

Leigh Dovetail Jig Cheat Sheet

Through Dovetails (TD) *All work runs vertically*

- 1) Windmill finger assembly for proper TD icon. Flip until TD Pin icon shows.
- 2) Adjust spacing of fingers as necessary
 - a) For drawers this will be for the back piece and each side of the jig will need to be set up in mirror setups.
- 3) Flip finger assembly to TD Tail's icon and adjust to 1" setting. (This is "All" on older jigs.)
- 4) Select a dovetail bit appropriate for the work and the guide bushing appropriate for the cutter and set up your router (see chart below for cutter/guide bushing selection).
- 5) Adjust hold-downs for thickness of materials/backer boards.
- 6) Set cutter depth to thickness of mating work plus 1/64" to 1/32".
- 7) Place backer board.
- 8) Place tail board in jig with face toward the jig and cut tails routing only in the middle of each finger.
 - a) For drawers each side is cut on the appropriate side of the jig and this means that your carpenter triangle is against a stop.
- 9) Flip finger assembly to and set to "A" diameter of cutter as given below
- 10) Replace backer board.
- 11) Place pin board in the jig with face *away* from the jig. (This is the only instance where the outside face is turned away from the jig. Change to the straight cutter that matches the dovetail bit you choose and route out pins. (See chart below)
 - a) For drawers each end of the back will be routed on each side of the jig with the carpenter triangle on the stop and the face away from the jig.
- 12) Rout Pins

Stock Thickness	Dovetail Cutter	Straight Cutter	Guide Bushing	"A" diameter
1" – 1 1/4"	100	150	5/8"	13/16"
5/8" to 1"	90	160	5/8"	11/16"
1/2" to 13/16"	80	140	7/16"	1/2"
3/8" to 5/8"	75	140	7/16"	7/16"
1/4" to 1/2"	70	140	7/16"	3/8"
Up to 3/8"	60	140	7/16"	5/16"
Up to 1/4"	50	140	7/16"	1/4"

Adjusting the Fit: Adjusting the finger assembly one-graduation father back in the jig (a lesser value) will result in approximately a .012" looser fit and vice versa.

Half Blind Dovetails (HB) *Pins run horizontally and tails run vertically.*

- 1) Turn finger assembly for proper HB icon. Flip until HB Tail icon shows.
- 2) Adjust spacing of fingers as necessary and set to thickness of tail board material.
- 3) Adjust hold-downs for thickness of materials/backer boards.
- 13) Select a dovetail bit appropriate for the work (see chart below) and a 7/16" guide bushing. Install them in your router. Selection is based on the "B" cutting depth being two thirds to three quarters of the thickness of the pin board material.
- 4) Set depth of router to the B" depth of the selected cutter. This is the amount the cutter protrudes below the finger assembly and is easily set by scratching the "B" distance on the stock with a marking gauge.
- 5) Place backer board
- 6) Rout tails:
 - a) Place the cross cut bar in the finger assembly and make a climb cut across the work.
 - b) Remove cross cut bar and rout tails going only between each finger and rounding at the opening to created a rounded tail.
- 7) Remove backer board and snug pin board up to tail board. Lock tail board down and remove pin board.
- 8) Flip finger assembly and set to thickness of tail board material.
- 9) Rout pin sockets.

Cutter	"B" Cutting Depth (<i>2/3-3/4 thickness of pin board</i>)
128	3/8"
120	7/16"
101	5/8"
80	3/4"

Adjusting the Fit: Raising the cutter will loosen the fit and lowering it will tighten it, however you have to rout *both halves* of the joint to test the new setting.

In the forgoing discussion flip means to roll the finger assembly while turn means to revolve it end to end.