The Bevel Part 4. Carving, gluing, and trimming the bevel

In this section, we will carve the bevel, and make sure the carved surface is flat. We will then make the bevel veneer and glue it to our carved surface, followed by trimming and sanding the veneer.

Photo 51

In Photo 51, I am using a coarse rasp to sand the corner of the bevel. As I get closer to the final position, I'll switch to a finer file. You want to be very careful not to file away the dark border around where you will glue down your veneer. That's why I'm wearing magnifying glasses to do this step. I want to be sure I can see my boundary really well.

Photo 52

In photo 52, I'm using a curved scraper, to be absolutely sure that I don't have a bulging (convex) curve on the outside of the bevel. It will be impossible to properly glue down the bevel veneer unless this surface is flat.

Photo 53

In photo 53, I'm marking the edges of the carved surface with a white pencil to see how sharp they are. If these corners are fuzzy or crooked, I'll want to do some more carving to clean them up.

Photo 54

In photo 54, I'm checking the straightness of the carved area with a straightedge. As you rock the straightedge back and forth, listen for a "click" as the flat edge hits the flat edge of the wood. If you don't hear this, your surface is still curved—and you should use the curved scraper more. At this point, you should look carefully at the bevel area, and check for holes and gaps. If any of these exist, you must fill them with wood, or epoxy, or glue and wood dust, then sand flat. You must NOT have any holes or gaps in the bevel area.

Photo 55

In photo 55, I'm showing how to trace the shape of the bevel. I'm using a back bevel instead of our top bevel for the next few photos, but the steps are the same. The paper is held at the same angle as the bevel—about 45 degrees from the top and sides. The side of the pencil lead is used to trace the bevel edge.

Photo 56

In photo 56, you can see the tracing of the exact shape of the back bevel. The top bevel will have more of a crescent shape.

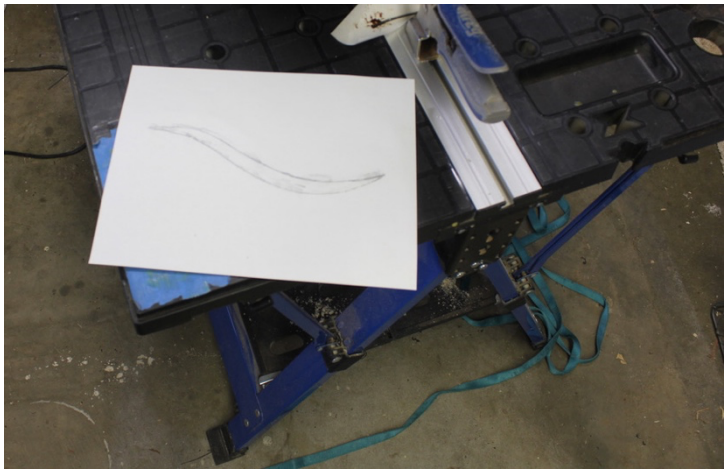
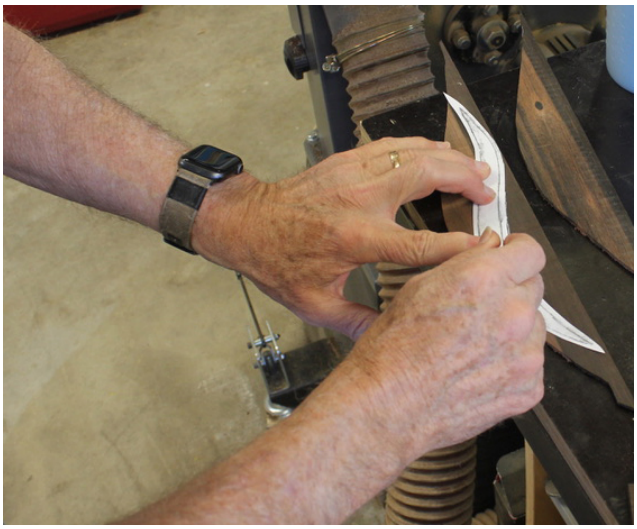


Photo 57



In Photo 57, I have cut around the tracing by about 3/16”, and an using a white pencil to trace this oversize bevel tracing onto a piece of macassar ebony scrap material.

Photo 58

You can see the final tracing of the back bevel on the macassar ebony scrap in Photo 58.

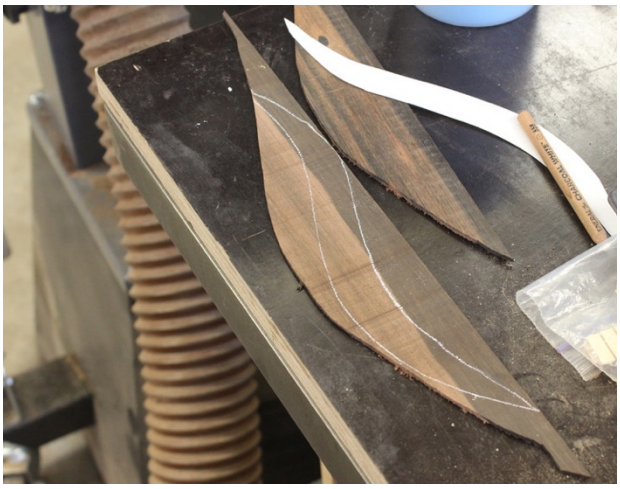


Photo 59

In Photo 59, I'm using a bandsaw to cut the macassar ebony piece to size. After this step, the piece is thinned down to a thickness of approximately .035". I do this by using double sided tape to tape it to a board, then putting it through the thickness sander. This gives me very accurate results.

Photo 60

In Photo 60, the bevel veneer has been thinned down to .035", and I'm using a hot pipe (electric) to bend it to match the curvature of the back bevel—as closely as possible. I use a spray bottle of water to wet the piece, and slowly bend it with the pipe.—keep your fingers away from the pipe!

Photo 61

In Photo 61, you can see that the bevel veneer fits pretty well. Next step—gluing. Also, be sure the veneer will sit flat against the carved edge. If it wants to rock up and down, your surface isn't flat yet—and it needs more carving.

Photo 62

In Photo 62, I'm using a pipete filled with superglue to glue the veneer to the basswood backer. Note that I'm using superglue and holding the veneer with my fingers. This is why I make my own veneer—much thicker than a standard veneer (closer to .022-.025") so the superglue won't seep through and glue my fingers.

Photo 63

Now, we go back to the top bevel we were working on. Here, we've traced the bevel onto a piece of macassar ebony, cut it out, sanded the thickness to approx. .035", and we're bending it to the shape of the top bevel.

Photo 64

In Photo 64, I'm checking the bend of the veneer against the bend of the carved bevel on the guitar. The fit is good.

Photo 65

In Photo 65, I'm using the superglue pipette to run glue into the joint between the veneer and the carved backing. As soon as the glue is holding in one spot, I can move down and glue the next area. Be absolutely sure that the fit of your veneer is perfectly flat against the carved surface.

Photo 66

In Photo 66, I'm almost done—getting near the end of the veneer. I'm also trying to keep all the superglue off the spruce top, and only on the purfling and the sacrificial material.

Photo 67

Once the glue is holding, and has been left long enough for the glue to seep thoroughly under the veneer (a couple of minutes), I'll use some accelerator to make sure it's dry.

Photo 68

As you can see in photo 68, after gluing the top, I'll turn the guitar on its side and use the pipette to put superglue into the side part of the joint—filing any little gaps that show up.

Photo 69

After the glue sets up, it's time to spray with accelerator.

Photo 70

Once the glue is very dry, and has been sitting for several minutes, I'll use a sharp scraper to start trimming down the excess veneer. Note that you can only scrape in the right grain direction . You risk splitting the veneer if you scrape against the grain.

Photo 71

You can also use a small hand plane to trim the excess veneer. You must still pay attention to the wood grain, however, and only go with the grain.

Photo 72

Once the top trimming is close, the sides must be trimmed. I am using a scraper in photo 72. Again, the wood grain is critical with the scraper.

Photo 73

After the veneer is trimmed with a scraper or a plane (or both), a sanding block is used (I'll start with 150 grit paper) to get the final bit of the veneer leveled.

Photo 74

Here is a common problem. This is a small grain tearout—but could also be the result of a glue gap under the veneer. The best way to fix this is to try and drip as much superglue as possible into this area. If there's a gap under the veneer, you need to fill it.

Photo 75

Here, I'm dribbling superglue into the gap. Once this is sanded, it will be invisible.

Photo 76

Here it is—the final bevel. I personally think a good bevel is a very useful addition, and also a very beautiful feature. Many thanks to Grit Laskin and Kevin Ryan (the real developers of the bevel) for their permission to not only make my bevels, but to tell you about them.