### **B975 User Guide**

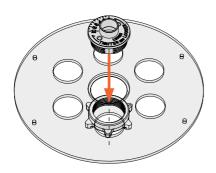
### **CHAPTER 3**

## The Leigh e10 eBush

Note: Normal tolerances with bits, guide bushings and router runout will generally produce poor fitting joints. The included Leigh e10 elliptical guide bushing (eBush) solves this problem.



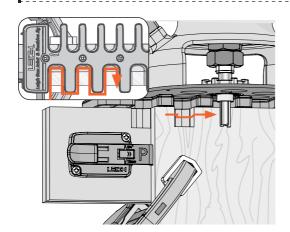
Patents for Leigh elliptical guide bushings: U.S. 9,375,860 UK GB2443974



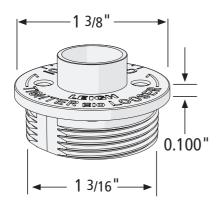
#### 3-1 How the e10 Works

Routing on the B975 requires a router fitted with the included e10 eBush (guide bushing).

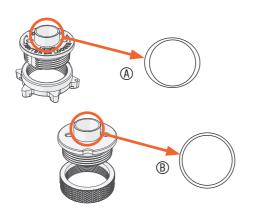
The e10 is installed in the base of the router and the guide bushing retaining nut is screwed on, under the router base.



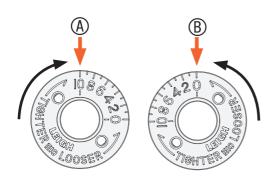
**3-2** The barrel of the e10 steers the router and the bit in and around the openings of the template.



**3-3 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 adapter. If your router requires an adapter, please see the Guide Bushing Adapter chart and Leigh guide bushing adapters in Chapter 8.

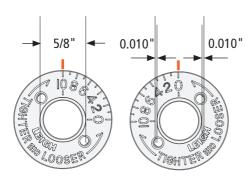


**3-4** The Leigh eBush barrel (A) is elliptical, unlike plain circular template guide bushings (B). When the e10 is rotated, the effective diameter of the barrel changes, allowing fit adjustments as small as 0.001"[0.025mm]. The e10 eBush is included with the jig.



# 3-5 All routing starts with the eBush in the No.5 position.

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 e-Bush nut after each adjustment.



**3-6 Joint Fit Adjustment** The effective diameter of the e10 is 5/8" 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 perfect fit will be established with one or two test cuts.



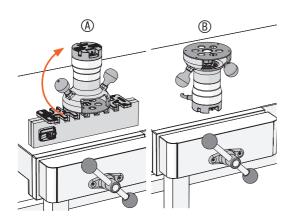
Feb 30, 1/2" joint Maple, 160 bit



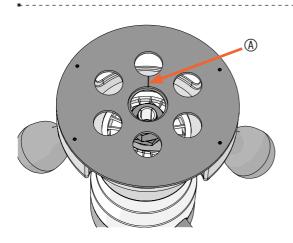
May 5, 3/4" joint Walnut, 160 bit

**EXAMPLE ONLY** 

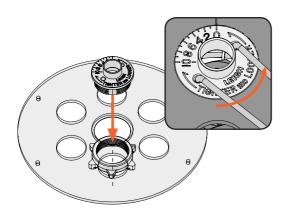
**3-8** Each chapter provides a place to mark your perfect eBush setting, for easy repeatability the next time.



**3-9 Fitting the eBush to the Router.** Place the router on the jig with handles positioned the way you would normally hold the router (a). Then turn the router upside down and place it on the workbench (b), keeping the same face of the router toward you.



**3-10** Make a small scratch line on the router base or eBush adapter, at the 12 o'clock position. This will be a reference line for all eBush settings **(A)**.



**3-11** 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. All other routing begins with the eBush set to 5.

Be sure to retighten the eBush nut after each adjustment.