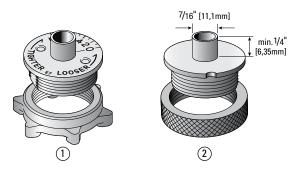
SUPERJIG - CHAPTER 3

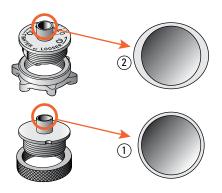
The Leigh e-Bush and Optional Guidebushes

The guidebush is the vital link between router and jig. All joints created on a Superjig are routed with the unique e7* elliptical guidebush, a Leigh innovation that provides precise joint fit adjustment for box joints and sliding dovetails. If your router doesn't accept the e7-Bush, you can use an alternative guidebush with some limitations.

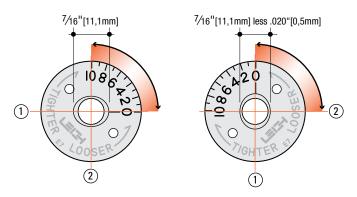
*Supplied with each Superjig. U.S. Patent No. 8,256,475. UK Patent No. GB2443974. Canada Patent No. 2,611,232.



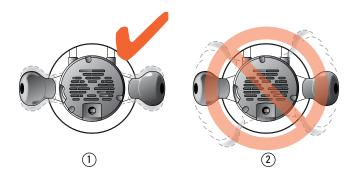
3-1 The Leigh e7-Bush ① is used to rout through, half-blind, single pass half-blind and sliding dovetails on a Superjig. The elliptical design provides precise joint fit adjustment for box joints and sliding dovetails. A round 7/16"[11,1mm] guidebush ② (min. barrel length 1/4"[6,35mm]), can be used to rout through, half-blind, and sliding dovetails on the Superjig, but the e7-Bush is superior.



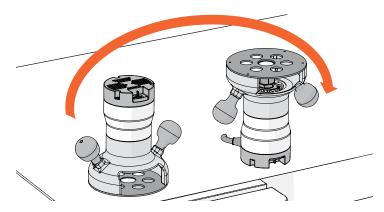
3-2 The Leigh e7-Bush that comes with your Superjig is a unique template guidebush that is adjustable in size. Unlike regular circular template guidebushes ①, the e7-Bush is slightly elliptical in cross section ②. This simple innovation effectively changes the guidebush "active diameter size" when it's rotated, and provides benefits not possible with a standard round guidebush.



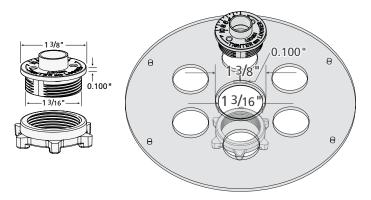
3-3 The e7-Bush (7/16") fits the router base or a guide bush adaptor in the base (see Appendix I). The ellipse/oval shape has a major axis 0.7/16"[11,1mm], and minor axis 0.7/16"[11,1mm] less .020"[0.5mm]. Turning the e-Bush 90 degrees in the router base changes the active diameter by .020"[,5mm] providing minute adjustment and recordable settings for perfectly fitting box joints.



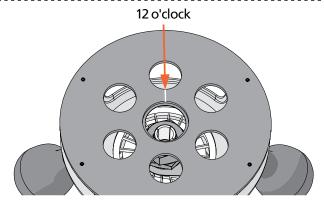
3-4 Here's how it works. In normal use on a dovetail jig, the operator does not rotate the router more than a few degrees either way ①. In fact, because of potential bit-to-bush eccentricity problems it is advisable to minimize router rotation on jigs ②.



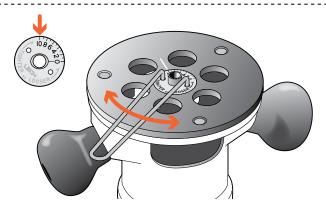
To install the e7-Bush, follow these simple steps. Hold the router the way you normally hold and operate it on the jig. Now, upend the router in the same orientation.



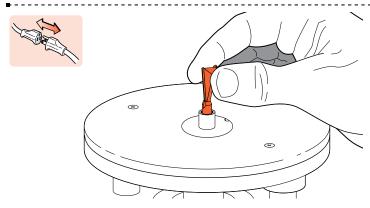
3-6 To fit the Leigh eBush directly to your router, the router base must have a 1-3/8" diameter counter bore. If your router base does not have the correct counter bore, you will need a guide bush adaptor or aftermarket router base plate. Leigh offers several guide bush adaptors to fit many common routers. See the Guide Bush Adaptor Selection Chart in Appendix 1, page 68.



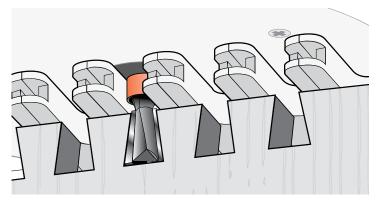
Think of the router base as a clock face. Make a small scratch line or permanent ink mark on the router base or e-Bush adaptor at the 12 o'clock position ①. This will be your reference mark for all e7-Bush settings.



3-8 Use the pin wrench to align the No. 10 on the eBush to the reference line on the router base. The No.10 setting is used for all through and variably spaced half-blind dovetails on Superjigs. Settings for single pass half-blinds, box joints and sliding dovetails are described in applicable chapters. Be sure to retighten the e-Bush nut after each adjustment.



The bit goes through the guidebush and fits in the router collet or chuck.



3-10 The projecting part of the guidebush runs along the side edge of the guide finger. The rotating bit cuts the wood only, and touches neither the guidebush nor the guide surface.