Installing a router in a Router Table

Installing a router is a task that has frustrated many wood workers. Lots of time spent lining things up only to find that the router is off center just a little bit. This is normally only an issue when guide bushings are used and often is not discovered until the need arises. The following method will allow you to properly center your router in the router plate with accuracy and less frustration than any other method I have ever tried.

All routers are held in place by 3 or 4 screws. When the router is used as a hand held router these same screws retain the base plate to the router mount casting. The router base plate should be removed and stored when installing in a table plate.

Some router installations will require the use of longer screws to hold the router to the table plate. The original base plate is often thinner than the table plate. Make sure the screws used are long enough without being excessively long. Some routers have holes that will not accept a long screw and the length must be within a small range to hold properly. When locating the correct screw size, get an extra set of screws. These screws are the secret to accurately installing your router.

Secure a screw in your drill chuck with about 3/8" of the screw sticking out. Using a grinder or stationary belt sander, grind the head off the screw while rotating the screw with the drill. The objective is to create sharp pointed headless screws. Caution use safety glasses and watch out. The screws get very hot! Make a screw for each mounting hole.

Screw in the pointed screws with the points sticking out. Insert each until about 1/8" to 1/4" of the screw is above the router base. Sharp pointed screws will act as transfer punches to locate the exact center of the holes for subsequent drilling.

Install a bushing in the router plate and tighten the nut. Check the fit of the bushing. If, due to variations in manufacturing by plate manufacturer, the fit is poor, wrap the top lip with tape until it is snug in the hole. The tape can be trimmed if necessary. This method can also be used when the bushings are used for wood working.

Insert the tapered centering pin into the bushing from above and into the collet of the router. The collet should be tightened just enough to allow the pin to be tapped in. The taper of the pin will cause the router collet to center on the bushing. The height adjusting capability of the router should be tightened and locked in place just like it would be in use.

Double check everything to make sure all is centered and snug, when correct just tap the plate over the screws and they will make a punch mark on the underside of the plate in the exact center of the screw hole. Take out the pin and bushing and remove the screws from the router.

Drill the plate from the bottoms side using a sharp drill bit. Drill the screw holes one size oversized from the minimum required. Countersink the top of the plate for the appropriate screws used. Install the router and check with the centering pin. All should fit perfectly. HAVE FUN AND BE SAFE!