

Framus Guitar Restoration

2nd March 2015

This early 1970s Framus has had a bit of a hard life.

Whilst working abroad around 1980-ish the present owner's brother accepted it as part-settlement towards a loan he had given to a fellow worker.

Its sentimental value is much higher than its monetary worth, but we all know that feeling of attachment you can get towards your first instruments.

In some distant past it had been restrung with steel strings instead of nylon.

The catastrophic result was that the top buckled & detached in places, one of the braces inside snapped & most of them broke away from the top. Also the bridge lifted & pinged off.

Someone had tried to glue and bolt the bridge back on (very badly) but the instrument was virtually unplayable.

The neck, back & sides were still in reasonable condition though rather dirty and scratched.

The top, besides the damage already mentioned, had areas of quite deep wear, scratches & dents. Like the rest of the instrument it was very dirty.

My brief was to make it structurally sound and playable, without making it look new nor changing its essential characteristics too much from how it would have been originally.

It needed to look like an old, much played guitar that had been reasonably looked after. Not the wreck it had become.

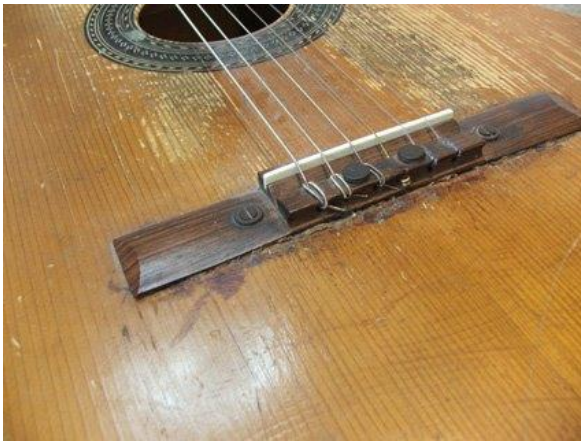


Photo 1.

Here you can see that the detached bridge had been glued and bolted back in place, but it no longer conformed to the contour of the top. Also evident are the areas of deep wear above and below the strings.



Photo 2.

The top had been pulled away from the sides in several places and damaged.

An attempt had been made to glue it back down, but generally this had not been successfully achieved.

The strap end-pin is missing also.



Photo 3.

The back and sides were in a reasonable condition apart from a few scratches and a forty year accumulation of dirt. There was no structural damage to be concerned about.

The laminated back is unbraced and is formed with a nice arch.

It has a bolt-on neck secured with 4 large screws through a neck-plate from the rear.



Photo 4.

The neck was in good condition for the age, just a bit dirty. The steel strings had worn down some of the frets and the fingerboard had some very slight wear indentations too. Unusually for a nylon strung guitar it was fitted with a truss rod. The adjuster nut needed a bit of freeing up and lubricating but was otherwise OK. The original truss-rod cover was missing.



Photo 5.

I started by removing the bridge.

After taking out the bolts and screws I wasn't too sure how well it would come off. I suspected that the glue used was not the usual types associated with guitar construction and so might prove difficult.

Luckily though, as it wasn't seated very well, I was able to get a heated spatula underneath it after warming the bridge to soften the glue a bit.

A few minutes of careful probing with the spatula popped it off quite cleanly.



Photo 6.

Next I removed the top so that I could get a good look at the brace damage.

This was when I discovered that the instrument had originally been French polished. I hadn't been too sure up to this stage, but when I warmed the top to soften the glue for removal it caused the finish to soften also and my workshop was filled with the distinct aroma of French polish (which I rather like!).



Photo 7.

I repaired the broken brace and secured all of them back in their proper positions on the top.

I also needed to patch up the broken area of the top at the edge.

The top is a 3 piece lamination and so I made up a laminated patch out of spruce to use as the infill. I made the outer piece of lamination just large enough to fill the damaged area. The middle lamination was 5mm larger all round and the inner piece 5mm larger still. This was so that I could get a good strong overlapping bond on the existing wood.



Photo 8.

With the top off I was able to get a closer look at the faded label.

I could just make out the date code which was 73E (May 1973) and the serial number 01054.

Unfortunately the model name / number and the Inspectors signature were too faded to read. The signature is likely to be that of Richard Muller who I believe was the Framus master guitar-maker and final inspector around that time.

Before continuing I cleaned up the edge to get rid of the old glue and broken remnants ready to accept the top.



Photo 9.

Next I re-attached the top and left it 24 hours to ensure a good bond.



Photo 10.

Having released the clamps I then sanded the top down ready for re-finishing with stain and French polish.

After sanding, the deeper scratches and heavily worn areas are still visible. To be rid of them completely I would have taken the top down too thin & probably right through the upper lamination.

I could have made a complete new top, but that would have changed the appearance and sound of the instrument quite drastically, well beyond my brief.

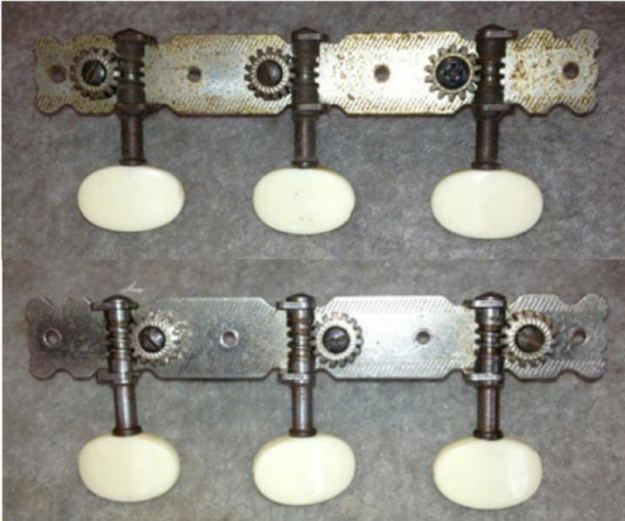


Photo 11.

The tuners were rather dirty and stiff to operate. I dismantled and refurbished them so they operated smoothly. This before-and-after picture shows that they came up quite nicely.



Photo 12.

The neck and fingerboard needed a good clean plus a fret level/dress & polish. I made a new truss-rod cover from Rosewood to replace the missing original. From the discolouration of the original finish I could see the outline of the missing part and so made the new one to the same shape. The remainder of the appearance was just done from my imagination. A couple of mother-of-pearl dots were inlaid for embellishment and a pair of nickel screws secured it into the existing fixing holes in the head.



Photo 13.

Now it was the time to stick my little label inside and then apply the finishing.

Firstly I applied some stain to the patched area to colour-match the new wood with the old, and then applied a further coat to the entire top.

Once the stain had dried I then applied the fading-up coats of French polish along the grain. This was followed by a further 4 bodying-in coats and left to harden for a while and then the surface was lightly rubbed with fine sand-paper. I repeated the bodying-in process before finally spiriting-off with a 50/50 French polish/methylated spirits mix.

Because of all the imperfections in the top I didn't want to create a high gloss finish. That would have highlighted them even more. On the back & sides I just rejuvenated the existing polish by rubbing it over with spirit before buffing it up with a lint-free cloth.



Photo 14.

The old bridge was in too bad a shape to be re-used and so I made a new replica one from Rosewood. I copied the original but added 1.5mm to the height so that I could add a little more strength to the wings which had distorted upward on the original. It also allowed me to reduce the saddle protrusion above the bridge which had been a little excessive on the old one.

I located the bridge in the exact position of the original by utilising the two bolt holes that had been added during the earlier attempted repair. A mother-of-pearl strip hides the new screws.

I complemented the replica bridge with a new bone saddle.



Photo 15.

Finally a replacement end-pin was fitted....

Photo 16 & 17. ... And a new set of nylon strings completed the project.



John Walker

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