

The Bound Headstock:

Binding a guitar headstock can really make the headstock look beautiful. However, it can be difficult to do, and it takes some practice to make them look right. There's nothing wrong with a simple, unbound headstock, but sometimes you just want that extra pop that binding the headstock can add.

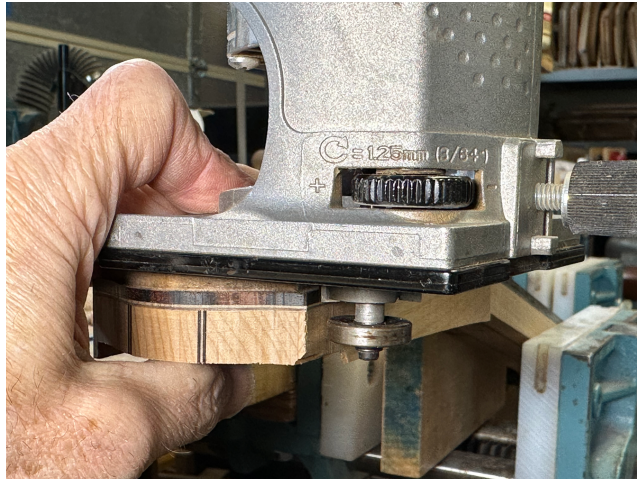
We'll start with the headstock shown. The thickness has not been reduced, so



there is plenty of room for a cutter with a bearing to easily ride along the sides of the headstock. We're going to put a binding layer of about .066, with a purfling layer of about .022, to give a total of about .88 for the binding + purfling cut. One thing to note: the headstock veneer consists of three layers: The top-a thick (nearly 1/8 thick piece of macassar ebony, the middle, a .022" thick veneer of maple, and at the bottom, a .022" thick veneer of walnut.

Since the fingerboard is 1/4" thick, we're going to put a piece of MDF on top of the headstock surface, so a router can smoothly ride on the top of the MDF surface and not be impacted by the fingerboard. As you can see in the photo, we have screwed the MDF piece into holes that will later be drilled out for the tuning machines.





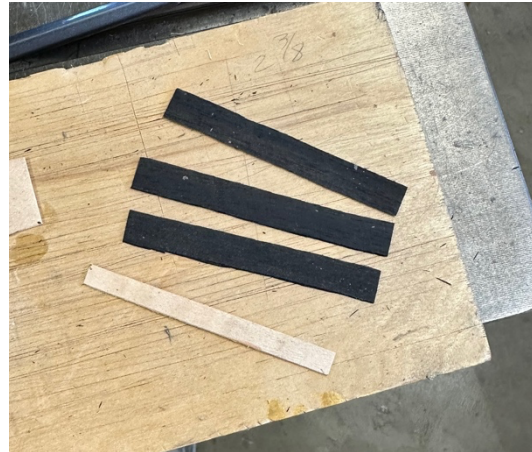
You can see how the router will ride along the headstock—on top of the MDF spacer. The cutter will cut a .090" cut into the edge of the headstock, and the bearing is riding on the headstock edge. Note that the cut will be just above the maple veneer at the edge of the headstock.

In the next photo, you can see the position of the router during the actual cut. The neck is held in a vise, with the headstock as parallel to the found as possible. I try to hold the router base still with my left hand, while guiding the router with my right. I'll have to stop the cut about halfway through, and turn the setup around, so the opposite side of the headstock is facing me.



Here is the headstock after the cut. You can see the cut is very level, with the top of the maple veneer (just under the headstock) showing at the bottom of the cut.

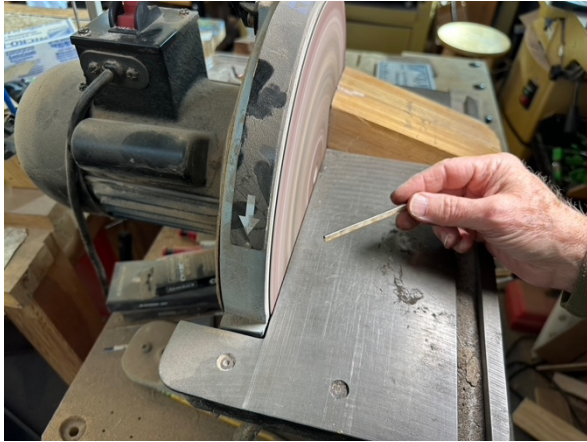
The next thing we'll do, is prepare the binding and purfling for the headstock. It will consist of a very dark binding layer, which will consist of three pieces of .022" thick macassar ebony veneer. The purfling layer is a piece of .022" thick maple veneer. All 4 pieces will be glued together using titebond 1. This will allow us to easily bend the entire sandwich as needed.



Here is the sandwich all glued up. I put glue between the layers, then clamped them together in a vise for about 30 minutes.

The next thing we'll do is sand down the binding/purfling sandwich on the disc sander. This will give us nice square edges, and a final height of just over 1/8".





Here is one piece, ready to go.

Now, we bend the sandwich over a hot iron, to get the shape we need.



Here are the first pieces bent to the shape of the areas we want to cover. Next, we'll bend the longer pieces, and start to miter the corners.

Here, you can see I'm trying to get the angles right for the corners. This is tricky, because you have to get the angle and the length right. If you get the angle right, but the piece is a little short—you have to make a new piece.



I will put a piece in place, and mark the angle with a pencil. Then I'll use my disk sander to sand the angle onto the binding piece—trying to leave it a little long—then, gradually take the piece down to final size. As I get two pieces together, I'll tape them down, and move on the the next corner.

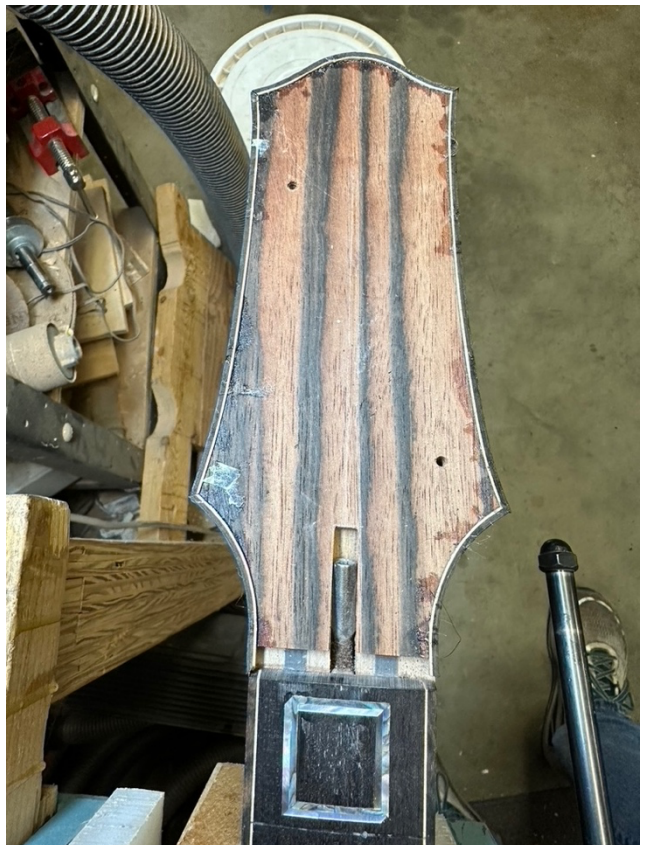
Here's how I miter the corners with my disc sander.





Once all my lengths and corners look right, I'll strap it all down. This step will usually show that many of the pieces are slightly too long, so you have to go back and adjust them. Once everything looks good, I'll use CA glue, and glue it all down, leaving the string on.

Here's what it looks like when the glue is dry and the string is taken off—time to sand.





Use a flat sanding block to get things level. I'll typically start with 150 grit, then move to 220.

Here it is...I still have to trim the bidding/purfling ends down by the nut slot, but it's looking pretty good...





Here it is—with holes cut for the tuning machines, and a little inlay work done. Next, finishing...

Here's another one: Koa binding on an ebony headstock.

