

This Framus archtop was literally coming apart at the seams.



Photo 1:

Serial number 28909-G53 is stamped on the back of the headstock which indicates that it dates from July 1953. Although the last digit is possibly a badly stamped number 8; giving a more likely production year of 1958.

There is no model number or name identified anywhere on it. It looks very much like a 5/50 or 5/51. Originally it had a scratch-guard but that has been lost, leaving only the mounting holes in the side of the neck & body.

At some time it had been fitted with a neck-mounted pick-up. There are witness holes on both sides of the fingerboard where it was mounted & there is a hole for a jack socket in the side of the lower bout.



Photo 2: The back was pulling loose most of the way around the body.



Photo 3: The front & binding had lifted around the lower bout.



Photo 4:
The neck heel had shrunk back from the body leaving a gap at the end of the heel.



Photo 5:
The tuners worked but some were quite stiff to turn & others were bent. Also some of the knobs were splitting.



Photo 6:
Only 2 of the tuners had their bushes.
The others had no support & so the pull of the strings was deflecting the shafts & causing the holes in the head to be worn out of shape.

Notice also that the rosewood string-nut has broken away at the ends allowing the E-strings to slip off the zero-fret during play.

With the aid of an inspection mirror inserted through the F-holes it was possible to see that the two top braces had failed. See photos 7 & 8.

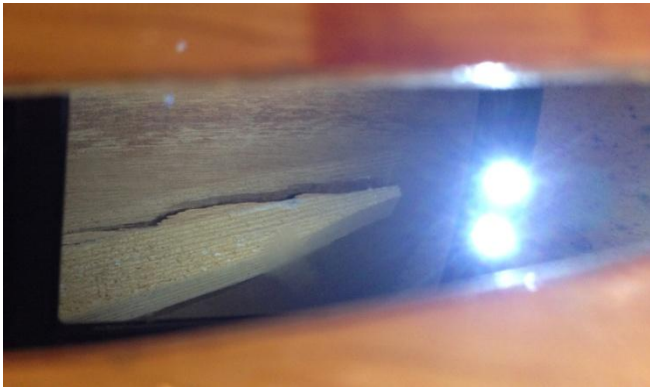


Photo 7: A broken brace.



Photo 8: The other brace detached from the top.



Photo 9:

The bridge was set down as low as it could go but the string height over the 12th fret was at a massive height of 4.6mm.

The neck was remarkably straight. Despite not having a truss-rod there was just the correct amount of neck relief & the fret-board, although very dirty was also in good condition.

The frets were not very level & showed some wear on the first 5 positions.

Repair & Restoration.

The plan was to get it back to a playable condition with a nice action height & maintain the character of the instrument. It was to look like a vintage guitar that had been well cared for over its 60 year life. It was not to look as though it had just come out of the manufacturing plant.

With that approach in mind it felt that modern tuners would look too out of place.

Framus is now under the Warwick banner and they still market Framus vintage nickel tuners that have oval-pearloid knobs – An exact match & fit for the ones on this guitar.

A bit expensive but well worth having to keep the right look & get perfect function.

It was decided that a new pick-up should be fitted & wired directly to an output jack without any tone or volume controls.

To make the instrument aesthetically pleasing it would need a replica scratch-guard.

Rather than white or black as it would have been originally, it was thought that a faux-tortoiseshell pattern would compliment it nicely.

To make it structurally sound, then of course it had to be taken apart.....



Photo 10:

The first step was to remove the back to enable the internal repairs.

The back which was already detached around most of its periphery came off quite easily. A hot knife loosened most of the remaining glue & just a little blast with a steam jet dealt with a couple of stubborn areas.

Astonishingly there were some fragments of an old German newspaper stuck on the back. Can't think why, unless it was used for masking off during manufacture.

The back was then cleaned up to rid it of the glue remnants & sanded ready for re-attachment later.



Photos 11 & 12: With the back off it was possible to assess the damage to the braces. One of them just had a failure of the glued joint but the other had partially ripped the surrounding surface. Both relatively easy to resolve.



Photo 13:

To ensure good adhesion both braces were removed & then re-attached with hide glue. It was convenient to use 6 clamps & wooden clamping cauls to hold the braces securely in place whilst the adhesive cured.



Photo 14:
Once the glue had dried the braces were ready to be sanded smooth.

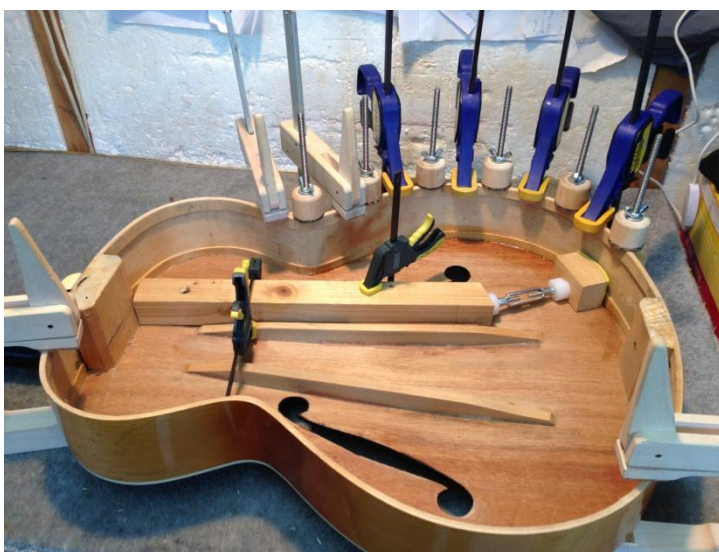


Photo 15:
The next step was to re-attach the top to the sides where it had come adrift. The open joints were first cleaned of glue remnants by scraping them out with a hot knife & then some sandpaper. The side had sprung inwards where the joint had failed so required some method of pushing it back into place before gluing. A wooden strut was clamped to the brace & through the F-hole. Then a small jack clamp was used to adjust the side to align properly with the top. Hide glue was applied to the joint & a dozen clamps held it all in place.



Photo 16:
The neck heel required shimming to plug the gap caused by shrinkage. The neck joint itself was still tightly adhered & stable so didn't need any further attention. A tapered shim about 15mm long was pressed into the gap & glued in position.

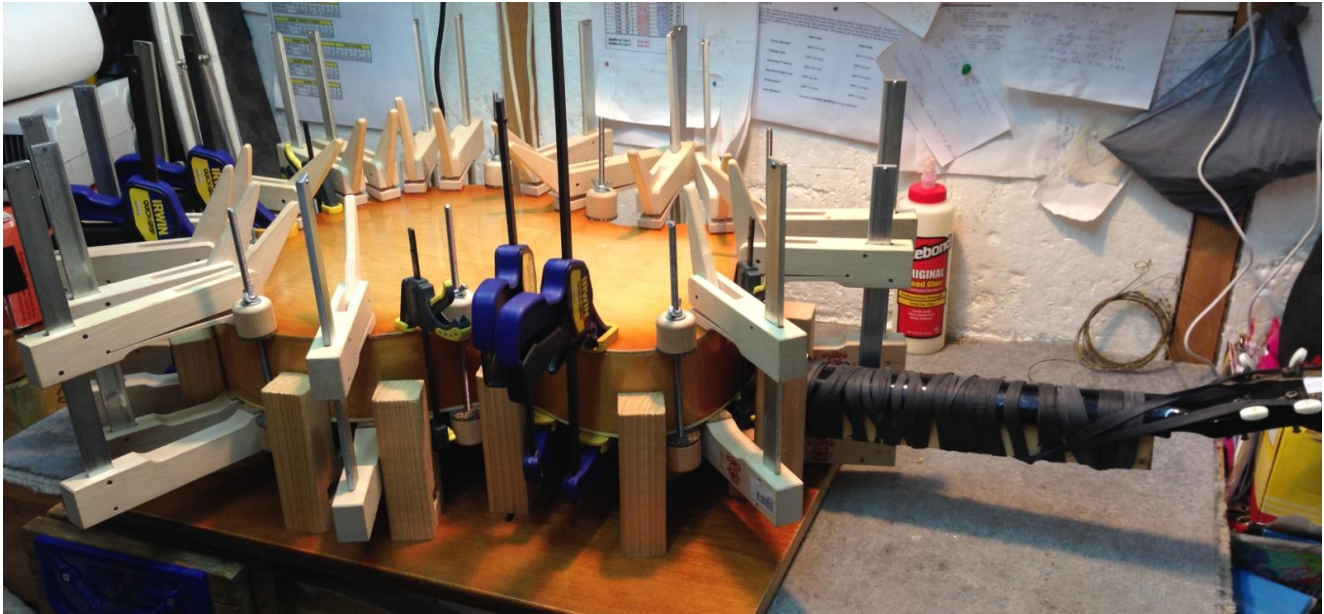


Photo 17: Re-attaching the back presents a slight challenge.

The body is only rigid when all the components are firmly attached. Until then the sides are able to flex which allows the neck to wave around somewhat.

To ensure the neck gets set at the correct height & alignment to the top it must be firmly held in position whilst the back is being re-glued.

A long beam was put over the fretboard & held in place with strong elastic strapping. The required projected height of the frets at the bridge position was calculated & a correctly sized block was placed under the beam, located at the bridge position. A clamping arrangement held it firmly to the guitar top & also set the neck to align with the body centreline.

The guitar was then placed top-side down into a holding fixture so that the back could be glued on. A total of 30 clamps were employed to keep the back in place whilst the adhesive cured overnight.

The back & sides aligned quite accurately & only a minimal amount of trimming was necessary to smooth them in.

This guitar never originally had any binding around the back & so it was left as it was without any. A touch-up to the lacquer around the edge of the back blended it all in.



Photo 18:

With the guitar body all securely back together it was time to concentrate on the fretboard. It was given a good clean & conditioned with lem-oil.

The old damaged string-nut was carefully knocked loose & then the frets were levelled & dressed.

A new nut was crafted out of a piece of rosewood & fitted in place. The string spacing was kept identical to the original.



Photos 19 & 20: A new set of Framus vintage nickel tuners with oval-pearloid knobs were fitted to replace the bent & rusty old ones. These are an exact replica of the originals & are a perfect fit with the original fixing holes.

A new set of tuner bushes were pressed into the head to support the string spigots. The holes needed reaming out slightly as these were a marginally larger external diameter than the originals. That was an advantage because the original holes had been worn out of shape due to the missing bushes.



Photos 21 & 22: A Schaller Western Vintage-F pick-up was chosen to mount onto the end of the neck. It is neat looking & sounds great.

It comes with a fitted ¼" jack plug to go directly to the amp. To keep it tidier the jack plug was removed & the wire routed through the F-hole then connected to a jack socket placed in an existing hole in the guitar side.

The wire will be hidden under the new scratch-guard.



Photos 23 & 24: The inspiration for the shape of the scratch-guard came from an online picture of a Framus Atlantis 5-52. A copy of the picture was enlarged to full size so that a cutting template could be made. A cardboard mock-up was shaped first so that the proportions could be finalised & mounting method determined.

The mounting bracket is a modified Gibson Les Paul one as it was found to be the closest to the required height. Rather than secure it with a screw through the scratch-guard it fits into a slotted

block glued onto the back of the guard. Another smaller block is attached near the tip of the guard which slides onto a fixing pin in the side of the neck.



Photo 25:

The scratch-guard is secured in place by a screw through the bracket into an existing hole in the waist of the guitar.

The scratch-guard is quite rigid so it was not necessary to have another fixing point on the corner near the bridge.

The guard material is 3-ply with a lighter centre layer. A chamfer was put around the top edge which exposes the lighter line to give a pleasing definition to the shape.



Photo 26:

The instrument was strung & tuned to pitch to determine the resulting action height over the 12th fret.

The repairs to the body & top braces had pulled the action down somewhat but it was still greater than desired even though the bridge was adjusted as low as it could go. Therefore the bridge height had to be reduced. To keep the proportions balanced the height reduction was split between the two bridge sections. 2mm was taken off the bridge feet & 2mm off the bottom surface of the top section.

The new bridge height gives an action of 2.00mm at the 12th fret with enough scope for up & down adjustment.



Photo 27:

The tailpiece was cleaned up & polished to rid it of some rust traces.

Then a new set of strings was fitted & a few adjustments made to the final set-up of the action & intonation.



Photo 28: And here it is.

One Framus vintage archtop guitar, back in good order, looking & sounding great.