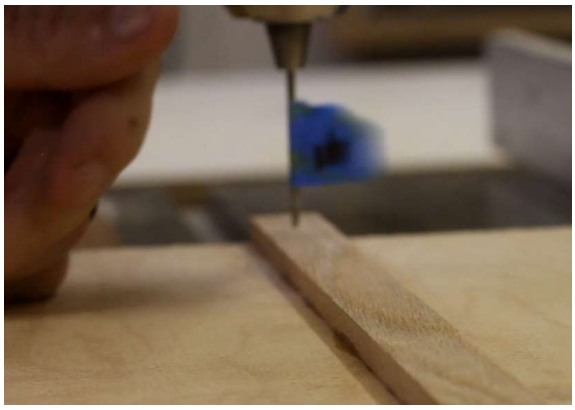
Just cut out a piece of 3/4" plywood to 1' 8" x 1' 2" for starters.



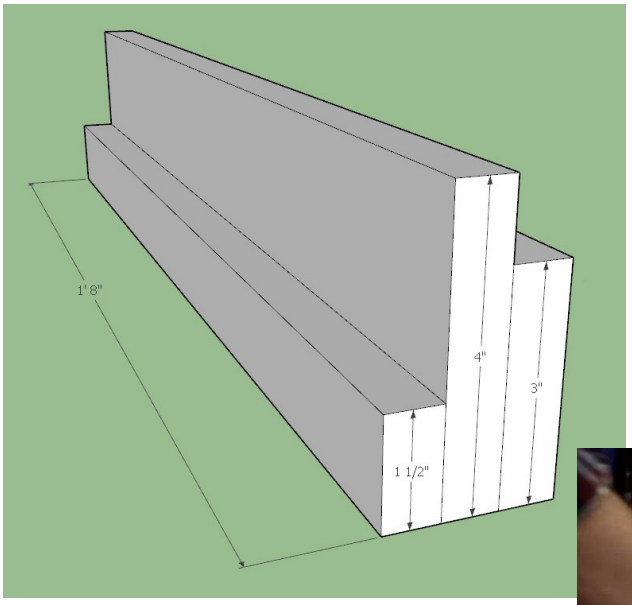
Then, just like with the others, cut your runners so that they fit into the miter slots perfectly with no side-to-side slop. Space them up with washers, add some glue, and gently set the base down on top of them using the table saw fence to keep things square.

When the glue is dry, gently slide the sled back and out of the miter slots, flip it over, drill, countersink, and add some 1/2" screws to the runners.

Also, chip off any squeeze out that might be there and make any subtle sanding adjustments to make the sled slide smoothly on the table saw surface.



Fence Offenses:



The bottom fence is a lamination of three strips of 3/4" plywood. The length of each strip equals the width of your sled base. With that in mind, I **DON'T** recommend that you cut them to their final dimensions prior to gluing up. Instead, cut them slightly oversized and long so that after the glue dries, you can clean them up with perfect edges on the table saw and miter saw.

That being said, cut your strips at 2", 4 1/2", and 3 1/2" wide with a length of 1' 9" or so.

Draw a reference line on the front of the tall middle piece that is exactly 2 1/2" down from the top. Then draw another on the back that is exactly 1" down from the top.

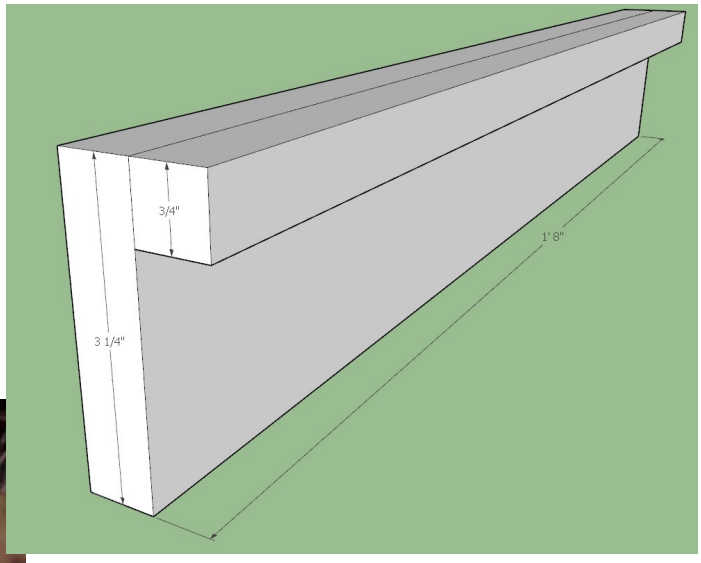
Apply glue to the surface of the thin (2") strip and line it up precisely to the reference line on the front of the tall piece and clamp to dry… and again with the remaining piece on the back side.

Once the bottom fence is dry, remove it from the clamps and trim it to its final height (4") on the table saw. This should leave you with a perfectly flush bottom edge which will let the fence sit perfectly true on the base.

Then over at the miter saw, trim each end so that the fence reaches its final width (1' 8").

Repeat the same process for the top section of the fence as you did for the bottom. Start by cutting out two slightly oversized strips. The front face (the larger one) cut at 3 3/4" and the other at 1 1/4".

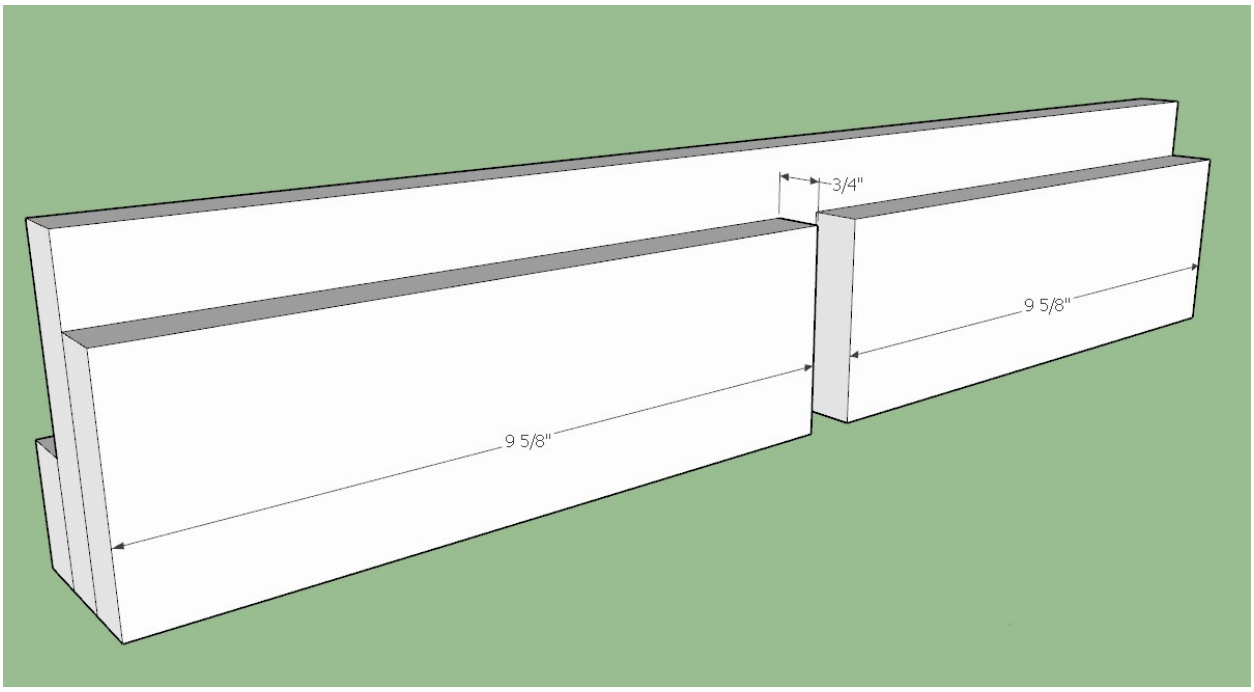
Mark a reference line exactly 2 1/2" up from the bottom of the front face (the larger one) and glue on the thinner strip right at the line. Clamp it up to dry.



Once the fence is dry, clean it up on the table saw by setting your fence at exactly 3 1/4" and flushing up the two pieces. Then over at the miter saw you can cut it to its 1' 8" final width by trimming the ends.

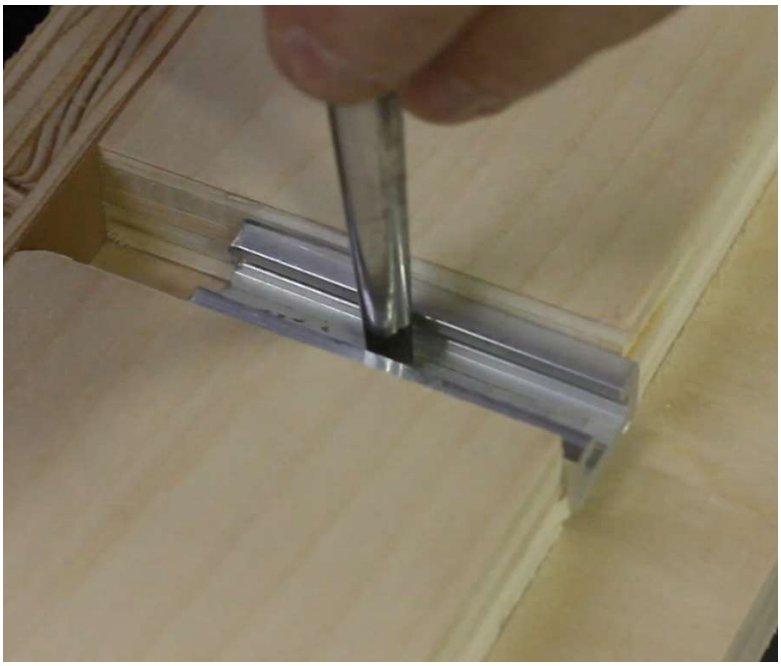
When you're done with the two fences, they should drop together and slide somewhat easily across one another.

The next thing to do is to add a small dust-collecting chamfer to the bottom-front edge of the bottom fence. Tilt your table saw blade to 45-degrees and take off just about 1/8" of the bottom-front edge. This will allow dust to collect behind the fence instead of in front where it might jeopardize how squarely your project pieces rest against the front face of the fences.



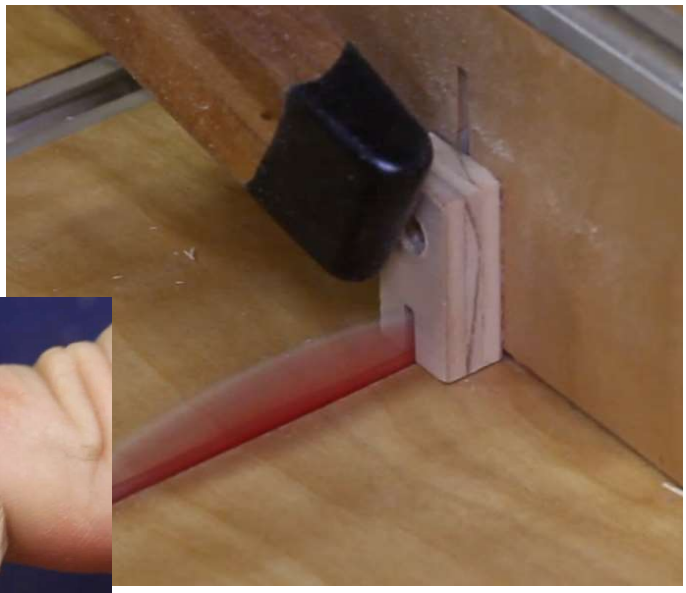
There is a small vertical T-track groove that needs to be cut into the back of the bottom fence right in the middle. What's different about this one is that the depth should be 3/4". If centered properly, there should be 9 5/8" of material on either side of the groove. I used a router with a 3/4" bit to cut mine but you can just as easily use a table saw and a crosscut sled to notch it out.

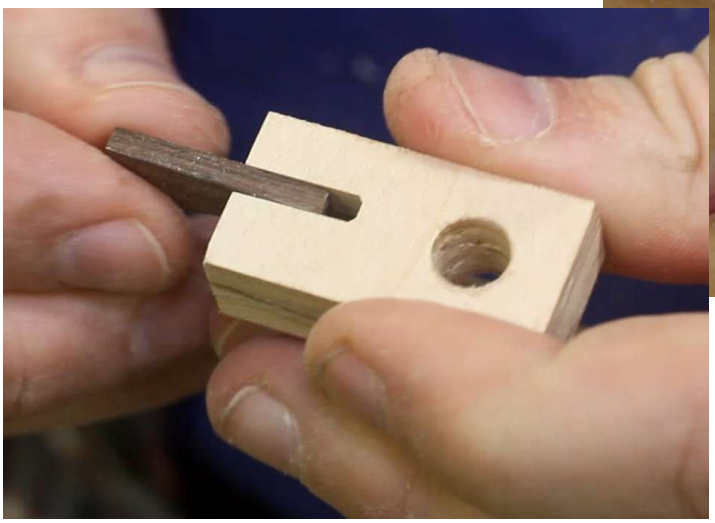
Once the groove is cut out, trim off a small piece of T-track approximately 2 1/4" in length, drop in some CA glue or epoxy into the groove, and set the track down into it keeping it flush up to the top of the back edge.



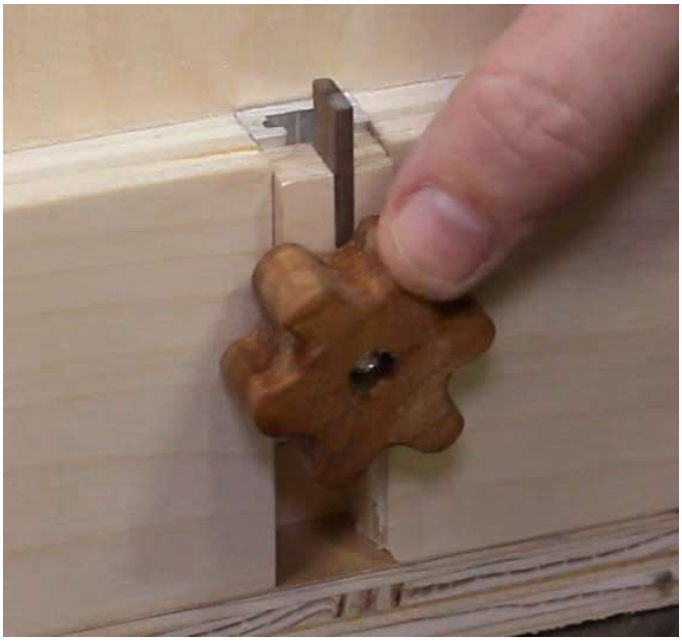
The next piece to make is the indexing key for your saw blade. Start by cutting out a small piece of plywood, 1 3/8" long by 3/4" wide. Drill a hole for a T-track bolt 3/8" down in from one end and 3/8" in from the sides to center it.

Next, very carefully, make a centered cut through it with your table saw blade about 1/2" in height. I strongly recommend you clamp it securely to your crosscut sled for this operation as cutting pieces this small on your table saw can be very dangerous.





Now you need to cut a strip of hardwood to act as the indexing key that is exactly the width of the kerf you just made. I used the Thin Strip Jig from Part 1 of this video series to cut my strip. It's a good idea to cut it just a hair larger than you need and lightly sand the sides to creep up on a perfect fit. Use digital calipers to help you be precise with your adjustments. The width of this key is **EVERYTHING** when it comes to how accurate this jig will be so take your time and get it perfect.



If the key is too **narrow**, your notches will be too wide but your fingers will be too narrow. Likewise, if the key is too **wide**, your notches will be too narrow but your fingers will be too wide! You need to find the perfect width for your key where the notches and fingers are exactly the same width.

Lastly, drop a T-track bolt through the hole, add a knob, and slide it into place in the track.

If the fit is too snug, then sand the sides of the key holder just a touch so that it operates a bit more smoothly.

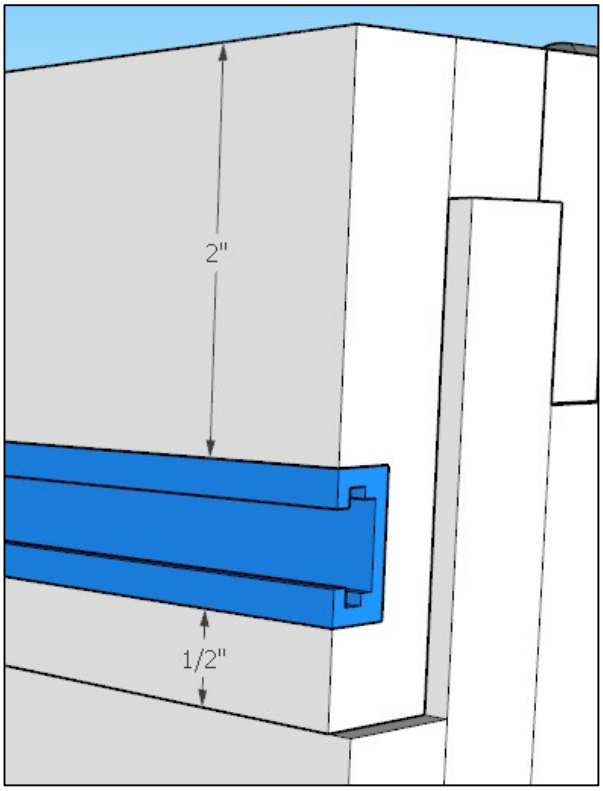
Now we're ready to attach the bottom fence to the sled base that we made earlier. Put the sled into the miter slots on your table saw surface and bring the saw fence close to the edge of the base. Then, using a framing square as a guide, place the bottom fence into position on the rear of the sled and get it as square as you can by eye. Once you have it as good as you're going to get it, then carefully slide the back edge off the table saw and apply some clamps to hold it securely. Then flip the jig over, drill some holes, countersink, and add some 2 1/2" screws to secure the fence in place.

Putting in the T-track:

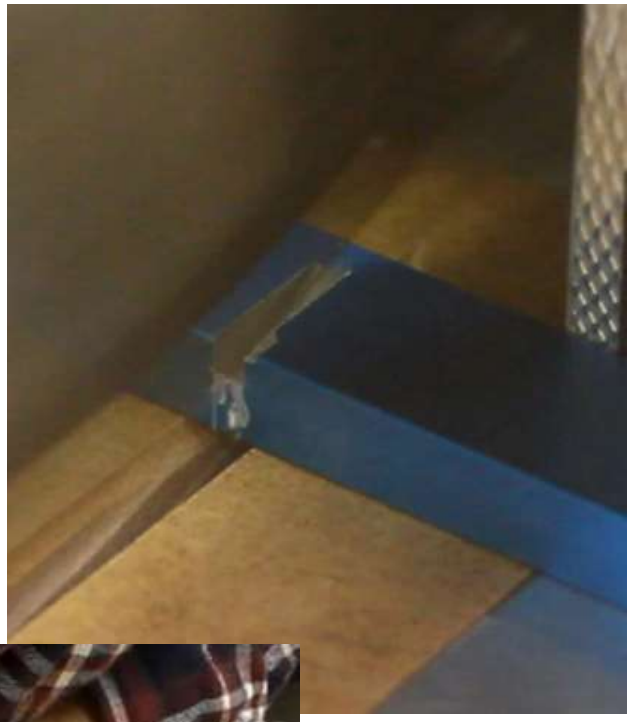
As you may have already noticed, I'm having you do things in a slightly different, and more efficient, order than I did in the video. I used a dado stack to quickly cut the T-track channels but if you don't have that type of blade you can accomplish the same task with a router and 3/4" straight bit or by taking multiple passes on your table saw with a flat-toothed blade and adjusting the fence a little bit after each pass.

I recommend making a couple practice pieces first to make sure you've got the right channel size before cutting your piece. We're shooting for a perfect fit here with no slop but yet not too tight AND the groove **MUST** let the T-track sit **JUST BELOW** the surface (maybe 1/32" to 1/16").

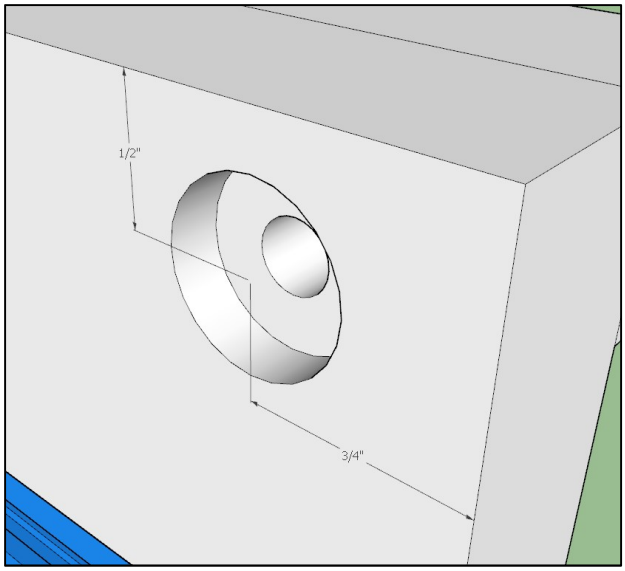
Cut the channel 2" from the top of the fence, which should leave just 1/2" of material on the bottom.



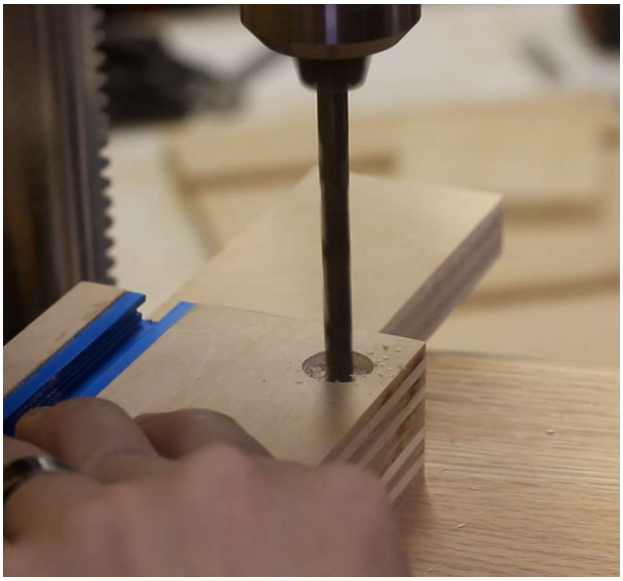
Cut your T-track to length using a miter saw or hack saw, glue it into the channel, secure it down with shortened screws. You, most likely, will have to grind off the tips of some short 3/8" screws so that they fit without protruded out the back side of the fence.



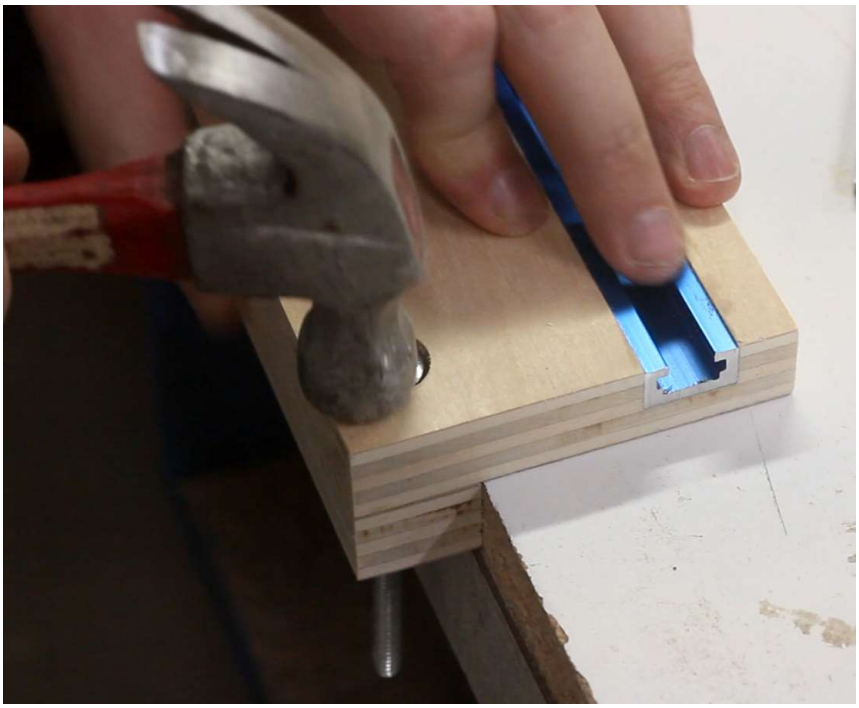
Drilling the Holes:



The size of the two holes and the counter bore are completely dependent on the size of bolts that you're using for this. But regardless of that, the holes should be drilled at 3/4" in from the sides and 1/2" down from the top of the top fence (the one with the T-track installed).



When I drilled out these holes, I used a piece of scrap 3/4" plywood to brace up the fence so that it would remain flat during the drilling process. Whether you're using a drill press or drilling by hand, this still helps you keep things stable for a more accurate hole.



Now carriage bolts typically have a square section between the bolt head and the threads. This is handy to keep the bolts from spinning in their holes but might require you to chisel out a tiny recess for them to nest down into. I, on the other hand, just gave them a few taps with the hammer and they sunk right down into the hole just fine. If you'd like to epoxy or glue them in to completely eliminate the chance that they'll spin, then that's fine. I didn't really find it necessary so I just left them as is.

Making the Template:

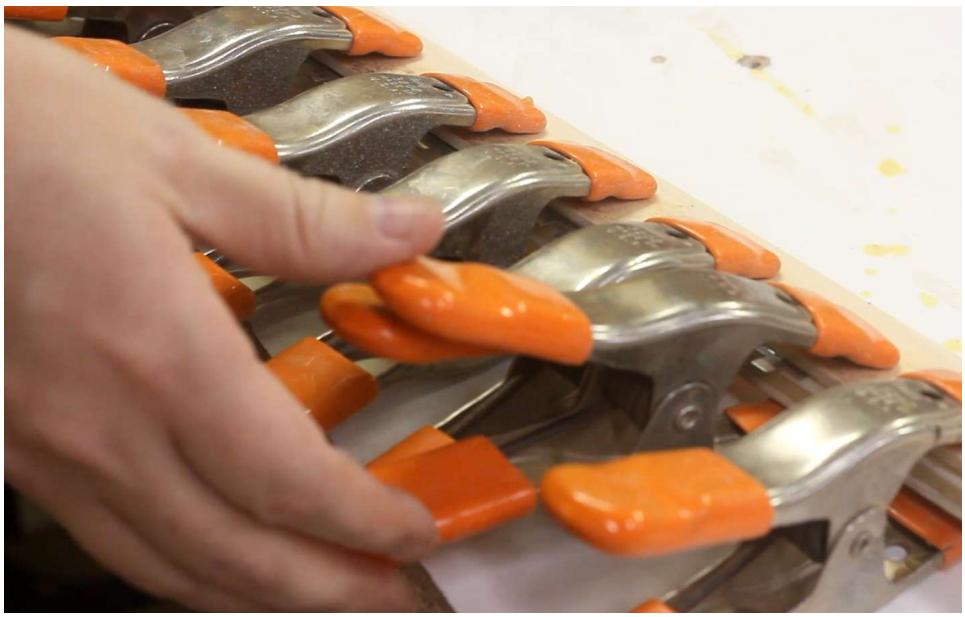
The trick to making box joints work is to make very consistent fingers and gaps that measure exactly the same. As with anything, if you try to do it by hand, you introduce the element of human error. So to get around this, I own a CNC and figured I should use the robot to create the templates for me. So right about now you're saying, "That's great Drew, but I don't have a CNC". The next best thing is to make the templates FROM something that was cut using a CNC. After giving it some thought, I figured that tiling trowels would be perfect for this! They come in all different notch sizes and lengths, they're machined to perfection, and they're made from hardy metal. So I picked myself up a 1/4" x 1/4" x 1/4" notched tiling trowel at the local home store.

Using my angle grinder, I cut off about 1 1/2" of the notched edge and discarded the rest. Then, by clamping it into the vice, I could use my angle grinder again to make a series of angled cuts into the top edge of the metal strip to give the epoxy something to hold onto in the next step.

I ripped down a 1 1/2” strip of plywood and cut it to just 1/2” thickness on the table saw. This will be the template strip. I trimmed the length to 1’ 8”, marked where the holes need to be so that it would fit onto the back of the top fence, and then drilled those out. Then I cut another one just like it but trimmed it to 1’ 6” long (leaving 2” on either side for the tightening knobs). This piece will be the other half of the template strip which sandwiches in the notched metal piece from before.

At this point, I used my trim router and a straight bit set to a depth of 1/32” and carved out a recess into the template strip for the metal piece to rest into. This doesn’t have to be all that precise or even clean-looking since it’ll all get covered up, but carve it out so that the metal piece sticks out 3/8” from the bottom of the template strip.

Then, I slathered on some epoxy across the strip, dropped the notched metal piece into place, and sandwiched on the front of the template strip. After clamping it up, I set it off to the side to cure.



Finishing it up:

The last step is to make a coplanar block for the front of the sled. This will keep both sides of the sled on the same plane and subsequently your cuts will be kept square.

I laminated up two pieces of scrap 3/4” plywood, cut a 2” wide strip with a length of 10”, and glued it down flush with the front of the sled.

Now you can make your first cut through the jig, but just be careful regarding how high you set your blade.

It’s not common to make very large box joints, so there’s really no need to set the blade very high. Mainly, just make sure that you don’t set it so high that you cut into the bottom edge of the top sliding fence.

Next, put two spacing washers over your bolts to offset the template strip roughly 1/16” so that once things are tightened down the top fence will still slide easily over the bottom fence.

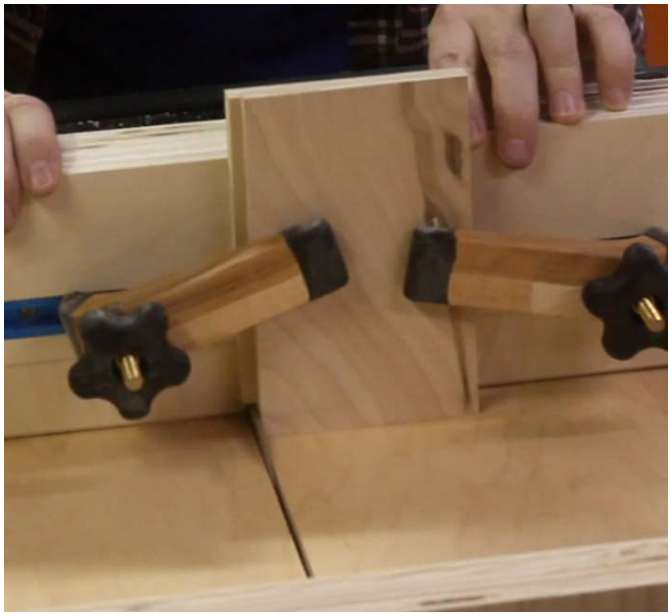
Using the Jig:

To use the jig, first figure out which template you want to use and tighten it into place on the top fence bolts. This doesn't have to be crazy tight, just snug is fine. The goal is for it to be tight enough where there's no wiggle to the template strip but yet loose enough to allow you to still slide the top fence over the bottom.

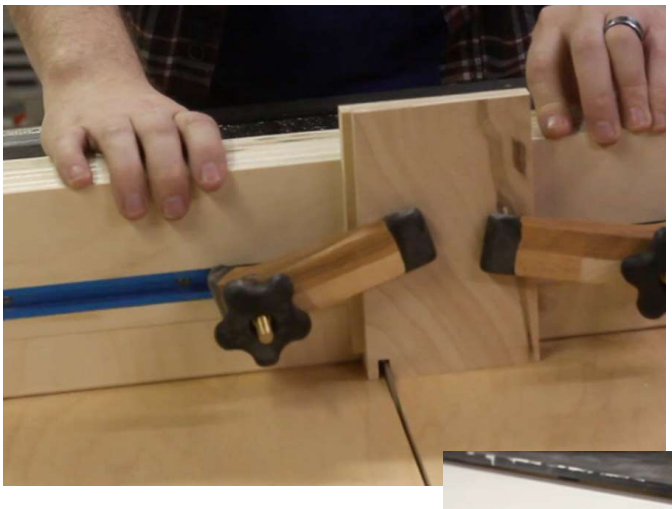
Slide the top fence to the left so that the index key is positioned in one of the first few notches on the right side of the template.

Clamp your two project pieces to the front of the top fence with hold-downs so that the back piece is lined up just over the blade kerf and the front piece is offset by the width of the notches in the template that you're using.

Next, loosen the knob and raise the index key and tighten it at a height where it's just about 1/16" from touching the top of the inside of the template notches. Then, nudge the top fence to the left so that the index key is touching the right-hand side of the notch in the template.



Now you can start cutting! Fire up the saw and gently push the jig through. It's not necessary to push the jig so far that the blade comes all the way through the back though. Just push it far enough so that the full height of the blade is cut into your project pieces.



Then pull the jig back, nudge the top fence to the right one kerf-width, and make another cut. Once you can't nudge the top fence any further to the right, gently lift the top fence just enough to move it so that the indexing key will fall into the next notch on the template. Set the top fence back down squarely, make sure the indexing key is against the right side of the notch, and make another cut. Then it's just a whole bunch of rinse and repeat until you're done cutting the joint.

Once you've reached the end of your joint, shut off the saw, loosen and lower the indexing key, return the top fence to its centered position, unclamp your project pieces, and check the fit!

It's as easy as that!

Now go and have some fun buying a whole bunch of tiling trowels and making templates of different sizes!

Hold-Down Clamps:

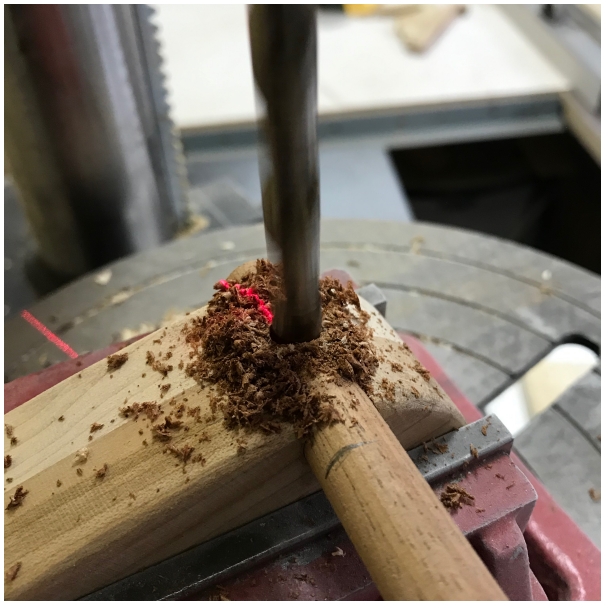
I made some home-made hold-down clamps to use with all these jigs and they've proven to be very handy. I figured I'd include these plans as an extra in case you wanted to make your own as well.

Start off by printing off the 1:1 hold-down clamp stencil near the end of this document. Take that, cut it out, and glue it onto some hardwood that's 1"-1.5" thick and drill out the hole with a 1/2" drill bit.

Next, take it over to the bandsaw and cut it out just outside of the line.

Smooth things out at the sander, working your way up to the line, and round off the edges to make it a bit more comfy to the touch.

Next, I made a 1/2" hardwood dowel (you can buy them if you don't want to make your own) and sanded down until it fit smoothly and could rotate easily within the hole.



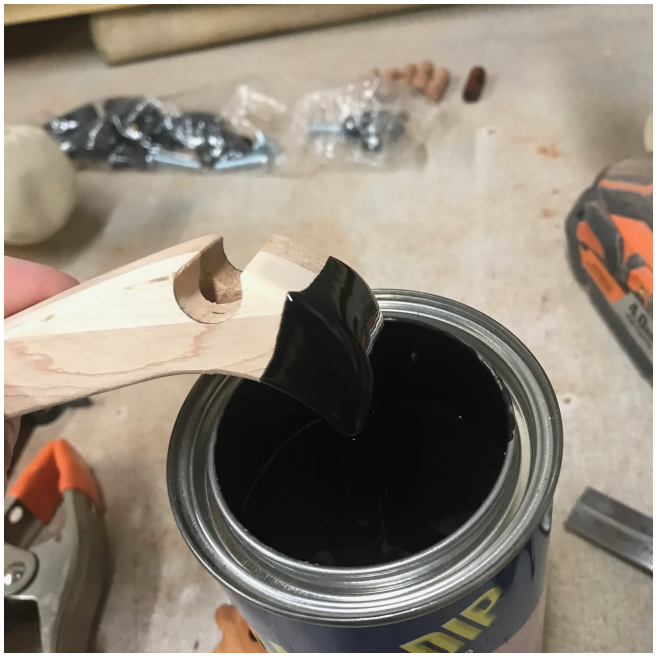
Trim the dowel to fit and then take it over to the drill press and drill a 5/16" hole straight through the dowel and the clamp.

It helps to have the piece clamped into a vice while you do this next operation…

Next, remove the dowel piece, tilt the piece in the vice, and drill again using the same entrance hole but drilling more towards the rear of the clamp. Then repeat the process with the piece tilted the other way so you drill more towards the front. The end result should be a splayed hole. Refer to the pictures to get a better idea of what I'm talking about.

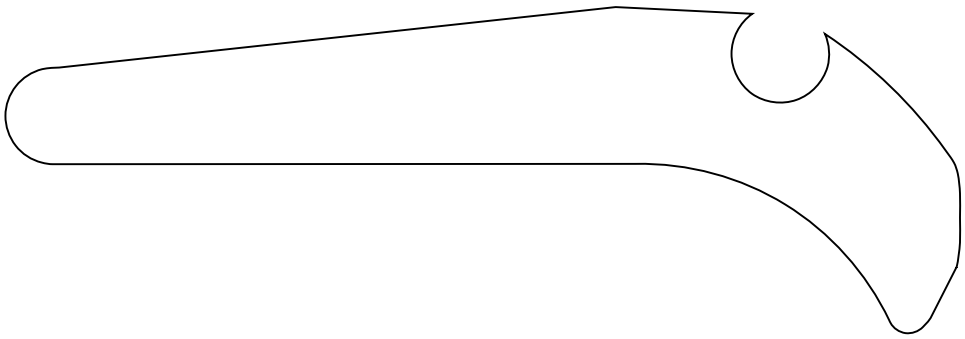
Then I wanted to give the ends more gripping strength so I gave them a couple coats of Plasti-Dip. This really improved their holding ability dramatically and it was a very easy application process. Just dip and hang to dry. 30 minutes later you can apply another coat if you like. And with a four hour cure time, you're back in business.

Using the short side gives a tremendous amount of holding force but requires a longer bolt. I recommend searching your plumbing department for Johni bolts (used to hold toilets to flanges).



They're super cheap and they're the same size and shape as T-track bolts and work perfectly for this sort of thing.

Aside from that, your hold-down clamps are complete!



Thanks!

I sincerely hope you enjoyed the video, the build, and the outcome! Thank you so much for supporting Fisher's Shop by purchasing these plans. I appreciate it very much and I'm grateful. I value each one of my viewers and especially those that go the extra mile to purchase the plans and replicate something that I designed and built. My channel grows primarily by word of mouth, so if you've enjoyed my videos and had fun building this project, please consider helping the channel grow by spreading Fisher's Shop videos to your friends and followers on social media. Thanks again!!

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