

## Woodline USA 5.5 mm kit 3010 kit installation and removal.

There are two cutters in the 3010 kit. They are identical. One is black and the other red only for convenience. They will fit either the three wing rail and stile sets or the two wing sets.

To change the bits from 1/4" slot and tenon to 5.5mm for use with flat panels of undersized 1/4" plywood, simply replace the two existing slot cutters with the two from the kit. Note the number of small washers and thin shim stock washers and the placement of each shim. Make a written note of the number of shims and replace them when reconverting to the 1/4" system later.

It is common for the bits to need adjustment shimming for proper fit. The instructions on page two detail the method of placing or removing shims to assure proper fit. The method is identical for either 5.5mm or 1/4" systems.

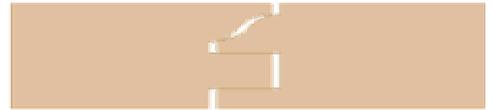
It is best to shim the rail bit first.

Shim Count	above bearing	Below Bearing
Rail Bit		
Stile Bit	Between profile and slot	

## Making Rail and Stile Cutters Fit. Shim for Fit

Rail and stile router bits and shaper cutters must occasionally be shimmed for proper fit. Many Woodline USA router bits can be shimmed for a proper fit or to adjust the bit after sharpening or for a tighter fit in a specific wood.

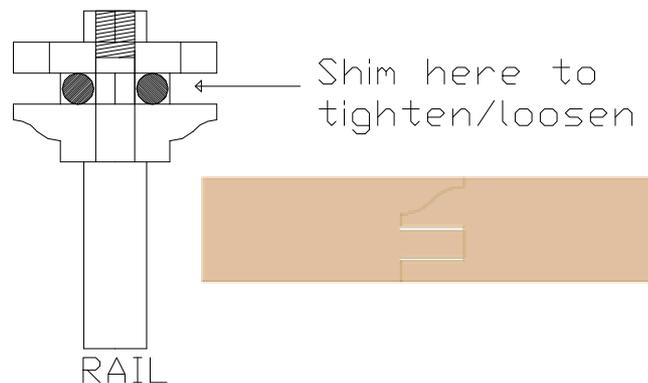
Not all fit errors are caused by shims or cutter alignment. Depth of cut errors will produce a gap on the surface of the rail and stile or a cut that is too shallow not allowing full mesh of the joint and are generally caused by errors in fence position. Both rail and stile boards **MUST** contact the bearing firmly when cuts are made.



Two areas can be shimmed.

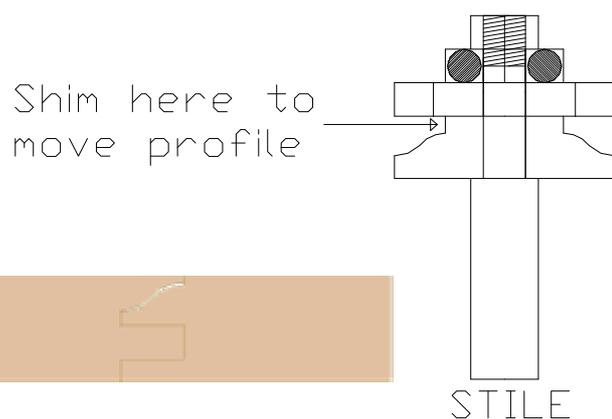
### Tongue:

The tongue is produced by the rail bit. The rail bit has a bearing between the profile and the slot cutter. The gap of the bearing produces the thickness of the tongue and determines more than any other factor the tightness of the fit. Add shim(s) between the bearing and the slot cutter to produce a tighter fit. Remove shim(s) to make the tongue thinner and thus a looser fit. **DO NOT** shim the stile bit in an attempt to make the joint tight.



### Profile:

If a gap exists in the profile, when viewed from the end, shim(s) can be added or removed to the space between the stile slot cutter and the profile cutter of the stile bit.



When shimming bits, be sure they are reassembled correctly and the retainer nuts tightened properly before turning on the router. If the nut is not tight and the bit spins on the shaft, the fit of the bit can change due to wear on the brass shims.



If the bit spins on the shaft recheck for fit and shim as necessary before proceeding.