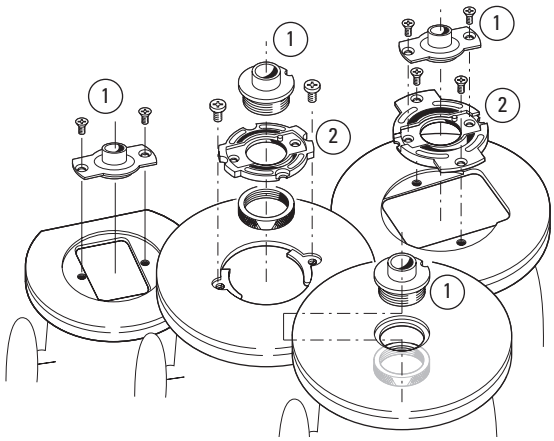
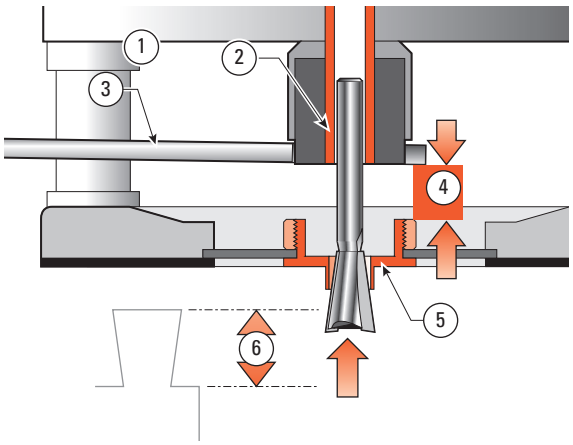
D1600 CHAPTER 7

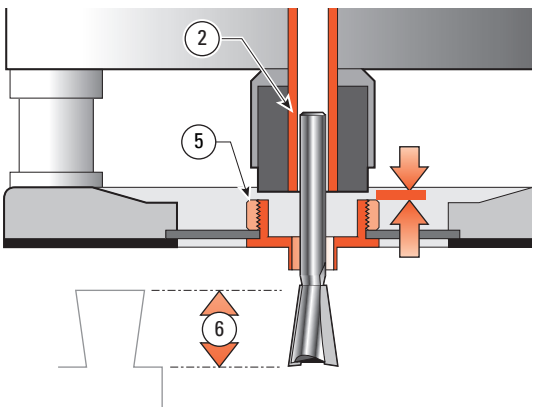
Router Preparation



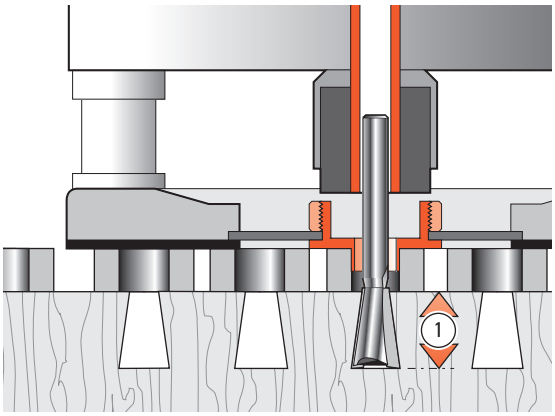
7-1
The router of course, must always have the correct size of Guidebush fitted ①. The D1600 uses only a 7⁄16"[11,1mm] O.D. guidebush for all dovetails. One is included with the D1600 but your router base may also require a guidebush adapter ②. Please see Appendix I "Guidebush Selection".



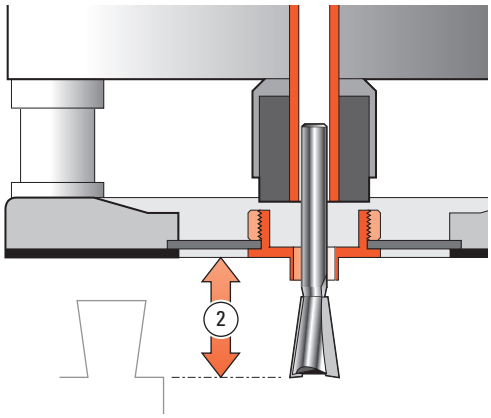
7-2
When fitting a cutter to the router ①, **always fit the cutter shank as deeply into the collet ② as possible.** Always rout with the collet as close to the guidebush as possible. Usually you will not be able to get the collet wrench ③ securely on the collet nut with the collet at its optimum low position, so fit the cutter into the collet so that the remaining travel ④ between the collet and the guidebush ⑤ will let the cutter reach the required depth of cut ⑥.



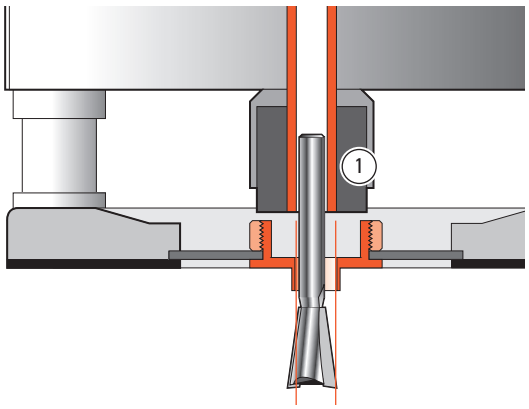
7-3
Tighten the collet ② securely and lower the collet to adjust the depth of cut ⑥, but make sure the collet does not contact the guidebush ⑤.



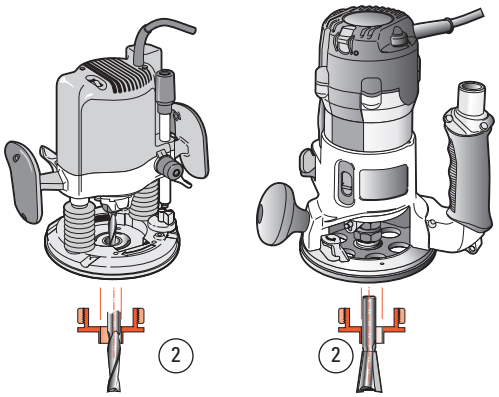
7-4 Depth of Cut:
The depth of cut always refers to the actual depth of the cut into the wood beneath the guidefingers ①.



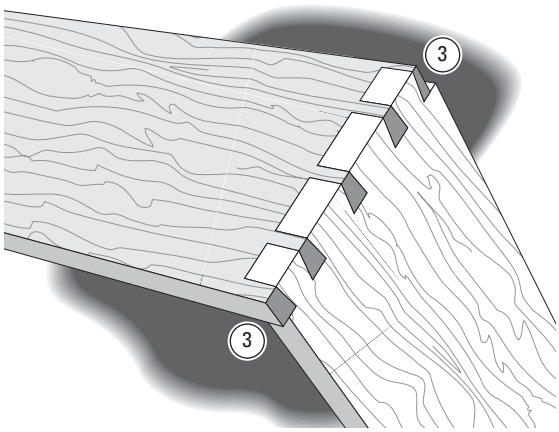
7-5
Depth of cut is not the distance the cutter projects from the router base. This is cutter projection ②. This manual generally refers to depth of cut, with one exception (see 9-7). Cutter projection ② is always .500"[12,7mm] more than depth of cut.



7-6
Ideally, the router collet (and cutter) should be concentric (centred) to the guidebush as in figure 7-5. Regrettably, this is often not the case; the cutter can be off centre (eccentric to) the guidebush ①. The illustration shows the problem highly exaggerated. The good news: cutter to bush alignment doesn't affect joint fit or flushness; both are "adjusted out" in normal jig setup.



7-7
Concentricity problems can only arise if two routers are used for through dovetails, (one for pins; one for tails). Routers with different cutter to guidebush offsets ② (misalignment shown highly exaggerated)…



7-8
…will cause pin to tailboard ③ misalignment (again, shown highly exaggerated).
Fortunately, some newer routers have sub-bases that can adjust for concentricity. If you don't have this type, it might pay to stick to a single router for through dovetails. ■