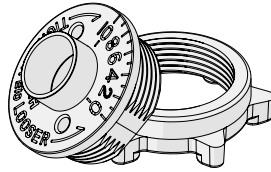



## TD330 User Guide

# CHAPTER 3 The Leigh eBush



**Note:** The patented Leigh e10 elliptical guide bushing, fitted to your router, ensures a great fitting joint every time. This chapter describes how a simple turn of the e10 is all it takes to adjust joint fit.

Leigh e10 Elliptical Guide Bushing: U.S. Patent no. 8,256,475 UK Patent no. GB2443974 Canada Patent no. 2,611,232



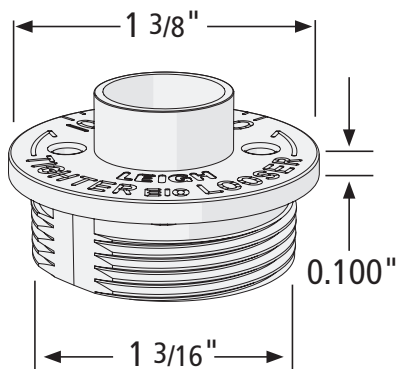
### Watch the Online Instructional Video



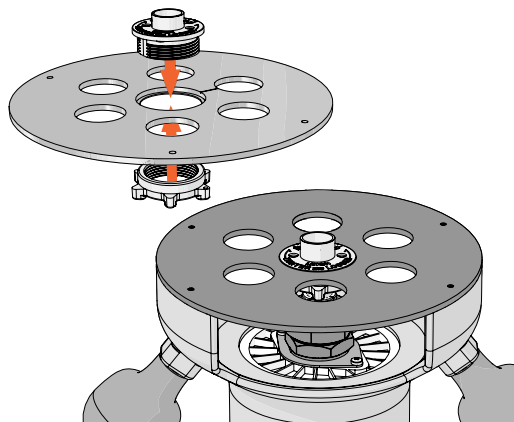
Scan QR Code

Reduce your learning time dramatically! Stream to your smart phone or tablet to use in your workshop while you're working. See Instructional Videos section in Support menu at [leightools.com](http://leightools.com) or scan QR code for instant video.

**3-1 Watching the online video in addition to reading this user guide will reduce your learning time dramatically.** The video can be streamed to your smart phone or tablet and used in your shop as a visual reference. Visit [leightools.com](http://leightools.com) and find the video in the Support section.

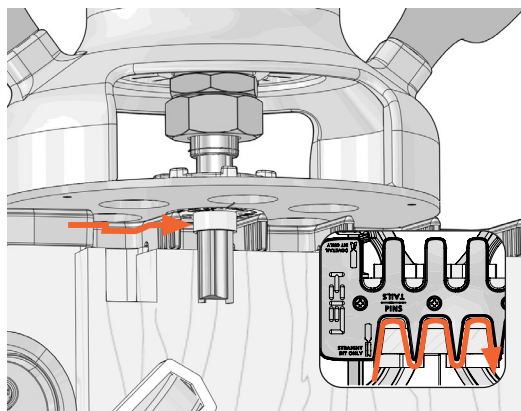


**3-2 The Leigh eBush System** is designed around the 1-3/8" industry standard. Some routers accept the Leigh eBush directly. Many routers require the use of a guide bushing adaptor. If your router requires an adaptor, please see Chapter 7, Guide Bushing Adaptor Selection, or visit [leightools.com/guide-bushings-adaptors](http://leightools.com/guide-bushings-adaptors).



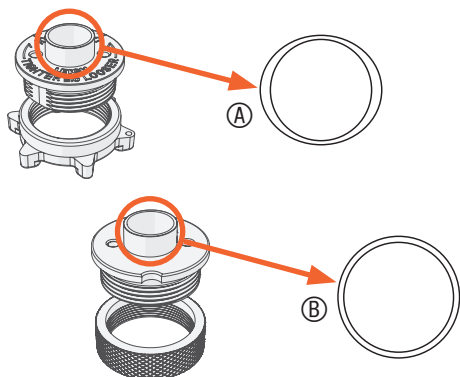
**3-3** Routing on the TD330 requires a router fitted with the included e10 eBush.

The e10 is installed in the base of the router and the guide bushing retaining nut is screwed on from the inside of the router base.



### 3-4 How a Guide Bushing Works

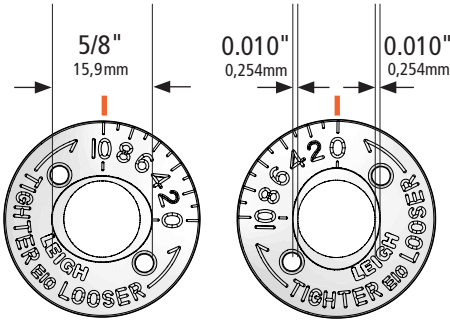
The barrel of the guide bushing steers the router and the bits in and around the openings of the template.



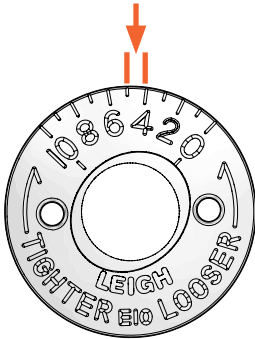
### 3-5 Joint Fit Adjustment

The Leigh eBush barrel (A) is elliptical, unlike plain circular template guide bushings (B). When the e10 is rotated, the effective diameter of the barrel changes, allowing fit adjustments as small as 0.001" [0,025mm]. The e10 eBush is included with the jig.

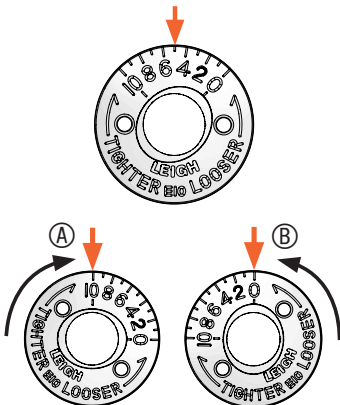
**Note:** The elliptical barrel of the e10 shown in these and the following diagrams is exaggerated for clarity.



**3-6** The effective diameter of the e10 is 5/8" [15,9mm] at the 10 position. Rotating the eBush to the 0 position reduces the effective diameter by 0.020" [0,5mm].



**3-7** One increment of the eBush changes the joint glue line by 0.002" [0,05mm]. Half an increment changes the fit by an incredible 0.001" [0,025mm]. A proper fit will be established with one or two test cuts.



**3-8 Test routing always starts with the eBush set at 5** This allows adjustment for a tighter or looser fit. Turning the eBush toward the 10 position **A** results in a tighter fit. Turning the eBush toward the 0 position **B** results in a looser fit. **Be sure to retighten the eBush nut after each adjustment.**

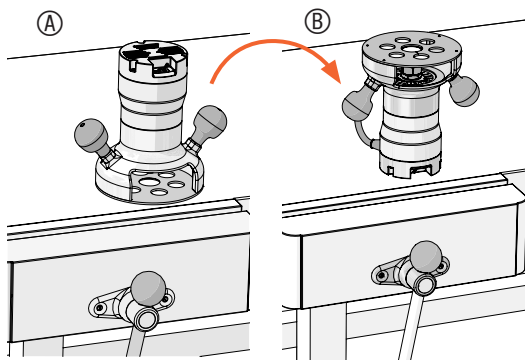


Feb 27, Maple  
160 bit



May 5, Poplar  
160 bit

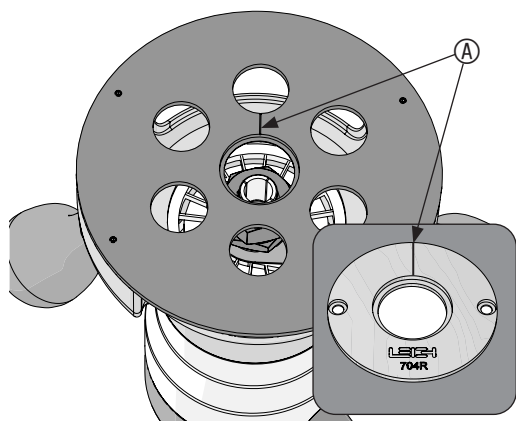
EXAMPLE ONLY



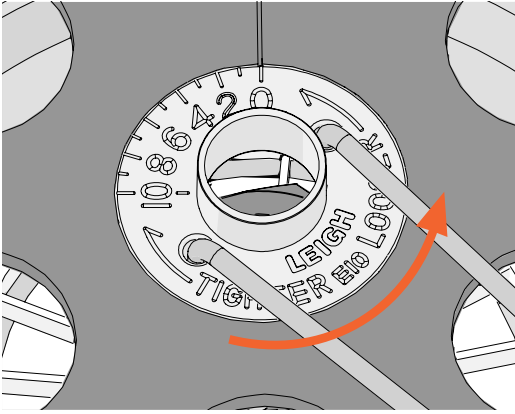
### 3-10 Fitting the eBush to the Router

Place the router on the workbench with the handles positioned the way you would normally hold them **(A)**.

Then turn the router upside down and place it on the workbench **(B)**, keeping the same face of the router toward you.



**3-11** Make a small scratch line on the router base or eBush adaptor, at the 12 o'clock position. This will be a reference line for all eBush settings **(A)**.



**3-12** Install the **e10-Bush** in the router base and use the pin wrench to align the 0 to the reference line. The 0 setting is only used for beam preparation in Chapter 4, Mounting & Assembly.

**Be sure to retighten the eBush nut after each adjustment. ■**