

The carving is done so that the ends of the ribs are a little flexible to accommodate themselves to movement in the board: Without this flexibility, they would just pop off if stressed.

The best tool for this work is a sharp chisel. Carefully clamp the upside down board to your bench, because the ribs are tough and will take some pressure to shape.

Cutting the jack mortises

Now turn your soundboard right way up, and make your clean penetrations for the jacks. Use a very sharp small chisel, the X-acto knife and/or small files, always cutting downwards to avoid tearing out the fibres of the soundboard. Watch where the grain wants to pull your tools where you don't intend them. Keep the sides of the mortises parallel and smooth. The cutouts through the soundboard will match the slots in your boxguide exactly, because you marked them yourself.

6. Installing the soundboard

The weather is nice today, and the soundboard at equilibrium. Ideally, it should be just slightly drier than normal.

The completed soundboard should fit nicely into the case, and you should have already checked that all the gluing surfaces are level and that you have made the clearance chamfer in the wrestplank.

Clamping the soundboard

The padded nails are very useful for clamping the soundboard to the liners and the diagonal hitchpinrail. The technique is shown in one of the photos. Space the nails about 10–12cm (4"–5") apart, close to the case walls so the holes will be hidden later by the moulding.

On the main right part of the wrestplank, you can also use screw clamps bearing on a suitable scrap of wood to distribute the pressure. On the dogleg, several clamping solutions are possible: Padded nails centered on the future holes of the tuning pins holes, weights or perhaps a piece of wood clamped at the two ends...

Before gluing, prepare all your clamps, and if you are going to use the padded nails, insert them lightly into their holes in the soundboard.

Quickly spread your glue on the top of the liners and wrestplank. The oak of the latter is thirsty, so use plenty of glue there. Drop your soundboard in place, and press it down.

Work quickly with your nails around the edges, and into the diagonal hitchpinrail. Use a nailset to avoid marring the inside wood of the case unnecessarily. Watch for any bulging between your nails: The soundboard really wants to soak up the moisture from the glue. Put some extra nails in between if you see the expansion of the board making waves along your liners.

Clean your excess glue after about 20 minutes, and leave the soundboard clamped overnight. The following day, carefully remove the padded nails because you don't want to break them off.

Captivating the boxguide

Both ends of the boxguide can now be permanently fastened to the bottom frames. Fill the space made by your chamfer on the treble end with a thickness of scrap veneer and glue. There should be enough spring in the soundboard to clamp this while your glue dries. If you have some space with the bass end of the boxguide hovering above the left bottom frame, use some veneer likewise. If there is no space there, just squeeze the boxguide up a fraction while you spread some glue on the contact point with the frame.