

INSTRUMENT LIFEBOOK

# INSTRUCTIONS

FOR HANDLING & CARE OF INSTRUMENTS



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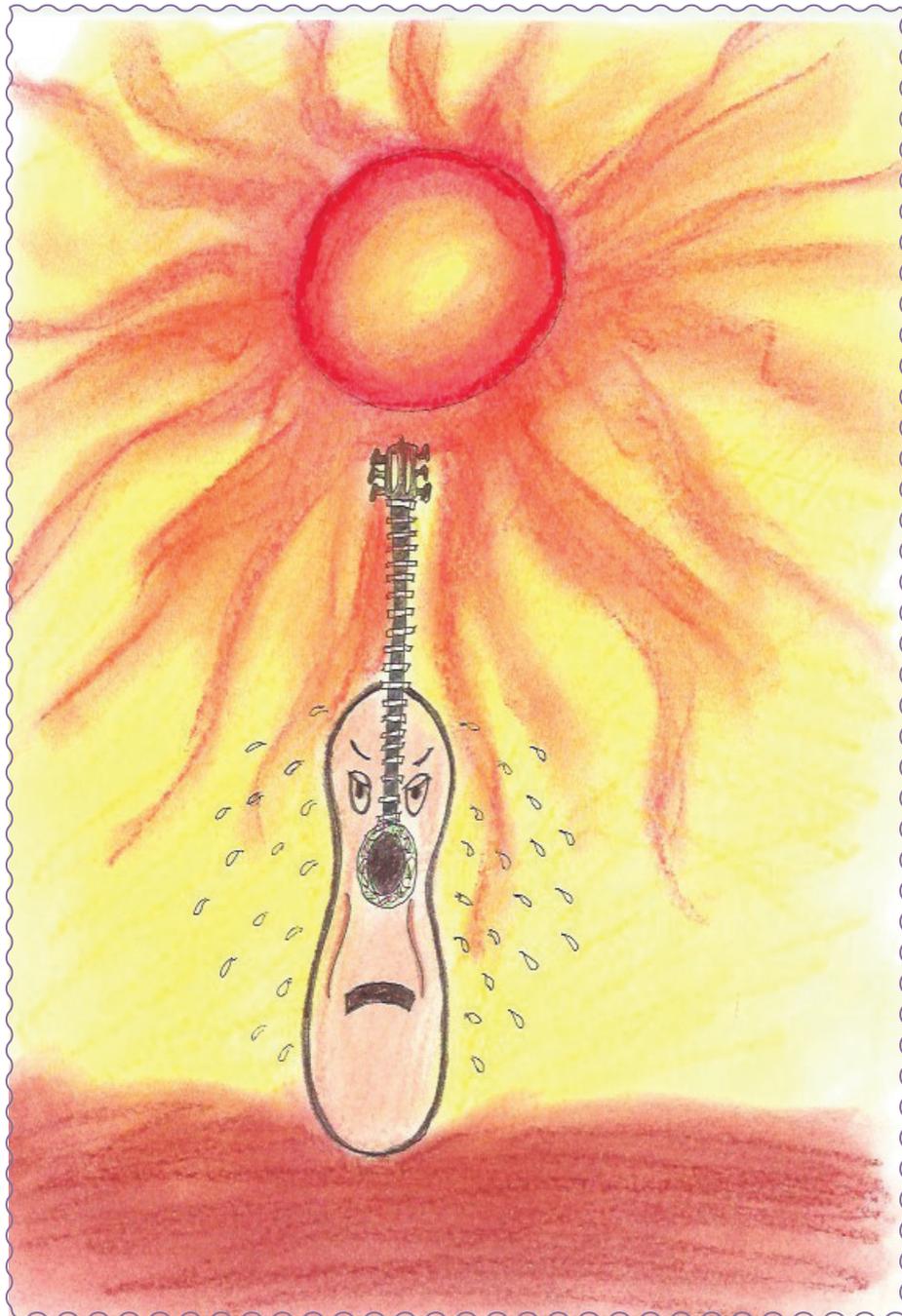


## WHAT IS A SPANISH GUITAR?

Let's start from the beginning. What is a Spanish guitar? To know how to take care of an instrument it must be clear to us what we have in our hands and with what materials it is constructed.

A Spanish guitar is an instrument mainly made with different woods, glues and varnishes. Wood is a hygroscopic material, the same as many of the glues which can be affected by these changes in humidity. This way we reach one of the greatest dangers in the conservation of this musical instrument: not to adequately manage the levels of humidity in the place where the guitar is stored.

It is true that our system of natural aging gives the wood we use in our artisan guitars a higher stability. We have woods with a seniority between 20 and 60 years, that little by little are replaced so that, with the same system, we are able to use them in the future. Nevertheless, this characteristic is not enough. There must be inspections. This lack of control has two sides:

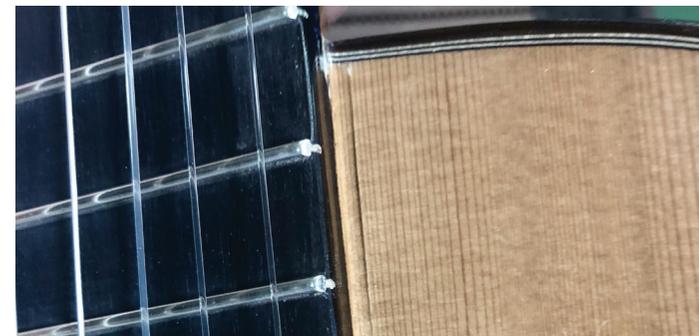


a) Say that we live in an extremely dry place. In that case, the lack of intervention to solve the problem makes our guitar get dehydrated and shrink. What symptoms could we find then?

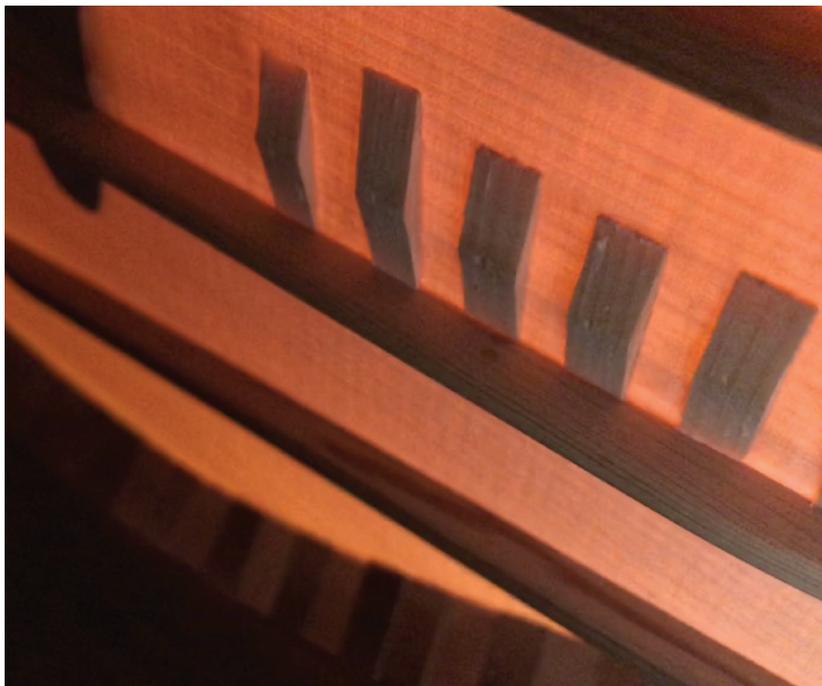
1. It is usual that the frets protrude when the neck shrinks. It is noticed when you slip your hand along the neck.



2. A further consequence of this lack of hydration of the instrument is, for example, the cracks at both sides of the fingerboard, very common in guitars of a certain age. The force that keeps this part of the guitar is aggravated with the dehydration of the wood that is shrunk and weakened.



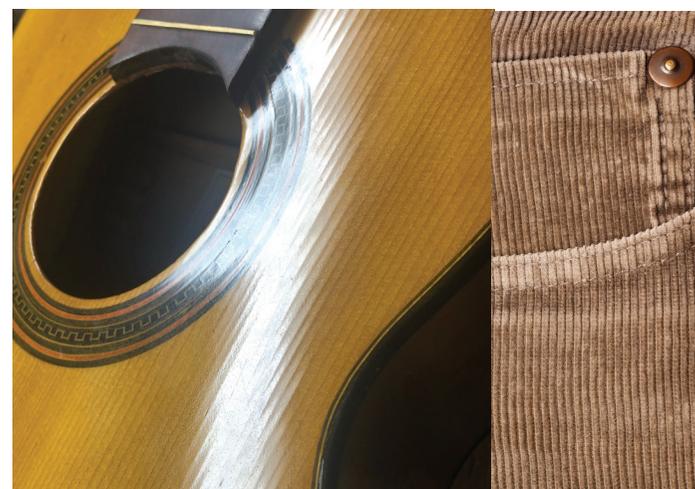
**3.** Cracks that appear due to dryness. They are produced by what has been said before and can be repaired with small wooden wedges that are placed perpendicularly to the wood grain we are repairing, so that the force exerted prevents the crack to continue opening. So as to allow you to have an idea, it is as if we seal a deep wound with stitches.



**4.** Changes in the fingerboard. Ebony is normally used in guitar making for the fingerboard because of its density and hardness, nevertheless, if it gets an extremely dry it can also be affected. In this case the wood will bend making a hollow. We work on the fingerboard to give it a deeper fall in the area of the bass strings (6th, 5th and 4th), because being thicker strings they need a larger relief to be able to vibrate unimpeded avoiding buzzings. When dryness is higher this fall is increased so the guitarist will notice his guitar has a higher tone, it is harder and uncomfortable.



**5.** In an extreme situation can appear what we call “pana” (corduroy). The wood suffers such dehydration that this produces a similar effect in the touch and sight to the corduroy fabric or corduroy clothes. For example a client, who left his guitar in a room facing the sun directly during a whole hot and dry summer, came to the workshop with this problem. It also happened to another who travelled around South Africa for hours with the guitar in the car boot.



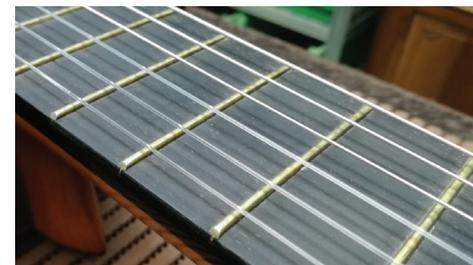


**b) No less dangerous is the excessive humidity that you can find in some places. What consequences could this characteristic bring?**

**1.** In this case the fingerboard, in a manner of speaking, moves in the opposite direction. When the wood expands due to the humidity the fingerboard may bend making a small hill so to say, that makes the fingerboard stay closer to the strings. In this case the guitarist can find that the guitar has a lower action, softer and maybe uncomfortable buzzes will appear produced by the deformity of the fingerboard.



**2.** In this case the frets would get stuck, as the wood will be swollen and this variation in the frets that we use will not be produced, as they are not hygroscopic. Excessive humidity may react in the frets giving them a greenish color due to their oxidation.



3. Decoupling. Glue may lose its function, since the wood is a hygroscopic material. Wood is swollen and pushes the rest of the construction. In some cases it can recover its state and then cracks can be produced.



4. Stranger, but not for that reason it stops from occurring in humid countries, is the reaction in the varnish that ends up leaving it milky, that is, of a whitish color.



## HOW CAN WE AVOID IT?

It is very easy. The first thing you need in your houses is a hygrometer. The **ideal humidity** that we recommend is **50%**. However this characteristic is very difficult to attain and maintain, **but under no circumstance can humidity be lower than 40% or higher than 60%**. You can use several means:

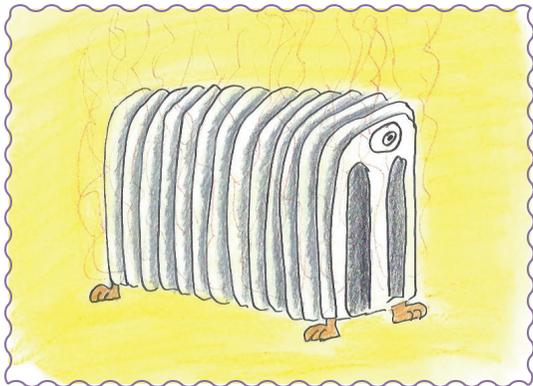


1. From the sophisticated humidifiers with moisture control, to the simplest. Home remedies can also be used such as putting a moist sponge in a plastic bag with small holes so that it transpires, always ensuring that it is moist, not soaked.

2. Using dehumidifiers or inventions such as putting rice in a cloth bag under the head of the guitar inside the case, and changing it every time the rice gets humid.

## Other precautions that we must take into account are:

1. Keep it away from heating sources and air conditioners that may dry it. The exception is found in very humid places where it is appropriate to put, every now and then, air conditioner or heating, but they must always be controlled by a hygrometer avoiding direct exposure.

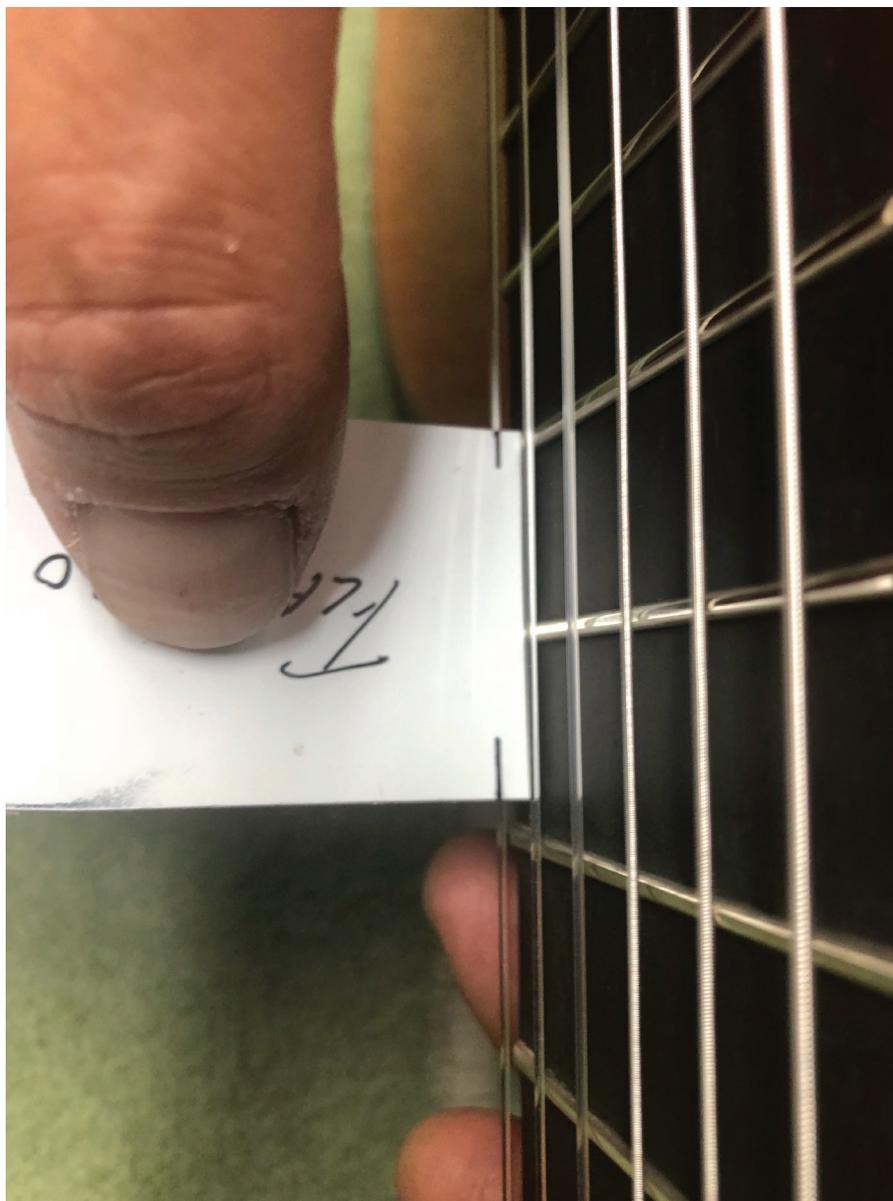


2. From time to time take te guitar out of the case, because it can keep humidity.

3. Do not put it close to the walls because they are sensitive to humidity.

4. Avoid bumps. There are two types of frequent repairs in our workshop. The bump on the block which will make the inner block break, and the breaking of the head which is highly frequent in the guitars of kids. Cracks due to pressure are also common, for example, in their transport, or if you place too much weight on the case where the guitar is kept.





## ADJUSTMENTS AND ACTION

As regards to the adjustment of the guitar you have to take into account that all of you, as guitarists, have your own particularities. Each of you has a unique way to play the instrument. We place a standard measurement that usually applies to most of the musicians, but sometimes it has to be changed to adapt to you. This procedure is simple:

- 1.** To adjust the height the saddle should be touched at the base, never at the top.
- 2.** If you are looking for a more comfortable action in the first frets you will lower the saddle.
- 3.** If you need a higher action, you can add a thin wedge of paper-wood under the saddle.





## BUZZINGS AND CLEANING THE GUITAR

With reference to buzzings, weird vibrations or noises, you must monitor that none of the bolts of the headstock are loose, and that the strings are not from a defective edition or worn out.

Finally, all that remains for me to say is that cleaning a guitar is very simple. You only need a cloth, preferably microfiber, and if the instrument is very dirty, you may use specialized products such as the ones we use in the workshop. You must be very careful with non specific products for guitars because they may harm the varnish. In the case of French polish you must avoid products with alcohol. . It is better that you use a damp cloth in any case.

There are also products to hydrate the fingerboard, for example the Dunlop ones. We use sewing machine oil, with a cloth and a scouring sponge. We take away the strings, wipe with the scouring sponge to clean, put a little bit of oil with the cloth and we spread it.

I have just briefly commented on what it means to take good care of the instrument, but if you have any doubt, please, feel free to ask us.