

making a **Bowtie Inlay**

The inlay kit consists of a brass bushing with locking ring, a removable sleeve, a centring post, and a down-cut spiral bit.



One of the easiest and most reliable ways to fix a defect in the surface of a workpiece is with an inlaid patch. All you need to do is rout away the affected area and replace it with a patch that matches the surrounding grain. Traditionally, these inlays were painstakingly crafted to fit into hand-carved and chiseled recesses. But today, all you need is a plunge router and a simple inlay kit. These tools make it easy to inlay a perfect patch.

THE INLAY KIT. The secret to getting great results is in the design of the inlay kit, shown in the margin. It's just a brass guide bushing that locks into the base of your router (like the ones you'd use with a dove-

tail jig) and a removable sleeve. The offset created by the sleeve matches the diameter of the spiral router bit. The removable sleeve allows you rout the inlay and the matching recess with only one template. This ensures a perfect fitting inlay every time.

You can buy inlay kits as well as acrylic templates like the "bowtie" shown above, from just about any woodworking supply store or on-line retailer. You can also make your own templates from 6mm Masonite.

GETTING STARTED. As you can see in the box on the opposite page, the template and bushing kit make inlay work pretty straightforward. The downcut spiral bit leaves a smooth edge on both pieces.

But before you begin, you'll need to set up your router. You can use the centring post to install the bushing and secure it in the

router base. This way, you'll be assured that the bit is centred in the bushing. If it isn't, you'll probably get some small variations as you move the router around the inside of the template. Those variations will show up as very noticeable gaps in your finished inlay.

ROUT THE RECESS. The first step is to rout away the defect and clear out the recess for the inlay. You start by centring your template over the affected area and attaching it to the workpiece with some double-sided tape. Then, with the spiral bit installed and the sleeve on the bushing, rout out the recess.

CUT OUT THE INLAY. To make a matching inlay piece, use the template as a "window" to find the right grain on a piece of stock that closely matches the original workpiece.

To keep the template from moving

Online Extra

Then, fasten the template securely to the inlay blank. To keep the template from moving and ruining the inlay, make sure to use fresh tape for each piece.

Now you can remove the sleeve from the bushing and carefully rout around the template to outline the inlay. The next step is to move to the band saw and cut the inlay free from the blank.

ASSEMBLY. Since the router bit cuts the outside of the inlay piece and the inside of the recess, the inlay pieces have sharp corners and the corners of the recess are rounded. You can either lightly sand the inlay to round the corners or use a chisel to square the corners in the recess. Either way, be careful to remove only small amounts of wood at a time to ensure a tight fit. Check your fit as you go.

When you have the fit you want, apply glue in the recess, especially around the sides, so it will seal tightly. Then cover the inlay with wax paper and a block of wood, and tap the piece in place. Clamp the assembly until the glue dries. You can complete the inlay by scraping or sanding the surface flush.

Using the router inlay kit, all it takes is a little patience and these simple techniques to do nearly flawless inlay work. You'll be surprised at how quickly you can make a small knot or pitch pocket disappear. And that means you can fix just about any of these small defects in your projects. **W**

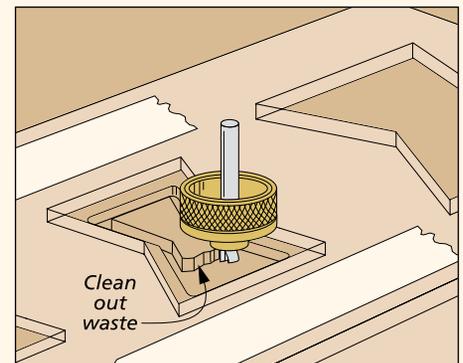
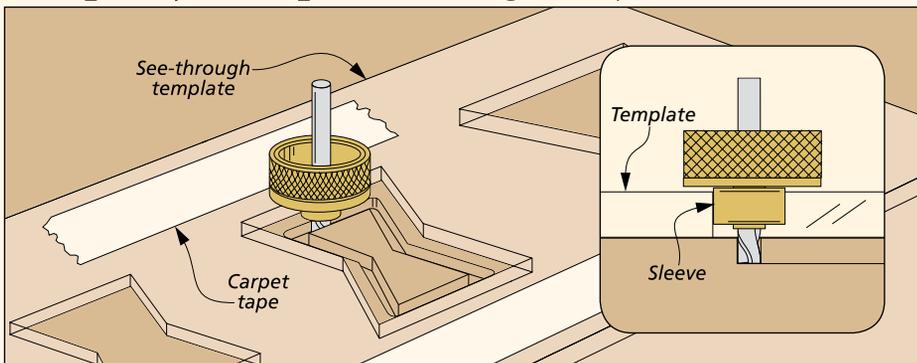


A pitch pocket is just one example of a defect that can detract from the look of a project.



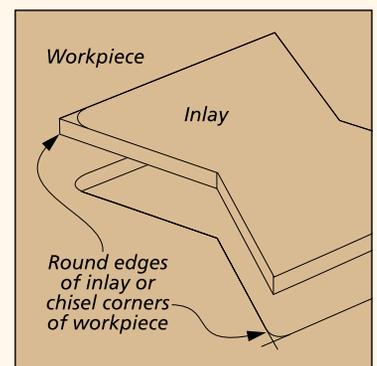
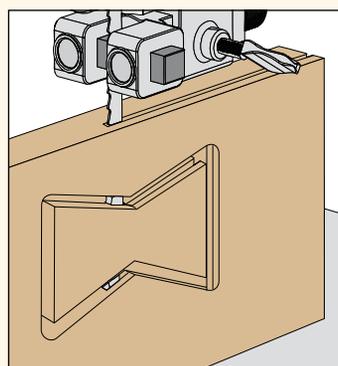
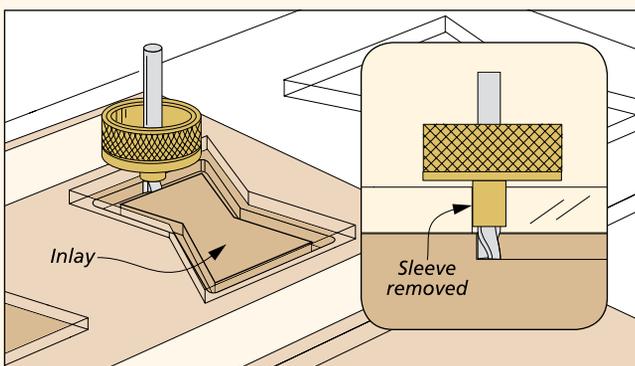
An inlaid patch with matching grain solves the problem and is almost undetectable.

Step-By-Step: Making Inlays



Rout the Shape. Begin by attaching the template to the workpiece with double-sided tape. With the bushing installed on the router, and the bit set to a depth of 3mm, rout the outline. Keep the bushing tight against the template as you work your way around.

Clean out the Recess. Carefully move the router around the recess to remove all the wood and leave a flat bottom.



Cut the Inlay. With the template attached to the inlay material, remove the sleeve and rout counterclockwise around the template. Make sure to keep the router flat.

Free the Inlay. At the band saw, resaw the inlay blank to free the routed inlay piece.

Refine the Fit. For a perfect fit, either round the corners of the inlay, or square the recess.