

# Inlay Tutorial

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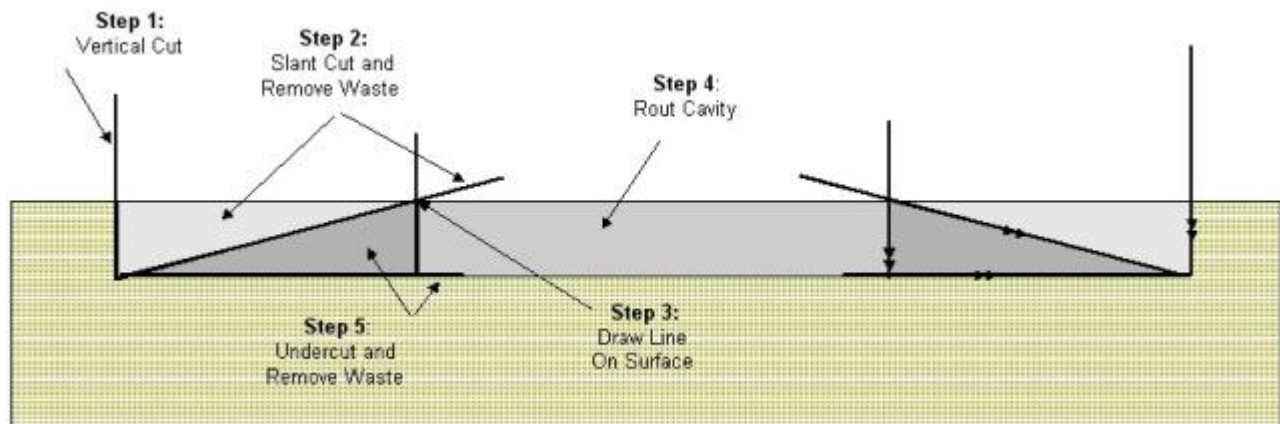
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It's past time for the long-awaited tutorial on inlays. I promised it too long ago, but your patience will now be rewarded.

First a bit of history. In the spring of 2007, my daughter moved into her first apartment. Given her limitations, this was a huge accomplishment, and I wanted to commemorate it by creating an inlaid butterfly for her. I literally spent the entire summer trying to make that inlay. I tried every method I could find on the Internet and in books. Nothing worked. One day, the next year after she had died, this method simply appeared in my brain, fully formed. The first time I tried it, I had total success. Since then, I have enjoyed making many inlays, and I have never had a failure.

I truly believe that if you follow this method carefully, you can inlay any shape your heart desires, and have success on the first try. Even if you are a novice woodworker.

This drawing summarizes the cuts you will make:



The first step, of course, is to make the inlay. You have almost no limitations as to the shape or size this inlay can be. The only one I can think of is that you should not have any outside corners that are more acute than an X-Acto knife blade or otherwise your narrowest blade. Inside corners may be as acute as you like. Make sure all edge surfaces are smooth and vertical to the face.

Initial thickness will depend on how fragile the inlay is. Final inlay depth will be about 1/32", but any extra thickness can be sanded off after the inlay is in place. My minimum is about 1/16" to 1/8". They have been as thick as 1/4".

Next, position the inlay exactly where you want it on the base wood. Attach it temporarily, yet firmly. I use double stick tape. I understand that some people use hot glue in this situation.

Beginning now on the diagram, Step 1:

You're going to cut around the outside of the inlay as closely as possible to its edge. I use an X-Acto knife because I know it will be razor-sharp and it has the thinnest kerf of any blade in my arsenal. Its downside is that both edges are angled. Therefore, you must be careful to hold the edge of the blade alongside the edge of the inlay--vertical.

My first pass is always very light. I pay particular attention to the grain of the base wood because that grain can make my blade try to wander. When I reach an area where the grain would try to divert my blade, I stop and start again from the other direction. I never cut toward an outside corner. I always put my blade at the point and cut back from there.

If I have an acute inside angle on the inlay that is too tight for my blade to get into, I stick the point into the base wood along that line and "connect the dots" after the inlay is removed.

Once I have the light cut, I go over it several more times with increasing pressure. Then I remove the inlay, and usually go over it even more to make sure the cut is sufficiently deep. Be careful that you don't break the inlay as you remove it. I use a small paint scraper.

If you have completed this step successfully, you have virtually assured that your inlay will be a success.

Step 2:

Next you will use a chisel to cut from inside the recess area down to the bottom of your original cutline. I find that starting the cut about 1/8" inside the recess area and holding the chisel about 15° above the surface is about right. Don't pry the waste out--cut it out. This cut does not need to be pretty, but the original cutline that is revealed should be beautiful. This step isolates your margin from any further activity and is the secret of the success of this method.

Step 3:

With a boldly contrasting marker, draw a line along the top of the angled cut you just made. For dark woods, I use a white pencil from Hobby Lobby.

After Steps 2 & 3:



Step 4:

Rout out the area within the line you just drew. I use a 1/8" spiral bit set to 1/32" in my smallest router.

After Step 4:



Step 5:

With bevel down, chisel out the area under your first chisel cut. Now all that's left are any sharp outside points. I lay the X-acto blade as close to horizontal as I can as I wedge it into the corner.

After Step 5:



Test fit? Don't outsmart yourself here. If you've done your job right, you won't be able to. What I do is make sure that all areas "catch" at the same time--just enough that it won't slide. Any more and I wouldn't be able to get the inlay out to add glue. If it doesn't seem to fit, consider that the only way it's supposed to fit is exactly straight down all at once.

When you're applying glue, remember that excess glue may not be able to squeeze out, so don't get too exuberant. I use regular wood glue, dark for dark base woods and light for light.

For clamping, I usually cover with a thick board a hair bigger than the inlay to make sure all those points get tucked in equally. This also helps the inlay to go in vertically.

All that's left is to clean the surface and sand smooth. One time I had a particularly thick fragile inlay and a small base wood. I was able to shave the excess inlay close with the bandsaw, but sanding is rarely tedious. Because of the two different woods, be sure to mount the sandpaper on a flat backer rather than just holding it in your hand.

Now get thee to the shop and make an inlay. Be sure to post pics of your success. I'll go first:



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Carolyn

"It's good to know, but it's better to understand." Auze Jackson

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