

WORK IN PROGRESS

Making of a flat top electric guitar type Fender Stratocaster

Copying the instrument

To make a type of a well known instrument like the Fender Stratocaster we first need to copy an existing one. Unless there is a need to attempt to make an exact copy during this process we should look at possible flaws in our model and try to eliminate them from our to be models.

To copy the instrument every detail is recorded onto paper, plywood or what ever is seen appropriate. It is a good idea to have master and working models separate.

The neck is always done prior to making the neck pocket model to achieve an absolute fit.



Picture 1. Plywood models.

The Body part 1

First step is to Choose the wood and work it to appropriate pieces with the help of planing machines. Then the wood for the body can be glued together, seems must be exact 90 degree matches achieve a stable glued seam. This time 3 pieces of wood were used.



Pictures 2 and 3. Glueing the body woods together.

Once this is done the wood is remove to make space for the microphones, other hardware and the neck pocket. First wood is removed roughly and a nice finish is then done with a milling cutter.



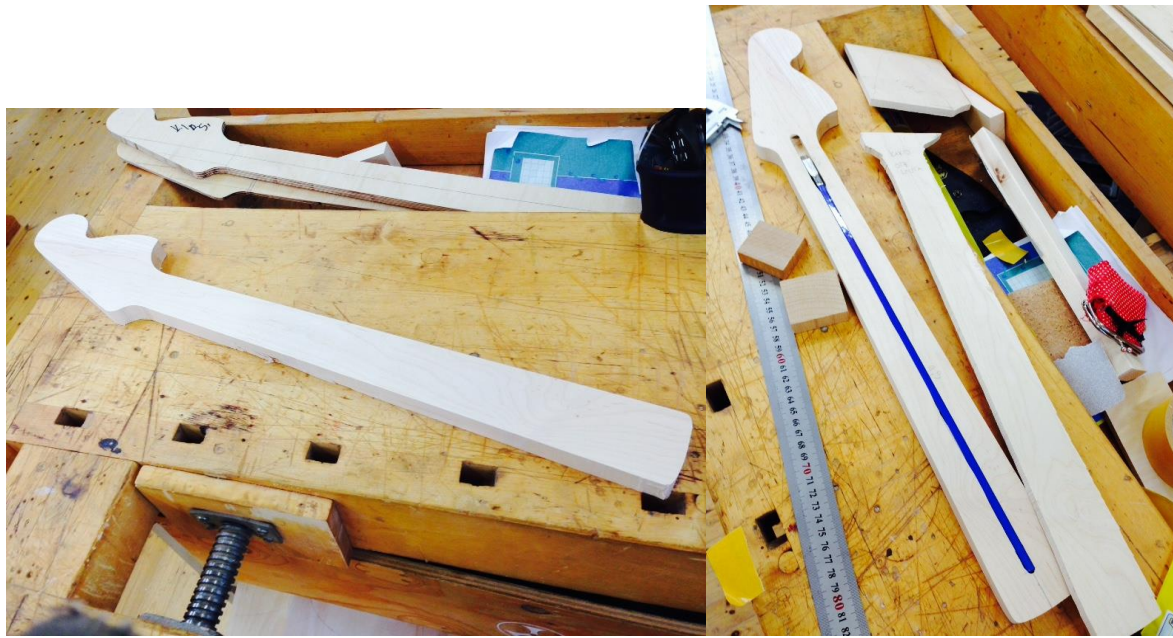
Pictures 3 and 4. Making room for the hardware and cutting the shape.

Building a Stratocaster type of instrument one must remember to make a cavity in the rear side also to fit the springs for the vibrato. This is also the place where the ground wire for the strings is soldered but about that later.

For a Stratocaster type instrument we also need to shape the tummy contour from the back and front right corner tilt from the front. Also 12,7 R is in order for the edges.

The Neck part 1

In this build we are using a full maple neck. The wood needs to be neatly split into the actual neck wood and the fingerboard to make the seam as invisible as possible. A mortise is created for the trussrod onto the surface of the neck wood.



Pictures 5 and 6. Neck wood, fingerboard and the trussrod.

Next it is time to make holes for the tuning machines and glue the fingerboard onto the neck wood.



Pictures 7 and 8. Tuning machine holes and glueing the fingerboard.

Fitting

At this stage it is important to fit all the pieces and hardware for it is still easy to modify the cavities as needed.



Picture 9 Fitting the parts.

The neck part 2 TBD

Fingerboard scale, fret mortises.

Thinning of the headstock & creating the curve & drilling a whole for the trossrod ajustement.

Preparing the body and the neck for the finish

The finish

The base lacquer

The stain / burst

The finish lacquer

Time to let the lacquer to sit for 2 weeks before polish.

The Polish

Putting it all together

Fine tuning

The Docs

How to take care of your instrument

Warranty

Certificate of Authenticity

Rock & Roll!