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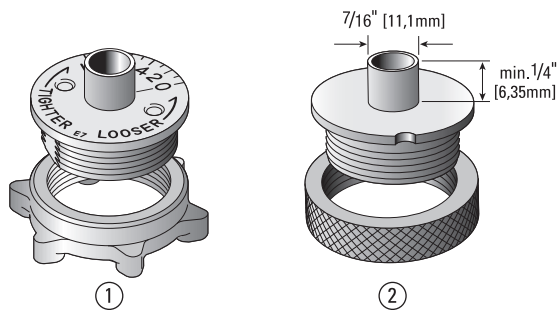


## D4R Pro - CHAPTER 3

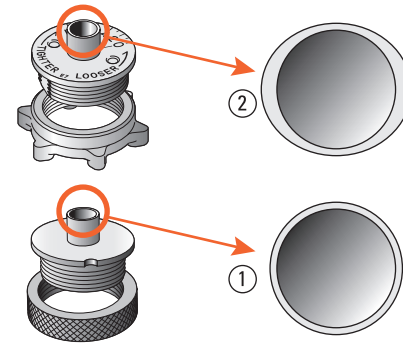
# The Leigh eBush and Optional Guidebushes

The guidebush is the vital link between router and jig. All joints created on the D4R Pro 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.

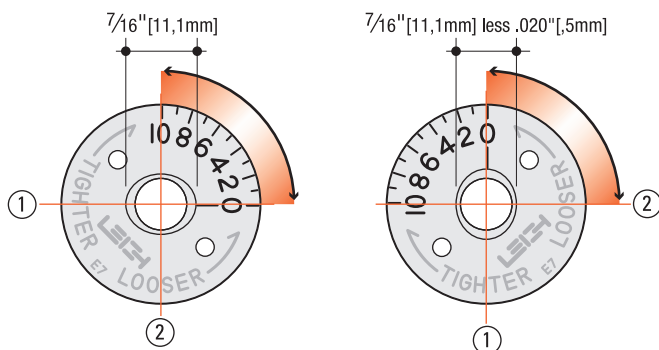
\*Supplied with the D4R Pro. U.S. Patent No. 8,256,475. UK Patent No. GB2443974. Canada Patent No. 2,611,232



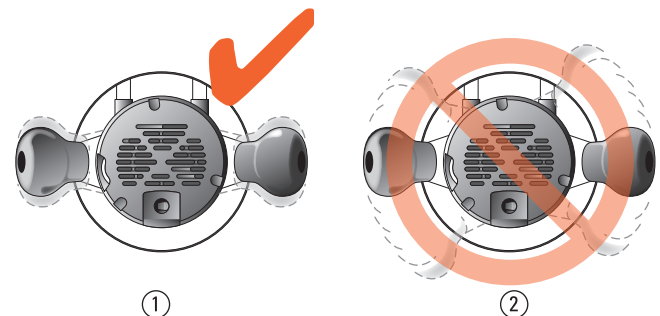
**3-1** The Leigh e7-Bush ① is used to rout through, half-blind, single pass half-blind and sliding dovetails, and also box joints on the D4R Pro. The elliptical design provides precise joint fit adjustment for box joints and sliding dovetails. A round  $7/16$ " [11,1mm] guidebush (min. barrel length  $1/4$ " [6,35mm]) ② can be used to rout through, half-blind, and sliding dovetails on the D4R Pro.



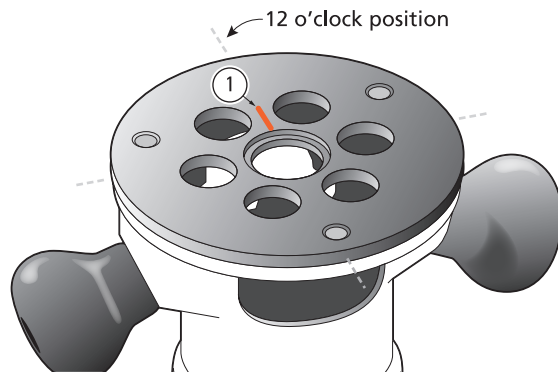
**3-2** The Leigh e7-Bush that comes with your D4R Pro is a unique template guidebush that is adjustable in size. Unlike regular circular template guidebushes ①, the e7-Bush is slightly elliptical in cross section ②. This simple innovation effectively changes the guidebush "active diameter size" when it's rotated, and provides benefits not possible with a standard round guidebush.



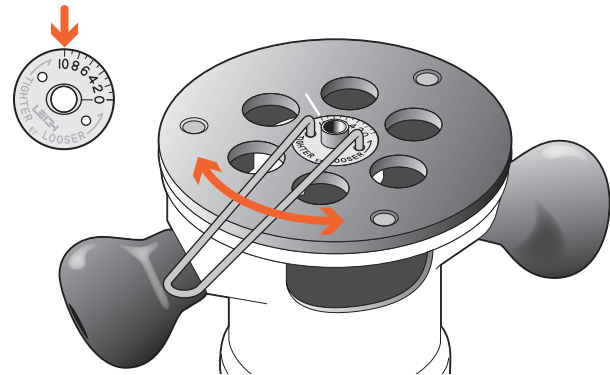
**3-3** The e7-Bush ( $7/16$ " ) fits the router base or a guide bush adaptor in the base (see Appendix I). The ellipse/oval shape has a major axis ①  $7/16$ " [11,1mm], and minor axis ②  $7/16$ " [11,1mm] less .020" [5mm]. Turning the eBush 90° in the router base changes the active diameter by .020" [5mm] providing minute adjustment and recordable settings for perfectly fitting box joints.



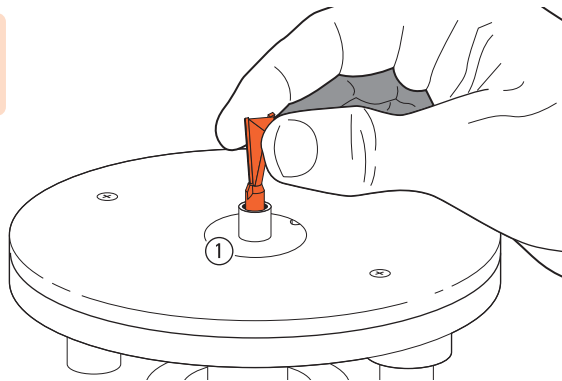
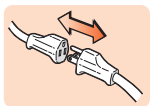
**3-4** Here's how it works. In normal use on a dovetail jig, the operator does not rotate the router more than a few degrees either way ①. In fact, because of potential bit-to-bush eccentricity problems it is advisable to minimize router rotation on jigs ②.



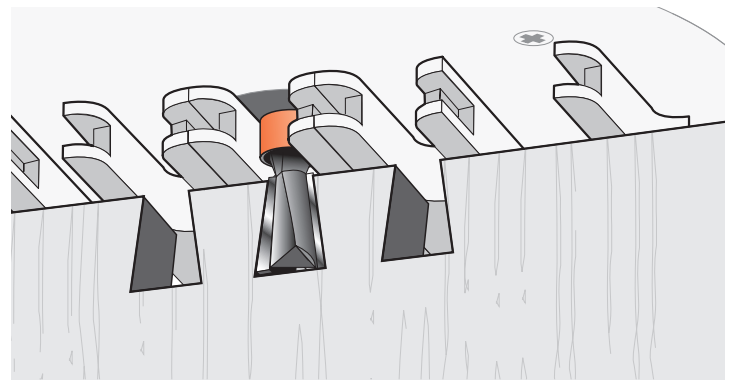
**3-5** Establish the orientation in which you normally hold and operate the router on the jig. Now, up-end the router in the same orientation. Make a small scratch line or permanent ink mark ① on the router base or eBush adaptor at the 12 o'clock position. Learn about eBush adaptors on page 69.



**3-6** Fit the e7-Bush to the router and align No.10 to the scratch mark. This setting is used for all through and variably spaced half-blind dovetails on the D4R Pro. Settings for single pass half-blinds, box joints and sliding dovetails are described in applicable chapters. **Be sure to retighten the eBush nut after each adjustment is made with the included pin wrench.**



**3-7** The bit goes through the e7-Bush ① and fits in the router collet or chuck.



**3-8** 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. ■