Congratulations on the purchase of your new Router Table Spline Jig! It allows you to quickly and easily add beautiful dovetail or straight splines to reinforce the mitered corner joints of your projects. For safe and effective operation of the jig, please read the instructions fully before starting.
Jig Setup

1. With the bit you will use to cut the spline slots installed in a table-mounted router, place the jig base on the router table so that the bit extends through the center opening and the expandable bars are in the miter track.

2. Adjust the base to roughly center the bit in relation to the large opening and the black line on the face.

3. Place the centering gauge in the narrow slot and slide it up against the shaft of the router bit. The “V” will center the base with the bit. **Fig. 1.**

4. Tighten the knobs to lock the base in the miter track. Back the centering gauge away from the bit, lift it out and return it to its storage area on the jig’s sled. **Fig. 1.**

Cut the Spline Slots

1. Determine your spline spacing. At each spline location, use a square to draw lines to locate the center of the spline slot. Make the lines at least 4½” long so you’ll be able to see them when the workpiece is in the jig. Mark all spine locations. Also mark a line on a test board that’s the same width as your workpiece. **Fig. 2.**
2. Place the sled part of the jig on the base, making sure that the sled’s runners are in the corresponding slots in the base.

3. With the sled backed away from the bit, clamp the test board in the sled, aligning the line on the board with the centerline on the sled. Fig. 3.

4. Slide the fences against the sides of the test board and tighten the knobs to secure them in place. (For boxes too wide to fit between both fences, the left fence can be removed. The right fence must remain on the jig at all times for safe operation.) Fig. 4.

5. Turn on the router. Push the sled forward through the bit and then pull it back to rout a test slot. Fig. 5. Safety note: Keep your fingers outside the fences.

6. Check the cut location and depth and make any necessary adjustments.

7. Place the workpiece in the jig, clamping it to the sled, if desired, for increased stability. Make your first cut.

8. Rotate the workpiece to cut spline slots at that setting in the remaining corners.

9. For symmetrically spaced off-center cuts, set the jig and rout the first four spline slots, then flip the workpiece to rout four slots equidistant from the other edge.

**Add Fence Extensions for Narrow Stock**

1. Extra support is helpful when working with narrow stock for projects such as picture frames. First, follow Steps 1-3 above to mark spline locations.

2. Cut square or rectangular extensions from flat scrap wood or sheet stock.

3. Attach the extensions with appropriately sized screws driven through the four holes in each fence. Fig. 6.

4. Rout the spline slots as detailed in Steps 4-8 above.
Add the Splines

For Straight Splines
1. Cut or obtain appropriately dimensioned stock. (The fit should be snug but not overly so.)

2. Apply glue to the splines and slots and install the splines. Let glue dry.

3. Trim splines flush to box sides with flush-cut saw, then sand smooth.

For Dovetail Splines
1. To cut the splines, you will use the same dovetail bit you used to cut the slots, this time with your router installed in a router table with a fence. Set the bit height 1/16" greater than the depth of the spline slots.

2. Position the router table fence so that about only 30% of the cutter extends beyond the fence face. This is only a starting point; you will need to fine-tune the fence position through trial and error.

3. Select stock that is thicker than the maximum width of the dovetail bit you used to cut the spline slots. For example, if you used a 1/2" bit, the stock should be at least 5/8" thick.

4. Routing a test piece on edge and taking care to keep the stock tight against the fence, make a pass on each side. Test the fit in the spline slot. (The goal is a fit that’s snug but not overly tight.) Fig. 7.

5. If the spline doesn’t fit, adjust the fence position slightly and make more test cuts. Repeat until you arrive at the right setting, then rout your splines.

6. Rip the dovetailed section of the spline blank(s) from the rest of the stock and cut into shorter pieces. Fig. 8.

7. Apply glue to the splines and slots and install the splines. Let glue dry. Fig. 9.

8. Trim splines flush to box sides, then sand smooth. Fig. 10.

Check Rockler.com for updates. If you have further questions, please contact our Technical Support Department at 1-800-260-9663 or support@rockler.com